Row Name	Sources Included
CR-Vault Row	244-CR-Vault
C-101 Row	None
C-102 Row	None
C-103 Row	C-301 Catch Tank Pipeline
C-201 Row	None

CAS Number	Analyte Name	Concentration	Peak Year	Kd
		pCi/L (Rad) or mg/L (Non-rad)		
3H	Tritium	0		0
14C	Carbon-14	4.42E-04	9781	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	4.99E-02	10461	0
106Ru	Ruthenium-106	0		1
113mCd	Cadmium-113m	0		1
126Sn	Tin-126	0		1
125Sb	Antimony-125	0		1
129I	Iodine-129	3.35E-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)	1.72E-08	10481	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	1.75E-05	10481	
7440-42-8	Boron	0		3
7440-43-9	Cadmium	0		1.26
7440-70-2	Calcium	0		4
7440-45-1	Cerium	4.09E-07	10481	
16887-00-6	Chloride	7.98E-07	10481	
18540-29-9	Chromium	1.88E-06	10481	0
7440-48-4	Cobalt	1.95E-10	12032	0.1
7440-50-8	Copper	0		35
57-12-5	Cyanide	0		9.9
16984-48-8	Fluoride	6.88E-06	10481	
OHDEMAND	Hydroxide OH	5.13E-04	10481	
7439-89-6	Iron	0		25
7439-91-0	Lanthanum	2.24E-07	10481	
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	3.41E-07	10481	
7440-02-0	Nickel	0		48
14797-55-8	Nitrate	4.93E-05	10481	0
14797-65-0	Nitrite	1.96E-05	10481	0
338-70-5	Oxalate	1.10E-05	10481	
14265-44-2	Phosphate	8.12E-05	10481	
7440-10-0	Praseodymium	1.55E-07	10481	
7440-16-6	Rhodium	8.01E-08	10481	
7440-17-7	Rubidium	4.88E-07	10481	
7440-18-8	Ruthenium	0		1
7782-49-2	Selenium	0		5
7440-21-3	Silicon	0		30
7440-22-4	Silver	0		2.7
7440-23-5	Sodium	1.20E-04	10481	
7440-24-6	Strontium	0		16.1
14808-79-8	Sulfate	5.63E-06	10481	
7440-25-7	Tantalum	4.75E-08	10481	
13494-80-9	Tellurium	8.59E-08	10481	
7440-28-0	Thallium	0		71
7440-29-1	Thorium	0		1
7440-32-6	Titanium	0		1000
7440-33-7	Tungsten	2.63E-07	10481	
7440-61-1	Uranium	0		0.6
7440-62-2	Vanadium	0		50
7440-65-5	Yttrium	5.09E-08	10481	
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	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
1	Infinity

Report Generated on: 5/25/2005, 12:52:46 PM
Report Generated by H0098416 (David J. Watson)
Decision Management Tool Version 4.0.0.37
241-C-301 TanksCFarm_MUST.txt case02.stp

Major Assumptions Used:
Dilution factor for WMA-C: 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
0	Infinity
0	Infinity
0	Infinity
1	Infinity
5	Infinity
5	Infinity
2	Infinity
0	Infinity
5	Infinity
0	Infinity
0	Infinity
0	Infinity
5	Infinity
1	Infinity
5	Infinity
0	Infinity
0.6	Infinity
5	Infinity
0	Infinity
5	Infinity
5	Infinity

CAS Number	Analyte Name	Concentration	Peak Year	Kd
		pCi/L (Rad) or mg/L (Non-rad)		
3H	Tritium	0		0
14C	Carbon-14	1.63E-03	9781	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	1.84E-01	10461	0
106Ru	Ruthenium-106	0		1
113mCd	Cadmium-113m	0		1
126Sn	Tin-126	0		1
125Sb	Antimony-125	0		1
129I	Iodine-129	1.24E-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)	6.34E-08	10481	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	6.44E-05	10481	
7440-42-8	Boron	0		3
7440-43-9	Cadmium	0		1.26
7440-70-2	Calcium	0		4
7440-45-1	Cerium	1.51E-06	10481	
16887-00-6	Chloride	2.94E-06	10481	
18540-29-9	Chromium	6.92E-06	10481	0
7440-48-4	Cobalt	7.17E-10	12032	0.1
7440-50-8	Copper	0		35
57-12-5	Cyanide	0		9.9
16984-48-8	Fluoride	2.53E-05	10481	
OHDEMAND	Hydroxide OH	1.89E-03	10481	
7439-89-6	Iron	0		25
7439-91-0	Lanthanum	8.24E-07	10481	
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	1.25E-06	10481	
7440-02-0	Nickel	0		48
14797-55-8	Nitrate	1.82E-04	10481	0
14797-65-0	Nitrite	7.21E-05	10481	0
338-70-5	Oxalate	4.05E-05	10481	
14265-44-2	Phosphate	2.99E-04	10481	
7440-10-0	Praseodymium	5.71E-07	10481	
7440-16-6	Rhodium	2.95E-07	10481	
7440-17-7	Rubidium	1.80E-06	10481	
7440-18-8	Ruthenium	0		1
7782-49-2	Selenium	0		5
7440-21-3	Silicon	0		30
7440-22-4	Silver	0		2.7
7440-23-5	Sodium	4.42E-04	10481	
7440-24-6	Strontium	0		16.1
14808-79-8	Sulfate	2.07E-05	10481	
7440-25-7	Tantalum	1.75E-07	10481	
13494-80-9	Tellurium	3.17E-07	10481	
7440-28-0	Thallium	0		71
7440-29-1	Thorium	0		1
7440-32-6	Titanium	0		1000
7440-33-7	Tungsten	9.69E-07	10481	
7440-61-1	Uranium	0		0.6
7440-62-2	Vanadium	0		50
7440-65-5	Yttrium	1.87E-07	10481	
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	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
1	Infinity

Report Generated on: 5/25/2005, 12:52:58 PM
Report Generated by H0098416 (David J. Watson)
Decision Management Tool Version 4.0.0.37
244-CR-Vault TanksCFarm_MUST.txt case02.stp

Major Assumptions Used:
Dilution factor for WMA-C: 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
0	Infinity
0	Infinity
0	Infinity
1	Infinity
5	Infinity
5	Infinity
2	Infinity
0	Infinity
5	Infinity
0	Infinity
0	Infinity
0	Infinity
5	Infinity
1	Infinity
5	Infinity
0	Infinity
0.6	Infinity
5	Infinity
0	Infinity
5	Infinity
5	Infinity

CAS Number	Analyte Name	Concentration	Peak Year	Kd	Kd Bin
		pCi/L (Rad) or mg/L (Non-rad)			
3H	Tritium	9.82E-05	2071	0	0
14C	Carbon-14	3.35E-03	2192	0	0
59Ni	Nickel-59	0		48	5
63Ni	Nickel-63	0		48	5
60Co	Cobalt-60	2.55E-16	2073	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	9.11E-04	5701	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	2.36E-08	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
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	1.69E-06	5711		0
7440-70-2	Calcium	0		4	5
16887-00-6	Chloride	1.24E-06	5711		0
18540-29-9	Chromium	2.70E-07	5711	0	0

16984-48-8	Fluoride	2.83E-06	5711		0
7439-89-6	Iron	0		25	5
7439-97-6	Mercury	0		5.2	5
7440-02-0	Nickel	0		48	5
14797-55-8	Nitrate	8.06E-05	5711	0	0
14797-65-0	Nitrite	1.84E-06	5711	0	0
14265-44-2	Phosphate	1.92E-05	5711		0
7440-21-3	Silicon	0		30	5
7440-23-5	Sodium	5.36E-05	5711		0
7440-24-6	Strontium	0		16.1	5
7440-29-1	Thorium	0		1	1
7440-67-7	Zirconium	0		500	5

Half-Life

Years	
	Report Generated on: 5/25/2005, 12:53:08 PM
	Report Generated by H0098416 (David J. Watson)
12.33	**Decision Management Tool Version 4.0.0.37**
5730	Pipe System Pipe System_C.txt case04.stp
74999	
100.1	
5.2713	**Major Assumptions Used:**
805000	Dilution factor for WMA-C: 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	
14050000000	
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	
Infinity	

Infinity
Infinity
Infinity
Infinity
Infinity
Infinity
Infinity
Infinity
Infinity
Infinity
Infinity
Infinity

CAS Number	Analyte Name	Concentration	Peak Year	Kd
		pCi/L (Rad) or mg/L (Non-rad)		
3H	Tritium	9.82E-05	2071	0
14C	Carbon-14	3.35E-03	2192	0
59Ni	Nickel-59	0		48
63Ni	Nickel-63	0		48
60Co	Cobalt-60	2.55E-16	2073	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	5.00E-02	10441	0
106Ru	Ruthenium-106	0		1
113mCd	Cadmium-113m	0		1
126Sn	Tin-126	0		1
125Sb	Antimony-125	0		1
129I	Iodine-129	2.39E-08	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)	1.72E-08	10481	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	1.78E-05	10411	
7440-42-8	Boron	0		3
7440-43-9	Cadmium	0		1.26
7440-70-2	Calcium	0		4
7440-45-1	Cerium	4.09E-07	10481	
16887-00-6	Chloride	1.24E-06	5801	
18540-29-9	Chromium	1.92E-06	10371	0
7440-48-4	Cobalt	1.95E-10	12032	0.1
7440-50-8	Copper	0		35
57-12-5	Cyanide	0		9.9
16984-48-8	Fluoride	7.35E-06	10141	
OHDEMAND	Hydroxide OH	5.13E-04	10481	
7439-89-6	Iron	0		25
7439-91-0	Lanthanum	2.24E-07	10481	
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	3.41E-07	10481	
7440-02-0	Nickel	0		48
14797-55-8	Nitrate	8.10E-05	5801	0
14797-65-0	Nitrite	1.99E-05	10411	0
338-70-5	Oxalate	1.10E-05	10481	
14265-44-2	Phosphate	8.43E-05	10291	
7440-10-0	Praseodymium	1.55E-07	10481	
7440-16-6	Rhodium	8.01E-08	10481	
7440-17-7	Rubidium	4.88E-07	10481	
7440-18-8	Ruthenium	0		1
7782-49-2	Selenium	0		5
7440-21-3	Silicon	0		30
7440-22-4	Silver	0		2.7
7440-23-5	Sodium	1.29E-04	10111	
7440-24-6	Strontium	0		16.1
14808-79-8	Sulfate	5.63E-06	10481	
7440-25-7	Tantalum	4.75E-08	10481	
13494-80-9	Tellurium	8.59E-08	10481	
7440-28-0	Thallium	0		71
7440-29-1	Thorium	0		1
7440-32-6	Titanium	0		1000
7440-33-7	Tungsten	2.63E-07	10481	
7440-61-1	Uranium	0		0.6
7440-62-2	Vanadium	0		50
7440-65-5	Yttrium	5.09E-08	10481	
7440-66-6	Zinc	0		62
7440-67-7	Zirconium	0		500

Kd Bin	Half-Life	
	Years	**Report Generated on: 6/13/2005, 1:30:51 PM**
		Report Generated by H0098416 (David J. Watson)
0	12.33	**Decision Management Tool Version 4.0.0.37**
0	5730	241-C-301 TanksCFarm_MUST.txt case02.stp
5	74999	
5	100.1	Pipe System Pipe System_C.txt case04.stp
0.1	5.2713	
2	805000	
5	28.149	**Major Assumptions Used:**
5	16.13	Dilution factor for WMA-C: 40
5	1530000	Compliance Monitoring Start Year :2001
0	211097	
1	1.01736	
1	14.1	
1	246000	Verified by John Middleton 6/15/05
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	
1	Infinity	

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