

<u>Row Name</u>	<u>Sources Included</u>
CR-Vault Row	UPR-200-E-81 UPR-200-E-82 UPR-200-E-86
C-101 Row	C-101 Leak C-110 Leak UPR-200-E-107
C-102 Row	C-105 Leak C-111 Leak
C-103 Row	None
C-201 Row	C-201 Leak C-202 Leak C-203 Leak C-204 Leak

CAS Number	Analyte Name	Concentration pCi/L (Rad) or mg/L (Non-rad)	Peak Year	Kd
3H	Tritium	2.54E+00	2071	0
14C	Carbon-14	2.75E+00	2192	0
59Ni	Nickel-59	0		48
63Ni	Nickel-63	0		48
60Co	Cobalt-60	9.25E-10	2073	0.1
79Se	Selenium-79	0		3.1
90Sr	Strontium-90 + D	0		16.1
93mNb	Niobium-93m	0		100
99Tc	Technetium-99	6.98E-01	5701	0
106Ru	Ruthenium-106	0		1
113mCd	Cadmium-113m	0		1
126Sn	Tin-126	0		1
125Sb	Antimony-125	0		1
129I	Iodine-129	1.85E-03	12032	0.2
134Cs	Cesium-134	0		25
137Cs	Cesium-137 + Daughters	0		25
151Sm	Samarium-151	0		1
152Eu	Europium-152	0		1
154Eu	Europium-154	0		1
155Eu	Europium-155	0		1
226Ra	Radium-226 + D	0		1
228Ra	Radium-228 + D	0		1
227Ac	Actinium-227 + D	0		67
229Th	Thorium-229 + D	0		3
232Th	Thorium-232	0		3
231Pa	Protactinium-231	0		550
232U	Uranium-232	0		0.6
233U	Uranium-233	0		0.6
234U	Uranium-234	0		0.6
235U	Uranium-235 + D	0		0.6
236U	Uranium-236	0		0.6
238U	Uranium-238 + D	0		0.6
237Np	Neptunium-237 + D	0		2
238Pu	Plutonium-238	0		3
239Pu	Plutonium-239	0		3
240Pu	Plutonium-240	0		3
241Pu	Plutonium-241 + D	0		3
242Pu	Plutonium-242	0		3
241Am	Americium-241	0		3
243Am	Americium-243 + D	0		3
242Cm	Curium-242	0		3
243Cm	Curium-243	0		3
244Cm	Curium-244	0		3
7429-90-5	Aluminum	0		1
7664-41-7	Ammonia -- (a)	1.11E-06	5711	0.00093
7440-70-2	Calcium	0		4
16887-00-6	Chloride	1.44E-03	5711	

18540-29-9	Chromium	5.59E-04	5711	0
7439-89-6	Iron	0		25
7439-92-1	Lead	0		5.2
7440-02-0	Nickel	0		48
14797-55-8	Nitrate	1.50E-01	5711	0
14797-65-0	Nitrite	4.58E-02	5711	0
7440-22-4	Silver	0		2.7
7440-23-5	Sodium	1.31E-01	5711	
14808-79-8	Sulfate	2.27E-03	5711	
7440-61-1	Uranium	0		0.6

Kd Bin Half-Life

Years
0 12.33
0 5730
5 74999
5 100.1
0.1 5.2713
2 805000
5 28.149
5 16.13
0 211097
1 1.01736
1 14.1
1 246000
1 2.7299
0.2 15700000
5 2.0619
5 29.999
1 89.997
1 13.33
1 8.5919
1 4.68
1 1600
1 5.7498
5 21.769
2 7340
2 1405000000
5 32759
0.6 69.799
0.6 159198
0.6 245694
0.6 703700000
0.6 23420000
0.6 4468000000
2 2140000
2 87.697
2 24110
2 6563
2 14.35
2 373507
2 432.7
2 7370
2 0.44611
2 28.499
2 18.1
1 Infinity
0 Infinity
5 Infinity
0 Infinity

Report Generated on: 5/25/2005, 12:39:34 PM
Report Generated by H0098416 (David J. Watson)
Decision Management Tool Version 4.0.0.37
UPR-200-E-81 TanksUPR_C.txt case04.stp
Major Assumptions Used:
Dilution factor for WMA-C: 40
Compliance Monitoring Start Year :2001

0 Infinity
5 Infinity
5 Infinity
5 Infinity
0 Infinity
0 Infinity
2 Infinity
0 Infinity
0 Infinity
0.6 Infinity

CAS Number	Analyte Name	Concentration pCi/L (Rad) or mg/L (Non-rad)	Peak Year	Kd
3H	Tritium	2.15E-02	2071	0
14C	Carbon-14	7.02E-01	2192	0
59Ni	Nickel-59	0		48
63Ni	Nickel-63	0		48
60Co	Cobalt-60	7.74E-11	2073	0.1
79Se	Selenium-79	0		3.1
90Sr	Strontium-90 + D	0		16.1
93mNb	Niobium-93m	0		100
99Tc	Technetium-99	3.60E+01	5701	0
106Ru	Ruthenium-106	0		1
113mCd	Cadmium-113m	0		1
126Sn	Tin-126	0		1
125Sb	Antimony-125	0		1
129I	Iodine-129	6.52E-05	12032	0.2
134Cs	Cesium-134	0		25
137Cs	Cesium-137 + Daughters	0		25
151Sm	Samarium-151	0		1
152Eu	Europium-152	0		1
154Eu	Europium-154	0		1
155Eu	Europium-155	0		1
226Ra	Radium-226 + D	0		1
228Ra	Radium-228 + D	0		1
227Ac	Actinium-227 + D	0		67
229Th	Thorium-229 + D	0		3
232Th	Thorium-232	0		3
231Pa	Protactinium-231	0		550
232U	Uranium-232	0		0.6
233U	Uranium-233	0		0.6
234U	Uranium-234	0		0.6
235U	Uranium-235 + D	0		0.6
236U	Uranium-236	0		0.6
238U	Uranium-238 + D	0		0.6
237Np	Neptunium-237 + D	0		2
238Pu	Plutonium-238	0		3
239Pu	Plutonium-239	0		3
240Pu	Plutonium-240	0		3
241Pu	Plutonium-241 + D	0		3
242Pu	Plutonium-242	0		3
241Am	Americium-241	0		3
243Am	Americium-243 + D	0		3
242Cm	Curium-242	0		3
243Cm	Curium-243	0		3
244Cm	Curium-244	0		3
7429-90-5	Aluminum	0		1
7664-41-7	Ammonia -- (a)	1.07E-04	5711	0.00093
7440-69-9	Bismuth	2.69E-07	5711	
7440-70-2	Calcium	0		4

16887-00-6	Chloride	6.38E-04	5711	
18540-29-9	Chromium	4.17E-04	5711	0
16984-48-8	Fluoride	9.27E-06	5711	
7439-89-6	Iron	0		25
7439-92-1	Lead	0		5.2
7439-96-5	Manganese	0		1
7439-97-6	Mercury	0		5.2
7440-02-0	Nickel	0		48
14797-55-8	Nitrate	1.97E-02	5711	0
14797-65-0	Nitrite	1.01E-02	5711	0
14265-44-2	Phosphate	1.55E-04	5711	
7440-21-3	Silicon	0		30
7440-22-4	Silver	0		2.7
7440-23-5	Sodium	2.43E-02	5711	
14808-79-8	Sulfate	2.29E-03	5711	
7440-61-1	Uranium	0		0.6
7440-67-7	Zirconium	0		500

Kd Bin Half-Life

	Years
0	12.33
0	5730
5	74999
5	100.1
0.1	5.2713
2	805000
5	28.149
5	16.13
0	211097
1	1.01736
1	14.1
1	246000
1	2.7299
0.2	15700000
5	2.0619
5	29.999
1	89.997
1	13.33
1	8.5919
1	4.68
1	1600
1	5.7498
5	21.769
2	7340
2	1405000000
5	32759
0.6	69.799
0.6	159198
0.6	245694
0.6	703700000
0.6	23420000
0.6	4468000000
2	2140000
2	87.697
2	24110
2	6563
2	14.35
2	373507
2	432.7
2	7370
2	0.44611
2	28.499
2	18.1
1	Infinity
0	Infinity
0	Infinity
5	Infinity

Report Generated on: 5/25/2005, 12:39:45 PM
Report Generated by H0098416 (David J. Watson)
Decision Management Tool Version 4.0.0.37
UPR-200-E-82 TanksUPR_C.txt case04.stp
Major Assumptions Used:
Dilution factor for WMA-C: 40
Compliance Monitoring Start Year :2001

0 Infinity
0 Infinity
0 Infinity
5 Infinity
5 Infinity
1 Infinity
5 Infinity
5 Infinity
0 Infinity
0 Infinity
0 Infinity
5 Infinity
2 Infinity
0 Infinity
0 Infinity
0.6 Infinity
5 Infinity

CAS Number	Analyte Name	Concentration pCi/L (Rad) or mg/L (Non-rad)	Peak Year	Kd
3H	Tritium	7.99E-02	2071	0
14C	Carbon-14	2.46E+00	2192	0
59Ni	Nickel-59	0		48
63Ni	Nickel-63	0		48
60Co	Cobalt-60	4.15E-10	2073	0.1
79Se	Selenium-79	0		3.1
90Sr	Strontium-90 + D	0		16.1
93mNb	Niobium-93m	0		100
99Tc	Technetium-99	1.25E+02	5701	0
106Ru	Ruthenium-106	0		1
113mCd	Cadmium-113m	0		1
126Sn	Tin-126	0		1
125Sb	Antimony-125	0		1
129I	Iodine-129	2.03E-04	12032	0.2
134Cs	Cesium-134	0		25
137Cs	Cesium-137 + Daughters	0		25
151Sm	Samarium-151	0		1
152Eu	Europium-152	0		1
154Eu	Europium-154	0		1
155Eu	Europium-155	0		1
226Ra	Radium-226 + D	0		1
228Ra	Radium-228 + D	0		1
227Ac	Actinium-227 + D	0		67
229Th	Thorium-229 + D	0		3
232Th	Thorium-232	0		3
231Pa	Protactinium-231	0		550
232U	Uranium-232	0		0.6
233U	Uranium-233	0		0.6
234U	Uranium-234	0		0.6
235U	Uranium-235 + D	0		0.6
236U	Uranium-236	0		0.6
238U	Uranium-238 + D	0		0.6
237Np	Neptunium-237 + D	0		2
238Pu	Plutonium-238	0		3
239Pu	Plutonium-239	0		3
240Pu	Plutonium-240	0		3
241Pu	Plutonium-241 + D	0		3
242Pu	Plutonium-242	0		3
241Am	Americium-241	0		3
243Am	Americium-243 + D	0		3
242Cm	Curium-242	0		3
243Cm	Curium-243	0		3
244Cm	Curium-244	0		3
7429-90-5	Aluminum	0		1
7664-41-7	Ammonia -- (a)	5.27E-04	5711	0.00093
7440-69-9	Bismuth	7.47E-07	5711	
7440-70-2	Calcium	0		4

16887-00-6	Chloride	1.19E-03	5711	
18540-29-9	Chromium	1.56E-03	5711	0
16984-48-8	Fluoride	2.17E-05	5711	
7439-89-6	Iron	0		25
7439-92-1	Lead	0		5.2
7439-96-5	Manganese	0		1
7439-97-6	Mercury	0		5.2
7440-02-0	Nickel	0		48
14797-55-8	Nitrate	3.26E-02	5711	0
14797-65-0	Nitrite	3.85E-02	5711	0
14265-44-2	Phosphate	3.72E-03	5711	
7440-21-3	Silicon	0		30
7440-23-5	Sodium	5.43E-02	5711	
14808-79-8	Sulfate	1.25E-02	5711	
7440-61-1	Uranium	0		0.6
7440-67-7	Zirconium	0		500

Kd Bin Half-Life

	Years
0	12.33
0	5730
5	74999
5	100.1
0.1	5.2713
2	805000
5	28.149
5	16.13
0	211097
1	1.01736
1	14.1
1	246000
1	2.7299
0.2	15700000
5	2.0619
5	29.999
1	89.997
1	13.33
1	8.5919
1	4.68
1	1600
1	5.7498
5	21.769
2	7340
2	1405000000
5	32759
0.6	69.799
0.6	159198
0.6	245694
0.6	703700000
0.6	23420000
0.6	4468000000
2	2140000
2	87.697
2	24110
2	6563
2	14.35
2	373507
2	432.7
2	7370
2	0.44611
2	28.499
2	18.1
1	Infinity
0	Infinity
0	Infinity
5	Infinity

Report Generated on: 5/25/2005, 12:39:54 PM
Report Generated by H0098416 (David J. Watson)
Decision Management Tool Version 4.0.0.37
UPR-200-E-86 TanksUPR_C.txt case04.stp
Major Assumptions Used:
Dilution factor for WMA-C: 40
Compliance Monitoring Start Year :2001

0 Infinity
0 Infinity
0 Infinity
5 Infinity
5 Infinity
1 Infinity
5 Infinity
5 Infinity
0 Infinity
0 Infinity
0 Infinity
5 Infinity
0 Infinity
0 Infinity
0.6 Infinity
5 Infinity

CAS Number	Analyte Name	Concentration pCi/L (Rad) or mg/L (Non-rad)	Peak Year	Kd
3H	Tritium	1.29E-05	2071	0
14C	Carbon-14	8.46E-05	2192	0
59Ni	Nickel-59	0		48
63Ni	Nickel-63	0		48
60Co	Cobalt-60	1.15E-15	2073	0.1
79Se	Selenium-79	0		3.1
90Sr	Strontium-90 + D	0		16.1
93mNb	Niobium-93m	0		100
99Tc	Technetium-99	1.80E-03	5701	0
106Ru	Ruthenium-106	0		1
113mCd	Cadmium-113m	0		1
126Sn	Tin-126	0		1
125Sb	Antimony-125	0		1
129I	Iodine-129	7.04E-09	12032	0.2
134Cs	Cesium-134	0		25
137Cs	Cesium-137 + Daughters	0		25
151Sm	Samarium-151	0		1
152Eu	Europium-152	0		1
154Eu	Europium-154	0		1
155Eu	Europium-155	0		1
226Ra	Radium-226 + D	0		1
228Ra	Radium-228 + D	0		1
227Ac	Actinium-227 + D	0		67
229Th	Thorium-229 + D	0		3
232Th	Thorium-232	0		3
231Pa	Protactinium-231	0		550
232U	Uranium-232	0		0.6
233U	Uranium-233	0		0.6
234U	Uranium-234	0		0.6
235U	Uranium-235 + D	0		0.6
236U	Uranium-236	0		0.6
238U	Uranium-238 + D	0		0.6
237Np	Neptunium-237 + D	0		2
238Pu	Plutonium-238	0		3
239Pu	Plutonium-239	0		3
240Pu	Plutonium-240	0		3
241Pu	Plutonium-241 + D	0		3
242Pu	Plutonium-242	0		3
241Am	Americium-241	0		3
243Am	Americium-243 + D	0		3
242Cm	Curium-242	0		3
243Cm	Curium-243	0		3
244Cm	Curium-244	0		3
7664-41-7	Ammonia -- (a)	3.32E-09	5711	0.00093
7440-69-9	Bismuth	1.83E-08	5711	
7440-70-2	Calcium	0		4
16887-00-6	Chloride	1.64E-06	5711	

18540-29-9	Chromium	8.09E-08	5711	0
7439-89-6	Iron	0		25
7439-97-6	Mercury	0		5.2
7440-02-0	Nickel	0		48
14797-55-8	Nitrate	8.86E-05	5711	0
14797-65-0	Nitrite	3.57E-06	5711	0
14265-44-2	Phosphate	3.21E-06	5711	
7440-22-4	Silver	0		2.7
7440-23-5	Sodium	4.44E-05	5711	
14808-79-8	Sulfate	5.70E-06	5711	
7440-61-1	Uranium	0		0.6
71-36-3	n-Butyl alcohol (1-butanol)	3.32E-10	5711	0.002076

Kd Bin Half-Life

Years
0 12.33
0 5730
5 74999
5 100.1
0.1 5.2713
2 805000
5 28.149
5 16.13
0 211097
1 1.01736
1 14.1
1 246000
1 2.7299
0.2 15700000
5 2.0619
5 29.999
1 89.997
1 13.33
1 8.5919
1 4.68
1 1600
1 5.7498
5 21.769
2 7340
2 1405000000
5 32759
0.6 69.799
0.6 159198
0.6 245694
0.6 703700000
0.6 23420000
0.6 4468000000
2 2140000
2 87.697
2 24110
2 6563
2 14.35
2 373507
2 432.7
2 7370
2 0.44611
2 28.499
2 18.1
0 Infinity
0 Infinity
5 Infinity
0 Infinity

Report Generated on: 5/25/2005, 12:40:06 PM
Report Generated by H0098416 (David J. Watson)
Decision Management Tool Version 4.0.0.37
UPR-200-E-107 TanksUPR_C.txt case04.stp
Major Assumptions Used:
Dilution factor for WMA-C: 40
Compliance Monitoring Start Year :2001

0 Infinity
5 Infinity
5 Infinity
5 Infinity
0 Infinity
0 Infinity
0 Infinity
2 Infinity
0 Infinity
0 Infinity
0.6 Infinity
0 Infinity

CAS Number	Analyte Name	Concentration pCi/L (Rad) or mg/L (Non-rad)	Peak Year	Kd
3H	Tritium	6.09E+00	2044	0
14C	Carbon-14	1.54E+01	2051	0
59Ni	Nickel-59	0		48
63Ni	Nickel-63	0		48
60Co	Cobalt-60	1.18E-03	2052	0.1
79Se	Selenium-79	0		3.1
90Sr	Strontium-90 + D	0		16.1
93mNb	Niobium-93m	0		100
99Tc	Technetium-99	4.53E+02	2051	0
106Ru	Ruthenium-106	0		1
113mCd	Cadmium-113m	0		1
126Sn	Tin-126	8.87E-06	12032	1
125Sb	Antimony-125	0		1
129I	Iodine-129	1.37E-03	9621	0.2
134Cs	Cesium-134	0		25
137Cs	Cesium-137 + Daughters	0		25
151Sm	Samarium-151	4.58E-13	3961	1
152Eu	Europium-152	0		1
154Eu	Europium-154	0		1
155Eu	Europium-155	0		1
226Ra	Radium-226 + D	1.16E-12	12032	1
228Ra	Radium-228 + D	0		1
227Ac	Actinium-227 + D	0		67
229Th	Thorium-229 + D	0		3
232Th	Thorium-232	0		3
231Pa	Protactinium-231	0		550
232U	Uranium-232	1.99E-12	2175	0.6
233U	Uranium-233	7.49E-06	12032	0.6
234U	Uranium-234	1.45E-05	12032	0.6
235U	Uranium-235 + D	6.32E-07	12032	0.6
236U	Uranium-236	3.31E-07	12032	0.6
238U	Uranium-238 + D	1.51E-05	12032	0.6
237Np	Neptunium-237 + D	0		2
238Pu	Plutonium-238	0		3
239Pu	Plutonium-239	0		3
240Pu	Plutonium-240	0		3
241Pu	Plutonium-241 + D	0		3
242Pu	Plutonium-242	0		3
241Am	Americium-241	0		3
243Am	Americium-243 + D	0		3
242Cm	Curium-242	0		3
243Cm	Curium-243	0		3
244Cm	Curium-244	0		3
7429-90-5	Aluminum	9.09E-09	12032	1
7664-41-7	Ammonia -- (a)	8.86E-04	2051	0.00093
7440-69-9	Bismuth	1.22E-06	2051	
7440-70-2	Calcium	0		4

16887-00-6	Chloride	3.51E-03	2051	
18540-29-9	Chromium	3.06E-03	2051	0
16984-48-8	Fluoride	3.67E-05	2051	
7439-89-6	Iron	0		25
7439-92-1	Lead	0		5.2
7439-96-5	Manganese	8.03E-12	12032	1
7439-97-6	Mercury	0		5.2
7440-02-0	Nickel	0		48
14797-55-8	Nitrate	1.01E-01	2051	0
14797-65-0	Nitrite	8.22E-02	2051	0
14265-44-2	Phosphate	1.14E-04	2051	
7440-21-3	Silicon	0		30
7440-22-4	Silver	0		2.7
7440-23-5	Sodium	1.34E-01	2051	
14808-79-8	Sulfate	2.65E-02	2051	
7440-61-1	Uranium	4.53E-08	12032	0.6
7440-67-7	Zirconium	0		500
71-36-3	n-Butyl alcohol (1-butanol)	2.23E-03	2051	0.002076

Kd Bin Half-Life

Years

0 12.33
0 5730
5 74999
5 100.1
0.1 5.2713
2 805000
5 28.149
5 16.13
0 211097
1 1.01736
1 14.1
1 246000
1 2.7299
0.2 15700000
5 2.0619
5 29.999
1 89.997
1 13.33
1 8.5919
1 4.68
1 1600
1 5.7498
5 21.769
2 7340
2 1405000000
5 32759
0.6 69.799
0.6 159198
0.6 245694
0.6 703700000
0.6 23420000
0.6 4468000000
2 2140000
2 87.697
2 24110
2 6563
2 14.35
2 373507
2 432.7
2 7370
2 0.44611
2 28.499
2 18.1
1 Infinity
0 Infinity
0 Infinity
5 Infinity

Report Generated on: 5/25/2005, 12:40:24 PM
Report Generated by H0098416 (David J. Watson)
Decision Management Tool Version 4.0.0.37
241-C-101 TanksPastLeaks_C.txt case01.stp
Major Assumptions Used:
Dilution factor for WMA-C: 40
Compliance Monitoring Start Year :2001

0 Infinity
0 Infinity
0 Infinity
5 Infinity
5 Infinity
1 Infinity
5 Infinity
5 Infinity
0 Infinity
0 Infinity
0 Infinity
5 Infinity
2 Infinity
0 Infinity
0 Infinity
0.6 Infinity
5 Infinity
0 Infinity

CAS Number	Analyte Name	Concentration pCi/L (Rad) or mg/L (Non-rad)	Peak Year	Kd
3H	Tritium	6.24E+00	2044	0
14C	Carbon-14	1.00E+01	2051	0
59Ni	Nickel-59	0		48
63Ni	Nickel-63	0		48
60Co	Cobalt-60	1.33E-03	2052	0.1
79Se	Selenium-79	0		3.1
90Sr	Strontium-90 + D	0		16.1
93mNb	Niobium-93m	0		100
99Tc	Technetium-99	4.57E+02	2051	0
106Ru	Ruthenium-106	0		1
113mCd	Cadmium-113m	0		1
126Sn	Tin-126	9.09E-06	12032	1
125Sb	Antimony-125	0		1
129I	Iodine-129	1.01E-03	9621	0.2
134Cs	Cesium-134	0		25
137Cs	Cesium-137 + Daughters	0		25
151Sm	Samarium-151	2.12E-13	3961	1
152Eu	Europium-152	0		1
154Eu	Europium-154	0		1
155Eu	Europium-155	0		1
226Ra	Radium-226 + D	1.40E-12	12032	1
228Ra	Radium-228 + D	0		1
227Ac	Actinium-227 + D	0		67
229Th	Thorium-229 + D	0		3
232Th	Thorium-232	0		3
231Pa	Protactinium-231	0		550
232U	Uranium-232	1.13E-11	2175	0.6
233U	Uranium-233	4.22E-05	12032	0.6
234U	Uranium-234	1.43E-05	12032	0.6
235U	Uranium-235 + D	6.13E-07	12032	0.6
236U	Uranium-236	4.96E-07	12032	0.6
238U	Uranium-238 + D	1.29E-05	12032	0.6
237Np	Neptunium-237 + D	0		2
238Pu	Plutonium-238	0		3
239Pu	Plutonium-239	0		3
240Pu	Plutonium-240	0		3
241Pu	Plutonium-241 + D	0		3
242Pu	Plutonium-242	0		3
241Am	Americium-241	0		3
243Am	Americium-243 + D	0		3
242Cm	Curium-242	0		3
243Cm	Curium-243	0		3
244Cm	Curium-244	0		3
7429-90-5	Aluminum	2.01E-08	12032	1
7664-41-7	Ammonia -- (a)	1.01E-03	2051	0.00093
7440-69-9	Bismuth	4.47E-06	2051	
7440-70-2	Calcium	0		4

16887-00-6	Chloride	5.77E-03	2051	
18540-29-9	Chromium	2.86E-03	2051	0
16984-48-8	Fluoride	1.68E-04	2051	
7439-89-6	Iron	0		25
7439-91-0	Lanthanum	1.86E-12	2051	
7439-92-1	Lead	0		5.2
7439-96-5	Manganese	6.13E-11	12032	1
7439-97-6	Mercury	0		5.2
7440-02-0	Nickel	0		48
14797-55-8	Nitrate	2.31E-01	2051	0
14797-65-0	Nitrite	7.61E-02	2051	0
14265-44-2	Phosphate	4.05E-03	2051	
7440-21-3	Silicon	0		30
7440-22-4	Silver	0		2.7
7440-23-5	Sodium	2.12E-01	2051	
14808-79-8	Sulfate	2.92E-02	2051	
7440-61-1	Uranium	3.86E-08	12032	0.6
7440-67-7	Zirconium	0		500
71-36-3	n-Butyl alcohol (1-butanol)	1.30E-03	2051	0.002076

Kd Bin Half-Life

Years

0	12.33
0	5730
5	74999
5	100.1
0.1	5.2713
2	805000
5	28.149
5	16.13
0	211097
1	1.01736
1	14.1
1	246000
1	2.7299
0.2	15700000
5	2.0619
5	29.999
1	89.997
1	13.33
1	8.5919
1	4.68
1	1600
1	5.7498
5	21.769
2	7340
2	14050000000
5	32759
0.6	69.799
0.6	159198
0.6	245694
0.6	703700000
0.6	23420000
0.6	4468000000
2	2140000
2	87.697
2	24110
2	6563
2	14.35
2	373507
2	432.7
2	7370
2	0.44611
2	28.499
2	18.1
1	Infinity
0	Infinity
0	Infinity
5	Infinity

Report Generated on: 5/25/2005, 12:40:37 PM
Report Generated by H0098416 (David J. Watson)
Decision Management Tool Version 4.0.0.37
241-C-105 TanksPastLeaks_C.txt case01.stp

Major Assumptions Used:
Dilution factor for WMA-C: 40
Compliance Monitoring Start Year :2001

0 Infinity
0 Infinity
0 Infinity
5 Infinity
0 Infinity
5 Infinity
1 Infinity
5 Infinity
5 Infinity
0 Infinity
0 Infinity
0 Infinity
5 Infinity
2 Infinity
0 Infinity
0 Infinity
0.6 Infinity
5 Infinity
0 Infinity

CAS Number	Analyte Name	Concentration pCi/L (Rad) or mg/L (Non-rad)	Peak Year	Kd
3H	Tritium	6.39E+00	2044	0
14C	Carbon-14	3.29E+00	2051	0
59Ni	Nickel-59	0		48
63Ni	Nickel-63	0		48
60Co	Cobalt-60	3.84E-05	2052	0.1
79Se	Selenium-79	0		3.1
90Sr	Strontium-90 + D	0		16.1
93mNb	Niobium-93m	0		100
99Tc	Technetium-99	4.91E+01	2051	0
106Ru	Ruthenium-106	0		1
113mCd	Cadmium-113m	0		1
126Sn	Tin-126	8.08E-07	12032	1
125Sb	Antimony-125	0		1
129I	Iodine-129	3.53E-04	9621	0.2
134Cs	Cesium-134	0		25
137Cs	Cesium-137 + Daughters	0		25
151Sm	Samarium-151	5.79E-14	3961	1
152Eu	Europium-152	0		1
154Eu	Europium-154	0		1
155Eu	Europium-155	0		1
226Ra	Radium-226 + D	1.39E-11	12032	1
228Ra	Radium-228 + D	0		1
227Ac	Actinium-227 + D	0		67
229Th	Thorium-229 + D	0		3
232Th	Thorium-232	0		3
231Pa	Protactinium-231	0		550
232U	Uranium-232	5.54E-15	2175	0.6
233U	Uranium-233	2.84E-11	12032	0.6
234U	Uranium-234	2.92E-05	12032	0.6
235U	Uranium-235 + D	1.34E-06	12032	0.6
236U	Uranium-236	3.31E-07	12032	0.6
238U	Uranium-238 + D	3.07E-05	12032	0.6
237Np	Neptunium-237 + D	0		2
238Pu	Plutonium-238	0		3
239Pu	Plutonium-239	0		3
240Pu	Plutonium-240	0		3
241Pu	Plutonium-241 + D	0		3
242Pu	Plutonium-242	0		3
241Am	Americium-241	0		3
243Am	Americium-243 + D	0		3
242Cm	Curium-242	0		3
243Cm	Curium-243	0		3
244Cm	Curium-244	0		3
7664-41-7	Ammonia -- (a)	4.50E-03	2051	0.00093
7440-69-9	Bismuth	7.01E-04	2051	
7440-70-2	Calcium	0		4
16887-00-6	Chloride	4.77E-02	2051	

18540-29-9	Chromium	2.96E-03	2051	0
16984-48-8	Fluoride	8.33E-03	2051	
7439-89-6	Iron	0		25
7439-97-6	Mercury	0		5.2
7440-02-0	Nickel	0		48
14797-55-8	Nitrate	2.61E+00	2051	0
14797-65-0	Nitrite	1.03E-01	2051	0
14265-44-2	Phosphate	1.01E-01	2051	
7440-21-3	Silicon	0		30
7440-22-4	Silver	0		2.7
7440-23-5	Sodium	1.32E+00	2051	
14808-79-8	Sulfate	1.68E-01	2051	
7440-61-1	Uranium	9.19E-08	12032	0.6
7440-67-7	Zirconium	0		500
71-36-3	n-Butyl alcohol (1-butanol)	8.89E-06	2051	0.002076

Kd Bin Half-Life

Years
0 12.33
0 5730
5 74999
5 100.1
0.1 5.2713
2 805000
5 28.149
5 16.13
0 211097
1 1.01736
1 14.1
1 246000
1 2.7299
0.2 15700000
5 2.0619
5 29.999
1 89.997
1 13.33
1 8.5919
1 4.68
1 1600
1 5.7498
5 21.769
2 7340
2 1405000000
5 32759
0.6 69.799
0.6 159198
0.6 245694
0.6 703700000
0.6 23420000
0.6 4468000000
2 2140000
2 87.697
2 24110
2 6563
2 14.35
2 373507
2 432.7
2 7370
2 0.44611
2 28.499
2 18.1
0 Infinity
0 Infinity
5 Infinity
0 Infinity

Report Generated on: 5/25/2005, 12:40:55 PM
Report Generated by H0098416 (David J. Watson)
Decision Management Tool Version 4.0.0.37
241-C-110 TanksPastLeaks_C.txt case01.stp
Major Assumptions Used:
Dilution factor for WMA-C: 40
Compliance Monitoring Start Year :2001

0 Infinity
0 Infinity
5 Infinity
5 Infinity
5 Infinity
0 Infinity
0 Infinity
0 Infinity
5 Infinity
2 Infinity
0 Infinity
0 Infinity
0.6 Infinity
5 Infinity
0 Infinity

CAS Number	Analyte Name	Concentration pCi/L (Rad) or mg/L (Non-rad)	Peak Year	Kd
3H	Tritium	2.35E+02	2044	0
14C	Carbon-14	3.26E+01	2051	0
59Ni	Nickel-59	0		48
63Ni	Nickel-63	0		48
60Co	Cobalt-60	8.52E-03	2052	0.1
79Se	Selenium-79	0		3.1
90Sr	Strontium-90 + D	0		16.1
93mNb	Niobium-93m	0		100
99Tc	Technetium-99	1.09E+02	2051	0
106Ru	Ruthenium-106	0		1
113mCd	Cadmium-113m	0		1
126Sn	Tin-126	2.08E-06	12032	1
125Sb	Antimony-125	0		1
129I	Iodine-129	2.99E-02	9621	0.2
134Cs	Cesium-134	0		25
137Cs	Cesium-137 + Daughters	0		25
151Sm	Samarium-151	3.55E-12	3961	1
152Eu	Europium-152	0		1
154Eu	Europium-154	0		1
155Eu	Europium-155	0		1
226Ra	Radium-226 + D	3.09E-12	12032	1
228Ra	Radium-228 + D	0		1
227Ac	Actinium-227 + D	0		67
229Th	Thorium-229 + D	0		3
232Th	Thorium-232	0		3
231Pa	Protactinium-231	0		550
232U	Uranium-232	6.70E-14	2175	0.6
233U	Uranium-233	1.03E-08	12032	0.6
234U	Uranium-234	7.53E-05	12032	0.6
235U	Uranium-235 + D	3.30E-06	12032	0.6
236U	Uranium-236	1.74E-06	12032	0.6
238U	Uranium-238 + D	7.86E-05	12032	0.6
237Np	Neptunium-237 + D	0		2
238Pu	Plutonium-238	0		3
239Pu	Plutonium-239	0		3
240Pu	Plutonium-240	0		3
241Pu	Plutonium-241 + D	0		3
242Pu	Plutonium-242	0		3
241Am	Americium-241	0		3
243Am	Americium-243 + D	0		3
242Cm	Curium-242	0		3
243Cm	Curium-243	0		3
244Cm	Curium-244	0		3
7429-90-5	Aluminum	6.66E-07	12032	1
7664-41-7	Ammonia -- (a)	2.41E-03	2051	0.00093
7440-69-9	Bismuth	1.59E-04	2051	
7440-70-2	Calcium	0		4

16887-00-6	Chloride	4.36E-02	2051	
18540-29-9	Chromium	1.06E-02	2051	0
16984-48-8	Fluoride	5.41E-03	2051	
7439-89-6	Iron	0		25
7439-92-1	Lead	0		5.2
7439-96-5	Manganese	2.67E-14	12032	1
7439-97-6	Mercury	0		5.2
7440-02-0	Nickel	0		48
14797-55-8	Nitrate	2.16E+00	2051	0
14797-65-0	Nitrite	9.39E-01	2051	0
14265-44-2	Phosphate	1.78E-02	2051	
7440-21-3	Silicon	0		30
7440-22-4	Silver	0		2.7
7440-23-5	Sodium	2.16E+00	2051	
14808-79-8	Sulfate	1.61E-01	2051	
7440-61-1	Uranium	2.35E-07	12032	0.6
7440-67-7	Zirconium	0		500
71-36-3	n-Butyl alcohol (1-butanol)	1.62E-05	2051	0.002076

Kd Bin Half-Life

Years
0 12.33
0 5730
5 74999
5 100.1
0.1 5.2713
2 805000
5 28.149
5 16.13
0 211097
1 1.01736
1 14.1
1 246000
1 2.7299
0.2 15700000
5 2.0619
5 29.999
1 89.997
1 13.33
1 8.5919
1 4.68
1 1600
1 5.7498
5 21.769
2 7340
2 1405000000
5 32759
0.6 69.799
0.6 159198
0.6 245694
0.6 703700000
0.6 23420000
0.6 4468000000
2 2140000
2 87.697
2 24110
2 6563
2 14.35
2 373507
2 432.7
2 7370
2 0.44611
2 28.499
2 18.1
1 Infinity
0 Infinity
0 Infinity
5 Infinity

Report Generated on: 5/25/2005, 12:41:03 PM
Report Generated by H0098416 (David J. Watson)
Decision Management Tool Version 4.0.0.37
241-C-111 TanksPastLeaks_C.txt case01.stp
Major Assumptions Used:
Dilution factor for WMA-C: 40
Compliance Monitoring Start Year :2001

0 Infinity
0 Infinity
0 Infinity
5 Infinity
5 Infinity
1 Infinity
5 Infinity
5 Infinity
0 Infinity
0 Infinity
0 Infinity
5 Infinity
2 Infinity
0 Infinity
0 Infinity
0.6 Infinity
5 Infinity
0 Infinity

CAS Number	Analyte Name	Concentration pCi/L (Rad) or mg/L (Non-rad)	Peak Year	Kd
3H	Tritium	9.56E-02	2044	0
14C	Carbon-14	5.57E-01	2051	0
59Ni	Nickel-59	0		48
63Ni	Nickel-63	0		48
60Co	Cobalt-60	1.18E-03	2052	0.1
79Se	Selenium-79	0		3.1
90Sr	Strontium-90 + D	0		16.1
93mNb	Niobium-93m	0		100
99Tc	Technetium-99	2.16E+01	2051	0
106Ru	Ruthenium-106	0		1
113mCd	Cadmium-113m	0		1
126Sn	Tin-126	4.26E-07	12032	1
125Sb	Antimony-125	0		1
129I	Iodine-129	7.29E-06	9621	0.2
134Cs	Cesium-134	0		25
137Cs	Cesium-137 + Daughters	0		25
151Sm	Samarium-151	8.09E-13	3961	1
152Eu	Europium-152	0		1
154Eu	Europium-154	0		1
155Eu	Europium-155	0		1
226Ra	Radium-226 + D	5.69E-14	12032	1
228Ra	Radium-228 + D	0		1
227Ac	Actinium-227 + D	0		67
229Th	Thorium-229 + D	0		3
232Th	Thorium-232	0		3
231Pa	Protactinium-231	0		550
232U	Uranium-232	8.94E-15	2175	0.6
233U	Uranium-233	2.35E-09	12032	0.6
234U	Uranium-234	7.71E-06	12032	0.6
235U	Uranium-235 + D	3.35E-07	12032	0.6
236U	Uranium-236	1.89E-07	12032	0.6
238U	Uranium-238 + D	7.94E-06	12032	0.6
237Np	Neptunium-237 + D	0		2
238Pu	Plutonium-238	0		3
239Pu	Plutonium-239	0		3
240Pu	Plutonium-240	0		3
241Pu	Plutonium-241 + D	0		3
242Pu	Plutonium-242	0		3
241Am	Americium-241	0		3
243Am	Americium-243 + D	0		3
242Cm	Curium-242	0		3
243Cm	Curium-243	0		3
244Cm	Curium-244	0		3
7664-41-7	Ammonia -- (a)	2.43E-04	2051	0.00093
7440-70-2	Calcium	0		4
16887-00-6	Chloride	6.89E-03	2051	
18540-29-9	Chromium	1.57E-03	2051	0

16984-48-8	Fluoride	3.37E-08	2051	
7439-89-6	Iron	0		25
7439-92-1	Lead	0		5.2
7439-96-5	Manganese	2.35E-15	12032	1
7439-97-6	Mercury	0		5.2
7440-02-0	Nickel	0		48
14797-55-8	Nitrate	1.96E-01	2051	0
14797-65-0	Nitrite	5.30E-02	2051	0
7440-21-3	Silicon	0		30
7440-23-5	Sodium	2.01E-01	2051	
14808-79-8	Sulfate	2.56E-02	2051	
7440-61-1	Uranium	2.38E-08	12032	0.6

Kd Bin Half-Life

	Years
0	12.33
0	5730
5	74999
5	100.1
0.1	5.2713
2	805000
5	28.149
5	16.13
0	211097
1	1.01736
1	14.1
1	246000
1	2.7299
0.2	15700000
5	2.0619
5	29.999
1	89.997
1	13.33
1	8.5919
1	4.68
1	1600
1	5.7498
5	21.769
2	7340
2	1405000000
5	32759
0.6	69.799
0.6	159198
0.6	245694
0.6	703700000
0.6	23420000
0.6	4468000000
2	2140000
2	87.697
2	24110
2	6563
2	14.35
2	373507
2	432.7
2	7370
2	0.44611
2	28.499
2	18.1
0	Infinity
5	Infinity
0	Infinity
0	Infinity

Report Generated on: 5/25/2005, 12:41:13 PM
Report Generated by H0098416 (David J. Watson)
Decision Management Tool Version 4.0.0.37
241-C-201 TanksPastLeaks_C.txt case01.stp
Major Assumptions Used:
Dilution factor for WMA-C: 40
Compliance Monitoring Start Year :2001

0 Infinity
5 Infinity
5 Infinity
1 Infinity
5 Infinity
5 Infinity
0 Infinity
0 Infinity
5 Infinity
0 Infinity
0 Infinity
0.6 Infinity

CAS Number	Analyte Name	Concentration pCi/L (Rad) or mg/L (Non-rad)	Peak Year	Kd
3H	Tritium	7.81E-02	2044	0
14C	Carbon-14	4.55E-01	2051	0
59Ni	Nickel-59	0		48
63Ni	Nickel-63	0		48
60Co	Cobalt-60	9.64E-04	2052	0.1
79Se	Selenium-79	0		3.1
90Sr	Strontium-90 + D	0		16.1
93mNb	Niobium-93m	0		100
99Tc	Technetium-99	1.77E+01	2051	0
106Ru	Ruthenium-106	0		1
113mCd	Cadmium-113m	0		1
126Sn	Tin-126	3.48E-07	12032	1
125Sb	Antimony-125	0		1
129I	Iodine-129	5.96E-06	9621	0.2
134Cs	Cesium-134	0		25
137Cs	Cesium-137 + Daughters	0		25
151Sm	Samarium-151	6.62E-13	3961	1
152Eu	Europium-152	0		1
154Eu	Europium-154	0		1
155Eu	Europium-155	0		1
226Ra	Radium-226 + D	4.65E-14	12032	1
228Ra	Radium-228 + D	0		1
227Ac	Actinium-227 + D	0		67
229Th	Thorium-229 + D	0		3
232Th	Thorium-232	0		3
231Pa	Protactinium-231	0		550
232U	Uranium-232	7.31E-15	2175	0.6
233U	Uranium-233	1.92E-09	12032	0.6
234U	Uranium-234	6.30E-06	12032	0.6
235U	Uranium-235 + D	2.74E-07	12032	0.6
236U	Uranium-236	1.55E-07	12032	0.6
238U	Uranium-238 + D	6.49E-06	12032	0.6
237Np	Neptunium-237 + D	0		2
238Pu	Plutonium-238	0		3
239Pu	Plutonium-239	0		3
240Pu	Plutonium-240	0		3
241Pu	Plutonium-241 + D	0		3
242Pu	Plutonium-242	0		3
241Am	Americium-241	0		3
243Am	Americium-243 + D	0		3
242Cm	Curium-242	0		3
243Cm	Curium-243	0		3
244Cm	Curium-244	0		3
7664-41-7	Ammonia -- (a)	1.98E-04	2051	0.00093
7440-70-2	Calcium	0		4
16887-00-6	Chloride	5.63E-03	2051	
18540-29-9	Chromium	1.29E-03	2051	0

16984-48-8	Fluoride	2.80E-08	2051	
7439-89-6	Iron	0		25
7439-92-1	Lead	0		5.2
7439-96-5	Manganese	1.96E-15	12032	1
7439-97-6	Mercury	0		5.2
7440-02-0	Nickel	0		48
14797-55-8	Nitrate	1.60E-01	2051	0
14797-65-0	Nitrite	4.33E-02	2051	0
7440-21-3	Silicon	0		30
7440-23-5	Sodium	1.65E-01	2051	
14808-79-8	Sulfate	2.09E-02	2051	
7440-61-1	Uranium	1.94E-08	12032	0.6

Kd Bin Half-Life

Years
0 12.33
0 5730
5 74999
5 100.1
0.1 5.2713
2 805000
5 28.149
5 16.13
0 211097
1 1.01736
1 14.1
1 246000
1 2.7299
0.2 15700000
5 2.0619
5 29.999
1 89.997
1 13.33
1 8.5919
1 4.68
1 1600
1 5.7498
5 21.769
2 7340
2 1405000000
5 32759
0.6 69.799
0.6 159198
0.6 245694
0.6 703700000
0.6 23420000
0.6 4468000000
2 2140000
2 87.697
2 24110
2 6563
2 14.35
2 373507
2 432.7
2 7370
2 0.44611
2 28.499
2 18.1
0 Infinity
5 Infinity
0 Infinity
0 Infinity

Report Generated on: 5/25/2005, 12:41:23 PM
Report Generated by H0098416 (David J. Watson)
Decision Management Tool Version 4.0.0.37
241-C-202 TanksPastLeaks_C.txt case01.stp
Major Assumptions Used:
Dilution factor for WMA-C: 40
Compliance Monitoring Start Year :2001

0 Infinity
5 Infinity
5 Infinity
1 Infinity
5 Infinity
5 Infinity
0 Infinity
0 Infinity
5 Infinity
0 Infinity
0 Infinity
0.6 Infinity

CAS Number	Analyte Name	Concentration pCi/L (Rad) or mg/L (Non-rad)	Peak Year	Kd
3H	Tritium	7.39E-02	2044	0
14C	Carbon-14	4.30E-01	2051	0
59Ni	Nickel-59	0		48
63Ni	Nickel-63	0		48
60Co	Cobalt-60	9.12E-04	2052	0.1
79Se	Selenium-79	0		3.1
90Sr	Strontium-90 + D	0		16.1
93mNb	Niobium-93m	0		100
99Tc	Technetium-99	1.67E+01	2051	0
106Ru	Ruthenium-106	0		1
113mCd	Cadmium-113m	0		1
126Sn	Tin-126	3.29E-07	12032	1
125Sb	Antimony-125	0		1
129I	Iodine-129	5.63E-06	9621	0.2
134Cs	Cesium-134	0		25
137Cs	Cesium-137 + Daughters	0		25
151Sm	Samarium-151	6.25E-13	3961	1
152Eu	Europium-152	0		1
154Eu	Europium-154	0		1
155Eu	Europium-155	0		1
226Ra	Radium-226 + D	4.39E-14	12032	1
228Ra	Radium-228 + D	0		1
227Ac	Actinium-227 + D	0		67
229Th	Thorium-229 + D	0		3
232Th	Thorium-232	0		3
231Pa	Protactinium-231	0		550
232U	Uranium-232	6.91E-15	2175	0.6
233U	Uranium-233	1.81E-09	12032	0.6
234U	Uranium-234	5.95E-06	12032	0.6
235U	Uranium-235 + D	2.59E-07	12032	0.6
236U	Uranium-236	1.46E-07	12032	0.6
238U	Uranium-238 + D	6.13E-06	12032	0.6
237Np	Neptunium-237 + D	0		2
238Pu	Plutonium-238	0		3
239Pu	Plutonium-239	0		3
240Pu	Plutonium-240	0		3
241Pu	Plutonium-241 + D	0		3
242Pu	Plutonium-242	0		3
241Am	Americium-241	0		3
243Am	Americium-243 + D	0		3
242Cm	Curium-242	0		3
243Cm	Curium-243	0		3
244Cm	Curium-244	0		3
7664-41-7	Ammonia -- (a)	1.88E-04	2051	0.00093
7440-70-2	Calcium	0		4
16887-00-6	Chloride	5.33E-03	2051	
18540-29-9	Chromium	1.22E-03	2051	0

7439-89-6	Iron	0		25
7439-92-1	Lead	0		5.2
7439-97-6	Mercury	0		5.2
7440-02-0	Nickel	0		48
14797-55-8	Nitrate	1.51E-01	2051	0
14797-65-0	Nitrite	4.10E-02	2051	0
7440-23-5	Sodium	1.56E-01	2051	
14808-79-8	Sulfate	1.98E-02	2051	
7440-61-1	Uranium	1.84E-08	12032	0.6

Kd Bin Half-Life

Years

0 12.33
0 5730
5 74999
5 100.1
0.1 5.2713
2 805000
5 28.149
5 16.13
0 211097
1 1.01736
1 14.1
1 246000
1 2.7299
0.2 15700000
5 2.0619
5 29.999
1 89.997
1 13.33
1 8.5919
1 4.68
1 1600
1 5.7498
5 21.769
2 7340
2 1405000000
5 32759
0.6 69.799
0.6 159198
0.6 245694
0.6 703700000
0.6 23420000
0.6 4468000000
2 2140000
2 87.697
2 24110
2 6563
2 14.35
2 373507
2 432.7
2 7370
2 0.44611
2 28.499
2 18.1
0 Infinity
5 Infinity
0 Infinity
0 Infinity

Report Generated on: 5/25/2005, 12:41:32 PM
Report Generated by H0098416 (David J. Watson)
Decision Management Tool Version 4.0.0.37
241-C-203 TanksPastLeaks_C.txt case01.stp
Major Assumptions Used:
Dilution factor for WMA-C: 40
Compliance Monitoring Start Year :2001

5 Infinity
5 Infinity
5 Infinity
5 Infinity
0 Infinity
0 Infinity
0 Infinity
0 Infinity
0.6 Infinity

CAS Number	Analyte Name	Concentration pCi/L (Rad) or mg/L (Non-rad)	Peak Year	Kd
3H	Tritium	6.27E-02	2044	0
14C	Carbon-14	3.65E-01	2051	0
59Ni	Nickel-59	0		48
63Ni	Nickel-63	0		48
60Co	Cobalt-60	7.74E-04	2052	0.1
79Se	Selenium-79	0		3.1
90Sr	Strontium-90 + D	0		16.1
93mNb	Niobium-93m	0		100
99Tc	Techneium-99	1.42E+01	2051	0
106Ru	Ruthenium-106	0		1
113mCd	Cadmium-113m	0		1
126Sn	Tin-126	2.80E-07	12032	1
125Sb	Antimony-125	0		1
129I	Iodine-129	4.78E-06	9621	0.2
134Cs	Cesium-134	0		25
137Cs	Cesium-137 + Daughters	0		25
151Sm	Samarium-151	5.31E-13	3961	1
152Eu	Europium-152	0		1
154Eu	Europium-154	0		1
155Eu	Europium-155	0		1
226Ra	Radium-226 + D	3.73E-14	12032	1
228Ra	Radium-228 + D	0		1
227Ac	Actinium-227 + D	0		67
229Th	Thorium-229 + D	0		3
232Th	Thorium-232	0		3
231Pa	Protactinium-231	0		550
232U	Uranium-232	5.87E-15	2175	0.6
233U	Uranium-233	1.54E-09	12032	0.6
234U	Uranium-234	5.06E-06	12032	0.6
235U	Uranium-235 + D	2.20E-07	12032	0.6
236U	Uranium-236	1.24E-07	12032	0.6
238U	Uranium-238 + D	5.21E-06	12032	0.6
237Np	Neptunium-237 + D	0		2
238Pu	Plutonium-238	0		3
239Pu	Plutonium-239	0		3
240Pu	Plutonium-240	0		3
241Pu	Plutonium-241 + D	0		3
242Pu	Plutonium-242	0		3
241Am	Americium-241	0		3
243Am	Americium-243 + D	0		3
242Cm	Curium-242	0		3
243Cm	Curium-243	0		3
244Cm	Curium-244	0		3
7664-41-7	Ammonia -- (a)	1.59E-04	2051	0.00093
7440-70-2	Calcium	0		4
16887-00-6	Chloride	4.52E-03	2051	
18540-29-9	Chromium	1.03E-03	2051	0

16984-48-8	Fluoride	1.07E-08	2051	
7439-89-6	Iron	0		25
7439-92-1	Lead	0		5.2
7439-96-5	Manganese	7.48E-16	12032	1
7439-97-6	Mercury	0		5.2
7440-02-0	Nickel	0		48
14797-55-8	Nitrate	1.28E-01	2051	0
14797-65-0	Nitrite	3.48E-02	2051	0
7440-21-3	Silicon	0		30
7440-23-5	Sodium	1.32E-01	2051	
14808-79-8	Sulfate	1.68E-02	2051	
7440-61-1	Uranium	1.56E-08	12032	0.6

Kd Bin Half-Life

Years

0 12.33
0 5730
5 74999
5 100.1
0.1 5.2713
2 805000
5 28.149
5 16.13
0 211097
1 1.01736
1 14.1
1 246000
1 2.7299
0.2 15700000
5 2.0619
5 29.999
1 89.997
1 13.33
1 8.5919
1 4.68
1 1600
1 5.7498
5 21.769
2 7340
2 1405000000
5 32759
0.6 69.799
0.6 159198
0.6 245694
0.6 703700000
0.6 23420000
0.6 4468000000
2 2140000
2 87.697
2 24110
2 6563
2 14.35
2 373507
2 432.7
2 7370
2 0.44611
2 28.499
2 18.1
0 Infinity
5 Infinity
0 Infinity
0 Infinity

<p>Report Generated on: 5/25/2005, 12:41:40 PM Report Generated by H0098416 (David J. Watson) Decision Management Tool Version 4.0.0.37 241-C-204 TanksPastLeaks_C.txt case01.stp</p> <p>Major Assumptions Used: Dilution factor for WMA-C: 40 Compliance Monitoring Start Year :2001</p>

0 Infinity
5 Infinity
5 Infinity
1 Infinity
5 Infinity
5 Infinity
0 Infinity
0 Infinity
5 Infinity
0 Infinity
0 Infinity
0.6 Infinity

CAS Number	Analyte Name	Concentration pCi/L (Rad) or mg/L (Non-rad)	Peak Year	Kd
3H	Tritium	2.64E+00	2071	0
14C	Carbon-14	5.91E+00	2192	0
59Ni	Nickel-59	0		48
63Ni	Nickel-63	0		48
60Co	Cobalt-60	1.42E-09	2073	0.1
79Se	Selenium-79	0		3.1
90Sr	Strontium-90 + D	0		16.1
93mNb	Niobium-93m	0		100
99Tc	Technetium-99	1.62E+02	5701	0
106Ru	Ruthenium-106	0		1
113mCd	Cadmium-113m	0		1
126Sn	Tin-126	0		1
125Sb	Antimony-125	0		1
129I	Iodine-129	2.12E-03	12032	0.2
134Cs	Cesium-134	0		25
137Cs	Cesium-137 + Daughters	0		25
151Sm	Samarium-151	0		1
152Eu	Europium-152	0		1
154Eu	Europium-154	0		1
155Eu	Europium-155	0		1
226Ra	Radium-226 + D	0		1
228Ra	Radium-228 + D	0		1
227Ac	Actinium-227 + D	0		67
229Th	Thorium-229 + D	0		3
232Th	Thorium-232	0		3
231Pa	Protactinium-231	0		550
232U	Uranium-232	0		0.6
233U	Uranium-233	0		0.6
234U	Uranium-234	0		0.6
235U	Uranium-235 + D	0		0.6
236U	Uranium-236	0		0.6
238U	Uranium-238 + D	0		0.6
237Np	Neptunium-237 + D	0		2
238Pu	Plutonium-238	0		3
239Pu	Plutonium-239	0		3
240Pu	Plutonium-240	0		3
241Pu	Plutonium-241 + D	0		3
242Pu	Plutonium-242	0		3
241Am	Americium-241	0		3
243Am	Americium-243 + D	0		3
242Cm	Curium-242	0		3
243Cm	Curium-243	0		3
244Cm	Curium-244	0		3
7429-90-5	Aluminum	0		1
7664-41-7	Ammonia -- (a)	6.34E-04	5711	0.00093
7440-69-9	Bismuth	1.02E-06	5711	
7440-70-2	Calcium	0		4

16887-00-6	Chloride	3.26E-03	5711	
18540-29-9	Chromium	2.53E-03	5711	0
16984-48-8	Fluoride	3.10E-05	5711	
7439-89-6	Iron	0		25
7439-92-1	Lead	0		5.2
7439-96-5	Manganese	0		1
7439-97-6	Mercury	0		5.2
7440-02-0	Nickel	0		48
14797-55-8	Nitrate	2.02E-01	5711	0
14797-65-0	Nitrite	9.44E-02	5711	0
14265-44-2	Phosphate	3.88E-03	5711	
7440-21-3	Silicon	0		30
7440-22-4	Silver	0		2.7
7440-23-5	Sodium	2.09E-01	5711	
14808-79-8	Sulfate	1.71E-02	5711	
7440-61-1	Uranium	0		0.6
7440-67-7	Zirconium	0		500

Kd Bin Half-Life

Years
0 12.33
0 5730
5 74999
5 100.1
0.1 5.2713
2 805000
5 28.149
5 16.13
0 211097
1 1.01736
1 14.1
1 246000
1 2.7299
0.2 15700000
5 2.0619
5 29.999
1 89.997
1 13.33
1 8.5919
1 4.68
1 1600
1 5.7498
5 21.769
2 7340
2 1405000000
5 32759
0.6 69.799
0.6 159198
0.6 245694
0.6 703700000
0.6 23420000
0.6 4468000000
2 2140000
2 87.697
2 24110
2 6563
2 14.35
2 373507
2 432.7
2 7370
2 0.44611
2 28.499
2 18.1
1 Infinity
0 Infinity
0 Infinity
5 Infinity

Report Generated on: 6/15/2005, 9:09:07 AM
Report Generated by H0098416 (David J. Watson)
Decision Management Tool Version 4.0.0.37
UPR-200-E-81 TanksUPR_C.txt case04.stp
UPR-200-E-82 TanksUPR_C.txt case04.stp
UPR-200-E-86 TanksUPR_C.txt case04.stp
Major Assumptions Used:
Dilution factor for WMA-C: 40
Compliance Monitoring Start Year :2001

Verified by John Middleton 6/15/05

0 Infinity
0 Infinity
0 Infinity
5 Infinity
5 Infinity
1 Infinity
5 Infinity
5 Infinity
0 Infinity
0 Infinity
0 Infinity
5 Infinity
2 Infinity
0 Infinity
0 Infinity
0.6 Infinity
5 Infinity

CAS Number	Analyte Name	Concentration pCi/L (Rad) or mg/L (Non-rad)	Peak Year	Kd
3H	Tritium	1.25E+01	2044	0
14C	Carbon-14	1.87E+01	2051	0
59Ni	Nickel-59	0		48
63Ni	Nickel-63	0		48
60Co	Cobalt-60	1.22E-03	2052	0.1
79Se	Selenium-79	0		3.1
90Sr	Strontium-90 + D	0		16.1
93mNb	Niobium-93m	0		100
99Tc	Technetium-99	5.02E+02	2051	0
106Ru	Ruthenium-106	0		1
113mCd	Cadmium-113m	0		1
126Sn	Tin-126	9.68E-06	12032	1
125Sb	Antimony-125	0		1
129I	Iodine-129	1.72E-03	9621	0.2
134Cs	Cesium-134	0		25
137Cs	Cesium-137 + Daughters	0		25
151Sm	Samarium-151	5.16E-13	3961	1
152Eu	Europium-152	0		1
154Eu	Europium-154	0		1
155Eu	Europium-155	0		1
226Ra	Radium-226 + D	1.50E-11	12032	1
228Ra	Radium-228 + D	0		1
227Ac	Actinium-227 + D	0		67
229Th	Thorium-229 + D	0		3
232Th	Thorium-232	0		3
231Pa	Protactinium-231	0		550
232U	Uranium-232	1.99E-12	2175	0.6
233U	Uranium-233	7.49E-06	12032	0.6
234U	Uranium-234	4.37E-05	12032	0.6
235U	Uranium-235 + D	1.98E-06	12032	0.6
236U	Uranium-236	6.62E-07	12032	0.6
238U	Uranium-238 + D	4.58E-05	12032	0.6
237Np	Neptunium-237 + D	0		2
238Pu	Plutonium-238	0		3
239Pu	Plutonium-239	0		3
240Pu	Plutonium-240	0		3
241Pu	Plutonium-241 + D	0		3
242Pu	Plutonium-242	0		3
241Am	Americium-241	0		3
243Am	Americium-243 + D	0		3
242Cm	Curium-242	0		3
243Cm	Curium-243	0		3
244Cm	Curium-244	0		3
7429-90-5	Aluminum	9.09E-09	12032	1
7664-41-7	Ammonia -- (a)	5.38E-03	2051	0.00093
7440-69-9	Bismuth	7.03E-04	2051	
7440-70-2	Calcium	0		4

16887-00-6	Chloride	5.12E-02	2051	
18540-29-9	Chromium	6.02E-03	2051	0
16984-48-8	Fluoride	8.37E-03	2051	
7439-89-6	Iron	0		25
7439-92-1	Lead	0		5.2
7439-96-5	Manganese	8.03E-12	12032	1
7439-97-6	Mercury	0		5.2
7440-02-0	Nickel	0		48
14797-55-8	Nitrate	2.71E+00	2051	0
14797-65-0	Nitrite	1.85E-01	2051	0
14265-44-2	Phosphate	1.01E-01	2051	
7440-21-3	Silicon	0		30
7440-22-4	Silver	0		2.7
7440-23-5	Sodium	1.45E+00	2051	
14808-79-8	Sulfate	1.95E-01	2051	
7440-61-1	Uranium	1.37E-07	12032	0.6
7440-67-7	Zirconium	0		500
71-36-3	n-Butyl alcohol (1-butanol)	2.24E-03	2051	0.002076

Kd Bin Half-Life

Years

0	12.33
0	5730
5	74999
5	100.1
0.1	5.2713
2	805000
5	28.149
5	16.13
0	211097
1	1.01736
1	14.1
1	246000
1	2.7299
0.2	15700000
5	2.0619
5	29.999
1	89.997
1	13.33
1	8.5919
1	4.68
1	1600
1	5.7498
5	21.769
2	7340
2	14050000000
5	32759
0.6	69.799
0.6	159198
0.6	245694
0.6	703700000
0.6	23420000
0.6	4468000000
2	2140000
2	87.697
2	24110
2	6563
2	14.35
2	373507
2	432.7
2	7370
2	0.44611
2	28.499
2	18.1
1	Infinity
0	Infinity
0	Infinity
5	Infinity

Report Generated on: 5/25/2005, 12:49:21 PM		
Report Generated by H0098416 (David J. Watson)		
Decision Management Tool Version 4.0.0.37		
241-C-101	TanksPastLeaks_C.txt	case01.stp
241-C-110	TanksPastLeaks_C.txt	case01.stp
UPR-200-E-107	TanksUPR_C.txt	case04.stp
Major Assumptions Used:		
Dilution factor for WMA-C: 40		
Compliance Monitoring Start Year :2001		

Verified by John Middleton 6/15/05

0 Infinity
0 Infinity
0 Infinity
5 Infinity
5 Infinity
1 Infinity
5 Infinity
5 Infinity
0 Infinity
0 Infinity
0 Infinity
5 Infinity
2 Infinity
0 Infinity
0 Infinity
0.6 Infinity
5 Infinity
0 Infinity

CAS Number	Analyte Name	Concentration pCi/L (Rad) or mg/L (Non-rad)	Peak Year	Kd
3H	Tritium	2.41E+02	2044	0
14C	Carbon-14	4.27E+01	2051	0
59Ni	Nickel-59	0		48
63Ni	Nickel-63	0		48
60Co	Cobalt-60	9.85E-03	2052	0.1
79Se	Selenium-79	0		3.1
90Sr	Strontium-90 + D	0		16.1
93mNb	Niobium-93m	0		100
99Tc	Technetium-99	5.65E+02	2051	0
106Ru	Ruthenium-106	0		1
113mCd	Cadmium-113m	0		1
126Sn	Tin-126	1.12E-05	12032	1
125Sb	Antimony-125	0		1
129I	Iodine-129	3.09E-02	9621	0.2
134Cs	Cesium-134	0		25
137Cs	Cesium-137 + Daughters	0		25
151Sm	Samarium-151	3.76E-12	3961	1
152Eu	Europium-152	0		1
154Eu	Europium-154	0		1
155Eu	Europium-155	0		1
226Ra	Radium-226 + D	4.49E-12	12032	1
228Ra	Radium-228 + D	0		1
227Ac	Actinium-227 + D	0		67
229Th	Thorium-229 + D	0		3
232Th	Thorium-232	0		3
231Pa	Protactinium-231	0		550
232U	Uranium-232	1.13E-11	2175	0.6
233U	Uranium-233	4.22E-05	12032	0.6
234U	Uranium-234	8.96E-05	12032	0.6
235U	Uranium-235 + D	3.92E-06	12032	0.6
236U	Uranium-236	2.23E-06	12032	0.6
238U	Uranium-238 + D	9.14E-05	12032	0.6
237Np	Neptunium-237 + D	0		2
238Pu	Plutonium-238	0		3
239Pu	Plutonium-239	0		3
240Pu	Plutonium-240	0		3
241Pu	Plutonium-241 + D	0		3
242Pu	Plutonium-242	0		3
241Am	Americium-241	0		3
243Am	Americium-243 + D	0		3
242Cm	Curium-242	0		3
243Cm	Curium-243	0		3
244Cm	Curium-244	0		3
7429-90-5	Aluminum	6.86E-07	12032	1
7664-41-7	Ammonia -- (a)	3.42E-03	2051	0.00093
7440-69-9	Bismuth	1.63E-04	2051	
7440-70-2	Calcium	0		4

16887-00-6	Chloride	4.94E-02	2051	
18540-29-9	Chromium	1.35E-02	2051	0
16984-48-8	Fluoride	5.58E-03	2051	
7439-89-6	Iron	0		25
7439-91-0	Lanthanum	1.86E-12	2051	
7439-92-1	Lead	0		5.2
7439-96-5	Manganese	6.13E-11	12032	1
7439-97-6	Mercury	0		5.2
7440-02-0	Nickel	0		48
14797-55-8	Nitrate	2.39E+00	2051	0
14797-65-0	Nitrite	1.02E+00	2051	0
14265-44-2	Phosphate	2.18E-02	2051	
7440-21-3	Silicon	0		30
7440-22-4	Silver	0		2.7
7440-23-5	Sodium	2.37E+00	2051	
14808-79-8	Sulfate	1.90E-01	2051	
7440-61-1	Uranium	2.74E-07	12032	0.6
7440-67-7	Zirconium	0		500
71-36-3	n-Butyl alcohol (1-butanol)	1.32E-03	2051	0.002076

Kd Bin Half-Life

Years
0 12.33
0 5730
5 74999
5 100.1
0.1 5.2713
2 805000
5 28.149
5 16.13
0 211097
1 1.01736
1 14.1
1 246000
1 2.7299
0.2 15700000
5 2.0619
5 29.999
1 89.997
1 13.33
1 8.5919
1 4.68
1 1600
1 5.7498
5 21.769
2 7340
2 1405000000
5 32759
0.6 69.799
0.6 159198
0.6 245694
0.6 703700000
0.6 23420000
0.6 4468000000
2 2140000
2 87.697
2 24110
2 6563
2 14.35
2 373507
2 432.7
2 7370
2 0.44611
2 28.499
2 18.1
1 Infinity
0 Infinity
0 Infinity
5 Infinity

Report Generated on: 5/25/2005, 12:49:40 PM
Report Generated by H0098416 (David J. Watson)
Decision Management Tool Version 4.0.0.37
241-C-105 TanksPastLeaks_C.txt case01.stp
241-C-111 TanksPastLeaks_C.txt case01.stp

Major Assumptions Used:
Dilution factor for WMA-C: 40
Compliance Monitoring Start Year :2001

Verified by John Middleton 6/15/05

0 Infinity
0 Infinity
0 Infinity
5 Infinity
0 Infinity
5 Infinity
1 Infinity
5 Infinity
5 Infinity
0 Infinity
0 Infinity
0 Infinity
5 Infinity
2 Infinity
0 Infinity
0 Infinity
0.6 Infinity
5 Infinity
0 Infinity

CAS Number	Analyte Name	Concentration pCi/L (Rad) or mg/L (Non-rad)	Peak Year	Kd
3H	Tritium	3.10E-01	2044	0
14C	Carbon-14	1.81E+00	2051	0
59Ni	Nickel-59	0		48
63Ni	Nickel-63	0		48
60Co	Cobalt-60	3.83E-03	2052	0.1
79Se	Selenium-79	0		3.1
90Sr	Strontium-90 + D	0		16.1
93mNb	Niobium-93m	0		100
99Tc	Technetium-99	7.03E+01	2051	0
106Ru	Ruthenium-106	0		1
113mCd	Cadmium-113m	0		1
126Sn	Tin-126	1.38E-06	12032	1
125Sb	Antimony-125	0		1
129I	Iodine-129	2.37E-05	9621	0.2
134Cs	Cesium-134	0		25
137Cs	Cesium-137 + Daughters	0		25
151Sm	Samarium-151	2.63E-12	3961	1
152Eu	Europium-152	0		1
154Eu	Europium-154	0		1
155Eu	Europium-155	0		1
226Ra	Radium-226 + D	1.85E-13	12032	1
228Ra	Radium-228 + D	0		1
227Ac	Actinium-227 + D	0		67
229Th	Thorium-229 + D	0		3
232Th	Thorium-232	0		3
231Pa	Protactinium-231	0		550
232U	Uranium-232	2.90E-14	2175	0.6
233U	Uranium-233	7.62E-09	12032	0.6
234U	Uranium-234	2.50E-05	12032	0.6
235U	Uranium-235 + D	1.09E-06	12032	0.6
236U	Uranium-236	6.15E-07	12032	0.6
238U	Uranium-238 + D	2.58E-05	12032	0.6
237Np	Neptunium-237 + D	0		2
238Pu	Plutonium-238	0		3
239Pu	Plutonium-239	0		3
240Pu	Plutonium-240	0		3
241Pu	Plutonium-241 + D	0		3
242Pu	Plutonium-242	0		3
241Am	Americium-241	0		3
243Am	Americium-243 + D	0		3
242Cm	Curium-242	0		3
243Cm	Curium-243	0		3
244Cm	Curium-244	0		3
7664-41-7	Ammonia -- (a)	7.88E-04	2051	0.00093
7440-70-2	Calcium	0		4
16887-00-6	Chloride	2.24E-02	2051	
18540-29-9	Chromium	5.11E-03	2051	0

16984-48-8	Fluoride	7.24E-08	2051	
7439-89-6	Iron	0		25
7439-92-1	Lead	0		5.2
7439-96-5	Manganese	5.06E-15	12032	1
7439-97-6	Mercury	0		5.2
7440-02-0	Nickel	0		48
14797-55-8	Nitrate	6.35E-01	2051	0
14797-65-0	Nitrite	1.72E-01	2051	0
7440-21-3	Silicon	0		30
7440-23-5	Sodium	6.54E-01	2051	
14808-79-8	Sulfate	8.32E-02	2051	
7440-61-1	Uranium	7.72E-08	12032	0.6

Kd Bin Half-Life

Years				
0	12.33			
0	5730	241-C-201	TanksPastLeaks_C.txt	case01.stp
5	74999			
5	100.1	241-C-202	TanksPastLeaks_C.txt	case01.stp
0.1	5.2713			
2	805000	241-C-203	TanksPastLeaks_C.txt	case01.stp
5	28.149			
5	16.13	241-C-204	TanksPastLeaks_C.txt	case01.stp
0	211097			
1	1.01736			
1	14.1			
1	246000			
1	2.7299			
0.2	15700000			
5	2.0619			
5	29.999			
1	89.997	Verified by John Middleton	6/15/05	
1	13.33			
1	8.5919			
1	4.68			
1	1600			
1	5.7498			
5	21.769			
2	7340			
2	1405000000			
5	32759			
0.6	69.799			
0.6	159198			
0.6	245694			
0.6	703700000			
0.6	23420000			
0.6	4468000000			
2	2140000			
2	87.697			
2	24110			
2	6563			
2	14.35			
2	373507			
2	432.7			
2	7370			
2	0.44611			
2	28.499			
2	18.1			
0	Infinity			
5	Infinity			
0	Infinity			
0	Infinity			

0 Infinity
5 Infinity
5 Infinity
1 Infinity
5 Infinity
5 Infinity
0 Infinity
0 Infinity
5 Infinity
0 Infinity
0 Infinity
0.6 Infinity