

## 4. GROUNDWATER

This section summarizes analytical results for routine groundwater monitoring at PORTS in 2007 at the following locations:

- X-749/X-120/Peter Kiewit (PK) Landfill
- Quadrant I Groundwater Investigative Area/X-749A Classified Materials Disposal Facility
- Quadrant II Groundwater Investigative Area
- X-701B Holding Pond
- X-633 Pumphouse/Cooling Towers Area
- X-616 Chromium Sludge Surface Impoundments
- X-740 Waste Oil Handling Facility
- X-611A Former Lime Sludge Lagoons
- X-735 Landfills
- X-734 Landfills
- X-533 Switchyard Area
- Surface water monitoring locations
- Exit pathway monitoring locations

Results for radiological parameters and volatile organic compounds (VOCs) are reported in this section. Only those VOCs that were detected in at least one sampling event are listed in this section. All results are included for radiological parameters, even if a specific constituent was not detected at a specific well or location during any sampling event in 2007. Results for chromium at the X-616 Chromium Sludge Surface Impoundments are also included in this section because chromium is a primary contaminant in this area. Results are provided for metals at the X-633 Pumphouse/Cooling Towers Area, X-611A Former Lime Sludge Lagoons, and X-533 Switchyard Area because these are the only analytical parameters for these areas.

Throughout 2007, the laboratory that analyzed groundwater samples reported concentrations of VOCs detected above the laboratory's detection limit but below laboratory's confident reporting limit (also called the practical quantitation limit). These detections are reported by the laboratory with an "estimated" qualifier (J) to indicate that there is uncertainty, or error, associated with the measurement. These results are considered detections because by definition, the analytes are present in the sample; however, these estimated detections are usually at least an order of magnitude below the preliminary remediation goal for the constituent.

Two VOCs, acetone and methylene chloride, were frequently detected in both environmental and blank samples (field and trip blanks) collected in 2007. Acetone and methylene chloride are common laboratory contaminants that are not typically detected in the PORTS groundwater plumes. Detections of acetone and methylene chloride are often qualified by the laboratory with a "B", which indicates that the analyte was also detected in the laboratory blank associated with the environmental sample and may be present due to laboratory contamination.

Other VOCs, including trichloroethene, 1,1,1-trichloroethane, 1,1-dichloroethane, 2-butanone (methyl ethyl ketone), carbon disulfide, trichlorofluoromethane, chloroform, and toluene were detected in trip and/or field blanks during 2007. These detections indicate that samples (both environmental samples and blank samples) may become contaminated with low concentrations of VOCs during other portions of the sampling process, although contamination can still occur in the laboratory (benzene,

1,2-dichlorobenzene, and 1,4-dichlorobenzene were also detected in one or more laboratory blanks in 2007). Other sources of contamination may include storage areas for sampling equipment (such as bottles and blank water), areas in which samples are collected or prepared, sample containers, and storage areas after samples are collected (such as refrigerators or sample shipping containers).

The primary purpose of the groundwater data, as stated in the *Quality Assurance Project Plan*, is to determine the nature and extent of contamination in groundwater and associated surface water at PORTS. Data collected in 2007 meet this purpose.

Complete groundwater monitoring results for sampling completed as required by the *Integrated Groundwater Monitoring Plan* are provided in the *2007 Groundwater Monitoring Report for the Portsmouth Gaseous Diffusion Plant*.

The following tables are included in this section:

- Table 4.1. Volatile organic compounds detected at the X-749/X-120/PK Landfill – 2007
- Table 4.2. Results for radionuclides at the X-749/X-120/PK Landfill – 2007
- Table 4.3. Volatile organic compounds detected at the Quadrant I Groundwater Investigative Area – 2007
- Table 4.4. Results for radionuclides at the Quadrant I Groundwater Investigative Area – 2007
- Table 4.5. Volatile organic compounds detected at the Quadrant II Groundwater Investigative Area – 2007
- Table 4.6. Results for radionuclides at the Quadrant II Groundwater Investigative Area – 2007
- Table 4.7. Volatile organic compounds detected at the X-701B Holding Pond – 2007
- Table 4.8. Results for radionuclides at the X-701B Holding Pond – 2007
- Table 4.9. Results for chromium at the X-633 Pumphouse/Cooling Towers Area – 2007
- Table 4.10. Volatile organic compounds detected at the X-616 Chromium Sludge Surface Impoundments – 2007
- Table 4.11. Results for chromium at the X-616 Chromium Sludge Surface Impoundments – 2007
- Table 4.12. Results for radionuclides at the X-616 Chromium Sludge Surface Impoundments – 2007
- Table 4.13. Volatile organic compounds detected at the X-740 Waste Oil Handling Facility – 2007
- Table 4.14. Results for radionuclides at the X-740 Waste Oil Handling Facility – 2007
- Table 4.15. Results for beryllium and chromium at the X-611A Former Lime Sludge Lagoons – 2007
- Table 4.16. Results for radionuclides at the X-735 Landfills – 2007

- Table 4.17. Volatile organic compounds detected at the X-734 Landfills – 2007
- Table 4.18. Results for radionuclides at the X-734 Landfills – 2007
- Table 4.19. Results for cadmium, cobalt, and nickel at the X-533 Switchyard Area – 2007
- Table 4.20. Volatile organic compounds detected at surface water monitoring locations – 2007
- Table 4.21. Results for radionuclides at surface water monitoring locations – 2007
- Table 4.22. Results for radionuclides at exit pathway monitoring locations – 2007

A table for volatile organic compounds at the X-735 Landfills is not provided because routine monitoring at this landfill in 2007 did not detect any VOCs other than a common sample contaminant (acetone) and a laboratory contaminant (benzene), which was qualified by the laboratory with a “B” indicating that the analyte was detected in the laboratory blank sample and was most likely present in the environmental sample due to laboratory contamination.

The following laboratory data qualifiers are used in the tables in this section:

Data qualifier	Meaning
B	Inorganics (metals): the result was less than the practical quantitation limit but greater than or equal to the instrument detection limit. Organics (VOCs): the analyte was detected in the laboratory blank sample.
J	Organics (VOCs): the reported value is an estimated concentration greater than the method detection limit but less than the practical quantitation limit.
U	Undetected

Some results for radionuclides are reported in exponential notation. The number and sign (+ or -) to the right of the “E” indicate the number of places to the right or left of the decimal point. For example, 3.4E-04 is 0.00034 (the decimal point moves four places to the left); 2.1E+02 is 210 (the decimal point moves two places to the right). Data qualifiers, if any, are to the right of the result (for example, 5.66E-07 U, where U is the data qualifier that indicates the parameter was undetected).

**Table 4.1. Volatile organic compounds detected at the X-749/X-120/PK Landfill – 2007**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
F-27G	1,1-Dichloroethane	µg/L		1 J		
	cis-1,2-Dichloroethene	µg/L		0.55 J		
MH GW-4	1,1-Dichloroethane	µg/L	0.59 J	0.4 J	0.27 J	0.41 J
	1,2-Dichlorobenzene	µg/L	0.2 J	2 U	2 U	2 U
	1,4-Dichlorobenzene	µg/L	0.38 J	2 U	2 U	2 U
	Chlorobenzene	µg/L	0.37 J	2 U	2 U	0.34 J
	cis-1,2-Dichloroethene	µg/L	1.5 J	1.3 J	0.78 J	1.4 J
	Methylene chloride	µg/L	0.46 BJ	2 U	5 U	5 U
MH GW-5	1,1,1-Trichloroethane	µg/L	2 U	0.18 J	2 U	2 U
	1,1-Dichloroethane	µg/L	0.68 J	0.64 J	0.53 J	0.61 J
	1,1-Dichloroethene	µg/L	0.62 J	2 U	2 U	2 U
	cis-1,2-Dichloroethene	µg/L	2.7	2.4	2.7	2.8
	Methylene chloride	µg/L	0.42 BJ	2 U	5 U	5 U
	Trichloroethene	µg/L	2 U	0.3 J	2 U	2 U
PK-09G	Chloroform	µg/L	1.1 J			1.1 J
	cis-1,2-Dichloroethene	µg/L	1.8 J			2.3
	Trichloroethene	µg/L	150			130
PK-10G	Trichloroethene	µg/L	0.28 J		0.23 J	
PK-14G	Acetone	µg/L	10 U	10 U	2.7 J	10 U
	cis-1,2-Dichloroethene	µg/L	2 U	0.5 J	2 U	2 U
	Toluene	µg/L	2 U	0.35 J	2 U	2 U
PK-15B	cis-1,2-Dichloroethene	µg/L	0.21 J		0.48 J	
PK-16G	1,1-Dichloroethane	µg/L	2 U	2 U	0.34 J	0.38 J
	cis-1,2-Dichloroethene	µg/L	2 U	1.8 J	5.8	6
	trans-1,2-Dichloroethene	µg/L	1 U	1 U	0.28 J	0.27 J
	Vinyl chloride	µg/L	1 U	1 U	2.9	2
PK-17B	1,1-Dichloroethane	µg/L	2.4	4.8	3	3.4
	1,1-Dichloroethene	µg/L	0.3 J	0.28 J	0.22 J	0.3 J
	Acetone	µg/L	5.8 J	10 U	10 U	10 U
	Benzene	µg/L	0.22 J	0.24 J	0.17 J	0.21 J
	Chlorobenzene	µg/L	1.2 J	0.52 J	0.36 J	0.7 J
	cis-1,2-Dichloroethene	µg/L	35	54	42	48
	trans-1,2-Dichloroethene	µg/L	1	1.5	1.5	1.4
	Trichloroethene	µg/L	0.95 J	2 U	1.2 J	1.3 J
	Vinyl chloride	µg/L	16	34	32	28
PK-19B	1,1-Dichloroethane	µg/L	0.19 J		0.16 J	
	Chloroethane	µg/L	1.4 J		1.4 J	
	Vinyl chloride	µg/L	0.46 J		0.44 J	
PK-21B	1,1,1-Trichloroethane	µg/L	2 U	0.22 J	2 U	2 U
	1,1-Dichloroethane	µg/L	170	160	160	160
	1,1-Dichloroethene	µg/L	2.1	2.8	1.9 J	2
	1,2-Dichloroethane	µg/L	0.83 J	1.4 J	0.81 J	0.9 J
	Acetone	µg/L	10 U	2.8 J	10 U	10 U
	Benzene	µg/L	0.78 J	0.8 J	0.86 J	0.85 J
	cis-1,2-Dichloroethene	µg/L	14	15	14	14
	Methylene chloride	µg/L	2 U	5 U	5 U	0.33 J
	Trichloroethene	µg/L	0.53 J	2 U	0.57 J	0.58 J
	Vinyl chloride	µg/L	21	26	17	22

**Table 4.1. Volatile organic compounds detected at the X-749/X-120/PK Landfill – 2007 (continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
PK-PL6	1,1,1-Trichloroethane	µg/L	8.6	11	0.5 J	1.2 J
	1,1-Dichloroethane	µg/L	13	12	1.9 J	3.6
	1,1-Dichloroethene	µg/L	6.6	6.6	0.5 J	1.8 J
	1,2-Dichloroethane	µg/L	2 U	0.15 J	2 U	2 U
	cis-1,2-Dichloroethene	µg/L	2.5	2.7	1.8 J	1.4 J
	Methylene chloride	µg/L	0.46 BJ	2 U	5 U	5 U
	Trichloroethene	µg/L	3.7	7.9	0.31 J	1 J
PK-PL6A	1,1,1-Trichloroethane	µg/L	12	16	3.3	5.6
	1,1-Dichloroethane	µg/L	15	16	13	15
	1,1-Dichloroethene	µg/L	8.6	9.5	3.3	9
	Acetone	µg/L	10 U	5.4 J	10 U	10 U
	cis-1,2-Dichloroethene	µg/L	2.8	3	1.6 J	3
	Methylene chloride	µg/L	0.45 BJ	2 U	5 U	5 U
	Trichloroethene	µg/L	4.7	6.9	2	5
STSW-102G	Vinyl chloride	µg/L	1 U	1 U	0.56 J	1.1
	1,1,1-Trichloroethane	µg/L		63		
	1,1,2-Trichloroethane	µg/L		1.3 J		
	1,1-Dichloroethane	µg/L		230		
	1,1-Dichloroethene	µg/L		170		
	1,2-Dichloroethane	µg/L		85		
	Benzene	µg/L		0.52 J		
	Chloroethane	µg/L		4.7		
	Chloroform	µg/L		8.9		
	cis-1,2-Dichloroethene	µg/L		85		
	Tetrachloroethene	µg/L		0.56 J		
	trans-1,2-Dichloroethene	µg/L		0.7 J		
	Trichloroethene	µg/L		550		
WP-01G	1,1-Dichloroethane	µg/L		1.1 J		2 U
	1,1-Dichloroethene	µg/L		0.47 J		2 U
	cis-1,2-Dichloroethene	µg/L		0.25 J		2 U
	Trichloroethene	µg/L		1.2 J		2 U
WP-02G	Acetone	µg/L		10 U		9.9 J
WP-03G	1,1,1-Trichloroethane	µg/L	0.49 J	2 U	0.29 J	0.35 J
	1,1-Dichloroethane	µg/L	2.5	2	1.9 J	2.4
	1,1-Dichloroethene	µg/L	1.4 J	1.1 J	0.98 J	1.2 J
	1,2-Dichloroethane	µg/L	0.5 J	0.54 J	0.36 J	0.56 J
	cis-1,2-Dichloroethene	µg/L	0.24 J	0.23 J	0.21 J	0.28 J
	Trichloroethene	µg/L	3.7	3.1	2.9	3.6
WP-07G	1,1-Dichloroethane	µg/L				0.55 J
	1,1-Dichloroethene	µg/L				0.16 J
	Trichloroethene	µg/L				0.58 J
X120-03G	Chloroform	µg/L		0.33 J		
X120-05G	Trichloroethene	µg/L		7.4		
X120-08G	1,1,1-Trichloroethane	µg/L		3.3		2.7
	1,1-Dichloroethane	µg/L		2.6		2.1
	1,1-Dichloroethene	µg/L		9.8		9.8
	1,2-Dichloroethane	µg/L		0.33 J		0.23 J
	Chloroform	µg/L		0.38 J		0.29 J

**Table 4.1. Volatile organic compounds detected at the X-749/X-120/PK Landfill – 2007 (continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X120-08G	cis-1,2-Dichloroethene	µg/L		0.22 J		0.17 J
	Trichloroethene	µg/L		7.6		7.2
X120-09G	1,1,1-Trichloroethane	µg/L		32		
	1,1,2-Trichloroethane	µg/L		1.9 J		
	1,1-Dichloroethane	µg/L		24		
	1,1-Dichloroethene	µg/L		77		
	1,2-Dichloroethane	µg/L		2.6		
	Chloroform	µg/L		2.7		
	cis-1,2-Dichloroethene	µg/L		1.6 J		
	Tetrachloroethene	µg/L		0.53 J		
	Trichloroethene	µg/L		45		
	1,1,1-Trichloroethane	µg/L		5.6		
X120-10G	1,1,2-Trichloroethane	µg/L		0.59 J		
	1,1-Dichloroethane	µg/L		5		
	1,1-Dichloroethene	µg/L		26		
	1,2-Dichloroethane	µg/L		0.47 J		
	Chloroform	µg/L		0.72 J		
	Trichloroethene	µg/L		3.1		
	1,1-Dichloroethene	µg/L		0.48 J		
X120-11G	cis-1,2-Dichloroethene	µg/L		8		
	trans-1,2-Dichloroethene	µg/L		0.22 J		
	Trichloroethene	µg/L		350		
	Acetone	µg/L		30 J		3.2 J
X749-04G	Chloroform	µg/L		20 U		1.3 J
	Trichloroethene	µg/L		1600		320
	1,1-Dichloroethane	µg/L				1.5 J
X749-05G	1,1-Dichloroethene	µg/L				0.4 J
	Chloroform	µg/L				1.2 J
	cis-1,2-Dichloroethene	µg/L				0.85 J
	Tetrachloroethene	µg/L				9.7
	Trichloroethene	µg/L				130
	1,1,1-Trichloroethane	µg/L		690		660
X749-06G	1,1,2-Trichloroethane	µg/L		44		47
	1,1-Dichloroethane	µg/L		1800		1900
	1,1-Dichloroethene	µg/L		1700		1900
	1,2-Dichloroethane	µg/L		40		42
	Chloroform	µg/L		110		140
	cis-1,2-Dichloroethene	µg/L		300		390
	Methylene chloride	µg/L		21 J		43 J
	Tetrachloroethene	µg/L		120		150
	Trichloroethene	µg/L		4600		5300
	Vinyl chloride	µg/L		12 J		12 J
X749-07G	1,1,1,2-Tetrachloroethane	µg/L		0.2 J		
	1,1,1-Trichloroethane	µg/L	170	190	200	150
	1,1,2-Trichloroethane	µg/L	1.3 J	1.6	1.9 J	1.7 J
	1,1-Dichloroethane	µg/L	82	160	170	360
	1,1-Dichloroethene	µg/L	270	250	260	330
	1,2-Dichloroethane	µg/L	19	53	58	110

**Table 4.1. Volatile organic compounds detected at the X-749/X-120/PK Landfill – 2007 (continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X749-07G	Acetone	µg/L	20 U	9.4 J	10 U	20 U
	Benzene	µg/L	4 U	0.63 J	0.68 J	1 J
	Carbon tetrachloride	µg/L	25	1 U	2 U	4 U
	Chloroethane	µg/L	12	6.6	9.5	2 J
	Chloroform	µg/L	3.7 J	6.3	9.3	12
	cis-1,2-Dichloroethene	µg/L	30		57	90
	Methylene chloride	µg/L	4 U	5 U	0.72 J	0.8 J
	Tetrachloroethene	µg/L	2.6 J	2.9	2.9	3.5 J
	trans-1,2-Dichloroethene	µg/L	2 U	0.31 J	0.34 J	0.39 J
	Trichloroethene	µg/L	360	460	460	780
	Vinyl chloride	µg/L	9.2	14	21	15
X749-08G	1,1,1-Trichloroethane	µg/L		70		59
	1,1,2-Trichloroethane	µg/L		0.77 J		0.63 J
	1,1-Dichloroethane	µg/L		41		33
	1,1-Dichloroethene	µg/L		110		120
	1,2-Dichloroethane	µg/L		8.1		6.2
	Acetone	µg/L		2.6 J		10 U
	Benzene	µg/L		0.21 J		0.24 J
	Chloroethane	µg/L		1 J		2 U
	Chloroform	µg/L		1.8		1.5 J
	cis-1,2-Dichloroethene	µg/L				34
	Tetrachloroethene	µg/L		1 U		0.21 J
	trans-1,2-Dichloroethene	µg/L		0.26 J		0.31 J
	Trichloroethene	µg/L		160		140
	Vinyl chloride	µg/L		1.2		0.9 J
X749-09GA	1,1,1-Trichloroethane	µg/L		54		51
	1,1,2-Trichloroethane	µg/L		0.51 J		0.37 J
	1,1-Dichloroethane	µg/L		22		22
	1,1-Dichloroethene	µg/L		78		70
	1,2-Dichloroethane	µg/L		4.1		3.9
	Chloroform	µg/L		1.3 J		1.2 J
	cis-1,2-Dichloroethene	µg/L		21		19
	trans-1,2-Dichloroethene	µg/L		0.19 J		0.2 J
	Trichloroethene	µg/L		67		57
	Vinyl chloride	µg/L		0.42 J		0.44 J
X749-10GA	1,1-Dichloroethane	µg/L	13	4.8	8.2	6.2
	1,1-Dichloroethene	µg/L	31	11	19	14
	Chloroethane	µg/L	2.1	2 U	1.2 J	0.44 J
	cis-1,2-Dichloroethene	µg/L	5	2.6		3.1
	Trichloroethene	µg/L	0.68 J	0.48 J	0.6 J	0.52 J
	Vinyl chloride	µg/L	2.1	1 U	0.89 J	0.52 J
X749-13G	1,1,1-Trichloroethane	µg/L		54		
	1,1,2-Trichloroethane	µg/L		0.51 J		
	1,1-Dichloroethane	µg/L		15		
	1,1-Dichloroethene	µg/L		99		
	1,2-Dichloroethane	µg/L		2.5		
	Chloroform	µg/L		2.4		
	cis-1,2-Dichloroethene	µg/L		16		

**Table 4.1. Volatile organic compounds detected at the X-749/X-120/PK Landfill – 2007 (continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X749-13G	trans-1,2-Dichloroethene	µg/L		0.17 J		
	Trichloroethene	µg/L		85		
X749-20G	1,1,1-Trichloroethane	µg/L				8.2
	1,1-Dichloroethane	µg/L				12
	1,1-Dichloroethene	µg/L				17
	1,2-Dichloroethane	µg/L				2.7
	Chloroform	µg/L				1.1 J
	cis-1,2-Dichloroethene	µg/L				7.8
	Trichloroethene	µg/L				76
X749-21G	1,1,1-Trichloroethane	µg/L		0.19 J		2.7
	1,1-Dichloroethane	µg/L		2 U		0.49 J
	1,1-Dichloroethene	µg/L		2 U		1.8 J
	Trichloroethene	µg/L		2.7		3.2
X749-24G	Acetone	µg/L		2.5 J		10 U
	Trichloroethene	µg/L		2 U		0.18 J
X749-26G	1,1,1-Trichloroethane	µg/L		3.7		
	1,1-Dichloroethane	µg/L		8.2		
	1,1-Dichloroethene	µg/L		4.5		
	1,2-Dichloroethane	µg/L		3.8		
	Chloroform	µg/L		0.34 J		
	cis-1,2-Dichloroethene	µg/L		1.1 J		
	Trichloroethene	µg/L		15		
X749-27G	1,1,1-Trichloroethane	µg/L				38
	1,1,2-Trichloroethane	µg/L				1.2 J
	1,1-Dichloroethane	µg/L				36
	1,1-Dichloroethene	µg/L				86
	1,2-Dichloroethane	µg/L				13
	Chloroform	µg/L				4
	cis-1,2-Dichloroethene	µg/L				7.3
	Tetrachloroethene	µg/L				1.6 J
	Trichloroethene	µg/L				110
	Vinyl chloride	µg/L				0.65 J
X749-28G	1,1,1-Trichloroethane	µg/L				19
	1,1,2-Trichloroethane	µg/L				0.71 J
	1,1-Dichloroethane	µg/L				13
	1,1-Dichloroethene	µg/L				42
	1,2-Dichloroethane	µg/L				1.1 J
	Carbon tetrachloride	µg/L				0.19 J
	Chloroform	µg/L				2
	cis-1,2-Dichloroethene	µg/L				1.8 J
	Tetrachloroethene	µg/L				2
	Trichloroethene	µg/L				96
X749-29G	1,1,1-Trichloroethane	µg/L				0.25 J
	1,1-Dichloroethane	µg/L				0.2 J
	Chloroform	µg/L				0.75 J
	cis-1,2-Dichloroethene	µg/L				0.48 J
	Trichloroethene	µg/L				33
X749-30G	1,1-Dichloroethene	µg/L				0.29 J



**Table 4.1. Volatile organic compounds detected at the X-749/X-120/PK Landfill – 2007 (continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X749-30G	Acetone	µg/L				1.9 J
	Chloroform	µg/L				0.76 J
	cis-1,2-Dichloroethene	µg/L				0.76 J
	Trichloroethene	µg/L				41
X749-35G	1,1,1-Trichloroethane	µg/L				120
	1,1,2-Trichloroethane	µg/L				0.66 J
	1,1-Dichloroethane	µg/L				15
	1,1-Dichloroethene	µg/L				67
	Chloroform	µg/L				0.6 J
	cis-1,2-Dichloroethene	µg/L				10
	Tetrachloroethene	µg/L				0.42 J
	trans-1,2-Dichloroethene	µg/L				0.22 J
	Trichloroethene	µg/L				130
	Vinyl chloride	µg/L				0.97 J
X749-37G	1,1,1-Trichloroethane	µg/L		43		
	1,1,2-Trichloroethane	µg/L		2		
	1,1-Dichloroethane	µg/L		39		
	1,1-Dichloroethene	µg/L		120		
	1,2-Dichloroethane	µg/L		3		
	Acetone	µg/L		4.9 J		
	Chloroethane	µg/L		0.57 J		
	Chloroform	µg/L		3.6		
	cis-1,2-Dichloroethene	µg/L		11		
	Tetrachloroethene	µg/L		2		
	Trichloroethene	µg/L		110		
X749-41G	cis-1,2-Dichloroethene	µg/L		1.5 J		
	trans-1,2-Dichloroethene	µg/L		0.36 J		
	Trichloroethene	µg/L		340		
X749-42G	Trichloroethene	µg/L				28
X749-44G	1,1,1-Trichloroethane	µg/L		4.1		4
	1,1-Dichloroethane	µg/L		19		17
	1,1-Dichloroethene	µg/L		12		13
	1,2-Dichloroethane	µg/L		7.1		5.8
	Chloroform	µg/L		0.94 J		0.93 J
	cis-1,2-Dichloroethene	µg/L		2.6		2.5
	Trichloroethene	µg/L		34		33
X749-45G	1,1,1-Trichloroethane	µg/L		3.8		0.79 J
	1,1-Dichloroethane	µg/L		32		7.1
	1,1-Dichloroethene	µg/L		23		4.9
	1,2-Dichloroethane	µg/L		11		1.7 J
	Chloroethane	µg/L		5.2		1 J
	Chloroform	µg/L		0.94 J		0.18 J
	cis-1,2-Dichloroethene	µg/L		30		6.2
	Trichloroethene	µg/L		80		17
X749-50B	1,1-Dichloroethane	µg/L				9.9
	1,1-Dichloroethene	µg/L				0.55 J
	1,2-Dichloroethane	µg/L				6.1
	Chloroethane	µg/L				1.3 J

**Table 4.1. Volatile organic compounds detected at the X-749/X-120/PK Landfill – 2007 (continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X749-50B	cis-1,2-Dichloroethene	µg/L				2.2
	Trichloroethene	µg/L				0.42 J
X749-54B	1,1-Dichloroethane	µg/L		1.4 J		1.2 J
	Trichloroethene	µg/L		4.4		10
X749-66G	Acetone	µg/L				3 J
X749-67G	1,1,1-Trichloroethane	µg/L		20		28
	1,1,2-Trichloroethane	µg/L		0.9 J		0.93 J
	1,1-Dichloroethane	µg/L		210		190
	1,1-Dichloroethene	µg/L		160		150
	1,2-Dichloroethane	µg/L		55		53
	Benzene	µg/L		0.35 J		0.61 J
	Chloroethane	µg/L		13		5.1
	Chloroform	µg/L		7		7.2
	cis-1,2-Dichloroethene	µg/L		180		110
	Methylene chloride	µg/L		1.2 BJ		1.4 J
	trans-1,2-Dichloroethene	µg/L		0.58 J		0.5 J
	Trichloroethene	µg/L		570		490
	Vinyl chloride	µg/L		1.2 J		0.92 J
X749-96G	Acetone	µg/L	11	10 U	10 U	10 U
	Methylene chloride	µg/L	2 U	2 U	0.5 J	5 U
X749-97G	1,1,1-Trichloroethane	µg/L	2.7	4.4	5	0.74 J
	1,1-Dichloroethane	µg/L	64	72	36	6.7
	1,1-Dichloroethene	µg/L	36	42	18	3.6
	1,2-Dichloroethane	µg/L	17	22	13	1.7 J
	Acetone	µg/L	3.6 BJ	10 U	10 U	10 U
	Benzene	µg/L	0.17 J	2 U	2 U	2 U
	Chloroethane	µg/L	3.7	8.3	0.81 J	2 U
	Chloroform	µg/L	0.87 J	1.4 J	1.1 J	2 U
	cis-1,2-Dichloroethene	µg/L	71	72	12	1.9 J
	Methylene chloride	µg/L	2 U	0.91 BJ	0.68 J	5 U
	Trichloroethene	µg/L	64	110	63	13
	Vinyl chloride	µg/L	0.72 J	0.4 J	1 U	1 U
X749-98G	Methylene chloride	µg/L	2 U	2 U	0.34 J	5 U
X749-99M	Methylene chloride	µg/L				0.41 J
X749-101M	Methylene chloride	µg/L				0.37 J
X749-102G	1,1,1-Trichloroethane	µg/L	0.74 J	0.78 J	1.1 J	0.62 J
	1,1-Dichloroethane	µg/L	5.1	5.1	6.6	4.7
	1,1-Dichloroethene	µg/L	3.1	3	3.9	3.1
	1,2-Dichloroethane	µg/L	1.5 J	1.7 J	2.6	1.3 J
	Chloroform	µg/L	0.24 J	0.27 J	0.35 J	0.2 J
	cis-1,2-Dichloroethene	µg/L	0.62 J	0.6 J	0.79 J	0.6 J
	Trichloroethene	µg/L	8	8.1	8.8	7.6
X749-103G	Acetone	µg/L	3.2 J	10 U	10 U	10 U
	Methylene chloride	µg/L	2 U	2 U	0.55 J	0.36 J
X749-105G	Acetone	µg/L	10 U	10 U	5.4 J	10 U
	Methylene chloride	µg/L	2 U	2 U	0.46 J	5 U
X749-106G	1,1,1-Trichloroethane	µg/L		87		58
	1,1,2-Trichloroethane	µg/L		4.3		4.5

**Table 4.1. Volatile organic compounds detected at the X-749/X-120/PK Landfill – 2007 (continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X749-106G	1,1-Dichloroethane	µg/L		70		58
	1,1-Dichloroethene	µg/L		280		230
	1,2-Dichloroethane	µg/L		6.4		5.5
	Acetone	µg/L		4.9 J		10 U
	Chloroform	µg/L		6.7		6.5
	cis-1,2-Dichloroethene	µg/L		4.6		4.5
	Tetrachloroethene	µg/L		1.6 J		1.8 J
	Trichloroethene	µg/L		160		110
X749-107G	1,1,1-Trichloroethane	µg/L		81		69
	1,1,2-Trichloroethane	µg/L		4.8		4.5
	1,1-Dichloroethane	µg/L		70		57
	1,1-Dichloroethene	µg/L		270		270
	1,2-Dichloroethane	µg/L		6.7		5.4
	Acetone	µg/L		4.1 J		10 U
	Chloroform	µg/L		7.6		6.9
	cis-1,2-Dichloroethene	µg/L		6.1		5.2
X749-108G	Tetrachloroethene	µg/L		1.4 J		1.4 J
	Trichloroethene	µg/L		150		130
	1,1,1-Trichloroethane	µg/L		77		65
	1,1,2-Trichloroethane	µg/L		3.2		4.2
	1,1-Dichloroethane	µg/L		59		58
	1,1-Dichloroethene	µg/L		220		170
	1,2-Dichloroethane	µg/L		4.8		5.4
	Acetone	µg/L		7.4 J		10 U
X749-109G	Chloroform	µg/L		6.5		7.7
	cis-1,2-Dichloroethene	µg/L		4.1		4.2
	Methylene chloride	µg/L		0.47 J		0.63 J
	Tetrachloroethene	µg/L		1.4 J		1.4 J
	Trichloroethene	µg/L		150		120
	Vinyl chloride	µg/L		1 U		0.38 J
	1,1,1-Trichloroethane	µg/L		2.1		1.5 J
	1,1-Dichloroethane	µg/L		9.9		8.1
X749-110G	1,1-Dichloroethene	µg/L		6.2		4
	1,2-Dichloroethane	µg/L		3.4		2.5
	Chloroform	µg/L		0.47 J		0.39 J
	cis-1,2-Dichloroethene	µg/L		1.1 J		0.9 J
	Trichloroethene	µg/L		16		11
	1,1,1-Trichloroethane	µg/L		41		28
	1,1,2-Trichloroethane	µg/L		1.2 J		1.2 J
	1,1-Dichloroethane	µg/L		150		160
X749-110G	1,1-Dichloroethene	µg/L		160		170
	1,2-Dichloroethane	µg/L		58		44
	Benzene	µg/L		0.69 J		0.82 J
	Chloroethane	µg/L		15		11
	Chloroform	µg/L		8.9		8.4
	cis-1,2-Dichloroethene	µg/L		170		190
	Methylene chloride	µg/L		1.3 J		1.2 J
	Tetrachloroethene	µg/L		0.27 J		4 U

**Table 4.1. Volatile organic compounds detected at the X-749/X-120/PK Landfill – 2007 (continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X749-110G	trans-1,2-Dichloroethene	µg/L		0.81 J		0.83 J
	Trichloroethene	µg/L		320		470
	Vinyl chloride	µg/L		7.3		7.3
X749-113G	1,1,1-Trichloroethane	µg/L		84		110
	1,1,2-Trichloroethane	µg/L		1.3 J		1.2 J
	1,1-Dichloroethane	µg/L		82		170
	1,1-Dichloroethene	µg/L		130		260
	1,2-Dichloroethane	µg/L		44		110
	Chloroform	µg/L		6.1		8.7
	cis-1,2-Dichloroethene	µg/L		11		12
	Methylene chloride	µg/L		2 U		0.53 J
	Tetrachloroethene	µg/L		1.5 J		1.6 J
	trans-1,2-Dichloroethene	µg/L		1 U		0.19 J
	Trichloroethene	µg/L		180		260
	1,1,1-Trichloroethane	µg/L		0.44 J		0.35 J
	1,1-Dichloroethane	µg/L		0.56 J		0.61 J
X749-114G	1,1-Dichloroethene	µg/L		0.18 J		0.19 J
	Benzene	µg/L		0.43 J		0.42 J
	cis-1,2-Dichloroethene	µg/L		0.26 J		0.27 J
	Methylene chloride	µg/L		2 U		0.37 J
	1,1,1-Trichloroethane	µg/L		0.27 J		2.8
	1,1-Dichloroethane	µg/L		0.25 J		2
X749-BG9G	1,1-Dichloroethene	µg/L		0.41 J		4.6
	cis-1,2-Dichloroethene	µg/L		2 U		1.4 J
	Trichloroethene	µg/L		0.33 J		3.6
	1,1-Dichloroethane	µg/L		0.21 J		2 U
	1,1-Dichloroethene	µg/L		0.46 J		0.28 J
X749-PZ02G	Trichloroethene	µg/L		0.86 J		0.67 J
	1,2-Dichlorobenzene	µg/L	0.15 BJ	2 U	2 U	2 U
	1,4-Dichlorobenzene	µg/L	0.16 BJ	2 U	2 U	2 U
X749-PZ03G	Acetone	µg/L	10	10 U	4.6 J	10 U
	Methylene chloride	µg/L	2 U	2 U	0.39 J	0.46 J
	Trichloroethene	µg/L	2 U	2 U	2 U	0.19 J
	1,1,1-Trichloroethane	µg/L	34	37	46	23
	1,1,2-Trichloroethane	µg/L	0.89 J	0.92 J	1.3 J	0.69 J
X749-PZ04G	1,1-Dichloroethane	µg/L	210	170	160	160
	1,1-Dichloroethene	µg/L	120	87	140	89
	1,2-Dichloroethane	µg/L	56	67	100	49
	Benzene	µg/L	0.47 J	0.5 J	0.54 J	0.38 J
	Chloroethane	µg/L	3.1	5.7	6.6	1.5 J
	Chloroform	µg/L	7.3	7.8	10	5.4
	cis-1,2-Dichloroethene	µg/L	87	96	98	58
	Methylene chloride	µg/L	0.44 J	0.66 J	1.3 J	1.1 J
	Tetrachloroethene	µg/L	0.25 J	0.23 J	0.25 J	2 U
	trans-1,2-Dichloroethene	µg/L	0.6 J	0.77 J	0.41 J	0.65 J
	Trichloroethene	µg/L	460	380	470	320
	Vinyl chloride	µg/L	0.82 J	0.89 J	1.3	0.56 J
	Acetone	µg/L	29	10 U	10 U	10 U

**Table 4.1. Volatile organic compounds detected at the X-749/X-120/PK Landfill – 2007 (continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X749-PZ05G	Trichloroethene	µg/L	0.17 J	2 U	0.21 J	2 U
X749-PZ06G	1,1,1-Trichloroethane	µg/L		20		
	1,1,2-Trichloroethane	µg/L		0.91 J		
	1,1-Dichloroethane	µg/L		17		
	1,1-Dichloroethene	µg/L		61		
	1,2-Dichloroethane	µg/L		2		
	Chloroform	µg/L		2.3		
	cis-1,2-Dichloroethene	µg/L		1 J		0.93 J
	Trichloroethene	µg/L		21		22
X749-PZ08G	1,1-Dichloroethane	µg/L		0.25 J		
	cis-1,2-Dichloroethene	µg/L		0.63 J		
	Trichloroethene	µg/L		1 J		
X749-PZ09G	1,1,1-Trichloroethane	µg/L				2.1
	1,1-Dichloroethane	µg/L				2.9
	1,1-Dichloroethene	µg/L				6.8
	Chloroform	µg/L				0.35 J
	cis-1,2-Dichloroethene	µg/L				4.5
	Trichloroethene	µg/L				47
	Vinyl chloride	µg/L				0.87 J
X749-PZ10G	1,1,1-Trichloroethane	µg/L		22		24
	1,1-Dichloroethane	µg/L		0.68 J		0.76 J
	1,1-Dichloroethene	µg/L		120		140
	Chloroform	µg/L		27		29
	cis-1,2-Dichloroethene	µg/L		0.65 J		0.77 J
	Trichloroethene	µg/L		770		790
X749-PZ11G	1,1,1-Trichloroethane	µg/L		75		67
	1,1,2-Trichloroethane	µg/L		0.55 J		0.41 J
	1,1-Dichloroethane	µg/L		39		26
	1,1-Dichloroethene	µg/L		45		34
	Benzene	µg/L		0.7 J		0.6 J
	Chloroethane	µg/L		0.43 J		2 U
	Chloroform	µg/L		0.66 J		0.56 J
	cis-1,2-Dichloroethene	µg/L		17		14
	trans-1,2-Dichloroethene	µg/L		0.63 J		0.53 J
	Trichloroethene	µg/L		160		160
	Vinyl chloride	µg/L		3.2		5.8
X749-PZ12G	1,1,1-Trichloroethane	µg/L				23
	1,1-Dichloroethane	µg/L				63
	1,1-Dichloroethene	µg/L				59
	1,2-Dichloroethane	µg/L				0.99 J
	Benzene	µg/L				2.6
	Chloroethane	µg/L				4.4
	Chloroform	µg/L				0.21 J
	cis-1,2-Dichloroethene	µg/L				13
	trans-1,2-Dichloroethene	µg/L				0.46 J
	Trichloroethene	µg/L				26
	Vinyl chloride	µg/L				4.9
X749-PZ13G	1,1,1-Trichloroethane	µg/L				120

**Table 4.1. Volatile organic compounds detected at the X-749/X-120/PK Landfill – 2007 (continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X749-PZ13G	1,1,2-Trichloroethane	µg/L				1 J
	1,1-Dichloroethane	µg/L				63
	1,1-Dichloroethene	µg/L				210
	1,2-Dichloroethane	µg/L				6.9
	Benzene	µg/L				0.51 J
	Chloroethane	µg/L				4.4
	Chloroform	µg/L				2.3
	cis-1,2-Dichloroethene	µg/L				44
	Methylene chloride	µg/L				0.44 J
	trans-1,2-Dichloroethene	µg/L				0.62 J
	Trichloroethene	µg/L				190
	Vinyl chloride	µg/L				4.4
X749-WPW	1,1,1-Trichloroethane	µg/L		95 J		210
	1,1,2-Trichloroethane	µg/L		1.4 J		3.2 J
	1,1-Dichloroethane	µg/L		100		210
	1,1-Dichloroethene	µg/L		170		290
	1,2-Dichloroethane	µg/L		21		50
	Benzene	µg/L		0.97 J		1.8 J
	Chloroethane	µg/L		1 J		8 U
	Chloroform	µg/L		16		41
	cis-1,2-Dichloroethene	µg/L		110		120
	Methylene chloride	µg/L		0.38 J		20 U
	Tetrachloroethene	µg/L		2.8		5.2 J
	trans-1,2-Dichloroethene	µg/L		0.64 J		4 U
	Trichloroethene	µg/L		790		1100
	Vinyl chloride	µg/L		14		28

**Table 4.2. Results for radionuclides at the X-749/X-120/PK Landfill – 2007**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
PK-09G	Technetium-99	pCi/L				-1.99 U
WP-01G	Americium-241	pCi/L		0.04619 U		
	Neptunium-237	pCi/L		-0.0153 U		
	Plutonium-238	pCi/L		0.00767 U		
	Plutonium-239/240	pCi/L		-0.0076 U		
	Technetium-99	pCi/L		-0.398 U		-3.47 U
	Uranium	µg/L		0.02171 U		
	Uranium-233/234	pCi/L		0.03647 U		
	Uranium-235	pCi/L		0 U		
	Uranium-236	pCi/L		0 U		
	Uranium-238	pCi/L		0.00729 U		
WP-02G	Americium-241	pCi/L		0 U		
	Neptunium-237	pCi/L		-0.0067 U		
	Plutonium-238	pCi/L		0.02699 U		
	Plutonium-239/240	pCi/L		0.02025 U		
	Technetium-99	pCi/L		-3.39 U		
	Uranium	µg/L		0.0809 U		
	Uranium-233/234	pCi/L		0.03401 U		
	Uranium-235	pCi/L		0 U		
	Uranium-236	pCi/L		0.00753 U		
	Uranium-238	pCi/L		0.02714 U		
WP-03G	Americium-241	pCi/L		0.01583 U		
	Neptunium-237	pCi/L		0.00906 U		
	Plutonium-238	pCi/L		0.02708 U		
	Plutonium-239/240	pCi/L		0.00902 U		
	Technetium-99	pCi/L		-3.72 U		-2.24 U
	Uranium	µg/L		0.08785 U		
	Uranium-233/234	pCi/L		0.0381 U		
	Uranium-235	pCi/L		-0.0094 U		
	Uranium-236	pCi/L		-0.0084 U		
	Uranium-238	pCi/L		0.0304 U		
WP-04G	Americium-241	pCi/L		0.01566 U		
	Neptunium-237	pCi/L		2.7E-05 U		
	Plutonium-238	pCi/L		0.02034 U		
	Plutonium-239/240	pCi/L		0.02036 U		
	Technetium-99	pCi/L		-5.07 U		
	Uranium	µg/L		-0.0201 U		
	Uranium-233/234	pCi/L		0.02281 U		
	Uranium-235	pCi/L		0.00936 U		
	Uranium-236	pCi/L		-0.0084 U		
	Uranium-238	pCi/L		-0.0076 U		
X120-08G	Americium-241	pCi/L				0.01454 U
	Neptunium-237	pCi/L				-0.00730 U
	Plutonium-238	pCi/L				0.01458 U
	Plutonium-239/240	pCi/L				1.46E-05 U
	Technetium-99	pCi/L				-0.111 U
	Uranium	µg/L				0.06936 U
	Uranium-233/234	pCi/L				0.05415 U

**Table 4.2. Results for radionuclides at the X-749/X-120/PK Landfill – 2007 (continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X120-08G	Uranium-235	pCi/L				0 U
	Uranium-236	pCi/L				0.0257 U
	Uranium-238	pCi/L				0.02317 U
X749-04G	Technetium-99	pCi/L				-3.03 U
X749-05G	Technetium-99	pCi/L				5.39 U
X749-07G	Americium-241	pCi/L	0.01661 U			
	Neptunium-237	pCi/L	-0.0335 U			
	Plutonium-238	pCi/L	0.02008 U			
	Plutonium-239/240	pCi/L	0.0134 U			
	Technetium-99	pCi/L	320			
	Uranium	µg/L	0.1113 U			
	Uranium-233/234	pCi/L	4.5E-05 U			
	Uranium-235	pCi/L	0 U			
	Uranium-236	pCi/L	0 U			
	Uranium-238	pCi/L	0.03741 U			
	Americium-241	pCi/L	0.00811 U			
	Neptunium-237	pCi/L	0.02666 U			
	Plutonium-238	pCi/L	0.00666 U			
	Plutonium-239/240	pCi/L	0.01329 U			
	Technetium-99	pCi/L	15.1			
X749-08G	Uranium	µg/L	0.1647 U			
	Uranium-233/234	pCi/L	0.06345 U			
	Uranium-235	pCi/L	0 U			
	Uranium-236	pCi/L	-0.0088 U			
	Uranium-238	pCi/L	0.05537 U			
X749-09GA	Technetium-99	pCi/L				2.5 U
X749-10GA	Americium-241	pCi/L		0.008305 U		
	Neptunium-237	pCi/L		-0.02109 U		
	Plutonium-238	pCi/L		0.01405 U		
	Plutonium-239/240	pCi/L		-0.01403 U		
	Technetium-99	pCi/L		-7.66 U		
	Uranium	µg/L		0.1065 U		
	Uranium-233/234	pCi/L		0.02878 U		
	Uranium-235	pCi/L		0 U		
	Uranium-236	pCi/L		-0.01589 U		
	Uranium-238	pCi/L		0.03587 U		
X749-14B	Americium-241	pCi/L				0.01168 U
	Neptunium-237	pCi/L				0.02124 U
	Plutonium-238	pCi/L				0.007078 U
	Plutonium-239/240	pCi/L				0.02117 U
	Technetium-99	pCi/L				-2.62 U
	Uranium	µg/L				0.03485 U
	Uranium-233/234	pCi/L				0.02647 U
	Uranium-235	pCi/L				-0.01629 U
	Uranium-236	pCi/L				-0.00731 U
	Uranium-238	pCi/L				0.0132 U
X749-22G	Technetium-99	pCi/L				-1.33 U
X749-27G	Technetium-99	pCi/L				22.4



**Table 4.2. Results for radionuclides at the X-749/X-120/PK Landfill – 2007 (continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X749-28G	Technetium-99	pCi/L				0.119 U
X749-29G	Technetium-99	pCi/L				-1.72 U
X749-30G	Technetium-99	pCi/L				-5.18 U
X749-43G	Technetium-99	pCi/L				-4.21 U
X749-44G	Americium-241	pCi/L				0.008052 U
	Neptunium-237	pCi/L				-0.0212 U
	Plutonium-238	pCi/L				0.03045 U
	Plutonium-239/240	pCi/L				-0.03078 U
	Technetium-99	pCi/L				24.5
	Uranium	µg/L				0.2568
	Uranium-233/234	pCi/L				0.06427 U
	Uranium-235	pCi/L				0.008806 U
	Uranium-236	pCi/L				0 U
	Uranium-238	pCi/L				0.08549
	Americium-241	pCi/L				0.02657 U
	Neptunium-237	pCi/L				-0.03518 U
	Plutonium-238	pCi/L				-0.00701 U
	Plutonium-239/240	pCi/L				0.007031 U
	Technetium-99	pCi/L				-4.47 U
	Uranium	µg/L				0.1083
X749-45G	Uranium-233/234	pCi/L				0.06406 U
	Uranium-235	pCi/L				0.008779 U
	Uranium-236	pCi/L				0.01576 U
	Uranium-238	pCi/L				0.03551
	Americium-241	pCi/L				0 U
	Neptunium-237	pCi/L				-0.01404 U
	Plutonium-238	pCi/L				0.01403 U
	Plutonium-239/240	pCi/L				0 U
	Technetium-99	pCi/L				-1.38 U
	Uranium	µg/L				0.02051 U
	Uranium-233/234	pCi/L				-0.01542 U
	Uranium-235	pCi/L				-0.00953 U
	Uranium-236	pCi/L				0 U
	Uranium-238	pCi/L				0.007742 U
	Americium-241	pCi/L				0.01021 U
	Neptunium-237	pCi/L				-0.00682 U
X749-54B	Plutonium-238	pCi/L				0.02723 U
	Plutonium-239/240	pCi/L				0.01362 U
	Technetium-99	pCi/L				-3.2 U
	Uranium	µg/L				0.9212
	Uranium-233/234	pCi/L				0.8861
	Uranium-235	pCi/L				-0.00958 U
	Uranium-236	pCi/L				0.00861 U
	Uranium-238	pCi/L				0.3103
	Americium-241	pCi/L				-1.28 U
	Neptunium-237	pCi/L				0.03129 U
	Plutonium-238	pCi/L				1.4E-05 U
	Technetium-99	pCi/L				0.01397 U
	Uranium	µg/L				0.9212
	Uranium-233/234	pCi/L				0.8861
	Uranium-235	pCi/L				-0.00958 U
	Uranium-236	pCi/L				0.00861 U
	Uranium-238	pCi/L				0.3103
X749-64B	Americium-241	pCi/L				-1.28 U
	Neptunium-237	pCi/L				0.03129 U
	Plutonium-238	pCi/L				1.4E-05 U
	Technetium-99	pCi/L				0.01397 U
	Uranium	µg/L				0.9212
	Uranium-233/234	pCi/L				0.8861
	Uranium-235	pCi/L				-0.00958 U
	Uranium-236	pCi/L				0.00861 U
	Uranium-238	pCi/L				0.3103
	Americium-241	pCi/L				-1.28 U
	Neptunium-237	pCi/L				0.03129 U
	Plutonium-238	pCi/L				1.4E-05 U
	Technetium-99	pCi/L				0.01397 U
	Uranium	µg/L				0.9212
	Uranium-233/234	pCi/L				0.8861
	Uranium-235	pCi/L				-0.00958 U
	Uranium-236	pCi/L				0.00861 U
	Uranium-238	pCi/L				0.3103
X749-66G	Technetium-99	pCi/L				-1.28 U
X749-68G	Americium-241	pCi/L				0.03129 U
	Neptunium-237	pCi/L				1.4E-05 U
	Plutonium-238	pCi/L				0.01397 U

**Table 4.2. Results for radionuclides at the X-749/X-120/PK Landfill – 2007 (continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X749-68G	Plutonium-239/240	pCi/L				-0.00698 U
	Technetium-99	pCi/L				0.573 U
	Uranium	µg/L				0.1055
	Uranium-233/234	pCi/L				1.42E-05 U
	Uranium-235	pCi/L				0 U
	Uranium-236	pCi/L				0 U
	Uranium-238	pCi/L				0.03546
X749-96G	Americium-241	pCi/L	0.008 U			
	Neptunium-237	pCi/L	-0.057 U			
	Plutonium-238	pCi/L	-0.008 U			
	Plutonium-239/240	pCi/L	-0.008 U			
	Technetium-99	pCi/L	-3.71 U			
	Uranium	µg/L	0.1946 U			
	Uranium-233/234	pCi/L	0.1117 U			
X749-97G	Uranium-235	pCi/L	0.0197 U			
	Uranium-236	pCi/L	-0.009 U			
	Uranium-238	pCi/L	0.0637 U			
	Americium-241	pCi/L	1E-05 U			
	Neptunium-237	pCi/L	-0.007 U			
	Plutonium-238	pCi/L	0.0070 U			
	Plutonium-239/240	pCi/L	0.0070 U			
X749-98G	Technetium-99	pCi/L	0.626 U			-0.979 U
	Uranium	µg/L	0.5397			
	Uranium-233/234	pCi/L	0.3218			
	Uranium-235	pCi/L	-0.011 U			
	Uranium-236	pCi/L	0 U			
	Uranium-238	pCi/L	0.1823			
	Americium-241	pCi/L	2E-05 U			
X749-102G	Neptunium-237	pCi/L	-0.058 U			
	Plutonium-238	pCi/L	-0.007 U			
	Plutonium-239/240	pCi/L	0.0146 U			
	Technetium-99	pCi/L	-0.982 U			
	Uranium	µg/L	0.3568			
	Uranium-233/234	pCi/L	0.0969			
	Uranium-235	pCi/L	0.0092 U			
X749-103G	Uranium-236	pCi/L	0.0165 U			
	Uranium-238	pCi/L	0.119			
	Americium-241	pCi/L	0.0191 U	-0.0189 U	-0.008697 U	0.03263 U
	Neptunium-237	pCi/L	-0.028 U	-0.0144 U	-0.01424 U	2.19E-05 U
	Plutonium-238	pCi/L	0.0491 U	0.0431 U	0.02133 U	0.01462 U
	Plutonium-239/240	pCi/L	-0.014 U	0.01437 U	0.007116 U	-0.00727 U
	Technetium-99	pCi/L	-6.13 U	-2.42 U	2.03 U	-2.64 U
X749-103G	Uranium	µg/L	0.1383	-0.0213 U	0.1295 U	0.04666 U
	Uranium-233/234	pCi/L	0.0078 U	0.03606 U	0.05116 U	0.05498 U
	Uranium-235	pCi/L	0 U	0 U	0.01051 U	0 U
	Uranium-236	pCi/L	0.0086 U	8E-06 U	9.426E-06 U	8.69E-06 U
	Uranium-238	pCi/L	0.0464	-0.0072 U	0.04256 U	0.01568 U
	Americium-241	pCi/L	0 U	0 U	0.0383 U	-0.02037 U

**Table 4.2. Results for radionuclides at the X-749/X-120/PK Landfill – 2007 (continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X749-103G	Neptunium-237	pCi/L	-0.007 U	0.01457 U	-0.03392 U	-0.00717 U
	Plutonium-238	pCi/L	0.0142 U	0.01452 U	0.02035 U	0 U
	Plutonium-239/240	pCi/L	0.0142 U	0.02903 U	0.00678 U	0.01433 U
	Technetium-99	pCi/L	-8.64 U	-3.42 U	1.58 U	-1.19 U
	Uranium	µg/L	0.0458 U	0.02382 U	-0.06686 U	0.1353 U
	Uranium-233/234	pCi/L	0.0231 U	0.02405 U	-0.06223 U	0.007373 U
	Uranium-235	pCi/L	0 U	0 U	0.00961 U	0.01807 U
	Uranium-236	pCi/L	0 U	0 U	-0.008611 U	0 U
	Uranium-238	pCi/L	0.0154 U	0.00800 U	-0.02328 U	0.04385 U
X749-104G	Americium-241	pCi/L	0.0092 U	-0.009 U	-0.008681 U	0.007996 U
	Neptunium-237	pCi/L	-0.021 U	0.01612 U	3.093E-05 U	-0.00676 U
	Plutonium-238	pCi/L	0 U	0.0562 U	0.01544 U	-0.027 U
	Plutonium-239/240	pCi/L	0.007 U	-0.0080 U	0.03088 U	-0.01349 U
	Technetium-99	pCi/L	-2.92 U	-2.17 U	-2.57 U	-4.17 U
	Uranium	µg/L	0.0223 U	-0.0963 U	0.1569 U	0.09596 U
	Uranium-233/234	pCi/L	0.0524 U	0.05684 U	0.05275 U	0.03239 U
	Uranium-235	pCi/L	0 U	0 U	0 U	0 U
	Uranium-236	pCi/L	0 U	0 U	0.01669 U	-0.01433 U
X749-105G	Uranium-238	pCi/L	0.0075 U	-0.0324 U	0.05263 U	0.03232 U
	Americium-241	pCi/L	2E-05 U	0.00871 U	-0.02364 U	0.007475 U
	Neptunium-237	pCi/L	-0.008 U	-0.0500 U	-0.173 U	6.96E-06 U
	Plutonium-238	pCi/L	0.0231 U	0.00999 U	0.032 U	0.006958 U
	Plutonium-239/240	pCi/L	-0.015 U	0.01999 U	-0.006379 U	0.006957 U
	Technetium-99	pCi/L	-2.81 U	-0.901 U	2.8 U	-2.24 U
	Uranium	µg/L	0.036 U	0.104 U	0.2545	0.04574 U
	Uranium-233/234	pCi/L	0.0625 U	0.05601 U	-0.02376 U	0.06086 U
	Uranium-235	pCi/L	-0.038 U	0 U	-0.0196 U	0 U
X749-106G	Uranium-236	pCi/L	-0.026 U	0 U	-0.0088 U	0.03369 U
	Uranium-238	pCi/L	0.0157 U	0.03493 U	0.08732	0.01519 U
	Americium-241	pCi/L		0.01769 U		
	Neptunium-237	pCi/L		-0.0460 U		
	Plutonium-238	pCi/L		0.01532 U		
	Plutonium-239/240	pCi/L		-0.0153 U		
	Technetium-99	pCi/L		3.99 U		
	Uranium	µg/L		0.09476 U		
	Uranium-233/234	pCi/L		0.03984 U		
X749-107G	Uranium-235	pCi/L		0 U		
	Uranium-236	pCi/L		0.00882 U		
	Uranium-238	pCi/L		0.03179 U		
	Americium-241	pCi/L		0.00810 U		
	Neptunium-237	pCi/L		-0.0372 U		
	Plutonium-238	pCi/L		0.02226 U		
	Plutonium-239/240	pCi/L		-0.0148 U		
	Technetium-99	pCi/L		4.51 U		
	Uranium	µg/L		0.00020 U		
	Uranium-233/234	pCi/L		0.01735 U		
	Uranium-235	pCi/L		0 U		
	Uranium-236	pCi/L		0.00959 U		

**Table 4.2. Results for radionuclides at the X-749/X-120/PK Landfill – 2007 (continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X749-107G	Uranium-238	pCi/L		1.7E-05 U		
X749-108G	Americium-241	pCi/L		0.00841 U		
	Neptunium-237	pCi/L		-0.0348 U		
	Plutonium-238	pCi/L		2.3E-05 U		
	Plutonium-239/240	pCi/L		-0.0463 U		
	Technetium-99	pCi/L		7.51 U		
	Uranium	µg/L		-0.042 U		
	Uranium-233/234	pCi/L		0.03748 U		
	Uranium-235	pCi/L		0.00924 U		
	Uranium-236	pCi/L		0 U		
	Uranium-238	pCi/L		-0.0149 U		
X749-109G	Americium-241	pCi/L		0.01827 U		0.008668 U
	Neptunium-237	pCi/L		-0.0076 U		-0.03178 U
	Plutonium-238	pCi/L		0.03045 U		0.02381 U
	Plutonium-239/240	pCi/L		0.01523 U		-0.01581 U
	Technetium-99	pCi/L		8.99 U		2.68 U
	Uranium	µg/L		0.1352 U		0.02219 U
	Uranium-233/234	pCi/L		0.03801 U		0.03346 U
	Uranium-235	pCi/L		0 U		0.008246 U
	Uranium-236	pCi/L		-0.0084 U		0 U
	Uranium-238	pCi/L		0.04548 U		0.006718 U
X749-110G	Americium-241	pCi/L		0.02307 U		0.009151 U
	Neptunium-237	pCi/L		0.02872 U		-0.01399 U
	Plutonium-238	pCi/L		0.01433 U		0.02096 U
	Plutonium-239/240	pCi/L		-0.0143 U		-0.02091 U
	Technetium-99	pCi/L		14.7		7.35 U
	Uranium	µg/L		0.1268 U		0.389
	Uranium-233/234	pCi/L		0.0796		0.16
	Uranium-235	pCi/L		-0.0089 U		0 U
	Uranium-236	pCi/L		0.00802 U		0.008057 U
	Uranium-238	pCi/L		0.04335 U		0.1307
X749-111G	Americium-241	pCi/L		0.00761 U		0.007584 U
	Neptunium-237	pCi/L		0.01659 U		-0.01567 U
	Plutonium-238	pCi/L		0.02478 U		-0.00783 U
	Plutonium-239/240	pCi/L		0.00827 U		-0.01564 U
	Technetium-99	pCi/L		-1.97 U		-2.23 U
	Uranium	µg/L		0.06756 U		0.2724
	Uranium-233/234	pCi/L		0.07063		0.09873
	Uranium-235	pCi/L		0.01742 U		0 U
	Uranium-236	pCi/L		0 U		0.00781 U
	Uranium-238	pCi/L		0.02114 U		0.09147
X749-112G	Americium-241	pCi/L		0.02715 U		0.01495 U
	Neptunium-237	pCi/L		-0.0139 U		-0.00764 U
	Plutonium-238	pCi/L		0.01392 U		0.02291 U
	Plutonium-239/240	pCi/L		0.00696 U		-0.00761 U
	Technetium-99	pCi/L		-1.96 U		-1.29 U
	Uranium	µg/L		0.241		0.3578
	Uranium-233/234	pCi/L		0.1684		0.1431

**Table 4.2. Results for radionuclides at the X-749/X-120/PK Landfill – 2007 (continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X749-112G	Uranium-235	pCi/L		0.00989 U		0 U
	Uranium-236	pCi/L		0.00888 U		0 U
	Uranium-238	pCi/L		0.08004		0.1202
X749-113G	Americium-241	pCi/L		0.02433 U		0.00878 U
	Neptunium-237	pCi/L		0.01488 U		0.007221 U
	Plutonium-238	pCi/L		0.00743 U		0.02158 U
	Plutonium-239/240	pCi/L		-0.0222 U		0.0144 U
	Technetium-99	pCi/L		77.9		117
	Uranium	µg/L		0.1494 U		0.1532
	Uranium-233/234	pCi/L		0.08493 U		0.06998
	Uranium-235	pCi/L		0.00873 U		0.007846 U
X749-114G	Uranium-236	pCi/L		7.8E-06 U		0 U
	Uranium-238	pCi/L		0.04943 U		0.05078
	Americium-241	pCi/L		3.3E-05 U		0.03254 U
	Neptunium-237	pCi/L		0.007 U		-0.01375 U
	Plutonium-238	pCi/L		-0.0209 U		0.02059 U
	Plutonium-239/240	pCi/L		0.007 U		0 U
	Technetium-99	pCi/L		-2.77 U		-2.6 U
	Uranium	µg/L		12.5		7.344
	Uranium-233/234	pCi/L		4.784		2.689
	Uranium-235	pCi/L		0.1147		0.1079
X749-PZ02G	Uranium-236	pCi/L		0.00792 U		0.01614 U
	Uranium-238	pCi/L		4.189		2.458
	Americium-241	pCi/L				0 U
	Neptunium-237	pCi/L				-0.01356 U
	Plutonium-238	pCi/L				0.01355 U
	Plutonium-239/240	pCi/L				6.77E-06 U
	Technetium-99	pCi/L				-0.418 U
	Uranium	µg/L				0.1372 U
	Uranium-233/234	pCi/L				-0.01535 U
	Uranium-235	pCi/L				0 U
X749-PZ04G	Uranium-236	pCi/L				0 U
	Uranium-238	pCi/L				0.0461 U
	Technetium-99	pCi/L				21.9
	Technetium-99	pCi/L				577
X749-PZ11G	Technetium-99	pCi/L				4.08 U
X749-PZ12G	Technetium-99	pCi/L				3.99 U
X749-PZ13G	Technetium-99	pCi/L				9.03

**Table 4.3. Volatile organic compounds detected at the Quadrant I Groundwater Investigative Area – 2007**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X230K-14G	Acetone	µg/L	2.2 J			
	cis-1,2-Dichloroethene	µg/L	0.23 J			
	Trichloroethene	µg/L	5.2			
X230K-15G	cis-1,2-Dichloroethene	µg/L			0.24 J	
	Trichloroethene	µg/L			1.7 J	
X231A-01G	1,1,1-Trichloroethane	µg/L		0.38 J		0.22 J
	1,1-Dichloroethane	µg/L		5.1		7.7
	1,1-Dichloroethene	µg/L		1.5 J		2.2
	1,2-Dichlorobenzene	µg/L		0.17 BJ		2 U
	1,4-Dichlorobenzene	µg/L		0.19 BJ		2 U
	Acetone	µg/L		2.5 J		5.5 J
	Benzene	µg/L		0.22 J		0.34 J
	Chloroethane	µg/L		2 U		0.79 J
	Chloroform	µg/L		0.75 J		0.38 J
	cis-1,2-Dichloroethene	µg/L		3		1.5 J
	Styrene	µg/L		0.48 J		
	Trichloroethene	µg/L		95		26
X231A-04G	1,1,1-Trichloroethane	µg/L			0.47 J	
	1,1-Dichloroethane	µg/L			0.17 J	
	1,1-Dichloroethene	µg/L			2.3	
	Chloroform	µg/L			0.46 J	
	cis-1,2-Dichloroethene	µg/L			1.4 J	
	Trichloroethene	µg/L			21	
X231B-02G	1,1-Dichloroethane	µg/L	0.67 J		0.25 J	
	1,1-Dichloroethene	µg/L	1.1 J		0.42 J	
	1,2-Dichlorobenzene	µg/L	0.17 BJ		2 U	
	Bromodichloromethane	µg/L	0.19 J		0.18 J	
	Carbon tetrachloride	µg/L	0.22 J		0.19 J	
	Chloroform	µg/L	38		37	
	cis-1,2-Dichloroethene	µg/L	30		25	
	Methylene chloride	µg/L	0.48 J		0.38 J	
	Tetrachloroethene	µg/L	0.32 J		0.35 J	
	trans-1,2-Dichloroethene	µg/L	0.71 J		0.87 J	
	Trichloroethene	µg/L	480		400	
X231B-03G	1,1,1-Trichloroethane	µg/L	19		15	
	1,1,2-Trichloroethane	µg/L	2.3		1.7 J	
	1,1-Dichloroethane	µg/L	29		18	
	1,1-Dichloroethene	µg/L	150		90	
	1,2-Dichloroethane	µg/L	0.81 J		0.59 J	
	Benzene	µg/L	0.18 J		2 U	
	Chloroform	µg/L	5.5		3.8	
	cis-1,2-Dichloroethene	µg/L	19			
	Dichlorodifluoromethane	µg/L			2.3 J	
	Methylene chloride	µg/L	0.6 J		10 U	
	Tetrachloroethene	µg/L	2.9		2	
	trans-1,2-Dichloroethene	µg/L	1.2		0.87 J	
	Trichloroethene	µg/L	690		480	
X231B-04G	1,1-Dichloroethene	µg/L	2 U		0.28 J	

**Table 4.3. Volatile organic compounds detected at the Quadrant I Groundwater Investigative Area – 2007  
(continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X231B-04G	Chloroform	µg/L	3.3		0.6 J	
	cis-1,2-Dichloroethene	µg/L	16		17	
	Methylene chloride	µg/L	0.38 J		5 U	
	Tetrachloroethene	µg/L	0.3 J		0.25 J	
	trans-1,2-Dichloroethene	µg/L	0.4 J		0.6 J	
	Trichloroethene	µg/L	330		350	
X231B-06G	1,1,1-Trichloroethane	µg/L	110		54	
	1,1,2-Trichloroethane	µg/L	0.89 J		0.49 J	
	1,1-Dichloroethane	µg/L	46		30	
	1,1-Dichloroethene	µg/L	100		75	
	1,2-Dichloroethane	µg/L	1.1 J		0.93 J	
	Acetone	µg/L	4 J		10 U	
	Chloroform	µg/L	0.23 J		0.71 J	
	cis-1,2-Dichloroethene	µg/L	1.4 J			
	Methylene chloride	µg/L	0.41 J		5 U	
	Tetrachloroethene	µg/L	0.67 J		0.69 J	
	trans-1,2-Dichloroethene	µg/L	1 U		0.15 J	
	Trichloroethene	µg/L	53		150	
X231B-07G	1,1-Dichloroethene	µg/L	0.33 J			
	Acetone	µg/L	4 J			
	Chloroform	µg/L	1.4 J			
	cis-1,2-Dichloroethene	µg/L	9			
	Methylene chloride	µg/L	0.4 J			
	Tetrachloroethene	µg/L	0.34 J			
	trans-1,2-Dichloroethene	µg/L	0.3 J			
	Trichloroethene	µg/L	100			
X231B-08G	1,1,1-Trichloroethane	µg/L	0.66 J		3.4	
	1,1-Dichloroethane	µg/L	2 U		0.23 J	
	1,1-Dichloroethene	µg/L	2.5		11	
	cis-1,2-Dichloroethene	µg/L	2 U		0.16 J	
	Methylene chloride	µg/L	0.33 J		5 U	
	Trichloroethene	µg/L	11		22	
X231B-11G	1,1,1-Trichloroethane	µg/L	4.1			
	1,1-Dichloroethane	µg/L	0.21 J			
	1,1-Dichloroethene	µg/L	12			
	Trichloroethene	µg/L	1.4 J			
X231B-12G	1,1,1-Trichloroethane	µg/L	3.9		5.3	
	1,1-Dichloroethane	µg/L	0.2 J		0.27 J	
	1,1-Dichloroethene	µg/L	13		14	
	cis-1,2-Dichloroethene	µg/L	2 U		0.18 J	
	Trichloroethene	µg/L	7.7		8.2	
X231B-14G	1,1,1-Trichloroethane	µg/L	5.7		5.4	
	1,1-Dichloroethane	µg/L	1.6 J		1.5 J	
	1,1-Dichloroethene	µg/L	43		38	
	1,2-Dichloroethane	µg/L	2 U		0.19 J	
	Chloroform	µg/L	1.5 J		1.4 J	
	cis-1,2-Dichloroethene	µg/L	9.2		7.5	
	Trichloroethene	µg/L	180		160	

**Table 4.3. Volatile organic compounds detected at the Quadrant I Groundwater Investigative Area – 2007  
(continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X231B-15G	1,1-Dichloroethene	µg/L	0.26 J		2 U	
	Acetone	µg/L	12		10 U	
	cis-1,2-Dichloroethene	µg/L	0.84 J		1.2 J	
	trans-1,2-Dichloroethene	µg/L	0.2 J		0.31 J	
	Trichloroethene	µg/L	0.95 J		1.2 J	
X231B-16G	1,1,1-Trichloroethane	µg/L	1.4 J		1.5 J	
	1,1-Dichloroethane	µg/L	0.19 J		0.26 J	
	1,1-Dichloroethene	µg/L	5.7		6.3	
	1,2-Dichlorobenzene	µg/L	0.13 BJ		2 U	
	Acetone	µg/L	11		10 U	
	Chloroform	µg/L	0.31 J		0.59 J	
	cis-1,2-Dichloroethene	µg/L	2 U		0.2 J	
	Trichloroethene	µg/L	0.43 J		0.45 J	
	1,1-Dichloroethane	µg/L	0.23 J			
	1,1-Dichloroethene	µg/L	9.8			
X231B-19G	1,1-Dichloroethane	µg/L	0.23 J			
	1,1-Dichloroethene	µg/L	9.8			
X231B-20G	1,1-Dichloroethene	µg/L	0.76 J		4.4	
	Acetone	µg/L	10 U		2.7 J	
	Chloroform	µg/L	0.45 J		0.5 J	
	cis-1,2-Dichloroethene	µg/L	0.47 J		0.49 J	
	Trichloroethene	µg/L	68		59	
X231B-23G	1,1,1-Trichloroethane	µg/L	1.1 J		1.4 J	
	1,1-Dichloroethane	µg/L	0.18 J		0.19 J	
	1,1-Dichloroethene	µg/L	4.1		3.7	
	cis-1,2-Dichloroethene	µg/L	0.31 J		0.3 J	
	Methylene chloride	µg/L	0.51 BJ		5 U	
	Trichloroethene	µg/L	3.1		5.6	
X231B-27G	Acetone	µg/L	120		10 U	
X231B-28G	Acetone	µg/L	18		10 U	
	cis-1,2-Dichloroethene	µg/L	0.39 J		0.48 J	
	Trichloroethene	µg/L	2.5		3.9	
X231B-29G	Chloroform	µg/L	0.18 J			
	cis-1,2-Dichloroethene	µg/L	0.72 J			
	Methylene chloride	µg/L	0.52 BJ			
	Tetrachloroethene	µg/L	0.26 J			
	trans-1,2-Dichloroethene	µg/L	0.27 J			
	Trichloroethene	µg/L	19			
X231B-32B	Trichloroethene	µg/L			0.54 J	
X231B-36G	1,1-Dichloroethene	µg/L	0.28 J			
	Acetone	µg/L	45			
	cis-1,2-Dichloroethene	µg/L	1.2 J			
	Trichloroethene	µg/L	77			
X231B-37G	1,1-Dichloroethane	µg/L	4.1		4.9	
	1,1-Dichloroethene	µg/L	4.8		4.4	
	Benzene	µg/L	0.24 J		0.21 J	
	cis-1,2-Dichloroethene	µg/L	9.1		10	
	trans-1,2-Dichloroethene	µg/L	1.9		1.8	
	Trichloroethene	µg/L	27		31	
	Vinyl chloride	µg/L	0.63 J		1 U	



**Table 4.3. Volatile organic compounds detected at the Quadrant I Groundwater Investigative Area – 2007  
(continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X231B-38G	1,1,1-Trichloroethane	µg/L	1.4 J			
	1,1-Dichloroethene	µg/L	2.1			
	1,2-Dichlorobenzene	µg/L	0.39 J			
	cis-1,2-Dichloroethene	µg/L	0.39 J			
	Trichloroethene	µg/L	1.1 J			
X231B-39G	Trichloroethene	µg/L	1.4 J			
X326-09G	1,1-Dichloroethene	µg/L	17 J		78	
	Bromodichloromethane	µg/L	20 J		53 U	
	Carbon tetrachloride	µg/L	4.8 J		53 U	
	Chloroform	µg/L	760		80	
	cis-1,2-Dichloroethene	µg/L	63		58	
	Dibromochloromethane	µg/L	4.3 J		53 U	
	Methylene chloride	µg/L	14 BJ		130 U	
	Trichloroethene	µg/L	8800		11000	
	Chloroform	µg/L	0.31 J		0.22 J	
	cis-1,2-Dichloroethene	µg/L	1.2 J		1.3 J	
X326-10G	Methylene chloride	µg/L	0.4 BJ		5 U	
	Trichloroethene	µg/L	11		13	
	1,1,1-Trichloroethane	µg/L	1.2 J		1.1 J	
	1,1-Dichloroethane	µg/L	0.46 J		0.49 J	
X626-07G	1,1-Dichloroethene	µg/L	36		34	
	1,4-Dichlorobenzene	µg/L	4 U		0.19 J	
	Benzene	µg/L	0.39 J		0.42 J	
	Chloroform	µg/L	2.3 J		2.8	
	cis-1,2-Dichloroethene	µg/L	0.59 J		1.1 J	
	Trichloroethene	µg/L	290		350	
	cis-1,2-Dichloroethene	µg/L	0.84 J			
	Methylene chloride	µg/L	0.45 BJ			
X710-01G	Trichloroethene	µg/L	27			
	Trichloroethene	µg/L		1.1 J		0.55 J
	Trichloroethene	µg/L			11	48
X749A-11G	Trichloroethene	µg/L				
X749A-12G	cis-1,2-Dichloroethene	µg/L		0.38 J		
X760-02G	Methylene chloride	µg/L	0.37 BJ			
	Trichloroethene	µg/L	0.82 J			
	Chloroform	µg/L	1.2 J			
X760-03G	cis-1,2-Dichloroethene	µg/L	3.9 J			
	Trichloroethene	µg/L	340			
	Chloroform	µg/L	2 J			
X760-07G	cis-1,2-Dichloroethene	µg/L	7.2 J			
	Trichloroethene	µg/L	480			
	cis-1,2-Dichloroethene	µg/L	310		290	
X770-MW17G	Trichloroethene	µg/L	7300		3800	

**Table 4.4. Results for radionuclides at the Quadrant I Groundwater Investigative Area – 2007**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X230K-11G	Americium-241	pCi/L			0.00986 U	
	Neptunium-237	pCi/L			0.0302 U	
	Plutonium-238	pCi/L			0.02259 U	
	Plutonium-239/240	pCi/L			7.52E-06 U	
	Technetium-99	pCi/L			-0.704 U	
	Uranium	µg/L			0.7288	
	Uranium-233/234	pCi/L			0.1376	
	Uranium-235	pCi/L			0.009427 U	
	Uranium-236	pCi/L			0 U	
	Uranium-238	pCi/L			0.2441	
X230K-14G	Americium-241	pCi/L	0.0089 U			
	Neptunium-237	pCi/L	8E-06 U			
	Plutonium-238	pCi/L	0.016 U			
	Plutonium-239/240	pCi/L	-0.016 U			
	Technetium-99	pCi/L	0.189 U			
	Uranium	µg/L	0.2602 U			
	Uranium-233/234	pCi/L	0.0356 U			
	Uranium-235	pCi/L	-0.011 U			
	Uranium-236	pCi/L	-0.01 U			
	Uranium-238	pCi/L	0.0885 U			
X230K-15G	Americium-241	pCi/L			0.008892 U	
	Neptunium-237	pCi/L			-0.01387 U	
	Plutonium-238	pCi/L			0.006928 U	
	Plutonium-239/240	pCi/L			0.01384 U	
	Technetium-99	pCi/L			0 U	
	Uranium	µg/L			0.2968	
	Uranium-233/234	pCi/L			0.09903	
	Uranium-235	pCi/L			0.01018 U	
	Uranium-236	pCi/L			0 U	
	Uranium-238	pCi/L			0.09884	
X231A-01G	Americium-241	pCi/L		0.5928 JU		-0.02099 U
	Neptunium-237	pCi/L		0.0177 U		-0.08256 U
	Plutonium-238	pCi/L		0.01765 U		0.03299 U
	Plutonium-239/240	pCi/L		-0.0176 U		-0.03289 U
	Technetium-99	pCi/L		3.54 U		12
	Uranium	µg/L		20.13		48.74
	Uranium-233/234	pCi/L		9.819		15.88
	Uranium-235	pCi/L		0.3262		0.4521
	Uranium-236	pCi/L		0.0202 U		0.02194 U
	Uranium-238	pCi/L		6.733		16.34
X231A-04G	Americium-241	pCi/L			0.02607 U	
	Neptunium-237	pCi/L			-0.05925 U	
	Plutonium-238	pCi/L			0.0338 U	
	Plutonium-239/240	pCi/L			-0.01686 U	
	Technetium-99	pCi/L			-0.873 U	
	Uranium	µg/L			0.2529	
	Uranium-233/234	pCi/L			0.1533	
	Uranium-235	pCi/L			0 U	

**Table 4.4. Results for radionuclides at the Quadrant I Groundwater Investigative Area – 2007 (continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X231A-04G	Uranium-236	pCi/L			0 U	
	Uranium-238	pCi/L			0.08498	
X231B-02G	Americium-241	pCi/L	1E-05 U		0.0362 U	
	Neptunium-237	pCi/L	-0.016 U		-0.02799 U	
	Plutonium-238	pCi/L	0.0078 U		-0.006959 U	
	Plutonium-239/240	pCi/L	0.0157 U		-0.02791 U	
	Technetium-99	pCi/L	24.6		23.4	
	Uranium	µg/L	0.2931		0.2784	
	Uranium-233/234	pCi/L	0.1889		0.09281	
	Uranium-235	pCi/L	0.0086 U		0.009541 U	
	Uranium-236	pCi/L	0 U		0.01713 U	
	Uranium-238	pCi/L	0.0977		0.09262	
X231B-03G	Americium-241	pCi/L	0.009 U		8.192E-06 U	
	Neptunium-237	pCi/L	0.0232 U		-0.006941 U	
	Plutonium-238	pCi/L	8E-06 U		0.02081 U	
	Plutonium-239/240	pCi/L	-0.008 U		0.01388 U	
	Technetium-99	pCi/L	11.6		4.16 U	
	Uranium	µg/L	0.5373		0.385	
	Uranium-233/234	pCi/L	0.1247		0.1515	
	Uranium-235	pCi/L	0.0192 U		0.009346 U	
	Uranium-236	pCi/L	0 U		-0.008383 U	
	Uranium-238	pCi/L	0.1788		0.1286	
X231B-04G	Americium-241	pCi/L	0.0204 U		0.01047 U	
	Neptunium-237	pCi/L	-0.028 U		1.404E-05 U	
	Plutonium-238	pCi/L	0.0284 U		0.02802 U	
	Plutonium-239/240	pCi/L	0.0142 U		0.01401 U	
	Technetium-99	pCi/L	18.1		14.9	
	Uranium	µg/L	3.037		1.347	
	Uranium-233/234	pCi/L	7.493		3.235	
	Uranium-235	pCi/L	0.3717		0.1191	
	Uranium-236	pCi/L	0.0257 U		0.008915 U	
	Uranium-238	pCi/L	0.9868		0.4418	
X231B-06G	Americium-241	pCi/L	2E-05 U		0.009473 U	
	Neptunium-237	pCi/L	-0.014 U		-0.028 U	
	Plutonium-238	pCi/L	0 U		0.02098 U	
	Plutonium-239/240	pCi/L	-0.014 U		0 U	
	Technetium-99	pCi/L	128		7.14 U	
	Uranium	µg/L	4.822		0.8683	
	Uranium-233/234	pCi/L	6.004		1.26	
	Uranium-235	pCi/L	0.3532		0.0315 U	
	Uranium-236	pCi/L	0.0373 U		0.01885 U	
	Uranium-238	pCi/L	1.588		0.2888	
X231B-07G	Americium-241	pCi/L	0.0209 U			
	Neptunium-237	pCi/L	-0.008 U			
	Plutonium-238	pCi/L	0.0075 U			
	Plutonium-239/240	pCi/L	0.0075 U			
	Technetium-99	pCi/L	2.84 U			
	Uranium	µg/L	0.2981			

**Table 4.4. Results for radionuclides at the Quadrant I Groundwater Investigative Area – 2007 (continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X231B-07G	Uranium-233/234	pCi/L	0.0498 U			
	Uranium-235	pCi/L	0.0102 U			
	Uranium-236	pCi/L	0.0092 U			
	Uranium-238	pCi/L	0.0992			
X231B-08G	Americium-241	pCi/L	-0.015 U		0.02408 U	
	Neptunium-237	pCi/L	-0.040 U		4.164E-05 U	
	Plutonium-238	pCi/L	0.0135 U		0.01663 U	
	Plutonium-239/240	pCi/L	-0.013 U		2.491E-05 U	
	Technetium-99	pCi/L	-10.9 U		-1.5 U	
	Uranium	µg/L	0.5848		0.5985	
	Uranium-233/234	pCi/L	0.2469		0.1422	
	Uranium-235	pCi/L	0.009 U		0.01032 U	
	Uranium-236	pCi/L	0.0080 U		-0.00925 U	
	Uranium-238	pCi/L	0.1956		0.2002	
	Americium-241	pCi/L	0.0487 U			
	Neptunium-237	pCi/L	-0.022 U			
X231B-11G	Plutonium-238	pCi/L	0.011 U			
	Plutonium-239/240	pCi/L	0.011 U			
	Technetium-99	pCi/L	-3.89 U			
	Uranium	µg/L	0.1276			
	Uranium-233/234	pCi/L	0.0144 U			
	Uranium-235	pCi/L	0 U			
	Uranium-236	pCi/L	0 U			
	Uranium-238	pCi/L	0.0429			
	Americium-241	pCi/L	0.0374 U		-0.03555 U	
	Neptunium-237	pCi/L	-0.024 U		0.008839 U	
	Plutonium-238	pCi/L	-0.012 U		0.01764 U	
	Plutonium-239/240	pCi/L	0.0235 U		-0.01761 U	
X231B-12G	Technetium-99	pCi/L	-1.27 U		0.0844 U	
	Uranium	µg/L	0.223		0.2337	
	Uranium-233/234	pCi/L	0.0372 U		0.03499 U	
	Uranium-235	pCi/L	0.0092 U		0 U	
	Uranium-236	pCi/L	0 U		0 U	
	Uranium-238	pCi/L	0.0741		0.07853	
	Americium-241	pCi/L	0.0231 U		0.01729 U	
	Neptunium-237	pCi/L	-0.008 U		-0.02143 U	
	Plutonium-238	pCi/L	0.0153 U		0.02854 U	
	Plutonium-239/240	pCi/L	-0.015 U		1.426E-05 U	
	Technetium-99	pCi/L	6.57 U		2.62 U	
	Uranium	µg/L	0.0759 U		0.2262	
X231B-14G	Uranium-233/234	pCi/L	0.0083 U		0.007633 U	
	Uranium-235	pCi/L	0.0101 U		0 U	
	Uranium-236	pCi/L	0.0091 U		8.43E-06 U	
	Uranium-238	pCi/L	0.0246 U		0.07602	
	Americium-241	pCi/L	2E-05 U		0.01013 U	
	Neptunium-237	pCi/L	3E-05 U		-0.05282 U	
	Plutonium-238	pCi/L	0.0307 U		0.0226 U	
	Plutonium-239/240	pCi/L	0.0077 U		0.03013 U	
X231B-15G						

**Table 4.4. Results for radionuclides at the Quadrant I Groundwater Investigative Area – 2007 (continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X231B-15G	Technetium-99	pCi/L	5.73 U		-4.2 U	
	Uranium	µg/L	0.065 U		0.234	
	Uranium-233/234	pCi/L	0.0219 U		0.04299 U	
	Uranium-235	pCi/L	9E-06 U		8.826E-06 U	
	Uranium-236	pCi/L	8E-06 U		0 U	
	Uranium-238	pCi/L	0.0218 U		0.07863	
X231B-16G	Americium-241	pCi/L	0 U		0.01332 U	
	Neptunium-237	pCi/L	-0.034 U		1.564E-05 U	
	Plutonium-238	pCi/L	0.0274 U		0.02341 U	
	Plutonium-239/240	pCi/L	0.0068 U		0.007803 U	
	Technetium-99	pCi/L	1.55 U		-3.19 U	
	Uranium	µg/L	0.17		0.3175	
	Uranium-233/234	pCi/L	0.0290 U		0.04281 U	
	Uranium-235	pCi/L	-0.009 U		0 U	
	Uranium-236	pCi/L	0.0080 U		0 U	
	Uranium-238	pCi/L	0.0579		0.1067	
X231B-19G	Americium-241	pCi/L	1E-05 U			
	Neptunium-237	pCi/L	-0.007 U			
	Plutonium-238	pCi/L	-0.007 U			
	Plutonium-239/240	pCi/L	0.0067 U			
	Technetium-99	pCi/L	-4.11 U			
	Uranium	µg/L	0.7939			
	Uranium-233/234	pCi/L	0.1919			
	Uranium-235	pCi/L	0.0182 U			
	Uranium-236	pCi/L	0 U			
	Uranium-238	pCi/L	0.2652			
X231B-20G	Americium-241	pCi/L	0.0345 U		-0.01128 U	
	Neptunium-237	pCi/L	-0.015 U		2.135E-05 U	
	Plutonium-238	pCi/L	0.0146 U		0.01422 U	
	Plutonium-239/240	pCi/L	0.0073 U		0.02133 U	
	Technetium-99	pCi/L	-8 U		0.199 U	
	Uranium	µg/L	0.1204 U		0.2761	
	Uranium-233/234	pCi/L	0.135		0.09297	
	Uranium-235	pCi/L	0.0098 U		0 U	
	Uranium-236	pCi/L	-0.009 U		0 U	
	Uranium-238	pCi/L	0.0396 U		0.09278	
X231B-23G	Americium-241	pCi/L	0.029 U		0.0243 U	
	Neptunium-237	pCi/L	1E-05 U		-0.008065 U	
	Plutonium-238	pCi/L	0.0213 U		0.01613 U	
	Plutonium-239/240	pCi/L	0.0071 U		0 U	
	Technetium-99	pCi/L	-5.15 U		-4.8 U	
	Uranium	µg/L	0.7985		0.4414	
	Uranium-233/234	pCi/L	0.3728		0.2416	
	Uranium-235	pCi/L	0.0282 U		0.02129 U	
	Uranium-236	pCi/L	0.0084 U		0.009556 U	
	Uranium-238	pCi/L	0.2658		0.1464	
X231B-24B	Americium-241	pCi/L			0.04141 U	
	Neptunium-237	pCi/L			-0.04556 U	

**Table 4.4. Results for radionuclides at the Quadrant I Groundwater Investigative Area – 2007 (continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X231B-24B	Plutonium-238	pCi/L			0.01518 U	
	Plutonium-239/240	pCi/L			0.02275 U	
	Technetium-99	pCi/L			-4.53 U	
	Uranium	µg/L			0.1589 U	
	Uranium-233/234	pCi/L			0.3133	
	Uranium-235	pCi/L			0 U	
	Uranium-236	pCi/L			0 U	
	Uranium-238	pCi/L			0.05339 U	
X231B-27G	Americium-241	pCi/L	0.0159 U		0.00805 U	
	Neptunium-237	pCi/L	-0.026 U		-0.01475 U	
	Plutonium-238	pCi/L	0.0088 U		0.01474 U	
	Plutonium-239/240	pCi/L	0.0088 U		0.02947 U	
	Technetium-99	pCi/L	-3.86 U		-1.66 U	
	Uranium	µg/L	0.0463 U		0.1261	
	Uranium-233/234	pCi/L	0.0315 U		0.04988 U	
	Uranium-235	pCi/L	0 U		0.01025 U	
X231B-28G	Uranium-236	pCi/L	-0.026 U		0 U	
	Uranium-238	pCi/L	0.0157 U		0.04147	
	Americium-241	pCi/L	-0.012 U		0.04439 U	
	Neptunium-237	pCi/L	-0.03 U		-0.05167 U	
	Plutonium-238	pCi/L	0.0221 U		0.02582 U	
	Plutonium-239/240	pCi/L	-0.007 U		0.0000129 U	
	Technetium-99	pCi/L	-4.51 U		-1.19 U	
	Uranium	µg/L	0.1433 U		0.1988	
X231B-29G	Uranium-233/234	pCi/L	0.1527		0.08082	
	Uranium-235	pCi/L	0 U		0.009062 U	
	Uranium-236	pCi/L	0 U		0 U	
	Uranium-238	pCi/L	0.0481 U		0.06598	
	Americium-241	pCi/L	-0.01 U			
	Neptunium-237	pCi/L	0.0147 U			
	Plutonium-238	pCi/L	0.0220 U			
	Plutonium-239/240	pCi/L	1E-05 U			
X231B-32B	Technetium-99	pCi/L	-0.832 U			
	Uranium	µg/L	0.1859			
	Uranium-233/234	pCi/L	0.1301			
	Uranium-235	pCi/L	0.0214 U			
	Uranium-236	pCi/L	-0.01 U			
	Uranium-238	pCi/L	0.0606			
	Americium-241	pCi/L			0.03451 U	
	Neptunium-237	pCi/L			0.006792 U	
	Plutonium-238	pCi/L			0.02709 U	
	Plutonium-239/240	pCi/L			0.006773 U	
	Technetium-99	pCi/L			-0.724 U	
	Uranium	µg/L			0.1905	
	Uranium-233/234	pCi/L			0.3796	
	Uranium-235	pCi/L			0.009756 U	
	Uranium-236	pCi/L			0 U	
	Uranium-238	pCi/L			0.06314	

**Table 4.4. Results for radionuclides at the Quadrant I Groundwater Investigative Area – 2007 (continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X231B-33B	Americium-241	pCi/L			0.0208 U	
	Neptunium-237	pCi/L			0.01435 U	
	Plutonium-238	pCi/L			0.01431 U	
	Plutonium-239/240	pCi/L			0.007155 U	
	Technetium-99	pCi/L			0.421 U	
	Uranium	µg/L			0.08134 U	
	Uranium-233/234	pCi/L			0.05454	
	Uranium-235	pCi/L			0 U	
	Uranium-236	pCi/L			0.02014 U	
	Uranium-238	pCi/L			0.02722 U	
X231B-34B	Americium-241	pCi/L			0.0461 U	
	Neptunium-237	pCi/L			7.414E-06 U	
	Plutonium-238	pCi/L			0.01481 U	
	Plutonium-239/240	pCi/L			0.007422 U	
	Technetium-99	pCi/L			0.502 U	
	Uranium	µg/L			0.0519 U	
	Uranium-233/234	pCi/L			0.349	
	Uranium-235	pCi/L			0 U	
	Uranium-236	pCi/L			0 U	
	Uranium-238	pCi/L			0.01742 U	
X231B-36G	Americium-241	pCi/L	0.0193 U			
	Neptunium-237	pCi/L	3E-05 U			
	Plutonium-238	pCi/L	0.0085 U			
	Plutonium-239/240	pCi/L	-0.008 U			
	Technetium-99	pCi/L	-2.2 U			
	Uranium	µg/L	0.8536			
	Uranium-233/234	pCi/L	0.4323			
	Uranium-235	pCi/L	0.0172 U			
	Uranium-236	pCi/L	0 U			
	Uranium-238	pCi/L	0.2853			
X231B-37G	Americium-241	pCi/L	0.0083 U		0.007878 U	
	Neptunium-237	pCi/L	-0.022 U		0 U	
	Plutonium-238	pCi/L	0.0071 U		0.0219 U	
	Plutonium-239/240	pCi/L	0.0355 U		0.007306 U	
	Technetium-99	pCi/L	-2.52 U		0.193 U	
	Uranium	µg/L	0.3103		0.3412	
	Uranium-233/234	pCi/L	0.1492		0.09954	
	Uranium-235	pCi/L	0 U		0 U	
	Uranium-236	pCi/L	0 U		0.00848 U	
	Uranium-238	pCi/L	0.1042		0.1146	
X231B-38G	Americium-241	pCi/L	0.0267 U			
	Neptunium-237	pCi/L	-0.040 U			
	Plutonium-238	pCi/L	-0.010 U			
	Plutonium-239/240	pCi/L	-0.010 U			
	Technetium-99	pCi/L	-8.22 U			
	Uranium	µg/L	2.095			
	Uranium-233/234	pCi/L	0.6786			
	Uranium-235	pCi/L	0 U			

**Table 4.4. Results for radionuclides at the Quadrant I Groundwater Investigative Area – 2007 (continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X231B-38G	Uranium-236	pCi/L	0 U			
	Uranium-238	pCi/L	0.704			
X231B-39G	Americium-241	pCi/g	-0.014 U			
	Neptunium-237	pCi/L	-0.016 U			
	Plutonium-238	pCi/L	0.0081 U			
	Plutonium-239/240	pCi/L	8E-06 U			
	Technetium-99	pCi/L	-2.24 U			
	Uranium	µg/L	0.9193			
	Uranium-233/234	pCi/L	0.3345			
	Uranium-235	pCi/L	0.0253 U			
	Uranium-236	pCi/L	0 U			
	Uranium-238	pCi/L	0.3066			
X326-09G	Americium-241	pCi/L	0.0185 U		-0.009309 U	
	Neptunium-237	pCi/L	-0.021 U		7.206E-06 U	
	Plutonium-238	pCi/L	7E-06 U		0.02158 U	
	Plutonium-239/240	pCi/L	0.0071 U		0.02877 U	
	Technetium-99	pCi/L	3.77 U		-1.28 U	
	Uranium	µg/L	0.4589		0.498	
	Uranium-233/234	pCi/L	0.1868		0.1032 U	
	Uranium-235	pCi/L	0.0256 U		-0.01155 U	
	Uranium-236	pCi/L	0 U		-0.01037 U	
	Uranium-238	pCi/L	0.1519		0.1684	
X326-10G	Americium-241	pCi/L	0.0361 U		2.225E-05 U	
	Neptunium-237	pCi/L	0.0140 U		7.671E-06 U	
	Plutonium-238	pCi/L	0.028 U		0.0000153 U	
	Plutonium-239/240	pCi/L	0.0140 U		0.01531 U	
	Technetium-99	pCi/L	-1.52 U		-3.56 U	
	Uranium	µg/L	3.242		8.006	
	Uranium-233/234	pCi/L	1.116		2.824	
	Uranium-235	pCi/L	0.054		0.1771	
	Uranium-236	pCi/L	0.0081 U		-0.01058 U	
	Uranium-238	pCi/L	1.085		2.675	
X626-07G	Americium-241	pCi/L	0.0553 U		0.02244 U	
	Neptunium-237	pCi/L	-0.014 U		-0.1642 U	
	Plutonium-238	pCi/L	7E-06 U		0.0205 U	
	Plutonium-239/240	pCi/L	0.0139 U		1.365E-05 U	
	Technetium-99	pCi/L	-5.81 U		-3.9 U	
	Uranium	µg/L	0.6561		0.8017	
	Uranium-233/234	pCi/L	0.3679		0.2055	
	Uranium-235	pCi/L	0.0413 U		0.02204 U	
	Uranium-236	pCi/L	-0.028 U		-0.009875 U	
	Uranium-238	pCi/L	0.2169		0.2675	
X710-01G	Americium-241	pCi/L	-0.061 U			
	Neptunium-237	pCi/L	-0.019 U			
	Plutonium-238	pCi/L	0.0096 U			
	Plutonium-239/240	pCi/L	0.0191 U			
	Technetium-99	pCi/L	-1.64 U			
	Uranium	µg/L	0.1127 U			



**Table 4.4. Results for radionuclides at the Quadrant I Groundwater Investigative Area – 2007 (continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X710-01G	Uranium-233/234	pCi/L	0.1039			
	Uranium-235	pCi/L	0.0092 U			
	Uranium-236	pCi/L	0 U			
	Uranium-238	pCi/L	0.0371 U			
X749A-01G	Americium-241	pCi/L		0.02004 U		0.008846 U
	Neptunium-237	pCi/L		-0.038 U		-0.007 U
	Plutonium-238	pCi/L		7.6E-06 U		0.02097 U
	Plutonium-239/240	pCi/L		2.3E-05 U		2.09E-05 U
	Technetium-99	pCi/L		-2.27 U		0.77 U
	Uranium	µg/L		0.7768		0.2659
	Uranium-233/234	pCi/L		0.369		0.05428 U
	Uranium-235	pCi/L		0.01493 U		0.01671 U
	Uranium-236	pCi/L		0.01341 U		-0.0075 U
	Uranium-238	pCi/L		0.2596		0.08791
	Americium-241	pCi/L		0 U		0.04193 U
X749A-02G	Neptunium-237	pCi/L		0.01755 U		0.02897 U
	Plutonium-238	pCi/L		0.01749 U		0.007231 U
	Plutonium-239/240	pCi/L		1.7E-05 U		0.02166 U
	Technetium-99	pCi/L		0.192 U		0.427 U
	Uranium	µg/L		0.3204		0.3206
	Uranium-233/234	pCi/L		0.1541		0.2602
	Uranium-235	pCi/L		0 U		0.00944 U
	Uranium-236	pCi/L		0 U		-0.00846 U
	Uranium-238	pCi/L		0.1076		0.1069
	Americium-241	pCi/L		-0.0085 U		-0.00713 U
	Neptunium-237	pCi/L		-0.0263 U		-0.02829 U
X749A-03G	Plutonium-238	pCi/L		0.01751 U		0.00707 U
	Plutonium-239/240	pCi/L		0.00875 U		7.06E-06 U
	Technetium-99	pCi/L		-5.66 U		2.34 U
	Uranium	µg/L		1.44		1.179
	Uranium-233/234	pCi/L		0.3644		0.2913
	Uranium-235	pCi/L		0.01729 U		-0.00874 U
	Uranium-236	pCi/L		7.8E-06 U		0 U
	Uranium-238	pCi/L		0.4825		0.3969
	Americium-241	pCi/L		0.03445 U		3.28E-05 U
	Neptunium-237	pCi/L		-0.0068 U		0.0267 U
	Plutonium-238	pCi/L		0.0205 U		0.0266 U
X749A-04G	Plutonium-239/240	pCi/L		-0.0068 U		-0.00661 U
	Technetium-99	pCi/L		-2.55 U		-1.29 U
	Uranium	µg/L		0.08141 U		0.1142
	Uranium-233/234	pCi/L		-0.0558 U		0.05375 U
	Uranium-235	pCi/L		0.03941 U		0 U
	Uranium-236	pCi/L		-0.0265 U		0.008505 U
	Uranium-238	pCi/L		0.02398 U		0.03831
	Americium-241	pCi/L		0.00775 U		0.01615 U
	Neptunium-237	pCi/L		7.2E-06 U		0.007997 U
	Plutonium-238	pCi/L		0.01438 U		0.007982 U
	Plutonium-239/240	pCi/L		0.0072 U		-0.03181 U
X749A-05G						

**Table 4.4. Results for radionuclides at the Quadrant I Groundwater Investigative Area – 2007 (continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X749A-05G	Technetium-99	pCi/L		2.42 U		-4.51 U
	Uranium	µg/L		5.7E-05 U		0.5976
	Uranium-233/234	pCi/L		0.07551		0.1277
	Uranium-235	pCi/L		0 U		0.01968 U
	Uranium-236	pCi/L		0 U		0.008834 U
	Uranium-238	pCi/L		1.5E-05 U		0.199
X749A-07G	Americium-241	pCi/L		0.019 U		0 U
	Neptunium-237	pCi/L		-0.0160 U		0.01495 U
	Plutonium-238	pCi/L		0.04806 U		0.02237 U
	Plutonium-239/240	pCi/L		-0.016 U		0.0149 U
	Technetium-99	pCi/L		-5.14 U		-3.47 U
	Uranium	µg/L		5.725		2.097
	Uranium-233/234	pCi/L		2.085		0.7706
	Uranium-235	pCi/L		0.06126 U		-0.00870 U
	Uranium-236	pCi/L		0 U		-0.01564 U
	Uranium-238	pCi/L		1.918		0.7056
	Americium-241	pCi/L				0.01271 U
X749A-11G	Neptunium-237	pCi/L				-0.03653 U
	Plutonium-238	pCi/L				0.0219 U
	Plutonium-239/240	pCi/L				0.007311 U
	Technetium-99	pCi/L				-0.924 U
	Uranium	µg/L				3.036
	Uranium-233/234	pCi/L				1
	Uranium-235	pCi/L				0.06803
	Uranium-236	pCi/L				0 U
	Uranium-238	pCi/L				1.014
	Americium-241	pCi/L		0.01588 U		-0.00777 U
	Neptunium-237	pCi/L		-0.0070 U		0.006707 U
X749A-12G	Plutonium-238	pCi/L		-0.0070 U		0.02005 U
	Plutonium-239/240	pCi/L		0.01406 U		-0.02001 U
	Technetium-99	pCi/L		-3.99 U		-0.166 U
	Uranium	µg/L		0.2965		0.3926
	Uranium-233/234	pCi/L		0.05702 U		0.1029 U
	Uranium-235	pCi/L		0 U		0 U
	Uranium-236	pCi/L		0.01579 U		0 U
	Uranium-238	pCi/L		0.09956		0.1319
	Americium-241	pCi/L				0.02001 U
	Neptunium-237	pCi/L				-0.04772 U
	Plutonium-238	pCi/L				0.02723 U
X749A-13GA	Plutonium-239/240	pCi/L				-0.00678 U
	Technetium-99	pCi/L				-3.23 U
	Uranium	µg/L				0.8775
	Uranium-233/234	pCi/L				0.3821
	Uranium-235	pCi/L				0.009819 U
	Uranium-236	pCi/L				0.008816 U
	Uranium-238	pCi/L				0.2939
	Americium-241	pCi/L		0.01695 U		0.01662 U
	Neptunium-237	pCi/L		-0.0069 U		0.0283 U

**Table 4.4. Results for radionuclides at the Quadrant I Groundwater Investigative Area – 2007 (continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X749A-14G	Plutonium-238	pCi/L		0.00693 U		0.007051 U
	Plutonium-239/240	pCi/L		-0.0069 U		-0.02818 U
	Technetium-99	pCi/L		-1.51 U		-1.02 U
	Uranium	µg/L		0.3313		0.3423
	Uranium-233/234	pCi/L		0.1107		0.1945
	Uranium-235	pCi/L		0.00910 U		0.01999 U
	Uranium-236	pCi/L		0.00817 U		0 U
	Uranium-238	pCi/L		0.1105		0.1132
X749A-15G	Americium-241	pCi/L				0.007383 U
	Neptunium-237	pCi/L				-0.0294 U
	Plutonium-238	pCi/L				0.007347 U
	Plutonium-239/240	pCi/L				0.02937 U
	Technetium-99	pCi/L				-3.07 U
	Uranium	µg/L				0.1578 U
	Uranium-233/234	pCi/L				0.06638
	Uranium-235	pCi/L				0 U
X749A-16G	Uranium-236	pCi/L				0.007351 U
	Uranium-238	pCi/L				0.053 U
	Americium-241	pCi/L		0.00844 U		-0.008 U
	Neptunium-237	pCi/L		-0.0097 U		-0.00817 U
	Plutonium-238	pCi/L		0.00970 U		0.02456 U
	Plutonium-239/240	pCi/L		0.00970 U		8.18E-06 U
	Technetium-99	pCi/L		0.167 U		3.8 U
	Uranium	µg/L		0.04066 U		0.2173
X760-02G	Uranium-233/234	pCi/L		-0.0917 U		0.1098
	Uranium-235	pCi/L		-0.0189 U		0 U
	Uranium-236	pCi/L		-0.0085 U		-0.0081 U
	Uranium-238	pCi/L		0.0154 U		0.07306
	Americium-241	pCi/L	-0.012 U			
	Neptunium-237	pCi/L	-0.021 U			
	Plutonium-238	pCi/L	0.0143 U			
	Plutonium-239/240	pCi/L	0.0214 U			
X760-03G	Technetium-99	pCi/L	-1.6 U			
	Uranium	µg/L	1.105			
	Uranium-233/234	pCi/L	0.3084			
	Uranium-235	pCi/L	0.0371 U			
	Uranium-236	pCi/L	0.0083 U			
	Uranium-238	pCi/L	0.3678			
	Americium-241	pCi/L	-0.023 U			
	Neptunium-237	pCi/L	-0.042 U			
	Plutonium-238	pCi/L	0.0069 U			
	Plutonium-239/240	pCi/L	7E-06 U			
	Technetium-99	pCi/L	4.96 U			
	Uranium	µg/L	0.3909			
	Uranium-233/234	pCi/L	0.1681			
	Uranium-235	pCi/L	0.0189 U			
	Uranium-236	pCi/L	0.0085 U			
	Uranium-238	pCi/L	0.1296			

**Table 4.4. Results for radionuclides at the Quadrant I Groundwater Investigative Area – 2007 (continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X760-07G	Americium-241	pCi/L	0.0323 U			
	Neptunium-237	pCi/L	7E-06 U			
	Plutonium-238	pCi/L	0 U			
	Plutonium-239/240	pCi/L	-0.022 U			
	Technetium-99	pCi/L	-0.416 U			
	Uranium	µg/L	0.5335			
	Uranium-233/234	pCi/L	0.2655			
	Uranium-235	pCi/L	0 U			
	Uranium-236	pCi/L	0.0086 U			
	Uranium-238	pCi/L	0.1792			
X770-MW17G	Americium-241	pCi/L	-0.008 U		0.0265 U	
	Neptunium-237	pCi/L	-0.008 U		0.02193 U	
	Plutonium-238	pCi/L	0.0151 U		-0.02183 U	
	Plutonium-239/240	pCi/L	0.0075 U		0.01459 U	
	Technetium-99	pCi/L	-0.569 U		-0.0178 U	
	Uranium	µg/L	2.09		0.9991	
	Uranium-233/234	pCi/L	0.8373		0.2305	
	Uranium-235	pCi/L	0.0209 U		0.02941 U	
	Uranium-236	pCi/L	9E-06 U		0 U	
	Uranium-238	pCi/L	0.7005		0.3331	

**Table 4.5. Volatile organic compounds detected at the Quadrant II Groundwater Investigative Area – 2007**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X700-02G	1,1,1-Trichloroethane	µg/L			19 J	
	1,1-Dichloroethane	µg/L			15 J	
	1,1-Dichloroethene	µg/L			190	
	1,2-Dichloroethane	µg/L			6.9 J	
	cis-1,2-Dichloroethene	µg/L			75	
	Methylene chloride	µg/L			18 BJ	
	Trichloroethene	µg/L			7200	
X701-26G	1,1-Dichloroethene	µg/L			4.6	
	Chloroform	µg/L			0.63 J	
	Tetrachloroethene	µg/L			12	
	Trichloroethene	µg/L			5.1	
	Trichlorofluoromethane	µg/L			3.5	
X701-27G	1,1,1-Trichloroethane	µg/L			0.31 J	
	1,1-Dichloroethane	µg/L			0.51 J	
	1,1-Dichloroethene	µg/L			3.8	
	cis-1,2-Dichloroethene	µg/L			0.2 J	
	Trichloroethene	µg/L			1.4 J	
X701-28GA	cis-1,2-Dichloroethene	µg/L			0.2 J	
X701-45G	1,1-Dichloroethane	µg/L			0.29 J	
	1,1-Dichloroethene	µg/L			0.66 J	
	1,2-Dichloroethane	µg/L			0.22 J	
	Trichloroethene	µg/L			0.69 J	
X701-46G	Methylene chloride	µg/L			0.47 J	
X701-68G	1,1,1-Trichloroethane	µg/L			0.27 J	
	1,1-Dichloroethane	µg/L			0.37 J	
	1,1-Dichloroethene	µg/L			1.8 J	
	Chloroform	µg/L			0.46 J	
	cis-1,2-Dichloroethene	µg/L			1 J	
	Trichloroethene	µg/L			43	
	Trichlorofluoromethane	µg/L			0.31 J	
X701-69G	1,1-Dichloroethene	µg/L			1.5 J	
	cis-1,2-Dichloroethene	µg/L			310	
	Methylene chloride	µg/L			3.1 BJ	
	trans-1,2-Dichloroethene	µg/L			9.6	
	Trichloroethene	µg/L			1500	
X701-70G	1,1-Dichloroethene	µg/L			2.3 J	
	Methylene chloride	µg/L			3.2 BJ	
	Trichloroethene	µg/L			1500	
X701-117GA	1,1,1-Trichloroethane	µg/L			0.34 J	
	1,1-Dichloroethene	µg/L			0.93 J	
	Chloroform	µg/L			0.33 J	
	Trichloroethene	µg/L			310	
X705-01GA	1,1-Dichloroethene	µg/L			1 J	
	Bromodichloromethane	µg/L			0.35 J	
	Carbon tetrachloride	µg/L			1.4 J	
	Chloroform	µg/L			34	
	cis-1,2-Dichloroethene	µg/L			0.37 J	
	Tetrachloroethene	µg/L			0.62 J	

**Table 4.5. Volatile organic compounds detected at the Quadrant II Groundwater Investigative Area – 2007  
(continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X705-01GA	Trichloroethene	µg/L			120	
X705-02G	1,1-Dichloroethane	µg/L			0.2 J	
	1,1-Dichloroethene	µg/L			0.86 J	
	cis-1,2-Dichloroethene	µg/L			0.62 J	
	Trichloroethene	µg/L			43	
X705-03G	1,1-Dichloroethane	µg/L			1.4 J	
	1,1-Dichloroethene	µg/L			1.3 J	
	cis-1,2-Dichloroethene	µg/L			7	
	Tetrachloroethene	µg/L			0.37 J	
	trans-1,2-Dichloroethene	µg/L			0.32 J	
	Trichloroethene	µg/L			47	
X705-04G	1,1-Dichloroethane	µg/L			0.31 J	
	1,1-Dichloroethene	µg/L			3.5	
	1,2-Dichloroethane	µg/L			0.44 J	
	Bromodichloromethane	µg/L			2	
	Carbon tetrachloride	µg/L			20	
	Chloroform	µg/L			560	
	Dibromochloromethane	µg/L			0.33 J	
	Methylene chloride	µg/L			0.61 BJ	
	Tetrachloroethene	µg/L			1.9 J	
	Trichloroethene	µg/L			150	
X705-06G	1,1-Dichloroethane	µg/L			0.43 J	
	1,1-Dichloroethene	µg/L			3.2	
	Acetone	µg/L			29	
	Chloroform	µg/L			2.1	
	cis-1,2-Dichloroethene	µg/L			6.2	
	Tetrachloroethene	µg/L			4.3	
	Trichloroethene	µg/L			56	
X705-07G	Acetone	µg/L			6.2 J	
	Chloroform	µg/L			0.82 J	
	cis-1,2-Dichloroethene	µg/L			1.1 J	
	Trichloroethene	µg/L			11	
	Trichlorofluoromethane	µg/L			0.4 J	
X705-08G	Trichlorofluoromethane	µg/L			14	
X720-01G	1,1,1-Trichloroethane	µg/L			1400	
	1,1-Dichloroethane	µg/L			56 J	
	1,1-Dichloroethene	µg/L			1300	
	Chloroform	µg/L			50 J	
	cis-1,2-Dichloroethene	µg/L			67 J	
	Methylene chloride	µg/L			110 BJ	
	Trichloroethene	µg/L			92000	
X720-08G	1,1-Dichloroethene	µg/L			110	
	cis-1,2-Dichloroethene	µg/L			4.5 J	
	Methylene chloride	µg/L			11 BJ	
	Trichloroethene	µg/L			5600	

**Table 4.6. Results for radionuclides at the Quadrant II Groundwater Investigative Area – 2007**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
PRCL-01G	Americium-241	pCi/L			0.03457 U	
	Neptunium-237	pCi/L			-0.01808 U	
	Plutonium-238	pCi/L			-0.01806 U	
	Plutonium-239/240	pCi/L			-0.02711 U	
	Technetium-99	pCi/L			-4.94 U	
	Uranium	µg/L			0.02813 U	
	Uranium-233/234	pCi/L			0.102	
	Uranium-235	pCi/L			0.01049 U	
	Uranium-236	pCi/L			0 U	
	Uranium-238	pCi/L			0.00851 U	
X700-02G	Americium-241	pCi/L			0.0000116 U	
	Neptunium-237	pCi/L			-0.02813 U	
	Plutonium-238	pCi/L			1.404E-05 U	
	Plutonium-239/240	pCi/L			7.017E-06 U	
	Technetium-99	pCi/L			52.6	
	Uranium	µg/L			1.521	
	Uranium-233/234	pCi/L			0.3534	
	Uranium-235	pCi/L			0.0304 U	
	Uranium-236	pCi/L			0.0182 U	
	Uranium-238	pCi/L			0.5083	
X701-26G	Americium-241	pCi/L			0.01174 U	
	Neptunium-237	pCi/L			-0.02705 U	
	Plutonium-238	pCi/L			0.02029 U	
	Plutonium-239/240	pCi/L			-0.03375 U	
	Technetium-99	pCi/L			23.2	
	Uranium	µg/L			6.031	
	Uranium-233/234	pCi/L			3.469	
	Uranium-235	pCi/L			0.07624	
	Uranium-236	pCi/L			-0.0171 U	
	Uranium-238	pCi/L			2.02	
X701-27G	Americium-241	pCi/L			-0.01888 U	
	Neptunium-237	pCi/L			2.036E-05 U	
	Plutonium-238	pCi/L			0.02709 U	
	Plutonium-239/240	pCi/L			0.02032 U	
	Technetium-99	pCi/L			-5.19 U	
	Uranium	µg/L			9.756	
	Uranium-233/234	pCi/L			3.626	
	Uranium-235	pCi/L			0.1425	
	Uranium-236	pCi/L			0.01706 U	
	Uranium-238	pCi/L			3.265	
X701-28GA	Americium-241	pCi/L			0.01212 U	
	Neptunium-237	pCi/L			0.03595 U	
	Plutonium-238	pCi/L			0.02867 U	
	Plutonium-239/240	pCi/L			-0.007145 U	
	Technetium-99	pCi/L			-1.36 U	
	Uranium	µg/L			1.758	
	Uranium-233/234	pCi/L			0.8231	
	Uranium-235	pCi/L			0.05641 U	

**Table 4.6. Results for radionuclides at the Quadrant II Groundwater Investigative Area – 2007 (continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X701-28GA	Uranium-236	pCi/L			-0.008432 U	
	Uranium-238	pCi/L			0.5856	
X701-29G	Americium-241	pCi/L			-0.01921 U	
	Neptunium-237	pCi/L			-0.0665 U	
	Plutonium-238	pCi/L			0.006653 U	
	Plutonium-239/240	pCi/L			-0.01327 U	
	Technetium-99	pCi/L			-6.42 U	
	Uranium	µg/L			0.1097 U	
	Uranium-233/234	pCi/L			0.07081 U	
	Uranium-235	pCi/L			0.01746 U	
	Uranium-236	pCi/L			0 U	
	Uranium-238	pCi/L			0.03532 U	
X701-45G	Americium-241	pCi/L			0.03502 U	
	Neptunium-237	pCi/L			-0.01941 U	
	Plutonium-238	pCi/L			-0.006449 U	
	Plutonium-239/240	pCi/L			-0.01289 U	
	Technetium-99	pCi/L			0.0162 U	
	Uranium	µg/L			1.921	
	Uranium-233/234	pCi/L			0.7478	
	Uranium-235	pCi/L			0.03968 U	
	Uranium-236	pCi/L			8.898E-06 U	
	Uranium-238	pCi/L			0.642	
X701-46G	Americium-241	pCi/L			-0.01625 U	
	Neptunium-237	pCi/L			-0.008082 U	
	Plutonium-238	pCi/L			0.01622 U	
	Plutonium-239/240	pCi/L			-0.03237 U	
	Technetium-99	pCi/L			2.54 U	
	Uranium	µg/L			11.56	
	Uranium-233/234	pCi/L			4.811	
	Uranium-235	pCi/L			0.2086	
	Uranium-236	pCi/L			0.02809 U	
	Uranium-238	pCi/L			3.865	
X701-68G	Americium-241	pCi/L			-0.03482 U	
	Neptunium-237	pCi/L			-0.02156 U	
	Plutonium-238	pCi/L			0.01437 U	
	Plutonium-239/240	pCi/L			0.007187 U	
	Technetium-99	pCi/L			19.3	
	Uranium	µg/L			3.031	
	Uranium-233/234	pCi/L			1.034	
	Uranium-235	pCi/L			0.03014 U	
	Uranium-236	pCi/L			0.01804 U	
	Uranium-238	pCi/L			1.016	
X701-69G	Americium-241	pCi/L			-0.01733 U	
	Neptunium-237	pCi/L			4.069E-05 U	
	Plutonium-238	pCi/L			0.02032 U	
	Plutonium-239/240	pCi/L			0 U	
	Technetium-99	pCi/L			4.29 U	
	Uranium	µg/L			5.663	



**Table 4.6. Results for radionuclides at the Quadrant II Groundwater Investigative Area – 2007 (continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X701-69G	Uranium-233/234	pCi/L			2.828	
	Uranium-235	pCi/L			0.1318	
	Uranium-236	pCi/L			0 U	
	Uranium-238	pCi/L			1.891	
X701-70G	Americium-241	pCi/L			0.01049 U	
	Neptunium-237	pCi/L			-0.01356 U	
	Plutonium-238	pCi/L			0.00679 U	
	Plutonium-239/240	pCi/L			0.00677 U	
X701-117GA	Technetium-99	pCi/L			41.6	
	Uranium	µg/L			3.287	
	Uranium-233/234	pCi/L			1.132	
	Uranium-235	pCi/L			0.07921	
	Uranium-236	pCi/L			8.882E-06 U	
	Uranium-238	pCi/L			1.097	
	Americium-241	pCi/L			-0.01862 U	
	Neptunium-237	pCi/L			0.006437 U	
	Plutonium-238	pCi/L			0.006406 U	
	Plutonium-239/240	pCi/L			0.006413 U	
	Technetium-99	pCi/L			41.4	
	Uranium	µg/L			2.65	
	Uranium-233/234	pCi/L			1.035	
	Uranium-235	pCi/L			0.05025 U	
	Uranium-236	pCi/L			0 U	
	Uranium-238	pCi/L			0.8861	
X705-01GA	Americium-241	pCi/L			-0.009328 U	
	Neptunium-237	pCi/L			0.01919 U	
	Plutonium-238	pCi/L			0.0255 U	
	Plutonium-239/240	pCi/L			-0.006338 U	
	Technetium-99	pCi/L			732	
	Uranium	µg/L			1.394	
	Uranium-233/234	pCi/L			0.3847	
	Uranium-235	pCi/L			0.03029 U	
	Uranium-236	pCi/L			0.009066 U	
	Uranium-238	pCi/L			0.4656	
X705-02G	Americium-241	pCi/L			-0.04188 U	
	Neptunium-237	pCi/L			-0.04921 U	
	Plutonium-238	pCi/L			0.02109 U	
	Plutonium-239/240	pCi/L			0.007035 U	
	Technetium-99	pCi/L			-4.45 U	
	Uranium	µg/L			5.56	
	Uranium-233/234	pCi/L			1.917	
	Uranium-235	pCi/L			0.1177	
	Uranium-236	pCi/L			0.00881 U	
	Uranium-238	pCi/L			1.858	
X705-03G	Americium-241	pCi/L			0.02971 U	
	Neptunium-237	pCi/L			-0.09834 U	
	Plutonium-238	pCi/L			0.007566 U	
	Plutonium-239/240	pCi/L			0.007551 U	

**Table 4.6. Results for radionuclides at the Quadrant II Groundwater Investigative Area – 2007 (continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X705-03G	Technetium-99	pCi/L			-0.409 U	
	Uranium	µg/L			2.457	
	Uranium-233/234	pCi/L			0.638	
	Uranium-235	pCi/L			0.05688	
	Uranium-236	pCi/L			8.504E-06 U	
	Uranium-238	pCi/L			0.8206	
X705-04G	Americium-241	pCi/L			4.174E-05 U	
	Neptunium-237	pCi/L			-0.00681 U	
	Plutonium-238	pCi/L			0.02725 U	
	Plutonium-239/240	pCi/L			-0.02719 U	
	Technetium-99	pCi/L			8.4 U	
	Uranium	µg/L			2.13	
	Uranium-233/234	pCi/L			0.9398	
	Uranium-235	pCi/L			0.0483	
	Uranium-236	pCi/L			0.01735 U	
	Uranium-238	pCi/L			0.7112	
	Americium-241	pCi/L			0.01056 U	
	Neptunium-237	pCi/L			-0.03345 U	
	Plutonium-238	pCi/L			0 U	
	Plutonium-239/240	pCi/L			1.335E-05 U	
X705-05B	Technetium-99	pCi/L			-7.41 U	
	Uranium	µg/L			0.2093 U	
	Uranium-233/234	pCi/L			0.4986	
	Uranium-235	pCi/L			-0.008776 U	
	Uranium-236	pCi/L			0 U	
	Uranium-238	pCi/L			0.07109 U	
	Americium-241	pCi/L			0 U	
	Neptunium-237	pCi/L			0.007216 U	
	Plutonium-238	pCi/L			0.02155 U	
	Plutonium-239/240	pCi/L			2.152E-05 U	
	Technetium-99	pCi/L			26.4	
	Uranium	µg/L			0.82	
	Uranium-233/234	pCi/L			0.2295	
	Uranium-235	pCi/L			0.009432 U	
X705-06G	Uranium-236	pCi/L			0 U	
	Uranium-238	pCi/L			0.2747	
	Americium-241	pCi/L			-0.01111 U	
	Neptunium-237	pCi/L			-0.05393 U	
	Plutonium-238	pCi/L			0.01347 U	
	Plutonium-239/240	pCi/L			-0.01344 U	
	Technetium-99	pCi/L			214	
	Uranium	µg/L			2.077	
	Uranium-233/234	pCi/L			0.6623	
	Uranium-235	pCi/L			0.0258 U	
	Uranium-236	pCi/L			-0.007714 U	
	Uranium-238	pCi/L			0.6957	
	Americium-241	pCi/L			0.04781 U	
	Neptunium-237	pCi/L			-0.01414 U	
X705-07G						
X705-08G						

**Table 4.6. Results for radionuclides at the Quadrant II Groundwater Investigative Area – 2007 (continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X705-08G	Plutonium-238	pCi/L			1.412E-05 U	
	Plutonium-239/240	pCi/L			0.007072 U	
	Technetium-99	pCi/L			-0.792 U	
	Uranium	µg/L			1.629	
	Uranium-233/234	pCi/L			0.633	
	Uranium-235	pCi/L			0.008774 U	
	Uranium-236	pCi/L			0 U	
	Uranium-238	pCi/L			0.5465	
X705-09B	Americium-241	pCi/L			0.01519 U	
	Neptunium-237	pCi/L			-0.02746 U	
	Plutonium-238	pCi/L			0.03428 U	
	Plutonium-239/240	pCi/L			-0.01368 U	
	Technetium-99	pCi/L			-4.19 U	
	Uranium	µg/L			0.2765	
	Uranium-233/234	pCi/L			0.1086	
	Uranium-235	pCi/L			0 U	
X705-10B	Uranium-236	pCi/L			0.008589 U	
	Uranium-238	pCi/L			0.09287	
	Americium-241	pCi/L			9.45E-06 U	
	Neptunium-237	pCi/L			-0.08359 U	
	Plutonium-238	pCi/L			0.006975 U	
	Plutonium-239/240	pCi/L			-0.00694 U	
	Technetium-99	pCi/L			-4.4 U	
	Uranium	µg/L			1.599	
X720-01G	Uranium-233/234	pCi/L			1.725	
	Uranium-235	pCi/L			0.009897 U	
	Uranium-236	pCi/L			0 U	
	Uranium-238	pCi/L			0.5365	
	Americium-241	pCi/L			0.01138 U	
	Neptunium-237	pCi/L			-0.0207 U	
	Plutonium-238	pCi/L			2.065E-05 U	
	Plutonium-239/240	pCi/L			0.01379 U	
X720-07G	Technetium-99	pCi/L			-2.89 U	
	Uranium	µg/L			17.49	
	Uranium-233/234	pCi/L			5.416	
	Uranium-235	pCi/L			0.2475	
	Uranium-236	pCi/L			0.01778 U	
	Uranium-238	pCi/L			5.854	
	Americium-241	pCi/L			0.03803 U	
	Neptunium-237	pCi/L			-0.03386 U	
	Plutonium-238	pCi/L			0.04061 U	
	Plutonium-239/240	pCi/L			0.01353 U	
	Technetium-99	pCi/L			-0.798 U	
	Uranium	µg/L			12.33	
	Uranium-233/234	pCi/L			4.217	
	Uranium-235	pCi/L			0.246	
	Uranium-236	pCi/L			0.02455 U	
	Uranium-238	pCi/L			4.12	

**Table 4.6. Results for radionuclides at the Quadrant II Groundwater Investigative Area – 2007 (continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X720-08G	Americium-241	pCi/L			-0.01001 U	
	Neptunium-237	pCi/L			0.00669 U	
	Plutonium-238	pCi/L			0.01332 U	
	Plutonium-239/240	pCi/L			0.01332 U	
	Technetium-99	pCi/L			221	
	Uranium	µg/L			3.568	
	Uranium-233/234	pCi/L			1.267	
	Uranium-235	pCi/L			0.06881	
	Uranium-236	pCi/L			8.818E-06 U	
	Uranium-238	pCi/L			1.193	

**Table 4.7. Volatile organic compounds detected at the X-701B Holding Pond – 2007**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
LBC-PZ03	cis-1,2-Dichloroethene	µg/L	11		40	
	Methylene chloride	µg/L	0.43 BJ		5 U	
	trans-1,2-Dichloroethene	µg/L	0.23 J		0.98 J	
	Trichloroethene	µg/L	24		64	
LBC-PZ06	Methylene chloride	µg/L	0.41 BJ		5 U	
	Trichloroethene	µg/L	0.27 J		2 U	
X230J7-01GA	1,1-Dichloroethene	µg/L	0.25 J			
	Acetone	µg/L	2.4 J			
	cis-1,2-Dichloroethene	µg/L	0.55 J			
	Trichloroethene	µg/L	230			
X230J7-02GA	Chloroform	µg/L	0.57 J			
	cis-1,2-Dichloroethene	µg/L	2.3 J			
	Tetrachloroethene	µg/L	0.71 J			
	Trichloroethene	µg/L	960			
X230J7-03GA	1,1,2-Trichloroethane	µg/L	1.6 J			
	1,1-Dichloroethene	µg/L	0.9 J			
	cis-1,2-Dichloroethene	µg/L	240			
	Tetrachloroethene	µg/L	1.6 J			
	trans-1,2-Dichloroethene	µg/L	8.5			
	Trichloroethene	µg/L	1900			
	Vinyl chloride	µg/L	4.2 J			
X700-03G	Acetone	µg/L	9 J			
	cis-1,2-Dichloroethene	µg/L	0.35 J			
X701-01G	1,1-Dichloroethene	µg/L	0.15 J		0.22 J	
	Acetone	µg/L	28		10 U	
	cis-1,2-Dichloroethene	µg/L	1.3 J		4.8	
	Trichloroethene	µg/L	8		23	
X701-02G	1,1-Dichloroethene	µg/L	0.23 J		2 U	
	Acetone	µg/L	12		10 U	
	cis-1,2-Dichloroethene	µg/L	5.1		4.8	
	Trichloroethene	µg/L	8.9		9.2	
X701-05G	cis-1,2-Dichloroethene	µg/L	2 U		0.65 J	
	Methylene chloride	µg/L	0.42 BJ		5 U	
	Trichloroethene	µg/L	1 J		15	
X701-06G	1,1-Dichloroethane	µg/L	0.2 J		0.23 J	
	1,1-Dichloroethene	µg/L	1.9 J		1 J	
	Acetone	µg/L	3.6 J		10 U	
	cis-1,2-Dichloroethene	µg/L	26		57	
	trans-1,2-Dichloroethene	µg/L	0.88 J		1.4	
	Trichloroethene	µg/L	72		82	
X701-08G	1,1,1-Trichloroethane	µg/L			160 J	
	cis-1,2-Dichloroethene	µg/L			610 J	
	Tetrachloroethene	µg/L			490 J	
	Trichloroethene	µg/L			180000	
X701-09G	cis-1,2-Dichloroethene	µg/L	6400			
	Methylene chloride	µg/L	480 J			
	Tetrachloroethene	µg/L	230 J			
	Trichloroethene	µg/L	200000			

**Table 4.7. Volatile organic compounds detected at the X-701B Holding Pond – 2007 (continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X701-10G	1,1,2-Trichloroethane	µg/L	13 U		2.3 J	
	1,1-Dichloroethene	µg/L	1.2 J		1.1 J	
	Acetone	µg/L	67 U		51 J	
	cis-1,2-Dichloroethene	µg/L	67		42	
	Methylene chloride	µg/L	3.4 J		33 U	
	Tetrachloroethene	µg/L	1.8 J		1.6 J	
	Trichloroethene	µg/L	1900		1700	
X701-12G	1,2-Dichlorobenzene	µg/L	5.3 U		0.34 J	
	Acetone	µg/L	35		10 U	
	Chloroform	µg/L	5.3 U		0.25 J	
	cis-1,2-Dichloroethene	µg/L	45		49	
	Tetrachloroethene	µg/L	5.3 U		0.73 J	
	Trichloroethene	µg/L	73		290	
	Vinyl chloride	µg/L	2.8		3	
X701-13G	1,1-Dichloroethene	µg/L	2 J		27 U	
	Acetone	µg/L	47 J		85 J	
	cis-1,2-Dichloroethene	µg/L	86			
	Tetrachloroethene	µg/L	7.4 J		11 J	
	Trichloroethene	µg/L	2700		5000	
X701-14G	1,1,1-Trichloroethane	µg/L	91 J		26 J	
	Acetone	µg/L	1400 J		550 J	
	cis-1,2-Dichloroethene	µg/L	2700			
	Tetrachloroethene	µg/L	70 J		36 J	
	Trichloroethene	µg/L	49000		20000	
X701-15G	Acetone	µg/L	19		10 U	
	cis-1,2-Dichloroethene	µg/L	30		24	
	Methylene chloride	µg/L	0.57 BJ		5 U	
	trans-1,2-Dichloroethene	µg/L	0.7 J		0.71 J	
	Trichloroethene	µg/L	6.4		250	
X701-16G	Acetone	µg/L	42		10 U	
	cis-1,2-Dichloroethene	µg/L	2 U		0.29 J	
	Methylene chloride	µg/L	0.59 BJ		5 U	
	Trichloroethene	µg/L	2 U		8.9	
X701-19G	Methylene chloride	µg/L	0.5 BJ		5 U	
X701-20G	Acetone	µg/L	55000			
	cis-1,2-Dichloroethene	µg/L	2500			
	Methylene chloride	µg/L	630 BJ			
	Trichloroethene	µg/L	180000			
X701-21G	1,2-Dichlorobenzene	µg/L	0.21 J		0.21 J	
	Chloroform	µg/L	0.37 J		0.49 J	
	cis-1,2-Dichloroethene	µg/L	0.19 J		0.19 J	
	Methylene chloride	µg/L	0.5 BJ		5 U	
	Trichloroethene	µg/L	30		24	
X701-23G	Trichloroethene	µg/L			1.7 J	
X701-24G	1,1,2-Trichloroethane	µg/L	100 U		10	
	1,1-Dichloroethane	µg/L	100 U		1.4 J	
	1,1-Dichloroethene	µg/L	100 U		5.7 J	
	1,2-Dichloroethane	µg/L	100 U		1.1 J	

**Table 4.7. Volatile organic compounds detected at the X-701B Holding Pond – 2007 (continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X701-24G	cis-1,2-Dichloroethene	µg/L	740		970	
	Methylene chloride	µg/L	26 BJ		20 U	
	Tetrachloroethene	µg/L	100 U		6.6 J	
	trans-1,2-Dichloroethene	µg/L	17 J		15	
	Trichloroethene	µg/L	10000		11000	
	Vinyl chloride	µg/L	31 J		33	
X701-25G	1,1,2,2-Tetrachloroethane	µg/L	0.35 J		1 U	
	1,2-Dichlorobenzene	µg/L	0.44 J		2 U	
	1,4-Dichlorobenzene	µg/L	0.45 J		2 U	
	Bromoform	µg/L	0.24 J		2 U	
	Chlorobenzene	µg/L	0.21 J		2 U	
	Methylene chloride	µg/L	0.56 BJ		5 U	
	Trichloroethene	µg/L	0.34 J		2 U	
X701-30G	cis-1,2-Dichloroethene	µg/L	0.16 J		0.2 J	
	Trichloroethene	µg/L	4.4		5.3	
	Trichlorofluoromethane	µg/L	2 U		0.49 J	
X701-31G	Acetone	µg/L	4.3 J			
	Trichloroethene	µg/L	1.2 J			
X701-38G	1,2-Dichlorobenzene	µg/L			0.46 J	
	Acetone	µg/L			8.5 J	
	Chloroform	µg/L			2.3	
X701-58B	Acetone	µg/L			2.8 J	
	Benzene	µg/L			0.74 J	
X701-61B	1,2-Dimethylbenzene	µg/L			0.4 J	
	cis-1,2-Dichloroethene	µg/L			0.33 J	
	Ethylbenzene	µg/L			0.2 J	
	M + P Xylene	µg/L			5	
	Trichloroethene	µg/L			0.31 J	
X701-127G	1,1,2-Trichloroethane	µg/L	120 J		120 J	
	1,1-Dichloroethene	µg/L	400 U		32 J	
	cis-1,2-Dichloroethene	µg/L	460		1300	
	Methylene chloride	µg/L	200 BJ		1000 U	
	Tetrachloroethene	µg/L	400 U		60 J	
	Trichloroethene	µg/L	56000		85000	
X701-128G	Chlorobenzene	µg/L	130 J		200 U	
	cis-1,2-Dichloroethene	µg/L	65 J		60 J	
	Methylene chloride	µg/L	230 BJ		500 U	
	Trichloroethene	µg/L	20000		20000	
X701-BW2G	1,1-Dichloroethane	µg/L	1.6 J			
	1,1-Dichloroethene	µg/L	16			
	Acetone	µg/L	7.2 J			
	Chloroform	µg/L	0.48 J			
	cis-1,2-Dichloroethene	µg/L	59			
	Methylene chloride	µg/L	1.6 BJ			
	trans-1,2-Dichloroethene	µg/L	1.8 J			
	Trichloroethene	µg/L	770			
X701-BW4G	1,2-Dichlorobenzene	µg/L	2 U		0.14 J	
	cis-1,2-Dichloroethene	µg/L	1.6 J		3.2	

**Table 4.7. Volatile organic compounds detected at the X-701B Holding Pond – 2007 (continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X701-BW4G	Trichloroethene	µg/L	1.2 J		1.9 J	
X744G-01G	Acetone	µg/L	5.3 J		9.4 J	
X744G-02G	Acetone	µg/L	3.3 J		10 U	
	cis-1,2-Dichloroethene	µg/L	1.1 J		2.7	
	Trichloroethene	µg/L	17		37	
	Trichlorofluoromethane	µg/L	2.1		4.2	
X744G-03G	Acetone	µg/L	6 J		10 U	
	Trichloroethene	µg/L	0.9 J		1.5 J	



**Table 4.8. Results for radionuclides at the X-701B Holding Pond – 2007**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
LBC-PZ03	Americium-241	pCi/L	-0.019 U		-0.03206 U	
	Neptunium-237	pCi/L	-0.009 U		-0.08739 U	
	Plutonium-238	pCi/L	0.0093 U		0.02182 U	
	Plutonium-239/240	pCi/L	-0.046 U		0.007271 U	
	Technetium-99	pCi/L	-4.23 U		-2.93 U	
	Uranium	µg/L	0.0231 U		0.0001808 U	
	Uranium-233/234	pCi/L	0.0467 U		0.04193 U	
	Uranium-235	pCi/L	0 U		0 U	
	Uranium-236	pCi/L	0 U		9.27E-06 U	
	Uranium-238	pCi/L	0.0078 U		5.847E-05 U	
LBC-PZ06	Americium-241	pCi/L	-0.019 U		0.01516 U	
	Neptunium-237	pCi/L	-0.048 U		-0.04607 U	
	Plutonium-238	pCi/L	0.0080 U		3.064E-05 U	
	Plutonium-239/240	pCi/L	0.0080 U		-0.007645 U	
	Technetium-99	pCi/L	-3.85 U		1.1 U	
	Uranium	µg/L	0.0751 U		0.5889	
	Uranium-233/234	pCi/L	0.0254 U		0.1694	
	Uranium-235	pCi/L	0 U		0.008719 U	
	Uranium-236	pCi/L	-0.009 U		7.806E-06 U	
	Uranium-238	pCi/L	0.0253 U		0.1971	
X230J7-01GA	Americium-241	pCi/L	-0.016 U			
	Neptunium-237	pCi/L	-0.035 U			
	Plutonium-238	pCi/L	0.0263 U			
	Plutonium-239/240	pCi/L	0.0088 U			
	Technetium-99	pCi/L	-4.18 U			
	Uranium	µg/L	0.3459			
	Uranium-233/234	pCi/L	0.1518			
	Uranium-235	pCi/L	0.0089 U			
	Uranium-236	pCi/L	0 U			
	Uranium-238	pCi/L	0.1154			
X230J7-02GA	Americium-241	pCi/L	0.0086 U			
	Neptunium-237	pCi/L	-0.015 U			
	Plutonium-238	pCi/L	0 U			
	Plutonium-239/240	pCi/L	-0.007 U			
	Technetium-99	pCi/L	21.3			
	Uranium	µg/L	0.2002			
	Uranium-233/234	pCi/L	0.1024			
	Uranium-235	pCi/L	0.0180 U			
	Uranium-236	pCi/L	0 U			
	Uranium-238	pCi/L	0.0657			
X230J7-03GA	Americium-241	pCi/L	0.0162 U			
	Neptunium-237	pCi/L	-0.069 U			
	Plutonium-238	pCi/L	0.0137 U			
	Plutonium-239/240	pCi/L	-0.007 U			
	Technetium-99	pCi/L	11.7			
	Uranium	µg/L	0.2288 U			
	Uranium-233/234	pCi/L	0.0235 U			
	Uranium-235	pCi/L	-0.01 U			

**Table 4.8. Results for radionuclides at the X-701B Holding Pond – 2007 (continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X230J7-03GA	Uranium-236	pCi/L	-0.017 U			
	Uranium-238	pCi/L	0.0778 U			
X230J7-04GA	Americium-241	pCi/L			0.008286 U	
	Neptunium-237	pCi/L			4.927E-05 U	
	Plutonium-238	pCi/L			0.01406 U	
	Plutonium-239/240	pCi/L			2.807E-05 U	
	Technetium-99	pCi/L			-2.2 U	
	Uranium	µg/L			0.2013 U	
	Uranium-233/234	pCi/L			0.05163 U	
	Uranium-235	pCi/L			-0.01059 U	
	Uranium-236	pCi/L			-0.009512 U	
	Uranium-238	pCi/L			0.06865 U	
X700-03G	Americium-241	pCi/L	0.0942 U			
	Neptunium-237	pCi/L	-0.009 U			
	Plutonium-238	pCi/L	0.0178 U			
	Plutonium-239/240	pCi/L	9E-06 U			
	Technetium-99	pCi/L	-1.8 U			
	Uranium	µg/L	0.2883			
	Uranium-233/234	pCi/L	0.0883 U			
	Uranium-235	pCi/L	0 U			
	Uranium-236	pCi/L	0 U			
	Uranium-238	pCi/L	0.0969			
X701-01G	Americium-241	pCi/L	0.0704 U			
	Neptunium-237	pCi/L	-0.163 U			
	Plutonium-238	pCi/L	-0.015 U			
	Plutonium-239/240	pCi/L	0.0148 U			
	Technetium-99	pCi/L	-0.196 U			
	Uranium	µg/L	2.05			
	Uranium-233/234	pCi/L	0.8946			
	Uranium-235	pCi/L	0.0101 U			
	Uranium-236	pCi/L	0.0182 U			
	Uranium-238	pCi/L	0.688			
X701-02G	Americium-241	pCi/L	1E-05 U		0 U	
	Neptunium-237	pCi/L	-0.007 U		-0.006799 U	
	Plutonium-238	pCi/L	-0.022 U		0.02037 U	
	Plutonium-239/240	pCi/L	7E-06 U		0.01357 U	
	Technetium-99	pCi/L	4.03 U		0.108 U	
	Uranium	µg/L	0.106 U		0.5831	
	Uranium-233/234	pCi/L	0.4455		0.4262	
	Uranium-235	pCi/L	1E-05 U		0.01095 U	
	Uranium-236	pCi/L	0 U		0 U	
	Uranium-238	pCi/L	0.0356 U		0.195	
X701-05G	Americium-241	pCi/L	1E-05 U		0.03522 U	
	Neptunium-237	pCi/L	0.0432 U		0.03303 U	
	Plutonium-238	pCi/L	0.0216 U		0.02633 U	
	Plutonium-239/240	pCi/L	-0.007 U		0.01317 U	
	Technetium-99	pCi/L	625		515	
	Uranium	µg/L	107.7		55.48	

**Table 4.8. Results for radionuclides at the X-701B Holding Pond – 2007 (continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X701-05G	Uranium-233/234	pCi/L	200.2		109.1	
	Uranium-235	pCi/L	8.274		5.141	
	Uranium-236	pCi/L	1.582		0.7394	
	Uranium-238	pCi/L	35.43		18.18	
X701-06G	Americium-241	pCi/L	0.009 U		1.121E-05 U	
	Neptunium-237	pCi/L	3E-05 U		-0.01554 U	
	Plutonium-238	pCi/L	0.0142 U		2.328E-05 U	
	Plutonium-239/240	pCi/L	0.0214 U		-0.01551 U	
	Technetium-99	pCi/L	7.52 U		6.02 U	
	Uranium	µg/L	0.6818		1.489	
	Uranium-233/234	pCi/L	0.2285		0.4788	
	Uranium-235	pCi/L	0.0113 U		0.01738 U	
	Uranium-236	pCi/L	0.0101 U		0 U	
	Uranium-238	pCi/L	0.228		0.4989	
	Americium-241	pCi/L			0.03044 U	
X701-08G	Neptunium-237	pCi/L			-0.006962 U	
	Plutonium-238	pCi/L			0.02085 U	
	Plutonium-239/240	pCi/L			0.006956 U	
	Technetium-99	pCi/L			944	
	Uranium	µg/L			0.1647 U	
	Uranium-233/234	pCi/L			0.0858	
	Uranium-235	pCi/L			0.009622 U	
	Uranium-236	pCi/L			0 U	
	Uranium-238	pCi/L			0.0545 U	
	Americium-241	pCi/L	-0.101 U			
	Neptunium-237	pCi/L	-0.014 U			
X701-09G	Plutonium-238	pCi/L	0.0207 U			
	Plutonium-239/240	pCi/L	-0.007 U			
	Technetium-99	pCi/L	727			
	Uranium	µg/L	0.2944 U			
	Uranium-233/234	pCi/L	0.1239			
	Uranium-235	pCi/L	0 U			
	Uranium-236	pCi/L	0 U			
	Uranium-238	pCi/L	0.0989 U			
	Americium-241	pCi/L	-0.008 U		0.01754 U	
	Neptunium-237	pCi/L	-0.021 U		3.613E-05 U	
	Plutonium-238	pCi/L	1E-05 U		0.02885 U	
X701-10G	Plutonium-239/240	pCi/L	-0.014 U		-0.02161 U	
	Technetium-99	pCi/L	0.814 U		2.53 U	
	Uranium	µg/L	0.0861 U		0.1247	
	Uranium-233/234	pCi/L	0.0422 U		0.05632 U	
	Uranium-235	pCi/L	0.0087 U		0.01985 U	
	Uranium-236	pCi/L	0.0078 U		0 U	
	Uranium-238	pCi/L	0.0281 U		0.04014	
	Americium-241	pCi/L	1E-05 U		1.123E-05 U	
	Neptunium-237	pCi/L	-0.030 U		2.752E-05 U	
	Plutonium-238	pCi/L	0.0453 U		0.02062 U	
	Plutonium-239/240	pCi/L	0.0151 U		-0.08231 U	
X701-12G						

**Table 4.8. Results for radionuclides at the X-701B Holding Pond – 2007 (continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X701-12G	Technetium-99	pCi/L	216		198	
	Uranium	µg/L	0.1509 U		0.1378	
	Uranium-233/234	pCi/L	0.0173 U		0 U	
	Uranium-235	pCi/L	-0.011 U		0.01122 U	
	Uranium-236	pCi/L	0 U		-0.01006 U	
	Uranium-238	pCi/L	0.0517 U		0.04537	
X701-13G	Americium-241	pCi/L	0.0338 U		8.086E-06 U	
	Neptunium-237	pCi/L	0.0221 U		0.007301 U	
	Plutonium-238	pCi/L	0.0147 U		0.007273 U	
	Plutonium-239/240	pCi/L	0.0073 U		7.266E-06 U	
	Technetium-99	pCi/L	168		170	
	Uranium	µg/L	0.0897 U		0.2148	
X701-14G	Uranium-233/234	pCi/L	0.0756 U		0.0476	
	Uranium-235	pCi/L	9E-06 U		0.009786 U	
	Uranium-236	pCi/L	-0.008 U		0.008787 U	
	Uranium-238	pCi/L	0.0302 U		0.07125	
	Americium-241	pCi/L	0.0293 U		0.02971 U	
	Neptunium-237	pCi/L	0.023 U		0.007149 U	
X701-15G	Plutonium-238	pCi/L	0.0305 U		1.417E-05 U	
	Plutonium-239/240	pCi/L	-0.030 U		0.007093 U	
	Technetium-99	pCi/L	209		235	
	Uranium	µg/L	0.2747		0.1676 U	
	Uranium-233/234	pCi/L	0.1527		0.0246 U	
	Uranium-235	pCi/L	0.0094 U		-0.01009 U	
X701-16G	Uranium-236	pCi/L	0.0085 U		0 U	
	Uranium-238	pCi/L	0.0914		0.05723 U	
	Americium-241	pCi/L	0.0324 U		0.01914 U	
	Neptunium-237	pCi/L	0.0232 U		1.472E-05 U	
	Plutonium-238	pCi/L	0.0231 U		0.02939 U	
	Plutonium-239/240	pCi/L	0.0077 U		2.202E-05 U	
X701-18G	Technetium-99	pCi/L	-0.272 U		-2.01 U	
	Uranium	µg/L	-4E-05 U		0.2046 U	
	Uranium-233/234	pCi/L	0.0548 U		0.1443	
	Uranium-235	pCi/L	0 U		0.01047 U	
	Uranium-236	pCi/L	-0.010 U		0.009399 U	
	Uranium-238	pCi/L	4E-05 U		0.06778 U	
X701-16G	Americium-241	pCi/L	9E-06 U		-0.008505 U	
	Neptunium-237	pCi/L	-0.072 U		-0.04415 U	
	Plutonium-238	pCi/L	0.0080 U		1.469E-05 U	
	Plutonium-239/240	pCi/L	2E-05 U		-0.03671 U	
	Technetium-99	pCi/L	2.98 U		0.0812 U	
	Uranium	µg/L	0.1553 U		0.7854	
X701-16G	Uranium-233/234	pCi/L	0.0178 U		0.183	
	Uranium-235	pCi/L	-0.011 U		0 U	
	Uranium-236	pCi/L	0 U		0.01126 U	
	Uranium-238	pCi/L	0.0532 U		0.2638	
	Americium-241	pCi/L			-0.008302 U	
	Neptunium-237	pCi/L			-0.05324 U	

**Table 4.8. Results for radionuclides at the X-701B Holding Pond – 2007 (continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X701-18G	Plutonium-238	pCi/L			0.00667 U	
	Plutonium-239/240	pCi/L			-0.01328 U	
	Technetium-99	pCi/L			-2.22 U	
	Uranium	µg/L			0.1267 U	
	Uranium-233/234	pCi/L			0.03424 U	
	Uranium-235	pCi/L			0 U	
	Uranium-236	pCi/L			-0.01892 U	
	Uranium-238	pCi/L			0.04266 U	
X701-19G	Americium-241	pCi/L	0.0256 U		0.008723 U	
	Neptunium-237	pCi/L	-0.015 U		-0.03151 U	
	Plutonium-238	pCi/L	0.0074 U		0.01573 U	
	Plutonium-239/240	pCi/L	1E-05 U		-0.01571 U	
	Technetium-99	pCi/L	1.01 U		-6.69 U	
	Uranium	µg/L	0.0539 U		0.191 U	
	Uranium-233/234	pCi/L	0.0815 U		0.09187 U	
	Uranium-235	pCi/L	0 U		0 U	
	Uranium-236	pCi/L	0.0100 U		0 U	
	Uranium-238	pCi/L	0.0181 U		0.06417 U	
X701-20G	Americium-241	pCi/L	0.028 U			
	Neptunium-237	pCi/L	-0.023 U			
	Plutonium-238	pCi/L	0.0157 U			
	Plutonium-239/240	pCi/L	0.0078 U			
	Technetium-99	pCi/L	110			
	Uranium	µg/L	-0.008 U			
	Uranium-233/234	pCi/L	0.0242 U			
	Uranium-235	pCi/L	-0.03 U			
	Uranium-236	pCi/L	0.0089 U			
	Uranium-238	pCi/L	4E-05 U			
X701-21G	Americium-241	pCi/L	0.0094 U		8.561E-06 U	
	Neptunium-237	pCi/L	-0.050 U		-0.08963 U	
	Plutonium-238	pCi/L	0.0286 U		0.007482 U	
	Plutonium-239/240	pCi/L	0.0642 U		1.491E-05 U	
	Technetium-99	pCi/L	40.8		33.3	
	Uranium	µg/L	0.2745 U		0.1847 U	
	Uranium-233/234	pCi/L	0.0916 U		0.07995 U	
	Uranium-235	pCi/L	0.0103 U		0 U	
	Uranium-236	pCi/L	0 U		0 U	
	Uranium-238	pCi/L	0.0913 U		0.06205 U	
X701-23G	Americium-241	pCi/L			0.01745 U	
	Neptunium-237	pCi/L			0.02112 U	
	Plutonium-238	pCi/L			0.02808 U	
	Plutonium-239/240	pCi/L			0.01404 U	
	Technetium-99	pCi/L			-4.62 U	
	Uranium	µg/L			0.1373 U	
	Uranium-233/234	pCi/L			0.0000277 U	
	Uranium-235	pCi/L			0 U	
	Uranium-236	pCi/L			0 U	
	Uranium-238	pCi/L			0.04612 U	

**Table 4.8. Results for radionuclides at the X-701B Holding Pond – 2007 (continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X701-24G	Americium-241	pCi/L	-0.007 U		0.028 U	
	Neptunium-237	pCi/L	-0.021 U		-0.06434 U	
	Plutonium-238	pCi/L	0.0138 U		1.426E-05 U	
	Plutonium-239/240	pCi/L	-0.014 U		-0.007123 U	
	Technetium-99	pCi/L	-0.45 U		4.87 U	
	Uranium	µg/L	0.117 U		0.2635 U	
	Uranium-233/234	pCi/L	0.0566 U		0.1242 U	
	Uranium-235	pCi/L	-0.01 U		0 U	
	Uranium-236	pCi/L	-0.018 U		0.009819 U	
	Uranium-238	pCi/L	0.0403 U		0.0885 U	
X701-25G	Americium-241	pCi/L	0.0294 U		-0.01063 U	
	Neptunium-237	pCi/L	-0.023 U		-0.007095 U	
	Plutonium-238	pCi/L	0.0154 U		0.02838 U	
	Plutonium-239/240	pCi/L	-0.031 U		0.02838 U	
	Technetium-99	pCi/L	-5.34 U		-3.22 U	
	Uranium	µg/L	-0.019 U		0.2848	
	Uranium-233/234	pCi/L	0.0483 U		0.009539 U	
	Uranium-235	pCi/L	0.0199 U		0.01171 U	
	Uranium-236	pCi/L	0 U		-0.0105 U	
	Uranium-238	pCi/L	-0.008 U		0.09472	
X701-30G	Americium-241	pCi/L	0.0171 U			
	Neptunium-237	pCi/L	-0.007 U			
	Plutonium-238	pCi/L	7E-06 U			
	Plutonium-239/240	pCi/L	2E-05 U			
	Technetium-99	pCi/L	0.634 U			
	Uranium	µg/L	0.0208 U			
	Uranium-233/234	pCi/L	-0.008 U			
	Uranium-235	pCi/L	-0.01 U			
	Uranium-236	pCi/L	-0.009 U			
	Uranium-238	pCi/L	0.0079 U			
X701-31G	Americium-241	pCi/L	0.0393 U			
	Neptunium-237	pCi/L	7E-06 U			
	Plutonium-238	pCi/L	0.0137 U			
	Plutonium-239/240	pCi/L	0.0069 U			
	Technetium-99	pCi/L	-3.04 U			
	Uranium	µg/L	0.0956 U			
	Uranium-233/234	pCi/L	0.0166 U			
	Uranium-235	pCi/L	-0.010 U			
	Uranium-236	pCi/L	-0.018 U			
	Uranium-238	pCi/L	0.0331 U			
X701-38G	Americium-241	pCi/L			0.01047 U	
	Neptunium-237	pCi/L			0.006941 U	
	Plutonium-238	pCi/L			0.02077 U	
	Plutonium-239/240	pCi/L			0.02077 U	
	Technetium-99	pCi/L			-6.21 U	
	Uranium	µg/L			-0.04244 U	
	Uranium-233/234	pCi/L			0.04271	
	Uranium-235	pCi/L			0.03162 U	

**Table 4.8. Results for radionuclides at the X-701B Holding Pond – 2007 (continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X701-38G	Uranium-236	pCi/L			-0.009453 U	
	Uranium-238	pCi/L			-0.01703 U	
X701-48G	Americium-241	pCi/L			0.05235 U	
	Neptunium-237	pCi/L			-0.05865 U	
	Plutonium-238	pCi/L			0.01465 U	
	Plutonium-239/240	pCi/L			-0.01462 U	
	Technetium-99	pCi/L			-4.44 U	
	Uranium	µg/L			0.05781 U	
	Uranium-233/234	pCi/L			0.04879 U	
	Uranium-235	pCi/L			0 U	
	Uranium-236	pCi/L			-0.01079 U	
	Uranium-238	pCi/L			0.01948 U	
X701-50B	Americium-241	pCi/L			0.03644 U	
	Neptunium-237	pCi/L			2.052E-05 U	
	Plutonium-238	pCi/L			0.01367 U	
	Plutonium-239/240	pCi/L			-0.01363 U	
	Technetium-99	pCi/L			-5.29 U	
	Uranium	µg/L			0.1783	
	Uranium-233/234	pCi/L			0.1886	
	Uranium-235	pCi/L			0 U	
	Uranium-236	pCi/L			0 U	
	Uranium-238	pCi/L			0.0599	
X701-58B	Americium-241	pCi/L			-0.01939 U	
	Neptunium-237	pCi/L			-0.02794 U	
	Plutonium-238	pCi/L			0.02094 U	
	Plutonium-239/240	pCi/L			0.006984 U	
	Technetium-99	pCi/L			-4.46 U	
	Uranium	µg/L			0.4918	
	Uranium-233/234	pCi/L			0.5175	
	Uranium-235	pCi/L			0.009682 U	
	Uranium-236	pCi/L			0.008685 U	
	Uranium-238	pCi/L			0.1643	
X701-61B	Americium-241	pCi/L			1.429E-05 U	
	Neptunium-237	pCi/L			-0.04397 U	
	Plutonium-238	pCi/L			0.03513 U	
	Plutonium-239/240	pCi/L			8.771E-06 U	
	Technetium-99	pCi/L			0.323 U	
	Uranium	µg/L			0.3802	
	Uranium-233/234	pCi/L			0.2021	
	Uranium-235	pCi/L			-0.03734 U	
	Uranium-236	pCi/L			1.118E-05 U	
	Uranium-238	pCi/L			0.1311	
X701-127G	Americium-241	pCi/L	-0.008 U		0.008917 U	
	Neptunium-237	pCi/L	0.0062 U		-0.01419 U	
	Plutonium-238	pCi/L	0.0185 U		0.04968 U	
	Plutonium-239/240	pCi/L	-0.012 U		-0.007082 U	
	Technetium-99	pCi/L	16.1		11.6	
	Uranium	µg/L	0.3978		0.1591 U	

**Table 4.8. Results for radionuclides at the X-701B Holding Pond – 2007 (continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X701-127G	Uranium-233/234	pCi/L	0.2178		-0.008809 U	
	Uranium-235	pCi/L	0 U		0 U	
	Uranium-236	pCi/L	-0.009 U		0.02957 U	
	Uranium-238	pCi/L	0.1337		0.05331 U	
X701-128G	Americium-241	pCi/L	0.0248 U		1.532E-05 U	
	Neptunium-237	pCi/L	-0.014 U		-0.07088 U	
	Plutonium-238	pCi/L	0.0141 U		-0.007074 U	
	Plutonium-239/240	pCi/L	-0.021 U		0.007096 U	
	Technetium-99	pCi/L	6.3 U		2.38 U	
	Uranium	µg/L	0.2042 U		0.3183	
	Uranium-233/234	pCi/L	0.1057		0.1327	
	Uranium-235	pCi/L	0.0093 U		0.01091 U	
	Uranium-236	pCi/L	0 U		0.009798 U	
	Uranium-238	pCi/L	0.0678 U		0.1059	
X701-BW1G	Americium-241	pCi/L			0.008167 U	
	Neptunium-237	pCi/L			0.03618 U	
	Plutonium-238	pCi/L			0.02885 U	
	Plutonium-239/240	pCi/L			-0.007205 U	
	Technetium-99	pCi/L			-1.91 U	
	Uranium	µg/L			0.2369	
	Uranium-233/234	pCi/L			0.05802 U	
	Uranium-235	pCi/L			0 U	
	Uranium-236	pCi/L			0 U	
	Uranium-238	pCi/L			0.0796	
X701-BW2G	Americium-241	pCi/L	0.0096 U			
	Neptunium-237	pCi/L	0.0153 U			
	Plutonium-238	pCi/L	0.0381 U			
	Plutonium-239/240	pCi/L	0.0229 U			
	Technetium-99	pCi/L	409			
	Uranium	µg/L	0.2287			
	Uranium-233/234	pCi/L	0.0312 U			
	Uranium-235	pCi/L	-0.01 U			
	Uranium-236	pCi/L	0 U			
	Uranium-238	pCi/L	0.0777			
X701-BW4G	Americium-241	pCi/L	-0.009 U		0.009999 U	
	Neptunium-237	pCi/L	-0.020 U		0.007421 U	
	Plutonium-238	pCi/L	-0.007 U		0.02929 U	
	Plutonium-239/240	pCi/L	0.0068 U		3.656E-05 U	
	Technetium-99	pCi/L	335		301	
	Uranium	µg/L	0.1078		0.1017 U	
	Uranium-233/234	pCi/L	0.0213 U		0.04279	
	Uranium-235	pCi/L	0.0088 U		0 U	
	Uranium-236	pCi/L	8E-06 U		0 U	
	Uranium-238	pCi/L	0.0355		0.03417 U	



**Table 4.9. Results for chromium at the X-633 Pumphouse/Cooling Towers Area – 2007**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X633-07G	Chromium	µg/L		690		500
X633-PZ04G	Chromium	µg/L		16		31

**Table 4.10. Volatile organic compounds detected at the X-616 Chromium Sludge Surface Impoundments – 2007**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X616-02G	Methylene chloride	µg/L	0.5 BJ			
X616-09G	1,1,1-Trichloroethane	µg/L	4.3			
	1,1-Dichloroethane	µg/L	1.8 J			
	1,1-Dichloroethene	µg/L	20			
	cis-1,2-Dichloroethene	µg/L	1.6 J			
	Methylene chloride	µg/L	0.48 BJ			
	Trichloroethene	µg/L	13			
X616-10G	Methylene chloride	µg/L	0.54 BJ			
X616-13G	1,1,1-Trichloroethane	µg/L	0.83 J			
	1,1-Dichloroethane	µg/L	0.26 J			
	1,1-Dichloroethene	µg/L	2.9			
	Methylene chloride	µg/L	0.51 BJ			
	Trichloroethene	µg/L	0.73 J			
X616-14G	1,1,1-Trichloroethane	µg/L	0.48 J			
	1,1-Dichloroethene	µg/L	1.5 J			
	Acetone	µg/L	2 BJ			
	Methylene chloride	µg/L	0.47 BJ			
	Trichlorofluoromethane	µg/L	0.46 J			
X616-16G	cis-1,2-Dichloroethene	µg/L	2.6			
	Methylene chloride	µg/L	0.44 BJ			
	Trichloroethene	µg/L	2.3			
X616-17G	Acetone	µg/L	11			
X616-19B	Acetone	µg/L	100			
X616-20B	1,1-Dichloroethane	µg/L	0.47 J			
	1,1-Dichloroethene	µg/L	0.33 J			
	cis-1,2-Dichloroethene	µg/L	0.43 J			
	Trichloroethene	µg/L	9.6			
X616-21G	Acetone	µg/L	3.5 J			
X616-25G	Acetone	µg/L	7.8 J			
	cis-1,2-Dichloroethene	µg/L	0.42 J			
	Trichloroethene	µg/L	0.78 J			
X616-28B	1,1,1-Trichloroethane	µg/L	0.87 J			
	1,1-Dichloroethene	µg/L	0.61 J			
	Trichloroethene	µg/L	0.23 J			

**Table 4.11. Results for chromium at the X-616 Chromium Sludge Surface Impoundments – 2007**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X616-02G	Chromium	µg/L	0.95 B			
X616-05G	Chromium	µg/L	820			
X616-09G	Chromium	µg/L	6.9			
X616-10G	Chromium	µg/L	2.5			
X616-13G	Chromium	µg/L	2.8			
X616-14G	Chromium	µg/L	1.9 B			
X616-16G	Chromium	µg/L	1.6 B			
X616-17G	Chromium	µg/L	9.8			
X616-19B	Chromium	µg/L	12			
X616-20B	Chromium	µg/L	1.5 B			
X616-21G	Chromium	µg/L	3			
X616-22G	Chromium	µg/L	1.3 B			
X616-24B	Chromium	µg/L	2			
X616-25G	Chromium	µg/L	5.1			
X616-26G	Chromium	µg/L	25			
X616-28B	Chromium	µg/L	1.8 B			

**Table 4.12. Results for radionuclides at the X-616 Chromium Sludge Surface Impoundments – 2007**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X616-02G	Americium-241	pCi/L	0.0451 U			
	Neptunium-237	pCi/L	-0.040 U			
	Plutonium-238	pCi/L	0.0160 U			
	Plutonium-239/240	pCi/L	0 U			
	Technetium-99	pCi/L	-1.72 U			
	Uranium	µg/L	2.902			
	Uranium-233/234	pCi/L	1.359			
	Uranium-235	pCi/L	0.0458			
	Uranium-236	pCi/L	0.0247 U			
	Uranium-238	pCi/L	0.9709			
X616-05G	Americium-241	pCi/L	0 U			
	Neptunium-237	pCi/L	-0.068 U			
	Plutonium-238	pCi/L	0.0075 U			
	Plutonium-239/240	pCi/L	0.0151 U			
	Technetium-99	pCi/L	-3.14 U			
	Uranium	µg/L	0.4891			
	Uranium-233/234	pCi/L	0.1933			
	Uranium-235	pCi/L	0 U			
	Uranium-236	pCi/L	0 U			
	Uranium-238	pCi/L	0.1643			
X616-09G	Americium-241	pCi/L	0.0191 U			
	Neptunium-237	pCi/L	-0.008 U			
	Plutonium-238	pCi/L	2E-05 U			
	Plutonium-239/240	pCi/L	-0.008 U			
	Technetium-99	pCi/L	-1.31 U			
	Uranium	µg/L	2.17			
	Uranium-233/234	pCi/L	0.9634			
	Uranium-235	pCi/L	0.0281 U			
	Uranium-236	pCi/L	0 U			
	Uranium-238	pCi/L	0.7268			
X616-10G	Americium-241	pCi/L	0.0173 U			
	Neptunium-237	pCi/L	2E-05 U			
	Plutonium-238	pCi/L	0.0241 U			
	Plutonium-239/240	pCi/L	0.0241 U			
	Technetium-99	pCi/L	-4.54 U			
	Uranium	µg/L	0.8964			
	Uranium-233/234	pCi/L	0.3461			
	Uranium-235	pCi/L	0.0093 U			
	Uranium-236	pCi/L	0.0083 U			
	Uranium-238	pCi/L	0.3003			
X616-13G	Americium-241	pCi/L	0.0768 U			
	Neptunium-237	pCi/L	-0.017 U			
	Plutonium-238	pCi/L	3E-05 U			
	Plutonium-239/240	pCi/L	-0.017 U			
	Technetium-99	pCi/L	-3.52 U			
	Uranium	µg/L	0.8285			
	Uranium-233/234	pCi/L	0.3856			
	Uranium-235	pCi/L	0.0111 U			

**Table 4.12. Results for radionuclides at the X-616 Chromium Sludge Surface Impoundments – 2007  
(continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X616-13G	Uranium-236	pCi/L	0 U			
	Uranium-238	pCi/L	0.2774			
X616-14G	Americium-241	pCi/L	2E-05 U			
	Neptunium-237	pCi/L	0.0138 U			
	Plutonium-238	pCi/L	0.0275 U			
	Plutonium-239/240	pCi/L	-0.014 U			
	Technetium-99	pCi/L	-4.47 U			
	Uranium	µg/L	1.626			
	Uranium-233/234	pCi/L	0.6894			
	Uranium-235	pCi/L	0.0177 U			
	Uranium-236	pCi/L	0.0159 U			
	Uranium-238	pCi/L	0.5447			
X616-16G	Americium-241	pCi/L	4E-05 U			
	Neptunium-237	pCi/L	-0.015 U			
	Plutonium-238	pCi/L	7E-06 U			
	Plutonium-239/240	pCi/L	0.0146 U			
	Technetium-99	pCi/L	-3.51 U			
	Uranium	µg/L	0.176 U			
	Uranium-233/234	pCi/L	0.1851			
	Uranium-235	pCi/L	0 U			
	Uranium-236	pCi/L	0 U			
	Uranium-238	pCi/L	0.0591 U			
X616-17G	Americium-241	pCi/L	0.0303 U			
	Neptunium-237	pCi/L	-0.031 U			
	Plutonium-238	pCi/L	-0.008 U			
	Plutonium-239/240	pCi/L	-0.008 U			
	Technetium-99	pCi/L	-5.23 U			
	Uranium	µg/L	0.6932			
	Uranium-233/234	pCi/L	0.2243			
	Uranium-235	pCi/L	0.0184 U			
	Uranium-236	pCi/L	0.0083 U			
	Uranium-238	pCi/L	0.2313			
X616-19B	Americium-241	pCi/L	0.0105 U			
	Neptunium-237	pCi/L	-0.021 U			
	Plutonium-238	pCi/L	0.0205 U			
	Plutonium-239/240	pCi/L	0.0068 U			
	Technetium-99	pCi/L	-2.59 U			
	Uranium	µg/L	0.7466			
	Uranium-233/234	pCi/L	0.4596			
	Uranium-235	pCi/L	0 U			
	Uranium-236	pCi/L	0 U			
	Uranium-238	pCi/L	0.2509			
X616-20B	Americium-241	pCi/L	0.0580 U			
	Neptunium-237	pCi/L	0.0073 U			
	Plutonium-238	pCi/L	7E-06 U			
	Plutonium-239/240	pCi/L	0.0145 U			
	Technetium-99	pCi/L	-6.91 U			
	Uranium	µg/L	0.4661			

**Table 4.12. Results for radionuclides at the X-616 Chromium Sludge Surface Impoundments – 2007  
(continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X616-20B	Uranium-233/234	pCi/L	0.2471			
	Uranium-235	pCi/L	0.0174 U			
	Uranium-236	pCi/L	0.0078 U			
	Uranium-238	pCi/L	0.155			
X616-21G	Americium-241	pCi/L	-0.009 U			
	Neptunium-237	pCi/L	1E-05 U			
	Plutonium-238	pCi/L	1E-05 U			
	Plutonium-239/240	pCi/L	-0.007 U			
	Technetium-99	pCi/L	0.114 U			
	Uranium	µg/L	0.5699			
	Uranium-233/234	pCi/L	0.3358			
	Uranium-235	pCi/L	0 U			
	Uranium-236	pCi/L	0 U			
	Uranium-238	pCi/L	0.1915			
X616-22G	Americium-241	pCi/L	0.0296 U			
	Neptunium-237	pCi/L	-0.021 U			
	Plutonium-238	pCi/L	0.0142 U			
	Plutonium-239/240	pCi/L	-0.014 U			
	Technetium-99	pCi/L	-6.66 U			
	Uranium	µg/L	0.7771			
	Uranium-233/234	pCi/L	0.4108			
	Uranium-235	pCi/L	0.0097 U			
	Uranium-236	pCi/L	0.0088 U			
	Uranium-238	pCi/L	0.2602			
X616-24B	Americium-241	pCi/L	0.0442 U			
	Neptunium-237	pCi/L	-0.04 U			
	Plutonium-238	pCi/L	0.0158 U			
	Plutonium-239/240	pCi/L	-0.047 U			
	Technetium-99	pCi/L	-7.54 U			
	Uranium	µg/L	0.0946 U			
	Uranium-233/234	pCi/L	0.2241			
	Uranium-235	pCi/L	0.0095 U			
	Uranium-236	pCi/L	0.0086 U			
	Uranium-238	pCi/L	0.0309 U			
X616-25G	Americium-241	pCi/L	0.0379 U			
	Neptunium-237	pCi/L	-0.015 U			
	Plutonium-238	pCi/L	-0.015 U			
	Plutonium-239/240	pCi/L	0.0149 U			
	Technetium-99	pCi/L	-6.15 U			
	Uranium	µg/L	1.34			
	Uranium-233/234	pCi/L	0.4824			
	Uranium-235	pCi/L	0.0099 U			
	Uranium-236	pCi/L	0.0089 U			
	Uranium-238	pCi/L	0.4493			
X616-26G	Americium-241	pCi/L	-0.015 U			
	Neptunium-237	pCi/L	0 U			
	Plutonium-238	pCi/L	0 U			
	Plutonium-239/240	pCi/L	0.0302 U			

**Table 4.12. Results for radionuclides at the X-616 Chromium Sludge Surface Impoundments – 2007  
(continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X616-26G	Technetium-99	pCi/L	-10.2 U			
	Uranium	µg/L	1.779			
	Uranium-233/234	pCi/L	0.7184			
	Uranium-235	pCi/L	0.0187 U			
	Uranium-236	pCi/L	0.0084 U			
	Uranium-238	pCi/L	0.5962			
X616-28B	Americium-241	pCi/L	0.0184 U			
	Neptunium-237	pCi/L	-0.01 U			
	Plutonium-238	pCi/L	0 U			
	Plutonium-239/240	pCi/L	-0.038 U			
	Technetium-99	pCi/L	-4.46 U			
	Uranium	µg/L	1.282			
	Uranium-233/234	pCi/L	1.088			
	Uranium-235	pCi/L	0 U			
	Uranium-236	pCi/L	0.0092 U			
	Uranium-238	pCi/L	0.4308			

**Table 4.13. Volatile organic compounds detected at the X-740 Waste Oil Handling Facility – 2007**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X740-01G	4-Methyl-2-pentanone	µg/L		1.4 J		
	Acetone	µg/L		4.7 J		
X740-02G	1,1,1-Trichloroethane	µg/L				6.9
	1,1-Dichloroethane	µg/L				4.4
	1,1-Dichloroethene	µg/L				6.7
	Trichloroethene	µg/L				6.3
X740-03G	1,1,1-Trichloroethane	µg/L		190		180
	1,1-Dichloroethane	µg/L		48		52 J
	1,1-Dichloroethene	µg/L		1100		1600
	1,2-Dichloroethane	µg/L		220		260
	Chloroform	µg/L		16 J		20 J
	cis-1,2-Dichloroethene	µg/L				20 J
	Tetrachloroethene	µg/L		180		210
	Trichloroethene	µg/L		6300		7600
X740-04G	1,1,1-Trichloroethane	µg/L		0.74 J		
	1,1-Dichloroethane	µg/L		0.31 J		
	1,1-Dichloroethene	µg/L		0.81 J		
	1,2-Dichloroethane	µg/L		0.32 J		
	Acetone	µg/L		13		
	cis-1,2-Dichloroethene	µg/L		0.42 J		
	Trichloroethene	µg/L		5.6		
X740-08G	1,1,1-Trichloroethane	µg/L		1.5 J		
	1,1-Dichloroethane	µg/L		12		
	1,1-Dichloroethene	µg/L		1.8 J		
	cis-1,2-Dichloroethene	µg/L		20		
	trans-1,2-Dichloroethene	µg/L		5.8		
	Trichloroethene	µg/L		13		
X740-09B	1,1,1-Trichloroethane	µg/L		46		2.5 J
	1,1-Dichloroethane	µg/L		11 J		11
	1,1-Dichloroethene	µg/L		400		300
	1,2-Dichloroethane	µg/L		81		55
	Acetone	µg/L		67 U		8.7 J
	Chloroform	µg/L		6.1 J		0.84 J
	cis-1,2-Dichloroethene	µg/L		6.2 J		8.3
	Methylene chloride	µg/L		33 U		1.8 J
	Tetrachloroethene	µg/L		35		28
	Trichloroethene	µg/L		2000		1300
X740-10G	1,1,1-Trichloroethane	µg/L		11		12
	1,1-Dichloroethane	µg/L		5.2		6.5
	1,1-Dichloroethene	µg/L		53		70
	1,2-Dichloroethane	µg/L		8.5		13
	Acetone	µg/L		10 U		3.8 J
	Chloroform	µg/L		0.68 J		1 J
	cis-1,2-Dichloroethene	µg/L		2.4		2.7
	Tetrachloroethene	µg/L		4.5		6.3
	Trichloroethene	µg/L		240		340
X740-11G	1,1,1-Trichloroethane	µg/L		0.75 J		2 U
	1,1-Dichloroethane	µg/L		0.34 J		2 U



**Table 4.13. Volatile organic compounds detected at the X-740 Waste Oil Handling Facility – 2007  
(continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X740-11G	1,1-Dichloroethene	µg/L		6.4		1.4 J
	1,2-Dichloroethane	µg/L		1.3 J		2 U
	cis-1,2-Dichloroethene	µg/L		0.46 J		2 U
	Trichloroethene	µg/L		16		4.1
X740-14B	Trichloroethene	µg/L		0.74 J		0.52 J
X740-PZ10G	1,1,1-Trichloroethane	µg/L		2.9		3.6
	1,1-Dichloroethane	µg/L		0.61 J		0.49 J
	1,1-Dichloroethene	µg/L		7.1		8.5
	1,2-Dichloroethane	µg/L		1.6 J		2
	Chloroform	µg/L		2 U		0.19 J
	cis-1,2-Dichloroethene	µg/L		0.52 J		2 U
	Tetrachloroethene	µg/L		0.98 J		1 J
	Trichloroethene	µg/L		56		56
	1,1,1-Trichloroethane	µg/L		4.2		4.2
	1,1-Dichloroethane	µg/L		0.96 J		1 J
	1,1-Dichloroethene	µg/L		25		26
	1,2-Dichloroethane	µg/L		6.7		6.3
X740-PZ12G	Chloroform	µg/L		0.56 J		0.62 J
	cis-1,2-Dichloroethene	µg/L		0.61 J		0.24 J
	Tetrachloroethene	µg/L		1 J		1.2 J
	Trichloroethene	µg/L		140		130
	1,1,1-Trichloroethane	µg/L		5.1		1.8 J
	1,1-Dichloroethane	µg/L		1.4 J		0.58 J
	1,1-Dichloroethene	µg/L		41		17
	1,2-Dichloroethane	µg/L		9.1		3.5
X740-PZ14G	Chloroform	µg/L		0.74 J		0.35 J
	cis-1,2-Dichloroethene	µg/L		0.75 J		2 U
	Tetrachloroethene	µg/L		0.89 J		0.35 J
	Trichloroethene	µg/L		170		55
	1,1,1-Trichloroethane	µg/L		2.4		2.9
	1,1-Dichloroethane	µg/L		0.51 J		0.69 J
	1,1-Dichloroethene	µg/L		11		13
	1,2-Dichloroethane	µg/L		3.3		4.3
X740-PZ17G	Acetone	µg/L		10 U		1.9 J
	Chloroform	µg/L		0.32 J		0.37 J
	cis-1,2-Dichloroethene	µg/L		0.47 J		2 U
	Trichloroethene	µg/L		39		39

**Table 4.14. Results for radionuclides at the X-740 Waste Oil Handling Facility – 2007**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X740-01G	Americium-241	pCi/L		0.04502 U		
	Neptunium-237	pCi/L		-0.0168 U		
	Plutonium-238	pCi/L		0.03348 U		
	Plutonium-239/240	pCi/L		0.01675 U		
	Technetium-99	pCi/L		6.67 U		
	Uranium	µg/L		0.06626 U		
	Uranium-233/234	pCi/L		0.01546 U		
	Uranium-235	pCi/L		-0.0095 U		
	Uranium-236	pCi/L		0 U		
	Uranium-238	pCi/L		0.02311 U		
X740-02G	Americium-241	pCi/L				0.02519 U
	Neptunium-237	pCi/L				7.76E-06 U
	Plutonium-238	pCi/L				0.01549 U
	Plutonium-239/240	pCi/L				0.01549 U
	Technetium-99	pCi/L				-0.495 U
	Uranium	µg/L				10.77
	Uranium-233/234	pCi/L				4.276
	Uranium-235	pCi/L				0.1957
	Uranium-236	pCi/L				-0.00878 U
	Uranium-238	pCi/L				3.602
X740-03G	Americium-241	pCi/L		0.00750 U		-0.01049 U
	Neptunium-237	pCi/L		-0.0132 U		0.00632 U
	Plutonium-238	pCi/L		0.0132 U		6.28E-06 U
	Plutonium-239/240	pCi/L		0.00662 U		0.01885 U
	Technetium-99	pCi/L		5.33 U		-6.54 U
	Uranium	µg/L		6.843		4.642
	Uranium-233/234	pCi/L		2.873		2.036
	Uranium-235	pCi/L		0.1128		0.099
	Uranium-236	pCi/L		0.02532 U		0.008097 U
	Uranium-238	pCi/L		2.289		1.551
X740-04G	Americium-241	pCi/L		0.02852 U		
	Neptunium-237	pCi/L		-0.0271 U		
	Plutonium-238	pCi/L		-0.0067 U		
	Plutonium-239/240	pCi/L		0.01352 U		
	Technetium-99	pCi/L		-3.35 U		
	Uranium	µg/L		1.743		
	Uranium-233/234	pCi/L		0.6478		
	Uranium-235	pCi/L		0.00951 U		
	Uranium-236	pCi/L		-0.0171 U		
	Uranium-238	pCi/L		0.5849		
X740-05G	Americium-241	pCi/L				0.01984 U
	Neptunium-237	pCi/L				-0.00756 U
	Plutonium-238	pCi/L				0.01511 U
	Plutonium-239/240	pCi/L				-0.00753 U
	Technetium-99	pCi/L				-2 U
	Uranium	µg/L				2.902
	Uranium-233/234	pCi/L				0.9121
	Uranium-235	pCi/L				0.03901 U

**Table 4.14. Results for radionuclides at the X-740 Waste Oil Handling Facility – 2007 (continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X740-05G	Uranium-236	pCi/L				0.006185 U
	Uranium-238	pCi/L				0.9715
X740-06G	Americium-241	pCi/L				0.017 U
	Neptunium-237	pCi/L				-0.04275 U
	Plutonium-238	pCi/L				0.008564 U
	Plutonium-239/240	pCi/L				-0.0683 U
	Technetium-99	pCi/L				-3.18 U
	Uranium	µg/L				0.2652
	Uranium-233/234	pCi/L				0.1648
	Uranium-235	pCi/L				0 U
	Uranium-236	pCi/L				0 U
	Uranium-238	pCi/L				0.08911
X740-07B	Americium-241	pCi/L				-0.00771 U
	Neptunium-237	pCi/L				-0.02027 U
	Plutonium-238	pCi/L				0 U
	Plutonium-239/240	pCi/L				-0.06064 U
	Technetium-99	pCi/L				-4.69 U
	Uranium	µg/L				-0.04478 U
	Uranium-233/234	pCi/L				-0.06786 U
	Uranium-235	pCi/L				-0.01675 U
	Uranium-236	pCi/L				0 U
	Uranium-238	pCi/L				-0.01355 U
X740-08G	Americium-241	pCi/L		0.03288 U		
	Neptunium-237	pCi/L		-0.0747 U		
	Plutonium-238	pCi/L		0.02036 U		
	Plutonium-239/240	pCi/L		0.00678 U		
	Technetium-99	pCi/L		-5.02 U		
	Uranium	µg/L		2.977		
	Uranium-233/234	pCi/L		1.285		
	Uranium-235	pCi/L		0.02007 U		
	Uranium-236	pCi/L		0 U		
	Uranium-238	pCi/L		0.9985		
X740-09B	Americium-241	pCi/L		0.0245 U		0.01216 U
	Neptunium-237	pCi/L		-0.0243 U		3.62E-05 U
	Plutonium-238	pCi/L		0.0162 U		0.02887 U
	Plutonium-239/240	pCi/L		-0.0162 U		-0.01441 U
	Technetium-99	pCi/L		-6.4 U		-5.03 U
	Uranium	µg/L		0.4691		0.2759
	Uranium-233/234	pCi/L		0.2481		0.2832
	Uranium-235	pCi/L		0 U		0.008734 U
	Uranium-236	pCi/L		0.00833 U		0.007842 U
	Uranium-238	pCi/L		0.1576		0.09187
X740-10G	Americium-241	pCi/L		0.03175 U		-0.00940 U
	Neptunium-237	pCi/L		-0.0369 U		-0.03072 U
	Plutonium-238	pCi/L		0.03695 U		0.006151 U
	Plutonium-239/240	pCi/L		-0.0295 U		6.13E-06 U
	Technetium-99	pCi/L		-5.99 U		-5.72 U
	Uranium	µg/L		2.551		2.307

**Table 4.14. Results for radionuclides at the X-740 Waste Oil Handling Facility – 2007 (continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X740-10G	Uranium-233/234	pCi/L		1.046		0.8796
	Uranium-235	pCi/L		0.03609 U		7.91E-06 U
	Uranium-236	pCi/L		0.0243 U		0.007111 U
	Uranium-238	pCi/L		0.854		0.7753
X740-11G	Americium-241	pCi/L		-0.0077 U		0.01257 U
	Neptunium-237	pCi/L		0.02086 U		-0.02184 U
	Plutonium-238	pCi/L		0.01387 U		0.02907 U
	Plutonium-239/240	pCi/L		0.00694 U		-0.01452 U
	Technetium-99	pCi/L		7.11 U		0.678 U
	Uranium	µg/L		0.6015		0.426
	Uranium-233/234	pCi/L		0.1868		0.1663
	Uranium-235	pCi/L		0.00923 U		0.00977 U
	Uranium-236	pCi/L		0 U		0 U
	Uranium-238	pCi/L		0.2013		0.1423
X740-12B	Americium-241	pCi/L		0.00837 U		3.01E-05 U
	Neptunium-237	pCi/L		0.0065 U		-0.01427 U
	Plutonium-238	pCi/L		0.01292 U		0.02851 U
	Plutonium-239/240	pCi/L		0.01292 U		0.01425 U
	Technetium-99	pCi/L		-3.02 U		-0.461 U
	Uranium	µg/L		0.2483		0.1957 U
	Uranium-233/234	pCi/L		0.06906 U		0.1098
	Uranium-235	pCi/L		-0.0095 U		0 U
	Uranium-236	pCi/L		0.0085 U		0 U
	Uranium-238	pCi/L		0.08422		0.06577 U
X740-13G	Americium-241	pCi/L		0.00858 U		0.03791 U
	Neptunium-237	pCi/L		-0.0138 U		0.007801 U
	Plutonium-238	pCi/L		0.0138 U		0.007795 U
	Plutonium-239/240	pCi/L		-0.0069 U		0.007795 U
	Technetium-99	pCi/L		-5.18 U		-2.49 U
	Uranium	µg/L		0.1917		0.06739 U
	Uranium-233/234	pCi/L		-0.0070 U		0.007611 U
	Uranium-235	pCi/L		0.00874 U		0 U
	Uranium-236	pCi/L		-0.0078 U		0 U
	Uranium-238	pCi/L		0.06367		0.02265 U
X740-14B	Americium-241	pCi/L		0.01516 U		-0.00869 U
	Neptunium-237	pCi/L		-0.0436 U		-0.0523 U
	Plutonium-238	pCi/L		0.02907 U		0.01495 U
	Plutonium-239/240	pCi/L		-0.0073 U		0 U
	Technetium-99	pCi/L		-4.18 U		0.581 U
	Uranium	µg/L		0.4087		0.4422
	Uranium-233/234	pCi/L		0.1884		0.1289
	Uranium-235	pCi/L		0 U		0.0318 U
	Uranium-236	pCi/L		-0.0080 U		-0.0095 U
	Uranium-238	pCi/L		0.1374		0.1458
X740-PZ10G	Americium-241	pCi/L		-0.0155 U		-0.02903 U
	Neptunium-237	pCi/L		-0.0212 U		-0.00779 U
	Plutonium-238	pCi/L		0.00707 U		0.03119 U
	Plutonium-239/240	pCi/L		-0.0071 U		7.79E-06 U

**Table 4.14. Results for radionuclides at the X-740 Waste Oil Handling Facility – 2007 (continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X740-PZ10G	Technetium-99	pCi/L		-5.34 U		-1.85 U
	Uranium	µg/L		0.2643		0.8106
	Uranium-233/234	pCi/L		0.2751		0.2122
	Uranium-235	pCi/L		0 U		0.04027 U
	Uranium-236	pCi/L		-0.009 U		0 U
	Uranium-238	pCi/L		0.08884		0.2688
X740-PZ12G	Americium-241	pCi/L		0.01651 U		2.12E-05 U
	Neptunium-237	pCi/L		0.00695 U		-0.00779 U
	Plutonium-238	pCi/L		6.9E-06 U		0.00778 U
	Plutonium-239/240	pCi/L		0.0069 U		0.01556 U
	Technetium-99	pCi/L		-2.09 U		-2.15 U
	Uranium	µg/L		0.2051 U		0.2207 U
	Uranium-233/234	pCi/L		0.1287		0.1073
	Uranium-235	pCi/L		0.00934 U		0 U
	Uranium-236	pCi/L		0.01678 U		0.009138 U
	Uranium-238	pCi/L		0.068 U		0.07412 U
X740-PZ14G	Americium-241	pCi/L		-0.0086 U		0.04 U
	Neptunium-237	pCi/L		0.00649 U		-0.00819 U
	Plutonium-238	pCi/L		0.01942 U		-0.00817 U
	Plutonium-239/240	pCi/L		0.02588 U		0.008199 U
	Technetium-99	pCi/L		-1.61 U		-2.68 U
	Uranium	µg/L		2.802		1.969
	Uranium-233/234	pCi/L		0.9001		0.9697
	Uranium-235	pCi/L		0.05551		0.03829 U
	Uranium-236	pCi/L		0 U		8.59E-06 U
	Uranium-238	pCi/L		0.9367		0.6581
X740-PZ17G	Americium-241	pCi/L		0.01643 U		0.009869 U
	Neptunium-237	pCi/L		-0.0211 U		1.36E-05 U
	Plutonium-238	pCi/L		1.4E-05 U		0.01358 U
	Plutonium-239/240	pCi/L		0.00706 U		-0.01354 U
	Technetium-99	pCi/L		-5.56 U		-6.4 U
	Uranium	µg/L		1.487		1.21
	Uranium-233/234	pCi/L		0.5625		0.547
	Uranium-235	pCi/L		0.03558 U		0.009118 U
	Uranium-236	pCi/L		0 U		-0.00818 U
	Uranium-238	pCi/L		0.4965		0.4057

**Table 4.15. Results for beryllium and chromium at the X-611A Former Lime Sludge Lagoons – 2007**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
F-07G	Beryllium	µg/L	1.4		7.8	
	Chromium	µg/L	1.1 B		3.3	
F-08B	Beryllium	µg/L	1 U		1 U	
	Chromium	µg/L	1.3 B		1.2 B	
X611-01B	Beryllium	µg/L	1 U		1 U	
	Chromium	µg/L	1.5 B		3.4	
X611-02BA	Beryllium	µg/L	1 U		1 U	
	Chromium	µg/L	1.5 B		1.2 B	
X611-03G	Beryllium	µg/L	1 U		1 U	
	Chromium	µg/L	1.2 B		0.71 B	
X611-04BA	Beryllium	µg/L	1 U		0.51 B	
	Chromium	µg/L	2.7		2.1	

**Table 4.16. Results for radionuclides at the X-735 Landfills – 2007**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X735-01G	Americium-241	pCi/L				8.13E-06 U
	Neptunium-237	pCi/L				-0.02164 U
	Plutonium-238	pCi/L				0.01443 U
	Plutonium-239/240	pCi/L				-0.02158 U
	Technetium-99	pCi/L				-1.84 U
	Uranium	µg/L				0.02896 U
	Uranium-233/234	pCi/L				0.04786 U
	Uranium-235	pCi/L				0.01968 U
	Uranium-236	pCi/L				8.82E-06 U
	Uranium-238	pCi/L				0.007973 U
X735-01GA	Americium-241	pCi/L		0 U		-0.00950 U
	Neptunium-237	pCi/L		-0.0128 U		-0.00775 U
	Plutonium-238	pCi/L		0.00642 U		0.02334 U
	Plutonium-239/240	pCi/L		0.0128 U		-0.02329 U
	Technetium-99	pCi/L		0.0301 U		-2.48 U
	Uranium	µg/L		0.06489 U		0.07428 U
	Uranium-233/234	pCi/L		-0.0218 U		3.21E-05 U
	Uranium-235	pCi/L		0 U		0.009921 U
	Uranium-236	pCi/L		8.1E-06 U		0 U
	Uranium-238	pCi/L		0.02181 U		0.02408 U
X735-02GA	Americium-241	pCi/L		0.02696 U		1.73E-05 U
	Neptunium-237	pCi/L		-0.0076 U		0.00702 U
	Plutonium-238	pCi/L		0.05296 U		0.02095 U
	Plutonium-239/240	pCi/L		0.01514 U		0.02792 U
	Technetium-99	pCi/L		1.1 U		-2.64 U
	Uranium	µg/L		0.01922 U		0.06891 U
	Uranium-233/234	pCi/L		0.01446 U		0.04631 U
	Uranium-235	pCi/L		-0.0089 U		0 U
	Uranium-236	pCi/L		0.00800 U		0.008547 U
	Uranium-238	pCi/L		0.00721 U		0.02311 U
X735-03G	Americium-241	pCi/L				-0.01516 U
	Neptunium-237	pCi/L				-0.02048 U
	Plutonium-238	pCi/L				0.006841 U
	Plutonium-239/240	pCi/L				0.01365 U
	Technetium-99	pCi/L				0.459 U
	Uranium	µg/L				0.106 U
	Uranium-233/234	pCi/L				0.02145 U
	Uranium-235	pCi/L				0 U
	Uranium-236	pCi/L				7.9E-06 U
	Uranium-238	pCi/L				0.03561 U
X735-03GA	Americium-241	pCi/L		8.9E-06 U		-0.00839 U
	Neptunium-237	pCi/L		-0.0152 U		-0.02772 U
	Plutonium-238	pCi/L		0.01522 U		-0.01381 U
	Plutonium-239/240	pCi/L		0.00762 U		0.01385 U
	Technetium-99	pCi/L		-2.97 U		-1.15 U
	Uranium	µg/L		0.04882 U		0.02075 U
	Uranium-233/234	pCi/L		-0.0165 U		0.01398 U
	Uranium-235	pCi/L		0 U		0 U

**Table 4.16. Results for radionuclides at the X-735 Landfills – 2007 (continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X735-03GA	Uranium-236	pCi/L		-0.0091 U		0 U
	Uranium-238	pCi/L		0.01645 U		0.006971 U
X735-04G	Americium-241	pCi/L				0.04328 U
	Neptunium-237	pCi/L				-0.00928 U
	Plutonium-238	pCi/L				0.01856 U
	Plutonium-239/240	pCi/L				-0.03705 U
	Technetium-99	pCi/L				-7.29 U
	Uranium	µg/L				0.09064 U
	Uranium-233/234	pCi/L				0.03164 U
	Uranium-235	pCi/L				-0.01298 U
	Uranium-236	pCi/L				0.01167 U
	Uranium-238	pCi/L				0.03155 U
X735-04GA	Americium-241	pCi/L		0 U		-0.00808 U
	Neptunium-237	pCi/L		-0.0292 U		0.02094 U
	Plutonium-238	pCi/L		1.5E-05 U		0.00695 U
	Plutonium-239/240	pCi/L		0.00731 U		0.02085 U
	Technetium-99	pCi/L		4.1 U		-1.06 U
	Uranium	µg/L		0.4305		0.08737 U
	Uranium-233/234	pCi/L		0.08699		0.02942 U
	Uranium-235	pCi/L		0.02299 U		0 U
	Uranium-236	pCi/L		6.9E-06 U		0 U
	Uranium-238	pCi/L		0.1426		0.02936 U
X735-05G	Americium-241	pCi/L				0.01197 U
	Neptunium-237	pCi/L				-0.04134 U
	Plutonium-238	pCi/L				0.006884 U
	Plutonium-239/240	pCi/L				-0.01374 U
	Technetium-99	pCi/L				-2.23 U
	Uranium	µg/L				0.1397 U
	Uranium-233/234	pCi/L				0.03144 U
	Uranium-235	pCi/L				0 U
	Uranium-236	pCi/L				-0.01737 U
	Uranium-238	pCi/L				0.04702 U
X735-05GA	Americium-241	pCi/L		0.04021 U		0 U
	Neptunium-237	pCi/L		2.9E-05 U		-0.00687 U
	Plutonium-238	pCi/L		0.0073 U		0.02057 U
	Plutonium-239/240	pCi/L		2.9E-05 U		-0.01369 U
	Technetium-99	pCi/L		-3.18 U		-2.08 U
	Uranium	µg/L		0.3061		0.06555 U
	Uranium-233/234	pCi/L		0.1336		0.04586 U
	Uranium-235	pCi/L		0.0097 U		-0.00941 U
	Uranium-236	pCi/L		0 U		0 U
	Uranium-238	pCi/L		0.102		0.02287 U
X735-06GAA	Americium-241	pCi/L		0.02589 U		0.01794 U
	Neptunium-237	pCi/L		-0.0381 U		-0.03892 U
	Plutonium-238	pCi/L		0.00763 U		0.01943 U
	Plutonium-239/240	pCi/L		0.00762 U		-0.01291 U
	Technetium-99	pCi/L		-2.2 U		-1.44 U
	Uranium	µg/L		0.06808 U		0.002249 U



**Table 4.16. Results for radionuclides at the X-735 Landfills – 2007 (continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X735-06GAA	Uranium-233/234	pCi/L		0.07381 U		0.06372 U
	Uranium-235	pCi/L		0.00910 U		0.008732 U
	Uranium-236	pCi/L		-0.0082 U		-0.00783 U
	Uranium-238	pCi/L		0.0221 U		1.41E-05 U
X735-12G	Americium-241	pCi/L				0.0339 U
	Neptunium-237	pCi/L				7.04E-06 U
	Plutonium-238	pCi/L				0.02107 U
	Plutonium-239/240	pCi/L				7.02E-06 U
	Technetium-99	pCi/L				-1.74 U
	Uranium	µg/L				0.3119
	Uranium-233/234	pCi/L				0.09755 U
	Uranium-235	pCi/L				0 U
	Uranium-236	pCi/L				0 U
	Uranium-238	pCi/L				0.1048
	Americium-241	pCi/L		0.01607 U		0.01035 U
X735-13GA	Neptunium-237	pCi/L		-0.0069 U		-0.03752 U
	Plutonium-238	pCi/L		0.02803 U		0.0125 U
	Plutonium-239/240	pCi/L		0.02102 U		1.25E-05 U
	Technetium-99	pCi/L		4.8 U		-5.82 U
	Uranium	µg/L		0.249		0.06346 U
	Uranium-233/234	pCi/L		0.03461 U		0.01479 U
	Uranium-235	pCi/L		0.00854 U		-0.00909 U
	Uranium-236	pCi/L		0.00767 U		0.008171 U
	Uranium-238	pCi/L		0.08288		0.02209 U
	Americium-241	pCi/L		0.00994 U		0.02126 U
	Neptunium-237	pCi/L		0.01363 U		-0.05113 U
X735-16B	Plutonium-238	pCi/L		0.04071 U		0.01701 U
	Plutonium-239/240	pCi/L		0.00679 U		0.008514 U
	Technetium-99	pCi/L		0.104 U		-1.61 U
	Uranium	µg/L		0.04725 U		0.02847 U
	Uranium-233/234	pCi/L		3.0E-05 U		0.04281 U
	Uranium-235	pCi/L		0.0093 U		0.01056 U
	Uranium-236	pCi/L		0 U		0.009478 U
	Uranium-238	pCi/L		0.01505 U		0.008574 U
	Americium-241	pCi/L		-0.0165 U		0.009798 U
	Neptunium-237	pCi/L		2.2E-05 U		-0.05433 U
	Plutonium-238	pCi/L		0.01466 U		0.007767 U
X735-17B	Plutonium-239/240	pCi/L		0 U		-0.02322 U
	Technetium-99	pCi/L		1.36 U		-6.9 U
	Uranium	µg/L		0.2484		0.2808
	Uranium-233/234	pCi/L		0.09947		0.1393
	Uranium-235	pCi/L		-0.0175 U		-0.00903 U
	Uranium-236	pCi/L		-0.0079 U		0.008119 U
	Uranium-238	pCi/L		0.08506		0.09511
	Americium-241	pCi/L		9E-06 U		0.0202 U
	Neptunium-237	pCi/L		-0.0463 U		-0.06138 U
	Plutonium-238	pCi/L		0.0077 U		0.02299 U
	Plutonium-239/240	pCi/L		-0.0154 U		-0.04591 U

**Table 4.16. Results for radionuclides at the X-735 Landfills – 2007 (continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X735-18B	Technetium-99	pCi/L		-0.0044 U		1.23 U
	Uranium	µg/L		0.08704 U		0.2526
	Uranium-233/234	pCi/L		0.07141 U		0.1702
	Uranium-235	pCi/L		0.00880 U		0 U
	Uranium-236	pCi/L		-0.0079 U		-0.00785 U
	Uranium-238	pCi/L		0.0285 U		0.08492
X735-19G	Americium-241	pCi/L		0.01659 U		3.05E-05 U
	Neptunium-237	pCi/L		-0.0068 U		-0.04604 U
	Plutonium-238	pCi/L		0.0206 U		0.01316 U
	Plutonium-239/240	pCi/L		0.02748 U		-0.00654 U
	Technetium-99	pCi/L		-0.587 U		-3.05 U
	Uranium	µg/L		2.8E-05 U		0.09476 U
	Uranium-233/234	pCi/L		0.03743		0.0638 U
	Uranium-235	pCi/L		0 U		0 U
	Uranium-236	pCi/L		0 U		8.82E-06 U
	Uranium-238	pCi/L		7.5E-06 U		0.03184 U
	Americium-241	pCi/L		0.01716 U		2.35E-06 U
	Neptunium-237	pCi/L		3.6E-05 U		-0.03947 U
	Plutonium-238	pCi/L		0.02155 U		0.01314 U
	Plutonium-239/240	pCi/L		0.00719 U		-0.01311 U
X735-20B	Technetium-99	pCi/L		-2.46 U		-6.08 U
	Uranium	µg/L		0.1111 U		0.1212 U
	Uranium-233/234	pCi/L		0.1273		0.1061
	Uranium-235	pCi/L		0 U		0 U
	Uranium-236	pCi/L		-0.0083 U		0 U
	Uranium-238	pCi/L		0.03738 U		0.04072 U
	Americium-241	pCi/L		8.9E-06 U		-0.02347 U
	Neptunium-237	pCi/L		-0.0758 U		-0.01333 U
	Plutonium-238	pCi/L		-0.0069 U		2.66E-05 U
	Plutonium-239/240	pCi/L		0.01377 U		-0.0133 U
	Technetium-99	pCi/L		-0.0703 U		-3.89 U
	Uranium	µg/L		0.3578		0.3395
	Uranium-233/234	pCi/L		0.2048		0.2084
	Uranium-235	pCi/L		-0.0093 U		0 U
X735-21G	Uranium-236	pCi/L		-0.0084 U		0 U
	Uranium-238	pCi/L		0.1211		0.1141
	Americium-241	pCi/L		0.00939 U		0.01783 U
	Neptunium-237	pCi/L		-0.0146 U		-0.00823 U
	Plutonium-238	pCi/L		0.02915 U		0.00824 U
	Plutonium-239/240	pCi/L		1.5E-05 U		-0.01639 U
	Technetium-99	pCi/L		0.646 U		-3.44 U
	Uranium	µg/L		0.04543 U		0.1025 U
	Uranium-233/234	pCi/L		3.8E-05 U		0.03364 U
	Uranium-235	pCi/L		0 U		0.01036 U
	Uranium-236	pCi/L		0 U		-0.0093 U
	Uranium-238	pCi/L		0.01527 U		0.03355 U
	Americium-241	pCi/L		0.0224 U		0.009647 U
	Neptunium-237	pCi/L		2.2E-05 U		-0.0254 U
X737-05B	Technetium-99	pCi/L		0.646 U		-3.44 U
	Uranium	µg/L		0.04543 U		0.1025 U
	Uranium-233/234	pCi/L		3.8E-05 U		0.03364 U
	Uranium-235	pCi/L		0 U		0.01036 U
	Uranium-236	pCi/L		0 U		-0.0093 U
	Uranium-238	pCi/L		0.01527 U		0.03355 U
	Americium-241	pCi/L		0.0224 U		0.009647 U
	Neptunium-237	pCi/L		2.2E-05 U		-0.0254 U
	Technetium-99	pCi/L		0.646 U		-3.44 U
	Uranium	µg/L		0.04543 U		0.1025 U
X737-06G	Uranium-233/234	pCi/L		3.8E-05 U		0.03364 U
	Uranium-235	pCi/L		0 U		0.01036 U
	Uranium-236	pCi/L		0 U		-0.0093 U
	Uranium-238	pCi/L		0.01527 U		0.03355 U
	Americium-241	pCi/L		0.0224 U		0.009647 U
	Neptunium-237	pCi/L		2.2E-05 U		-0.0254 U
	Technetium-99	pCi/L		0.646 U		-3.44 U
	Uranium	µg/L		0.04543 U		0.1025 U
	Uranium-233/234	pCi/L		3.8E-05 U		0.03364 U
	Uranium-235	pCi/L		0 U		0.01036 U

**Table 4.16. Results for radionuclides at the X-735 Landfills – 2007 (continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X737-06G	Plutonium-238	pCi/L		0.02185 U		3.38E-05 U
	Plutonium-239/240	pCi/L		0.00728 U		-0.02534 U
	Technetium-99	pCi/L		4.59 U		-2.49 U
	Uranium	µg/L		0.05897 U		0.06382 U
	Uranium-233/234	pCi/L		0.01326 U		0.04632 U
	Uranium-235	pCi/L		0 U		-0.01901 U
	Uranium-236	pCi/L		7.3E-06 U		0.008545 U
	Uranium-238	pCi/L		0.01982 U		0.0231 U
X737-07B	Americium-241	pCi/L		0.01889 U		-0.01268 U
	Neptunium-237	pCi/L		6.4E-06 U		8.16E-06 U
	Plutonium-238	pCi/L		0.02561 U		0.03258 U
	Plutonium-239/240	pCi/L		-0.0128 U		0.03259 U
	Technetium-99	pCi/L		4.69 U		0.108 U
	Uranium	µg/L		0.02005 U		0.04811 U
	Uranium-233/234	pCi/L		0.00671 U		0.01537 U
	Uranium-235	pCi/L		0 U		0.009468 U
X737-08B	Uranium-236	pCi/L		0.00743 U		0 U
	Uranium-238	pCi/L		0.0067 U		0.01532 U
	Americium-241	pCi/L		2.1E-05 U		0.008858 U
	Neptunium-237	pCi/L		-0.0081 U		-0.0398 U
	Plutonium-238	pCi/L		0.01625 U		0.01591 U
	Plutonium-239/240	pCi/L		1.6E-05 U		0.007956 U
	Technetium-99	pCi/L		-0.758 U		-2.28 U
	Uranium	µg/L		0.2798		0.7281
X737-09G	Uranium-233/234	pCi/L		0.3422		0.8835
	Uranium-235	pCi/L		0.0096 U		0 U
	Uranium-236	pCi/L		0 U		0.01645 U
	Uranium-238	pCi/L		0.09316		0.2445
	Americium-241	pCi/L		0.00798 U		8.56E-06 U
	Neptunium-237	pCi/L		-0.0950 U		-0.015 U
	Plutonium-238	pCi/L		-0.0079 U		0.02248 U
	Plutonium-239/240	pCi/L		-0.0395 U		-0.00747 U
	Technetium-99	pCi/L		0.453 U		-3.2 U
	Uranium	µg/L		0.1982 U		0.1143 U
	Uranium-233/234	pCi/L		0.03709 U		0.05404 U
	Uranium-235	pCi/L		0 U		0 U
	Uranium-236	pCi/L		0 U		-0.01707 U
	Uranium-238	pCi/L		0.0666 U		0.03851 U

**Table 4.17. Volatile organic compounds detected at the X-734 Landfills – 2007**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
RSY-02B	Toluene	µg/L		0.25 J		2 U
X734-05B	1,2-Dimethylbenzene	µg/L		0.35 J		0.28 J
	Benzene	µg/L		0.94 J		1.7 J
	Ethylbenzene	µg/L		0.51 J		0.37 J
	Toluene	µg/L		0.19 J		0.34 J
X734-06G	Acetone	µg/L		3.3 J		10 U
X734-15G	1,1-Dichloroethane	µg/L		0.44 J		0.38 J
X734-16G	Acetone	µg/L				11
X734-20G	Acetone	µg/L				2.8 J
X734-23G	cis-1,2-Dichloroethene	µg/L		12		10
	trans-1,2-Dichloroethene	µg/L		0.59 J		0.43 J
	Trichloroethene	µg/L		2 U		0.21 J
	Vinyl chloride	µg/L		4.2		2

**Table 4.18. Results for radionuclides at the X-734 Landfills – 2007**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
RSY-02B	Americium-241	pCi/L		0.01981 U		0.01035 U
	Neptunium-237	pCi/L		-0.0239 U		1.36E-05 U
	Plutonium-238	pCi/L		0.00798 U		0.02712 U
	Plutonium-239/240	pCi/L		3.2E-05 U		0.02712 U
	Technetium-99	pCi/L		3.55 U		-5.57 U
	Uranium	µg/L		0.1428 U		0.06892 U
	Uranium-233/234	pCi/L		0.06892 U		0.1622
	Uranium-235	pCi/L		-0.0121 U		9.52E-06 U
	Uranium-236	pCi/L		-0.0109 U		0 U
X734-01G	Uranium-238	pCi/L		0.04912 U		0.02315 U
	Americium-241	pCi/L		-0.0957 U		0.0126 U
	Neptunium-237	pCi/L		-0.0213 U		-0.00685 U
	Plutonium-238	pCi/L		0.01417 U		0.006855 U
	Plutonium-239/240	pCi/L		2.1E-05 U		-0.00685 U
	Technetium-99	pCi/L		2.42 U		-3.9 U
	Uranium	µg/L		0.1177 U		0.2276
	Uranium-233/234	pCi/L		0.05549 U		0.07749
	Uranium-235	pCi/L		0 U		-0.00955 U
X734-02B	Uranium-236	pCi/L		0 U		0 U
	Uranium-238	pCi/L		0.03956 U		0.07732
	Americium-241	pCi/L		0 U		0.04309 U
	Neptunium-237	pCi/L		2.1E-05 U		7.09E-06 U
	Plutonium-238	pCi/L		0.028 U		0.02829 U
	Plutonium-239/240	pCi/L		0.035 U		0.02122 U
	Technetium-99	pCi/L		3.4 U		-2.22 U
	Uranium	µg/L		-0.0030 U		0.08727 U
	Uranium-233/234	pCi/L		-0.0177 U		-0.022 U
X734-03G	Uranium-235	pCi/L		-0.011 U		0 U
	Uranium-236	pCi/L		-0.0098 U		0 U
	Uranium-238	pCi/L		1.8E-05 U		0.02933 U
	Americium-241	pCi/L		2.0E-05 U		9.34E-06 U
	Neptunium-237	pCi/L		-0.0268 U		-0.00693 U
	Plutonium-238	pCi/L		-0.0267 U		0.02078 U
	Plutonium-239/240	pCi/L		-0.0400 U		0.02078 U
	Technetium-99	pCi/L		3.14 U		-4.74 U
	Uranium	µg/L		0.213		0.1207
X734-04G	Uranium-233/234	pCi/L		0.1181		0.1034
	Uranium-235	pCi/L		0.00971 U		0.009808 U
	Uranium-236	pCi/L		0 U		0 U
	Uranium-238	pCi/L		0.07071		0.03967
	Americium-241	pCi/L		0.01763 U		-0.00893 U
	Neptunium-237	pCi/L		-0.2284 U		0.008166 U
	Plutonium-238	pCi/L		-0.0127 U		0.01627 U
	Plutonium-239/240	pCi/L		-0.038 U		0.008135 U
	Technetium-99	pCi/L		4.59 U		-4.7 U
	Uranium	µg/L		1.377		1.544
	Uranium-233/234	pCi/L		0.6852		0.5715
	Uranium-235	pCi/L		0.02588 U		0.02858 U

**Table 4.18. Results for radionuclides at the X-734 Landfills – 2007 (continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X734-04G	Uranium-236	pCi/L		-0.0077 U		0.008553 U
	Uranium-238	pCi/L		0.4605		0.5164
X734-05B	Americium-241	pCi/L		1.8E-05 U		-0.00875 U
	Neptunium-237	pCi/L		-0.0142 U		6.58E-06 U
	Plutonium-238	pCi/L		0.01422 U		0.01971 U
	Plutonium-239/240	pCi/L		-0.0213 U		0.01314 U
	Technetium-99	pCi/L		6.88 U		-2.32 U
	Uranium	µg/L		0.5207 U		0.5395
	Uranium-233/234	pCi/L		0.4633		0.4465
	Uranium-235	pCi/L		-0.0136 U		9.33E-06 U
	Uranium-236	pCi/L		0 U		0 U
	Uranium-238	pCi/L		0.1762		0.1813
X734-06G	Americium-241	pCi/L		-0.0279 U		8.72E-06 U
	Neptunium-237	pCi/L		0.00719 U		-0.02324 U
	Plutonium-238	pCi/L		0.00718 U		-0.01544 U
	Plutonium-239/240	pCi/L		1.4E-05 U		0.01547 U
	Technetium-99	pCi/L		3.58 U		-6.03 U
	Uranium	µg/L		0.156		0.1061 U
	Uranium-233/234	pCi/L		0.04578 U		0.0357
	Uranium-235	pCi/L		-0.0094 U		0 U
	Uranium-236	pCi/L		0 U		0 U
	Uranium-238	pCi/L		0.05324		0.03564 U
X734-10G	Americium-241	pCi/L		-0.0086 U		0.0233 U
	Neptunium-237	pCi/L		-0.0489 U		0 U
	Plutonium-238	pCi/L		0.02093 U		1.37E-05 U
	Plutonium-239/240	pCi/L		-0.0209 U		6.86E-06 U
	Technetium-99	pCi/L		2.27 U		-0.44 U
	Uranium	µg/L		0.08818 U		0.4503
	Uranium-233/234	pCi/L		0.05494 U		0.05082 U
	Uranium-235	pCi/L		-0.0193 U		-0.01044 U
	Uranium-236	pCi/L		0 U		0.01876 U
	Uranium-238	pCi/L		0.03135 U		0.1521
X734-14G	Americium-241	pCi/L		0.05511 U		-0.02958 U
	Neptunium-237	pCi/L		-0.0136 U		-0.03702 U
	Plutonium-238	pCi/L		0.01362 U		0.02218 U
	Plutonium-239/240	pCi/L		6.8E-06 U		-0.00738 U
	Technetium-99	pCi/L		1.98 U		-5.39 U
	Uranium	µg/L		0.8218		0.843
	Uranium-233/234	pCi/L		0.4386		0.4332
	Uranium-235	pCi/L		0.02898 U		9.21E-06 U
	Uranium-236	pCi/L		0 U		0 U
	Uranium-238	pCi/L		0.2735		0.2832
X734-15G	Americium-241	pCi/L		0.01039 U		0.01005 U
	Neptunium-237	pCi/L		4.1E-05 U		-0.03554 U
	Plutonium-238	pCi/L		0.01355 U		2.84E-05 U
	Plutonium-239/240	pCi/L		-0.0068 U		0 U
	Technetium-99	pCi/L		0.818 U		-2.83 U
	Uranium	µg/L		0.1339		0.209

**Table 4.18. Results for radionuclides at the X-734 Landfills – 2007 (continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X734-15G	Uranium-233/234	pCi/L		-0.0152 U		0.08598
	Uranium-235	pCi/L		-0.0094 U		0 U
	Uranium-236	pCi/L		0.00847 U		0.008656 U
	Uranium-238	pCi/L		0.04579		0.07019
X734-16G	Americium-241	pCi/L				0.01465 U
	Neptunium-237	pCi/L				0.01982 U
	Plutonium-238	pCi/L				0.01318 U
	Plutonium-239/240	pCi/L				-0.01316 U
	Technetium-99	pCi/L				-3.41 U
	Uranium	µg/L				4.64
	Uranium-233/234	pCi/L				2.045
	Uranium-235	pCi/L				0.07791
	Uranium-236	pCi/L				-0.01747 U
	Uranium-238	pCi/L				1.552
	Americium-241	pCi/L		0.05079 U		0.03164 U
X734-18G	Neptunium-237	pCi/L		-0.0072 U		-0.00719 U
	Plutonium-238	pCi/L		0.01447 U		2.87E-05 U
	Plutonium-239/240	pCi/L		-0.0144 U		0.01435 U
	Technetium-99	pCi/L		1.36 U		-3.81 U
	Uranium	µg/L		1.52		1.173
	Uranium-233/234	pCi/L		0.8807		0.709
	Uranium-235	pCi/L		0.01906 U		-0.03927 U
	Uranium-236	pCi/L		0.00856 U		0.008823 U
	Uranium-238	pCi/L		0.5088		0.3975
	Americium-241	pCi/L				-0.01798 U
	Neptunium-237	pCi/L				-0.01406 U
X734-20G	Plutonium-238	pCi/L				0.02107 U
	Plutonium-239/240	pCi/L				0.02107 U
	Technetium-99	pCi/L				19.3
	Uranium	µg/L				0.142
	Uranium-233/234	pCi/L				0.09989
	Uranium-235	pCi/L				0.01896 U
	Uranium-236	pCi/L				8.50E-06 U
	Uranium-238	pCi/L				0.04601
	Americium-241	pCi/L		-0.0158 U		1.94E-05 U
	Neptunium-237	pCi/L		2E-05 U		4.41E-05 U
	Plutonium-238	pCi/L		0.01311 U		0.02931 U
X734-22G	Plutonium-239/240	pCi/L		0.00656 U		-0.01464 U
	Technetium-99	pCi/L		4.47 U		-6.64 U
	Uranium	µg/L		1.373		1.479
	Uranium-233/234	pCi/L		0.4325		0.4731
	Uranium-235	pCi/L		0.02541 U		0 U
	Uranium-236	pCi/L		0.00760 U		0.01839 U
	Uranium-238	pCi/L		0.4591		0.497
	Americium-241	pCi/L		0.0161 U		0.009603 U
	Neptunium-237	pCi/L		6.6E-06 U		-0.04534 U
	Plutonium-238	pCi/L		0.01987 U		-0.01938 U
	Plutonium-239/240	pCi/L		0.01987 U		-0.00643 U
X734-23G						

**Table 4.18. Results for radionuclides at the X-734 Landfills – 2007 (continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X734-23G	Technetium-99	pCi/L		3.1 U		-2.84 U
	Uranium	µg/L		0.09544 U		0.09117
	Uranium-233/234	pCi/L		0.04013 U		0.01494 U
	Uranium-235	pCi/L		0 U		0.009213 U
	Uranium-236	pCi/L		0.00889 U		0 U
	Uranium-238	pCi/L		0.03202 U		0.02981 U



**Table 4.19. Results for cadmium, cobalt, and nickel at the X-533 Switchyard Area – 2007**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
F-03G	Cadmium	µg/L		30		54
	Cobalt	µg/L		67		200
	Nickel	µg/L		380		1200
TCP-01G	Cadmium	µg/L		19		19
	Cobalt	µg/L		61		58
	Nickel	µg/L		260		220
X533-03G	Cadmium	µg/L		8.9		16
	Cobalt	µg/L		31		48
	Nickel	µg/L		180		260

**Table 4.20. Volatile organic compounds detected at surface water monitoring locations – 2007**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
BRC-SW01	Bromodichloromethane	µg/L	2	3.2	3	3.5
	Bromoform	µg/L	0.49 J	2 U	1.3 J	0.96 J
	Chloroform	µg/L	4.5	5.8	3.1	3.7
	Dibromochloromethane	µg/L	2	2.4	3.3	3.6
	Trichloroethene	µg/L	2 U	0.35 J	2 U	2 U
BRC-SW02	Acetone	µg/L	4.2 J	140	110	10 U
	Toluene	µg/L	2 U	2 U	0.27 J	2 U
EDD-SW01	Acetone	µg/L	4.8 BJ	3.2 J	10 U	10 U
	Bromodichloromethane	µg/L	2	1 J	2.1	1.9 J
	Bromoform	µg/L	2 U	2 U	1.3 J	1.8 J
	Chloroform	µg/L	3.5	1.8 J	1.7 J	0.99 J
	cis-1,2-Dichloroethene	µg/L	0.26 J	1.6 J	2 U	2 U
	Dibromochloromethane	µg/L	1.9 J	0.87 J	3.1	2.4
	Trichloroethene	µg/L	0.56 J	7.4	2 U	2 U
LBC-SW01	Acetone	µg/L	2.9 BJ	10 U	10 U	10 U
	Bromodichloromethane	µg/L	0.7 J	0.32 J	1.6 J	1.6 J
	Bromoform	µg/L	2 U	2 U	1.3 J	1.6 J
	Chloroform	µg/L	1.2 J	0.52 J	1.3 J	0.86 J
	cis-1,2-Dichloroethene	µg/L	0.26 J	0.32 J	2 U	2 U
	Dibromochloromethane	µg/L	0.72 J	0.21 J	2.3	2.2
	Trichloroethene	µg/L	0.47 J	0.68 J	2 U	2 U
LBC-SW02	Acetone	µg/L	1.9 BJ	10 U	10 U	10 U
	Bromodichloromethane	µg/L	0.52 J	0.24 J	0.81 J	1.1 J
	Bromoform	µg/L	2 U	2 U	0.71 J	1.6 J
	Chloroform	µg/L	0.94 J	0.5 J	0.67 J	0.6 J
	cis-1,2-Dichloroethene	µg/L	0.19 J	0.28 J	2 U	2 U
	Dibromochloromethane	µg/L	0.52 J	0.21 J	1.4 J	1.7 J
	Trichloroethene	µg/L	0.4 J	0.53 J	2 U	2 U
LBC-SW03	Bromodichloromethane	µg/L	0.17 J	2 U	2 U	0.21 J
	Bromoform	µg/L	2 U	2 U	0.45 J	2 U
	Chloroform	µg/L	0.36 J	2 U	2 U	2 U
	Dibromochloromethane	µg/L	2 U	2 U	0.2 J	0.51 J
NHP-SW01	Acetone	µg/L	10 U	10 U	7.2 J	10 U
	Bromodichloromethane	µg/L	2 U	2 U	2 U	0.29 J
	Chloroform	µg/L	2 U	2 U	0.19 J	0.28 J
	Dibromochloromethane	µg/L	2 U	2 U	2 U	0.42 J
UND-SW01	1,1-Dichloroethane	µg/L	2 U	2 U	0.28 J	0.21 J
	1,1-Dichloroethene	µg/L	0.19 J	0.21 J	0.38 J	0.38 J
	Acetone	µg/L	10 U	10 U	5 J	10 U
	cis-1,2-Dichloroethene	µg/L	2 U	0.19 J	0.5 J	0.51 J
	Trichloroethene	µg/L	2.3	4.4	7.1	5.4
WDD-SW01	Trichlorofluoromethane	µg/L	2 U	2 U	0.64 J	0.4 J
	Acetone	µg/L	25	3.2 J	9.4 J	10 U
	Bromodichloromethane	µg/L	0.34 J	0.46 J	0.97 J	0.3 J
	Bromoform	µg/L	2 U	0.53 J	0.62 J	2 U
	Chloroform	µg/L	0.4 J	0.26 J	0.65 J	0.54 J
	Dibromochloromethane	µg/L	0.41 J	0.9 J	1.2 J	0.3 J
	Methylene chloride	µg/L	2 U	2 U	0.69 J	5 U

**Table 4.20. Volatile organic compounds detected at surface water monitoring locations – 2007 (continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
WDD-SW02	Acetone	µg/L	63	2.8 J	10 U	10 U
	Methylene chloride	µg/L	2 U	2 U	0.7 J	5 U
WDD-SW03	Acetone	µg/L	6.2 J	2.3 J	5.2 J	10 U
	Bromodichloromethane	µg/L	0.21 J	2 U	2 U	2 U
	Chloroform	µg/L	0.22 J	2 U	0.27 J	0.21 J
	Dibromochloromethane	µg/L	0.24 J	2 U	2 U	0.18 J
	Methylene chloride	µg/L	2 U	2 U	0.68 J	5 U

**Table 4.21. Results for radionuclides at surface water monitoring locations – 2007**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
BRC-SW01	Americium-241	pCi/L	0 U	0.03246 U	-0.007886 U	9.27E-06 U
	Neptunium-237	pCi/L	0 U	0.00678 U	2.576E-05 U	7.63E-06 U
	Plutonium-238	pCi/L	0.0217 U	0.01352 U	0.01286 U	0.02286 U
	Plutonium-239/240	pCi/L	0.0072 U	0.00676 U	3.211E-05 U	0 U
	Technetium-99	pCi/L	-4.54 U	4.04 U	-4.42 U	-0.549 U
	Uranium	µg/L	1.404	3.668	0.2349 U	2.078
	Uranium-233/234	pCi/L	1.045	1.424	0.1162 U	4.571
	Uranium-235	pCi/L	0.0847	0.03798 U	-0.008935 U	0.1443
	Uranium-236	pCi/L	0.0169 U	-0.0085 U	0 U	0.02592 U
	Uranium-238	pCi/L	0.4642	1.229	0.07973 U	0.6851
BRC-SW02	Americium-241	pCi/L	0.02 U	-0.0092 U	0.008363 U	0.03386 U
	Neptunium-237	pCi/L	0.0082 U	0.00725 U	-0.05865 U	-0.0148 U
	Plutonium-238	pCi/L	0.0164 U	7.2E-06 U	0.01465 U	0.02216 U
	Plutonium-239/240	pCi/L	0.0082 U	2.2E-05 U	-0.007283 U	1.48E-05 U
	Technetium-99	pCi/L	-8.09 U	1.08 U	-4.07 U	-3.64 U
	Uranium	µg/L	0.865	0.79	0.4563	0.7158
	Uranium-233/234	pCi/L	0.8662	0.6715	0.5546	0.8167
	Uranium-235	pCi/L	0.0274 U	0.01763 U	0.01875 U	0.01738 U
	Uranium-236	pCi/L	0.0082 U	0.00791 U	0 U	0.007798 U
	Uranium-238	pCi/L	0.2881	0.2638	0.1516	0.2389
EDD-SW01	Americium-241	pCi/L	0.0157 U	0.00887 U	0.008352 U	-0.00887 U
	Neptunium-237	pCi/L	-0.036 U	7.7E-06 U	-0.0614 U	-0.05507 U
	Plutonium-238	pCi/L	0.0072 U	0.03068 U	0.006832 U	0.02062 U
	Plutonium-239/240	pCi/L	7E-06 U	0.01535 U	-0.006791 U	0.02062 U
	Technetium-99	pCi/L	31.4	39.7	-1.51 U	2.96 U
	Uranium	µg/L	1.693	2.242	0.4931	0.324
	Uranium-233/234	pCi/L	3.681	4.534	0.5739	0.6132
	Uranium-235	pCi/L	0.1735	0.1113	0.009698 U	0.01892 U
	Uranium-236	pCi/L	0.0367 U	0.04165	0.008708 U	0.00849 U
	Uranium-238	pCi/L	0.5531	0.743	0.1648	0.1071
LBC-SW01	Americium-241	pCi/L	-0.016 U	0.00764 U	0.02129 U	0.02301 U
	Neptunium-237	pCi/L	-0.015 U	-0.0075 U	2.187E-05 U	0.02611 U
	Plutonium-238	pCi/L	-0.015 U	0.00744 U	0.0291 U	0.006526 U
	Plutonium-239/240	pCi/L	-0.008 U	0.02233 U	-0.007254 U	-0.0325 U
	Technetium-99	pCi/L	10.3	12.6	-3.98 U	-1.46 U
	Uranium	µg/L	0.758	0.56	0.3627	0.4976
	Uranium-233/234	pCi/L	1.499	1.228	0.6438	0.6313
	Uranium-235	pCi/L	0.0292 U	0.0438 U	0.009343 U	0.04582 U
	Uranium-236	pCi/L	0.0175 U	7.9E-06 U	0.008389 U	8.22E-06 U
	Uranium-238	pCi/L	0.2519	0.1842	0.121	0.1631
LBC-SW02	Americium-241	pCi/L	-0.016 U	0.04251 U	0.0289 U	-0.02516 U
	Neptunium-237	pCi/L	1E-05 U	-0.0206 U	1.455E-05 U	-0.07526 U
	Plutonium-238	pCi/L	0.0194 U	0.02061 U	0.02904 U	1.37E-05 U
	Plutonium-239/240	pCi/L	-0.006 U	-0.0068 U	0.03631 U	-0.00681 U
	Technetium-99	pCi/L	8.83	12.3	-0.773 U	-4.74 U
	Uranium	µg/L	0.837	0.6556	0.6131	0.2917
	Uranium-233/234	pCi/L	1.392	1.312	0.7635	0.6056
	Uranium-235	pCi/L	0.1086	0.03698 U	0.009057 U	0.009223 U

**Table 4.21. Results for radionuclides at surface water monitoring locations – 2007 (continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
LBC-SW02	Uranium-236	pCi/L	0.0177 U	0 U	0 U	0.02484 U
	Uranium-238	pCi/L	0.2714	0.2169	0.2052	0.09702
LBC-SW03	Americium-241	pCi/L	2E-05 U	-0.0086 U	-0.02751 U	1.64E-05 U
	Neptunium-237	pCi/L	-0.043 U	-0.0366 U	-0.06279 U	-0.00681 U
	Plutonium-238	pCi/L	-0.007 U	0.01465 U	0.02786 U	0.0272 U
	Plutonium-239/240	pCi/L	-0.021 U	1.5E-05 U	0.01394 U	6.8E-06 U
	Technetium-99	pCi/L	7.51 U	11.3	-2.07 U	-2.2 U
	Uranium	µg/L	0.5672	0.7681	0.5948	0.3844
	Uranium-233/234	pCi/L	1.133	1.337	0.7179	0.7165
LBC-SW04	Uranium-235	pCi/L	0.0090 U	1.8E-05 U	0.01884 U	0.02762 U
	Uranium-236	pCi/L	0.0081 U	0.00818 U	-0.008451 U	0.008267 U
	Uranium-238	pCi/L	0.1897	0.258	0.1982	0.1266
	Americium-241	pCi/L	1E-05 U	2.5E-05 U	1.049E-05 U	-0.0107 U
	Neptunium-237	pCi/L	-0.245 U	0.00769 U	-0.006985 U	-0.00666 U
	Plutonium-238	pCi/L	1E-05 U	7.6E-06 U	1.403E-05 U	0.02003 U
	Plutonium-239/240	pCi/L	-0.007 U	0.00765 U	0.01404 U	0.02003 U
	Technetium-99	pCi/L	14.7	10.4	0.638 U	-0.702 U
	Uranium	µg/L	0.9175	0.8988	0.9373	0.9184
	Uranium-233/234	pCi/L	1.15	1.377	1.033	1.046
	Uranium-235	pCi/L	0.0195 U	0.03883 U	0.02466 U	0.07462
	Uranium-236	pCi/L	0 U	0.00872 U	0.01476 U	0.009572 U
	Uranium-238	pCi/L	0.3065	0.2984	0.3126	0.3019
	Americium-241	pCi/L	-0.016 U	0.00863 U	0.0101 U	-0.01081 U
	Neptunium-237	pCi/L	-0.171 U	7.7E-06 U	0.0313 U	-0.02025 U
	Plutonium-238	pCi/L	-0.008 U	0.00768 U	0.01562 U	0.02024 U
	Plutonium-239/240	pCi/L	-0.06 U	7.7E-06 U	0.03121 U	-0.01348 U
NHP-SW01	Technetium-99	pCi/L	-2.14 U	-4.19 U	-4.42 U	-5.96 U
	Uranium	µg/L	4.924	4.145	4.509	1.963
	Uranium-233/234	pCi/L	2.409	1.641	2.095	0.7409
	Uranium-235	pCi/L	0.1174	0.0869	0.09502	0.05712
	Uranium-236	pCi/L	0.0081 U	0 U	0 U	-0.00854 U
	Uranium-238	pCi/L	1.644	1.385	1.507	0.6547
	Americium-241	pCi/L	-0.019 U	-0.0129 U	2.843E-05 U	-0.01124 U
	Neptunium-237	pCi/L	0 U	0.03553 U	0.006711 U	-0.01461 U
	Plutonium-238	pCi/L	0.0307 U	2.8E-05 U	0.02653 U	0.0292 U
	Plutonium-239/240	pCi/L	-0.008 U	-0.0212 U	-0.006606 U	-0.00729 U
	Technetium-99	pCi/L	-1.52 U	0.284 U	-4.98 U	-1.15 U
	Uranium	µg/L	2.676	2.084	1.775	1.867
	Uranium-233/234	pCi/L	0.9983	0.8603	0.9493	0.7186
	Uranium-235	pCi/L	0.0101 U	0.00983 U	0.02788 U	0 U
	Uranium-236	pCi/L	0.0091 U	0 U	0 U	0 U
	Uranium-238	pCi/L	0.8983	0.6995	0.594	0.6275
UND-SW01	Americium-241	pCi/L	0 U	0.00829 U	-0.04179 U	1.82E-05 U
	Neptunium-237	pCi/L	-0.007 U	-0.0071 U	-0.00646 U	3.48E-05 U
	Plutonium-238	pCi/L	0 U	0.02853 U	0.02619 U	6.95E-06 U
	Plutonium-239/240	pCi/L	-0.014 U	-0.0071 U	-0.006534 U	-0.00694 U
	Technetium-99	pCi/L	-2.55 U	3 U	-7.88 U	1.18 U
	Uranium	µg/L	1.084	0.9429	0.7706	0.691
UND-SW02						

**Table 4.21. Results for radionuclides at surface water monitoring locations – 2007 (continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
UND-SW02	Uranium-233/234	pCi/L	0.3937	0.4613	0.207	0.2859
	Uranium-235	pCi/L	0.0291 U	0.01996 U	0.009113 U	0.009531 U
	Uranium-236	pCi/L	0.0174 U	0.01793 U	0.00819 U	0 U
	Uranium-238	pCi/L	0.3615	0.315	0.2581	0.2313
WDD-SW01	Americium-241	pCi/L	-0.012 U	0.02601 U	-0.007863 U	0.01071 U
	Neptunium-237	pCi/L	-0.023 U	0.0142 U	2.119E-05 U	-0.03378 U
	Plutonium-238	pCi/L	0.0232 U	0.02122 U	-0.01408 U	0.006758 U
	Plutonium-239/240	pCi/L	0 U	-0.0212 U	0.007073 U	-0.00674 U
	Technetium-99	pCi/L	-5.86 U	1.2 U	2.92 U	-2.08 U
	Uranium	µg/L	2.511	2.191	1.772	1.79
	Uranium-233/234	pCi/L	2.314	1.418	1.09	1.557
	Uranium-235	pCi/L	0.0739 U	0.01357 U	0.0000196 U	0.0669
	Uranium-236	pCi/L	0.0166 U	0.01217 U	8.801E-06 U	0.01716 U
	Uranium-238	pCi/L	0.837	0.7349	0.5954	0.5954
WDD-SW02	Americium-241	pCi/L	0.0094 U	0.01346 U	0 U	0.02251 U
	Neptunium-237	pCi/L	0 U	0.01576 U	-0.0271 U	0.006916 U
	Plutonium-238	pCi/L	0.0306 U	-0.0078 U	2.704E-05 U	0.02065 U
	Plutonium-239/240	pCi/L	0 U	0.00787 U	0.0203 U	-0.02062 U
	Technetium-99	pCi/L	-7.73 U	-0.74 U	3.12 U	-2.52 U
	Uranium	µg/L	3.009	2.824	1.708	0.5353
	Uranium-233/234	pCi/L	1.697	1.783	0.7998	0.3803
	Uranium-235	pCi/L	0.1142	0.07549	0 U	0.01915 U
	Uranium-236	pCi/L	0.0171 U	0 U	0.009228 U	0 U
	Uranium-238	pCi/L	1.001	0.9422	0.5737	0.1782
WDD-SW03	Americium-241	pCi/L	0.0105 U	0.05235 U	1.726E-05 U	-0.00884 U
	Neptunium-237	pCi/L	-0.014 U	0.0288 U	-0.1178 U	-0.03032 U
	Plutonium-238	pCi/L	0.0213 U	0.02154 U	0.03674 U	0.007576 U
	Plutonium-239/240	pCi/L	0.0071 U	-0.0072 U	-0.022 U	-0.03023 U
	Technetium-99	pCi/L	-2.3 U	-1.69 U	-2.44 U	-3.1 U
	Uranium	µg/L	2.606	2.628	0.9345	1.163
	Uranium-233/234	pCi/L	1.88	1.051	0.5056	0.7707
	Uranium-235	pCi/L	0.087	0.08938	0.01979 U	0.02825 U
	Uranium-236	pCi/L	0.0174 U	0.01605 U	-0.008869 U	0 U
	Uranium-238	pCi/L	0.8678	0.875	0.3123	0.3884

**Table 4.22. Results for radionuclides at exit pathway monitoring locations – 2007**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
F-29B	Americium-241	pCi/L		7.6E-06 U		
	Neptunium-237	pCi/L		0.00709 U		
	Plutonium-238	pCi/L		0.00707 U		
	Plutonium-239/240	pCi/L		0 U		
	Technetium-99	pCi/L		-3.04 U		
	Uranium	µg/L		-0.0220 U		
	Uranium-233/234	pCi/L		-0.0148 U		
	Uranium-235	pCi/L		0 U		
	Uranium-236	pCi/L		0 U		
	Uranium-238	pCi/L		-0.0074 U		
X749-62B	Americium-241	pCi/L		0.05667 U		
	Neptunium-237	pCi/L		0 U		
	Plutonium-238	pCi/L		0.0065 U		
	Plutonium-239/240	pCi/L		1.9E-05 U		
	Technetium-99	pCi/L		-1.13 U		
	Uranium	µg/L		0.09657 U		
	Uranium-233/234	pCi/L		0.01631 U		
	Uranium-235	pCi/L		0 U		
	Uranium-236	pCi/L		0 U		
	Uranium-238	pCi/L		0.03245 U		

Note: A table is not provided for volatile organic compounds at exit pathway monitoring locations because none were detected in wells F-29B and X749-62B. Results for the following additional exit pathway monitoring locations can be found in the following tables:

Tables 4.20 and 4.21 (BRC-SW02, LBC-SW04, UND-SW02, and WDD-SW03)

Tables 4.7 and 4.8 (X701-48G)

Tables 4.1 and 4.2 (X749-14B, X749-44G, X749-45G, X749-64B, X749-68G, X749-96G, X749-97G, X749-98G, X749-99M, X749-100M, and X749-101M)





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