Appendix H

Ecological Support Text, Tables, and Briefs

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Environmental Calculations

ECF-100FR1-11-0022 *Ecological Risk Evaluation for the 100-FR-1, 100-FR-2, IU-2, and IU-6 Source Operable Unit* H-149

Terms

AUF	area use factor
BAF	bioaccumulation factor
CERCLA	*Comprehensive Environmental Response, Compensation, and Liability Act of 1980*
COPEC	contaminants of potential ecological concern
DOE	U.S. Department of Energy
Eco-SSL	ecological soil screening level
EPA	U.S. Environmental Protection Agency
EPC	exposure point concentration
HQ	hazard quotient
MATC	maximum acceptable toxicant concentration
ND	nondetect
NOEC	no observed effect level
ORNL	Oak Ridge National Laboratory
PRG	preliminary remediation goals
RCBRA	River Corridor Baseline Risk Assessment
RI/FS	remedial investigation/feasibility study
SMDP	Scientific Management Decision Process
SSL	soil screening levels

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H1 Introduction

Appendix H provides the support documentation for ecology related items of the RI/FS. Details include Flora and fauna lists potentially onsite or in the county, risk evaluation tables, the associated environmental calculation, and other information as outlined in the sections below. This appendix also contains *Ecological Risk Evaluation for the 100-FR-1, 100-FR-2, 100-IU-2, and 100-IU-6 Source Operable Units* (ECF-100FR1-11-0022) and associated tables. The calculation and tables are in electronic format and recorded on compact disk included with this appendix.

H2 Terrestrial Ecological Risk Evaluation

This section contains the terrestrial ecological risk evaluation calculations in Tables H-1 through Table H-19 as referenced in Chapter 7 of this report. Tables H-1 through H-18 listed in the contents above are in electronic format and recorded on compact disk included with this appendix.

Tables H-1 through H-6 present the supporting documentation of the values included in the terrestrial ecological risk evaluation (toxicity reference values, exposure factors, bioconcentration factors, area use factors). Tables H-7 through H-19 present the ecological risk calculations. These include the soil exposure point concentration (EPC) comparison to soil screening levels (SSLs), background, and preliminary remediation goals (PRGs) for each waste site and the subsequent SMDP rationale (Table H-19).

Table H-19. Summary of Factors Considered for Scientific Decision Management Process for the 100-F/IU-2/IU-6 OU

Waste Site and Waste Site Description	Decision Unit	COPEC	EPC (mg/kg)	Plant/ Invert-ebrate PRG (mg/kg)	Confidence and Basis	Avian/ Mammal PRG (mg/kg)	Confidence and Basis	# Sampling Locations	Area or Length of Waste Site	Depth of Samples (bgs)	# Results > PRG	Range of Concentrations (mg/kg)	Range of HQ	Data Quality	Carry Waste Site into FS for Remedy Evaluation?
100-F-19:2 Effluent Pipelines	Over-burden	Mercury	0.41	0.3	Confidence in the PRG is low. The basis of the value is the ORNL compendium of plant toxicity thresholds (ES/ER/TM-85/R3). The LOEC was assigned low confidence by the authors because the toxicity threshold in the chosen study was more than two orders of magnitude lower than the next usable study and no primary literature available for effects on plants.	1.6	Not Exceeded	4	2,712 m (8,898 ft)	5m (16ft)	1	<0.013 to 0.41	<0.043 to 1.4	None	No. Soil samples collected from a depth greater than 4.6 m [15 ft] bgs: direct contact within point of compliance is incomplete.
100-F-26:10 Process Sewer Pipelines	Over-burden Focused	Selenium	1.8	2	Not Exceeded	1.4	Confidence in the PRG is moderate to high. The value is a PRG based on estimates of dietary exposure to a deer mouse represented by a regression model for plants and median BAF for invertebrates that included Hanford Site-specific prey tissue samples in the data set. The effect level was appropriately set using a LOAEL. The PRG model assumed all individuals of the population being protected obtain all food and other exposure to COPCs exclusively from the waste site. For all the 100-F/IU area waste sites this is a conservative assumption. The PRG values are intended to be protective of populations not individuals but factors such as population densities and distributions, were not considered in the development of the PRGs. PRGs would have been greater had these factors been considered.	4	567m (1,860 ft)	4.3m (14ft)	1	<1.2 to 1.8	<0.86 to 1.3	None	No. EPC only slightly greater than wildlife PRG. Low confidence in analytical method. Detected concentrations and MDLs are reported within the same range as the PRG values. One slightly elevated sample along a linear pipeline does not suggest exposure is sufficient to cause an adverse effect to the population of deer mice or other small mammals. Exposure to unaffected areas adjacent to this linear feature would reduce the exposure to acceptable levels. If the samples were to be included in a future excavation, the excavated material with slightly elevated concentrations in 1 of 11 samples would be mixed with surrounding unaffected material resulting in exposure below the PRG.

Table H-19. Summary of Factors Considered for Scientific Decision Management Process for the 100-F/IU-2/IU-6 OU

Waste Site and Waste Site Description	Decision Unit	COPEC	EPC (mg/kg)	Plant/ Invert-ebrate PRG (mg/kg)	Confidence and Basis	Avian/ Mammal PRG (mg/kg)	Confidence and Basis	# Sampling Locations	Area or Length of Waste Site	Depth of Samples (bgs)	# Results > PRG	Range of Concentrations (mg/kg)	Range of HQ	Data Quality	Carry Waste Site into FS for Remedy Evaluation?
100-F-26:14 Process Sewer Pipelines	Shallow	Boron	32	29	Confidence in the PRG is moderate to high. The basis of the value is the Hanford Site-specific NOEC for plants published in the RCBRA (DOE/RL-2007-21). There is high confidence with respect to a lack of toxicity at this concentration because there was no correlation between boron soil concentration up to this value and the measured response in the bioassays. The PRG is a NOEC set at the highest concentration tested in Hanford samples (no LOEC established), thus the concentration at which effects might be observed is unknown.	32	Not Exceeded	4	152 m (499 ft)	6m (20ft)	1	<1.1 to 32	<0.037 to 1.1	None	No. Soil samples collected from a depth greater than 4.6 m [15 ft] bgs: direct contact within point of compliance is incomplete.
100-F-26:4 Process Sewer Pipelines	Over-burden Focused	Boron	32	29	Confidence in the PRG is moderate to high. The basis of the value is the Hanford Site-specific NOEC for plants published in the RCBRA (DOE/RL-2007-21). There is high confidence with respect to a lack of toxicity at this concentration because there was no correlation between boron soil concentration up to this value and the measured response in the bioassays. The PRG is a NOEC set at the highest concentration tested in Hanford samples (no LOEC established), thus the concentration at which effects might be observed is unknown.	32	Not Exceeded	10	966 m (3,196 ft)	2.5m (8ft)	1	2.3 to 32	0.077 to 1.08	None	No. For plants and invertebrates, the PRG is an unbounded NOEC, thus there is uncertainty as to what concentration at the site would result in an adverse risk to either of these communities. With only one of ten samples slightly greater than the plant/invertebrate PRG, the average exposure to plants/invertebrates would not present a risk. An elevated concentration at one point along a linear pipeline does not suggest exposure is sufficient to cause an adverse effect to the plant or invertebrate communities. There is ample unaffected habitat for terrestrial invertebrates available in adjacent area and along the River Corridor. For plants, if adverse effects did occur, habitat fragmentation in the 100-F/IU OUs would not be likely given the current level of ecological services the habitat is providing in the current condition and the available habitat refugia nearby (See Section 7.6.3).

Table H-19. Summary of Factors Considered for Scientific Decision Management Process for the 100-F/IU-2/IU-6 OU

Waste Site and Waste Site Description	Decision Unit	COPEC	EPC (mg/kg)	Plant/ Invert-ebrate PRG (mg/kg)	Confidence and Basis	Avian/ Mammal PRG (mg/kg)	Confidence and Basis	# Sampling Locations	Area or Length of Waste Site	Depth of Samples (bgs)	# Results > PRG	Range of Concentrations (mg/kg)	Range of HQ	Data Quality	Carry Waste Site into FS for Remedy Evaluation?
100-F-26:4 Process Sewer Pipelines	Shallow_1	Selenium	2.7	2	Confidence in the PRG is moderate to high. The basis of the value is the site-specific NOEC for plants published in ECF-HANFORD-11-0158. There is high confidence with respect to a lack of toxicity at this concentration because there was no correlation between selenium soil concentration up to this value and the measured response in the bioassays. The PRG is a NOEC set at the highest concentration tested in Hanford Site samples (no LOEC established); thus the concentration at which effects might be observed is unknown.	1.4	Confidence in the PRG is moderate to high. The value is a PRG based on estimates of dietary exposure to a deer mouse represented by a regression model for plants and median BAF for invertebrates that included Hanford Site-specific prey tissue samples in the data set. The effect level was appropriately set using a LOAEL. The PRG model assumed all individuals of the population being protected obtain all food and other exposure to COPCs exclusively from the waste site. For all the 100-F/IU area waste sites this is a conservative assumption. The PRG values are intended to be protective of populations not individuals but factors such as population densities and distributions, were not considered in the development of the PRGs. PRGs would have been greater had these factors been considered.	10	966 m (3,196 ft)	2.5m (8ft)	1/1	<1.2 to 2.7	< 0.86 to 1.9	None	No. Only 1 of 10 samples was detected and exceeded both the plant/invertebrate and wildlife PRGs. An elevated concentration at one point along a linear pipeline does not suggest exposure is sufficient to cause an adverse effect to the population of deer mice or other small mammals. Exposure to unaffected areas adjacent to this linear feature would reduce the exposure to acceptable levels. Further, samples were collected 2.5 m (8 ft) below ground, much deeper than the burrowing depth of small mammals at Hanford (<1 m [3.3 ft] pocket mouse [Cline et al., 1980]). If the samples were to be included in a future excavation, the excavated material with slightly elevated concentrations in 1 of ten samples would be mixed with surrounding unaffected material resulting in exposure similar to the PRG. The plant/invertebrate PRG is an unbounded NOEC, thus there is uncertainty as to what concentration at the site would result in an adverse risk to either plant or invertebrate communities. There is ample unaffected habitat for terrestrial invertebrates available in adjacent area and along the River Corridor. For plants, if adverse effects did occur, habitat fragmentation in the 100-F/IU OUs would not be likely given the current level of ecological services the habitat is providing in the current condition and the available habitat refugia nearby (See Section 7.6.3).
100-F-26:9 Process Sewer Pipelines	Over-burden Focused	Barium	659	358	Confidence in the PRG is moderate to high. The basis of the value is the site-specific NOEC for invertebrates published in the RCBRA (DOE/RL-2007-21). There is high confidence with respect to a lack of toxicity at this concentration because there was no correlation between barium soil concentration up to this value and the measured response in the bioassays. The PRG is a NOEC set at the highest concentration tested in Hanford Site samples (no LOEC established); thus the concentration at which effects might be observed is unknown.	1690	Not Exceeded	4	1,374 m (4,508 ft)	3.7m (12ft)	1	41 to 659	0.11 to 1.8	3 results are flagged with "C" qualifiers	No. An elevated concentration at one point along a linear pipeline does not suggest exposure is sufficient to cause an adverse effect to the plant or invertebrate communities. The plant/invertebrate PRG is an unbounded NOEC, thus there is uncertainty as to what concentration at the site would result in an adverse risk to either plant or invertebrate communities. There is ample unaffected habitat for terrestrial invertebrates available in adjacent area and along the River Corridor. For plants, if adverse effects did occur, habitat fragmentation in the 100-F/IU OUs would not be likely given the current level of ecological services the habitat is providing in the current condition and the available habitat refugia nearby (See Section 7.6.3).

Table H-19. Summary of Factors Considered for Scientific Decision Management Process for the 100-F/IU-2/IU-6 OU

Waste Site and Waste Site Description	Decision Unit	COPEC	EPC (mg/kg)	Plant/ Invert-ebrate PRG (mg/kg)	Confidence and Basis	Avian/ Mammal PRG (mg/kg)	Confidence and Basis	# Sampling Locations	Area or Length of Waste Site	Depth of Samples (bgs)	# Results > PRG	Range of Concentrations (mg/kg)	Range of HQ	Data Quality	Carry Waste Site into FS for Remedy Evaluation?
100-F-26:9 Process Sewer Pipelines	Over-burden Focused	Boron	62	29	Confidence in the PRG is moderate to high. The basis of the value is the Hanford Site-specific NOEC for plants published in the RCBRA (DOE/RL-2007-21). There is high confidence with respect to a lack of toxicity at this concentration because there was no correlation between boron soil concentration up to this value and the measured response in the bioassays. The PRG is a NOEC set at the highest concentration tested in Hanford samples (no LOEC established), thus the concentration at which effects might be observed is unknown.	32	Confidence in the PRG is moderate. The value is a PRG based on estimates of dietary exposure to a great basin pocket mouse represented by a median BAF for plants that included Hanford Site-specific prey tissue samples in the data set. The effect level was appropriately set using a LOAEL. The PRG model assumed all individuals of the population being protected obtain all food and other exposure to COPCs exclusively from the waste site. For all the 100-D/H area waste sites this is a conservative assumption. The PRG values are intended to be protective of populations not individuals but factors such as population densities and distributions, were not considered in the development of the PRGs. PRGs would have been greater had these factors been considered.	4	1,374 m (4,508 ft)	3.7m (12ft)	1/1	1.2 to 62	0.04 to 2.1	2 results are flagged with "C" qualifiers	No. An elevated concentration at one point along a linear pipeline does not suggest exposure is sufficient to cause an adverse effect to the population of deer mice or other small mammals. Exposure to unaffected areas adjacent to this linear feature would reduce the exposure to acceptable levels. Further, samples were collected 3.7 m (12 ft) below ground, much deeper than the burrowing depth of small mammals at Hanford (<1 m [3.3 ft] pocket mouse [Cline et al., 1980]). If the samples were to be included in a future excavation, the excavated material with slightly elevated concentrations in 1 of ten samples would be mixed with surrounding unaffected material resulting in exposure similar to the PRG. The plant/invertebrate PRG is an unbounded NOEC, thus there is uncertainty as to what concentration at the site would result in an adverse risk to either of these communities. There is ample unaffected habitat for terrestrial invertebrates available in adjacent area and along the River Corridor. For plants, if adverse effects did occur, habitat fragmentation in the 100-F/IU OUs would not be likely given the current level of ecological services the habitat is providing in the current condition and the available habitat refugia nearby (See Section 7.6.3).
100-F-26:9 Process Sewer Pipelines	Over-burden Focused	Copper	183	58	Confidence in the PRG is moderate. The basis is the Hanford Site-specific NOEC for effects on invertebrates based on results of toxicity testing conducted by and interpreted by Ecology (Ecology Publication 11-03-006). There is high confidence with respect to a lack of toxicity at this concentration because there was no correlation between copper soil concentration up to this value and the measured response in the bioassays. The PRG is a NOEC set at the highest concentration tested in Hanford samples (no LOEC established), thus the higher concentration at which effects might be observed is unknown.	193	Not Exceeded	4	1,374 m (4,508 ft)	3.7m (12ft)	1	10.6 to 183	0.18 to 3.2	2 results are flagged with "C" qualifiers	No. The plant/invertebrate PRG is an unbounded NOEC, thus there is uncertainty as to what concentration at the site would result in an adverse risk to either of these communities. Also, an elevated concentration at one point along a linear pipeline does not suggest exposure is sufficient to cause an adverse effect to the plant or invertebrate communities. There is ample unaffected habitat for terrestrial invertebrates available in adjacent area and along the River Corridor. For plants, if adverse effects did occur, habitat fragmentation in the 100-F/IU OUs would not be likely given the current level of ecological services the habitat is providing in the current condition and the available habitat refugia nearby (See Section 7.6.3). No soil concentrations greater than lowest wildlife PRG for biomagnifying compound.

Table H-19. Summary of Factors Considered for Scientific Decision Management Process for the 100-F/IU-2/IU-6 OU

Waste Site and Waste Site Description	Decision Unit	COPEC	EPC (mg/kg)	Plant/ Invert-ebrate PRG (mg/kg)	Confidence and Basis	Avian/ Mammal PRG (mg/kg)	Confidence and Basis	# Sampling Locations	Area or Length of Waste Site	Depth of Samples (bgs)	# Results > PRG	Range of Concentrations (mg/kg)	Range of HQ	Data Quality	Carry Waste Site into FS for Remedy Evaluation?
100-F-26:9 Process Sewer Pipelines	Shallow Focused	Mercury	0.81	0.3	Confidence in the PRG is low. The basis of the value is the ORNL compendium of plant toxicity thresholds (ES/ER/TM-85/R3). The LOEC was assigned low confidence by the authors because the toxicity threshold in the chosen study was more than two orders of magnitude lower than the next usable study and no primary literature available for effects on plants.	1.6	Not Exceeded	14	1,374 m (4,508 ft)	3.7m (12ft)	1	<0.008 to 0.81	<0.03 to 2.7	None	No. An elevated concentration at one point along a linear pipeline does not suggest exposure is sufficient to cause an adverse effect to the plant or invertebrate communities. With only one of fourteen samples slightly greater than the plant/invertebrate PRG, the average exposure to plants/invertebrates would not present a risk. There is ample unaffected habitat for terrestrial invertebrates available in adjacent area and along the River Corridor. For plants, if adverse effects did occur, habitat fragmentation in the 100-F/IU OUs would not be likely given the current level of ecological services the habitat is providing in the current condition and the available habitat refugia nearby (See Section 7.6.3). No soil concentrations greater than lowest wildlife PRG for biomagnifying compound.
100-F-31 Septic System, Drain Field, and Associated Piping	Shallow	Mercury	1.2	0.3	Confidence in the PRG is low. The basis of the value is the ORNL compendium of plant toxicity thresholds (ES/ER/TM-85/R3). The LOEC was assigned low confidence by the authors because the toxicity threshold in the chosen study was more than two orders of magnitude lower than the next usable study and no primary literature available for effects on plants.	1.6	Not Exceeded	10	64 m^2 (689 ft^2)	3m (9.8ft)	1	<0.01 to 1.2	<0.03 to 4.0	None	No. With only one of ten samples slightly greater than the plant/invertebrate PRG, the average exposure to plants/invertebrates would not present a risk. There is ample unaffected habitat for terrestrial invertebrates available in adjacent area and along the River Corridor. For plants, if adverse effects did occur, habitat fragmentation in the 100-F/IU OUs would not be likely given the current level of ecological services the habitat is providing in the current condition and the available habitat refugia nearby (See Section 7.6.3). No soil concentrations greater than lowest wildlife PRG for biomagnifying compound.
100-F-33 Aquatic Biology Fishponds and Fish Laboratory	Staging Pile Area Focused	Mercury	0.38	0.3	Confidence in the PRG is low. The basis of the value is the ORNL compendium of plant toxicity thresholds (ES/ER/TM-85/R3). The LOEC was assigned low confidence by the authors because the toxicity threshold in the chosen study was more than two orders of magnitude lower than the next usable study and no primary literature available for effects on plants.	1.6	Not Exceeded	1	885 m^2 (9,526 ft^2)	Three Ponds: Trench 1: 3.9m (12.8 ft) Trench 2: 2m (7 ft) Test Pit 3: 1.5m (5 ft)	1	0.38	1.3	None	No. The EPC at a small sight is only slightly above a PRG of low confidence. There is ample unaffected habitat for terrestrial invertebrates available in adjacent area and along the River Corridor. For plants, if adverse effects did occur, habitat fragmentation in the 100-F/IU OUs would not be likely given the current level of ecological services the habitat is providing in the current condition and the available habitat refugia nearby (See Section 7.6.3). No soil concentrations greater than lowest wildlife PRG for biomagnifying compound.

Table H-19. Summary of Factors Considered for Scientific Decision Management Process for the 100-F/IU-2/IU-6 OU

Waste Site and Waste Site Description	Decision Unit	COPEC	EPC (mg/kg)	Plant/ Invert-ebrate PRG (mg/kg)	Confidence and Basis	Avian/ Mammal PRG (mg/kg)	Confidence and Basis	# Sampling Locations	Area or Length of Waste Site	Depth of Samples (bgs)	# Results > PRG	Range of Concentrations (mg/kg)	Range of HQ	Data Quality	Carry Waste Site into FS for Remedy Evaluation?
100-F-37 French Drain	Shallow Focused	Barium	508	358	Confidence in the PRG is moderate to high. The basis of the value is the site-specific NOEC for invertebrates published in the RCBRA (DOE/RL-2007-21). There is high confidence with respect to a lack of toxicity at this concentration because there was no correlation between barium soil concentration up to this value and the measured response in the bioassays. The PRG is a NOEC set at the highest concentration tested in Hanford Site samples (no LOEC established); thus the concentration at which effects might be observed is unknown.	1690	Not Exceeded	1	0.8 m^2 (8.6 ft^2)	4.6m (15ft)	1	508	1.4	None	No. Soil samples collected from a depth greater than 4.6 m [15 ft] bgs: direct contact within point of compliance is incomplete.
100-F-37 French Drain	Shallow Focused	Lead	214	1700	Not Exceeded	156	Confidence in the PRG is high. The value is a PRG based on estimates of dietary exposure to killdeer represented by a regression model for invertebrates that included Hanford Site-specific prey tissue samples in the data set. The effect level was appropriately set using a LOAEL. The PRG model assumed all individuals of the population being protected obtain all food and other exposure to COPCs exclusively from the waste site. For all the 100-F/IU area waste sites this is a conservative assumption. The PRG values are intended to be protective of populations not individuals but factors such as population densities and distributions, were not considered in the development of the PRGs. PRGs would have been greater had these factors been considered.	1	0.8 m^2 (8.6 ft^2)	4.6m (15ft)	1	214	1.4	None	No. Soil samples collected from a depth greater than 4.6 m [15 ft] bgs: direct contact within point of compliance is incomplete.

Table H-19. Summary of Factors Considered for Scientific Decision Management Process for the 100-F/IU-2/IU-6 OU

Waste Site and Waste Site Description	Decision Unit	COPEC	EPC (mg/kg)	Plant/ Invert-ebrate PRG (mg/kg)	Confidence and Basis	Avian/ Mammal PRG (mg/kg)	Confidence and Basis	# Sampling Locations	Area or Length of Waste Site	Depth of Samples (bgs)	# Results > PRG	Range of Concentrations (mg/kg)	Range of HQ	Data Quality	Carry Waste Site into FS for Remedy Evaluation?
100-F-38 Disposal Site for Potentially Yellow Paint	Shallow Focused	Barium	388	358	Confidence in the PRG is moderate to high. The basis of the value is the site-specific NOEC for invertebrates published in the RCBRA (DOE/RL-2007-21). There is high confidence with respect to a lack of toxicity at this concentration because there was no correlation between barium soil concentration up to this value and the measured response in the bioassays. The PRG is a NOEC set at the highest concentration tested in Hanford Site samples (no LOEC established); thus the concentration at which effects might be observed is unknown.	1690	Not Exceeded	3	0.8 m^2 (8.6 ft^2)	0.9m (3ft)	1	105 to 388	0.29 to 1.1	None	No. For plants and invertebrates, the PRG is an unbounded NOEC, thus there is uncertainty as to what concentration at the site would result in an adverse risk to either of these communities. Size of site is insignificant with respect to ecological risk. With only one of three samples slightly greater than the plant/invertebrate PRG, the average exposure to plants/invertebrates would not likely present a risk. The small area of the waste site coupled with the low magnitude of exceedance of the PRG does not indicate a community level effect. There is ample unaffected habitat for terrestrial invertebrates available in adjacent area and along the River Corridor. For plants, if adverse effects did occur, habitat fragmentation in the 100-F/IU OUs would not be likely given the current level of ecological services the habitat is providing in the current condition and the available habitat refugia nearby (See Section 7.6.3).
100-F-45 Radioactive Process Sewer Floating Pipeline	Shallow	Mercury	1.0	0.3	Confidence in the PRG is low. The basis of the value is the ORNL compendium of plant toxicity thresholds (ES/ER/TM-85/R3). The LOEC was assigned low confidence by the authors because the toxicity threshold in the chosen study was more than two orders of magnitude lower than the next usable study and no primary literature available for effects on plants.	1.6	Not Exceeded	12	23 m^2 (248 ft^2)	2.0m (6.6ft)	1	0.0069 to 1.1	.023 to 3.7	None	No. With only one of twelve samples exceeding the plant/invertebrate PRG, the average exposure to plants/invertebrates would not present a risk. The small area of the waste site coupled with the low magnitude of exceedance of the PRG does not indicate a community level effect. There is ample unaffected habitat for terrestrial invertebrates available in adjacent area and along the River Corridor. For plants, if adverse effects did occur, habitat fragmentation in the 100-F/IU OUs would not be likely given the current level of ecological services the habitat is providing in the current condition and the available habitat refugia nearby (See Section 7.6.3).No soil concentrations greater than lowest wildlife PRG for biomagnifying compound.

Table H-19. Summary of Factors Considered for Scientific Decision Management Process for the 100-F/IU-2/IU-6 OU

Waste Site and Waste Site Description	Decision Unit	COPEC	EPC (mg/kg)	Plant/ Invert-ebrate PRG (mg/kg)	Confidence and Basis	Avian/ Mammal PRG (mg/kg)	Confidence and Basis	# Sampling Locations	Area or Length of Waste Site	Depth of Samples (bgs)	# Results > PRG	Range of Concentrations (mg/kg)	Range of HQ	Data Quality	Carry Waste Site into FS for Remedy Evaluation?
100-F-47 Electrical Substation	Shallow	Mercury	0.91	0.3	Confidence in the PRG is low. The basis of the value is the ORNL compendium of plant toxicity thresholds (ES/ER/TM-85/R3). The LOEC was assigned low confidence by the authors because the toxicity threshold in the chosen study was more than two orders of magnitude lower than the next usable study and no primary literature available for effects on plants.	1.6	Not Exceeded	12	12,508 m^2 (134,635 ft^2)	4.4m (14ft)	1	<0.0049 to 0.97	<0.02 to 3.2	None	No. With only one of twelve samples exceeding the plant/invertebrate PRG, the average exposure to plants/invertebrates would not present a risk. The small area of the waste site coupled with the low magnitude of exceedance of the PRG does not indicate a community level effect. There is ample unaffected habitat for terrestrial invertebrates available in adjacent area and along the River Corridor. For plants, if adverse effects did occur, habitat fragmentation in the 100-F/IU OUs would not be likely given the current level of ecological services the habitat is providing in the current condition and the available habitat refugia nearby (See Section 7.6.3). Lastly, samples collected at a depth below the maximum observed plant rooting depth at Hanford (3 m [9.8 ft]; PNL-1948). Any excavation would mix the deeper soil with the overlying soil resulting in a lower exposure concentration. No soil concentrations greater than lowest wildlife PRG for biomagnifying compound.
100-F-55 and 100-F-62 Unknown Ash Layer and Sanitary Sewer Pipelines	Shallow_2	Mercury	6.8	0.3	Confidence in the PRG is low. The basis of the value is the ORNL compendium of plant toxicity thresholds (ES/ER/TM-85/R3). The LOEC was assigned low confidence by the authors because the toxicity threshold in the chosen study was more than two orders of magnitude lower than the next usable study and no primary literature available for effects on plants.	1.6	Confidence in the PRG is moderate to high. The value is a PRG based on estimates of dietary exposure to a deer mouse represented by a regression model for plants and median BAF for invertebrates that included Hanford Site-specific prey tissue samples in the data set. The effect level was appropriately set using a LOAEL. The PRG model assumed all individuals of the population being protected obtained all food and other exposure to COPCs exclusively from the waste site. For all the 100-F/IU area waste sites, this is a conservative assumption. The PRG values are intended to be protective of populations, not individuals, but factors such as population densities and distributions, were not considered in the development of the PRGs. PRGs would have been greater had these factors been considered.	12	F-55: 3.1 m^2 (33.4 ft^2) F-62: 129.3 m^2 (1,392 ft^2)	North: 2.3m (7.6ft) South: 4.4m (14.5ft)	6	0.083 to 16	0.28 to 53/.05 to 10	None	No. The home range of the deer mouse is almost 10 times greater (9,670 ft^2/900 m^2; Bowers and Smith, 1979) than the site size. Employing an AUF would result in a hazard quotient below 1. Also, samples were collected 2.3 m (7.6ft) below ground, much deeper than the burrowing depth of small mammals (<1 m [3.3 ft] pocket mouse [Cline et al., 1980]) at the Hanford Site. Direct exposure at this depth is unlikely. There is ample unaffected habitat for invertebrates adjacent to the site and along the River Corridor. For invertebrates, burrowing has been recorded to 8.9 ft (2.7 m; PNL-2774); however exposure at this depth would be minimal. Effects to plants are uncertain given the low confidence in the PRG. If adverse effects did occur, habitat fragmentation in the 100-F Source OU would not be likely given the current level of ecological services the habitat is providing in the current condition and the available habitat refugia nearby (See Section 7.6.3). If the samples were to be included in a future excavation, the excavated material with slightly elevated concentrations in 6 of 12 samples would be mixed with surrounding unaffected material resulting in exposure similar to the PRG.

Table H-19. Summary of Factors Considered for Scientific Decision Management Process for the 100-F/IU-2/IU-6 OU

Waste Site and Waste Site Description	Decision Unit	COPEC	EPC (mg/kg)	Plant/ Invert-ebrate PRG (mg/kg)	Confidence and Basis	Avian/ Mammal PRG (mg/kg)	Confidence and Basis	# Sampling Locations	Area or Length of Waste Site	Depth of Samples (bgs)	# Results > PRG	Range of Concentrations (mg/kg)	Range of HQ	Data Quality	Carry Waste Site into FS for Remedy Evaluation?
100-F-55 and 100-F-62 Unknown Ash Layer and Sanitary Sewer Pipelines	Staging Pile Area Footprint Focused	Mercury	0.69	0.3	Confidence in the PRG is low. The basis of the value is the ORNL compendium of plant toxicity thresholds (ES/ER/TM-85/R3). The LOEC was assigned low confidence by the authors because the toxicity threshold in the chosen study was more than two orders of magnitude lower than the next usable study and no primary literature available for effects on plants.	1.6	Not Exceeded	14	F-55: 0.8 m^2 (8.6 ft^2) F-62: 63 m^2 (678 ft^2)	North: 2.3m (7.6ft) South: 4.4m (14.5ft)	3	<0.005 to 0.69	<0.02 to 2.3	None	No. Three of fourteen samples at a very small site were only slightly greater than the plant/invertebrate PRG, with which there is low confidence. There is ample unaffected habitat for terrestrial invertebrates available in adjacent area and along the River Corridor. Effects to plants are uncertain given the low confidence in the PRG. If adverse effects did occur, habitat fragmentation in the 100-F Source OU would not be likely given the current level of ecological services the habitat is providing in the current condition and the available habitat refugia nearby (See Section 7.6.3). No soil concentrations greater than lowest wildlife PRG for biomagnifying compound.
100-F-56:1 (100-F-56: Hazardous and Dangerous Materials Dumping Area)	Shallow	Mercury	1.8	0.3	Confidence in the PRG is low. The basis of the value is the ORNL compendium of plant toxicity thresholds (ES/ER/TM-85/R3). The LOEC was assigned low confidence by the authors because the toxicity threshold in the chosen study was more than two orders of magnitude lower than the next usable study and no primary literature available for effects on plants.	1.6	Confidence in the PRG is moderate to high. The value is a PRG based on estimates of dietary exposure to a deer mouse represented by a regression model for plants and median BAF for invertebrates that included Hanford Site-specific prey tissue samples in the data set. The effect level was appropriately set using a LOAEL. The PRG model assumed all individuals of the population being protected obtained all food and other exposure to COPCs exclusively from the waste site. For all the 100-F/IU area waste sites, this is a conservative assumption. The PRG values are intended to be protective of populations, not individuals, but factors such as population densities and distributions, were not considered in the development of the PRGs. PRGs would have been greater had these factors been considered.	12	17 m2 (183 ft^2) (includes F-56:1 and F-56:2, could not find individual areas)	0.2m (9in)	1/1	<0.0052 to 1.9	<0.017 to 6.3	None	No. The size of the waste site is very small at 183 ft^2 (17 m^2). The home range of the deer mouse is more than 50 times greater (9,670 ft^2/900 m^2; Bowers and Smith, 1979). Employing an AUF would result in a hazard quotient below 1 and just 1 of 12 samples exceeds the wildlife PRG. There is ample unaffected habitat for terrestrial invertebrates available in adjacent area and along the River Corridor. Effects to plants are uncertain given the low confidence in the PRG. If adverse effects did occur, habitat fragmentation in the 100-F Source OU would not be likely given the current level of ecological services the habitat is providing in the current condition and the available habitat refugia nearby (See Section 7.6.3).

Table H-19. Summary of Factors Considered for Scientific Decision Management Process for the 100-F/IU-2/IU-6 OU

Waste Site and Waste Site Description	Decision Unit	COPEC	EPC (mg/kg)	Plant/ Invert-ebrate PRG (mg/kg)	Confidence and Basis	Avian/ Mammal PRG (mg/kg)	Confidence and Basis	# Sampling Locations	Area or Length of Waste Site	Depth of Samples (bgs)	# Results > PRG	Range of Concentrations (mg/kg)	Range of HQ	Data Quality	Carry Waste Site into FS for Remedy Evaluation?
100-F-61 Unknown Stained Soil	Shallow	Mercury	0.69	0.3	Confidence in the PRG is low. The basis of the value is the ORNL compendium of plant toxicity thresholds (ES/ER/TM-85/R3). The LOEC was assigned low confidence by the authors because the toxicity threshold in the chosen study was more than two orders of magnitude lower than the next usable study and no primary literature available for effects on plants.	1.6	Not Exceeded	12	0.8 m^2 (8.6 ft^2)	1.0m (3.3ft)	1	0.0048 to 0.69	0.016 to 2.3	None	No. With only one of twelve samples slightly greater than the plant/invertebrate PRG from an extremely small site, the average exposure to plants/invertebrates would not present a risk. There is ample unaffected habitat for terrestrial invertebrates available in adjacent area and along the River Corridor. Effects to plants are uncertain given the low confidence in the PRG. If adverse effects did occur, habitat fragmentation in the 100-F Source OU would not be likely given the current level of ecological services the habitat is providing in the current condition and the available habitat refugia nearby (See Section 7.6.3). No soil concentrations greater than lowest wildlife PRG for biomagnifying compound.
100-F-9 French Drain - Received Steam Condensation	Shallow Focused	Mercury	0.41	0.3	Confidence in the PRG is low. The basis of the value is the ORNL compendium of plant toxicity thresholds (ES/ER/TM-85/R3). The LOEC was assigned low confidence by the authors because the toxicity threshold in the chosen study was more than two orders of magnitude lower than the next usable study and no primary literature available for effects on plants.	1.6	Not Exceeded	2	2.75 m^2 (29.6 ft^2)	2.1m (7ft)	2	0.38 to 0.41	1.3 to 1.4	None	No. No soil concentrations greater than lowest wildlife PRG for biomagnifying compound. Size of site is small and ample unaffected habitat for invertebrates is available in adjacent areas and along the River Corridor. Effects to plants are uncertain given the low confidence in the PRG. If adverse effects did occur, habitat fragmentation in the 100-F Source OU would not be likely given the current level of ecological services the habitat is providing in the current condition and the available habitat refugia nearby (See Section 7.6.3).
118-F-1 Burial Ground for Reactor Operations	Over-burden	Silver	4.3	3	Confidence in the PRG is High. The basis of the value is a Hanford-specific NOEC for invertebrates published in ECF-HANFORD-11-0158. There is high confidence with respect to a lack of toxicity at this concentration because there was no correlation between silver soil concentration up to this value and the measured response in the bioassays. The PRG is a NOEC set at the highest concentration tested in Hanford Site samples (no LOEC established); thus the concentration at which effects might be observed is unknown.	98	Not Exceeded	17	26,278 m^2 (282,854 ft^2)	5.5m (18ft)	1	<0.26 to 4.3	<0.09 to 1.4	None	No. Soil samples collected from a depth greater than 4.6 m [15 ft] bgs: direct contact within point of compliance is incomplete.

Table H-19. Summary of Factors Considered for Scientific Decision Management Process for the 100-F/IU-2/IU-6 OU

Waste Site and Waste Site Description	Decision Unit	COPEC	EPC (mg/kg)	Plant/ Invert-ebrate PRG (mg/kg)	Confidence and Basis	Avian/ Mammal PRG (mg/kg)	Confidence and Basis	# Sampling Locations	Area or Length of Waste Site	Depth of Samples (bgs)	# Results > PRG	Range of Concentrations (mg/kg)	Range of HQ	Data Quality	Carry Waste Site into FS for Remedy Evaluation?
118-F-7 Inactive Solid Waste Storage Vault for Reactor Parts	Shallow	Molybdenum	2.4	2	Confidence in the PRG is low. The basis of the value is the ORNL compendium of plant toxicity thresholds (ES/ER/TM-85/R3). The value was assigned low confidence by the authors as a result of the limited number of studies available in the published literature and because no primary literature was available for effects on plants. Neuman et al. (1987) reported that phytotoxicity of molybdenum has never been reported in the literature.	5.7	Not Exceeded	4	41 m^2 (441 ft^2)	3m (9.8ft)	1	<0.82 to 2.4	<0.41 to 1.2	None	No. With only one of four samples slightly greater than the plant/invertebrate PRG of low confidence there is no significant risk to either of these communities. This coupled with the small area of the waste site and the depth of the samples collected does not indicate a community level effect. Further, there is ample unaffected habitat for terrestrial invertebrates available in adjacent area and along the River Corridor. For plants, if adverse effects did occur, habitat fragmentation in the 100-F Source OU would not be likely given the current level of ecological services the habitat is providing in the current condition and the available habitat refugia nearby (See Section 7.6.3).
118-F-7 Inactive Solid Waste Storage Vault for Reactor Parts	Staging Pile Area	Copper	552	58	Confidence in the PRG is moderate. The basis is the Hanford Site-specific NOEC for effects on invertebrates based on results of toxicity testing conducted by and interpreted by Ecology (Ecology Publication 11-03-006). There is high confidence with respect to a lack of toxicity at this concentration because there was no correlation between copper soil concentration up to this value and the measured response in the bioassays. The PRG is a NOEC set at the highest concentration tested in Hanford samples (no LOEC established), thus the higher concentration at which effects might be observed is unknown.	193	Confidence in the PRG is moderate to high. The PRG value is based on estimates of dietary exposure to a deer mouse represented by a regression model for invertebrates and median BAF for plants that included Hanford Site-specific prey tissue samples in the data set. The effect level was appropriately set using a LOAEL. The PRG model assumed all individuals of the population being protected obtain all food and other exposure to COPCs exclusively from the waste site. For all the 100-F/IU area waste sites this is a conservative assumption. The PRG values are intended to be protective of populations not individuals but factors such as population densities and distributions were not considered in the development of the PRGs. PRGs would have been greater had these factors been considered.	4	41 m^2 (441 ft^2)	3m (9.8ft)	1/1	11 to 552	0.19 to 9.5	None	No. An elevated concentration at a very small site does not suggest exposure is sufficient to cause an adverse effect to the population of killdeer. The exposure estimate does not include consideration of an AUF such as foraging range. As shown in Appendix H Table H-6, the home ranges of the killdeer of 80,128 m^2 (862,488 ft^2 [Mace, 1971]) is greater than the size of the waste site thus employing an AUF would yield a hazard quotient below 1. The plant/invertebrate PRG is an unbounded NOEC, thus there is uncertainty as to what concentration at the site would result in an adverse risk to either of these communities. There is ample unaffected habitat for terrestrial invertebrates available in adjacent area and along the River Corridor. The maximum observed depth of invertebrates reported at the Hanford Site was 2.7 m (8.9 ft; PNL-2774). Samples at this site were collected below these depths. If adverse effects did occur, habitat fragmentation in the 100-F Source OU would not be likely given the current level of ecological services the habitat is providing in the current condition and the available habitat refugia nearby (See Section 7.6.3).

Table H-19. Summary of Factors Considered for Scientific Decision Management Process for the 100-F/IU-2/IU-6 OU

Waste Site and Waste Site Description	Decision Unit	COPEC	EPC (mg/kg)	Plant/ Invert-ebrate PRG (mg/kg)	Confidence and Basis	Avian/ Mammal PRG (mg/kg)	Confidence and Basis	# Sampling Locations	Area or Length of Waste Site	Depth of Samples (bgs)	# Results > PRG	Range of Concentrations (mg/kg)	Range of HQ	Data Quality	Carry Waste Site into FS for Remedy Evaluation?
118-F-8:4 Underwater Collection, Storage, and Transfer Facility for Irradiated Fuel Elements	Shallow	Mercury	0.53	0.3	Confidence in the PRG is low. The basis of the value is the ORNL compendium of plant toxicity thresholds (ES/ER/TM-85/R3). The LOEC was assigned low confidence by the authors because the toxicity threshold in the chosen study was more than two orders of magnitude lower than the next usable study and no primary literature available for effects on plants.	1.6	Not Exceeded	4	709 m^2 (7632 ft^2)	8m (26ft)	1	0.09 to 0.53	1.0 to 1.8	None	No. Soil samples collected from a depth greater than 4.6 m [15 ft] bgs: direct contact within point of compliance is incomplete.
118-F-8:4 Underwater Collection, Storage, and Transfer Facility for Irradiated Fuel Elements	Shallow	Selenium	1.5	2	Not Exceeded	1.4	Confidence in the PRG is moderate to high. The value is a PRG based on estimates of dietary exposure to a deer mouse represented by a regression model for plants and median BAF for invertebrates that included Hanford Site-specific prey tissue samples in the data set. The effect level was appropriately set using a LOAEL. The PRG model assumed all individuals of the population being protected obtain all food and other exposure to COPCs exclusively from the waste site. For all the 100-F/IU area waste sites this is a conservative assumption. The PRG values are intended to be protective of populations not individuals but factors such as population densities and distributions, were not considered in the development of the PRGs. PRGs would have been greater had these factors been considered.	4	709 m^2 (7632 ft^2)	8m (26ft)	1	<1.2 to 1.5	<0.86 to 1.1	None	No. Soil samples collected from a depth greater than 4.6 m [15 ft] bgs: direct contact within point of compliance is incomplete.

Table H-19. Summary of Factors Considered for Scientific Decision Management Process for the 100-F/IU-2/IU-6 OU

Waste Site and Waste Site Description	Decision Unit	COPEC	EPC (mg/kg)	Plant/ Invert-ebrate PRG (mg/kg)	Confidence and Basis	Avian/ Mammal PRG (mg/kg)	Confidence and Basis	# Sampling Locations	Area or Length of Waste Site	Depth of Samples (bgs)	# Results > PRG	Range of Concentrations (mg/kg)	Range of HQ	Data Quality	Carry Waste Site into FS for Remedy Evaluation?
120-F-1 Trench- Glass Dump Waste Site	Shallow	Selenium	1.8	2	Not Exceeded	1.4	Confidence in the PRG is moderate to high. The value is a PRG based on estimates of dietary exposure to a deer mouse represented by a regression model for plants and median BAF for invertebrates that included Hanford Site-specific prey tissue samples in the data set. The effect level was appropriately set using a LOAEL. The PRG model assumed all individuals of the population being protected obtain all food and other exposure to COPCs exclusively from the waste site. For all the 100-F/IU area waste sites this is a conservative assumption. The PRG values are intended to be protective of populations not individuals but factors such as population densities and distributions, were not considered in the development of the PRGs. PRGs would have been greater had these factors been considered.	21	2,273 m^2 (24,466 ft^2)	6.5m (21ft)	1	<1.5 to <1.9	<1.1 to <1.4	None	No. Soil samples collected from a depth greater than 4.6 m [15 ft] bgs: direct contact within point of compliance is incomplete.

Table H-19. Summary of Factors Considered for Scientific Decision Management Process for the 100-F/IU-2/IU-6 OU

Waste Site and Waste Site Description	Decision Unit	COPEC	EPC (mg/kg)	Plant/ Invert-ebrate PRG (mg/kg)	Confidence and Basis	Avian/ Mammal PRG (mg/kg)	Confidence and Basis	# Sampling Locations	Area or Length of Waste Site	Depth of Samples (bgs)	# Results > PRG	Range of Concentrations (mg/kg)	Range of HQ	Data Quality	Carry Waste Site into FS for Remedy Evaluation?
1607-F3 Septic Tank-Sanitary Sewer System	Shallow	Selenium	4.2	2	Confidence in the PRG is moderate to high. The basis of the value is the site-specific NOEC for plants published in ECF-HANFORD-11-0158. There is high confidence with respect to a lack of toxicity at this concentration because there was no correlation between selenium soil concentration up to this value and the measured response in the bioassays. The PRG is a NOEC set at the highest concentration tested in Hanford Site samples (no LOEC established); thus the concentration at which effects might be observed is unknown.	1.4	Confidence in the PRG is moderate to high. The value is a PRG based on estimates of dietary exposure to a deer mouse represented by a regression model for plants and median BAF for invertebrates that included Hanford Site-specific prey tissue samples in the data set. The effect level was appropriately set using a LOAEL. The PRG model assumed all individuals of the population being protected obtain all food and other exposure to COPCs exclusively from the waste site. For all the 100-F/IU area waste sites this is a conservative assumption. The PRG values are intended to be protective of populations not individuals but factors such as population densities and distributions, were not considered in the development of the PRGs. PRGs would have been greater had these factors been considered.	10	399 m^2 (4,295 ft^2)	Septic Tank: 4m (13ft) Drain Field: 2m (7ft)	1/1	<3.6 to 4.2	<2.6 to 3.0	None	The single detected sample was collected from the base of a drain pipe. The plant/invertebrate PRG is an unbounded NOEC, thus there is uncertainty as to what concentration at the site would result in an adverse risk to either plant or invertebrate communities. There is ample unaffected habitat for terrestrial invertebrates available in adjacent area and along the River Corridor. The exposure estimate does not include consideration of an AUF such as foraging range. The home range of the deer mouse (9,670 ft^2/900 m^2; Bowers and Smith, 1979) is twice the acreage of the site thus employing an AUF would yield a lower HQ. Samples were collected 2 and 4 meters (7 and 13 ft) below ground, deeper than the burrowing depth of small mammals at Hanford (<1 m [3.3 ft] pocket mouse [Cline et al., 1980]). The small size of the site, depth of samples, and low magnitude of exceedance support a recommendation of no further action required.

Table H-19. Summary of Factors Considered for Scientific Decision Management Process for the 100-F/IU-2/IU-6 OU

Waste Site and Waste Site Description	Decision Unit	COPEC	EPC (mg/kg)	Plant/ Invert-ebrate PRG (mg/kg)	Confidence and Basis	Avian/ Mammal PRG (mg/kg)	Confidence and Basis	# Sampling Locations	Area or Length of Waste Site	Depth of Samples (bgs)	# Results > PRG	Range of Concentrations (mg/kg)	Range of HQ	Data Quality	Carry Waste Site into FS for Remedy Evaluation?
1607-F4 Septic Tank-Sanitary Sewer System	Shallow	Mercury	1.2	0.3	Confidence in the PRG is low. The basis of the value is the ORNL compendium of plant toxicity thresholds (ES/ER/TM-85/R3). The LOEC was assigned low confidence by the authors because the toxicity threshold in the chosen study was more than two orders of magnitude lower than the next usable study and no primary literature available for effects on plants.	1.6	Not Exceeded	10	29 m^2 (312 ft^2)	3.2m (10.5ft)	1	<0.01 to 1.2	<0.03 to 4.0	None	No. No soil concentrations greater than lowest wildlife PRG for a biomagnifying compound. Only one of ten samples greater than the plant/invertebrate PRG from a very small site. The average exposure to plants/invertebrates would not present a significant risk. There is ample unaffected habitat for terrestrial invertebrates available in adjacent area and along the River Corridor. The maximum observed depth of invertebrates reported at the Hanford Site was 2.7 m (8.9 ft; PNL-2774). Samples at this site were collected below these depths. Exposure to invertebrates at this site is considered to be insignificant. For plants, if adverse effects did occur, habitat fragmentation in the 100-F/IU OUs would not be likely given the current level of ecological services the habitat is providing in the current condition and the available habitat refugia nearby (See Section 7.6.2). Lastly, samples collected at a depth below the maximum observed plant rooting depth at Hanford (3 m [9.8 ft]; PNL-1948). Any excavation would mix the deeper soil with the overlying soil resulting in a lower exposure concentration.

Table H-19. Summary of Factors Considered for Scientific Decision Management Process for the 100-F/IU-2/IU-6 OU

Waste Site and Waste Site Description	Decision Unit	COPEC	EPC (mg/kg)	Plant/ Invert-ebrate PRG (mg/kg)	Confidence and Basis	Avian/ Mammal PRG (mg/kg)	Confidence and Basis	# Sampling Locations	Area or Length of Waste Site	Depth of Samples (bgs)	# Results > PRG	Range of Concentrations (mg/kg)	Range of HQ	Data Quality	Carry Waste Site into FS for Remedy Evaluation?
1607-F4 Septic Tank-Sanitary Sewer System	Shallow	Selenium	1.6	2	Not Exceeded	1.4	Confidence in the PRG is moderate to high. The value is a PRG based on estimates of dietary exposure to a deer mouse represented by a regression model for plants and median BAF for invertebrates that included Hanford Site-specific prey tissue samples in the data set. The effect level was appropriately set using a LOAEL. The PRG model assumed all individuals of the population being protected obtain all food and other exposure to COPCs exclusively from the waste site. For all the 100-F/IU area waste sites this is a conservative assumption. The PRG values are intended to be protective of populations not individuals but factors such as population densities and distributions, were not considered in the development of the PRGs. PRGs would have been greater had these factors been considered.	10	29 m^2 (312 ft^2)	3.2m (10.5ft)	2	<1.3 to 2.2	<0.93 to 1.6	3 results are flagged with "C" qualifiers	No. The exposure estimate does not include consideration of an AUF such as foraging range. The home range of the deer mouse (9,670 ft^2/900 m^2; Bowers and Smith, 1979) is 30 times greater than the acreage of the site thus employing an AUF would yield a hazard quotient below 1. Samples were collected 3.2 m (10.5 ft) below ground, much deeper than the burrowing depth of small mammals at Hanford (<1 m [3.3 ft] pocket mouse [Cline et al., 1980]). The small size of the site, depth of samples, and low magnitude of exceedance support a recommendation of no further action required. Also, if the sample were to be included in a future excavation, the excavated material with slightly elevated concentrations in one of four samples would be mixed with surrounding unaffected material resulting in exposure below the PRG.
1607-F7 Septic Tank, Tile Field, and Associated Pipeline	Staging Pile Area Focused	Dieldrin	0.023	NA	NA	0.02	Confidence in the value is moderate. The value is based on an SSL calculated for a deer mouse using conservative assumptions including published literature values for tissue accumulation as opposed to using Hanford Site-specific data which could be higher or lower than the literature.	1	89 m^2 (958 ft^2)	0.7m (2.3ft)	1	23	1.15	None	No. The size of the waste site is very small at 958 ft^2 (89 m^2). The home range of the deer mouse is 10 times greater (9,670 ft^2/900 m^2; Bowers and Smith, 1979). Employing an AUF would result in a hazard quotient below 1. Effects to plants are unknown and if adverse effects did occur, habitat fragmentation in the 100-F/IU Source OUs would not be likely given the current level of ecological services the habitat is providing in the current condition and the available habitat refugia nearby (See Section 7.6.3).

Table H-19. Summary of Factors Considered for Scientific Decision Management Process for the 100-F/IU-2/IU-6 OU

Waste Site and Waste Site Description	Decision Unit	COPEC	EPC (mg/kg)	Plant/ Invert-ebrate PRG (mg/kg)	Confidence and Basis	Avian/ Mammal PRG (mg/kg)	Confidence and Basis	# Sampling Locations	Area or Length of Waste Site	Depth of Samples (bgs)	# Results > PRG	Range of Concentrations (mg/kg)	Range of HQ	Data Quality	Carry Waste Site into FS for Remedy Evaluation?
600-351 No Description Found	Shallow Focused	Arsenic	250	128	Confidence in the PRG is moderate. The basis is the Hanford Site-Specific NOEC for effects on plants and invertebrates from Ecology Publication 11-03-006. There is high confidence with respect to a lack of toxicity at this concentration because there was no correlation between arsenic soil concentration up to this value and the measured response in the bioassays. However, the PRG is a NOEC set at the highest concentration tested in Hanford samples, thus the concentration at which effects might be observed is unknown.	127	Confidence in the PRG is moderate to high. The PRG value is based on estimates of dietary exposure to a deer mouse represented by a regression model for invertebrates and median BAF for plants that included Hanford Site-specific prey tissue samples in the data set. The effect level was appropriately set using a LOAEL. The PRG model assumed all individuals of the population being protected obtain all food and other exposure to COPCs exclusively from the waste site. For all the 100-FIU area waste sites this is a conservative assumption. The PRG values are intended to be protective of populations not individuals but factors such as population densities and distributions were not considered in the development of the PRGs. PRGs would have been greater had these factors been considered.	4	14 m^2 (151 ft^2)	1.8m (6ft)	1	49 to 250	0.31 to 1.6	None	No. The size of the waste site is very small at 151 ft^2 (14 m^2). The home range of the deer mouse (9,670 ft^2/900 m^2; Bowers and Smith, 1979) and Great Basin Pocket Mouse (526 m^2 [5663 ft^2]; O'Farrell et al., 1975) are significantly greater than the size of the waste site. Employing an AUF would result in a hazard quotient below 1. Samples were collected 1.8 meters below ground, deeper than the burrowing depth of small mammals at Hanford (<1 m [3.3 ft] pocket mouse [Cline et al., 1980]). The small size of the site, depth of samples, and low magnitude of exceedance indicate no unacceptable risk. Also, if the sample were to be included in a future excavation, the excavated material with slightly elevated concentrations in one of four samples would be mixed with surrounding unaffected material resulting in exposure below the PRG. For plants and invertebrates, the PRG is an unbounded NOEC, thus there is uncertainty as to what concentration at the site would result in an adverse risk to either of these communities. There is ample unaffected habitat for terrestrial invertebrates available in adjacent area and along the River Corridor area. For plants, if adverse effects did occur, habitat fragmentation in the 100-F/IU Source OUs would not be likely given the current level of ecological services the habitat is providing in the current condition and the available habitat refugia nearby (See Section 7.6.3).

Table H-19. Summary of Factors Considered for Scientific Decision Management Process for the 100-F/IU-2/IU-6 OU

Waste Site and Waste Site Description	Decision Unit	COPEC	EPC (mg/kg)	Plant/ Invert-ebrate PRG (mg/kg)	Confidence and Basis	Avian/ Mammal PRG (mg/kg)	Confidence and Basis	# Sampling Locations	Area or Length of Waste Site	Depth of Samples (bgs)	# Results > PRG	Range of Concentrations (mg/kg)	Range of HQ	Data Quality	Carry Waste Site into FS for Remedy Evaluation?
600-351 No Description Found	Shallow Focused	Lead	805	1700	Not Exceeded	156	Confidence in the PRG is high. The value is a PRG based on estimates of dietary exposure to killdeer represented by a regression model for invertebrates that included Hanford Site-specific prey tissue samples in the data set. The effect level was appropriately set using a LOAEL. The PRG model assumed all individuals of the population being protected obtain all food and other exposure to COPCs exclusively from the waste site. For all the 100-F/IU area waste sites this is a conservative assumption. The PRG values are intended to be protective of populations not individuals but factors such as population densities and distributions, were not considered in the development of the PRGs. PRGs would have been greater had these factors been considered.	4	14 m^2 (151 ft^2)	1.8m (6ft)	2	72 to 805	0.46 to 5.2	None	No. The exposure estimate does not include consideration of an AUF such as foraging range. As shown in Appendix H Table H-6, the home ranges of the killdeer of 80,128 m^2 (862,488 ft^2 [Mace, 1971]) is greater than the size of the waste site thus employing an AUF would yield a hazard quotient below 1 and risk at this site is acceptable.
600-176 Paint Materials Dumping Area	Staging Pile Area Footprint_2	Lead	457	1700	Not Exceeded	156	Confidence in the PRG is high. The value is a PRG based on estimates of dietary exposure to killdeer represented by a regression model for invertebrates that included Hanford Site-specific prey tissue samples in the data set. The effect level was appropriately set using a LOAEL. The PRG model assumed all individuals of the population being protected obtain all food and other exposure to COPCs exclusively from the waste site. For all the 100-F/IU area waste sites this is a conservative assumption. The PRG values are intended to be protective of populations not individuals but factors such as population densities and distributions, were not considered in the development of the PRGs. PRGs would have been greater had these factors been considered.	12	1,038 m^2 (11,173 ft^2)	1.5m (5ft)	1	2.5 to 498	.016 to 3.2	None	No. An elevated concentration at a point site does not suggest exposure is sufficient to cause an adverse effect to the population of killdeer. Furthermore, the exposure estimate does not include consideration of an AUF such as foraging range. As shown in Appendix H Table H-6, the home ranges of the killdeer of 80,128 m^2 (862,488 ft^2 [Mace, 1971]) is 75 times greater than the acreage of the site thus employing an AUF would yield a hazard quotient below 1 and risk at this site is acceptable.

Table H-19. Summary of Factors Considered for Scientific Decision Management Process for the 100-F/IU-2/IU-6 OU

Waste Site and Waste Site Description	Decision Unit	COPEC	EPC (mg/kg)	Plant/ Invert-ebrate PRG (mg/kg)	Confidence and Basis	Avian/ Mammal PRG (mg/kg)	Confidence and Basis	# Sampling Locations	Area or Length of Waste Site	Depth of Samples (bgs)	# Results > PRG	Range of Concentrations (mg/kg)	Range of HQ	Data Quality	Carry Waste Site into FS for Remedy Evaluation?
600-296 Sanitary Sewer	Shallow Focused	Barium	741	358	Confidence in the PRG is moderate to high. The basis of the value is the site-specific NOEC for invertebrates published in the RCBRA (DOE/RL-2007-21). There is high confidence with respect to a lack of toxicity at this concentration because there was no correlation between barium soil concentration up to this value and the measured response in the bioassays. The PRG is a NOEC set at the highest concentration tested in Hanford Site samples (no LOEC established); thus the concentration at which effects might be observed is unknown.	1690	Not Exceeded	2	46 m^2 (495 ft^2)	3.6m (12ft)	1	59 to 741	0.16 to 2.1	None	No. For plants and invertebrates, the PRG is an unbounded NOEC, thus there is uncertainty as to what concentration at the site would result in an adverse risk to either of these communities. Size of site is small with ample unaffected habitat for terrestrial invertebrates available in adjacent area and along the River Corridor area. Also, the maximum observed depth of invertebrates reported at the Hanford Site was 2.7 m (8.9 ft; PNL-2774), shallower than the depth the samples were collected. For plants, if adverse effects did occur, habitat fragmentation in the 100-F/IU Source OUs would not be likely given the current level of ecological services the habitat is providing in the current condition and the available habitat refugia nearby (See Section 7.6.3). Also, if the sample were to be included in a future excavation, the excavated material with slightly elevated concentrations in one of four samples would be mixed with surrounding unaffected material resulting in exposure below the PRG.
600-296 Sanitary Sewer	Shallow Focused	Mercury	0.65	0.3	Confidence in the PRG is low. The basis of the value is the ORNL compendium of plant toxicity thresholds (ES/ER/TM-85/R3). The LOEC was assigned low confidence by the authors because the toxicity threshold in the chosen study was more than two orders of magnitude lower than the next usable study and no primary literature available for effects on plants.	1.6	Not Exceeded	2	46 m^2 (495 ft^2)	3.6m (12ft)	1	0.0083 to 0.65	0.028 to 2.2	None	No. No soil concentrations greater than lowest wildlife PRG for biomagnifying compound. Size of site is small with ample unaffected habitat available in adjacent area. If adverse effects did occur, habitat fragmentation in the 100-F/IU Source OUs would not be likely given the current level of ecological services the habitat is providing in the current condition and the available habitat refugia nearby (See Section 7.6.3). Also, if the sample were to be included in a future excavation, the excavated material with slightly elevated concentrations in one of four samples would be mixed with surrounding unaffected material resulting in exposure below the PRG.

Table H-19. Summary of Factors Considered for Scientific Decision Management Process for the 100-F/IU-2/IU-6 OU

Waste Site and Waste Site Description	Decision Unit	COPEC	EPC (mg/kg)	Plant/ Invert-ebrate PRG (mg/kg)	Confidence and Basis	Avian/ Mammal PRG (mg/kg)	Confidence and Basis	# Sampling Locations	Area or Length of Waste Site	Depth of Samples (bgs)	# Results > PRG	Range of Concentrations (mg/kg)	Range of HQ	Data Quality	Carry Waste Site into FS for Remedy Evaluation?
600-146 Metal Materials Dumping Area	Shallow Focused	Copper	475	58	Confidence in the PRG is moderate. The basis is the Hanford Site-specific NOEC for effects on invertebrates based on results of toxicity testing conducted by and interpreted by Ecology (Ecology Publication 11-03-006). There is high confidence with respect to a lack of toxicity at this concentration because there was no correlation between copper soil concentration up to this value and the measured response in the bioassays. The PRG is a NOEC set at the highest concentration tested in Hanford samples (no LOEC established), thus the higher concentration at which effects might be observed is unknown.	193	Confidence in the PRG is moderate to high. The PRG value is based on estimates of dietary exposure to a deer mouse represented by a regression model for invertebrates and median BAF for plants that included Hanford Site-specific prey tissue samples in the data set. The effect level was appropriately set using a LOAEL. The PRG model assumed all individuals of the population being protected obtain all food and other exposure to COPCs exclusively from the waste site. For all the 100-F/IU area waste sites this is a conservative assumption. The PRG values are intended to be protective of populations not individuals but factors such as population densities and distributions were not considered in the development of the PRGs. PRGs would have been greater had these factors been considered.	4	3,947 m^2 (42,485 ft^2)	3.1m (10ft)	1	13 to 475	0.22 to 8.2	None	No. The lowest wildlife PRG was exceeded by a factor of two in one of four samples at a depth of 10 feet. All other wildlife PRGs are greater than the EPC. The exposure estimates do not include consideration of AUFs. As shown in Appendix H Table H-6, the home ranges of the killdeer of 80,128 m^2 (862,488 ft^2 [Mace, 1971]) is greater than the size of the waste site, thus employing an AUF yields a hazard quotient below 1. Also, if the sample were to be included in a future excavation, the excavated material with slightly elevated concentrations in one of four samples would be mixed with surrounding unaffected material resulting in exposure below the PRG. For plants and invertebrates, the PRG is an unbounded NOEC, thus there is uncertainty as to what concentration at the site would result in an adverse risk to either of these communities. There is ample unaffected habitat for terrestrial invertebrates available in adjacent area and along the River Corridor. For plants, if adverse effects did occur, habitat fragmentation in the 100-F/IU Source OUs would not be likely given the current level of ecological services the habitat is providing in the current condition and the available habitat refugia nearby (See Section 7.6.3).
600-146 Metal Materials Dumping Area	Shallow Focused	Nickel	39	38	Confidence in value is moderate to high. The basis is the EPA's Eco-SSL for plants representing the geometric mean of toxicity thresholds from published literature reviewed by a panel of experts selected by EPA. The effects values included six studies that noted EC20s for growth, four MATCs for growth and one MATC for reproduction. The review did not include any toxicity tests conducted at the Hanford site.	247	Not Exceeded	4	3,947 m^2 (42,485 ft^2)	3.1m (10ft)	1	13 to 39	0.34 to 1.03	None	No. With only one of four samples slightly greater than the plant/invertebrate PRG, the average exposure to plants/invertebrates would not present a risk. For plants, if adverse effects did occur, habitat fragmentation in the 100-F/IU Source OUs would not be likely given the current level of ecological services the habitat is providing in the current condition and the available habitat refugia nearby (See Section 7.6.3). No soil concentrations greater than lowest wildlife PRG for biomagnifying compound.

Table H-19. Summary of Factors Considered for Scientific Decision Management Process for the 100-F/IU-2/IU-6 OU

Waste Site and Waste Site Description	Decision Unit	COPEC	EPC (mg/kg)	Plant/ Invert-ebrate PRG (mg/kg)	Confidence and Basis	Avian/ Mammal PRG (mg/kg)	Confidence and Basis	# Sampling Locations	Area or Length of Waste Site	Depth of Samples (bgs)	# Results > PRG	Range of Concentrations (mg/kg)	Range of HQ	Data Quality	Carry Waste Site into FS for Remedy Evaluation?
600-186 Trench - Septic Tanks and Sewage Treatment Plants at the Hanford Construction Camp	Shallow Focused	Mercury	0.85	0.3	Confidence in the PRG is low. The basis of the value is the ORNL compendium of plant toxicity thresholds (ES/ER/TM-85/R3). The LOEC was assigned low confidence by the authors because the toxicity threshold in the chosen study was more than two orders of magnitude lower than the next usable study and no primary literature available for effects on plants.	1.6	Not Exceeded	10	11,712 m^2 (126,067 ft^2)	0.3m (1ft)	2	0.011 to 0.85	0.04 to 2.8	None	No. With only two of ten samples slightly greater than the plant/invertebrate PRG, the average exposure to plants/invertebrates would not present a risk. There is ample unaffected habitat for terrestrial invertebrates available in adjacent area and along the River Corridor. For plants, if adverse effects did occur, habitat fragmentation in the 100-F/IU Source OUs would not be likely given the current level of ecological services the habitat is providing in the current condition and the available habitat refugia nearby (See Section 7.6.3). No soil concentrations greater than lowest wildlife PRG for biomagnifying compound.
600-186 Trench - Septic Tanks and Sewage Treatment Plants at the Hanford Construction Camp	Shallow Focused	Silver	22	3	Confidence in the PRG is High. The basis of the value is a Hanford-specific NOEC for invertebrates published in ECF-HANFORD-11-0158. There is high confidence with respect to a lack of toxicity at this concentration because there was no correlation between silver soil concentration up to this value and the measured response in the bioassays. The PRG is a NOEC set at the highest concentration tested in Hanford Site samples (no LOEC established); thus the concentration at which effects might be observed is unknown.	98	Not Exceeded	10	11,712 m^2 (126,067 ft^2)	0.3m (1ft)	1	<0.14 to 22	<0.05 to 7.3	None	No. With only one of ten samples slightly greater than the plant/invertebrate PRG, the average exposure to plants/invertebrates would not present a risk. The PRG is an unbounded NOEC, thus there is uncertainty as to what concentration at the site would result in an adverse risk to either of these communities. There is ample unaffected habitat for terrestrial invertebrates available in adjacent area and along the River Corridor.

Table H-19. Summary of Factors Considered for Scientific Decision Management Process for the 100-F/IU-2/IU-6 OU

Waste Site and Waste Site Description	Decision Unit	COPEC	EPC (mg/kg)	Plant/ Invert-ebrate PRG (mg/kg)	Confidence and Basis	Avian/ Mammal PRG (mg/kg)	Confidence and Basis	# Sampling Locations	Area or Length of Waste Site	Depth of Samples (bgs)	# Results > PRG	Range of Concentrations (mg/kg)	Range of HQ	Data Quality	Carry Waste Site into FS for Remedy Evaluation?
600-186 Trench - Septic Tanks and Sewage Treatment Plants at the Hanford Construction Camp	Shallow Focused	Vanadium	141	89	Confidence in the PRG is High. The basis of the value is a Hanford Site-specific NOEC for plants published in ECF-HANFORD-11-0158. There is high confidence with respect to a lack of toxicity at this concentration because there was no correlation between vanadium soil concentration up to this value and the measured response in the bioassays. The PRG is a NOEC set at the highest concentration tested in Hanford Site samples (no LOEC established); thus the concentration at which effects might be observed is unknown.	43	Confidence in the PRG is moderate. The value is a PRG based on estimates of dietary exposure to a killdeer using a regression model for invertebrates that included Hanford Site-specific prey tissue samples in the data set. The effect level was appropriately set using a LOAEL. The PRG model assumed all individuals of the population being protected obtained all food and other exposure to COPCs exclusively from the waste site. For all the 100-F/IU area waste sites this is a conservative assumption. The PRG values are intended to be protective of populations, not individuals, but factors such as population densities and distributions were not considered in the development of the PRGs. PRGs would have been greater had these factors been considered.	10	11,712 m^2 (126,067 ft^2)	0.3m (1ft)	8	41 to 141	0.95 to 3.3	None	No. No known sources of vanadium. The EPC exceeds the killdeer, California quail and Western Meadowlark PRGs. The exposure estimates do not include consideration of AUFs. The home ranges of the killdeer of 80,128 m^2 (862,488 ft^2 [Mace, 1971]), meadowlark (30,351 m^2; Lanyon 1956), and quail (105,218m^2; CWHR, 2012) are greater than the size of the waste site; employing AUFs yields hazard quotients below 1. The PRG is an unbounded NOEC, thus there is uncertainty as to what concentration at the site would result in an adverse risk. There is ample unaffected habitat for terrestrial invertebrates available in adjacent area and along the River Corridor. For plants, if adverse effects did occur, habitat fragmentation in the 100-F/IU Source OUs would not be likely given the current level of ecological services the habitat is providing in the current condition and the available habitat refugia nearby (See Section 7.6.3).
600-202 Miscellaneous Trash/Debris Burn and Burial Pits	Shallow Focused	Copper	88	58	Confidence in the PRG is moderate. The basis is the Hanford Site-specific NOEC for effects on invertebrates based on results of toxicity testing conducted by and interpreted by Ecology (Ecology Publication 11-03-006). There is high confidence with respect to a lack of toxicity at this concentration because there was no correlation between copper soil concentration up to this value and the measured response in the bioassays. The PRG is a NOEC set at the highest concentration tested in Hanford samples (no LOEC established), thus the higher concentration at which effects might be observed is unknown.	193	Not Exceeded	4	18, 999 m^2 (204,504 ft^2)	0.6m (2ft)	1	15 to 88	0.25 to 1.5	None	No. With only one of four samples slightly greater than the plant/invertebrate PRG, the average exposure to plants/invertebrates would not present a risk. For invertebrates, the PRG is an unbounded NOEC, thus there is uncertainty as to what concentration at the site would result in an adverse risk. There is ample unaffected habitat for terrestrial invertebrates available in adjacent area and along the River Corridor. For plants, if adverse effects did occur, habitat fragmentation in the 100-F/IU Source OUs would not be likely given the current level of ecological services the habitat is providing in the current condition and the available habitat refugia nearby (See Section 7.6.3). No soil concentrations greater than lowest wildlife PRG for biomagnifying compound.

Table H-19. Summary of Factors Considered for Scientific Decision Management Process for the 100-F/IU-2/IU-6 OU

Waste Site and Waste Site Description	Decision Unit	COPEC	EPC (mg/kg)	Plant/ Invert-ebrate PRG (mg/kg)	Confidence and Basis	Avian/ Mammal PRG (mg/kg)	Confidence and Basis	# Sampling Locations	Area or Length of Waste Site	Depth of Samples (bgs)	# Results > PRG	Range of Concentrations (mg/kg)	Range of HQ	Data Quality	Carry Waste Site into FS for Remedy Evaluation?
600-202 Miscellaneous Trash/Debris Burn and Burial Pits	Shallow Focused	Lead	278	1700	Not Exceeded	156	Confidence in the PRG is high. The value is a PRG based on estimates of dietary exposure to killdeer represented by a regression model for invertebrates that included Hanford Site-specific prey tissue samples in the data set. The effect level was appropriately set using a LOAEL. The PRG model assumed all individuals of the population being protected obtain all food and other exposure to COPCs exclusively from the waste site. For all the 100-F/IU area waste sites this is a conservative assumption. The PRG values are intended to be protective of populations not individuals but factors such as population densities and distributions, were not considered in the development of the PRGs. PRGs would have been greater had these factors been considered.	5	18,999 m^2 (204,504 ft^2)	0.6m (2ft)	1	0.067 to 278	$4.3E^{-4}$ to 1.8	None	No. The lowest wildlife PRG was exceeded by less than a factor of two in one of five samples. All other wildlife PRGs are greater than the EPC. The exposure estimates do not include consideration of AUFs. The home ranges of the killdeer of 80,128 m^2 (862,488 ft^2 [Mace, 1971]) is almost four times the size of the waste site, thus employing an AUF yields hazard quotients below 1. Also, if the sample were to be included in a future excavation, the excavated material with slightly elevated concentrations in one of five samples would be mixed with surrounding unaffected material resulting in exposure below the PRG.
600-205 Domestic Refuse Dumping Area	Shallow Focused	Vanadium	86	89	Not Exceeded	43	Confidence in the PRG is moderate. The value is a PRG based on estimates of dietary exposure to a killdeer using a regression model for invertebrates that included Hanford Site-specific prey tissue samples in the data set. The effect level was appropriately set using a LOAEL. The PRG model assumed all individuals of the population being protected obtained all food and other exposure to COPCs exclusively from the waste site. For all the 100-F/IU area waste sites this is a conservative assumption. The PRG values are intended to be protective of populations, not individuals, but factors such as population densities and distributions were not considered in the development of the PRGs. PRGs would have been greater had these factors been considered.	12	23,568 m^2 (253,684 ft^2)	3.7m (12ft)	12	53 to 86	1.2 to 2.0	None	No. The EPC is essentially at the Hanford site background of 85 mg/kg. The lowest wildlife PRG was exceeded only by a factor of two. All other wildlife PRGs are greater than the EPC, except for the CA quail. The exposure estimates do not include consideration of AUFs. The home ranges of the killdeer of 80,128 m^2 (862,488 ft^2 [Mace, 1971]) and the CA quail (>105,000 m^2; CWHR, 2012) are significantly greater than the acreage of the site thus employing an AUF yields hazard quotients below 1.

Table H-19. Summary of Factors Considered for Scientific Decision Management Process for the 100-F/IU-2/IU-6 OU

Waste Site and Waste Site Description	Decision Unit	COPEC	EPC (mg/kg)	Plant/ Invert-ebrate PRG (mg/kg)	Confidence and Basis	Avian/ Mammal PRG (mg/kg)	Confidence and Basis	# Sampling Locations	Area or Length of Waste Site	Depth of Samples (bgs)	# Results > PRG	Range of Concentrations (mg/kg)	Range of HQ	Data Quality	Carry Waste Site into FS for Remedy Evaluation?
600-3 Disposal Site for Railroad Yard Maintenance Shop	Shallow Focused	Barium	841	358	Confidence in the PRG is moderate to high. The basis of the value is the site-specific NOEC for invertebrates published in the RCBRA (DOE/RL-2007-21). There is high confidence with respect to a lack of toxicity at this concentration because there was no correlation between barium soil concentration up to this value and the measured response in the bioassays. The PRG is a NOEC set at the highest concentration tested in Hanford Site samples (no LOEC established); thus the concentration at which effects might be observed is unknown.	1690	Not Exceeded	17	113,856 m^2 (1,225,536 ft^2)	unknown	1	0.50 to 841	0.0014 to 2.3	None	No. With one of seventeen samples slightly greater than the plant and invertebrate PRGs, the average exposure to plants/invertebrates would not present a risk. The PRG is an unbounded NOEC, thus there is uncertainty as to what concentration at the site would result in an adverse risk to either of these communities. There is ample unaffected habitat for terrestrial invertebrates available in adjacent area and along the River Corridor. For plants, if adverse effects did occur, habitat fragmentation in the 100-F/IU Source OUs would not be likely given the current level of ecological services the habitat is providing in the current condition and the available habitat refugia nearby (See Section 7.6.3).
600-3 Disposal Site for Railroad Yard Maintenance Shop	Shallow Focused	Copper	152	58	Confidence in the PRG is moderate. The basis is the Hanford Site-specific NOEC for effects on invertebrates based on results of toxicity testing conducted by and interpreted by Ecology (Ecology Publication 11-03-006). There is high confidence with respect to a lack of toxicity at this concentration because there was no correlation between copper soil concentration up to this value and the measured response in the bioassays. The PRG is a NOEC set at the highest concentration tested in Hanford samples (no LOEC established), thus the higher concentration at which effects might be observed is unknown.	193	Not Exceeded	16	113,856 m^2 (1,225,536 ft^2)	unknown	1	8.9 to 152	0.15 to 2.6	None	No. With one of sixteen samples slightly greater than the plant/invertebrate PRG, the average exposure to plants and invertebrates would not present a risk. The invertebrate PRG is an unbounded NOEC, thus there is uncertainty as to what concentration at the site would result in an adverse risk. There is ample unaffected habitat for terrestrial invertebrates available in adjacent area and along the River Corridor. For plants, if adverse effects did occur, habitat fragmentation in the 100-F/IU Source OUs would not be likely given the current level of ecological services the habitat is providing in the current condition and the available habitat refugia nearby (See Section 7.6.3).

Table H-19. Summary of Factors Considered for Scientific Decision Management Process for the 100-F/IU-2/IU-6 OU

Waste Site and Waste Site Description	Decision Unit	COPEC	EPC (mg/kg)	Plant/ Invert-ebrate PRG (mg/kg)	Confidence and Basis	Avian/ Mammal PRG (mg/kg)	Confidence and Basis	# Sampling Locations	Area or Length of Waste Site	Depth of Samples (bgs)	# Results > PRG	Range of Concentrations (mg/kg)	Range of HQ	Data Quality	Carry Waste Site into FS for Remedy Evaluation?
600-3 Disposal Site for Railroad Yard Maintenance Shop	Shallow Focused	Lead	1640	1700	Not Exceeded	156	Confidence in the PRG is high. The value is a PRG based on estimates of dietary exposure to killdeer represented by a regression model for invertebrates that included Hanford Site-specific prey tissue samples in the data set. The effect level was appropriately set using a LOAEL. The PRG model assumed all individuals of the population being protected obtain all food and other exposure to COPCs exclusively from the waste site. For all the 100-F/IU area waste sites this is a conservative assumption. The PRG values are intended to be protective of populations not individuals but factors such as population densities and distributions, were not considered in the development of the PRGs. PRGs would have been greater had these factors been considered.	17	113,856 m^2 (1,225,536 ft^2)	unknown	2	3.3 to 1,640	0.02 to 11	None	No. The EPC (represented by the maximum concentration) exceeds the killdeer, CA quail, and meadowlark PRGs. The average exposure would be significantly lower (average = 137 mg/kg) and below all wildlife PRGs. Also, if the samples were to be included in a future excavation, the excavated material with slightly elevated concentrations in two of 17 samples would be mixed with surrounding unaffected material resulting in exposure below the PRG.
600-3 Disposal Site for Railroad Yard Maintenance Shop	Staging Pile Area Footprint Focused	Lead	236	1700	Not Exceeded	156	Confidence in the PRG is high. The value is a PRG based on estimates of dietary exposure to killdeer represented by a regression model for invertebrates that included Hanford Site-specific prey tissue samples in the data set. The effect level was appropriately set using a LOAEL. The PRG model assumed all individuals of the population being protected obtain all food and other exposure to COPCs exclusively from the waste site. For all the 100-F/IU area waste sites this is a conservative assumption. The PRG values are intended to be protective of populations not individuals but factors such as population densities and distributions, were not considered in the development of the PRGs. PRGs would have been greater had these factors been considered.	2	113,856 m^2 (1,225,536 ft^2)	unknown	1	38 to 236	0.24 to 1.5	None	No. The lowest wildlife PRG was exceeded by less than a factor of two in one sample. All other wildlife PRGs are greater than the EPC. Population level risk is not expected. Population density data for killdeer ranges from 11 to 100 pairs per 100 ha (247 ac) (Nol and Lambert, 1984; Cadman et al., 1987). At that density, the site would be occupied by no more than 11 pairs of killdeer, and just a portion of the population found across the Hanford Plateau. Also, exposure just at the area of the elevated concentration is unlikely. If the sample were to be included in a future excavation, the excavated material with slightly elevated concentrations in one of two samples would be mixed with surrounding unaffected material resulting in exposure below the PRG.

Table H-19. Summary of Factors Considered for Scientific Decision Management Process for the 100-F/IU-2/IU-6 OU

Waste Site and Waste Site Description	Decision Unit	COPEC	EPC (mg/kg)	Plant/ Invert-ebrate PRG (mg/kg)	Confidence and Basis	Avian/ Mammal PRG (mg/kg)	Confidence and Basis	# Sampling Locations	Area or Length of Waste Site	Depth of Samples (bgs)	# Results > PRG	Range of Concentrations (mg/kg)	Range of HQ	Data Quality	Carry Waste Site into FS for Remedy Evaluation?
600-322 Carbon Steel Pipe with a Diamond Plate Cover	Shallow Focused	Molybdenum	4.3	2	Confidence in the PRG is low. The basis of the value is the ORNL compendium of plant toxicity thresholds (ES/ER/TM-85/R3). The value was assigned low confidence by the authors as a result of the limited number of studies available in the published literature and because no primary literature was available for effects on plants. Neuman et al. (1987) reported that phytotoxicity of molybdenum has never been reported in the literature.	5.7	Not Exceeded	2	3.2 m^2 (34.5 ft^2)	0.3m (1ft)	1	<0.26 to 4.3	<0.13 to 2.2	None	No. Size of site is small with ample unaffected habitat for terrestrial invertebrates available in adjacent area and along the River Corridor. For plants, if adverse effects did occur, habitat fragmentation in the 100-F/IU Source OUs would not be likely given the current level of ecological services the habitat is providing in the current condition and the available habitat refugia nearby (See Section 7.6.3).
600-323 Bermed Area with Coal Cinders	Shallow Focused	Barium	549	358	Confidence in the PRG is moderate to high. The basis of the value is the site-specific NOEC for invertebrates published in the RCBRA (DOE/RL-2007-21). There is high confidence with respect to a lack of toxicity at this concentration because there was no correlation between barium soil concentration up to this value and the measured response in the bioassays. The PRG is a NOEC set at the highest concentration tested in Hanford Site samples (no LOEC established); thus the concentration at which effects might be observed is unknown.	1690	Not Exceeded	5	1,152 m^2 (12,400 ft^2)	2.1m (7ft)	2	71 to 549	0.20 to 1.5	None	No. The PRG is an unbounded NOEC, thus there is uncertainty as to what concentration at the site would result in an adverse risk to either plant or invertebrate communities. There is ample unaffected habitat for terrestrial invertebrates available in adjacent area and along the River Corridor. For plants, if adverse effects did occur, habitat fragmentation in the 100-F/IU Source OUs would not be likely given the current level of ecological services the habitat is providing in the current condition and the available habitat refugia nearby (See Section 7.6.3).
600-323 Bermed Area with Coal Cinders	Shallow Focused	Boron	34	29	Confidence in the PRG is moderate to high. The basis of the value is the Hanford Site-specific NOEC for plants published in the RCBRA (DOE/RL-2007-21). There is high confidence with respect to a lack of toxicity at this concentration because there was no correlation between boron soil concentration up to this value and the measured response in the bioassays. The PRG is a NOEC set at the highest concentration tested in Hanford samples (no LOEC established), thus the concentration at which effects might be observed is unknown.	32	Not Exceeded	5	1,152 m^2 (12,400 ft^2)	2.1m (7ft)	1	3.1 to 34	0.10 to 1.1	None	No. With only one of five samples only slightly greater than the plant/invertebrate PRG, the average exposure to plants/invertebrates would not present a risk. The plant/invertebrate PRG is an unbounded NOEC, thus there is uncertainty as to what concentration at the site would result in an adverse risk to either plant or invertebrate communities. There is ample unaffected habitat for terrestrial invertebrates available in adjacent area and along the River Corridor. For plants, if adverse effects did occur, habitat fragmentation in the 100-F/IU Source OUs would not be likely given the current level of ecological services the habitat is providing in the current condition and the available habitat refugia nearby (See Section 7.6.3).

Table H-19. Summary of Factors Considered for Scientific Decision Management Process for the 100-F/IU-2/IU-6 OU

Waste Site and Waste Site Description	Decision Unit	COPEC	EPC (mg/kg)	Plant/ Invert-ebrate PRG (mg/kg)	Confidence and Basis	Avian/ Mammal PRG (mg/kg)	Confidence and Basis	# Sampling Locations	Area or Length of Waste Site	Depth of Samples (bgs)	# Results > PRG	Range of Concentrations (mg/kg)	Range of HQ	Data Quality	Carry Waste Site into FS for Remedy Evaluation?
600-323 Bermed Area with Coal Cinders	Shallow Focused	Selenium	2.2	2	Confidence in the PRG is moderate to high. The basis of the value is the site-specific NOEC for plants published in ECF-HANFORD-11-0158. There is high confidence with respect to a lack of toxicity at this concentration because there was no correlation between selenium soil concentration up to this value and the measured response in the bioassays. The PRG is a NOEC set at the highest concentration tested in Hanford Site samples (no LOEC established); thus the concentration at which effects might be observed is unknown.	1.4	Confidence in the PRG is moderate to high. The value is a PRG based on estimates of dietary exposure to a deer mouse represented by a regression model for plants and median BAF for invertebrates that included Hanford Site-specific prey tissue samples in the data set. The effect level was appropriately set using a LOAEL. The PRG model assumed all individuals of the population being protected obtain all food and other exposure to COPCs exclusively from the waste site. For all the 100-F/IU area waste sites this is a conservative assumption. The PRG values are intended to be protective of populations not individuals but factors such as population densities and distributions, were not considered in the development of the PRGs. PRGs would have been greater had these factors been considered.	5	1,152 m^2 (12,400 ft^2)	2.1m (7ft)	1	<0.82 to 2.2	<1.4 to 1.6	None	No. Only 1 of 5 samples slightly exceeded the plant/invertebrate and wildlife PRGs. An average exposure would be below both PRGs. The plant/invertebrate PRG is an unbounded NOEC, thus there is uncertainty as to what concentration at the site would result in an adverse risk to either plant or invertebrate communities. There is ample unaffected habitat for terrestrial invertebrates available in adjacent area and along the River Corridor. For plants, if adverse effects did occur, habitat fragmentation in the 100-F/IU Source OUs would not be likely given the current level of ecological services the habitat is providing in the current condition and the available habitat refugia nearby (See Section 7.6.3). The lowest wildlife PRG was exceeded by less than a factor of two in one sample. All other wildlife PRGs are greater than the EPC. The exposure estimates do not include consideration of AUFs. The EPC is less than twice the PRGs for small mammals. At roughly 0.11 hectares (<0.4 acres), only individual not population level effects would be expected. In 1976, Hedlund and Rogers (BNWL-2181) reported the population density for the Great Basin pocket mouse in the 200 Area averaged 27 individuals per hectare. Further, samples were collected 3 m (10 ft) below ground, much deeper than the burrowing depth of small mammals at the Hanford Site (<1 m [3.3 ft] pocket mouse [Cline et al., 1980]). Direct exposure at this depth is expected to be minimal and the number of individuals exposed and experiencing an adverse effected would not result in population level effects. If the sample were to be included in a future excavation, the excavated material with slightly elevated concentrations in one of two samples would be mixed with surrounding unaffected material resulting in exposure below the PRG.

Table H-19. Summary of Factors Considered for Scientific Decision Management Process for the 100-F/IU-2/IU-6 OU

Waste Site and Waste Site Description	Decision Unit	COPEC	EPC (mg/kg)	Plant/ Invert-ebrate PRG (mg/kg)	Confidence and Basis	Avian/ Mammal PRG (mg/kg)	Confidence and Basis	# Sampling Locations	Area or Length of Waste Site	Depth of Samples (bgs)	# Results > PRG	Range of Concentrations (mg/kg)	Range of HQ	Data Quality	Carry Waste Site into FS for Remedy Evaluation?
600-334:1 (600-334: Process Unit/Plant)	Shallow Focused	Mercury	1.9	0.3	Confidence in the PRG is low. The basis of the value is the ORNL compendium of plant toxicity thresholds (ES/ER/TM-85/R3). The LOEC was assigned low confidence by the authors because the toxicity threshold in the chosen study was more than two orders of magnitude lower than the next usable study and no primary literature available for effects on plants.	1.6	Confidence in the PRG is moderate to high. The value is a PRG based on estimates of dietary exposure to a deer mouse represented by a regression model for plants and median BAF for invertebrates that included Hanford Site-specific prey tissue samples in the data set. The effect level was appropriately set using a LOAEL. The PRG model assumed all individuals of the population being protected obtained all food and other exposure to COPCs exclusively from the waste site. For all the 100-F/IU Area waste sites, this is a conservative assumption. The PRG values are intended to be protective of populations, not individuals, but factors such as population densities and distributions, were not considered in the development of the PRGs. PRGs would have been greater had these factors been considered.	5	1,578 m^2 (16,986 ft^2) (included 334:1 and :2).	1.5m (5ft)	2/1	0.014 to 1.9	0.05 to 6.3	None	No. Only 2 of 5 samples exceeded the plant/invertebrate PRG given low confidence by the authors. For plants, if adverse effects did occur, habitat fragmentation in the 100-F/IU OUs would not be likely given the current level of ecological services the habitat is providing in the current condition and the available habitat refugia nearby (See Section 7.6.3). Only one sample in a small waste site greater than the wildlife PRG. An average exposure would be below the wildlife PRG. The EPC is less than twice the PRGs for small mammals. At roughly 0.15 hectares (0.4 acres), only individual not population level effects would be expected. In 1976, Hedlund and Rogers (BNWL-2181) reported the population density for the Great Basin pocket mouse in the 200 Area averaged 27 individuals per hectare. Further, samples were collected 3 m (10 ft) below ground, much deeper than the burrowing depth of small mammals at the Hanford Site (<1 m [3.3 ft] pocket mouse [Cline et al., 1980]). Direct exposure at this depth is expected to be minimal and the number of individuals exposed and experiencing an adverse effected would not result in population level effects. If the samples were to be included in a future excavation, the excavated material with slightly elevated concentrations in two of five samples would be mixed with surrounding unaffected material resulting in exposure similar to the PRG.

Table H-19. Summary of Factors Considered for Scientific Decision Management Process for the 100-F/IU-2/IU-6 OU

Waste Site and Waste Site Description	Decision Unit	COPEC	EPC (mg/kg)	Plant/ Invert-ebrate PRG (mg/kg)	Confidence and Basis	Avian/ Mammal PRG (mg/kg)	Confidence and Basis	# Sampling Locations	Area or Length of Waste Site	Depth of Samples (bgs)	# Results > PRG	Range of Concentrations (mg/kg)	Range of HQ	Data Quality	Carry Waste Site into FS for Remedy Evaluation?

Sources: Complete citations for the following references are listed in the main text of this appendix.

BNWL-2181, *Characterization of Small Mammal Populations Inhabiting the B-C Cribs Environs*.

Bowers and Smith, 1979, "Differential Habitat Utilization by Sexes of the Deer Mouse, *Peromyscus maniculatus*."

Cadman et al., 1987, *Atlas of the Breeding Birds of Ontario*

Cline et al., 1980, "Loose Rock as Biobarriers in Shallow Land Burial."

DOE/RL-2007-21, *River Corridor Baseline Risk Assessment, Volume I: Ecological Risk Assessment*.

ECF-HANFORD-11-0158, *Tier 2 Terrestrial Plant and Invertebrate Preliminary Remediation Goals (PRGs) for Nonradionuclides for Use at the Hanford Site*

Ecology Publication 11-03-006, *Ecological Soil Screening Levels for Arsenic and Lead in the Tacoma Smelter Plume Footprint and Hanford Site Old Orchards Ecology*.

ES/ER/TM-85/R3, *Toxicological Benchmarks for Screening Contaminants of Potential Concern for Effects on Terrestrial Plants: 1997 Revision*

Lanyon, W.E., 1994, "Western Meadowlark (*Sturnella neglecta*)," *The Birds of North America*.

Mace, Terrence R., 1971, *Nest Dispersion and Productivity of Killdeers (Charadrium vociferous)*.

Neuman et al., 1987, "Copper and Molybdenum," *Reclaiming Mine Soils and Overburden in the Western United States: Analytical Parameters and Procedures*.

Nol and Lambert, 1984, "Comparison of Killdeers, *Charadrius vociferus*, Breeding in Mainland and Peninsular Sites in Southern Ontario."

PNL-1948, *Radioactivity Associated with Biota and Soils of the 216-A-24 Crib*.

Note: Analytical results flagged with a "C" qualifier indicate that analyte was detected in both the sample and the associated QC blank.

AUF = area use factor
BAF = bioaccumulation factor
Eco-SSL = ecological soil screening level
EPA = U.S. Environmental Protection Agency
EPC = exposure point concentration
HQ = hazard quotient
MATC = maximum acceptable toxicant concentration
ND = nondetect
NOEC = no observed effect level
ORNL = Oak Ridge National Laboratory
PRG = preliminary remediation goal
RCBRA = River Corridor Baseline Risk Assessment

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H3 Flora and Fauna Occurrence

This section includes a brief discussion of the fauna occurring or potentially occurring on the Hanford Site as referenced in Chapter 3 of this report. Table H-20 contains the functional type, scientific name, common name, habitat type and whether data is available to identify the species at the Hanford Site. Table H-21 presents the federal and state status of the threatened and endangered flora and fauna.

Wildlife use of habitat overlaps considerably between the riparian and upland zones. Use of the riparian zone is likely higher than that of the upland zone associated with the *Comprehensive Environmental Response, Compensation, and Liability Act of 1980* (CERCLA) waste sites because of its proximity to the Columbia River. River access results in greater species diversity and the presence of higher density and higher stature vegetation that remains productive over a longer period of time (*River Corridor Baseline Risk Assessment, Volume I: Ecological Risk Assessment* [DOE/RL-2007-21], hereinafter called RCBRA). Species lists have been compiled for the major classes of vertebrates that have been observed on the Hanford Site or within the Hanford Reach of the Columbia River and include 46 species of mammals, 145 species of birds, 10 species of reptiles, 5 species of amphibians, and more than 45 species of fish (*Hanford Site National Environmental Policy Act (NEPA) Characterization* [PNNL-6415]). For invertebrates, a total of 1,509 species-level identifications have been completed, and the collection of 40,000 specimens has resulted in the identification of 43 new taxa and 142 new findings in the State of Washington (*Biodiversity Inventory and Analysis of the Hanford Site Final Report 1994-1999* [Soll et al., 1999]). The high diversity of insect species on the Hanford Site reflects the size, complexity, and relatively undisturbed quality of the shrub-steppe habitat. Table H-21 presents an extensive list of species known or potentially occurring on the Hanford Site classified by habitat type.
Mammals of the upland environment that might be found in and adjacent to the 100 and 300 Areas include mule deer (*Odocoileus hemionus*), badger (*Taxidea taxus*), coyote (*Canis latrans*), Great Basin pocket mouse (*Perognathus parvus*), northern pocket gopher (*Thomomys talpoides*), black-tailed jackrabbit (*Lepus californicus*), and cottontail rabbit (*Sylvilagus nuttalii*) (*100 Areas CERCLA Ecological Investigations* [WHC-EP-0620]). The abundance of these species and the occurrence of others vary according to the soil type and vegetative community. While other large mammals, such as elk (*Cervus elaphus*), are infrequently observed in the 100 and 300 Areas upland reactor areas, the number of individual large mammals present per unit area may increase as habitat quality and shrub cover improve through natural recovery and waste site restoration. Some mammals common to the upland environment are also likely to use and inhabit the riparian environment, including the western harvest mouse (*Reithrodontomys megalotis*), the Great Basin pocket mouse (*Perognathus parvus*), and the deer mouse (*Peromyscus maniculatus*) (*Synthesis of Ecological Data Collected in the Riparian and Riverine Environments of the Hanford Reach* [PNNL-14516]). A complete list of mammals observed and expected in all habitats of the 100 Area is provided in *100 Areas CERCLA Ecological Investigations* (WHC-EP-0620). *Hanford Site National Environmental Policy Act (NEPA) Characterization* (PNNL-6415) presents a complete listing of Hanford Site wildlife species.

Several species of birds present in the upland zones rely on structures such as buildings, fences, and utility poles for some of their habitat needs. Raptors, such as red-tailed hawk (*Buteo jamaicensis*), are present, and frequently nest on buildings, utility poles and towers, and trees along the river. Nonvegetated areas provide nesting habitat for nighthawks (*Chordeiles minor*) and killdeer (*Charadrius vociferus*). Canada geese (*Branta canadensis*) use open cheatgrass areas for winter grazing. Following restoration, improvements in shrub coverage will provide important habitat for native shrub-steppe bird species such as the horned lark (*Eremophila alpestris*), western meadowlark (*Sturnella neglecta*), savannah sparrow (*Passerculus sandwichensis*), loggerhead shrike (*Lanius ludovicianus*), and possibly sage sparrow (*Amphispiza belli*). Raptors will continue to be present, but as the shrubs develop and the open grassy areas shrink in size, wintering geese will likely avoid the area, preferring the cheatgrass areas associated

with nearby abandoned farm fields and orchards. A list of bird species observed in the 100 Area is available in *100 Areas CERCLA Ecological Investigations* (WHC-EP-0620). A catalogue of Hanford Site avian species is presented in *Hanford Site National Environmental Policy Act (NEPA) Characterization* (PNNL-6415).

Synthesis of Ecological Data Collected in the Riparian and Riverine Environments of the Hanford Reach (PNNL-14516) provides information on bird populations with respect to riparian vegetation. Location data are available in the electronic Environmental Monitoring and Compliance Project database managed by PNNL. Research efforts have assessed winter bird populations in cottonwood/willow (*Populus/Salix*) communities of the Columbia River shoreline ("A Vagrant Occurrence of the Black Phoebe in Southeastern Washington" [Rickard, 1964]; "Comparison of Winter Bird Populations After a Decade," [Rickard and Rickard, 1972]), and quantified shorebird response to water fluctuations in the Columbia River nearshore environment ("Avian Interactions with Mid-Columbia River Water Level Fluctuations" [Books, 1985]). The information gathered during these research efforts has been used to document the status and ecology of the Hanford Site's avian wildlife.

Common reptiles found in upland environments at the Hanford Site include the rattlesnake (*Crotalus viridis*), gopher snake (*Pituophis melanoleucus*), yellow-bellied racer (*Coluber constrictor*), and side blotch lizard (*Uta stansburiana*) (*Habitat Types on the Hanford Site: Wildlife and Plant Species of Concern* [PNL-8942]; *A Synthesis of Ecological Data from the 100 Areas of the Hanford Site* [WHC-EP-0601]). A variety of snakes common to the upland areas may also use the riparian habitat. Other reptiles that may be found in the riparian zone include the western terrestrial garter snake (*Thamnophis sirtalis*) and the painted turtle (*Chrysemys picta*) (*Herpetofauna of the Hanford Nuclear Reservation, Grant, Franklin and Benton Counties, Washington* [Hallock, 1998]; *Synthesis of Ecological Data Collected in the Riparian and Riverine Environments of the Hanford Reach* [PNNL-14516]). Amphibians in the riparian and nearshore environments of the Hanford Reach include mostly Woodhouse's toads (*Bufo woodhousii*), but bullfrogs (*Rana catesbeiana*) and Great Basin spadefoot toads (*Scaphiopus intermontanus*) may also be present (*Synthesis of Ecological Data Collected in the Riparian and Riverine Environments of the Hanford Reach* [PNNL-14516]).

The dominant ground-dwelling invertebrate species in the upland environment are harvester ants (*Pogonomyrmex owyheei*) and darkling beetles (family *Tenebrionidae*). Harvester ants can exist on vegetated and nonvegetated soils and have been documented on waste sites (*Characterization of the Hanford 300 Area Burial Grounds: Task IV – Biological Transport* [PNL-2774]). Darkling beetles, however, rely on vegetative matter in the soil during their larval stage and therefore are not expected to occur in areas void of vegetation (*Darkling Beetle Populations (*Tenebrionidae*) of the Hanford Site in Southcentral Washington* [PNL-2465]). Areas that were not used as waste sites or have not been affected by Hanford Site operations likely have less soil disturbance and may support a more robust and diverse community of soil-dwelling fauna than previously disturbed or remediated sites.

More than 45 species of fish have been identified in the Hanford Reach of the Columbia River. Of these species, Chinook salmon (*Oncorhynchus tshawytscha*), Sockeye salmon (*Oncorhynchus nerka*), Coho salmon (*Oncorhynchus kisutch*), and steelhead (*Oncorhynchus mykiss*) use the river as a migration route to and from upstream spawning areas and are of the greatest economic importance. Other fish of importance to sport anglers are the native mountain whitefish (*Prosopium williamsoni*) and white sturgeon (*Acipenser transmontanus*). Introduced species like smallmouth bass (*Micropterus dolomieui*), black crappie (*Pomoxis nigromaculatus*), channel catfish (*Ictalurus punctatus*), and walleye (*Stizostedion vitreum*) are also popular. Other large fish populations include introduced common carp (*Cyprinus carpio*) and native species such as redside shiner (*Richardsonius balteatus*) and largescale suckers

(*Catostomus macrocheilus*). Smaller fish, such as sculpin (*Cottus* sp.), are associated with shoreline habitats and have small home ranges (RCBRA [DOE/RL-2007-21]).

Table H-20. Species Known or Potentially Occurring on the Hanford Site Classified by Primary Functional and Habitat Type

Functional Type	Scientific Name	Common Name	Hanford Location Data*	Habitat Type		
				Riparian	Aquatic	Upland
Avian Herbivore	*Callipepla californica*	California quail	x	x		x
	Branta canadensis moffitti	Canada goose	x	x	x	
	Eremophila alpestris	Horned lark				x
	Anas platyrhynchos	Mallard	x	x	x	
	Zenaida macroura	Mourning dove	x	x		x
	Melospiza melodia	Song sparrow	x	x		x
Avian Predator	*Recurvirostra americana*	American avocet	x	x		
	Fulica americana	American coot	x		x	
	Corvus brachyrhynchos	American crow	x	x		x
	Carduelis tristis	American goldfinch	x	x		x
	Falco sparverius	American kestrel	x	x		x
	Anthus rubescens	American pipit	x			x
	Turdus migratorius	American robin	x	x		x
	Spizella arborea	American tree sparrow	x	x		x
	Pelecanus erythrorhynchos	American white pelican	x	x	x	
	Anas americana	American wigeon	x		x	
	Haliaeetus leucocephalus	Bald eagle	x	x		x
	Riparia riparia	Bank swallow	x	x		x
	Tyto alba	Barn owl	x	x		x
	Hirundo rustica	Barn swallow	x	x		x
	Bucephala islandica	Barrow's goldeneye	x		x	
	Ceryle alcyon	Belted kingfisher	x	x	x	

Table H-20. Species Known or Potentially Occurring on the Hanford Site Classified by Primary Functional and Habitat Type

Functional Type	Scientific Name	Common Name	Hanford Location Data*	Habitat Type		
				Riparian	Aquatic	Upland
	Thryomanes bewickii	Bewick's wren	x	x		
	Sayomis nigricans	Black phoebe	x			x
	Pica pica	Black-billed magpie	x	x		x
	Nycticorax nycticorax	Black-crowned night heron	x	x	x	
	Pheucticus melanocephalus	Black-headed grosbeak	x	x		x
	Amphispiza bilineata	Black-throated sparrow	x			x
	Anas discors	Blue-winged teal	x		x	
	Vireo solitarius	Blue-headed vireo	x	x		
	Euphagus cyanocephalus	Brewer's blackbird	x	x		x
	Spizella breweri	Brewer's sparrow	x			x
	Molothrus ater	Brown-headed cowbird	x	x		x
	Bucephala albeola	Bufflehead	x		x	
	Icterus galbula	Bullock's oriole	x	x		x
	Athene cunicularia hypugea	Burrowing owl	x			x
	Larus californicus	California gull	x		x	
	Aythya valisineria	Canvasback	x		x	
	Catherpes mexicanus	Canyon wren	x			x
	Sterna caspia	Caspian tern	x		x	
	Carpodacus cassinii	Cassin's finch	x			x
	Bombycilla cedrorum	Cedar waxwing	x	x		x
	Spizella passerina	Chipping sparrow	x	x		x
	Alectoris chukar	Chukar	x			x
	Anas cyanoptera	Cinnamon teal	x		x	

Table H-20. Species Known or Potentially Occurring on the Hanford Site Classified by Primary Functional and Habitat Type

Functional Type	Scientific Name	Common Name	Hanford Location Data*	Habitat Type		
				Riparian	Aquatic	Upland
	Hirundo pyrrhonota	Cliff swallow	x	x		x
	Bucephala clangula	Common goldeneye	x		x	
	Gavia immer	Common loon	x		x	
	Mergus merganser	Common merganser	x		x	
	Chordeiles minor	Common nighthawk	x	x		x
	Phalaenoptilus nuttallii	Common poorwill	x	x		
	Corvus corax	Common raven	x	x		x
	Carduelis flammea	Common redpoll	x			x
	Gallinago gallinago	Common snipe	x	x		
	Accipiter cooperii	Cooper's hawk	x	x		x
	Junco hyemalis	Dark-eyed junco	x	x		x
	Phalacrocorax auritus	Double-crested cormorant	x		x	
	Picoides pubescens	Downy woodpecker	x	x		x
	Calidris alpina	Dunlin	x	x		
	Podiceps nigricollis	Eared grebe	x		x	
	Tyrannus tyrannus	Eastern kingbird	x	x		x
	Empidonax spp.	Empidonax flycatcher	x	x		x
	Sturnus vulgaris	European starling	x			x
	Coccothraustes vespertinus	Evening grosbeak	x			x
	Buteo regalis	Ferruginous hawk	x			x
	Sterna forsteri	Forster's tern	x		x	
	Passerella iliaca	Fox sparrow	x	x		x
	Anas strepera	Gadwall	x		x	
	Larus glaucescens	Glaucous-winged gull	x		x	

Table H-20. Species Known or Potentially Occurring on the Hanford Site Classified by Primary Functional and Habitat Type

Functional Type	Scientific Name	Common Name	Hanford Location Data*	Habitat Type		
				Riparian	Aquatic	Upland
	Aquila chrysaetos	Golden eagle	x			x
	Regulus satrapa	Golden-crowned kinglet	x	x		x
	Zonotrichia atricapilla	Golden-crowned sparrow	x	x		x
	Ammodramus savannarum	Grasshopper sparrow	x			x
	Perdix perdix	Gray partridge	x			x
	Leucosticte tephrocotis	Gray-crowned Rosy-Finch	x			x
	Ardea herodias	Great blue heron	x	x	x	
	Casmerodius albus	Great egret	x	x	x	
	Bubo virginianus	Great horned owl	x	x		x
	Aythya marila	Greater scaup	x		x	
	Tringa melanoleuca	Greater yellowlegs	x		x	
	Anas crecca	Green-winged teal	x		x	
	Empidonax hammondii	Hammond's flycatcher	x	x		x
	Larus argentatus	Herring gull	x		x	x
	Catharus guttatus	Hermit thrush	x	x		x
	Lophodytes cucullatus	Hooded merganser	x		x	
	Podiceps auritus	Horned grebe	x		x	
	Carpodacus mexicanus	House finch	x	x		x
	Passer domesticus	House sparrow	x	x		x
	Troglodytes aedon	House wren	x	x		x
	Charadrius vociferus	Killdeer	x	x		x
	Calcarius lapponicus	Lapland longspur	x			x
	Chondestes grammacus	Lark sparrow	x			x

Table H-20. Species Known or Potentially Occurring on the Hanford Site Classified by Primary Functional and Habitat Type

Functional Type	Scientific Name	Common Name	Hanford Location Data*	Habitat Type		
				Riparian	Aquatic	Upland
	Passerina amoena	Lazuli bunting	x			x
	Aythya affinis	Lesser scaup	x		x	
	Tringa flavipes	Lesser yellowlegs	x		x	
	Melanerpes lewis	Lewis's woodpecker	x	x		x
	Melospiza lincolnii	Lincoln's sparrow	x	x		x
	Lanius ludovicianus	Loggerhead shrike	x			x
	Numenius americanus	Long-billed curlew	x			x
	Limnodromus scolopaceus	Long-billed dowitcher	x		x	
	Asio otus	Long-eared owl	x	x		x
	Oporornis tolmiei	MacGillivray's warbler	x	x		x
	Cistothorus palustris	Marsh wren	x	x		x
	Falco columbarius	Merlin	x			x
	Sialia currucoides	Mountain bluebird	x			x
	Vermivora ruficapilla	Nashville warbler	x	x		x
	Colaptes auratus	Northern flicker	x	x		x
	Accipiter gentilis	Northern goshawk	x			x
	Circus cyaneus	Northern harrier	x			x
	Mimus polyglottos	Northern mockingbird	x			x
	Anas acuta	Northern pintail duck	x		x	
	Stelgidopteryx serripennis	Northern rough-winged swallow	x	x		x
	Anas clypeata	Northern shoveler	x		x	
	Lanius excubitor	Northern shrike	x			x

Table H-20. Species Known or Potentially Occurring on the Hanford Site Classified by Primary Functional and Habitat Type

Functional Type	Scientific Name	Common Name	Hanford Location Data*	Habitat Type		
				Riparian	Aquatic	Upland
	Contopus borealis	Olive-sided flycatcher	x	x		x
	Vermivora celata	Orange-crowned warbler	x	x		x
	Pandion haliaetus	Osprey	x	x	x	
	Empidonax difficilis	Pacific-slope flycatcher	x	x		
	Falco peregrinus anatum	Peregrine falcon	x		x	x
	Podilymbus podiceps	Pied-billed grebe	x		x	
	Falco mexicanus	Prairie falcon	x			x
	Mergus serrator	Red-breasted merganser	x		x	
	Sitta canadensis	Red-breasted nuthatch	x			x
	Aythya americana	Redhead	x		x	
	Sphyrapicus nuchalis	Red-naped sapsucker	x	x		x
	Podiceps grisegena	Red-necked grebe	x		x	
	Phalaropus lobatus	Red-necked phalarope	x	x		
	Buteo jamaicensis	Red-tailed hawk	x			x
	Agelaius phoeniceus	Red-winged blackbird	x	x		x
	Larus delawarensis	Ring-billed gull	x	x		
	Aythya collaris	Ring-necked duck	x		x	
	Phasianus colchicus	Ring-necked pheasant	x	x		x
	Columba livia	Rock dove	x			x
	Salpinctes obsoletus	Rock wren	x			x
	Buteo lagopus	Rough-legged hawk	x			x

Table H-20. Species Known or Potentially Occurring on the Hanford Site Classified by Primary Functional and Habitat Type

Functional Type	Scientific Name	Common Name	Hanford Location Data*	Habitat Type		
				Riparian	Aquatic	Upland
	Regulus calendula	Ruby-crowned kinglet	x	x		x
	Oxyura jamaicensis	Ruddy duck	x		x	
	Selasphorus rufus	Rufous hummingbird	x	x		x
	Amphispiza belli	Sage sparrow	x			x
	Oreoscoptes montanus	Sage thrasher	x			x
	Grus canadensis	Sandhill crane	x	x		
	Passerculus sandwichensis	Savannah sparrow	x			x
	Sayornis saya	Say's phoebe	x			x
	Accipiter striatus	Sharp-shinned hawk	x	x		x
	Asio flammeus	Short-eared owl	x			x
	Tringa solitaria	Solitary sandpiper	x		x	
	Porzana carolina	Sora	x	x	x	
	Pipilo erythrophthalmus	Spotted towhee	x	x		x
	Actitis macularia	Spotted sandpiper	x		x	
	Buteo swainsoni	Swainson's hawk	x			x
	Myadestes townsendi	Townsend's solitaire	x	x		x
	Dendroica townsendi	Townsend's warbler	x	x		
	Tachycineta bicolor	Tree swallow	x	x	x	
	Cygnus columbianus	Tundra (Whistling) swan	x		x	
	Ixoreus naevius	Varied thrush	x	x		x
	Pooecetes gramineus affinis	Vesper sparrow	x			x

Table H-20. Species Known or Potentially Occurring on the Hanford Site Classified by Primary Functional and Habitat Type

Functional Type	Scientific Name	Common Name	Hanford Location Data*	Habitat Type		
				Riparian	Aquatic	Upland
	Tachycineta thalassina	Violet-green swallow	x	x		x
	Rallus limicola	Virginia rail	x	x	x	
	Vireo gilvus	Warbling vireo	x	x		x
	Sialia mexicana	Western bluebird	x			x
	Aechmophorus occidentalis	Western grebe	x		x	
	Tyrannus verticalis	Western kingbird	x	x		x
	Sturnella neglecta	Western meadowlark	x	x		x
	Calidris mauri	Western sandpiper	x		x	
	Piranga ludoviciana	Western tanager	x	x		x
	Contopus sordidulus	Western wood-pewee	x	x		x
	Zonotrichia leucophrys	White-crowned sparrow	x	x		x
	Wilsonia pusilla	Wilson's warbler	x	x		x
	Troglodytes troglodytes	Winter wren	x	x		x
	Aix sponsa	Wood duck	x		x	
	Dendroica petechia	Yellow warbler	x	x		x
	Icteria virens	Yellow-breasted chat	x	x		
	Xanthocephalus xanthocephalus	Yellow-headed blackbird	x	x		x
	Dendroica coronata	Yellow-rumped warbler	x	x		x
Benthic Biota	*Pacifasticus leniusculus*	Crayfish	x		x	
	Anodonta californiensis	California floater (mussel)			x	
	Anodonta kennerlyi	Western floater (mussel)			x	

Table H-20. Species Known or Potentially Occurring on the Hanford Site Classified by Primary Functional and Habitat Type

Functional Type	Scientific Name	Common Name	Hanford Location Data*	Habitat Type		
				Riparian	Aquatic	Upland
	Anodonta nuttalliana	Winged floater (mussel)			x	
	Anodonta oregonensis	Oregon floater (mussel)			x	
	Corbicula fluminea	Asiatic clam	x		x	
	Gonidea angulata	Western ridged mussel			x	
	Margaritifera falcata	Western pearlshell mussel			x	
	Fisherola nuttalli	Shortface lanx			x	
	Fulminicola columbianus	Columbia pebblesnail			x	
	Pisidium sp.	Peaclam			x	
	Gyraulus sp.	Snail			x	
	Limnaea sp.	Snail			x	
	Physa sp.	Snail			x	
	Radix sp.	Snail			x	
	Stagnicola sp.	Pondsnail			x	
Carnivorous Reptiles and Amphibians	*Rana catesbeiana*	Bullfrog	x	x		x
	Pituophis catenifer deserticola	Great Basin gopher snake	x	x		x
	Scaphiopus intermontanus	Great Basin spadefoot toad	x			x
	Hypsiglena torquata	Night snake				x
	Sceloporus graciosus	Northern sagebrush lizard	x			x
	Pseudacris regilla (formally Hyla regilla)	Pacific tree frog		x		
	Chrysemys picta	Painted turtle		x	x	
	Phrynosoma douglassii	Short-horned lizard				x

Table H-20. Species Known or Potentially Occurring on the Hanford Site Classified by Primary Functional and Habitat Type

Functional Type	Scientific Name	Common Name	Hanford Location Data*	Habitat Type		
				Riparian	Aquatic	Upland
	Uta stansburiana	Side-blotched lizard	x			x
	Charina bottae	Rocky Mountain rubber boa		x		
	Ambystoma tigrinum	Tiger salamander			x	
	Crotalus viridis	Western rattlesnake	x			x
	Thamnophis sirtalis	Western terrestrial garter snake		x	x	
	Coluber constrictor	Western yellow-bellied racer	x	x		x
	Bufo woodhousei	Woodhouse's toad	x	x		x
Fish Herbivore	*Cyprinus carpio*	Common carp	x		x	
	Catostomus columbianus	Bridgelip sucker			x	
	Catostomus macrocheilus	Largescale sucker			x	
Fish Predator	*Alosa sapidissima*	American shad			x	
	Ameiurus melas	Black bullhead			x	
	Pomoxis nigromaculatus	Black crappie			x	
	Ictalurus furcatus	Blue catfish			x	
	Lepomis macrochirus	Bluegill	x		x	
	Ameiurus nebulosus	Brown bullhead	x		x	
	Salvelinus confluentus	Bull trout			x	
	Lota lota	Burbot			x	
	Ictalurus punctatus	Channel catfish			x	
	Oncorhynchus tshawytscha	Chinook salmon	x		x	
	Acrocheilus alutaceus	Chiselmouth	x		x	

Table H-20. Species Known or Potentially Occurring on the Hanford Site Classified by Primary Functional and Habitat Type

Functional Type	Scientific Name	Common Name	Hanford Location Data*	Habitat Type		
				Riparian	Aquatic	Upland
	Oncorhynchus kisutch	Coho salmon	x		x	
	Oncorhynchus clarkii	Cutthroat trout			x	
	Salvelinus malma	Dolly Varden			x	
	Coregonus clupeaformis	Lake whitefish			x	
	Micropterus salmoides	Largemouth bass			x	
	Rhinichthys falcatus	Leopard dace			x	
	Rhinichthys cataractae	Longnose dace			x	
	Gambusia affinis	Western mosquitofish			x	
	Cottus bairdii	Mottled sculpin			x	
	Prosopium williamsoni	Mountain whitefish	x		x	
	Catostomus platyrhynchus	Mountain sucker			x	
	Pungitius pungitius	Nine spine stickleback			x	
	Ptychocheilus oregonensis	Northern pikeminnow	x		x	
	Lampetra tridentata	Pacific lamprey	x		x	
	Mylocheilus caurinus	Peamouth	x		x	
	Cottus beldingii	Piute sculpin			x	
	Cottus asper	Prickly sculpin	x		x	
	Lepomis gibbosus	Pumpkinseed	x		x	
	Oncorhynchus mykiss	Rainbow trout (steelhead)			x	
	Richardsonius balteatus	Redside shiner	x		x	

Table H-20. Species Known or Potentially Occurring on the Hanford Site Classified by Primary Functional and Habitat Type

Functional Type	Scientific Name	Common Name	Hanford Location Data*	Habitat Type		
				Riparian	Aquatic	Upland
	Cottus perplexus	Reticulate sculpin			x	
	Lampetra ayresii	River lamprey			x	
	Percopsis transmontana	Sand roller			x	
	Micropterus dolomieu	Smallmouth bass	x		x	
	Oncorhynchus nerka	Sockeye salmon	x		x	
	Rhinichthys osculus	Speckled (Spotted) dace	x		x	
	Gasterosteus aculeatus	Threespine stickleback	x		x	
	Cottus rhotheus	Torrent sculpin			x	
	Sander vitreus	Walleye	x		x	
	Pomoxis annularis	White crappie			x	
	Acipenser transmontanus	White sturgeon			x	
	Ameiurus natalis	Yellow bullhead			x	
	Perca flavescens	Yellow perch	x		x	
Mammal Herbivore	*Castor canadensis*	Beaver		x	x	
	Lepus californicus	Black-tailed jackrabbit	x			x
	Neotoma cinerea	Bushy-tailed woodrat	x			x
	Cervus elaphus	Rocky Mountain elk	x	x		x
	Perognathus parvus	Great Basin pocket mouse	x	x		x
	Tamias minimus	Least chipmunk				x
	Microtus montanus	Montane vole	x			x
	Odocoileus hemionus	Mule deer	x	x		x
	Ondatra zibethica	Muskrat		x	x	

Table H-20. Species Known or Potentially Occurring on the Hanford Site Classified by Primary Functional and Habitat Type

Functional Type	Scientific Name	Common Name	Hanford Location Data*	Habitat Type		
				Riparian	Aquatic	Upland
	Thomomys talpoides	Northern pocket gopher	x			x
	Sylvilagus nuttallii	Nuttall's (or mountain) cottontail	x			x
	Erethizon dorsatum	Porcupine		x		
	Lemmiscus curtatus	Sagebrush vole	x			x
	Urocitellus townsendii (formally Spermophilus townsendii)	Townsend's ground squirrel	x			x
	Urocitellus washingtoni (formally Spermophilus washingtoni)	Washington ground squirrel				x
	Reithrodontomys megalotis	Western harvest mouse	x	x		x
	Odocoileus virginianus	White-tailed deer		x		
	Lepus townsendii	White-tailed jackrabbit				x
	Marmota flaviventris	Yellow-bellied marmot				x
Mammal Predator	*Taxidea taxus*	badger				x
	Eptesicus fuscus	Big brown bat	x	x		x
	Lynx rufus	Bobcat		x		x
	Canis latrans	Coyote	x			x
	Peromyscus maniculatus	Deer mouse	x	x		x
	Lasiurus cinereus	Hoary bat	x	x		x
	Mus musculus	House mouse	x	x		
	Myotis rolans	Long-legged myotis (bat)	x	x		x

Table H-20. Species Known or Potentially Occurring on the Hanford Site Classified by Primary Functional and Habitat Type

Functional Type	Scientific Name	Common Name	Hanford Location Data*	Habitat Type		
				Riparian	Aquatic	Upland
	Myotis lucifugus	Little brown myotis (bat)	x	x		x
	Mustela frenata	Long-tailed weasel		x		
	Sorex merriami	Merriam's shrew				x
	Mustela vison	Mink		x		
	Puma concolor concolor	Mountain lion				x
	Onychomys leucogaster	Northern grasshopper mouse	x			x
	Rattus norvegicus	Norway rat		x		x
	Antrozous pallidus	Pallid bat	x	x		x
	Procyon lotor	Raccoon		x		
	Lutra canadensis	River otter		x	x	
	Mustela erminea	Short-tail weasel		x		
	Lasionycteris noctivagans	Silver-haired bat	x	x		x
	Mephitis mephitis	Striped skunk		x		
	Sorex vagrans	Vagrant shrew		x		
	Pipistrellus hesperus	Western pipistrelle (bat)	x	x		x
	Myotis leibii	Western small-footed myotis (bat)	x			x
	Myotis yumanensis	Yuma myotis (bat)	x	x		x

* Species listed in this table are from the following sources: locational data from EMC and SESP Project databases; TNC (*Biodiversity Inventory and Analysis of the Hanford Site Final Report 1994-1999* [Soll et al., 1999]; *Biodiversity Studies of the Hanford Site: Final Report August 2003* [Evans et al., 2003]); "The Status, Distribution and Ecology of Wildlife on the U.S. DOE Hanford Site: A Historical Overview of Research Activities" [Fitzner and Gray, 1991]; *Hanford Site National Environmental Policy Act* (NEPA) *Characterization* [PNNL-6415]; a working list of species developed by B.L. Tiller under EMC Project.

Table H-21. Flora and Fauna Threatened and Endangered Species List

Scientific Name	Common Name	State Status	Federal Status
Upland Flora			
Oenothera caespitosa ssp. caespitosa	Caespitose evening primrose	SS	
Orobanche californica	California broomrape	SX	
Astragalus columbianus	Columbia milk-vetch	SS	FCo
Nicotiana attenuata	Coyote tobacco	SS	
Cuscuta denticulata	Desert dodder	ST	
Camissonia pygmaea	Dwarf evening-primrose	SS	
Astragalus geyeri	Geyer's milk-vetch	ST	
Cryptantha leucophaea	Gray cryptantha	SS	FCo
Aliciella leptomeria	Great Basin gilia	ST	
Lomatium tuberosum	Hoover's desert parsley	SS	FCo
Loeflingia squarrosa var. squarrosa	Loeflingia	ST	
Cryptantha scoparia	Miner's candle	SS	
Erigeron piperianus	Piper's daisy	SS	
Cistanthe rosea	Rosy pussypaws	ST	
Calochortus macrocarpus	Sagebrush-mariposa lily	SE	
Camissonia minor	Small-flower evening primrose	SS	
Cryptantha spiculifera	Snake River cryptantha	SS	
Ribes cereum	Squaw currant	SE	
Mimulus suksdorfii	Suksdorf's monkey-flower	SS	
Eriogonum codium	Umtanum desert buckwheat	SE	FC
Eatonella nivea	White etonella	ST	
Riparian Flora			
Lipocarpha aristulata	Awned halfchaff sedge	ST	
Eleocharis rostellata	Beaked spike-rush	SS	
Hypericum majus	Canadian St. John's-wort	SS	
Anagallis minima	Chaffweed	ST	
Ammannia robusta	Grand redstem	ST	

Table H-21. Flora and Fauna Threatened and Endangered Species List

Scientific Name	Common Name	State Status	Federal Status
Rotala ramosior	Lowland toothcup	ST	
Rorippa columbiae	Persistent sepal yellowcress	SE	FCo
Birds			
Pelecanus erythrorhynchos	American white pelican	SE	
Haliaeetus leucocephalus	Bald eagle	SS	FCo
Athene cunicularia	Burrowing owl	SC	FCo
Gavia immer	Common loon	SS	
Buteo regalis	Ferruginous hawk	ST	FCo
Otus flammeolus	Flammulated owl	SC	
Aquila chrysaetos	Golden eagle	SC	
Centrocercus urophasianus	Greater sage grouse	ST	FC
Melanerpes lewis	Lewis' woodpecker	SC	
Lanius ludovicianus	Loggerhead shrike	SC	FCo
Accipiter gentilis	Northern goshawk	SC	FCo
Falco peregrinus	Peregrine falcon	SS	FCo
Amphispiza belli	Sage sparrow	SC	
Oreoscoptes montanus	Sage thrasher	SC	
Grus canadensis	Sandhill crane	SE	
Aechmophorus occidenalis	Western grebe	SC	
Mammals			
Lepus californicus	Black-tailed jackrabbit	SC	
Sorex merriami	Merriam's shrew	SC	
Urocitellus townsendii (formerly Spermophilus townsendii)	Townsend's ground squirrel	SC	FCo
Urocitellus washingtoni (formerly Spermophilus washingtoni)	Washington ground squirrel	SC	FC
Lepus townsendii	White-tailed jackrabbit	SC	
Reptiles/Amphibians			
Sceloporus graciosus	Northern sagebrush lizard	SC	FCo
Masticophis taeniatus	Striped whipsnake	SC	

Table H-21. Flora and Fauna Threatened and Endangered Species List

Scientific Name	Common Name	State Status	Federal Status
	Aquatics		
Salvelinus confluentus	Bull trout	SC	FT
Anodonta californiensis	California floater (mussel)	SC	FCo
Oncorhynchus tshawytscha	Chinook salmon	SC	FE
Rhinichthys falcatus	Leopard dace	SC	
Catostormus platyrhynchus	Mountain sucker	SC	
Lampetra tridentata	Pacific lamprey	SM	FCo
Oncorhynchus mykiss	Rainbow trout (steelhead)	SC	FT
Lampetra ayresi	River lamprey	SC	FCo
Fisherola nuttalli	Giant Columbia River limpet	SC	

Sources: "List of Vascular Plants Tracked by the Washington Natural Heritage Program" (WNHP, 2011); "Species of Concern" (WDFW, 2011).

FC = Federal Candidate
FCo = Federal Species of Concern
FE = Federal Endangered
FT = Federal Threatened
SC = State Candidate
SE = State Endangered
SM = State Monitored
SS = State Sensitive
ST = State Threatened
SX = Possibly extinct or extirpated from Washington

H4 Tissue Samples

This section includes the tissue samples presented in Tables H-22 through H-26 and brief discussion as referenced in Chapter 4 of this report. These tables present the analyte concentrations for detected and non-detected tissue samples (plant, invertebrate, small mammal, deer antler, and bird) collected from the 100-F/IU Area.

Table H-22. Plant Tissue Samples from 100-F/100-IU-2/100-IU-6 Area

Analyte	Data Source	Nondetect Samples			Detect Samples			Total of All Samples		
		Number	Minimum	Maximum	Number	Minimum	Maximum	Number	Minimum	Maximum
Inorganics (mg/kg)										
Aluminum	PNNL				18	0.160	104	18	0.160	104
	RCBRA	5	1.7	7.7	36	5.4	269	41	1.7	269
Antimony	PNNL	3	0.00117	0.00225	16	0.00128	0.00708	19	0.00117	0.00708
	RCBRA	39	0.21	2.9	2	0.27	0.28	41	0.21	2.9
Arsenic	PNNL	3	0.0117	0.021	16	0.0156	0.150	19	0.0117	0.150
	RCBRA	37	0.39	4	4	1.6	2.2	41	0.39	4
Barium	PNNL				18	1.13	44.1	18	1.13	44.1
	RCBRA				41	1.2	25.7	41	1.2	25.7
Beryllium	PNNL	19	0.00234	0.0225				19	0.00234	0.0225
	RCBRA	40	0.01	0.13	1	0.03	0.03	41	0.01	0.13
Bismuth	RCBRA	41	0.38	3.4				41	0.38	3.4
Boron	RCBRA	1	0.34	0.34	40	0.49	117	41	0.34	117
Cadmium	PNNL				19	0.00351	0.307	19	0.00351	0.307
	RCBRA	39	0.05	0.46	2	0.07	0.23	41	0.05	0.46
Calcium	RCBRA				41	322	20500	41	322	20500
Calculated total uranium	PNNL	7	-0.00194	0.00528	3	0.00344	0.285	10	-0.00194	0.285
	RCBRA	39	-0.0190	0.149	2	0.0786	0.984	41	-0.0190	0.984
Chromium	PNNL	1	0.03	0.03	18	0.0153	0.190	19	0.0153	0.190
	RCBRA	8	0.12	0.26	33	0.1	3.3	41	0.1	3.3
Cobalt	RCBRA	39	0.08	0.92	2	0.21	0.37	41	0.08	0.92
Copper	PNNL				19	0.399	3.34	19	0.399	3.34
	RCBRA	2	0.95	1	39	0.37	13.4	41	0.37	13.4
Iron	RCBRA	8	10.6	68.9	33	26.5	517	41	10.6	517
Lead	PNNL	1	0.0042	0.0042	18	0.00410	0.187	19	0.00410	0.187
	RCBRA	38	0.29	2	3	0.34	0.75	41	0.29	2
Lithium	RCBRA	13	0.03	0.2	28	0.03	0.84	41	0.03	0.84
Magnesium	RCBRA				41	172	3390	41	172	3390

Table H-22. Plant Tissue Samples from 100-F/100-IU-2/100-IU-6 Area

Analyte	Data Source	Nondetect Samples			Detect Samples			Total of All Samples		
		Number	Minimum	Maximum	Number	Minimum	Maximum	Number	Minimum	Maximum
Manganese	PNNL				18	0.778	16.8	18	0.778	16.8
	RCBRA				41	3	56.1	41	3	56.1
Mercury	PNNL	10	0.00585	0.0105	9	0.00261	0.0546	19	0.00261	0.0546
	RCBRA	41	0.01	0.1				41	0.01	0.1
Molybdenum	RCBRA	17	0.15	1.9	24	0.17	4.4	41	0.15	4.4
Nickel	PNNL				19	0.0199	0.433	19	0.0199	0.433
	RCBRA	9	0.22	1.4	32	0.26	2.8	41	0.22	2.8
Nitrogen in nitrite and nitrate	RCBRA				6	41.3	436	6	41.3	436
Phosphorus	RCBRA				41	335	4710	41	335	4710
Potassium	RCBRA				41	2390	24400	41	2390	24400
Selenium	PNNL	15	0.0234	0.15	4	0.0307	0.128	19	0.0234	0.15
	RCBRA	33	0.41	3.1	8	0.45	1.5	41	0.41	3.1
Silicon	RCBRA				41	31	754	41	31	754
Silver	PNNL	17	0.00117	0.00675	2	0.00302	0.00307	19	0.00117	0.00675
	RCBRA	33	0.06	0.46	8	0.07	0.86	41	0.06	0.86
Sodium	RCBRA	8	12.4	16	33	9.1	71.6	41	9.1	71.6
Strontium (elemental)	RCBRA				41	1.3	92.4	41	1.3	92.4
Thallium	PNNL	7	0.0021	0.0021	12	0.00075	0.0971	19	0.00075	0.0971
	RCBRA	41	0.65	4.6				41	0.65	4.6
Thorium	PNNL	16	0.00234	0.0042	2	0.00559	0.0174	18	0.00234	0.0174
Tin	RCBRA	39	0.99	7.1	2	2.8	3.3	41	0.99	7.1
Titanium	RCBRA				33	0.74	22.4	33	0.74	22.4
Uranium (inorganic)	PNNL	7	0.000117	0.00021	11	0.000152	0.00731	18	0.000117	0.00731
	RCBRA	37	0.81	5.2	4	2.2	7.9	41	0.81	7.9
Vanadium	RCBRA	29	0.08	0.59	12	0.14	0.98	41	0.08	0.98
Zinc	PNNL				19	1.47	20.0	19	1.47	20.0
	RCBRA				41	3	43.5	41	3	43.5
Zirconium	RCBRA	33	0.98	7				33	0.98	7

Table H-22. Plant Tissue Samples from 100-F/100-IU-2/100-IU-6 Area

Analyte	Data Source	Nondetect Samples			Detect Samples			Total of All Samples		
		Number	Minimum	Maximum	Number	Minimum	Maximum	Number	Minimum	Maximum
Organics (mg/kg)										
1,2,4-Trichlorobenzene	RCBRA	40	3.8	100				40	3.8	100
1,2-Dichlorobenzene	RCBRA	40	3.8	100				40	3.8	100
1,3-Dichlorobenzene	RCBRA	40	3.8	100				40	3.8	100
1,4-Dichlorobenzene	RCBRA	40	3.8	100				40	3.8	100
2,4,5-Trichlorophenol	RCBRA	40	9.5	250				40	9.5	250
2,4,6-Trichlorophenol	RCBRA	40	3.8	100				40	3.8	100
2,4-Dichlorophenol	RCBRA	40	3.8	100				40	3.8	100
2,4-Dimethylphenol	RCBRA	40	3.8	100				40	3.8	100
2,4-Dinitrophenol	RCBRA	40	9.5	250				40	9.5	250
2,4-Dinitrotoluene	RCBRA	40	3.8	100				40	3.8	100
2,6-Dinitrotoluene	RCBRA	40	3.8	100				40	3.8	100
2-Chloronaphthalene	RCBRA	40	3.8	100				40	3.8	100
2-Chlorophenol	RCBRA	40	3.8	100				40	3.8	100
2-Methylnaphthalene	RCBRA	40	3.8	100				40	3.8	100
2-Methylphenol [cresol, o-]	RCBRA	40	3.8	100				40	3.8	100
2-Nitroaniline	RCBRA	40	9.5	250				40	9.5	250
2-Nitrophenol	RCBRA	40	3.8	100				40	3.8	100
3,3*-Dichlorobenzidine	RCBRA	40	3.8	100				40	3.8	100
3+4 Methylphenol [cresol, m+p]	RCBRA	39	3.8	100	1	0.11	0.11	40	0.11	100
3-Nitroaniline	RCBRA	40	9.5	250				40	9.5	250
4,6-Dinitro-2-methylphenol	RCBRA	40	9.5	250				40	9.5	250
4-Bromophenylphenyl ether	RCBRA	40	3.8	100				40	3.8	100
4-Chloro-3-methylphenol	RCBRA	40	3.8	100				40	3.8	100
4-Chloroaniline	RCBRA	40	3.8	100				40	3.8	100
4-Chlorophenylphenyl ether	RCBRA	40	3.8	100				40	3.8	100
4-Nitroaniline	RCBRA	40	9.5	250				40	9.5	250
4-Nitrophenol	RCBRA	40	9.5	250				40	9.5	250
Acenaphthene	RCBRA	40	3.8	100				40	3.8	100

Table H-22. Plant Tissue Samples from 100-F/100-IU-2/100-IU-6 Area

Analyte	Data Source	Nondetect Samples			Detect Samples			Total of All Samples		
		Number	Minimum	Maximum	Number	Minimum	Maximum	Number	Minimum	Maximum
Acenaphthylene	RCBRA	40	3.8	100				40	3.8	100
Aldrin	RCBRA	36	0.008	0.12	3	0.0056	0.012	39	0.0056	0.12
Alpha-BHC	RCBRA	32	0.008	0.12	8	0.0024	0.028	40	0.0024	0.12
alpha-Chlordane	RCBRA	39	0.008	0.12				39	0.008	0.12
Anthracene	RCBRA	40	3.8	100				40	3.8	100
Aroclor-1016	RCBRA	39	0.08	1.2				39	0.08	1.2
Aroclor-1221	RCBRA	39	0.08	1.2				39	0.08	1.2
Aroclor-1232	RCBRA	39	0.08	1.2				39	0.08	1.2
Aroclor-1242	RCBRA	39	0.08	1.2				39	0.08	1.2
Aroclor-1248	RCBRA	39	0.08	1.2				39	0.08	1.2
Aroclor-1254	RCBRA	39	0.08	1.2				39	0.08	1.2
Aroclor-1260	RCBRA	39	0.08	1.2				39	0.08	1.2
Benzo[a]anthracene	RCBRA	40	3.8	100				40	3.8	100
Benzo[a]pyrene	RCBRA	40	3.8	100				40	3.8	100
Benzo[b]fluoranthene	RCBRA	40	3.8	100				40	3.8	100
Benzo[ghi]perylene	RCBRA	40	3.8	100				40	3.8	100
Benzo[k]fluoranthene	RCBRA	40	3.8	100				40	3.8	100
beta-1,2,3,4,5,6-Hexachlorocyclohexane	RCBRA	38	0.008	0.12	1	0.096	0.096	39	0.008	0.12
Bis[2-chloro-1-methylethyl]ether	RCBRA	40	3.8	100				40	3.8	100
Bis[2-Chloroethoxy]methane	RCBRA	40	3.8	100				40	3.8	100
Bis[2-chloroethyl] ether	RCBRA	40	3.8	100				40	3.8	100
Bis[2-ethylhexyl] phthalate	RCBRA	38	0.26	100	3	0.3	0.75	41	0.26	100
Butylbenzylphthalate	RCBRA	40	3.8	100				40	3.8	100
Carbazole	RCBRA	40	3.8	100				40	3.8	100
Chrysene	RCBRA	40	3.8	100				40	3.8	100
Delta-BHC	RCBRA	30	0.008	0.12	9	0.006	0.085	39	0.006	0.12
Dibenz[a,h]anthracene	RCBRA	40	3.8	100				40	3.8	100
Dibenzofuran	RCBRA	40	3.8	100				40	3.8	100

Table H-22. Plant Tissue Samples from 100-F/100-IU-2/100-IU-6 Area

Analyte	Data Source	Nondetect Samples			Detect Samples			Total of All Samples		
		Number	Minimum	Maximum	Number	Minimum	Maximum	Number	Minimum	Maximum
Dichlorodiphenyldichloroethane	RCBRA	37	0.008	0.12	2	0.013	0.031	39	0.008	0.12
Dichlorodiphenyldichloroethylene	RCBRA	32	0.008	0.12	7	0.024	0.55	39	0.008	0.55
Dichlorodiphenyltrichloroethane	RCBRA	37	0.008	0.12	2	0.032	0.071	39	0.008	0.12
Dieldrin	RCBRA	31	0.008	0.12	8	0.0058	0.34	39	0.0058	0.34
Diethylphthalate	RCBRA	34	3.8	100	6	1.3	18	40	1.3	100
Dimethyl phthalate	RCBRA	40	3.8	100				40	3.8	100
Di-n-butylphthalate	RCBRA	41	0.4	100				41	0.4	100
Di-n-octylphthalate	RCBRA	40	3.8	100				40	3.8	100
Endosulfan I	RCBRA	35	0.008	0.12	4	0.009	0.1	39	0.008	0.12
Endosulfan II	RCBRA	33	0.008	0.12	6	0.0026	0.078	39	0.0026	0.12
Endosulfan sulfate	RCBRA	35	0.008	0.12	4	0.014	0.11	39	0.008	0.12
Endrin	RCBRA	35	0.008	0.12	4	0.0022	0.11	39	0.0022	0.12
Endrin aldehyde	RCBRA	36	0.008	0.12	3	0.0054	0.026	39	0.0054	0.12
Endrin ketone	RCBRA	37	0.008	0.12	2	0.0068	0.009	39	0.0068	0.12
Fluoranthene	RCBRA	40	3.8	100				40	3.8	100
Fluorene	RCBRA	40	3.8	100				40	3.8	100
Gamma-BHC (lindane)	RCBRA	33	0.008	0.12	6	0.002	0.012	39	0.002	0.12
gamma-Chlordane	RCBRA	23	0.008	0.12	17	0.0024	0.12	40	0.0024	0.12
Heptachlor	RCBRA	36	0.008	0.12	3	0.002	0.15	39	0.002	0.15
Heptachlor epoxide	RCBRA	35	0.008	0.12	4	0.01	0.018	39	0.008	0.12
Hexachlorobenzene	RCBRA	40	3.8	100				40	3.8	100
Hexachlorobutadiene	RCBRA	40	3.8	100				40	3.8	100
Hexachlorocyclopentadiene	RCBRA	40	3.8	100				40	3.8	100
Hexachloroethane	RCBRA	40	3.8	100				40	3.8	100
Indeno[1,2,3-cd]pyrene	RCBRA	40	3.8	100				40	3.8	100
Isophorone	RCBRA	40	3.8	100				40	3.8	100
Methoxychlor	RCBRA	30	0.008	0.12	10	0.023	0.17	40	0.008	0.17
Naphthalene	RCBRA	40	3.8	100				40	3.8	100
Nitrobenzene	RCBRA	40	3.8	100				40	3.8	100

Table H-22. Plant Tissue Samples from 100-F/100-IU-2/100-IU-6 Area

Analyte	Data Source	Nondetect Samples			Detect Samples			Total of All Samples		
		Number	Minimum	Maximum	Number	Minimum	Maximum	Number	Minimum	Maximum
N-Nitroso-di-n-dipropylamine	RCBRA	40	3.8	100				40	3.8	100
N-Nitrosodiphenylamine	RCBRA	40	3.8	100				40	3.8	100
Pentachlorophenol	RCBRA	40	9.5	250				40	9.5	250
Phenanthrene	RCBRA	40	3.8	100				40	3.8	100
Phenol	RCBRA	39	3.8	100	1	0.58	0.58	40	0.58	100
Pyrene	RCBRA	40	3.8	100				40	3.8	100
Toxaphene	RCBRA	39	0.08	1.2				39	0.08	1.2
Radionuclides (pCi/g)										
Americium-241	RCBRA	41	0.019	0.89				41	0.019	0.89
Antimony-125	PNNL	17	-0.0269	0.0036				17	-0.0269	0.0036
	RCBRA	41	0.038	0.334				41	0.038	0.334
Beryllium-7	PNNL	3	-0.0263	0.48	14	0.130	4.11	17	-0.0263	4.11
	RCBRA	41	0	3.1				41	0	3.1
Carbon-14	RCBRA	2	0.167	2.67				2	0.167	2.67
Cerium/praseodymium-144	PNNL	3	-0.013005	-0.0009105				3	-0.013005	-0.000911
Cesium-134	PNNL	17	-0.0255	0.00575				17	-0.0255	0.00575
	RCBRA	41	0.024	0.175				41	0.024	0.175
Cesium-137	PNNL	15	-0.00688	0.02	2	0.00415	0.0380	17	-0.00688	0.0380
	RCBRA	41	0.018	0.141				41	0.018	0.141
Cobalt-60	PNNL	15	-0.0151	0.0571	2	0.00230	0.00657	17	-0.0151	0.0571
	RCBRA	41	0.02	0.152				41	0.02	0.152
Europium-152	PNNL	2	-0.00402	0.00710				2	-0.00402	0.00710
	RCBRA	41	0.043	0.387				41	0.043	0.387
Europium-154	PNNL	16	-0.0196	0.135	1	0.00408	0.00408	17	-0.0196	0.135
	RCBRA	41	0.068	0.457				41	0.068	0.457
Europium-155	PNNL	17	-0.00446	0.0244				17	-0.00446	0.0244
	RCBRA	41	0.031	0.37				41	0.031	0.37
Plutonium-238	PNNL	6	-0.0000109	0.0000393				6	-0.0000109	0.0000393
	RCBRA	29	-0.062	0.087				29	-0.062	0.087

Table H-22. Plant Tissue Samples from 100-F/100-IU-2/100-IU-6 Area

Analyte	Data Source	Nondetect Samples			Detect Samples			Total of All Samples		
		Number	Minimum	Maximum	Number	Minimum	Maximum	Number	Minimum	Maximum
Plutonium-239/240	PNNL	3	-0.0000102	0.00000791	3	0.0000306	0.000891	6	-0.0000102	0.000891
	RCBRA	29	-0.026	0.032				29	-0.026	0.032
Potassium-40	PNNL				17	0.756	56.7	17	0.756	56.7
	RCBRA	4	0	3.86	37	2.76	10.8	41	0	10.8
Radium-226	RCBRA	41	0.035	0.317				41	0.035	0.317
Radium-228	RCBRA	41	0.08	0.753				41	0.08	0.753
Ruthenium-106	PNNL	17	-0.0542	0.14				17	-0.0542	0.14
	RCBRA	41	0.17	1.3				41	0.17	1.3
Strontium-90	PNNL	4	-0.00203	0.00393	12	0.00113	0.719	16	-0.00203	0.719
	RCBRA	39	-0.072	0.13	2	0.626	10.1	41	-0.072	10.1
Technetium-99	PNNL	3	-0.0983	0.104	4	0.0677	0.73	7	-0.0983	0.73
	RCBRA	2	-0.003	0.059				2	-0.003	0.059
Thorium-228	RCBRA	41	-0.122	0.102				41	-0.122	0.102
Thorium-230	RCBRA	33	-0.132	0.281	8	0.227	0.424	41	-0.132	0.424
Thorium-232	RCBRA	41	-0.031	0.08				41	-0.031	0.08
Tritium	PNNL	1	0.0111	0.0111				1	0.0111	0.0111
	RCBRA	6	-4.23	3.36				6	-4.23	3.36
Uranium-233/234	PNNL	8	-0.00531	0.00805	2	0.00119	0.12	10	-0.00531	0.12
	RCBRA	40	-0.025	0.086	1	0.225	0.225	41	-0.025	0.225
Uranium-235	PNNL	9	-0.00238	0.000887	1	0.00411	0.00411	10	-0.00238	0.00411
	RCBRA	41	-0.007	0.03				41	-0.007	0.03
Uranium-238	PNNL	7	-0.00165	0.012	3	0.00115	0.0953	10	-0.00165	0.0953
	RCBRA	39	-0.007	0.05	2	0.023	0.326	41	-0.007	0.326
Zinc-65	PNNL	3	-0.00462	0.00662				3	-0.00462	0.00662
Zirconium/niobium-95	PNNL	3	-0.0000467	0.00402				3	-0.0000467	0.00402

Table H-23. Invertebrate Tissue Samples from 100-F/100-IU-2/100-IU-6 Area

Analyte	Data Source	Nondetect Samples			Detect Samples			Total of All Samples		
		Number	Minimum	Maximum	Number	Minimum	Maximum	Number	Minimum	Maximum
Inorganics (mg/kg)										
Aluminum	PNNL				6	94.0	629	6	94.0	629
	RCBRA				22	4.5	91.2	22	4.5	91.2
Antimony	PNNL				6	0.00250	0.0147	6	0.00250	0.0147
	RCBRA	16	0.21	0.53	6	0.44	0.56	22	0.21	0.56
Arsenic	PNNL				6	0.241	0.761	6	0.241	0.761
	RCBRA	3	0.58	0.59	19	0.51	2.9	22	0.51	2.9
Barium	PNNL				6	1.29	6.44	6	1.29	6.44
	RCBRA				22	0.97	22.8	22	0.97	22.8
Beryllium	PNNL	2	0.0039	0.0039	4	0.00694	0.0145	6	0.0039	0.0145
	RCBRA	22	0.01	0.02				22	0.01	0.02
Bismuth	RCBRA	22	0.38	0.61				22	0.38	0.61
Boron	RCBRA				22	0.44	6.5	22	0.44	6.5
Cadmium	PNNL				6	0.0139	0.127	6	0.0139	0.127
	RCBRA	12	0.07	0.08	10	0.07	0.57	22	0.07	0.57
Calcium	RCBRA				22	306	8410	22	306	8410
Calculated total uranium	RCBRA	3	0	0.244	1	0.696	0.696	4	0	0.696
Chromium	PNNL				6	0.111	0.839	6	0.111	0.839
	RCBRA	2	0.12	0.29	20	0.17	3.7	22	0.12	3.7
Cobalt	RCBRA	10	0.08	0.14	12	0.08	0.24	22	0.08	0.24
Copper	PNNL				6	3.94	13.9	6	3.94	13.9
	RCBRA				22	3.8	29.5	22	3.8	29.5
Iron	RCBRA				22	26.8	203	22	26.8	203
Lead	PNNL				6	0.0410	0.195	6	0.0410	0.195
	RCBRA	13	0.29	0.33	9	0.32	2.2	22	0.29	2.2
Lithium	RCBRA	15	0.04	0.18	7	0.03	0.08	22	0.03	0.18
Magnesium	RCBRA				22	342	888	22	342	888
Manganese	PNNL				6	5.11	19.3	6	5.11	19.3
	RCBRA				22	2.9	10.4	22	2.9	10.4

Table H-23. Invertebrate Tissue Samples from 100-F/100-IU-2/100-IU-6 Area

Analyte	Data Source	Nondetect Samples			Detect Samples			Total of All Samples		
		Number	Minimum	Maximum	Number	Minimum	Maximum	Number	Minimum	Maximum
Mercury	PNNL				6	0.00476	0.0122	6	0.00476	0.0122
	RCBRA	18	0.01	0.02	4	0.02	0.1	22	0.01	0.1
Molybdenum	RCBRA	3	0.28	0.28	19	0.2	0.79	22	0.2	0.79
Nickel	PNNL				6	0.106	0.612	6	0.106	0.612
	RCBRA	7	0.22	0.26	15	0.26	1.9	22	0.22	1.9
Phosphorus	RCBRA				22	2010	2710	22	2010	2710
Potassium	RCBRA				22	1650	2850	22	1650	2850
Selenium	PNNL				6	0.0398	0.220	6	0.0398	0.220
	RCBRA	15	0.44	0.81	7	0.46	0.99	22	0.44	0.99
Silicon	RCBRA				22	7.5	148	22	7.5	148
Silver	PNNL				6	0.00165	0.0133	6	0.00165	0.0133
	RCBRA	20	0.07	0.09	2	0.07	0.07	22	0.07	0.09
Sodium	RCBRA				22	322	1130	22	322	1130
Strontium (elemental)	RCBRA				20	2.7	14.4	20	2.7	14.4
Thallium	PNNL				6	0.00170	0.00597	6	0.00170	0.00597
	RCBRA	22	0.65	0.84				22	0.65	0.84
Thorium	PNNL				6	0.0122	0.120	6	0.0122	0.120
Tin	RCBRA	22	1	3.2				22	1	3.2
Titanium	RCBRA				2	0.26	1.3	2	0.26	1.3
Uranium (inorganic)	PNNL				6	0.00245	0.0193	6	0.00245	0.0193
	RCBRA	12	0.82	1.4	10	1.6	2.7	22	0.82	2.7
Vanadium	PNNL				6	0.204	2.05	6	0.204	2.05
	RCBRA	4	0.08	0.09	18	0.1	0.48	22	0.08	0.48
Zinc	PNNL				6	19.5	51.9	6	19.5	51.9
	RCBRA				22	30.1	82.8	22	30.1	82.8
Zirconium	RCBRA	7	0.99	1				7	0.99	1
Organics (mg/kg)										
Acenaphthene	RCBRA	3	0.781	0.971				3	0.781	0.971
Acenaphthylene	RCBRA	3	0.781	0.971				3	0.781	0.971

Table H-23. Invertebrate Tissue Samples from 100-F/100-IU-2/100-IU-6 Area

Analyte	Data Source	Nondetect Samples			Detect Samples			Total of All Samples		
		Number	Minimum	Maximum	Number	Minimum	Maximum	Number	Minimum	Maximum
Aldrin	RCBRA	9	0.023	0.04	1	0.01	0.01	10	0.01	0.04
Alpha-BHC	RCBRA	10	0.023	0.04				10	0.023	0.04
alpha-Chlordane	RCBRA	9	0.023	0.038	1	0.22	0.22	10	0.023	0.22
Anthracene	RCBRA	3	0.0781	0.0971				3	0.0781	0.0971
Benzo[a]anthracene	RCBRA	3	0.0781	0.0971				3	0.0781	0.0971
Benzo[a]pyrene	RCBRA	3	0.0781	0.0971				3	0.0781	0.0971
Benzo[b]fluoranthene	RCBRA	3	0.0781	0.0971				3	0.0781	0.0971
Benzo[ghi]perylene	RCBRA	3	0.0781	0.0971				3	0.0781	0.0971
Benzo[k]fluoranthene	RCBRA	3	0.0781	0.0971				3	0.0781	0.0971
beta-1,2,3,4,5,6-Hexachlorocyclohexane	RCBRA	8	0.023	0.04	2	0.021	0.12	10	0.021	0.12
Chrysene	RCBRA	3	0.0781	0.0971				3	0.0781	0.0971
Delta-BHC	RCBRA	10	0.023	0.04				10	0.023	0.04
Dibenz[a,h]anthracene	RCBRA	3	0.0781	0.0971				3	0.0781	0.0971
Dichlorodiphenyldichloroethane	RCBRA	8	0.023	0.04	2	0.039	0.074	10	0.023	0.074
Dichlorodiphenyldichloroethylene	RCBRA	9	0.023	0.04	1	0.018	0.018	10	0.018	0.04
Dichlorodiphenyltrichloroethane	RCBRA	5	0.027	0.04	5	0.019	0.18	10	0.019	0.18
Dieldrin	RCBRA	10	0.023	0.04				10	0.023	0.04
Endosulfan I	RCBRA	6	0.023	0.04	4	0.021	0.1	10	0.021	0.1
Endosulfan II	RCBRA	10	0.023	0.04				10	0.023	0.04
Endosulfan sulfate	RCBRA	9	0.023	0.04	1	1.4	1.4	10	0.023	1.4
Endrin	RCBRA	10	0.023	0.04				10	0.023	0.04
Endrin aldehyde	RCBRA	9	0.023	0.04	1	0.02	0.02	10	0.02	0.04
Endrin ketone	RCBRA	10	0.023	0.04				10	0.023	0.04
Fluoranthene	RCBRA	2	0.0781	0.0813	1	0.091	0.091	3	0.0781	0.091
Fluorene	RCBRA	2	0.0781	0.0971	1	0.14	0.14	3	0.0781	0.14
Gamma-BHC (lindane)	RCBRA	10	0.023	0.04				10	0.023	0.04
gamma-Chlordane	RCBRA	10	0.023	0.04				10	0.023	0.04
Heptachlor	RCBRA	10	0.023	0.04				10	0.023	0.04
Heptachlor epoxide	RCBRA	9	0.023	0.04	1	0.036	0.036	10	0.023	0.04

Table H-23. Invertebrate Tissue Samples from 100-F/100-IU-2/100-IU-6 Area

Analyte	Data Source	Nondetect Samples			Detect Samples			Total of All Samples		
		Number	Minimum	Maximum	Number	Minimum	Maximum	Number	Minimum	Maximum
Indeno[1,2,3-cd]pyrene	RCBRA	3	0.0781	0.0971				3	0.0781	0.0971
Methoxychlor	RCBRA	5	0.027	0.04	5	0.034	0.18	10	0.027	0.18
Naphthalene	RCBRA	3	0.781	0.971				3	0.781	0.971
Phenanthrene	RCBRA	3	0.0781	0.0971				3	0.0781	0.0971
Pyrene	RCBRA	3	0.0781	0.0971				3	0.0781	0.0971
Toxaphene	RCBRA	10	0.23	0.4				10	0.23	0.4
Radionuclides (pCi/g)										
strontium-90	PNNL	6	0.0029	0.0217				6	0.0029	0.0217
	RCBRA	5	-0.18	0.022				5	-0.18	0.022
Technetium-99	RCBRA	1	-0.244	-0.244				1	-0.244	-0.244
Thorium-228	RCBRA	4	0.03	0.233				4	0.03	0.233
Thorium-230	RCBRA	4	-0.03	0.233				4	-0.03	0.233
Thorium-232	RCBRA	4	0	0.233				4	0	0.233
Uranium-233/234	RCBRA	4	0	0.077				4	0	0.077
Uranium-235	RCBRA	4	0	0.032				4	0	0.032
Uranium-238	RCBRA	3	0	0.077	1	0.234	0.234	4	0	0.234

Table H-24. Mouse Tissue Samples from 100-F/100-IU-2/100-IU-6 Area. (9 Pages)

Analyte	Data Source	Nondetect Samples			Detect Samples			Total of All Samples		
		Number	Minimum	Maximum	Number	Minimum	Maximum	Number	Minimum	Maximum
Inorganics (mg/kg)										
Aluminum	PNNL	2	0.48	0.48	4	0.630	11.6	6	0.48	11.6
	RCBRA	15	1.7	2.8	31	2.1	102	46	1.7	102
Antimony	PNNL	2	0.0016	0.0016	4	0.00174	0.00296	6	0.0016	0.00296
	RCBRA	46	0.21	0.43				46	0.21	0.43
Arsenic	PNNL	5	0.032	0.032	1	0.112	0.112	6	0.032	0.112
	RCBRA	29	0.39	0.6	17	0.41	0.87	46	0.39	0.87
Barium	PNNL	6	0.128	0.128				6	0.128	0.128
	RCBRA				46	0.04	7.1	46	0.04	7.1
Beryllium	PNNL	6	0.0032	0.0032				6	0.0032	0.0032
	RCBRA	35	0.01	0.02	11	0.02	0.03	46	0.01	0.03
Bismuth	RCBRA	46	0.38	0.5				46	0.38	0.5
Boron	RCBRA	25	0.22	0.36	21	0.25	0.93	46	0.22	0.93
Cadmium	PNNL				6	0.0193	0.0934	6	0.0193	0.0934
	RCBRA	21	0.05	0.07	25	0.05	0.93	46	0.05	0.93
Calcium	RCBRA				46	46.3	18400	46	46.3	18400
Calculated total uranium	RCBRA	22	-0.0804	0.241	1	1.78	1.78	23	-0.0804	1.78
Chromium	PNNL				6	0.0534	0.531	6	0.0534	0.531
	RCBRA	8	0.12	0.13	38	0.12	0.87	46	0.12	0.87
Cobalt	RCBRA	44	0.08	0.14	2	0.08	0.13	46	0.08	0.14
Copper	PNNL				6	3.94	6.46	6	3.94	6.46
	RCBRA				46	2.5	15.3	46	2.5	15.3
Iron	RCBRA				46	88.6	358	46	88.6	358
Lead	PNNL	2	0.16	0.16	4	0.0182	0.0458	6	0.0182	0.16
	RCBRA	28	0.29	0.33	18	0.31	2.4	46	0.29	2.4
Lithium	RCBRA	9	0.03	0.13	37	0.03	0.11	46	0.03	0.13
Magnesium	RCBRA				46	183	691	46	183	691
Manganese	PNNL				6	2.49	5.89	6	2.49	5.89
	RCBRA				46	2	8.2	46	2	8.2

Table H-24. Mouse Tissue Samples from 100-F/100-IU-2/100-IU-6 Area. (9 Pages)

Analyte	Data Source	Nondetect Samples			Detect Samples			Total of All Samples		
		Number	Minimum	Maximum	Number	Minimum	Maximum	Number	Minimum	Maximum
Mercury	PNNL				6	0.00339	0.00714	6	0.00339	0.00714
	RCBRA	44	0.01	0.03	2	0.02	0.02	46	0.01	0.03
Molybdenum	RCBRA	10	0.27	0.28	36	0.28	1.6	46	0.27	1.6
Nickel	PNNL				6	0.0184	0.0982	6	0.0184	0.0982
	RCBRA	31	0.22	0.26	15	0.26	2.8	46	0.22	2.8
Phosphorus	RCBRA				46	2760	12500	46	2760	12500
Potassium	RCBRA				46	2040	3340	46	2040	3340
Selenium	PNNL				6	0.306	0.496	6	0.306	0.496
	RCBRA	7	0.44	0.46	39	0.46	2.6	46	0.44	2.6
Silicon	RCBRA				46	4.2	91.3	46	4.2	91.3
Silver	PNNL	5	0.00096	0.00096	1	0.0009632	0.0009632	6	0.00096	0.0009632
	RCBRA	37	0.06	0.09	9	0.07	0.17	46	0.06	0.17
Sodium	RCBRA				46	892	2500	46	892	2500
Strontium (elemental)	RCBRA				42	0.06	18.7	42	0.06	18.7
Thallium	PNNL				6	0.00132	0.00531	6	0.00132	0.00531
	RCBRA	46	0.65	0.79				46	0.65	0.79
Thorium	PNNL	5	0.0032	0.0032	1	0.00358	0.00358	6	0.0032	0.00358
Tin	RCBRA	25	0.99	3.2	21	1.1	2.6	46	0.99	3.2
Titanium	RCBRA	1	0.03	0.03	15	0.06	9.1	16	0.03	9.1
Uranium(inorganic)	PNNL	5	0.00032	0.00032	1	0.0003712	0.0003712	6	0.00032	0.0003712
	RCBRA	43	0.81	1.4	3	1	1.5	46	0.81	1.5
Vanadium	PNNL	4	0.0096	0.0096	2	0.0144	0.0336	6	0.0096	0.0336
	RCBRA	31	0.08	0.09	15	0.08	0.26	46	0.08	0.26
Zinc	PNNL				6	20.5	33.9	6	20.5	33.9
	RCBRA				46	24.9	130	46	24.9	130
Zirconium	RCBRA	17	0.31	1	4	0.75	0.88	21	0.31	1
Organics (mg/kg)										
1,2,4-Trichlorobenzene	RCBRA	23	2.8	4.8				23	2.8	4.8
1,2-Dichlorobenzene	RCBRA	23	2.8	4.8				23	2.8	4.8

Table H-24. Mouse Tissue Samples from 100-F/100-IU-2/100-IU-6 Area. (9 Pages)

Analyte	Data Source	Nondetect Samples			Detect Samples			Total of All Samples		
		Number	Minimum	Maximum	Number	Minimum	Maximum	Number	Minimum	Maximum
1,3-Dichlorobenzene	RCBRA	23	2.8	4.8				23	2.8	4.8
1,4-Dichlorobenzene	RCBRA	23	2.8	4.8				23	2.8	4.8
2,4,5-Trichlorophenol	RCBRA	23	7.1	12				23	7.1	12
2,4,6-Trichlorophenol	RCBRA	23	2.8	4.8				23	2.8	4.8
2,4-Dichlorophenol	RCBRA	23	2.8	4.8				23	2.8	4.8
2,4-Dimethylphenol	RCBRA	23	2.8	4.8				23	2.8	4.8
2,4-Dinitrophenol	RCBRA	23	7.1	12				23	7.1	12
2,4-Dinitrotoluene	RCBRA	23	2.8	4.8				23	2.8	4.8
2,6-Dinitrotoluene	RCBRA	23	2.8	4.8				23	2.8	4.8
2-Chloronaphthalene	RCBRA	23	2.8	4.8				23	2.8	4.8
2-Chlorophenol	RCBRA	23	2.8	4.8				23	2.8	4.8
2-Methylnaphthalene	RCBRA	23	2.8	4.8				23	2.8	4.8
2-Methylphenol [cresol, o-]	RCBRA	23	2.8	4.8				23	2.8	4.8
2-Nitroaniline	RCBRA	23	7.1	12				23	7.1	12
2-Nitrophenol	RCBRA	23	2.8	4.8				23	2.8	4.8
3,3*-Dichlorobenzidine	RCBRA	23	2.8	4.8				23	2.8	4.8
3+4 Methylphenol [cresol, m+p]	RCBRA	18	2.8	4.2	5	0.22	0.34	23	0.22	4.2
3-Nitroaniline	RCBRA	23	7.1	12				23	7.1	12
4,6-Dinitro-2-methylphenol	RCBRA	23	7.1	12				23	7.1	12
4-Bromophenylphenyl ether	RCBRA	23	2.8	4.8				23	2.8	4.8
4-Chloro-3-methylphenol	RCBRA	23	2.8	4.8				23	2.8	4.8
4-Chloroaniline	RCBRA	23	2.8	4.8				23	2.8	4.8
4-Chlorophenylphenyl ether	RCBRA	23	2.8	4.8				23	2.8	4.8
4-Nitroaniline	RCBRA	23	7.1	12				23	7.1	12
4-Nitrophenol	RCBRA	23	7.1	12				23	7.1	12
Acenaphthene	RCBRA	23	2.8	4.8				23	2.8	4.8
Acenaphthylene	RCBRA	23	2.8	4.8				23	2.8	4.8
Aldrin	RCBRA	15	0.014	0.02	8	0.0083	0.029	23	0.0083	0.029
Alpha-BHC	RCBRA	23	0.014	0.02				23	0.014	0.02

Table H-24. Mouse Tissue Samples from 100-F/100-IU-2/100-IU-6 Area. (9 Pages)

Analyte	Data Source	Nondetect Samples			Detect Samples			Total of All Samples		
		Number	Minimum	Maximum	Number	Minimum	Maximum	Number	Minimum	Maximum
alpha-Chlordane	RCBRA	23	0.014	0.02				23	0.014	0.02
Anthracene	RCBRA	23	2.8	4.8				23	2.8	4.8
Aroclor-1016	RCBRA	23	0.081	0.92				23	0.081	0.92
Aroclor-1221	RCBRA	23	0.081	0.92				23	0.081	0.92
Aroclor-1232	RCBRA	23	0.081	0.92				23	0.081	0.92
Aroclor-1242	RCBRA	23	0.081	0.92				23	0.081	0.92
Aroclor-1248	RCBRA	23	0.081	0.92				23	0.081	0.92
	RCBRA	23	0.081	0.92				23	0.081	0.92
Aroclor-1260	RCBRA	23	0.081	0.92				23	0.081	0.92
Benzo[a]anthracene	RCBRA	23	2.8	4.8				23	2.8	4.8
Benzo[a]pyrene	RCBRA	23	2.8	4.8				23	2.8	4.8
Benzo[b]fluoranthene	RCBRA	23	2.8	4.8				23	2.8	4.8
Benzo[ghi]perylene	RCBRA	23	2.8	4.8				23	2.8	4.8
Benzo[k]fluoranthene	RCBRA	23	2.8	4.8				23	2.8	4.8
beta-1,2,3,4,5,6-Hexachlorocyclohexane	RCBRA	19	0.014	0.02	4	0.014	0.046	23	0.014	0.046
Bis[2-chloro-1-methylethyl]ether	RCBRA	23	2.8	4.8				23	2.8	4.8
Bis[2-Chloroethoxy]methane	RCBRA	23	2.8	4.8				23	2.8	4.8
Bis[2-chloroethyl] ether	RCBRA	23	2.8	4.8				23	2.8	4.8
Bis[2-ethylhexyl] phthalate	RCBRA	8	0.54	3.8	15	0.18	14	23	0.18	14
Butylbenzylphthalate	RCBRA	23	2.8	4.8				23	2.8	4.8
Carbazole	RCBRA	23	2.8	4.8				23	2.8	4.8
Chrysene	RCBRA	23	2.8	4.8				23	2.8	4.8
Delta-BHC	RCBRA	20	0.014	0.02	3	0.026	0.04	23	0.014	0.04
Dibenz[a,h]anthracene	RCBRA	23	2.8	4.8				23	2.8	4.8
Dibenzofuran	RCBRA	23	2.8	4.8				23	2.8	4.8
Dichlorodiphenyldi-chloroethane	RCBRA	23	0.014	0.02				23	0.014	0.02
Dichlorodiphenyldi-chloroethylene	RCBRA	22	0.014	0.02	1	0.011	0.011	23	0.011	0.02
Dichlorodiphenyltri-chloroethane	RCBRA	23	0.014	0.02				23	0.014	0.02

Table H-24. Mouse Tissue Samples from 100-F/100-IU-2/100-IU-6 Area. (9 Pages)

Analyte	Data Source	Nondetect Samples			Detect Samples			Total of All Samples		
		Number	Minimum	Maximum	Number	Minimum	Maximum	Number	Minimum	Maximum
Dieldrin	RCBRA	23	0.014	0.02				23	0.014	0.02
Diethylphthalate	RCBRA	23	2.8	4.8				23	2.8	4.8
Dimethyl phthalate	RCBRA	23	2.8	4.8				23	2.8	4.8
Di-n-butylphthalate	RCBRA	16	2.8	4.8	7	0.17	0.32	23	0.17	4.8
Di-n-octylphthalate	RCBRA	19	2.8	4	4	0.3	0.74	23	0.3	4
Endosulfan I	RCBRA	23	0.014	0.02				23	0.014	0.02
Endosulfan II	RCBRA	23	0.014	0.02				23	0.014	0.02
Endosulfan sulfate	RCBRA	23	0.014	0.02				23	0.014	0.02
Endrin	RCBRA	23	0.014	0.02				23	0.014	0.02
Endrin aldehyde	RCBRA	23	0.014	0.02				23	0.014	0.02
Endrin ketone	RCBRA	23	0.014	0.02				23	0.014	0.02
Fluoranthene	RCBRA	23	2.8	4.8				23	2.8	4.8
Fluorene	RCBRA	23	2.8	4.8				23	2.8	4.8
Gamma-BHC (lindane)	RCBRA	22	0.014	0.02	1	0.0079	0.0079	23	0.0079	0.02
gamma-Chlordane	RCBRA	23	0.014	0.02				23	0.014	0.02
Heptachlor	RCBRA	22	0.014	0.02	1	0.019	0.019	23	0.014	0.02
Heptachlor epoxide	RCBRA	23	0.014	0.02				23	0.014	0.02
Hexachlorobenzene	RCBRA	23	2.8	4.8				23	2.8	4.8
Hexachlorobutadiene	RCBRA	23	2.8	4.8				23	2.8	4.8
Hexachlorocyclopentadiene	RCBRA	23	2.8	4.8				23	2.8	4.8
Hexachloroethane	RCBRA	23	2.8	4.8				23	2.8	4.8
Indeno[1,2,3-cd]pyrene	RCBRA	23	2.8	4.8				23	2.8	4.8
Isophorone	RCBRA	23	2.8	4.8				23	2.8	4.8
Methoxychlor	RCBRA	22	0.014	0.03	1	0.03	0.03	23	0.014	0.03
Naphthalene	RCBRA	23	2.8	4.8				23	2.8	4.8
Nitrobenzene	RCBRA	23	2.8	4.8				23	2.8	4.8
N-Nitroso-di-n-dipropylamine	RCBRA	23	2.8	4.8				23	2.8	4.8
N-Nitrosodiphenylamine	RCBRA	23	2.8	4.8				23	2.8	4.8
Pentachlorophenol	RCBRA	22	7.1	12	1	0.18	0.18	23	0.18	12

Table H-24. Mouse Tissue Samples from 100-F/100-IU-2/100-IU-6 Area. (9 Pages)

Analyte	Data Source	Nondetect Samples			Detect Samples			Total of All Samples		
		Number	Minimum	Maximum	Number	Minimum	Maximum	Number	Minimum	Maximum
Phenanthrene	RCBRA	23	2.8	4.8				23	2.8	4.8
Phenol	RCBRA	9	3.2	4.2	14	0.16	0.62	23	0.16	4.2
Pyrene	RCBRA	23	2.8	4.8				23	2.8	4.8
Toxaphene	RCBRA	23	0.14	0.2				23	0.14	0.2
Radionuclides (pCi/g)										
Americium-241	RCBRA	23	0.041	0.34				23	0.041	0.34
Antimony-125	PNNL	2	-0.0226	0.0204				2	-0.0226	0.0204
	RCBRA	23	0.071	0.22				23	0.071	0.22
Barium-133	RCBRA	5	0.032	0.1				5	0.032	0.1
Beryllium-7	PNNL	2	-0.323	-0.148				2	-0.323	-0.148
	RCBRA	23	0	0.86				23	0	0.86
Carbon-14	RCBRA	1	-1.92	-1.92				1	-1.92	-1.92
Cesium-134	PNNL	2	0.0154	0.0588				2	0.0154	0.0588
	RCBRA	23	0.034	0.14				23	0.034	0.14
Cesium-137	PNNL	2	-0.11	0.0421				2	-0.11	0.0421
	RCBRA	23	0.031	0.11				23	0.031	0.11
Cobalt-60	PNNL	2	0.0129	0.0289				2	0.0129	0.0289
	RCBRA	23	0.032	0.13				23	0.032	0.13
Europium-152	PNNL	2	-0.0993	0.0509				2	-0.0993	0.0509
	RCBRA	23	0.076	0.276				23	0.076	0.276
Europium-154	PNNL	2	-0.168	0.239				2	-0.168	0.239
	RCBRA	23	0.092	0.32				23	0.092	0.32
Europium-155	PNNL	2	0.03	0.086				2	0.03	0.086
	RCBRA	23	0.073	0.29				23	0.073	0.29
Plutonium-238	RCBRA	17	-0.038	0.043				17	-0.038	0.043
Plutonium-239/240	RCBRA	17	0	0.157				17	0	0.157
Potassium-40	PNNL				2	3.23	4.27	2	3.23	4.27
	RCBRA	6	0	3.5	17	2.03	4.34	23	0	4.34
Radium-226	RCBRA	23	0.055	0.25				23	0.055	0.25

Table H-24. Mouse Tissue Samples from 100-F/100-IU-2/100-IU-6 Area. (9 Pages)

Analyte	Data Source	Nondetect Samples			Detect Samples			Total of All Samples		
		Number	Minimum	Maximum	Number	Minimum	Maximum	Number	Minimum	Maximum
Radium-228	RCBRA	23	0.13	0.53				23	0.13	0.53
Ruthenium-106	PNNL	2	-0.231	-0.11				2	-0.231	-0.11
	RCBRA	23	0.26	0.89				23	0.26	0.89
Strontium-90	PNNL	4	0.000158	0.0401				4	0.000158	0.0401
	RCBRA	20	-0.087	0.132	3	0.251	0.406	23	-0.087	0.406
Technetium-99	RCBRA	1	0.067	0.067				1	0.067	0.067
Thorium-228	RCBRA	23	-0.108	0.162				23	-0.108	0.162
Thorium-230	RCBRA	23	-0.136	0.567				23	-0.136	0.567
Thorium-232	RCBRA	23	-0.04	0.069				23	-0.04	0.069
Uranium-233/234	RCBRA	22	-0.021	0.054	1	0.423	0.423	23	-0.021	0.423
Uranium-235	RCBRA	23	0	0.1				23	0	0.1
Uranium-238	RCBRA	22	-0.027	0.081	1	0.597	0.597	23	-0.027	0.597

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Table H-25. Deer Tissue Samples from 100-F/100-IU-2/100-IU-6 Area

Analyte	Data Source	Non Detect Samples			Detect Samples			Total of All Samples		
		Number	Minimum	Maximum	Number	Minimum	Maximum	Number	Minimum	Maximum
Radionuclides (pCi/g)										
Antimony-125	PNNL	5	-0.0046	0.0261				5	-0.0046	0.0261
Beryllium-7	PNNL	5	-0.319	0.0237				5	-0.319	0.0237
Cesium-134	PNNL	5	-0.0107	0.00171				5	-0.0107	0.00171
Cesium-137	PNNL	4	-0.00017	0.00866	1	0.0247	0.0247	5	-0.00017	0.0247
Cobalt-60	PNNL	5	-0.00603	0.00444				5	-0.00603	0.00444
Europium-152	PNNL	2	-0.0025	0.00692				2	-0.0025	0.00692
Europium-154	PNNL	5	-0.024	0.0329				5	-0.024	0.0329
Europium-155	PNNL	5	-0.0124	0.0121				5	-0.0124	0.0121
Potassium-40	PNNL				5	2.39	3.03	5	2.39	3.03
Ruthenium-106	PNNL	5	-0.309	0.278				5	-0.309	0.278
strontium-90	PNNL	1	0.0602	0.0602	8	0.113	0.574	9	0.0602	0.574

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Table H-26. Bird Tissue Samples from 100-F/100-IU-2/100-IU-6 Area

Analyte	Data Source	Nondetect Samples			Detect Samples			Total of All Samples		
		Number	Minimum	Maximum	Number	Minimum	Maximum	Number	Minimum	Maximum
Inorganics (mg/kg)										
Aluminum	PNNL				4	0.253	3.05	4	0.253	3.05
	RCBRA				2	7	7.6	2	7	7.6
Antimony	PNNL	4	0.0032	0.0032				4	0.0032	0.0032
	RCBRA	2	0.21	0.34				2	0.21	0.34
Arsenic	PNNL	1	0.032	0.032	3	0.114	0.336	4	0.032	0.336
	RCBRA	1	0.4	0.4	1	0.91	0.91	2	0.4	0.91
Barium	PNNL				2	0.0630	0.0726	2	0.0630	0.0726
	RCBRA				2	0.43	0.65	2	0.43	0.65
Beryllium	PNNL	4	0.0064	0.0064				4	0.0064	0.0064
	RCBRA	1	0.02	0.02	1	0.02	0.02	2	0.02	0.02
Bismuth	RCBRA	2	0.39	0.62				2	0.39	0.62
Boron	RCBRA	1	0.35	0.35	1	5.8	5.8	2	0.35	5.8
Cadmium	PNNL				4	0.139	1.07	4	0.139	1.07
	RCBRA				2	0.05	0.17	2	0.05	0.17
Calcium	RCBRA				2	1,870	5,870	2	1,870	5,870
Calculated total uranium	RCBRA	1	0.0190	0.0190				1	0.0190	0.0190
Chromium	PNNL				4	0.102	0.310	4	0.102	0.310
	RCBRA				2	0.21	0.24	2	0.21	0.24
Cobalt	RCBRA	2	0.08	0.12				2	0.08	0.12
Copper	PNNL				4	4.64	5.344	4	4.64	5.344
	RCBRA				2	3	7.8	2	3	7.8
Iron	RCBRA				2	35.7	69.1	2	35.7	69.1
Lead	PNNL				4	0.0112	0.0918	4	0.0112	0.0918
	RCBRA	2	0.32	0.52				2	0.32	0.52
Lithium	RCBRA				2	0.05	0.15	2	0.05	0.15
Magnesium	RCBRA				2	159	306	2	159	306
Manganese	PNNL				4	4.10	7.17	4	4.10	7.17
	RCBRA				2	0.87	4.7	2	0.87	4.7

Table H-26. Bird Tissue Samples from 100-F/100-IU-2/100-IU-6 Area

Analyte	Data Source	Nondetect Samples			Detect Samples			Total of All Samples		
		Number	Minimum	Maximum	Number	Minimum	Maximum	Number	Minimum	Maximum
Mercury	PNNL	1	0.016	0.016	1	0.0193	0.0193	2	0.016	0.0193
	RCBRA	1	0.02	0.02	1	0.02	0.02	2	0.02	0.02
Molybdenum	RCBRA				2	0.2	0.56	2	0.2	0.56
Nickel	PNNL	3	0.016	0.016	1	0.0274	0.0274	4	0.016	0.0274
	RCBRA	2	0.26	0.42				2	0.26	0.42
Phosphorus	RCBRA				2	236	4730	2	236	4730
Potassium	RCBRA				2	862	2520	2	862	2520
Selenium	PNNL				4	0.662	2.17	4	0.662	2.17
	RCBRA	1	0.67	0.67	1	1.5	1.5	2	0.67	1.5
Silicon	RCBRA				2	8.2	15.2	2	8.2	15.2
Silver	PNNL	4	0.00288	0.0032				4	0.00288	0.0032
	RCBRA	2	0.09	0.14				2	0.09	0.14
Sodium	RCBRA				2	891	1290	2	891	1290
Strontium (elemental)	RCBRA				2	2.7	4.6	2	2.7	4.6
Thallium	PNNL				4	0.00280	0.00746	4	0.00280	0.00746
	RCBRA	2	0.78	1.2				2	0.78	1.2
Thorium	PNNL	4	0.00171	0.0064				4	0.00171	0.0064
Tin	RCBRA				2	1.7	4.1	2	1.7	4.1
Uranium (inorganic)	PNNL	4	0.00288	0.0032				4	0.00288	0.0032
	RCBRA	2	1.4	2.2				2	1.4	2.2
Vanadium	RCBRA	2	0.08	0.12				2	0.08	0.12
Zinc	PNNL				4	30.0	33.0	4	30.0	33.0
	RCBRA				2	28.3	35	2	28.3	35
Organics (mg/kg)										
1,2,4-Trichlorobenzene	RCBRA	1	1.7	1.7				1	1.7	1.7
1,2-Dichlorobenzene	RCBRA	1	1.7	1.7				1	1.7	1.7
1,3-Dichlorobenzene	RCBRA	1	1.7	1.7				1	1.7	1.7
1,4-Dichlorobenzene	RCBRA	1	1.7	1.7				1	1.7	1.7
2,4,5-Trichlorophenol	RCBRA	1	4.2	4.2				1	4.2	4.2

Table H-26. Bird Tissue Samples from 100-F/100-IU-2/100-IU-6 Area

Analyte	Data Source	Nondetect Samples			Detect Samples			Total of All Samples		
		Number	Minimum	Maximum	Number	Minimum	Maximum	Number	Minimum	Maximum
2,4,6-Trichlorophenol	RCBRA	1	1.7	1.7				1	1.7	1.7
2,4-Dichlorophenol	RCBRA	1	1.7	1.7				1	1.7	1.7
2,4-Dimethylphenol	RCBRA	1	1.7	1.7				1	1.7	1.7
2,4-Dinitrophenol	RCBRA	1	4.2	4.2				1	4.2	4.2
2,4-Dinitrotoluene	RCBRA	1	1.7	1.7				1	1.7	1.7
2,6-Dinitrotoluene	RCBRA	1	1.7	1.7				1	1.7	1.7
2-Chloronaphthalene	RCBRA	1	1.7	1.7				1	1.7	1.7
2-Chlorophenol	RCBRA	1	1.7	1.7				1	1.7	1.7
2-Methylnaphthalene	RCBRA	1	1.7	1.7				1	1.7	1.7
2-Methylphenol [cresol, o-]	RCBRA	1	1.7	1.7				1	1.7	1.7
2-Nitroaniline	RCBRA	1	4.2	4.2				1	4.2	4.2
2-Nitrophenol	RCBRA	1	1.7	1.7				1	1.7	1.7
3,3*-Dichlorobenzidine	RCBRA	1	1.7	1.7				1	1.7	1.7
3+4 Methylphenol [cresol, m+p]	RCBRA	1	1.7	1.7				1	1.7	1.7
3-Nitroaniline	RCBRA	1	4.2	4.2				1	4.2	4.2
4,6-Dinitro-2-methylphenol	RCBRA	1	4.2	4.2				1	4.2	4.2
4-Bromophenylphenyl ether	RCBRA	1	1.7	1.7				1	1.7	1.7
4-Chloro-3-methylphenol	RCBRA	1	1.7	1.7				1	1.7	1.7
4-Chloroaniline	RCBRA	1	1.7	1.7				1	1.7	1.7
4-Chlorophenylphenyl ether	RCBRA	1	1.7	1.7				1	1.7	1.7
4-Nitroaniline	RCBRA	1	4.2	4.2				1	4.2	4.2
4-Nitrophenol	RCBRA	1	4.2	4.2				1	4.2	4.2
Acenaphthene	RCBRA	1	1.7	1.7				1	1.7	1.7
Acenaphthylene	RCBRA	1	1.7	1.7				1	1.7	1.7
Aldrin	RCBRA	1	0.002	0.002				1	0.002	0.002
Alpha-BHC	RCBRA	1	0.002	0.002				1	0.002	0.002
alpha-Chlordane	RCBRA	1	0.002	0.002				1	0.002	0.002
Anthracene	RCBRA	1	1.7	1.7				1	1.7	1.7
Aroclor-1016	RCBRA	1	0.02	0.02				1	0.02	0.02

Table H-26. Bird Tissue Samples from 100-F/100-IU-2/100-IU-6 Area

Analyte	Data Source	Nondetect Samples			Detect Samples			Total of All Samples		
		Number	Minimum	Maximum	Number	Minimum	Maximum	Number	Minimum	Maximum
Aroclor-1221	RCBRA	1	0.02	0.02				1	0.02	0.02
Aroclor-1232	RCBRA	1	0.02	0.02				1	0.02	0.02
Aroclor-1242	RCBRA	1	0.02	0.02				1	0.02	0.02
Aroclor-1248	RCBRA	1	0.02	0.02				1	0.02	0.02
Aroclor-1254	RCBRA				1	0.064	0.064	1	0.064	0.064
Aroclor-1260	RCBRA	1	0.02	0.02				1	0.02	0.02
Benzo[a]anthracene	RCBRA	1	1.7	1.7				1	1.7	1.7
Benzo[a]pyrene	RCBRA	1	1.7	1.7				1	1.7	1.7
Benzo[b]fluoranthene	RCBRA	1	1.7	1.7				1	1.7	1.7
Benzo[ghi]perylene	RCBRA	1	1.7	1.7				1	1.7	1.7
Benzo[k]fluoranthene	RCBRA	1	1.7	1.7				1	1.7	1.7
beta-1,2,3,4,5,6-Hexachlorocyclohexane	RCBRA	1	0.002	0.002				1	0.002	0.002
Bis[2-chloro-1-methylethyl]ether	RCBRA	1	1.7	1.7				1	1.7	1.7
Bis[2-Chloroethoxy]methane	RCBRA	1	1.7	1.7				1	1.7	1.7
Bis[2-chloroethyl] ether	RCBRA	1	1.7	1.7				1	1.7	1.7
Bis[2-ethylhexyl] phthalate	RCBRA				1	0.28	0.28	1	0.28	0.28
Butylbenzylphthalate	RCBRA	1	1.7	1.7				1	1.7	1.7
Carbazole	RCBRA	1	1.7	1.7				1	1.7	1.7
Chrysene	RCBRA	1	1.7	1.7				1	1.7	1.7
Delta-BHC	RCBRA	1	0.002	0.002				1	0.002	0.002
Dibenz[a,h]anthracene	RCBRA	1	1.7	1.7				1	1.7	1.7
Dibenzofuran	RCBRA	1	1.7	1.7				1	1.7	1.7
Dichlorodiphenyldichloroethane	RCBRA				1	0.0082	0.0082	1	0.0082	0.0082
Dichlorodiphenyldichloroethylene	RCBRA				1	0.15	0.15	1	0.15	0.15
Dichlorodiphenyltrichloroethane	RCBRA	1	0.002	0.002				1	0.002	0.002
Dieldrin	RCBRA	1	0.002	0.002				1	0.002	0.002
Diethylphthalate	RCBRA	1	1.7	1.7				1	1.7	1.7
Dimethyl phthalate	RCBRA	1	1.7	1.7				1	1.7	1.7

Table H-26. Bird Tissue Samples from 100-F/100-IU-2/100-IU-6 Area

Analyte	Data Source	Nondetect Samples			Detect Samples			Total of All Samples		
		Number	Minimum	Maximum	Number	Minimum	Maximum	Number	Minimum	Maximum
Di-n-butylphthalate	RCBRA	1	1.7	1.7				1	1.7	1.7
Di-n-octylphthalate	RCBRA	1	1.7	1.7				1	1.7	1.7
Endosulfan I	RCBRA	1	0.002	0.002				1	0.002	0.002
Endosulfan II	RCBRA	1	0.002	0.002				1	0.002	0.002
Endosulfan sulfate	RCBRA				1	0.0075	0.0075	1	0.0075	0.0075
Endrin	RCBRA	1	0.002	0.002				1	0.002	0.002
Endrin aldehyde	RCBRA				1	0.0055	0.0055	1	0.0055	0.0055
Endrin ketone	RCBRA				1	0.0023	0.0023	1	0.0023	0.0023
Fluoranthene	RCBRA	1	1.7	1.7				1	1.7	1.7
Fluorene	RCBRA	1	1.7	1.7				1	1.7	1.7
Gamma-BHC (lindane)	RCBRA				1	0.0038	0.0038	1	0.0038	0.0038
gamma-Chlordane	RCBRA	1	0.002	0.002				1	0.002	0.002
Heptachlor	RCBRA	1	0.002	0.002				1	0.002	0.002
Heptachlor epoxide	RCBRA	1	0.002	0.002				1	0.002	0.002
Hexachlorobenzene	RCBRA	1	1.7	1.7				1	1.7	1.7
Hexachlorobutadiene	RCBRA	1	1.7	1.7				1	1.7	1.7
Hexachlorocyclopentadiene	RCBRA	1	1.7	1.7				1	1.7	1.7
Hexachloroethane	RCBRA	1	1.7	1.7				1	1.7	1.7
Indeno[1,2,3-cd]pyrene	RCBRA	1	1.7	1.7				1	1.7	1.7
Isophorone	RCBRA	1	1.7	1.7				1	1.7	1.7
Methoxychlor	RCBRA				1	0.008	0.008	1	0.008	0.008
Naphthalene	RCBRA	1	1.7	1.7				1	1.7	1.7
Nitrobenzene	RCBRA	1	1.7	1.7				1	1.7	1.7
N-Nitroso-di-n-dipropylamine	RCBRA	1	1.7	1.7				1	1.7	1.7
N-Nitrosodiphenylamine	RCBRA	1	1.7	1.7				1	1.7	1.7
Pentachlorophenol	RCBRA	1	4.2	4.2				1	4.2	4.2
Phenanthrene	RCBRA	1	1.7	1.7				1	1.7	1.7
Phenol	RCBRA	1	1.7	1.7				1	1.7	1.7
Pyrene	RCBRA	1	1.7	1.7				1	1.7	1.7

Table H-26. Bird Tissue Samples from 100-F/100-IU-2/100-IU-6 Area

Analyte	Data Source	Nondetect Samples			Detect Samples			Total of All Samples		
		Number	Minimum	Maximum	Number	Minimum	Maximum	Number	Minimum	Maximum
Toxaphene	RCBRA	1	0.02	0.02				1	0.02	0.02
Radionuclides (pCi/g)										
Americium-241	RCBRA	1	0.415	0.415				1	0.415	0.415
Antimony-125	PNNL	22	-0.043	0.0335				22	-0.043	0.0335
	RCBRA	1	0.242	0.242				1	0.242	0.242
Beryllium-7	PNNL	22	-0.243	0.377				22	-0.243	0.377
	RCBRA	1	0	0				1	0	0
Cerium/praseodymium-144	PNNL	6	-0.0855	0.0242				6	-0.0855	0.0242
Cesium-134	PNNL	22	-0.0446	0.0289				22	-0.0446	0.0289
	RCBRA	1	0.129	0.129				1	0.129	0.129
Cesium-137	PNNL	18	-0.0198	0.0205	4	0.00843	0.0232	22	-0.0198	0.0232
	RCBRA	1	0.236	0.236				1	0.236	0.236
Cobalt-60	PNNL	20	-0.0118	0.0586	2	0.0115	0.0307	22	-0.0118	0.0586
	RCBRA	1	0.244	0.244				1	0.244	0.244
Europium-152	PNNL	4	-0.0246	-0.00338				4	-0.0246	-0.00338
	RCBRA	1	0.285	0.285				1	0.285	0.285
Europium-154	PNNL	21	-0.0423	0.0772	1	0.0336	0.0336	22	-0.0423	0.0772
	RCBRA	1	0.308	0.308				1	0.308	0.308
Europium-155	PNNL	22	-0.0279	0.051				22	-0.0279	0.051
	RCBRA	1	0.243	0.243				1	0.243	0.243
Potassium-40	PNNL				22	1.45	3.71	22	1.45	3.71
	RCBRA	1	0.007	0.007				1	0.007	0.007
Radium-226	RCBRA	1	0.226	0.226				1	0.226	0.226
Radium-228	RCBRA	1	0.494	0.494				1	0.494	0.494
Ruthenium-106	PNNL	21	-0.141	0.161	1	0.0725	0.0725	22	-0.141	0.161
	RCBRA	1	0.88	0.88				1	0.88	0.88
strontium-90	PNNL	14	-0.0233	0.0352	8	0.0403	0.102	22	-0.0233	0.102
	RCBRA	1	0.136	0.136				1	0.136	0.136
Thorium-228	RCBRA	1	0.057	0.057				1	0.057	0.057

Table H-26. Bird Tissue Samples from 100-F/100-IU-2/100-IU-6 Area

Analyte	Data Source	Nondetect Samples			Detect Samples			Total of All Samples		
		Number	Minimum	Maximum	Number	Minimum	Maximum	Number	Minimum	Maximum
Thorium-230	RCBRA	1	-0.028	-0.028				1	-0.028	-0.028
Thorium-232	RCBRA	1	-0.028	-0.028				1	-0.028	-0.028
Uranium-233/234	RCBRA	1	0.013	0.013				1	0.013	0.013
Uranium-235	RCBRA	1	-0.004	-0.004				1	-0.004	-0.004
Uranium-238	RCBRA	1	0.007	0.007				1	0.007	0.007
Zinc-65	PNNL	5	-0.0101	0.0292	1	0.0467	0.0467	6	-0.0101	0.0467
Zirconium/niobium-95	PNNL	6	0.00234	0.033				6	0.00234	0.033

H5 Sample Locations

This section contains the sample locations for the contaminants of potential ecological concern (COPECs) at wastes sites identified in Scientific Management Decision Process (SMDP) as shown in Figures H-1 through H-52.

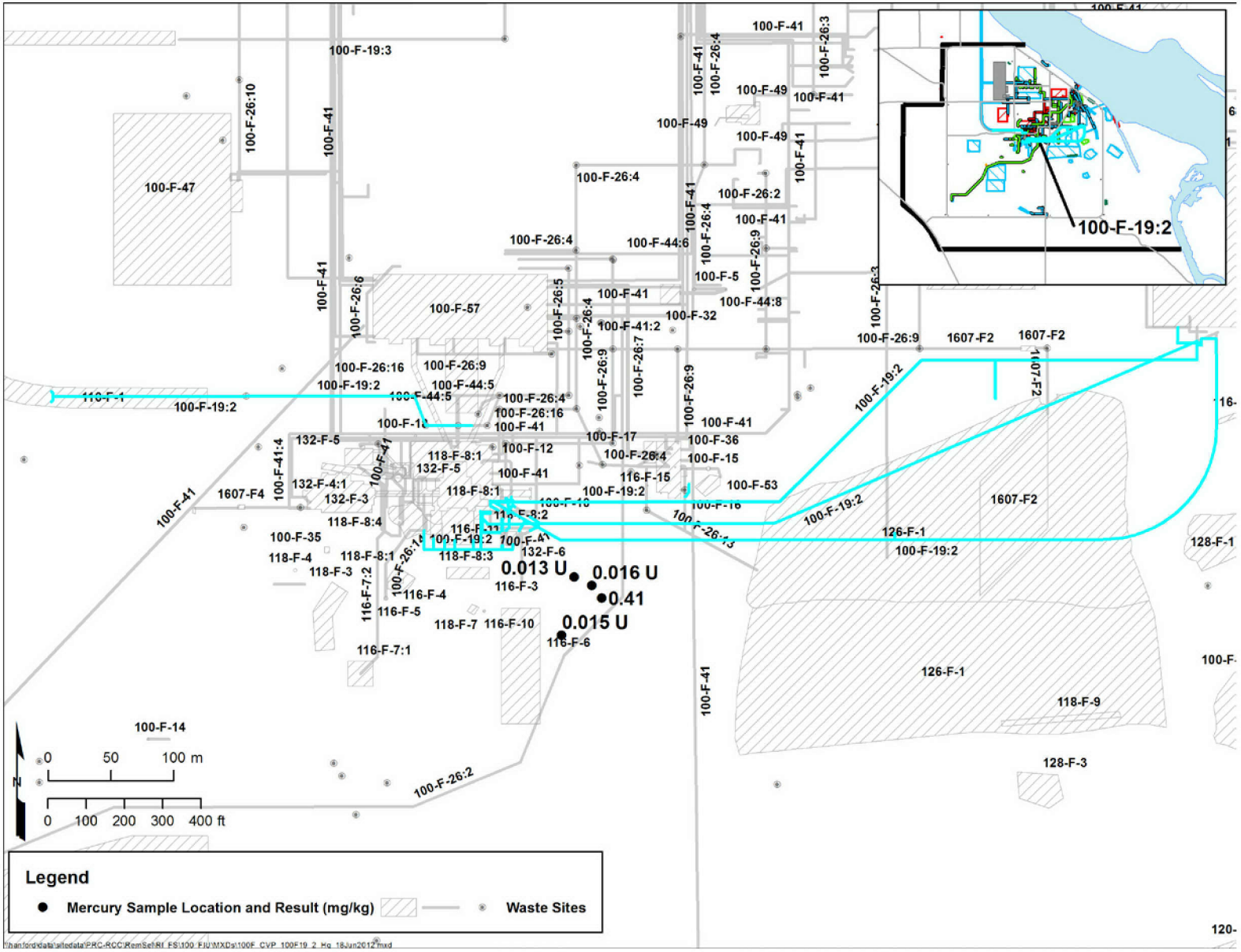

Figure H-1. 100-F Effluent Pipelines (100-F-19:2_Overburden) Sampling Locations and Associated Mercury Results

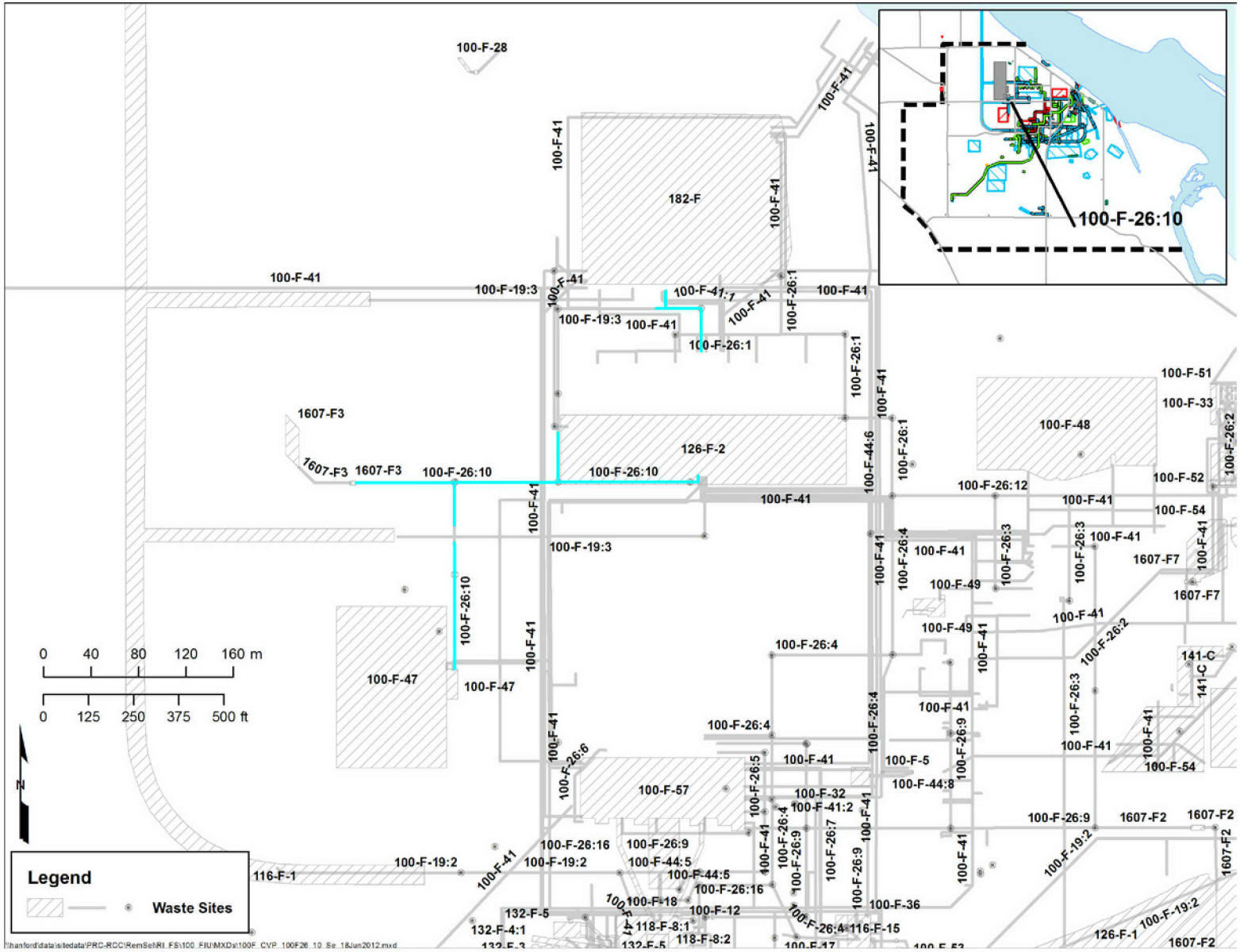

Figure H-2. 100-F Process Sewer Pipelines (100-F-26:10_Overburden_Focused) Sampling Locations and Associated Selenium Results

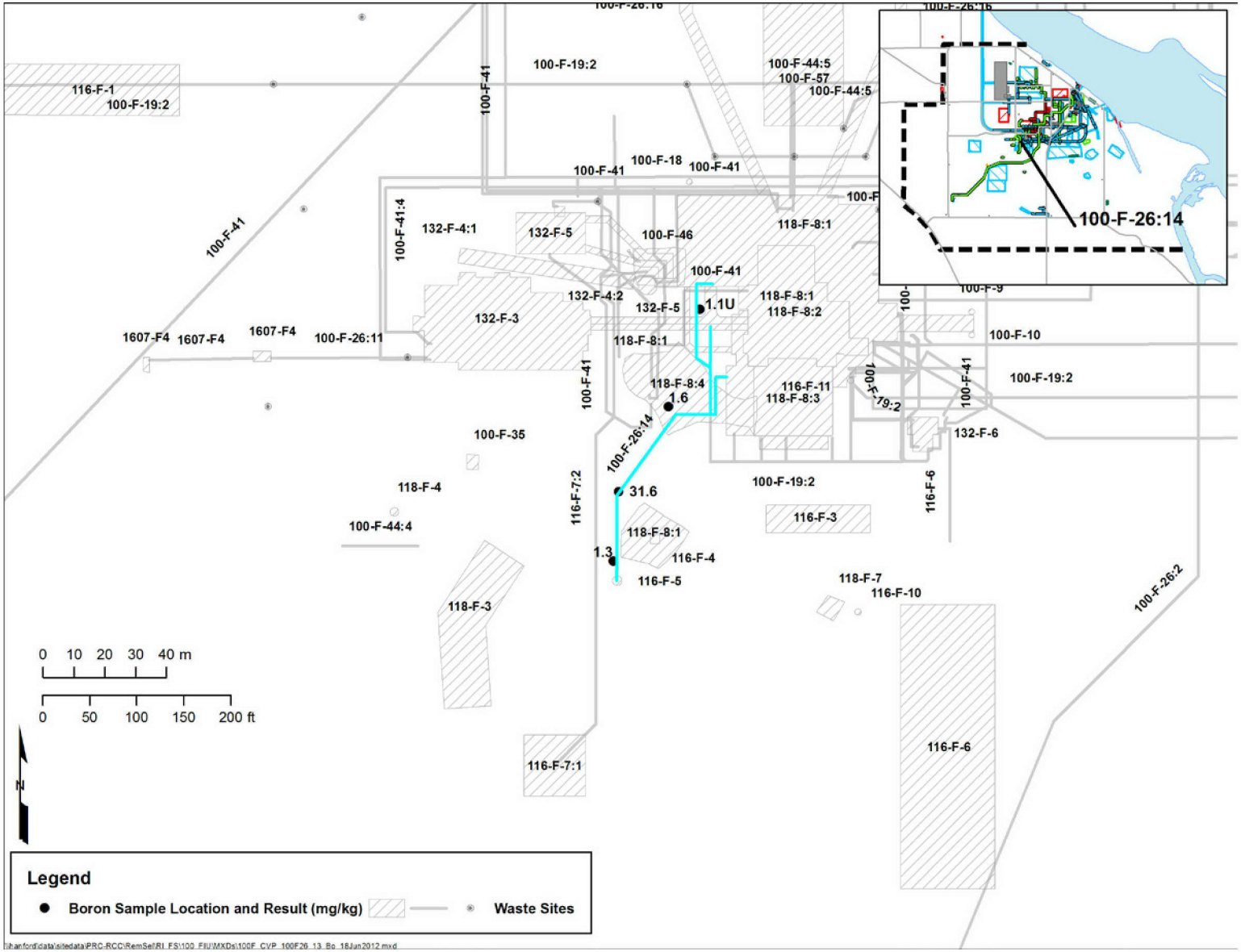

Figure H-3. 100-F Process Sewer Pipelines (100-F-26:14_Shallow) Sampling Locations and Associated Boron Results

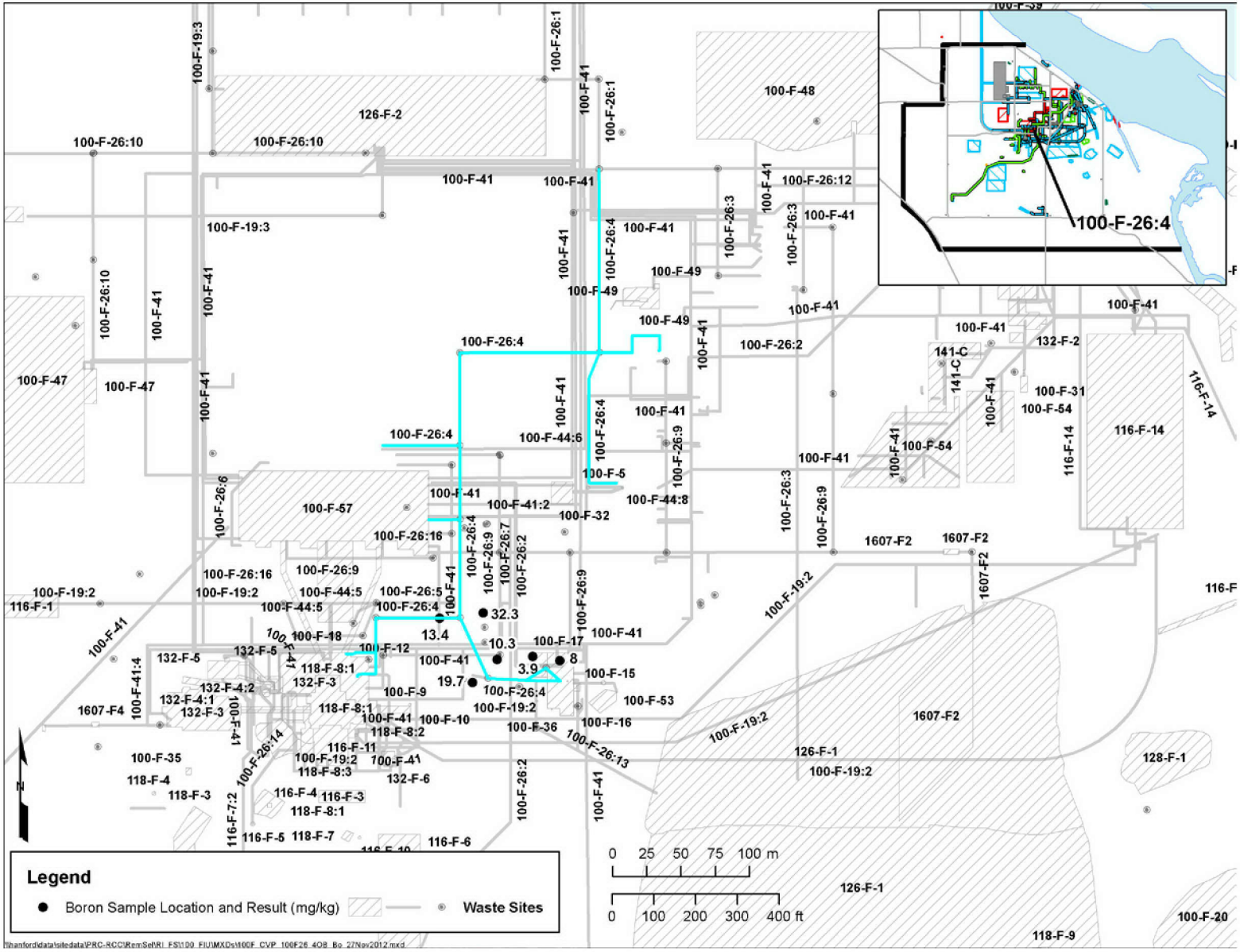

Figure H-4. 100-F Process Sewer Pipelines (100-F-26:4_Overburden_Focused) Sampling Locations and Associated Boron Results

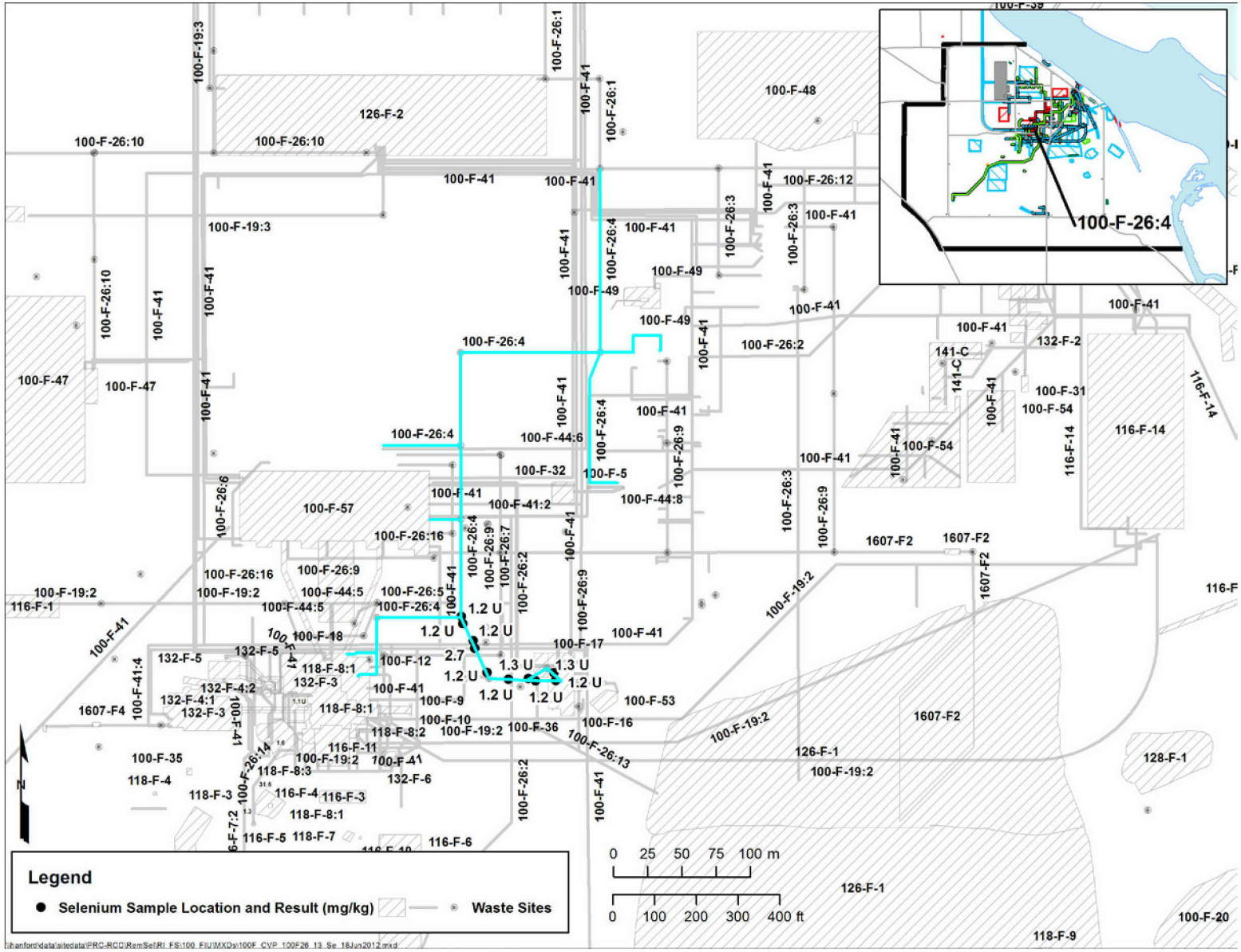

Figure H-5. 100-F Process Sewer Pipelines (100-F-26:4_Shallow_1) Sampling Locations and Associated Selenium Results

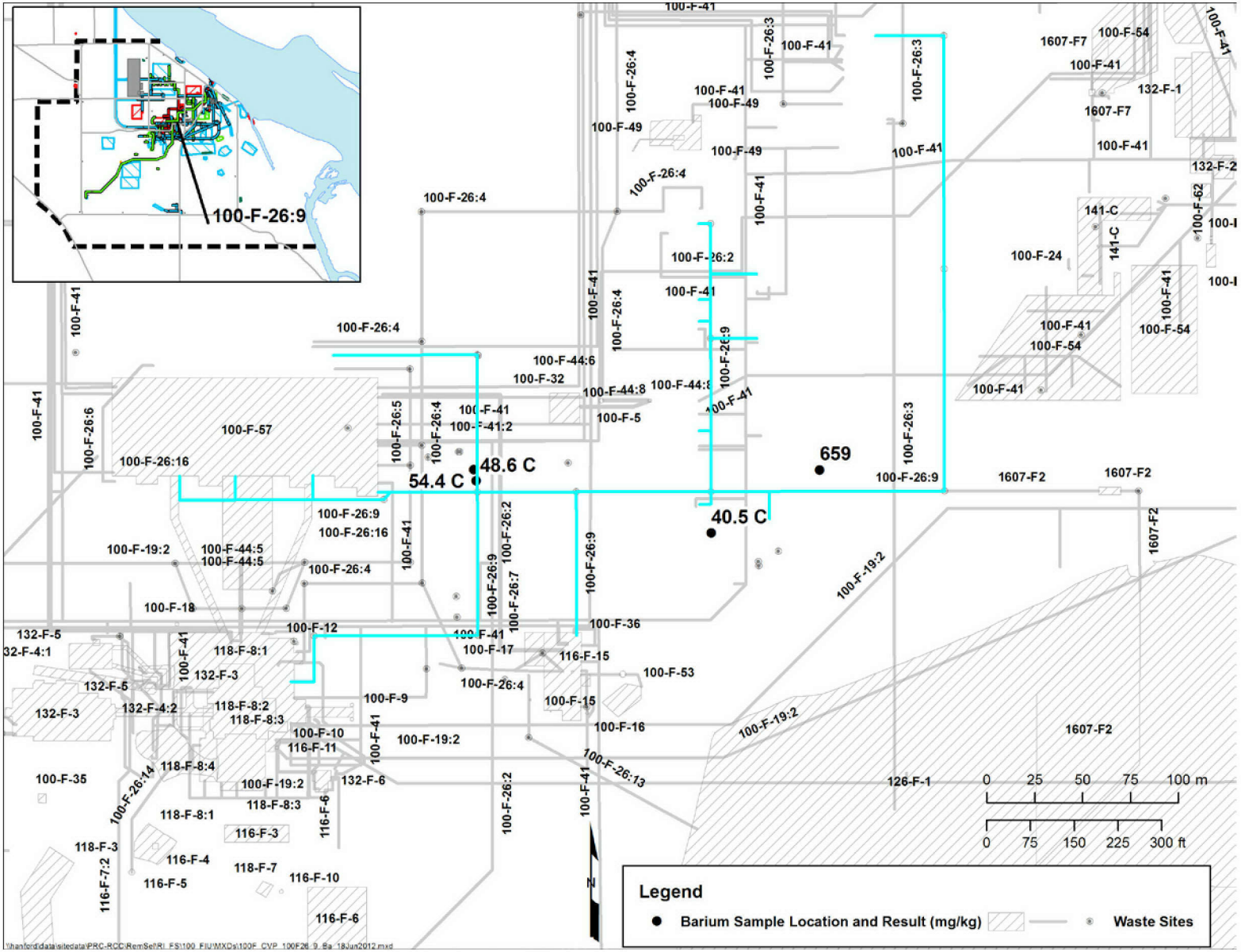

Figure H-6. 100-F Process Sewer Pipelines (100-F-26:9_Overburden_Focused) Sampling Locations and Associated Barium Results

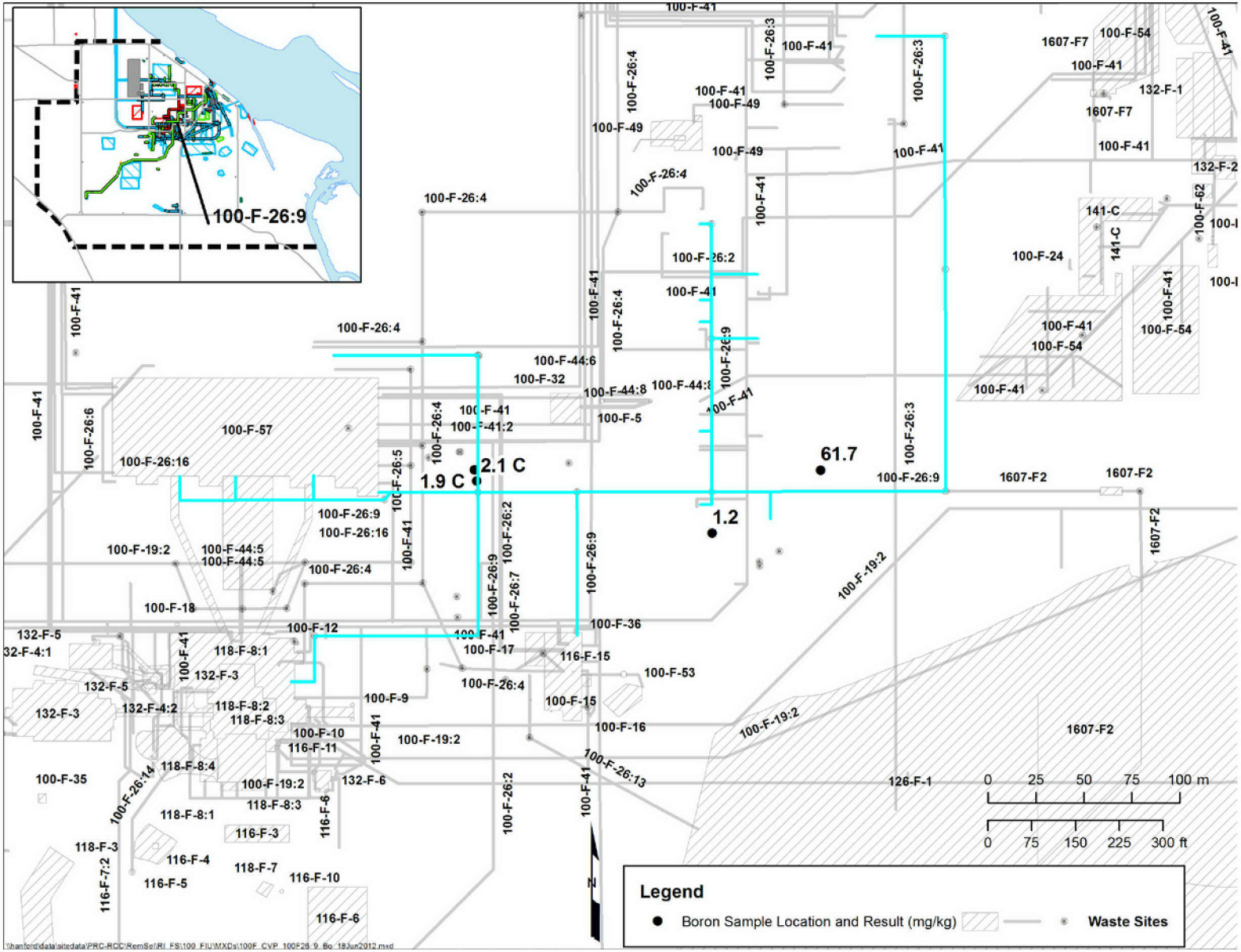

Figure H-7. 100-F Process Sewer Pipelines (100-F-26:9_Overburden_Focused) Sampling Locations and Associated Boron Results

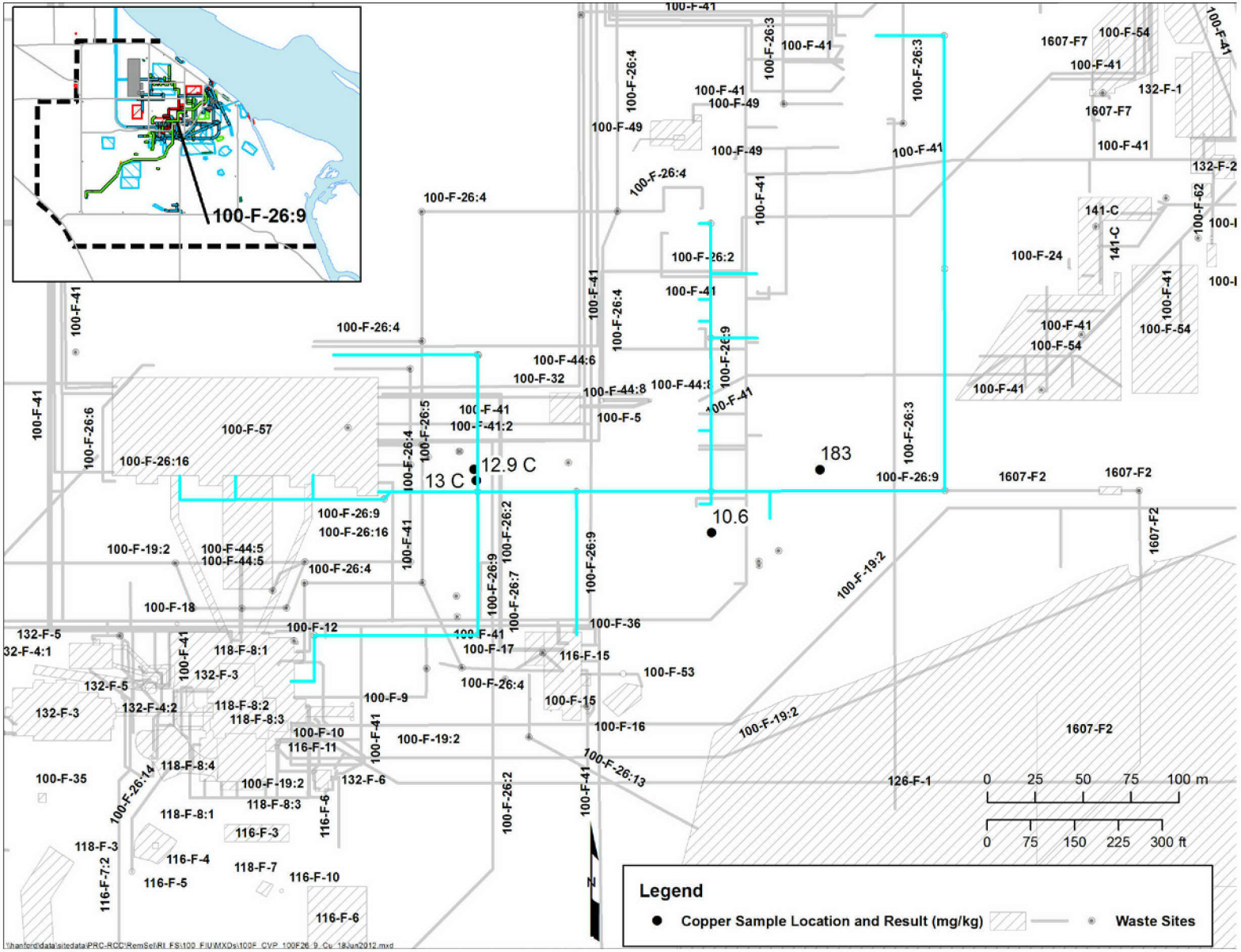

Figure H-8. 100-F Process Sewer Pipelines (100-F-26:9_Overburden_Focused) Sampling Locations and Associated Copper Results

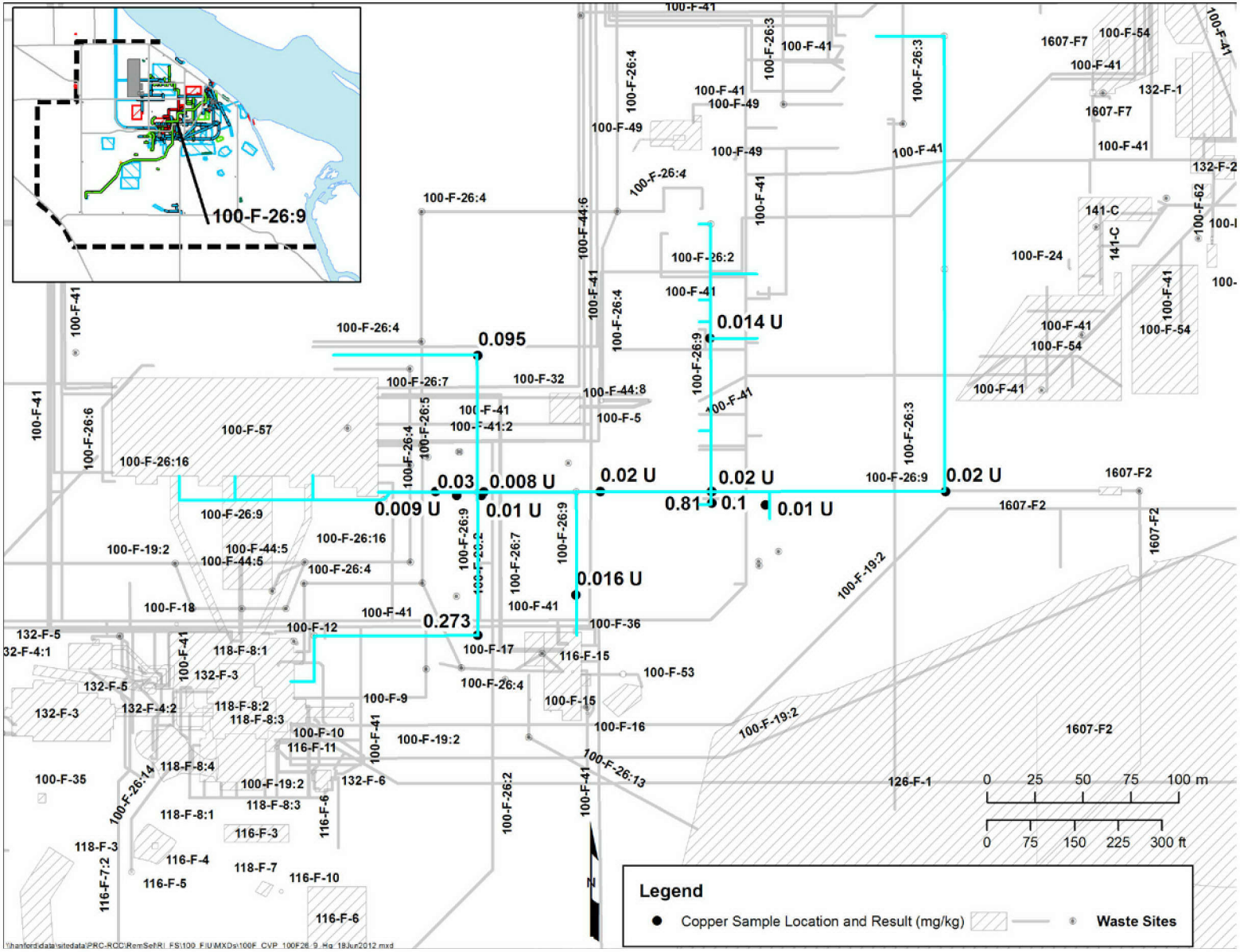

Figure H-9. 100-F Process Sewer Pipelines (100-F-26:9_Overburden_Focused) Sampling Locations and Associated Mercury Results

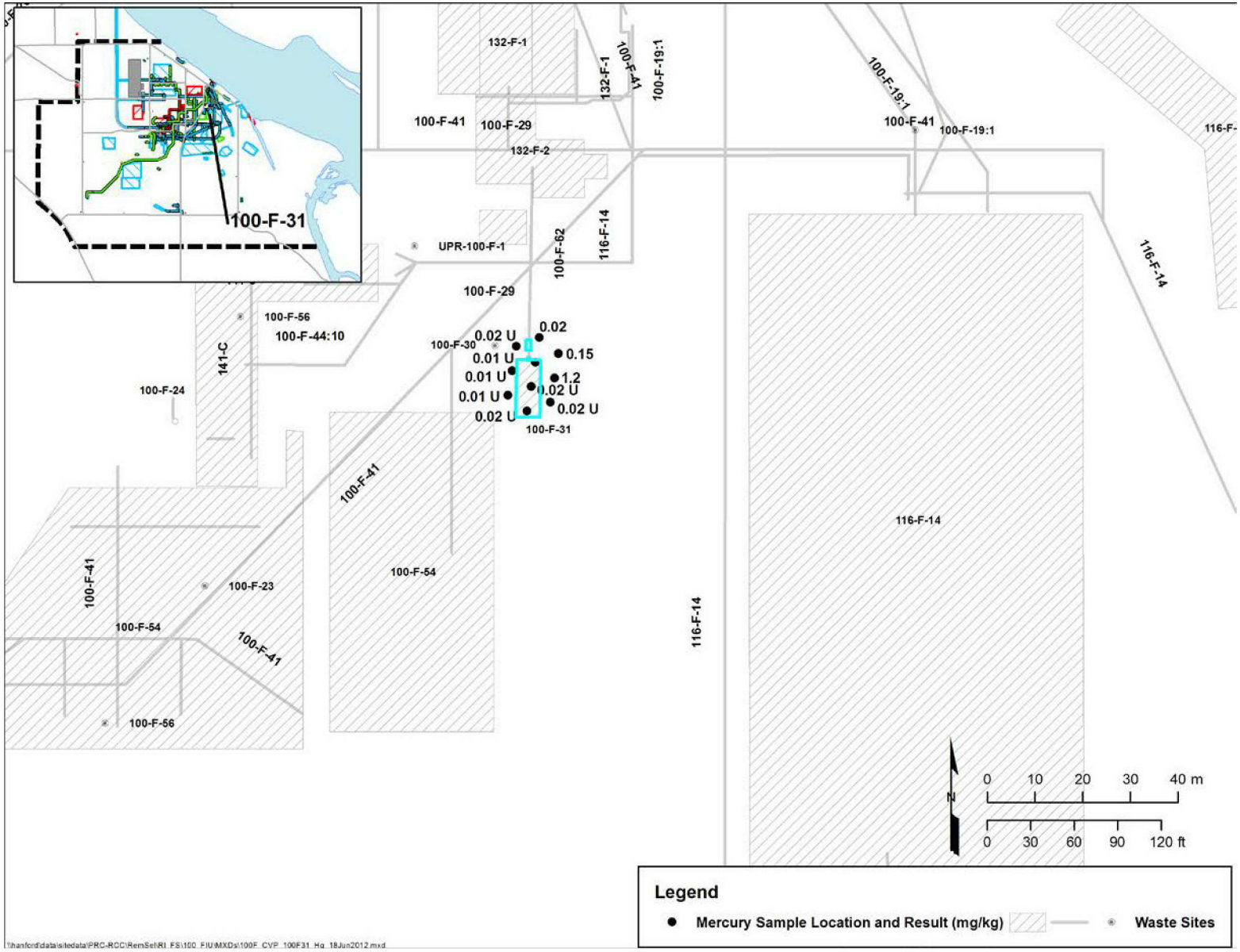

Figure H-10. 100-F Septic System, Drain Field, and Associated Piping (100-F-31_Shallow) Sampling Locations and Associated Mercury Results

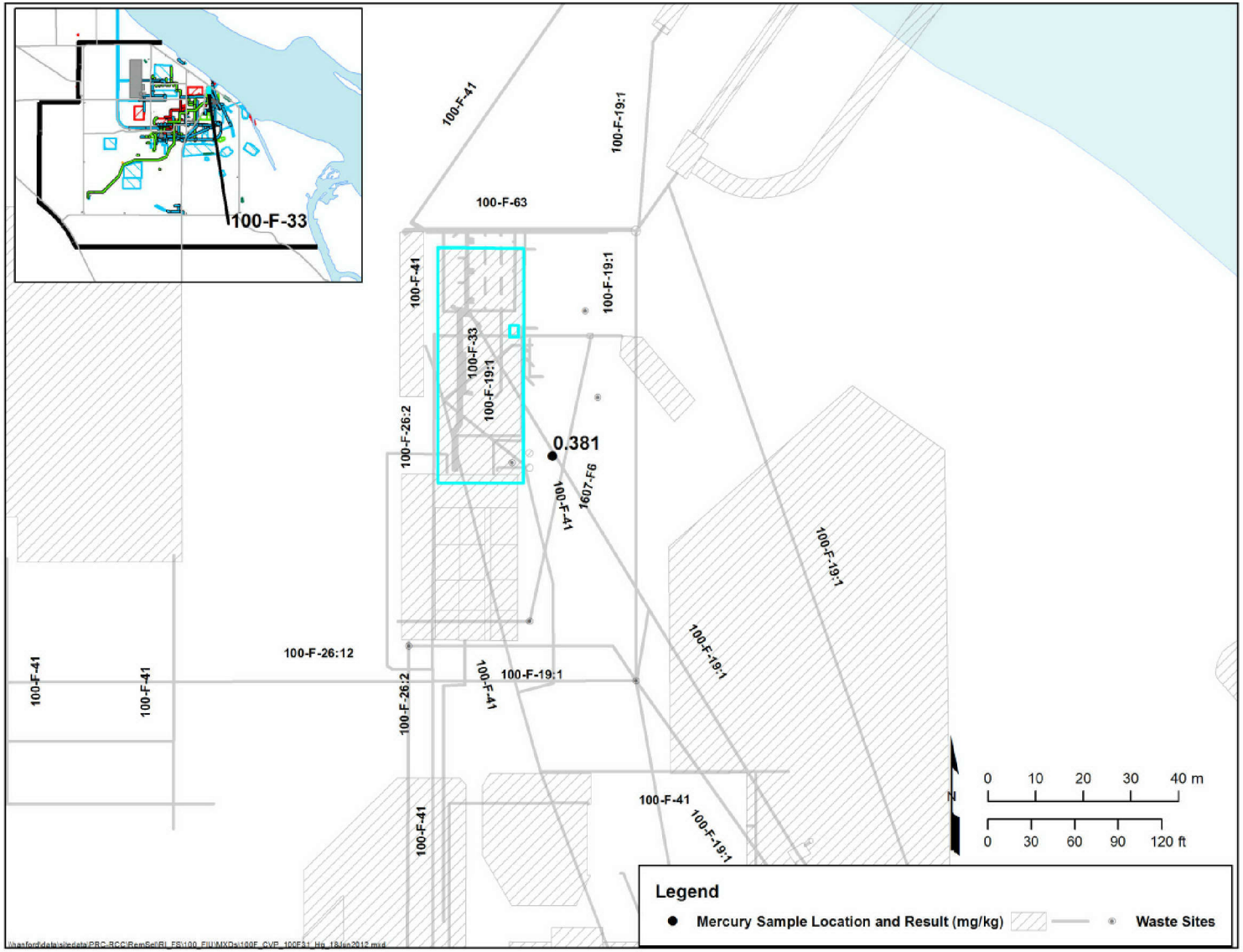

Figure H-11. 100-F Aquatic Biology Fishponds and Fish Laboratory (100-F-33_Staging_Pile_Area_Focused) Sampling Locations and Associated Mercury Results

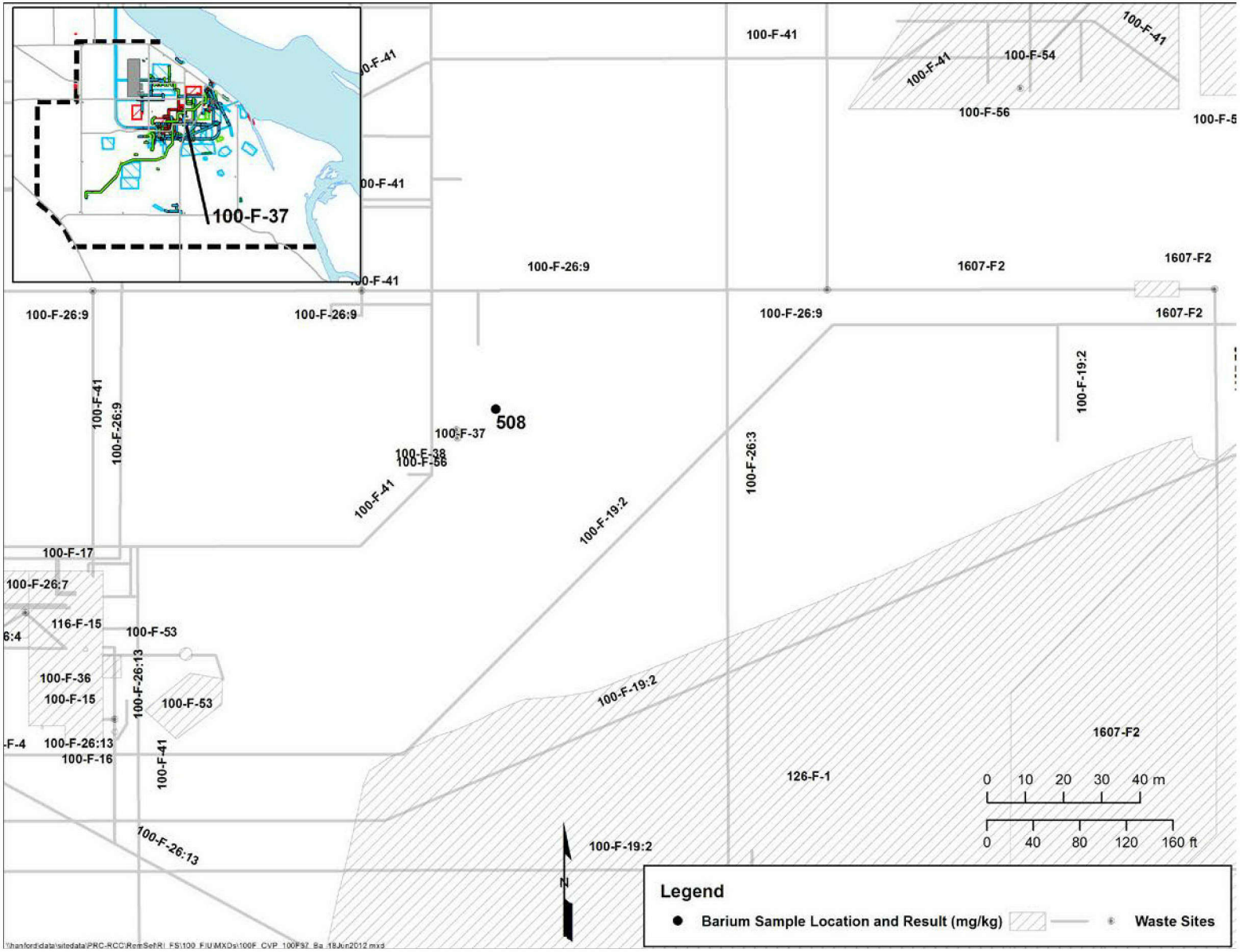

Figure H-12. 100-F French Drain (100-F-37_Shallow_Focused) Sampling Locations and Associated Barium Results

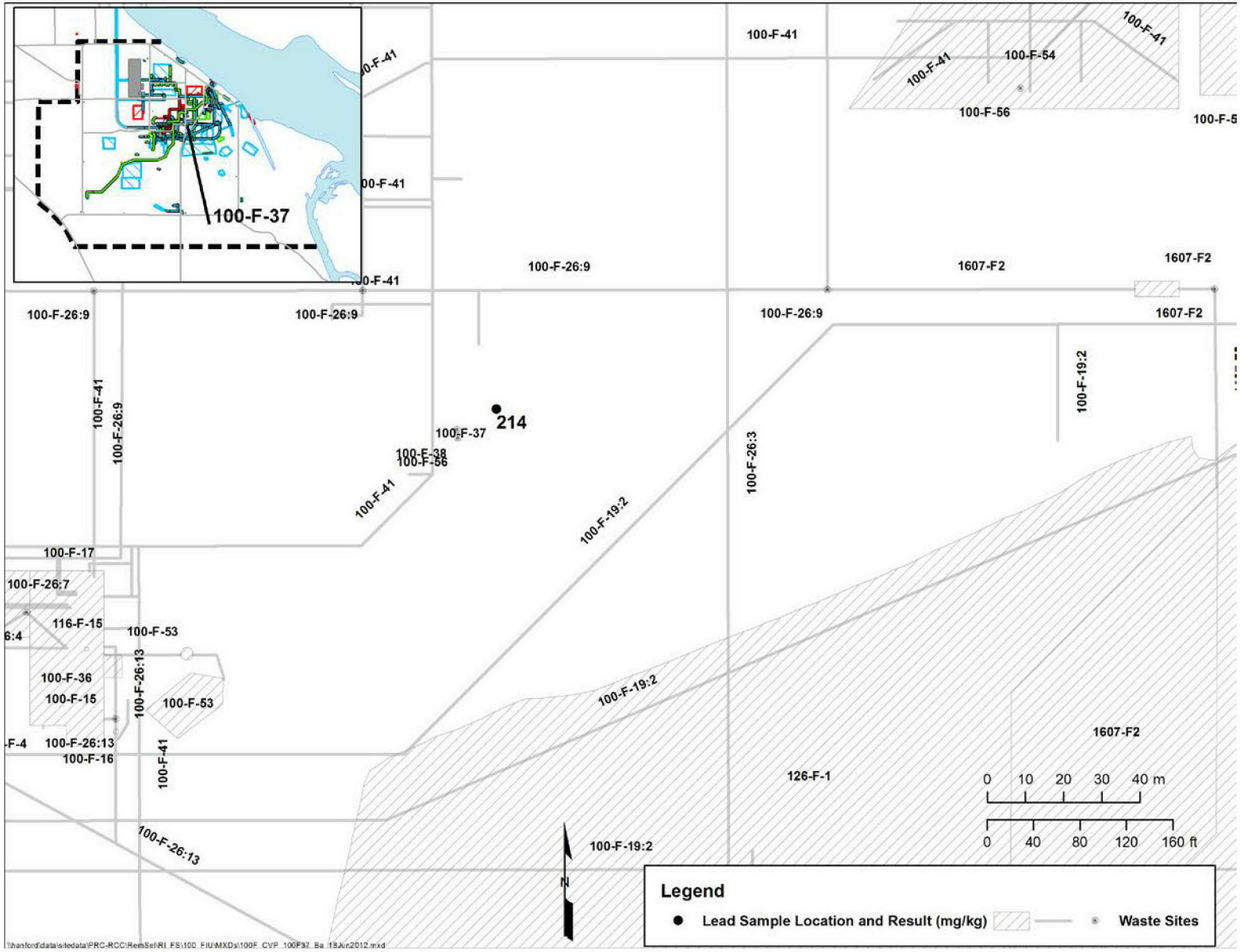

Figure H-13. 100-F French Drain (100-F-37_Shallow_Focused) Sampling Locations and Associated Lead Results

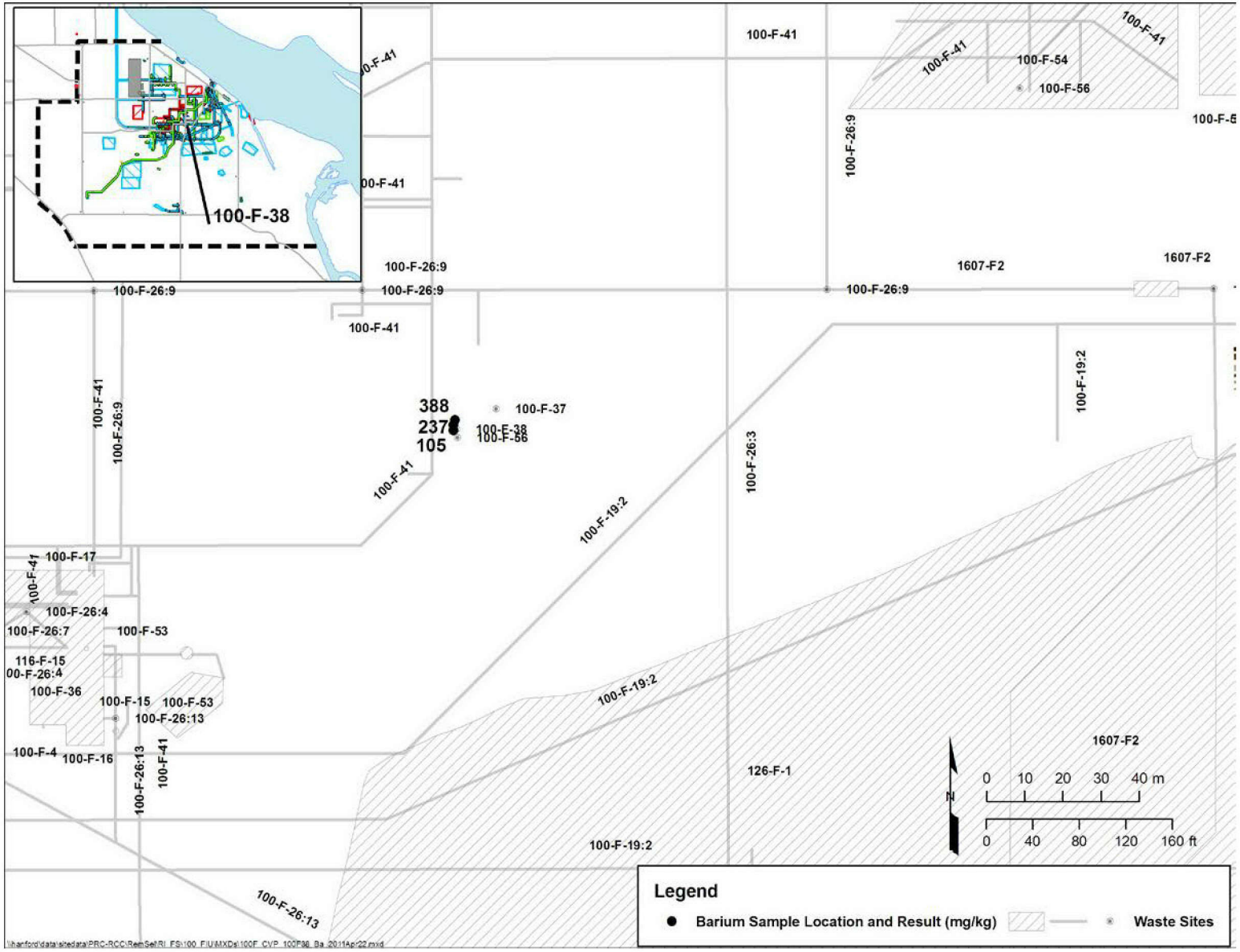

Figure H-14. 100-F Disposal Site for Potentially Yellow Paint (100-F-38_Shallow_Focused) Sampling Locations and Associated Barium Results

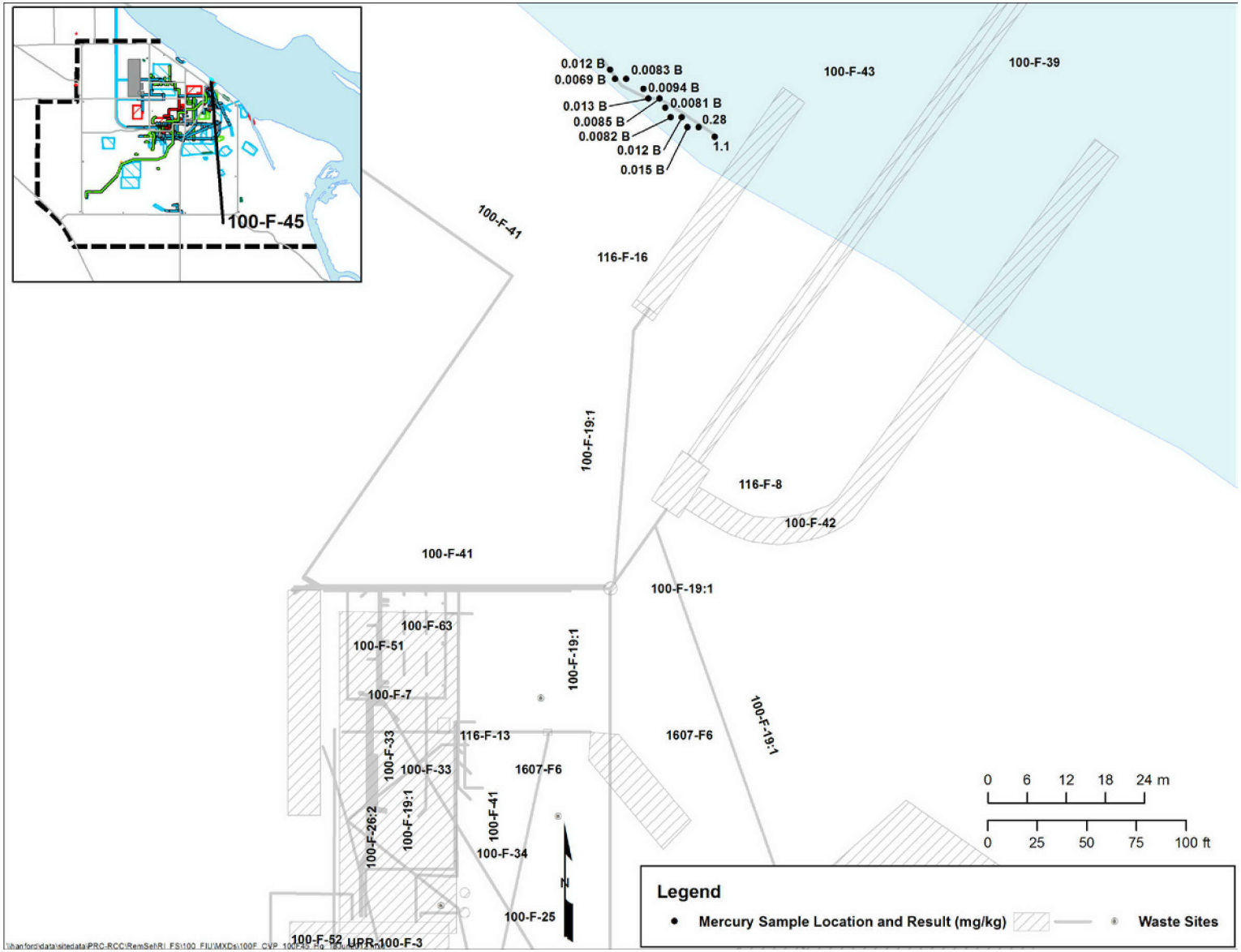

Figure H-15. 100-F Radioactive Process Sewer Floating Pipeline (100-F-45_Shallow) Sampling Locations and Associated Mercury Results

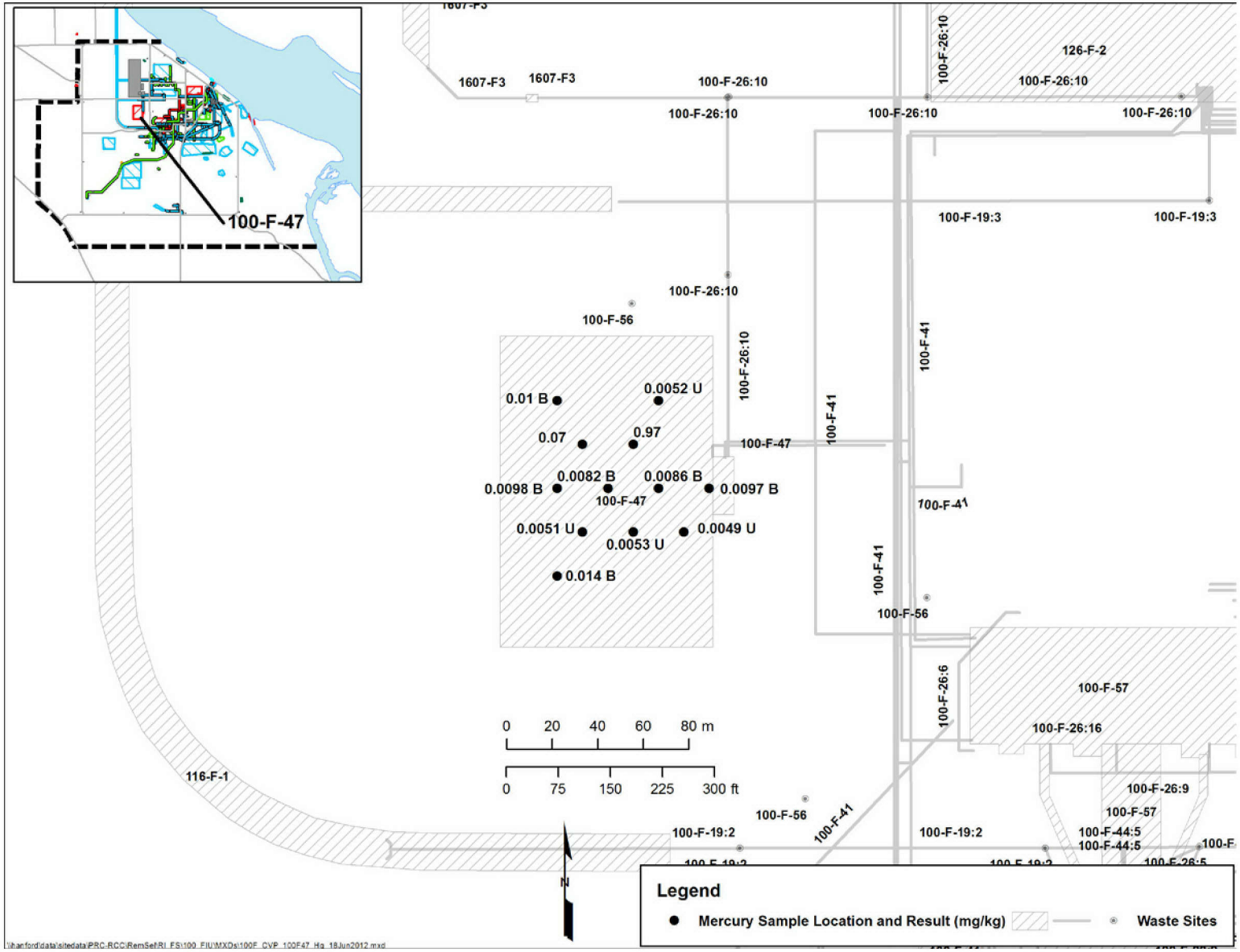

Figure H-16. 100-F Electrical Substation (100-F-47_Shallow) Sampling Locations and Associated Mercury Results

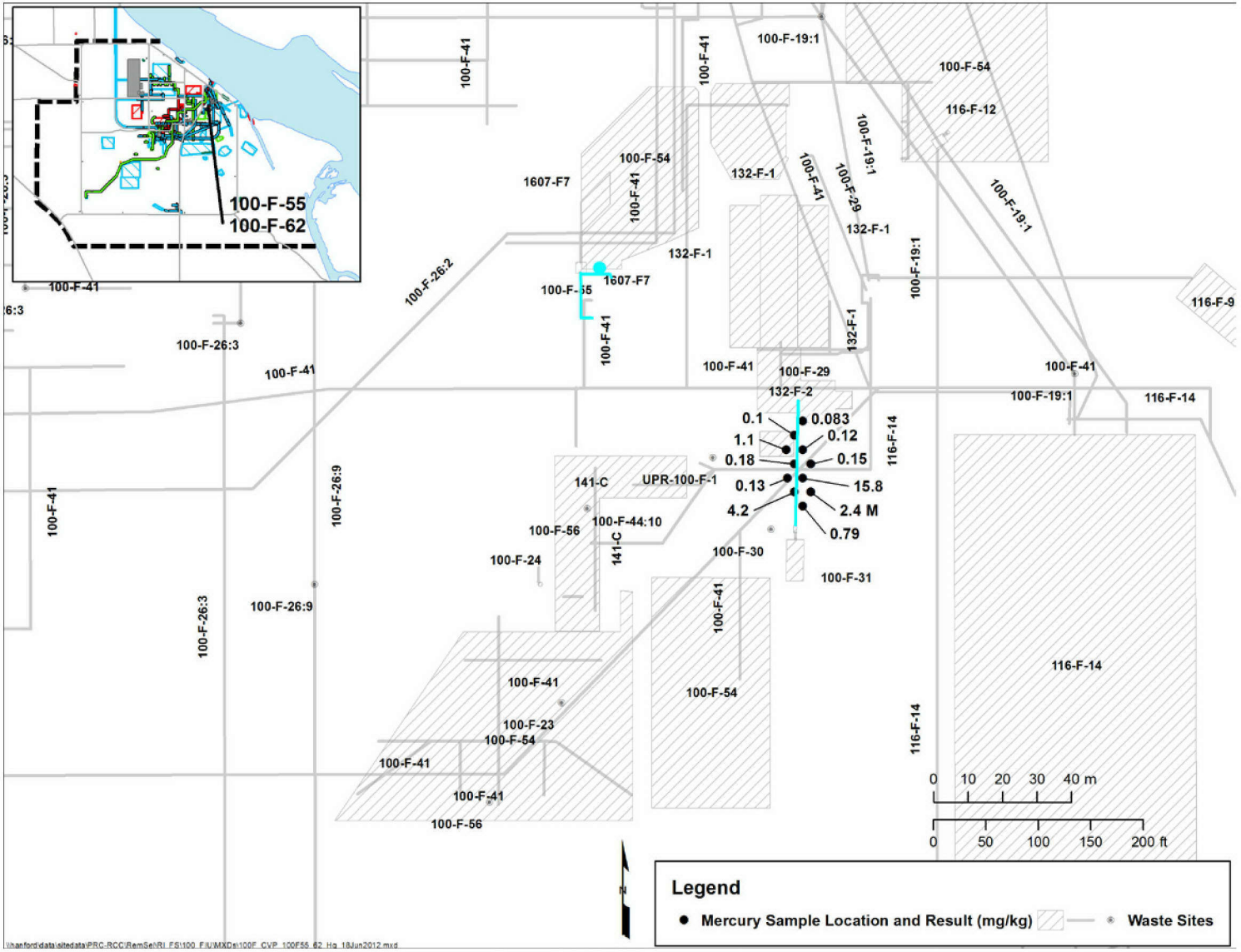

Figure H-17. 100-F Unknown Ash Layer and Sanitary Sewer Pipelines (100-F-55 and 100-F-62_Shallow_2) Sampling Locations and Associated Mercury Results

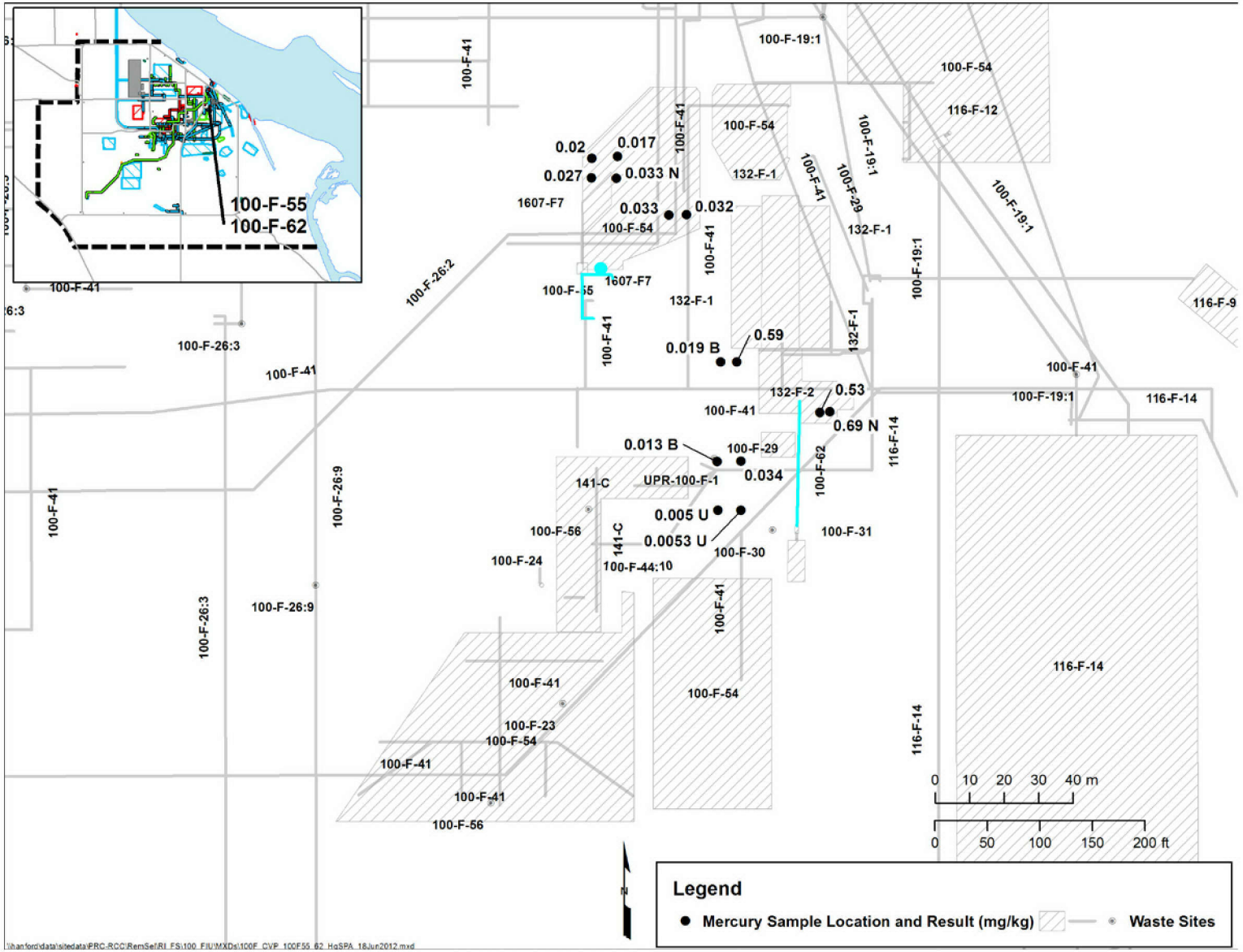

Figure H-18. 100-F Unknown Ash Layer and Sanitary Sewer Pipelines (100-F-55 and 100-F-62_Staging_Pile_Area_Footprint_Focused) Sampling Locations and Associated Mercury Results

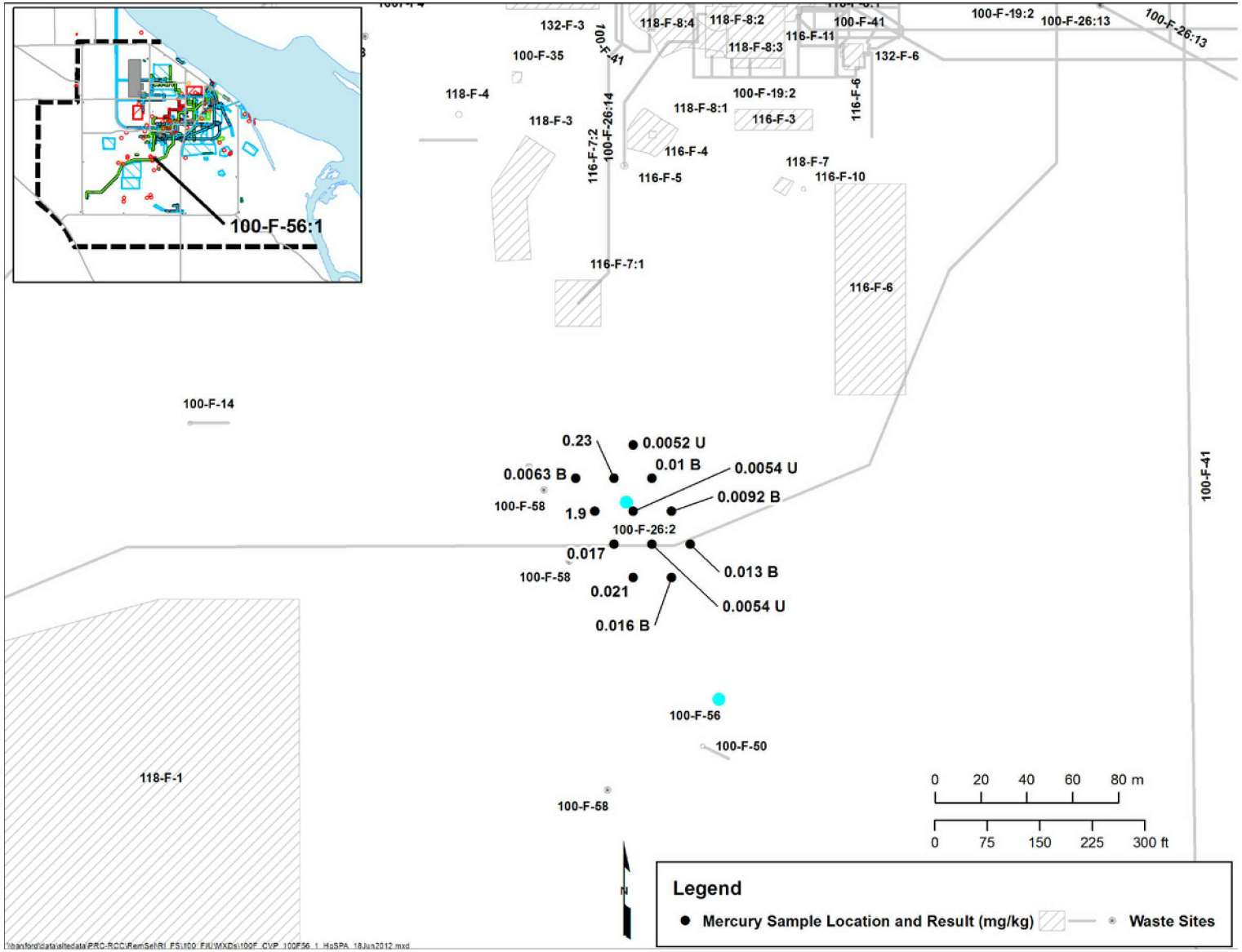

Figure H-19. 100-F (100-F-56: Hazardous and Dangerous Materials Dumping Area) (100-F-56:1_Shallow) Sampling Locations and Associated Mercury Results

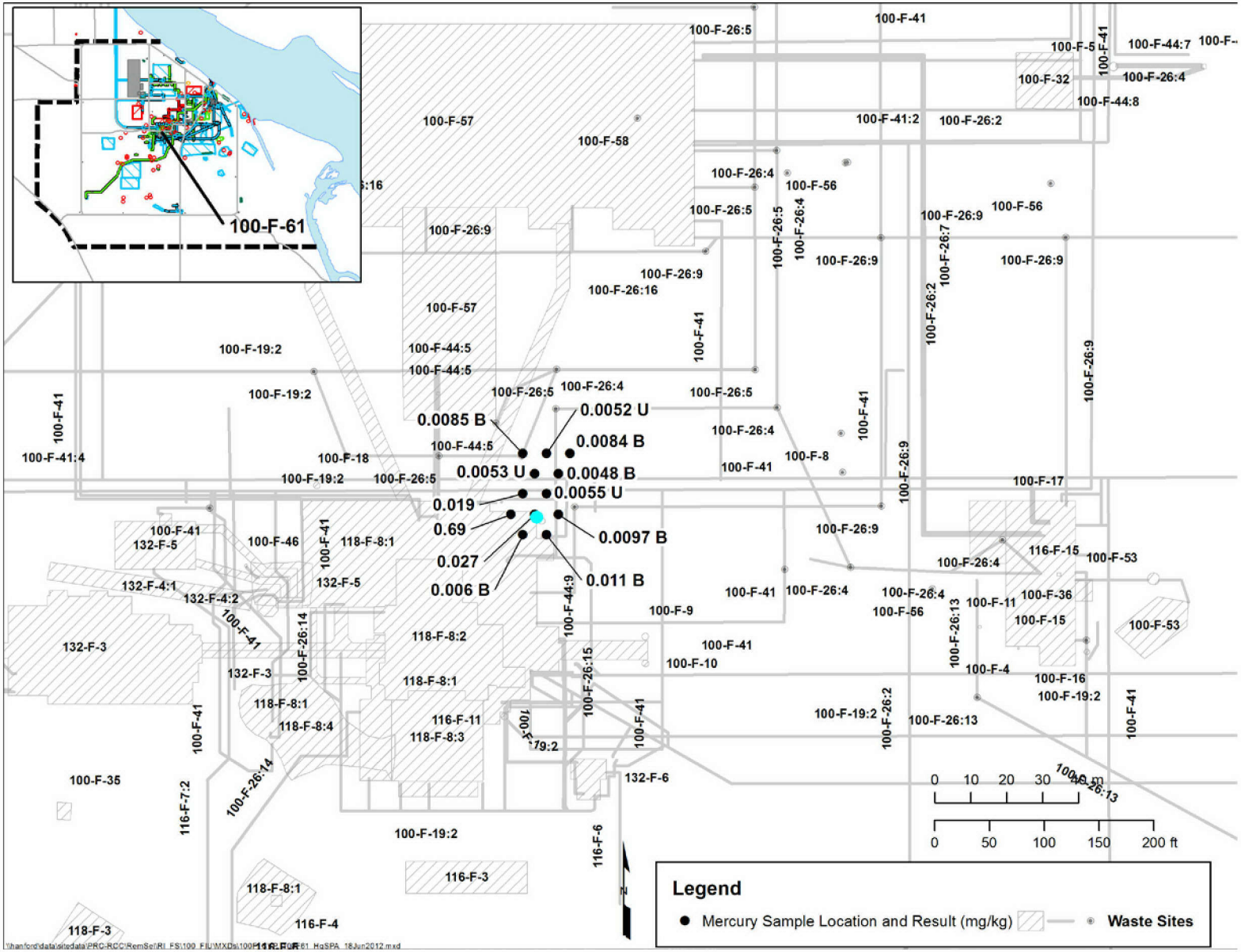

Figure H-20. 100-F Unknown Stained Soil (100-F-61_Shallow) Sampling Locations and Associated Mercury Results

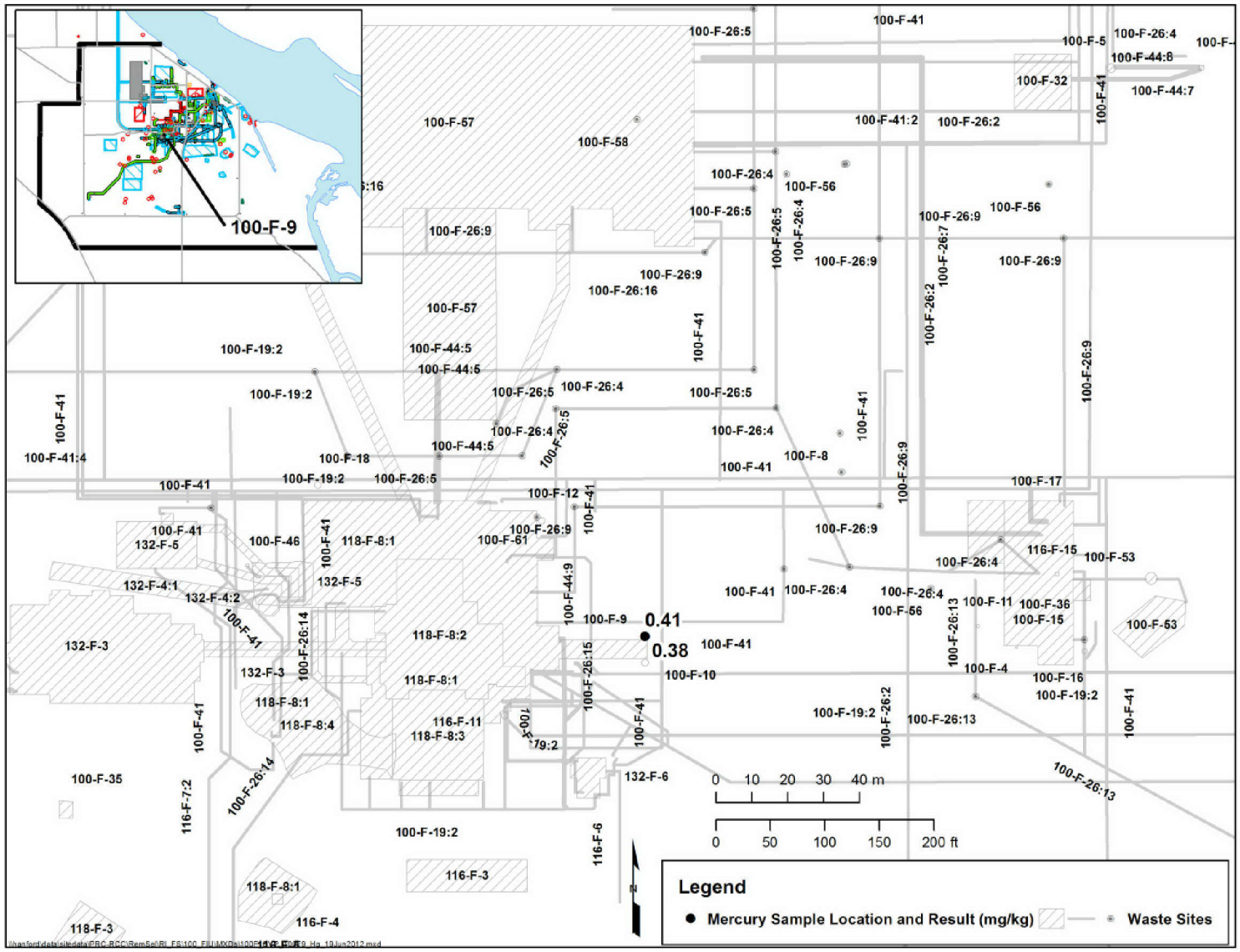

Figure H-21. 100-F French Drain - Received Steam Condensation (100-F-9_Shallow_ Focused) Sampling Locations and Associated Mercury Results

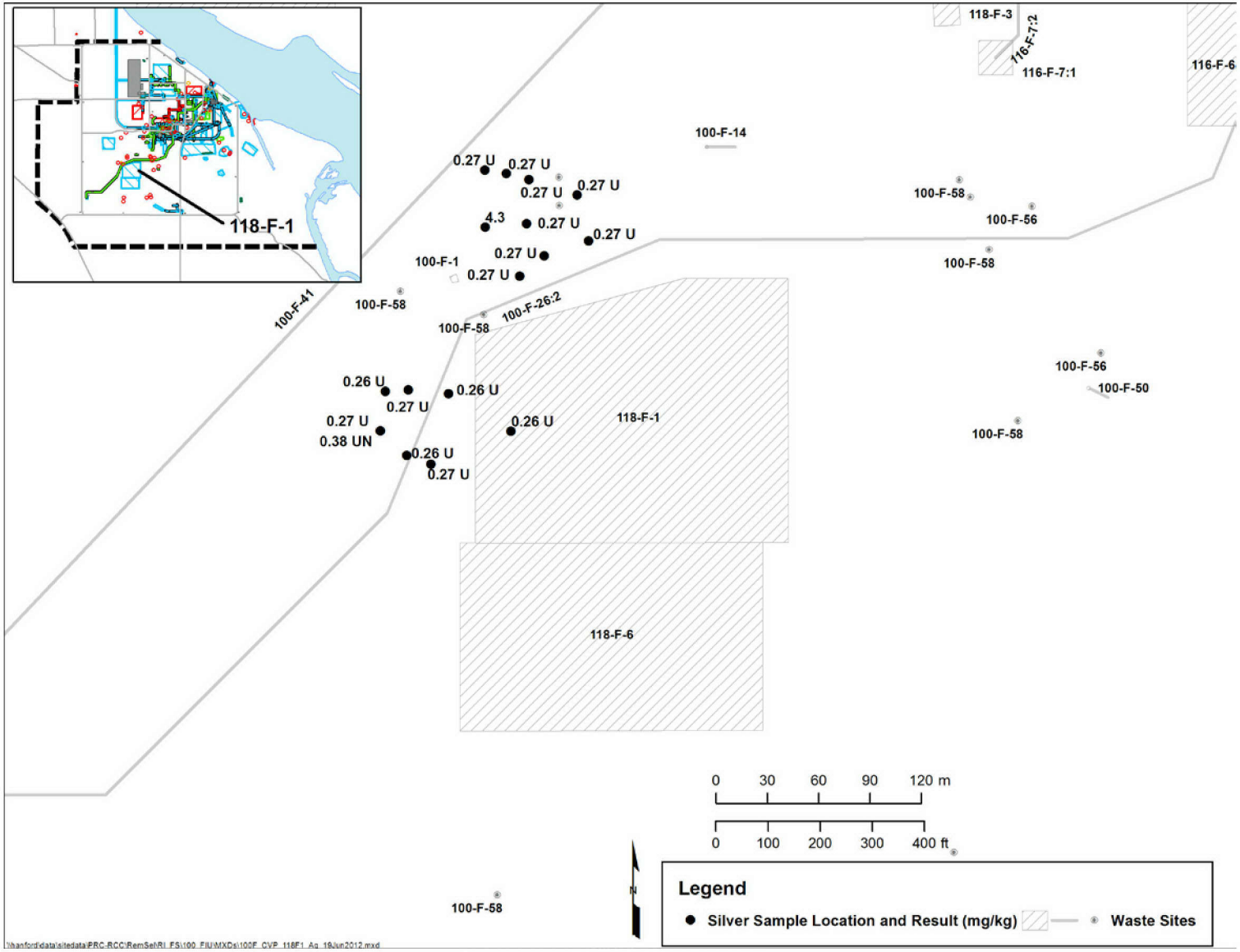

Figure H-22. 100-F Burial Ground for Reactor Operations (118-F-1_Shallow_Overburden) Sampling Locations and Associated Silver Results

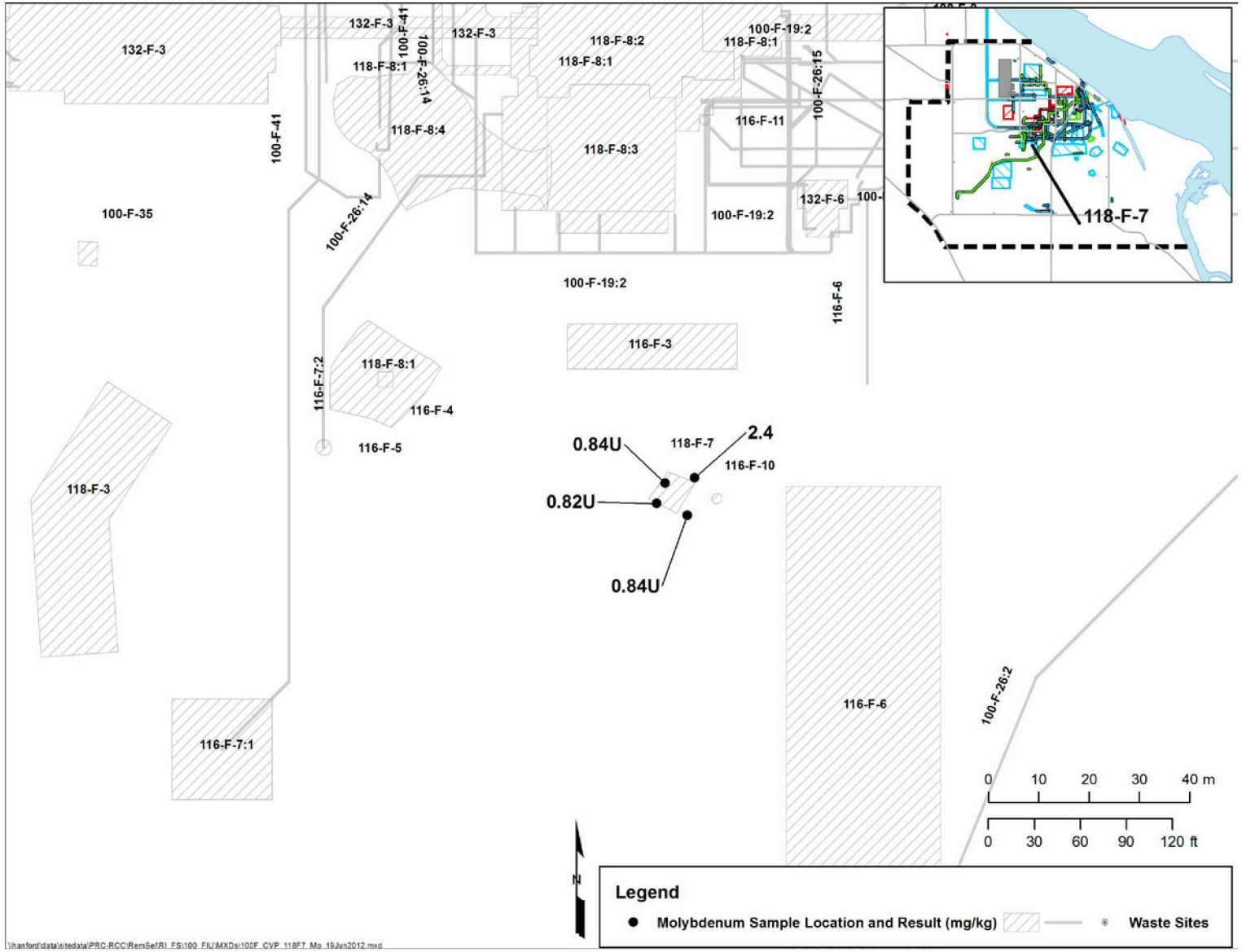

Figure H-23. 100-F Inactive Solid Waste Storage Vault for Reactor Parts (118-F-7_Shallow) Sampling Locations and Associated Molybdenum Results

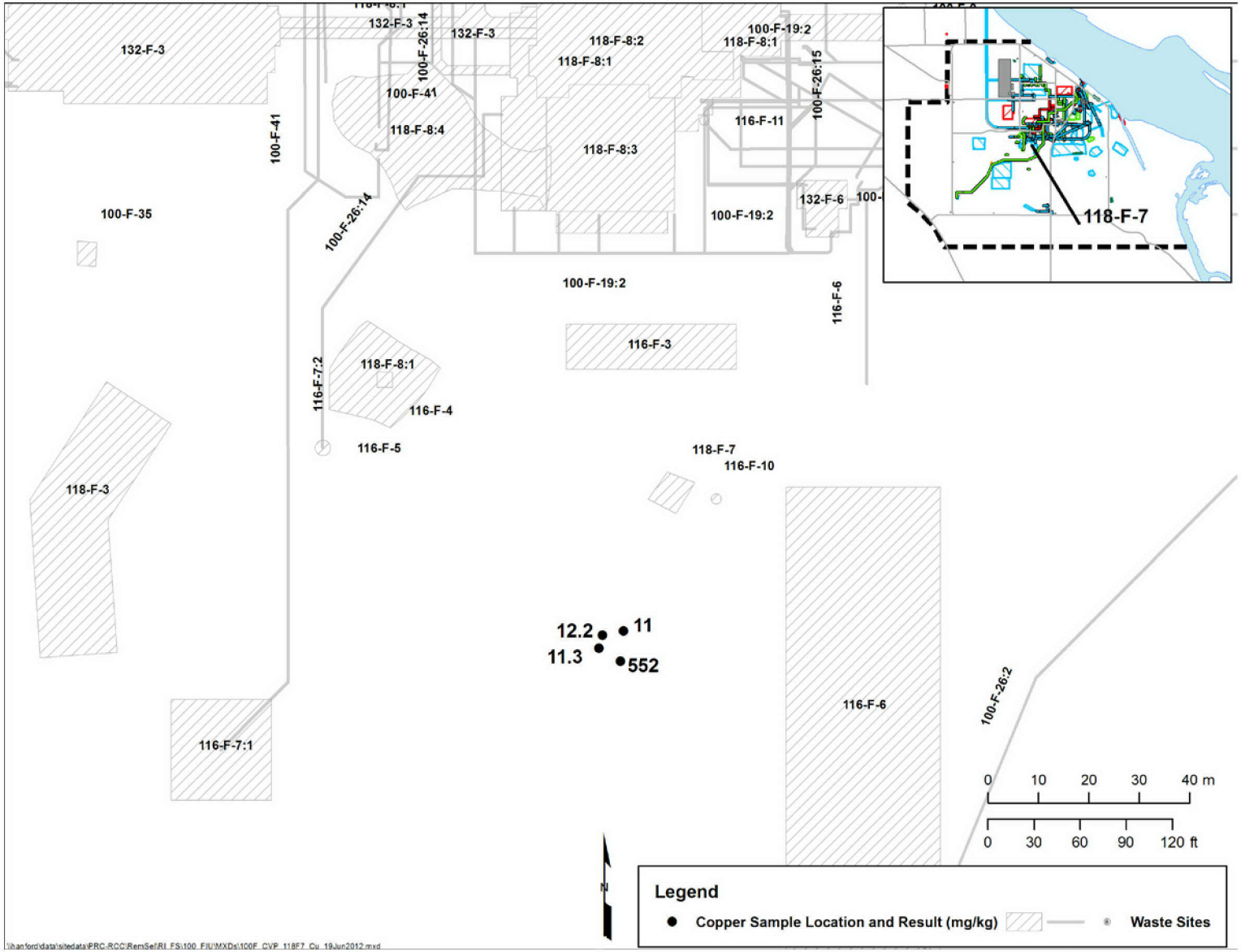

Figure H-24. 100-F Inactive Solid Waste Storage Vault for Reactor Parts (118-F-7_Staging Pile Area) Sampling Locations and Associated Copper Results

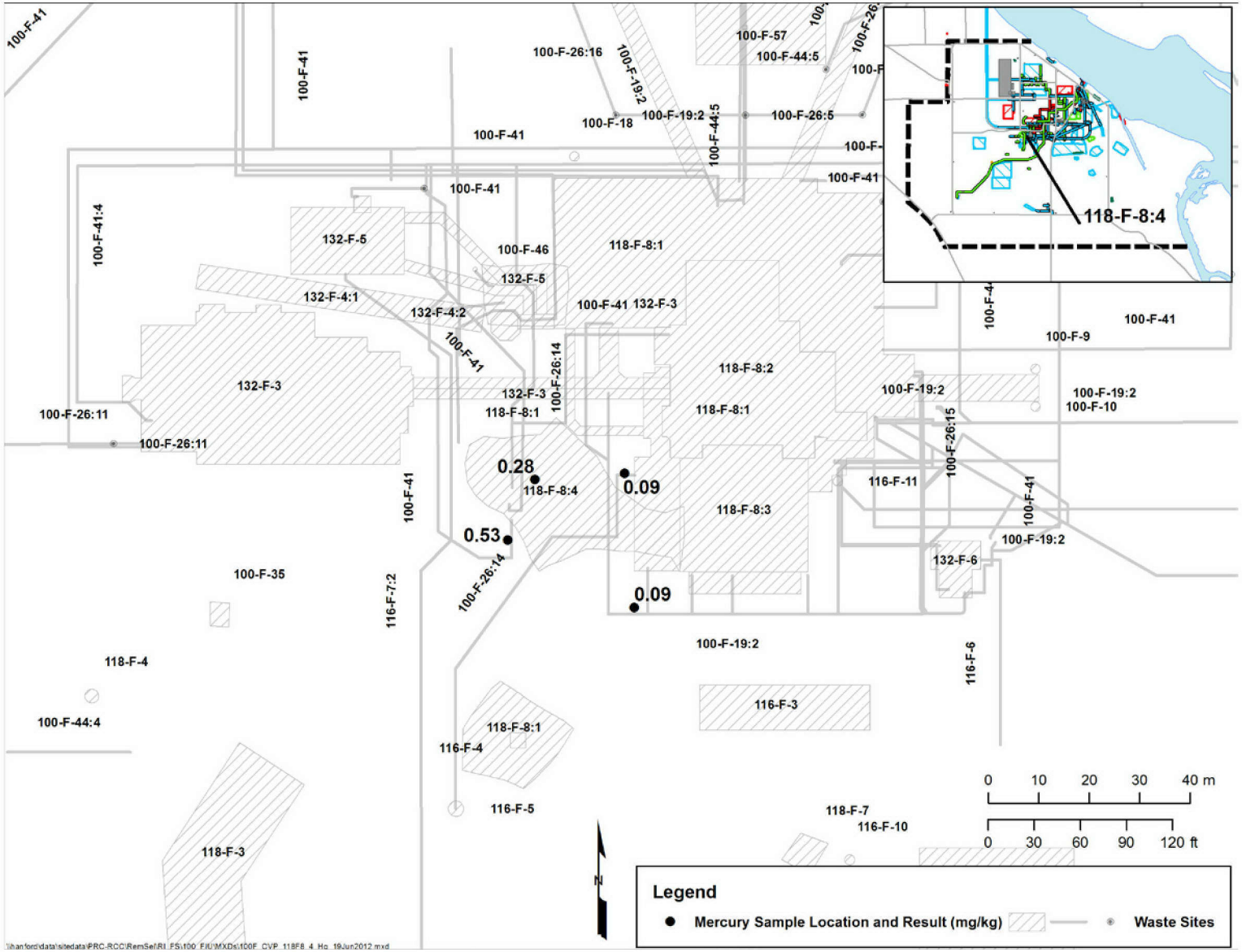

Figure H-25. 100-F Underwater Collection, Storage, and Transfer Facility for Irradiated Fuel Elements (118-F-8:4_Shallow) Sampling Locations and Associated Mercury Results

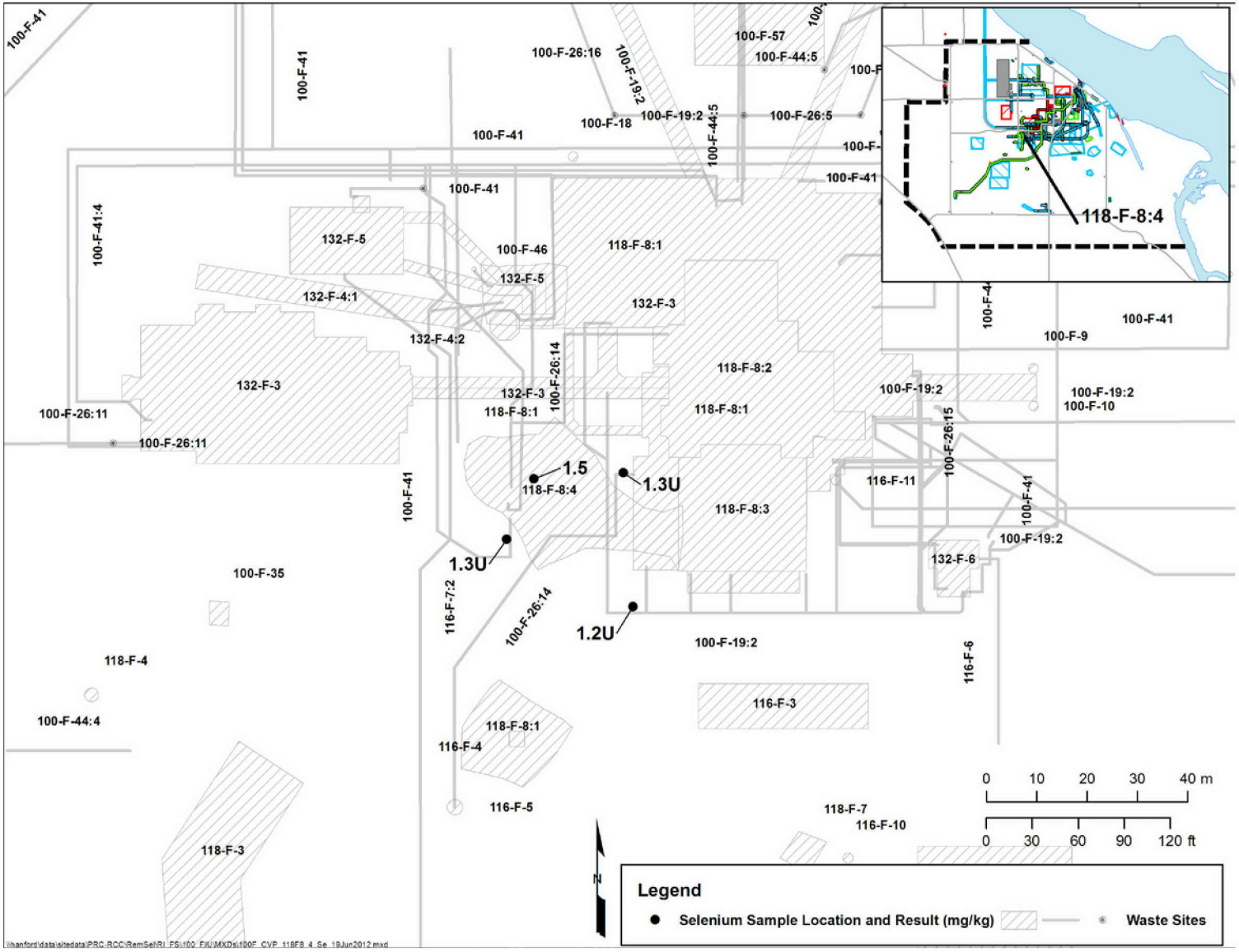

Figure H-26. 100-F Underwater Collection, Storage, and Transfer Facility for Irradiated Fuel Elements (118-F-8:4_Shallow) Sampling Locations and Associated Selenium Results

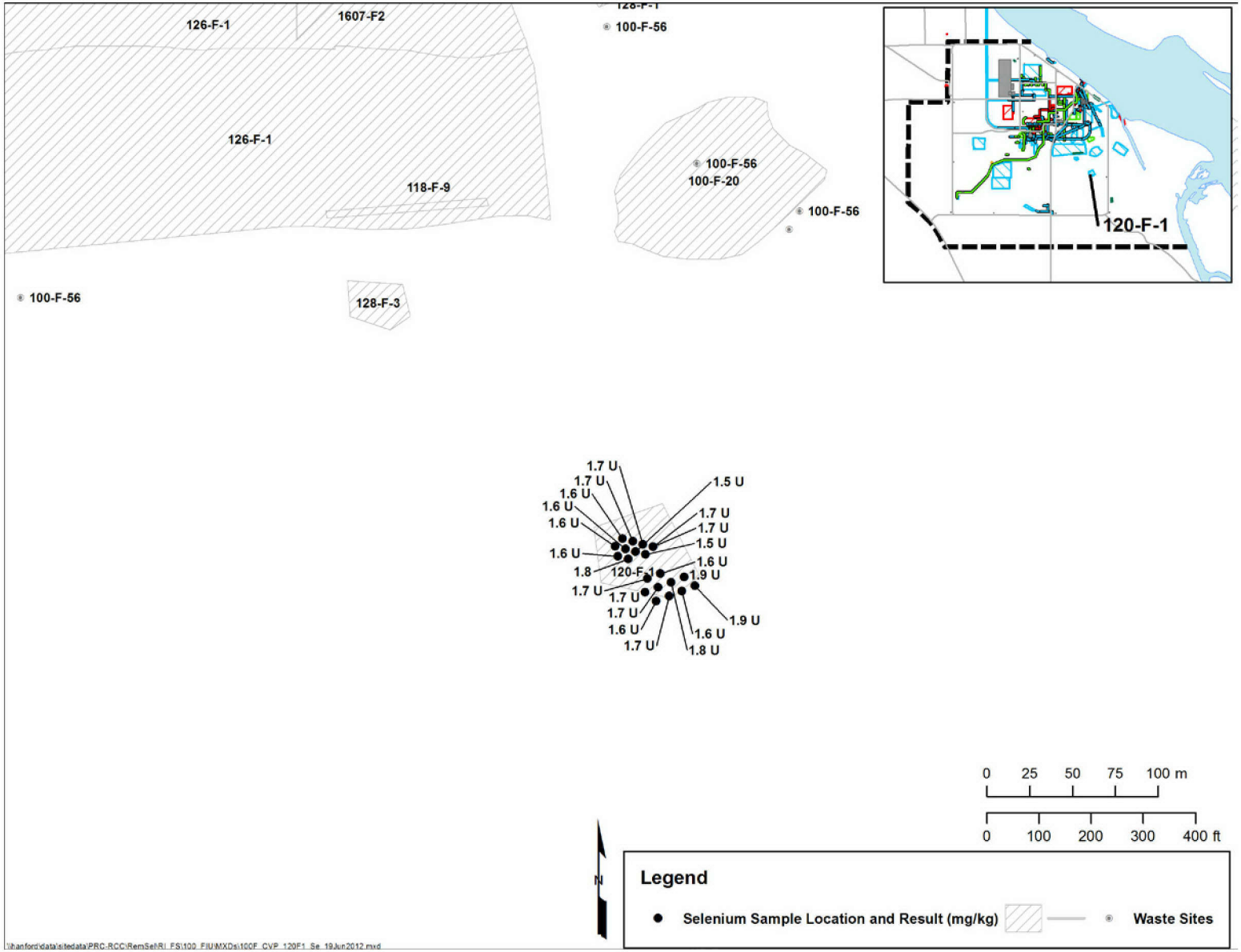

Figure H-27. 100-F Trench- Glass Dump Waste Site (120-F-1_Shallow) Sampling Locations and Associated Selenium Results

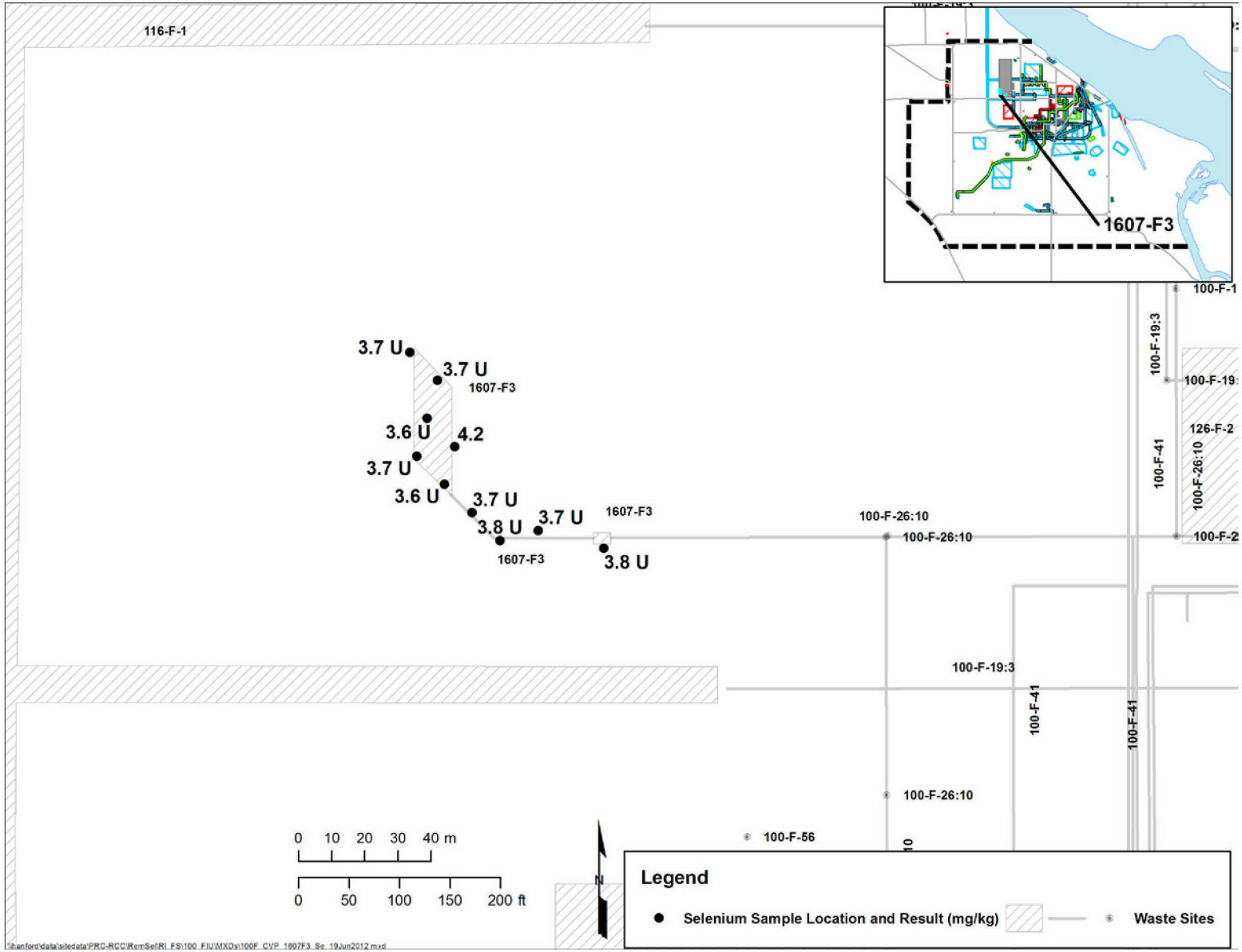

Figure H-28. 100-F Septic Tank- Sanitary Sewer System (1607-F3_Shallow) Sampling Locations and Associated Selenium Results

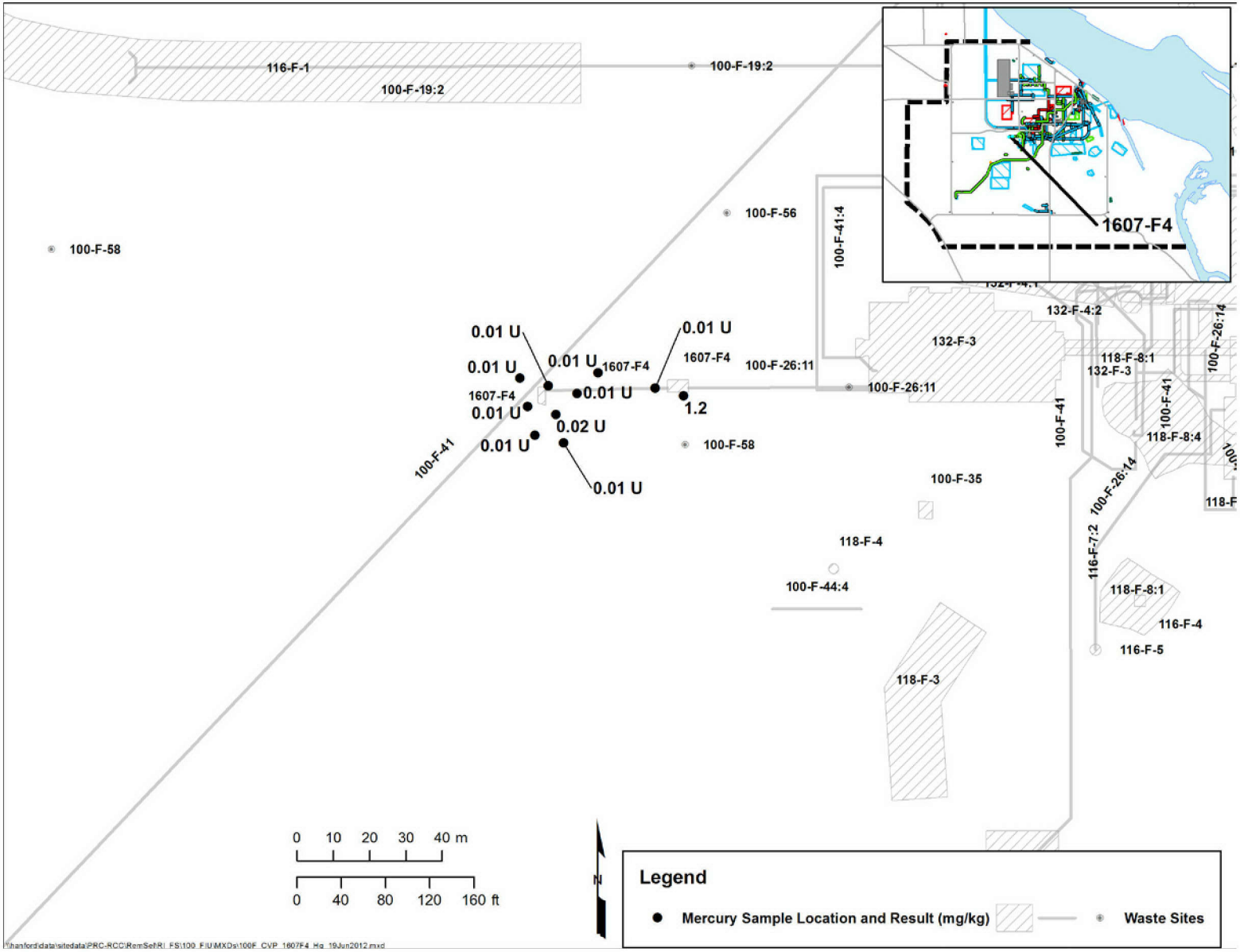

Figure H-29. 100-F Septic Tank- Sanitary Sewer System (1607-F4_Shallow) Sampling Locations and Associated Mercury Results

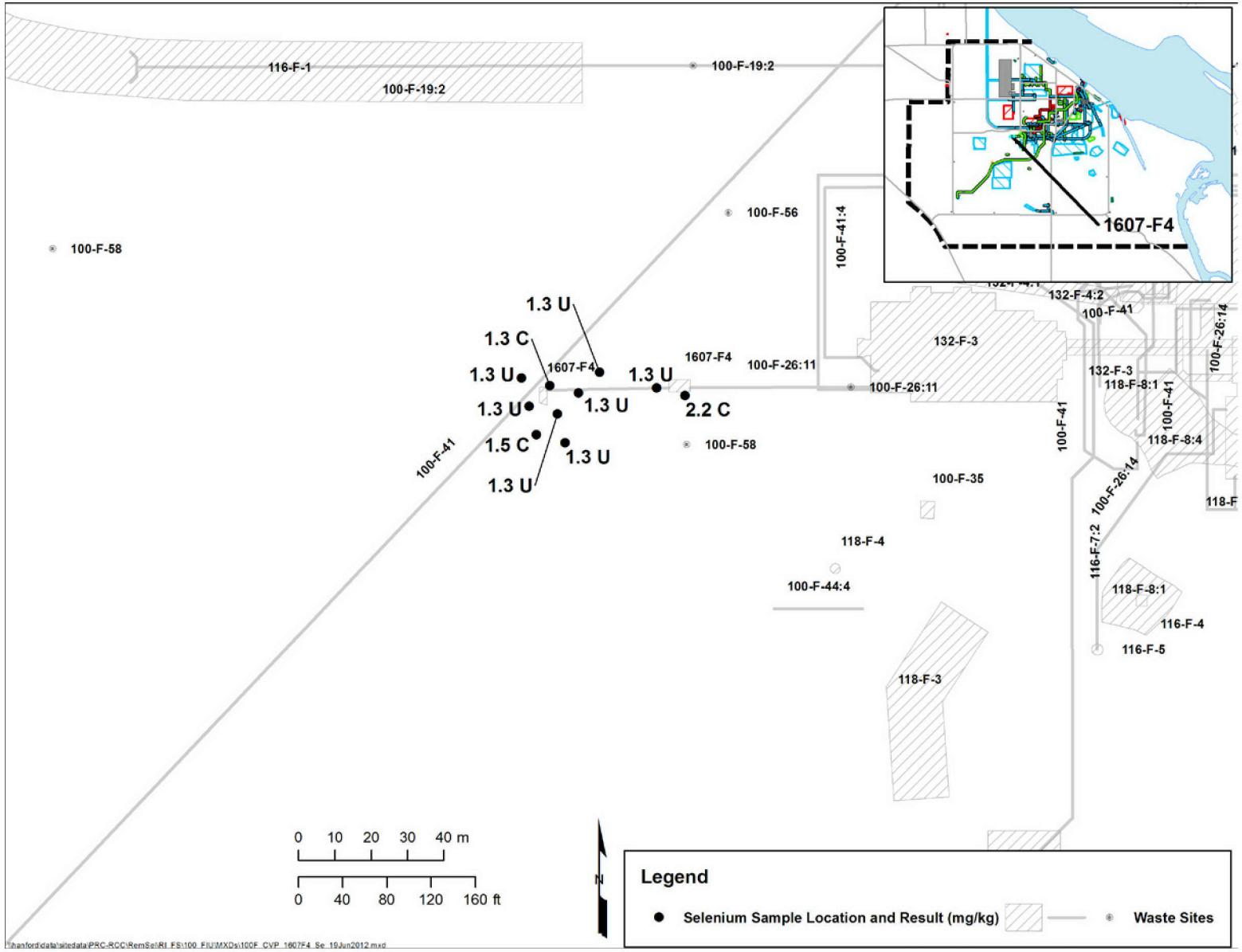

Figure H-30. 100-F Septic Tank- Sanitary Sewer System (1607-F4_Shallow) Sampling Locations and Associated Selenium Results

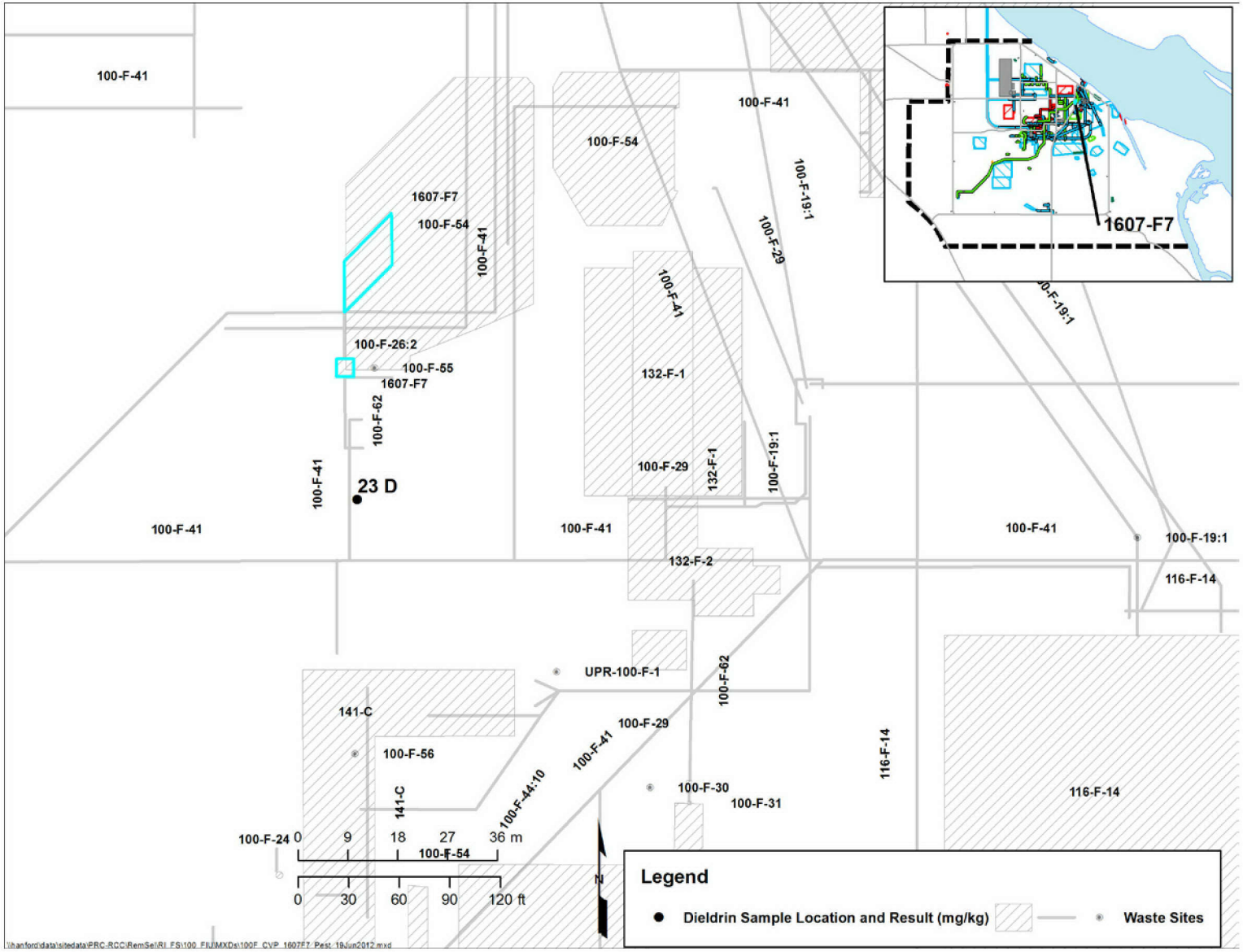

Figure H-31. 100-F Septic Tank, Tile Field, and Associated Pipeline (1607-F7_Staging_Pile_Area_Focused) Sampling Locations and Associated Dieldrin Results

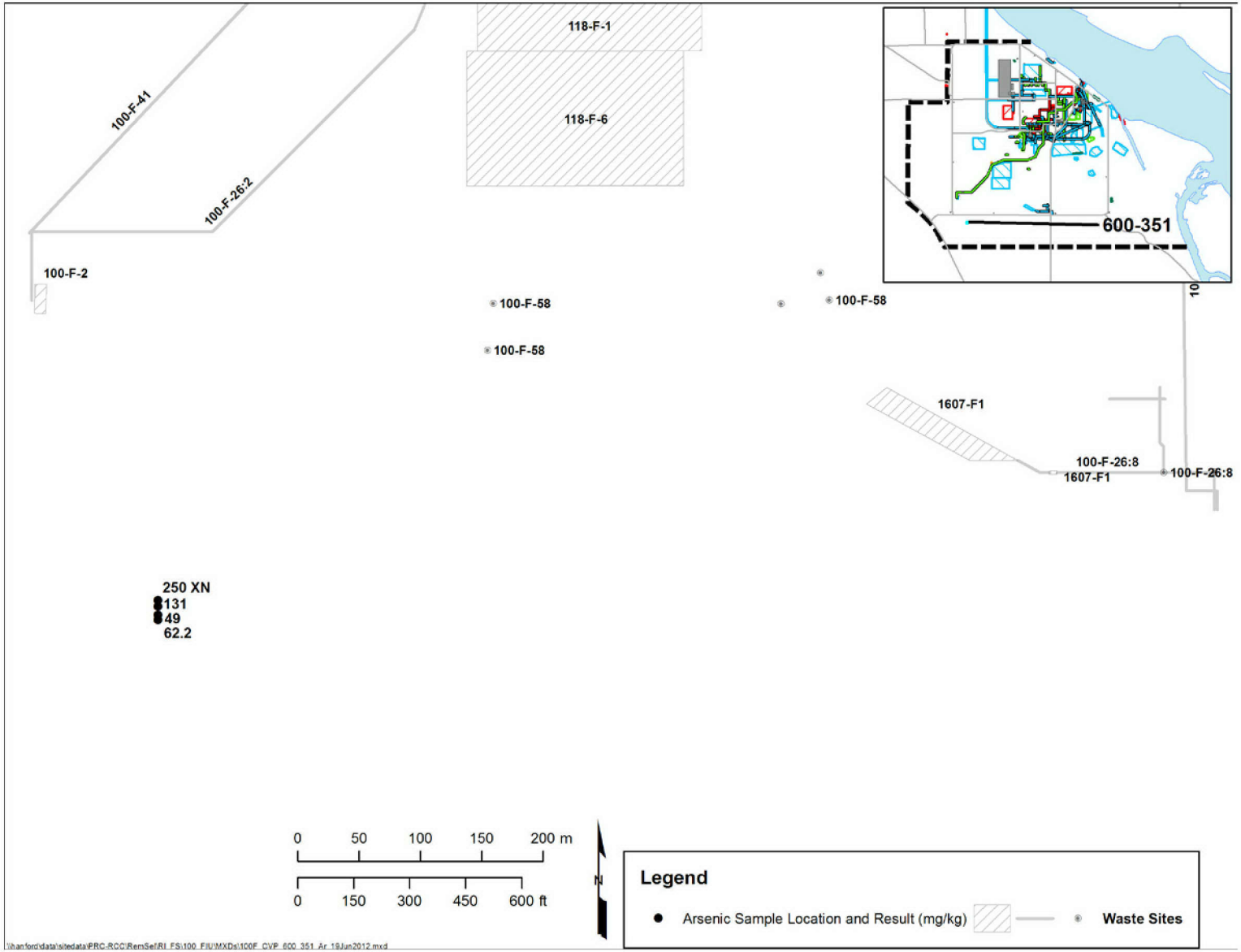

Figure H-32. 100-F No Description Found (600-351_Shallow_Focused) Sampling Locations and Associated Arsenic Results

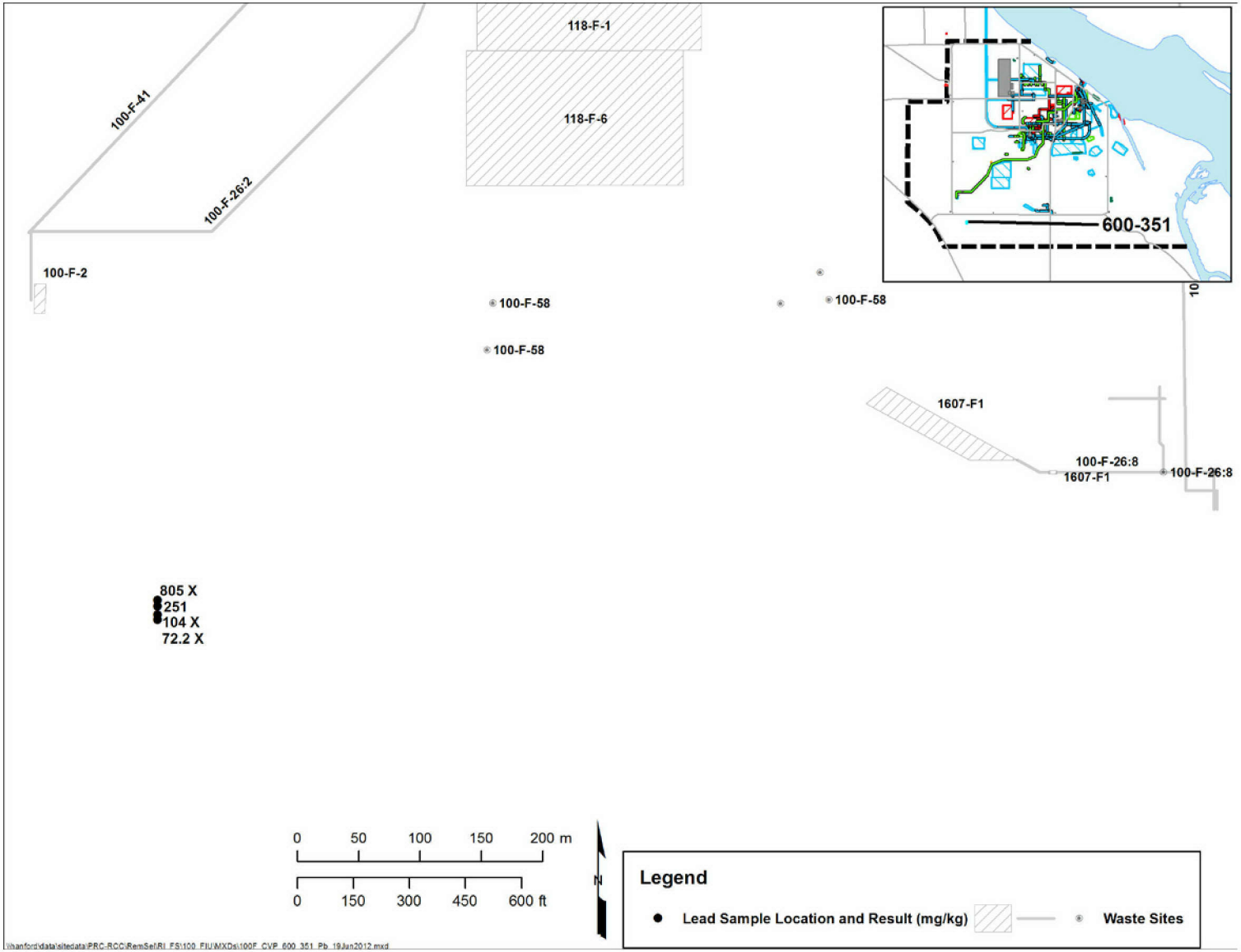

Figure H-33. 100-F No Description Found (600-351_Shallow_Focused) Sampling Locations and Associated Lead Results

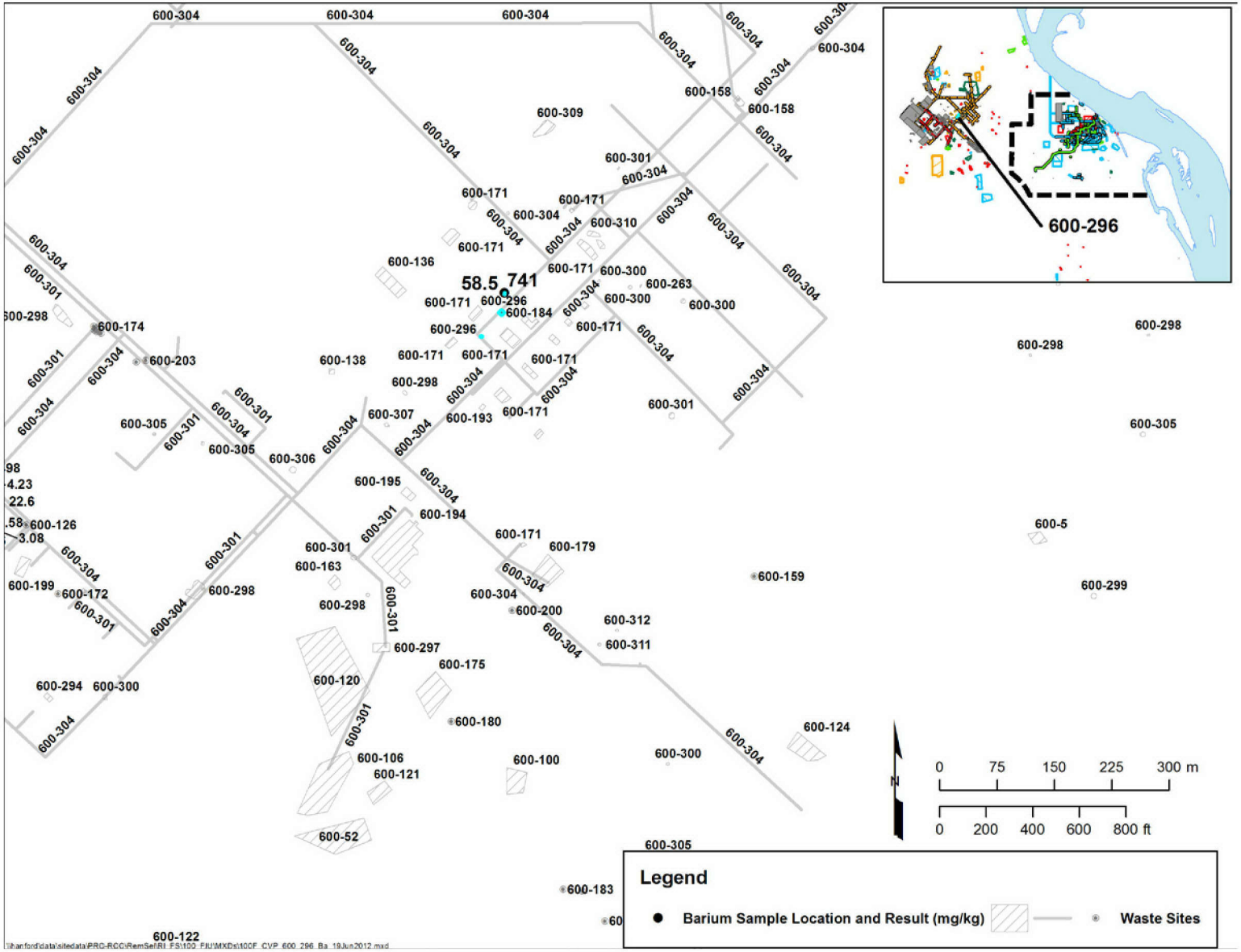

Figure H-34. 100-IU2 Sanitary Sewer (600-296_Shallow_Focused) Sampling Locations and Associated Barium Results

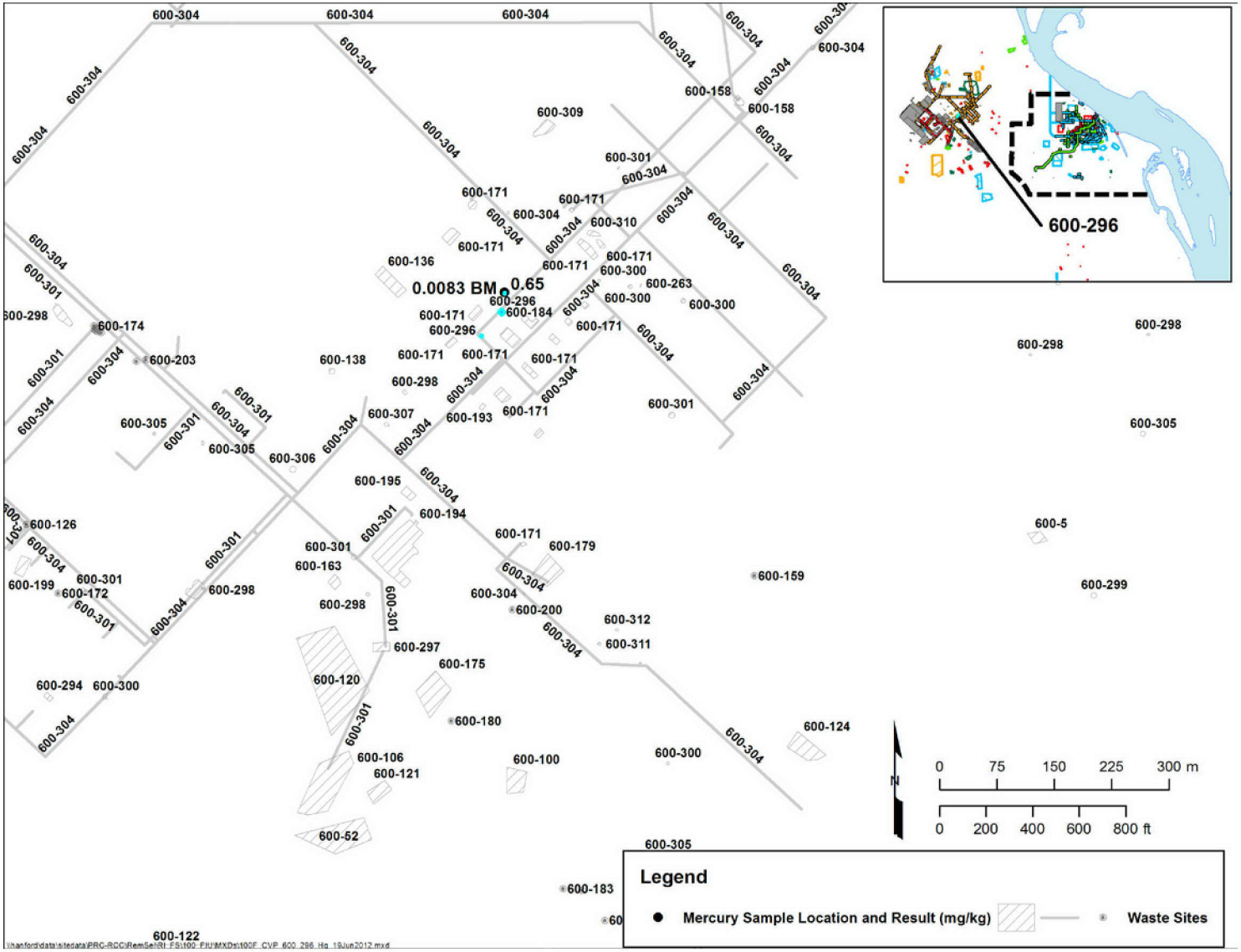

Figure H-35. 100-IU2 Sanitary Sewer (600-296_Shallow_Focused) Sampling Locations and Associated Mercury Results

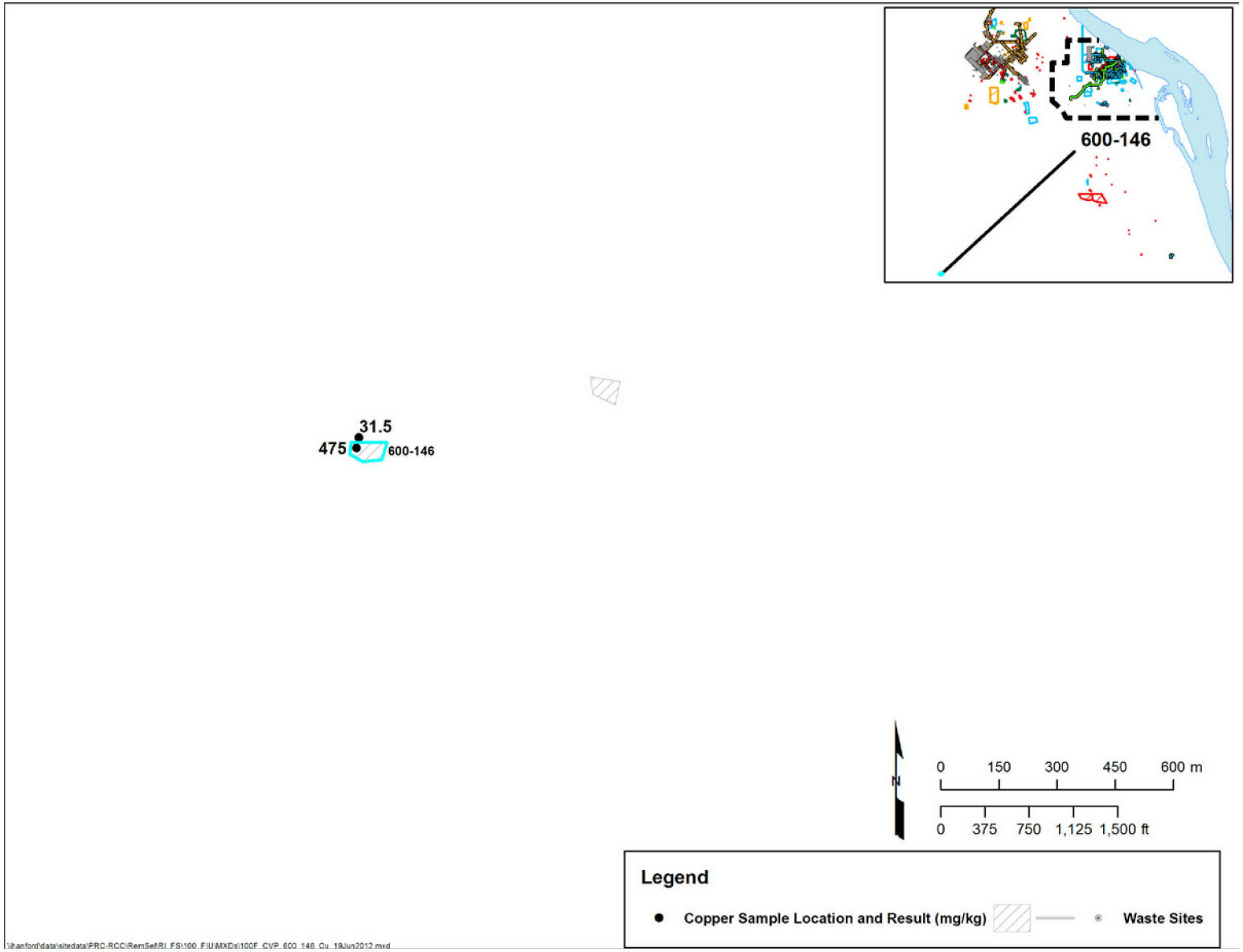

Figure H-36. 100-IU6 Metal Materials Dumping Area (600-146_Shallow_Focused) Sampling Locations and Associated Copper Results

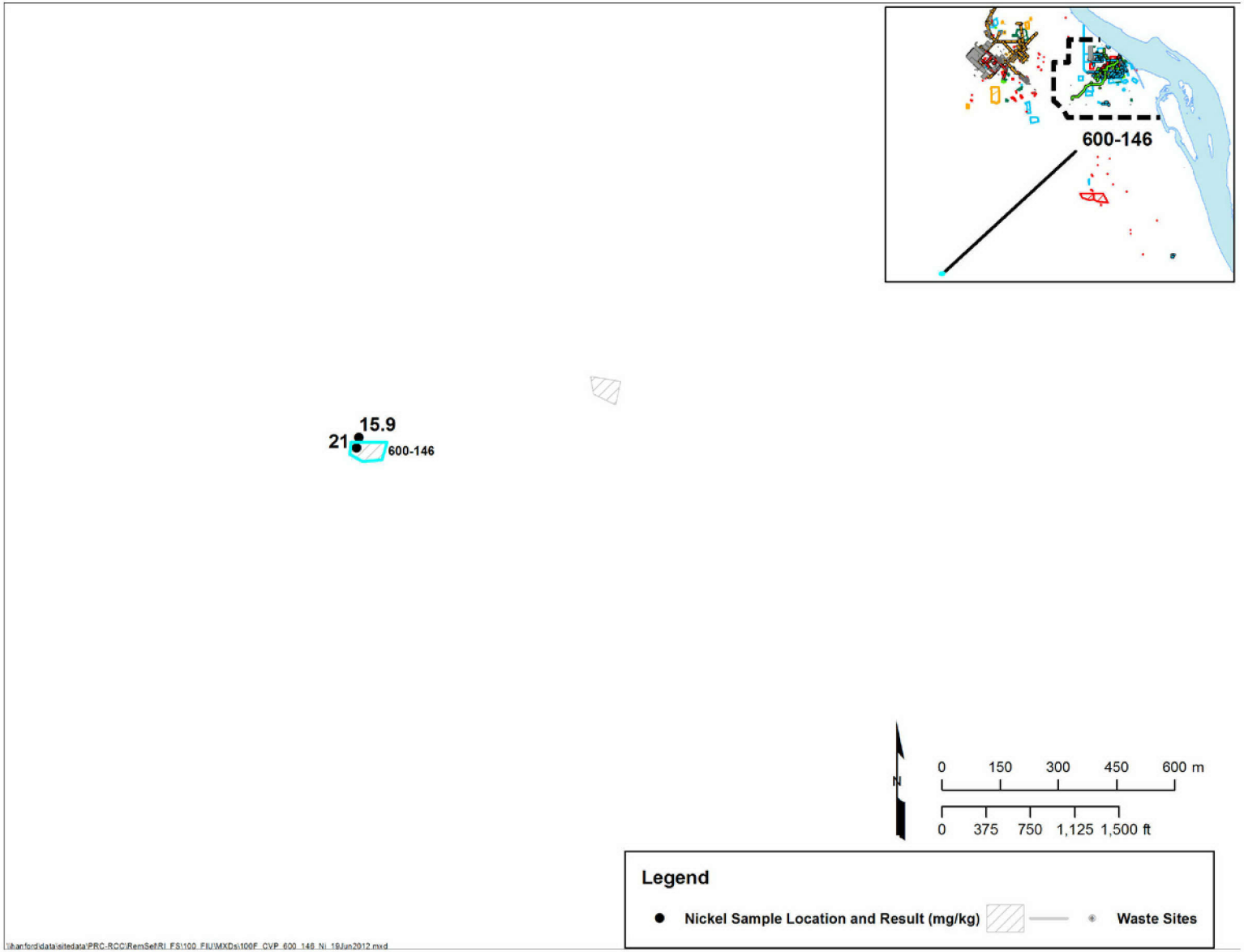

Figure H-37. 100-IU6 Metal Materials Dumping Area (600-146_Shallow_Focused) Sampling Locations and Associated Nickel Results

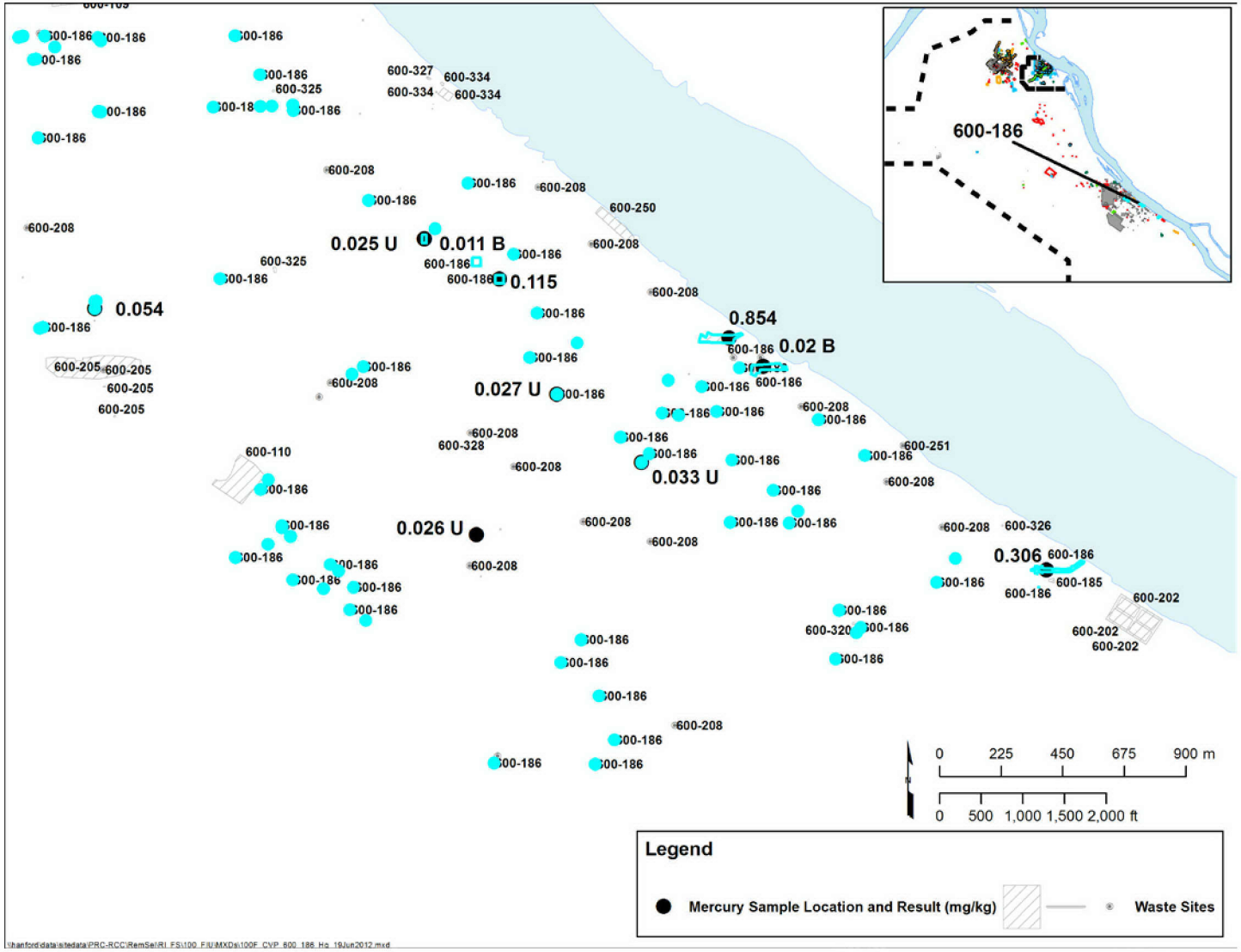

Figure H-38. 100-IU6 Trench - Septic Tanks and Sewage Treatment Plants at the Hanford Construction Camp (600-186_Shallow_Focused) Sampling Locations and Associated Mercury Results

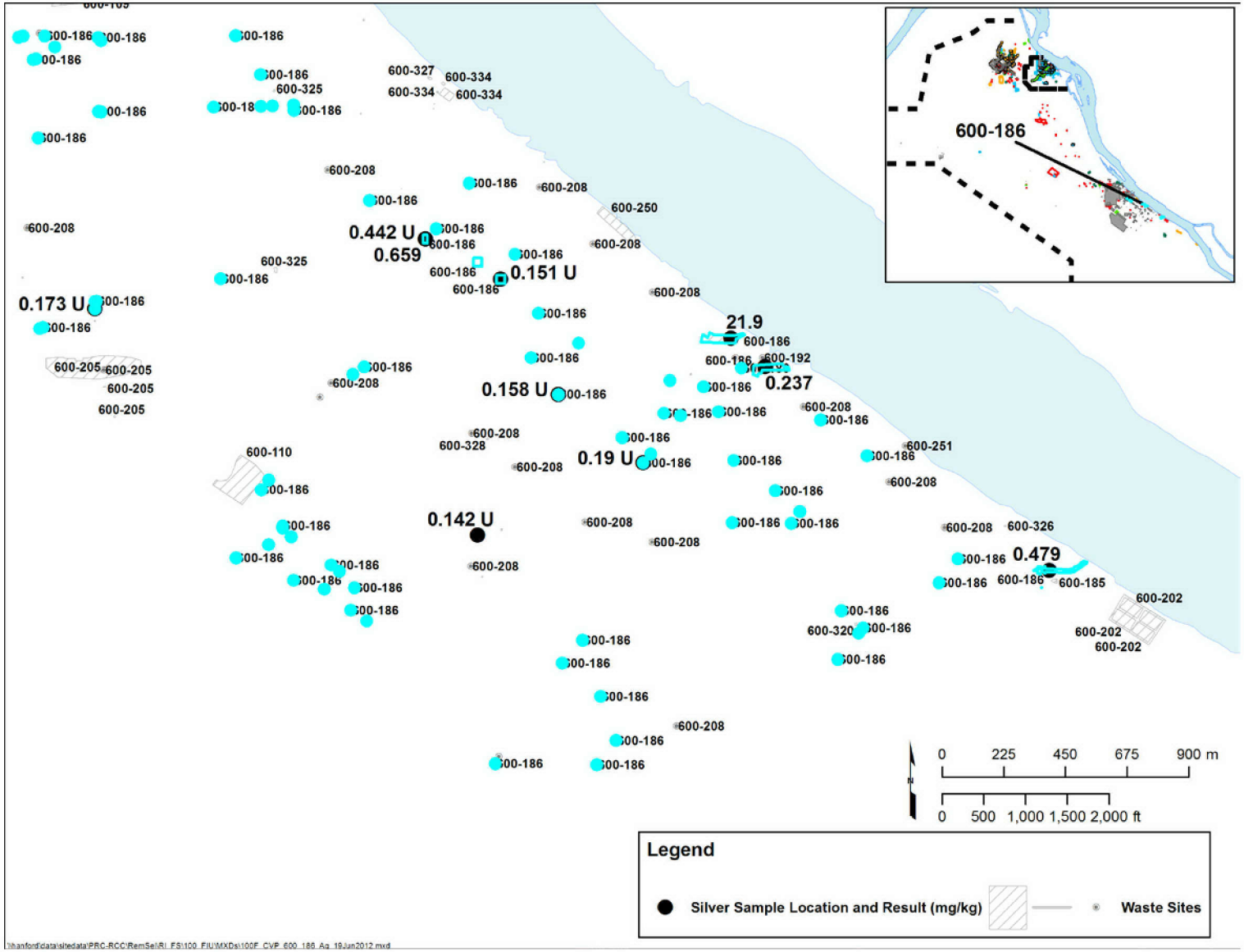

Figure H-39. 100-IU6 Trench - Septic Tanks and Sewage Treatment Plants at the Hanford Construction Camp (600-186_Shallow_Focused) Sampling Locations and Associated Silver Results

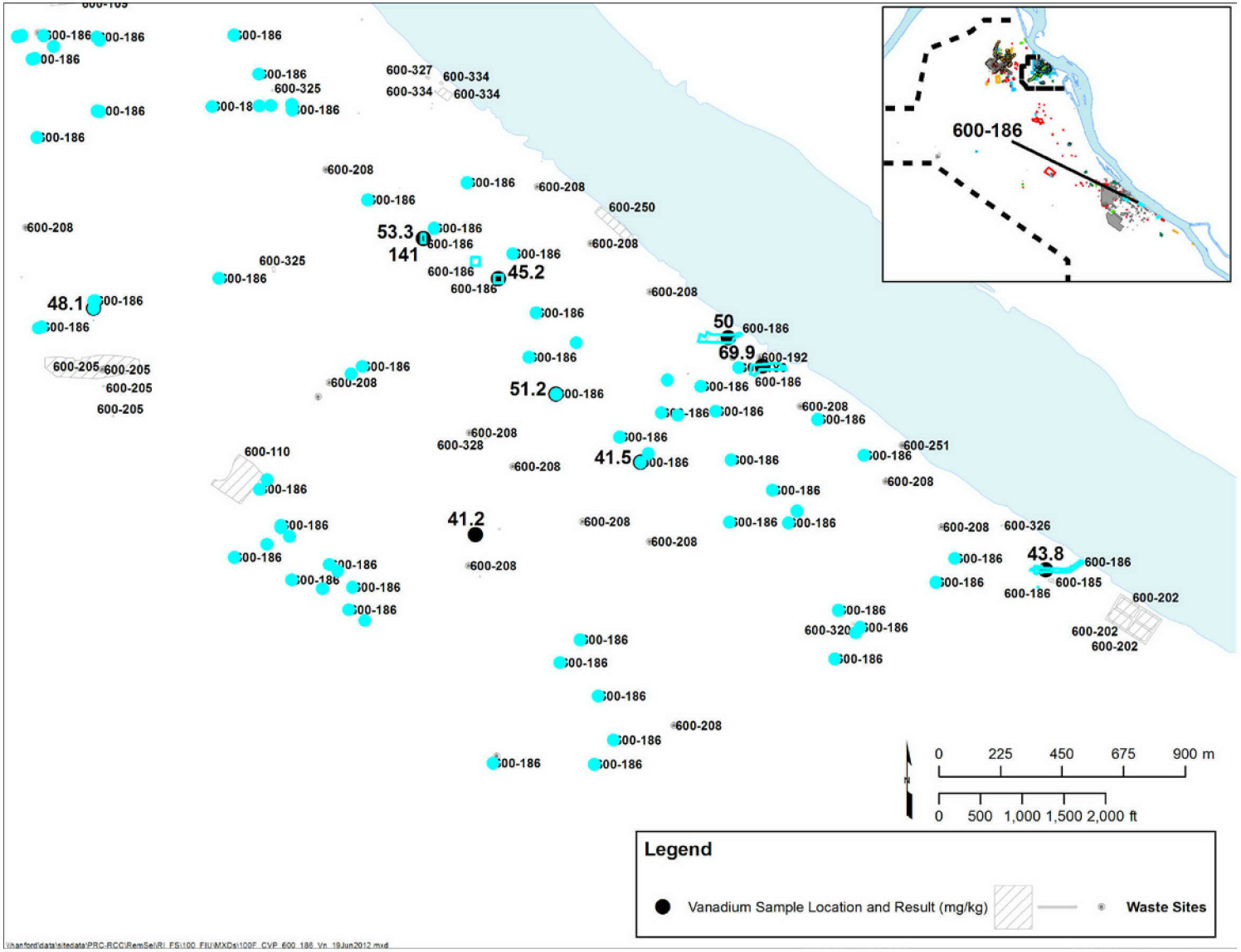

Figure H-40. 100-IU6 Trench - Septic Tanks and Sewage Treatment Plants at the Hanford Construction Camp (600-186_Shallow_Focused) Sampling Locations and Associated Vanadium Results

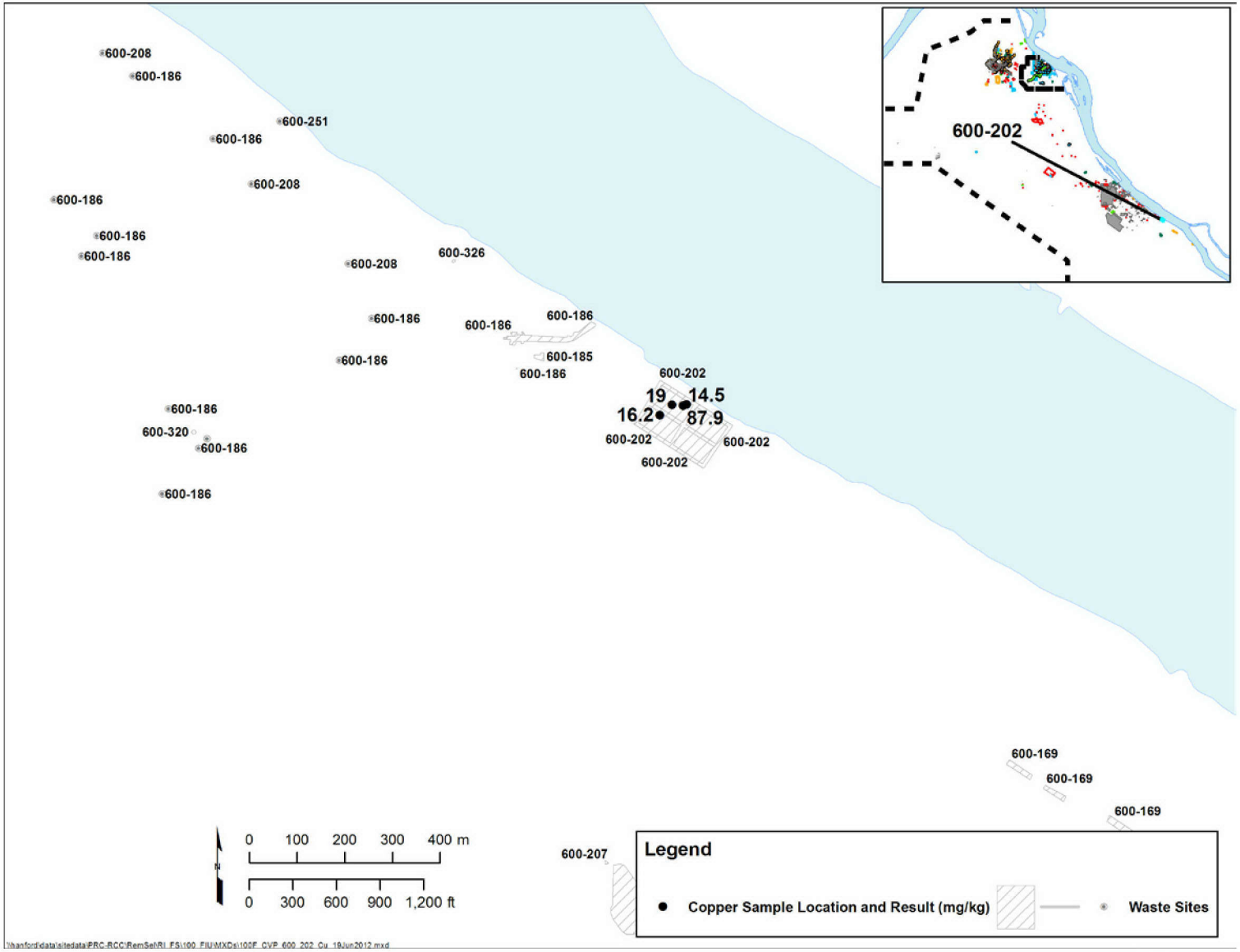

Figure H-41. 100-IU6 Trench - Miscellaneous Trash/Debris Burn and Burial Pits (600-202_Shallow_Focused) Sampling Locations and Associated Copper Results

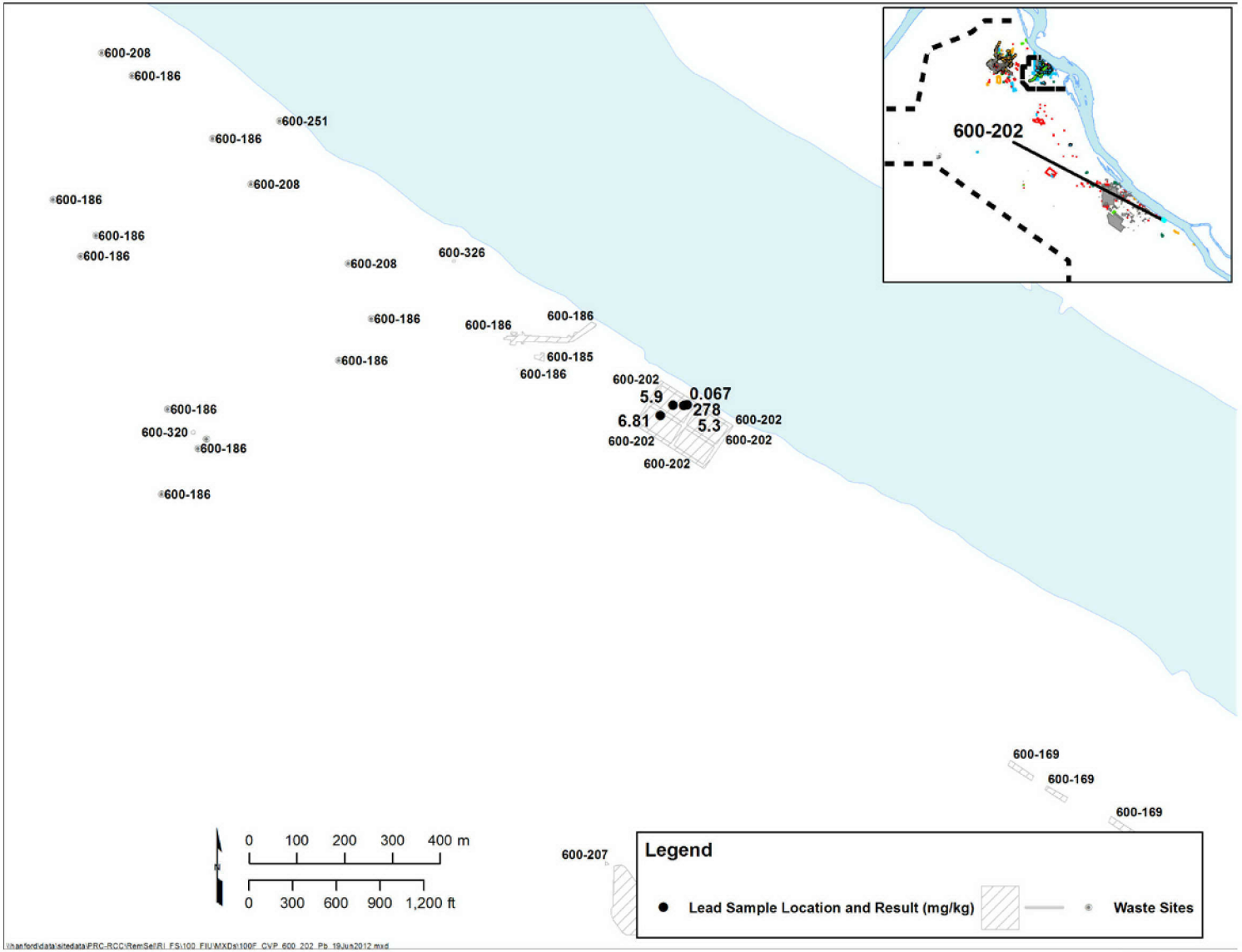

Figure H-42. 100-IU6 Trench - Miscellaneous Trash/Debris Burn and Burial Pits (600-202_Shallow_Focused) Sampling Locations and Associated Lead Results

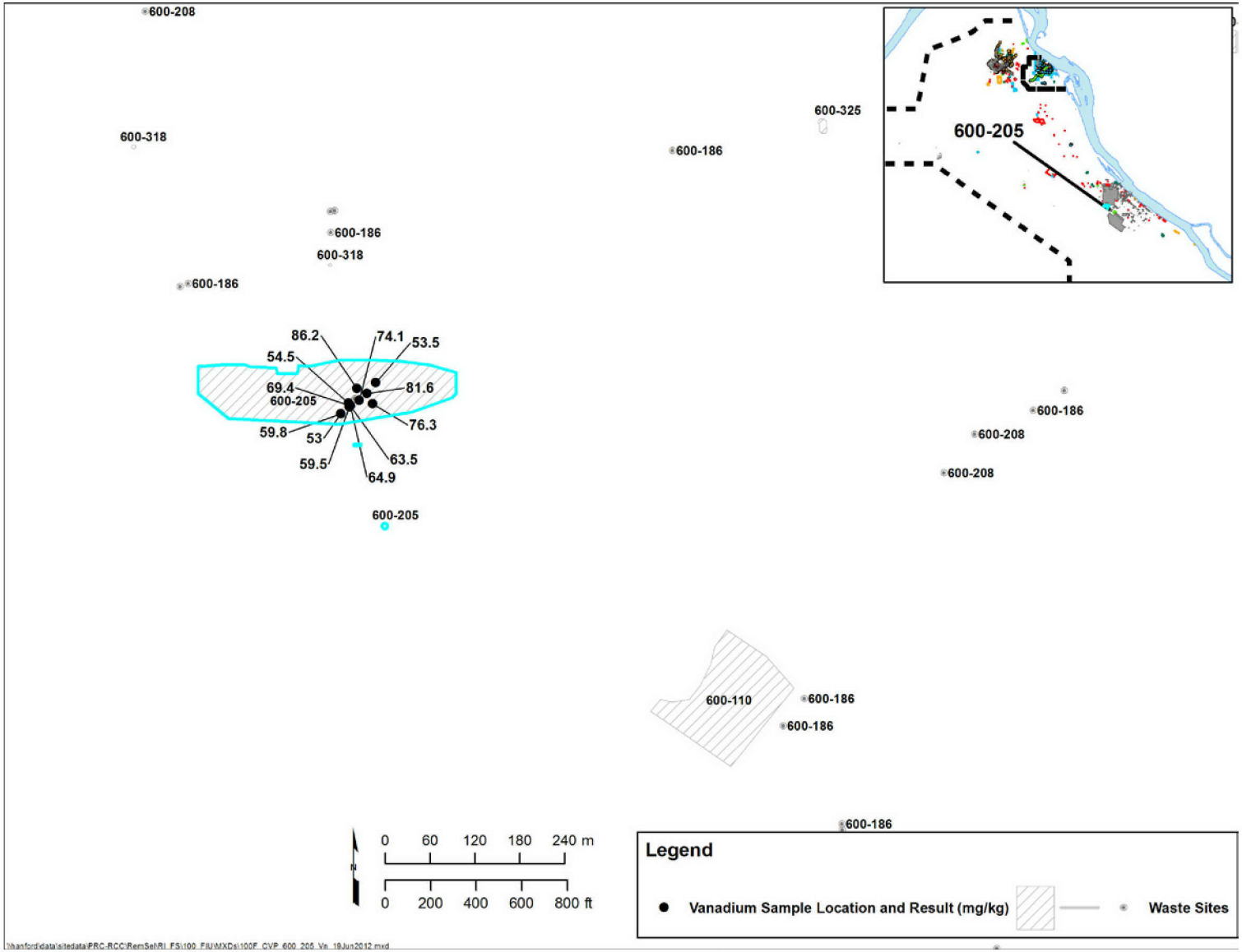

Figure H-43. 100-IU6 Domestic Refuse Dumping Area (600-205_Shallow_Focused) Sampling Locations and Associated Vanadium Results

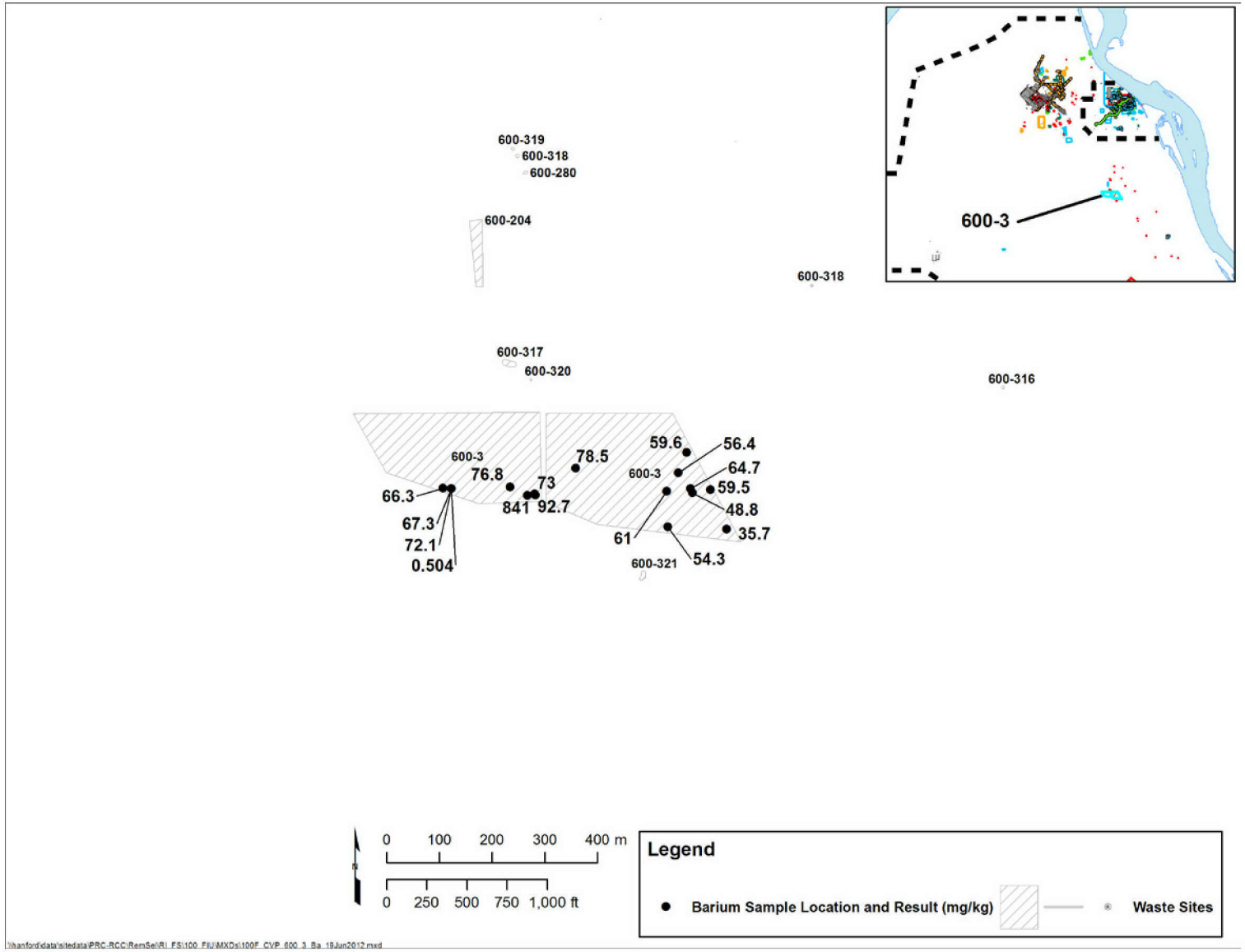

Figure H-44. 100-IU6 Disposal Site for Railroad Yard Maintenance Shop (600-3_Shallow_Focused) Sampling Locations and Associated Barium Results

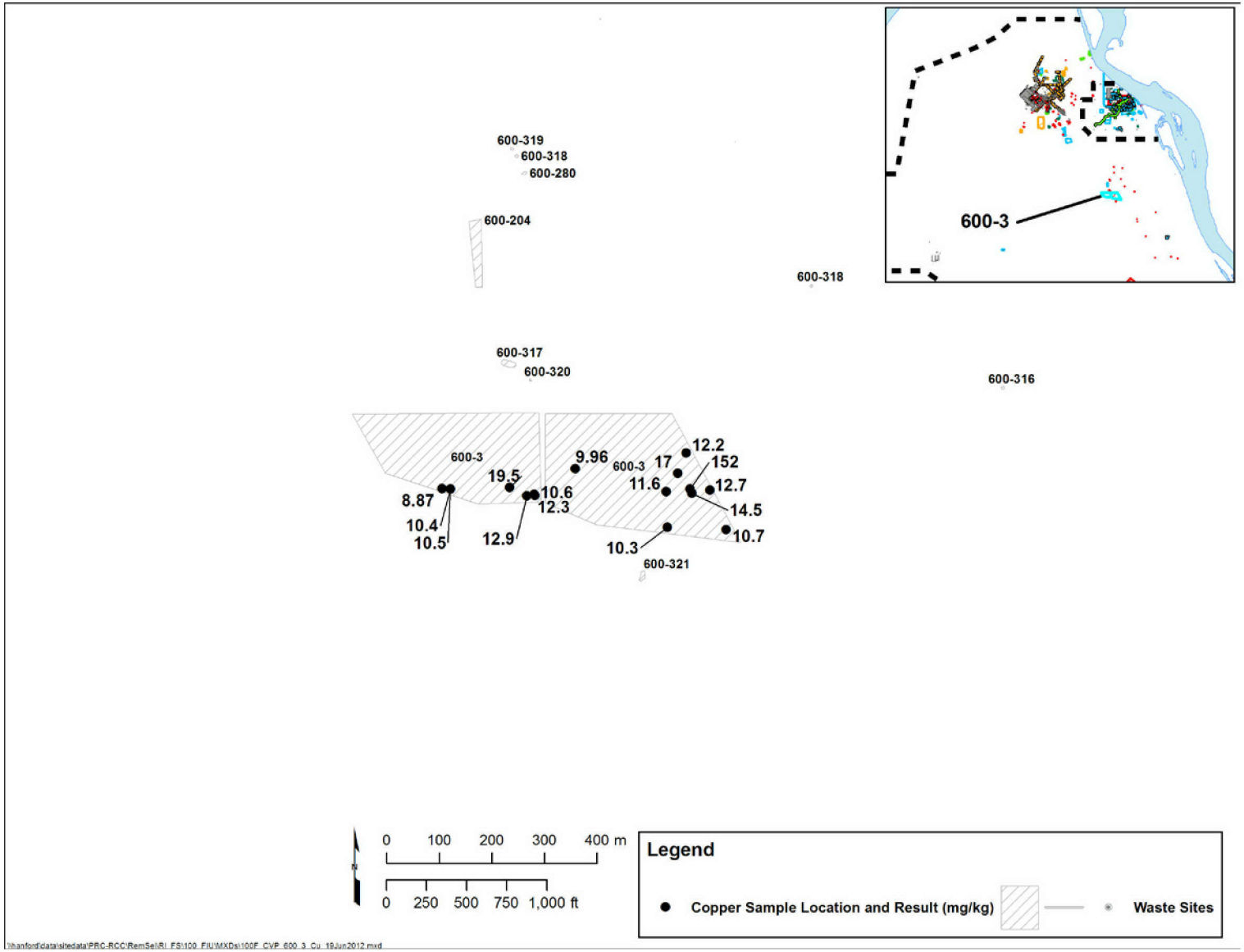

Figure H-45. 100-IU6 Disposal Site for Railroad Yard Maintenance Shop (600-3_Shallow_Focused) Sampling Locations and Associated Copper Results

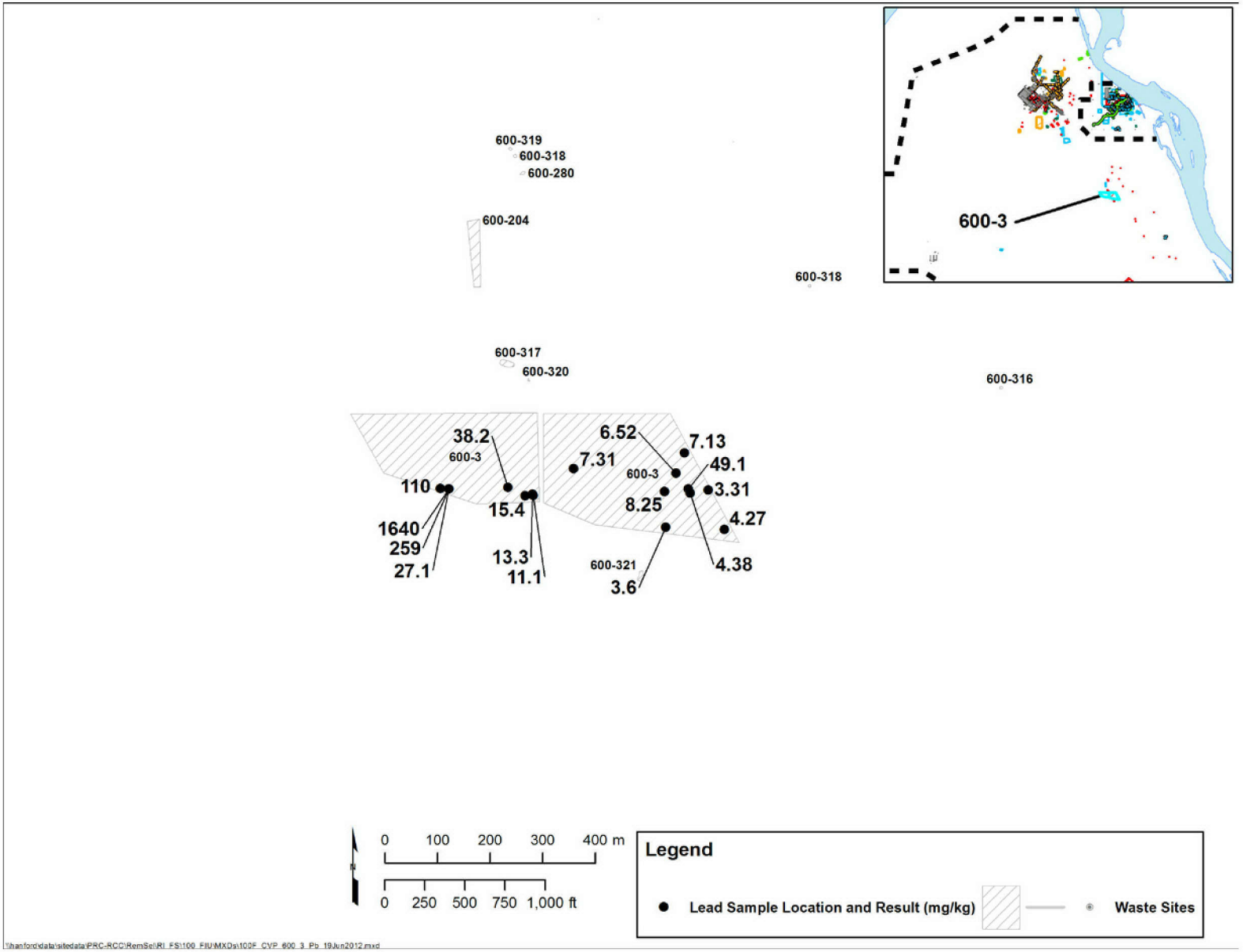

Figure H-46. 100-IU6 Disposal Site for Railroad Yard Maintenance Shop (600-3_Shallow_Focused) Sampling Locations and Associated Lead Results

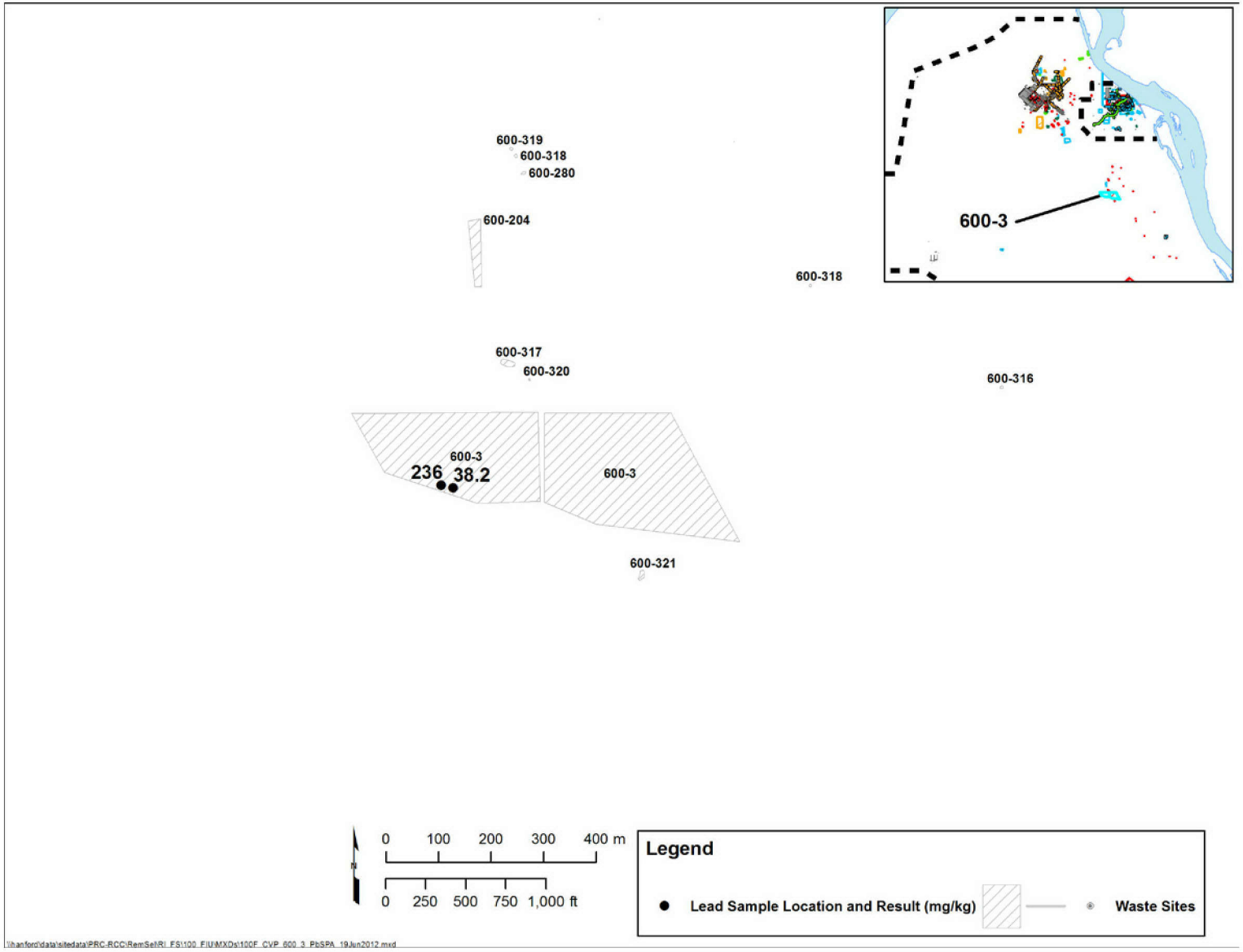

Figure H-47. 100-IU6 Disposal Site for Railroad Yard Maintenance Shop (600-3_Staging_Pile_Area_Footprint_Focused) Sampling Locations and Associated lead Results

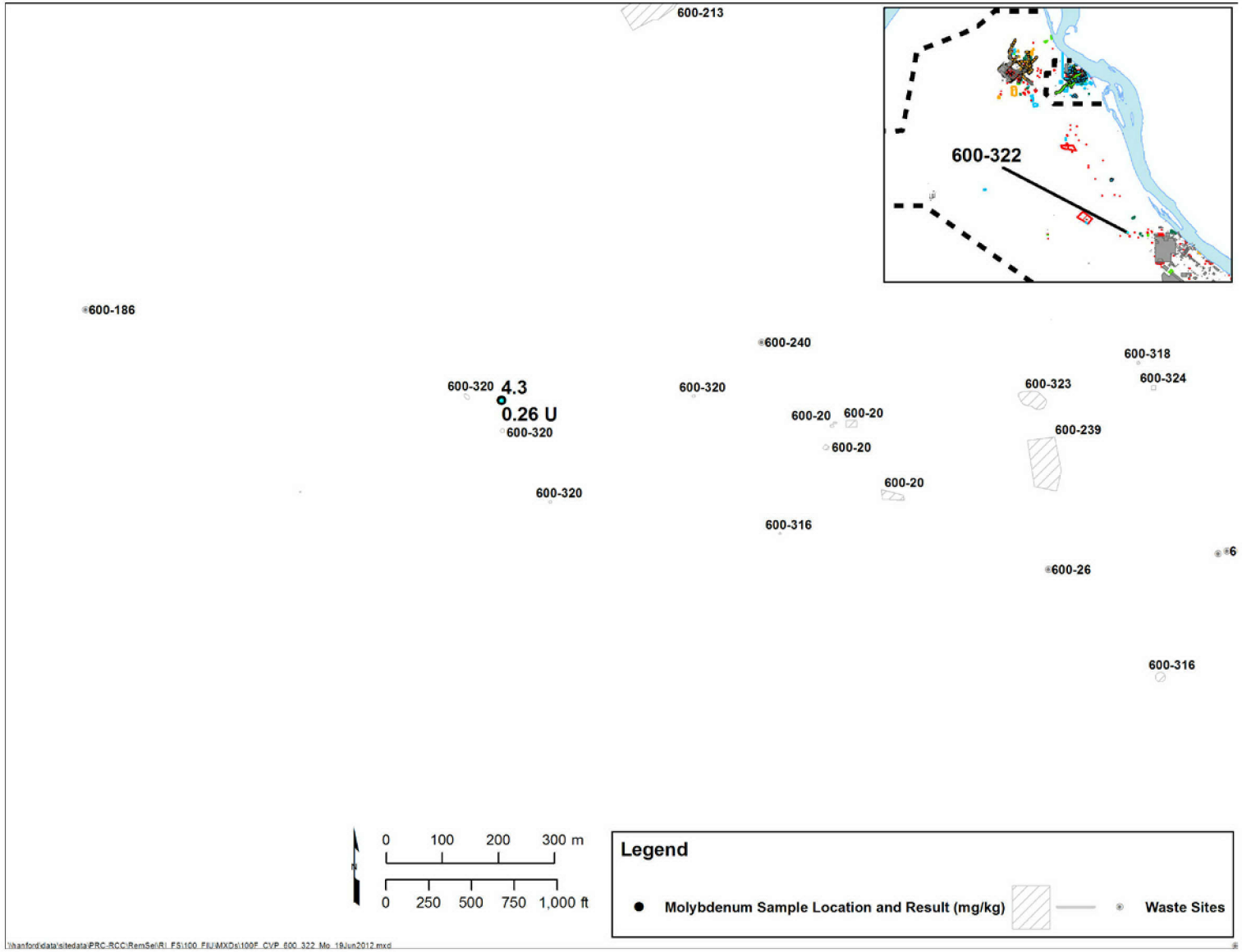

Figure H-48. 100-IU6 Carbon Steel Pipe with a Diamond Plate Cover (600-322_Shallow_Focused) Sampling Locations and Associated Molybdenum Results

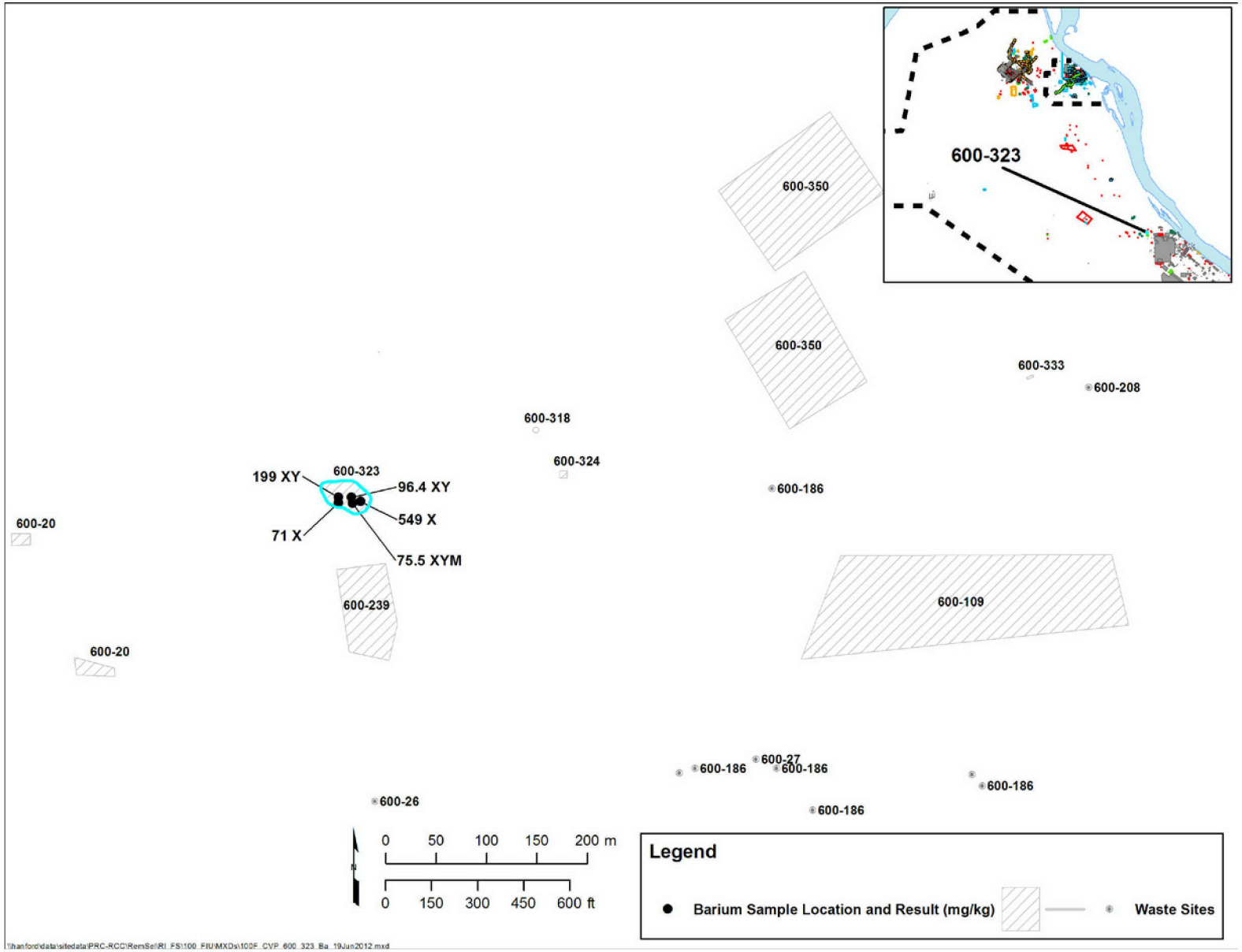

Figure H-49. 100-IU6 Bermed Area with Coal Cinders (600-323_Shallow_Focused) Sampling Locations and Associated Barium Results

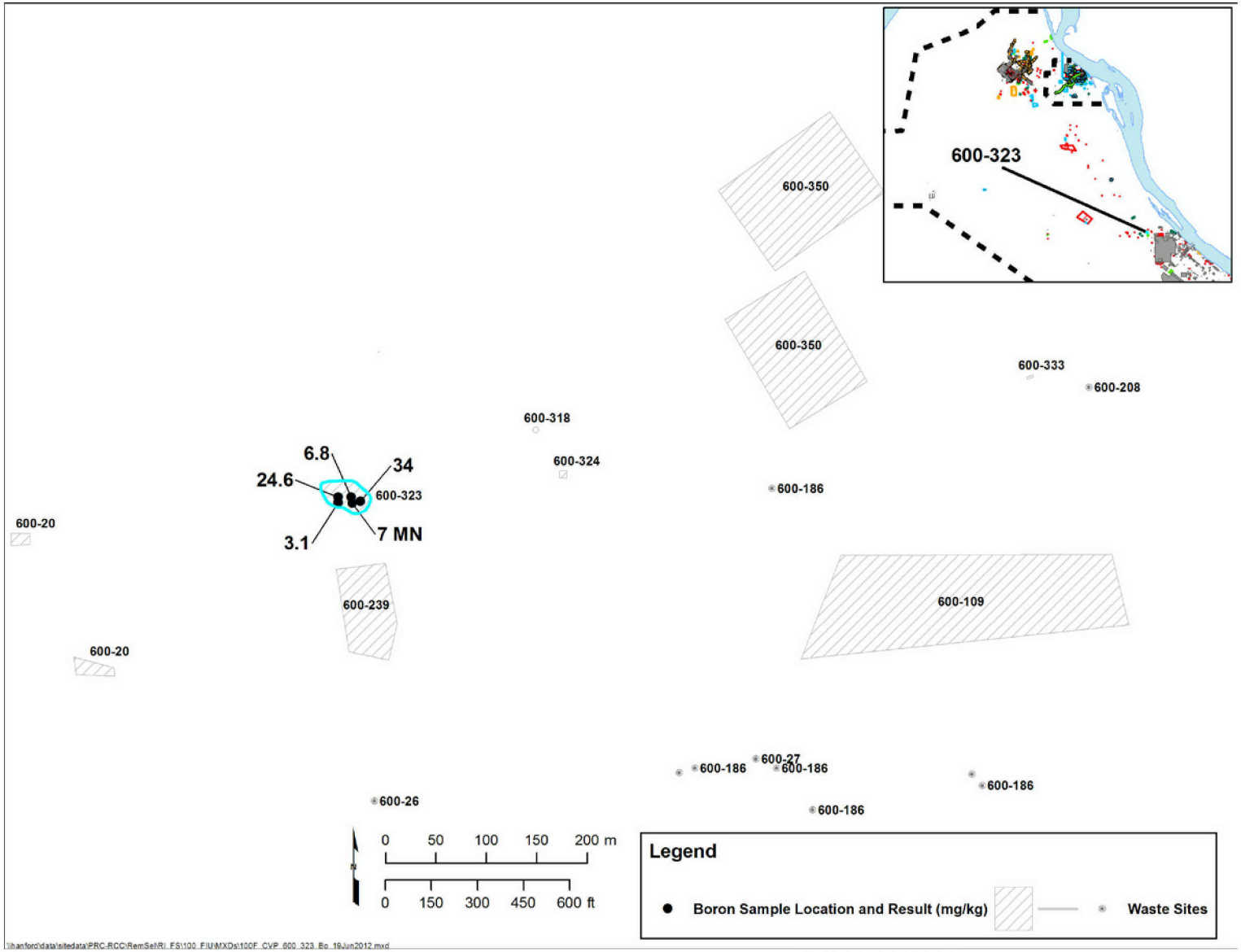

Figure H-50. 100-IU6 Bermed Area with Coal Cinders (600-323_Shallow_Focused) Sampling Locations and Associated Boron Results

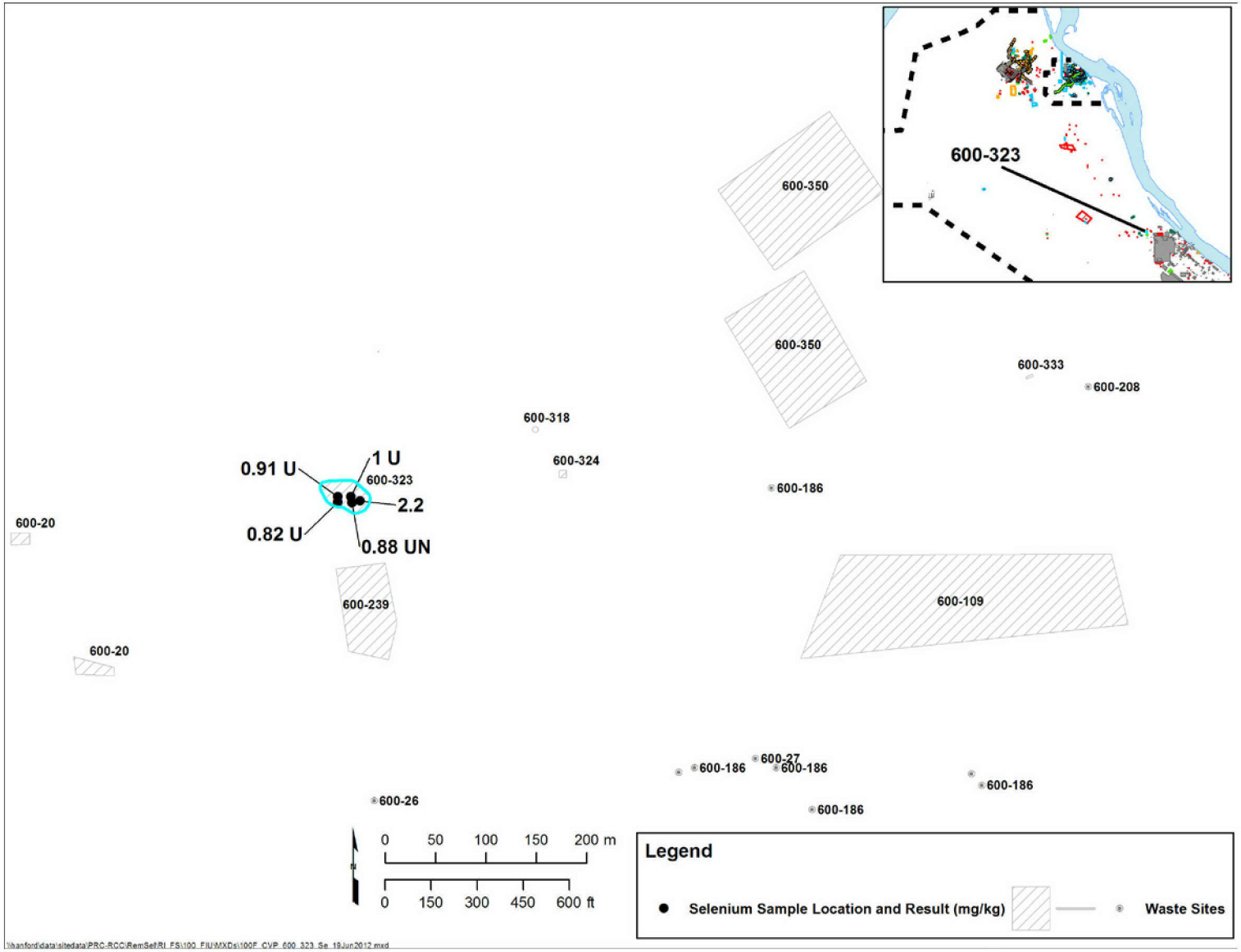

Figure H-51. 100-IU6 Bermed Area with Coal Cinders (600-323_Shallow_Focused) Sampling Locations and Associated Selenium Results

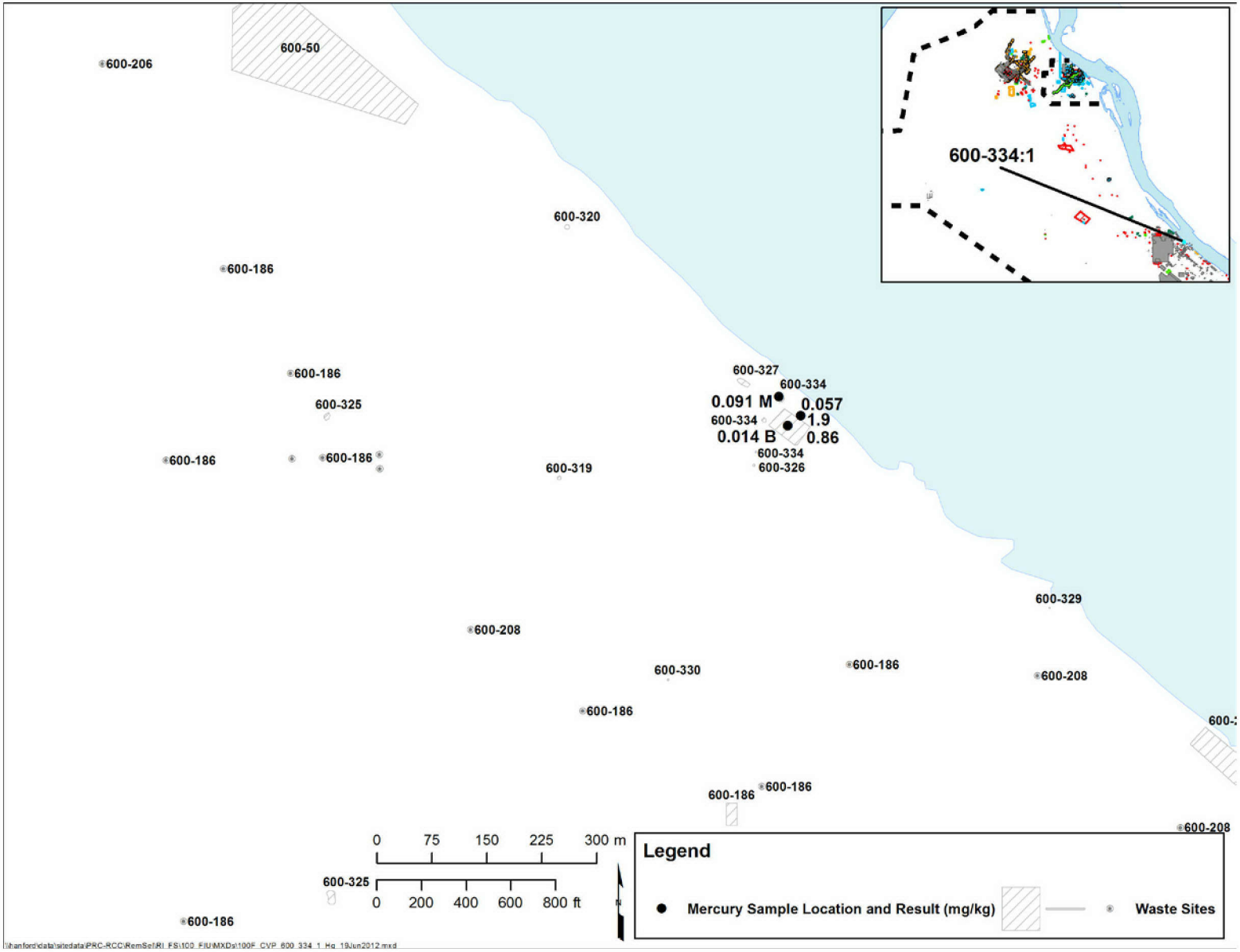

Figure H-52. 100-IU6 (600-334: Process Unit/Plant) (600-334:1_Shallow_Focused) Sampling Locations and Associated Mercury Results

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CHPRC ADMINISTRATIVE DOCUMENT PROCESSING AND APPROVAL

DOCUMENT TITLE: Ecological Risk Evaluation for the 100-FR-1, 100-FR-2, and 100-IU-6 Source Operable Units	**OWNING ORGANIZATION/FACILITY:** EP&SP SA - 12/11/2012
Document Number: ECF-100FR1-11-0022	**Revision/Change Number:** Draft ~~A~~ B

DOCUMENT TYPE *(Check Applicable)* [ ] Plan [X] Report [ ] Study [ ] Description Document [ ] Other

DOCUMENT ACTION *(Check One)* [ ] New [X] Revision [ ] Cancellation

RESPONSIBLE CONTACTS

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("yes" requires information clearance review in accordance with PRC-PRO-IRM-184)

DOCUMENT REVISION SUMMARY

NOTE: Provide a brief description or summary of the changes for the document listed.
Additional waste sites and addition of SOF and drinking water evaluations

REVIEWERS **Others**

Name *(print)*	Organization
Demitria Wright	
Chris McCarthy	

APPROVAL SIGNATURES

Author:			RELEASE / ISSUE
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A-6005-184 (REV 3)

Nichols, William E

From: Michael.Elias@ch2m.com
Sent: Monday, December 03, 2012 2:29 PM
To: Nichols, William E
Subject: RE: Request Approval: ECF-100FR1-11-0022 Draft A

I approve the release of this calculation.

Mike

From: Nichols, William E [mailto:William_E_Nichols@rl.gov]
Sent: Monday, December 03, 2012 5:16 PM
To: Elias, Michael/WDC
Subject: Request Approval: ECF-100FR1-11-0022 Draft A

Michael,

We are in the process of issuing one Environmental Calculation File that you filled the role of Originator (PRC-PRO-EP-40205) for:

- ECF-100FR1-11-0022 Draft A

A copy is attached.

Would you please, by response to this email, acknowledge that you approve the issue and release of this calculation in your role as Originator?

Thanks for your attention to this matter,

Will

Will Nichols
Modeling Team Leader

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Date Received for Clearance Process (MM/DD/YYYY)
12/11/2012

INFORMATION CLEARANCE FORM

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- [ ] Abstract
- [ ] Journal Article
- [ ] Summary
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- [ ] Visual Aid
- [ ] Software
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- [x] Report
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B. Document Number ECF-100FR1-11-0022 Draft B

C. Title
Ecological Risk Evaluation for the 100-FR-1, 100-FR-2, and 100-IU-6 Source Operable Units

D. Proposed Internet Address

E. Required Information (MANDATORY)

1. Is document potentially Classified? (●) No ( ) Yes

Aly, Alaa H Approved via IDMS data file
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2. Group Sponsoring _____
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J. Comments

Information Clearance Approval

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APPROVED
By Shauna E. Adams at 10:44 am, Dec 11, 2012

If Additional Comments, Please Attach Separate Sheet

A-6001-401 (REV 5)

DOE/RL-2010-98, DRAFT A
DECEMBER 2012

ECF-100FR1-11-0022
Draft B

Ecological Risk Evaluation for the 100-FR-1, 100-FR-2, and 100-IU-6 Source Operable Units

Prepared for the U.S. Department of Energy
Assistant Secretary for Environmental Management

Contractor for the U.S. Department of Energy
under Contract DE-AC06-08RL14788

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DOE/RL-2010-98, DRAFT A
DECEMBER 2012

ECF-100FR1-11-0022
Draft B

Ecological Risk Evaluation for the 100-FR-1, 100-FR-2, and 100-IU-6 Source Operable Units

Document Type: ENV Program/Project: EP & SP

M. Elias
CH2M Hill

Date Published
December 2012

Prepared for the U.S. Department of Energy
Assistant Secretary for Environmental Management

Contractor for the U.S. Department of Energy
under Contract DE-AC06-08RL14788

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APPROVED
By Shauna E. Adams at 10:45 am, Dec 11, 2012

Release Approval Date

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Environmental Calculation Cover Page

Part 1: Completed by the Responsible Manager

Project: 100 Areas and 300 Area Remedial Investigation/Feasibility Study Reports

Date: November 16, 2012

Calculation Title & Description: Ecological Risk Evaluation for the 100-FR-1, 100-FR-2, and 100-IU-6 Source Operable Units

Preparer: Michael Elias	**Basis of Qualification:** Education & Experience
Checker: Demitria Wright	**Basis of Qualification:** Education & Experience
Senior Reviewer: Chris McCarthy	**Basis of Qualification:** Eductaion & Experience

Part 2: Completed by Preparer

Calculation No.: ECF-100FR1-11-0022

Revision No.: Draft A

Revision History:

Revision No.	Description	Date	Affected Pages
Draft	Additional waste sites and addition of HI	8/4/11	1-10
Draft A	Additional waste sites and addition of SOF and drinking water evaluations	11/16/12	1-10

Part 3: Document Review & Approval:

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11/19/12
DATE

Nichols, William E

From: Chris.McCarthy@ch2m.com
Sent: Monday, December 03, 2012 2:11 PM
To: Nichols, William E
Subject: RE: ECF approval: ECF-100FR1-11-0022 Draft A

I approve.

From: Nichols, William E [mailto:William_E_Nichols@rl.gov]
Sent: Monday, December 03, 2012 5:10 PM
To: McCarthy, Chris/BOS
Subject: ECF approval: ECF-100FR1-11-0022 Draft A

Chris,

We are in the process of issuing one Environmental Calculation File that you filled the roll of Senior Reviewer (PRC-PRO-EP-40205) for:

- ECF-100FR1-11-0022 Draft A

A copy is attached.

Would you please, by response to this email, acknowledge that you approve the issue and release of this calculation in your role as Senior Reviewer?

Thanks for your attention to this matter,

Will

Will Nichols
Modeling Team Leader

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1 Purpose

This Environmental Calculation for the 100-F/IU-2/IU-6 Source OUs documents the following:

- Calculation of Hazard Quotients (HQs), Sum of Fractions (SOFs), and Hazard Indexes (HIs) for the evaluation of risk to ecological receptors (plants, soil invertebrates, and wildlife) from radionuclides and chemical constituents in the upper 4.6 m (15 ft) of the upland area soils; and,
- Evaluation of the site-relatedness of constituents based on the comparison of site concentrations to non site-impacted background concentrations for radionuclides and inorganic constituents with HQs, SOFs, or HIs ≥ 1.

The HQ, SOF, HI, and background comparisons presented in this Environmental Calculation are intended for use in the Ecological Risk Assessment (ERA) being prepared for the 100-F/IU-2/IU-6 OUs of the Hanford Site. That ERA completes both a Screening and preliminary remediation goal (PRG) evaluation; the results of the ERA will be used to evaluate the ecological risk remaining following remediation and to provide information for risk managers to consider when deciding if additional remediation is necessary with respect to ecological risks for the 100-F/IU-2/IU-6 OUs.

HQs are intended to characterize the potential for risk to the specified receptors from exposure to contaminants via the evaluated exposure pathways. HQs are the ratios of the estimated site-specific exposures to a constituent compared to the estimated exposure levels at which no adverse health effects are likely to occur. Because the dose from radionuclides is additive, the combined effects from two or more radionuclides are calculated as ratios of the estimated total site-specific exposures to effect levels using the SOF method. The dose from polychlorinated biphenyls (Aroclors) is also additive; therefore, the total contributions of Aroclors were also calculated using the HI method. For inorganic or radiological constituents indicating a potential risk (HQ or SOF ≥ 1) for at least one ecological receptor, background comparisons were conducted to determine if the concentrations are greater than those in unaffected areas. Risks are not considered to be site-related in the ERA if onsite concentrations do not exceed background concentrations. Background concentrations were not available for organic constituents.

The risk characterization process described in this document is consistent with *Ecological Risk Assessment Guidance for Superfund: Process for Designing and Conducting Ecological Risk Assessments, Interim Final* (EPA/540-R-97-006). The HQs, SOFs, HIs, and background comparison outcomes presented in this Environmental Calculation are not intended to be final risk outcomes; it will be revised as needed to incorporate updates to the risk characterization process and/or underlying values used to calculate risks that occur during the Remedial Investigation/Feasibility Study (RI/FS) process for the 100-F/IU-2/IU-6 OUs.

The risk characterization process presented in this document is intended for use in evaluating risks for waste sites located in upland habitats. It is not intended for evaluating riparian or near-shore areas of the River Corridor, as these have been defined in the *River Corridor Baseline Risk Assessment: Evaluation of Current Conditions and Completed Interim Actions Volume 1: Ecological Risk Assessment* (DOE/RL-2007-21, Rev 0).

2 Methodology

The HQs, SOFs, HIs, and background comparisons are based on the evaluation of risk to ecological receptors as described in Section 1. The following sections describe the steps used to develop the screening HQs, SOFs, and HIs (Section 2.1), the approach for comparing site to background concentrations (Section 2.2), the approach for developing the PRG HQs (Section 2.3), and the approach

for estimating wildlife exposure to chemicals and radionuclides received by drinking from seeps leading to the Columbia River in the vicinity of the 100-F/IU2, and IU6 OUs (Section 2.4).

2.1 Screening HQ, SOF, and HI Calculation

Risks at the 100-F/IU OUs were evaluated based on the ratio of Exposure Point Concentrations (EPCs) to SSLs (defined below), resulting in HQs, and are described by the following equation:

$$HQ = EPC/SSL$$

where:

HQ	=	ecological hazard quotient (unitless)
EPC	=	soil concentration (µg/kg for non-radionuclides and pCi/g for radionuclides)
SSL	=	soil screening level (µg/kg for non-radionuclides and pCi/g for radionuclides)

Once the HQ was calculated, the SOF for radionuclides or the HI for Aroclors was calculated for a decision unit as follows:

$$\text{SOF or HI} = \sum_{j=1}^{n} \text{Exposure}_j / \text{SSL}_j$$

where:

SOF = sum of fractions

HI = Hazard Index

Exposure_j = exposure concentration for individual radiological or chemical constituents

SSL_j = soil screening level for individual radiological or chemical constituents

HQ, SOF, or HI values less than 1.0 indicate that adverse effects associated with exposure to a given constituent are unlikely (EPA/540-R-97-006). These constituents were not considered to represent a risk and were excluded from further evaluation in the ERA. An HQ, SOF, or HI $\geq$ 1.0 indicates a potential for risk, but does not indicate that a risk is actually present. Inorganic or radiolonuclide constituents with an HQ or SOF $\geq$ 1.0 for at least one ecological receptor (plant, invertebrate, bird, or mammal) were further evaluated, as discussed in Section 2.2, to determine if the detected concentrations also exceed background. When the SOF is $\geq$ 1.0, the individual radionuclides are carried into the background evaluation for that decision unit. As noted above, background concentrations were not available for organic constituents, so this evaluation was not completed for Aroclors or other organics.

Table 1 identifies the soil decision units that were designated for each waste site in the 100-F/IU-2/IU-6 OUs. Table 2 defines the area and depth sampled within each soil decision unit and describes the sampling design used. The soil depth decision units evaluated in the ERA, and for which EPCs were calculated, are overburden (backfill), overburden-focused (backfill), staging pile area (0 to 15 bgs), staging pile area-focused (0 to 15 bgs), staging pile area-footprint (0 to 15 bgs), staging pile area-footprint-focused (0 to 15 bgs), shallow (0 to 15 ft bgs), and shallow-focused (0 to 15 ft bgs). All focused samples were collected using the focused study design. Samples collected greater than 15 ft bgs (deep and deep_focused) were not included in the ERA.

The EPC represents the Upper Confidence Limit (UCL) of the arithmetic mean concentration of the analyzed constituent for each decision unit within the footprint of each remediated waste site. A detailed

description of the process used to calculate the EPCs and the resulting EPC values for the 100-F/IU-2/IU-6 OUs is provided in the *Computation of Exposure Point Concentrations for the 100-FR-1, 100-FR-2, 100-IU-2, and 100-IU-6 Source Operable Units* (ECF-100FR1-11-0020).

The soil EPCs for each evaluated waste site and decision unit were compared to the following SSLs for each receptor group selected for evaluation in the ERA:

- Terrestrial Plants and Soil Invertebrates - The overall lowest of the available plant and soil invertebrate values in *Tier 1 Risk Based Concentrations for the Protection of Ecological Receptors at the Hanford Site* (CHPRC-00784 found in Appendix H of DOE/RL-2010-97) were used as the SSLs for this calculation.
- Avian and Mammalian Wildlife - The overall lowest of the avian and mammalian lowest observed adverse effect level (LOAEL)-based values in CHPRC-00784 were used as the SSLs for this calculation.

Because the plant/invertebrate and/or wildlife SSL values for 10 COPCs (arsenic, boron, lithium, mercury, manganese, molybdenum, selenium, strontium, thallium, and uranium) were higher than the corresponding PRG values, EPCs for these COPCs were reviewed to confirm they were below both the SSL and PRG. Any of these 10 COPCs with EPCs greater than either the SSL or PRG were then carried forward.

2.2 Background Concentration Comparison

The soil EPCs for inorganics or radionuclides with an HQ or SOF $\geq$ 1.0 were compared to the lognormal 90th percentile background concentrations for the Hanford Site. If the SOFs were greater than or equal to 1.0, individual radionuclides for that waste site decision unit were carried into the background evaluation. Background concentrations are not available for organic chemicals, so organics were not evaluated in the background comparison. Accordingly, Aroclors with HIs $\geq$ 1.0 were carried forward in the risk assessment process without comparison to background concentrations. For inorganic constituents in soil at the Hanford Site, background concentrations are described in DOE/RL-92-24, *Hanford Site Background, Part 1, Soil Background for Nonradioactive Analytes*. That document provides the 90th percentile background concentrations for several inorganic constituents. For inorganic constituents not included in DOE/RL-92-24, the 90th percentile concentrations were obtained from Ecology (Ecology Publication 94-115), ECF-Hanford-11-038 (*Soil Background for Interim Use at the Hanford Site*), or from DOE/RL-96-17 (*Remedial Design Report/Remedial Action Work Plan for the 100 Area*). For radiological constituents, background concentrations in soil at the Hanford Site are described in DOE/RL-96-12, *Hanford Site Background, Part 2, Soil Background for Radionuclides*.

Inorganic or radionuclide constituents with EPCs meeting or exceeding SSLs (i.e., HQ or SOF $\geq$ 1.0) but with EPCs that do not exceed the 90th percentile background concentration were not considered to represent a site-related risk and were excluded from further evaluation. Constituents with EPCs meeting or exceeding SSLs and with EPCs greater than the 90th percentile background concentrations and organics for which background values are not available were further considered in the PRG evaluation.

2.3 PRG HQ Calculation

Chemical-decision-unit combinations with EPCs equaling or exceeding the SSLs (including organics) and with inorganics and radionuclides with EPCs greater than the 90th percentile background concentrations at 100-F/IU-2/IU-6 OUs were further evaluated based on the ratio of EPCs to PRGs, resulting in HQs, and are described by the following equation:

$$HQ = EPC/PRG$$

where:

HQ	=	ecological hazard quotient (unitless)
EPC	=	soil concentration (µg/kg for non-radionuclides and pCi/g for radionuclides)
PRG	=	preliminary remediation goal (µg/kg for non-radionuclides and pCi/g for radionuclides)

As described in Section 2.1, the EPC represents the UCL concentration of the analyzed constituent for each decision unit within the footprint of each remediated waste site. The soil EPCs for each evaluated waste site and decision unit were compared to PRGs for each receptor group with EPCs exceeding SSLs and background.

The primary difference between the SSL and PRG comparisons for wildlife is the use of bioaccumulation factors that are based on the foodchain present at the Hanford site (e.g., arthropods in soil) for the calculation of the PRG, and the incorporation of Hanford-specific tissue data in the models. Development of the PRGs for birds and mammals focused on the integration of available Hanford-specific bioaccumulation data for plants, terrestrial arthropods, and small mammals into existing bioaccumulation models to more accurately reflect site-specific conditions and the potential exposure of wildlife to chemicals from the ingestion of prey at this Site. Details of the calculations of the avian and mammalian PRGs are found in CHPRC-01311 (*Tier 2 Risk Based Concentrations for the Protection of Ecological Receptors at the Hanford Site)*. As with SSLs, the PRGs selected are also based on Lowest Observed Adverse Effect Levels (LOAELs).

PRGs for the evaluation of potential impacts to terrestrial plants and soil invertebrates are primarily no observed effect concentrations (NOECs) from the RCBRA (DOE/RL-2007-21 Volume 1, Rev. 0), Ecology (Ecology Publication-11-003-006), and from a recent study in 2011 as presented in ECF HANFORD-11-0158 (*Tier 2 Terrestrial Plant and Invertebrate Preliminary Remediation Goals (PRGs) for Nonradionuclides for Use at the Hanford Site*).

2.4 Freshwater Seeps Drinking Water and HQ Calculations

The estimates of exposure from drinking water ingestion by wildlife include the use of a simplified model whereby the rate of ingestion is standardized to the body weight of the receptor on a per kilogram basis. The simplified allometric scaling equations presented in *Scaling of Osmotic Regulation in Mammals and Birds* (Calder and Braun, 1983) were used to estimate the number of liters consumed per kilogram body weight per day. These rates of ingestion were then multiplied by the concentration of chemicals to calculate the total dose from the drinking water pathway as shown below:

$$\text{Dose} = [\text{Water} \times \text{DWIR}] \times \text{AUF}$$

where:

Dose	=	drinking water exposure (mg/kg body weight/day)
Water	=	chemical concentration in seep (mg/L)
DWIR	=	drinking water ingestion rate (L/kg body weight/day)
AUF	=	area use factor (area of site/home range of receptor) (unitless)

Drinking water ingestion was estimated for several species of birds and mammals expected to occur in the 100-F/IU-2/IU-6 riparian areas along the Columbia River, with the initial assumption that they reside at

the site and fulfill their drinking water requirements exclusively from the seeps, but only for nine months of the year because the river stage is elevated from mid-April to mid-July making the seeps inaccessible. Therefore, an AUF of 0.75 was employed for all species except bats. For bats, an AUF of 0.5 was used because bats use a combination of hibernating and seeking alternative sources of emergent insects during the winter months (WDFW, 2012).

Estimates are excluded for rodents (i.e., deer mouse, grasshopper mouse, and pocket mouse) because they maintain water balance through excreting concentrated urine, obtaining water from food and water generated during metabolism (Verts and Kirkland, 1988, "*Perognathus parvus*").

Assuming that wildlife meet their daily drinking water requirements from the seeps, instead of a more readily available source such as the river, is a conservative approach meant to evaluate a worst-case scenario rather than attempt to establish a method for predicting exposure under the complex scenario that exists at the site. Therefore, though it represents an overestimate, the UCL of the arithmetic mean concentration of the analyzed constituent in seep water (as described for soil in Section 2.1) was employed as the EPC as a conservative estimate of exposure. While filtered water data are used in evaluations of the effects on aquatic receptors (because those are the concentrations that are bioavailable), unfiltered concentrations are more appropriate for drinking water (because bioavailability may change within the digestive tract). Both were included to be comprehensive because in rare cases filtered concentrations can be higher than unfiltered concentrations. Results of filtered concentration and unfiltered concentration data were evaluated separately. When both filtered and unfiltered were measured in the same sampling location and event they were not pooled because doing so would overestimate the exposure concentration.

HQs for inorganics were estimated as the ratio of estimated ingestion doses to toxicological reference values (TRVs). The TRVs employed were the same as those used to develop the wildlife PRGs used to evaluate soil as presented in CHPRC-00784 and CHPRC-01311.

$$HQ = Dose/TRV$$

where:

HQ = ecological hazard quotient (unitless)
Dose = drinking water exposure (mg/kg body weight/day)
TRV = toxicological reference value (mg/kg-body weight-day)

For radionuclides, the HQs were simply a ratio of the measured concentrations in water to the biota concentration guides (BCGs) for wildlife. The lowest water BCGs of terrestrial or riparian animal receptors were taken from the DOE's *A Graded Approach for Evaluating Radiation Doses to Aquatic and terrestrial Biota* (DOE-STD-1153-2002) or were calculated using the RESRAD BIOTA tool (DOE/EH-0676) when not available in DOE-STD-1153-2002. SOFs were calculated as described in Section 2.1. Also as described in Section 2.1, the EPC represents the UCL of the arithmetic mean concentration of the analyzed constituent.

$$HQ = (EPC*AUF) / BCG$$

where:

HQ = ecological hazard quotient (unitless)
EPC = radionuclide concentration in seep (pCi/L)
AUF = area use factor (unitless)
BCG = biota concentration guides (pCi/L)

3 Assumptions and Inputs

The following sections provide the input values for the HQ, SOF, and HI calculations (Sections 3.1, 3.2, 3.4, and 3.5) and comparison to background concentrations (Section 3.3).

3.1 EPC Concentrations

Site and decision unit EPCs (described in Section 2.1) for surface soil used to calculate HQs, SOFs, and HIs are shown in Table 3 through Table 5 for the 100-F, 100-IU-2, and 100-IU-6 OU waste sites.

3.2 Soil Screening Levels (SSLs)

Available SSLs (described in Section 2.1) used to calculate HQs, SOFs, and HIs are included in Table 3 through Table 5 for the 100-F, 100-IU-2, and 100-IU-6 OU waste sites.

3.3 Background Concentrations

Background concentrations (described in Section 2.2) for soil used to evaluate exceedances of background are provided in Table 6 for the 100-F OU waste sites, Table 7 for the 100-IU-2 OU waste sites, and Table 8 for the 100-IU-6 OU waste sites. The results of the comparisons are then summarized in Tables 9 through 11 for the 100-F, 100-IU-2, and 100-IU-6 OU waste sites. As noted above, background values are not available for organics, and they were carried forward.

3.4 PRG Evaluation

PRGs (described in Section 2.3) used to calculate the HQs for chemicals with EPCs that exceeded both SSLs and background are provided in Table 12 through Table 14 for the 100-F, 100-IU-2, and 100-IU-6 OU waste sites, respectively and summarized in Tables 15 through 17, respectively.

3.5 Freshwater Seeps Drinking Water Evaluation

EPCs of seep water data for chemicals used to calculate drinking water ingestion HQs are found in Table 18 and those for radionuclides in seeps are found in Table 19. Body weights and allometric scaling-based drinking water ingestion rates are provided in Table 18. TRVs, body weights, and allometric scaling-based drinking ingestion rates for chemicals are provided in Table 18, while BCGs are provided in Table 19.

4 Software Applications

All supporting calculations were performed on electronic spreadsheets using Microsoft Excel. Electronic versions of all spreadsheets are provided with calculations included to facilitate comparison with hand calculations and checking of logical or lookup functions. This approach meets the requirements for "Single Use Software" as described in *CHPRC Environmental Calculation Preparation and Issue*, PRC-PRO-EP-40205.

5 Calculation

5.1 Screening HQ, SOF, HI and PRG HQ Calculations

HQs were calculated by comparing EPC concentrations to SSLs and PRGs using Microsoft Excel spreadsheets. EPCs were compared to SSLs and PRGs for terrestrial plants or soil invertebrates (the lower

of the two) and for avian or mammalian wildlife (similarly, the lower of the two). The SOFs for radionuclides were calculated for a decision unit by summing the individual HQs for each radionuclide within that decision unit. The HIs for Aroclors were similarly calculated for a decision unit by summing the individual HQs for each Aroclor within that decision unit. The results of these calculations are presented in Tables 3 through 5 for the SSL comparison and Tables 12 through 14 for the PRG comparison.

5.2 Background Concentration Comparison

Site concentrations for inorganics were compared to background by comparing EPC concentrations to background concentrations using Microsoft Excel spreadsheets. EPCs were compared only for constituents with SSL-based HQs or SOFs $\geq$ 1.0. The results of these calculations are presented in Tables 6 through 8.

5.3 Freshwater Seeps Drinking Water Evaluation

EPCs of chemicals in seeps were used to estimate a worst-case scenario of potential wildlife exposure to chemicals in seep water based on the assumption that wildlife use seeps as an exclusive source of drinking water. However, area use factors were employed that account for the fact that many of the receptors are not present year round due to migration or hibernation, and the seeps themselves are not "available" year round. Results of the comparisons for chemicals are presented in Table 18. For radionuclides, exposure EPCs of radioactivity were compared to BCGs to evaluate the potential dose of radioactivity received through drinking seep water. Results are presented in Table 19.

6 Results/Conclusions

A summary of the chemicals exceeding one or both the SSLs (plant/invertebrate and/or bird/mammal) and background is presented in Tables 9 through 11 for the 100-F, 100-IU-2, and 100-IU-6 OUs, respectively. The HQs for SOFs for radionuclides and the HIs for Aroclors were less than 1 for all waste sites decision units.

Summaries of the chemicals exceeding both the PRGs and background at the 100-F, 100-IU-2, and 100-IU-6 OU waste sites are presented in Tables 15 through 17, respectively. The EPCs for the inorganic analytes arsenic, barium, boron, copper, lead, mercury, molybdenum, nickel, selenium, silver, and vanadium exceeded background and one or both groups of PRGs (plants/invertebrates, birds/mammals) and the EPC for the organic analyte dieldrin exceeded the SSL for wildlife in at least one of the following waste sites:

- 100-F-19:2_Overburden: Mercury
- 100-F-26:10_Overburden_Focused: Selenium
- 100-F-26:14_Shallow: Boron
- 100-F-26:4_Overburden_Focused: Boron
- 100-F-26:4_Shallow_1: Selenium
- 100-F-26:9_Overburden_Focused: Barium, Boron, Copper
- 100-F-26:9_Shallow_Focused: Mercury

- 100-F-31_Shallow: Mercury
- 100-F-33_Staging Pile Area_Focused: Mercury
- 100-F-37_Shallow_Focused: Barium, Lead
- 100-F-38_Shallow_Focused: Barium
- 100-F-45_Shallow: Mercury
- 100-F-47_Shallow: Mercury
- 100-F-55 and 100-F-62_Shallow_2: Mercury
- 100-F-55 and 100-F-62_Staging Pile Area Footprint_Focused: Mercury
- 100-F-56:1_Shallow: Mercury
- 100-F-61_Shallow: Mercury
- 100-F-9_Shallow_Focused: Mercury
- 118-F-1_Overburden: Silver
- 118-F-7_Shallow: Molybdenum
- 118-F-7_Staging Pile Area: Copper
- 118-F-8:4_Shallow: Mercury, Selenium
- 120-F-1_Shallow: Selenium
- 1607-F3_Shallow: Selenium
- 1607-F4_Shallow: Mercury, Selenium
- 1607-F7_Staging Pile Area_Focused: Dieldrin
- 600-351_Shallow_Focused: Arsenic, Lead
- 600-176_Staging Pile Area Footprint_2: Lead
- 600-296_Shallow_Focused: Barium, Mercury
- 600-146_Shallow_Focused: Copper, Nickel
- 600-186_Shallow_Focused: Mercury, Silver, Vanadium
- 600-202_Shallow_Focused: Copper, Lead
- 600-205_Shallow_Focused: Vanadium
- 600-3_Shallow_Focused: Barium, Copper, Lead
- 600-3_Staging Pile Area Footprint_Focused: Lead
- 600-322_Shallow_Focused: Molybdenum

- 600-323_Shallow_Focused: Barium, Boron, Selenium
- 600-334:1_Shallow_Focused: Mercury

Comparison of EPCs for seeps along the100-F/IU-2/IU-6 riparian area to TRVs resulted in HQs of less than 0.1 for all inorganic chemicals or radionuclides (Tables 18 and 19). These results indicate that no further evaluation of drinking water is warranted for both inorganic chemicals and radionuclides. The same conclusion is reached even when considering the drinking ingestion in combination with total ingestion from terrestrial pathways.

6.1 Supporting Information

The backup information supporting these calculations is provided in the following files:

Microsoft Excel workbook "100-FIU2IU6 AreaEcoRiskCalcBrief_EcoHQs.xlsx" containing:

- Table 1. Summary of Waste Sites and Decision Units for the 100-F/IU-2/IU-6 OUs
- Table 2. Summary of Decision Unit Soil Reaches
- Table 3. Comparison of 100-F Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs
- Table 4. Comparison of 100-IU-2 Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs
- Table 5. Comparison of 100-IU-6 Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs
- Table 6. Comparison of Chemicals Exceeding SSLs in 100-F Decision Areas Surface Soils (0 to 15 feet) to Background Concentrations
- Table 7. Comparison of Chemicals Exceeding SSLs in 100-IU-2 Decision Areas Surface Soils (0 to 15 feet) to Background Concentrations
- Table 8. Comparison of Chemicals Exceeding SSLs in 100-IU-6 Decision Areas Surface Soils (0 to 15 feet) to Background Concentrations
- Table 9. Summary of 100-F Waste Sites Ecological Evaluation Based on SSLs and Background for Surface Soils (0 to 15 feet)
- Table 10. Summary of 100-IU-2 Waste Sites Ecological Evaluation Based on SSLs and Background for Surface Soils (0 to 15 feet)
- Table 11. Summary of 100-IU-6 Waste Sites Ecological Evaluation Based on SSLs and Background for Surface Soils (0 to 15 feet)
- Table 12. Comparison of 100-F Decision Area Surface Soil (0 to 15 feet) Concentrations to PRGs
- Table 13. Comparison of 100-IU-2 Decision Area Surface Soil (0 to 15 feet) Concentrations to PRGs
- Table 14. Comparison of 100-IU-6 Decision Area Surface Soil (0 to 15 feet) Concentrations to PRGs

- Table 15. Summary of 100-F Source OU Waste Sites Ecological Evaluation Based on PRGs for Surface Soils (0 to 15 feet)
- Table 16. Summary of 100-IU-2 Source OU Waste Sites Ecological Evaluation Based on PRGs for Surface Soils (0 to 15 feet)
- Table 17. Summary of 100-IU-6 Source OU Waste Sites Ecological Evaluation Based on PRGs for Surface Soils (0 to 15 feet)
- Table 18. Wildlife Exposure to Chemicals through Drinking from Seeps in the 100-F/IU-2/IU-6 Riparian Area
- Table 19. Wildlife Exposure to Radionuclides through Drinking from Seeps in the100-F/IU-2/IU-6 Riparian Area

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Table 1. Summary of Waste Sites and Decision Units for the 100-F/IU-2/IU-6 Source OUs

Waste Site	Decision Unit
100-F	
100-F-11	Shallow_Focused
100-F-12	Shallow_Focused
100-F-14	Shallow_Focused
100-F-15	Overburden
	Shallow
100-F-16	Shallow_Focused
100-F-18	Shallow_Focused
100-F-19:1	Deep
	Overburden
	Shallow
100-F-19:2	Deep
	Deep_Focused
	Overburden
	Shallow
	Shallow_Focused
100-F-2	Shallow
100-F-20	Shallow
	Staging pile area
100-F-23	Shallow[a]
100-F-24	Shallow
100-F-25	Shallow
100-F-26:1	Deep_Focused
	Shallow_Focused
100-F-26:10	Overburden_Focused
	Shallow
	Shallow_Focused
100-F-26:11	Shallow_Focused
100-F-26:12	Overburden
	Shallow
	Staging Pile Area
100-F-26:13	Overburden_Focused
	Shallow
	Shallow_Focused
100-F-26:14	Overburden
	Shallow
100-F-26:15	Overburden_Focused
	Shallow
	Shallow_Focused
100-F-26:2	Shallow_Focused
100-F-26:4	Overburden_Focused
	Overburden_Focused_3
	Shallow_1
	Shallow_2
	Shallow_Focused
100-F-26:5	Deep_Focused
	Shallow_Focused

Table 1. Summary of Waste Sites and Decision Units for the 100-F/IU-2/IU-6 Source OUs

Waste Site	Decision Unit
100-F-26:7	Overburden_Focused
	Shallow
	Shallow_Focused
	Staging Pile Area Footprint
100-F-26:8	Overburden_Focused
	Shallow
	Shallow_Focused
100-F-26:9	Overburden
	Overburden_Focused
	Shallow
	Shallow_Focused
	Staging Pile Area
100-F-31	Shallow
100-F-33	Shallow
	Shallow_Focused
	Staging pile area_Focused
100-F-35	Shallow
100-F-36	Shallow
	Shallow_Focused
100-F-37	Shallow_Focused
100-F-38	Shallow_Focused
100-F-4	Shallow_Focused
100-F-44:2	Shallow_Focused
100-F-44:5	Shallow_Focused
100-F-44:8	Shallow
	Staging Pile Area Footprint
100-F-44:9	Overburden_Focused
	Shallow
	Staging Pile Area Footprint
100-F-45	Overburden_Focused
	Shallow
	Staging Pile Area Footprint
100-F-46	Shallow_Focused
100-F-47	Shallow
100-F-48	Overburden
	Overburden_Focused
	Shallow_1
	Shallow_2
100-F-49	Shallow
	Shallow_Focused
	Staging Pile Area Footprint_Focused
100-F-50	Shallow_Focused
100-F-51 and 100-F-63	Overburden_Focused
	Shallow

Table 1. Summary of Waste Sites and Decision Units for the 100-F/IU-2/IU-6 Source OUs

Waste Site	Decision Unit
100-F-52	Shallow_Focused
100-F-53	Shallow_Focused
100-F-54	Shallow
100-F-55 and 100-F-62	Shallow_1
	Shallow_2
	Shallow_Focused
	Staging Pile Area Footprint_Focused
100-F-56:1	Shallow
	Shallow_Focused
100-F-60	Shallow_Focused
100-F-61	Shallow
100-F-7	Shallow_Focused
100-F-9	Shallow_Focused
116-F-1	Overburden
	Shallow
116-F-10	Shallow
116-F-11	Shallow_Focused
116-F-14	Deep
	Shallow
116-F-15	Shallow
116-F-16	Overburden
	Shallow
116-F-2	Deep
	Overburden
	Shallow
116-F-3	Shallow
116-F-4	Deep_Focused
	Overburden_Focused
	Shallow_Focused
116-F-5	Shallow
116-F-6	Deep
	Shallow
116-F-7	Deep_Focused
116-F-8	Deep
	Overburden
	Shallow
116-F-9	Deep
	Shallow
118-F-1	Overburden
	Shallow
	Shallow_Focused[a]
	Staging Pile Area

Table 1. Summary of Waste Sites and Decision Units for the 100-F/IU-2/IU-6 Source OUs

Waste Site	Decision Unit
118-F-2	Overburden
	Shallow
	Shallow_Focused
	Staging Pile Area
118-F-3	Overburden
	Shallow
	Staging Pile Area
118-F-4	Shallow_Focused[a]
118-F-5	Overburden
	Shallow_1
	Shallow_3[a]
118-F-6	Overburden
	Shallow
	Shallow_Focused
118-F-7	Overburden
	Shallow
	Shallow_Focused
	Staging Pile Area
118-F-8:1	Deep
	Shallow
118-F-8:3	Deep
118-F-8:4	Deep
	Overburden
	Shallow
120-F-1	Shallow
126-F-1	Overburden
	Shallow
126-F-2	Staging pile area_Focused
128-F-1	Shallow_Focused
128-F-2	Shallow
	Staging pile area_Focused
128-F-3	Shallow
	Staging pile area_Focused
132-F-1	Shallow
	Staging pile area_Focused
141-C	Shallow
	Staging Pile Area_Focused
1607-F2	Shallow
1607-F3	Shallow
	Staging pile area_Focused
1607-F4	Overburden_Focused
	Shallow
	Shallow_Focused

Table 1. Summary of Waste Sites and Decision Units for the 100-F/IU-2/IU-6 Source OUs

Waste Site	Decision Unit
1607-F5	Shallow
	Staging pile area_Focused
1607-F6	Overburden
	Shallow
1607-F7	Shallow
	Staging pile area_Focused
182-F	Overburden_Focused
	Shallow_Focused
600-351	Shallow_Focused
UPR-100-F-2	Shallow
100-F-10	See 118-F-8:1
100-F-19:3	See 100-F-19:1
116-F-12	
100-F-34	
100-F-29	See 100-F-19:2
UPR-100-F-1	
1607-F1	See 100-F-26:1
100-F-44:1	
UPR-100-F-3	See 100-F-25
100-IU-2	
600-100	Shallow
	Shallow_Focused
600-120 and 600-297	Overburden_Focused
	Shallow
	Staging Pile Area
600-124	Shallow
	Staging Pile Area
600-125	Overburden_Focused
	Shallow_Focused
	Staging Pile Area_Focused
600-127	Deep
	Deep_Focused
	Overburden_Focused
	Shallow
	Shallow_Focused
	Staging Pile Area_3
	Staging Pile Area_4
600-128	Shallow_Focused
600-131	Shallow_Focused
600-132	Shallow_Focused
600-139	Shallow_Focused
600-176	Shallow
	Staging Pile Area Footprint_2
	Staging Pile Area Footprint_3

Table 1. Summary of Waste Sites and Decision Units for the 100-F/IU-2/IU-6 Source OUs

Waste Site	Decision Unit
600-181	Shallow_Focused
600-182	Overburden_Focused
	Shallow_1_Focused
	Shallow_2_Focused
	Staging Pile Area_Focused
600-188	Overburden_Focused
	Shallow
	Staging Pile Area_Focused
600-190	Shallow_Focused
600-295	Shallow_Focused
600-296	Shallow_Focused
600-302	Shallow_Focused
600-341:1	Shallow_1_Focused
	Shallow_2_Focused
600-341:2	Shallow_Focused
600-343	Shallow_Focused
600-344	Shallow_Focused
600-345	Shallow_Focused
600-346	Shallow
600-5	Shallow_Focused
	Staging Pile Area_Focused
628-1	Shallow_Focused
100-IU-6	
600-107	Shallow_Focused
600-108 and 600-257	Shallow_Focused
	Staging Pile Area Footprint_Focused
600-109	Overburden_Focused
	Shallow
	Shallow_Focused
	Staging Pile Area
600-111	Shallow
	Shallow_Focused
600-146	Shallow_Focused
600-149:2	Shallow
	Shallow_Focused
600-178	Overburden_Focused
	Shallow_Focused
	Staging Pile Area Footprint_Focused
600-186	Shallow_Focused
600-202	Shallow_1
	Shallow_2
	Shallow_Focused
	Staging Pile Area Footprint
600-204	Shallow_Focused

Table 1. Summary of Waste Sites and Decision Units for the 100-F/IU-2/IU-6 Source OUs

Waste Site	Decision Unit
600-205	Shallow_Focused
	Staging Pile Area Footprint_Focused
600-23	Overburden
	Shallow
	Shallow_Focused
600-280	Shallow_Focused
600-3	Shallow_1
	Shallow_2
	Shallow_Focused
	Staging Pile Area Footprint
	Staging Pile Area Footprint_Focused
600-315	Shallow_Focused
600-322	Shallow_Focused
600-323	Shallow_Focused
600-327	Shallow_Focused
600-334:1	Shallow_Focused
600-350	Shallow_Focused
JA JONES 1	Overburden
	Shallow
	Shallow_Focused

Note:

a. Only excluded analytes detected

Table 2. Summary of Decision Unit Soil Reaches

Decision Unit Name	Depth	Sampling Design Description
Shallow	0 to 4.6 m (15 ft) bgs	Samples collected using a statistical sampling design
Staging Pile Area	0 to 4.6 m (15 ft) bgs	
Staging Pile Area_Footprint	0 to 4.6 m (15 ft) bgs	
Overburden	Not applicable	
Shallow_Focused	0 to 4.6 m (15 ft) bgs	Samples collected using a focused sampling design
Staging Pile Area_Focused	0 to 4.6 m (15 ft) bgs	
Staging Pile Area_Foot_Focused	0 to 4.6 m (15 ft) bgs	
Overburden_Focused	Not applicable	

Table 3. Comparison of 100-F Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
100-F-11_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	11,600	4.00E+02	**2.90E+01**	3.82E+04	3.04E-01
100-F-12_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	55	4.00E+04	1.38E-03	1.47E+03	3.73E-02
100-F-12_Shallow_Focused	non-Rad	Aroclors HI		ug/kg	--	--	1.38E-03	--	3.73E-02
100-F-12_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	2,800	1.00E+04	2.80E-01	1.90E+05	1.48E-02
100-F-12_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	68,700	3.30E+05	2.08E-01	1.32E+06	5.19E-02
100-F-12_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	436	1.00E+04	4.36E-02	1.39E+04	3.13E-02
100-F-12_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	995	5.00E+02	**1.99E+00**	1.33E+05	7.49E-03
100-F-12_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	110	4.00E+03	2.75E-02	1.63E+03	6.75E-02
100-F-12_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	10,500	4.00E+02	**2.63E+01**	3.82E+04	2.75E-01
100-F-12_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	6,900	1.30E+04	5.31E-01	1.11E+05	6.19E-02
100-F-12_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	12,900	5.00E+04	2.58E-01	1.07E+05	1.20E-01
100-F-12_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	4,500	5.00E+04	9.00E-02	3.56E+04	1.26E-01
100-F-12_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	318,000	2.20E+05	**1.45E+00**	5.80E+06	5.48E-02
100-F-12_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	23	1.00E+02	2.30E-01	1.87E+03	1.23E-02
100-F-12_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	216	2.00E+03	1.08E-01	1.40E+04	1.55E-02
100-F-12_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	11,200	3.00E+04	3.73E-01	3.26E+04	3.44E-01
100-F-12_Shallow_Focused	non-Rad	Silver	7440-22-4	µg/kg	89	2.00E+03	4.45E-02	4.96E+04	1.79E-03
100-F-12_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	45,500	2.00E+03	**2.28E+01**	3.11E+04	**1.46E+00**
100-F-12_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	46,100	5.00E+04	9.22E-01	6.78E+04	6.80E-01
100-F-14_Shallow_Focused	non-Rad	Alpha-BHC	319-84-6	µg/kg	1.4	No Value	--	No Value	--
100-F-14_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	1,900	1.00E+04	1.90E-01	1.90E+05	1.00E-02
100-F-14_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	67,500	3.30E+05	2.05E-01	1.32E+06	5.10E-02
100-F-14_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	463	1.00E+04	4.63E-02	1.39E+04	3.32E-02
100-F-14_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	25	1.00E+05	2.54E-04	4.54E+04	5.59E-04
100-F-14_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,000	5.00E+02	**2.00E+00**	1.33E+05	7.52E-03
100-F-14_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	9,100	4.00E+02	**2.28E+01**	3.82E+04	2.38E-01
100-F-14_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	7,500	1.30E+04	5.77E-01	1.11E+05	6.73E-02
	non-Rad	Copper	7440-50-8	µg/kg	14,400	5.00E+04	2.88E-01	1.07E+05	1.34E-01
100-F-14_Shallow_Focused	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	22	No Value	--	No Value	--
100-F-14_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	3,600	5.00E+04	7.20E-02	3.56E+04	1.01E-01
100-F-14_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	311,000	2.20E+05	**1.41E+00**	5.80E+06	5.36E-02
100-F-14_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	84	1.00E+02	8.40E-01	1.87E+03	4.50E-02
100-F-14_Shallow_Focused	non-Rad	Methylene chloride	75-09-2	µg/kg	19	No Value	--	1.66E+05	1.13E-04
100-F-14_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	458	2.00E+03	2.29E-01	1.40E+04	3.28E-02
100-F-14_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	10,400	3.00E+04	3.47E-01	3.26E+04	3.19E-01
100-F-14_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	59,700	2.00E+03	**2.99E+01**	3.11E+04	**1.92E+00**
100-F-14_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	43,400	5.00E+04	8.68E-01	6.78E+04	6.40E-01
100-F-14_Shallow_Focused	Rad	Cesium-137	10045-97-3	pCi/g	0.017	2.21E+03	7.69E-06	9.24E+02	1.84E-05
100-F-14_Shallow_Focused	Rad	Rads SOF	---	pCi/g	--	--	7.69E-06	--	1.84E-05
100-F-15_Overburden	non-Rad	Chromium	7440-47-3	µg/kg	13,800	4.00E+02	**3.45E+01**	3.82E+04	3.62E-01
100-F-15_Overburden	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	1,300	No Value	--	1.25E+06	1.04E-03
100-F-15_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	15,600	4.00E+02	**3.90E+01**	3.82E+04	4.09E-01
100-F-15_Shallow	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	450	No Value	--	1.25E+06	3.61E-04
100-F-16_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	14,100	4.00E+02	**3.53E+01**	3.82E+04	3.69E-01
100-F-16_Shallow_Focused	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	510	No Value	--	1.25E+06	4.10E-04
100-F-16_Shallow_Focused	Rad	Plutonium-239/240	PU-239/240	pCi/g	0.032	1.27E+04	2.52E-06	6.27E+03	5.10E-06
100-F-16_Shallow_Focused	Rad	Rads SOF	---	pCi/g	--	--	2.52E-06	--	5.10E-06
100-F-18_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	1,700	1.00E+04	1.70E-01	1.90E+05	8.97E-03
100-F-18_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	38,000	3.30E+05	1.15E-01	1.32E+06	2.87E-02
100-F-18_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	269	1.00E+04	2.69E-02	1.39E+04	1.93E-02
100-F-18_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	20	1.00E+05	2.01E-04	4.54E+04	4.43E-04
100-F-18_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	619	5.00E+02	**1.24E+00**	1.33E+05	4.66E-03
100-F-18_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	8,500	4.00E+02	**2.13E+01**	3.82E+04	2.23E-01
100-F-18_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	4,700	1.30E+04	3.62E-01	1.11E+05	4.22E-02
100-F-18_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	26,700	5.00E+04	5.34E-01	1.07E+05	2.49E-01
100-F-18_Shallow_Focused	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	20	No Value	--	No Value	--

Table 3. Comparison of 100-F Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
100-F-18_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	2,900	5.00E+04	5.80E-02	3.56E+04	8.15E-02
100-F-18_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	217,000	2.20E+05	9.86E-01	5.80E+06	3.74E-02
100-F-18_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	89	1.00E+02	8.90E-01	1.87E+03	4.77E-02
100-F-18_Shallow_Focused	non-Rad	Methylene chloride	75-09-2	µg/kg	7.7	No Value	--	1.66E+05	4.64E-05
100-F-18_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	250	2.00E+03	1.25E-01	1.40E+04	1.79E-02
100-F-18_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	9,500	3.00E+04	3.17E-01	3.26E+04	2.92E-01
100-F-18_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	31,600	2.00E+03	**1.58E+01**	3.11E+04	**1.02E+00**
100-F-18_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	34,500	5.00E+04	6.90E-01	6.78E+04	5.09E-01
100-F-19:1_Overburden	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	740	No Value	--	1.25E+06	5.94E-04
100-F-19:1_Overburden	Rad	Carbon-14	14762-75-5	pCi/g	5.0	6.07E+04	8.27E-05	3.16E+01	1.59E-01
100-F-19:1_Overburden	Rad	Cesium-137	10045-97-3	pCi/g	0.043	2.21E+03	1.95E-05	9.24E+02	4.65E-05
100-F-19:1_Overburden	Rad	Rads SOF	---	pCi/g	--	--	1.02E-04	--	1.59E-01
100-F-19:1_Shallow	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	624	No Value	--	1.25E+06	5.01E-04
100-F-19:1_Shallow	Rad	Carbon-14	14762-75-5	pCi/g	4.1	6.07E+04	6.79E-05	3.16E+01	1.30E-01
100-F-19:1_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.10	2.21E+03	4.67E-05	9.24E+02	1.12E-04
100-F-19:1_Shallow	Rad	Total beta radiostrontium	SR-RAD	pCi/g	0.33	3.58E+03	9.33E-05	9.11E+01	3.67E-03
100-F-19:1_Shallow	Rad	Rads SOF	---	pCi/g	--	--	2.08E-04	--	1.34E-01
100-F-19:2_Overburden	non-Rad	Barium	7440-39-3	µg/kg	51,200	3.30E+05	1.55E-01	1.32E+06	3.87E-02
100-F-19:2_Overburden	non-Rad	Lead	7439-92-1	µg/kg	8,000	5.00E+04	1.60E-01	3.56E+04	2.25E-01
100-F-19:2_Overburden	non-Rad	Mercury	7439-97-6	µg/kg	410	1.00E+02	**4.10E+00**	1.87E+03	2.20E-01
100-F-19:2_Overburden	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	1,671	5.00E+03	3.34E-01	7.86E+05	2.13E-03
100-F-19:2_Overburden	Rad	Cesium-137	10045-97-3	pCi/g	0.20	2.21E+03	9.09E-05	9.24E+02	2.17E-04
100-F-19:2_Overburden	Rad	Cobalt-60	10198-40-0	pCi/g	0.11	6.13E+03	1.86E-05	8.05E+02	1.42E-04
100-F-19:2_Overburden	Rad	Europium-152	14683-23-9	pCi/g	0.37	1.47E+04	2.51E-05	1.74E+03	2.12E-04
100-F-19:2_Overburden	Rad	Europium-154	15585-10-1	pCi/g	0.18	1.25E+04	1.46E-05	1.61E+03	1.13E-04
100-F-19:2_Overburden	Rad	Nickel-63	13981-37-8	pCi/g	4.9	No Value	--	No Value	--
100-F-19:2_Overburden	Rad	Total beta radiostrontium	SR-RAD	pCi/g	0.42	3.58E+03	1.19E-04	9.11E+01	4.66E-03
100-F-19:2_Overburden	Rad	Tritium	10028-17-8	pCi/g	0.81	1.68E+06	4.81E-07	4.20E+02	1.92E-03
100-F-19:2_Overburden	Rad	Uranium-233/234	U-233/234	pCi/g	0.52	5.16E+04	1.00E-05	6.37E+03	8.13E-05
100-F-19:2_Overburden	Rad	Uranium-238	U-238	pCi/g	0.57	1.57E+04	3.61E-05	5.15E+03	1.10E-04
100-F-19:2_Overburden	Rad	Rads SOF	---	pCi/g	--	--	3.15E-04	--	7.46E-03
100-F-19:2_Shallow	non-Rad	Barium	7440-39-3	µg/kg	122,000	3.30E+05	3.70E-01	1.32E+06	9.22E-02
100-F-19:2_Shallow	non-Rad	Lead	7439-92-1	µg/kg	4,800	5.00E+04	9.60E-02	3.56E+04	1.35E-01
100-F-19:2_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	1,916	5.00E+03	3.83E-01	7.86E+05	2.44E-03
100-F-19:2_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.14	2.21E+03	6.41E-05	9.24E+02	1.53E-04
100-F-19:2_Shallow	Rad	Europium-152	14683-23-9	pCi/g	0.35	1.47E+04	2.37E-05	1.74E+03	2.01E-04
100-F-19:2_Shallow	Rad	Nickel-63	13981-37-8	pCi/g	7.0	No Value	--	No Value	--
100-F-19:2_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.59	5.16E+04	1.14E-05	6.37E+03	9.23E-05
100-F-19:2_Shallow	Rad	Uranium-238	U-238	pCi/g	0.64	1.57E+04	4.09E-05	5.15E+03	1.25E-04
100-F-19:2_Shallow	Rad	Rads SOF	---	pCi/g	--	--	1.40E-04	--	5.71E-04
100-F-19:2_Shallow_Focused	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	1,100	No Value	--	1.25E+06	8.83E-04
100-F-2_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.35	2.21E+03	1.58E-04	9.24E+02	3.79E-04
100-F-2_Shallow	Rad	Rads SOF	---	pCi/g	--	--	1.58E-04	--	3.79E-04
100-F-20_Shallow	non-Rad	Lead	7439-92-1	µg/kg	31,200	5.00E+04	6.24E-01	3.56E+04	8.77E-01
100-F-20_Staging pile area	non-Rad	Arsenic	7440-38-2	µg/kg	3,400	1.00E+04	3.40E-01	1.90E+05	1.79E-02
100-F-20_Staging pile area	non-Rad	Barium	7440-39-3	µg/kg	77,800	3.30E+05	2.36E-01	1.32E+06	5.88E-02
100-F-20_Staging pile area	non-Rad	Beryllium	7440-41-7	µg/kg	530	1.00E+04	5.30E-02	1.39E+04	3.80E-02
100-F-20_Staging pile area	non-Rad	Boron	7440-42-8	µg/kg	2,600	5.00E+02	**5.20E+00**	1.33E+05	1.96E-02
100-F-20_Staging pile area	non-Rad	Cadmium	7440-43-9	µg/kg	140	4.00E+03	3.50E-02	1.63E+03	8.59E-02
100-F-20_Staging pile area	non-Rad	Chromium	7440-47-3	µg/kg	9,200	4.00E+02	**2.30E+01**	3.82E+04	2.41E-01
100-F-20_Staging pile area	non-Rad	Cobalt	7440-48-4	µg/kg	6,200	1.30E+04	4.77E-01	1.11E+05	5.56E-02
100-F-20_Staging pile area	non-Rad	Copper	7440-50-8	µg/kg	23,700	5.00E+04	4.74E-01	1.07E+05	2.21E-01
100-F-20_Staging pile area	non-Rad	Lead	7439-92-1	µg/kg	18,500	5.00E+04	3.70E-01	3.56E+04	5.20E-01
100-F-20_Staging pile area	non-Rad	Manganese	7439-96-5	µg/kg	328,000	2.20E+05	**1.49E+00**	5.80E+06	5.66E-02
100-F-20_Staging pile area	non-Rad	Mercury	7439-97-6	µg/kg	50	1.00E+02	5.00E-01	1.87E+03	2.68E-02
100-F-20_Staging pile area	non-Rad	Molybdenum	7439-98-7	µg/kg	850	2.00E+03	4.25E-01	1.40E+04	6.09E-02

Table 3. Comparison of 100-F Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
100-F-20_Staging pile area	non-Rad	Nickel	7440-02-0	µg/kg	9,900	3.00E+04	3.30E-01	3.26E+04	3.04E-01
100-F-20_Staging pile area	non-Rad	Vanadium	7440-62-2	µg/kg	42,900	2.00E+03	**2.15E+01**	3.11E+04	**1.38E+00**
100-F-20_Staging pile area	non-Rad	Zinc	7440-66-6	µg/kg	87,600	5.00E+04	**1.75E+00**	6.78E+04	**1.29E+00**
100-F-20_Staging pile area	Rad	Cesium-137	10045-97-3	pCi/g	0.044	2.21E+03	1.99E-05	9.24E+02	4.76E-05
100-F-20_Staging pile area	Rad	Rads SOF	---	pCi/g	--	--	1.99E-05	--	4.76E-05
100-F-24_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.053	2.21E+03	2.40E-05	9.24E+02	5.74E-05
100-F-24_Shallow	Rad	Rads SOF	---	pCi/g	--	--	2.40E-05	--	5.74E-05
100-F-25_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	140	1.00E+02	**1.40E+00**	1.87E+03	7.50E-02
100-F-25_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.071	2.21E+03	3.21E-05	9.24E+02	7.68E-05
100-F-25_Shallow	Rad	Europium-152	14683-23-9	pCi/g	0.13	1.47E+04	9.12E-06	1.74E+03	7.70E-05
100-F-25_Shallow	Rad	Nickel-63	13981-37-8	pCi/g	4.6	No Value	--	No Value	--
100-F-25_Shallow	Rad	Rads SOF	---	pCi/g	--	--	4.12E-05	--	1.54E-04
100-F-26:1_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	263	5.00E+03	5.26E-02	5.98E+03	4.39E-02
100-F-26:1_Shallow_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	14	4.00E+04	3.50E-04	1.47E+03	9.49E-03
100-F-26:1_Shallow_Focused	non-Rad	Aroclors HI		ug/kg	--	--	3.50E-04	--	9.49E-03
100-F-26:1_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	3,600	1.00E+04	3.60E-01	1.90E+05	1.90E-02
100-F-26:1_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	82,700	3.30E+05	2.51E-01	1.32E+06	6.25E-02
100-F-26:1_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	400	1.00E+04	4.00E-02	1.39E+04	2.87E-02
100-F-26:1_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	2,800	5.00E+02	**5.60E+00**	1.33E+05	2.11E-02
100-F-26:1_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	157	4.00E+03	3.93E-02	1.63E+03	9.63E-02
100-F-26:1_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	12,900	4.00E+02	**3.23E+01**	3.82E+04	3.38E-01
100-F-26:1_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	7,300	1.30E+04	5.62E-01	1.11E+05	6.55E-02
100-F-26:1_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	14,200	5.00E+04	2.84E-01	1.07E+05	1.33E-01
100-F-26:1_Shallow_Focused	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	277	No Value	--	1.25E+06	2.22E-04
100-F-26:1_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	5,900	5.00E+04	1.18E-01	3.56E+04	1.66E-01
100-F-26:1_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	352,000	2.20E+05	**1.60E+00**	5.80E+06	6.07E-02
100-F-26:1_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	93	1.00E+02	9.30E-01	1.87E+03	4.98E-02
100-F-26:1_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	373	2.00E+03	1.87E-01	1.40E+04	2.67E-02
100-F-26:1_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	11,600	3.00E+04	3.87E-01	3.26E+04	3.56E-01
100-F-26:1_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	44,800	2.00E+03	**2.24E+01**	3.11E+04	**1.44E+00**
100-F-26:1_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	44,200	5.00E+04	8.84E-01	6.78E+04	6.52E-01
100-F-26:10_Overburden_Focused	non-Rad	Antimony	7440-36-0	µg/kg	880	5.00E+03	1.76E-01	5.98E+03	1.47E-01
100-F-26:10_Overburden_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	7.9	4.00E+04	1.98E-04	1.47E+03	5.36E-03
100-F-26:10_Overburden_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	10	4.00E+04	2.50E-04	1.47E+03	6.78E-03
100-F-26:10_Overburden_Focused	non-Rad	Aroclors HI		ug/kg	--	--	4.48E-04	--	1.21E-02
100-F-26:10_Overburden_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	4,700	1.00E+04	4.70E-01	1.90E+05	2.48E-02
100-F-26:10_Overburden_Focused	non-Rad	Barium	7440-39-3	µg/kg	117,000	3.30E+05	3.55E-01	1.32E+06	8.84E-02
100-F-26:10_Overburden_Focused	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	18	1.80E+04	1.00E-03	7.64E+04	2.36E-04
100-F-26:10_Overburden_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	19	1.80E+04	1.06E-03	3.92E+04	4.84E-04
100-F-26:10_Overburden_Focused	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	25	1.80E+04	1.39E-03	3.92E+04	6.37E-04
100-F-26:10_Overburden_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	280	1.00E+04	2.80E-02	1.39E+04	2.01E-02
100-F-26:10_Overburden_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	250	1.00E+05	2.50E-03	4.54E+04	5.50E-03
100-F-26:10_Overburden_Focused	non-Rad	Boron	7440-42-8	µg/kg	5,800	5.00E+02	**1.16E+01**	1.33E+05	4.36E-02
100-F-26:10_Overburden_Focused	non-Rad	Chromium	7440-47-3	µg/kg	10,700	4.00E+02	**2.68E+01**	3.82E+04	2.80E-01
100-F-26:10_Overburden_Focused	non-Rad	Chrysene	218-01-9	µg/kg	23	1.80E+04	1.28E-03	4.45E+04	5.17E-04
100-F-26:10_Overburden_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	6,800	1.30E+04	5.23E-01	1.11E+05	6.10E-02
100-F-26:10_Overburden_Focused	non-Rad	Copper	7440-50-8	µg/kg	15,800	5.00E+04	3.16E-01	1.07E+05	1.48E-01
100-F-26:10_Overburden_Focused	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	30	No Value	--	No Value	--
100-F-26:10_Overburden_Focused	non-Rad	Fluoranthene	206-44-0	µg/kg	26	1.80E+04	1.44E-03	8.39E+05	3.10E-05
100-F-26:10_Overburden_Focused	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	270	No Value	--	1.25E+06	2.17E-04
100-F-26:10_Overburden_Focused	non-Rad	Lead	7439-92-1	µg/kg	10,700	5.00E+04	2.14E-01	3.56E+04	3.01E-01
100-F-26:10_Overburden_Focused	non-Rad	Manganese	7439-96-5	µg/kg	291,000	2.20E+05	**1.32E+00**	5.80E+06	5.02E-02
100-F-26:10_Overburden_Focused	non-Rad	Nickel	7440-02-0	µg/kg	12,300	3.00E+04	4.10E-01	3.26E+04	3.78E-01
100-F-26:10_Overburden_Focused	non-Rad	Pyrene	129-00-0	µg/kg	35	1.80E+04	1.94E-03	6.00E+05	5.83E-05
100-F-26:10_Overburden_Focused	non-Rad	Selenium	7782-49-2	µg/kg	1,800	5.20E+02	**3.46E+00**	1.90E+03	9.48E-01
100-F-26:10_Overburden_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	36,500	2.00E+03	**1.83E+01**	3.11E+04	**1.17E+00**

Table 3. Comparison of 100-F Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
100-F-26:10_Overburden_Focused	non-Rad	Zinc	7440-66-6	µg/kg	51,900	5.00E+04	**1.04E+00**	6.78E+04	7.66E-01
100-F-26:10_Shallow	non-Rad	Antimony	7440-36-0	µg/kg	1,000	5.00E+03	2.00E-01	5.98E+03	1.67E-01
100-F-26:10_Shallow	non-Rad	Aroclor-1254	11097-69-1	µg/kg	54	4.00E+04	1.34E-03	1.47E+03	3.64E-02
100-F-26:10_Shallow	non-Rad	Aroclor-1260	11096-82-5	µg/kg	54	4.00E+04	1.35E-03	1.47E+03	3.66E-02
100-F-26:10_Shallow	non-Rad	Aroclors HI		ug/kg	--	--	2.69E-03	--	7.30E-02
100-F-26:10_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	4,105	1.00E+04	4.10E-01	1.90E+05	2.17E-02
100-F-26:10_Shallow	non-Rad	Barium	7440-39-3	µg/kg	69,412	3.30E+05	2.10E-01	1.32E+06	5.25E-02
100-F-26:10_Shallow	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	41	1.80E+04	2.28E-03	6.40E+04	6.41E-04
100-F-26:10_Shallow	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	39	1.80E+04	2.17E-03	7.64E+04	5.10E-04
100-F-26:10_Shallow	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	19	1.80E+04	1.06E-03	3.92E+04	4.84E-04
100-F-26:10_Shallow	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	48	1.80E+04	2.67E-03	3.92E+04	1.22E-03
100-F-26:10_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	310	1.00E+04	3.10E-02	1.39E+04	2.22E-02
100-F-26:10_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	93	1.00E+05	9.30E-04	4.54E+04	2.05E-03
100-F-26:10_Shallow	non-Rad	Boron	7440-42-8	µg/kg	2,790	5.00E+02	**5.58E+00**	1.33E+05	2.10E-02
100-F-26:10_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	9,640	4.00E+02	**2.41E+01**	3.82E+04	2.53E-01
100-F-26:10_Shallow	non-Rad	Chrysene	218-01-9	µg/kg	60	1.80E+04	3.33E-03	4.45E+04	1.35E-03
100-F-26:10_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	6,034	1.30E+04	4.64E-01	1.11E+05	5.41E-02
100-F-26:10_Shallow	non-Rad	Copper	7440-50-8	µg/kg	12,269	5.00E+04	2.45E-01	1.07E+05	1.15E-01
100-F-26:10_Shallow	non-Rad	Dieldrin	60-57-1	µg/kg	4.9	No Value	--	2.09E+01	2.35E-01
100-F-26:10_Shallow	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	26	No Value	--	No Value	--
100-F-26:10_Shallow	non-Rad	Fluoranthene	206-44-0	µg/kg	120	1.80E+04	6.67E-03	8.39E+05	1.43E-04
100-F-26:10_Shallow	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	268	No Value	--	1.25E+06	2.15E-04
100-F-26:10_Shallow	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	24	1.80E+04	1.33E-03	3.57E+04	6.73E-04
100-F-26:10_Shallow	non-Rad	Lead	7439-92-1	µg/kg	8,969	5.00E+04	1.79E-01	3.56E+04	2.52E-01
100-F-26:10_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	286,118	2.20E+05	**1.30E+00**	5.80E+06	4.93E-02
100-F-26:10_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	10	1.00E+02	1.00E-01	1.87E+03	5.36E-03
100-F-26:10_Shallow	non-Rad	Methoxychlor	72-43-5	µg/kg	1.7	No Value	--	2.18E+04	7.78E-05
100-F-26:10_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	640	2.00E+03	3.20E-01	1.40E+04	4.58E-02
100-F-26:10_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	10,726	3.00E+04	3.58E-01	3.26E+04	3.29E-01
100-F-26:10_Shallow	non-Rad	Pyrene	129-00-0	µg/kg	110	1.80E+04	6.11E-03	6.00E+05	1.83E-04
100-F-26:10_Shallow	non-Rad	Selenium	7782-49-2	µg/kg	1,369	5.20E+02	**2.63E+00**	1.90E+03	7.21E-01
100-F-26:10_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	33,054	2.00E+03	**1.65E+01**	3.11E+04	**1.06E+00**
100-F-26:10_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	36,294	5.00E+04	7.26E-01	6.78E+04	5.35E-01
100-F-26:10_Shallow_Focused	non-Rad	4,4'-DDT (Dichlorodiphenyltrichloroethane)	50-29-3	µg/kg	1.5	No Value	--	8.82E+02	1.70E-03
100-F-26:10_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	8,500	1.00E+04	8.50E-01	1.90E+05	4.49E-02
100-F-26:10_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	54,100	3.30E+05	1.64E-01	1.32E+06	4.09E-02
100-F-26:10_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	290	1.00E+04	2.90E-02	1.39E+04	2.08E-02
100-F-26:10_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	860	1.00E+05	8.60E-03	4.54E+04	1.89E-02
100-F-26:10_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,600	5.00E+02	**3.20E+00**	1.33E+05	1.20E-02
100-F-26:10_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	150	4.00E+03	3.75E-02	1.63E+03	9.20E-02
100-F-26:10_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	7,800	4.00E+02	**1.95E+01**	3.82E+04	2.04E-01
100-F-26:10_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	5,200	1.30E+04	4.00E-01	1.11E+05	4.66E-02
100-F-26:10_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	12,000	5.00E+04	2.40E-01	1.07E+05	1.12E-01
100-F-26:10_Shallow_Focused	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	39	No Value	--	No Value	--
100-F-26:10_Shallow_Focused	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	320	No Value	--	1.25E+06	2.57E-04
100-F-26:10_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	24,900	5.00E+04	4.98E-01	3.56E+04	7.00E-01
100-F-26:10_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	257,000	2.20E+05	**1.17E+00**	5.80E+06	4.43E-02
100-F-26:10_Shallow_Focused	non-Rad	Methoxychlor	72-43-5	µg/kg	3.0	No Value	--	2.18E+04	1.37E-04
100-F-26:10_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	470	2.00E+03	2.35E-01	1.40E+04	3.37E-02
100-F-26:10_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	10,500	3.00E+04	3.50E-01	3.26E+04	3.22E-01
100-F-26:10_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	31,700	2.00E+03	**1.59E+01**	3.11E+04	**1.02E+00**
100-F-26:10_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	40,500	5.00E+04	8.10E-01	6.78E+04	5.97E-01
100-F-26:11_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	2,900	1.00E+04	2.90E-01	1.90E+05	1.53E-02
100-F-26:11_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	63,200	3.30E+05	1.92E-01	1.32E+06	4.78E-02
100-F-26:11_Shallow_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	20	1.80E+04	1.11E-03	3.92E+04	5.09E-04
100-F-26:11_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	30	1.00E+05	3.00E-04	4.54E+04	6.60E-04

Table 3. Comparison of 100-F Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
100-F-26:11_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,400	5.00E+02	**2.80E+00**	1.33E+05	1.05E-02
100-F-26:11_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	160	4.00E+03	4.00E-02	1.63E+03	9.82E-02
100-F-26:11_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	10,400	4.00E+02	**2.60E+01**	3.82E+04	2.72E-01
100-F-26:11_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	6,700	1.30E+04	5.15E-01	1.11E+05	6.01E-02
100-F-26:11_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	14,200	5.00E+04	2.84E-01	1.07E+05	1.33E-01
100-F-26:11_Shallow_Focused	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	38	No Value	--	No Value	--
100-F-26:11_Shallow_Focused	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	390	No Value	--	1.25E+06	3.13E-04
100-F-26:11_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	23,600	5.00E+04	4.72E-01	3.56E+04	6.63E-01
100-F-26:11_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	294,000	2.20E+05	**1.34E+00**	5.80E+06	5.07E-02
100-F-26:11_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	30	1.00E+02	3.00E-01	1.87E+03	1.61E-02
100-F-26:11_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	240	2.00E+03	1.20E-01	1.40E+04	1.72E-02
100-F-26:11_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	10,100	3.00E+04	3.37E-01	3.26E+04	3.10E-01
100-F-26:11_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	45,900	2.00E+03	**2.30E+01**	3.11E+04	**1.47E+00**
100-F-26:11_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	56,700	5.00E+04	**1.13E+00**	6.78E+04	8.36E-01
100-F-26:12_Overburden	non-Rad	Arsenic	7440-38-2	µg/kg	2,882	1.00E+04	2.88E-01	1.90E+05	1.52E-02
100-F-26:12_Overburden	non-Rad	Barium	7440-39-3	µg/kg	57,538	3.30E+05	1.74E-01	1.32E+06	4.35E-02
100-F-26:12_Overburden	non-Rad	Beryllium	7440-41-7	µg/kg	262	1.00E+04	2.62E-02	1.39E+04	1.88E-02
100-F-26:12_Overburden	non-Rad	Boron	7440-42-8	µg/kg	2,421	5.00E+02	**4.84E+00**	1.33E+05	1.82E-02
100-F-26:12_Overburden	non-Rad	Cadmium	7440-43-9	µg/kg	158	4.00E+03	3.94E-02	1.63E+03	9.66E-02
100-F-26:12_Overburden	non-Rad	Chromium	7440-47-3	µg/kg	8,743	4.00E+02	**2.19E+01**	3.82E+04	2.29E-01
100-F-26:12_Overburden	non-Rad	Cobalt	7440-48-4	µg/kg	4,943	1.30E+04	3.80E-01	1.11E+05	4.43E-02
100-F-26:12_Overburden	non-Rad	Copper	7440-50-8	µg/kg	12,210	5.00E+04	2.44E-01	1.07E+05	1.14E-01
100-F-26:12_Overburden	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	293	No Value	--	1.25E+06	2.35E-04
100-F-26:12_Overburden	non-Rad	Lead	7439-92-1	µg/kg	5,695	5.00E+04	1.14E-01	3.56E+04	1.60E-01
100-F-26:12_Overburden	non-Rad	Manganese	7439-96-5	µg/kg	240,610	2.20E+05	**1.09E+00**	5.80E+06	4.15E-02
100-F-26:12_Overburden	non-Rad	Mercury	7439-97-6	µg/kg	60	1.00E+02	6.00E-01	1.87E+03	3.21E-02
100-F-26:12_Overburden	non-Rad	Molybdenum	7439-98-7	µg/kg	620	2.00E+03	3.10E-01	1.40E+04	4.44E-02
100-F-26:12_Overburden	non-Rad	Nickel	7440-02-0	µg/kg	9,811	3.00E+04	3.27E-01	3.26E+04	3.01E-01
100-F-26:12_Overburden	non-Rad	Vanadium	7440-62-2	µg/kg	31,558	2.00E+03	**1.58E+01**	3.11E+04	**1.01E+00**
100-F-26:12_Overburden	non-Rad	Zinc	7440-66-6	µg/kg	32,061	5.00E+04	6.41E-01	6.78E+04	4.73E-01
100-F-26:12_Overburden	Rad	Cesium-137	10045-97-3	pCi/g	0.056	2.21E+03	2.53E-05	9.24E+02	6.06E-05
100-F-26:12_Overburden	Rad	Europium-152	14683-23-9	pCi/g	0.081	1.47E+04	5.51E-06	1.74E+03	4.66E-05
100-F-26:12_Overburden	Rad	Tritium	10028-17-8	pCi/g	5.9	1.68E+06	3.52E-06	4.20E+02	1.41E-02
100-F-26:12_Overburden	Rad	Rads SOF	---	pCi/g	--	--	3.43E-05	--	1.42E-02
100-F-26:12_Shallow	non-Rad	Antimony	7440-36-0	µg/kg	1,000	5.00E+03	2.00E-01	5.98E+03	1.67E-01
100-F-26:12_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	3,797	1.00E+04	3.80E-01	1.90E+05	2.00E-02
100-F-26:12_Shallow	non-Rad	Barium	7440-39-3	µg/kg	54,294	3.30E+05	1.65E-01	1.32E+06	4.10E-02
100-F-26:12_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	186	1.00E+04	1.86E-02	1.39E+04	1.34E-02
100-F-26:12_Shallow	non-Rad	Boron	7440-42-8	µg/kg	2,013	5.00E+02	**4.03E+00**	1.33E+05	1.51E-02
100-F-26:12_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	7,949	4.00E+02	**1.99E+01**	3.82E+04	2.08E-01
100-F-26:12_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	5,004	1.30E+04	3.85E-01	1.11E+05	4.49E-02
100-F-26:12_Shallow	non-Rad	Copper	7440-50-8	µg/kg	14,109	5.00E+04	2.82E-01	1.07E+05	1.32E-01
100-F-26:12_Shallow	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	320	No Value	--	1.25E+06	2.57E-04
100-F-26:12_Shallow	non-Rad	Lead	7439-92-1	µg/kg	9,282	5.00E+04	1.86E-01	3.56E+04	2.61E-01
100-F-26:12_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	225,939	2.20E+05	**1.03E+00**	5.80E+06	3.90E-02
100-F-26:12_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	28	1.00E+02	2.79E-01	1.87E+03	1.50E-02
100-F-26:12_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	480	2.00E+03	2.40E-01	1.40E+04	3.44E-02
100-F-26:12_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	9,312	3.00E+04	3.10E-01	3.26E+04	2.86E-01
100-F-26:12_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	28,449	2.00E+03	**1.42E+01**	3.11E+04	9.14E-01
100-F-26:12_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	32,386	5.00E+04	6.48E-01	6.78E+04	4.78E-01
100-F-26:12_Staging Pile Area	non-Rad	Arsenic	7440-38-2	µg/kg	3,626	1.00E+04	3.63E-01	1.90E+05	1.91E-02
100-F-26:12_Staging Pile Area	non-Rad	Barium	7440-39-3	µg/kg	73,949	3.30E+05	2.24E-01	1.32E+06	5.59E-02
100-F-26:12_Staging Pile Area	non-Rad	Beryllium	7440-41-7	µg/kg	160	1.00E+04	1.60E-02	1.39E+04	1.15E-02
100-F-26:12_Staging Pile Area	non-Rad	Boron	7440-42-8	µg/kg	2,972	5.00E+02	**5.94E+00**	1.33E+05	2.24E-02
100-F-26:12_Staging Pile Area	non-Rad	Cadmium	7440-43-9	µg/kg	190	4.00E+03	4.75E-02	1.63E+03	1.17E-01
100-F-26:12_Staging Pile Area	non-Rad	Chromium	7440-47-3	µg/kg	11,246	4.00E+02	**2.81E+01**	3.82E+04	2.95E-01

Table 3. Comparison of 100-F Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
100-F-26:12_Staging Pile Area	non-Rad	Cobalt	7440-48-4	µg/kg	6,238	1.30E+04	4.80E-01	1.11E+05	5.60E-02
100-F-26:12_Staging Pile Area	non-Rad	Copper	7440-50-8	µg/kg	13,599	5.00E+04	2.72E-01	1.07E+05	1.27E-01
100-F-26:12_Staging Pile Area	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	307	No Value	--	1.25E+06	2.47E-04
100-F-26:12_Staging Pile Area	non-Rad	Lead	7439-92-1	µg/kg	7,611	5.00E+04	1.52E-01	3.56E+04	2.14E-01
100-F-26:12_Staging Pile Area	non-Rad	Manganese	7439-96-5	µg/kg	264,980	2.20E+05	**1.20E+00**	5.80E+06	4.57E-02
100-F-26:12_Staging Pile Area	non-Rad	Mercury	7439-97-6	µg/kg	56	1.00E+02	5.60E-01	1.87E+03	3.00E-02
100-F-26:12_Staging Pile Area	non-Rad	Molybdenum	7439-98-7	µg/kg	534	2.00E+03	2.67E-01	1.40E+04	3.82E-02
100-F-26:12_Staging Pile Area	non-Rad	Nickel	7440-02-0	µg/kg	10,946	3.00E+04	3.65E-01	3.26E+04	3.36E-01
100-F-26:12_Staging Pile Area	non-Rad	Vanadium	7440-62-2	µg/kg	38,910	2.00E+03	**1.95E+01**	3.11E+04	**1.25E+00**
100-F-26:12_Staging Pile Area	non-Rad	Zinc	7440-66-6	µg/kg	44,863	5.00E+04	8.97E-01	6.78E+04	6.62E-01
100-F-26:12_Staging Pile Area	Rad	Carbon-14	14762-75-5	pCi/g	5.1	6.07E+04	8.40E-05	3.16E+01	1.61E-01
100-F-26:12_Staging Pile Area	Rad	Cesium-137	10045-97-3	pCi/g	0.064	2.21E+03	2.89E-05	9.24E+02	6.91E-05
100-F-26:12_Staging Pile Area	Rad	Total beta radiostrontium	SR-RAD	pCi/g	0.56	3.58E+03	1.57E-04	9.11E+01	6.18E-03
100-F-26:12_Staging Pile Area	Rad	Rads SOF	---	pCi/g	--	--	2.70E-04	--	1.67E-01
100-F-26:13_Overburden_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	38	4.00E+04	9.50E-04	1.47E+03	2.58E-02
100-F-26:13_Overburden_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	14	4.00E+04	3.50E-04	1.47E+03	9.49E-03
100-F-26:13_Overburden_Focused	non-Rad	Aroclors HI		ug/kg	--	--	1.30E-03	--	3.53E-02
100-F-26:13_Overburden_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	9,600	1.00E+04	9.60E-01	1.90E+05	5.07E-02
100-F-26:13_Overburden_Focused	non-Rad	Barium	7440-39-3	µg/kg	92,800	3.30E+05	2.81E-01	1.32E+06	7.01E-02
100-F-26:13_Overburden_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	400	1.00E+04	4.00E-02	1.39E+04	2.87E-02
100-F-26:13_Overburden_Focused	non-Rad	Boron	7440-42-8	µg/kg	6,100	5.00E+02	**1.22E+01**	1.33E+05	4.59E-02
100-F-26:13_Overburden_Focused	non-Rad	Chromium	7440-47-3	µg/kg	11,600	4.00E+02	**2.90E+01**	3.82E+04	3.04E-01
100-F-26:13_Overburden_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	6,400	1.30E+04	4.92E-01	1.11E+05	5.74E-02
100-F-26:13_Overburden_Focused	non-Rad	Copper	7440-50-8	µg/kg	12,100	5.00E+04	2.42E-01	1.07E+05	1.13E-01
100-F-26:13_Overburden_Focused	non-Rad	Lead	7439-92-1	µg/kg	29,600	5.00E+04	5.92E-01	3.56E+04	8.32E-01
100-F-26:13_Overburden_Focused	non-Rad	Manganese	7439-96-5	µg/kg	295,000	2.20E+05	**1.34E+00**	5.80E+06	5.09E-02
100-F-26:13_Overburden_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	520	2.00E+03	2.60E-01	1.40E+04	3.72E-02
100-F-26:13_Overburden_Focused	non-Rad	Nickel	7440-02-0	µg/kg	10,200	3.00E+04	3.40E-01	3.26E+04	3.13E-01
100-F-26:13_Overburden_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	39,000	2.00E+03	**1.95E+01**	3.11E+04	**1.25E+00**
100-F-26:13_Overburden_Focused	non-Rad	Zinc	7440-66-6	µg/kg	44,900	5.00E+04	8.98E-01	6.78E+04	6.62E-01
100-F-26:13_Overburden_Focused	Rad	Cesium-137	10045-97-3	pCi/g	0.13	2.21E+03	5.75E-05	9.24E+02	1.37E-04
100-F-26:13_Overburden_Focused	Rad	Rads SOF	---	pCi/g	--	--	5.75E-05	--	1.37E-04
100-F-26:13_Shallow	non-Rad	Aroclor-1254	11097-69-1	µg/kg	8.1	4.00E+04	2.03E-04	1.47E+03	5.49E-03
100-F-26:13_Shallow	non-Rad	Aroclor-1260	11096-82-5	µg/kg	9.6	4.00E+04	2.41E-04	1.47E+03	6.54E-03
100-F-26:13_Shallow	non-Rad	Aroclors HI		ug/kg	--	--	4.44E-04	--	1.20E-02
100-F-26:13_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	4,402	1.00E+04	4.40E-01	1.90E+05	2.32E-02
100-F-26:13_Shallow	non-Rad	Barium	7440-39-3	µg/kg	52,589	3.30E+05	1.59E-01	1.32E+06	3.98E-02
100-F-26:13_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	337	1.00E+04	3.37E-02	1.39E+04	2.42E-02
100-F-26:13_Shallow	non-Rad	Boron	7440-42-8	µg/kg	1,500	5.00E+02	**3.00E+00**	1.33E+05	1.13E-02
100-F-26:13_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	9,231	4.00E+02	**2.31E+01**	3.82E+04	2.42E-01
100-F-26:13_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	5,264	1.30E+04	4.05E-01	1.11E+05	4.72E-02
100-F-26:13_Shallow	non-Rad	Copper	7440-50-8	µg/kg	11,289	5.00E+04	2.26E-01	1.07E+05	1.05E-01
100-F-26:13_Shallow	non-Rad	Lead	7439-92-1	µg/kg	14,012	5.00E+04	2.80E-01	3.56E+04	3.94E-01
100-F-26:13_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	237,795	2.20E+05	**1.08E+00**	5.80E+06	4.10E-02
100-F-26:13_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	554	2.00E+03	2.77E-01	1.40E+04	3.97E-02
100-F-26:13_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	9,195	3.00E+04	3.07E-01	3.26E+04	2.82E-01
100-F-26:13_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	1,581	5.00E+03	3.16E-01	7.86E+05	2.01E-03
100-F-26:13_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	34,034	2.00E+03	**1.70E+01**	3.11E+04	**1.09E+00**
100-F-26:13_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	35,774	5.00E+04	7.15E-01	6.78E+04	5.28E-01
100-F-26:13_Shallow	Rad	Carbon-14	14762-75-5	pCi/g	13	6.07E+04	2.16E-04	3.16E+01	4.15E-01
100-F-26:13_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.055	2.21E+03	2.49E-05	9.24E+02	5.95E-05
100-F-26:13_Shallow	Rad	Total beta radiostrontium	SR-RAD	pCi/g	2.0	3.58E+03	5.61E-04	9.11E+01	2.21E-02
100-F-26:13_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.66	5.16E+04	1.27E-05	6.37E+03	1.03E-04
100-F-26:13_Shallow	Rad	Uranium-238	U-238	pCi/g	0.53	1.57E+04	3.38E-05	5.15E+03	1.03E-04
100-F-26:13_Shallow	Rad	Rads SOF	---	pCi/g	--	--	8.48E-04	--	4.37E-01
100-F-26:13_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	44,500	3.30E+05	1.35E-01	1.32E+06	3.36E-02

Table 3. Comparison of 100-F Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
100-F-26:13_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	160	1.00E+04	1.60E-02	1.39E+04	1.15E-02
100-F-26:13_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,400	5.00E+02	**2.80E+00**	1.33E+05	1.05E-02
100-F-26:13_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	6,900	4.00E+02	**1.73E+01**	3.82E+04	1.81E-01
100-F-26:13_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	4,300	1.30E+04	3.31E-01	1.11E+05	3.86E-02
100-F-26:13_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	10,300	5.00E+04	2.06E-01	1.07E+05	9.62E-02
100-F-26:13_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	2,400	5.00E+04	4.80E-02	3.56E+04	6.75E-02
100-F-26:13_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	201,000	2.20E+05	9.14E-01	5.80E+06	3.47E-02
100-F-26:13_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	480	2.00E+03	2.40E-01	1.40E+04	3.44E-02
100-F-26:13_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	8,300	3.00E+04	2.77E-01	3.26E+04	2.55E-01
100-F-26:13_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	22,300	2.00E+03	**1.12E+01**	3.11E+04	7.16E-01
100-F-26:13_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	26,700	5.00E+04	5.34E-01	6.78E+04	3.94E-01
100-F-26:14_Overburden	non-Rad	Arsenic	7440-38-2	µg/kg	3,100	1.00E+04	3.10E-01	1.90E+05	1.64E-02
100-F-26:14_Overburden	non-Rad	Barium	7440-39-3	µg/kg	105,000	3.30E+05	3.18E-01	1.32E+06	7.94E-02
100-F-26:14_Overburden	non-Rad	Beryllium	7440-41-7	µg/kg	210	1.00E+04	2.10E-02	1.39E+04	1.51E-02
100-F-26:14_Overburden	non-Rad	Boron	7440-42-8	µg/kg	13,500	5.00E+02	**2.70E+01**	1.33E+05	1.02E-01
100-F-26:14_Overburden	non-Rad	Cadmium	7440-43-9	µg/kg	190	4.00E+03	4.75E-02	1.63E+03	1.17E-01
100-F-26:14_Overburden	non-Rad	Chromium	7440-47-3	µg/kg	9,700	4.00E+02	**2.43E+01**	3.82E+04	2.54E-01
100-F-26:14_Overburden	non-Rad	Cobalt	7440-48-4	µg/kg	6,800	1.30E+04	5.23E-01	1.11E+05	6.10E-02
100-F-26:14_Overburden	non-Rad	Copper	7440-50-8	µg/kg	15,300	5.00E+04	3.06E-01	1.07E+05	1.43E-01
100-F-26:14_Overburden	non-Rad	Lead	7439-92-1	µg/kg	20,400	5.00E+04	4.08E-01	3.56E+04	5.73E-01
100-F-26:14_Overburden	non-Rad	Manganese	7439-96-5	µg/kg	298,000	2.20E+05	**1.35E+00**	5.80E+06	5.14E-02
100-F-26:14_Overburden	non-Rad	Mercury	7439-97-6	µg/kg	70	1.00E+02	7.00E-01	1.87E+03	3.75E-02
100-F-26:14_Overburden	non-Rad	Molybdenum	7439-98-7	µg/kg	560	2.00E+03	2.80E-01	1.40E+04	4.01E-02
100-F-26:14_Overburden	non-Rad	Nickel	7440-02-0	µg/kg	10,400	3.00E+04	3.47E-01	3.26E+04	3.19E-01
100-F-26:14_Overburden	non-Rad	Vanadium	7440-62-2	µg/kg	42,400	2.00E+03	**2.12E+01**	3.11E+04	**1.36E+00**
100-F-26:14_Overburden	non-Rad	Zinc	7440-66-6	µg/kg	38,900	5.00E+04	7.78E-01	6.78E+04	5.74E-01
100-F-26:14_Overburden	Rad	Cesium-137	10045-97-3	pCi/g	2.0	2.21E+03	8.87E-04	9.24E+02	2.12E-03
100-F-26:14_Overburden	Rad	Cobalt-60	10198-40-0	pCi/g	0.25	6.13E+03	4.11E-05	8.05E+02	3.13E-04
100-F-26:14_Overburden	Rad	Europium-152	14683-23-9	pCi/g	1.4	1.47E+04	9.25E-05	1.74E+03	7.82E-04
100-F-26:14_Overburden	Rad	Nickel-63	13981-37-8	pCi/g	9.6	No Value	--	No Value	--
100-F-26:14_Overburden	Rad	Total beta radiostrontium	SR-RAD	pCi/g	0.37	3.58E+03	1.04E-04	9.11E+01	4.09E-03
100-F-26:14_Overburden	Rad	Rads SOF	---	pCi/g	--	--	1.12E-03	--	7.31E-03
100-F-26:14_Shallow	non-Rad	Antimony	7440-36-0	µg/kg	830	5.00E+03	1.66E-01	5.98E+03	1.39E-01
100-F-26:14_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	3,100	1.00E+04	3.10E-01	1.90E+05	1.64E-02
100-F-26:14_Shallow	non-Rad	Barium	7440-39-3	µg/kg	216,000	3.30E+05	6.55E-01	1.32E+06	1.63E-01
100-F-26:14_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	330	1.00E+04	3.30E-02	1.39E+04	2.37E-02
100-F-26:14_Shallow	non-Rad	Boron	7440-42-8	µg/kg	31,600	5.00E+02	**6.32E+01**	1.33E+05	2.38E-01
100-F-26:14_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	9,500	4.00E+02	**2.38E+01**	3.82E+04	2.49E-01
100-F-26:14_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	6,600	1.30E+04	5.08E-01	1.11E+05	5.92E-02
100-F-26:14_Shallow	non-Rad	Copper	7440-50-8	µg/kg	13,200	5.00E+04	2.64E-01	1.07E+05	1.23E-01
100-F-26:14_Shallow	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	500	No Value	--	1.25E+06	4.02E-04
100-F-26:14_Shallow	non-Rad	Lead	7439-92-1	µg/kg	5,900	5.00E+04	1.18E-01	3.56E+04	1.66E-01
100-F-26:14_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	291,000	2.20E+05	**1.32E+00**	5.80E+06	5.02E-02
100-F-26:14_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	20	1.00E+02	2.00E-01	1.87E+03	1.07E-02
100-F-26:14_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	510	2.00E+03	2.55E-01	1.40E+04	3.65E-02
100-F-26:14_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	10,000	3.00E+04	3.33E-01	3.26E+04	3.07E-01
100-F-26:14_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	40,200	2.00E+03	**2.01E+01**	3.11E+04	**1.29E+00**
100-F-26:14_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	35,900	5.00E+04	7.18E-01	6.78E+04	5.30E-01
100-F-26:14_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.26	2.21E+03	1.19E-04	9.24E+02	2.85E-04
100-F-26:14_Shallow	Rad	Cobalt-60	10198-40-0	pCi/g	0.089	6.13E+03	1.45E-05	8.05E+02	1.11E-04
100-F-26:14_Shallow	Rad	Europium-152	14683-23-9	pCi/g	0.53	1.47E+04	3.57E-05	1.74E+03	3.02E-04
100-F-26:14_Shallow	Rad	Rads SOF	---	pCi/g	--	--	1.69E-04	--	6.98E-04
100-F-26:15_Overburden_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	2,500	1.00E+04	2.50E-01	1.90E+05	1.32E-02
100-F-26:15_Overburden_Focused	non-Rad	Barium	7440-39-3	µg/kg	66,900	3.30E+05	2.03E-01	1.32E+06	5.06E-02
100-F-26:15_Overburden_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	290	1.00E+04	2.90E-02	1.39E+04	2.08E-02
100-F-26:15_Overburden_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,900	5.00E+02	**3.80E+00**	1.33E+05	1.43E-02

Table 3. Comparison of 100-F Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
100-F-26:15_Overburden_Focused	non-Rad	Chromium	7440-47-3	µg/kg	9,500	4.00E+02	**2.38E+01**	3.82E+04	2.49E-01
100-F-26:15_Overburden_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	5,900	1.30E+04	4.54E-01	1.11E+05	5.29E-02
100-F-26:15_Overburden_Focused	non-Rad	Copper	7440-50-8	µg/kg	14,300	5.00E+04	2.86E-01	1.07E+05	1.34E-01
100-F-26:15_Overburden_Focused	non-Rad	Lead	7439-92-1	µg/kg	5,000	5.00E+04	1.00E-01	3.56E+04	1.41E-01
100-F-26:15_Overburden_Focused	non-Rad	Manganese	7439-96-5	µg/kg	277,000	2.20E+05	**1.26E+00**	5.80E+06	4.78E-02
100-F-26:15_Overburden_Focused	non-Rad	Nickel	7440-02-0	µg/kg	9,700	3.00E+04	3.23E-01	3.26E+04	2.98E-01
100-F-26:15_Overburden_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	36,700	2.00E+03	**1.84E+01**	3.11E+04	**1.18E+00**
100-F-26:15_Overburden_Focused	non-Rad	Zinc	7440-66-6	µg/kg	34,800	5.00E+04	6.96E-01	6.78E+04	5.13E-01
100-F-26:15_Overburden_Focused	Rad	Cesium-137	10045-97-3	pCi/g	0.10	2.21E+03	4.66E-05	9.24E+02	1.11E-04
100-F-26:15_Overburden_Focused	Rad	Europium-152	14683-23-9	pCi/g	0.31	1.47E+04	2.10E-05	1.74E+03	1.78E-04
100-F-26:15_Overburden_Focused	Rad	Rads SOF	---	pCi/g	--	--	6.76E-05	--	2.89E-04
100-F-26:15_Shallow	non-Rad	Antimony	7440-36-0	µg/kg	850	5.00E+03	1.70E-01	5.98E+03	1.42E-01
100-F-26:15_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	2,314	1.00E+04	2.31E-01	1.90E+05	1.22E-02
100-F-26:15_Shallow	non-Rad	Barium	7440-39-3	µg/kg	79,390	3.30E+05	2.41E-01	1.32E+06	6.00E-02
100-F-26:15_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	248	1.00E+04	2.48E-02	1.39E+04	1.78E-02
100-F-26:15_Shallow	non-Rad	Boron	7440-42-8	µg/kg	4,162	5.00E+02	**8.32E+00**	1.33E+05	3.13E-02
100-F-26:15_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	170	4.00E+03	4.25E-02	1.63E+03	1.04E-01
100-F-26:15_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	8,578	4.00E+02	**2.14E+01**	3.82E+04	2.25E-01
100-F-26:15_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	5,851	1.30E+04	4.50E-01	1.11E+05	5.25E-02
100-F-26:15_Shallow	non-Rad	Copper	7440-50-8	µg/kg	12,718	5.00E+04	2.54E-01	1.07E+05	1.19E-01
100-F-26:15_Shallow	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	262	No Value	--	1.25E+06	2.11E-04
100-F-26:15_Shallow	non-Rad	Lead	7439-92-1	µg/kg	4,125	5.00E+04	8.25E-02	3.56E+04	1.16E-01
100-F-26:15_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	280,532	2.20E+05	**1.28E+00**	5.80E+06	4.84E-02
100-F-26:15_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	130	1.00E+02	**1.30E+00**	1.87E+03	6.96E-02
100-F-26:15_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	661	2.00E+03	3.30E-01	1.40E+04	4.73E-02
100-F-26:15_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	9,579	3.00E+04	3.19E-01	3.26E+04	2.94E-01
100-F-26:15_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	34,310	2.00E+03	**1.72E+01**	3.11E+04	**1.10E+00**
100-F-26:15_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	33,378	5.00E+04	6.68E-01	6.78E+04	4.92E-01
100-F-26:15_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.099	2.21E+03	4.47E-05	9.24E+02	1.07E-04
100-F-26:15_Shallow	Rad	Europium-152	14683-23-9	pCi/g	0.22	1.47E+04	1.47E-05	1.74E+03	1.24E-04
100-F-26:15_Shallow	Rad	Rads SOF	---	pCi/g	--	--	5.94E-05	--	2.31E-04
100-F-26:15_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	2,200	1.00E+04	2.20E-01	1.90E+05	1.16E-02
100-F-26:15_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	40,100	3.30E+05	1.22E-01	1.32E+06	3.03E-02
100-F-26:15_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	170	1.00E+04	1.70E-02	1.39E+04	1.22E-02
100-F-26:15_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,400	5.00E+02	**2.80E+00**	1.33E+05	1.05E-02
100-F-26:15_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	120	4.00E+03	3.00E-02	1.63E+03	7.36E-02
100-F-26:15_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	8,200	4.00E+02	**2.05E+01**	3.82E+04	2.15E-01
100-F-26:15_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	5,100	1.30E+04	3.92E-01	1.11E+05	4.57E-02
100-F-26:15_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	13,700	5.00E+04	2.74E-01	1.07E+05	1.28E-01
100-F-26:15_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	3,200	5.00E+04	6.40E-02	3.56E+04	8.99E-02
100-F-26:15_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	235,000	2.20E+05	**1.07E+00**	5.80E+06	4.05E-02
100-F-26:15_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	9,400	3.00E+04	3.13E-01	3.26E+04	2.89E-01
100-F-26:15_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	31,300	2.00E+03	**1.57E+01**	3.11E+04	**1.01E+00**
100-F-26:15_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	28,300	5.00E+04	5.66E-01	6.78E+04	4.17E-01
100-F-26:15_Shallow_Focused	Rad	Carbon-14	14762-75-5	pCi/g	2.5	6.07E+04	4.15E-05	3.16E+01	7.97E-02
100-F-26:15_Shallow_Focused	Rad	Rads SOF	---	pCi/g	--	--	4.15E-05	--	7.97E-02
100-F-26:2_Shallow_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	11	4.00E+04	2.75E-04	1.47E+03	7.46E-03
100-F-26:2_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	14	4.00E+04	3.50E-04	1.47E+03	9.49E-03
100-F-26:2_Shallow_Focused	non-Rad	Aroclors HI		ug/kg	--	--	6.25E-04	--	1.70E-02
100-F-26:2_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	2,100	1.00E+04	2.10E-01	1.90E+05	1.11E-02
100-F-26:2_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	74,300	3.30E+05	2.25E-01	1.32E+06	5.62E-02
100-F-26:2_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	190	1.00E+04	1.90E-02	1.39E+04	1.36E-02
100-F-26:2_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,700	5.00E+02	**3.40E+00**	1.33E+05	1.28E-02
100-F-26:2_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	70	4.00E+03	1.75E-02	1.63E+03	4.29E-02
100-F-26:2_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	7,700	4.00E+02	**1.93E+01**	3.82E+04	2.02E-01
100-F-26:2_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	6,600	1.30E+04	5.08E-01	1.11E+05	5.92E-02

Table 3. Comparison of 100-F Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
100-F-26:2_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	11,100	5.00E+04	2.22E-01	1.07E+05	1.04E-01
100-F-26:2_Shallow_Focused	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	390	No Value	--	1.25E+06	3.13E-04
100-F-26:2_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	5,400	5.00E+04	1.08E-01	3.56E+04	1.52E-01
100-F-26:2_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	303,000	2.20E+05	**1.38E+00**	5.80E+06	5.23E-02
100-F-26:2_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	420	2.00E+03	2.10E-01	1.40E+04	3.01E-02
100-F-26:2_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	8,700	3.00E+04	2.90E-01	3.26E+04	2.67E-01
100-F-26:2_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	46,900	2.00E+03	**2.35E+01**	3.11E+04	**1.51E+00**
100-F-26:2_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	38,300	5.00E+04	7.66E-01	6.78E+04	5.65E-01
100-F-26:4_Overburden_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	11	4.00E+04	2.75E-04	1.47E+03	7.46E-03
100-F-26:4_Overburden_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	3.3	4.00E+04	8.25E-05	1.47E+03	2.24E-03
100-F-26:4_Overburden_Focused	non-Rad	Aroclors HI		ug/kg	--	--	3.58E-04	--	9.70E-03
100-F-26:4_Overburden_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	4,100	1.00E+04	4.10E-01	1.90E+05	2.16E-02
100-F-26:4_Overburden_Focused	non-Rad	Barium	7440-39-3	µg/kg	260,000	3.30E+05	7.88E-01	1.32E+06	1.97E-01
100-F-26:4_Overburden_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	420	1.00E+04	4.20E-02	1.39E+04	3.01E-02
100-F-26:4_Overburden_Focused	non-Rad	Boron	7440-42-8	µg/kg	32,300	5.00E+02	**6.46E+01**	1.33E+05	2.43E-01
100-F-26:4_Overburden_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	201	4.00E+03	5.03E-02	1.63E+03	1.23E-01
100-F-26:4_Overburden_Focused	non-Rad	Chromium	7440-47-3	µg/kg	10,400	4.00E+02	**2.60E+01**	3.82E+04	2.72E-01
100-F-26:4_Overburden_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	6,000	1.30E+04	4.62E-01	1.11E+05	5.38E-02
100-F-26:4_Overburden_Focused	non-Rad	Copper	7440-50-8	µg/kg	17,300	5.00E+04	3.46E-01	1.07E+05	1.62E-01
100-F-26:4_Overburden_Focused	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	240	No Value	--	1.25E+06	1.93E-04
100-F-26:4_Overburden_Focused	non-Rad	Lead	7439-92-1	µg/kg	20,000	5.00E+04	4.00E-01	3.56E+04	5.62E-01
100-F-26:4_Overburden_Focused	non-Rad	Manganese	7439-96-5	µg/kg	297,000	2.20E+05	**1.35E+00**	5.80E+06	5.12E-02
100-F-26:4_Overburden_Focused	non-Rad	Mercury	7439-97-6	µg/kg	150	1.00E+02	**1.50E+00**	1.87E+03	8.04E-02
100-F-26:4_Overburden_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	850	2.00E+03	4.25E-01	1.40E+04	6.09E-02
100-F-26:4_Overburden_Focused	non-Rad	Nickel	7440-02-0	µg/kg	9,900	3.00E+04	3.30E-01	3.26E+04	3.04E-01
100-F-26:4_Overburden_Focused	non-Rad	Total petroleum hydrocarbons	TPH	µg/kg	141,000	No Value	--	No Value	--
100-F-26:4_Overburden_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	1,453	5.00E+03	2.91E-01	7.86E+05	1.85E-03
100-F-26:4_Overburden_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	41,500	2.00E+03	**2.08E+01**	3.11E+04	**1.33E+00**
100-F-26:4_Overburden_Focused	non-Rad	Zinc	7440-66-6	µg/kg	56,600	5.00E+04	**1.13E+00**	6.78E+04	8.35E-01
100-F-26:4_Overburden_Focused	Rad	Cesium-137	10045-97-3	pCi/g	0.062	2.21E+03	2.81E-05	9.24E+02	6.71E-05
100-F-26:4_Overburden_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	0.46	5.16E+04	8.93E-06	6.37E+03	7.24E-05
100-F-26:4_Overburden_Focused	Rad	Uranium-238	U-238	pCi/g	0.49	1.57E+04	3.11E-05	5.15E+03	9.48E-05
100-F-26:4_Overburden_Focused	Rad	Rads SOF	---	pCi/g	--	--	6.81E-05	--	2.34E-04
100-F-26:4_Overburden_Focused_3	non-Rad	Arsenic	7440-38-2	µg/kg	6,500	1.00E+04	6.50E-01	1.90E+05	3.43E-02
100-F-26:4_Overburden_Focused_3	non-Rad	Barium	7440-39-3	µg/kg	109,000	3.30E+05	3.30E-01	1.32E+06	8.24E-02
100-F-26:4_Overburden_Focused_3	non-Rad	Beryllium	7440-41-7	µg/kg	230	1.00E+04	2.30E-02	1.39E+04	1.65E-02
100-F-26:4_Overburden_Focused_3	non-Rad	Boron	7440-42-8	µg/kg	5,100	5.00E+02	**1.02E+01**	1.33E+05	3.84E-02
100-F-26:4_Overburden_Focused_3	non-Rad	Cadmium	7440-43-9	µg/kg	99	4.00E+03	2.48E-02	1.63E+03	6.07E-02
100-F-26:4_Overburden_Focused_3	non-Rad	Chromium	7440-47-3	µg/kg	11,000	4.00E+02	**2.75E+01**	3.82E+04	2.88E-01
100-F-26:4_Overburden_Focused_3	non-Rad	Cobalt	7440-48-4	µg/kg	6,500	1.30E+04	5.00E-01	1.11E+05	5.83E-02
100-F-26:4_Overburden_Focused_3	non-Rad	Copper	7440-50-8	µg/kg	15,000	5.00E+04	3.00E-01	1.07E+05	1.40E-01
100-F-26:4_Overburden_Focused_3	non-Rad	Lead	7439-92-1	µg/kg	16,000	5.00E+04	3.20E-01	3.56E+04	4.50E-01
100-F-26:4_Overburden_Focused_3	non-Rad	Manganese	7439-96-5	µg/kg	299,000	2.20E+05	**1.36E+00**	5.80E+06	5.16E-02
100-F-26:4_Overburden_Focused_3	non-Rad	Mercury	7439-97-6	µg/kg	8.3	1.00E+02	8.30E-02	1.87E+03	4.45E-03
100-F-26:4_Overburden_Focused_3	non-Rad	Molybdenum	7439-98-7	µg/kg	300	2.00E+03	1.50E-01	1.40E+04	2.15E-02
100-F-26:4_Overburden_Focused_3	non-Rad	Nickel	7440-02-0	µg/kg	11,200	3.00E+04	3.73E-01	3.26E+04	3.44E-01
100-F-26:4_Overburden_Focused_3	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	µg/kg	2,700	2.00E+05	1.35E-02	3.56E+08	7.58E-06
100-F-26:4_Overburden_Focused_3	non-Rad	Total petroleum hydrocarbons - diesel range extended to C36	TPHDIESELEXT	µg/kg	10,000	No Value	--	No Value	--
100-F-26:4_Overburden_Focused_3	non-Rad	Vanadium	7440-62-2	µg/kg	47,200	2.00E+03	**2.36E+01**	3.11E+04	**1.52E+00**
100-F-26:4_Overburden_Focused_3	non-Rad	Zinc	7440-66-6	µg/kg	41,900	5.00E+04	8.38E-01	6.78E+04	6.18E-01
100-F-26:4_Shallow_1	non-Rad	Antimony	7440-36-0	µg/kg	718	5.00E+03	1.44E-01	5.98E+03	1.20E-01
100-F-26:4_Shallow_1	non-Rad	Arsenic	7440-38-2	µg/kg	1,950	1.00E+04	1.95E-01	1.90E+05	1.03E-02
100-F-26:4_Shallow_1	non-Rad	Barium	7440-39-3	µg/kg	75,842	3.30E+05	2.30E-01	1.32E+06	5.73E-02
100-F-26:4_Shallow_1	non-Rad	Beryllium	7440-41-7	µg/kg	210	1.00E+04	2.10E-02	1.39E+04	1.51E-02
100-F-26:4_Shallow_1	non-Rad	Boron	7440-42-8	µg/kg	5,760	5.00E+02	**1.15E+01**	1.33E+05	4.33E-02
100-F-26:4_Shallow_1	non-Rad	Chromium	7440-47-3	µg/kg	8,347	4.00E+02	**2.09E+01**	3.82E+04	2.19E-01

Table 3. Comparison of 100-F Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
100-F-26:4_Shallow_1	non-Rad	Cobalt	7440-48-4	µg/kg	4,973	1.30E+04	3.83E-01	1.11E+05	4.46E-02
100-F-26:4_Shallow_1	non-Rad	Copper	7440-50-8	µg/kg	11,577	5.00E+04	2.32E-01	1.07E+05	1.08E-01
100-F-26:4_Shallow_1	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	546	No Value	--	1.25E+06	4.38E-04
100-F-26:4_Shallow_1	non-Rad	Lead	7439-92-1	µg/kg	5,817	5.00E+04	1.16E-01	3.56E+04	1.64E-01
100-F-26:4_Shallow_1	non-Rad	Manganese	7439-96-5	µg/kg	232,660	2.20E+05	**1.06E+00**	5.80E+06	4.01E-02
100-F-26:4_Shallow_1	non-Rad	Mercury	7439-97-6	µg/kg	60	1.00E+02	6.00E-01	1.87E+03	3.21E-02
100-F-26:4_Shallow_1	non-Rad	Molybdenum	7439-98-7	µg/kg	890	2.00E+03	4.45E-01	1.40E+04	6.37E-02
100-F-26:4_Shallow_1	non-Rad	Nickel	7440-02-0	µg/kg	9,380	3.00E+04	3.13E-01	3.26E+04	2.88E-01
100-F-26:4_Shallow_1	non-Rad	Selenium	7782-49-2	µg/kg	2,700	5.20E+02	**5.19E+00**	1.90E+03	**1.42E+00**
100-F-26:4_Shallow_1	non-Rad	Vanadium	7440-62-2	µg/kg	27,956	2.00E+03	**1.40E+01**	3.11E+04	8.98E-01
100-F-26:4_Shallow_1	non-Rad	Zinc	7440-66-6	µg/kg	34,707	5.00E+04	6.94E-01	6.78E+04	5.12E-01
100-F-26:4_Shallow_1	Rad	Cesium-137	10045-97-3	pCi/g	0.26	2.21E+03	1.17E-04	9.24E+02	2.79E-04
100-F-26:4_Shallow_1	Rad	Rads SOF	---	pCi/g	--	--	1.17E-04	--	2.79E-04
100-F-26:4_Shallow_2	non-Rad	Aroclor-1260	11096-82-5	µg/kg	4.8	4.00E+04	1.20E-04	1.47E+03	3.26E-03
100-F-26:4_Shallow_2	non-Rad	Aroclors HI		ug/kg	--	--	1.20E-04	--	3.26E-03
100-F-26:4_Shallow_2	non-Rad	Arsenic	7440-38-2	µg/kg	2,827	1.00E+04	2.83E-01	1.90E+05	1.49E-02
100-F-26:4_Shallow_2	non-Rad	Barium	7440-39-3	µg/kg	92,173	3.30E+05	2.79E-01	1.32E+06	6.97E-02
100-F-26:4_Shallow_2	non-Rad	Beryllium	7440-41-7	µg/kg	209	1.00E+04	2.09E-02	1.39E+04	1.50E-02
100-F-26:4_Shallow_2	non-Rad	Boron	7440-42-8	µg/kg	4,903	5.00E+02	**9.81E+00**	1.33E+05	3.69E-02
100-F-26:4_Shallow_2	non-Rad	Cadmium	7440-43-9	µg/kg	89	4.00E+03	2.22E-02	1.63E+03	5.44E-02
100-F-26:4_Shallow_2	non-Rad	Chromium	7440-47-3	µg/kg	11,066	4.00E+02	**2.77E+01**	3.82E+04	2.90E-01
100-F-26:4_Shallow_2	non-Rad	Cobalt	7440-48-4	µg/kg	6,033	1.30E+04	4.64E-01	1.11E+05	5.41E-02
100-F-26:4_Shallow_2	non-Rad	Copper	7440-50-8	µg/kg	13,975	5.00E+04	2.79E-01	1.07E+05	1.31E-01
100-F-26:4_Shallow_2	non-Rad	Lead	7439-92-1	µg/kg	9,654	5.00E+04	1.93E-01	3.56E+04	2.71E-01
100-F-26:4_Shallow_2	non-Rad	Manganese	7439-96-5	µg/kg	275,252	2.20E+05	**1.25E+00**	5.80E+06	4.75E-02
100-F-26:4_Shallow_2	non-Rad	Mercury	7439-97-6	µg/kg	12	1.00E+02	1.20E-01	1.87E+03	6.43E-03
100-F-26:4_Shallow_2	non-Rad	Molybdenum	7439-98-7	µg/kg	316	2.00E+03	1.58E-01	1.40E+04	2.26E-02
100-F-26:4_Shallow_2	non-Rad	Nickel	7440-02-0	µg/kg	11,596	3.00E+04	3.87E-01	3.26E+04	3.56E-01
100-F-26:4_Shallow_2	non-Rad	Selenium	7782-49-2	µg/kg	930	5.20E+02	**1.79E+00**	1.90E+03	4.90E-01
100-F-26:4_Shallow_2	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	µg/kg	6,371	2.00E+05	3.19E-02	3.56E+08	1.79E-05
100-F-26:4_Shallow_2	non-Rad	Total petroleum hydrocarbons - diesel range extended to C36	TPHDIESELEXT	µg/kg	25,575	No Value	--	No Value	--
100-F-26:4_Shallow_2	non-Rad	Vanadium	7440-62-2	µg/kg	43,748	2.00E+03	**2.19E+01**	3.11E+04	**1.41E+00**
100-F-26:4_Shallow_2	non-Rad	Zinc	7440-66-6	µg/kg	37,849	5.00E+04	7.57E-01	6.78E+04	5.58E-01
100-F-26:4_Shallow_Focused	non-Rad	2-Methylnaphthalene	91-57-6	µg/kg	26	2.90E+04	8.97E-04	6.01E+03	4.32E-03
100-F-26:4_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	381	5.00E+03	7.62E-02	5.98E+03	6.37E-02
100-F-26:4_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	3,600	1.00E+04	3.60E-01	1.90E+05	1.90E-02
100-F-26:4_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	76,200	3.30E+05	2.31E-01	1.32E+06	5.76E-02
100-F-26:4_Shallow_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	19	1.80E+04	1.06E-03	3.92E+04	4.84E-04
100-F-26:4_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	611	1.00E+04	6.11E-02	1.39E+04	4.38E-02
100-F-26:4_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	241	1.00E+05	2.41E-03	4.54E+04	5.30E-03
100-F-26:4_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	2,700	5.00E+02	**5.40E+00**	1.33E+05	2.03E-02
100-F-26:4_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	669	4.00E+03	1.67E-01	1.63E+03	4.10E-01
100-F-26:4_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	11,700	4.00E+02	**2.93E+01**	3.82E+04	3.07E-01
100-F-26:4_Shallow_Focused	non-Rad	Chrysene	218-01-9	µg/kg	25	1.80E+04	1.39E-03	4.45E+04	5.62E-04
100-F-26:4_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	6,100	1.30E+04	4.69E-01	1.11E+05	5.47E-02
100-F-26:4_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	16,900	5.00E+04	3.38E-01	1.07E+05	1.58E-01
100-F-26:4_Shallow_Focused	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	226	No Value	--	No Value	--
100-F-26:4_Shallow_Focused	non-Rad	Fluoranthene	206-44-0	µg/kg	35	1.80E+04	1.96E-03	8.39E+05	4.19E-05
100-F-26:4_Shallow_Focused	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	370	No Value	--	1.25E+06	2.97E-04
100-F-26:4_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	8,600	5.00E+04	1.72E-01	3.56E+04	2.42E-01
100-F-26:4_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	310,000	2.20E+05	**1.41E+00**	5.80E+06	5.35E-02
100-F-26:4_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	150	1.00E+02	**1.50E+00**	1.87E+03	8.04E-02
100-F-26:4_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	314	2.00E+03	1.57E-01	1.40E+04	2.25E-02
100-F-26:4_Shallow_Focused	non-Rad	Naphthalene	91-20-3	µg/kg	39	2.90E+04	1.34E-03	1.00E+05	3.90E-04
100-F-26:4_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	12,100	3.00E+04	4.03E-01	3.26E+04	3.71E-01
100-F-26:4_Shallow_Focused	non-Rad	Pyrene	129-00-0	µg/kg	33	1.80E+04	1.83E-03	6.00E+05	5.49E-05

Table 3. Comparison of 100-F Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
100-F-26:4_Shallow_Focused	non-Rad	Selenium	7782-49-2	µg/kg	591	5.20E+02	**1.14E+00**	1.90E+03	3.11E-01
100-F-26:4_Shallow_Focused	non-Rad	Silver	7440-22-4	µg/kg	219	2.00E+03	1.10E-01	4.96E+04	4.41E-03
100-F-26:4_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	46,100	2.00E+03	**2.31E+01**	3.11E+04	**1.48E+00**
100-F-26:4_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	85,100	5.00E+04	**1.70E+00**	6.78E+04	**1.26E+00**
100-F-26:4_Shallow_Focused	Rad	Cesium-137	10045-97-3	pCi/g	0.58	2.21E+03	2.61E-04	9.24E+02	6.23E-04
100-F-26:4_Shallow_Focused	Rad	Europium-152	14683-23-9	pCi/g	0.23	1.47E+04	1.54E-05	1.74E+03	1.30E-04
100-F-26:4_Shallow_Focused	Rad	Rads SOF	---	pCi/g	--	--	2.76E-04	--	7.53E-04
100-F-26:5_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	2,300	1.00E+04	2.30E-01	1.90E+05	1.21E-02
100-F-26:5_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	50,400	3.30E+05	1.53E-01	1.32E+06	3.81E-02
100-F-26:5_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,000	5.00E+02	**2.00E+00**	1.33E+05	7.52E-03
100-F-26:5_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	280	4.00E+03	7.00E-02	1.63E+03	1.72E-01
100-F-26:5_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	9,300	4.00E+02	**2.33E+01**	3.82E+04	2.44E-01
100-F-26:5_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	4,800	1.30E+04	3.69E-01	1.11E+05	4.31E-02
100-F-26:5_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	12,500	5.00E+04	2.50E-01	1.07E+05	1.17E-01
100-F-26:5_Shallow_Focused	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	280	No Value	--	1.25E+06	2.25E-04
100-F-26:5_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	3,600	5.00E+04	7.20E-02	3.56E+04	1.01E-01
100-F-26:5_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	231,000	2.20E+05	**1.05E+00**	5.80E+06	3.98E-02
100-F-26:5_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	320	2.00E+03	1.60E-01	1.40E+04	2.29E-02
100-F-26:5_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	10,500	3.00E+04	3.50E-01	3.26E+04	3.22E-01
100-F-26:5_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	33,500	2.00E+03	**1.68E+01**	3.11E+04	**1.08E+00**
100-F-26:5_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	39,200	5.00E+04	7.84E-01	6.78E+04	5.78E-01
100-F-26:7_Overburden_Focused	non-Rad	Antimony	7440-36-0	µg/kg	680	5.00E+03	1.36E-01	5.98E+03	1.14E-01
100-F-26:7_Overburden_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	2,100	1.00E+04	2.10E-01	1.90E+05	1.11E-02
100-F-26:7_Overburden_Focused	non-Rad	Barium	7440-39-3	µg/kg	153,000	3.30E+05	4.64E-01	1.32E+06	1.16E-01
100-F-26:7_Overburden_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	120	1.00E+04	1.20E-02	1.39E+04	8.60E-03
100-F-26:7_Overburden_Focused	non-Rad	Boron	7440-42-8	µg/kg	10,600	5.00E+02	**2.12E+01**	1.33E+05	7.97E-02
100-F-26:7_Overburden_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	130	4.00E+03	3.25E-02	1.63E+03	7.98E-02
100-F-26:7_Overburden_Focused	non-Rad	Chromium	7440-47-3	µg/kg	17,700	4.00E+02	**4.43E+01**	3.82E+04	4.64E-01
100-F-26:7_Overburden_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	6,400	1.30E+04	4.92E-01	1.11E+05	5.74E-02
100-F-26:7_Overburden_Focused	non-Rad	Copper	7440-50-8	µg/kg	15,400	5.00E+04	3.08E-01	1.07E+05	1.44E-01
100-F-26:7_Overburden_Focused	non-Rad	Lead	7439-92-1	µg/kg	8,900	5.00E+04	1.78E-01	3.56E+04	2.50E-01
100-F-26:7_Overburden_Focused	non-Rad	Manganese	7439-96-5	µg/kg	319,000	2.20E+05	**1.45E+00**	5.80E+06	5.50E-02
100-F-26:7_Overburden_Focused	non-Rad	Mercury	7439-97-6	µg/kg	66	1.00E+02	6.60E-01	1.87E+03	3.54E-02
100-F-26:7_Overburden_Focused	non-Rad	Nickel	7440-02-0	µg/kg	11,500	3.00E+04	3.83E-01	3.26E+04	3.53E-01
100-F-26:7_Overburden_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	47,600	2.00E+03	**2.38E+01**	3.11E+04	**1.53E+00**
100-F-26:7_Overburden_Focused	non-Rad	Zinc	7440-66-6	µg/kg	44,400	5.00E+04	8.88E-01	6.78E+04	6.55E-01
100-F-26:7_Shallow	non-Rad	Antimony	7440-36-0	µg/kg	684	5.00E+03	1.37E-01	5.98E+03	1.14E-01
100-F-26:7_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	1,957	1.00E+04	1.96E-01	1.90E+05	1.03E-02
100-F-26:7_Shallow	non-Rad	Barium	7440-39-3	µg/kg	103,545	3.30E+05	3.14E-01	1.32E+06	7.83E-02
100-F-26:7_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	65	1.00E+04	6.50E-03	1.39E+04	4.66E-03
100-F-26:7_Shallow	non-Rad	Boron	7440-42-8	µg/kg	8,960	5.00E+02	**1.79E+01**	1.33E+05	6.74E-02
100-F-26:7_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	108	4.00E+03	2.70E-02	1.63E+03	6.62E-02
100-F-26:7_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	11,159	4.00E+02	**2.79E+01**	3.82E+04	2.92E-01
100-F-26:7_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	5,949	1.30E+04	4.58E-01	1.11E+05	5.34E-02
100-F-26:7_Shallow	non-Rad	Copper	7440-50-8	µg/kg	14,070	5.00E+04	2.81E-01	1.07E+05	1.31E-01
100-F-26:7_Shallow	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	346	No Value	--	1.25E+06	2.78E-04
100-F-26:7_Shallow	non-Rad	Lead	7439-92-1	µg/kg	6,875	5.00E+04	1.37E-01	3.56E+04	1.93E-01
100-F-26:7_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	282,226	2.20E+05	**1.28E+00**	5.80E+06	4.87E-02
100-F-26:7_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	18	1.00E+02	1.80E-01	1.87E+03	9.66E-03
100-F-26:7_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	410	2.00E+03	2.05E-01	1.40E+04	2.94E-02
100-F-26:7_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	10,497	3.00E+04	3.50E-01	3.26E+04	3.22E-01
100-F-26:7_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	47,555	2.00E+03	**2.38E+01**	3.11E+04	**1.53E+00**
100-F-26:7_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	42,672	5.00E+04	8.53E-01	6.78E+04	6.29E-01
100-F-26:7_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	3,300	1.00E+04	3.30E-01	1.90E+05	1.74E-02
100-F-26:7_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	76,200	3.30E+05	2.31E-01	1.32E+06	5.76E-02
100-F-26:7_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	64	1.00E+04	6.40E-03	1.39E+04	4.59E-03

Table 3. Comparison of 100-F Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
100-F-26:7_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,700	5.00E+02	**3.40E+00**	1.33E+05	1.28E-02
100-F-26:7_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	130	4.00E+03	3.25E-02	1.63E+03	7.98E-02
100-F-26:7_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	11,000	4.00E+02	**2.75E+01**	3.82E+04	2.88E-01
100-F-26:7_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	7,300	1.30E+04	5.62E-01	1.11E+05	6.55E-02
100-F-26:7_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	15,400	5.00E+04	3.08E-01	1.07E+05	1.44E-01
100-F-26:7_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	6,700	5.00E+04	1.34E-01	3.56E+04	1.88E-01
100-F-26:7_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	321,000	2.20E+05	**1.46E+00**	5.80E+06	5.54E-02
100-F-26:7_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	9.8	1.00E+02	9.80E-02	1.87E+03	5.25E-03
100-F-26:7_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	11,700	3.00E+04	3.90E-01	3.26E+04	3.59E-01
100-F-26:7_Shallow_Focused	non-Rad	Silver	7440-22-4	µg/kg	210	2.00E+03	1.05E-01	4.96E+04	4.23E-03
100-F-26:7_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	39,700	2.00E+03	**1.99E+01**	3.11E+04	**1.28E+00**
100-F-26:7_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	39,500	5.00E+04	7.90E-01	6.78E+04	5.83E-01
100-F-26:7_Staging Pile Area Footprint	non-Rad	Antimony	7440-36-0	µg/kg	731	5.00E+03	1.46E-01	5.98E+03	1.22E-01
100-F-26:7_Staging Pile Area Footprint	non-Rad	Arsenic	7440-38-2	µg/kg	1,716	1.00E+04	1.72E-01	1.90E+05	9.06E-03
100-F-26:7_Staging Pile Area Footprint	non-Rad	Barium	7440-39-3	µg/kg	106,026	3.30E+05	3.21E-01	1.32E+06	8.01E-02
100-F-26:7_Staging Pile Area Footprint	non-Rad	Boron	7440-42-8	µg/kg	5,756	5.00E+02	**1.15E+01**	1.33E+05	4.33E-02
100-F-26:7_Staging Pile Area Footprint	non-Rad	Cadmium	7440-43-9	µg/kg	99	4.00E+03	2.47E-02	1.63E+03	6.05E-02
100-F-26:7_Staging Pile Area Footprint	non-Rad	Chromium	7440-47-3	µg/kg	9,634	4.00E+02	**2.41E+01**	3.82E+04	2.52E-01
100-F-26:7_Staging Pile Area Footprint	non-Rad	Cobalt	7440-48-4	µg/kg	6,118	1.30E+04	4.71E-01	1.11E+05	5.49E-02
100-F-26:7_Staging Pile Area Footprint	non-Rad	Copper	7440-50-8	µg/kg	12,164	5.00E+04	2.43E-01	1.07E+05	1.14E-01
100-F-26:7_Staging Pile Area Footprint	non-Rad	Lead	7439-92-1	µg/kg	3,804	5.00E+04	7.61E-02	3.56E+04	1.07E-01
100-F-26:7_Staging Pile Area Footprint	non-Rad	Manganese	7439-96-5	µg/kg	276,272	2.20E+05	**1.26E+00**	5.80E+06	4.76E-02
100-F-26:7_Staging Pile Area Footprint	non-Rad	Mercury	7439-97-6	µg/kg	6.7	1.00E+02	6.70E-02	1.87E+03	3.59E-03
100-F-26:7_Staging Pile Area Footprint	non-Rad	Molybdenum	7439-98-7	µg/kg	366	2.00E+03	1.83E-01	1.40E+04	2.62E-02
100-F-26:7_Staging Pile Area Footprint	non-Rad	Nickel	7440-02-0	µg/kg	9,792	3.00E+04	3.26E-01	3.26E+04	3.01E-01
100-F-26:7_Staging Pile Area Footprint	non-Rad	Selenium	7782-49-2	µg/kg	960	5.20E+02	**1.85E+00**	1.90E+03	5.06E-01
100-F-26:7_Staging Pile Area Footprint	non-Rad	Vanadium	7440-62-2	µg/kg	52,232	2.00E+03	**2.61E+01**	3.11E+04	**1.68E+00**
100-F-26:7_Staging Pile Area Footprint	non-Rad	Zinc	7440-66-6	µg/kg	37,192	5.00E+04	7.44E-01	6.78E+04	5.49E-01
100-F-26:8_Overburden_Focused	non-Rad	4,4'-DDE (Dichlorodiphenyldichloroethylene)	72-55-9	µg/kg	1.9	No Value	--	4.00E+02	4.76E-03
100-F-26:8_Overburden_Focused	non-Rad	4,4'-DDT (Dichlorodiphenyltrichloroethane)	50-29-3	µg/kg	1.4	No Value	--	8.82E+02	1.59E-03
100-F-26:8_Overburden_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	3,900	1.00E+04	3.90E-01	1.90E+05	2.06E-02
100-F-26:8_Overburden_Focused	non-Rad	Barium	7440-39-3	µg/kg	76,200	3.30E+05	2.31E-01	1.32E+06	5.76E-02
100-F-26:8_Overburden_Focused	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	26	1.80E+04	1.44E-03	6.40E+04	4.06E-04
100-F-26:8_Overburden_Focused	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	38	1.80E+04	2.11E-03	7.64E+04	4.97E-04
100-F-26:8_Overburden_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	23	1.80E+04	1.28E-03	3.92E+04	5.86E-04
100-F-26:8_Overburden_Focused	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	30	1.80E+04	1.67E-03	3.92E+04	7.65E-04
100-F-26:8_Overburden_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	450	1.00E+04	4.50E-02	1.39E+04	3.23E-02
100-F-26:8_Overburden_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	62	1.00E+05	6.20E-04	4.54E+04	1.37E-03
100-F-26:8_Overburden_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,600	5.00E+02	**3.20E+00**	1.33E+05	1.20E-02
100-F-26:8_Overburden_Focused	non-Rad	Chromium	7440-47-3	µg/kg	10,500	4.00E+02	**2.63E+01**	3.82E+04	2.75E-01
100-F-26:8_Overburden_Focused	non-Rad	Chrysene	218-01-9	µg/kg	37	1.80E+04	2.06E-03	4.45E+04	8.31E-04
100-F-26:8_Overburden_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	7,200	1.30E+04	5.54E-01	1.11E+05	6.46E-02
100-F-26:8_Overburden_Focused	non-Rad	Copper	7440-50-8	µg/kg	12,900	5.00E+04	2.58E-01	1.07E+05	1.20E-01
100-F-26:8_Overburden_Focused	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	25	No Value	--	No Value	--
100-F-26:8_Overburden_Focused	non-Rad	Fluoranthene	206-44-0	µg/kg	33	1.80E+04	1.83E-03	8.39E+05	3.93E-05
100-F-26:8_Overburden_Focused	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	220	No Value	--	1.25E+06	1.77E-04
100-F-26:8_Overburden_Focused	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	19	1.80E+04	1.06E-03	3.57E+04	5.33E-04
100-F-26:8_Overburden_Focused	non-Rad	Lead	7439-92-1	µg/kg	11,500	5.00E+04	2.30E-01	3.56E+04	3.23E-01
100-F-26:8_Overburden_Focused	non-Rad	Manganese	7439-96-5	µg/kg	332,000	2.20E+05	**1.51E+00**	5.80E+06	5.73E-02
100-F-26:8_Overburden_Focused	non-Rad	Methoxychlor	72-43-5	µg/kg	1.8	No Value	--	2.18E+04	8.24E-05
100-F-26:8_Overburden_Focused	non-Rad	Nickel	7440-02-0	µg/kg	10,600	3.00E+04	3.53E-01	3.26E+04	3.25E-01
100-F-26:8_Overburden_Focused	non-Rad	Pyrene	129-00-0	µg/kg	57	1.80E+04	3.17E-03	6.00E+05	9.50E-05
100-F-26:8_Overburden_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	45,900	2.00E+03	**2.30E+01**	3.11E+04	**1.47E+00**
100-F-26:8_Overburden_Focused	non-Rad	Zinc	7440-66-6	µg/kg	54,000	5.00E+04	**1.08E+00**	6.78E+04	7.96E-01
100-F-26:8_Shallow	non-Rad	4,4'-DDD (Dichlorodiphenyldichloroethane)	72-54-8	µg/kg	1.2	No Value	--	8.82E+02	1.36E-03
100-F-26:8_Shallow	non-Rad	4,4'-DDE (Dichlorodiphenyldichloroethylene)	72-55-9	µg/kg	4.1	No Value	--	4.00E+02	1.02E-02

Table 3. Comparison of 100-F Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
100-F-26:8_Shallow	non-Rad	4,4'-DDT (Dichlorodiphenyltrichloroethane)	50-29-3	µg/kg	3.0	No Value	--	8.82E+02	3.40E-03
100-F-26:8_Shallow	non-Rad	Alpha-Chlordane	5103-71-9	µg/kg	4.2	1.00E+03	4.20E-03	5.04E+04	8.33E-05
100-F-26:8_Shallow	non-Rad	Antimony	7440-36-0	µg/kg	1,100	5.00E+03	2.20E-01	5.98E+03	1.84E-01
100-F-26:8_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	2,206	1.00E+04	2.21E-01	1.90E+05	1.16E-02
100-F-26:8_Shallow	non-Rad	Barium	7440-39-3	µg/kg	63,964	3.30E+05	1.94E-01	1.32E+06	4.83E-02
100-F-26:8_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	300	1.00E+04	3.00E-02	1.39E+04	2.15E-02
100-F-26:8_Shallow	non-Rad	beta-1,2,3,4,5,6-Hexachlorocyclohexane (beta-BHC)	319-85-7	µg/kg	0.60	No Value	--	4.08E+03	1.47E-04
100-F-26:8_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	178	1.00E+05	1.78E-03	4.54E+04	3.93E-03
100-F-26:8_Shallow	non-Rad	Boron	7440-42-8	µg/kg	2,100	5.00E+02	**4.20E+00**	1.33E+05	1.58E-02
100-F-26:8_Shallow	non-Rad	Chlordane	57-74-9	µg/kg	2.5	1.00E+03	2.50E-03	5.04E+04	4.96E-05
100-F-26:8_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	12,660	4.00E+02	**3.17E+01**	3.82E+04	3.32E-01
100-F-26:8_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	5,604	1.30E+04	4.31E-01	1.11E+05	5.03E-02
100-F-26:8_Shallow	non-Rad	Copper	7440-50-8	µg/kg	11,206	5.00E+04	2.24E-01	1.07E+05	1.05E-01
100-F-26:8_Shallow	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	29	No Value	--	No Value	--
100-F-26:8_Shallow	non-Rad	Endosulfan I	959-98-8	µg/kg	0.53	No Value	--	7.10E+02	7.46E-04
100-F-26:8_Shallow	non-Rad	Fluoranthene	206-44-0	µg/kg	22	1.80E+04	1.22E-03	8.39E+05	2.62E-05
100-F-26:8_Shallow	non-Rad	Heptachlor epoxide	1024-57-3	µg/kg	0.60	No Value	--	No Value	--
100-F-26:8_Shallow	non-Rad	Lead	7439-92-1	µg/kg	8,311	5.00E+04	1.66E-01	3.56E+04	2.34E-01
100-F-26:8_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	263,616	2.20E+05	**1.20E+00**	5.80E+06	4.55E-02
100-F-26:8_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	160	1.00E+02	**1.60E+00**	1.87E+03	8.57E-02
100-F-26:8_Shallow	non-Rad	Methoxychlor	72-43-5	µg/kg	1.0	No Value	--	2.18E+04	4.58E-05
100-F-26:8_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	520	2.00E+03	2.60E-01	1.40E+04	3.72E-02
100-F-26:8_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	8,851	3.00E+04	2.95E-01	3.26E+04	2.72E-01
100-F-26:8_Shallow	non-Rad	Pyrene	129-00-0	µg/kg	29	1.80E+04	1.61E-03	6.00E+05	4.83E-05
100-F-26:8_Shallow	non-Rad	Selenium	7782-49-2	µg/kg	1,335	5.20E+02	**2.57E+00**	1.90E+03	7.03E-01
100-F-26:8_Shallow	non-Rad	Silver	7440-22-4	µg/kg	510	2.00E+03	2.55E-01	4.96E+04	1.03E-02
100-F-26:8_Shallow	non-Rad	Total petroleum hydrocarbons	TPH	µg/kg	253,000	No Value	--	No Value	--
100-F-26:8_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	33,413	2.00E+03	**1.67E+01**	3.11E+04	**1.07E+00**
100-F-26:8_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	37,472	5.00E+04	7.49E-01	6.78E+04	5.53E-01
100-F-26:8_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	2,600	1.00E+04	2.60E-01	1.90E+05	1.37E-02
100-F-26:8_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	85,200	3.30E+05	2.58E-01	1.32E+06	6.44E-02
100-F-26:8_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	460	1.00E+04	4.60E-02	1.39E+04	3.30E-02
100-F-26:8_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	84	1.00E+05	8.40E-04	4.54E+04	1.85E-03
100-F-26:8_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	9,600	4.00E+02	**2.40E+01**	3.82E+04	2.52E-01
100-F-26:8_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	7,300	1.30E+04	5.62E-01	1.11E+05	6.55E-02
100-F-26:8_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	12,200	5.00E+04	2.44E-01	1.07E+05	1.14E-01
100-F-26:8_Shallow_Focused	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	22	No Value	--	No Value	--
100-F-26:8_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	7,100	5.00E+04	1.42E-01	3.56E+04	2.00E-01
100-F-26:8_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	364,000	2.20E+05	**1.65E+00**	5.80E+06	6.28E-02
100-F-26:8_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	10,300	3.00E+04	3.43E-01	3.26E+04	3.16E-01
100-F-26:8_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	1,238	5.00E+03	2.48E-01	7.86E+05	1.58E-03
100-F-26:8_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	39,800	2.00E+03	**1.99E+01**	3.11E+04	**1.28E+00**
100-F-26:8_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	47,400	5.00E+04	9.48E-01	6.78E+04	6.99E-01
100-F-26:8_Shallow_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	0.60	5.16E+04	1.16E-05	6.37E+03	9.42E-05
100-F-26:8_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	0.42	1.57E+04	2.65E-05	5.15E+03	8.08E-05
100-F-26:8_Shallow_Focused	Rad	Rads SOF	---	pCi/g	--	--	3.81E-05	--	1.75E-04
100-F-26:9_Overburden	non-Rad	2-Methylnaphthalene	91-57-6	µg/kg	27	2.90E+04	9.31E-04	6.01E+03	4.49E-03
100-F-26:9_Overburden	non-Rad	Anthracene	120-12-7	µg/kg	22	2.90E+04	7.59E-04	6.78E+05	3.24E-05
100-F-26:9_Overburden	non-Rad	Antimony	7440-36-0	µg/kg	1,000	5.00E+03	2.00E-01	5.98E+03	1.67E-01
100-F-26:9_Overburden	non-Rad	Aroclor-1260	11096-82-5	µg/kg	180	4.00E+04	4.50E-03	1.47E+03	1.22E-01
100-F-26:9_Overburden	non-Rad	Aroclors HI		ug/kg	--	--	4.50E-03	--	1.22E-01
100-F-26:9_Overburden	non-Rad	Arsenic	7440-38-2	µg/kg	2,859	1.00E+04	2.86E-01	1.90E+05	1.51E-02
100-F-26:9_Overburden	non-Rad	Barium	7440-39-3	µg/kg	266,416	3.30E+05	8.07E-01	1.32E+06	2.01E-01
100-F-26:9_Overburden	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	100	1.80E+04	5.56E-03	6.40E+04	1.56E-03
100-F-26:9_Overburden	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	110	1.80E+04	6.11E-03	7.64E+04	1.44E-03
100-F-26:9_Overburden	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	89	1.80E+04	4.94E-03	3.92E+04	2.27E-03

Table 3. Comparison of 100-F Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
100-F-26:9_Overburden	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	97	1.80E+04	5.39E-03	3.92E+04	2.47E-03
100-F-26:9_Overburden	non-Rad	Beryllium	7440-41-7	µg/kg	317	1.00E+04	3.17E-02	1.39E+04	2.27E-02
100-F-26:9_Overburden	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	243	1.00E+05	2.43E-03	4.54E+04	5.36E-03
100-F-26:9_Overburden	non-Rad	Boron	7440-42-8	µg/kg	15,662	5.00E+02	**3.13E+01**	1.33E+05	1.18E-01
100-F-26:9_Overburden	non-Rad	Chromium	7440-47-3	µg/kg	8,384	4.00E+02	**2.10E+01**	3.82E+04	2.20E-01
100-F-26:9_Overburden	non-Rad	Chrysene	218-01-9	µg/kg	140	1.80E+04	7.78E-03	4.45E+04	3.14E-03
100-F-26:9_Overburden	non-Rad	Cobalt	7440-48-4	µg/kg	6,286	1.30E+04	4.84E-01	1.11E+05	5.64E-02
100-F-26:9_Overburden	non-Rad	Copper	7440-50-8	µg/kg	17,179	5.00E+04	3.44E-01	1.07E+05	1.60E-01
100-F-26:9_Overburden	non-Rad	Dibenz[a,h]anthracene	53-70-3	µg/kg	22	1.80E+04	1.22E-03	4.41E+04	4.98E-04
100-F-26:9_Overburden	non-Rad	Fluoranthene	206-44-0	µg/kg	220	1.80E+04	1.22E-02	8.39E+05	2.62E-04
100-F-26:9_Overburden	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	319	No Value	--	1.25E+06	2.56E-04
100-F-26:9_Overburden	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	71	1.80E+04	3.94E-03	3.57E+04	1.99E-03
100-F-26:9_Overburden	non-Rad	Lead	7439-92-1	µg/kg	6,965	5.00E+04	1.39E-01	3.56E+04	1.96E-01
100-F-26:9_Overburden	non-Rad	Manganese	7439-96-5	µg/kg	277,999	2.20E+05	**1.26E+00**	5.80E+06	4.79E-02
100-F-26:9_Overburden	non-Rad	Mercury	7439-97-6	µg/kg	100	1.00E+02	**1.00E+00**	1.87E+03	5.36E-02
100-F-26:9_Overburden	non-Rad	Molybdenum	7439-98-7	µg/kg	1,300	2.00E+03	6.50E-01	1.40E+04	9.31E-02
100-F-26:9_Overburden	non-Rad	Naphthalene	91-20-3	µg/kg	18	2.90E+04	6.21E-04	1.00E+05	1.80E-04
100-F-26:9_Overburden	non-Rad	Nickel	7440-02-0	µg/kg	10,648	3.00E+04	3.55E-01	3.26E+04	3.27E-01
100-F-26:9_Overburden	non-Rad	Pyrene	129-00-0	µg/kg	260	1.80E+04	1.44E-02	6.00E+05	4.33E-04
100-F-26:9_Overburden	non-Rad	Vanadium	7440-62-2	µg/kg	40,062	2.00E+03	**2.00E+01**	3.11E+04	**1.29E+00**
100-F-26:9_Overburden	non-Rad	Zinc	7440-66-6	µg/kg	44,529	5.00E+04	8.91E-01	6.78E+04	6.57E-01
100-F-26:9_Overburden	Rad	Cesium-137	10045-97-3	pCi/g	0.044	2.21E+03	1.98E-05	9.24E+02	4.74E-05
100-F-26:9_Overburden	Rad	Rads SOF	---	pCi/g	--	--	1.98E-05	--	4.74E-05
100-F-26:9_Overburden_Focused	non-Rad	2-Methylnaphthalene	91-57-6	µg/kg	23	2.90E+04	7.93E-04	6.01E+03	3.82E-03
100-F-26:9_Overburden_Focused	non-Rad	4-Nitroaniline	100-01-6	µg/kg	37	No Value	--	No Value	--
100-F-26:9_Overburden_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	72	4.00E+04	1.80E-03	1.47E+03	4.88E-02
100-F-26:9_Overburden_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	77	4.00E+04	1.93E-03	1.47E+03	5.22E-02
100-F-26:9_Overburden_Focused	non-Rad	Aroclors HI		ug/kg	--	--	3.73E-03	--	1.01E-01
100-F-26:9_Overburden_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	2,700	1.00E+04	2.70E-01	1.90E+05	1.42E-02
100-F-26:9_Overburden_Focused	non-Rad	Barium	7440-39-3	µg/kg	659,000	3.30E+05	**2.00E+00**	1.32E+06	4.98E-01
100-F-26:9_Overburden_Focused	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	21	1.80E+04	1.17E-03	6.40E+04	3.28E-04
100-F-26:9_Overburden_Focused	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	23	1.80E+04	1.28E-03	7.64E+04	3.01E-04
100-F-26:9_Overburden_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	26	1.80E+04	1.44E-03	3.92E+04	6.63E-04
100-F-26:9_Overburden_Focused	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	21	1.80E+04	1.17E-03	3.92E+04	5.35E-04
100-F-26:9_Overburden_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	860	1.00E+04	8.60E-02	1.39E+04	6.17E-02
100-F-26:9_Overburden_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	450	1.00E+05	4.50E-03	4.54E+04	9.91E-03
100-F-26:9_Overburden_Focused	non-Rad	Boron	7440-42-8	µg/kg	61,700	5.00E+02	**1.23E+02**	1.33E+05	4.64E-01
100-F-26:9_Overburden_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	160	4.00E+03	4.00E-02	1.63E+03	9.82E-02
100-F-26:9_Overburden_Focused	non-Rad	Chromium	7440-47-3	µg/kg	12,500	4.00E+02	**3.13E+01**	3.82E+04	3.28E-01
100-F-26:9_Overburden_Focused	non-Rad	Chrysene	218-01-9	µg/kg	44	1.80E+04	2.44E-03	4.45E+04	9.88E-04
100-F-26:9_Overburden_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	7,600	1.30E+04	5.85E-01	1.11E+05	6.82E-02
100-F-26:9_Overburden_Focused	non-Rad	Copper	7440-50-8	µg/kg	183,000	5.00E+04	**3.66E+00**	1.07E+05	**1.71E+00**
100-F-26:9_Overburden_Focused	non-Rad	Fluoranthene	206-44-0	µg/kg	32	1.80E+04	1.78E-03	8.39E+05	3.81E-05
100-F-26:9_Overburden_Focused	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	240	No Value	--	1.25E+06	1.93E-04
100-F-26:9_Overburden_Focused	non-Rad	Lead	7439-92-1	µg/kg	81,700	5.00E+04	**1.63E+00**	3.56E+04	**2.30E+00**
100-F-26:9_Overburden_Focused	non-Rad	Manganese	7439-96-5	µg/kg	254,000	2.20E+05	**1.15E+00**	5.80E+06	4.38E-02
100-F-26:9_Overburden_Focused	non-Rad	Mercury	7439-97-6	µg/kg	30	1.00E+02	3.00E-01	1.87E+03	1.61E-02
100-F-26:9_Overburden_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	1,100	2.00E+03	5.50E-01	1.40E+04	7.88E-02
100-F-26:9_Overburden_Focused	non-Rad	Naphthalene	91-20-3	µg/kg	30	2.90E+04	1.03E-03	1.00E+05	3.00E-04
100-F-26:9_Overburden_Focused	non-Rad	Nickel	7440-02-0	µg/kg	13,200	3.00E+04	4.40E-01	3.26E+04	4.05E-01
100-F-26:9_Overburden_Focused	non-Rad	Pyrene	129-00-0	µg/kg	59	1.80E+04	3.28E-03	6.00E+05	9.83E-05
100-F-26:9_Overburden_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	49,300	2.00E+03	**2.47E+01**	3.11E+04	**1.58E+00**
100-F-26:9_Overburden_Focused	non-Rad	Zinc	7440-66-6	µg/kg	85,800	5.00E+04	**1.72E+00**	6.78E+04	**1.27E+00**
100-F-26:9_Shallow	non-Rad	Anthracene	120-12-7	µg/kg	26	2.90E+04	8.97E-04	6.78E+05	3.83E-05
100-F-26:9_Shallow	non-Rad	Aroclor-1254	11097-69-1	µg/kg	9.1	4.00E+04	2.28E-04	1.47E+03	6.18E-03
100-F-26:9_Shallow	non-Rad	Aroclor-1260	11096-82-5	µg/kg	17	4.00E+04	4.25E-04	1.47E+03	1.15E-02

Table 3. Comparison of 100-F Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
100-F-26:9_Shallow	non-Rad	Aroclors HI		ug/kg	--	--	6.53E-04	--	1.77E-02
100-F-26:9_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	2,650	1.00E+04	2.65E-01	1.90E+05	1.40E-02
100-F-26:9_Shallow	non-Rad	Barium	7440-39-3	µg/kg	117,460	3.30E+05	3.56E-01	1.32E+06	8.88E-02
100-F-26:9_Shallow	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	108	1.80E+04	5.98E-03	6.40E+04	1.68E-03
100-F-26:9_Shallow	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	120	1.80E+04	6.67E-03	7.64E+04	1.57E-03
100-F-26:9_Shallow	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	85	1.80E+04	4.72E-03	3.92E+04	2.16E-03
100-F-26:9_Shallow	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	100	1.80E+04	5.56E-03	3.92E+04	2.55E-03
100-F-26:9_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	271	1.00E+04	2.71E-02	1.39E+04	1.94E-02
100-F-26:9_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	152	1.00E+05	1.52E-03	4.54E+04	3.34E-03
100-F-26:9_Shallow	non-Rad	Boron	7440-42-8	µg/kg	14,334	5.00E+02	**2.87E+01**	1.33E+05	1.08E-01
100-F-26:9_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	174	4.00E+03	4.35E-02	1.63E+03	1.07E-01
100-F-26:9_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	9,462	4.00E+02	**2.37E+01**	3.82E+04	2.48E-01
100-F-26:9_Shallow	non-Rad	Chrysene	218-01-9	µg/kg	134	1.80E+04	7.45E-03	4.45E+04	3.01E-03
100-F-26:9_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	6,363	1.30E+04	4.89E-01	1.11E+05	5.71E-02
100-F-26:9_Shallow	non-Rad	Copper	7440-50-8	µg/kg	14,904	5.00E+04	2.98E-01	1.07E+05	1.39E-01
100-F-26:9_Shallow	non-Rad	Dibenz[a,h]anthracene	53-70-3	µg/kg	39	1.80E+04	2.17E-03	4.41E+04	8.84E-04
100-F-26:9_Shallow	non-Rad	Fluoranthene	206-44-0	µg/kg	235	1.80E+04	1.30E-02	8.39E+05	2.80E-04
100-F-26:9_Shallow	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	284	No Value	--	1.25E+06	2.28E-04
100-F-26:9_Shallow	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	74	1.80E+04	4.11E-03	3.57E+04	2.07E-03
100-F-26:9_Shallow	non-Rad	Lead	7439-92-1	µg/kg	5,799	5.00E+04	1.16E-01	3.56E+04	1.63E-01
100-F-26:9_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	285,355	2.20E+05	**1.30E+00**	5.80E+06	4.92E-02
100-F-26:9_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	278	1.00E+02	**2.78E+00**	1.87E+03	1.49E-01
100-F-26:9_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	910	2.00E+03	4.55E-01	1.40E+04	6.52E-02
100-F-26:9_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	10,157	3.00E+04	3.39E-01	3.26E+04	3.12E-01
100-F-26:9_Shallow	non-Rad	Pyrene	129-00-0	µg/kg	227	1.80E+04	1.26E-02	6.00E+05	3.78E-04
100-F-26:9_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	42,960	2.00E+03	**2.15E+01**	3.11E+04	**1.38E+00**
100-F-26:9_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	45,180	5.00E+04	9.04E-01	6.78E+04	6.66E-01
100-F-26:9_Shallow_Focused	non-Rad	Anthracene	120-12-7	µg/kg	20	2.90E+04	6.90E-04	6.78E+05	2.95E-05
100-F-26:9_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	1,600	5.00E+03	3.20E-01	5.98E+03	2.67E-01
100-F-26:9_Shallow_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	190	4.00E+04	4.75E-03	1.47E+03	1.29E-01
100-F-26:9_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	60	4.00E+04	1.50E-03	1.47E+03	4.07E-02
100-F-26:9_Shallow_Focused	non-Rad	Aroclors HI		ug/kg	--	--	6.25E-03	--	1.70E-01
100-F-26:9_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	2,800	1.00E+04	2.80E-01	1.90E+05	1.48E-02
100-F-26:9_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	329,000	3.30E+05	9.97E-01	1.32E+06	2.49E-01
100-F-26:9_Shallow_Focused	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	90	1.80E+04	5.00E-03	6.40E+04	1.41E-03
100-F-26:9_Shallow_Focused	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	71	1.80E+04	3.94E-03	7.64E+04	9.29E-04
100-F-26:9_Shallow_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	49	1.80E+04	2.72E-03	3.92E+04	1.25E-03
100-F-26:9_Shallow_Focused	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	68	1.80E+04	3.78E-03	3.92E+04	1.73E-03
100-F-26:9_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	596	1.00E+04	5.96E-02	1.39E+04	4.27E-02
100-F-26:9_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	690	1.00E+05	6.90E-03	4.54E+04	1.52E-02
100-F-26:9_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	28,600	5.00E+02	**5.72E+01**	1.33E+05	2.15E-01
100-F-26:9_Shallow_Focused	non-Rad	Butylbenzylphthalate	85-68-7	µg/kg	49	No Value	--	No Value	--
100-F-26:9_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	340	4.00E+03	8.50E-02	1.63E+03	2.09E-01
100-F-26:9_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	17,000	4.00E+02	**4.25E+01**	3.82E+04	4.45E-01
100-F-26:9_Shallow_Focused	non-Rad	Chrysene	218-01-9	µg/kg	120	1.80E+04	6.67E-03	4.45E+04	2.70E-03
100-F-26:9_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	6,200	1.30E+04	4.77E-01	1.11E+05	5.56E-02
100-F-26:9_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	26,500	5.00E+04	5.30E-01	1.07E+05	2.47E-01
100-F-26:9_Shallow_Focused	non-Rad	Diethylphthalate	84-66-2	µg/kg	34	1.00E+05	3.40E-04	No Value	--
100-F-26:9_Shallow_Focused	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	136	No Value	--	No Value	--
100-F-26:9_Shallow_Focused	non-Rad	Fluoranthene	206-44-0	µg/kg	130	1.80E+04	7.22E-03	8.39E+05	1.55E-04
100-F-26:9_Shallow_Focused	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	360	No Value	--	1.25E+06	2.89E-04
100-F-26:9_Shallow_Focused	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	47	1.80E+04	2.61E-03	3.57E+04	1.32E-03
100-F-26:9_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	16,900	5.00E+04	3.38E-01	3.56E+04	4.75E-01
100-F-26:9_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	274,000	2.20E+05	**1.25E+00**	5.80E+06	4.73E-02
100-F-26:9_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	810	1.00E+02	**8.10E+00**	1.87E+03	4.34E-01
100-F-26:9_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	1,100	2.00E+03	5.50E-01	1.40E+04	7.88E-02

Table 3. Comparison of 100-F Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
100-F-26:9_Shallow_Focused	non-Rad	Naphthalene	91-20-3	µg/kg	23	2.90E+04	7.81E-04	1.00E+05	2.26E-04
100-F-26:9_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	10,200	3.00E+04	3.40E-01	3.26E+04	3.13E-01
100-F-26:9_Shallow_Focused	non-Rad	Pyrene	129-00-0	µg/kg	310	1.80E+04	1.72E-02	6.00E+05	5.17E-04
100-F-26:9_Shallow_Focused	non-Rad	Selenium	7782-49-2	µg/kg	1,300	5.20E+02	**2.50E+00**	1.90E+03	6.85E-01
100-F-26:9_Shallow_Focused	non-Rad	Silver	7440-22-4	µg/kg	1,200	2.00E+03	6.00E-01	4.96E+04	2.42E-02
100-F-26:9_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	42,300	2.00E+03	**2.12E+01**	3.11E+04	**1.36E+00**
100-F-26:9_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	122,000	5.00E+04	**2.44E+00**	6.78E+04	**1.80E+00**
100-F-26:9_Shallow_Focused	Rad	Cesium-137	10045-97-3	pCi/g	0.29	2.21E+03	1.31E-04	9.24E+02	3.13E-04
100-F-26:9_Shallow_Focused	Rad	Rads SOF	---	pCi/g	--	--	1.31E-04	--	3.13E-04
100-F-26:9_Staging Pile Area	non-Rad	4,4'-DDE (Dichlorodiphenyldichloroethylene)	72-55-9	µg/kg	2.9	No Value	--	4.00E+02	7.26E-03
100-F-26:9_Staging Pile Area	non-Rad	Alpha-Chlordane	5103-71-9	µg/kg	2.7	1.00E+03	2.70E-03	5.04E+04	5.36E-05
100-F-26:9_Staging Pile Area	non-Rad	Anthracene	120-12-7	µg/kg	26	2.90E+04	8.97E-04	6.78E+05	3.83E-05
100-F-26:9_Staging Pile Area	non-Rad	Aroclor-1254	11097-69-1	µg/kg	23	4.00E+04	5.75E-04	1.47E+03	1.56E-02
100-F-26:9_Staging Pile Area	non-Rad	Aroclor-1260	11096-82-5	µg/kg	19	4.00E+04	4.75E-04	1.47E+03	1.29E-02
100-F-26:9_Staging Pile Area	non-Rad	Aroclors HI		ug/kg	--	--	1.05E-03	--	2.85E-02
100-F-26:9_Staging Pile Area	non-Rad	Arsenic	7440-38-2	µg/kg	11,014	1.00E+04	**1.10E+00**	1.90E+05	5.81E-02
100-F-26:9_Staging Pile Area	non-Rad	Barium	7440-39-3	µg/kg	59,167	3.30E+05	1.79E-01	1.32E+06	4.47E-02
100-F-26:9_Staging Pile Area	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	120	1.80E+04	6.67E-03	6.40E+04	1.87E-03
100-F-26:9_Staging Pile Area	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	140	1.80E+04	7.78E-03	7.64E+04	1.83E-03
100-F-26:9_Staging Pile Area	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	75	1.80E+04	4.17E-03	3.92E+04	1.91E-03
100-F-26:9_Staging Pile Area	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	120	1.80E+04	6.67E-03	3.92E+04	3.06E-03
100-F-26:9_Staging Pile Area	non-Rad	Beryllium	7440-41-7	µg/kg	462	1.00E+04	4.62E-02	1.39E+04	3.31E-02
100-F-26:9_Staging Pile Area	non-Rad	beta-1,2,3,4,5,6-Hexachlorocyclohexane (beta-BHC)	319-85-7	µg/kg	3.9	No Value	--	4.08E+03	9.57E-04
100-F-26:9_Staging Pile Area	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	333	1.00E+05	3.33E-03	4.54E+04	7.34E-03
100-F-26:9_Staging Pile Area	non-Rad	Boron	7440-42-8	µg/kg	1,604	5.00E+02	**3.21E+00**	1.33E+05	1.21E-02
100-F-26:9_Staging Pile Area	non-Rad	Chlordane	57-74-9	µg/kg	2.6	1.00E+03	2.60E-03	5.04E+04	5.16E-05
100-F-26:9_Staging Pile Area	non-Rad	Chromium	7440-47-3	µg/kg	10,408	4.00E+02	**2.60E+01**	3.82E+04	2.73E-01
100-F-26:9_Staging Pile Area	non-Rad	Chrysene	218-01-9	µg/kg	160	1.80E+04	8.89E-03	4.45E+04	3.59E-03
100-F-26:9_Staging Pile Area	non-Rad	Cobalt	7440-48-4	µg/kg	5,815	1.30E+04	4.47E-01	1.11E+05	5.22E-02
100-F-26:9_Staging Pile Area	non-Rad	Copper	7440-50-8	µg/kg	15,482	5.00E+04	3.10E-01	1.07E+05	1.45E-01
100-F-26:9_Staging Pile Area	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	26	No Value	--	No Value	--
100-F-26:9_Staging Pile Area	non-Rad	Fluoranthene	206-44-0	µg/kg	200	1.80E+04	1.11E-02	8.39E+05	2.38E-04
100-F-26:9_Staging Pile Area	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	281	No Value	--	1.25E+06	2.26E-04
100-F-26:9_Staging Pile Area	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	83	1.80E+04	4.61E-03	3.57E+04	2.33E-03
100-F-26:9_Staging Pile Area	non-Rad	Lead	7439-92-1	µg/kg	35,063	5.00E+04	7.01E-01	3.56E+04	9.85E-01
100-F-26:9_Staging Pile Area	non-Rad	Manganese	7439-96-5	µg/kg	263,395	2.20E+05	**1.20E+00**	5.80E+06	4.54E-02
100-F-26:9_Staging Pile Area	non-Rad	Mercury	7439-97-6	µg/kg	120	1.00E+02	**1.20E+00**	1.87E+03	6.43E-02
100-F-26:9_Staging Pile Area	non-Rad	Molybdenum	7439-98-7	µg/kg	750	2.00E+03	3.75E-01	1.40E+04	5.37E-02
100-F-26:9_Staging Pile Area	non-Rad	Nickel	7440-02-0	µg/kg	11,185	3.00E+04	3.73E-01	3.26E+04	3.43E-01
100-F-26:9_Staging Pile Area	non-Rad	Pyrene	129-00-0	µg/kg	260	1.80E+04	1.44E-02	6.00E+05	4.33E-04
100-F-26:9_Staging Pile Area	non-Rad	Vanadium	7440-62-2	µg/kg	30,622	2.00E+03	**1.53E+01**	3.11E+04	9.84E-01
100-F-26:9_Staging Pile Area	non-Rad	Zinc	7440-66-6	µg/kg	36,533	5.00E+04	7.31E-01	6.78E+04	5.39E-01
100-F-31_Shallow	non-Rad	Antimony	7440-36-0	µg/kg	490	5.00E+03	9.80E-02	5.98E+03	8.19E-02
100-F-31_Shallow	non-Rad	Aroclor-1254	11097-69-1	µg/kg	17	4.00E+04	4.15E-04	1.47E+03	1.13E-02
100-F-31_Shallow	non-Rad	Aroclors HI		ug/kg	--	--	4.15E-04	--	1.13E-02
100-F-31_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	3,822	1.00E+04	3.82E-01	1.90E+05	2.02E-02
100-F-31_Shallow	non-Rad	Barium	7440-39-3	µg/kg	75,963	3.30E+05	2.30E-01	1.32E+06	5.74E-02
100-F-31_Shallow	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	45	1.80E+04	2.47E-03	6.40E+04	6.95E-04
100-F-31_Shallow	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	41	1.80E+04	2.27E-03	7.64E+04	5.35E-04
100-F-31_Shallow	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	36	1.80E+04	2.01E-03	3.92E+04	9.23E-04
100-F-31_Shallow	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	39	1.80E+04	2.14E-03	3.92E+04	9.82E-04
100-F-31_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	166	1.00E+04	1.66E-02	1.39E+04	1.19E-02
100-F-31_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	59	1.00E+05	5.93E-04	4.54E+04	1.31E-03
100-F-31_Shallow	non-Rad	Boron	7440-42-8	µg/kg	2,890	5.00E+02	**5.78E+00**	1.33E+05	2.17E-02
100-F-31_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	685	4.00E+03	1.71E-01	1.63E+03	4.20E-01
100-F-31_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	9,321	4.00E+02	**2.33E+01**	3.82E+04	2.44E-01

Table 3. Comparison of 100-F Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
100-F-31_Shallow	non-Rad	Chrysene	218-01-9	µg/kg	52	1.80E+04	2.87E-03	4.45E+04	1.16E-03
100-F-31_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	4,614	1.30E+04	3.55E-01	1.11E+05	4.14E-02
100-F-31_Shallow	non-Rad	Copper	7440-50-8	µg/kg	13,914	5.00E+04	2.78E-01	1.07E+05	1.30E-01
100-F-31_Shallow	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	34	No Value	--	No Value	--
100-F-31_Shallow	non-Rad	Fluoranthene	206-44-0	µg/kg	69	1.80E+04	3.81E-03	8.39E+05	8.17E-05
100-F-31_Shallow	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	363	No Value	--	1.25E+06	2.91E-04
100-F-31_Shallow	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	25	1.80E+04	1.39E-03	3.57E+04	7.01E-04
100-F-31_Shallow	non-Rad	Lead	7439-92-1	µg/kg	8,680	5.00E+04	1.74E-01	3.56E+04	2.44E-01
100-F-31_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	230,196	2.20E+05	**1.05E+00**	5.80E+06	3.97E-02
100-F-31_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	1,200	1.00E+02	**1.20E+01**	1.87E+03	6.43E-01
100-F-31_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	9,916	3.00E+04	3.31E-01	3.26E+04	3.04E-01
100-F-31_Shallow	non-Rad	Pyrene	129-00-0	µg/kg	89	1.80E+04	4.96E-03	6.00E+05	1.49E-04
100-F-31_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	34,376	2.00E+03	**1.72E+01**	3.11E+04	**1.10E+00**
100-F-31_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	45,652	5.00E+04	9.13E-01	6.78E+04	6.73E-01
100-F-33_Shallow	non-Rad	2-Methylnaphthalene	91-57-6	µg/kg	31	2.90E+04	1.06E-03	6.01E+03	5.11E-03
100-F-33_Shallow	non-Rad	Aroclor-1254	11097-69-1	µg/kg	190	4.00E+04	4.75E-03	1.47E+03	1.29E-01
100-F-33_Shallow	non-Rad	Aroclors HI		ug/kg	--	--	4.75E-03	--	1.29E-01
100-F-33_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	5,355	1.00E+04	5.35E-01	1.90E+05	2.83E-02
100-F-33_Shallow	non-Rad	Barium	7440-39-3	µg/kg	68,146	3.30E+05	2.07E-01	1.32E+06	5.15E-02
100-F-33_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	40	1.00E+04	3.98E-03	1.39E+04	2.86E-03
100-F-33_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	64	1.00E+05	6.36E-04	4.54E+04	1.40E-03
100-F-33_Shallow	non-Rad	Boron	7440-42-8	µg/kg	1,514	5.00E+02	**3.03E+00**	1.33E+05	1.14E-02
100-F-33_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	100	4.00E+03	2.49E-02	1.63E+03	6.11E-02
100-F-33_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	9,437	4.00E+02	**2.36E+01**	3.82E+04	2.47E-01
100-F-33_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	5,528	1.30E+04	4.25E-01	1.11E+05	4.96E-02
100-F-33_Shallow	non-Rad	Copper	7440-50-8	µg/kg	11,662	5.00E+04	2.33E-01	1.07E+05	1.09E-01
100-F-33_Shallow	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	27	No Value	--	No Value	--
100-F-33_Shallow	non-Rad	Lead	7439-92-1	µg/kg	9,061	5.00E+04	1.81E-01	3.56E+04	2.55E-01
100-F-33_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	256,825	2.20E+05	**1.17E+00**	5.80E+06	4.43E-02
100-F-33_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	47	1.00E+02	4.70E-01	1.87E+03	2.52E-02
100-F-33_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	255	2.00E+03	1.27E-01	1.40E+04	1.82E-02
100-F-33_Shallow	non-Rad	Naphthalene	91-20-3	µg/kg	22	2.90E+04	7.69E-04	1.00E+05	2.23E-04
100-F-33_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	10,321	3.00E+04	3.44E-01	3.26E+04	3.17E-01
100-F-33_Shallow	non-Rad	Phenol	108-95-2	µg/kg	19	3.00E+04	6.31E-04	1.51E+06	1.25E-05
100-F-33_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	34,010	2.00E+03	**1.70E+01**	3.11E+04	**1.09E+00**
100-F-33_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	71,718	5.00E+04	**1.43E+00**	6.78E+04	**1.06E+00**
100-F-33_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	347	5.00E+03	6.94E-02	5.98E+03	5.80E-02
100-F-33_Shallow_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	94	4.00E+04	2.35E-03	1.47E+03	6.37E-02
100-F-33_Shallow_Focused	non-Rad	Aroclors HI		ug/kg	--	--	2.35E-03	--	6.37E-02
100-F-33_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	3,000	1.00E+04	3.00E-01	1.90E+05	1.58E-02
100-F-33_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	68,200	3.30E+05	2.07E-01	1.32E+06	5.15E-02
100-F-33_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	408	1.00E+04	4.08E-02	1.39E+04	2.93E-02
100-F-33_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	2,700	5.00E+02	**5.40E+00**	1.33E+05	2.03E-02
100-F-33_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	171	4.00E+03	4.28E-02	1.63E+03	1.05E-01
100-F-33_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	13,400	4.00E+02	**3.35E+01**	3.82E+04	3.51E-01
100-F-33_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	6,500	1.30E+04	5.00E-01	1.11E+05	5.83E-02
100-F-33_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	44,200	5.00E+04	8.84E-01	1.07E+05	4.13E-01
100-F-33_Shallow_Focused	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	277	No Value	--	1.25E+06	2.22E-04
100-F-33_Shallow_Focused	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	17	1.80E+04	9.45E-04	3.57E+04	4.77E-04
100-F-33_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	14,700	5.00E+04	2.94E-01	3.56E+04	4.13E-01
100-F-33_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	312,000	2.20E+05	**1.42E+00**	5.80E+06	5.38E-02
100-F-33_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	266	2.00E+03	1.33E-01	1.40E+04	1.90E-02
100-F-33_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	11,800	3.00E+04	3.93E-01	3.26E+04	3.62E-01
100-F-33_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	50,400	2.00E+03	**2.52E+01**	3.11E+04	**1.62E+00**
100-F-33_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	58,200	5.00E+04	**1.16E+00**	6.78E+04	8.58E-01
100-F-33_Shallow_Focused	Rad	Cesium-137	10045-97-3	pCi/g	0.19	2.21E+03	8.46E-05	9.24E+02	2.02E-04

Table 3. Comparison of 100-F Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
100-F-33_Shallow_Focused	Rad	Europium-152	14683-23-9	pCi/g	0.095	1.47E+04	6.46E-06	1.74E+03	5.46E-05
100-F-33_Shallow_Focused	Rad	Rads SOF	---	pCi/g	--	--	9.11E-05	--	2.57E-04
100-F-33_Staging pile area_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	48	4.00E+04	1.20E-03	1.47E+03	3.26E-02
100-F-33_Staging pile area_Focused	non-Rad	Aroclors HI		ug/kg	--	--	1.20E-03	--	3.26E-02
100-F-33_Staging pile area_Focused	non-Rad	Barium	7440-39-3	µg/kg	77,400	3.30E+05	2.35E-01	1.32E+06	5.85E-02
100-F-33_Staging pile area_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	52	1.00E+05	5.18E-04	4.54E+04	1.14E-03
100-F-33_Staging pile area_Focused	non-Rad	Boron	7440-42-8	µg/kg	2,000	5.00E+02	**4.00E+00**	1.33E+05	1.50E-02
100-F-33_Staging pile area_Focused	non-Rad	Chromium	7440-47-3	µg/kg	9,400	4.00E+02	**2.35E+01**	3.82E+04	2.46E-01
100-F-33_Staging pile area_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	5,400	1.30E+04	4.15E-01	1.11E+05	4.84E-02
100-F-33_Staging pile area_Focused	non-Rad	Copper	7440-50-8	µg/kg	12,500	5.00E+04	2.50E-01	1.07E+05	1.17E-01
100-F-33_Staging pile area_Focused	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	30	No Value	--	No Value	--
100-F-33_Staging pile area_Focused	non-Rad	Lead	7439-92-1	µg/kg	7,300	5.00E+04	1.46E-01	3.56E+04	2.05E-01
100-F-33_Staging pile area_Focused	non-Rad	Manganese	7439-96-5	µg/kg	250,000	2.20E+05	**1.14E+00**	5.80E+06	4.31E-02
100-F-33_Staging pile area_Focused	non-Rad	Mercury	7439-97-6	µg/kg	381	1.00E+02	**3.81E+00**	1.87E+03	2.04E-01
100-F-33_Staging pile area_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	280	2.00E+03	1.40E-01	1.40E+04	2.01E-02
100-F-33_Staging pile area_Focused	non-Rad	Nickel	7440-02-0	µg/kg	9,900	3.00E+04	3.30E-01	3.26E+04	3.04E-01
100-F-33_Staging pile area_Focused	non-Rad	Silver	7440-22-4	µg/kg	174	2.00E+03	8.70E-02	4.96E+04	3.51E-03
100-F-33_Staging pile area_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	36,100	2.00E+03	**1.81E+01**	3.11E+04	**1.16E+00**
100-F-33_Staging pile area_Focused	non-Rad	Zinc	7440-66-6	µg/kg	49,000	5.00E+04	9.80E-01	6.78E+04	7.23E-01
100-F-35_Shallow	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	520	No Value	--	1.25E+06	4.18E-04
100-F-35_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	2,399	5.00E+03	4.80E-01	7.86E+05	3.05E-03
100-F-35_Shallow	Rad	Americium-241	14596-10-2	pCi/g	1.8	2.15E+04	8.51E-05	4.84E+03	3.78E-04
100-F-35_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	2.6	2.21E+03	1.16E-03	9.24E+02	2.77E-03
100-F-35_Shallow	Rad	Plutonium-239/240	PU-239/240	pCi/g	1.7	1.27E+04	1.32E-04	6.27E+03	2.68E-04
100-F-35_Shallow	Rad	Total beta radiostrontium	SR-RAD	pCi/g	0.64	3.58E+03	1.78E-04	9.11E+01	7.00E-03
100-F-35_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.91	5.16E+04	1.77E-05	6.37E+03	1.43E-04
100-F-35_Shallow	Rad	Uranium-238	U-238	pCi/g	0.81	1.57E+04	5.13E-05	5.15E+03	1.57E-04
100-F-35_Shallow	Rad	Rads SOF	---	pCi/g	--	--	1.62E-03	--	1.07E-02
100-F-36_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	1,800	1.00E+04	1.80E-01	1.90E+05	9.50E-03
100-F-36_Shallow	non-Rad	Barium	7440-39-3	µg/kg	33,500	3.30E+05	1.02E-01	1.32E+06	2.53E-02
100-F-36_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	190	1.00E+04	1.90E-02	1.39E+04	1.36E-02
100-F-36_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	6,900	4.00E+02	**1.73E+01**	3.82E+04	1.81E-01
100-F-36_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	3,800	1.30E+04	2.92E-01	1.11E+05	3.41E-02
100-F-36_Shallow	non-Rad	Copper	7440-50-8	µg/kg	10,200	5.00E+04	2.04E-01	1.07E+05	9.53E-02
100-F-36_Shallow	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	325	No Value	--	1.25E+06	2.61E-04
100-F-36_Shallow	non-Rad	Lead	7439-92-1	µg/kg	2,100	5.00E+04	4.20E-02	3.56E+04	5.90E-02
100-F-36_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	195,000	2.20E+05	8.86E-01	5.80E+06	3.36E-02
100-F-36_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	8,100	3.00E+04	2.70E-01	3.26E+04	2.49E-01
100-F-36_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	3,007	5.00E+03	6.01E-01	7.86E+05	3.83E-03
100-F-36_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	27,700	2.00E+03	**1.39E+01**	3.11E+04	8.90E-01
100-F-36_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	25,300	5.00E+04	5.06E-01	6.78E+04	3.73E-01
100-F-36_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.69	5.16E+04	1.33E-05	6.37E+03	1.08E-04
100-F-36_Shallow	Rad	Uranium-238	U-238	pCi/g	1.0	1.57E+04	6.43E-05	5.15E+03	1.96E-04
100-F-36_Shallow	Rad	Rads SOF	---	pCi/g	--	--	7.76E-05	--	3.04E-04
100-F-36_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	3,000	1.00E+04	3.00E-01	1.90E+05	1.58E-02
100-F-36_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	86,100	3.30E+05	2.61E-01	1.32E+06	6.51E-02
100-F-36_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	350	1.00E+04	3.50E-02	1.39E+04	2.51E-02
100-F-36_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,200	5.00E+02	**2.40E+00**	1.33E+05	9.03E-03
100-F-36_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	8,800	4.00E+02	**2.20E+01**	3.82E+04	2.31E-01
100-F-36_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	6,900	1.30E+04	5.31E-01	1.11E+05	6.19E-02
100-F-36_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	12,100	5.00E+04	2.42E-01	1.07E+05	1.13E-01
100-F-36_Shallow_Focused	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	866	No Value	--	1.25E+06	6.95E-04
100-F-36_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	5,500	5.00E+04	1.10E-01	3.56E+04	1.55E-01
100-F-36_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	356,000	2.20E+05	**1.62E+00**	5.80E+06	6.14E-02
100-F-36_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	9,000	3.00E+04	3.00E-01	3.26E+04	2.76E-01
100-F-36_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	2,131	5.00E+03	4.26E-01	7.86E+05	2.71E-03

Table 3. Comparison of 100-F Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
100-F-36_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	44,800	2.00E+03	**2.24E+01**	3.11E+04	**1.44E+00**
100-F-36_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	41,000	5.00E+04	8.20E-01	6.78E+04	6.05E-01
100-F-36_Shallow_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	0.57	5.16E+04	1.10E-05	6.37E+03	8.93E-05
100-F-36_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	0.72	1.57E+04	4.56E-05	5.15E+03	1.39E-04
100-F-36_Shallow_Focused	Rad	Rads SOF	---	pCi/g	--	--	5.66E-05	--	2.28E-04
100-F-37_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	17,300	1.00E+04	**1.73E+00**	1.90E+05	9.13E-02
100-F-37_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	508,000	3.30E+05	**1.54E+00**	1.32E+06	3.84E-01
100-F-37_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	340	1.00E+05	3.40E-03	4.54E+04	7.49E-03
100-F-37_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	710	4.00E+03	1.78E-01	1.63E+03	4.36E-01
100-F-37_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	18,100	4.00E+02	**4.53E+01**	3.82E+04	4.74E-01
100-F-37_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	214,000	5.00E+04	**4.28E+00**	3.56E+04	**6.01E+00**
100-F-37_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	70	1.00E+02	7.00E-01	1.87E+03	3.75E-02
100-F-38_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	32	4.00E+04	8.00E-04	1.47E+03	2.17E-02
100-F-38_Shallow_Focused	non-Rad	Aroclors HI		ug/kg	--	--	8.00E-04	--	2.17E-02
100-F-38_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	2,400	1.00E+04	2.40E-01	1.90E+05	1.27E-02
100-F-38_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	388,000	3.30E+05	**1.18E+00**	1.32E+06	2.93E-01
100-F-38_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	434	1.00E+04	4.34E-02	1.39E+04	3.11E-02
100-F-38_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	513	1.00E+05	5.13E-03	4.54E+04	1.13E-02
100-F-38_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	23,500	5.00E+02	**4.70E+01**	1.33E+05	1.77E-01
100-F-38_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	117	4.00E+03	2.93E-02	1.63E+03	7.18E-02
100-F-38_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	14,500	4.00E+02	**3.63E+01**	3.82E+04	3.80E-01
100-F-38_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	6,300	1.30E+04	4.85E-01	1.11E+05	5.65E-02
100-F-38_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	18,000	5.00E+04	3.60E-01	1.07E+05	1.68E-01
100-F-38_Shallow_Focused	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	47	No Value	**--**	No Value	**--**
100-F-38_Shallow_Focused	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	1,900	No Value	**--**	1.25E+06	1.53E-03
100-F-38_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	38,400	5.00E+04	7.68E-01	3.56E+04	**1.08E+00**
100-F-38_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	291,000	2.20E+05	**1.32E+00**	5.80E+06	5.02E-02
100-F-38_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	510	2.00E+03	2.55E-01	1.40E+04	3.65E-02
100-F-38_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	10,800	3.00E+04	3.60E-01	3.26E+04	3.31E-01
100-F-38_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	44,100	2.00E+03	**2.21E+01**	3.11E+04	**1.42E+00**
100-F-38_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	36,400	5.00E+04	7.28E-01	6.78E+04	5.37E-01
100-F-4_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	16,100	4.00E+02	**4.03E+01**	3.82E+04	4.22E-01
100-F-4_Shallow_Focused	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	3,200	No Value	**--**	1.25E+06	2.57E-03
100-F-4_Shallow_Focused	Rad	Plutonium-239/240	PU-239/240	pCi/g	0.052	1.27E+04	4.09E-06	6.27E+03	8.29E-06
100-F-4_Shallow_Focused	Rad	Rads SOF	---	pCi/g	--	--	4.09E-06	--	8.29E-06
100-F-44:2_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	2,200	1.00E+04	2.20E-01	1.90E+05	1.16E-02
100-F-44:2_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	51,800	3.30E+05	1.57E-01	1.32E+06	3.92E-02
100-F-44:2_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	140	1.00E+04	1.40E-02	1.39E+04	1.00E-02
100-F-44:2_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,800	5.00E+02	**3.60E+00**	1.33E+05	1.35E-02
100-F-44:2_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	70	4.00E+03	1.75E-02	1.63E+03	4.29E-02
100-F-44:2_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	9,200	4.00E+02	**2.30E+01**	3.82E+04	2.41E-01
100-F-44:2_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	4,800	1.30E+04	3.69E-01	1.11E+05	4.31E-02
100-F-44:2_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	14,800	5.00E+04	2.96E-01	1.07E+05	1.38E-01
100-F-44:2_Shallow_Focused	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	280	No Value	**--**	1.25E+06	2.25E-04
100-F-44:2_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	3,200	5.00E+04	6.40E-02	3.56E+04	8.99E-02
100-F-44:2_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	235,000	2.20E+05	**1.07E+00**	5.80E+06	4.05E-02
100-F-44:2_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	20	1.00E+02	2.00E-01	1.87E+03	1.07E-02
100-F-44:2_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	10,600	3.00E+04	3.53E-01	3.26E+04	3.25E-01
100-F-44:2_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	31,600	2.00E+03	**1.58E+01**	3.11E+04	**1.02E+00**
100-F-44:2_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	90,700	5.00E+04	**1.81E+00**	6.78E+04	**1.34E+00**
100-F-44:5_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	2,300	1.00E+04	2.30E-01	1.90E+05	1.21E-02
100-F-44:5_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	46,400	3.30E+05	1.41E-01	1.32E+06	3.51E-02
100-F-44:5_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	340	1.00E+04	3.40E-02	1.39E+04	2.44E-02
100-F-44:5_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	2,100	5.00E+02	**4.20E+00**	1.33E+05	1.58E-02
100-F-44:5_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	7,900	4.00E+02	**1.98E+01**	3.82E+04	2.07E-01
100-F-44:5_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	7,200	1.30E+04	5.54E-01	1.11E+05	6.46E-02

Table 3. Comparison of 100-F Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
100-F-44:5_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	12,500	5.00E+04	2.50E-01	1.07E+05	1.17E-01
100-F-44:5_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	3,100	5.00E+04	6.20E-02	3.56E+04	8.71E-02
100-F-44:5_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	250,000	2.20E+05	**1.14E+00**	5.80E+06	4.31E-02
100-F-44:5_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	11,200	3.00E+04	3.73E-01	3.26E+04	3.44E-01
100-F-44:5_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	30,600	2.00E+03	**1.53E+01**	3.11E+04	9.83E-01
100-F-44:5_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	29,100	5.00E+04	5.82E-01	6.78E+04	4.29E-01
100-F-44:8_Shallow	non-Rad	Anthracene	120-12-7	µg/kg	9.1	2.90E+04	3.14E-04	6.78E+05	1.34E-05
100-F-44:8_Shallow	non-Rad	Antimony	7440-36-0	µg/kg	360	5.00E+03	7.20E-02	5.98E+03	6.02E-02
100-F-44:8_Shallow	non-Rad	Aroclor-1254	11097-69-1	µg/kg	84	4.00E+04	2.09E-03	1.47E+03	5.68E-02
100-F-44:8_Shallow	non-Rad	Aroclor-1260	11096-82-5	µg/kg	59	4.00E+04	1.47E-03	1.47E+03	4.00E-02
100-F-44:8_Shallow	non-Rad	Aroclors HI		ug/kg	--	--	3.56E-03	--	9.68E-02
100-F-44:8_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	2,416	1.00E+04	2.42E-01	1.90E+05	1.27E-02
100-F-44:8_Shallow	non-Rad	Barium	7440-39-3	µg/kg	125,676	3.30E+05	3.81E-01	1.32E+06	9.50E-02
100-F-44:8_Shallow	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	23	1.80E+04	1.30E-03	6.40E+04	3.65E-04
100-F-44:8_Shallow	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	36	1.80E+04	1.99E-03	7.64E+04	4.69E-04
100-F-44:8_Shallow	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	18	1.80E+04	1.00E-03	3.92E+04	4.59E-04
100-F-44:8_Shallow	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	7.8	1.80E+04	4.32E-04	3.92E+04	1.98E-04
100-F-44:8_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	143	1.00E+04	1.43E-02	1.39E+04	1.02E-02
100-F-44:8_Shallow	non-Rad	Boron	7440-42-8	µg/kg	11,762	5.00E+02	**2.35E+01**	1.33E+05	8.85E-02
100-F-44:8_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	95	4.00E+03	2.37E-02	1.63E+03	5.82E-02
100-F-44:8_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	10,810	4.00E+02	**2.70E+01**	3.82E+04	2.83E-01
100-F-44:8_Shallow	non-Rad	Chrysene	218-01-9	µg/kg	23	1.80E+04	1.26E-03	4.45E+04	5.09E-04
100-F-44:8_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	6,982	1.30E+04	5.37E-01	1.11E+05	6.26E-02
100-F-44:8_Shallow	non-Rad	Copper	7440-50-8	µg/kg	16,533	5.00E+04	3.31E-01	1.07E+05	1.54E-01
100-F-44:8_Shallow	non-Rad	Fluoranthene	206-44-0	µg/kg	35	1.80E+04	1.92E-03	8.39E+05	4.12E-05
100-F-44:8_Shallow	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	19	1.80E+04	1.06E-03	3.57E+04	5.33E-04
100-F-44:8_Shallow	non-Rad	Lead	7439-92-1	µg/kg	5,741	5.00E+04	1.15E-01	3.56E+04	1.61E-01
100-F-44:8_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	289,822	2.20E+05	**1.32E+00**	5.80E+06	5.00E-02
100-F-44:8_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	106	1.00E+02	**1.06E+00**	1.87E+03	5.67E-02
100-F-44:8_Shallow	non-Rad	Methylene chloride	75-09-2	µg/kg	3.1	No Value	**--**	1.66E+05	1.84E-05
100-F-44:8_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	386	2.00E+03	1.93E-01	1.40E+04	2.76E-02
100-F-44:8_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	11,934	3.00E+04	3.98E-01	3.26E+04	3.66E-01
100-F-44:8_Shallow	non-Rad	Pyrene	129-00-0	µg/kg	39	1.80E+04	2.17E-03	6.00E+05	6.50E-05
100-F-44:8_Shallow	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	µg/kg	47,322	2.00E+05	2.37E-01	3.56E+08	1.33E-04
100-F-44:8_Shallow	non-Rad	Total petroleum hydrocarbons - diesel range extended to C36	TPHDIESELEXT	µg/kg	105,648	No Value	**--**	No Value	**--**
100-F-44:8_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	49,287	2.00E+03	**2.46E+01**	3.11E+04	**1.58E+00**
100-F-44:8_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	47,891	5.00E+04	9.58E-01	6.78E+04	7.06E-01
100-F-44:8_Staging Pile Area Footprint	non-Rad	Aroclor-1254	11097-69-1	µg/kg	26	4.00E+04	6.47E-04	1.47E+03	1.75E-02
100-F-44:8_Staging Pile Area Footprint	non-Rad	Aroclor-1260	11096-82-5	µg/kg	29	4.00E+04	7.21E-04	1.47E+03	1.96E-02
100-F-44:8_Staging Pile Area Footprint	non-Rad	Aroclors HI		ug/kg	--	--	1.37E-03	--	3.71E-02
100-F-44:8_Staging Pile Area Footprint	non-Rad	Arsenic	7440-38-2	µg/kg	2,392	1.00E+04	2.39E-01	1.90E+05	1.26E-02
100-F-44:8_Staging Pile Area Footprint	non-Rad	Barium	7440-39-3	µg/kg	69,258	3.30E+05	2.10E-01	1.32E+06	5.23E-02
100-F-44:8_Staging Pile Area Footprint	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	31	1.80E+04	1.72E-03	6.40E+04	4.84E-04
100-F-44:8_Staging Pile Area Footprint	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	31	1.80E+04	1.72E-03	7.64E+04	4.06E-04
100-F-44:8_Staging Pile Area Footprint	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	26	1.80E+04	1.44E-03	3.92E+04	6.63E-04
100-F-44:8_Staging Pile Area Footprint	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	6.7	1.80E+04	3.72E-04	3.92E+04	1.71E-04
100-F-44:8_Staging Pile Area Footprint	non-Rad	Beryllium	7440-41-7	µg/kg	99	1.00E+04	9.85E-03	1.39E+04	7.06E-03
100-F-44:8_Staging Pile Area Footprint	non-Rad	Boron	7440-42-8	µg/kg	1,433	5.00E+02	**2.87E+00**	1.33E+05	1.08E-02
100-F-44:8_Staging Pile Area Footprint	non-Rad	Cadmium	7440-43-9	µg/kg	96	4.00E+03	2.41E-02	1.63E+03	5.91E-02
100-F-44:8_Staging Pile Area Footprint	non-Rad	Chromium	7440-47-3	µg/kg	8,432	4.00E+02	**2.11E+01**	3.82E+04	2.21E-01
100-F-44:8_Staging Pile Area Footprint	non-Rad	Chrysene	218-01-9	µg/kg	24	1.80E+04	1.33E-03	4.45E+04	5.39E-04
100-F-44:8_Staging Pile Area Footprint	non-Rad	Cobalt	7440-48-4	µg/kg	7,348	1.30E+04	5.65E-01	1.11E+05	6.59E-02
100-F-44:8_Staging Pile Area Footprint	non-Rad	Copper	7440-50-8	µg/kg	13,669	5.00E+04	2.73E-01	1.07E+05	1.28E-01
100-F-44:8_Staging Pile Area Footprint	non-Rad	Fluoranthene	206-44-0	µg/kg	50	1.80E+04	2.78E-03	8.39E+05	5.96E-05
100-F-44:8_Staging Pile Area Footprint	non-Rad	Lead	7439-92-1	µg/kg	5,664	5.00E+04	1.13E-01	3.56E+04	1.59E-01
100-F-44:8_Staging Pile Area Footprint	non-Rad	Manganese	7439-96-5	µg/kg	271,082	2.20E+05	**1.23E+00**	5.80E+06	4.68E-02

Table 3. Comparison of 100-F Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
100-F-44:8_Staging Pile Area Footprint	non-Rad	Mercury	7439-97-6	µg/kg	53	1.00E+02	5.32E-01	1.87E+03	2.85E-02
100-F-44:8_Staging Pile Area Footprint	non-Rad	Methylene chloride	75-09-2	µg/kg	3.1	No Value	--	1.66E+05	1.87E-05
100-F-44:8_Staging Pile Area Footprint	non-Rad	Nickel	7440-02-0	µg/kg	10,454	3.00E+04	3.48E-01	3.26E+04	3.21E-01
100-F-44:8_Staging Pile Area Footprint	non-Rad	Pyrene	129-00-0	µg/kg	56	1.80E+04	3.11E-03	6.00E+05	9.33E-05
100-F-44:8_Staging Pile Area Footprint	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	µg/kg	13,238	2.00E+05	6.62E-02	3.56E+08	3.71E-05
100-F-44:8_Staging Pile Area Footprint	non-Rad	Total petroleum hydrocarbons - diesel range extended to C36	TPHDIESELEXT	µg/kg	110,000	No Value	--	No Value	--
100-F-44:8_Staging Pile Area Footprint	non-Rad	Vanadium	7440-62-2	µg/kg	50,796	2.00E+03	**2.54E+01**	3.11E+04	**1.63E+00**
100-F-44:8_Staging Pile Area Footprint	non-Rad	Zinc	7440-66-6	µg/kg	43,092	5.00E+04	8.62E-01	6.78E+04	6.36E-01
100-F-44:9_Overburden_Focused	non-Rad	Antimony	7440-36-0	µg/kg	520	5.00E+03	1.04E-01	5.98E+03	8.69E-02
100-F-44:9_Overburden_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	31	4.00E+04	7.75E-04	1.47E+03	2.10E-02
100-F-44:9_Overburden_Focused	non-Rad	Aroclors HI		ug/kg	--	--	7.75E-04	--	2.10E-02
100-F-44:9_Overburden_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	4,000	1.00E+04	4.00E-01	1.90E+05	2.11E-02
100-F-44:9_Overburden_Focused	non-Rad	Barium	7440-39-3	µg/kg	62,300	3.30E+05	1.89E-01	1.32E+06	4.71E-02
100-F-44:9_Overburden_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	88	1.00E+04	8.80E-03	1.39E+04	6.31E-03
100-F-44:9_Overburden_Focused	non-Rad	Boron	7440-42-8	µg/kg	2,000	5.00E+02	**4.00E+00**	1.33E+05	1.50E-02
100-F-44:9_Overburden_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	210	4.00E+03	5.25E-02	1.63E+03	1.29E-01
100-F-44:9_Overburden_Focused	non-Rad	Chromium	7440-47-3	µg/kg	9,700	4.00E+02	**2.43E+01**	3.82E+04	2.54E-01
100-F-44:9_Overburden_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	7,100	1.30E+04	5.46E-01	1.11E+05	6.37E-02
100-F-44:9_Overburden_Focused	non-Rad	Copper	7440-50-8	µg/kg	17,800	5.00E+04	3.56E-01	1.07E+05	1.66E-01
100-F-44:9_Overburden_Focused	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	311	No Value	--	1.25E+06	2.50E-04
100-F-44:9_Overburden_Focused	non-Rad	Lead	7439-92-1	µg/kg	13,600	5.00E+04	2.72E-01	3.56E+04	3.82E-01
100-F-44:9_Overburden_Focused	non-Rad	Manganese	7439-96-5	µg/kg	281,000	2.20E+05	**1.28E+00**	5.80E+06	4.85E-02
100-F-44:9_Overburden_Focused	non-Rad	Mercury	7439-97-6	µg/kg	23	1.00E+02	2.30E-01	1.87E+03	1.23E-02
100-F-44:9_Overburden_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	850	2.00E+03	4.25E-01	1.40E+04	6.09E-02
100-F-44:9_Overburden_Focused	non-Rad	Nickel	7440-02-0	µg/kg	18,600	3.00E+04	6.20E-01	3.26E+04	5.71E-01
100-F-44:9_Overburden_Focused	non-Rad	Selenium	7782-49-2	µg/kg	1,100	5.20E+02	**2.12E+00**	1.90E+03	5.79E-01
100-F-44:9_Overburden_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	42,200	2.00E+03	**2.11E+01**	3.11E+04	**1.36E+00**
100-F-44:9_Overburden_Focused	non-Rad	Zinc	7440-66-6	µg/kg	55,300	5.00E+04	**1.11E+00**	6.78E+04	8.16E-01
100-F-44:9_Overburden_Focused	Rad	Cesium-137	10045-97-3	pCi/g	0.081	2.21E+03	3.68E-05	9.24E+02	8.80E-05
100-F-44:9_Overburden_Focused	Rad	Europium-152	14683-23-9	pCi/g	0.12	1.47E+04	8.03E-06	1.74E+03	6.78E-05
100-F-44:9_Overburden_Focused	Rad	Tritium	10028-17-8	pCi/g	0.018	1.68E+06	1.08E-08	4.20E+02	4.33E-05
100-F-44:9_Overburden_Focused	Rad	Rads SOF	---	pCi/g	--	--	4.48E-05	--	1.99E-04
100-F-44:9_Shallow	non-Rad	Antimony	7440-36-0	µg/kg	510	5.00E+03	1.02E-01	5.98E+03	8.52E-02
100-F-44:9_Shallow	non-Rad	Aroclor-1260	11096-82-5	µg/kg	34	4.00E+04	8.38E-04	1.47E+03	2.27E-02
100-F-44:9_Shallow	non-Rad	Aroclors HI		ug/kg	--	--	8.38E-04	--	2.27E-02
100-F-44:9_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	4,733	1.00E+04	4.73E-01	1.90E+05	2.50E-02
100-F-44:9_Shallow	non-Rad	Barium	7440-39-3	µg/kg	59,638	3.30E+05	1.81E-01	1.32E+06	4.51E-02
100-F-44:9_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	173	1.00E+04	1.73E-02	1.39E+04	1.24E-02
100-F-44:9_Shallow	non-Rad	Boron	7440-42-8	µg/kg	1,450	5.00E+02	**2.90E+00**	1.33E+05	1.09E-02
100-F-44:9_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	92	4.00E+03	2.31E-02	1.63E+03	5.67E-02
100-F-44:9_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	11,182	4.00E+02	**2.80E+01**	3.82E+04	2.93E-01
100-F-44:9_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	6,559	1.30E+04	5.05E-01	1.11E+05	5.88E-02
100-F-44:9_Shallow	non-Rad	Copper	7440-50-8	µg/kg	16,504	5.00E+04	3.30E-01	1.07E+05	1.54E-01
100-F-44:9_Shallow	non-Rad	Lead	7439-92-1	µg/kg	6,400	5.00E+04	1.28E-01	3.56E+04	1.80E-01
100-F-44:9_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	290,704	2.20E+05	**1.32E+00**	5.80E+06	5.01E-02
100-F-44:9_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	33	1.00E+02	3.26E-01	1.87E+03	1.75E-02
100-F-44:9_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	374	2.00E+03	1.87E-01	1.40E+04	2.68E-02
100-F-44:9_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	10,979	3.00E+04	3.66E-01	3.26E+04	3.37E-01
100-F-44:9_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	42,977	2.00E+03	**2.15E+01**	3.11E+04	**1.38E+00**
100-F-44:9_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	52,535	5.00E+04	**1.05E+00**	6.78E+04	7.75E-01
100-F-44:9_Shallow	Rad	Total beta radiostrontium	SR-RAD	pCi/g	0.21	3.58E+03	5.89E-05	9.11E+01	2.32E-03
100-F-44:9_Shallow	Rad	Tritium	10028-17-8	pCi/g	0.015	1.68E+06	9.05E-09	4.20E+02	3.62E-05
100-F-44:9_Shallow	Rad	Rads SOF	---	pCi/g	--	--	5.89E-05	--	2.36E-03
100-F-44:9_Staging Pile Area Footprint	non-Rad	Aroclor-1260	11096-82-5	µg/kg	27	4.00E+04	6.71E-04	1.47E+03	1.82E-02
100-F-44:9_Staging Pile Area Footprint	non-Rad	Aroclors HI		ug/kg	--	--	6.71E-04	--	1.82E-02
100-F-44:9_Staging Pile Area Footprint	non-Rad	Arsenic	7440-38-2	µg/kg	2,142	1.00E+04	2.14E-01	1.90E+05	1.13E-02

Table 3. Comparison of 100-F Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
100-F-44:9_Staging Pile Area Footprint	non-Rad	Barium	7440-39-3	µg/kg	65,552	3.30E+05	1.99E-01	1.32E+06	4.95E-02
100-F-44:9_Staging Pile Area Footprint	non-Rad	Beryllium	7440-41-7	µg/kg	134	1.00E+04	1.34E-02	1.39E+04	9.61E-03
100-F-44:9_Staging Pile Area Footprint	non-Rad	Boron	7440-42-8	µg/kg	1,980	5.00E+02	**3.96E+00**	1.33E+05	1.49E-02
100-F-44:9_Staging Pile Area Footprint	non-Rad	Cadmium	7440-43-9	µg/kg	86	4.00E+03	2.14E-02	1.63E+03	5.26E-02
100-F-44:9_Staging Pile Area Footprint	non-Rad	Chromium	7440-47-3	µg/kg	12,509	4.00E+02	**3.13E+01**	3.82E+04	3.28E-01
100-F-44:9_Staging Pile Area Footprint	non-Rad	Cobalt	7440-48-4	µg/kg	7,335	1.30E+04	5.64E-01	1.11E+05	6.58E-02
100-F-44:9_Staging Pile Area Footprint	non-Rad	Copper	7440-50-8	µg/kg	15,113	5.00E+04	3.02E-01	1.07E+05	1.41E-01
100-F-44:9_Staging Pile Area Footprint	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	178	No Value	--	1.25E+06	1.43E-04
100-F-44:9_Staging Pile Area Footprint	non-Rad	Lead	7439-92-1	µg/kg	4,786	5.00E+04	9.57E-02	3.56E+04	1.35E-01
100-F-44:9_Staging Pile Area Footprint	non-Rad	Manganese	7439-96-5	µg/kg	304,989	2.20E+05	**1.39E+00**	5.80E+06	5.26E-02
100-F-44:9_Staging Pile Area Footprint	non-Rad	Mercury	7439-97-6	µg/kg	34	1.00E+02	3.35E-01	1.87E+03	1.79E-02
100-F-44:9_Staging Pile Area Footprint	non-Rad	Molybdenum	7439-98-7	µg/kg	450	2.00E+03	2.25E-01	1.40E+04	3.22E-02
100-F-44:9_Staging Pile Area Footprint	non-Rad	Nickel	7440-02-0	µg/kg	11,033	3.00E+04	3.68E-01	3.26E+04	3.39E-01
100-F-44:9_Staging Pile Area Footprint	non-Rad	Selenium	7782-49-2	µg/kg	930	5.20E+02	**1.79E+00**	1.90E+03	4.90E-01
100-F-44:9_Staging Pile Area Footprint	non-Rad	Silver	7440-22-4	µg/kg	430	2.00E+03	2.15E-01	4.96E+04	8.67E-03
100-F-44:9_Staging Pile Area Footprint	non-Rad	Vanadium	7440-62-2	µg/kg	46,865	2.00E+03	**2.34E+01**	3.11E+04	**1.51E+00**
100-F-44:9_Staging Pile Area Footprint	non-Rad	Zinc	7440-66-6	µg/kg	40,985	5.00E+04	8.20E-01	6.78E+04	6.05E-01
100-F-44:9_Staging Pile Area Footprint	Rad	Cesium-137	10045-97-3	pCi/g	0.18	2.21E+03	8.05E-05	9.24E+02	1.93E-04
100-F-44:9_Staging Pile Area Footprint	Rad	Europium-152	14683-23-9	pCi/g	1.1	1.47E+04	7.28E-05	1.74E+03	6.15E-04
100-F-44:9_Staging Pile Area Footprint	Rad	Tritium	10028-17-8	pCi/g	0.090	1.68E+06	5.35E-08	4.20E+02	2.14E-04
100-F-44:9_Staging Pile Area Footprint	Rad	Rads SOF	---	pCi/g	--	--	1.53E-04	--	1.02E-03
100-F-45_Overburden_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	2,400	1.00E+04	2.40E-01	1.90E+05	1.27E-02
100-F-45_Overburden_Focused	non-Rad	Barium	7440-39-3	µg/kg	58,700	3.30E+05	1.78E-01	1.32E+06	4.44E-02
100-F-45_Overburden_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	160	1.00E+04	1.60E-02	1.39E+04	1.15E-02
100-F-45_Overburden_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,300	5.00E+02	**2.60E+00**	1.33E+05	9.78E-03
100-F-45_Overburden_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	98	4.00E+03	2.45E-02	1.63E+03	6.01E-02
100-F-45_Overburden_Focused	non-Rad	Chromium	7440-47-3	µg/kg	20,700	4.00E+02	**5.18E+01**	3.82E+04	5.42E-01
100-F-45_Overburden_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	5,300	1.30E+04	4.08E-01	1.11E+05	4.75E-02
100-F-45_Overburden_Focused	non-Rad	Copper	7440-50-8	µg/kg	11,500	5.00E+04	2.30E-01	1.07E+05	1.07E-01
100-F-45_Overburden_Focused	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	231	No Value	--	1.25E+06	1.85E-04
100-F-45_Overburden_Focused	non-Rad	Lead	7439-92-1	µg/kg	4,700	5.00E+04	9.40E-02	3.56E+04	1.32E-01
100-F-45_Overburden_Focused	non-Rad	Manganese	7439-96-5	µg/kg	237,000	2.20E+05	**1.08E+00**	5.80E+06	4.09E-02
100-F-45_Overburden_Focused	non-Rad	Mercury	7439-97-6	µg/kg	59	1.00E+02	5.90E-01	1.87E+03	3.16E-02
100-F-45_Overburden_Focused	non-Rad	Nickel	7440-02-0	µg/kg	10,600	3.00E+04	3.53E-01	3.26E+04	3.25E-01
100-F-45_Overburden_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	34,500	2.00E+03	**1.73E+01**	3.11E+04	**1.11E+00**
100-F-45_Overburden_Focused	non-Rad	Zinc	7440-66-6	µg/kg	34,500	5.00E+04	6.90E-01	6.78E+04	5.09E-01
100-F-45_Overburden_Focused	Rad	Cesium-137	10045-97-3	pCi/g	0.067	2.21E+03	3.03E-05	9.24E+02	7.24E-05
100-F-45_Overburden_Focused	Rad	Rads SOF	---	pCi/g	--	--	3.03E-05	--	7.24E-05
100-F-45_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	2,484	1.00E+04	2.48E-01	1.90E+05	1.31E-02
100-F-45_Shallow	non-Rad	Barium	7440-39-3	µg/kg	72,078	3.30E+05	2.18E-01	1.32E+06	5.45E-02
100-F-45_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	108	1.00E+04	1.08E-02	1.39E+04	7.77E-03
100-F-45_Shallow	non-Rad	Boron	7440-42-8	µg/kg	1,700	5.00E+02	**3.40E+00**	1.33E+05	1.28E-02
100-F-45_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	290	4.00E+03	7.25E-02	1.63E+03	1.78E-01
100-F-45_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	34,335	4.00E+02	**8.58E+01**	3.82E+04	9.00E-01
100-F-45_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	5,959	1.30E+04	4.58E-01	1.11E+05	5.34E-02
100-F-45_Shallow	non-Rad	Copper	7440-50-8	µg/kg	17,272	5.00E+04	3.45E-01	1.07E+05	1.61E-01
100-F-45_Shallow	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	960	No Value	--	1.25E+06	7.71E-04
100-F-45_Shallow	non-Rad	Lead	7439-92-1	µg/kg	7,617	5.00E+04	1.52E-01	3.56E+04	2.14E-01
100-F-45_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	274,740	2.20E+05	**1.25E+00**	5.80E+06	4.74E-02
100-F-45_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	1,034	1.00E+02	**1.03E+01**	1.87E+03	5.54E-01
100-F-45_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	487	2.00E+03	2.43E-01	1.40E+04	3.49E-02
100-F-45_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	11,261	3.00E+04	3.75E-01	3.26E+04	3.46E-01
100-F-45_Shallow	non-Rad	Silver	7440-22-4	µg/kg	180	2.00E+03	9.00E-02	4.96E+04	3.63E-03
100-F-45_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	38,311	2.00E+03	**1.92E+01**	3.11E+04	**1.23E+00**
100-F-45_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	54,296	5.00E+04	**1.09E+00**	6.78E+04	8.01E-01
100-F-45_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	1.7	2.21E+03	7.59E-04	9.24E+02	1.82E-03

Table 3. Comparison of 100-F Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
100-F-45_Shallow	Rad	Europium-152	14683-23-9	pCi/g	0.32	1.47E+04	2.20E-05	1.74E+03	1.86E-04
100-F-45_Shallow	Rad	Rads SOF	---	pCi/g	--	--	7.81E-04	--	2.01E-03
100-F-45_Staging Pile Area Footprint	non-Rad	Arsenic	7440-38-2	µg/kg	2,349	1.00E+04	2.35E-01	1.90E+05	1.24E-02
100-F-45_Staging Pile Area Footprint	non-Rad	Barium	7440-39-3	µg/kg	79,938	3.30E+05	2.42E-01	1.32E+06	6.04E-02
100-F-45_Staging Pile Area Footprint	non-Rad	Beryllium	7440-41-7	µg/kg	156	1.00E+04	1.56E-02	1.39E+04	1.12E-02
100-F-45_Staging Pile Area Footprint	non-Rad	Boron	7440-42-8	µg/kg	2,766	5.00E+02	**5.53E+00**	1.33E+05	2.08E-02
100-F-45_Staging Pile Area Footprint	non-Rad	Cadmium	7440-43-9	µg/kg	91	4.00E+03	2.27E-02	1.63E+03	5.56E-02
100-F-45_Staging Pile Area Footprint	non-Rad	Chromium	7440-47-3	µg/kg	11,780	4.00E+02	**2.94E+01**	3.82E+04	3.09E-01
100-F-45_Staging Pile Area Footprint	non-Rad	Cobalt	7440-48-4	µg/kg	6,154	1.30E+04	4.73E-01	1.11E+05	5.52E-02
100-F-45_Staging Pile Area Footprint	non-Rad	Copper	7440-50-8	µg/kg	12,140	5.00E+04	2.43E-01	1.07E+05	1.13E-01
100-F-45_Staging Pile Area Footprint	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	274	No Value	--	1.25E+06	2.20E-04
100-F-45_Staging Pile Area Footprint	non-Rad	Lead	7439-92-1	µg/kg	5,644	5.00E+04	1.13E-01	3.56E+04	1.59E-01
100-F-45_Staging Pile Area Footprint	non-Rad	Manganese	7439-96-5	µg/kg	254,059	2.20E+05	**1.15E+00**	5.80E+06	4.38E-02
100-F-45_Staging Pile Area Footprint	non-Rad	Mercury	7439-97-6	µg/kg	15	1.00E+02	1.49E-01	1.87E+03	7.97E-03
100-F-45_Staging Pile Area Footprint	non-Rad	Molybdenum	7439-98-7	µg/kg	310	2.00E+03	1.55E-01	1.40E+04	2.22E-02
100-F-45_Staging Pile Area Footprint	non-Rad	Nickel	7440-02-0	µg/kg	10,032	3.00E+04	3.34E-01	3.26E+04	3.08E-01
100-F-45_Staging Pile Area Footprint	non-Rad	Vanadium	7440-62-2	µg/kg	40,197	2.00E+03	**2.01E+01**	3.11E+04	**1.29E+00**
100-F-45_Staging Pile Area Footprint	non-Rad	Zinc	7440-66-6	µg/kg	36,668	5.00E+04	7.33E-01	6.78E+04	5.41E-01
100-F-45_Staging Pile Area Footprint	Rad	Cesium-137	10045-97-3	pCi/g	0.11	2.21E+03	4.79E-05	9.24E+02	1.15E-04
100-F-45_Staging Pile Area Footprint	Rad	Rads SOF	---	pCi/g	--	--	4.79E-05	--	1.15E-04
100-F-46_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	1,200	5.00E+03	2.40E-01	5.98E+03	2.01E-01
100-F-46_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	4.8	4.00E+04	1.20E-04	1.47E+03	3.26E-03
100-F-46_Shallow_Focused	non-Rad	Aroclors HI		ug/kg	--	--	1.20E-04	--	3.26E-03
100-F-46_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	1,900	1.00E+04	1.90E-01	1.90E+05	1.00E-02
100-F-46_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	57,700	3.30E+05	1.75E-01	1.32E+06	4.36E-02
100-F-46_Shallow_Focused	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	3.9	1.80E+04	2.17E-04	6.40E+04	6.09E-05
100-F-46_Shallow_Focused	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	2.9	1.80E+04	1.61E-04	7.64E+04	3.79E-05
100-F-46_Shallow_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	3.0	1.80E+04	1.67E-04	3.92E+04	7.65E-05
100-F-46_Shallow_Focused	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	7.6	1.80E+04	4.22E-04	3.92E+04	1.94E-04
100-F-46_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	510	1.00E+04	5.10E-02	1.39E+04	3.66E-02
100-F-46_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	3,900	5.00E+02	**7.80E+00**	1.33E+05	2.93E-02
100-F-46_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	8,500	4.00E+02	**2.13E+01**	3.82E+04	2.23E-01
100-F-46_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	5,200	1.30E+04	4.00E-01	1.11E+05	4.66E-02
100-F-46_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	12,000	5.00E+04	2.40E-01	1.07E+05	1.12E-01
100-F-46_Shallow_Focused	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	280	No Value	--	1.25E+06	2.25E-04
100-F-46_Shallow_Focused	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	10	1.80E+04	5.56E-04	3.57E+04	2.80E-04
100-F-46_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	5,500	5.00E+04	1.10E-01	3.56E+04	1.55E-01
100-F-46_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	245,000	2.20E+05	**1.11E+00**	5.80E+06	4.23E-02
100-F-46_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	860	2.00E+03	4.30E-01	1.40E+04	6.16E-02
100-F-46_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	9,000	3.00E+04	3.00E-01	3.26E+04	2.76E-01
100-F-46_Shallow_Focused	non-Rad	Silver	7440-22-4	µg/kg	380	2.00E+03	1.90E-01	4.96E+04	7.66E-03
100-F-46_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	34,200	2.00E+03	**1.71E+01**	3.11E+04	**1.10E+00**
100-F-46_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	30,600	5.00E+04	6.12E-01	6.78E+04	4.51E-01
100-F-46_Shallow_Focused	Rad	Tritium	10028-17-8	pCi/g	34	1.68E+06	2.01E-05	4.20E+02	8.05E-02
100-F-46_Shallow_Focused	Rad	Rads SOF	---	pCi/g	--	--	2.01E-05	--	8.05E-02
100-F-47_Shallow	non-Rad	Antimony	7440-36-0	µg/kg	390	5.00E+03	7.80E-02	5.98E+03	6.52E-02
100-F-47_Shallow	non-Rad	Aroclor-1254	11097-69-1	µg/kg	9.2	4.00E+04	2.30E-04	1.47E+03	6.24E-03
100-F-47_Shallow	non-Rad	Aroclor-1260	11096-82-5	µg/kg	21	4.00E+04	5.22E-04	1.47E+03	1.42E-02
100-F-47_Shallow	non-Rad	Aroclors HI		ug/kg	--	--	7.52E-04	--	2.04E-02
100-F-47_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	3,711	1.00E+04	3.71E-01	1.90E+05	1.96E-02
100-F-47_Shallow	non-Rad	Barium	7440-39-3	µg/kg	51,357	3.30E+05	1.56E-01	1.32E+06	3.88E-02
100-F-47_Shallow	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	62	1.80E+04	3.44E-03	6.40E+04	9.66E-04
100-F-47_Shallow	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	57	1.80E+04	3.18E-03	7.64E+04	7.48E-04
100-F-47_Shallow	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	100	1.80E+04	5.53E-03	3.92E+04	2.54E-03
100-F-47_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	81	1.00E+04	8.09E-03	1.39E+04	5.80E-03
100-F-47_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	660	1.00E+05	6.60E-03	4.54E+04	1.45E-02

Table 3. Comparison of 100-F Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
100-F-47_Shallow	non-Rad	Boron	7440-42-8	µg/kg	1,833	5.00E+02	**3.67E+00**	1.33E+05	1.38E-02
100-F-47_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	93	4.00E+03	2.33E-02	1.63E+03	5.71E-02
100-F-47_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	10,781	4.00E+02	**2.70E+01**	3.82E+04	2.82E-01
100-F-47_Shallow	non-Rad	Chrysene	218-01-9	µg/kg	72	1.80E+04	4.02E-03	4.45E+04	1.62E-03
100-F-47_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	6,086	1.30E+04	4.68E-01	1.11E+05	5.46E-02
100-F-47_Shallow	non-Rad	Copper	7440-50-8	µg/kg	13,960	5.00E+04	2.79E-01	1.07E+05	1.30E-01
100-F-47_Shallow	non-Rad	Fluoranthene	206-44-0	µg/kg	97	1.80E+04	5.37E-03	8.39E+05	1.15E-04
100-F-47_Shallow	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	46	1.80E+04	2.56E-03	3.57E+04	1.29E-03
100-F-47_Shallow	non-Rad	Lead	7439-92-1	µg/kg	10,383	5.00E+04	2.08E-01	3.56E+04	2.92E-01
100-F-47_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	259,094	2.20E+05	**1.18E+00**	5.80E+06	4.47E-02
100-F-47_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	907	1.00E+02	**9.07E+00**	1.87E+03	4.86E-01
100-F-47_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	450	2.00E+03	2.25E-01	1.40E+04	3.22E-02
100-F-47_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	11,083	3.00E+04	3.69E-01	3.26E+04	3.40E-01
100-F-47_Shallow	non-Rad	Pyrene	129-00-0	µg/kg	84	1.80E+04	4.67E-03	6.00E+05	1.40E-04
100-F-47_Shallow	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	µg/kg	19,258	2.00E+05	9.63E-02	3.56E+08	5.40E-05
100-F-47_Shallow	non-Rad	Total petroleum hydrocarbons - diesel range extended to C36	TPHDIESELEXT	µg/kg	37,638	No Value	--	No Value	--
100-F-47_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	37,121	2.00E+03	**1.86E+01**	3.11E+04	**1.19E+00**
100-F-47_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	37,988	5.00E+04	7.60E-01	6.78E+04	5.60E-01
100-F-48_Overburden	non-Rad	2-Butanone	78-93-3	µg/kg	2.5	No Value	--	3.12E+06	8.15E-07
100-F-48_Overburden	non-Rad	Acetone	67-64-1	µg/kg	16	No Value	--	No Value	--
100-F-48_Overburden	non-Rad	Aroclor-1260	11096-82-5	µg/kg	79	4.00E+04	1.97E-03	1.47E+03	5.33E-02
100-F-48_Overburden	non-Rad	Aroclors HI		ug/kg	--	--	1.97E-03	--	5.33E-02
100-F-48_Overburden	non-Rad	Arsenic	7440-38-2	µg/kg	3,350	1.00E+04	3.35E-01	1.90E+05	1.77E-02
100-F-48_Overburden	non-Rad	Barium	7440-39-3	µg/kg	63,354	3.30E+05	1.92E-01	1.32E+06	4.79E-02
100-F-48_Overburden	non-Rad	Beryllium	7440-41-7	µg/kg	221	1.00E+04	2.21E-02	1.39E+04	1.59E-02
100-F-48_Overburden	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	87	1.00E+05	8.70E-04	4.54E+04	1.92E-03
100-F-48_Overburden	non-Rad	Boron	7440-42-8	µg/kg	1,283	5.00E+02	**2.57E+00**	1.33E+05	9.65E-03
100-F-48_Overburden	non-Rad	Cadmium	7440-43-9	µg/kg	83	4.00E+03	2.07E-02	1.63E+03	5.08E-02
100-F-48_Overburden	non-Rad	Chromium	7440-47-3	µg/kg	10,921	4.00E+02	**2.73E+01**	3.82E+04	2.86E-01
100-F-48_Overburden	non-Rad	Cobalt	7440-48-4	µg/kg	5,677	1.30E+04	4.37E-01	1.11E+05	5.09E-02
100-F-48_Overburden	non-Rad	Copper	7440-50-8	µg/kg	12,682	5.00E+04	2.54E-01	1.07E+05	1.18E-01
100-F-48_Overburden	non-Rad	Ethylbenzene	100-41-4	µg/kg	1.5	No Value	--	1.03E+06	1.44E-06
100-F-48_Overburden	non-Rad	Lead	7439-92-1	µg/kg	7,551	5.00E+04	1.51E-01	3.56E+04	2.12E-01
100-F-48_Overburden	non-Rad	Manganese	7439-96-5	µg/kg	257,998	2.20E+05	**1.17E+00**	5.80E+06	4.45E-02
100-F-48_Overburden	non-Rad	Mercury	7439-97-6	µg/kg	7.1	1.00E+02	7.05E-02	1.87E+03	3.78E-03
100-F-48_Overburden	non-Rad	Methoxychlor	72-43-5	µg/kg	1.2	No Value	--	2.18E+04	5.49E-05
100-F-48_Overburden	non-Rad	Methylene chloride	75-09-2	µg/kg	2.2	No Value	--	1.66E+05	1.33E-05
100-F-48_Overburden	non-Rad	Molybdenum	7439-98-7	µg/kg	440	2.00E+03	2.20E-01	1.40E+04	3.15E-02
100-F-48_Overburden	non-Rad	Nickel	7440-02-0	µg/kg	10,836	3.00E+04	3.61E-01	3.26E+04	3.33E-01
100-F-48_Overburden	non-Rad	Phenol	108-95-2	µg/kg	22	3.00E+04	7.33E-04	1.51E+06	1.46E-05
100-F-48_Overburden	non-Rad	Toluene	108-88-3	µg/kg	1.0	2.00E+05	5.00E-06	5.20E+06	1.92E-07
100-F-48_Overburden	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	µg/kg	3,551	2.00E+05	1.78E-02	3.56E+08	9.96E-06
100-F-48_Overburden	non-Rad	Total petroleum hydrocarbons - diesel range extended to C36	TPHDIESELEXT	µg/kg	9,008	No Value	--	No Value	--
100-F-48_Overburden	non-Rad	Vanadium	7440-62-2	µg/kg	38,122	2.00E+03	**1.91E+01**	3.11E+04	**1.22E+00**
100-F-48_Overburden	non-Rad	Xylenes (total)	1330-20-7	µg/kg	2.1	No Value	--	8.26E+05	2.53E-06
100-F-48_Overburden	non-Rad	Zinc	7440-66-6	µg/kg	31,504	5.00E+04	6.30E-01	6.78E+04	4.65E-01
100-F-48_Overburden_Focused	non-Rad	1,1-Dichloroethene	75-35-4	µg/kg	4.5	No Value	--	1.65E+05	2.73E-05
100-F-48_Overburden_Focused	non-Rad	2-Butanone	78-93-3	µg/kg	6.8	No Value	--	3.12E+06	2.18E-06
100-F-48_Overburden_Focused	non-Rad	4,4'-DDT (Dichlorodiphenyltrichloroethane)	50-29-3	µg/kg	0.89	No Value	--	8.82E+02	1.01E-03
100-F-48_Overburden_Focused	non-Rad	Acetone	67-64-1	µg/kg	39	No Value	--	No Value	--
100-F-48_Overburden_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	23	4.00E+04	5.75E-04	1.47E+03	1.56E-02
100-F-48_Overburden_Focused	non-Rad	Aroclors HI		ug/kg	--	--	5.75E-04	--	1.56E-02
100-F-48_Overburden_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	2,800	1.00E+04	2.80E-01	1.90E+05	1.48E-02
100-F-48_Overburden_Focused	non-Rad	Barium	7440-39-3	µg/kg	72,300	3.30E+05	2.19E-01	1.32E+06	5.46E-02
100-F-48_Overburden_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	210	1.00E+04	2.10E-02	1.39E+04	1.51E-02
100-F-48_Overburden_Focused	non-Rad	Boron	7440-42-8	µg/kg	2,500	5.00E+02	**5.00E+00**	1.33E+05	1.88E-02

Table 3. Comparison of 100-F Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
100-F-48_Overburden_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	91	4.00E+03	2.28E-02	1.63E+03	5.58E-02
100-F-48_Overburden_Focused	non-Rad	Chromium	7440-47-3	µg/kg	11,900	4.00E+02	**2.98E+01**	3.82E+04	3.12E-01
100-F-48_Overburden_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	6,800	1.30E+04	5.23E-01	1.11E+05	6.10E-02
100-F-48_Overburden_Focused	non-Rad	Copper	7440-50-8	µg/kg	14,500	5.00E+04	2.90E-01	1.07E+05	1.35E-01
100-F-48_Overburden_Focused	non-Rad	Ethylbenzene	100-41-4	µg/kg	1.7	No Value	--	1.03E+06	1.66E-06
100-F-48_Overburden_Focused	non-Rad	Lead	7439-92-1	µg/kg	6,500	5.00E+04	1.30E-01	3.56E+04	1.83E-01
100-F-48_Overburden_Focused	non-Rad	Manganese	7439-96-5	µg/kg	289,000	2.20E+05	**1.31E+00**	5.80E+06	4.98E-02
100-F-48_Overburden_Focused	non-Rad	Mercury	7439-97-6	µg/kg	8.9	1.00E+02	8.90E-02	1.87E+03	4.77E-03
100-F-48_Overburden_Focused	non-Rad	Methylene chloride	75-09-2	µg/kg	3.7	No Value	--	1.66E+05	2.23E-05
100-F-48_Overburden_Focused	non-Rad	Nickel	7440-02-0	µg/kg	14,400	3.00E+04	4.80E-01	3.26E+04	4.42E-01
100-F-48_Overburden_Focused	non-Rad	Phenol	108-95-2	µg/kg	38	3.00E+04	1.27E-03	1.51E+06	2.51E-05
100-F-48_Overburden_Focused	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	µg/kg	4,000	2.00E+05	2.00E-02	3.56E+08	1.12E-05
100-F-48_Overburden_Focused	non-Rad	Total petroleum hydrocarbons - diesel range extended to C36	TPHDIESELEXT	µg/kg	9,100	No Value	--	No Value	--
100-F-48_Overburden_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	38,600	2.00E+03	**1.93E+01**	3.11E+04	**1.24E+00**
100-F-48_Overburden_Focused	non-Rad	Xylenes (total)	1330-20-7	µg/kg	2.0	No Value	--	8.26E+05	2.42E-06
100-F-48_Overburden_Focused	non-Rad	Zinc	7440-66-6	µg/kg	39,600	5.00E+04	7.92E-01	6.78E+04	5.84E-01
100-F-48_Shallow_1	non-Rad	1,1-Dichloroethene	75-35-4	µg/kg	1.3	No Value	--	1.65E+05	7.87E-06
100-F-48_Shallow_1	non-Rad	2-Butanone	78-93-3	µg/kg	8.5	No Value	--	3.12E+06	2.71E-06
100-F-48_Shallow_1	non-Rad	2-Methylnaphthalene	91-57-6	µg/kg	21	2.90E+04	7.24E-04	6.01E+03	3.49E-03
100-F-48_Shallow_1	non-Rad	4,4'-DDT (Dichlorodiphenyltrichloroethane)	50-29-3	µg/kg	2.4	No Value	--	8.82E+02	2.72E-03
100-F-48_Shallow_1	non-Rad	Acetone	67-64-1	µg/kg	64	No Value	--	No Value	--
100-F-48_Shallow_1	non-Rad	Antimony	7440-36-0	µg/kg	520	5.00E+03	1.04E-01	5.98E+03	8.69E-02
100-F-48_Shallow_1	non-Rad	Aroclor-1254	11097-69-1	µg/kg	5.1	4.00E+04	1.28E-04	1.47E+03	3.46E-03
100-F-48_Shallow_1	non-Rad	Aroclor-1260	11096-82-5	µg/kg	93	4.00E+04	2.33E-03	1.47E+03	6.31E-02
100-F-48_Shallow_1	non-Rad	Aroclors HI		ug/kg	--	--	2.46E-03	--	6.66E-02
100-F-48_Shallow_1	non-Rad	Arsenic	7440-38-2	µg/kg	2,517	1.00E+04	2.52E-01	1.90E+05	1.33E-02
100-F-48_Shallow_1	non-Rad	Barium	7440-39-3	µg/kg	74,696	3.30E+05	2.26E-01	1.32E+06	5.65E-02
100-F-48_Shallow_1	non-Rad	Beryllium	7440-41-7	µg/kg	145	1.00E+04	1.45E-02	1.39E+04	1.04E-02
100-F-48_Shallow_1	non-Rad	Boron	7440-42-8	µg/kg	4,367	5.00E+02	**8.73E+00**	1.33E+05	3.29E-02
100-F-48_Shallow_1	non-Rad	Cadmium	7440-43-9	µg/kg	100	4.00E+03	2.51E-02	1.63E+03	6.15E-02
100-F-48_Shallow_1	non-Rad	Chromium	7440-47-3	µg/kg	12,289	4.00E+02	**3.07E+01**	3.82E+04	3.22E-01
100-F-48_Shallow_1	non-Rad	Chrysene	218-01-9	µg/kg	52	1.80E+04	2.89E-03	4.45E+04	1.17E-03
100-F-48_Shallow_1	non-Rad	Cobalt	7440-48-4	µg/kg	6,291	1.30E+04	4.84E-01	1.11E+05	5.64E-02
100-F-48_Shallow_1	non-Rad	Copper	7440-50-8	µg/kg	13,785	5.00E+04	2.76E-01	1.07E+05	1.29E-01
100-F-48_Shallow_1	non-Rad	Dieldrin	60-57-1	µg/kg	2.3	No Value	--	2.09E+01	1.10E-01
100-F-48_Shallow_1	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	32	No Value	--	No Value	--
100-F-48_Shallow_1	non-Rad	Ethylbenzene	100-41-4	µg/kg	1.5	No Value	--	1.03E+06	1.47E-06
100-F-48_Shallow_1	non-Rad	Lead	7439-92-1	µg/kg	8,470	5.00E+04	1.69E-01	3.56E+04	2.38E-01
100-F-48_Shallow_1	non-Rad	Manganese	7439-96-5	µg/kg	267,107	2.20E+05	**1.21E+00**	5.80E+06	4.61E-02
100-F-48_Shallow_1	non-Rad	Mercury	7439-97-6	µg/kg	151	1.00E+02	**1.51E+00**	1.87E+03	8.07E-02
100-F-48_Shallow_1	non-Rad	Methoxychlor	72-43-5	µg/kg	13	No Value	--	2.18E+04	5.95E-04
100-F-48_Shallow_1	non-Rad	Methylene chloride	75-09-2	µg/kg	2.2	No Value	--	1.66E+05	1.32E-05
100-F-48_Shallow_1	non-Rad	Molybdenum	7439-98-7	µg/kg	250	2.00E+03	1.25E-01	1.40E+04	1.79E-02
100-F-48_Shallow_1	non-Rad	Nickel	7440-02-0	µg/kg	11,481	3.00E+04	3.83E-01	3.26E+04	3.52E-01
100-F-48_Shallow_1	non-Rad	Phenol	108-95-2	µg/kg	660	3.00E+04	2.20E-02	1.51E+06	4.37E-04
100-F-48_Shallow_1	non-Rad	Pyrene	129-00-0	µg/kg	37	1.80E+04	2.06E-03	6.00E+05	6.17E-05
100-F-48_Shallow_1	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	µg/kg	20,868	2.00E+05	1.04E-01	3.56E+08	5.86E-05
100-F-48_Shallow_1	non-Rad	Total petroleum hydrocarbons - diesel range extended to C36	TPHDIESELEXT	µg/kg	86,681	No Value	--	No Value	--
100-F-48_Shallow_1	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	664	5.00E+03	1.33E-01	7.86E+05	8.45E-04
100-F-48_Shallow_1	non-Rad	Vanadium	7440-62-2	µg/kg	37,729	2.00E+03	**1.89E+01**	3.11E+04	**1.21E+00**
100-F-48_Shallow_1	non-Rad	Xylenes (total)	1330-20-7	µg/kg	2.2	No Value	--	8.26E+05	2.68E-06
100-F-48_Shallow_1	non-Rad	Zinc	7440-66-6	µg/kg	43,368	5.00E+04	8.67E-01	6.78E+04	6.40E-01
100-F-48_Shallow_1	Rad	Uranium-234	13966-29-5	pCi/g	0.26	5.16E+04	5.10E-06	6.37E+03	4.13E-05
100-F-48_Shallow_1	Rad	Uranium-238	U-238	pCi/g	0.17	1.57E+04	1.10E-05	5.15E+03	3.34E-05
100-F-48_Shallow_1	Rad	Rads SOF	---	pCi/g	--	--	1.61E-05	--	7.47E-05
100-F-48_Shallow_2	non-Rad	2-Butanone	78-93-3	µg/kg	5.0	No Value	--	3.12E+06	1.61E-06

Table 3. Comparison of 100-F Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
100-F-48_Shallow_2	non-Rad	2-Methylnaphthalene	91-57-6	µg/kg	24	2.90E+04	8.28E-04	6.01E+03	3.99E-03
100-F-48_Shallow_2	non-Rad	4,4'-DDT (Dichlorodiphenyltrichloroethane)	50-29-3	µg/kg	12	No Value	--	8.82E+02	1.31E-02
100-F-48_Shallow_2	non-Rad	Acetone	67-64-1	µg/kg	49	No Value	--	No Value	--
100-F-48_Shallow_2	non-Rad	Aroclor-1260	11096-82-5	µg/kg	15	4.00E+04	3.83E-04	1.47E+03	1.04E-02
100-F-48_Shallow_2	non-Rad	Aroclors HI		ug/kg	--	--	3.83E-04	--	1.04E-02
100-F-48_Shallow_2	non-Rad	Arsenic	7440-38-2	µg/kg	2,306	1.00E+04	2.31E-01	1.90E+05	1.22E-02
100-F-48_Shallow_2	non-Rad	Barium	7440-39-3	µg/kg	62,416	3.30E+05	1.89E-01	1.32E+06	4.72E-02
100-F-48_Shallow_2	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	25	1.80E+04	1.39E-03	3.92E+04	6.37E-04
100-F-48_Shallow_2	non-Rad	Beryllium	7440-41-7	µg/kg	139	1.00E+04	1.39E-02	1.39E+04	9.97E-03
100-F-48_Shallow_2	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	78	1.00E+05	7.78E-04	4.54E+04	1.71E-03
100-F-48_Shallow_2	non-Rad	Boron	7440-42-8	µg/kg	2,442	5.00E+02	**4.88E+00**	1.33E+05	1.84E-02
100-F-48_Shallow_2	non-Rad	Cadmium	7440-43-9	µg/kg	94	4.00E+03	2.34E-02	1.63E+03	5.75E-02
100-F-48_Shallow_2	non-Rad	Chromium	7440-47-3	µg/kg	10,945	4.00E+02	**2.74E+01**	3.82E+04	2.87E-01
100-F-48_Shallow_2	non-Rad	Cobalt	7440-48-4	µg/kg	5,853	1.30E+04	4.50E-01	1.11E+05	5.25E-02
100-F-48_Shallow_2	non-Rad	Copper	7440-50-8	µg/kg	13,261	5.00E+04	2.65E-01	1.07E+05	1.24E-01
100-F-48_Shallow_2	non-Rad	Endosulfan II	33213-65-9	µg/kg	0.56	No Value	--	7.10E+02	7.89E-04
100-F-48_Shallow_2	non-Rad	Ethylbenzene	100-41-4	µg/kg	1.7	No Value	--	1.03E+06	1.65E-06
100-F-48_Shallow_2	non-Rad	Fluoranthene	206-44-0	µg/kg	36	1.80E+04	2.00E-03	8.39E+05	4.29E-05
100-F-48_Shallow_2	non-Rad	Heptachlor epoxide	1024-57-3	µg/kg	4.0	No Value	--	No Value	--
100-F-48_Shallow_2	non-Rad	Lead	7439-92-1	µg/kg	4,949	5.00E+04	9.90E-02	3.56E+04	1.39E-01
100-F-48_Shallow_2	non-Rad	Manganese	7439-96-5	µg/kg	244,867	2.20E+05	**1.11E+00**	5.80E+06	4.22E-02
100-F-48_Shallow_2	non-Rad	Mercury	7439-97-6	µg/kg	17	1.00E+02	1.73E-01	1.87E+03	9.25E-03
100-F-48_Shallow_2	non-Rad	Nickel	7440-02-0	µg/kg	11,086	3.00E+04	3.70E-01	3.26E+04	3.40E-01
100-F-48_Shallow_2	non-Rad	Pyrene	129-00-0	µg/kg	36	1.80E+04	2.00E-03	6.00E+05	6.00E-05
100-F-48_Shallow_2	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	µg/kg	12,909	2.00E+05	6.45E-02	3.56E+08	3.62E-05
100-F-48_Shallow_2	non-Rad	Total petroleum hydrocarbons - diesel range extended to C36	TPHDIESELEXT	µg/kg	30,139	No Value	--	No Value	--
100-F-48_Shallow_2	non-Rad	Vanadium	7440-62-2	µg/kg	36,873	2.00E+03	**1.84E+01**	3.11E+04	**1.18E+00**
100-F-48_Shallow_2	non-Rad	Xylenes (total)	1330-20-7	µg/kg	2.2	No Value	--	8.26E+05	2.64E-06
100-F-48_Shallow_2	non-Rad	Zinc	7440-66-6	µg/kg	40,871	5.00E+04	8.17E-01	6.78E+04	6.03E-01
100-F-49_Shallow	non-Rad	4,4'-DDE (Dichlorodiphenyldichloroethylene)	72-55-9	µg/kg	0.81	No Value	--	4.00E+02	2.03E-03
100-F-49_Shallow	non-Rad	4,4'-DDT (Dichlorodiphenyltrichloroethane)	50-29-3	µg/kg	0.60	No Value	--	8.82E+02	6.80E-04
100-F-49_Shallow	non-Rad	Alpha-Chlordane	5103-71-9	µg/kg	2.9	1.00E+03	2.91E-03	5.04E+04	5.78E-05
100-F-49_Shallow	non-Rad	Anthracene	120-12-7	µg/kg	8.6	2.90E+04	2.97E-04	6.78E+05	1.27E-05
100-F-49_Shallow	non-Rad	Antimony	7440-36-0	µg/kg	634	5.00E+03	1.27E-01	5.98E+03	1.06E-01
100-F-49_Shallow	non-Rad	Aroclor-1254	11097-69-1	µg/kg	20	4.00E+04	5.00E-04	1.47E+03	1.36E-02
100-F-49_Shallow	non-Rad	Aroclor-1260	11096-82-5	µg/kg	7.2	4.00E+04	1.79E-04	1.47E+03	4.86E-03
100-F-49_Shallow	non-Rad	Aroclors HI		ug/kg	--	--	6.79E-04	--	1.85E-02
100-F-49_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	2,301	1.00E+04	2.30E-01	1.90E+05	1.21E-02
100-F-49_Shallow	non-Rad	Barium	7440-39-3	µg/kg	74,059	3.30E+05	2.24E-01	1.32E+06	5.60E-02
100-F-49_Shallow	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	16	1.80E+04	8.89E-04	6.40E+04	2.50E-04
100-F-49_Shallow	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	37	1.80E+04	2.06E-03	7.64E+04	4.84E-04
100-F-49_Shallow	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	43	1.80E+04	2.39E-03	3.92E+04	1.10E-03
100-F-49_Shallow	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	20	1.80E+04	1.11E-03	3.92E+04	5.10E-04
100-F-49_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	76	1.00E+04	7.60E-03	1.39E+04	5.45E-03
100-F-49_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	660	1.00E+05	6.60E-03	4.54E+04	1.45E-02
100-F-49_Shallow	non-Rad	Boron	7440-42-8	µg/kg	2,083	5.00E+02	**4.17E+00**	1.33E+05	1.57E-02
100-F-49_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	111	4.00E+03	2.78E-02	1.63E+03	6.83E-02
100-F-49_Shallow	non-Rad	Chlordane	57-74-9	µg/kg	3.1	1.00E+03	3.13E-03	5.04E+04	6.22E-05
100-F-49_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	11,187	4.00E+02	**2.80E+01**	3.82E+04	2.93E-01
100-F-49_Shallow	non-Rad	Chrysene	218-01-9	µg/kg	36	1.80E+04	2.00E-03	4.45E+04	8.09E-04
100-F-49_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	5,309	1.30E+04	4.08E-01	1.11E+05	4.76E-02
100-F-49_Shallow	non-Rad	Copper	7440-50-8	µg/kg	13,295	5.00E+04	2.66E-01	1.07E+05	1.24E-01
100-F-49_Shallow	non-Rad	Dieldrin	60-57-1	µg/kg	3.1	No Value	--	2.09E+01	1.49E-01
100-F-49_Shallow	non-Rad	Fluoranthene	206-44-0	µg/kg	77	1.80E+04	4.28E-03	8.39E+05	9.18E-05
100-F-49_Shallow	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	26	1.80E+04	1.44E-03	3.57E+04	7.29E-04
100-F-49_Shallow	non-Rad	Lead	7439-92-1	µg/kg	7,067	5.00E+04	1.41E-01	3.56E+04	1.99E-01

Table 3. Comparison of 100-F Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
100-F-49_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	252,487	2.20E+05	**1.15E+00**	5.80E+06	4.35E-02
100-F-49_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	11	1.00E+02	1.11E-01	1.87E+03	5.96E-03
100-F-49_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	400	2.00E+03	2.00E-01	1.40E+04	2.86E-02
100-F-49_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	10,656	3.00E+04	3.55E-01	3.26E+04	3.27E-01
100-F-49_Shallow	non-Rad	Pyrene	129-00-0	µg/kg	67	1.80E+04	3.72E-03	6.00E+05	1.12E-04
100-F-49_Shallow	non-Rad	Selenium	7782-49-2	µg/kg	1,200	5.20E+02	**2.31E+00**	1.90E+03	6.32E-01
100-F-49_Shallow	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	µg/kg	16,845	2.00E+05	8.42E-02	3.56E+08	4.73E-05
100-F-49_Shallow	non-Rad	Total petroleum hydrocarbons - diesel range extended to C36	TPHDIESELEXT	µg/kg	30,241	No Value	--	No Value	--
100-F-49_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	41,195	2.00E+03	**2.06E+01**	3.11E+04	**1.32E+00**
100-F-49_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	39,904	5.00E+04	7.98E-01	6.78E+04	5.89E-01
100-F-49_Shallow_Focused	non-Rad	Alpha-Chlordane	5103-71-9	µg/kg	0.43	1.00E+03	4.30E-04	5.04E+04	8.53E-06
100-F-49_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	520	5.00E+03	1.04E-01	5.98E+03	8.69E-02
100-F-49_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	2,800	1.00E+04	2.80E-01	1.90E+05	1.48E-02
100-F-49_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	42,800	3.30E+05	1.30E-01	1.32E+06	3.24E-02
100-F-49_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	530	1.00E+04	5.30E-02	1.39E+04	3.80E-02
100-F-49_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	660	1.00E+05	6.60E-03	4.54E+04	1.45E-02
100-F-49_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	68	4.00E+03	1.70E-02	1.63E+03	4.17E-02
100-F-49_Shallow_Focused	non-Rad	Chlordane	57-74-9	µg/kg	0.65	1.00E+03	6.50E-04	5.04E+04	1.29E-05
100-F-49_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	10,900	4.00E+02	**2.73E+01**	3.82E+04	2.86E-01
100-F-49_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	5,700	1.30E+04	4.38E-01	1.11E+05	5.11E-02
100-F-49_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	12,600	5.00E+04	2.52E-01	1.07E+05	1.18E-01
100-F-49_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	3,100	5.00E+04	6.20E-02	3.56E+04	8.71E-02
100-F-49_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	236,000	2.20E+05	**1.07E+00**	5.80E+06	4.07E-02
100-F-49_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	10,600	3.00E+04	3.53E-01	3.26E+04	3.25E-01
100-F-49_Shallow_Focused	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	µg/kg	5,000	2.00E+05	2.50E-02	3.56E+08	1.40E-05
100-F-49_Shallow_Focused	non-Rad	Total petroleum hydrocarbons - diesel range extended to C36	TPHDIESELEXT	µg/kg	11,000	No Value	--	No Value	--
100-F-49_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	41,400	2.00E+03	**2.07E+01**	3.11E+04	**1.33E+00**
100-F-49_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	33,200	5.00E+04	6.64E-01	6.78E+04	4.90E-01
100-F-49_Staging Pile Area Footprint_Focused	non-Rad	Alpha-Chlordane	5103-71-9	µg/kg	0.80	1.00E+03	8.00E-04	5.04E+04	1.59E-05
100-F-49_Staging Pile Area Footprint_Focused	non-Rad	Antimony	7440-36-0	µg/kg	840	5.00E+03	1.68E-01	5.98E+03	1.40E-01
100-F-49_Staging Pile Area Footprint_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	2,800	1.00E+04	2.80E-01	1.90E+05	1.48E-02
100-F-49_Staging Pile Area Footprint_Focused	non-Rad	Barium	7440-39-3	µg/kg	105,000	3.30E+05	3.18E-01	1.32E+06	7.94E-02
100-F-49_Staging Pile Area Footprint_Focused	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	9.7	1.80E+04	5.39E-04	7.64E+04	1.27E-04
100-F-49_Staging Pile Area Footprint_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	16	1.80E+04	8.89E-04	3.92E+04	4.08E-04
100-F-49_Staging Pile Area Footprint_Focused	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	4.9	1.80E+04	2.72E-04	3.92E+04	1.25E-04
100-F-49_Staging Pile Area Footprint_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	34	1.00E+04	3.40E-03	1.39E+04	2.44E-03
100-F-49_Staging Pile Area Footprint_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	660	1.00E+05	6.60E-03	4.54E+04	1.45E-02
100-F-49_Staging Pile Area Footprint_Focused	non-Rad	Boron	7440-42-8	µg/kg	4,100	5.00E+02	**8.20E+00**	1.33E+05	3.08E-02
100-F-49_Staging Pile Area Footprint_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	150	4.00E+03	3.75E-02	1.63E+03	9.20E-02
100-F-49_Staging Pile Area Footprint_Focused	non-Rad	Chlordane	57-74-9	µg/kg	1.0	1.00E+03	1.00E-03	5.04E+04	1.98E-05
100-F-49_Staging Pile Area Footprint_Focused	non-Rad	Chromium	7440-47-3	µg/kg	22,100	4.00E+02	**5.53E+01**	3.82E+04	5.79E-01
100-F-49_Staging Pile Area Footprint_Focused	non-Rad	Chrysene	218-01-9	µg/kg	10	1.80E+04	5.56E-04	4.45E+04	2.25E-04
100-F-49_Staging Pile Area Footprint_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	6,400	1.30E+04	4.92E-01	1.11E+05	5.74E-02
100-F-49_Staging Pile Area Footprint_Focused	non-Rad	Copper	7440-50-8	µg/kg	13,900	5.00E+04	2.78E-01	1.07E+05	1.30E-01
100-F-49_Staging Pile Area Footprint_Focused	non-Rad	Fluoranthene	206-44-0	µg/kg	21	1.80E+04	1.17E-03	8.39E+05	2.50E-05
100-F-49_Staging Pile Area Footprint_Focused	non-Rad	Lead	7439-92-1	µg/kg	13,900	5.00E+04	2.78E-01	3.56E+04	3.91E-01
100-F-49_Staging Pile Area Footprint_Focused	non-Rad	Manganese	7439-96-5	µg/kg	326,000	2.20E+05	**1.48E+00**	5.80E+06	5.62E-02
100-F-49_Staging Pile Area Footprint_Focused	non-Rad	Mercury	7439-97-6	µg/kg	16	1.00E+02	1.60E-01	1.87E+03	8.57E-03
100-F-49_Staging Pile Area Footprint_Focused	non-Rad	Nickel	7440-02-0	µg/kg	16,500	3.00E+04	5.50E-01	3.26E+04	5.06E-01
100-F-49_Staging Pile Area Footprint_Focused	non-Rad	Pyrene	129-00-0	µg/kg	19	1.80E+04	1.06E-03	6.00E+05	3.17E-05
100-F-49_Staging Pile Area Footprint_Focused	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	µg/kg	23,000	2.00E+05	1.15E-01	3.56E+08	6.45E-05
100-F-49_Staging Pile Area Footprint_Focused	non-Rad	Total petroleum hydrocarbons - diesel range extended to C36	TPHDIESELEXT	µg/kg	53,000	No Value	--	No Value	--
100-F-49_Staging Pile Area Footprint_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	45,700	2.00E+03	**2.29E+01**	3.11E+04	**1.47E+00**
100-F-49_Staging Pile Area Footprint_Focused	non-Rad	Zinc	7440-66-6	µg/kg	40,000	5.00E+04	8.00E-01	6.78E+04	5.90E-01
100-F-50_Shallow_Focused	non-Rad	4,4'-DDE (Dichlorodiphenyldichloroethylene)	72-55-9	µg/kg	1.4	No Value	--	4.00E+02	3.50E-03
100-F-50_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	2,200	1.00E+04	2.20E-01	1.90E+05	1.16E-02

Table 3. Comparison of 100-F Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
100-F-50_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	61,800	3.30E+05	1.87E-01	1.32E+06	4.67E-02
100-F-50_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	810	1.00E+04	8.10E-02	1.39E+04	5.81E-02
100-F-50_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	100	1.00E+05	1.00E-03	4.54E+04	2.20E-03
100-F-50_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	2,500	5.00E+02	**5.00E+00**	1.33E+05	1.88E-02
100-F-50_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	7,600	4.00E+02	**1.90E+01**	3.82E+04	1.99E-01
100-F-50_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	6,400	1.30E+04	4.92E-01	1.11E+05	5.74E-02
100-F-50_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	12,800	5.00E+04	2.56E-01	1.07E+05	1.20E-01
100-F-50_Shallow_Focused	non-Rad	Fluoranthene	206-44-0	µg/kg	21	1.80E+04	1.17E-03	8.39E+05	2.50E-05
100-F-50_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	4,900	5.00E+04	9.80E-02	3.56E+04	1.38E-01
100-F-50_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	310,000	2.20E+05	**1.41E+00**	5.80E+06	5.35E-02
100-F-50_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	9,700	3.00E+04	3.23E-01	3.26E+04	2.98E-01
100-F-50_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	53,100	2.00E+03	**2.66E+01**	3.11E+04	**1.71E+00**
100-F-50_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	44,400	5.00E+04	8.88E-01	6.78E+04	6.55E-01
100-F-50_Shallow_Focused	Rad	Cesium-137	10045-97-3	pCi/g	0.19	2.21E+03	8.51E-05	9.24E+02	2.03E-04
100-F-50_Shallow_Focused	Rad	Rads SOF	---	pCi/g	--	--	8.51E-05	--	2.03E-04
100-F-51 and 100-F-63_Overburden_Focused	non-Rad	Anthracene	120-12-7	µg/kg	16	2.90E+04	5.52E-04	6.78E+05	2.36E-05
100-F-51 and 100-F-63_Overburden_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	40	4.00E+04	1.00E-03	1.47E+03	2.71E-02
100-F-51 and 100-F-63_Overburden_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	27	4.00E+04	6.75E-04	1.47E+03	1.83E-02
100-F-51 and 100-F-63_Overburden_Focused	non-Rad	Aroclors HI		ug/kg	--	--	1.68E-03	--	4.54E-02
100-F-51 and 100-F-63_Overburden_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	4,100	1.00E+04	4.10E-01	1.90E+05	2.16E-02
100-F-51 and 100-F-63_Overburden_Focused	non-Rad	Barium	7440-39-3	µg/kg	73,200	3.30E+05	2.22E-01	1.32E+06	5.53E-02
100-F-51 and 100-F-63_Overburden_Focused	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	12	1.80E+04	6.67E-04	7.64E+04	1.57E-04
100-F-51 and 100-F-63_Overburden_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	5.8	1.80E+04	3.22E-04	3.92E+04	1.48E-04
100-F-51 and 100-F-63_Overburden_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	150	1.00E+04	1.50E-02	1.39E+04	1.08E-02
100-F-51 and 100-F-63_Overburden_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	660	1.00E+05	6.60E-03	4.54E+04	1.45E-02
100-F-51 and 100-F-63_Overburden_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,500	5.00E+02	**3.00E+00**	1.33E+05	1.13E-02
100-F-51 and 100-F-63_Overburden_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	120	4.00E+03	3.00E-02	1.63E+03	7.36E-02
100-F-51 and 100-F-63_Overburden_Focused	non-Rad	Chromium	7440-47-3	µg/kg	10,900	4.00E+02	**2.73E+01**	3.82E+04	2.86E-01
100-F-51 and 100-F-63_Overburden_Focused	non-Rad	Chrysene	218-01-9	µg/kg	25	1.80E+04	1.39E-03	4.45E+04	5.62E-04
100-F-51 and 100-F-63_Overburden_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	6,000	1.30E+04	4.62E-01	1.11E+05	5.38E-02
100-F-51 and 100-F-63_Overburden_Focused	non-Rad	Copper	7440-50-8	µg/kg	20,900	5.00E+04	4.18E-01	1.07E+05	1.95E-01
100-F-51 and 100-F-63_Overburden_Focused	non-Rad	Lead	7439-92-1	µg/kg	14,600	5.00E+04	2.92E-01	3.56E+04	4.10E-01
100-F-51 and 100-F-63_Overburden_Focused	non-Rad	Manganese	7439-96-5	µg/kg	270,000	2.20E+05	**1.23E+00**	5.80E+06	4.66E-02
100-F-51 and 100-F-63_Overburden_Focused	non-Rad	Mercury	7439-97-6	µg/kg	75	1.00E+02	7.50E-01	1.87E+03	4.02E-02
100-F-51 and 100-F-63_Overburden_Focused	non-Rad	Nickel	7440-02-0	µg/kg	10,700	3.00E+04	3.57E-01	3.26E+04	3.28E-01
100-F-51 and 100-F-63_Overburden_Focused	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	µg/kg	1,600	2.00E+05	8.00E-03	3.56E+08	4.49E-06
100-F-51 and 100-F-63_Overburden_Focused	non-Rad	Total petroleum hydrocarbons - diesel range extended to C36	TPHDIESELEXT	µg/kg	7,900	No Value	--	No Value	--
100-F-51 and 100-F-63_Overburden_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	476	5.00E+03	9.53E-02	7.86E+05	6.06E-04
100-F-51 and 100-F-63_Overburden_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	41,600	2.00E+03	**2.08E+01**	3.11E+04	**1.34E+00**
100-F-51 and 100-F-63_Overburden_Focused	non-Rad	Zinc	7440-66-6	µg/kg	52,500	5.00E+04	**1.05E+00**	6.78E+04	7.74E-01
100-F-51 and 100-F-63_Overburden_Focused	Rad	Carbon-14	14762-75-5	pCi/g	0.46	6.07E+04	7.64E-06	3.16E+01	1.47E-02
100-F-51 and 100-F-63_Overburden_Focused	Rad	Uranium-234	13966-29-5	pCi/g	0.16	5.16E+04	3.06E-06	6.37E+03	2.48E-05
100-F-51 and 100-F-63_Overburden_Focused	Rad	Uranium-238	U-238	pCi/g	0.16	1.57E+04	1.02E-05	5.15E+03	3.11E-05
100-F-51 and 100-F-63_Overburden_Focused	Rad	Rads SOF	---	pCi/g	--	--	2.09E-05	--	1.48E-02
100-F-51 and 100-F-63_Shallow	non-Rad	Aroclor-1254	11097-69-1	µg/kg	9.1	4.00E+04	2.29E-04	1.47E+03	6.20E-03
100-F-51 and 100-F-63_Shallow	non-Rad	Aroclor-1260	11096-82-5	µg/kg	7.5	4.00E+04	1.88E-04	1.47E+03	5.09E-03
100-F-51 and 100-F-63_Shallow	non-Rad	Aroclors HI		ug/kg	--	--	4.17E-04	--	1.13E-02
100-F-51 and 100-F-63_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	2,797	1.00E+04	2.80E-01	1.90E+05	1.48E-02
100-F-51 and 100-F-63_Shallow	non-Rad	Barium	7440-39-3	µg/kg	67,933	3.30E+05	2.06E-01	1.32E+06	5.13E-02
100-F-51 and 100-F-63_Shallow	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	7.9	1.80E+04	4.39E-04	6.40E+04	1.23E-04
100-F-51 and 100-F-63_Shallow	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	11	1.80E+04	5.95E-04	7.64E+04	1.40E-04
100-F-51 and 100-F-63_Shallow	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	8.2	1.80E+04	4.56E-04	3.92E+04	2.09E-04
100-F-51 and 100-F-63_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	130	1.00E+04	1.30E-02	1.39E+04	9.34E-03
100-F-51 and 100-F-63_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	660	1.00E+05	6.60E-03	4.54E+04	1.45E-02
100-F-51 and 100-F-63_Shallow	non-Rad	Boron	7440-42-8	µg/kg	1,283	5.00E+02	**2.57E+00**	1.33E+05	9.65E-03
100-F-51 and 100-F-63_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	81	4.00E+03	2.02E-02	1.63E+03	4.96E-02

Table 3. Comparison of 100-F Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
100-F-51 and 100-F-63_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	9,966	4.00E+02	**2.49E+01**	3.82E+04	2.61E-01
100-F-51 and 100-F-63_Shallow	non-Rad	Chrysene	218-01-9	µg/kg	9.6	1.80E+04	5.33E-04	4.45E+04	2.16E-04
100-F-51 and 100-F-63_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	5,629	1.30E+04	4.33E-01	1.11E+05	5.05E-02
100-F-51 and 100-F-63_Shallow	non-Rad	Copper	7440-50-8	µg/kg	14,379	5.00E+04	2.88E-01	1.07E+05	1.34E-01
100-F-51 and 100-F-63_Shallow	non-Rad	Fluoranthene	206-44-0	µg/kg	15	1.80E+04	8.33E-04	8.39E+05	1.79E-05
100-F-51 and 100-F-63_Shallow	non-Rad	Lead	7439-92-1	µg/kg	19,021	5.00E+04	3.80E-01	3.56E+04	5.35E-01
100-F-51 and 100-F-63_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	248,671	2.20E+05	**1.13E+00**	5.80E+06	4.29E-02
100-F-51 and 100-F-63_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	33	1.00E+02	3.31E-01	1.87E+03	1.77E-02
100-F-51 and 100-F-63_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	10,470	3.00E+04	3.49E-01	3.26E+04	3.21E-01
100-F-51 and 100-F-63_Shallow	non-Rad	Pyrene	129-00-0	µg/kg	13	1.80E+04	7.22E-04	6.00E+05	2.17E-05
100-F-51 and 100-F-63_Shallow	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	µg/kg	1,120	2.00E+05	5.60E-03	3.56E+08	3.14E-06
100-F-51 and 100-F-63_Shallow	non-Rad	Total petroleum hydrocarbons - diesel range extended to C36	TPHDIESELEXT	µg/kg	5,627	No Value	--	No Value	--
100-F-51 and 100-F-63_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	587	5.00E+03	1.17E-01	7.86E+05	7.47E-04
100-F-51 and 100-F-63_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	39,841	2.00E+03	**1.99E+01**	3.11E+04	**1.28E+00**
100-F-51 and 100-F-63_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	52,147	5.00E+04	**1.04E+00**	6.78E+04	7.69E-01
100-F-51 and 100-F-63_Shallow	Rad	Carbon-14	14762-75-5	pCi/g	0.67	6.07E+04	1.10E-05	3.16E+01	2.11E-02
100-F-51 and 100-F-63_Shallow	Rad	Uranium-234	13966-29-5	pCi/g	0.21	5.16E+04	4.13E-06	6.37E+03	3.34E-05
100-F-51 and 100-F-63_Shallow	Rad	Uranium-238	U-238	pCi/g	0.22	1.57E+04	1.41E-05	5.15E+03	4.31E-05
100-F-51 and 100-F-63_Shallow	Rad	Rads SOF	---	pCi/g	--	--	2.92E-05	--	2.12E-02
100-F-52_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	3,100	1.00E+04	3.10E-01	1.90E+05	1.64E-02
100-F-52_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	67,600	3.30E+05	2.05E-01	1.32E+06	5.11E-02
100-F-52_Shallow_Focused	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	19	1.80E+04	1.06E-03	7.64E+04	2.49E-04
100-F-52_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	490	1.00E+04	4.90E-02	1.39E+04	3.51E-02
100-F-52_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	240	1.00E+05	2.40E-03	4.54E+04	5.28E-03
100-F-52_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,500	5.00E+02	**3.00E+00**	1.33E+05	1.13E-02
100-F-52_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	9,000	4.00E+02	**2.25E+01**	3.82E+04	2.36E-01
100-F-52_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	5,400	1.30E+04	4.15E-01	1.11E+05	4.84E-02
100-F-52_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	13,800	5.00E+04	2.76E-01	1.07E+05	1.29E-01
100-F-52_Shallow_Focused	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	31	No Value	--	No Value	--
100-F-52_Shallow_Focused	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	1,100	No Value	--	1.25E+06	8.83E-04
100-F-52_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	5,200	5.00E+04	1.04E-01	3.56E+04	1.46E-01
100-F-52_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	270,000	2.20E+05	**1.23E+00**	5.80E+06	4.66E-02
100-F-52_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	10	1.00E+02	1.00E-01	1.87E+03	5.36E-03
100-F-52_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	10,900	3.00E+04	3.63E-01	3.26E+04	3.35E-01
100-F-52_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	2,605	5.00E+03	5.21E-01	7.86E+05	3.32E-03
100-F-52_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	35,100	2.00E+03	**1.76E+01**	3.11E+04	**1.13E+00**
100-F-52_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	36,100	5.00E+04	7.22E-01	6.78E+04	5.32E-01
100-F-52_Shallow_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	0.55	5.16E+04	1.07E-05	6.37E+03	8.65E-05
100-F-52_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	0.88	1.57E+04	5.57E-05	5.15E+03	1.70E-04
100-F-52_Shallow_Focused	Rad	Rads SOF	---	pCi/g	--	--	6.64E-05	--	2.57E-04
100-F-53_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	1,010	5.00E+03	2.02E-01	5.98E+03	1.69E-01
100-F-53_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	2,610	1.00E+04	2.61E-01	1.90E+05	1.38E-02
100-F-53_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	75,200	3.30E+05	2.28E-01	1.32E+06	5.68E-02
100-F-53_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	370	1.00E+04	3.70E-02	1.39E+04	2.65E-02
100-F-53_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	200	1.00E+05	2.00E-03	4.54E+04	4.40E-03
100-F-53_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	2,000	5.00E+02	**4.00E+00**	1.33E+05	1.50E-02
100-F-53_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	130	4.00E+03	3.25E-02	1.63E+03	7.98E-02
100-F-53_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	11,200	4.00E+02	**2.80E+01**	3.82E+04	2.93E-01
100-F-53_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	5,790	1.30E+04	4.45E-01	1.11E+05	5.19E-02
100-F-53_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	12,400	5.00E+04	2.48E-01	1.07E+05	1.16E-01
100-F-53_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	21,200	5.00E+04	4.24E-01	3.56E+04	5.96E-01
100-F-53_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	413,000	2.20E+05	**1.88E+00**	5.80E+06	7.12E-02
100-F-53_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	380	2.00E+03	1.90E-01	1.40E+04	2.72E-02
100-F-53_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	10,100	3.00E+04	3.37E-01	3.26E+04	3.10E-01
100-F-53_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	1,673	5.00E+03	3.35E-01	7.86E+05	2.13E-03
100-F-53_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	45,600	2.00E+03	**2.28E+01**	3.11E+04	**1.46E+00**

Table 3. Comparison of 100-F Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
100-F-53_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	46,900	5.00E+04	9.38E-01	6.78E+04	6.92E-01
100-F-53_Shallow_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	0.80	5.16E+04	1.54E-05	6.37E+03	1.25E-04
100-F-53_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	0.56	1.57E+04	3.58E-05	5.15E+03	1.09E-04
100-F-53_Shallow_Focused	Rad	Rads SOF	---	pCi/g	--	--	5.12E-05	--	2.34E-04
100-F-54_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.45	2.21E+03	2.02E-04	9.24E+02	4.83E-04
100-F-54_Shallow	Rad	Europium-152	14683-23-9	pCi/g	0.60	1.47E+04	4.07E-05	1.74E+03	3.44E-04
100-F-54_Shallow	Rad	Rads SOF	---	pCi/g	--	--	2.43E-04	--	8.27E-04
100-F-55 and 100-F-62_Shallow_1	non-Rad	4,4'-DDE (Dichlorodiphenyldichloroethylene)	72-55-9	µg/kg	12	No Value	--	4.00E+02	3.00E-02
100-F-55 and 100-F-62_Shallow_1	non-Rad	4,4'-DDT (Dichlorodiphenyltrichloroethane)	50-29-3	µg/kg	11	No Value	--	8.82E+02	1.25E-02
100-F-55 and 100-F-62_Shallow_1	non-Rad	Acenaphthene	83-32-9	µg/kg	16	2.00E+04	8.00E-04	1.10E+06	1.46E-05
100-F-55 and 100-F-62_Shallow_1	non-Rad	Alpha-Chlordane	5103-71-9	µg/kg	9.0	1.00E+03	8.99E-03	5.04E+04	1.78E-04
100-F-55 and 100-F-62_Shallow_1	non-Rad	Anthracene	120-12-7	µg/kg	8.5	2.90E+04	2.94E-04	6.78E+05	1.26E-05
100-F-55 and 100-F-62_Shallow_1	non-Rad	Aroclor-1260	11096-82-5	µg/kg	17	4.00E+04	4.20E-04	1.47E+03	1.14E-02
100-F-55 and 100-F-62_Shallow_1	non-Rad	Aroclors HI		ug/kg	--	--	4.20E-04	--	1.14E-02
100-F-55 and 100-F-62_Shallow_1	non-Rad	Arsenic	7440-38-2	µg/kg	3,302	1.00E+04	3.30E-01	1.90E+05	1.74E-02
100-F-55 and 100-F-62_Shallow_1	non-Rad	Barium	7440-39-3	µg/kg	103,747	3.30E+05	3.14E-01	1.32E+06	7.84E-02
100-F-55 and 100-F-62_Shallow_1	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	44	1.80E+04	2.45E-03	6.40E+04	6.88E-04
100-F-55 and 100-F-62_Shallow_1	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	57	1.80E+04	3.18E-03	7.64E+04	7.50E-04
100-F-55 and 100-F-62_Shallow_1	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	42	1.80E+04	2.36E-03	3.92E+04	1.08E-03
100-F-55 and 100-F-62_Shallow_1	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	21	1.80E+04	1.14E-03	3.92E+04	5.25E-04
100-F-55 and 100-F-62_Shallow_1	non-Rad	Beryllium	7440-41-7	µg/kg	286	1.00E+04	2.86E-02	1.39E+04	2.05E-02
100-F-55 and 100-F-62_Shallow_1	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	353	1.00E+05	3.53E-03	4.54E+04	7.77E-03
100-F-55 and 100-F-62_Shallow_1	non-Rad	Boron	7440-42-8	µg/kg	2,179	5.00E+02	**4.36E+00**	1.33E+05	1.64E-02
100-F-55 and 100-F-62_Shallow_1	non-Rad	Cadmium	7440-43-9	µg/kg	133	4.00E+03	3.34E-02	1.63E+03	8.19E-02
100-F-55 and 100-F-62_Shallow_1	non-Rad	Chlordane	57-74-9	µg/kg	8.6	1.00E+03	8.58E-03	5.04E+04	1.70E-04
100-F-55 and 100-F-62_Shallow_1	non-Rad	Chromium	7440-47-3	µg/kg	12,368	4.00E+02	**3.09E+01**	3.82E+04	3.24E-01
100-F-55 and 100-F-62_Shallow_1	non-Rad	Chrysene	218-01-9	µg/kg	46	1.80E+04	2.53E-03	4.45E+04	1.02E-03
100-F-55 and 100-F-62_Shallow_1	non-Rad	Cobalt	7440-48-4	µg/kg	6,919	1.30E+04	5.32E-01	1.11E+05	6.21E-02
100-F-55 and 100-F-62_Shallow_1	non-Rad	Copper	7440-50-8	µg/kg	16,925	5.00E+04	3.38E-01	1.07E+05	1.58E-01
100-F-55 and 100-F-62_Shallow_1	non-Rad	Dibenz[a,h]anthracene	53-70-3	µg/kg	18	1.80E+04	1.00E-03	4.41E+04	4.08E-04
100-F-55 and 100-F-62_Shallow_1	non-Rad	Dieldrin	60-57-1	µg/kg	12	No Value	--	2.09E+01	5.70E-01
100-F-55 and 100-F-62_Shallow_1	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	67	No Value	--	No Value	--
100-F-55 and 100-F-62_Shallow_1	non-Rad	Fluoranthene	206-44-0	µg/kg	150	1.80E+04	8.34E-03	8.39E+05	1.79E-04
100-F-55 and 100-F-62_Shallow_1	non-Rad	Fluorene	86-73-7	µg/kg	17	2.90E+04	5.86E-04	1.75E+05	9.69E-05
100-F-55 and 100-F-62_Shallow_1	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	36	1.80E+04	1.98E-03	3.57E+04	9.98E-04
100-F-55 and 100-F-62_Shallow_1	non-Rad	Lead	7439-92-1	µg/kg	65,065	5.00E+04	**1.30E+00**	3.56E+04	**1.83E+00**
100-F-55 and 100-F-62_Shallow_1	non-Rad	Manganese	7439-96-5	µg/kg	325,163	2.20E+05	**1.48E+00**	5.80E+06	5.61E-02
100-F-55 and 100-F-62_Shallow_1	non-Rad	Mercury	7439-97-6	µg/kg	25	1.00E+02	2.51E-01	1.87E+03	1.34E-02
100-F-55 and 100-F-62_Shallow_1	non-Rad	Molybdenum	7439-98-7	µg/kg	260	2.00E+03	1.30E-01	1.40E+04	1.86E-02
100-F-55 and 100-F-62_Shallow_1	non-Rad	Nickel	7440-02-0	µg/kg	12,018	3.00E+04	4.01E-01	3.26E+04	3.69E-01
100-F-55 and 100-F-62_Shallow_1	non-Rad	Phenol	108-95-2	µg/kg	25	3.00E+04	8.33E-04	1.51E+06	1.65E-05
100-F-55 and 100-F-62_Shallow_1	non-Rad	Pyrene	129-00-0	µg/kg	177	1.80E+04	9.81E-03	6.00E+05	2.94E-04
100-F-55 and 100-F-62_Shallow_1	non-Rad	Vanadium	7440-62-2	µg/kg	42,866	2.00E+03	**2.14E+01**	3.11E+04	**1.38E+00**
100-F-55 and 100-F-62_Shallow_1	non-Rad	Zinc	7440-66-6	µg/kg	53,696	5.00E+04	**1.07E+00**	6.78E+04	7.92E-01
100-F-55 and 100-F-62_Shallow_2	non-Rad	Anthracene	120-12-7	µg/kg	17	2.90E+04	5.69E-04	6.78E+05	2.43E-05
100-F-55 and 100-F-62_Shallow_2	non-Rad	Aroclor-1248	12672-29-6	µg/kg	240	4.00E+04	6.00E-03	3.25E+02	7.39E-01
100-F-55 and 100-F-62_Shallow_2	non-Rad	Aroclor-1254	11097-69-1	µg/kg	15	4.00E+04	3.71E-04	1.47E+03	1.01E-02
100-F-55 and 100-F-62_Shallow_2	non-Rad	Aroclor-1260	11096-82-5	µg/kg	8.5	4.00E+04	2.13E-04	1.47E+03	5.76E-03
100-F-55 and 100-F-62_Shallow_2	non-Rad	Aroclors HI		ug/kg	--	--	6.58E-03	--	7.55E-01
100-F-55 and 100-F-62_Shallow_2	non-Rad	Arsenic	7440-38-2	µg/kg	3,053	1.00E+04	3.05E-01	1.90E+05	1.61E-02
100-F-55 and 100-F-62_Shallow_2	non-Rad	Barium	7440-39-3	µg/kg	85,283	3.30E+05	2.58E-01	1.32E+06	6.45E-02
100-F-55 and 100-F-62_Shallow_2	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	76	1.80E+04	4.20E-03	6.40E+04	1.18E-03
100-F-55 and 100-F-62_Shallow_2	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	64	1.80E+04	3.57E-03	7.64E+04	8.41E-04
100-F-55 and 100-F-62_Shallow_2	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	45	1.80E+04	2.51E-03	3.92E+04	1.15E-03
100-F-55 and 100-F-62_Shallow_2	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	29	1.80E+04	1.63E-03	3.92E+04	7.47E-04
100-F-55 and 100-F-62_Shallow_2	non-Rad	Beryllium	7440-41-7	µg/kg	146	1.00E+04	1.46E-02	1.39E+04	1.05E-02

Table 3. Comparison of 100-F Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
100-F-55 and 100-F-62_Shallow_2	non-Rad	Boron	7440-42-8	µg/kg	4,158	5.00E+02	**8.32E+00**	1.33E+05	3.13E-02
100-F-55 and 100-F-62_Shallow_2	non-Rad	Cadmium	7440-43-9	µg/kg	100	4.00E+03	2.49E-02	1.63E+03	6.12E-02
100-F-55 and 100-F-62_Shallow_2	non-Rad	Chromium	7440-47-3	µg/kg	11,540	4.00E+02	**2.89E+01**	3.82E+04	3.02E-01
100-F-55 and 100-F-62_Shallow_2	non-Rad	Chrysene	218-01-9	µg/kg	71	1.80E+04	3.95E-03	4.45E+04	1.60E-03
100-F-55 and 100-F-62_Shallow_2	non-Rad	Cobalt	7440-48-4	µg/kg	6,397	1.30E+04	4.92E-01	1.11E+05	5.74E-02
100-F-55 and 100-F-62_Shallow_2	non-Rad	Copper	7440-50-8	µg/kg	13,411	5.00E+04	2.68E-01	1.07E+05	1.25E-01
100-F-55 and 100-F-62_Shallow_2	non-Rad	Dibenz[a,h]anthracene	53-70-3	µg/kg	23	1.80E+04	1.28E-03	4.41E+04	5.21E-04
100-F-55 and 100-F-62_Shallow_2	non-Rad	Fluoranthene	206-44-0	µg/kg	127	1.80E+04	7.04E-03	8.39E+05	1.51E-04
100-F-55 and 100-F-62_Shallow_2	non-Rad	Fluorene	86-73-7	µg/kg	9.6	2.90E+04	3.33E-04	1.75E+05	5.50E-05
100-F-55 and 100-F-62_Shallow_2	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	39	1.80E+04	2.17E-03	3.57E+04	1.09E-03
100-F-55 and 100-F-62_Shallow_2	non-Rad	Lead	7439-92-1	µg/kg	5,536	5.00E+04	1.11E-01	3.56E+04	1.56E-01
100-F-55 and 100-F-62_Shallow_2	non-Rad	Manganese	7439-96-5	µg/kg	256,619	2.20E+05	**1.17E+00**	5.80E+06	4.43E-02
100-F-55 and 100-F-62_Shallow_2	non-Rad	Mercury	7439-97-6	µg/kg	6,786	1.00E+02	**6.79E+01**	1.87E+03	**3.64E+00**
100-F-55 and 100-F-62_Shallow_2	non-Rad	Molybdenum	7439-98-7	µg/kg	250	2.00E+03	1.25E-01	1.40E+04	1.79E-02
100-F-55 and 100-F-62_Shallow_2	non-Rad	Nickel	7440-02-0	µg/kg	12,732	3.00E+04	4.24E-01	3.26E+04	3.91E-01
100-F-55 and 100-F-62_Shallow_2	non-Rad	Phenol	108-95-2	µg/kg	35	3.00E+04	1.17E-03	1.51E+06	2.32E-05
100-F-55 and 100-F-62_Shallow_2	non-Rad	Pyrene	129-00-0	µg/kg	142	1.80E+04	7.92E-03	6.00E+05	2.37E-04
100-F-55 and 100-F-62_Shallow_2	non-Rad	Vanadium	7440-62-2	µg/kg	39,226	2.00E+03	**1.96E+01**	3.11E+04	**1.26E+00**
100-F-55 and 100-F-62_Shallow_2	non-Rad	Zinc	7440-66-6	µg/kg	49,926	5.00E+04	9.99E-01	6.78E+04	7.36E-01
100-F-55 and 100-F-62_Shallow_2	Rad	Cesium-137	10045-97-3	pCi/g	0.051	2.21E+03	2.30E-05	9.24E+02	5.51E-05
100-F-55 and 100-F-62_Shallow_2	Rad	Rads SOF	---	pCi/g	--	--	2.30E-05	--	5.51E-05
100-F-55 and 100-F-62_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	660	5.00E+03	1.32E-01	5.98E+03	1.10E-01
100-F-55 and 100-F-62_Shallow_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	4.9	4.00E+04	1.23E-04	1.47E+03	3.32E-03
100-F-55 and 100-F-62_Shallow_Focused	non-Rad	Aroclors HI		ug/kg	--	--	1.23E-04	--	3.32E-03
100-F-55 and 100-F-62_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	3,000	1.00E+04	3.00E-01	1.90E+05	1.58E-02
100-F-55 and 100-F-62_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	48,600	3.30E+05	1.47E-01	1.32E+06	3.67E-02
100-F-55 and 100-F-62_Shallow_Focused	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	8.4	1.80E+04	4.67E-04	7.64E+04	1.10E-04
100-F-55 and 100-F-62_Shallow_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	4.7	1.80E+04	2.61E-04	3.92E+04	1.20E-04
100-F-55 and 100-F-62_Shallow_Focused	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	6.3	1.80E+04	3.50E-04	3.92E+04	1.61E-04
100-F-55 and 100-F-62_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	38	1.00E+04	3.80E-03	1.39E+04	2.72E-03
100-F-55 and 100-F-62_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,200	5.00E+02	**2.40E+00**	1.33E+05	9.03E-03
100-F-55 and 100-F-62_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	76	4.00E+03	1.90E-02	1.63E+03	4.66E-02
100-F-55 and 100-F-62_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	10,800	4.00E+02	**2.70E+01**	3.82E+04	2.83E-01
100-F-55 and 100-F-62_Shallow_Focused	non-Rad	Chrysene	218-01-9	µg/kg	6.7	1.80E+04	3.72E-04	4.45E+04	1.51E-04
100-F-55 and 100-F-62_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	5,900	1.30E+04	4.54E-01	1.11E+05	5.29E-02
100-F-55 and 100-F-62_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	13,000	5.00E+04	2.60E-01	1.07E+05	1.21E-01
100-F-55 and 100-F-62_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	4,700	5.00E+04	9.40E-02	3.56E+04	1.32E-01
100-F-55 and 100-F-62_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	286,000	2.20E+05	**1.30E+00**	5.80E+06	4.93E-02
100-F-55 and 100-F-62_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	10,400	3.00E+04	3.47E-01	3.26E+04	3.19E-01
100-F-55 and 100-F-62_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	42,000	2.00E+03	**2.10E+01**	3.11E+04	**1.35E+00**
100-F-55 and 100-F-62_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	34,500	5.00E+04	6.90E-01	6.78E+04	5.09E-01
100-F-55 and 100-F-62_Staging Pile Area Footprint_Focused	non-Rad	Alpha-Chlordane	5103-71-9	µg/kg	0.81	1.00E+03	8.10E-04	5.04E+04	1.61E-05
100-F-55 and 100-F-62_Staging Pile Area Footprint_Focused	non-Rad	Anthracene	120-12-7	µg/kg	26	2.90E+04	8.97E-04	6.78E+05	3.83E-05
100-F-55 and 100-F-62_Staging Pile Area Footprint_Focused	non-Rad	Aroclor-1248	12672-29-6	µg/kg	25	4.00E+04	6.25E-04	3.25E+02	7.70E-02
100-F-55 and 100-F-62_Staging Pile Area Footprint_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	19	4.00E+04	4.75E-04	1.47E+03	1.29E-02
100-F-55 and 100-F-62_Staging Pile Area Footprint_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	22	4.00E+04	5.50E-04	1.47E+03	1.49E-02
100-F-55 and 100-F-62_Staging Pile Area Footprint_Focused	non-Rad	Aroclors HI		ug/kg	--	--	1.65E-03	--	1.05E-01
100-F-55 and 100-F-62_Staging Pile Area Footprint_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	3,900	1.00E+04	3.90E-01	1.90E+05	2.06E-02
100-F-55 and 100-F-62_Staging Pile Area Footprint_Focused	non-Rad	Barium	7440-39-3	µg/kg	157,000	3.30E+05	4.76E-01	1.32E+06	1.19E-01
100-F-55 and 100-F-62_Staging Pile Area Footprint_Focused	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	110	1.80E+04	6.11E-03	6.40E+04	1.72E-03
100-F-55 and 100-F-62_Staging Pile Area Footprint_Focused	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	86	1.80E+04	4.78E-03	7.64E+04	1.13E-03
100-F-55 and 100-F-62_Staging Pile Area Footprint_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	62	1.80E+04	3.44E-03	3.92E+04	1.58E-03
100-F-55 and 100-F-62_Staging Pile Area Footprint_Focused	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	43	1.80E+04	2.39E-03	3.92E+04	1.10E-03
100-F-55 and 100-F-62_Staging Pile Area Footprint_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	330	1.00E+04	3.30E-02	1.39E+04	2.37E-02
100-F-55 and 100-F-62_Staging Pile Area Footprint_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	660	1.00E+05	6.60E-03	4.54E+04	1.45E-02
100-F-55 and 100-F-62_Staging Pile Area Footprint_Focused	non-Rad	Boron	7440-42-8	µg/kg	8,300	5.00E+02	**1.66E+01**	1.33E+05	6.24E-02

Table 3. Comparison of 100-F Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
100-F-55 and 100-F-62_Staging Pile Area Footprint_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	270	4.00E+03	6.75E-02	1.63E+03	1.66E-01
100-F-55 and 100-F-62_Staging Pile Area Footprint_Focused	non-Rad	Chlordane	57-74-9	µg/kg	0.91	1.00E+03	9.10E-04	5.04E+04	1.81E-05
100-F-55 and 100-F-62_Staging Pile Area Footprint_Focused	non-Rad	Chromium	7440-47-3	µg/kg	16,900	4.00E+02	**4.23E+01**	3.82E+04	4.43E-01
100-F-55 and 100-F-62_Staging Pile Area Footprint_Focused	non-Rad	Chrysene	218-01-9	µg/kg	100	1.80E+04	5.56E-03	4.45E+04	2.25E-03
100-F-55 and 100-F-62_Staging Pile Area Footprint_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	7,300	1.30E+04	5.62E-01	1.11E+05	6.55E-02
100-F-55 and 100-F-62_Staging Pile Area Footprint_Focused	non-Rad	Copper	7440-50-8	µg/kg	18,200	5.00E+04	3.64E-01	1.07E+05	1.70E-01
100-F-55 and 100-F-62_Staging Pile Area Footprint_Focused	non-Rad	Dieldrin	60-57-1	µg/kg	3.0	No Value	--	2.09E+01	1.44E-01
100-F-55 and 100-F-62_Staging Pile Area Footprint_Focused	non-Rad	Fluoranthene	206-44-0	µg/kg	200	1.80E+04	1.11E-02	8.39E+05	2.38E-04
100-F-55 and 100-F-62_Staging Pile Area Footprint_Focused	non-Rad	Fluorene	86-73-7	µg/kg	16	2.90E+04	5.52E-04	1.75E+05	9.12E-05
100-F-55 and 100-F-62_Staging Pile Area Footprint_Focused	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	749	No Value	--	1.25E+06	6.01E-04
100-F-55 and 100-F-62_Staging Pile Area Footprint_Focused	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	49	1.80E+04	2.72E-03	3.57E+04	1.37E-03
100-F-55 and 100-F-62_Staging Pile Area Footprint_Focused	non-Rad	Lead	7439-92-1	µg/kg	19,500	5.00E+04	3.90E-01	3.56E+04	5.48E-01
100-F-55 and 100-F-62_Staging Pile Area Footprint_Focused	non-Rad	Manganese	7439-96-5	µg/kg	340,000	2.20E+05	**1.55E+00**	5.80E+06	5.86E-02
100-F-55 and 100-F-62_Staging Pile Area Footprint_Focused	non-Rad	Mercury	7439-97-6	µg/kg	690	1.00E+02	**6.90E+00**	1.87E+03	3.70E-01
100-F-55 and 100-F-62_Staging Pile Area Footprint_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	390	2.00E+03	1.95E-01	1.40E+04	2.79E-02
100-F-55 and 100-F-62_Staging Pile Area Footprint_Focused	non-Rad	Nickel	7440-02-0	µg/kg	15,000	3.00E+04	5.00E-01	3.26E+04	4.60E-01
100-F-55 and 100-F-62_Staging Pile Area Footprint_Focused	non-Rad	Phenol	108-95-2	µg/kg	80	3.00E+04	2.67E-03	1.51E+06	5.29E-05
100-F-55 and 100-F-62_Staging Pile Area Footprint_Focused	non-Rad	Pyrene	129-00-0	µg/kg	160	1.80E+04	8.89E-03	6.00E+05	2.67E-04
100-F-55 and 100-F-62_Staging Pile Area Footprint_Focused	non-Rad	Silver	7440-22-4	µg/kg	970	2.00E+03	4.85E-01	4.96E+04	1.95E-02
100-F-55 and 100-F-62_Staging Pile Area Footprint_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	42,600	2.00E+03	**2.13E+01**	3.11E+04	**1.37E+00**
100-F-55 and 100-F-62_Staging Pile Area Footprint_Focused	non-Rad	Zinc	7440-66-6	µg/kg	74,800	5.00E+04	**1.50E+00**	6.78E+04	**1.10E+00**
100-F-55 and 100-F-62_Staging Pile Area Footprint_Focused	Rad	Cesium-137	10045-97-3	pCi/g	0.14	2.21E+03	6.20E-05	9.24E+02	1.48E-04
100-F-55 and 100-F-62_Staging Pile Area Footprint_Focused	Rad	Rads SOF	---	pCi/g	--	--	6.20E-05	--	1.48E-04
100-F-56:1_Shallow	non-Rad	Aroclor-1254	11097-69-1	µg/kg	3.2	4.00E+04	8.00E-05	1.47E+03	2.17E-03
100-F-56:1_Shallow	non-Rad	Aroclors HI		ug/kg	--	--	8.00E-05	--	2.17E-03
100-F-56:1_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	2,037	1.00E+04	2.04E-01	1.90E+05	1.08E-02
100-F-56:1_Shallow	non-Rad	Barium	7440-39-3	µg/kg	67,818	3.30E+05	2.06E-01	1.32E+06	5.13E-02
100-F-56:1_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	174	1.00E+04	1.74E-02	1.39E+04	1.25E-02
100-F-56:1_Shallow	non-Rad	Boron	7440-42-8	µg/kg	1,317	5.00E+02	**2.63E+00**	1.33E+05	9.91E-03
100-F-56:1_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	78	4.00E+03	1.96E-02	1.63E+03	4.81E-02
100-F-56:1_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	10,361	4.00E+02	**2.59E+01**	3.82E+04	2.71E-01
100-F-56:1_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	6,840	1.30E+04	5.26E-01	1.11E+05	6.13E-02
100-F-56:1_Shallow	non-Rad	Copper	7440-50-8	µg/kg	13,275	5.00E+04	2.65E-01	1.07E+05	1.24E-01
100-F-56:1_Shallow	non-Rad	Lead	7439-92-1	µg/kg	8,270	5.00E+04	1.65E-01	3.56E+04	2.32E-01
100-F-56:1_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	276,638	2.20E+05	**1.26E+00**	5.80E+06	4.77E-02
100-F-56:1_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	1,771	1.00E+02	**1.77E+01**	1.87E+03	9.49E-01
100-F-56:1_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	251	2.00E+03	1.26E-01	1.40E+04	1.80E-02
100-F-56:1_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	10,713	3.00E+04	3.57E-01	3.26E+04	3.29E-01
100-F-56:1_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	48,417	2.00E+03	**2.42E+01**	3.11E+04	**1.56E+00**
100-F-56:1_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	35,948	5.00E+04	7.19E-01	6.78E+04	5.30E-01
100-F-56:1_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	18	4.00E+04	4.50E-04	1.47E+03	1.22E-02
100-F-56:1_Shallow_Focused	non-Rad	Aroclors HI		ug/kg	--	--	4.50E-04	--	1.22E-02
100-F-56:1_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	2,600	1.00E+04	2.60E-01	1.90E+05	1.37E-02
100-F-56:1_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	91,000	3.30E+05	2.76E-01	1.32E+06	6.88E-02
100-F-56:1_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	420	1.00E+04	4.20E-02	1.39E+04	3.01E-02
100-F-56:1_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	2,600	5.00E+02	**5.20E+00**	1.33E+05	1.96E-02
100-F-56:1_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	140	4.00E+03	3.50E-02	1.63E+03	8.59E-02
100-F-56:1_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	58,600	4.00E+02	**1.47E+02**	3.82E+04	**1.54E+00**
100-F-56:1_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	7,500	1.30E+04	5.77E-01	1.11E+05	6.73E-02
100-F-56:1_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	16,800	5.00E+04	3.36E-01	1.07E+05	1.57E-01
100-F-56:1_Shallow_Focused	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	1,560	No Value	--	1.25E+06	1.25E-03
100-F-56:1_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	22,500	5.00E+04	4.50E-01	3.56E+04	6.32E-01
100-F-56:1_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	296,000	2.20E+05	**1.35E+00**	5.80E+06	5.11E-02
100-F-56:1_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	21	1.00E+02	2.10E-01	1.87E+03	1.13E-02
100-F-56:1_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	450	2.00E+03	2.25E-01	1.40E+04	3.22E-02
100-F-56:1_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	10,200	3.00E+04	3.40E-01	3.26E+04	3.13E-01

Table 3. Comparison of 100-F Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
100-F-56:1_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	49,300	2.00E+03	**2.47E+01**	3.11E+04	**1.58E+00**
100-F-56:1_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	40,300	5.00E+04	8.06E-01	6.78E+04	5.94E-01
100-F-60_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	2,100	1.00E+04	2.10E-01	1.90E+05	1.11E-02
100-F-60_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	83,000	3.30E+05	2.52E-01	1.32E+06	6.27E-02
100-F-60_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	200	1.00E+04	2.00E-02	1.39E+04	1.43E-02
100-F-60_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	3,300	5.00E+02	**6.60E+00**	1.33E+05	2.48E-02
100-F-60_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	45	4.00E+03	1.13E-02	1.63E+03	2.76E-02
100-F-60_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	9,900	4.00E+02	**2.48E+01**	3.82E+04	2.59E-01
100-F-60_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	5,100	1.30E+04	3.92E-01	1.11E+05	4.57E-02
100-F-60_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	12,200	5.00E+04	2.44E-01	1.07E+05	1.14E-01
100-F-60_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	26,000	5.00E+04	5.20E-01	3.56E+04	7.31E-01
100-F-60_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	248,000	2.20E+05	**1.13E+00**	5.80E+06	4.28E-02
100-F-60_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	9.9	1.00E+02	9.90E-02	1.87E+03	5.30E-03
100-F-60_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	10,100	3.00E+04	3.37E-01	3.26E+04	3.10E-01
100-F-60_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	38,600	2.00E+03	**1.93E+01**	3.11E+04	**1.24E+00**
100-F-60_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	37,000	5.00E+04	7.40E-01	6.78E+04	5.46E-01
100-F-61_Shallow	non-Rad	Anthracene	120-12-7	µg/kg	61	2.90E+04	2.11E-03	6.78E+05	9.03E-05
100-F-61_Shallow	non-Rad	Aroclor-1260	11096-82-5	µg/kg	130	4.00E+04	3.24E-03	1.47E+03	8.79E-02
100-F-61_Shallow	non-Rad	Aroclors HI		ug/kg	--	--	3.24E-03	--	8.79E-02
100-F-61_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	2,668	1.00E+04	2.67E-01	1.90E+05	1.41E-02
100-F-61_Shallow	non-Rad	Barium	7440-39-3	µg/kg	66,908	3.30E+05	2.03E-01	1.32E+06	5.06E-02
100-F-61_Shallow	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	362	1.80E+04	2.01E-02	6.40E+04	5.65E-03
100-F-61_Shallow	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	197	1.80E+04	1.09E-02	7.64E+04	2.58E-03
100-F-61_Shallow	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	135	1.80E+04	7.51E-03	3.92E+04	3.45E-03
100-F-61_Shallow	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	79	1.80E+04	4.37E-03	3.92E+04	2.00E-03
100-F-61_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	397	1.00E+04	3.97E-02	1.39E+04	2.85E-02
100-F-61_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	42	1.00E+05	4.20E-04	4.54E+04	9.25E-04
100-F-61_Shallow	non-Rad	Boron	7440-42-8	µg/kg	2,403	5.00E+02	**4.81E+00**	1.33E+05	1.81E-02
100-F-61_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	106	4.00E+03	2.66E-02	1.63E+03	6.53E-02
100-F-61_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	11,835	4.00E+02	**2.96E+01**	3.82E+04	3.10E-01
100-F-61_Shallow	non-Rad	Chrysene	218-01-9	µg/kg	224	1.80E+04	1.24E-02	4.45E+04	5.03E-03
100-F-61_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	6,254	1.30E+04	4.81E-01	1.11E+05	5.61E-02
100-F-61_Shallow	non-Rad	Copper	7440-50-8	µg/kg	15,346	5.00E+04	3.07E-01	1.07E+05	1.43E-01
100-F-61_Shallow	non-Rad	Dibenz[a,h]anthracene	53-70-3	µg/kg	35	1.80E+04	1.94E-03	4.41E+04	7.93E-04
100-F-61_Shallow	non-Rad	Fluoranthene	206-44-0	µg/kg	511	1.80E+04	2.84E-02	8.39E+05	6.08E-04
100-F-61_Shallow	non-Rad	Fluorene	86-73-7	µg/kg	100	2.90E+04	3.45E-03	1.75E+05	5.70E-04
100-F-61_Shallow	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	99	1.80E+04	5.48E-03	3.57E+04	2.76E-03
100-F-61_Shallow	non-Rad	Lead	7439-92-1	µg/kg	6,243	5.00E+04	1.25E-01	3.56E+04	1.75E-01
100-F-61_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	298,817	2.20E+05	**1.36E+00**	5.80E+06	5.15E-02
100-F-61_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	640	1.00E+02	**6.40E+00**	1.87E+03	3.43E-01
100-F-61_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	520	2.00E+03	2.60E-01	1.40E+04	3.72E-02
100-F-61_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	11,237	3.00E+04	3.75E-01	3.26E+04	3.45E-01
100-F-61_Shallow	non-Rad	Pyrene	129-00-0	µg/kg	554	1.80E+04	3.08E-02	6.00E+05	9.24E-04
100-F-61_Shallow	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	µg/kg	22,371	2.00E+05	1.12E-01	3.56E+08	6.28E-05
100-F-61_Shallow	non-Rad	Total petroleum hydrocarbons - diesel range extended to C36	TPHDIESELEXT	µg/kg	48,222	No Value	--	No Value	--
100-F-61_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	44,351	2.00E+03	**2.22E+01**	3.11E+04	**1.42E+00**
100-F-61_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	39,326	5.00E+04	7.87E-01	6.78E+04	5.80E-01
100-F-7_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	2,700	1.00E+04	2.70E-01	1.90E+05	1.42E-02
100-F-7_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	72,500	3.30E+05	2.20E-01	1.32E+06	5.48E-02
100-F-7_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	344	1.00E+04	3.44E-02	1.39E+04	2.47E-02
100-F-7_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	30	1.00E+05	3.02E-04	4.54E+04	6.65E-04
100-F-7_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,000	5.00E+02	**2.00E+00**	1.33E+05	7.52E-03
100-F-7_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	123	4.00E+03	3.08E-02	1.63E+03	7.55E-02
100-F-7_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	9,900	4.00E+02	**2.48E+01**	3.82E+04	2.59E-01
100-F-7_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	6,000	1.30E+04	4.62E-01	1.11E+05	5.38E-02
100-F-7_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	11,800	5.00E+04	2.36E-01	1.07E+05	1.10E-01

Table 3. Comparison of 100-F Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
100-F-7_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	4,300	5.00E+04	8.60E-02	3.56E+04	1.21E-01
100-F-7_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	262,000	2.20E+05	**1.19E+00**	5.80E+06	4.52E-02
100-F-7_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	131	1.00E+02	**1.31E+00**	1.87E+03	7.02E-02
100-F-7_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	299	2.00E+03	1.50E-01	1.40E+04	2.14E-02
100-F-7_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	10,200	3.00E+04	3.40E-01	3.26E+04	3.13E-01
100-F-7_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	38,400	2.00E+03	**1.92E+01**	3.11E+04	**1.23E+00**
100-F-7_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	43,800	5.00E+04	8.76E-01	6.78E+04	6.46E-01
100-F-9_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	2,600	1.00E+04	2.60E-01	1.90E+05	1.37E-02
100-F-9_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	42,300	3.30E+05	1.28E-01	1.32E+06	3.20E-02
100-F-9_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	220	1.00E+04	2.20E-02	1.39E+04	1.58E-02
100-F-9_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	2,300	5.00E+02	**4.60E+00**	1.33E+05	1.73E-02
100-F-9_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	60	4.00E+03	1.50E-02	1.63E+03	3.68E-02
100-F-9_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	13,900	4.00E+02	**3.48E+01**	3.82E+04	3.64E-01
100-F-9_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	5,700	1.30E+04	4.38E-01	1.11E+05	5.11E-02
100-F-9_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	13,600	5.00E+04	2.72E-01	1.07E+05	1.27E-01
100-F-9_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	4,700	5.00E+04	9.40E-02	3.56E+04	1.32E-01
100-F-9_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	273,000	2.20E+05	**1.24E+00**	5.80E+06	4.71E-02
100-F-9_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	410	1.00E+02	**4.10E+00**	1.87E+03	2.20E-01
100-F-9_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	170	2.00E+03	8.50E-02	1.40E+04	1.22E-02
100-F-9_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	11,600	3.00E+04	3.87E-01	3.26E+04	3.56E-01
100-F-9_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	48,200	2.00E+03	**2.41E+01**	3.11E+04	**1.55E+00**
100-F-9_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	38,300	5.00E+04	7.66E-01	6.78E+04	5.65E-01
116-F-1_Overburden	non-Rad	Arsenic	7440-38-2	µg/kg	11,119	1.00E+04	**1.11E+00**	1.90E+05	5.87E-02
116-F-1_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	5,955	1.00E+04	5.95E-01	1.90E+05	3.14E-02
116-F-1_Shallow	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	828	No Value	--	1.25E+06	6.65E-04
116-F-1_Shallow	Rad	Carbon-14	14762-75-5	pCi/g	2.5	6.07E+04	4.14E-05	3.16E+01	7.96E-02
116-F-1_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.17	2.21E+03	7.84E-05	9.24E+02	1.87E-04
116-F-1_Shallow	Rad	Europium-152	14683-23-9	pCi/g	0.57	1.47E+04	3.86E-05	1.74E+03	3.26E-04
116-F-1_Shallow	Rad	Rads SOF	---	pCi/g	--	--	1.58E-04	--	8.01E-02
116-F-10_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	10,600	4.00E+02	**2.65E+01**	3.82E+04	2.78E-01
116-F-10_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	2,051	5.00E+03	4.10E-01	7.86E+05	2.61E-03
116-F-10_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	1.5	2.21E+03	6.79E-04	9.24E+02	1.62E-03
116-F-10_Shallow	Rad	Cobalt-60	10198-40-0	pCi/g	0.14	6.13E+03	2.33E-05	8.05E+02	1.78E-04
116-F-10_Shallow	Rad	Europium-152	14683-23-9	pCi/g	0.57	1.47E+04	3.87E-05	1.74E+03	3.27E-04
116-F-10_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.54	5.16E+04	1.04E-05	6.37E+03	8.45E-05
116-F-10_Shallow	Rad	Uranium-238	U-238	pCi/g	0.69	1.57E+04	4.39E-05	5.15E+03	1.34E-04
116-F-10_Shallow	Rad	Rads SOF	---	pCi/g	--	--	7.95E-04	--	2.34E-03
116-F-11_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	7,600	5.00E+04	1.52E-01	3.56E+04	2.14E-01
116-F-11_Shallow_Focused	Rad	Cesium-137	10045-97-3	pCi/g	0.27	2.21E+03	1.21E-04	9.24E+02	2.89E-04
116-F-11_Shallow_Focused	Rad	Europium-152	14683-23-9	pCi/g	1.4	1.47E+04	9.46E-05	1.74E+03	7.99E-04
116-F-11_Shallow_Focused	Rad	Rads SOF	---	pCi/g	--	--	2.16E-04	--	1.09E-03
116-F-14_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	2,661	1.00E+04	2.66E-01	1.90E+05	1.40E-02
116-F-14_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	24,156	4.00E+02	**6.04E+01**	3.82E+04	6.33E-01
116-F-14_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	8,011	1.30E+04	6.16E-01	1.11E+05	7.18E-02
116-F-14_Shallow	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	1,485	No Value	--	1.25E+06	1.19E-03
116-F-14_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.75	2.21E+03	3.39E-04	9.24E+02	8.11E-04
116-F-14_Shallow	Rad	Cobalt-60	10198-40-0	pCi/g	0.090	6.13E+03	1.47E-05	8.05E+02	1.12E-04
116-F-14_Shallow	Rad	Europium-152	14683-23-9	pCi/g	3.1	1.47E+04	2.11E-04	1.74E+03	1.79E-03
116-F-14_Shallow	Rad	Europium-154	15585-10-1	pCi/g	0.24	1.25E+04	1.90E-05	1.61E+03	1.47E-04
116-F-14_Shallow	Rad	Nickel-63	13981-37-8	pCi/g	20	No Value	--	No Value	--
116-F-14_Shallow	Rad	Total beta radiostrontium	SR-RAD	pCi/g	0.32	3.58E+03	8.94E-05	9.11E+01	3.51E-03
116-F-14_Shallow	Rad	Rads SOF	---	pCi/g	--	--	6.73E-04	--	6.37E-03
116-F-15_Shallow	non-Rad	Aroclor-1254	11097-69-1	µg/kg	16	4.00E+04	4.00E-04	1.47E+03	1.09E-02
116-F-15_Shallow	non-Rad	Aroclor-1260	11096-82-5	µg/kg	27	4.00E+04	6.75E-04	1.47E+03	1.83E-02
116-F-15_Shallow	non-Rad	Aroclors HI		ug/kg	--	--	1.08E-03	--	2.92E-02
116-F-15_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	2,810	1.00E+04	2.81E-01	1.90E+05	1.48E-02

Table 3. Comparison of 100-F Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
116-F-15_Shallow	non-Rad	Barium	7440-39-3	µg/kg	90,808	3.30E+05	2.75E-01	1.32E+06	6.86E-02
116-F-15_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	145	1.00E+04	1.45E-02	1.39E+04	1.04E-02
116-F-15_Shallow	non-Rad	Boron	7440-42-8	µg/kg	11,562	5.00E+02	**2.31E+01**	1.33E+05	8.70E-02
116-F-15_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	100	4.00E+03	2.49E-02	1.63E+03	6.12E-02
116-F-15_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	13,311	4.00E+02	**3.33E+01**	3.82E+04	3.49E-01
116-F-15_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	5,556	1.30E+04	4.27E-01	1.11E+05	4.98E-02
116-F-15_Shallow	non-Rad	Copper	7440-50-8	µg/kg	14,130	5.00E+04	2.83E-01	1.07E+05	1.32E-01
116-F-15_Shallow	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	680	No Value	--	1.25E+06	5.46E-04
116-F-15_Shallow	non-Rad	Lead	7439-92-1	µg/kg	15,865	5.00E+04	3.17E-01	3.56E+04	4.46E-01
116-F-15_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	244,514	2.20E+05	**1.11E+00**	5.80E+06	4.22E-02
116-F-15_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	179	1.00E+02	**1.79E+00**	1.87E+03	9.61E-02
116-F-15_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	715	2.00E+03	3.58E-01	1.40E+04	5.12E-02
116-F-15_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	10,522	3.00E+04	3.51E-01	3.26E+04	3.23E-01
116-F-15_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	1,691	5.00E+03	3.38E-01	7.86E+05	2.15E-03
116-F-15_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	38,303	2.00E+03	**1.92E+01**	3.11E+04	**1.23E+00**
116-F-15_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	38,914	5.00E+04	7.78E-01	6.78E+04	5.74E-01
116-F-15_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.15	2.21E+03	6.84E-05	9.24E+02	1.64E-04
116-F-15_Shallow	Rad	Europium-152	14683-23-9	pCi/g	0.070	1.47E+04	4.76E-06	1.74E+03	4.02E-05
116-F-15_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.60	5.16E+04	1.16E-05	6.37E+03	9.40E-05
116-F-15_Shallow	Rad	Uranium-238	U-238	pCi/g	0.57	1.57E+04	3.62E-05	5.15E+03	1.10E-04
116-F-15_Shallow	Rad	Rads SOF	---	pCi/g	--	--	1.21E-04	--	4.08E-04
116-F-16_Overburden	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	230	No Value	--	1.25E+06	1.85E-04
116-F-16_Overburden	non-Rad	Lead	7439-92-1	µg/kg	3,200	5.00E+04	6.40E-02	3.56E+04	8.99E-02
116-F-16_Shallow	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	420	No Value	--	1.25E+06	3.37E-04
116-F-16_Shallow	non-Rad	Lead	7439-92-1	µg/kg	5,300	5.00E+04	1.06E-01	3.56E+04	1.49E-01
116-F-2_Overburden	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	420	No Value	--	1.25E+06	3.37E-04
116-F-2_Overburden	Rad	Cesium-137	10045-97-3	pCi/g	0.12	2.21E+03	5.57E-05	9.24E+02	1.33E-04
116-F-2_Overburden	Rad	Rads SOF	---	pCi/g	--	--	5.57E-05	--	1.33E-04
116-F-2_Shallow	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	1,123	No Value	--	1.25E+06	9.01E-04
116-F-2_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.31	2.21E+03	1.41E-04	9.24E+02	3.38E-04
116-F-2_Shallow	Rad	Europium-152	14683-23-9	pCi/g	1.0	1.47E+04	6.94E-05	1.74E+03	5.86E-04
116-F-2_Shallow	Rad	Rads SOF	---	pCi/g	--	--	2.10E-04	--	9.24E-04
116-F-3_Shallow	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	736	No Value	--	1.25E+06	5.91E-04
116-F-3_Shallow	Rad	Europium-152	14683-23-9	pCi/g	0.36	1.47E+04	2.43E-05	1.74E+03	2.05E-04
116-F-3_Shallow	Rad	Rads SOF	---	pCi/g	--	--	2.43E-05	--	2.05E-04
116-F-4_Overburden_Focused	non-Rad	Fluoride	16984-48-8	µg/kg	54,600	No Value	--	2.28E+06	2.39E-02
116-F-4_Overburden_Focused	non-Rad	Nitrogen in Nitrite and Nitrate	NO2+NO3-N	µg/kg	11,700	No Value	--	No Value	--
116-F-4_Overburden_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	1,637	5.00E+03	3.27E-01	7.86E+05	2.08E-03
116-F-4_Overburden_Focused	Rad	Cesium-137	10045-97-3	pCi/g	3.5	2.21E+03	1.58E-03	9.24E+02	3.79E-03
116-F-4_Overburden_Focused	Rad	Plutonium-239/240	PU-239/240	pCi/g	0.080	1.27E+04	6.30E-06	6.27E+03	1.28E-05
116-F-4_Overburden_Focused	Rad	Strontium-90	10098-97-2	pCi/g	1.6	3.58E+03	4.47E-04	9.11E+01	1.76E-02
116-F-4_Overburden_Focused	Rad	Technetium-99	14133-76-7	pCi/g	1.5	2.19E+04	6.85E-05	5.36E+03	2.80E-04
116-F-4_Overburden_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	0.72	5.16E+04	1.40E-05	6.37E+03	1.13E-04
116-F-4_Overburden_Focused	Rad	Uranium-235	15117-96-1	pCi/g	0.075	2.74E+04	2.74E-06	4.36E+03	1.72E-05
116-F-4_Overburden_Focused	Rad	Uranium-238	U-238	pCi/g	0.55	1.57E+04	3.50E-05	5.15E+03	1.07E-04
116-F-4_Overburden_Focused	Rad	Rads SOF	---	pCi/g	--	--	2.15E-03	--	2.19E-02
116-F-4_Shallow_Focused	non-Rad	Fluoride	16984-48-8	µg/kg	6,500	No Value	--	2.28E+06	2.85E-03
116-F-4_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	1,607	5.00E+03	3.21E-01	7.86E+05	2.05E-03
116-F-4_Shallow_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	0.45	5.16E+04	8.72E-06	6.37E+03	7.06E-05
116-F-4_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	0.54	1.57E+04	3.44E-05	5.15E+03	1.05E-04
116-F-4_Shallow_Focused	Rad	Rads SOF	---	pCi/g	--	--	4.31E-05	--	1.76E-04
116-F-5_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	17,300	1.00E+04	**1.73E+00**	1.90E+05	9.13E-02
116-F-5_Shallow	non-Rad	Barium	7440-39-3	µg/kg	85,000	3.30E+05	2.58E-01	1.32E+06	6.42E-02
116-F-5_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	550	1.00E+04	5.50E-02	1.39E+04	3.94E-02
116-F-5_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	11,200	4.00E+02	**2.80E+01**	3.82E+04	2.93E-01
116-F-5_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	8,600	1.30E+04	6.62E-01	1.11E+05	7.71E-02

Table 3. Comparison of 100-F Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
116-F-5_Shallow	non-Rad	Copper	7440-50-8	µg/kg	13,400	5.00E+04	2.68E-01	1.07E+05	1.25E-01
116-F-5_Shallow	non-Rad	Lead	7439-92-1	µg/kg	18,600	5.00E+04	3.72E-01	3.56E+04	5.23E-01
116-F-5_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	325,000	2.20E+05	**1.48E+00**	5.80E+06	5.61E-02
116-F-5_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	11,400	3.00E+04	3.80E-01	3.26E+04	3.50E-01
116-F-5_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	1,488	5.00E+03	2.98E-01	7.86E+05	1.89E-03
116-F-5_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	45,600	2.00E+03	**2.28E+01**	3.11E+04	**1.46E+00**
116-F-5_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	43,200	5.00E+04	8.64E-01	6.78E+04	6.37E-01
116-F-5_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.22	2.21E+03	1.00E-04	9.24E+02	2.40E-04
116-F-5_Shallow	Rad	Uranium-238	U-238	pCi/g	0.50	1.57E+04	3.18E-05	5.15E+03	9.71E-05
116-F-5_Shallow	Rad	Rads SOF	---	pCi/g	--	--	1.32E-04	--	3.37E-04
116-F-6_Shallow	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	498	No Value	--	1.25E+06	4.00E-04
116-F-6_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.53	2.21E+03	2.38E-04	9.24E+02	5.70E-04
116-F-6_Shallow	Rad	Cobalt-60	10198-40-0	pCi/g	0.083	6.13E+03	1.35E-05	8.05E+02	1.03E-04
116-F-6_Shallow	Rad	Europium-152	14683-23-9	pCi/g	0.28	1.47E+04	1.93E-05	1.74E+03	1.63E-04
116-F-6_Shallow	Rad	Total beta radiostrontium	SR-RAD	pCi/g	1.4	3.58E+03	3.98E-04	9.11E+01	1.57E-02
116-F-6_Shallow	Rad	Rads SOF	---	pCi/g	--	--	6.69E-04	--	1.65E-02
116-F-8_Overburden	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	250	No Value	--	1.25E+06	2.01E-04
116-F-8_Shallow	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	350	No Value	--	1.25E+06	2.81E-04
116-F-9_Shallow	Rad	Total beta radiostrontium	SR-RAD	pCi/g	1.5	3.58E+03	4.22E-04	9.11E+01	1.66E-02
116-F-9_Shallow	Rad	Rads SOF	---	pCi/g	--	--	4.22E-04	--	1.66E-02
118-F-1_Overburden	non-Rad	Antimony	7440-36-0	µg/kg	1,400	5.00E+03	2.80E-01	5.98E+03	2.34E-01
118-F-1_Overburden	non-Rad	Arsenic	7440-38-2	µg/kg	3,529	1.00E+04	3.53E-01	1.90E+05	1.86E-02
118-F-1_Overburden	non-Rad	Barium	7440-39-3	µg/kg	79,630	3.30E+05	2.41E-01	1.32E+06	6.02E-02
118-F-1_Overburden	non-Rad	Beryllium	7440-41-7	µg/kg	419	1.00E+04	4.19E-02	1.39E+04	3.01E-02
118-F-1_Overburden	non-Rad	Boron	7440-42-8	µg/kg	3,490	5.00E+02	**6.98E+00**	1.33E+05	2.63E-02
118-F-1_Overburden	non-Rad	Chromium	7440-47-3	µg/kg	9,573	4.00E+02	**2.39E+01**	3.82E+04	2.51E-01
118-F-1_Overburden	non-Rad	Cobalt	7440-48-4	µg/kg	8,356	1.30E+04	6.43E-01	1.11E+05	7.49E-02
118-F-1_Overburden	non-Rad	Copper	7440-50-8	µg/kg	12,817	5.00E+04	2.56E-01	1.07E+05	1.20E-01
118-F-1_Overburden	non-Rad	Lead	7439-92-1	µg/kg	11,569	5.00E+04	2.31E-01	3.56E+04	3.25E-01
118-F-1_Overburden	non-Rad	Manganese	7439-96-5	µg/kg	339,100	2.20E+05	**1.54E+00**	5.80E+06	5.85E-02
118-F-1_Overburden	non-Rad	Molybdenum	7439-98-7	µg/kg	673	2.00E+03	3.37E-01	1.40E+04	4.82E-02
118-F-1_Overburden	non-Rad	Nickel	7440-02-0	µg/kg	10,966	3.00E+04	3.66E-01	3.26E+04	3.37E-01
118-F-1_Overburden	non-Rad	Selenium	7782-49-2	µg/kg	1,412	5.20E+02	**2.71E+00**	1.90E+03	7.44E-01
118-F-1_Overburden	non-Rad	Silver	7440-22-4	µg/kg	4,300	2.00E+03	**2.15E+00**	4.96E+04	8.67E-02
118-F-1_Overburden	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	1,433	5.00E+03	2.87E-01	7.86E+05	1.82E-03
118-F-1_Overburden	non-Rad	Vanadium	7440-62-2	µg/kg	57,388	2.00E+03	**2.87E+01**	3.11E+04	**1.84E+00**
118-F-1_Overburden	non-Rad	Zinc	7440-66-6	µg/kg	45,106	5.00E+04	9.02E-01	6.78E+04	6.65E-01
118-F-1_Overburden	Rad	Americium-241	14596-10-2	pCi/g	0.60	2.15E+04	2.79E-05	4.84E+03	1.24E-04
118-F-1_Overburden	Rad	Cesium-137	10045-97-3	pCi/g	0.049	2.21E+03	2.23E-05	9.24E+02	5.33E-05
118-F-1_Overburden	Rad	Curium-244	13981-15-2	pCi/g	0.041	1.53E+05	2.69E-07	5.08E+04	8.11E-07
118-F-1_Overburden	Rad	Uranium-233/234	U-233/234	pCi/g	0.51	5.16E+04	9.91E-06	6.37E+03	8.03E-05
118-F-1_Overburden	Rad	Uranium-234	13966-29-5	pCi/g	0.13	5.16E+04	2.56E-06	6.37E+03	2.07E-05
118-F-1_Overburden	Rad	Uranium-238	U-238	pCi/g	0.48	1.57E+04	3.07E-05	5.15E+03	9.34E-05
118-F-1_Overburden	Rad	Rads SOF	---	pCi/g	--	--	9.36E-05	--	3.73E-04
118-F-1_Shallow	non-Rad	Antimony	7440-36-0	µg/kg	920	5.00E+03	1.84E-01	5.98E+03	1.54E-01
118-F-1_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	2,459	1.00E+04	2.46E-01	1.90E+05	1.30E-02
118-F-1_Shallow	non-Rad	Barium	7440-39-3	µg/kg	51,867	3.30E+05	1.57E-01	1.32E+06	3.92E-02
118-F-1_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	220	1.00E+04	2.20E-02	1.39E+04	1.58E-02
118-F-1_Shallow	non-Rad	Boron	7440-42-8	µg/kg	1,429	5.00E+02	**2.86E+00**	1.33E+05	1.08E-02
118-F-1_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	100	4.00E+03	2.50E-02	1.63E+03	6.14E-02
118-F-1_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	8,367	4.00E+02	**2.09E+01**	3.82E+04	2.19E-01
118-F-1_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	6,339	1.30E+04	4.88E-01	1.11E+05	5.69E-02
118-F-1_Shallow	non-Rad	Copper	7440-50-8	µg/kg	12,107	5.00E+04	2.42E-01	1.07E+05	1.13E-01
118-F-1_Shallow	non-Rad	Lead	7439-92-1	µg/kg	5,380	5.00E+04	1.08E-01	3.56E+04	1.51E-01
118-F-1_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	275,054	2.20E+05	**1.25E+00**	5.80E+06	4.74E-02
118-F-1_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	463	2.00E+03	2.32E-01	1.40E+04	3.32E-02

Table 3. Comparison of 100-F Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
118-F-1_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	10,394	3.00E+04	3.46E-01	3.26E+04	3.19E-01
118-F-1_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	1,780	5.00E+03	3.56E-01	7.86E+05	2.27E-03
118-F-1_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	45,765	2.00E+03	**2.29E+01**	3.11E+04	**1.47E+00**
118-F-1_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	45,708	5.00E+04	9.14E-01	6.78E+04	6.74E-01
118-F-1_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.24	2.21E+03	1.09E-04	9.24E+02	2.60E-04
118-F-1_Shallow	Rad	Cobalt-60	10198-40-0	pCi/g	0.13	6.13E+03	2.04E-05	8.05E+02	1.55E-04
118-F-1_Shallow	Rad	Nickel-63	13981-37-8	pCi/g	6.8	No Value	--	No Value	--
118-F-1_Shallow	Rad	Plutonium-239/240	PU-239/240	pCi/g	0.24	1.27E+04	1.91E-05	6.27E+03	3.88E-05
118-F-1_Shallow	Rad	Total beta radiostrontium	SR-RAD	pCi/g	0.66	3.58E+03	1.84E-04	9.11E+01	7.25E-03
118-F-1_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.54	5.16E+04	1.05E-05	6.37E+03	8.52E-05
118-F-1_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.057	2.74E+04	2.07E-06	4.36E+03	1.30E-05
118-F-1_Shallow	Rad	Uranium-238	U-238	pCi/g	0.60	1.57E+04	3.80E-05	5.15E+03	1.16E-04
118-F-1_Shallow	Rad	Rads SOF	---	pCi/g	--	--	3.83E-04	--	7.92E-03
118-F-1_Staging Pile Area	non-Rad	Arsenic	7440-38-2	µg/kg	11,600	1.00E+04	**1.16E+00**	1.90E+05	6.12E-02
118-F-1_Staging Pile Area	non-Rad	Barium	7440-39-3	µg/kg	76,779	3.30E+05	2.33E-01	1.32E+06	5.80E-02
118-F-1_Staging Pile Area	non-Rad	Beryllium	7440-41-7	µg/kg	286	1.00E+04	2.86E-02	1.39E+04	2.05E-02
118-F-1_Staging Pile Area	non-Rad	Boron	7440-42-8	µg/kg	1,200	5.00E+02	**2.40E+00**	1.33E+05	9.03E-03
118-F-1_Staging Pile Area	non-Rad	Cadmium	7440-43-9	µg/kg	100	4.00E+03	2.50E-02	1.63E+03	6.14E-02
118-F-1_Staging Pile Area	non-Rad	Chromium	7440-47-3	µg/kg	10,607	4.00E+02	**2.65E+01**	3.82E+04	2.78E-01
118-F-1_Staging Pile Area	non-Rad	Cobalt	7440-48-4	µg/kg	7,167	1.30E+04	5.51E-01	1.11E+05	6.43E-02
118-F-1_Staging Pile Area	non-Rad	Copper	7440-50-8	µg/kg	13,189	5.00E+04	2.64E-01	1.07E+05	1.23E-01
118-F-1_Staging Pile Area	non-Rad	Lead	7439-92-1	µg/kg	33,300	5.00E+04	6.66E-01	3.56E+04	9.36E-01
118-F-1_Staging Pile Area	non-Rad	Manganese	7439-96-5	µg/kg	320,989	2.20E+05	**1.46E+00**	5.80E+06	5.54E-02
118-F-1_Staging Pile Area	non-Rad	Mercury	7439-97-6	µg/kg	20	1.00E+02	2.00E-01	1.87E+03	1.07E-02
118-F-1_Staging Pile Area	non-Rad	Molybdenum	7439-98-7	µg/kg	690	2.00E+03	3.45E-01	1.40E+04	4.94E-02
118-F-1_Staging Pile Area	non-Rad	Nickel	7440-02-0	µg/kg	10,900	3.00E+04	3.63E-01	3.26E+04	3.35E-01
118-F-1_Staging Pile Area	non-Rad	Silver	7440-22-4	µg/kg	880	2.00E+03	4.40E-01	4.96E+04	1.77E-02
118-F-1_Staging Pile Area	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	1,931	5.00E+03	3.86E-01	7.86E+05	2.46E-03
118-F-1_Staging Pile Area	non-Rad	Vanadium	7440-62-2	µg/kg	43,457	2.00E+03	**2.17E+01**	3.11E+04	**1.40E+00**
118-F-1_Staging Pile Area	non-Rad	Zinc	7440-66-6	µg/kg	40,550	5.00E+04	8.11E-01	6.78E+04	5.98E-01
118-F-1_Staging Pile Area	Rad	Cesium-137	10045-97-3	pCi/g	0.74	2.21E+03	3.35E-04	9.24E+02	8.02E-04
118-F-1_Staging Pile Area	Rad	Cobalt-60	10198-40-0	pCi/g	0.11	6.13E+03	1.86E-05	8.05E+02	1.42E-04
118-F-1_Staging Pile Area	Rad	Europium-152	14683-23-9	pCi/g	0.21	1.47E+04	1.43E-05	1.74E+03	1.21E-04
118-F-1_Staging Pile Area	Rad	Nickel-63	13981-37-8	pCi/g	14	No Value	--	No Value	--
118-F-1_Staging Pile Area	Rad	Total beta radiostrontium	SR-RAD	pCi/g	0.34	3.58E+03	9.44E-05	9.11E+01	3.71E-03
118-F-1_Staging Pile Area	Rad	Uranium-233/234	U-233/234	pCi/g	0.62	5.16E+04	1.21E-05	6.37E+03	9.78E-05
118-F-1_Staging Pile Area	Rad	Uranium-238	U-238	pCi/g	0.65	1.57E+04	4.13E-05	5.15E+03	1.26E-04
118-F-1_Staging Pile Area	Rad	Rads SOF	---	pCi/g	--	--	5.16E-04	--	5.00E-03
118-F-2_Overburden	non-Rad	Arsenic	7440-38-2	µg/kg	2,600	1.00E+04	2.60E-01	1.90E+05	1.37E-02
118-F-2_Overburden	non-Rad	Barium	7440-39-3	µg/kg	86,800	3.30E+05	2.63E-01	1.32E+06	6.56E-02
118-F-2_Overburden	non-Rad	Beryllium	7440-41-7	µg/kg	520	1.00E+04	5.20E-02	1.39E+04	3.73E-02
118-F-2_Overburden	non-Rad	Boron	7440-42-8	µg/kg	1,400	5.00E+02	**2.80E+00**	1.33E+05	1.05E-02
118-F-2_Overburden	non-Rad	Cadmium	7440-43-9	µg/kg	230	4.00E+03	5.75E-02	1.63E+03	1.41E-01
118-F-2_Overburden	non-Rad	Chromium	7440-47-3	µg/kg	9,400	4.00E+02	**2.35E+01**	3.82E+04	2.46E-01
118-F-2_Overburden	non-Rad	Cobalt	7440-48-4	µg/kg	8,900	1.30E+04	6.85E-01	1.11E+05	7.98E-02
118-F-2_Overburden	non-Rad	Copper	7440-50-8	µg/kg	12,800	5.00E+04	2.56E-01	1.07E+05	1.20E-01
118-F-2_Overburden	non-Rad	Lead	7439-92-1	µg/kg	4,800	5.00E+04	9.60E-02	3.56E+04	1.35E-01
118-F-2_Overburden	non-Rad	Manganese	7439-96-5	µg/kg	395,000	2.20E+05	**1.80E+00**	5.80E+06	6.81E-02
118-F-2_Overburden	non-Rad	Molybdenum	7439-98-7	µg/kg	450	2.00E+03	2.25E-01	1.40E+04	3.22E-02
118-F-2_Overburden	non-Rad	Nickel	7440-02-0	µg/kg	13,300	3.00E+04	4.43E-01	3.26E+04	4.08E-01
118-F-2_Overburden	non-Rad	Selenium	7782-49-2	µg/kg	1,400	5.20E+02	**2.69E+00**	1.90E+03	7.37E-01
118-F-2_Overburden	non-Rad	Silver	7440-22-4	µg/kg	290	2.00E+03	1.45E-01	4.96E+04	5.84E-03
118-F-2_Overburden	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	1,363	5.00E+03	2.73E-01	7.86E+05	1.74E-03
118-F-2_Overburden	non-Rad	Vanadium	7440-62-2	µg/kg	63,000	2.00E+03	**3.15E+01**	3.11E+04	**2.02E+00**
118-F-2_Overburden	non-Rad	Zinc	7440-66-6	µg/kg	52,100	5.00E+04	**1.04E+00**	6.78E+04	7.68E-01
118-F-2_Overburden	Rad	Cesium-137	10045-97-3	pCi/g	0.11	2.21E+03	4.89E-05	9.24E+02	1.17E-04

Table 3. Comparison of 100-F Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
118-F-2_Overburden	Rad	Uranium-233/234	U-233/234	pCi/g	0.59	5.16E+04	1.15E-05	6.37E+03	9.28E-05
118-F-2_Overburden	Rad	Uranium-238	U-238	pCi/g	0.46	1.57E+04	2.92E-05	5.15E+03	8.89E-05
118-F-2_Overburden	Rad	Rads SOF	---	pCi/g	--	--	8.96E-05	--	2.99E-04
118-F-2_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	2,900	1.00E+04	2.90E-01	1.90E+05	1.53E-02
118-F-2_Shallow	non-Rad	Barium	7440-39-3	µg/kg	93,000	3.30E+05	2.82E-01	1.32E+06	7.03E-02
118-F-2_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	370	1.00E+04	3.70E-02	1.39E+04	2.65E-02
118-F-2_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	160	4.00E+03	4.00E-02	1.63E+03	9.82E-02
118-F-2_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	13,000	4.00E+02	**3.25E+01**	3.82E+04	3.41E-01
118-F-2_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	8,100	1.30E+04	6.23E-01	1.11E+05	7.26E-02
118-F-2_Shallow	non-Rad	Copper	7440-50-8	µg/kg	17,000	5.00E+04	3.40E-01	1.07E+05	1.59E-01
118-F-2_Shallow	non-Rad	Lead	7439-92-1	µg/kg	6,800	5.00E+04	1.36E-01	3.56E+04	1.91E-01
118-F-2_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	347,000	2.20E+05	**1.58E+00**	5.80E+06	5.98E-02
118-F-2_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	15,100	3.00E+04	5.03E-01	3.26E+04	4.63E-01
118-F-2_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	2,498	5.00E+03	5.00E-01	7.86E+05	3.18E-03
118-F-2_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	41,300	2.00E+03	**2.07E+01**	3.11E+04	**1.33E+00**
118-F-2_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	47,400	5.00E+04	9.48E-01	6.78E+04	6.99E-01
118-F-2_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.093	2.21E+03	4.21E-05	9.24E+02	1.01E-04
118-F-2_Shallow	Rad	Plutonium-239/240	PU-239/240	pCi/g	0.31	1.27E+04	2.47E-05	6.27E+03	5.01E-05
118-F-2_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.68	5.16E+04	1.32E-05	6.37E+03	1.07E-04
118-F-2_Shallow	Rad	Uranium-238	U-238	pCi/g	0.84	1.57E+04	5.34E-05	5.15E+03	1.63E-04
118-F-2_Shallow	Rad	Rads SOF	---	pCi/g	--	--	1.33E-04	--	4.21E-04
118-F-2_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	780	5.00E+03	1.56E-01	5.98E+03	1.30E-01
118-F-2_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	1,500	1.00E+04	1.50E-01	1.90E+05	7.92E-03
118-F-2_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	58,800	3.30E+05	1.78E-01	1.32E+06	4.44E-02
118-F-2_Shallow_Focused	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	39	1.80E+04	2.17E-03	6.40E+04	6.09E-04
118-F-2_Shallow_Focused	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	29	1.80E+04	1.61E-03	7.64E+04	3.79E-04
118-F-2_Shallow_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	37	1.80E+04	2.06E-03	3.92E+04	9.43E-04
118-F-2_Shallow_Focused	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	49	1.80E+04	2.72E-03	3.92E+04	1.25E-03
118-F-2_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	370	1.00E+04	3.70E-02	1.39E+04	2.65E-02
118-F-2_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	110	1.00E+05	1.10E-03	4.54E+04	2.42E-03
118-F-2_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,200	5.00E+02	**2.40E+00**	1.33E+05	9.03E-03
118-F-2_Shallow_Focused	non-Rad	Butylbenzylphthalate	85-68-7	µg/kg	23	No Value	--	No Value	--
118-F-2_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	220	4.00E+03	5.50E-02	1.63E+03	1.35E-01
118-F-2_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	6,600	4.00E+02	**1.65E+01**	3.82E+04	1.73E-01
118-F-2_Shallow_Focused	non-Rad	Chrysene	218-01-9	µg/kg	61	1.80E+04	3.39E-03	4.45E+04	1.37E-03
118-F-2_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	6,800	1.30E+04	5.23E-01	1.11E+05	6.10E-02
118-F-2_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	10,400	5.00E+04	2.08E-01	1.07E+05	9.71E-02
118-F-2_Shallow_Focused	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	50	No Value	--	No Value	--
118-F-2_Shallow_Focused	non-Rad	Fluoranthene	206-44-0	µg/kg	79	1.80E+04	4.39E-03	8.39E+05	9.41E-05
118-F-2_Shallow_Focused	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	22	1.80E+04	1.22E-03	3.57E+04	6.17E-04
118-F-2_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	3,800	5.00E+04	7.60E-02	3.56E+04	1.07E-01
118-F-2_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	274,000	2.20E+05	**1.25E+00**	5.80E+06	4.73E-02
118-F-2_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	480	2.00E+03	2.40E-01	1.40E+04	3.44E-02
118-F-2_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	10,700	3.00E+04	3.57E-01	3.26E+04	3.28E-01
118-F-2_Shallow_Focused	non-Rad	Pyrene	129-00-0	µg/kg	73	1.80E+04	4.06E-03	6.00E+05	1.22E-04
118-F-2_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	1,289	5.00E+03	2.58E-01	7.86E+05	1.64E-03
118-F-2_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	56,800	2.00E+03	**2.84E+01**	3.11E+04	**1.82E+00**
118-F-2_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	40,900	5.00E+04	8.18E-01	6.78E+04	6.03E-01
118-F-2_Shallow_Focused	Rad	Cesium-137	10045-97-3	pCi/g	0.062	2.21E+03	2.81E-05	9.24E+02	6.71E-05
118-F-2_Shallow_Focused	Rad	Europium-152	14683-23-9	pCi/g	0.14	1.47E+04	9.18E-06	1.74E+03	7.76E-05
118-F-2_Shallow_Focused	Rad	Nickel-63	13981-37-8	pCi/g	5.1	No Value	--	No Value	--
118-F-2_Shallow_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	0.52	5.16E+04	1.01E-05	6.37E+03	8.15E-05
118-F-2_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	0.43	1.57E+04	2.76E-05	5.15E+03	8.41E-05
118-F-2_Shallow_Focused	Rad	Rads SOF	---	pCi/g	--	--	7.50E-05	--	3.10E-04
118-F-2_Staging Pile Area	non-Rad	Arsenic	7440-38-2	µg/kg	2,700	1.00E+04	2.70E-01	1.90E+05	1.42E-02
118-F-2_Staging Pile Area	non-Rad	Barium	7440-39-3	µg/kg	79,300	3.30E+05	2.40E-01	1.32E+06	5.99E-02

Table 3. Comparison of 100-F Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
118-F-2_Staging Pile Area	non-Rad	Beryllium	7440-41-7	µg/kg	400	1.00E+04	4.00E-02	1.39E+04	2.87E-02
118-F-2_Staging Pile Area	non-Rad	Boron	7440-42-8	µg/kg	1,400	5.00E+02	**2.80E+00**	1.33E+05	1.05E-02
118-F-2_Staging Pile Area	non-Rad	Chromium	7440-47-3	µg/kg	8,400	4.00E+02	**2.10E+01**	3.82E+04	2.20E-01
118-F-2_Staging Pile Area	non-Rad	Cobalt	7440-48-4	µg/kg	7,000	1.30E+04	5.38E-01	1.11E+05	6.28E-02
118-F-2_Staging Pile Area	non-Rad	Copper	7440-50-8	µg/kg	12,600	5.00E+04	2.52E-01	1.07E+05	1.18E-01
118-F-2_Staging Pile Area	non-Rad	Lead	7439-92-1	µg/kg	4,700	5.00E+04	9.40E-02	3.56E+04	1.32E-01
118-F-2_Staging Pile Area	non-Rad	Manganese	7439-96-5	µg/kg	337,000	2.20E+05	**1.53E+00**	5.80E+06	5.81E-02
118-F-2_Staging Pile Area	non-Rad	Molybdenum	7439-98-7	µg/kg	900	2.00E+03	4.50E-01	1.40E+04	6.45E-02
118-F-2_Staging Pile Area	non-Rad	Nickel	7440-02-0	µg/kg	10,600	3.00E+04	3.53E-01	3.26E+04	3.25E-01
118-F-2_Staging Pile Area	non-Rad	Selenium	7782-49-2	µg/kg	1,400	5.20E+02	**2.69E+00**	1.90E+03	7.37E-01
118-F-2_Staging Pile Area	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	1,557	5.00E+03	3.11E-01	7.86E+05	1.98E-03
118-F-2_Staging Pile Area	non-Rad	Vanadium	7440-62-2	µg/kg	42,000	2.00E+03	**2.10E+01**	3.11E+04	**1.35E+00**
118-F-2_Staging Pile Area	non-Rad	Zinc	7440-66-6	µg/kg	40,300	5.00E+04	8.06E-01	6.78E+04	5.94E-01
118-F-2_Staging Pile Area	Rad	Cesium-137	10045-97-3	pCi/g	0.62	2.21E+03	2.82E-04	9.24E+02	6.74E-04
118-F-2_Staging Pile Area	Rad	Plutonium-238	13981-16-3	pCi/g	1.0	1.75E+04	5.71E-05	5.98E+03	1.67E-04
118-F-2_Staging Pile Area	Rad	Uranium-233/234	U-233/234	pCi/g	0.74	5.16E+04	1.44E-05	6.37E+03	1.16E-04
118-F-2_Staging Pile Area	Rad	Uranium-238	U-238	pCi/g	0.52	1.57E+04	3.33E-05	5.15E+03	1.02E-04
118-F-2_Staging Pile Area	Rad	Rads SOF	---	pCi/g	--	--	3.87E-04	--	1.06E-03
118-F-3_Overburden	non-Rad	Arsenic	7440-38-2	µg/kg	2,900	1.00E+04	2.90E-01	1.90E+05	1.53E-02
118-F-3_Overburden	non-Rad	Barium	7440-39-3	µg/kg	73,200	3.30E+05	2.22E-01	1.32E+06	5.53E-02
118-F-3_Overburden	non-Rad	Beryllium	7440-41-7	µg/kg	280	1.00E+04	2.80E-02	1.39E+04	2.01E-02
118-F-3_Overburden	non-Rad	Boron	7440-42-8	µg/kg	2,600	5.00E+02	**5.20E+00**	1.33E+05	1.96E-02
118-F-3_Overburden	non-Rad	Chromium	7440-47-3	µg/kg	8,900	4.00E+02	**2.23E+01**	3.82E+04	2.33E-01
118-F-3_Overburden	non-Rad	Cobalt	7440-48-4	µg/kg	6,500	1.30E+04	5.00E-01	1.11E+05	5.83E-02
118-F-3_Overburden	non-Rad	Copper	7440-50-8	µg/kg	12,800	5.00E+04	2.56E-01	1.07E+05	1.20E-01
118-F-3_Overburden	non-Rad	Lead	7439-92-1	µg/kg	4,900	5.00E+04	9.80E-02	3.56E+04	1.38E-01
118-F-3_Overburden	non-Rad	Manganese	7439-96-5	µg/kg	302,000	2.20E+05	**1.37E+00**	5.80E+06	5.21E-02
118-F-3_Overburden	non-Rad	Nickel	7440-02-0	µg/kg	12,300	3.00E+04	4.10E-01	3.26E+04	3.78E-01
118-F-3_Overburden	non-Rad	Vanadium	7440-62-2	µg/kg	39,300	2.00E+03	**1.97E+01**	3.11E+04	**1.26E+00**
118-F-3_Overburden	non-Rad	Zinc	7440-66-6	µg/kg	36,400	5.00E+04	7.28E-01	6.78E+04	5.37E-01
118-F-3_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	2,200	1.00E+04	2.20E-01	1.90E+05	1.16E-02
118-F-3_Shallow	non-Rad	Barium	7440-39-3	µg/kg	116,000	3.30E+05	3.52E-01	1.32E+06	8.77E-02
118-F-3_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	240	1.00E+04	2.40E-02	1.39E+04	1.72E-02
118-F-3_Shallow	non-Rad	Boron	7440-42-8	µg/kg	12,700	5.00E+02	**2.54E+01**	1.33E+05	9.55E-02
118-F-3_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	8,300	4.00E+02	**2.08E+01**	3.82E+04	2.17E-01
118-F-3_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	5,600	1.30E+04	4.31E-01	1.11E+05	5.02E-02
118-F-3_Shallow	non-Rad	Copper	7440-50-8	µg/kg	12,000	5.00E+04	2.40E-01	1.07E+05	1.12E-01
118-F-3_Shallow	non-Rad	Lead	7439-92-1	µg/kg	4,500	5.00E+04	9.00E-02	3.56E+04	1.26E-01
118-F-3_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	264,000	2.20E+05	**1.20E+00**	5.80E+06	4.55E-02
118-F-3_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	8,800	3.00E+04	2.93E-01	3.26E+04	2.70E-01
118-F-3_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	33,000	2.00E+03	**1.65E+01**	3.11E+04	**1.06E+00**
118-F-3_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	37,300	5.00E+04	7.46E-01	6.78E+04	5.50E-01
118-F-3_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.16	2.21E+03	7.24E-05	9.24E+02	1.73E-04
118-F-3_Shallow	Rad	Cobalt-60	10198-40-0	pCi/g	0.38	6.13E+03	6.17E-05	8.05E+02	4.70E-04
118-F-3_Shallow	Rad	Nickel-63	13981-37-8	pCi/g	24	No Value	--	No Value	--
118-F-3_Shallow	Rad	Total beta radiostrontium	SR-RAD	pCi/g	0.28	3.58E+03	7.71E-05	9.11E+01	3.03E-03
118-F-3_Shallow	Rad	Rads SOF	---	pCi/g	--	--	2.11E-04	--	3.67E-03
118-F-3_Staging Pile Area	non-Rad	Arsenic	7440-38-2	µg/kg	1,900	1.00E+04	1.90E-01	1.90E+05	1.00E-02
118-F-3_Staging Pile Area	non-Rad	Barium	7440-39-3	µg/kg	98,300	3.30E+05	2.98E-01	1.32E+06	7.43E-02
118-F-3_Staging Pile Area	non-Rad	Beryllium	7440-41-7	µg/kg	250	1.00E+04	2.50E-02	1.39E+04	1.79E-02
118-F-3_Staging Pile Area	non-Rad	Boron	7440-42-8	µg/kg	6,600	5.00E+02	**1.32E+01**	1.33E+05	4.97E-02
118-F-3_Staging Pile Area	non-Rad	Chromium	7440-47-3	µg/kg	7,400	4.00E+02	**1.85E+01**	3.82E+04	1.94E-01
118-F-3_Staging Pile Area	non-Rad	Cobalt	7440-48-4	µg/kg	5,500	1.30E+04	4.23E-01	1.11E+05	4.93E-02
118-F-3_Staging Pile Area	non-Rad	Copper	7440-50-8	µg/kg	12,800	5.00E+04	2.56E-01	1.07E+05	1.20E-01
118-F-3_Staging Pile Area	non-Rad	Lead	7439-92-1	µg/kg	5,600	5.00E+04	1.12E-01	3.56E+04	1.57E-01
118-F-3_Staging Pile Area	non-Rad	Manganese	7439-96-5	µg/kg	261,000	2.20E+05	**1.19E+00**	5.80E+06	4.50E-02

Table 3. Comparison of 100-F Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
118-F-3_Staging Pile Area	non-Rad	Nickel	7440-02-0	µg/kg	8,900	3.00E+04	2.97E-01	3.26E+04	2.73E-01
118-F-3_Staging Pile Area	non-Rad	Vanadium	7440-62-2	µg/kg	32,200	2.00E+03	**1.61E+01**	3.11E+04	**1.03E+00**
118-F-3_Staging Pile Area	non-Rad	Zinc	7440-66-6	µg/kg	36,700	5.00E+04	7.34E-01	6.78E+04	5.41E-01
118-F-3_Staging Pile Area	Rad	Cesium-137	10045-97-3	pCi/g	0.22	2.21E+03	9.86E-05	9.24E+02	2.36E-04
118-F-3_Staging Pile Area	Rad	Cobalt-60	10198-40-0	pCi/g	0.38	6.13E+03	6.17E-05	8.05E+02	4.70E-04
118-F-3_Staging Pile Area	Rad	Europium-152	14683-23-9	pCi/g	0.11	1.47E+04	7.28E-06	1.74E+03	6.15E-05
118-F-3_Staging Pile Area	Rad	Nickel-63	13981-37-8	pCi/g	15	No Value	--	No Value	--
118-F-3_Staging Pile Area	Rad	Rads SOF	---	pCi/g	--	--	1.68E-04	--	7.68E-04
118-F-5_Overburden	Rad	Cesium-137	10045-97-3	pCi/g	0.026	2.21E+03	1.18E-05	9.24E+02	2.81E-05
118-F-5_Overburden	Rad	Total beta radiostrontium	SR-RAD	pCi/g	0.65	3.58E+03	1.83E-04	9.11E+01	7.18E-03
118-F-5_Overburden	Rad	Rads SOF	---	pCi/g	--	--	1.95E-04	--	7.21E-03
118-F-5_Shallow_1	Rad	Tritium	10028-17-8	pCi/g	4.8	1.68E+06	2.86E-06	4.20E+02	1.15E-02
118-F-5_Shallow_1	Rad	Rads SOF	---	pCi/g	--	--	2.86E-06	--	1.15E-02
118-F-6_Overburden	Rad	Cesium-137	10045-97-3	pCi/g	0.048	2.21E+03	2.18E-05	9.24E+02	5.20E-05
118-F-6_Overburden	Rad	Total beta radiostrontium	SR-RAD	pCi/g	1.3	3.58E+03	3.69E-04	9.11E+01	1.45E-02
118-F-6_Overburden	Rad	Rads SOF	---	pCi/g	--	--	3.91E-04	--	1.46E-02
118-F-6_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.32	2.21E+03	1.43E-04	9.24E+02	3.42E-04
118-F-6_Shallow	Rad	Total beta radiostrontium	SR-RAD	pCi/g	4.1	3.58E+03	1.15E-03	9.11E+01	4.53E-02
118-F-6_Shallow	Rad	Rads SOF	---	pCi/g	--	--	1.29E-03	--	4.56E-02
118-F-6_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	42,000	1.00E+05	4.20E-01	4.54E+04	9.25E-01
118-F-6_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	1,164	5.00E+03	2.33E-01	7.86E+05	1.48E-03
118-F-6_Shallow_Focused	Rad	Cesium-137	10045-97-3	pCi/g	1.6	2.21E+03	7.33E-04	9.24E+02	1.75E-03
118-F-6_Shallow_Focused	Rad	Total beta radiostrontium	SR-RAD	pCi/g	0.46	3.58E+03	1.29E-04	9.11E+01	5.07E-03
118-F-6_Shallow_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	0.40	5.16E+04	7.69E-06	6.37E+03	6.23E-05
118-F-6_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	0.39	1.57E+04	2.49E-05	5.15E+03	7.59E-05
118-F-6_Shallow_Focused	Rad	Rads SOF	---	pCi/g	--	--	8.95E-04	--	6.96E-03
118-F-7_Overburden	non-Rad	Arsenic	7440-38-2	µg/kg	2,600	1.00E+04	2.60E-01	1.90E+05	1.37E-02
118-F-7_Overburden	non-Rad	Barium	7440-39-3	µg/kg	49,400	3.30E+05	1.50E-01	1.32E+06	3.73E-02
118-F-7_Overburden	non-Rad	Beryllium	7440-41-7	µg/kg	550	1.00E+04	5.50E-02	1.39E+04	3.94E-02
118-F-7_Overburden	non-Rad	Boron	7440-42-8	µg/kg	1,400	5.00E+02	**2.80E+00**	1.33E+05	1.05E-02
118-F-7_Overburden	non-Rad	Chromium	7440-47-3	µg/kg	9,600	4.00E+02	**2.40E+01**	3.82E+04	2.52E-01
118-F-7_Overburden	non-Rad	Cobalt	7440-48-4	µg/kg	4,900	1.30E+04	3.77E-01	1.11E+05	4.39E-02
118-F-7_Overburden	non-Rad	Copper	7440-50-8	µg/kg	11,500	5.00E+04	2.30E-01	1.07E+05	1.07E-01
118-F-7_Overburden	non-Rad	Lead	7439-92-1	µg/kg	5,300	5.00E+04	1.06E-01	3.56E+04	1.49E-01
118-F-7_Overburden	non-Rad	Manganese	7439-96-5	µg/kg	256,000	2.20E+05	**1.16E+00**	5.80E+06	4.42E-02
118-F-7_Overburden	non-Rad	Nickel	7440-02-0	µg/kg	9,600	3.00E+04	3.20E-01	3.26E+04	2.95E-01
118-F-7_Overburden	non-Rad	Vanadium	7440-62-2	µg/kg	31,400	2.00E+03	**1.57E+01**	3.11E+04	**1.01E+00**
118-F-7_Overburden	non-Rad	Zinc	7440-66-6	µg/kg	32,000	5.00E+04	6.40E-01	6.78E+04	4.72E-01
118-F-7_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	3,900	1.00E+04	3.90E-01	1.90E+05	2.06E-02
118-F-7_Shallow	non-Rad	Barium	7440-39-3	µg/kg	65,000	3.30E+05	1.97E-01	1.32E+06	4.91E-02
118-F-7_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	390	1.00E+04	3.90E-02	1.39E+04	2.80E-02
118-F-7_Shallow	non-Rad	Boron	7440-42-8	µg/kg	4,800	5.00E+02	**9.60E+00**	1.33E+05	3.61E-02
118-F-7_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	8,300	4.00E+02	**2.08E+01**	3.82E+04	2.17E-01
118-F-7_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	5,400	1.30E+04	4.15E-01	1.11E+05	4.84E-02
118-F-7_Shallow	non-Rad	Copper	7440-50-8	µg/kg	12,500	5.00E+04	2.50E-01	1.07E+05	1.17E-01
118-F-7_Shallow	non-Rad	Lead	7439-92-1	µg/kg	18,800	5.00E+04	3.76E-01	3.56E+04	5.28E-01
118-F-7_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	259,000	2.20E+05	**1.18E+00**	5.80E+06	4.47E-02
118-F-7_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	2,400	2.00E+03	**1.20E+00**	1.40E+04	1.72E-01
118-F-7_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	9,500	3.00E+04	3.17E-01	3.26E+04	2.92E-01
118-F-7_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	34,800	2.00E+03	**1.74E+01**	3.11E+04	**1.12E+00**
118-F-7_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	36,300	5.00E+04	7.26E-01	6.78E+04	5.35E-01
118-F-7_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.40	2.21E+03	1.82E-04	9.24E+02	4.36E-04
118-F-7_Shallow	Rad	Total beta radiostrontium	SR-RAD	pCi/g	0.25	3.58E+03	6.96E-05	9.11E+01	2.73E-03
118-F-7_Shallow	Rad	Rads SOF	---	pCi/g	--	--	2.52E-04	--	3.17E-03
118-F-7_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	10,200	1.00E+04	**1.02E+00**	1.90E+05	5.38E-02
118-F-7_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	58,000	3.30E+05	1.76E-01	1.32E+06	4.38E-02

Table 3. Comparison of 100-F Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
118-F-7_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	350	1.00E+04	3.50E-02	1.39E+04	2.51E-02
118-F-7_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,900	5.00E+02	**3.80E+00**	1.33E+05	1.43E-02
118-F-7_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	7,300	4.00E+02	**1.83E+01**	3.82E+04	1.91E-01
118-F-7_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	5,000	1.30E+04	3.85E-01	1.11E+05	4.48E-02
118-F-7_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	11,300	5.00E+04	2.26E-01	1.07E+05	1.06E-01
118-F-7_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	63,800	5.00E+04	**1.28E+00**	3.56E+04	**1.79E+00**
118-F-7_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	254,000	2.20E+05	**1.15E+00**	5.80E+06	4.38E-02
118-F-7_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	8,500	3.00E+04	2.83E-01	3.26E+04	2.61E-01
118-F-7_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	27,100	2.00E+03	**1.36E+01**	3.11E+04	8.71E-01
118-F-7_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	35,400	5.00E+04	7.08E-01	6.78E+04	5.22E-01
118-F-7_Staging Pile Area	non-Rad	Arsenic	7440-38-2	µg/kg	8,600	1.00E+04	8.60E-01	1.90E+05	4.54E-02
118-F-7_Staging Pile Area	non-Rad	Barium	7440-39-3	µg/kg	83,200	3.30E+05	2.52E-01	1.32E+06	6.29E-02
118-F-7_Staging Pile Area	non-Rad	Beryllium	7440-41-7	µg/kg	810	1.00E+04	8.10E-02	1.39E+04	5.81E-02
118-F-7_Staging Pile Area	non-Rad	Boron	7440-42-8	µg/kg	3,900	5.00E+02	**7.80E+00**	1.33E+05	2.93E-02
118-F-7_Staging Pile Area	non-Rad	Chromium	7440-47-3	µg/kg	13,700	4.00E+02	**3.43E+01**	3.82E+04	3.59E-01
118-F-7_Staging Pile Area	non-Rad	Cobalt	7440-48-4	µg/kg	6,200	1.30E+04	4.77E-01	1.11E+05	5.56E-02
118-F-7_Staging Pile Area	non-Rad	Copper	7440-50-8	µg/kg	552,000	5.00E+04	**1.10E+01**	1.07E+05	**5.16E+00**
118-F-7_Staging Pile Area	non-Rad	Lead	7439-92-1	µg/kg	31,100	5.00E+04	6.22E-01	3.56E+04	8.74E-01
118-F-7_Staging Pile Area	non-Rad	Manganese	7439-96-5	µg/kg	279,000	2.20E+05	**1.27E+00**	5.80E+06	4.81E-02
118-F-7_Staging Pile Area	non-Rad	Mercury	7439-97-6	µg/kg	10	1.00E+02	1.00E-01	1.87E+03	5.36E-03
118-F-7_Staging Pile Area	non-Rad	Molybdenum	7439-98-7	µg/kg	1,100	2.00E+03	5.50E-01	1.40E+04	7.88E-02
118-F-7_Staging Pile Area	non-Rad	Nickel	7440-02-0	µg/kg	13,200	3.00E+04	4.40E-01	3.26E+04	4.05E-01
118-F-7_Staging Pile Area	non-Rad	Vanadium	7440-62-2	µg/kg	45,100	2.00E+03	**2.26E+01**	3.11E+04	**1.45E+00**
118-F-7_Staging Pile Area	non-Rad	Zinc	7440-66-6	µg/kg	43,500	5.00E+04	8.70E-01	6.78E+04	6.42E-01
118-F-7_Staging Pile Area	Rad	Cesium-137	10045-97-3	pCi/g	0.23	2.21E+03	1.02E-04	9.24E+02	2.44E-04
118-F-7_Staging Pile Area	Rad	Europium-152	14683-23-9	pCi/g	0.39	1.47E+04	2.64E-05	1.74E+03	2.23E-04
118-F-7_Staging Pile Area	Rad	Total beta radiostrontium	SR-RAD	pCi/g	0.82	3.58E+03	2.30E-04	9.11E+01	9.03E-03
118-F-7_Staging Pile Area	Rad	Rads SOF	---	pCi/g	--	--	3.58E-04	--	9.50E-03
118-F-8:1_Shallow	non-Rad	Aroclor-1260	11096-82-5	µg/kg	15	4.00E+04	3.75E-04	1.47E+03	1.02E-02
118-F-8:1_Shallow	non-Rad	Aroclors HI		ug/kg	--	--	3.75E-04	--	1.02E-02
118-F-8:1_Shallow	non-Rad	Barium	7440-39-3	µg/kg	137,000	3.30E+05	4.15E-01	1.32E+06	1.04E-01
118-F-8:1_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	38,777	4.00E+02	**9.69E+01**	3.82E+04	**1.02E+00**
118-F-8:1_Shallow	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	752	No Value	**--**	1.25E+06	6.04E-04
118-F-8:1_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	40	1.00E+02	4.00E-01	1.87E+03	2.14E-02
118-F-8:1_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	1,753	5.00E+03	3.51E-01	7.86E+05	2.23E-03
118-F-8:1_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.62	2.21E+03	2.79E-04	9.24E+02	6.67E-04
118-F-8:1_Shallow	Rad	Europium-152	14683-23-9	pCi/g	0.59	1.47E+04	4.01E-05	1.74E+03	3.39E-04
118-F-8:1_Shallow	Rad	Europium-155	14391-16-3	pCi/g	0.094	1.53E+05	6.14E-07	3.34E+04	2.81E-06
118-F-8:1_Shallow	Rad	Total beta radiostrontium	SR-RAD	pCi/g	0.20	3.58E+03	5.64E-05	9.11E+01	2.22E-03
118-F-8:1_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.65	5.16E+04	1.26E-05	6.37E+03	1.02E-04
118-F-8:1_Shallow	Rad	Uranium-238	U-238	pCi/g	0.59	1.57E+04	3.75E-05	5.15E+03	1.14E-04
118-F-8:1_Shallow	Rad	Rads SOF	---	pCi/g	--	--	4.26E-04	--	3.44E-03
118-F-8:4_Overburden	non-Rad	Aroclor-1254	11097-69-1	µg/kg	5.5	4.00E+04	1.38E-04	1.47E+03	3.73E-03
118-F-8:4_Overburden	non-Rad	Aroclors HI		ug/kg	--	--	1.38E-04	--	3.73E-03
118-F-8:4_Overburden	non-Rad	Arsenic	7440-38-2	µg/kg	2,820	1.00E+04	2.82E-01	1.90E+05	1.49E-02
118-F-8:4_Overburden	non-Rad	Barium	7440-39-3	µg/kg	67,998	3.30E+05	2.06E-01	1.32E+06	5.14E-02
118-F-8:4_Overburden	non-Rad	Beryllium	7440-41-7	µg/kg	690	1.00E+04	6.90E-02	1.39E+04	4.95E-02
118-F-8:4_Overburden	non-Rad	Boron	7440-42-8	µg/kg	2,006	5.00E+02	**4.01E+00**	1.33E+05	1.51E-02
118-F-8:4_Overburden	non-Rad	Cadmium	7440-43-9	µg/kg	275	4.00E+03	6.88E-02	1.63E+03	1.69E-01
118-F-8:4_Overburden	non-Rad	Chromium	7440-47-3	µg/kg	8,304	4.00E+02	**2.08E+01**	3.82E+04	2.18E-01
118-F-8:4_Overburden	non-Rad	Cobalt	7440-48-4	µg/kg	6,232	1.30E+04	4.79E-01	1.11E+05	5.59E-02
118-F-8:4_Overburden	non-Rad	Copper	7440-50-8	µg/kg	13,996	5.00E+04	2.80E-01	1.07E+05	1.31E-01
118-F-8:4_Overburden	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	288	No Value	**--**	1.25E+06	2.31E-04
118-F-8:4_Overburden	non-Rad	Lead	7439-92-1	µg/kg	5,499	5.00E+04	1.10E-01	3.56E+04	1.55E-01
118-F-8:4_Overburden	non-Rad	Manganese	7439-96-5	µg/kg	318,045	2.20E+05	**1.45E+00**	5.80E+06	5.49E-02
118-F-8:4_Overburden	non-Rad	Mercury	7439-97-6	µg/kg	127	1.00E+02	**1.27E+00**	1.87E+03	6.80E-02

Table 3. Comparison of 100-F Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
118-F-8:4_Overburden	non-Rad	Molybdenum	7439-98-7	µg/kg	623	2.00E+03	3.12E-01	1.40E+04	4.46E-02
118-F-8:4_Overburden	non-Rad	Nickel	7440-02-0	µg/kg	9,490	3.00E+04	3.16E-01	3.26E+04	2.91E-01
118-F-8:4_Overburden	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	1,617	5.00E+03	3.23E-01	7.86E+05	2.06E-03
118-F-8:4_Overburden	non-Rad	Vanadium	7440-62-2	µg/kg	41,120	2.00E+03	**2.06E+01**	3.11E+04	**1.32E+00**
118-F-8:4_Overburden	non-Rad	Zinc	7440-66-6	µg/kg	38,251	5.00E+04	7.65E-01	6.78E+04	5.64E-01
118-F-8:4_Overburden	Rad	Cesium-137	10045-97-3	pCi/g	0.29	2.21E+03	1.31E-04	9.24E+02	3.14E-04
118-F-8:4_Overburden	Rad	Cobalt-60	10198-40-0	pCi/g	0.020	6.13E+03	3.26E-06	8.05E+02	2.48E-05
118-F-8:4_Overburden	Rad	Europium-152	14683-23-9	pCi/g	0.44	1.47E+04	3.00E-05	1.74E+03	2.53E-04
118-F-8:4_Overburden	Rad	Plutonium-239/240	PU-239/240	pCi/g	0.97	1.27E+04	7.67E-05	6.27E+03	1.55E-04
118-F-8:4_Overburden	Rad	Uranium-233/234	U-233/234	pCi/g	0.50	5.16E+04	9.65E-06	6.37E+03	7.82E-05
118-F-8:4_Overburden	Rad	Uranium-235	15117-96-1	pCi/g	0.029	2.74E+04	1.06E-06	4.36E+03	6.65E-06
118-F-8:4_Overburden	Rad	Uranium-238	U-238	pCi/g	0.54	1.57E+04	3.46E-05	5.15E+03	1.05E-04
118-F-8:4_Overburden	Rad	Rads SOF	---	pCi/g	--	--	2.86E-04	--	9.37E-04
118-F-8:4_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	2,600	1.00E+04	2.60E-01	1.90E+05	1.37E-02
118-F-8:4_Shallow	non-Rad	Barium	7440-39-3	µg/kg	74,300	3.30E+05	2.25E-01	1.32E+06	5.62E-02
118-F-8:4_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	460	1.00E+04	4.60E-02	1.39E+04	3.30E-02
118-F-8:4_Shallow	non-Rad	Boron	7440-42-8	µg/kg	2,500	5.00E+02	**5.00E+00**	1.33E+05	1.88E-02
118-F-8:4_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	280	4.00E+03	7.00E-02	1.63E+03	1.72E-01
118-F-8:4_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	10,100	4.00E+02	**2.53E+01**	3.82E+04	2.65E-01
118-F-8:4_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	5,700	1.30E+04	4.38E-01	1.11E+05	5.11E-02
118-F-8:4_Shallow	non-Rad	Copper	7440-50-8	µg/kg	14,800	5.00E+04	2.96E-01	1.07E+05	1.38E-01
118-F-8:4_Shallow	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	260	No Value	--	1.25E+06	2.09E-04
118-F-8:4_Shallow	non-Rad	Lead	7439-92-1	µg/kg	10,300	5.00E+04	2.06E-01	3.56E+04	2.89E-01
118-F-8:4_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	285,000	2.20E+05	**1.30E+00**	5.80E+06	4.92E-02
118-F-8:4_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	530	1.00E+02	**5.30E+00**	1.87E+03	2.84E-01
118-F-8:4_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	9,700	3.00E+04	3.23E-01	3.26E+04	2.98E-01
118-F-8:4_Shallow	non-Rad	Selenium	7782-49-2	µg/kg	1,500	5.20E+02	**2.88E+00**	1.90E+03	7.90E-01
118-F-8:4_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	1,551	5.00E+03	3.10E-01	7.86E+05	1.97E-03
118-F-8:4_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	37,500	2.00E+03	**1.88E+01**	3.11E+04	**1.20E+00**
118-F-8:4_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	37,100	5.00E+04	7.42E-01	6.78E+04	5.47E-01
118-F-8:4_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.32	2.21E+03	1.43E-04	9.24E+02	3.41E-04
118-F-8:4_Shallow	Rad	Europium-152	14683-23-9	pCi/g	0.19	1.47E+04	1.26E-05	1.74E+03	1.06E-04
118-F-8:4_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.58	5.16E+04	1.12E-05	6.37E+03	9.09E-05
118-F-8:4_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.034	2.74E+04	1.24E-06	4.36E+03	7.80E-06
118-F-8:4_Shallow	Rad	Uranium-238	U-238	pCi/g	0.52	1.57E+04	3.32E-05	5.15E+03	1.01E-04
118-F-8:4_Shallow	Rad	Rads SOF	---	pCi/g	--	--	2.01E-04	--	6.47E-04
120-F-1_Shallow	non-Rad	4,4'-DDE (Dichlorodiphenyldichloroethylene)	72-55-9	µg/kg	1.8	No Value	--	4.00E+02	4.51E-03
120-F-1_Shallow	non-Rad	4,4'-DDT (Dichlorodiphenyltrichloroethane)	50-29-3	µg/kg	2.1	No Value	--	8.82E+02	2.38E-03
120-F-1_Shallow	non-Rad	Alpha-Chlordane	5103-71-9	µg/kg	8.8	1.00E+03	8.80E-03	5.04E+04	1.75E-04
120-F-1_Shallow	non-Rad	Antimony	7440-36-0	µg/kg	910	5.00E+03	1.82E-01	5.98E+03	1.52E-01
120-F-1_Shallow	non-Rad	Aroclor-1254	11097-69-1	µg/kg	23	4.00E+04	5.75E-04	1.47E+03	1.56E-02
120-F-1_Shallow	non-Rad	Aroclor-1260	11096-82-5	µg/kg	9.8	4.00E+04	2.45E-04	1.47E+03	6.65E-03
120-F-1_Shallow	non-Rad	Aroclors HI		ug/kg	--	--	8.20E-04	--	2.23E-02
120-F-1_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	2,615	1.00E+04	2.61E-01	1.90E+05	1.38E-02
120-F-1_Shallow	non-Rad	Barium	7440-39-3	µg/kg	56,732	3.30E+05	1.72E-01	1.32E+06	4.29E-02
120-F-1_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	505	1.00E+04	5.05E-02	1.39E+04	3.62E-02
120-F-1_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	94	1.00E+05	9.38E-04	4.54E+04	2.07E-03
120-F-1_Shallow	non-Rad	Boron	7440-42-8	µg/kg	2,457	5.00E+02	**4.91E+00**	1.33E+05	1.85E-02
120-F-1_Shallow	non-Rad	Chlordane	57-74-9	µg/kg	8.7	1.00E+03	8.66E-03	5.04E+04	1.72E-04
120-F-1_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	9,781	4.00E+02	**2.45E+01**	3.82E+04	2.56E-01
120-F-1_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	6,270	1.30E+04	4.82E-01	1.11E+05	5.62E-02
120-F-1_Shallow	non-Rad	Copper	7440-50-8	µg/kg	12,167	5.00E+04	2.43E-01	1.07E+05	1.14E-01
120-F-1_Shallow	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	27	No Value	--	No Value	--
120-F-1_Shallow	non-Rad	Endosulfan I	959-98-8	µg/kg	1.8	No Value	--	7.10E+02	2.54E-03
120-F-1_Shallow	non-Rad	Fluoride	16984-48-8	µg/kg	3,900	No Value	--	2.28E+06	1.71E-03
120-F-1_Shallow	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	300	No Value	--	1.25E+06	2.41E-04

Table 3. Comparison of 100-F Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
120-F-1_Shallow	non-Rad	Lead	7439-92-1	µg/kg	5,896	5.00E+04	1.18E-01	3.56E+04	1.66E-01
120-F-1_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	286,696	2.20E+05	**1.30E+00**	5.80E+06	4.94E-02
120-F-1_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	102	1.00E+02	**1.02E+00**	1.87E+03	5.49E-02
120-F-1_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	850	2.00E+03	4.25E-01	1.40E+04	6.09E-02
120-F-1_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	10,814	3.00E+04	3.60E-01	3.26E+04	3.32E-01
120-F-1_Shallow	non-Rad	Nitrate	14797-55-8	µg/kg	8,849	No Value	--	3.40E+08	2.60E-05
120-F-1_Shallow	non-Rad	Selenium	7782-49-2	µg/kg	1,800	5.20E+02	**3.46E+00**	1.90E+03	9.48E-01
120-F-1_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	44,878	2.00E+03	**2.24E+01**	3.11E+04	**1.44E+00**
120-F-1_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	36,425	5.00E+04	7.29E-01	6.78E+04	5.37E-01
126-F-1_Overburden	Rad	Cesium-137	10045-97-3	pCi/g	0.10	2.21E+03	4.69E-05	9.24E+02	1.12E-04
126-F-1_Overburden	Rad	Cobalt-60	10198-40-0	pCi/g	0.081	6.13E+03	1.32E-05	8.05E+02	1.01E-04
126-F-1_Overburden	Rad	Europium-152	14683-23-9	pCi/g	0.38	1.47E+04	2.56E-05	1.74E+03	2.16E-04
126-F-1_Overburden	Rad	Rads SOF	---	pCi/g	--	--	8.57E-05	--	4.29E-04
126-F-1_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	109	5.00E+03	2.18E-02	7.86E+05	1.39E-04
126-F-1_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.51	2.21E+03	2.29E-04	9.24E+02	5.47E-04
126-F-1_Shallow	Rad	Cobalt-60	10198-40-0	pCi/g	0.20	6.13E+03	3.25E-05	8.05E+02	2.47E-04
126-F-1_Shallow	Rad	Europium-152	14683-23-9	pCi/g	3.3	1.47E+04	2.26E-04	1.74E+03	1.91E-03
126-F-1_Shallow	Rad	Europium-154	15585-10-1	pCi/g	0.46	1.25E+04	3.65E-05	1.61E+03	2.84E-04
126-F-1_Shallow	Rad	Europium-155	14391-16-3	pCi/g	0.032	1.53E+05	2.09E-07	3.34E+04	9.58E-07
126-F-1_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.24	2.74E+04	8.61E-06	4.36E+03	5.41E-05
126-F-1_Shallow	Rad	Rads SOF	---	pCi/g	--	--	5.33E-04	--	3.04E-03
126-F-2_Staging pile area_Focused	non-Rad	Acenaphthene	83-32-9	µg/kg	173	2.00E+04	8.65E-03	1.10E+06	1.58E-04
126-F-2_Staging pile area_Focused	non-Rad	Anthracene	120-12-7	µg/kg	412	2.90E+04	1.42E-02	6.78E+05	6.07E-04
126-F-2_Staging pile area_Focused	non-Rad	Antimony	7440-36-0	µg/kg	478	5.00E+03	9.56E-02	5.98E+03	7.99E-02
126-F-2_Staging pile area_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	74	4.00E+04	1.85E-03	1.47E+03	5.02E-02
126-F-2_Staging pile area_Focused	non-Rad	Aroclors HI		ug/kg	--	--	1.85E-03	--	5.02E-02
126-F-2_Staging pile area_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	3,000	1.00E+04	3.00E-01	1.90E+05	1.58E-02
126-F-2_Staging pile area_Focused	non-Rad	Barium	7440-39-3	µg/kg	82,400	3.30E+05	2.50E-01	1.32E+06	6.23E-02
126-F-2_Staging pile area_Focused	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	758	1.80E+04	4.21E-02	6.40E+04	1.18E-02
126-F-2_Staging pile area_Focused	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	696	1.80E+04	3.87E-02	7.64E+04	9.11E-03
126-F-2_Staging pile area_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	555	1.80E+04	3.09E-02	3.92E+04	1.42E-02
126-F-2_Staging pile area_Focused	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	758	1.80E+04	4.21E-02	3.92E+04	1.93E-02
126-F-2_Staging pile area_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	299	1.00E+04	2.99E-02	1.39E+04	2.14E-02
126-F-2_Staging pile area_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	407	1.00E+05	4.07E-03	4.54E+04	8.97E-03
126-F-2_Staging pile area_Focused	non-Rad	Boron	7440-42-8	µg/kg	5,600	5.00E+02	**1.12E+01**	1.33E+05	4.21E-02
126-F-2_Staging pile area_Focused	non-Rad	Chromium	7440-47-3	µg/kg	10,900	4.00E+02	**2.73E+01**	3.82E+04	2.86E-01
126-F-2_Staging pile area_Focused	non-Rad	Chrysene	218-01-9	µg/kg	842	1.80E+04	4.68E-02	4.45E+04	1.89E-02
126-F-2_Staging pile area_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	6,200	1.30E+04	4.77E-01	1.11E+05	5.56E-02
126-F-2_Staging pile area_Focused	non-Rad	Copper	7440-50-8	µg/kg	17,400	5.00E+04	3.48E-01	1.07E+05	1.63E-01
126-F-2_Staging pile area_Focused	non-Rad	Dibenz[a,h]anthracene	53-70-3	µg/kg	203	1.80E+04	1.13E-02	4.41E+04	4.61E-03
126-F-2_Staging pile area_Focused	non-Rad	Fluoranthene	206-44-0	µg/kg	1,804	1.80E+04	1.00E-01	8.39E+05	2.15E-03
126-F-2_Staging pile area_Focused	non-Rad	Fluorene	86-73-7	µg/kg	211	2.90E+04	7.27E-03	1.75E+05	1.20E-03
126-F-2_Staging pile area_Focused	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	256	1.80E+04	1.42E-02	3.57E+04	7.18E-03
126-F-2_Staging pile area_Focused	non-Rad	Lead	7439-92-1	µg/kg	17,200	5.00E+04	3.44E-01	3.56E+04	4.83E-01
126-F-2_Staging pile area_Focused	non-Rad	Manganese	7439-96-5	µg/kg	274,000	2.20E+05	**1.25E+00**	5.80E+06	4.73E-02
126-F-2_Staging pile area_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	389	2.00E+03	1.95E-01	1.40E+04	2.79E-02
126-F-2_Staging pile area_Focused	non-Rad	Nickel	7440-02-0	µg/kg	10,300	3.00E+04	3.43E-01	3.26E+04	3.16E-01
126-F-2_Staging pile area_Focused	non-Rad	Pyrene	129-00-0	µg/kg	1,754	1.80E+04	9.75E-02	6.00E+05	2.92E-03
126-F-2_Staging pile area_Focused	non-Rad	Total petroleum hydrocarbons	TPH	µg/kg	1.65E+06	No Value	--	No Value	--
126-F-2_Staging pile area_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	2,265	5.00E+03	4.53E-01	7.86E+05	2.88E-03
126-F-2_Staging pile area_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	41,600	2.00E+03	**2.08E+01**	3.11E+04	**1.34E+00**
126-F-2_Staging pile area_Focused	non-Rad	Zinc	7440-66-6	µg/kg	76,900	5.00E+04	**1.54E+00**	6.78E+04	**1.13E+00**
126-F-2_Staging pile area_Focused	Rad	Cesium-137	10045-97-3	pCi/g	0.071	2.21E+03	3.21E-05	9.24E+02	7.68E-05
126-F-2_Staging pile area_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	0.53	5.16E+04	1.03E-05	6.37E+03	8.35E-05
126-F-2_Staging pile area_Focused	Rad	Uranium-238	U-238	pCi/g	0.76	1.57E+04	4.85E-05	5.15E+03	1.48E-04
126-F-2_Staging pile area_Focused	Rad	Rads SOF	---	pCi/g	--	--	9.09E-05	--	3.08E-04

Table 3. Comparison of 100-F Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
128-F-1_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	2,100	1.00E+04	2.10E-01	1.90E+05	1.11E-02
128-F-1_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	67,400	3.30E+05	2.04E-01	1.32E+06	5.09E-02
128-F-1_Shallow_Focused	non-Rad	beta-1,2,3,4,5,6-Hexachlorocyclohexane (beta-BHC)	319-85-7	µg/kg	3.8	No Value	--	4.08E+03	9.32E-04
128-F-1_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	21	1.00E+05	2.10E-04	4.54E+04	4.62E-04
128-F-1_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	12,100	4.00E+02	**3.03E+01**	3.82E+04	3.17E-01
128-F-1_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	3,100	5.00E+04	6.20E-02	3.56E+04	8.71E-02
128-F-1_Shallow_Focused	non-Rad	Total petroleum hydrocarbons	TPH	µg/kg	4,400	No Value	--	No Value	--
128-F-2_Shallow	non-Rad	4,4'-DDD (Dichlorodiphenyldichloroethane)	72-54-8	µg/kg	3.0	No Value	--	8.82E+02	3.40E-03
128-F-2_Shallow	non-Rad	4,4'-DDE (Dichlorodiphenyldichloroethylene)	72-55-9	µg/kg	4.6	No Value	--	4.00E+02	1.15E-02
128-F-2_Shallow	non-Rad	4,4'-DDT (Dichlorodiphenyltrichloroethane)	50-29-3	µg/kg	34	No Value	--	8.82E+02	3.86E-02
128-F-2_Shallow	non-Rad	Acenaphthene	83-32-9	µg/kg	63	2.00E+04	3.15E-03	1.10E+06	5.75E-05
128-F-2_Shallow	non-Rad	Aldrin	309-00-2	µg/kg	1.7	No Value	--	1.65E+02	1.03E-02
128-F-2_Shallow	non-Rad	Alpha-Chlordane	5103-71-9	µg/kg	3.7	1.00E+03	3.72E-03	5.04E+04	7.38E-05
128-F-2_Shallow	non-Rad	Anthracene	120-12-7	µg/kg	120	2.90E+04	4.14E-03	6.78E+05	1.77E-04
128-F-2_Shallow	non-Rad	Antimony	7440-36-0	µg/kg	920	5.00E+03	1.84E-01	5.98E+03	1.54E-01
128-F-2_Shallow	non-Rad	Aroclor-1254	11097-69-1	µg/kg	44	4.00E+04	1.10E-03	1.47E+03	2.98E-02
128-F-2_Shallow	non-Rad	Aroclors HI		ug/kg	--	--	1.10E-03	--	2.98E-02
128-F-2_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	3,866	1.00E+04	3.87E-01	1.90E+05	2.04E-02
128-F-2_Shallow	non-Rad	Barium	7440-39-3	µg/kg	77,043	3.30E+05	2.33E-01	1.32E+06	5.82E-02
128-F-2_Shallow	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	264	1.80E+04	1.47E-02	6.40E+04	4.13E-03
128-F-2_Shallow	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	263	1.80E+04	1.46E-02	7.64E+04	3.45E-03
128-F-2_Shallow	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	198	1.80E+04	1.10E-02	3.92E+04	5.05E-03
128-F-2_Shallow	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	263	1.80E+04	1.46E-02	3.92E+04	6.71E-03
128-F-2_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	322	1.00E+04	3.22E-02	1.39E+04	2.31E-02
128-F-2_Shallow	non-Rad	beta-1,2,3,4,5,6-Hexachlorocyclohexane (beta-BHC)	319-85-7	µg/kg	8.8	No Value	--	4.08E+03	2.17E-03
128-F-2_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	105	1.00E+05	1.05E-03	4.54E+04	2.31E-03
128-F-2_Shallow	non-Rad	Boron	7440-42-8	µg/kg	1,955	5.00E+02	**3.91E+00**	1.33E+05	1.47E-02
128-F-2_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	148	4.00E+03	3.69E-02	1.63E+03	9.06E-02
128-F-2_Shallow	non-Rad	Carbazole	86-74-8	µg/kg	62	No Value	--	No Value	--
128-F-2_Shallow	non-Rad	Chlordane	57-74-9	µg/kg	4.6	1.00E+03	4.60E-03	5.04E+04	9.13E-05
128-F-2_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	21,554	4.00E+02	**5.39E+01**	3.82E+04	5.65E-01
128-F-2_Shallow	non-Rad	Chrysene	218-01-9	µg/kg	290	1.80E+04	1.61E-02	4.45E+04	6.51E-03
128-F-2_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	6,012	1.30E+04	4.62E-01	1.11E+05	5.39E-02
128-F-2_Shallow	non-Rad	Copper	7440-50-8	µg/kg	40,037	5.00E+04	8.01E-01	1.07E+05	3.74E-01
128-F-2_Shallow	non-Rad	Dibenz[a,h]anthracene	53-70-3	µg/kg	99	1.80E+04	5.50E-03	4.41E+04	2.24E-03
128-F-2_Shallow	non-Rad	Dibenzofuran	132-64-9	µg/kg	21	No Value	--	No Value	--
128-F-2_Shallow	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	35	No Value	--	No Value	--
128-F-2_Shallow	non-Rad	Endosulfan I	959-98-8	µg/kg	4.0	No Value	--	7.10E+02	5.63E-03
128-F-2_Shallow	non-Rad	Endrin	72-20-8	µg/kg	22	No Value	--	No Value	--
128-F-2_Shallow	non-Rad	Fluoranthene	206-44-0	µg/kg	224	1.80E+04	1.24E-02	8.39E+05	2.67E-04
128-F-2_Shallow	non-Rad	Fluorene	86-73-7	µg/kg	46	2.90E+04	1.59E-03	1.75E+05	2.62E-04
128-F-2_Shallow	non-Rad	Heptachlor	76-44-8	µg/kg	3.3	No Value	--	No Value	--
128-F-2_Shallow	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	631	No Value	--	1.25E+06	5.07E-04
128-F-2_Shallow	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	157	1.80E+04	8.72E-03	3.57E+04	4.40E-03
128-F-2_Shallow	non-Rad	Lead	7439-92-1	µg/kg	11,776	5.00E+04	2.36E-01	3.56E+04	3.31E-01
128-F-2_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	281,593	2.20E+05	**1.28E+00**	5.80E+06	4.86E-02
128-F-2_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	35	1.00E+02	3.45E-01	1.87E+03	1.85E-02
128-F-2_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	440	2.00E+03	2.20E-01	1.40E+04	3.15E-02
128-F-2_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	14,310	3.00E+04	4.77E-01	3.26E+04	4.39E-01
128-F-2_Shallow	non-Rad	Pyrene	129-00-0	µg/kg	239	1.80E+04	1.33E-02	6.00E+05	3.99E-04
128-F-2_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	35,140	2.00E+03	**1.76E+01**	3.11E+04	**1.13E+00**
128-F-2_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	45,403	5.00E+04	9.08E-01	6.78E+04	6.70E-01
128-F-2_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.22	2.21E+03	9.86E-05	9.24E+02	2.36E-04
128-F-2_Shallow	Rad	Rads SOF	---	pCi/g	--	--	9.86E-05	--	2.36E-04
128-F-2_Staging pile area_Focused	non-Rad	4,4'-DDE (Dichlorodiphenyldichloroethylene)	72-55-9	µg/kg	2.2	No Value	--	4.00E+02	5.51E-03
128-F-2_Staging pile area_Focused	non-Rad	4,4'-DDT (Dichlorodiphenyltrichloroethane)	50-29-3	µg/kg	6.6	No Value	--	8.82E+02	7.48E-03

Table 3. Comparison of 100-F Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
128-F-2_Staging pile area_Focused	non-Rad	Acenaphthene	83-32-9	µg/kg	27	2.00E+04	1.35E-03	1.10E+06	2.46E-05
128-F-2_Staging pile area_Focused	non-Rad	Anthracene	120-12-7	µg/kg	60	2.90E+04	2.07E-03	6.78E+05	8.85E-05
128-F-2_Staging pile area_Focused	non-Rad	Antimony	7440-36-0	µg/kg	1,500	5.00E+03	3.00E-01	5.98E+03	2.51E-01
128-F-2_Staging pile area_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	48	4.00E+04	1.20E-03	1.47E+03	3.26E-02
128-F-2_Staging pile area_Focused	non-Rad	Aroclors HI		ug/kg	--	--	1.20E-03	--	3.26E-02
128-F-2_Staging pile area_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	5,200	1.00E+04	5.20E-01	1.90E+05	2.74E-02
128-F-2_Staging pile area_Focused	non-Rad	Barium	7440-39-3	µg/kg	68,200	3.30E+05	2.07E-01	1.32E+06	5.15E-02
128-F-2_Staging pile area_Focused	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	320	1.80E+04	1.78E-02	6.40E+04	5.00E-03
128-F-2_Staging pile area_Focused	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	280	1.80E+04	1.56E-02	7.64E+04	3.66E-03
128-F-2_Staging pile area_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	210	1.80E+04	1.17E-02	3.92E+04	5.35E-03
128-F-2_Staging pile area_Focused	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	230	1.80E+04	1.28E-02	3.92E+04	5.86E-03
128-F-2_Staging pile area_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	110	1.00E+05	1.10E-03	4.54E+04	2.42E-03
128-F-2_Staging pile area_Focused	non-Rad	Carbazole	86-74-8	µg/kg	30	No Value	--	No Value	--
128-F-2_Staging pile area_Focused	non-Rad	Chromium	7440-47-3	µg/kg	32,200	4.00E+02	**8.05E+01**	3.82E+04	8.44E-01
128-F-2_Staging pile area_Focused	non-Rad	Chrysene	218-01-9	µg/kg	370	1.80E+04	2.06E-02	4.45E+04	8.31E-03
128-F-2_Staging pile area_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	6,300	1.30E+04	4.85E-01	1.11E+05	5.65E-02
128-F-2_Staging pile area_Focused	non-Rad	Copper	7440-50-8	µg/kg	23,900	5.00E+04	4.78E-01	1.07E+05	2.23E-01
128-F-2_Staging pile area_Focused	non-Rad	Dibenz[a,h]anthracene	53-70-3	µg/kg	77	1.80E+04	4.28E-03	4.41E+04	1.74E-03
128-F-2_Staging pile area_Focused	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	71	No Value	--	No Value	--
128-F-2_Staging pile area_Focused	non-Rad	Fluoranthene	206-44-0	µg/kg	670	1.80E+04	3.72E-02	8.39E+05	7.98E-04
128-F-2_Staging pile area_Focused	non-Rad	Fluorene	86-73-7	µg/kg	19	2.90E+04	6.55E-04	1.75E+05	1.08E-04
128-F-2_Staging pile area_Focused	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	730	No Value	--	1.25E+06	5.86E-04
128-F-2_Staging pile area_Focused	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	150	1.80E+04	8.33E-03	3.57E+04	4.20E-03
128-F-2_Staging pile area_Focused	non-Rad	Lead	7439-92-1	µg/kg	24,800	5.00E+04	4.96E-01	3.56E+04	6.97E-01
128-F-2_Staging pile area_Focused	non-Rad	Manganese	7439-96-5	µg/kg	277,000	2.20E+05	**1.26E+00**	5.80E+06	4.78E-02
128-F-2_Staging pile area_Focused	non-Rad	Mercury	7439-97-6	µg/kg	50	1.00E+02	5.00E-01	1.87E+03	2.68E-02
128-F-2_Staging pile area_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	1,300	2.00E+03	6.50E-01	1.40E+04	9.31E-02
128-F-2_Staging pile area_Focused	non-Rad	Nickel	7440-02-0	µg/kg	11,700	3.00E+04	3.90E-01	3.26E+04	3.59E-01
128-F-2_Staging pile area_Focused	non-Rad	Pyrene	129-00-0	µg/kg	790	1.80E+04	4.39E-02	6.00E+05	1.32E-03
128-F-2_Staging pile area_Focused	non-Rad	Selenium	7782-49-2	µg/kg	950	5.20E+02	**1.83E+00**	1.90E+03	5.00E-01
128-F-2_Staging pile area_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	42,700	2.00E+03	**2.14E+01**	3.11E+04	**1.37E+00**
128-F-2_Staging pile area_Focused	non-Rad	Zinc	7440-66-6	µg/kg	124,000	5.00E+04	**2.48E+00**	6.78E+04	**1.83E+00**
128-F-3_Shallow	non-Rad	2-Butanone	78-93-3	µg/kg	5.0	No Value	--	3.12E+06	1.60E-06
128-F-3_Shallow	non-Rad	2-Hexanone	591-78-6	µg/kg	8.0	No Value	--	1.71E+06	4.68E-06
128-F-3_Shallow	non-Rad	4,4'-DDD (Dichlorodiphenyldichloroethane)	72-54-8	µg/kg	4.3	No Value	--	8.82E+02	4.88E-03
128-F-3_Shallow	non-Rad	4,4'-DDE (Dichlorodiphenyldichloroethylene)	72-55-9	µg/kg	2.3	No Value	--	4.00E+02	5.76E-03
128-F-3_Shallow	non-Rad	4,4'-DDT (Dichlorodiphenyltrichloroethane)	50-29-3	µg/kg	1.6	No Value	--	8.82E+02	1.81E-03
128-F-3_Shallow	non-Rad	4-Methyl-2-Pentanone	108-10-1	µg/kg	8.0	No Value	--	1.93E+06	4.15E-06
128-F-3_Shallow	non-Rad	Acetone	67-64-1	µg/kg	9.0	No Value	--	No Value	--
128-F-3_Shallow	non-Rad	Aldrin	309-00-2	µg/kg	0.56	No Value	--	1.65E+02	3.40E-03
128-F-3_Shallow	non-Rad	Alpha-Chlordane	5103-71-9	µg/kg	2.8	1.00E+03	2.80E-03	5.04E+04	5.55E-05
128-F-3_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	2,588	1.00E+04	2.59E-01	1.90E+05	1.37E-02
128-F-3_Shallow	non-Rad	Barium	7440-39-3	µg/kg	209,520	3.30E+05	6.35E-01	1.32E+06	1.58E-01
128-F-3_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	485	1.00E+04	4.85E-02	1.39E+04	3.48E-02
128-F-3_Shallow	non-Rad	beta-1,2,3,4,5,6-Hexachlorocyclohexane (beta-BHC)	319-85-7	µg/kg	5.4	No Value	--	4.08E+03	1.32E-03
128-F-3_Shallow	non-Rad	Boron	7440-42-8	µg/kg	17,002	5.00E+02	**3.40E+01**	1.33E+05	1.28E-01
128-F-3_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	260	4.00E+03	6.50E-02	1.63E+03	1.60E-01
128-F-3_Shallow	non-Rad	Chlorobenzene	108-90-7	µg/kg	4.2	4.00E+04	1.05E-04	1.65E+05	2.55E-05
128-F-3_Shallow	non-Rad	Chloroform	67-66-3	µg/kg	3.8	No Value	--	1.65E+05	2.32E-05
128-F-3_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	42,093	4.00E+02	**1.05E+02**	3.82E+04	**1.10E+00**
128-F-3_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	6,229	1.30E+04	4.79E-01	1.11E+05	5.59E-02
128-F-3_Shallow	non-Rad	Copper	7440-50-8	µg/kg	20,447	5.00E+04	4.09E-01	1.07E+05	1.91E-01
128-F-3_Shallow	non-Rad	Endosulfan I	959-98-8	µg/kg	1.3	No Value	--	7.10E+02	1.89E-03
128-F-3_Shallow	non-Rad	Ethylbenzene	100-41-4	µg/kg	2.0	No Value	--	1.03E+06	1.95E-06
128-F-3_Shallow	non-Rad	Gamma-BHC (Lindane)	58-89-9	µg/kg	1.3	No Value	--	No Value	--
128-F-3_Shallow	non-Rad	Heptachlor epoxide	1024-57-3	µg/kg	0.55	No Value	--	No Value	--

Table 3. Comparison of 100-F Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
128-F-3_Shallow	non-Rad	Lead	7439-92-1	µg/kg	4,453	5.00E+04	8.91E-02	3.56E+04	1.25E-01
128-F-3_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	295,905	2.20E+05	**1.35E+00**	5.80E+06	5.10E-02
128-F-3_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	23	1.00E+02	2.31E-01	1.87E+03	1.24E-02
128-F-3_Shallow	non-Rad	Methoxychlor	72-43-5	µg/kg	9.8	No Value	--	2.18E+04	4.49E-04
128-F-3_Shallow	non-Rad	Methylene chloride	75-09-2	µg/kg	21	No Value	--	1.66E+05	1.27E-04
128-F-3_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	10,844	3.00E+04	3.61E-01	3.26E+04	3.33E-01
128-F-3_Shallow	non-Rad	Silver	7440-22-4	µg/kg	280	2.00E+03	1.40E-01	4.96E+04	5.64E-03
128-F-3_Shallow	non-Rad	Styrene	100-42-5	µg/kg	4.0	No Value	--	No Value	--
128-F-3_Shallow	non-Rad	Tetrachloroethene	127-18-4	µg/kg	1.0	No Value	--	6.98E+04	1.43E-05
128-F-3_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	40,225	2.00E+03	**2.01E+01**	3.11E+04	**1.29E+00**
128-F-3_Shallow	non-Rad	Xylenes (total)	1330-20-7	µg/kg	7.0	No Value	--	8.26E+05	8.48E-06
128-F-3_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	42,793	5.00E+04	8.56E-01	6.78E+04	6.31E-01
128-F-3_Staging pile area_Focused	non-Rad	4,4'-DDE (Dichlorodiphenyldichloroethylene)	72-55-9	µg/kg	3.1	No Value	--	4.00E+02	7.76E-03
128-F-3_Staging pile area_Focused	non-Rad	4,4'-DDT (Dichlorodiphenyltrichloroethane)	50-29-3	µg/kg	0.76	No Value	--	8.82E+02	8.61E-04
128-F-3_Staging pile area_Focused	non-Rad	Barium	7440-39-3	µg/kg	141,000	3.30E+05	4.27E-01	1.32E+06	1.07E-01
128-F-3_Staging pile area_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	580	1.00E+04	5.80E-02	1.39E+04	4.16E-02
128-F-3_Staging pile area_Focused	non-Rad	Boron	7440-42-8	µg/kg	5,500	5.00E+02	**1.10E+01**	1.33E+05	4.14E-02
128-F-3_Staging pile area_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	270	4.00E+03	6.75E-02	1.63E+03	1.66E-01
128-F-3_Staging pile area_Focused	non-Rad	Chlorobenzene	108-90-7	µg/kg	3.0	4.00E+04	7.50E-05	1.65E+05	1.82E-05
128-F-3_Staging pile area_Focused	non-Rad	Chloroform	67-66-3	µg/kg	3.0	No Value	--	1.65E+05	1.82E-05
128-F-3_Staging pile area_Focused	non-Rad	Chromium	7440-47-3	µg/kg	9,800	4.00E+02	**2.45E+01**	3.82E+04	2.57E-01
128-F-3_Staging pile area_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	6,600	1.30E+04	5.08E-01	1.11E+05	5.92E-02
128-F-3_Staging pile area_Focused	non-Rad	Copper	7440-50-8	µg/kg	11,600	5.00E+04	2.32E-01	1.07E+05	1.08E-01
128-F-3_Staging pile area_Focused	non-Rad	Endosulfan II	33213-65-9	µg/kg	0.88	No Value	--	7.10E+02	1.24E-03
128-F-3_Staging pile area_Focused	non-Rad	Lead	7439-92-1	µg/kg	8,300	5.00E+04	1.66E-01	3.56E+04	2.33E-01
128-F-3_Staging pile area_Focused	non-Rad	Manganese	7439-96-5	µg/kg	331,000	2.20E+05	**1.50E+00**	5.80E+06	5.71E-02
128-F-3_Staging pile area_Focused	non-Rad	Methylene chloride	75-09-2	µg/kg	22	No Value	--	1.66E+05	1.33E-04
128-F-3_Staging pile area_Focused	non-Rad	Nickel	7440-02-0	µg/kg	9,200	3.00E+04	3.07E-01	3.26E+04	2.82E-01
128-F-3_Staging pile area_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	46,400	2.00E+03	**2.32E+01**	3.11E+04	**1.49E+00**
128-F-3_Staging pile area_Focused	non-Rad	Zinc	7440-66-6	µg/kg	44,800	5.00E+04	8.96E-01	6.78E+04	6.61E-01
132-F-1_Shallow	non-Rad	2-Methylnaphthalene	91-57-6	µg/kg	171	2.90E+04	5.91E-03	6.01E+03	2.85E-02
132-F-1_Shallow	non-Rad	Alpha-Chlordane	5103-71-9	µg/kg	2.7	1.00E+03	2.66E-03	5.04E+04	5.28E-05
132-F-1_Shallow	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	75	1.80E+04	4.19E-03	6.40E+04	1.18E-03
132-F-1_Shallow	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	88	1.80E+04	4.90E-03	7.64E+04	1.15E-03
132-F-1_Shallow	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	74	1.80E+04	4.11E-03	3.92E+04	1.89E-03
132-F-1_Shallow	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	98	1.80E+04	5.44E-03	3.92E+04	2.50E-03
132-F-1_Shallow	non-Rad	beta-1,2,3,4,5,6-Hexachlorocyclohexane (beta-BHC)	319-85-7	µg/kg	1.8	No Value	--	4.08E+03	4.51E-04
132-F-1_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	90	1.00E+05	9.00E-04	4.54E+04	1.98E-03
132-F-1_Shallow	non-Rad	Chlordane	57-74-9	µg/kg	3.4	1.00E+03	3.42E-03	5.04E+04	6.78E-05
132-F-1_Shallow	non-Rad	Chrysene	218-01-9	µg/kg	104	1.80E+04	5.78E-03	4.45E+04	2.34E-03
132-F-1_Shallow	non-Rad	Dibenzofuran	132-64-9	µg/kg	44	No Value	--	No Value	--
132-F-1_Shallow	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	43	No Value	--	No Value	--
132-F-1_Shallow	non-Rad	Fluoranthene	206-44-0	µg/kg	102	1.80E+04	5.69E-03	8.39E+05	1.22E-04
132-F-1_Shallow	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	43	1.80E+04	2.40E-03	3.57E+04	1.21E-03
132-F-1_Shallow	non-Rad	Naphthalene	91-20-3	µg/kg	245	2.90E+04	8.44E-03	1.00E+05	2.45E-03
132-F-1_Shallow	non-Rad	Pyrene	129-00-0	µg/kg	124	1.80E+04	6.89E-03	6.00E+05	2.07E-04
132-F-1_Staging pile area_Focused	non-Rad	4,4'-DDT (Dichlorodiphenyltrichloroethane)	50-29-3	µg/kg	2.7	No Value	--	8.82E+02	3.02E-03
132-F-1_Staging pile area_Focused	non-Rad	Anthracene	120-12-7	µg/kg	269	2.90E+04	9.28E-03	6.78E+05	3.97E-04
132-F-1_Staging pile area_Focused	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	535	1.80E+04	2.97E-02	6.40E+04	8.36E-03
132-F-1_Staging pile area_Focused	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	1,114	1.80E+04	6.19E-02	7.64E+04	1.46E-02
132-F-1_Staging pile area_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	841	1.80E+04	4.67E-02	3.92E+04	2.14E-02
132-F-1_Staging pile area_Focused	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	780	1.80E+04	4.33E-02	3.92E+04	1.99E-02
132-F-1_Staging pile area_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	57	1.00E+05	5.65E-04	4.54E+04	1.24E-03
132-F-1_Staging pile area_Focused	non-Rad	Chrysene	218-01-9	µg/kg	2,137	1.80E+04	1.19E-01	4.45E+04	4.80E-02
132-F-1_Staging pile area_Focused	non-Rad	Dibenz[a,h]anthracene	53-70-3	µg/kg	256	1.80E+04	1.42E-02	4.41E+04	5.80E-03
132-F-1_Staging pile area_Focused	non-Rad	Fluoranthene	206-44-0	µg/kg	169	1.80E+04	9.41E-03	8.39E+05	2.02E-04

Table 3. Comparison of 100-F Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
132-F-1_Staging pile area_Focused	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	620	1.80E+04	3.44E-02	3.57E+04	1.74E-02
132-F-1_Staging pile area_Focused	non-Rad	Pyrene	129-00-0	µg/kg	273	1.80E+04	1.52E-02	6.00E+05	4.55E-04
141-C_Shallow	non-Rad	Anthracene	120-12-7	µg/kg	65	2.90E+04	2.22E-03	6.78E+05	9.51E-05
141-C_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	3,743	1.00E+04	3.74E-01	1.90E+05	1.98E-02
141-C_Shallow	non-Rad	Barium	7440-39-3	µg/kg	93,191	3.30E+05	2.82E-01	1.32E+06	7.04E-02
141-C_Shallow	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	125	1.80E+04	6.97E-03	6.40E+04	1.96E-03
141-C_Shallow	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	65	1.80E+04	3.63E-03	7.64E+04	8.55E-04
141-C_Shallow	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	41	1.80E+04	2.26E-03	3.92E+04	1.04E-03
141-C_Shallow	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	76	1.80E+04	4.20E-03	3.92E+04	1.93E-03
141-C_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	346	1.00E+04	3.46E-02	1.39E+04	2.48E-02
141-C_Shallow	non-Rad	Boron	7440-42-8	µg/kg	5,336	5.00E+02	**1.07E+01**	1.33E+05	4.01E-02
141-C_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	8,938	4.00E+02	**2.23E+01**	3.82E+04	2.34E-01
141-C_Shallow	non-Rad	Chrysene	218-01-9	µg/kg	63	1.80E+04	3.49E-03	4.45E+04	1.41E-03
141-C_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	6,059	1.30E+04	4.66E-01	1.11E+05	5.43E-02
141-C_Shallow	non-Rad	Copper	7440-50-8	µg/kg	12,899	5.00E+04	2.58E-01	1.07E+05	1.20E-01
141-C_Shallow	non-Rad	Dibenz[a,h]anthracene	53-70-3	µg/kg	15	1.80E+04	8.35E-04	4.41E+04	3.41E-04
141-C_Shallow	non-Rad	Fluoranthene	206-44-0	µg/kg	176	1.80E+04	9.77E-03	8.39E+05	2.10E-04
141-C_Shallow	non-Rad	Fluorene	86-73-7	µg/kg	30	2.90E+04	1.03E-03	1.75E+05	1.71E-04
141-C_Shallow	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	671	No Value	--	1.25E+06	5.39E-04
141-C_Shallow	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	45	1.80E+04	2.51E-03	3.57E+04	1.27E-03
141-C_Shallow	non-Rad	Lead	7439-92-1	µg/kg	11,208	5.00E+04	2.24E-01	3.56E+04	3.15E-01
141-C_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	315,353	2.20E+05	**1.43E+00**	5.80E+06	5.44E-02
141-C_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	27	1.00E+02	2.70E-01	1.87E+03	1.45E-02
141-C_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	9,995	3.00E+04	3.33E-01	3.26E+04	3.07E-01
141-C_Shallow	non-Rad	Pyrene	129-00-0	µg/kg	163	1.80E+04	9.04E-03	6.00E+05	2.71E-04
141-C_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	38,368	2.00E+03	**1.92E+01**	3.11E+04	**1.23E+00**
141-C_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	46,969	5.00E+04	9.39E-01	6.78E+04	6.93E-01
141-C_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.059	2.21E+03	2.67E-05	9.24E+02	6.39E-05
141-C_Shallow	Rad	Total beta radiostrontium	SR-RAD	pCi/g	1.7	3.58E+03	4.75E-04	9.11E+01	1.87E-02
141-C_Shallow	Rad	Rads SOF	---	pCi/g	--	--	5.02E-04	--	1.88E-02
141-C_Staging Pile Area_Focused	non-Rad	Acenaphthene	83-32-9	µg/kg	102	2.00E+04	5.11E-03	1.10E+06	9.32E-05
141-C_Staging Pile Area_Focused	non-Rad	Anthracene	120-12-7	µg/kg	7.6	2.90E+04	2.61E-04	6.78E+05	1.12E-05
141-C_Staging Pile Area_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	2,500	1.00E+04	2.50E-01	1.90E+05	1.32E-02
141-C_Staging Pile Area_Focused	non-Rad	Barium	7440-39-3	µg/kg	81,700	3.30E+05	2.48E-01	1.32E+06	6.18E-02
141-C_Staging Pile Area_Focused	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	76	1.80E+04	4.21E-03	6.40E+04	1.18E-03
141-C_Staging Pile Area_Focused	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	46	1.80E+04	2.56E-03	7.64E+04	6.04E-04
141-C_Staging Pile Area_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	48	1.80E+04	2.66E-03	3.92E+04	1.22E-03
141-C_Staging Pile Area_Focused	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	17	1.80E+04	9.64E-04	3.92E+04	4.42E-04
141-C_Staging Pile Area_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	302	1.00E+04	3.02E-02	1.39E+04	2.17E-02
141-C_Staging Pile Area_Focused	non-Rad	Boron	7440-42-8	µg/kg	2,700	5.00E+02	**5.40E+00**	1.33E+05	2.03E-02
141-C_Staging Pile Area_Focused	non-Rad	Chromium	7440-47-3	µg/kg	7,000	4.00E+02	**1.75E+01**	3.82E+04	1.83E-01
141-C_Staging Pile Area_Focused	non-Rad	Chrysene	218-01-9	µg/kg	197	1.80E+04	1.09E-02	4.45E+04	4.42E-03
141-C_Staging Pile Area_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	5,700	1.30E+04	4.38E-01	1.11E+05	5.11E-02
141-C_Staging Pile Area_Focused	non-Rad	Copper	7440-50-8	µg/kg	10,900	5.00E+04	2.18E-01	1.07E+05	1.02E-01
141-C_Staging Pile Area_Focused	non-Rad	Fluoranthene	206-44-0	µg/kg	88	1.80E+04	4.87E-03	8.39E+05	1.05E-04
141-C_Staging Pile Area_Focused	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	58	1.80E+04	3.20E-03	3.57E+04	1.62E-03
141-C_Staging Pile Area_Focused	non-Rad	Lead	7439-92-1	µg/kg	5,300	5.00E+04	1.06E-01	3.56E+04	1.49E-01
141-C_Staging Pile Area_Focused	non-Rad	Manganese	7439-96-5	µg/kg	285,000	2.20E+05	**1.30E+00**	5.80E+06	4.92E-02
141-C_Staging Pile Area_Focused	non-Rad	Nickel	7440-02-0	µg/kg	8,600	3.00E+04	2.87E-01	3.26E+04	2.64E-01
141-C_Staging Pile Area_Focused	non-Rad	Pyrene	129-00-0	µg/kg	82	1.80E+04	4.55E-03	6.00E+05	1.37E-04
141-C_Staging Pile Area_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	33,400	2.00E+03	**1.67E+01**	3.11E+04	**1.07E+00**
141-C_Staging Pile Area_Focused	non-Rad	Zinc	7440-66-6	µg/kg	37,500	5.00E+04	7.50E-01	6.78E+04	5.53E-01
141-C_Staging Pile Area_Focused	Rad	Cesium-137	10045-97-3	pCi/g	0.041	2.21E+03	1.86E-05	9.24E+02	4.44E-05
141-C_Staging Pile Area_Focused	Rad	Rads SOF	---	pCi/g	--	--	1.86E-05	--	4.44E-05
1607-F2_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.19	2.21E+03	8.68E-05	9.24E+02	2.08E-04
1607-F2_Shallow	Rad	Europium-152	14683-23-9	pCi/g	0.51	1.47E+04	3.45E-05	1.74E+03	2.92E-04

Table 3. Comparison of 100-F Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
1607-F2_Shallow	Rad	Rads SOF	---	pCi/g	--	--	1.21E-04	--	5.00E-04
1607-F3_Shallow	non-Rad	Alpha-Chlordane	5103-71-9	µg/kg	1.0	1.00E+03	1.00E-03	5.04E+04	1.98E-05
1607-F3_Shallow	non-Rad	Aroclor-1260	11096-82-5	µg/kg	3.5	4.00E+04	8.75E-05	1.47E+03	2.37E-03
1607-F3_Shallow	non-Rad	Aroclors HI		ug/kg	--	--	8.75E-05	--	2.37E-03
1607-F3_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	7,552	1.00E+04	7.55E-01	1.90E+05	3.98E-02
1607-F3_Shallow	non-Rad	Barium	7440-39-3	µg/kg	73,139	3.30E+05	2.22E-01	1.32E+06	5.53E-02
1607-F3_Shallow	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	33	1.80E+04	1.83E-03	7.64E+04	4.32E-04
1607-F3_Shallow	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	29	1.80E+04	1.61E-03	3.92E+04	7.39E-04
1607-F3_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	253	1.00E+04	2.53E-02	1.39E+04	1.81E-02
1607-F3_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	54	1.00E+05	5.36E-04	4.54E+04	1.18E-03
1607-F3_Shallow	non-Rad	Boron	7440-42-8	µg/kg	451	5.00E+02	9.02E-01	1.33E+05	3.39E-03
1607-F3_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	460	4.00E+03	1.15E-01	1.63E+03	2.82E-01
1607-F3_Shallow	non-Rad	Chlordane	57-74-9	µg/kg	2.6	1.00E+03	2.60E-03	5.04E+04	5.16E-05
1607-F3_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	9,725	4.00E+02	**2.43E+01**	3.82E+04	2.55E-01
1607-F3_Shallow	non-Rad	Chrysene	218-01-9	µg/kg	22	1.80E+04	1.22E-03	4.45E+04	4.94E-04
1607-F3_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	5,991	1.30E+04	4.61E-01	1.11E+05	5.37E-02
1607-F3_Shallow	non-Rad	Copper	7440-50-8	µg/kg	13,229	5.00E+04	2.65E-01	1.07E+05	1.24E-01
1607-F3_Shallow	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	25	No Value	--	No Value	--
1607-F3_Shallow	non-Rad	Ethylbenzene	100-41-4	µg/kg	2.0	No Value	--	1.03E+06	1.95E-06
1607-F3_Shallow	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	22	1.80E+04	1.22E-03	3.57E+04	6.17E-04
1607-F3_Shallow	non-Rad	Lead	7439-92-1	µg/kg	24,146	5.00E+04	4.83E-01	3.56E+04	6.79E-01
1607-F3_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	273,899	2.20E+05	**1.24E+00**	5.80E+06	4.72E-02
1607-F3_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	27	1.00E+02	2.69E-01	1.87E+03	1.44E-02
1607-F3_Shallow	non-Rad	Methylene chloride	75-09-2	µg/kg	26	No Value	--	1.66E+05	1.60E-04
1607-F3_Shallow	non-Rad	m-Xylene	108-38-3	µg/kg	4.0	No Value	--	No Value	--
1607-F3_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	10,246	3.00E+04	3.42E-01	3.26E+04	3.14E-01
1607-F3_Shallow	non-Rad	o-Xylene	95-47-6	µg/kg	2.0	No Value	--	No Value	--
1607-F3_Shallow	non-Rad	Selenium	7782-49-2	µg/kg	4,200	5.20E+02	**8.08E+00**	1.90E+03	**2.21E+00**
1607-F3_Shallow	non-Rad	Tetrachloroethene	127-18-4	µg/kg	2.0	No Value	--	6.98E+04	2.87E-05
1607-F3_Shallow	non-Rad	Toluene	108-88-3	µg/kg	1.0	2.00E+05	5.00E-06	5.20E+06	1.92E-07
1607-F3_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	34,149	2.00E+03	**1.71E+01**	3.11E+04	**1.10E+00**
1607-F3_Shallow	non-Rad	Xylenes (total)	1330-20-7	µg/kg	4.7	No Value	--	8.26E+05	5.68E-06
1607-F3_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	42,536	5.00E+04	8.51E-01	6.78E+04	6.27E-01
1607-F3_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.14	2.21E+03	6.33E-05	9.24E+02	1.52E-04
1607-F3_Shallow	Rad	Rads SOF	---	pCi/g	--	--	6.33E-05	--	1.52E-04
1607-F3_Staging pile area_Focused	non-Rad	4,4'-DDE (Dichlorodiphenyldichloroethylene)	72-55-9	µg/kg	0.49	No Value	--	4.00E+02	1.23E-03
1607-F3_Staging pile area_Focused	non-Rad	4,4'-DDT (Dichlorodiphenyltrichloroethane)	50-29-3	µg/kg	0.35	No Value	--	8.82E+02	3.97E-04
1607-F3_Staging pile area_Focused	non-Rad	Acetone	67-64-1	µg/kg	5.0	No Value	--	No Value	--
1607-F3_Staging pile area_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	3.4	4.00E+04	8.50E-05	1.47E+03	2.31E-03
1607-F3_Staging pile area_Focused	non-Rad	Aroclors HI		ug/kg	--	--	8.50E-05	--	2.31E-03
1607-F3_Staging pile area_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	12,100	1.00E+04	**1.21E+00**	1.90E+05	6.38E-02
1607-F3_Staging pile area_Focused	non-Rad	Barium	7440-39-3	µg/kg	60,200	3.30E+05	1.82E-01	1.32E+06	4.55E-02
1607-F3_Staging pile area_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	20	1.00E+04	2.00E-03	1.39E+04	1.43E-03
1607-F3_Staging pile area_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	82	1.00E+05	8.20E-04	4.54E+04	1.81E-03
1607-F3_Staging pile area_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,700	5.00E+02	**3.40E+00**	1.33E+05	1.28E-02
1607-F3_Staging pile area_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	270	4.00E+03	6.75E-02	1.63E+03	1.66E-01
1607-F3_Staging pile area_Focused	non-Rad	Chlordane	57-74-9	µg/kg	0.83	1.00E+03	8.30E-04	5.04E+04	1.65E-05
1607-F3_Staging pile area_Focused	non-Rad	Chloroform	67-66-3	µg/kg	1.0	No Value	--	1.65E+05	6.05E-06
1607-F3_Staging pile area_Focused	non-Rad	Chromium	7440-47-3	µg/kg	9,400	4.00E+02	**2.35E+01**	3.82E+04	2.46E-01
1607-F3_Staging pile area_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	5,200	1.30E+04	4.00E-01	1.11E+05	4.66E-02
1607-F3_Staging pile area_Focused	non-Rad	Copper	7440-50-8	µg/kg	14,500	5.00E+04	2.90E-01	1.07E+05	1.35E-01
1607-F3_Staging pile area_Focused	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	120	No Value	--	No Value	--
1607-F3_Staging pile area_Focused	non-Rad	Lead	7439-92-1	µg/kg	54,900	5.00E+04	**1.10E+00**	3.56E+04	**1.54E+00**
1607-F3_Staging pile area_Focused	non-Rad	Manganese	7439-96-5	µg/kg	255,000	2.20E+05	**1.16E+00**	5.80E+06	4.40E-02
1607-F3_Staging pile area_Focused	non-Rad	Mercury	7439-97-6	µg/kg	30	1.00E+02	3.00E-01	1.87E+03	1.61E-02
1607-F3_Staging pile area_Focused	non-Rad	Methylene chloride	75-09-2	µg/kg	8.0	No Value	--	1.66E+05	4.83E-05

Table 3. Comparison of 100-F Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
1607-F3_Staging pile area_Focused	non-Rad	Nickel	7440-02-0	µg/kg	9,600	3.00E+04	3.20E-01	3.26E+04	2.95E-01
1607-F3_Staging pile area_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	28,200	2.00E+03	**1.41E+01**	3.11E+04	9.06E-01
1607-F3_Staging pile area_Focused	non-Rad	Zinc	7440-66-6	µg/kg	38,400	5.00E+04	7.68E-01	6.78E+04	5.66E-01
1607-F4_Overburden_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	2,300	1.00E+04	2.30E-01	1.90E+05	1.21E-02
1607-F4_Overburden_Focused	non-Rad	Barium	7440-39-3	µg/kg	125,000	3.30E+05	3.79E-01	1.32E+06	9.45E-02
1607-F4_Overburden_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	430	1.00E+04	4.30E-02	1.39E+04	3.08E-02
1607-F4_Overburden_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	140	1.00E+05	1.40E-03	4.54E+04	3.08E-03
1607-F4_Overburden_Focused	non-Rad	Boron	7440-42-8	µg/kg	5,800	5.00E+02	**1.16E+01**	1.33E+05	4.36E-02
1607-F4_Overburden_Focused	non-Rad	Chromium	7440-47-3	µg/kg	10,500	4.00E+02	**2.63E+01**	3.82E+04	2.75E-01
1607-F4_Overburden_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	7,200	1.30E+04	5.54E-01	1.11E+05	6.46E-02
1607-F4_Overburden_Focused	non-Rad	Copper	7440-50-8	µg/kg	13,600	5.00E+04	2.72E-01	1.07E+05	1.27E-01
1607-F4_Overburden_Focused	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	24	No Value	--	No Value	--
1607-F4_Overburden_Focused	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	280	No Value	--	1.25E+06	2.25E-04
1607-F4_Overburden_Focused	non-Rad	Lead	7439-92-1	µg/kg	7,700	5.00E+04	1.54E-01	3.56E+04	2.16E-01
1607-F4_Overburden_Focused	non-Rad	Manganese	7439-96-5	µg/kg	334,000	2.20E+05	**1.52E+00**	5.80E+06	5.76E-02
1607-F4_Overburden_Focused	non-Rad	Nickel	7440-02-0	µg/kg	10,900	3.00E+04	3.63E-01	3.26E+04	3.35E-01
1607-F4_Overburden_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	47,900	2.00E+03	**2.40E+01**	3.11E+04	**1.54E+00**
1607-F4_Overburden_Focused	non-Rad	Zinc	7440-66-6	µg/kg	41,300	5.00E+04	8.26E-01	6.78E+04	6.09E-01
1607-F4_Shallow	non-Rad	4,4'-DDE (Dichlorodiphenyldichloroethylene)	72-55-9	µg/kg	2.1	No Value	--	4.00E+02	5.26E-03
1607-F4_Shallow	non-Rad	4,4'-DDT (Dichlorodiphenyltrichloroethane)	50-29-3	µg/kg	2.8	No Value	--	8.82E+02	3.17E-03
1607-F4_Shallow	non-Rad	Alpha-Chlordane	5103-71-9	µg/kg	5.6	1.00E+03	5.60E-03	5.04E+04	1.11E-04
1607-F4_Shallow	non-Rad	Antimony	7440-36-0	µg/kg	1,010	5.00E+03	2.02E-01	5.98E+03	1.69E-01
1607-F4_Shallow	non-Rad	Aroclor-1254	11097-69-1	µg/kg	46	4.00E+04	1.15E-03	1.47E+03	3.12E-02
1607-F4_Shallow	non-Rad	Aroclor-1260	11096-82-5	µg/kg	6.7	4.00E+04	1.68E-04	1.47E+03	4.54E-03
1607-F4_Shallow	non-Rad	Aroclors HI		ug/kg	--	--	1.32E-03	--	3.57E-02
1607-F4_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	2,198	1.00E+04	2.20E-01	1.90E+05	1.16E-02
1607-F4_Shallow	non-Rad	Barium	7440-39-3	µg/kg	70,070	3.30E+05	2.12E-01	1.32E+06	5.30E-02
1607-F4_Shallow	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	22	1.80E+04	1.22E-03	6.40E+04	3.44E-04
1607-F4_Shallow	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	18	1.80E+04	1.00E-03	3.92E+04	4.59E-04
1607-F4_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	333	1.00E+04	3.33E-02	1.39E+04	2.39E-02
1607-F4_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	91	1.00E+05	9.14E-04	4.54E+04	2.01E-03
1607-F4_Shallow	non-Rad	Boron	7440-42-8	µg/kg	1,876	5.00E+02	**3.75E+00**	1.33E+05	1.41E-02
1607-F4_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	380	4.00E+03	9.50E-02	1.63E+03	2.33E-01
1607-F4_Shallow	non-Rad	Chlordane	57-74-9	µg/kg	4.5	1.00E+03	4.50E-03	5.04E+04	8.93E-05
1607-F4_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	14,407	4.00E+02	**3.60E+01**	3.82E+04	3.77E-01
1607-F4_Shallow	non-Rad	Chrysene	218-01-9	µg/kg	26	1.80E+04	1.44E-03	4.45E+04	5.84E-04
1607-F4_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	6,530	1.30E+04	5.02E-01	1.11E+05	5.86E-02
1607-F4_Shallow	non-Rad	Copper	7440-50-8	µg/kg	14,304	5.00E+04	2.86E-01	1.07E+05	1.34E-01
1607-F4_Shallow	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	33	No Value	--	No Value	--
1607-F4_Shallow	non-Rad	Fluoranthene	206-44-0	µg/kg	44	1.80E+04	2.44E-03	8.39E+05	5.24E-05
1607-F4_Shallow	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	210	No Value	--	1.25E+06	1.69E-04
1607-F4_Shallow	non-Rad	Lead	7439-92-1	µg/kg	4,758	5.00E+04	9.52E-02	3.56E+04	1.34E-01
1607-F4_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	297,305	2.20E+05	**1.35E+00**	5.80E+06	5.13E-02
1607-F4_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	1,200	1.00E+02	**1.20E+01**	1.87E+03	6.43E-01
1607-F4_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	580	2.00E+03	2.90E-01	1.40E+04	4.15E-02
1607-F4_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	9,942	3.00E+04	3.31E-01	3.26E+04	3.05E-01
1607-F4_Shallow	non-Rad	Phenol	108-95-2	µg/kg	28	3.00E+04	9.49E-04	1.51E+06	1.88E-05
1607-F4_Shallow	non-Rad	Pyrene	129-00-0	µg/kg	38	1.80E+04	2.11E-03	6.00E+05	6.33E-05
1607-F4_Shallow	non-Rad	Selenium	7782-49-2	µg/kg	1,602	5.20E+02	**3.08E+00**	1.90E+03	8.44E-01
1607-F4_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	40,330	2.00E+03	**2.02E+01**	3.11E+04	**1.30E+00**
1607-F4_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	50,618	5.00E+04	**1.01E+00**	6.78E+04	7.47E-01
1607-F4_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	2,000	1.00E+04	2.00E-01	1.90E+05	1.06E-02
1607-F4_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	36,100	3.30E+05	1.09E-01	1.32E+06	2.73E-02
1607-F4_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	270	1.00E+04	2.70E-02	1.39E+04	1.94E-02
1607-F4_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	190	1.00E+05	1.90E-03	4.54E+04	4.18E-03
1607-F4_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	7,000	4.00E+02	**1.75E+01**	3.82E+04	1.83E-01

Table 3. Comparison of 100-F Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
1607-F4_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	4,500	1.30E+04	3.46E-01	1.11E+05	4.04E-02
1607-F4_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	13,600	5.00E+04	2.72E-01	1.07E+05	1.27E-01
1607-F4_Shallow_Focused	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	41	No Value	--	No Value	--
1607-F4_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	3,400	5.00E+04	6.80E-02	3.56E+04	9.56E-02
1607-F4_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	218,000	2.20E+05	9.91E-01	5.80E+06	3.76E-02
1607-F4_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	490	2.00E+03	2.45E-01	1.40E+04	3.51E-02
1607-F4_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	9,500	3.00E+04	3.17E-01	3.26E+04	2.92E-01
1607-F4_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	1,363	5.00E+03	2.73E-01	7.86E+05	1.74E-03
1607-F4_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	27,300	2.00E+03	**1.37E+01**	3.11E+04	8.77E-01
1607-F4_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	30,800	5.00E+04	6.16E-01	6.78E+04	4.54E-01
1607-F4_Shallow_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	0.49	5.16E+04	9.48E-06	6.37E+03	7.68E-05
1607-F4_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	0.46	1.57E+04	2.92E-05	5.15E+03	8.89E-05
1607-F4_Shallow_Focused	Rad	Rads SOF	---	pCi/g	--	--	3.87E-05	--	1.66E-04
1607-F5_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	2,763	1.00E+04	2.76E-01	1.90E+05	1.46E-02
1607-F5_Shallow	non-Rad	Barium	7440-39-3	µg/kg	45,328	3.30E+05	1.37E-01	1.32E+06	3.43E-02
1607-F5_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	199	1.00E+04	1.99E-02	1.39E+04	1.43E-02
1607-F5_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	172	1.00E+05	1.72E-03	4.54E+04	3.79E-03
1607-F5_Shallow	non-Rad	Boron	7440-42-8	µg/kg	474	5.00E+02	9.47E-01	1.33E+05	3.56E-03
1607-F5_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	8,606	4.00E+02	**2.15E+01**	3.82E+04	2.26E-01
1607-F5_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	4,642	1.30E+04	3.57E-01	1.11E+05	4.16E-02
1607-F5_Shallow	non-Rad	Copper	7440-50-8	µg/kg	13,290	5.00E+04	2.66E-01	1.07E+05	1.24E-01
1607-F5_Shallow	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	93	No Value	--	No Value	--
1607-F5_Shallow	non-Rad	Lead	7439-92-1	µg/kg	4,655	5.00E+04	9.31E-02	3.56E+04	1.31E-01
1607-F5_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	216,602	2.20E+05	9.85E-01	5.80E+06	3.74E-02
1607-F5_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	530	2.00E+03	2.65E-01	1.40E+04	3.80E-02
1607-F5_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	10,084	3.00E+04	3.36E-01	3.26E+04	3.09E-01
1607-F5_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	27,297	2.00E+03	**1.36E+01**	3.11E+04	8.77E-01
1607-F5_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	29,602	5.00E+04	5.92E-01	6.78E+04	4.37E-01
1607-F5_Staging pile area_Focused	non-Rad	4,4'-DDE (Dichlorodiphenyldichloroethylene)	72-55-9	µg/kg	1.8	No Value	--	4.00E+02	4.51E-03
1607-F5_Staging pile area_Focused	non-Rad	4,4'-DDT (Dichlorodiphenyltrichloroethane)	50-29-3	µg/kg	1.5	No Value	--	8.82E+02	1.70E-03
1607-F5_Staging pile area_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	5.5	4.00E+04	1.38E-04	1.47E+03	3.73E-03
1607-F5_Staging pile area_Focused	non-Rad	Aroclors HI		ug/kg	--	--	1.38E-04	--	3.73E-03
1607-F5_Staging pile area_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	2,800	1.00E+04	2.80E-01	1.90E+05	1.48E-02
1607-F5_Staging pile area_Focused	non-Rad	Barium	7440-39-3	µg/kg	69,700	3.30E+05	2.11E-01	1.32E+06	5.27E-02
1607-F5_Staging pile area_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	90	1.00E+04	9.00E-03	1.39E+04	6.45E-03
1607-F5_Staging pile area_Focused	non-Rad	beta-1,2,3,4,5,6-Hexachlorocyclohexane (beta-BHC)	319-85-7	µg/kg	1.6	No Value	--	4.08E+03	3.93E-04
1607-F5_Staging pile area_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	75	1.00E+05	7.50E-04	4.54E+04	1.65E-03
1607-F5_Staging pile area_Focused	non-Rad	Boron	7440-42-8	µg/kg	3,000	5.00E+02	**6.00E+00**	1.33E+05	2.26E-02
1607-F5_Staging pile area_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	330	4.00E+03	8.25E-02	1.63E+03	2.02E-01
1607-F5_Staging pile area_Focused	non-Rad	Chromium	7440-47-3	µg/kg	8,600	4.00E+02	**2.15E+01**	3.82E+04	2.25E-01
1607-F5_Staging pile area_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	5,100	1.30E+04	3.92E-01	1.11E+05	4.57E-02
1607-F5_Staging pile area_Focused	non-Rad	Copper	7440-50-8	µg/kg	12,600	5.00E+04	2.52E-01	1.07E+05	1.18E-01
1607-F5_Staging pile area_Focused	non-Rad	Endosulfan I	959-98-8	µg/kg	0.60	No Value	--	7.10E+02	8.45E-04
1607-F5_Staging pile area_Focused	non-Rad	Lead	7439-92-1	µg/kg	6,900	5.00E+04	1.38E-01	3.56E+04	1.94E-01
1607-F5_Staging pile area_Focused	non-Rad	Manganese	7439-96-5	µg/kg	239,000	2.20E+05	**1.09E+00**	5.80E+06	4.12E-02
1607-F5_Staging pile area_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	310	2.00E+03	1.55E-01	1.40E+04	2.22E-02
1607-F5_Staging pile area_Focused	non-Rad	Nickel	7440-02-0	µg/kg	9,300	3.00E+04	3.10E-01	3.26E+04	2.85E-01
1607-F5_Staging pile area_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	29,000	2.00E+03	**1.45E+01**	3.11E+04	9.32E-01
1607-F5_Staging pile area_Focused	non-Rad	Zinc	7440-66-6	µg/kg	35,300	5.00E+04	7.06E-01	6.78E+04	5.21E-01
1607-F6_Overburden	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	87	1.00E+05	8.74E-04	4.54E+04	1.92E-03
1607-F6_Overburden	non-Rad	Chromium	7440-47-3	µg/kg	9,796	4.00E+02	**2.45E+01**	3.82E+04	2.57E-01
1607-F6_Overburden	non-Rad	Diethylphthalate	84-66-2	µg/kg	130	1.00E+05	1.30E-03	No Value	--
1607-F6_Overburden	non-Rad	Lead	7439-92-1	µg/kg	2,736	5.00E+04	5.47E-02	3.56E+04	7.69E-02
1607-F6_Overburden	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	1,587	5.00E+03	3.17E-01	7.86E+05	2.02E-03
1607-F6_Overburden	Rad	Uranium-233/234	U-233/234	pCi/g	0.47	5.16E+04	9.16E-06	6.37E+03	7.42E-05
1607-F6_Overburden	Rad	Uranium-234	13966-29-5	pCi/g	0.63	5.16E+04	1.23E-05	6.37E+03	9.94E-05

Table 3. Comparison of 100-F Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
1607-F6_Overburden	Rad	Uranium-238	U-238	pCi/g	0.53	1.57E+04	3.40E-05	5.15E+03	1.04E-04
1607-F6_Overburden	Rad	Rads SOF	---	pCi/g	--	--	5.55E-05	--	2.78E-04
1607-F6_Shallow	non-Rad	Aroclor-1254	11097-69-1	µg/kg	342	4.00E+04	8.55E-03	1.47E+03	2.32E-01
1607-F6_Shallow	non-Rad	Aroclors HI		ug/kg	--	--	8.55E-03	--	2.32E-01
1607-F6_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	60	1.00E+05	6.03E-04	4.54E+04	1.33E-03
1607-F6_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	10,300	4.00E+02	**2.58E+01**	3.82E+04	2.70E-01
1607-F6_Shallow	non-Rad	Diethylphthalate	84-66-2	µg/kg	24	1.00E+05	2.40E-04	No Value	--
1607-F6_Shallow	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	120	No Value	--	No Value	--
1607-F6_Shallow	non-Rad	Lead	7439-92-1	µg/kg	13,247	5.00E+04	2.65E-01	3.56E+04	3.72E-01
1607-F6_Shallow	non-Rad	Phenol	108-95-2	µg/kg	84	3.00E+04	2.80E-03	1.51E+06	5.56E-05
1607-F6_Shallow	non-Rad	Pyrene	129-00-0	µg/kg	22	1.80E+04	1.22E-03	6.00E+05	3.67E-05
1607-F6_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	2,284	5.00E+03	4.57E-01	7.86E+05	2.91E-03
1607-F6_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.089	2.21E+03	4.03E-05	9.24E+02	9.63E-05
1607-F6_Shallow	Rad	Europium-152	14683-23-9	pCi/g	0.065	1.47E+04	4.42E-06	1.74E+03	3.74E-05
1607-F6_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.50	5.16E+04	9.59E-06	6.37E+03	7.77E-05
1607-F6_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.19	2.74E+04	7.01E-06	4.36E+03	4.40E-05
1607-F6_Shallow	Rad	Uranium-238	U-238	pCi/g	0.75	1.57E+04	4.77E-05	5.15E+03	1.45E-04
1607-F6_Shallow	Rad	Rads SOF	---	pCi/g	--	--	1.09E-04	--	4.00E-04
1607-F7_Shallow	non-Rad	2-Hexanone	591-78-6	µg/kg	2.7	No Value	--	1.71E+06	1.59E-06
1607-F7_Shallow	non-Rad	2-Methylnaphthalene	91-57-6	µg/kg	134	2.90E+04	4.61E-03	6.01E+03	2.23E-02
1607-F7_Shallow	non-Rad	4,4'-DDE (Dichlorodiphenyldichloroethylene)	72-55-9	µg/kg	1.6	No Value	--	4.00E+02	4.08E-03
1607-F7_Shallow	non-Rad	4,4'-DDT (Dichlorodiphenyltrichloroethane)	50-29-3	µg/kg	5.3	No Value	--	8.82E+02	5.96E-03
1607-F7_Shallow	non-Rad	4-Methyl-2-Pentanone	108-10-1	µg/kg	3.0	No Value	--	1.93E+06	1.56E-06
1607-F7_Shallow	non-Rad	Acetone	67-64-1	µg/kg	15	No Value	--	No Value	--
1607-F7_Shallow	non-Rad	Aldrin	309-00-2	µg/kg	0.42	No Value	--	1.65E+02	2.55E-03
1607-F7_Shallow	non-Rad	Alpha-BHC	319-84-6	µg/kg	1.1	No Value	--	No Value	--
1607-F7_Shallow	non-Rad	Alpha-Chlordane	5103-71-9	µg/kg	1.2	1.00E+03	1.19E-03	5.04E+04	2.36E-05
1607-F7_Shallow	non-Rad	Antimony	7440-36-0	µg/kg	530	5.00E+03	1.06E-01	5.98E+03	8.86E-02
1607-F7_Shallow	non-Rad	Aroclor-1254	11097-69-1	µg/kg	8.4	4.00E+04	2.10E-04	1.47E+03	5.70E-03
1607-F7_Shallow	non-Rad	Aroclor-1260	11096-82-5	µg/kg	9.0	4.00E+04	2.24E-04	1.47E+03	6.08E-03
1607-F7_Shallow	non-Rad	Aroclors HI		ug/kg	--	--	4.34E-04	--	1.18E-02
1607-F7_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	2,720	1.00E+04	2.72E-01	1.90E+05	1.44E-02
1607-F7_Shallow	non-Rad	Barium	7440-39-3	µg/kg	99,249	3.30E+05	3.01E-01	1.32E+06	7.50E-02
1607-F7_Shallow	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	26	1.80E+04	1.44E-03	6.40E+04	4.06E-04
1607-F7_Shallow	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	23	1.80E+04	1.28E-03	7.64E+04	3.01E-04
1607-F7_Shallow	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	48	1.80E+04	2.67E-03	3.92E+04	1.22E-03
1607-F7_Shallow	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	46	1.80E+04	2.56E-03	3.92E+04	1.17E-03
1607-F7_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	396	1.00E+04	3.96E-02	1.39E+04	2.84E-02
1607-F7_Shallow	non-Rad	beta-1,2,3,4,5,6-Hexachlorocyclohexane (beta-BHC)	319-85-7	µg/kg	3.7	No Value	--	4.08E+03	9.14E-04
1607-F7_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	47	1.00E+05	4.67E-04	4.54E+04	1.03E-03
1607-F7_Shallow	non-Rad	Boron	7440-42-8	µg/kg	3,219	5.00E+02	**6.44E+00**	1.33E+05	2.42E-02
1607-F7_Shallow	non-Rad	Butylbenzylphthalate	85-68-7	µg/kg	37	No Value	--	No Value	--
1607-F7_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	216	4.00E+03	5.40E-02	1.63E+03	1.33E-01
1607-F7_Shallow	non-Rad	Chlordane	57-74-9	µg/kg	1.1	1.00E+03	1.10E-03	5.04E+04	2.18E-05
1607-F7_Shallow	non-Rad	Chloroform	67-66-3	µg/kg	3.4	No Value	--	1.65E+05	2.05E-05
1607-F7_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	11,376	4.00E+02	**2.84E+01**	3.82E+04	2.98E-01
1607-F7_Shallow	non-Rad	Chrysene	218-01-9	µg/kg	76	1.80E+04	4.22E-03	4.45E+04	1.71E-03
1607-F7_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	5,635	1.30E+04	4.33E-01	1.11E+05	5.05E-02
1607-F7_Shallow	non-Rad	Copper	7440-50-8	µg/kg	13,715	5.00E+04	2.74E-01	1.07E+05	1.28E-01
1607-F7_Shallow	non-Rad	Dibenzofuran	132-64-9	µg/kg	30	No Value	--	No Value	--
1607-F7_Shallow	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	40	No Value	--	No Value	--
1607-F7_Shallow	non-Rad	Endosulfan I	959-98-8	µg/kg	0.54	No Value	--	7.10E+02	7.61E-04
1607-F7_Shallow	non-Rad	Fluoranthene	206-44-0	µg/kg	72	1.80E+04	4.00E-03	8.39E+05	8.58E-05
1607-F7_Shallow	non-Rad	Gamma-BHC (Lindane)	58-89-9	µg/kg	0.92	No Value	--	No Value	--
1607-F7_Shallow	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	500	No Value	--	1.25E+06	4.02E-04
1607-F7_Shallow	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	58	1.80E+04	3.22E-03	3.57E+04	1.63E-03

Table 3. Comparison of 100-F Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
1607-F7_Shallow	non-Rad	Lead	7439-92-1	µg/kg	31,177	5.00E+04	6.24E-01	3.56E+04	8.76E-01
1607-F7_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	279,444	2.20E+05	**1.27E+00**	5.80E+06	4.82E-02
1607-F7_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	20	1.00E+02	2.00E-01	1.87E+03	1.07E-02
1607-F7_Shallow	non-Rad	Methoxychlor	72-43-5	µg/kg	1.4	No Value	--	2.18E+04	6.41E-05
1607-F7_Shallow	non-Rad	Methylene chloride	75-09-2	µg/kg	14	No Value	--	1.66E+05	8.52E-05
1607-F7_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	477	2.00E+03	2.39E-01	1.40E+04	3.42E-02
1607-F7_Shallow	non-Rad	Naphthalene	91-20-3	µg/kg	96	2.90E+04	3.30E-03	1.00E+05	9.56E-04
1607-F7_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	9,902	3.00E+04	3.30E-01	3.26E+04	3.04E-01
1607-F7_Shallow	non-Rad	Pyrene	129-00-0	µg/kg	71	1.80E+04	3.94E-03	6.00E+05	1.18E-04
1607-F7_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	31,959	2.00E+03	**1.60E+01**	3.11E+04	**1.03E+00**
1607-F7_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	50,531	5.00E+04	**1.01E+00**	6.78E+04	7.45E-01
1607-F7_Staging pile area_Focused	non-Rad	1,4-Dichlorobenzene	106-46-7	µg/kg	46	No Value	--	No Value	--
1607-F7_Staging pile area_Focused	non-Rad	2-Methylnaphthalene	91-57-6	µg/kg	110	2.90E+04	3.79E-03	6.01E+03	1.83E-02
1607-F7_Staging pile area_Focused	non-Rad	4,4'-DDD (Dichlorodiphenyldichloroethane)	72-54-8	µg/kg	2.2	No Value	--	8.82E+02	2.49E-03
1607-F7_Staging pile area_Focused	non-Rad	4,4'-DDE (Dichlorodiphenyldichloroethylene)	72-55-9	µg/kg	58	No Value	--	4.00E+02	1.45E-01
1607-F7_Staging pile area_Focused	non-Rad	4,4'-DDT (Dichlorodiphenyltrichloroethane)	50-29-3	µg/kg	46	No Value	--	8.82E+02	5.21E-02
1607-F7_Staging pile area_Focused	non-Rad	Alpha-Chlordane	5103-71-9	µg/kg	5.5	1.00E+03	5.50E-03	5.04E+04	1.09E-04
1607-F7_Staging pile area_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	60	4.00E+04	1.50E-03	1.47E+03	4.07E-02
1607-F7_Staging pile area_Focused	non-Rad	Aroclors HI		ug/kg	--	--	1.50E-03	--	4.07E-02
1607-F7_Staging pile area_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	3,400	1.00E+04	3.40E-01	1.90E+05	1.79E-02
1607-F7_Staging pile area_Focused	non-Rad	Barium	7440-39-3	µg/kg	147,000	3.30E+05	4.45E-01	1.32E+06	1.11E-01
1607-F7_Staging pile area_Focused	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	22	1.80E+04	1.22E-03	6.40E+04	3.44E-04
1607-F7_Staging pile area_Focused	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	32	1.80E+04	1.78E-03	7.64E+04	4.19E-04
1607-F7_Staging pile area_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	36	1.80E+04	2.00E-03	3.92E+04	9.18E-04
1607-F7_Staging pile area_Focused	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	32	1.80E+04	1.78E-03	3.92E+04	8.16E-04
1607-F7_Staging pile area_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	300	1.00E+04	3.00E-02	1.39E+04	2.15E-02
1607-F7_Staging pile area_Focused	non-Rad	beta-1,2,3,4,5,6-Hexachlorocyclohexane (beta-BHC)	319-85-7	µg/kg	1.4	No Value	--	4.08E+03	3.44E-04
1607-F7_Staging pile area_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	35	1.00E+05	3.50E-04	4.54E+04	7.71E-04
1607-F7_Staging pile area_Focused	non-Rad	Boron	7440-42-8	µg/kg	7,700	5.00E+02	**1.54E+01**	1.33E+05	5.79E-02
1607-F7_Staging pile area_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	220	4.00E+03	5.50E-02	1.63E+03	1.35E-01
1607-F7_Staging pile area_Focused	non-Rad	Chlordane	57-74-9	µg/kg	3.7	1.00E+03	3.70E-03	5.04E+04	7.34E-05
1607-F7_Staging pile area_Focused	non-Rad	Chlorobenzene	108-90-7	µg/kg	1.0	4.00E+04	2.50E-05	1.65E+05	6.08E-06
1607-F7_Staging pile area_Focused	non-Rad	Chloroform	67-66-3	µg/kg	1.0	No Value	--	1.65E+05	6.05E-06
1607-F7_Staging pile area_Focused	non-Rad	Chromium	7440-47-3	µg/kg	12,200	4.00E+02	**3.05E+01**	3.82E+04	3.20E-01
1607-F7_Staging pile area_Focused	non-Rad	Chrysene	218-01-9	µg/kg	850	1.80E+04	4.72E-02	4.45E+04	1.91E-02
1607-F7_Staging pile area_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	6,400	1.30E+04	4.92E-01	1.11E+05	5.74E-02
1607-F7_Staging pile area_Focused	non-Rad	Copper	7440-50-8	µg/kg	16,400	5.00E+04	3.28E-01	1.07E+05	1.53E-01
1607-F7_Staging pile area_Focused	non-Rad	Dibenz[a,h]anthracene	53-70-3	µg/kg	18	1.80E+04	1.00E-03	4.41E+04	4.08E-04
1607-F7_Staging pile area_Focused	non-Rad	Dibenzofuran	132-64-9	µg/kg	27	No Value	--	No Value	--
1607-F7_Staging pile area_Focused	non-Rad	Dieldrin	60-57-1	µg/kg	23	No Value	--	2.09E+01	**1.10E+00**
1607-F7_Staging pile area_Focused	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	34	No Value	--	No Value	--
1607-F7_Staging pile area_Focused	non-Rad	Ethylbenzene	100-41-4	µg/kg	2.0	No Value	--	1.03E+06	1.95E-06
1607-F7_Staging pile area_Focused	non-Rad	Fluoranthene	206-44-0	µg/kg	37	1.80E+04	2.06E-03	8.39E+05	4.41E-05
1607-F7_Staging pile area_Focused	non-Rad	Heptachlor	76-44-8	µg/kg	15	No Value	--	No Value	--
1607-F7_Staging pile area_Focused	non-Rad	Heptachlor epoxide	1024-57-3	µg/kg	0.89	No Value	--	No Value	--
1607-F7_Staging pile area_Focused	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	27	1.80E+04	1.50E-03	3.57E+04	7.57E-04
1607-F7_Staging pile area_Focused	non-Rad	Lead	7439-92-1	µg/kg	12,300	5.00E+04	2.46E-01	3.56E+04	3.46E-01
1607-F7_Staging pile area_Focused	non-Rad	Manganese	7439-96-5	µg/kg	300,000	2.20E+05	**1.36E+00**	5.80E+06	5.17E-02
1607-F7_Staging pile area_Focused	non-Rad	Mercury	7439-97-6	µg/kg	40	1.00E+02	4.00E-01	1.87E+03	2.14E-02
1607-F7_Staging pile area_Focused	non-Rad	Methylene chloride	75-09-2	µg/kg	13	No Value	--	1.66E+05	7.84E-05
1607-F7_Staging pile area_Focused	non-Rad	Naphthalene	91-20-3	µg/kg	72	2.90E+04	2.48E-03	1.00E+05	7.20E-04
1607-F7_Staging pile area_Focused	non-Rad	Nickel	7440-02-0	µg/kg	11,300	3.00E+04	3.77E-01	3.26E+04	3.47E-01
1607-F7_Staging pile area_Focused	non-Rad	Pyrene	129-00-0	µg/kg	51	1.80E+04	2.83E-03	6.00E+05	8.50E-05
1607-F7_Staging pile area_Focused	non-Rad	Styrene	100-42-5	µg/kg	3.0	No Value	--	No Value	--
1607-F7_Staging pile area_Focused	non-Rad	Toluene	108-88-3	µg/kg	1.0	2.00E+05	5.00E-06	5.20E+06	1.92E-07
1607-F7_Staging pile area_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	40,200	2.00E+03	**2.01E+01**	3.11E+04	**1.29E+00**

Table 3. Comparison of 100-F Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
1607-F7_Staging pile area_Focused	non-Rad	Xylenes (total)	1330-20-7	µg/kg	6.0	No Value	--	8.26E+05	7.27E-06
1607-F7_Staging pile area_Focused	non-Rad	Zinc	7440-66-6	µg/kg	72,000	5.00E+04	**1.44E+00**	6.78E+04	**1.06E+00**
182-F_Overburden_Focused	non-Rad	Antimony	7440-36-0	µg/kg	500	5.00E+03	1.00E-01	5.98E+03	8.36E-02
182-F_Overburden_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	36	4.00E+04	9.00E-04	1.47E+03	2.44E-02
182-F_Overburden_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	15	4.00E+04	3.75E-04	1.47E+03	1.02E-02
182-F_Overburden_Focused	non-Rad	Aroclors HI		ug/kg	--	--	1.28E-03	--	3.46E-02
182-F_Overburden_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	6,400	1.00E+04	6.40E-01	1.90E+05	3.38E-02
182-F_Overburden_Focused	non-Rad	Barium	7440-39-3	µg/kg	79,000	3.30E+05	2.39E-01	1.32E+06	5.97E-02
182-F_Overburden_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	490	1.00E+04	4.90E-02	1.39E+04	3.51E-02
182-F_Overburden_Focused	non-Rad	Boron	7440-42-8	µg/kg	3,200	5.00E+02	**6.40E+00**	1.33E+05	2.41E-02
182-F_Overburden_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	780	4.00E+03	1.95E-01	1.63E+03	4.79E-01
182-F_Overburden_Focused	non-Rad	Chromium	7440-47-3	µg/kg	22,600	4.00E+02	**5.65E+01**	3.82E+04	5.92E-01
182-F_Overburden_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	6,900	1.30E+04	5.31E-01	1.11E+05	6.19E-02
182-F_Overburden_Focused	non-Rad	Copper	7440-50-8	µg/kg	18,700	5.00E+04	3.74E-01	1.07E+05	1.75E-01
182-F_Overburden_Focused	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	280	No Value	--	1.25E+06	2.25E-04
182-F_Overburden_Focused	non-Rad	Lead	7439-92-1	µg/kg	58,700	5.00E+04	**1.17E+00**	3.56E+04	**1.65E+00**
182-F_Overburden_Focused	non-Rad	Manganese	7439-96-5	µg/kg	312,000	2.20E+05	**1.42E+00**	5.80E+06	5.38E-02
182-F_Overburden_Focused	non-Rad	Mercury	7439-97-6	µg/kg	40	1.00E+02	4.00E-01	1.87E+03	2.14E-02
182-F_Overburden_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	560	2.00E+03	2.80E-01	1.40E+04	4.01E-02
182-F_Overburden_Focused	non-Rad	Nickel	7440-02-0	µg/kg	16,800	3.00E+04	5.60E-01	3.26E+04	5.16E-01
182-F_Overburden_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	49,100	2.00E+03	**2.46E+01**	3.11E+04	**1.58E+00**
182-F_Overburden_Focused	non-Rad	Zinc	7440-66-6	µg/kg	139,000	5.00E+04	**2.78E+00**	6.78E+04	**2.05E+00**
182-F_Overburden_Focused	Rad	Cesium-137	10045-97-3	pCi/g	0.11	2.21E+03	5.02E-05	9.24E+02	1.20E-04
182-F_Overburden_Focused	Rad	Rads SOF	---	pCi/g	--	--	5.02E-05	--	1.20E-04
182-F_Shallow_Focused	non-Rad	Aroclor-1016	12674-11-2	µg/kg	20	4.00E+04	5.00E-04	1.82E+03	1.10E-02
182-F_Shallow_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	110	4.00E+04	2.75E-03	1.47E+03	7.46E-02
182-F_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	23	4.00E+04	5.75E-04	1.47E+03	1.56E-02
182-F_Shallow_Focused	non-Rad	Aroclors HI		ug/kg	--	--	3.83E-03	--	1.01E-01
600-351_Shallow_Focused	non-Rad	2,4-DB(4-(2,4-Dichlorophenoxy)butanoic acid)	94-82-6	µg/kg	27	No Value	--	No Value	--
600-351_Shallow_Focused	non-Rad	2-(2-methyl-4-chlorophenoxy) propionic acid	93-65-2	µg/kg	2,300	No Value	--	No Value	--
600-351_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	900	5.00E+03	1.80E-01	5.98E+03	1.50E-01
600-351_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	250,000	1.00E+04	**2.50E+01**	1.90E+05	**1.32E+00**
600-351_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	97,100	3.30E+05	2.94E-01	1.32E+06	7.34E-02
600-351_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	300	1.00E+04	3.00E-02	1.39E+04	2.15E-02
600-351_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,700	5.00E+02	**3.40E+00**	1.33E+05	1.28E-02
600-351_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	340	4.00E+03	8.50E-02	1.63E+03	2.09E-01
600-351_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	12,400	4.00E+02	**3.10E+01**	3.82E+04	3.25E-01
600-351_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	8,400	1.30E+04	6.46E-01	1.11E+05	7.53E-02
600-351_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	16,300	5.00E+04	3.26E-01	1.07E+05	1.52E-01
600-351_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	805,000	5.00E+04	**1.61E+01**	3.56E+04	**2.26E+01**
600-351_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	364,000	2.20E+05	**1.65E+00**	5.80E+06	6.28E-02
600-351_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	8.0	1.00E+02	8.00E-02	1.87E+03	4.29E-03
600-351_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	500	2.00E+03	2.50E-01	1.40E+04	3.58E-02
600-351_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	12,500	3.00E+04	4.17E-01	3.26E+04	3.84E-01
600-351_Shallow_Focused	non-Rad	Selenium	7782-49-2	µg/kg	920	5.20E+02	**1.77E+00**	1.90E+03	4.85E-01
600-351_Shallow_Focused	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	µg/kg	24,000	2.00E+05	1.20E-01	3.56E+08	6.73E-05
600-351_Shallow_Focused	non-Rad	Total petroleum hydrocarbons - diesel range extended to C36	TPHDIESELEXT	µg/kg	48,000	No Value	--	No Value	--
600-351_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	48,800	2.00E+03	**2.44E+01**	3.11E+04	**1.57E+00**
600-351_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	51,200	5.00E+04	**1.02E+00**	6.78E+04	7.55E-01
UPR-100-F-2_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.14	2.21E+03	6.30E-05	9.24E+02	1.51E-04
UPR-100-F-2_Shallow	Rad	Cobalt-60	10198-40-0	pCi/g	0.086	6.13E+03	1.40E-05	8.05E+02	1.07E-04
UPR-100-F-2_Shallow	Rad	Europium-152	14683-23-9	pCi/g	0.57	1.47E+04	3.88E-05	1.74E+03	3.28E-04
UPR-100-F-2_Shallow	Rad	Europium-154	15585-10-1	pCi/g	0.20	1.25E+04	1.57E-05	1.61E+03	1.22E-04
UPR-100-F-2_Shallow	Rad	Rads SOF	---	pCi/g	--	--	1.32E-04	--	7.08E-04

Table 4. Comparison of 100-IU-2 Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
600-100_Shallow	non-Rad	2,4,5-T(2,4,5-Trichlorophenoxyacetic acid)	93-76-5	µg/kg	8.6	No Value	--	No Value	--
600-100_Shallow	non-Rad	2,4-DB(4-(2,4-Dichlorophenoxy)butanoic acid)	94-82-6	µg/kg	8.0	No Value	--	No Value	--
600-100_Shallow	non-Rad	Acetone	67-64-1	µg/kg	8.0	No Value	--	No Value	--
600-100_Shallow	non-Rad	Antimony	7440-36-0	µg/kg	489	5.00E+03	9.78E-02	5.98E+03	8.17E-02
600-100_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	2,267	1.00E+04	2.27E-01	1.90E+05	1.20E-02
600-100_Shallow	non-Rad	Barium	7440-39-3	µg/kg	67,811	3.30E+05	2.05E-01	1.32E+06	5.13E-02
600-100_Shallow	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	1.4	1.80E+04	7.56E-05	7.64E+04	1.78E-05
600-100_Shallow	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	1.6	1.80E+04	9.06E-05	3.92E+04	4.16E-05
600-100_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	203	1.00E+04	2.03E-02	1.39E+04	1.45E-02
600-100_Shallow	non-Rad	Boron	7440-42-8	µg/kg	1,322	5.00E+02	**2.64E+00**	1.33E+05	9.95E-03
600-100_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	93	4.00E+03	2.32E-02	1.63E+03	5.70E-02
600-100_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	9,345	4.00E+02	**2.34E+01**	3.82E+04	2.45E-01
600-100_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	7,332	1.30E+04	5.64E-01	1.11E+05	6.58E-02
600-100_Shallow	non-Rad	Copper	7440-50-8	µg/kg	11,556	5.00E+04	2.31E-01	1.07E+05	1.08E-01
600-100_Shallow	non-Rad	Fluoranthene	206-44-0	µg/kg	14	1.80E+04	7.56E-04	8.39E+05	1.62E-05
600-100_Shallow	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	3.6	1.80E+04	1.99E-04	3.57E+04	1.00E-04
600-100_Shallow	non-Rad	Lead	7439-92-1	µg/kg	4,441	5.00E+04	8.88E-02	3.56E+04	1.25E-01
600-100_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	312,314	2.20E+05	**1.42E+00**	5.80E+06	5.39E-02
600-100_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	370	2.00E+03	1.85E-01	1.40E+04	2.65E-02
600-100_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	10,072	3.00E+04	3.36E-01	3.26E+04	3.09E-01
600-100_Shallow	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	µg/kg	85,400	2.00E+05	4.27E-01	3.56E+08	2.40E-04
600-100_Shallow	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling)	TPH/OILH	µg/kg	32,384	No Value	--	No Value	--
600-100_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	62,373	2.00E+03	**3.12E+01**	3.11E+04	**2.00E+00**
600-100_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	40,723	5.00E+04	8.14E-01	6.78E+04	6.01E-01
600-100_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	485	5.00E+03	9.70E-02	5.98E+03	8.10E-02
600-100_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	1,750	1.00E+04	1.75E-01	1.90E+05	9.23E-03
600-100_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	59,600	3.30E+05	1.81E-01	1.32E+06	4.50E-02
600-100_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	177	1.00E+04	1.77E-02	1.39E+04	1.27E-02
600-100_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	768	5.00E+02	**1.54E+00**	1.33E+05	5.78E-03
600-100_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	97	4.00E+03	2.43E-02	1.63E+03	5.95E-02
600-100_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	9,140	4.00E+02	**2.29E+01**	3.82E+04	2.39E-01
600-100_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	7,440	1.30E+04	5.72E-01	1.11E+05	6.67E-02
600-100_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	10,900	5.00E+04	2.18E-01	1.07E+05	1.02E-01
600-100_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	4,050	5.00E+04	8.10E-02	3.56E+04	1.14E-01
600-100_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	301,000	2.20E+05	**1.37E+00**	5.80E+06	5.19E-02
600-100_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	369	2.00E+03	1.85E-01	1.40E+04	2.64E-02
600-100_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	11,300	3.00E+04	3.77E-01	3.26E+04	3.47E-01
600-100_Shallow_Focused	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling)	TPH/OILH	µg/kg	3,780	No Value	--	No Value	--
600-100_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	67,100	2.00E+03	**3.36E+01**	3.11E+04	**2.16E+00**
600-100_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	49,900	5.00E+04	9.98E-01	6.78E+04	7.36E-01
600-120 and 600-297_Overburden_Focused	non-Rad	Acenaphthene	83-32-9	µg/kg	16	2.00E+04	7.90E-04	1.10E+06	1.44E-05
600-120 and 600-297_Overburden_Focused	non-Rad	Anthracene	120-12-7	µg/kg	1.0	2.90E+04	3.48E-05	6.78E+05	1.49E-06
600-120 and 600-297_Overburden_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	2,480	1.00E+04	2.48E-01	1.90E+05	1.31E-02
600-120 and 600-297_Overburden_Focused	non-Rad	Barium	7440-39-3	µg/kg	67,300	3.30E+05	2.04E-01	1.32E+06	5.09E-02
600-120 and 600-297_Overburden_Focused	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	2.1	1.80E+04	1.15E-04	6.40E+04	3.23E-05
600-120 and 600-297_Overburden_Focused	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	5.4	1.80E+04	3.01E-04	7.64E+04	7.09E-05
600-120 and 600-297_Overburden_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	7.8	1.80E+04	4.31E-04	3.92E+04	1.98E-04
600-120 and 600-297_Overburden_Focused	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	3.2	1.80E+04	1.79E-04	3.92E+04	8.21E-05
600-120 and 600-297_Overburden_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	241	1.00E+04	2.41E-02	1.39E+04	1.73E-02
600-120 and 600-297_Overburden_Focused	non-Rad	Boron	7440-42-8	µg/kg	2,100	5.00E+02	**4.20E+00**	1.33E+05	1.58E-02
600-120 and 600-297_Overburden_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	146	4.00E+03	3.65E-02	1.63E+03	8.96E-02
600-120 and 600-297_Overburden_Focused	non-Rad	Chromium	7440-47-3	µg/kg	9,170	4.00E+02	**2.29E+01**	3.82E+04	2.40E-01
600-120 and 600-297_Overburden_Focused	non-Rad	Chrysene	218-01-9	µg/kg	1.4	1.80E+04	7.67E-05	4.45E+04	3.10E-05
600-120 and 600-297_Overburden_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	5,970	1.30E+04	4.59E-01	1.11E+05	5.35E-02
600-120 and 600-297_Overburden_Focused	non-Rad	Copper	7440-50-8	µg/kg	10,900	5.00E+04	2.18E-01	1.07E+05	1.02E-01
600-120 and 600-297_Overburden_Focused	non-Rad	Dibenz[a,h]anthracene	53-70-3	µg/kg	1.1	1.80E+04	6.22E-05	4.41E+04	2.54E-05
600-120 and 600-297_Overburden_Focused	non-Rad	Fluoranthene	206-44-0	µg/kg	62	1.80E+04	3.43E-03	8.39E+05	7.36E-05
600-120 and 600-297_Overburden_Focused	non-Rad	Fluorene	86-73-7	µg/kg	18	2.90E+04	6.14E-04	1.75E+05	1.02E-04
600-120 and 600-297_Overburden_Focused	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	24	1.80E+04	1.36E-03	3.57E+04	6.84E-04
600-120 and 600-297_Overburden_Focused	non-Rad	Lead	7439-92-1	µg/kg	4,600	5.00E+04	9.20E-02	3.56E+04	1.29E-01
600-120 and 600-297_Overburden_Focused	non-Rad	Manganese	7439-96-5	µg/kg	289,000	2.20E+05	**1.31E+00**	5.80E+06	4.98E-02
600-120 and 600-297_Overburden_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	272	2.00E+03	1.36E-01	1.40E+04	1.95E-02
600-120 and 600-297_Overburden_Focused	non-Rad	Naphthalene	91-20-3	µg/kg	89	2.90E+04	3.08E-03	1.00E+05	8.94E-04
600-120 and 600-297_Overburden_Focused	non-Rad	Nickel	7440-02-0	µg/kg	8,750	3.00E+04	2.92E-01	3.26E+04	2.69E-01
600-120 and 600-297_Overburden_Focused	non-Rad	Pyrene	129-00-0	µg/kg	9.2	1.80E+04	5.13E-04	6.00E+05	1.54E-05
600-120 and 600-297_Overburden_Focused	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling)	TPH/OILH	µg/kg	55,400	No Value	--	No Value	--
600-120 and 600-297_Overburden_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	50,600	2.00E+03	**2.53E+01**	3.11E+04	**1.63E+00**
600-120 and 600-297_Overburden_Focused	non-Rad	Zinc	7440-66-6	µg/kg	67,600	5.00E+04	**1.35E+00**	6.78E+04	9.97E-01
600-120 and 600-297_Shallow	non-Rad	Acenaphthene	83-32-9	µg/kg	2.7	2.00E+04	1.35E-04	1.10E+06	2.46E-06
600-120 and 600-297_Shallow	non-Rad	Anthracene	120-12-7	µg/kg	1.7	2.90E+04	5.88E-05	6.78E+05	2.51E-06
600-120 and 600-297_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	2,874	1.00E+04	2.87E-01	1.90E+05	1.52E-02

Table 4. Comparison of 100-IU-2 Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
600-120 and 600-297_Shallow	non-Rad	Barium	7440-39-3	µg/kg	64,463	3.30E+05	1.95E-01	1.32E+06	4.87E-02
600-120 and 600-297_Shallow	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	0.86	1.80E+04	4.76E-05	6.40E+04	1.34E-05
600-120 and 600-297_Shallow	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	2.3	1.80E+04	1.25E-04	7.64E+04	2.94E-05
600-120 and 600-297_Shallow	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	1.5	1.80E+04	8.22E-05	3.92E+04	3.77E-05
600-120 and 600-297_Shallow	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	0.91	1.80E+04	5.03E-05	3.92E+04	2.31E-05
600-120 and 600-297_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	242	1.00E+04	2.42E-02	1.39E+04	1.74E-02
600-120 and 600-297_Shallow	non-Rad	Boron	7440-42-8	µg/kg	4,028	5.00E+02	**8.06E+00**	1.33E+05	3.03E-02
600-120 and 600-297_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	107	4.00E+03	2.67E-02	1.63E+03	6.55E-02
600-120 and 600-297_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	10,931	4.00E+02	**2.73E+01**	3.82E+04	2.86E-01
600-120 and 600-297_Shallow	non-Rad	Chrysene	218-01-9	µg/kg	2.2	1.80E+04	1.19E-04	4.45E+04	4.83E-05
600-120 and 600-297_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	5,619	1.30E+04	4.32E-01	1.11E+05	5.04E-02
600-120 and 600-297_Shallow	non-Rad	Copper	7440-50-8	µg/kg	12,330	5.00E+04	2.47E-01	1.07E+05	1.15E-01
600-120 and 600-297_Shallow	non-Rad	Dibenz[a,h]anthracene	53-70-3	µg/kg	0.94	1.80E+04	5.22E-05	4.41E+04	2.13E-05
600-120 and 600-297_Shallow	non-Rad	Fluoranthene	206-44-0	µg/kg	2.8	1.80E+04	1.54E-04	8.39E+05	3.30E-06
600-120 and 600-297_Shallow	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	2.6	1.80E+04	1.46E-04	3.57E+04	7.34E-05
600-120 and 600-297_Shallow	non-Rad	Lead	7439-92-1	µg/kg	4,520	5.00E+04	9.04E-02	3.56E+04	1.27E-01
600-120 and 600-297_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	264,473	2.20E+05	**1.20E+00**	5.80E+06	4.56E-02
600-120 and 600-297_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	281	2.00E+03	1.41E-01	1.40E+04	2.02E-02
600-120 and 600-297_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	10,778	3.00E+04	3.59E-01	3.26E+04	3.31E-01
600-120 and 600-297_Shallow	non-Rad	Pyrene	129-00-0	µg/kg	4.3	1.80E+04	2.38E-04	6.00E+05	7.13E-06
600-120 and 600-297_Shallow	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling)	TPH/OILH	µg/kg	11,830	No Value	--	No Value	--
600-120 and 600-297_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	44,356	2.00E+03	**2.22E+01**	3.11E+04	**1.42E+00**
600-120 and 600-297_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	33,430	5.00E+04	6.69E-01	6.78E+04	4.93E-01
600-120 and 600-297_Staging Pile Area	non-Rad	4,4'-DDE (Dichlorodiphenyldichloroethylene)	72-55-9	µg/kg	1.7	No Value	--	4.00E+02	4.28E-03
600-120 and 600-297_Staging Pile Area	non-Rad	Acenaphthene	83-32-9	µg/kg	14	2.00E+04	7.19E-04	1.10E+06	1.31E-05
600-120 and 600-297_Staging Pile Area	non-Rad	Anthracene	120-12-7	µg/kg	1.0	2.90E+04	3.47E-05	6.78E+05	1.48E-06
600-120 and 600-297_Staging Pile Area	non-Rad	Arsenic	7440-38-2	µg/kg	2,679	1.00E+04	2.68E-01	1.90E+05	1.41E-02
600-120 and 600-297_Staging Pile Area	non-Rad	Barium	7440-39-3	µg/kg	65,441	3.30E+05	1.98E-01	1.32E+06	4.95E-02
600-120 and 600-297_Staging Pile Area	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	2.7	1.80E+04	1.48E-04	6.40E+04	4.17E-05
600-120 and 600-297_Staging Pile Area	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	8.0	1.80E+04	4.46E-04	7.64E+04	1.05E-04
600-120 and 600-297_Staging Pile Area	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	8.2	1.80E+04	4.54E-04	3.92E+04	2.09E-04
600-120 and 600-297_Staging Pile Area	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	3.7	1.80E+04	2.03E-04	3.92E+04	9.30E-05
600-120 and 600-297_Staging Pile Area	non-Rad	Beryllium	7440-41-7	µg/kg	240	1.00E+04	2.40E-02	1.39E+04	1.72E-02
600-120 and 600-297_Staging Pile Area	non-Rad	beta-1,2,3,4,5,6-Hexachlorocyclohexane (beta-BHC)	319-85-7	µg/kg	1.5	No Value	--	4.08E+03	3.68E-04
600-120 and 600-297_Staging Pile Area	non-Rad	Boron	7440-42-8	µg/kg	2,638	5.00E+02	**5.28E+00**	1.33E+05	1.98E-02
600-120 and 600-297_Staging Pile Area	non-Rad	Cadmium	7440-43-9	µg/kg	107	4.00E+03	2.68E-02	1.63E+03	6.59E-02
600-120 and 600-297_Staging Pile Area	non-Rad	Chromium	7440-47-3	µg/kg	9,539	4.00E+02	**2.38E+01**	3.82E+04	2.50E-01
600-120 and 600-297_Staging Pile Area	non-Rad	Chrysene	218-01-9	µg/kg	1.00	1.80E+04	5.54E-05	4.45E+04	2.24E-05
600-120 and 600-297_Staging Pile Area	non-Rad	Cobalt	7440-48-4	µg/kg	5,730	1.30E+04	4.41E-01	1.11E+05	5.14E-02
600-120 and 600-297_Staging Pile Area	non-Rad	Copper	7440-50-8	µg/kg	11,398	5.00E+04	2.28E-01	1.07E+05	1.06E-01
600-120 and 600-297_Staging Pile Area	non-Rad	Dibenz[a,h]anthracene	53-70-3	µg/kg	3.5	1.80E+04	1.95E-04	4.41E+04	7.94E-05
600-120 and 600-297_Staging Pile Area	non-Rad	Fluoranthene	206-44-0	µg/kg	27	1.80E+04	1.47E-03	8.39E+05	3.16E-05
600-120 and 600-297_Staging Pile Area	non-Rad	Fluorene	86-73-7	µg/kg	8.2	2.90E+04	2.81E-04	1.75E+05	4.65E-05
600-120 and 600-297_Staging Pile Area	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	74	1.80E+04	4.08E-03	3.57E+04	2.06E-03
600-120 and 600-297_Staging Pile Area	non-Rad	Lead	7439-92-1	µg/kg	3,261	5.00E+04	6.52E-02	3.56E+04	9.16E-02
600-120 and 600-297_Staging Pile Area	non-Rad	Manganese	7439-96-5	µg/kg	272,403	2.20E+05	**1.24E+00**	5.80E+06	4.70E-02
600-120 and 600-297_Staging Pile Area	non-Rad	Molybdenum	7439-98-7	µg/kg	269	2.00E+03	1.34E-01	1.40E+04	1.92E-02
600-120 and 600-297_Staging Pile Area	non-Rad	Naphthalene	91-20-3	µg/kg	12	2.90E+04	4.21E-04	1.00E+05	1.22E-04
600-120 and 600-297_Staging Pile Area	non-Rad	Nickel	7440-02-0	µg/kg	9,496	3.00E+04	3.17E-01	3.26E+04	2.91E-01
600-120 and 600-297_Staging Pile Area	non-Rad	Pyrene	129-00-0	µg/kg	3.3	1.80E+04	1.84E-04	6.00E+05	5.52E-06
600-120 and 600-297_Staging Pile Area	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling)	TPH/OILH	µg/kg	21,462	No Value	--	No Value	--
600-120 and 600-297_Staging Pile Area	non-Rad	Vanadium	7440-62-2	µg/kg	46,470	2.00E+03	**2.32E+01**	3.11E+04	**1.49E+00**
600-120 and 600-297_Staging Pile Area	non-Rad	Zinc	7440-66-6	µg/kg	35,055	5.00E+04	7.01E-01	6.78E+04	5.17E-01
600-124_Shallow	non-Rad	Acenaphthene	83-32-9	µg/kg	192	2.00E+04	9.60E-03	1.10E+06	1.75E-04
600-124_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	2,106	1.00E+04	2.11E-01	1.90E+05	1.11E-02
600-124_Shallow	non-Rad	Barium	7440-39-3	µg/kg	68,796	3.30E+05	2.08E-01	1.32E+06	5.20E-02
600-124_Shallow	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	11	1.80E+04	6.33E-04	6.40E+04	1.78E-04
600-124_Shallow	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	15	1.80E+04	8.17E-04	7.64E+04	1.92E-04
600-124_Shallow	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	16	1.80E+04	8.89E-04	3.92E+04	4.08E-04
600-124_Shallow	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	7.3	1.80E+04	4.06E-04	3.92E+04	1.86E-04
600-124_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	255	1.00E+04	2.55E-02	1.39E+04	1.83E-02
600-124_Shallow	non-Rad	Boron	7440-42-8	µg/kg	1,241	5.00E+02	**2.48E+00**	1.33E+05	9.34E-03
600-124_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	171	4.00E+03	4.29E-02	1.63E+03	1.05E-01
600-124_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	10,608	4.00E+02	**2.65E+01**	3.82E+04	2.78E-01
600-124_Shallow	non-Rad	Chrysene	218-01-9	µg/kg	26	1.80E+04	1.45E-03	4.45E+04	5.86E-04
600-124_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	6,700	1.30E+04	5.15E-01	1.11E+05	6.01E-02
600-124_Shallow	non-Rad	Copper	7440-50-8	µg/kg	12,160	5.00E+04	2.43E-01	1.07E+05	1.14E-01
600-124_Shallow	non-Rad	Dibenz[a,h]anthracene	53-70-3	µg/kg	4.1	1.80E+04	2.25E-04	4.41E+04	9.18E-05
600-124_Shallow	non-Rad	Fluoranthene	206-44-0	µg/kg	76	1.80E+04	4.23E-03	8.39E+05	9.07E-05
600-124_Shallow	non-Rad	Fluorene	86-73-7	µg/kg	25	2.90E+04	8.72E-04	1.75E+05	1.44E-04
600-124_Shallow	non-Rad	Lead	7439-92-1	µg/kg	3,743	5.00E+04	7.49E-02	3.56E+04	1.05E-01

Table 4. Comparison of 100-IU-2 Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
600-124_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	323,187	2.20E+05	**1.47E+00**	5.80E+06	5.57E-02
600-124_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	460	2.00E+03	2.30E-01	1.40E+04	3.29E-02
600-124_Shallow	non-Rad	Naphthalene	91-20-3	µg/kg	113	2.90E+04	3.90E-03	1.00E+05	1.13E-03
600-124_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	10,075	3.00E+04	3.36E-01	3.26E+04	3.09E-01
600-124_Shallow	non-Rad	Pyrene	129-00-0	µg/kg	42	1.80E+04	2.33E-03	6.00E+05	6.98E-05
600-124_Shallow	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling)	TPH/OILH	µg/kg	4,220	No Value	--	No Value	--
600-124_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	68,302	2.00E+03	**3.42E+01**	3.11E+04	**2.19E+00**
600-124_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	42,558	5.00E+04	8.51E-01	6.78E+04	6.28E-01
600-124_Staging Pile Area	non-Rad	Acenaphthene	83-32-9	µg/kg	1.3	2.00E+04	6.50E-05	1.10E+06	1.19E-06
600-124_Staging Pile Area	non-Rad	Antimony	7440-36-0	µg/kg	286	5.00E+03	5.72E-02	5.98E+03	4.78E-02
600-124_Staging Pile Area	non-Rad	Arsenic	7440-38-2	µg/kg	2,324	1.00E+04	2.32E-01	1.90E+05	1.23E-02
600-124_Staging Pile Area	non-Rad	Barium	7440-39-3	µg/kg	66,433	3.30E+05	2.01E-01	1.32E+06	5.02E-02
600-124_Staging Pile Area	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	2.9	1.80E+04	1.62E-04	6.40E+04	4.54E-05
600-124_Staging Pile Area	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	3.2	1.80E+04	1.76E-04	7.64E+04	4.15E-05
600-124_Staging Pile Area	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	4.8	1.80E+04	2.65E-04	3.92E+04	1.21E-04
600-124_Staging Pile Area	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	2.1	1.80E+04	1.16E-04	3.92E+04	5.33E-05
600-124_Staging Pile Area	non-Rad	Beryllium	7440-41-7	µg/kg	256	1.00E+04	2.56E-02	1.39E+04	1.83E-02
600-124_Staging Pile Area	non-Rad	Boron	7440-42-8	µg/kg	2,262	5.00E+02	**4.52E+00**	1.33E+05	1.70E-02
600-124_Staging Pile Area	non-Rad	Cadmium	7440-43-9	µg/kg	170	4.00E+03	4.24E-02	1.63E+03	1.04E-01
600-124_Staging Pile Area	non-Rad	Chromium	7440-47-3	µg/kg	12,157	4.00E+02	**3.04E+01**	3.82E+04	3.19E-01
600-124_Staging Pile Area	non-Rad	Chrysene	218-01-9	µg/kg	2.9	1.80E+04	1.60E-04	4.45E+04	6.48E-05
600-124_Staging Pile Area	non-Rad	Cobalt	7440-48-4	µg/kg	6,546	1.30E+04	5.04E-01	1.11E+05	5.87E-02
600-124_Staging Pile Area	non-Rad	Copper	7440-50-8	µg/kg	16,920	5.00E+04	3.38E-01	1.07E+05	1.58E-01
600-124_Staging Pile Area	non-Rad	Dibenz[a,h]anthracene	53-70-3	µg/kg	2.0	1.80E+04	1.10E-04	4.41E+04	4.49E-05
600-124_Staging Pile Area	non-Rad	Fluoranthene	206-44-0	µg/kg	7.4	1.80E+04	4.08E-04	8.39E+05	8.76E-06
600-124_Staging Pile Area	non-Rad	Fluorene	86-73-7	µg/kg	3.3	2.90E+04	1.15E-04	1.75E+05	1.90E-05
600-124_Staging Pile Area	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	12	1.80E+04	6.86E-04	3.57E+04	3.46E-04
600-124_Staging Pile Area	non-Rad	Lead	7439-92-1	µg/kg	4,908	5.00E+04	9.82E-02	3.56E+04	1.38E-01
600-124_Staging Pile Area	non-Rad	Manganese	7439-96-5	µg/kg	310,485	2.20E+05	**1.41E+00**	5.80E+06	5.35E-02
600-124_Staging Pile Area	non-Rad	Molybdenum	7439-98-7	µg/kg	770	2.00E+03	3.85E-01	1.40E+04	5.51E-02
600-124_Staging Pile Area	non-Rad	Nickel	7440-02-0	µg/kg	11,260	3.00E+04	3.75E-01	3.26E+04	3.46E-01
600-124_Staging Pile Area	non-Rad	Pyrene	129-00-0	µg/kg	6.8	1.80E+04	3.77E-04	6.00E+05	1.13E-05
600-124_Staging Pile Area	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling)	TPH/OILH	µg/kg	124,798	No Value	--	No Value	--
600-124_Staging Pile Area	non-Rad	Vanadium	7440-62-2	µg/kg	66,526	2.00E+03	**3.33E+01**	3.11E+04	**2.14E+00**
600-124_Staging Pile Area	non-Rad	Zinc	7440-66-6	µg/kg	53,404	5.00E+04	**1.07E+00**	6.78E+04	7.88E-01
600-125_Overburden_Focused	non-Rad	Antimony	7440-36-0	µg/kg	445	5.00E+03	8.90E-02	5.98E+03	7.44E-02
600-125_Overburden_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	3,240	1.00E+04	3.24E-01	1.90E+05	1.71E-02
600-125_Overburden_Focused	non-Rad	Barium	7440-39-3	µg/kg	83,400	3.30E+05	2.53E-01	1.32E+06	6.30E-02
600-125_Overburden_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	336	1.00E+04	3.36E-02	1.39E+04	2.41E-02
600-125_Overburden_Focused	non-Rad	Boron	7440-42-8	µg/kg	2,060	5.00E+02	**4.12E+00**	1.33E+05	1.55E-02
600-125_Overburden_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	164	4.00E+03	4.10E-02	1.63E+03	1.01E-01
600-125_Overburden_Focused	non-Rad	Chromium	7440-47-3	µg/kg	13,600	4.00E+02	**3.40E+01**	3.82E+04	3.56E-01
600-125_Overburden_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	7,460	1.30E+04	5.74E-01	1.11E+05	6.69E-02
600-125_Overburden_Focused	non-Rad	Copper	7440-50-8	µg/kg	13,000	5.00E+04	2.60E-01	1.07E+05	1.21E-01
600-125_Overburden_Focused	non-Rad	Lead	7439-92-1	µg/kg	5,030	5.00E+04	1.01E-01	3.56E+04	1.41E-01
600-125_Overburden_Focused	non-Rad	Manganese	7439-96-5	µg/kg	344,000	2.20E+05	**1.56E+00**	5.80E+06	5.93E-02
600-125_Overburden_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	412	2.00E+03	2.06E-01	1.40E+04	2.95E-02
600-125_Overburden_Focused	non-Rad	Nickel	7440-02-0	µg/kg	10,800	3.00E+04	3.60E-01	3.26E+04	3.31E-01
600-125_Overburden_Focused	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling)	TPH/OILH	µg/kg	16,500	No Value	--	No Value	--
600-125_Overburden_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	65,000	2.00E+03	**3.25E+01**	3.11E+04	**2.09E+00**
600-125_Overburden_Focused	non-Rad	Zinc	7440-66-6	µg/kg	45,200	5.00E+04	9.04E-01	6.78E+04	6.67E-01
600-125_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	408	5.00E+03	8.16E-02	5.98E+03	6.82E-02
600-125_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	2,730	1.00E+04	2.73E-01	1.90E+05	1.44E-02
600-125_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	62,200	3.30E+05	1.88E-01	1.32E+06	4.70E-02
600-125_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	214	1.00E+04	2.14E-02	1.39E+04	1.53E-02
600-125_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	796	5.00E+02	**1.59E+00**	1.33E+05	5.99E-03
600-125_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	107	4.00E+03	2.68E-02	1.63E+03	6.57E-02
600-125_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	8,890	4.00E+02	**2.22E+01**	3.82E+04	2.33E-01
600-125_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	7,110	1.30E+04	5.47E-01	1.11E+05	6.38E-02
600-125_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	15,300	5.00E+04	3.06E-01	1.07E+05	1.43E-01
600-125_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	2,620	5.00E+04	5.24E-02	3.56E+04	7.36E-02
600-125_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	294,000	2.20E+05	**1.34E+00**	5.80E+06	5.07E-02
600-125_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	568	2.00E+03	2.84E-01	1.40E+04	4.07E-02
600-125_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	11,500	3.00E+04	3.83E-01	3.26E+04	3.53E-01
600-125_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	69,500	2.00E+03	**3.48E+01**	3.11E+04	**2.23E+00**
600-125_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	42,600	5.00E+04	8.52E-01	6.78E+04	6.28E-01
600-125_Staging Pile Area_Focused	non-Rad	Antimony	7440-36-0	µg/kg	434	5.00E+03	8.68E-02	5.98E+03	7.25E-02
600-125_Staging Pile Area_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	3,150	1.00E+04	3.15E-01	1.90E+05	1.66E-02
600-125_Staging Pile Area_Focused	non-Rad	Barium	7440-39-3	µg/kg	89,600	3.30E+05	2.72E-01	1.32E+06	6.77E-02
600-125_Staging Pile Area_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	352	1.00E+04	3.52E-02	1.39E+04	2.52E-02
600-125_Staging Pile Area_Focused	non-Rad	Boron	7440-42-8	µg/kg	2,210	5.00E+02	**4.42E+00**	1.33E+05	1.66E-02

Table 4. Comparison of 100-IU-2 Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
600-125_Staging Pile Area_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	159	4.00E+03	3.98E-02	1.63E+03	9.76E-02
600-125_Staging Pile Area_Focused	non-Rad	Chromium	7440-47-3	µg/kg	14,800	4.00E+02	**3.70E+01**	3.82E+04	3.88E-01
600-125_Staging Pile Area_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	7,500	1.30E+04	5.77E-01	1.11E+05	6.73E-02
600-125_Staging Pile Area_Focused	non-Rad	Copper	7440-50-8	µg/kg	12,000	5.00E+04	2.40E-01	1.07E+05	1.12E-01
600-125_Staging Pile Area_Focused	non-Rad	Lead	7439-92-1	µg/kg	4,980	5.00E+04	9.96E-02	3.56E+04	1.40E-01
600-125_Staging Pile Area_Focused	non-Rad	Manganese	7439-96-5	µg/kg	369,000	2.20E+05	**1.68E+00**	5.80E+06	6.36E-02
600-125_Staging Pile Area_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	405	2.00E+03	2.03E-01	1.40E+04	2.90E-02
600-125_Staging Pile Area_Focused	non-Rad	Nickel	7440-02-0	µg/kg	11,100	3.00E+04	3.70E-01	3.26E+04	3.41E-01
600-125_Staging Pile Area_Focused	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling)	TPH/OILH	µg/kg	12,700	No Value	--	No Value	--
600-125_Staging Pile Area_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	63,800	2.00E+03	**3.19E+01**	3.11E+04	**2.05E+00**
600-125_Staging Pile Area_Focused	non-Rad	Zinc	7440-66-6	µg/kg	45,400	5.00E+04	9.08E-01	6.78E+04	6.70E-01
600-127_Overburden_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	3,800	1.00E+04	3.80E-01	1.90E+05	2.01E-02
600-127_Overburden_Focused	non-Rad	Barium	7440-39-3	µg/kg	121,000	3.30E+05	3.67E-01	1.32E+06	9.15E-02
600-127_Overburden_Focused	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	9.0	1.80E+04	5.00E-04	7.64E+04	1.18E-04
600-127_Overburden_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	8.9	1.80E+04	4.94E-04	3.92E+04	2.27E-04
600-127_Overburden_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	210	1.00E+04	2.10E-02	1.39E+04	1.51E-02
600-127_Overburden_Focused	non-Rad	Boron	7440-42-8	µg/kg	3,700	5.00E+02	**7.40E+00**	1.33E+05	2.78E-02
600-127_Overburden_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	150	4.00E+03	3.75E-02	1.63E+03	9.20E-02
600-127_Overburden_Focused	non-Rad	Chromium	7440-47-3	µg/kg	11,700	4.00E+02	**2.93E+01**	3.82E+04	3.07E-01
600-127_Overburden_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	7,900	1.30E+04	6.08E-01	1.11E+05	7.09E-02
600-127_Overburden_Focused	non-Rad	Copper	7440-50-8	µg/kg	15,500	5.00E+04	3.10E-01	1.07E+05	1.45E-01
600-127_Overburden_Focused	non-Rad	Lead	7439-92-1	µg/kg	10,600	5.00E+04	2.12E-01	3.56E+04	2.98E-01
600-127_Overburden_Focused	non-Rad	Manganese	7439-96-5	µg/kg	386,000	2.20E+05	**1.75E+00**	5.80E+06	6.66E-02
600-127_Overburden_Focused	non-Rad	Methylene chloride	75-09-2	µg/kg	6.7	No Value	--	1.66E+05	4.04E-05
600-127_Overburden_Focused	non-Rad	Nickel	7440-02-0	µg/kg	11,900	3.00E+04	3.97E-01	3.26E+04	3.65E-01
600-127_Overburden_Focused	non-Rad	Phenol	108-95-2	µg/kg	23	3.00E+04	7.67E-04	1.51E+06	1.52E-05
600-127_Overburden_Focused	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	µg/kg	34,000	2.00E+05	1.70E-01	3.56E+08	9.54E-05
600-127_Overburden_Focused	non-Rad	Total petroleum hydrocarbons - diesel range extended to C36	TPHDIESELEXT	µg/kg	83,000	No Value	--	No Value	--
600-127_Overburden_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	41,900	2.00E+03	**2.10E+01**	3.11E+04	**1.35E+00**
600-127_Overburden_Focused	non-Rad	Zinc	7440-66-6	µg/kg	48,000	5.00E+04	9.60E-01	6.78E+04	7.08E-01
600-127_Shallow	non-Rad	Acetone	67-64-1	µg/kg	11	No Value	--	No Value	--
600-127_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	2,790	1.00E+04	2.79E-01	1.90E+05	1.47E-02
600-127_Shallow	non-Rad	Barium	7440-39-3	µg/kg	64,524	3.30E+05	1.96E-01	1.32E+06	4.88E-02
600-127_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	279	1.00E+04	2.79E-02	1.39E+04	2.00E-02
600-127_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	139	1.00E+05	1.39E-03	4.54E+04	3.06E-03
600-127_Shallow	non-Rad	Boron	7440-42-8	µg/kg	1,100	5.00E+02	**2.20E+00**	1.33E+05	8.28E-03
600-127_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	59	4.00E+03	1.47E-02	1.63E+03	3.60E-02
600-127_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	13,483	4.00E+02	**3.37E+01**	3.82E+04	3.53E-01
600-127_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	5,560	1.30E+04	4.28E-01	1.11E+05	4.99E-02
600-127_Shallow	non-Rad	Copper	7440-50-8	µg/kg	15,289	5.00E+04	3.06E-01	1.07E+05	1.43E-01
600-127_Shallow	non-Rad	Lead	7439-92-1	µg/kg	3,936	5.00E+04	7.87E-02	3.56E+04	1.11E-01
600-127_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	268,426	2.20E+05	**1.22E+00**	5.80E+06	4.63E-02
600-127_Shallow	non-Rad	Methylene chloride	75-09-2	µg/kg	2.6	No Value	--	1.66E+05	1.57E-05
600-127_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	13,097	3.00E+04	4.37E-01	3.26E+04	4.02E-01
600-127_Shallow	non-Rad	Phenol	108-95-2	µg/kg	34	3.00E+04	1.13E-03	1.51E+06	2.24E-05
600-127_Shallow	non-Rad	Selenium	7782-49-2	µg/kg	920	5.20E+02	**1.77E+00**	1.90E+03	4.85E-01
600-127_Shallow	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	µg/kg	1,204	2.00E+05	6.02E-03	3.56E+08	3.38E-06
600-127_Shallow	non-Rad	Total petroleum hydrocarbons - diesel range extended to C36	TPHDIESELEXT	µg/kg	2,375	No Value	--	No Value	--
600-127_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	33,823	2.00E+03	**1.69E+01**	3.11E+04	**1.09E+00**
600-127_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	34,172	5.00E+04	6.83E-01	6.78E+04	5.04E-01
600-127_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	2,700	1.00E+04	2.70E-01	1.90E+05	1.42E-02
600-127_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	96,200	3.30E+05	2.92E-01	1.32E+06	7.27E-02
600-127_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	220	1.00E+04	2.20E-02	1.39E+04	1.58E-02
600-127_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,300	5.00E+02	**2.60E+00**	1.33E+05	9.78E-03
600-127_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	140	4.00E+03	3.50E-02	1.63E+03	8.59E-02
600-127_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	12,600	4.00E+02	**3.15E+01**	3.82E+04	3.30E-01
600-127_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	8,300	1.30E+04	6.38E-01	1.11E+05	7.44E-02
600-127_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	15,600	5.00E+04	3.12E-01	1.07E+05	1.46E-01
600-127_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	7,100	5.00E+04	1.42E-01	3.56E+04	2.00E-01
600-127_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	413,000	2.20E+05	**1.88E+00**	5.80E+06	7.12E-02
600-127_Shallow_Focused	non-Rad	Methylene chloride	75-09-2	µg/kg	4.9	No Value	--	1.66E+05	2.96E-05
600-127_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	12,100	3.00E+04	4.03E-01	3.26E+04	3.71E-01
600-127_Shallow_Focused	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	µg/kg	3,100	2.00E+05	1.55E-02	3.56E+08	8.70E-06
600-127_Shallow_Focused	non-Rad	Total petroleum hydrocarbons - diesel range extended to C36	TPHDIESELEXT	µg/kg	8,900	No Value	--	No Value	--
600-127_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	41,700	2.00E+03	**2.09E+01**	3.11E+04	**1.34E+00**
600-127_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	45,500	5.00E+04	9.10E-01	6.78E+04	6.71E-01
600-127_Staging Pile Area_3	non-Rad	1,2-Dichloroethene (Total)	540-59-0	µg/kg	0.69	No Value	--	No Value	--
600-127_Staging Pile Area_3	non-Rad	Acetone	67-64-1	µg/kg	11	No Value	--	No Value	--
600-127_Staging Pile Area_3	non-Rad	Arsenic	7440-38-2	µg/kg	3,277	1.00E+04	3.28E-01	1.90E+05	1.73E-02
600-127_Staging Pile Area_3	non-Rad	Barium	7440-39-3	µg/kg	112,573	3.30E+05	3.41E-01	1.32E+06	8.51E-02
600-127_Staging Pile Area_3	non-Rad	Beryllium	7440-41-7	µg/kg	291	1.00E+04	2.91E-02	1.39E+04	2.08E-02

Table 4. Comparison of 100-IU-2 Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
600-127_Staging Pile Area_3	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	149	1.00E+05	1.49E-03	4.54E+04	3.28E-03
600-127_Staging Pile Area_3	non-Rad	Boron	7440-42-8	µg/kg	5,365	5.00E+02	**1.07E+01**	1.33E+05	4.04E-02
600-127_Staging Pile Area_3	non-Rad	Cadmium	7440-43-9	µg/kg	140	4.00E+03	3.51E-02	1.63E+03	8.62E-02
600-127_Staging Pile Area_3	non-Rad	Chromium	7440-47-3	µg/kg	12,799	4.00E+02	**3.20E+01**	3.82E+04	3.35E-01
600-127_Staging Pile Area_3	non-Rad	Cobalt	7440-48-4	µg/kg	8,875	1.30E+04	6.83E-01	1.11E+05	7.96E-02
600-127_Staging Pile Area_3	non-Rad	Copper	7440-50-8	µg/kg	15,224	5.00E+04	3.04E-01	1.07E+05	1.42E-01
600-127_Staging Pile Area_3	non-Rad	Diethylphthalate	84-66-2	µg/kg	71	1.00E+05	7.13E-04	No Value	--
600-127_Staging Pile Area_3	non-Rad	Lead	7439-92-1	µg/kg	6,896	5.00E+04	1.38E-01	3.56E+04	1.94E-01
600-127_Staging Pile Area_3	non-Rad	Manganese	7439-96-5	µg/kg	420,531	2.20E+05	**1.91E+00**	5.80E+06	7.25E-02
600-127_Staging Pile Area_3	non-Rad	Methylene chloride	75-09-2	µg/kg	4.1	No Value	--	1.66E+05	2.48E-05
600-127_Staging Pile Area_3	non-Rad	Nickel	7440-02-0	µg/kg	12,432	3.00E+04	4.14E-01	3.26E+04	3.82E-01
600-127_Staging Pile Area_3	non-Rad	Phenol	108-95-2	µg/kg	30	3.00E+04	1.02E-03	1.51E+06	2.02E-05
600-127_Staging Pile Area_3	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	µg/kg	8,198	2.00E+05	4.10E-02	3.56E+08	2.30E-05
600-127_Staging Pile Area_3	non-Rad	Total petroleum hydrocarbons - diesel range extended to C36	TPHDIESELEXT	µg/kg	14,360	No Value	--	No Value	--
600-127_Staging Pile Area_3	non-Rad	Vanadium	7440-62-2	µg/kg	50,081	2.00E+03	**2.50E+01**	3.11E+04	**1.61E+00**
600-127_Staging Pile Area_3	non-Rad	Zinc	7440-66-6	µg/kg	60,059	5.00E+04	**1.20E+00**	6.78E+04	8.86E-01
600-127_Staging Pile Area_4	non-Rad	Arsenic	7440-38-2	µg/kg	3,321	1.00E+04	3.32E-01	1.90E+05	1.75E-02
600-127_Staging Pile Area_4	non-Rad	Barium	7440-39-3	µg/kg	109,002	3.30E+05	3.30E-01	1.32E+06	8.24E-02
600-127_Staging Pile Area_4	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	12	1.80E+04	6.67E-04	7.64E+04	1.57E-04
600-127_Staging Pile Area_4	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	24	1.80E+04	1.33E-03	3.92E+04	6.12E-04
600-127_Staging Pile Area_4	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	7.6	1.80E+04	4.22E-04	3.92E+04	1.94E-04
600-127_Staging Pile Area_4	non-Rad	Beryllium	7440-41-7	µg/kg	235	1.00E+04	2.35E-02	1.39E+04	1.69E-02
600-127_Staging Pile Area_4	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	392	1.00E+05	3.92E-03	4.54E+04	8.63E-03
600-127_Staging Pile Area_4	non-Rad	Boron	7440-42-8	µg/kg	7,907	5.00E+02	**1.58E+01**	1.33E+05	5.95E-02
600-127_Staging Pile Area_4	non-Rad	Cadmium	7440-43-9	µg/kg	118	4.00E+03	2.96E-02	1.63E+03	7.27E-02
600-127_Staging Pile Area_4	non-Rad	Chromium	7440-47-3	µg/kg	12,049	4.00E+02	**3.01E+01**	3.82E+04	3.16E-01
600-127_Staging Pile Area_4	non-Rad	Chrysene	218-01-9	µg/kg	19	1.80E+04	1.06E-03	4.45E+04	4.27E-04
600-127_Staging Pile Area_4	non-Rad	Cobalt	7440-48-4	µg/kg	8,341	1.30E+04	6.42E-01	1.11E+05	7.48E-02
600-127_Staging Pile Area_4	non-Rad	Copper	7440-50-8	µg/kg	15,751	5.00E+04	3.15E-01	1.07E+05	1.47E-01
600-127_Staging Pile Area_4	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	16	1.80E+04	8.89E-04	3.57E+04	4.49E-04
600-127_Staging Pile Area_4	non-Rad	Lead	7439-92-1	µg/kg	6,460	5.00E+04	1.29E-01	3.56E+04	1.82E-01
600-127_Staging Pile Area_4	non-Rad	Manganese	7439-96-5	µg/kg	391,778	2.20E+05	**1.78E+00**	5.80E+06	6.76E-02
600-127_Staging Pile Area_4	non-Rad	Methylene chloride	75-09-2	µg/kg	4.1	No Value	--	1.66E+05	2.45E-05
600-127_Staging Pile Area_4	non-Rad	Nickel	7440-02-0	µg/kg	12,301	3.00E+04	4.10E-01	3.26E+04	3.78E-01
600-127_Staging Pile Area_4	non-Rad	Phenol	108-95-2	µg/kg	24	3.00E+04	8.14E-04	1.51E+06	1.62E-05
600-127_Staging Pile Area_4	non-Rad	Pyrene	129-00-0	µg/kg	48	1.80E+04	2.67E-03	6.00E+05	8.00E-05
600-127_Staging Pile Area_4	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	µg/kg	34,347	2.00E+05	1.72E-01	3.56E+08	9.64E-05
600-127_Staging Pile Area_4	non-Rad	Total petroleum hydrocarbons - diesel range extended to C36	TPHDIESELEXT	µg/kg	63,459	No Value	--	No Value	--
600-127_Staging Pile Area_4	non-Rad	Vanadium	7440-62-2	µg/kg	45,292	2.00E+03	**2.26E+01**	3.11E+04	**1.45E+00**
600-127_Staging Pile Area_4	non-Rad	Zinc	7440-66-6	µg/kg	44,294	5.00E+04	8.86E-01	6.78E+04	6.53E-01
600-128_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	2,200	1.00E+04	2.20E-01	1.90E+05	1.16E-02
600-128_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	71,100	3.30E+05	2.15E-01	1.32E+06	5.37E-02
600-128_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	170	1.00E+05	1.70E-03	4.54E+04	3.74E-03
600-128_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	160	4.00E+03	4.00E-02	1.63E+03	9.82E-02
600-128_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	10,900	4.00E+02	**2.73E+01**	3.82E+04	2.86E-01
600-128_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	8,500	5.00E+04	1.70E-01	3.56E+04	2.39E-01
600-128_Shallow_Focused	non-Rad	Total petroleum hydrocarbons	TPH	µg/kg	158,000	No Value	--	No Value	--
600-131_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	3,200	1.00E+04	3.20E-01	1.90E+05	1.69E-02
600-131_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	65,300	3.30E+05	1.98E-01	1.32E+06	4.94E-02
600-131_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	49	1.00E+05	4.90E-04	4.54E+04	1.08E-03
600-131_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	60	4.00E+03	1.50E-02	1.63E+03	3.68E-02
600-131_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	16,700	4.00E+02	**4.18E+01**	3.82E+04	4.38E-01
600-131_Shallow_Focused	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	22	No Value	--	No Value	--
600-131_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	3,400	5.00E+04	6.80E-02	3.56E+04	9.56E-02
600-132_Shallow_Focused	non-Rad	4,4'-DDT (Dichlorodiphenyltrichloroethane)	50-29-3	µg/kg	3.4	No Value	--	8.82E+02	3.85E-03
600-132_Shallow_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	190	4.00E+04	4.75E-03	1.47E+03	1.29E-01
600-132_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	32	4.00E+04	8.00E-04	1.47E+03	2.17E-02
600-132_Shallow_Focused	non-Rad	Aroclors HI		ug/kg	--	--	5.55E-03	--	1.51E-01
600-132_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	2,600	1.00E+04	2.60E-01	1.90E+05	1.37E-02
600-132_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	59,700	3.30E+05	1.81E-01	1.32E+06	4.51E-02
600-132_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	50	1.00E+05	5.00E-04	4.54E+04	1.10E-03
600-132_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	400	4.00E+03	1.00E-01	1.63E+03	2.45E-01
600-132_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	17,100	4.00E+02	**4.28E+01**	3.82E+04	4.48E-01
600-132_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	12,300	5.00E+04	2.46E-01	3.56E+04	3.46E-01
600-132_Shallow_Focused	non-Rad	Selenium	7782-49-2	µg/kg	470	5.20E+02	9.04E-01	1.90E+03	2.48E-01
600-132_Shallow_Focused	non-Rad	Total petroleum hydrocarbons	TPH	µg/kg	8,500	No Value	--	No Value	--
600-139_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	2,400	1.00E+04	2.40E-01	1.90E+05	1.27E-02
600-139_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	72,000	3.30E+05	2.18E-01	1.32E+06	5.44E-02
600-139_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	3,500	1.00E+05	3.50E-02	4.54E+04	7.71E-02
600-139_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	12,000	4.00E+02	**3.00E+01**	3.82E+04	3.14E-01
600-139_Shallow_Focused	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	3,500	No Value	--	No Value	--

Table 4. Comparison of 100-IU-2 Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
600-139_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	4,400	5.00E+04	8.80E-02	3.56E+04	1.24E-01
600-139_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	20	1.00E+02	2.00E-01	1.87E+03	1.07E-02
600-139_Shallow_Focused	non-Rad	Total petroleum hydrocarbons	TPH	µg/kg	7,900	No Value	--	No Value	--
600-176_Shallow	non-Rad	Acenaphthene	83-32-9	µg/kg	12	2.00E+04	6.03E-04	1.10E+06	1.10E-05
600-176_Shallow	non-Rad	Anthracene	120-12-7	µg/kg	2.2	2.90E+04	7.54E-05	6.78E+05	3.22E-06
600-176_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	3,047	1.00E+04	3.05E-01	1.90E+05	1.61E-02
600-176_Shallow	non-Rad	Barium	7440-39-3	µg/kg	52,001	3.30E+05	1.58E-01	1.32E+06	3.93E-02
600-176_Shallow	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	8.5	1.80E+04	4.72E-04	6.40E+04	1.33E-04
600-176_Shallow	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	13	1.80E+04	7.11E-04	7.64E+04	1.67E-04
600-176_Shallow	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	29	1.80E+04	1.59E-03	3.92E+04	7.30E-04
600-176_Shallow	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	5.9	1.80E+04	3.25E-04	3.92E+04	1.49E-04
600-176_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	221	1.00E+04	2.21E-02	1.39E+04	1.58E-02
600-176_Shallow	non-Rad	Boron	7440-42-8	µg/kg	1,044	5.00E+02	**2.09E+00**	1.33E+05	7.85E-03
600-176_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	136	4.00E+03	3.39E-02	1.63E+03	8.32E-02
600-176_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	15,654	4.00E+02	**3.91E+01**	3.82E+04	4.10E-01
600-176_Shallow	non-Rad	Chrysene	218-01-9	µg/kg	8.3	1.80E+04	4.62E-04	4.45E+04	1.87E-04
600-176_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	5,115	1.30E+04	3.93E-01	1.11E+05	4.59E-02
600-176_Shallow	non-Rad	Copper	7440-50-8	µg/kg	12,960	5.00E+04	2.59E-01	1.07E+05	1.21E-01
600-176_Shallow	non-Rad	Dibenz[a,h]anthracene	53-70-3	µg/kg	2.1	1.80E+04	1.14E-04	4.41E+04	4.67E-05
600-176_Shallow	non-Rad	Fluoranthene	206-44-0	µg/kg	22	1.80E+04	1.24E-03	8.39E+05	2.67E-05
600-176_Shallow	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	9.2	1.80E+04	5.08E-04	3.57E+04	2.57E-04
600-176_Shallow	non-Rad	Lead	7439-92-1	µg/kg	3,860	5.00E+04	7.72E-02	3.56E+04	1.08E-01
600-176_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	269,753	2.20E+05	**1.23E+00**	5.80E+06	4.65E-02
600-176_Shallow	non-Rad	Methylene chloride	75-09-2	µg/kg	3.9	No Value	--	1.66E+05	2.34E-05
600-176_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	322	2.00E+03	1.61E-01	1.40E+04	2.30E-02
600-176_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	11,978	3.00E+04	3.99E-01	3.26E+04	3.68E-01
600-176_Shallow	non-Rad	Pyrene	129-00-0	µg/kg	21	1.80E+04	1.15E-03	6.00E+05	3.44E-05
600-176_Shallow	non-Rad	Selenium	7782-49-2	µg/kg	348	5.20E+02	6.69E-01	1.90E+03	1.83E-01
600-176_Shallow	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling)	TPH/OILH	µg/kg	10,200	No Value	--	No Value	--
600-176_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	61,816	2.00E+03	**3.09E+01**	3.11E+04	**1.99E+00**
600-176_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	34,377	5.00E+04	6.88E-01	6.78E+04	5.07E-01
600-176_Staging Pile Area Footprint_2	non-Rad	2,4-DB(4-(2,4-Dichlorophenoxy)butanoic acid)	94-82-6	µg/kg	17	No Value	--	No Value	--
600-176_Staging Pile Area Footprint_2	non-Rad	2-Hexanone	591-78-6	µg/kg	5.6	No Value	--	1.71E+06	3.30E-06
600-176_Staging Pile Area Footprint_2	non-Rad	4,4'-DDD (Dichlorodiphenyldichloroethane)	72-54-8	µg/kg	4.9	No Value	--	8.82E+02	5.52E-03
600-176_Staging Pile Area Footprint_2	non-Rad	4,4'-DDE (Dichlorodiphenyldichloroethylene)	72-55-9	µg/kg	9.3	No Value	--	4.00E+02	2.32E-02
600-176_Staging Pile Area Footprint_2	non-Rad	4,4'-DDT (Dichlorodiphenyltrichloroethane)	50-29-3	µg/kg	9.1	No Value	--	8.82E+02	1.03E-02
600-176_Staging Pile Area Footprint_2	non-Rad	Acenaphthene	83-32-9	µg/kg	29	2.00E+04	1.47E-03	1.10E+06	2.68E-05
600-176_Staging Pile Area Footprint_2	non-Rad	Alpha-Chlordane	5103-71-9	µg/kg	5.0	1.00E+03	5.01E-03	5.04E+04	9.94E-05
600-176_Staging Pile Area Footprint_2	non-Rad	Anthracene	120-12-7	µg/kg	5.1	2.90E+04	1.76E-04	6.78E+05	7.50E-06
600-176_Staging Pile Area Footprint_2	non-Rad	Antimony	7440-36-0	µg/kg	602	5.00E+03	1.20E-01	5.98E+03	1.01E-01
600-176_Staging Pile Area Footprint_2	non-Rad	Aroclor-1254	11097-69-1	µg/kg	104	4.00E+04	2.59E-03	1.47E+03	7.03E-02
600-176_Staging Pile Area Footprint_2	non-Rad	Aroclor-1260	11096-82-5	µg/kg	25	4.00E+04	6.14E-04	1.47E+03	1.66E-02
600-176_Staging Pile Area Footprint_2	non-Rad	Aroclors HI		ug/kg	--	--	3.20E-03	--	8.69E-02
600-176_Staging Pile Area Footprint_2	non-Rad	Arsenic	7440-38-2	µg/kg	2,973	1.00E+04	2.97E-01	1.90E+05	1.57E-02
600-176_Staging Pile Area Footprint_2	non-Rad	Barium	7440-39-3	µg/kg	69,614	3.30E+05	2.11E-01	1.32E+06	5.26E-02
600-176_Staging Pile Area Footprint_2	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	3.3	1.80E+04	1.86E-04	6.40E+04	5.23E-05
600-176_Staging Pile Area Footprint_2	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	9.1	1.80E+04	5.08E-04	7.64E+04	1.20E-04
600-176_Staging Pile Area Footprint_2	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	9.2	1.80E+04	5.12E-04	3.92E+04	2.35E-04
600-176_Staging Pile Area Footprint_2	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	5.9	1.80E+04	3.28E-04	3.92E+04	1.51E-04
600-176_Staging Pile Area Footprint_2	non-Rad	Beryllium	7440-41-7	µg/kg	227	1.00E+04	2.27E-02	1.39E+04	1.63E-02
600-176_Staging Pile Area Footprint_2	non-Rad	Boron	7440-42-8	µg/kg	2,235	5.00E+02	**4.47E+00**	1.33E+05	1.68E-02
600-176_Staging Pile Area Footprint_2	non-Rad	Cadmium	7440-43-9	µg/kg	213	4.00E+03	5.33E-02	1.63E+03	1.31E-01
600-176_Staging Pile Area Footprint_2	non-Rad	Chromium	7440-47-3	µg/kg	60,644	4.00E+02	**1.52E+02**	3.82E+04	**1.59E+00**
600-176_Staging Pile Area Footprint_2	non-Rad	Chrysene	218-01-9	µg/kg	3.9	1.80E+04	2.19E-04	4.45E+04	8.86E-05
600-176_Staging Pile Area Footprint_2	non-Rad	Cobalt	7440-48-4	µg/kg	5,581	1.30E+04	4.29E-01	1.11E+05	5.01E-02
600-176_Staging Pile Area Footprint_2	non-Rad	Copper	7440-50-8	µg/kg	14,874	5.00E+04	2.97E-01	1.07E+05	1.39E-01
600-176_Staging Pile Area Footprint_2	non-Rad	Dibenz[a,h]anthracene	53-70-3	µg/kg	2.4	1.80E+04	1.36E-04	4.41E+04	5.53E-05
600-176_Staging Pile Area Footprint_2	non-Rad	Fluoranthene	206-44-0	µg/kg	78	1.80E+04	4.34E-03	8.39E+05	9.31E-05
600-176_Staging Pile Area Footprint_2	non-Rad	Fluorene	86-73-7	µg/kg	17	2.90E+04	5.93E-04	1.75E+05	9.81E-05
600-176_Staging Pile Area Footprint_2	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	42	1.80E+04	2.34E-03	3.57E+04	1.18E-03
600-176_Staging Pile Area Footprint_2	non-Rad	Lead	7439-92-1	µg/kg	456,552	5.00E+04	**9.13E+00**	3.56E+04	**1.28E+01**
600-176_Staging Pile Area Footprint_2	non-Rad	Manganese	7439-96-5	µg/kg	265,238	2.20E+05	**1.21E+00**	5.80E+06	4.57E-02
600-176_Staging Pile Area Footprint_2	non-Rad	Methylene chloride	75-09-2	µg/kg	3.4	No Value	--	1.66E+05	2.04E-05
600-176_Staging Pile Area Footprint_2	non-Rad	Molybdenum	7439-98-7	µg/kg	309	2.00E+03	1.54E-01	1.40E+04	2.21E-02
600-176_Staging Pile Area Footprint_2	non-Rad	Naphthalene	91-20-3	µg/kg	51	2.90E+04	1.76E-03	1.00E+05	5.09E-04
600-176_Staging Pile Area Footprint_2	non-Rad	Nickel	7440-02-0	µg/kg	10,485	3.00E+04	3.50E-01	3.26E+04	3.22E-01
600-176_Staging Pile Area Footprint_2	non-Rad	Pyrene	129-00-0	µg/kg	10	1.80E+04	5.77E-04	6.00E+05	1.73E-05
600-176_Staging Pile Area Footprint_2	non-Rad	Toluene	108-88-3	µg/kg	2.3	2.00E+05	1.14E-05	5.20E+06	4.38E-07
600-176_Staging Pile Area Footprint_2	non-Rad	Vanadium	7440-62-2	µg/kg	45,984	2.00E+03	**2.30E+01**	3.11E+04	**1.48E+00**
600-176_Staging Pile Area Footprint_2	non-Rad	Zinc	7440-66-6	µg/kg	46,201	5.00E+04	9.24E-01	6.78E+04	6.81E-01
600-176_Staging Pile Area Footprint_3	non-Rad	2,4-DB(4-(2,4-Dichlorophenoxy)butanoic acid)	94-82-6	µg/kg	16	No Value	--	No Value	--

Table 4. Comparison of 100-IU-2 Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
600-176_Staging Pile Area Footprint_3	non-Rad	4,4'-DDT (Dichlorodiphenyltrichloroethane)	50-29-3	µg/kg	3.4	No Value	--	8.82E+02	3.85E-03
600-176_Staging Pile Area Footprint_3	non-Rad	Acenaphthene	83-32-9	µg/kg	63	2.00E+04	3.13E-03	1.10E+06	5.71E-05
600-176_Staging Pile Area Footprint_3	non-Rad	Anthracene	120-12-7	µg/kg	3.3	2.90E+04	1.13E-04	6.78E+05	4.84E-06
600-176_Staging Pile Area Footprint_3	non-Rad	Aroclor-1254	11097-69-1	µg/kg	8.0	4.00E+04	1.99E-04	1.47E+03	5.39E-03
600-176_Staging Pile Area Footprint_3	non-Rad	Aroclor-1260	11096-82-5	µg/kg	16	4.00E+04	4.06E-04	1.47E+03	1.10E-02
600-176_Staging Pile Area Footprint_3	non-Rad	Aroclors HI		ug/kg	--	--	6.05E-04	--	1.64E-02
600-176_Staging Pile Area Footprint_3	non-Rad	Arsenic	7440-38-2	µg/kg	2,903	1.00E+04	2.90E-01	1.90E+05	1.53E-02
600-176_Staging Pile Area Footprint_3	non-Rad	Barium	7440-39-3	µg/kg	70,774	3.30E+05	2.14E-01	1.32E+06	5.35E-02
600-176_Staging Pile Area Footprint_3	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	6.7	1.80E+04	3.70E-04	6.40E+04	1.04E-04
600-176_Staging Pile Area Footprint_3	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	10	1.80E+04	5.59E-04	7.64E+04	1.32E-04
600-176_Staging Pile Area Footprint_3	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	11	1.80E+04	5.88E-04	3.92E+04	2.70E-04
600-176_Staging Pile Area Footprint_3	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	4.8	1.80E+04	2.66E-04	3.92E+04	1.22E-04
600-176_Staging Pile Area Footprint_3	non-Rad	Beryllium	7440-41-7	µg/kg	256	1.00E+04	2.56E-02	1.39E+04	1.83E-02
600-176_Staging Pile Area Footprint_3	non-Rad	Boron	7440-42-8	µg/kg	2,050	5.00E+02	**4.10E+00**	1.33E+05	1.54E-02
600-176_Staging Pile Area Footprint_3	non-Rad	Cadmium	7440-43-9	µg/kg	183	4.00E+03	4.57E-02	1.63E+03	1.12E-01
600-176_Staging Pile Area Footprint_3	non-Rad	Chromium	7440-47-3	µg/kg	15,017	4.00E+02	**3.75E+01**	3.82E+04	3.93E-01
600-176_Staging Pile Area Footprint_3	non-Rad	Chrysene	218-01-9	µg/kg	3.7	1.80E+04	2.05E-04	4.45E+04	8.29E-05
600-176_Staging Pile Area Footprint_3	non-Rad	Cobalt	7440-48-4	µg/kg	6,029	1.30E+04	4.64E-01	1.11E+05	5.41E-02
600-176_Staging Pile Area Footprint_3	non-Rad	Copper	7440-50-8	µg/kg	14,379	5.00E+04	2.88E-01	1.07E+05	1.34E-01
600-176_Staging Pile Area Footprint_3	non-Rad	Dibenz[a,h]anthracene	53-70-3	µg/kg	2.8	1.80E+04	1.56E-04	4.41E+04	6.37E-05
600-176_Staging Pile Area Footprint_3	non-Rad	Fluoranthene	206-44-0	µg/kg	41	1.80E+04	2.30E-03	8.39E+05	4.94E-05
600-176_Staging Pile Area Footprint_3	non-Rad	Fluorene	86-73-7	µg/kg	5.9	2.90E+04	2.03E-04	1.75E+05	3.36E-05
600-176_Staging Pile Area Footprint_3	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	22	1.80E+04	1.23E-03	3.57E+04	6.18E-04
600-176_Staging Pile Area Footprint_3	non-Rad	Lead	7439-92-1	µg/kg	43,853	5.00E+04	8.77E-01	3.56E+04	**1.23E+00**
600-176_Staging Pile Area Footprint_3	non-Rad	Manganese	7439-96-5	µg/kg	296,528	2.20E+05	**1.35E+00**	5.80E+06	5.11E-02
600-176_Staging Pile Area Footprint_3	non-Rad	Methylene chloride	75-09-2	µg/kg	3.1	No Value	--	1.66E+05	1.86E-05
600-176_Staging Pile Area Footprint_3	non-Rad	Molybdenum	7439-98-7	µg/kg	389	2.00E+03	1.95E-01	1.40E+04	2.79E-02
600-176_Staging Pile Area Footprint_3	non-Rad	Naphthalene	91-20-3	µg/kg	20	2.90E+04	6.83E-04	1.00E+05	1.98E-04
600-176_Staging Pile Area Footprint_3	non-Rad	Nickel	7440-02-0	µg/kg	10,536	3.00E+04	3.51E-01	3.26E+04	3.23E-01
600-176_Staging Pile Area Footprint_3	non-Rad	Pyrene	129-00-0	µg/kg	11	1.80E+04	6.23E-04	6.00E+05	1.87E-05
600-176_Staging Pile Area Footprint_3	non-Rad	Toluene	108-88-3	µg/kg	2.0	2.00E+05	9.95E-06	5.20E+06	3.83E-07
600-176_Staging Pile Area Footprint_3	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling)	TPH/OILH	µg/kg	602,000	No Value	--	No Value	--
600-176_Staging Pile Area Footprint_3	non-Rad	Vanadium	7440-62-2	µg/kg	49,986	2.00E+03	**2.50E+01**	3.11E+04	**1.61E+00**
600-176_Staging Pile Area Footprint_3	non-Rad	Zinc	7440-66-6	µg/kg	43,805	5.00E+04	8.76E-01	6.78E+04	6.46E-01
600-181_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	3,000	1.00E+04	3.00E-01	1.90E+05	1.58E-02
600-181_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	98,100	3.30E+05	2.97E-01	1.32E+06	7.41E-02
600-181_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	47	1.00E+05	4.70E-04	4.54E+04	1.03E-03
600-181_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	120	4.00E+03	3.00E-02	1.63E+03	7.36E-02
600-181_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	14,600	4.00E+02	**3.65E+01**	3.82E+04	3.83E-01
600-181_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	4,600	5.00E+04	9.20E-02	3.56E+04	1.29E-01
600-181_Shallow_Focused	non-Rad	Total petroleum hydrocarbons	TPH	µg/kg	7,600	No Value	--	No Value	--
600-182_Overburden_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	2,900	1.00E+04	2.90E-01	1.90E+05	1.53E-02
600-182_Overburden_Focused	non-Rad	Barium	7440-39-3	µg/kg	83,900	3.30E+05	2.54E-01	1.32E+06	6.34E-02
600-182_Overburden_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	300	1.00E+04	3.00E-02	1.39E+04	2.15E-02
600-182_Overburden_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,770	5.00E+02	**3.54E+00**	1.33E+05	1.33E-02
600-182_Overburden_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	128	4.00E+03	3.20E-02	1.63E+03	7.85E-02
600-182_Overburden_Focused	non-Rad	Chromium	7440-47-3	µg/kg	11,100	4.00E+02	**2.78E+01**	3.82E+04	2.91E-01
600-182_Overburden_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	6,590	1.30E+04	5.07E-01	1.11E+05	5.91E-02
600-182_Overburden_Focused	non-Rad	Copper	7440-50-8	µg/kg	12,200	5.00E+04	2.44E-01	1.07E+05	1.14E-01
600-182_Overburden_Focused	non-Rad	Lead	7439-92-1	µg/kg	5,050	5.00E+04	1.01E-01	3.56E+04	1.42E-01
600-182_Overburden_Focused	non-Rad	Manganese	7439-96-5	µg/kg	353,000	2.20E+05	**1.60E+00**	5.80E+06	6.09E-02
600-182_Overburden_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	425	2.00E+03	2.13E-01	1.40E+04	3.04E-02
600-182_Overburden_Focused	non-Rad	Nickel	7440-02-0	µg/kg	10,900	3.00E+04	3.63E-01	3.26E+04	3.35E-01
600-182_Overburden_Focused	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling)	TPH/OILH	µg/kg	14,500	No Value	--	No Value	--
600-182_Overburden_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	57,800	2.00E+03	**2.89E+01**	3.11E+04	**1.86E+00**
600-182_Overburden_Focused	non-Rad	Zinc	7440-66-6	µg/kg	45,500	5.00E+04	9.10E-01	6.78E+04	6.71E-01
600-182_Shallow_1_Focused	non-Rad	Antimony	7440-36-0	µg/kg	270	5.00E+03	5.40E-02	5.98E+03	4.51E-02
600-182_Shallow_1_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	2,990	1.00E+04	2.99E-01	1.90E+05	1.58E-02
600-182_Shallow_1_Focused	non-Rad	Barium	7440-39-3	µg/kg	84,100	3.30E+05	2.55E-01	1.32E+06	6.36E-02
600-182_Shallow_1_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	322	1.00E+04	3.22E-02	1.39E+04	2.31E-02
600-182_Shallow_1_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,750	5.00E+02	**3.50E+00**	1.33E+05	1.32E-02
600-182_Shallow_1_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	154	4.00E+03	3.85E-02	1.63E+03	9.45E-02
600-182_Shallow_1_Focused	non-Rad	Chromium	7440-47-3	µg/kg	11,700	4.00E+02	**2.93E+01**	3.82E+04	3.07E-01
600-182_Shallow_1_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	7,220	1.30E+04	5.55E-01	1.11E+05	6.48E-02
600-182_Shallow_1_Focused	non-Rad	Copper	7440-50-8	µg/kg	12,600	5.00E+04	2.52E-01	1.07E+05	1.18E-01
600-182_Shallow_1_Focused	non-Rad	Lead	7439-92-1	µg/kg	4,620	5.00E+04	9.24E-02	3.56E+04	1.30E-01
600-182_Shallow_1_Focused	non-Rad	Manganese	7439-96-5	µg/kg	382,000	2.20E+05	**1.74E+00**	5.80E+06	6.59E-02
600-182_Shallow_1_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	546	2.00E+03	2.73E-01	1.40E+04	3.91E-02
600-182_Shallow_1_Focused	non-Rad	Nickel	7440-02-0	µg/kg	10,800	3.00E+04	3.60E-01	3.26E+04	3.31E-01
600-182_Shallow_1_Focused	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling)	TPH/OILH	µg/kg	12,500	No Value	--	No Value	--
600-182_Shallow_1_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	72,200	2.00E+03	**3.61E+01**	3.11E+04	**2.32E+00**

Table 4. Comparison of 100-IU-2 Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
600-182_Shallow_1_Focused	non-Rad	Zinc	7440-66-6	µg/kg	45,700	5.00E+04	9.14E-01	6.78E+04	6.74E-01
600-182_Shallow_2_Focused	non-Rad	Antimony	7440-36-0	µg/kg	353	5.00E+03	7.06E-02	5.98E+03	5.90E-02
600-182_Shallow_2_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	3,390	1.00E+04	3.39E-01	1.90E+05	1.79E-02
600-182_Shallow_2_Focused	non-Rad	Barium	7440-39-3	µg/kg	90,000	3.30E+05	2.73E-01	1.32E+06	6.80E-02
600-182_Shallow_2_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	344	1.00E+04	3.44E-02	1.39E+04	2.47E-02
600-182_Shallow_2_Focused	non-Rad	Boron	7440-42-8	µg/kg	2,050	5.00E+02	**4.10E+00**	1.33E+05	1.54E-02
600-182_Shallow_2_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	168	4.00E+03	4.20E-02	1.63E+03	1.03E-01
600-182_Shallow_2_Focused	non-Rad	Chromium	7440-47-3	µg/kg	13,000	4.00E+02	**3.25E+01**	3.82E+04	3.41E-01
600-182_Shallow_2_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	7,580	1.30E+04	5.83E-01	1.11E+05	6.80E-02
600-182_Shallow_2_Focused	non-Rad	Copper	7440-50-8	µg/kg	12,900	5.00E+04	2.58E-01	1.07E+05	1.20E-01
600-182_Shallow_2_Focused	non-Rad	Lead	7439-92-1	µg/kg	6,600	5.00E+04	1.32E-01	3.56E+04	1.86E-01
600-182_Shallow_2_Focused	non-Rad	Manganese	7439-96-5	µg/kg	364,000	2.20E+05	**1.65E+00**	5.80E+06	6.28E-02
600-182_Shallow_2_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	403	2.00E+03	2.02E-01	1.40E+04	2.89E-02
600-182_Shallow_2_Focused	non-Rad	Nickel	7440-02-0	µg/kg	10,600	3.00E+04	3.53E-01	3.26E+04	3.25E-01
600-182_Shallow_2_Focused	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling)	TPH/OILH	µg/kg	15,900	No Value	--	No Value	--
600-182_Shallow_2_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	65,200	2.00E+03	**3.26E+01**	3.11E+04	**2.09E+00**
600-182_Shallow_2_Focused	non-Rad	Zinc	7440-66-6	µg/kg	46,400	5.00E+04	9.28E-01	6.78E+04	6.84E-01
600-182_Staging Pile Area_Focused	non-Rad	Antimony	7440-36-0	µg/kg	266	5.00E+03	5.32E-02	5.98E+03	4.44E-02
600-182_Staging Pile Area_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	3,180	1.00E+04	3.18E-01	1.90E+05	1.68E-02
600-182_Staging Pile Area_Focused	non-Rad	Barium	7440-39-3	µg/kg	84,900	3.30E+05	2.57E-01	1.32E+06	6.42E-02
600-182_Staging Pile Area_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	334	1.00E+04	3.34E-02	1.39E+04	2.39E-02
600-182_Staging Pile Area_Focused	non-Rad	Boron	7440-42-8	µg/kg	2,550	5.00E+02	**5.10E+00**	1.33E+05	1.92E-02
600-182_Staging Pile Area_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	150	4.00E+03	3.75E-02	1.63E+03	9.20E-02
600-182_Staging Pile Area_Focused	non-Rad	Chromium	7440-47-3	µg/kg	12,700	4.00E+02	**3.18E+01**	3.82E+04	3.33E-01
600-182_Staging Pile Area_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	7,340	1.30E+04	5.65E-01	1.11E+05	6.58E-02
600-182_Staging Pile Area_Focused	non-Rad	Copper	7440-50-8	µg/kg	11,900	5.00E+04	2.38E-01	1.07E+05	1.11E-01
600-182_Staging Pile Area_Focused	non-Rad	Lead	7439-92-1	µg/kg	3,950	5.00E+04	7.90E-02	3.56E+04	1.11E-01
600-182_Staging Pile Area_Focused	non-Rad	Manganese	7439-96-5	µg/kg	357,000	2.20E+05	**1.62E+00**	5.80E+06	6.16E-02
600-182_Staging Pile Area_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	414	2.00E+03	2.07E-01	1.40E+04	2.96E-02
600-182_Staging Pile Area_Focused	non-Rad	Nickel	7440-02-0	µg/kg	10,700	3.00E+04	3.57E-01	3.26E+04	3.28E-01
600-182_Staging Pile Area_Focused	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling)	TPH/OILH	µg/kg	5,340	No Value	--	No Value	--
600-182_Staging Pile Area_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	64,200	2.00E+03	**3.21E+01**	3.11E+04	**2.06E+00**
600-182_Staging Pile Area_Focused	non-Rad	Zinc	7440-66-6	µg/kg	45,700	5.00E+04	9.14E-01	6.78E+04	6.74E-01
600-188_Overburden_Focused	non-Rad	Acenaphthene	83-32-9	µg/kg	1.2	2.00E+04	6.20E-05	1.10E+06	1.13E-06
600-188_Overburden_Focused	non-Rad	Acetone	67-64-1	µg/kg	8.3	No Value	--	No Value	--
600-188_Overburden_Focused	non-Rad	Anthracene	120-12-7	µg/kg	0.83	2.90E+04	2.85E-05	6.78E+05	1.22E-06
600-188_Overburden_Focused	non-Rad	Antimony	7440-36-0	µg/kg	299	5.00E+03	5.98E-02	5.98E+03	5.00E-02
600-188_Overburden_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	2,750	1.00E+04	2.75E-01	1.90E+05	1.45E-02
600-188_Overburden_Focused	non-Rad	Barium	7440-39-3	µg/kg	89,200	3.30E+05	2.70E-01	1.32E+06	6.74E-02
600-188_Overburden_Focused	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	26	1.80E+04	1.45E-03	6.40E+04	4.08E-04
600-188_Overburden_Focused	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	64	1.80E+04	3.54E-03	7.64E+04	8.35E-04
600-188_Overburden_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	79	1.80E+04	4.39E-03	3.92E+04	2.02E-03
600-188_Overburden_Focused	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	40	1.80E+04	2.22E-03	3.92E+04	1.02E-03
600-188_Overburden_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	375	1.00E+04	3.75E-02	1.39E+04	2.69E-02
600-188_Overburden_Focused	non-Rad	Boron	7440-42-8	µg/kg	2,230	5.00E+02	**4.46E+00**	1.33E+05	1.68E-02
600-188_Overburden_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	226	4.00E+03	5.65E-02	1.63E+03	1.39E-01
600-188_Overburden_Focused	non-Rad	Chromium	7440-47-3	µg/kg	13,800	4.00E+02	**3.45E+01**	3.82E+04	3.62E-01
600-188_Overburden_Focused	non-Rad	Chrysene	218-01-9	µg/kg	40	1.80E+04	2.23E-03	4.45E+04	9.03E-04
600-188_Overburden_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	6,750	1.30E+04	5.19E-01	1.11E+05	6.05E-02
600-188_Overburden_Focused	non-Rad	Copper	7440-50-8	µg/kg	13,500	5.00E+04	2.70E-01	1.07E+05	1.26E-01
600-188_Overburden_Focused	non-Rad	Dibenz[a,h]anthracene	53-70-3	µg/kg	7.9	1.80E+04	4.41E-04	4.41E+04	1.80E-04
600-188_Overburden_Focused	non-Rad	Fluoranthene	206-44-0	µg/kg	72	1.80E+04	3.99E-03	8.39E+05	8.57E-05
600-188_Overburden_Focused	non-Rad	Fluorene	86-73-7	µg/kg	1.9	2.90E+04	6.69E-05	1.75E+05	1.11E-05
600-188_Overburden_Focused	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	70	1.80E+04	3.89E-03	3.57E+04	1.97E-03
600-188_Overburden_Focused	non-Rad	Lead	7439-92-1	µg/kg	8,450	5.00E+04	1.69E-01	3.56E+04	2.37E-01
600-188_Overburden_Focused	non-Rad	Manganese	7439-96-5	µg/kg	383,000	2.20E+05	**1.74E+00**	5.80E+06	6.61E-02
600-188_Overburden_Focused	non-Rad	Methylene chloride	75-09-2	µg/kg	8.5	No Value	--	1.66E+05	5.12E-05
600-188_Overburden_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	553	2.00E+03	2.77E-01	1.40E+04	3.96E-02
600-188_Overburden_Focused	non-Rad	Nickel	7440-02-0	µg/kg	11,800	3.00E+04	3.93E-01	3.26E+04	3.62E-01
600-188_Overburden_Focused	non-Rad	Pyrene	129-00-0	µg/kg	45	1.80E+04	2.51E-03	6.00E+05	7.53E-05
600-188_Overburden_Focused	non-Rad	Selenium	7782-49-2	µg/kg	218	5.20E+02	4.19E-01	1.90E+03	1.15E-01
600-188_Overburden_Focused	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling)	TPH/OILH	µg/kg	39,400	No Value	--	No Value	--
600-188_Overburden_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	51,400	2.00E+03	**2.57E+01**	3.11E+04	**1.65E+00**
600-188_Overburden_Focused	non-Rad	Zinc	7440-66-6	µg/kg	48,700	5.00E+04	9.74E-01	6.78E+04	7.18E-01
600-188_Shallow	non-Rad	Acetone	67-64-1	µg/kg	11	No Value	--	No Value	--
600-188_Shallow	non-Rad	Antimony	7440-36-0	µg/kg	239	5.00E+03	4.78E-02	5.98E+03	3.99E-02
600-188_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	2,443	1.00E+04	2.44E-01	1.90E+05	1.29E-02
600-188_Shallow	non-Rad	Barium	7440-39-3	µg/kg	64,047	3.30E+05	1.94E-01	1.32E+06	4.84E-02
600-188_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	244	1.00E+04	2.44E-02	1.39E+04	1.75E-02
600-188_Shallow	non-Rad	Boron	7440-42-8	µg/kg	1,139	5.00E+02	**2.28E+00**	1.33E+05	8.57E-03
600-188_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	139	4.00E+03	3.48E-02	1.63E+03	8.54E-02

Table 4. Comparison of 100-IU-2 Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
600-188_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	11,577	4.00E+02	**2.89E+01**	3.82E+04	3.03E-01
600-188_Shallow	non-Rad	Chrysene	218-01-9	µg/kg	3.1	1.80E+04	1.72E-04	4.45E+04	6.94E-05
600-188_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	4,836	1.30E+04	3.72E-01	1.11E+05	4.34E-02
600-188_Shallow	non-Rad	Copper	7440-50-8	µg/kg	10,774	5.00E+04	2.15E-01	1.07E+05	1.01E-01
600-188_Shallow	non-Rad	Lead	7439-92-1	µg/kg	4,925	5.00E+04	9.85E-02	3.56E+04	1.38E-01
600-188_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	308,174	2.20E+05	**1.40E+00**	5.80E+06	5.31E-02
600-188_Shallow	non-Rad	Methylene chloride	75-09-2	µg/kg	6.0	No Value	--	1.66E+05	3.60E-05
600-188_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	355	2.00E+03	1.77E-01	1.40E+04	2.54E-02
600-188_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	12,680	3.00E+04	4.23E-01	3.26E+04	3.89E-01
600-188_Shallow	non-Rad	Selenium	7782-49-2	µg/kg	219	5.20E+02	4.21E-01	1.90E+03	1.15E-01
600-188_Shallow	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling)	TPH/OILH	µg/kg	33,790	No Value	--	No Value	--
600-188_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	39,522	2.00E+03	**1.98E+01**	3.11E+04	**1.27E+00**
600-188_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	31,905	5.00E+04	6.38E-01	6.78E+04	4.71E-01
600-188_Staging Pile Area_Focused	non-Rad	Acenaphthene	83-32-9	µg/kg	58	2.00E+04	2.88E-03	1.10E+06	5.26E-05
600-188_Staging Pile Area_Focused	non-Rad	Antimony	7440-36-0	µg/kg	296	5.00E+03	5.92E-02	5.98E+03	4.95E-02
600-188_Staging Pile Area_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	2,580	1.00E+04	2.58E-01	1.90E+05	1.36E-02
600-188_Staging Pile Area_Focused	non-Rad	Barium	7440-39-3	µg/kg	83,900	3.30E+05	2.54E-01	1.32E+06	6.34E-02
600-188_Staging Pile Area_Focused	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	30	1.80E+04	1.64E-03	6.40E+04	4.61E-04
600-188_Staging Pile Area_Focused	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	55	1.80E+04	3.07E-03	7.64E+04	7.24E-04
600-188_Staging Pile Area_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	99	1.80E+04	5.51E-03	3.92E+04	2.53E-03
600-188_Staging Pile Area_Focused	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	44	1.80E+04	2.46E-03	3.92E+04	1.13E-03
600-188_Staging Pile Area_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	347	1.00E+04	3.47E-02	1.39E+04	2.49E-02
600-188_Staging Pile Area_Focused	non-Rad	Boron	7440-42-8	µg/kg	2,280	5.00E+02	**4.56E+00**	1.33E+05	1.72E-02
600-188_Staging Pile Area_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	203	4.00E+03	5.08E-02	1.63E+03	1.25E-01
600-188_Staging Pile Area_Focused	non-Rad	Chromium	7440-47-3	µg/kg	11,500	4.00E+02	**2.88E+01**	3.82E+04	3.01E-01
600-188_Staging Pile Area_Focused	non-Rad	Chrysene	218-01-9	µg/kg	42	1.80E+04	2.36E-03	4.45E+04	9.52E-04
600-188_Staging Pile Area_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	6,740	1.30E+04	5.18E-01	1.11E+05	6.05E-02
600-188_Staging Pile Area_Focused	non-Rad	Copper	7440-50-8	µg/kg	12,900	5.00E+04	2.58E-01	1.07E+05	1.20E-01
600-188_Staging Pile Area_Focused	non-Rad	Dibenz[a,h]anthracene	53-70-3	µg/kg	7.4	1.80E+04	4.12E-04	4.41E+04	1.68E-04
600-188_Staging Pile Area_Focused	non-Rad	Fluoranthene	206-44-0	µg/kg	100	1.80E+04	5.53E-03	8.39E+05	1.19E-04
600-188_Staging Pile Area_Focused	non-Rad	Fluorene	86-73-7	µg/kg	3.1	2.90E+04	1.06E-04	1.75E+05	1.76E-05
600-188_Staging Pile Area_Focused	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	80	1.80E+04	4.43E-03	3.57E+04	2.23E-03
600-188_Staging Pile Area_Focused	non-Rad	Lead	7439-92-1	µg/kg	5,840	5.00E+04	1.17E-01	3.56E+04	1.64E-01
600-188_Staging Pile Area_Focused	non-Rad	Manganese	7439-96-5	µg/kg	385,000	2.20E+05	**1.75E+00**	5.80E+06	6.64E-02
600-188_Staging Pile Area_Focused	non-Rad	Methylene chloride	75-09-2	µg/kg	7.3	No Value	--	1.66E+05	4.39E-05
600-188_Staging Pile Area_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	562	2.00E+03	2.81E-01	1.40E+04	4.02E-02
600-188_Staging Pile Area_Focused	non-Rad	Nickel	7440-02-0	µg/kg	11,000	3.00E+04	3.67E-01	3.26E+04	3.38E-01
600-188_Staging Pile Area_Focused	non-Rad	Pyrene	129-00-0	µg/kg	63	1.80E+04	3.52E-03	6.00E+05	1.06E-04
600-188_Staging Pile Area_Focused	non-Rad	Selenium	7782-49-2	µg/kg	284	5.20E+02	5.46E-01	1.90E+03	1.50E-01
600-188_Staging Pile Area_Focused	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling)	TPH/OILH	µg/kg	36,900	No Value	--	No Value	--
600-188_Staging Pile Area_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	49,600	2.00E+03	**2.48E+01**	3.11E+04	**1.59E+00**
600-188_Staging Pile Area_Focused	non-Rad	Zinc	7440-66-6	µg/kg	43,900	5.00E+04	8.78E-01	6.78E+04	6.48E-01
600-190_Shallow_Focused	non-Rad	Anthracene	120-12-7	µg/kg	47	2.90E+04	1.62E-03	6.78E+05	6.93E-05
600-190_Shallow_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	1,100	4.00E+04	2.75E-02	1.47E+03	7.46E-01
600-190_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	130	4.00E+04	3.25E-03	1.47E+03	8.82E-02
600-190_Shallow_Focused	non-Rad	Aroclors HI		ug/kg	--	--	3.08E-02	--	8.34E-01
600-190_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	2,500	1.00E+04	2.50E-01	1.90E+05	1.32E-02
600-190_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	81,500	3.30E+05	2.47E-01	1.32E+06	6.16E-02
600-190_Shallow_Focused	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	62	1.80E+04	3.44E-03	7.64E+04	8.11E-04
600-190_Shallow_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	52	1.80E+04	2.89E-03	3.92E+04	1.33E-03
600-190_Shallow_Focused	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	44	1.80E+04	2.44E-03	3.92E+04	1.12E-03
600-190_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	2,400	1.00E+05	2.40E-02	4.54E+04	5.28E-02
600-190_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	120	4.00E+03	3.00E-02	1.63E+03	7.36E-02
600-190_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	13,800	4.00E+02	**3.45E+01**	3.82E+04	3.62E-01
600-190_Shallow_Focused	non-Rad	Chrysene	218-01-9	µg/kg	53	1.80E+04	2.94E-03	4.45E+04	1.19E-03
600-190_Shallow_Focused	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	16,000	No Value	--	No Value	--
600-190_Shallow_Focused	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	57	1.80E+04	3.17E-03	3.57E+04	1.60E-03
600-190_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	10,800	5.00E+04	2.16E-01	3.56E+04	3.04E-01
600-190_Shallow_Focused	non-Rad	Naphthalene	91-20-3	µg/kg	100	2.90E+04	3.45E-03	1.00E+05	1.00E-03
600-190_Shallow_Focused	non-Rad	Pyrene	129-00-0	µg/kg	47	1.80E+04	2.61E-03	6.00E+05	7.83E-05
600-190_Shallow_Focused	non-Rad	Total petroleum hydrocarbons	TPH	µg/kg	24,800	No Value	--	No Value	--
600-295_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	3,370	1.00E+04	3.37E-01	1.90E+05	1.78E-02
600-295_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	35,900	3.30E+05	1.09E-01	1.32E+06	2.71E-02
600-295_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	210	1.00E+04	2.10E-02	1.39E+04	1.51E-02
600-295_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	799	5.00E+02	**1.60E+00**	1.33E+05	6.01E-03
600-295_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	100	4.00E+03	2.50E-02	1.63E+03	6.14E-02
600-295_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	17,200	4.00E+02	**4.30E+01**	3.82E+04	4.51E-01
600-295_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	4,940	1.30E+04	3.80E-01	1.11E+05	4.43E-02
600-295_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	12,300	5.00E+04	2.46E-01	1.07E+05	1.15E-01
600-295_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	3,370	5.00E+04	6.74E-02	3.56E+04	9.47E-02
600-295_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	267,000	2.20E+05	**1.21E+00**	5.80E+06	4.60E-02

Table 4. Comparison of 100-IU-2 Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
600-295_Shallow_Focused	non-Rad	Methylene chloride	75-09-2	µg/kg	2.1	No Value	--	1.66E+05	1.26E-05
600-295_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	259	2.00E+03	1.30E-01	1.40E+04	1.85E-02
600-295_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	12,200	3.00E+04	4.07E-01	3.26E+04	3.74E-01
600-295_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	52,500	2.00E+03	**2.63E+01**	3.11E+04	**1.69E+00**
600-295_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	29,700	5.00E+04	5.94E-01	6.78E+04	4.38E-01
600-296_Shallow_Focused	non-Rad	4,4'-DDD (Dichlorodiphenyldichloroethane)	72-54-8	µg/kg	35	No Value	--	8.82E+02	3.97E-02
600-296_Shallow_Focused	non-Rad	4,4'-DDE (Dichlorodiphenyldichloroethylene)	72-55-9	µg/kg	3.4	No Value	--	4.00E+02	8.51E-03
600-296_Shallow_Focused	non-Rad	Alpha-Chlordane	5103-71-9	µg/kg	93	1.00E+03	9.30E-02	5.04E+04	1.84E-03
600-296_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	120	4.00E+04	3.00E-03	1.47E+03	8.14E-02
600-296_Shallow_Focused	non-Rad	Aroclors HI		ug/kg	--	--	3.00E-03	--	8.14E-02
600-296_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	3,200	1.00E+04	3.20E-01	1.90E+05	1.69E-02
600-296_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	741,000	3.30E+05	**2.25E+00**	1.32E+06	5.60E-01
600-296_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	65	1.00E+04	6.50E-03	1.39E+04	4.66E-03
600-296_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	55	1.00E+05	5.50E-04	4.54E+04	1.21E-03
600-296_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	2,100	5.00E+02	**4.20E+00**	1.33E+05	1.58E-02
600-296_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	650	4.00E+03	1.63E-01	1.63E+03	3.99E-01
600-296_Shallow_Focused	non-Rad	Chlordane	57-74-9	µg/kg	94	1.00E+03	9.40E-02	5.04E+04	1.86E-03
600-296_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	12,600	4.00E+02	**3.15E+01**	3.82E+04	3.30E-01
600-296_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	6,200	1.30E+04	4.77E-01	1.11E+05	5.56E-02
600-296_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	31,000	5.00E+04	6.20E-01	1.07E+05	2.90E-01
600-296_Shallow_Focused	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	51	No Value	--	No Value	--
600-296_Shallow_Focused	non-Rad	Endrin	72-20-8	µg/kg	1.6	No Value	--	No Value	--
600-296_Shallow_Focused	non-Rad	Heptachlor	76-44-8	µg/kg	0.45	No Value	--	No Value	--
600-296_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	59,300	5.00E+04	**1.19E+00**	3.56E+04	**1.67E+00**
600-296_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	287,000	2.20E+05	**1.30E+00**	5.80E+06	4.95E-02
600-296_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	650	1.00E+02	**6.50E+00**	1.87E+03	3.48E-01
600-296_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	590	2.00E+03	2.95E-01	1.40E+04	4.23E-02
600-296_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	12,700	3.00E+04	4.23E-01	3.26E+04	3.90E-01
600-296_Shallow_Focused	non-Rad	Silver	7440-22-4	µg/kg	210	2.00E+03	1.05E-01	4.96E+04	4.23E-03
600-296_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	38,500	2.00E+03	**1.93E+01**	3.11E+04	**1.24E+00**
600-296_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	123,000	5.00E+04	**2.46E+00**	6.78E+04	**1.81E+00**
600-302_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	400	5.00E+03	8.00E-02	5.98E+03	6.68E-02
600-302_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	7.6	4.00E+04	1.90E-04	1.47E+03	5.15E-03
600-302_Shallow_Focused	non-Rad	Aroclors HI		ug/kg	--	--	1.90E-04	--	5.15E-03
600-302_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	2,500	1.00E+04	2.50E-01	1.90E+05	1.32E-02
600-302_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	64,300	3.30E+05	1.95E-01	1.32E+06	4.86E-02
600-302_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	100	1.00E+04	1.00E-02	1.39E+04	7.17E-03
600-302_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	87	1.00E+05	8.70E-04	4.54E+04	1.92E-03
600-302_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	210	4.00E+03	5.25E-02	1.63E+03	1.29E-01
600-302_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	8,700	4.00E+02	**2.18E+01**	3.82E+04	2.28E-01
600-302_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	5,800	1.30E+04	4.46E-01	1.11E+05	5.20E-02
600-302_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	15,000	5.00E+04	3.00E-01	1.07E+05	1.40E-01
600-302_Shallow_Focused	non-Rad	Fluoride	16984-48-8	µg/kg	1,600	No Value	--	2.28E+06	7.01E-04
600-302_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	6,500	5.00E+04	1.30E-01	3.56E+04	1.83E-01
600-302_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	252,000	2.20E+05	**1.15E+00**	5.80E+06	4.35E-02
600-302_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	9.2	1.00E+02	9.20E-02	1.87E+03	4.93E-03
600-302_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	340	2.00E+03	1.70E-01	1.40E+04	2.43E-02
600-302_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	10,600	3.00E+04	3.53E-01	3.26E+04	3.25E-01
600-302_Shallow_Focused	non-Rad	Nitrogen in Nitrate	NO3-N	µg/kg	1,300	No Value	--	No Value	--
600-302_Shallow_Focused	non-Rad	Nitrogen in Nitrite and Nitrate	NO2+NO3-N	µg/kg	850	No Value	--	No Value	--
600-302_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	27,500	2.00E+03	**1.38E+01**	3.11E+04	8.83E-01
600-302_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	122,000	5.00E+04	**2.44E+00**	6.78E+04	**1.80E+00**
600-341:1_Shallow_1_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	2,680	1.00E+04	2.68E-01	1.90E+05	1.41E-02
600-341:1_Shallow_1_Focused	non-Rad	Barium	7440-39-3	µg/kg	97,200	3.30E+05	2.95E-01	1.32E+06	7.35E-02
600-341:1_Shallow_1_Focused	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	1.4	1.80E+04	7.56E-05	6.40E+04	2.12E-05
600-341:1_Shallow_1_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	2.1	1.80E+04	1.14E-04	3.92E+04	5.23E-05
600-341:1_Shallow_1_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	316	1.00E+04	3.16E-02	1.39E+04	2.27E-02
600-341:1_Shallow_1_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,790	5.00E+02	**3.58E+00**	1.33E+05	1.35E-02
600-341:1_Shallow_1_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	1,860	4.00E+03	4.65E-01	1.63E+03	**1.14E+00**
600-341:1_Shallow_1_Focused	non-Rad	Chromium	7440-47-3	µg/kg	15,200	4.00E+02	**3.80E+01**	3.82E+04	3.98E-01
600-341:1_Shallow_1_Focused	non-Rad	Chrysene	218-01-9	µg/kg	2.1	1.80E+04	1.18E-04	4.45E+04	4.76E-05
600-341:1_Shallow_1_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	8,100	1.30E+04	6.23E-01	1.11E+05	7.26E-02
600-341:1_Shallow_1_Focused	non-Rad	Copper	7440-50-8	µg/kg	17,600	5.00E+04	3.52E-01	1.07E+05	1.64E-01
600-341:1_Shallow_1_Focused	non-Rad	Lead	7439-92-1	µg/kg	13,100	5.00E+04	2.62E-01	3.56E+04	3.68E-01
600-341:1_Shallow_1_Focused	non-Rad	Manganese	7439-96-5	µg/kg	563,000	2.20E+05	**2.56E+00**	5.80E+06	9.71E-02
600-341:1_Shallow_1_Focused	non-Rad	Mercury	7439-97-6	µg/kg	177	1.00E+02	**1.77E+00**	1.87E+03	9.48E-02
600-341:1_Shallow_1_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	472	2.00E+03	2.36E-01	1.40E+04	3.38E-02
600-341:1_Shallow_1_Focused	non-Rad	Nickel	7440-02-0	µg/kg	14,800	3.00E+04	4.93E-01	3.26E+04	4.54E-01
600-341:1_Shallow_1_Focused	non-Rad	Pyrene	129-00-0	µg/kg	2.3	1.80E+04	1.27E-04	6.00E+05	3.82E-06
600-341:1_Shallow_1_Focused	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling)	TPH/OILH	µg/kg	45,300	No Value	--	No Value	--
600-341:1_Shallow_1_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	64,700	2.00E+03	**3.24E+01**	3.11E+04	**2.08E+00**

Table 4. Comparison of 100-IU-2 Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
600-341:1_Shallow_1_Focused	non-Rad	Zinc	7440-66-6	µg/kg	317,000	5.00E+04	**6.34E+00**	6.78E+04	**4.68E+00**
600-341:1_Shallow_2_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	3,300	1.00E+04	3.30E-01	1.90E+05	1.74E-02
600-341:1_Shallow_2_Focused	non-Rad	Barium	7440-39-3	µg/kg	90,200	3.30E+05	2.73E-01	1.32E+06	6.82E-02
600-341:1_Shallow_2_Focused	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	7.0	1.80E+04	3.88E-04	6.40E+04	1.09E-04
600-341:1_Shallow_2_Focused	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	7.1	1.80E+04	3.93E-04	7.64E+04	9.25E-05
600-341:1_Shallow_2_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	12	1.80E+04	6.83E-04	3.92E+04	3.14E-04
600-341:1_Shallow_2_Focused	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	5.9	1.80E+04	3.25E-04	3.92E+04	1.49E-04
600-341:1_Shallow_2_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	449	1.00E+04	4.49E-02	1.39E+04	3.22E-02
600-341:1_Shallow_2_Focused	non-Rad	Boron	7440-42-8	µg/kg	2,970	5.00E+02	**5.94E+00**	1.33E+05	2.23E-02
600-341:1_Shallow_2_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	122	4.00E+03	3.05E-02	1.63E+03	7.49E-02
600-341:1_Shallow_2_Focused	non-Rad	Chromium	7440-47-3	µg/kg	15,800	4.00E+02	**3.95E+01**	3.82E+04	4.14E-01
600-341:1_Shallow_2_Focused	non-Rad	Chrysene	218-01-9	µg/kg	15	1.80E+04	8.06E-04	4.45E+04	3.26E-04
600-341:1_Shallow_2_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	8,080	1.30E+04	6.22E-01	1.11E+05	7.25E-02
600-341:1_Shallow_2_Focused	non-Rad	Copper	7440-50-8	µg/kg	14,800	5.00E+04	2.96E-01	1.07E+05	1.38E-01
600-341:1_Shallow_2_Focused	non-Rad	Dibenz[a,h]anthracene	53-70-3	µg/kg	1.2	1.80E+04	6.72E-05	4.41E+04	2.74E-05
600-341:1_Shallow_2_Focused	non-Rad	Fluoranthene	206-44-0	µg/kg	18	1.80E+04	9.72E-04	8.39E+05	2.09E-05
600-341:1_Shallow_2_Focused	non-Rad	Lead	7439-92-1	µg/kg	5,800	5.00E+04	1.16E-01	3.56E+04	1.63E-01
600-341:1_Shallow_2_Focused	non-Rad	Manganese	7439-96-5	µg/kg	423,000	2.20E+05	**1.92E+00**	5.80E+06	7.30E-02
600-341:1_Shallow_2_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	460	2.00E+03	2.30E-01	1.40E+04	3.29E-02
600-341:1_Shallow_2_Focused	non-Rad	Nickel	7440-02-0	µg/kg	12,000	3.00E+04	4.00E-01	3.26E+04	3.68E-01
600-341:1_Shallow_2_Focused	non-Rad	Pyrene	129-00-0	µg/kg	13	1.80E+04	7.28E-04	6.00E+05	2.18E-05
600-341:1_Shallow_2_Focused	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling)	TPH/OILH	µg/kg	29,500	No Value	--	No Value	--
600-341:1_Shallow_2_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	57,000	2.00E+03	**2.85E+01**	3.11E+04	**1.83E+00**
600-341:1_Shallow_2_Focused	non-Rad	Zinc	7440-66-6	µg/kg	106,000	5.00E+04	**2.12E+00**	6.78E+04	**1.56E+00**
600-341:2_Shallow_Focused	non-Rad	Acenaphthene	83-32-9	µg/kg	7.7	2.00E+04	3.84E-04	1.10E+06	7.01E-06
600-341:2_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	520	5.00E+03	1.04E-01	5.98E+03	8.69E-02
600-341:2_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	3,060	1.00E+04	3.06E-01	1.90E+05	1.61E-02
600-341:2_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	137,000	3.30E+05	4.15E-01	1.32E+06	1.04E-01
600-341:2_Shallow_Focused	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	4.8	1.80E+04	2.66E-04	6.40E+04	7.48E-05
600-341:2_Shallow_Focused	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	5.5	1.80E+04	3.03E-04	7.64E+04	7.13E-05
600-341:2_Shallow_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	5.5	1.80E+04	3.03E-04	3.92E+04	1.39E-04
600-341:2_Shallow_Focused	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	2.2	1.80E+04	1.19E-04	3.92E+04	5.48E-05
600-341:2_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	316	1.00E+04	3.16E-02	1.39E+04	2.27E-02
600-341:2_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	2,610	5.00E+02	**5.22E+00**	1.33E+05	1.96E-02
600-341:2_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	233	4.00E+03	5.83E-02	1.63E+03	1.43E-01
600-341:2_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	15,900	4.00E+02	**3.98E+01**	3.82E+04	4.17E-01
600-341:2_Shallow_Focused	non-Rad	Chrysene	218-01-9	µg/kg	5.6	1.80E+04	3.12E-04	4.45E+04	1.26E-04
600-341:2_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	6,900	1.30E+04	5.31E-01	1.11E+05	6.19E-02
600-341:2_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	15,000	5.00E+04	3.00E-01	1.07E+05	1.40E-01
600-341:2_Shallow_Focused	non-Rad	Dibenz[a,h]anthracene	53-70-3	µg/kg	4.6	1.80E+04	2.57E-04	4.41E+04	1.05E-04
600-341:2_Shallow_Focused	non-Rad	Fluoranthene	206-44-0	µg/kg	13	1.80E+04	7.33E-04	8.39E+05	1.57E-05
600-341:2_Shallow_Focused	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	2.0	1.80E+04	1.11E-04	3.57E+04	5.61E-05
600-341:2_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	9,820	5.00E+04	1.96E-01	3.56E+04	2.76E-01
600-341:2_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	374,000	2.20E+05	**1.70E+00**	5.80E+06	6.45E-02
600-341:2_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	544	2.00E+03	2.72E-01	1.40E+04	3.90E-02
600-341:2_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	11,600	3.00E+04	3.87E-01	3.26E+04	3.56E-01
600-341:2_Shallow_Focused	non-Rad	Pyrene	129-00-0	µg/kg	8.8	1.80E+04	4.86E-04	6.00E+05	1.46E-05
600-341:2_Shallow_Focused	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling)	TPH/OILH	µg/kg	58,600	No Value	--	No Value	--
600-341:2_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	48,100	2.00E+03	**2.41E+01**	3.11E+04	**1.55E+00**
600-341:2_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	119,000	5.00E+04	**2.38E+00**	6.78E+04	**1.76E+00**
600-343_Shallow_Focused	non-Rad	Acenaphthene	83-32-9	µg/kg	11	2.00E+04	5.25E-04	1.10E+06	9.58E-06
600-343_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	5,130	1.00E+04	5.13E-01	1.90E+05	2.71E-02
600-343_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	56,100	3.30E+05	1.70E-01	1.32E+06	4.24E-02
600-343_Shallow_Focused	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	2.2	1.80E+04	1.24E-04	6.40E+04	3.50E-05
600-343_Shallow_Focused	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	1.8	1.80E+04	9.94E-05	7.64E+04	2.34E-05
600-343_Shallow_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	3.9	1.80E+04	2.14E-04	3.92E+04	9.84E-05
600-343_Shallow_Focused	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	1.9	1.80E+04	1.08E-04	3.92E+04	4.95E-05
600-343_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	205	1.00E+04	2.05E-02	1.39E+04	1.47E-02
600-343_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	894	5.00E+02	**1.79E+00**	1.33E+05	6.73E-03
600-343_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	53	4.00E+03	1.33E-02	1.63E+03	3.25E-02
600-343_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	7,010	4.00E+02	**1.75E+01**	3.82E+04	1.84E-01
600-343_Shallow_Focused	non-Rad	Chrysene	218-01-9	µg/kg	0.88	1.80E+04	4.88E-05	4.45E+04	1.97E-05
600-343_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	9,840	1.30E+04	7.57E-01	1.11E+05	8.83E-02
600-343_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	16,300	5.00E+04	3.26E-01	1.07E+05	1.52E-01
600-343_Shallow_Focused	non-Rad	Fluoranthene	206-44-0	µg/kg	19	1.80E+04	1.05E-03	8.39E+05	2.25E-05
600-343_Shallow_Focused	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	16	1.80E+04	8.72E-04	3.57E+04	4.40E-04
600-343_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	4,260	5.00E+04	8.52E-02	3.56E+04	1.20E-01
600-343_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	386,000	2.20E+05	**1.75E+00**	5.80E+06	6.66E-02
600-343_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	11	1.00E+02	1.10E-01	1.87E+03	5.89E-03
600-343_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	402	2.00E+03	2.01E-01	1.40E+04	2.88E-02
600-343_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	8,170	3.00E+04	2.72E-01	3.26E+04	2.51E-01

Table 4. Comparison of 100-IU-2 Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
600-343_Shallow_Focused	non-Rad	Pyrene	129-00-0	µg/kg	1.5	1.80E+04	8.22E-05	6.00E+05	2.47E-06
600-343_Shallow_Focused	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling)	TPH/OILH	µg/kg	41,900	No Value	--	No Value	--
600-343_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	82,300	2.00E+03	**4.12E+01**	3.11E+04	**2.64E+00**
600-343_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	53,500	5.00E+04	**1.07E+00**	6.78E+04	7.89E-01
600-344_Shallow_Focused	non-Rad	Acenaphthene	83-32-9	µg/kg	18	2.00E+04	8.85E-04	1.10E+06	1.62E-05
600-344_Shallow_Focused	non-Rad	Anthracene	120-12-7	µg/kg	1.3	2.90E+04	4.45E-05	6.78E+05	1.90E-06
600-344_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	400	5.00E+03	8.00E-02	5.98E+03	6.68E-02
600-344_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	3,050	1.00E+04	3.05E-01	1.90E+05	1.61E-02
600-344_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	62,200	3.30E+05	1.88E-01	1.32E+06	4.70E-02
600-344_Shallow_Focused	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	14	1.80E+04	7.89E-04	6.40E+04	2.22E-04
600-344_Shallow_Focused	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	10	1.80E+04	5.61E-04	7.64E+04	1.32E-04
600-344_Shallow_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	8.0	1.80E+04	4.43E-04	3.92E+04	2.03E-04
600-344_Shallow_Focused	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	3.7	1.80E+04	2.06E-04	3.92E+04	9.46E-05
600-344_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	228	1.00E+04	2.28E-02	1.39E+04	1.63E-02
600-344_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,850	5.00E+02	**3.70E+00**	1.33E+05	1.39E-02
600-344_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	99	4.00E+03	2.48E-02	1.63E+03	6.07E-02
600-344_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	12,700	4.00E+02	**3.18E+01**	3.82E+04	3.33E-01
600-344_Shallow_Focused	non-Rad	Chrysene	218-01-9	µg/kg	9.1	1.80E+04	5.04E-04	4.45E+04	2.04E-04
600-344_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	5,410	1.30E+04	4.16E-01	1.11E+05	4.85E-02
600-344_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	9,310	5.00E+04	1.86E-01	1.07E+05	8.70E-02
600-344_Shallow_Focused	non-Rad	Fluoranthene	206-44-0	µg/kg	26	1.80E+04	1.42E-03	8.39E+05	3.04E-05
600-344_Shallow_Focused	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	4.9	1.80E+04	2.71E-04	3.57E+04	1.37E-04
600-344_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	6,410	5.00E+04	1.28E-01	3.56E+04	1.80E-01
600-344_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	262,000	2.20E+05	**1.19E+00**	5.80E+06	4.52E-02
600-344_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	350	2.00E+03	1.75E-01	1.40E+04	2.51E-02
600-344_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	10,200	3.00E+04	3.40E-01	3.26E+04	3.13E-01
600-344_Shallow_Focused	non-Rad	Pyrene	129-00-0	µg/kg	28	1.80E+04	1.55E-03	6.00E+05	4.65E-05
600-344_Shallow_Focused	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling)	TPH/OILH	µg/kg	37,300	No Value	--	No Value	--
600-344_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	43,700	2.00E+03	**2.19E+01**	3.11E+04	**1.40E+00**
600-344_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	39,000	5.00E+04	7.80E-01	6.78E+04	5.75E-01
600-345_Shallow_Focused	non-Rad	Acenaphthene	83-32-9	µg/kg	1.5	2.00E+04	7.40E-05	1.10E+06	1.35E-06
600-345_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	3,060	1.00E+04	3.06E-01	1.90E+05	1.61E-02
600-345_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	98,400	3.30E+05	2.98E-01	1.32E+06	7.44E-02
600-345_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	346	1.00E+04	3.46E-02	1.39E+04	2.48E-02
600-345_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,960	5.00E+02	**3.92E+00**	1.33E+05	1.47E-02
600-345_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	70	4.00E+03	1.75E-02	1.63E+03	4.29E-02
600-345_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	18,100	4.00E+02	**4.53E+01**	3.82E+04	4.74E-01
600-345_Shallow_Focused	non-Rad	Chrysene	218-01-9	µg/kg	1.0	1.80E+04	5.78E-05	4.45E+04	2.34E-05
600-345_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	8,010	1.30E+04	6.16E-01	1.11E+05	7.18E-02
600-345_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	15,600	5.00E+04	3.12E-01	1.07E+05	1.46E-01
600-345_Shallow_Focused	non-Rad	Fluoranthene	206-44-0	µg/kg	2.0	1.80E+04	1.12E-04	8.39E+05	2.41E-06
600-345_Shallow_Focused	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	6.0	1.80E+04	3.32E-04	3.57E+04	1.67E-04
600-345_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	4,860	5.00E+04	9.72E-02	3.56E+04	1.37E-01
600-345_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	417,000	2.20E+05	**1.90E+00**	5.80E+06	7.19E-02
600-345_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	14	1.00E+02	1.40E-01	1.87E+03	7.50E-03
600-345_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	328	2.00E+03	1.64E-01	1.40E+04	2.35E-02
600-345_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	13,000	3.00E+04	4.33E-01	3.26E+04	3.99E-01
600-345_Shallow_Focused	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling)	TPH/OILH	µg/kg	156,000	No Value	--	No Value	--
600-345_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	67,000	2.00E+03	**3.35E+01**	3.11E+04	**2.15E+00**
600-345_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	44,000	5.00E+04	8.80E-01	6.78E+04	6.49E-01
600-346_Shallow	non-Rad	2-Methylnaphthalene	91-57-6	µg/kg	65	2.90E+04	2.25E-03	6.01E+03	1.09E-02
600-346_Shallow	non-Rad	Acenaphthene	83-32-9	µg/kg	62	2.00E+04	3.10E-03	1.10E+06	5.65E-05
600-346_Shallow	non-Rad	Anthracene	120-12-7	µg/kg	2.3	2.90E+04	7.90E-05	6.78E+05	3.38E-06
600-346_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	2,919	1.00E+04	2.92E-01	1.90E+05	1.54E-02
600-346_Shallow	non-Rad	Barium	7440-39-3	µg/kg	86,200	3.30E+05	2.61E-01	1.32E+06	6.52E-02
600-346_Shallow	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	4.3	1.80E+04	2.40E-04	6.40E+04	6.74E-05
600-346_Shallow	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	4.7	1.80E+04	2.62E-04	7.64E+04	6.18E-05
600-346_Shallow	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	3.8	1.80E+04	2.09E-04	3.92E+04	9.61E-05
600-346_Shallow	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	1.7	1.80E+04	9.22E-05	3.92E+04	4.23E-05
600-346_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	353	1.00E+04	3.53E-02	1.39E+04	2.53E-02
600-346_Shallow	non-Rad	beta-1,2,3,4,5,6-Hexachlorocyclohexane (beta-BHC)	319-85-7	µg/kg	2.9	No Value	--	4.08E+03	7.02E-04
600-346_Shallow	non-Rad	Boron	7440-42-8	µg/kg	2,588	5.00E+02	**5.18E+00**	1.33E+05	1.95E-02
600-346_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	67	4.00E+03	1.68E-02	1.63E+03	4.11E-02
600-346_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	13,778	4.00E+02	**3.44E+01**	3.82E+04	3.61E-01
600-346_Shallow	non-Rad	Chrysene	218-01-9	µg/kg	167	1.80E+04	9.28E-03	4.45E+04	3.75E-03
600-346_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	8,198	1.30E+04	6.31E-01	1.11E+05	7.35E-02
600-346_Shallow	non-Rad	Copper	7440-50-8	µg/kg	15,408	5.00E+04	3.08E-01	1.07E+05	1.44E-01
600-346_Shallow	non-Rad	Dibenz[a,h]anthracene	53-70-3	µg/kg	18	1.80E+04	9.72E-04	4.41E+04	3.97E-04
600-346_Shallow	non-Rad	Endosulfan I	959-98-8	µg/kg	3.1	No Value	--	7.10E+02	4.38E-03
600-346_Shallow	non-Rad	Fluoranthene	206-44-0	µg/kg	127	1.80E+04	7.06E-03	8.39E+05	1.51E-04
600-346_Shallow	non-Rad	Fluorene	86-73-7	µg/kg	24	2.90E+04	8.11E-04	1.75E+05	1.34E-04

Table 4. Comparison of 100-IU-2 Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
600-346_Shallow	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	15	1.80E+04	8.33E-04	3.57E+04	4.20E-04
600-346_Shallow	non-Rad	Lead	7439-92-1	µg/kg	5,209	5.00E+04	1.04E-01	3.56E+04	1.46E-01
600-346_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	397,658	2.20E+05	**1.81E+00**	5.80E+06	6.86E-02
600-346_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	443	2.00E+03	2.22E-01	1.40E+04	3.17E-02
600-346_Shallow	non-Rad	Naphthalene	91-20-3	µg/kg	97	2.90E+04	3.33E-03	1.00E+05	9.67E-04
600-346_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	11,884	3.00E+04	3.96E-01	3.26E+04	3.65E-01
600-346_Shallow	non-Rad	Pyrene	129-00-0	µg/kg	9.1	1.80E+04	5.04E-04	6.00E+05	1.51E-05
600-346_Shallow	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	µg/kg	24,225	2.00E+05	1.21E-01	3.56E+08	6.80E-05
600-346_Shallow	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling)	TPH/OILH	µg/kg	77,961	No Value	--	No Value	--
600-346_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	54,091	2.00E+03	**2.70E+01**	3.11E+04	**1.74E+00**
600-346_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	42,531	5.00E+04	8.51E-01	6.78E+04	6.27E-01
600-5_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	415	5.00E+03	8.30E-02	5.98E+03	6.93E-02
600-5_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	3,570	1.00E+04	3.57E-01	1.90E+05	1.88E-02
600-5_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	84,500	3.30E+05	2.56E-01	1.32E+06	6.39E-02
600-5_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	338	1.00E+04	3.38E-02	1.39E+04	2.42E-02
600-5_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	2,080	5.00E+02	**4.16E+00**	1.33E+05	1.56E-02
600-5_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	135	4.00E+03	3.38E-02	1.63E+03	8.28E-02
600-5_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	13,400	4.00E+02	**3.35E+01**	3.82E+04	3.51E-01
600-5_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	6,890	1.30E+04	5.30E-01	1.11E+05	6.18E-02
600-5_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	12,100	5.00E+04	2.42E-01	1.07E+05	1.13E-01
600-5_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	4,150	5.00E+04	8.30E-02	3.56E+04	1.17E-01
600-5_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	327,000	2.20E+05	**1.49E+00**	5.80E+06	5.64E-02
600-5_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	362	2.00E+03	1.81E-01	1.40E+04	2.59E-02
600-5_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	10,700	3.00E+04	3.57E-01	3.26E+04	3.28E-01
600-5_Shallow_Focused	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling)	TPH/OILH	µg/kg	23,900	No Value	--	No Value	--
600-5_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	59,400	2.00E+03	**2.97E+01**	3.11E+04	**1.91E+00**
600-5_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	40,700	5.00E+04	8.14E-01	6.78E+04	6.00E-01
600-5_Staging Pile Area_Focused	non-Rad	Antimony	7440-36-0	µg/kg	335	5.00E+03	6.70E-02	5.98E+03	5.60E-02
600-5_Staging Pile Area_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	3,410	1.00E+04	3.41E-01	1.90E+05	1.80E-02
600-5_Staging Pile Area_Focused	non-Rad	Barium	7440-39-3	µg/kg	90,700	3.30E+05	2.75E-01	1.32E+06	6.86E-02
600-5_Staging Pile Area_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	335	1.00E+04	3.35E-02	1.39E+04	2.40E-02
600-5_Staging Pile Area_Focused	non-Rad	Boron	7440-42-8	µg/kg	2,260	5.00E+02	**4.52E+00**	1.33E+05	1.70E-02
600-5_Staging Pile Area_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	149	4.00E+03	3.73E-02	1.63E+03	9.14E-02
600-5_Staging Pile Area_Focused	non-Rad	Chromium	7440-47-3	µg/kg	13,100	4.00E+02	**3.28E+01**	3.82E+04	3.43E-01
600-5_Staging Pile Area_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	6,760	1.30E+04	5.20E-01	1.11E+05	6.06E-02
600-5_Staging Pile Area_Focused	non-Rad	Copper	7440-50-8	µg/kg	12,200	5.00E+04	2.44E-01	1.07E+05	1.14E-01
600-5_Staging Pile Area_Focused	non-Rad	Lead	7439-92-1	µg/kg	5,190	5.00E+04	1.04E-01	3.56E+04	1.46E-01
600-5_Staging Pile Area_Focused	non-Rad	Manganese	7439-96-5	µg/kg	330,000	2.20E+05	**1.50E+00**	5.80E+06	5.69E-02
600-5_Staging Pile Area_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	344	2.00E+03	1.72E-01	1.40E+04	2.46E-02
600-5_Staging Pile Area_Focused	non-Rad	Nickel	7440-02-0	µg/kg	10,500	3.00E+04	3.50E-01	3.26E+04	3.22E-01
600-5_Staging Pile Area_Focused	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling)	TPH/OILH	µg/kg	33,600	No Value	--	No Value	--
600-5_Staging Pile Area_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	57,100	2.00E+03	**2.86E+01**	3.11E+04	**1.83E+00**
600-5_Staging Pile Area_Focused	non-Rad	Zinc	7440-66-6	µg/kg	42,300	5.00E+04	8.46E-01	6.78E+04	6.24E-01
628-1_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	3,000	1.00E+04	3.00E-01	1.90E+05	1.58E-02
628-1_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	83,000	3.30E+05	2.52E-01	1.32E+06	6.27E-02
628-1_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	54	1.00E+05	5.40E-04	4.54E+04	1.19E-03
628-1_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	13,600	4.00E+02	**3.40E+01**	3.82E+04	3.56E-01
628-1_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	5,100	5.00E+04	1.02E-01	3.56E+04	1.43E-01
628-1_Shallow_Focused	non-Rad	Total petroleum hydrocarbons	TPH	µg/kg	9,400	No Value	--	No Value	--

Table 5. Comparison of 100-IU-6 Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
600-107_Shallow_Focused	Rad	Cesium-137	10045-97-3	pCi/g	0.084	2.21E+03	3.80E-05	9.24E+02	9.09E-05
600-107_Shallow_Focused	Rad	Rads SOF	---	pCi/g	--	--	3.80E-05	--	9.09E-05
600-108 and 600-257_Shallow_Focused	non-Rad	Acenaphthene	83-32-9	µg/kg	45	2.00E+04	2.26E-03	1.10E+06	4.12E-05
600-108 and 600-257_Shallow_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	10	1.80E+04	5.61E-04	3.92E+04	2.57E-04
600-108 and 600-257_Shallow_Focused	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	2.5	1.80E+04	1.38E-04	3.92E+04	6.32E-05
600-108 and 600-257_Shallow_Focused	non-Rad	Chrysene	218-01-9	µg/kg	1.9	1.80E+04	1.04E-04	4.45E+04	4.20E-05
600-108 and 600-257_Shallow_Focused	non-Rad	Fluoranthene	206-44-0	µg/kg	10	1.80E+04	5.72E-04	8.39E+05	1.23E-05
600-108 and 600-257_Shallow_Focused	non-Rad	Pyrene	129-00-0	µg/kg	20	1.80E+04	1.09E-03	6.00E+05	3.27E-05
600-108 and 600-257_Staging Pile Area I	non-Rad	Acenaphthene	83-32-9	µg/kg	0.89	2.00E+04	4.47E-05	1.10E+06	8.15E-07
600-108 and 600-257_Staging Pile Area I	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	0.91	1.80E+04	5.05E-05	3.92E+04	2.32E-05
600-108 and 600-257_Staging Pile Area I	non-Rad	Fluoranthene	206-44-0	µg/kg	3.3	1.80E+04	1.86E-04	8.39E+05	3.98E-06
600-109_Overburden_Focused	non-Rad	Acenaphthene	83-32-9	µg/kg	6.0	2.00E+04	3.00E-04	1.10E+06	5.47E-06
600-109_Overburden_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	15,300	1.00E+04	**1.53E+00**	1.90E+05	8.07E-02
600-109_Overburden_Focused	non-Rad	Barium	7440-39-3	µg/kg	99,000	3.30E+05	3.00E-01	1.32E+06	7.48E-02
600-109_Overburden_Focused	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	1.8	1.80E+04	1.00E-04	6.40E+04	2.81E-05
600-109_Overburden_Focused	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	2.0	1.80E+04	1.13E-04	7.64E+04	2.67E-05
600-109_Overburden_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	2.5	1.80E+04	1.36E-04	3.92E+04	6.25E-05
600-109_Overburden_Focused	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	1.3	1.80E+04	7.33E-05	3.92E+04	3.37E-05
600-109_Overburden_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	312	1.00E+04	3.12E-02	1.39E+04	2.24E-02
600-109_Overburden_Focused	non-Rad	Boron	7440-42-8	µg/kg	2,530	5.00E+02	**5.06E+00**	1.33E+05	1.90E-02
600-109_Overburden_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	191	4.00E+03	4.78E-02	1.63E+03	1.17E-01
600-109_Overburden_Focused	non-Rad	Chromium	7440-47-3	µg/kg	13,300	4.00E+02	**3.33E+01**	3.82E+04	3.48E-01
600-109_Overburden_Focused	non-Rad	Chrysene	218-01-9	µg/kg	2.3	1.80E+04	1.28E-04	4.45E+04	5.19E-05
600-109_Overburden_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	7,520	1.30E+04	5.78E-01	1.11E+05	6.74E-02
600-109_Overburden_Focused	non-Rad	Copper	7440-50-8	µg/kg	12,000	5.00E+04	2.40E-01	1.07E+05	1.12E-01
600-109_Overburden_Focused	non-Rad	Fluoranthene	206-44-0	µg/kg	14	1.80E+04	7.78E-04	8.39E+05	1.67E-05
600-109_Overburden_Focused	non-Rad	Lead	7439-92-1	µg/kg	71,900	5.00E+04	**1.44E+00**	3.56E+04	**2.02E+00**
	non-Rad	Manganese	7439-96-5	µg/kg	354,000	2.20E+05	**1.61E+00**	5.80E+06	6.11E-02
600-109_Overburden_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	233	2.00E+03	1.17E-01	1.40E+04	1.67E-02
600-109_Overburden_Focused	non-Rad	Nickel	7440-02-0	µg/kg	10,800	3.00E+04	3.60E-01	3.26E+04	3.31E-01
600-109_Overburden_Focused	non-Rad	Pyrene	129-00-0	µg/kg	3.6	1.80E+04	1.98E-04	6.00E+05	5.95E-06
600-109_Overburden_Focused	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling)	TPH/OILH	µg/kg	26,600	No Value	--	No Value	--
600-109_Overburden_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	54,500	2.00E+03	**2.73E+01**	3.11E+04	**1.75E+00**
600-109_Overburden_Focused	non-Rad	Zinc	7440-66-6	µg/kg	52,800	5.00E+04	**1.06E+00**	6.78E+04	7.79E-01
600-109_Shallow	non-Rad	Anthracene	120-12-7	µg/kg	1.4	2.90E+04	4.97E-05	6.78E+05	2.12E-06
600-109_Shallow	non-Rad	Antimony	7440-36-0	µg/kg	375	5.00E+03	7.50E-02	5.98E+03	6.27E-02
600-109_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	7,746	1.00E+04	7.75E-01	1.90E+05	4.09E-02
600-109_Shallow	non-Rad	Barium	7440-39-3	µg/kg	87,937	3.30E+05	2.66E-01	1.32E+06	6.65E-02
600-109_Shallow	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	6.2	1.80E+04	3.42E-04	6.40E+04	9.62E-05
600-109_Shallow	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	5.6	1.80E+04	3.13E-04	7.64E+04	7.38E-05
600-109_Shallow	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	10	1.80E+04	5.67E-04	3.92E+04	2.60E-04
600-109_Shallow	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	3.8	1.80E+04	2.11E-04	3.92E+04	9.66E-05
600-109_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	250	1.00E+04	2.50E-02	1.39E+04	1.79E-02
600-109_Shallow	non-Rad	Boron	7440-42-8	µg/kg	1,045	5.00E+02	**2.09E+00**	1.33E+05	7.86E-03
600-109_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	116	4.00E+03	2.91E-02	1.63E+03	7.15E-02
600-109_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	8,803	4.00E+02	**2.20E+01**	3.82E+04	2.31E-01
600-109_Shallow	non-Rad	Chrysene	218-01-9	µg/kg	6.4	1.80E+04	3.55E-04	4.45E+04	1.44E-04
600-109_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	9,870	1.30E+04	7.59E-01	1.11E+05	8.85E-02
600-109_Shallow	non-Rad	Copper	7440-50-8	µg/kg	15,671	5.00E+04	3.13E-01	1.07E+05	1.46E-01
600-109_Shallow	non-Rad	Fluoranthene	206-44-0	µg/kg	7.0	1.80E+04	3.88E-04	8.39E+05	8.32E-06
600-109_Shallow	non-Rad	Fluorene	86-73-7	µg/kg	1.6	2.90E+04	5.48E-05	1.75E+05	9.07E-06
600-109_Shallow	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	15	1.80E+04	8.39E-04	3.57E+04	4.23E-04
600-109_Shallow	non-Rad	Lead	7439-92-1	µg/kg	16,219	5.00E+04	3.24E-01	3.56E+04	4.56E-01
600-109_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	368,917	2.20E+05	**1.68E+00**	5.80E+06	6.36E-02
600-109_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	378	2.00E+03	1.89E-01	1.40E+04	2.71E-02
600-109_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	11,238	3.00E+04	3.75E-01	3.26E+04	3.45E-01
600-109_Shallow	non-Rad	Pyrene	129-00-0	µg/kg	3.0	1.80E+04	1.67E-04	6.00E+05	5.00E-06
600-109_Shallow	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling)	TPH/OILH	µg/kg	8,926	No Value	--	No Value	--
600-109_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	80,728	2.00E+03	**4.04E+01**	3.11E+04	**2.59E+00**
600-109_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	52,684	5.00E+04	**1.05E+00**	6.78E+04	7.77E-01
600-109_Shallow_Focused	non-Rad	Anthracene	120-12-7	µg/kg	0.88	2.90E+04	3.04E-05	6.78E+05	1.30E-06
600-109_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	6,070	1.00E+04	6.07E-01	1.90E+05	3.20E-02
600-109_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	84,500	3.30E+05	2.56E-01	1.32E+06	6.39E-02

Table 5. Comparison of 100-IU-6 Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
600-109_Shallow_Focused	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	4.8	1.80E+04	2.64E-04	6.40E+04	7.44E-05
600-109_Shallow_Focused	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	3.1	1.80E+04	1.69E-04	7.64E+04	3.99E-05
600-109_Shallow_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	2.4	1.80E+04	1.32E-04	3.92E+04	6.07E-05
600-109_Shallow_Focused	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	1.1	1.80E+04	6.22E-05	3.92E+04	2.86E-05
600-109_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	269	1.00E+04	2.69E-02	1.39E+04	1.93E-02
600-109_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,700	5.00E+02	**3.40E+00**	1.33E+05	1.28E-02
600-109_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	113	4.00E+03	2.83E-02	1.63E+03	6.93E-02
600-109_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	10,900	4.00E+02	**2.73E+01**	3.82E+04	2.86E-01
600-109_Shallow_Focused	non-Rad	Chrysene	218-01-9	µg/kg	3.0	1.80E+04	1.64E-04	4.45E+04	6.63E-05
600-109_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	7,340	1.30E+04	5.65E-01	1.11E+05	6.58E-02
600-109_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	16,400	5.00E+04	3.28E-01	1.07E+05	1.53E-01
600-109_Shallow_Focused	non-Rad	Fluoranthene	206-44-0	µg/kg	7.5	1.80E+04	4.14E-04	8.39E+05	8.89E-06
600-109_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	24,700	5.00E+04	4.94E-01	3.56E+04	6.94E-01
600-109_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	307,000	2.20E+05	**1.40E+00**	5.80E+06	5.29E-02
600-109_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	190	2.00E+03	9.50E-02	1.40E+04	1.36E-02
600-109_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	10,600	3.00E+04	3.53E-01	3.26E+04	3.25E-01
600-109_Shallow_Focused	non-Rad	Pyrene	129-00-0	µg/kg	8.4	1.80E+04	4.65E-04	6.00E+05	1.39E-05
600-109_Shallow_Focused	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling)	TPH/OILH	µg/kg	6,950	No Value	--	No Value	--
600-109_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	52,500	2.00E+03	**2.63E+01**	3.11E+04	**1.69E+00**
600-109_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	45,600	5.00E+04	9.12E-01	6.78E+04	6.73E-01
600-109_Staging Pile Area	non-Rad	Acenaphthene	83-32-9	µg/kg	30	2.00E+04	1.50E-03	1.10E+06	2.74E-05
600-109_Staging Pile Area	non-Rad	Anthracene	120-12-7	µg/kg	2.1	2.90E+04	7.31E-05	6.78E+05	3.13E-06
600-109_Staging Pile Area	non-Rad	Antimony	7440-36-0	µg/kg	781	5.00E+03	1.56E-01	5.98E+03	1.31E-01
600-109_Staging Pile Area	non-Rad	Arsenic	7440-38-2	µg/kg	24,017	1.00E+04	**2.40E+00**	1.90E+05	1.27E-01
600-109_Staging Pile Area	non-Rad	Barium	7440-39-3	µg/kg	95,226	3.30E+05	2.89E-01	1.32E+06	7.20E-02
600-109_Staging Pile Area	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	2.9	1.80E+04	1.60E-04	6.40E+04	4.49E-05
600-109_Staging Pile Area	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	4.7	1.80E+04	2.62E-04	7.64E+04	6.17E-05
600-109_Staging Pile Area	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	5.3	1.80E+04	2.92E-04	3.92E+04	1.34E-04
600-109_Staging Pile Area	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	1.9	1.80E+04	1.06E-04	3.92E+04	4.87E-05
600-109_Staging Pile Area	non-Rad	Beryllium	7440-41-7	µg/kg	284	1.00E+04	2.84E-02	1.39E+04	2.04E-02
600-109_Staging Pile Area	non-Rad	Boron	7440-42-8	µg/kg	2,068	5.00E+02	**4.14E+00**	1.33E+05	1.56E-02
600-109_Staging Pile Area	non-Rad	Cadmium	7440-43-9	µg/kg	186	4.00E+03	4.64E-02	1.63E+03	1.14E-01
600-109_Staging Pile Area	non-Rad	Chromium	7440-47-3	µg/kg	11,217	4.00E+02	**2.80E+01**	3.82E+04	2.94E-01
600-109_Staging Pile Area	non-Rad	Cobalt	7440-48-4	µg/kg	7,697	1.30E+04	5.92E-01	1.11E+05	6.90E-02
600-109_Staging Pile Area	non-Rad	Copper	7440-50-8	µg/kg	14,532	5.00E+04	2.91E-01	1.07E+05	1.36E-01
600-109_Staging Pile Area	non-Rad	Dibenz[a,h]anthracene	53-70-3	µg/kg	1.4	1.80E+04	7.54E-05	4.41E+04	3.07E-05
600-109_Staging Pile Area	non-Rad	Fluoranthene	206-44-0	µg/kg	14	1.80E+04	7.81E-04	8.39E+05	1.68E-05
600-109_Staging Pile Area	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	15	1.80E+04	8.29E-04	3.57E+04	4.18E-04
600-109_Staging Pile Area	non-Rad	Lead	7439-92-1	µg/kg	125,620	5.00E+04	**2.51E+00**	3.56E+04	**3.53E+00**
600-109_Staging Pile Area	non-Rad	Manganese	7439-96-5	µg/kg	357,262	2.20E+05	**1.62E+00**	5.80E+06	6.16E-02
600-109_Staging Pile Area	non-Rad	Molybdenum	7439-98-7	µg/kg	456	2.00E+03	2.28E-01	1.40E+04	3.27E-02
600-109_Staging Pile Area	non-Rad	Nickel	7440-02-0	µg/kg	10,405	3.00E+04	3.47E-01	3.26E+04	3.19E-01
600-109_Staging Pile Area	non-Rad	Pyrene	129-00-0	µg/kg	3.0	1.80E+04	1.69E-04	6.00E+05	5.08E-06
600-109_Staging Pile Area	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	µg/kg	16,487	2.00E+05	8.24E-02	3.56E+08	4.63E-05
600-109_Staging Pile Area	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling)	TPH/OILH	µg/kg	30,132	No Value	--	No Value	--
600-109_Staging Pile Area	non-Rad	Vanadium	7440-62-2	µg/kg	53,018	2.00E+03	**2.65E+01**	3.11E+04	**1.70E+00**
600-109_Staging Pile Area	non-Rad	Zinc	7440-66-6	µg/kg	67,999	5.00E+04	**1.36E+00**	6.78E+04	**1.00E+00**
600-111_Shallow	non-Rad	Antimony	7440-36-0	µg/kg	1,200	5.00E+03	2.40E-01	5.98E+03	2.01E-01
600-111_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	5,253	1.00E+04	5.25E-01	1.90E+05	2.77E-02
600-111_Shallow	non-Rad	Barium	7440-39-3	µg/kg	150,934	3.30E+05	4.57E-01	1.32E+06	1.14E-01
600-111_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	967	1.00E+04	9.67E-02	1.39E+04	6.93E-02
600-111_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	37	1.00E+05	3.71E-04	4.54E+04	8.17E-04
600-111_Shallow	non-Rad	Boron	7440-42-8	µg/kg	1,200	5.00E+02	**2.40E+00**	1.33E+05	9.03E-03
600-111_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	11,678	4.00E+02	**2.92E+01**	3.82E+04	3.06E-01
600-111_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	10,665	1.30E+04	8.20E-01	1.11E+05	9.57E-02
600-111_Shallow	non-Rad	Copper	7440-50-8	µg/kg	22,631	5.00E+04	4.53E-01	1.07E+05	2.11E-01
600-111_Shallow	non-Rad	Isophorone	78-59-1	µg/kg	20	No Value	--	No Value	--
600-111_Shallow	non-Rad	Lead	7439-92-1	µg/kg	11,659	5.00E+04	2.33E-01	3.56E+04	3.28E-01
600-111_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	513,612	2.20E+05	**2.33E+00**	5.80E+06	8.86E-02
600-111_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	30	1.00E+02	3.00E-01	1.87E+03	1.61E-02
600-111_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	1,074	2.00E+03	5.37E-01	1.40E+04	7.69E-02
600-111_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	14,865	3.00E+04	4.96E-01	3.26E+04	4.56E-01
600-111_Shallow	non-Rad	Pyrene	129-00-0	µg/kg	18	1.80E+04	1.00E-03	6.00E+05	3.00E-05

Table 5. Comparison of 100-IU-6 Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
600-111_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	75,684	2.00E+03	**3.78E+01**	3.11E+04	**2.43E+00**
600-111_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	62,190	5.00E+04	**1.24E+00**	6.78E+04	9.17E-01
600-111_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	200	5.00E+03	4.00E-02	5.98E+03	3.34E-02
600-111_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	8,700	1.00E+04	8.70E-01	1.90E+05	4.59E-02
600-111_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	138,000	3.30E+05	4.18E-01	1.32E+06	1.04E-01
600-111_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	660	1.00E+04	6.60E-02	1.39E+04	4.73E-02
600-111_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,500	5.00E+02	**3.00E+00**	1.33E+05	1.13E-02
600-111_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	360	4.00E+03	9.00E-02	1.63E+03	2.21E-01
600-111_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	17,900	4.00E+02	**4.48E+01**	3.82E+04	4.69E-01
600-111_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	9,700	1.30E+04	7.46E-01	1.11E+05	8.70E-02
600-111_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	29,100	5.00E+04	5.82E-01	1.07E+05	2.72E-01
600-111_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	19,400	5.00E+04	3.88E-01	3.56E+04	5.45E-01
600-111_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	441,000	2.20E+05	**2.00E+00**	5.80E+06	7.61E-02
600-111_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	20	1.00E+02	2.00E-01	1.87E+03	1.07E-02
600-111_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	540	2.00E+03	2.70E-01	1.40E+04	3.87E-02
600-111_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	23,600	3.00E+04	7.87E-01	3.26E+04	7.24E-01
600-111_Shallow_Focused	non-Rad	Selenium	7782-49-2	µg/kg	290	5.20E+02	5.58E-01	1.90E+03	1.53E-01
600-111_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	60,400	2.00E+03	**3.02E+01**	3.11E+04	**1.94E+00**
600-111_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	60,000	5.00E+04	**1.20E+00**	6.78E+04	8.85E-01
600-111_Shallow_Focused	Rad	Americium-241	14596-10-2	pCi/g	0.23	2.15E+04	1.05E-05	4.84E+03	4.67E-05
600-111_Shallow_Focused	Rad	Plutonium-239/240	PU-239/240	pCi/g	0.82	1.27E+04	6.43E-05	6.27E+03	1.30E-04
600-111_Shallow_Focused	Rad	Rads SOF	---	pCi/g	--	--	7.48E-05	--	1.77E-04
600-146_Shallow_Focused	non-Rad	2,4-Dinitrotoluene	121-14-2	µg/kg	121	No Value	--	2.64E+04	4.59E-03
600-146_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	1,090	5.00E+03	2.18E-01	5.98E+03	1.82E-01
600-146_Shallow_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	32	4.00E+04	8.03E-04	1.47E+03	2.18E-02
600-146_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	8.5	4.00E+04	2.11E-04	1.47E+03	5.73E-03
600-146_Shallow_Focused	non-Rad	Aroclors HI		ug/kg	--	--	1.01E-03	--	2.75E-02
600-146_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	2,020	1.00E+04	2.02E-01	1.90E+05	1.07E-02
600-146_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	79,500	3.30E+05	2.41E-01	1.32E+06	6.01E-02
600-146_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	213	1.00E+04	2.13E-02	1.39E+04	1.53E-02
600-146_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	2,660	5.00E+02	**5.32E+00**	1.33E+05	2.00E-02
600-146_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	254	4.00E+03	6.35E-02	1.63E+03	1.56E-01
600-146_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	8,220	4.00E+02	**2.06E+01**	3.82E+04	2.15E-01
600-146_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	7,460	1.30E+04	5.74E-01	1.11E+05	6.69E-02
600-146_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	475,000	5.00E+04	**9.50E+00**	1.07E+05	**4.44E+00**
600-146_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	19,200	5.00E+04	3.84E-01	3.56E+04	5.40E-01
600-146_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	362,000	2.20E+05	**1.65E+00**	5.80E+06	6.24E-02
600-146_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	14	1.00E+02	1.40E-01	1.87E+03	7.50E-03
600-146_Shallow_Focused	non-Rad	Methylene chloride	75-09-2	µg/kg	2.6	No Value	--	1.66E+05	1.56E-05
600-146_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	402	2.00E+03	2.01E-01	1.40E+04	2.88E-02
600-146_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	39,400	3.00E+04	**1.31E+00**	3.26E+04	**1.21E+00**
600-146_Shallow_Focused	non-Rad	Selenium	7782-49-2	µg/kg	732	5.20E+02	**1.41E+00**	1.90E+03	3.86E-01
600-146_Shallow_Focused	non-Rad	Silver	7440-22-4	µg/kg	305	2.00E+03	1.53E-01	4.96E+04	6.15E-03
600-146_Shallow_Focused	non-Rad	Styrene	100-42-5	µg/kg	1.7	No Value	--	No Value	--
600-146_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	72,600	2.00E+03	**3.63E+01**	3.11E+04	**2.33E+00**
600-146_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	154,000	5.00E+04	**3.08E+00**	6.78E+04	**2.27E+00**
600-149:2_Shallow	non-Rad	Antimony	7440-36-0	µg/kg	380	5.00E+03	7.60E-02	5.98E+03	6.35E-02
600-149:2_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	5,173	1.00E+04	5.17E-01	1.90E+05	2.73E-02
600-149:2_Shallow	non-Rad	Barium	7440-39-3	µg/kg	89,076	3.30E+05	2.70E-01	1.32E+06	6.73E-02
600-149:2_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	170	1.00E+04	1.70E-02	1.39E+04	1.22E-02
600-149:2_Shallow	non-Rad	Boron	7440-42-8	µg/kg	987	5.00E+02	**1.97E+00**	1.33E+05	7.42E-03
600-149:2_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	145	4.00E+03	3.62E-02	1.63E+03	8.88E-02
600-149:2_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	13,989	4.00E+02	**3.50E+01**	3.82E+04	3.67E-01
600-149:2_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	8,419	1.30E+04	6.48E-01	1.11E+05	7.55E-02
600-149:2_Shallow	non-Rad	Copper	7440-50-8	µg/kg	16,954	5.00E+04	3.39E-01	1.07E+05	1.58E-01
600-149:2_Shallow	non-Rad	Lead	7439-92-1	µg/kg	16,309	5.00E+04	3.26E-01	3.56E+04	4.58E-01
600-149:2_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	393,085	2.20E+05	**1.79E+00**	5.80E+06	6.78E-02
600-149:2_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	541	2.00E+03	2.71E-01	1.40E+04	3.88E-02
600-149:2_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	13,790	3.00E+04	4.60E-01	3.26E+04	4.23E-01
600-149:2_Shallow	non-Rad	Selenium	7782-49-2	µg/kg	873	5.20E+02	**1.68E+00**	1.90E+03	4.60E-01
600-149:2_Shallow	non-Rad	Tin	7440-31-5	µg/kg	980	5.00E+04	1.96E-02	2.04E+05	4.80E-03
600-149:2_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	54,219	2.00E+03	**2.71E+01**	3.11E+04	**1.74E+00**
600-149:2_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	51,198	5.00E+04	**1.02E+00**	6.78E+04	7.55E-01

Table 5. Comparison of 100-IU-6 Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
600-149:2_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	540	5.00E+03	1.08E-01	5.98E+03	9.02E-02
600-149:2_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	4,100	1.00E+04	4.10E-01	1.90E+05	2.16E-02
600-149:2_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	83,800	3.30E+05	2.54E-01	1.32E+06	6.33E-02
600-149:2_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	400	1.00E+04	4.00E-02	1.39E+04	2.87E-02
600-149:2_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,900	5.00E+02	**3.80E+00**	1.33E+05	1.43E-02
600-149:2_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	280	4.00E+03	7.00E-02	1.63E+03	1.72E-01
600-149:2_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	11,000	4.00E+02	**2.75E+01**	3.82E+04	2.88E-01
600-149:2_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	10,900	1.30E+04	8.38E-01	1.11E+05	9.78E-02
600-149:2_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	31,700	5.00E+04	6.34E-01	1.07E+05	2.96E-01
600-149:2_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	153,000	5.00E+04	**3.06E+00**	3.56E+04	**4.30E+00**
600-149:2_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	367,000	2.20E+05	**1.67E+00**	5.80E+06	6.33E-02
600-149:2_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	610	2.00E+03	3.05E-01	1.40E+04	4.37E-02
600-149:2_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	18,900	3.00E+04	6.30E-01	3.26E+04	5.80E-01
600-149:2_Shallow_Focused	non-Rad	Selenium	7782-49-2	µg/kg	1,100	5.20E+02	**2.12E+00**	1.90E+03	5.79E-01
600-149:2_Shallow_Focused	non-Rad	Tin	7440-31-5	µg/kg	850	5.00E+04	1.70E-02	2.04E+05	4.16E-03
600-149:2_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	72,800	2.00E+03	**3.64E+01**	3.11E+04	**2.34E+00**
600-149:2_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	50,100	5.00E+04	**1.00E+00**	6.78E+04	7.39E-01
600-178_Overburden_Focused	non-Rad	4,4'-DDE (Dichlorodiphenyldichloroethylene)	72-55-9	µg/kg	7.8	No Value	--	4.00E+02	1.95E-02
600-178_Overburden_Focused	non-Rad	4,4'-DDT (Dichlorodiphenyltrichloroethane)	50-29-3	µg/kg	1.5	No Value	--	8.82E+02	1.72E-03
600-178_Overburden_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	2,780	1.00E+04	2.78E-01	1.90E+05	1.47E-02
600-178_Overburden_Focused	non-Rad	Barium	7440-39-3	µg/kg	62,600	3.30E+05	1.90E-01	1.32E+06	4.73E-02
600-178_Overburden_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	230	1.00E+04	2.30E-02	1.39E+04	1.65E-02
600-178_Overburden_Focused	non-Rad	Boron	7440-42-8	µg/kg	905	5.00E+02	**1.81E+00**	1.33E+05	6.81E-03
600-178_Overburden_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	121	4.00E+03	3.03E-02	1.63E+03	7.42E-02
600-178_Overburden_Focused	non-Rad	Chromium	7440-47-3	µg/kg	6,700	4.00E+02	**1.68E+01**	3.82E+04	1.76E-01
600-178_Overburden_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	6,560	1.30E+04	5.05E-01	1.11E+05	5.88E-02
600-178_Overburden_Focused	non-Rad	Copper	7440-50-8	µg/kg	9,870	5.00E+04	1.97E-01	1.07E+05	9.22E-02
600-178_Overburden_Focused	non-Rad	Lead	7439-92-1	µg/kg	3,820	5.00E+04	7.64E-02	3.56E+04	1.07E-01
600-178_Overburden_Focused	non-Rad	Manganese	7439-96-5	µg/kg	307,000	2.20E+05	**1.40E+00**	5.80E+06	5.29E-02
600-178_Overburden_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	359	2.00E+03	1.80E-01	1.40E+04	2.57E-02
600-178_Overburden_Focused	non-Rad	Nickel	7440-02-0	µg/kg	6,930	3.00E+04	2.31E-01	3.26E+04	2.13E-01
600-178_Overburden_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	66,000	2.00E+03	**3.30E+01**	3.11E+04	**2.12E+00**
600-178_Overburden_Focused	non-Rad	Zinc	7440-66-6	µg/kg	43,600	5.00E+04	8.72E-01	6.78E+04	6.43E-01
600-178_Shallow_Focused	non-Rad	4,4'-DDE (Dichlorodiphenyldichloroethylene)	72-55-9	µg/kg	13	No Value	--	4.00E+02	3.35E-02
600-178_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	3,120	1.00E+04	3.12E-01	1.90E+05	1.65E-02
600-178_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	76,100	3.30E+05	2.31E-01	1.32E+06	5.75E-02
600-178_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	264	1.00E+04	2.64E-02	1.39E+04	1.89E-02
600-178_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,110	5.00E+02	**2.22E+00**	1.33E+05	8.35E-03
600-178_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	131	4.00E+03	3.28E-02	1.63E+03	8.04E-02
600-178_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	8,580	4.00E+02	**2.15E+01**	3.82E+04	2.25E-01
600-178_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	9,250	1.30E+04	7.12E-01	1.11E+05	8.30E-02
600-178_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	10,500	5.00E+04	2.10E-01	1.07E+05	9.81E-02
600-178_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	5,770	5.00E+04	1.15E-01	3.56E+04	1.62E-01
600-178_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	337,000	2.20E+05	**1.53E+00**	5.80E+06	5.81E-02
600-178_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	363	2.00E+03	1.82E-01	1.40E+04	2.60E-02
600-178_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	8,910	3.00E+04	2.97E-01	3.26E+04	2.73E-01
600-178_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	62,900	2.00E+03	**3.15E+01**	3.11E+04	**2.02E+00**
600-178_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	43,000	5.00E+04	8.60E-01	6.78E+04	6.34E-01
600-178_Staging Pile Area Footprint_Foc	non-Rad	4,4'-DDE (Dichlorodiphenyldichloroethylene)	72-55-9	µg/kg	4.7	No Value	--	4.00E+02	1.17E-02
600-178_Staging Pile Area Footprint_Foc	non-Rad	4,4'-DDT (Dichlorodiphenyltrichloroethane)	50-29-3	µg/kg	1.7	No Value	--	8.82E+02	1.89E-03
600-178_Staging Pile Area Footprint_Foc	non-Rad	Arsenic	7440-38-2	µg/kg	2,820	1.00E+04	2.82E-01	1.90E+05	1.49E-02
600-178_Staging Pile Area Footprint_Foc	non-Rad	Barium	7440-39-3	µg/kg	67,600	3.30E+05	2.05E-01	1.32E+06	5.11E-02
600-178_Staging Pile Area Footprint_Foc	non-Rad	Beryllium	7440-41-7	µg/kg	258	1.00E+04	2.58E-02	1.39E+04	1.85E-02
600-178_Staging Pile Area Footprint_Foc	non-Rad	Boron	7440-42-8	µg/kg	1,260	5.00E+02	**2.52E+00**	1.33E+05	9.48E-03
600-178_Staging Pile Area Footprint_Foc	non-Rad	Cadmium	7440-43-9	µg/kg	108	4.00E+03	2.70E-02	1.63E+03	6.63E-02
600-178_Staging Pile Area Footprint_Foc	non-Rad	Chromium	7440-47-3	µg/kg	8,240	4.00E+02	**2.06E+01**	3.82E+04	2.16E-01
600-178_Staging Pile Area Footprint_Foc	non-Rad	Cobalt	7440-48-4	µg/kg	6,130	1.30E+04	4.72E-01	1.11E+05	5.50E-02
600-178_Staging Pile Area Footprint_Foc	non-Rad	Copper	7440-50-8	µg/kg	9,750	5.00E+04	1.95E-01	1.07E+05	9.11E-02
600-178_Staging Pile Area Footprint_Foc	non-Rad	Lead	7439-92-1	µg/kg	4,070	5.00E+04	8.14E-02	3.56E+04	1.14E-01
600-178_Staging Pile Area Footprint_Foc	non-Rad	Manganese	7439-96-5	µg/kg	290,000	2.20E+05	**1.32E+00**	5.80E+06	5.00E-02
600-178_Staging Pile Area Footprint_Foc	non-Rad	Molybdenum	7439-98-7	µg/kg	335	2.00E+03	1.68E-01	1.40E+04	2.40E-02
600-178_Staging Pile Area Footprint_Foc	non-Rad	Nickel	7440-02-0	µg/kg	7,700	3.00E+04	2.57E-01	3.26E+04	2.36E-01
600-178_Staging Pile Area Footprint_Foc	non-Rad	Vanadium	7440-62-2	µg/kg	52,100	2.00E+03	**2.61E+01**	3.11E+04	**1.67E+00**

Table 5. Comparison of 100-IU-6 Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
600-178_Staging Pile Area Footprint_Foc	non-Rad	Zinc	7440-66-6	µg/kg	38,900	5.00E+04	7.78E-01	6.78E+04	5.74E-01
600-186_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	650	5.00E+03	1.30E-01	5.98E+03	1.09E-01
600-186_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	50	4.00E+04	1.25E-03	1.47E+03	3.38E-02
600-186_Shallow_Focused	non-Rad	Aroclors HI		ug/kg	--	--	1.25E-03	--	3.38E-02
600-186_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	5,640	1.00E+04	5.64E-01	1.90E+05	2.98E-02
600-186_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	139,000	3.30E+05	4.21E-01	1.32E+06	1.05E-01
600-186_Shallow_Focused	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	1.7	1.80E+04	9.28E-05	6.40E+04	2.61E-05
600-186_Shallow_Focused	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	5.3	1.80E+04	2.96E-04	7.64E+04	6.96E-05
600-186_Shallow_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	9.7	1.80E+04	5.38E-04	3.92E+04	2.47E-04
600-186_Shallow_Focused	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	2.7	1.80E+04	1.50E-04	3.92E+04	6.88E-05
600-186_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	471	1.00E+04	4.71E-02	1.39E+04	3.38E-02
600-186_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	3,290	5.00E+02	**6.58E+00**	1.33E+05	2.48E-02
600-186_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	871	4.00E+03	2.18E-01	1.63E+03	5.34E-01
600-186_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	98,000	4.00E+02	**2.45E+02**	3.82E+04	**2.57E+00**
600-186_Shallow_Focused	non-Rad	Chrysene	218-01-9	µg/kg	1.6	1.80E+04	8.61E-05	4.45E+04	3.48E-05
600-186_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	8,990	1.30E+04	6.92E-01	1.11E+05	8.06E-02
600-186_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	42,300	5.00E+04	8.46E-01	1.07E+05	3.95E-01
600-186_Shallow_Focused	non-Rad	Dibenz[a,h]anthracene	53-70-3	µg/kg	0.98	1.80E+04	5.46E-05	4.41E+04	2.23E-05
600-186_Shallow_Focused	non-Rad	Fluoranthene	206-44-0	µg/kg	2.6	1.80E+04	1.46E-04	8.39E+05	3.13E-06
600-186_Shallow_Focused	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	320	No Value	--	1.25E+06	2.57E-04
600-186_Shallow_Focused	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	5.8	1.80E+04	3.21E-04	3.57E+04	1.62E-04
600-186_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	93,500	5.00E+04	**1.87E+00**	3.56E+04	**2.63E+00**
600-186_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	307,000	2.20E+05	**1.40E+00**	5.80E+06	5.29E-02
600-186_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	854	1.00E+02	**8.54E+00**	1.87E+03	4.58E-01
600-186_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	1,230	2.00E+03	6.15E-01	1.40E+04	8.81E-02
600-186_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	17,400	3.00E+04	5.80E-01	3.26E+04	5.34E-01
600-186_Shallow_Focused	non-Rad	Pyrene	129-00-0	µg/kg	8.1	1.80E+04	4.51E-04	6.00E+05	1.35E-05
600-186_Shallow_Focused	non-Rad	Selenium	7782-49-2	µg/kg	393	5.20E+02	7.56E-01	1.90E+03	2.07E-01
600-186_Shallow_Focused	non-Rad	Silver	7440-22-4	µg/kg	21,900	2.00E+03	**1.10E+01**	4.96E+04	4.41E-01
600-186_Shallow_Focused	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling)	TPH/OILH	µg/kg	18,500	No Value	--	No Value	--
600-186_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	141,000	2.00E+03	**7.05E+01**	3.11E+04	**4.53E+00**
600-186_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	137,000	5.00E+04	**2.74E+00**	6.78E+04	**2.02E+00**
600-202_Shallow_1	non-Rad	Acenaphthene	83-32-9	µg/kg	9.2	2.00E+04	4.61E-04	1.10E+06	8.41E-06
600-202_Shallow_1	non-Rad	Aldrin	309-00-2	µg/kg	2.9	No Value	--	1.65E+02	1.74E-02
600-202_Shallow_1	non-Rad	Antimony	7440-36-0	µg/kg	403	5.00E+03	8.05E-02	5.98E+03	6.73E-02
600-202_Shallow_1	non-Rad	Arsenic	7440-38-2	µg/kg	5,034	1.00E+04	5.03E-01	1.90E+05	2.66E-02
600-202_Shallow_1	non-Rad	Barium	7440-39-3	µg/kg	84,721	3.30E+05	2.57E-01	1.32E+06	6.40E-02
600-202_Shallow_1	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	1.2	1.80E+04	6.67E-05	3.92E+04	3.06E-05
600-202_Shallow_1	non-Rad	Beryllium	7440-41-7	µg/kg	317	1.00E+04	3.17E-02	1.39E+04	2.27E-02
600-202_Shallow_1	non-Rad	beta-1,2,3,4,5,6-Hexachlorocyclohexane (beta-BHC)	319-85-7	µg/kg	3.3	No Value	--	4.08E+03	8.15E-04
600-202_Shallow_1	non-Rad	Boron	7440-42-8	µg/kg	1,746	5.00E+02	**3.49E+00**	1.33E+05	1.31E-02
600-202_Shallow_1	non-Rad	Cadmium	7440-43-9	µg/kg	84	4.00E+03	2.09E-02	1.63E+03	5.13E-02
600-202_Shallow_1	non-Rad	Chromium	7440-47-3	µg/kg	17,641	4.00E+02	**4.41E+01**	3.82E+04	4.62E-01
600-202_Shallow_1	non-Rad	Chrysene	218-01-9	µg/kg	2.4	1.80E+04	1.33E-04	4.45E+04	5.37E-05
600-202_Shallow_1	non-Rad	Cobalt	7440-48-4	µg/kg	5,433	1.30E+04	4.18E-01	1.11E+05	4.87E-02
600-202_Shallow_1	non-Rad	Copper	7440-50-8	µg/kg	13,520	5.00E+04	2.70E-01	1.07E+05	1.26E-01
600-202_Shallow_1	non-Rad	Fluoranthene	206-44-0	µg/kg	4.3	1.80E+04	2.41E-04	8.39E+05	5.16E-06
600-202_Shallow_1	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	3.3	1.80E+04	1.81E-04	3.57E+04	9.12E-05
600-202_Shallow_1	non-Rad	Lead	7439-92-1	µg/kg	5,428	5.00E+04	1.09E-01	3.56E+04	1.53E-01
600-202_Shallow_1	non-Rad	Manganese	7439-96-5	µg/kg	308,336	2.20E+05	**1.40E+00**	5.80E+06	5.32E-02
600-202_Shallow_1	non-Rad	Molybdenum	7439-98-7	µg/kg	235	2.00E+03	1.18E-01	1.40E+04	1.68E-02
600-202_Shallow_1	non-Rad	Nickel	7440-02-0	µg/kg	15,979	3.00E+04	5.33E-01	3.26E+04	4.90E-01
600-202_Shallow_1	non-Rad	Vanadium	7440-62-2	µg/kg	46,058	2.00E+03	**2.30E+01**	3.11E+04	**1.48E+00**
600-202_Shallow_1	non-Rad	Zinc	7440-66-6	µg/kg	40,454	5.00E+04	8.09E-01	6.78E+04	5.97E-01
600-202_Shallow_2	non-Rad	Acenaphthene	83-32-9	µg/kg	7.9	2.00E+04	3.95E-04	1.10E+06	7.21E-06
600-202_Shallow_2	non-Rad	Anthracene	120-12-7	µg/kg	2.0	2.90E+04	7.00E-05	6.78E+05	2.99E-06
600-202_Shallow_2	non-Rad	Arsenic	7440-38-2	µg/kg	6,830	1.00E+04	6.83E-01	1.90E+05	3.60E-02
600-202_Shallow_2	non-Rad	Barium	7440-39-3	µg/kg	101,572	3.30E+05	3.08E-01	1.32E+06	7.68E-02
600-202_Shallow_2	non-Rad	Beryllium	7440-41-7	µg/kg	420	1.00E+04	4.20E-02	1.39E+04	3.01E-02
600-202_Shallow_2	non-Rad	Boron	7440-42-8	µg/kg	3,117	5.00E+02	**6.23E+00**	1.33E+05	2.35E-02
600-202_Shallow_2	non-Rad	Cadmium	7440-43-9	µg/kg	156	4.00E+03	3.90E-02	1.63E+03	9.57E-02
600-202_Shallow_2	non-Rad	Chromium	7440-47-3	µg/kg	22,382	4.00E+02	**5.60E+01**	3.82E+04	5.86E-01
600-202_Shallow_2	non-Rad	Cobalt	7440-48-4	µg/kg	7,211	1.30E+04	5.55E-01	1.11E+05	6.47E-02

Table 5. Comparison of 100-IU-6 Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
600-202_Shallow_2	non-Rad	Copper	7440-50-8	µg/kg	16,341	5.00E+04	3.27E-01	1.07E+05	1.53E-01
600-202_Shallow_2	non-Rad	Fluoranthene	206-44-0	µg/kg	5.1	1.80E+04	2.86E-04	8.39E+05	6.13E-06
600-202_Shallow_2	non-Rad	Fluorene	86-73-7	µg/kg	35	2.90E+04	1.19E-03	1.75E+05	1.97E-04
600-202_Shallow_2	non-Rad	Lead	7439-92-1	µg/kg	6,814	5.00E+04	1.36E-01	3.56E+04	1.92E-01
600-202_Shallow_2	non-Rad	Manganese	7439-96-5	µg/kg	368,794	2.20E+05	**1.68E+00**	5.80E+06	6.36E-02
600-202_Shallow_2	non-Rad	Molybdenum	7439-98-7	µg/kg	335	2.00E+03	1.67E-01	1.40E+04	2.40E-02
600-202_Shallow_2	non-Rad	Naphthalene	91-20-3	µg/kg	21	2.90E+04	7.14E-04	1.00E+05	2.07E-04
600-202_Shallow_2	non-Rad	Nickel	7440-02-0	µg/kg	19,045	3.00E+04	6.35E-01	3.26E+04	5.85E-01
600-202_Shallow_2	non-Rad	Pyrene	129-00-0	µg/kg	2.6	1.80E+04	1.43E-04	6.00E+05	4.29E-06
600-202_Shallow_2	non-Rad	Selenium	7782-49-2	µg/kg	337	5.20E+02	6.48E-01	1.90E+03	1.78E-01
600-202_Shallow_2	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling)	TPH/OILH	µg/kg	8,170	No Value	--	No Value	--
600-202_Shallow_2	non-Rad	Vanadium	7440-62-2	µg/kg	48,606	2.00E+03	**2.43E+01**	3.11E+04	**1.56E+00**
600-202_Shallow_2	non-Rad	Zinc	7440-66-6	µg/kg	49,589	5.00E+04	9.92E-01	6.78E+04	7.31E-01
600-202_Shallow_Focused	non-Rad	Acenaphthene	83-32-9	µg/kg	14	2.00E+04	6.95E-04	1.10E+06	1.27E-05
600-202_Shallow_Focused	non-Rad	Alpha-BHC	319-84-6	µg/kg	2.0	No Value	--	No Value	--
600-202_Shallow_Focused	non-Rad	Anthracene	120-12-7	µg/kg	11	2.90E+04	3.93E-04	6.78E+05	1.68E-05
600-202_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	735	5.00E+03	1.47E-01	5.98E+03	1.23E-01
600-202_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	10,200	1.00E+04	**1.02E+00**	1.90E+05	5.38E-02
600-202_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	201,000	3.30E+05	6.09E-01	1.32E+06	1.52E-01
600-202_Shallow_Focused	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	17	1.80E+04	9.61E-04	6.40E+04	2.70E-04
600-202_Shallow_Focused	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	1.2	1.80E+04	6.78E-05	7.64E+04	1.60E-05
600-202_Shallow_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	16	1.80E+04	8.67E-04	3.92E+04	3.98E-04
600-202_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	876	1.00E+04	8.76E-02	1.39E+04	6.28E-02
600-202_Shallow_Focused	non-Rad	beta-1,2,3,4,5,6-Hexachlorocyclohexane (beta-BHC)	319-85-7	µg/kg	15	No Value	--	4.08E+03	3.56E-03
600-202_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	69	1.00E+05	6.91E-04	4.54E+04	1.52E-03
600-202_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	13,000	5.00E+02	**2.60E+01**	1.33E+05	9.78E-02
600-202_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	1,290	4.00E+03	3.23E-01	1.63E+03	7.91E-01
600-202_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	21,900	4.00E+02	**5.48E+01**	3.82E+04	5.74E-01
600-202_Shallow_Focused	non-Rad	Chrysene	218-01-9	µg/kg	6.1	1.80E+04	3.38E-04	4.45E+04	1.37E-04
600-202_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	8,300	1.30E+04	6.38E-01	1.11E+05	7.44E-02
600-202_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	87,900	5.00E+04	**1.76E+00**	1.07E+05	8.21E-01
600-202_Shallow_Focused	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	36	No Value	--	No Value	--
600-202_Shallow_Focused	non-Rad	Endosulfan I	959-98-8	µg/kg	3.0	No Value	--	7.10E+02	4.21E-03
600-202_Shallow_Focused	non-Rad	Fluoranthene	206-44-0	µg/kg	61	1.80E+04	3.39E-03	8.39E+05	7.27E-05
600-202_Shallow_Focused	non-Rad	Fluorene	86-73-7	µg/kg	15	2.90E+04	5.07E-04	1.75E+05	8.38E-05
600-202_Shallow_Focused	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	83	1.80E+04	4.58E-03	3.57E+04	2.31E-03
600-202_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	278,000	5.00E+04	**5.56E+00**	3.56E+04	**7.81E+00**
600-202_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	411,000	2.20E+05	**1.87E+00**	5.80E+06	7.09E-02
600-202_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	1,170	2.00E+03	5.85E-01	1.40E+04	8.38E-02
600-202_Shallow_Focused	non-Rad	Naphthalene	91-20-3	µg/kg	27	2.90E+04	9.14E-04	1.00E+05	2.65E-04
600-202_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	23,700	3.00E+04	7.90E-01	3.26E+04	7.27E-01
600-202_Shallow_Focused	non-Rad	Pyrene	129-00-0	µg/kg	6.8	1.80E+04	3.79E-04	6.00E+05	1.14E-05
600-202_Shallow_Focused	non-Rad	Silver	7440-22-4	µg/kg	1,540	2.00E+03	7.70E-01	4.96E+04	3.10E-02
600-202_Shallow_Focused	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling)	TPH/OILH	µg/kg	104,000	No Value	--	No Value	--
600-202_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	50,300	2.00E+03	**2.52E+01**	3.11E+04	**1.62E+00**
600-202_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	403,000	5.00E+04	**8.06E+00**	6.78E+04	**5.94E+00**
600-202_Staging Pile Area Footprint	non-Rad	4,4'-DDD (Dichlorodiphenyldichloroethane)	72-54-8	µg/kg	2.5	No Value	--	8.82E+02	2.84E-03
600-202_Staging Pile Area Footprint	non-Rad	4,4'-DDE (Dichlorodiphenyldichloroethylene)	72-55-9	µg/kg	2.0	No Value	--	4.00E+02	5.11E-03
600-202_Staging Pile Area Footprint	non-Rad	4,4'-DDT (Dichlorodiphenyltrichloroethane)	50-29-3	µg/kg	2.1	No Value	--	8.82E+02	2.43E-03
600-202_Staging Pile Area Footprint	non-Rad	Acenaphthene	83-32-9	µg/kg	43	2.00E+04	2.14E-03	1.10E+06	3.90E-05
600-202_Staging Pile Area Footprint	non-Rad	Aldrin	309-00-2	µg/kg	6.0	No Value	--	1.65E+02	3.64E-02
600-202_Staging Pile Area Footprint	non-Rad	Anthracene	120-12-7	µg/kg	4.8	2.90E+04	1.65E-04	6.78E+05	7.03E-06
600-202_Staging Pile Area Footprint	non-Rad	Antimony	7440-36-0	µg/kg	713	5.00E+03	1.43E-01	5.98E+03	1.19E-01
600-202_Staging Pile Area Footprint	non-Rad	Arsenic	7440-38-2	µg/kg	5,082	1.00E+04	5.08E-01	1.90E+05	2.68E-02
600-202_Staging Pile Area Footprint	non-Rad	Barium	7440-39-3	µg/kg	108,339	3.30E+05	3.28E-01	1.32E+06	8.19E-02
600-202_Staging Pile Area Footprint	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	24	1.80E+04	1.35E-03	6.40E+04	3.78E-04
600-202_Staging Pile Area Footprint	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	19	1.80E+04	1.05E-03	7.64E+04	2.47E-04
600-202_Staging Pile Area Footprint	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	37	1.80E+04	2.08E-03	3.92E+04	9.52E-04
600-202_Staging Pile Area Footprint	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	12	1.80E+04	6.64E-04	3.92E+04	3.05E-04
600-202_Staging Pile Area Footprint	non-Rad	Beryllium	7440-41-7	µg/kg	245	1.00E+04	2.45E-02	1.39E+04	1.76E-02
600-202_Staging Pile Area Footprint	non-Rad	Boron	7440-42-8	µg/kg	9,973	5.00E+02	**1.99E+01**	1.33E+05	7.50E-02
600-202_Staging Pile Area Footprint	non-Rad	Cadmium	7440-43-9	µg/kg	405	4.00E+03	1.01E-01	1.63E+03	2.48E-01
600-202_Staging Pile Area Footprint	non-Rad	Chromium	7440-47-3	µg/kg	15,595	4.00E+02	**3.90E+01**	3.82E+04	4.09E-01

Table 5. Comparison of 100-IU-6 Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
600-202_Staging Pile Area Footprint	non-Rad	Chrysene	218-01-9	µg/kg	53	1.80E+04	2.92E-03	4.45E+04	1.18E-03
600-202_Staging Pile Area Footprint	non-Rad	Cobalt	7440-48-4	µg/kg	7,092	1.30E+04	5.46E-01	1.11E+05	6.36E-02
600-202_Staging Pile Area Footprint	non-Rad	Copper	7440-50-8	µg/kg	40,782	5.00E+04	8.16E-01	1.07E+05	3.81E-01
600-202_Staging Pile Area Footprint	non-Rad	Dibenz[a,h]anthracene	53-70-3	µg/kg	14	1.80E+04	7.87E-04	4.41E+04	3.21E-04
600-202_Staging Pile Area Footprint	non-Rad	Endrin	72-20-8	µg/kg	2.2	No Value	--	No Value	--
600-202_Staging Pile Area Footprint	non-Rad	Fluoranthene	206-44-0	µg/kg	116	1.80E+04	6.44E-03	8.39E+05	1.38E-04
600-202_Staging Pile Area Footprint	non-Rad	Fluorene	86-73-7	µg/kg	7.8	2.90E+04	2.69E-04	1.75E+05	4.46E-05
600-202_Staging Pile Area Footprint	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	260	No Value	--	1.25E+06	2.09E-04
600-202_Staging Pile Area Footprint	non-Rad	Lead	7439-92-1	µg/kg	63,502	5.00E+04	**1.27E+00**	3.56E+04	**1.78E+00**
600-202_Staging Pile Area Footprint	non-Rad	Manganese	7439-96-5	µg/kg	344,273	2.20E+05	**1.56E+00**	5.80E+06	5.94E-02
600-202_Staging Pile Area Footprint	non-Rad	Methoxychlor	72-43-5	µg/kg	1.6	No Value	--	2.18E+04	7.37E-05
600-202_Staging Pile Area Footprint	non-Rad	Molybdenum	7439-98-7	µg/kg	953	2.00E+03	4.77E-01	1.40E+04	6.83E-02
600-202_Staging Pile Area Footprint	non-Rad	Naphthalene	91-20-3	µg/kg	11	2.90E+04	3.94E-04	1.00E+05	1.14E-04
600-202_Staging Pile Area Footprint	non-Rad	Nickel	7440-02-0	µg/kg	12,835	3.00E+04	4.28E-01	3.26E+04	3.94E-01
600-202_Staging Pile Area Footprint	non-Rad	Pyrene	129-00-0	µg/kg	206	1.80E+04	1.15E-02	6.00E+05	3.44E-04
600-202_Staging Pile Area Footprint	non-Rad	Silver	7440-22-4	µg/kg	275	2.00E+03	1.38E-01	4.96E+04	5.54E-03
600-202_Staging Pile Area Footprint	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	µg/kg	11,500	2.00E+05	5.75E-02	3.56E+08	3.23E-05
600-202_Staging Pile Area Footprint	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling)	TPH/OILH	µg/kg	114,498	No Value	--	No Value	--
600-202_Staging Pile Area Footprint	non-Rad	Vanadium	7440-62-2	µg/kg	55,794	2.00E+03	**2.79E+01**	3.11E+04	**1.79E+00**
600-202_Staging Pile Area Footprint	non-Rad	Zinc	7440-66-6	µg/kg	174,723	5.00E+04	**3.49E+00**	6.78E+04	**2.58E+00**
600-204_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	2,700	1.00E+04	2.70E-01	1.90E+05	1.42E-02
600-204_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	166,000	3.30E+05	5.03E-01	1.32E+06	1.25E-01
600-204_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	150	1.00E+05	1.50E-03	4.54E+04	3.30E-03
600-204_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	80	4.00E+03	2.00E-02	1.63E+03	4.91E-02
600-204_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	10,800	4.00E+02	**2.70E+01**	3.82E+04	2.83E-01
600-204_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	27,700	5.00E+04	5.54E-01	3.56E+04	7.79E-01
600-204_Shallow_Focused	non-Rad	Total petroleum hydrocarbons	TPH	µg/kg	41,200	No Value	--	No Value	--
600-205_Shallow_Focused	non-Rad	2,4-Dimethylphenol	105-67-9	µg/kg	21	No Value	--	No Value	--
600-205_Shallow_Focused	non-Rad	4,4'-DDD (Dichlorodiphenyldichloroethane)	72-54-8	µg/kg	68	No Value	--	8.82E+02	7.71E-02
600-205_Shallow_Focused	non-Rad	Acenaphthene	83-32-9	µg/kg	59	2.00E+04	2.96E-03	1.10E+06	5.39E-05
600-205_Shallow_Focused	non-Rad	Anthracene	120-12-7	µg/kg	9.3	2.90E+04	3.21E-04	6.78E+05	1.37E-05
600-205_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	670	5.00E+03	1.34E-01	5.98E+03	1.12E-01
600-205_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	5,420	1.00E+04	5.42E-01	1.90E+05	2.86E-02
600-205_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	86,200	3.30E+05	2.61E-01	1.32E+06	6.52E-02
600-205_Shallow_Focused	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	4.5	1.80E+04	2.47E-04	7.64E+04	5.82E-05
600-205_Shallow_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	14	1.80E+04	7.61E-04	3.92E+04	3.49E-04
600-205_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	1,800	1.00E+04	1.80E-01	1.39E+04	1.29E-01
600-205_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	150	1.00E+05	1.50E-03	4.54E+04	3.30E-03
600-205_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,500	5.00E+02	**3.00E+00**	1.33E+05	1.13E-02
600-205_Shallow_Focused	non-Rad	Butylbenzylphthalate	85-68-7	µg/kg	25	No Value	--	No Value	--
600-205_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	670	4.00E+03	1.68E-01	1.63E+03	4.11E-01
600-205_Shallow_Focused	non-Rad	Chlordane	57-74-9	µg/kg	6.5	1.00E+03	6.50E-03	5.04E+04	1.29E-04
600-205_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	10,200	4.00E+02	**2.55E+01**	3.82E+04	2.67E-01
600-205_Shallow_Focused	non-Rad	Chrysene	218-01-9	µg/kg	420	1.80E+04	2.33E-02	4.45E+04	9.43E-03
600-205_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	10,600	1.30E+04	8.15E-01	1.11E+05	9.51E-02
600-205_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	22,000	5.00E+04	4.40E-01	1.07E+05	2.05E-01
600-205_Shallow_Focused	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	79	No Value	--	No Value	--
600-205_Shallow_Focused	non-Rad	Endosulfan I	959-98-8	µg/kg	12	No Value	--	7.10E+02	1.69E-02
600-205_Shallow_Focused	non-Rad	Fluoranthene	206-44-0	µg/kg	33	1.80E+04	1.83E-03	8.39E+05	3.93E-05
600-205_Shallow_Focused	non-Rad	Fluorene	86-73-7	µg/kg	5.2	2.90E+04	1.78E-04	1.75E+05	2.95E-05
600-205_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	40,300	5.00E+04	8.06E-01	3.56E+04	**1.13E+00**
600-205_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	427,000	2.20E+05	**1.94E+00**	5.80E+06	7.36E-02
600-205_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	890	2.00E+03	4.45E-01	1.40E+04	6.37E-02
600-205_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	13,700	3.00E+04	4.57E-01	3.26E+04	4.20E-01
600-205_Shallow_Focused	non-Rad	Pyrene	129-00-0	µg/kg	62	1.80E+04	3.44E-03	6.00E+05	1.03E-04
600-205_Shallow_Focused	non-Rad	Selenium	7782-49-2	µg/kg	500	5.20E+02	9.62E-01	1.90E+03	2.63E-01
600-205_Shallow_Focused	non-Rad	Total petroleum hydrocarbons	TPH	µg/kg	1.90E+06	No Value	--	No Value	--
600-205_Shallow_Focused	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	µg/kg	3,200	2.00E+05	1.60E-02	3.56E+08	8.98E-06
600-205_Shallow_Focused	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling)	TPH/OILH	µg/kg	7,860	No Value	--	No Value	--
600-205_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	86,200	2.00E+03	**4.31E+01**	3.11E+04	**2.77E+00**
600-205_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	61,700	5.00E+04	**1.23E+00**	6.78E+04	9.10E-01
600-205_Staging Pile Area Footprint_Foc	non-Rad	Acenaphthene	83-32-9	µg/kg	3.4	2.00E+04	1.70E-04	1.10E+06	3.10E-06
600-205_Staging Pile Area Footprint_Foc	non-Rad	Arsenic	7440-38-2	µg/kg	3,180	1.00E+04	3.18E-01	1.90E+05	1.68E-02

Table 5. Comparison of 100-IU-6 Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
600-205_Staging Pile Area Footprint_Foc	non-Rad	Barium	7440-39-3	µg/kg	75,000	3.30E+05	2.27E-01	1.32E+06	5.67E-02
600-205_Staging Pile Area Footprint_Foc	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	1.5	1.80E+04	8.06E-05	7.64E+04	1.90E-05
600-205_Staging Pile Area Footprint_Foc	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	3.6	1.80E+04	2.01E-04	3.92E+04	9.20E-05
600-205_Staging Pile Area Footprint_Foc	non-Rad	Beryllium	7440-41-7	µg/kg	275	1.00E+04	2.75E-02	1.39E+04	1.97E-02
600-205_Staging Pile Area Footprint_Foc	non-Rad	Boron	7440-42-8	µg/kg	1,260	5.00E+02	**2.52E+00**	1.33E+05	9.48E-03
600-205_Staging Pile Area Footprint_Foc	non-Rad	Cadmium	7440-43-9	µg/kg	250	4.00E+03	6.25E-02	1.63E+03	1.53E-01
600-205_Staging Pile Area Footprint_Foc	non-Rad	Chromium	7440-47-3	µg/kg	9,020	4.00E+02	**2.26E+01**	3.82E+04	2.36E-01
600-205_Staging Pile Area Footprint_Foc	non-Rad	Chrysene	218-01-9	µg/kg	6.1	1.80E+04	3.38E-04	4.45E+04	1.37E-04
600-205_Staging Pile Area Footprint_Foc	non-Rad	Cobalt	7440-48-4	µg/kg	6,810	1.30E+04	5.24E-01	1.11E+05	6.11E-02
600-205_Staging Pile Area Footprint_Foc	non-Rad	Copper	7440-50-8	µg/kg	13,200	5.00E+04	2.64E-01	1.07E+05	1.23E-01
600-205_Staging Pile Area Footprint_Foc	non-Rad	Fluoranthene	206-44-0	µg/kg	146	1.80E+04	8.11E-03	8.39E+05	1.74E-04
600-205_Staging Pile Area Footprint_Foc	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	4.6	1.80E+04	2.54E-04	3.57E+04	1.28E-04
600-205_Staging Pile Area Footprint_Foc	non-Rad	Lead	7439-92-1	µg/kg	12,000	5.00E+04	2.40E-01	3.56E+04	3.37E-01
600-205_Staging Pile Area Footprint_Foc	non-Rad	Manganese	7439-96-5	µg/kg	318,000	2.20E+05	**1.45E+00**	5.80E+06	5.48E-02
600-205_Staging Pile Area Footprint_Foc	non-Rad	Molybdenum	7439-98-7	µg/kg	287	2.00E+03	1.44E-01	1.40E+04	2.06E-02
600-205_Staging Pile Area Footprint_Foc	non-Rad	Nickel	7440-02-0	µg/kg	9,230	3.00E+04	3.08E-01	3.26E+04	2.83E-01
600-205_Staging Pile Area Footprint_Foc	non-Rad	Pyrene	129-00-0	µg/kg	4.9	1.80E+04	2.74E-04	6.00E+05	8.23E-06
600-205_Staging Pile Area Footprint_Foc	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling)	TPH/OILH	µg/kg	103,000	No Value	--	No Value	--
600-205_Staging Pile Area Footprint_Foc	non-Rad	Vanadium	7440-62-2	µg/kg	53,000	2.00E+03	**2.65E+01**	3.11E+04	**1.70E+00**
600-205_Staging Pile Area Footprint_Foc	non-Rad	Zinc	7440-66-6	µg/kg	45,700	5.00E+04	9.14E-01	6.78E+04	6.74E-01
600-23_Overburden	non-Rad	Arsenic	7440-38-2	µg/kg	3,516	1.00E+04	3.52E-01	1.90E+05	1.86E-02
600-23_Overburden	non-Rad	Barium	7440-39-3	µg/kg	75,900	3.30E+05	2.30E-01	1.32E+06	5.74E-02
600-23_Overburden	non-Rad	Cadmium	7440-43-9	µg/kg	74	4.00E+03	1.85E-02	1.63E+03	4.54E-02
600-23_Overburden	non-Rad	Chromium	7440-47-3	µg/kg	11,100	4.00E+02	**2.77E+01**	3.82E+04	2.91E-01
600-23_Overburden	non-Rad	Lead	7439-92-1	µg/kg	12,902	5.00E+04	2.58E-01	3.56E+04	3.63E-01
600-23_Overburden	non-Rad	Manganese	7439-96-5	µg/kg	295,027	2.20E+05	**1.34E+00**	5.80E+06	5.09E-02
600-23_Overburden	non-Rad	Selenium	7782-49-2	µg/kg	290	5.20E+02	5.58E-01	1.90E+03	1.53E-01
600-23_Overburden	non-Rad	Zinc	7440-66-6	µg/kg	67,433	5.00E+04	**1.35E+00**	6.78E+04	9.95E-01
600-23_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	2,866	1.00E+04	2.87E-01	1.90E+05	1.51E-02
600-23_Shallow	non-Rad	Barium	7440-39-3	µg/kg	70,525	3.30E+05	2.14E-01	1.32E+06	5.33E-02
600-23_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	187	4.00E+03	4.67E-02	1.63E+03	1.15E-01
600-23_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	10,238	4.00E+02	**2.56E+01**	3.82E+04	2.68E-01
600-23_Shallow	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	631	No Value	--	1.25E+06	5.07E-04
600-23_Shallow	non-Rad	Lead	7439-92-1	µg/kg	5,475	5.00E+04	1.10E-01	3.56E+04	1.54E-01
600-23_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	293,839	2.20E+05	**1.34E+00**	5.80E+06	5.07E-02
600-23_Shallow	non-Rad	Selenium	7782-49-2	µg/kg	290	5.20E+02	5.58E-01	1.90E+03	1.53E-01
600-23_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	63,472	5.00E+04	**1.27E+00**	6.78E+04	9.36E-01
600-23_Shallow_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	1,300	4.00E+04	3.25E-02	1.47E+03	8.82E-01
600-23_Shallow_Focused	non-Rad	Aroclors HI		ug/kg	--	--	3.25E-02	--	8.82E-01
600-23_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	2,500	1.00E+04	2.50E-01	1.90E+05	1.32E-02
600-23_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	86,200	3.30E+05	2.61E-01	1.32E+06	6.52E-02
600-23_Shallow_Focused	non-Rad	Benzene	71-43-2	µg/kg	2.0	No Value	--	7.02E+04	2.85E-05
600-23_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	180	4.00E+03	4.50E-02	1.63E+03	1.10E-01
600-23_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	18,500	4.00E+02	**4.63E+01**	3.82E+04	4.85E-01
600-23_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	4,900	5.00E+04	9.80E-02	3.56E+04	1.38E-01
600-23_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	330,000	2.20E+05	**1.50E+00**	5.80E+06	5.69E-02
600-23_Shallow_Focused	non-Rad	Methylene chloride	75-09-2	µg/kg	9.0	No Value	--	1.66E+05	5.43E-05
600-23_Shallow_Focused	non-Rad	Selenium	7782-49-2	µg/kg	660	5.20E+02	**1.27E+00**	1.90E+03	3.48E-01
600-23_Shallow_Focused	non-Rad	Toluene	108-88-3	µg/kg	1.0	2.00E+05	5.00E-06	5.20E+06	1.92E-07
600-23_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	560	5.00E+03	1.12E-01	7.86E+05	7.12E-04
600-23_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	55,100	5.00E+04	**1.10E+00**	6.78E+04	8.13E-01
600-23_Shallow_Focused	Rad	Cesium-137	10045-97-3	pCi/g	0.018	2.21E+03	8.14E-06	9.24E+02	1.95E-05
600-23_Shallow_Focused	Rad	Europium-155	14391-16-3	pCi/g	0.042	1.53E+05	2.75E-07	3.34E+04	1.26E-06
600-23_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	0.19	1.57E+04	1.20E-05	5.15E+03	3.65E-05
600-23_Shallow_Focused	Rad	Rads SOF	---	pCi/g	--	--	2.04E-05	--	5.73E-05
600-280_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	1,660	5.00E+03	3.32E-01	5.98E+03	2.77E-01
600-280_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	2,420	1.00E+04	2.42E-01	1.90E+05	1.28E-02
600-280_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	61,200	3.30E+05	1.85E-01	1.32E+06	4.63E-02
600-280_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	255	1.00E+04	2.55E-02	1.39E+04	1.83E-02
600-280_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	916	5.00E+02	**1.83E+00**	1.33E+05	6.89E-03
600-280_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	5,700	4.00E+02	**1.43E+01**	3.82E+04	1.49E-01
600-280_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	5,570	1.30E+04	4.28E-01	1.11E+05	5.00E-02
600-280_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	10,500	5.00E+04	2.10E-01	1.07E+05	9.81E-02

Table 5. Comparison of 100-IU-6 Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
600-280_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	22,700	5.00E+04	4.54E-01	3.56E+04	6.38E-01
600-280_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	311,000	2.20E+05	**1.41E+00**	5.80E+06	5.36E-02
600-280_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	406	2.00E+03	2.03E-01	1.40E+04	2.91E-02
600-280_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	7,630	3.00E+04	2.54E-01	3.26E+04	2.34E-01
600-280_Shallow_Focused	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling)	TPH/OILH	µg/kg	76,100	No Value	--	No Value	--
600-280_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	65,500	2.00E+03	**3.28E+01**	3.11E+04	**2.10E+00**
600-280_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	43,300	5.00E+04	8.66E-01	6.78E+04	6.39E-01
600-3_Shallow_1	non-Rad	Acenaphthene	83-32-9	µg/kg	21	2.00E+04	1.05E-03	1.10E+06	1.92E-05
600-3_Shallow_1	non-Rad	Anthracene	120-12-7	µg/kg	2.3	2.90E+04	7.97E-05	6.78E+05	3.41E-06
600-3_Shallow_1	non-Rad	Antimony	7440-36-0	µg/kg	335	5.00E+03	6.70E-02	5.98E+03	5.60E-02
600-3_Shallow_1	non-Rad	Aroclor-1260	11096-82-5	µg/kg	12	4.00E+04	2.93E-04	1.47E+03	7.93E-03
600-3_Shallow_1	non-Rad	Aroclors HI		ug/kg	--	--	2.93E-04	--	7.93E-03
600-3_Shallow_1	non-Rad	Arsenic	7440-38-2	µg/kg	3,019	1.00E+04	3.02E-01	1.90E+05	1.59E-02
600-3_Shallow_1	non-Rad	Barium	7440-39-3	µg/kg	72,952	3.30E+05	2.21E-01	1.32E+06	5.51E-02
600-3_Shallow_1	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	4.6	1.80E+04	2.55E-04	6.40E+04	7.16E-05
600-3_Shallow_1	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	17	1.80E+04	9.61E-04	7.64E+04	2.26E-04
600-3_Shallow_1	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	5.2	1.80E+04	2.91E-04	3.92E+04	1.34E-04
600-3_Shallow_1	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	6.2	1.80E+04	3.43E-04	3.92E+04	1.57E-04
600-3_Shallow_1	non-Rad	Beryllium	7440-41-7	µg/kg	312	1.00E+04	3.12E-02	1.39E+04	2.23E-02
600-3_Shallow_1	non-Rad	Boron	7440-42-8	µg/kg	954	5.00E+02	**1.91E+00**	1.33E+05	7.18E-03
600-3_Shallow_1	non-Rad	Cadmium	7440-43-9	µg/kg	118	4.00E+03	2.94E-02	1.63E+03	7.22E-02
600-3_Shallow_1	non-Rad	Chromium	7440-47-3	µg/kg	9,965	4.00E+02	**2.49E+01**	3.82E+04	2.61E-01
600-3_Shallow_1	non-Rad	Chrysene	218-01-9	µg/kg	11	1.80E+04	5.90E-04	4.45E+04	2.39E-04
600-3_Shallow_1	non-Rad	Cobalt	7440-48-4	µg/kg	6,718	1.30E+04	5.17E-01	1.11E+05	6.03E-02
600-3_Shallow_1	non-Rad	Copper	7440-50-8	µg/kg	12,939	5.00E+04	2.59E-01	1.07E+05	1.21E-01
600-3_Shallow_1	non-Rad	Dibenz[a,h]anthracene	53-70-3	µg/kg	1.7	1.80E+04	9.33E-05	4.41E+04	3.81E-05
600-3_Shallow_1	non-Rad	Fluoranthene	206-44-0	µg/kg	13	1.80E+04	7.32E-04	8.39E+05	1.57E-05
600-3_Shallow_1	non-Rad	Fluorene	86-73-7	µg/kg	0.95	2.90E+04	3.28E-05	1.75E+05	5.42E-06
600-3_Shallow_1	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	9.3	1.80E+04	5.17E-04	3.57E+04	2.61E-04
600-3_Shallow_1	non-Rad	Lead	7439-92-1	µg/kg	7,365	5.00E+04	1.47E-01	3.56E+04	2.07E-01
600-3_Shallow_1	non-Rad	Manganese	7439-96-5	µg/kg	314,529	2.20E+05	**1.43E+00**	5.80E+06	5.42E-02
600-3_Shallow_1	non-Rad	Molybdenum	7439-98-7	µg/kg	375	2.00E+03	1.88E-01	1.40E+04	2.69E-02
600-3_Shallow_1	non-Rad	Nickel	7440-02-0	µg/kg	9,437	3.00E+04	3.15E-01	3.26E+04	2.90E-01
600-3_Shallow_1	non-Rad	Pyrene	129-00-0	µg/kg	62	1.80E+04	3.45E-03	6.00E+05	1.03E-04
600-3_Shallow_1	non-Rad	Selenium	7782-49-2	µg/kg	377	5.20E+02	7.25E-01	1.90E+03	1.99E-01
600-3_Shallow_1	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling)	TPH/OILH	µg/kg	4,960	No Value	--	No Value	--
600-3_Shallow_1	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	2,000	5.00E+03	4.00E-01	7.86E+05	2.55E-03
600-3_Shallow_1	non-Rad	Vanadium	7440-62-2	µg/kg	62,613	2.00E+03	**3.13E+01**	3.11E+04	**2.01E+00**
600-3_Shallow_1	non-Rad	Zinc	7440-66-6	µg/kg	41,668	5.00E+04	8.33E-01	6.78E+04	6.15E-01
600-3_Shallow_1	Rad	Cesium-137	10045-97-3	pCi/g	0.033	2.21E+03	1.49E-05	9.24E+02	3.57E-05
600-3_Shallow_1	Rad	Uranium-233/234	U-233/234	pCi/g	0.70	5.16E+04	1.35E-05	6.37E+03	1.10E-04
600-3_Shallow_1	Rad	Uranium-238	U-238	pCi/g	0.67	1.57E+04	4.28E-05	5.15E+03	1.30E-04
600-3_Shallow_1	Rad	Rads SOF	---	pCi/g	--	--	7.12E-05	--	2.76E-04
600-3_Shallow_2	non-Rad	Acenaphthene	83-32-9	µg/kg	28	2.00E+04	1.42E-03	1.10E+06	2.60E-05
600-3_Shallow_2	non-Rad	Anthracene	120-12-7	µg/kg	3.9	2.90E+04	1.36E-04	6.78E+05	5.81E-06
600-3_Shallow_2	non-Rad	Antimony	7440-36-0	µg/kg	388	5.00E+03	7.76E-02	5.98E+03	6.49E-02
600-3_Shallow_2	non-Rad	Aroclor-1260	11096-82-5	µg/kg	5.8	4.00E+04	1.45E-04	1.47E+03	3.94E-03
600-3_Shallow_2	non-Rad	Aroclors HI		ug/kg	--	--	1.45E-04	--	3.94E-03
600-3_Shallow_2	non-Rad	Arsenic	7440-38-2	µg/kg	3,187	1.00E+04	3.19E-01	1.90E+05	1.68E-02
600-3_Shallow_2	non-Rad	Barium	7440-39-3	µg/kg	58,538	3.30E+05	1.77E-01	1.32E+06	4.42E-02
600-3_Shallow_2	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	136	1.80E+04	7.58E-03	6.40E+04	2.13E-03
600-3_Shallow_2	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	68	1.80E+04	3.75E-03	7.64E+04	8.83E-04
600-3_Shallow_2	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	25	1.80E+04	1.39E-03	3.92E+04	6.40E-04
600-3_Shallow_2	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	32	1.80E+04	1.77E-03	3.92E+04	8.13E-04
600-3_Shallow_2	non-Rad	Beryllium	7440-41-7	µg/kg	281	1.00E+04	2.81E-02	1.39E+04	2.02E-02
600-3_Shallow_2	non-Rad	Boron	7440-42-8	µg/kg	1,038	5.00E+02	**2.08E+00**	1.33E+05	7.81E-03
600-3_Shallow_2	non-Rad	Cadmium	7440-43-9	µg/kg	102	4.00E+03	2.54E-02	1.63E+03	6.23E-02
600-3_Shallow_2	non-Rad	Chromium	7440-47-3	µg/kg	11,176	4.00E+02	**2.79E+01**	3.82E+04	2.93E-01
600-3_Shallow_2	non-Rad	Chrysene	218-01-9	µg/kg	13	1.80E+04	7.10E-04	4.45E+04	2.87E-04
600-3_Shallow_2	non-Rad	Cobalt	7440-48-4	µg/kg	5,449	1.30E+04	4.19E-01	1.11E+05	4.89E-02
600-3_Shallow_2	non-Rad	Copper	7440-50-8	µg/kg	16,811	5.00E+04	3.36E-01	1.07E+05	1.57E-01
600-3_Shallow_2	non-Rad	Dibenz[a,h]anthracene	53-70-3	µg/kg	7.3	1.80E+04	4.06E-04	4.41E+04	1.66E-04
600-3_Shallow_2	non-Rad	Fluoranthene	206-44-0	µg/kg	49	1.80E+04	2.71E-03	8.39E+05	5.82E-05

Table 5. Comparison of 100-IU-6 Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
600-3_Shallow_2	non-Rad	Fluorene	86-73-7	µg/kg	3.0	2.90E+04	1.03E-04	1.75E+05	1.71E-05
600-3_Shallow_2	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	38	1.80E+04	2.09E-03	3.57E+04	1.05E-03
600-3_Shallow_2	non-Rad	Lead	7439-92-1	µg/kg	65,041	5.00E+04	**1.30E+00**	3.56E+04	**1.83E+00**
600-3_Shallow_2	non-Rad	Manganese	7439-96-5	µg/kg	246,287	2.20E+05	**1.12E+00**	5.80E+06	4.25E-02
600-3_Shallow_2	non-Rad	Molybdenum	7439-98-7	µg/kg	297	2.00E+03	1.48E-01	1.40E+04	2.12E-02
600-3_Shallow_2	non-Rad	Naphthalene	91-20-3	µg/kg	10.0	2.90E+04	3.44E-04	1.00E+05	9.99E-05
600-3_Shallow_2	non-Rad	Nickel	7440-02-0	µg/kg	11,155	3.00E+04	3.72E-01	3.26E+04	3.42E-01
600-3_Shallow_2	non-Rad	Pyrene	129-00-0	µg/kg	15	1.80E+04	8.50E-04	6.00E+05	2.55E-05
600-3_Shallow_2	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling)	TPH/OILH	µg/kg	24,700	No Value	--	No Value	--
600-3_Shallow_2	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	1,900	5.00E+03	3.80E-01	7.86E+05	2.42E-03
600-3_Shallow_2	non-Rad	Vanadium	7440-62-2	µg/kg	49,260	2.00E+03	**2.46E+01**	3.11E+04	**1.58E+00**
600-3_Shallow_2	non-Rad	Zinc	7440-66-6	µg/kg	39,739	5.00E+04	7.95E-01	6.78E+04	5.86E-01
600-3_Shallow_2	Rad	Cesium-137	10045-97-3	pCi/g	0.085	2.21E+03	3.85E-05	9.24E+02	9.20E-05
600-3_Shallow_2	Rad	Uranium-233/234	U-233/234	pCi/g	0.62	5.16E+04	1.20E-05	6.37E+03	9.70E-05
600-3_Shallow_2	Rad	Uranium-238	U-238	pCi/g	0.64	1.57E+04	4.07E-05	5.15E+03	1.24E-04
600-3_Shallow_2	Rad	Rads SOF	---	pCi/g	--	--	9.12E-05	--	3.13E-04
600-3_Shallow_Focused	non-Rad	4,4'-DDE (Dichlorodiphenyldichloroethylene)	72-55-9	µg/kg	1.6	No Value	--	4.00E+02	4.08E-03
600-3_Shallow_Focused	non-Rad	Acenaphthene	83-32-9	µg/kg	102	2.00E+04	5.10E-03	1.10E+06	9.31E-05
600-3_Shallow_Focused	non-Rad	Anthracene	120-12-7	µg/kg	13	2.90E+04	4.41E-04	6.78E+05	1.89E-05
600-3_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	11,700	5.00E+03	**2.34E+00**	5.98E+03	**1.96E+00**
600-3_Shallow_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	31	4.00E+04	7.68E-04	1.47E+03	2.08E-02
600-3_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	19	4.00E+04	4.75E-04	1.47E+03	1.29E-02
600-3_Shallow_Focused	non-Rad	Aroclors HI		ug/kg	--	--	1.24E-03	--	3.37E-02
600-3_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	3,140	1.00E+04	3.14E-01	1.90E+05	1.66E-02
600-3_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	841,000	3.30E+05	**2.55E+00**	1.32E+06	6.36E-01
600-3_Shallow_Focused	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	89	1.80E+04	4.94E-03	6.40E+04	1.39E-03
600-3_Shallow_Focused	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	119	1.80E+04	6.61E-03	7.64E+04	1.56E-03
600-3_Shallow_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	92	1.80E+04	5.12E-03	3.92E+04	2.35E-03
600-3_Shallow_Focused	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	43	1.80E+04	2.41E-03	3.92E+04	1.10E-03
600-3_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	361	1.00E+04	3.61E-02	1.39E+04	2.59E-02
600-3_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,790	5.00E+02	**3.58E+00**	1.33E+05	1.35E-02
600-3_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	296	4.00E+03	7.40E-02	1.63E+03	1.82E-01
600-3_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	19,400	4.00E+02	**4.85E+01**	3.82E+04	5.08E-01
600-3_Shallow_Focused	non-Rad	Chrysene	218-01-9	µg/kg	32	1.80E+04	1.80E-03	4.45E+04	7.28E-04
600-3_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	7,840	1.30E+04	6.03E-01	1.11E+05	7.03E-02
600-3_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	152,000	5.00E+04	**3.04E+00**	1.07E+05	**1.42E+00**
600-3_Shallow_Focused	non-Rad	Dibenz[a,h]anthracene	53-70-3	µg/kg	12	1.80E+04	6.83E-04	4.41E+04	2.79E-04
600-3_Shallow_Focused	non-Rad	Fluoranthene	206-44-0	µg/kg	224	1.80E+04	1.24E-02	8.39E+05	2.67E-04
600-3_Shallow_Focused	non-Rad	Fluorene	86-73-7	µg/kg	5.8	2.90E+04	1.99E-04	1.75E+05	3.28E-05
600-3_Shallow_Focused	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	91	1.80E+04	5.06E-03	3.57E+04	2.55E-03
600-3_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	1.64E+06	5.00E+04	**3.28E+01**	3.56E+04	**4.61E+01**
600-3_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	383,000	2.20E+05	**1.74E+00**	5.80E+06	6.61E-02
600-3_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	916	2.00E+03	4.58E-01	1.40E+04	6.56E-02
600-3_Shallow_Focused	non-Rad	Naphthalene	91-20-3	µg/kg	1.6	2.90E+04	5.59E-05	1.00E+05	1.62E-05
600-3_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	14,800	3.00E+04	4.93E-01	3.26E+04	4.54E-01
600-3_Shallow_Focused	non-Rad	Pyrene	129-00-0	µg/kg	88	1.80E+04	4.89E-03	6.00E+05	1.47E-04
600-3_Shallow_Focused	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	µg/kg	133,000	2.00E+05	6.65E-01	3.56E+08	3.73E-04
600-3_Shallow_Focused	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling)	TPH/OILH	µg/kg	48,900	No Value	--	No Value	--
600-3_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	2,533	5.00E+03	5.07E-01	7.86E+05	3.22E-03
600-3_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	68,400	2.00E+03	**3.42E+01**	3.11E+04	**2.20E+00**
600-3_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	384,000	5.00E+04	**7.68E+00**	6.78E+04	**5.66E+00**
600-3_Shallow_Focused	Rad	Cesium-137	10045-97-3	pCi/g	0.015	2.21E+03	6.79E-06	9.24E+02	1.62E-05
600-3_Shallow_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	0.74	5.16E+04	1.43E-05	6.37E+03	1.16E-04
600-3_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	0.85	1.57E+04	5.42E-05	5.15E+03	1.65E-04
600-3_Shallow_Focused	Rad	Rads SOF	---	pCi/g	--	--	7.53E-05	--	2.97E-04
600-3_Staging Pile Area Footprint	non-Rad	Acenaphthene	83-32-9	µg/kg	27	2.00E+04	1.36E-03	1.10E+06	2.48E-05
600-3_Staging Pile Area Footprint	non-Rad	Anthracene	120-12-7	µg/kg	4.6	2.90E+04	1.60E-04	6.78E+05	6.82E-06
600-3_Staging Pile Area Footprint	non-Rad	Aroclor-1254	11097-69-1	µg/kg	11	4.00E+04	2.75E-04	1.47E+03	7.46E-03
600-3_Staging Pile Area Footprint	non-Rad	Aroclor-1260	11096-82-5	µg/kg	17	4.00E+04	4.15E-04	1.47E+03	1.12E-02
600-3_Staging Pile Area Footprint	non-Rad	Aroclors HI		ug/kg	--	--	6.90E-04	--	1.87E-02
600-3_Staging Pile Area Footprint	non-Rad	Arsenic	7440-38-2	µg/kg	8,861	1.00E+04	8.86E-01	1.90E+05	4.68E-02
600-3_Staging Pile Area Footprint	non-Rad	Barium	7440-39-3	µg/kg	80,420	3.30E+05	2.44E-01	1.32E+06	6.08E-02
600-3_Staging Pile Area Footprint	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	39	1.80E+04	2.15E-03	6.40E+04	6.04E-04

Table 5. Comparison of 100-IU-6 Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
600-3_Staging Pile Area Footprint	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	29	1.80E+04	1.63E-03	7.64E+04	3.84E-04
600-3_Staging Pile Area Footprint	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	32	1.80E+04	1.77E-03	3.92E+04	8.13E-04
600-3_Staging Pile Area Footprint	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	20	1.80E+04	1.10E-03	3.92E+04	5.04E-04
600-3_Staging Pile Area Footprint	non-Rad	Beryllium	7440-41-7	µg/kg	307	1.00E+04	3.07E-02	1.39E+04	2.20E-02
600-3_Staging Pile Area Footprint	non-Rad	Boron	7440-42-8	µg/kg	1,584	5.00E+02	**3.17E+00**	1.33E+05	1.19E-02
600-3_Staging Pile Area Footprint	non-Rad	Cadmium	7440-43-9	µg/kg	199	4.00E+03	4.99E-02	1.63E+03	1.22E-01
600-3_Staging Pile Area Footprint	non-Rad	Chromium	7440-47-3	µg/kg	9,690	4.00E+02	**2.42E+01**	3.82E+04	2.54E-01
600-3_Staging Pile Area Footprint	non-Rad	Chrysene	218-01-9	µg/kg	31	1.80E+04	1.71E-03	4.45E+04	6.90E-04
600-3_Staging Pile Area Footprint	non-Rad	Cobalt	7440-48-4	µg/kg	6,802	1.30E+04	5.23E-01	1.11E+05	6.10E-02
600-3_Staging Pile Area Footprint	non-Rad	Copper	7440-50-8	µg/kg	13,715	5.00E+04	2.74E-01	1.07E+05	1.28E-01
600-3_Staging Pile Area Footprint	non-Rad	Dibenz[a,h]anthracene	53-70-3	µg/kg	3.9	1.80E+04	2.18E-04	4.41E+04	8.89E-05
600-3_Staging Pile Area Footprint	non-Rad	Fluoranthene	206-44-0	µg/kg	100	1.80E+04	5.53E-03	8.39E+05	1.19E-04
600-3_Staging Pile Area Footprint	non-Rad	Fluorene	86-73-7	µg/kg	3.0	2.90E+04	1.04E-04	1.75E+05	1.73E-05
600-3_Staging Pile Area Footprint	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	18	1.80E+04	1.01E-03	3.57E+04	5.09E-04
600-3_Staging Pile Area Footprint	non-Rad	Lead	7439-92-1	µg/kg	22,247	5.00E+04	4.45E-01	3.56E+04	6.25E-01
600-3_Staging Pile Area Footprint	non-Rad	Manganese	7439-96-5	µg/kg	340,091	2.20E+05	**1.55E+00**	5.80E+06	5.87E-02
600-3_Staging Pile Area Footprint	non-Rad	Molybdenum	7439-98-7	µg/kg	360	2.00E+03	1.80E-01	1.40E+04	2.58E-02
600-3_Staging Pile Area Footprint	non-Rad	Nickel	7440-02-0	µg/kg	9,460	3.00E+04	3.15E-01	3.26E+04	2.90E-01
600-3_Staging Pile Area Footprint	non-Rad	Pyrene	129-00-0	µg/kg	49	1.80E+04	2.75E-03	6.00E+05	8.24E-05
600-3_Staging Pile Area Footprint	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	µg/kg	7,320	2.00E+05	3.66E-02	3.56E+08	2.05E-05
600-3_Staging Pile Area Footprint	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling)	TPH/OILH	µg/kg	17,326	No Value	--	No Value	--
600-3_Staging Pile Area Footprint	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	1,878	5.00E+03	3.76E-01	7.86E+05	2.39E-03
600-3_Staging Pile Area Footprint	non-Rad	Vanadium	7440-62-2	µg/kg	62,937	2.00E+03	**3.15E+01**	3.11E+04	**2.02E+00**
600-3_Staging Pile Area Footprint	non-Rad	Zinc	7440-66-6	µg/kg	59,275	5.00E+04	**1.19E+00**	6.78E+04	8.74E-01
600-3_Staging Pile Area Footprint	Rad	Cesium-137	10045-97-3	pCi/g	0.068	2.21E+03	3.08E-05	9.24E+02	7.36E-05
600-3_Staging Pile Area Footprint	Rad	Uranium-233/234	U-233/234	pCi/g	0.75	5.16E+04	1.45E-05	6.37E+03	1.18E-04
600-3_Staging Pile Area Footprint	Rad	Uranium-238	U-238	pCi/g	0.63	1.57E+04	4.02E-05	5.15E+03	1.22E-04
600-3_Staging Pile Area Footprint	Rad	Rads SOF	---	pCi/g	--	--	8.55E-05	--	3.14E-04
600-3_Staging Pile Area Footprint_Focus	non-Rad	Antimony	7440-36-0	µg/kg	617	5.00E+03	1.23E-01	5.98E+03	1.03E-01
600-3_Staging Pile Area Footprint_Focus	non-Rad	Arsenic	7440-38-2	µg/kg	2,570	1.00E+04	2.57E-01	1.90E+05	1.36E-02
600-3_Staging Pile Area Footprint_Focus	non-Rad	Barium	7440-39-3	µg/kg	69,100	3.30E+05	2.09E-01	1.32E+06	5.22E-02
600-3_Staging Pile Area Footprint_Focus	non-Rad	Beryllium	7440-41-7	µg/kg	265	1.00E+04	2.65E-02	1.39E+04	1.90E-02
600-3_Staging Pile Area Footprint_Focus	non-Rad	Boron	7440-42-8	µg/kg	1,390	5.00E+02	**2.78E+00**	1.33E+05	1.05E-02
600-3_Staging Pile Area Footprint_Focus	non-Rad	Cadmium	7440-43-9	µg/kg	150	4.00E+03	3.75E-02	1.63E+03	9.20E-02
600-3_Staging Pile Area Footprint_Focus	non-Rad	Chromium	7440-47-3	µg/kg	7,870	4.00E+02	**1.97E+01**	3.82E+04	2.06E-01
600-3_Staging Pile Area Footprint_Focus	non-Rad	Cobalt	7440-48-4	µg/kg	6,390	1.30E+04	4.92E-01	1.11E+05	5.73E-02
600-3_Staging Pile Area Footprint_Focus	non-Rad	Copper	7440-50-8	µg/kg	9,450	5.00E+04	1.89E-01	1.07E+05	8.83E-02
600-3_Staging Pile Area Footprint_Focus	non-Rad	Lead	7439-92-1	µg/kg	236,000	5.00E+04	**4.72E+00**	3.56E+04	**6.63E+00**
600-3_Staging Pile Area Footprint_Focus	non-Rad	Manganese	7439-96-5	µg/kg	320,000	2.20E+05	**1.45E+00**	5.80E+06	5.52E-02
600-3_Staging Pile Area Footprint_Focus	non-Rad	Molybdenum	7439-98-7	µg/kg	412	2.00E+03	2.06E-01	1.40E+04	2.95E-02
600-3_Staging Pile Area Footprint_Focus	non-Rad	Nickel	7440-02-0	µg/kg	7,420	3.00E+04	2.47E-01	3.26E+04	2.28E-01
600-3_Staging Pile Area Footprint_Focus	non-Rad	Vanadium	7440-62-2	µg/kg	63,100	2.00E+03	**3.16E+01**	3.11E+04	**2.03E+00**
600-3_Staging Pile Area Footprint_Focus	non-Rad	Zinc	7440-66-6	µg/kg	45,800	5.00E+04	9.16E-01	6.78E+04	6.76E-01
600-315_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	2,000	1.00E+04	2.00E-01	1.90E+05	1.06E-02
600-315_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	90,100	3.30E+05	2.73E-01	1.32E+06	6.81E-02
600-315_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	460	1.00E+04	4.60E-02	1.39E+04	3.30E-02
600-315_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	13,300	5.00E+02	**2.66E+01**	1.33E+05	1.00E-01
600-315_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	640	4.00E+03	1.60E-01	1.63E+03	3.93E-01
600-315_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	5,300	4.00E+02	**1.33E+01**	3.82E+04	1.39E-01
600-315_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	3,500	1.30E+04	2.69E-01	1.11E+05	3.14E-02
600-315_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	7,900	5.00E+04	1.58E-01	1.07E+05	7.38E-02
600-315_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	7,400	5.00E+04	1.48E-01	3.56E+04	2.08E-01
600-315_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	169,000	2.20E+05	7.68E-01	5.80E+06	2.91E-02
600-315_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	17	1.00E+02	1.70E-01	1.87E+03	9.11E-03
600-315_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	410	2.00E+03	2.05E-01	1.40E+04	2.94E-02
600-315_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	4,900	3.00E+04	1.63E-01	3.26E+04	1.50E-01
600-315_Shallow_Focused	non-Rad	Selenium	7782-49-2	µg/kg	1,400	5.20E+02	**2.69E+00**	1.90E+03	7.37E-01
600-315_Shallow_Focused	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	µg/kg	66,000	2.00E+05	3.30E-01	3.56E+08	1.85E-04
600-315_Shallow_Focused	non-Rad	Total petroleum hydrocarbons - diesel range extended to C36	TPHDIESELEXT	µg/kg	110,000	No Value	--	No Value	--
600-315_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	17,600	2.00E+03	**8.80E+00**	3.11E+04	5.65E-01
600-315_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	24,200	5.00E+04	4.84E-01	6.78E+04	3.57E-01
600-322_Shallow_Focused	non-Rad	4,4'-DDE (Dichlorodiphenyldichloroethylene)	72-55-9	µg/kg	2.6	No Value	--	4.00E+02	6.51E-03
600-322_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	1,100	5.00E+03	2.20E-01	5.98E+03	1.84E-01

Table 5. Comparison of 100-IU-6 Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
600-322_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	4,900	1.00E+04	4.90E-01	1.90E+05	2.59E-02
600-322_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	77,500	3.30E+05	2.35E-01	1.32E+06	5.86E-02
600-322_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	120	1.00E+04	1.20E-02	1.39E+04	8.60E-03
600-322_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,500	5.00E+02	**3.00E+00**	1.33E+05	1.13E-02
600-322_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	250	4.00E+03	6.25E-02	1.63E+03	1.53E-01
600-322_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	32,800	4.00E+02	**8.20E+01**	3.82E+04	8.59E-01
600-322_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	7,700	1.30E+04	5.92E-01	1.11E+05	6.91E-02
600-322_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	57,400	5.00E+04	**1.15E+00**	1.07E+05	5.36E-01
600-322_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	72,200	5.00E+04	**1.44E+00**	3.56E+04	**2.03E+00**
600-322_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	556,000	2.20E+05	**2.53E+00**	5.80E+06	9.59E-02
600-322_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	37	1.00E+02	3.70E-01	1.87E+03	1.98E-02
600-322_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	4,300	2.00E+03	**2.15E+00**	1.40E+04	3.08E-01
600-322_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	35,400	3.00E+04	**1.18E+00**	3.26E+04	**1.09E+00**
600-322_Shallow_Focused	non-Rad	Silver	7440-22-4	µg/kg	210	2.00E+03	1.05E-01	4.96E+04	4.23E-03
600-322_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	50,200	2.00E+03	**2.51E+01**	3.11E+04	**1.61E+00**
600-322_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	62,900	5.00E+04	**1.26E+00**	6.78E+04	9.28E-01
600-323_Shallow_Focused	non-Rad	Acenaphthene	83-32-9	µg/kg	31	2.00E+04	1.55E-03	1.10E+06	2.83E-05
600-323_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	4,300	1.00E+04	4.30E-01	1.90E+05	2.27E-02
600-323_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	549,000	3.30E+05	**1.66E+00**	1.32E+06	4.15E-01
600-323_Shallow_Focused	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	4.6	1.80E+04	2.56E-04	6.40E+04	7.19E-05
600-323_Shallow_Focused	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	18	1.80E+04	1.00E-03	7.64E+04	2.36E-04
600-323_Shallow_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	50	1.80E+04	2.78E-03	3.92E+04	1.27E-03
600-323_Shallow_Focused	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	9.9	1.80E+04	5.50E-04	3.92E+04	2.52E-04
600-323_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	680	1.00E+04	6.80E-02	1.39E+04	4.88E-02
600-323_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	34,000	5.00E+02	**6.80E+01**	1.33E+05	2.56E-01
600-323_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	140	4.00E+03	3.50E-02	1.63E+03	8.59E-02
600-323_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	12,600	4.00E+02	**3.15E+01**	3.82E+04	3.30E-01
600-323_Shallow_Focused	non-Rad	Chrysene	218-01-9	µg/kg	170	1.80E+04	9.44E-03	4.45E+04	3.82E-03
600-323_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	7,300	1.30E+04	5.62E-01	1.11E+05	6.55E-02
600-323_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	20,400	5.00E+04	4.08E-01	1.07E+05	1.91E-01
600-323_Shallow_Focused	non-Rad	Fluoranthene	206-44-0	µg/kg	87	1.80E+04	4.83E-03	8.39E+05	1.04E-04
600-323_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	5,200	5.00E+04	1.04E-01	3.56E+04	1.46E-01
600-323_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	357,000	2.20E+05	**1.62E+00**	5.80E+06	6.16E-02
600-323_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	18	1.00E+02	1.80E-01	1.87E+03	9.64E-03
600-323_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	1,100	2.00E+03	5.50E-01	1.40E+04	7.88E-02
600-323_Shallow_Focused	non-Rad	Naphthalene	91-20-3	µg/kg	120	2.90E+04	4.14E-03	1.00E+05	1.20E-03
600-323_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	14,100	3.00E+04	4.70E-01	3.26E+04	4.33E-01
600-323_Shallow_Focused	non-Rad	Selenium	7782-49-2	µg/kg	2,200	5.20E+02	**4.23E+00**	1.90E+03	**1.16E+00**
600-323_Shallow_Focused	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	µg/kg	50,000	2.00E+05	2.50E-01	3.56E+08	1.40E-04
600-323_Shallow_Focused	non-Rad	Total petroleum hydrocarbons - diesel range extended to C36	TPHDIESELEXT	µg/kg	68,000	No Value	--	No Value	--
600-323_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	44,000	2.00E+03	**2.20E+01**	3.11E+04	**1.41E+00**
600-323_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	41,400	5.00E+04	8.28E-01	6.78E+04	6.11E-01
600-327_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	4,800	1.00E+04	4.80E-01	1.90E+05	2.53E-02
600-327_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	116,000	3.30E+05	3.52E-01	1.32E+06	8.77E-02
600-327_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	160	1.00E+04	1.60E-02	1.39E+04	1.15E-02
600-327_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,100	5.00E+02	**2.20E+00**	1.33E+05	8.28E-03
600-327_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	120	4.00E+03	3.00E-02	1.63E+03	7.36E-02
600-327_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	16,400	4.00E+02	**4.10E+01**	3.82E+04	4.30E-01
600-327_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	8,100	1.30E+04	6.23E-01	1.11E+05	7.26E-02
600-327_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	15,500	5.00E+04	3.10E-01	1.07E+05	1.45E-01
600-327_Shallow_Focused	non-Rad	Fluorene	86-73-7	µg/kg	41	2.90E+04	1.41E-03	1.75E+05	2.34E-04
600-327_Shallow_Focused	non-Rad	Fluoride	16984-48-8	µg/kg	2,100	No Value	--	2.28E+06	9.21E-04
600-327_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	6,700	5.00E+04	1.34E-01	3.56E+04	1.88E-01
600-327_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	342,000	2.20E+05	**1.55E+00**	5.80E+06	5.90E-02
600-327_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	6.0	1.00E+02	6.00E-02	1.87E+03	3.21E-03
600-327_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	15,900	3.00E+04	5.30E-01	3.26E+04	4.88E-01
600-327_Shallow_Focused	non-Rad	Nitrogen in Nitrate	NO3-N	µg/kg	2,700	No Value	--	No Value	--
600-327_Shallow_Focused	non-Rad	Nitrogen in Nitrite and Nitrate	NO2+NO3-N	µg/kg	2,700	No Value	--	No Value	--
600-327_Shallow_Focused	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	µg/kg	2,200	2.00E+05	1.10E-02	3.56E+08	6.17E-06
600-327_Shallow_Focused	non-Rad	Total petroleum hydrocarbons - diesel range extended to C36	TPHDIESELEXT	µg/kg	3,000	No Value	--	No Value	--
600-327_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	44,000	2.00E+03	**2.20E+01**	3.11E+04	**1.41E+00**
600-327_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	46,500	5.00E+04	9.30E-01	6.78E+04	6.86E-01
600-334:1_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	4,200	1.00E+04	4.20E-01	1.90E+05	2.22E-02

Table 5. Comparison of 100-IU-6 Decision Area Surface Soil (0 to 15 feet) Concentrations to SSLs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/Invertebrate SSL	Hazard Quotient	Wildlife SSL	Hazard Quotient
600-334:1_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	85,400	3.30E+05	2.59E-01	1.32E+06	6.46E-02
600-334:1_Shallow_Focused	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	3.8	1.80E+04	2.11E-04	6.40E+04	5.94E-05
600-334:1_Shallow_Focused	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	25	1.80E+04	1.39E-03	7.64E+04	3.27E-04
600-334:1_Shallow_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	25	1.80E+04	1.39E-03	3.92E+04	6.37E-04
600-334:1_Shallow_Focused	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	17	1.80E+04	9.44E-04	3.92E+04	4.33E-04
600-334:1_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	150	1.00E+04	1.50E-02	1.39E+04	1.08E-02
600-334:1_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	100	1.00E+05	1.00E-03	4.54E+04	2.20E-03
600-334:1_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	3,300	5.00E+02	**6.60E+00**	1.33E+05	2.48E-02
600-334:1_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	400	4.00E+03	1.00E-01	1.63E+03	2.45E-01
600-334:1_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	11,800	4.00E+02	**2.95E+01**	3.82E+04	3.09E-01
600-334:1_Shallow_Focused	non-Rad	Chrysene	218-01-9	µg/kg	39	1.80E+04	2.17E-03	4.45E+04	8.76E-04
600-334:1_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	5,800	1.30E+04	4.46E-01	1.11E+05	5.20E-02
600-334:1_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	17,500	5.00E+04	3.50E-01	1.07E+05	1.63E-01
600-334:1_Shallow_Focused	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	34	1.80E+04	1.89E-03	3.57E+04	9.53E-04
600-334:1_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	14,200	5.00E+04	2.84E-01	3.56E+04	3.99E-01
600-334:1_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	329,000	2.20E+05	**1.50E+00**	5.80E+06	5.67E-02
600-334:1_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	1,900	1.00E+02	**1.90E+01**	1.87E+03	**1.02E+00**
600-334:1_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	290	2.00E+03	1.45E-01	1.40E+04	2.08E-02
600-334:1_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	10,700	3.00E+04	3.57E-01	3.26E+04	3.28E-01
600-334:1_Shallow_Focused	non-Rad	Nitrogen in Nitrate	NO3-N	µg/kg	259,000	No Value	--	No Value	--
600-334:1_Shallow_Focused	non-Rad	Nitrogen in Nitrite and Nitrate	NO2+NO3-N	µg/kg	287,000	No Value	--	No Value	--
600-334:1_Shallow_Focused	non-Rad	Pyrene	129-00-0	µg/kg	78	1.80E+04	4.33E-03	6.00E+05	1.30E-04
600-334:1_Shallow_Focused	non-Rad	Silver	7440-22-4	µg/kg	220	2.00E+03	1.10E-01	4.96E+04	4.43E-03
600-334:1_Shallow_Focused	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	µg/kg	7,900	2.00E+05	3.95E-02	3.56E+08	2.22E-05
600-334:1_Shallow_Focused	non-Rad	Total petroleum hydrocarbons - diesel range extended to C36	TPHDIESELEXT	µg/kg	74,000	No Value	--	No Value	--
600-334:1_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	43,200	2.00E+03	**2.16E+01**	3.11E+04	**1.39E+00**
600-334:1_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	73,000	5.00E+04	**1.46E+00**	6.78E+04	**1.08E+00**
600-350_Shallow_Focused	non-Rad	Anthracene	120-12-7	µg/kg	3.1	2.90E+04	1.07E-04	6.78E+05	4.57E-06
600-350_Shallow_Focused	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	23	1.80E+04	1.28E-03	6.40E+04	3.59E-04
600-350_Shallow_Focused	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	21	1.80E+04	1.17E-03	7.64E+04	2.75E-04
600-350_Shallow_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	16	1.80E+04	8.89E-04	3.92E+04	4.08E-04
600-350_Shallow_Focused	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	6.6	1.80E+04	3.67E-04	3.92E+04	1.68E-04
600-350_Shallow_Focused	non-Rad	Chrysene	218-01-9	µg/kg	20	1.80E+04	1.11E-03	4.45E+04	4.49E-04
600-350_Shallow_Focused	non-Rad	Fluoranthene	206-44-0	µg/kg	52	1.80E+04	2.89E-03	8.39E+05	6.20E-05
600-350_Shallow_Focused	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	17	1.80E+04	9.44E-04	3.57E+04	4.77E-04
600-350_Shallow_Focused	non-Rad	Pyrene	129-00-0	µg/kg	63	1.80E+04	3.50E-03	6.00E+05	1.05E-04
JA JONES 1_Overburden	non-Rad	Barium	7440-39-3	µg/kg	80,600	3.30E+05	2.44E-01	1.32E+06	6.09E-02
JA JONES 1_Overburden	non-Rad	Cadmium	7440-43-9	µg/kg	470	4.00E+03	1.18E-01	1.63E+03	2.88E-01
JA JONES 1_Overburden	non-Rad	Chromium	7440-47-3	µg/kg	10,000	4.00E+02	**2.50E+01**	3.82E+04	2.62E-01
JA JONES 1_Overburden	non-Rad	Lead	7439-92-1	µg/kg	17,100	5.00E+04	3.42E-01	3.56E+04	4.81E-01
JA JONES 1_Shallow	non-Rad	Barium	7440-39-3	µg/kg	84,191	3.30E+05	2.55E-01	1.32E+06	6.36E-02
JA JONES 1_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	485	4.00E+03	1.21E-01	1.63E+03	2.98E-01
JA JONES 1_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	16,349	4.00E+02	**4.09E+01**	3.82E+04	4.28E-01
JA JONES 1_Shallow	non-Rad	Lead	7439-92-1	µg/kg	54,479	5.00E+04	**1.09E+00**	3.56E+04	**1.53E+00**
JA JONES 1_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	82,600	3.30E+05	2.50E-01	1.32E+06	6.24E-02
JA JONES 1_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	80	4.00E+03	2.00E-02	1.63E+03	4.91E-02
JA JONES 1_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	10,500	4.00E+02	**2.63E+01**	3.82E+04	2.75E-01
JA JONES 1_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	8,100	5.00E+04	1.62E-01	3.56E+04	2.28E-01

Table 6. Comparison of Chemicals Exceeding SSLs in 100-F Decision Areas Surface Soils (0 to 15 feet) to Background Concentrations

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > 90th Percentile Background Value?
100-F-11_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	11,600	1.85E+04	No
100-F-12_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	995	3.89E+03	No
100-F-12_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	10,500	1.85E+04	No
100-F-12_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	318,000	5.12E+05	No
100-F-12_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	45,500	8.51E+04	No
100-F-14_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,000	3.89E+03	No
100-F-14_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	9,100	1.85E+04	No
100-F-14_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	311,000	5.12E+05	No
100-F-14_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	59,700	8.51E+04	No
100-F-15_Overburden	non-Rad	Chromium	7440-47-3	µg/kg	13,800	1.85E+04	No
100-F-15_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	15,600	1.85E+04	No
100-F-16_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	14,100	1.85E+04	No
100-F-18_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	619	3.89E+03	No
100-F-18_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	8,500	1.85E+04	No
100-F-18_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	31,600	8.51E+04	No
100-F-19:2_Overburden	non-Rad	Mercury	7439-97-6	µg/kg	410	1.31E+01	**Yes**
100-F-20_Staging pile area	non-Rad	Boron	7440-42-8	µg/kg	2,600	3.89E+03	No
100-F-20_Staging pile area	non-Rad	Chromium	7440-47-3	µg/kg	9,200	1.85E+04	No
100-F-20_Staging pile area	non-Rad	Manganese	7439-96-5	µg/kg	328,000	5.12E+05	No
100-F-20_Staging pile area	non-Rad	Vanadium	7440-62-2	µg/kg	42,900	8.51E+04	No
100-F-20_Staging pile area	non-Rad	Zinc	7440-66-6	µg/kg	87,600	6.78E+04	**Yes**
100-F-25_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	140	1.31E+01	**Yes**
100-F-26:1_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	2,800	3.89E+03	No
100-F-26:1_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	12,900	1.85E+04	No
100-F-26:1_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	352,000	5.12E+05	No
100-F-26:1_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	44,800	8.51E+04	No
100-F-26:10_Overburden_Focused	non-Rad	Boron	7440-42-8	µg/kg	5,800	3.89E+03	**Yes**
100-F-26:10_Overburden_Focused	non-Rad	Chromium	7440-47-3	µg/kg	10,700	1.85E+04	No
100-F-26:10_Overburden_Focused	non-Rad	Manganese	7439-96-5	µg/kg	291,000	5.12E+05	No
100-F-26:10_Overburden_Focused	non-Rad	Selenium	7782-49-2	µg/kg	1,800	7.80E+02	**Yes**
100-F-26:10_Overburden_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	36,500	8.51E+04	No
100-F-26:10_Overburden_Focused	non-Rad	Zinc	7440-66-6	µg/kg	51,900	6.78E+04	No
100-F-26:10_Shallow	non-Rad	Boron	7440-42-8	µg/kg	2,790	3.89E+03	No
100-F-26:10_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	9,640	1.85E+04	No
100-F-26:10_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	286,118	5.12E+05	No
100-F-26:10_Shallow	non-Rad	Selenium	7782-49-2	µg/kg	1,369	7.80E+02	**Yes**
100-F-26:10_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	33,054	8.51E+04	No
100-F-26:10_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,600	3.89E+03	No
100-F-26:10_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	7,800	1.85E+04	No
100-F-26:10_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	257,000	5.12E+05	No
100-F-26:10_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	31,700	8.51E+04	No
100-F-26:11_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,400	3.89E+03	No
100-F-26:11_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	10,400	1.85E+04	No
100-F-26:11_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	294,000	5.12E+05	No
100-F-26:11_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	45,900	8.51E+04	No
100-F-26:11_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	56,700	6.78E+04	No
100-F-26:12_Overburden	non-Rad	Boron	7440-42-8	µg/kg	2,421	3.89E+03	No
100-F-26:12_Overburden	non-Rad	Chromium	7440-47-3	µg/kg	8,743	1.85E+04	No
100-F-26:12_Overburden	non-Rad	Manganese	7439-96-5	µg/kg	240,610	5.12E+05	No
100-F-26:12_Overburden	non-Rad	Vanadium	7440-62-2	µg/kg	31,558	8.51E+04	No
100-F-26:12_Shallow	non-Rad	Boron	7440-42-8	µg/kg	2,013	3.89E+03	No
100-F-26:12_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	7,949	1.85E+04	No
100-F-26:12_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	225,939	5.12E+05	No
100-F-26:12_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	28,449	8.51E+04	No
100-F-26:12_Staging Pile Area	non-Rad	Boron	7440-42-8	µg/kg	2,972	3.89E+03	No
100-F-26:12_Staging Pile Area	non-Rad	Chromium	7440-47-3	µg/kg	11,246	1.85E+04	No
100-F-26:12_Staging Pile Area	non-Rad	Manganese	7439-96-5	µg/kg	264,980	5.12E+05	No
100-F-26:12_Staging Pile Area	non-Rad	Vanadium	7440-62-2	µg/kg	38,910	8.51E+04	No
100-F-26:13_Overburden_Focused	non-Rad	Boron	7440-42-8	µg/kg	6,100	3.89E+03	**Yes**
100-F-26:13_Overburden_Focused	non-Rad	Chromium	7440-47-3	µg/kg	11,600	1.85E+04	No
100-F-26:13_Overburden_Focused	non-Rad	Manganese	7439-96-5	µg/kg	295,000	5.12E+05	No
100-F-26:13_Overburden_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	39,000	8.51E+04	No
100-F-26:13_Shallow	non-Rad	Boron	7440-42-8	µg/kg	1,500	3.89E+03	No
100-F-26:13_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	9,231	1.85E+04	No
100-F-26:13_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	237,795	5.12E+05	No
100-F-26:13_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	34,034	8.51E+04	No
100-F-26:13_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,400	3.89E+03	No
100-F-26:13_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	6,900	1.85E+04	No
100-F-26:13_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	22,300	8.51E+04	No
100-F-26:14_Overburden	non-Rad	Boron	7440-42-8	µg/kg	13,500	3.89E+03	**Yes**
100-F-26:14_Overburden	non-Rad	Chromium	7440-47-3	µg/kg	9,700	1.85E+04	No
100-F-26:14_Overburden	non-Rad	Manganese	7439-96-5	µg/kg	298,000	5.12E+05	No
100-F-26:14_Overburden	non-Rad	Vanadium	7440-62-2	µg/kg	42,400	8.51E+04	No
100-F-26:14_Shallow	non-Rad	Boron	7440-42-8	µg/kg	31,600	3.89E+03	**Yes**
100-F-26:14_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	9,500	1.85E+04	No
100-F-26:14_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	291,000	5.12E+05	No
100-F-26:14_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	40,200	8.51E+04	No
100-F-26:15_Overburden_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,900	3.89E+03	No
100-F-26:15_Overburden_Focused	non-Rad	Chromium	7440-47-3	µg/kg	9,500	1.85E+04	No

Table 6. Comparison of Chemicals Exceeding SSLs in 100-F Decision Areas Surface Soils (0 to 15 feet) to Background Concentrations

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > 90th Percentile Background Value?
100-F-26:15_Overburden_Focused	non-Rad	Manganese	7439-96-5	µg/kg	277,000	5.12E+05	No
100-F-26:15_Overburden_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	36,700	8.51E+04	No
100-F-26:15_Shallow	non-Rad	Boron	7440-42-8	µg/kg	4,162	3.89E+03	Yes
100-F-26:15_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	8,578	1.85E+04	No
100-F-26:15_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	280,532	5.12E+05	No
100-F-26:15_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	130	1.31E+01	Yes
100-F-26:15_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	34,310	8.51E+04	No
100-F-26:15_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,400	3.89E+03	No
100-F-26:15_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	8,200	1.85E+04	No
100-F-26:15_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	235,000	5.12E+05	No
100-F-26:15_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	31,300	8.51E+04	No
100-F-26:2_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,700	3.89E+03	No
100-F-26:2_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	7,700	1.85E+04	No
100-F-26:2_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	303,000	5.12E+05	No
100-F-26:2_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	46,900	8.51E+04	No
100-F-26:4_Overburden_Focused	non-Rad	Boron	7440-42-8	µg/kg	32,300	3.89E+03	Yes
100-F-26:4_Overburden_Focused	non-Rad	Chromium	7440-47-3	µg/kg	10,400	1.85E+04	No
100-F-26:4_Overburden_Focused	non-Rad	Manganese	7439-96-5	µg/kg	297,000	5.12E+05	No
100-F-26:4_Overburden_Focused	non-Rad	Mercury	7439-97-6	µg/kg	150	1.31E+01	Yes
100-F-26:4_Overburden_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	41,500	8.51E+04	No
100-F-26:4_Overburden_Focused	non-Rad	Zinc	7440-66-6	µg/kg	56,600	6.78E+04	No
100-F-26:4_Overburden_Focused_3	non-Rad	Boron	7440-42-8	µg/kg	5,100	3.89E+03	Yes
100-F-26:4_Overburden_Focused_3	non-Rad	Chromium	7440-47-3	µg/kg	11,000	1.85E+04	No
100-F-26:4_Overburden_Focused_3	non-Rad	Manganese	7439-96-5	µg/kg	299,000	5.12E+05	No
100-F-26:4_Overburden_Focused_3	non-Rad	Vanadium	7440-62-2	µg/kg	47,200	8.51E+04	No
100-F-26:4_Shallow_1	non-Rad	Boron	7440-42-8	µg/kg	5,760	3.89E+03	Yes
100-F-26:4_Shallow_1	non-Rad	Chromium	7440-47-3	µg/kg	8,347	1.85E+04	No
100-F-26:4_Shallow_1	non-Rad	Manganese	7439-96-5	µg/kg	232,660	5.12E+05	No
100-F-26:4_Shallow_1	non-Rad	Selenium	7782-49-2	µg/kg	2,700	7.80E+02	Yes
100-F-26:4_Shallow_1	non-Rad	Vanadium	7440-62-2	µg/kg	27,956	8.51E+04	No
100-F-26:4_Shallow_2	non-Rad	Boron	7440-42-8	µg/kg	4,903	3.89E+03	Yes
100-F-26:4_Shallow_2	non-Rad	Chromium	7440-47-3	µg/kg	11,066	1.85E+04	No
100-F-26:4_Shallow_2	non-Rad	Manganese	7439-96-5	µg/kg	275,252	5.12E+05	No
100-F-26:4_Shallow_2	non-Rad	Selenium	7782-49-2	µg/kg	930	7.80E+02	Yes
100-F-26:4_Shallow_2	non-Rad	Vanadium	7440-62-2	µg/kg	43,748	8.51E+04	No
100-F-26:4_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	2,700	3.89E+03	No
100-F-26:4_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	11,700	1.85E+04	No
100-F-26:4_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	310,000	5.12E+05	No
100-F-26:4_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	150	1.31E+01	Yes
100-F-26:4_Shallow_Focused	non-Rad	Selenium	7782-49-2	µg/kg	591	7.80E+02	No
100-F-26:4_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	46,100	8.51E+04	No
100-F-26:4_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	85,100	6.78E+04	Yes
100-F-26:5_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,000	3.89E+03	No
100-F-26:5_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	9,300	1.85E+04	No
100-F-26:5_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	231,000	5.12E+05	No
100-F-26:5_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	33,500	8.51E+04	No
100-F-26:7_Overburden_Focused	non-Rad	Boron	7440-42-8	µg/kg	10,600	3.89E+03	Yes
100-F-26:7_Overburden_Focused	non-Rad	Chromium	7440-47-3	µg/kg	17,700	1.85E+04	No
100-F-26:7_Overburden_Focused	non-Rad	Manganese	7439-96-5	µg/kg	319,000	5.12E+05	No
100-F-26:7_Overburden_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	47,600	8.51E+04	No
100-F-26:7_Shallow	non-Rad	Boron	7440-42-8	µg/kg	8,960	3.89E+03	Yes
100-F-26:7_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	11,159	1.85E+04	No
100-F-26:7_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	282,226	5.12E+05	No
100-F-26:7_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	47,555	8.51E+04	No
100-F-26:7_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,700	3.89E+03	No
100-F-26:7_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	11,000	1.85E+04	No
100-F-26:7_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	321,000	5.12E+05	No
100-F-26:7_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	39,700	8.51E+04	No
100-F-26:7_Staging Pile Area Footprint	non-Rad	Boron	7440-42-8	µg/kg	5,756	3.89E+03	Yes
100-F-26:7_Staging Pile Area Footprint	non-Rad	Chromium	7440-47-3	µg/kg	9,634	1.85E+04	No
100-F-26:7_Staging Pile Area Footprint	non-Rad	Manganese	7439-96-5	µg/kg	276,272	5.12E+05	No
100-F-26:7_Staging Pile Area Footprint	non-Rad	Selenium	7782-49-2	µg/kg	960	7.80E+02	Yes
100-F-26:7_Staging Pile Area Footprint	non-Rad	Vanadium	7440-62-2	µg/kg	52,232	8.51E+04	No
100-F-26:8_Overburden_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,600	3.89E+03	No
100-F-26:8_Overburden_Focused	non-Rad	Chromium	7440-47-3	µg/kg	10,500	1.85E+04	No
100-F-26:8_Overburden_Focused	non-Rad	Manganese	7439-96-5	µg/kg	332,000	5.12E+05	No
100-F-26:8_Overburden_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	45,900	8.51E+04	No
100-F-26:8_Overburden_Focused	non-Rad	Zinc	7440-66-6	µg/kg	54,000	6.78E+04	No
100-F-26:8_Shallow	non-Rad	Boron	7440-42-8	µg/kg	2,100	3.89E+03	No
100-F-26:8_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	12,660	1.85E+04	No
100-F-26:8_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	263,616	5.12E+05	No
100-F-26:8_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	160	1.31E+01	Yes
100-F-26:8_Shallow	non-Rad	Selenium	7782-49-2	µg/kg	1,335	7.80E+02	Yes
100-F-26:8_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	33,413	8.51E+04	No
100-F-26:8_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	9,600	1.85E+04	No
100-F-26:8_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	364,000	5.12E+05	No
100-F-26:8_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	39,800	8.51E+04	No
100-F-26:9_Overburden	non-Rad	Boron	7440-42-8	µg/kg	15,662	3.89E+03	Yes
100-F-26:9_Overburden	non-Rad	Chromium	7440-47-3	µg/kg	8,384	1.85E+04	No

Table 6. Comparison of Chemicals Exceeding SSLs in 100-F Decision Areas Surface Soils (0 to 15 feet) to Background Concentrations

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > 90th Percentile Background Value?
100-F-26:9_Overburden	non-Rad	Manganese	7439-96-5	µg/kg	277,999	5.12E+05	No
100-F-26:9_Overburden	non-Rad	Mercury	7439-97-6	µg/kg	100	1.31E+01	Yes
100-F-26:9_Overburden	non-Rad	Vanadium	7440-62-2	µg/kg	40,062	8.51E+04	No
100-F-26:9_Overburden_Focused	non-Rad	Barium	7440-39-3	µg/kg	659,000	1.32E+05	Yes
100-F-26:9_Overburden_Focused	non-Rad	Boron	7440-42-8	µg/kg	61,700	3.89E+03	Yes
100-F-26:9_Overburden_Focused	non-Rad	Chromium	7440-47-3	µg/kg	12,500	1.85E+04	No
100-F-26:9_Overburden_Focused	non-Rad	Copper	7440-50-8	µg/kg	183,000	2.20E+04	Yes
100-F-26:9_Overburden_Focused	non-Rad	Lead	7439-92-1	µg/kg	81,700	1.02E+04	Yes
100-F-26:9_Overburden_Focused	non-Rad	Manganese	7439-96-5	µg/kg	254,000	5.12E+05	No
100-F-26:9_Overburden_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	49,300	8.51E+04	No
100-F-26:9_Overburden_Focused	non-Rad	Zinc	7440-66-6	µg/kg	85,800	6.78E+04	Yes
100-F-26:9_Shallow	non-Rad	Boron	7440-42-8	µg/kg	14,334	3.89E+03	Yes
100-F-26:9_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	9,462	1.85E+04	No
100-F-26:9_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	285,355	5.12E+05	No
100-F-26:9_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	278	1.31E+01	Yes
100-F-26:9_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	42,960	8.51E+04	No
100-F-26:9_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	28,600	3.89E+03	Yes
100-F-26:9_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	17,000	1.85E+04	No
100-F-26:9_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	274,000	5.12E+05	No
100-F-26:9_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	810	1.31E+01	Yes
100-F-26:9_Shallow_Focused	non-Rad	Selenium	7782-49-2	µg/kg	1,300	7.80E+02	Yes
100-F-26:9_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	42,300	8.51E+04	No
100-F-26:9_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	122,000	6.78E+04	Yes
100-F-26:9_Staging Pile Area	non-Rad	Arsenic	7440-38-2	µg/kg	11,014	6.47E+03	Yes
100-F-26:9_Staging Pile Area	non-Rad	Boron	7440-42-8	µg/kg	1,604	3.89E+03	No
100-F-26:9_Staging Pile Area	non-Rad	Chromium	7440-47-3	µg/kg	10,408	1.85E+04	No
100-F-26:9_Staging Pile Area	non-Rad	Manganese	7439-96-5	µg/kg	263,395	5.12E+05	No
100-F-26:9_Staging Pile Area	non-Rad	Mercury	7439-97-6	µg/kg	120	1.31E+01	Yes
100-F-26:9_Staging Pile Area	non-Rad	Vanadium	7440-62-2	µg/kg	30,622	8.51E+04	No
100-F-31_Shallow	non-Rad	Boron	7440-42-8	µg/kg	2,890	3.89E+03	No
100-F-31_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	9,321	1.85E+04	No
100-F-31_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	230,196	5.12E+05	No
100-F-31_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	1,200	1.31E+01	Yes
100-F-31_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	34,376	8.51E+04	No
100-F-33_Shallow	non-Rad	Boron	7440-42-8	µg/kg	1,514	3.89E+03	No
100-F-33_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	9,437	1.85E+04	No
100-F-33_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	256,825	5.12E+05	No
100-F-33_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	34,010	8.51E+04	No
100-F-33_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	71,718	6.78E+04	Yes
100-F-33_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	2,700	3.89E+03	No
100-F-33_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	13,400	1.85E+04	No
100-F-33_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	312,000	5.12E+05	No
100-F-33_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	50,400	8.51E+04	No
100-F-33_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	58,200	6.78E+04	No
100-F-33_Staging pile area_Focused	non-Rad	Boron	7440-42-8	µg/kg	2,000	3.89E+03	No
100-F-33_Staging pile area_Focused	non-Rad	Chromium	7440-47-3	µg/kg	9,400	1.85E+04	No
100-F-33_Staging pile area_Focused	non-Rad	Manganese	7439-96-5	µg/kg	250,000	5.12E+05	No
100-F-33_Staging pile area_Focused	non-Rad	Mercury	7439-97-6	µg/kg	381	1.31E+01	Yes
100-F-33_Staging pile area_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	36,100	8.51E+04	No
100-F-36_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	6,900	1.85E+04	No
100-F-36_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	27,700	8.51E+04	No
100-F-36_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,200	3.89E+03	No
100-F-36_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	8,800	1.85E+04	No
100-F-36_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	356,000	5.12E+05	No
100-F-36_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	44,800	8.51E+04	No
100-F-37_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	17,300	6.47E+03	Yes
100-F-37_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	508,000	1.32E+05	Yes
100-F-37_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	18,100	1.85E+04	No
100-F-37_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	214,000	1.02E+04	Yes
100-F-38_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	388,000	1.32E+05	Yes
100-F-38_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	23,500	3.89E+03	Yes
100-F-38_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	14,500	1.85E+04	No
100-F-38_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	38,400	1.02E+04	Yes
100-F-38_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	291,000	5.12E+05	No
100-F-38_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	44,100	8.51E+04	No
100-F-4_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	16,100	1.85E+04	No
100-F-44:2_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,800	3.89E+03	No
100-F-44:2_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	9,200	1.85E+04	No
100-F-44:2_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	235,000	5.12E+05	No
100-F-44:2_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	31,600	8.51E+04	No
100-F-44:2_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	90,700	6.78E+04	Yes
100-F-44:5_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	2,100	3.89E+03	No
100-F-44:5_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	7,900	1.85E+04	No
100-F-44:5_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	250,000	5.12E+05	No
100-F-44:5_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	30,600	8.51E+04	No
100-F-44:8_Shallow	non-Rad	Boron	7440-42-8	µg/kg	11,762	3.89E+03	Yes
100-F-44:8_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	10,810	1.85E+04	No
100-F-44:8_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	289,822	5.12E+05	No
100-F-44:8_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	106	1.31E+01	Yes

Table 6. Comparison of Chemicals Exceeding SSLs in 100-F Decision Areas Surface Soils (0 to 15 feet) to Background Concentrations

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > 90th Percentile Background Value?
100-F-44:8_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	49,287	8.51E+04	No
100-F-44:8_Staging Pile Area Footprint	non-Rad	Boron	7440-42-8	µg/kg	1,433	3.89E+03	No
100-F-44:8_Staging Pile Area Footprint	non-Rad	Chromium	7440-47-3	µg/kg	8,432	1.85E+04	No
100-F-44:8_Staging Pile Area Footprint	non-Rad	Manganese	7439-96-5	µg/kg	271,082	5.12E+05	No
100-F-44:8_Staging Pile Area Footprint	non-Rad	Vanadium	7440-62-2	µg/kg	50,796	8.51E+04	No
100-F-44:9_Overburden_Focused	non-Rad	Boron	7440-42-8	µg/kg	2,000	3.89E+03	No
100-F-44:9_Overburden_Focused	non-Rad	Chromium	7440-47-3	µg/kg	9,700	1.85E+04	No
100-F-44:9_Overburden_Focused	non-Rad	Manganese	7439-96-5	µg/kg	281,000	5.12E+05	No
100-F-44:9_Overburden_Focused	non-Rad	Selenium	7782-49-2	µg/kg	1,100	7.80E+02	**Yes**
100-F-44:9_Overburden_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	42,200	8.51E+04	No
100-F-44:9_Overburden_Focused	non-Rad	Zinc	7440-66-6	µg/kg	55,300	6.78E+04	No
100-F-44:9_Shallow	non-Rad	Boron	7440-42-8	µg/kg	1,450	3.89E+03	No
100-F-44:9_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	11,182	1.85E+04	No
100-F-44:9_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	290,704	5.12E+05	No
100-F-44:9_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	42,977	8.51E+04	No
100-F-44:9_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	52,535	6.78E+04	No
100-F-44:9_Staging Pile Area Footprint	non-Rad	Boron	7440-42-8	µg/kg	1,980	3.89E+03	No
100-F-44:9_Staging Pile Area Footprint	non-Rad	Chromium	7440-47-3	µg/kg	12,509	1.85E+04	No
100-F-44:9_Staging Pile Area Footprint	non-Rad	Manganese	7439-96-5	µg/kg	304,989	5.12E+05	No
100-F-44:9_Staging Pile Area Footprint	non-Rad	Selenium	7782-49-2	µg/kg	930	7.80E+02	**Yes**
100-F-44:9_Staging Pile Area Footprint	non-Rad	Vanadium	7440-62-2	µg/kg	46,865	8.51E+04	No
100-F-45_Overburden_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,300	3.89E+03	No
100-F-45_Overburden_Focused	non-Rad	Chromium	7440-47-3	µg/kg	20,700	1.85E+04	**Yes**
100-F-45_Overburden_Focused	non-Rad	Manganese	7439-96-5	µg/kg	237,000	5.12E+05	No
100-F-45_Overburden_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	34,500	8.51E+04	No
100-F-45_Shallow	non-Rad	Boron	7440-42-8	µg/kg	1,700	3.89E+03	No
100-F-45_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	34,335	1.85E+04	**Yes**
100-F-45_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	274,740	5.12E+05	No
100-F-45_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	1,034	1.31E+01	**Yes**
100-F-45_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	38,311	8.51E+04	No
100-F-45_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	54,296	6.78E+04	No
100-F-45_Staging Pile Area Footprint	non-Rad	Boron	7440-42-8	µg/kg	2,766	3.89E+03	No
100-F-45_Staging Pile Area Footprint	non-Rad	Chromium	7440-47-3	µg/kg	11,780	1.85E+04	No
100-F-45_Staging Pile Area Footprint	non-Rad	Manganese	7439-96-5	µg/kg	254,059	5.12E+05	No
100-F-45_Staging Pile Area Footprint	non-Rad	Vanadium	7440-62-2	µg/kg	40,197	8.51E+04	No
100-F-46_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	3,900	3.89E+03	**Yes**
100-F-46_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	8,500	1.85E+04	No
100-F-46_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	245,000	5.12E+05	No
100-F-46_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	34,200	8.51E+04	No
100-F-47_Shallow	non-Rad	Boron	7440-42-8	µg/kg	1,833	3.89E+03	No
100-F-47_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	10,781	1.85E+04	No
100-F-47_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	259,094	5.12E+05	No
100-F-47_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	907	1.31E+01	**Yes**
100-F-47_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	37,121	8.51E+04	No
100-F-48_Overburden	non-Rad	Boron	7440-42-8	µg/kg	1,283	3.89E+03	No
100-F-48_Overburden	non-Rad	Chromium	7440-47-3	µg/kg	10,921	1.85E+04	No
100-F-48_Overburden	non-Rad	Manganese	7439-96-5	µg/kg	257,998	5.12E+05	No
100-F-48_Overburden	non-Rad	Vanadium	7440-62-2	µg/kg	38,122	8.51E+04	No
100-F-48_Overburden_Focused	non-Rad	Boron	7440-42-8	µg/kg	2,500	3.89E+03	No
100-F-48_Overburden_Focused	non-Rad	Chromium	7440-47-3	µg/kg	11,900	1.85E+04	No
100-F-48_Overburden_Focused	non-Rad	Manganese	7439-96-5	µg/kg	289,000	5.12E+05	No
100-F-48_Overburden_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	38,600	8.51E+04	No
100-F-48_Shallow_1	non-Rad	Boron	7440-42-8	µg/kg	4,367	3.89E+03	**Yes**
100-F-48_Shallow_1	non-Rad	Chromium	7440-47-3	µg/kg	12,289	1.85E+04	No
100-F-48_Shallow_1	non-Rad	Manganese	7439-96-5	µg/kg	267,107	5.12E+05	No
100-F-48_Shallow_1	non-Rad	Mercury	7439-97-6	µg/kg	151	1.31E+01	**Yes**
100-F-48_Shallow_1	non-Rad	Vanadium	7440-62-2	µg/kg	37,729	8.51E+04	No
100-F-48_Shallow_2	non-Rad	Boron	7440-42-8	µg/kg	2,442	3.89E+03	No
100-F-48_Shallow_2	non-Rad	Chromium	7440-47-3	µg/kg	10,945	1.85E+04	No
100-F-48_Shallow_2	non-Rad	Manganese	7439-96-5	µg/kg	244,867	5.12E+05	No
100-F-48_Shallow_2	non-Rad	Vanadium	7440-62-2	µg/kg	36,873	8.51E+04	No
100-F-49_Shallow	non-Rad	Boron	7440-42-8	µg/kg	2,083	3.89E+03	No
100-F-49_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	11,187	1.85E+04	No
100-F-49_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	252,487	5.12E+05	No
100-F-49_Shallow	non-Rad	Selenium	7782-49-2	µg/kg	1,200	7.80E+02	**Yes**
100-F-49_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	41,195	8.51E+04	No
100-F-49_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	10,900	1.85E+04	No
100-F-49_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	236,000	5.12E+05	No
100-F-49_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	41,400	8.51E+04	No
100-F-49_Staging Pile Area Footprint_Focused	non-Rad	Boron	7440-42-8	µg/kg	4,100	3.89E+03	**Yes**
100-F-49_Staging Pile Area Footprint_Focused	non-Rad	Chromium	7440-47-3	µg/kg	22,100	1.85E+04	**Yes**
100-F-49_Staging Pile Area Footprint_Focused	non-Rad	Manganese	7439-96-5	µg/kg	326,000	5.12E+05	No
100-F-49_Staging Pile Area Footprint_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	45,700	8.51E+04	No
100-F-50_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	2,500	3.89E+03	No
100-F-50_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	7,600	1.85E+04	No

Table 6. Comparison of Chemicals Exceeding SSLs in 100-F Decision Areas Surface Soils (0 to 15 feet) to Background Concentrations

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > 90th Percentile Background Value?
100-F-50_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	310,000	5.12E+05	No
100-F-50_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	53,100	8.51E+04	No
100-F-51 and 100-F-63_Overburden_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,500	3.89E+03	No
100-F-51 and 100-F-63_Overburden_Focused	non-Rad	Chromium	7440-47-3	µg/kg	10,900	1.85E+04	No
100-F-51 and 100-F-63_Overburden_Focused	non-Rad	Manganese	7439-96-5	µg/kg	270,000	5.12E+05	No
100-F-51 and 100-F-63_Overburden_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	41,600	8.51E+04	No
100-F-51 and 100-F-63_Overburden_Focused	non-Rad	Zinc	7440-66-6	µg/kg	52,500	6.78E+04	No
100-F-51 and 100-F-63_Shallow	non-Rad	Boron	7440-42-8	µg/kg	1,283	3.89E+03	No
100-F-51 and 100-F-63_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	9,966	1.85E+04	No
100-F-51 and 100-F-63_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	248,671	5.12E+05	No
100-F-51 and 100-F-63_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	39,841	8.51E+04	No
100-F-51 and 100-F-63_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	52,147	6.78E+04	No
100-F-52_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,500	3.89E+03	No
100-F-52_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	9,000	1.85E+04	No
100-F-52_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	270,000	5.12E+05	No
100-F-52_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	35,100	8.51E+04	No
100-F-53_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	2,000	3.89E+03	No
100-F-53_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	11,200	1.85E+04	No
100-F-53_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	413,000	5.12E+05	No
100-F-53_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	45,600	8.51E+04	No
100-F-55 and 100-F-62_Shallow_1	non-Rad	Boron	7440-42-8	µg/kg	2,179	3.89E+03	No
100-F-55 and 100-F-62_Shallow_1	non-Rad	Chromium	7440-47-3	µg/kg	12,368	1.85E+04	No
100-F-55 and 100-F-62_Shallow_1	non-Rad	Lead	7439-92-1	µg/kg	65,065	1.02E+04	**Yes**
100-F-55 and 100-F-62_Shallow_1	non-Rad	Manganese	7439-96-5	µg/kg	325,163	5.12E+05	No
100-F-55 and 100-F-62_Shallow_1	non-Rad	Vanadium	7440-62-2	µg/kg	42,866	8.51E+04	No
100-F-55 and 100-F-62_Shallow_1	non-Rad	Zinc	7440-66-6	µg/kg	53,696	6.78E+04	No
100-F-55 and 100-F-62_Shallow_2	non-Rad	Boron	7440-42-8	µg/kg	4,158	3.89E+03	**Yes**
100-F-55 and 100-F-62_Shallow_2	non-Rad	Chromium	7440-47-3	µg/kg	11,540	1.85E+04	No
100-F-55 and 100-F-62_Shallow_2	non-Rad	Manganese	7439-96-5	µg/kg	256,619	5.12E+05	No
100-F-55 and 100-F-62_Shallow_2	non-Rad	Mercury	7439-97-6	µg/kg	6,786	1.31E+01	**Yes**
100-F-55 and 100-F-62_Shallow_2	non-Rad	Vanadium	7440-62-2	µg/kg	39,226	8.51E+04	No
100-F-55 and 100-F-62_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,200	3.89E+03	No
100-F-55 and 100-F-62_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	10,800	1.85E+04	No
100-F-55 and 100-F-62_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	286,000	5.12E+05	No
100-F-55 and 100-F-62_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	42,000	8.51E+04	No
100-F-55 and 100-F-62_Staging Pile Area Footprint_Focused	non-Rad	Boron	7440-42-8	µg/kg	8,300	3.89E+03	**Yes**
100-F-55 and 100-F-62_Staging Pile Area Footprint_Focused	non-Rad	Chromium	7440-47-3	µg/kg	16,900	1.85E+04	No
100-F-55 and 100-F-62_Staging Pile Area Footprint_Focused	non-Rad	Manganese	7439-96-5	µg/kg	340,000	5.12E+05	No
100-F-55 and 100-F-62_Staging Pile Area Footprint_Focused	non-Rad	Mercury	7439-97-6	µg/kg	690	1.31E+01	**Yes**
100-F-55 and 100-F-62_Staging Pile Area Footprint_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	42,600	8.51E+04	No
100-F-55 and 100-F-62_Staging Pile Area Footprint_Focused	non-Rad	Zinc	7440-66-6	µg/kg	74,800	6.78E+04	**Yes**
100-F-56:1_Shallow	non-Rad	Boron	7440-42-8	µg/kg	1,317	3.89E+03	No
100-F-56:1_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	10,361	1.85E+04	No
100-F-56:1_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	276,638	5.12E+05	No
100-F-56:1_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	1,771	1.31E+01	**Yes**
100-F-56:1_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	48,417	8.51E+04	No
100-F-56:1_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	2,600	3.89E+03	No
100-F-56:1_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	58,600	1.85E+04	**Yes**
100-F-56:1_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	296,000	5.12E+05	No
100-F-56:1_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	49,300	8.51E+04	No
100-F-60_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	3,300	3.89E+03	No
100-F-60_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	9,900	1.85E+04	No
100-F-60_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	248,000	5.12E+05	No
100-F-60_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	38,600	8.51E+04	No
100-F-61_Shallow	non-Rad	Boron	7440-42-8	µg/kg	2,403	3.89E+03	No
100-F-61_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	11,835	1.85E+04	No
100-F-61_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	298,817	5.12E+05	No
100-F-61_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	640	1.31E+01	**Yes**
100-F-61_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	44,351	8.51E+04	No
100-F-7_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,000	3.89E+03	No
100-F-7_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	9,900	1.85E+04	No
100-F-7_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	262,000	5.12E+05	No
100-F-7_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	131	1.31E+01	**Yes**
100-F-7_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	38,400	8.51E+04	No
100-F-9_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	2,300	3.89E+03	No
100-F-9_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	13,900	1.85E+04	No
100-F-9_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	273,000	5.12E+05	No
100-F-9_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	410	1.31E+01	**Yes**

Table 6. Comparison of Chemicals Exceeding SSLs in 100-F Decision Areas Surface Soils (0 to 15 feet) to Background Concentrations

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > 90th Percentile Background Value?
100-F-9_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	48,200	8.51E+04	No
116-F-1_Overburden	non-Rad	Arsenic	7440-38-2	µg/kg	11,119	6.47E+03	Yes
116-F-10_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	10,600	1.85E+04	No
116-F-14_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	24,156	1.85E+04	Yes
116-F-15_Shallow	non-Rad	Boron	7440-42-8	µg/kg	11,562	3.89E+03	Yes
116-F-15_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	13,311	1.85E+04	No
116-F-15_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	244,514	5.12E+05	No
116-F-15_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	179	1.31E+01	Yes
116-F-15_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	38,303	8.51E+04	No
116-F-5_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	17,300	6.47E+03	Yes
116-F-5_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	11,200	1.85E+04	No
116-F-5_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	325,000	5.12E+05	No
116-F-5_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	45,600	8.51E+04	No
118-F-1_Overburden	non-Rad	Boron	7440-42-8	µg/kg	3,490	3.89E+03	No
118-F-1_Overburden	non-Rad	Chromium	7440-47-3	µg/kg	9,573	1.85E+04	No
118-F-1_Overburden	non-Rad	Manganese	7439-96-5	µg/kg	339,100	5.12E+05	No
118-F-1_Overburden	non-Rad	Selenium	7782-49-2	µg/kg	1,412	7.80E+02	Yes
118-F-1_Overburden	non-Rad	Silver	7440-22-4	µg/kg	4,300	1.67E+02	Yes
118-F-1_Overburden	non-Rad	Vanadium	7440-62-2	µg/kg	57,388	8.51E+04	No
118-F-1_Shallow	non-Rad	Boron	7440-42-8	µg/kg	1,429	3.89E+03	No
118-F-1_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	8,367	1.85E+04	No
118-F-1_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	275,054	5.12E+05	No
118-F-1_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	45,765	8.51E+04	No
118-F-1_Staging Pile Area	non-Rad	Arsenic	7440-38-2	µg/kg	11,600	6.47E+03	Yes
118-F-1_Staging Pile Area	non-Rad	Boron	7440-42-8	µg/kg	1,200	3.89E+03	No
118-F-1_Staging Pile Area	non-Rad	Chromium	7440-47-3	µg/kg	10,607	1.85E+04	No
118-F-1_Staging Pile Area	non-Rad	Manganese	7439-96-5	µg/kg	320,989	5.12E+05	No
118-F-1_Staging Pile Area	non-Rad	Vanadium	7440-62-2	µg/kg	43,457	8.51E+04	No
118-F-2_Overburden	non-Rad	Boron	7440-42-8	µg/kg	1,400	3.89E+03	No
118-F-2_Overburden	non-Rad	Chromium	7440-47-3	µg/kg	9,400	1.85E+04	No
118-F-2_Overburden	non-Rad	Manganese	7439-96-5	µg/kg	395,000	5.12E+05	No
118-F-2_Overburden	non-Rad	Selenium	7782-49-2	µg/kg	1,400	7.80E+02	Yes
118-F-2_Overburden	non-Rad	Vanadium	7440-62-2	µg/kg	63,000	8.51E+04	No
118-F-2_Overburden	non-Rad	Zinc	7440-66-6	µg/kg	52,100	6.78E+04	No
118-F-2_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	13,000	1.85E+04	No
118-F-2_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	347,000	5.12E+05	No
118-F-2_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	41,300	8.51E+04	No
118-F-2_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,200	3.89E+03	No
118-F-2_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	6,600	1.85E+04	No
118-F-2_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	274,000	5.12E+05	No
118-F-2_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	56,800	8.51E+04	No
118-F-2_Staging Pile Area	non-Rad	Boron	7440-42-8	µg/kg	1,400	3.89E+03	No
118-F-2_Staging Pile Area	non-Rad	Chromium	7440-47-3	µg/kg	8,400	1.85E+04	No
118-F-2_Staging Pile Area	non-Rad	Manganese	7439-96-5	µg/kg	337,000	5.12E+05	No
118-F-2_Staging Pile Area	non-Rad	Selenium	7782-49-2	µg/kg	1,400	7.80E+02	Yes
118-F-2_Staging Pile Area	non-Rad	Vanadium	7440-62-2	µg/kg	42,000	8.51E+04	No
118-F-3_Overburden	non-Rad	Boron	7440-42-8	µg/kg	2,600	3.89E+03	No
118-F-3_Overburden	non-Rad	Chromium	7440-47-3	µg/kg	8,900	1.85E+04	No
118-F-3_Overburden	non-Rad	Manganese	7439-96-5	µg/kg	302,000	5.12E+05	No
118-F-3_Overburden	non-Rad	Vanadium	7440-62-2	µg/kg	39,300	8.51E+04	No
118-F-3_Shallow	non-Rad	Boron	7440-42-8	µg/kg	12,700	3.89E+03	Yes
118-F-3_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	8,300	1.85E+04	No
118-F-3_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	264,000	5.12E+05	No
118-F-3_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	33,000	8.51E+04	No
118-F-3_Staging Pile Area	non-Rad	Boron	7440-42-8	µg/kg	6,600	3.89E+03	Yes
118-F-3_Staging Pile Area	non-Rad	Chromium	7440-47-3	µg/kg	7,400	1.85E+04	No
118-F-3_Staging Pile Area	non-Rad	Manganese	7439-96-5	µg/kg	261,000	5.12E+05	No
118-F-3_Staging Pile Area	non-Rad	Vanadium	7440-62-2	µg/kg	32,200	8.51E+04	No
118-F-7_Overburden	non-Rad	Boron	7440-42-8	µg/kg	1,400	3.89E+03	No
118-F-7_Overburden	non-Rad	Chromium	7440-47-3	µg/kg	9,600	1.85E+04	No
118-F-7_Overburden	non-Rad	Manganese	7439-96-5	µg/kg	256,000	5.12E+05	No
118-F-7_Overburden	non-Rad	Vanadium	7440-62-2	µg/kg	31,400	8.51E+04	No
118-F-7_Shallow	non-Rad	Boron	7440-42-8	µg/kg	4,800	3.89E+03	Yes
118-F-7_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	8,300	1.85E+04	No
118-F-7_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	259,000	5.12E+05	No
118-F-7_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	2,400	4.70E+02	Yes
118-F-7_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	34,800	8.51E+04	No
118-F-7_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	10,200	6.47E+03	Yes
118-F-7_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,900	3.89E+03	No
118-F-7_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	7,300	1.85E+04	No
118-F-7_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	63,800	1.02E+04	Yes
118-F-7_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	254,000	5.12E+05	No
118-F-7_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	27,100	8.51E+04	No
118-F-7_Staging Pile Area	non-Rad	Boron	7440-42-8	µg/kg	3,900	3.89E+03	Yes
118-F-7_Staging Pile Area	non-Rad	Chromium	7440-47-3	µg/kg	13,700	1.85E+04	No
118-F-7_Staging Pile Area	non-Rad	Copper	7440-50-8	µg/kg	552,000	2.20E+04	Yes
118-F-7_Staging Pile Area	non-Rad	Manganese	7439-96-5	µg/kg	279,000	5.12E+05	No
118-F-7_Staging Pile Area	non-Rad	Vanadium	7440-62-2	µg/kg	45,100	8.51E+04	No
118-F-8:1_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	38,777	1.85E+04	Yes

Table 6. Comparison of Chemicals Exceeding SSLs in 100-F Decision Areas Surface Soils (0 to 15 feet) to Background Concentrations

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > 90th Percentile Background Value?
118-F-8:4_Overburden	non-Rad	Boron	7440-42-8	µg/kg	2,006	3.89E+03	No
118-F-8:4_Overburden	non-Rad	Chromium	7440-47-3	µg/kg	8,304	1.85E+04	No
118-F-8:4_Overburden	non-Rad	Manganese	7439-96-5	µg/kg	318,045	5.12E+05	No
118-F-8:4_Overburden	non-Rad	Mercury	7439-97-6	µg/kg	127	1.31E+01	Yes
118-F-8:4_Overburden	non-Rad	Vanadium	7440-62-2	µg/kg	41,120	8.51E+04	No
118-F-8:4_Shallow	non-Rad	Boron	7440-42-8	µg/kg	2,500	3.89E+03	No
118-F-8:4_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	10,100	1.85E+04	No
118-F-8:4_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	285,000	5.12E+05	No
118-F-8:4_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	530	1.31E+01	Yes
118-F-8:4_Shallow	non-Rad	Selenium	7782-49-2	µg/kg	1,500	7.80E+02	Yes
118-F-8:4_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	37,500	8.51E+04	No
120-F-1_Shallow	non-Rad	Boron	7440-42-8	µg/kg	2,457	3.89E+03	No
120-F-1_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	9,781	1.85E+04	No
120-F-1_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	286,696	5.12E+05	No
120-F-1_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	102	1.31E+01	Yes
120-F-1_Shallow	non-Rad	Selenium	7782-49-2	µg/kg	1,800	7.80E+02	Yes
120-F-1_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	44,878	8.51E+04	No
126-F-2_Staging pile area_Focused	non-Rad	Boron	7440-42-8	µg/kg	5,600	3.89E+03	Yes
126-F-2_Staging pile area_Focused	non-Rad	Chromium	7440-47-3	µg/kg	10,900	1.85E+04	No
126-F-2_Staging pile area_Focused	non-Rad	Manganese	7439-96-5	µg/kg	274,000	5.12E+05	No
126-F-2_Staging pile area_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	41,600	8.51E+04	No
126-F-2_Staging pile area_Focused	non-Rad	Zinc	7440-66-6	µg/kg	76,900	6.78E+04	Yes
128-F-1_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	12,100	1.85E+04	No
128-F-2_Shallow	non-Rad	Boron	7440-42-8	µg/kg	1,955	3.89E+03	No
128-F-2_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	21,554	1.85E+04	Yes
128-F-2_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	281,593	5.12E+05	No
128-F-2_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	35,140	8.51E+04	No
128-F-2_Staging pile area_Focused	non-Rad	Chromium	7440-47-3	µg/kg	32,200	1.85E+04	Yes
128-F-2_Staging pile area_Focused	non-Rad	Manganese	7439-96-5	µg/kg	277,000	5.12E+05	No
128-F-2_Staging pile area_Focused	non-Rad	Selenium	7782-49-2	µg/kg	950	7.80E+02	Yes
128-F-2_Staging pile area_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	42,700	8.51E+04	No
128-F-2_Staging pile area_Focused	non-Rad	Zinc	7440-66-6	µg/kg	124,000	6.78E+04	Yes
128-F-3_Shallow	non-Rad	Boron	7440-42-8	µg/kg	17,002	3.89E+03	Yes
128-F-3_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	42,093	1.85E+04	Yes
128-F-3_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	295,905	5.12E+05	No
128-F-3_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	40,225	8.51E+04	No
128-F-3_Staging pile area_Focused	non-Rad	Boron	7440-42-8	µg/kg	5,500	3.89E+03	Yes
128-F-3_Staging pile area_Focused	non-Rad	Chromium	7440-47-3	µg/kg	9,800	1.85E+04	No
128-F-3_Staging pile area_Focused	non-Rad	Manganese	7439-96-5	µg/kg	331,000	5.12E+05	No
128-F-3_Staging pile area_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	46,400	8.51E+04	No
141-C_Shallow	non-Rad	Boron	7440-42-8	µg/kg	5,336	3.89E+03	Yes
141-C_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	8,938	1.85E+04	No
141-C_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	315,353	5.12E+05	No
141-C_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	38,368	8.51E+04	No
141-C_Staging Pile Area_Focused	non-Rad	Boron	7440-42-8	µg/kg	2,700	3.89E+03	No
141-C_Staging Pile Area_Focused	non-Rad	Chromium	7440-47-3	µg/kg	7,000	1.85E+04	No
141-C_Staging Pile Area_Focused	non-Rad	Manganese	7439-96-5	µg/kg	285,000	5.12E+05	No
141-C_Staging Pile Area_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	33,400	8.51E+04	No
1607-F3_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	9,725	1.85E+04	No
1607-F3_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	273,899	5.12E+05	No
1607-F3_Shallow	non-Rad	Selenium	7782-49-2	µg/kg	4,200	7.80E+02	Yes
1607-F3_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	34,149	8.51E+04	No
1607-F3_Staging pile area_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	12,100	6.47E+03	Yes
1607-F3_Staging pile area_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,700	3.89E+03	No
1607-F3_Staging pile area_Focused	non-Rad	Chromium	7440-47-3	µg/kg	9,400	1.85E+04	No
1607-F3_Staging pile area_Focused	non-Rad	Lead	7439-92-1	µg/kg	54,900	1.02E+04	Yes
1607-F3_Staging pile area_Focused	non-Rad	Manganese	7439-96-5	µg/kg	255,000	5.12E+05	No
1607-F3_Staging pile area_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	28,200	8.51E+04	No
1607-F4_Overburden_Focused	non-Rad	Boron	7440-42-8	µg/kg	5,800	3.89E+03	Yes
1607-F4_Overburden_Focused	non-Rad	Chromium	7440-47-3	µg/kg	10,500	1.85E+04	No
1607-F4_Overburden_Focused	non-Rad	Manganese	7439-96-5	µg/kg	334,000	5.12E+05	No
1607-F4_Overburden_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	47,900	8.51E+04	No
1607-F4_Shallow	non-Rad	Boron	7440-42-8	µg/kg	1,876	3.89E+03	No
1607-F4_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	14,407	1.85E+04	No
1607-F4_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	297,305	5.12E+05	No
1607-F4_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	1,200	1.31E+01	Yes
1607-F4_Shallow	non-Rad	Selenium	7782-49-2	µg/kg	1,602	7.80E+02	Yes
1607-F4_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	40,330	8.51E+04	No
1607-F4_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	50,618	6.78E+04	No
1607-F4_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	7,000	1.85E+04	No
1607-F4_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	27,300	8.51E+04	No
1607-F5_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	8,606	1.85E+04	No
1607-F5_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	27,297	8.51E+04	No
1607-F5_Staging pile area_Focused	non-Rad	Boron	7440-42-8	µg/kg	3,000	3.89E+03	No
1607-F5_Staging pile area_Focused	non-Rad	Chromium	7440-47-3	µg/kg	8,600	1.85E+04	No
1607-F5_Staging pile area_Focused	non-Rad	Manganese	7439-96-5	µg/kg	239,000	5.12E+05	No
1607-F5_Staging pile area_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	29,000	8.51E+04	No
1607-F6_Overburden	non-Rad	Chromium	7440-47-3	µg/kg	9,796	1.85E+04	No
1607-F6_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	10,300	1.85E+04	No

Table 6. Comparison of Chemicals Exceeding SSLs in 100-F Decision Areas Surface Soils (0 to 15 feet) to Background Concentrations

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > 90th Percentile Background Value?
1607-F7_Shallow	non-Rad	Boron	7440-42-8	µg/kg	3,219	3.89E+03	No
1607-F7_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	11,376	1.85E+04	No
1607-F7_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	279,444	5.12E+05	No
1607-F7_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	31,959	8.51E+04	No
1607-F7_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	50,531	6.78E+04	No
1607-F7_Staging pile area_Focused	non-Rad	Boron	7440-42-8	µg/kg	7,700	3.89E+03	**Yes**
1607-F7_Staging pile area_Focused	non-Rad	Chromium	7440-47-3	µg/kg	12,200	1.85E+04	No
1607-F7_Staging pile area_Focused	non-Rad	Dieldrin	60-57-1	µg/kg	23	--	--
1607-F7_Staging pile area_Focused	non-Rad	Manganese	7439-96-5	µg/kg	300,000	5.12E+05	No
1607-F7_Staging pile area_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	40,200	8.51E+04	No
1607-F7_Staging pile area_Focused	non-Rad	Zinc	7440-66-6	µg/kg	72,000	6.78E+04	**Yes**
182-F_Overburden_Focused	non-Rad	Boron	7440-42-8	µg/kg	3,200	3.89E+03	No
182-F_Overburden_Focused	non-Rad	Chromium	7440-47-3	µg/kg	22,600	1.85E+04	**Yes**
182-F_Overburden_Focused	non-Rad	Lead	7439-92-1	µg/kg	58,700	1.02E+04	**Yes**
182-F_Overburden_Focused	non-Rad	Manganese	7439-96-5	µg/kg	312,000	5.12E+05	No
182-F_Overburden_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	49,100	8.51E+04	No
182-F_Overburden_Focused	non-Rad	Zinc	7440-66-6	µg/kg	139,000	6.78E+04	**Yes**
600-351_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	250,000	6.47E+03	**Yes**
600-351_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,700	3.89E+03	No
600-351_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	12,400	1.85E+04	No
600-351_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	805,000	1.02E+04	**Yes**
600-351_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	364,000	5.12E+05	No
600-351_Shallow_Focused	non-Rad	Selenium	7782-49-2	µg/kg	920	7.80E+02	**Yes**
600-351_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	48,800	8.51E+04	No
600-351_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	51,200	6.78E+04	No

Table 7. Comparison of Chemicals Exceeding SSLs in 100-IU-2 Decision Areas Surface Soils (0 to 15 feet) to Background Concentrations

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > 90th Percentile Background Value?
600-100_Shallow	non-Rad	Boron	7440-42-8	µg/kg	1,322	3.89E+03	No
600-100_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	9,345	1.85E+04	No
600-100_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	312,314	5.12E+05	No
600-100_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	62,373	8.51E+04	No
600-100_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	768	3.89E+03	No
600-100_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	9,140	1.85E+04	No
600-100_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	301,000	5.12E+05	No
600-100_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	67,100	8.51E+04	No
600-120 and 600-297_Overburden_Focused	non-Rad	Boron	7440-42-8	µg/kg	2,100	3.89E+03	No
600-120 and 600-297_Overburden_Focused	non-Rad	Chromium	7440-47-3	µg/kg	9,170	1.85E+04	No
600-120 and 600-297_Overburden_Focused	non-Rad	Manganese	7439-96-5	µg/kg	289,000	5.12E+05	No
600-120 and 600-297_Overburden_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	50,600	8.51E+04	No
600-120 and 600-297_Overburden_Focused	non-Rad	Zinc	7440-66-6	µg/kg	67,600	6.78E+04	No
600-120 and 600-297_Shallow	non-Rad	Boron	7440-42-8	µg/kg	4,028	3.89E+03	**Yes**
600-120 and 600-297_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	10,931	1.85E+04	No
600-120 and 600-297_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	264,473	5.12E+05	No
600-120 and 600-297_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	44,356	8.51E+04	No
600-120 and 600-297_Staging Pile Area	non-Rad	Boron	7440-42-8	µg/kg	2,638	3.89E+03	No
600-120 and 600-297_Staging Pile Area	non-Rad	Chromium	7440-47-3	µg/kg	9,539	1.85E+04	No
600-120 and 600-297_Staging Pile Area	non-Rad	Manganese	7439-96-5	µg/kg	272,403	5.12E+05	No
600-120 and 600-297_Staging Pile Area	non-Rad	Vanadium	7440-62-2	µg/kg	46,470	8.51E+04	No
600-124_Shallow	non-Rad	Boron	7440-42-8	µg/kg	1,241	3.89E+03	No
600-124_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	10,608	1.85E+04	No
600-124_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	323,187	5.12E+05	No
600-124_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	68,302	8.51E+04	No
600-124_Staging Pile Area	non-Rad	Boron	7440-42-8	µg/kg	2,262	3.89E+03	No
600-124_Staging Pile Area	non-Rad	Chromium	7440-47-3	µg/kg	12,157	1.85E+04	No
600-124_Staging Pile Area	non-Rad	Manganese	7439-96-5	µg/kg	310,485	5.12E+05	No
600-124_Staging Pile Area	non-Rad	Vanadium	7440-62-2	µg/kg	66,526	8.51E+04	No
600-124_Staging Pile Area	non-Rad	Zinc	7440-66-6	µg/kg	53,404	6.78E+04	No

Table 7. Comparison of Chemicals Exceeding SSLs in 100-IU-2 Decision Areas Surface Soils (0 to 15 feet) to Background Concentrations

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > 90th Percentile Background Value?
600-125_Overburden_Focused	non-Rad	Boron	7440-42-8	µg/kg	2,060	3.89E+03	No
600-125_Overburden_Focused	non-Rad	Chromium	7440-47-3	µg/kg	13,600	1.85E+04	No
600-125_Overburden_Focused	non-Rad	Manganese	7439-96-5	µg/kg	344,000	5.12E+05	No
600-125_Overburden_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	65,000	8.51E+04	No
600-125_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	796	3.89E+03	No
600-125_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	8,890	1.85E+04	No
600-125_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	294,000	5.12E+05	No
600-125_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	69,500	8.51E+04	No
600-125_Staging Pile Area_Focused	non-Rad	Boron	7440-42-8	µg/kg	2,210	3.89E+03	No
600-125_Staging Pile Area_Focused	non-Rad	Chromium	7440-47-3	µg/kg	14,800	1.85E+04	No
600-125_Staging Pile Area_Focused	non-Rad	Manganese	7439-96-5	µg/kg	369,000	5.12E+05	No
600-125_Staging Pile Area_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	63,800	8.51E+04	No
600-127_Overburden_Focused	non-Rad	Boron	7440-42-8	µg/kg	3,700	3.89E+03	No
600-127_Overburden_Focused	non-Rad	Chromium	7440-47-3	µg/kg	11,700	1.85E+04	No
600-127_Overburden_Focused	non-Rad	Manganese	7439-96-5	µg/kg	386,000	5.12E+05	No
600-127_Overburden_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	41,900	8.51E+04	No
600-127_Shallow	non-Rad	Boron	7440-42-8	µg/kg	1,100	3.89E+03	No
600-127_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	13,483	1.85E+04	No
600-127_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	268,426	5.12E+05	No
600-127_Shallow	non-Rad	Selenium	7782-49-2	µg/kg	920	7.80E+02	**Yes**
600-127_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	33,823	8.51E+04	No
600-127_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,300	3.89E+03	No
600-127_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	12,600	1.85E+04	No
600-127_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	413,000	5.12E+05	No
600-127_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	41,700	8.51E+04	No
600-127_Staging Pile Area_3	non-Rad	Boron	7440-42-8	µg/kg	5,365	3.89E+03	**Yes**
600-127_Staging Pile Area_3	non-Rad	Chromium	7440-47-3	µg/kg	12,799	1.85E+04	No
600-127_Staging Pile Area_3	non-Rad	Manganese	7439-96-5	µg/kg	420,531	5.12E+05	No
600-127_Staging Pile Area_3	non-Rad	Vanadium	7440-62-2	µg/kg	50,081	8.51E+04	No
600-127_Staging Pile Area_3	non-Rad	Zinc	7440-66-6	µg/kg	60,059	6.78E+04	No

Table 7. Comparison of Chemicals Exceeding SSLs in 100-IU-2 Decision Areas Surface Soils (0 to 15 feet) to Background Concentrations

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > 90th Percentile Background Value?
600-127_Staging Pile Area_4	non-Rad	Boron	7440-42-8	µg/kg	7,907	3.89E+03	**Yes**
600-127_Staging Pile Area_4	non-Rad	Chromium	7440-47-3	µg/kg	12,049	1.85E+04	No
600-127_Staging Pile Area_4	non-Rad	Manganese	7439-96-5	µg/kg	391,778	5.12E+05	No
600-127_Staging Pile Area_4	non-Rad	Vanadium	7440-62-2	µg/kg	45,292	8.51E+04	No
600-128_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	10,900	1.85E+04	No
600-131_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	16,700	1.85E+04	No
600-132_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	17,100	1.85E+04	No
600-139_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	12,000	1.85E+04	No
600-176_Shallow	non-Rad	Boron	7440-42-8	µg/kg	1,044	3.89E+03	No
600-176_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	15,654	1.85E+04	No
600-176_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	269,753	5.12E+05	No
600-176_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	61,816	8.51E+04	No
600-176_Staging Pile Area Footprint_2	non-Rad	Boron	7440-42-8	µg/kg	2,235	3.89E+03	No
600-176_Staging Pile Area Footprint_2	non-Rad	Chromium	7440-47-3	µg/kg	60,644	1.85E+04	**Yes**
600-176_Staging Pile Area Footprint_2	non-Rad	Lead	7439-92-1	µg/kg	456,552	1.02E+04	**Yes**
600-176_Staging Pile Area Footprint_2	non-Rad	Manganese	7439-96-5	µg/kg	265,238	5.12E+05	No
600-176_Staging Pile Area Footprint_2	non-Rad	Vanadium	7440-62-2	µg/kg	45,984	8.51E+04	No
600-176_Staging Pile Area Footprint_3	non-Rad	Boron	7440-42-8	µg/kg	2,050	3.89E+03	No
600-176_Staging Pile Area Footprint_3	non-Rad	Chromium	7440-47-3	µg/kg	15,017	1.85E+04	No
600-176_Staging Pile Area Footprint_3	non-Rad	Lead	7439-92-1	µg/kg	43,853	1.02E+04	**Yes**
600-176_Staging Pile Area Footprint_3	non-Rad	Manganese	7439-96-5	µg/kg	296,528	5.12E+05	No
600-176_Staging Pile Area Footprint_3	non-Rad	Vanadium	7440-62-2	µg/kg	49,986	8.51E+04	No
600-181_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	14,600	1.85E+04	No
600-182_Overburden_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,770	3.89E+03	No
600-182_Overburden_Focused	non-Rad	Chromium	7440-47-3	µg/kg	11,100	1.85E+04	No
600-182_Overburden_Focused	non-Rad	Manganese	7439-96-5	µg/kg	353,000	5.12E+05	No
600-182_Overburden_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	57,800	8.51E+04	No
600-182_Shallow_1_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,750	3.89E+03	No
600-182_Shallow_1_Focused	non-Rad	Chromium	7440-47-3	µg/kg	11,700	1.85E+04	No
600-182_Shallow_1_Focused	non-Rad	Manganese	7439-96-5	µg/kg	382,000	5.12E+05	No

Table 7. Comparison of Chemicals Exceeding SSLs in 100-IU-2 Decision Areas Surface Soils (0 to 15 feet) to Background Concentrations

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > 90th Percentile Background Value?
600-182_Shallow_1_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	72,200	8.51E+04	No
600-182_Shallow_2_Focused	non-Rad	Boron	7440-42-8	µg/kg	2,050	3.89E+03	No
600-182_Shallow_2_Focused	non-Rad	Chromium	7440-47-3	µg/kg	13,000	1.85E+04	No
600-182_Shallow_2_Focused	non-Rad	Manganese	7439-96-5	µg/kg	364,000	5.12E+05	No
600-182_Shallow_2_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	65,200	8.51E+04	No
600-182_Staging Pile Area_Focused	non-Rad	Boron	7440-42-8	µg/kg	2,550	3.89E+03	No
600-182_Staging Pile Area_Focused	non-Rad	Chromium	7440-47-3	µg/kg	12,700	1.85E+04	No
600-182_Staging Pile Area_Focused	non-Rad	Manganese	7439-96-5	µg/kg	357,000	5.12E+05	No
600-182_Staging Pile Area_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	64,200	8.51E+04	No
600-188_Overburden_Focused	non-Rad	Boron	7440-42-8	µg/kg	2,230	3.89E+03	No
600-188_Overburden_Focused	non-Rad	Chromium	7440-47-3	µg/kg	13,800	1.85E+04	No
600-188_Overburden_Focused	non-Rad	Manganese	7439-96-5	µg/kg	383,000	5.12E+05	No
600-188_Overburden_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	51,400	8.51E+04	No
600-188_Shallow	non-Rad	Boron	7440-42-8	µg/kg	1,139	3.89E+03	No
600-188_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	11,577	1.85E+04	No
600-188_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	308,174	5.12E+05	No
600-188_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	39,522	8.51E+04	No
600-188_Staging Pile Area_Focused	non-Rad	Boron	7440-42-8	µg/kg	2,280	3.89E+03	No
600-188_Staging Pile Area_Focused	non-Rad	Chromium	7440-47-3	µg/kg	11,500	1.85E+04	No
600-188_Staging Pile Area_Focused	non-Rad	Manganese	7439-96-5	µg/kg	385,000	5.12E+05	No
600-188_Staging Pile Area_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	49,600	8.51E+04	No
600-190_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	13,800	1.85E+04	No
600-295_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	799	3.89E+03	No
600-295_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	17,200	1.85E+04	No
600-295_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	267,000	5.12E+05	No
600-295_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	52,500	8.51E+04	No
600-296_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	741,000	1.32E+05	**Yes**
600-296_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	2,100	3.89E+03	No
600-296_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	12,600	1.85E+04	No
600-296_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	59,300	1.02E+04	**Yes**

Table 7. Comparison of Chemicals Exceeding SSLs in 100-IU-2 Decision Areas Surface Soils (0 to 15 feet) to Background Concentrations

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > 90th Percentile Background Value?
600-296_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	287,000	5.12E+05	No
600-296_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	650	1.31E+01	**Yes**
600-296_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	38,500	8.51E+04	No
600-296_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	123,000	6.78E+04	**Yes**
600-302_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	8,700	1.85E+04	No
600-302_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	252,000	5.12E+05	No
600-302_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	27,500	8.51E+04	No
600-302_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	122,000	6.78E+04	**Yes**
600-341:1_Shallow_1_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,790	3.89E+03	No
600-341:1_Shallow_1_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	1,860	5.63E+02	**Yes**
600-341:1_Shallow_1_Focused	non-Rad	Chromium	7440-47-3	µg/kg	15,200	1.85E+04	No
600-341:1_Shallow_1_Focused	non-Rad	Manganese	7439-96-5	µg/kg	563,000	5.12E+05	**Yes**
600-341:1_Shallow_1_Focused	non-Rad	Mercury	7439-97-6	µg/kg	177	1.31E+01	**Yes**
600-341:1_Shallow_1_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	64,700	8.51E+04	No
600-341:1_Shallow_1_Focused	non-Rad	Zinc	7440-66-6	µg/kg	317,000	6.78E+04	**Yes**
600-341:1_Shallow_2_Focused	non-Rad	Boron	7440-42-8	µg/kg	2,970	3.89E+03	No
600-341:1_Shallow_2_Focused	non-Rad	Chromium	7440-47-3	µg/kg	15,800	1.85E+04	No
600-341:1_Shallow_2_Focused	non-Rad	Manganese	7439-96-5	µg/kg	423,000	5.12E+05	No
600-341:1_Shallow_2_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	57,000	8.51E+04	No
600-341:1_Shallow_2_Focused	non-Rad	Zinc	7440-66-6	µg/kg	106,000	6.78E+04	**Yes**
600-341:2_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	2,610	3.89E+03	No
600-341:2_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	15,900	1.85E+04	No
600-341:2_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	374,000	5.12E+05	No
600-341:2_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	48,100	8.51E+04	No
600-341:2_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	119,000	6.78E+04	**Yes**
600-343_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	894	3.89E+03	No
600-343_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	7,010	1.85E+04	No
600-343_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	386,000	5.12E+05	No
600-343_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	82,300	8.51E+04	No
600-343_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	53,500	6.78E+04	No

Table 7. Comparison of Chemicals Exceeding SSLs in 100-IU-2 Decision Areas Surface Soils (0 to 15 feet) to Background Concentrations

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > 90th Percentile Background Value?
600-344_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,850	3.89E+03	No
600-344_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	12,700	1.85E+04	No
600-344_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	262,000	5.12E+05	No
600-344_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	43,700	8.51E+04	No
600-345_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,960	3.89E+03	No
600-345_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	18,100	1.85E+04	No
600-345_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	417,000	5.12E+05	No
600-345_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	67,000	8.51E+04	No
600-346_Shallow	non-Rad	Boron	7440-42-8	µg/kg	2,588	3.89E+03	No
600-346_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	13,778	1.85E+04	No
600-346_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	397,658	5.12E+05	No
600-346_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	54,091	8.51E+04	No
600-5_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	2,080	3.89E+03	No
600-5_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	13,400	1.85E+04	No
600-5_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	327,000	5.12E+05	No
600-5_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	59,400	8.51E+04	No
600-5_Staging Pile Area_Focused	non-Rad	Boron	7440-42-8	µg/kg	2,260	3.89E+03	No
600-5_Staging Pile Area_Focused	non-Rad	Chromium	7440-47-3	µg/kg	13,100	1.85E+04	No
600-5_Staging Pile Area_Focused	non-Rad	Manganese	7439-96-5	µg/kg	330,000	5.12E+05	No
600-5_Staging Pile Area_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	57,100	8.51E+04	No
628-1_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	13,600	1.85E+04	No

Table 8. Comparison of Chemicals Exceeding SSLs in 100-IU-6 Decision Areas Surface Soils (0 to 15 feet) to Background Concentrations

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > 90th Percentile Background Value?
600-109_Overburden_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	15,300	6.47E+03	**Yes**
600-109_Overburden_Focused	non-Rad	Boron	7440-42-8	µg/kg	2,530	3.89E+03	No
600-109_Overburden_Focused	non-Rad	Chromium	7440-47-3	µg/kg	13,300	1.85E+04	No
600-109_Overburden_Focused	non-Rad	Lead	7439-92-1	µg/kg	71,900	1.02E+04	**Yes**
600-109_Overburden_Focused	non-Rad	Manganese	7439-96-5	µg/kg	354,000	5.12E+05	No
600-109_Overburden_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	54,500	8.51E+04	No
600-109_Overburden_Focused	non-Rad	Zinc	7440-66-6	µg/kg	52,800	6.78E+04	No
600-109_Shallow	non-Rad	Boron	7440-42-8	µg/kg	1,045	3.89E+03	No
600-109_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	8,803	1.85E+04	No
600-109_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	368,917	5.12E+05	No
600-109_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	80,728	8.51E+04	No
600-109_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	52,684	6.78E+04	No
600-109_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,700	3.89E+03	No
600-109_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	10,900	1.85E+04	No
600-109_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	307,000	5.12E+05	No
600-109_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	52,500	8.51E+04	No
600-109_Staging Pile Area	non-Rad	Arsenic	7440-38-2	µg/kg	24,017	6.47E+03	**Yes**
600-109_Staging Pile Area	non-Rad	Boron	7440-42-8	µg/kg	2,068	3.89E+03	No
600-109_Staging Pile Area	non-Rad	Chromium	7440-47-3	µg/kg	11,217	1.85E+04	No
600-109_Staging Pile Area	non-Rad	Lead	7439-92-1	µg/kg	125,620	1.02E+04	**Yes**
600-109_Staging Pile Area	non-Rad	Manganese	7439-96-5	µg/kg	357,262	5.12E+05	No
600-109_Staging Pile Area	non-Rad	Vanadium	7440-62-2	µg/kg	53,018	8.51E+04	No
600-109_Staging Pile Area	non-Rad	Zinc	7440-66-6	µg/kg	67,999	6.78E+04	**Yes**
600-111_Shallow	non-Rad	Boron	7440-42-8	µg/kg	1,200	3.89E+03	No
600-111_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	11,678	1.85E+04	No
600-111_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	513,612	5.12E+05	**Yes**
600-111_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	75,684	8.51E+04	No
600-111_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	62,190	6.78E+04	No
600-111_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,500	3.89E+03	No
600-111_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	17,900	1.85E+04	No
600-111_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	441,000	5.12E+05	No
600-111_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	60,400	8.51E+04	No
600-111_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	60,000	6.78E+04	No
600-146_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	2,660	3.89E+03	No
600-146_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	8,220	1.85E+04	No
600-146_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	475,000	2.20E+04	**Yes**
600-146_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	362,000	5.12E+05	No
600-146_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	39,400	1.91E+04	**Yes**
600-146_Shallow_Focused	non-Rad	Selenium	7782-49-2	µg/kg	732	7.80E+02	No
600-146_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	72,600	8.51E+04	No

Table 8. Comparison of Chemicals Exceeding SSLs in 100-IU-6 Decision Areas Surface Soils (0 to 15 feet) to Background Concentrations

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > 90th Percentile Background Value?
600-146_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	154,000	6.78E+04	**Yes**
600-149:2_Shallow	non-Rad	Boron	7440-42-8	µg/kg	987	3.89E+03	No
600-149:2_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	13,989	1.85E+04	No
600-149:2_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	393,085	5.12E+05	No
600-149:2_Shallow	non-Rad	Selenium	7782-49-2	µg/kg	873	7.80E+02	**Yes**
600-149:2_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	54,219	8.51E+04	No
600-149:2_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	51,198	6.78E+04	No
600-149:2_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,900	3.89E+03	No
600-149:2_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	11,000	1.85E+04	No
600-149:2_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	153,000	1.02E+04	**Yes**
600-149:2_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	367,000	5.12E+05	No
600-149:2_Shallow_Focused	non-Rad	Selenium	7782-49-2	µg/kg	1,100	7.80E+02	**Yes**
600-149:2_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	72,800	8.51E+04	No
600-149:2_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	50,100	6.78E+04	No
600-178_Overburden_Focused	non-Rad	Boron	7440-42-8	µg/kg	905	3.89E+03	No
600-178_Overburden_Focused	non-Rad	Chromium	7440-47-3	µg/kg	6,700	1.85E+04	No
600-178_Overburden_Focused	non-Rad	Manganese	7439-96-5	µg/kg	307,000	5.12E+05	No
600-178_Overburden_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	66,000	8.51E+04	No
600-178_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,110	3.89E+03	No
600-178_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	8,580	1.85E+04	No
600-178_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	337,000	5.12E+05	No
600-178_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	62,900	8.51E+04	No
600-178_Staging Pile Area Footprint_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,260	3.89E+03	No
600-178_Staging Pile Area Footprint_Focused	non-Rad	Chromium	7440-47-3	µg/kg	8,240	1.85E+04	No
600-178_Staging Pile Area Footprint_Focused	non-Rad	Manganese	7439-96-5	µg/kg	290,000	5.12E+05	No
600-178_Staging Pile Area Footprint_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	52,100	8.51E+04	No
600-186_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	3,290	3.89E+03	No
600-186_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	98,000	1.85E+04	**Yes**
600-186_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	93,500	1.02E+04	**Yes**
600-186_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	307,000	5.12E+05	No
600-186_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	854	1.31E+01	**Yes**
600-186_Shallow_Focused	non-Rad	Silver	7440-22-4	µg/kg	21,900	1.67E+02	**Yes**
600-186_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	141,000	8.51E+04	**Yes**
600-186_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	137,000	6.78E+04	**Yes**
600-202_Shallow_1	non-Rad	Boron	7440-42-8	µg/kg	1,746	3.89E+03	No

Table 8. Comparison of Chemicals Exceeding SSLs in 100-IU-6 Decision Areas Surface Soils (0 to 15 feet) to Background Concentrations

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > 90th Percentile Background Value?
600-202_Shallow_1	non-Rad	Chromium	7440-47-3	µg/kg	17,641	1.85E+04	No
600-202_Shallow_1	non-Rad	Manganese	7439-96-5	µg/kg	308,336	5.12E+05	No
600-202_Shallow_1	non-Rad	Vanadium	7440-62-2	µg/kg	46,058	8.51E+04	No
600-202_Shallow_2	non-Rad	Boron	7440-42-8	µg/kg	3,117	3.89E+03	No
600-202_Shallow_2	non-Rad	Chromium	7440-47-3	µg/kg	22,382	1.85E+04	**Yes**
600-202_Shallow_2	non-Rad	Manganese	7439-96-5	µg/kg	368,794	5.12E+05	No
600-202_Shallow_2	non-Rad	Vanadium	7440-62-2	µg/kg	48,606	8.51E+04	No
600-202_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	10,200	6.47E+03	**Yes**
600-202_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	13,000	3.89E+03	**Yes**
600-202_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	21,900	1.85E+04	**Yes**
600-202_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	87,900	2.20E+04	**Yes**
600-202_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	278,000	1.02E+04	**Yes**
600-202_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	411,000	5.12E+05	No
600-202_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	50,300	8.51E+04	No
600-202_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	403,000	6.78E+04	**Yes**
600-202_Staging Pile Area Footprint	non-Rad	Boron	7440-42-8	µg/kg	9,973	3.89E+03	**Yes**
600-202_Staging Pile Area Footprint	non-Rad	Chromium	7440-47-3	µg/kg	15,595	1.85E+04	No
600-202_Staging Pile Area Footprint	non-Rad	Lead	7439-92-1	µg/kg	63,502	1.02E+04	**Yes**
600-202_Staging Pile Area Footprint	non-Rad	Manganese	7439-96-5	µg/kg	344,273	5.12E+05	No
600-202_Staging Pile Area Footprint	non-Rad	Vanadium	7440-62-2	µg/kg	55,794	8.51E+04	No
600-202_Staging Pile Area Footprint	non-Rad	Zinc	7440-66-6	µg/kg	174,723	6.78E+04	**Yes**
600-204_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	10,800	1.85E+04	No
600-205_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,500	3.89E+03	No
600-205_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	10,200	1.85E+04	No
600-205_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	40,300	1.02E+04	**Yes**
600-205_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	427,000	5.12E+05	No
600-205_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	86,200	8.51E+04	**Yes**
600-205_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	61,700	6.78E+04	No
600-205_Staging Pile Area Footprint_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,260	3.89E+03	No
600-205_Staging Pile Area Footprint_Focused	non-Rad	Chromium	7440-47-3	µg/kg	9,020	1.85E+04	No
600-205_Staging Pile Area Footprint_Focused	non-Rad	Manganese	7439-96-5	µg/kg	318,000	5.12E+05	No
600-205_Staging Pile Area Footprint_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	53,000	8.51E+04	No
600-23_Overburden	non-Rad	Chromium	7440-47-3	µg/kg	11,100	1.85E+04	No
600-23_Overburden	non-Rad	Manganese	7439-96-5	µg/kg	295,027	5.12E+05	No
600-23_Overburden	non-Rad	Zinc	7440-66-6	µg/kg	67,433	6.78E+04	No

Table 8. Comparison of Chemicals Exceeding SSLs in 100-IU-6 Decision Areas Surface Soils (0 to 15 feet) to Background Concentrations

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > 90th Percentile Background Value?
600-23_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	10,238	1.85E+04	No
600-23_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	293,839	5.12E+05	No
600-23_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	63,472	6.78E+04	No
600-23_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	18,500	1.85E+04	No
600-23_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	330,000	5.12E+05	No
600-23_Shallow_Focused	non-Rad	Selenium	7782-49-2	µg/kg	660	7.80E+02	No
600-23_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	55,100	6.78E+04	No
600-280_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	916	3.89E+03	No
600-280_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	5,700	1.85E+04	No
600-280_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	311,000	5.12E+05	No
600-280_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	65,500	8.51E+04	No
600-3_Shallow_1	non-Rad	Boron	7440-42-8	µg/kg	954	3.89E+03	No
600-3_Shallow_1	non-Rad	Chromium	7440-47-3	µg/kg	9,965	1.85E+04	No
600-3_Shallow_1	non-Rad	Manganese	7439-96-5	µg/kg	314,529	5.12E+05	No
600-3_Shallow_1	non-Rad	Vanadium	7440-62-2	µg/kg	62,613	8.51E+04	No
600-3_Shallow_2	non-Rad	Boron	7440-42-8	µg/kg	1,038	3.89E+03	No
600-3_Shallow_2	non-Rad	Chromium	7440-47-3	µg/kg	11,176	1.85E+04	No
600-3_Shallow_2	non-Rad	Lead	7439-92-1	µg/kg	65,041	1.02E+04	**Yes**
600-3_Shallow_2	non-Rad	Manganese	7439-96-5	µg/kg	246,287	5.12E+05	No
600-3_Shallow_2	non-Rad	Vanadium	7440-62-2	µg/kg	49,260	8.51E+04	No
600-3_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	11,700	1.30E+02	**Yes**
600-3_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	841,000	1.32E+05	**Yes**
600-3_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,790	3.89E+03	No
600-3_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	19,400	1.85E+04	**Yes**
600-3_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	152,000	2.20E+04	**Yes**
600-3_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	1.64E+06	1.02E+04	**Yes**
600-3_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	383,000	5.12E+05	No
600-3_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	68,400	8.51E+04	No
600-3_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	384,000	6.78E+04	**Yes**
600-3_Staging Pile Area Footprint	non-Rad	Boron	7440-42-8	µg/kg	1,584	3.89E+03	No
600-3_Staging Pile Area Footprint	non-Rad	Chromium	7440-47-3	µg/kg	9,690	1.85E+04	No
600-3_Staging Pile Area Footprint	non-Rad	Manganese	7439-96-5	µg/kg	340,091	5.12E+05	No
600-3_Staging Pile Area Footprint	non-Rad	Vanadium	7440-62-2	µg/kg	62,937	8.51E+04	No
600-3_Staging Pile Area Footprint	non-Rad	Zinc	7440-66-6	µg/kg	59,275	6.78E+04	No
600-3_Staging Pile Area Footprint_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,390	3.89E+03	No
600-3_Staging Pile Area Footprint_Focused	non-Rad	Chromium	7440-47-3	µg/kg	7,870	1.85E+04	No

Table 8. Comparison of Chemicals Exceeding SSLs in 100-IU-6 Decision Areas Surface Soils (0 to 15 feet) to Background Concentrations

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > 90th Percentile Background Value?
600-3_Staging Pile Area Footprint_Focused	non-Rad	Lead	7439-92-1	µg/kg	236,000	1.02E+04	**Yes**
600-3_Staging Pile Area Footprint_Focused	non-Rad	Manganese	7439-96-5	µg/kg	320,000	5.12E+05	No
600-3_Staging Pile Area Footprint_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	63,100	8.51E+04	No
600-315_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	13,300	3.89E+03	**Yes**
600-315_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	5,300	1.85E+04	No
600-315_Shallow_Focused	non-Rad	Selenium	7782-49-2	µg/kg	1,400	7.80E+02	**Yes**
600-315_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	17,600	8.51E+04	No
600-322_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,500	3.89E+03	No
600-322_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	32,800	1.85E+04	**Yes**
600-322_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	57,400	2.20E+04	**Yes**
600-322_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	72,200	1.02E+04	**Yes**
600-322_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	556,000	5.12E+05	**Yes**
600-322_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	4,300	4.70E+02	**Yes**
600-322_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	35,400	1.91E+04	**Yes**
600-322_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	50,200	8.51E+04	No
600-322_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	62,900	6.78E+04	No
600-323_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	549,000	1.32E+05	**Yes**
600-323_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	34,000	3.89E+03	**Yes**
600-323_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	12,600	1.85E+04	No
600-323_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	357,000	5.12E+05	No
600-323_Shallow_Focused	non-Rad	Selenium	7782-49-2	µg/kg	2,200	7.80E+02	**Yes**
600-323_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	44,000	8.51E+04	No
600-327_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,100	3.89E+03	No
600-327_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	16,400	1.85E+04	No
600-327_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	342,000	5.12E+05	No
600-327_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	44,000	8.51E+04	No
600-334:1_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	3,300	3.89E+03	No
600-334:1_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	11,800	1.85E+04	No
600-334:1_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	329,000	5.12E+05	No
600-334:1_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	1,900	1.31E+01	**Yes**
600-334:1_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	43,200	8.51E+04	No
600-334:1_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	73,000	6.78E+04	**Yes**
JA JONES 1_Overburden	non-Rad	Chromium	7440-47-3	µg/kg	10,000	1.85E+04	No
JA JONES 1_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	16,349	1.85E+04	No
JA JONES 1_Shallow	non-Rad	Lead	7439-92-1	µg/kg	54,479	1.02E+04	**Yes**
JA JONES 1_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	10,500	1.85E+04	No

Table 9. Summary of 100-F Waste Sites Ecological Evaluation Based on SSLs and Background for Surface Soils (0 to 15 feet)

Waste Site/Decision Unit	Exceedances based on comparisons to SSLs and Background[1]	
	Plant/Invertebrate SSL-based HQ	Wilidfe SSL-based HQ
100-F-19:2_Overburden	Mercury (4.1)	--
100-F-20_Staging pile area	Zinc (1.8)	Zinc (1.3)
100-F-25_Shallow	Mercury (1.4)	--
100-F-26:10_Overburden_Focused	Boron (11.6) Selenium (3.5)	--
100-F-26:10_Shallow	Selenium (2.6)	--
100-F-26:13_Overburden_Focused	Boron (12.2)	--
100-F-26:14_Overburden	Boron (27.0)	--
100-F-26:14_Shallow	Boron (63.2)	--
100-F-26:15_Shallow	Boron (8.3) Mercury (1.3)	--
100-F-26:4_Overburden_Focused	Boron (64.6) Mercury (1.5)	--
100-F-26:4_Overburden_Focused_3	Boron (10.2)	--
100-F-26:4_Shallow_1	Boron (11.5) Selenium (5.2)	Selenium (1.4)
100-F-26:4_Shallow_2	Boron (9.8) Selenium (1.8)	--
100-F-26:4_Shallow_Focused	Mercury (1.5) Zinc (1.7)	Zinc (1.3)
100-F-26:7_Overburden_Focused	Boron (21.2)	--
100-F-26:7_Shallow	Boron (17.9)	--
100-F-26:7_Staging Pile Area Footprint	Boron (11.5) Selenium (1.8)	--
100-F-26:8_Shallow	Mercury (1.6) Selenium (2.6)	--
100-F-26:9_Overburden	Boron (31.3)	--
100-F-26:9_Overburden_Focused	Barium (2.0) Boron (123.4) Copper (3.7) Lead (1.6) Zinc (1.7)	Copper (1.7) Lead (2.3) Zinc (1.3)
100-F-26:9_Shallow	Boron (28.7) Mercury (2.8)	--

Table 9. Summary of 100-F Waste Sites Ecological Evaluation Based on SSLs and Background for Surface Soils (0 to 15 feet)

Waste Site/Decision Unit	Exceedances based on comparisons to SSLs and Background[1]	
	Plant/Invertebrate SSL-based HQ	Wilidfe SSL-based HQ
100-F-26:9_Shallow_Focused	Boron (57.2) Mercury (8.1) Selenium (2.5) Zinc (2.4)	Zinc (1.8)
100-F-26:9_Staging Pile Area	Arsenic (1.1) Mercury (1.2)	--
100-F-31_Shallow	Mercury (12.0)	--
100-F-33_Shallow	Zinc (1.4)	Zinc (1.1)
100-F-33_Staging pile area_Focused	Mercury (3.8)	--
100-F-37_Shallow_Focused	Arsenic (1.7) Barium (1.5) Lead (4.3)	Lead (6.0)
100-F-38_Shallow_Focused	Barium (1.2) Boron (47.0)	Lead (1.1)
100-F-44:2_Shallow_Focused	Zinc (1.8)	Zinc (1.3)
100-F-44:8_Shallow	Boron (23.5) Mercury (1.1)	--
100-F-44:9_Overburden_Focused	Selenium (2.1)	--
100-F-44:9_Staging Pile Area Footprint	Selenium (1.8)	--
100-F-45_Overburden_Focused	Chromium (51.8)	--
100-F-45_Shallow	Chromium (85.8) Mercury (10.3)	--
100-F-46_Shallow_Focused	Boron (7.8)	--
100-F-47_Shallow	Mercury (9.1)	--
100-F-48_Shallow_1	Boron (8.7) Mercury (1.5)	--
100-F-49_Shallow	Selenium (2.3)	--
100-F-49_Staging Pile Area Footprint_Focused	Boron (8.2) Chromium (55.3)	--
100-F-55 and 100-F-62_Shallow_1	Lead (1.3)	Lead (1.8)
100-F-55 and 100-F-62_Shallow_2	Boron (8.3) Mercury (67.9)	Mercury (3.6)
100-F-55 and 100-F-62_Staging Pile Area Footprint_Focused	Boron (16.6) Mercury (6.9) Zinc (1.5)	Zinc (1.1)

Table 9. Summary of 100-F Waste Sites Ecological Evaluation Based on SSLs and Background for Surface Soils (0 to 15 feet)

Waste Site/Decision Unit	Exceedances based on comparisons to SSLs and Background[1]	
	Plant/Invertebrate SSL-based HQ	Wilidfe SSL-based HQ
100-F-56:1_Shallow	Mercury (17.7)	--
100-F-56:1_Shallow_Focused	Chromium (146.5)	Chromium (1.5)
100-F-61_Shallow	Mercury (6.4)	--
100-F-7_Shallow_Focused	Mercury (1.3)	--
100-F-9_Shallow_Focused	Mercury (4.1)	--
116-F-1_Overburden	Arsenic (1.1)	--
116-F-14_Shallow	Chromium (60.4)	--
116-F-15_Shallow	Boron (23.1) Mercury (1.8)	--
116-F-5_Shallow	Arsenic (1.7)	--
118-F-1_Overburden	Selenium (2.7) Silver (2.2)	--
118-F-1_Staging Pile Area	Arsenic (1.2)	--
118-F-2_Overburden	Selenium (2.7)	--
118-F-2_Staging Pile Area	Selenium (2.7)	--
118-F-3_Shallow	Boron (25.4)	--
118-F-3_Staging Pile Area	Boron (13.2)	--
118-F-7_Shallow	Boron (9.6) Molybdenum (1.2)	--
118-F-7_Shallow_Focused	Arsenic (1.0) Lead (1.3)	Lead (1.8)
118-F-7_Staging Pile Area	Boron (7.8) Copper (11.0)	Copper (5.2)
118-F-8:1_Shallow	Chromium (96.9)	Chromium (1.0)
118-F-8:4_Overburden	Mercury (1.3)	--
118-F-8:4_Shallow	Mercury (5.3) Selenium (2.9)	--
120-F-1_Shallow	Mercury (1.0) Selenium (3.5)	--
126-F-2_Staging pile area_Focused	Boron (11.2) Zinc (1.5)	Zinc (1.1)
128-F-2_Shallow	Chromium (53.9)	--
128-F-2_Staging pile area_Focused	Chromium (80.5) Selenium (1.8) Zinc (2.5)	Zinc (1.8)

Table 9. Summary of 100-F Waste Sites Ecological Evaluation Based on SSLs and Background for Surface Soils (0 to 15 feet)

Waste Site/Decision Unit	Exceedances based on comparisons to SSLs and Background[1]	
	Plant/Invertebrate SSL-based HQ	Wilidfe SSL-based HQ
128-F-3_Shallow	Boron (34.0) Chromium (105.2)	Chromium (1.1)
128-F-3_Staging pile area_Focused	Boron (11.0)	--
141-C_Shallow	Boron (10.7)	--
1607-F3_Shallow	Selenium (8.1)	Selenium (2.2)
1607-F3_Staging pile area_Focused	Arsenic (1.2) Lead (1.1)	Lead (1.5)
1607-F4_Overburden_Focused	Boron (11.6)	--
1607-F4_Shallow	Mercury (12.0) Selenium (3.1)	--
1607-F7_Staging pile area_Focused	Boron (15.4) Zinc (1.4)	Dieldrin (1.1) Zinc (1.1)
182-F_Overburden_Focused	Chromium (56.5) Lead (1.2) Zinc (2.8)	Lead (1.6) Zinc (2.1)
600-351_Shallow_Focused	Arsenic (25.0) Lead (16.1) Selenium (1.8)	Arsenic (1.3) Lead (22.6)

[1] Exceedances of both the SSL and 90th percentile of Hanford Site background concentration, when background value is available.

Table 10. Summary of 100-IU-2 Waste Sites Ecological Evaluation Based on SSLs and Background for Surface Soils (0 to 15 feet)

Waste Site/Decision Unit	Exceedances based on comparisons to SSLs and Background1	
	Plant/Invertebrate SSL-based HQ	Wilidfe SSL-based HQ
600-120 and 600-297_Shallow	Boron (8.1)	--
600-127_Shallow	Selenium (1.8)	--
600-127_Staging Pile Area_3	Boron (10.7)	--
600-127_Staging Pile Area_4	Boron (15.8)	--
600-176_Staging Pile Area Footprint_2	Chromium (151.6) Lead (9.1)	Chromium (1.6) Lead (12.8)
600-176_Staging Pile Area Footprint_3	--	Lead (1.2)
600-296_Shallow_Focused	Barium (2.2) Lead (1.2) Mercury (6.5) Zinc (2.5)	Lead (1.7) Zinc (1.8)
600-302_Shallow_Focused	Zinc (2.4)	Zinc (1.8)
600-341:1_Shallow_1_Focused	Manganese (2.6) Mercury (1.8) Zinc (6.3)	Cadmium (1.1) Zinc (4.7)
600-341:1_Shallow_2_Focused	Zinc (2.1)	Zinc (1.6)
600-341:2_Shallow_Focused	Zinc (2.4)	Zinc (1.8)

[1] Exceedances of both the SSL and 90th percentile of Hanford Site background concentration, when background value is available.

Table 11. Summary of 100-IU-6 Waste Sites Ecological Evaluation Based on SSLs and Background for Surface Soils (0 to 15 feet)

Waste Site/Decision Unit	Exceedances based on comparisons to SSLs and Background[1]	
	Plant/Invertebrate SSL-based HQ	Wilidfe SSL-based HQ
600-109_Overburden_Focused	Arsenic (1.5) Lead (1.4)	Lead (2.0)
600-109_Staging Pile Area	Arsenic (2.4) Lead (2.5) Zinc (1.4)	Lead (3.5) Zinc (1.0)
600-111_Shallow	Manganese (2.3)	--
600-146_Shallow_Focused	Copper (9.5) Nickel (1.3) Zinc (3.1)	Copper (4.4) Nickel (1.2) Zinc (2.3)
600-149:2_Shallow	Selenium (1.7)	--
600-149:2_Shallow_Focused	Lead (3.1) Selenium (2.1)	Lead (4.3)
600-186_Shallow_Focused	Chromium (245.0) Lead (1.9) Mercury (8.5) Silver (11.0) Vanadium (70.5) Zinc (2.7)	Chromium (2.6) Lead (2.6) Vanadium (4.5) Zinc (2.0)
600-202_Shallow_2	Chromium (56.0)	--
600-202_Shallow_Focused	Arsenic (1.0) Boron (26.0) Chromium (54.8) Copper (1.8) Lead (5.6) Zinc (8.1)	Lead (7.8) Zinc (5.9)
600-202_Staging Pile Area Footprint	Boron (19.9) Lead (1.3) Zinc (3.5)	Lead (1.8) Zinc (2.6)
600-205_Shallow_Focused	Vanadium (43.1)	Lead (1.1) Vanadium (2.8)
600-3_Shallow_2	Lead (1.3)	Lead (1.8)
600-3_Shallow_Focused	Antimony (2.3) Barium (2.5) Chromium (48.5) Copper (3.0) Lead (32.8) Zinc (7.7)	Antimony (2.0) Copper (1.4) Lead (46.1) Zinc (5.7)

Table 11. Summary of 100-IU-6 Waste Sites Ecological Evaluation Based on SSLs and Background for Surface Soils (0 to 15 feet)

Waste Site/Decision Unit	Exceedances based on comparisons to SSLs and Background[1]	
	Plant/Invertebrate SSL-based HQ	Wilidfe SSL-based HQ
600-3_Staging Pile Area Footprint_Focused	Lead (4.7)	Lead (6.6)
600-315_Shallow_Focused	Boron (26.6) Selenium (2.7)	--
600-322_Shallow_Focused	Chromium (82.0) Copper (1.1) Lead (1.4) Manganese (2.5) Molybdenum (2.2) Nickel (1.2)	Lead (2.0) Nickel (1.1)
600-323_Shallow_Focused	Barium (1.7) Boron (68.0) Selenium (4.2)	Selenium (1.2)
600-334:1_Shallow_Focused	Mercury (19.0) Zinc (1.5)	Mercury (1.0) Zinc (1.1)
JA JONES 1_Shallow	Lead (1.1)	Lead (1.5)

[1] Exceedances of both the SSL and 90th percentile of Hanford Site background concentration, when background value is available.

Table 12. Comparison of 100-F Decision Area Surface Soil (0 to 15 feet) Concentrations to PRGs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/ Invertebrate PRG[1]	Hazard Quotient	Wildlife PRG[2]	Hazard Quotient
100-F-19:2_Overburden	non-Rad	Mercury	7439-97-6	µg/kg	410	3.00E+02	**1.37E+00**	1.56E+03	2.63E-01
100-F-20_Staging pile area	non-Rad	Zinc	7440-66-6	µg/kg	87,600	6.21E+05	1.41E-01	8.56E+05	1.02E-01
100-F-25_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	140	3.00E+02	4.67E-01	1.56E+03	8.97E-02
100-F-26:10_Overburden_Focused	non-Rad	Boron	7440-42-8	µg/kg	5,800	2.96E+04	1.96E-01	3.20E+04	1.81E-01
100-F-26:10_Overburden_Focused	non-Rad	Selenium	7782-49-2	µg/kg	1,800	2.02E+03	8.91E-01	1.43E+03	**1.26E+00**
100-F-26:10_Shallow	non-Rad	Selenium	7782-49-2	µg/kg	1,369	2.02E+03	6.78E-01	1.43E+03	9.57E-01
100-F-26:13_Overburden_Focused	non-Rad	Boron	7440-42-8	µg/kg	6,100	2.96E+04	2.06E-01	3.20E+04	1.91E-01
100-F-26:14_Overburden	non-Rad	Boron	7440-42-8	µg/kg	13,500	2.96E+04	4.56E-01	3.20E+04	4.22E-01
100-F-26:14_Shallow	non-Rad	Boron	7440-42-8	µg/kg	31,600	2.96E+04	**1.07E+00**	3.20E+04	9.88E-01
100-F-26:15_Shallow	non-Rad	Boron	7440-42-8	µg/kg	4,162	2.96E+04	1.41E-01	3.20E+04	1.30E-01
100-F-26:15_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	130	3.00E+02	4.33E-01	1.56E+03	8.33E-02
100-F-26:4_Overburden_Focused	non-Rad	Boron	7440-42-8	µg/kg	32,300	2.96E+04	**1.09E+00**	3.20E+04	**1.01E+00**
100-F-26:4_Overburden_Focused	non-Rad	Mercury	7439-97-6	µg/kg	150	3.00E+02	5.00E-01	1.56E+03	9.62E-02
100-F-26:4_Overburden_Focused_3	non-Rad	Boron	7440-42-8	µg/kg	5,100	2.96E+04	1.72E-01	3.20E+04	1.59E-01
100-F-26:4_Shallow_1	non-Rad	Boron	7440-42-8	µg/kg	5,760	2.96E+04	1.95E-01	3.20E+04	1.80E-01
100-F-26:4_Shallow_1	non-Rad	Selenium	7782-49-2	µg/kg	2,700	2.02E+03	**1.34E+00**	1.43E+03	**1.89E+00**
100-F-26:4_Shallow_2	non-Rad	Boron	7440-42-8	µg/kg	4,903	2.96E+04	1.66E-01	3.20E+04	1.53E-01
100-F-26:4_Shallow_2	non-Rad	Selenium	7782-49-2	µg/kg	930	2.02E+03	4.60E-01	1.43E+03	6.50E-01
100-F-26:4_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	150	3.00E+02	5.00E-01	1.56E+03	9.62E-02
100-F-26:4_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	85,100	6.21E+05	1.37E-01	8.56E+05	9.94E-02
100-F-26:7_Overburden_Focused	non-Rad	Boron	7440-42-8	µg/kg	10,600	2.96E+04	3.58E-01	3.20E+04	3.31E-01
100-F-26:7_Shallow	non-Rad	Boron	7440-42-8	µg/kg	8,960	2.96E+04	3.03E-01	3.20E+04	2.80E-01
100-F-26:7_Staging Pile Area Footprint	non-Rad	Boron	7440-42-8	µg/kg	5,756	2.96E+04	1.94E-01	3.20E+04	1.80E-01
100-F-26:7_Staging Pile Area Footprint	non-Rad	Selenium	7782-49-2	µg/kg	960	2.02E+03	4.75E-01	1.43E+03	6.71E-01
100-F-26:8_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	160	3.00E+02	5.33E-01	1.56E+03	1.03E-01
100-F-26:8_Shallow	non-Rad	Selenium	7782-49-2	µg/kg	1,335	2.02E+03	6.61E-01	1.43E+03	9.33E-01
100-F-26:9_Overburden	non-Rad	Boron	7440-42-8	µg/kg	15,662	2.96E+04	5.29E-01	3.20E+04	4.89E-01
100-F-26:9_Overburden	non-Rad	Mercury	7439-97-6	µg/kg	100	3.00E+02	3.33E-01	1.56E+03	6.41E-02
100-F-26:9_Overburden_Focused	non-Rad	Barium	7440-39-3	µg/kg	659,000	3.58E+05	**1.84E+00**	1.69E+06	3.90E-01
100-F-26:9_Overburden_Focused	non-Rad	Boron	7440-42-8	µg/kg	61,700	2.96E+04	**2.08E+00**	3.20E+04	**1.93E+00**
100-F-26:9_Overburden_Focused	non-Rad	Copper	7440-50-8	µg/kg	183,000	5.80E+04	**3.16E+00**	1.93E+05	9.48E-01
100-F-26:9_Overburden_Focused	non-Rad	Lead	7439-92-1	µg/kg	81,700	1.70E+06	4.81E-02	1.56E+05	5.24E-01
100-F-26:9_Overburden_Focused	non-Rad	Zinc	7440-66-6	µg/kg	85,800	6.21E+05	1.38E-01	8.56E+05	1.00E-01
100-F-26:9_Shallow	non-Rad	Boron	7440-42-8	µg/kg	14,334	2.96E+04	4.84E-01	3.20E+04	4.48E-01
100-F-26:9_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	278	3.00E+02	9.26E-01	1.56E+03	1.78E-01
100-F-26:9_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	28,600	2.96E+04	9.66E-01	3.20E+04	8.94E-01
100-F-26:9_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	810	3.00E+02	**2.70E+00**	1.56E+03	5.19E-01
100-F-26:9_Shallow_Focused	non-Rad	Selenium	7782-49-2	µg/kg	1,300	2.02E+03	6.44E-01	1.43E+03	9.09E-01
100-F-26:9_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	122,000	6.21E+05	1.96E-01	8.56E+05	1.43E-01
100-F-26:9_Staging Pile Area	non-Rad	Arsenic	7440-38-2	µg/kg	11,014	1.28E+05	8.60E-02	1.27E+05	8.67E-02
100-F-26:9_Staging Pile Area	non-Rad	Mercury	7439-97-6	µg/kg	120	3.00E+02	4.00E-01	1.56E+03	7.69E-02
100-F-31_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	1,200	3.00E+02	**4.00E+00**	1.56E+03	7.69E-01
100-F-33_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	71,718	6.21E+05	1.15E-01	8.56E+05	8.38E-02
100-F-33_Staging pile area_Focused	non-Rad	Mercury	7439-97-6	µg/kg	381	3.00E+02	**1.27E+00**	1.56E+03	2.44E-01

Table 12. Comparison of 100-F Decision Area Surface Soil (0 to 15 feet) Concentrations to PRGs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/ Invertebrate PRG[1]	Hazard Quotient	Wildlife PRG[2]	Hazard Quotient
100-F-37_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	17,300	1.28E+05	1.35E-01	1.27E+05	1.36E-01
100-F-37_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	508,000	3.58E+05	**1.42E+00**	1.69E+06	3.01E-01
100-F-37_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	214,000	1.70E+06	1.26E-01	1.56E+05	**1.37E+00**
100-F-38_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	388,000	3.58E+05	**1.08E+00**	1.69E+06	2.30E-01
100-F-38_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	23,500	2.96E+04	7.94E-01	3.20E+04	7.34E-01
100-F-38_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	38,400	1.70E+06	2.26E-02	1.56E+05	2.46E-01
100-F-44:2_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	90,700	6.21E+05	1.46E-01	8.56E+05	1.06E-01
100-F-44:8_Shallow	non-Rad	Boron	7440-42-8	µg/kg	11,762	2.96E+04	3.97E-01	3.20E+04	3.68E-01
100-F-44:8_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	106	3.00E+02	3.53E-01	1.56E+03	6.79E-02
100-F-44:9_Overburden_Focused	non-Rad	Selenium	7782-49-2	µg/kg	1,100	2.02E+03	5.45E-01	1.43E+03	7.69E-01
100-F-44:9_Staging Pile Area Footprint	non-Rad	Selenium	7782-49-2	µg/kg	930	2.02E+03	4.60E-01	1.43E+03	6.50E-01
100-F-45_Overburden_Focused	non-Rad	Chromium	7440-47-3	µg/kg	20,700	1.49E+05	1.39E-01	1.09E+05	1.90E-01
100-F-45_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	34,335	1.49E+05	2.30E-01	1.09E+05	3.15E-01
100-F-45_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	1,034	3.00E+02	**3.45E+00**	1.56E+03	6.63E-01
100-F-46_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	3,900	2.96E+04	1.32E-01	3.20E+04	1.22E-01
100-F-47_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	907	3.00E+02	**3.02E+00**	1.56E+03	5.81E-01
100-F-48_Shallow_1	non-Rad	Boron	7440-42-8	µg/kg	4,367	2.96E+04	1.48E-01	3.20E+04	1.36E-01
100-F-48_Shallow_1	non-Rad	Mercury	7439-97-6	µg/kg	151	3.00E+02	5.02E-01	1.56E+03	9.66E-02
100-F-49_Shallow	non-Rad	Selenium	7782-49-2	µg/kg	1,200	2.02E+03	5.94E-01	1.43E+03	8.39E-01
100-F-49_Staging Pile Area Footprint_Focused	non-Rad	Boron	7440-42-8	µg/kg	4,100	2.96E+04	1.39E-01	3.20E+04	1.28E-01
100-F-49_Staging Pile Area Footprint_Focused	non-Rad	Chromium	7440-47-3	µg/kg	22,100	1.49E+05	1.48E-01	1.09E+05	2.03E-01
100-F-55 and 100-F-62_Shallow_1	non-Rad	Lead	7439-92-1	µg/kg	65,065	1.70E+06	3.83E-02	1.56E+05	4.17E-01
100-F-55 and 100-F-62_Shallow_2	non-Rad	Boron	7440-42-8	µg/kg	4,158	2.96E+04	1.40E-01	3.20E+04	1.30E-01
100-F-55 and 100-F-62_Shallow_2	non-Rad	Mercury	7439-97-6	µg/kg	6,786	3.00E+02	**2.26E+01**	1.56E+03	**4.35E+00**
100-F-55 and 100-F-62_Staging Pile Area Footprint	non-Rad	Boron	7440-42-8	µg/kg	8,300	2.96E+04	2.80E-01	3.20E+04	2.59E-01
100-F-55 and 100-F-62_Staging Pile Area Footprint	non-Rad	Mercury	7439-97-6	µg/kg	690	3.00E+02	**2.30E+00**	1.56E+03	4.42E-01
100-F-55 and 100-F-62_Staging Pile Area Footprint	non-Rad	Zinc	7440-66-6	µg/kg	74,800	6.21E+05	1.20E-01	8.56E+05	8.74E-02
100-F-56:1_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	1,771	3.00E+02	**5.90E+00**	1.56E+03	**1.14E+00**
100-F-56:1_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	58,600	1.49E+05	3.93E-01	1.09E+05	5.38E-01
100-F-61_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	640	3.00E+02	**2.13E+00**	1.56E+03	4.10E-01
100-F-7_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	131	3.00E+02	4.37E-01	1.56E+03	8.40E-02
100-F-9_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	410	3.00E+02	**1.37E+00**	1.56E+03	2.63E-01
116-F-1_Overburden	non-Rad	Arsenic	7440-38-2	µg/kg	11,119	1.28E+05	8.69E-02	1.27E+05	8.75E-02
116-F-14_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	24,156	1.49E+05	1.62E-01	1.09E+05	2.22E-01
116-F-15_Shallow	non-Rad	Boron	7440-42-8	µg/kg	11,562	2.96E+04	3.91E-01	3.20E+04	3.61E-01
116-F-15_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	179	3.00E+02	5.98E-01	1.56E+03	1.15E-01
116-F-5_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	17,300	1.28E+05	1.35E-01	1.27E+05	1.36E-01
118-F-1_Overburden	non-Rad	Selenium	7782-49-2	µg/kg	1,412	2.02E+03	6.99E-01	1.43E+03	9.87E-01
118-F-1_Overburden	non-Rad	Silver	7440-22-4	µg/kg	4,300	2.99E+03	**1.44E+00**	9.83E+05	4.37E-03
118-F-1_Staging Pile Area	non-Rad	Arsenic	7440-38-2	µg/kg	11,600	1.28E+05	9.06E-02	1.27E+05	9.13E-02
118-F-2_Overburden	non-Rad	Selenium	7782-49-2	µg/kg	1,400	2.02E+03	6.93E-01	1.43E+03	9.79E-01
118-F-2_Staging Pile Area	non-Rad	Selenium	7782-49-2	µg/kg	1,400	2.02E+03	6.93E-01	1.43E+03	9.79E-01
118-F-3_Shallow	non-Rad	Boron	7440-42-8	µg/kg	12,700	2.96E+04	4.29E-01	3.20E+04	3.97E-01
118-F-3_Staging Pile Area	non-Rad	Boron	7440-42-8	µg/kg	6,600	2.96E+04	2.23E-01	3.20E+04	2.06E-01

Table 12. Comparison of 100-F Decision Area Surface Soil (0 to 15 feet) Concentrations to PRGs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/ Invertebrate PRG[1]	Hazard Quotient	Wildlife PRG[2]	Hazard Quotient
118-F-7_Shallow	non-Rad	Boron	7440-42-8	µg/kg	4,800	2.96E+04	1.62E-01	3.20E+04	1.50E-01
118-F-7_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	2,400	2.00E+03	**1.20E+00**	5.74E+03	4.18E-01
118-F-7_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	10,200	1.28E+05	7.97E-02	1.27E+05	8.03E-02
118-F-7_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	63,800	1.70E+06	3.75E-02	1.56E+05	4.09E-01
118-F-7_Staging Pile Area	non-Rad	Boron	7440-42-8	µg/kg	3,900	2.96E+04	1.32E-01	3.20E+04	1.22E-01
118-F-7_Staging Pile Area	non-Rad	Copper	7440-50-8	µg/kg	552,000	5.80E+04	**9.52E+00**	1.93E+05	**2.86E+00**
118-F-8:1_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	38,777	1.49E+05	2.60E-01	1.09E+05	3.56E-01
118-F-8:4_Overburden	non-Rad	Mercury	7439-97-6	µg/kg	127	3.00E+02	4.23E-01	1.56E+03	8.13E-02
118-F-8:4_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	530	3.00E+02	**1.77E+00**	1.56E+03	3.40E-01
118-F-8:4_Shallow	non-Rad	Selenium	7782-49-2	µg/kg	1,500	2.02E+03	7.43E-01	1.43E+03	**1.05E+00**
120-F-1_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	102	3.00E+02	3.42E-01	1.56E+03	6.57E-02
120-F-1_Shallow	non-Rad	Selenium	7782-49-2	µg/kg	1,800	2.02E+03	8.91E-01	1.43E+03	**1.26E+00**
126-F-2_Staging pile area_Focused	non-Rad	Boron	7440-42-8	µg/kg	5,600	2.96E+04	1.89E-01	3.20E+04	1.75E-01
126-F-2_Staging pile area_Focused	non-Rad	Zinc	7440-66-6	µg/kg	76,900	6.21E+05	1.24E-01	8.56E+05	8.98E-02
128-F-2_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	21,554	1.49E+05	1.45E-01	1.09E+05	1.98E-01
128-F-2_Staging pile area_Focused	non-Rad	Chromium	7440-47-3	µg/kg	32,200	1.49E+05	2.16E-01	1.09E+05	2.95E-01
128-F-2_Staging pile area_Focused	non-Rad	Selenium	7782-49-2	µg/kg	950	2.02E+03	4.70E-01	1.43E+03	6.64E-01
128-F-2_Staging pile area_Focused	non-Rad	Zinc	7440-66-6	µg/kg	124,000	6.21E+05	2.00E-01	8.56E+05	1.45E-01
128-F-3_Shallow	non-Rad	Boron	7440-42-8	µg/kg	17,002	2.96E+04	5.74E-01	3.20E+04	5.31E-01
128-F-3_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	42,093	1.49E+05	2.83E-01	1.09E+05	3.86E-01
128-F-3_Staging pile area_Focused	non-Rad	Boron	7440-42-8	µg/kg	5,500	2.96E+04	1.86E-01	3.20E+04	1.72E-01
141-C_Shallow	non-Rad	Boron	7440-42-8	µg/kg	5,336	2.96E+04	1.80E-01	3.20E+04	1.67E-01
1607-F3_Shallow	non-Rad	Selenium	7782-49-2	µg/kg	4,200	2.02E+03	**2.08E+00**	1.43E+03	**2.94E+00**
1607-F3_Staging pile area_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	12,100	1.28E+05	9.45E-02	1.27E+05	9.53E-02
1607-F3_Staging pile area_Focused	non-Rad	Lead	7439-92-1	µg/kg	54,900	1.70E+06	3.23E-02	1.56E+05	3.52E-01
1607-F4_Overburden_Focused	non-Rad	Boron	7440-42-8	µg/kg	5,800	2.96E+04	1.96E-01	3.20E+04	1.81E-01
1607-F4_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	1,200	3.00E+02	**4.00E+00**	1.56E+03	7.69E-01
1607-F4_Shallow	non-Rad	Selenium	7782-49-2	µg/kg	1,602	2.02E+03	7.93E-01	1.43E+03	**1.12E+00**
1607-F7_Staging pile area_Focused	non-Rad	Boron	7440-42-8	µg/kg	7,700	2.96E+04	2.60E-01	3.20E+04	2.41E-01
1607-F7_Staging pile area_Focused	non-Rad	Dieldrin	60-57-1	µg/kg	23	--	--	--	--
1607-F7_Staging pile area_Focused	non-Rad	Zinc	7440-66-6	µg/kg	72,000	6.21E+05	1.16E-01	8.56E+05	8.41E-02
182-F_Overburden_Focused	non-Rad	Chromium	7440-47-3	µg/kg	22,600	1.49E+05	1.52E-01	1.09E+05	2.07E-01
182-F_Overburden_Focused	non-Rad	Lead	7439-92-1	µg/kg	58,700	1.70E+06	3.45E-02	1.56E+05	3.76E-01
182-F_Overburden_Focused	non-Rad	Zinc	7440-66-6	µg/kg	139,000	6.21E+05	2.24E-01	8.56E+05	1.62E-01
600-351_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	250,000	1.28E+05	**1.95E+00**	1.27E+05	**1.97E+00**
600-351_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	805,000	1.70E+06	4.74E-01	1.56E+05	**5.16E+00**
600-351_Shallow_Focused	non-Rad	Selenium	7782-49-2	µg/kg	920	2.02E+03	4.55E-01	1.43E+03	6.43E-01

Table 13. Comparison of 100-IU-2 Decision Area Surface Soil (0 to 15 feet) Concentrations to PRGs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/ Invertebrate PRG[1]	Hazard Quotient	Wildlife PRG[2]	Hazard Quotient
600-120 and 600-297_Shallow	non-Rad	Boron	7440-42-8	µg/kg	4,028	2.96E+04	1.36E-01	3.20E+04	1.26E-01
600-127_Shallow	non-Rad	Selenium	7782-49-2	µg/kg	920	2.02E+03	4.55E-01	1.43E+03	6.43E-01
600-127_Staging Pile Area_3	non-Rad	Boron	7440-42-8	µg/kg	5,365	2.96E+04	1.81E-01	3.20E+04	1.68E-01
600-127_Staging Pile Area_4	non-Rad	Boron	7440-42-8	µg/kg	7,907	2.96E+04	2.67E-01	3.20E+04	2.47E-01
600-176_Staging Pile Area Footprint_2	non-Rad	Chromium	7440-47-3	µg/kg	60,644	1.49E+05	4.07E-01	1.09E+05	5.56E-01
600-176_Staging Pile Area Footprint_2	non-Rad	Lead	7439-92-1	µg/kg	456,552	1.70E+06	2.69E-01	1.56E+05	**2.93E+00**
600-176_Staging Pile Area Footprint_3	non-Rad	Lead	7439-92-1	µg/kg	43,853	1.70E+06	2.58E-02	1.56E+05	2.81E-01
600-296_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	741,000	3.58E+05	**2.07E+00**	1.69E+06	4.38E-01
600-296_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	59,300	1.70E+06	3.49E-02	1.56E+05	3.80E-01
600-296_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	650	3.00E+02	**2.17E+00**	1.56E+03	4.17E-01
600-296_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	123,000	6.21E+05	1.98E-01	8.56E+05	1.44E-01
600-302_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	122,000	6.21E+05	1.96E-01	8.56E+05	1.43E-01
600-341:1_Shallow_1_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	1,860	9.84E+03	1.89E-01	2.86E+04	6.50E-02
600-341:1_Shallow_1_Focused	non-Rad	Manganese	7439-96-5	µg/kg	563,000	1.26E+06	4.47E-01	3.32E+06	1.70E-01
600-341:1_Shallow_1_Focused	non-Rad	Mercury	7439-97-6	µg/kg	177	3.00E+02	5.90E-01	1.56E+03	1.13E-01
600-341:1_Shallow_1_Focused	non-Rad	Zinc	7440-66-6	µg/kg	317,000	6.21E+05	5.10E-01	8.56E+05	3.70E-01
600-341:1_Shallow_2_Focused	non-Rad	Zinc	7440-66-6	µg/kg	106,000	6.21E+05	1.71E-01	8.56E+05	1.24E-01
600-341:2_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	119,000	6.21E+05	1.92E-01	8.56E+05	1.39E-01

Table 14. Comparison of 100-IU-6 Decision Area Surface Soil (0 to 15 feet) Concentrations to PRGs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/ Invertebrate PRG[1]	Hazard Quotient	Wildlife PRG[2]	Hazard Quotient
600-109_Overburden_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	15,300	1.28E+05	1.20E-01	1.27E+05	1.20E-01
600-109_Overburden_Focused	non-Rad	Lead	7439-92-1	µg/kg	71,900	1.70E+06	4.23E-02	1.56E+05	4.61E-01
600-109_Staging Pile Area	non-Rad	Arsenic	7440-38-2	µg/kg	24,017	1.28E+05	1.88E-01	1.27E+05	1.89E-01
600-109_Staging Pile Area	non-Rad	Lead	7439-92-1	µg/kg	125,620	1.70E+06	7.39E-02	1.56E+05	8.05E-01
600-109_Staging Pile Area	non-Rad	Zinc	7440-66-6	µg/kg	67,999	6.21E+05	1.09E-01	8.56E+05	7.94E-02
600-111_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	513,612	1.26E+06	4.08E-01	3.32E+06	1.55E-01
600-146_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	475,000	5.80E+04	**8.19E+00**	1.93E+05	**2.46E+00**
600-146_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	39,400	3.80E+04	**1.04E+00**	2.47E+05	1.60E-01
600-146_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	154,000	6.21E+05	2.48E-01	8.56E+05	1.80E-01
600-149:2_Shallow	non-Rad	Selenium	7782-49-2	µg/kg	873	2.02E+03	4.32E-01	1.43E+03	6.11E-01
600-149:2_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	153,000	1.70E+06	9.00E-02	1.56E+05	9.81E-01
600-149:2_Shallow_Focused	non-Rad	Selenium	7782-49-2	µg/kg	1,100	2.02E+03	5.45E-01	1.43E+03	7.69E-01
600-186_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	98,000	1.49E+05	6.58E-01	1.09E+05	8.99E-01
600-186_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	93,500	1.70E+06	5.50E-02	1.56E+05	5.99E-01
600-186_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	854	3.00E+02	**2.85E+00**	1.56E+03	5.47E-01
600-186_Shallow_Focused	non-Rad	Silver	7440-22-4	µg/kg	21,900	2.99E+03	**7.32E+00**	9.83E+05	2.23E-02
600-186_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	141,000	8.94E+04	**1.58E+00**	4.32E+04	**3.26E+00**
600-186_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	137,000	6.21E+05	2.21E-01	8.56E+05	1.60E-01
600-202_Shallow_2	non-Rad	Chromium	7440-47-3	µg/kg	22,382	1.49E+05	1.50E-01	1.09E+05	2.05E-01
600-202_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	10,200	1.28E+05	7.97E-02	1.27E+05	8.03E-02
600-202_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	13,000	2.96E+04	4.39E-01	3.20E+04	4.06E-01
600-202_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	21,900	1.49E+05	1.47E-01	1.09E+05	2.01E-01
600-202_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	87,900	5.80E+04	**1.52E+00**	1.93E+05	4.55E-01
600-202_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	278,000	1.70E+06	1.64E-01	1.56E+05	**1.78E+00**
600-202_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	403,000	6.21E+05	6.49E-01	8.56E+05	4.71E-01
600-202_Staging Pile Area Footprint	non-Rad	Boron	7440-42-8	µg/kg	9,973	2.96E+04	3.37E-01	3.20E+04	3.12E-01
600-202_Staging Pile Area Footprint	non-Rad	Lead	7439-92-1	µg/kg	63,502	1.70E+06	3.74E-02	1.56E+05	4.07E-01
600-202_Staging Pile Area Footprint	non-Rad	Zinc	7440-66-6	µg/kg	174,723	6.21E+05	2.81E-01	8.56E+05	2.04E-01
600-205_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	40,300	1.70E+06	2.37E-02	1.56E+05	2.58E-01
600-205_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	86,200	8.94E+04	9.64E-01	4.32E+04	**2.00E+00**
600-3_Shallow_2	non-Rad	Lead	7439-92-1	µg/kg	65,041	1.70E+06	3.83E-02	1.56E+05	4.17E-01
600-3_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	11,700	8.42E+05	1.39E-02	9.20E+04	1.27E-01
600-3_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	841,000	3.58E+05	**2.35E+00**	1.69E+06	4.98E-01
600-3_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	19,400	1.49E+05	1.30E-01	1.09E+05	1.78E-01
600-3_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	152,000	5.80E+04	**2.62E+00**	1.93E+05	7.88E-01
600-3_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	1.64E+06	1.70E+06	9.65E-01	1.56E+05	**1.05E+01**
600-3_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	384,000	6.21E+05	6.18E-01	8.56E+05	4.49E-01
600-3_Staging Pile Area Footprint_Focused	non-Rad	Lead	7439-92-1	µg/kg	236,000	1.70E+06	1.39E-01	1.56E+05	**1.51E+00**
600-315_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	13,300	2.96E+04	4.49E-01	3.20E+04	4.16E-01
600-315_Shallow_Focused	non-Rad	Selenium	7782-49-2	µg/kg	1,400	2.02E+03	6.93E-01	1.43E+03	9.79E-01
600-322_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	32,800	1.49E+05	2.20E-01	1.09E+05	3.01E-01
600-322_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	57,400	5.80E+04	9.90E-01	1.93E+05	2.97E-01
600-322_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	72,200	1.70E+06	4.25E-02	1.56E+05	4.63E-01
600-322_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	556,000	1.26E+06	4.41E-01	3.32E+06	1.67E-01
600-322_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	4,300	2.00E+03	**2.15E+00**	5.74E+03	7.49E-01
600-322_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	35,400	3.80E+04	9.32E-01	2.47E+05	1.43E-01
600-323_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	549,000	3.58E+05	**1.53E+00**	1.69E+06	3.25E-01

Table 14. Comparison of 100-IU-6 Decision Area Surface Soil (0 to 15 feet) Concentrations to PRGs

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Plant/ Invertebrate PRG[1]	Hazard Quotient	Wildlife PRG[2]	Hazard Quotient
600-323_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	34,000	2.96E+04	**1.15E+00**	3.20E+04	**1.06E+00**
600-323_Shallow_Focused	non-Rad	Selenium	7782-49-2	µg/kg	2,200	2.02E+03	**1.09E+00**	1.43E+03	**1.54E+00**
600-334:1_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	1,900	3.00E+02	**6.33E+00**	1.56E+03	**1.22E+00**
600-334:1_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	73,000	6.21E+05	1.18E-01	8.56E+05	8.53E-02
JA JONES 1_Shallow	non-Rad	Lead	7439-92-1	µg/kg	54,479	1.70E+06	3.20E-02	1.56E+05	3.49E-01

Table 15. Summary of 100-F Source OU Waste Sites Ecological Evaluation Based on PRGs for Surface Soils (0 to 15 feet)

Waste Site/Decision Unit	Plant/Invertebrate HQ	Wildlife HQ
100-F-19:2_Overburden	Mercury (1.4)	--
100-F-26:10_Overburden_Focused	--	Selenium (1.3)
100-F-26:14_Shallow	Boron (1.1)	--
100-F-26:4_Overburden_Focused	Boron (1.1)	Boron (1.0)
100-F-26:4_Shallow_1	Selenium (1.3)	Selenium (1.9)
100-F-26:9_Overburden_Focused	Barium (1.8) Boron (2.1) Copper (3.2)	Boron (1.9)
100-F-26:9_Shallow_Focused	Mercury (2.7)	--
100-F-31_Shallow	Mercury (4.0)	--
100-F-33_Staging pile area_Focused	Mercury (1.3)	--
100-F-37_Shallow_Focused	Barium (1.4)	Lead (1.4)
100-F-38_Shallow_Focused	Barium (1.1)	--
100-F-45_Shallow	Mercury (3.4)	--
100-F-47_Shallow	Mercury (3.0)	--
100-F-55 and 100-F-62_Shallow_2	Mercury (22.6)	Mercury (4.4)
100-F-55 and 100-F-62_Staging Pile Area Footprint_Focused	Mercury (2.3)	--
100-F-56:1_Shallow	Mercury (5.9)	Mercury (1.1)
100-F-61_Shallow	Mercury (2.1)	--
100-F-9_Shallow_Focused	Mercury (1.4)	--
118-F-1_Overburden	Silver (1.4)	--
118-F-7_Shallow	Molybdenum (1.2)	--
118-F-7_Stagging pile area	Copper (9.5)	Copper (2.6)
118-F-8:4_Shallow	Mercury (1.8)	Selenium (1.0)
120-F-1_Shallow	--	Selenium (1.3)
1607-F3_Shallow	Selenium (2.1)	Selenium (2.9)
1607-F4_Shallow	Mercury (4.0)	Selenium (1.1)
1607-F7_Staging pile area_Focused	--	Dieldrin (1.1)
600-351_Shallow_Focused	Arsenic (2.0)	Arsenic (2.0) Lead (5.2)

Table 16. Summary of 100-IU-2 Source OU Waste Sites Ecological Evaluation Based on PRGs for Surface Soils (0 to 15 feet)

Waste Site/Decision Unit	Plant/Invertebrate HQ	Wildlife HQ
600-176_Staging Pile Area Footprint_2	--	Lead (2.9)
600-296_Shallow_Focused	Barium (2.1) Mercury (2.2)	--

Table 17. Summary of 100-IU-6 Source OU Waste Sites Ecological Evaluation Based on PRGs for Surface Soils (0 to 15 feet)

Waste Site/Decision Unit	Plant/Invertebrate HQ	Wildlife HQ
600-146_Shallow_Focused	Copper (8.2) Nickel (1.0)	Copper (2.2)
600-186_Shallow_Focused	Mercury (2.8) Silver (7.3) Vanadium (1.6)	Vanadium (3.3)
600-202_Shallow_Focused	Copper (1.5)	Lead (1.8)
600-205_Shallow_Focused	--	Vanadium (2.0)
600-3_Shallow_Focused	Barium (2.3) Copper (2.6)	Lead (10.5)
600-3_Staging Pile Area Footprint_Focused	--	Lead (1.5)
600-322_Shallow_Focused	Molybdenum (2.2)	--
600-323_Shallow_Focused	Barium (1.5) Boron (1.1) Selenium (1.1)	Selenium (1.5) Boron (1.1)
600-334:1_Shallow_Focused	Mercury (6.3)	Mercury (1.2)

Table 18. Wildlife Exposure to Chemicals through Drinking from Seeps in the 100-F/IU-2/IU-6 Riparian Area

Chemical	Seep Max Detect (mg/L)	Mammal LOAEL TRV (mg/kg-bw-d)	Bird LOAEL TRV (mg/kg-bw-d)	Elk Incidental Water Intake (mg/kg BW/d)	Elk LOAEL HQ	Badger Incidental Water Intake (mg/kg BW/d)	Badger LOAEL HQ	Bat Incidental Water Intake (mg/kg BW/d)	Bat LOAEL HQ	Killdeer Incidental Water Intake (mg/kg BW/d)	Killdeer LOAEL HQ	Swallow Incidental Water Intake (mg/kg BW/d)	Swallow LOAEL HQ	Quail Incidental Water Intake (mg/kg BW/d)	Quail LOAEL HQ	Meadowlark Incidental Water Intake (mg/kg BW/d)	Meadowlark LOAEL HQ	Hawk Incidental Water Intake (mg/kg BW/d)	Hawk LOAEL HQ
Unfiltered samples																			
Aluminum	0.94	19.3	NA	4.10E-02	2.12E-03	5.70E-02	2.95E-03	7.35E-02	3.81E-03	9.75E-02	---	1.43E-01	---	7.32E-02	---	4.17E-02	---	3.94E-02	---
Antimony	0.00039	0.5900	NA	1.70E-05	2.88E-05	2.36E-05	4.01E-05	3.05E-05	5.17E-05	4.05E-05	---	5.92E-05	---	3.04E-05	---	1.73E-05	---	1.63E-05	---
Arsenic	0.004909	1.6600	40.3000	2.14E-04	1.29E-04	2.98E-04	1.79E-04	3.84E-04	2.31E-04	5.09E-04	1.26E-05	7.45E-04	1.85E-05	3.83E-04	9.49E-06	2.18E-04	5.40E-06	2.06E-04	5.11E-06
Barium	0.054	75.0000	41.7000	2.36E-03	3.14E-05	3.27E-03	4.36E-05	4.22E-03	5.63E-05	5.60E-03	1.34E-04	8.19E-03	1.96E-04	4.21E-03	1.01E-04	2.39E-03	5.74E-05	2.26E-03	5.43E-05
Beryllium	0.00027	0.5320	NA	1.18E-05	2.21E-05	1.64E-05	3.08E-05	2.11E-05	3.97E-05	2.80E-05	---	4.10E-05	---	2.10E-05	---	1.20E-05	---	1.13E-05	---
Cadmium	0.000631	10.0000	1.4700	2.75E-05	2.75E-06	3.83E-05	3.83E-06	4.94E-05	4.94E-06	6.55E-05	4.45E-05	9.57E-05	6.51E-05	4.92E-05	3.34E-05	2.80E-05	1.90E-05	2.64E-05	1.80E-05
Calculated Total Uranium	0.010241886	6.1300	16.0000	4.47E-04	7.29E-05	6.21E-04	1.01E-04	8.01E-04	1.31E-04	1.06E-03	6.64E-05	1.55E-03	9.71E-05	7.98E-04	4.99E-05	4.54E-04	2.84E-05	4.29E-04	2.68E-05
Chloride	13.70	NA	NA	5.98E-01	---	8.30E-01	---	1.07E+00	---	1.42E+00	---	2.08E+00	---	1.07E+00	---	6.07E-01	---	5.74E-01	---
Chloroform	0.0014	41.0000	34.4000	6.11E-05	1.49E-06	8.49E-05	2.07E-06	1.10E-04	2.67E-06	1.45E-04	4.22E-06	2.12E-04	6.17E-06	1.09E-04	3.17E-06	6.21E-05	1.80E-06	5.87E-05	1.71E-06
Chromium	0.0216	9.6200	2.7800	9.42E-04	9.80E-05	1.31E-03	1.36E-04	1.69E-03	1.76E-04	2.24E-03	8.06E-04	3.28E-03	1.18E-03	1.68E-03	6.05E-04	9.57E-04	3.44E-04	9.05E-04	3.26E-04
Copper	0.0145	9.3400	12.1000	6.33E-04	6.77E-05	8.79E-04	9.41E-05	1.13E-03	1.21E-04	1.50E-03	1.24E-04	2.20E-03	1.82E-04	1.13E-03	9.34E-05	6.43E-04	5.31E-05	6.08E-04	5.02E-05
Fluoride	0.7	52.7500	32.0000	3.05E-02	5.79E-04	4.24E-02	8.04E-04	5.48E-02	1.04E-03	7.26E-02	2.27E-03	1.06E-01	3.32E-03	5.45E-02	1.70E-03	3.10E-02	9.70E-04	2.93E-02	9.17E-04
Hexavalent Chromium	0.00136	40.0000	NA	5.93E-05	1.48E-06	8.24E-05	2.06E-06	1.06E-04	2.66E-06	1.41E-04	---	2.06E-04	---	1.06E-04	---	6.03E-05	---	5.70E-05	---
Iodine	0.2772169	13.7000	NA	1.21E-02	8.83E-04	1.68E-02	1.23E-03	2.17E-02	1.58E-03	2.88E-02	---	4.21E-02	---	2.16E-02	---	1.23E-02	---	1.16E-02	---
Iron	1.6	NA	NA	6.98E-02	---	9.70E-02	---	1.25E-01	---	1.66E-01	---	2.43E-01	---	1.25E-01	---	7.09E-02	---	6.71E-02	---
Lead	0.0186	8.9000	3.2600	8.11E-04	9.12E-05	1.13E-03	1.27E-04	1.45E-03	1.63E-04	1.93E-03	5.92E-04	2.82E-03	8.66E-04	1.45E-03	4.45E-04	8.24E-04	2.53E-04	7.80E-04	2.39E-04
Manganese	0.082	71.0000	348.0000	3.58E-03	5.04E-05	4.97E-03	7.00E-05	6.41E-03	9.03E-05	8.51E-03	2.44E-05	1.24E-02	3.58E-05	6.39E-03	1.84E-05	3.63E-03	1.04E-05	3.44E-03	9.88E-06
Mercury	0.0000115	0.1600	0.3700	5.02E-07	3.14E-06	6.97E-07	4.36E-06	9.00E-07	5.62E-06	1.19E-06	3.22E-06	1.74E-06	4.72E-06	8.96E-07	2.42E-06	5.10E-07	1.38E-06	4.82E-07	1.30E-06
Methylene chloride	0.00052	50.0000	34.4000	2.27E-05	4.54E-07	3.15E-05	6.30E-07	4.07E-05	8.13E-07	5.40E-05	1.57E-06	7.89E-05	2.29E-06	4.05E-05	1.18E-06	2.30E-05	6.70E-07	2.18E-05	6.34E-07
Nickel	0.022	3.4000	11.5000	9.60E-04	2.82E-04	1.33E-03	3.92E-04	1.72E-03	5.06E-04	2.28E-03	1.98E-04	3.34E-03	2.90E-04	1.71E-03	1.49E-04	9.75E-04	8.48E-05	9.22E-04	8.02E-05
Nitrogen	4700.00	1130.0000	NA	2.05E+02	**1.81E-01**	2.85E+02	**2.52E-01**	3.68E+02	**3.25E-01**	4.88E+02	---	7.13E+02	---	3.66E+02	---	2.08E+02	---	1.97E+02	---
Selenium	0.0045	0.2150	0.5790	1.96E-04	9.13E-04	2.73E-04	1.27E-03	3.52E-04	1.64E-03	4.67E-04	8.06E-04	6.83E-04	1.18E-03	3.51E-04	6.06E-04	1.99E-04	3.44E-04	1.89E-04	3.26E-04
Silver	0.0000743	60.2000	20.2000	3.24E-06	5.38E-08	4.50E-06	7.48E-08	5.81E-06	9.65E-08	7.71E-06	3.82E-07	1.13E-05	5.58E-07	5.79E-06	2.87E-07	3.29E-06	1.63E-07	3.11E-06	1.54E-07
Strontium	0.17	263.0000	NA	7.42E-03	2.82E-05	1.03E-02	3.92E-05	1.33E-02	5.06E-05	1.76E-02	---	2.58E-02	---	1.32E-02	---	7.53E-03	---	7.12E-03	---
Sulfate	61.5	NA	NA	2.68E+00	---	3.73E+00	---	4.81E+00	---	6.38E+00	---	9.33E+00	---	4.79E+00	---	2.73E+00	---	2.58E+00	---
Thallium	0.000188	0.0750	NA	8.20E-06	1.09E-04	1.14E-05	1.52E-04	1.47E-05	1.96E-04	1.95E-05	---	2.85E-05	---	1.46E-05	---	8.33E-06	---	7.88E-06	---
Toluene	0.00047	520.0000	40.7000	2.05E-05	3.94E-08	2.85E-05	5.48E-08	3.68E-05	7.07E-08	4.88E-05	1.20E-06	7.13E-05	1.75E-06	3.66E-05	9.00E-07	2.08E-05	5.12E-07	1.97E-05	4.84E-07
Xylenes [total]	0.00085	350.0000	40.7000	3.71E-05	1.06E-07	5.15E-05	1.47E-07	6.65E-05	1.90E-07	8.82E-05	2.17E-06	1.29E-04	3.17E-06	6.62E-05	1.63E-06	3.77E-05	9.26E-07	3.56E-05	8.75E-07
Vanadium	0.019	8.3100	0.6880	8.29E-04	9.97E-05	1.15E-03	1.39E-04	1.49E-03	1.79E-04	1.97E-03	2.87E-03	2.88E-03	4.19E-03	1.48E-03	2.15E-03	8.42E-04	1.22E-03	7.96E-04	1.16E-03
Zinc	0.113	75.9000	66.5000	4.93E-03	6.49E-05	6.85E-03	9.03E-05	8.84E-03	1.16E-04	1.17E-02	1.76E-04	1.71E-02	2.58E-04	8.81E-03	1.32E-04	5.01E-03	7.53E-05	4.74E-03	7.12E-05
Filtered samples																			
Antimony	0.0043	0.5900	NA	1.88E-04	3.18E-04	2.61E-04	4.42E-04	3.36E-04	5.70E-04	4.46E-04	---	6.52E-04	---	3.35E-04	---	1.91E-04	---	1.80E-04	---
Arsenic	0.00371	1.6600	40.3000	1.62E-04	9.75E-05	2.25E-04	1.35E-04	2.90E-04	1.75E-04	3.85E-04	9.55E-06	5.63E-04	1.40E-05	2.89E-04	7.17E-06	1.64E-04	4.08E-06	1.55E-04	3.86E-06
Barium	0.0517	75.0000	41.7000	2.26E-03	3.01E-05	3.13E-03	4.18E-05	4.04E-03	5.39E-05	5.36E-03	1.29E-04	7.84E-03	1.88E-04	4.03E-03	9.66E-05	2.29E-03	5.50E-05	2.17E-03	5.20E-05
Beryllium	0.0018	0.5320	NA	7.85E-05	1.48E-04	1.09E-04	2.05E-04	1.41E-04	2.65E-04	1.87E-04	---	2.73E-04	---	1.40E-04	---	7.98E-05	---	7.54E-05	---
Cadmium	0.0000448	10.0000	1.4700	1.95E-06	1.95E-07	2.72E-06	2.72E-07	3.50E-06	3.50E-07	4.65E-06	3.16E-06	6.80E-06	4.62E-06	3.49E-06	2.37E-06	1.99E-06	1.35E-06	1.88E-06	1.28E-06
Chromium	0.024	9.6200	2.7800	1.05E-03	1.09E-04	1.45E-03	1.51E-04	1.88E-03	1.95E-04	2.49E-03	8.96E-04	3.64E-03	1.31E-03	1.87E-03	6.73E-04	1.06E-03	3.83E-04	1.01E-03	3.62E-04
Copper	0.00108	9.3400	12.1000	4.71E-05	5.04E-06	6.55E-05	7.01E-06	8.45E-05	9.04E-06	1.12E-04	9.26E-06	1.64E-04	1.35E-05	8.42E-05	6.96E-06	4.79E-05	3.96E-06	4.53E-05	3.74E-06
Iron	0.0679	NA	NA	2.96E-03	---	4.12E-03	---	5.31E-03	---	7.04E-03	---	1.03E-02	---	5.29E-03	---	3.01E-03	---	2.85E-03	---
Lead	0.000158	8.9000	3.2600	6.89E-06	7.74E-07	9.58E-06	1.08E-06	1.24E-05	1.39E-06	1.64E-05	5.03E-06	2.40E-05	7.35E-06	1.23E-05	3.78E-06	7.00E-06	2.15E-06	6.62E-06	2.03E-06
Manganese	0.0079	71.0000	348.0000	3.45E-04	4.85E-06	4.79E-04	6.75E-06	6.18E-04	8.70E-06	8.20E-04	2.36E-06	1.20E-03	3.44E-06	6.16E-04	1.77E-06	3.50E-04	1.01E-06	3.31E-04	9.51E-07
Nickel	0.00166	3.4000	11.5000	7.24E-05	2.13E-05	1.01E-04	2.96E-05	1.30E-04	3.82E-05	1.72E-04	1.50E-05	2.52E-04	2.19E-05	1.29E-04	1.12E-05	7.36E-05	6.40E-06	6.96E-05	6.05E-06
Selenium	0.00154	0.2150	0.5790	6.72E-05	3.12E-04	9.34E-05	4.34E-04	1.20E-04	5.60E-04	1.60E-04	2.76E-04	2.34E-04	4.04E-04	1.20E-04	2.07E-04	6.83E-05	1.18E-04	6.45E-05	1.11E-04
Strontium	0.312	263.0000	NA	1.36E-02	5.18E-05	1.89E-02	7.19E-05	2.44E-02	9.28E-05	3.24E-02	---	4.73E-02	---	2.43E-02	---	1.38E-02	---	1.31E-02	---
Thallium	0.0000194	0.0750	NA	8.46E-07	1.13E-05	1.18E-06	1.57E-05	1.52E-06	2.02E-05	2.01E-06	---	2.94E-06	---	1.51E-06	---	8.60E-07	---	8.13E-07	---
Vanadium	0.0468	8.3100	0.6880	2.04E-03	2.46E-04	2.84E-03	3.41E-04	3.66E-03	4.41E-04	4.86E-03	7.06E-03	7.10E-03	**1.03E-02**	3.65E-03	5.30E-03	2.07E-03	3.02E-03	1.96E-03	2.85E-03
Zinc	0.0031	75.9000	66.5000	1.35E-04	1.78E-06	1.88E-04	2.48E-06	2.42E-04	3.19E-06	3.22E-04	4.84E-06	4.70E-04	7.07E-06	2.42E-04	3.63E-06	1.37E-04	2.07E-06	1.30E-04	1.95E-06

Notes:

Drinking water ingestion rate estimated using Calder and Braun, 1983

Calder and Braun (1983) regression equation format --> L water/kg body weight/day = *a* (kilograms body weight)^{b} /kg body weight

Group	*a*	*b*
all birds	5.90E-02	6.70E-01
all mammals	9.90E-02	9.00E-01

Body weight (kg) for: Elk =	2.04E+02	assumed average weight of Rocky Mountain Elk (*Cervus canadensis*) cow (Red Orbit, 2012)
Badger =	7.60E+00	median from multiple studies (Messick and Hornocker, 1981; Silva and Downing, 1995)
Little Brown Bat =	1.03E-02	assumed average weight (*Myotis lucifugus*) from Silva and Downing, 1995
Killdeer =	7.56E-02	median from multiple studies (Purdue and Haines, 1977; Stegeman, 1955; Jackson and Jackson, 2000; Dunning, 1993)
Swallow =	2.39E-02	mean adult weight (*Hirundo pyrrhonota*) during breeding (Brown and Brown, 1995)
California Quail =	1.80E-01	median from multiple studies (Robel, 1969; Roseberry and Klimstra, 1971;Guthery et al., 1988)
Western Meadowlark =	9.95E-01	median from multiple studies (Wiens and Rotenberry, 1980; Maher, 1979)
Red-tailed Hawk =	1.18E+00	median from multiple studies (Craighead and Craighead,1956; Steenhof,1983; Springer and Osborne,1983)

	Elk	Badger	Bat	Killdeer	Swallow	California Quail	Western Meadowlark	Red-tailed Hawk
Drinking water ingestion rate (L/kg-bw-d) =	5.82E-02	8.08E-02	1.56E-01	1.38E-01	2.02E-01	1.04E-01	5.91E-02	5.59E-02
Area use factor (unitless) =	7.50E-01	7.50E-01	5.00E-01	7.50E-01	7.50E-01	7.50E-01	7.50E-01	7.50E-01

Acronyms:

EPC = exposure point concentration

HQ = hazard quotient

LOAEL = lowest observed adverse effect level

mg/kg/d = milligrams of chemical per kilogram per day

mg/kg-bw/d = milligrams of chemical per kilogram bodyweight per day
mg/L = milligrams per liter
NA = not available
NOAEL = no observed adverse effect level
TRV = toxicological reference value

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Table 19. Wildlife Exposure to Radionuclides through Drinking from Seeps in the 100-F/IU-2/IU-6 Riparian Area

Analyte Name	Units	Seeps EPC (pCi/L)	Water BCG	Exposure Dose to Wildlife	Wildlife HQ	Exposure Dose to Bats	Bats HQ
Unfiltered samples							
Beryllium-7	pCi/L	1.06E+01	--	7.95E+00	--	5.30E+00	--
Cesium-134	pCi/L	1.03E+00	2.11E+01	7.73E-01	**4.88E-02**	5.15E-01	**2.44E-02**
Cobalt-60	pCi/L	9.67E+00	3.76E+03	7.25E+00	2.57E-03	4.84E+00	1.29E-03
Gross alpha	pCi/L	1.37E+01	--	1.03E+01	--	6.85E+00	--
Gross beta	pCi/L	8.40E+01	--	6.30E+01	--	4.20E+01	--
Iodine-129	pCi/L	4.06E-01	3.84E+04	3.04E-01	1.06E-05	2.03E-01	5.28E-06
Strontium-90	pCi/L	5.83E-02	2.78E+02	4.37E-02	2.10E-04	2.92E-02	1.05E-04
Technetium-99	pCi/L	1.44E+02	6.67E+05	1.08E+02	2.16E-04	7.20E+01	1.08E-04
Tritium	pCi/L	1.73E+05	2.31E+08	1.30E+05	7.49E-04	8.65E+04	3.74E-04
Uranium [radionuclide]	pCi/L	4.50E+00	2.00E+02	3.38E+00	**2.25E-02**	2.25E+00	**1.13E-02**
Uranium-234	pCi/L	5.06E+00	2.02E+02	3.80E+00	**2.50E-02**	2.53E+00	**1.25E-02**
Uranium-235	pCi/L	1.35E-01	2.17E+02	1.01E-01	6.22E-04	6.75E-02	3.11E-04
Uranium-238	pCi/L	3.42E+00	2.23E+02	2.57E+00	**1.53E-02**	1.71E+00	7.67E-03
Zirconium/Niobium-95	pCi/L	2.33E+01	7.33E+03	1.75E+01	3.18E-03	1.17E+01	1.59E-03
Rads SOF					**7.83E-02**		**3.91E-02**

Notes:

AUF = area use factor which was assumed as 0.75 due to inaccessibility of seeps from mid April to mid July for all wildlife except bats for which it was assumed to be 0.5 due to their hibernation in winter in addition to the summer inaccessibility of the seeps.

EPC (Exposure Point Concentrations) were calculated as the upper confidence limit (UCL) on the arithmetic mean using the most recent version of EPA's Pro UCL software

BCG (Biota Concentration Guides) represent the lowest value among those calculated for riparian and terrestrial animals

BCGs for cesium-137, europium-154, europium-155, strontium-90, technetium-99, tritium, and uranium isotopes were published in DOE-STD-1153-2002

HQ = hazard quotient calculated as the exposure dose divided by the water BCG

SOF = sum of fractiosn calculated as the sum of hazard quotients for individual radionuclides

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