

<u>Row Name</u>	<u>Sources Included</u>
S-101Row	None
S-104 Row	None
S-107 Row	None
S-110 Row	Pipeline
SX-101 Row	241-SX-302 Catch Tank
SX-104 Row	None
SX-107 Row	None
SX-110 Row	None
SX-113 Row	None

CAS Number	Analyte Name	Concentration pCi/L (Rad) or mg/L (Non-rad)	Peak Year	Kd	Kd Bin
3H	Tritium	4.16E-17	2281	0	0
14C	Carbon-14	7.71E-04	7831	0	0
59Ni	Nickel-59	0		48	5
63Ni	Nickel-63	0		48	5
60Co	Cobalt-60	0		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
93Zr	Zirconium-93	0		600	5
99Tc	Technetium-99	6.61E-02	8191	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	5.57E-10	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
7440-36-0	Antimony	0		1	1
7440-38-2	Arsenic	0		39	5

7440-39-3	Barium	0		60	5
7440-41-7	Beryllium	0		70	5
7440-69-9	Bismuth	5.56E-07	8201		0
7440-42-8	Boron	0		3	2
7440-43-9	Cadmium	0		1.26	1
7440-70-2	Calcium	0		4	5
7440-45-1	Cerium	7.63E-07	8201		0
16887-00-6	Chloride	2.22E-06	8201		0
18540-29-9	Chromium	7.49E-05	8201	0	0
7440-48-4	Cobalt	3.17E-09	12032	0.1	0.1
7440-50-8	Copper	0		35	5
16984-48-8	Fluoride	3.61E-07	8201		0
OHDEMAND	Hydroxide OH	9.26E-04	8201		0
7439-89-6	Iron	0		25	5
7439-91-0	Lanthanum	2.40E-07	8201		0
7439-92-1	Lead	0		5.2	5
7439-93-2	Lithium	0		300	5
7439-95-4	Magnesium	0		4.5	5
7439-96-5	Manganese	0		1	1
7439-97-6	Mercury	0		5.2	5
7439-98-7	Molybdenum	0		4	5
7440-00-8	Neodymium	9.04E-07	8201		0
7440-02-0	Nickel	0		48	5
14797-55-8	Nitrate	1.38E-04	8201	0	0
14797-65-0	Nitrite	2.31E-05	8201	0	0
338-70-5	Oxalate	5.67E-05	8201		0
14265-44-2	Phosphate	1.48E-05	8201		0
7440-16-6	Rhodium	9.97E-11	8201		0
7440-18-8	Ruthenium	0		1	1
7782-49-2	Selenium	0		5	5
7440-21-3	Silicon	0		30	5
7440-22-4	Silver	0		2.7	2
7440-23-5	Sodium	1.64E-04	8201		0
7440-24-6	Strontium	0		16.1	5
14808-79-8	Sulfate	6.76E-06	8201		0
7440-29-1	Thorium	0		1	1
7440-32-6	Titanium	0		1000	5
7440-61-1	Uranium	0		0.6	0.6
7440-62-2	Vanadium	0		50	5
7440-65-5	Yttrium	1.53E-09	8201		0
7440-66-6	Zinc	0		62	5
7440-67-7	Zirconium	0		500	5

Half-Life

Years

Report Generated on: 5/25/2005, 1:36:00 PM

Report Generated by H0098416 (David J. Watson)

Decision Management Tool Version 4.0.0.37

12.33
5730 241-SX-302 TanksSXFarm_MUST.txt case02.stp

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5.2713 **Major Assumptions Used:**

805000 Dilution factor for WMA-SX: 40

28.149 Compliance Monitoring Start Year :2001

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1.01736 Verified by John Middleton 6/15/05

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Infinity

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Infinity

CAS Number	Analyte Name	Concentration pCi/L (Rad) or mg/L (Non-rad)	Peak Year	Kd	Kd Bin
3H	Tritium	1.62E-02	2058	0	0
14C	Carbon-14	4.86E-02	2094	0	0
59Ni	Nickel-59	0		48	5
63Ni	Nickel-63	0		48	5
60Co	Cobalt-60	1.59E-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	5.48E+00	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	7.91E-06	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	3.28E-07	2094		0
7440-70-2	Calcium	0		4	5
16887-00-6	Chloride	2.28E-04	2094		0

18540-29-9	Chromium	6.89E-05	2094	0	0
16984-48-8	Fluoride	2.02E-06	2094		0
7439-89-6	Iron	0		25	5
7439-91-0	Lanthanum	1.66E-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	5.29E-03	2094	0	0
14797-65-0	Nitrite	2.62E-03	2094	0	0
14265-44-2	Phosphate	5.66E-05	2094		0
7440-21-3	Silicon	0		30	5
7440-23-5	Sodium	5.89E-03	2094		0
7440-24-6	Strontium	0		16.1	5
14808-79-8	Sulfate	1.05E-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

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Report Generated by H0098416 (David J. Watson)
Decision Management Tool Version 4.0.0.37
Pipe System Pipe System_S.txt case04.stp

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

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14.1 Verified by John Middleton 6/15/05

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