

4. GROUNDWATER

This section summarizes analytical results for routine groundwater monitoring at PORTS in 2006 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 2006. 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 2006, the laboratory used to analyze 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 2006. 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, 2-butanone (methyl ethyl ketone), benzene, and toluene, were detected in trip and/or field blanks during 2006. 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 and trichloroethene were detected in laboratory blanks in 2006). 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 2006 meet this purpose.

Complete groundwater monitoring results for sampling completed as required by the *Integrated Groundwater Monitoring Plan* are provided in the *2006 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 – 2006
- Table 4.2. Results for radionuclides at the X-749/X-120/PK Landfill – 2006
- Table 4.3. Volatile organic compounds detected at the Quadrant I Groundwater Investigative Area – 2006
- Table 4.4. Results for radionuclides at the Quadrant I Groundwater Investigative Area – 2006
- Table 4.5. Volatile organic compounds detected at the Quadrant II Groundwater Investigative Area – 2006
- Table 4.6. Results for radionuclides at the Quadrant II Groundwater Investigative Area – 2006
- Table 4.7. Volatile organic compounds detected at the X-701B Holding Pond – 2006
- Table 4.8. Results for radionuclides at the X-701B Holding Pond – 2006
- Table 4.9. Results for chromium at the X-633 Pumphouse/Cooling Towers Area – 2006
- Table 4.10. Volatile organic compounds detected at the X-616 Chromium Sludge Surface Impoundments – 2006
- Table 4.11. Results for chromium at the X-616 Chromium Sludge Surface Impoundments – 2006
- Table 4.12. Results for radionuclides at the X-616 Chromium Sludge Surface Impoundments – 2006
- Table 4.13. Volatile organic compounds detected at the X-740 Waste Oil Handling Facility – 2006
- Table 4.14. Results for radionuclides at the X-740 Waste Oil Handling Facility – 2006
- Table 4.15. Results for beryllium and chromium at the X-611A Former Lime Sludge Lagoons – 2006
- Table 4.16. Results for radionuclides at the X-735 Landfills – 2006

- Table 4.17. Volatile organic compounds detected at the X-734 Landfills – 2006
- Table 4.18. Results for radionuclides at the X-734 Landfills – 2006
- Table 4.19. Results for cadmium, cobalt, and nickel at the X-533 Switchyard Area – 2006
- Table 4.20. Volatile organic compounds detected at surface water monitoring locations – 2006
- Table 4.21. Results for radionuclides at surface water monitoring locations – 2006
- Table 4.22. Results for radionuclides at exit pathway monitoring locations – 2006

A table for volatile organic compounds at the X-735 Landfills is not provided because routine monitoring at this landfill in 2006 did not detect any VOCs other than common sample contaminants methylene chloride and acetone. In Table 4.1, two sets of data are provided for volatile organic compounds in wells WP-01, WP-02, WP-03, and WP-04 in the first quarter because two sets of samples were collected from these wells in the first quarter and sent to different laboratories.

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 – 2006

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
MH GW-4	1,1-Dichloroethane	µg/L	0.5 J	0.38 J	0.27 J	0.5 J
	Acetone	µg/L	10 U	3.9 BJ	10 U	10 U
	Chlorobenzene	µg/L	0.25 J	0.25 J	0.2 J	0.27 J
	cis-1,2-Dichloroethene	µg/L	1.4 J	1.6 J	1.1 J	1.3 J
	Methylene chloride	µg/L	2 U	0.39 BJ	2 U	2 U
	Vinyl chloride	µg/L	0.39 J	1 U	0.3 J	0.64 J
MH GW-5	1,1-Dichloroethane	µg/L	0.64 J	0.84 J	0.79 J	0.6 J
	Acetone	µg/L	10 U	5.6 BJ	10 U	10 U
	Chlorobenzene	µg/L	2 U	0.23 J	2 U	2 U
	cis-1,2-Dichloroethene	µg/L	2.4	4.4	3.4	2.3
	Methylene chloride	µg/L	2 U	0.48 BJ	2 U	2 U
	Vinyl chloride	µg/L	1 U	1 U	0.22 J	1 U
PK-09G	Chloroform	µg/L	0.52 J			
	cis-1,2-Dichloroethene	µg/L	1.7 J			
	Trichloroethene	µg/L	120			
PK-10G	Trichloroethene	µg/L	2 U		0.24 J	
PK-14G	1,1-Dichloroethane	µg/L	2 U	2 U	4 U	0.21 J
	Acetone	µg/L	10 U	10 U	19 J	3.2 J
	cis-1,2-Dichloroethene	µg/L	2 U	2 U	4 U	2.7
	Methylene chloride	µg/L	2 U	2 U	4 U	0.6 BJ
	Vinyl chloride	µg/L	1 U	1 U	2 U	0.66 J
PK-15B	Acetone	µg/L	10 U		2 J	
PK-16G	1,1-Dichloroethane	µg/L	2 U	0.33 J	0.44 J	2 U
	Acetone	µg/L	10 U	10 U	10 U	5.6 J
	cis-1,2-Dichloroethene	µg/L	2 U	4.3	5.8	2 U
	Methylene chloride	µg/L	2 U	2 U	2 U	0.43 BJ
	trans-1,2-Dichloroethene	µg/L	1 U	0.23 J	0.28 J	1 U
	Vinyl chloride	µg/L	1 U	1.9	2.8	1 U
PK-17B	1,1-Dichloroethane	µg/L	1.1 J	3.7	3.5	1.5 J
	1,1-Dichloroethene	µg/L	2 U	0.38 J	0.32 J	2 U
	Acetone	µg/L	10 U	10 U	10 U	12
	Benzene	µg/L	2 U	0.31 J	0.27 J	2 U
	Chlorobenzene	µg/L	0.75 J	0.99 J	0.5 J	0.75 J
	cis-1,2-Dichloroethene	µg/L	15	53	57	21
	Methylene chloride	µg/L	2 U	2 U	2 U	0.36 BJ
	trans-1,2-Dichloroethene	µg/L	0.52 J	1.7	1.9	0.73 J
	Trichloroethene	µg/L	0.53 J	2.5	2	0.58 J
	Vinyl chloride	µg/L	7.6	24	24	10
PK-18B	Acetone	µg/L	10 U		3.4 J	
PK-19B	1,1-Dichloroethane	µg/L	0.7 J		0.38 J	
	Acetone	µg/L	10 U		3.9 J	
	Chloroethane	µg/L	1.8 J		1.1 J	
	cis-1,2-Dichloroethene	µg/L	0.17 J		2 U	
	Vinyl chloride	µg/L	0.65 J		0.53 J	
PK-21B	1,1-Dichloroethane	µg/L	180	150	160	170
	1,1-Dichloroethene	µg/L	2.4	2.5	2.1 J	2.1
	1,2-Dichloroethane	µg/L	0.96 J	0.71 J	10 U	1.3 J
	Acetone	µg/L	10 U	10 U	50 U	5.3 J

Table 4.1. Volatile organic compounds detected at the X-749/X-120/PK Landfill – 2006 (continued)

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
PK-21B	Benzene	µg/L	0.8 J	0.82 J	0.87 J	0.81 J
	cis-1,2-Dichloroethene	µg/L	14	13	15	14
	Methylene chloride	µg/L	2 U	0.63 BJ	10 U	0.38 BJ
	Trichloroethene	µg/L	0.7 J	0.6 J	10 U	0.63 J
	Vinyl chloride	µg/L	23	29	17	23
PK-PL6	1,1,1-Trichloroethane	µg/L	3.2	3.3	3.1	5
	1,1-Dichloroethane	µg/L	5.8	6.6	6	9.8
	1,1-Dichloroethene	µg/L	2.2	2.5	2.4	4.4
	Acetone	µg/L	10 U	4.8 BJ	10 U	10 U
	cis-1,2-Dichloroethene	µg/L	1.4 J	2	1.7 J	1.8 J
	Methylene chloride	µg/L	2 U	0.39 BJ	2 U	2 U
	Trichloroethene	µg/L	1.5 J	1.9 J	2	2.5
	Vinyl chloride	µg/L	1 U	1 U	0.44 J	1 U
	1,1,1-Trichloroethane	µg/L	7.2	8	7.9	8
	1,1-Dichloroethane	µg/L	11	12	12	15
PK-PL6A	1,1-Dichloroethene	µg/L	5.3	6.7	7.7	5.8
	cis-1,2-Dichloroethene	µg/L	2.2	2.4	2.5	2.6
	Methylene chloride	µg/L	2 U	0.39 BJ	2 U	2 U
	Trichloroethene	µg/L	3.3	4.2	4.7	3.3
	Vinyl chloride	µg/L	0.55 J	1 U	1.4	0.39 J
STSW-102G	1,1,1-Trichloroethane	µg/L		63		
	1,1,2-Trichloroethane	µg/L		1.2 J		
	1,1-Dichloroethane	µg/L		280		
	1,1-Dichloroethene	µg/L		160		
	1,2-Dichloroethane	µg/L		99		
	Acetone	µg/L		35		
	Benzene	µg/L		0.55 J		
	Chloroethane	µg/L		3.9 J		
	Chloroform	µg/L		9.8		
	cis-1,2-Dichloroethene	µg/L		77		
	Methylene chloride	µg/L		2 J		
	trans-1,2-Dichloroethene	µg/L		0.59 J		
	Trichloroethene	µg/L		550		
	Vinyl chloride	µg/L		0.93 J		
WP-01	Acetone	µg/L	5.2 J	10 U		10 U
	Carbon disulfide	µg/L	2 U	0.1 J		2 U
	Methylene chloride	µg/L	2 U	0.3 BJ		2 U
WP-02	Acetone	µg/L	5.8 J	1 BJ		10 U
	Methylene chloride	µg/L	2 U	0.3 BJ		2 U
WP-03	1,1,1-Trichloroethane	µg/L	0.59 J	0.5 J	0.38 J	0.43 J
	1,1-Dichloroethane	µg/L	2.8	2	1.8 J	1.9 J
	1,1-Dichloroethene	µg/L	1.5 J	1 J	1.2 J	1.1 J
	1,2-Dichloroethane	µg/L	0.74 J	0.7 J	0.49 J	0.49 J
	Acetone	µg/L	10 U	10 U	10 U	10 U
	Chloroform	µg/L	2 U	0.1 J	2 U	2 U
	cis-1,2-Dichloroethene	µg/L	0.26 J	0.3 J	0.24 J	0.25 J
	Methylene chloride	µg/L	2 U	1 BJ	0.52 BJ	2 U
	Trichloroethene	µg/L	3.3	4	3.2	3.3

Table 4.1. Volatile organic compounds detected at the X-749/X-120/PK Landfill – 2006 (continued)

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
WP-04	Acetone	µg/L	6.5 J	10 U		10 U
	Methylene chloride	µg/L	2 U	0.3 BJ		2 U
X120-05G	Acetone	µg/L		34		
	Methylene chloride	µg/L		0.37 BJ		
	Trichloroethene	µg/L		8.1		
X120-08G	1,1,1-Trichloroethane	µg/L		5.9		3.9
	1,1,2-Trichloroethane	µg/L		0.39 J		0.37 J
	1,1-Dichloroethane	µg/L		4		3
	1,1-Dichloroethene	µg/L		16		15
	1,2-Dichloroethane	µg/L		0.5 J		0.43 J
	Acetone	µg/L		7.9 J		10 U
	Chloroform	µg/L		0.55 J		0.41 J
	cis-1,2-Dichloroethene	µg/L		0.32 J		0.21 J
	Methylene chloride	µg/L		0.42 BJ		2 U
	Trichloroethene	µg/L		9.5		8.2
X120-10G	1,1,1-Trichloroethane	µg/L		3.8		
	1,1-Dichloroethane	µg/L		2.9		
	1,1-Dichloroethene	µg/L		14		
	1,2-Dichloroethane	µg/L		0.24 J		
	Acetone	µg/L		5.1 J		
	Chloroform	µg/L		0.42 J		
	Methylene chloride	µg/L		0.38 BJ		
	Trichloroethene	µg/L		1.4 J		
X749-06G	1,1,1-Trichloroethane	µg/L		770		570
	1,1,2-Trichloroethane	µg/L		39		42 J
	1,1-Dichloroethane	µg/L		1700		1900
	1,1-Dichloroethene	µg/L		1600		1800
	1,2-Dichloroethane	µg/L		40		43 J
	Benzene	µg/L		2.3 J		100 U
	Chloroform	µg/L		110		110
	cis-1,2-Dichloroethene	µg/L		270		300
	Methylene chloride	µg/L		29 B		100 U
	Tetrachloroethene	µg/L		87		110
	Trichloroethene	µg/L		3500		4400
	Vinyl chloride	µg/L		19		50 U
X749-07G	1,1,1-Trichloroethane	µg/L	120	120	140	140
	1,1,2-Trichloroethane	µg/L	1.1 J	1.2 J	20 U	8 U
	1,1-Dichloroethane	µg/L	83	120	140	71
	1,1-Dichloroethene	µg/L	160	140	200	220
	1,2-Dichloroethane	µg/L	24	46	52	12
	Benzene	µg/L	2 U	0.28 J	20 U	8 U
	Chloroethane	µg/L	2.5	1.9 J	20 U	6 J
	Chloroform	µg/L	4.4	5.9	5.3 J	2.7 J
	cis-1,2-Dichloroethene	µg/L	16	20	29	20
	Methylene chloride	µg/L	0.6 J	0.53 BJ	20 U	8 U
	Tetrachloroethene	µg/L	2.2	2	2.6 J	2.4 J
	trans-1,2-Dichloroethene	µg/L	0.48 J	0.27 J	10 U	4 U
	Trichloroethene	µg/L	290	300	330	220

Table 4.1. Volatile organic compounds detected at the X-749/X-120/PK Landfill – 2006 (continued)

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X749-07G	Vinyl chloride	µg/L	1.1	1.2	10 U	2.3 J
X749-08G	1,1,1-Trichloroethane	µg/L		41		51
	1,1,2-Trichloroethane	µg/L		2 U		0.72 J
	1,1-Dichloroethane	µg/L		21		44
	1,1-Dichloroethene	µg/L		55		120
	1,2-Dichloroethane	µg/L		4.9		7.8
	Acetone	µg/L		6 J		10 U
	Benzene	µg/L		2 U		0.24 J
	Chloroethane	µg/L		0.51 J		0.91 J
	Chloroform	µg/L		1.1 J		1.7 J
	cis-1,2-Dichloroethene	µg/L		21		42
	Methylene chloride	µg/L		0.47 BJ		2 U
	trans-1,2-Dichloroethene	µg/L		0.21 J		0.28 J
	Trichloroethene	µg/L		76		140
	Vinyl chloride	µg/L		0.9 J		1.2
X749-09GA	1,1,1-Trichloroethane	µg/L		56		37
	1,1,2-Trichloroethane	µg/L		0.53 J		0.37 J
	1,1-Dichloroethane	µg/L		25		16
	1,1-Dichloroethene	µg/L		66		54
	1,2-Dichloroethane	µg/L		4.4		2.4
	Acetone	µg/L		4 J		10 U
	Chloroethane	µg/L		0.63 J		2 U
	Chloroform	µg/L		1.5 J		0.77 J
	cis-1,2-Dichloroethene	µg/L		21		12
	Methylene chloride	µg/L		0.53 BJ		2 U
	trans-1,2-Dichloroethene	µg/L		0.2 J		1 U
	Trichloroethene	µg/L		61		45
	Vinyl chloride	µg/L		0.83 J		1 U
X749-10GA	1,1-Dichloroethane	µg/L	17	11	8.8	8.9
	1,1-Dichloroethene	µg/L	31	18	18	16
	1,2-Dichloroethane	µg/L	2 U	0.18 J	0.24 J	2 U
	Acetone	µg/L	10 U	5.9 J	10 U	25
	Chloroethane	µg/L	1.9 J	0.87 J	0.5 J	0.84 J
	cis-1,2-Dichloroethene	µg/L	7.9	4.7	4.5	4.2
	Methylene chloride	µg/L	2 U	0.37 BJ	2 U	0.38 J
	Trichloroethene	µg/L	0.89 J	0.68 J	0.95 J	0.54 J
	Vinyl chloride	µg/L	1.4	0.82 J	0.55 J	0.63 J
X749-20G	1,1,1-Trichloroethane	µg/L				9.2
	1,1-Dichloroethane	µg/L				12
	1,1-Dichloroethene	µg/L				14
	1,2-Dichloroethane	µg/L				3.1
	Chloroform	µg/L				1.2 J
	cis-1,2-Dichloroethene	µg/L				6.9
	Methylene chloride	µg/L				0.35 J
	Tetrachloroethene	µg/L				0.2 J
	Trichloroethene	µg/L				65
	Vinyl chloride	µg/L				0.42 J
X749-21G	1,1,1-Trichloroethane	µg/L		0.8 J		2.7

Table 4.1. Volatile organic compounds detected at the X-749/X-120/PK Landfill – 2006 (continued)

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X749-21G	1,1-Dichloroethane	µg/L		2 U		0.48 J
	1,1-Dichloroethene	µg/L		0.38 J		1.5 J
	Acetone	µg/L		6.7 J		70
	Methylene chloride	µg/L		0.35 BJ		2 U
	Trichloroethene	µg/L		2.8		7.1
X749-23G	Acetone	µg/L				34
X749-24G	Acetone	µg/L		6 BJ		10 U
X749-35G	1,1,1-Trichloroethane	µg/L				140
	1,1,2-Trichloroethane	µg/L				0.81 J
	1,1-Dichloroethane	µg/L				14
	1,1-Dichloroethene	µg/L				76
	1,2-Dichloroethane	µg/L				0.5 J
	Benzene	µg/L				0.25 J
	Chloroform	µg/L				0.99 J
	cis-1,2-Dichloroethene	µg/L				7.2
	Methylene chloride	µg/L				0.37 J
	Tetrachloroethene	µg/L				0.45 J
	Trichloroethene	µg/L				140
	Vinyl chloride	µg/L				0.89 J
X749-42G	Acetone	µg/L				15
	cis-1,2-Dichloroethene	µg/L				0.22 J
	Trichloroethene	µg/L				31
X749-44G	1,1,1-Trichloroethane	µg/L		5		4.2
	1,1-Dichloroethane	µg/L		19		21
	1,1-Dichloroethene	µg/L		12		14
	1,2-Dichloroethane	µg/L		7.5		7.2
	Chloroform	µg/L		1.1 J		0.99 J
	cis-1,2-Dichloroethene	µg/L		2.8		2.6
	Trichloroethene	µg/L		31		32
X749-45G	1,1,1-Trichloroethane	µg/L		3.7		1.5 J
	1,1-Dichloroethane	µg/L		26		11
	1,1-Dichloroethene	µg/L		19		6.8
	1,2-Dichloroethane	µg/L		9.9		3.4
	2-Butanone	µg/L		1.9 J		5 U
	Acetone	µg/L		5.8 J		33
	Chloroethane	µg/L		5.6		1.4 J
	Chloroform	µg/L		0.91 J		0.35 J
	cis-1,2-Dichloroethene	µg/L		26		8.8
	Methylene chloride	µg/L		0.78 J		0.39 J
	Trichloroethene	µg/L		57		22
X749-50B	1,1-Dichloroethane	µg/L				13
	1,1-Dichloroethene	µg/L				0.72 J
	1,2-Dichloroethane	µg/L				7.7
	Chloroethane	µg/L				2
	cis-1,2-Dichloroethene	µg/L				3
	Methylene chloride	µg/L				0.36 J
	Trichloroethene	µg/L				0.56 J
X749-51B	Acetone	µg/L				61

Table 4.1. Volatile organic compounds detected at the X-749/X-120/PK Landfill – 2006 (continued)

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X749-54B	1,1-Dichloroethane	µg/L		1.1 J		0.87 J
	Acetone	µg/L		5.2 BJ		120
	Trichloroethene	µg/L		4.2		1.8 J
	Vinyl chloride	µg/L		0.37 J		1 U
X749-67G	1,1,1-Trichloroethane	µg/L		33		26
	1,1,2-Trichloroethane	µg/L		20 U		1.3 J
	1,1-Dichloroethane	µg/L		210		180
	1,1-Dichloroethene	µg/L		160		130
	1,2-Dichloroethane	µg/L		66		53
	Acetone	µg/L		230		20 U
	Benzene	µg/L		20 U		1 BJ
	Chloroethane	µg/L		12 J		14
	Chloroform	µg/L		8.9 J		7
	cis-1,2-Dichloroethene	µg/L		150		130
	Methylene chloride	µg/L		8.3 BJ		0.7 J
	trans-1,2-Dichloroethene	µg/L		10 U		0.56 J
	Trichloroethene	µg/L		550		420
X749-68G	Methylene chloride	µg/L				0.33 J
X749-96G	Acetone	µg/L	10 U	3 J	10 U	61
	Methylene chloride	µg/L	2 U	0.38 BJ	2 U	2 U
	Trichloroethene	µg/L	2 U	2 U	0.19 J	2 U
X749-97G	1,1,1-Trichloroethane	µg/L	2 U	2.3	1.3 J	1.3 J
	1,1-Dichloroethane	µg/L	8.1	25	18	33
	1,1-Dichloroethene	µg/L	3.9	12	9.6	19
	1,2-Dichloroethane	µg/L	1.7 J	6.3	5	7.7
	Acetone	µg/L	10 U	4.3 J	10 U	10 U
	Benzene	µg/L	2 U	2 U	2 U	0.25 BJ
	Chloroethane	µg/L	0.38 J	2 U	2 U	1.7 J
	Chloroform	µg/L	2 U	0.74 J	0.47 J	0.48 J
	cis-1,2-Dichloroethene	µg/L	11	14	14	33
	Methylene chloride	µg/L	2 U	0.51 BJ	2 U	2 U
	Trichloroethene	µg/L	8.6	46	32	40
X749-98G	Acetone	µg/L	10 U	3.8 J	10 U	10 U
	Methylene chloride	µg/L	2 U	0.37 BJ	2 U	0.47 BJ
	Trichloroethene	µg/L	2 U	2 U	0.22 J	2 U
X749-101M	Methylene chloride	µg/L				0.64 BJ
X749-102G	1,1,1-Trichloroethane	µg/L	2 U	1.1 J	1.1 J	0.76 J
	1,1-Dichloroethane	µg/L	2 U	5.8	6.2	5
	1,1-Dichloroethene	µg/L	2 U	3.3	4	3
	1,2-Dichloroethane	µg/L	2 U	1.9 J	1.9 J	1.3 J
	Acetone	µg/L	12 B	10 U	10 U	10 U
	Chloroform	µg/L	2 U	0.31 J	0.32 J	0.24 J
	cis-1,2-Dichloroethene	µg/L	2 U	0.79 J	0.97 J	0.52 J
	Methylene chloride	µg/L	1.6 J	2 U	2 U	2 U
	Trichloroethene	µg/L	2 U	8.9	11	7.4
X749-103G	Acetone	µg/L	10 U	20	10 U	10 U
	Methylene chloride	µg/L	0.64 J	2 U	2 U	2 U
X749-104G	Acetone	µg/L	29 B	5.7 J	10 U	10 U

Table 4.1. Volatile organic compounds detected at the X-749/X-120/PK Landfill – 2006 (continued)

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X749-104G	Methylene chloride	µg/L	0.47 J	2 U	2 U	2 U
X749-105G	Acetone	µg/L	18 B	10 U	10 U	10 U
	Methylene chloride	µg/L	0.45 J	0.37 BJ	2 U	2 U
X749-106G	1,1,1-Trichloroethane	µg/L		100		91
	1,1,2-Trichloroethane	µg/L		4.5		3.3 J
	1,1-Dichloroethane	µg/L		76		66
	1,1-Dichloroethene	µg/L		270		320
	1,2-Dichloroethane	µg/L		7.4		7.1 J
	Carbon tetrachloride	µg/L		2 U		11
	Chloroform	µg/L		8.2		7.5 J
	cis-1,2-Dichloroethene	µg/L		5.4		5.4 J
	Methylene chloride	µg/L		2 U		3.6 BJ
	Tetrachloroethene	µg/L		1.5 J		1.4 J
	Trichloroethene	µg/L		150		160
	Vinyl chloride	µg/L		0.57 J		4 U
X749-107G	1,1,1-Trichloroethane	µg/L		95		95
	1,1,2-Trichloroethane	µg/L		4.8		4.5
	1,1-Dichloroethane	µg/L		77		71
	1,1-Dichloroethene	µg/L		260		340
	1,2-Dichloroethane	µg/L		7.8		7.9
	Benzene	µg/L		0.17 J		4 U
	Chloroethane	µg/L		0.63 J		4 U
	Chloroform	µg/L		9.2		8.6
	cis-1,2-Dichloroethene	µg/L		6.5		6.5
	Methylene chloride	µg/L		0.32 BJ		1.7 BJ
	Tetrachloroethene	µg/L		1.2 J		1.2 J
	Trichloroethene	µg/L		150		180
	Vinyl chloride	µg/L		0.23 J		2 U
X749-108G	1,1,1-Trichloroethane	µg/L		89		85
	1,1,2-Trichloroethane	µg/L		3.7		3.5 J
	1,1-Dichloroethane	µg/L		67		58
	1,1-Dichloroethene	µg/L		200		270
	1,2-Dichloroethane	µg/L		6.1		6.6
	Chloroform	µg/L		7.9		8.1
	cis-1,2-Dichloroethene	µg/L		4.2		4.1
	Methylene chloride	µg/L		0.71 BJ		2.1 BJ
	Tetrachloroethene	µg/L		1.2 J		1.2 J
	Trichloroethene	µg/L		140		190
	Vinyl chloride	µg/L		0.53 J		2 U
X749-109G	1,1,1-Trichloroethane	µg/L		1.9 J		1.8 J
	1,1-Dichloroethane	µg/L		9.2		8.3
	1,1-Dichloroethene	µg/L		4.6		4.9
	1,2-Dichloroethane	µg/L		3.5		3.3
	Acetone	µg/L		4.6 J		6.1 BJ
	Chloroform	µg/L		0.49 J		0.47 J
	cis-1,2-Dichloroethene	µg/L		1.2 J		1.1 J
	Methylene chloride	µg/L		0.36 J		0.59 BJ
	Trichloroethene	µg/L		12		13

Table 4.1. Volatile organic compounds detected at the X-749/X-120/PK Landfill – 2006 (continued)

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X749-110G	1,1,1-Trichloroethane	µg/L		36		28
	1,1,2-Trichloroethane	µg/L		1.1 J		1.2 J
	1,1-Dichloroethane	µg/L		140		160
	1,1-Dichloroethene	µg/L		140		140
	1,2-Dichloroethane	µg/L		52		53
	Benzene	µg/L		0.75 J		0.7 J
	Chloroethane	µg/L		19		17
	Chloroform	µg/L		7.7		7.3
	cis-1,2-Dichloroethene	µg/L		170		180
	Methylene chloride	µg/L		2.2 BJ		1.4 J
	trans-1,2-Dichloroethene	µg/L		0.81 J		0.74 J
	Trichloroethene	µg/L		310		320
	Vinyl chloride	µg/L		4.2		7.2
X749-111G	Acetone	µg/L		7.1 BJ		10 U
X749-112G	Acetone	µg/L		7.7 BJ		10 U
X749-113G	1,1,1-Trichloroethane	µg/L		82		77
	1,1,2-Trichloroethane	µg/L		1.3 J		1.4 J
	1,1-Dichloroethane	µg/L		86		74
	1,1-Dichloroethene	µg/L		110		110
	1,2-Dichloroethane	µg/L		45		38
	Chloroethane	µg/L		2 U		0.81 J
	Chloroform	µg/L		6.2		6.3
	cis-1,2-Dichloroethene	µg/L		10		11
	Methylene chloride	µg/L		0.57 BJ		0.56 J
	Tetrachloroethene	µg/L		1.1 J		1.7 J
	trans-1,2-Dichloroethene	µg/L		1 U		0.16 J
	Trichloroethene	µg/L		160		150
	Vinyl chloride	µg/L		0.53 J		0.58 J
X749-114G	1,1,1-Trichloroethane	µg/L		0.46 J		0.29 J
	1,1-Dichloroethane	µg/L		0.58 J		0.52 J
	1,1-Dichloroethene	µg/L		0.18 J		2 U
	Benzene	µg/L		0.48 J		0.44 J
	cis-1,2-Dichloroethene	µg/L		0.27 J		0.33 J
	Methylene chloride	µg/L		0.36 BJ		2 U
X749-BG9G	1,1,1-Trichloroethane	µg/L		0.39 J		0.27 J
	1,1-Dichloroethane	µg/L		0.34 J		0.46 J
	1,1-Dichloroethene	µg/L		0.4 J		0.49 J
	Trichloroethene	µg/L		0.37 J		0.64 J
X749-PZ02G	1,1-Dichloroethane	µg/L		2 U		0.28 J
	1,1-Dichloroethene	µg/L		0.45 J		0.7 J
	Acetone	µg/L		36 B		10 U
	cis-1,2-Dichloroethene	µg/L		2 U		0.16 J
	Trichloroethene	µg/L		1.2 J		1.3 J
X749-PZ03G	Acetone	µg/L	10 U	10 U	2.8 J	10 U
	Benzene	µg/L	2 U	2 U	2 U	0.18 BJ
	Methylene chloride	µg/L	0.97 J	2 U	2 U	2 U
	Trichloroethene	µg/L	2 U	2 U	0.29 J	2 U
X749-PZ04G	1,1,1-Trichloroethane	µg/L	35	38	39	33

Table 4.1. Volatile organic compounds detected at the X-749/X-120/PK Landfill – 2006 (continued)

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X749-PZ04G	1,1,2-Trichloroethane	µg/L	0.6 J	0.84 J	20 U	8 U
	1,1-Dichloroethane	µg/L	160	210	200	230
	1,1-Dichloroethene	µg/L	72	100	130	130
	1,2-Dichloroethane	µg/L	64	67	55	61
	Benzene	µg/L	0.31 J	0.5 J	20 U	8 U
	Chloroethane	µg/L	1.2 J	4.1	20 U	4.3 J
	Chloroform	µg/L	6	7.7	7.3 J	6.7 J
	cis-1,2-Dichloroethene	µg/L	48	86	84	81
	Methylene chloride	µg/L	1.6 J	1.8 J	20 U	8 U
	trans-1,2-Dichloroethene	µg/L	0.24 J	0.32 J	10 U	4 U
	Trichloroethene	µg/L	320	430	490	430
	Vinyl chloride	µg/L	0.61 J	0.87 J	10 U	4 U
X749-PZ05G	Acetone	µg/L	10 U	3.1 J	10 U	10 U
	Methylene chloride	µg/L	0.44 J	0.32 J	2 U	2 U
	Trichloroethene	µg/L	2 U	2 U	0.19 J	2 U
X749-PZ06G	1,1,1-Trichloroethane	µg/L		17		
	1,1,2-Trichloroethane	µg/L		1.1 J		
	1,1-Dichloroethane	µg/L		13		
	1,1-Dichloroethene	µg/L		55		
	1,2-Dichloroethane	µg/L		1.7 J		
	Carbon tetrachloride	µg/L		2		
	Chloroform	µg/L		2.3		
	cis-1,2-Dichloroethene	µg/L		0.47 J		0.62 J
	Methylene chloride	µg/L		0.59 BJ		
	Trichloroethene	µg/L		19		13
X749-PZ10G	1,1,1-Trichloroethane	µg/L		20		18
	1,1-Dichloroethane	µg/L		0.62 J		0.62 J
	1,1-Dichloroethene	µg/L		84		86
	1,2-Dichloroethane	µg/L		0.39 J		0.47 J
	Chloroform	µg/L		22		21
	cis-1,2-Dichloroethene	µg/L		0.79 J		0.52 J
	Methylene chloride	µg/L		1 BJ		4 U
	Trichloroethene	µg/L		610		560
X749-WPW	1,1,1-Trichloroethane	µg/L		88		86
	1,1,2-Trichloroethane	µg/L		1.5 J		2.7 J
	1,1-Dichloroethane	µg/L		96		110
	1,1-Dichloroethene	µg/L		130		250
	1,2-Dichloroethane	µg/L		22		21
	Benzene	µg/L		0.87 J		1.5 J
	Chloroethane	µg/L		0.84 J		10 U
	Chloroform	µg/L		13		9.1 J
	cis-1,2-Dichloroethene	µg/L		110		120
	Methylene chloride	µg/L		1.6 BJ		2.3 J
	Tetrachloroethene	µg/L		2.3 J		3.4 J
	trans-1,2-Dichloroethene	µg/L		0.38 J		5 U
	Trichloroethene	µg/L		520		970
	Vinyl chloride	µg/L		8.9		17

Table 4.2. Results for radionuclides at the X-749/X-120/PK Landfill – 2006

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
WP-01	Americium-241	pCi/L	8E-06 U			
	Neptunium-237	pCi/L	8E-06 U			
	Plutonium-238	pCi/L	0.0154 U			
	Plutonium-239/240	pCi/L	-0.008 U			
	Technetium-99	pCi/L	5.35 U			
	Uranium	µg/L	0.0626 U			
	Uranium-233/234	pCi/L	0.0874			
	Uranium-235	pCi/L	-0.009 U			
	Uranium-236	pCi/L	0 U			
	Uranium-238	pCi/L	0.0218 U			
WP-02	Americium-241	pCi/L	2E-05 U			
	Neptunium-237	pCi/L	0 U			
	Plutonium-238	pCi/L	0.0068 U			
	Plutonium-239/240	pCi/L	0.0136 U			
	Technetium-99	pCi/L	1.96 U			
	Uranium	µg/L	0.114			
	Uranium-233/234	pCi/L	0.0615			
	Uranium-235	pCi/L	0 U			
	Uranium-236	pCi/L	-0.009 U			
	Uranium-238	pCi/L	0.0383			
WP-03	Americium-241	pCi/L	0.0077 U			
	Neptunium-237	pCi/L	-0.007 U			
	Plutonium-238	pCi/L	0.0267 U			
	Plutonium-239/240	pCi/L	-0.013 U			
	Technetium-99	pCi/L	5.95 U			
	Uranium	µg/L	0.0622 U			
	Uranium-233/234	pCi/L	0.014 U			
	Uranium-235	pCi/L	0 U			
	Uranium-236	pCi/L	0 U			
	Uranium-238	pCi/L	0.0209 U			
WP-04	Americium-241	pCi/L	0.0165 U			
	Neptunium-237	pCi/L	-0.029 U			
	Plutonium-238	pCi/L	2E-05 U			
	Plutonium-239/240	pCi/L	-0.007 U			
	Technetium-99	pCi/L	-0.642 U			
	Uranium	µg/L	0.2088			
	Uranium-233/234	pCi/L	0.1687			
	Uranium-235	pCi/L	0 U			
	Uranium-236	pCi/L	0 U			
	Uranium-238	pCi/L	0.0702			
X749-14B	Americium-241	pCi/L		0.01567 U		
	Neptunium-237	pCi/L		1.6E-05 U		
	Plutonium-238	pCi/L		0.0158 U		
	Plutonium-239/240	pCi/L		0.0158 U		
	Technetium-99	pCi/L		4.33 U		
	Uranium	µg/L		-0.0262 U		
	Uranium-233/234	pCi/L		0.1439		
	Uranium-235	pCi/L		-0.0177 U		

Table 4.2. Results for radionuclides at the X-749/X-120/PK Landfill – 2006 (continued)

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X749-14B	Uranium-236	pCi/L		-0.0159 U		
	Uranium-238	pCi/L		-0.0072 U		
X749-64B	Americium-241	pCi/L		0.00903 U		
	Neptunium-237	pCi/L		0.01004 U		
	Plutonium-238	pCi/L		4E-05 U		
	Plutonium-239/240	pCi/L		0.02001 U		
	Technetium-99	pCi/L		0.254 U		
	Uranium	µg/L		0.4922		
	Uranium-233/234	pCi/L		0.8719		
	Uranium-235	pCi/L		1.1E-05 U		
	Uranium-236	pCi/L		0 U		
	Uranium-238	pCi/L		0.1653		
X749-102G	Americium-241	pCi/L	0.024 U	0 U	7.904E-06 U	-0.02805 U
	Neptunium-237	pCi/L	-0.014 U	-0.0075 U	0.008823 U	-0.02924 U
	Plutonium-238	pCi/L	-0.021 U	0.01508 U	0.02633 U	0.01461 U
	Plutonium-239/240	pCi/L	0.0070 U	-0.0226 U	-0.008755 U	0.02189 U
	Technetium-99	pCi/L	4.67 U	-3.26 U	1.08 U	-4.04 U
	Uranium	µg/L	0.0629 U	0.1545	0.05029 U	0.1423
	Uranium-233/234	pCi/L	7E-06 U	0.02973 U	0.01607 U	0.02356 U
	Uranium-235	pCi/L	0 U	0 U	0.009898 U	0.009662 U
	Uranium-236	pCi/L	0.0078 U	0 U	0 U	0.008676 U
	Uranium-238	pCi/L	0.0211 U	0.0519	0.01602 U	0.0469
X749-103G	Americium-241	pCi/L	8E-06 U	0.0084 U	0.006986 U	0.02996 U
	Neptunium-237	pCi/L	-0.008 U	-0.0077 U	-0.02168 U	-0.02072 U
	Plutonium-238	pCi/L	0.0226 U	0.03078 U	0.02165 U	0.01384 U
	Plutonium-239/240	pCi/L	-0.015 U	-0.0077 U	-0.007207 U	-0.00688 U
	Technetium-99	pCi/L	1.21 U	-2.79 U	2.27 U	0.155 U
	Uranium	µg/L	-1E-04 U	0.1241	0.02204 U	0.04876 U
	Uranium-233/234	pCi/L	0.0292 U	0.05015	-0.03701 U	0.03279 U
	Uranium-235	pCi/L	0 U	0 U	0 U	0 U
	Uranium-236	pCi/L	-0.008 U	0 U	0 U	0 U
	Uranium-238	pCi/L	7E-06 U	0.04171	0.007408 U	0.01638 U
X749-104G	Americium-241	pCi/L	-0.009 U	0 U	0.007705 U	0.01486 U
	Neptunium-237	pCi/L	-0.007 U	0.00806 U	-0.0266 U	2.94E-05 U
	Plutonium-238	pCi/L	7E-06 U	0.01607 U	-0.008837 U	0.02348 U
	Plutonium-239/240	pCi/L	0 U	8.0E-06 U	0.01771 U	-0.00586 U
	Technetium-99	pCi/L	-4.94 U	-5.03 U	0.191 U	-2.15 U
	Uranium	µg/L	0.0419 U	0.0697 U	0.1224	0.1613 U
	Uranium-233/234	pCi/L	0.0141 U	0.05474	0.05767	0.2276
	Uranium-235	pCi/L	0 U	0 U	0 U	0.008257 U
	Uranium-236	pCi/L	0.0078 U	0 U	0 U	1.46E-05 U
	Uranium-238	pCi/L	0.0140 U	0.02342 U	0.04111	0.05345 U
X749-105G	Americium-241	pCi/L	8E-06 U	-0.0148 U	0.007735 U	1.60E-05 U
	Neptunium-237	pCi/L	0.0176 U	0 U	0.007253 U	-0.04782 U
	Plutonium-238	pCi/L	0.0234 U	1.7E-05 U	0.007247 U	0.01365 U
	Plutonium-239/240	pCi/L	0 U	1.7E-05 U	-0.01444 U	-0.01362 U
	Technetium-99	pCi/L	-2.48 U	0 U	0.947 U	2.31 U
	Uranium	µg/L	0.1676	0.2139	0.1447	-0.1751 U

Table 4.2. Results for radionuclides at the X-749/X-120/PK Landfill – 2006 (continued)

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X749-105G	Uranium-233/234	pCi/L	0.0494	0.05046 U	0.04797 U	-0.0298 U
	Uranium-235	pCi/L	0 U	0 U	0.008453 U	0.009222 U
	Uranium-236	pCi/L	0 U	-0.008 U	0 U	-0.00827 U
	Uranium-238	pCi/L	0.0563	0.07193	0.04787	-0.05962 U
X749-106G	Americium-241	pCi/L		0.01563 U		
	Neptunium-237	pCi/L		1.5E-05 U		
	Plutonium-238	pCi/L		-0.0219 U		
	Plutonium-239/240	pCi/L		0.00731 U		
	Technetium-99	pCi/L		-0.182 U		
	Uranium	µg/L		0.04463 U		
	Uranium-233/234	pCi/L		0.05259 U		
	Uranium-235	pCi/L		0 U		
	Uranium-236	pCi/L		0 U		
	Uranium-238	pCi/L		0.01499 U		
	Americium-241	pCi/L		0.01519 U		
X749-107G	Neptunium-237	pCi/L		-0.0092 U		
	Plutonium-238	pCi/L		0.01838 U		
	Plutonium-239/240	pCi/L		0.0092 U		
	Technetium-99	pCi/L		5.35 U		
	Uranium	µg/L		0.09836 U		
	Uranium-233/234	pCi/L		0.07774 U		
	Uranium-235	pCi/L		0.00799 U		
	Uranium-236	pCi/L		0 U		
	Uranium-238	pCi/L		0.03233 U		
	Americium-241	pCi/L		7.7E-06 U		
	Neptunium-237	pCi/L		1.6E-05 U		
X749-108G	Plutonium-238	pCi/L		1.6E-05 U		
	Plutonium-239/240	pCi/L		-0.0079 U		
	Technetium-99	pCi/L		4.65 U		
	Uranium	µg/L		0.1294		
	Uranium-233/234	pCi/L		0.06316		
	Uranium-235	pCi/L		0.01731 U		
	Uranium-236	pCi/L		-0.0155 U		
	Uranium-238	pCi/L		0.04202		
	Americium-241	pCi/L		0 U		0.009474 U
	Neptunium-237	pCi/L		-0.0368 U		-0.04565 U
	Plutonium-238	pCi/L		0.00736 U		0.0228 U
X749-109G	Plutonium-239/240	pCi/L		0.00737 U		-0.03035 U
	Technetium-99	pCi/L		4.29 U		4.42 U
	Uranium	µg/L		0.02286 U		-0.06793 U
	Uranium-233/234	pCi/L		-0.023 U		0.03175 U
	Uranium-235	pCi/L		0 U		0.009762 U
	Uranium-236	pCi/L		0 U		-0.00876 U
	Uranium-238	pCi/L		0.00769 U		-0.02365 U
	Americium-241	pCi/L		-0.0073 U		0.02846 U
	Neptunium-237	pCi/L		-0.0149 U		-0.05178 U
	Plutonium-238	pCi/L		0.00748 U		0.01479 U
	Plutonium-239/240	pCi/L		7.4E-06 U		-0.01474 U

Table 4.2. Results for radionuclides at the X-749/X-120/PK Landfill – 2006 (continued)

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X749-110G	Technetium-99	pCi/L		10.9		14.3
	Uranium	µg/L		0.3244		0.2054 U
	Uranium-233/234	pCi/L		0.152		0.08884 U
	Uranium-235	pCi/L		0.02206 U		0 U
	Uranium-236	pCi/L		-0.0099 U		0.01093 U
	Uranium-238	pCi/L		0.1071		0.06895 U
X749-111G	Americium-241	pCi/L		0.02201 U		0.007575 U
	Neptunium-237	pCi/L		-0.0613 U		-0.02121 U
	Plutonium-238	pCi/L		0.00682 U		-0.00704 U
	Plutonium-239/240	pCi/L		-0.0204 U		0.007057 U
	Technetium-99	pCi/L		-3.04 U		-1.36 U
	Uranium	µg/L		0.1576		0.197 U
	Uranium-233/234	pCi/L		0.0694		0.09697 U
	Uranium-235	pCi/L		0.0107 U		-0.00918 U
	Uranium-236	pCi/L		0.00961 U		0.008264 U
	Uranium-238	pCi/L		0.05194		0.06698 U
	Americium-241	pCi/L		0.01514 U		0.01494 U
	Neptunium-237	pCi/L		2.1E-05 U		-0.0162 U
	Plutonium-238	pCi/L		0.01367 U		-0.00806 U
	Plutonium-239/240	pCi/L		-0.0068 U		1.62E-05 U
X749-112G	Technetium-99	pCi/L		-5.75 U		-2.37 U
	Uranium	µg/L		0.308		0.2737
	Uranium-233/234	pCi/L		0.08566 U		0.1757
	Uranium-235	pCi/L		0.01056 U		0.008669 U
	Uranium-236	pCi/L		0 U		7.78E-06 U
	Uranium-238	pCi/L		0.1025		0.09117
	Americium-241	pCi/L		0.00882 U		-0.00941 U
	Neptunium-237	pCi/L		-0.0071 U		-0.04424 U
	Plutonium-238	pCi/L		0.01426 U		0.0221 U
	Plutonium-239/240	pCi/L		-0.0071 U		-0.00735 U
	Technetium-99	pCi/L		65.9		125
	Uranium	µg/L		0.1173		0.2054 U
	Uranium-233/234	pCi/L		0.07115		-0.00869 U
	Uranium-235	pCi/L		0 U		-0.02191 U
X749-113G	Uranium-236	pCi/L		-0.0087 U		-0.01968 U
	Uranium-238	pCi/L		0.03944		0.07107 U
	Americium-241	pCi/L		7.2E-06 U		1.11E-05 U
	Neptunium-237	pCi/L		0.01636 U		-0.03928 U
	Plutonium-238	pCi/L		0.00817 U		0.01307 U
	Plutonium-239/240	pCi/L		0 U		0.0196 U
	Technetium-99	pCi/L		-0.783 U		-0.767 U
	Uranium	µg/L		11.02		12.37
	Uranium-233/234	pCi/L		4.723		5.028
	Uranium-235	pCi/L		0.2909		0.1515
	Uranium-236	pCi/L		0 U		-0.01942 U
	Uranium-238	pCi/L		3.677		4.142
X749-114G						

Table 4.3. Volatile organic compounds detected at the Quadrant I Groundwater Investigative Area – 2006

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X230K-11G	Acetone	µg/L			2.9 BJ	
	Toluene	µg/L			0.19 J	
X230K-15G	cis-1,2-Dichloroethene	µg/L			0.17 J	
	Methylene chloride	µg/L			0.33 BJ	
	Trichloroethene	µg/L			4.5	
X231A-01G	1,1,1-Trichloroethane	µg/L			0.31 J	
	1,1-Dichloroethane	µg/L			1.6 J	
	1,1-Dichloroethene	µg/L			2.3	
	Acetone	µg/L			13 B	
	Chloroform	µg/L			0.46 J	
	cis-1,2-Dichloroethene	µg/L			1.4 J	
X231A-04G	Trichloroethene	µg/L			37	
	1,1,1-Trichloroethane	µg/L			0.66 J	
	1,1-Dichloroethane	µg/L			0.19 J	
	1,1-Dichloroethene	µg/L			3.2	
	Acetone	µg/L			35 B	
	Chloroform	µg/L			0.38 J	
	cis-1,2-Dichloroethene	µg/L			0.6 J	
	Trichloroethene	µg/L			20	
X231B-02G	1,1-Dichloroethane	µg/L	0.72 J		0.49 J	
	1,1-Dichloroethene	µg/L	0.88 J		0.8 J	
	Acetone	µg/L	20 U		200	
	Chloroform	µg/L	28		45	
	cis-1,2-Dichloroethene	µg/L	31		41	
	Methylene chloride	µg/L	1.7 J		4 U	
	Tetrachloroethene	µg/L	4 U		0.41 J	
	trans-1,2-Dichloroethene	µg/L	1.3 J		1.4 J	
	Trichloroethene	µg/L	690		920	
	1,1,1-Trichloroethane	µg/L	56		50	
X231B-03G	1,1,2-Trichloroethane	µg/L	4.6 J		5.7	
	1,1-Dichloroethane	µg/L	70		78	
	1,1-Dichloroethene	µg/L	240		310	
	1,2-Dichloroethane	µg/L	2.1 J		2.3 J	
	Benzene	µg/L	8 U		0.46 J	
	Chloroform	µg/L	20		18	
	cis-1,2-Dichloroethene	µg/L	38		34	
	Methylene chloride	µg/L	3.3 J		4 U	
	Tetrachloroethene	µg/L	4.3 J		5.5	
	trans-1,2-Dichloroethene	µg/L	1.8 J		1.2 J	
X231B-04G	Trichloroethene	µg/L	1300		1300 E	
	1,1-Dichloroethene	µg/L	0.45 J		0.37 J	
	Acetone	µg/L	20 U		140	
	Chloroform	µg/L	5.7		12	
	cis-1,2-Dichloroethene	µg/L	28		30	
	Methylene chloride	µg/L	1.5 J		4 U	
	Tetrachloroethene	µg/L	4 U		0.41 J	
	trans-1,2-Dichloroethene	µg/L	0.81 J		0.65 J	
	Trichloroethene	µg/L	750		720	

**Table 4.3. Volatile organic compounds detected at the Quadrant I Groundwater Investigative Area – 2006
(continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X231B-06G	1,1,1-Trichloroethane	µg/L	330		580	
	1,1,2-Trichloroethane	µg/L	4		22	
	1,1-Dichloroethane	µg/L	140		170	
	1,1-Dichloroethene	µg/L	460		1900	
	1,2-Dichloroethane	µg/L	5.4		20	
	1,2-Dimethylbenzene	µg/L	0.44 J		13 U	
	Acetone	µg/L	10 U		410	
	Benzene	µg/L	0.26 J		1.6 J	
	Chloroethane	µg/L	0.53 J		13 U	
	Chloroform	µg/L	1.6 J		5.7 J	
	cis-1,2-Dichloroethene	µg/L	18		34	
	Methylene chloride	µg/L	0.64 J		2.2 J	
	Tetrachloroethene	µg/L	3.6		20	
	trans-1,2-Dichloroethene	µg/L	1 U		2.6 J	
	Trichloroethene	µg/L	370		870	
X231B-08G	1,1,1-Trichloroethane	µg/L	0.3 J		2.4	
	1,1-Dichloroethane	µg/L	2 U		0.17 J	
	1,1-Dichloroethene	µg/L	0.92 J		8.2	
	cis-1,2-Dichloroethene	µg/L	0.2 J		0.25 J	
	Trichloroethene	µg/L	22		39	
X231B-12G	1,1,1-Trichloroethane	µg/L	4.9		3.8	
	1,1-Dichloroethane	µg/L	0.28 J		0.27 J	
	1,1-Dichloroethene	µg/L	14		16	
	cis-1,2-Dichloroethene	µg/L	0.19 J		0.16 J	
	Trichloroethene	µg/L	13		11	
X231B-14G	1,1,1-Trichloroethane	µg/L	7.5		4.8	
	1,1-Dichloroethane	µg/L	2.1		1.6 J	
	1,1-Dichloroethene	µg/L	52		48	
	1,1-Dichloroethene	µg/L	45		48	
	1,2-Dichloroethane	µg/L	0.31 J		0.15 J	
	Acetone	µg/L	10 U		16	
	Chloroform	µg/L	2		1.3 J	
	cis-1,2-Dichloroethene	µg/L	9.6		10	
	Methylene chloride	µg/L	0.4 J		0.38 BJ	
X231B-15G	Trichloroethene	µg/L	230		210	
	1,1,1-Trichloroethane	µg/L	0.45 J		2 U	
	1,1-Dichloroethane	µg/L	0.16 J		2 U	
	1,1-Dichloroethene	µg/L	1.9 J		0.78 J	
	cis-1,2-Dichloroethene	µg/L	0.43 J		0.62 J	
	trans-1,2-Dichloroethene	µg/L	1 U		0.17 J	
X231B-16G	Trichloroethene	µg/L	0.81 J		0.89 J	
	1,1,1-Trichloroethane	µg/L	1.9 J		1.8 J	
	1,1-Dichloroethane	µg/L	0.26 J		0.24 J	
	1,1-Dichloroethene	µg/L	7.5		7.1	
	Acetone	µg/L	10 U		31	
	Benzene	µg/L	2 U		0.26 BJ	
	Chloroform	µg/L	0.17 J		0.21 J	
	cis-1,2-Dichloroethene	µg/L	0.21 J		0.17 J	

**Table 4.3. Volatile organic compounds detected at the Quadrant I Groundwater Investigative Area – 2006
(continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X231B-16G	Trichloroethene	µg/L	0.62 J		0.57 J	
X231B-20G	1,1-Dichloroethene	µg/L	2 U		0.3 J	
	Acetone	µg/L	10 U		33 B	
	Chloroform	µg/L	0.42 J		0.29 J	
	cis-1,2-Dichloroethene	µg/L	0.67 J		0.48 J	
	Trichloroethene	µg/L	80		58	
X231B-23G	1,1,1-Trichloroethane	µg/L	1.5 J		1.3 J	
	1,1-Dichloroethane	µg/L	2 U		0.18 J	
	1,1-Dichloroethene	µg/L	4.5		4.8	
	Chloroform	µg/L	2 U		0.18 J	
	cis-1,2-Dichloroethene	µg/L	0.32 J		0.34 J	
	Trichloroethene	µg/L	12		5	
X231B-24B	Acetone	µg/L			8 J	
X231B-28G	cis-1,2-Dichloroethene	µg/L	0.28 J		0.33 J	
	Trichloroethene	µg/L	1.2 J		1.7 J	
X231B-32B	Acetone	µg/L			2.1 J	
X231B-37G	1,1-Dichloroethane	µg/L	5.5		4.4	
	1,1-Dichloroethene	µg/L	6		6	
	Benzene	µg/L	0.27 J		0.27 J	
	Chloroethane	µg/L	2 U		0.48 J	
	cis-1,2-Dichloroethene	µg/L	11		12	
	trans-1,2-Dichloroethene	µg/L	2.3		2.2	
	Trichloroethene	µg/L	32		35	
X326-09G	1,1-Dichloroethene	µg/L	3.5 J		4.2 J	
	Acetone	µg/L	100 U		74 J	
	Bromodichloromethane	µg/L	30		25 J	
	Bromoform	µg/L	2.2 J		40 U	
	Carbon tetrachloride	µg/L	6.2 J		5.9 J	
	Chloroform	µg/L	920		840	
	cis-1,2-Dichloroethene	µg/L	40		53	
	Dibromochloromethane	µg/L	6.1 J		5.5 J	
	Trichloroethene	µg/L	4700		9000	
X326-10G	Chloroform	µg/L	0.38 J		0.23 J	
	cis-1,2-Dichloroethene	µg/L	1.4 J		1.4 J	
	trans-1,2-Dichloroethene	µg/L	1 U		0.17 J	
	Trichloroethene	µg/L	14		14	
X626-07G	1,1-Dichloroethene	µg/L	1.8 J		22	
	Chloroform	µg/L	2.7		2.6	
	cis-1,2-Dichloroethene	µg/L	0.92 J		1.1 J	
	Trichloroethene	µg/L	300		430	
X749A-01G	Acetone	µg/L		6.6 BJ		
	Trichloroethene	µg/L		2.7		
X749A-03G	Acetone	µg/L		2.6 J		
X749A-04G	Acetone	µg/L		13		
X749A-05G	Acetone	µg/L		3.2 J		
X749A-07G	Acetone	µg/L		2.2 J		
X749A-12G	Acetone	µg/L		3.4 BJ		
	cis-1,2-Dichloroethene	µg/L		0.17 J		

**Table 4.3. Volatile organic compounds detected at the Quadrant I Groundwater Investigative Area – 2006
(continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X749A-13GA	Acetone	µg/L		15 B		
X770-MW17G	1,1-Dichloroethene	µg/L	80 U		2.6	
	Chloroform	µg/L	80 U		2.6	
	cis-1,2-Dichloroethene	µg/L	370		280 J	
	trans-1,2-Dichloroethene	µg/L	40 U		2.2	
	Trichloroethene	µg/L	8700		5400	
	Vinyl chloride	µg/L	40 U		1.1	

Table 4.4. Results for radionuclides at the Quadrant I Groundwater Investigative Area – 2006

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X230K-11G	Americium-241	pCi/L			0.04079 U	
	Neptunium-237	pCi/L			-0.03418 U	
	Plutonium-238	pCi/L			0.008559 U	
	Plutonium-239/240	pCi/L			-0.008516 U	
	Technetium-99	pCi/L			-0.0838 U	
	Uranium	µg/L			0.9947	
	Uranium-233/234	pCi/L			0.2594	
	Uranium-235	pCi/L			0.02999 U	
	Uranium-236	pCi/L			8.967E-06 U	
	Uranium-238	pCi/L			0.3316	
X230K-14G	Americium-241	pCi/L	-0.0151 U			
	Neptunium-237	pCi/L	-0.0264 U			
	Plutonium-238	pCi/L	0.03511 U			
	Plutonium-239/240	pCi/L	0.00878 U			
	Technetium-99	pCi/L	-0.087 U			
	Uranium	µg/L	0.1529 U			
	Uranium-233/234	pCi/L	0.1028			
	Uranium-235	pCi/L	0 U			
	Uranium-236	pCi/L	0.0095 U			
	Uranium-238	pCi/L	0.05132 U			
X230K-15G	Americium-241	pCi/L			2.458E-05 U	
	Neptunium-237	pCi/L			8.683E-06 U	
	Plutonium-238	pCi/L			1.732E-05 U	
	Plutonium-239/240	pCi/L			-0.01731 U	
	Technetium-99	pCi/L			-1.84 U	
	Uranium	µg/L			0.2982	
	Uranium-233/234	pCi/L			0.1292	
	Uranium-235	pCi/L			-0.01137 U	
	Uranium-236	pCi/L			-0.01021 U	
	Uranium-238	pCi/L			0.1013	
X231A-01G	Americium-241	pCi/L			-0.03234 U	0.13 U
	Neptunium-237	pCi/L			0.08852 U	-0.05268 U
	Plutonium-238	pCi/L			0.02209 U	0.01756 U
	Plutonium-239/240	pCi/L			0.02209 U	0.03509 U
	Technetium-99	pCi/L			7.98 U	10.9
	Uranium	µg/L			37.74	31.65
	Uranium-233/234	pCi/L			13.51	10.62
	Uranium-235	pCi/L			0.6673	0.5803
	Uranium-236	pCi/L			0.06659 U	0.01184 U
	Uranium-238	pCi/L			12.62	10.58
X231A-04G	Americium-241	pCi/L			-0.008411 U	
	Neptunium-237	pCi/L			0.01924 U	
	Plutonium-238	pCi/L			0.02876 U	
	Plutonium-239/240	pCi/L			0.009596 U	
	Technetium-99	pCi/L			5.88 U	
	Uranium	µg/L			0.339	
	Uranium-233/234	pCi/L			0.0286 U	
	Uranium-235	pCi/L			0 U	

Table 4.4. Results for radionuclides at the Quadrant I Groundwater Investigative Area – 2006 (continued)

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X231A-04G	Uranium-236	pCi/L			0.02368 U	
	Uranium-238	pCi/L			0.1138	
X231B-02G	Americium-241	pCi/L	-0.007 U		0.01543 U	
	Neptunium-237	pCi/L	-0.014 U		-0.1075 U	
	Plutonium-238	pCi/L	1E-05 U		0.01431 U	
	Plutonium-239/240	pCi/L	-0.007 U		-0.04282 U	
	Technetium-99	pCi/L	22.2		24.7	
	Uranium	µg/L	0.3021		0.2176	
	Uranium-233/234	pCi/L	0.2738		0.09894	
	Uranium-235	pCi/L	0.0089 U		0.008137 U	
	Uranium-236	pCi/L	0.008 U		0 U	
	Uranium-238	pCi/L	0.1007		0.07241	
X231B-03G	Americium-241	pCi/L	0.0146 U		-0.007084 U	
	Neptunium-237	pCi/L	-0.018 U		-0.04071 U	
	Plutonium-238	pCi/L	0.0176 U		8.12E-06 U	
	Plutonium-239/240	pCi/L	0.0088 U		0.01626 U	
	Technetium-99	pCi/L	15.1		12.9	
	Uranium	µg/L	0.4565		0.2869	
	Uranium-233/234	pCi/L	0.0999		0.1095	
	Uranium-235	pCi/L	0 U		0 U	
	Uranium-236	pCi/L	0.0085 U		0 U	
	Uranium-238	pCi/L	0.1534		0.0964	
X231B-04G	Americium-241	pCi/L	-0.025 U		-0.007634 U	
	Neptunium-237	pCi/L	-0.042 U		-0.02264 U	
	Plutonium-238	pCi/L	0.0141 U		0.01509 U	
	Plutonium-239/240	pCi/L	2E-05 U		-0.007524 U	
	Technetium-99	pCi/L	24.7		32.6	
	Uranium	µg/L	2.087		2.348	
	Uranium-233/234	pCi/L	5.399		4.827	
	Uranium-235	pCi/L	0.2705		0.1509	
	Uranium-236	pCi/L	0.0076 U		0.01594 U	
	Uranium-238	pCi/L	0.677		0.7753	
X231B-06G	Americium-241	pCi/L	0.0072 U		-0.02289 U	
	Neptunium-237	pCi/L	0.0138 U		-0.05689 U	
	Plutonium-238	pCi/L	0.0275 U		0.0284 U	
	Plutonium-239/240	pCi/L	0.0069 U		4.964E-05 U	
	Technetium-99	pCi/L	48.8		24.7	
	Uranium	µg/L	3.232		0.7159	
	Uranium-233/234	pCi/L	5.826		0.9493	
	Uranium-235	pCi/L	0.2963		0.06164	
	Uranium-236	pCi/L	0.0172 U		-0.007898 U	
	Uranium-238	pCi/L	1.059		0.2351	
X231B-07G	Americium-241	pCi/L		2.1E-05 U		
	Neptunium-237	pCi/L		0.00834 U		
	Plutonium-238	pCi/L		0.01662 U		
	Plutonium-239/240	pCi/L		0.02493 U		
	Technetium-99	pCi/L		6.65 U		
	Uranium	µg/L		0.2871		

Table 4.4. Results for radionuclides at the Quadrant I Groundwater Investigative Area – 2006 (continued)

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X231B-07G	Uranium-233/234	pCi/L		0.1475		
	Uranium-235	pCi/L		0.0091 U		
	Uranium-236	pCi/L		0 U		
	Uranium-238	pCi/L		0.09567		
X231B-08G	Americium-241	pCi/L	0.0075 U		0.03051 U	
	Neptunium-237	pCi/L	0.0074 U		-0.00726 U	
	Plutonium-238	pCi/L	0.0074 U		0.02913 U	
	Plutonium-239/240	pCi/L	-0.015 U		0.007291 U	
	Technetium-99	pCi/L	-0.021 U		2.27 U	
	Uranium	µg/L	0.571		0.4778	
	Uranium-233/234	pCi/L	0.1511		0.1889	
	Uranium-235	pCi/L	0.0373 U		0 U	
	Uranium-236	pCi/L	0 U		-0.007742 U	
	Uranium-238	pCi/L	0.1886		0.1606	
	Americium-241	pCi/L		0.01954 U		
	Neptunium-237	pCi/L		0 U		
	Plutonium-238	pCi/L		0.01116 U		
X231B-11G	Plutonium-239/240	pCi/L		0 U		
	Technetium-99	pCi/L		1.69 U		
	Uranium	µg/L		0.1216 U		
	Uranium-233/234	pCi/L		0.05614 U		
	Uranium-235	pCi/L		0.00989 U		
	Uranium-236	pCi/L		-0.0089 U		
	Uranium-238	pCi/L		0.04001 U		
	Americium-241	pCi/L	0.0072 U		0.01185 U	
	Neptunium-237	pCi/L	8E-06 U		-0.0474 U	
	Plutonium-238	pCi/L	0.0242 U		0.009503 U	
	Plutonium-239/240	pCi/L	0 U		0.009474 U	
	Technetium-99	pCi/L	-4.48 U		-3.02 U	
	Uranium	µg/L	0.1379 U		0.2283	
X231B-12G	Uranium-233/234	pCi/L	0.116		0.03074 U	
	Uranium-235	pCi/L	0 U		0 U	
	Uranium-236	pCi/L	0 U		0.00852 U	
	Uranium-238	pCi/L	0.0463 U		0.07669	
	Americium-241	pCi/L	0.0161 U		8.573E-06 U	
	Neptunium-237	pCi/L	0 U		-0.05556 U	
	Plutonium-238	pCi/L	0.0361 U		0.009263 U	
	Plutonium-239/240	pCi/L	2E-05 U		1.847E-05 U	
	Technetium-99	pCi/L	-6.3 U		1.14 U	
	Uranium	µg/L	0.1976		0.1245 U	
	Uranium-233/234	pCi/L	0.0225 U		0.0336 U	
	Uranium-235	pCi/L	-0.009 U		1.033E-05 U	
	Uranium-236	pCi/L	0 U		9.278E-06 U	
	Uranium-238	pCi/L	0.0672		0.04185 U	
X231B-14G	Americium-241	pCi/L	0.0249 U		-0.02579 U	
	Neptunium-237	pCi/L	0.0146 U		-0.02621 U	
	Plutonium-238	pCi/L	1E-05 U		0.008747 U	
	Plutonium-239/240	pCi/L	0.0073 U		0.02617 U	
X231B-15G						

Table 4.4. Results for radionuclides at the Quadrant I Groundwater Investigative Area – 2006 (continued)

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X231B-15G	Technetium-99	pCi/L	-6.38 U		-0.148 U	
	Uranium	µg/L	0.0622 U		0.1975	
	Uranium-233/234	pCi/L	0.014 U		0.05904 U	
	Uranium-235	pCi/L	0 U		-0.01039 U	
	Uranium-236	pCi/L	0.0077 U		0 U	
	Uranium-238	pCi/L	0.0209 U		0.0673	
X231B-16G	Americium-241	pCi/L	8E-06 U		-0.0295 U	
	Neptunium-237	pCi/L	0 U		-0.07074 U	
	Plutonium-238	pCi/L	0.0247 U		-0.01762 U	
	Plutonium-239/240	pCi/L	-0.025 U		-0.04409 U	
	Technetium-99	pCi/L	-8.34 U		-4.69 U	
	Uranium	µg/L	0.3596		0.223	
	Uranium-233/234	pCi/L	0.106		0.02505 U	
	Uranium-235	pCi/L	0 U		0 U	
	Uranium-236	pCi/L	-0.008 U		0 U	
	Uranium-238	pCi/L	0.1209		0.07495	
X231B-19G	Americium-241	pCi/L		-0.0117 U		
	Neptunium-237	pCi/L		0.02634 U		
	Plutonium-238	pCi/L		0.00877 U		
	Plutonium-239/240	pCi/L		-0.0175 U		
	Technetium-99	pCi/L		0.163 U		
	Uranium	µg/L		0.3648		
	Uranium-233/234	pCi/L		0.2456		
	Uranium-235	pCi/L		0 U		
	Uranium-236	pCi/L		0 U		
	Uranium-238	pCi/L		0.1226		
X231B-20G	Americium-241	pCi/L	-0.008 U		-0.007066 U	
	Neptunium-237	pCi/L	0 U		6.953E-06 U	
	Plutonium-238	pCi/L	0.0067 U		0.02083 U	
	Plutonium-239/240	pCi/L	0 U		0.006953 U	
	Technetium-99	pCi/L	2.69 U		3.5 U	
	Uranium	µg/L	0.2664		0.02237 U	
	Uranium-233/234	pCi/L	0.0905 U		0.03381 U	
	Uranium-235	pCi/L	-0.009 U		0.008336 U	
	Uranium-236	pCi/L	0.0077 U		0 U	
	Uranium-238	pCi/L	0.0902		0.00677 U	
X231B-23G	Americium-241	pCi/L	0 U		-0.01188 U	
	Neptunium-237	pCi/L	-0.048 U		-0.03263 U	
	Plutonium-238	pCi/L	0.0160 U		0.03259 U	
	Plutonium-239/240	pCi/L	8E-06 U		0.008147 U	
	Technetium-99	pCi/L	-4.52 U		1.31 U	
	Uranium	µg/L	0.5762		0.7297	
	Uranium-233/234	pCi/L	0.1707		0.2626	
	Uranium-235	pCi/L	0 U		0 U	
	Uranium-236	pCi/L	0 U		9.374E-06 U	
	Uranium-238	pCi/L	0.1936		0.2452	
X231B-24B	Americium-241	pCi/L			0.01849 U	
	Neptunium-237	pCi/L			-0.0268 U	

Table 4.4. Results for radionuclides at the Quadrant I Groundwater Investigative Area – 2006 (continued)

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X231B-24B	Plutonium-238	pCi/L			0.01785 U	
	Plutonium-239/240	pCi/L			0.008935 U	
	Technetium-99	pCi/L			-1.4 U	
	Uranium	µg/L			0.2496	
	Uranium-233/234	pCi/L			0.2268	
	Uranium-235	pCi/L			0 U	
	Uranium-236	pCi/L			0.009303 U	
	Uranium-238	pCi/L			0.08382	
X231B-27G	Americium-241	pCi/L	0.0184 U		0.007203 U	
	Neptunium-237	pCi/L	-0.008 U		0.007859 U	
	Plutonium-238	pCi/L	0.0241 U		1.564E-05 U	
	Plutonium-239/240	pCi/L	-0.008 U		0.007829 U	
	Technetium-99	pCi/L	2.63 U		-3.68 U	
	Uranium	µg/L	0.0477 U		0.3139	
	Uranium-233/234	pCi/L	5E-05 U		0.09945 U	
	Uranium-235	pCi/L	0.0094 U		-0.008748 U	
	Uranium-236	pCi/L	0 U		0 U	
	Uranium-238	pCi/L	0.0152 U		0.1063	
X231B-28G	Americium-241	pCi/L	-0.007 U		0.008273 U	
	Neptunium-237	pCi/L	-0.016 U		-0.04049 U	
	Plutonium-238	pCi/L	2E-05 U		0.02426 U	
	Plutonium-239/240	pCi/L	0.0081 U		-0.02422 U	
	Technetium-99	pCi/L	3.33 U		-3.75 U	
	Uranium	µg/L	0.1453		0.1167 U	
	Uranium-233/234	pCi/L	0.0894		0.01579 U	
	Uranium-235	pCi/L	0.0085 U		0 U	
	Uranium-236	pCi/L	0.0076 U		0 U	
	Uranium-238	pCi/L	0.0480		0.03922 U	
X231B-29G	Americium-241	pCi/L		-0.0114 U		
	Neptunium-237	pCi/L		-0.0174 U		
	Plutonium-238	pCi/L		0.03467 U		
	Plutonium-239/240	pCi/L		0.00867 U		
	Technetium-99	pCi/L		0.375 U		
	Uranium	µg/L		0.06705 U		
	Uranium-233/234	pCi/L		0.03911 U		
	Uranium-235	pCi/L		-0.0096 U		
	Uranium-236	pCi/L		0 U		
	Uranium-238	pCi/L		0.02339 U		
X231B-32B	Americium-241	pCi/L			9.775E-06 U	
	Neptunium-237	pCi/L			-0.008682 U	
	Plutonium-238	pCi/L			0.008666 U	
	Plutonium-239/240	pCi/L			0.01733 U	
	Technetium-99	pCi/L			-0.111 U	
	Uranium	µg/L			0.3049	
	Uranium-233/234	pCi/L			0.2787	
	Uranium-235	pCi/L			-0.009804 U	
	Uranium-236	pCi/L			8.812E-06 U	
	Uranium-238	pCi/L			0.1033	

Table 4.4. Results for radionuclides at the Quadrant I Groundwater Investigative Area – 2006 (continued)

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X231B-33B	Americium-241	pCi/L			1.162E-05 U	
	Neptunium-237	pCi/L			-0.04776 U	
	Plutonium-238	pCi/L			0.03977 U	
	Plutonium-239/240	pCi/L			-0.04765 U	
	Technetium-99	pCi/L			-4.77 U	
	Uranium	µg/L			0.04233 U	
	Uranium-233/234	pCi/L			0.05 U	
	Uranium-235	pCi/L			0 U	
	Uranium-236	pCi/L			-0.007903 U	
	Uranium-238	pCi/L			0.01426 U	
X231B-34B	Americium-241	pCi/L			-0.01364 U	
	Neptunium-237	pCi/L			0.007683 U	
	Plutonium-238	pCi/L			0.03062 U	
	Plutonium-239/240	pCi/L			-0.007638 U	
	Technetium-99	pCi/L			-3.38 U	
	Uranium	µg/L			0.2542 U	
	Uranium-233/234	pCi/L			0.248	
	Uranium-235	pCi/L			0 U	
	Uranium-236	pCi/L			0.00947 U	
	Uranium-238	pCi/L			0.08537 U	
X231B-36G	Americium-241	pCi/L		0.01718 U		
	Neptunium-237	pCi/L		-0.0107 U		
	Plutonium-238	pCi/L		0.04274 U		
	Plutonium-239/240	pCi/L		2.1E-05 U		
	Technetium-99	pCi/L		-1.76 U		
	Uranium	µg/L		0.7901		
	Uranium-233/234	pCi/L		0.2983		
	Uranium-235	pCi/L		0.02102 U		
	Uranium-236	pCi/L		0 U		
	Uranium-238	pCi/L		0.2636		
X231B-37G	Americium-241	pCi/L	0.0247 U		-0.009422 U	
	Neptunium-237	pCi/L	8E-06 U		-0.05051 U	
	Plutonium-238	pCi/L	0 U		0.008421 U	
	Plutonium-239/240	pCi/L	0.0079 U		-0.008395 U	
	Technetium-99	pCi/L	-0.726 U		-0.54 U	
	Uranium	µg/L	0.493		0.315	
	Uranium-233/234	pCi/L	0.1207		0.1861	
	Uranium-235	pCi/L	0 U		0.009979 U	
	Uranium-236	pCi/L	0 U		0 U	
	Uranium-238	pCi/L	0.1657		0.105	
X231B-38G	Americium-241	pCi/L		2.6E-05 U		
	Neptunium-237	pCi/L		-0.0095 U		
	Plutonium-238	pCi/L		0.01907 U		
	Plutonium-239/240	pCi/L		-0.0095 U		
	Technetium-99	pCi/L		-4.58 U		
	Uranium	µg/L		2.341		
	Uranium-233/234	pCi/L		0.7944		
	Uranium-235	pCi/L		0.01942 U		

Table 4.4. Results for radionuclides at the Quadrant I Groundwater Investigative Area – 2006 (continued)

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X231B-38G	Uranium-236	pCi/L		-0.0261 U		
	Uranium-238	pCi/L		0.785		
X231B-39G	Americium-241	pCi/g		0.01354 U		
	Neptunium-237	pCi/L		-0.0667 U		
	Plutonium-238	pCi/L		0.01668 U		
	Plutonium-239/240	pCi/L		-0.0914 U		
	Technetium-99	pCi/L		-1.02 U		
	Uranium	µg/L		0.7498		
	Uranium-233/234	pCi/L		0.2271		
	Uranium-235	pCi/L		0 U		
	Uranium-236	pCi/L		0.00932 U		
	Uranium-238	pCi/L		0.2519		
X326-09G	Americium-241	pCi/L	-0.015 U		0.00842 U	
	Neptunium-237	pCi/L	-0.022 U		-0.08733 U	
	Plutonium-238	pCi/L	0.0293 U		0.007294 U	
	Plutonium-239/240	pCi/L	1E-05 U		-0.05078 U	
	Technetium-99	pCi/L	2.97 U		3.02 U	
	Uranium	µg/L	0.1704		0.2158	
	Uranium-233/234	pCi/L	0.2578		0.06005	
	Uranium-235	pCi/L	0 U		-0.008214 U	
	Uranium-236	pCi/L	0.0159 U		0 U	
	Uranium-238	pCi/L	0.0572		0.07325	
X326-10G	Americium-241	pCi/L	0.0282 U		-0.008829 U	
	Neptunium-237	pCi/L	4E-05 U		-0.03656 U	
	Plutonium-238	pCi/L	0.0300 U		0.02922 U	
	Plutonium-239/240	pCi/L	0.0075 U		-0.01456 U	
	Technetium-99	pCi/L	3.24 U		7.04 U	
	Uranium	µg/L	3.124		5.576	
	Uranium-233/234	pCi/L	1.241		1.733	
	Uranium-235	pCi/L	0.0641		0.05089	
	Uranium-236	pCi/L	0.0144 U		0 U	
	Uranium-238	pCi/L	1.044		1.869	
X626-07G	Americium-241	pCi/L	0.021 U		0.01468 U	
	Neptunium-237	pCi/L	0.0148 U		2.437E-05 U	
	Plutonium-238	pCi/L	-0.007 U		0.01623 U	
	Plutonium-239/240	pCi/L	-0.015 U		-0.0243 U	
	Technetium-99	pCi/L	8.22 U		3.02 U	
	Uranium	µg/L	0.2674		0.3387	
	Uranium-233/234	pCi/L	0.0957		0.114	
	Uranium-235	pCi/L	0.0079 U		0 U	
	Uranium-236	pCi/L	0 U		0 U	
	Uranium-238	pCi/L	0.0892		0.1138	
X710-01G	Americium-241	pCi/L		3.3E-05 U		
	Neptunium-237	pCi/L		-0.0759 U		
	Plutonium-238	pCi/L		2.2E-05 U		
	Plutonium-239/240	pCi/L		2.2E-05 U		
	Technetium-99	pCi/L		-3.29 U		
	Uranium	µg/L		0.3911		

Table 4.4. Results for radionuclides at the Quadrant I Groundwater Investigative Area – 2006 (continued)

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X710-01G	Uranium-233/234	pCi/L		0.06541 U		
	Uranium-235	pCi/L		0.01008 U		
	Uranium-236	pCi/L		0 U		
	Uranium-238	pCi/L		0.1305		
X749A-01G	Americium-241	pCi/L		0.0151 U		-0.01269 U
	Neptunium-237	pCi/L		-0.0307 U		-0.01716 U
	Plutonium-238	pCi/L		2.3E-05 U		1.71E-05 U
	Plutonium-239/240	pCi/L		-0.0153 U		-0.02569 U
	Technetium-99	pCi/L		-0.518 U		3.06 U
	Uranium	µg/L		0.6881		0.79
	Uranium-233/234	pCi/L		0.4122		0.2692
	Uranium-235	pCi/L		0.01956 U		-0.03555 U
	Uranium-236	pCi/L		0 U		-0.01064 U
	Uranium-238	pCi/L		0.2295		0.2687
X749A-02G	Americium-241	pCi/L		7.8E-06 U		0.03006 U
	Neptunium-237	pCi/L		-0.0143 U		0.006729 U
	Plutonium-238	pCi/L		0.02151 U		0.00671 U
	Plutonium-239/240	pCi/L		-0.0143 U		0.01341 U
	Technetium-99	pCi/L		1.36 U		-1.05 U
	Uranium	µg/L		0.148		0.2515 U
	Uranium-233/234	pCi/L		0.02896 U		0.1508
	Uranium-235	pCi/L		-0.0089 U		0.01033 U
	Uranium-236	pCi/L		0 U		0 U
	Uranium-238	pCi/L		0.05052		0.08359 U
X749A-03G	Americium-241	pCi/L		-0.0181 U		0.008652 U
	Neptunium-237	pCi/L		3.9E-05 U		-0.03621 U
	Plutonium-238	pCi/L		0.0464 U		-0.02894 U
	Plutonium-239/240	pCi/L		1.5E-05 U		-0.00723 U
	Technetium-99	pCi/L		-2.52 U		-0.99 U
	Uranium	µg/L		0.3321		0.8703
	Uranium-233/234	pCi/L		0.1278		0.3778
	Uranium-235	pCi/L		0 U		9.50E-06 U
	Uranium-236	pCi/L		0.00884 U		0.00854 U
	Uranium-238	pCi/L		0.1116		0.2924
X749A-04G	Americium-241	pCi/L		8.1E-06 U		0.01202 U
	Neptunium-237	pCi/L		0.00782 U		-0.00758 U
	Plutonium-238	pCi/L		0.00779 U		0.01513 U
	Plutonium-239/240	pCi/L		-0.0077 U		-0.00755 U
	Technetium-99	pCi/L		-0.821 U		1.87 U
	Uranium	µg/L		0.02433 U		0.3073
	Uranium-233/234	pCi/L		0.00739 U		0.02856 U
	Uranium-235	pCi/L		0.00909 U		-0.0117 U
	Uranium-236	pCi/L		0 U		1.05E-05 U
	Uranium-238	pCi/L		0.00736 U		0.1043
X749A-05G	Americium-241	pCi/L		8.4E-06 U		-0.00927 U
	Neptunium-237	pCi/L		0 U		-0.00851 U
	Plutonium-238	pCi/L		0.02881 U		-0.00849 U
	Plutonium-239/240	pCi/L		0.02161 U		8.49E-06 U

Table 4.4. Results for radionuclides at the Quadrant I Groundwater Investigative Area – 2006 (continued)

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X749A-05G	Technetium-99	pCi/L		-4.31 U		-2.5 U
	Uranium	µg/L		0.07559 U		0.2693
	Uranium-233/234	pCi/L		0.02455 U		0.09864 U
	Uranium-235	pCi/L		0.01009 U		0.01106 U
	Uranium-236	pCi/L		0 U		0.009927 U
	Uranium-238	pCi/L		0.0245 U		0.08945
X749A-07G	Americium-241	pCi/L		0.0087 U		-0.01144 U
	Neptunium-237	pCi/L		-0.0249 U		-0.04148 U
	Plutonium-238	pCi/L		-0.0166 U		-0.00689 U
	Plutonium-239/240	pCi/L		0.03322 U		0.006916 U
	Technetium-99	pCi/L		-4.75 U		-1.77 U
	Uranium	µg/L		7.768		8.09
	Uranium-233/234	pCi/L		2.892		3.367
	Uranium-235	pCi/L		0.1321		0.1662
	Uranium-236	pCi/L		0.0365 U		0.008289 U
	Uranium-238	pCi/L		2.598		2.703
X749A-12G	Americium-241	pCi/L		0.00842 U		0.01156 U
	Neptunium-237	pCi/L		-0.0115 U		-0.09679 U
	Plutonium-238	pCi/L		-0.0057 U		8.05E-06 U
	Plutonium-239/240	pCi/L		0.01153 U		5.63E-05 U
	Technetium-99	pCi/L		-1.63 U		-5.35 U
	Uranium	µg/L		-0.0075 U		0.1185 U
	Uranium-233/234	pCi/L		0.06832 U		0.04891 U
	Uranium-235	pCi/L		-0.0281 U		-0.01004 U
	Uranium-236	pCi/L		-0.0084 U		0.009034 U
	Uranium-238	pCi/L		2.3E-05 U		0.04067 U
X749A-13GA	Americium-241	pCi/L		0.00815 U		0.04303 U
	Neptunium-237	pCi/L		-0.0144 U		-0.02299 U
	Plutonium-238	pCi/L		0.01441 U		0.03063 U
	Plutonium-239/240	pCi/L		-0.0072 U		0.007654 U
	Technetium-99	pCi/L		-4.92 U		-0.766 U
	Uranium	µg/L		1.356		1.944
	Uranium-233/234	pCi/L		0.5411		0.5754
	Uranium-235	pCi/L		0.00878 U		0.03736 U
	Uranium-236	pCi/L		-0.0079 U		0.008384 U
	Uranium-238	pCi/L		0.4548		0.6497
X749A-14G	Americium-241	pCi/L		0.00774 U		0.01595 U
	Neptunium-237	pCi/L		-0.0866 U		-0.00859 U
	Plutonium-238	pCi/L		0.01994 U		0.008596 U
	Plutonium-239/240	pCi/L		-0.0133 U		0.01719 U
	Technetium-99	pCi/L		-1.57 U		-4.41 U
	Uranium	µg/L		0.082 U		0.2786
	Uranium-233/234	pCi/L		0.04255 U		0.2012
	Uranium-235	pCi/L		-0.0087 U		0.009546 U
	Uranium-236	pCi/L		0.00785 U		0.01714 U
	Uranium-238	pCi/L		0.02829 U		0.09268
X749A-16G	Americium-241	pCi/L		0.00738 U		0.008314 U
	Neptunium-237	pCi/L		-0.0154 U		-0.02802 U

Table 4.4. Results for radionuclides at the Quadrant I Groundwater Investigative Area – 2006 (continued)

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X749A-16G	Plutonium-238	pCi/L		0.0154 U		-0.01864 U
	Plutonium-239/240	pCi/L		-0.0154 U		-0.0093 U
	Technetium-99	pCi/L		-0.642 U		3.33 U
	Uranium	µg/L		0.1271		0.7904
	Uranium-233/234	pCi/L		0.06699		0.2984
	Uranium-235	pCi/L		0.01033 U		0 U
	Uranium-236	pCi/L		9.3E-06 U		0 U
	Uranium-238	pCi/L		0.04178		0.2656
X760-02G	Americium-241	pCi/L		-0.0354 U		
	Neptunium-237	pCi/L		-0.0017 U		
	Plutonium-238	pCi/L		0.05024 U		
	Plutonium-239/240	pCi/L		0.00837 U		
	Technetium-99	pCi/L		1.21 U		
	Uranium	µg/L		1.087		
	Uranium-233/234	pCi/L		0.1831		
	Uranium-235	pCi/L		1.0E-05 U		
X760-03G	Uranium-236	pCi/L		0.00922 U		
	Uranium-238	pCi/L		0.3654		
	Americium-241	pCi/L		1.2E-05 U		
	Neptunium-237	pCi/L		-0.0353 U		
	Plutonium-238	pCi/L		0.01766 U		
	Plutonium-239/240	pCi/L		-0.0088 U		
	Technetium-99	pCi/L		2.87 U		
	Uranium	µg/L		0.5201		
X760-07G	Uranium-233/234	pCi/L		0.1188		
	Uranium-235	pCi/L		0.00977 U		
	Uranium-236	pCi/L		0 U		
	Uranium-238	pCi/L		0.1739		
	Americium-241	pCi/L		0.05995 U		
	Neptunium-237	pCi/L		-0.0292 U		
	Plutonium-238	pCi/L		0.03888 U		
	Plutonium-239/240	pCi/L		0 U		
X770-MW17G	Technetium-99	pCi/L		0.642 U		
	Uranium	µg/L		0.8029		
	Uranium-233/234	pCi/L		0.1487		
	Uranium-235	pCi/L		-0.0108 U		
	Uranium-236	pCi/L		0.01938 U		
	Uranium-238	pCi/L		0.2706		
	Americium-241	pCi/L	-0.007 U		-0.04117 U	
	Neptunium-237	pCi/L	0.0077 U		-0.02552 U	
	Plutonium-238	pCi/L	2E-05 U		0.03401 U	
	Plutonium-239/240	pCi/L	0.0077 U		8.494E-06 U	
	Technetium-99	pCi/L	-1.88 U		-6.36 U	
	Uranium	µg/L	1.482		24.24	
	Uranium-233/234	pCi/L	0.4476		9.242	
	Uranium-235	pCi/L	0.0175 U		0.3261	
	Uranium-236	pCi/L	0.0079 U		0.02252 U	
	Uranium-238	pCi/L	0.4964		8.117	

Table 4.5. Volatile organic compounds detected at the Quadrant II Groundwater Investigative Area – 2006

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X700-02G	1,1,1-Trichloroethane	µg/L			11 J	
	1,1-Dichloroethane	µg/L			12 J	
	1,1-Dichloroethene	µg/L			130	
	1,2-Dichloroethane	µg/L			4.5 J	
	4-Methyl-2-pentanone	µg/L			12 J	
	Acetone	µg/L			180 J	
	cis-1,2-Dichloroethene	µg/L			76	
	Trichloroethene	µg/L			7200	
X701-45G	1,1-Dichloroethane	µg/L			0.25 J	
	1,1-Dichloroethene	µg/L			0.49 J	
	Acetone	µg/L			3.1 J	
	Trichloroethene	µg/L			0.65 J	
X701-68G	1,1-Dichloroethane	µg/L			0.3 J	
	1,1-Dichloroethene	µg/L			1.4 J	
	Chloroform	µg/L			0.41 J	
	cis-1,2-Dichloroethene	µg/L			0.66 J	
	Trichloroethene	µg/L			35	
X701-69G	1,1-Dichloroethene	µg/L			1.3 J	
	cis-1,2-Dichloroethene	µg/L			330	
	Tetrachloroethene	µg/L			10 J	
	trans-1,2-Dichloroethene	µg/L			12	
	Trichloroethene	µg/L			1900	
X701-70G	1,1-Dichloroethene	µg/L			4.1 J	
	Trichloroethene	µg/L			1700	
X701-117GA	1,1,1-Trichloroethane	µg/L			0.29 J	
	1,1-Dichloroethane	µg/L			0.17 J	
	1,1-Dichloroethene	µg/L			0.82 J	
	Acetone	µg/L			2.7 J	
	Chloroform	µg/L			0.27 J	
	cis-1,2-Dichloroethene	µg/L			4.2	
	Trichloroethene	µg/L			220	
X705-01GA	1,1-Dichloroethene	µg/L			0.81 J	
	Acetone	µg/L			2.5 J	
	Bromodichloromethane	µg/L			0.25 J	
	Carbon tetrachloride	µg/L			0.8 J	
	Chloroform	µg/L			17	
	cis-1,2-Dichloroethene	µg/L			0.47 J	
	Methylene chloride	µg/L			0.36 BJ	
	Tetrachloroethene	µg/L			0.48 J	
	Trichloroethene	µg/L			160	
X705-04G	1,1-Dichloroethane	µg/L			0.22 J	
	1,1-Dichloroethene	µg/L			2.6	
	1,2-Dichloroethane	µg/L			0.27 J	
	Bromodichloromethane	µg/L			1.3 J	
	Carbon tetrachloride	µg/L			13	
	Chloroform	µg/L			300	
	Dibromochloromethane	µg/L			0.21 J	
	Methylene chloride	µg/L			0.41 BJ	

**Table 4.5. Volatile organic compounds detected at the Quadrant II Groundwater Investigative Area – 2006
(continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X705-04G	Tetrachloroethene	µg/L			1.5 J	
	Trichloroethene	µg/L			210	
X705-07G	1,1-Dichloroethene	µg/L			0.15 J	
	Chloroform	µg/L			0.56 J	
	cis-1,2-Dichloroethene	µg/L			0.89 J	
	Methylene chloride	µg/L			0.35 BJ	
	Trichloroethene	µg/L			13	
	1,1,1-Trichloroethane	µg/L			1300 J	
X720-01G	1,1-Dichloroethene	µg/L			1700 J	
	Trichloroethene	µg/L			130000	
	1,1-Dichloroethene	µg/L			64	
X720-08G	Chloroform	µg/L			5.3 J	
	Trichloroethene	µg/L			4700	

Table 4.6. Results for radionuclides at the Quadrant II Groundwater Investigative Area – 2006

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
PRCL-01G	Americium-241	pCi/L		0.06194 U		
	Neptunium-237	pCi/L		-0.0662 U		
	Plutonium-238	pCi/L		0.01656 U		
	Plutonium-239/240	pCi/L		-0.0165 U		
	Technetium-99	pCi/L		-2.16 U		
	Uranium	µg/L		0.05095 U		
	Uranium-233/234	pCi/L		0.01716 U		
	Uranium-235	pCi/L		0 U		
	Uranium-236	pCi/L		9.5E-06 U		
	Uranium-238	pCi/L		0.01712 U		
X700-02G	Americium-241	pCi/L			-0.01275 U	
	Neptunium-237	pCi/L			0.03659 U	
	Plutonium-238	pCi/L			0.009122 U	
	Plutonium-239/240	pCi/L			0.009122 U	
	Technetium-99	pCi/L			73.4	
	Uranium	µg/L			1.519	
	Uranium-233/234	pCi/L			0.5997	
	Uranium-235	pCi/L			1.087E-05 U	
	Uranium-236	pCi/L			-0.009757 U	
	Uranium-238	pCi/L			0.5104	
X701-26G	Americium-241	pCi/L		0 U		
	Neptunium-237	pCi/L		0 U		
	Plutonium-238	pCi/L		0.04704 U		
	Plutonium-239/240	pCi/L		7.8E-06 U		
	Technetium-99	pCi/L		42.2		
	Uranium	µg/L		6.121		
	Uranium-233/234	pCi/L		3.155		
	Uranium-235	pCi/L		0.0626		
	Uranium-236	pCi/L		0 U		
	Uranium-238	pCi/L		2.051		
X701-27G	Americium-241	pCi/L		0.01087 U		
	Neptunium-237	pCi/L		-0.0919 U		
	Plutonium-238	pCi/L		1.8E-05 U		
	Plutonium-239/240	pCi/L		-0.0091 U		
	Technetium-99	pCi/L		-0.0223 U		
	Uranium	µg/L		8.457		
	Uranium-233/234	pCi/L		3.342		
	Uranium-235	pCi/L		0.1036		
	Uranium-236	pCi/L		0.0279 U		
	Uranium-238	pCi/L		2.832		
X701-28GA	Americium-241	pCi/L			0.01957 U	
	Neptunium-237	pCi/L			0.007433 U	
	Plutonium-238	pCi/L			0.02959 U	
	Plutonium-239/240	pCi/L			1.478E-05 U	
	Technetium-99	pCi/L			7.53 U	
	Uranium	µg/L			1.926	
	Uranium-233/234	pCi/L			1.449	
	Uranium-235	pCi/L			0.02518 U	

Table 4.6. Results for radionuclides at the Quadrant II Groundwater Investigative Area – 2006 (continued)

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X701-28GA	Uranium-236	pCi/L			0.007535 U	
	Uranium-238	pCi/L			0.645	
X701-29G	Americium-241	pCi/L		-0.0104 U		
	Neptunium-237	pCi/L		7.4E-06 U		
	Plutonium-238	pCi/L		0.02969 U		
	Plutonium-239/240	pCi/L		7.4E-06 U		
	Technetium-99	pCi/L		-1.86 U		
	Uranium	µg/L		0.1533 U		
	Uranium-233/234	pCi/L		0.1449		
	Uranium-235	pCi/L		0.00894 U		
	Uranium-236	pCi/L		0.01605 U		
	Uranium-238	pCi/L		0.05063 U		
	Americium-241	pCi/L			0.01111 U	
X701-45G	Neptunium-237	pCi/L			-0.01452 U	
	Plutonium-238	pCi/L			0.02899 U	
	Plutonium-239/240	pCi/L			-0.02172 U	
	Technetium-99	pCi/L			-5.51 U	
	Uranium	µg/L			0.5633	
	Uranium-233/234	pCi/L			0.2115	
	Uranium-235	pCi/L			0.009317 U	
	Uranium-236	pCi/L			0 U	
	Uranium-238	pCi/L			0.1884	
	Americium-241	pCi/L		0.06158 U		
	Neptunium-237	pCi/L		0.01044 U		
X701-46G	Plutonium-238	pCi/L		0.05194 U		
	Plutonium-239/240	pCi/L		1.0E-05 U		
	Technetium-99	pCi/L		0.486 U		
	Uranium	µg/L		11.11		
	Uranium-233/234	pCi/L		5.99		
	Uranium-235	pCi/L		0.1589		
	Uranium-236	pCi/L		0.06115		
	Uranium-238	pCi/L		3.719		
	Americium-241	pCi/L			1.137E-05 U	
	Neptunium-237	pCi/L			-0.05675 U	
	Plutonium-238	pCi/L			0.02127 U	
X701-68G	Plutonium-239/240	pCi/L			-0.04245 U	
	Technetium-99	pCi/L			18.1	
	Uranium	µg/L			1.643	
	Uranium-233/234	pCi/L			0.7047	
	Uranium-235	pCi/L			0 U	
	Uranium-236	pCi/L			0 U	
	Uranium-238	pCi/L			0.5521	
	Americium-241	pCi/L			0.03036 U	
	Neptunium-237	pCi/L			-0.007615 U	
	Plutonium-238	pCi/L			0.03046 U	
	Plutonium-239/240	pCi/L			0.007616 U	
X701-69G	Technetium-99	pCi/L			-0.318 U	
	Uranium	µg/L			5.761	

Table 4.6. Results for radionuclides at the Quadrant II Groundwater Investigative Area – 2006 (continued)

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X701-69G	Uranium-233/234	pCi/L			2.971	
	Uranium-235	pCi/L			0.06964	
	Uranium-236	pCi/L			0.007816 U	
	Uranium-238	pCi/L			1.929	
X701-70G	Americium-241	pCi/L			0.01248 U	
	Neptunium-237	pCi/L			-0.05011 U	
	Plutonium-238	pCi/L			2.498E-05 U	
	Plutonium-239/240	pCi/L			0.03751 U	
	Technetium-99	pCi/L			30	
	Uranium	µg/L			2.258	
	Uranium-233/234	pCi/L			1.161	
	Uranium-235	pCi/L			0.01377 U	
	Uranium-236	pCi/L			-0.01235 U	
	Uranium-238	pCi/L			0.7577	
X701-117GA	Americium-241	pCi/L			0.03771 U	
	Neptunium-237	pCi/L			-0.06947 U	
	Plutonium-238	pCi/L			0.03082 U	
	Plutonium-239/240	pCi/L			0 U	
	Technetium-99	pCi/L			56.4	
	Uranium	µg/L			2.948	
	Uranium-233/234	pCi/L			1.334	
	Uranium-235	pCi/L			1.868E-05 U	
	Uranium-236	pCi/L			8.386E-06 U	
	Uranium-238	pCi/L			0.9907	
X705-01GA	Americium-241	pCi/L			0.008982 U	
	Neptunium-237	pCi/L			-0.0796 U	
	Plutonium-238	pCi/L			0.0177 U	
	Plutonium-239/240	pCi/L			-0.04407 U	
	Technetium-99	pCi/L			831	
	Uranium	µg/L			0.7324	
	Uranium-233/234	pCi/L			0.3945	
	Uranium-235	pCi/L			0 U	
	Uranium-236	pCi/L			0 U	
	Uranium-238	pCi/L			0.2461	
X705-02G	Americium-241	pCi/L			-0.009507 U	
	Neptunium-237	pCi/L			-0.0561 U	
	Plutonium-238	pCi/L			0.01603 U	
	Plutonium-239/240	pCi/L			0.008048 U	
	Technetium-99	pCi/L			4.86 U	
	Uranium	µg/L			5.398	
	Uranium-233/234	pCi/L			1.612	
	Uranium-235	pCi/L			0.04439	
	Uranium-236	pCi/L			0.007971 U	
	Uranium-238	pCi/L			1.81	
X705-03G	Americium-241	pCi/L		0.01511 U		
	Neptunium-237	pCi/L		-0.0369 U		
	Plutonium-238	pCi/L		0.0442 U		
	Plutonium-239/240	pCi/L		-0.0221 U		

Table 4.6. Results for radionuclides at the Quadrant II Groundwater Investigative Area – 2006 (continued)

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X705-03G	Technetium-99	pCi/L		-3.49 U		
	Uranium	µg/L		1.798		
	Uranium-233/234	pCi/L		0.7321		
	Uranium-235	pCi/L		0.02656 U		
	Uranium-236	pCi/L		0.00795 U		
	Uranium-238	pCi/L		0.6017		
X705-04G	Americium-241	pCi/L			0.02251 U	
	Neptunium-237	pCi/L			-0.009252 U	
	Plutonium-238	pCi/L			0.009244 U	
	Plutonium-239/240	pCi/L			-0.009235 U	
	Technetium-99	pCi/L			13.3	
	Uranium	µg/L			2.163	
	Uranium-233/234	pCi/L			0.7192	
	Uranium-235	pCi/L			0.01868 U	
	Uranium-236	pCi/L			0 U	
	Uranium-238	pCi/L			0.7253	
X705-05B	Americium-241	pCi/L		0.02639 U		
	Neptunium-237	pCi/L		-0.0309 U		
	Plutonium-238	pCi/L		0.0309 U		
	Plutonium-239/240	pCi/L		1.5E-05 U		
	Technetium-99	pCi/L		-1.79 U		
	Uranium	µg/L		0.337		
	Uranium-233/234	pCi/L		0.5253		
	Uranium-235	pCi/L		0.00926 U		
	Uranium-236	pCi/L		0.00831 U		
	Uranium-238	pCi/L		0.1124		
X705-06G	Americium-241	pCi/L		9.9E-06 U		
	Neptunium-237	pCi/L		-0.0471 U		
	Plutonium-238	pCi/L		0.04704 U		
	Plutonium-239/240	pCi/L		-0.0078 U		
	Technetium-99	pCi/L		34.7		
	Uranium	µg/L		0.6106		
	Uranium-233/234	pCi/L		0.2594		
	Uranium-235	pCi/L		0.00843 U		
	Uranium-236	pCi/L		0.00756 U		
	Uranium-238	pCi/L		0.2044		
X705-07G	Americium-241	pCi/L			9.867E-06 U	
	Neptunium-237	pCi/L			0.02583 U	
	Plutonium-238	pCi/L			1.716E-05 U	
	Plutonium-239/240	pCi/L			8.578E-06 U	
	Technetium-99	pCi/L			245	
	Uranium	µg/L			1.321	
	Uranium-233/234	pCi/L			0.7707	
	Uranium-235	pCi/L			0.02641 U	
	Uranium-236	pCi/L			0 U	
	Uranium-238	pCi/L			0.4415	
X705-08G	Americium-241	pCi/L		-0.0152 U		
	Neptunium-237	pCi/L		-0.0160 U		

Table 4.6. Results for radionuclides at the Quadrant II Groundwater Investigative Area – 2006 (continued)

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X705-08G	Plutonium-238	pCi/L		-0.008 U		
	Plutonium-239/240	pCi/L		-0.016 U		
	Technetium-99	pCi/L		1.65 U		
	Uranium	µg/L		1.547		
	Uranium-233/234	pCi/L		0.5538		
	Uranium-235	pCi/L		0.04555		
	Uranium-236	pCi/L		0 U		
	Uranium-238	pCi/L		0.5159		
X705-09B	Americium-241	pCi/L		-0.0087 U		
	Neptunium-237	pCi/L		0.00912 U		
	Plutonium-238	pCi/L		0.05441 U		
	Plutonium-239/240	pCi/L		0.00909 U		
	Technetium-99	pCi/L		-5.47 U		
	Uranium	µg/L		0.1667		
	Uranium-233/234	pCi/L		0.00708 U		
	Uranium-235	pCi/L		0 U		
X705-10B	Uranium-236	pCi/L		0.00777 U		
	Uranium-238	pCi/L		0.05599		
	Americium-241	pCi/L			0.01543 U	
	Neptunium-237	pCi/L			-0.006844 U	
	Plutonium-238	pCi/L			0.04793 U	
	Plutonium-239/240	pCi/L			-0.0205 U	
	Technetium-99	pCi/L			2.78 U	
	Uranium	µg/L			1.143	
X720-01G	Uranium-233/234	pCi/L			1.845	
	Uranium-235	pCi/L			0.02529 U	
	Uranium-236	pCi/L			7.562E-06 U	
	Uranium-238	pCi/L			0.3819	
	Americium-241	pCi/L			1.439E-05 U	
	Neptunium-237	pCi/L			-0.08277 U	
	Plutonium-238	pCi/L			0.03005 U	
	Plutonium-239/240	pCi/L			-0.0225 U	
X720-07G	Technetium-99	pCi/L			5.96 U	
	Uranium	µg/L			15.37	
	Uranium-233/234	pCi/L			5.31	
	Uranium-235	pCi/L			0.2656	
	Uranium-236	pCi/L			0.01767 U	
	Uranium-238	pCi/L			5.14	
	Americium-241	pCi/L		-0.0336 U		
	Neptunium-237	pCi/L		0.00817 U		
X720-07G	Plutonium-238	pCi/L		0.03258 U		
	Plutonium-239/240	pCi/L		0.00817 U		
	Technetium-99	pCi/L		-7.05 U		
	Uranium	µg/L		12.28		
	Uranium-233/234	pCi/L		4.206		
	Uranium-235	pCi/L		0.2112		
	Uranium-236	pCi/L		0.0165 U		
	Uranium-238	pCi/L		4.108		

Table 4.6. Results for radionuclides at the Quadrant II Groundwater Investigative Area – 2006 (continued)

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X720-08G	Americium-241	pCi/L			0.01266 U	
	Neptunium-237	pCi/L			-0.01554 U	
	Plutonium-238	pCi/L			0.01551 U	
	Plutonium-239/240	pCi/L			0.01552 U	
	Technetium-99	pCi/L			227	
	Uranium	µg/L			4.056	
	Uranium-233/234	pCi/L			1.685	
	Uranium-235	pCi/L			0.07494 U	
	Uranium-236	pCi/L			0.01683 U	
	Uranium-238	pCi/L			1.356	

Table 4.7. Volatile organic compounds detected at the X-701B Holding Pond – 2006

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
LBC-PZ03	Benzene	µg/L	0.19 J		2 U	
	Chloroform	µg/L	2 U		0.22 J	
	cis-1,2-Dichloroethene	µg/L	20		9.1	
	Methylene chloride	µg/L	0.32 J		2 U	
	Toluene	µg/L	0.5 J		2 U	
	trans-1,2-Dichloroethene	µg/L	0.29 J		0.3 J	
	Trichloroethene	µg/L	32		45	
LBC-PZ06	Acetone	µg/L	10 U		4.1 J	
	Trichloroethene	µg/L	2 U		0.17 J	
X230J7-01GA	1,1-Dichloroethene	µg/L	0.26 J			
	cis-1,2-Dichloroethene	µg/L	0.71 J			
	Trichloroethene	µg/L	220			
X230J7-02GA	cis-1,2-Dichloroethene	µg/L	3.4 J			
	Trichloroethene	µg/L	1200			
X230J7-03GA	1,2-Dichloroethane	µg/L	4 J			
	cis-1,2-Dichloroethene	µg/L	350			
	trans-1,2-Dichloroethene	µg/L	17			
	Trichloroethene	µg/L	1700			
	Vinyl chloride	µg/L	11			
X230J7-04GA	Benzene	µg/L			0.27 J	
X701-01G	Acetone	µg/L	10 U		4.1 J	
	cis-1,2-Dichloroethene	µg/L	0.6 J		1.1 J	
	Trichloroethene	µg/L	4		6.8	
X701-02G	1,1-Dichloroethene	µg/L	0.49 J		0.31 J	
	Acetone	µg/L	10 U		32	
	Chlorobenzene	µg/L	2 U		0.2 J	
	cis-1,2-Dichloroethene	µg/L	7.3		6.8	
	trans-1,2-Dichloroethene	µg/L	1 U		0.21 J	
	Trichloroethene	µg/L	18		13	
	Methylene chloride	µg/L	2 U		0.77 BJ	
X701-05G	Trichloroethene	µg/L	3.4		4.8	
	1,1-Dichloroethane	µg/L	0.28 J		0.2 J	
X701-06G	1,1-Dichloroethene	µg/L	3.2		2	
	Acetone	µg/L	10 U		32	
	Chloroform	µg/L	0.21 J		0.16 J	
	cis-1,2-Dichloroethene	µg/L	12		20	
	trans-1,2-Dichloroethene	µg/L	0.64 J		1	
	Trichloroethene	µg/L	120		92	
	cis-1,2-Dichloroethene	µg/L			840 J	
X701-08G	Tetrachloroethene	µg/L			940 J	
	Trichloroethene	µg/L			240000	
	cis-1,2-Dichloroethene	µg/L	17000			
X701-09G	Trichloroethene	µg/L	510000			
X701-10G	1,1,2-Trichloroethane	µg/L	2.1 J		1.9 J	
	1,1-Dichloroethene	µg/L	8 U		0.63 J	
	Benzene	µg/L	0.86 J		8 U	
	cis-1,2-Dichloroethene	µg/L	57		42	
	Methylene chloride	µg/L	2.4 J		8 U	

Table 4.7. Volatile organic compounds detected at the X-701B Holding Pond – 2006 (continued)

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X701-10G	Tetrachloroethene	µg/L	1.1 J		1.2 J	
	Trichloroethene	µg/L	1800		1200	
	Vinyl chloride	µg/L	3.1 J		2.4 J	
X701-12G	1,1-Dichloroethane	µg/L	0.18 J		0.17 J	
	1,1-Dichloroethene	µg/L	0.25 J		0.21 J	
	1,2-Dichlorobenzene	µg/L	0.53 J		0.32 J	
	Acetone	µg/L	10 U		9.2 J	
	Chlorobenzene	µg/L	0.18 J		2 U	
	Chloroform	µg/L	2 U		0.21 J	
	cis-1,2-Dichloroethene	µg/L	49		52	
	Methylene chloride	µg/L	2 U		0.42 BJ	
	Tetrachloroethene	µg/L	0.43 J		0.4 J	
	Trichloroethene	µg/L	47		44	
	Vinyl chloride	µg/L	3.2		3.6	
	1,1,2-Trichloroethane	µg/L	40 U		8.3 J	
X701-13G	Acetone	µg/L	200 U		48 J	
	cis-1,2-Dichloroethene	µg/L	70		91	
	Methylene chloride	µg/L	40 U		13 BJ	
	Tetrachloroethene	µg/L	17 J		18 J	
	Trichloroethene	µg/L	7400		5600	
	Vinyl chloride	µg/L	8.7 J		9.9 J	
	1,1,1-Trichloroethane	µg/L	100 J			
	1,1-Dichloroethene	µg/L	33 J			
X701-14G	cis-1,2-Dichloroethene	µg/L	2300			
	Tetrachloroethene	µg/L	66 J			
	Trichloroethene	µg/L	44000			
	Vinyl chloride	µg/L	56 J			
	Acetone	µg/L	10 U		4.9 J	
X701-15G	cis-1,2-Dichloroethene	µg/L	2.6		24	
	trans-1,2-Dichloroethene	µg/L	1 U		0.63 J	
	Trichloroethene	µg/L	1.5 J		6.8	
X701-16G	Acetone	µg/L	26		3.3 J	
X701-18G	Acetone	µg/L			12	
	Benzene	µg/L			0.24 BJ	
X701-19G	Acetone	µg/L	10 U		3.3 J	
X701-20G	1,1,1-Trichloroethane	µg/L	51 J			
	1,1,2-Trichloroethane	µg/L	140 J			
	1,1-Dichloroethene	µg/L	53 J			
	cis-1,2-Dichloroethene	µg/L	1400			
	Tetrachloroethene	µg/L	110 J			
	Trichloroethene	µg/L	140000			
X701-21G	1,2-Dichlorobenzene	µg/L	0.24 J		0.22 J	
	Acetone	µg/L	10 U		3.9 J	
	Chloroform	µg/L	0.25 J		0.32 J	
	cis-1,2-Dichloroethene	µg/L	0.48 J		0.35 J	
	Trichloroethene	µg/L	55		30	
X701-23G	Acetone	µg/L			6.3 J	
	Benzene	µg/L			0.26 BJ	

Table 4.7. Volatile organic compounds detected at the X-701B Holding Pond – 2006 (continued)

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X701-23G	Trichloroethene	µg/L			1.5 J	
X701-24G	1,1,2-Trichloroethane	µg/L	11 J		100 U	
	1,1-Dichloroethene	µg/L	4.5 J		7.6 J	
	cis-1,2-Dichloroethene	µg/L	730		1200	
	Tetrachloroethene	µg/L	4.2 J		100 U	
	trans-1,2-Dichloroethene	µg/L	11 J		15 J	
	Trichloroethene	µg/L	7900		15000	
	Vinyl chloride	µg/L	31		48 J	
X701-25G	Trichloroethene	µg/L	0.75 J		2 U	
X701-30G	cis-1,2-Dichloroethene	µg/L	0.2 J		0.33 J	
	Trichloroethene	µg/L	7.7		9	
	Trichlorofluoromethane	µg/L	0.35 J		4 U	
X701-38G	1,2-Dichlorobenzene	µg/L			0.41 J	
	Chloroform	µg/L			1.6 J	
X701-48G	Acetone	µg/L			9.8 J	
	Benzene	µg/L			0.23 BJ	
X701-58B	Acetone	µg/L			5.3 J	
	Benzene	µg/L			0.58 J	
X701-61B	Acetone	µg/L			98	
	cis-1,2-Dichloroethene	µg/L			0.88 J	
	M + P Xylene	µg/L			2.6	
	Methylene chloride	µg/L			0.52 BJ	
	Trichloroethene	µg/L			0.32 J	
X701-127G	1,1,2-Trichloroethane	µg/L	70 J		4000 U	
	Acetone	µg/L	2000 U		16000 J	
	Benzene	µg/L	400 U		480 BJ	
	cis-1,2-Dichloroethene	µg/L	490		330 J	
	Tetrachloroethene	µg/L	44 J		4000 U	
	Trichloroethene	µg/L	60000		50000	
X701-128G	1,1,2-Trichloroethane	µg/L	100 U		16 J	
	Acetone	µg/L	500 U		180 J	
	cis-1,2-Dichloroethene	µg/L	34 J		33 J	
	Methylene chloride	µg/L	100 U		17 BJ	
	Tetrachloroethene	µg/L	11 J		80 U	
	Trichloroethene	µg/L	16000		10000	
X701-BW1G	Acetone	µg/L			4.6 J	
X701-BW2G	1,1-Dichloroethane	µg/L	0.68 J			
	1,1-Dichloroethene	µg/L	6.9			
	1,1-Dichloroethene	µg/L	7.7 J			
	Chloroform	µg/L	0.38 J			
	cis-1,2-Dichloroethene	µg/L	82			
	trans-1,2-Dichloroethene	µg/L	4.1			
	Trichloroethene	µg/L	750			
X701-BW4G	Acetone	µg/L	10 U		32	
	Chlorobenzene	µg/L	2 U		0.2 J	
	cis-1,2-Dichloroethene	µg/L	0.85 J		0.89 J	
	Trichloroethene	µg/L	1.1 J		1.2 J	
X744G-02G	Acetone	µg/L	10 U		4.2 J	

Table 4.7. Volatile organic compounds detected at the X-701B Holding Pond – 2006 (continued)

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X744G-02G	cis-1,2-Dichloroethene	µg/L	0.69 J		0.9 J	
	Trichloroethene	µg/L	11		14	
	Trichlorofluoromethane	µg/L	1.2 J		1.6 J	
X744G-03G	Trichloroethene	µg/L	0.47 J		0.91 J	

Table 4.8. Results for radionuclides at the X-701B Holding Pond – 2006

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
LBC-PZ03	Americium-241	pCi/L	0 U		0 U	
	Neptunium-237	pCi/L	-0.013 U		-0.04127 U	
	Plutonium-238	pCi/L	0.0063 U		0.02747 U	
	Plutonium-239/240	pCi/L	-0.013 U		0.03433 U	
	Technetium-99	pCi/L	1.61 U		-6.56 U	
	Uranium	µg/L	0.0216 U		0.01559 U	
	Uranium-233/234	pCi/L	3E-05 U		0.08737	
	Uranium-235	pCi/L	0 U		-0.01656 U	
	Uranium-236	pCi/L	0 U		0 U	
	Uranium-238	pCi/L	0.0072 U		0.006713 U	
LBC-PZ06	Americium-241	pCi/L	8E-06 U		7.728E-06 U	
	Neptunium-237	pCi/L	0 U		-0.00751 U	
	Plutonium-238	pCi/L	0.0073 U		0.03002 U	
	Plutonium-239/240	pCi/L	0.0219 U		2.999E-05 U	
	Technetium-99	pCi/L	1.21 U		-3.94 U	
	Uranium	µg/L	0.1659		0.1196	
	Uranium-233/234	pCi/L	0.0884		0.01324 U	
	Uranium-235	pCi/L	0.0168 U		0.008131 U	
	Uranium-236	pCi/L	0 U		0 U	
	Uranium-238	pCi/L	0.0543		0.03947	
X230J7-01GA	Americium-241	pCi/L	0.0146 U			
	Neptunium-237	pCi/L	1E-05 U			
	Plutonium-238	pCi/L	0.0282 U			
	Plutonium-239/240	pCi/L	1E-05 U			
	Technetium-99	pCi/L	6.62 U			
	Uranium	µg/L	0.2454			
	Uranium-233/234	pCi/L	0.0526 U			
	Uranium-235	pCi/L	0 U			
	Uranium-236	pCi/L	-0.008 U			
	Uranium-238	pCi/L	0.0825			
X230J7-02GA	Americium-241	pCi/L	0 U			
	Neptunium-237	pCi/L	-0.027 U			
	Plutonium-238	pCi/L	0.0068 U			
	Plutonium-239/240	pCi/L	-0.007 U			
	Technetium-99	pCi/L	43.1			
	Uranium	µg/L	0.1516			
	Uranium-233/234	pCi/L	0.0511			
	Uranium-235	pCi/L	1E-05 U			
	Uranium-236	pCi/L	-0.009 U			
	Uranium-238	pCi/L	0.051			
X230J7-03GA	Americium-241	pCi/L	0.0078 U			
	Neptunium-237	pCi/L	0.0068 U			
	Plutonium-238	pCi/L	0.0136 U			
	Plutonium-239/240	pCi/L	0.0068 U			
	Technetium-99	pCi/L	19.3			
	Uranium	µg/L	0.149 U			
	Uranium-233/234	pCi/L	0.0658 U			
	Uranium-235	pCi/L	0.0102 U			

Table 4.8. Results for radionuclides at the X-701B Holding Pond – 2006 (continued)

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X230J7-03GA	Uranium-236	pCi/L	-0.018 U			
	Uranium-238	pCi/L	0.0493 U			
X230J7-04GA	Americium-241	pCi/L			-0.008838 U	
	Neptunium-237	pCi/L			-0.02482 U	
	Plutonium-238	pCi/L			0.03305 U	
	Plutonium-239/240	pCi/L			0 U	
	Technetium-99	pCi/L			-3.36 U	
	Uranium	µg/L			0.1268	
	Uranium-233/234	pCi/L			0.05118 U	
	Uranium-235	pCi/L			0 U	
	Uranium-236	pCi/L			0.009447 U	
	Uranium-238	pCi/L			0.04256	
X700-03G	Americium-241	pCi/L	0.0165 U			
	Neptunium-237	pCi/L	-0.015 U			
	Plutonium-238	pCi/L	0.0298 U			
	Plutonium-239/240	pCi/L	0.0224 U			
	Technetium-99	pCi/L	0.962 U			
	Uranium	µg/L	0.0568 U			
	Uranium-233/234	pCi/L	0.08			
	Uranium-235	pCi/L	0.0076 U			
	Uranium-236	pCi/L	0 U			
	Uranium-238	pCi/L	0.0184 U			
X701-02G	Americium-241	pCi/L	0 U		-0.01528 U	
	Neptunium-237	pCi/L	-0.020 U		0.02811 U	
	Plutonium-238	pCi/L	-0.007 U		0.02102 U	
	Plutonium-239/240	pCi/L	-0.020 U		0.02102 U	
	Technetium-99	pCi/L	6.52 U		-0.256 U	
	Uranium	µg/L	0.6078		0.3305	
	Uranium-233/234	pCi/L	0.4269		0.2743	
	Uranium-235	pCi/L	0.0079 U		0.01692 U	
	Uranium-236	pCi/L	0.0071 U		0.007594 U	
	Uranium-238	pCi/L	0.2035		0.1095	
X701-05G	Americium-241	pCi/L	-0.015 U		0.03559 U	
	Neptunium-237	pCi/L	0.0335 U		-0.03604 U	
	Plutonium-238	pCi/L	0.0084 U		-0.04498 U	
	Plutonium-239/240	pCi/L	-0.017 U		0.03604 U	
	Technetium-99	pCi/L	451		60.7	
	Uranium	µg/L	140.1		30.69	
	Uranium-233/234	pCi/L	282.3		62.02	
	Uranium-235	pCi/L	12.87		2.759	
	Uranium-236	pCi/L	1.799		0.4431	
	Uranium-238	pCi/L	45.92		10.06	
X701-06G	Americium-241	pCi/L	0.0141 U		-0.008099 U	
	Neptunium-237	pCi/L	-0.015 U		-0.02123 U	
	Plutonium-238	pCi/L	0.0224 U		0.007096 U	
	Plutonium-239/240	pCi/L	-0.022 U		0.007089 U	
	Technetium-99	pCi/L	8.23 U		5.72 U	
	Uranium	µg/L	0.28		0.1777	

Table 4.8. Results for radionuclides at the X-701B Holding Pond – 2006 (continued)

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X701-06G	Uranium-233/234	pCi/L	0.1446		0.05908	
	Uranium-235	pCi/L	0 U		0.008097 U	
	Uranium-236	pCi/L	0 U		0.00727 U	
	Uranium-238	pCi/L	0.0941		0.05896	
X701-08G	Americium-241	pCi/L			0.02207 U	
	Neptunium-237	pCi/L			-0.01531 U	
	Plutonium-238	pCi/L			0.02294 U	
	Plutonium-239/240	pCi/L			-0.007638 U	
	Technetium-99	pCi/L			6.74 U	
	Uranium	µg/L			0.1983 U	
	Uranium-233/234	pCi/L			-0.007112 U	
	Uranium-235	pCi/L			0.02648 U	
	Uranium-236	pCi/L			0 U	
	Uranium-238	pCi/L			0.06428 U	
	Americium-241	pCi/L	1E-05 U			
X701-09G	Neptunium-237	pCi/L	-0.021 U			
	Plutonium-238	pCi/L	0.0211 U			
	Plutonium-239/240	pCi/L	0.0070 U			
	Technetium-99	pCi/L	111			
	Uranium	µg/L	0.0752 U			
	Uranium-233/234	pCi/L	0.0633			
	Uranium-235	pCi/L	0 U			
	Uranium-236	pCi/L	0 U			
	Uranium-238	pCi/L	0.0253 U			
	Americium-241	pCi/L	0.0137 U		-0.007263 U	
	Neptunium-237	pCi/L	0.0072 U		-0.02133 U	
X701-10G	Plutonium-238	pCi/L	0.0072 U		0.01421 U	
	Plutonium-239/240	pCi/L	0 U		-0.03545 U	
	Technetium-99	pCi/L	-1.05 U		3.94 U	
	Uranium	µg/L	0.0852 U		0.1212	
	Uranium-233/234	pCi/L	0.0716		0.06793	
	Uranium-235	pCi/L	0 U		0 U	
	Uranium-236	pCi/L	0.0079 U		0.007524 U	
	Uranium-238	pCi/L	0.0286 U		0.04067	
	Americium-241	pCi/L	0 U		0.006696 U	
	Neptunium-237	pCi/L	-0.018 U		-0.01378 U	
	Plutonium-238	pCi/L	0.0271 U		-0.02062 U	
X701-12G	Plutonium-239/240	pCi/L	0.0181 U		-0.02063 U	
	Technetium-99	pCi/L	436		176	
	Uranium	µg/L	0.3685		0.01989 U	
	Uranium-233/234	pCi/L	0.3409		0.01339 U	
	Uranium-235	pCi/L	0.0412		0 U	
	Uranium-236	pCi/L	0.0148 U		0 U	
	Uranium-238	pCi/L	0.1201		0.006684 U	
	Americium-241	pCi/L	0.0157 U		0.02201 U	
	Neptunium-237	pCi/L	0.0322 U		-0.02693 U	
	Plutonium-238	pCi/L	0.0193 U		2.015E-05 U	
	Plutonium-239/240	pCi/L	-0.013 U		1.343E-05 U	
X701-13G						

Table 4.8. Results for radionuclides at the X-701B Holding Pond – 2006 (continued)

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X701-13G	Technetium-99	pCi/L	107		113	
	Uranium	µg/L	0.1238		0.09659 U	
	Uranium-233/234	pCi/L	0.0832		-0.006487 U	
	Uranium-235	pCi/L	0 U		0 U	
	Uranium-236	pCi/L	0.0154 U		-0.02166 U	
	Uranium-238	pCi/L	0.0415		0.03257 U	
X701-14G	Americium-241	pCi/L	0.0076 U			
	Neptunium-237	pCi/L	0.0069 U			
	Plutonium-238	pCi/L	0.0069 U			
	Plutonium-239/240	pCi/L	7E-06 U			
	Technetium-99	pCi/L	103			
	Uranium	µg/L	0.2776			
X701-15G	Uranium-233/234	pCi/L	0.1252			
	Uranium-235	pCi/L	0.0343 U			
	Uranium-236	pCi/L	-0.008 U			
	Uranium-238	pCi/L	0.0902			
	Americium-241	pCi/L	0.0364 U		0.007345 U	
	Neptunium-237	pCi/L	3E-05 U		-0.01368 U	
X701-16G	Plutonium-238	pCi/L	0.0207 U		0.006843 U	
	Plutonium-239/240	pCi/L	0.0138 U		1.366E-05 U	
	Technetium-99	pCi/L	3.55 U		1.52 U	
	Uranium	µg/L	0.4004		0.2563	
	Uranium-233/234	pCi/L	0.1474		0.07126 U	
	Uranium-235	pCi/L	-0.014 U		0.02395 U	
X701-18G	Uranium-236	pCi/L	0 U		0.007168 U	
	Uranium-238	pCi/L	0.1358		0.08396	
	Americium-241	pCi/L	0.0179 U		-0.02967 U	
	Neptunium-237	pCi/L	-0.012 U		-0.03771 U	
	Plutonium-238	pCi/L	0.0183 U		0.03012 U	
	Plutonium-239/240	pCi/L	0.0122 U		-0.007522 U	
X701-19G	Technetium-99	pCi/L	-1.22 U		-1.34 U	
	Uranium	µg/L	0.4751		0.3424	
	Uranium-233/234	pCi/L	0.1599		0.08642 U	
	Uranium-235	pCi/L	0 U		0 U	
	Uranium-236	pCi/L	0.0077 U		0.01595 U	
	Uranium-238	pCi/L	0.1596		0.115	
X701-18G	Americium-241	pCi/L			0.008558 U	
	Neptunium-237	pCi/L			-0.04352 U	
	Plutonium-238	pCi/L			0.03477 U	
	Plutonium-239/240	pCi/L			8.683E-06 U	
	Technetium-99	pCi/L			-2.34 U	
	Uranium	µg/L			5.789E-05 U	
X701-18G	Uranium-233/234	pCi/L			0.06419	
	Uranium-235	pCi/L			0 U	
	Uranium-236	pCi/L			0 U	
	Uranium-238	pCi/L			0.000016 U	
	Americium-241	pCi/L	0.0070 U		6.851E-06 U	
	Neptunium-237	pCi/L	0.0076 U		-0.03576 U	

Table 4.8. Results for radionuclides at the X-701B Holding Pond – 2006 (continued)

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X701-19G	Plutonium-238	pCi/L	0.0302 U		0.007163 U	
	Plutonium-239/240	pCi/L	0.0226 U		-0.01427 U	
	Technetium-99	pCi/L	4.32 U		-1.35 U	
	Uranium	µg/L	0.0912 U		0.08693 U	
	Uranium-233/234	pCi/L	0.0158 U		-0.04259 U	
	Uranium-235	pCi/L	-0.01 U		0.008771 U	
	Uranium-236	pCi/L	0 U		0.007876 U	
	Uranium-238	pCi/L	0.0315 U		0.02839 U	
X701-20G	Americium-241	pCi/L	0.0271 U			
	Neptunium-237	pCi/L	1E-05 U			
	Plutonium-238	pCi/L	0.0202 U			
	Plutonium-239/240	pCi/L	-0.013 U			
	Technetium-99	pCi/L	85.3			
	Uranium	µg/L	0.1386			
	Uranium-233/234	pCi/L	0.0267 U			
	Uranium-235	pCi/L	0 U			
X701-21G	Uranium-236	pCi/L	0 U			
	Uranium-238	pCi/L	0.0466			
	Americium-241	pCi/L	0.0267 U		0 U	
	Neptunium-237	pCi/L	-0.013 U		-0.01289 U	
	Plutonium-238	pCi/L	0.0135 U		2.571E-05 U	
	Plutonium-239/240	pCi/L	-0.007 U		0.01287 U	
	Technetium-99	pCi/L	111		75.4	
	Uranium	µg/L	0.1969		0.04254 U	
X701-23G	Uranium-233/234	pCi/L	0.0862		0.06099 U	
	Uranium-235	pCi/L	8E-06 U		0.008359 U	
	Uranium-236	pCi/L	0 U		0 U	
	Uranium-238	pCi/L	0.0662		0.01354 U	
	Americium-241	pCi/L			-0.008471 U	
	Neptunium-237	pCi/L			-0.08455 U	
	Plutonium-238	pCi/L			0.02816 U	
	Plutonium-239/240	pCi/L			0.01876 U	
X701-24G	Technetium-99	pCi/L			0.582 U	
	Uranium	µg/L			0.07695 U	
	Uranium-233/234	pCi/L			0.0000167 U	
	Uranium-235	pCi/L			0.01031 U	
	Uranium-236	pCi/L			-0.0185 U	
	Uranium-238	pCi/L			0.02503 U	
	Americium-241	pCi/L	0.0078 U		-0.008658 U	
	Neptunium-237	pCi/L	-0.021 U		-0.009066 U	
	Plutonium-238	pCi/L	0.0069 U		9.069E-06 U	
	Plutonium-239/240	pCi/L	-0.007 U		9.069E-06 U	
	Technetium-99	pCi/L	9.59		16.3	
	Uranium	µg/L	0.3078		0.2807	
	Uranium-233/234	pCi/L	0.1418		0.07733	
	Uranium-235	pCi/L	-0.009 U		0 U	
	Uranium-236	pCi/L	0 U		0 U	
	Uranium-238	pCi/L	0.1043		0.09433	

Table 4.8. Results for radionuclides at the X-701B Holding Pond – 2006 (continued)

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X701-25G	Americium-241	pCi/L	0.0084 U		0 U	
	Neptunium-237	pCi/L	6E-06 U		-0.01938 U	
	Plutonium-238	pCi/L	0.0060 U		0.02903 U	
	Plutonium-239/240	pCi/L	-0.006 U		0.009676 U	
	Technetium-99	pCi/L	2.88 U		-4.55 U	
	Uranium	µg/L	-0.020 U		0.02348 U	
	Uranium-233/234	pCi/L	0.038 U		0.0393	
	Uranium-235	pCi/L	0.0094 U		0 U	
	Uranium-236	pCi/L	8E-06 U		0.008705 U	
	Uranium-238	pCi/L	-0.008 U		0.007844 U	
X701-38G	Americium-241	pCi/L			0.01024 U	
	Neptunium-237	pCi/L			-0.02255 U	
	Plutonium-238	pCi/L			0.06762 U	
	Plutonium-239/240	pCi/L			0.007549 U	
	Technetium-99	pCi/L			3.69 U	
	Uranium	µg/L			0.1112 U	
	Uranium-233/234	pCi/L			0.1318	
	Uranium-235	pCi/L			0.009033 U	
	Uranium-236	pCi/L			0 U	
	Uranium-238	pCi/L			0.03655 U	
X701-48G	Americium-241	pCi/L			-0.008471 U	
	Neptunium-237	pCi/L			-0.0347 U	
	Plutonium-238	pCi/L			0.026 U	
	Plutonium-239/240	pCi/L			0.01734 U	
	Technetium-99	pCi/L			1.11 U	
	Uranium	µg/L			-0.02445 U	
	Uranium-233/234	pCi/L			-0.0411 U	
	Uranium-235	pCi/L			2.031E-05 U	
	Uranium-236	pCi/L			0 U	
	Uranium-238	pCi/L			-0.008214 U	
X701-50B	Americium-241	pCi/L			0 U	
	Neptunium-237	pCi/L			0 U	
	Plutonium-238	pCi/L			0.02812 U	
	Plutonium-239/240	pCi/L			0.00703 U	
	Technetium-99	pCi/L			0.391 U	
	Uranium	µg/L			0.0205 U	
	Uranium-233/234	pCi/L			0.05585 U	
	Uranium-235	pCi/L			0.007646 U	
	Uranium-236	pCi/L			0 U	
	Uranium-238	pCi/L			0.006204 U	
X701-58B	Americium-241	pCi/L			7.635E-06 U	
	Neptunium-237	pCi/L			-0.03976 U	
	Plutonium-238	pCi/L			0.01984 U	
	Plutonium-239/240	pCi/L			-0.006607 U	
	Technetium-99	pCi/L			-6.47 U	
	Uranium	µg/L			0.2079	
	Uranium-233/234	pCi/L			0.2491	
	Uranium-235	pCi/L			0.008534 U	

Table 4.8. Results for radionuclides at the X-701B Holding Pond – 2006 (continued)

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X701-58B	Uranium-236	pCi/L			0.007663 U	
	Uranium-238	pCi/L			0.06905	
X701-61B	Americium-241	pCi/L			0.01482 U	
	Neptunium-237	pCi/L			0.007301 U	
	Plutonium-238	pCi/L			0.02183 U	
	Plutonium-239/240	pCi/L			-0.007259 U	
	Technetium-99	pCi/L			-3.41 U	
	Uranium	µg/L			0.1666	
	Uranium-233/234	pCi/L			0.1262	
	Uranium-235	pCi/L			0 U	
	Uranium-236	pCi/L			0 U	
	Uranium-238	pCi/L			0.05599	
X701-127G	Americium-241	pCi/L	0.0085 U		-0.01823 U	
	Neptunium-237	pCi/L	0.0062 U		-0.06113 U	
	Plutonium-238	pCi/L	0.0185 U		0.0436 U	
	Plutonium-239/240	pCi/L	0.0062 U		1.742E-05 U	
	Technetium-99	pCi/L	10.7		-0.127 U	
	Uranium	µg/L	0.9963		0.09701 U	
	Uranium-233/234	pCi/L	0.2865		0.0245 U	
	Uranium-235	pCi/L	9E-06 U		0 U	
	Uranium-236	pCi/L	0 U		0 U	
	Uranium-238	pCi/L	0.3348		0.0326 U	
X701-128G	Americium-241	pCi/L	-0.008 U		-0.01973 U	
	Neptunium-237	pCi/L	0.0058 U		-0.009727 U	
	Plutonium-238	pCi/L	0.0229 U		0.00972 U	
	Plutonium-239/240	pCi/L	6E-06 U		9.701E-06 U	
	Technetium-99	pCi/L	7.12 U		0.668 U	
	Uranium	µg/L	1.01		0.4759	
	Uranium-233/234	pCi/L	0.4023		0.1489	
	Uranium-235	pCi/L	0.0266 U		0.02296 U	
	Uranium-236	pCi/L	0 U		0 U	
	Uranium-238	pCi/L	0.337		0.1579	
X701-BW1G	Americium-241	pCi/L			7.489E-06 U	
	Neptunium-237	pCi/L			-0.02272 U	
	Plutonium-238	pCi/L			0.04538 U	
	Plutonium-239/240	pCi/L			0.007562 U	
	Technetium-99	pCi/L			9.88	
	Uranium	µg/L			0.08926 U	
	Uranium-233/234	pCi/L			0.0285 U	
	Uranium-235	pCi/L			0.01756 U	
	Uranium-236	pCi/L			0 U	
	Uranium-238	pCi/L			0.02842 U	
X701-BW2G	Americium-241	pCi/L	-0.007 U			
	Neptunium-237	pCi/L	2E-05 U			
	Plutonium-238	pCi/L	0.0232 U			
	Plutonium-239/240	pCi/L	-0.008 U			
	Technetium-99	pCi/L	482			
	Uranium	µg/L	0.131			

Table 4.8. Results for radionuclides at the X-701B Holding Pond – 2006 (continued)

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X701-BW2G	Uranium-233/234	pCi/L	0.0662 U			
	Uranium-235	pCi/L	0 U			
	Uranium-236	pCi/L	8E-06 U			
	Uranium-238	pCi/L	0.0440			
X701-BW4G	Americium-241	pCi/L	7E-06 U		0.007774 U	
	Neptunium-237	pCi/L	-0.015 U		0.01507 U	
	Plutonium-238	pCi/L	0.0222 U		0.03757 U	
	Plutonium-239/240	pCi/L	-0.007 U		0.03006 U	
	Technetium-99	pCi/L	315		291	
	Uranium	µg/L	0.0239 U		-0.002417 U	
	Uranium-233/234	pCi/L	0.029 U		-0.01579 U	
	Uranium-235	pCi/L	0.0089 U		-0.009788 U	
	Uranium-236	pCi/L	8E-06 U		0.008798 U	
	Uranium-238	pCi/L	0.0072 U		1.584E-05 U	

Table 4.9. Results for chromium at the X-633 Pumphouse/Cooling Towers Area – 2006

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X633-07G	Chromium	µg/L		510		790
X633-PZ04G	Chromium	µg/L		15		16

Table 4.10. Volatile organic compounds detected at the X-616 Chromium Sludge Surface Impoundments – 2006

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X616-09G	1,1,1-Trichloroethane	µg/L	3.5			
	1,1-Dichloroethane	µg/L	1.3 J			
	1,1-Dichloroethene	µg/L	13			
	cis-1,2-Dichloroethene	µg/L	1.4 J			
	Trichloroethene	µg/L	9.8			
X616-16G	1,1-Dichloroethane	µg/L	0.17 J			
	1,1-Dichloroethene	µg/L	0.22 J			
	cis-1,2-Dichloroethene	µg/L	1.8 J			
	Trichloroethene	µg/L	2.1			
X616-20B	1,1-Dichloroethane	µg/L	0.49 J			
	1,1-Dichloroethene	µg/L	0.17 J			
	cis-1,2-Dichloroethene	µg/L	0.32 J			
	Trichloroethene	µg/L	10			
X616-25G	1,1-Dichloroethane	µg/L	0.18 J			
	cis-1,2-Dichloroethene	µg/L	0.39 J			
	Trichloroethene	µg/L	0.59 J			
X616-28B	1,1,1-Trichloroethane	µg/L	0.48 J			
	1,1-Dichloroethene	µg/L	0.35 J			
	Trichloroethene	µg/L	0.18 J			

Table 4.11. Results for chromium at the X-616 Chromium Sludge Surface Impoundments – 2006

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X616-02G	Chromium	µg/L	0.72 B			
X616-05G	Chromium	µg/L	580			
X616-09G	Chromium	µg/L	2.1			
X616-16G	Chromium	µg/L	1.1 B			
X616-20B	Chromium	µg/L	1.1 B			
X616-25G	Chromium	µg/L	4.5			
X616-28B	Chromium	µg/L	1.1 B			

Table 4.12. Results for radionuclides at the X-616 Chromium Sludge Surface Impoundments – 2006

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X616-02G	Americium-241	pCi/L	-0.016 U			
	Neptunium-237	pCi/L	-0.007 U			
	Plutonium-238	pCi/L	7E-06 U			
	Plutonium-239/240	pCi/L	7E-06 U			
	Technetium-99	pCi/L	5.1 U			
	Uranium	µg/L	1.763			
	Uranium-233/234	pCi/L	0.795			
	Uranium-235	pCi/L	0.0228 U			
	Uranium-236	pCi/L	0.0068 U			
	Uranium-238	pCi/L	0.5904			
X616-05G	Americium-241	pCi/L	0.0077 U			
	Neptunium-237	pCi/L	-0.024 U			
	Plutonium-238	pCi/L	0.0317 U			
	Plutonium-239/240	pCi/L	0.0079 U			
	Technetium-99	pCi/L	2.72 U			
	Uranium	µg/L	0.2728			
	Uranium-233/234	pCi/L	0.1302			
	Uranium-235	pCi/L	0.0080 U			
	Uranium-236	pCi/L	0 U			
	Uranium-238	pCi/L	0.091			
X616-09G	Americium-241	pCi/L	0.0076 U			
	Neptunium-237	pCi/L	1E-05 U			
	Plutonium-238	pCi/L	0.0263 U			
	Plutonium-239/240	pCi/L	7E-06 U			
	Technetium-99	pCi/L	1.13 U			
	Uranium	µg/L	1.997			
	Uranium-233/234	pCi/L	0.8911			
	Uranium-235	pCi/L	0.0256 U			
	Uranium-236	pCi/L	0 U			
	Uranium-238	pCi/L	0.6687			
X616-16G	Americium-241	pCi/L	0.0151 U			
	Neptunium-237	pCi/L	1E-05 U			
	Plutonium-238	pCi/L	-0.007 U			
	Plutonium-239/240	pCi/L	-0.007 U			
	Technetium-99	pCi/L	3.1 U			
	Uranium	µg/L	0.6777			
	Uranium-233/234	pCi/L	0.1899			
	Uranium-235	pCi/L	0.0347 U			
	Uranium-236	pCi/L	0 U			
	Uranium-238	pCi/L	0.2246			
X616-20B	Americium-241	pCi/L	0 U			
	Neptunium-237	pCi/L	1E-05 U			
	Plutonium-238	pCi/L	0.0303 U			
	Plutonium-239/240	pCi/L	1E-05 U			
	Technetium-99	pCi/L	4.67 U			
	Uranium	µg/L	0.4293			
	Uranium-233/234	pCi/L	0.2223			
	Uranium-235	pCi/L	0.0081 U			

**Table 4.12. Results for radionuclides at the X-616 Chromium Sludge Surface Impoundments – 2006
(continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X616-20B	Uranium-236	pCi/L	0 U			
	Uranium-238	pCi/L	0.1435			
X616-25G	Americium-241	pCi/L	0.0166 U			
	Neptunium-237	pCi/L	7E-06 U			
	Plutonium-238	pCi/L	-0.014 U			
	Plutonium-239/240	pCi/L	-0.014 U			
	Technetium-99	pCi/L	2.9 U			
	Uranium	µg/L	1.518			
	Uranium-233/234	pCi/L	0.4592			
	Uranium-235	pCi/L	0.0177 U			
	Uranium-236	pCi/L	0 U			
	Uranium-238	pCi/L	0.5084			
X616-28B	Americium-241	pCi/L	-0.017 U			
	Neptunium-237	pCi/L	-0.014 U			
	Plutonium-238	pCi/L	0.0209 U			
	Plutonium-239/240	pCi/L	0.0278 U			
	Technetium-99	pCi/L	10.9			
	Uranium	µg/L	0.5564			
	Uranium-233/234	pCi/L	0.3714			
	Uranium-235	pCi/L	0.0176 U			
	Uranium-236	pCi/L	0.0079 U			
	Uranium-238	pCi/L	0.1853			

Table 4.13. Volatile organic compounds detected at the X-740 Waste Oil Handling Facility – 2006

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X740-01G	1,2-Dichloroethane	µg/L		0.57 J		
	Acetone	µg/L		4 J		
X740-03G	1,1,1-Trichloroethane	µg/L		110		210 J
	1,1-Dichloroethane	µg/L		32 J		57 J
	1,1-Dichloroethene	µg/L		860		1600
	1,2-Dichloroethane	µg/L		130		250 J
	Chloroform	µg/L		11 J		21 J
	cis-1,2-Dichloroethene	µg/L		11 J		20 J
	Methylene chloride	µg/L		16 BJ		17 BJ
	Tetrachloroethene	µg/L		130		190 J
	Trichloroethene	µg/L		4500		7400
X740-04G	1,1,1-Trichloroethane	µg/L		0.64 J		
	1,1-Dichloroethane	µg/L		0.28 J		
	1,1-Dichloroethene	µg/L		0.85 J		
	1,2-Dichloroethane	µg/L		0.77 J		
	Trichloroethene	µg/L		5.3		
X740-08G	1,1,1-Trichloroethane	µg/L		2.1		
	1,1-Dichloroethane	µg/L		14		
	1,1-Dichloroethene	µg/L		2.8		
	1,2-Dichloroethane	µg/L		0.17 J		
	cis-1,2-Dichloroethene	µg/L		21		
	Methylene chloride	µg/L		0.43 BJ		
	trans-1,2-Dichloroethene	µg/L		7.4		
	Trichloroethene	µg/L		14		
X740-09B	1,1,1-Trichloroethane	µg/L		34		11 U
	1,1-Dichloroethane	µg/L		9.6 J		7.7 J
	1,1-Dichloroethene	µg/L		270		100
	1,2-Dichloroethane	µg/L		41		19
	Chloroform	µg/L		3.6 J		1.4 J
	cis-1,2-Dichloroethene	µg/L		3.8 J		2.4 J
	Methylene chloride	µg/L		3.8 BJ		3.2 BJ
	Tetrachloroethene	µg/L		32		13
	Trichloroethene	µg/L		1200		700
X740-10G	1,1,1-Trichloroethane	µg/L		11		12
	1,1-Dichloroethane	µg/L		4.6		5.4
	1,1-Dichloroethene	µg/L		62		54
	1,2-Dichloroethane	µg/L		10		11
	Chloroform	µg/L		0.91 J		0.89 J
	cis-1,2-Dichloroethene	µg/L		2 J		2.4 J
	Methylene chloride	µg/L		1.9 BJ		4 U
	Tetrachloroethene	µg/L		5.4		5.4
	Trichloroethene	µg/L		300		120
X740-11G	1,1,1-Trichloroethane	µg/L		0.82 J		0.4 J
	1,1-Dichloroethane	µg/L		0.4 J		0.24 J
	1,1-Dichloroethene	µg/L		5.9		2.7
	1,2-Dichloroethane	µg/L		1.9 J		1.3 J
	Methylene chloride	µg/L		2 U		0.35 BJ
	Trichloroethene	µg/L		15		7.7

**Table 4.13. Volatile organic compounds detected at the X-740 Waste Oil Handling Facility – 2006
(continued)**

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X740-12B	Methylene chloride	µg/L		2 U		0.37 BJ
X740-13G	1,2-Dichloroethane	µg/L		0.2 J		2 U
	Acetone	µg/L		10 U		3.9 J
	Methylene chloride	µg/L		2 U		0.37 BJ
X740-14B	1,1-Dichloroethene	µg/L		0.39 J		0.59 J
	Trichloroethene	µg/L		2.4		1.6 J
X740-PZ10G	1,1,1-Trichloroethane	µg/L		3.5		5.2
	1,1-Dichloroethane	µg/L		0.82 J		0.59 J
	1,1-Dichloroethene	µg/L		8.5		8.6
	1,2-Dichloroethane	µg/L		2.1		2.9
	Chloroform	µg/L		0.17 J		0.22 J
	cis-1,2-Dichloroethene	µg/L		0.2 J		2 U
	M + P Xylene	µg/L		0.46 J		2 U
	Methylene chloride	µg/L		2 U		0.38 BJ
	Tetrachloroethene	µg/L		1.3 J		1.5 J
	Trichloroethene	µg/L		57		61
X740-PZ12G	1,1,1-Trichloroethane	µg/L		5		5.1
	1,1-Dichloroethane	µg/L		1.2 J		1.1 J
	1,1-Dichloroethene	µg/L		33		25
	1,2-Dichloroethane	µg/L		6.5		7.8
	Chloroform	µg/L		0.65 J		0.72 J
	cis-1,2-Dichloroethene	µg/L		0.33 J		0.3 J
	Tetrachloroethene	µg/L		1.3 J		1.1 J
	Trichloroethene	µg/L		150		130
X740-PZ14G	1,1,1-Trichloroethane	µg/L		4.3		2.4
	1,1-Dichloroethane	µg/L		1.5 J		0.8 J
	1,1-Dichloroethene	µg/L		33		19
	1,2-Dichloroethane	µg/L		8.4		4.7
	Chloroform	µg/L		0.68 J		0.42 J
	cis-1,2-Dichloroethene	µg/L		0.41 J		0.25 J
	Tetrachloroethene	µg/L		0.76 J		0.38 J
	Trichloroethene	µg/L		130		75
X740-PZ17G	1,1,1-Trichloroethane	µg/L		2.9		1.9 J
	1,1-Dichloroethane	µg/L		0.69 J		0.46 J
	1,1-Dichloroethene	µg/L		16		8.5
	1,2-Dichloroethane	µg/L		4.3		2.9
	Acetone	µg/L		3.6 J		10 U
	Chloroform	µg/L		0.4 J		0.27 J
	Tetrachloroethene	µg/L		0.2 J		2 U
	Trichloroethene	µg/L		46		32

Table 4.14. Results for radionuclides at the X-740 Waste Oil Handling Facility – 2006

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X740-01G	Americium-241	pCi/L		0.02639 U		
	Neptunium-237	pCi/L		2.1E-05 U		
	Plutonium-238	pCi/L		0.02053 U		
	Plutonium-239/240	pCi/L		-0.0103 U		
	Technetium-99	pCi/L		-0.305 U		
	Uranium	µg/L		0.0211 U		
	Uranium-233/234	pCi/L		0.09932		
	Uranium-235	pCi/L		0 U		
	Uranium-236	pCi/L		0 U		
	Uranium-238	pCi/L		0.00709 U		
X740-03G	Americium-241	pCi/L		7.0E-06 U		8.37E-06 U
	Neptunium-237	pCi/L		1.5E-05 U		-0.00748 U
	Plutonium-238	pCi/L		0.02999 U		0.02241 U
	Plutonium-239/240	pCi/L		-0.0075 U		-0.01492 U
	Technetium-99	pCi/L		-3.05 U		-2.07 U
	Uranium	µg/L		5.609		3.704
	Uranium-233/234	pCi/L		2.57		1.956
	Uranium-235	pCi/L		0.07144		0.01808 U
	Uranium-236	pCi/L		8.0E-06 U		0 U
	Uranium-238	pCi/L		1.878		1.243
X740-04G	Americium-241	pCi/L		1.1E-05 U		
	Neptunium-237	pCi/L		-0.0095 U		
	Plutonium-238	pCi/L		0.01904 U		
	Plutonium-239/240	pCi/L		-0.0095 U		
	Technetium-99	pCi/L		-4.21 U		
	Uranium	µg/L		1.218		
	Uranium-233/234	pCi/L		0.3741		
	Uranium-235	pCi/L		8.9E-06 U		
	Uranium-236	pCi/L		0.00797 U		
	Uranium-238	pCi/L		0.4092		
X740-08G	Americium-241	pCi/L		0.01312 U		
	Neptunium-237	pCi/L		0.00769 U		
	Plutonium-238	pCi/L		0.03062 U		
	Plutonium-239/240	pCi/L		0.01531 U		
	Technetium-99	pCi/L		-2.5 U		
	Uranium	µg/L		2.749		
	Uranium-233/234	pCi/L		1.192		
	Uranium-235	pCi/L		0.03699 U		
	Uranium-236	pCi/L		0 U		
	Uranium-238	pCi/L		0.9203		
X740-09B	Americium-241	pCi/L		1.1E-05 U		0.00823 U
	Neptunium-237	pCi/L		1.8E-05 U		-0.03193 U
	Plutonium-238	pCi/L		8.8E-06 U		0.03198 U
	Plutonium-239/240	pCi/L		-0.0353 U		-0.1171 U
	Technetium-99	pCi/L		-2.29 U		2.45 U
	Uranium	µg/L		0.6122		0.3817 U
	Uranium-233/234	pCi/L		0.32		0.3819
	Uranium-235	pCi/L		0.01012 U		0.01309 U

Table 4.14. Results for radionuclides at the X-740 Waste Oil Handling Facility – 2006 (continued)

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X740-09B	Uranium-236	pCi/L		0.01817 U		2.50E-05 U
	Uranium-238	pCi/L		0.2047		0.1271 U
X740-10G	Americium-241	pCi/L		0.01751 U		-0.00765 U
	Neptunium-237	pCi/L		1.4E-05 U		-0.00703 U
	Plutonium-238	pCi/L		2.1E-05 U		0.02811 U
	Plutonium-239/240	pCi/L		-0.0143 U		-0.00701 U
	Technetium-99	pCi/L		-2.57 U		0.748 U
	Uranium	µg/L		2.507		2.235
	Uranium-233/234	pCi/L		0.8731		0.8322
	Uranium-235	pCi/L		0.0189 U		0.02015 U
	Uranium-236	pCi/L		0 U		9.63E-06 U
	Uranium-238	pCi/L		0.8408		0.7491
X740-11G	Americium-241	pCi/L		0.01611 U		-0.00770 U
	Neptunium-237	pCi/L		-0.0157 U		0.007301 U
	Plutonium-238	pCi/L		0.01574 U		0.02906 U
	Plutonium-239/240	pCi/L		0.00786 U		0.01454 U
	Technetium-99	pCi/L		-0.877 U		-5.35 U
	Uranium	µg/L		0.476		0.4357
	Uranium-233/234	pCi/L		0.1953		0.3166
	Uranium-235	pCi/L		0.02779 U		9.52E-06 U
	Uranium-236	pCi/L		0.00832 U		0 U
	Uranium-238	pCi/L		0.1574		0.1464
X740-12B	Americium-241	pCi/L		-0.0151 U		-0.03272 U
	Neptunium-237	pCi/L		-0.0276 U		-0.00807 U
	Plutonium-238	pCi/L		0.02067 U		0.03221 U
	Plutonium-239/240	pCi/L		0.02756 U		0.008061 U
	Technetium-99	pCi/L		-0.913 U		-2.1 U
	Uranium	µg/L		0.04475 U		0.06504 U
	Uranium-233/234	pCi/L		0.05285 U		-0.1406 U
	Uranium-235	pCi/L		0 U		0.03476 U
	Uranium-236	pCi/L		-0.0084 U		-0.01039 U
	Uranium-238	pCi/L		0.01508 U		0.01881 U
X740-13G	Americium-241	pCi/L		0.00892 U		0.007583 U
	Neptunium-237	pCi/L		-0.0132 U		-0.1274 U
	Plutonium-238	pCi/L		0.00659 U		0.0283 U
	Plutonium-239/240	pCi/L		0 U		-0.02118 U
	Technetium-99	pCi/L		2.38 U		-1.11 U
	Uranium	µg/L		0.1662		0.02483 U
	Uranium-233/234	pCi/L		0.07082		0.06757 U
	Uranium-235	pCi/L		0.00971 U		0.009259 U
	Uranium-236	pCi/L		0 U		0 U
	Uranium-238	pCi/L		0.05497		0.007513 U
X740-14B	Americium-241	pCi/L		0 U		0.0166 U
	Neptunium-237	pCi/L		-0.0233 U		-0.07604 U
	Plutonium-238	pCi/L		0.0155 U		3.37E-05 U
	Plutonium-239/240	pCi/L		-0.0155 U		-0.05056 U
	Technetium-99	pCi/L		-1.36 U		0.0845 U
	Uranium	µg/L		0.4792		0.3414

Table 4.14. Results for radionuclides at the X-740 Waste Oil Handling Facility – 2006 (continued)

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X740-14B	Uranium-233/234	pCi/L		0.135		0.2718
	Uranium-235	pCi/L		0.02937 U		0.01082 U
	Uranium-236	pCi/L		0 U		0 U
	Uranium-238	pCi/L		0.1584		0.1137
X740-PZ10G	Americium-241	pCi/L		0.01988 U		-0.05583 U
	Neptunium-237	pCi/L		-0.0174 U		1.84E-05 U
	Plutonium-238	pCi/L		0.01733 U		-0.00915 U
	Plutonium-239/240	pCi/L		0.01733 U		9.15E-06 U
	Technetium-99	pCi/L		1.39 U		-3.88 U
	Uranium	µg/L		0.295		0.2786 U
	Uranium-233/234	pCi/L		0.1561		0.08479 U
	Uranium-235	pCi/L		8.7E-06 U		1.16E-05 U
	Uranium-236	pCi/L		0 U		-0.03118 U
	Uranium-238	pCi/L		0.09911		0.09379 U
X740-PZ12G	Americium-241	pCi/L		1.3E-05 U		0.01787 U
	Neptunium-237	pCi/L		0 U		-0.03664 U
	Plutonium-238	pCi/L		0.02215 U		0.02926 U
	Plutonium-239/240	pCi/L		0.00738 U		-0.0292 U
	Technetium-99	pCi/L		-2.82 U		-2.12 U
	Uranium	µg/L		0.2288		0.3488
	Uranium-233/234	pCi/L		0.07783 U		0.1312
	Uranium-235	pCi/L		-0.0087 U		1.67E-05 U
	Uranium-236	pCi/L		0 U		0 U
	Uranium-238	pCi/L		0.07765		0.1172
X740-PZ14G	Americium-241	pCi/L		-0.008 U		-0.06213 U
	Neptunium-237	pCi/L		-0.0322 U		-0.0783 U
	Plutonium-238	pCi/L		1.6E-05 U		1.56E-05 U
	Plutonium-239/240	pCi/L		0.00805 U		-0.03901 U
	Technetium-99	pCi/L		-2.68 U		-1.79 U
	Uranium	µg/L		3.712		2.788
	Uranium-233/234	pCi/L		1.629		0.9205
	Uranium-235	pCi/L		0.03773 U		0 U
	Uranium-236	pCi/L		0 U		9.92E-06 U
	Uranium-238	pCi/L		1.244		0.9369
X740-PZ17G	Americium-241	pCi/L		0.04007 U		2.33E-05 U
	Neptunium-237	pCi/L		-0.0078 U		0.01619 U
	Plutonium-238	pCi/L		0.01557 U		0.02423 U
	Plutonium-239/240	pCi/L		0.00778 U		0.01615 U
	Technetium-99	pCi/L		2.63 U		-2.6 U
	Uranium	µg/L		2.343		1.306
	Uranium-233/234	pCi/L		1.101		0.6292
	Uranium-235	pCi/L		0.02646 U		1.96E-05 U
	Uranium-236	pCi/L		0.00793 U		0.02521 U
	Uranium-238	pCi/L		0.7848		0.4388

Table 4.15. Results for beryllium and chromium at the X-611A Former Lime Sludge Lagoons – 2006

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
F-07G	Beryllium	µg/L	8.6		3	
	Chromium	µg/L	5.6		2.9	
F-08B	Beryllium	µg/L	1 U		1 U	
	Chromium	µg/L	0.58 B		2.2	
X611-01B	Beryllium	µg/L	1 U		1 U	
	Chromium	µg/L	1.2 B		4.6	
X611-02BA	Beryllium	µg/L	1 U		1 U	
	Chromium	µg/L	1.8 B		3	
X611-03G	Beryllium	µg/L	1 U		1 U	
	Chromium	µg/L	0.63 B		2	
X611-04BA	Beryllium	µg/L	0.2 B		0.59 B	
	Chromium	µg/L	1.6 B		4.7	

Table 4.16. Results for radionuclides at the X-735 Landfills – 2006

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X735-01G	Americium-241	pCi/L		-0.0211 U		3.29E-05 U
	Neptunium-237	pCi/L		-0.0610 U		-0.04006 U
	Plutonium-238	pCi/L		-0.0135 U		-0.00665 U
	Plutonium-239/240	pCi/L		-0.027 U		-0.03995 U
	Technetium-99	pCi/L		0.624 U		-2.33 U
	Uranium	µg/L		-0.0206 U		4.05E-09 U
	Uranium-233/234	pCi/L		0.00891 U		2.53E-05 U
	Uranium-235	pCi/L		0.02195 U		0 U
	Uranium-236	pCi/L		0 U		0 U
	Uranium-238	pCi/L		-0.0089 U		0 U
X735-01GA	Americium-241	pCi/L		-0.0076 U		0.00925 U
	Neptunium-237	pCi/L		8.2E-06 U		-0.00714 U
	Plutonium-238	pCi/L		0.00814 U		0.007146 U
	Plutonium-239/240	pCi/L		8.1E-06 U		-0.00713 U
	Technetium-99	pCi/L		-7.73 U		1.73 U
	Uranium	µg/L		2.1E-06 U		0.002666 U
	Uranium-233/234	pCi/L		0.01338 U		-0.01596 U
	Uranium-235	pCi/L		0 U		0.009874 U
	Uranium-236	pCi/L		0 U		0 U
	Uranium-238	pCi/L		0 U		1.6E-05 U
X735-02GA	Americium-241	pCi/L		0.00779 U		1.54E-05 U
	Neptunium-237	pCi/L		-0.0531 U		-0.01476 U
	Plutonium-238	pCi/L		0.00757 U		-0.00735 U
	Plutonium-239/240	pCi/L		2.3E-05 U		-0.00736 U
	Technetium-99	pCi/L		-5.09 U		-2.92 U
	Uranium	µg/L		-0.0018 U		-0.02362 U
	Uranium-233/234	pCi/L		0.01878 U		0.03185 U
	Uranium-235	pCi/L		-0.0077 U		0 U
	Uranium-236	pCi/L		0.01386 U		0 U
	Uranium-238	pCi/L		1.2E-05 U		-0.00794 U
X735-03G	Americium-241	pCi/L		8.1E-06 U		1.57E-05 U
	Neptunium-237	pCi/L		8.5E-06 U		0.02886 U
	Plutonium-238	pCi/L		0.01703 U		0.03591 U
	Plutonium-239/240	pCi/L		0.02554 U		0.007186 U
	Technetium-99	pCi/L		-2.76 U		-1.13 U
	Uranium	µg/L		0.08004 U		0.1418 U
	Uranium-233/234	pCi/L		0.09531 U		-0.02341 U
	Uranium-235	pCi/L		0.01068 U		0.009639 U
	Uranium-236	pCi/L		0 U		0 U
	Uranium-238	pCi/L		0.02594 U		0.0468 U
X735-03GA	Americium-241	pCi/L		0.02146 U		0.03306 U
	Neptunium-237	pCi/L		-0.0139 U		1.35E-05 U
	Plutonium-238	pCi/L		0.00697 U		0.01349 U
	Plutonium-239/240	pCi/L		0.00697 U		0.006739 U
	Technetium-99	pCi/L		1.63 U		-1.35 U
	Uranium	µg/L		0.02516 U		0.02407 U
	Uranium-233/234	pCi/L		0.00848 U		0.01621 U
	Uranium-235	pCi/L		0 U		0 U

Table 4.16. Results for radionuclides at the X-735 Landfills – 2006 (continued)

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X735-03GA	Uranium-236	pCi/L		0 U		0 U
	Uranium-238	pCi/L		0.00845 U		0.008087 U
X735-04G	Americium-241	pCi/L		0.01602 U		0.008672 U
	Neptunium-237	pCi/L		0.01607 U		-0.04341 U
	Plutonium-238	pCi/L		0.00801 U		7.22E-06 U
	Plutonium-239/240	pCi/L		-0.0080 U		-0.00722 U
	Technetium-99	pCi/L		-3.37 U		1.19 U
	Uranium	µg/L		0.09868 U		0.1011 U
	Uranium-233/234	pCi/L		0.04991 U		0.00856 U
X735-04GA	Uranium-235	pCi/L		0 U		0 U
	Uranium-236	pCi/L		-0.0092 U		0 U
	Uranium-238	pCi/L		0.0332 U		0.03398 U
	Americium-241	pCi/L		-0.0236 U		0.03264 U
	Neptunium-237	pCi/L		-0.0177 U		-0.01355 U
	Plutonium-238	pCi/L		0.01764 U		0.006771 U
	Plutonium-239/240	pCi/L		0.01763 U		-0.04729 U
	Technetium-99	pCi/L		3.85 U		1.15 U
	Uranium	µg/L		0.05548 U		0.09867 U
	Uranium-233/234	pCi/L		-0.0177 U		0.0166 U
	Uranium-235	pCi/L		0.01095 U		0 U
	Uranium-236	pCi/L		-0.0098 U		0.009195 U
	Uranium-238	pCi/L		0.01772 U		0.03311 U
	Americium-241	pCi/L		-0.0080 U		-0.01056 U
X735-05G	Neptunium-237	pCi/L		0.0178 U		-0.0195 U
	Plutonium-238	pCi/L		0.01774 U		0.0065 U
	Plutonium-239/240	pCi/L		0.00887 U		-0.00647 U
	Technetium-99	pCi/L		-1.73 U		-1.53 U
	Uranium	µg/L		0.1625		0.1654 U
	Uranium-233/234	pCi/L		0.04845 U		0.05568 U
	Uranium-235	pCi/L		-0.0199 U		0 U
	Uranium-236	pCi/L		0 U		0.008813 U
	Uranium-238	pCi/L		0.05638		0.05554 U
	Americium-241	pCi/L		0.03141 U		0.03468 U
	Neptunium-237	pCi/L		-0.0614 U		-0.0342 U
	Plutonium-238	pCi/L		0.00878 U		2.73E-05 U
	Plutonium-239/240	pCi/L		0.00877 U		2.73E-05 U
	Technetium-99	pCi/L		-5.11 U		-4.31 U
X735-05GA	Uranium	µg/L		-0.0377 U		0.02644 U
	Uranium-233/234	pCi/L		0.01153 U		0.1281
	Uranium-235	pCi/L		-0.0142 U		0.009874 U
	Uranium-236	pCi/L		0.01275 U		0 U
	Uranium-238	pCi/L		-0.0115 U		0.007996 U
	Americium-241	pCi/L		7.0E-06 U		8.59E-06 U
	Neptunium-237	pCi/L		-0.0279 U		-0.07322 U
	Plutonium-238	pCi/L		0.0209 U		-0.00811 U
	Plutonium-239/240	pCi/L		0.00697 U		-0.03244 U
	Technetium-99	pCi/L		-4.84 U		-1.36 U
	Uranium	µg/L		0.1637 U		0.1805 U
X735-06GAA						

Table 4.16. Results for radionuclides at the X-735 Landfills – 2006 (continued)

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X735-06GAA	Uranium-233/234	pCi/L		0.05516 U		0.05322 U
	Uranium-235	pCi/L		0 U		0 U
	Uranium-236	pCi/L		-0.0076 U		0 U
	Uranium-238	pCi/L		0.05504 U		0.06064 U
X735-12G	Americium-241	pCi/L		7.0E-06 U		-0.00971 U
	Neptunium-237	pCi/L		0 U		-0.02721 U
	Plutonium-238	pCi/L		0.03072 U		6.79E-06 U
	Plutonium-239/240	pCi/L		7.7E-06 U		-0.03393 U
	Technetium-99	pCi/L		-1.86 U		-4.58 U
	Uranium	µg/L		0.2226 U		0.3048
	Uranium-233/234	pCi/L		0.03835 U		0.05136 U
	Uranium-235	pCi/L		-0.0189 U		0 U
	Uranium-236	pCi/L		0.00848 U		-0.00947 U
	Uranium-238	pCi/L		0.07643 U		0.1025
X735-13GA	Americium-241	pCi/L		0.00856 U		0 U
	Neptunium-237	pCi/L		-0.0086 U		-0.04089 U
	Plutonium-238	pCi/L		0.02583 U		-0.0163 U
	Plutonium-239/240	pCi/L		-0.0086 U		-0.01629 U
	Technetium-99	pCi/L		-4.42 U		-2.23 U
	Uranium	µg/L		0.08239 U		0.2662
	Uranium-233/234	pCi/L		0.04164 U		0.05231 U
	Uranium-235	pCi/L		0 U		0 U
	Uranium-236	pCi/L		0 U		0 U
	Uranium-238	pCi/L		0.02768 U		0.08946
X735-16B	Americium-241	pCi/L		-0.0079 U		3.55E-05 U
	Neptunium-237	pCi/L		-0.0255 U		0.02155 U
	Plutonium-238	pCi/L		0.01912 U		0.02865 U
	Plutonium-239/240	pCi/L		1.3E-05 U		1.43E-05 U
	Technetium-99	pCi/L		-7.55 U		-0.148 U
	Uranium	µg/L		0.06027 U		0.05174 U
	Uranium-233/234	pCi/L		0.05401		8.73E-06 U
	Uranium-235	pCi/L		0 U		0 U
	Uranium-236	pCi/L		0.00748 U		-0.00967 U
	Uranium-238	pCi/L		0.02021 U		0.01744 U
X735-17B	Americium-241	pCi/L		8.2E-06 U		0.009178 U
	Neptunium-237	pCi/L		-0.0439 U		-0.00706 U
	Plutonium-238	pCi/L		0.00731 U		0.01413 U
	Plutonium-239/240	pCi/L		-0.0219 U		-0.02116 U
	Technetium-99	pCi/L		-5.2 U		-5.71 U
	Uranium	µg/L		0.2359		0.3126
	Uranium-233/234	pCi/L		0.1337		0.07172 U
	Uranium-235	pCi/L		-0.0082 U		0.01964 U
	Uranium-236	pCi/L		-0.0074 U		0 U
	Uranium-238	pCi/L		0.08003		0.1033
X735-18B	Americium-241	pCi/L		0.0261 U		-0.01873 U
	Neptunium-237	pCi/L		8.2E-06 U		-0.02593 U
	Plutonium-238	pCi/L		1.6E-05 U		0.006506 U
	Plutonium-239/240	pCi/L		-0.0082 U		-0.01292 U

Table 4.16. Results for radionuclides at the X-735 Landfills – 2006 (continued)

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X735-18B	Technetium-99	pCi/L		0.741 U		-0.758 U
	Uranium	µg/L		0.02756 U		0.1393 U
	Uranium-233/234	pCi/L		0.03339 U		0.1094
	Uranium-235	pCi/L		0.0103 U		0 U
	Uranium-236	pCi/L		0 U		0 U
	Uranium-238	pCi/L		0.00834 U		0.04679 U
X735-19G	Americium-241	pCi/L		0.00767 U		0.01181 U
	Neptunium-237	pCi/L		-0.0297 U		-0.05708 U
	Plutonium-238	pCi/L		0 U		0.01425 U
	Plutonium-239/240	pCi/L		-0.0296 U		-0.01424 U
	Technetium-99	pCi/L		-4.52 U		-1.24 U
	Uranium	µg/L		0.04152 U		0.09963 U
X735-20B	Uranium-233/234	pCi/L		0.02106 U		-0.03444 U
	Uranium-235	pCi/L		0 U		-0.01064 U
	Uranium-236	pCi/L		-0.0078 U		-0.00956 U
	Uranium-238	pCi/L		0.01399 U		0.03448 U
	Americium-241	pCi/L		1.7E-05 U		0.0333 U
	Neptunium-237	pCi/L		7.4E-06 U		-0.02212 U
X735-21G	Plutonium-238	pCi/L		2.2E-05 U		0.01474 U
	Plutonium-239/240	pCi/L		-0.0073 U		-0.01469 U
	Technetium-99	pCi/L		-4.29 U		-0.0219 U
	Uranium	µg/L		0.4328		0.2739
	Uranium-233/234	pCi/L		0.2416		0.1382
	Uranium-235	pCi/L		0.00851 U		0 U
X737-05B	Uranium-236	pCi/L		0 U		0.0204 U
	Uranium-238	pCi/L		0.1447		0.09191
	Americium-241	pCi/L		0.00785 U		0 U
	Neptunium-237	pCi/L		-0.0065 U		1.60E-05 U
	Plutonium-238	pCi/L		0.01296 U		0.02398 U
	Plutonium-239/240	pCi/L		0.01945 U		-0.00798 U
X737-06G	Technetium-99	pCi/L		1.53 U		2.47 U
	Uranium	µg/L		0.7704		0.5792
	Uranium-233/234	pCi/L		0.331		0.09284
	Uranium-235	pCi/L		-0.0215 U		0 U
	Uranium-236	pCi/L		0 U		0.01028 U
	Uranium-238	pCi/L		0.2608		0.1946
X737-05B	Americium-241	pCi/L		7.5E-06 U		2.25E-05 U
	Neptunium-237	pCi/L		0.02424 U		-0.01427 U
	Plutonium-238	pCi/L		0.00808 U		7.13E-06 U
	Plutonium-239/240	pCi/L		8.0E-06 U		-0.03562 U
	Technetium-99	pCi/L		-4.66 U		-2.48 U
	Uranium	µg/L		0.03936 U		0.04625 U
X737-06G	Uranium-233/234	pCi/L		0.03975		0.01559 U
	Uranium-235	pCi/L		0 U		0 U
	Uranium-236	pCi/L		0 U		0 U
	Uranium-238	pCi/L		0.01322 U		0.01554 U
	Americium-241	pCi/L		0 U		1.22E-05 U
	Neptunium-237	pCi/L		0.01439 U		-0.04526 U

Table 4.16. Results for radionuclides at the X-735 Landfills – 2006 (continued)

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X737-06G	Plutonium-238	pCi/L		1.4E-05 U		-0.01503 U
	Plutonium-239/240	pCi/L		-0.0143 U		0.007538 U
	Technetium-99	pCi/L		-7.08 U		-0.729 U
	Uranium	µg/L		4.3E-05 U		0.05236 U
	Uranium-233/234	pCi/L		0.02012 U		3.34E-05 U
	Uranium-235	pCi/L		0 U		0.01031 U
	Uranium-236	pCi/L		0 U		0 U
	Uranium-238	pCi/L		1.3E-05 U		0.01667 U
X737-07B	Americium-241	pCi/L		-0.0163 U		0 U
	Neptunium-237	pCi/L		-0.0212 U		-0.00661 U
	Plutonium-238	pCi/L		0 U		-0.0132 U
	Plutonium-239/240	pCi/L		0.01413 U		-0.00659 U
	Technetium-99	pCi/L		-6.96 U		-4.91 U
	Uranium	µg/L		0.01878 U		0.02515 U
	Uranium-233/234	pCi/L		0.02823 U		-0.02533 U
	Uranium-235	pCi/L		-0.0087 U		0 U
X737-08B	Uranium-236	pCi/L		0.00781 U		0 U
	Uranium-238	pCi/L		0.00704 U		0.008454 U
	Americium-241	pCi/L		-0.0237 U		-0.01467 U
	Neptunium-237	pCi/L		-0.0073 U		-0.00708 U
	Plutonium-238	pCi/L		1.5E-05 U		0.02119 U
	Plutonium-239/240	pCi/L		-0.0219 U		-0.00705 U
	Technetium-99	pCi/L		2.74 U		2.12 U
	Uranium	µg/L		0.1018 U		0.1887
X737-09G	Uranium-233/234	pCi/L		0.2227		0.2698
	Uranium-235	pCi/L		1.1E-05 U		0 U
	Uranium-236	pCi/L		0 U		0.008789 U
	Uranium-238	pCi/L		0.03419 U		0.06335
	Americium-241	pCi/L		0.00666 U		-0.03896 U
	Neptunium-237	pCi/L		-0.0222 U		0.01377 U
	Plutonium-238	pCi/L		-0.0147 U		1.37E-05 U
	Plutonium-239/240	pCi/L		0.0295 U		0.01373 U
	Technetium-99	pCi/L		-0.291 U		6.39 U
	Uranium	µg/L		0.4031		0.1287
	Uranium-233/234	pCi/L		0.1601		0.04177 U
	Uranium-235	pCi/L		0.01039 U		0.01717 U
	Uranium-236	pCi/L		0 U		0.007709 U
	Uranium-238	pCi/L		0.1345		0.04167

Table 4.17. Volatile organic compounds detected at the X-734 Landfills – 2006

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
RSY-02B	Acetone	µg/L		310		3.4 J
X734-01G	Acetone	µg/L		5.4 J		2.5 J
X734-02B	1,1-Dichloroethane	µg/L		0.28 J		2 U
	1,4-Dichlorobenzene	µg/L		0.83 J		2 U
	Acetone	µg/L		22		10 U
	Chlorobenzene	µg/L		0.2 J		2 U
X734-03G	1,1-Dichloroethane	µg/L		0.25 J		0.28 J
	1,4-Dichlorobenzene	µg/L		0.65 J		0.64 J
	Methylene chloride	µg/L		0.36 J		2 U
X734-05B	1,2-Dimethylbenzene	µg/L		1 U		0.2 J
	Acetone	µg/L		18 B		10 U
	Benzene	µg/L		1.2		1.9 J
	Ethylbenzene	µg/L		0.28 J		0.26 J
	Methylene chloride	µg/L		0.33 BJ		2 U
	Toluene	µg/L		0.25 J		0.32 J
X734-06G	1,2-Dichlorobenzene	µg/L		1 U		0.95 J
	Acetone	µg/L		17		1.9 J
	Trichloroethene	µg/L		1 U		0.22 J
X734-10G	Acetone	µg/L		9.8 J		2 J
X734-14G	Acetone	µg/L		9.3 BJ		10 U
X734-15G	1,1-Dichloroethane	µg/L		0.58 J		0.24 J
	Acetone	µg/L		6.7 J		10 U
X734-16G	Acetone	µg/L		4.1 J		3.5 J
X734-18G	1,1-Dichloroethane	µg/L		1 U		0.17 J
	Acetone	µg/L		5.3 J		2 J
X734-22G	Acetone	µg/L		49 B		10 U
X734-23G	Acetone	µg/L		25 B		10 U
	Benzene	µg/L		1 U		0.2 J
	cis-1,2-Dichloroethene	µg/L		11		10
	trans-1,2-Dichloroethene	µg/L		0.55		0.53 J
	Vinyl chloride	µg/L		4.2		3.7

Table 4.18. Results for radionuclides at the X-734 Landfills – 2006

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
RSY-02B	Americium-241	pCi/L		0 U		0.00866 U
	Neptunium-237	pCi/L		0 U		0 U
	Plutonium-238	pCi/L		0.01491 U		0.01283 U
	Plutonium-239/240	pCi/L		-0.0074 U		0.00642 U
	Technetium-99	pCi/L		-0.476 U		-2.48 U
	Uranium	µg/L		-0.0032 U		0.1699
	Uranium-233/234	pCi/L		0.0393 U		0.134
	Uranium-235	pCi/L		-0.0121 U		0.008701 U
	Uranium-236	pCi/L		0 U		7.54E-06 U
X734-01G	Uranium-238	pCi/L		9.8E-06 U		0.05632
	Americium-241	pCi/L		0.00783 U		-0.02655 U
	Neptunium-237	pCi/L		-0.0739 U		-0.02176 U
	Plutonium-238	pCi/L		0.0246 U		0.02177 U
	Plutonium-239/240	pCi/L		-0.0982 U		0.02176 U
	Technetium-99	pCi/L		-3.47 U		-1.95 U
	Uranium	µg/L		0.09126 U		0.1358 U
	Uranium-233/234	pCi/L		-0.0243 U		0.09791 U
	Uranium-235	pCi/L		-0.0200 U		1.55E-05 U
X734-02B	Uranium-236	pCi/L		0 U		0.007238 U
	Uranium-238	pCi/L		0.03246 U		0.04559 U
	Americium-241	pCi/L		1.5E-05 U		-0.02377 U
	Neptunium-237	pCi/L		-0.0068 U		0.006661 U
	Plutonium-238	pCi/L		0.02051 U		0.01991 U
	Plutonium-239/240	pCi/L		-0.0068 U		0.02654 U
	Technetium-99	pCi/L		-2.76 U		-4.69 U
	Uranium	µg/L		0.00264 U		0.01792 U
	Uranium-233/234	pCi/L		3.2E-05 U		0.0982
X734-03G	Uranium-235	pCi/L		0.00985 U		-0.01861 U
	Uranium-236	pCi/L		0 U		0.02509 U
	Uranium-238	pCi/L		8E-06 U		0.007544 U
	Americium-241	pCi/L		0 U		0.008922 U
	Neptunium-237	pCi/L		-0.0165 U		0.006075 U
	Plutonium-238	pCi/L		0.00826 U		0.01814 U
	Plutonium-239/240	pCi/L		0 U		-0.00604 U
	Technetium-99	pCi/L		-1.37 U		-0.584 U
	Uranium	µg/L		0.5794		0.6805
X734-04G	Uranium-233/234	pCi/L		0.3677		0.8268
	Uranium-235	pCi/L		0.02269 U		0.08196
	Uranium-236	pCi/L		0 U		0.04909 U
	Uranium-238	pCi/L		0.1927		0.221
	Americium-241	pCi/L		0.00761 U		0.04494 U
	Neptunium-237	pCi/L		-0.0320 U		0.006537 U
	Plutonium-238	pCi/L		0.008 U		0.01954 U
	Plutonium-239/240	pCi/L		-0.008 U		6.51E-06 U
	Technetium-99	pCi/L		-3.44 U		0.669 U
	Uranium	µg/L		1.831		1.88
	Uranium-233/234	pCi/L		0.7212		0.7393
	Uranium-235	pCi/L		0.02022 U		0.0251 U

Table 4.18. Results for radionuclides at the X-734 Landfills – 2006 (continued)

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X734-04G	Uranium-236	pCi/L		0.01816 U		0.007512 U
	Uranium-238	pCi/L		0.6134		0.6295
X734-05B	Americium-241	pCi/L		0.01521 U		1.77E-05 U
	Neptunium-237	pCi/L		-0.0817 U		-0.09051 U
	Plutonium-238	pCi/L		0.02966 U		0.02781 U
	Plutonium-239/240	pCi/L		-0.0370 U		-0.04165 U
	Technetium-99	pCi/L		-0.0424 U		-2.56 U
	Uranium	µg/L		0.4808		0.6288
	Uranium-233/234	pCi/L		0.4209		0.4286
	Uranium-235	pCi/L		0 U		0.008392 U
	Uranium-236	pCi/L		0 U		0.01507 U
X734-06G	Uranium-238	pCi/L		0.1616		0.2105
	Americium-241	pCi/L		0.00776 U		-0.01086 U
	Neptunium-237	pCi/L		-0.0066 U		-0.0127 U
	Plutonium-238	pCi/L		0.0133 U		0.02538 U
	Plutonium-239/240	pCi/L		0.00668 U		6.34E-06 U
	Technetium-99	pCi/L		-4.28 U		-1.76 U
	Uranium	µg/L		0.2488		0.01901 U
	Uranium-233/234	pCi/L		0.209		0.1226
	Uranium-235	pCi/L		0.02241 U		6.62E-06 U
X734-10G	Uranium-236	pCi/L		0 U		-0.01427 U
	Uranium-238	pCi/L		0.08159		0.006457 U
	Americium-241	pCi/L		0.00774 U		3.01E-05 U
	Neptunium-237	pCi/L		-0.0075 U		-0.01287 U
	Plutonium-238	pCi/L		0.01499 U		0.02569 U
	Plutonium-239/240	pCi/L		0.00749 U		-0.01283 U
	Technetium-99	pCi/L		-2.09 U		-1.75 U
	Uranium	µg/L		0.2077		0.2907
	Uranium-233/234	pCi/L		0.08741		0.2202
X734-14G	Uranium-235	pCi/L		0 U		0 U
	Uranium-236	pCi/L		0 U		0 U
	Uranium-238	pCi/L		0.06979		0.09768
	Americium-241	pCi/L		0.00786 U		9.78E-06 U
	Neptunium-237	pCi/L		-0.0066 U		-0.02038 U
	Plutonium-238	pCi/L		0.00664 U		0.006805 U
	Plutonium-239/240	pCi/L		-0.0066 U		0.01357 U
	Technetium-99	pCi/L		0.459 U		-2.43 U
	Uranium	µg/L		0.7311		1.106
X734-15G	Uranium-233/234	pCi/L		0.3154		0.7557
	Uranium-235	pCi/L		0.01081 U		0.007916 U
	Uranium-236	pCi/L		-0.0194 U		0.02839 U
	Uranium-238	pCi/L		0.2448		0.3707
	Americium-241	pCi/L		0.0151 U		0.00866 U
	Neptunium-237	pCi/L		0 U		0.00676 U
	Plutonium-238	pCi/L		7.4E-06 U		0.02023 U
	Plutonium-239/240	pCi/L		-0.0074 U		6.74E-06 U
	Technetium-99	pCi/L		-3.66 U		-2.3 U
	Uranium	µg/L		0.1261 U		0.2823

Table 4.18. Results for radionuclides at the X-734 Landfills – 2006 (continued)

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X734-15G	Uranium-233/234	pCi/L		0.0425 U		0.2453
	Uranium-235	pCi/L		0 U		0.007759 U
	Uranium-236	pCi/L		-0.0094 U		0 U
	Uranium-238	pCi/L		0.04241 U		0.09416
X734-16G	Americium-241	pCi/L		-0.0081 U		-0.01001 U
	Neptunium-237	pCi/L		-0.0057 U		5.30E-05 U
	Plutonium-238	pCi/L		0.0114 U		0.02647 U
	Plutonium-239/240	pCi/L		0.0171 U		-0.03964 U
	Technetium-99	pCi/L		-0.106 U		-2.12 U
	Uranium	µg/L		3.902		4.682
	Uranium-233/234	pCi/L		1.495		2.02
	Uranium-235	pCi/L		0.0733		0.06388
	Uranium-236	pCi/L		0.01097 U		0 U
	Uranium-238	pCi/L		1.305		1.568
X734-18G	Americium-241	pCi/L		-0.0071 U		-0.02519 U
	Neptunium-237	pCi/L		3.3E-05 U		-0.0069 U
	Plutonium-238	pCi/L		-0.0165 U		0.01377 U
	Plutonium-239/240	pCi/L		-0.0082 U		-0.02063 U
	Technetium-99	pCi/L		-7.24 U		-3.64 U
	Uranium	µg/L		1.337		1.336
	Uranium-233/234	pCi/L		0.6497		0.9898
	Uranium-235	pCi/L		0.01179 U		0.03392 U
	Uranium-236	pCi/L		-0.0106 U		0.007622 U
	Uranium-238	pCi/L		0.4482		0.4459
X734-20G	Americium-241	pCi/L				0.02458 U
	Neptunium-237	pCi/L				-0.06899 U
	Plutonium-238	pCi/L				2.50E-05 U
	Plutonium-239/240	pCi/L				-0.00623 U
	Technetium-99	pCi/L				1.08 U
	Uranium	µg/L				0.1289
	Uranium-233/234	pCi/L				0.1128
	Uranium-235	pCi/L				0 U
	Uranium-236	pCi/L				0 U
	Uranium-238	pCi/L				0.04331
X734-22G	Americium-241	pCi/L		2.4E-05 U		0.02691 U
	Neptunium-237	pCi/L		-0.0349 U		0.01351 U
	Plutonium-238	pCi/L		-0.0069 U		0.02692 U
	Plutonium-239/240	pCi/L		0.00697 U		-0.01344 U
	Technetium-99	pCi/L		-2.98 U		-2.87 U
	Uranium	µg/L		1.109		1.072
	Uranium-233/234	pCi/L		0.5345		0.5951
	Uranium-235	pCi/L		0.01911 U		0.009063 U
	Uranium-236	pCi/L		0 U		0 U
	Uranium-238	pCi/L		0.371		0.3593
X734-23G	Americium-241	pCi/L		-0.0188 U		0.01464 U
	Neptunium-237	pCi/L		3.1E-05 U		-0.06632 U
	Plutonium-238	pCi/L		0 U		0.01326 U
	Plutonium-239/240	pCi/L		1.6E-05 U		-0.01321 U

Table 4.18. Results for radionuclides at the X-734 Landfills – 2006 (continued)

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
X734-23G	Technetium-99	pCi/L		3.51 U		-3.72 U
	Uranium	µg/L		0.04893 U		0.04746 U
	Uranium-233/234	pCi/L		0.03476 U		0.1292
	Uranium-235	pCi/L		-0.0107 U		0.0177 U
	Uranium-236	pCi/L		0.00963 U		0.007947 U
	Uranium-238	pCi/L		0.01734 U		0.01432 U

Table 4.19. Results for cadmium, cobalt, and nickel at the X-533 Switchyard Area – 2006

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
F-03G	Cadmium	µg/L		29		38
	Cobalt	µg/L		62		70
	Nickel	µg/L		310		430
TCP-01G	Cadmium	µg/L		15		19
	Cobalt	µg/L		50		52
	Nickel	µg/L		210		220
X533-03G	Cadmium	µg/L		10		13
	Cobalt	µg/L		32		38
	Nickel	µg/L		170		210

Table 4.20. Volatile organic compounds detected at surface water monitoring locations – 2006

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
BRC-SW01	Acetone	µg/L	10 U	4.9 J	10 U	4.3 J
	Bromodichloromethane	µg/L	2.4	3.2	2.8	7.6
	Bromoform	µg/L	0.68 J	0.79 J	0.77 J	2
	Chloroform	µg/L	3.3	3.4	3.4	25
	Dibromochloromethane	µg/L	2.6	3	2.8	5.9
BRC-SW02	Acetone	µg/L	11	2.9 J	10 U	160
	Chloroform	µg/L	0.21 J	2 U	2 U	2 U
	Methylene chloride	µg/L	0.32 J	0.32 J	2 U	2 U
EDD-SW01	Acetone	µg/L	10 U	17 B	10 U	10 U
	Bromodichloromethane	µg/L	1.7 J	2.1	3.5	1.9 J
	Bromoform	µg/L	0.99 J	0.62 J	0.94 J	0.73 J
	Chloroform	µg/L	1.7 J	2.1	3.8	1.8 J
	cis-1,2-Dichloroethene	µg/L	0.17 J	0.23 J	2 U	0.18 J
	Dibromochloromethane	µg/L	2.7	2.2	3.6	2.5
	Methylene chloride	µg/L	2 U	0.33 BJ	2 U	0.33 J
	Trichloroethene	µg/L	0.33 J	2 U	0.29 J	0.16 J
LBC-SW01	Acetone	µg/L	10 U	5.4 BJ	10 U	3 J
	Bromodichloromethane	µg/L	1.2 J	1.7 J	3.1	1.3 J
	Bromoform	µg/L	0.65 J	0.58 J	0.85 J	0.54 J
	Chloroform	µg/L	1.2 J	1.6 J	3.3	1.3 J
	cis-1,2-Dichloroethene	µg/L	0.23 J	0.21 J	2 U	0.2 J
	Dibromochloromethane	µg/L	1.9 J	1.8 J	3.2	1.8 J
	Methylene chloride	µg/L	2 U	2 U	2 U	0.33 J
	Trichloroethene	µg/L	0.59 J	2 U	2 U	0.25 J
LBC-SW02	Acetone	µg/L	10 U	5.1 BJ	10 U	200
	Bromodichloromethane	µg/L	0.83 J	1.1 J	2	0.85 J
	Bromoform	µg/L	0.57 J	0.39 J	0.64 J	0.31 J
	Chloroform	µg/L	0.88 J	1.1 J	2.1	0.91 J
	cis-1,2-Dichloroethene	µg/L	0.18 J	2 U	2 U	0.17 J
	Dibromochloromethane	µg/L	1.4 J	1.2 J	2.2	1.1 J
	Methylene chloride	µg/L	2 U	2 U	2 U	0.33 J
	Trichloroethene	µg/L	0.4 J	2 U	2 U	0.2 J
LBC-SW03	Acetone	µg/L	10 U	4.9 BJ	10 U	10 U
	Bromodichloromethane	µg/L	0.25 J	2 U	0.35 J	0.19 J
	Bromoform	µg/L	0.26 J	2 U	0.22 J	2 U
	Chloroform	µg/L	0.18 J	2 U	0.28 J	0.17 J
	Dibromochloromethane	µg/L	0.47 J	0.24 J	0.49 J	0.32 J
LBC-SW04	Acetone	µg/L	10 U	3 BJ	10 U	10 U
NHP-SW01	Acetone	µg/L	10 U	5.1 BJ	10 U	10 U
	Bromodichloromethane	µg/L	2 U	2 U	2 U	0.19 J
	Chloroform	µg/L	2 U	2 U	2 U	0.22 J
	Dibromochloromethane	µg/L	2 U	2 U	2 U	0.26 J
UND-SW01	1,1-Dichloroethane	µg/L	2 U	2 U	0.22 J	2 U
	1,1-Dichloroethene	µg/L	0.21 J	0.28 J	0.29 J	2 U
	Acetone	µg/L	10 U	3.9 J	10 U	2.9 J
	cis-1,2-Dichloroethene	µg/L	2 U	0.23 J	0.47 J	2 U
	Trichloroethene	µg/L	1.7 J	3.6	6.9	2 U
UND-SW02	Acetone	µg/L	10 U	14	10 U	2 J

Table 4.20. Volatile organic compounds detected at surface water monitoring locations – 2006 (continued)

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
UND-SW02	Methylene chloride	µg/L	2 U	0.35 J	2 U	2 U
	Trichloroethene	µg/L	2 U	2 U	2 U	1.5 J
WDD-SW01	Acetone	µg/L	6 J	8.5 BJ	10 U	9.7 J
	Bromodichloromethane	µg/L	0.74 J	0.9 J	1.7 J	0.33 J
	Bromoform	µg/L	0.89 J	0.81 J	1 J	2 U
	Chloroform	µg/L	0.58 J	0.66 J	1.4 J	0.67 J
	Dibromochloromethane	µg/L	1.3 J	1.3 J	2.5	0.42 J
WDD-SW02	2-Butanone	µg/L	5 U	5 U	5 U	13
	Acetone	µg/L	10 U	11 B	10 U	10 U
WDD-SW03	Acetone	µg/L	10 U	8.4 BJ	10 U	10 U
	Bromodichloromethane	µg/L	0.4 J	0.28 J	2 U	0.22 J
	Bromoform	µg/L	0.35 J	0.24 J	2 U	0.36 J
	Chloroform	µg/L	0.34 J	0.33 J	0.28 J	0.19 J
	Dibromochloromethane	µg/L	0.55 J	0.33 J	0.32 J	0.3 J

Table 4.21. Results for radionuclides at surface water monitoring locations – 2006

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
BRC-SW01	Americium-241	pCi/L	0.0081 U	0.0084 U	1.553E-05 U	2.39E-05 U
	Neptunium-237	pCi/L	-0.007 U	-0.0086 U	-0.007661 U	-0.00631 U
	Plutonium-238	pCi/L	0.0140 U	0.01721 U	0.02295 U	0.02524 U
	Plutonium-239/240	pCi/L	7E-06 U	-0.0086 U	0.007647 U	-0.0189 U
	Technetium-99	pCi/L	3.78 U	-2.75 U	-3.53 U	-5.41 U
	Uranium	µg/L	1.567	0.3538	0.1223 U	0.8814
	Uranium-233/234	pCi/L	1.193	0.1414	0.06869 U	3.147
	Uranium-235	pCi/L	0.0375 U	0.03077 U	0 U	0.05533 U
	Uranium-236	pCi/L	0 U	-0.0092 U	0 U	0.03311 U
BRC-SW02	Uranium-238	pCi/L	0.5233	0.1162	0.04111 U	0.2909
	Americium-241	pCi/L	0.0086 U	0.00751 U	0 U	0.02332 U
	Neptunium-237	pCi/L	-0.007 U	1.8E-05 U	-0.02238 U	-0.02825 U
	Plutonium-238	pCi/L	0.0068 U	0.00903 U	0.01491 U	0.007064 U
	Plutonium-239/240	pCi/L	-0.007 U	0 U	0.007464 U	-0.02112 U
	Technetium-99	pCi/L	3.88 U	-0.947 U	-1.8 U	-7.04 U
	Uranium	µg/L	1.001	0.6223	0.7205	0.4667
	Uranium-233/234	pCi/L	0.8592	0.7489	0.7625	0.6876
	Uranium-235	pCi/L	0.0534	0.03186 U	0.03688 U	0.02859 U
EDD-SW01	Uranium-236	pCi/L	0.008 U	0.00954 U	0.00828 U	0.008566 U
	Uranium-238	pCi/L	0.3315	0.2062	0.2387	0.1542
	Americium-241	pCi/L	-0.009 U	-0.0170 U	8.087E-06 U	0 U
	Neptunium-237	pCi/L	-0.021 U	-0.009 U	-0.03418 U	-0.09056 U
	Plutonium-238	pCi/L	0.0205 U	-0.009 U	0.02048 U	2.46E-05 U
	Plutonium-239/240	pCi/L	0.0137 U	0.009 U	-0.02729 U	1.64E-05 U
	Technetium-99	pCi/L	22.8	-0.354 U	1.74 U	2.47 U
	Uranium	µg/L	0.5309	0.4104	0.18	0.4431
	Uranium-233/234	pCi/L	1.333	0.5317	0.2365	0.6754
LBC-SW01	Uranium-235	pCi/L	0.0632	0.01058 U	0.01621 U	0.03011 U
	Uranium-236	pCi/L	0.0071 U	0 U	0.007276 U	0 U
	Uranium-238	pCi/L	0.1726	0.137	0.059	0.1462
	Americium-241	pCi/L	0.0153 U	-0.0078 U	0.007939 U	0.01588 U
	Neptunium-237	pCi/L	-0.056 U	0.00874 U	-0.01285 U	-0.09182 U
	Plutonium-238	pCi/L	0.0070 U	0.01742 U	-0.006396 U	0.01965 U
	Plutonium-239/240	pCi/L	-0.007 U	0.02612 U	-0.03207 U	-0.03923 U
	Technetium-99	pCi/L	12.7	-1.95 U	4.72 U	-3.56 U
	Uranium	µg/L	0.5375	0.3992	0.2049	0.4073
LBC-SW02	Uranium-233/234	pCi/L	1.038	0.5931	0.2161	0.6679
	Uranium-235	pCi/L	0.0303 U	0.03801 U	0.01666 U	0.03877 U
	Uranium-236	pCi/L	0.0068 U	0.00854 U	-0.007471 U	0.008704 U
	Uranium-238	pCi/L	0.1778	0.1307	0.0674	0.1333
	Americium-241	pCi/L	-0.008 U	-0.0220 U	0 U	-0.00967 U
	Neptunium-237	pCi/L	-0.016 U	-0.0302 U	-0.02214 U	-0.01435 U
	Plutonium-238	pCi/L	-0.016 U	0.02263 U	0.02946 U	-0.01432 U
	Plutonium-239/240	pCi/L	0.0163 U	-0.0151 U	-0.007351 U	-0.00714 U
	Technetium-99	pCi/L	20	0.0479 U	3.65 U	-2.11 U
	Uranium	µg/L	0.5693	0.5076	0.1355	0.3985
	Uranium-233/234	pCi/L	0.9814	0.6885	0.3468	0.4713
	Uranium-235	pCi/L	0.0463	0.01103 U	0.007923 U	0.0204 U

Table 4.21. Results for radionuclides at surface water monitoring locations – 2006 (continued)

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
LBC-SW02	Uranium-236	pCi/L	-0.007 U	0 U	-0.01421 U	0.009158 U
	Uranium-238	pCi/L	0.1872	0.1696	0.04487	0.132
LBC-SW03	Americium-241	pCi/L	-0.007 U	0 U	0 U	0.007448 U
	Neptunium-237	pCi/L	-0.029 U	-0.0196 U	1.349E-05 U	-0.08629 U
	Plutonium-238	pCi/L	0.0286 U	-0.0294 U	6.724E-06 U	0.007202 U
	Plutonium-239/240	pCi/L	-0.007 U	-0.0196 U	1.345E-05 U	-0.03583 U
	Technetium-99	pCi/L	18.9	-1.14 U	2.6 U	-1.9 U
	Uranium	µg/L	0.6375	0.4713	0.1427 U	0.4015
	Uranium-233/234	pCi/L	1.092	0.7552	0.4254	0.6647
	Uranium-235	pCi/L	0.0337 U	0.01024 U	0.008329 U	0.008731 U
LBC-SW04	Uranium-236	pCi/L	0.0151 U	0.00919 U	0 U	0.007832 U
	Uranium-238	pCi/L	0.2111	0.1574	0.04719 U	0.1341
	Americium-241	pCi/L	0.0206 U	1.8E-05 U	0.01536 U	-0.01873 U
	Neptunium-237	pCi/L	0.0131 U	-0.0433 U	-0.01699 U	-0.03716 U
	Plutonium-238	pCi/L	0.0066 U	0.01442 U	0.01697 U	0.007441 U
	Plutonium-239/240	pCi/L	0.0197 U	0.00726 U	-0.02541 U	-0.00740 U
	Technetium-99	pCi/L	14.5	-0.243 U	0.886 U	-0.349 U
	Uranium	µg/L	1.176	1.037	0.448	0.6359
	Uranium-233/234	pCi/L	1.181	1.039	0.5911	1.057
	Uranium-235	pCi/L	0.0231 U	0.0923	0.01602 U	0.02899 U
NHP-SW01	Uranium-236	pCi/L	0.0139 U	0 U	0 U	0 U
	Uranium-238	pCi/L	0.393	0.3402	0.1491	0.211
	Americium-241	pCi/L	0.0241 U	0 U	-0.02183 U	-0.00818 U
	Neptunium-237	pCi/L	-0.007 U	-0.0226 U	1.566E-05 U	-0.02136 U
	Plutonium-238	pCi/L	0.0138 U	0.03754 U	0.03127 U	0.02138 U
	Plutonium-239/240	pCi/L	0.0208 U	-0.0075 U	7.81E-06 U	-0.01419 U
	Technetium-99	pCi/L	4.05 U	-2.65 U	1.18 U	-5.94 U
	Uranium	µg/L	5.885	3.874	3.509	4.131
	Uranium-233/234	pCi/L	2.217	1.273	1.315	1.462
	Uranium-235	pCi/L	0.0773	0.0538	0.1152	0.08724
UND-SW01	Uranium-236	pCi/L	0.0174 U	0.00966 U	0.007957 U	0 U
	Uranium-238	pCi/L	1.971	1.297	1.169	1.38
	Americium-241	pCi/L	0.0165 U	0 U	-0.007323 U	-0.02064 U
	Neptunium-237	pCi/L	-0.036 U	0.00789 U	-0.007341 U	-0.03285 U
	Plutonium-238	pCi/L	0.0288 U	0.01566 U	0.01466 U	0.01313 U
	Plutonium-239/240	pCi/L	-0.022 U	-0.0156 U	7.321E-06 U	-0.00655 U
	Technetium-99	pCi/L	1.12 U	-0.156 U	1.35 U	-7.43 U
	Uranium	µg/L	2.365	1.227	1.041	1.528
	Uranium-233/234	pCi/L	0.7618	0.5625	0.4146	0.6717
	Uranium-235	pCi/L	0.0202 U	1.1E-05 U	0.007998 U	0.0296 U
UND-SW02	Uranium-236	pCi/L	-0.009 U	0 U	7.167E-06 U	0.008855 U
	Uranium-238	pCi/L	0.793	0.4122	0.3491	0.5107
	Americium-241	pCi/L	0.0081 U	9E-06 U	0.007496 U	0.01755 U
	Neptunium-237	pCi/L	-0.033 U	0 U	0 U	-0.03628 U
	Plutonium-238	pCi/L	0.0195 U	0.00817 U	0.0224 U	0.02174 U
	Plutonium-239/240	pCi/L	-0.019 U	0.01635 U	0 U	-0.02171 U
	Technetium-99	pCi/L	4.25 U	-2.31 U	-0.752 U	-6.29 U
	Uranium	µg/L	1.009	1.567	0.7157	0.3478

Table 4.21. Results for radionuclides at surface water monitoring locations – 2006 (continued)

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
UND-SW02	Uranium-233/234	pCi/L	0.3677	0.7809	0.2403	0.2238
	Uranium-235	pCi/L	0.0089 U	0.04378 U	0.008466 U	0.0178 U
	Uranium-236	pCi/L	0 U	0.00983 U	7.595E-06 U	0.008 U
	Uranium-238	pCi/L	0.3381	0.5225	0.2397	0.1152
WDD-SW01	Americium-241	pCi/L	9E-06 U	0 U	8.527E-06 U	0.008063 U
	Neptunium-237	pCi/L	1E-05 U	-0.0319 U	-0.01409 U	-0.05846 U
	Plutonium-238	pCi/L	0.0243 U	-0.0238 U	0.02813 U	0.006519 U
	Plutonium-239/240	pCi/L	0.0061 U	1.6E-05 U	-0.007019 U	-0.01297 U
	Technetium-99	pCi/L	2.02 U	-2.84 U	-1.55 U	-4.55 U
	Uranium	µg/L	2.226	0.9879	0.5253	1.509
	Uranium-233/234	pCi/L	0.8857	0.458	0.1839	1.058
	Uranium-235	pCi/L	8E-06 U	0.02093 U	8.718E-06 U	0.06671
	Uranium-236	pCi/L	0.0075 U	-0.0094 U	7.828E-06 U	0.008557 U
	Uranium-238	pCi/L	0.7479	0.3301	0.1765	0.5012
WDD-SW02	Americium-241	pCi/L	0.0220 U	0.00872 U	-0.007571 U	0.008995 U
	Neptunium-237	pCi/L	-0.039 U	-0.0221 U	-0.007011 U	-0.0398 U
	Plutonium-238	pCi/L	0.0131 U	0.01471 U	0.007005 U	-0.00792 U
	Plutonium-239/240	pCi/L	1E-05 U	-0.0073 U	0.007005 U	-0.00792 U
	Technetium-99	pCi/L	-3.22 U	4.25 U	-2.7 U	-6.62 U
	Uranium	µg/L	2.331	1.962	1.595	1.179
	Uranium-233/234	pCi/L	1.1	1.079	0.5279	0.568
	Uranium-235	pCi/L	0.0819	0.04438 U	0.0257 U	0.00922 U
	Uranium-236	pCi/L	0 U	0 U	7.686E-06 U	0.01656 U
	Uranium-238	pCi/L	0.7759	0.6553	0.5337	0.3953
WDD-SW03	Americium-241	pCi/L	0.0253 U	8.2E-06 U	0.00766 U	0.02859 U
	Neptunium-237	pCi/L	0.0133 U	-0.0309 U	-0.007391 U	-0.01544 U
	Plutonium-238	pCi/L	0.0199 U	0.00770 U	0.02956 U	2.31E-05 U
	Plutonium-239/240	pCi/L	0.0133 U	-0.0077 U	0.02216 U	-0.00768 U
	Technetium-99	pCi/L	1.93 U	1.5 U	0.515 U	-3.62 U
	Uranium	µg/L	2.349	0.876	0.4856	1.211
	Uranium-233/234	pCi/L	1.159	0.5443	0.3279	0.5598
	Uranium-235	pCi/L	0.0286 U	0.02066 U	0.03762 U	0.02726 U
	Uranium-236	pCi/L	0.0086 U	0 U	0 U	0 U
	Uranium-238	pCi/L	0.7868	0.2925	0.1598	0.4043

Table 4.22. Results for radionuclides at exit pathway monitoring locations – 2006

Sampling Location	Parameter	Unit	First quarter	Second quarter	Third quarter	Fourth quarter
F-29B	Americium-241	pCi/L		0.02139 U		
	Neptunium-237	pCi/L		0.01497 U		
	Plutonium-238	pCi/L		0.02237 U		
	Plutonium-239/240	pCi/L		0.00747 U		
	Technetium-99	pCi/L		-1.75 U		
	Uranium	µg/L		0.06481 U		
	Uranium-233/234	pCi/L		0.1022		
	Uranium-235	pCi/L		0 U		
	Uranium-236	pCi/L		-0.0161 U		
	Uranium-238	pCi/L		0.02186 U		
X749-62B	Americium-241	pCi/L		-0.0145 U		
	Neptunium-237	pCi/L		-0.0377 U		
	Plutonium-238	pCi/L		0.02259 U		
	Plutonium-239/240	pCi/L		-0.0075 U		
	Technetium-99	pCi/L		2.09 U		
	Uranium	µg/L		0.06746 U		
	Uranium-233/234	pCi/L		0.03526		
	Uranium-235	pCi/L		0.0174 U		
	Uranium-236	pCi/L		7.8E-06 U		
	Uranium-238	pCi/L		0.02112 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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