

**Row Name**   **Sources Included**

UR-Vault Row	244-UR-Vault Pipeline
U-101 Row	None
U-104 Row	None
U-107 Row	None
U-110 Row	244-U-DCR

CAS Number	Analyte Name	Concentration pCi/L (Rad) or mg/L (Non-rad)	Peak Year	Kd
3H	Tritium	4.31E-16	2281	0
14C	Carbon-14	8.57E-03	7831	0
59Ni	Nickel-59	0		48
63Ni	Nickel-63	0		48
60Co	Cobalt-60	0		0.1
79Se	Selenium-79	0		3.1
90Sr	Strontium-90 + D	0		16.1
93mNb	Niobium-93m	0		100
93Zr	Zirconium-93	0		600
99Tc	Technetium-99	3.80E+00	8191	0
106Ru	Ruthenium-106	0		1
113mCd	Cadmium-113m	0		1
126Sn	Tin-126	0		1
125Sb	Antimony-125	0		1
129I	Iodine-129	4.03E-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
7429-90-5	Aluminum	0		1
7664-41-7	Ammonia -- (a)	6.60E-06	8201	0.00093
7440-36-0	Antimony	0		1

7440-38-2	Arsenic	0		39
7440-39-3	Barium	0		60
7440-41-7	Beryllium	0		70
7440-69-9	Bismuth	5.06E-05	8201	
7440-42-8	Boron	0		3
7440-43-9	Cadmium	0		1.26
7440-70-2	Calcium	0		4
7440-45-1	Cerium	4.67E-06	8201	
16887-00-6	Chloride	1.19E-05	8201	
18540-29-9	Chromium	2.95E-04	8201	0
7440-48-4	Cobalt	1.65E-08	12032	0.1
7440-50-8	Copper	0		35
57-12-5	Cyanide	0		9.9
16984-48-8	Fluoride	1.17E-05	8201	
OHDEMAND	Hydroxide OH	4.05E-03	8201	
7439-89-6	Iron	0		25
7439-91-0	Lanthanum	1.16E-06	8201	
7439-92-1	Lead	0		5.2
7439-93-2	Lithium	0		300
7439-95-4	Magnesium	0		4.5
7439-96-5	Manganese	0		1
7439-97-6	Mercury	0		5.2
7439-98-7	Molybdenum	0		4
7440-00-8	Neodymium	5.84E-06	8201	
7440-02-0	Nickel	0		48
14797-55-8	Nitrate	8.55E-04	8201	0
14797-65-0	Nitrite	1.63E-04	8201	0
338-70-5	Oxalate	3.82E-04	8201	
14265-44-2	Phosphate	3.25E-04	8201	
7782-49-2	Selenium	0		5
7440-21-3	Silicon	0		30
7440-22-4	Silver	0		2.7
7440-23-5	Sodium	1.45E-03	8201	
7440-24-6	Strontium	0		16.1
14808-79-8	Sulfate	9.36E-05	8201	
7440-28-0	Thallium	0		71
7440-29-1	Thorium	0		1
7440-32-6	Titanium	0		1000
7440-62-2	Vanadium	0		50
7440-65-5	Yttrium	2.13E-09	8201	
7440-66-6	Zinc	0		62
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  
5 1530000  
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  
1 Infinity

**Report Generated on: 5/25/2005, 3:16:30 PM**  
**Report Generated by H0098416 ( David J. Watson )**  
**Decision Management Tool Version 4.0.0.37**  
244-UR Vault TanksUFarm\_MUST.txt case02.stp  
**Major Assumptions Used:**  
Dilution factor for WMA-U: 40  
Compliance Monitoring Start Year :2001

5 Infinity  
5 Infinity  
5 Infinity  
0 Infinity  
2 Infinity  
1 Infinity  
5 Infinity  
0 Infinity  
0 Infinity  
0 Infinity  
0.1 Infinity  
5 Infinity  
5 Infinity  
0 Infinity  
0 Infinity  
5 Infinity  
0 Infinity  
5 Infinity  
5 Infinity  
5 Infinity  
1 Infinity  
5 Infinity  
5 Infinity  
0 Infinity  
5 Infinity  
0 Infinity  
0 Infinity  
0 Infinity  
0 Infinity  
5 Infinity  
5 Infinity  
2 Infinity  
0 Infinity  
5 Infinity  
0 Infinity  
5 Infinity  
1 Infinity  
5 Infinity  
5 Infinity  
0 Infinity  
5 Infinity  
5 Infinity

<b>CAS Number</b>	<b>Analyte Name</b>	<b>Concentration</b> pCi/L (Rad) or mg/L (Non-rad)	<b>Peak Year</b>	<b>Kd</b>
3H	Tritium	1.04E-16	2281	0
14C	Carbon-14	2.07E-03	7831	0
59Ni	Nickel-59	0		48
63Ni	Nickel-63	0		48
60Co	Cobalt-60	0		0.1
79Se	Selenium-79	0		3.1
90Sr	Strontium-90 + D	0		16.1
93mNb	Niobium-93m	0		100
93Zr	Zirconium-93	0		600
99Tc	Technetium-99	9.20E-01	8191	0
106Ru	Ruthenium-106	0		1
113mCd	Cadmium-113m	0		1
126Sn	Tin-126	0		1
125Sb	Antimony-125	0		1
129I	Iodine-129	9.77E-10	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)	1.60E-06	8201	0.00093
7440-36-0	Antimony	0		1

7440-38-2	Arsenic	0		39
7440-39-3	Barium	0		60
7440-41-7	Beryllium	0		70
7440-69-9	Bismuth	1.22E-05	8201	
7440-42-8	Boron	0		3
7440-43-9	Cadmium	0		1.26
7440-70-2	Calcium	0		4
7440-45-1	Cerium	1.13E-06	8201	
16887-00-6	Chloride	2.89E-06	8201	
18540-29-9	Chromium	7.14E-05	8201	0
7440-48-4	Cobalt	3.99E-09	12032	0.1
7440-50-8	Copper	0		35
57-12-5	Cyanide	0		9.9
16984-48-8	Fluoride	2.83E-06	8201	
OHDEMAND	Hydroxide OH	9.81E-04	8201	
7439-89-6	Iron	0		25
7439-91-0	Lanthanum	2.80E-07	8201	
7439-92-1	Lead	0		5.2
7439-93-2	Lithium	0		300
7439-95-4	Magnesium	0		4.5
7439-96-5	Manganese	0		1
7439-97-6	Mercury	0		5.2
7439-98-7	Molybdenum	0		4
7440-00-8	Neodymium	1.41E-06	8201	
7440-02-0	Nickel	0		48
14797-55-8	Nitrate	2.07E-04	8201	0
14797-65-0	Nitrite	3.94E-05	8201	0
338-70-5	Oxalate	9.25E-05	8201	
14265-44-2	Phosphate	7.87E-05	8201	
7782-49-2	Selenium	0		5
7440-21-3	Silicon	0		30
7440-22-4	Silver	0		2.7
7440-23-5	Sodium	3.51E-04	8201	
7440-24-6	Strontium	0		16.1
14808-79-8	Sulfate	2.27E-05	8201	
7440-28-0	Thallium	0		71
7440-29-1	Thorium	0		1
7440-32-6	Titanium	0		1000
7440-61-1	Uranium	0		0.6
7440-62-2	Vanadium	0		50
7440-65-5	Yttrium	5.16E-10	8201	
7440-66-6	Zinc	0		62
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  
5 1530000  
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  
1 Infinity

**Report Generated on: 5/25/2005, 3:16:43 PM**  
**Report Generated by H0098416 ( David J. Watson )**  
**Decision Management Tool Version 4.0.0.37**  
244-U-DCR TanksUFarm\_MUST.txt case02.stp  
**Major Assumptions Used:**  
Dilution factor for WMA-U: 40  
Compliance Monitoring Start Year :2001



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

<b>CAS Number</b>	<b>Analyte Name</b>	<b>Concentration</b> pCi/L (Rad) or mg/L (Non-rad)	<b>Peak Year</b>	<b>Kd</b>	<b>Kd Bin</b>
3H	Tritium	9.20E-02	2058	0	0
14C	Carbon-14	2.73E+00	2094	0	0
59Ni	Nickel-59	0		48	5
63Ni	Nickel-63	0		48	5
60Co	Cobalt-60	9.56E-12	2069	0.1	0.1
79Se	Selenium-79	0		3.1	2
90Sr	Strontium-90 + D	0		16.1	5
93mNb	Niobium-93m	0		100	5
99Tc	Technetium-99	3.15E+01	2094	0	0
106Ru	Ruthenium-106	0		1	1
113mCd	Cadmium-113m	0		1	1
126Sn	Tin-126	0		1	1
125Sb	Antimony-125	0		1	1
129I	Iodine-129	7.19E-05	12032	0.2	0.2
134Cs	Cesium-134	0		25	5
137Cs	Cesium-137 + Daughters	0		25	5
151Sm	Samarium-151	0		1	1
152Eu	Europium-152	0		1	1
154Eu	Europium-154	0		1	1
155Eu	Europium-155	0		1	1
226Ra	Radium-226 + D	0		1	1
228Ra	Radium-228 + D	0		1	1
227Ac	Actinium-227 + D	0		67	5
229Th	Thorium-229 + D	0		3	2
232Th	Thorium-232	0		3	2
231Pa	Protactinium-231	0		550	5
232U	Uranium-232	0		0.6	0.6
233U	Uranium-233	0		0.6	0.6
234U	Uranium-234	0		0.6	0.6
235U	Uranium-235 + D	0		0.6	0.6
236U	Uranium-236	0		0.6	0.6
238U	Uranium-238 + D	0		0.6	0.6
237Np	Neptunium-237 + D	0		2	2
238Pu	Plutonium-238	0		3	2
239Pu	Plutonium-239	0		3	2
240Pu	Plutonium-240	0		3	2
241Pu	Plutonium-241 + D	0		3	2
242Pu	Plutonium-242	0		3	2
241Am	Americium-241	0		3	2
243Am	Americium-243 + D	0		3	2
242Cm	Curium-242	0		3	2
243Cm	Curium-243	0		3	2
244Cm	Curium-244	0		3	2
7429-90-5	Aluminum	0		1	1
7440-69-9	Bismuth	4.96E-06	2094		0
7440-70-2	Calcium	0		4	5
16887-00-6	Chloride	1.46E-03	2094		0

18540-29-9	Chromium	7.50E-04	2094	0	0
16984-48-8	Fluoride	1.15E-05	2094		0
7439-89-6	Iron	0		25	5
7439-91-0	Lanthanum	9.50E-11	2094		0
7439-92-1	Lead	0		5.2	5
7439-96-5	Manganese	0		1	1
7439-97-6	Mercury	0		5.2	5
7440-02-0	Nickel	0		48	5
14797-55-8	Nitrate	3.67E-02	2094	0	0
14797-65-0	Nitrite	1.69E-02	2094	0	0
14265-44-2	Phosphate	1.75E-03	2094		0
7440-21-3	Silicon	0		30	5
7440-23-5	Sodium	4.33E-02	2094		0
7440-24-6	Strontium	0		16.1	5
14808-79-8	Sulfate	5.95E-04	2094		0
7440-29-1	Thorium	0		1	1
7440-61-1	Uranium	0		0.6	0.6
7440-67-7	Zirconium	0		500	5

## Half-Life

Years

Report Generated on: 5/25/2005, 3:18:27 PM

Report Generated by H0098416 ( David J. Watson )

Decision Management Tool Version 4.0.0.37

12.33  
5730 Pipe System Pipe System\_U.txt case04.stp

74999

100.1

5.2713 **Major Assumptions Used:**

805000 Dilution factor for WMA-U: 40

28.149 Compliance Monitoring Start Year :2001

16.13

211097

1.01736

14.1

246000

2.7299

15700000

2.0619

29.999

89.997

13.33

8.5919

4.68

1600

5.7498

21.769

7340

1405000000

32759

69.799

159198

245694

703700000

23420000

4468000000

2140000

87.697

24110

6563

14.35

373507

432.7

7370

0.44611

28.499

18.1

Infinity

Infinity

Infinity

Infinity



CAS Number	Analyte Name	Concentration pCi/L (Rad) or mg/L (Non-rad)	Peak Year	Kd
3H	Tritium	9.20E-02	2058	0
14C	Carbon-14	2.73E+00	2094	0
59Ni	Nickel-59	0		48
63Ni	Nickel-63	0		48
60Co	Cobalt-60	9.56E-12	2069	0.1
79Se	Selenium-79	0		3.1
90Sr	Strontium-90 + D	0		16.1
93mNb	Niobium-93m	0		100
93Zr	Zirconium-93	0		600
99Tc	Technetium-99	3.15E+01	2094	0
106Ru	Ruthenium-106	0		1
113mCd	Cadmium-113m	0		1
126Sn	Tin-126	0		1
125Sb	Antimony-125	0		1
129I	Iodine-129	7.19E-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)	6.60E-06	8201	0.00093
7440-36-0	Antimony	0		1

7440-38-2	Arsenic	0		39
7440-39-3	Barium	0		60
7440-41-7	Beryllium	0		70
7440-69-9	Bismuth	5.07E-05	8191	
7440-42-8	Boron	0		3
7440-43-9	Cadmium	0		1.26
7440-70-2	Calcium	0		4
7440-45-1	Cerium	4.67E-06	8201	
16887-00-6	Chloride	1.46E-03	2094	
18540-29-9	Chromium	7.50E-04	2094	0
7440-48-4	Cobalt	1.65E-08	12032	0.1
7440-50-8	Copper	0		35
57-12-5	Cyanide	0		9.9
16984-48-8	Fluoride	1.20E-05	8111	
OHDEMAND	Hydroxide OH	4.05E-03	8201	
7439-89-6	Iron	0		25
7439-91-0	Lanthanum	1.16E-06	8201	
7439-92-1	Lead	0		5.2
7439-93-2	Lithium	0		300
7439-95-4	Magnesium	0		4.5
7439-96-5	Manganese	0		1
7439-97-6	Mercury	0		5.2
7439-98-7	Molybdenum	0		4
7440-00-8	Neodymium	5.84E-06	8201	
7440-02-0	Nickel	0		48
14797-55-8	Nitrate	3.67E-02	2094	0
14797-65-0	Nitrite	1.69E-02	2094	0
338-70-5	Oxalate	3.82E-04	8201	
14265-44-2	Phosphate	1.75E-03	2094	
7782-49-2	Selenium	0		5
7440-21-3	Silicon	0		30
7440-22-4	Silver	0		2.7
7440-23-5	Sodium	4.33E-02	2094	
7440-24-6	Strontium	0		16.1
14808-79-8	Sulfate	5.95E-04	2094	
7440-28-0	Thallium	0		71
7440-29-1	Thorium	0		1
7440-32-6	Titanium	0		1000
7440-61-1	Uranium	0		0.6
7440-62-2	Vanadium	0		50
7440-65-5	Yttrium	2.13E-09	8201	
7440-66-6	Zinc	0		62
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  
5 1530000  
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  
1 Infinity

<b>Report Generated on: 5/25/2005, 3:19:54 PM</b>		
<b>Report Generated by H0098416 ( David J. Watson )</b>		
<b>Decision Management Tool Version 4.0.0.37</b>		
244-UR Vault	TanksUFarm_MUST.txt	case02.stp
Pipe System	Pipe System_U.txt	case04.stp
<b>Major Assumptions Used:</b>		
Dilution factor for WMA-U: 40		
Compliance Monitoring Start Year :2001		

Verified by John Middleton 6/15/05



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

CAS Number	Analyte Name	Concentration pCi/L (Rad) or mg/L (Non-rad)	Peak Year	Kd
3H	Tritium	1.04E-16	2281	0
14C	Carbon-14	2.07E-03	7831	0
59Ni	Nickel-59	0		48
63Ni	Nickel-63	0		48
60Co	Cobalt-60	0		0.1
79Se	Selenium-79	0		3.1
90Sr	Strontium-90 + D	0		16.1
93mNb	Niobium-93m	0		100
93Zr	Zirconium-93	0		600
99Tc	Technetium-99	9.20E-01	8191	0
106Ru	Ruthenium-106	0		1
113mCd	Cadmium-113m	0		1
126Sn	Tin-126	0		1
125Sb	Antimony-125	0		1
129I	Iodine-129	9.77E-10	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)	1.60E-06	8201	0.00093
7440-36-0	Antimony	0		1

7440-38-2	Arsenic	0		39
7440-39-3	Barium	0		60
7440-41-7	Beryllium	0		70
7440-69-9	Bismuth	1.22E-05	8201	
7440-42-8	Boron	0		3
7440-43-9	Cadmium	0		1.26
7440-70-2	Calcium	0		4
7440-45-1	Cerium	1.13E-06	8201	
16887-00-6	Chloride	2.89E-06	8201	
18540-29-9	Chromium	7.14E-05	8201	0
7440-48-4	Cobalt	3.99E-09	12032	0.1
7440-50-8	Copper	0		35
57-12-5	Cyanide	0		9.9
16984-48-8	Fluoride	2.83E-06	8201	
OHDEMAND	Hydroxide OH	9.81E-04	8201	
7439-89-6	Iron	0		25
7439-91-0	Lanthanum	2.80E-07	8201	
7439-92-1	Lead	0		5.2
7439-93-2	Lithium	0		300
7439-95-4	Magnesium	0		4.5
7439-96-5	Manganese	0		1
7439-97-6	Mercury	0		5.2
7439-98-7	Molybdenum	0		4
7440-00-8	Neodymium	1.41E-06	8201	
7440-02-0	Nickel	0		48
14797-55-8	Nitrate	2.07E-04	8201	0
14797-65-0	Nitrite	3.94E-05	8201	0
338-70-5	Oxalate	9.25E-05	8201	
14265-44-2	Phosphate	7.87E-05	8201	
7782-49-2	Selenium	0		5
7440-21-3	Silicon	0		30
7440-22-4	Silver	0		2.7
7440-23-5	Sodium	3.51E-04	8201	
7440-24-6	Strontium	0		16.1
14808-79-8	Sulfate	2.27E-05	8201	
7440-28-0	Thallium	0		71
7440-29-1	Thorium	0		1
7440-32-6	Titanium	0		1000
7440-61-1	Uranium	0		0.6
7440-62-2	Vanadium	0		50
7440-65-5	Yttrium	5.16E-10	8201	
7440-66-6	Zinc	0		62
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  
5 1530000  
0 211097  
1 1.01736  
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0.2 15700000  
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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  
1 Infinity

**Report Generated on: 5/25/2005, 3:23:32 PM**  
**Report Generated by H0098416 ( David J. Watson )**  
**Decision Management Tool Version 4.0.0.37**  
244-U-DCR TanksUFarm\_MUST.txt case02.stp  
**Major Assumptions Used:**  
Dilution factor for WMA-U: 40  
Compliance Monitoring Start Year :2001

Verified by John Middleton 6/15/05

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