Appendix E.

Inventory Estimates

September 1996

Each tank's inventory estimate is given in three tables: TLM Solids Composite, SMM Composite, and Total Inventory Estimates. Furthermore, each table expresses analyte average concentration as mol/L or ppm as well as kg or MCi inventories. Total site inventories in Mmols and kg are also shown for Rev. 3a as well as for previous revisions, Rev. 1 and Rev. 2. These site inventories are further broken down into DST, SST, Crib, and Leak destinations.

Total Site Inventories Rev. 3a..... E-1a

Total Site Inventories Rev. 2.1..... E-1b

Total Site Inventories Rev. 1..... E-1c

NE Quadrant..... E-2 to E-68

SW Quadrant..... E-69 to E-109

NW Quadrant ..... E-110 to E-150

SE Quadrant..... E-151 to E-178

Rev. 3a	All Quadrants	SST's	DST's	CRIB	Leaks	All Quadrants	SST's	DST's	CRIB	Leaks	Total Site
	kg or Ci	kg or Ci	kg or Ci	kg or Ci	kg or Ci	Mmol	Mmol	Mmol	Mmol	Mmol	Mmol
Na+	40,278,796	25,846,590	14,432,205	19,970,700	125,804	1,752.01	1,124.25	627.76	868.67	5.47	2,626.15
Al+++	7,718,242	5,528,101	2,190,140	238,498	24,421	286.07	204.90	81.18	8.84	0.91	295.82
Fe+++(total)	1,834,821	1,614,566	220,255	32,982	200	32.85	28.91	3.94	0.59	3.58E-03	33.45
Cr+++	784,651	651,600	133,051	65,835	1,798	15.09	12.53	2.56	1.27	0.03	16.39
Bi+++	524,044	512,758	11,286	238,438	70	2.51	2.45	0.05	1.14	3.35E-04	3.65
La+++	40,439	40,301	137	4,618	0	0.29	0.29	9.89E-04	0.03	5.92E-10	0.32
Hg++	6,859	5,814	1,045	98	1	0.03	0.03	0.01	4.88E-04	2.89E-06	0.03
ZrO-- (as Zr)	231,633	37,047	194,585	15,676	23	2.54	0.41	2.13	0.17	2.52E-04	2.71
Pb++	279,158	268,445	10,712	346	68	1.35	1.30	0.05	1.67E-03	3.29E-04	1.35
Ni++	182,028	143,822	38,206	33,641	185	3.10	2.45	0.65	0.57	3.15E-03	3.68
Sr++	167,309	167,280	29	971	1.73E-05	1.91	1.91	3.31E-04	0.01	1.97E-10	1.92
Mn++++	38,719	15,164	23,555	1,409	55	0.70	0.28	0.43	0.03	9.99E-04	0.73
Ca++	618,706	496,631	122,075	120,738	651	15.44	12.39	3.05	3.01	0.02	18.47
K+	481,105	181,333	299,772	190,221	807	12.30	4.64	7.67	4.86	0.02	17.19
balance											
density											
vol%solids											
void frac.											
H2O (kg)	167,290,147	92,747,189	74,542,958	389,945,072	1,494,089						558,729,308 (kg)
TOC (kg)	1,804,768	908,245	896,523	1,175	1,710						1,807,653 (kg)
free OH-	117,973	108,761	9,212	0	0						
OH-	22,987,261	16,474,351	6,512,909	264,712	2,750	1,352.19	969.08	383.11	15.57	0.16	1,367.92
NO3-	45,356,204	29,146,381	16,209,823	34,615,677	134,991	731.55	470.10	261.45	558.32	2.18	1,292.05
NO2-	13,558,862	8,980,065	4,578,797	1,191,079	58,948	294.76	195.22	99.54	25.89	1.28	321.93
CO3--	4,828,553	2,877,517	1,951,035	294,098	13,617	80.46	47.95	32.51	4.90	0.23	85.59
PO4---	4,027,865	3,313,321	714,543	4,121,004	6,459	42.41	34.89	7.52	43.39	0.07	85.87
SO4--	3,216,632	1,997,496	1,219,136	2,837,184	13,917	33.49	20.79	12.69	29.54	0.14	63.17
SiO3--(as Si)	613,786	477,306	136,479	235,421	987	21.85	16.99	4.86	8.38	0.04	30.27
F-	638,880	269,420	369,461	1,036,301	383	33.63	14.18	19.45	54.54	0.02	88.19
Cl-	956,820	575,672	381,148	558,785	3,063	27.01	16.25	10.76	15.77	0.09	42.86
C6H5O7---	677,916	371,956	305,960	0	1,575	3.59	1.97	1.62	0.00	0.01	3.59
EDTA----	619,298	295,066	324,231	0	37	2.15	1.02	1.13	0.00	1.30E-04	2.15
HEDTA---	1,033,866	478,663	555,203	0	71	3.77	1.75	2.03	0.00	2.60E-04	3.77
glycolate-	1,100,157	406,684	693,473	0	1,277	14.66	5.42	9.24	0.00	0.02	14.68
acetate-	99,430	56,963	42,467	0	1	1.68	0.97	0.72	0.00	9.44E-06	1.68
oxalate--	69,140	69,065	74	2,503	0	0.79	0.78	8.46E-04	0.03	5.06E-10	0.81
DBP	561,734	325,238	236,496	674	975	3.49	2.02	1.47	4.18E-03	6.05E-03	3.50
butanol	198,054	114,684	83,370	238	344	2.67	1.55	1.12	3.21E-03	4.64E-03	2.68
NH3	412,232	90,575	321,657	804	435	24.25	5.33	18.92	0.05	0.03	24.32
Fe(CN)6----	144,596	144,596	0	0	0	0.53	0.53	0.00	0.00	0.00	0.53
Pu (Kg)	761	561	200	47	1	761 (kg)	561 (kg)	200 (kg)	47 (kg)	1 (kg)	809 (kg)
U	2,340,778	2,100,669	240,110	166,241	1,632	9.83	8.83	1.01	0.70	0.01	10.54
Cs (Ci)	45,954,431	22,659,039	23,295,392	1,380,005	146,180	45.95 (MCi)	22.66 (MCi)	23.30 (MCi)	1.38 (MCi)	0.15 (MCi)	47.48 (MCi)
Sr (Ci)	57,531,391	39,005,853	18,525,538	628,583	56,689	57.53 (MCi)	39.01 (MCi)	18.53 (MCi)	0.63 (MCi)	0.06 (MCi)	58.22 (MCi)
BTU	2,058,493	1,259,679	798,814	36,537	3,643	2,058,493	1,259,679	798,814	36,537	3,643	2,098,673.12
Kgal	60,892	35,198	25,694	111,701	428	60,892	35,198	25,694	111,701	428	173,020.58

Rev. 2.1	All Quadrants	SST's	DST's	CRIB	All Quadrants	SST's	DST's	CRIB	Total Site
	kg or Ci	kg or Ci	kg or Ci	kg or Ci	Mmol	Mmol	Mmol	Mmol	Mmol
Na+	39,869,088	26,349,790	13,519,298	19,816,905	1,734.19	1,146.14	588.05	861.98	2,596.17
Al+++	7,227,434	5,238,168	1,989,266	990,172	267.88	194.15	73.73	36.70	304.58
Fe+++(total)	1,959,378	1,696,120	263,258	31,155	35.08	30.37	4.71	0.56	35.64
Cr+++	772,727	650,112	122,615	61,940	14.86	12.50	2.36	1.19	16.05
Bi+++	518,514	509,598	8,917	217,594	2.48	2.44	0.04	1.04	3.52
La+++	40,395	40,274	122	4,618	0.29	0.29	8.78E-04	0.03	0.32
Hg++	6,738	5,703	1,036	90	0.03	0.03	0.01	0.00	0.03
ZrO-- (as Zr)	223,514	29,846	193,668	13,712	2.45	0.33	2.12	0.15	2.60
Pb++	3,058	2,199	858	0	0.01	0.01	4.14E-03	8.69E-08	0.01
Ni++	207,270	163,375	43,895	32,298	3.53	2.78	0.75	0.55	4.08
Sr++	156,060	155,978	81	3,074	1.78	1.78	0.00	0.04	1.82
Mn++++	218,859	147,120	71,739	1,483	3.98	2.68	1.31	0.03	4.01
Ca++	687,768	549,841	137,927	115,871	17.16	13.72	3.44	2.89	20.05
K+	583,042	252,607	330,434	189,162	14.91	6.46	8.45	4.84	19.75
balance									
density									
vol%solids									
void frac.									
H2O (kg)	173,557,939	97,530,137	76,027,802	380,968,142					728,084,021 (kg)
TOC (kg)	2,285,697	1,198,955	1,086,742	3,706					4,575,099 (kg)
free OH-	169,563	161,684	7,879	0					
OH-	22,108,986	15,945,020	6,163,966	262,266	1,300.53	937.94	362.59	15.43	1,315.96
NO3-	43,518,622	29,068,830	14,449,792	34,348,733	701.91	468.85	233.06	554.01	1,255.93
NO2-	14,307,743	9,882,971	4,424,772	1,088,886	311.04	214.85	96.19	23.67	334.71
CO3--	4,457,848	2,675,391	1,782,458	289,889	74.29	44.58	29.70	4.83	79.12
PO4---	3,930,206	3,240,958	689,248	4,058,985	41.38	34.13	7.26	42.74	84.12
SO4--	3,020,692	1,963,288	1,057,404	2,783,749	31.45	20.44	11.01	28.98	60.43
SiO3--(as Si)	680,926	531,491	149,434	236,052	24.24	18.92	5.32	8.40	32.64
F-	613,936	254,083	359,853	1,041,922	32.31	13.37	18.94	54.84	87.15
Cl-	956,718	597,152	359,567	553,371	27.00	16.85	10.15	15.62	42.62
C6H5O7---	687,055	397,293	289,762	214	3.63	2.10	1.53	1.13E-03	3.64
EDTA----	615,106	303,638	311,467	0	2.14	1.05	1.08	0.00	2.14
HEDTA---	1,013,650	479,980	533,670	0	3.70	1.75	1.95	1.60E-06	3.70
									0.00
glycolate-	1,063,514	402,773	660,741	14	14.18	5.37	8.81	1.93E-04	14.18
acetate-	108,311	67,573	40,739	0	1.84	1.14	0.69	0.00E+00	1.84
oxalate--	23,482	23,191	291	11,030	0.27	0.26	3.31E-03	0.13	0.39
DBP	633,577	457,447	176,129	629	3.94	2.84	1.09	3.91E-03	3.94
butanol	208,335	127,423	80,912	290	2.81	1.72	1.09	3.91E-03	2.81
									0.00
NH3	374,658	65,318	309,340	762	22.04	3.84	18.20	0.04	22.08
Fe(CN)6----	145,854	145,854	0	0	0.54	0.54	0.00	0.00	0.54
Pu (Kg)	799	591	208	40	799 (kg)	591 (kg)	208 (kg)	40 (kg)	839 (kg)
U	1,878,401	1,624,415	253,986	174,555	7.89	6.82	1.07	0.73	8.62
Cs (Ci)	46,289,261	23,483,524	22,805,737	956,353	46.29 (MCi)	23.48 (MCi)	22.81 (MCi)	0.96 (MCi)	47.25 (MCi)
Sr (Ci)	56,990,048	38,645,507	18,344,541	615,691	56.99 (MCi)	38.65 (MCi)	18.34 (MCi)	0.62 (MCi)	57.61 (MCi)
BTU	2,051,399	1,264,583	786,816	29,463	2,051,399	1,264,583	786,816	29,463	2,080,862
Kgal	61,051	35,426	25,625	109,382	61,051	35,426	25,625	109,382	170,433

Rev. 1	**All Quadrants**	**All Quadrants**
	kg or Ci	**Mmol**
Na+	41,819,736	1,819.04
Al+++	7,399,058	274.24
Fe+++(total)	2,765,546	49.52
Cr+++	825,430	15.87
Bi+++	560,647	2.68
La+++	40,260	0.29
Hg++	6,560	0.03
ZrO-- (as Zr)	264,533	2.90
Pb++	14,332	0.07
Ni++	229,135	3.90
Sr++	156,064	1.78
Mn++++	72,799	1.33
Ca++	614,585	15.33
K+	296,027	7.57
balance		
density		
vol%solids		
void frac.		
H2O (kg)	175,691,357	
TOC (kg)	1,675,594	
free OH-	596,539	
OH-	22,841,487	1,343.62
NO3-	38,330,554	618.23
NO2-	22,076,614	479.93
CO3--	4,522,265	75.36
PO4---	4,738,086	49.89
SO4--	3,670,995	38.22
SiO3--(as Si)	459,592	16.36
F-	754,456	39.71
Cl-	739,159	20.86
C6H5O7---	753,819	3.99
EDTA----	585,578	2.03
HEDTA---	952,458	3.47
glycolate-	1,072,884	14.30
acetate-	111,888	1.90
oxalate--	23,080	0.26
DBP	447,348	2.78
butanol	146,702	1.98
NH3	386,204	22.72
Fe(CN)6----	139,035	0.51
Pu (kg)	718	718 (kg)
U	1,875,663	7.88
Cs (Ci)	60,772,917	60.77 (MCi)
Sr (Ci)	59,325,367	59.33 (MCi)
BTU	2,336,850	2,336,850
Kgal	60,621	60,621

Rev. 3

Single-Shell Tank 241-A-101			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	1.44E+04 kg	(2.99 kgal)	
Heat Load	0.625 kW	(2.13E+03 BTU/hr)	
Bulk Density	1.28 (g/cc)		
Void Fraction	0.841		
Water wt%	66.6		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	1.83	3.30E+04	476
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	2.63	1.15E+05	1.66E+03
Cr^{3+}	6.75E-03	275	3.97
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0.102	4.68E+03	67.5
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.421	1.32E+04	191
K^{+}	2.65E-03	81.2	1.17
OH^{-}	8.43	1.12E+05	1.62E+03
$NO3^{-}$	2.53E-11	1.23E-06	1.77E-08
$NO2^{-}$	0.379	1.37E+04	197
$CO3^{2-}$	0.421	1.98E+04	286
$PO4^{3-}$	0	0	0
$SO4^{2-}$	3.68E-02	2.77E+03	40.0
Si (as SiO_3^{2-})	0.622	1.37E+04	197
F^{-}	0	0	0
Cl^{-}	1.22E-02	339	4.88
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0.134	1.78E+03	25.7
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0.275 (µCi/g)	6.61E-02 (kg)
U	3.14E-02 (M)	5.86E+03 (µg/g)	84.5 (kg)
Cs	0.219 (Ci/L)	171 (µCi/g)	2.47E+03 (Ci)
Sr	8.06 (Ci/L)	6.32E+03 (µCi/g)	9.11E+04 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

Rev. 3

Single-Shell Tank 241-A-101			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	5.20E+06 kg	(950 kgal)	
Heat Load	5.97 kW	(2.04E+04 BTU/hr)	
Bulk Density*	1.45 (g/cc)		
Water wt%†	45.9		
TOC wt% C (wet)	1.24		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	9.46	1.50E+05	7.82E+05
Al^{3+}	1.34	2.50E+04	1.30E+05
Fe^{3+} (total Fe)	5.08E-03	196	1.02E+03
Cr^{3+}	4.01E-02	1.44E+03	7.50E+03
Bi^{3+}	9.87E-04	143	742
La^{3+}	1.91E-05	1.83	9.54
Hg^{2+}	7.87E-06	1.09	5.68
Zr (as $ZrO(OH)_2$)	5.38E-04	33.9	176
Pb^{2+}	1.06E-03	152	790
Ni^{2+}	4.19E-03	170	884
Sr^{2+}	6.37E-06	0.386	2.01
Mn^{4+}	3.71E-03	141	732
Ca^{2+}	2.30E-02	638	3.32E+03
K^{+}	4.67E-02	1.26E+03	6.57E+03
OH^{-}	5.85	6.87E+04	3.57E+05
$NO3^{-}$	3.65	1.56E+05	8.14E+05
$NO2^{-}$	1.95	6.21E+04	3.23E+05
$CO3^{2-}$	0.417	1.73E+04	8.99E+04
$PO4^{3-}$	7.51E-02	4.93E+03	2.57E+04
$SO4^{2-}$	0.228	1.51E+04	7.87E+04
Si (as SiO_3^{2-})	6.19E-02	1.20E+03	6.25E+03
F^{-}	5.96E-02	782	4.07E+03
Cl^{-}	0.169	4.13E+03	2.15E+04
$C_6H_5O_7^{3-}$	2.71E-02	3.54E+03	1.84E+04
$EDTA^{4-}$	2.92E-02	5.81E+03	3.02E+04
$HEDTA^{3-}$	5.25E-02	9.96E+03	5.18E+04
$glycolate^{-}$	0.108	5.60E+03	2.91E+04
$acetate^{-}$	1.85E-02	754	3.92E+03
$oxalate^{2-}$	1.63E-05	0.995	5.17
DBP	2.14E-02	3.94E+03	2.05E+04
butanol	2.14E-02	1.10E+03	5.71E+03
NH_3	3.34E-02	393	2.04E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	61.2 (µCi/L)		3.67 (kg)
U	8.71E-03 (M)	1.43E+03 (µg/g)	7.46E+03 (kg)
Cs	0.224 (Ci/L)	155 (µCi/g)	8.07E+05 (Ci)
Sr	9.04E-02 (Ci/L)	62.5 (µCi/g)	3.25E+05 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.
†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Single-Shell Tank 241-A-101			
Total Inventory Estimate*			
Physical Properties			
Total Waste	5.22E+06 kg	(953 kgal)	
Heat Load	6.59 kW	(2.25E+04 BTU/hr)	
Bulk Density†	1.45 (g/cc)		
Water wt%†	45.9		
TOC wt% C (wet)†	1.23		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	9.44	1.50E+05	7.83E+05
Al^{3+}	1.34	2.49E+04	1.30E+05
Fe^{3+} (total Fe)	1.33E-02	514	2.68E+03
Cr^{3+}	4.00E-02	1.44E+03	7.50E+03
Bi^{3+}	9.84E-04	142	742
La^{3+}	1.90E-05	1.83	9.54
Hg^{2+}	7.85E-06	1.09	5.68
Zr (as $ZrO(OH)_2$)	5.36E-04	33.8	176
Pb^{2+}	1.06E-03	152	790
Ni^{2+}	4.49E-03	182	951
Sr^{2+}	6.35E-06	0.385	2.01
Mn^{4+}	3.69E-03	140	732
Ca^{2+}	2.43E-02	673	3.51E+03
K^{+}	4.66E-02	1.26E+03	6.57E+03
OH^{-}	5.85	6.88E+04	3.59E+05
$NO3^{-}$	3.64	1.56E+05	8.14E+05
$NO2^{-}$	1.95	6.19E+04	3.23E+05
$CO3^{2-}$	0.417	1.73E+04	9.02E+04
$PO4^{3-}$	7.49E-02	4.92E+03	2.57E+04
$SO4^{2-}$	0.227	1.51E+04	7.88E+04
Si (as SiO_3^{2-})	6.36E-02	1.24E+03	6.45E+03
F^{-}	5.94E-02	780	4.07E+03
Cl^{-}	0.168	4.12E+03	2.15E+04
$C_6H_5O_7^{3-}$	2.70E-02	3.53E+03	1.84E+04
$EDTA^{4-}$	2.91E-02	5.79E+03	3.02E+04
$HEDTA^{3-}$	5.24E-02	9.93E+03	5.18E+04
$glycolate^{-}$	0.108	5.58E+03	2.91E+04
$acetate^{-}$	1.84E-02	752	3.92E+03
$oxalate^{2-}$	1.63E-05	0.992	5.17
DBP	2.14E-02	3.93E+03	2.05E+04
butanol	2.14E-02	1.10E+03	5.71E+03
NH_3	3.37E-02	397	2.07E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		4.29E-02 (µCi/g)	3.73 (kg)
U	8.78E-03 (M)	1.45E+03 (µg/g)	7.54E+03 (kg)
Cs	0.224 (Ci/L)	155 (µCi/g)	8.10E+05 (Ci)
Sr	0.115 (Ci/L)	79.8 (µCi/g)	4.16E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).
†Volume average for density, mass average Water wt% and TOC wt% C.

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Single-Shell Tank 241-A-102			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	1.98E+04 kg	(3.00 kgal)	
Heat Load	0.633 kW	(2.16E+03 BTU/hr)	
Bulk Density	1.75 (g/cc)		
Void Fraction	0.850		
Water wt%	49.2		
TOC wt% C (wet)	2.99		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	6.44	8.48E+04	1.68E+03
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	1.50	4.80E+04	952
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.137	3.14E+03	62.2
K^{+}	1.16E-02	259	5.14
OH^{-}	10.7	1.04E+05	2.05E+03
$NO3^{-}$	3.92E-06	0.139	2.76E-03
$NO2^{-}$	0.553	1.46E+04	289
$CO3^{2-}$	0.340	1.17E+04	231
$PO4^{3-}$	0	0	0
$SO4^{2-}$	8.71E-02	4.79E+03	94.9
Si (as SiO_3^{2-})	1.80	2.90E+04	575
F^{-}	0	0	0
Cl^{-}	5.32E-02	1.08E+03	21.4
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0.128	2.11E+04	419
$HEDTA^{3-}$	0.256	4.02E+04	797
$glycolate^{-}$	0.256	1.10E+04	218
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	2.59E-05	3.95	7.83E-02
butanol	2.59E-05	1.10	2.18E-02
NH_3	0.115	1.12E+03	22.1
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		2.18 (µCi/g)	0.721 (kg)
U	1.00 (M)	1.37E+05 (µg/g)	2.71E+03 (kg)
Cs	4.16E-02 (Ci/L)	23.8 (µCi/g)	472 (Ci)
Sr	8.26 (Ci/L)	4.73E+03 (µCi/g)	9.37E+04 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-A-102			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	1.76E+05 kg	(38.0 kgal)	
Heat Load	0.117 kW	(399 BTU/hr)	
Bulk Density*	1.22 (g/cc)		
Water wt%†	68.2		
TOC wt% C (wet)	0.754		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.70	8.84E+04	1.55E+04
Al^{3+}	0.671	1.48E+04	2.60E+03
Fe^{3+} (total Fe)	2.44E-03	111	19.6
Cr^{3+}	1.95E-02	830	146
Bi^{3+}	4.88E-04	83.5	14.7
La^{3+}	8.78E-06	0.998	0.175
Hg^{2+}	3.97E-06	0.652	0.115
Zr (as $ZrO(OH)_2$)	2.57E-04	19.2	3.37
Pb^{2+}	5.46E-04	92.6	16.3
Ni^{2+}	2.00E-03	96.0	16.9
Sr^{2+}	2.93E-06	0.210	3.69E-02
Mn^{4+}	1.87E-03	84.0	14.8
Ca^{2+}	1.11E-02	363	63.7
K^{+}	2.33E-02	745	131
OH^{-}	2.92	4.07E+04	7.15E+03
$NO3^{-}$	1.78	9.03E+04	1.59E+04
$NO2^{-}$	0.974	3.67E+04	6.45E+03
$CO3^{2-}$	0.209	1.03E+04	1.80E+03
$PO4^{3-}$	3.75E-02	2.92E+03	512
$SO4^{2-}$	0.115	9.03E+03	1.59E+03
Si (as SiO_3^{2-})	3.02E-02	695	122
F^{-}	2.97E-02	462	81.2
Cl^{-}	8.38E-02	2.43E+03	427
$C_6H_5O_7^{3-}$	1.36E-02	2.11E+03	370
$EDTA^{4-}$	1.52E-02	3.59E+03	632
$HEDTA^{3-}$	2.74E-02	6.14E+03	1.08E+03
$glycolate^{-}$	5.43E-02	3.34E+03	586
$acetate^{-}$	1.00E-02	483	84.9
$oxalate^{2-}$	7.51E-06	0.541	9.51E-02
DBP	1.10E-02	2.39E+03	421
butanol	1.10E-02	667	117
NH_3	1.58E-02	220	38.7
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	29.8 (µCi/L)		7.13E-02 (kg)
U	4.21E-03 (M)	821 (µg/g)	144 (kg)
Cs	0.110 (Ci/L)	90.2 (µCi/g)	1.59E+04 (Ci)
Sr	4.41E-02 (Ci/L)	36.1 (µCi/g)	6.34E+03 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-A-102			
Total Inventory Estimate*			
Physical Properties			
Total Waste	1.96E+05 kg	(41.0 kgal)	
Heat Load	0.750 kW	(2.56E+03 BTU/hr)	
Bulk Density†	1.26 (g/cc)		
Water wt%†	66.3		
TOC wt% C (wet)†	0.981		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.82	8.80E+04	1.72E+04
Al^{3+}	0.622	1.33E+04	2.60E+03
Fe^{3+} (total Fe)	0.112	4.97E+03	971
Cr^{3+}	1.81E-02	746	146
Bi^{3+}	4.53E-04	75.0	14.7
La^{3+}	8.14E-06	0.897	0.175
Hg^{2+}	3.68E-06	0.586	0.115
Zr (as $ZrO(OH)_2$)	2.38E-04	17.2	3.37
Pb^{2+}	5.06E-04	83.2	16.3
Ni^{2+}	1.85E-03	86.3	16.9
Sr^{2+}	2.71E-06	0.189	3.69E-02
Mn^{4+}	1.73E-03	75.5	14.8
Ca^{2+}	2.02E-02	644	126
K^{+}	2.24E-02	696	136
OH^{-}	3.49	4.71E+04	9.20E+03
$NO3^{-}$	1.65	8.12E+04	1.59E+04
$NO2^{-}$	0.943	3.44E+04	6.73E+03
$CO3^{2-}$	0.219	1.04E+04	2.04E+03
$PO4^{3-}$	3.48E-02	2.62E+03	512
$SO4^{2-}$	0.113	8.60E+03	1.68E+03
Si (as SiO_3^{2-})	0.160	3.56E+03	697
F^{-}	2.75E-02	415	81.2
Cl^{-}	8.15E-02	2.29E+03	448
$C_6H_5O_7^{3-}$	1.26E-02	1.89E+03	370
$EDTA^{4-}$	2.35E-02	5.37E+03	1.05E+03
$HEDTA^{3-}$	4.41E-02	9.59E+03	1.88E+03
$glycolate^{-}$	6.91E-02	4.11E+03	804
$acetate^{-}$	9.27E-03	434	84.9
$oxalate^{2-}$	6.96E-06	0.486	9.51E-02
DBP	1.02E-02	2.15E+03	421
butanol	1.02E-02	599	117
NH_3	2.31E-02	311	60.9
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0.243 (µCi/g)	0.792 (kg)
U	7.73E-02 (M)	1.46E+04 (µg/g)	2.85E+03 (kg)
Cs	0.105 (Ci/L)	83.5 (µCi/g)	1.63E+04 (Ci)
Sr	0.645 (Ci/L)	511 (µCi/g)	1.00E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

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Single-Shell Tank 241-A-103			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	1.48E+04 kg	(3.00 kgal)	
Heat Load	0.917 kW	(3.13E+03 BTU/hr)	
Bulk Density	1.30 (g/cc)		
Void Fraction	0.831		
Water wt%	69.3		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	5.60	9.90E+04	1.46E+03
Al^{3+}	7.11E-02	1.48E+03	21.8
Fe^{3+} (total Fe)	1.30	5.59E+04	825
Cr^{3+}	1.42E-02	568	8.38
Bi^{3+}	9.64E-06	1.55	2.29E-02
La^{3+}	0	0	0
Hg^{2+}	3.02E-07	4.66E-02	6.88E-04
Zr (as $ZrO(OH)_2$)	3.43E-07	2.41E-02	3.55E-04
Pb^{2+}	4.94E-05	7.87	0.116
Ni^{2+}	0.139	6.27E+03	92.6
Sr^{2+}	0	0	0
Mn^{4+}	2.21E-03	93.5	1.38
Ca^{2+}	0.110	3.38E+03	49.9
K^{+}	6.16E-03	185	2.73
OH^{-}	4.46	5.83E+04	861
$NO3^{-}$	4.32E-09	2.06E-04	3.04E-06
$NO2^{-}$	0.640	2.26E+04	334
$CO3^{2-}$	0.223	1.03E+04	152
$PO4^{3-}$	1.95E-02	1.42E+03	21.0
$SO4^{2-}$	6.79E-02	5.02E+03	74.1
Si (as SiO_3^{2-})	2.27	4.90E+04	723
F^{-}	3.28E-04	4.78	7.07E-02
Cl^{-}	1.48E-02	404	5.97
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0.193	2.52E+03	37.2
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		7.28 (µCi/g)	1.79 (kg)
U	2.41E-03 (M)	441 (µg/g)	6.51 (kg)
Cs	0.230 (Ci/L)	176 (µCi/g)	2.61E+03 (Ci)
Sr	11.8 (Ci/L)	9.09E+03 (µCi/g)	1.34E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-A-103			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	2.05E+06 kg	(368 kgal)	
Heat Load	2.43 kW	(8.29E+03 BTU/hr)	
Bulk Density*	1.47 (g/cc)		
Water wt%†	43.7		
TOC wt% C (wet)	1.33		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	10.0	1.57E+05	3.21E+05
Al^{3+}	1.43	2.63E+04	5.39E+04
Fe^{3+} (total Fe)	5.22E-03	198	406
Cr^{3+}	4.17E-02	1.47E+03	3.02E+03
Bi^{3+}	1.04E-03	148	304
La^{3+}	1.88E-05	1.77	3.64
Hg^{2+}	8.47E-06	1.15	2.37
Zr (as $ZrO(OH)_2$)	5.49E-04	34.0	69.7
Pb^{2+}	1.16E-03	164	336
Ni^{2+}	4.28E-03	171	350
Sr^{2+}	6.26E-06	0.372	0.764
Mn^{4+}	3.99E-03	149	305
Ca^{2+}	2.37E-02	643	1.32E+03
K^{+}	4.98E-02	1.32E+03	2.71E+03
OH^{-}	6.25	7.21E+04	1.48E+05
$NO3^{-}$	3.81	1.60E+05	3.29E+05
$NO2^{-}$	2.08	6.49E+04	1.33E+05
$CO3^{2-}$	0.446	1.82E+04	3.73E+04
$PO4^{3-}$	8.01E-02	5.16E+03	1.06E+04
$SO4^{2-}$	0.245	1.60E+04	3.28E+04
Si (as SiO_3^{2-})	6.47E-02	1.23E+03	2.53E+03
F^{-}	6.35E-02	818	1.68E+03
Cl^{-}	0.179	4.30E+03	8.83E+03
$C_6H_5O_7^{3-}$	2.92E-02	3.74E+03	7.68E+03
$EDTA^{4-}$	3.23E-02	6.31E+03	1.30E+04
$HEDTA^{3-}$	5.79E-02	1.08E+04	2.21E+04
$glycolate^{-}$	0.116	5.90E+03	1.21E+04
$acetate^{-}$	2.13E-02	853	1.75E+03
$oxalate^{2-}$	1.61E-05	0.960	1.97
DBP	2.35E-02	4.24E+03	8.70E+03
butanol	2.35E-02	1.18E+03	2.42E+03
NH_3	3.39E-02	391	802
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	63.7 (µCi/L)		1.48 (kg)
U	9.02E-03 (M)	1.46E+03 (µg/g)	2.99E+03 (kg)
Cs	0.236 (Ci/L)	160 (µCi/g)	3.29E+05 (Ci)
Sr	9.42E-02 (Ci/L)	63.9 (µCi/g)	1.31E+05 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-A-103			
Total Inventory Estimate*			
Physical Properties			
Total Waste	2.07E+06 kg	(371 kgal)	
Heat Load	3.34 kW	(1.14E+04 BTU/hr)	
Bulk Density†	1.47 (g/cc)		
Water wt%†	43.9		
TOC wt% C (wet)†	1.32		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	10.0	1.56E+05	3.23E+05
Al^{3+}	1.42	2.61E+04	5.39E+04
Fe^{3+} (total Fe)	1.57E-02	595	1.23E+03
Cr^{3+}	4.14E-02	1.46E+03	3.03E+03
Bi^{3+}	1.03E-03	147	304
La^{3+}	1.86E-05	1.76	3.64
Hg^{2+}	8.41E-06	1.15	2.37
Zr (as $ZrO(OH)_2$)	5.44E-04	33.7	69.7
Pb^{2+}	1.16E-03	163	336
Ni^{2+}	5.37E-03	214	443
Sr^{2+}	6.21E-06	0.370	0.764
Mn^{4+}	3.97E-03	148	307
Ca^{2+}	2.44E-02	663	1.37E+03
K^{+}	4.94E-02	1.31E+03	2.71E+03
OH^{-}	6.24	7.20E+04	1.49E+05
$NO3^{-}$	3.78	1.59E+05	3.29E+05
$NO2^{-}$	2.07	6.46E+04	1.34E+05
$CO3^{2-}$	0.445	1.81E+04	3.75E+04
$PO4^{3-}$	7.96E-02	5.13E+03	1.06E+04
$SO4^{2-}$	0.244	1.59E+04	3.29E+04
Si (as SiO_3^{2-})	8.25E-02	1.57E+03	3.26E+03
F^{-}	6.30E-02	812	1.68E+03
Cl^{-}	0.178	4.27E+03	8.84E+03
$C_6H_5O_7^{3-}$	2.89E-02	3.71E+03	7.68E+03
$EDTA^{4-}$	3.20E-02	6.26E+03	1.30E+04
$HEDTA^{3-}$	5.74E-02	1.07E+04	2.21E+04
$glycolate^{-}$	0.115	5.86E+03	1.21E+04
$acetate^{-}$	2.11E-02	847	1.75E+03
$oxalate^{2-}$	1.59E-05	0.953	1.97
DBP	2.33E-02	4.21E+03	8.70E+03
butanol	2.33E-02	1.17E+03	2.42E+03
NH_3	3.52E-02	406	839
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		9.48E-02 (µCi/g)	3.27 (kg)
U	8.97E-03 (M)	1.45E+03 (µg/g)	3.00E+03 (kg)
Cs	0.236 (Ci/L)	161 (µCi/g)	3.32E+05 (Ci)
Sr	0.189 (Ci/L)	128 (µCi/g)	2.65E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

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Single-Shell Tank 241-A-104			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	1.38E+05 kg	(28.0 kgal)	
Heat Load	8.46 kW	(2.89E+04 BTU/hr)	
Bulk Density	1.30 (g/cc)		
Void Fraction	0.831		
Water wt%	69.2		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	5.47	9.67E+04	1.33E+04
Al^{3+}	6.86E-02	1.42E+03	196
Fe^{3+} (total Fe)	1.35	5.79E+04	7.98E+03
Cr^{3+}	1.39E-02	557	76.7
Bi^{3+}	9.30E-06	1.49	0.206
La^{3+}	0	0	0
Hg^{2+}	2.92E-07	4.50E-02	6.20E-03
Zr (as $ZrO(OH)_2$)	3.31E-07	2.32E-02	3.20E-03
Pb^{2+}	4.77E-05	7.60	1.05
Ni^{2+}	0.138	6.22E+03	856
Sr^{2+}	0	0	0
Mn^{4+}	2.14E-03	90.2	12.4
Ca^{2+}	0.121	3.72E+03	512
K^{+}	6.04E-03	182	25.0
OH^{-}	4.60	6.02E+04	8.28E+03
$NO3^{-}$	4.17E-09	1.99E-04	2.74E-05
$NO2^{-}$	0.631	2.23E+04	3.07E+03
$CO3^{2-}$	0.230	1.06E+04	1.46E+03
$PO4^{3-}$	1.88E-02	1.37E+03	189
$SO4^{2-}$	6.68E-02	4.94E+03	680
Si (as SiO_3^{2-})	2.21	4.77E+04	6.57E+03
F^{-}	3.16E-04	4.62	0.636
Cl^{-}	1.47E-02	402	55.3
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0.191	2.50E+03	344
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		7.03 (µCi/g)	16.1 (kg)
U	3.43E-03 (M)	629 (µg/g)	86.6 (kg)
Cs	0.229 (Ci/L)	176 (µCi/g)	2.43E+04 (Ci)
Sr	11.7 (Ci/L)	9.00E+03 (µCi/g)	1.24E+06 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-A-104			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	0 (g/cc)		
Water wt%†	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Single-Shell Tank 241-A-104			
Total Inventory Estimate*			
Physical Properties			
Total Waste	1.38E+05 kg	(28.0 kgal)	
Heat Load	8.46 kW	(2.89E+04 BTU/hr)	
Bulk Density†	1.30 (g/cc)		
Water wt%†	69.2		
TOC wt% C (wet)†	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	5.47	9.67E+04	1.33E+04
Al^{3+}	6.86E-02	1.42E+03	196
Fe^{3+} (total Fe)	1.35	5.79E+04	7.98E+03
Cr^{3+}	1.39E-02	557	76.7
Bi^{3+}	9.30E-06	1.49	0.206
La^{3+}	0	0	0
Hg^{2+}	2.92E-07	4.50E-02	6.20E-03
Zr (as $ZrO(OH)_2$)	3.31E-07	2.32E-02	3.20E-03
Pb^{2+}	4.77E-05	7.60	1.05
Ni^{2+}	0.138	6.22E+03	856
Sr^{2+}	0	0	0
Mn^{4+}	2.14E-03	90.2	12.4
Ca^{2+}	0.121	3.72E+03	512
K^{+}	6.04E-03	182	25.0
OH^{-}	4.60	6.02E+04	8.28E+03
$NO3^{-}$	4.17E-09	1.99E-04	2.74E-05
$NO2^{-}$	0.631	2.23E+04	3.07E+03
$CO3^{2-}$	0.230	1.06E+04	1.46E+03
$PO4^{3-}$	1.88E-02	1.37E+03	189
$SO4^{2-}$	6.68E-02	4.94E+03	680
Si (as SiO_3^{2-})	2.21	4.77E+04	6.57E+03
F^{-}	3.16E-04	4.62	0.636
Cl^{-}	1.47E-02	402	55.3
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0.191	2.50E+03	344
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		7.03 (µCi/g)	16.1 (kg)
U	3.43E-03 (M)	629 (µg/g)	86.6 (kg)
Cs	0.229 (Ci/L)	176 (µCi/g)	2.43E+04 (Ci)
Sr	11.7 (Ci/L)	9.00E+03 (µCi/g)	1.24E+06 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Single-Shell Tank 241-A-105			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	1.02E+05 kg	(19.0 kgal)	
Heat Load	6.82 kW	(2.33E+04 BTU/hr)	
Bulk Density	1.42 (g/cc)		
Void Fraction	0.808		
Water wt%	59.2		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.03	6.55E+04	6.66E+03
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	2.96	1.17E+05	1.19E+04
Cr^{3+}	6.51E-03	239	24.3
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	5.82E-02	2.41E+03	246
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.243	6.88E+03	701
K^{+}	4.59E-03	127	12.9
OH^{-}	10.2	1.22E+05	1.25E+04
$NO3^{-}$	1.52E-14	6.67E-10	6.79E-11
$NO2^{-}$	0.587	1.91E+04	1.94E+03
$CO3^{2-}$	0.243	1.03E+04	1.05E+03
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0.129	8.77E+03	892
Si (as SiO_3^{2-})	1.52	3.02E+04	3.08E+03
F^{-}	0	0	0
Cl^{-}	2.11E-02	528	53.8
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0.242	2.91E+03	296
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.04 (µCi/g)	1.76 (kg)
U	0.175 (M)	2.95E+04 (µg/g)	3.00E+03 (kg)
Cs	0.561 (Ci/L)	396 (µCi/g)	4.03E+04 (Ci)
Sr	13.7 (Ci/L)	9.67E+03 (µCi/g)	9.84E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-A-105			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	0 (g/cc)		
Water wt%†	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Single-Shell Tank 241-A-105			
Total Inventory Estimate*			
Physical Properties			
Total Waste	1.02E+05 kg	(19.0 kgal)	
Heat Load	6.82 kW	(2.33E+04 BTU/hr)	
Bulk Density†	1.42 (g/cc)		
Water wt%†	59.2		
TOC wt% C (wet)†	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.03	6.55E+04	6.66E+03
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	2.96	1.17E+05	1.19E+04
Cr^{3+}	6.51E-03	239	24.3
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	5.82E-02	2.41E+03	246
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.243	6.88E+03	701
K^{+}	4.59E-03	127	12.9
OH^{-}	10.2	1.22E+05	1.25E+04
$NO3^{-}$	1.52E-14	6.67E-10	6.79E-11
$NO2^{-}$	0.587	1.91E+04	1.94E+03
$CO3^{2-}$	0.243	1.03E+04	1.05E+03
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0.129	8.77E+03	892
Si (as SiO_3^{2-})	1.52	3.02E+04	3.08E+03
F^{-}	0	0	0
Cl^{-}	2.11E-02	528	53.8
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0.242	2.91E+03	296
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.04 (µCi/g)	1.76 (kg)
U	0.175 (M)	2.95E+04 (µg/g)	3.00E+03 (kg)
Cs	0.561 (Ci/L)	396 (µCi/g)	4.03E+04 (Ci)
Sr	13.7 (Ci/L)	9.67E+03 (µCi/g)	9.84E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

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Single-Shell Tank 241-A-106			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	2.95E+05 kg	(50.0 kgal)	
Heat Load	12.5 kW	(4.28E+04 BTU/hr)	
Bulk Density	1.56 (g/cc)		
Void Fraction	0.842		
Water wt%	56.2		
TOC wt% C (wet)	1.94		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	6.09	8.98E+04	2.65E+04
Al^{3+}	2.99E-02	517	153
Fe^{3+} (total Fe)	1.42	5.08E+04	1.50E+04
Cr^{3+}	5.96E-03	199	58.7
Bi^{3+}	4.05E-06	0.543	0.160
La^{3+}	0	0	0
Hg^{2+}	1.27E-07	1.63E-02	4.82E-03
Zr (as $ZrO(OH)_2$)	1.44E-07	8.43E-03	2.49E-03
Pb^{2+}	2.08E-05	2.76	0.814
Ni^{2+}	5.84E-02	2.20E+03	648
Sr^{2+}	0	0	0
Mn^{4+}	9.30E-04	32.7	9.66
Ca^{2+}	0.125	3.22E+03	951
K^{+}	9.30E-03	233	68.8
OH^{-}	8.05	8.78E+04	2.59E+04
$NO3^{-}$	2.28E-06	9.05E-02	2.67E-02
$NO2^{-}$	0.590	1.74E+04	5.13E+03
$CO3^{2-}$	0.291	1.12E+04	3.30E+03
$PO4^{3-}$	8.18E-03	498	147
$SO4^{2-}$	7.90E-02	4.87E+03	1.44E+03
Si (as SiO_3^{2-})	2.00	3.60E+04	1.06E+04
F^{-}	1.38E-04	1.68	0.495
Cl^{-}	3.71E-02	843	249
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	7.43E-02	1.37E+04	4.05E+03
$HEDTA^{3-}$	0.149	2.61E+04	7.71E+03
$glycolate^{-}$	0.149	7.15E+03	2.11E+03
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	1.50E-05	2.56	0.757
butanol	1.50E-05	0.714	0.211
NH_3	0.148	1.61E+03	475
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		3.97 (µCi/g)	19.5 (kg)
U	0.583 (M)	8.90E+04 (µg/g)	2.63E+04 (kg)
Cs	0.121 (Ci/L)	77.3 (µCi/g)	2.28E+04 (Ci)
Sr	9.76 (Ci/L)	6.26E+03 (µCi/g)	1.85E+06 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-A-106			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	4.44E+05 kg	(75.0 kgal)	
Heat Load	0.610 kW	(2.08E+03 BTU/hr)	
Bulk Density*	1.56 (g/cc)		
Water wt%†	36.6		
TOC wt% C (wet)	1.17		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	12.0	1.76E+05	7.81E+04
Al^{3+}	1.67	2.89E+04	1.28E+04
Fe^{3+} (total Fe)	7.01E-03	251	111
Cr^{3+}	5.51E-02	1.83E+03	814
Bi^{3+}	1.27E-03	170	75.6
La^{3+}	3.06E-05	2.72	1.21
Hg^{2+}	9.55E-06	1.23	0.544
Zr (as $ZrO(OH)_2$)	7.73E-04	45.1	20.0
Pb^{2+}	1.19E-03	158	70.3
Ni^{2+}	5.91E-03	222	98.5
Sr^{2+}	1.02E-05	0.571	0.254
Mn^{4+}	4.45E-03	156	69.4
Ca^{2+}	3.18E-02	816	362
K^{+}	5.82E-02	1.46E+03	646
OH^{-}	7.29	7.93E+04	3.52E+04
$NO3^{-}$	4.89	1.94E+05	8.61E+04
$NO2^{-}$	2.47	7.28E+04	3.23E+04
$CO3^{2-}$	0.495	1.90E+04	8.43E+03
$PO4^{3-}$	9.28E-02	5.64E+03	2.50E+03
$SO4^{2-}$	0.272	1.67E+04	7.41E+03
Si (as SiO_3^{2-})	8.02E-02	1.44E+03	639
F^{-}	7.48E-02	910	404
Cl^{-}	0.212	4.81E+03	2.14E+03
$C_6H_5O_7^{3-}$	3.22E-02	3.90E+03	1.73E+03
$EDTA^{4-}$	2.72E-02	5.02E+03	2.23E+03
$HEDTA^{3-}$	4.92E-02	8.63E+03	3.83E+03
$glycolate^{-}$	0.117	5.60E+03	2.48E+03
$acetate^{-}$	1.66E-02	626	278
$oxalate^{2-}$	2.62E-05	1.47	0.654
DBP	2.45E-02	4.18E+03	1.85E+03
butanol	2.45E-02	1.16E+03	516
NH_3	4.94E-02	538	239
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	80.5 (µCi/L)		0.381 (kg)
U	1.18E-02 (M)	1.80E+03 (µg/g)	797 (kg)
Cs	0.288 (Ci/L)	184 (µCi/g)	8.18E+04 (Ci)
Sr	0.118 (Ci/L)	75.8 (µCi/g)	3.36E+04 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-A-106			
Total Inventory Estimate*			
Physical Properties			
Total Waste	7.39E+05 kg	(125 kgal)	
Heat Load	13.2 kW	(4.49E+04 BTU/hr)	
Bulk Density†	1.56 (g/cc)		
Water wt%†	44.4		
TOC wt% C (wet)†	1.48		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	9.62	1.42E+05	1.05E+05
Al^{3+}	1.02	1.76E+04	1.30E+04
Fe^{3+} (total Fe)	0.571	2.04E+04	1.51E+04
Cr^{3+}	3.55E-02	1.18E+03	873
Bi^{3+}	7.67E-04	103	75.8
La^{3+}	1.83E-05	1.63	1.21
Hg^{2+}	5.78E-06	0.742	0.548
Zr (as $ZrO(OH)_2$)	4.64E-04	27.1	20.0
Pb^{2+}	7.25E-04	96.2	71.1
Ni^{2+}	2.69E-02	1.01E+03	747
Sr^{2+}	6.12E-06	0.343	0.254
Mn^{4+}	3.04E-03	107	79.1
Ca^{2+}	6.92E-02	1.78E+03	1.31E+03
K^{+}	3.86E-02	967	715
OH^{-}	7.59	8.27E+04	6.11E+04
$NO3^{-}$	2.94	1.17E+05	8.61E+04
$NO2^{-}$	1.72	5.06E+04	3.74E+04
$CO3^{2-}$	0.413	1.59E+04	1.17E+04
$PO4^{3-}$	5.90E-02	3.59E+03	2.65E+03
$SO4^{2-}$	0.195	1.20E+04	8.85E+03
Si (as SiO_3^{2-})	0.847	1.52E+04	1.13E+04
F^{-}	4.50E-02	547	404
Cl^{-}	0.142	3.23E+03	2.38E+03
$C_6H_5O_7^{3-}$	1.93E-02	2.34E+03	1.73E+03
$EDTA^{4-}$	4.60E-02	8.49E+03	6.27E+03
$HEDTA^{3-}$	8.90E-02	1.56E+04	1.15E+04
$glycolate^{-}$	0.129	6.21E+03	4.59E+03
$acetate^{-}$	9.95E-03	376	278
$oxalate^{2-}$	1.57E-05	0.885	0.654
DBP	1.47E-02	2.51E+03	1.85E+03
butanol	1.47E-02	699	517
NH_3	8.87E-02	966	713
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.62 (µCi/g)	19.9 (kg)
U	0.240 (M)	3.66E+04 (µg/g)	2.71E+04 (kg)
Cs	0.221 (Ci/L)	142 (µCi/g)	1.05E+05 (Ci)
Sr	3.97 (Ci/L)	2.54E+03 (µCi/g)	1.88E+06 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

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Single-Shell Tank 241-AX-101			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	7.34E+04 kg	(13.0 kgal)	
Heat Load	4.22 kW	(1.44E+04 BTU/hr)	
Bulk Density	1.49 (g/cc)		
Void Fraction	0.818		
Water wt%	56.5		
TOC wt% C (wet)	0.808		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.59	7.07E+04	5.19E+03
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	2.62	9.82E+04	7.21E+03
Cr^{3+}	5.01E-03	175	12.8
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	4.48E-02	1.76E+03	129
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.219	5.87E+03	431
K^{+}	6.20E-03	163	11.9
OH^{-}	10.3	1.17E+05	8.61E+03
$NO3^{-}$	9.05E-07	3.76E-02	2.76E-03
$NO2^{-}$	0.580	1.79E+04	1.31E+03
$CO3^{2-}$	0.265	1.07E+04	784
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0.119	7.69E+03	565
Si (as SiO_3^{2-})	1.59	2.99E+04	2.20E+03
F^{-}	0	0	0
Cl^{-}	2.85E-02	677	49.7
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	2.95E-02	5.71E+03	419
$HEDTA^{3-}$	5.91E-02	1.09E+04	797
$glycolate^{-}$	5.91E-02	2.97E+03	218
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	5.98E-06	1.07	7.83E-02
butanol	5.98E-06	0.297	2.18E-02
NH_3	0.213	2.42E+03	178
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.35 (µCi/g)	1.65 (kg)
U	0.366 (M)	5.84E+04 (µg/g)	4.29E+03 (kg)
Cs	0.441 (Ci/L)	296 (µCi/g)	2.17E+04 (Ci)
Sr	12.4 (Ci/L)	8.33E+03 (µCi/g)	6.12E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

Rev. 3

Single-Shell Tank 241-AX-101			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	4.15E+06 kg	(735 kgal)	
Heat Load	5.01 kW	(1.71E+04 BTU/hr)	
Bulk Density*	1.49 (g/cc)		
Water wt%†	42.3		
TOC wt% C (wet)	1.35		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	10.4	1.60E+05	6.65E+05
Al^{3+}	1.49	2.69E+04	1.11E+05
Fe^{3+} (total Fe)	5.41E-03	203	841
Cr^{3+}	4.33E-02	1.51E+03	6.26E+03
Bi^{3+}	1.08E-03	152	630
La^{3+}	1.96E-05	1.83	7.59
Hg^{2+}	8.78E-06	1.18	4.90
Zr (as $ZrO(OH)_2$)	5.71E-04	35.0	145
Pb^{2+}	1.20E-03	167	694
Ni^{2+}	4.45E-03	175	726
Sr^{2+}	6.55E-06	0.385	1.60
Mn^{4+}	4.13E-03	152	631
Ca^{2+}	2.45E-02	660	2.74E+03
K^{+}	5.15E-02	1.35E+03	5.60E+03
OH^{-}	6.47	7.38E+04	3.06E+05
$NO3^{-}$	3.95	1.64E+05	6.81E+05
$NO2^{-}$	2.16	6.65E+04	2.76E+05
$CO3^{2-}$	0.461	1.86E+04	7.70E+04
$PO4^{3-}$	8.31E-02	5.29E+03	2.19E+04
$SO4^{2-}$	0.254	1.63E+04	6.77E+04
Si (as SiO_3^{2-})	6.70E-02	1.26E+03	5.23E+03
F^{-}	6.58E-02	839	3.48E+03
Cl^{-}	0.185	4.40E+03	1.83E+04
$C_6H_5O_7^{3-}$	3.01E-02	3.82E+03	1.58E+04
$EDTA^{4-}$	3.30E-02	6.38E+03	2.65E+04
$HEDTA^{3-}$	5.91E-02	1.09E+04	4.51E+04
$glycolate^{-}$	0.119	5.99E+03	2.48E+04
$acetate^{-}$	2.19E-02	867	3.60E+03
$oxalate^{2-}$	1.68E-05	0.992	4.12
DBP	2.43E-02	4.33E+03	1.80E+04
butanol	2.43E-02	1.21E+03	5.00E+03
NH_3	3.53E-02	402	1.67E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	65.9 (µCi/L)		3.06 (kg)
U	9.34E-03 (M)	1.49E+03 (µg/g)	6.19E+03 (kg)
Cs	0.245 (Ci/L)	164 (µCi/g)	6.81E+05 (Ci)
Sr	9.74E-02 (Ci/L)	65.3 (µCi/g)	2.71E+05 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-AX-101			
Total Inventory Estimate*			
Physical Properties			
Total Waste	4.22E+06 kg	(748 kgal)	
Heat Load	9.24 kW	(3.15E+04 BTU/hr)	
Bulk Density†	1.49 (g/cc)		
Water wt%†	42.6		
TOC wt% C (wet)†	1.34		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	10.3	1.59E+05	6.70E+05
Al^{3+}	1.46	2.64E+04	1.11E+05
Fe^{3+} (total Fe)	5.09E-02	1.91E+03	8.05E+03
Cr^{3+}	4.26E-02	1.49E+03	6.27E+03
Bi^{3+}	1.06E-03	149	630
La^{3+}	1.93E-05	1.80	7.59
Hg^{2+}	8.63E-06	1.16	4.90
Zr (as $ZrO(OH)_2$)	5.61E-04	34.3	145
Pb^{2+}	1.18E-03	164	694
Ni^{2+}	5.15E-03	203	856
Sr^{2+}	6.44E-06	0.378	1.60
Mn^{4+}	4.06E-03	150	631
Ca^{2+}	2.79E-02	750	3.17E+03
K^{+}	5.07E-02	1.33E+03	5.61E+03
OH^{-}	6.54	7.45E+04	3.15E+05
$NO3^{-}$	3.88	1.61E+05	6.81E+05
$NO2^{-}$	2.13	6.57E+04	2.77E+05
$CO3^{2-}$	0.458	1.84E+04	7.78E+04
$PO4^{3-}$	8.16E-02	5.20E+03	2.19E+04
$SO4^{2-}$	0.251	1.62E+04	6.83E+04
Si (as SiO_3^{2-})	9.34E-02	1.76E+03	7.43E+03
F^{-}	6.47E-02	824	3.48E+03
Cl^{-}	0.183	4.34E+03	1.83E+04
$C_6H_5O_7^{3-}$	2.96E-02	3.75E+03	1.58E+04
$EDTA^{4-}$	3.29E-02	6.37E+03	2.69E+04
$HEDTA^{3-}$	5.91E-02	1.09E+04	4.59E+04
$glycolate^{-}$	0.118	5.93E+03	2.51E+04
$acetate^{-}$	2.15E-02	852	3.60E+03
$oxalate^{2-}$	1.65E-05	0.975	4.12
DBP	2.38E-02	4.25E+03	1.80E+04
butanol	2.38E-02	1.18E+03	5.00E+03
NH_3	3.83E-02	437	1.85E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		6.69E-02 (µCi/g)	4.70 (kg)
U	1.55E-02 (M)	2.48E+03 (µg/g)	1.05E+04 (kg)
Cs	0.248 (Ci/L)	166 (µCi/g)	7.03E+05 (Ci)
Sr	0.312 (Ci/L)	209 (µCi/g)	8.83E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

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Single-Shell Tank 241-AX-102			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	3.20E+04 kg	(5.98 kgal)	
Heat Load	3.90 kW	(1.33E+04 BTU/hr)	
Bulk Density	1.41 (g/cc)		
Void Fraction	0.849		
Water wt%	63.7		
TOC wt% C (wet)	3.59E-02		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	2.94	4.78E+04	1.53E+03
Al^{3+}	1.02	1.95E+04	625
Fe^{3+} (total Fe)	1.32	5.22E+04	1.67E+03
Cr^{3+}	2.56E-03	94.3	3.02
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	9.37E-06	1.37	4.39E-02
Ni^{2+}	5.19E-02	2.16E+03	69.1
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.257	7.30E+03	234
K^{+}	4.07E-03	113	3.61
OH^{-}	9.62	1.16E+05	3.70E+03
$NO3^{-}$	0.329	1.44E+04	461
$NO2^{-}$	0.274	8.93E+03	286
$CO3^{2-}$	0.257	1.09E+04	350
$PO4^{3-}$	1.39E-02	931	29.8
$SO4^{2-}$	1.94E-02	1.32E+03	42.1
Si (as SiO_3^{2-})	1.02	2.03E+04	651
F^{-}	0	0	0
Cl^{-}	1.87E-02	469	15.0
$C_6H_5O_7^{3-}$	7.05E-03	943	30.2
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0.119	1.43E+03	45.8
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		12.7 (µCi/g)	6.78 (kg)
U	0.384 (M)	6.46E+04 (µg/g)	2.07E+03 (kg)
Cs	0.236 (Ci/L)	167 (µCi/g)	5.35E+03 (Ci)
Sr	25.4 (Ci/L)	1.79E+04 (µCi/g)	5.75E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-AX-102			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	1.91E+05 kg	(33.0 kgal)	
Heat Load	0.258 kW	(880 BTU/hr)	
Bulk Density*	1.53 (g/cc)		
Water wt%†	39.3		
TOC wt% C (wet)	1.18		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	11.2	1.69E+05	3.22E+04
Al^{3+}	1.58	2.79E+04	5.32E+03
Fe^{3+} (total Fe)	6.45E-03	236	45.0
Cr^{3+}	5.04E-02	1.72E+03	328
Bi^{3+}	1.19E-03	162	30.9
La^{3+}	2.66E-05	2.42	0.461
Hg^{2+}	9.05E-06	1.19	0.227
Zr (as $ZrO(OH)_2$)	6.96E-04	41.5	7.93
Pb^{2+}	1.16E-03	157	30.0
Ni^{2+}	5.41E-03	208	39.7
Sr^{2+}	8.86E-06	0.508	9.70E-02
Mn^{4+}	4.22E-03	152	29.0
Ca^{2+}	2.92E-02	767	146
K^{+}	5.47E-02	1.40E+03	267
OH^{-}	6.88	7.66E+04	1.46E+04
$NO3^{-}$	4.50	1.83E+05	3.49E+04
$NO2^{-}$	2.32	6.99E+04	1.34E+04
$CO3^{2-}$	0.469	1.84E+04	3.52E+03
$PO4^{3-}$	8.72E-02	5.42E+03	1.04E+03
$SO4^{2-}$	0.259	1.63E+04	3.11E+03
Si (as SiO_3^{2-})	7.54E-02	1.39E+03	265
F^{-}	7.02E-02	873	167
Cl^{-}	0.199	4.62E+03	882
$C_6H_5O_7^{3-}$	3.11E-02	3.85E+03	734
$EDTA^{4-}$	2.74E-02	5.17E+03	987
$HEDTA^{3-}$	4.93E-02	8.85E+03	1.69E+03
$glycolate^{-}$	0.112	5.51E+03	1.05E+03
$acetate^{-}$	1.76E-02	679	130
$oxalate^{2-}$	2.27E-05	1.31	0.250
DBP	2.37E-02	4.14E+03	790
butanol	2.37E-02	1.15E+03	220
NH_3	4.43E-02	493	94.2
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	75.2 (µCi/L)		0.157 (kg)
U	1.09E-02 (M)	1.70E+03 (µg/g)	325 (kg)
Cs	0.281 (Ci/L)	184 (µCi/g)	3.52E+04 (Ci)
Sr	0.110 (Ci/L)	72.2 (µCi/g)	1.38E+04 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.
†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-AX-102			
Total Inventory Estimate*			
Physical Properties			
Total Waste	2.23E+05 kg	(39.0 kgal)	
Heat Load	4.15 kW	(1.42E+04 BTU/hr)	
Bulk Density†	1.51 (g/cc)		
Water wt%†	42.8		
TOC wt% C (wet)†	1.01		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	9.94	1.51E+05	3.37E+04
Al^{3+}	1.49	2.67E+04	5.95E+03
Fe^{3+} (total Fe)	0.208	7.69E+03	1.72E+03
Cr^{3+}	4.31E-02	1.48E+03	331
Bi^{3+}	1.00E-03	139	30.9
La^{3+}	2.25E-05	2.07	0.461
Hg^{2+}	7.66E-06	1.02	0.227
Zr (as $ZrO(OH)_2$)	5.89E-04	35.6	7.93
Pb^{2+}	9.84E-04	135	30.1
Ni^{2+}	1.26E-02	488	109
Sr^{2+}	7.50E-06	0.435	9.70E-02
Mn^{4+}	3.57E-03	130	29.0
Ca^{2+}	6.42E-02	1.71E+03	380
K^{+}	4.70E-02	1.22E+03	271
OH^{-}	7.30	8.22E+04	1.83E+04
$NO3^{-}$	3.86	1.59E+05	3.53E+04
$NO2^{-}$	2.01	6.12E+04	1.36E+04
$CO3^{2-}$	0.437	1.74E+04	3.87E+03
$PO4^{3-}$	7.60E-02	4.78E+03	1.07E+03
$SO4^{2-}$	0.222	1.41E+04	3.15E+03
Si (as SiO_3^{2-})	0.221	4.11E+03	916
F^{-}	5.94E-02	747	167
Cl^{-}	0.171	4.02E+03	897
$C_6H_5O_7^{3-}$	2.74E-02	3.43E+03	765
$EDTA^{4-}$	2.32E-02	4.43E+03	987
$HEDTA^{3-}$	4.18E-02	7.58E+03	1.69E+03
$glycolate^{-}$	9.50E-02	4.72E+03	1.05E+03
$acetate^{-}$	1.49E-02	581	130
$oxalate^{2-}$	1.92E-05	1.12	0.250
DBP	2.01E-02	3.54E+03	790
butanol	2.01E-02	987	220
NH_3	5.58E-02	628	140
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.87 (µCi/g)	6.94 (kg)
U	6.81E-02 (M)	1.07E+04 (µg/g)	2.39E+03 (kg)
Cs	0.274 (Ci/L)	182 (µCi/g)	4.05E+04 (Ci)
Sr	3.99 (Ci/L)	2.64E+03 (µCi/g)	5.88E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).
†Volume average for density, mass average Water wt% and TOC wt% C.

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Single-Shell Tank 241-AX-103			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	7.50E+04 kg	(14.0 kgal)	
Heat Load	5.02 kW	(1.71E+04 BTU/hr)	
Bulk Density	1.42 (g/cc)		
Void Fraction	0.808		
Water wt%	59.2		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.03	6.55E+04	4.91E+03
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	2.96	1.17E+05	8.76E+03
Cr^{3+}	6.51E-03	239	17.9
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	5.82E-02	2.41E+03	181
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.243	6.88E+03	516
K^{+}	4.59E-03	127	9.50
OH^{-}	10.2	1.22E+05	9.18E+03
$NO3^{-}$	1.52E-14	6.67E-10	5.00E-11
$NO2^{-}$	0.587	1.91E+04	1.43E+03
$CO3^{2-}$	0.243	1.03E+04	773
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0.129	8.77E+03	657
Si (as SiO_3^{2-})	1.52	3.02E+04	2.27E+03
F^{-}	0	0	0
Cl^{-}	2.11E-02	528	39.6
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0.242	2.91E+03	218
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.04 (µCi/g)	1.29 (kg)
U	0.175 (M)	2.95E+04 (µg/g)	2.21E+03 (kg)
Cs	0.561 (Ci/L)	396 (µCi/g)	2.97E+04 (Ci)
Sr	13.7 (Ci/L)	9.67E+03 (µCi/g)	7.25E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-AX-103			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	5.38E+05 kg	(98.0 kgal)	
Heat Load	0.600 kW	(2.05E+03 BTU/hr)	
Bulk Density*	1.45 (g/cc)		
Water wt%†	45.6		
TOC wt% C (wet)	1.20		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	9.55	1.51E+05	8.15E+04
Al^{3+}	1.37	2.54E+04	1.37E+04
Fe^{3+} (total Fe)	5.07E-03	195	105
Cr^{3+}	3.95E-02	1.41E+03	761
Bi^{3+}	9.84E-04	142	76.3
La^{3+}	1.90E-05	1.81	0.977
Hg^{2+}	7.85E-06	1.09	0.584
Zr (as $ZrO(OH)_2$)	5.33E-04	33.5	18.1
Pb^{2+}	1.06E-03	151	81.5
Ni^{2+}	4.20E-03	170	91.5
Sr^{2+}	6.32E-06	0.382	0.205
Mn^{4+}	3.67E-03	139	74.9
Ca^{2+}	2.30E-02	634	342
K^{+}	4.71E-02	1.27E+03	683
OH^{-}	5.95	6.97E+04	3.76E+04
$NO3^{-}$	3.71	1.58E+05	8.53E+04
$NO2^{-}$	1.94	6.15E+04	3.31E+04
$CO3^{2-}$	0.427	1.76E+04	9.50E+03
$PO4^{3-}$	7.47E-02	4.89E+03	2.63E+03
$SO4^{2-}$	0.228	1.51E+04	8.11E+03
Si (as SiO_3^{2-})	6.23E-02	1.21E+03	649
F^{-}	5.94E-02	778	419
Cl^{-}	0.170	4.16E+03	2.24E+03
$C_6H_5O_7^{3-}$	2.79E-02	3.63E+03	1.95E+03
$EDTA^{4-}$	2.71E-02	5.37E+03	2.89E+03
$HEDTA^{3-}$	4.83E-02	9.12E+03	4.91E+03
$glycolate^{-}$	0.115	5.97E+03	3.21E+03
$acetate^{-}$	1.87E-02	762	410
$oxalate^{2-}$	1.62E-05	0.984	0.530
DBP	2.15E-02	3.95E+03	2.13E+03
butanol	2.15E-02	1.10E+03	592
NH_3	3.29E-02	385	207
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	61.4 (µCi/L)		0.379 (kg)
U	8.75E-03 (M)	1.44E+03 (µg/g)	773 (kg)
Cs	0.216 (Ci/L)	149 (µCi/g)	8.03E+04 (Ci)
Sr	8.97E-02 (Ci/L)	61.8 (µCi/g)	3.33E+04 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.
†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-AX-103			
Total Inventory Estimate*			
Physical Properties			
Total Waste	6.13E+05 kg	(112 kgal)	
Heat Load	5.62 kW	(1.92E+04 BTU/hr)	
Bulk Density†	1.45 (g/cc)		
Water wt%†	47.2		
TOC wt% C (wet)†	1.05		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	8.86	1.41E+05	8.64E+04
Al^{3+}	1.20	2.23E+04	1.37E+04
Fe^{3+} (total Fe)	0.374	1.44E+04	8.86E+03
Cr^{3+}	3.53E-02	1.27E+03	779
Bi^{3+}	8.61E-04	124	76.3
La^{3+}	1.66E-05	1.59	0.977
Hg^{2+}	6.87E-06	0.952	0.584
Zr (as $ZrO(OH)_2$)	4.67E-04	29.4	18.1
Pb^{2+}	9.28E-04	133	81.5
Ni^{2+}	1.09E-02	444	272
Sr^{2+}	5.53E-06	0.335	0.205
Mn^{4+}	3.22E-03	122	74.9
Ca^{2+}	5.05E-02	1.40E+03	858
K^{+}	4.18E-02	1.13E+03	692
OH^{-}	6.48	7.62E+04	4.67E+04
$NO3^{-}$	3.24	1.39E+05	8.53E+04
$NO2^{-}$	1.77	5.63E+04	3.46E+04
$CO3^{2-}$	0.404	1.67E+04	1.03E+04
$PO4^{3-}$	6.53E-02	4.29E+03	2.63E+03
$SO4^{2-}$	0.215	1.43E+04	8.76E+03
Si (as SiO_3^{2-})	0.245	4.76E+03	2.92E+03
F^{-}	5.20E-02	683	419
Cl^{-}	0.152	3.71E+03	2.28E+03
$C_6H_5O_7^{3-}$	2.44E-02	3.19E+03	1.95E+03
$EDTA^{4-}$	2.37E-02	4.72E+03	2.89E+03
$HEDTA^{3-}$	4.22E-02	8.00E+03	4.91E+03
$glycolate^{-}$	0.101	5.24E+03	3.21E+03
$acetate^{-}$	1.64E-02	669	410
$oxalate^{2-}$	1.42E-05	0.864	0.530
DBP	1.88E-02	3.47E+03	2.13E+03
butanol	1.88E-02	966	592
NH_3	5.90E-02	693	425
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0.164 (µCi/g)	1.67 (kg)
U	2.96E-02 (M)	4.86E+03 (µg/g)	2.98E+03 (kg)
Cs	0.259 (Ci/L)	179 (µCi/g)	1.10E+05 (Ci)
Sr	1.79 (Ci/L)	1.24E+03 (µCi/g)	7.58E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).
†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Single-Shell Tank 241-AX-104			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	3.75E+04 kg	(6.99 kgal)	
Heat Load	2.51 kW	(8.57E+03 BTU/hr)	
Bulk Density	1.42 (g/cc)		
Void Fraction	0.808		
Water wt%	59.2		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.03	6.55E+04	2.45E+03
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	2.96	1.17E+05	4.38E+03
Cr^{3+}	6.51E-03	239	8.96
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	5.82E-02	2.41E+03	90.4
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.243	6.88E+03	258
K^{+}	4.59E-03	127	4.75
OH^{-}	10.2	1.22E+05	4.58E+03
$NO3^{-}$	1.52E-14	6.67E-10	2.50E-11
$NO2^{-}$	0.587	1.91E+04	715
$CO3^{2-}$	0.243	1.03E+04	386
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0.129	8.77E+03	328
Si (as SiO_3^{2-})	1.52	3.02E+04	1.13E+03
F^{-}	0	0	0
Cl^{-}	2.11E-02	528	19.8
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0.242	2.91E+03	109
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.04 (µCi/g)	0.647 (kg)
U	0.175 (M)	2.95E+04 (µg/g)	1.10E+03 (kg)
Cs	0.561 (Ci/L)	396 (µCi/g)	1.48E+04 (Ci)
Sr	13.7 (Ci/L)	9.67E+03 (µCi/g)	3.62E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-AX-104			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	0 (g/cc)		
Water wt%†	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-AX-104			
Total Inventory Estimate*			
Physical Properties			
Total Waste	3.75E+04 kg	(6.99 kgal)	
Heat Load	2.51 kW	(8.57E+03 BTU/hr)	
Bulk Density†	1.42 (g/cc)		
Water wt%†	59.2		
TOC wt% C (wet)†	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.03	6.55E+04	2.45E+03
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	2.96	1.17E+05	4.38E+03
Cr^{3+}	6.51E-03	239	8.96
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	5.82E-02	2.41E+03	90.4
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.243	6.88E+03	258
K^{+}	4.59E-03	127	4.75
OH^{-}	10.2	1.22E+05	4.58E+03
$NO3^{-}$	1.52E-14	6.67E-10	2.50E-11
$NO2^{-}$	0.587	1.91E+04	715
$CO3^{2-}$	0.243	1.03E+04	386
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0.129	8.77E+03	328
Si (as SiO_3^{2-})	1.52	3.02E+04	1.13E+03
F^{-}	0	0	0
Cl^{-}	2.11E-02	528	19.8
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0.242	2.91E+03	109
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.04 (µCi/g)	0.647 (kg)
U	0.175 (M)	2.95E+04 (µg/g)	1.10E+03 (kg)
Cs	0.561 (Ci/L)	396 (µCi/g)	1.48E+04 (Ci)
Sr	13.7 (Ci/L)	9.67E+03 (µCi/g)	3.62E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

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Single-Shell Tank 241-B-101			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	6.89E+05 kg	(113 kgal)	
Heat Load	6.37 kW	(2.18E+04 BTU/hr)	
Bulk Density	1.61 (g/cc)		
Void Fraction	0.713		
Water wt%	50.9		
TOC wt% C (wet)	3.91E-02		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	8.35	1.19E+05	8.21E+04
Al^{3+}	1.30	2.17E+04	1.49E+04
Fe^{3+} (total Fe)	0.592	2.05E+04	1.41E+04
Cr^{3+}	4.56E-03	147	101
Bi^{3+}	3.46E-02	4.49E+03	3.10E+03
La^{3+}	0	0	0
Hg^{2+}	3.84E-05	4.78	3.29
Zr (as $ZrO(OH)_2$)	2.95E-03	167	115
Pb^{2+}	3.74E-08	4.81E-03	3.32E-03
Ni^{2+}	0.222	8.08E+03	5.57E+03
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.116	2.89E+03	1.99E+03
K^{+}	1.33E-02	322	222
OH^{-}	7.41	7.82E+04	5.39E+04
$NO3^{-}$	2.84	1.09E+05	7.52E+04
$NO2^{-}$	0.411	1.17E+04	8.09E+03
$CO3^{2-}$	0.287	1.07E+04	7.37E+03
$PO4^{3-}$	1.07	6.29E+04	4.33E+04
$SO4^{2-}$	0.117	6.98E+03	4.81E+03
Si (as SiO_3^{2-})	0.500	8.72E+03	6.01E+03
F^{-}	0.119	1.40E+03	968
Cl^{-}	7.32E-02	1.61E+03	1.11E+03
$C_6H_5O_7^{3-}$	1.90E-03	224	154
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	2.04E-02	950	655
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	1.61E-05	2.67	1.84
butanol	1.61E-05	0.742	0.512
NH_3	2.26E-02	239	164
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.14 (µCi/g)	13.1 (kg)
U	0.177 (M)	2.61E+04 (µg/g)	1.80E+04 (kg)
Cs	2.84E-02 (Ci/L)	17.6 (µCi/g)	1.21E+04 (Ci)
Sr	2.19 (Ci/L)	1.36E+03 (µCi/g)	9.37E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-B-101			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	0 (g/cc)		
Water wt%†	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-B-101			
Total Inventory Estimate*			
Physical Properties			
Total Waste	6.89E+05 kg	(113 kgal)	
Heat Load	6.37 kW	(2.18E+04 BTU/hr)	
Bulk Density†	1.61 (g/cc)		
Water wt%†	50.9		
TOC wt% C (wet)†	3.91E-02		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	8.35	1.19E+05	8.21E+04
Al^{3+}	1.30	2.17E+04	1.49E+04
Fe^{3+} (total Fe)	0.592	2.05E+04	1.41E+04
Cr^{3+}	4.56E-03	147	101
Bi^{3+}	3.46E-02	4.49E+03	3.10E+03
La^{3+}	0	0	0
Hg^{2+}	3.84E-05	4.78	3.29
Zr (as $ZrO(OH)_2$)	2.95E-03	167	115
Pb^{2+}	3.74E-08	4.81E-03	3.32E-03
Ni^{2+}	0.222	8.08E+03	5.57E+03
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.116	2.89E+03	1.99E+03
K^{+}	1.33E-02	322	222
OH^{-}	7.41	7.82E+04	5.39E+04
$NO3^{-}$	2.84	1.09E+05	7.52E+04
$NO2^{-}$	0.411	1.17E+04	8.09E+03
$CO3^{2-}$	0.287	1.07E+04	7.37E+03
$PO4^{3-}$	1.07	6.29E+04	4.33E+04
$SO4^{2-}$	0.117	6.98E+03	4.81E+03
Si (as SiO_3^{2-})	0.500	8.72E+03	6.01E+03
F^{-}	0.119	1.40E+03	968
Cl^{-}	7.32E-02	1.61E+03	1.11E+03
$C_6H_5O_7^{3-}$	1.90E-03	224	154
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	2.04E-02	950	655
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	1.61E-05	2.67	1.84
butanol	1.61E-05	0.742	0.512
NH_3	2.26E-02	239	164
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.14 (µCi/g)	13.1 (kg)
U	0.177 (M)	2.61E+04 (µg/g)	1.80E+04 (kg)
Cs	2.84E-02 (Ci/L)	17.6 (µCi/g)	1.21E+04 (Ci)
Sr	2.19 (Ci/L)	1.36E+03 (µCi/g)	9.37E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

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Single-Shell Tank 241-B-102			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	1.64E+05 kg	(28.0 kgal)	
Heat Load	2.05E-02 kW	(70.0 BTU/hr)	
Bulk Density	1.55 (g/cc)		
Void Fraction	0.708		
Water wt%	54.1		
TOC wt% C (wet)	1.71E-04		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	8.44	1.25E+05	2.06E+04
Al^{3+}	0.400	6.95E+03	1.14E+03
Fe^{3+} (total Fe)	0.205	7.37E+03	1.21E+03
Cr^{3+}	5.28E-03	177	29.1
Bi^{3+}	3.95E-02	5.31E+03	874
La^{3+}	0	0	0
Hg^{2+}	2.55E-04	32.9	5.41
Zr (as $ZrO(OH)_2$)	3.36E-03	197	32.5
Pb^{2+}	1.16E-02	1.55E+03	255
Ni^{2+}	7.04E-03	266	43.8
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	9.81E-02	2.53E+03	417
K^{+}	1.35E-02	340	56.0
OH^{-}	3.41	3.74E+04	6.15E+03
$NO3^{-}$	3.26	1.30E+05	2.14E+04
$NO2^{-}$	0.265	7.86E+03	1.29E+03
$CO3^{2-}$	0.402	1.55E+04	2.55E+03
$PO4^{3-}$	1.24	7.62E+04	1.25E+04
$SO4^{2-}$	0.134	8.31E+03	1.37E+03
Si (as SiO_3^{2-})	2.72E-02	493	81.1
F^{-}	0.136	1.66E+03	273
Cl^{-}	7.61E-02	1.74E+03	286
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	1.84E-05	3.15	0.519
butanol	1.84E-05	0.878	0.144
NH_3	7.77E-04	8.51	1.40
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		5.09E-02 (µCi/g)	0.139 (kg)
U	0.226 (M)	3.46E+04 (µg/g)	5.69E+03 (kg)
Cs	1.88E-02 (Ci/L)	12.1 (µCi/g)	2.00E+03 (Ci)
Sr	1.56E-02 (Ci/L)	10.1 (µCi/g)	1.65E+03 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-B-102			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	1.62E+04 kg	(4.00 kgal)	
Heat Load	2.84E-03 kW	(9.70 BTU/hr)	
Bulk Density*	1.07 (g/cc)		
Water wt%†	88.3		
TOC wt% C (wet)	8.55E-02		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	1.53	3.27E+04	531
Al^{3+}	0.215	5.40E+03	87.7
Fe^{3+} (total Fe)	9.57E-04	49.9	0.810
Cr^{3+}	4.74E-03	230	3.74
Bi^{3+}	4.81E-04	93.7	1.52
La^{3+}	5.80E-07	7.52E-02	1.22E-03
Hg^{2+}	2.99E-06	0.560	9.10E-03
Zr (as $ZrO(OH)_2$)	3.25E-04	27.6	0.448
Pb^{2+}	3.19E-04	61.6	1.000
Ni^{2+}	8.20E-04	44.9	0.729
Sr^{2+}	1.93E-07	1.58E-02	2.57E-04
Mn^{4+}	4.13E-04	21.2	0.344
Ca^{2+}	4.34E-03	162	2.63
K^{+}	6.53E-03	238	3.87
OH^{-}	0.916	1.45E+04	236
$NO3^{-}$	0.691	4.00E+04	649
$NO2^{-}$	0.247	1.06E+04	172
$CO3^{2-}$	6.25E-02	3.50E+03	56.8
$PO4^{3-}$	2.12E-02	1.88E+03	30.5
$SO4^{2-}$	4.26E-02	3.82E+03	62.0
Si (as SiO_3^{2-})	9.07E-03	238	3.86
F^{-}	2.65E-02	470	7.63
Cl^{-}	2.67E-02	884	14.4
$C_6H_5O_7^{3-}$	3.22E-03	568	9.22
$EDTA^{4-}$	5.96E-04	160	2.60
$HEDTA^{3-}$	9.49E-05	24.3	0.394
$glycolate^{-}$	3.35E-03	234	3.80
$acetate^{-}$	3.50E-03	193	3.13
$oxalate^{2-}$	4.97E-07	4.08E-02	6.62E-04
DBP	3.04E-03	754	12.2
butanol	3.04E-03	210	3.41
NH_3	2.97E-03	47.1	0.765
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	10.7 (µCi/L)		2.70E-03 (kg)
U	1.71E-03 (M)	379 (µg/g)	6.16 (kg)
Cs	2.50E-02 (Ci/L)	23.3 (µCi/g)	378 (Ci)
Sr	1.05E-02 (Ci/L)	9.76 (µCi/g)	158 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.
†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-B-102			
Total Inventory Estimate*			
Physical Properties			
Total Waste	1.81E+05 kg	(32.0 kgal)	
Heat Load	2.33E-02 kW	(79.7 BTU/hr)	
Bulk Density†	1.49 (g/cc)		
Water wt%†	58.4		
TOC wt% C (wet)†	1.08E-02		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	7.58	1.17E+05	2.11E+04
Al^{3+}	0.377	6.81E+03	1.23E+03
Fe^{3+} (total Fe)	0.179	6.71E+03	1.21E+03
Cr^{3+}	5.22E-03	182	32.9
Bi^{3+}	3.46E-02	4.85E+03	876
La^{3+}	7.26E-08	6.76E-03	1.22E-03
Hg^{2+}	2.23E-04	30.0	5.42
Zr (as $ZrO(OH)_2$)	2.98E-03	182	32.9
Pb^{2+}	1.02E-02	1.42E+03	256
Ni^{2+}	6.26E-03	246	44.5
Sr^{2+}	2.42E-08	1.42E-03	2.57E-04
Mn^{4+}	5.16E-05	1.90	0.344
Ca^{2+}	8.64E-02	2.32E+03	419
K^{+}	1.26E-02	331	59.8
OH^{-}	3.10	3.53E+04	6.38E+03
$NO3^{-}$	2.94	1.22E+05	2.20E+04
$NO2^{-}$	0.263	8.11E+03	1.47E+03
$CO3^{2-}$	0.359	1.44E+04	2.61E+03
$PO4^{3-}$	1.09	6.95E+04	1.26E+04
$SO4^{2-}$	0.123	7.91E+03	1.43E+03
Si (as SiO_3^{2-})	2.50E-02	470	84.9
F^{-}	0.122	1.55E+03	281
Cl^{-}	6.99E-02	1.66E+03	300
$C_6H_5O_7^{3-}$	4.02E-04	51.0	9.22
$EDTA^{4-}$	7.45E-05	14.4	2.60
$HEDTA^{3-}$	1.19E-05	2.18	0.394
$glycolate^{-}$	4.18E-04	21.0	3.80
$acetate^{-}$	4.38E-04	17.3	3.13
$oxalate^{2-}$	6.21E-08	3.66E-03	6.62E-04
DBP	3.96E-04	70.6	12.8
butanol	3.96E-04	19.7	3.55
NH_3	1.05E-03	12.0	2.16
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		4.72E-02 (µCi/g)	0.142 (kg)
U	0.198 (M)	3.15E+04 (µg/g)	5.70E+03 (kg)
Cs	1.96E-02 (Ci/L)	13.1 (µCi/g)	2.38E+03 (Ci)
Sr	1.50E-02 (Ci/L)	10.0 (µCi/g)	1.81E+03 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).
†Volume average for density, mass average Water wt% and TOC wt% C.

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Single-Shell Tank 241-B-103			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	3.44E+05 kg	(59.0 kgal)	
Heat Load	4.68E-02 kW	(160 BTU/hr)	
Bulk Density	1.54 (g/cc)		
Void Fraction	0.730		
Water wt%	55.0		
TOC wt% C (wet)	1.90E-04		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	8.96	1.34E+05	4.60E+04
Al^{3+}	0.211	3.70E+03	1.27E+03
Fe^{3+} (total Fe)	0.201	7.28E+03	2.50E+03
Cr^{3+}	5.68E-03	192	65.9
Bi^{3+}	4.37E-02	5.93E+03	2.04E+03
La^{3+}	0	0	0
Hg^{2+}	4.84E-05	6.31	2.17
Zr (as $ZrO(OH)_2$)	3.72E-03	220	75.8
Pb^{2+}	0	0	0
Ni^{2+}	7.70E-03	294	101
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	9.03E-02	2.35E+03	808
K^{+}	1.49E-02	378	130
OH^{-}	2.10	2.32E+04	7.98E+03
$NO3^{-}$	3.58	1.44E+05	4.96E+04
$NO2^{-}$	0.284	8.49E+03	2.92E+03
$CO3^{2-}$	0.304	1.18E+04	4.07E+03
$PO4^{3-}$	1.35	8.33E+04	2.87E+04
$SO4^{2-}$	0.143	8.91E+03	3.06E+03
Si (as SiO_3^{2-})	3.00E-02	548	188
F^{-}	0.150	1.85E+03	637
Cl^{-}	8.38E-02	1.93E+03	663
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	2.04E-05	3.52	1.21
butanol	2.04E-05	0.980	0.337
NH_3	8.59E-04	9.48	3.26
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		9.12E-03 (µCi/g)	5.23E-02 (kg)
U	0.107 (M)	1.65E+04 (µg/g)	5.67E+03 (kg)
Cs	2.07E-02 (Ci/L)	13.5 (µCi/g)	4.63E+03 (Ci)
Sr	1.67E-02 (Ci/L)	10.9 (µCi/g)	3.73E+03 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-B-103			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	0 (g/cc)		
Water wt%†	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-B-103			
Total Inventory Estimate*			
Physical Properties			
Total Waste	3.44E+05 kg	(59.0 kgal)	
Heat Load	4.68E-02 kW	(160 BTU/hr)	
Bulk Density†	1.54 (g/cc)		
Water wt%†	55.0		
TOC wt% C (wet)†	1.90E-04		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	8.96	1.34E+05	4.60E+04
Al^{3+}	0.211	3.70E+03	1.27E+03
Fe^{3+} (total Fe)	0.201	7.28E+03	2.50E+03
Cr^{3+}	5.68E-03	192	65.9
Bi^{3+}	4.37E-02	5.93E+03	2.04E+03
La^{3+}	0	0	0
Hg^{2+}	4.84E-05	6.31	2.17
Zr (as $ZrO(OH)_2$)	3.72E-03	220	75.8
Pb^{2+}	0	0	0
Ni^{2+}	7.70E-03	294	101
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	9.03E-02	2.35E+03	808
K^{+}	1.49E-02	378	130
OH^{-}	2.10	2.32E+04	7.98E+03
$NO3^{-}$	3.58	1.44E+05	4.96E+04
$NO2^{-}$	0.284	8.49E+03	2.92E+03
$CO3^{2-}$	0.304	1.18E+04	4.07E+03
$PO4^{3-}$	1.35	8.33E+04	2.87E+04
$SO4^{2-}$	0.143	8.91E+03	3.06E+03
Si (as SiO_3^{2-})	3.00E-02	548	188
F^{-}	0.150	1.85E+03	637
Cl^{-}	8.38E-02	1.93E+03	663
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	2.04E-05	3.52	1.21
butanol	2.04E-05	0.980	0.337
NH_3	8.59E-04	9.48	3.26
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		9.12E-03 (µCi/g)	5.23E-02 (kg)
U	0.107 (M)	1.65E+04 (µg/g)	5.67E+03 (kg)
Cs	2.07E-02 (Ci/L)	13.5 (µCi/g)	4.63E+03 (Ci)
Sr	1.67E-02 (Ci/L)	10.9 (µCi/g)	3.73E+03 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Single-Shell Tank 241-B-104			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	1.78E+06 kg	(366 kgal)	
Heat Load	0.115 kW	(391 BTU/hr)	
Bulk Density	1.28 (g/cc)		
Void Fraction	0.779		
Water wt%	69.5		
TOC wt% C (wet)	4.01E-05		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.71	8.44E+04	1.50E+05
Al^{3+}	0.322	6.76E+03	1.20E+04
Fe^{3+} (total Fe)	0.382	1.66E+04	2.95E+04
Cr^{3+}	4.13E-03	167	297
Bi^{3+}	6.71E-02	1.09E+04	1.94E+04
La^{3+}	0	0	0
Hg^{2+}	2.77E-05	4.32	7.69
Zr (as $ZrO(OH)_2$)	2.97E-03	211	376
Pb^{2+}	0	0	0
Ni^{2+}	2.43E-03	111	197
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.106	3.32E+03	5.90E+03
K^{+}	6.05E-03	184	328
OH^{-}	2.19	2.90E+04	5.15E+04
$NO3^{-}$	1.23	5.96E+04	1.06E+05
$NO2^{-}$	0.132	4.74E+03	8.43E+03
$CO3^{2-}$	0.128	5.97E+03	1.06E+04
$PO4^{3-}$	1.01	7.46E+04	1.33E+05
$SO4^{2-}$	6.04E-02	4.52E+03	8.04E+03
Si (as SiO_3^{2-})	5.92E-02	1.30E+03	2.30E+03
F^{-}	0.174	2.58E+03	4.59E+03
Cl^{-}	3.06E-02	843	1.50E+03
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	3.58E-06	0.741	1.32
butanol	3.58E-06	0.206	0.367
NH_3	3.33E-04	4.41	7.85
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.31E-02 (µCi/g)	0.388 (kg)
U	1.25E-03 (M)	232 (µg/g)	413 (kg)
Cs	1.34E-02 (Ci/L)	10.4 (µCi/g)	1.86E+04 (Ci)
Sr	2.96E-03 (Ci/L)	2.31 (µCi/g)	4.10E+03 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-B-104			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	2.32E+04 kg	(5.02 kgal)	
Heat Load	4.55E-03 kW	(15.6 BTU/hr)	
Bulk Density*	1.22 (g/cc)		
Water wt%†	66.5		
TOC wt% C (wet)	3.51E-04		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	5.19	9.80E+04	2.27E+03
Al^{3+}	0.309	6.83E+03	158
Fe^{3+} (total Fe)	2.08E-03	95.3	2.21
Cr^{3+}	8.20E-03	350	8.10
Bi^{3+}	4.16E-03	713	16.5
La^{3+}	0	0	0
Hg^{2+}	1.04E-05	1.71	3.96E-02
Zr (as $ZrO(OH)_2$)	3.12E-03	233	5.41
Pb^{2+}	0	0	0
Ni^{2+}	1.87E-03	90.1	2.09
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	9.36E-03	308	7.13
K^{+}	2.17E-02	696	16.1
OH^{-}	1.26	1.76E+04	407
$NO3^{-}$	2.91	1.48E+05	3.43E+03
$NO2^{-}$	0.414	1.56E+04	362
$CO3^{2-}$	0.188	9.25E+03	214
$PO4^{3-}$	0.156	1.22E+04	282
$SO4^{2-}$	0.202	1.60E+04	370
Si (as SiO_3^{2-})	3.53E-02	815	18.9
F^{-}	0.219	3.42E+03	79.3
Cl^{-}	0.122	3.56E+03	82.4
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	2.97E-05	6.49	0.150
butanol	2.97E-05	1.81	4.19E-02
NH_3	1.25E-03	17.5	0.405
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	15.9 (µCi/L)		5.03E-03 (kg)
U	4.16E-03 (M)	812 (µg/g)	18.8 (kg)
Cs	1.68E-02 (Ci/L)	13.8 (µCi/g)	320 (Ci)
Sr	2.39E-02 (Ci/L)	19.6 (µCi/g)	454 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-B-104			
Total Inventory Estimate*			
Physical Properties			
Total Waste	1.80E+06 kg	(371 kgal)	
Heat Load	0.119 kW	(407 BTU/hr)	
Bulk Density†	1.28 (g/cc)		
Water wt%†	69.4		
TOC wt% C (wet)†	4.43E-05		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.72	8.45E+04	1.52E+05
Al^{3+}	0.322	6.76E+03	1.22E+04
Fe^{3+} (total Fe)	0.377	1.64E+04	2.95E+04
Cr^{3+}	4.18E-03	169	305
Bi^{3+}	6.62E-02	1.08E+04	1.94E+04
La^{3+}	0	0	0
Hg^{2+}	2.74E-05	4.29	7.73
Zr (as $ZrO(OH)_2$)	2.97E-03	211	381
Pb^{2+}	0	0	0
Ni^{2+}	2.42E-03	111	199
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.105	3.28E+03	5.91E+03
K^{+}	6.27E-03	191	344
OH^{-}	2.18	2.88E+04	5.19E+04
$NO3^{-}$	1.26	6.07E+04	1.09E+05
$NO2^{-}$	0.136	4.88E+03	8.80E+03
$CO3^{2-}$	0.129	6.01E+03	1.08E+04
$PO4^{3-}$	0.997	7.38E+04	1.33E+05
$SO4^{2-}$	6.24E-02	4.67E+03	8.41E+03
Si (as SiO_3^{2-})	5.89E-02	1.29E+03	2.32E+03
F^{-}	0.175	2.59E+03	4.67E+03
Cl^{-}	3.18E-02	878	1.58E+03
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	3.93E-06	0.815	1.47
butanol	3.93E-06	0.227	0.409
NH_3	3.46E-04	4.58	8.26
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.31E-02 (µCi/g)	0.393 (kg)
U	1.29E-03 (M)	239 (µg/g)	432 (kg)
Cs	1.34E-02 (Ci/L)	10.5 (µCi/g)	1.89E+04 (Ci)
Sr	3.24E-03 (Ci/L)	2.53 (µCi/g)	4.55E+03 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

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Single-Shell Tank 241-B-105			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	8.83E+05 kg	(158 kgal)	
Heat Load	0.114 kW	(388 BTU/hr)	
Bulk Density	1.48 (g/cc)		
Void Fraction	0.755		
Water wt%	58.2		
TOC wt% C (wet)	1.72E-04		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	8.24	1.28E+05	1.13E+05
Al^{3+}	0.249	4.54E+03	4.01E+03
Fe^{3+} (total Fe)	0.239	9.04E+03	7.98E+03
Cr^{3+}	5.53E-03	195	172
Bi^{3+}	5.06E-02	7.15E+03	6.32E+03
La^{3+}	0	0	0
Hg^{2+}	4.64E-05	6.29	5.56
Zr (as $ZrO(OH)_2$)	3.76E-03	232	205
Pb^{2+}	0	0	0
Ni^{2+}	6.88E-03	273	241
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	9.25E-02	2.51E+03	2.22E+03
K^{+}	1.36E-02	360	318
OH^{-}	1.70	2.24E+04	1.72E+04
$NO3^{-}$	3.23	1.56E+05	1.20E+05
$NO2^{-}$	0.265	9.49E+03	7.29E+03
$CO3^{2-}$	0.198	9.27E+03	7.12E+03
$PO4^{3-}$	1.32	9.78E+04	7.51E+04
$SO4^{2-}$	0.128	9.57E+03	7.35E+03
Si (as SiO_3^{2-})	3.77E-02	824	633
F^{-}	0.162	2.40E+03	1.84E+03
Cl^{-}	7.59E-02	2.10E+03	1.61E+03
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	1.77E-05	3.66	2.81
butanol	1.77E-05	1.02	0.782
NH_3	7.86E-04	10.4	7.99
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.02E-02 (µCi/g)	0.150 (kg)
U	5.02E-03 (M)	809 (µg/g)	715 (kg)
Cs	2.02E-02 (Ci/L)	13.7 (µCi/g)	1.21E+04 (Ci)
Sr	1.42E-02 (Ci/L)	9.60 (µCi/g)	8.48E+03 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-B-105			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	0 (g/cc)		
Water wt%†	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na^{+}, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Single-Shell Tank 241-B-105			
Total Inventory Estimate*			
Physical Properties			
Total Waste	8.83E+05 kg	(158 kgal)	
Heat Load	0.114 kW	(388 BTU/hr)	
Bulk Density†	1.48 (g/cc)		
Water wt%†	58.2		
TOC wt% C (wet)†	1.72E-04		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	8.24	1.28E+05	1.13E+05
Al^{3+}	0.249	4.54E+03	4.01E+03
Fe^{3+} (total Fe)	0.239	9.04E+03	7.98E+03
Cr^{3+}	5.53E-03	195	172
Bi^{3+}	5.06E-02	7.15E+03	6.32E+03
La^{3+}	0	0	0
Hg^{2+}	4.64E-05	6.29	5.56
Zr (as $ZrO(OH)_2$)	3.76E-03	232	205
Pb^{2+}	0	0	0
Ni^{2+}	6.88E-03	273	241
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	9.25E-02	2.51E+03	2.22E+03
K^{+}	1.36E-02	360	318
OH^{-}	1.70	2.24E+04	1.72E+04
$NO3^{-}$	3.23	1.56E+05	1.20E+05
$NO2^{-}$	0.265	9.49E+03	7.29E+03
$CO3^{2-}$	0.198	9.27E+03	7.12E+03
$PO4^{3-}$	1.32	9.78E+04	7.51E+04
$SO4^{2-}$	0.128	9.57E+03	7.35E+03
Si (as SiO_3^{2-})	3.77E-02	824	633
F^{-}	0.162	2.40E+03	1.84E+03
Cl^{-}	7.59E-02	2.10E+03	1.61E+03
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	1.77E-05	3.66	2.81
butanol	1.77E-05	1.02	0.782
NH_3	7.86E-04	10.4	7.99
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.02E-02 (µCi/g)	0.150 (kg)
U	5.02E-03 (M)	809 (µg/g)	715 (kg)
Cs	2.02E-02 (Ci/L)	13.7 (µCi/g)	1.21E+04 (Ci)
Sr	1.42E-02 (Ci/L)	9.60 (µCi/g)	8.48E+03 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Single-Shell Tank 241-B-106			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	6.71E+05 kg	(116 kgal)	
Heat Load	9.57E-02 kW	(327 BTU/hr)	
Bulk Density	1.53 (g/cc)		
Void Fraction	0.750		
Water wt%	55.6		
TOC wt% C (wet)	2.02E-04		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	9.17	1.38E+05	9.25E+04
Al^{3+}	0.223	3.93E+03	2.64E+03
Fe^{3+} (total Fe)	0.205	7.49E+03	5.03E+03
Cr^{3+}	5.91E-03	201	135
Bi^{3+}	4.60E-02	6.30E+03	4.22E+03
La^{3+}	0	0	0
Hg^{2+}	5.10E-05	6.69	4.49
Zr (as $ZrO(OH)_2$)	3.92E-03	234	157
Pb^{2+}	0	0	0
Ni^{2+}	8.08E-03	310	208
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	9.06E-02	2.38E+03	1.59E+03
K^{+}	1.56E-02	400	269
OH^{-}	1.56	1.79E+04	1.16E+04
$NO3^{-}$	3.77	1.58E+05	1.03E+05
$NO2^{-}$	0.299	9.31E+03	6.04E+03
$CO3^{2-}$	0.219	8.91E+03	5.78E+03
$PO4^{3-}$	1.40	9.01E+04	5.85E+04
$SO4^{2-}$	0.146	9.49E+03	6.16E+03
Si (as SiO_3^{2-})	3.16E-02	600	389
F^{-}	0.158	2.04E+03	1.32E+03
Cl^{-}	8.82E-02	2.12E+03	1.37E+03
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
glycolate^{-}	0	0	0
acetate^{-}	0	0	0
$oxalate^{2-}$	0	0	0
DBP	2.15E-05	3.86	2.51
butanol	2.15E-05	1.08	0.698
NH_3	9.04E-04	10.4	6.75
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		9.45E-03 (µCi/g)	0.106 (kg)
U	6.03E-03 (M)	940 (µg/g)	631 (kg)
Cs	2.18E-02 (Ci/L)	14.3 (µCi/g)	9.57E+03 (Ci)
Sr	1.72E-02 (Ci/L)	11.3 (µCi/g)	7.56E+03 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-B-106			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	4.28E+03 kg	(1.00 kgal)	
Heat Load	1.14E-03 kW	(3.88 BTU/hr)	
Bulk Density*	1.13 (g/cc)		
Water wt%†	79.1		
TOC wt% C (wet)	0.113		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	2.85	5.80E+04	248
Al^{3+}	0.330	7.87E+03	33.7
Fe^{3+} (total Fe)	1.91E-03	94.5	0.404
Cr^{3+}	8.13E-03	374	1.60
Bi^{3+}	1.50E-03	277	1.18
La^{3+}	6.24E-04	76.7	0.328
Hg^{2+}	5.44E-06	0.966	4.13E-03
Zr (as $ZrO(OH)_2$)	7.66E-04	61.9	0.265
Pb^{2+}	4.77E-04	87.5	0.374
Ni^{2+}	1.63E-03	84.8	0.363
Sr^{2+}	2.08E-04	16.1	6.90E-02
Mn^{4+}	1.05E-03	51.2	0.219
Ca^{2+}	8.65E-03	307	1.31
K^{+}	3.95E-02	1.36E+03	5.84
OH^{-}	1.41	2.12E+04	90.6
$NO3^{-}$	1.46	8.00E+04	342
$NO2^{-}$	0.375	1.52E+04	65.2
$CO3^{2-}$	0.109	5.81E+03	24.9
$PO4^{3-}$	4.94E-02	4.15E+03	17.8
$SO4^{2-}$	7.92E-02	6.73E+03	28.8
Si (as SiO_3^{2-})	1.68E-02	419	1.79
F^{-}	8.34E-02	1.40E+03	6.00
Cl^{-}	5.21E-02	1.63E+03	6.99
$C_6H_5O_7^{3-}$	4.50E-03	753	3.22
$EDTA^{4-}$	8.04E-04	205	0.877
$HEDTA^{3-}$	1.32E-04	32.0	0.137
glycolate^{-}	4.97E-03	330	1.41
acetate^{-}	4.71E-03	246	1.05
$oxalate^{2-}$	5.34E-04	41.6	0.178
DBP	4.14E-03	974	4.17
butanol	4.14E-03	271	1.16
NH_3	4.75E-03	71.4	0.305
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	19.5 (µCi/L)		1.23E-03 (kg)
U	3.05E-03 (M)	642 (µg/g)	2.75 (kg)
Cs	3.75E-02 (Ci/L)	33.2 (µCi/g)	142 (Ci)
Sr	1.85E-02 (Ci/L)	16.3 (µCi/g)	69.9 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-B-106			
Total Inventory Estimate*			
Physical Properties			
Total Waste	6.75E+05 kg	(117 kgal)	
Heat Load	9.69E-02 kW	(331 BTU/hr)	
Bulk Density†	1.53 (g/cc)		
Water wt%†	55.8		
TOC wt% C (wet)†	1.17E-03		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	9.11	1.37E+05	9.28E+04
Al^{3+}	0.224	3.96E+03	2.67E+03
Fe^{3+} (total Fe)	0.203	7.44E+03	5.03E+03
Cr^{3+}	5.93E-03	202	137
Bi^{3+}	4.57E-02	6.26E+03	4.23E+03
La^{3+}	5.33E-06	0.486	0.328
Hg^{2+}	5.06E-05	6.65	4.49
Zr (as $ZrO(OH)_2$)	3.89E-03	233	157
Pb^{2+}	4.08E-06	0.554	0.374
Ni^{2+}	8.03E-03	309	209
Sr^{2+}	1.78E-06	0.102	6.90E-02
Mn^{4+}	8.99E-06	0.324	0.219
Ca^{2+}	8.99E-02	2.36E+03	1.60E+03
K^{+}	1.58E-02	406	274
OH^{-}	1.56	1.79E+04	1.17E+04
$NO3^{-}$	3.75	1.58E+05	1.03E+05
$NO2^{-}$	0.300	9.35E+03	6.10E+03
$CO3^{2-}$	0.218	8.89E+03	5.80E+03
$PO4^{3-}$	1.39	8.96E+04	5.85E+04
$SO4^{2-}$	0.145	9.48E+03	6.19E+03
Si (as SiO_3^{2-})	3.14E-02	599	391
F^{-}	0.158	2.03E+03	1.33E+03
Cl^{-}	8.79E-02	2.11E+03	1.38E+03
$C_6H_5O_7^{3-}$	3.85E-05	4.77	3.22
$EDTA^{4-}$	6.87E-06	1.30	0.877
$HEDTA^{3-}$	1.13E-06	0.203	0.137
glycolate^{-}	4.25E-05	2.09	1.41
acetate^{-}	4.03E-05	1.56	1.05
$oxalate^{2-}$	4.56E-06	0.263	0.178
DBP	5.66E-05	10.0	6.67
butanol	5.66E-05	2.79	1.86
NH_3	9.37E-04	10.8	7.06
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		9.50E-03 (µCi/g)	0.107 (kg)
U	6.01E-03 (M)	938 (µg/g)	633 (kg)
Cs	2.19E-02 (Ci/L)	14.4 (µCi/g)	9.71E+03 (Ci)
Sr	1.72E-02 (Ci/L)	11.3 (µCi/g)	7.63E+03 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

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Single-Shell Tank 241-B-107			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	8.01E+05 kg	(164 kgal)	
Heat Load	3.59E-02 kW	(123 BTU/hr)	
Bulk Density	1.29 (g/cc)		
Void Fraction	0.695		
Water wt%	70.9		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.88	8.69E+04	6.96E+04
Al^{3+}	0.475	9.93E+03	7.96E+03
Fe^{3+} (total Fe)	0.323	1.40E+04	1.12E+04
Cr^{3+}	3.77E-03	152	122
Bi^{3+}	7.70E-02	1.25E+04	9.99E+03
La^{3+}	0	0	0
Hg^{2+}	1.06E-04	16.4	13.2
Zr (as $ZrO(OH)_2$)	1.03E-02	728	583
Pb^{2+}	0	0	0
Ni^{2+}	1.16E-03	52.8	42.3
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	7.55E-02	2.34E+03	1.88E+03
K^{+}	3.23E-03	97.7	78.3
OH^{-}	2.62	2.91E+04	2.76E+04
$NO3^{-}$	0.374	1.52E+04	1.44E+04
$NO2^{-}$	0.179	5.39E+03	5.11E+03
$CO3^{2-}$	7.55E-02	2.96E+03	2.81E+03
$PO4^{3-}$	1.33	8.28E+04	7.85E+04
$SO4^{2-}$	4.47E-02	2.81E+03	2.66E+03
Si (as SiO_3^{2-})	6.32E-02	1.16E+03	1.10E+03
F^{-}	0.165	2.06E+03	1.95E+03
Cl^{-}	1.48E-02	344	326
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	1.79E-04	1.99	1.89
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		5.93E-03 (µCi/g)	7.92E-02 (kg)
U	5.72E-04 (M)	105 (µg/g)	84.4 (kg)
Cs	1.22E-02 (Ci/L)	9.44 (µCi/g)	7.57E+03 (Ci)
Sr	1.08E-04 (Ci/L)	8.35E-02 (µCi/g)	66.9 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-B-107			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	3.91E+03 kg	(1.01 kgal)	
Heat Load	1.28E-04 kW	(0.436 BTU/hr)	
Bulk Density*	1.03 (g/cc)		
Water wt%†	96.0		
TOC wt% C (wet)	2.78E-03		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0.444	9.95E+03	38.9
Al^{3+}	0.138	3.63E+03	14.2
Fe^{3+} (total Fe)	4.68E-04	25.4	9.94E-02
Cr^{3+}	8.68E-04	44.0	0.172
Bi^{3+}	6.59E-05	13.4	5.25E-02
La^{3+}	0	0	0
Hg^{2+}	2.12E-06	0.414	1.62E-03
Zr (as $ZrO(OH)_2$)	3.88E-05	3.45	1.35E-02
Pb^{2+}	3.18E-04	64.2	0.251
Ni^{2+}	3.67E-04	21.0	8.21E-02
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	2.10E-03	82.2	0.321
K^{+}	8.31E-04	31.6	0.124
OH^{-}	0.558	9.24E+03	36.1
$NO3^{-}$	0.186	1.12E+04	43.9
$NO2^{-}$	8.83E-02	3.96E+03	15.5
$CO3^{2-}$	5.03E-03	294	1.15
$PO4^{3-}$	2.46E-03	228	0.890
$SO4^{2-}$	6.58E-03	616	2.41
Si (as SiO_3^{2-})	1.90E-03	52.0	0.203
F^{-}	3.48E-03	64.4	0.252
Cl^{-}	4.11E-03	142	0.554
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	1.98E-04	51.4	0.201
butanol	1.98E-04	14.3	5.60E-02
NH_3	1.74E-04	2.88	1.13E-02
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	6.62 (µCi/L)		4.20E-04 (kg)
U	9.22E-04 (M)	214 (µg/g)	0.836 (kg)
Cs	5.36E-03 (Ci/L)	5.23 (µCi/g)	20.4 (Ci)
Sr	1.24E-03 (Ci/L)	1.21 (µCi/g)	4.73 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-B-107			
Total Inventory Estimate*			
Physical Properties			
Total Waste	8.05E+05 kg	(165 kgal)	
Heat Load	3.60E-02 kW	(123 BTU/hr)	
Bulk Density†	1.29 (g/cc)		
Water wt%†	71.0		
TOC wt% C (wet)†	1.70E-05		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.85	8.65E+04	6.96E+04
Al^{3+}	0.473	9.90E+03	7.97E+03
Fe^{3+} (total Fe)	0.321	1.39E+04	1.12E+04
Cr^{3+}	3.75E-03	151	122
Bi^{3+}	7.65E-02	1.24E+04	9.99E+03
La^{3+}	0	0	0
Hg^{2+}	1.05E-04	16.3	13.2
Zr (as $ZrO(OH)_2$)	1.02E-02	724	583
Pb^{2+}	1.94E-06	0.312	0.251
Ni^{2+}	1.16E-03	52.6	42.4
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	7.50E-02	2.33E+03	1.88E+03
K^{+}	3.21E-03	97.4	78.4
OH^{-}	2.61	2.90E+04	2.77E+04
$NO3^{-}$	0.373	1.52E+04	1.44E+04
$NO2^{-}$	0.178	5.38E+03	5.13E+03
$CO3^{2-}$	7.50E-02	2.95E+03	2.81E+03
$PO4^{3-}$	1.32	8.24E+04	7.85E+04
$SO4^{2-}$	4.44E-02	2.80E+03	2.67E+03
Si (as SiO_3^{2-})	6.28E-02	1.16E+03	1.10E+03
F^{-}	0.164	2.05E+03	1.95E+03
Cl^{-}	1.48E-02	343	327
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	1.21E-06	0.250	0.201
butanol	1.21E-06	6.95E-02	5.60E-02
NH_3	1.79E-04	2.00	1.90
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		5.93E-03 (µCi/g)	7.96E-02 (kg)
U	5.74E-04 (M)	106 (µg/g)	85.3 (kg)
Cs	1.21E-02 (Ci/L)	9.42 (µCi/g)	7.59E+03 (Ci)
Sr	1.15E-04 (Ci/L)	8.90E-02 (µCi/g)	71.7 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

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Single-Shell Tank 241-B-108			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	5.13E+05 kg	(94.0 kgal)	
Heat Load	5.70E-02 kW	(195 BTU/hr)	
Bulk Density	1.44 (g/cc)		
Void Fraction	0.730		
Water wt%	60.6		
TOC wt% C (wet)	1.37E-04		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	7.62	1.21E+05	6.23E+04
Al^{3+}	0.314	5.87E+03	3.01E+03
Fe^{3+} (total Fe)	0.248	9.59E+03	4.92E+03
Cr^{3+}	5.14E-03	185	95.1
Bi^{3+}	5.72E-02	8.29E+03	4.26E+03
La^{3+}	0	0	0
Hg^{2+}	7.08E-05	9.84	5.05
Zr (as $ZrO(OH)_2$)	6.23E-03	394	202
Pb^{2+}	0	0	0
Ni^{2+}	5.58E-03	227	117
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	8.51E-02	2.37E+03	1.21E+03
K^{+}	1.12E-02	302	155
OH^{-}	1.94	2.29E+04	1.17E+04
$NO3^{-}$	2.54	1.09E+05	5.61E+04
$NO2^{-}$	0.256	8.15E+03	4.18E+03
$CO3^{2-}$	0.167	6.96E+03	3.57E+03
$PO4^{3-}$	1.38	9.06E+04	4.65E+04
$SO4^{2-}$	0.109	7.28E+03	3.74E+03
Si (as SiO_3^{2-})	4.30E-02	838	430
F^{-}	0.161	2.12E+03	1.09E+03
Cl^{-}	6.17E-02	1.51E+03	777
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	1.37E-05	2.53	1.30
butanol	1.37E-05	0.704	0.361
NH_3	6.42E-04	7.57	3.88
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		8.31E-03 (µCi/g)	7.11E-02 (kg)
U	4.06E-03 (M)	670 (µg/g)	344 (kg)
Cs	1.83E-02 (Ci/L)	12.7 (µCi/g)	6.52E+03 (Ci)
Sr	1.10E-02 (Ci/L)	7.64 (µCi/g)	3.92E+03 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-B-108			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	0 (g/cc)		
Water wt%†	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Single-Shell Tank 241-B-108			
Total Inventory Estimate*			
Physical Properties			
Total Waste	5.13E+05 kg	(94.0 kgal)	
Heat Load	5.70E-02 kW	(195 BTU/hr)	
Bulk Density†	1.44 (g/cc)		
Water wt%†	60.6		
TOC wt% C (wet)†	1.37E-04		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	7.62	1.21E+05	6.23E+04
Al^{3+}	0.314	5.87E+03	3.01E+03
Fe^{3+} (total Fe)	0.248	9.59E+03	4.92E+03
Cr^{3+}	5.14E-03	185	95.1
Bi^{3+}	5.72E-02	8.29E+03	4.26E+03
La^{3+}	0	0	0
Hg^{2+}	7.08E-05	9.84	5.05
Zr (as $ZrO(OH)_2$)	6.23E-03	394	202
Pb^{2+}	0	0	0
Ni^{2+}	5.58E-03	227	117
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	8.51E-02	2.37E+03	1.21E+03
K^{+}	1.12E-02	302	155
OH^{-}	1.94	2.29E+04	1.17E+04
$NO3^{-}$	2.54	1.09E+05	5.61E+04
$NO2^{-}$	0.256	8.15E+03	4.18E+03
$CO3^{2-}$	0.167	6.96E+03	3.57E+03
$PO4^{3-}$	1.38	9.06E+04	4.65E+04
$SO4^{2-}$	0.109	7.28E+03	3.74E+03
Si (as SiO_3^{2-})	4.30E-02	838	430
F^{-}	0.161	2.12E+03	1.09E+03
Cl^{-}	6.17E-02	1.51E+03	777
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	1.37E-05	2.53	1.30
butanol	1.37E-05	0.704	0.361
NH_3	6.42E-04	7.57	3.88
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		8.31E-03 (µCi/g)	7.11E-02 (kg)
U	4.06E-03 (M)	670 (µg/g)	344 (kg)
Cs	1.83E-02 (Ci/L)	12.7 (µCi/g)	6.52E+03 (Ci)
Sr	1.10E-02 (Ci/L)	7.64 (µCi/g)	3.92E+03 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Single-Shell Tank 241-B-109			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	5.61E+05 kg	(97.0 kgal)	
Heat Load	7.03E-02 kW	(240 BTU/hr)	
Bulk Density	1.53 (g/cc)		
Void Fraction	0.751		
Water wt%	55.0		
TOC wt% C (wet)	1.75E-04		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	8.10	1.22E+05	6.84E+04
Al^{3+}	0.978	1.73E+04	9.69E+03
Fe^{3+} (total Fe)	0.239	8.72E+03	4.90E+03
Cr^{3+}	5.43E-03	185	104
Bi^{3+}	3.99E-02	5.45E+03	3.06E+03
La^{3+}	0	0	0
Hg^{2+}	8.37E-04	110	61.6
Zr (as $ZrO(OH)_2$)	3.39E-03	202	114
Pb^{2+}	4.37E-02	5.92E+03	3.32E+03
Ni^{2+}	7.15E-03	275	154
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.121	3.18E+03	1.79E+03
K^{+}	1.38E-02	353	198
OH^{-}	4.21	4.68E+04	2.63E+04
$NO3^{-}$	3.33	1.35E+05	7.59E+04
$NO2^{-}$	0.289	8.69E+03	4.88E+03
$CO3^{2-}$	0.233	9.14E+03	5.13E+03
$PO4^{3-}$	1.21	7.54E+04	4.23E+04
$SO4^{2-}$	0.128	8.02E+03	4.50E+03
Si (as SiO_3^{2-})	2.73E-02	502	282
F^{-}	0.137	1.70E+03	956
Cl^{-}	7.75E-02	1.80E+03	1.01E+03
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	1.86E-05	3.23	1.81
butanol	1.86E-05	0.901	0.506
NH_3	7.88E-04	8.76	4.92
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0.170 (µCi/g)	1.59 (kg)
U	3.29E-02 (M)	5.13E+03 (µg/g)	2.88E+03 (kg)
Cs	1.91E-02 (Ci/L)	12.5 (µCi/g)	7.03E+03 (Ci)
Sr	1.51E-02 (Ci/L)	9.89 (µCi/g)	5.55E+03 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-B-109			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	1.72E+05 kg	(30.0 kgal)	
Heat Load	0.140 kW	(477 BTU/hr)	
Bulk Density*	1.52 (g/cc)		
Water wt%†	43.7		
TOC wt% C (wet)	0.725		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	10.4	1.57E+05	2.71E+04
Al^{3+}	1.88	3.34E+04	5.76E+03
Fe^{3+} (total Fe)	2.35E-03	86.4	14.9
Cr^{3+}	3.52E-02	1.21E+03	208
Bi^{3+}	1.36E-03	187	32.2
La^{3+}	4.86E-06	0.445	7.67E-02
Hg^{2+}	1.17E-05	1.55	0.268
Zr (as $ZrO(OH)_2$)	4.47E-04	26.9	4.63
Pb^{2+}	1.88E-03	257	44.2
Ni^{2+}	2.11E-03	81.8	14.1
Sr^{2+}	1.62E-06	9.36E-02	1.61E-02
Mn^{4+}	4.90E-03	177	30.6
Ca^{2+}	1.06E-02	279	48.1
K^{+}	5.68E-02	1.46E+03	252
OH^{-}	8.01	8.97E+04	1.55E+04
$NO3^{-}$	3.29	1.34E+05	2.32E+04
$NO2^{-}$	2.63	7.96E+04	1.37E+04
$CO3^{2-}$	0.435	1.72E+04	2.96E+03
$PO4^{3-}$	0.103	6.46E+03	1.11E+03
$SO4^{2-}$	0.288	1.82E+04	3.14E+03
Si (as SiO_3^{2-})	3.99E-02	739	127
F^{-}	8.98E-02	1.12E+03	194
Cl^{-}	0.192	4.47E+03	771
$C_6H_5O_7^{3-}$	3.62E-02	4.50E+03	776
$EDTA^{4-}$	8.12E-03	1.54E+03	266
$HEDTA^{3-}$	1.10E-03	198	34.1
$glycolate^{-}$	2.55E-02	1.26E+03	217
$acetate^{-}$	4.83E-02	1.88E+03	324
$oxalate^{2-}$	4.16E-06	0.241	4.16E-02
DBP	3.84E-02	6.73E+03	1.16E+03
butanol	3.84E-02	1.87E+03	323
NH_3	1.55E-02	174	29.9
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	35.2 (µCi/L)		6.67E-02 (kg)
U	4.70E-03 (M)	737 (µg/g)	127 (kg)
Cs	0.205 (Ci/L)	135 (µCi/g)	2.33E+04 (Ci)
Sr	3.99E-02 (Ci/L)	26.3 (µCi/g)	4.54E+03 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-B-109			
Total Inventory Estimate*			
Physical Properties			
Total Waste	7.34E+05 kg	(127 kgal)	
Heat Load	0.210 kW	(717 BTU/hr)	
Bulk Density†	1.53 (g/cc)		
Water wt%†	52.4		
TOC wt% C (wet)†	0.171		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	8.64	1.30E+05	9.55E+04
Al^{3+}	1.19	2.11E+04	1.54E+04
Fe^{3+} (total Fe)	0.183	6.69E+03	4.91E+03
Cr^{3+}	1.25E-02	425	312
Bi^{3+}	3.08E-02	4.21E+03	3.09E+03
La^{3+}	1.15E-06	0.105	7.67E-02
Hg^{2+}	6.42E-04	84.3	61.9
Zr (as $ZrO(OH)_2$)	2.70E-03	161	118
Pb^{2+}	3.38E-02	4.59E+03	3.37E+03
Ni^{2+}	5.96E-03	229	168
Sr^{2+}	3.83E-07	2.20E-02	1.61E-02
Mn^{4+}	1.16E-03	41.7	30.6
Ca^{2+}	9.53E-02	2.50E+03	1.84E+03
K^{+}	2.40E-02	614	450
OH^{-}	5.10	5.68E+04	4.17E+04
$NO3^{-}$	3.32	1.35E+05	9.90E+04
$NO2^{-}$	0.841	2.53E+04	1.86E+04
$CO3^{2-}$	0.281	1.10E+04	8.10E+03
$PO4^{3-}$	0.952	5.92E+04	4.34E+04
$SO4^{2-}$	0.166	1.04E+04	7.65E+03
Si (as SiO_3^{2-})	3.03E-02	558	409
F^{-}	0.126	1.57E+03	1.15E+03
Cl^{-}	0.104	2.43E+03	1.78E+03
$C_6H_5O_7^{3-}$	8.54E-03	1.06E+03	776
$EDTA^{4-}$	1.92E-03	362	266
$HEDTA^{3-}$	2.59E-04	46.5	34.1
$glycolate^{-}$	6.02E-03	296	217
$acetate^{-}$	1.14E-02	441	324
$oxalate^{2-}$	9.83E-07	5.67E-02	4.16E-02
DBP	9.09E-03	1.58E+03	1.16E+03
butanol	9.09E-03	441	324
NH_3	4.27E-03	47.5	34.9
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0.136 (µCi/g)	1.66 (kg)
U	2.63E-02 (M)	4.10E+03 (µg/g)	3.01E+03 (kg)
Cs	6.31E-02 (Ci/L)	41.3 (µCi/g)	3.03E+04 (Ci)
Sr	2.10E-02 (Ci/L)	13.7 (µCi/g)	1.01E+04 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Single-Shell Tank 241-B-110			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	1.12E+06 kg	(246 kgal)	
Heat Load	1.08 kW	(3.67E+03 BTU/hr)	
Bulk Density	1.20 (g/cc)		
Void Fraction	0.841		
Water wt%	75.1		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	2.96	5.66E+04	6.34E+04
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0.681	3.16E+04	3.54E+04
Cr^{3+}	4.07E-03	176	197
Bi^{3+}	7.03E-02	1.22E+04	1.37E+04
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	2.05E-03	100	112
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.199	6.63E+03	7.42E+03
K^{+}	4.45E-03	145	162
OH^{-}	2.09	2.96E+04	3.32E+04
$NO3^{-}$	0.829	4.28E+04	4.79E+04
$NO2^{-}$	8.91E-03	341	382
$CO3^{2-}$	0.199	9.92E+03	1.11E+04
$PO4^{3-}$	0.647	5.11E+04	5.72E+04
$SO4^{2-}$	3.45E-02	2.75E+03	3.08E+03
Si (as SiO_3^{2-})	7.14E-02	1.67E+03	1.87E+03
F^{-}	0.145	2.28E+03	2.56E+03
Cl^{-}	2.05E-02	603	675
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	2.95E-03	41.7	46.7
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		2.60E-02 (µCi/g)	0.485 (kg)
U	2.20E-03 (M)	436 (µg/g)	488 (kg)
Cs	7.05E-03 (Ci/L)	5.87 (µCi/g)	6.56E+03 (Ci)
Sr	0.167 (Ci/L)	139 (µCi/g)	1.55E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-B-110			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	0 (g/cc)		
Water wt%†	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Single-Shell Tank 241-B-110			
Total Inventory Estimate*			
Physical Properties			
Total Waste	1.12E+06 kg	(246 kgal)	
Heat Load	1.08 kW	(3.67E+03 BTU/hr)	
Bulk Density†	1.20 (g/cc)		
Water wt%†	75.1		
TOC wt% C (wet)†	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	2.96	5.66E+04	6.34E+04
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0.681	3.16E+04	3.54E+04
Cr^{3+}	4.07E-03	176	197
Bi^{3+}	7.03E-02	1.22E+04	1.37E+04
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	2.05E-03	100	112
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.199	6.63E+03	7.42E+03
K^{+}	4.45E-03	145	162
OH^{-}	2.09	2.96E+04	3.32E+04
$NO3^{-}$	0.829	4.28E+04	4.79E+04
$NO2^{-}$	8.91E-03	341	382
$CO3^{2-}$	0.199	9.92E+03	1.11E+04
$PO4^{3-}$	0.647	5.11E+04	5.72E+04
$SO4^{2-}$	3.45E-02	2.75E+03	3.08E+03
Si (as SiO_3^{2-})	7.14E-02	1.67E+03	1.87E+03
F^{-}	0.145	2.28E+03	2.56E+03
Cl^{-}	2.05E-02	603	675
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	2.95E-03	41.7	46.7
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		2.60E-02 (µCi/g)	0.485 (kg)
U	2.20E-03 (M)	436 (µg/g)	488 (kg)
Cs	7.05E-03 (Ci/L)	5.87 (µCi/g)	6.56E+03 (Ci)
Sr	0.167 (Ci/L)	139 (µCi/g)	1.55E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

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Single-Shell Tank 241-B-111			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	1.03E+06 kg	(236 kgal)	
Heat Load	9.33 kW	(3.19E+04 BTU/hr)	
Bulk Density	1.16 (g/cc)		
Void Fraction	0.928		
Water wt%	78.3		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	1.51	3.00E+04	3.10E+04
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	1.04	5.01E+04	5.18E+04
Cr^{3+}	8.66E-03	389	402
Bi^{3+}	3.64E-02	6.56E+03	6.79E+03
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	9.45E-03	479	495
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.275	9.53E+03	9.86E+03
K^{+}	3.60E-03	121	126
OH^{-}	3.32	4.87E+04	5.04E+04
$NO3^{-}$	0.579	3.10E+04	3.21E+04
$NO2^{-}$	6.61E-02	2.63E+03	2.72E+03
$CO3^{2-}$	0.275	1.43E+04	1.48E+04
$PO4^{3-}$	0.124	1.02E+04	1.06E+04
$SO4^{2-}$	3.85E-02	3.20E+03	3.31E+03
Si (as SiO_3^{2-})	0.184	4.47E+03	4.62E+03
F^{-}	9.69E-02	1.59E+03	1.64E+03
Cl^{-}	1.66E-02	506	524
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	2.67E-02	391	405
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0.148 (µCi/g)	2.56 (kg)
U	1.94E-02 (M)	3.98E+03 (µg/g)	4.12E+03 (kg)
Cs	6.20E-02 (Ci/L)	53.5 (µCi/g)	5.54E+04 (Ci)
Sr	1.51 (Ci/L)	1.30E+03 (µCi/g)	1.35E+06 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

Rev. 3

Single-Shell Tank 241-B-111			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	5.53E+03 kg	(1.01 kgal)	
Heat Load	4.02E-03 kW	(13.7 BTU/hr)	
Bulk Density*	1.44 (g/cc)		
Water wt%†	49.5		
TOC wt% C (wet)	0.650		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	8.82	1.41E+05	778
Al^{3+}	1.60	3.00E+04	166
Fe^{3+} (total Fe)	2.00E-03	77.5	0.429
Cr^{3+}	3.00E-02	1.08E+03	5.99
Bi^{3+}	1.15E-03	167	0.925
La^{3+}	4.14E-06	0.399	2.21E-03
Hg^{2+}	1.00E-05	1.39	7.70E-03
Zr (as $ZrO(OH)_2$)	3.81E-04	24.1	0.133
Pb^{2+}	1.60E-03	230	1.27
Ni^{2+}	1.80E-03	73.4	0.406
Sr^{2+}	1.38E-06	8.39E-02	4.64E-04
Mn^{4+}	4.17E-03	159	0.880
Ca^{2+}	9.00E-03	250	1.38
K^{+}	4.83E-02	1.31E+03	7.25
OH^{-}	6.81	8.04E+04	445
$NO3^{-}$	2.80	1.20E+05	666
$NO2^{-}$	2.23	7.13E+04	394
$CO3^{2-}$	0.370	1.54E+04	85.3
$PO4^{3-}$	8.79E-02	5.79E+03	32.0
$SO4^{2-}$	0.245	1.64E+04	90.4
Si (as SiO_3^{2-})	3.40E-02	663	3.66
F^{-}	7.64E-02	1.01E+03	5.57
Cl^{-}	0.163	4.01E+03	22.2
$C_6H_5O_7^{3-}$	3.08E-02	4.04E+03	22.3
$EDTA^{4-}$	6.91E-03	1.38E+03	7.64
$HEDTA^{3-}$	9.32E-04	177	0.981
$glycolate^{-}$	2.17E-02	1.13E+03	6.24
$acetate^{-}$	4.11E-02	1.68E+03	9.31
$oxalate^{2-}$	3.54E-06	0.216	1.20E-03
DBP	3.27E-02	6.03E+03	33.4
butanol	3.27E-02	1.68E+03	9.30
NH_3	1.32E-02	156	0.861
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	30.0 (µCi/L)		1.92E-03 (kg)
U	4.00E-03 (M)	661 (µg/g)	3.66 (kg)
Cs	0.174 (Ci/L)	121 (µCi/g)	670 (Ci)
Sr	3.40E-02 (Ci/L)	23.6 (µCi/g)	131 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.
†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-B-111			
Total Inventory Estimate*			
Physical Properties			
Total Waste	1.04E+06 kg	(237 kgal)	
Heat Load	9.33 kW	(3.19E+04 BTU/hr)	
Bulk Density†	1.16 (g/cc)		
Water wt%†	78.2		
TOC wt% C (wet)†	2.78E-03		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	1.54	3.05E+04	3.18E+04
Al^{3+}	6.84E-03	159	166
Fe^{3+} (total Fe)	1.03	4.98E+04	5.18E+04
Cr^{3+}	8.75E-03	392	408
Bi^{3+}	3.62E-02	6.53E+03	6.79E+03
La^{3+}	1.77E-08	2.12E-03	2.21E-03
Hg^{2+}	4.28E-08	7.40E-03	7.70E-03
Zr (as $ZrO(OH)_2$)	1.63E-06	0.128	0.133
Pb^{2+}	6.85E-06	1.22	1.27
Ni^{2+}	9.41E-03	477	496
Sr^{2+}	5.90E-09	4.46E-04	4.64E-04
Mn^{4+}	1.78E-05	0.846	0.880
Ca^{2+}	0.274	9.48E+03	9.86E+03
K^{+}	3.79E-03	128	133
OH^{-}	3.34	4.89E+04	5.09E+04
$NO3^{-}$	0.589	3.15E+04	3.27E+04
$NO2^{-}$	7.54E-02	2.99E+03	3.11E+03
$CO3^{2-}$	0.276	1.43E+04	1.48E+04
$PO4^{3-}$	0.124	1.02E+04	1.06E+04
$SO4^{2-}$	3.94E-02	3.27E+03	3.40E+03
Si (as SiO_3^{2-})	0.184	4.45E+03	4.62E+03
F^{-}	9.68E-02	1.59E+03	1.65E+03
Cl^{-}	1.72E-02	525	546
$C_6H_5O_7^{3-}$	1.32E-04	21.5	22.3
$EDTA^{4-}$	2.95E-05	7.34	7.64
$HEDTA^{3-}$	3.99E-06	0.943	0.981
$glycolate^{-}$	9.27E-05	6.00	6.24
$acetate^{-}$	1.76E-04	8.95	9.31
$oxalate^{2-}$	1.51E-08	1.15E-03	1.20E-03
DBP	1.40E-04	32.1	33.4
butanol	1.40E-04	8.94	9.30
NH_3	2.66E-02	390	406
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0.148 (µCi/g)	2.56 (kg)
U	1.93E-02 (M)	3.96E+03 (µg/g)	4.12E+03 (kg)
Cs	6.25E-02 (Ci/L)	53.9 (µCi/g)	5.61E+04 (Ci)
Sr	1.50 (Ci/L)	1.29E+03 (µCi/g)	1.35E+06 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).
†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Single-Shell Tank 241-B-112			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	1.58E+05 kg	(30.0 kgal)	
Heat Load	0.114 kW	(390 BTU/hr)	
Bulk Density	1.39 (g/cc)		
Void Fraction	0.856		
Water wt%	54.0		
TOC wt% C (wet)	0.281		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	7.18	1.19E+05	1.87E+04
Al^{3+}	1.14	2.23E+04	3.51E+03
Fe^{3+} (total Fe)	0.375	1.51E+04	2.38E+03
Cr^{3+}	2.94E-02	1.10E+03	174
Bi^{3+}	1.96E-02	2.96E+03	466
La^{3+}	1.72E-06	0.172	2.72E-02
Hg^{2+}	1.93E-05	2.79	0.440
Zr (as $ZrO(OH)_2$)	1.58E-04	10.4	1.64
Pb^{2+}	3.02E-03	452	71.1
Ni^{2+}	7.90E-03	334	52.7
Sr^{2+}	1.92E-06	0.121	1.91E-02
Mn^{4+}	1.74E-03	68.7	10.8
Ca^{2+}	0.168	4.85E+03	765
K^{+}	2.17E-02	612	96.5
OH^{-}	6.03	7.39E+04	1.16E+04
$NO3^{-}$	3.73	1.66E+05	2.62E+04
$NO2^{-}$	0.930	3.08E+04	4.86E+03
$CO3^{2-}$	0.396	1.71E+04	2.70E+03
$PO4^{3-}$	0.102	6.99E+03	1.10E+03
$SO4^{2-}$	0.114	7.88E+03	1.24E+03
Si (as SiO_3^{2-})	5.03E-02	1.02E+03	161
F^{-}	8.28E-02	1.13E+03	179
Cl^{-}	7.53E-02	1.92E+03	303
$C_6H_5O_7^{3-}$	1.28E-02	1.74E+03	275
$EDTA^{4-}$	2.87E-03	596	93.9
$HEDTA^{3-}$	3.88E-04	76.6	12.1
glycolate^{-}	9.01E-03	487	76.8
acetate^{-}	1.71E-02	727	115
$oxalate^{2-}$	1.47E-06	9.34E-02	1.47E-02
DBP	1.36E-02	2.61E+03	411
butanol	1.36E-02	726	114
NH_3	5.49E-03	67.2	10.6
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		7.05E-02 (µCi/g)	0.185 (kg)
U	1.38E-02 (M)	2.36E+03 (µg/g)	372 (kg)
Cs	0.115 (Ci/L)	82.9 (µCi/g)	1.31E+04 (Ci)
Sr	6.93E-02 (Ci/L)	49.9 (µCi/g)	7.87E+03 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-B-112			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	1.52E+04 kg	(3.01 kgal)	
Heat Load	9.08E-03 kW	(31.0 BTU/hr)	
Bulk Density*	1.34 (g/cc)		
Water wt%†	58.5		
TOC wt% C (wet)	0.534		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	6.73	1.16E+05	1.76E+03
Al^{3+}	1.22	2.46E+04	374
Fe^{3+} (total Fe)	1.52E-03	63.7	0.969
Cr^{3+}	2.29E-02	890	13.5
Bi^{3+}	8.80E-04	138	2.09
La^{3+}	3.16E-06	0.328	4.99E-03
Hg^{2+}	7.62E-06	1.14	1.74E-02
Zr (as $ZrO(OH)_2$)	2.90E-04	19.8	0.301
Pb^{2+}	1.22E-03	189	2.88
Ni^{2+}	1.37E-03	60.3	0.917
Sr^{2+}	1.05E-06	6.90E-02	1.05E-03
Mn^{4+}	3.18E-03	131	1.99
Ca^{2+}	6.86E-03	206	3.13
K^{+}	3.69E-02	1.08E+03	16.4
OH^{-}	5.19	6.61E+04	1.01E+03
$NO3^{-}$	2.13	9.90E+04	1.51E+03
$NO2^{-}$	1.70	5.86E+04	892
$CO3^{2-}$	0.282	1.27E+04	193
$PO4^{3-}$	6.70E-02	4.76E+03	72.4
$SO4^{2-}$	0.187	1.34E+04	204
Si (as SiO_3^{2-})	2.59E-02	545	8.28
F^{-}	5.82E-02	828	12.6
Cl^{-}	0.124	3.30E+03	50.1
$C_6H_5O_7^{3-}$	2.35E-02	3.32E+03	50.5
$EDTA^{4-}$	5.27E-03	1.14E+03	17.3
$HEDTA^{3-}$	7.11E-04	146	2.22
glycolate^{-}	1.65E-02	928	14.1
acetate^{-}	3.13E-02	1.38E+03	21.0
$oxalate^{2-}$	2.70E-06	0.178	2.70E-03
DBP	2.49E-02	4.96E+03	75.4
butanol	2.49E-02	1.38E+03	21.0
NH_3	1.01E-02	128	1.95
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	22.9 (µCi/L)		4.34E-03 (kg)
U	3.05E-03 (M)	543 (µg/g)	8.26 (kg)
Cs	0.133 (Ci/L)	99.6 (µCi/g)	1.51E+03 (Ci)
Sr	2.59E-02 (Ci/L)	19.4 (µCi/g)	295 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.
†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-B-112			
Total Inventory Estimate*			
Physical Properties			
Total Waste	1.73E+05 kg	(33.0 kgal)	
Heat Load	0.123 kW	(421 BTU/hr)	
Bulk Density†	1.38 (g/cc)		
Water wt%†	54.4		
TOC wt% C (wet)†	0.304		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	7.14	1.19E+05	2.05E+04
Al^{3+}	1.15	2.25E+04	3.88E+03
Fe^{3+} (total Fe)	0.341	1.38E+04	2.38E+03
Cr^{3+}	2.88E-02	1.08E+03	187
Bi^{3+}	1.79E-02	2.71E+03	468
La^{3+}	1.85E-06	0.186	3.21E-02
Hg^{2+}	1.83E-05	2.65	0.458
Zr (as $ZrO(OH)_2$)	1.70E-04	11.2	1.94
Pb^{2+}	2.86E-03	428	74.0
Ni^{2+}	7.31E-03	310	53.6
Sr^{2+}	1.84E-06	0.116	2.01E-02
Mn^{4+}	1.87E-03	74.1	12.8
Ca^{2+}	0.153	4.44E+03	768
K^{+}	2.31E-02	653	113
OH^{-}	5.96	7.32E+04	1.26E+04
$NO3^{-}$	3.58	1.61E+05	2.77E+04
$NO2^{-}$	1.00	3.33E+04	5.75E+03
$CO3^{2-}$	0.386	1.67E+04	2.89E+03
$PO4^{3-}$	9.89E-02	6.79E+03	1.17E+03
$SO4^{2-}$	0.121	8.37E+03	1.45E+03
Si (as SiO_3^{2-})	4.81E-02	977	169
F^{-}	8.06E-02	1.11E+03	191
Cl^{-}	7.98E-02	2.04E+03	353
$C_6H_5O_7^{3-}$	1.38E-02	1.88E+03	325
$EDTA^{4-}$	3.09E-03	644	111
$HEDTA^{3-}$	4.17E-04	82.7	14.3
glycolate^{-}	9.70E-03	526	90.9
acetate^{-}	1.84E-02	785	136
$oxalate^{2-}$	1.58E-06	0.101	1.74E-02
DBP	1.46E-02	2.81E+03	486
butanol	1.46E-02	784	135
NH_3	5.91E-03	72.6	12.5
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		6.58E-02 (µCi/g)	0.189 (kg)
U	1.28E-02 (M)	2.20E+03 (µg/g)	381 (kg)
Cs	0.117 (Ci/L)	84.4 (µCi/g)	1.46E+04 (Ci)
Sr	6.53E-02 (Ci/L)	47.2 (µCi/g)	8.16E+03 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).
†Volume average for density, mass average Water wt% and TOC wt% C.

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Single-Shell Tank 241-B-201			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	1.46E+05 kg	(28.0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density	1.38 (g/cc)		
Void Fraction	0.834		
Water wt%	55.5		
TOC wt% C (wet)	1.12		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.52	7.55E+04	1.10E+04
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0.361	1.46E+04	2.14E+03
Cr^{3+}	3.44E-03	130	19.0
Bi^{3+}	6.04E-02	9.17E+03	1.34E+03
La^{3+}	0.237	2.39E+04	3.49E+03
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	1.34E-03	57.3	8.36
Sr^{2+}	1.57	9.97E+04	1.45E+04
Mn^{4+}	3.86E-03	154	22.5
Ca^{2+}	0.244	7.10E+03	1.04E+03
K^{+}	0.228	6.46E+03	943
OH^{-}	4.92	6.07E+04	8.86E+03
$NO3^{-}$	1.33	5.98E+04	8.72E+03
$NO2^{-}$	0	0	0
$CO3^{2-}$	0.244	1.06E+04	1.55E+03
$PO4^{3-}$	9.65E-02	6.66E+03	971
$SO4^{2-}$	1.34E-03	93.7	13.7
Si (as SiO_3^{2-})	0	0	0
F^{-}	2.03	2.81E+04	4.10E+03
Cl^{-}	2.49E-02	642	93.6
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0.643	4.11E+04	6.00E+03
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.00E-02 (µCi/g)	2.44E-02 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-B-201			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	3.79E+03 kg	(1.00 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	1.00 (g/cc)		
Water wt%†	100		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Single-Shell Tank 241-B-201			
Total Inventory Estimate*			
Physical Properties			
Total Waste	1.50E+05 kg	(29.0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density†	1.36 (g/cc)		
Water wt%†	57.1		
TOC wt% C (wet)†	1.08		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.36	7.36E+04	1.10E+04
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0.349	1.43E+04	2.14E+03
Cr^{3+}	3.32E-03	127	19.0
Bi^{3+}	5.83E-02	8.94E+03	1.34E+03
La^{3+}	0.229	2.33E+04	3.49E+03
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	1.30E-03	55.8	8.36
Sr^{2+}	1.51	9.72E+04	1.45E+04
Mn^{4+}	3.73E-03	150	22.5
Ca^{2+}	0.235	6.92E+03	1.04E+03
K^{+}	0.220	6.30E+03	943
OH^{-}	4.75	5.92E+04	8.86E+03
$NO3^{-}$	1.28	5.83E+04	8.72E+03
$NO2^{-}$	0	0	0
$CO3^{2-}$	0.235	1.04E+04	1.55E+03
$PO4^{3-}$	9.32E-02	6.49E+03	971
$SO4^{2-}$	1.30E-03	91.4	13.7
Si (as SiO_3^{2-})	0	0	0
F^{-}	1.96	2.74E+04	4.10E+03
Cl^{-}	2.41E-02	625	93.6
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0.621	4.01E+04	6.00E+03
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		9.77E-03 (µCi/g)	2.44E-02 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

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Single-Shell Tank 241-B-202			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	1.41E+05 kg	(27.0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density	1.38 (g/cc)		
Void Fraction	0.834		
Water wt%	55.5		
TOC wt% C (wet)	1.12		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.52	7.55E+04	1.06E+04
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0.361	1.46E+04	2.06E+03
Cr^{3+}	3.44E-03	130	18.3
Bi^{3+}	6.04E-02	9.17E+03	1.29E+03
La^{3+}	0.237	2.39E+04	3.36E+03
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	1.34E-03	57.3	8.06
Sr^{2+}	1.57	9.97E+04	1.40E+04
Mn^{4+}	3.86E-03	154	21.7
Ca^{2+}	0.244	7.10E+03	998
K^{+}	0.228	6.46E+03	909
OH^{-}	4.92	6.07E+04	8.54E+03
$NO3^{-}$	1.33	5.98E+04	8.41E+03
$NO2^{-}$	0	0	0
$CO3^{2-}$	0.244	1.06E+04	1.49E+03
$PO4^{3-}$	9.65E-02	6.66E+03	937
$SO4^{2-}$	1.34E-03	93.7	13.2
Si (as SiO_3^{2-})	0	0	0
F^{-}	2.03	2.81E+04	3.95E+03
Cl^{-}	2.49E-02	642	90.2
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0.643	4.11E+04	5.78E+03
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.00E-02 (µCi/g)	2.35E-02 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-B-202			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	0 (g/cc)		
Water wt%†	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-B-202			
Total Inventory Estimate*			
Physical Properties			
Total Waste	1.41E+05 kg	(27.0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density†	1.38 (g/cc)		
Water wt%†	55.5		
TOC wt% C (wet)†	1.12		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.52	7.55E+04	1.06E+04
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0.361	1.46E+04	2.06E+03
Cr^{3+}	3.44E-03	130	18.3
Bi^{3+}	6.04E-02	9.17E+03	1.29E+03
La^{3+}	0.237	2.39E+04	3.36E+03
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	1.34E-03	57.3	8.06
Sr^{2+}	1.57	9.97E+04	1.40E+04
Mn^{4+}	3.86E-03	154	21.7
Ca^{2+}	0.244	7.10E+03	998
K^{+}	0.228	6.46E+03	909
OH^{-}	4.92	6.07E+04	8.54E+03
$NO3^{-}$	1.33	5.98E+04	8.41E+03
$NO2^{-}$	0	0	0
$CO3^{2-}$	0.244	1.06E+04	1.49E+03
$PO4^{3-}$	9.65E-02	6.66E+03	937
$SO4^{2-}$	1.34E-03	93.7	13.2
Si (as SiO_3^{2-})	0	0	0
F^{-}	2.03	2.81E+04	3.95E+03
Cl^{-}	2.49E-02	642	90.2
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0.643	4.11E+04	5.78E+03
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.00E-02 (µCi/g)	2.35E-02 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Single-Shell Tank 241-B-203			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	2.60E+05 kg	(50.0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density	1.38 (g/cc)		
Void Fraction	0.834		
Water wt%	55.5		
TOC wt% C (wet)	1.12		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.52	7.55E+04	1.97E+04
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0.361	1.46E+04	3.81E+03
Cr^{3+}	3.44E-03	130	33.9
Bi^{3+}	6.04E-02	9.17E+03	2.39E+03
La^{3+}	0.237	2.39E+04	6.22E+03
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	1.34E-03	57.3	14.9
Sr^{2+}	1.57	9.97E+04	2.60E+04
Mn^{4+}	3.86E-03	154	40.1
Ca^{2+}	0.244	7.10E+03	1.85E+03
K^{+}	0.228	6.46E+03	1.68E+03
OH^{-}	4.92	6.07E+04	1.58E+04
$NO3^{-}$	1.33	5.98E+04	1.56E+04
$NO2^{-}$	0	0	0
$CO3^{2-}$	0.244	1.06E+04	2.77E+03
$PO4^{3-}$	9.65E-02	6.66E+03	1.73E+03
$SO4^{2-}$	1.34E-03	93.7	24.4
Si (as SiO_3^{2-})	0	0	0
F^{-}	2.03	2.81E+04	7.32E+03
Cl^{-}	2.49E-02	642	167
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0.643	4.11E+04	1.07E+04
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.00E-02 (µCi/g)	4.35E-02 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-B-203			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	3.79E+03 kg	(1.00 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	1.00 (g/cc)		
Water wt%†	100.0		
TOC wt% C (wet)	1.49E-06		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	5.23E-04	12.0	4.56E-02
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	3.50E-06	0.196	7.42E-04
Cr^{3+}	1.36E-05	0.706	2.68E-03
Bi^{3+}	4.83E-07	0.101	3.82E-04
La^{3+}	7.24E-07	0.101	3.81E-04
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	3.13E-06	0.184	6.97E-04
Sr^{2+}	2.41E-07	2.11E-02	8.02E-05
Mn^{4+}	5.59E-07	3.07E-02	1.16E-04
Ca^{2+}	1.58E-05	0.632	2.40E-03
K^{+}	3.40E-05	1.33	5.05E-03
OH^{-}	8.66E-05	1.47	5.59E-03
$NO3^{-}$	4.48E-04	27.8	0.105
$NO2^{-}$	3.92E-05	1.80	6.84E-03
$CO3^{2-}$	4.29E-06	0.258	9.77E-04
$PO4^{3-}$	5.70E-06	0.542	2.05E-03
$SO4^{2-}$	6.73E-06	0.647	2.45E-03
Si (as SiO_3^{2-})	0	0	0
F^{-}	2.90E-05	0.550	2.09E-03
Cl^{-}	8.79E-06	0.312	1.18E-03
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	6.19E-07	5.45E-02	2.07E-04
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	1.54E-03 (µCi/L)		9.75E-08 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-B-203			
Total Inventory Estimate*			
Physical Properties			
Total Waste	2.64E+05 kg	(51.0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density†	1.37 (g/cc)		
Water wt%†	56.4		
TOC wt% C (wet)†	1.10		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.43	7.44E+04	1.97E+04
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0.354	1.44E+04	3.81E+03
Cr^{3+}	3.37E-03	128	33.9
Bi^{3+}	5.92E-02	9.04E+03	2.39E+03
La^{3+}	0.232	2.36E+04	6.22E+03
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	1.32E-03	56.5	14.9
Sr^{2+}	1.54	9.83E+04	2.60E+04
Mn^{4+}	3.79E-03	152	40.1
Ca^{2+}	0.239	7.00E+03	1.85E+03
K^{+}	0.223	6.37E+03	1.68E+03
OH^{-}	4.82	5.99E+04	1.58E+04
$NO3^{-}$	1.30	5.90E+04	1.56E+04
$NO2^{-}$	7.71E-07	2.59E-02	6.84E-03
$CO3^{2-}$	0.239	1.05E+04	2.77E+03
$PO4^{3-}$	9.46E-02	6.56E+03	1.73E+03
$SO4^{2-}$	1.32E-03	92.4	24.4
Si (as SiO_3^{2-})	0	0	0
F^{-}	1.99	2.77E+04	7.32E+03
Cl^{-}	2.44E-02	632	167
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0.630	4.05E+04	1.07E+04
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		9.88E-03 (µCi/g)	4.35E-02 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

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Single-Shell Tank 241-B-204			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	2.55E+05 kg	(49.0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density	1.38 (g/cc)		
Void Fraction	0.834		
Water wt%	55.5		
TOC wt% C (wet)	1.12		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.52	7.55E+04	1.93E+04
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0.361	1.46E+04	3.74E+03
Cr^{3+}	3.44E-03	130	33.2
Bi^{3+}	6.04E-02	9.17E+03	2.34E+03
La^{3+}	0.237	2.39E+04	6.10E+03
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	1.34E-03	57.3	14.6
Sr^{2+}	1.57	9.97E+04	2.54E+04
Mn^{4+}	3.86E-03	154	39.3
Ca^{2+}	0.244	7.10E+03	1.81E+03
K^{+}	0.228	6.46E+03	1.65E+03
OH^{-}	4.92	6.07E+04	1.55E+04
$NO3^{-}$	1.33	5.98E+04	1.53E+04
$NO2^{-}$	0	0	0
$CO3^{2-}$	0.244	1.06E+04	2.71E+03
$PO4^{3-}$	9.65E-02	6.66E+03	1.70E+03
$SO4^{2-}$	1.34E-03	93.7	23.9
Si (as SiO_3^{2-})	0	0	0
F^{-}	2.03	2.81E+04	7.17E+03
Cl^{-}	2.49E-02	642	164
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0.643	4.11E+04	1.05E+04
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.00E-02 (µCi/g)	4.27E-02 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-B-204			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	3.82E+03 kg	(1.00 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	1.01 (g/cc)		
Water wt%†	98.1		
TOC wt% C (wet)	3.11E-04		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0.209	4.78E+03	18.3
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	1.75E-03	97.1	0.371
Cr^{3+}	6.92E-03	357	1.37
Bi^{3+}	1.02E-04	21.1	8.06E-02
La^{3+}	1.52E-04	21.0	8.04E-02
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	1.57E-03	91.6	0.350
Sr^{2+}	5.08E-05	4.42	1.69E-02
Mn^{4+}	1.18E-04	6.42	2.45E-02
Ca^{2+}	7.88E-03	314	1.20
K^{+}	7.52E-03	292	1.12
OH^{-}	4.45E-02	750	2.87
$NO3^{-}$	0.174	1.07E+04	41.0
$NO2^{-}$	2.05E-02	934	3.57
$CO3^{2-}$	1.90E-03	113	0.433
$PO4^{3-}$	1.20E-03	113	0.433
$SO4^{2-}$	3.45E-03	329	1.26
Si (as SiO_3^{2-})	0	0	0
F^{-}	6.10E-03	115	0.440
Cl^{-}	3.46E-03	122	0.466
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	1.30E-04	11.4	4.36E-02
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0.325 (µCi/L)		2.06E-05 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-B-204			
Total Inventory Estimate*			
Physical Properties			
Total Waste	2.59E+05 kg	(50.0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density†	1.37 (g/cc)		
Water wt%†	56.4		
TOC wt% C (wet)†	1.10		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.43	7.45E+04	1.93E+04
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0.354	1.44E+04	3.74E+03
Cr^{3+}	3.51E-03	133	34.6
Bi^{3+}	5.92E-02	9.04E+03	2.34E+03
La^{3+}	0.232	2.35E+04	6.10E+03
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	1.35E-03	57.8	15.0
Sr^{2+}	1.53	9.82E+04	2.54E+04
Mn^{4+}	3.79E-03	152	39.4
Ca^{2+}	0.239	7.00E+03	1.81E+03
K^{+}	0.223	6.37E+03	1.65E+03
OH^{-}	4.82	5.99E+04	1.55E+04
$NO3^{-}$	1.30	5.91E+04	1.53E+04
$NO2^{-}$	4.10E-04	13.8	3.57
$CO3^{2-}$	0.239	1.05E+04	2.71E+03
$PO4^{3-}$	9.46E-02	6.56E+03	1.70E+03
$SO4^{2-}$	1.39E-03	97.2	25.2
Si (as SiO_3^{2-})	0	0	0
F^{-}	1.99	2.77E+04	7.17E+03
Cl^{-}	2.45E-02	634	164
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0.630	4.05E+04	1.05E+04
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		9.88E-03 (µCi/g)	4.27E-02 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

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Single-Shell Tank 241-BX-101			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	2.89E+05 kg	(42.0 kgal)	
Heat Load	1.56 kW	(5.34E+03 BTU/hr)	
Bulk Density	1.82 (g/cc)		
Void Fraction	0.425		
Water wt%	40.7		
TOC wt% C (wet)	5.76E-02		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	5.55	7.01E+04	2.03E+04
Al^{3+}	1.88	2.78E+04	8.05E+03
Fe^{3+} (total Fe)	0.765	2.35E+04	6.79E+03
Cr^{3+}	8.56E-04	24.5	7.08
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0.374	1.21E+04	3.49E+03
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.121	2.66E+03	771
K^{+}	2.59E-03	55.7	16.1
OH^{-}	18.1	1.69E+05	4.88E+04
$NO3^{-}$	4.34E-02	1.48E+03	428
$NO2^{-}$	0.314	7.93E+03	2.29E+03
$CO3^{2-}$	1.41	4.65E+04	1.35E+04
$PO4^{3-}$	0.278	1.45E+04	4.19E+03
$SO4^{2-}$	6.45E-02	3.40E+03	985
Si (as SiO_3^{2-})	0.740	1.14E+04	3.30E+03
F^{-}	0	0	0
Cl^{-}	1.19E-02	232	67.2
$C_6H_5O_7^{3-}$	2.68E-03	278	80.4
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	3.57E-02	1.47E+03	426
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	2.73E-02	255	73.9
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0.884 (µCi/g)	4.27 (kg)
U	1.55 (M)	2.02E+05 (µg/g)	5.85E+04 (kg)
Cs	5.80E-04 (Ci/L)	0.319 (µCi/g)	92.2 (Ci)
Sr	1.46 (Ci/L)	802 (µCi/g)	2.32E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-BX-101			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	5.05E+03 kg	(1.00 kgal)	
Heat Load	2.98E-03 kW	(10.2 BTU/hr)	
Bulk Density*	1.33 (g/cc)		
Water wt%†	59.0		
TOC wt% C (wet)	0.528		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	6.62	1.14E+05	577
Al^{3+}	1.20	2.43E+04	123
Fe^{3+} (total Fe)	1.50E-03	63.0	0.318
Cr^{3+}	2.25E-02	879	4.44
Bi^{3+}	8.66E-04	136	0.686
La^{3+}	3.11E-06	0.324	1.64E-03
Hg^{2+}	7.50E-06	1.13	5.71E-03
Zr (as $ZrO(OH)_2$)	2.86E-04	19.6	9.88E-02
Pb^{2+}	1.20E-03	187	0.943
Ni^{2+}	1.35E-03	59.6	0.301
Sr^{2+}	1.04E-06	6.82E-02	3.44E-04
Mn^{4+}	3.13E-03	129	0.652
Ca^{2+}	6.75E-03	203	1.03
K^{+}	3.63E-02	1.07E+03	5.38
OH^{-}	5.11	6.53E+04	330
$NO3^{-}$	2.10	9.79E+04	494
$NO2^{-}$	1.68	5.80E+04	293
$CO3^{2-}$	0.278	1.25E+04	63.2
$PO4^{3-}$	6.60E-02	4.71E+03	23.8
$SO4^{2-}$	0.184	1.33E+04	67.1
Si (as SiO_3^{2-})	2.55E-02	538	2.72
F^{-}	5.73E-02	818	4.13
Cl^{-}	0.122	3.26E+03	16.4
$C_6H_5O_7^{3-}$	2.31E-02	3.28E+03	16.6
$EDTA^{4-}$	5.18E-03	1.12E+03	5.66
$HEDTA^{3-}$	7.00E-04	144	0.727
$glycolate^{-}$	1.63E-02	917	4.63
$acetate^{-}$	3.08E-02	1.37E+03	6.90
$oxalate^{2-}$	2.66E-06	0.176	8.87E-04
DBP	2.45E-02	4.90E+03	24.7
butanol	2.45E-02	1.37E+03	6.89
NH_3	9.90E-03	126	0.638
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	22.5 (µCi/L)		1.42E-03 (kg)
U	3.00E-03 (M)	537 (µg/g)	2.71 (kg)
Cs	0.131 (Ci/L)	98.4 (µCi/g)	497 (Ci)
Sr	2.55E-02 (Ci/L)	19.2 (µCi/g)	96.7 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-BX-101			
Total Inventory Estimate*			
Physical Properties			
Total Waste	2.95E+05 kg	(43.0 kgal)	
Heat Load	1.57 kW	(5.35E+03 BTU/hr)	
Bulk Density†	1.81 (g/cc)		
Water wt%†	41.1		
TOC wt% C (wet)†	6.57E-02		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	5.58	7.09E+04	2.09E+04
Al^{3+}	1.86	2.78E+04	8.17E+03
Fe^{3+} (total Fe)	0.747	2.31E+04	6.79E+03
Cr^{3+}	1.36E-03	39.1	11.5
Bi^{3+}	2.02E-05	2.33	0.686
La^{3+}	7.24E-08	5.56E-03	1.64E-03
Hg^{2+}	1.75E-07	1.94E-02	5.71E-03
Zr (as $ZrO(OH)_2$)	6.65E-06	0.335	9.88E-02
Pb^{2+}	2.80E-05	3.20	0.943
Ni^{2+}	0.365	1.19E+04	3.49E+03
Sr^{2+}	2.41E-08	1.17E-03	3.44E-04
Mn^{4+}	7.29E-05	2.21	0.652
Ca^{2+}	0.118	2.62E+03	772
K^{+}	3.38E-03	73.0	21.5
OH^{-}	17.8	1.67E+05	4.92E+04
$NO3^{-}$	9.13E-02	3.13E+03	922
$NO2^{-}$	0.345	8.78E+03	2.59E+03
$CO3^{2-}$	1.39	4.59E+04	1.35E+04
$PO4^{3-}$	0.273	1.43E+04	4.22E+03
$SO4^{2-}$	6.73E-02	3.57E+03	1.05E+03
Si (as SiO_3^{2-})	0.723	1.12E+04	3.31E+03
F^{-}	1.34E-03	14.0	4.13
Cl^{-}	1.45E-02	284	83.6
$C_6H_5O_7^{3-}$	3.15E-03	329	97.0
$EDTA^{4-}$	1.21E-04	19.2	5.66
$HEDTA^{3-}$	1.63E-05	2.47	0.727
$glycolate^{-}$	3.52E-02	1.46E+03	430
$acetate^{-}$	7.19E-04	23.4	6.90
$oxalate^{2-}$	6.19E-08	3.01E-03	8.87E-04
DBP	5.71E-04	84.0	24.7
butanol	5.71E-04	23.4	6.89
NH_3	2.69E-02	253	74.5
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0.869 (µCi/g)	4.27 (kg)
U	1.51 (M)	1.99E+05 (µg/g)	5.85E+04 (kg)
Cs	3.62E-03 (Ci/L)	2.00 (µCi/g)	589 (Ci)
Sr	1.43 (Ci/L)	789 (µCi/g)	2.32E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Single-Shell Tank 241-BX-102			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	2.81E+05 kg	(96.0 kgal)	
Heat Load	5.03E-03 kW	(17.2 BTU/hr)	
Bulk Density	0.774 (g/cc)		
Void Fraction	0.125		
Water wt%	27.1		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	8.83	2.62E+05	7.38E+04
Al^{3+}	0.362	1.26E+04	3.55E+03
Fe^{3+} (total Fe)	0.116	8.36E+03	2.35E+03
Cr^{3+}	4.19E-04	28.1	7.91
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	3.08E-04	79.7	22.4
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	1.70E-02	4.54E+03	1.28E+03
Ni^{2+}	2.09E-04	15.9	4.47
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	9.35E-02	4.84E+03	1.36E+03
K^{+}	1.61E-04	8.14	2.29
OH^{-}	4.05	8.90E+04	2.50E+04
$NO3^{-}$	4.18E-02	3.35E+03	943
$NO2^{-}$	1.39E-02	825	232
$CO3^{2-}$	0.469	3.63E+04	1.02E+04
$PO4^{3-}$	9.58E-02	1.17E+04	3.30E+03
$SO4^{2-}$	2.02E-02	2.50E+03	703
Si (as SiO_3^{2-})	4.02	1.46E+05	4.10E+04
F^{-}	0	0	0
Cl^{-}	7.42E-04	33.9	9.55
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	2.57E-06	5.65E-02	1.59E-02
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0.126 (µCi/g)	0.591 (kg)
U	0.487 (M)	1.50E+05 (µg/g)	4.21E+04 (kg)
Cs	3.05E-04 (Ci/L)	0.394 (µCi/g)	111 (Ci)
Sr	1.84E-03 (Ci/L)	2.38 (µCi/g)	670 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-BX-102			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	0 (g/cc)		
Water wt%†	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Single-Shell Tank 241-BX-102			
Total Inventory Estimate*			
Physical Properties			
Total Waste	2.81E+05 kg	(96.0 kgal)	
Heat Load	5.03E-03 kW	(17.2 BTU/hr)	
Bulk Density†	0.774 (g/cc)		
Water wt%†	27.1		
TOC wt% C (wet)†	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	8.83	2.62E+05	7.38E+04
Al^{3+}	0.362	1.26E+04	3.55E+03
Fe^{3+} (total Fe)	0.116	8.36E+03	2.35E+03
Cr^{3+}	4.19E-04	28.1	7.91
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	3.08E-04	79.7	22.4
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	1.70E-02	4.54E+03	1.28E+03
Ni^{2+}	2.09E-04	15.9	4.47
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	9.35E-02	4.84E+03	1.36E+03
K^{+}	1.61E-04	8.14	2.29
OH^{-}	4.05	8.90E+04	2.50E+04
$NO3^{-}$	4.18E-02	3.35E+03	943
$NO2^{-}$	1.39E-02	825	232
$CO3^{2-}$	0.469	3.63E+04	1.02E+04
$PO4^{3-}$	9.58E-02	1.17E+04	3.30E+03
$SO4^{2-}$	2.02E-02	2.50E+03	703
Si (as SiO_3^{2-})	4.02	1.46E+05	4.10E+04
F^{-}	0	0	0
Cl^{-}	7.42E-04	33.9	9.55
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	2.57E-06	5.65E-02	1.59E-02
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0.126 (µCi/g)	0.591 (kg)
U	0.487 (M)	1.50E+05 (µg/g)	4.21E+04 (kg)
Cs	3.05E-04 (Ci/L)	0.394 (µCi/g)	111 (Ci)
Sr	1.84E-03 (Ci/L)	2.38 (µCi/g)	670 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

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Single-Shell Tank 241-BX-103			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	4.03E+05 kg	(62.0 kgal)	
Heat Load	1.15E-02 kW	(39.4 BTU/hr)	
Bulk Density	1.72 (g/cc)		
Void Fraction	0.410		
Water wt%	45.1		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.55	6.08E+04	2.45E+04
Al^{3+}	0.756	1.19E+04	4.79E+03
Fe^{3+} (total Fe)	0.162	5.27E+03	2.13E+03
Cr^{3+}	1.38E-03	41.8	16.9
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	7.63E-04	89.0	35.9
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	4.20E-02	5.06E+03	2.04E+03
Ni^{2+}	6.91E-04	23.6	9.52
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.115	2.67E+03	1.08E+03
K^{+}	4.76E-04	10.8	4.36
OH^{-}	13.5	1.33E+05	5.37E+04
$NO3^{-}$	0.121	4.36E+03	1.76E+03
$NO2^{-}$	3.70E-02	989	399
$CO3^{2-}$	1.68	5.88E+04	2.37E+04
$PO4^{3-}$	0.348	1.92E+04	7.76E+03
$SO4^{2-}$	7.27E-02	4.06E+03	1.64E+03
Si (as SiO_3^{2-})	1.35E-03	22.1	8.90
F^{-}	0	0	0
Cl^{-}	2.19E-03	45.1	18.2
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	7.35E-06	7.27E-02	2.93E-02
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0.142 (µCi/g)	0.954 (kg)
U	1.76 (M)	2.43E+05 (µg/g)	9.82E+04 (kg)
Cs	9.89E-04 (Ci/L)	0.575 (µCi/g)	232 (Ci)
Sr	6.61E-03 (Ci/L)	3.84 (µCi/g)	1.55E+03 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-BX-103			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	1.90E+04 kg	(4.00 kgal)	
Heat Load	1.19E-02 kW	(40.6 BTU/hr)	
Bulk Density*	1.25 (g/cc)		
Water wt%†	66.0		
TOC wt% C (wet)	0.580		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	5.21	9.58E+04	1.82E+03
Al^{3+}	0.825	1.78E+04	337
Fe^{3+} (total Fe)	1.82E-03	81.1	1.54
Cr^{3+}	2.13E-02	884	16.7
Bi^{3+}	5.23E-04	87.4	1.66
La^{3+}	1.81E-06	0.201	3.81E-03
Hg^{2+}	4.97E-06	0.797	1.51E-02
Zr (as $ZrO(OH)_2$)	1.81E-04	13.2	0.251
Pb^{2+}	7.86E-04	130	2.47
Ni^{2+}	1.57E-03	73.8	1.40
Sr^{2+}	6.03E-07	4.22E-02	8.00E-04
Mn^{4+}	2.92E-03	128	2.43
Ca^{2+}	8.28E-03	265	5.03
K^{+}	2.74E-02	858	16.3
OH^{-}	3.61	4.90E+04	929
$NO3^{-}$	1.72	8.51E+04	1.61E+03
$NO2^{-}$	1.25	4.59E+04	870
$CO3^{2-}$	0.246	1.18E+04	224
$PO4^{3-}$	4.27E-02	3.24E+03	61.4
$SO4^{2-}$	0.147	1.13E+04	214
Si (as SiO_3^{2-})	2.86E-02	643	12.2
F^{-}	3.42E-02	519	9.84
Cl^{-}	9.37E-02	2.65E+03	50.3
$C_6H_5O_7^{3-}$	2.08E-02	3.15E+03	59.6
$EDTA^{4-}$	7.39E-03	1.70E+03	32.3
$HEDTA^{3-}$	9.19E-03	2.01E+03	38.2
$glycolate^{-}$	2.79E-02	1.67E+03	31.7
$acetate^{-}$	1.78E-02	841	15.9
$oxalate^{2-}$	1.55E-06	0.109	2.06E-03
DBP	1.86E-02	3.95E+03	74.9
butanol	1.86E-02	1.10E+03	20.9
NH_3	1.34E-02	182	3.45
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	26.4 (µCi/L)		6.67E-03 (kg)
U	3.52E-03 (M)	670 (µg/g)	12.7 (kg)
Cs	0.111 (Ci/L)	88.4 (µCi/g)	1.68E+03 (Ci)
Sr	3.95E-02 (Ci/L)	31.6 (µCi/g)	599 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.
†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-BX-103			
Total Inventory Estimate*			
Physical Properties			
Total Waste	4.22E+05 kg	(66.0 kgal)	
Heat Load	2.34E-02 kW	(79.9 BTU/hr)	
Bulk Density†	1.69 (g/cc)		
Water wt%†	46.1		
TOC wt% C (wet)†	2.60E-02		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.59	6.24E+04	2.63E+04
Al^{3+}	0.760	1.21E+04	5.12E+03
Fe^{3+} (total Fe)	0.153	5.04E+03	2.13E+03
Cr^{3+}	2.59E-03	79.6	33.6
Bi^{3+}	3.17E-05	3.92	1.66
La^{3+}	1.10E-07	9.01E-03	3.81E-03
Hg^{2+}	7.17E-04	85.1	35.9
Zr (as $ZrO(OH)_2$)	1.10E-05	0.593	0.251
Pb^{2+}	3.95E-02	4.84E+03	2.05E+03
Ni^{2+}	7.44E-04	25.8	10.9
Sr^{2+}	3.66E-08	1.89E-03	8.00E-04
Mn^{4+}	1.77E-04	5.76	2.43
Ca^{2+}	0.108	2.57E+03	1.08E+03
K^{+}	2.11E-03	48.8	20.6
OH^{-}	12.9	1.29E+05	5.46E+04
$NO3^{-}$	0.218	7.99E+03	3.37E+03
$NO2^{-}$	0.110	3.01E+03	1.27E+03
$CO3^{2-}$	1.60	5.67E+04	2.39E+04
$PO4^{3-}$	0.330	1.85E+04	7.82E+03
$SO4^{2-}$	7.72E-02	4.39E+03	1.85E+03
Si (as SiO_3^{2-})	3.00E-03	49.9	21.1
F^{-}	2.07E-03	23.3	9.84
Cl^{-}	7.74E-03	162	68.5
$C_6H_5O_7^{3-}$	1.26E-03	141	59.6
$EDTA^{4-}$	4.48E-04	76.4	32.3
$HEDTA^{3-}$	5.57E-04	90.4	38.2
$glycolate^{-}$	1.69E-03	75.1	31.7
$acetate^{-}$	1.08E-03	37.8	15.9
$oxalate^{2-}$	9.38E-08	4.89E-03	2.06E-03
DBP	1.13E-03	177	74.9
butanol	1.13E-03	49.4	20.9
NH_3	8.20E-04	8.24	3.48
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0.136 (µCi/g)	0.960 (kg)
U	1.65 (M)	2.33E+05 (µg/g)	9.82E+04 (kg)
Cs	7.63E-03 (Ci/L)	4.52 (µCi/g)	1.91E+03 (Ci)
Sr	8.60E-03 (Ci/L)	5.09 (µCi/g)	2.15E+03 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).
†Volume average for density, mass average Water wt% and TOC wt% C.

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Single-Shell Tank 241-BX-104			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	2.71E+05 kg	(41.0 kgal)	
Heat Load	8.28E-03 kW	(28.3 BTU/hr)	
Bulk Density	1.75 (g/cc)		
Void Fraction	0.358		
Water wt%	44.4		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	5.04	6.63E+04	1.80E+04
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0.119	3.79E+03	1.03E+03
Cr^{3+}	1.24E-03	36.9	10.0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	6.20E-04	20.8	5.65
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	8.41E-02	1.93E+03	523
K^{+}	2.74E-04	6.13	1.66
OH^{-}	12.3	1.20E+05	3.24E+04
$NO3^{-}$	6.25E-02	2.22E+03	601
$NO2^{-}$	9.15E-03	241	65.3
$CO3^{2-}$	1.89	6.48E+04	1.76E+04
$PO4^{3-}$	0.400	2.17E+04	5.89E+03
$SO4^{2-}$	8.20E-02	4.51E+03	1.22E+03
Si (as SiO_3^{2-})	1.55E-03	24.9	6.76
F^{-}	0	0	0
Cl^{-}	1.26E-03	25.5	6.92
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	3.51E-06	3.42E-02	9.27E-03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		3.71E-03 (µCi/g)	1.68E-02 (kg)
U	1.99 (M)	2.71E+05 (µg/g)	7.34E+04 (kg)
Cs	8.40E-04 (Ci/L)	0.481 (µCi/g)	130 (Ci)
Sr	7.34E-03 (Ci/L)	4.20 (µCi/g)	1.14E+03 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-BX-104			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	3.09E+05 kg	(58.0 kgal)	
Heat Load	0.353 kW	(1.21E+03 BTU/hr)	
Bulk Density*	1.41 (g/cc)		
Water wt%†	48.0		
TOC wt% C (wet)	1.01		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	8.83	1.44E+05	4.46E+04
Al^{3+}	1.15	2.19E+04	6.79E+03
Fe^{3+} (total Fe)	5.82E-03	230	71.3
Cr^{3+}	4.30E-02	1.59E+03	491
Bi^{3+}	9.31E-04	138	42.7
La^{3+}	2.86E-05	2.82	0.872
Hg^{2+}	6.39E-06	0.910	0.281
Zr (as $ZrO(OH)_2$)	6.42E-04	41.6	12.9
Pb^{2+}	7.04E-04	104	32.0
Ni^{2+}	4.87E-03	203	62.8
Sr^{2+}	9.53E-06	0.593	0.183
Mn^{4+}	2.98E-03	116	35.9
Ca^{2+}	2.64E-02	751	232
K^{+}	4.18E-02	1.16E+03	359
OH^{-}	5.02	6.06E+04	1.88E+04
$NO3^{-}$	3.81	1.68E+05	5.19E+04
$NO2^{-}$	1.72	5.61E+04	1.73E+04
$CO3^{2-}$	0.360	1.53E+04	4.75E+03
$PO4^{3-}$	6.79E-02	4.58E+03	1.42E+03
$SO4^{2-}$	0.190	1.30E+04	4.01E+03
Si (as SiO_3^{2-})	6.33E-02	1.26E+03	391
F^{-}	5.26E-02	709	219
Cl^{-}	0.156	3.93E+03	1.21E+03
$C_6H_5O_7^{3-}$	2.20E-02	2.95E+03	914
$EDTA^{4-}$	2.29E-02	4.68E+03	1.45E+03
$HEDTA^{3-}$	4.41E-02	8.59E+03	2.66E+03
$glycolate^{-}$	9.98E-02	5.31E+03	1.64E+03
$acetate^{-}$	5.12E-03	215	66.4
$oxalate^{2-}$	2.45E-05	1.53	0.473
DBP	1.42E-02	2.68E+03	828
butanol	1.42E-02	746	231
NH_3	4.19E-02	505	156
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	64.7 (µCi/L)		0.237 (kg)
U	9.53E-03 (M)	1.61E+03 (µg/g)	498 (kg)
Cs	0.203 (Ci/L)	144 (µCi/g)	4.45E+04 (Ci)
Sr	9.79E-02 (Ci/L)	69.5 (µCi/g)	2.15E+04 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.
†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-BX-104			
Total Inventory Estimate*			
Physical Properties			
Total Waste	5.80E+05 kg	(99.0 kgal)	
Heat Load	0.362 kW	(1.23E+03 BTU/hr)	
Bulk Density†	1.55 (g/cc)		
Water wt%†	46.3		
TOC wt% C (wet)†	0.537		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	7.26	1.08E+05	6.25E+04
Al^{3+}	0.671	1.17E+04	6.79E+03
Fe^{3+} (total Fe)	5.26E-02	1.89E+03	1.10E+03
Cr^{3+}	2.57E-02	864	501
Bi^{3+}	5.46E-04	73.6	42.7
La^{3+}	1.68E-05	1.50	0.872
Hg^{2+}	3.74E-06	0.485	0.281
Zr (as $ZrO(OH)_2$)	3.76E-04	22.2	12.9
Pb^{2+}	4.13E-04	55.2	32.0
Ni^{2+}	3.11E-03	118	68.4
Sr^{2+}	5.59E-06	0.316	0.183
Mn^{4+}	1.75E-03	61.9	35.9
Ca^{2+}	5.03E-02	1.30E+03	756
K^{+}	2.46E-02	621	360
OH^{-}	8.03	8.82E+04	5.12E+04
$NO3^{-}$	2.26	9.05E+04	5.25E+04
$NO2^{-}$	1.01	3.00E+04	1.74E+04
$CO3^{2-}$	0.992	3.84E+04	2.23E+04
$PO4^{3-}$	0.205	1.26E+04	7.31E+03
$SO4^{2-}$	0.145	9.02E+03	5.24E+03
Si (as SiO_3^{2-})	3.77E-02	685	397
F^{-}	3.08E-02	378	219
Cl^{-}	9.20E-02	2.10E+03	1.22E+03
$C_6H_5O_7^{3-}$	1.29E-02	1.57E+03	914
$EDTA^{4-}$	1.34E-02	2.49E+03	1.45E+03
$HEDTA^{3-}$	2.59E-02	4.58E+03	2.66E+03
$glycolate^{-}$	5.85E-02	2.83E+03	1.64E+03
$acetate^{-}$	3.00E-03	114	66.4
$oxalate^{2-}$	1.43E-05	0.815	0.473
DBP	8.31E-03	1.43E+03	828
butanol	8.31E-03	398	231
NH_3	2.45E-02	269	156
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		2.62E-02 (µCi/g)	0.254 (kg)
U	0.829 (M)	1.27E+05 (µg/g)	7.39E+04 (kg)
Cs	0.119 (Ci/L)	76.9 (µCi/g)	4.46E+04 (Ci)
Sr	6.04E-02 (Ci/L)	39.0 (µCi/g)	2.26E+04 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).
†Volume average for density, mass average Water wt% and TOC wt% C.

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Single-Shell Tank 241-BX-105			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	3.04E+05 kg	(46.0 kgal)	
Heat Load	9.29E-03 kW	(31.7 BTU/hr)	
Bulk Density	1.75 (g/cc)		
Void Fraction	0.358		
Water wt%	44.4		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	5.04	6.63E+04	2.02E+04
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0.119	3.79E+03	1.15E+03
Cr^{3+}	1.24E-03	36.9	11.2
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	6.20E-04	20.8	6.34
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	8.41E-02	1.93E+03	587
K^{+}	2.74E-04	6.13	1.86
OH^{-}	12.3	1.20E+05	3.64E+04
$NO3^{-}$	6.25E-02	2.22E+03	674
$NO2^{-}$	9.15E-03	241	73.3
$CO3^{2-}$	1.89	6.48E+04	1.97E+04
$PO4^{3-}$	0.400	2.17E+04	6.61E+03
$SO4^{2-}$	8.20E-02	4.51E+03	1.37E+03
Si (as SiO_3^{2-})	1.55E-03	24.9	7.58
F^{-}	0	0	0
Cl^{-}	1.26E-03	25.5	7.76
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	3.51E-06	3.42E-02	1.04E-02
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		3.71E-03 (µCi/g)	1.88E-02 (kg)
U	1.99 (M)	2.71E+05 (µg/g)	8.24E+04 (kg)
Cs	8.40E-04 (Ci/L)	0.481 (µCi/g)	146 (Ci)
Sr	7.34E-03 (Ci/L)	4.20 (µCi/g)	1.28E+03 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-BX-105			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	2.67E+04 kg	(5.00 kgal)	
Heat Load	2.93E-02 kW	(100 BTU/hr)	
Bulk Density*	1.41 (g/cc)		
Water wt%†	48.6		
TOC wt% C (wet)	1.04		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	8.74	1.43E+05	3.80E+03
Al^{3+}	1.19	2.28E+04	606
Fe^{3+} (total Fe)	5.26E-03	209	5.56
Cr^{3+}	4.04E-02	1.49E+03	39.8
Bi^{3+}	9.21E-04	137	3.64
La^{3+}	2.35E-05	2.32	6.19E-02
Hg^{2+}	6.77E-06	0.964	2.57E-02
Zr (as $ZrO(OH)_2$)	5.77E-04	37.4	0.996
Pb^{2+}	8.25E-04	121	3.23
Ni^{2+}	4.39E-03	183	4.88
Sr^{2+}	7.85E-06	0.488	1.30E-02
Mn^{4+}	3.14E-03	123	3.27
Ca^{2+}	2.39E-02	679	18.1
K^{+}	4.21E-02	1.17E+03	31.2
OH^{-}	5.19	6.26E+04	1.67E+03
$NO3^{-}$	3.61	1.59E+05	4.23E+03
$NO2^{-}$	1.76	5.74E+04	1.53E+03
$CO3^{2-}$	0.364	1.55E+04	414
$PO4^{3-}$	6.81E-02	4.59E+03	122
$SO4^{2-}$	0.197	1.34E+04	358
Si (as SiO_3^{2-})	5.97E-02	1.19E+03	31.7
F^{-}	5.36E-02	722	19.3
Cl^{-}	0.155	3.90E+03	104
$C_6H_5O_7^{3-}$	2.31E-02	3.11E+03	82.8
$EDTA^{4-}$	2.33E-02	4.76E+03	127
$HEDTA^{3-}$	4.34E-02	8.44E+03	225
$glycolate^{-}$	9.53E-02	5.07E+03	135
$acetate^{-}$	1.03E-02	433	11.5
$oxalate^{2-}$	2.01E-05	1.26	3.36E-02
DBP	1.66E-02	3.13E+03	83.5
butanol	1.66E-02	872	23.3
NH_3	3.70E-02	447	11.9
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	60.2 (µCi/L)		1.90E-02 (kg)
U	8.79E-03 (M)	1.48E+03 (µg/g)	39.6 (kg)
Cs	0.201 (Ci/L)	143 (µCi/g)	3.81E+03 (Ci)
Sr	9.02E-02 (Ci/L)	64.0 (µCi/g)	1.71E+03 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.
†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-BX-105			
Total Inventory Estimate*			
Physical Properties			
Total Waste	3.31E+05 kg	(51.0 kgal)	
Heat Load	3.86E-02 kW	(132 BTU/hr)	
Bulk Density†	1.71 (g/cc)		
Water wt%†	44.7		
TOC wt% C (wet)†	8.35E-02		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	5.40	7.25E+04	2.40E+04
Al^{3+}	0.116	1.83E+03	606
Fe^{3+} (total Fe)	0.108	3.51E+03	1.16E+03
Cr^{3+}	5.08E-03	154	51.0
Bi^{3+}	9.03E-05	11.0	3.64
La^{3+}	2.31E-06	0.187	6.19E-02
Hg^{2+}	6.64E-07	7.77E-02	2.57E-02
Zr (as $ZrO(OH)_2$)	5.66E-05	3.01	0.996
Pb^{2+}	8.09E-05	9.78	3.23
Ni^{2+}	9.90E-04	33.9	11.2
Sr^{2+}	7.69E-07	3.93E-02	1.30E-02
Mn^{4+}	3.08E-04	9.88	3.27
Ca^{2+}	7.82E-02	1.83E+03	605
K^{+}	4.38E-03	99.9	33.0
OH^{-}	11.6	1.15E+05	3.80E+04
$NO3^{-}$	0.410	1.48E+04	4.91E+03
$NO2^{-}$	0.181	4.85E+03	1.60E+03
$CO3^{2-}$	1.74	6.08E+04	2.01E+04
$PO4^{3-}$	0.367	2.04E+04	6.73E+03
$SO4^{2-}$	9.33E-02	5.23E+03	1.73E+03
Si (as SiO_3^{2-})	7.25E-03	119	39.3
F^{-}	5.25E-03	58.2	19.3
Cl^{-}	1.63E-02	338	112
$C_6H_5O_7^{3-}$	2.27E-03	250	82.8
$EDTA^{4-}$	2.28E-03	384	127
$HEDTA^{3-}$	4.25E-03	680	225
$glycolate^{-}$	9.34E-03	409	135
$acetate^{-}$	1.01E-03	34.9	11.5
$oxalate^{2-}$	1.97E-06	0.101	3.36E-02
DBP	1.63E-03	252	83.5
butanol	1.63E-03	70.3	23.3
NH_3	3.63E-03	36.0	11.9
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		6.86E-03 (µCi/g)	3.78E-02 (kg)
U	1.79 (M)	2.49E+05 (µg/g)	8.24E+04 (kg)
Cs	2.05E-02 (Ci/L)	12.0 (µCi/g)	3.95E+03 (Ci)
Sr	1.55E-02 (Ci/L)	9.02 (µCi/g)	2.98E+03 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).
†Volume average for density, mass average Water wt% and TOC wt% C.

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Single-Shell Tank 241-BX-106			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	1.91E+05 kg	(31.0 kgal)	
Heat Load	0.200 kW	(684 BTU/hr)	
Bulk Density	1.63 (g/cc)		
Void Fraction	0.738		
Water wt%	38.1		
TOC wt% C (wet)	0.405		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	11.7	1.65E+05	3.15E+04
Al^{3+}	1.94	3.21E+04	6.14E+03
Fe^{3+} (total Fe)	2.60E-02	890	170
Cr^{3+}	4.59E-02	1.46E+03	280
Bi^{3+}	8.12E-04	104	19.9
La^{3+}	2.92E-06	0.248	4.75E-02
Hg^{2+}	3.27E-05	4.03	0.770
Zr (as $ZrO(OH)_2$)	2.68E-04	15.0	2.87
Pb^{2+}	5.12E-03	651	125
Ni^{2+}	1.22E-02	441	84.4
Sr^{2+}	3.24E-06	0.174	3.33E-02
Mn^{4+}	2.94E-03	99.0	18.9
Ca^{2+}	7.44E-02	1.83E+03	350
K^{+}	3.41E-02	817	156
OH^{-}	9.50	9.91E+04	1.89E+04
$NO3^{-}$	5.80	2.21E+05	4.22E+04
$NO2^{-}$	1.57	4.44E+04	8.50E+03
$CO3^{2-}$	0.636	2.34E+04	4.47E+03
$PO4^{3-}$	0.101	5.86E+03	1.12E+03
$SO4^{2-}$	0.181	1.06E+04	2.04E+03
Si (as SiO_3^{2-})	7.09E-02	1.22E+03	234
F^{-}	5.38E-02	627	120
Cl^{-}	0.115	2.50E+03	478
$C_6H_5O_7^{3-}$	2.17E-02	2.51E+03	481
$EDTA^{4-}$	4.86E-03	859	164
$HEDTA^{3-}$	6.57E-04	110	21.1
$glycolate^{-}$	1.53E-02	702	134
$acetate^{-}$	2.89E-02	1.05E+03	200
$oxalate^{2-}$	2.49E-06	0.135	2.58E-02
DBP	2.30E-02	3.76E+03	718
butanol	2.30E-02	1.05E+03	200
NH_3	9.29E-03	96.9	18.5
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		9.63E-02 (µCi/g)	0.307 (kg)
U	0.216 (M)	3.15E+04 (µg/g)	6.02E+03 (kg)
Cs	0.195 (Ci/L)	119 (µCi/g)	2.29E+04 (Ci)
Sr	0.118 (Ci/L)	72.4 (µCi/g)	1.38E+04 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-BX-106			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	7.05E+04 kg	(15.0 kgal)	
Heat Load	3.97E-02 kW	(135 BTU/hr)	
Bulk Density*	1.24 (g/cc)		
Water wt%†	67.5		
TOC wt% C (wet)	0.533		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.89	9.06E+04	6.38E+03
Al^{3+}	0.847	1.84E+04	1.30E+03
Fe^{3+} (total Fe)	1.59E-03	71.4	5.03
Cr^{3+}	1.70E-02	711	50.1
Bi^{3+}	5.80E-04	97.7	6.88
La^{3+}	2.13E-06	0.239	1.68E-02
Hg^{2+}	5.62E-06	0.908	6.40E-02
Zr (as $ZrO(OH)_2$)	1.95E-04	14.3	1.01
Pb^{2+}	8.96E-04	150	10.5
Ni^{2+}	1.36E-03	64.4	4.54
Sr^{2+}	7.11E-07	5.02E-02	3.54E-03
Mn^{4+}	2.32E-03	103	7.23
Ca^{2+}	7.16E-03	231	16.3
K^{+}	2.59E-02	817	57.6
OH^{-}	3.62	4.96E+04	3.50E+03
$NO3^{-}$	1.60	7.99E+04	5.63E+03
$NO2^{-}$	1.17	4.33E+04	3.05E+03
$CO3^{2-}$	0.219	1.06E+04	747
$PO4^{3-}$	4.59E-02	3.51E+03	247
$SO4^{2-}$	0.134	1.04E+04	732
Si (as SiO_3^{2-})	2.29E-02	519	36.6
F^{-}	3.84E-02	587	41.4
Cl^{-}	8.79E-02	2.51E+03	177
$C_6H_5O_7^{3-}$	1.64E-02	2.49E+03	176
$EDTA^{4-}$	7.44E-03	1.73E+03	122
$HEDTA^{3-}$	8.31E-03	1.84E+03	129
$glycolate^{-}$	2.62E-02	1.58E+03	111
$acetate^{-}$	2.09E-02	995	70.1
$oxalate^{2-}$	1.83E-06	0.129	9.12E-03
DBP	1.68E-02	3.59E+03	253
butanol	1.68E-02	1.00E+03	70.6
NH_3	8.61E-03	118	8.31
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	22.3 (µCi/L)		2.11E-02 (kg)
U	2.96E-03 (M)	567 (µg/g)	40.0 (kg)
Cs	0.112 (Ci/L)	90.2 (µCi/g)	6.36E+03 (Ci)
Sr	2.59E-02 (Ci/L)	20.8 (µCi/g)	1.47E+03 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.
†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-BX-106			
Total Inventory Estimate*			
Physical Properties			
Total Waste	2.62E+05 kg	(46.0 kgal)	
Heat Load	0.240 kW	(820 BTU/hr)	
Bulk Density†	1.50 (g/cc)		
Water wt%†	46.0		
TOC wt% C (wet)†	0.439		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	9.47	1.45E+05	3.79E+04
Al^{3+}	1.58	2.84E+04	7.43E+03
Fe^{3+} (total Fe)	1.80E-02	670	175
Cr^{3+}	3.65E-02	1.26E+03	330
Bi^{3+}	7.37E-04	102	26.8
La^{3+}	2.66E-06	0.246	6.43E-02
Hg^{2+}	2.39E-05	3.19	0.834
Zr (as $ZrO(OH)_2$)	2.44E-04	14.8	3.88
Pb^{2+}	3.74E-03	516	135
Ni^{2+}	8.70E-03	340	88.9
Sr^{2+}	2.42E-06	0.141	3.69E-02
Mn^{4+}	2.74E-03	100.0	26.2
Ca^{2+}	5.25E-02	1.40E+03	366
K^{+}	3.14E-02	817	214
OH^{-}	7.58	8.57E+04	2.24E+04
$NO3^{-}$	4.43	1.83E+05	4.78E+04
$NO2^{-}$	1.44	4.41E+04	1.16E+04
$CO3^{2-}$	0.500	1.99E+04	5.22E+03
$PO4^{3-}$	8.28E-02	5.23E+03	1.37E+03
$SO4^{2-}$	0.166	1.06E+04	2.77E+03
Si (as SiO_3^{2-})	5.52E-02	1.03E+03	270
F^{-}	4.88E-02	616	161
Cl^{-}	0.106	2.50E+03	655
$C_6H_5O_7^{3-}$	1.99E-02	2.51E+03	656
$EDTA^{4-}$	5.70E-03	1.09E+03	286
$HEDTA^{3-}$	3.15E-03	575	150
$glycolate^{-}$	1.88E-02	939	246
$acetate^{-}$	2.63E-02	1.03E+03	271
$oxalate^{2-}$	2.28E-06	0.133	3.49E-02
DBP	2.10E-02	3.71E+03	972
butanol	2.10E-02	1.03E+03	271
NH_3	9.07E-03	103	26.8
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		7.52E-02 (µCi/g)	0.328 (kg)
U	0.146 (M)	2.32E+04 (µg/g)	6.06E+03 (kg)
Cs	0.168 (Ci/L)	112 (µCi/g)	2.92E+04 (Ci)
Sr	8.80E-02 (Ci/L)	58.5 (µCi/g)	1.53E+04 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).
†Volume average for density, mass average Water wt% and TOC wt% C.

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Single-Shell Tank 241-BX-107			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	1.65E+06 kg	(344 kgal)	
Heat Load	0.115 kW	(394 BTU/hr)	
Bulk Density	1.26 (g/cc)		
Void Fraction	0.731		
Water wt%	72.1		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.37	7.95E+04	1.31E+05
Al^{3+}	0.622	1.33E+04	2.19E+04
Fe^{3+} (total Fe)	0.268	1.18E+04	1.95E+04
Cr^{3+}	3.99E-03	164	270
Bi^{3+}	6.45E-02	1.07E+04	1.75E+04
La^{3+}	0	0	0
Hg^{2+}	8.75E-05	13.9	22.9
Zr (as $ZrO(OH)_2$)	9.05E-03	653	1.07E+03
Pb^{2+}	0	0	0
Ni^{2+}	1.23E-03	56.9	93.8
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	6.40E-02	2.03E+03	3.34E+03
K^{+}	3.06E-03	94.7	156
OH^{-}	2.83	3.81E+04	6.27E+04
$NO3^{-}$	0.380	1.86E+04	3.06E+04
$NO2^{-}$	0.205	7.45E+03	1.23E+04
$CO3^{2-}$	6.40E-02	3.04E+03	5.00E+03
$PO4^{3-}$	1.16	8.71E+04	1.43E+05
$SO4^{2-}$	4.72E-02	3.59E+03	5.91E+03
Si (as SiO_3^{2-})	5.82E-02	1.29E+03	2.13E+03
F^{-}	0.175	2.64E+03	4.34E+03
Cl^{-}	1.41E-02	395	650
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	3.21E-04	4.32	7.11
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.02E-02 (µCi/g)	0.279 (kg)
U	5.92E-04 (M)	111 (µg/g)	183 (kg)
Cs	1.87E-02 (Ci/L)	14.8 (µCi/g)	2.43E+04 (Ci)
Sr	1.66E-04 (Ci/L)	0.132 (µCi/g)	217 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-BX-107			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	4.43E+03 kg	(1.01 kgal)	
Heat Load	2.05E-03 kW	(7.00 BTU/hr)	
Bulk Density*	1.16 (g/cc)		
Water wt%†	74.3		
TOC wt% C (wet)	0.302		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	3.82	7.57E+04	335
Al^{3+}	0.303	7.04E+03	31.2
Fe^{3+} (total Fe)	1.89E-03	90.9	0.403
Cr^{3+}	2.10E-02	940	4.16
Bi^{3+}	2.18E-04	39.1	0.173
La^{3+}	1.63E-09	1.95E-04	8.62E-07
Hg^{2+}	1.25E-06	0.216	9.55E-04
Zr (as $ZrO(OH)_2$)	1.47E-04	11.6	5.13E-02
Pb^{2+}	1.23E-04	22.0	9.75E-02
Ni^{2+}	1.66E-03	83.8	0.372
Sr^{2+}	5.42E-10	4.09E-05	1.81E-07
Mn^{4+}	2.74E-03	130	0.574
Ca^{2+}	8.78E-03	303	1.34
K^{+}	1.86E-02	627	2.78
OH^{-}	1.53	2.24E+04	99.3
$NO3^{-}$	1.58	8.45E+04	375
$NO2^{-}$	0.785	3.11E+04	138
$CO3^{2-}$	0.201	1.04E+04	45.9
$PO4^{3-}$	4.12E-02	3.37E+03	14.9
$SO4^{2-}$	0.123	1.01E+04	44.9
Si (as SiO_3^{2-})	2.61E-02	631	2.79
F^{-}	1.22E-02	200	0.885
Cl^{-}	7.36E-02	2.24E+03	9.95
$C_6H_5O_7^{3-}$	2.00E-02	3.25E+03	14.4
$EDTA^{4-}$	3.58E-04	88.8	0.394
$HEDTA^{3-}$	7.24E-04	171	0.758
$glycolate^{-}$	4.59E-03	296	1.31
$acetate^{-}$	3.03E-06	0.154	6.81E-04
$oxalate^{2-}$	1.39E-09	1.05E-04	4.67E-07
DBP	1.27E-02	2.91E+03	12.9
butanol	1.27E-02	810	3.59
NH_3	1.84E-02	269	1.19
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	23.1 (µCi/L)		1.47E-03 (kg)
U	3.82E-03 (M)	782 (µg/g)	3.46 (kg)
Cs	3.60E-02 (Ci/L)	31.0 (µCi/g)	137 (Ci)
Sr	5.47E-02 (Ci/L)	47.1 (µCi/g)	209 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-BX-107			
Total Inventory Estimate*			
Physical Properties			
Total Waste	1.65E+06 kg	(345 kgal)	
Heat Load	0.117 kW	(401 BTU/hr)	
Bulk Density†	1.26 (g/cc)		
Water wt%†	72.1		
TOC wt% C (wet)†	8.10E-04		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.37	7.95E+04	1.31E+05
Al^{3+}	0.621	1.33E+04	2.19E+04
Fe^{3+} (total Fe)	0.267	1.18E+04	1.95E+04
Cr^{3+}	4.04E-03	166	274
Bi^{3+}	6.43E-02	1.06E+04	1.75E+04
La^{3+}	4.75E-12	5.22E-07	8.62E-07
Hg^{2+}	8.72E-05	13.8	22.9
Zr (as $ZrO(OH)_2$)	9.02E-03	651	1.07E+03
Pb^{2+}	3.60E-07	5.90E-02	9.75E-02
Ni^{2+}	1.23E-03	57.0	94.1
Sr^{2+}	1.58E-12	1.10E-07	1.81E-07
Mn^{4+}	8.00E-06	0.348	0.574
Ca^{2+}	6.39E-02	2.03E+03	3.34E+03
K^{+}	3.11E-03	96.2	159
OH^{-}	2.83	3.80E+04	6.28E+04
$NO3^{-}$	0.383	1.88E+04	3.10E+04
$NO2^{-}$	0.206	7.51E+03	1.24E+04
$CO3^{2-}$	6.44E-02	3.06E+03	5.05E+03
$PO4^{3-}$	1.16	8.69E+04	1.43E+05
$SO4^{2-}$	4.74E-02	3.60E+03	5.95E+03
Si (as SiO_3^{2-})	5.81E-02	1.29E+03	2.13E+03
F^{-}	0.175	2.63E+03	4.34E+03
Cl^{-}	1.43E-02	400	660
$C_6H_5O_7^{3-}$	5.84E-05	8.73	14.4
$EDTA^{4-}$	1.05E-06	0.238	0.394
$HEDTA^{3-}$	2.12E-06	0.459	0.758
$glycolate^{-}$	1.34E-05	0.795	1.31
$acetate^{-}$	8.84E-09	4.13E-04	6.81E-04
$oxalate^{2-}$	4.07E-12	2.83E-07	4.67E-07
DBP	3.71E-05	7.80	12.9
butanol	3.71E-05	2.17	3.59
NH_3	3.74E-04	5.03	8.31
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.02E-02 (µCi/g)	0.281 (kg)
U	6.01E-04 (M)	113 (µg/g)	187 (kg)
Cs	1.87E-02 (Ci/L)	14.8 (µCi/g)	2.45E+04 (Ci)
Sr	3.26E-04 (Ci/L)	0.258 (µCi/g)	425 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

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Single-Shell Tank 241-BX-108			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	1.24E+05 kg	(26.0 kgal)	
Heat Load	9.67E-03 kW	(33.0 BTU/hr)	
Bulk Density	1.26 (g/cc)		
Void Fraction	0.743		
Water wt%	72.5		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.22	7.71E+04	9.54E+03
Al^{3+}	0.668	1.44E+04	1.77E+03
Fe^{3+} (total Fe)	0.251	1.12E+04	1.38E+03
Cr^{3+}	4.05E-03	168	20.7
Bi^{3+}	6.06E-02	1.01E+04	1.25E+03
La^{3+}	0	0	0
Hg^{2+}	8.18E-05	13.1	1.61
Zr (as $ZrO(OH)_2$)	8.66E-03	628	77.7
Pb^{2+}	0	0	0
Ni^{2+}	1.25E-03	58.3	7.21
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	6.05E-02	1.93E+03	238
K^{+}	3.01E-03	93.8	11.6
OH^{-}	2.90	3.92E+04	4.85E+03
$NO3^{-}$	0.381	1.88E+04	2.33E+03
$NO2^{-}$	0.213	7.79E+03	963
$CO3^{2-}$	6.05E-02	2.89E+03	357
$PO4^{3-}$	1.11	8.36E+04	1.03E+04
$SO4^{2-}$	4.80E-02	3.67E+03	454
Si (as SiO_3^{2-})	5.66E-02	1.27E+03	157
F^{-}	0.179	2.70E+03	334
Cl^{-}	1.39E-02	391	48.3
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	3.66E-04	4.95	0.612
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.15E-02 (µCi/g)	2.38E-02 (kg)
U	5.98E-04 (M)	113 (µg/g)	14.0 (kg)
Cs	2.07E-02 (Ci/L)	16.5 (µCi/g)	2.04E+03 (Ci)
Sr	1.85E-04 (Ci/L)	0.147 (µCi/g)	18.2 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-BX-108			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	0 (g/cc)		
Water wt%†	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Single-Shell Tank 241-BX-108			
Total Inventory Estimate*			
Physical Properties			
Total Waste	1.24E+05 kg	(26.0 kgal)	
Heat Load	9.67E-03 kW	(33.0 BTU/hr)	
Bulk Density†	1.26 (g/cc)		
Water wt%†	72.5		
TOC wt% C (wet)†	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.22	7.71E+04	9.54E+03
Al^{3+}	0.668	1.44E+04	1.77E+03
Fe^{3+} (total Fe)	0.251	1.12E+04	1.38E+03
Cr^{3+}	4.05E-03	168	20.7
Bi^{3+}	6.06E-02	1.01E+04	1.25E+03
La^{3+}	0	0	0
Hg^{2+}	8.18E-05	13.1	1.61
Zr (as $ZrO(OH)_2$)	8.66E-03	628	77.7
Pb^{2+}	0	0	0
Ni^{2+}	1.25E-03	58.3	7.21
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	6.05E-02	1.93E+03	238
K^{+}	3.01E-03	93.8	11.6
OH^{-}	2.90	3.92E+04	4.85E+03
$NO3^{-}$	0.381	1.88E+04	2.33E+03
$NO2^{-}$	0.213	7.79E+03	963
$CO3^{2-}$	6.05E-02	2.89E+03	357
$PO4^{3-}$	1.11	8.36E+04	1.03E+04
$SO4^{2-}$	4.80E-02	3.67E+03	454
Si (as SiO_3^{2-})	5.66E-02	1.27E+03	157
F^{-}	0.179	2.70E+03	334
Cl^{-}	1.39E-02	391	48.3
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	3.66E-04	4.95	0.612
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.15E-02 (µCi/g)	2.38E-02 (kg)
U	5.98E-04 (M)	113 (µg/g)	14.0 (kg)
Cs	2.07E-02 (Ci/L)	16.5 (µCi/g)	2.04E+03 (Ci)
Sr	1.85E-04 (Ci/L)	0.147 (µCi/g)	18.2 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Single-Shell Tank 241-BX-109			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	9.49E+05 kg	(193 kgal)	
Heat Load	0.111 kW	(379 BTU/hr)	
Bulk Density	1.30 (g/cc)		
Void Fraction	0.892		
Water wt%	62.4		
TOC wt% C (wet)	2.54E-04		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	3.57	6.32E+04	5.99E+04
Al^{3+}	0.152	3.15E+03	2.99E+03
Fe^{3+} (total Fe)	1.33	5.71E+04	5.42E+04
Cr^{3+}	3.18E-03	127	121
Bi^{3+}	7.78E-03	1.25E+03	1.19E+03
La^{3+}	0	0	0
Hg^{2+}	1.02E-05	1.58	1.50
Zr (as $ZrO(OH)_2$)	1.24E-03	86.8	82.4
Pb^{2+}	0	0	0
Ni^{2+}	1.44E-03	65.2	61.9
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.292	9.02E+03	8.56E+03
K^{+}	1.35E-02	407	386
OH^{-}	5.14	6.72E+04	6.38E+04
$NO3^{-}$	1.87	8.94E+04	8.48E+04
$NO2^{-}$	0.348	1.23E+04	1.17E+04
$CO3^{2-}$	0.429	1.98E+04	1.88E+04
$PO4^{3-}$	0.253	1.85E+04	1.76E+04
$SO4^{2-}$	0.116	8.57E+03	8.14E+03
Si (as SiO_3^{2-})	8.82E-03	191	181
F^{-}	3.38E-02	494	469
Cl^{-}	7.96E-02	2.17E+03	2.06E+03
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	2.29E-05	4.69	4.45
butanol	2.29E-05	1.31	1.24
NH_3	8.12E-04	10.6	10.1
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		5.57E-03 (µCi/g)	8.81E-02 (kg)
U	0.115 (M)	2.11E+04 (µg/g)	2.00E+04 (kg)
Cs	6.26E-03 (Ci/L)	4.82 (µCi/g)	4.57E+03 (Ci)
Sr	1.82E-02 (Ci/L)	14.0 (µCi/g)	1.33E+04 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-BX-109			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	0 (g/cc)		
Water wt%†	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Single-Shell Tank 241-BX-109			
Total Inventory Estimate*			
Physical Properties			
Total Waste	9.49E+05 kg	(193 kgal)	
Heat Load	0.111 kW	(379 BTU/hr)	
Bulk Density†	1.30 (g/cc)		
Water wt%†	62.4		
TOC wt% C (wet)†	2.54E-04		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	3.57	6.32E+04	5.99E+04
Al^{3+}	0.152	3.15E+03	2.99E+03
Fe^{3+} (total Fe)	1.33	5.71E+04	5.42E+04
Cr^{3+}	3.18E-03	127	121
Bi^{3+}	7.78E-03	1.25E+03	1.19E+03
La^{3+}	0	0	0
Hg^{2+}	1.02E-05	1.58	1.50
Zr (as $ZrO(OH)_2$)	1.24E-03	86.8	82.4
Pb^{2+}	0	0	0
Ni^{2+}	1.44E-03	65.2	61.9
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.292	9.02E+03	8.56E+03
K^{+}	1.35E-02	407	386
OH^{-}	5.14	6.72E+04	6.38E+04
$NO3^{-}$	1.87	8.94E+04	8.48E+04
$NO2^{-}$	0.348	1.23E+04	1.17E+04
$CO3^{2-}$	0.429	1.98E+04	1.88E+04
$PO4^{3-}$	0.253	1.85E+04	1.76E+04
$SO4^{2-}$	0.116	8.57E+03	8.14E+03
Si (as SiO_3^{2-})	8.82E-03	191	181
F^{-}	3.38E-02	494	469
Cl^{-}	7.96E-02	2.17E+03	2.06E+03
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	2.29E-05	4.69	4.45
butanol	2.29E-05	1.31	1.24
NH_3	8.12E-04	10.6	10.1
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		5.57E-03 (µCi/g)	8.81E-02 (kg)
U	0.115 (M)	2.11E+04 (µg/g)	2.00E+04 (kg)
Cs	6.26E-03 (Ci/L)	4.82 (µCi/g)	4.57E+03 (Ci)
Sr	1.82E-02 (Ci/L)	14.0 (µCi/g)	1.33E+04 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Single-Shell Tank 241-BX-110			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	9.94E+05 kg	(198 kgal)	
Heat Load	0.364 kW	(1.24E+03 BTU/hr)	
Bulk Density	1.33 (g/cc)		
Void Fraction	0.760		
Water wt%	63.7		
TOC wt% C (wet)	0.117		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	5.82	1.01E+05	1.00E+05
Al^{3+}	1.02	2.08E+04	2.06E+04
Fe^{3+} (total Fe)	0.187	7.85E+03	7.81E+03
Cr^{3+}	1.40E-02	549	546
Bi^{3+}	4.46E-02	7.03E+03	6.99E+03
La^{3+}	6.85E-07	7.17E-02	7.13E-02
Hg^{2+}	6.73E-05	10.2	10.1
Zr (as $ZrO(OH)_2$)	6.55E-03	451	448
Pb^{2+}	1.20E-03	188	187
Ni^{2+}	3.86E-03	171	170
Sr^{2+}	7.62E-07	5.03E-02	5.00E-02
Mn^{4+}	6.90E-04	28.6	28.4
Ca^{2+}	6.02E-02	1.82E+03	1.81E+03
K^{+}	1.03E-02	304	303
OH^{-}	4.29	5.50E+04	5.47E+04
$NO3^{-}$	1.66	7.77E+04	7.72E+04
$NO2^{-}$	0.544	1.89E+04	1.88E+04
$CO3^{2-}$	0.151	6.83E+03	6.79E+03
$PO4^{3-}$	0.840	6.02E+04	5.98E+04
$SO4^{2-}$	7.91E-02	5.73E+03	5.69E+03
Si (as SiO_3^{2-})	5.99E-02	1.27E+03	1.26E+03
F^{-}	0.156	2.23E+03	2.22E+03
Cl^{-}	3.77E-02	1.01E+03	1.00E+03
$C_6H_5O_7^{3-}$	5.09E-03	725	721
$EDTA^{4-}$	1.14E-03	248	247
$HEDTA^{3-}$	1.54E-04	31.9	31.7
$glycolate^{-}$	3.58E-03	203	202
$acetate^{-}$	6.80E-03	302	301
$oxalate^{2-}$	5.86E-07	3.89E-02	3.86E-02
DBP	5.40E-03	1.08E+03	1.08E+03
butanol	5.40E-03	302	300
NH_3	2.51E-03	32.2	32.0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		3.73E-02 (µCi/g)	0.619 (kg)
U	5.95E-03 (M)	1.07E+03 (µg/g)	1.06E+03 (kg)
Cs	6.38E-02 (Ci/L)	48.1 (µCi/g)	4.78E+04 (Ci)
Sr	2.77E-02 (Ci/L)	20.9 (µCi/g)	2.08E+04 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-BX-110			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	0 (g/cc)		
Water wt%†	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-BX-110			
Total Inventory Estimate*			
Physical Properties			
Total Waste	9.94E+05 kg	(198 kgal)	
Heat Load	0.364 kW	(1.24E+03 BTU/hr)	
Bulk Density†	1.33 (g/cc)		
Water wt%†	63.7		
TOC wt% C (wet)†	0.117		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	5.82	1.01E+05	1.00E+05
Al^{3+}	1.02	2.08E+04	2.06E+04
Fe^{3+} (total Fe)	0.187	7.85E+03	7.81E+03
Cr^{3+}	1.40E-02	549	546
Bi^{3+}	4.46E-02	7.03E+03	6.99E+03
La^{3+}	6.85E-07	7.17E-02	7.13E-02
Hg^{2+}	6.73E-05	10.2	10.1
Zr (as $ZrO(OH)_2$)	6.55E-03	451	448
Pb^{2+}	1.20E-03	188	187
Ni^{2+}	3.86E-03	171	170
Sr^{2+}	7.62E-07	5.03E-02	5.00E-02
Mn^{4+}	6.90E-04	28.6	28.4
Ca^{2+}	6.02E-02	1.82E+03	1.81E+03
K^{+}	1.03E-02	304	303
OH^{-}	4.29	5.50E+04	5.47E+04
$NO3^{-}$	1.66	7.77E+04	7.72E+04
$NO2^{-}$	0.544	1.89E+04	1.88E+04
$CO3^{2-}$	0.151	6.83E+03	6.79E+03
$PO4^{3-}$	0.840	6.02E+04	5.98E+04
$SO4^{2-}$	7.91E-02	5.73E+03	5.69E+03
Si (as SiO_3^{2-})	5.99E-02	1.27E+03	1.26E+03
F^{-}	0.156	2.23E+03	2.22E+03
Cl^{-}	3.77E-02	1.01E+03	1.00E+03
$C_6H_5O_7^{3-}$	5.09E-03	725	721
$EDTA^{4-}$	1.14E-03	248	247
$HEDTA^{3-}$	1.54E-04	31.9	31.7
$glycolate^{-}$	3.58E-03	203	202
$acetate^{-}$	6.80E-03	302	301
$oxalate^{2-}$	5.86E-07	3.89E-02	3.86E-02
DBP	5.40E-03	1.08E+03	1.08E+03
butanol	5.40E-03	302	300
NH_3	2.51E-03	32.2	32.0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		3.73E-02 (µCi/g)	0.619 (kg)
U	5.95E-03 (M)	1.07E+03 (µg/g)	1.06E+03 (kg)
Cs	6.38E-02 (Ci/L)	48.1 (µCi/g)	4.78E+04 (Ci)
Sr	2.77E-02 (Ci/L)	20.9 (µCi/g)	2.08E+04 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Single-Shell Tank 241-BX-111			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	1.24E+06 kg	(211 kgal)	
Heat Load	1.29 kW	(4.42E+03 BTU/hr)	
Bulk Density	1.56 (g/cc)		
Void Fraction	0.781		
Water wt%	41.8		
TOC wt% C (wet)	0.398		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	11.1	1.63E+05	2.03E+05
Al^{3+}	1.95	3.38E+04	4.20E+04
Fe^{3+} (total Fe)	4.07E-02	1.46E+03	1.82E+03
Cr^{3+}	4.36E-02	1.46E+03	1.81E+03
Bi^{3+}	7.46E-03	1.00E+03	1.25E+03
La^{3+}	2.74E-06	0.244	0.304
Hg^{2+}	3.95E-05	5.09	6.33
Zr (as $ZrO(OH)_2$)	1.32E-03	77.0	95.8
Pb^{2+}	4.81E-03	640	796
Ni^{2+}	1.17E-02	439	546
Sr^{2+}	3.05E-06	0.171	0.213
Mn^{4+}	2.76E-03	97.3	121
Ca^{2+}	6.91E-02	1.78E+03	2.21E+03
K^{+}	3.24E-02	813	1.01E+03
OH^{-}	8.29	9.04E+04	1.13E+05
$NO3^{-}$	5.50	2.19E+05	2.72E+05
$NO2^{-}$	1.52	4.47E+04	5.57E+04
$CO3^{2-}$	0.432	1.67E+04	2.07E+04
$PO4^{3-}$	0.192	1.17E+04	1.45E+04
$SO4^{2-}$	0.170	1.05E+04	1.30E+04
Si (as SiO_3^{2-})	7.40E-02	1.33E+03	1.66E+03
F^{-}	7.96E-02	971	1.21E+03
Cl^{-}	0.110	2.50E+03	3.11E+03
$C_6H_5O_7^{3-}$	2.04E-02	2.47E+03	3.07E+03
$EDTA^{4-}$	4.57E-03	845	1.05E+03
$HEDTA^{3-}$	6.17E-04	109	135
$glycolate^{-}$	1.43E-02	690	859
$acetate^{-}$	2.72E-02	1.03E+03	1.28E+03
$oxalate^{2-}$	2.34E-06	0.132	0.165
DBP	2.16E-02	3.69E+03	4.59E+03
butanol	2.16E-02	1.03E+03	1.28E+03
NH_3	8.81E-03	96.2	120
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		9.63E-02 (µCi/g)	2.00 (kg)
U	2.20E-02 (M)	3.36E+03 (µg/g)	4.18E+03 (kg)
Cs	0.187 (Ci/L)	120 (µCi/g)	1.50E+05 (Ci)
Sr	0.110 (Ci/L)	70.7 (µCi/g)	8.80E+04 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-BX-111			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	0 (g/cc)		
Water wt%†	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-BX-111			
Total Inventory Estimate*			
Physical Properties			
Total Waste	1.24E+06 kg	(211 kgal)	
Heat Load	1.29 kW	(4.42E+03 BTU/hr)	
Bulk Density†	1.56 (g/cc)		
Water wt%†	41.8		
TOC wt% C (wet)†	0.398		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	11.1	1.63E+05	2.03E+05
Al^{3+}	1.95	3.38E+04	4.20E+04
Fe^{3+} (total Fe)	4.07E-02	1.46E+03	1.82E+03
Cr^{3+}	4.36E-02	1.46E+03	1.81E+03
Bi^{3+}	7.46E-03	1.00E+03	1.25E+03
La^{3+}	2.74E-06	0.244	0.304
Hg^{2+}	3.95E-05	5.09	6.33
Zr (as $ZrO(OH)_2$)	1.32E-03	77.0	95.8
Pb^{2+}	4.81E-03	640	796
Ni^{2+}	1.17E-02	439	546
Sr^{2+}	3.05E-06	0.171	0.213
Mn^{4+}	2.76E-03	97.3	121
Ca^{2+}	6.91E-02	1.78E+03	2.21E+03
K^{+}	3.24E-02	813	1.01E+03
OH^{-}	8.29	9.04E+04	1.13E+05
$NO3^{-}$	5.50	2.19E+05	2.72E+05
$NO2^{-}$	1.52	4.47E+04	5.57E+04
$CO3^{2-}$	0.432	1.67E+04	2.07E+04
$PO4^{3-}$	0.192	1.17E+04	1.45E+04
$SO4^{2-}$	0.170	1.05E+04	1.30E+04
Si (as SiO_3^{2-})	7.40E-02	1.33E+03	1.66E+03
F^{-}	7.96E-02	971	1.21E+03
Cl^{-}	0.110	2.50E+03	3.11E+03
$C_6H_5O_7^{3-}$	2.04E-02	2.47E+03	3.07E+03
$EDTA^{4-}$	4.57E-03	845	1.05E+03
$HEDTA^{3-}$	6.17E-04	109	135
$glycolate^{-}$	1.43E-02	690	859
$acetate^{-}$	2.72E-02	1.03E+03	1.28E+03
$oxalate^{2-}$	2.34E-06	0.132	0.165
DBP	2.16E-02	3.69E+03	4.59E+03
butanol	2.16E-02	1.03E+03	1.28E+03
NH_3	8.81E-03	96.2	120
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		9.63E-02 (µCi/g)	2.00 (kg)
U	2.20E-02 (M)	3.36E+03 (µg/g)	4.18E+03 (kg)
Cs	0.187 (Ci/L)	120 (µCi/g)	1.50E+05 (Ci)
Sr	0.110 (Ci/L)	70.7 (µCi/g)	8.80E+04 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

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Single-Shell Tank 241-BX-112			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	7.96E+05 kg	(164 kgal)	
Heat Load	9.58E-02 kW	(327 BTU/hr)	
Bulk Density	1.28 (g/cc)		
Void Fraction	0.783		
Water wt%	69.9		
TOC wt% C (wet)	4.70E-05		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.65	8.34E+04	6.64E+04
Al^{3+}	0.737	1.55E+04	1.23E+04
Fe^{3+} (total Fe)	0.184	8.01E+03	6.37E+03
Cr^{3+}	4.64E-03	188	150
Bi^{3+}	4.45E-02	7.26E+03	5.78E+03
La^{3+}	0	0	0
Hg^{2+}	5.66E-05	8.86	7.05
Zr (as $ZrO(OH)_2$)	6.41E-03	456	363
Pb^{2+}	0	0	0
Ni^{2+}	2.65E-03	121	96.6
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	5.43E-02	1.70E+03	1.35E+03
K^{+}	5.31E-03	162	129
OH^{-}	2.86	3.79E+04	3.02E+04
$NO3^{-}$	1.05	5.07E+04	4.03E+04
$NO2^{-}$	0.257	9.22E+03	7.33E+03
$CO3^{2-}$	7.94E-02	3.72E+03	2.96E+03
$PO4^{3-}$	0.982	7.27E+04	5.79E+04
$SO4^{2-}$	6.98E-02	5.23E+03	4.16E+03
Si (as SiO_3^{2-})	4.65E-02	1.02E+03	810
F^{-}	0.185	2.75E+03	2.18E+03
Cl^{-}	2.76E-02	762	606
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	4.19E-06	0.869	0.691
butanol	4.19E-06	0.242	0.193
NH_3	6.21E-04	8.24	6.55
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.56E-02 (µCi/g)	0.207 (kg)
U	1.68E-03 (M)	312 (µg/g)	248 (kg)
Cs	2.78E-02 (Ci/L)	21.7 (µCi/g)	1.73E+04 (Ci)
Sr	3.57E-03 (Ci/L)	2.78 (µCi/g)	2.22E+03 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-BX-112			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	5.21E+03 kg	(1.00 kgal)	
Heat Load	4.52E-03 kW	(15.4 BTU/hr)	
Bulk Density*	1.37 (g/cc)		
Water wt%†	53.8		
TOC wt% C (wet)	1.06		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	7.70	1.29E+05	671
Al^{3+}	1.24	2.44E+04	127
Fe^{3+} (total Fe)	2.72E-03	111	0.577
Cr^{3+}	2.70E-02	1.02E+03	5.33
Bi^{3+}	8.87E-04	135	0.703
La^{3+}	3.92E-06	0.397	2.07E-03
Hg^{2+}	8.24E-06	1.20	6.27E-03
Zr (as $ZrO(OH)_2$)	3.24E-04	21.5	0.112
Pb^{2+}	1.29E-03	194	1.01
Ni^{2+}	2.22E-03	94.7	0.493
Sr^{2+}	1.31E-06	8.34E-02	4.34E-04
Mn^{4+}	3.69E-03	148	0.769
Ca^{2+}	1.23E-02	359	1.87
K^{+}	4.02E-02	1.15E+03	5.97
OH^{-}	5.36	6.64E+04	346
$NO3^{-}$	2.50	1.13E+05	589
$NO2^{-}$	1.77	5.93E+04	309
$CO3^{2-}$	0.360	1.57E+04	81.9
$PO4^{3-}$	6.99E-02	4.83E+03	25.2
$SO4^{2-}$	0.215	1.51E+04	78.4
Si (as SiO_3^{2-})	4.03E-02	823	4.29
F^{-}	5.78E-02	799	4.16
Cl^{-}	0.139	3.57E+03	18.6
$C_6H_5O_7^{3-}$	2.55E-02	3.51E+03	18.3
$EDTA^{4-}$	2.22E-02	4.65E+03	24.2
$HEDTA^{3-}$	3.51E-02	7.00E+03	36.5
$glycolate^{-}$	6.32E-02	3.45E+03	18.0
$acetate^{-}$	2.95E-02	1.27E+03	6.60
$oxalate^{2-}$	3.36E-06	0.215	1.12E-03
DBP	2.51E-02	4.87E+03	25.4
butanol	2.51E-02	1.36E+03	7.06
NH_3	1.49E-02	184	0.960
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	38.3 (µCi/L)		2.42E-03 (kg)
U	5.10E-03 (M)	884 (µg/g)	4.61 (kg)
Cs	0.180 (Ci/L)	131 (µCi/g)	684 (Ci)
Sr	5.15E-02 (Ci/L)	37.5 (µCi/g)	195 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.
†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-BX-112			
Total Inventory Estimate*			
Physical Properties			
Total Waste	8.01E+05 kg	(165 kgal)	
Heat Load	0.100 kW	(342 BTU/hr)	
Bulk Density†	1.28 (g/cc)		
Water wt%†	69.8		
TOC wt% C (wet)†	6.93E-03		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.67	8.37E+04	6.71E+04
Al^{3+}	0.740	1.56E+04	1.25E+04
Fe^{3+} (total Fe)	0.183	7.96E+03	6.37E+03
Cr^{3+}	4.78E-03	194	155
Bi^{3+}	4.43E-02	7.21E+03	5.78E+03
La^{3+}	2.38E-08	2.58E-03	2.07E-03
Hg^{2+}	5.63E-05	8.81	7.05
Zr (as $ZrO(OH)_2$)	6.37E-03	453	363
Pb^{2+}	7.82E-06	1.26	1.01
Ni^{2+}	2.65E-03	121	97.1
Sr^{2+}	7.94E-09	5.42E-04	4.34E-04
Mn^{4+}	2.24E-05	0.960	0.769
Ca^{2+}	5.40E-02	1.69E+03	1.35E+03
K^{+}	5.52E-03	168	135
OH^{-}	2.88	3.81E+04	3.05E+04
$NO3^{-}$	1.06	5.11E+04	4.09E+04
$NO2^{-}$	0.266	9.54E+03	7.64E+03
$CO3^{2-}$	8.11E-02	3.79E+03	3.04E+03
$PO4^{3-}$	0.976	7.23E+04	5.79E+04
$SO4^{2-}$	7.07E-02	5.30E+03	4.24E+03
Si (as SiO_3^{2-})	4.64E-02	1.02E+03	814
F^{-}	0.184	2.73E+03	2.19E+03
Cl^{-}	2.83E-02	780	625
$C_6H_5O_7^{3-}$	1.55E-04	22.8	18.3
$EDTA^{4-}$	1.35E-04	30.2	24.2
$HEDTA^{3-}$	2.13E-04	45.5	36.5
$glycolate^{-}$	3.84E-04	22.4	18.0
$acetate^{-}$	1.79E-04	8.25	6.60
$oxalate^{2-}$	2.04E-08	1.40E-03	1.12E-03
DBP	1.57E-04	32.5	26.0
butanol	1.57E-04	9.06	7.26
NH_3	7.08E-04	9.38	7.51
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.57E-02 (µCi/g)	0.209 (kg)
U	1.70E-03 (M)	316 (µg/g)	253 (kg)
Cs	2.87E-02 (Ci/L)	22.4 (µCi/g)	1.79E+04 (Ci)
Sr	3.86E-03 (Ci/L)	3.01 (µCi/g)	2.41E+03 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).
†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3a

Single-Shell Tank 241-BY-101			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	2.39E+06 kg	(387 kgal)	
Heat Load	2.50 kW	(8.55E+03 BTU/hr)	
Bulk Density	1.63 (g/cc)		
Void Fraction	0.739		
Water wt%	38.0		
TOC wt% C (wet)	0.405		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	11.7	1.65E+05	3.94E+05
Al^{3+}	1.94	3.21E+04	7.67E+04
Fe^{3+} (total Fe)	2.59E-02	886	2.12E+03
Cr^{3+}	4.59E-02	1.47E+03	3.50E+03
Bi^{3+}	8.13E-04	104	249
La^{3+}	2.92E-06	0.249	0.594
Hg^{2+}	3.28E-05	4.03	9.63
Zr (as $ZrO(OH)_2$)	2.68E-04	15.0	35.9
Pb^{2+}	5.13E-03	652	1.56E+03
Ni^{2+}	1.23E-02	442	1.05E+03
Sr^{2+}	3.25E-06	0.175	0.417
Mn^{4+}	2.94E-03	99.1	237
Ca^{2+}	7.44E-02	1.83E+03	4.37E+03
K^{+}	3.41E-02	818	1.95E+03
OH^{-}	9.50	9.90E+04	2.36E+05
$NO3^{-}$	5.81	2.21E+05	5.27E+05
$NO2^{-}$	1.58	4.45E+04	1.06E+05
$CO3^{2-}$	0.634	2.33E+04	5.57E+04
$PO4^{3-}$	0.100	5.84E+03	1.39E+04
$SO4^{2-}$	0.181	1.07E+04	2.54E+04
Si (as SiO_3^{2-})	7.09E-02	1.22E+03	2.92E+03
F^{-}	5.39E-02	628	1.50E+03
Cl^{-}	0.115	2.50E+03	5.97E+03
$C_6H_5O_7^{3-}$	2.17E-02	2.52E+03	6.01E+03
$EDTA^{4-}$	4.87E-03	861	2.06E+03
$HEDTA^{3-}$	6.57E-04	111	264
$glycolate^{-}$	1.53E-02	703	1.68E+03
$acetate^{-}$	2.90E-02	1.05E+03	2.51E+03
$oxalate^{2-}$	2.50E-06	0.135	0.322
DBP	2.30E-02	2.97E+03	7.09E+03
butanol	2.30E-02	1.05E+03	2.50E+03
NH_3	9.31E-03	97.0	232
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		9.64E-02 (µCi/g)	3.84 (kg)
U	0.213 (M)	3.12E+04 (µg/g)	7.44E+04 (kg)
Cs	0.195 (Ci/L)	120 (µCi/g)	2.86E+05 (Ci)
Sr	0.118 (Ci/L)	72.5 (µCi/g)	1.73E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-BY-101			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Waste	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	0 (g/cc)		
Water wt%†	0		
TOC wt% C (wet)	0		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3a

Single-Shell Tank 241-BY-101			
Total Inventory Estimate*			
Physical Properties			
Total Waste	2.39E+06 kg	(387 kgal)	
Heat Load	2.50 kW	(8.55E+03 BTU/hr)	
Bulk Density†	1.63 (g/cc)		
Water wt%†	38.0		
TOC wt% C (wet)†	0.405		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	11.7	1.65E+05	3.94E+05
Al^{3+}	1.94	3.21E+04	7.67E+04
Fe^{3+} (total Fe)	2.59E-02	886	2.12E+03
Cr^{3+}	4.59E-02	1.47E+03	3.50E+03
Bi^{3+}	8.13E-04	104	249
La^{3+}	2.92E-06	0.249	0.594
Hg^{2+}	3.28E-05	4.03	9.63
Zr (as $ZrO(OH)_2$)	2.68E-04	15.0	35.9
Pb^{2+}	5.13E-03	652	1.56E+03
Ni^{2+}	1.23E-02	442	1.05E+03
Sr^{2+}	3.25E-06	0.175	0.417
Mn^{4+}	2.94E-03	99.1	237
Ca^{2+}	7.44E-02	1.83E+03	4.37E+03
K^{+}	3.41E-02	818	1.95E+03
OH^{-}	9.50	9.90E+04	2.36E+05
$NO3^{-}$	5.81	2.21E+05	5.27E+05
$NO2^{-}$	1.58	4.45E+04	1.06E+05
$CO3^{2-}$	0.634	2.33E+04	5.57E+04
$PO4^{3-}$	0.100	5.84E+03	1.39E+04
$SO4^{2-}$	0.181	1.07E+04	2.54E+04
Si (as SiO_3^{2-})	7.09E-02	1.22E+03	2.92E+03
F^{-}	5.39E-02	628	1.50E+03
Cl^{-}	0.115	2.50E+03	5.97E+03
$C_6H_5O_7^{3-}$	2.17E-02	2.52E+03	6.01E+03
$EDTA^{4-}$	4.87E-03	861	2.06E+03
$HEDTA^{3-}$	6.57E-04	111	264
$glycolate^{-}$	1.53E-02	703	1.68E+03
$acetate^{-}$	2.90E-02	1.05E+03	2.51E+03
$oxalate^{2-}$	2.50E-06	0.135	0.322
DBP	2.30E-02	2.97E+03	7.09E+03
butanol	2.30E-02	1.05E+03	2.50E+03
NH_3	9.31E-03	97.0	232
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		9.64E-02 (µCi/g)	3.84 (kg)
U	0.213 (M)	3.12E+04 (µg/g)	7.44E+04 (kg)
Cs	0.195 (Ci/L)	120 (µCi/g)	2.86E+05 (Ci)
Sr	0.118 (Ci/L)	72.5 (µCi/g)	1.73E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

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Single-Shell Tank 241-BY-102			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	2.03E+06 kg	(330 kgal)	
Heat Load	2.23 kW	(7.61E+03 BTU/hr)	
Bulk Density	1.62 (g/cc)		
Void Fraction	0.756		
Water wt%	37.8		
TOC wt% C (wet)	0.425		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	12.0	1.70E+05	3.45E+05
Al^{3+}	2.03	3.37E+04	6.84E+04
Fe^{3+} (total Fe)	2.17E-02	744	1.51E+03
Cr^{3+}	4.80E-02	1.54E+03	3.12E+03
Bi^{3+}	8.50E-04	109	222
La^{3+}	3.05E-06	0.261	0.529
Hg^{2+}	3.43E-05	4.23	8.58
Zr (as $ZrO(OH)_2$)	2.81E-04	15.7	32.0
Pb^{2+}	5.36E-03	684	1.39E+03
Ni^{2+}	1.28E-02	462	938
Sr^{2+}	3.40E-06	0.183	0.372
Mn^{4+}	3.08E-03	104	211
Ca^{2+}	7.40E-02	1.82E+03	3.70E+03
K^{+}	3.56E-02	858	1.74E+03
OH^{-}	9.37	9.80E+04	1.99E+05
$NO3^{-}$	6.07	2.31E+05	4.70E+05
$NO2^{-}$	1.65	4.66E+04	9.47E+04
$CO3^{2-}$	0.577	2.13E+04	4.33E+04
$PO4^{3-}$	8.66E-02	5.06E+03	1.03E+04
$SO4^{2-}$	0.185	1.10E+04	2.22E+04
Si (as SiO_3^{2-})	7.41E-02	1.28E+03	2.60E+03
F^{-}	5.63E-02	658	1.34E+03
Cl^{-}	0.120	2.62E+03	5.32E+03
$C_6H_5O_7^{3-}$	2.27E-02	2.64E+03	5.36E+03
$EDTA^{4-}$	5.09E-03	903	1.83E+03
$HEDTA^{3-}$	6.87E-04	116	235
$glycolate^{-}$	1.60E-02	738	1.50E+03
$acetate^{-}$	3.03E-02	1.10E+03	2.23E+03
$oxalate^{2-}$	2.61E-06	0.141	0.287
DBP	2.41E-02	3.94E+03	8.01E+03
butanol	2.41E-02	1.10E+03	2.23E+03
NH_3	9.73E-03	102	207
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0.101 (µCi/g)	3.41 (kg)
U	0.133 (M)	1.39E+03 (µg/g)	3.95E+04 (kg)
Cs	0.204 (Ci/L)	125 (µCi/g)	2.55E+05 (Ci)
Sr	0.123 (Ci/L)	75.8 (µCi/g)	1.54E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-BY-102			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	5.53E+04 kg	(11.0 kgal)	
Heat Load	4.16E-02 kW	(142 BTU/hr)	
Bulk Density*	1.33 (g/cc)		
Water wt%†	58.3		
TOC wt% C (wet)	0.979		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	6.72	1.16E+05	6.43E+03
Al^{3+}	1.10	2.24E+04	1.24E+03
Fe^{3+} (total Fe)	2.18E-03	91.5	5.06
Cr^{3+}	2.30E-02	902	49.8
Bi^{3+}	7.59E-04	120	6.61
La^{3+}	3.11E-06	0.326	1.80E-02
Hg^{2+}	7.01E-06	1.06	5.86E-02
Zr (as $ZrO(OH)_2$)	2.58E-04	17.7	0.980
Pb^{2+}	1.12E-03	174	9.63
Ni^{2+}	1.76E-03	77.8	4.30
Sr^{2+}	1.04E-06	6.85E-02	3.78E-03
Mn^{4+}	3.18E-03	131	7.27
Ca^{2+}	9.82E-03	296	16.4
K^{+}	3.56E-02	1.05E+03	57.9
OH^{-}	4.75	6.08E+04	3.36E+03
$NO3^{-}$	2.15	1.00E+05	5.54E+03
$NO2^{-}$	1.56	5.42E+04	2.99E+03
$CO3^{2-}$	0.312	1.41E+04	778
$PO4^{3-}$	6.07E-02	4.34E+03	240
$SO4^{2-}$	0.187	1.36E+04	749
Si (as SiO_3^{2-})	3.37E-02	713	39.4
F^{-}	5.00E-02	716	39.6
Cl^{-}	0.122	3.25E+03	180
$C_6H_5O_7^{3-}$	2.24E-02	3.20E+03	177
$EDTA^{4-}$	1.99E-02	4.33E+03	239
$HEDTA^{3-}$	3.13E-02	6.47E+03	358
$glycolate^{-}$	5.66E-02	3.20E+03	177
$acetate^{-}$	2.72E-02	1.21E+03	66.9
$oxalate^{2-}$	2.66E-06	0.177	9.76E-03
DBP	2.23E-02	4.47E+03	247
butanol	2.23E-02	1.25E+03	68.9
NH_3	1.21E-02	154	8.53
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	31.3 (µCi/L)		2.17E-02 (kg)
U	4.13E-03 (M)	52.9 (µg/g)	41.0 (kg)
Cs	0.152 (Ci/L)	115 (µCi/g)	6.33E+03 (Ci)
Sr	4.24E-02 (Ci/L)	32.0 (µCi/g)	1.77E+03 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Single-Shell Tank 241-BY-102			
Total Inventory Estimate*			
Physical Properties			
Total Waste	2.09E+06 kg	(341 kgal)	
Heat Load	2.27 kW	(7.75E+03 BTU/hr)	
Bulk Density†	1.62 (g/cc)		
Water wt%†	38.3		
TOC wt% C (wet)†	0.440		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	11.8	1.68E+05	3.51E+05
Al^{3+}	2.00	3.34E+04	6.96E+04
Fe^{3+} (total Fe)	2.10E-02	727	1.52E+03
Cr^{3+}	4.72E-02	1.52E+03	3.17E+03
Bi^{3+}	8.47E-04	110	229
La^{3+}	3.05E-06	0.263	0.547
Hg^{2+}	3.34E-05	4.15	8.64
Zr (as $ZrO(OH)_2$)	2.80E-04	15.8	32.9
Pb^{2+}	5.22E-03	670	1.40E+03
Ni^{2+}	1.24E-02	452	942
Sr^{2+}	3.32E-06	0.180	0.375
Mn^{4+}	3.08E-03	105	218
Ca^{2+}	7.19E-02	1.78E+03	3.72E+03
K^{+}	3.56E-02	863	1.80E+03
OH^{-}	9.22	9.70E+04	2.02E+05
$NO3^{-}$	5.94	2.28E+05	4.75E+05
$NO2^{-}$	1.64	4.68E+04	9.77E+04
$CO3^{2-}$	0.568	2.11E+04	4.40E+04
$PO4^{3-}$	8.58E-02	5.04E+03	1.05E+04
$SO4^{2-}$	0.185	1.10E+04	2.30E+04
Si (as SiO_3^{2-})	7.28E-02	1.27E+03	2.64E+03
F^{-}	5.61E-02	660	1.38E+03
Cl^{-}	0.120	2.64E+03	5.50E+03
$C_6H_5O_7^{3-}$	2.27E-02	2.65E+03	5.53E+03
$EDTA^{4-}$	5.57E-03	993	2.07E+03
$HEDTA^{3-}$	1.68E-03	284	593
$glycolate^{-}$	1.73E-02	803	1.67E+03
$acetate^{-}$	3.02E-02	1.10E+03	2.30E+03
$oxalate^{2-}$	2.61E-06	0.142	0.297
DBP	2.40E-02	3.96E+03	8.25E+03
butanol	2.40E-02	1.10E+03	2.30E+03
NH_3	9.80E-03	103	215
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		9.89E-02 (µCi/g)	3.44 (kg)
U	0.129 (M)	1.35E+03 (µg/g)	3.95E+04 (kg)
Cs	0.202 (Ci/L)	125 (µCi/g)	2.61E+05 (Ci)
Sr	0.121 (Ci/L)	74.6 (µCi/g)	1.56E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Single-Shell Tank 241-BY-103			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	2.45E+06 kg	(400 kgal)	
Heat Load	2.79 kW	(9.53E+03 BTU/hr)	
Bulk Density	1.62 (g/cc)		
Void Fraction	0.779		
Water wt%	37.7		
TOC wt% C (wet)	0.442		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	12.2	1.73E+05	4.23E+05
Al^{3+}	2.23	3.72E+04	9.11E+04
Fe^{3+} (total Fe)	2.60E-02	898	2.20E+03
Cr^{3+}	4.96E-02	1.60E+03	3.90E+03
Bi^{3+}	8.79E-04	114	278
La^{3+}	3.15E-06	0.271	0.663
Hg^{2+}	1.68E-04	20.9	51.2
Zr (as $ZrO(OH)_2$)	2.90E-04	16.4	40.1
Pb^{2+}	1.29E-02	1.65E+03	4.04E+03
Ni^{2+}	1.32E-02	480	1.17E+03
Sr^{2+}	3.51E-06	0.190	0.466
Mn^{4+}	3.18E-03	108	264
Ca^{2+}	7.90E-02	1.96E+03	4.79E+03
K^{+}	3.69E-02	892	2.18E+03
OH^{-}	9.47	9.97E+04	2.44E+05
$NO3^{-}$	6.28	2.41E+05	5.90E+05
$NO2^{-}$	1.71	4.86E+04	1.19E+05
$CO3^{2-}$	0.497	1.85E+04	4.52E+04
$PO4^{3-}$	6.70E-02	3.94E+03	9.63E+03
$SO4^{2-}$	0.187	1.11E+04	2.72E+04
Si (as SiO_3^{2-})	7.65E-02	1.33E+03	3.25E+03
F^{-}	5.82E-02	685	1.67E+03
Cl^{-}	0.124	2.73E+03	6.68E+03
$C_6H_5O_7^{3-}$	2.34E-02	2.74E+03	6.71E+03
$EDTA^{4-}$	5.26E-03	938	2.30E+03
$HEDTA^{3-}$	7.11E-04	121	295
$glycolate^{-}$	1.65E-02	767	1.88E+03
$acetate^{-}$	3.13E-02	1.14E+03	2.80E+03
$oxalate^{2-}$	2.70E-06	0.147	0.360
DBP	2.49E-02	4.10E+03	1.00E+04
butanol	2.49E-02	1.14E+03	2.79E+03
NH_3	1.01E-02	106	259
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0.130 (µCi/g)	5.32 (kg)
U	2.99E-02 (M)	314 (µg/g)	1.08E+04 (kg)
Cs	0.211 (Ci/L)	130 (µCi/g)	3.19E+05 (Ci)
Sr	0.127 (Ci/L)	78.6 (µCi/g)	1.92E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-BY-103			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	0 (g/cc)		
Water wt%†	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Single-Shell Tank 241-BY-103			
Total Inventory Estimate*			
Physical Properties			
Total Waste	2.45E+06 kg	(400 kgal)	
Heat Load	2.79 kW	(9.53E+03 BTU/hr)	
Bulk Density†	1.62 (g/cc)		
Water wt%†	37.7		
TOC wt% C (wet)†	0.442		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	12.2	1.73E+05	4.23E+05
Al^{3+}	2.23	3.72E+04	9.11E+04
Fe^{3+} (total Fe)	2.60E-02	898	2.20E+03
Cr^{3+}	4.96E-02	1.60E+03	3.90E+03
Bi^{3+}	8.79E-04	114	278
La^{3+}	3.15E-06	0.271	0.663
Hg^{2+}	1.68E-04	20.9	51.2
Zr (as $ZrO(OH)_2$)	2.90E-04	16.4	40.1
Pb^{2+}	1.29E-02	1.65E+03	4.04E+03
Ni^{2+}	1.32E-02	480	1.17E+03
Sr^{2+}	3.51E-06	0.190	0.466
Mn^{4+}	3.18E-03	108	264
Ca^{2+}	7.90E-02	1.96E+03	4.79E+03
K^{+}	3.69E-02	892	2.18E+03
OH^{-}	9.47	9.97E+04	2.44E+05
$NO3^{-}$	6.28	2.41E+05	5.90E+05
$NO2^{-}$	1.71	4.86E+04	1.19E+05
$CO3^{2-}$	0.497	1.85E+04	4.52E+04
$PO4^{3-}$	6.70E-02	3.94E+03	9.63E+03
$SO4^{2-}$	0.187	1.11E+04	2.72E+04
Si (as SiO_3^{2-})	7.65E-02	1.33E+03	3.25E+03
F^{-}	5.82E-02	685	1.67E+03
Cl^{-}	0.124	2.73E+03	6.68E+03
$C_6H_5O_7^{3-}$	2.34E-02	2.74E+03	6.71E+03
$EDTA^{4-}$	5.26E-03	938	2.30E+03
$HEDTA^{3-}$	7.11E-04	121	295
$glycolate^{-}$	1.65E-02	767	1.88E+03
$acetate^{-}$	3.13E-02	1.14E+03	2.80E+03
$oxalate^{2-}$	2.70E-06	0.147	0.360
DBP	2.49E-02	4.10E+03	1.00E+04
butanol	2.49E-02	1.14E+03	2.79E+03
NH_3	1.01E-02	106	259
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0.130 (µCi/g)	5.32 (kg)
U	2.99E-02 (M)	314 (µg/g)	1.08E+04 (kg)
Cs	0.211 (Ci/L)	130 (µCi/g)	3.19E+05 (Ci)
Sr	0.127 (Ci/L)	78.6 (µCi/g)	1.92E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Single-Shell Tank 241-BY-104			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	1.86E+06 kg	(326 kgal)	
Heat Load	1.31 kW	(4.47E+03 BTU/hr)	
Bulk Density	1.51 (g/cc)		
Void Fraction	0.845		
Water wt%	46.5		
TOC wt% C (wet)	0.434		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	8.45	1.29E+05	2.40E+05
Al^{3+}	1.16	2.08E+04	3.86E+04
Fe^{3+} (total Fe)	0.448	1.66E+04	3.09E+04
Cr^{3+}	2.87E-02	992	1.84E+03
Bi^{3+}	0.132	1.83E+04	3.40E+04
La^{3+}	1.74E-06	0.161	0.299
Hg^{2+}	1.96E-05	2.61	4.84
Zr (as $ZrO(OH)_2$)	1.60E-04	9.70	18.0
Pb^{2+}	3.06E-03	421	783
Ni^{2+}	6.70E-02	2.61E+03	4.86E+03
Sr^{2+}	1.94E-06	0.113	0.210
Mn^{4+}	1.76E-03	64.1	119
Ca^{2+}	0.179	4.77E+03	8.87E+03
K^{+}	2.80E-02	727	1.35E+03
OH^{-}	6.56	7.41E+04	1.38E+05
$NO3^{-}$	4.57	1.88E+05	3.50E+05
$NO2^{-}$	1.02	3.11E+04	5.77E+04
$CO3^{2-}$	0.410	1.64E+04	3.04E+04
$PO4^{3-}$	0.224	1.41E+04	2.62E+04
$SO4^{2-}$	0.181	1.16E+04	2.15E+04
Si (as SiO_3^{2-})	7.24E-02	1.35E+03	2.51E+03
F^{-}	0.122	1.53E+03	2.85E+03
Cl^{-}	0.104	2.44E+03	4.54E+03
$C_6H_5O_7^{3-}$	1.30E-02	1.63E+03	3.02E+03
$EDTA^{4-}$	2.91E-03	556	1.03E+03
$HEDTA^{3-}$	3.92E-04	71.4	133
glycolate^{-}	9.12E-03	454	844
acetate^{-}	1.73E-02	678	1.26E+03
$oxalate^{2-}$	1.49E-06	8.71E-02	0.162
DBP	1.38E-02	2.43E+03	4.52E+03
butanol	1.38E-02	677	1.26E+03
NH_3	5.73E-03	64.6	120
$Fe(CN)_6^{4-}$	3.59E-02	6.46E+03	1.20E+04
Radiological Constituents			
Pu		6.27E-02 (µCi/g)	1.94 (kg)
U	7.04E-02 (M)	795 (µg/g)	2.07E+04 (kg)
Cs	0.123 (Ci/L)	82.0 (µCi/g)	1.52E+05 (Ci)
Sr	7.16E-02 (Ci/L)	47.5 (µCi/g)	8.83E+04 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-BY-104			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	0 (g/cc)		
Water wt%†	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
glycolate^{-}	0	0	0
acetate^{-}	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Single-Shell Tank 241-BY-104			
Total Inventory Estimate*			
Physical Properties			
Total Waste	1.86E+06 kg	(326 kgal)	
Heat Load	1.31 kW	(4.47E+03 BTU/hr)	
Bulk Density†	1.51 (g/cc)		
Water wt%†	46.5		
TOC wt% C (wet)†	0.434		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	8.45	1.29E+05	2.40E+05
Al^{3+}	1.16	2.08E+04	3.86E+04
Fe^{3+} (total Fe)	0.448	1.66E+04	3.09E+04
Cr^{3+}	2.87E-02	992	1.84E+03
Bi^{3+}	0.132	1.83E+04	3.40E+04
La^{3+}	1.74E-06	0.161	0.299
Hg^{2+}	1.96E-05	2.61	4.84
Zr (as $ZrO(OH)_2$)	1.60E-04	9.70	18.0
Pb^{2+}	3.06E-03	421	783
Ni^{2+}	6.70E-02	2.61E+03	4.86E+03
Sr^{2+}	1.94E-06	0.113	0.210
Mn^{4+}	1.76E-03	64.1	119
Ca^{2+}	0.179	4.77E+03	8.87E+03
K^{+}	2.80E-02	727	1.35E+03
OH^{-}	6.56	7.41E+04	1.38E+05
$NO3^{-}$	4.57	1.88E+05	3.50E+05
$NO2^{-}$	1.02	3.11E+04	5.77E+04
$CO3^{2-}$	0.410	1.64E+04	3.04E+04
$PO4^{3-}$	0.224	1.41E+04	2.62E+04
$SO4^{2-}$	0.181	1.16E+04	2.15E+04
Si (as SiO_3^{2-})	7.24E-02	1.35E+03	2.51E+03
F^{-}	0.122	1.53E+03	2.85E+03
Cl^{-}	0.104	2.44E+03	4.54E+03
$C_6H_5O_7^{3-}$	1.30E-02	1.63E+03	3.02E+03
$EDTA^{4-}$	2.91E-03	556	1.03E+03
$HEDTA^{3-}$	3.92E-04	71.4	133
glycolate^{-}	9.12E-03	454	844
acetate^{-}	1.73E-02	678	1.26E+03
$oxalate^{2-}$	1.49E-06	8.71E-02	0.162
DBP	1.38E-02	2.43E+03	4.52E+03
butanol	1.38E-02	677	1.26E+03
NH_3	5.73E-03	64.6	120
$Fe(CN)_6^{4-}$	3.59E-02	6.46E+03	1.20E+04
Radiological Constituents			
Pu		6.27E-02 (µCi/g)	1.94 (kg)
U	7.04E-02 (M)	795 (µg/g)	2.07E+04 (kg)
Cs	0.123 (Ci/L)	82.0 (µCi/g)	1.52E+05 (Ci)
Sr	7.16E-02 (Ci/L)	47.5 (µCi/g)	8.83E+04 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

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Single-Shell Tank 241-BY-105			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	2.97E+06 kg	(503 kgal)	
Heat Load	2.46 kW	(8.39E+03 BTU/hr)	
Bulk Density	1.56 (g/cc)		
Void Fraction	0.794		
Water wt%	42.5		
TOC wt% C (wet)	0.416		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	9.55	1.41E+05	4.18E+05
Al^{3+}	1.47	2.54E+04	7.53E+04
Fe^{3+} (total Fe)	0.293	1.05E+04	3.11E+04
Cr^{3+}	3.48E-02	1.16E+03	3.45E+03
Bi^{3+}	8.11E-02	1.09E+04	3.23E+04
La^{3+}	2.16E-06	0.193	0.572
Hg^{2+}	2.43E-05	3.13	9.27
Zr (as $ZrO(OH)_2$)	1.99E-04	11.6	34.5
Pb^{2+}	3.80E-03	505	1.50E+03
Ni^{2+}	4.57E-02	1.72E+03	5.11E+03
Sr^{2+}	2.41E-06	0.135	0.401
Mn^{4+}	2.18E-03	76.9	228
Ca^{2+}	0.470	1.21E+04	3.59E+04
K^{+}	3.00E-02	752	2.23E+03
OH^{-}	8.08	8.82E+04	2.62E+05
$NO3^{-}$	4.98	1.98E+05	5.88E+05
$NO2^{-}$	1.21	3.59E+04	1.06E+05
$CO3^{2-}$	0.482	1.86E+04	5.50E+04
$PO4^{3-}$	0.173	1.06E+04	3.13E+04
$SO4^{2-}$	0.190	1.17E+04	3.47E+04
Si (as SiO_3^{2-})	0.172	3.11E+03	9.21E+03
F^{-}	9.48E-02	1.16E+03	3.43E+03
Cl^{-}	0.107	2.43E+03	7.21E+03
$C_6H_5O_7^{3-}$	1.61E-02	1.95E+03	5.79E+03
$EDTA^{4-}$	3.61E-03	667	1.98E+03
$HEDTA^{3-}$	4.87E-04	85.7	254
glycolate^{-}	1.13E-02	545	1.62E+03
acetate^{-}	2.15E-02	813	2.41E+03
$oxalate^{2-}$	1.85E-06	0.105	0.310
DBP	1.71E-02	2.92E+03	8.65E+03
butanol	1.71E-02	812	2.41E+03
NH_3	7.00E-03	76.4	227
$Fe(CN)_6^{4-}$	2.21E-02	3.83E+03	1.14E+04
Radiological Constituents			
Pu		7.50E-02 (µCi/g)	3.70 (kg)
U	0.115 (M)	1.26E+03 (µg/g)	5.22E+04 (kg)
Cs	0.149 (Ci/L)	95.5 (µCi/g)	2.83E+05 (Ci)
Sr	8.81E-02 (Ci/L)	56.6 (µCi/g)	1.68E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-BY-105			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	0 (g/cc)		
Water wt%†	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
glycolate^{-}	0	0	0
acetate^{-}	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Single-Shell Tank 241-BY-105			
Total Inventory Estimate*			
Physical Properties			
Total Waste	2.97E+06 kg	(503 kgal)	
Heat Load	2.46 kW	(8.39E+03 BTU/hr)	
Bulk Density†	1.56 (g/cc)		
Water wt%†	42.5		
TOC wt% C (wet)†	0.416		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	9.55	1.41E+05	4.18E+05
Al^{3+}	1.47	2.54E+04	7.53E+04
Fe^{3+} (total Fe)	0.293	1.05E+04	3.11E+04
Cr^{3+}	3.48E-02	1.16E+03	3.45E+03
Bi^{3+}	8.11E-02	1.09E+04	3.23E+04
La^{3+}	2.16E-06	0.193	0.572
Hg^{2+}	2.43E-05	3.13	9.27
Zr (as $ZrO(OH)_2$)	1.99E-04	11.6	34.5
Pb^{2+}	3.80E-03	505	1.50E+03
Ni^{2+}	4.57E-02	1.72E+03	5.11E+03
Sr^{2+}	2.41E-06	0.135	0.401
Mn^{4+}	2.18E-03	76.9	228
Ca^{2+}	0.470	1.21E+04	3.59E+04
K^{+}	3.00E-02	752	2.23E+03
OH^{-}	8.08	8.82E+04	2.62E+05
$NO3^{-}$	4.98	1.98E+05	5.88E+05
$NO2^{-}$	1.21	3.59E+04	1.06E+05
$CO3^{2-}$	0.482	1.86E+04	5.50E+04
$PO4^{3-}$	0.173	1.06E+04	3.13E+04
$SO4^{2-}$	0.190	1.17E+04	3.47E+04
Si (as SiO_3^{2-})	0.172	3.11E+03	9.21E+03
F^{-}	9.48E-02	1.16E+03	3.43E+03
Cl^{-}	0.107	2.43E+03	7.21E+03
$C_6H_5O_7^{3-}$	1.61E-02	1.95E+03	5.79E+03
$EDTA^{4-}$	3.61E-03	667	1.98E+03
$HEDTA^{3-}$	4.87E-04	85.7	254
glycolate^{-}	1.13E-02	545	1.62E+03
acetate^{-}	2.15E-02	813	2.41E+03
$oxalate^{2-}$	1.85E-06	0.105	0.310
DBP	1.71E-02	2.92E+03	8.65E+03
butanol	1.71E-02	812	2.41E+03
NH_3	7.00E-03	76.4	227
$Fe(CN)_6^{4-}$	2.21E-02	3.83E+03	1.14E+04
Radiological Constituents			
Pu		7.50E-02 (µCi/g)	3.70 (kg)
U	0.115 (M)	1.26E+03 (µg/g)	5.22E+04 (kg)
Cs	0.149 (Ci/L)	95.5 (µCi/g)	2.83E+05 (Ci)
Sr	8.81E-02 (Ci/L)	56.6 (µCi/g)	1.68E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Single-Shell Tank 241-BY-106			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	3.84E+06 kg	(642 kgal)	
Heat Load	3.91 kW	(1.34E+04 BTU/hr)	
Bulk Density	1.58 (g/cc)		
Void Fraction	0.802		
Water wt%	40.3		
TOC wt% C (wet)	0.468		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	11.1	1.62E+05	6.20E+05
Al^{3+}	1.82	3.10E+04	1.19E+05
Fe^{3+} (total Fe)	0.154	5.45E+03	2.09E+04
Cr^{3+}	4.34E-02	1.43E+03	5.48E+03
Bi^{3+}	4.11E-02	5.44E+03	2.09E+04
La^{3+}	2.73E-06	0.240	0.923
Hg^{2+}	3.07E-05	3.90	15.0
Zr (as $ZrO(OH)_2$)	2.51E-04	14.5	55.7
Pb^{2+}	4.80E-03	630	2.42E+03
Ni^{2+}	3.18E-02	1.18E+03	4.54E+03
Sr^{2+}	3.04E-06	0.169	0.648
Mn^{4+}	2.76E-03	95.8	368
Ca^{2+}	0.105	2.67E+03	1.02E+04
K^{+}	3.45E-02	854	3.28E+03
OH^{-}	8.28	8.91E+04	3.42E+05
$NO3^{-}$	5.81	2.28E+05	8.75E+05
$NO2^{-}$	1.50	4.37E+04	1.68E+05
$CO3^{2-}$	0.468	1.78E+04	6.82E+04
$PO4^{3-}$	0.117	7.03E+03	2.70E+04
$SO4^{2-}$	0.188	1.14E+04	4.39E+04
Si (as SiO_3^{2-})	7.60E-02	1.35E+03	5.19E+03
F^{-}	8.03E-02	966	3.71E+03
Cl^{-}	0.120	2.68E+03	1.03E+04
$C_6H_5O_7^{3-}$	2.03E-02	2.43E+03	9.34E+03
$EDTA^{4-}$	4.56E-03	832	3.19E+03
$HEDTA^{3-}$	6.16E-04	107	410
$glycolate^{-}$	1.43E-02	680	2.61E+03
$acetate^{-}$	2.71E-02	1.01E+03	3.89E+03
$oxalate^{2-}$	2.34E-06	0.130	0.500
DBP	2.16E-02	3.63E+03	1.40E+04
butanol	2.16E-02	1.01E+03	3.89E+03
NH_3	8.77E-03	94.3	362
$Fe(CN)_6^{4-}$	1.67E-02	2.86E+03	1.10E+04
Radiological Constituents			
Pu		9.30E-02 (µCi/g)	5.95 (kg)
U	3.92E-02 (M)	422 (µg/g)	2.27E+04 (kg)
Cs	0.185 (Ci/L)	117 (µCi/g)	4.49E+05 (Ci)
Sr	0.111 (Ci/L)	69.9 (µCi/g)	2.69E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

Rev. 3

Single-Shell Tank 241-BY-106			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	0 (g/cc)		
Water wt%†	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-BY-106			
Total Inventory Estimate*			
Physical Properties			
Total Waste	3.84E+06 kg	(642 kgal)	
Heat Load	3.91 kW	(1.34E+04 BTU/hr)	
Bulk Density†	1.58 (g/cc)		
Water wt%†	40.3		
TOC wt% C (wet)†	0.468		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	11.1	1.62E+05	6.20E+05
Al^{3+}	1.82	3.10E+04	1.19E+05
Fe^{3+} (total Fe)	0.154	5.45E+03	2.09E+04
Cr^{3+}	4.34E-02	1.43E+03	5.48E+03
Bi^{3+}	4.11E-02	5.44E+03	2.09E+04
La^{3+}	2.73E-06	0.240	0.923
Hg^{2+}	3.07E-05	3.90	15.0
Zr (as $ZrO(OH)_2$)	2.51E-04	14.5	55.7
Pb^{2+}	4.80E-03	630	2.42E+03
Ni^{2+}	3.18E-02	1.18E+03	4.54E+03
Sr^{2+}	3.04E-06	0.169	0.648
Mn^{4+}	2.76E-03	95.8	368
Ca^{2+}	0.105	2.67E+03	1.02E+04
K^{+}	3.45E-02	854	3.28E+03
OH^{-}	8.28	8.91E+04	3.42E+05
$NO3^{-}$	5.81	2.28E+05	8.75E+05
$NO2^{-}$	1.50	4.37E+04	1.68E+05
$CO3^{2-}$	0.468	1.78E+04	6.82E+04
$PO4^{3-}$	0.117	7.03E+03	2.70E+04
$SO4^{2-}$	0.188	1.14E+04	4.39E+04
Si (as SiO_3^{2-})	7.60E-02	1.35E+03	5.19E+03
F^{-}	8.03E-02	966	3.71E+03
Cl^{-}	0.120	2.68E+03	1.03E+04
$C_6H_5O_7^{3-}$	2.03E-02	2.43E+03	9.34E+03
$EDTA^{4-}$	4.56E-03	832	3.19E+03
$HEDTA^{3-}$	6.16E-04	107	410
$glycolate^{-}$	1.43E-02	680	2.61E+03
$acetate^{-}$	2.71E-02	1.01E+03	3.89E+03
$oxalate^{2-}$	2.34E-06	0.130	0.500
DBP	2.16E-02	3.63E+03	1.40E+04
butanol	2.16E-02	1.01E+03	3.89E+03
NH_3	8.77E-03	94.3	362
$Fe(CN)_6^{4-}$	1.67E-02	2.86E+03	1.10E+04
Radiological Constituents			
Pu		9.30E-02 (µCi/g)	5.95 (kg)
U	3.92E-02 (M)	422 (µg/g)	2.27E+04 (kg)
Cs	0.185 (Ci/L)	117 (µCi/g)	4.49E+05 (Ci)
Sr	0.111 (Ci/L)	69.9 (µCi/g)	2.69E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Single-Shell Tank 241-BY-107			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	1.50E+06 kg	(266 kgal)	
Heat Load	1.11 kW	(3.80E+03 BTU/hr)	
Bulk Density	1.49 (g/cc)		
Void Fraction	0.832		
Water wt%	47.3		
TOC wt% C (wet)	0.422		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	8.61	1.33E+05	1.99E+05
Al^{3+}	1.28	2.31E+04	3.48E+04
Fe^{3+} (total Fe)	0.396	1.48E+04	2.22E+04
Cr^{3+}	2.98E-02	1.04E+03	1.56E+03
Bi^{3+}	7.66E-02	1.07E+04	1.61E+04
La^{3+}	1.81E-06	0.168	0.253
Hg^{2+}	2.55E-05	3.43	5.16
Zr (as $ZrO(OH)_2$)	7.99E-04	48.9	73.4
Pb^{2+}	3.18E-03	441	663
Ni^{2+}	4.45E-02	1.75E+03	2.63E+03
Sr^{2+}	2.01E-06	0.118	0.177
Mn^{4+}	1.82E-03	67.1	101
Ca^{2+}	0.148	3.98E+03	5.97E+03
K^{+}	2.72E-02	712	1.07E+03
OH^{-}	6.72	7.66E+04	1.15E+05
$NO3^{-}$	4.46	1.85E+05	2.79E+05
$NO2^{-}$	1.07	3.30E+04	4.95E+04
$CO3^{2-}$	0.400	1.61E+04	2.42E+04
$PO4^{3-}$	0.232	1.48E+04	2.22E+04
$SO4^{2-}$	0.168	1.08E+04	1.63E+04
Si (as SiO_3^{2-})	6.56E-02	1.24E+03	1.86E+03
F^{-}	0.104	1.33E+03	2.00E+03
Cl^{-}	0.101	2.39E+03	3.59E+03
$C_6H_5O_7^{3-}$	1.34E-02	1.70E+03	2.56E+03
$EDTA^{4-}$	3.02E-03	582	875
$HEDTA^{3-}$	4.07E-04	74.8	112
$glycolate^{-}$	9.47E-03	476	715
$acetate^{-}$	1.79E-02	710	1.07E+03
$oxalate^{2-}$	1.55E-06	9.13E-02	0.137
DBP	1.43E-02	2.55E+03	3.82E+03
butanol	1.43E-02	709	1.07E+03
NH_3	5.97E-03	68.0	102
$Fe(CN)_6^{4-}$	3.07E-02	5.56E+03	8.35E+03
Radiological Constituents			
Pu		6.69E-02 (µCi/g)	1.67 (kg)
U	5.61E-02 (M)	639 (µg/g)	1.34E+04 (kg)
Cs	0.127 (Ci/L)	85.4 (µCi/g)	1.28E+05 (Ci)
Sr	7.53E-02 (Ci/L)	50.5 (µCi/g)	7.58E+04 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-BY-107			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	0 (g/cc)		
Water wt%†	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-BY-107			
Total Inventory Estimate*			
Physical Properties			
Total Waste	1.50E+06 kg	(266 kgal)	
Heat Load	1.11 kW	(3.80E+03 BTU/hr)	
Bulk Density†	1.49 (g/cc)		
Water wt%†	47.3		
TOC wt% C (wet)†	0.422		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	8.61	1.33E+05	1.99E+05
Al^{3+}	1.28	2.31E+04	3.48E+04
Fe^{3+} (total Fe)	0.396	1.48E+04	2.22E+04
Cr^{3+}	2.98E-02	1.04E+03	1.56E+03
Bi^{3+}	7.66E-02	1.07E+04	1.61E+04
La^{3+}	1.81E-06	0.168	0.253
Hg^{2+}	2.55E-05	3.43	5.16
Zr (as $ZrO(OH)_2$)	7.99E-04	48.9	73.4
Pb^{2+}	3.18E-03	441	663
Ni^{2+}	4.45E-02	1.75E+03	2.63E+03
Sr^{2+}	2.01E-06	0.118	0.177
Mn^{4+}	1.82E-03	67.1	101
Ca^{2+}	0.148	3.98E+03	5.97E+03
K^{+}	2.72E-02	712	1.07E+03
OH^{-}	6.72	7.66E+04	1.15E+05
$NO3^{-}$	4.46	1.85E+05	2.79E+05
$NO2^{-}$	1.07	3.30E+04	4.95E+04
$CO3^{2-}$	0.400	1.61E+04	2.42E+04
$PO4^{3-}$	0.232	1.48E+04	2.22E+04
$SO4^{2-}$	0.168	1.08E+04	1.63E+04
Si (as SiO_3^{2-})	6.56E-02	1.24E+03	1.86E+03
F^{-}	0.104	1.33E+03	2.00E+03
Cl^{-}	0.101	2.39E+03	3.59E+03
$C_6H_5O_7^{3-}$	1.34E-02	1.70E+03	2.56E+03
$EDTA^{4-}$	3.02E-03	582	875
$HEDTA^{3-}$	4.07E-04	74.8	112
$glycolate^{-}$	9.47E-03	476	715
$acetate^{-}$	1.79E-02	710	1.07E+03
$oxalate^{2-}$	1.55E-06	9.13E-02	0.137
DBP	1.43E-02	2.55E+03	3.82E+03
butanol	1.43E-02	709	1.07E+03
NH_3	5.97E-03	68.0	102
$Fe(CN)_6^{4-}$	3.07E-02	5.56E+03	8.35E+03
Radiological Constituents			
Pu		6.69E-02 (µCi/g)	1.67 (kg)
U	5.61E-02 (M)	639 (µg/g)	1.34E+04 (kg)
Cs	0.127 (Ci/L)	85.4 (µCi/g)	1.28E+05 (Ci)
Sr	7.53E-02 (Ci/L)	50.5 (µCi/g)	7.58E+04 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Single-Shell Tank 241-BY-108			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	1.24E+06 kg	(228 kgal)	
Heat Load	0.503 kW	(1.72E+03 BTU/hr)	
Bulk Density	1.44 (g/cc)		
Void Fraction	0.890		
Water wt%	53.0		
TOC wt% C (wet)	0.589		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	6.28	1.00E+05	1.25E+05
Al^{3+}	0.593	1.11E+04	1.38E+04
Fe^{3+} (total Fe)	0.660	2.56E+04	3.18E+04
Cr^{3+}	1.62E-02	584	725
Bi^{3+}	0.185	2.68E+04	3.33E+04
La^{3+}	8.92E-07	8.61E-02	0.107
Hg^{2+}	1.00E-05	1.40	1.73
Zr (as $ZrO(OH)_2$)	8.20E-05	5.20	6.45
Pb^{2+}	1.57E-03	226	280
Ni^{2+}	0.102	4.15E+03	5.16E+03
Sr^{2+}	9.92E-07	6.04E-02	7.50E-02
Mn^{4+}	8.99E-04	34.3	42.6
Ca^{2+}	0.217	6.04E+03	7.50E+03
K^{+}	2.26E-02	615	763
OH^{-}	4.73	5.59E+04	6.94E+04
$NO3^{-}$	3.55	1.53E+05	1.90E+05
$NO2^{-}$	0.594	1.90E+04	2.36E+04
$CO3^{2-}$	0.335	1.40E+04	1.74E+04
$PO4^{3-}$	0.291	1.92E+04	2.39E+04
$SO4^{2-}$	0.177	1.18E+04	1.46E+04
Si (as SiO_3^{2-})	6.65E-02	1.30E+03	1.61E+03
F^{-}	0.158	2.09E+03	2.60E+03
Cl^{-}	9.13E-02	2.25E+03	2.79E+03
$C_6H_5O_7^{3-}$	6.63E-03	871	1.08E+03
$EDTA^{4-}$	1.49E-03	298	370
$HEDTA^{3-}$	2.01E-04	38.3	47.5
$glycolate^{-}$	4.67E-03	243	302
$acetate^{-}$	8.85E-03	363	451
$oxalate^{2-}$	7.63E-07	4.67E-02	5.80E-02
DBP	7.04E-03	1.30E+03	1.62E+03
butanol	7.04E-03	363	450
NH_3	3.07E-03	36.3	45.1
$Fe(CN)_6^{4-}$	8.98E-02	1.69E+04	2.10E+04
Radiological Constituents			
Pu		3.43E-02 (µCi/g)	0.710 (kg)
U	8.66E-02 (M)	1.02E+03 (µg/g)	1.78E+04 (kg)
Cs	6.95E-02 (Ci/L)	48.3 (µCi/g)	6.00E+04 (Ci)
Sr	3.82E-02 (Ci/L)	26.6 (µCi/g)	3.30E+04 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-BY-108			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	0 (g/cc)		
Water wt%†	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Single-Shell Tank 241-BY-108			
Total Inventory Estimate*			
Physical Properties			
Total Waste	1.24E+06 kg	(228 kgal)	
Heat Load	0.503 kW	(1.72E+03 BTU/hr)	
Bulk Density†	1.44 (g/cc)		
Water wt%†	53.0		
TOC wt% C (wet)†	0.589		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	6.28	1.00E+05	1.25E+05
Al^{3+}	0.593	1.11E+04	1.38E+04
Fe^{3+} (total Fe)	0.660	2.56E+04	3.18E+04
Cr^{3+}	1.62E-02	584	725
Bi^{3+}	0.185	2.68E+04	3.33E+04
La^{3+}	8.92E-07	8.61E-02	0.107
Hg^{2+}	1.00E-05	1.40	1.73
Zr (as $ZrO(OH)_2$)	8.20E-05	5.20	6.45
Pb^{2+}	1.57E-03	226	280
Ni^{2+}	0.102	4.15E+03	5.16E+03
Sr^{2+}	9.92E-07	6.04E-02	7.50E-02
Mn^{4+}	8.99E-04	34.3	42.6
Ca^{2+}	0.217	6.04E+03	7.50E+03
K^{+}	2.26E-02	615	763
OH^{-}	4.73	5.59E+04	6.94E+04
$NO3^{-}$	3.55	1.53E+05	1.90E+05
$NO2^{-}$	0.594	1.90E+04	2.36E+04
$CO3^{2-}$	0.335	1.40E+04	1.74E+04
$PO4^{3-}$	0.291	1.92E+04	2.39E+04
$SO4^{2-}$	0.177	1.18E+04	1.46E+04
Si (as SiO_3^{2-})	6.65E-02	1.30E+03	1.61E+03
F^{-}	0.158	2.09E+03	2.60E+03
Cl^{-}	9.13E-02	2.25E+03	2.79E+03
$C_6H_5O_7^{3-}$	6.63E-03	871	1.08E+03
$EDTA^{4-}$	1.49E-03	298	370
$HEDTA^{3-}$	2.01E-04	38.3	47.5
$glycolate^{-}$	4.67E-03	243	302
$acetate^{-}$	8.85E-03	363	451
$oxalate^{2-}$	7.63E-07	4.67E-02	5.80E-02
DBP	7.04E-03	1.30E+03	1.62E+03
butanol	7.04E-03	363	450
NH_3	3.07E-03	36.3	45.1
$Fe(CN)_6^{4-}$	8.98E-02	1.69E+04	2.10E+04
Radiological Constituents			
Pu		3.43E-02 (µCi/g)	0.710 (kg)
U	8.66E-02 (M)	1.02E+03 (µg/g)	1.78E+04 (kg)
Cs	6.95E-02 (Ci/L)	48.3 (µCi/g)	6.00E+04 (Ci)
Sr	3.82E-02 (Ci/L)	26.6 (µCi/g)	3.30E+04 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Single-Shell Tank 241-BY-109			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	2.61E+06 kg	(423 kgal)	
Heat Load	2.77 kW	(9.45E+03 BTU/hr)	
Bulk Density	1.63 (g/cc)		
Void Fraction	0.743		
Water wt%	38.0		
TOC wt% C (wet)	0.410		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	11.8	1.66E+05	4.34E+05
Al^{3+}	1.96	3.25E+04	8.48E+04
Fe^{3+} (total Fe)	2.48E-02	850	2.22E+03
Cr^{3+}	4.65E-02	1.48E+03	3.87E+03
Bi^{3+}	8.23E-04	106	275
La^{3+}	2.95E-06	0.252	0.657
Hg^{2+}	3.32E-05	4.08	10.6
Zr (as $ZrO(OH)_2$)	2.71E-04	15.2	39.6
Pb^{2+}	5.19E-03	660	1.72E+03
Ni^{2+}	1.24E-02	447	1.17E+03
Sr^{2+}	3.29E-06	0.177	0.461
Mn^{4+}	2.98E-03	100	262
Ca^{2+}	7.43E-02	1.83E+03	4.77E+03
K^{+}	3.45E-02	828	2.16E+03
OH^{-}	9.46	9.88E+04	2.58E+05
$NO3^{-}$	5.87	2.24E+05	5.83E+05
$NO2^{-}$	1.59	4.50E+04	1.17E+05
$CO3^{2-}$	0.619	2.28E+04	5.95E+04
$PO4^{3-}$	9.67E-02	5.64E+03	1.47E+04
$SO4^{2-}$	0.182	1.07E+04	2.80E+04
Si (as SiO_3^{2-})	7.18E-02	1.24E+03	3.23E+03
F^{-}	5.45E-02	636	1.66E+03
Cl^{-}	0.116	2.53E+03	6.60E+03
$C_6H_5O_7^{3-}$	2.19E-02	2.55E+03	6.64E+03
$EDTA^{4-}$	4.93E-03	871	2.27E+03
$HEDTA^{3-}$	6.65E-04	112	292
$glycolate^{-}$	1.55E-02	712	1.86E+03
$acetate^{-}$	2.93E-02	1.06E+03	2.77E+03
$oxalate^{2-}$	2.53E-06	0.137	0.356
DBP	2.33E-02	3.81E+03	9.93E+03
butanol	2.33E-02	1.06E+03	2.77E+03
NH_3	9.41E-03	98.3	256
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		9.76E-02 (µCi/g)	4.24 (kg)
U	0.193 (M)	2.01E+03 (µg/g)	7.35E+04 (kg)
Cs	0.197 (Ci/L)	121 (µCi/g)	3.16E+05 (Ci)
Sr	0.119 (Ci/L)	73.3 (µCi/g)	1.91E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-BY-109			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	0 (g/cc)		
Water wt%†	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-BY-109			
Total Inventory Estimate*			
Physical Properties			
Total Waste	2.61E+06 kg	(423 kgal)	
Heat Load	2.77 kW	(9.45E+03 BTU/hr)	
Bulk Density†	1.63 (g/cc)		
Water wt%†	38.0		
TOC wt% C (wet)†	0.410		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	11.8	1.66E+05	4.34E+05
Al^{3+}	1.96	3.25E+04	8.48E+04
Fe^{3+} (total Fe)	2.48E-02	850	2.22E+03
Cr^{3+}	4.65E-02	1.48E+03	3.87E+03
Bi^{3+}	8.23E-04	106	275
La^{3+}	2.95E-06	0.252	0.657
Hg^{2+}	3.32E-05	4.08	10.6
Zr (as $ZrO(OH)_2$)	2.71E-04	15.2	39.6
Pb^{2+}	5.19E-03	660	1.72E+03
Ni^{2+}	1.24E-02	447	1.17E+03
Sr^{2+}	3.29E-06	0.177	0.461
Mn^{4+}	2.98E-03	100	262
Ca^{2+}	7.43E-02	1.83E+03	4.77E+03
K^{+}	3.45E-02	828	2.16E+03
OH^{-}	9.46	9.88E+04	2.58E+05
$NO3^{-}$	5.87	2.24E+05	5.83E+05
$NO2^{-}$	1.59	4.50E+04	1.17E+05
$CO3^{2-}$	0.619	2.28E+04	5.95E+04
$PO4^{3-}$	9.67E-02	5.64E+03	1.47E+04
$SO4^{2-}$	0.182	1.07E+04	2.80E+04
Si (as SiO_3^{2-})	7.18E-02	1.24E+03	3.23E+03
F^{-}	5.45E-02	636	1.66E+03
Cl^{-}	0.116	2.53E+03	6.60E+03
$C_6H_5O_7^{3-}$	2.19E-02	2.55E+03	6.64E+03
$EDTA^{4-}$	4.93E-03	871	2.27E+03
$HEDTA^{3-}$	6.65E-04	112	292
$glycolate^{-}$	1.55E-02	712	1.86E+03
$acetate^{-}$	2.93E-02	1.06E+03	2.77E+03
$oxalate^{2-}$	2.53E-06	0.137	0.356
DBP	2.33E-02	3.81E+03	9.93E+03
butanol	2.33E-02	1.06E+03	2.77E+03
NH_3	9.41E-03	98.3	256
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		9.76E-02 (µCi/g)	4.24 (kg)
U	0.193 (M)	2.01E+03 (µg/g)	7.35E+04 (kg)
Cs	0.197 (Ci/L)	121 (µCi/g)	3.16E+05 (Ci)
Sr	0.119 (Ci/L)	73.3 (µCi/g)	1.91E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Single-Shell Tank 241-BY-110			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	2.24E+06 kg	(398 kgal)	
Heat Load	1.55 kW	(5.30E+03 BTU/hr)	
Bulk Density	1.49 (g/cc)		
Void Fraction	0.839		
Water wt%	48.2		
TOC wt% C (wet)	0.479		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	8.32	1.29E+05	2.88E+05
Al^{3+}	1.20	2.18E+04	4.88E+04
Fe^{3+} (total Fe)	0.375	1.41E+04	3.16E+04
Cr^{3+}	2.80E-02	981	2.20E+03
Bi^{3+}	0.104	1.46E+04	3.26E+04
La^{3+}	1.69E-06	0.158	0.353
Hg^{2+}	2.43E-05	3.28	7.35
Zr (as $ZrO(OH)_2$)	8.07E-04	49.5	111
Pb^{2+}	2.96E-03	413	925
Ni^{2+}	5.90E-02	2.33E+03	5.22E+03
Sr^{2+}	1.88E-06	0.111	0.248
Mn^{4+}	1.70E-03	62.8	141
Ca^{2+}	0.148	4.00E+03	8.95E+03
K^{+}	2.64E-02	695	1.56E+03
OH^{-}	6.28	7.19E+04	1.61E+05
$NO3^{-}$	4.33	1.81E+05	4.04E+05
$NO2^{-}$	0.994	3.08E+04	6.89E+04
$CO3^{2-}$	0.372	1.50E+04	3.36E+04
$PO4^{3-}$	0.263	1.68E+04	3.77E+04
$SO4^{2-}$	0.170	1.10E+04	2.47E+04
Si (as SiO_3^{2-})	6.95E-02	1.31E+03	2.94E+03
F^{-}	0.124	1.59E+03	3.56E+03
Cl^{-}	9.74E-02	2.32E+03	5.20E+03
$C_6H_5O_7^{3-}$	1.25E-02	1.59E+03	3.57E+03
$EDTA^{4-}$	2.81E-03	545	1.22E+03
$HEDTA^{3-}$	3.80E-04	70.1	157
glycolate^{-}	8.83E-03	446	998
acetate^{-}	1.67E-02	665	1.49E+03
$oxalate^{2-}$	1.44E-06	8.55E-02	0.191
DBP	1.33E-02	2.38E+03	5.34E+03
butanol	1.33E-02	664	1.49E+03
NH_3	5.55E-03	63.5	142
$Fe(CN)_6^{4-}$	4.59E-02	8.36E+03	1.87E+04
Radiological Constituents			
Pu		6.27E-02 (µCi/g)	2.34 (kg)
U	5.63E-02 (M)	643 (µg/g)	2.02E+04 (kg)
Cs	0.121 (Ci/L)	81.2 (µCi/g)	1.82E+05 (Ci)
Sr	6.91E-02 (Ci/L)	46.5 (µCi/g)	1.04E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-BY-110			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	0 (g/cc)		
Water wt%†	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
glycolate^{-}	0	0	0
acetate^{-}	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Single-Shell Tank 241-BY-110			
Total Inventory Estimate*			
Physical Properties			
Total Waste	2.24E+06 kg	(398 kgal)	
Heat Load	1.55 kW	(5.30E+03 BTU/hr)	
Bulk Density†	1.49 (g/cc)		
Water wt%†	48.2		
TOC wt% C (wet)†	0.479		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	8.32	1.29E+05	2.88E+05
Al^{3+}	1.20	2.18E+04	4.88E+04
Fe^{3+} (total Fe)	0.375	1.41E+04	3.16E+04
Cr^{3+}	2.80E-02	981	2.20E+03
Bi^{3+}	0.104	1.46E+04	3.26E+04
La^{3+}	1.69E-06	0.158	0.353
Hg^{2+}	2.43E-05	3.28	7.35
Zr (as $ZrO(OH)_2$)	8.07E-04	49.5	111
Pb^{2+}	2.96E-03	413	925
Ni^{2+}	5.90E-02	2.33E+03	5.22E+03
Sr^{2+}	1.88E-06	0.111	0.248
Mn^{4+}	1.70E-03	62.8	141
Ca^{2+}	0.148	4.00E+03	8.95E+03
K^{+}	2.64E-02	695	1.56E+03
OH^{-}	6.28	7.19E+04	1.61E+05
$NO3^{-}$	4.33	1.81E+05	4.04E+05
$NO2^{-}$	0.994	3.08E+04	6.89E+04
$CO3^{2-}$	0.372	1.50E+04	3.36E+04
$PO4^{3-}$	0.263	1.68E+04	3.77E+04
$SO4^{2-}$	0.170	1.10E+04	2.47E+04
Si (as SiO_3^{2-})	6.95E-02	1.31E+03	2.94E+03
F^{-}	0.124	1.59E+03	3.56E+03
Cl^{-}	9.74E-02	2.32E+03	5.20E+03
$C_6H_5O_7^{3-}$	1.25E-02	1.59E+03	3.57E+03
$EDTA^{4-}$	2.81E-03	545	1.22E+03
$HEDTA^{3-}$	3.80E-04	70.1	157
glycolate^{-}	8.83E-03	446	998
acetate^{-}	1.67E-02	665	1.49E+03
$oxalate^{2-}$	1.44E-06	8.55E-02	0.191
DBP	1.33E-02	2.38E+03	5.34E+03
butanol	1.33E-02	664	1.49E+03
NH_3	5.55E-03	63.5	142
$Fe(CN)_6^{4-}$	4.59E-02	8.36E+03	1.87E+04
Radiological Constituents			
Pu		6.27E-02 (µCi/g)	2.34 (kg)
U	5.63E-02 (M)	643 (µg/g)	2.02E+04 (kg)
Cs	0.121 (Ci/L)	81.2 (µCi/g)	1.82E+05 (Ci)
Sr	6.91E-02 (Ci/L)	46.5 (µCi/g)	1.04E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

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Single-Shell Tank 241-BY-111			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	2.82E+06 kg	(459 kgal)	
Heat Load	3.09 kW	(1.06E+04 BTU/hr)	
Bulk Density	1.63 (g/cc)		
Void Fraction	0.755		
Water wt%	37.8		
TOC wt% C (wet)	0.424		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	12.0	1.70E+05	4.79E+05
Al^{3+}	2.02	3.36E+04	9.49E+04
Fe^{3+} (total Fe)	2.19E-02	752	2.12E+03
Cr^{3+}	4.79E-02	1.53E+03	4.32E+03
Bi^{3+}	8.49E-04	109	308
La^{3+}	3.04E-06	0.260	0.735
Hg^{2+}	3.42E-05	4.22	11.9
Zr (as $ZrO(OH)_2$)	2.80E-04	15.7	44.4
Pb^{2+}	5.35E-03	682	1.93E+03
Ni^{2+}	1.28E-02	461	1.30E+03
Sr^{2+}	3.39E-06	0.183	0.516
Mn^{4+}	3.07E-03	104	293
Ca^{2+}	7.40E-02	1.82E+03	5.15E+03
K^{+}	3.56E-02	856	2.42E+03
OH^{-}	9.38	9.81E+04	2.77E+05
$NO3^{-}$	6.05	2.31E+05	6.52E+05
$NO2^{-}$	1.64	4.65E+04	1.31E+05
$CO3^{2-}$	0.580	2.14E+04	6.05E+04
$PO4^{3-}$	8.73E-02	5.10E+03	1.44E+04
$SO4^{2-}$	0.185	1.09E+04	3.09E+04
Si (as SiO_3^{2-})	7.39E-02	1.28E+03	3.61E+03
F^{-}	5.62E-02	657	1.85E+03
Cl^{-}	0.120	2.62E+03	7.39E+03
$C_6H_5O_7^{3-}$	2.26E-02	2.63E+03	7.43E+03
$EDTA^{4-}$	5.08E-03	900	2.54E+03
$HEDTA^{3-}$	6.86E-04	116	327
$glycolate^{-}$	1.59E-02	736	2.08E+03
$acetate^{-}$	3.02E-02	1.10E+03	3.10E+03
$oxalate^{2-}$	2.60E-06	0.141	0.398
DBP	2.40E-02	3.94E+03	1.11E+04
butanol	2.40E-02	1.10E+03	3.09E+03
NH_3	9.71E-03	102	287
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0.101 (µCi/g)	4.74 (kg)
U	0.137 (M)	1.43E+03 (µg/g)	5.66E+04 (kg)
Cs	0.203 (Ci/L)	125 (µCi/g)	3.53E+05 (Ci)
Sr	0.123 (Ci/L)	75.6 (µCi/g)	2.14E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-BY-111			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	0 (g/cc)		
Water wt%†	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Single-Shell Tank 241-BY-111			
Total Inventory Estimate*			
Physical Properties			
Total Waste	2.82E+06 kg	(459 kgal)	
Heat Load	3.09 kW	(1.06E+04 BTU/hr)	
Bulk Density†	1.63 (g/cc)		
Water wt%†	37.8		
TOC wt% C (wet)†	0.424		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	12.0	1.70E+05	4.79E+05
Al^{3+}	2.02	3.36E+04	9.49E+04
Fe^{3+} (total Fe)	2.19E-02	752	2.12E+03
Cr^{3+}	4.79E-02	1.53E+03	4.32E+03
Bi^{3+}	8.49E-04	109	308
La^{3+}	3.04E-06	0.260	0.735
Hg^{2+}	3.42E-05	4.22	11.9
Zr (as $ZrO(OH)_2$)	2.80E-04	15.7	44.4
Pb^{2+}	5.35E-03	682	1.93E+03
Ni^{2+}	1.28E-02	461	1.30E+03
Sr^{2+}	3.39E-06	0.183	0.516
Mn^{4+}	3.07E-03	104	293
Ca^{2+}	7.40E-02	1.82E+03	5.15E+03
K^{+}	3.56E-02	856	2.42E+03
OH^{-}	9.38	9.81E+04	2.77E+05
$NO3^{-}$	6.05	2.31E+05	6.52E+05
$NO2^{-}$	1.64	4.65E+04	1.31E+05
$CO3^{2-}$	0.580	2.14E+04	6.05E+04
$PO4^{3-}$	8.73E-02	5.10E+03	1.44E+04
$SO4^{2-}$	0.185	1.09E+04	3.09E+04
Si (as SiO_3^{2-})	7.39E-02	1.28E+03	3.61E+03
F^{-}	5.62E-02	657	1.85E+03
Cl^{-}	0.120	2.62E+03	7.39E+03
$C_6H_5O_7^{3-}$	2.26E-02	2.63E+03	7.43E+03
$EDTA^{4-}$	5.08E-03	900	2.54E+03
$HEDTA^{3-}$	6.86E-04	116	327
$glycolate^{-}$	1.59E-02	736	2.08E+03
$acetate^{-}$	3.02E-02	1.10E+03	3.10E+03
$oxalate^{2-}$	2.60E-06	0.141	0.398
DBP	2.40E-02	3.94E+03	1.11E+04
butanol	2.40E-02	1.10E+03	3.09E+03
NH_3	9.71E-03	102	287
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0.101 (µCi/g)	4.74 (kg)
U	0.137 (M)	1.43E+03 (µg/g)	5.66E+04 (kg)
Cs	0.203 (Ci/L)	125 (µCi/g)	3.53E+05 (Ci)
Sr	0.123 (Ci/L)	75.6 (µCi/g)	2.14E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Single-Shell Tank 241-BY-112			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	1.78E+06 kg	(291 kgal)	
Heat Load	2.02 kW	(6.90E+03 BTU/hr)	
Bulk Density	1.61 (g/cc)		
Void Fraction	0.779		
Water wt%	37.8		
TOC wt% C (wet)	0.447		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	12.2	1.73E+05	3.08E+05
Al^{3+}	2.09	3.49E+04	6.20E+04
Fe^{3+} (total Fe)	3.61E-02	1.25E+03	2.22E+03
Cr^{3+}	4.94E-02	1.59E+03	2.83E+03
Bi^{3+}	6.76E-03	875	1.55E+03
La^{3+}	3.14E-06	0.270	0.480
Hg^{2+}	3.52E-05	4.38	7.79
Zr (as $ZrO(OH)_2$)	2.89E-04	16.3	29.0
Pb^{2+}	5.51E-03	708	1.26E+03
Ni^{2+}	1.58E-02	575	1.02E+03
Sr^{2+}	3.49E-06	0.190	0.337
Mn^{4+}	3.16E-03	108	191
Ca^{2+}	7.82E-02	1.94E+03	3.45E+03
K^{+}	3.70E-02	896	1.59E+03
OH^{-}	9.10	9.59E+04	1.70E+05
$NO3^{-}$	6.29	2.42E+05	4.29E+05
$NO2^{-}$	1.70	4.84E+04	8.60E+04
$CO3^{2-}$	0.507	1.89E+04	3.35E+04
$PO4^{3-}$	7.78E-02	4.58E+03	8.13E+03
$SO4^{2-}$	0.190	1.13E+04	2.01E+04
Si (as SiO_3^{2-})	7.75E-02	1.35E+03	2.40E+03
F^{-}	6.19E-02	729	1.30E+03
Cl^{-}	0.125	2.75E+03	4.89E+03
$C_6H_5O_7^{3-}$	2.33E-02	2.73E+03	4.86E+03
$EDTA^{4-}$	5.24E-03	935	1.66E+03
$HEDTA^{3-}$	7.07E-04	120	213
$glycolate^{-}$	1.64E-02	764	1.36E+03
$acetate^{-}$	3.12E-02	1.14E+03	2.03E+03
$oxalate^{2-}$	2.69E-06	0.146	0.260
DBP	2.48E-02	4.09E+03	7.26E+03
butanol	2.48E-02	1.14E+03	2.02E+03
NH_3	1.00E-02	105	188
$Fe(CN)_6^{4-}$	1.61E-03	270	480
Radiological Constituents			
Pu		0.104 (µCi/g)	3.09 (kg)
U	4.13E-02 (M)	435 (µg/g)	1.08E+04 (kg)
Cs	0.210 (Ci/L)	130 (µCi/g)	2.31E+05 (Ci)
Sr	0.126 (Ci/L)	78.3 (µCi/g)	1.39E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-BY-112			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	0 (g/cc)		
Water wt%†	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-BY-112			
Total Inventory Estimate*			
Physical Properties			
Total Waste	1.78E+06 kg	(291 kgal)	
Heat Load	2.02 kW	(6.90E+03 BTU/hr)	
Bulk Density†	1.61 (g/cc)		
Water wt%†	37.8		
TOC wt% C (wet)†	0.447		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	12.2	1.73E+05	3.08E+05
Al^{3+}	2.09	3.49E+04	6.20E+04
Fe^{3+} (total Fe)	3.61E-02	1.25E+03	2.22E+03
Cr^{3+}	4.94E-02	1.59E+03	2.83E+03
Bi^{3+}	6.76E-03	875	1.55E+03
La^{3+}	3.14E-06	0.270	0.480
Hg^{2+}	3.52E-05	4.38	7.79
Zr (as $ZrO(OH)_2$)	2.89E-04	16.3	29.0
Pb^{2+}	5.51E-03	708	1.26E+03
Ni^{2+}	1.58E-02	575	1.02E+03
Sr^{2+}	3.49E-06	0.190	0.337
Mn^{4+}	3.16E-03	108	191
Ca^{2+}	7.82E-02	1.94E+03	3.45E+03
K^{+}	3.70E-02	896	1.59E+03
OH^{-}	9.10	9.59E+04	1.70E+05
$NO3^{-}$	6.29	2.42E+05	4.29E+05
$NO2^{-}$	1.70	4.84E+04	8.60E+04
$CO3^{2-}$	0.507	1.89E+04	3.35E+04
$PO4^{3-}$	7.78E-02	4.58E+03	8.13E+03
$SO4^{2-}$	0.190	1.13E+04	2.01E+04
Si (as SiO_3^{2-})	7.75E-02	1.35E+03	2.40E+03
F^{-}	6.19E-02	729	1.30E+03
Cl^{-}	0.125	2.75E+03	4.89E+03
$C_6H_5O_7^{3-}$	2.33E-02	2.73E+03	4.86E+03
$EDTA^{4-}$	5.24E-03	935	1.66E+03
$HEDTA^{3-}$	7.07E-04	120	213
$glycolate^{-}$	1.64E-02	764	1.36E+03
$acetate^{-}$	3.12E-02	1.14E+03	2.03E+03
$oxalate^{2-}$	2.69E-06	0.146	0.260
DBP	2.48E-02	4.09E+03	7.26E+03
butanol	2.48E-02	1.14E+03	2.02E+03
NH_3	1.00E-02	105	188
$Fe(CN)_6^{4-}$	1.61E-03	270	480
Radiological Constituents			
Pu		0.104 (µCi/g)	3.09 (kg)
U	4.13E-02 (M)	435 (µg/g)	1.08E+04 (kg)
Cs	0.210 (Ci/L)	130 (µCi/g)	2.31E+05 (Ci)
Sr	0.126 (Ci/L)	78.3 (µCi/g)	1.39E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

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Single-Shell Tank 241-C-101			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	4.74E+05 kg	(88.0 kgal)	
Heat Load	2.26E-02 kW	(77.1 BTU/hr)	
Bulk Density	1.42 (g/cc)		
Void Fraction	0.825		
Water wt%	55.9		
TOC wt% C (wet)	9.59E-05		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	2.41	3.89E+04	1.85E+04
Al^{3+}	3.42	6.48E+04	3.07E+04
Fe^{3+} (total Fe)	0.727	2.85E+04	1.35E+04
Cr^{3+}	2.58E-03	94.3	44.7
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	2.54E-03	358	170
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0.133	1.93E+04	9.15E+03
Ni^{2+}	1.29E-03	53.2	25.2
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.253	7.11E+03	3.37E+03
K^{+}	6.32E-03	174	82.4
OH^{-}	14.3	1.71E+05	8.11E+04
$NO3^{-}$	1.09	4.73E+04	2.25E+04
$NO2^{-}$	0.420	1.36E+04	6.43E+03
$CO3^{2-}$	0.371	1.56E+04	7.41E+03
$PO4^{3-}$	5.42E-02	3.62E+03	1.72E+03
$SO4^{2-}$	5.34E-02	3.60E+03	1.71E+03
Si (as SiO_3^{2-})	5.82E-03	115	54.4
F^{-}	0	0	0
Cl^{-}	3.63E-02	902	428
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	9.48E-06	1.77	0.840
butanol	9.48E-06	0.494	0.234
NH_3	3.57E-04	4.26	2.02
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0.566 (µCi/g)	4.47 (kg)
U	0.208 (M)	3.47E+04 (µg/g)	1.65E+04 (kg)
Cs	1.79E-03 (Ci/L)	1.26 (µCi/g)	596 (Ci)
Sr	8.82E-03 (Ci/L)	6.19 (µCi/g)	2.94E+03 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-C-101			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	0 (g/cc)		
Water wt%†	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-C-101			
Total Inventory Estimate*			
Physical Properties			
Total Waste	4.74E+05 kg	(88.0 kgal)	
Heat Load	2.26E-02 kW	(77.1 BTU/hr)	
Bulk Density†	1.42 (g/cc)		
Water wt%†	55.9		
TOC wt% C (wet)†	9.59E-05		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	2.41	3.89E+04	1.85E+04
Al^{3+}	3.42	6.48E+04	3.07E+04
Fe^{3+} (total Fe)	0.727	2.85E+04	1.35E+04
Cr^{3+}	2.58E-03	94.3	44.7
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	2.54E-03	358	170
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0.133	1.93E+04	9.15E+03
Ni^{2+}	1.29E-03	53.2	25.2
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.253	7.11E+03	3.37E+03
K^{+}	6.32E-03	174	82.4
OH^{-}	14.3	1.71E+05	8.11E+04
$NO3^{-}$	1.09	4.73E+04	2.25E+04
$NO2^{-}$	0.420	1.36E+04	6.43E+03
$CO3^{2-}$	0.371	1.56E+04	7.41E+03
$PO4^{3-}$	5.42E-02	3.62E+03	1.72E+03
$SO4^{2-}$	5.34E-02	3.60E+03	1.71E+03
Si (as SiO_3^{2-})	5.82E-03	115	54.4
F^{-}	0	0	0
Cl^{-}	3.63E-02	902	428
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	9.48E-06	1.77	0.840
butanol	9.48E-06	0.494	0.234
NH_3	3.57E-04	4.26	2.02
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0.566 (µCi/g)	4.47 (kg)
U	0.208 (M)	3.47E+04 (µg/g)	1.65E+04 (kg)
Cs	1.79E-03 (Ci/L)	1.26 (µCi/g)	596 (Ci)
Sr	8.82E-03 (Ci/L)	6.19 (µCi/g)	2.94E+03 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

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Single-Shell Tank 241-C-102			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	2.39E+06 kg	(423 kgal)	
Heat Load	3.93E-02 kW	(134 BTU/hr)	
Bulk Density	1.49 (g/cc)		
Void Fraction	0.783		
Water wt%	52.8		
TOC wt% C (wet)	1.06E-03		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	1.68	2.59E+04	6.18E+04
Al^{3+}	5.02	9.08E+04	2.17E+05
Fe^{3+} (total Fe)	0.501	1.88E+04	4.48E+04
Cr^{3+}	2.69E-03	93.8	224
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	4.87E-03	655	1.56E+03
Zr (as $ZrO(OH)_2$)	2.85E-02	1.74E+03	4.16E+03
Pb^{2+}	0.263	3.66E+04	8.73E+04
Ni^{2+}	3.56E-03	140	334
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.287	7.72E+03	1.84E+04
K^{+}	9.65E-03	253	604
OH^{-}	18.8	2.15E+05	5.13E+05
$NO3^{-}$	0.697	2.90E+04	6.92E+04
$NO2^{-}$	0.243	7.49E+03	1.79E+04
$CO3^{2-}$	0.315	1.27E+04	3.02E+04
$PO4^{3-}$	1.44E-02	918	2.19E+03
$SO4^{2-}$	1.74E-02	1.12E+03	2.67E+03
Si (as SiO_3^{2-})	1.34E-03	25.2	60.1
F^{-}	0.169	2.16E+03	5.15E+03
Cl^{-}	1.44E-02	342	817
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	1.09E-04	19.5	46.6
butanol	1.09E-04	5.43	13.0
NH_3	2.04E-02	232	554
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.02 (µCi/g)	40.7 (kg)
U	0.198 (M)	3.16E+04 (µg/g)	7.55E+04 (kg)
Cs	1.83E-03 (Ci/L)	1.23 (µCi/g)	2.93E+03 (Ci)
Sr	2.37E-03 (Ci/L)	1.59 (µCi/g)	3.79E+03 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-C-102			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	0 (g/cc)		
Water wt%†	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-C-102			
Total Inventory Estimate*			
Physical Properties			
Total Waste	2.39E+06 kg	(423 kgal)	
Heat Load	3.93E-02 kW	(134 BTU/hr)	
Bulk Density†	1.49 (g/cc)		
Water wt%†	52.8		
TOC wt% C (wet)†	1.06E-03		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	1.68	2.59E+04	6.18E+04
Al^{3+}	5.02	9.08E+04	2.17E+05
Fe^{3+} (total Fe)	0.501	1.88E+04	4.48E+04
Cr^{3+}	2.69E-03	93.8	224
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	4.87E-03	655	1.56E+03
Zr (as $ZrO(OH)_2$)	2.85E-02	1.74E+03	4.16E+03
Pb^{2+}	0.263	3.66E+04	8.73E+04
Ni^{2+}	3.56E-03	140	334
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.287	7.72E+03	1.84E+04
K^{+}	9.65E-03	253	604
OH^{-}	18.8	2.15E+05	5.13E+05
$NO3^{-}$	0.697	2.90E+04	6.92E+04
$NO2^{-}$	0.243	7.49E+03	1.79E+04
$CO3^{2-}$	0.315	1.27E+04	3.02E+04
$PO4^{3-}$	1.44E-02	918	2.19E+03
$SO4^{2-}$	1.74E-02	1.12E+03	2.67E+03
Si (as SiO_3^{2-})	1.34E-03	25.2	60.1
F^{-}	0.169	2.16E+03	5.15E+03
Cl^{-}	1.44E-02	342	817
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	1.09E-04	19.5	46.6
butanol	1.09E-04	5.43	13.0
NH_3	2.04E-02	232	554
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.02 (µCi/g)	40.7 (kg)
U	0.198 (M)	3.16E+04 (µg/g)	7.55E+04 (kg)
Cs	1.83E-03 (Ci/L)	1.23 (µCi/g)	2.93E+03 (Ci)
Sr	2.37E-03 (Ci/L)	1.59 (µCi/g)	3.79E+03 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

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Single-Shell Tank 241-C-103			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	3.21E+05 kg	(62.0 kgal)	
Heat Load	7.64 kW	(2.61E+04 BTU/hr)	
Bulk Density	1.37 (g/cc)		
Void Fraction	0.833		
Water wt%	62.2		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	3.44	5.79E+04	1.86E+04
Al^{3+}	3.10	6.13E+04	1.97E+04
Fe^{3+} (total Fe)	0.623	2.55E+04	8.17E+03
Cr^{3+}	7.26E-03	276	88.6
Bi^{3+}	3.89E-06	0.594	0.191
La^{3+}	0	0	0
Hg^{2+}	1.51E-03	221	71.0
Zr (as $ZrO(OH)_2$)	1.38E-07	9.24E-03	2.96E-03
Pb^{2+}	7.02E-02	1.06E+04	3.41E+03
Ni^{2+}	5.68E-02	2.44E+03	783
Sr^{2+}	0	0	0
Mn^{4+}	8.92E-04	35.9	11.5
Ca^{2+}	0.116	3.40E+03	1.09E+03
K^{+}	3.19E-03	91.2	29.2
OH^{-}	12.2	1.52E+05	4.88E+04
$NO3^{-}$	0.336	1.53E+04	4.89E+03
$NO2^{-}$	0.660	2.22E+04	7.12E+03
$CO3^{2-}$	0.162	7.11E+03	2.28E+03
$PO4^{3-}$	7.86E-03	546	175
$SO4^{2-}$	3.37E-02	2.37E+03	760
Si (as SiO_3^{2-})	0.924	1.90E+04	6.09E+03
F^{-}	1.32E-04	1.84	0.589
Cl^{-}	9.22E-03	239	76.6
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	7.79E-02	969	311
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		3.15 (µCi/g)	16.8 (kg)
U	5.98E-02 (M)	1.04E+04 (µg/g)	3.34E+03 (kg)
Cs	9.38E-02 (Ci/L)	68.7 (µCi/g)	2.20E+04 (Ci)
Sr	4.77 (Ci/L)	3.49E+03 (µCi/g)	1.12E+06 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

Rev. 3

Single-Shell Tank 241-C-103			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	5.68E+05 kg	(133 kgal)	
Heat Load	0.258 kW	(880 BTU/hr)	
Bulk Density*	1.13 (g/cc)		
Water wt%†	78.7		
TOC wt% C (wet)	1.72		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	2.86	5.82E+04	3.31E+04
Al^{3+}	0.315	7.52E+03	4.27E+03
Fe^{3+} (total Fe)	1.36E-03	67.6	38.4
Cr^{3+}	7.33E-03	338	192
Bi^{3+}	1.83E-04	33.8	19.2
La^{3+}	7.31E-07	9.00E-02	5.11E-02
Hg^{2+}	2.13E-06	0.378	0.215
Zr (as $ZrO(OH)_2$)	6.48E-05	5.24	2.98
Pb^{2+}	3.60E-04	66.1	37.6
Ni^{2+}	7.16E-04	37.2	21.2
Sr^{2+}	2.44E-07	1.89E-02	1.07E-02
Mn^{4+}	9.55E-04	46.5	26.4
Ca^{2+}	6.13E-03	218	124
K^{+}	1.46E-02	505	287
OH^{-}	1.41	2.13E+04	1.21E+04
$NO3^{-}$	0.811	4.45E+04	2.53E+04
$NO2^{-}$	0.470	1.92E+04	1.09E+04
$CO3^{2-}$	0.158	8.40E+03	4.77E+03
$PO4^{3-}$	1.64E-02	1.38E+03	785
$SO4^{2-}$	7.89E-02	6.72E+03	3.82E+03
Si (as SiO_3^{2-})	1.97E-02	490	278
F^{-}	1.19E-02	201	114
Cl^{-}	5.06E-02	1.59E+03	902
$C_6H_5O_7^{3-}$	7.36E-03	1.23E+03	701
$EDTA^{4-}$	4.42E-02	1.13E+04	6.40E+03
$HEDTA^{3-}$	8.39E-02	2.04E+04	1.16E+04
$glycolate^{-}$	9.39E-02	6.25E+03	3.55E+03
$acetate^{-}$	1.40E-02	734	417
$oxalate^{2-}$	6.25E-07	4.88E-02	2.77E-02
DBP	6.28E-03	1.48E+03	841
butanol	6.28E-03	412	234
NH_3	4.57E-03	68.8	39.1
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	18.8 (µCi/L)		0.158 (kg)
U	2.51E-03 (M)	530 (µg/g)	301 (kg)
Cs	5.41E-02 (Ci/L)	47.9 (µCi/g)	2.72E+04 (Ci)
Sr	3.84E-02 (Ci/L)	34.0 (µCi/g)	1.93E+04 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Single-Shell Tank 241-C-103			
Total Inventory Estimate*			
Physical Properties			
Total Waste	8.89E+05 kg	(195 kgal)	
Heat Load	7.90 kW	(2.70E+04 BTU/hr)	
Bulk Density†	1.20 (g/cc)		
Water wt%†	72.8		
TOC wt% C (wet)†	1.10		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	3.04	5.81E+04	5.16E+04
Al^{3+}	1.20	2.69E+04	2.39E+04
Fe^{3+} (total Fe)	0.199	9.23E+03	8.21E+03
Cr^{3+}	7.31E-03	316	281
Bi^{3+}	1.26E-04	21.8	19.4
La^{3+}	4.99E-07	5.75E-02	5.11E-02
Hg^{2+}	4.81E-04	80.1	71.2
Zr (as $ZrO(OH)_2$)	4.43E-05	3.35	2.98
Pb^{2+}	2.26E-02	3.88E+03	3.45E+03
Ni^{2+}	1.85E-02	904	804
Sr^{2+}	1.66E-07	1.21E-02	1.07E-02
Mn^{4+}	9.35E-04	42.7	37.9
Ca^{2+}	4.11E-02	1.37E+03	1.22E+03
K^{+}	1.10E-02	356	316
OH^{-}	4.85	6.85E+04	6.09E+04
$NO3^{-}$	0.660	3.40E+04	3.02E+04
$NO2^{-}$	0.530	2.03E+04	1.80E+04
$CO3^{2-}$	0.159	7.93E+03	7.05E+03
$PO4^{3-}$	1.37E-02	1.08E+03	960
$SO4^{2-}$	6.45E-02	5.15E+03	4.58E+03
Si (as SiO_3^{2-})	0.307	7.17E+03	6.37E+03
F^{-}	8.17E-03	129	115
Cl^{-}	3.74E-02	1.10E+03	979
$C_6H_5O_7^{3-}$	5.02E-03	789	701
$EDTA^{4-}$	3.01E-02	7.21E+03	6.40E+03
$HEDTA^{3-}$	5.72E-02	1.30E+04	1.16E+04
$glycolate^{-}$	6.41E-02	3.99E+03	3.55E+03
$acetate^{-}$	9.57E-03	469	417
$oxalate^{2-}$	4.27E-07	3.12E-02	2.77E-02
DBP	4.28E-03	946	841
butanol	4.28E-03	264	234
NH_3	2.79E-02	394	350
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.15 (µCi/g)	17.0 (kg)
U	2.07E-02 (M)	4.10E+03 (µg/g)	3.64E+03 (kg)
Cs	6.67E-02 (Ci/L)	55.4 (µCi/g)	4.93E+04 (Ci)
Sr	1.54 (Ci/L)	1.28E+03 (µCi/g)	1.14E+06 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Single-Shell Tank 241-C-104			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	1.60E+06 kg	(290 kgal)	
Heat Load	8.49 kW	(2.90E+04 BTU/hr)	
Bulk Density	1.46 (g/cc)		
Void Fraction	0.798		
Water wt%	54.1		
TOC wt% C (wet)	0.154		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	2.36	3.71E+04	5.94E+04
Al^{3+}	3.50	6.47E+04	1.04E+05
Fe^{3+} (total Fe)	1.15	4.39E+04	7.03E+04
Cr^{3+}	3.24E-03	116	185
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	3.02E-03	415	664
Zr (as $ZrO(OH)_2$)	8.63E-02	5.39E+03	8.64E+03
Pb^{2+}	0.134	1.90E+04	3.05E+04
Ni^{2+}	4.75E-02	1.91E+03	3.06E+03
Sr^{2+}	0	0	0
Mn^{4+}	5.91E-05	2.23	3.56
Ca^{2+}	0.343	9.41E+03	1.51E+04
K^{+}	2.23E-02	599	959
OH^{-}	16.1	1.88E+05	3.01E+05
$NO3^{-}$	0.504	2.14E+04	3.43E+04
$NO2^{-}$	0.550	1.73E+04	2.78E+04
$CO3^{2-}$	0.388	1.60E+04	2.56E+04
$PO4^{3-}$	1.40E-02	910	1.46E+03
$SO4^{2-}$	1.77E-02	1.16E+03	1.86E+03
Si (as SiO_3^{2-})	8.46E-02	1.63E+03	2.61E+03
F^{-}	0.502	6.53E+03	1.05E+04
Cl^{-}	1.55E-02	376	602
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	4.86E-03	959	1.54E+03
$HEDTA^{3-}$	9.71E-03	1.82E+03	2.92E+03
$glycolate^{-}$	9.71E-03	499	800
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	1.89E-03	344	551
butanol	1.89E-03	95.8	153
NH_3	0.127	1.48E+03	2.37E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0.955 (µCi/g)	25.5 (kg)
U	0.176 (M)	2.87E+04 (µg/g)	4.59E+04 (kg)
Cs	5.80E-02 (Ci/L)	39.8 (µCi/g)	6.37E+04 (Ci)
Sr	1.11 (Ci/L)	760 (µCi/g)	1.22E+06 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-C-104			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	2.50E+04 kg	(5.04 kgal)	
Heat Load	2.25E-02 kW	(76.9 BTU/hr)	
Bulk Density*	1.31 (g/cc)		
Water wt%†	58.1		
TOC wt% C (wet)	1.08		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	6.62	1.16E+05	2.90E+03
Al^{3+}	0.907	1.87E+04	466
Fe^{3+} (total Fe)	3.75E-03	160	3.99
Cr^{3+}	2.87E-02	1.14E+03	28.4
Bi^{3+}	6.73E-04	107	2.68
La^{3+}	1.48E-05	1.57	3.91E-02
Hg^{2+}	5.28E-06	0.809	2.02E-02
Zr (as $ZrO(OH)_2$)	3.90E-04	27.2	0.678
Pb^{2+}	6.93E-04	110	2.73
Ni^{2+}	3.04E-03	136	3.40
Sr^{2+}	4.93E-06	0.329	8.23E-03
Mn^{4+}	2.46E-03	103	2.57
Ca^{2+}	1.70E-02	520	13.0
K^{+}	3.24E-02	968	24.2
OH^{-}	3.96	5.14E+04	1.28E+03
$NO3^{-}$	2.60	1.23E+05	3.07E+03
$NO2^{-}$	1.34	4.70E+04	1.17E+03
$CO3^{2-}$	0.286	1.31E+04	327
$PO4^{3-}$	5.00E-02	3.63E+03	90.6
$SO4^{2-}$	0.155	1.14E+04	284
Si (as SiO_3^{2-})	4.42E-02	949	23.7
F^{-}	4.00E-02	580	14.5
Cl^{-}	0.118	3.18E+03	79.3
$C_6H_5O_7^{3-}$	1.79E-02	2.58E+03	64.5
$EDTA^{4-}$	2.52E-02	5.54E+03	138
$HEDTA^{3-}$	4.66E-02	9.74E+03	243
$glycolate^{-}$	8.23E-02	4.71E+03	118
$acetate^{-}$	1.23E-02	554	13.8
$oxalate^{2-}$	1.26E-05	0.850	2.12E-02
DBP	1.39E-02	2.83E+03	70.6
butanol	1.39E-02	788	19.7
NH_3	2.50E-02	324	8.10
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	44.1 (µCi/L)		1.40E-02 (kg)
U	6.38E-03 (M)	1.16E+03 (µg/g)	28.9 (kg)
Cs	0.155 (Ci/L)	118 (µCi/g)	2.95E+03 (Ci)
Sr	6.76E-02 (Ci/L)	51.6 (µCi/g)	1.29E+03 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Single-Shell Tank 241-C-104			
Total Inventory Estimate*			
Physical Properties			
Total Waste	1.63E+06 kg	(295 kgal)	
Heat Load	8.52 kW	(2.91E+04 BTU/hr)	
Bulk Density†	1.46 (g/cc)		
Water wt%†	54.2		
TOC wt% C (wet)†	0.169		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	2.43	3.83E+04	6.23E+04
Al^{3+}	3.45	6.40E+04	1.04E+05
Fe^{3+} (total Fe)	1.13	4.32E+04	7.03E+04
Cr^{3+}	3.68E-03	131	214
Bi^{3+}	1.15E-05	1.65	2.68
La^{3+}	2.52E-07	2.41E-02	3.91E-02
Hg^{2+}	2.97E-03	408	664
Zr (as $ZrO(OH)_2$)	8.48E-02	5.31E+03	8.64E+03
Pb^{2+}	0.132	1.88E+04	3.05E+04
Ni^{2+}	4.67E-02	1.88E+03	3.06E+03
Sr^{2+}	8.41E-08	5.06E-03	8.23E-03
Mn^{4+}	1.00E-04	3.77	6.14
Ca^{2+}	0.337	9.27E+03	1.51E+04
K^{+}	2.25E-02	604	983
OH^{-}	15.9	1.86E+05	3.02E+05
$NO3^{-}$	0.540	2.30E+04	3.74E+04
$NO2^{-}$	0.564	1.78E+04	2.89E+04
$CO3^{2-}$	0.386	1.59E+04	2.59E+04
$PO4^{3-}$	1.46E-02	952	1.55E+03
$SO4^{2-}$	2.00E-02	1.32E+03	2.15E+03
Si (as SiO_3^{2-})	8.39E-02	1.62E+03	2.63E+03
F^{-}	0.494	6.44E+03	1.05E+04
Cl^{-}	1.72E-02	419	681
$C_6H_5O_7^{3-}$	3.06E-04	39.7	64.5
$EDTA^{4-}$	5.20E-03	1.03E+03	1.67E+03
$HEDTA^{3-}$	1.03E-02	1.95E+03	3.17E+03
$glycolate^{-}$	1.10E-02	564	917
$acetate^{-}$	2.10E-04	8.50	13.8
$oxalate^{2-}$	2.16E-07	1.30E-02	2.12E-02
DBP	2.09E-03	382	621
butanol	2.09E-03	106	173
NH_3	0.125	1.46E+03	2.38E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0.941 (µCi/g)	25.5 (kg)
U	0.173 (M)	2.82E+04 (µg/g)	4.59E+04 (kg)
Cs	5.97E-02 (Ci/L)	41.0 (µCi/g)	6.67E+04 (Ci)
Sr	1.09 (Ci/L)	749 (µCi/g)	1.22E+06 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Single-Shell Tank 241-C-105			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	7.96E+05 kg	(150 kgal)	
Heat Load	2.00E-02 kW	(68.4 BTU/hr)	
Bulk Density	1.40 (g/cc)		
Void Fraction	0.842		
Water wt%	58.1		
TOC wt% C (wet)	2.86E-05		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	2.14	3.51E+04	2.79E+04
Al^{3+}	4.64	8.93E+04	7.11E+04
Fe^{3+} (total Fe)	0.306	1.22E+04	9.69E+03
Cr^{3+}	2.61E-03	96.7	76.9
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	2.27E-03	325	259
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0.106	1.57E+04	1.25E+04
Ni^{2+}	1.30E-03	54.6	43.4
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.143	4.09E+03	3.25E+03
K^{+}	2.64E-03	73.7	58.6
OH^{-}	16.3	1.98E+05	1.57E+05
$NO3^{-}$	0.726	3.21E+04	2.56E+04
$NO2^{-}$	0.643	2.11E+04	1.68E+04
$CO3^{2-}$	0.160	6.83E+03	5.43E+03
$PO4^{3-}$	1.19E-02	807	642
$SO4^{2-}$	2.25E-02	1.54E+03	1.23E+03
Si (as SiO_3^{2-})	1.52E-02	305	243
F^{-}	0	0	0
Cl^{-}	1.43E-02	360	287
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	2.78E-06	0.528	0.420
butanol	2.78E-06	0.147	0.117
NH_3	2.24E-04	2.71	2.16
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0.527 (µCi/g)	6.99 (kg)
U	0.103 (M)	1.74E+04 (µg/g)	1.39E+04 (kg)
Cs	2.09E-03 (Ci/L)	1.49 (µCi/g)	1.18E+03 (Ci)
Sr	3.79E-03 (Ci/L)	2.70 (µCi/g)	2.15E+03 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-C-105			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	0 (g/cc)		
Water wt%†	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Single-Shell Tank 241-C-105			
Total Inventory Estimate*			
Physical Properties			
Total Waste	7.96E+05 kg	(150 kgal)	
Heat Load	2.00E-02 kW	(68.4 BTU/hr)	
Bulk Density†	1.40 (g/cc)		
Water wt%†	58.1		
TOC wt% C (wet)†	2.86E-05		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	2.14	3.51E+04	2.79E+04
Al^{3+}	4.64	8.93E+04	7.11E+04
Fe^{3+} (total Fe)	0.306	1.22E+04	9.69E+03
Cr^{3+}	2.61E-03	96.7	76.9
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	2.27E-03	325	259
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0.106	1.57E+04	1.25E+04
Ni^{2+}	1.30E-03	54.6	43.4
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.143	4.09E+03	3.25E+03
K^{+}	2.64E-03	73.7	58.6
OH^{-}	16.3	1.98E+05	1.57E+05
$NO3^{-}$	0.726	3.21E+04	2.56E+04
$NO2^{-}$	0.643	2.11E+04	1.68E+04
$CO3^{2-}$	0.160	6.83E+03	5.43E+03
$PO4^{3-}$	1.19E-02	807	642
$SO4^{2-}$	2.25E-02	1.54E+03	1.23E+03
Si (as SiO_3^{2-})	1.52E-02	305	243
F^{-}	0	0	0
Cl^{-}	1.43E-02	360	287
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	2.78E-06	0.528	0.420
butanol	2.78E-06	0.147	0.117
NH_3	2.24E-04	2.71	2.16
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0.527 (µCi/g)	6.99 (kg)
U	0.103 (M)	1.74E+04 (µg/g)	1.39E+04 (kg)
Cs	2.09E-03 (Ci/L)	1.49 (µCi/g)	1.18E+03 (Ci)
Sr	3.79E-03 (Ci/L)	2.70 (µCi/g)	2.15E+03 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Single-Shell Tank 241-C-106			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	1.12E+06 kg	(197 kgal)	
Heat Load	35.6 kW	(1.22E+05 BTU/hr)	
Bulk Density	1.50 (g/cc)		
Void Fraction	0.770		
Water wt%	54.4		
TOC wt% C (wet)	5.96E-02		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	5.11	7.82E+04	8.76E+04
Al^{3+}	2.53	4.54E+04	5.08E+04
Fe^{3+} (total Fe)	1.37	5.08E+04	5.69E+04
Cr^{3+}	7.59E-03	263	294
Bi^{3+}	4.70E-06	0.654	0.732
La^{3+}	0	0	0
Hg^{2+}	4.36E-04	58.3	65.2
Zr (as $ZrO(OH)_2$)	1.67E-07	1.02E-02	1.14E-02
Pb^{2+}	2.03E-02	2.80E+03	3.14E+03
Ni^{2+}	0.387	1.51E+04	1.69E+04
Sr^{2+}	0	0	0
Mn^{4+}	1.08E-03	39.5	44.2
Ca^{2+}	0.154	4.11E+03	4.61E+03
K^{+}	6.46E-03	168	188
OH^{-}	13.8	1.56E+05	1.75E+05
$NO3^{-}$	0.264	1.09E+04	1.22E+04
$NO2^{-}$	0.718	2.20E+04	2.46E+04
$CO3^{2-}$	0.262	1.05E+04	1.17E+04
$PO4^{3-}$	2.01E-02	1.27E+03	1.42E+03
$SO4^{2-}$	5.15E-02	3.29E+03	3.69E+03
Si (as SiO_3^{2-})	1.74	3.25E+04	3.64E+04
F^{-}	1.60E-04	2.02	2.26
Cl^{-}	2.47E-02	584	654
$C_6H_5O_7^{3-}$	2.28E-03	287	322
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	3.04E-02	1.52E+03	1.70E+03
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	2.12E-06	0.375	0.420
butanol	2.12E-06	0.105	0.117
NH_3	0.117	1.33E+03	1.49E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		4.08 (µCi/g)	76.1 (kg)
U	0.177 (M)	2.80E+04 (µg/g)	3.14E+04 (kg)
Cs	0.112 (Ci/L)	74.8 (µCi/g)	8.37E+04 (Ci)
Sr	7.01 (Ci/L)	4.67E+03 (µCi/g)	5.22E+06 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-C-106			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	1.24E+05 kg	(32.0 kgal)	
Heat Load	4.37E-03 kW	(14.9 BTU/hr)	
Bulk Density*	1.03 (g/cc)		
Water wt%†	95.7		
TOC wt% C (wet)	9.05E-02		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0.537	1.20E+04	1.50E+03
Al^{3+}	8.22E-02	2.16E+03	269
Fe^{3+} (total Fe)	3.15E-04	17.1	2.13
Cr^{3+}	4.66E-08	2.36E-03	2.94E-04
Bi^{3+}	2.40E-11	4.88E-06	6.07E-07
La^{3+}	6.96E-18	9.42E-13	1.17E-13
Hg^{2+}	4.97E-13	9.72E-08	1.21E-08
Zr (as $ZrO(OH)_2$)	7.37E-12	6.55E-07	8.15E-08
Pb^{2+}	7.70E-11	1.56E-05	1.93E-06
Ni^{2+}	2.83E-04	16.2	2.02
Sr^{2+}	2.32E-18	1.98E-13	2.46E-14
Mn^{4+}	2.68E-09	1.44E-04	1.79E-05
Ca^{2+}	1.42E-03	55.3	6.88
K^{+}	2.13E-03	81.0	10.1
OH^{-}	0.359	5.96E+03	740
$NO3^{-}$	0.257	1.55E+04	1.93E+03
$NO2^{-}$	1.49E-02	669	83.2
$CO3^{2-}$	4.24E-02	2.48E+03	308
$PO4^{3-}$	1.58E-03	146	18.2
$SO4^{2-}$	6.94E-03	650	80.8
Si (as SiO_3^{2-})	5.35E-03	147	18.2
F^{-}	1.08E-09	2.00E-05	2.49E-06
Cl^{-}	9.78E-03	338	42.0
$C_6H_5O_7^{3-}$	2.37E-03	436	54.2
$EDTA^{4-}$	3.66E-12	1.03E-06	1.28E-07
$HEDTA^{3-}$	3.10E-12	8.28E-07	1.03E-07
$glycolate^{-}$	3.16E-02	2.31E+03	287
$acetate^{-}$	1.36E-11	7.81E-07	9.71E-08
$oxalate^{2-}$	5.95E-18	5.11E-13	6.35E-14
DBP	4.03E-09	1.05E-03	1.30E-04
butanol	4.03E-09	2.91E-04	3.62E-05
NH_3	3.36E-05	0.557	6.92E-02
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	4.72 (µCi/L)		9.54E-03 (kg)
U	6.30E-04 (M)	146 (µg/g)	18.2 (kg)
Cs	3.02E-07 (Ci/L)	2.95E-04 (µCi/g)	3.66E-02 (Ci)
Sr	5.35E-03 (Ci/L)	5.22 (µCi/g)	648 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-C-106			
Total Inventory Estimate*			
Physical Properties			
Total Waste	1.24E+06 kg	(229 kgal)	
Heat Load	35.6 kW	(1.22E+05 BTU/hr)	
Bulk Density†	1.44 (g/cc)		
Water wt%†	58.5		
TOC wt% C (wet)†	6.27E-02		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.47	7.16E+04	8.91E+04
Al^{3+}	2.18	4.10E+04	5.11E+04
Fe^{3+} (total Fe)	1.17	4.57E+04	5.69E+04
Cr^{3+}	6.52E-03	236	294
Bi^{3+}	4.04E-06	0.588	0.732
La^{3+}	9.73E-19	9.41E-14	1.17E-13
Hg^{2+}	3.75E-04	52.4	65.2
Zr (as $ZrO(OH)_2$)	1.44E-07	9.15E-03	1.14E-02
Pb^{2+}	1.75E-02	2.52E+03	3.14E+03
Ni^{2+}	0.333	1.36E+04	1.69E+04
Sr^{2+}	3.24E-19	1.98E-14	2.46E-14
Mn^{4+}	9.28E-04	35.5	44.2
Ca^{2+}	0.133	3.71E+03	4.61E+03
K^{+}	5.85E-03	159	198
OH^{-}	11.9	1.41E+05	1.76E+05
$NO3^{-}$	0.263	1.14E+04	1.41E+04
$NO2^{-}$	0.620	1.99E+04	2.47E+04
$CO3^{2-}$	0.231	9.66E+03	1.20E+04
$PO4^{3-}$	1.75E-02	1.16E+03	1.44E+03
$SO4^{2-}$	4.53E-02	3.03E+03	3.77E+03
Si (as SiO_3^{2-})	1.50	2.93E+04	3.64E+04
F^{-}	1.37E-04	1.82	2.26
Cl^{-}	2.27E-02	559	696
$C_6H_5O_7^{3-}$	2.29E-03	302	376
$EDTA^{4-}$	5.12E-13	1.03E-07	1.28E-07
$HEDTA^{3-}$	4.33E-13	8.27E-08	1.03E-07
$glycolate^{-}$	3.06E-02	1.60E+03	1.99E+03
$acetate^{-}$	1.90E-12	7.81E-08	9.71E-08
$oxalate^{2-}$	8.32E-19	5.10E-14	6.35E-14
DBP	1.82E-06	0.338	0.420
butanol	1.82E-06	9.41E-02	0.117
NH_3	0.101	1.20E+03	1.49E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		3.67 (µCi/g)	76.1 (kg)
U	0.152 (M)	2.52E+04 (µg/g)	3.14E+04 (kg)
Cs	9.66E-02 (Ci/L)	67.3 (µCi/g)	8.37E+04 (Ci)
Sr	6.03 (Ci/L)	4.20E+03 (µCi/g)	5.23E+06 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

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Single-Shell Tank 241-C-107			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	1.41E+06 kg	(275 kgal)	
Heat Load	4.27 kW	(1.46E+04 BTU/hr)	
Bulk Density	1.36 (g/cc)		
Void Fraction	0.715		
Water wt%	65.8		
TOC wt% C (wet)	0.280		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.50	7.62E+04	1.08E+05
Al^{3+}	1.17	2.32E+04	3.27E+04
Fe^{3+} (total Fe)	0.427	1.76E+04	2.48E+04
Cr^{3+}	3.30E-03	127	179
Bi^{3+}	6.10E-02	9.40E+03	1.33E+04
La^{3+}	0	0	0
Hg^{2+}	8.79E-04	130	184
Zr (as $ZrO(OH)_2$)	8.16E-03	549	775
Pb^{2+}	4.38E-02	6.69E+03	9.45E+03
Ni^{2+}	1.08E-03	46.6	65.8
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.113	3.34E+03	4.71E+03
K^{+}	3.65E-03	105	148
OH^{-}	5.72	7.17E+04	1.01E+05
$NO3^{-}$	0.366	1.67E+04	2.36E+04
$NO2^{-}$	0.212	7.20E+03	1.02E+04
$CO3^{2-}$	0.128	5.65E+03	7.98E+03
$PO4^{3-}$	1.06	7.39E+04	1.04E+05
$SO4^{2-}$	4.30E-02	3.05E+03	4.30E+03
Si (as SiO_3^{2-})	0.181	3.75E+03	5.30E+03
F^{-}	0.131	1.84E+03	2.59E+03
Cl^{-}	1.68E-02	438	619
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	9.31E-03	1.98E+03	2.79E+03
$HEDTA^{3-}$	1.86E-02	3.76E+03	5.31E+03
$glycolate^{-}$	1.86E-02	1.03E+03	1.45E+03
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	1.89E-06	0.370	0.522
butanol	1.89E-06	0.103	0.145
NH_3	8.49E-03	106	150
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0.392 (µCi/g)	9.22 (kg)
U	0.101 (M)	1.78E+04 (µg/g)	2.51E+04 (kg)
Cs	1.30E-02 (Ci/L)	9.55 (µCi/g)	1.35E+04 (Ci)
Sr	0.601 (Ci/L)	443 (µCi/g)	6.25E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-C-107			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	0 (g/cc)		
Water wt%†	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Single-Shell Tank 241-C-107			
Total Inventory Estimate*			
Physical Properties			
Total Waste	1.41E+06 kg	(275 kgal)	
Heat Load	4.27 kW	(1.46E+04 BTU/hr)	
Bulk Density†	1.36 (g/cc)		
Water wt%†	65.8		
TOC wt% C (wet)†	0.280		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.50	7.62E+04	1.08E+05
Al^{3+}	1.17	2.32E+04	3.27E+04
Fe^{3+} (total Fe)	0.427	1.76E+04	2.48E+04
Cr^{3+}	3.30E-03	127	179
Bi^{3+}	6.10E-02	9.40E+03	1.33E+04
La^{3+}	0	0	0
Hg^{2+}	8.79E-04	130	184
Zr (as $ZrO(OH)_2$)	8.16E-03	549	775
Pb^{2+}	4.38E-02	6.69E+03	9.45E+03
Ni^{2+}	1.08E-03	46.6	65.8
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.113	3.34E+03	4.71E+03
K^{+}	3.65E-03	105	148
OH^{-}	5.72	7.17E+04	1.01E+05
$NO3^{-}$	0.366	1.67E+04	2.36E+04
$NO2^{-}$	0.212	7.20E+03	1.02E+04
$CO3^{2-}$	0.128	5.65E+03	7.98E+03
$PO4^{3-}$	1.06	7.39E+04	1.04E+05
$SO4^{2-}$	4.30E-02	3.05E+03	4.30E+03
Si (as SiO_3^{2-})	0.181	3.75E+03	5.30E+03
F^{-}	0.131	1.84E+03	2.59E+03
Cl^{-}	1.68E-02	438	619
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	9.31E-03	1.98E+03	2.79E+03
$HEDTA^{3-}$	1.86E-02	3.76E+03	5.31E+03
$glycolate^{-}$	1.86E-02	1.03E+03	1.45E+03
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	1.89E-06	0.370	0.522
butanol	1.89E-06	0.103	0.145
NH_3	8.49E-03	106	150
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0.392 (µCi/g)	9.22 (kg)
U	0.101 (M)	1.78E+04 (µg/g)	2.51E+04 (kg)
Cs	1.30E-02 (Ci/L)	9.55 (µCi/g)	1.35E+04 (Ci)
Sr	0.601 (Ci/L)	443 (µCi/g)	6.25E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Single-Shell Tank 241-C-108			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	3.33E+05 kg	(66.0 kgal)	
Heat Load	0.401 kW	(1.37E+03 BTU/hr)	
Bulk Density	1.33 (g/cc)		
Void Fraction	0.814		
Water wt%	65.3		
TOC wt% C (wet)	0.351		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.12	7.11E+04	2.37E+04
Al^{3+}	0.239	4.84E+03	1.61E+03
Fe^{3+} (total Fe)	0.803	3.37E+04	1.12E+04
Cr^{3+}	2.77E-03	108	36.0
Bi^{3+}	3.38E-02	5.31E+03	1.77E+03
La^{3+}	0	0	0
Hg^{2+}	4.64E-05	6.99	2.33
Zr (as $ZrO(OH)_2$)	4.53E-03	310	103
Pb^{2+}	0	0	0
Ni^{2+}	0.120	5.27E+03	1.75E+03
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.308	9.28E+03	3.09E+03
K^{+}	9.32E-03	273	91.0
OH^{-}	3.76	4.80E+04	1.60E+04
$NO3^{-}$	0.996	4.64E+04	1.54E+04
$NO2^{-}$	0.628	2.17E+04	7.22E+03
$CO3^{2-}$	0.371	1.67E+04	5.57E+03
$PO4^{3-}$	0.652	4.65E+04	1.55E+04
$SO4^{2-}$	7.14E-02	5.15E+03	1.71E+03
Si (as SiO_3^{2-})	2.78E-02	586	195
F^{-}	7.26E-02	1.04E+03	345
Cl^{-}	5.08E-02	1.35E+03	450
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	1.05E-05	2.11	0.700
butanol	1.05E-05	0.586	0.195
NH_3	4.52E-02	577	192
$Fe(CN)_6^{4-}$	6.49E-02	1.32E+04	4.39E+03
Radiological Constituents			
Pu		3.72E-03 (µCi/g)	2.06E-02 (kg)
U	0.103 (M)	1.84E+04 (µg/g)	6.14E+03 (kg)
Cs	0.330 (Ci/L)	248 (µCi/g)	8.26E+04 (Ci)
Sr	8.39E-03 (Ci/L)	6.30 (µCi/g)	2.10E+03 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-C-108			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	0 (g/cc)		
Water wt%†	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.
†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Single-Shell Tank 241-C-108			
Total Inventory Estimate*			
Physical Properties			
Total Waste	3.33E+05 kg	(66.0 kgal)	
Heat Load	0.401 kW	(1.37E+03 BTU/hr)	
Bulk Density†	1.33 (g/cc)		
Water wt%†	65.3		
TOC wt% C (wet)†	0.351		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.12	7.11E+04	2.37E+04
Al^{3+}	0.239	4.84E+03	1.61E+03
Fe^{3+} (total Fe)	0.803	3.37E+04	1.12E+04
Cr^{3+}	2.77E-03	108	36.0
Bi^{3+}	3.38E-02	5.31E+03	1.77E+03
La^{3+}	0	0	0
Hg^{2+}	4.64E-05	6.99	2.33
Zr (as $ZrO(OH)_2$)	4.53E-03	310	103
Pb^{2+}	0	0	0
Ni^{2+}	0.120	5.27E+03	1.75E+03
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.308	9.28E+03	3.09E+03
K^{+}	9.32E-03	273	91.0
OH^{-}	3.76	4.80E+04	1.60E+04
$NO3^{-}$	0.996	4.64E+04	1.54E+04
$NO2^{-}$	0.628	2.17E+04	7.22E+03
$CO3^{2-}$	0.371	1.67E+04	5.57E+03
$PO4^{3-}$	0.652	4.65E+04	1.55E+04
$SO4^{2-}$	7.14E-02	5.15E+03	1.71E+03
Si (as SiO_3^{2-})	2.78E-02	586	195
F^{-}	7.26E-02	1.04E+03	345
Cl^{-}	5.08E-02	1.35E+03	450
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	1.05E-05	2.11	0.700
butanol	1.05E-05	0.586	0.195
NH_3	4.52E-02	577	192
$Fe(CN)_6^{4-}$	6.49E-02	1.32E+04	4.39E+03
Radiological Constituents			
Pu		3.72E-03 (µCi/g)	2.06E-02 (kg)
U	0.103 (M)	1.84E+04 (µg/g)	6.14E+03 (kg)
Cs	0.330 (Ci/L)	248 (µCi/g)	8.26E+04 (Ci)
Sr	8.39E-03 (Ci/L)	6.30 (µCi/g)	2.10E+03 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).
†Volume average for density, mass average Water wt% and TOC wt% C.

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Single-Shell Tank 241-C-109			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	3.37E+05 kg	(62.0 kgal)	
Heat Load	4.64 kW	(1.59E+04 BTU/hr)	
Bulk Density	1.44 (g/cc)		
Void Fraction	0.855		
Water wt%	62.2		
TOC wt% C (wet)	1.46		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	3.49	5.59E+04	1.88E+04
Al^{3+}	0.196	3.69E+03	1.24E+03
Fe^{3+} (total Fe)	0.951	3.70E+04	1.25E+04
Cr^{3+}	1.35E-03	49.0	16.5
Bi^{3+}	1.24E-02	1.81E+03	609
La^{3+}	0	0	0
Hg^{2+}	1.70E-05	2.38	0.802
Zr (as $ZrO(OH)_2$)	1.66E-03	106	35.5
Pb^{2+}	1.71E-02	2.47E+03	832
Ni^{2+}	0.494	2.02E+04	6.81E+03
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.589	1.65E+04	5.54E+03
K^{+}	1.64E-02	447	150
OH^{-}	4.45	5.27E+04	1.77E+04
$NO3^{-}$	6.72E-02	2.90E+03	978
$NO2^{-}$	1.76	5.66E+04	1.90E+04
$CO3^{2-}$	0.590	2.47E+04	8.30E+03
$PO4^{3-}$	0.299	1.98E+04	6.67E+03
$SO4^{2-}$	2.39E-02	1.60E+03	538
Si (as SiO_3^{2-})	1.02E-02	199	67.2
F^{-}	2.67E-02	353	119
Cl^{-}	4.20E-02	1.04E+03	349
$C_6H_5O_7^{3-}$	3.72E-03	490	165
$EDTA^{4-}$	7.45E-03	1.49E+03	503
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	4.75E-02	1.95E+03	657
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0.229	2.71E+03	914
$Fe(CN)_6^{4-}$	0.259	4.89E+04	1.65E+04
Radiological Constituents			
Pu		8.60E-04 (µCi/g)	4.83E-03 (kg)
U	0.200 (M)	3.31E+04 (µg/g)	1.12E+04 (kg)
Cs	1.30 (Ci/L)	904 (µCi/g)	3.05E+05 (Ci)
Sr	2.04 (Ci/L)	1.42E+03 (µCi/g)	4.78E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-C-109			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	1.52E+04 kg	(4.01 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	1.00 (g/cc)		
Water wt%†	100		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Single-Shell Tank 241-C-109			
Total Inventory Estimate*			
Physical Properties			
Total Waste	3.52E+05 kg	(66.0 kgal)	
Heat Load	4.64 kW	(1.59E+04 BTU/hr)	
Bulk Density†	1.41 (g/cc)		
Water wt%†	63.8		
TOC wt% C (wet)†	1.40		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	3.28	5.35E+04	1.88E+04
Al^{3+}	0.184	3.53E+03	1.24E+03
Fe^{3+} (total Fe)	0.894	3.54E+04	1.25E+04
Cr^{3+}	1.27E-03	46.9	16.5
Bi^{3+}	1.17E-02	1.73E+03	609
La^{3+}	0	0	0
Hg^{2+}	1.60E-05	2.28	0.802
Zr (as $ZrO(OH)_2$)	1.56E-03	101	35.5
Pb^{2+}	1.61E-02	2.36E+03	832
Ni^{2+}	0.464	1.93E+04	6.81E+03
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.553	1.57E+04	5.54E+03
K^{+}	1.54E-02	427	150
OH^{-}	4.18	5.04E+04	1.77E+04
$NO3^{-}$	6.31E-02	2.78E+03	978
$NO2^{-}$	1.66	5.41E+04	1.90E+04
$CO3^{2-}$	0.554	2.36E+04	8.30E+03
$PO4^{3-}$	0.281	1.90E+04	6.67E+03
$SO4^{2-}$	2.24E-02	1.53E+03	538
Si (as SiO_3^{2-})	9.57E-03	191	67.2
F^{-}	2.50E-02	338	119
Cl^{-}	3.95E-02	992	349
$C_6H_5O_7^{3-}$	3.50E-03	469	165
$EDTA^{4-}$	6.99E-03	1.43E+03	503
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	4.46E-02	1.87E+03	657
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0.215	2.60E+03	914
$Fe(CN)_6^{4-}$	0.243	4.68E+04	1.65E+04
Radiological Constituents			
Pu		8.23E-04 (µCi/g)	4.83E-03 (kg)
U	0.188 (M)	3.17E+04 (µg/g)	1.12E+04 (kg)
Cs	1.22 (Ci/L)	865 (µCi/g)	3.05E+05 (Ci)
Sr	1.91 (Ci/L)	1.36E+03 (µCi/g)	4.78E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

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Single-Shell Tank 241-C-110			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	9.14E+05 kg	(187 kgal)	
Heat Load	4.09E-02 kW	(140 BTU/hr)	
Bulk Density	1.29 (g/cc)		
Void Fraction	0.695		
Water wt%	70.9		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.88	8.69E+04	7.93E+04
Al^{3+}	0.475	9.93E+03	9.08E+03
Fe^{3+} (total Fe)	0.323	1.40E+04	1.28E+04
Cr^{3+}	3.77E-03	152	139
Bi^{3+}	7.70E-02	1.25E+04	1.14E+04
La^{3+}	0	0	0
Hg^{2+}	1.06E-04	16.4	15.0
Zr (as $ZrO(OH)_2$)	1.03E-02	728	665
Pb^{2+}	0	0	0
Ni^{2+}	1.16E-03	52.8	48.2
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	7.55E-02	2.34E+03	2.14E+03
K^{+}	3.23E-03	97.7	89.3
OH^{-}	2.62	3.45E+04	3.15E+04
$NO3^{-}$	0.374	1.80E+04	1.64E+04
$NO2^{-}$	0.179	6.38E+03	5.83E+03
$CO3^{2-}$	7.55E-02	3.51E+03	3.21E+03
$PO4^{3-}$	1.33	9.80E+04	8.95E+04
$SO4^{2-}$	4.47E-02	3.32E+03	3.04E+03
Si (as SiO_3^{2-})	6.32E-02	1.38E+03	1.26E+03
F^{-}	0.165	2.43E+03	2.22E+03
Cl^{-}	1.48E-02	407	372
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	1.79E-04	2.36	2.16
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		5.93E-03 (µCi/g)	9.03E-02 (kg)
U	5.72E-04 (M)	105 (µg/g)	96.3 (kg)
Cs	1.22E-02 (Ci/L)	9.44 (µCi/g)	8.63E+03 (Ci)
Sr	1.08E-04 (Ci/L)	8.35E-02 (µCi/g)	76.3 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-C-110			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	0 (g/cc)		
Water wt%†	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Single-Shell Tank 241-C-110			
Total Inventory Estimate*			
Physical Properties			
Total Waste	9.14E+05 kg	(187 kgal)	
Heat Load	4.09E-02 kW	(140 BTU/hr)	
Bulk Density†	1.29 (g/cc)		
Water wt%†	70.9		
TOC wt% C (wet)†	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.88	8.69E+04	7.93E+04
Al^{3+}	0.475	9.93E+03	9.08E+03
Fe^{3+} (total Fe)	0.323	1.40E+04	1.28E+04
Cr^{3+}	3.77E-03	152	139
Bi^{3+}	7.70E-02	1.25E+04	1.14E+04
La^{3+}	0	0	0
Hg^{2+}	1.06E-04	16.4	15.0
Zr (as $ZrO(OH)_2$)	1.03E-02	728	665
Pb^{2+}	0	0	0
Ni^{2+}	1.16E-03	52.8	48.2
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	7.55E-02	2.34E+03	2.14E+03
K^{+}	3.23E-03	97.7	89.3
OH^{-}	2.62	3.45E+04	3.15E+04
$NO3^{-}$	0.374	1.80E+04	1.64E+04
$NO2^{-}$	0.179	6.38E+03	5.83E+03
$CO3^{2-}$	7.55E-02	3.51E+03	3.21E+03
$PO4^{3-}$	1.33	9.80E+04	8.95E+04
$SO4^{2-}$	4.47E-02	3.32E+03	3.04E+03
Si (as SiO_3^{2-})	6.32E-02	1.38E+03	1.26E+03
F^{-}	0.165	2.43E+03	2.22E+03
Cl^{-}	1.48E-02	407	372
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	1.79E-04	2.36	2.16
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		5.93E-03 (µCi/g)	9.03E-02 (kg)
U	5.72E-04 (M)	105 (µg/g)	96.3 (kg)
Cs	1.22E-02 (Ci/L)	9.44 (µCi/g)	8.63E+03 (Ci)
Sr	1.08E-04 (Ci/L)	8.35E-02 (µCi/g)	76.3 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

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Single-Shell Tank 241-C-111			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	2.89E+05 kg	(57.0 kgal)	
Heat Load	0.167 kW	(572 BTU/hr)	
Bulk Density	1.34 (g/cc)		
Void Fraction	0.751		
Water wt%	66.3		
TOC wt% C (wet)	0.168		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	3.94	6.76E+04	1.95E+04
Al^{3+}	1.76	3.55E+04	1.03E+04
Fe^{3+} (total Fe)	0.282	1.17E+04	3.39E+03
Cr^{3+}	3.10E-03	120	34.8
Bi^{3+}	4.86E-02	7.58E+03	2.19E+03
La^{3+}	0	0	0
Hg^{2+}	7.76E-04	116	33.6
Zr (as $ZrO(OH)_2$)	6.51E-03	443	128
Pb^{2+}	3.30E-02	5.11E+03	1.48E+03
Ni^{2+}	5.82E-02	2.55E+03	737
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.151	4.52E+03	1.31E+03
K^{+}	3.29E-03	96.0	27.7
OH^{-}	6.81	8.64E+04	2.50E+04
$NO3^{-}$	0.395	1.83E+04	5.29E+03
$NO2^{-}$	0.499	1.71E+04	4.96E+03
$CO3^{2-}$	0.151	6.77E+03	1.96E+03
$PO4^{3-}$	0.852	6.04E+04	1.74E+04
$SO4^{2-}$	3.24E-02	2.33E+03	672
Si (as SiO_3^{2-})	4.47E-02	936	271
F^{-}	0.104	1.48E+03	428
Cl^{-}	1.51E-02	400	116
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	2.17E-02	276	79.7
$Fe(CN)_6^{4-}$	3.13E-02	6.32E+03	1.83E+03
Radiological Constituents			
Pu		0.176 (µCi/g)	0.846 (kg)
U	5.22E-02 (M)	9.27E+03 (µg/g)	2.68E+03 (kg)
Cs	0.165 (Ci/L)	123 (µCi/g)	3.55E+04 (Ci)
Sr	5.62E-04 (Ci/L)	0.420 (µCi/g)	121 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-C-111			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	0 (g/cc)		
Water wt%†	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.
†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-C-111			
Total Inventory Estimate*			
Physical Properties			
Total Waste	2.89E+05 kg	(57.0 kgal)	
Heat Load	0.167 kW	(572 BTU/hr)	
Bulk Density†	1.34 (g/cc)		
Water wt%†	66.3		
TOC wt% C (wet)†	0.168		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	3.94	6.76E+04	1.95E+04
Al^{3+}	1.76	3.55E+04	1.03E+04
Fe^{3+} (total Fe)	0.282	1.17E+04	3.39E+03
Cr^{3+}	3.10E-03	120	34.8
Bi^{3+}	4.86E-02	7.58E+03	2.19E+03
La^{3+}	0	0	0
Hg^{2+}	7.76E-04	116	33.6
Zr (as $ZrO(OH)_2$)	6.51E-03	443	128
Pb^{2+}	3.30E-02	5.11E+03	1.48E+03
Ni^{2+}	5.82E-02	2.55E+03	737
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.151	4.52E+03	1.31E+03
K^{+}	3.29E-03	96.0	27.7
OH^{-}	6.81	8.64E+04	2.50E+04
$NO3^{-}$	0.395	1.83E+04	5.29E+03
$NO2^{-}$	0.499	1.71E+04	4.96E+03
$CO3^{2-}$	0.151	6.77E+03	1.96E+03
$PO4^{3-}$	0.852	6.04E+04	1.74E+04
$SO4^{2-}$	3.24E-02	2.33E+03	672
Si (as SiO_3^{2-})	4.47E-02	936	271
F^{-}	0.104	1.48E+03	428
Cl^{-}	1.51E-02	400	116
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	2.17E-02	276	79.7
$Fe(CN)_6^{4-}$	3.13E-02	6.32E+03	1.83E+03
Radiological Constituents			
Pu		0.176 (µCi/g)	0.846 (kg)
U	5.22E-02 (M)	9.27E+03 (µg/g)	2.68E+03 (kg)
Cs	0.165 (Ci/L)	123 (µCi/g)	3.55E+04 (Ci)
Sr	5.62E-04 (Ci/L)	0.420 (µCi/g)	121 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).
†Volume average for density, mass average Water wt% and TOC wt% C.

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Single-Shell Tank 241-C-112			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	5.65E+05 kg	(104 kgal)	
Heat Load	2.74 kW	(9.37E+03 BTU/hr)	
Bulk Density	1.44 (g/cc)		
Void Fraction	0.854		
Water wt%	63.1		
TOC wt% C (wet)	1.25		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	3.38	5.42E+04	3.06E+04
Al^{3+}	0.996	1.87E+04	1.06E+04
Fe^{3+} (total Fe)	0.382	1.49E+04	8.40E+03
Cr^{3+}	9.96E-04	36.1	20.4
Bi^{3+}	1.11E-02	1.62E+03	913
La^{3+}	0	0	0
Hg^{2+}	5.02E-04	70.1	39.6
Zr (as $ZrO(OH)_2$)	1.49E-03	94.4	53.3
Pb^{2+}	2.56E-02	3.69E+03	2.08E+03
Ni^{2+}	0.453	1.85E+04	1.05E+04
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.585	1.63E+04	9.23E+03
K^{+}	8.63E-03	235	133
OH^{-}	5.27	6.25E+04	3.53E+04
$NO3^{-}$	0.146	6.30E+03	3.56E+03
$NO2^{-}$	1.68	5.40E+04	3.05E+04
$CO3^{2-}$	0.586	2.45E+04	1.38E+04
$PO4^{3-}$	0.273	1.81E+04	1.02E+04
$SO4^{2-}$	1.85E-02	1.24E+03	700
Si (as SiO_3^{2-})	1.12E-02	220	124
F^{-}	2.38E-02	316	178
Cl^{-}	3.69E-02	910	514
$C_6H_5O_7^{3-}$	3.17E-04	41.7	23.6
$EDTA^{4-}$	6.34E-04	127	71.8
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	4.04E-03	166	93.8
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0.175	2.07E+03	1.17E+03
$Fe(CN)_6^{4-}$	0.247	4.66E+04	2.63E+04
Radiological Constituents			
Pu		0.109 (µCi/g)	1.03 (kg)
U	0.209 (M)	3.47E+04 (µg/g)	1.96E+04 (kg)
Cs	1.24 (Ci/L)	863 (µCi/g)	4.87E+05 (Ci)
Sr	0.174 (Ci/L)	121 (µCi/g)	6.83E+04 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-C-112			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	0 (g/cc)		
Water wt%†	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-C-112			
Total Inventory Estimate*			
Physical Properties			
Total Waste	5.65E+05 kg	(104 kgal)	
Heat Load	2.74 kW	(9.37E+03 BTU/hr)	
Bulk Density†	1.44 (g/cc)		
Water wt%†	63.1		
TOC wt% C (wet)†	1.25		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	3.38	5.42E+04	3.06E+04
Al^{3+}	0.996	1.87E+04	1.06E+04
Fe^{3+} (total Fe)	0.382	1.49E+04	8.40E+03
Cr^{3+}	9.96E-04	36.1	20.4
Bi^{3+}	1.11E-02	1.62E+03	913
La^{3+}	0	0	0
Hg^{2+}	5.02E-04	70.1	39.6
Zr (as $ZrO(OH)_2$)	1.49E-03	94.4	53.3
Pb^{2+}	2.56E-02	3.69E+03	2.08E+03
Ni^{2+}	0.453	1.85E+04	1.05E+04
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.585	1.63E+04	9.23E+03
K^{+}	8.63E-03	235	133
OH^{-}	5.27	6.25E+04	3.53E+04
$NO3^{-}$	0.146	6.30E+03	3.56E+03
$NO2^{-}$	1.68	5.40E+04	3.05E+04
$CO3^{2-}$	0.586	2.45E+04	1.38E+04
$PO4^{3-}$	0.273	1.81E+04	1.02E+04
$SO4^{2-}$	1.85E-02	1.24E+03	700
Si (as SiO_3^{2-})	1.12E-02	220	124
F^{-}	2.38E-02	316	178
Cl^{-}	3.69E-02	910	514
$C_6H_5O_7^{3-}$	3.17E-04	41.7	23.6
$EDTA^{4-}$	6.34E-04	127	71.8
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	4.04E-03	166	93.8
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0.175	2.07E+03	1.17E+03
$Fe(CN)_6^{4-}$	0.247	4.66E+04	2.63E+04
Radiological Constituents			
Pu		0.109 (µCi/g)	1.03 (kg)
U	0.209 (M)	3.47E+04 (µg/g)	1.96E+04 (kg)
Cs	1.24 (Ci/L)	863 (µCi/g)	4.87E+05 (Ci)
Sr	0.174 (Ci/L)	121 (µCi/g)	6.83E+04 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

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Single-Shell Tank 241-C-201			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	1.21E+04 kg	(2.00 kgal)	
Heat Load	0.459 kW	(1.57E+03 BTU/hr)	
Bulk Density	1.60 (g/cc)		
Void Fraction	0.590		
Water wt%	44.0		
TOC wt% C (wet)	0.638		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	3.43	4.94E+04	597
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	2.89	1.01E+05	1.22E+03
Cr^{3+}	3.92E-03	128	1.54
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	7.58E-02	9.83E+03	119
Ni^{2+}	9.29E-02	3.41E+03	41.2
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	4.41E-02	1.11E+03	13.4
K^{+}	3.67E-02	898	10.8
OH^{-}	15.0	1.60E+05	1.93E+03
$NO3^{-}$	3.12E-02	1.21E+03	14.6
$NO2^{-}$	0.453	1.31E+04	158
$CO3^{2-}$	0.945	3.55E+04	429
$PO4^{3-}$	0.200	1.19E+04	144
$SO4^{2-}$	6.88E-02	4.14E+03	50.0
Si (as SiO_3^{2-})	7.75E-04	13.6	0.165
F^{-}	0	0	0
Cl^{-}	2.09E-02	464	5.60
$C_6H_5O_7^{3-}$	1.65E-02	1.95E+03	23.6
$EDTA^{4-}$	3.30E-02	5.95E+03	71.8
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0.210	7.77E+03	93.8
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0.223	2.37E+03	28.6
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		2.03E-03 (µCi/g)	4.09E-04 (kg)
U	0.994 (M)	1.48E+05 (µg/g)	1.79E+03 (kg)
Cs	4.20E-04 (Ci/L)	0.263 (µCi/g)	3.18 (Ci)
Sr	9.02 (Ci/L)	5.65E+03 (µCi/g)	6.82E+04 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-C-201			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	0 (g/cc)		
Water wt%†	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-C-201			
Total Inventory Estimate*			
Physical Properties			
Total Waste	1.21E+04 kg	(2.00 kgal)	
Heat Load	0.459 kW	(1.57E+03 BTU/hr)	
Bulk Density†	1.60 (g/cc)		
Water wt%†	44.0		
TOC wt% C (wet)†	0.638		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	3.43	4.94E+04	597
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	2.89	1.01E+05	1.22E+03
Cr^{3+}	3.92E-03	128	1.54
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	7.58E-02	9.83E+03	119
Ni^{2+}	9.29E-02	3.41E+03	41.2
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	4.41E-02	1.11E+03	13.4
K^{+}	3.67E-02	898	10.8
OH^{-}	15.0	1.60E+05	1.93E+03
$NO3^{-}$	3.12E-02	1.21E+03	14.6
$NO2^{-}$	0.453	1.31E+04	158
$CO3^{2-}$	0.945	3.55E+04	429
$PO4^{3-}$	0.200	1.19E+04	144
$SO4^{2-}$	6.88E-02	4.14E+03	50.0
Si (as SiO_3^{2-})	7.75E-04	13.6	0.165
F^{-}	0	0	0
Cl^{-}	2.09E-02	464	5.60
$C_6H_5O_7^{3-}$	1.65E-02	1.95E+03	23.6
$EDTA^{4-}$	3.30E-02	5.95E+03	71.8
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0.210	7.77E+03	93.8
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0.223	2.37E+03	28.6
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		2.03E-03 (µCi/g)	4.09E-04 (kg)
U	0.994 (M)	1.48E+05 (µg/g)	1.79E+03 (kg)
Cs	4.20E-04 (Ci/L)	0.263 (µCi/g)	3.18 (Ci)
Sr	9.02 (Ci/L)	5.65E+03 (µCi/g)	6.82E+04 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

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Single-Shell Tank 241-C-202			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	5.48E+03 kg	(1.00 kgal)	
Heat Load	0.460 kW	(1.57E+03 BTU/hr)	
Bulk Density	1.45 (g/cc)		
Void Fraction	0.823		
Water wt%	43.6		
TOC wt% C (wet)	1.41		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	1.83	2.90E+04	159
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	5.67	2.19E+05	1.20E+03
Cr^{3+}	6.59E-03	237	1.30
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0.152	2.17E+04	119
Ni^{2+}	0.185	7.51E+03	41.1
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	4.04E-03	112	0.613
K^{+}	7.31E-02	1.98E+03	10.8
OH^{-}	17.8	2.09E+05	1.14E+03
$NO3^{-}$	1.49E-17	6.38E-13	3.49E-15
$NO2^{-}$	0.897	2.85E+04	156
$CO3^{2-}$	4.04E-03	167	0.917
$PO4^{3-}$	0	0	0
$SO4^{2-}$	5.56E-02	3.69E+03	20.2
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	4.05E-02	992	5.44
$C_6H_5O_7^{3-}$	3.30E-02	4.31E+03	23.6
$EDTA^{4-}$	6.59E-02	1.31E+04	71.9
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0.420	1.71E+04	93.9
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0.445	5.23E+03	28.7
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0 (µCi/g)	0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	18.0 (Ci/L)	1.25E+04 (µCi/g)	6.83E+04 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-C-202			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	0 (g/cc)		
Water wt%†	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-C-202			
Total Inventory Estimate*			
Physical Properties			
Total Waste	5.48E+03 kg	(1.00 kgal)	
Heat Load	0.460 kW	(1.57E+03 BTU/hr)	
Bulk Density†	1.45 (g/cc)		
Water wt%†	43.6		
TOC wt% C (wet)†	1.41		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	1.83	2.90E+04	159
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	5.67	2.19E+05	1.20E+03
Cr^{3+}	6.59E-03	237	1.30
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0.152	2.17E+04	119
Ni^{2+}	0.185	7.51E+03	41.1
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	4.04E-03	112	0.613
K^{+}	7.31E-02	1.98E+03	10.8
OH^{-}	17.8	2.09E+05	1.14E+03
$NO3^{-}$	1.49E-17	6.38E-13	3.49E-15
$NO2^{-}$	0.897	2.85E+04	156
$CO3^{2-}$	4.04E-03	167	0.917
$PO4^{3-}$	0	0	0
$SO4^{2-}$	5.56E-02	3.69E+03	20.2
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	4.05E-02	992	5.44
$C_6H_5O_7^{3-}$	3.30E-02	4.31E+03	23.6
$EDTA^{4-}$	6.59E-02	1.31E+04	71.9
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0.420	1.71E+04	93.9
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0.445	5.23E+03	28.7
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0 (µCi/g)	0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	18.0 (Ci/L)	1.25E+04 (µCi/g)	6.83E+04 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Single-Shell Tank 241-C-203			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	3.19E+04 kg	(5.00 kgal)	
Heat Load	0.460 kW	(1.57E+03 BTU/hr)	
Bulk Density	1.69 (g/cc)		
Void Fraction	0.451		
Water wt%	44.2		
TOC wt% C (wet)	0.241		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.40	5.99E+04	1.91E+03
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	1.23	4.06E+04	1.30E+03
Cr^{3+}	2.31E-03	71.2	2.27
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	3.03E-02	3.72E+03	119
Ni^{2+}	3.75E-02	1.30E+03	41.6
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	6.81E-02	1.62E+03	51.7
K^{+}	1.48E-02	343	11.0
OH^{-}	13.4	1.35E+05	4.30E+03
$NO3^{-}$	5.00E-02	1.84E+03	58.6
$NO2^{-}$	0.186	5.09E+03	162
$CO3^{2-}$	1.51	5.37E+04	1.71E+03
$PO4^{3-}$	0.320	1.80E+04	575
$SO4^{2-}$	7.67E-02	4.37E+03	139
Si (as SiO_3^{2-})	1.24E-03	20.7	0.659
F^{-}	0	0	0
Cl^{-}	9.10E-03	191	6.10
$C_6H_5O_7^{3-}$	6.58E-03	738	23.5
$EDTA^{4-}$	1.32E-02	2.25E+03	71.8
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	8.39E-02	2.94E+03	93.7
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	8.90E-02	897	28.6
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		3.08E-03 (µCi/g)	1.64E-03 (kg)
U	1.59 (M)	2.24E+05 (µg/g)	7.16E+03 (kg)
Cs	6.72E-04 (Ci/L)	0.399 (µCi/g)	12.7 (Ci)
Sr	3.61 (Ci/L)	2.14E+03 (µCi/g)	6.82E+04 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

Rev. 3

Single-Shell Tank 241-C-203			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	0 (g/cc)		
Water wt%†	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Single-Shell Tank 241-C-203			
Total Inventory Estimate*			
Physical Properties			
Total Waste	3.19E+04 kg	(5.00 kgal)	
Heat Load	0.460 kW	(1.57E+03 BTU/hr)	
Bulk Density†	1.69 (g/cc)		
Water wt%†	44.2		
TOC wt% C (wet)†	0.241		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.40	5.99E+04	1.91E+03
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	1.23	4.06E+04	1.30E+03
Cr^{3+}	2.31E-03	71.2	2.27
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	3.03E-02	3.72E+03	119
Ni^{2+}	3.75E-02	1.30E+03	41.6
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	6.81E-02	1.62E+03	51.7
K^{+}	1.48E-02	343	11.0
OH^{-}	13.4	1.35E+05	4.30E+03
$NO3^{-}$	5.00E-02	1.84E+03	58.6
$NO2^{-}$	0.186	5.09E+03	162
$CO3^{2-}$	1.51	5.37E+04	1.71E+03
$PO4^{3-}$	0.320	1.80E+04	575
$SO4^{2-}$	7.67E-02	4.37E+03	139
Si (as SiO_3^{2-})	1.24E-03	20.7	0.659
F^{-}	0	0	0
Cl^{-}	9.10E-03	191	6.10
$C_6H_5O_7^{3-}$	6.58E-03	738	23.5
$EDTA^{4-}$	1.32E-02	2.25E+03	71.8
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	8.39E-02	2.94E+03	93.7
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	8.90E-02	897	28.6
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		3.08E-03 (µCi/g)	1.64E-03 (kg)
U	1.59 (M)	2.24E+05 (µg/g)	7.16E+03 (kg)
Cs	6.72E-04 (Ci/L)	0.399 (µCi/g)	12.7 (Ci)
Sr	3.61 (Ci/L)	2.14E+03 (µCi/g)	6.82E+04 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Single-Shell Tank 241-C-204			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	1.87E+04 kg	(3.00 kgal)	
Heat Load	0.460 kW	(1.57E+03 BTU/hr)	
Bulk Density	1.65 (g/cc)		
Void Fraction	0.513		
Water wt%	44.1		
TOC wt% C (wet)	0.412		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	3.97	5.54E+04	1.04E+03
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	1.97	6.67E+04	1.25E+03
Cr^{3+}	3.02E-03	95.5	1.78
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	5.05E-02	6.35E+03	119
Ni^{2+}	6.21E-02	2.21E+03	41.4
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	5.74E-02	1.40E+03	26.1
K^{+}	2.45E-02	583	10.9
OH^{-}	14.1	1.46E+05	2.72E+03
$NO3^{-}$	4.16E-02	1.57E+03	29.3
$NO2^{-}$	0.305	8.52E+03	159
$CO3^{2-}$	1.26	4.59E+04	858
$PO4^{3-}$	0.267	1.54E+04	287
$SO4^{2-}$	7.32E-02	4.27E+03	79.8
Si (as SiO_3^{2-})	1.03E-03	17.6	0.330
F^{-}	0	0	0
Cl^{-}	1.43E-02	309	5.77
$C_6H_5O_7^{3-}$	1.10E-02	1.26E+03	23.6
$EDTA^{4-}$	2.20E-02	3.84E+03	71.8
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0.140	5.02E+03	93.8
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0.148	1.53E+03	28.6
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		2.63E-03 (µCi/g)	8.18E-04 (kg)
U	1.33 (M)	1.92E+05 (µg/g)	3.58E+03 (kg)
Cs	5.60E-04 (Ci/L)	0.340 (µCi/g)	6.36 (Ci)
Sr	6.01 (Ci/L)	3.65E+03 (µCi/g)	6.82E+04 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

Rev. 3

Single-Shell Tank 241-C-204			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	0 (g/cc)		
Water wt%†	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Single-Shell Tank 241-C-204			
Total Inventory Estimate*			
Physical Properties			
Total Waste	1.87E+04 kg	(3.00 kgal)	
Heat Load	0.460 kW	(1.57E+03 BTU/hr)	
Bulk Density†	1.65 (g/cc)		
Water wt%†	44.1		
TOC wt% C (wet)†	0.412		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	3.97	5.54E+04	1.04E+03
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	1.97	6.67E+04	1.25E+03
Cr^{3+}	3.02E-03	95.5	1.78
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	5.05E-02	6.35E+03	119
Ni^{2+}	6.21E-02	2.21E+03	41.4
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	5.74E-02	1.40E+03	26.1
K^{+}	2.45E-02	583	10.9
OH^{-}	14.1	1.46E+05	2.72E+03
$NO3^{-}$	4.16E-02	1.57E+03	29.3
$NO2^{-}$	0.305	8.52E+03	159
$CO3^{2-}$	1.26	4.59E+04	858
$PO4^{3-}$	0.267	1.54E+04	287
$SO4^{2-}$	7.32E-02	4.27E+03	79.8
Si (as SiO_3^{2-})	1.03E-03	17.6	0.330
F^{-}	0	0	0
Cl^{-}	1.43E-02	309	5.77
$C_6H_5O_7^{3-}$	1.10E-02	1.26E+03	23.6
$EDTA^{4-}$	2.20E-02	3.84E+03	71.8
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0.140	5.02E+03	93.8
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0.148	1.53E+03	28.6
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		2.63E-03 (µCi/g)	8.18E-04 (kg)
U	1.33 (M)	1.92E+05 (µg/g)	3.58E+03 (kg)
Cs	5.60E-04 (Ci/L)	0.340 (µCi/g)	6.36 (Ci)
Sr	6.01 (Ci/L)	3.65E+03 (µCi/g)	6.82E+04 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Single-Shell Tank 241-S-101			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	1.22E+06 kg	(211 kgal)	
Heat Load	3.65 kW	(1.25E+04 BTU/hr)	
Bulk Density	1.53 (g/cc)		
Void Fraction	0.810		
Water wt%	46.9		
TOC wt% C (wet)	2.76E-03		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	5.89	8.87E+04	1.08E+05
Al^{3+}	3.93	6.95E+04	8.47E+04
Fe^{3+} (total Fe)	0.472	1.73E+04	2.10E+04
Cr^{3+}	0.478	1.63E+04	1.99E+04
Bi^{3+}	3.22E-06	0.441	0.537
La^{3+}	1.25E-11	1.13E-06	1.38E-06
Hg^{2+}	5.61E-04	73.8	89.9
Zr (as $ZrO(OH)_2$)	1.56E-06	9.34E-02	0.114
Pb^{2+}	1.62E-02	2.21E+03	2.69E+03
Ni^{2+}	2.87E-02	1.10E+03	1.34E+03
Sr^{2+}	3.80E-11	2.18E-06	2.66E-06
Mn^{4+}	2.34E-05	0.843	1.03
Ca^{2+}	0.143	3.75E+03	4.57E+03
K^{+}	1.48E-02	378	461
OH^{-}	16.5	1.84E+05	2.25E+05
$NO3^{-}$	2.35	9.55E+04	1.16E+05
$NO2^{-}$	1.77	5.35E+04	6.52E+04
$CO3^{2-}$	0.145	5.71E+03	6.96E+03
$PO4^{3-}$	2.08E-04	12.9	15.8
$SO4^{2-}$	2.67E-02	1.68E+03	2.05E+03
Si (as SiO_3^{2-})	6.28E-02	1.16E+03	1.41E+03
F^{-}	1.84E-04	2.29	2.80
Cl^{-}	6.77E-02	1.57E+03	1.92E+03
$C_6H_5O_7^{3-}$	1.72E-04	21.3	25.9
$EDTA^{4-}$	6.69E-06	1.26	1.54
$HEDTA^{3-}$	5.55E-06	0.997	1.22
$glycolate^{-}$	2.42E-04	11.9	14.5
$acetate^{-}$	2.51E-05	0.972	1.19
$oxalate^{2-}$	1.07E-11	6.15E-07	7.50E-07
DBP	1.52E-04	26.5	32.3
butanol	1.52E-04	7.39	9.01
NH_3	7.07E-02	787	959
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0.275 (µCi/g)	5.58 (kg)
U	4.91E-02 (M)	7.65E+03 (µg/g)	9.33E+03 (kg)
Cs	0.159 (Ci/L)	104 (µCi/g)	1.27E+05 (Ci)
Sr	0.567 (Ci/L)	372 (µCi/g)	4.53E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

Rev. 3

Single-Shell Tank 241-S-101			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	1.19E+06 kg	(216 kgal)	
Heat Load	1.36 kW	(4.65E+03 BTU/hr)	
Bulk Density*	1.45 (g/cc)		
Water wt%†	44.7		
TOC wt% C (wet)	0.729		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	9.69	1.53E+05	1.82E+05
Al^{3+}	1.33	2.46E+04	2.93E+04
Fe^{3+} (total Fe)	6.24E-03	240	285
Cr^{3+}	4.98E-02	1.78E+03	2.12E+03
Bi^{3+}	1.01E-03	145	172
La^{3+}	2.77E-05	2.65	3.15
Hg^{2+}	7.21E-06	0.995	1.18
Zr (as $ZrO(OH)_2$)	6.96E-04	43.6	51.9
Pb^{2+}	8.11E-04	116	137
Ni^{2+}	5.36E-03	216	257
Sr^{2+}	9.24E-06	0.557	0.662
Mn^{4+}	3.29E-03	124	148
Ca^{2+}	2.84E-02	782	929
K^{+}	4.56E-02	1.23E+03	1.46E+03
OH^{-}	5.79	6.77E+04	8.05E+04
$NO3^{-}$	4.25	1.81E+05	2.15E+05
$NO2^{-}$	2.00	6.32E+04	7.52E+04
$CO3^{2-}$	0.365	1.51E+04	1.79E+04
$PO4^{3-}$	7.38E-02	4.82E+03	5.73E+03
$SO4^{2-}$	0.201	1.33E+04	1.58E+04
Si (as SiO_3^{2-})	6.64E-02	1.28E+03	1.53E+03
F^{-}	5.69E-02	743	883
Cl^{-}	0.170	4.15E+03	4.93E+03
$C_6H_5O_7^{3-}$	2.53E-02	3.29E+03	3.91E+03
$EDTA^{4-}$	1.29E-02	2.55E+03	3.03E+03
$HEDTA^{3-}$	2.38E-02	4.49E+03	5.33E+03
$glycolate^{-}$	7.71E-02	3.98E+03	4.73E+03
$acetate^{-}$	6.16E-03	250	297
$oxalate^{2-}$	2.37E-05	1.43	1.71
DBP	1.65E-02	3.03E+03	3.60E+03
butanol	1.65E-02	843	1.00E+03
NH_3	4.75E-02	556	661
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	68.3 (µCi/L)		0.931 (kg)
U	1.03E-02 (M)	1.69E+03 (µg/g)	2.01E+03 (kg)
Cs	0.208 (Ci/L)	143 (µCi/g)	1.70E+05 (Ci)
Sr	0.103 (Ci/L)	70.5 (µCi/g)	8.38E+04 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Single-Shell Tank 241-S-101			
Total Inventory Estimate*			
Physical Properties			
Total Waste	2.41E+06 kg	(427 kgal)	
Heat Load	5.01 kW	(1.71E+04 BTU/hr)	
Bulk Density†	1.49 (g/cc)		
Water wt%†	45.8		
TOC wt% C (wet)†	0.361		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	7.81	1.21E+05	2.90E+05
Al^{3+}	2.61	4.73E+04	1.14E+05
Fe^{3+} (total Fe)	0.236	8.86E+03	2.13E+04
Cr^{3+}	0.262	9.13E+03	2.20E+04
Bi^{3+}	5.12E-04	71.8	173
La^{3+}	1.40E-05	1.31	3.15
Hg^{2+}	2.81E-04	37.8	91.1
Zr (as $ZrO(OH)_2$)	3.53E-04	21.6	52.0
Pb^{2+}	8.44E-03	1.17E+03	2.83E+03
Ni^{2+}	1.69E-02	665	1.60E+03
Sr^{2+}	4.67E-06	0.275	0.662
Mn^{4+}	1.68E-03	61.9	149
Ca^{2+}	8.50E-02	2.29E+03	5.50E+03
K^{+}	3.04E-02	797	1.92E+03
OH^{-}	11.1	1.27E+05	3.05E+05
$NO3^{-}$	3.31	1.38E+05	3.32E+05
$NO2^{-}$	1.89	5.83E+04	1.40E+05
$CO3^{2-}$	0.256	1.03E+04	2.49E+04
$PO4^{3-}$	3.74E-02	2.39E+03	5.75E+03
$SO4^{2-}$	0.115	7.42E+03	1.79E+04
Si (as SiO_3^{2-})	6.46E-02	1.22E+03	2.93E+03
F^{-}	2.89E-02	368	886
Cl^{-}	0.120	2.84E+03	6.85E+03
$C_6H_5O_7^{3-}$	1.29E-02	1.64E+03	3.94E+03
$EDTA^{4-}$	6.51E-03	1.26E+03	3.03E+03
$HEDTA^{3-}$	1.20E-02	2.22E+03	5.33E+03
$glycolate^{-}$	3.91E-02	1.97E+03	4.74E+03
$acetate^{-}$	3.13E-03	124	298
$oxalate^{2-}$	1.20E-05	0.709	1.71
DBP	8.44E-03	1.51E+03	3.63E+03
butanol	8.44E-03	420	1.01E+03
NH_3	5.90E-02	673	1.62E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0.162 (µCi/g)	6.51 (kg)
U	2.95E-02 (M)	4.71E+03 (µg/g)	1.13E+04 (kg)
Cs	0.184 (Ci/L)	123 (µCi/g)	2.97E+05 (Ci)
Sr	0.332 (Ci/L)	223 (µCi/g)	5.37E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Single-Shell Tank 241-S-102			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	2.24E+04 kg	(4.00 kgal)	
Heat Load	0.112 kW	(382 BTU/hr)	
Bulk Density	1.48 (g/cc)		
Void Fraction	0.799		
Water wt%	52.0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	2.37	3.68E+04	825
Al^{3+}	4.14	7.54E+04	1.69E+03
Fe^{3+} (total Fe)	1.01	3.81E+04	856
Cr^{3+}	0.874	3.06E+04	688
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	5.07E-02	2.01E+03	45.0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.215	5.80E+03	130
K^{+}	8.50E-03	224	5.03
OH^{-}	18.6	2.13E+05	4.79E+03
$NO3^{-}$	3.52E-02	1.47E+03	33.0
$NO2^{-}$	1.95	6.06E+04	1.36E+03
$CO3^{2-}$	0.215	8.68E+03	195
$PO4^{3-}$	0	0	0
$SO4^{2-}$	1.53E-02	992	22.3
Si (as SiO_3^{2-})	1.19E-02	225	5.04
F^{-}	0	0	0
Cl^{-}	3.91E-02	934	21.0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0.132	1.51E+03	33.9
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.08E-02 (µCi/g)	4.04E-03 (kg)
U	2.16E-02 (M)	3.46E+03 (µg/g)	77.7 (kg)
Cs	7.93E-02 (Ci/L)	53.4 (µCi/g)	1.20E+03 (Ci)
Sr	1.04 (Ci/L)	703 (µCi/g)	1.58E+04 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

Rev. 3

Single-Shell Tank 241-S-102			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	2.90E+06 kg	(545 kgal)	
Heat Load	3.06 kW	(1.05E+04 BTU/hr)	
Bulk Density*	1.40 (g/cc)		
Water wt%†	48.8		
TOC wt% C (wet)	0.668		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	8.62	1.41E+05	4.09E+05
Al^{3+}	1.17	2.24E+04	6.50E+04
Fe^{3+} (total Fe)	5.58E-03	222	643
Cr^{3+}	4.37E-02	1.62E+03	4.69E+03
Bi^{3+}	9.70E-04	144	418
La^{3+}	3.00E-05	2.97	8.60
Hg^{2+}	6.55E-06	0.935	2.71
Zr (as $ZrO(OH)_2$)	6.71E-04	43.6	126
Pb^{2+}	7.12E-04	105	304
Ni^{2+}	4.79E-03	200	580
Sr^{2+}	1.00E-05	0.624	1.81
Mn^{4+}	2.94E-03	115	333
Ca^{2+}	2.54E-02	724	2.10E+03
K^{+}	4.09E-02	1.14E+03	3.30E+03
OH^{-}	5.03	6.10E+04	1.77E+05
$NO3^{-}$	3.89	1.72E+05	4.97E+05
$NO2^{-}$	1.75	5.74E+04	1.66E+05
$CO3^{2-}$	0.322	1.38E+04	3.99E+04
$PO4^{3-}$	6.67E-02	4.51E+03	1.31E+04
$SO4^{2-}$	0.178	1.22E+04	3.53E+04
Si (as SiO_3^{2-})	5.86E-02	1.17E+03	3.40E+03
F^{-}	5.46E-02	739	2.14E+03
Cl^{-}	0.152	3.83E+03	1.11E+04
$C_6H_5O_7^{3-}$	2.12E-02	2.85E+03	8.26E+03
$EDTA^{4-}$	1.18E-02	2.43E+03	7.04E+03
$HEDTA^{3-}$	2.23E-02	4.34E+03	1.26E+04
$glycolate^{-}$	6.83E-02	3.65E+03	1.06E+04
$acetate^{-}$	4.59E-03	193	558
$oxalate^{2-}$	2.57E-05	1.61	4.66
DBP	1.40E-02	2.66E+03	7.70E+03
butanol	1.40E-02	741	2.15E+03
NH_3	4.28E-02	518	1.50E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	60.6 (µCi/L)		2.08 (kg)
U	9.16E-03 (M)	1.55E+03 (µg/g)	4.50E+03 (kg)
Cs	0.188 (Ci/L)	134 (µCi/g)	3.88E+05 (Ci)
Sr	8.95E-02 (Ci/L)	63.7 (µCi/g)	1.85E+05 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Single-Shell Tank 241-S-102			
Total Inventory Estimate*			
Physical Properties			
Total Waste	2.92E+06 kg	(549 kgal)	
Heat Load	3.17 kW	(1.08E+04 BTU/hr)	
Bulk Density†	1.40 (g/cc)		
Water wt%†	48.8		
TOC wt% C (wet)†	0.663		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	8.58	1.40E+05	4.10E+05
Al^{3+}	1.19	2.28E+04	6.67E+04
Fe^{3+} (total Fe)	1.29E-02	514	1.50E+03
Cr^{3+}	4.98E-02	1.84E+03	5.38E+03
Bi^{3+}	9.63E-04	143	418
La^{3+}	2.98E-05	2.95	8.60
Hg^{2+}	6.50E-06	0.928	2.71
Zr (as $ZrO(OH)_2$)	6.67E-04	43.3	126
Pb^{2+}	7.07E-04	104	304
Ni^{2+}	5.12E-03	214	625
Sr^{2+}	9.93E-06	0.620	1.81
Mn^{4+}	2.92E-03	114	333
Ca^{2+}	2.67E-02	763	2.23E+03
K^{+}	4.07E-02	1.13E+03	3.31E+03
OH^{-}	5.13	6.21E+04	1.81E+05
$NO3^{-}$	3.86	1.70E+05	4.97E+05
$NO2^{-}$	1.75	5.74E+04	1.67E+05
$CO3^{2-}$	0.321	1.37E+04	4.01E+04
$PO4^{3-}$	6.62E-02	4.47E+03	1.31E+04
$SO4^{2-}$	0.177	1.21E+04	3.54E+04
Si (as SiO_3^{2-})	5.83E-02	1.17E+03	3.40E+03
F^{-}	5.42E-02	734	2.14E+03
Cl^{-}	0.151	3.81E+03	1.11E+04
$C_6H_5O_7^{3-}$	2.10E-02	2.83E+03	8.26E+03
$EDTA^{4-}$	1.18E-02	2.41E+03	7.04E+03
$HEDTA^{3-}$	2.21E-02	4.31E+03	1.26E+04
$glycolate^{-}$	6.78E-02	3.62E+03	1.06E+04
$acetate^{-}$	4.55E-03	191	558
$oxalate^{2-}$	2.55E-05	1.60	4.66
DBP	1.39E-02	2.64E+03	7.70E+03
butanol	1.39E-02	735	2.15E+03
NH_3	4.35E-02	526	1.54E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		4.29E-02 (µCi/g)	2.09 (kg)
U	9.25E-03 (M)	1.57E+03 (µg/g)	4.58E+03 (kg)
Cs	0.187 (Ci/L)	133 (µCi/g)	3.89E+05 (Ci)
Sr	9.64E-02 (Ci/L)	68.7 (µCi/g)	2.00E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

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Single-Shell Tank 241-S-103			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	5.05E+04 kg	(9.00 kgal)	
Heat Load	0.252 kW	(860 BTU/hr)	
Bulk Density	1.48 (g/cc)		
Void Fraction	0.799		
Water wt%	52.0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	2.37	3.68E+04	1.86E+03
Al^{3+}	4.14	7.54E+04	3.81E+03
Fe^{3+} (total Fe)	1.01	3.81E+04	1.93E+03
Cr^{3+}	0.874	3.06E+04	1.55E+03
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	5.07E-02	2.01E+03	101
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.215	5.80E+03	293
K^{+}	8.50E-03	224	11.3
OH^{-}	18.6	2.13E+05	1.08E+04
$NO3^{-}$	3.52E-02	1.47E+03	74.3
$NO2^{-}$	1.95	6.06E+04	3.06E+03
$CO3^{2-}$	0.215	8.68E+03	438
$PO4^{3-}$	0	0	0
$SO4^{2-}$	1.53E-02	992	50.1
Si (as SiO_3^{2-})	1.19E-02	225	11.3
F^{-}	0	0	0
Cl^{-}	3.91E-02	934	47.2
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0.132	1.51E+03	76.2
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.08E-02 (µCi/g)	4.04E-03 (kg)
U	2.16E-02 (M)	3.46E+03 (µg/g)	175 (kg)
Cs	7.93E-02 (Ci/L)	53.4 (µCi/g)	2.70E+03 (Ci)
Sr	1.04 (Ci/L)	703 (µCi/g)	3.55E+04 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-S-103			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	1.44E+06 kg	(239 kgal)	
Heat Load	1.94 kW	(6.64E+03 BTU/hr)	
Bulk Density*	1.59 (g/cc)		
Water wt%†	34.0		
TOC wt% C (wet)	0.867		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	12.6	1.82E+05	2.62E+05
Al^{3+}	1.69	2.87E+04	4.13E+04
Fe^{3+} (total Fe)	8.21E-03	288	415
Cr^{3+}	6.30E-02	2.06E+03	2.96E+03
Bi^{3+}	1.50E-03	197	283
La^{3+}	4.91E-05	4.29	6.16
Hg^{2+}	9.86E-06	1.24	1.79
Zr (as $ZrO(OH)_2$)	1.03E-03	59.3	85.3
Pb^{2+}	1.06E-03	138	199
Ni^{2+}	7.04E-03	260	374
Sr^{2+}	1.64E-05	0.901	1.30
Mn^{4+}	4.26E-03	147	212
Ca^{2+}	3.73E-02	941	1.35E+03
K^{+}	6.04E-02	1.49E+03	2.14E+03
OH^{-}	7.32	7.83E+04	1.13E+05
$NO3^{-}$	5.68	2.22E+05	3.19E+05
$NO2^{-}$	2.52	7.30E+04	1.05E+05
$CO3^{2-}$	0.479	1.81E+04	2.60E+04
$PO4^{3-}$	0.101	6.01E+03	8.64E+03
$SO4^{2-}$	0.264	1.60E+04	2.30E+04
Si (as SiO_3^{2-})	8.57E-02	1.51E+03	2.18E+03
F^{-}	8.43E-02	1.01E+03	1.45E+03
Cl^{-}	0.223	4.98E+03	7.15E+03
$C_6H_5O_7^{3-}$	3.10E-02	3.69E+03	5.30E+03
$EDTA^{4-}$	1.73E-02	3.14E+03	4.52E+03
$HEDTA^{3-}$	3.25E-02	5.61E+03	8.06E+03
$glycolate^{-}$	0.101	4.76E+03	6.84E+03
$acetate^{-}$	6.87E-03	255	367
$oxalate^{2-}$	4.20E-05	2.32	3.34
DBP	2.07E-02	3.46E+03	4.98E+03
butanol	2.07E-02	965	1.39E+03
NH_3	6.27E-02	671	965
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	89.1 (µCi/L)		1.34 (kg)
U	1.34E-02 (M)	2.01E+03 (µg/g)	2.88E+03 (kg)
Cs	0.272 (Ci/L)	171 (µCi/g)	2.46E+05 (Ci)
Sr	0.130 (Ci/L)	81.8 (µCi/g)	1.18E+05 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.
†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-S-103			
Total Inventory Estimate*			
Physical Properties			
Total Waste	1.49E+06 kg	(248 kgal)	
Heat Load	2.20 kW	(7.50E+03 BTU/hr)	
Bulk Density†	1.59 (g/cc)		
Water wt%†	34.6		
TOC wt% C (wet)†	0.837		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	12.2	1.78E+05	2.64E+05
Al^{3+}	1.78	3.03E+04	4.51E+04
Fe^{3+} (total Fe)	4.47E-02	1.57E+03	2.34E+03
Cr^{3+}	9.24E-02	3.03E+03	4.51E+03
Bi^{3+}	1.44E-03	190	283
La^{3+}	4.73E-05	4.14	6.16
Hg^{2+}	9.50E-06	1.20	1.79
Zr (as $ZrO(OH)_2$)	9.96E-04	57.3	85.3
Pb^{2+}	1.02E-03	133	199
Ni^{2+}	8.62E-03	319	475
Sr^{2+}	1.58E-05	0.871	1.30
Mn^{4+}	4.10E-03	142	212
Ca^{2+}	4.37E-02	1.11E+03	1.65E+03
K^{+}	5.86E-02	1.44E+03	2.15E+03
OH^{-}	7.73	8.29E+04	1.23E+05
$NO3^{-}$	5.48	2.14E+05	3.19E+05
$NO2^{-}$	2.50	7.26E+04	1.08E+05
$CO3^{2-}$	0.469	1.78E+04	2.64E+04
$PO4^{3-}$	9.69E-02	5.80E+03	8.64E+03
$SO4^{2-}$	0.255	1.55E+04	2.30E+04
Si (as SiO_3^{2-})	8.30E-02	1.47E+03	2.19E+03
F^{-}	8.13E-02	974	1.45E+03
Cl^{-}	0.217	4.84E+03	7.20E+03
$C_6H_5O_7^{3-}$	2.99E-02	3.56E+03	5.30E+03
$EDTA^{4-}$	1.67E-02	3.04E+03	4.52E+03
$HEDTA^{3-}$	3.13E-02	5.42E+03	8.06E+03
$glycolate^{-}$	9.71E-02	4.59E+03	6.84E+03
$acetate^{-}$	6.62E-03	247	367
$oxalate^{2-}$	4.04E-05	2.25	3.34
DBP	1.99E-02	3.35E+03	4.98E+03
butanol	1.99E-02	932	1.39E+03
NH_3	6.52E-02	699	1.04E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		5.45E-02 (µCi/g)	1.35 (kg)
U	1.37E-02 (M)	2.05E+03 (µg/g)	3.06E+03 (kg)
Cs	0.265 (Ci/L)	167 (µCi/g)	2.49E+05 (Ci)
Sr	0.163 (Ci/L)	103 (µCi/g)	1.53E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).
†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Single-Shell Tank 241-S-104			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	1.68E+06 kg	(293 kgal)	
Heat Load	4.94 kW	(1.69E+04 BTU/hr)	
Bulk Density	1.51 (g/cc)		
Void Fraction	0.828		
Water wt%	48.4		
TOC wt% C (wet)	3.59E-03		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	6.38	9.71E+04	1.63E+05
Al^{3+}	3.19	5.70E+04	9.56E+04
Fe^{3+} (total Fe)	0.396	1.46E+04	2.45E+04
Cr^{3+}	0.447	1.54E+04	2.58E+04
Bi^{3+}	4.15E-06	0.574	0.961
La^{3+}	1.61E-11	1.48E-06	2.47E-06
Hg^{2+}	3.35E-04	44.4	74.5
Zr (as $ZrO(OH)_2$)	2.01E-06	0.121	0.204
Pb^{2+}	9.74E-03	1.34E+03	2.24E+03
Ni^{2+}	2.71E-02	1.05E+03	1.76E+03
Sr^{2+}	4.89E-11	2.84E-06	4.76E-06
Mn^{4+}	3.02E-05	1.10	1.84
Ca^{2+}	0.131	3.48E+03	5.83E+03
K^{+}	1.72E-02	446	747
OH^{-}	13.8	1.55E+05	2.59E+05
$NO3^{-}$	2.97	1.22E+05	2.04E+05
$NO2^{-}$	1.82	5.53E+04	9.27E+04
$CO3^{2-}$	0.134	5.33E+03	8.93E+03
$PO4^{3-}$	2.68E-04	16.8	28.2
$SO4^{2-}$	3.06E-02	1.95E+03	3.26E+03
Si (as SiO_3^{2-})	7.67E-02	1.43E+03	2.39E+03
F^{-}	2.37E-04	2.98	5.00
Cl^{-}	7.90E-02	1.85E+03	3.11E+03
$C_6H_5O_7^{3-}$	2.21E-04	27.7	46.4
$EDTA^{4-}$	8.61E-06	1.64	2.75
$HEDTA^{3-}$	7.15E-06	1.30	2.17
$glycolate^{-}$	3.12E-04	15.5	26.0
$acetate^{-}$	3.24E-05	1.27	2.12
$oxalate^{2-}$	1.37E-11	8.00E-07	1.34E-06
DBP	1.96E-04	34.5	57.9
butanol	1.96E-04	9.62	16.1
NH_3	6.56E-02	738	1.24E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0.195 (µCi/g)	5.44 (kg)
U	4.16E-02 (M)	6.55E+03 (µg/g)	1.10E+04 (kg)
Cs	0.189 (Ci/L)	125 (µCi/g)	2.10E+05 (Ci)
Sr	0.529 (Ci/L)	350 (µCi/g)	5.87E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

Rev. 3

Single-Shell Tank 241-S-104			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	4.68E+03 kg	(1.01 kgal)	
Heat Load	3.84E-03 kW	(13.1 BTU/hr)	
Bulk Density*	1.23 (g/cc)		
Water wt%†	70.1		
TOC wt% C (wet)	5.74E-03		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.13	7.76E+04	363
Al^{3+}	0.971	2.14E+04	100
Fe^{3+} (total Fe)	1.24E-03	56.7	0.265
Cr^{3+}	1.87E-02	792	3.70
Bi^{3+}	5.37E-06	0.916	4.29E-03
La^{3+}	2.08E-11	2.36E-06	1.10E-08
Hg^{2+}	8.44E-07	0.138	6.46E-04
Zr (as $ZrO(OH)_2$)	2.61E-06	0.194	9.08E-04
Pb^{2+}	1.34E-04	22.6	0.106
Ni^{2+}	1.12E-03	53.6	0.251
Sr^{2+}	6.93E-12	4.96E-07	2.32E-09
Mn^{4+}	3.91E-05	1.75	8.20E-03
Ca^{2+}	5.60E-03	183	0.856
K^{+}	1.81E-02	578	2.70
OH^{-}	3.89	5.39E+04	252
$NO3^{-}$	1.74	8.80E+04	412
$NO2^{-}$	1.32	4.95E+04	232
$CO3^{2-}$	9.46E-03	463	2.17
$PO4^{3-}$	3.47E-04	26.9	0.126
$SO4^{2-}$	3.14E-02	2.47E+03	11.5
Si (as SiO_3^{2-})	2.11E-02	485	2.27
F^{-}	3.07E-04	4.77	2.23E-02
Cl^{-}	8.30E-02	2.40E+03	11.2
$C_6H_5O_7^{3-}$	2.86E-04	44.2	0.207
$EDTA^{4-}$	1.12E-05	2.62	1.23E-02
$HEDTA^{3-}$	9.26E-06	2.07	9.70E-03
$glycolate^{-}$	4.04E-04	24.8	0.116
$acetate^{-}$	4.19E-05	2.02	9.45E-03
$oxalate^{2-}$	1.78E-11	1.28E-06	5.98E-09
DBP	2.54E-04	55.2	0.258
butanol	2.54E-04	15.4	7.19E-02
NH_3	2.21E-02	306	1.43
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	18.6 (µCi/L)		1.19E-03 (kg)
U	2.49E-03 (M)	483 (µg/g)	2.26 (kg)
Cs	0.184 (Ci/L)	150 (µCi/g)	704 (Ci)
Sr	2.11E-02 (Ci/L)	17.2 (µCi/g)	80.6 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Single-Shell Tank 241-S-104			
Total Inventory Estimate*			
Physical Properties			
Total Waste	1.68E+06 kg	(294 kgal)	
Heat Load	4.94 kW	(1.69E+04 BTU/hr)	
Bulk Density†	1.51 (g/cc)		
Water wt%†	48.4		
TOC wt% C (wet)†	3.60E-03		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	6.37	9.70E+04	1.63E+05
Al^{3+}	3.19	5.69E+04	9.57E+04
Fe^{3+} (total Fe)	0.395	1.46E+04	2.45E+04
Cr^{3+}	0.446	1.54E+04	2.58E+04
Bi^{3+}	4.15E-06	0.575	0.966
La^{3+}	1.61E-11	1.48E-06	2.49E-06
Hg^{2+}	3.34E-04	44.3	74.5
Zr (as $ZrO(OH)_2$)	2.01E-06	0.122	0.204
Pb^{2+}	9.71E-03	1.33E+03	2.24E+03
Ni^{2+}	2.70E-02	1.05E+03	1.76E+03
Sr^{2+}	4.88E-11	2.83E-06	4.76E-06
Mn^{4+}	3.02E-05	1.10	1.85
Ca^{2+}	0.131	3.47E+03	5.83E+03
K^{+}	1.72E-02	446	750
OH^{-}	13.7	1.54E+05	2.60E+05
$NO3^{-}$	2.96	1.22E+05	2.04E+05
$NO2^{-}$	1.82	5.53E+04	9.29E+04
$CO3^{2-}$	0.134	5.31E+03	8.93E+03
$PO4^{3-}$	2.68E-04	16.8	28.3
$SO4^{2-}$	3.06E-02	1.95E+03	3.27E+03
Si (as SiO_3^{2-})	7.65E-02	1.42E+03	2.39E+03
F^{-}	2.38E-04	2.99	5.02
Cl^{-}	7.90E-02	1.85E+03	3.12E+03
$C_6H_5O_7^{3-}$	2.21E-04	27.7	46.6
$EDTA^{4-}$	8.62E-06	1.64	2.76
$HEDTA^{3-}$	7.16E-06	1.30	2.18
$glycolate^{-}$	3.13E-04	15.5	26.1
$acetate^{-}$	3.24E-05	1.27	2.13
$oxalate^{2-}$	1.38E-11	8.02E-07	1.35E-06
DBP	1.96E-04	34.6	58.1
butanol	1.96E-04	9.63	16.2
NH_3	6.54E-02	737	1.24E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0.194 (µCi/g)	5.45 (kg)
U	4.14E-02 (M)	6.53E+03 (µg/g)	1.10E+04 (kg)
Cs	0.189 (Ci/L)	125 (µCi/g)	2.11E+05 (Ci)
Sr	0.527 (Ci/L)	349 (µCi/g)	5.87E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Single-Shell Tank 241-S-105			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	1.12E+04 kg	(2.00 kgal)	
Heat Load	5.59E-02 kW	(191 BTU/hr)	
Bulk Density	1.48 (g/cc)		
Void Fraction	0.799		
Water wt%	52.0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	2.37	3.68E+04	412
Al^{3+}	4.14	7.54E+04	845
Fe^{3+} (total Fe)	1.01	3.81E+04	428
Cr^{3+}	0.874	3.06E+04	344
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	5.07E-02	2.01E+03	22.5
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.215	5.80E+03	65.0
K^{+}	8.50E-03	224	2.51
OH^{-}	18.6	2.13E+05	2.39E+03
$NO3^{-}$	3.52E-02	1.47E+03	16.5
$NO2^{-}$	1.95	6.06E+04	680
$CO3^{2-}$	0.215	8.68E+03	97.4
$PO4^{3-}$	0	0	0
$SO4^{2-}$	1.53E-02	992	11.1
Si (as SiO_3^{2-})	1.19E-02	225	2.52
F^{-}	0	0	0
Cl^{-}	3.91E-02	934	10.5
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0.132	1.51E+03	16.9
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.08E-02 (µCi/g)	2.02E-03 (kg)
U	2.16E-02 (M)	3.46E+03 (µg/g)	38.8 (kg)
Cs	7.93E-02 (Ci/L)	53.4 (µCi/g)	599 (Ci)
Sr	1.04 (Ci/L)	703 (µCi/g)	7.89E+03 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-S-105			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	2.24E+06 kg	(405 kgal)	
Heat Load	2.75 kW	(9.40E+03 BTU/hr)	
Bulk Density*	1.46 (g/cc)		
Water wt%†	44.7		
TOC wt% C (wet)	0.288		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	9.52	1.50E+05	3.36E+05
Al^{3+}	1.48	2.74E+04	6.14E+04
Fe^{3+} (total Fe)	6.15E-03	235	527
Cr^{3+}	6.42E-02	2.29E+03	5.12E+03
Bi^{3+}	7.01E-04	100	225
La^{3+}	1.43E-09	1.36E-04	3.05E-04
Hg^{2+}	5.68E-06	0.780	1.75
Zr (as $ZrO(OH)_2$)	4.92E-04	30.7	68.8
Pb^{2+}	6.61E-04	93.8	210
Ni^{2+}	5.43E-03	218	488
Sr^{2+}	4.77E-10	2.86E-05	6.41E-05
Mn^{4+}	2.35E-03	88.4	198
Ca^{2+}	2.79E-02	766	1.71E+03
K^{+}	4.03E-02	1.08E+03	2.41E+03
OH^{-}	6.27	7.30E+04	1.63E+05
$NO3^{-}$	4.36	1.85E+05	4.14E+05
$NO2^{-}$	2.41	7.58E+04	1.70E+05
$CO3^{2-}$	0.227	9.33E+03	2.09E+04
$PO4^{3-}$	5.19E-02	3.37E+03	7.55E+03
$SO4^{2-}$	0.154	1.01E+04	2.27E+04
Si (as SiO_3^{2-})	6.08E-02	1.17E+03	2.62E+03
F^{-}	3.90E-02	508	1.14E+03
Cl^{-}	0.158	3.84E+03	8.59E+03
$C_6H_5O_7^{3-}$	1.73E-02	2.23E+03	5.00E+03
$EDTA^{4-}$	1.92E-03	379	848
$HEDTA^{3-}$	3.07E-03	577	1.29E+03
$glycolate^{-}$	2.65E-02	1.36E+03	3.05E+03
$acetate^{-}$	2.47E-03	99.7	223
$oxalate^{2-}$	1.22E-09	7.38E-05	1.65E-04
DBP	1.16E-02	2.12E+03	4.74E+03
butanol	1.16E-02	590	1.32E+03
NH_3	5.10E-02	594	1.33E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	60.6 (µCi/L)		1.55 (kg)
U	1.09E-02 (M)	1.78E+03 (µg/g)	3.98E+03 (kg)
Cs	0.240 (Ci/L)	165 (µCi/g)	3.69E+05 (Ci)
Sr	9.94E-02 (Ci/L)	68.1 (µCi/g)	1.52E+05 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-S-105			
Total Inventory Estimate*			
Physical Properties			
Total Waste	2.25E+06 kg	(407 kgal)	
Heat Load	2.81 kW	(9.59E+03 BTU/hr)	
Bulk Density†	1.46 (g/cc)		
Water wt%†	44.7		
TOC wt% C (wet)†	0.287		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	9.49	1.49E+05	3.36E+05
Al^{3+}	1.50	2.76E+04	6.22E+04
Fe^{3+} (total Fe)	1.11E-02	424	955
Cr^{3+}	6.82E-02	2.43E+03	5.46E+03
Bi^{3+}	6.98E-04	99.9	225
La^{3+}	1.42E-09	1.35E-04	3.05E-04
Hg^{2+}	5.65E-06	0.776	1.75
Zr (as $ZrO(OH)_2$)	4.90E-04	30.6	68.8
Pb^{2+}	6.58E-04	93.3	210
Ni^{2+}	5.65E-03	227	511
Sr^{2+}	4.75E-10	2.85E-05	6.41E-05
Mn^{4+}	2.34E-03	88.0	198
Ca^{2+}	2.88E-02	791	1.78E+03
K^{+}	4.01E-02	1.07E+03	2.42E+03
OH^{-}	6.33	7.37E+04	1.66E+05
$NO3^{-}$	4.34	1.84E+05	4.15E+05
$NO2^{-}$	2.40	7.57E+04	1.70E+05
$CO3^{2-}$	0.227	9.33E+03	2.10E+04
$PO4^{3-}$	5.16E-02	3.36E+03	7.55E+03
$SO4^{2-}$	0.153	1.01E+04	2.27E+04
Si (as SiO_3^{2-})	6.05E-02	1.16E+03	2.62E+03
F^{-}	3.88E-02	505	1.14E+03
Cl^{-}	0.158	3.82E+03	8.60E+03
$C_6H_5O_7^{3-}$	1.72E-02	2.22E+03	5.00E+03
$EDTA^{4-}$	1.91E-03	377	848
$HEDTA^{3-}$	3.06E-03	574	1.29E+03
$glycolate^{-}$	2.64E-02	1.35E+03	3.05E+03
$acetate^{-}$	2.46E-03	99.2	223
$oxalate^{2-}$	1.22E-09	7.34E-05	1.65E-04
DBP	1.16E-02	2.11E+03	4.74E+03
butanol	1.16E-02	587	1.32E+03
NH_3	5.14E-02	598	1.35E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		4.13E-02 (µCi/g)	1.55 (kg)
U	1.09E-02 (M)	1.78E+03 (µg/g)	4.01E+03 (kg)
Cs	0.240 (Ci/L)	164 (µCi/g)	3.69E+05 (Ci)
Sr	0.104 (Ci/L)	71.2 (µCi/g)	1.60E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Single-Shell Tank 241-S-106			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	2.15E+05 kg	(32.0 kgal)	
Heat Load	3.20E-03 kW	(10.9 BTU/hr)	
Bulk Density	1.77 (g/cc)		
Void Fraction	0.651		
Water wt%	24.5		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	7.84	1.02E+05	2.18E+04
Al^{3+}	11.2	1.71E+05	3.66E+04
Fe^{3+} (total Fe)	0.165	5.20E+03	1.12E+03
Cr^{3+}	2.04E-03	59.8	12.8
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	4.08E-03	462	99.1
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0.118	1.38E+04	2.95E+03
Ni^{2+}	1.02E-03	33.7	7.24
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.121	2.73E+03	586
K^{+}	1.47E-03	32.4	6.96
OH^{-}	41.7	4.00E+05	8.59E+04
$NO3^{-}$	0.571	2.00E+04	4.29E+03
$NO2^{-}$	0.959	2.49E+04	5.34E+03
$CO3^{2-}$	0.121	4.09E+03	878
$PO4^{3-}$	0	0	0
$SO4^{2-}$	8.39E-03	455	97.6
Si (as SiO_3^{2-})	2.01E-02	319	68.4
F^{-}	0	0	0
Cl^{-}	6.76E-03	135	29.0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	2.20E-04	2.11	0.453
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.44 (µCi/g)	5.15 (kg)
U	0.183 (M)	2.46E+04 (µg/g)	5.29E+03 (kg)
Cs	2.61E-03 (Ci/L)	1.47 (µCi/g)	316 (Ci)
Sr	2.11E-03 (Ci/L)	1.19 (µCi/g)	255 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-S-106			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	2.57E+06 kg	(447 kgal)	
Heat Load	3.45 kW	(1.18E+04 BTU/hr)	
Bulk Density*	1.52 (g/cc)		
Water wt%†	40.5		
TOC wt% C (wet)	0.370		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	10.7	1.62E+05	4.16E+05
Al^{3+}	1.69	3.01E+04	7.73E+04
Fe^{3+} (total Fe)	6.52E-03	240	616
Cr^{3+}	6.75E-02	2.31E+03	5.94E+03
Bi^{3+}	6.20E-04	85.4	219
La^{3+}	2.81E-08	2.57E-03	6.60E-03
Hg^{2+}	5.43E-06	0.716	1.84
Zr (as $ZrO(OH)_2$)	4.27E-04	25.6	65.8
Pb^{2+}	6.55E-04	89.4	230
Ni^{2+}	5.76E-03	223	573
Sr^{2+}	9.36E-09	5.40E-04	1.39E-03
Mn^{4+}	3.00E-03	109	279
Ca^{2+}	2.96E-02	781	2.01E+03
K^{+}	4.62E-02	1.19E+03	3.06E+03
OH^{-}	7.20	8.06E+04	2.07E+05
$NO3^{-}$	4.74	1.94E+05	4.98E+05
$NO2^{-}$	2.68	8.12E+04	2.09E+05
$CO3^{2-}$	0.284	1.12E+04	2.88E+04
$PO4^{3-}$	5.60E-02	3.50E+03	9.00E+03
$SO4^{2-}$	0.178	1.13E+04	2.90E+04
Si (as SiO_3^{2-})	7.03E-02	1.30E+03	3.34E+03
F^{-}	3.43E-02	428	1.10E+03
Cl^{-}	0.184	4.28E+03	1.10E+04
$C_6H_5O_7^{3-}$	2.35E-02	2.92E+03	7.50E+03
$EDTA^{4-}$	2.10E-03	399	1.02E+03
$HEDTA^{3-}$	3.45E-03	623	1.60E+03
$glycolate^{-}$	4.48E-02	2.21E+03	5.68E+03
$acetate^{-}$	2.43E-03	94.3	242
$oxalate^{2-}$	2.40E-08	1.39E-03	3.58E-03
DBP	1.48E-02	2.60E+03	6.67E+03
butanol	1.48E-02	723	1.86E+03
NH_3	5.58E-02	624	1.60E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	68.4 (µCi/L)		1.93 (kg)
U	1.14E-02 (M)	1.79E+03 (µg/g)	4.61E+03 (kg)
Cs	0.274 (Ci/L)	181 (µCi/g)	4.64E+05 (Ci)
Sr	0.112 (Ci/L)	73.8 (µCi/g)	1.90E+05 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.
†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Single-Shell Tank 241-S-106			
Total Inventory Estimate*			
Physical Properties			
Total Waste	2.78E+06 kg	(479 kgal)	
Heat Load	3.46 kW	(1.18E+04 BTU/hr)	
Bulk Density†	1.54 (g/cc)		
Water wt%†	39.3		
TOC wt% C (wet)†	0.342		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	10.5	1.57E+05	4.38E+05
Al^{3+}	2.33	4.09E+04	1.14E+05
Fe^{3+} (total Fe)	1.71E-02	622	1.73E+03
Cr^{3+}	6.32E-02	2.14E+03	5.95E+03
Bi^{3+}	5.79E-04	78.8	219
La^{3+}	2.62E-08	2.37E-03	6.60E-03
Hg^{2+}	2.78E-04	36.3	101
Zr (as $ZrO(OH)_2$)	3.98E-04	23.6	65.8
Pb^{2+}	8.47E-03	1.14E+03	3.18E+03
Ni^{2+}	5.45E-03	208	580
Sr^{2+}	8.74E-09	4.98E-04	1.39E-03
Mn^{4+}	2.80E-03	100	279
Ca^{2+}	3.57E-02	931	2.59E+03
K^{+}	4.32E-02	1.10E+03	3.06E+03
OH^{-}	9.50	1.05E+05	2.93E+05
$NO3^{-}$	4.47	1.80E+05	5.02E+05
$NO2^{-}$	2.57	7.68E+04	2.14E+05
$CO3^{2-}$	0.273	1.07E+04	2.97E+04
$PO4^{3-}$	5.23E-02	3.23E+03	9.00E+03
$SO4^{2-}$	0.167	1.04E+04	2.91E+04
Si (as SiO_3^{2-})	6.70E-02	1.23E+03	3.41E+03
F^{-}	3.20E-02	395	1.10E+03
Cl^{-}	0.172	3.96E+03	1.10E+04
$C_6H_5O_7^{3-}$	2.19E-02	2.69E+03	7.50E+03
$EDTA^{4-}$	1.96E-03	368	1.02E+03
$HEDTA^{3-}$	3.22E-03	575	1.60E+03
$glycolate^{-}$	4.18E-02	2.04E+03	5.68E+03
$acetate^{-}$	2.26E-03	87.0	242
$oxalate^{2-}$	2.24E-08	1.29E-03	3.58E-03
DBP	1.38E-02	2.40E+03	6.67E+03
butanol	1.38E-02	667	1.86E+03
NH_3	5.20E-02	576	1.60E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0.153 (µCi/g)	7.08 (kg)
U	2.29E-02 (M)	3.55E+03 (µg/g)	9.90E+03 (kg)
Cs	0.256 (Ci/L)	167 (µCi/g)	4.65E+05 (Ci)
Sr	0.105 (Ci/L)	68.2 (µCi/g)	1.90E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).
†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3a

Single-Shell Tank 241-S-107			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	1.54E+06 kg	(254 kgal)	
Heat Load	2.75 kW	(9.38E+03 BTU/hr)	
Bulk Density	1.60 (g/cc)		
Void Fraction	0.749		
Water wt%	41.3		
TOC wt% C (wet)	3.17E-04		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	4.68	6.74E+04	1.03E+05
Al^{3+}	6.47	1.09E+05	1.68E+05
Fe^{3+} (total Fe)	0.510	1.78E+04	2.74E+04
Cr^{3+}	0.330	1.07E+04	1.65E+04
Bi^{3+}	3.86E-07	5.06E-02	7.76E-02
La^{3+}	1.50E-12	1.30E-07	2.00E-07
Hg^{2+}	3.39E-03	426	654
Zr (as $ZrO(OH)_2$)	6.57E-02	3.75E+03	5.76E+03
Pb^{2+}	9.51E-02	1.23E+04	1.89E+04
Ni^{2+}	1.98E-02	727	1.12E+03
Sr^{2+}	4.56E-12	2.50E-07	3.84E-07
Mn^{4+}	2.81E-06	9.67E-02	0.148
Ca^{2+}	0.184	4.61E+03	7.08E+03
K^{+}	1.90E-02	464	713
OH^{-}	25.8	2.75E+05	4.21E+05
$NO3^{-}$	0.612	2.37E+04	3.65E+04
$NO2^{-}$	1.18	3.39E+04	5.21E+04
$CO3^{2-}$	0.184	6.92E+03	1.06E+04
$PO4^{3-}$	2.49E-05	1.48	2.28
$SO4^{2-}$	1.24E-02	748	1.15E+03
Si (as SiO_3^{2-})	1.79E-02	315	484
F^{-}	0.375	4.46E+03	6.84E+03
Cl^{-}	2.48E-02	551	846
$C_6H_5O_7^{3-}$	2.06E-05	2.44	3.74
$EDTA^{4-}$	8.02E-07	0.145	0.222
$HEDTA^{3-}$	6.66E-07	0.114	0.176
$glycolate^{-}$	2.91E-05	1.37	2.10
$acetate^{-}$	3.02E-06	0.111	0.171
$oxalate^{2-}$	1.28E-12	7.05E-08	1.08E-07
DBP	1.83E-05	2.40	3.69
butanol	1.83E-05	0.848	1.30
NH_3	9.61E-02	1.02E+03	1.57E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.13 (µCi/g)	28.8 (kg)
U	0.154 (M)	2.30E+04 (µg/g)	3.53E+04 (kg)
Cs	4.52E-02 (Ci/L)	28.3 (µCi/g)	4.34E+04 (Ci)
Sr	0.393 (Ci/L)	246 (µCi/g)	3.77E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-S-107			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Waste	6.20E+05 kg	(122 kgal)	
Heat Load	0.627 kW	(2.14E+03 BTU/hr)	
Bulk Density*	1.34 (g/cc)		
Water wt%†	54.4		
TOC wt% C (wet)	0.940		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	7.39	1.27E+05	7.85E+04
Al^{3+}	0.947	1.90E+04	1.18E+04
Fe^{3+} (total Fe)	4.90E-03	204	126
Cr^{3+}	3.56E-02	1.38E+03	855
Bi^{3+}	7.81E-04	122	75.4
La^{3+}	2.47E-05	2.56	1.59
Hg^{2+}	5.34E-06	0.798	0.495
Zr (as $ZrO(OH)_2$)	5.39E-04	36.6	22.7
Pb^{2+}	5.87E-04	90.7	56.2
Ni^{2+}	4.08E-03	179	111
Sr^{2+}	8.24E-06	0.538	0.334
Mn^{4+}	2.51E-03	103	63.7
Ca^{2+}	2.22E-02	664	412
K^{+}	3.51E-02	1.02E+03	634
OH^{-}	4.16	5.27E+04	3.27E+04
$NO3^{-}$	3.18	1.47E+05	9.11E+04
$NO2^{-}$	1.42	4.86E+04	3.01E+04
$CO3^{2-}$	0.308	1.38E+04	8.53E+03
$PO4^{3-}$	5.73E-02	4.05E+03	2.51E+03
$SO4^{2-}$	0.161	1.15E+04	7.14E+03
Si (as SiO_3^{2-})	5.36E-02	1.12E+03	695
F^{-}	4.41E-02	624	387
Cl^{-}	0.131	3.46E+03	2.14E+03
$C_6H_5O_7^{3-}$	1.85E-02	2.61E+03	1.62E+03
$EDTA^{4-}$	2.09E-02	4.48E+03	2.78E+03
$HEDTA^{3-}$	4.04E-02	8.25E+03	5.11E+03
$glycolate^{-}$	8.86E-02	4.95E+03	3.07E+03
$acetate^{-}$	4.33E-03	191	118
$oxalate^{2-}$	2.12E-05	1.39	0.860
DBP	1.18E-02	1.86E+03	1.15E+03
butanol	1.18E-02	654	405
NH_3	3.48E-02	440	273
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	54.7 (µCi/L)		0.421 (kg)
U	8.01E-03 (M)	1.42E+03 (µg/g)	880 (kg)
Cs	0.171 (Ci/L)	127 (µCi/g)	7.88E+04 (Ci)
Sr	8.28E-02 (Ci/L)	61.8 (µCi/g)	3.83E+04 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3a

Single-Shell Tank 241-S-107			
Total Inventory Estimate*			
Physical Properties			
Total Waste	2.16E+06 kg	(376 kgal)	
Heat Load	3.37 kW	(1.15E+04 BTU/hr)	
Bulk Density†	1.51 (g/cc)		
Water wt%†	45.1		
TOC wt% C (wet)†	0.271		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	5.56	8.44E+04	1.82E+05
Al^{3+}	4.67	8.33E+04	1.79E+05
Fe^{3+} (total Fe)	0.346	1.28E+04	2.75E+04
Cr^{3+}	0.234	8.04E+03	1.73E+04
Bi^{3+}	2.54E-04	35.0	75.5
La^{3+}	8.03E-06	0.737	1.59
Hg^{2+}	2.29E-03	304	655
Zr (as $ZrO(OH)_2$)	4.45E-02	2.68E+03	5.78E+03
Pb^{2+}	6.44E-02	8.81E+03	1.90E+04
Ni^{2+}	1.47E-02	569	1.23E+03
Sr^{2+}	2.68E-06	0.155	0.334
Mn^{4+}	8.17E-04	29.6	63.9
Ca^{2+}	0.131	3.48E+03	7.50E+03
K^{+}	2.42E-02	625	1.35E+03
OH^{-}	18.8	2.11E+05	4.54E+05
$NO3^{-}$	1.45	5.92E+04	1.28E+05
$NO2^{-}$	1.26	3.82E+04	8.22E+04
$CO3^{2-}$	0.224	8.89E+03	1.92E+04
$PO4^{3-}$	1.86E-02	1.17E+03	2.51E+03
$SO4^{2-}$	6.07E-02	3.85E+03	8.29E+03
Si (as SiO_3^{2-})	2.95E-02	547	1.18E+03
F^{-}	0.267	3.35E+03	7.23E+03
Cl^{-}	5.93E-02	1.39E+03	2.99E+03
$C_6H_5O_7^{3-}$	6.02E-03	752	1.62E+03
$EDTA^{4-}$	6.77E-03	1.29E+03	2.78E+03
$HEDTA^{3-}$	1.31E-02	2.37E+03	5.11E+03
$glycolate^{-}$	2.88E-02	1.43E+03	3.07E+03
$acetate^{-}$	1.41E-03	54.9	118
$oxalate^{2-}$	6.87E-06	0.399	0.860
DBP	3.86E-03	535	1.15E+03
butanol	3.86E-03	189	407
NH_3	7.62E-02	856	1.84E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0.814 (µCi/g)	29.2 (kg)
U	0.107 (M)	1.68E+04 (µg/g)	3.62E+04 (kg)
Cs	8.59E-02 (Ci/L)	56.7 (µCi/g)	1.22E+05 (Ci)
Sr	0.292 (Ci/L)	193 (µCi/g)	4.16E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3a

Single-Shell Tank 241-S-108			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	2.81E+04 kg	(5.00 kgal)	
Heat Load	0.140 kW	(478 BTU/hr)	
Bulk Density	1.48 (g/cc)		
Void Fraction	0.799		
Water wt%	52.0		
TOC wt% C (wet)	0		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	2.37	3.68E+04	1.03E+03
Al^{3+}	4.14	7.54E+04	2.11E+03
Fe^{3+} (total Fe)	1.01	3.81E+04	1.07E+03
Cr^{3+}	0.874	3.06E+04	859
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	5.07E-02	2.01E+03	56.3
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.215	5.80E+03	163
K^{+}	8.50E-03	224	6.29
OH^{-}	18.6	2.13E+05	5.99E+03
$NO3^{-}$	3.52E-02	1.47E+03	41.2
$NO2^{-}$	1.95	6.06E+04	1.70E+03
$CO3^{2-}$	0.215	8.68E+03	243
$PO4^{3-}$	0	0	0
$SO4^{2-}$	1.53E-02	992	27.8
Si (as SiO_3^{2-})	1.19E-02	225	6.30
F^{-}	0	0	0
Cl^{-}	3.91E-02	934	26.2
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0.132	1.51E+03	42.3
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.08E-02 (µCi/g)	5.05E-03 (kg)
U	2.16E-02 (M)	3.46E+03 (µg/g)	97.1 (kg)
Cs	7.93E-02 (Ci/L)	53.4 (µCi/g)	1.50E+03 (Ci)
Sr	1.04 (Ci/L)	703 (µCi/g)	1.97E+04 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

Rev. 3a

Single-Shell Tank 241-S-108			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Waste	2.86E+06 kg	(497 kgal)	
Heat Load	3.79 kW	(1.29E+04 BTU/hr)	
Bulk Density*	1.52 (g/cc)		
Water wt%†	40.2		
TOC wt% C (wet)	0.350		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	10.8	1.63E+05	4.65E+05
Al^{3+}	1.66	2.94E+04	8.41E+04
Fe^{3+} (total Fe)	6.91E-03	254	726
Cr^{3+}	7.15E-02	2.45E+03	6.99E+03
Bi^{3+}	7.59E-04	104	298
La^{3+}	1.79E-09	1.64E-04	4.68E-04
Hg^{2+}	6.20E-06	0.819	2.34
Zr (as $ZrO(OH)_2$)	5.29E-04	31.8	90.7
Pb^{2+}	7.26E-04	99.1	283
Ni^{2+}	6.10E-03	236	673
Sr^{2+}	5.97E-10	3.45E-05	9.85E-05
Mn^{4+}	2.96E-03	107	306
Ca^{2+}	3.14E-02	828	2.37E+03
K^{+}	4.59E-02	1.18E+03	3.38E+03
OH^{-}	7.04	7.89E+04	2.25E+05
$NO3^{-}$	4.85	1.98E+05	5.66E+05
$NO2^{-}$	2.69	8.16E+04	2.33E+05
$CO3^{2-}$	0.276	1.09E+04	3.11E+04
$PO4^{3-}$	6.21E-02	3.89E+03	1.11E+04
$SO4^{2-}$	0.181	1.14E+04	3.27E+04
Si (as SiO_3^{2-})	6.99E-02	1.29E+03	3.70E+03
F^{-}	4.20E-02	526	1.50E+03
Cl^{-}	0.180	4.20E+03	1.20E+04
$C_6H_5O_7^{3-}$	2.21E-02	2.75E+03	7.85E+03
$EDTA^{4-}$	2.37E-03	450	1.29E+03
$HEDTA^{3-}$	3.90E-03	705	2.01E+03
$glycolate^{-}$	3.44E-02	1.70E+03	4.85E+03
$acetate^{-}$	2.72E-03	106	302
$oxalate^{2-}$	1.53E-09	8.89E-05	2.54E-04
DBP	1.45E-02	2.01E+03	5.73E+03
butanol	1.45E-02	708	2.02E+03
NH_3	5.74E-02	643	1.84E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	69.0 (µCi/L)		2.16 (kg)
U	1.21E-02 (M)	1.89E+03 (µg/g)	5.41E+03 (kg)
Cs	0.266 (Ci/L)	175 (µCi/g)	5.00E+05 (Ci)
Sr	0.114 (Ci/L)	75.3 (µCi/g)	2.15E+05 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3a

Single-Shell Tank 241-S-108			
Total Inventory Estimate*			
Physical Properties			
Total Waste	2.88E+06 kg	(502 kgal)	
Heat Load	3.93 kW	(1.34E+04 BTU/hr)	
Bulk Density†	1.52 (g/cc)		
Water wt%†	40.3		
TOC wt% C (wet)†	0.347		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	10.7	1.62E+05	4.66E+05
Al^{3+}	1.68	2.99E+04	8.62E+04
Fe^{3+} (total Fe)	1.69E-02	623	1.80E+03
Cr^{3+}	7.94E-02	2.72E+03	7.85E+03
Bi^{3+}	7.51E-04	103	298
La^{3+}	1.77E-09	1.62E-04	4.68E-04
Hg^{2+}	6.14E-06	0.811	2.34
Zr (as $ZrO(OH)_2$)	5.23E-04	31.4	90.7
Pb^{2+}	7.19E-04	98.1	283
Ni^{2+}	6.54E-03	253	730
Sr^{2+}	5.91E-10	3.41E-05	9.85E-05
Mn^{4+}	2.93E-03	106	306
Ca^{2+}	3.32E-02	876	2.53E+03
K^{+}	4.56E-02	1.17E+03	3.39E+03
OH^{-}	7.16	8.02E+04	2.31E+05
$NO3^{-}$	4.80	1.96E+05	5.66E+05
$NO2^{-}$	2.69	8.14E+04	2.35E+05
$CO3^{2-}$	0.275	1.09E+04	3.14E+04
$PO4^{3-}$	6.15E-02	3.85E+03	1.11E+04
$SO4^{2-}$	0.179	1.13E+04	3.27E+04
Si (as SiO_3^{2-})	6.94E-02	1.28E+03	3.70E+03
F^{-}	4.16E-02	521	1.50E+03
Cl^{-}	0.179	4.17E+03	1.20E+04
$C_6H_5O_7^{3-}$	2.18E-02	2.72E+03	7.85E+03
$EDTA^{4-}$	2.35E-03	446	1.29E+03
$HEDTA^{3-}$	3.86E-03	698	2.01E+03
$glycolate^{-}$	3.41E-02	1.68E+03	4.85E+03
$acetate^{-}$	2.70E-03	105	302
$oxalate^{2-}$	1.52E-09	8.80E-05	2.54E-04
DBP	1.44E-02	1.99E+03	5.73E+03
butanol	1.44E-02	701	2.02E+03
NH_3	5.81E-02	651	1.88E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		4.51E-02 (µCi/g)	2.17 (kg)
U	1.22E-02 (M)	1.91E+03 (µg/g)	5.51E+03 (kg)
Cs	0.264 (Ci/L)	174 (µCi/g)	5.02E+05 (Ci)
Sr	0.124 (Ci/L)	81.4 (µCi/g)	2.35E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3a

Single-Shell Tank 241-S-109			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	8.72E+04 kg	(13.0 kgal)	
Heat Load	1.30E-03 kW	(4.44 BTU/hr)	
Bulk Density	1.77 (g/cc)		
Void Fraction	0.651		
Water wt%	24.5		
TOC wt% C (wet)	0		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	7.84	1.02E+05	8.87E+03
Al^{3+}	11.2	1.71E+05	1.49E+04
Fe^{3+} (total Fe)	0.165	5.20E+03	453
Cr^{3+}	2.04E-03	59.8	5.21
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	4.08E-03	462	40.3
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0.118	1.38E+04	1.20E+03
Ni^{2+}	1.02E-03	33.7	2.94
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.121	2.73E+03	238
K^{+}	1.47E-03	32.4	2.83
OH^{-}	41.7	4.00E+05	3.49E+04
$NO3^{-}$	0.571	2.00E+04	1.74E+03
$NO2^{-}$	0.959	2.49E+04	2.17E+03
$CO3^{2-}$	0.121	4.09E+03	357
$PO4^{3-}$	0	0	0
$SO4^{2-}$	8.39E-03	455	39.6
Si (as SiO_3^{2-})	2.01E-02	319	27.8
F^{-}	0	0	0
Cl^{-}	6.76E-03	135	11.8
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	2.20E-04	2.11	0.184
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.44 (µCi/g)	2.09 (kg)
U	0.183 (M)	2.46E+04 (µg/g)	2.15E+03 (kg)
Cs	2.61E-03 (Ci/L)	1.47 (µCi/g)	128 (Ci)
Sr	2.11E-03 (Ci/L)	1.19 (µCi/g)	104 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

Rev. 3a

Single-Shell Tank 241-S-109			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Waste	2.83E+06 kg	(494 kgal)	
Heat Load	3.70 kW	(1.26E+04 BTU/hr)	
Bulk Density*	1.51 (g/cc)		
Water wt%†	40.7		
TOC wt% C (wet)	0.369		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	10.7	1.62E+05	4.58E+05
Al^{3+}	1.63	2.90E+04	8.21E+04
Fe^{3+} (total Fe)	6.86E-03	253	716
Cr^{3+}	7.00E-02	2.41E+03	6.80E+03
Bi^{3+}	7.36E-04	102	288
La^{3+}	1.54E-08	1.41E-03	4.00E-03
Hg^{2+}	6.10E-06	0.809	2.29
Zr (as $ZrO(OH)_2$)	5.11E-04	30.8	87.2
Pb^{2+}	7.19E-04	98.5	279
Ni^{2+}	6.05E-03	235	664
Sr^{2+}	5.14E-09	2.97E-04	8.41E-04
Mn^{4+}	3.09E-03	112	318
Ca^{2+}	3.11E-02	825	2.33E+03
K^{+}	4.58E-02	1.18E+03	3.35E+03
OH^{-}	6.95	7.81E+04	2.21E+05
$NO3^{-}$	4.77	1.96E+05	5.53E+05
$NO2^{-}$	2.64	8.03E+04	2.27E+05
$CO3^{2-}$	0.287	1.14E+04	3.22E+04
$PO4^{3-}$	6.38E-02	4.00E+03	1.13E+04
$SO4^{2-}$	0.183	1.16E+04	3.29E+04
Si (as SiO_3^{2-})	7.00E-02	1.30E+03	3.68E+03
F^{-}	4.08E-02	512	1.45E+03
Cl^{-}	0.179	4.19E+03	1.18E+04
$C_6H_5O_7^{3-}$	2.34E-02	2.92E+03	8.27E+03
$EDTA^{4-}$	2.32E-03	442	1.25E+03
$HEDTA^{3-}$	3.80E-03	689	1.95E+03
$glycolate^{-}$	3.84E-02	1.91E+03	5.39E+03
$acetate^{-}$	2.70E-03	105	298
$oxalate^{2-}$	1.32E-08	7.67E-04	2.17E-03
DBP	1.52E-02	2.11E+03	5.96E+03
butanol	1.52E-02	743	2.10E+03
NH_3	5.65E-02	635	1.80E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	69.0 (µCi/L)		2.15 (kg)
U	1.19E-02 (M)	1.87E+03 (µg/g)	5.29E+03 (kg)
Cs	0.258 (Ci/L)	170 (µCi/g)	4.82E+05 (Ci)
Sr	0.114 (Ci/L)	75.6 (µCi/g)	2.14E+05 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3a

Single-Shell Tank 241-S-109			
Total Inventory Estimate*			
Physical Properties			
Total Waste	2.92E+06 kg	(507 kgal)	
Heat Load	3.70 kW	(1.26E+04 BTU/hr)	
Bulk Density†	1.52 (g/cc)		
Water wt%†	40.2		
TOC wt% C (wet)†	0.358		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	10.6	1.60E+05	4.67E+05
Al^{3+}	1.87	3.33E+04	9.70E+04
Fe^{3+} (total Fe)	1.09E-02	401	1.17E+03
Cr^{3+}	6.82E-02	2.34E+03	6.81E+03
Bi^{3+}	7.18E-04	98.7	288
La^{3+}	1.50E-08	1.37E-03	4.00E-03
Hg^{2+}	1.11E-04	14.6	42.6
Zr (as $ZrO(OH)_2$)	4.98E-04	29.9	87.2
Pb^{2+}	3.72E-03	507	1.48E+03
Ni^{2+}	5.92E-03	229	667
Sr^{2+}	5.00E-09	2.89E-04	8.41E-04
Mn^{4+}	3.01E-03	109	318
Ca^{2+}	3.34E-02	882	2.57E+03
K^{+}	4.46E-02	1.15E+03	3.35E+03
OH^{-}	7.84	8.77E+04	2.56E+05
$NO3^{-}$	4.67	1.90E+05	5.55E+05
$NO2^{-}$	2.60	7.86E+04	2.29E+05
$CO3^{2-}$	0.283	1.12E+04	3.26E+04
$PO4^{3-}$	6.21E-02	3.89E+03	1.13E+04
$SO4^{2-}$	0.179	1.13E+04	3.30E+04
Si (as SiO_3^{2-})	6.87E-02	1.27E+03	3.70E+03
F^{-}	3.98E-02	497	1.45E+03
Cl^{-}	0.174	4.07E+03	1.19E+04
$C_6H_5O_7^{3-}$	2.28E-02	2.84E+03	8.27E+03
$EDTA^{4-}$	2.26E-03	429	1.25E+03
$HEDTA^{3-}$	3.70E-03	668	1.95E+03
$glycolate^{-}$	3.74E-02	1.85E+03	5.39E+03
$acetate^{-}$	2.63E-03	102	298
$oxalate^{2-}$	1.28E-08	7.44E-04	2.17E-03
DBP	1.48E-02	2.04E+03	5.96E+03
butanol	1.48E-02	721	2.10E+03
NH_3	5.50E-02	616	1.80E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		8.73E-02 (µCi/g)	4.24 (kg)
U	1.63E-02 (M)	2.55E+03 (µg/g)	7.44E+03 (kg)
Cs	0.251 (Ci/L)	165 (µCi/g)	4.82E+05 (Ci)
Sr	0.111 (Ci/L)	73.4 (µCi/g)	2.14E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3a

Single-Shell Tank 241-S-110			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	6.61E+05 kg	(113 kgal)	
Heat Load	2.49 kW	(8.52E+03 BTU/hr)	
Bulk Density	1.54 (g/cc)		
Void Fraction	0.767		
Water wt%	45.3		
TOC wt% C (wet)	0		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	3.53	5.26E+04	3.47E+04
Al^{3+}	5.64	9.86E+04	6.51E+04
Fe^{3+} (total Fe)	0.833	3.01E+04	1.99E+04
Cr^{3+}	0.689	2.32E+04	1.53E+04
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	8.66E-04	113	74.3
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	2.50E-02	3.35E+03	2.21E+03
Ni^{2+}	4.01E-02	1.53E+03	1.01E+03
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.195	5.05E+03	3.34E+03
K^{+}	7.01E-03	177	117
OH^{-}	23.5	2.59E+05	1.71E+05
$NO3^{-}$	0.149	5.98E+03	3.95E+03
$NO2^{-}$	1.74	5.19E+04	3.43E+04
$CO3^{2-}$	0.195	7.56E+03	4.99E+03
$PO4^{3-}$	0	0	0
$SO4^{2-}$	1.38E-02	861	569
Si (as SiO_3^{2-})	1.36E-02	247	163
F^{-}	0	0	0
Cl^{-}	3.22E-02	740	489
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0.104	1.14E+03	754
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0.359 (µCi/g)	3.95 (kg)
U	5.59E-02 (M)	8.62E+03 (µg/g)	5.70E+03 (kg)
Cs	6.30E-02 (Ci/L)	40.8 (µCi/g)	2.69E+04 (Ci)
Sr	0.822 (Ci/L)	532 (µCi/g)	3.52E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-S-110			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Waste	1.58E+06 kg	(277 kgal)	
Heat Load	1.99 kW	(6.78E+03 BTU/hr)	
Bulk Density*	1.50 (g/cc)		
Water wt%†	41.4		
TOC wt% C (wet)	0.613		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	10.6	1.62E+05	2.54E+05
Al^{3+}	1.56	2.80E+04	4.40E+04
Fe^{3+} (total Fe)	6.52E-03	242	382
Cr^{3+}	5.90E-02	2.04E+03	3.22E+03
Bi^{3+}	7.86E-04	109	172
La^{3+}	8.17E-06	0.756	1.19
Hg^{2+}	6.77E-06	0.904	1.42
Zr (as $ZrO(OH)_2$)	5.30E-04	32.2	50.7
Pb^{2+}	8.24E-04	114	179
Ni^{2+}	5.67E-03	222	349
Sr^{2+}	2.72E-06	0.159	0.250
Mn^{4+}	3.55E-03	130	205
Ca^{2+}	2.97E-02	791	1.25E+03
K^{+}	4.72E-02	1.23E+03	1.94E+03
OH^{-}	6.74	7.63E+04	1.20E+05
$NO3^{-}$	4.57	1.89E+05	2.97E+05
$NO2^{-}$	2.39	7.30E+04	1.15E+05
$CO3^{2-}$	0.361	1.44E+04	2.27E+04
$PO4^{3-}$	6.28E-02	3.97E+03	6.26E+03
$SO4^{2-}$	0.204	1.30E+04	2.05E+04
Si (as SiO_3^{2-})	7.21E-02	1.35E+03	2.12E+03
F^{-}	4.41E-02	558	879
Cl^{-}	0.183	4.31E+03	6.79E+03
$C_6H_5O_7^{3-}$	2.83E-02	3.57E+03	5.62E+03
$EDTA^{4-}$	8.14E-03	1.56E+03	2.46E+03
$HEDTA^{3-}$	1.47E-02	2.69E+03	4.23E+03
$glycolate^{-}$	7.08E-02	3.54E+03	5.57E+03
$acetate^{-}$	4.96E-03	195	307
$oxalate^{2-}$	6.99E-06	0.410	0.645
DBP	1.81E-02	2.53E+03	3.99E+03
butanol	1.81E-02	892	1.41E+03
NH_3	5.17E-02	585	922
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	72.6 (µCi/L)		1.27 (kg)
U	1.13E-02 (M)	1.79E+03 (µg/g)	2.83E+03 (kg)
Cs	0.241 (Ci/L)	160 (µCi/g)	2.52E+05 (Ci)
Sr	0.114 (Ci/L)	75.9 (µCi/g)	1.20E+05 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3a

Single-Shell Tank 241-S-110			
Total Inventory Estimate*			
Physical Properties			
Total Waste	2.24E+06 kg	(390 kgal)	
Heat Load	4.48 kW	(1.53E+04 BTU/hr)	
Bulk Density†	1.51 (g/cc)		
Water wt%†	42.6		
TOC wt% C (wet)†	0.432		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	8.52	1.29E+05	2.89E+05
Al^{3+}	2.74	4.88E+04	1.09E+05
Fe^{3+} (total Fe)	0.246	9.07E+03	2.03E+04
Cr^{3+}	0.242	8.29E+03	1.85E+04
Bi^{3+}	5.59E-04	77.1	172
La^{3+}	5.80E-06	0.532	1.19
Hg^{2+}	2.56E-04	33.9	75.8
Zr (as $ZrO(OH)_2$)	3.76E-04	22.7	50.7
Pb^{2+}	7.82E-03	1.07E+03	2.39E+03
Ni^{2+}	1.57E-02	607	1.36E+03
Sr^{2+}	1.93E-06	0.112	0.250
Mn^{4+}	2.52E-03	91.6	205
Ca^{2+}	7.74E-02	2.05E+03	4.58E+03
K^{+}	3.56E-02	918	2.05E+03
OH^{-}	11.6	1.30E+05	2.91E+05
$NO3^{-}$	3.29	1.35E+05	3.01E+05
$NO2^{-}$	2.20	6.68E+04	1.49E+05
$CO3^{2-}$	0.313	1.24E+04	2.77E+04
$PO4^{3-}$	4.46E-02	2.80E+03	6.26E+03
$SO4^{2-}$	0.149	9.44E+03	2.11E+04
Si (as SiO_3^{2-})	5.52E-02	1.02E+03	2.29E+03
F^{-}	3.13E-02	393	879
Cl^{-}	0.139	3.26E+03	7.28E+03
$C_6H_5O_7^{3-}$	2.01E-02	2.51E+03	5.62E+03
$EDTA^{4-}$	5.78E-03	1.10E+03	2.46E+03
$HEDTA^{3-}$	1.05E-02	1.89E+03	4.23E+03
$glycolate^{-}$	5.03E-02	2.49E+03	5.57E+03
$acetate^{-}$	3.52E-03	137	307
$oxalate^{2-}$	4.97E-06	0.289	0.645
DBP	1.28E-02	1.78E+03	3.99E+03
butanol	1.28E-02	629	1.41E+03
NH_3	6.68E-02	750	1.68E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0.140 (µCi/g)	5.22 (kg)
U	2.43E-02 (M)	3.81E+03 (µg/g)	8.52E+03 (kg)
Cs	0.189 (Ci/L)	125 (µCi/g)	2.79E+05 (Ci)
Sr	0.319 (Ci/L)	211 (µCi/g)	4.71E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3a

Single-Shell Tank 241-S-111			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	4.51E+05 kg	(78.0 kgal)	
Heat Load	1.85 kW	(6.31E+03 BTU/hr)	
Bulk Density	1.53 (g/cc)		
Void Fraction	0.776		
Water wt%	47.1		
TOC wt% C (wet)	0		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	3.21	4.84E+04	2.18E+04
Al^{3+}	5.23	9.24E+04	4.17E+04
Fe^{3+} (total Fe)	0.883	3.23E+04	1.46E+04
Cr^{3+}	0.740	2.52E+04	1.14E+04
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	6.28E-04	82.4	37.2
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	1.81E-02	2.45E+03	1.11E+03
Ni^{2+}	4.30E-02	1.65E+03	746
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.200	5.25E+03	2.37E+03
K^{+}	7.42E-03	190	85.7
OH^{-}	22.2	2.47E+05	1.11E+05
$NO3^{-}$	0.118	4.77E+03	2.15E+03
$NO2^{-}$	1.80	5.42E+04	2.45E+04
$CO3^{2-}$	0.200	7.86E+03	3.54E+03
$PO4^{3-}$	0	0	0
$SO4^{2-}$	1.42E-02	896	404
Si (as SiO_3^{2-})	1.31E-02	241	109
F^{-}	0	0	0
Cl^{-}	3.41E-02	792	357
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0.111	1.24E+03	559
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0.266 (µCi/g)	2.00 (kg)
U	4.65E-02 (M)	7.24E+03 (µg/g)	3.27E+03 (kg)
Cs	6.75E-02 (Ci/L)	44.2 (µCi/g)	1.99E+04 (Ci)
Sr	0.883 (Ci/L)	578 (µCi/g)	2.61E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-S-111			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Waste	2.79E+06 kg	(460 kgal)	
Heat Load	4.05 kW	(1.38E+04 BTU/hr)	
Bulk Density*	1.60 (g/cc)		
Water wt%†	34.3		
TOC wt% C (wet)	0.562		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	12.5	1.80E+05	5.02E+05
Al^{3+}	1.91	3.21E+04	8.95E+04
Fe^{3+} (total Fe)	7.75E-03	270	753
Cr^{3+}	7.48E-02	2.43E+03	6.78E+03
Bi^{3+}	8.70E-04	113	316
La^{3+}	1.41E-05	1.22	3.41
Hg^{2+}	7.15E-06	0.895	2.50
Zr (as $ZrO(OH)_2$)	5.92E-04	33.7	94.0
Pb^{2+}	8.52E-04	110	307
Ni^{2+}	6.79E-03	249	694
Sr^{2+}	4.70E-06	0.257	0.718
Mn^{4+}	3.82E-03	131	366
Ca^{2+}	3.52E-02	881	2.46E+03
K^{+}	5.57E-02	1.36E+03	3.79E+03
OH^{-}	8.17	8.67E+04	2.42E+05
$NO3^{-}$	5.51	2.13E+05	5.95E+05
$NO2^{-}$	2.98	8.56E+04	2.39E+05
$CO3^{2-}$	0.379	1.42E+04	3.96E+04
$PO4^{3-}$	7.42E-02	4.40E+03	1.23E+04
$SO4^{2-}$	0.226	1.36E+04	3.78E+04
Si (as SiO_3^{2-})	8.39E-02	1.47E+03	4.10E+03
F^{-}	4.84E-02	575	1.60E+03
Cl^{-}	0.217	4.79E+03	1.34E+04
$C_6H_5O_7^{3-}$	2.99E-02	3.53E+03	9.85E+03
$EDTA^{4-}$	7.02E-03	1.26E+03	3.52E+03
$HEDTA^{3-}$	1.25E-02	2.14E+03	5.98E+03
$glycolate^{-}$	6.88E-02	3.22E+03	8.98E+03
$acetate^{-}$	4.82E-03	178	495
$oxalate^{2-}$	1.21E-05	0.663	1.85
DBP	1.90E-02	2.50E+03	6.96E+03
butanol	1.90E-02	880	2.45E+03
NH_3	6.37E-02	676	1.89E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	82.7 (µCi/L)		2.40 (kg)
U	1.34E-02 (M)	1.99E+03 (µg/g)	5.55E+03 (kg)
Cs	0.305 (Ci/L)	190 (µCi/g)	5.31E+05 (Ci)
Sr	0.133 (Ci/L)	83.0 (µCi/g)	2.31E+05 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3a

Single-Shell Tank 241-S-111			
Total Inventory Estimate*			
Physical Properties			
Total Waste	3.24E+06 kg	(538 kgal)	
Heat Load	5.89 kW	(2.01E+04 BTU/hr)	
Bulk Density†	1.59 (g/cc)		
Water wt%†	36.1		
TOC wt% C (wet)†	0.484		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	11.2	1.62E+05	5.24E+05
Al^{3+}	2.39	4.05E+04	1.31E+05
Fe^{3+} (total Fe)	0.135	4.72E+03	1.53E+04
Cr^{3+}	0.171	5.60E+03	1.81E+04
Bi^{3+}	7.44E-04	97.7	316
La^{3+}	1.21E-05	1.05	3.41
Hg^{2+}	9.71E-05	12.2	39.7
Zr (as $ZrO(OH)_2$)	5.06E-04	29.0	94.0
Pb^{2+}	3.35E-03	436	1.41E+03
Ni^{2+}	1.20E-02	444	1.44E+03
Sr^{2+}	4.02E-06	0.222	0.718
Mn^{4+}	3.27E-03	113	366
Ca^{2+}	5.91E-02	1.49E+03	4.82E+03
K^{+}	4.87E-02	1.20E+03	3.88E+03
OH^{-}	10.2	1.09E+05	3.53E+05
$NO3^{-}$	4.73	1.84E+05	5.97E+05
$NO2^{-}$	2.81	8.12E+04	2.63E+05
$CO3^{2-}$	0.353	1.33E+04	4.31E+04
$PO4^{3-}$	6.35E-02	3.79E+03	1.23E+04
$SO4^{2-}$	0.195	1.18E+04	3.82E+04
Si (as SiO_3^{2-})	7.36E-02	1.30E+03	4.21E+03
F^{-}	4.14E-02	495	1.60E+03
Cl^{-}	0.190	4.23E+03	1.37E+04
$C_6H_5O_7^{3-}$	2.56E-02	3.04E+03	9.85E+03
$EDTA^{4-}$	6.00E-03	1.09E+03	3.52E+03
$HEDTA^{3-}$	1.07E-02	1.85E+03	5.98E+03
$glycolate^{-}$	5.88E-02	2.77E+03	8.98E+03
$acetate^{-}$	4.12E-03	153	495
$oxalate^{2-}$	1.03E-05	0.571	1.85
DBP	1.63E-02	2.15E+03	6.96E+03
butanol	1.63E-02	757	2.45E+03
NH_3	7.06E-02	755	2.44E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		8.15E-02 (µCi/g)	4.40 (kg)
U	1.82E-02 (M)	2.72E+03 (µg/g)	8.81E+03 (kg)
Cs	0.270 (Ci/L)	170 (µCi/g)	5.51E+05 (Ci)
Sr	0.242 (Ci/L)	152 (µCi/g)	4.92E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3a

Single-Shell Tank 241-S-112			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	3.70E+04 kg	(6.00 kgal)	
Heat Load	8.43E-02 kW	(288 BTU/hr)	
Bulk Density	1.63 (g/cc)		
Void Fraction	0.725		
Water wt%	37.0		
TOC wt% C (wet)	0		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	5.11	7.21E+04	2.67E+03
Al^{3+}	7.67	1.27E+05	4.70E+03
Fe^{3+} (total Fe)	0.589	2.02E+04	747
Cr^{3+}	0.438	1.40E+04	517
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	2.04E-03	251	9.29
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	5.88E-02	7.49E+03	277
Ni^{2+}	2.59E-02	933	34.5
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.168	4.13E+03	153
K^{+}	4.99E-03	120	4.43
OH^{-}	30.2	3.15E+05	1.16E+04
$NO3^{-}$	0.303	1.15E+04	426
$NO2^{-}$	1.46	4.12E+04	1.52E+03
$CO3^{2-}$	0.168	6.18E+03	228
$PO4^{3-}$	0	0	0
$SO4^{2-}$	1.19E-02	700	25.8
Si (as SiO_3^{2-})	1.60E-02	276	10.2
F^{-}	0	0	0
Cl^{-}	2.29E-02	499	18.5
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	6.60E-02	689	25.5
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0.789 (µCi/g)	0.486 (kg)
U	0.102 (M)	1.50E+04 (µg/g)	554 (kg)
Cs	4.10E-02 (Ci/L)	25.2 (µCi/g)	930 (Ci)
Sr	0.523 (Ci/L)	321 (µCi/g)	1.19E+04 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

Rev. 3a

Single-Shell Tank 241-S-112			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Waste	2.99E+06 kg	(517 kgal)	
Heat Load	4.01 kW	(1.37E+04 BTU/hr)	
Bulk Density*	1.53 (g/cc)		
Water wt%†	39.5		
TOC wt% C (wet)	0.358		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	10.9	1.65E+05	4.92E+05
Al^{3+}	1.69	2.98E+04	8.90E+04
Fe^{3+} (total Fe)	7.03E-03	257	768
Cr^{3+}	7.26E-02	2.47E+03	7.39E+03
Bi^{3+}	7.72E-04	106	316
La^{3+}	1.88E-07	1.71E-02	5.12E-02
Hg^{2+}	6.32E-06	0.830	2.48
Zr (as $ZrO(OH)_2$)	5.37E-04	32.1	95.9
Pb^{2+}	7.41E-04	101	301
Ni^{2+}	6.20E-03	238	713
Sr^{2+}	6.28E-08	3.60E-03	1.08E-02
Mn^{4+}	3.03E-03	109	325
Ca^{2+}	3.19E-02	837	2.50E+03
K^{+}	4.68E-02	1.20E+03	3.58E+03
OH^{-}	7.17	7.97E+04	2.38E+05
$NO3^{-}$	4.93	2.00E+05	5.98E+05
$NO2^{-}$	2.74	8.24E+04	2.46E+05
$CO3^{2-}$	0.282	1.11E+04	3.31E+04
$PO4^{3-}$	6.34E-02	3.94E+03	1.18E+04
$SO4^{2-}$	0.185	1.16E+04	3.47E+04
Si (as SiO_3^{2-})	7.12E-02	1.31E+03	3.92E+03
F^{-}	4.28E-02	532	1.59E+03
Cl^{-}	0.183	4.25E+03	1.27E+04
$C_6H_5O_7^{3-}$	2.26E-02	2.80E+03	8.36E+03
$EDTA^{4-}$	2.49E-03	470	1.41E+03
$HEDTA^{3-}$	4.10E-03	735	2.20E+03
$glycolate^{-}$	3.54E-02	1.74E+03	5.19E+03
$acetate^{-}$	2.87E-03	111	331
$oxalate^{2-}$	1.61E-07	9.29E-03	2.78E-02
DBP	1.48E-02	2.04E+03	6.11E+03
butanol	1.48E-02	720	2.15E+03
NH_3	5.84E-02	649	1.94E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	70.3 (µCi/L)		2.29 (kg)
U	1.23E-02 (M)	1.92E+03 (µg/g)	5.73E+03 (kg)
Cs	0.270 (Ci/L)	177 (µCi/g)	5.29E+05 (Ci)
Sr	0.116 (Ci/L)	76.2 (µCi/g)	2.28E+05 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3a

Single-Shell Tank 241-S-112			
Total Inventory Estimate*			
Physical Properties			
Total Waste	3.03E+06 kg	(523 kgal)	
Heat Load	4.09 kW	(1.40E+04 BTU/hr)	
Bulk Density†	1.53 (g/cc)		
Water wt%†	39.5		
TOC wt% C (wet)†	0.354		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	10.9	1.64E+05	4.95E+05
Al^{3+}	1.75	3.10E+04	9.37E+04
Fe^{3+} (total Fe)	1.37E-02	501	1.52E+03
Cr^{3+}	7.68E-02	2.61E+03	7.90E+03
Bi^{3+}	7.63E-04	104	316
La^{3+}	1.86E-07	1.69E-02	5.12E-02
Hg^{2+}	2.96E-05	3.89	11.8
Zr (as $ZrO(OH)_2$)	5.31E-04	31.7	95.9
Pb^{2+}	1.41E-03	191	577
Ni^{2+}	6.43E-03	247	747
Sr^{2+}	6.21E-08	3.56E-03	1.08E-02
Mn^{4+}	2.99E-03	107	325
Ca^{2+}	3.35E-02	878	2.66E+03
K^{+}	4.63E-02	1.18E+03	3.59E+03
OH^{-}	7.43	8.26E+04	2.50E+05
$NO3^{-}$	4.88	1.98E+05	5.99E+05
$NO2^{-}$	2.72	8.19E+04	2.48E+05
$CO3^{2-}$	0.281	1.10E+04	3.33E+04
$PO4^{3-}$	6.27E-02	3.89E+03	1.18E+04
$SO4^{2-}$	0.183	1.15E+04	3.47E+04
Si (as SiO_3^{2-})	7.06E-02	1.30E+03	3.93E+03
F^{-}	4.23E-02	526	1.59E+03
Cl^{-}	0.181	4.21E+03	1.27E+04
$C_6H_5O_7^{3-}$	2.23E-02	2.76E+03	8.36E+03
$EDTA^{4-}$	2.46E-03	464	1.41E+03
$HEDTA^{3-}$	4.05E-03	726	2.20E+03
$glycolate^{-}$	3.50E-02	1.72E+03	5.19E+03
$acetate^{-}$	2.84E-03	109	331
$oxalate^{2-}$	1.59E-07	9.18E-03	2.78E-02
DBP	1.47E-02	2.02E+03	6.11E+03
butanol	1.47E-02	711	2.15E+03
NH_3	5.84E-02	650	1.97E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		5.51E-02 (µCi/g)	2.78 (kg)
U	1.33E-02 (M)	2.08E+03 (µg/g)	6.28E+03 (kg)
Cs	0.267 (Ci/L)	175 (µCi/g)	5.29E+05 (Ci)
Sr	0.121 (Ci/L)	79.2 (µCi/g)	2.40E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Single-Shell Tank 241-SX-101			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	1.75E+06 kg	(310 kgal)	
Heat Load	6.16 kW	(2.10E+04 BTU/hr)	
Bulk Density	1.49 (g/cc)		
Void Fraction	0.836		
Water wt%	51.1		
TOC wt% C (wet)	3.34E-03		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	5.63	8.71E+04	1.52E+05
Al^{3+}	2.74	4.98E+04	8.69E+04
Fe^{3+} (total Fe)	0.512	1.92E+04	3.35E+04
Cr^{3+}	0.549	1.92E+04	3.35E+04
Bi^{3+}	3.80E-06	0.534	0.931
La^{3+}	1.47E-11	1.37E-06	2.40E-06
Hg^{2+}	5.97E-07	8.05E-02	0.140
Zr (as $ZrO(OH)_2$)	1.84E-06	0.113	0.197
Pb^{2+}	9.46E-05	13.2	23.0
Ni^{2+}	3.28E-02	1.29E+03	2.26E+03
Sr^{2+}	4.48E-11	2.64E-06	4.61E-06
Mn^{4+}	2.76E-05	1.02	1.78
Ca^{2+}	0.145	3.91E+03	6.83E+03
K^{+}	1.70E-02	447	781
OH^{-}	12.4	1.42E+05	2.48E+05
$NO3^{-}$	2.68	1.12E+05	1.95E+05
$NO2^{-}$	1.90	5.89E+04	1.03E+05
$CO3^{2-}$	0.148	5.97E+03	1.04E+04
$PO4^{3-}$	2.45E-04	15.6	27.3
$SO4^{2-}$	2.98E-02	1.93E+03	3.36E+03
Si (as SiO_3^{2-})	7.07E-02	1.33E+03	2.33E+03
F^{-}	2.17E-04	2.78	4.85
Cl^{-}	7.81E-02	1.86E+03	3.25E+03
$C_6H_5O_7^{3-}$	2.02E-04	25.7	44.9
$EDTA^{4-}$	7.89E-06	1.53	2.67
$HEDTA^{3-}$	6.55E-06	1.21	2.11
glycolate^{-}	2.86E-04	14.4	25.2
acetate^{-}	2.97E-05	1.18	2.05
$oxalate^{2-}$	1.26E-11	7.45E-07	1.30E-06
DBP	1.80E-04	32.1	56.1
butanol	1.80E-04	8.95	15.6
NH_3	8.10E-02	926	1.62E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		5.44E-02 (µCi/g)	1.58 (kg)
U	2.78E-02 (M)	4.44E+03 (µg/g)	7.75E+03 (kg)
Cs	0.186 (Ci/L)	125 (µCi/g)	2.18E+05 (Ci)
Sr	0.650 (Ci/L)	437 (µCi/g)	7.63E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-SX-101			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	6.85E+05 kg	(146 kgal)	
Heat Load	0.488 kW	(1.67E+03 BTU/hr)	
Bulk Density*	1.24 (g/cc)		
Water wt%†	65.8		
TOC wt% C (wet)	0.437		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	5.09	9.45E+04	6.47E+04
Al^{3+}	0.698	1.52E+04	1.04E+04
Fe^{3+} (total Fe)	3.29E-03	148	102
Cr^{3+}	2.63E-02	1.10E+03	755
Bi^{3+}	5.53E-04	93.3	63.9
La^{3+}	1.60E-05	1.79	1.23
Hg^{2+}	3.79E-06	0.614	0.420
Zr (as $ZrO(OH)_2$)	3.83E-04	28.2	19.3
Pb^{2+}	4.15E-04	69.4	47.5
Ni^{2+}	2.83E-03	134	91.8
Sr^{2+}	5.33E-06	0.377	0.258
Mn^{4+}	1.66E-03	73.5	50.3
Ca^{2+}	1.50E-02	484	331
K^{+}	2.40E-02	757	518
OH^{-}	3.03	4.16E+04	2.85E+04
$NO3^{-}$	2.26	1.13E+05	7.74E+04
$NO2^{-}$	1.05	3.90E+04	2.67E+04
$CO3^{2-}$	0.188	9.09E+03	6.22E+03
$PO4^{3-}$	3.86E-02	2.96E+03	2.03E+03
$SO4^{2-}$	0.104	8.09E+03	5.54E+03
Si (as SiO_3^{2-})	3.46E-02	786	538
F^{-}	3.11E-02	478	327
Cl^{-}	8.97E-02	2.57E+03	1.76E+03
$C_6H_5O_7^{3-}$	1.25E-02	1.91E+03	1.31E+03
$EDTA^{4-}$	6.70E-03	1.56E+03	1.07E+03
$HEDTA^{3-}$	1.26E-02	2.78E+03	1.90E+03
glycolate^{-}	3.95E-02	2.39E+03	1.64E+03
acetate^{-}	2.67E-03	127	87.2
$oxalate^{2-}$	1.37E-05	0.972	0.666
DBP	8.25E-03	1.77E+03	1.21E+03
butanol	8.25E-03	494	338
NH_3	2.54E-02	348	238
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	35.7 (µCi/L)		0.329 (kg)
U	5.43E-03 (M)	1.04E+03 (µg/g)	714 (kg)
Cs	0.112 (Ci/L)	90.5 (µCi/g)	6.19E+04 (Ci)
Sr	5.31E-02 (Ci/L)	42.9 (µCi/g)	2.94E+04 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Single-Shell Tank 241-SX-101			
Total Inventory Estimate*			
Physical Properties			
Total Waste	2.43E+06 kg	(456 kgal)	
Heat Load	6.65 kW	(2.27E+04 BTU/hr)	
Bulk Density†	1.41 (g/cc)		
Water wt%†	55.2		
TOC wt% C (wet)†	0.126		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	5.46	8.92E+04	2.17E+05
Al^{3+}	2.09	4.01E+04	9.73E+04
Fe^{3+} (total Fe)	0.349	1.38E+04	3.36E+04
Cr^{3+}	0.381	1.41E+04	3.42E+04
Bi^{3+}	1.80E-04	26.7	64.8
La^{3+}	5.12E-06	0.505	1.23
Hg^{2+}	1.62E-06	0.231	0.560
Zr (as $ZrO(OH)_2$)	1.24E-04	8.03	19.5
Pb^{2+}	1.97E-04	29.0	70.5
Ni^{2+}	2.32E-02	967	2.35E+03
Sr^{2+}	1.71E-06	0.106	0.258
Mn^{4+}	5.49E-04	21.4	52.1
Ca^{2+}	0.104	2.95E+03	7.16E+03
K^{+}	1.93E-02	535	1.30E+03
OH^{-}	9.42	1.14E+05	2.76E+05
$NO3^{-}$	2.54	1.12E+05	2.72E+05
$NO2^{-}$	1.63	5.33E+04	1.29E+05
$CO3^{2-}$	0.161	6.85E+03	1.66E+04
$PO4^{3-}$	1.25E-02	846	2.06E+03
$SO4^{2-}$	5.37E-02	3.66E+03	8.90E+03
Si (as SiO_3^{2-})	5.91E-02	1.18E+03	2.87E+03
F^{-}	1.01E-02	137	332
Cl^{-}	8.18E-02	2.06E+03	5.00E+03
$C_6H_5O_7^{3-}$	4.14E-03	557	1.35E+03
$EDTA^{4-}$	2.15E-03	440	1.07E+03
$HEDTA^{3-}$	4.03E-03	785	1.91E+03
glycolate^{-}	1.29E-02	685	1.66E+03
acetate^{-}	8.76E-04	36.7	89.3
$oxalate^{2-}$	4.38E-06	0.274	0.666
DBP	2.76E-03	523	1.27E+03
butanol	2.76E-03	146	354
NH_3	6.32E-02	763	1.85E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		4.72E-02 (µCi/g)	1.91 (kg)
U	2.06E-02 (M)	3.48E+03 (µg/g)	8.47E+03 (kg)
Cs	0.162 (Ci/L)	115 (µCi/g)	2.80E+05 (Ci)
Sr	0.459 (Ci/L)	326 (µCi/g)	7.93E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Single-Shell Tank 241-SX-102			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	3.31E+05 kg	(59.0 kgal)	
Heat Load	1.65 kW	(5.64E+03 BTU/hr)	
Bulk Density	1.48 (g/cc)		
Void Fraction	0.799		
Water wt%	52.0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	2.37	3.68E+04	1.22E+04
Al^{3+}	4.14	7.54E+04	2.50E+04
Fe^{3+} (total Fe)	1.01	3.81E+04	1.26E+04
Cr^{3+}	0.874	3.06E+04	1.01E+04
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	5.07E-02	2.01E+03	664
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.215	5.80E+03	1.92E+03
K^{+}	8.50E-03	224	74.3
OH^{-}	18.6	2.13E+05	7.07E+04
$NO3^{-}$	3.52E-02	1.47E+03	487
$NO2^{-}$	1.95	6.06E+04	2.01E+04
$CO3^{2-}$	0.215	8.68E+03	2.87E+03
$PO4^{3-}$	0	0	0
$SO4^{2-}$	1.53E-02	992	329
Si (as SiO_3^{2-})	1.19E-02	225	74.4
F^{-}	0	0	0
Cl^{-}	3.91E-02	934	309
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0.132	1.51E+03	500
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.08E-02 (µCi/g)	5.97E-02 (kg)
U	2.16E-02 (M)	3.46E+03 (µg/g)	1.15E+03 (kg)
Cs	7.93E-02 (Ci/L)	53.4 (µCi/g)	1.77E+04 (Ci)
Sr	1.04 (Ci/L)	703 (µCi/g)	2.33E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

Rev. 3

Single-Shell Tank 241-SX-102			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	3.07E+06 kg	(484 kgal)	
Heat Load	4.48 kW	(1.53E+04 BTU/hr)	
Bulk Density*	1.67 (g/cc)		
Water wt%†	28.4		
TOC wt% C (wet)	1.03		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	14.5	1.99E+05	6.10E+05
Al^{3+}	1.93	3.11E+04	9.55E+04
Fe^{3+} (total Fe)	9.34E-03	311	956
Cr^{3+}	7.14E-02	2.22E+03	6.80E+03
Bi^{3+}	1.65E-03	206	632
La^{3+}	5.95E-05	4.93	15.1
Hg^{2+}	1.13E-05	1.36	4.16
Zr (as $ZrO(OH)_2$)	1.13E-03	61.4	188
Pb^{2+}	1.26E-03	156	477
Ni^{2+}	7.99E-03	280	860
Sr^{2+}	1.98E-05	1.04	3.18
Mn^{4+}	5.05E-03	166	509
Ca^{2+}	4.25E-02	1.02E+03	3.12E+03
K^{+}	6.98E-02	1.63E+03	5.00E+03
OH^{-}	8.50	8.63E+04	2.65E+05
$NO3^{-}$	6.31	2.34E+05	7.17E+05
$NO2^{-}$	2.88	7.91E+04	2.43E+05
$CO3^{2-}$	0.577	2.07E+04	6.34E+04
$PO4^{3-}$	0.116	6.60E+03	2.02E+04
$SO4^{2-}$	0.314	1.80E+04	5.52E+04
Si (as SiO_3^{2-})	9.97E-02	1.67E+03	5.13E+03
F^{-}	9.33E-02	1.06E+03	3.25E+03
Cl^{-}	0.257	5.44E+03	1.67E+04
$C_6H_5O_7^{3-}$	3.92E-02	4.42E+03	1.36E+04
$EDTA^{4-}$	2.19E-02	3.76E+03	1.15E+04
$HEDTA^{3-}$	4.05E-02	6.64E+03	2.04E+04
$glycolate^{-}$	0.125	5.60E+03	1.72E+04
$acetate^{-}$	1.02E-02	359	1.10E+03
$oxalate^{2-}$	5.09E-05	2.67	8.20
DBP	2.58E-02	4.11E+03	1.26E+04
butanol	2.58E-02	1.14E+03	3.51E+03
NH_3	6.99E-02	709	2.18E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	103 (µCi/L)		3.15 (kg)
U	1.53E-02 (M)	2.18E+03 (µg/g)	6.69E+03 (kg)
Cs	0.302 (Ci/L)	180 (µCi/g)	5.54E+05 (Ci)
Sr	0.153 (Ci/L)	91.5 (µCi/g)	2.81E+05 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.
†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Single-Shell Tank 241-SX-102			
Total Inventory Estimate*			
Physical Properties			
Total Waste	3.40E+06 kg	(543 kgal)	
Heat Load	6.14 kW	(2.10E+04 BTU/hr)	
Bulk Density†	1.65 (g/cc)		
Water wt%†	30.7		
TOC wt% C (wet)†	0.931		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	13.2	1.83E+05	6.22E+05
Al^{3+}	2.17	3.55E+04	1.21E+05
Fe^{3+} (total Fe)	0.118	4.00E+03	1.36E+04
Cr^{3+}	0.159	4.99E+03	1.70E+04
Bi^{3+}	1.47E-03	186	632
La^{3+}	5.30E-05	4.45	15.1
Hg^{2+}	1.01E-05	1.22	4.16
Zr (as $ZrO(OH)_2$)	1.00E-03	55.4	188
Pb^{2+}	1.12E-03	140	477
Ni^{2+}	1.26E-02	448	1.52E+03
Sr^{2+}	1.77E-05	0.936	3.18
Mn^{4+}	4.50E-03	150	509
Ca^{2+}	6.12E-02	1.48E+03	5.04E+03
K^{+}	6.32E-02	1.49E+03	5.08E+03
OH^{-}	9.60	9.86E+04	3.35E+05
$NO3^{-}$	5.63	2.11E+05	7.17E+05
$NO2^{-}$	2.78	7.73E+04	2.63E+05
$CO3^{2-}$	0.538	1.95E+04	6.63E+04
$PO4^{3-}$	0.104	5.96E+03	2.02E+04
$SO4^{2-}$	0.281	1.63E+04	5.56E+04
Si (as SiO_3^{2-})	9.02E-02	1.53E+03	5.21E+03
F^{-}	8.32E-02	955	3.25E+03
Cl^{-}	0.233	5.00E+03	1.70E+04
$C_6H_5O_7^{3-}$	3.49E-02	3.99E+03	1.36E+04
$EDTA^{4-}$	1.95E-02	3.39E+03	1.15E+04
$HEDTA^{3-}$	3.61E-02	5.99E+03	2.04E+04
$glycolate^{-}$	0.111	5.06E+03	1.72E+04
$acetate^{-}$	9.07E-03	324	1.10E+03
$oxalate^{2-}$	4.53E-05	2.41	8.20
DBP	2.30E-02	3.71E+03	1.26E+04
butanol	2.30E-02	1.03E+03	3.51E+03
NH_3	7.66E-02	787	2.68E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		5.66E-02 (µCi/g)	3.21 (kg)
U	1.60E-02 (M)	2.30E+03 (µg/g)	7.83E+03 (kg)
Cs	0.278 (Ci/L)	168 (µCi/g)	5.71E+05 (Ci)
Sr	0.250 (Ci/L)	151 (µCi/g)	5.14E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).
†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Single-Shell Tank 241-SX-103			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	6.32E+05 kg	(112 kgal)	
Heat Load	1.49 kW	(5.09E+03 BTU/hr)	
Bulk Density	1.49 (g/cc)		
Void Fraction	0.867		
Water wt%	50.4		
TOC wt% C (wet)	6.04E-03		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	8.28	1.28E+05	8.07E+04
Al^{3+}	1.61	2.92E+04	1.84E+04
Fe^{3+} (total Fe)	0.106	3.97E+03	2.51E+03
Cr^{3+}	0.285	9.95E+03	6.29E+03
Bi^{3+}	6.87E-06	0.964	0.609
La^{3+}	2.66E-11	2.48E-06	1.57E-06
Hg^{2+}	1.08E-06	0.145	9.18E-02
Zr (as $ZrO(OH)_2$)	3.34E-06	0.204	0.129
Pb^{2+}	1.71E-04	23.8	15.0
Ni^{2+}	1.83E-02	720	455
Sr^{2+}	8.11E-11	4.77E-06	3.01E-06
Mn^{4+}	5.00E-05	1.84	1.17
Ca^{2+}	8.91E-02	2.40E+03	1.51E+03
K^{+}	2.39E-02	627	396
OH^{-}	7.42	8.46E+04	5.35E+04
$NO3^{-}$	4.82	2.01E+05	1.27E+05
$NO2^{-}$	1.86	5.75E+04	3.63E+04
$CO3^{2-}$	9.40E-02	3.79E+03	2.39E+03
$PO4^{3-}$	4.44E-04	28.3	17.9
$SO4^{2-}$	4.16E-02	2.68E+03	1.69E+03
Si (as SiO_3^{2-})	0.118	2.23E+03	1.41E+03
F^{-}	3.93E-04	5.01	3.17
Cl^{-}	0.110	2.61E+03	1.65E+03
$C_6H_5O_7^{3-}$	3.66E-04	46.5	29.4
$EDTA^{4-}$	1.43E-05	2.76	1.74
$HEDTA^{3-}$	1.19E-05	2.18	1.38
glycolate^{-}	5.18E-04	26.0	16.5
acetate^{-}	5.37E-05	2.13	1.34
$oxalate^{2-}$	2.28E-11	1.34E-06	8.50E-07
DBP	3.25E-04	58.0	36.7
butanol	3.25E-04	16.2	10.2
NH_3	4.00E-02	456	288
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		8.95E-02 (µCi/g)	0.942 (kg)
U	3.28E-02 (M)	5.23E+03 (µg/g)	3.31E+03 (kg)
Cs	0.272 (Ci/L)	183 (µCi/g)	1.15E+05 (Ci)
Sr	0.332 (Ci/L)	223 (µCi/g)	1.41E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-SX-103			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	3.29E+06 kg	(540 kgal)	
Heat Load	4.52 kW	(1.55E+04 BTU/hr)	
Bulk Density*	1.61 (g/cc)		
Water wt%†	32.5		
TOC wt% C (wet)	1.01		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	13.1	1.88E+05	6.17E+05
Al^{3+}	1.71	2.87E+04	9.44E+04
Fe^{3+} (total Fe)	8.64E-03	300	987
Cr^{3+}	6.28E-02	2.03E+03	6.68E+03
Bi^{3+}	1.65E-03	215	707
La^{3+}	7.99E-05	6.90	22.7
Hg^{2+}	1.06E-05	1.32	4.33
Zr (as $ZrO(OH)_2$)	1.14E-03	64.5	212
Pb^{2+}	1.12E-03	144	475
Ni^{2+}	7.36E-03	269	884
Sr^{2+}	2.66E-05	1.45	4.77
Mn^{4+}	4.34E-03	148	487
Ca^{2+}	3.93E-02	979	3.22E+03
K^{+}	6.48E-02	1.58E+03	5.18E+03
OH^{-}	7.52	7.95E+04	2.61E+05
$NO3^{-}$	5.81	2.24E+05	7.36E+05
$NO2^{-}$	2.52	7.19E+04	2.37E+05
$CO3^{2-}$	0.528	1.97E+04	6.47E+04
$PO4^{3-}$	0.110	6.49E+03	2.13E+04
$SO4^{2-}$	0.284	1.70E+04	5.58E+04
Si (as SiO_3^{2-})	9.03E-02	1.58E+03	5.18E+03
F^{-}	9.35E-02	1.10E+03	3.63E+03
Cl^{-}	0.235	5.18E+03	1.70E+04
$C_6H_5O_7^{3-}$	3.31E-02	3.89E+03	1.28E+04
$EDTA^{4-}$	2.22E-02	3.97E+03	1.30E+04
$HEDTA^{3-}$	4.19E-02	7.14E+03	2.35E+04
glycolate^{-}	0.120	5.61E+03	1.85E+04
acetate^{-}	7.75E-03	284	935
$oxalate^{2-}$	6.84E-05	3.74	12.3
DBP	2.20E-02	3.63E+03	1.19E+04
butanol	2.20E-02	1.01E+03	3.33E+03
NH_3	6.45E-02	682	2.24E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	94.4 (µCi/L)		3.22 (kg)
U	1.39E-02 (M)	2.06E+03 (µg/g)	6.78E+03 (kg)
Cs	0.276 (Ci/L)	172 (µCi/g)	5.64E+05 (Ci)
Sr	0.137 (Ci/L)	85.0 (µCi/g)	2.79E+05 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Single-Shell Tank 241-SX-103			
Total Inventory Estimate*			
Physical Properties			
Total Waste	3.92E+06 kg	(652 kgal)	
Heat Load	6.01 kW	(2.05E+04 BTU/hr)	
Bulk Density†	1.59 (g/cc)		
Water wt%†	35.4		
TOC wt% C (wet)†	0.851		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	12.3	1.78E+05	6.98E+05
Al^{3+}	1.69	2.88E+04	1.13E+05
Fe^{3+} (total Fe)	2.54E-02	892	3.50E+03
Cr^{3+}	0.101	3.31E+03	1.30E+04
Bi^{3+}	1.37E-03	180	707
La^{3+}	6.62E-05	5.79	22.7
Hg^{2+}	8.93E-06	1.13	4.42
Zr (as $ZrO(OH)_2$)	9.43E-04	54.2	212
Pb^{2+}	9.58E-04	125	490
Ni^{2+}	9.24E-03	342	1.34E+03
Sr^{2+}	2.21E-05	1.22	4.77
Mn^{4+}	3.60E-03	125	488
Ca^{2+}	4.78E-02	1.21E+03	4.73E+03
K^{+}	5.78E-02	1.42E+03	5.58E+03
OH^{-}	7.51	8.03E+04	3.15E+05
$NO3^{-}$	5.64	2.20E+05	8.62E+05
$NO2^{-}$	2.40	6.96E+04	2.73E+05
$CO3^{2-}$	0.453	1.71E+04	6.71E+04
$PO4^{3-}$	9.11E-02	5.45E+03	2.13E+04
$SO4^{2-}$	0.243	1.47E+04	5.75E+04
Si (as SiO_3^{2-})	9.51E-02	1.68E+03	6.59E+03
F^{-}	7.75E-02	927	3.64E+03
Cl^{-}	0.213	4.76E+03	1.87E+04
$C_6H_5O_7^{3-}$	2.75E-02	3.27E+03	1.28E+04
$EDTA^{4-}$	1.83E-02	3.33E+03	1.30E+04
$HEDTA^{3-}$	3.47E-02	5.99E+03	2.35E+04
glycolate^{-}	9.98E-02	4.71E+03	1.85E+04
acetate^{-}	6.43E-03	239	936
$oxalate^{2-}$	5.66E-05	3.14	12.3
DBP	1.82E-02	3.06E+03	1.20E+04
butanol	1.82E-02	851	3.34E+03
NH_3	6.03E-02	645	2.53E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		6.37E-02 (µCi/g)	4.16 (kg)
U	1.72E-02 (M)	2.57E+03 (µg/g)	1.01E+04 (kg)
Cs	0.275 (Ci/L)	173 (µCi/g)	6.80E+05 (Ci)
Sr	0.170 (Ci/L)	107 (µCi/g)	4.20E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Single-Shell Tank 241-SX-104			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	9.51E+05 kg	(169 kgal)	
Heat Load	3.60 kW	(1.23E+04 BTU/hr)	
Bulk Density	1.49 (g/cc)		
Void Fraction	0.830		
Water wt%	51.2		
TOC wt% C (wet)	2.75E-03		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	5.06	7.82E+04	7.44E+04
Al^{3+}	2.99	5.43E+04	5.16E+04
Fe^{3+} (total Fe)	0.601	2.26E+04	2.15E+04
Cr^{3+}	0.606	2.12E+04	2.02E+04
Bi^{3+}	3.13E-06	0.440	0.418
La^{3+}	1.21E-11	1.13E-06	1.08E-06
Hg^{2+}	4.91E-07	6.63E-02	6.30E-02
Zr (as $ZrO(OH)_2$)	1.52E-06	9.31E-02	8.85E-02
Pb^{2+}	7.79E-05	10.9	10.3
Ni^{2+}	3.59E-02	1.42E+03	1.35E+03
Sr^{2+}	3.69E-11	2.17E-06	2.07E-06
Mn^{4+}	2.28E-05	0.841	0.800
Ca^{2+}	0.157	4.25E+03	4.04E+03
K^{+}	1.55E-02	408	388
OH^{-}	13.5	1.55E+05	1.47E+05
$NO3^{-}$	2.21	9.23E+04	8.77E+04
$NO2^{-}$	1.91	5.92E+04	5.63E+04
$CO3^{2-}$	0.160	6.45E+03	6.13E+03
$PO4^{3-}$	2.02E-04	12.9	12.3
$SO4^{2-}$	2.73E-02	1.76E+03	1.68E+03
Si (as SiO_3^{2-})	6.03E-02	1.14E+03	1.08E+03
F^{-}	1.79E-04	2.29	2.17
Cl^{-}	7.12E-02	1.70E+03	1.61E+03
$C_6H_5O_7^{3-}$	1.67E-04	21.2	20.2
$EDTA^{4-}$	6.49E-06	1.26	1.20
$HEDTA^{3-}$	5.39E-06	0.994	0.945
$glycolate^{-}$	2.35E-04	11.9	11.3
$acetate^{-}$	2.44E-05	0.969	0.922
$oxalate^{2-}$	1.04E-11	6.13E-07	5.83E-07
DBP	1.48E-04	26.5	25.2
butanol	1.48E-04	7.37	7.01
NH_3	9.00E-02	1.03E+03	978
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		4.67E-02 (µCi/g)	0.740 (kg)
U	2.67E-02 (M)	4.27E+03 (µg/g)	4.06E+03 (kg)
Cs	0.167 (Ci/L)	112 (µCi/g)	1.07E+05 (Ci)
Sr	0.720 (Ci/L)	484 (µCi/g)	4.60E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

Rev. 3

Single-Shell Tank 241-SX-104			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	2.69E+06 kg	(445 kgal)	
Heat Load	3.66 kW	(1.25E+04 BTU/hr)	
Bulk Density*	1.60 (g/cc)		
Water wt%†	33.8		
TOC wt% C (wet)	0.922		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	12.7	1.84E+05	4.93E+05
Al^{3+}	1.73	2.92E+04	7.85E+04
Fe^{3+} (total Fe)	8.23E-03	288	774
Cr^{3+}	6.44E-02	2.10E+03	5.64E+03
Bi^{3+}	1.35E-03	177	475
La^{3+}	3.93E-05	3.42	9.19
Hg^{2+}	9.55E-06	1.20	3.22
Zr (as $ZrO(OH)_2$)	9.30E-04	53.2	143
Pb^{2+}	1.07E-03	139	373
Ni^{2+}	7.05E-03	260	698
Sr^{2+}	1.31E-05	0.719	1.93
Mn^{4+}	4.31E-03	148	399
Ca^{2+}	3.74E-02	940	2.53E+03
K^{+}	6.02E-02	1.48E+03	3.96E+03
OH^{-}	7.56	8.06E+04	2.17E+05
$NO3^{-}$	5.57	2.16E+05	5.81E+05
$NO2^{-}$	2.58	7.45E+04	2.00E+05
$CO3^{2-}$	0.491	1.85E+04	4.96E+04
$PO4^{3-}$	9.88E-02	5.88E+03	1.58E+04
$SO4^{2-}$	0.267	1.61E+04	4.33E+04
Si (as SiO_3^{2-})	8.77E-02	1.54E+03	4.15E+03
F^{-}	7.61E-02	907	2.44E+03
Cl^{-}	0.224	4.99E+03	1.34E+04
$C_6H_5O_7^{3-}$	3.36E-02	3.99E+03	1.07E+04
$EDTA^{4-}$	1.85E-02	3.33E+03	8.96E+03
$HEDTA^{3-}$	3.43E-02	5.90E+03	1.58E+04
$glycolate^{-}$	0.109	5.11E+03	1.37E+04
$acetate^{-}$	8.35E-03	309	830
$oxalate^{2-}$	3.36E-05	1.85	4.98
DBP	2.18E-02	3.64E+03	9.78E+03
butanol	2.18E-02	1.01E+03	2.72E+03
NH_3	6.18E-02	659	1.77E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	90.3 (µCi/L)		2.53 (kg)
U	1.36E-02 (M)	2.02E+03 (µg/g)	5.44E+03 (kg)
Cs	0.270 (Ci/L)	169 (µCi/g)	4.54E+05 (Ci)
Sr	0.135 (Ci/L)	84.8 (µCi/g)	2.28E+05 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Single-Shell Tank 241-SX-104			
Total Inventory Estimate*			
Physical Properties			
Total Waste	3.64E+06 kg	(614 kgal)	
Heat Load	7.26 kW	(2.48E+04 BTU/hr)	
Bulk Density†	1.57 (g/cc)		
Water wt%†	38.4		
TOC wt% C (wet)†	0.682		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	10.6	1.56E+05	5.68E+05
Al^{3+}	2.08	3.58E+04	1.30E+05
Fe^{3+} (total Fe)	0.171	6.11E+03	2.22E+04
Cr^{3+}	0.214	7.09E+03	2.58E+04
Bi^{3+}	9.79E-04	131	476
La^{3+}	2.85E-05	2.53	9.19
Hg^{2+}	7.05E-06	0.904	3.29
Zr (as $ZrO(OH)_2$)	6.74E-04	39.3	143
Pb^{2+}	7.96E-04	105	384
Ni^{2+}	1.50E-02	563	2.05E+03
Sr^{2+}	9.49E-06	0.531	1.93
Mn^{4+}	3.13E-03	110	400
Ca^{2+}	7.04E-02	1.80E+03	6.56E+03
K^{+}	4.79E-02	1.20E+03	4.35E+03
OH^{-}	9.20	9.99E+04	3.64E+05
$NO3^{-}$	4.64	1.84E+05	6.69E+05
$NO2^{-}$	2.40	7.05E+04	2.56E+05
$CO3^{2-}$	0.400	1.53E+04	5.57E+04
$PO4^{3-}$	7.17E-02	4.35E+03	1.58E+04
$SO4^{2-}$	0.201	1.24E+04	4.49E+04
Si (as SiO_3^{2-})	8.01E-02	1.44E+03	5.23E+03
F^{-}	5.52E-02	671	2.44E+03
Cl^{-}	0.182	4.13E+03	1.50E+04
$C_6H_5O_7^{3-}$	2.44E-02	2.95E+03	1.07E+04
$EDTA^{4-}$	1.34E-02	2.46E+03	8.96E+03
$HEDTA^{3-}$	2.49E-02	4.35E+03	1.58E+04
$glycolate^{-}$	7.88E-02	3.78E+03	1.37E+04
$acetate^{-}$	6.06E-03	228	831
$oxalate^{2-}$	2.44E-05	1.37	4.98
DBP	1.59E-02	2.70E+03	9.81E+03
butanol	1.59E-02	751	2.73E+03
NH_3	6.96E-02	756	2.75E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		5.40E-02 (µCi/g)	3.27 (kg)
U	1.72E-02 (M)	2.61E+03 (µg/g)	9.50E+03 (kg)
Cs	0.241 (Ci/L)	154 (µCi/g)	5.61E+05 (Ci)
Sr	0.296 (Ci/L)	189 (µCi/g)	6.88E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Single-Shell Tank 241-SX-105			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	3.35E+05 kg	(55.0 kgal)	
Heat Load	2.61 kW	(8.92E+03 BTU/hr)	
Bulk Density	1.61 (g/cc)		
Void Fraction	0.804		
Water wt%	47.5		
TOC wt% C (wet)	3.47E-03		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	6.16	8.81E+04	2.95E+04
Al^{3+}	2.68	4.50E+04	1.50E+04
Fe^{3+} (total Fe)	0.725	2.52E+04	8.43E+03
Cr^{3+}	1.09	3.51E+04	1.18E+04
Bi^{3+}	4.25E-06	0.553	0.185
La^{3+}	1.65E-11	1.42E-06	4.76E-07
Hg^{2+}	6.68E-07	8.34E-02	2.79E-02
Zr (as $ZrO(OH)_2$)	2.06E-06	0.117	3.92E-02
Pb^{2+}	1.06E-04	13.7	4.57
Ni^{2+}	4.16E-02	1.52E+03	508
Sr^{2+}	5.02E-11	2.74E-06	9.16E-07
Mn^{4+}	3.10E-05	1.06	0.354
Ca^{2+}	0.185	4.61E+03	1.54E+03
K^{+}	1.85E-02	450	150
OH^{-}	14.9	1.57E+05	5.25E+04
$NO3^{-}$	2.99	1.15E+05	3.86E+04
$NO2^{-}$	1.84	5.27E+04	1.76E+04
$CO3^{2-}$	0.188	7.01E+03	2.35E+03
$PO4^{3-}$	2.75E-04	16.2	5.43
$SO4^{2-}$	3.19E-02	1.91E+03	638
Si (as SiO_3^{2-})	0.154	2.69E+03	900
F^{-}	2.43E-04	2.88	0.963
Cl^{-}	8.48E-02	1.87E+03	626
$C_6H_5O_7^{3-}$	2.27E-04	26.7	8.93
$EDTA^{4-}$	8.83E-06	1.58	0.530
$HEDTA^{3-}$	7.34E-06	1.25	0.419
$glycolate^{-}$	3.20E-04	15.0	5.00
$acetate^{-}$	3.32E-05	1.22	0.408
$oxalate^{2-}$	1.41E-11	7.72E-07	2.58E-07
DBP	2.01E-04	33.3	11.1
butanol	2.01E-04	9.28	3.10
NH_3	0.107	1.13E+03	379
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		5.66E-02 (µCi/g)	0.316 (kg)
U	6.88E-02 (M)	1.02E+04 (µg/g)	3.41E+03 (kg)
Cs	0.216 (Ci/L)	135 (µCi/g)	4.50E+04 (Ci)
Sr	1.71 (Ci/L)	1.07E+03 (µCi/g)	3.57E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-SX-105			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	3.85E+06 kg	(628 kgal)	
Heat Load	5.38 kW	(1.84E+04 BTU/hr)	
Bulk Density*	1.62 (g/cc)		
Water wt%†	32.1		
TOC wt% C (wet)	0.961		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	13.3	1.88E+05	7.25E+05
Al^{3+}	1.80	3.00E+04	1.15E+05
Fe^{3+} (total Fe)	8.56E-03	295	1.14E+03
Cr^{3+}	6.74E-02	2.16E+03	8.33E+03
Bi^{3+}	1.36E-03	176	676
La^{3+}	4.99E-05	4.28	16.5
Hg^{2+}	9.77E-06	1.21	4.66
Zr (as $ZrO(OH)_2$)	9.29E-04	52.3	202
Pb^{2+}	1.11E-03	142	546
Ni^{2+}	7.34E-03	266	1.02E+03
Sr^{2+}	1.66E-05	0.900	3.46
Mn^{4+}	4.60E-03	156	601
Ca^{2+}	3.89E-02	963	3.71E+03
K^{+}	6.31E-02	1.52E+03	5.86E+03
OH^{-}	7.89	8.28E+04	3.19E+05
$NO3^{-}$	5.77	2.21E+05	8.50E+05
$NO2^{-}$	2.70	7.67E+04	2.95E+05
$CO3^{2-}$	0.515	1.91E+04	7.35E+04
$PO4^{3-}$	0.102	6.00E+03	2.31E+04
$SO4^{2-}$	0.280	1.66E+04	6.38E+04
Si (as SiO_3^{2-})	9.18E-02	1.59E+03	6.13E+03
F^{-}	7.68E-02	900	3.47E+03
Cl^{-}	0.234	5.11E+03	1.97E+04
$C_6H_5O_7^{3-}$	3.61E-02	4.22E+03	1.62E+04
$EDTA^{4-}$	1.94E-02	3.45E+03	1.33E+04
$HEDTA^{3-}$	3.59E-02	6.08E+03	2.34E+04
$glycolate^{-}$	0.115	5.32E+03	2.05E+04
$acetate^{-}$	9.19E-03	335	1.29E+03
$oxalate^{2-}$	4.27E-05	2.32	8.93
DBP	2.32E-02	3.82E+03	1.47E+04
butanol	2.32E-02	1.06E+03	4.09E+03
NH_3	6.40E-02	672	2.59E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	94.2 (µCi/L)		3.73 (kg)
U	1.41E-02 (M)	2.08E+03 (µg/g)	8.00E+03 (kg)
Cs	0.278 (Ci/L)	172 (µCi/g)	6.61E+05 (Ci)
Sr	0.143 (Ci/L)	88.1 (µCi/g)	3.39E+05 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-SX-105			
Total Inventory Estimate*			
Physical Properties			
Total Waste	4.19E+06 kg	(683 kgal)	
Heat Load	7.99 kW	(2.73E+04 BTU/hr)	
Bulk Density†	1.62 (g/cc)		
Water wt%†	33.4		
TOC wt% C (wet)†	0.884		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	12.7	1.80E+05	7.55E+05
Al^{3+}	1.87	3.12E+04	1.30E+05
Fe^{3+} (total Fe)	6.63E-02	2.29E+03	9.57E+03
Cr^{3+}	0.149	4.80E+03	2.01E+04
Bi^{3+}	1.25E-03	162	677
La^{3+}	4.59E-05	3.94	16.5
Hg^{2+}	9.04E-06	1.12	4.69
Zr (as $ZrO(OH)_2$)	8.55E-04	48.2	202
Pb^{2+}	1.03E-03	132	550
Ni^{2+}	1.01E-02	366	1.53E+03
Sr^{2+}	1.53E-05	0.828	3.46
Mn^{4+}	4.24E-03	144	601
Ca^{2+}	5.07E-02	1.25E+03	5.25E+03
K^{+}	5.95E-02	1.44E+03	6.01E+03
OH^{-}	8.45	8.87E+04	3.71E+05
$NO3^{-}$	5.54	2.12E+05	8.89E+05
$NO2^{-}$	2.63	7.47E+04	3.13E+05
$CO3^{2-}$	0.489	1.81E+04	7.58E+04
$PO4^{3-}$	9.42E-02	5.53E+03	2.31E+04
$SO4^{2-}$	0.260	1.54E+04	6.45E+04
Si (as SiO_3^{2-})	9.68E-02	1.68E+03	7.03E+03
F^{-}	7.06E-02	829	3.47E+03
Cl^{-}	0.222	4.85E+03	2.03E+04
$C_6H_5O_7^{3-}$	3.33E-02	3.88E+03	1.63E+04
$EDTA^{4-}$	1.78E-02	3.17E+03	1.33E+04
$HEDTA^{3-}$	3.30E-02	5.59E+03	2.34E+04
$glycolate^{-}$	0.106	4.90E+03	2.05E+04
$acetate^{-}$	8.45E-03	308	1.29E+03
$oxalate^{2-}$	3.92E-05	2.13	8.93
DBP	2.14E-02	3.52E+03	1.47E+04
butanol	2.14E-02	979	4.10E+03
NH_3	6.75E-02	709	2.97E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		5.80E-02 (µCi/g)	4.05 (kg)
U	1.85E-02 (M)	2.73E+03 (µg/g)	1.14E+04 (kg)
Cs	0.273 (Ci/L)	169 (µCi/g)	7.06E+05 (Ci)
Sr	0.269 (Ci/L)	166 (µCi/g)	6.96E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

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Single-Shell Tank 241-SX-106			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	5.64E+03 kg	(1.00 kgal)	
Heat Load	1.19E-02 kW	(40.5 BTU/hr)	
Bulk Density	1.49 (g/cc)		
Void Fraction	0.873		
Water wt%	50.2		
TOC wt% C (wet)	6.63E-03		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	8.85	1.37E+05	771
Al^{3+}	1.36	2.47E+04	139
Fe^{3+} (total Fe)	1.70E-02	639	3.60
Cr^{3+}	0.228	7.94E+03	44.8
Bi^{3+}	7.55E-06	1.06	5.97E-03
La^{3+}	2.92E-11	2.72E-06	1.54E-08
Hg^{2+}	1.19E-06	0.159	9.00E-04
Zr (as $ZrO(OH)_2$)	3.66E-06	0.224	1.26E-03
Pb^{2+}	1.88E-04	26.1	0.147
Ni^{2+}	1.51E-02	595	3.36
Sr^{2+}	8.91E-11	5.23E-06	2.95E-08
Mn^{4+}	5.49E-05	2.02	1.14E-02
Ca^{2+}	7.68E-02	2.06E+03	11.6
K^{+}	2.54E-02	667	3.76
OH^{-}	6.32	7.21E+04	407
$NO3^{-}$	5.29	2.20E+05	1.24E+03
$NO2^{-}$	1.85	5.72E+04	323
$CO3^{2-}$	8.22E-02	3.31E+03	18.7
$PO4^{3-}$	4.87E-04	31.0	0.175
$SO4^{2-}$	4.42E-02	2.85E+03	16.1
Si (as SiO_3^{2-})	0.129	2.42E+03	13.7
F^{-}	4.32E-04	5.50	3.11E-02
Cl^{-}	0.117	2.77E+03	15.6
$C_6H_5O_7^{3-}$	4.02E-04	51.0	0.288
$EDTA^{4-}$	1.57E-05	3.03	1.71E-02
$HEDTA^{3-}$	1.30E-05	2.39	1.35E-02
$glycolate^{-}$	5.68E-04	28.6	0.161
$acetate^{-}$	5.89E-05	2.33	1.32E-02
$oxalate^{2-}$	2.50E-11	1.48E-06	8.33E-09
DBP	3.57E-04	63.7	0.359
butanol	3.57E-04	17.7	0.100
NH_3	3.10E-02	354	2.00
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		9.72E-02 (µCi/g)	9.14E-03 (kg)
U	3.39E-02 (M)	5.41E+03 (µg/g)	30.5 (kg)
Cs	0.291 (Ci/L)	195 (µCi/g)	1.10E+03 (Ci)
Sr	0.263 (Ci/L)	176 (µCi/g)	994 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-SX-106			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	3.11E+06 kg	(537 kgal)	
Heat Load	3.93 kW	(1.34E+04 BTU/hr)	
Bulk Density*	1.53 (g/cc)		
Water wt%†	38.2		
TOC wt% C (wet)	0.813		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	11.4	1.71E+05	5.31E+05
Al^{3+}	1.52	2.68E+04	8.35E+04
Fe^{3+} (total Fe)	7.41E-03	270	841
Cr^{3+}	5.67E-02	1.92E+03	5.99E+03
Bi^{3+}	1.36E-03	186	578
La^{3+}	4.48E-05	4.06	12.7
Hg^{2+}	8.92E-06	1.17	3.64
Zr (as $ZrO(OH)_2$)	9.39E-04	55.9	174
Pb^{2+}	9.57E-04	129	403
Ni^{2+}	6.35E-03	243	758
Sr^{2+}	1.49E-05	0.855	2.66
Mn^{4+}	3.85E-03	138	430
Ca^{2+}	3.37E-02	881	2.74E+03
K^{+}	5.46E-02	1.39E+03	4.34E+03
OH^{-}	6.59	7.31E+04	2.28E+05
$NO3^{-}$	5.13	2.08E+05	6.46E+05
$NO2^{-}$	2.27	6.81E+04	2.12E+05
$CO3^{2-}$	0.433	1.70E+04	5.28E+04
$PO4^{3-}$	9.10E-02	5.64E+03	1.76E+04
$SO4^{2-}$	0.239	1.50E+04	4.66E+04
Si (as SiO_3^{2-})	7.72E-02	1.42E+03	4.41E+03
F^{-}	7.66E-02	950	2.96E+03
Cl^{-}	0.201	4.66E+03	1.45E+04
$C_6H_5O_7^{3-}$	2.79E-02	3.45E+03	1.07E+04
$EDTA^{4-}$	1.57E-02	2.95E+03	9.18E+03
$HEDTA^{3-}$	2.94E-02	5.27E+03	1.64E+04
$glycolate^{-}$	9.10E-02	4.46E+03	1.39E+04
$acetate^{-}$	6.18E-03	238	742
$oxalate^{2-}$	3.83E-05	2.20	6.86
DBP	1.86E-02	3.24E+03	1.01E+04
butanol	1.86E-02	902	2.81E+03
NH_3	5.66E-02	628	1.96E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	80.3 (µCi/L)		2.72 (kg)
U	1.21E-02 (M)	1.88E+03 (µg/g)	5.84E+03 (kg)
Cs	0.245 (Ci/L)	160 (µCi/g)	4.98E+05 (Ci)
Sr	0.117 (Ci/L)	76.5 (µCi/g)	2.38E+05 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-SX-106			
Total Inventory Estimate*			
Physical Properties			
Total Waste	3.12E+06 kg	(538 kgal)	
Heat Load	3.95 kW	(1.35E+04 BTU/hr)	
Bulk Density†	1.53 (g/cc)		
Water wt%†	38.2		
TOC wt% C (wet)†	0.811		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	11.4	1.71E+05	5.32E+05
Al^{3+}	1.52	2.68E+04	8.36E+04
Fe^{3+} (total Fe)	7.42E-03	271	844
Cr^{3+}	5.70E-02	1.93E+03	6.03E+03
Bi^{3+}	1.36E-03	185	578
La^{3+}	4.47E-05	4.06	12.7
Hg^{2+}	8.90E-06	1.17	3.64
Zr (as $ZrO(OH)_2$)	9.37E-04	55.8	174
Pb^{2+}	9.56E-04	129	403
Ni^{2+}	6.37E-03	244	761
Sr^{2+}	1.49E-05	0.853	2.66
Mn^{4+}	3.84E-03	138	430
Ca^{2+}	3.37E-02	883	2.75E+03
K^{+}	5.45E-02	1.39E+03	4.34E+03
OH^{-}	6.59	7.31E+04	2.28E+05
$NO3^{-}$	5.13	2.08E+05	6.48E+05
$NO2^{-}$	2.27	6.81E+04	2.12E+05
$CO3^{2-}$	0.432	1.69E+04	5.28E+04
$PO4^{3-}$	9.08E-02	5.63E+03	1.76E+04
$SO4^{2-}$	0.238	1.49E+04	4.66E+04
Si (as SiO_3^{2-})	7.73E-02	1.42E+03	4.42E+03
F^{-}	7.64E-02	949	2.96E+03
Cl^{-}	0.201	4.65E+03	1.45E+04
$C_6H_5O_7^{3-}$	2.79E-02	3.44E+03	1.07E+04
$EDTA^{4-}$	1.57E-02	2.95E+03	9.18E+03
$HEDTA^{3-}$	2.94E-02	5.26E+03	1.64E+04
$glycolate^{-}$	9.08E-02	4.45E+03	1.39E+04
$acetate^{-}$	6.17E-03	238	742
$oxalate^{2-}$	3.83E-05	2.20	6.86
DBP	1.86E-02	3.23E+03	1.01E+04
butanol	1.86E-02	901	2.81E+03
NH_3	5.65E-02	628	1.96E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		5.25E-02 (µCi/g)	2.73 (kg)
U	1.21E-02 (M)	1.88E+03 (µg/g)	5.87E+03 (kg)
Cs	0.245 (Ci/L)	160 (µCi/g)	4.99E+05 (Ci)
Sr	0.117 (Ci/L)	76.7 (µCi/g)	2.39E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Single-Shell Tank 241-SX-107			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	6.51E+05 kg	(104 kgal)	
Heat Load	6.83 kW	(2.33E+04 BTU/hr)	
Bulk Density	1.65 (g/cc)		
Void Fraction	0.759		
Water wt%	46.9		
TOC wt% C (wet)	9.78E-04		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	3.62	5.04E+04	3.28E+04
Al^{3+}	3.83	6.26E+04	4.07E+04
Fe^{3+} (total Fe)	1.24	4.18E+04	2.72E+04
Cr^{3+}	1.58	4.98E+04	3.24E+04
Bi^{3+}	1.23E-06	0.156	0.101
La^{3+}	4.78E-12	4.02E-07	2.61E-07
Hg^{2+}	1.94E-07	2.35E-02	1.53E-02
Zr (as $ZrO(OH)_2$)	5.99E-07	3.30E-02	2.15E-02
Pb^{2+}	3.07E-05	3.85	2.51
Ni^{2+}	6.03E-02	2.14E+03	1.39E+03
Sr^{2+}	1.46E-11	7.72E-07	5.02E-07
Mn^{4+}	8.98E-06	0.299	0.194
Ca^{2+}	0.259	6.29E+03	4.09E+03
K^{+}	1.19E-02	282	183
OH^{-}	21.1	2.17E+05	1.41E+05
$NO3^{-}$	0.886	3.32E+04	2.16E+04
$NO2^{-}$	1.86	5.17E+04	3.36E+04
$CO3^{2-}$	0.260	9.45E+03	6.15E+03
$PO4^{3-}$	7.96E-05	4.57	2.98
$SO4^{2-}$	2.05E-02	1.19E+03	775
Si (as SiO_3^{2-})	0.138	2.35E+03	1.53E+03
F^{-}	7.06E-05	0.812	0.528
Cl^{-}	5.47E-02	1.17E+03	763
$C_6H_5O_7^{3-}$	6.58E-05	7.52	4.89
$EDTA^{4-}$	2.56E-06	0.447	0.291
$HEDTA^{3-}$	2.13E-06	0.353	0.230
$glycolate^{-}$	9.29E-05	4.22	2.74
$acetate^{-}$	9.64E-06	0.344	0.224
$oxalate^{2-}$	4.09E-12	2.18E-07	1.42E-07
DBP	5.83E-05	9.39	6.11
butanol	5.83E-05	2.62	1.70
NH_3	0.161	1.65E+03	1.07E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		2.44E-02 (µCi/g)	0.265 (kg)
U	8.05E-02 (M)	1.16E+04 (µg/g)	7.54E+03 (kg)
Cs	0.139 (Ci/L)	83.9 (µCi/g)	5.46E+04 (Ci)
Sr	2.48 (Ci/L)	1.50E+03 (µCi/g)	9.77E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-SX-107			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	0 (g/cc)		
Water wt%†	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-SX-107			
Total Inventory Estimate*			
Physical Properties			
Total Waste	6.51E+05 kg	(104 kgal)	
Heat Load	6.83 kW	(2.33E+04 BTU/hr)	
Bulk Density†	1.65 (g/cc)		
Water wt%†	46.9		
TOC wt% C (wet)†	9.78E-04		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	3.62	5.04E+04	3.28E+04
Al^{3+}	3.83	6.26E+04	4.07E+04
Fe^{3+} (total Fe)	1.24	4.18E+04	2.72E+04
Cr^{3+}	1.58	4.98E+04	3.24E+04
Bi^{3+}	1.23E-06	0.156	0.101
La^{3+}	4.78E-12	4.02E-07	2.61E-07
Hg^{2+}	1.94E-07	2.35E-02	1.53E-02
Zr (as $ZrO(OH)_2$)	5.99E-07	3.30E-02	2.15E-02
Pb^{2+}	3.07E-05	3.85	2.51
Ni^{2+}	6.03E-02	2.14E+03	1.39E+03
Sr^{2+}	1.46E-11	7.72E-07	5.02E-07
Mn^{4+}	8.98E-06	0.299	0.194
Ca^{2+}	0.259	6.29E+03	4.09E+03
K^{+}	1.19E-02	282	183
OH^{-}	21.1	2.17E+05	1.41E+05
$NO3^{-}$	0.886	3.32E+04	2.16E+04
$NO2^{-}$	1.86	5.17E+04	3.36E+04
$CO3^{2-}$	0.260	9.45E+03	6.15E+03
$PO4^{3-}$	7.96E-05	4.57	2.98
$SO4^{2-}$	2.05E-02	1.19E+03	775
Si (as SiO_3^{2-})	0.138	2.35E+03	1.53E+03
F^{-}	7.06E-05	0.812	0.528
Cl^{-}	5.47E-02	1.17E+03	763
$C_6H_5O_7^{3-}$	6.58E-05	7.52	4.89
$EDTA^{4-}$	2.56E-06	0.447	0.291
$HEDTA^{3-}$	2.13E-06	0.353	0.230
$glycolate^{-}$	9.29E-05	4.22	2.74
$acetate^{-}$	9.64E-06	0.344	0.224
$oxalate^{2-}$	4.09E-12	2.18E-07	1.42E-07
DBP	5.83E-05	9.39	6.11
butanol	5.83E-05	2.62	1.70
NH_3	0.161	1.65E+03	1.07E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		2.44E-02 (µCi/g)	0.265 (kg)
U	8.05E-02 (M)	1.16E+04 (µg/g)	7.54E+03 (kg)
Cs	0.139 (Ci/L)	83.9 (µCi/g)	5.46E+04 (Ci)
Sr	2.48 (Ci/L)	1.50E+03 (µCi/g)	9.77E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Single-Shell Tank 241-SX-108			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	5.38E+05 kg	(87.0 kgal)	
Heat Load	5.58 kW	(1.91E+04 BTU/hr)	
Bulk Density	1.63 (g/cc)		
Void Fraction	0.752		
Water wt%	47.6		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	2.54	3.57E+04	1.92E+04
Al^{3+}	4.27	7.06E+04	3.80E+04
Fe^{3+} (total Fe)	1.36	4.65E+04	2.50E+04
Cr^{3+}	1.60	5.10E+04	2.74E+04
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	6.45E-02	2.32E+03	1.25E+03
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.275	6.75E+03	3.63E+03
K^{+}	9.07E-03	217	117
OH^{-}	22.6	2.35E+05	1.27E+05
$NO3^{-}$	2.79E-02	1.06E+03	570
$NO2^{-}$	1.88	5.30E+04	2.85E+04
$CO3^{2-}$	0.275	1.01E+04	5.43E+03
$PO4^{3-}$	0	0	0
$SO4^{2-}$	1.57E-02	925	498
Si (as SiO_3^{2-})	0.108	1.86E+03	1.00E+03
F^{-}	0	0	0
Cl^{-}	4.17E-02	905	487
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0.172	1.79E+03	965
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.16E-02 (µCi/g)	0.104 (kg)
U	7.26E-02 (M)	1.06E+04 (µg/g)	5.69E+03 (kg)
Cs	0.101 (Ci/L)	62.1 (µCi/g)	3.34E+04 (Ci)
Sr	2.45 (Ci/L)	1.50E+03 (µCi/g)	8.06E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-SX-108			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	0 (g/cc)		
Water wt%†	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Single-Shell Tank 241-SX-108			
Total Inventory Estimate*			
Physical Properties			
Total Waste	5.38E+05 kg	(87.0 kgal)	
Heat Load	5.58 kW	(1.91E+04 BTU/hr)	
Bulk Density†	1.63 (g/cc)		
Water wt%†	47.6		
TOC wt% C (wet)†	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	2.54	3.57E+04	1.92E+04
Al^{3+}	4.27	7.06E+04	3.80E+04
Fe^{3+} (total Fe)	1.36	4.65E+04	2.50E+04
Cr^{3+}	1.60	5.10E+04	2.74E+04
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	6.45E-02	2.32E+03	1.25E+03
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.275	6.75E+03	3.63E+03
K^{+}	9.07E-03	217	117
OH^{-}	22.6	2.35E+05	1.27E+05
$NO3^{-}$	2.79E-02	1.06E+03	570
$NO2^{-}$	1.88	5.30E+04	2.85E+04
$CO3^{2-}$	0.275	1.01E+04	5.43E+03
$PO4^{3-}$	0	0	0
$SO4^{2-}$	1.57E-02	925	498
Si (as SiO_3^{2-})	0.108	1.86E+03	1.00E+03
F^{-}	0	0	0
Cl^{-}	4.17E-02	905	487
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0.172	1.79E+03	965
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.16E-02 (µCi/g)	0.104 (kg)
U	7.26E-02 (M)	1.06E+04 (µg/g)	5.69E+03 (kg)
Cs	0.101 (Ci/L)	62.1 (µCi/g)	3.34E+04 (Ci)
Sr	2.45 (Ci/L)	1.50E+03 (µCi/g)	8.06E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

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Single-Shell Tank 241-SX-109			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	1.45E+06 kg	(250 kgal)	
Heat Load	6.73 kW	(2.30E+04 BTU/hr)	
Bulk Density	1.54 (g/cc)		
Void Fraction	0.841		
Water wt%	49.2		
TOC wt% C (wet)	4.89E-03		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	7.35	1.10E+05	1.60E+05
Al^{3+}	2.07	3.64E+04	5.29E+04
Fe^{3+} (total Fe)	0.363	1.32E+04	1.92E+04
Cr^{3+}	0.608	2.06E+04	2.99E+04
Bi^{3+}	5.74E-06	0.781	1.13
La^{3+}	2.22E-11	2.01E-06	2.92E-06
Hg^{2+}	9.01E-07	0.118	0.171
Zr (as $ZrO(OH)_2$)	2.78E-06	0.165	0.240
Pb^{2+}	1.43E-04	19.3	28.0
Ni^{2+}	2.79E-02	1.07E+03	1.55E+03
Sr^{2+}	6.77E-11	3.86E-06	5.61E-06
Mn^{4+}	4.17E-05	1.49	2.17
Ca^{2+}	0.129	3.36E+03	4.88E+03
K^{+}	2.15E-02	548	797
OH^{-}	10.5	1.16E+05	1.69E+05
$NO3^{-}$	4.03	1.63E+05	2.36E+05
$NO2^{-}$	1.86	5.56E+04	8.07E+04
$CO3^{2-}$	0.133	5.18E+03	7.53E+03
$PO4^{3-}$	3.70E-04	22.9	33.3
$SO4^{2-}$	3.74E-02	2.34E+03	3.40E+03
Si (as SiO_3^{2-})	0.130	2.39E+03	3.47E+03
F^{-}	3.28E-04	4.06	5.90
Cl^{-}	9.88E-02	2.28E+03	3.31E+03
$C_6H_5O_7^{3-}$	3.06E-04	37.6	54.7
$EDTA^{4-}$	1.19E-05	2.23	3.25
$HEDTA^{3-}$	9.89E-06	1.77	2.57
$glycolate^{-}$	4.32E-04	21.1	30.7
$acetate^{-}$	4.48E-05	1.72	2.50
$oxalate^{2-}$	1.90E-11	1.09E-06	1.58E-06
DBP	2.71E-04	47.0	68.3
butanol	2.71E-04	13.1	19.0
NH_3	6.78E-02	750	1.09E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		7.48E-02 (µCi/g)	1.81 (kg)
U	4.67E-02 (M)	7.24E+03 (µg/g)	1.05E+04 (kg)
Cs	0.247 (Ci/L)	161 (µCi/g)	2.34E+05 (Ci)
Sr	0.884 (Ci/L)	576 (µCi/g)	8.37E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-SX-109			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	0 (g/cc)		
Water wt%†	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-SX-109			
Total Inventory Estimate*			
Physical Properties			
Total Waste	1.45E+06 kg	(250 kgal)	
Heat Load	6.73 kW	(2.30E+04 BTU/hr)	
Bulk Density†	1.54 (g/cc)		
Water wt%†	49.2		
TOC wt% C (wet)†	4.89E-03		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	7.35	1.10E+05	1.60E+05
Al^{3+}	2.07	3.64E+04	5.29E+04
Fe^{3+} (total Fe)	0.363	1.32E+04	1.92E+04
Cr^{3+}	0.608	2.06E+04	2.99E+04
Bi^{3+}	5.74E-06	0.781	1.13
La^{3+}	2.22E-11	2.01E-06	2.92E-06
Hg^{2+}	9.01E-07	0.118	0.171
Zr (as $ZrO(OH)_2$)	2.78E-06	0.165	0.240
Pb^{2+}	1.43E-04	19.3	28.0
Ni^{2+}	2.79E-02	1.07E+03	1.55E+03
Sr^{2+}	6.77E-11	3.86E-06	5.61E-06
Mn^{4+}	4.17E-05	1.49	2.17
Ca^{2+}	0.129	3.36E+03	4.88E+03
K^{+}	2.15E-02	548	797
OH^{-}	10.5	1.16E+05	1.69E+05
$NO3^{-}$	4.03	1.63E+05	2.36E+05
$NO2^{-}$	1.86	5.56E+04	8.07E+04
$CO3^{2-}$	0.133	5.18E+03	7.53E+03
$PO4^{3-}$	3.70E-04	22.9	33.3
$SO4^{2-}$	3.74E-02	2.34E+03	3.40E+03
Si (as SiO_3^{2-})	0.130	2.39E+03	3.47E+03
F^{-}	3.28E-04	4.06	5.90
Cl^{-}	9.88E-02	2.28E+03	3.31E+03
$C_6H_5O_7^{3-}$	3.06E-04	37.6	54.7
$EDTA^{4-}$	1.19E-05	2.23	3.25
$HEDTA^{3-}$	9.89E-06	1.77	2.57
$glycolate^{-}$	4.32E-04	21.1	30.7
$acetate^{-}$	4.48E-05	1.72	2.50
$oxalate^{2-}$	1.90E-11	1.09E-06	1.58E-06
DBP	2.71E-04	47.0	68.3
butanol	2.71E-04	13.1	19.0
NH_3	6.78E-02	750	1.09E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		7.48E-02 (µCi/g)	1.81 (kg)
U	4.67E-02 (M)	7.24E+03 (µg/g)	1.05E+04 (kg)
Cs	0.247 (Ci/L)	161 (µCi/g)	2.34E+05 (Ci)
Sr	0.884 (Ci/L)	576 (µCi/g)	8.37E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

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Single-Shell Tank 241-SX-110			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	4.37E+05 kg	(62.0 kgal)	
Heat Load	6.85 kW	(2.34E+04 BTU/hr)	
Bulk Density	1.86 (g/cc)		
Void Fraction	0.719		
Water wt%	41.7		
TOC wt% C (wet)	2.57E-03		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	5.93	7.32E+04	3.20E+04
Al^{3+}	3.12	4.52E+04	1.98E+04
Fe^{3+} (total Fe)	1.39	4.18E+04	1.83E+04
Cr^{3+}	2.38	6.64E+04	2.90E+04
Bi^{3+}	3.65E-06	0.410	0.179
La^{3+}	1.41E-11	1.05E-06	4.61E-07
Hg^{2+}	5.74E-07	6.18E-02	2.70E-02
Zr (as $ZrO(OH)_2$)	1.77E-06	8.68E-02	3.79E-02
Pb^{2+}	9.10E-05	10.1	4.42
Ni^{2+}	6.80E-02	2.14E+03	937
Sr^{2+}	4.31E-11	2.03E-06	8.86E-07
Mn^{4+}	2.66E-05	0.784	0.343
Ca^{2+}	0.299	6.43E+03	2.81E+03
K^{+}	1.81E-02	380	166
OH^{-}	22.7	2.07E+05	9.04E+04
$NO3^{-}$	2.56	8.52E+04	3.72E+04
$NO2^{-}$	1.73	4.26E+04	1.86E+04
$CO3^{2-}$	0.301	9.71E+03	4.24E+03
$PO4^{3-}$	2.36E-04	12.0	5.25
$SO4^{2-}$	3.03E-02	1.56E+03	684
Si (as SiO_3^{2-})	0.309	4.65E+03	2.03E+03
F^{-}	2.09E-04	2.13	0.932
Cl^{-}	8.31E-02	1.58E+03	691
$C_6H_5O_7^{3-}$	1.95E-04	19.8	8.64
$EDTA^{4-}$	7.58E-06	1.17	0.513
$HEDTA^{3-}$	6.30E-06	0.927	0.405
glycolate^{-}	2.75E-04	11.1	4.84
acetate^{-}	2.85E-05	0.903	0.395
$oxalate^{2-}$	1.21E-11	5.72E-07	2.50E-07
DBP	1.73E-04	24.7	10.8
butanol	1.73E-04	6.87	3.00
NH_3	0.185	1.68E+03	736
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		4.60E-02 (µCi/g)	0.335 (kg)
U	0.155 (M)	1.98E+04 (µg/g)	8.65E+03 (kg)
Cs	0.237 (Ci/L)	127 (µCi/g)	5.56E+04 (Ci)
Sr	4.17 (Ci/L)	2.24E+03 (µCi/g)	9.78E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-SX-110			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	0 (g/cc)		
Water wt%†	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
glycolate^{-}	0	0	0
acetate^{-}	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-SX-110			
Total Inventory Estimate*			
Physical Properties			
Total Waste	4.37E+05 kg	(62.0 kgal)	
Heat Load	6.85 kW	(2.34E+04 BTU/hr)	
Bulk Density†	1.86 (g/cc)		
Water wt%†	41.7		
TOC wt% C (wet)†	2.57E-03		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	5.93	7.32E+04	3.20E+04
Al^{3+}	3.12	4.52E+04	1.98E+04
Fe^{3+} (total Fe)	1.39	4.18E+04	1.83E+04
Cr^{3+}	2.38	6.64E+04	2.90E+04
Bi^{3+}	3.65E-06	0.410	0.179
La^{3+}	1.41E-11	1.05E-06	4.61E-07
Hg^{2+}	5.74E-07	6.18E-02	2.70E-02
Zr (as $ZrO(OH)_2$)	1.77E-06	8.68E-02	3.79E-02
Pb^{2+}	9.10E-05	10.1	4.42
Ni^{2+}	6.80E-02	2.14E+03	937
Sr^{2+}	4.31E-11	2.03E-06	8.86E-07
Mn^{4+}	2.66E-05	0.784	0.343
Ca^{2+}	0.299	6.43E+03	2.81E+03
K^{+}	1.81E-02	380	166
OH^{-}	22.7	2.07E+05	9.04E+04
$NO3^{-}$	2.56	8.52E+04	3.72E+04
$NO2^{-}$	1.73	4.26E+04	1.86E+04
$CO3^{2-}$	0.301	9.71E+03	4.24E+03
$PO4^{3-}$	2.36E-04	12.0	5.25
$SO4^{2-}$	3.03E-02	1.56E+03	684
Si (as SiO_3^{2-})	0.309	4.65E+03	2.03E+03
F^{-}	2.09E-04	2.13	0.932
Cl^{-}	8.31E-02	1.58E+03	691
$C_6H_5O_7^{3-}$	1.95E-04	19.8	8.64
$EDTA^{4-}$	7.58E-06	1.17	0.513
$HEDTA^{3-}$	6.30E-06	0.927	0.405
glycolate^{-}	2.75E-04	11.1	4.84
acetate^{-}	2.85E-05	0.903	0.395
$oxalate^{2-}$	1.21E-11	5.72E-07	2.50E-07
DBP	1.73E-04	24.7	10.8
butanol	1.73E-04	6.87	3.00
NH_3	0.185	1.68E+03	736
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		4.60E-02 (µCi/g)	0.335 (kg)
U	0.155 (M)	1.98E+04 (µg/g)	8.65E+03 (kg)
Cs	0.237 (Ci/L)	127 (µCi/g)	5.56E+04 (Ci)
Sr	4.17 (Ci/L)	2.24E+03 (µCi/g)	9.78E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Single-Shell Tank 241-SX-111			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	8.16E+05 kg	(125 kgal)	
Heat Load	9.99 kW	(3.41E+04 BTU/hr)	
Bulk Density	1.72 (g/cc)		
Void Fraction	0.750		
Water wt%	44.9		
TOC wt% C (wet)	1.93E-03		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.82	6.42E+04	5.24E+04
Al^{3+}	3.42	5.34E+04	4.36E+04
Fe^{3+} (total Fe)	1.23	3.97E+04	3.24E+04
Cr^{3+}	1.81	5.46E+04	4.46E+04
Bi^{3+}	2.54E-06	0.307	0.251
La^{3+}	9.82E-12	7.91E-07	6.45E-07
Hg^{2+}	3.98E-07	4.63E-02	3.78E-02
Zr (as $ZrO(OH)_2$)	1.23E-06	6.51E-02	5.31E-02
Pb^{2+}	6.32E-05	7.59	6.19
Ni^{2+}	6.07E-02	2.07E+03	1.69E+03
Sr^{2+}	2.99E-11	1.52E-06	1.24E-06
Mn^{4+}	1.85E-05	0.588	0.480
Ca^{2+}	0.264	6.14E+03	5.01E+03
K^{+}	1.51E-02	342	279
OH^{-}	20.8	2.05E+05	1.68E+05
$NO3^{-}$	1.79	6.43E+04	5.25E+04
$NO2^{-}$	1.81	4.82E+04	3.93E+04
$CO3^{2-}$	0.266	9.25E+03	7.55E+03
$PO4^{3-}$	1.64E-04	9.01	7.35
$SO4^{2-}$	2.57E-02	1.43E+03	1.17E+03
Si (as SiO_3^{2-})	0.204	3.32E+03	2.71E+03
F^{-}	1.45E-04	1.60	1.30
Cl^{-}	6.93E-02	1.42E+03	1.16E+03
$C_6H_5O_7^{3-}$	1.35E-04	14.8	12.1
$EDTA^{4-}$	5.27E-06	0.880	0.718
$HEDTA^{3-}$	4.37E-06	0.695	0.567
$glycolate^{-}$	1.91E-04	8.30	6.78
$acetate^{-}$	1.98E-05	0.678	0.553
$oxalate^{2-}$	8.40E-12	4.29E-07	3.50E-07
DBP	1.20E-04	18.5	15.1
butanol	1.20E-04	5.15	4.20
NH_3	0.162	1.60E+03	1.31E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		3.71E-02 (µCi/g)	0.505 (kg)
U	0.107 (M)	1.47E+04 (µg/g)	1.20E+04 (kg)
Cs	0.186 (Ci/L)	108 (µCi/g)	8.78E+04 (Ci)
Sr	3.01 (Ci/L)	1.74E+03 (µCi/g)	1.42E+06 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-SX-111			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	0 (g/cc)		
Water wt%†	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-SX-111			
Total Inventory Estimate*			
Physical Properties			
Total Waste	8.16E+05 kg	(125 kgal)	
Heat Load	9.99 kW	(3.41E+04 BTU/hr)	
Bulk Density†	1.72 (g/cc)		
Water wt%†	44.9		
TOC wt% C (wet)†	1.93E-03		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.82	6.42E+04	5.24E+04
Al^{3+}	3.42	5.34E+04	4.36E+04
Fe^{3+} (total Fe)	1.23	3.97E+04	3.24E+04
Cr^{3+}	1.81	5.46E+04	4.46E+04
Bi^{3+}	2.54E-06	0.307	0.251
La^{3+}	9.82E-12	7.91E-07	6.45E-07
Hg^{2+}	3.98E-07	4.63E-02	3.78E-02
Zr (as $ZrO(OH)_2$)	1.23E-06	6.51E-02	5.31E-02
Pb^{2+}	6.32E-05	7.59	6.19
Ni^{2+}	6.07E-02	2.07E+03	1.69E+03
Sr^{2+}	2.99E-11	1.52E-06	1.24E-06
Mn^{4+}	1.85E-05	0.588	0.480
Ca^{2+}	0.264	6.14E+03	5.01E+03
K^{+}	1.51E-02	342	279
OH^{-}	20.8	2.05E+05	1.68E+05
$NO3^{-}$	1.79	6.43E+04	5.25E+04
$NO2^{-}$	1.81	4.82E+04	3.93E+04
$CO3^{2-}$	0.266	9.25E+03	7.55E+03
$PO4^{3-}$	1.64E-04	9.01	7.35
$SO4^{2-}$	2.57E-02	1.43E+03	1.17E+03
Si (as SiO_3^{2-})	0.204	3.32E+03	2.71E+03
F^{-}	1.45E-04	1.60	1.30
Cl^{-}	6.93E-02	1.42E+03	1.16E+03
$C_6H_5O_7^{3-}$	1.35E-04	14.8	12.1
$EDTA^{4-}$	5.27E-06	0.880	0.718
$HEDTA^{3-}$	4.37E-06	0.695	0.567
$glycolate^{-}$	1.91E-04	8.30	6.78
$acetate^{-}$	1.98E-05	0.678	0.553
$oxalate^{2-}$	8.40E-12	4.29E-07	3.50E-07
DBP	1.20E-04	18.5	15.1
butanol	1.20E-04	5.15	4.20
NH_3	0.162	1.60E+03	1.31E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		3.71E-02 (µCi/g)	0.505 (kg)
U	0.107 (M)	1.47E+04 (µg/g)	1.20E+04 (kg)
Cs	0.186 (Ci/L)	108 (µCi/g)	8.78E+04 (Ci)
Sr	3.01 (Ci/L)	1.74E+03 (µCi/g)	1.42E+06 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

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Single-Shell Tank 241-SX-112			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	5.86E+05 kg	(92.0 kgal)	
Heat Load	6.57 kW	(2.25E+04 BTU/hr)	
Bulk Density	1.68 (g/cc)		
Void Fraction	0.756		
Water wt%	46.0		
TOC wt% C (wet)	1.47E-03		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.21	5.76E+04	3.37E+04
Al^{3+}	3.62	5.80E+04	3.40E+04
Fe^{3+} (total Fe)	1.22	4.04E+04	2.37E+04
Cr^{3+}	1.67	5.16E+04	3.02E+04
Bi^{3+}	1.89E-06	0.234	0.137
La^{3+}	7.31E-12	6.03E-07	3.53E-07
Hg^{2+}	2.96E-07	3.53E-02	2.07E-02
Zr (as $ZrO(OH)_2$)	9.16E-07	4.96E-02	2.91E-02
Pb^{2+}	4.70E-05	5.78	3.39
Ni^{2+}	6.00E-02	2.09E+03	1.23E+03
Sr^{2+}	2.23E-11	1.16E-06	6.79E-07
Mn^{4+}	1.37E-05	0.448	0.263
Ca^{2+}	0.260	6.18E+03	3.62E+03
K^{+}	1.35E-02	313	184
OH^{-}	20.8	2.10E+05	1.23E+05
$NO3^{-}$	1.34	4.93E+04	2.89E+04
$NO2^{-}$	1.83	5.01E+04	2.94E+04
$CO3^{2-}$	0.261	9.30E+03	5.45E+03
$PO4^{3-}$	1.22E-04	6.87	4.03
$SO4^{2-}$	2.31E-02	1.32E+03	772
Si (as SiO_3^{2-})	0.168	2.80E+03	1.64E+03
F^{-}	1.08E-04	1.22	0.714
Cl^{-}	6.19E-02	1.30E+03	764
$C_6H_5O_7^{3-}$	1.01E-04	11.3	6.62
$EDTA^{4-}$	3.92E-06	0.671	0.393
$HEDTA^{3-}$	3.25E-06	0.530	0.311
glycolate^{-}	1.42E-04	6.33	3.71
acetate^{-}	1.47E-05	0.517	0.303
oxalate^{2-}	6.25E-12	3.27E-07	1.92E-07
DBP	8.92E-05	14.1	8.27
butanol	8.92E-05	3.93	2.30
NH_3	0.160	1.62E+03	947
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		3.10E-02 (µCi/g)	0.302 (kg)
U	9.17E-02 (M)	1.30E+04 (µg/g)	7.60E+03 (kg)
Cs	0.161 (Ci/L)	95.9 (µCi/g)	5.62E+04 (Ci)
Sr	2.69 (Ci/L)	1.60E+03 (µCi/g)	9.37E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-SX-112			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	0 (g/cc)		
Water wt%†	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
glycolate^{-}	0	0	0
acetate^{-}	0	0	0
oxalate^{2-}	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-SX-112			
Total Inventory Estimate*			
Physical Properties			
Total Waste	5.86E+05 kg	(92.0 kgal)	
Heat Load	6.57 kW	(2.25E+04 BTU/hr)	
Bulk Density†	1.68 (g/cc)		
Water wt%†	46.0		
TOC wt% C (wet)†	1.47E-03		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.21	5.76E+04	3.37E+04
Al^{3+}	3.62	5.80E+04	3.40E+04
Fe^{3+} (total Fe)	1.22	4.04E+04	2.37E+04
Cr^{3+}	1.67	5.16E+04	3.02E+04
Bi^{3+}	1.89E-06	0.234	0.137
La^{3+}	7.31E-12	6.03E-07	3.53E-07
Hg^{2+}	2.96E-07	3.53E-02	2.07E-02
Zr (as $ZrO(OH)_2$)	9.16E-07	4.96E-02	2.91E-02
Pb^{2+}	4.70E-05	5.78	3.39
Ni^{2+}	6.00E-02	2.09E+03	1.23E+03
Sr^{2+}	2.23E-11	1.16E-06	6.79E-07
Mn^{4+}	1.37E-05	0.448	0.263
Ca^{2+}	0.260	6.18E+03	3.62E+03
K^{+}	1.35E-02	313	184
OH^{-}	20.8	2.10E+05	1.23E+05
$NO3^{-}$	1.34	4.93E+04	2.89E+04
$NO2^{-}$	1.83	5.01E+04	2.94E+04
$CO3^{2-}$	0.261	9.30E+03	5.45E+03
$PO4^{3-}$	1.22E-04	6.87	4.03
$SO4^{2-}$	2.31E-02	1.32E+03	772
Si (as SiO_3^{2-})	0.168	2.80E+03	1.64E+03
F^{-}	1.08E-04	1.22	0.714
Cl^{-}	6.19E-02	1.30E+03	764
$C_6H_5O_7^{3-}$	1.01E-04	11.3	6.62
$EDTA^{4-}$	3.92E-06	0.671	0.393
$HEDTA^{3-}$	3.25E-06	0.530	0.311
glycolate^{-}	1.42E-04	6.33	3.71
acetate^{-}	1.47E-05	0.517	0.303
oxalate^{2-}	6.25E-12	3.27E-07	1.92E-07
DBP	8.92E-05	14.1	8.27
butanol	8.92E-05	3.93	2.30
NH_3	0.160	1.62E+03	947
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		3.10E-02 (µCi/g)	0.302 (kg)
U	9.17E-02 (M)	1.30E+04 (µg/g)	7.60E+03 (kg)
Cs	0.161 (Ci/L)	95.9 (µCi/g)	5.62E+04 (Ci)
Sr	2.69 (Ci/L)	1.60E+03 (µCi/g)	9.37E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

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Single-Shell Tank 241-SX-113			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	5.40E+04 kg	(31.0 kgal)	
Heat Load	5.59E-02 kW	(191 BTU/hr)	
Bulk Density	0.460 (g/cc)		
Void Fraction	5.15E-02		
Water wt%	6.03		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	10.1	5.06E+05	2.73E+04
Al^{3+}	0.342	2.00E+04	1.08E+03
Fe^{3+} (total Fe)	0.149	1.81E+04	979
Cr^{3+}	5.63E-02	6.36E+03	344
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	3.26E-03	416	22.5
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	8.87E-02	7.72E+03	417
K^{+}	5.48E-04	46.5	2.51
OH^{-}	1.20	4.43E+04	2.39E+03
$NO3^{-}$	2.27E-03	305	16.5
$NO2^{-}$	0.126	1.26E+04	679
$CO3^{2-}$	1.38E-02	1.80E+03	97.3
$PO4^{3-}$	0	0	0
$SO4^{2-}$	9.87E-04	206	11.1
Si (as SiO_3^{2-})	5.31	3.24E+05	1.75E+04
F^{-}	0	0	0
Cl^{-}	2.52E-03	194	10.5
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	8.48E-03	313	16.9
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		2.24E-03 (µCi/g)	2.02E-03 (kg)
U	1.39E-03 (M)	718 (µg/g)	38.8 (kg)
Cs	5.11E-03 (Ci/L)	11.1 (µCi/g)	599 (Ci)
Sr	6.72E-02 (Ci/L)	146 (µCi/g)	7.89E+03 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-SX-113			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	0 (g/cc)		
Water wt%†	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-SX-113			
Total Inventory Estimate*			
Physical Properties			
Total Waste	5.40E+04 kg	(31.0 kgal)	
Heat Load	5.59E-02 kW	(191 BTU/hr)	
Bulk Density†	0.460 (g/cc)		
Water wt%†	6.03		
TOC wt% C (wet)†	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	10.1	5.06E+05	2.73E+04
Al^{3+}	0.342	2.00E+04	1.08E+03
Fe^{3+} (total Fe)	0.149	1.81E+04	979
Cr^{3+}	5.63E-02	6.36E+03	344
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	3.26E-03	416	22.5
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	8.87E-02	7.72E+03	417
K^{+}	5.48E-04	46.5	2.51
OH^{-}	1.20	4.43E+04	2.39E+03
$NO3^{-}$	2.27E-03	305	16.5
$NO2^{-}$	0.126	1.26E+04	679
$CO3^{2-}$	1.38E-02	1.80E+03	97.3
$PO4^{3-}$	0	0	0
$SO4^{2-}$	9.87E-04	206	11.1
Si (as SiO_3^{2-})	5.31	3.24E+05	1.75E+04
F^{-}	0	0	0
Cl^{-}	2.52E-03	194	10.5
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	8.48E-03	313	16.9
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		2.24E-03 (µCi/g)	2.02E-03 (kg)
U	1.39E-03 (M)	718 (µg/g)	38.8 (kg)
Cs	5.11E-03 (Ci/L)	11.1 (µCi/g)	599 (Ci)
Sr	6.72E-02 (Ci/L)	146 (µCi/g)	7.89E+03 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Single-Shell Tank 241-SX-114			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	1.12E+06 kg	(181 kgal)	
Heat Load	9.39 kW	(3.21E+04 BTU/hr)	
Bulk Density	1.64 (g/cc)		
Void Fraction	0.807		
Water wt%	46.5		
TOC wt% C (wet)	4.43E-03		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	7.30	1.02E+05	1.15E+05
Al^{3+}	2.23	3.67E+04	4.12E+04
Fe^{3+} (total Fe)	0.623	2.12E+04	2.38E+04
Cr^{3+}	1.12	3.55E+04	3.99E+04
Bi^{3+}	5.55E-06	0.708	0.794
La^{3+}	2.15E-11	1.82E-06	2.04E-06
Hg^{2+}	8.71E-07	0.107	0.120
Zr (as $ZrO(OH)_2$)	2.69E-06	0.150	0.168
Pb^{2+}	1.38E-04	17.5	19.6
Ni^{2+}	3.82E-02	1.37E+03	1.54E+03
Sr^{2+}	6.54E-11	3.50E-06	3.93E-06
Mn^{4+}	4.04E-05	1.35	1.52
Ca^{2+}	0.173	4.24E+03	4.75E+03
K^{+}	2.15E-02	513	576
OH^{-}	13.5	1.40E+05	1.58E+05
$NO3^{-}$	3.89	1.47E+05	1.65E+05
$NO2^{-}$	1.81	5.08E+04	5.70E+04
$CO3^{2-}$	0.177	6.49E+03	7.28E+03
$PO4^{3-}$	3.58E-04	20.7	23.3
$SO4^{2-}$	3.70E-02	2.17E+03	2.43E+03
Si (as SiO_3^{2-})	0.193	3.31E+03	3.71E+03
F^{-}	3.17E-04	3.68	4.13
Cl^{-}	9.86E-02	2.13E+03	2.39E+03
$C_6H_5O_7^{3-}$	2.96E-04	34.1	38.3
$EDTA^{4-}$	1.15E-05	2.03	2.27
$HEDTA^{3-}$	9.57E-06	1.60	1.80
$glycolate^{-}$	4.18E-04	19.1	21.5
$acetate^{-}$	4.33E-05	1.56	1.75
$oxalate^{2-}$	1.84E-11	9.87E-07	1.11E-06
DBP	2.62E-04	42.6	47.8
butanol	2.62E-04	11.9	13.3
NH_3	9.80E-02	1.02E+03	1.14E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		6.94E-02 (µCi/g)	1.30 (kg)
U	8.10E-02 (M)	1.18E+04 (µg/g)	1.32E+04 (kg)
Cs	0.257 (Ci/L)	157 (µCi/g)	1.76E+05 (Ci)
Sr	1.86 (Ci/L)	1.13E+03 (µCi/g)	1.27E+06 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-SX-114			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	0 (g/cc)		
Water wt%†	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-SX-114			
Total Inventory Estimate*			
Physical Properties			
Total Waste	1.12E+06 kg	(181 kgal)	
Heat Load	9.39 kW	(3.21E+04 BTU/hr)	
Bulk Density†	1.64 (g/cc)		
Water wt%†	46.5		
TOC wt% C (wet)†	4.43E-03		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	7.30	1.02E+05	1.15E+05
Al^{3+}	2.23	3.67E+04	4.12E+04
Fe^{3+} (total Fe)	0.623	2.12E+04	2.38E+04
Cr^{3+}	1.12	3.55E+04	3.99E+04
Bi^{3+}	5.55E-06	0.708	0.794
La^{3+}	2.15E-11	1.82E-06	2.04E-06
Hg^{2+}	8.71E-07	0.107	0.120
Zr (as $ZrO(OH)_2$)	2.69E-06	0.150	0.168
Pb^{2+}	1.38E-04	17.5	19.6
Ni^{2+}	3.82E-02	1.37E+03	1.54E+03
Sr^{2+}	6.54E-11	3.50E-06	3.93E-06
Mn^{4+}	4.04E-05	1.35	1.52
Ca^{2+}	0.173	4.24E+03	4.75E+03
K^{+}	2.15E-02	513	576
OH^{-}	13.5	1.40E+05	1.58E+05
$NO3^{-}$	3.89	1.47E+05	1.65E+05
$NO2^{-}$	1.81	5.08E+04	5.70E+04
$CO3^{2-}$	0.177	6.49E+03	7.28E+03
$PO4^{3-}$	3.58E-04	20.7	23.3
$SO4^{2-}$	3.70E-02	2.17E+03	2.43E+03
Si (as SiO_3^{2-})	0.193	3.31E+03	3.71E+03
F^{-}	3.17E-04	3.68	4.13
Cl^{-}	9.86E-02	2.13E+03	2.39E+03
$C_6H_5O_7^{3-}$	2.96E-04	34.1	38.3
$EDTA^{4-}$	1.15E-05	2.03	2.27
$HEDTA^{3-}$	9.57E-06	1.60	1.80
$glycolate^{-}$	4.18E-04	19.1	21.5
$acetate^{-}$	4.33E-05	1.56	1.75
$oxalate^{2-}$	1.84E-11	9.87E-07	1.11E-06
DBP	2.62E-04	42.6	47.8
butanol	2.62E-04	11.9	13.3
NH_3	9.80E-02	1.02E+03	1.14E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		6.94E-02 (µCi/g)	1.30 (kg)
U	8.10E-02 (M)	1.18E+04 (µg/g)	1.32E+04 (kg)
Cs	0.257 (Ci/L)	157 (µCi/g)	1.76E+05 (Ci)
Sr	1.86 (Ci/L)	1.13E+03 (µCi/g)	1.27E+06 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

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Single-Shell Tank 241-SX-115			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	6.75E+04 kg	(12.0 kgal)	
Heat Load	0.239 kW	(817 BTU/hr)	
Bulk Density	1.49 (g/cc)		
Void Fraction	0.836		
Water wt%	51.1		
TOC wt% C (wet)	3.32E-03		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	5.61	8.68E+04	5.86E+03
Al^{3+}	2.75	5.00E+04	3.37E+03
Fe^{3+} (total Fe)	0.515	1.93E+04	1.31E+03
Cr^{3+}	0.551	1.93E+04	1.30E+03
Bi^{3+}	3.77E-06	0.530	3.58E-02
La^{3+}	1.46E-11	1.37E-06	9.22E-08
Hg^{2+}	5.93E-07	8.00E-02	5.40E-03
Zr (as $ZrO(OH)_2$)	1.83E-06	0.112	7.59E-03
Pb^{2+}	9.40E-05	13.1	0.884
Ni^{2+}	3.29E-02	1.30E+03	87.7
Sr^{2+}	4.45E-11	2.62E-06	1.77E-07
Mn^{4+}	2.75E-05	1.01	6.85E-02
Ca^{2+}	0.146	3.93E+03	265
K^{+}	1.70E-02	446	30.1
OH^{-}	12.5	1.43E+05	9.63E+03
$NO3^{-}$	2.66	1.11E+05	7.50E+03
$NO2^{-}$	1.90	5.89E+04	3.98E+03
$CO3^{2-}$	0.148	5.99E+03	404
$PO4^{3-}$	2.44E-04	15.6	1.05
$SO4^{2-}$	2.98E-02	1.92E+03	130
Si (as SiO_3^{2-})	7.03E-02	1.33E+03	89.7
F^{-}	2.16E-04	2.76	0.186
Cl^{-}	7.79E-02	1.85E+03	125
$C_6H_5O_7^{3-}$	2.01E-04	25.6	1.73
$EDTA^{4-}$	7.84E-06	1.52	0.103
$HEDTA^{3-}$	6.51E-06	1.20	8.10E-02
glycolate^{-}	2.84E-04	14.3	0.968
acetate^{-}	2.95E-05	1.17	7.90E-02
$oxalate^{2-}$	1.25E-11	7.40E-07	5.00E-08
DBP	1.78E-04	31.9	2.16
butanol	1.78E-04	8.89	0.601
NH_3	8.13E-02	930	62.8
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		5.41E-02 (µCi/g)	6.09E-02 (kg)
U	2.77E-02 (M)	4.44E+03 (µg/g)	300 (kg)
Cs	0.185 (Ci/L)	125 (µCi/g)	8.41E+03 (Ci)
Sr	0.653 (Ci/L)	439 (µCi/g)	2.97E+04 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-SX-115			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	0 (g/cc)		
Water wt%†	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
glycolate^{-}	0	0	0
acetate^{-}	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-SX-115			
Total Inventory Estimate*			
Physical Properties			
Total Waste	6.75E+04 kg	(12.0 kgal)	
Heat Load	0.239 kW	(817 BTU/hr)	
Bulk Density†	1.49 (g/cc)		
Water wt%†	51.1		
TOC wt% C (wet)†	3.32E-03		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	5.61	8.68E+04	5.86E+03
Al^{3+}	2.75	5.00E+04	3.37E+03
Fe^{3+} (total Fe)	0.515	1.93E+04	1.31E+03
Cr^{3+}	0.551	1.93E+04	1.30E+03
Bi^{3+}	3.77E-06	0.530	3.58E-02
La^{3+}	1.46E-11	1.37E-06	9.22E-08
Hg^{2+}	5.93E-07	8.00E-02	5.40E-03
Zr (as $ZrO(OH)_2$)	1.83E-06	0.112	7.59E-03
Pb^{2+}	9.40E-05	13.1	0.884
Ni^{2+}	3.29E-02	1.30E+03	87.7
Sr^{2+}	4.45E-11	2.62E-06	1.77E-07
Mn^{4+}	2.75E-05	1.01	6.85E-02
Ca^{2+}	0.146	3.93E+03	265
K^{+}	1.70E-02	446	30.1
OH^{-}	12.5	1.43E+05	9.63E+03
$NO3^{-}$	2.66	1.11E+05	7.50E+03
$NO2^{-}$	1.90	5.89E+04	3.98E+03
$CO3^{2-}$	0.148	5.99E+03	404
$PO4^{3-}$	2.44E-04	15.6	1.05
$SO4^{2-}$	2.98E-02	1.92E+03	130
Si (as SiO_3^{2-})	7.03E-02	1.33E+03	89.7
F^{-}	2.16E-04	2.76	0.186
Cl^{-}	7.79E-02	1.85E+03	125
$C_6H_5O_7^{3-}$	2.01E-04	25.6	1.73
$EDTA^{4-}$	7.84E-06	1.52	0.103
$HEDTA^{3-}$	6.51E-06	1.20	8.10E-02
glycolate^{-}	2.84E-04	14.3	0.968
acetate^{-}	2.95E-05	1.17	7.90E-02
$oxalate^{2-}$	1.25E-11	7.40E-07	5.00E-08
DBP	1.78E-04	31.9	2.16
butanol	1.78E-04	8.89	0.601
NH_3	8.13E-02	930	62.8
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		5.41E-02 (µCi/g)	6.09E-02 (kg)
U	2.77E-02 (M)	4.44E+03 (µg/g)	300 (kg)
Cs	0.185 (Ci/L)	125 (µCi/g)	8.41E+03 (Ci)
Sr	0.653 (Ci/L)	439 (µCi/g)	2.97E+04 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

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Single-Shell Tank 241-U-101			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	1.45E+05 kg	(22.0 kgal)	
Heat Load	4.45E-03 kW	(15.2 BTU/hr)	
Bulk Density	1.75 (g/cc)		
Void Fraction	0.358		
Water wt%	44.4		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	5.04	6.63E+04	9.65E+03
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0.119	3.79E+03	552
Cr^{3+}	1.24E-03	36.9	5.37
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	6.20E-04	20.8	3.03
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	8.41E-02	1.93E+03	281
K^{+}	2.74E-04	6.13	0.891
OH^{-}	12.3	1.20E+05	1.74E+04
$NO3^{-}$	6.25E-02	2.22E+03	322
$NO2^{-}$	9.15E-03	241	35.1
$CO3^{2-}$	1.89	6.48E+04	9.42E+03
$PO4^{3-}$	0.400	2.17E+04	3.16E+03
$SO4^{2-}$	8.20E-02	4.51E+03	656
Si (as SiO_3^{2-})	1.55E-03	24.9	3.63
F^{-}	0	0	0
Cl^{-}	1.26E-03	25.5	3.71
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	3.51E-06	3.42E-02	4.97E-03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		3.71E-03 (µCi/g)	9.00E-03 (kg)
U	1.99 (M)	2.71E+05 (µg/g)	3.94E+04 (kg)
Cs	8.40E-04 (Ci/L)	0.481 (µCi/g)	70.0 (Ci)
Sr	7.34E-03 (Ci/L)	4.20 (µCi/g)	611 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-U-101			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	1.14E+04 kg	(3.00 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	1.00 (g/cc)		
Water wt%†	100		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Single-Shell Tank 241-U-101			
Total Inventory Estimate*			
Physical Properties			
Total Waste	1.57E+05 kg	(25.0 kgal)	
Heat Load	4.45E-03 kW	(15.2 BTU/hr)	
Bulk Density†	1.66 (g/cc)		
Water wt%†	51.1		
TOC wt% C (wet)†	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.43	6.15E+04	9.65E+03
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0.104	3.52E+03	552
Cr^{3+}	1.09E-03	34.3	5.37
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	5.46E-04	19.3	3.03
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	7.40E-02	1.79E+03	281
K^{+}	2.41E-04	5.68	0.891
OH^{-}	10.8	1.11E+05	1.74E+04
$NO3^{-}$	5.50E-02	2.06E+03	322
$NO2^{-}$	8.05E-03	224	35.1
$CO3^{2-}$	1.66	6.01E+04	9.42E+03
$PO4^{3-}$	0.352	2.02E+04	3.16E+03
$SO4^{2-}$	7.22E-02	4.18E+03	656
Si (as SiO_3^{2-})	1.36E-03	23.1	3.63
F^{-}	0	0	0
Cl^{-}	1.11E-03	23.7	3.71
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	3.09E-06	3.17E-02	4.97E-03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		3.44E-03 (µCi/g)	9.00E-03 (kg)
U	1.75 (M)	2.51E+05 (µg/g)	3.94E+04 (kg)
Cs	7.39E-04 (Ci/L)	0.446 (µCi/g)	70.0 (Ci)
Sr	6.46E-03 (Ci/L)	3.90 (µCi/g)	611 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Single-Shell Tank 241-U-102			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	2.84E+05 kg	(43.0 kgal)	
Heat Load	8.69E-03 kW	(29.7 BTU/hr)	
Bulk Density	1.75 (g/cc)		
Void Fraction	0.358		
Water wt%	44.4		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	5.04	6.63E+04	1.89E+04
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0.119	3.79E+03	1.08E+03
Cr^{3+}	1.24E-03	36.9	10.5
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	6.20E-04	20.8	5.93
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	8.41E-02	1.93E+03	549
K^{+}	2.74E-04	6.13	1.74
OH^{-}	12.3	1.20E+05	3.40E+04
$NO3^{-}$	6.25E-02	2.22E+03	630
$NO2^{-}$	9.15E-03	241	68.5
$CO3^{2-}$	1.89	6.48E+04	1.84E+04
$PO4^{3-}$	0.400	2.17E+04	6.18E+03
$SO4^{2-}$	8.20E-02	4.51E+03	1.28E+03
Si (as SiO_3^{2-})	1.55E-03	24.9	7.09
F^{-}	0	0	0
Cl^{-}	1.26E-03	25.5	7.26
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	3.51E-06	3.42E-02	9.72E-03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		3.71E-03 (µCi/g)	1.76E-02 (kg)
U	1.99 (M)	2.71E+05 (µg/g)	7.70E+04 (kg)
Cs	8.40E-04 (Ci/L)	0.481 (µCi/g)	137 (Ci)
Sr	7.34E-03 (Ci/L)	4.20 (µCi/g)	1.20E+03 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-U-102			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	1.98E+06 kg	(331 kgal)	
Heat Load	2.62 kW	(8.96E+03 BTU/hr)	
Bulk Density*	1.58 (g/cc)		
Water wt%†	34.8		
TOC wt% C (wet)	0.951		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	12.4	1.81E+05	3.58E+05
Al^{3+}	1.63	2.78E+04	5.49E+04
Fe^{3+} (total Fe)	8.28E-03	293	579
Cr^{3+}	5.88E-02	1.94E+03	3.83E+03
Bi^{3+}	1.63E-03	216	426
La^{3+}	5.73E-05	5.05	9.98
Hg^{2+}	1.05E-05	1.34	2.65
Zr (as $ZrO(OH)_2$)	1.14E-03	65.9	130
Pb^{2+}	1.12E-03	147	289
Ni^{2+}	7.05E-03	263	519
Sr^{2+}	1.91E-05	1.06	2.10
Mn^{4+}	4.06E-03	141	279
Ca^{2+}	3.76E-02	956	1.89E+03
K^{+}	6.08E-02	1.51E+03	2.98E+03
OH^{-}	7.11	7.67E+04	1.51E+05
$NO3^{-}$	5.54	2.18E+05	4.30E+05
$NO2^{-}$	2.37	6.91E+04	1.37E+05
$CO3^{2-}$	0.496	1.89E+04	3.73E+04
$PO4^{3-}$	0.106	6.37E+03	1.26E+04
$SO4^{2-}$	0.269	1.64E+04	3.24E+04
Si (as SiO_3^{2-})	8.50E-02	1.51E+03	2.99E+03
F^{-}	9.22E-02	1.11E+03	2.19E+03
Cl^{-}	0.222	4.98E+03	9.83E+03
$C_6H_5O_7^{3-}$	3.01E-02	3.61E+03	7.13E+03
$EDTA^{4-}$	2.04E-02	3.72E+03	7.36E+03
$HEDTA^{3-}$	3.85E-02	6.70E+03	1.32E+04
$glycolate^{-}$	0.110	5.23E+03	1.03E+04
$acetate^{-}$	7.16E-03	268	529
$oxalate^{2-}$	4.91E-05	2.74	5.41
DBP	2.05E-02	3.46E+03	6.84E+03
butanol	2.05E-02	964	1.90E+03
NH_3	6.25E-02	673	1.33E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	89.8 (µCi/L)		1.88 (kg)
U	1.33E-02 (M)	2.00E+03 (µg/g)	3.96E+03 (kg)
Cs	0.265 (Ci/L)	168 (µCi/g)	3.32E+05 (Ci)
Sr	0.127 (Ci/L)	80.5 (µCi/g)	1.59E+05 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-U-102			
Total Inventory Estimate*			
Physical Properties			
Total Waste	2.26E+06 kg	(374 kgal)	
Heat Load	2.63 kW	(8.99E+03 BTU/hr)	
Bulk Density†	1.60 (g/cc)		
Water wt%†	35.9		
TOC wt% C (wet)†	0.842		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	11.6	1.67E+05	3.77E+05
Al^{3+}	1.44	2.43E+04	5.49E+04
Fe^{3+} (total Fe)	2.10E-02	734	1.66E+03
Cr^{3+}	5.22E-02	1.70E+03	3.84E+03
Bi^{3+}	1.44E-03	189	426
La^{3+}	5.07E-05	4.42	9.98
Hg^{2+}	9.33E-06	1.17	2.65
Zr (as $ZrO(OH)_2$)	1.01E-03	57.6	130
Pb^{2+}	9.87E-04	128	289
Ni^{2+}	6.31E-03	232	525
Sr^{2+}	1.69E-05	0.928	2.10
Mn^{4+}	3.59E-03	124	279
Ca^{2+}	4.29E-02	1.08E+03	2.44E+03
K^{+}	5.38E-02	1.32E+03	2.98E+03
OH^{-}	7.71	8.21E+04	1.85E+05
$NO3^{-}$	4.91	1.91E+05	4.31E+05
$NO2^{-}$	2.10	6.05E+04	1.37E+05
$CO3^{2-}$	0.656	2.47E+04	5.57E+04
$PO4^{3-}$	0.140	8.30E+03	1.88E+04
$SO4^{2-}$	0.248	1.49E+04	3.37E+04
Si (as SiO_3^{2-})	7.54E-02	1.33E+03	3.00E+03
F^{-}	8.16E-02	971	2.19E+03
Cl^{-}	0.196	4.35E+03	9.84E+03
$C_6H_5O_7^{3-}$	2.67E-02	3.16E+03	7.13E+03
$EDTA^{4-}$	1.80E-02	3.26E+03	7.36E+03
$HEDTA^{3-}$	3.41E-02	5.85E+03	1.32E+04
$glycolate^{-}$	9.72E-02	4.57E+03	1.03E+04
$acetate^{-}$	6.34E-03	234	529
$oxalate^{2-}$	4.34E-05	2.39	5.41
DBP	1.81E-02	3.02E+03	6.84E+03
butanol	1.81E-02	843	1.90E+03
NH_3	5.53E-02	589	1.33E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		5.02E-02 (µCi/g)	1.90 (kg)
U	0.240 (M)	3.58E+04 (µg/g)	8.10E+04 (kg)
Cs	0.234 (Ci/L)	147 (µCi/g)	3.32E+05 (Ci)
Sr	0.113 (Ci/L)	70.9 (µCi/g)	1.60E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Single-Shell Tank 241-U-103			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	2.12E+05 kg	(32.0 kgal)	
Heat Load	6.47E-03 kW	(22.1 BTU/hr)	
Bulk Density	1.75 (g/cc)		
Void Fraction	0.358		
Water wt%	44.4		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	5.04	6.63E+04	1.40E+04
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0.119	3.79E+03	803
Cr^{3+}	1.24E-03	36.9	7.81
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	6.20E-04	20.8	4.41
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	8.41E-02	1.93E+03	408
K^{+}	2.74E-04	6.13	1.30
OH^{-}	12.3	1.20E+05	2.53E+04
$NO3^{-}$	6.25E-02	2.22E+03	469
$NO2^{-}$	9.15E-03	241	51.0
$CO3^{2-}$	1.89	6.48E+04	1.37E+04
$PO4^{3-}$	0.400	2.17E+04	4.60E+03
$SO4^{2-}$	8.20E-02	4.51E+03	954
Si (as SiO_3^{2-})	1.55E-03	24.9	5.27
F^{-}	0	0	0
Cl^{-}	1.26E-03	25.5	5.40
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	3.51E-06	3.42E-02	7.24E-03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		3.71E-03 (µCi/g)	1.31E-02 (kg)
U	1.99 (M)	2.71E+05 (µg/g)	5.73E+04 (kg)
Cs	8.40E-04 (Ci/L)	0.481 (µCi/g)	102 (Ci)
Sr	7.34E-03 (Ci/L)	4.20 (µCi/g)	889 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-U-103			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	2.57E+06 kg	(436 kgal)	
Heat Load	3.30 kW	(1.13E+04 BTU/hr)	
Bulk Density*	1.56 (g/cc)		
Water wt%†	36.2		
TOC wt% C (wet)	0.916		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	12.0	1.77E+05	4.55E+05
Al^{3+}	1.57	2.73E+04	7.01E+04
Fe^{3+} (total Fe)	7.90E-03	283	728
Cr^{3+}	5.70E-02	1.90E+03	4.89E+03
Bi^{3+}	1.53E-03	206	529
La^{3+}	4.34E-05	3.87	9.95
Hg^{2+}	9.99E-06	1.29	3.31
Zr (as $ZrO(OH)_2$)	1.08E-03	63.1	162
Pb^{2+}	1.06E-03	141	362
Ni^{2+}	6.74E-03	254	653
Sr^{2+}	1.45E-05	0.814	2.09
Mn^{4+}	3.86E-03	136	350
Ca^{2+}	3.59E-02	924	2.37E+03
K^{+}	5.77E-02	1.45E+03	3.72E+03
OH^{-}	6.89	7.52E+04	1.93E+05
$NO3^{-}$	5.35	2.13E+05	5.47E+05
$NO2^{-}$	2.30	6.80E+04	1.75E+05
$CO3^{2-}$	0.474	1.83E+04	4.69E+04
$PO4^{3-}$	0.101	6.15E+03	1.58E+04
$SO4^{2-}$	0.257	1.59E+04	4.08E+04
Si (as SiO_3^{2-})	8.17E-02	1.47E+03	3.79E+03
F^{-}	8.68E-02	1.06E+03	2.72E+03
Cl^{-}	0.214	4.86E+03	1.25E+04
$C_6H_5O_7^{3-}$	2.91E-02	3.53E+03	9.08E+03
$EDTA^{4-}$	1.93E-02	3.57E+03	9.16E+03
$HEDTA^{3-}$	3.64E-02	6.40E+03	1.65E+04
$glycolate^{-}$	0.104	5.03E+03	1.29E+04
$acetate^{-}$	6.95E-03	263	677
$oxalate^{2-}$	3.71E-05	2.10	5.39
DBP	1.96E-02	3.35E+03	8.59E+03
butanol	1.96E-02	932	2.39E+03
NH_3	5.91E-02	646	1.66E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	86.0 (µCi/L)		2.38 (kg)
U	1.27E-02 (M)	1.95E+03 (µg/g)	5.00E+03 (kg)
Cs	0.251 (Ci/L)	161 (µCi/g)	4.14E+05 (Ci)
Sr	0.122 (Ci/L)	78.5 (µCi/g)	2.02E+05 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.
†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Single-Shell Tank 241-U-103			
Total Inventory Estimate*			
Physical Properties			
Total Waste	2.78E+06 kg	(468 kgal)	
Heat Load	3.31 kW	(1.13E+04 BTU/hr)	
Bulk Density†	1.57 (g/cc)		
Water wt%†	36.8		
TOC wt% C (wet)†	0.854		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	11.5	1.69E+05	4.69E+05
Al^{3+}	1.47	2.52E+04	7.01E+04
Fe^{3+} (total Fe)	1.55E-02	551	1.53E+03
Cr^{3+}	5.32E-02	1.76E+03	4.90E+03
Bi^{3+}	1.43E-03	190	529
La^{3+}	4.04E-05	3.58	9.95
Hg^{2+}	9.31E-06	1.19	3.31
Zr (as $ZrO(OH)_2$)	1.00E-03	58.3	162
Pb^{2+}	9.86E-04	130	362
Ni^{2+}	6.32E-03	236	657
Sr^{2+}	1.35E-05	0.752	2.09
Mn^{4+}	3.60E-03	126	350
Ca^{2+}	3.92E-02	1.00E+03	2.78E+03
K^{+}	5.38E-02	1.34E+03	3.72E+03
OH^{-}	7.25	7.86E+04	2.18E+05
$NO3^{-}$	4.99	1.97E+05	5.48E+05
$NO2^{-}$	2.15	6.29E+04	1.75E+05
$CO3^{2-}$	0.570	2.18E+04	6.06E+04
$PO4^{3-}$	0.121	7.34E+03	2.04E+04
$SO4^{2-}$	0.245	1.50E+04	4.17E+04
Si (as SiO_3^{2-})	7.62E-02	1.36E+03	3.79E+03
F^{-}	8.09E-02	979	2.72E+03
Cl^{-}	0.199	4.50E+03	1.25E+04
$C_6H_5O_7^{3-}$	2.71E-02	3.27E+03	9.08E+03
$EDTA^{4-}$	1.80E-02	3.29E+03	9.16E+03
$HEDTA^{3-}$	3.39E-02	5.92E+03	1.65E+04
$glycolate^{-}$	9.73E-02	4.65E+03	1.29E+04
$acetate^{-}$	6.47E-03	243	677
$oxalate^{2-}$	3.46E-05	1.94	5.39
DBP	1.82E-02	3.09E+03	8.59E+03
butanol	1.82E-02	861	2.39E+03
NH_3	5.51E-02	597	1.66E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		5.13E-02 (µCi/g)	2.39 (kg)
U	0.148 (M)	2.24E+04 (µg/g)	6.23E+04 (kg)
Cs	0.234 (Ci/L)	149 (µCi/g)	4.14E+05 (Ci)
Sr	0.114 (Ci/L)	72.9 (µCi/g)	2.03E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).
†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Single-Shell Tank 241-U-104			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	3.22E+05 kg	(79.0 kgal)	
Heat Load	8.08E-03 kW	(27.6 BTU/hr)	
Bulk Density	1.08 (g/cc)		
Void Fraction	0.181		
Water wt%	35.4		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	7.82	1.67E+05	5.38E+04
Al^{3+}	3.95E-02	989	319
Fe^{3+} (total Fe)	0.105	5.42E+03	1.75E+03
Cr^{3+}	6.28E-04	30.3	9.76
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	3.14E-04	17.1	5.51
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	8.21E-02	3.06E+03	984
K^{+}	1.39E-04	5.03	1.62
OH^{-}	6.22	9.82E+04	3.16E+04
$NO3^{-}$	3.16E-02	1.82E+03	586
$NO2^{-}$	4.63E-03	198	63.7
$CO3^{2-}$	0.955	5.32E+04	1.71E+04
$PO4^{3-}$	0.202	1.78E+04	5.75E+03
$SO4^{2-}$	4.15E-02	3.70E+03	1.19E+03
Si (as SiO_3^{2-})	2.80	7.30E+04	2.35E+04
F^{-}	0	0	0
Cl^{-}	6.37E-04	21.0	6.75
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	1.78E-06	2.81E-02	9.04E-03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		3.05E-03 (µCi/g)	1.64E-02 (kg)
U	1.01 (M)	2.22E+05 (µg/g)	7.16E+04 (kg)
Cs	4.25E-04 (Ci/L)	0.395 (µCi/g)	127 (Ci)
Sr	3.72E-03 (Ci/L)	3.45 (µCi/g)	1.11E+03 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

Rev. 3

Single-Shell Tank 241-U-104			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	2.89E+05 kg	(43.0 kgal)	
Heat Load	0.540 kW	(1.84E+03 BTU/hr)	
Bulk Density*	1.77 (g/cc)		
Water wt%†	24.4		
TOC wt% C (wet)	0.204		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	15.9	2.06E+05	5.95E+04
Al^{3+}	2.54	3.86E+04	1.12E+04
Fe^{3+} (total Fe)	1.61E-02	506	146
Cr^{3+}	6.52E-02	1.91E+03	552
Bi^{3+}	4.30E-03	506	146
La^{3+}	2.32E-09	1.81E-04	5.24E-05
Hg^{2+}	3.47E-05	3.92	1.13
Zr (as $ZrO(OH)_2$)	3.38E-03	174	50.2
Pb^{2+}	3.81E-03	445	128
Ni^{2+}	1.38E-02	455	131
Sr^{2+}	7.73E-10	3.82E-05	1.10E-05
Mn^{4+}	3.67E-03	114	32.8
Ca^{2+}	7.24E-02	1.63E+03	472
K^{+}	8.95E-02	1.97E+03	570
OH^{-}	10.7	1.02E+05	2.96E+04
$NO3^{-}$	7.42	2.59E+05	7.49E+04
$NO2^{-}$	3.01	7.80E+04	2.25E+04
$CO3^{2-}$	0.548	1.86E+04	5.36E+03
$PO4^{3-}$	0.188	1.01E+04	2.91E+03
$SO4^{2-}$	0.362	1.96E+04	5.65E+03
Si (as SiO_3^{2-})	0.106	1.68E+03	484
F^{-}	0.255	2.73E+03	788
Cl^{-}	0.241	4.81E+03	1.39E+03
$C_6H_5O_7^{3-}$	2.87E-04	30.5	8.82
$EDTA^{4-}$	4.39E-04	71.4	20.6
$HEDTA^{3-}$	1.85E-06	0.286	8.26E-02
$glycolate^{-}$	5.04E-05	2.13	0.616
$acetate^{-}$	2.80E-03	93.0	26.9
$oxalate^{2-}$	1.98E-09	9.84E-05	2.84E-05
DBP	2.41E-02	3.61E+03	1.04E+03
butanol	2.41E-02	1.01E+03	291
NH_3	0.159	1.53E+03	440
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	143 (µCi/L)		0.392 (kg)
U	2.19E-02 (M)	2.94E+03 (µg/g)	850 (kg)
Cs	0.571 (Ci/L)	322 (µCi/g)	9.29E+04 (Ci)
Sr	9.56E-02 (Ci/L)	53.9 (µCi/g)	1.56E+04 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-U-104			
Total Inventory Estimate*			
Physical Properties			
Total Waste	6.11E+05 kg	(122 kgal)	
Heat Load	0.548 kW	(1.87E+03 BTU/hr)	
Bulk Density†	1.32 (g/cc)		
Water wt%†	31.5		
TOC wt% C (wet)†	7.18E-02		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	10.7	1.85E+05	1.13E+05
Al^{3+}	0.921	1.88E+04	1.15E+04
Fe^{3+} (total Fe)	7.33E-02	3.10E+03	1.89E+03
Cr^{3+}	2.34E-02	919	562
Bi^{3+}	1.52E-03	239	146
La^{3+}	8.17E-10	8.58E-05	5.24E-05
Hg^{2+}	1.22E-05	1.85	1.13
Zr (as $ZrO(OH)_2$)	1.19E-03	82.2	50.2
Pb^{2+}	1.34E-03	210	128
Ni^{2+}	5.05E-03	224	137
Sr^{2+}	2.72E-10	1.80E-05	1.10E-05
Mn^{4+}	1.29E-03	53.7	32.8
Ca^{2+}	7.87E-02	2.38E+03	1.46E+03
K^{+}	3.16E-02	935	571
OH^{-}	7.79	1.00E+05	6.12E+04
$NO3^{-}$	2.64	1.24E+05	7.54E+04
$NO2^{-}$	1.06	3.70E+04	2.26E+04
$CO3^{2-}$	0.812	3.68E+04	2.25E+04
$PO4^{3-}$	0.197	1.42E+04	8.66E+03
$SO4^{2-}$	0.154	1.12E+04	6.84E+03
Si (as SiO_3^{2-})	1.85	3.93E+04	2.40E+04
F^{-}	8.98E-02	1.29E+03	788
Cl^{-}	8.54E-02	2.29E+03	1.40E+03
$C_6H_5O_7^{3-}$	1.01E-04	14.4	8.82
$EDTA^{4-}$	1.55E-04	33.7	20.6
$HEDTA^{3-}$	6.53E-07	0.135	8.26E-02
$glycolate^{-}$	1.78E-05	1.01	0.616
$acetate^{-}$	9.85E-04	44.0	26.9
$oxalate^{2-}$	6.99E-10	4.65E-05	2.84E-05
DBP	8.49E-03	1.71E+03	1.04E+03
butanol	8.49E-03	476	291
NH_3	5.61E-02	721	440
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		3.98E-02 (µCi/g)	0.408 (kg)
U	0.660 (M)	1.19E+05 (µg/g)	7.25E+04 (kg)
Cs	0.202 (Ci/L)	152 (µCi/g)	9.31E+04 (Ci)
Sr	3.61E-02 (Ci/L)	27.3 (µCi/g)	1.67E+04 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Single-Shell Tank 241-U-105			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	2.12E+05 kg	(32.0 kgal)	
Heat Load	6.47E-03 kW	(22.1 BTU/hr)	
Bulk Density	1.75 (g/cc)		
Void Fraction	0.358		
Water wt%	44.4		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	5.04	6.63E+04	1.40E+04
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0.119	3.79E+03	803
Cr^{3+}	1.24E-03	36.9	7.81
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	6.20E-04	20.8	4.41
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	8.41E-02	1.93E+03	408
K^{+}	2.74E-04	6.13	1.30
OH^{-}	12.3	1.94E+05	2.53E+04
$NO3^{-}$	6.25E-02	3.60E+03	469
$NO2^{-}$	9.15E-03	391	51.0
$CO3^{2-}$	1.89	1.05E+05	1.37E+04
$PO4^{3-}$	0.400	3.53E+04	4.60E+03
$SO4^{2-}$	8.20E-02	7.32E+03	954
Si (as SiO_3^{2-})	1.55E-03	40.4	5.27
F^{-}	0	0	0
Cl^{-}	1.26E-03	41.4	5.40
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	3.51E-06	5.55E-02	7.24E-03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		3.71E-03 (µCi/g)	1.31E-02 (kg)
U	1.99 (M)	2.71E+05 (µg/g)	5.73E+04 (kg)
Cs	8.40E-04 (Ci/L)	0.481 (µCi/g)	102 (Ci)
Sr	7.34E-03 (Ci/L)	4.20 (µCi/g)	889 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-U-105			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	2.36E+06 kg	(386 kgal)	
Heat Load	3.23 kW	(1.10E+04 BTU/hr)	
Bulk Density*	1.61 (g/cc)		
Water wt%†	32.2		
TOC wt% C (wet)	1.00		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	13.2	1.88E+05	4.44E+05
Al^{3+}	1.74	2.90E+04	6.84E+04
Fe^{3+} (total Fe)	8.70E-03	301	710
Cr^{3+}	6.29E-02	2.03E+03	4.78E+03
Bi^{3+}	1.67E-03	216	509
La^{3+}	5.26E-05	4.53	10.7
Hg^{2+}	1.09E-05	1.35	3.19
Zr (as $ZrO(OH)_2$)	1.16E-03	65.8	155
Pb^{2+}	1.16E-03	149	351
Ni^{2+}	7.41E-03	270	636
Sr^{2+}	1.75E-05	0.953	2.25
Mn^{4+}	4.26E-03	145	342
Ca^{2+}	3.95E-02	982	2.31E+03
K^{+}	6.38E-02	1.55E+03	3.65E+03
OH^{-}	7.61	8.02E+04	1.89E+05
$NO3^{-}$	5.85	2.25E+05	5.30E+05
$NO2^{-}$	2.54	7.23E+04	1.71E+05
$CO3^{2-}$	0.527	1.96E+04	4.62E+04
$PO4^{3-}$	0.111	6.51E+03	1.53E+04
$SO4^{2-}$	0.285	1.69E+04	3.99E+04
Si (as SiO_3^{2-})	9.04E-02	1.57E+03	3.71E+03
F^{-}	9.43E-02	1.11E+03	2.62E+03
Cl^{-}	0.236	5.18E+03	1.22E+04
$C_6H_5O_7^{3-}$	3.26E-02	3.82E+03	9.02E+03
$EDTA^{4-}$	2.20E-02	3.92E+03	9.25E+03
$HEDTA^{3-}$	4.15E-02	7.05E+03	1.66E+04
$glycolate^{-}$	0.119	5.53E+03	1.30E+04
$acetate^{-}$	7.87E-03	288	679
$oxalate^{2-}$	4.50E-05	2.46	5.79
DBP	2.18E-02	3.59E+03	8.47E+03
butanol	2.18E-02	1.00E+03	2.36E+03
NH_3	6.48E-02	682	1.61E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	94.9 (µCi/L)		2.34 (kg)
U	1.40E-02 (M)	2.07E+03 (µg/g)	4.89E+03 (kg)
Cs	0.276 (Ci/L)	171 (µCi/g)	4.04E+05 (Ci)
Sr	0.136 (Ci/L)	84.3 (µCi/g)	1.99E+05 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.
†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-U-105			
Total Inventory Estimate*			
Physical Properties			
Total Waste	2.57E+06 kg	(418 kgal)	
Heat Load	3.23 kW	(1.10E+04 BTU/hr)	
Bulk Density†	1.62 (g/cc)		
Water wt%†	33.2		
TOC wt% C (wet)†	0.924		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	12.6	1.78E+05	4.58E+05
Al^{3+}	1.60	2.66E+04	6.84E+04
Fe^{3+} (total Fe)	1.71E-02	589	1.51E+03
Cr^{3+}	5.81E-02	1.86E+03	4.78E+03
Bi^{3+}	1.54E-03	198	509
La^{3+}	4.86E-05	4.16	10.7
Hg^{2+}	1.00E-05	1.24	3.19
Zr (as $ZrO(OH)_2$)	1.08E-03	60.4	155
Pb^{2+}	1.07E-03	137	351
Ni^{2+}	6.89E-03	249	640
Sr^{2+}	1.62E-05	0.874	2.25
Mn^{4+}	3.93E-03	133	342
Ca^{2+}	4.29E-02	1.06E+03	2.72E+03
K^{+}	5.89E-02	1.42E+03	3.65E+03
OH^{-}	7.97	8.96E+04	2.14E+05
$NO3^{-}$	5.41	2.07E+05	5.31E+05
$NO2^{-}$	2.34	6.64E+04	1.71E+05
$CO3^{2-}$	0.631	2.66E+04	5.99E+04
$PO4^{3-}$	0.133	8.88E+03	1.99E+04
$SO4^{2-}$	0.269	1.61E+04	4.09E+04
Si (as SiO_3^{2-})	8.36E-02	1.45E+03	3.72E+03
F^{-}	8.71E-02	1.02E+03	2.62E+03
Cl^{-}	0.218	4.76E+03	1.22E+04
$C_6H_5O_7^{3-}$	3.01E-02	3.51E+03	9.02E+03
$EDTA^{4-}$	2.03E-02	3.60E+03	9.25E+03
$HEDTA^{3-}$	3.83E-02	6.47E+03	1.66E+04
$glycolate^{-}$	0.110	5.07E+03	1.30E+04
$acetate^{-}$	7.27E-03	264	679
$oxalate^{2-}$	4.16E-05	2.25	5.79
DBP	2.01E-02	3.30E+03	8.47E+03
butanol	2.01E-02	918	2.36E+03
NH_3	5.98E-02	626	1.61E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		5.43E-02 (µCi/g)	2.35 (kg)
U	0.165 (M)	2.42E+04 (µg/g)	6.22E+04 (kg)
Cs	0.255 (Ci/L)	157 (µCi/g)	4.04E+05 (Ci)
Sr	0.126 (Ci/L)	77.7 (µCi/g)	2.00E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).
†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Single-Shell Tank 241-U-106			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	1.72E+05 kg	(26.0 kgal)	
Heat Load	5.25E-03 kW	(17.9 BTU/hr)	
Bulk Density	1.75 (g/cc)		
Void Fraction	0.358		
Water wt%	44.4		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	5.04	6.63E+04	1.14E+04
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0.119	3.79E+03	652
Cr^{3+}	1.24E-03	36.9	6.35
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	6.20E-04	20.8	3.58
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	8.41E-02	1.93E+03	332
K^{+}	2.74E-04	6.13	1.05
OH^{-}	12.3	1.20E+05	2.06E+04
$NO3^{-}$	6.25E-02	2.22E+03	381
$NO2^{-}$	9.15E-03	241	41.4
$CO3^{2-}$	1.89	6.48E+04	1.11E+04
$PO4^{3-}$	0.400	2.17E+04	3.74E+03
$SO4^{2-}$	8.20E-02	4.51E+03	775
Si (as SiO_3^{2-})	1.55E-03	24.9	4.29
F^{-}	0	0	0
Cl^{-}	1.26E-03	25.5	4.39
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	3.51E-06	3.42E-02	5.88E-03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		3.71E-03 (µCi/g)	1.06E-02 (kg)
U	1.99 (M)	2.71E+05 (µg/g)	4.66E+04 (kg)
Cs	8.40E-04 (Ci/L)	0.481 (µCi/g)	82.7 (Ci)
Sr	7.34E-03 (Ci/L)	4.20 (µCi/g)	723 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-U-106			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	1.26E+06 kg	(200 kgal)	
Heat Load	1.80 kW	(6.13E+03 BTU/hr)	
Bulk Density*	1.66 (g/cc)		
Water wt%†	29.5		
TOC wt% C (wet)	1.13		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	14.1	1.96E+05	2.46E+05
Al^{3+}	1.90	3.09E+04	3.88E+04
Fe^{3+} (total Fe)	9.00E-03	303	380
Cr^{3+}	6.93E-02	2.17E+03	2.73E+03
Bi^{3+}	1.39E-03	175	220
La^{3+}	5.92E-05	4.96	6.22
Hg^{2+}	1.01E-05	1.23	1.54
Zr (as $ZrO(OH)_2$)	9.29E-04	51.1	64.1
Pb^{2+}	1.18E-03	147	184
Ni^{2+}	7.67E-03	272	341
Sr^{2+}	1.97E-05	1.04	1.31
Mn^{4+}	4.94E-03	164	205
Ca^{2+}	4.09E-02	989	1.24E+03
K^{+}	6.73E-02	1.59E+03	1.99E+03
OH^{-}	8.36	8.57E+04	1.08E+05
$NO3^{-}$	6.08	2.27E+05	2.85E+05
$NO2^{-}$	2.80	7.76E+04	9.74E+04
$CO3^{2-}$	0.575	2.08E+04	2.61E+04
$PO4^{3-}$	0.107	6.14E+03	7.70E+03
$SO4^{2-}$	0.301	1.74E+04	2.19E+04
Si (as SiO_3^{2-})	9.89E-02	1.68E+03	2.10E+03
F^{-}	7.85E-02	899	1.13E+03
Cl^{-}	0.249	5.32E+03	6.68E+03
$C_6H_5O_7^{3-}$	4.03E-02	4.59E+03	5.76E+03
$EDTA^{4-}$	2.48E-02	4.30E+03	5.40E+03
$HEDTA^{3-}$	4.61E-02	7.62E+03	9.57E+03
$glycolate^{-}$	0.147	6.64E+03	8.33E+03
$acetate^{-}$	1.09E-02	389	488
$oxalate^{2-}$	5.06E-05	2.69	3.37
DBP	2.52E-02	4.04E+03	5.07E+03
butanol	2.52E-02	1.12E+03	1.41E+03
NH_3	6.45E-02	661	830
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	101 (µCi/L)		1.29 (kg)
U	1.50E-02 (M)	2.15E+03 (µg/g)	2.70E+03 (kg)
Cs	0.285 (Ci/L)	172 (µCi/g)	2.16E+05 (Ci)
Sr	0.154 (Ci/L)	92.8 (µCi/g)	1.17E+05 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Single-Shell Tank 241-U-106			
Total Inventory Estimate*			
Physical Properties			
Total Waste	1.43E+06 kg	(226 kgal)	
Heat Load	1.80 kW	(6.15E+03 BTU/hr)	
Bulk Density†	1.67 (g/cc)		
Water wt%†	31.2		
TOC wt% C (wet)†	1.00		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	13.1	1.80E+05	2.57E+05
Al^{3+}	1.68	2.72E+04	3.88E+04
Fe^{3+} (total Fe)	2.16E-02	723	1.03E+03
Cr^{3+}	6.15E-02	1.92E+03	2.73E+03
Bi^{3+}	1.23E-03	154	220
La^{3+}	5.24E-05	4.36	6.22
Hg^{2+}	8.98E-06	1.08	1.54
Zr (as $ZrO(OH)_2$)	8.22E-04	44.9	64.1
Pb^{2+}	1.04E-03	129	184
Ni^{2+}	6.86E-03	241	345
Sr^{2+}	1.75E-05	0.917	1.31
Mn^{4+}	4.37E-03	144	205
Ca^{2+}	4.59E-02	1.10E+03	1.57E+03
K^{+}	5.96E-02	1.40E+03	1.99E+03
OH^{-}	8.81	8.98E+04	1.28E+05
$NO3^{-}$	5.39	2.00E+05	2.86E+05
$NO2^{-}$	2.48	6.83E+04	9.74E+04
$CO3^{2-}$	0.725	2.61E+04	3.72E+04
$PO4^{3-}$	0.141	8.01E+03	1.14E+04
$SO4^{2-}$	0.276	1.59E+04	2.27E+04
Si (as SiO_3^{2-})	8.77E-02	1.48E+03	2.11E+03
F^{-}	6.94E-02	791	1.13E+03
Cl^{-}	0.221	4.68E+03	6.69E+03
$C_6H_5O_7^{3-}$	3.56E-02	4.04E+03	5.76E+03
$EDTA^{4-}$	2.19E-02	3.79E+03	5.40E+03
$HEDTA^{3-}$	4.08E-02	6.71E+03	9.57E+03
$glycolate^{-}$	0.130	5.84E+03	8.33E+03
$acetate^{-}$	9.67E-03	342	488
$oxalate^{2-}$	4.48E-05	2.36	3.37
DBP	2.23E-02	3.55E+03	5.07E+03
butanol	2.23E-02	989	1.41E+03
NH_3	5.71E-02	581	830
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		5.40E-02 (µCi/g)	1.30 (kg)
U	0.242 (M)	3.45E+04 (µg/g)	4.93E+04 (kg)
Cs	0.252 (Ci/L)	151 (µCi/g)	2.16E+05 (Ci)
Sr	0.137 (Ci/L)	82.1 (µCi/g)	1.17E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Single-Shell Tank 241-U-107			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	5.10E+05 kg	(76.0 kgal)	
Heat Load	7.60E-03 kW	(25.9 BTU/hr)	
Bulk Density	1.77 (g/cc)		
Void Fraction	0.651		
Water wt%	24.5		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	7.84	1.02E+05	5.19E+04
Al^{3+}	11.2	1.71E+05	8.70E+04
Fe^{3+} (total Fe)	0.165	5.20E+03	2.65E+03
Cr^{3+}	2.04E-03	59.8	30.5
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	4.08E-03	462	235
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0.118	1.38E+04	7.01E+03
Ni^{2+}	1.02E-03	33.7	17.2
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.121	2.73E+03	1.39E+03
K^{+}	1.47E-03	32.4	16.5
OH^{-}	41.7	4.06E+05	2.04E+05
$NO3^{-}$	0.571	2.03E+04	1.02E+04
$NO2^{-}$	0.959	2.53E+04	1.27E+04
$CO3^{2-}$	0.121	4.15E+03	2.09E+03
$PO4^{3-}$	0	0	0
$SO4^{2-}$	8.39E-03	461	232
Si (as SiO_3^{2-})	2.01E-02	323	162
F^{-}	0	0	0
Cl^{-}	6.76E-03	137	68.9
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	2.20E-04	2.14	1.08
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.44 (µCi/g)	12.2 (kg)
U	0.183 (M)	2.46E+04 (µg/g)	1.26E+04 (kg)
Cs	2.61E-03 (Ci/L)	1.47 (µCi/g)	750 (Ci)
Sr	2.11E-03 (Ci/L)	1.19 (µCi/g)	607 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-U-107			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	1.94E+06 kg	(330 kgal)	
Heat Load	2.52 kW	(8.59E+03 BTU/hr)	
Bulk Density*	1.55 (g/cc)		
Water wt%†	36.7		
TOC wt% C (wet)	0.840		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	11.8	1.75E+05	3.40E+05
Al^{3+}	1.58	2.75E+04	5.33E+04
Fe^{3+} (total Fe)	7.70E-03	277	537
Cr^{3+}	5.89E-02	1.97E+03	3.82E+03
Bi^{3+}	1.41E-03	190	368
La^{3+}	4.66E-05	4.17	8.09
Hg^{2+}	9.27E-06	1.20	2.32
Zr (as $ZrO(OH)_2$)	9.74E-04	57.2	111
Pb^{2+}	9.96E-04	133	258
Ni^{2+}	6.60E-03	250	484
Sr^{2+}	1.55E-05	0.877	1.70
Mn^{4+}	3.98E-03	141	273
Ca^{2+}	3.50E-02	904	1.75E+03
K^{+}	5.67E-02	1.43E+03	2.77E+03
OH^{-}	6.86	7.52E+04	1.46E+05
$NO3^{-}$	5.31	2.12E+05	4.11E+05
$NO2^{-}$	2.36	6.99E+04	1.35E+05
$CO3^{2-}$	0.451	1.74E+04	3.38E+04
$PO4^{3-}$	9.47E-02	5.79E+03	1.12E+04
$SO4^{2-}$	0.248	1.54E+04	2.98E+04
Si (as SiO_3^{2-})	8.04E-02	1.45E+03	2.82E+03
F^{-}	7.95E-02	973	1.89E+03
Cl^{-}	0.209	4.78E+03	9.27E+03
$C_6H_5O_7^{3-}$	2.91E-02	3.55E+03	6.88E+03
$EDTA^{4-}$	1.65E-02	3.07E+03	5.94E+03
$HEDTA^{3-}$	3.10E-02	5.47E+03	1.06E+04
$glycolate^{-}$	9.53E-02	4.61E+03	8.93E+03
$acetate^{-}$	6.51E-03	247	480
$oxalate^{2-}$	3.99E-05	2.26	4.39
DBP	1.94E-02	3.33E+03	6.46E+03
butanol	1.94E-02	929	1.80E+03
NH_3	5.88E-02	644	1.25E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	83.6 (µCi/L)		1.77 (kg)
U	1.26E-02 (M)	1.92E+03 (µg/g)	3.73E+03 (kg)
Cs	0.254 (Ci/L)	164 (µCi/g)	3.18E+05 (Ci)
Sr	0.122 (Ci/L)	78.6 (µCi/g)	1.52E+05 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Single-Shell Tank 241-U-107			
Total Inventory Estimate*			
Physical Properties			
Total Waste	2.45E+06 kg	(406 kgal)	
Heat Load	2.52 kW	(8.62E+03 BTU/hr)	
Bulk Density†	1.59 (g/cc)		
Water wt%†	34.4		
TOC wt% C (wet)†	0.683		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	11.1	1.60E+05	3.91E+05
Al^{3+}	3.38	5.73E+04	1.40E+05
Fe^{3+} (total Fe)	3.71E-02	1.30E+03	3.19E+03
Cr^{3+}	4.82E-02	1.57E+03	3.85E+03
Bi^{3+}	1.15E-03	150	368
La^{3+}	3.79E-05	3.30	8.09
Hg^{2+}	7.71E-04	97.1	238
Zr (as $ZrO(OH)_2$)	7.92E-04	45.3	111
Pb^{2+}	2.28E-02	2.97E+03	7.27E+03
Ni^{2+}	5.56E-03	205	501
Sr^{2+}	1.26E-05	0.695	1.70
Mn^{4+}	3.24E-03	112	273
Ca^{2+}	5.11E-02	1.28E+03	3.14E+03
K^{+}	4.64E-02	1.14E+03	2.79E+03
OH^{-}	13.4	1.44E+05	3.50E+05
$NO3^{-}$	4.42	1.72E+05	4.22E+05
$NO2^{-}$	2.10	6.06E+04	1.48E+05
$CO3^{2-}$	0.389	1.47E+04	3.59E+04
$PO4^{3-}$	7.69E-02	4.59E+03	1.12E+04
$SO4^{2-}$	0.204	1.23E+04	3.00E+04
Si (as SiO_3^{2-})	6.91E-02	1.22E+03	2.98E+03
F^{-}	6.46E-02	770	1.89E+03
Cl^{-}	0.171	3.81E+03	9.34E+03
$C_6H_5O_7^{3-}$	2.37E-02	2.81E+03	6.88E+03
$EDTA^{4-}$	1.34E-02	2.43E+03	5.94E+03
$HEDTA^{3-}$	2.52E-02	4.33E+03	1.06E+04
$glycolate^{-}$	7.75E-02	3.65E+03	8.93E+03
$acetate^{-}$	5.29E-03	196	480
$oxalate^{2-}$	3.24E-05	1.79	4.39
DBP	1.58E-02	2.64E+03	6.46E+03
butanol	1.58E-02	735	1.80E+03
NH_3	4.78E-02	510	1.25E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0.343 (µCi/g)	14.0 (kg)
U	4.45E-02 (M)	6.65E+03 (µg/g)	1.63E+04 (kg)
Cs	0.207 (Ci/L)	130 (µCi/g)	3.19E+05 (Ci)
Sr	9.96E-02 (Ci/L)	62.5 (µCi/g)	1.53E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

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Single-Shell Tank 241-U-108			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	1.83E+05 kg	(29.0 kgal)	
Heat Load	4.10E-03 kW	(14.0 BTU/hr)	
Bulk Density	1.66 (g/cc)		
Void Fraction	0.721		
Water wt%	47.6		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	1.76	2.43E+04	4.43E+03
Al^{3+}	5.25	8.52E+04	1.56E+04
Fe^{3+} (total Fe)	0.422	1.42E+04	2.59E+03
Cr^{3+}	2.22E-03	69.5	12.7
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	9.88E-03	1.19E+03	218
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0.292	3.64E+04	6.64E+03
Ni^{2+}	1.11E-03	39.2	7.16
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.297	7.16E+03	1.31E+03
K^{+}	2.37E-03	55.6	10.2
OH^{-}	21.9	2.24E+05	4.08E+04
$NO3^{-}$	0.597	2.23E+04	4.06E+03
$NO2^{-}$	0.213	5.89E+03	1.08E+03
$CO3^{2-}$	0.484	1.74E+04	3.19E+03
$PO4^{3-}$	4.14E-02	2.36E+03	431
$SO4^{2-}$	1.71E-02	988	180
Si (as SiO_3^{2-})	1.60E-04	2.71	0.495
F^{-}	0	0	0
Cl^{-}	1.09E-02	232	42.3
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	5.63E-05	0.575	0.105
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		2.75 (µCi/g)	8.36 (kg)
U	0.641 (M)	9.17E+04 (µg/g)	1.67E+04 (kg)
Cs	3.21E-03 (Ci/L)	1.93 (µCi/g)	352 (Ci)
Sr	3.32E-03 (Ci/L)	2.00 (µCi/g)	364 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-U-108			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	2.70E+06 kg	(439 kgal)	
Heat Load	3.80 kW	(1.30E+04 BTU/hr)	
Bulk Density*	1.62 (g/cc)		
Water wt%†	32.0		
TOC wt% C (wet)	0.985		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	13.3	1.89E+05	5.09E+05
Al^{3+}	1.81	3.01E+04	8.12E+04
Fe^{3+} (total Fe)	8.68E-03	299	805
Cr^{3+}	6.91E-02	2.22E+03	5.97E+03
Bi^{3+}	1.25E-03	162	436
La^{3+}	4.50E-05	3.86	10.4
Hg^{2+}	9.43E-06	1.17	3.14
Zr (as $ZrO(OH)_2$)	8.49E-04	47.7	129
Pb^{2+}	1.10E-03	140	379
Ni^{2+}	7.45E-03	270	727
Sr^{2+}	1.50E-05	0.811	2.19
Mn^{4+}	4.76E-03	161	435
Ca^{2+}	3.95E-02	975	2.63E+03
K^{+}	6.29E-02	1.52E+03	4.09E+03
OH^{-}	7.96	8.34E+04	2.25E+05
$NO3^{-}$	5.73	2.19E+05	5.90E+05
$NO2^{-}$	2.74	7.77E+04	2.09E+05
$CO3^{2-}$	0.519	1.92E+04	5.17E+04
$PO4^{3-}$	0.104	6.08E+03	1.64E+04
$SO4^{2-}$	0.281	1.66E+04	4.48E+04
Si (as SiO_3^{2-})	9.28E-02	1.61E+03	4.33E+03
F^{-}	7.06E-02	827	2.23E+03
Cl^{-}	0.233	5.09E+03	1.37E+04
$C_6H_5O_7^{3-}$	3.78E-02	4.40E+03	1.19E+04
$EDTA^{4-}$	1.98E-02	3.51E+03	9.47E+03
$HEDTA^{3-}$	3.64E-02	6.15E+03	1.66E+04
$glycolate^{-}$	0.117	5.42E+03	1.46E+04
$acetate^{-}$	1.02E-02	370	998
$oxalate^{2-}$	3.85E-05	2.09	5.63
DBP	2.40E-02	3.93E+03	1.06E+04
butanol	2.40E-02	1.10E+03	2.95E+03
NH_3	6.35E-02	666	1.79E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	94.5 (µCi/L)		2.66 (kg)
U	1.42E-02 (M)	2.08E+03 (µg/g)	5.61E+03 (kg)
Cs	0.278 (Ci/L)	172 (µCi/g)	4.62E+05 (Ci)
Sr	0.146 (Ci/L)	89.9 (µCi/g)	2.42E+05 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-U-108			
Total Inventory Estimate*			
Physical Properties			
Total Waste	2.88E+06 kg	(468 kgal)	
Heat Load	3.80 kW	(1.30E+04 BTU/hr)	
Bulk Density†	1.62 (g/cc)		
Water wt%†	33.0		
TOC wt% C (wet)†	0.924		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	12.6	1.78E+05	5.13E+05
Al^{3+}	2.02	3.36E+04	9.68E+04
Fe^{3+} (total Fe)	3.43E-02	1.18E+03	3.39E+03
Cr^{3+}	6.50E-02	2.08E+03	5.98E+03
Bi^{3+}	1.18E-03	151	436
La^{3+}	4.22E-05	3.61	10.4
Hg^{2+}	6.21E-04	76.7	221
Zr (as $ZrO(OH)_2$)	7.96E-04	44.7	129
Pb^{2+}	1.91E-02	2.44E+03	7.02E+03
Ni^{2+}	7.06E-03	255	734
Sr^{2+}	1.41E-05	0.759	2.19
Mn^{4+}	4.47E-03	151	435
Ca^{2+}	5.54E-02	1.37E+03	3.94E+03
K^{+}	5.91E-02	1.42E+03	4.10E+03
OH^{-}	8.82	9.23E+04	2.66E+05
$NO3^{-}$	5.41	2.06E+05	5.94E+05
$NO2^{-}$	2.58	7.31E+04	2.10E+05
$CO3^{2-}$	0.516	1.91E+04	5.49E+04
$PO4^{3-}$	9.99E-02	5.84E+03	1.68E+04
$SO4^{2-}$	0.264	1.56E+04	4.50E+04
Si (as SiO_3^{2-})	8.71E-02	1.51E+03	4.33E+03
F^{-}	6.63E-02	775	2.23E+03
Cl^{-}	0.219	4.78E+03	1.38E+04
$C_6H_5O_7^{3-}$	3.54E-02	4.12E+03	1.19E+04
$EDTA^{4-}$	1.86E-02	3.29E+03	9.47E+03
$HEDTA^{3-}$	3.41E-02	5.76E+03	1.66E+04
$glycolate^{-}$	0.110	5.08E+03	1.46E+04
$acetate^{-}$	9.55E-03	347	998
$oxalate^{2-}$	3.61E-05	1.96	5.63
DBP	2.25E-02	3.69E+03	1.06E+04
butanol	2.25E-02	1.03E+03	2.95E+03
NH_3	5.96E-02	623	1.79E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0.229 (µCi/g)	11.0 (kg)
U	5.30E-02 (M)	7.77E+03 (µg/g)	2.24E+04 (kg)
Cs	0.261 (Ci/L)	161 (µCi/g)	4.63E+05 (Ci)
Sr	0.137 (Ci/L)	84.3 (µCi/g)	2.43E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Single-Shell Tank 241-U-109			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	3.20E+05 kg	(48.0 kgal)	
Heat Load	7.25E-03 kW	(24.8 BTU/hr)	
Bulk Density	1.76 (g/cc)		
Void Fraction	0.504		
Water wt%	34.4		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	6.44	8.42E+04	2.69E+04
Al^{3+}	5.60	8.59E+04	2.75E+04
Fe^{3+} (total Fe)	0.142	4.50E+03	1.44E+03
Cr^{3+}	1.64E-03	48.4	15.5
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	2.04E-03	233	74.3
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	5.88E-02	6.93E+03	2.21E+03
Ni^{2+}	8.19E-04	27.3	8.74
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.102	2.33E+03	746
K^{+}	8.71E-04	19.4	6.19
OH^{-}	27.0	2.61E+05	8.34E+04
$NO3^{-}$	0.317	1.12E+04	3.57E+03
$NO2^{-}$	0.484	1.27E+04	4.05E+03
$CO3^{2-}$	1.00	3.42E+04	1.09E+04
$PO4^{3-}$	0.200	1.08E+04	3.45E+03
$SO4^{2-}$	4.52E-02	2.47E+03	789
Si (as SiO_3^{2-})	1.08E-02	173	55.2
F^{-}	0	0	0
Cl^{-}	4.01E-03	80.7	25.8
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	1.12E-04	1.08	0.345
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0.727 (µCi/g)	3.87 (kg)
U	1.09 (M)	1.47E+05 (µg/g)	4.70E+04 (kg)
Cs	1.72E-03 (Ci/L)	0.980 (µCi/g)	313 (Ci)
Sr	4.73E-03 (Ci/L)	2.69 (µCi/g)	859 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-U-109			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	2.68E+06 kg	(415 kgal)	
Heat Load	4.11 kW	(1.40E+04 BTU/hr)	
Bulk Density*	1.71 (g/cc)		
Water wt%†	26.5		
TOC wt% C (wet)	1.13		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	15.1	2.04E+05	5.47E+05
Al^{3+}	2.06	3.25E+04	8.72E+04
Fe^{3+} (total Fe)	9.73E-03	318	854
Cr^{3+}	7.68E-02	2.34E+03	6.27E+03
Bi^{3+}	1.42E-03	174	468
La^{3+}	4.20E-05	3.42	9.17
Hg^{2+}	1.07E-05	1.25	3.36
Zr (as $ZrO(OH)_2$)	9.77E-04	52.2	140
Pb^{2+}	1.23E-03	150	401
Ni^{2+}	8.32E-03	286	767
Sr^{2+}	1.40E-05	0.719	1.93
Mn^{4+}	5.31E-03	171	458
Ca^{2+}	4.42E-02	1.04E+03	2.79E+03
K^{+}	7.14E-02	1.63E+03	4.38E+03
OH^{-}	9.03	8.99E+04	2.41E+05
$NO3^{-}$	6.52	2.37E+05	6.35E+05
$NO2^{-}$	3.08	8.29E+04	2.22E+05
$CO3^{2-}$	0.598	2.10E+04	5.64E+04
$PO4^{3-}$	0.113	6.29E+03	1.69E+04
$SO4^{2-}$	0.319	1.79E+04	4.81E+04
Si (as SiO_3^{2-})	0.107	1.76E+03	4.71E+03
F^{-}	8.04E-02	895	2.40E+03
Cl^{-}	0.266	5.52E+03	1.48E+04
$C_6H_5O_7^{3-}$	4.26E-02	4.71E+03	1.26E+04
$EDTA^{4-}$	2.52E-02	4.25E+03	1.14E+04
$HEDTA^{3-}$	4.69E-02	7.53E+03	2.02E+04
$glycolate^{-}$	0.146	6.42E+03	1.72E+04
$acetate^{-}$	1.12E-02	388	1.04E+03
$oxalate^{2-}$	3.59E-05	1.85	4.97
DBP	2.67E-02	4.16E+03	1.12E+04
butanol	2.67E-02	1.16E+03	3.11E+03
NH_3	7.27E-02	724	1.94E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	109 (µCi/L)		2.90 (kg)
U	1.62E-02 (M)	2.26E+03 (µg/g)	6.07E+03 (kg)
Cs	0.319 (Ci/L)	187 (µCi/g)	5.00E+05 (Ci)
Sr	0.167 (Ci/L)	97.8 (µCi/g)	2.62E+05 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-U-109			
Total Inventory Estimate*			
Physical Properties			
Total Waste	3.00E+06 kg	(463 kgal)	
Heat Load	4.12 kW	(1.41E+04 BTU/hr)	
Bulk Density†	1.71 (g/cc)		
Water wt%†	27.3		
TOC wt% C (wet)†	1.02		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	14.2	1.91E+05	5.74E+05
Al^{3+}	2.42	3.82E+04	1.15E+05
Fe^{3+} (total Fe)	2.34E-02	764	2.29E+03
Cr^{3+}	6.90E-02	2.09E+03	6.29E+03
Bi^{3+}	1.28E-03	156	468
La^{3+}	3.77E-05	3.05	9.17
Hg^{2+}	2.21E-04	25.9	77.7
Zr (as $ZrO(OH)_2$)	8.76E-04	46.7	140
Pb^{2+}	7.20E-03	871	2.62E+03
Ni^{2+}	7.54E-03	258	776
Sr^{2+}	1.26E-05	0.642	1.93
Mn^{4+}	4.76E-03	153	458
Ca^{2+}	5.03E-02	1.18E+03	3.53E+03
K^{+}	6.41E-02	1.46E+03	4.39E+03
OH^{-}	10.9	1.08E+05	3.25E+05
$NO3^{-}$	5.87	2.13E+05	6.38E+05
$NO2^{-}$	2.81	7.54E+04	2.26E+05
$CO3^{2-}$	0.640	2.24E+04	6.73E+04
$PO4^{3-}$	0.122	6.77E+03	2.03E+04
$SO4^{2-}$	0.291	1.63E+04	4.89E+04
Si (as SiO_3^{2-})	9.68E-02	1.59E+03	4.77E+03
F^{-}	7.21E-02	800	2.40E+03
Cl^{-}	0.239	4.94E+03	1.48E+04
$C_6H_5O_7^{3-}$	3.82E-02	4.21E+03	1.26E+04
$EDTA^{4-}$	2.26E-02	3.80E+03	1.14E+04
$HEDTA^{3-}$	4.21E-02	6.73E+03	2.02E+04
$glycolate^{-}$	0.131	5.74E+03	1.72E+04
$acetate^{-}$	1.01E-02	347	1.04E+03
$oxalate^{2-}$	3.22E-05	1.66	4.97
DBP	2.39E-02	3.72E+03	1.12E+04
butanol	2.39E-02	1.04E+03	3.11E+03
NH_3	6.52E-02	647	1.94E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0.134 (µCi/g)	6.78 (kg)
U	0.127 (M)	1.77E+04 (µg/g)	5.30E+04 (kg)
Cs	0.286 (Ci/L)	167 (µCi/g)	5.01E+05 (Ci)
Sr	0.150 (Ci/L)	87.7 (µCi/g)	2.63E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Single-Shell Tank 241-U-110			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	9.50E+05 kg	(186 kgal)	
Heat Load	4.03E-02 kW	(138 BTU/hr)	
Bulk Density	1.35 (g/cc)		
Void Fraction	0.651		
Water wt%	66.4		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.90	8.34E+04	7.93E+04
Al^{3+}	0.414	8.28E+03	7.86E+03
Fe^{3+} (total Fe)	0.297	1.23E+04	1.17E+04
Cr^{3+}	3.44E-03	133	126
Bi^{3+}	6.71E-02	1.04E+04	9.87E+03
La^{3+}	0	0	0
Hg^{2+}	9.20E-05	13.7	13.0
Zr (as $ZrO(OH)_2$)	8.97E-03	606	576
Pb^{2+}	0	0	0
Ni^{2+}	1.09E-03	47.4	45.1
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	7.66E-02	2.27E+03	2.16E+03
K^{+}	2.85E-03	82.4	78.3
OH^{-}	3.87	4.87E+04	4.63E+04
$NO3^{-}$	0.334	1.53E+04	1.46E+04
$NO2^{-}$	0.157	5.35E+03	5.09E+03
$CO3^{2-}$	0.309	1.37E+04	1.31E+04
$PO4^{3-}$	1.21	8.53E+04	8.10E+04
$SO4^{2-}$	4.95E-02	3.52E+03	3.35E+03
Si (as SiO_3^{2-})	5.52E-02	1.15E+03	1.09E+03
F^{-}	0.144	2.03E+03	1.93E+03
Cl^{-}	1.31E-02	344	326
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	1.57E-04	1.97	1.87
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		5.56E-03 (µCi/g)	8.80E-02 (kg)
U	0.257 (M)	4.53E+04 (µg/g)	4.31E+04 (kg)
Cs	1.07E-02 (Ci/L)	7.95 (µCi/g)	7.55E+03 (Ci)
Sr	1.04E-03 (Ci/L)	0.772 (µCi/g)	733 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-U-110			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	0 (g/cc)		
Water wt%†	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Single-Shell Tank 241-U-110			
Total Inventory Estimate*			
Physical Properties			
Total Waste	9.50E+05 kg	(186 kgal)	
Heat Load	4.03E-02 kW	(138 BTU/hr)	
Bulk Density†	1.35 (g/cc)		
Water wt%†	66.4		
TOC wt% C (wet)†	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.90	8.34E+04	7.93E+04
Al^{3+}	0.414	8.28E+03	7.86E+03
Fe^{3+} (total Fe)	0.297	1.23E+04	1.17E+04
Cr^{3+}	3.44E-03	133	126
Bi^{3+}	6.71E-02	1.04E+04	9.87E+03
La^{3+}	0	0	0
Hg^{2+}	9.20E-05	13.7	13.0
Zr (as $ZrO(OH)_2$)	8.97E-03	606	576
Pb^{2+}	0	0	0
Ni^{2+}	1.09E-03	47.4	45.1
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	7.66E-02	2.27E+03	2.16E+03
K^{+}	2.85E-03	82.4	78.3
OH^{-}	3.87	4.87E+04	4.63E+04
$NO3^{-}$	0.334	1.53E+04	1.46E+04
$NO2^{-}$	0.157	5.35E+03	5.09E+03
$CO3^{2-}$	0.309	1.37E+04	1.31E+04
$PO4^{3-}$	1.21	8.53E+04	8.10E+04
$SO4^{2-}$	4.95E-02	3.52E+03	3.35E+03
Si (as SiO_3^{2-})	5.52E-02	1.15E+03	1.09E+03
F^{-}	0.144	2.03E+03	1.93E+03
Cl^{-}	1.31E-02	344	326
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	1.57E-04	1.97	1.87
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		5.56E-03 (µCi/g)	8.80E-02 (kg)
U	0.257 (M)	4.53E+04 (µg/g)	4.31E+04 (kg)
Cs	1.07E-02 (Ci/L)	7.95 (µCi/g)	7.55E+03 (Ci)
Sr	1.04E-03 (Ci/L)	0.772 (µCi/g)	733 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Single-Shell Tank 241-U-111			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	1.36E+05 kg	(26.0 kgal)	
Heat Load	0.367 kW	(1.25E+03 BTU/hr)	
Bulk Density	1.39 (g/cc)		
Void Fraction	0.747		
Water wt%	60.7		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	3.62	6.01E+04	8.20E+03
Al^{3+}	2.31	4.49E+04	6.13E+03
Fe^{3+} (total Fe)	0.668	2.69E+04	3.67E+03
Cr^{3+}	0.439	1.65E+04	2.25E+03
Bi^{3+}	3.85E-02	5.80E+03	791
La^{3+}	0	0	0
Hg^{2+}	5.28E-05	7.64	1.04
Zr (as $ZrO(OH)_2$)	5.15E-03	339	46.2
Pb^{2+}	0	0	0
Ni^{2+}	2.59E-02	1.10E+03	150
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.145	4.19E+03	572
K^{+}	5.87E-03	165	22.6
OH^{-}	10.6	1.30E+05	1.78E+04
$NO3^{-}$	0.205	9.14E+03	1.25E+03
$NO2^{-}$	1.07	3.54E+04	4.83E+03
$CO3^{2-}$	0.145	6.27E+03	856
$PO4^{3-}$	0.666	4.56E+04	6.22E+03
$SO4^{2-}$	3.00E-02	2.08E+03	283
Si (as SiO_3^{2-})	3.75E-02	760	104
F^{-}	8.26E-02	1.13E+03	154
Cl^{-}	2.70E-02	689	94.0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	6.59E-02	808	110
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		8.54E-03 (µCi/g)	1.94E-02 (kg)
U	1.11E-02 (M)	1.90E+03 (µg/g)	259 (kg)
Cs	4.57E-02 (Ci/L)	33.0 (µCi/g)	4.50E+03 (Ci)
Sr	0.522 (Ci/L)	376 (µCi/g)	5.13E+04 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-U-111			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	1.57E+06 kg	(303 kgal)	
Heat Load	1.57 kW	(5.36E+03 BTU/hr)	
Bulk Density*	1.37 (g/cc)		
Water wt%†	51.9		
TOC wt% C (wet)	0.640		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	7.94	1.33E+05	2.09E+05
Al^{3+}	1.07	2.11E+04	3.32E+04
Fe^{3+} (total Fe)	5.16E-03	210	331
Cr^{3+}	4.01E-02	1.52E+03	2.39E+03
Bi^{3+}	9.09E-04	139	218
La^{3+}	2.88E-05	2.92	4.59
Hg^{2+}	6.09E-06	0.891	1.40
Zr (as $ZrO(OH)_2$)	6.30E-04	41.9	65.9
Pb^{2+}	6.59E-04	99.6	157
Ni^{2+}	4.43E-03	190	298
Sr^{2+}	9.61E-06	0.614	0.966
Mn^{4+}	2.61E-03	105	165
Ca^{2+}	2.35E-02	686	1.08E+03
K^{+}	3.78E-02	1.08E+03	1.70E+03
OH^{-}	4.67	5.78E+04	9.10E+04
$NO3^{-}$	3.54	1.60E+05	2.52E+05
$NO2^{-}$	1.61	5.39E+04	8.47E+04
$CO3^{2-}$	0.299	1.31E+04	2.06E+04
$PO4^{3-}$	6.21E-02	4.30E+03	6.77E+03
$SO4^{2-}$	0.165	1.16E+04	1.82E+04
Si (as SiO_3^{2-})	5.41E-02	1.11E+03	1.74E+03
F^{-}	5.12E-02	710	1.12E+03
Cl^{-}	0.140	3.63E+03	5.70E+03
$C_6H_5O_7^{3-}$	1.94E-02	2.68E+03	4.22E+03
$EDTA^{4-}$	1.12E-02	2.36E+03	3.71E+03
$HEDTA^{3-}$	2.11E-02	4.22E+03	6.64E+03
$glycolate^{-}$	6.40E-02	3.50E+03	5.50E+03
$acetate^{-}$	4.23E-03	182	286
$oxalate^{2-}$	2.47E-05	1.58	2.49
DBP	1.29E-02	2.50E+03	3.94E+03
butanol	1.29E-02	698	1.10E+03
NH_3	3.95E-02	490	771
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	56.0 (µCi/L)		1.10 (kg)
U	8.46E-03 (M)	1.47E+03 (µg/g)	2.31E+03 (kg)
Cs	0.173 (Ci/L)	126 (µCi/g)	1.99E+05 (Ci)
Sr	8.25E-02 (Ci/L)	60.1 (µCi/g)	9.46E+04 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-U-111			
Total Inventory Estimate*			
Physical Properties			
Total Waste	1.71E+06 kg	(329 kgal)	
Heat Load	1.94 kW	(6.61E+03 BTU/hr)	
Bulk Density†	1.37 (g/cc)		
Water wt%†	52.6		
TOC wt% C (wet)†	0.590		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	7.60	1.27E+05	2.18E+05
Al^{3+}	1.17	2.30E+04	3.94E+04
Fe^{3+} (total Fe)	5.75E-02	2.34E+03	4.00E+03
Cr^{3+}	7.16E-02	2.71E+03	4.64E+03
Bi^{3+}	3.88E-03	590	1.01E+03
La^{3+}	2.65E-05	2.69	4.59
Hg^{2+}	9.78E-06	1.43	2.44
Zr (as $ZrO(OH)_2$)	9.87E-04	65.6	112
Pb^{2+}	6.07E-04	91.7	157
Ni^{2+}	6.12E-03	262	448
Sr^{2+}	8.85E-06	0.565	0.966
Mn^{4+}	2.40E-03	96.2	165
Ca^{2+}	3.31E-02	966	1.65E+03
K^{+}	3.53E-02	1.01E+03	1.72E+03
OH^{-}	5.14	6.36E+04	1.09E+05
$NO3^{-}$	3.27	1.48E+05	2.53E+05
$NO2^{-}$	1.56	5.24E+04	8.96E+04
$CO3^{2-}$	0.287	1.25E+04	2.14E+04
$PO4^{3-}$	0.110	7.60E+03	1.30E+04
$SO4^{2-}$	0.154	1.08E+04	1.85E+04
Si (as SiO_3^{2-})	5.28E-02	1.08E+03	1.85E+03
F^{-}	5.37E-02	744	1.27E+03
Cl^{-}	0.131	3.39E+03	5.80E+03
$C_6H_5O_7^{3-}$	1.79E-02	2.47E+03	4.22E+03
$EDTA^{4-}$	1.03E-02	2.17E+03	3.71E+03
$HEDTA^{3-}$	1.95E-02	3.89E+03	6.64E+03
$glycolate^{-}$	5.89E-02	3.22E+03	5.50E+03
$acetate^{-}$	3.89E-03	167	286
$oxalate^{2-}$	2.27E-05	1.46	2.49
DBP	1.19E-02	2.30E+03	3.94E+03
butanol	1.19E-02	642	1.10E+03
NH_3	4.16E-02	515	881
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		3.83E-02 (µCi/g)	1.12 (kg)
U	8.66E-03 (M)	1.50E+03 (µg/g)	2.57E+03 (kg)
Cs	0.163 (Ci/L)	119 (µCi/g)	2.03E+05 (Ci)
Sr	0.117 (Ci/L)	85.4 (µCi/g)	1.46E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

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Single-Shell Tank 241-U-112			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	2.36E+05 kg	(45.0 kgal)	
Heat Load	0.204 kW	(695 BTU/hr)	
Bulk Density	1.38 (g/cc)		
Void Fraction	0.705		
Water wt%	59.8		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.88	8.11E+04	1.91E+04
Al^{3+}	2.48	4.83E+04	1.14E+04
Fe^{3+} (total Fe)	0.409	1.65E+04	3.89E+03
Cr^{3+}	0.139	5.22E+03	1.23E+03
Bi^{3+}	5.47E-02	8.26E+03	1.95E+03
La^{3+}	0	0	0
Hg^{2+}	6.19E-04	89.7	21.2
Zr (as $ZrO(OH)_2$)	7.32E-03	482	114
Pb^{2+}	1.57E-02	2.35E+03	554
Ni^{2+}	8.84E-03	375	88.4
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.103	2.99E+03	704
K^{+}	3.81E-03	108	25.4
OH^{-}	10.3	1.27E+05	2.99E+04
$NO3^{-}$	0.348	1.56E+04	3.67E+03
$NO2^{-}$	0.559	1.86E+04	4.38E+03
$CO3^{2-}$	0.103	4.47E+03	1.05E+03
$PO4^{3-}$	0.947	6.49E+04	1.53E+04
$SO4^{2-}$	3.53E-02	2.45E+03	577
Si (as SiO_3^{2-})	4.95E-02	1.00E+03	237
F^{-}	0.118	1.61E+03	380
Cl^{-}	1.75E-02	449	106
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	2.06E-02	253	59.7
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0.251 (µCi/g)	0.989 (kg)
U	2.82E-02 (M)	4.85E+03 (µg/g)	1.14E+03 (kg)
Cs	2.13E-02 (Ci/L)	15.4 (µCi/g)	3.64E+03 (Ci)
Sr	0.163 (Ci/L)	117 (µCi/g)	2.77E+04 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

Rev. 3

Single-Shell Tank 241-U-112			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	1.52E+04 kg	(4.01 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	1.00 (g/cc)		
Water wt%†	100		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-U-112			
Total Inventory Estimate*			
Physical Properties			
Total Waste	2.51E+05 kg	(49.0 kgal)	
Heat Load	0.204 kW	(695 BTU/hr)	
Bulk Density†	1.35 (g/cc)		
Water wt%†	63.1		
TOC wt% C (wet)†	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.48	7.62E+04	1.91E+04
Al^{3+}	2.27	4.53E+04	1.14E+04
Fe^{3+} (total Fe)	0.376	1.55E+04	3.89E+03
Cr^{3+}	0.128	4.90E+03	1.23E+03
Bi^{3+}	5.03E-02	7.76E+03	1.95E+03
La^{3+}	0	0	0
Hg^{2+}	5.69E-04	84.3	21.2
Zr (as $ZrO(OH)_2$)	6.73E-03	453	114
Pb^{2+}	1.44E-02	2.21E+03	554
Ni^{2+}	8.12E-03	352	88.4
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	9.47E-02	2.80E+03	704
K^{+}	3.50E-03	101	25.4
OH^{-}	9.48	1.19E+05	2.99E+04
$NO3^{-}$	0.319	1.46E+04	3.67E+03
$NO2^{-}$	0.513	1.74E+04	4.38E+03
$CO3^{2-}$	9.47E-02	4.20E+03	1.05E+03
$PO4^{3-}$	0.870	6.10E+04	1.53E+04
$SO4^{2-}$	3.24E-02	2.30E+03	577
Si (as SiO_3^{2-})	4.54E-02	943	237
F^{-}	0.108	1.52E+03	380
Cl^{-}	1.61E-02	422	106
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	1.89E-02	238	59.7
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0.236 (µCi/g)	0.989 (kg)
U	2.59E-02 (M)	4.56E+03 (µg/g)	1.14E+03 (kg)
Cs	1.96E-02 (Ci/L)	14.5 (µCi/g)	3.64E+03 (Ci)
Sr	0.149 (Ci/L)	110 (µCi/g)	2.77E+04 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Single-Shell Tank 241-U-201			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	2.68E+04 kg	(4.00 kgal)	
Heat Load	4.00E-04 kW	(1.37 BTU/hr)	
Bulk Density	1.77 (g/cc)		
Void Fraction	0.651		
Water wt%	24.5		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	7.84	1.02E+05	2.73E+03
Al^{3+}	11.2	1.71E+05	4.58E+03
Fe^{3+} (total Fe)	0.165	5.20E+03	139
Cr^{3+}	2.04E-03	59.8	1.60
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	4.08E-03	462	12.4
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0.118	1.38E+04	369
Ni^{2+}	1.02E-03	33.7	0.905
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.121	2.73E+03	73.3
K^{+}	1.47E-03	32.4	0.869
OH^{-}	41.7	4.00E+05	1.07E+04
$NO3^{-}$	0.571	2.00E+04	536
$NO2^{-}$	0.959	2.49E+04	668
$CO3^{2-}$	0.121	4.09E+03	110
$PO4^{3-}$	0	0	0
$SO4^{2-}$	8.39E-03	455	12.2
Si (as SiO_3^{2-})	2.01E-02	319	8.54
F^{-}	0	0	0
Cl^{-}	6.76E-03	135	3.62
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	2.20E-04	2.11	5.66E-02
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.44 (µCi/g)	0.644 (kg)
U	0.183 (M)	2.46E+04 (µg/g)	661 (kg)
Cs	2.61E-03 (Ci/L)	1.47 (µCi/g)	39.5 (Ci)
Sr	2.11E-03 (Ci/L)	1.19 (µCi/g)	31.9 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-U-201			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	3.79E+03 kg	(1.00 kgal)	
Heat Load	1.98E-06 kW	(6.75E-03 BTU/hr)	
Bulk Density*	1.00 (g/cc)		
Water wt%†	100.0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.00E-03	92.0	0.348
Al^{3+}	9.36E-04	25.2	9.57E-02
Fe^{3+} (total Fe)	2.53E-06	0.141	5.36E-04
Cr^{3+}	2.33E-05	1.21	4.59E-03
Bi^{3+}	1.97E-07	4.11E-02	1.56E-04
La^{3+}	0	0	0
Hg^{2+}	5.37E-09	1.08E-03	4.08E-06
Zr (as $ZrO(OH)_2$)	1.48E-07	1.35E-02	5.10E-05
Pb^{2+}	7.80E-07	0.162	6.12E-04
Ni^{2+}	2.16E-06	0.127	4.80E-04
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	1.14E-05	0.456	1.73E-03
K^{+}	8.95E-06	0.350	1.33E-03
OH^{-}	3.76E-03	64.0	0.242
$NO3^{-}$	1.62E-03	101	0.381
$NO2^{-}$	1.34E-03	61.8	0.234
$CO3^{2-}$	1.68E-05	1.01	3.82E-03
$PO4^{3-}$	9.50E-06	0.902	3.42E-03
$SO4^{2-}$	2.64E-05	2.53	9.60E-03
Si (as SiO_3^{2-})	2.74E-05	0.769	2.92E-03
F^{-}	1.17E-05	0.222	8.42E-04
Cl^{-}	4.12E-05	1.46	5.52E-03
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	1.10E-05	0.187	7.07E-04
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	2.63E-02 (µCi/L)		1.72E-06 (kg)
U	4.91E-06 (M)	1.17 (µg/g)	4.42E-03 (kg)
Cs	7.38E-05 (Ci/L)	7.37E-02 (µCi/g)	0.279 (Ci)
Sr	2.62E-05 (Ci/L)	2.62E-02 (µCi/g)	9.92E-02 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Single-Shell Tank 241-U-201			
Total Inventory Estimate*			
Physical Properties			
Total Waste	3.06E+04 kg	(5.00 kgal)	
Heat Load	4.02E-04 kW	(1.37 BTU/hr)	
Bulk Density†	1.62 (g/cc)		
Water wt%†	39.6		
TOC wt% C (wet)†	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	6.27	8.92E+04	2.73E+03
Al^{3+}	8.96	1.50E+05	4.58E+03
Fe^{3+} (total Fe)	0.132	4.56E+03	139
Cr^{3+}	1.63E-03	52.5	1.61
Bi^{3+}	3.94E-08	5.09E-03	1.56E-04
La^{3+}	0	0	0
Hg^{2+}	3.26E-03	405	12.4
Zr (as $ZrO(OH)_2$)	2.95E-08	1.67E-03	5.10E-05
Pb^{2+}	9.41E-02	1.21E+04	369
Ni^{2+}	8.15E-04	29.6	0.905
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	9.66E-02	2.39E+03	73.3
K^{+}	1.18E-03	28.4	0.871
OH^{-}	33.4	3.51E+05	1.07E+04
$NO3^{-}$	0.457	1.75E+04	536
$NO2^{-}$	0.767	2.18E+04	668
$CO3^{2-}$	9.66E-02	3.58E+03	110
$PO4^{3-}$	1.90E-06	0.112	3.42E-03
$SO4^{2-}$	6.71E-03	399	12.2
Si (as SiO_3^{2-})	1.61E-02	279	8.55
F^{-}	2.34E-06	2.75E-02	8.42E-04
Cl^{-}	5.41E-03	119	3.63
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	1.78E-04	1.87	5.73E-02
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.26 (µCi/g)	0.644 (kg)
U	0.147 (M)	2.16E+04 (µg/g)	661 (kg)
Cs	2.10E-03 (Ci/L)	1.30 (µCi/g)	39.7 (Ci)
Sr	1.69E-03 (Ci/L)	1.05 (µCi/g)	32.0 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

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Single-Shell Tank 241-U-202			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	2.68E+04 kg	(4.00 kgal)	
Heat Load	4.00E-04 kW	(1.37 BTU/hr)	
Bulk Density	1.77 (g/cc)		
Void Fraction	0.651		
Water wt%	24.5		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	7.84	1.02E+05	2.73E+03
Al^{3+}	11.2	1.71E+05	4.58E+03
Fe^{3+} (total Fe)	0.165	5.20E+03	139
Cr^{3+}	2.04E-03	59.8	1.60
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	4.08E-03	462	12.4
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0.118	1.38E+04	369
Ni^{2+}	1.02E-03	33.7	0.905
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.121	2.73E+03	73.3
K^{+}	1.47E-03	32.4	0.870
OH^{-}	41.7	4.00E+05	1.07E+04
$NO3^{-}$	0.571	2.00E+04	536
$NO2^{-}$	0.959	2.49E+04	668
$CO3^{2-}$	0.121	4.09E+03	110
$PO4^{3-}$	0	0	0
$SO4^{2-}$	8.39E-03	455	12.2
Si (as SiO_3^{2-})	2.01E-02	319	8.55
F^{-}	0	0	0
Cl^{-}	6.76E-03	135	3.62
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	2.20E-04	2.11	5.66E-02
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.44 (µCi/g)	0.644 (kg)
U	0.183 (M)	2.46E+04 (µg/g)	661 (kg)
Cs	2.61E-03 (Ci/L)	1.47 (µCi/g)	39.5 (Ci)
Sr	2.11E-03 (Ci/L)	1.19 (µCi/g)	31.9 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

Rev. 3

Single-Shell Tank 241-U-202			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	3.79E+03 kg	(1.00 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	1.00 (g/cc)		
Water wt%†	100		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Single-Shell Tank 241-U-202			
Total Inventory Estimate*			
Physical Properties			
Total Waste	3.06E+04 kg	(5.00 kgal)	
Heat Load	4.00E-04 kW	(1.37 BTU/hr)	
Bulk Density†	1.62 (g/cc)		
Water wt%†	39.6		
TOC wt% C (wet)†	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	6.27	8.92E+04	2.73E+03
Al^{3+}	8.97	1.50E+05	4.58E+03
Fe^{3+} (total Fe)	0.132	4.56E+03	139
Cr^{3+}	1.63E-03	52.4	1.60
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	3.26E-03	405	12.4
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	9.41E-02	1.21E+04	369
Ni^{2+}	8.14E-04	29.6	0.905
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	9.66E-02	2.39E+03	73.3
K^{+}	1.18E-03	28.4	0.870
OH^{-}	33.4	3.51E+05	1.07E+04
$NO3^{-}$	0.457	1.75E+04	536
$NO2^{-}$	0.767	2.18E+04	668
$CO3^{2-}$	9.66E-02	3.59E+03	110
$PO4^{3-}$	0	0	0
$SO4^{2-}$	6.71E-03	398	12.2
Si (as SiO_3^{2-})	1.61E-02	279	8.55
F^{-}	0	0	0
Cl^{-}	5.41E-03	118	3.62
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	1.76E-04	1.85	5.66E-02
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.26 (µCi/g)	0.644 (kg)
U	0.147 (M)	2.16E+04 (µg/g)	661 (kg)
Cs	2.09E-03 (Ci/L)	1.29 (µCi/g)	39.5 (Ci)
Sr	1.69E-03 (Ci/L)	1.04 (µCi/g)	31.9 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

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Single-Shell Tank 241-U-203			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	1.34E+04 kg	(2.00 kgal)	
Heat Load	2.00E-04 kW	(0.683 BTU/hr)	
Bulk Density	1.77 (g/cc)		
Void Fraction	0.651		
Water wt%	24.5		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	7.84	1.02E+05	1.36E+03
Al^{3+}	11.2	1.71E+05	2.29E+03
Fe^{3+} (total Fe)	0.165	5.20E+03	69.7
Cr^{3+}	2.04E-03	59.8	0.801
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	4.08E-03	462	6.19
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0.118	1.38E+04	184
Ni^{2+}	1.02E-03	33.7	0.452
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.121	2.73E+03	36.6
K^{+}	1.47E-03	32.4	0.435
OH^{-}	41.7	4.00E+05	5.37E+03
$NO3^{-}$	0.571	2.00E+04	268
$NO2^{-}$	0.959	2.49E+04	334
$CO3^{2-}$	0.121	4.09E+03	54.8
$PO4^{3-}$	0	0	0
$SO4^{2-}$	8.39E-03	455	6.09
Si (as SiO_3^{2-})	2.01E-02	319	4.27
F^{-}	0	0	0
Cl^{-}	6.76E-03	135	1.81
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	2.20E-04	2.11	2.83E-02
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.44 (µCi/g)	0.322 (kg)
U	0.183 (M)	2.46E+04 (µg/g)	330 (kg)
Cs	2.61E-03 (Ci/L)	1.47 (µCi/g)	19.7 (Ci)
Sr	2.11E-03 (Ci/L)	1.19 (µCi/g)	16.0 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

Rev. 3

Single-Shell Tank 241-U-203			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	5.51E+03 kg	(1.00 kgal)	
Heat Load	4.14E-03 kW	(14.1 BTU/hr)	
Bulk Density*	1.46 (g/cc)		
Water wt%†	49.0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	8.38	1.32E+05	730
Al^{3+}	1.96	3.64E+04	200
Fe^{3+} (total Fe)	5.30E-03	204	1.12
Cr^{3+}	4.88E-02	1.74E+03	9.61
Bi^{3+}	4.12E-04	59.2	0.326
La^{3+}	0	0	0
Hg^{2+}	1.12E-05	1.55	8.54E-03
Zr (as $ZrO(OH)_2$)	3.09E-04	19.4	0.107
Pb^{2+}	1.63E-03	233	1.28
Ni^{2+}	4.52E-03	182	1.00
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	2.39E-02	657	3.62
K^{+}	1.87E-02	504	2.78
OH^{-}	7.89	9.21E+04	508
$NO3^{-}$	3.40	1.45E+05	799
$NO2^{-}$	2.81	8.90E+04	490
$CO3^{2-}$	3.52E-02	1.45E+03	8.01
$PO4^{3-}$	1.99E-02	1.30E+03	7.16
$SO4^{2-}$	5.53E-02	3.65E+03	20.1
Si (as SiO_3^{2-})	5.74E-02	1.11E+03	6.11
F^{-}	2.45E-02	320	1.76
Cl^{-}	8.62E-02	2.10E+03	11.6
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	2.30E-02	269	1.48
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	55.2 (µCi/L)		3.61E-03 (kg)
U	1.03E-02 (M)	1.68E+03 (µg/g)	9.27 (kg)
Cs	0.155 (Ci/L)	106 (µCi/g)	586 (Ci)
Sr	5.49E-02 (Ci/L)	37.7 (µCi/g)	208 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-U-203			
Total Inventory Estimate*			
Physical Properties			
Total Waste	1.89E+04 kg	(3.00 kgal)	
Heat Load	4.34E-03 kW	(14.8 BTU/hr)	
Bulk Density†	1.67 (g/cc)		
Water wt%†	32.7		
TOC wt% C (wet)†	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	8.02	1.11E+05	2.09E+03
Al^{3+}	8.12	1.32E+05	2.49E+03
Fe^{3+} (total Fe)	0.112	3.74E+03	70.8
Cr^{3+}	1.76E-02	550	10.4
Bi^{3+}	1.37E-04	17.2	0.326
La^{3+}	0	0	0
Hg^{2+}	2.72E-03	328	6.20
Zr (as $ZrO(OH)_2$)	1.03E-04	5.65	0.107
Pb^{2+}	7.89E-02	9.82E+03	186
Ni^{2+}	2.19E-03	77.0	1.46
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	8.85E-02	2.13E+03	40.3
K^{+}	7.23E-03	170	3.21
OH^{-}	30.4	3.11E+05	5.87E+03
$NO3^{-}$	1.52	5.64E+04	1.07E+03
$NO2^{-}$	1.58	4.36E+04	824
$CO3^{2-}$	9.22E-02	3.32E+03	62.9
$PO4^{3-}$	6.64E-03	378	7.16
$SO4^{2-}$	2.40E-02	1.39E+03	26.2
Si (as SiO_3^{2-})	3.25E-02	549	10.4
F^{-}	8.18E-03	93.3	1.76
Cl^{-}	3.33E-02	708	13.4
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	7.82E-03	79.8	1.51
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.03 (µCi/g)	0.325 (kg)
U	0.126 (M)	1.80E+04 (µg/g)	340 (kg)
Cs	5.33E-02 (Ci/L)	32.0 (µCi/g)	605 (Ci)
Sr	1.97E-02 (Ci/L)	11.8 (µCi/g)	224 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

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Single-Shell Tank 241-U-204			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	1.34E+04 kg	(2.00 kgal)	
Heat Load	2.00E-04 kW	(0.683 BTU/hr)	
Bulk Density	1.77 (g/cc)		
Void Fraction	0.651		
Water wt%	24.5		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	7.84	1.02E+05	1.36E+03
Al^{3+}	11.2	1.71E+05	2.29E+03
Fe^{3+} (total Fe)	0.165	5.20E+03	69.7
Cr^{3+}	2.04E-03	59.8	0.802
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	4.08E-03	462	6.20
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0.118	1.38E+04	185
Ni^{2+}	1.02E-03	33.7	0.452
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.121	2.73E+03	36.6
K^{+}	1.47E-03	32.4	0.435
OH^{-}	41.7	4.00E+05	5.37E+03
$NO3^{-}$	0.571	2.00E+04	268
$NO2^{-}$	0.959	2.49E+04	334
$CO3^{2-}$	0.121	4.09E+03	54.9
$PO4^{3-}$	0	0	0
$SO4^{2-}$	8.39E-03	455	6.10
Si (as SiO_3^{2-})	2.01E-02	319	4.27
F^{-}	0	0	0
Cl^{-}	6.76E-03	135	1.81
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	2.20E-04	2.11	2.83E-02
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.44 (µCi/g)	0.322 (kg)
U	0.183 (M)	2.46E+04 (µg/g)	331 (kg)
Cs	2.61E-03 (Ci/L)	1.47 (µCi/g)	19.7 (Ci)
Sr	2.11E-03 (Ci/L)	1.19 (µCi/g)	16.0 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-U-204			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	3.79E+03 kg	(1.00 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	1.00 (g/cc)		
Water wt%†	100		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Single-Shell Tank 241-U-204			
Total Inventory Estimate*			
Physical Properties			
Total Waste	1.72E+04 kg	(3.00 kgal)	
Heat Load	2.00E-04 kW	(0.683 BTU/hr)	
Bulk Density†	1.51 (g/cc)		
Water wt%†	49.7		
TOC wt% C (wet)†	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	5.23	7.94E+04	1.36E+03
Al^{3+}	7.47	1.33E+05	2.29E+03
Fe^{3+} (total Fe)	0.110	4.06E+03	69.7
Cr^{3+}	1.36E-03	46.6	0.802
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	2.72E-03	360	6.20
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	7.84E-02	1.07E+04	185
Ni^{2+}	6.79E-04	26.3	0.452
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	8.05E-02	2.13E+03	36.6
K^{+}	9.79E-04	25.3	0.435
OH^{-}	27.8	3.12E+05	5.37E+03
$NO3^{-}$	0.381	1.56E+04	268
$NO2^{-}$	0.639	1.94E+04	334
$CO3^{2-}$	8.05E-02	3.19E+03	54.9
$PO4^{3-}$	0	0	0
$SO4^{2-}$	5.59E-03	355	6.10
Si (as SiO_3^{2-})	1.34E-02	248	4.27
F^{-}	0	0	0
Cl^{-}	4.50E-03	105	1.81
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	1.47E-04	1.65	2.83E-02
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.12 (µCi/g)	0.322 (kg)
U	0.122 (M)	1.92E+04 (µg/g)	331 (kg)
Cs	1.74E-03 (Ci/L)	1.15 (µCi/g)	19.7 (Ci)
Sr	1.41E-03 (Ci/L)	0.928 (µCi/g)	16.0 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

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Single-Shell Tank 241-T-101			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	2.32E+05 kg	(37.0 kgal)	
Heat Load	5.11E-03 kW	(17.5 BTU/hr)	
Bulk Density	1.66 (g/cc)		
Void Fraction	0.741		
Water wt%	47.8		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	1.58	2.18E+04	5.07E+03
Al^{3+}	5.54	9.01E+04	2.09E+04
Fe^{3+} (total Fe)	0.439	1.48E+04	3.43E+03
Cr^{3+}	2.28E-03	71.3	16.6
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	1.04E-02	1.26E+03	293
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0.308	3.85E+04	8.94E+03
Ni^{2+}	1.14E-03	40.3	9.36
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.309	7.47E+03	1.73E+03
K^{+}	2.48E-03	58.5	13.6
OH^{-}	22.4	2.30E+05	5.34E+04
$NO3^{-}$	0.627	2.34E+04	5.44E+03
$NO2^{-}$	0.224	6.22E+03	1.44E+03
$CO3^{2-}$	0.406	1.47E+04	3.42E+03
$PO4^{3-}$	2.16E-02	1.24E+03	287
$SO4^{2-}$	1.35E-02	784	182
Si (as SiO_3^{2-})	8.38E-05	1.42	0.330
F^{-}	0	0	0
Cl^{-}	1.14E-02	244	56.6
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	5.92E-05	0.607	0.141
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		2.91 (µCi/g)	11.3 (kg)
U	0.567 (M)	8.13E+04 (µg/g)	1.89E+04 (kg)
Cs	3.34E-03 (Ci/L)	2.01 (µCi/g)	468 (Ci)
Sr	3.10E-03 (Ci/L)	1.87 (µCi/g)	434 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

Rev. 3

Single-Shell Tank 241-T-101			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	2.83E+05 kg	(65.0 kgal)	
Heat Load	0.123 kW	(421 BTU/hr)	
Bulk Density*	1.15 (g/cc)		
Water wt%†	76.3		
TOC wt% C (wet)	0.352		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	3.32	6.64E+04	1.88E+04
Al^{3+}	0.379	8.89E+03	2.51E+03
Fe^{3+} (total Fe)	2.21E-03	108	30.4
Cr^{3+}	1.40E-02	631	179
Bi^{3+}	7.62E-04	139	39.2
La^{3+}	2.82E-04	34.1	9.64
Hg^{2+}	2.88E-06	0.502	0.142
Zr (as $ZrO(OH)_2$)	3.88E-04	30.8	8.71
Pb^{2+}	2.59E-04	46.7	13.2
Ni^{2+}	1.88E-03	96.1	27.2
Sr^{2+}	9.40E-05	7.17	2.03
Mn^{4+}	1.35E-03	64.6	18.3
Ca^{2+}	1.01E-02	351	99.4
K^{+}	2.85E-02	969	274
OH^{-}	1.70	2.52E+04	7.12E+03
$NO3^{-}$	1.53	8.25E+04	2.33E+04
$NO2^{-}$	0.548	2.19E+04	6.20E+03
$CO3^{2-}$	0.148	7.70E+03	2.18E+03
$PO4^{3-}$	3.28E-02	2.71E+03	766
$SO4^{2-}$	7.71E-02	6.44E+03	1.82E+03
Si (as SiO_3^{2-})	2.31E-02	565	160
F^{-}	4.25E-02	703	199
Cl^{-}	6.11E-02	1.88E+03	533
$C_6H_5O_7^{3-}$	8.87E-03	1.46E+03	413
$EDTA^{4-}$	4.98E-03	1.25E+03	353
$HEDTA^{3-}$	9.75E-03	2.32E+03	657
$glycolate^{-}$	3.30E-02	2.15E+03	609
$acetate^{-}$	6.82E-04	35.0	9.90
$oxalate^{2-}$	2.41E-04	18.5	5.23
DBP	5.77E-03	1.33E+03	378
butanol	5.77E-03	372	105
NH_3	1.67E-02	246	69.7
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	24.7 (µCi/L)		0.101 (kg)
U	3.39E-03 (M)	702 (µg/g)	199 (kg)
Cs	5.87E-02 (Ci/L)	51.1 (µCi/g)	1.44E+04 (Ci)
Sr	3.35E-02 (Ci/L)	29.1 (µCi/g)	8.24E+03 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.
†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Single-Shell Tank 241-T-101			
Total Inventory Estimate*			
Physical Properties			
Total Waste	5.15E+05 kg	(102 kgal)	
Heat Load	0.128 kW	(438 BTU/hr)	
Bulk Density†	1.33 (g/cc)		
Water wt%†	63.5		
TOC wt% C (wet)†	0.193		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	2.69	4.63E+04	2.38E+04
Al^{3+}	2.25	4.55E+04	2.35E+04
Fe^{3+} (total Fe)	0.161	6.72E+03	3.46E+03
Cr^{3+}	9.72E-03	379	195
Bi^{3+}	4.86E-04	76.1	39.2
La^{3+}	1.80E-04	18.7	9.64
Hg^{2+}	3.78E-03	569	293
Zr (as $ZrO(OH)_2$)	2.47E-04	16.9	8.71
Pb^{2+}	0.112	1.74E+04	8.95E+03
Ni^{2+}	1.61E-03	70.9	36.5
Sr^{2+}	5.99E-05	3.93	2.03
Mn^{4+}	8.62E-04	35.5	18.3
Ca^{2+}	0.119	3.56E+03	1.83E+03
K^{+}	1.91E-02	558	288
OH^{-}	9.22	1.17E+05	6.05E+04
$NO3^{-}$	1.20	5.59E+04	2.88E+04
$NO2^{-}$	0.430	1.48E+04	7.64E+03
$CO3^{2-}$	0.241	1.09E+04	5.59E+03
$PO4^{3-}$	2.87E-02	2.04E+03	1.05E+03
$SO4^{2-}$	5.40E-02	3.89E+03	2.00E+03
Si (as SiO_3^{2-})	1.48E-02	311	160
F^{-}	2.71E-02	386	199
Cl^{-}	4.31E-02	1.14E+03	589
$C_6H_5O_7^{3-}$	5.65E-03	801	413
$EDTA^{4-}$	3.17E-03	685	353
$HEDTA^{3-}$	6.21E-03	1.28E+03	657
$glycolate^{-}$	2.10E-02	1.18E+03	609
$acetate^{-}$	4.35E-04	19.2	9.90
$oxalate^{2-}$	1.54E-04	10.1	5.23
DBP	3.68E-03	733	378
butanol	3.68E-03	204	105
NH_3	1.06E-02	136	69.9
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.32 (µCi/g)	11.4 (kg)
U	0.208 (M)	3.71E+04 (µg/g)	1.91E+04 (kg)
Cs	3.86E-02 (Ci/L)	28.9 (µCi/g)	1.49E+04 (Ci)
Sr	2.25E-02 (Ci/L)	16.8 (µCi/g)	8.67E+03 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).
†Volume average for density, mass average Water wt% and TOC wt% C.

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Single-Shell Tank 241-T-102			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	1.12E+05 kg	(19.0 kgal)	
Heat Load	1.71E-03 kW	(5.85 BTU/hr)	
Bulk Density	1.55 (g/cc)		
Void Fraction	0.720		
Water wt%	50.2		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	1.62	2.40E+04	2.68E+03
Al^{3+}	5.24	9.10E+04	1.02E+04
Fe^{3+} (total Fe)	0.421	1.51E+04	1.69E+03
Cr^{3+}	2.22E-03	74.3	8.30
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	5.29E-03	683	76.3
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0.291	3.88E+04	4.34E+03
Ni^{2+}	1.11E-03	41.9	4.69
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.296	7.63E+03	853
K^{+}	1.67E-03	42.1	4.71
OH^{-}	20.4	2.23E+05	2.49E+04
$NO3^{-}$	0.469	1.87E+04	2.09E+03
$NO2^{-}$	0.202	5.98E+03	668
$CO3^{2-}$	0.486	1.88E+04	2.10E+03
$PO4^{3-}$	4.21E-02	2.57E+03	287
$SO4^{2-}$	1.72E-02	1.07E+03	119
Si (as SiO_3^{2-})	1.63E-04	2.95	0.330
F^{-}	0	0	0
Cl^{-}	7.70E-03	176	19.6
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	3.01E-05	0.329	3.68E-02
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.06 (µCi/g)	1.98 (kg)
U	0.394 (M)	6.04E+04 (µg/g)	6.75E+03 (kg)
Cs	1.87E-03 (Ci/L)	1.20 (µCi/g)	135 (Ci)
Sr	2.23E-03 (Ci/L)	1.44 (µCi/g)	161 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

Rev. 3

Single-Shell Tank 241-T-102			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	4.92E+04 kg	(13.0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	1.00 (g/cc)		
Water wt%†	100		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Single-Shell Tank 241-T-102			
Total Inventory Estimate*			
Physical Properties			
Total Waste	1.61E+05 kg	(32.0 kgal)	
Heat Load	1.71E-03 kW	(5.85 BTU/hr)	
Bulk Density†	1.33 (g/cc)		
Water wt%†	65.4		
TOC wt% C (wet)†	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0.964	1.67E+04	2.68E+03
Al^{3+}	3.11	6.32E+04	1.02E+04
Fe^{3+} (total Fe)	0.250	1.05E+04	1.69E+03
Cr^{3+}	1.32E-03	51.6	8.30
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	3.14E-03	474	76.3
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0.173	2.70E+04	4.34E+03
Ni^{2+}	6.59E-04	29.1	4.69
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.176	5.30E+03	853
K^{+}	9.94E-04	29.2	4.71
OH^{-}	12.1	1.55E+05	2.49E+04
$NO3^{-}$	0.278	1.30E+04	2.09E+03
$NO2^{-}$	0.120	4.15E+03	668
$CO3^{2-}$	0.288	1.30E+04	2.10E+03
$PO4^{3-}$	2.50E-02	1.78E+03	287
$SO4^{2-}$	1.02E-02	740	119
Si (as SiO_3^{2-})	9.69E-05	2.05	0.330
F^{-}	0	0	0
Cl^{-}	4.57E-03	122	19.6
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	1.79E-05	0.229	3.68E-02
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0.738 (µCi/g)	1.98 (kg)
U	0.234 (M)	4.19E+04 (µg/g)	6.75E+03 (kg)
Cs	1.11E-03 (Ci/L)	0.836 (µCi/g)	135 (Ci)
Sr	1.33E-03 (Ci/L)	0.998 (µCi/g)	161 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Single-Shell Tank 241-T-103			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	1.05E+05 kg	(18.0 kgal)	
Heat Load	1.51E-03 kW	(5.16 BTU/hr)	
Bulk Density	1.54 (g/cc)		
Void Fraction	0.741		
Water wt%	50.6		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	1.43	2.13E+04	2.24E+03
Al^{3+}	5.53	9.67E+04	1.02E+04
Fe^{3+} (total Fe)	0.438	1.59E+04	1.67E+03
Cr^{3+}	2.28E-03	76.6	8.06
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	5.58E-03	726	76.3
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0.308	4.13E+04	4.34E+03
Ni^{2+}	1.14E-03	43.3	4.55
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.308	7.99E+03	841
K^{+}	1.75E-03	44.4	4.67
OH^{-}	20.8	2.29E+05	2.41E+04
$NO3^{-}$	0.491	1.97E+04	2.07E+03
$NO2^{-}$	0.213	6.34E+03	667
$CO3^{2-}$	0.408	1.59E+04	1.67E+03
$PO4^{3-}$	2.22E-02	1.36E+03	144
$SO4^{2-}$	1.36E-02	849	89.2
Si (as SiO_3^{2-})	8.61E-05	1.57	0.165
F^{-}	0	0	0
Cl^{-}	8.06E-03	185	19.5
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	3.16E-05	0.348	3.66E-02
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.13 (µCi/g)	1.98 (kg)
U	0.306 (M)	4.71E+04 (µg/g)	4.96E+03 (kg)
Cs	1.93E-03 (Ci/L)	1.25 (µCi/g)	131 (Ci)
Sr	1.95E-03 (Ci/L)	1.26 (µCi/g)	133 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

Rev. 3

Single-Shell Tank 241-T-103			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	3.47E+04 kg	(9.00 kgal)	
Heat Load	1.96E-03 kW	(6.68 BTU/hr)	
Bulk Density*	1.02 (g/cc)		
Water wt%†	97.0		
TOC wt% C (wet)	3.87E-02		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0.371	8.37E+03	290
Al^{3+}	5.17E-02	1.37E+03	47.5
Fe^{3+} (total Fe)	1.88E-04	10.3	0.358
Cr^{3+}	1.95E-03	99.6	3.45
Bi^{3+}	7.34E-06	1.51	5.22E-02
La^{3+}	1.36E-10	1.85E-05	6.42E-07
Hg^{2+}	1.81E-07	3.56E-02	1.23E-03
Zr (as $ZrO(OH)_2$)	4.23E-06	0.380	1.32E-02
Pb^{2+}	2.69E-05	5.48	0.190
Ni^{2+}	1.67E-04	9.64	0.334
Sr^{2+}	4.52E-11	3.90E-06	1.35E-07
Mn^{4+}	2.29E-04	12.4	0.429
Ca^{2+}	8.70E-04	34.3	1.19
K^{+}	1.70E-03	65.5	2.27
OH^{-}	0.236	3.95E+03	137
$NO3^{-}$	0.141	8.56E+03	297
$NO2^{-}$	8.24E-02	3.72E+03	129
$CO3^{2-}$	1.83E-02	1.08E+03	37.4
$PO4^{3-}$	9.92E-04	92.6	3.21
$SO4^{2-}$	8.84E-03	835	28.9
Si (as SiO_3^{2-})	2.99E-03	82.6	2.86
F^{-}	3.72E-04	6.96	0.241
Cl^{-}	6.41E-03	223	7.74
$C_6H_5O_7^{3-}$	1.92E-03	357	12.4
$EDTA^{4-}$	3.36E-05	9.51	0.330
$HEDTA^{3-}$	6.04E-05	16.3	0.564
$glycolate^{-}$	3.76E-03	277	9.60
$acetate^{-}$	2.41E-05	1.40	4.84E-02
$oxalate^{2-}$	1.16E-10	1.00E-05	3.48E-07
DBP	1.07E-03	279	9.67
butanol	1.07E-03	77.7	2.69
NH_3	1.77E-03	29.6	1.03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	2.83 (µCi/L)		1.61E-03 (kg)
U	3.86E-04 (M)	90.3 (µg/g)	3.13 (kg)
Cs	5.03E-03 (Ci/L)	4.94 (µCi/g)	171 (Ci)
Sr	5.02E-03 (Ci/L)	4.94 (µCi/g)	171 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Single-Shell Tank 241-T-103			
Total Inventory Estimate*			
Physical Properties			
Total Waste	1.40E+05 kg	(27.0 kgal)	
Heat Load	3.47E-03 kW	(11.8 BTU/hr)	
Bulk Density†	1.37 (g/cc)		
Water wt%†	62.1		
TOC wt% C (wet)†	9.60E-03		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	1.08	1.81E+04	2.53E+03
Al^{3+}	3.71	7.31E+04	1.02E+04
Fe^{3+} (total Fe)	0.292	1.19E+04	1.67E+03
Cr^{3+}	2.17E-03	82.3	11.5
Bi^{3+}	2.45E-06	0.374	5.22E-02
La^{3+}	4.52E-11	4.59E-06	6.42E-07
Hg^{2+}	3.72E-03	546	76.3
Zr (as $ZrO(OH)_2$)	1.41E-06	9.41E-02	1.32E-02
Pb^{2+}	0.205	3.11E+04	4.34E+03
Ni^{2+}	8.14E-04	34.9	4.88
Sr^{2+}	1.51E-11	9.66E-07	1.35E-07
Mn^{4+}	7.63E-05	3.06	0.429
Ca^{2+}	0.206	6.02E+03	842
K^{+}	1.74E-03	49.6	6.94
OH^{-}	14.0	1.73E+05	2.42E+04
$NO3^{-}$	0.374	1.70E+04	2.37E+03
$NO2^{-}$	0.169	5.69E+03	796
$CO3^{2-}$	0.278	1.22E+04	1.70E+03
$PO4^{3-}$	1.51E-02	1.05E+03	147
$SO4^{2-}$	1.20E-02	845	118
Si (as SiO_3^{2-})	1.05E-03	21.6	3.03
F^{-}	1.24E-04	1.72	0.241
Cl^{-}	7.51E-03	194	27.2
$C_6H_5O_7^{3-}$	6.41E-04	88.5	12.4
$EDTA^{4-}$	1.12E-05	2.36	0.330
$HEDTA^{3-}$	2.01E-05	4.03	0.564
$glycolate^{-}$	1.25E-03	68.7	9.60
$acetate^{-}$	8.02E-06	0.346	4.84E-02
$oxalate^{2-}$	3.87E-11	2.49E-06	3.48E-07
DBP	3.56E-04	69.1	9.67
butanol	3.56E-04	19.3	2.69
NH_3	6.12E-04	7.60	1.06
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0.850 (µCi/g)	1.98 (kg)
U	0.204 (M)	3.55E+04 (µg/g)	4.96E+03 (kg)
Cs	2.96E-03 (Ci/L)	2.16 (µCi/g)	303 (Ci)
Sr	2.97E-03 (Ci/L)	2.17 (µCi/g)	304 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Single-Shell Tank 241-T-104			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	2.09E+06 kg	(442 kgal)	
Heat Load	0.175 kW	(598 BTU/hr)	
Bulk Density	1.25 (g/cc)		
Void Fraction	0.750		
Water wt%	72.8		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.11	7.56E+04	1.58E+05
Al^{3+}	0.699	1.51E+04	3.16E+04
Fe^{3+} (total Fe)	0.239	1.07E+04	2.24E+04
Cr^{3+}	4.10E-03	170	357
Bi^{3+}	5.80E-02	9.68E+03	2.03E+04
La^{3+}	0	0	0
Hg^{2+}	7.80E-05	12.5	26.2
Zr (as $ZrO(OH)_2$)	8.40E-03	612	1.28E+03
Pb^{2+}	0	0	0
Ni^{2+}	1.26E-03	59.2	124
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	5.81E-02	1.86E+03	3.90E+03
K^{+}	2.98E-03	93.1	195
OH^{-}	2.94	4.00E+04	8.37E+04
$NO3^{-}$	0.382	1.90E+04	3.97E+04
$NO2^{-}$	0.218	8.02E+03	1.68E+04
$CO3^{2-}$	5.81E-02	2.79E+03	5.83E+03
$PO4^{3-}$	1.07	8.12E+04	1.70E+05
$SO4^{2-}$	4.86E-02	3.73E+03	7.80E+03
Si (as SiO_3^{2-})	5.56E-02	1.25E+03	2.61E+03
F^{-}	0.181	2.74E+03	5.74E+03
Cl^{-}	1.37E-02	388	812
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	3.95E-04	5.37	11.2
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.25E-02 (µCi/g)	0.435 (kg)
U	6.02E-04 (M)	115 (µg/g)	240 (kg)
Cs	2.21E-02 (Ci/L)	17.6 (µCi/g)	3.69E+04 (Ci)
Sr	1.97E-04 (Ci/L)	0.157 (µCi/g)	329 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

Rev. 3

Single-Shell Tank 241-T-104			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	1.41E+04 kg	(3.01 kgal)	
Heat Load	9.63E-03 kW	(32.9 BTU/hr)	
Bulk Density*	1.23 (g/cc)		
Water wt%†	66.1		
TOC wt% C (wet)	0.567		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	5.11	9.52E+04	1.34E+03
Al^{3+}	0.632	1.38E+04	195
Fe^{3+} (total Fe)	3.50E-03	158	2.23
Cr^{3+}	2.43E-02	1.02E+03	14.4
Bi^{3+}	1.35E-03	229	3.22
La^{3+}	4.15E-06	0.467	6.57E-03
Hg^{2+}	5.53E-06	0.898	1.26E-02
Zr (as $ZrO(OH)_2$)	9.92E-04	73.3	1.03
Pb^{2+}	3.69E-04	62.0	0.873
Ni^{2+}	2.96E-03	141	1.98
Sr^{2+}	1.38E-06	9.81E-02	1.38E-03
Mn^{4+}	1.57E-03	70.1	0.986
Ca^{2+}	1.59E-02	515	7.25
K^{+}	2.25E-02	714	10.1
OH^{-}	2.79	3.84E+04	540
$NO3^{-}$	2.16	1.09E+05	1.53E+03
$NO2^{-}$	0.979	3.65E+04	514
$CO3^{2-}$	0.195	9.48E+03	134
$PO4^{3-}$	6.92E-02	5.32E+03	75.0
$SO4^{2-}$	0.114	8.87E+03	125
Si (as SiO_3^{2-})	4.13E-02	939	13.2
F^{-}	7.95E-02	1.22E+03	17.2
Cl^{-}	8.71E-02	2.50E+03	35.2
$C_6H_5O_7^{3-}$	1.31E-02	2.00E+03	28.2
$EDTA^{4-}$	1.01E-02	2.36E+03	33.3
$HEDTA^{3-}$	1.92E-02	4.27E+03	60.2
$glycolate^{-}$	5.46E-02	3.32E+03	46.7
$acetate^{-}$	3.27E-03	156	2.20
$oxalate^{2-}$	3.55E-06	0.253	3.56E-03
DBP	7.93E-03	1.71E+03	24.1
butanol	7.93E-03	476	6.70
NH_3	2.20E-02	303	4.26
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	39.5 (µCi/L)		7.52E-03 (kg)
U	5.25E-03 (M)	1.01E+03 (µg/g)	14.3 (kg)
Cs	0.105 (Ci/L)	84.7 (µCi/g)	1.19E+03 (Ci)
Sr	5.27E-02 (Ci/L)	42.7 (µCi/g)	601 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Single-Shell Tank 241-T-104			
Total Inventory Estimate*			
Physical Properties			
Total Waste	2.11E+06 kg	(445 kgal)	
Heat Load	0.185 kW	(631 BTU/hr)	
Bulk Density†	1.25 (g/cc)		
Water wt%†	72.7		
TOC wt% C (wet)†	3.79E-03		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.12	7.57E+04	1.59E+05
Al^{3+}	0.699	1.51E+04	3.17E+04
Fe^{3+} (total Fe)	0.238	1.06E+04	2.24E+04
Cr^{3+}	4.24E-03	176	371
Bi^{3+}	5.76E-02	9.62E+03	2.03E+04
La^{3+}	2.81E-08	3.12E-03	6.57E-03
Hg^{2+}	7.75E-05	12.4	26.2
Zr (as $ZrO(OH)_2$)	8.35E-03	609	1.28E+03
Pb^{2+}	2.50E-06	0.414	0.873
Ni^{2+}	1.27E-03	59.7	126
Sr^{2+}	9.36E-09	6.56E-04	1.38E-03
Mn^{4+}	1.07E-05	0.468	0.986
Ca^{2+}	5.78E-02	1.85E+03	3.90E+03
K^{+}	3.11E-03	97.3	205
OH^{-}	2.94	4.00E+04	8.42E+04
$NO3^{-}$	0.395	1.96E+04	4.12E+04
$NO2^{-}$	0.223	8.21E+03	1.73E+04
$CO3^{2-}$	5.90E-02	2.83E+03	5.97E+03
$PO4^{3-}$	1.06	8.07E+04	1.70E+05
$SO4^{2-}$	4.90E-02	3.76E+03	7.93E+03
Si (as SiO_3^{2-})	5.55E-02	1.25E+03	2.63E+03
F^{-}	0.180	2.73E+03	5.76E+03
Cl^{-}	1.42E-02	402	847
$C_6H_5O_7^{3-}$	8.84E-05	13.4	28.2
$EDTA^{4-}$	6.86E-05	15.8	33.3
$HEDTA^{3-}$	1.30E-04	28.6	60.2
$glycolate^{-}$	3.70E-04	22.2	46.7
$acetate^{-}$	2.21E-05	1.04	2.20
$oxalate^{2-}$	2.40E-08	1.69E-03	3.56E-03
DBP	5.37E-05	11.4	24.1
butanol	5.37E-05	3.18	6.70
NH_3	5.42E-04	7.36	15.5
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.26E-02 (µCi/g)	0.442 (kg)
U	6.34E-04 (M)	121 (µg/g)	254 (kg)
Cs	2.26E-02 (Ci/L)	18.1 (µCi/g)	3.81E+04 (Ci)
Sr	5.52E-04 (Ci/L)	0.441 (µCi/g)	930 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Single-Shell Tank 241-T-105			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	4.61E+05 kg	(98.0 kgal)	
Heat Load	1.39E-02 kW	(47.5 BTU/hr)	
Bulk Density	1.24 (g/cc)		
Void Fraction	0.776		
Water wt%	72.2		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.01	7.41E+04	3.42E+04
Al^{3+}	0.229	4.96E+03	2.29E+03
Fe^{3+} (total Fe)	0.459	2.06E+04	9.52E+03
Cr^{3+}	3.57E-03	149	68.8
Bi^{3+}	7.95E-02	1.33E+04	6.16E+03
La^{3+}	0	0	0
Hg^{2+}	1.54E-05	2.48	1.14
Zr (as $ZrO(OH)_2$)	1.86E-03	136	63.0
Pb^{2+}	0	0	0
Ni^{2+}	1.27E-03	60.1	27.7
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.118	3.79E+03	1.75E+03
K^{+}	4.50E-03	141	65.2
OH^{-}	2.10	2.86E+04	1.32E+04
$NO3^{-}$	0.815	4.06E+04	1.87E+04
$NO2^{-}$	6.69E-02	2.47E+03	1.14E+03
$CO3^{2-}$	0.118	5.67E+03	2.62E+03
$PO4^{3-}$	0.979	7.48E+04	3.45E+04
$SO4^{2-}$	4.22E-02	3.25E+03	1.50E+03
Si (as SiO_3^{2-})	7.06E-02	1.59E+03	735
F^{-}	0.177	2.71E+03	1.25E+03
Cl^{-}	2.07E-02	589	272
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	1.47E-04	2.00	0.924
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.33E-02 (µCi/g)	0.102 (kg)
U	2.25E-04 (M)	43.1 (µg/g)	19.9 (kg)
Cs	7.90E-03 (Ci/L)	6.35 (µCi/g)	2.93E+03 (Ci)
Sr	7.55E-05 (Ci/L)	6.07E-02 (µCi/g)	28.0 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-T-105			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	0 (g/cc)		
Water wt%†	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.
†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-T-105			
Total Inventory Estimate*			
Physical Properties			
Total Waste	4.61E+05 kg	(98.0 kgal)	
Heat Load	1.39E-02 kW	(47.5 BTU/hr)	
Bulk Density†	1.24 (g/cc)		
Water wt%†	72.2		
TOC wt% C (wet)†	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.01	7.41E+04	3.42E+04
Al^{3+}	0.229	4.96E+03	2.29E+03
Fe^{3+} (total Fe)	0.459	2.06E+04	9.52E+03
Cr^{3+}	3.57E-03	149	68.8
Bi^{3+}	7.95E-02	1.33E+04	6.16E+03
La^{3+}	0	0	0
Hg^{2+}	1.54E-05	2.48	1.14
Zr (as $ZrO(OH)_2$)	1.86E-03	136	63.0
Pb^{2+}	0	0	0
Ni^{2+}	1.27E-03	60.1	27.7
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.118	3.79E+03	1.75E+03
K^{+}	4.50E-03	141	65.2
OH^{-}	2.10	2.86E+04	1.32E+04
$NO3^{-}$	0.815	4.06E+04	1.87E+04
$NO2^{-}$	6.69E-02	2.47E+03	1.14E+03
$CO3^{2-}$	0.118	5.67E+03	2.62E+03
$PO4^{3-}$	0.979	7.48E+04	3.45E+04
$SO4^{2-}$	4.22E-02	3.25E+03	1.50E+03
Si (as SiO_3^{2-})	7.06E-02	1.59E+03	735
F^{-}	0.177	2.71E+03	1.25E+03
Cl^{-}	2.07E-02	589	272
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	1.47E-04	2.00	0.924
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.33E-02 (µCi/g)	0.102 (kg)
U	2.25E-04 (M)	43.1 (µg/g)	19.9 (kg)
Cs	7.90E-03 (Ci/L)	6.35 (µCi/g)	2.93E+03 (Ci)
Sr	7.55E-05 (Ci/L)	6.07E-02 (µCi/g)	28.0 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).
†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Single-Shell Tank 241-T-106			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	1.06E+05 kg	(19.0 kgal)	
Heat Load	6.22E-03 kW	(21.2 BTU/hr)	
Bulk Density	1.47 (g/cc)		
Void Fraction	0.736		
Water wt%	49.1		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.91	7.67E+04	8.11E+03
Al^{3+}	5.20	9.54E+04	1.01E+04
Fe^{3+} (total Fe)	0.203	7.71E+03	815
Cr^{3+}	3.28E-03	116	12.3
Bi^{3+}	2.32E-02	3.30E+03	349
La^{3+}	0	0	0
Hg^{2+}	2.69E-03	368	38.8
Zr (as $ZrO(OH)_2$)	3.69E-03	229	24.2
Pb^{2+}	7.76E-02	1.09E+04	1.16E+03
Ni^{2+}	1.20E-03	47.9	5.07
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.102	2.79E+03	295
K^{+}	2.29E-03	60.9	6.43
OH^{-}	19.5	2.25E+05	2.38E+04
$NO3^{-}$	0.484	2.04E+04	2.16E+03
$NO2^{-}$	0.508	1.59E+04	1.68E+03
$CO3^{2-}$	0.102	4.18E+03	441
$PO4^{3-}$	0.463	2.99E+04	3.16E+03
$SO4^{2-}$	3.11E-02	2.03E+03	215
Si (as SiO_3^{2-})	3.38E-02	645	68.2
F^{-}	0.101	1.30E+03	138
Cl^{-}	1.05E-02	254	26.8
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	3.78E-04	4.38	0.462
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.01 (µCi/g)	1.78 (kg)
U	0.119 (M)	1.93E+04 (µg/g)	2.04E+03 (kg)
Cs	1.67E-02 (Ci/L)	11.4 (µCi/g)	1.20E+03 (Ci)
Sr	1.22E-03 (Ci/L)	0.827 (µCi/g)	87.4 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-T-106			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	7.59E+03 kg	(2.01 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	1.00 (g/cc)		
Water wt%†	100		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-T-106			
Total Inventory Estimate*			
Physical Properties			
Total Waste	1.13E+05 kg	(21.0 kgal)	
Heat Load	6.22E-03 kW	(21.2 BTU/hr)	
Bulk Density†	1.43 (g/cc)		
Water wt%†	52.5		
TOC wt% C (wet)†	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.44	7.16E+04	8.11E+03
Al^{3+}	4.70	8.90E+04	1.01E+04
Fe^{3+} (total Fe)	0.184	7.19E+03	815
Cr^{3+}	2.97E-03	108	12.3
Bi^{3+}	2.10E-02	3.08E+03	349
La^{3+}	0	0	0
Hg^{2+}	2.44E-03	343	38.8
Zr (as $ZrO(OH)_2$)	3.34E-03	214	24.2
Pb^{2+}	7.02E-02	1.02E+04	1.16E+03
Ni^{2+}	1.09E-03	44.7	5.07
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	9.25E-02	2.60E+03	295
K^{+}	2.07E-03	56.8	6.43
OH^{-}	17.6	2.10E+05	2.38E+04
$NO3^{-}$	0.438	1.91E+04	2.16E+03
$NO2^{-}$	0.460	1.48E+04	1.68E+03
$CO3^{2-}$	9.25E-02	3.90E+03	441
$PO4^{3-}$	0.419	2.79E+04	3.16E+03
$SO4^{2-}$	2.82E-02	1.90E+03	215
Si (as SiO_3^{2-})	3.05E-02	602	68.2
F^{-}	9.13E-02	1.22E+03	138
Cl^{-}	9.52E-03	237	26.8
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	3.42E-04	4.08	0.462
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0.944 (µCi/g)	1.78 (kg)
U	0.108 (M)	1.80E+04 (µg/g)	2.04E+03 (kg)
Cs	1.51E-02 (Ci/L)	10.6 (µCi/g)	1.20E+03 (Ci)
Sr	1.10E-03 (Ci/L)	0.771 (µCi/g)	87.4 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

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Single-Shell Tank 241-T-107			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	8.36E+05 kg	(171 kgal)	
Heat Load	3.74E-02 kW	(128 BTU/hr)	
Bulk Density	1.29 (g/cc)		
Void Fraction	0.695		
Water wt%	70.9		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.88	8.69E+04	7.26E+04
Al^{3+}	0.475	9.93E+03	8.30E+03
Fe^{3+} (total Fe)	0.323	1.40E+04	1.17E+04
Cr^{3+}	3.77E-03	152	127
Bi^{3+}	7.70E-02	1.25E+04	1.04E+04
La^{3+}	0	0	0
Hg^{2+}	1.06E-04	16.4	13.7
Zr (as $ZrO(OH)_2$)	1.03E-02	728	608
Pb^{2+}	0	0	0
Ni^{2+}	1.16E-03	52.8	44.1
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	7.55E-02	2.34E+03	1.96E+03
K^{+}	3.23E-03	97.7	81.7
OH^{-}	2.62	3.45E+04	2.88E+04
$NO3^{-}$	0.374	1.80E+04	1.50E+04
$NO2^{-}$	0.179	6.38E+03	5.33E+03
$CO3^{2-}$	7.55E-02	3.51E+03	2.93E+03
$PO4^{3-}$	1.33	9.80E+04	8.19E+04
$SO4^{2-}$	4.47E-02	3.32E+03	2.78E+03
Si (as SiO_3^{2-})	6.32E-02	1.38E+03	1.15E+03
F^{-}	0.165	2.43E+03	2.03E+03
Cl^{-}	1.48E-02	407	340
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	1.79E-04	2.36	1.97
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		5.93E-03 (µCi/g)	8.26E-02 (kg)
U	5.72E-04 (M)	105 (µg/g)	88.0 (kg)
Cs	1.22E-02 (Ci/L)	9.44 (µCi/g)	7.89E+03 (Ci)
Sr	1.08E-04 (Ci/L)	8.35E-02 (µCi/g)	69.8 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-T-107			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	3.41E+04 kg	(9.01 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	1.00 (g/cc)		
Water wt%†	100		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Single-Shell Tank 241-T-107			
Total Inventory Estimate*			
Physical Properties			
Total Waste	8.70E+05 kg	(180 kgal)	
Heat Load	3.74E-02 kW	(128 BTU/hr)	
Bulk Density†	1.28 (g/cc)		
Water wt%†	72.0		
TOC wt% C (wet)†	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.63	8.34E+04	7.26E+04
Al^{3+}	0.452	9.54E+03	8.30E+03
Fe^{3+} (total Fe)	0.307	1.34E+04	1.17E+04
Cr^{3+}	3.58E-03	146	127
Bi^{3+}	7.31E-02	1.20E+04	1.04E+04
La^{3+}	0	0	0
Hg^{2+}	1.00E-04	15.8	13.7
Zr (as $ZrO(OH)_2$)	9.78E-03	699	608
Pb^{2+}	0	0	0
Ni^{2+}	1.10E-03	50.7	44.1
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	7.17E-02	2.25E+03	1.96E+03
K^{+}	3.07E-03	93.9	81.7
OH^{-}	2.49	3.32E+04	2.88E+04
$NO3^{-}$	0.355	1.73E+04	1.50E+04
$NO2^{-}$	0.170	6.13E+03	5.33E+03
$CO3^{2-}$	7.17E-02	3.37E+03	2.93E+03
$PO4^{3-}$	1.27	9.42E+04	8.19E+04
$SO4^{2-}$	4.24E-02	3.19E+03	2.78E+03
Si (as SiO_3^{2-})	6.00E-02	1.32E+03	1.15E+03
F^{-}	0.157	2.34E+03	2.03E+03
Cl^{-}	1.41E-02	391	340
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	1.70E-04	2.27	1.97
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		5.70E-03 (µCi/g)	8.26E-02 (kg)
U	5.43E-04 (M)	101 (µg/g)	88.0 (kg)
Cs	1.16E-02 (Ci/L)	9.07 (µCi/g)	7.89E+03 (Ci)
Sr	1.02E-04 (Ci/L)	8.03E-02 (µCi/g)	69.8 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Single-Shell Tank 241-T-108			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	2.38E+05 kg	(44.0 kgal)	
Heat Load	2.23E-02 kW	(76.3 BTU/hr)	
Bulk Density	1.43 (g/cc)		
Void Fraction	0.714		
Water wt%	63.1		
TOC wt% C (wet)	1.08E-04		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	7.18	1.16E+05	2.75E+04
Al^{3+}	0.316	5.97E+03	1.42E+03
Fe^{3+} (total Fe)	0.270	1.06E+04	2.51E+03
Cr^{3+}	4.55E-03	166	39.4
Bi^{3+}	6.05E-02	8.86E+03	2.11E+03
La^{3+}	0	0	0
Hg^{2+}	7.08E-05	9.95	2.37
Zr (as $ZrO(OH)_2$)	6.66E-03	426	101
Pb^{2+}	0	0	0
Ni^{2+}	6.52E-03	268	63.8
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	9.53E-02	2.67E+03	636
K^{+}	9.04E-03	248	58.9
OH^{-}	2.01	2.39E+04	5.69E+03
$NO3^{-}$	1.79	7.78E+04	1.85E+04
$NO2^{-}$	0.237	7.63E+03	1.81E+03
$CO3^{2-}$	0.166	6.96E+03	1.66E+03
$PO4^{3-}$	1.52	1.01E+05	2.40E+04
$SO4^{2-}$	9.37E-02	6.30E+03	1.50E+03
Si (as SiO_3^{2-})	4.24E-02	834	198
F^{-}	0.155	2.07E+03	491
Cl^{-}	4.97E-02	1.23E+03	293
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	1.08E-05	2.00	0.476
butanol	1.08E-05	0.558	0.133
NH_3	5.55E-04	6.61	1.57
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		8.82E-03 (µCi/g)	3.50E-02 (kg)
U	4.25E-03 (M)	708 (µg/g)	168 (kg)
Cs	1.57E-02 (Ci/L)	11.0 (µCi/g)	2.61E+03 (Ci)
Sr	8.99E-03 (Ci/L)	6.30 (µCi/g)	1.50E+03 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-T-108			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	0 (g/cc)		
Water wt%†	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-T-108			
Total Inventory Estimate*			
Physical Properties			
Total Waste	2.38E+05 kg	(44.0 kgal)	
Heat Load	2.23E-02 kW	(76.3 BTU/hr)	
Bulk Density†	1.43 (g/cc)		
Water wt%†	63.1		
TOC wt% C (wet)†	1.08E-04		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	7.18	1.16E+05	2.75E+04
Al^{3+}	0.316	5.97E+03	1.42E+03
Fe^{3+} (total Fe)	0.270	1.06E+04	2.51E+03
Cr^{3+}	4.55E-03	166	39.4
Bi^{3+}	6.05E-02	8.86E+03	2.11E+03
La^{3+}	0	0	0
Hg^{2+}	7.08E-05	9.95	2.37
Zr (as $ZrO(OH)_2$)	6.66E-03	426	101
Pb^{2+}	0	0	0
Ni^{2+}	6.52E-03	268	63.8
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	9.53E-02	2.67E+03	636
K^{+}	9.04E-03	248	58.9
OH^{-}	2.01	2.39E+04	5.69E+03
$NO3^{-}$	1.79	7.78E+04	1.85E+04
$NO2^{-}$	0.237	7.63E+03	1.81E+03
$CO3^{2-}$	0.166	6.96E+03	1.66E+03
$PO4^{3-}$	1.52	1.01E+05	2.40E+04
$SO4^{2-}$	9.37E-02	6.30E+03	1.50E+03
Si (as SiO_3^{2-})	4.24E-02	834	198
F^{-}	0.155	2.07E+03	491
Cl^{-}	4.97E-02	1.23E+03	293
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	1.08E-05	2.00	0.476
butanol	1.08E-05	0.558	0.133
NH_3	5.55E-04	6.61	1.57
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		8.82E-03 (µCi/g)	3.50E-02 (kg)
U	4.25E-03 (M)	708 (µg/g)	168 (kg)
Cs	1.57E-02 (Ci/L)	11.0 (µCi/g)	2.61E+03 (Ci)
Sr	8.99E-03 (Ci/L)	6.30 (µCi/g)	1.50E+03 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

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Single-Shell Tank 241-T-109			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	3.41E+05 kg	(58.0 kgal)	
Heat Load	4.47E-02 kW	(153 BTU/hr)	
Bulk Density	1.55 (g/cc)		
Void Fraction	0.731		
Water wt%	57.2		
TOC wt% C (wet)	1.91E-04		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	9.29	1.37E+05	4.69E+04
Al^{3+}	0.170	2.96E+03	1.01E+03
Fe^{3+} (total Fe)	0.222	7.99E+03	2.72E+03
Cr^{3+}	5.26E-03	176	60.0
Bi^{3+}	4.55E-02	6.12E+03	2.09E+03
La^{3+}	0	0	0
Hg^{2+}	3.90E-05	5.04	1.72
Zr (as $ZrO(OH)_2$)	3.34E-03	196	67.0
Pb^{2+}	0	0	0
Ni^{2+}	1.14E-02	431	147
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.113	2.93E+03	998
K^{+}	1.43E-02	361	123
OH^{-}	1.45	1.59E+04	5.42E+03
$NO3^{-}$	3.09	1.23E+05	4.20E+04
$NO2^{-}$	0.290	8.58E+03	2.93E+03
$CO3^{2-}$	0.248	9.58E+03	3.27E+03
$PO4^{3-}$	1.69	1.03E+05	3.52E+04
$SO4^{2-}$	0.138	8.56E+03	2.92E+03
Si (as SiO_3^{2-})	2.34E-02	424	145
F^{-}	0.146	1.79E+03	610
Cl^{-}	8.16E-02	1.86E+03	635
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	2.06E-05	3.52	1.20
butanol	2.06E-05	0.981	0.335
NH_3	8.99E-04	9.83	3.35
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.10E-02 (µCi/g)	6.26E-02 (kg)
U	7.60E-03 (M)	1.16E+03 (µg/g)	397 (kg)
Cs	1.89E-02 (Ci/L)	12.2 (µCi/g)	4.15E+03 (Ci)
Sr	1.71E-02 (Ci/L)	11.0 (µCi/g)	3.76E+03 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-T-109			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	0 (g/cc)		
Water wt%†	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-T-109			
Total Inventory Estimate*			
Physical Properties			
Total Waste	3.41E+05 kg	(58.0 kgal)	
Heat Load	4.47E-02 kW	(153 BTU/hr)	
Bulk Density†	1.55 (g/cc)		
Water wt%†	57.2		
TOC wt% C (wet)†	1.91E-04		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	9.29	1.37E+05	4.69E+04
Al^{3+}	0.170	2.96E+03	1.01E+03
Fe^{3+} (total Fe)	0.222	7.99E+03	2.72E+03
Cr^{3+}	5.26E-03	176	60.0
Bi^{3+}	4.55E-02	6.12E+03	2.09E+03
La^{3+}	0	0	0
Hg^{2+}	3.90E-05	5.04	1.72
Zr (as $ZrO(OH)_2$)	3.34E-03	196	67.0
Pb^{2+}	0	0	0
Ni^{2+}	1.14E-02	431	147
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.113	2.93E+03	998
K^{+}	1.43E-02	361	123
OH^{-}	1.45	1.59E+04	5.42E+03
$NO3^{-}$	3.09	1.23E+05	4.20E+04
$NO2^{-}$	0.290	8.58E+03	2.93E+03
$CO3^{2-}$	0.248	9.58E+03	3.27E+03
$PO4^{3-}$	1.69	1.03E+05	3.52E+04
$SO4^{2-}$	0.138	8.56E+03	2.92E+03
Si (as SiO_3^{2-})	2.34E-02	424	145
F^{-}	0.146	1.79E+03	610
Cl^{-}	8.16E-02	1.86E+03	635
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	2.06E-05	3.52	1.20
butanol	2.06E-05	0.981	0.335
NH_3	8.99E-04	9.83	3.35
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.10E-02 (µCi/g)	6.26E-02 (kg)
U	7.60E-03 (M)	1.16E+03 (µg/g)	397 (kg)
Cs	1.89E-02 (Ci/L)	12.2 (µCi/g)	4.15E+03 (Ci)
Sr	1.71E-02 (Ci/L)	11.0 (µCi/g)	3.76E+03 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

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Single-Shell Tank 241-T-110			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	1.72E+06 kg	(376 kgal)	
Heat Load	1.69E-03 kW	(5.76 BTU/hr)	
Bulk Density	1.21 (g/cc)		
Void Fraction	0.838		
Water wt%	74.5		
TOC wt% C (wet)	3.40E-02		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	3.04	5.80E+04	9.96E+04
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0.641	2.97E+04	5.10E+04
Cr^{3+}	3.99E-03	172	295
Bi^{3+}	7.18E-02	1.24E+04	2.13E+04
La^{3+}	6.29E-03	725	1.24E+03
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	1.35E-03	65.9	113
Sr^{2+}	4.16E-02	3.02E+03	5.19E+03
Mn^{4+}	1.03E-04	4.67	8.02
Ca^{2+}	0.197	6.55E+03	1.12E+04
K^{+}	1.04E-02	337	579
OH^{-}	2.06	2.90E+04	4.98E+04
$NO3^{-}$	0.858	4.41E+04	7.57E+04
$NO2^{-}$	1.74E-03	66.3	114
$CO3^{2-}$	0.197	9.80E+03	1.68E+04
$PO4^{3-}$	0.656	5.16E+04	8.86E+04
$SO4^{2-}$	3.27E-02	2.60E+03	4.47E+03
Si (as SiO_3^{2-})	5.31E-02	1.24E+03	2.12E+03
F^{-}	0.198	3.11E+03	5.34E+03
Cl^{-}	2.07E-02	608	1.04E+03
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	1.71E-02	1.25E+03	2.14E+03
DBP	0	0	0
butanol	0	0	0
NH_3	4.89E-08	6.89E-04	1.18E-03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.13E-02 (µCi/g)	0.323 (kg)
U	6.75E-05 (M)	13.3 (µg/g)	22.9 (kg)
Cs	2.16E-04 (Ci/L)	0.179 (µCi/g)	307 (Ci)
Sr	2.58E-05 (Ci/L)	2.14E-02 (µCi/g)	36.8 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-T-110			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	1.19E+04 kg	(3.07 kgal)	
Heat Load	1.09E-05 kW	(3.73E-02 BTU/hr)	
Bulk Density*	1.03 (g/cc)		
Water wt%†	95.1		
TOC wt% C (wet)	3.31E-12		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0.693	1.55E+04	185
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	1.09E-03	59.4	0.708
Cr^{3+}	2.96E-03	150	1.79
Bi^{3+}	2.18E-03	445	5.30
La^{3+}	1.65E-12	2.24E-07	2.67E-09
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	8.75E-04	50.1	0.597
Sr^{2+}	5.51E-13	4.71E-08	5.61E-10
Mn^{4+}	1.28E-12	6.84E-08	8.15E-10
Ca^{2+}	4.91E-03	192	2.29
K^{+}	2.02E-03	76.9	0.917
OH^{-}	3.43E-02	569	6.78
$NO3^{-}$	0.378	2.29E+04	273
$NO2^{-}$	4.49E-04	20.2	0.240
$CO3^{2-}$	4.91E-03	287	3.42
$PO4^{3-}$	5.97E-02	5.53E+03	65.9
$SO4^{2-}$	1.47E-02	1.37E+03	16.4
Si (as SiO_3^{2-})	1.06E-02	291	3.47
F^{-}	6.33E-02	1.17E+03	14.0
Cl^{-}	9.28E-03	321	3.82
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	1.42E-12	1.21E-07	1.45E-09
DBP	0	0	0
butanol	0	0	0
NH_3	2.56E-08	4.25E-04	5.06E-06
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	6.34 (µCi/L)		1.23E-03 (kg)
U	2.98E-05 (M)	6.91 (µg/g)	8.23E-02 (kg)
Cs	1.55E-04 (Ci/L)	0.151 (µCi/g)	1.80 (Ci)
Sr	3.16E-05 (Ci/L)	3.08E-02 (µCi/g)	0.368 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-T-110			
Total Inventory Estimate*			
Physical Properties			
Total Waste	1.73E+06 kg	(379 kgal)	
Heat Load	1.70E-03 kW	(5.80 BTU/hr)	
Bulk Density†	1.21 (g/cc)		
Water wt%†	74.7		
TOC wt% C (wet)†	3.38E-02		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	3.02	5.77E+04	9.97E+04
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0.636	2.95E+04	5.10E+04
Cr^{3+}	3.98E-03	172	297
Bi^{3+}	7.12E-02	1.24E+04	2.14E+04
La^{3+}	6.24E-03	720	1.24E+03
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	1.35E-03	65.8	114
Sr^{2+}	4.13E-02	3.00E+03	5.19E+03
Mn^{4+}	1.02E-04	4.64	8.02
Ca^{2+}	0.196	6.50E+03	1.12E+04
K^{+}	1.03E-02	335	580
OH^{-}	2.04	2.88E+04	4.98E+04
$NO3^{-}$	0.854	4.39E+04	7.60E+04
$NO2^{-}$	1.73E-03	66.0	114
$CO3^{2-}$	0.196	9.74E+03	1.68E+04
$PO4^{3-}$	0.651	5.13E+04	8.87E+04
$SO4^{2-}$	3.25E-02	2.59E+03	4.48E+03
Si (as SiO_3^{2-})	5.27E-02	1.23E+03	2.13E+03
F^{-}	0.197	3.10E+03	5.36E+03
Cl^{-}	2.06E-02	606	1.05E+03
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	1.69E-02	1.24E+03	2.14E+03
DBP	0	0	0
butanol	0	0	0
NH_3	4.87E-08	6.88E-04	1.19E-03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.13E-02 (µCi/g)	0.324 (kg)
U	6.72E-05 (M)	13.3 (µg/g)	23.0 (kg)
Cs	2.15E-04 (Ci/L)	0.179 (µCi/g)	309 (Ci)
Sr	2.59E-05 (Ci/L)	2.15E-02 (µCi/g)	37.1 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

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Single-Shell Tank 241-T-111			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	2.04E+06 kg	(456 kgal)	
Heat Load	2.23E-03 kW	(7.61 BTU/hr)	
Bulk Density	1.18 (g/cc)		
Void Fraction	0.882		
Water wt%	75.8		
TOC wt% C (wet)	0.103		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	2.37	4.60E+04	9.39E+04
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0.683	3.22E+04	6.58E+04
Cr^{3+}	4.43E-03	194	397
Bi^{3+}	5.82E-02	1.03E+04	2.10E+04
La^{3+}	1.87E-02	2.19E+03	4.48E+03
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	1.42E-03	70.4	144
Sr^{2+}	0.124	9.15E+03	1.87E+04
Mn^{4+}	3.05E-04	14.1	28.9
Ca^{2+}	0.233	7.90E+03	1.61E+04
K^{+}	2.17E-02	716	1.46E+03
OH^{-}	2.39	3.44E+04	7.02E+04
$NO3^{-}$	0.803	4.21E+04	8.59E+04
$NO2^{-}$	1.53E-03	59.5	121
$CO3^{2-}$	0.233	1.18E+04	2.42E+04
$PO4^{3-}$	0.404	3.24E+04	6.62E+04
$SO4^{2-}$	2.76E-02	2.24E+03	4.57E+03
Si (as SiO_3^{2-})	3.51E-02	833	1.70E+03
F^{-}	0.281	4.50E+03	9.20E+03
Cl^{-}	1.90E-02	570	1.16E+03
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	5.07E-02	3.77E+03	7.71E+03
DBP	0	0	0
butanol	0	0	0
NH_3	4.91E-08	7.05E-04	1.44E-03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.09E-02 (µCi/g)	0.370 (kg)
U	5.64E-05 (M)	11.3 (µg/g)	23.2 (kg)
Cs	2.24E-04 (Ci/L)	0.189 (µCi/g)	386 (Ci)
Sr	3.62E-05 (Ci/L)	3.06E-02 (µCi/g)	62.5 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

Rev. 3

Single-Shell Tank 241-T-111			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	7.89E+03 kg	(2.06 kgal)	
Heat Load	3.23E-06 kW	(1.10E-02 BTU/hr)	
Bulk Density*	1.01 (g/cc)		
Water wt%†	97.8		
TOC wt% C (wet)	3.30E-12		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0.306	6.95E+03	54.8
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	4.82E-04	26.6	0.210
Cr^{3+}	1.31E-03	67.1	0.529
Bi^{3+}	9.63E-04	199	1.57
La^{3+}	1.62E-12	2.23E-07	1.76E-09
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	3.86E-04	22.4	0.177
Sr^{2+}	5.41E-13	4.69E-08	3.70E-10
Mn^{4+}	1.25E-12	6.81E-08	5.37E-10
Ca^{2+}	2.17E-03	85.9	0.677
K^{+}	8.91E-04	34.4	0.272
OH^{-}	1.52E-02	255	2.01
$NO3^{-}$	0.167	1.02E+04	80.7
$NO2^{-}$	1.98E-04	9.02	7.11E-02
$CO3^{2-}$	2.17E-03	129	1.01
$PO4^{3-}$	2.64E-02	2.47E+03	19.5
$SO4^{2-}$	6.48E-03	615	4.85
Si (as SiO_3^{2-})	4.70E-03	130	1.03
F^{-}	2.79E-02	525	4.14
Cl^{-}	4.10E-03	144	1.13
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	1.39E-12	1.21E-07	9.54E-10
DBP	0	0	0
butanol	0	0	0
NH_3	1.13E-08	1.90E-04	1.50E-06
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	2.80 (µCi/L)		3.64E-04 (kg)
U	1.31E-05 (M)	3.09 (µg/g)	2.44E-02 (kg)
Cs	6.84E-05 (Ci/L)	6.76E-02 (µCi/g)	0.533 (Ci)
Sr	1.40E-05 (Ci/L)	1.38E-02 (µCi/g)	0.109 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-T-111			
Total Inventory Estimate*			
Physical Properties			
Total Waste	2.05E+06 kg	(458 kgal)	
Heat Load	2.23E-03 kW	(7.62 BTU/hr)	
Bulk Density†	1.18 (g/cc)		
Water wt%†	75.9		
TOC wt% C (wet)†	0.102		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	2.36	4.58E+04	9.40E+04
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0.680	3.21E+04	6.59E+04
Cr^{3+}	4.41E-03	194	398
Bi^{3+}	5.79E-02	1.02E+04	2.10E+04
La^{3+}	1.86E-02	2.19E+03	4.48E+03
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	1.42E-03	70.3	144
Sr^{2+}	0.123	9.12E+03	1.87E+04
Mn^{4+}	3.03E-04	14.1	28.9
Ca^{2+}	0.232	7.87E+03	1.61E+04
K^{+}	2.16E-02	713	1.46E+03
OH^{-}	2.38	3.42E+04	7.02E+04
$NO3^{-}$	0.800	4.19E+04	8.60E+04
$NO2^{-}$	1.52E-03	59.3	121
$CO3^{2-}$	0.232	1.18E+04	2.42E+04
$PO4^{3-}$	0.402	3.23E+04	6.62E+04
$SO4^{2-}$	2.75E-02	2.23E+03	4.58E+03
Si (as SiO_3^{2-})	3.50E-02	830	1.70E+03
F^{-}	0.279	4.49E+03	9.20E+03
Cl^{-}	1.90E-02	568	1.16E+03
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	5.05E-02	3.76E+03	7.71E+03
DBP	0	0	0
butanol	0	0	0
NH_3	4.89E-08	7.03E-04	1.44E-03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.08E-02 (µCi/g)	0.370 (kg)
U	5.62E-05 (M)	11.3 (µg/g)	23.2 (kg)
Cs	2.23E-04 (Ci/L)	0.189 (µCi/g)	386 (Ci)
Sr	3.61E-05 (Ci/L)	3.06E-02 (µCi/g)	62.6 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

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Single-Shell Tank 241-T-112			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	2.55E+05 kg	(60.0 kgal)	
Heat Load	3.69E-04 kW	(1.26 BTU/hr)	
Bulk Density	1.13 (g/cc)		
Void Fraction	0.944		
Water wt%	81.4		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	1.20	2.45E+04	6.25E+03
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0.785	3.90E+04	9.95E+03
Cr^{3+}	5.11E-03	236	60.4
Bi^{3+}	4.11E-02	7.63E+03	1.95E+03
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	1.51E-03	78.9	20.2
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.276	9.84E+03	2.51E+03
K^{+}	3.49E-03	121	31.0
OH^{-}	2.41	3.64E+04	9.30E+03
$NO3^{-}$	0.654	3.60E+04	9.20E+03
$NO2^{-}$	1.51E-03	61.7	15.8
$CO3^{2-}$	0.276	1.47E+04	3.76E+03
$PO4^{3-}$	0.141	1.19E+04	3.03E+03
$SO4^{2-}$	2.54E-02	2.17E+03	554
Si (as SiO_3^{2-})	1.84E-02	460	117
F^{-}	0.109	1.85E+03	472
Cl^{-}	1.61E-02	506	129
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	5.69E-08	8.59E-04	2.19E-04
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.05E-02 (µCi/g)	4.46E-02 (kg)
U	5.15E-05 (M)	10.9 (µg/g)	2.78 (kg)
Cs	2.68E-04 (Ci/L)	0.238 (µCi/g)	60.8 (Ci)
Sr	5.47E-05 (Ci/L)	4.86E-02 (µCi/g)	12.4 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-T-112			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	2.66E+04 kg	(7.03 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	1.00 (g/cc)		
Water wt%†	100		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-T-112			
Total Inventory Estimate*			
Physical Properties			
Total Waste	2.82E+05 kg	(67.0 kgal)	
Heat Load	3.69E-04 kW	(1.26 BTU/hr)	
Bulk Density†	1.11 (g/cc)		
Water wt%†	83.2		
TOC wt% C (wet)†	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	1.07	2.22E+04	6.25E+03
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0.703	3.53E+04	9.95E+03
Cr^{3+}	4.58E-03	214	60.4
Bi^{3+}	3.68E-02	6.91E+03	1.95E+03
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	1.35E-03	71.5	20.2
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.247	8.92E+03	2.51E+03
K^{+}	3.12E-03	110	31.0
OH^{-}	2.16	3.30E+04	9.30E+03
$NO3^{-}$	0.585	3.26E+04	9.20E+03
$NO2^{-}$	1.35E-03	55.9	15.8
$CO3^{2-}$	0.247	1.33E+04	3.76E+03
$PO4^{3-}$	0.126	1.07E+04	3.03E+03
$SO4^{2-}$	2.27E-02	1.96E+03	554
Si (as SiO_3^{2-})	1.65E-02	416	117
F^{-}	9.79E-02	1.67E+03	472
Cl^{-}	1.44E-02	458	129
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	5.09E-08	7.78E-04	2.19E-04
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		9.49E-03 (µCi/g)	4.46E-02 (kg)
U	4.61E-05 (M)	9.86 (µg/g)	2.78 (kg)
Cs	2.40E-04 (Ci/L)	0.216 (µCi/g)	60.8 (Ci)
Sr	4.90E-05 (Ci/L)	4.40E-02 (µCi/g)	12.4 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

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Single-Shell Tank 241-T-201			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	1.46E+05 kg	(28.0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density	1.38 (g/cc)		
Void Fraction	0.834		
Water wt%	55.5		
TOC wt% C (wet)	1.12		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.52	7.55E+04	1.10E+04
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0.361	1.46E+04	2.14E+03
Cr^{3+}	3.44E-03	130	19.0
Bi^{3+}	6.04E-02	9.17E+03	1.34E+03
La^{3+}	0.237	2.39E+04	3.49E+03
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	1.34E-03	57.3	8.36
Sr^{2+}	1.57	9.97E+04	1.45E+04
Mn^{4+}	3.86E-03	154	22.5
Ca^{2+}	0.244	7.10E+03	1.04E+03
K^{+}	0.228	6.46E+03	943
OH^{-}	4.92	6.07E+04	8.86E+03
$NO3^{-}$	1.33	5.98E+04	8.72E+03
$NO2^{-}$	0	0	0
$CO3^{2-}$	0.244	1.06E+04	1.55E+03
$PO4^{3-}$	9.65E-02	6.66E+03	971
$SO4^{2-}$	1.34E-03	93.7	13.7
Si (as SiO_3^{2-})	0	0	0
F^{-}	2.03	2.81E+04	4.10E+03
Cl^{-}	2.49E-02	642	93.6
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0.643	4.11E+04	6.00E+03
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.00E-02 (µCi/g)	2.44E-02 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-T-201			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	3.79E+03 kg	(1.00 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	1.00 (g/cc)		
Water wt%†	100		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Single-Shell Tank 241-T-201			
Total Inventory Estimate*			
Physical Properties			
Total Waste	1.50E+05 kg	(29.0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density†	1.36 (g/cc)		
Water wt%†	56.7		
TOC wt% C (wet)†	1.09		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.36	7.36E+04	1.10E+04
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0.349	1.43E+04	2.14E+03
Cr^{3+}	3.32E-03	127	19.0
Bi^{3+}	5.83E-02	8.94E+03	1.34E+03
La^{3+}	0.229	2.33E+04	3.49E+03
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	1.30E-03	55.8	8.36
Sr^{2+}	1.51	9.72E+04	1.45E+04
Mn^{4+}	3.73E-03	150	22.5
Ca^{2+}	0.235	6.92E+03	1.04E+03
K^{+}	0.220	6.30E+03	943
OH^{-}	4.75	5.92E+04	8.86E+03
$NO3^{-}$	1.28	5.83E+04	8.72E+03
$NO2^{-}$	0	0	0
$CO3^{2-}$	0.235	1.04E+04	1.55E+03
$PO4^{3-}$	9.32E-02	6.49E+03	971
$SO4^{2-}$	1.30E-03	91.4	13.7
Si (as SiO_3^{2-})	0	0	0
F^{-}	1.96	2.74E+04	4.10E+03
Cl^{-}	2.41E-02	625	93.6
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0.621	4.01E+04	6.00E+03
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		9.77E-03 (µCi/g)	2.44E-02 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Single-Shell Tank 241-T-202			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	1.09E+05 kg	(21.0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density	1.38 (g/cc)		
Void Fraction	0.834		
Water wt%	55.5		
TOC wt% C (wet)	1.12		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.52	7.55E+04	8.26E+03
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0.361	1.46E+04	1.60E+03
Cr^{3+}	3.44E-03	130	14.2
Bi^{3+}	6.04E-02	9.17E+03	1.00E+03
La^{3+}	0.237	2.39E+04	2.61E+03
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	1.34E-03	57.3	6.27
Sr^{2+}	1.57	9.97E+04	1.09E+04
Mn^{4+}	3.86E-03	154	16.9
Ca^{2+}	0.244	7.10E+03	776
K^{+}	0.228	6.46E+03	707
OH^{-}	4.92	6.07E+04	6.65E+03
$NO3^{-}$	1.33	5.98E+04	6.54E+03
$NO2^{-}$	0	0	0
$CO3^{2-}$	0.244	1.06E+04	1.16E+03
$PO4^{3-}$	9.65E-02	6.66E+03	728
$SO4^{2-}$	1.34E-03	93.7	10.3
Si (as SiO_3^{2-})	0	0	0
F^{-}	2.03	2.81E+04	3.07E+03
Cl^{-}	2.49E-02	642	70.2
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0.643	4.11E+04	4.50E+03
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.00E-02 (µCi/g)	1.83E-02 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

Rev. 3

Single-Shell Tank 241-T-202			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	0 (g/cc)		
Water wt%†	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Single-Shell Tank 241-T-202			
Total Inventory Estimate*			
Physical Properties			
Total Waste	1.09E+05 kg	(21.0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density†	1.38 (g/cc)		
Water wt%†	55.5		
TOC wt% C (wet)†	1.12		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.52	7.55E+04	8.26E+03
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0.361	1.46E+04	1.60E+03
Cr^{3+}	3.44E-03	130	14.2
Bi^{3+}	6.04E-02	9.17E+03	1.00E+03
La^{3+}	0.237	2.39E+04	2.61E+03
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	1.34E-03	57.3	6.27
Sr^{2+}	1.57	9.97E+04	1.09E+04
Mn^{4+}	3.86E-03	154	16.9
Ca^{2+}	0.244	7.10E+03	776
K^{+}	0.228	6.46E+03	707
OH^{-}	4.92	6.07E+04	6.65E+03
$NO3^{-}$	1.33	5.98E+04	6.54E+03
$NO2^{-}$	0	0	0
$CO3^{2-}$	0.244	1.06E+04	1.16E+03
$PO4^{3-}$	9.65E-02	6.66E+03	728
$SO4^{2-}$	1.34E-03	93.7	10.3
Si (as SiO_3^{2-})	0	0	0
F^{-}	2.03	2.81E+04	3.07E+03
Cl^{-}	2.49E-02	642	70.2
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0.643	4.11E+04	4.50E+03
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.00E-02 (µCi/g)	1.83E-02 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Single-Shell Tank 241-T-203			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	1.82E+05 kg	(35.0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density	1.38 (g/cc)		
Void Fraction	0.834		
Water wt%	55.5		
TOC wt% C (wet)	1.12		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.52	7.55E+04	1.38E+04
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0.361	1.46E+04	2.67E+03
Cr^{3+}	3.44E-03	130	23.7
Bi^{3+}	6.04E-02	9.17E+03	1.67E+03
La^{3+}	0.237	2.39E+04	4.36E+03
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	1.34E-03	57.3	10.4
Sr^{2+}	1.57	9.97E+04	1.82E+04
Mn^{4+}	3.86E-03	154	28.1
Ca^{2+}	0.244	7.10E+03	1.29E+03
K^{+}	0.228	6.46E+03	1.18E+03
OH^{-}	4.92	6.07E+04	1.11E+04
$NO3^{-}$	1.33	5.98E+04	1.09E+04
$NO2^{-}$	0	0	0
$CO3^{2-}$	0.244	1.06E+04	1.94E+03
$PO4^{3-}$	9.65E-02	6.66E+03	1.21E+03
$SO4^{2-}$	1.34E-03	93.7	17.1
Si (as SiO_3^{2-})	0	0	0
F^{-}	2.03	2.81E+04	5.12E+03
Cl^{-}	2.49E-02	642	117
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0.643	4.11E+04	7.49E+03
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.00E-02 (µCi/g)	3.05E-02 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

Rev. 3

Single-Shell Tank 241-T-203			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	0 (g/cc)		
Water wt%†	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Single-Shell Tank 241-T-203			
Total Inventory Estimate*			
Physical Properties			
Total Waste	1.82E+05 kg	(35.0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density†	1.38 (g/cc)		
Water wt%†	55.5		
TOC wt% C (wet)†	1.12		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.52	7.55E+04	1.38E+04
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0.361	1.46E+04	2.67E+03
Cr^{3+}	3.44E-03	130	23.7
Bi^{3+}	6.04E-02	9.17E+03	1.67E+03
La^{3+}	0.237	2.39E+04	4.36E+03
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	1.34E-03	57.3	10.4
Sr^{2+}	1.57	9.97E+04	1.82E+04
Mn^{4+}	3.86E-03	154	28.1
Ca^{2+}	0.244	7.10E+03	1.29E+03
K^{+}	0.228	6.46E+03	1.18E+03
OH^{-}	4.92	6.07E+04	1.11E+04
$NO3^{-}$	1.33	5.98E+04	1.09E+04
$NO2^{-}$	0	0	0
$CO3^{2-}$	0.244	1.06E+04	1.94E+03
$PO4^{3-}$	9.65E-02	6.66E+03	1.21E+03
$SO4^{2-}$	1.34E-03	93.7	17.1
Si (as SiO_3^{2-})	0	0	0
F^{-}	2.03	2.81E+04	5.12E+03
Cl^{-}	2.49E-02	642	117
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0.643	4.11E+04	7.49E+03
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.00E-02 (µCi/g)	3.05E-02 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Single-Shell Tank 241-T-204			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	1.98E+05 kg	(38.0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density	1.38 (g/cc)		
Void Fraction	0.834		
Water wt%	55.5		
TOC wt% C (wet)	1.12		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.52	7.55E+04	1.49E+04
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0.361	1.46E+04	2.90E+03
Cr^{3+}	3.44E-03	130	25.7
Bi^{3+}	6.04E-02	9.17E+03	1.82E+03
La^{3+}	0.237	2.39E+04	4.73E+03
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	1.34E-03	57.3	11.3
Sr^{2+}	1.57	9.97E+04	1.97E+04
Mn^{4+}	3.86E-03	154	30.5
Ca^{2+}	0.244	7.10E+03	1.41E+03
K^{+}	0.228	6.46E+03	1.28E+03
OH^{-}	4.92	6.07E+04	1.20E+04
$NO3^{-}$	1.33	5.98E+04	1.18E+04
$NO2^{-}$	0	0	0
$CO3^{2-}$	0.244	1.06E+04	2.10E+03
$PO4^{3-}$	9.65E-02	6.66E+03	1.32E+03
$SO4^{2-}$	1.34E-03	93.7	18.6
Si (as SiO_3^{2-})	0	0	0
F^{-}	2.03	2.81E+04	5.56E+03
Cl^{-}	2.49E-02	642	127
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0.643	4.11E+04	8.14E+03
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.00E-02 (µCi/g)	3.31E-02 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

Rev. 3

Single-Shell Tank 241-T-204			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	0 (g/cc)		
Water wt%†	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Single-Shell Tank 241-T-204			
Total Inventory Estimate*			
Physical Properties			
Total Waste	1.98E+05 kg	(38.0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density†	1.38 (g/cc)		
Water wt%†	55.5		
TOC wt% C (wet)†	1.12		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.52	7.55E+04	1.49E+04
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0.361	1.46E+04	2.90E+03
Cr^{3+}	3.44E-03	130	25.7
Bi^{3+}	6.04E-02	9.17E+03	1.82E+03
La^{3+}	0.237	2.39E+04	4.73E+03
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	1.34E-03	57.3	11.3
Sr^{2+}	1.57	9.97E+04	1.97E+04
Mn^{4+}	3.86E-03	154	30.5
Ca^{2+}	0.244	7.10E+03	1.41E+03
K^{+}	0.228	6.46E+03	1.28E+03
OH^{-}	4.92	6.07E+04	1.20E+04
$NO3^{-}$	1.33	5.98E+04	1.18E+04
$NO2^{-}$	0	0	0
$CO3^{2-}$	0.244	1.06E+04	2.10E+03
$PO4^{3-}$	9.65E-02	6.66E+03	1.32E+03
$SO4^{2-}$	1.34E-03	93.7	18.6
Si (as SiO_3^{2-})	0	0	0
F^{-}	2.03	2.81E+04	5.56E+03
Cl^{-}	2.49E-02	642	127
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0.643	4.11E+04	8.14E+03
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.00E-02 (µCi/g)	3.31E-02 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3a

Single-Shell Tank 241-TX-101			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	4.32E+05 kg	(76.0 kgal)	
Heat Load	1.96 kW	(6.70E+03 BTU/hr)	
Bulk Density	1.50 (g/cc)		
Void Fraction	0.771		
Water wt%	50.5		
TOC wt% C (wet)	0		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	2.47	3.77E+04	1.63E+04
Al^{3+}	4.25	7.63E+04	3.30E+04
Fe^{3+} (total Fe)	1.00	3.73E+04	1.61E+04
Cr^{3+}	0.805	2.79E+04	1.20E+04
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	5.05E-02	1.97E+03	853
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.217	5.80E+03	2.51E+03
K^{+}	8.24E-03	214	92.7
OH^{-}	19.2	2.17E+05	9.37E+04
$NO3^{-}$	9.56E-02	3.94E+03	1.70E+03
$NO2^{-}$	1.80	5.51E+04	2.38E+04
$CO3^{2-}$	0.293	1.17E+04	5.05E+03
$PO4^{3-}$	1.58E-02	997	431
$SO4^{2-}$	1.75E-02	1.12E+03	483
Si (as SiO_3^{2-})	1.10E-02	205	88.7
F^{-}	0	0	0
Cl^{-}	3.86E-02	909	393
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0.121	1.37E+03	593
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0.690 (µCi/g)	4.97 (kg)
U	9.83E-02 (M)	1.56E+04 (µg/g)	6.73E+03 (kg)
Cs	7.30E-02 (Ci/L)	48.6 (µCi/g)	2.10E+04 (Ci)
Sr	0.961 (Ci/L)	639 (µCi/g)	2.76E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

Rev. 3a

Single-Shell Tank 241-TX-101			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Waste	5.51E+04 kg	(11.0 kgal)	
Heat Load	5.03E-02 kW	(172 BTU/hr)	
Bulk Density*	1.32 (g/cc)		
Water wt%†	56.8		
TOC wt% C (wet)	0.525		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	6.88	1.20E+05	6.59E+03
Al^{3+}	0.957	1.95E+04	1.08E+03
Fe^{3+} (total Fe)	4.43E-03	187	10.3
Cr^{3+}	3.64E-02	1.43E+03	78.8
Bi^{3+}	7.20E-04	114	6.27
La^{3+}	1.82E-05	1.91	0.105
Hg^{2+}	4.98E-06	0.755	4.16E-02
Zr (as $ZrO(OH)_2$)	5.01E-04	34.5	1.90
Pb^{2+}	5.47E-04	85.6	4.72
Ni^{2+}	3.82E-03	169	9.34
Sr^{2+}	6.06E-06	0.401	2.21E-02
Mn^{4+}	2.18E-03	90.5	4.99
Ca^{2+}	2.02E-02	610	33.6
K^{+}	3.21E-02	948	52.3
OH^{-}	4.15	5.33E+04	2.94E+03
$NO3^{-}$	3.05	1.43E+05	7.88E+03
$NO2^{-}$	1.45	5.04E+04	2.78E+03
$CO3^{2-}$	0.246	1.11E+04	614
$PO4^{3-}$	5.07E-02	3.64E+03	201
$SO4^{2-}$	0.138	1.00E+04	553
Si (as SiO_3^{2-})	4.66E-02	989	54.5
F^{-}	4.05E-02	582	32.1
Cl^{-}	0.121	3.24E+03	179
$C_6H_5O_7^{3-}$	1.65E-02	2.36E+03	130
$EDTA^{4-}$	8.38E-03	1.82E+03	101
$HEDTA^{3-}$	1.57E-02	3.26E+03	180
$glycolate^{-}$	5.06E-02	2.87E+03	158
$acetate^{-}$	3.26E-03	145	8.02
$oxalate^{2-}$	1.56E-05	1.04	5.71E-02
DBP	1.09E-02	1.73E+03	95.4
butanol	1.09E-02	610	33.6
NH_3	3.46E-02	444	24.5
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	47.8 (µCi/L)		3.32E-02 (kg)
U	7.36E-03 (M)	1.32E+03 (µg/g)	73.0 (kg)
Cs	0.155 (Ci/L)	117 (µCi/g)	6.44E+03 (Ci)
Sr	7.18E-02 (Ci/L)	54.2 (µCi/g)	2.99E+03 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3a

Single-Shell Tank 241-TX-101			
Total Inventory Estimate*			
Physical Properties			
Total Waste	4.88E+05 kg	(87.0 kgal)	
Heat Load	2.01 kW	(6.87E+03 BTU/hr)	
Bulk Density†	1.48 (g/cc)		
Water wt%†	51.2		
TOC wt% C (wet)†	5.93E-02		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	3.02	4.70E+04	2.29E+04
Al^{3+}	3.83	6.99E+04	3.41E+04
Fe^{3+} (total Fe)	0.878	3.31E+04	1.61E+04
Cr^{3+}	0.708	2.49E+04	1.21E+04
Bi^{3+}	9.11E-05	12.9	6.27
La^{3+}	2.30E-06	0.216	0.105
Hg^{2+}	6.30E-07	8.54E-02	4.16E-02
Zr (as $ZrO(OH)_2$)	6.33E-05	3.90	1.90
Pb^{2+}	6.92E-05	9.68	4.72
Ni^{2+}	4.46E-02	1.77E+03	863
Sr^{2+}	7.67E-07	4.54E-02	2.21E-02
Mn^{4+}	2.76E-04	10.2	4.99
Ca^{2+}	0.192	5.21E+03	2.54E+03
K^{+}	1.13E-02	297	145
OH^{-}	17.3	1.98E+05	9.66E+04
$NO3^{-}$	0.469	1.97E+04	9.58E+03
$NO2^{-}$	1.76	5.46E+04	2.66E+04
$CO3^{2-}$	0.287	1.16E+04	5.66E+03
$PO4^{3-}$	2.02E-02	1.30E+03	632
$SO4^{2-}$	3.28E-02	2.13E+03	1.04E+03
Si (as SiO_3^{2-})	1.55E-02	294	143
F^{-}	5.12E-03	65.8	32.1
Cl^{-}	4.90E-02	1.17E+03	572
$C_6H_5O_7^{3-}$	2.09E-03	267	130
$EDTA^{4-}$	1.06E-03	206	101
$HEDTA^{3-}$	1.99E-03	369	180
$glycolate^{-}$	6.40E-03	324	158
$acetate^{-}$	4.12E-04	16.4	8.02
$oxalate^{2-}$	1.97E-06	0.117	5.71E-02
DBP	1.38E-03	196	95.4
butanol	1.38E-03	69.0	33.6
NH_3	0.110	1.27E+03	617
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0.616 (µCi/g)	5.01 (kg)
U	8.68E-02 (M)	1.40E+04 (µg/g)	6.81E+03 (kg)
Cs	8.34E-02 (Ci/L)	56.3 (µCi/g)	2.74E+04 (Ci)
Sr	0.849 (Ci/L)	573 (µCi/g)	2.79E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3a

Single-Shell Tank 241-TX-102			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	1.32E+04 kg	(2.00 kgal)	
Heat Load	4.04E-04 kW	(1.38 BTU/hr)	
Bulk Density	1.75 (g/cc)		
Void Fraction	0.358		
Water wt%	44.4		
TOC wt% C (wet)	0		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	5.04	6.63E+04	877
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0.119	3.79E+03	50.2
Cr^{3+}	1.24E-03	36.9	0.488
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	6.20E-04	20.8	0.276
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	8.41E-02	1.93E+03	25.5
K^{+}	2.74E-04	6.13	8.10E-02
OH^{-}	12.3	1.20E+05	1.58E+03
$NO3^{-}$	6.25E-02	2.22E+03	29.3
$NO2^{-}$	9.15E-03	241	3.19
$CO3^{2-}$	1.89	6.48E+04	857
$PO4^{3-}$	0.400	2.17E+04	287
$SO4^{2-}$	8.20E-02	4.51E+03	59.6
Si (as SiO_3^{2-})	1.55E-03	24.9	0.330
F^{-}	0	0	0
Cl^{-}	1.26E-03	25.5	0.338
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	3.51E-06	3.42E-02	4.52E-04
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		3.71E-03 (µCi/g)	8.18E-04 (kg)
U	1.99 (M)	2.71E+05 (µg/g)	3.58E+03 (kg)
Cs	8.40E-04 (Ci/L)	0.481 (µCi/g)	6.36 (Ci)
Sr	7.34E-03 (Ci/L)	4.20 (µCi/g)	55.6 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-TX-102			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Waste	1.14E+06 kg	(215 kgal)	
Heat Load	1.16 kW	(3.95E+03 BTU/hr)	
Bulk Density*	1.40 (g/cc)		
Water wt%†	48.2		
TOC wt% C (wet)	0.883		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	8.83	1.45E+05	1.65E+05
Al^{3+}	1.02	1.97E+04	2.25E+04
Fe^{3+} (total Fe)	6.19E-03	247	281
Cr^{3+}	3.49E-02	1.30E+03	1.48E+03
Bi^{3+}	1.75E-03	261	298
La^{3+}	1.34E-09	1.33E-04	1.51E-04
Hg^{2+}	9.57E-06	1.37	1.56
Zr (as $ZrO(OH)_2$)	1.30E-03	84.4	96.3
Pb^{2+}	8.60E-04	127	145
Ni^{2+}	5.17E-03	217	247
Sr^{2+}	4.47E-10	2.79E-05	3.18E-05
Mn^{4+}	2.27E-03	89.1	102
Ca^{2+}	2.81E-02	803	915
K^{+}	4.35E-02	1.21E+03	1.38E+03
OH^{-}	4.52	5.48E+04	6.25E+04
$NO3^{-}$	4.12	1.82E+05	2.08E+05
$NO2^{-}$	1.42	4.67E+04	5.32E+04
$CO3^{2-}$	0.372	1.59E+04	1.82E+04
$PO4^{3-}$	9.41E-02	6.38E+03	7.27E+03
$SO4^{2-}$	0.207	1.42E+04	1.62E+04
Si (as SiO_3^{2-})	5.78E-02	1.16E+03	1.32E+03
F^{-}	9.95E-02	1.35E+03	1.54E+03
Cl^{-}	0.165	4.17E+03	4.76E+03
$C_6H_5O_7^{3-}$	1.52E-02	2.05E+03	2.34E+03
$EDTA^{4-}$	2.12E-02	4.35E+03	4.96E+03
$HEDTA^{3-}$	4.15E-02	8.13E+03	9.26E+03
$glycolate^{-}$	7.92E-02	4.24E+03	4.84E+03
$acetate^{-}$	2.53E-03	107	122
$oxalate^{2-}$	1.15E-09	7.20E-05	8.21E-05
DBP	1.24E-02	1.86E+03	2.12E+03
butanol	1.24E-02	656	748
NH_3	4.83E-02	586	668
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	64.8 (µCi/L)		0.878 (kg)
U	9.39E-03 (M)	1.60E+03 (µg/g)	1.82E+03 (kg)
Cs	0.187 (Ci/L)	134 (µCi/g)	1.52E+05 (Ci)
Sr	8.10E-02 (Ci/L)	57.8 (µCi/g)	6.59E+04 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-TX-102			
Total Inventory Estimate*			
Physical Properties			
Total Waste	1.15E+06 kg	(217 kgal)	
Heat Load	1.16 kW	(3.95E+03 BTU/hr)	
Bulk Density†	1.40 (g/cc)		
Water wt%†	48.1		
TOC wt% C (wet)†	0.872		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	8.79	1.44E+05	1.66E+05
Al^{3+}	1.01	1.95E+04	2.25E+04
Fe^{3+} (total Fe)	7.23E-03	287	331
Cr^{3+}	3.46E-02	1.28E+03	1.48E+03
Bi^{3+}	1.73E-03	258	298
La^{3+}	1.33E-09	1.31E-04	1.51E-04
Hg^{2+}	9.48E-06	1.35	1.56
Zr (as $ZrO(OH)_2$)	1.28E-03	83.5	96.3
Pb^{2+}	8.52E-04	126	145
Ni^{2+}	5.12E-03	214	247
Sr^{2+}	4.42E-10	2.76E-05	3.18E-05
Mn^{4+}	2.25E-03	88.1	102
Ca^{2+}	2.86E-02	816	941
K^{+}	4.31E-02	1.20E+03	1.38E+03
OH^{-}	4.59	5.56E+04	6.41E+04
$NO3^{-}$	4.08	1.80E+05	2.08E+05
$NO2^{-}$	1.41	4.61E+04	5.32E+04
$CO3^{2-}$	0.386	1.65E+04	1.90E+04
$PO4^{3-}$	9.69E-02	6.55E+03	7.56E+03
$SO4^{2-}$	0.206	1.41E+04	1.62E+04
Si (as SiO_3^{2-})	5.73E-02	1.15E+03	1.32E+03
F^{-}	9.86E-02	1.33E+03	1.54E+03
Cl^{-}	0.164	4.13E+03	4.76E+03
$C_6H_5O_7^{3-}$	1.51E-02	2.03E+03	2.34E+03
$EDTA^{4-}$	2.10E-02	4.30E+03	4.96E+03
$HEDTA^{3-}$	4.12E-02	8.03E+03	9.26E+03
$glycolate^{-}$	7.85E-02	4.19E+03	4.84E+03
$acetate^{-}$	2.51E-03	106	122
$oxalate^{2-}$	1.14E-09	7.12E-05	8.21E-05
DBP	1.23E-02	1.84E+03	2.12E+03
butanol	1.23E-02	648	748
NH_3	4.78E-02	579	668
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		4.57E-02 (µCi/g)	0.879 (kg)
U	2.76E-02 (M)	4.68E+03 (µg/g)	5.40E+03 (kg)
Cs	0.185 (Ci/L)	132 (µCi/g)	1.52E+05 (Ci)
Sr	8.03E-02 (Ci/L)	57.2 (µCi/g)	6.60E+04 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3a

Single-Shell Tank 241-TX-103			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	1.76E+04 kg	(3.00 kgal)	
Heat Load	2.31E-03 kW	(7.90 BTU/hr)	
Bulk Density	1.55 (g/cc)		
Void Fraction	0.731		
Water wt%	57.2		
TOC wt% C (wet)	1.91E-04		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	9.29	1.37E+05	2.43E+03
Al^{3+}	0.170	2.96E+03	52.2
Fe^{3+} (total Fe)	0.222	7.99E+03	141
Cr^{3+}	5.26E-03	176	3.11
Bi^{3+}	4.55E-02	6.12E+03	108
La^{3+}	0	0	0
Hg^{2+}	3.90E-05	5.04	8.89E-02
Zr (as $ZrO(OH)_2$)	3.34E-03	196	3.46
Pb^{2+}	0	0	0
Ni^{2+}	1.14E-02	431	7.61
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.113	2.93E+03	51.6
K^{+}	1.43E-02	361	6.37
OH^{-}	1.45	1.59E+04	280
$NO3^{-}$	3.09	1.23E+05	2.17E+03
$NO2^{-}$	0.290	8.58E+03	151
$CO3^{2-}$	0.248	9.58E+03	169
$PO4^{3-}$	1.69	1.03E+05	1.82E+03
$SO4^{2-}$	0.138	8.56E+03	151
Si (as SiO_3^{2-})	2.34E-02	424	7.48
F^{-}	0.146	1.79E+03	31.5
Cl^{-}	8.16E-02	1.86E+03	32.8
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	2.06E-05	2.78	4.91E-02
butanol	2.06E-05	0.981	1.73E-02
NH_3	8.99E-04	9.83	0.173
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.10E-02 (µCi/g)	3.24E-03 (kg)
U	7.60E-03 (M)	1.16E+03 (µg/g)	20.5 (kg)
Cs	1.89E-02 (Ci/L)	12.2 (µCi/g)	214 (Ci)
Sr	1.71E-02 (Ci/L)	11.0 (µCi/g)	194 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-TX-103			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Waste	7.20E+05 kg	(154 kgal)	
Heat Load	0.465 kW	(1.59E+03 BTU/hr)	
Bulk Density*	1.24 (g/cc)		
Water wt%†	65.7		
TOC wt% C (wet)	0.371		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	5.16	9.60E+04	6.92E+04
Al^{3+}	0.620	1.35E+04	9.75E+03
Fe^{3+} (total Fe)	3.62E-03	163	118
Cr^{3+}	2.14E-02	899	648
Bi^{3+}	1.07E-03	182	131
La^{3+}	6.21E-05	6.98	5.03
Hg^{2+}	5.50E-06	0.892	0.643
Zr (as $ZrO(OH)_2$)	7.38E-04	54.5	39.3
Pb^{2+}	4.98E-04	83.4	60.1
Ni^{2+}	3.10E-03	147	106
Sr^{2+}	2.07E-05	1.47	1.06
Mn^{4+}	1.47E-03	65.3	47.0
Ca^{2+}	1.64E-02	532	383
K^{+}	2.81E-02	888	640
OH^{-}	2.74	3.76E+04	2.71E+04
$NO3^{-}$	2.45	1.23E+05	8.85E+04
$NO2^{-}$	0.853	3.18E+04	2.29E+04
$CO3^{2-}$	0.214	1.04E+04	7.48E+03
$PO4^{3-}$	5.52E-02	4.24E+03	3.05E+03
$SO4^{2-}$	0.118	9.15E+03	6.59E+03
Si (as SiO_3^{2-})	3.37E-02	765	551
F^{-}	6.03E-02	927	668
Cl^{-}	9.62E-02	2.76E+03	1.99E+03
$C_6H_5O_7^{3-}$	1.01E-02	1.54E+03	1.11E+03
$EDTA^{4-}$	5.26E-03	1.23E+03	883
$HEDTA^{3-}$	1.00E-02	2.23E+03	1.61E+03
$glycolate^{-}$	3.65E-02	2.21E+03	1.59E+03
$acetate^{-}$	1.48E-03	70.9	51.1
$oxalate^{2-}$	5.31E-05	3.78	2.73
DBP	7.72E-03	1.31E+03	946
butanol	7.72E-03	463	334
NH_3	2.82E-02	388	280
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	37.8 (µCi/L)		0.367 (kg)
U	5.41E-03 (M)	1.04E+03 (µg/g)	750 (kg)
Cs	0.105 (Ci/L)	84.9 (µCi/g)	6.12E+04 (Ci)
Sr	4.54E-02 (Ci/L)	36.7 (µCi/g)	2.65E+04 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3a

Single-Shell Tank 241-TX-103			
Total Inventory Estimate*			
Physical Properties			
Total Waste	7.38E+05 kg	(157 kgal)	
Heat Load	0.467 kW	(1.60E+03 BTU/hr)	
Bulk Density†	1.24 (g/cc)		
Water wt%†	65.5		
TOC wt% C (wet)†	0.362		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	5.24	9.70E+04	7.16E+04
Al^{3+}	0.612	1.33E+04	9.80E+03
Fe^{3+} (total Fe)	7.79E-03	350	259
Cr^{3+}	2.11E-02	882	651
Bi^{3+}	1.92E-03	324	239
La^{3+}	6.09E-05	6.81	5.03
Hg^{2+}	6.14E-06	0.992	0.732
Zr (as $ZrO(OH)_2$)	7.88E-04	57.9	42.7
Pb^{2+}	4.88E-04	81.4	60.1
Ni^{2+}	3.26E-03	154	114
Sr^{2+}	2.03E-05	1.43	1.06
Mn^{4+}	1.44E-03	63.7	47.0
Ca^{2+}	1.83E-02	590	435
K^{+}	2.78E-02	876	646
OH^{-}	2.71	3.71E+04	2.74E+04
$NO3^{-}$	2.46	1.23E+05	9.07E+04
$NO2^{-}$	0.843	3.12E+04	2.30E+04
$CO3^{2-}$	0.215	1.04E+04	7.65E+03
$PO4^{3-}$	8.64E-02	6.61E+03	4.88E+03
$SO4^{2-}$	0.118	9.14E+03	6.74E+03
Si (as SiO_3^{2-})	3.35E-02	757	558
F^{-}	6.20E-02	948	700
Cl^{-}	9.59E-02	2.74E+03	2.02E+03
$C_6H_5O_7^{3-}$	9.89E-03	1.51E+03	1.11E+03
$EDTA^{4-}$	5.16E-03	1.20E+03	883
$HEDTA^{3-}$	9.86E-03	2.18E+03	1.61E+03
$glycolate^{-}$	3.58E-02	2.16E+03	1.59E+03
$acetate^{-}$	1.46E-03	69.2	51.1
$oxalate^{2-}$	5.21E-05	3.69	2.73
DBP	7.58E-03	1.28E+03	946
butanol	7.58E-03	452	334
NH_3	2.77E-02	379	280
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		3.01E-02 (µCi/g)	0.371 (kg)
U	5.45E-03 (M)	1.04E+03 (µg/g)	771 (kg)
Cs	0.103 (Ci/L)	83.2 (µCi/g)	6.14E+04 (Ci)
Sr	4.48E-02 (Ci/L)	36.1 (µCi/g)	2.67E+04 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3a

Single-Shell Tank 241-TX-104			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	1.19E+05 kg	(18.0 kgal)	
Heat Load	3.64E-03 kW	(12.4 BTU/hr)	
Bulk Density	1.75 (g/cc)		
Void Fraction	0.358		
Water wt%	44.4		
TOC wt% C (wet)	0		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	5.04	6.63E+04	7.89E+03
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0.119	3.79E+03	451
Cr^{3+}	1.24E-03	36.9	4.39
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	6.20E-04	20.8	2.48
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	8.41E-02	1.93E+03	230
K^{+}	2.74E-04	6.13	0.729
OH^{-}	12.3	1.20E+05	1.42E+04
$NO3^{-}$	6.25E-02	2.22E+03	264
$NO2^{-}$	9.15E-03	241	28.7
$CO3^{2-}$	1.89	6.48E+04	7.71E+03
$PO4^{3-}$	0.400	2.17E+04	2.59E+03
$SO4^{2-}$	8.20E-02	4.51E+03	537
Si (as SiO_3^{2-})	1.55E-03	24.9	2.97
F^{-}	0	0	0
Cl^{-}	1.26E-03	25.5	3.04
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	3.51E-06	3.42E-02	4.07E-03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		3.71E-03 (µCi/g)	7.37E-03 (kg)
U	1.99 (M)	2.71E+05 (µg/g)	3.22E+04 (kg)
Cs	8.40E-04 (Ci/L)	0.481 (µCi/g)	57.2 (Ci)
Sr	7.34E-03 (Ci/L)	4.20 (µCi/g)	500 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

Rev. 3a

Single-Shell Tank 241-TX-104			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Waste	2.48E+05 kg	(47.0 kgal)	
Heat Load	0.247 kW	(844 BTU/hr)	
Bulk Density*	1.40 (g/cc)		
Water wt%†	48.6		
TOC wt% C (wet)	0.937		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	8.71	1.44E+05	3.56E+04
Al^{3+}	1.01	1.95E+04	4.85E+03
Fe^{3+} (total Fe)	6.06E-03	243	60.2
Cr^{3+}	3.36E-02	1.25E+03	311
Bi^{3+}	1.61E-03	241	59.9
La^{3+}	1.23E-09	1.23E-04	3.04E-05
Hg^{2+}	8.84E-06	1.27	0.315
Zr (as $ZrO(OH)_2$)	1.19E-03	78.0	19.4
Pb^{2+}	7.97E-04	118	29.4
Ni^{2+}	5.05E-03	212	52.7
Sr^{2+}	4.11E-10	2.58E-05	6.40E-06
Mn^{4+}	2.10E-03	82.6	20.5
Ca^{2+}	2.75E-02	789	196
K^{+}	4.24E-02	1.19E+03	295
OH^{-}	4.46	5.43E+04	1.35E+04
$NO3^{-}$	4.09	1.82E+05	4.51E+04
$NO2^{-}$	1.36	4.47E+04	1.11E+04
$CO3^{2-}$	0.375	1.61E+04	4.00E+03
$PO4^{3-}$	8.80E-02	5.99E+03	1.49E+03
$SO4^{2-}$	0.198	1.36E+04	3.38E+03
Si (as SiO_3^{2-})	5.73E-02	1.15E+03	287
F^{-}	9.16E-02	1.25E+03	310
Cl^{-}	0.164	4.16E+03	1.03E+03
$C_6H_5O_7^{3-}$	1.51E-02	2.04E+03	507
$EDTA^{4-}$	2.25E-02	4.65E+03	1.16E+03
$HEDTA^{3-}$	4.44E-02	8.71E+03	2.16E+03
$glycolate^{-}$	9.39E-02	5.05E+03	1.25E+03
$acetate^{-}$	2.38E-03	101	25.0
$oxalate^{2-}$	1.05E-09	6.65E-05	1.65E-05
DBP	1.15E-02	1.73E+03	429
butanol	1.15E-02	610	151
NH_3	4.52E-02	551	137
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	64.5 (µCi/L)		0.191 (kg)
U	9.21E-03 (M)	1.57E+03 (µg/g)	390 (kg)
Cs	0.181 (Ci/L)	129 (µCi/g)	3.21E+04 (Ci)
Sr	8.06E-02 (Ci/L)	57.7 (µCi/g)	1.43E+04 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3a

Single-Shell Tank 241-TX-104			
Total Inventory Estimate*			
Physical Properties			
Total Waste	3.67E+05 kg	(65.0 kgal)	
Heat Load	0.251 kW	(856 BTU/hr)	
Bulk Density†	1.49 (g/cc)		
Water wt%†	47.2		
TOC wt% C (wet)†	0.633		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	7.70	1.19E+05	4.35E+04
Al^{3+}	0.731	1.32E+04	4.85E+03
Fe^{3+} (total Fe)	3.72E-02	1.39E+03	512
Cr^{3+}	2.47E-02	859	316
Bi^{3+}	1.16E-03	163	59.9
La^{3+}	8.91E-10	8.29E-05	3.04E-05
Hg^{2+}	6.39E-06	0.859	0.315
Zr (as $ZrO(OH)_2$)	8.63E-04	52.7	19.4
Pb^{2+}	5.76E-04	80.0	29.4
Ni^{2+}	3.82E-03	150	55.2
Sr^{2+}	2.97E-10	1.74E-05	6.40E-06
Mn^{4+}	1.52E-03	55.8	20.5
Ca^{2+}	4.32E-02	1.16E+03	426
K^{+}	3.08E-02	806	296
OH^{-}	6.63	7.55E+04	2.77E+04
$NO3^{-}$	2.97	1.23E+05	4.53E+04
$NO2^{-}$	0.983	3.03E+04	1.11E+04
$CO3^{2-}$	0.793	3.19E+04	1.17E+04
$PO4^{3-}$	0.174	1.11E+04	4.07E+03
$SO4^{2-}$	0.166	1.07E+04	3.92E+03
Si (as SiO_3^{2-})	4.19E-02	788	290
F^{-}	6.62E-02	843	310
Cl^{-}	0.119	2.82E+03	1.04E+03
$C_6H_5O_7^{3-}$	1.09E-02	1.38E+03	507
$EDTA^{4-}$	1.63E-02	3.15E+03	1.16E+03
$HEDTA^{3-}$	3.21E-02	5.89E+03	2.16E+03
$glycolate^{-}$	6.79E-02	3.41E+03	1.25E+03
$acetate^{-}$	1.72E-03	67.9	25.0
$oxalate^{2-}$	7.62E-10	4.49E-05	1.65E-05
DBP	8.30E-03	1.17E+03	429
butanol	8.30E-03	412	151
NH_3	3.27E-02	372	137
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		3.24E-02 (µCi/g)	0.199 (kg)
U	0.557 (M)	8.88E+04 (µg/g)	3.26E+04 (kg)
Cs	0.131 (Ci/L)	87.6 (µCi/g)	3.22E+04 (Ci)
Sr	6.03E-02 (Ci/L)	40.4 (µCi/g)	1.48E+04 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3a

Single-Shell Tank 241-TX-105			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	5.29E+04 kg	(8.00 kgal)	
Heat Load	1.62E-03 kW	(5.52 BTU/hr)	
Bulk Density	1.75 (g/cc)		
Void Fraction	0.358		
Water wt%	44.4		
TOC wt% C (wet)	0		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	5.04	6.63E+04	3.51E+03
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0.119	3.79E+03	201
Cr^{3+}	1.24E-03	36.9	1.95
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	6.20E-04	20.8	1.10
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	8.41E-02	1.93E+03	102
K^{+}	2.74E-04	6.13	0.324
OH^{-}	12.3	1.20E+05	6.32E+03
$NO3^{-}$	6.25E-02	2.22E+03	117
$NO2^{-}$	9.15E-03	241	12.7
$CO3^{2-}$	1.89	6.48E+04	3.43E+03
$PO4^{3-}$	0.400	2.17E+04	1.15E+03
$SO4^{2-}$	8.20E-02	4.51E+03	239
Si (as SiO_3^{2-})	1.55E-03	24.9	1.32
F^{-}	0	0	0
Cl^{-}	1.26E-03	25.5	1.35
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	3.51E-06	3.42E-02	1.81E-03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		3.71E-03 (µCi/g)	3.27E-03 (kg)
U	1.99 (M)	2.71E+05 (µg/g)	1.43E+04 (kg)
Cs	8.40E-04 (Ci/L)	0.481 (µCi/g)	25.4 (Ci)
Sr	7.34E-03 (Ci/L)	4.20 (µCi/g)	222 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

Rev. 3a

Single-Shell Tank 241-TX-105			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Waste	3.25E+06 kg	(601 kgal)	
Heat Load	3.30 kW	(1.13E+04 BTU/hr)	
Bulk Density*	1.43 (g/cc)		
Water wt%†	46.6		
TOC wt% C (wet)	0.351		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	9.30	1.50E+05	4.86E+05
Al^{3+}	1.15	2.18E+04	7.06E+04
Fe^{3+} (total Fe)	6.59E-03	258	837
Cr^{3+}	3.93E-02	1.43E+03	4.65E+03
Bi^{3+}	1.99E-03	291	946
La^{3+}	1.56E-09	1.52E-04	4.94E-04
Hg^{2+}	1.10E-05	1.54	5.01
Zr (as $ZrO(OH)_2$)	1.47E-03	94.1	306
Pb^{2+}	9.93E-04	144	468
Ni^{2+}	5.73E-03	236	766
Sr^{2+}	5.21E-10	3.20E-05	1.04E-04
Mn^{4+}	2.59E-03	99.5	323
Ca^{2+}	2.99E-02	840	2.73E+03
K^{+}	4.64E-02	1.27E+03	4.13E+03
OH^{-}	5.04	6.00E+04	1.95E+05
$NO3^{-}$	4.44	1.93E+05	6.26E+05
$NO2^{-}$	1.60	5.16E+04	1.67E+05
$CO3^{2-}$	0.371	1.56E+04	5.06E+04
$PO4^{3-}$	0.105	7.01E+03	2.28E+04
$SO4^{2-}$	0.218	1.47E+04	4.77E+04
Si (as SiO_3^{2-})	5.95E-02	1.17E+03	3.80E+03
F^{-}	0.113	1.51E+03	4.89E+03
Cl^{-}	0.172	4.27E+03	1.38E+04
$C_6H_5O_7^{3-}$	1.73E-02	2.29E+03	7.44E+03
$EDTA^{4-}$	2.11E-03	426	1.38E+03
$HEDTA^{3-}$	3.30E-03	633	2.06E+03
$glycolate^{-}$	4.07E-02	2.14E+03	6.95E+03
$acetate^{-}$	2.95E-03	122	396
$oxalate^{2-}$	1.34E-09	8.25E-05	2.68E-04
DBP	1.44E-02	2.11E+03	6.87E+03
butanol	1.44E-02	746	2.42E+03
NH_3	5.51E-02	656	2.13E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	66.9 (µCi/L)		2.54 (kg)
U	9.98E-03 (M)	1.66E+03 (µg/g)	5.40E+03 (kg)
Cs	0.198 (Ci/L)	139 (µCi/g)	4.50E+05 (Ci)
Sr	7.78E-02 (Ci/L)	54.5 (µCi/g)	1.77E+05 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-TX-105			
Total Inventory Estimate*			
Physical Properties			
Total Waste	3.30E+06 kg	(609 kgal)	
Heat Load	3.30 kW	(1.13E+04 BTU/hr)	
Bulk Density†	1.43 (g/cc)		
Water wt%†	46.5		
TOC wt% C (wet)†	0.345		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	9.24	1.48E+05	4.90E+05
Al^{3+}	1.14	2.14E+04	7.06E+04
Fe^{3+} (total Fe)	8.06E-03	314	1.04E+03
Cr^{3+}	3.88E-02	1.41E+03	4.65E+03
Bi^{3+}	1.96E-03	287	946
La^{3+}	1.54E-09	1.50E-04	4.94E-04
Hg^{2+}	1.08E-05	1.52	5.01
Zr (as $ZrO(OH)_2$)	1.45E-03	92.6	306
Pb^{2+}	9.80E-04	142	468
Ni^{2+}	5.67E-03	232	767
Sr^{2+}	5.14E-10	3.15E-05	1.04E-04
Mn^{4+}	2.55E-03	97.9	323
Ca^{2+}	3.06E-02	857	2.83E+03
K^{+}	4.58E-02	1.25E+03	4.13E+03
OH^{-}	5.14	6.10E+04	2.01E+05
$NO3^{-}$	4.38	1.90E+05	6.26E+05
$NO2^{-}$	1.58	5.08E+04	1.67E+05
$CO3^{2-}$	0.391	1.64E+04	5.40E+04
$PO4^{3-}$	0.109	7.24E+03	2.39E+04
$SO4^{2-}$	0.216	1.45E+04	4.79E+04
Si (as SiO_3^{2-})	5.87E-02	1.15E+03	3.80E+03
F^{-}	0.112	1.48E+03	4.89E+03
Cl^{-}	0.170	4.20E+03	1.39E+04
$C_6H_5O_7^{3-}$	1.71E-02	2.26E+03	7.44E+03
$EDTA^{4-}$	2.08E-03	419	1.38E+03
$HEDTA^{3-}$	3.25E-03	623	2.06E+03
$glycolate^{-}$	4.02E-02	2.11E+03	6.95E+03
$acetate^{-}$	2.91E-03	120	396
$oxalate^{2-}$	1.32E-09	8.12E-05	2.68E-04
DBP	1.42E-02	2.08E+03	6.87E+03
butanol	1.42E-02	734	2.42E+03
NH_3	5.44E-02	646	2.13E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		4.62E-02 (µCi/g)	2.54 (kg)
U	3.60E-02 (M)	5.98E+03 (µg/g)	1.97E+04 (kg)
Cs	0.195 (Ci/L)	136 (µCi/g)	4.50E+05 (Ci)
Sr	7.69E-02 (Ci/L)	53.7 (µCi/g)	1.77E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3a

Single-Shell Tank 241-TX-106			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	2.91E+04 kg	(5.00 kgal)	
Heat Load	0.112 kW	(383 BTU/hr)	
Bulk Density	1.54 (g/cc)		
Void Fraction	0.711		
Water wt%	50.2		
TOC wt% C (wet)	0		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	2.91	4.35E+04	1.26E+03
Al^{3+}	3.31	5.82E+04	1.69E+03
Fe^{3+} (total Fe)	0.834	3.03E+04	882
Cr^{3+}	0.700	2.37E+04	688
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	4.07E-02	1.55E+03	45.2
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.188	4.92E+03	143
K^{+}	6.86E-03	175	5.07
OH^{-}	17.4	1.92E+05	5.58E+03
$NO3^{-}$	4.06E-02	1.64E+03	47.7
$NO2^{-}$	1.56	4.69E+04	1.36E+03
$CO3^{2-}$	0.549	2.14E+04	623
$PO4^{3-}$	7.99E-02	4.94E+03	144
$SO4^{2-}$	2.87E-02	1.79E+03	52.1
Si (as SiO_3^{2-})	9.80E-03	179	5.21
F^{-}	0	0	0
Cl^{-}	3.15E-02	728	21.2
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0.105	1.17E+03	33.9
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		9.20E-03 (µCi/g)	4.46E-03 (kg)
U	0.415 (M)	6.43E+04 (µg/g)	1.87E+03 (kg)
Cs	6.36E-02 (Ci/L)	41.4 (µCi/g)	1.20E+03 (Ci)
Sr	0.836 (Ci/L)	544 (µCi/g)	1.58E+04 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-TX-106			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Waste	1.78E+06 kg	(336 kgal)	
Heat Load	1.75 kW	(5.98E+03 BTU/hr)	
Bulk Density*	1.40 (g/cc)		
Water wt%†	48.3		
TOC wt% C (wet)	0.618		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	8.82	1.45E+05	2.58E+05
Al^{3+}	1.06	2.03E+04	3.62E+04
Fe^{3+} (total Fe)	6.18E-03	246	439
Cr^{3+}	3.55E-02	1.32E+03	2.35E+03
Bi^{3+}	1.74E-03	259	463
La^{3+}	1.33E-09	1.32E-04	2.35E-04
Hg^{2+}	9.56E-06	1.37	2.44
Zr (as $ZrO(OH)_2$)	1.29E-03	83.9	150
Pb^{2+}	8.61E-04	127	227
Ni^{2+}	5.27E-03	221	394
Sr^{2+}	4.44E-10	2.77E-05	4.95E-05
Mn^{4+}	2.23E-03	87.3	156
Ca^{2+}	2.80E-02	801	1.43E+03
K^{+}	4.34E-02	1.21E+03	2.16E+03
OH^{-}	4.64	5.62E+04	1.00E+05
$NO3^{-}$	4.20	1.86E+05	3.32E+05
$NO2^{-}$	1.43	4.69E+04	8.37E+04
$CO3^{2-}$	0.365	1.56E+04	2.79E+04
$PO4^{3-}$	9.39E-02	6.36E+03	1.13E+04
$SO4^{2-}$	0.201	1.38E+04	2.46E+04
Si (as SiO_3^{2-})	5.67E-02	1.14E+03	2.03E+03
F^{-}	9.90E-02	1.34E+03	2.39E+03
Cl^{-}	0.165	4.18E+03	7.45E+03
$C_6H_5O_7^{3-}$	1.55E-02	2.09E+03	3.74E+03
$EDTA^{4-}$	1.17E-02	2.40E+03	4.29E+03
$HEDTA^{3-}$	2.26E-02	4.42E+03	7.88E+03
$glycolate^{-}$	6.66E-02	3.56E+03	6.35E+03
$acetate^{-}$	2.56E-03	108	192
$oxalate^{2-}$	1.14E-09	7.15E-05	1.28E-04
DBP	1.24E-02	1.85E+03	3.30E+03
butanol	1.24E-02	653	1.16E+03
NH_3	4.84E-02	586	1.05E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	64.3 (µCi/L)		1.36 (kg)
U	9.32E-03 (M)	1.58E+03 (µg/g)	2.82E+03 (kg)
Cs	0.184 (Ci/L)	131 (µCi/g)	2.34E+05 (Ci)
Sr	7.66E-02 (Ci/L)	54.6 (µCi/g)	9.74E+04 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3a

Single-Shell Tank 241-TX-106			
Total Inventory Estimate*			
Physical Properties			
Total Waste	1.81E+06 kg	(341 kgal)	
Heat Load	1.86 kW	(6.37E+03 BTU/hr)	
Bulk Density†	1.40 (g/cc)		
Water wt%†	48.4		
TOC wt% C (wet)†	0.608		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	8.73	1.43E+05	2.59E+05
Al^{3+}	1.09	2.09E+04	3.79E+04
Fe^{3+} (total Fe)	1.83E-02	728	1.32E+03
Cr^{3+}	4.52E-02	1.67E+03	3.04E+03
Bi^{3+}	1.72E-03	255	463
La^{3+}	1.31E-09	1.30E-04	2.35E-04
Hg^{2+}	9.42E-06	1.34	2.44
Zr (as $ZrO(OH)_2$)	1.27E-03	82.5	150
Pb^{2+}	8.49E-04	125	227
Ni^{2+}	5.79E-03	242	439
Sr^{2+}	4.37E-10	2.73E-05	4.95E-05
Mn^{4+}	2.20E-03	85.9	156
Ca^{2+}	3.04E-02	867	1.57E+03
K^{+}	4.29E-02	1.19E+03	2.16E+03
OH^{-}	4.83	5.84E+04	1.06E+05
$NO3^{-}$	4.14	1.83E+05	3.32E+05
$NO2^{-}$	1.43	4.69E+04	8.50E+04
$CO3^{2-}$	0.368	1.57E+04	2.85E+04
$PO4^{3-}$	9.37E-02	6.33E+03	1.15E+04
$SO4^{2-}$	0.199	1.36E+04	2.46E+04
Si (as SiO_3^{2-})	5.60E-02	1.12E+03	2.03E+03
F^{-}	9.76E-02	1.32E+03	2.39E+03
Cl^{-}	0.163	4.12E+03	7.48E+03
$C_6H_5O_7^{3-}$	1.53E-02	2.06E+03	3.74E+03
$EDTA^{4-}$	1.15E-02	2.37E+03	4.29E+03
$HEDTA^{3-}$	2.23E-02	4.35E+03	7.88E+03
$glycolate^{-}$	6.56E-02	3.50E+03	6.35E+03
$acetate^{-}$	2.52E-03	106	192
$oxalate^{2-}$	1.12E-09	7.03E-05	1.28E-04
DBP	1.22E-02	1.82E+03	3.30E+03
butanol	1.22E-02	642	1.16E+03
NH_3	4.92E-02	595	1.08E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		4.53E-02 (µCi/g)	1.37 (kg)
U	1.53E-02 (M)	2.59E+03 (µg/g)	4.69E+03 (kg)
Cs	0.182 (Ci/L)	130 (µCi/g)	2.35E+05 (Ci)
Sr	8.77E-02 (Ci/L)	62.4 (µCi/g)	1.13E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3a

Single-Shell Tank 241-TX-107			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	5.29E+04 kg	(8.00 kgal)	
Heat Load	1.62E-03 kW	(5.52 BTU/hr)	
Bulk Density	1.75 (g/cc)		
Void Fraction	0.358		
Water wt%	44.4		
TOC wt% C (wet)	0		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	5.04	6.63E+04	3.51E+03
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0.119	3.79E+03	201
Cr^{3+}	1.24E-03	36.9	1.95
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	6.20E-04	20.8	1.10
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	8.41E-02	1.93E+03	102
K^{+}	2.74E-04	6.13	0.324
OH^{-}	12.3	1.20E+05	6.32E+03
$NO3^{-}$	6.25E-02	2.22E+03	117
$NO2^{-}$	9.15E-03	241	12.7
$CO3^{2-}$	1.89	6.48E+04	3.43E+03
$PO4^{3-}$	0.400	2.17E+04	1.15E+03
$SO4^{2-}$	8.20E-02	4.51E+03	239
Si (as SiO_3^{2-})	1.55E-03	24.9	1.32
F^{-}	0	0	0
Cl^{-}	1.26E-03	25.5	1.35
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	3.51E-06	3.42E-02	1.81E-03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		3.71E-03 (µCi/g)	3.27E-03 (kg)
U	1.99 (M)	2.71E+05 (µg/g)	1.43E+04 (kg)
Cs	8.40E-04 (Ci/L)	0.481 (µCi/g)	25.4 (Ci)
Sr	7.34E-03 (Ci/L)	4.20 (µCi/g)	222 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-TX-107			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Waste	1.14E+05 kg	(28.0 kgal)	
Heat Load	2.78E-02 kW	(95.0 BTU/hr)	
Bulk Density*	1.07 (g/cc)		
Water wt%†	87.4		
TOC wt% C (wet)	0.227		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	1.65	3.53E+04	4.02E+03
Al^{3+}	0.192	4.81E+03	548
Fe^{3+} (total Fe)	1.15E-03	59.7	6.80
Cr^{3+}	6.39E-03	309	35.2
Bi^{3+}	3.05E-04	59.3	6.76
La^{3+}	2.33E-10	3.01E-05	3.43E-06
Hg^{2+}	1.68E-06	0.313	3.56E-02
Zr (as $ZrO(OH)_2$)	2.26E-04	19.2	2.18
Pb^{2+}	1.51E-04	29.2	3.32
Ni^{2+}	9.58E-04	52.3	5.96
Sr^{2+}	7.77E-11	6.34E-06	7.22E-07
Mn^{4+}	3.97E-04	20.3	2.31
Ca^{2+}	5.21E-03	194	22.1
K^{+}	8.04E-03	293	33.3
OH^{-}	0.846	1.34E+04	1.52E+03
$NO3^{-}$	0.776	4.48E+04	5.10E+03
$NO2^{-}$	0.257	1.10E+04	1.25E+03
$CO3^{2-}$	7.09E-02	3.96E+03	451
$PO4^{3-}$	1.66E-02	1.47E+03	168
$SO4^{2-}$	3.74E-02	3.34E+03	381
Si (as SiO_3^{2-})	1.08E-02	283	32.2
F^{-}	1.73E-02	307	34.9
Cl^{-}	3.11E-02	1.02E+03	117
$C_6H_5O_7^{3-}$	2.84E-03	500	56.9
$EDTA^{4-}$	4.19E-03	1.12E+03	128
$HEDTA^{3-}$	8.24E-03	2.10E+03	239
$glycolate^{-}$	1.75E-02	1.22E+03	139
$acetate^{-}$	4.50E-04	24.7	2.81
$oxalate^{2-}$	2.00E-10	1.63E-05	1.86E-06
DBP	2.17E-03	425	48.4
butanol	2.17E-03	150	17.1
NH_3	8.58E-03	136	15.5
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	12.2 (µCi/L)		2.16E-02 (kg)
U	1.74E-03 (M)	386 (µg/g)	43.9 (kg)
Cs	3.42E-02 (Ci/L)	31.8 (µCi/g)	3.62E+03 (Ci)
Sr	1.52E-02 (Ci/L)	14.1 (µCi/g)	1.61E+03 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3a

Single-Shell Tank 241-TX-107			
Total Inventory Estimate*			
Physical Properties			
Total Waste	1.67E+05 kg	(36.0 kgal)	
Heat Load	2.94E-02 kW	(101 BTU/hr)	
Bulk Density†	1.22 (g/cc)		
Water wt%†	73.7		
TOC wt% C (wet)†	0.155		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	2.40	4.51E+04	7.53E+03
Al^{3+}	0.149	3.29E+03	548
Fe^{3+} (total Fe)	2.73E-02	1.24E+03	207
Cr^{3+}	5.25E-03	223	37.2
Bi^{3+}	2.37E-04	40.5	6.76
La^{3+}	1.81E-10	2.06E-05	3.43E-06
Hg^{2+}	1.30E-06	0.214	3.56E-02
Zr (as $ZrO(OH)_2$)	1.76E-04	13.1	2.18
Pb^{2+}	1.18E-04	19.9	3.32
Ni^{2+}	8.83E-04	42.3	7.06
Sr^{2+}	6.05E-11	4.33E-06	7.22E-07
Mn^{4+}	3.09E-04	13.9	2.31
Ca^{2+}	2.27E-02	745	124
K^{+}	6.32E-03	202	33.7
OH^{-}	3.39	4.70E+04	7.85E+03
$NO3^{-}$	0.618	3.13E+04	5.22E+03
$NO2^{-}$	0.202	7.59E+03	1.27E+03
$CO3^{2-}$	0.474	2.32E+04	3.88E+03
$PO4^{3-}$	0.102	7.89E+03	1.32E+03
$SO4^{2-}$	4.73E-02	3.71E+03	619
Si (as SiO_3^{2-})	8.76E-03	201	33.5
F^{-}	1.35E-02	209	34.9
Cl^{-}	2.45E-02	708	118
$C_6H_5O_7^{3-}$	2.21E-03	341	56.9
$EDTA^{4-}$	3.26E-03	767	128
$HEDTA^{3-}$	6.41E-03	1.43E+03	239
$glycolate^{-}$	1.36E-02	835	139
$acetate^{-}$	3.50E-04	16.9	2.81
$oxalate^{2-}$	1.55E-10	1.12E-05	1.86E-06
DBP	1.69E-03	290	48.4
butanol	1.69E-03	102	17.1
NH_3	6.67E-03	92.6	15.5
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		8.94E-03 (µCi/g)	2.49E-02 (kg)
U	0.443 (M)	8.62E+04 (µg/g)	1.44E+04 (kg)
Cs	2.68E-02 (Ci/L)	21.9 (µCi/g)	3.65E+03 (Ci)
Sr	1.34E-02 (Ci/L)	11.0 (µCi/g)	1.83E+03 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3a

Single-Shell Tank 241-TX-108			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	3.31E+04 kg	(6.00 kgal)	
Heat Load	2.74E-03 kW	(9.37 BTU/hr)	
Bulk Density	1.46 (g/cc)		
Void Fraction	0.729		
Water wt%	53.8		
TOC wt% C (wet)	1.83E-04		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	4.06	6.40E+04	2.12E+03
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	1.09	4.17E+04	1.38E+03
Cr^{3+}	2.37E-03	84.4	2.80
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	1.18E-03	47.6	1.58
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.258	7.09E+03	235
K^{+}	1.06E-02	285	9.44
OH^{-}	7.80	9.09E+04	3.01E+03
$NO3^{-}$	1.48	6.29E+04	2.08E+03
$NO2^{-}$	0.249	7.86E+03	260
$CO3^{2-}$	0.970	3.99E+04	1.32E+03
$PO4^{3-}$	0.213	1.38E+04	459
$SO4^{2-}$	0.114	7.49E+03	248
Si (as SiO_3^{2-})	5.17E-04	9.95	0.330
F^{-}	0	0	0
Cl^{-}	6.30E-02	1.53E+03	50.6
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	1.85E-05	2.67	8.85E-02
butanol	1.85E-05	0.942	3.12E-02
NH_3	5.80E-04	6.76	0.224
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		3.41E-03 (µCi/g)	1.88E-03 (kg)
U	0.756 (M)	1.23E+05 (µg/g)	4.09E+03 (kg)
Cs	1.17E-03 (Ci/L)	0.804 (µCi/g)	26.6 (Ci)
Sr	1.71E-02 (Ci/L)	11.7 (µCi/g)	389 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-TX-108			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Waste	6.35E+05 kg	(128 kgal)	
Heat Load	0.509 kW	(1.74E+03 BTU/hr)	
Bulk Density*	1.31 (g/cc)		
Water wt%†	57.7		
TOC wt% C (wet)	0.324		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	6.75	1.18E+05	7.51E+04
Al^{3+}	0.828	1.71E+04	1.08E+04
Fe^{3+} (total Fe)	4.77E-03	203	129
Cr^{3+}	2.81E-02	1.11E+03	707
Bi^{3+}	1.41E-03	226	143
La^{3+}	1.08E-09	1.14E-04	7.25E-05
Hg^{2+}	7.73E-06	1.18	0.751
Zr (as $ZrO(OH)_2$)	1.05E-03	73.1	46.4
Pb^{2+}	6.93E-04	110	69.6
Ni^{2+}	4.13E-03	185	118
Sr^{2+}	3.59E-10	2.40E-05	1.52E-05
Mn^{4+}	1.78E-03	74.8	47.5
Ca^{2+}	2.16E-02	662	420
K^{+}	3.35E-02	1000	634
OH^{-}	3.63	4.71E+04	2.99E+04
$NO3^{-}$	3.23	1.53E+05	9.71E+04
$NO2^{-}$	1.14	3.99E+04	2.53E+04
$CO3^{2-}$	0.271	1.24E+04	7.89E+03
$PO4^{3-}$	7.53E-02	5.46E+03	3.46E+03
$SO4^{2-}$	0.156	1.14E+04	7.26E+03
Si (as SiO_3^{2-})	4.31E-02	925	587
F^{-}	8.04E-02	1.17E+03	740
Cl^{-}	0.125	3.39E+03	2.15E+03
$C_6H_5O_7^{3-}$	1.22E-02	1.76E+03	1.11E+03
$EDTA^{4-}$	3.04E-03	670	425
$HEDTA^{3-}$	5.45E-03	1.14E+03	723
$glycolate^{-}$	3.59E-02	2.06E+03	1.31E+03
$acetate^{-}$	2.05E-03	92.5	58.7
$oxalate^{2-}$	9.22E-10	6.19E-05	3.93E-05
DBP	9.96E-03	1.60E+03	1.01E+03
butanol	9.96E-03	564	358
NH_3	3.89E-02	505	320
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	48.6 (µCi/L)		0.393 (kg)
U	7.20E-03 (M)	1.31E+03 (µg/g)	830 (kg)
Cs	0.143 (Ci/L)	109 (µCi/g)	6.94E+04 (Ci)
Sr	5.65E-02 (Ci/L)	43.2 (µCi/g)	2.74E+04 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3a

Single-Shell Tank 241-TX-108			
Total Inventory Estimate*			
Physical Properties			
Total Waste	6.68E+05 kg	(134 kgal)	
Heat Load	0.512 kW	(1.75E+03 BTU/hr)	
Bulk Density†	1.32 (g/cc)		
Water wt%†	57.5		
TOC wt% C (wet)†	0.308		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	6.63	1.16E+05	7.73E+04
Al^{3+}	0.791	1.62E+04	1.08E+04
Fe^{3+} (total Fe)	5.33E-02	2.26E+03	1.51E+03
Cr^{3+}	2.69E-02	1.06E+03	710
Bi^{3+}	1.35E-03	215	143
La^{3+}	1.03E-09	1.09E-04	7.25E-05
Hg^{2+}	7.38E-06	1.12	0.751
Zr (as $ZrO(OH)_2$)	1.00E-03	69.4	46.4
Pb^{2+}	6.62E-04	104	69.6
Ni^{2+}	4.00E-03	178	119
Sr^{2+}	3.43E-10	2.28E-05	1.52E-05
Mn^{4+}	1.70E-03	71.1	47.5
Ca^{2+}	3.22E-02	981	655
K^{+}	3.25E-02	964	644
OH^{-}	3.82	4.93E+04	3.29E+04
$NO3^{-}$	3.16	1.49E+05	9.92E+04
$NO2^{-}$	1.10	3.84E+04	2.56E+04
$CO3^{2-}$	0.303	1.38E+04	9.21E+03
$PO4^{3-}$	8.14E-02	5.87E+03	3.92E+03
$SO4^{2-}$	0.154	1.12E+04	7.50E+03
Si (as SiO_3^{2-})	4.12E-02	880	587
F^{-}	7.68E-02	1.11E+03	740
Cl^{-}	0.123	3.30E+03	2.20E+03
$C_6H_5O_7^{3-}$	1.16E-02	1.67E+03	1.11E+03
$EDTA^{4-}$	2.91E-03	636	425
$HEDTA^{3-}$	5.20E-03	1.08E+03	723
$glycolate^{-}$	3.43E-02	1.96E+03	1.31E+03
$acetate^{-}$	1.96E-03	87.9	58.7
$oxalate^{2-}$	8.80E-10	5.89E-05	3.93E-05
DBP	9.52E-03	1.52E+03	1.01E+03
butanol	9.52E-03	536	358
NH_3	3.72E-02	480	321
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		3.55E-02 (µCi/g)	0.395 (kg)
U	4.07E-02 (M)	7.36E+03 (µg/g)	4.92E+03 (kg)
Cs	0.137 (Ci/L)	104 (µCi/g)	6.94E+04 (Ci)
Sr	5.48E-02 (Ci/L)	41.6 (µCi/g)	2.78E+04 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

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Single-Shell Tank 241-TX-109			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	1.82E+06 kg	(384 kgal)	
Heat Load	0.152 kW	(520 BTU/hr)	
Bulk Density	1.25 (g/cc)		
Void Fraction	0.750		
Water wt%	72.8		
TOC wt% C (wet)	0		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	4.11	7.55E+04	1.37E+05
Al^{3+}	0.700	1.51E+04	2.74E+04
Fe^{3+} (total Fe)	0.239	1.07E+04	1.94E+04
Cr^{3+}	4.10E-03	170	310
Bi^{3+}	5.79E-02	9.68E+03	1.76E+04
La^{3+}	0	0	0
Hg^{2+}	7.80E-05	12.5	22.7
Zr (as $ZrO(OH)_2$)	8.39E-03	612	1.11E+03
Pb^{2+}	0	0	0
Ni^{2+}	1.26E-03	59.2	108
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	5.80E-02	1.86E+03	3.38E+03
K^{+}	2.98E-03	93.1	169
OH^{-}	2.94	4.00E+04	7.27E+04
$NO3^{-}$	0.383	1.90E+04	3.45E+04
$NO2^{-}$	0.218	8.03E+03	1.46E+04
$CO3^{2-}$	5.80E-02	2.78E+03	5.06E+03
$PO4^{3-}$	1.07	8.12E+04	1.48E+05
$SO4^{2-}$	4.86E-02	3.73E+03	6.78E+03
Si (as SiO_3^{2-})	5.56E-02	1.25E+03	2.27E+03
F^{-}	0.181	2.74E+03	4.99E+03
Cl^{-}	1.37E-02	388	706
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	3.96E-04	5.38	9.78
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.25E-02 (µCi/g)	0.378 (kg)
U	6.02E-04 (M)	115 (µg/g)	208 (kg)
Cs	2.21E-02 (Ci/L)	17.7 (µCi/g)	3.21E+04 (Ci)
Sr	1.97E-04 (Ci/L)	0.158 (µCi/g)	287 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-TX-109			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Waste	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	0 (g/cc)		
Water wt%†	0		
TOC wt% C (wet)	0		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3a

Single-Shell Tank 241-TX-109			
Total Inventory Estimate*			
Physical Properties			
Total Waste	1.82E+06 kg	(384 kgal)	
Heat Load	0.152 kW	(520 BTU/hr)	
Bulk Density†	1.25 (g/cc)		
Water wt%†	72.8		
TOC wt% C (wet)†	0		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	4.11	7.55E+04	1.37E+05
Al^{3+}	0.700	1.51E+04	2.74E+04
Fe^{3+} (total Fe)	0.239	1.07E+04	1.94E+04
Cr^{3+}	4.10E-03	170	310
Bi^{3+}	5.79E-02	9.68E+03	1.76E+04
La^{3+}	0	0	0
Hg^{2+}	7.80E-05	12.5	22.7
Zr (as $ZrO(OH)_2$)	8.39E-03	612	1.11E+03
Pb^{2+}	0	0	0
Ni^{2+}	1.26E-03	59.2	108
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	5.80E-02	1.86E+03	3.38E+03
K^{+}	2.98E-03	93.1	169
OH^{-}	2.94	4.00E+04	7.27E+04
$NO3^{-}$	0.383	1.90E+04	3.45E+04
$NO2^{-}$	0.218	8.03E+03	1.46E+04
$CO3^{2-}$	5.80E-02	2.78E+03	5.06E+03
$PO4^{3-}$	1.07	8.12E+04	1.48E+05
$SO4^{2-}$	4.86E-02	3.73E+03	6.78E+03
Si (as SiO_3^{2-})	5.56E-02	1.25E+03	2.27E+03
F^{-}	0.181	2.74E+03	4.99E+03
Cl^{-}	1.37E-02	388	706
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	3.96E-04	5.38	9.78
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.25E-02 (µCi/g)	0.378 (kg)
U	6.02E-04 (M)	115 (µg/g)	208 (kg)
Cs	2.21E-02 (Ci/L)	17.7 (µCi/g)	3.21E+04 (Ci)
Sr	1.97E-04 (Ci/L)	0.158 (µCi/g)	287 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

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Single-Shell Tank 241-TX-110			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	1.73E+05 kg	(37.0 kgal)	
Heat Load	1.67E-02 kW	(56.9 BTU/hr)	
Bulk Density	1.24 (g/cc)		
Void Fraction	0.767		
Water wt%	73.4		
TOC wt% C (wet)	0		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	3.88	7.20E+04	1.25E+04
Al^{3+}	0.768	1.67E+04	2.90E+03
Fe^{3+} (total Fe)	0.214	9.64E+03	1.67E+03
Cr^{3+}	4.20E-03	176	30.6
Bi^{3+}	5.21E-02	8.80E+03	1.53E+03
La^{3+}	0	0	0
Hg^{2+}	6.96E-05	11.3	1.95
Zr (as $ZrO(OH)_2$)	7.81E-03	575	99.8
Pb^{2+}	0	0	0
Ni^{2+}	1.29E-03	61.2	10.6
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	5.28E-02	1.71E+03	296
K^{+}	2.90E-03	91.6	15.9
OH^{-}	3.04	4.17E+04	7.24E+03
$NO3^{-}$	0.385	1.93E+04	3.34E+03
$NO2^{-}$	0.230	8.55E+03	1.48E+03
$CO3^{2-}$	5.28E-02	2.56E+03	443
$PO4^{3-}$	0.990	7.59E+04	1.32E+04
$SO4^{2-}$	4.97E-02	3.86E+03	669
Si (as SiO_3^{2-})	5.33E-02	1.21E+03	209
F^{-}	0.185	2.84E+03	493
Cl^{-}	1.34E-02	382	66.2
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	4.62E-04	6.33	1.10
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.45E-02 (µCi/g)	4.20E-02 (kg)
U	6.11E-04 (M)	117 (µg/g)	20.4 (kg)
Cs	2.51E-02 (Ci/L)	20.3 (µCi/g)	3.51E+03 (Ci)
Sr	2.24E-04 (Ci/L)	0.181 (µCi/g)	31.4 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-TX-110			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Waste	2.27E+06 kg	(425 kgal)	
Heat Load	2.25 kW	(7.67E+03 BTU/hr)	
Bulk Density*	1.41 (g/cc)		
Water wt%†	47.9		
TOC wt% C (wet)	0.605		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	8.94	1.46E+05	3.31E+05
Al^{3+}	1.07	2.05E+04	4.65E+04
Fe^{3+} (total Fe)	6.27E-03	249	564
Cr^{3+}	3.61E-02	1.33E+03	3.02E+03
Bi^{3+}	1.79E-03	265	601
La^{3+}	1.37E-09	1.35E-04	3.06E-04
Hg^{2+}	9.81E-06	1.40	3.17
Zr (as $ZrO(OH)_2$)	1.33E-03	85.8	194
Pb^{2+}	8.84E-04	130	295
Ni^{2+}	5.36E-03	223	506
Sr^{2+}	4.57E-10	2.84E-05	6.44E-05
Mn^{4+}	2.29E-03	89.5	203
Ca^{2+}	2.85E-02	810	1.83E+03
K^{+}	4.41E-02	1.22E+03	2.77E+03
OH^{-}	4.71	5.69E+04	1.29E+05
$NO3^{-}$	4.26	1.87E+05	4.25E+05
$NO2^{-}$	1.46	4.76E+04	1.08E+05
$CO3^{2-}$	0.370	1.58E+04	3.57E+04
$PO4^{3-}$	9.63E-02	6.49E+03	1.47E+04
$SO4^{2-}$	0.205	1.40E+04	3.17E+04
Si (as SiO_3^{2-})	5.75E-02	1.15E+03	2.60E+03
F^{-}	0.102	1.37E+03	3.11E+03
Cl^{-}	0.167	4.21E+03	9.54E+03
$C_6H_5O_7^{3-}$	1.59E-02	2.13E+03	4.83E+03
$EDTA^{4-}$	1.12E-02	2.28E+03	5.17E+03
$HEDTA^{3-}$	2.15E-02	4.19E+03	9.49E+03
$glycolate^{-}$	6.52E-02	3.47E+03	7.87E+03
$acetate^{-}$	2.62E-03	110	249
$oxalate^{2-}$	1.17E-09	7.33E-05	1.66E-04
DBP	1.27E-02	1.89E+03	4.29E+03
butanol	1.27E-02	667	1.51E+03
NH_3	4.95E-02	597	1.35E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	65.1 (µCi/L)		1.75 (kg)
U	9.47E-03 (M)	1.60E+03 (µg/g)	3.62E+03 (kg)
Cs	0.186 (Ci/L)	132 (µCi/g)	3.00E+05 (Ci)
Sr	7.75E-02 (Ci/L)	55.0 (µCi/g)	1.25E+05 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-TX-110			
Total Inventory Estimate*			
Physical Properties			
Total Waste	2.44E+06 kg	(462 kgal)	
Heat Load	2.26 kW	(7.72E+03 BTU/hr)	
Bulk Density†	1.39 (g/cc)		
Water wt%†	49.7		
TOC wt% C (wet)†	0.562		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	8.54	1.41E+05	3.43E+05
Al^{3+}	1.05	2.03E+04	4.94E+04
Fe^{3+} (total Fe)	2.29E-02	916	2.24E+03
Cr^{3+}	3.35E-02	1.25E+03	3.05E+03
Bi^{3+}	5.82E-03	872	2.13E+03
La^{3+}	1.26E-09	1.26E-04	3.06E-04
Hg^{2+}	1.46E-05	2.10	5.12
Zr (as $ZrO(OH)_2$)	1.84E-03	121	294
Pb^{2+}	8.13E-04	121	295
Ni^{2+}	5.03E-03	212	517
Sr^{2+}	4.20E-10	2.64E-05	6.44E-05
Mn^{4+}	2.11E-03	83.1	203
Ca^{2+}	3.04E-02	874	2.13E+03
K^{+}	4.08E-02	1.14E+03	2.79E+03
OH^{-}	4.58	5.58E+04	1.36E+05
$NO3^{-}$	3.95	1.75E+05	4.28E+05
$NO2^{-}$	1.36	4.48E+04	1.09E+05
$CO3^{2-}$	0.344	1.48E+04	3.61E+04
$PO4^{3-}$	0.168	1.14E+04	2.79E+04
$SO4^{2-}$	0.193	1.33E+04	3.24E+04
Si (as SiO_3^{2-})	5.72E-02	1.15E+03	2.81E+03
F^{-}	0.108	1.48E+03	3.60E+03
Cl^{-}	0.155	3.94E+03	9.61E+03
$C_6H_5O_7^{3-}$	1.46E-02	1.98E+03	4.83E+03
$EDTA^{4-}$	1.03E-02	2.12E+03	5.17E+03
$HEDTA^{3-}$	1.98E-02	3.89E+03	9.49E+03
$glycolate^{-}$	6.00E-02	3.22E+03	7.87E+03
$acetate^{-}$	2.41E-03	102	249
$oxalate^{2-}$	1.08E-09	6.81E-05	1.66E-04
DBP	1.17E-02	1.76E+03	4.29E+03
butanol	1.17E-02	620	1.51E+03
NH_3	4.56E-02	555	1.35E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		4.40E-02 (µCi/g)	1.79 (kg)
U	8.76E-03 (M)	1.49E+03 (µg/g)	3.65E+03 (kg)
Cs	0.174 (Ci/L)	124 (µCi/g)	3.03E+05 (Ci)
Sr	7.13E-02 (Ci/L)	51.1 (µCi/g)	1.25E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

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Single-Shell Tank 241-TX-111			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	1.99E+05 kg	(43.0 kgal)	
Heat Load	2.26E-02 kW	(77.1 BTU/hr)	
Bulk Density	1.22 (g/cc)		
Void Fraction	0.791		
Water wt%	74.3		
TOC wt% C (wet)	0		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	3.56	6.69E+04	1.33E+04
Al^{3+}	0.862	1.90E+04	3.78E+03
Fe^{3+} (total Fe)	0.179	8.17E+03	1.62E+03
Cr^{3+}	4.34E-03	185	36.7
Bi^{3+}	4.42E-02	7.55E+03	1.50E+03
La^{3+}	0	0	0
Hg^{2+}	5.80E-05	9.51	1.89
Zr (as $ZrO(OH)_2$)	7.02E-03	524	104
Pb^{2+}	0	0	0
Ni^{2+}	1.33E-03	64.1	12.8
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	4.55E-02	1.49E+03	297
K^{+}	2.80E-03	89.5	17.8
OH^{-}	3.18	4.42E+04	8.79E+03
$NO3^{-}$	0.389	1.97E+04	3.92E+03
$NO2^{-}$	0.247	9.28E+03	1.85E+03
$CO3^{2-}$	4.55E-02	2.23E+03	444
$PO4^{3-}$	0.880	6.84E+04	1.36E+04
$SO4^{2-}$	5.14E-02	4.04E+03	803
Si (as SiO_3^{2-})	5.01E-02	1.15E+03	229
F^{-}	0.192	2.98E+03	593
Cl^{-}	1.29E-02	373	74.2
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	5.52E-04	7.68	1.53
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.75E-02 (µCi/g)	5.79E-02 (kg)
U	6.24E-04 (M)	122 (µg/g)	24.2 (kg)
Cs	2.93E-02 (Ci/L)	23.9 (µCi/g)	4.76E+03 (Ci)
Sr	2.62E-04 (Ci/L)	0.214 (µCi/g)	42.6 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-TX-111			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Waste	1.74E+06 kg	(327 kgal)	
Heat Load	1.74 kW	(5.94E+03 BTU/hr)	
Bulk Density*	1.41 (g/cc)		
Water wt%†	47.7		
TOC wt% C (wet)	0.681		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	8.96	1.46E+05	2.55E+05
Al^{3+}	1.07	2.04E+04	3.56E+04
Fe^{3+} (total Fe)	6.27E-03	249	434
Cr^{3+}	3.58E-02	1.32E+03	2.30E+03
Bi^{3+}	1.76E-03	262	456
La^{3+}	1.35E-09	1.33E-04	2.32E-04
Hg^{2+}	9.66E-06	1.38	2.40
Zr (as $ZrO(OH)_2$)	1.31E-03	84.6	147
Pb^{2+}	8.70E-04	128	223
Ni^{2+}	5.33E-03	222	387
Sr^{2+}	4.50E-10	2.80E-05	4.88E-05
Mn^{4+}	2.27E-03	88.4	154
Ca^{2+}	2.84E-02	809	1.41E+03
K^{+}	4.41E-02	1.22E+03	2.13E+03
OH^{-}	4.69	5.66E+04	9.87E+04
$NO3^{-}$	4.25	1.87E+05	3.26E+05
$NO2^{-}$	1.45	4.72E+04	8.24E+04
$CO3^{2-}$	0.374	1.59E+04	2.78E+04
$PO4^{3-}$	9.52E-02	6.42E+03	1.12E+04
$SO4^{2-}$	0.205	1.40E+04	2.44E+04
Si (as SiO_3^{2-})	5.80E-02	1.16E+03	2.02E+03
F^{-}	0.100	1.35E+03	2.36E+03
Cl^{-}	0.168	4.22E+03	7.36E+03
$C_6H_5O_7^{3-}$	1.58E-02	2.13E+03	3.71E+03
$EDTA^{4-}$	1.38E-02	2.81E+03	4.91E+03
$HEDTA^{3-}$	2.67E-02	5.20E+03	9.06E+03
$glycolate^{-}$	7.22E-02	3.85E+03	6.71E+03
$acetate^{-}$	2.58E-03	108	189
$oxalate^{2-}$	1.15E-09	7.22E-05	1.26E-04
DBP	1.25E-02	1.87E+03	3.25E+03
butanol	1.25E-02	658	1.15E+03
NH_3	4.89E-02	590	1.03E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	65.4 (µCi/L)		1.35 (kg)
U	9.48E-03 (M)	1.60E+03 (µg/g)	2.79E+03 (kg)
Cs	0.187 (Ci/L)	132 (µCi/g)	2.31E+05 (Ci)
Sr	7.88E-02 (Ci/L)	55.9 (µCi/g)	9.75E+04 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-TX-111			
Total Inventory Estimate*			
Physical Properties			
Total Waste	1.94E+06 kg	(370 kgal)	
Heat Load	1.76 kW	(6.02E+03 BTU/hr)	
Bulk Density†	1.39 (g/cc)		
Water wt%†	50.5		
TOC wt% C (wet)†	0.611		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	8.33	1.38E+05	2.68E+05
Al^{3+}	1.04	2.03E+04	3.94E+04
Fe^{3+} (total Fe)	2.63E-02	1.06E+03	2.06E+03
Cr^{3+}	3.21E-02	1.21E+03	2.34E+03
Bi^{3+}	6.69E-03	1.01E+03	1.96E+03
La^{3+}	1.19E-09	1.19E-04	2.32E-04
Hg^{2+}	1.53E-05	2.21	4.29
Zr (as $ZrO(OH)_2$)	1.97E-03	130	252
Pb^{2+}	7.69E-04	115	223
Ni^{2+}	4.86E-03	206	400
Sr^{2+}	3.98E-10	2.51E-05	4.88E-05
Mn^{4+}	2.00E-03	79.4	154
Ca^{2+}	3.04E-02	879	1.71E+03
K^{+}	3.93E-02	1.11E+03	2.15E+03
OH^{-}	4.52	5.54E+04	1.08E+05
$NO3^{-}$	3.80	1.70E+05	3.30E+05
$NO2^{-}$	1.31	4.33E+04	8.42E+04
$CO3^{2-}$	0.336	1.45E+04	2.82E+04
$PO4^{3-}$	0.186	1.28E+04	2.48E+04
$SO4^{2-}$	0.187	1.30E+04	2.52E+04
Si (as SiO_3^{2-})	5.70E-02	1.16E+03	2.24E+03
F^{-}	0.111	1.52E+03	2.95E+03
Cl^{-}	0.150	3.83E+03	7.43E+03
$C_6H_5O_7^{3-}$	1.40E-02	1.91E+03	3.71E+03
$EDTA^{4-}$	1.22E-02	2.53E+03	4.91E+03
$HEDTA^{3-}$	2.36E-02	4.67E+03	9.06E+03
$glycolate^{-}$	6.38E-02	3.45E+03	6.71E+03
$acetate^{-}$	2.28E-03	97.2	189
$oxalate^{2-}$	1.02E-09	6.48E-05	1.26E-04
DBP	1.11E-02	1.68E+03	3.25E+03
butanol	1.11E-02	591	1.15E+03
NH_3	4.33E-02	530	1.03E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		4.35E-02 (µCi/g)	1.41 (kg)
U	8.45E-03 (M)	1.45E+03 (µg/g)	2.82E+03 (kg)
Cs	0.168 (Ci/L)	121 (µCi/g)	2.36E+05 (Ci)
Sr	6.97E-02 (Ci/L)	50.2 (µCi/g)	9.76E+04 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

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Single-Shell Tank 241-TX-112			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	1.41E+05 kg	(24.0 kgal)	
Heat Load	1.85E-02 kW	(63.2 BTU/hr)	
Bulk Density	1.55 (g/cc)		
Void Fraction	0.731		
Water wt%	57.2		
TOC wt% C (wet)	1.91E-04		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	9.29	1.37E+05	1.94E+04
Al^{3+}	0.170	2.96E+03	418
Fe^{3+} (total Fe)	0.222	7.99E+03	1.13E+03
Cr^{3+}	5.26E-03	176	24.8
Bi^{3+}	4.55E-02	6.12E+03	864
La^{3+}	0	0	0
Hg^{2+}	3.90E-05	5.04	0.711
Zr (as $ZrO(OH)_2$)	3.34E-03	196	27.7
Pb^{2+}	0	0	0
Ni^{2+}	1.14E-02	431	60.9
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.113	2.93E+03	413
K^{+}	1.43E-02	361	51.0
OH^{-}	1.45	1.59E+04	2.24E+03
$NO3^{-}$	3.09	1.23E+05	1.74E+04
$NO2^{-}$	0.290	8.58E+03	1.21E+03
$CO3^{2-}$	0.248	9.58E+03	1.35E+03
$PO4^{3-}$	1.69	1.03E+05	1.46E+04
$SO4^{2-}$	0.138	8.56E+03	1.21E+03
Si (as SiO_3^{2-})	2.34E-02	424	59.8
F^{-}	0.146	1.79E+03	252
Cl^{-}	8.16E-02	1.86E+03	263
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	2.06E-05	2.78	0.393
butanol	2.06E-05	0.981	0.138
NH_3	8.99E-04	9.83	1.39
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.10E-02 (µCi/g)	2.59E-02 (kg)
U	7.60E-03 (M)	1.16E+03 (µg/g)	164 (kg)
Cs	1.89E-02 (Ci/L)	12.2 (µCi/g)	1.72E+03 (Ci)
Sr	1.71E-02 (Ci/L)	11.0 (µCi/g)	1.55E+03 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

Rev. 3a

Single-Shell Tank 241-TX-112			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Waste	3.36E+06 kg	(625 kgal)	
Heat Load	3.48 kW	(1.19E+04 BTU/hr)	
Bulk Density*	1.42 (g/cc)		
Water wt%†	47.4		
TOC wt% C (wet)	0.320		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	9.11	1.47E+05	4.95E+05
Al^{3+}	1.16	2.20E+04	7.41E+04
Fe^{3+} (total Fe)	6.63E-03	261	876
Cr^{3+}	3.91E-02	1.43E+03	4.82E+03
Bi^{3+}	2.06E-03	303	1.02E+03
La^{3+}	1.57E-09	1.54E-04	5.16E-04
Hg^{2+}	1.17E-05	1.65	5.56
Zr (as $ZrO(OH)_2$)	1.52E-03	97.7	328
Pb^{2+}	1.09E-03	159	534
Ni^{2+}	5.77E-03	238	801
Sr^{2+}	5.24E-10	3.23E-05	1.09E-04
Mn^{4+}	2.59E-03	100	337
Ca^{2+}	3.01E-02	849	2.86E+03
K^{+}	4.55E-02	1.25E+03	4.21E+03
OH^{-}	5.06	6.05E+04	2.03E+05
$NO3^{-}$	4.28	1.87E+05	6.28E+05
$NO2^{-}$	1.63	5.27E+04	1.77E+05
$CO3^{2-}$	0.354	1.50E+04	5.03E+04
$PO4^{3-}$	0.108	7.20E+03	2.42E+04
$SO4^{2-}$	0.220	1.49E+04	5.00E+04
Si (as SiO_3^{2-})	5.95E-02	1.18E+03	3.96E+03
F^{-}	0.117	1.57E+03	5.27E+03
Cl^{-}	0.163	4.07E+03	1.37E+04
$C_6H_5O_7^{3-}$	1.67E-02	2.23E+03	7.48E+03
$EDTA^{4-}$	1.29E-03	261	878
$HEDTA^{3-}$	1.54E-03	297	997
$glycolate^{-}$	3.39E-02	1.79E+03	6.02E+03
$acetate^{-}$	3.33E-03	138	465
$oxalate^{2-}$	1.34E-09	8.32E-05	2.80E-04
DBP	1.46E-02	2.17E+03	7.28E+03
butanol	1.46E-02	764	2.57E+03
NH_3	5.65E-02	676	2.27E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	65.8 (µCi/L)		2.60 (kg)
U	1.02E-02 (M)	1.71E+03 (µg/g)	5.74E+03 (kg)
Cs	0.204 (Ci/L)	143 (µCi/g)	4.82E+05 (Ci)
Sr	7.68E-02 (Ci/L)	54.1 (µCi/g)	1.82E+05 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3a

Single-Shell Tank 241-TX-112			
Total Inventory Estimate*			
Physical Properties			
Total Waste	3.50E+06 kg	(649 kgal)	
Heat Load	3.50 kW	(1.20E+04 BTU/hr)	
Bulk Density†	1.43 (g/cc)		
Water wt%†	47.8		
TOC wt% C (wet)†	0.307		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	9.12	1.47E+05	5.15E+05
Al^{3+}	1.12	2.13E+04	7.45E+04
Fe^{3+} (total Fe)	1.46E-02	572	2.00E+03
Cr^{3+}	3.79E-02	1.38E+03	4.84E+03
Bi^{3+}	3.67E-03	537	1.88E+03
La^{3+}	1.51E-09	1.47E-04	5.16E-04
Hg^{2+}	1.27E-05	1.79	6.27
Zr (as $ZrO(OH)_2$)	1.59E-03	102	356
Pb^{2+}	1.05E-03	152	534
Ni^{2+}	5.98E-03	246	862
Sr^{2+}	5.04E-10	3.10E-05	1.09E-04
Mn^{4+}	2.50E-03	96.3	337
Ca^{2+}	3.32E-02	933	3.27E+03
K^{+}	4.44E-02	1.22E+03	4.26E+03
OH^{-}	4.92	5.87E+04	2.06E+05
$NO3^{-}$	4.23	1.84E+05	6.45E+05
$NO2^{-}$	1.58	5.10E+04	1.79E+05
$CO3^{2-}$	0.350	1.47E+04	5.16E+04
$PO4^{3-}$	0.166	1.11E+04	3.88E+04
$SO4^{2-}$	0.217	1.46E+04	5.12E+04
Si (as SiO_3^{2-})	5.82E-02	1.15E+03	4.02E+03
F^{-}	0.118	1.58E+03	5.53E+03
Cl^{-}	0.160	3.98E+03	1.40E+04
$C_6H_5O_7^{3-}$	1.61E-02	2.14E+03	7.48E+03
$EDTA^{4-}$	1.24E-03	251	878
$HEDTA^{3-}$	1.48E-03	285	997
$glycolate^{-}$	3.26E-02	1.72E+03	6.02E+03
$acetate^{-}$	3.21E-03	133	465
$oxalate^{2-}$	1.29E-09	7.99E-05	2.80E-04
DBP	1.41E-02	2.08E+03	7.28E+03
butanol	1.41E-02	733	2.57E+03
NH_3	5.44E-02	649	2.27E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		4.49E-02 (µCi/g)	2.62 (kg)
U	1.01E-02 (M)	1.69E+03 (µg/g)	5.91E+03 (kg)
Cs	0.197 (Ci/L)	138 (µCi/g)	4.84E+05 (Ci)
Sr	7.46E-02 (Ci/L)	52.3 (µCi/g)	1.83E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3a

Single-Shell Tank 241-TX-113			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	8.47E+05 kg	(183 kgal)	
Heat Load	9.61E-02 kW	(328 BTU/hr)	
Bulk Density	1.22 (g/cc)		
Void Fraction	0.791		
Water wt%	74.3		
TOC wt% C (wet)	0		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	3.56	6.69E+04	5.66E+04
Al^{3+}	0.862	1.90E+04	1.61E+04
Fe^{3+} (total Fe)	0.179	8.17E+03	6.91E+03
Cr^{3+}	4.34E-03	185	156
Bi^{3+}	4.42E-02	7.55E+03	6.39E+03
La^{3+}	0	0	0
Hg^{2+}	5.80E-05	9.51	8.05
Zr (as $ZrO(OH)_2$)	7.02E-03	524	443
Pb^{2+}	0	0	0
Ni^{2+}	1.33E-03	64.1	54.3
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	4.55E-02	1.49E+03	1.26E+03
K^{+}	2.80E-03	89.5	75.8
OH^{-}	3.18	4.42E+04	3.74E+04
$NO3^{-}$	0.389	1.97E+04	1.67E+04
$NO2^{-}$	0.247	9.28E+03	7.86E+03
$CO3^{2-}$	4.55E-02	2.23E+03	1.89E+03
$PO4^{3-}$	0.880	6.84E+04	5.79E+04
$SO4^{2-}$	5.14E-02	4.04E+03	3.42E+03
Si (as SiO_3^{2-})	5.01E-02	1.15E+03	974
F^{-}	0.192	2.98E+03	2.52E+03
Cl^{-}	1.29E-02	373	316
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	5.52E-04	7.68	6.50
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.75E-02 (µCi/g)	0.247 (kg)
U	6.24E-04 (M)	122 (µg/g)	103 (kg)
Cs	2.93E-02 (Ci/L)	23.9 (µCi/g)	2.03E+04 (Ci)
Sr	2.62E-04 (Ci/L)	0.214 (µCi/g)	181 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

Rev. 3a

Single-Shell Tank 241-TX-113			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Waste	2.26E+06 kg	(424 kgal)	
Heat Load	2.40 kW	(8.20E+03 BTU/hr)	
Bulk Density*	1.41 (g/cc)		
Water wt%†	48.8		
TOC wt% C (wet)	0.258		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	8.72	1.42E+05	3.22E+05
Al^{3+}	1.16	2.23E+04	5.04E+04
Fe^{3+} (total Fe)	6.87E-03	272	615
Cr^{3+}	3.73E-02	1.38E+03	3.11E+03
Bi^{3+}	2.03E-03	302	682
La^{3+}	1.41E-09	1.40E-04	3.15E-04
Hg^{2+}	1.26E-05	1.79	4.05
Zr (as $ZrO(OH)_2$)	1.53E-03	98.9	223
Pb^{2+}	1.22E-03	180	407
Ni^{2+}	5.95E-03	248	560
Sr^{2+}	4.72E-10	2.94E-05	6.63E-05
Mn^{4+}	2.31E-03	90.0	203
Ca^{2+}	3.11E-02	885	2.00E+03
K^{+}	4.45E-02	1.24E+03	2.80E+03
OH^{-}	5.02	6.06E+04	1.37E+05
$NO3^{-}$	4.10	1.81E+05	4.08E+05
$NO2^{-}$	1.59	5.19E+04	1.17E+05
$CO3^{2-}$	0.327	1.40E+04	3.15E+04
$PO4^{3-}$	0.106	7.16E+03	1.62E+04
$SO4^{2-}$	0.206	1.41E+04	3.18E+04
Si (as SiO_3^{2-})	5.65E-02	1.13E+03	2.55E+03
F^{-}	0.118	1.59E+03	3.60E+03
Cl^{-}	0.152	3.82E+03	8.62E+03
$C_6H_5O_7^{3-}$	1.23E-02	1.65E+03	3.72E+03
$EDTA^{4-}$	6.39E-04	131	295
$HEDTA^{3-}$	3.69E-04	71.8	162
$glycolate^{-}$	2.50E-02	1.33E+03	3.01E+03
$acetate^{-}$	2.91E-03	122	276
$oxalate^{2-}$	1.21E-09	7.57E-05	1.71E-04
DBP	1.36E-02	2.03E+03	4.58E+03
butanol	1.36E-02	715	1.61E+03
NH_3	6.05E-02	730	1.65E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	65.1 (µCi/L)		1.74 (kg)
U	1.02E-02 (M)	1.72E+03 (µg/g)	3.88E+03 (kg)
Cs	0.221 (Ci/L)	157 (µCi/g)	3.55E+05 (Ci)
Sr	6.85E-02 (Ci/L)	48.7 (µCi/g)	1.10E+05 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3a

Single-Shell Tank 241-TX-113			
Total Inventory Estimate*			
Physical Properties			
Total Waste	3.11E+06 kg	(607 kgal)	
Heat Load	2.50 kW	(8.53E+03 BTU/hr)	
Bulk Density†	1.35 (g/cc)		
Water wt%†	55.8		
TOC wt% C (wet)†	0.187		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	7.16	1.22E+05	3.78E+05
Al^{3+}	1.07	2.14E+04	6.65E+04
Fe^{3+} (total Fe)	5.87E-02	2.42E+03	7.53E+03
Cr^{3+}	2.74E-02	1.05E+03	3.27E+03
Bi^{3+}	1.47E-02	2.28E+03	7.07E+03
La^{3+}	9.88E-10	1.02E-04	3.15E-04
Hg^{2+}	2.63E-05	3.90	12.1
Zr (as $ZrO(OH)_2$)	3.18E-03	215	667
Pb^{2+}	8.54E-04	131	407
Ni^{2+}	4.56E-03	198	615
Sr^{2+}	3.29E-10	2.14E-05	6.63E-05
Mn^{4+}	1.61E-03	65.5	203
Ca^{2+}	3.54E-02	1.05E+03	3.26E+03
K^{+}	3.20E-02	925	2.87E+03
OH^{-}	4.46	5.61E+04	1.74E+05
$NO3^{-}$	2.98	1.37E+05	4.25E+05
$NO2^{-}$	1.18	4.03E+04	1.25E+05
$CO3^{2-}$	0.242	1.08E+04	3.34E+04
$PO4^{3-}$	0.340	2.39E+04	7.41E+04
$SO4^{2-}$	0.159	1.13E+04	3.52E+04
Si (as SiO_3^{2-})	5.46E-02	1.13E+03	3.52E+03
F^{-}	0.140	1.97E+03	6.12E+03
Cl^{-}	0.110	2.88E+03	8.93E+03
$C_6H_5O_7^{3-}$	8.56E-03	1.20E+03	3.72E+03
$EDTA^{4-}$	4.46E-04	95.1	295
$HEDTA^{3-}$	2.58E-04	52.3	162
$glycolate^{-}$	1.75E-02	969	3.01E+03
$acetate^{-}$	2.03E-03	88.8	276
$oxalate^{2-}$	8.45E-10	5.51E-05	1.71E-04
DBP	9.48E-03	1.47E+03	4.58E+03
butanol	9.48E-03	520	1.61E+03
NH_3	4.24E-02	533	1.66E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		3.84E-02 (µCi/g)	1.99 (kg)
U	7.29E-03 (M)	1.28E+03 (µg/g)	3.99E+03 (kg)
Cs	0.163 (Ci/L)	121 (µCi/g)	3.75E+05 (Ci)
Sr	4.79E-02 (Ci/L)	35.4 (µCi/g)	1.10E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3a

Single-Shell Tank 241-TX-114			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	3.60E+05 kg	(62.0 kgal)	
Heat Load	4.68E-02 kW	(160 BTU/hr)	
Bulk Density	1.53 (g/cc)		
Void Fraction	0.735		
Water wt%	58.1		
TOC wt% C (wet)	1.81E-04		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	8.92	1.34E+05	4.81E+04
Al^{3+}	0.215	3.78E+03	1.36E+03
Fe^{3+} (total Fe)	0.219	8.00E+03	2.87E+03
Cr^{3+}	5.20E-03	176	63.5
Bi^{3+}	4.54E-02	6.19E+03	2.23E+03
La^{3+}	0	0	0
Hg^{2+}	4.03E-05	5.27	1.89
Zr (as $ZrO(OH)_2$)	3.58E-03	213	76.7
Pb^{2+}	0	0	0
Ni^{2+}	1.08E-02	413	148
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.109	2.85E+03	1.03E+03
K^{+}	1.36E-02	347	125
OH^{-}	1.56	1.73E+04	6.24E+03
$NO3^{-}$	2.91	1.18E+05	4.24E+04
$NO2^{-}$	0.287	8.61E+03	3.10E+03
$CO3^{2-}$	0.235	9.20E+03	3.31E+03
$PO4^{3-}$	1.64	1.01E+05	3.65E+04
$SO4^{2-}$	0.133	8.33E+03	2.99E+03
Si (as SiO_3^{2-})	2.52E-02	461	166
F^{-}	0.149	1.85E+03	665
Cl^{-}	7.72E-02	1.78E+03	641
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	1.92E-05	2.64	0.949
butanol	1.92E-05	0.931	0.335
NH_3	8.76E-04	9.72	3.50
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.13E-02 (µCi/g)	6.80E-02 (kg)
U	7.15E-03 (M)	1.11E+03 (µg/g)	399 (kg)
Cs	1.96E-02 (Ci/L)	12.8 (µCi/g)	4.59E+03 (Ci)
Sr	1.60E-02 (Ci/L)	10.5 (µCi/g)	3.76E+03 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

Rev. 3a

Single-Shell Tank 241-TX-114			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Waste	2.57E+06 kg	(473 kgal)	
Heat Load	2.75 kW	(9.39E+03 BTU/hr)	
Bulk Density*	1.44 (g/cc)		
Water wt%†	46.1		
TOC wt% C (wet)	0.284		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	9.40	1.50E+05	3.87E+05
Al^{3+}	1.21	2.27E+04	5.84E+04
Fe^{3+} (total Fe)	7.05E-03	274	705
Cr^{3+}	3.99E-02	1.45E+03	3.72E+03
Bi^{3+}	2.20E-03	321	824
La^{3+}	1.53E-09	1.48E-04	3.80E-04
Hg^{2+}	1.27E-05	1.77	4.56
Zr (as $ZrO(OH)_2$)	1.64E-03	104	268
Pb^{2+}	1.18E-03	171	439
Ni^{2+}	6.12E-03	250	644
Sr^{2+}	5.09E-10	3.11E-05	7.99E-05
Mn^{4+}	2.51E-03	95.9	247
Ca^{2+}	3.19E-02	892	2.29E+03
K^{+}	4.72E-02	1.29E+03	3.30E+03
OH^{-}	5.24	6.20E+04	1.59E+05
$NO3^{-}$	4.45	1.92E+05	4.94E+05
$NO2^{-}$	1.68	5.38E+04	1.38E+05
$CO3^{2-}$	0.358	1.50E+04	3.84E+04
$PO4^{3-}$	0.116	7.65E+03	1.97E+04
$SO4^{2-}$	0.224	1.50E+04	3.86E+04
Si (as SiO_3^{2-})	6.03E-02	1.18E+03	3.03E+03
F^{-}	0.126	1.67E+03	4.30E+03
Cl^{-}	0.168	4.14E+03	1.06E+04
$C_6H_5O_7^{3-}$	1.48E-02	1.95E+03	5.02E+03
$EDTA^{4-}$	7.39E-04	148	381
$HEDTA^{3-}$	4.51E-04	86.1	221
$glycolate^{-}$	2.92E-02	1.52E+03	3.92E+03
$acetate^{-}$	3.29E-03	135	348
$oxalate^{2-}$	1.31E-09	8.01E-05	2.06E-04
DBP	1.45E-02	2.12E+03	5.45E+03
butanol	1.45E-02	748	1.92E+03
NH_3	6.00E-02	710	1.83E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	68.1 (µCi/L)		2.03 (kg)
U	1.06E-02 (M)	1.75E+03 (µg/g)	4.51E+03 (kg)
Cs	0.219 (Ci/L)	153 (µCi/g)	3.93E+05 (Ci)
Sr	7.53E-02 (Ci/L)	52.5 (µCi/g)	1.35E+05 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3a

Single-Shell Tank 241-TX-114			
Total Inventory Estimate*			
Physical Properties			
Total Waste	2.93E+06 kg	(535 kgal)	
Heat Load	2.80 kW	(9.55E+03 BTU/hr)	
Bulk Density†	1.45 (g/cc)		
Water wt%†	47.6		
TOC wt% C (wet)†	0.249		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	9.34	1.48E+05	4.35E+05
Al^{3+}	1.09	2.04E+04	5.98E+04
Fe^{3+} (total Fe)	3.16E-02	1.22E+03	3.58E+03
Cr^{3+}	3.59E-02	1.29E+03	3.78E+03
Bi^{3+}	7.21E-03	1.04E+03	3.05E+03
La^{3+}	1.35E-09	1.30E-04	3.80E-04
Hg^{2+}	1.59E-05	2.20	6.45
Zr (as $ZrO(OH)_2$)	1.87E-03	118	345
Pb^{2+}	1.05E-03	150	439
Ni^{2+}	6.66E-03	270	792
Sr^{2+}	4.50E-10	2.73E-05	7.99E-05
Mn^{4+}	2.22E-03	84.2	247
Ca^{2+}	4.09E-02	1.13E+03	3.32E+03
K^{+}	4.33E-02	1.17E+03	3.43E+03
OH^{-}	4.81	5.66E+04	1.66E+05
$NO3^{-}$	4.27	1.83E+05	5.37E+05
$NO2^{-}$	1.52	4.83E+04	1.41E+05
$CO3^{2-}$	0.344	1.42E+04	4.17E+04
$PO4^{3-}$	0.292	1.92E+04	5.62E+04
$SO4^{2-}$	0.214	1.42E+04	4.16E+04
Si (as SiO_3^{2-})	5.62E-02	1.09E+03	3.20E+03
F^{-}	0.129	1.69E+03	4.96E+03
Cl^{-}	0.157	3.85E+03	1.13E+04
$C_6H_5O_7^{3-}$	1.31E-02	1.71E+03	5.02E+03
$EDTA^{4-}$	6.53E-04	130	381
$HEDTA^{3-}$	3.99E-04	75.5	221
$glycolate^{-}$	2.58E-02	1.34E+03	3.92E+03
$acetate^{-}$	2.91E-03	119	348
$oxalate^{2-}$	1.16E-09	7.03E-05	2.06E-04
DBP	1.28E-02	1.86E+03	5.45E+03
butanol	1.28E-02	656	1.92E+03
NH_3	5.31E-02	624	1.83E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		4.30E-02 (µCi/g)	2.10 (kg)
U	1.02E-02 (M)	1.68E+03 (µg/g)	4.91E+03 (kg)
Cs	0.196 (Ci/L)	136 (µCi/g)	3.97E+05 (Ci)
Sr	6.85E-02 (Ci/L)	47.3 (µCi/g)	1.39E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3a

Single-Shell Tank 241-TX-115			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	3.98E+04 kg	(8.00 kgal)	
Heat Load	4.68E-03 kW	(16.0 BTU/hr)	
Bulk Density	1.32 (g/cc)		
Void Fraction	0.914		
Water wt%	60.1		
TOC wt% C (wet)	3.05E-04		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	3.57	6.24E+04	2.49E+03
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	1.57	6.68E+04	2.66E+03
Cr^{3+}	2.93E-03	116	4.62
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	1.47E-03	65.4	2.61
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.345	1.05E+04	419
K^{+}	1.58E-02	470	18.7
OH^{-}	5.55	7.18E+04	2.86E+03
$NO3^{-}$	2.19	1.03E+05	4.11E+03
$NO2^{-}$	0.369	1.29E+04	514
$CO3^{2-}$	0.511	2.33E+04	929
$PO4^{3-}$	0.119	8.60E+03	343
$SO4^{2-}$	0.130	9.48E+03	377
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	9.38E-02	2.53E+03	101
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	2.78E-05	4.45	0.177
butanol	2.78E-05	1.57	6.24E-02
NH_3	8.68E-04	11.2	0.447
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		3.20E-03 (µCi/g)	2.13E-03 (kg)
U	0.140 (M)	2.53E+04 (µg/g)	1.01E+03 (kg)
Cs	1.34E-03 (Ci/L)	1.02 (µCi/g)	40.6 (Ci)
Sr	2.20E-02 (Ci/L)	16.7 (µCi/g)	667 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

Rev. 3a

Single-Shell Tank 241-TX-115			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Waste	3.03E+06 kg	(560 kgal)	
Heat Load	3.23 kW	(1.10E+04 BTU/hr)	
Bulk Density*	1.43 (g/cc)		
Water wt%†	46.7		
TOC wt% C (wet)	0.340		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	9.24	1.49E+05	4.50E+05
Al^{3+}	1.19	2.24E+04	6.80E+04
Fe^{3+} (total Fe)	6.95E-03	272	822
Cr^{3+}	3.90E-02	1.42E+03	4.30E+03
Bi^{3+}	2.07E-03	303	919
La^{3+}	1.50E-09	1.46E-04	4.43E-04
Hg^{2+}	1.22E-05	1.71	5.18
Zr (as $ZrO(OH)_2$)	1.55E-03	98.9	299
Pb^{2+}	1.15E-03	167	505
Ni^{2+}	6.02E-03	247	749
Sr^{2+}	5.01E-10	3.07E-05	9.31E-05
Mn^{4+}	2.48E-03	95.3	288
Ca^{2+}	3.15E-02	883	2.67E+03
K^{+}	4.68E-02	1.28E+03	3.88E+03
OH^{-}	5.16	6.14E+04	1.86E+05
$NO3^{-}$	4.38	1.90E+05	5.75E+05
$NO2^{-}$	1.63	5.25E+04	1.59E+05
$CO3^{2-}$	0.358	1.51E+04	4.56E+04
$PO4^{3-}$	0.109	7.22E+03	2.18E+04
$SO4^{2-}$	0.218	1.46E+04	4.43E+04
Si (as SiO_3^{2-})	5.98E-02	1.18E+03	3.56E+03
F^{-}	0.119	1.59E+03	4.80E+03
Cl^{-}	0.166	4.11E+03	1.24E+04
$C_6H_5O_7^{3-}$	1.47E-02	1.94E+03	5.88E+03
$EDTA^{4-}$	2.58E-03	521	1.58E+03
$HEDTA^{3-}$	4.25E-03	816	2.47E+03
$glycolate^{-}$	3.62E-02	1.90E+03	5.75E+03
$acetate^{-}$	2.92E-03	121	366
$oxalate^{2-}$	1.29E-09	7.93E-05	2.40E-04
DBP	1.42E-02	2.08E+03	6.31E+03
butanol	1.42E-02	735	2.22E+03
NH_3	5.98E-02	712	2.15E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	68.1 (µCi/L)		2.41 (kg)
U	1.04E-02 (M)	1.73E+03 (µg/g)	5.24E+03 (kg)
Cs	0.218 (Ci/L)	152 (µCi/g)	4.62E+05 (Ci)
Sr	7.50E-02 (Ci/L)	52.5 (µCi/g)	1.59E+05 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3a

Single-Shell Tank 241-TX-115			
Total Inventory Estimate*			
Physical Properties			
Total Waste	3.07E+06 kg	(568 kgal)	
Heat Load	3.24 kW	(1.11E+04 BTU/hr)	
Bulk Density†	1.43 (g/cc)		
Water wt%†	46.9		
TOC wt% C (wet)†	0.335		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	9.16	1.48E+05	4.53E+05
Al^{3+}	1.17	2.22E+04	6.80E+04
Fe^{3+} (total Fe)	2.90E-02	1.14E+03	3.48E+03
Cr^{3+}	3.85E-02	1.40E+03	4.31E+03
Bi^{3+}	2.04E-03	299	919
La^{3+}	1.48E-09	1.44E-04	4.43E-04
Hg^{2+}	1.20E-05	1.69	5.18
Zr (as $ZrO(OH)_2$)	1.53E-03	97.6	299
Pb^{2+}	1.13E-03	165	505
Ni^{2+}	5.95E-03	245	751
Sr^{2+}	4.94E-10	3.03E-05	9.31E-05
Mn^{4+}	2.44E-03	94.0	288
Ca^{2+}	3.59E-02	1.01E+03	3.09E+03
K^{+}	4.63E-02	1.27E+03	3.89E+03
OH^{-}	5.17	6.15E+04	1.89E+05
$NO3^{-}$	4.35	1.89E+05	5.79E+05
$NO2^{-}$	1.61	5.19E+04	1.59E+05
$CO3^{2-}$	0.361	1.52E+04	4.65E+04
$PO4^{3-}$	0.109	7.24E+03	2.22E+04
$SO4^{2-}$	0.217	1.46E+04	4.47E+04
Si (as SiO_3^{2-})	5.89E-02	1.16E+03	3.56E+03
F^{-}	0.117	1.56E+03	4.80E+03
Cl^{-}	0.165	4.09E+03	1.25E+04
$C_6H_5O_7^{3-}$	1.45E-02	1.92E+03	5.88E+03
$EDTA^{4-}$	2.54E-03	514	1.58E+03
$HEDTA^{3-}$	4.19E-03	805	2.47E+03
$glycolate^{-}$	3.57E-02	1.87E+03	5.75E+03
$acetate^{-}$	2.88E-03	119	366
$oxalate^{2-}$	1.27E-09	7.82E-05	2.40E-04
DBP	1.40E-02	2.06E+03	6.31E+03
butanol	1.40E-02	725	2.22E+03
NH_3	5.90E-02	703	2.16E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		4.71E-02 (µCi/g)	2.41 (kg)
U	1.22E-02 (M)	2.04E+03 (µg/g)	6.25E+03 (kg)
Cs	0.215 (Ci/L)	150 (µCi/g)	4.62E+05 (Ci)
Sr	7.43E-02 (Ci/L)	52.1 (µCi/g)	1.60E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3a

Single-Shell Tank 241-TX-116			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	2.00E+06 kg	(391 kgal)	
Heat Load	0.249 kW	(850 BTU/hr)	
Bulk Density	1.35 (g/cc)		
Void Fraction	0.604		
Water wt%	54.0		
TOC wt% C (wet)	1.81E-04		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	9.53	1.62E+05	3.24E+05
Al^{3+}	0.155	3.09E+03	6.17E+03
Fe^{3+} (total Fe)	0.199	8.23E+03	1.65E+04
Cr^{3+}	4.35E-03	167	334
Bi^{3+}	3.76E-02	5.81E+03	1.16E+04
La^{3+}	0	0	0
Hg^{2+}	3.22E-05	4.79	9.57
Zr (as $ZrO(OH)_2$)	2.76E-03	187	373
Pb^{2+}	0	0	0
Ni^{2+}	9.43E-03	410	819
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.108	3.19E+03	6.38E+03
K^{+}	1.19E-02	343	686
OH^{-}	1.20	1.51E+04	3.02E+04
$NO3^{-}$	2.55	1.17E+05	2.34E+05
$NO2^{-}$	0.239	8.15E+03	1.63E+04
$CO3^{2-}$	0.205	9.10E+03	1.82E+04
$PO4^{3-}$	1.40	9.81E+04	1.96E+05
$SO4^{2-}$	0.114	8.13E+03	1.63E+04
Si (as SiO_3^{2-})	1.01	2.09E+04	4.18E+04
F^{-}	0.121	1.70E+03	3.39E+03
Cl^{-}	6.74E-02	1.77E+03	3.53E+03
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	1.70E-05	2.64	5.28
butanol	1.70E-05	0.932	1.86
NH_3	7.42E-04	9.34	18.7
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.05E-02 (µCi/g)	0.349 (kg)
U	6.28E-03 (M)	1.11E+03 (µg/g)	2.21E+03 (kg)
Cs	1.56E-02 (Ci/L)	11.5 (µCi/g)	2.31E+04 (Ci)
Sr	1.41E-02 (Ci/L)	10.5 (µCi/g)	2.09E+04 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

Rev. 3a

Single-Shell Tank 241-TX-116			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Waste	8.81E+05 kg	(172 kgal)	
Heat Load	0.880 kW	(3.00E+03 BTU/hr)	
Bulk Density*	1.35 (g/cc)		
Water wt%†	53.9		
TOC wt% C (wet)	9.19E-02		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	7.51	1.28E+05	1.12E+05
Al^{3+}	1.01	2.01E+04	1.77E+04
Fe^{3+} (total Fe)	6.68E-03	276	243
Cr^{3+}	2.98E-02	1.14E+03	1.01E+03
Bi^{3+}	2.60E-03	402	354
La^{3+}	1.98E-09	2.03E-04	1.79E-04
Hg^{2+}	1.38E-05	2.04	1.80
Zr (as $ZrO(OH)_2$)	1.93E-03	130	114
Pb^{2+}	1.21E-03	186	164
Ni^{2+}	5.75E-03	250	220
Sr^{2+}	6.60E-10	4.28E-05	3.77E-05
Mn^{4+}	1.26E-03	51.1	45.0
Ca^{2+}	3.01E-02	891	785
K^{+}	4.15E-02	1.20E+03	1.06E+03
OH^{-}	4.25	5.34E+04	4.70E+04
$NO3^{-}$	3.69	1.69E+05	1.49E+05
$NO2^{-}$	1.32	4.47E+04	3.94E+04
$CO3^{2-}$	0.249	1.10E+04	9.72E+03
$PO4^{3-}$	0.118	8.30E+03	7.31E+03
$SO4^{2-}$	0.184	1.31E+04	1.15E+04
Si (as SiO_3^{2-})	4.88E-02	1.01E+03	892
F^{-}	0.146	2.05E+03	1.81E+03
Cl^{-}	0.128	3.35E+03	2.95E+03
$C_6H_5O_7^{3-}$	8.87E-05	12.4	10.9
$EDTA^{4-}$	1.11E-04	23.7	20.8
$HEDTA^{3-}$	9.73E-07	0.197	0.174
$glycolate^{-}$	3.21E-05	1.78	1.57
$acetate^{-}$	7.05E-04	30.8	27.1
$oxalate^{2-}$	1.69E-09	1.10E-04	9.71E-05
DBP	8.37E-03	1.30E+03	1.15E+03
butanol	8.37E-03	459	404
NH_3	6.68E-02	839	739
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	56.1 (µCi/L)		0.609 (kg)
U	9.19E-03 (M)	1.62E+03 (µg/g)	1.42E+03 (kg)
Cs	0.224 (Ci/L)	165 (µCi/g)	1.46E+05 (Ci)
Sr	4.49E-02 (Ci/L)	33.2 (µCi/g)	2.92E+04 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3a

Single-Shell Tank 241-TX-116			
Total Inventory Estimate*			
Physical Properties			
Total Waste	2.88E+06 kg	(563 kgal)	
Heat Load	1.13 kW	(3.85E+03 BTU/hr)	
Bulk Density†	1.35 (g/cc)		
Water wt%†	54.0		
TOC wt% C (wet)†	2.82E-02		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	8.91	1.52E+05	4.37E+05
Al^{3+}	0.416	8.30E+03	2.39E+04
Fe^{3+} (total Fe)	0.140	5.80E+03	1.67E+04
Cr^{3+}	1.21E-02	466	1.34E+03
Bi^{3+}	2.69E-02	4.16E+03	1.20E+04
La^{3+}	6.05E-10	6.22E-05	1.79E-04
Hg^{2+}	2.66E-05	3.95	11.4
Zr (as $ZrO(OH)_2$)	2.51E-03	169	487
Pb^{2+}	3.71E-04	56.8	164
Ni^{2+}	8.31E-03	361	1.04E+03
Sr^{2+}	2.02E-10	1.31E-05	3.77E-05
Mn^{4+}	3.84E-04	15.6	45.0
Ca^{2+}	8.39E-02	2.49E+03	7.17E+03
K^{+}	2.09E-02	605	1.74E+03
OH^{-}	2.13	2.68E+04	7.72E+04
$NO3^{-}$	2.90	1.33E+05	3.83E+05
$NO2^{-}$	0.568	1.93E+04	5.57E+04
$CO3^{2-}$	0.218	9.69E+03	2.79E+04
$PO4^{3-}$	1.00	7.06E+04	2.03E+05
$SO4^{2-}$	0.136	9.64E+03	2.78E+04
Si (as SiO_3^{2-})	0.713	1.48E+04	4.27E+04
F^{-}	0.128	1.81E+03	5.20E+03
Cl^{-}	8.59E-02	2.25E+03	6.48E+03
$C_6H_5O_7^{3-}$	2.71E-05	3.79	10.9
$EDTA^{4-}$	3.39E-05	7.24	20.8
$HEDTA^{3-}$	2.97E-07	6.03E-02	0.174
$glycolate^{-}$	9.80E-06	0.544	1.57
$acetate^{-}$	2.15E-04	9.41	27.1
$oxalate^{2-}$	5.18E-10	3.37E-05	9.71E-05
DBP	2.57E-03	400	1.15E+03
butanol	2.57E-03	141	406
NH_3	2.09E-02	263	758
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		2.00E-02 (µCi/g)	0.958 (kg)
U	7.17E-03 (M)	1.26E+03 (µg/g)	3.64E+03 (kg)
Cs	7.92E-02 (Ci/L)	58.6 (µCi/g)	1.69E+05 (Ci)
Sr	2.35E-02 (Ci/L)	17.4 (µCi/g)	5.01E+04 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3a

Single-Shell Tank 241-TX-117			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	1.20E+06 kg	(226 kgal)	
Heat Load	0.152 kW	(519 BTU/hr)	
Bulk Density	1.40 (g/cc)		
Void Fraction	0.637		
Water wt%	54.9		
TOC wt% C (wet)	1.84E-04		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	9.47	1.55E+05	1.86E+05
Al^{3+}	0.159	3.05E+03	3.66E+03
Fe^{3+} (total Fe)	0.205	8.16E+03	9.80E+03
Cr^{3+}	4.58E-03	170	204
Bi^{3+}	3.97E-02	5.90E+03	7.09E+03
La^{3+}	0	0	0
Hg^{2+}	3.40E-05	4.86	5.84
Zr (as $ZrO(OH)_2$)	2.92E-03	189	228
Pb^{2+}	0	0	0
Ni^{2+}	9.95E-03	416	500
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.109	3.11E+03	3.74E+03
K^{+}	1.25E-02	348	418
OH^{-}	1.27	1.53E+04	1.84E+04
$NO3^{-}$	2.69	1.19E+05	1.43E+05
$NO2^{-}$	0.252	8.27E+03	9.94E+03
$CO3^{2-}$	0.216	9.24E+03	1.11E+04
$PO4^{3-}$	1.47	9.96E+04	1.20E+05
$SO4^{2-}$	0.121	8.25E+03	9.91E+03
Si (as SiO_3^{2-})	0.748	1.50E+04	1.80E+04
F^{-}	0.127	1.72E+03	2.07E+03
Cl^{-}	7.11E-02	1.79E+03	2.16E+03
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	1.79E-05	2.68	3.22
butanol	1.79E-05	0.946	1.14
NH_3	7.83E-04	9.48	11.4
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.06E-02 (µCi/g)	0.213 (kg)
U	6.62E-03 (M)	1.12E+03 (µg/g)	1.35E+03 (kg)
Cs	1.65E-02 (Ci/L)	11.7 (µCi/g)	1.41E+04 (Ci)
Sr	1.49E-02 (Ci/L)	10.6 (µCi/g)	1.28E+04 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

Rev. 3a

Single-Shell Tank 241-TX-117			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Waste	1.60E+06 kg	(306 kgal)	
Heat Load	1.94 kW	(6.64E+03 BTU/hr)	
Bulk Density*	1.38 (g/cc)		
Water wt%†	51.5		
TOC wt% C (wet)	0.138		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	8.05	1.34E+05	2.14E+05
Al^{3+}	1.13	2.21E+04	3.53E+04
Fe^{3+} (total Fe)	7.52E-03	304	486
Cr^{3+}	3.31E-02	1.24E+03	1.99E+03
Bi^{3+}	2.41E-03	365	584
La^{3+}	1.89E-09	1.90E-04	3.03E-04
Hg^{2+}	1.48E-05	2.15	3.44
Zr (as $ZrO(OH)_2$)	1.82E-03	120	193
Pb^{2+}	1.43E-03	215	344
Ni^{2+}	6.47E-03	275	440
Sr^{2+}	6.29E-10	3.99E-05	6.38E-05
Mn^{4+}	1.82E-03	72.4	116
Ca^{2+}	3.38E-02	982	1.57E+03
K^{+}	4.59E-02	1.30E+03	2.08E+03
OH^{-}	4.78	5.88E+04	9.41E+04
$NO3^{-}$	3.84	1.72E+05	2.76E+05
$NO2^{-}$	1.47	4.89E+04	7.82E+04
$CO3^{2-}$	0.286	1.24E+04	1.99E+04
$PO4^{3-}$	0.111	7.64E+03	1.22E+04
$SO4^{2-}$	0.194	1.35E+04	2.16E+04
Si (as SiO_3^{2-})	5.49E-02	1.12E+03	1.79E+03
F^{-}	0.140	1.92E+03	3.07E+03
Cl^{-}	0.132	3.39E+03	5.42E+03
$C_6H_5O_7^{3-}$	1.28E-03	175	280
$EDTA^{4-}$	1.48E-04	30.9	49.5
$HEDTA^{3-}$	3.21E-05	6.37	10.2
$glycolate^{-}$	4.23E-03	230	367
$acetate^{-}$	8.44E-04	36.1	57.7
$oxalate^{2-}$	1.61E-09	1.03E-04	1.64E-04
DBP	1.16E-02	1.77E+03	2.84E+03
butanol	1.16E-02	625	1000
NH_3	7.80E-02	961	1.54E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	65.4 (µCi/L)		1.26 (kg)
U	1.04E-02 (M)	1.79E+03 (µg/g)	2.86E+03 (kg)
Cs	0.283 (Ci/L)	205 (µCi/g)	3.28E+05 (Ci)
Sr	5.22E-02 (Ci/L)	37.8 (µCi/g)	6.04E+04 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3a

Single-Shell Tank 241-TX-117			
Total Inventory Estimate*			
Physical Properties			
Total Waste	2.80E+06 kg	(532 kgal)	
Heat Load	2.10 kW	(7.16E+03 BTU/hr)	
Bulk Density†	1.39 (g/cc)		
Water wt%†	53.0		
TOC wt% C (wet)†	7.92E-02		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	8.65	1.43E+05	4.01E+05
Al^{3+}	0.717	1.39E+04	3.89E+04
Fe^{3+} (total Fe)	9.15E-02	3.67E+03	1.03E+04
Cr^{3+}	2.10E-02	784	2.19E+03
Bi^{3+}	1.82E-02	2.74E+03	7.67E+03
La^{3+}	1.08E-09	1.08E-04	3.03E-04
Hg^{2+}	2.30E-05	3.31	9.27
Zr (as $ZrO(OH)_2$)	2.29E-03	150	420
Pb^{2+}	8.25E-04	123	344
Ni^{2+}	7.95E-03	336	940
Sr^{2+}	3.62E-10	2.28E-05	6.38E-05
Mn^{4+}	1.05E-03	41.3	116
Ca^{2+}	6.58E-02	1.90E+03	5.31E+03
K^{+}	3.17E-02	892	2.50E+03
OH^{-}	3.29	4.02E+04	1.12E+05
$NO3^{-}$	3.35	1.49E+05	4.19E+05
$NO2^{-}$	0.951	3.15E+04	8.81E+04
$CO3^{2-}$	0.257	1.11E+04	3.10E+04
$PO4^{3-}$	0.689	4.71E+04	1.32E+05
$SO4^{2-}$	0.163	1.12E+04	3.15E+04
Si (as SiO_3^{2-})	0.349	7.06E+03	1.98E+04
F^{-}	0.134	1.84E+03	5.14E+03
Cl^{-}	0.106	2.71E+03	7.58E+03
$C_6H_5O_7^{3-}$	7.37E-04	100	280
$EDTA^{4-}$	8.53E-05	17.7	49.5
$HEDTA^{3-}$	1.85E-05	3.64	10.2
$glycolate^{-}$	2.43E-03	131	367
$acetate^{-}$	4.86E-04	20.6	57.7
$oxalate^{2-}$	9.28E-10	5.87E-05	1.64E-04
DBP	6.71E-03	1.01E+03	2.84E+03
butanol	6.71E-03	357	1.00E+03
NH_3	4.52E-02	553	1.55E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		3.16E-02 (µCi/g)	1.48 (kg)
U	8.78E-03 (M)	1.50E+03 (µg/g)	4.21E+03 (kg)
Cs	0.170 (Ci/L)	122 (µCi/g)	3.42E+05 (Ci)
Sr	3.63E-02 (Ci/L)	26.1 (µCi/g)	7.32E+04 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3a

Single-Shell Tank 241-TX-118			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	2.90E+05 kg	(45.0 kgal)	
Heat Load	4.63E-03 kW	(15.8 BTU/hr)	
Bulk Density	1.70 (g/cc)		
Void Fraction	0.573		
Water wt%	31.7		
TOC wt% C (wet)	2.32E-05		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	3.05	4.11E+04	1.19E+04
Al^{3+}	9.56	1.51E+05	4.39E+04
Fe^{3+} (total Fe)	1.49	4.88E+04	1.42E+04
Cr^{3+}	5.22E-03	159	46.2
Bi^{3+}	6.07E-03	744	216
La^{3+}	0	0	0
Hg^{2+}	5.21E-06	0.612	0.178
Zr (as $ZrO(OH)_2$)	4.46E-04	23.9	6.93
Pb^{2+}	0	0	0
Ni^{2+}	8.59E-02	2.96E+03	859
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.378	8.89E+03	2.58E+03
K^{+}	1.06E-02	244	70.8
OH^{-}	33.6	3.35E+05	9.73E+04
$NO3^{-}$	1.74	6.34E+04	1.84E+04
$NO2^{-}$	4.54E-02	1.22E+03	355
$CO3^{2-}$	0.483	1.70E+04	4.94E+03
$PO4^{3-}$	0.225	1.25E+04	3.64E+03
$SO4^{2-}$	2.17E-02	1.22E+03	355
Si (as SiO_3^{2-})	3.13E-03	51.5	15.0
F^{-}	1.95E-02	217	63.1
Cl^{-}	6.59E-02	1.37E+03	398
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	2.74E-06	0.338	9.82E-02
butanol	2.74E-06	0.119	3.46E-02
NH_3	1.20E-04	1.19	0.347
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		13.2 (µCi/g)	63.7 (kg)
U	1.01E-03 (M)	141 (µg/g)	41.1 (kg)
Cs	2.52E-03 (Ci/L)	1.48 (µCi/g)	429 (Ci)
Sr	2.28E-03 (Ci/L)	1.34 (µCi/g)	388 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

Rev. 3a

Single-Shell Tank 241-TX-118			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Waste	1.13E+06 kg	(240 kgal)	
Heat Load	0.770 kW	(2.63E+03 BTU/hr)	
Bulk Density*	1.24 (g/cc)		
Water wt%†	65.5		
TOC wt% C (wet)	0.423		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	5.17	9.60E+04	1.08E+05
Al^{3+}	0.660	1.44E+04	1.62E+04
Fe^{3+} (total Fe)	3.52E-03	159	178
Cr^{3+}	2.38E-02	998	1.12E+03
Bi^{3+}	8.45E-04	143	160
La^{3+}	1.69E-05	1.90	2.14
Hg^{2+}	4.80E-06	0.778	0.875
Zr (as $ZrO(OH)_2$)	5.91E-04	43.5	49.0
Pb^{2+}	4.65E-04	77.8	87.6
Ni^{2+}	3.01E-03	143	160
Sr^{2+}	5.65E-06	0.400	0.450
Mn^{4+}	1.50E-03	66.7	75.0
Ca^{2+}	1.60E-02	516	581
K^{+}	2.53E-02	800	900
OH^{-}	2.89	3.96E+04	4.46E+04
$NO3^{-}$	2.38	1.19E+05	1.34E+05
$NO2^{-}$	0.949	3.52E+04	3.96E+04
$CO3^{2-}$	0.202	9.80E+03	1.10E+04
$PO4^{3-}$	4.81E-02	3.69E+03	4.15E+03
$SO4^{2-}$	0.112	8.69E+03	9.79E+03
Si (as SiO_3^{2-})	3.43E-02	777	875
F^{-}	4.73E-02	726	817
Cl^{-}	9.41E-02	2.69E+03	3.03E+03
$C_6H_5O_7^{3-}$	1.08E-02	1.65E+03	1.86E+03
$EDTA^{4-}$	6.77E-03	1.57E+03	1.77E+03
$HEDTA^{3-}$	1.30E-02	2.87E+03	3.22E+03
$glycolate^{-}$	3.85E-02	2.33E+03	2.63E+03
$acetate^{-}$	1.91E-03	90.9	102
$oxalate^{2-}$	1.45E-05	1.03	1.16
DBP	7.83E-03	1.33E+03	1.50E+03
butanol	7.83E-03	469	527
NH_3	2.73E-02	374	421
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	37.2 (µCi/L)		0.563 (kg)
U	5.46E-03 (M)	1.05E+03 (µg/g)	1.18E+03 (kg)
Cs	0.110 (Ci/L)	89.0 (µCi/g)	1.00E+05 (Ci)
Sr	4.91E-02 (Ci/L)	39.6 (µCi/g)	4.46E+04 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3a

Single-Shell Tank 241-TX-118			
Total Inventory Estimate*			
Physical Properties			
Total Waste	1.42E+06 kg	(285 kgal)	
Heat Load	0.774 kW	(2.64E+03 BTU/hr)	
Bulk Density†	1.31 (g/cc)		
Water wt%†	58.6		
TOC wt% C (wet)†	0.337		
Chemical Constituents	mole/L	ppm	kg
Na^{+}	4.84	8.47E+04	1.20E+05
Al^{3+}	2.07	4.25E+04	6.01E+04
Fe^{3+} (total Fe)	0.238	1.01E+04	1.43E+04
Cr^{3+}	2.08E-02	826	1.17E+03
Bi^{3+}	1.67E-03	266	376
La^{3+}	1.43E-05	1.51	2.14
Hg^{2+}	4.87E-06	0.744	1.05
Zr (as $ZrO(OH)_2$)	5.68E-04	39.5	55.9
Pb^{2+}	3.92E-04	61.9	87.6
Ni^{2+}	1.61E-02	720	1.02E+03
Sr^{2+}	4.76E-06	0.318	0.450
Mn^{4+}	1.27E-03	53.0	75.0
Ca^{2+}	7.32E-02	2.23E+03	3.16E+03
K^{+}	2.30E-02	686	971
OH^{-}	7.74	1.00E+05	1.42E+05
$NO3^{-}$	2.28	1.08E+05	1.53E+05
$NO2^{-}$	0.806	2.83E+04	4.00E+04
$CO3^{2-}$	0.247	1.13E+04	1.60E+04
$PO4^{3-}$	7.61E-02	5.51E+03	7.80E+03
$SO4^{2-}$	9.79E-02	7.16E+03	1.01E+04
Si (as SiO_3^{2-})	2.94E-02	628	890
F^{-}	4.29E-02	622	880
Cl^{-}	8.97E-02	2.42E+03	3.43E+03
$C_6H_5O_7^{3-}$	9.12E-03	1.31E+03	1.86E+03
$EDTA^{4-}$	5.70E-03	1.25E+03	1.77E+03
$HEDTA^{3-}$	1.09E-02	2.28E+03	3.22E+03
$glycolate^{-}$	3.24E-02	1.85E+03	2.63E+03
$acetate^{-}$	1.61E-03	72.2	102
$oxalate^{2-}$	1.22E-05	0.819	1.16
DBP	6.60E-03	1.06E+03	1.50E+03
butanol	6.60E-03	372	527
NH_3	2.30E-02	298	421
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		2.72 (µCi/g)	64.3 (kg)
U	4.76E-03 (M)	863 (µg/g)	1.22E+03 (kg)
Cs	9.33E-02 (Ci/L)	71.1 (µCi/g)	1.01E+05 (Ci)
Sr	4.17E-02 (Ci/L)	31.8 (µCi/g)	4.50E+04 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Single-Shell Tank 241-TY-101			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	6.06E+05 kg	(118 kgal)	
Heat Load	0.969 kW	(3.31E+03 BTU/hr)	
Bulk Density	1.36 (g/cc)		
Void Fraction	0.849		
Water wt%	68.2		
TOC wt% C (wet)	0.338		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	5.01	8.50E+04	5.15E+04
Al^{3+}	0.330	6.58E+03	3.98E+03
Fe^{3+} (total Fe)	0.151	6.23E+03	3.78E+03
Cr^{3+}	3.18E-03	122	73.9
Bi^{3+}	0.147	2.27E+04	1.37E+04
La^{3+}	0	0	0
Hg^{2+}	1.52E-05	2.25	1.36
Zr (as $ZrO(OH)_2$)	1.58E-02	1.07E+03	646
Pb^{2+}	0	0	0
Ni^{2+}	0.121	5.25E+03	3.18E+03
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.190	5.60E+03	3.39E+03
K^{+}	7.97E-03	230	139
OH^{-}	1.69	2.12E+04	1.28E+04
$NO3^{-}$	1.24	5.66E+04	3.43E+04
$NO2^{-}$	0.484	1.64E+04	9.94E+03
$CO3^{2-}$	0.236	1.04E+04	6.32E+03
$PO4^{3-}$	0.926	6.49E+04	3.93E+04
$SO4^{2-}$	6.53E-02	4.63E+03	2.80E+03
Si (as SiO_3^{2-})	8.07E-02	1.67E+03	1.01E+03
F^{-}	0.186	2.61E+03	1.58E+03
Cl^{-}	4.27E-02	1.12E+03	676
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	8.02E-06	1.57	0.953
butanol	8.02E-06	0.438	0.265
NH_3	1.95E-02	245	148
$Fe(CN)_6^{4-}$	6.36E-02	1.27E+04	7.68E+03
Radiological Constituents			
Pu		1.62E-02 (µCi/g)	0.163 (kg)
U	3.41E-03 (M)	599 (µg/g)	363 (kg)
Cs	0.453 (Ci/L)	334 (µCi/g)	2.02E+05 (Ci)
Sr	6.85E-03 (Ci/L)	5.05 (µCi/g)	3.06E+03 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-TY-101			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	0 (g/cc)		
Water wt%†	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Single-Shell Tank 241-TY-101			
Total Inventory Estimate*			
Physical Properties			
Total Waste	6.06E+05 kg	(118 kgal)	
Heat Load	0.969 kW	(3.31E+03 BTU/hr)	
Bulk Density†	1.36 (g/cc)		
Water wt%†	68.2		
TOC wt% C (wet)†	0.338		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	5.01	8.50E+04	5.15E+04
Al^{3+}	0.330	6.58E+03	3.98E+03
Fe^{3+} (total Fe)	0.151	6.23E+03	3.78E+03
Cr^{3+}	3.18E-03	122	73.9
Bi^{3+}	0.147	2.27E+04	1.37E+04
La^{3+}	0	0	0
Hg^{2+}	1.52E-05	2.25	1.36
Zr (as $ZrO(OH)_2$)	1.58E-02	1.07E+03	646
Pb^{2+}	0	0	0
Ni^{2+}	0.121	5.25E+03	3.18E+03
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.190	5.60E+03	3.39E+03
K^{+}	7.97E-03	230	139
OH^{-}	1.69	2.12E+04	1.28E+04
$NO3^{-}$	1.24	5.66E+04	3.43E+04
$NO2^{-}$	0.484	1.64E+04	9.94E+03
$CO3^{2-}$	0.236	1.04E+04	6.32E+03
$PO4^{3-}$	0.926	6.49E+04	3.93E+04
$SO4^{2-}$	6.53E-02	4.63E+03	2.80E+03
Si (as SiO_3^{2-})	8.07E-02	1.67E+03	1.01E+03
F^{-}	0.186	2.61E+03	1.58E+03
Cl^{-}	4.27E-02	1.12E+03	676
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	8.02E-06	1.57	0.953
butanol	8.02E-06	0.438	0.265
NH_3	1.95E-02	245	148
$Fe(CN)_6^{4-}$	6.36E-02	1.27E+04	7.68E+03
Radiological Constituents			
Pu		1.62E-02 (µCi/g)	0.163 (kg)
U	3.41E-03 (M)	599 (µg/g)	363 (kg)
Cs	0.453 (Ci/L)	334 (µCi/g)	2.02E+05 (Ci)
Sr	6.85E-03 (Ci/L)	5.05 (µCi/g)	3.06E+03 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Single-Shell Tank 241-TY-102			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	1.71E+05 kg	(29.0 kgal)	
Heat Load	2.24E-02 kW	(76.4 BTU/hr)	
Bulk Density	1.55 (g/cc)		
Void Fraction	0.731		
Water wt%	57.2		
TOC wt% C (wet)	1.91E-04		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	9.29	1.37E+05	2.34E+04
Al^{3+}	0.170	2.96E+03	505
Fe^{3+} (total Fe)	0.222	7.99E+03	1.36E+03
Cr^{3+}	5.26E-03	176	30.0
Bi^{3+}	4.55E-02	6.12E+03	1.04E+03
La^{3+}	0	0	0
Hg^{2+}	3.90E-05	5.04	0.859
Zr (as $ZrO(OH)_2$)	3.34E-03	196	33.5
Pb^{2+}	0	0	0
Ni^{2+}	1.14E-02	431	73.6
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.113	2.93E+03	499
K^{+}	1.43E-02	361	61.6
OH^{-}	1.45	1.59E+04	2.71E+03
$NO3^{-}$	3.09	1.23E+05	2.10E+04
$NO2^{-}$	0.290	8.58E+03	1.46E+03
$CO3^{2-}$	0.248	9.58E+03	1.63E+03
$PO4^{3-}$	1.69	1.03E+05	1.76E+04
$SO4^{2-}$	0.138	8.56E+03	1.46E+03
Si (as SiO_3^{2-})	2.34E-02	424	72.3
F^{-}	0.146	1.79E+03	305
Cl^{-}	8.16E-02	1.86E+03	317
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	2.06E-05	3.52	0.601
butanol	2.06E-05	0.981	0.167
NH_3	8.99E-04	9.83	1.68
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.10E-02 (µCi/g)	3.13E-02 (kg)
U	7.60E-03 (M)	1.16E+03 (µg/g)	199 (kg)
Cs	1.89E-02 (Ci/L)	12.2 (µCi/g)	2.07E+03 (Ci)
Sr	1.71E-02 (Ci/L)	11.0 (µCi/g)	1.88E+03 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

Rev. 3

Single-Shell Tank 241-TY-102			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	1.82E+05 kg	(35.0 kgal)	
Heat Load	0.165 kW	(565 BTU/hr)	
Bulk Density*	1.37 (g/cc)		
Water wt%†	51.6		
TOC wt% C (wet)	0.382		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	8.07	1.35E+05	2.46E+04
Al^{3+}	0.988	1.95E+04	3.53E+03
Fe^{3+} (total Fe)	5.68E-03	231	42.0
Cr^{3+}	3.33E-02	1.26E+03	230
Bi^{3+}	1.65E-03	252	45.8
La^{3+}	1.26E-09	1.28E-04	2.33E-05
Hg^{2+}	9.06E-06	1.33	0.241
Zr (as $ZrO(OH)_2$)	1.22E-03	81.5	14.8
Pb^{2+}	8.16E-04	123	22.4
Ni^{2+}	4.92E-03	211	38.3
Sr^{2+}	4.21E-10	2.69E-05	4.89E-06
Mn^{4+}	2.10E-03	84.1	15.3
Ca^{2+}	2.58E-02	753	137
K^{+}	3.99E-02	1.14E+03	207
OH^{-}	4.33	5.38E+04	9.76E+03
$NO3^{-}$	3.88	1.76E+05	3.19E+04
$NO2^{-}$	1.35	4.52E+04	8.20E+03
$CO3^{2-}$	0.326	1.43E+04	2.59E+03
$PO4^{3-}$	8.87E-02	6.15E+03	1.12E+03
$SO4^{2-}$	0.184	1.29E+04	2.35E+03
Si (as SiO_3^{2-})	5.13E-02	1.05E+03	191
F^{-}	9.40E-02	1.30E+03	237
Cl^{-}	0.151	3.90E+03	708
$C_6H_5O_7^{3-}$	1.45E-02	2.00E+03	363
$EDTA^{4-}$	4.00E-03	841	153
$HEDTA^{3-}$	7.24E-03	1.45E+03	263
$glycolate^{-}$	4.56E-02	2.50E+03	453
$acetate^{-}$	2.44E-03	105	19.1
$oxalate^{2-}$	1.08E-09	6.95E-05	1.26E-05
DBP	1.17E-02	2.27E+03	413
butanol	1.17E-02	633	115
NH_3	4.57E-02	567	103
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	58.3 (µCi/L)		0.129 (kg)
U	8.55E-03 (M)	1.49E+03 (µg/g)	270 (kg)
Cs	0.170 (Ci/L)	124 (µCi/g)	2.25E+04 (Ci)
Sr	6.74E-02 (Ci/L)	49.2 (µCi/g)	8.93E+03 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Single-Shell Tank 241-TY-102			
Total Inventory Estimate*			
Physical Properties			
Total Waste	3.52E+05 kg	(64.0 kgal)	
Heat Load	0.188 kW	(641 BTU/hr)	
Bulk Density†	1.45 (g/cc)		
Water wt%†	54.1		
TOC wt% C (wet)†	0.209		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	8.62	1.36E+05	4.80E+04
Al^{3+}	0.618	1.15E+04	4.04E+03
Fe^{3+} (total Fe)	0.104	3.99E+03	1.40E+03
Cr^{3+}	2.06E-02	737	260
Bi^{3+}	2.15E-02	3.09E+03	1.09E+03
La^{3+}	6.91E-10	6.61E-05	2.33E-05
Hg^{2+}	2.26E-05	3.13	1.10
Zr (as $ZrO(OH)_2$)	2.19E-03	137	48.3
Pb^{2+}	4.46E-04	63.6	22.4
Ni^{2+}	7.86E-03	318	112
Sr^{2+}	2.30E-10	1.39E-05	4.89E-06
Mn^{4+}	1.15E-03	43.4	15.3
Ca^{2+}	6.55E-02	1.81E+03	636
K^{+}	2.83E-02	762	268
OH^{-}	3.03	3.54E+04	1.25E+04
$NO3^{-}$	3.52	1.50E+05	5.29E+04
$NO2^{-}$	0.867	2.74E+04	9.66E+03
$CO3^{2-}$	0.291	1.20E+04	4.23E+03
$PO4^{3-}$	0.814	5.32E+04	1.87E+04
$SO4^{2-}$	0.164	1.08E+04	3.81E+03
Si (as SiO_3^{2-})	3.87E-02	748	263
F^{-}	0.118	1.54E+03	541
Cl^{-}	0.119	2.91E+03	1.02E+03
$C_6H_5O_7^{3-}$	7.93E-03	1.03E+03	363
$EDTA^{4-}$	2.19E-03	434	153
$HEDTA^{3-}$	3.96E-03	747	263
$glycolate^{-}$	2.49E-02	1.29E+03	453
$acetate^{-}$	1.33E-03	54.2	19.1
$oxalate^{2-}$	5.91E-10	3.58E-05	1.26E-05
DBP	6.41E-03	1.17E+03	413
butanol	6.41E-03	327	115
NH_3	2.54E-02	297	105
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		2.73E-02 (µCi/g)	0.160 (kg)
U	8.12E-03 (M)	1.33E+03 (µg/g)	468 (kg)
Cs	0.101 (Ci/L)	69.7 (µCi/g)	2.45E+04 (Ci)
Sr	4.46E-02 (Ci/L)	30.7 (µCi/g)	1.08E+04 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Single-Shell Tank 241-TY-103			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	5.22E+05 kg	(108 kgal)	
Heat Load	0.645 kW	(2.20E+03 BTU/hr)	
Bulk Density	1.28 (g/cc)		
Void Fraction	0.919		
Water wt%	67.2		
TOC wt% C (wet)	0.256		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	3.01	5.42E+04	2.83E+04
Al^{3+}	0.188	3.98E+03	2.08E+03
Fe^{3+} (total Fe)	0.935	4.09E+04	2.13E+04
Cr^{3+}	2.46E-03	100	52.4
Bi^{3+}	9.24E-02	1.51E+04	7.89E+03
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	1.04E-02	740	387
Pb^{2+}	0	0	0
Ni^{2+}	8.41E-02	3.86E+03	2.02E+03
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.299	9.36E+03	4.89E+03
K^{+}	1.06E-02	325	170
OH^{-}	3.94	5.24E+04	2.74E+04
$NO3^{-}$	1.26	6.12E+04	3.20E+04
$NO2^{-}$	0.473	1.70E+04	8.90E+03
$CO3^{2-}$	0.388	1.82E+04	9.52E+03
$PO4^{3-}$	0.258	1.92E+04	1.00E+04
$SO4^{2-}$	8.14E-02	6.12E+03	3.19E+03
Si (as SiO_3^{2-})	5.11E-02	1.12E+03	586
F^{-}	9.21E-02	1.37E+03	715
Cl^{-}	6.08E-02	1.69E+03	880
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	1.57E-05	3.27	1.71
butanol	1.57E-05	0.911	0.476
NH_3	1.42E-02	188	98.4
$Fe(CN)_6^{4-}$	4.53E-02	9.60E+03	5.01E+03
Radiological Constituents			
Pu		1.04E-02 (µCi/g)	9.02E-02 (kg)
U	7.92E-02 (M)	1.48E+04 (µg/g)	7.71E+03 (kg)
Cs	0.319 (Ci/L)	249 (µCi/g)	1.30E+05 (Ci)
Sr	1.26E-02 (Ci/L)	9.83 (µCi/g)	5.14E+03 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-TY-103			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	2.67E+05 kg	(54.0 kgal)	
Heat Load	0.218 kW	(744 BTU/hr)	
Bulk Density*	1.31 (g/cc)		
Water wt%†	58.0		
TOC wt% C (wet)	0.242		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	6.69	1.18E+05	3.15E+04
Al^{3+}	0.834	1.72E+04	4.60E+03
Fe^{3+} (total Fe)	4.80E-03	205	54.8
Cr^{3+}	2.86E-02	1.14E+03	304
Bi^{3+}	1.55E-03	247	66.1
La^{3+}	1.16E-09	1.23E-04	3.28E-05
Hg^{2+}	8.35E-06	1.28	0.342
Zr (as $ZrO(OH)_2$)	1.15E-03	80.3	21.5
Pb^{2+}	7.39E-04	117	31.3
Ni^{2+}	4.18E-03	188	50.2
Sr^{2+}	3.85E-10	2.58E-05	6.90E-06
Mn^{4+}	1.90E-03	79.9	21.4
Ca^{2+}	2.18E-02	667	178
K^{+}	3.37E-02	1.01E+03	269
OH^{-}	3.64	4.73E+04	1.27E+04
$NO3^{-}$	3.16	1.50E+05	4.01E+04
$NO2^{-}$	1.18	4.15E+04	1.11E+04
$CO3^{2-}$	0.263	1.21E+04	3.23E+03
$PO4^{3-}$	7.97E-02	5.79E+03	1.55E+03
$SO4^{2-}$	0.162	1.19E+04	3.17E+03
Si (as SiO_3^{2-})	4.36E-02	936	250
F^{-}	8.79E-02	1.28E+03	341
Cl^{-}	0.122	3.30E+03	882
$C_6H_5O_7^{3-}$	1.23E-02	1.78E+03	476
$EDTA^{4-}$	5.12E-04	113	30.2
$HEDTA^{3-}$	3.75E-04	78.5	21.0
$glycolate^{-}$	2.50E-02	1.44E+03	384
$acetate^{-}$	2.08E-03	94.1	25.2
$oxalate^{2-}$	9.89E-10	6.66E-05	1.78E-05
DBP	1.06E-02	2.16E+03	577
butanol	1.06E-02	601	161
NH_3	4.16E-02	540	144
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	47.7 (µCi/L)		0.162 (kg)
U	7.32E-03 (M)	1.33E+03 (µg/g)	356 (kg)
Cs	0.147 (Ci/L)	112 (µCi/g)	3.00E+04 (Ci)
Sr	5.61E-02 (Ci/L)	42.9 (µCi/g)	1.15E+04 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Single-Shell Tank 241-TY-103			
Total Inventory Estimate*			
Physical Properties			
Total Waste	7.90E+05 kg	(162 kgal)	
Heat Load	0.863 kW	(2.95E+03 BTU/hr)	
Bulk Density†	1.29 (g/cc)		
Water wt%†	64.1		
TOC wt% C (wet)†	0.251		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.24	7.56E+04	5.97E+04
Al^{3+}	0.404	8.45E+03	6.68E+03
Fe^{3+} (total Fe)	0.625	2.71E+04	2.14E+04
Cr^{3+}	1.12E-02	451	356
Bi^{3+}	6.21E-02	1.01E+04	7.96E+03
La^{3+}	3.85E-10	4.16E-05	3.28E-05
Hg^{2+}	2.78E-06	0.433	0.342
Zr (as $ZrO(OH)_2$)	7.30E-03	517	408
Pb^{2+}	2.46E-04	39.6	31.3
Ni^{2+}	5.74E-02	2.62E+03	2.07E+03
Sr^{2+}	1.28E-10	8.74E-06	6.90E-06
Mn^{4+}	6.34E-04	27.1	21.4
Ca^{2+}	0.206	6.42E+03	5.07E+03
K^{+}	1.83E-02	556	439
OH^{-}	3.84	5.07E+04	4.00E+04
$NO3^{-}$	1.90	9.13E+04	7.21E+04
$NO2^{-}$	0.709	2.53E+04	2.00E+04
$CO3^{2-}$	0.346	1.61E+04	1.27E+04
$PO4^{3-}$	0.199	1.47E+04	1.16E+04
$SO4^{2-}$	0.108	8.06E+03	6.37E+03
Si (as SiO_3^{2-})	4.86E-02	1.06E+03	836
F^{-}	9.07E-02	1.34E+03	1.06E+03
Cl^{-}	8.11E-02	2.23E+03	1.76E+03
$C_6H_5O_7^{3-}$	4.11E-03	603	476
$EDTA^{4-}$	1.71E-04	38.2	30.2
$HEDTA^{3-}$	1.25E-04	26.6	21.0
$glycolate^{-}$	8.35E-03	486	384
$acetate^{-}$	6.95E-04	31.8	25.2
$oxalate^{2-}$	3.30E-10	2.25E-05	1.78E-05
DBP	3.54E-03	732	578
butanol	3.54E-03	204	161
NH_3	2.33E-02	307	243
$Fe(CN)_6^{4-}$	3.02E-02	6.35E+03	5.01E+03
Radiological Constituents			
Pu		1.92E-02 (µCi/g)	0.253 (kg)
U	5.53E-02 (M)	1.02E+04 (µg/g)	8.07E+03 (kg)
Cs	0.261 (Ci/L)	203 (µCi/g)	1.60E+05 (Ci)
Sr	2.71E-02 (Ci/L)	21.0 (µCi/g)	1.66E+04 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Single-Shell Tank 241-TY-104			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	2.14E+05 kg	(43.0 kgal)	
Heat Load	2.52E-02 kW	(85.9 BTU/hr)	
Bulk Density	1.32 (g/cc)		
Void Fraction	0.914		
Water wt%	60.1		
TOC wt% C (wet)	3.05E-04		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	3.57	6.24E+04	1.34E+04
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	1.57	6.68E+04	1.43E+04
Cr^{3+}	2.93E-03	116	24.8
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	1.47E-03	65.4	14.0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.345	1.05E+04	2.25E+03
K^{+}	1.58E-02	470	101
OH^{-}	5.55	7.18E+04	1.54E+04
$NO3^{-}$	2.19	1.03E+05	2.21E+04
$NO2^{-}$	0.369	1.29E+04	2.76E+03
$CO3^{2-}$	0.511	2.33E+04	4.99E+03
$PO4^{3-}$	0.119	8.60E+03	1.84E+03
$SO4^{2-}$	0.130	9.48E+03	2.03E+03
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	9.38E-02	2.53E+03	541
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	2.78E-05	5.63	1.20
butanol	2.78E-05	1.57	0.336
NH_3	8.68E-04	11.2	2.40
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		3.20E-03 (µCi/g)	1.14E-02 (kg)
U	0.140 (M)	2.53E+04 (µg/g)	5.41E+03 (kg)
Cs	1.34E-03 (Ci/L)	1.02 (µCi/g)	218 (Ci)
Sr	2.20E-02 (Ci/L)	16.7 (µCi/g)	3.58E+03 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-TY-104			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	1.14E+04 kg	(3.00 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	1.00 (g/cc)		
Water wt%†	100		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Single-Shell Tank 241-TY-104			
Total Inventory Estimate*			
Physical Properties			
Total Waste	2.25E+05 kg	(46.0 kgal)	
Heat Load	2.52E-02 kW	(85.9 BTU/hr)	
Bulk Density†	1.29 (g/cc)		
Water wt%†	62.7		
TOC wt% C (wet)†	2.85E-04		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	3.34	5.93E+04	1.34E+04
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	1.47	6.34E+04	1.43E+04
Cr^{3+}	2.74E-03	110	24.8
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	1.37E-03	62.1	14.0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.323	9.98E+03	2.25E+03
K^{+}	1.48E-02	446	101
OH^{-}	5.19	6.82E+04	1.54E+04
$NO3^{-}$	2.05	9.80E+04	2.21E+04
$NO2^{-}$	0.345	1.23E+04	2.76E+03
$CO3^{2-}$	0.478	2.22E+04	4.99E+03
$PO4^{3-}$	0.111	8.17E+03	1.84E+03
$SO4^{2-}$	0.121	9.00E+03	2.03E+03
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	8.77E-02	2.40E+03	541
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	2.60E-05	5.34	1.20
butanol	2.60E-05	1.49	0.336
NH_3	8.11E-04	10.7	2.40
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		3.04E-03 (µCi/g)	1.14E-02 (kg)
U	0.131 (M)	2.40E+04 (µg/g)	5.41E+03 (kg)
Cs	1.25E-03 (Ci/L)	0.967 (µCi/g)	218 (Ci)
Sr	2.06E-02 (Ci/L)	15.9 (µCi/g)	3.58E+03 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Single-Shell Tank 241-TY-105			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	7.87E+05 kg	(158 kgal)	
Heat Load	9.24E-02 kW	(316 BTU/hr)	
Bulk Density	1.32 (g/cc)		
Void Fraction	0.914		
Water wt%	60.1		
TOC wt% C (wet)	3.05E-04		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	3.57	6.24E+04	4.91E+04
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	1.57	6.68E+04	5.25E+04
Cr^{3+}	2.93E-03	116	91.2
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	1.47E-03	65.4	51.5
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.345	1.05E+04	8.27E+03
K^{+}	1.58E-02	470	370
OH^{-}	5.55	7.18E+04	5.65E+04
$NO3^{-}$	2.19	1.03E+05	8.12E+04
$NO2^{-}$	0.369	1.29E+04	1.02E+04
$CO3^{2-}$	0.511	2.33E+04	1.84E+04
$PO4^{3-}$	0.119	8.60E+03	6.77E+03
$SO4^{2-}$	0.130	9.48E+03	7.45E+03
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	9.38E-02	2.53E+03	1.99E+03
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	2.78E-05	5.63	4.43
butanol	2.78E-05	1.57	1.23
NH_3	8.68E-04	11.2	8.82
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		3.20E-03 (µCi/g)	4.20E-02 (kg)
U	0.140 (M)	2.53E+04 (µg/g)	1.99E+04 (kg)
Cs	1.34E-03 (Ci/L)	1.02 (µCi/g)	801 (Ci)
Sr	2.20E-02 (Ci/L)	16.7 (µCi/g)	1.32E+04 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-TY-105			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	3.31E+05 kg	(73.0 kgal)	
Heat Load	6.15E-02 kW	(210 BTU/hr)	
Bulk Density*	1.20 (g/cc)		
Water wt%†	66.2		
TOC wt% C (wet)	4.88E-04		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	5.21	1.00E+05	3.31E+04
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	2.67E-03	124	41.1
Cr^{3+}	4.27E-03	186	61.4
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	2.14E-03	105	34.7
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	1.20E-02	402	133
K^{+}	2.30E-02	753	249
OH^{-}	3.46E-02	492	163
$NO3^{-}$	3.44	1.78E+05	5.90E+04
$NO2^{-}$	0.289	1.11E+04	3.68E+03
$CO3^{2-}$	0.254	1.28E+04	4.22E+03
$PO4^{3-}$	0.174	1.38E+04	4.56E+03
$SO4^{2-}$	0.189	1.52E+04	5.02E+03
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0.137	4.05E+03	1.34E+03
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	4.05E-05	9.01	2.98
butanol	4.05E-05	2.51	0.830
NH_3	1.08E-03	15.3	5.07
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	5.36 (µCi/L)		2.47E-02 (kg)
U	5.33E-03 (M)	1.06E+03 (µg/g)	350 (kg)
Cs	1.40E-03 (Ci/L)	1.17 (µCi/g)	387 (Ci)
Sr	3.21E-02 (Ci/L)	26.8 (µCi/g)	8.87E+03 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

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Single-Shell Tank 241-TY-105			
Total Inventory Estimate*			
Physical Properties			
Total Waste	1.12E+06 kg	(231 kgal)	
Heat Load	0.154 kW	(526 BTU/hr)	
Bulk Density†	1.28 (g/cc)		
Water wt%†	62.0		
TOC wt% C (wet)†	3.62E-04		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.09	7.35E+04	8.22E+04
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	1.08	4.71E+04	5.26E+04
Cr^{3+}	3.36E-03	137	153
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	1.68E-03	77.1	86.1
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.240	7.52E+03	8.40E+03
K^{+}	1.81E-02	554	619
OH^{-}	3.81	5.07E+04	5.66E+04
$NO3^{-}$	2.59	1.25E+05	1.40E+05
$NO2^{-}$	0.344	1.24E+04	1.38E+04
$CO3^{2-}$	0.430	2.02E+04	2.26E+04
$PO4^{3-}$	0.136	1.01E+04	1.13E+04
$SO4^{2-}$	0.149	1.12E+04	1.25E+04
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0.107	2.98E+03	3.33E+03
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	3.18E-05	6.63	7.41
butanol	3.18E-05	1.85	2.06
NH_3	9.35E-04	12.4	13.9
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		3.58E-03 (µCi/g)	6.67E-02 (kg)
U	9.73E-02 (M)	1.81E+04 (µg/g)	2.02E+04 (kg)
Cs	1.36E-03 (Ci/L)	1.06 (µCi/g)	1.19E+03 (Ci)
Sr	2.52E-02 (Ci/L)	19.7 (µCi/g)	2.20E+04 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

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Single-Shell Tank 241-TY-106			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	3.45E+04 kg	(21.0 kgal)	
Heat Load	5.81E-04 kW	(1.98 BTU/hr)	
Bulk Density	0.434 (g/cc)		
Void Fraction	4.32E-02		
Water wt%	3.47		
TOC wt% C (wet)	4.37E-05		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	10.3	5.48E+05	1.89E+04
Al^{3+}	7.62E-02	4.74E+03	163
Fe^{3+} (total Fe)	0.160	2.06E+04	711
Cr^{3+}	1.39E-04	16.6	0.573
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	6.94E-05	9.39	0.324
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	9.25E-02	8.55E+03	295
K^{+}	7.48E-04	67.4	2.32
OH^{-}	0.263	3.40E+03	355
$NO3^{-}$	0.104	4.88E+03	510
$NO2^{-}$	1.75E-02	611	63.8
$CO3^{2-}$	2.42E-02	1.10E+03	115
$PO4^{3-}$	5.63E-03	407	42.5
$SO4^{2-}$	6.14E-03	448	46.8
Si (as SiO_3^{2-})	5.40	1.15E+05	1.21E+04
F^{-}	0	0	0
Cl^{-}	4.44E-03	120	12.5
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	1.32E-06	0.266	2.78E-02
butanol	1.32E-06	7.41E-02	7.75E-03
NH_3	4.11E-05	0.531	5.55E-02
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		4.59E-04 (µCi/g)	2.64E-04 (kg)
U	6.61E-03 (M)	3.63E+03 (µg/g)	125 (kg)
Cs	6.34E-05 (Ci/L)	0.146 (µCi/g)	5.03 (Ci)
Sr	1.04E-03 (Ci/L)	2.40 (µCi/g)	82.8 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Single-Shell Tank 241-TY-106			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	0 (g/cc)		
Water wt%†	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Single-Shell Tank 241-TY-106			
Total Inventory Estimate*			
Physical Properties			
Total Waste	3.45E+04 kg	(21.0 kgal)	
Heat Load	5.81E-04 kW	(1.98 BTU/hr)	
Bulk Density†	0.434 (g/cc)		
Water wt%†	3.47		
TOC wt% C (wet)†	4.37E-05		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	10.3	5.48E+05	1.89E+04
Al^{3+}	7.62E-02	4.74E+03	163
Fe^{3+} (total Fe)	0.160	2.06E+04	711
Cr^{3+}	1.39E-04	16.6	0.573
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	6.94E-05	9.39	0.324
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	9.25E-02	8.55E+03	295
K^{+}	7.48E-04	67.4	2.32
OH^{-}	0.263	3.40E+03	355
$NO3^{-}$	0.104	4.88E+03	510
$NO2^{-}$	1.75E-02	611	63.8
$CO3^{2-}$	2.42E-02	1.10E+03	115
$PO4^{3-}$	5.63E-03	407	42.5
$SO4^{2-}$	6.14E-03	448	46.8
Si (as SiO_3^{2-})	5.40	1.15E+05	1.21E+04
F^{-}	0	0	0
Cl^{-}	4.44E-03	120	12.5
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	1.32E-06	0.266	2.78E-02
butanol	1.32E-06	7.41E-02	7.75E-03
NH_3	4.11E-05	0.531	5.55E-02
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		4.59E-04 (µCi/g)	2.64E-04 (kg)
U	6.61E-03 (M)	3.63E+03 (µg/g)	125 (kg)
Cs	6.34E-05 (Ci/L)	0.146 (µCi/g)	5.03 (Ci)
Sr	1.04E-03 (Ci/L)	2.40 (µCi/g)	82.8 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

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Double-Shell Tank 241-AN-101			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density	0 (g/cc)		
Void Fraction	0		
Water wt%	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0 (µCi/g)	0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Double-Shell Tank 241-AN-101			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	3.39E+06 kg	(740 kgal)	
Heat Load	2.14 kW	(7.29E+03 BTU/hr)	
Bulk Density*	1.21 (g/cc)		
Water wt%†	69.7		
TOC wt% C (wet)	0.283		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.40	8.37E+04	2.83E+05
Al^{3+}	0.640	1.43E+04	4.83E+04
Fe^{3+} (total Fe)	2.74E-03	127	429
Cr^{3+}	2.45E-02	1.06E+03	3.58E+03
Bi^{3+}	5.71E-04	98.6	334
La^{3+}	2.99E-06	0.344	1.17
Hg^{2+}	3.63E-06	0.602	2.04
Zr (as $ZrO(OH)_2$)	4.43E-04	33.4	113
Pb^{2+}	3.67E-04	62.8	213
Ni^{2+}	2.34E-03	114	386
Sr^{2+}	9.98E-07	7.23E-02	0.245
Mn^{4+}	1.68E-03	76.2	258
Ca^{2+}	1.24E-02	412	1.40E+03
K^{+}	2.67E-02	865	2.93E+03
OH^{-}	2.74	3.86E+04	1.31E+05
$NO3^{-}$	1.93	9.87E+04	3.34E+05
$NO2^{-}$	0.986	3.75E+04	1.27E+05
$CO3^{2-}$	0.147	7.27E+03	2.46E+04
$PO4^{3-}$	3.90E-02	3.06E+03	1.04E+04
$SO4^{2-}$	8.87E-02	7.05E+03	2.39E+04
Si (as SiO_3^{2-})	2.79E-02	647	2.19E+03
F^{-}	3.82E-02	601	2.03E+03
Cl^{-}	7.65E-02	2.24E+03	7.59E+03
$C_6H_5O_7^{3-}$	9.86E-03	1.54E+03	5.22E+03
$EDTA^{4-}$	3.33E-03	793	2.69E+03
$HEDTA^{3-}$	5.45E-03	1.23E+03	4.18E+03
$glycolate^{-}$	2.18E-02	1.35E+03	4.59E+03
$acetate^{-}$	3.87E-03	189	639
$oxalate^{2-}$	2.56E-06	0.186	0.632
DBP	7.26E-03	967	3.27E+03
butanol	7.26E-03	445	1.51E+03
NH_3	4.24E-02	596	2.02E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	28.1 (µCi/L)		1.31 (kg)
U	4.57E-03 (M)	900 (µg/g)	3.05E+03 (kg)
Cs	0.100 (Ci/L)	83.0 (µCi/g)	2.81E+05 (Ci)
Sr	4.34E-02 (Ci/L)	35.8 (µCi/g)	1.21E+05 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.
†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Double-Shell Tank 241-AN-101			
Total Inventory Estimate*			
Physical Properties			
Total Waste	3.39E+06 kg	(740 kgal)	
Heat Load	2.14 kW	(7.29E+03 BTU/hr)	
Bulk Density†	1.21 (g/cc)		
Water wt%†	69.7		
TOC wt% C (wet)†	0.283		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.40	8.37E+04	2.83E+05
Al^{3+}	0.640	1.43E+04	4.83E+04
Fe^{3+} (total Fe)	2.74E-03	127	429
Cr^{3+}	2.45E-02	1.06E+03	3.58E+03
Bi^{3+}	5.71E-04	98.6	334
La^{3+}	2.99E-06	0.344	1.17
Hg^{2+}	3.63E-06	0.602	2.04
Zr (as $ZrO(OH)_2$)	4.43E-04	33.4	113
Pb^{2+}	3.67E-04	62.8	213
Ni^{2+}	2.34E-03	114	386
Sr^{2+}	9.98E-07	7.23E-02	0.245
Mn^{4+}	1.68E-03	76.2	258
Ca^{2+}	1.24E-02	412	1.40E+03
K^{+}	2.67E-02	865	2.93E+03
OH^{-}	2.74	3.86E+04	1.31E+05
$NO3^{-}$	1.93	9.87E+04	3.34E+05
$NO2^{-}$	0.986	3.75E+04	1.27E+05
$CO3^{2-}$	0.147	7.27E+03	2.46E+04
$PO4^{3-}$	3.90E-02	3.06E+03	1.04E+04
$SO4^{2-}$	8.87E-02	7.05E+03	2.39E+04
Si (as SiO_3^{2-})	2.79E-02	647	2.19E+03
F^{-}	3.82E-02	601	2.03E+03
Cl^{-}	7.65E-02	2.24E+03	7.59E+03
$C_6H_5O_7^{3-}$	9.86E-03	1.54E+03	5.22E+03
$EDTA^{4-}$	3.33E-03	793	2.69E+03
$HEDTA^{3-}$	5.45E-03	1.23E+03	4.18E+03
$glycolate^{-}$	2.18E-02	1.35E+03	4.59E+03
$acetate^{-}$	3.87E-03	189	639
$oxalate^{2-}$	2.56E-06	0.186	0.632
DBP	7.26E-03	967	3.27E+03
butanol	7.26E-03	445	1.51E+03
NH_3	4.24E-02	596	2.02E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		2.32E-02 (µCi/g)	1.31 (kg)
U	4.57E-03 (M)	900 (µg/g)	3.05E+03 (kg)
Cs	0.100 (Ci/L)	83.0 (µCi/g)	2.81E+05 (Ci)
Sr	4.34E-02 (Ci/L)	35.8 (µCi/g)	1.21E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).
†Volume average for density, mass average Water wt% and TOC wt% C.

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Double-Shell Tank 241-AN-102			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density	0 (g/cc)		
Void Fraction	0		
Water wt%	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0 (µCi/g)	0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Double-Shell Tank 241-AN-102			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	7.03E+06 kg	(1.09E+03 kgal)	
Heat Load	10.6 kW	(3.63E+04 BTU/hr)	
Bulk Density*	1.70 (g/cc)		
Water wt%†	27.6		
TOC wt% C (wet)	1.53		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	15.0	2.03E+05	1.42E+06
Al^{3+}	2.07	3.28E+04	2.30E+05
Fe^{3+} (total Fe)	8.45E-03	277	1.95E+03
Cr^{3+}	6.61E-02	2.02E+03	1.42E+04
Bi^{3+}	1.46E-03	179	1.26E+03
La^{3+}	2.44E-05	1.99	14.0
Hg^{2+}	1.14E-05	1.35	9.47
Zr (as $ZrO(OH)_2$)	8.01E-04	42.9	301
Pb^{2+}	1.53E-03	186	1.31E+03
Ni^{2+}	7.09E-03	244	1.72E+03
Sr^{2+}	8.15E-06	0.419	2.95
Mn^{4+}	7.07E-03	228	1.60E+03
Ca^{2+}	3.84E-02	903	6.34E+03
K^{+}	7.51E-02	1.72E+03	1.21E+04
OH^{-}	9.11	9.10E+04	6.39E+05
$NO3^{-}$	5.86	2.13E+05	1.50E+06
$NO2^{-}$	3.03	8.18E+04	5.75E+05
$CO3^{2-}$	0.695	2.45E+04	1.72E+05
$PO4^{3-}$	0.124	6.91E+03	4.85E+04
$SO4^{2-}$	0.358	2.02E+04	1.42E+05
Si (as SiO_3^{2-})	0.100	1.65E+03	1.16E+04
F^{-}	8.76E-02	977	6.87E+03
Cl^{-}	0.267	5.56E+03	3.90E+04
$C_6H_5O_7^{3-}$	4.73E-02	5.26E+03	3.69E+04
$EDTA^{4-}$	3.81E-02	6.45E+03	4.53E+04
$HEDTA^{3-}$	6.83E-02	1.10E+04	7.73E+04
$glycolate^{-}$	0.174	7.66E+03	5.38E+04
$acetate^{-}$	2.52E-02	873	6.13E+03
$oxalate^{2-}$	2.09E-05	1.08	7.59
DBP	3.51E-02	3.32E+03	2.33E+04
butanol	3.51E-02	1.53E+03	1.07E+04
NH_3	5.79E-02	578	4.06E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	99.1 (µCi/L)		6.81 (kg)
U	1.39E-02 (M)	1.95E+03 (µg/g)	1.37E+04 (kg)
Cs	0.331 (Ci/L)	194 (µCi/g)	1.37E+06 (Ci)
Sr	0.153 (Ci/L)	89.6 (µCi/g)	6.29E+05 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.
†Water wt% derived from the difference of density and total dissolved species.

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Double-Shell Tank 241-AN-102			
Total Inventory Estimate*			
Physical Properties			
Total Waste	7.03E+06 kg	(1.09E+03 kgal)	
Heat Load	10.6 kW	(3.63E+04 BTU/hr)	
Bulk Density†	1.70 (g/cc)		
Water wt%†	27.6		
TOC wt% C (wet)†	1.53		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	15.0	2.03E+05	1.42E+06
Al^{3+}	2.07	3.28E+04	2.30E+05
Fe^{3+} (total Fe)	8.45E-03	277	1.95E+03
Cr^{3+}	6.61E-02	2.02E+03	1.42E+04
Bi^{3+}	1.46E-03	179	1.26E+03
La^{3+}	2.44E-05	1.99	14.0
Hg^{2+}	1.14E-05	1.35	9.47
Zr (as $ZrO(OH)_2$)	8.01E-04	42.9	301
Pb^{2+}	1.53E-03	186	1.31E+03
Ni^{2+}	7.09E-03	244	1.72E+03
Sr^{2+}	8.15E-06	0.419	2.95
Mn^{4+}	7.07E-03	228	1.60E+03
Ca^{2+}	3.84E-02	903	6.34E+03
K^{+}	7.51E-02	1.72E+03	1.21E+04
OH^{-}	9.11	9.10E+04	6.39E+05
$NO3^{-}$	5.86	2.13E+05	1.50E+06
$NO2^{-}$	3.03	8.18E+04	5.75E+05
$CO3^{2-}$	0.695	2.45E+04	1.72E+05
$PO4^{3-}$	0.124	6.91E+03	4.85E+04
$SO4^{2-}$	0.358	2.02E+04	1.42E+05
Si (as SiO_3^{2-})	0.100	1.65E+03	1.16E+04
F^{-}	8.76E-02	977	6.87E+03
Cl^{-}	0.267	5.56E+03	3.90E+04
$C_6H_5O_7^{3-}$	4.73E-02	5.26E+03	3.69E+04
$EDTA^{4-}$	3.81E-02	6.45E+03	4.53E+04
$HEDTA^{3-}$	6.83E-02	1.10E+04	7.73E+04
$glycolate^{-}$	0.174	7.66E+03	5.38E+04
$acetate^{-}$	2.52E-02	873	6.13E+03
$oxalate^{2-}$	2.09E-05	1.08	7.59
DBP	3.51E-02	3.32E+03	2.33E+04
butanol	3.51E-02	1.53E+03	1.07E+04
NH_3	5.79E-02	578	4.06E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		5.82E-02 (µCi/g)	6.81 (kg)
U	1.39E-02 (M)	1.95E+03 (µg/g)	1.37E+04 (kg)
Cs	0.331 (Ci/L)	194 (µCi/g)	1.37E+06 (Ci)
Sr	0.153 (Ci/L)	89.6 (µCi/g)	6.29E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).
†Volume average for density, mass average Water wt% and TOC wt% C.

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Double-Shell Tank 241-AN-103			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	1.50E+04 kg	(2.00 kgal)	
Heat Load	0.240 kW	(818 BTU/hr)	
Bulk Density	1.99 (g/cc)		
Void Fraction	0.575		
Water wt%	33.6		
TOC wt% C (wet)	0.171		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	6.70	7.75E+04	1.16E+03
Al^{3+}	6.07	8.24E+04	1.24E+03
Fe^{3+} (total Fe)	2.21	6.21E+04	933
Cr^{3+}	1.15E-07	3.02E-03	4.54E-05
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	1.21	3.57E+04	536
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.203	4.10E+03	61.7
K^{+}	7.77E-03	153	2.30
OH^{-}	31.0	2.65E+05	3.99E+03
$NO3^{-}$	8.61E-04	26.9	0.404
$NO2^{-}$	0.993	2.30E+04	346
$CO3^{2-}$	0.353	1.07E+04	160
$PO4^{3-}$	5.77E-03	276	4.14
$SO4^{2-}$	2.54E-02	1.23E+03	18.4
Si (as SiO_3^{2-})	2.39	3.37E+04	507
F^{-}	0	0	0
Cl^{-}	3.57E-02	637	9.58
$C_6H_5O_7^{3-}$	8.65E-03	823	12.4
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0.115	4.36E+03	65.5
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	8.83E-02	756	11.4
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		2.61 (µCi/g)	0.654 (kg)
U	0.560 (M)	6.71E+04 (µg/g)	1.01E+03 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	4.70 (Ci/L)	2.37E+03 (µCi/g)	3.56E+04 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Double-Shell Tank 241-AN-103			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	5.61E+06 kg	(951 kgal)	
Heat Load	7.16 kW	(2.45E+04 BTU/hr)	
Bulk Density*	1.56 (g/cc)		
Water wt%†	33.3		
TOC wt% C (wet)	1.07		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	12.6	1.86E+05	1.04E+06
Al^{3+}	1.65	2.86E+04	1.61E+05
Fe^{3+} (total Fe)	1.04E-02	372	2.09E+03
Cr^{3+}	5.16E-02	1.72E+03	9.66E+03
Bi^{3+}	1.17E-03	156	877
La^{3+}	1.35E-05	1.20	6.73
Hg^{2+}	1.39E-05	1.78	10.0
Zr (as $ZrO(OH)_2$)	2.23E-03	130	732
Pb^{2+}	1.15E-03	153	857
Ni^{2+}	8.10E-03	305	1.71E+03
Sr^{2+}	4.49E-06	0.252	1.42
Mn^{4+}	9.25E-03	326	1.83E+03
Ca^{2+}	4.69E-02	1.21E+03	6.77E+03
K^{+}	0.179	4.49E+03	2.52E+04
OH^{-}	7.29	7.95E+04	4.46E+05
$NO3^{-}$	5.54	2.20E+05	1.24E+06
$NO2^{-}$	1.95	5.76E+04	3.23E+05
$CO3^{2-}$	0.674	2.59E+04	1.46E+05
$PO4^{3-}$	0.163	9.93E+03	5.57E+04
$SO4^{2-}$	0.242	1.49E+04	8.36E+04
Si (as SiO_3^{2-})	7.71E-02	1.39E+03	7.80E+03
F^{-}	0.193	2.35E+03	1.32E+04
Cl^{-}	0.219	4.98E+03	2.80E+04
$C_6H_5O_7^{3-}$	3.21E-02	3.89E+03	2.19E+04
$EDTA^{4-}$	1.86E-02	3.43E+03	1.92E+04
$HEDTA^{3-}$	3.22E-02	5.66E+03	3.18E+04
$glycolate^{-}$	0.196	9.45E+03	5.30E+04
$acetate^{-}$	1.57E-02	593	3.33E+03
$oxalate^{2-}$	1.15E-05	0.651	3.65
DBP	2.26E-02	2.34E+03	1.31E+04
butanol	2.26E-02	1.07E+03	6.03E+03
NH_3	0.446	4.86E+03	2.73E+04
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	101 (µCi/L)		6.07 (kg)
U	1.32E-02 (M)	2.02E+03 (µg/g)	1.13E+04 (kg)
Cs	0.240 (Ci/L)	154 (µCi/g)	8.65E+05 (Ci)
Sr	0.128 (Ci/L)	82.3 (µCi/g)	4.62E+05 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

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Double-Shell Tank 241-AN-103			
Total Inventory Estimate*			
Physical Properties			
Total Waste	5.63E+06 kg	(953 kgal)	
Heat Load	7.40 kW	(2.53E+04 BTU/hr)	
Bulk Density†	1.56 (g/cc)		
Water wt%†	33.3		
TOC wt% C (wet)†	1.07		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	12.6	1.85E+05	1.04E+06
Al^{3+}	1.66	2.88E+04	1.62E+05
Fe^{3+} (total Fe)	1.50E-02	537	3.02E+03
Cr^{3+}	5.15E-02	1.72E+03	9.66E+03
Bi^{3+}	1.16E-03	156	877
La^{3+}	1.34E-05	1.20	6.73
Hg^{2+}	1.38E-05	1.78	10.0
Zr (as $ZrO(OH)_2$)	2.22E-03	130	732
Pb^{2+}	1.15E-03	152	857
Ni^{2+}	1.06E-02	400	2.25E+03
Sr^{2+}	4.48E-06	0.252	1.42
Mn^{4+}	9.23E-03	325	1.83E+03
Ca^{2+}	4.72E-02	1.21E+03	6.83E+03
K^{+}	0.179	4.48E+03	2.52E+04
OH^{-}	7.34	8.00E+04	4.50E+05
$NO3^{-}$	5.53	2.20E+05	1.24E+06
$NO2^{-}$	1.95	5.75E+04	3.23E+05
$CO3^{2-}$	0.673	2.59E+04	1.46E+05
$PO4^{3-}$	0.163	9.90E+03	5.57E+04
$SO4^{2-}$	0.241	1.49E+04	8.37E+04
Si (as SiO_3^{2-})	8.20E-02	1.48E+03	8.30E+03
F^{-}	0.192	2.34E+03	1.32E+04
Cl^{-}	0.219	4.97E+03	2.80E+04
$C_6H_5O_7^{3-}$	3.21E-02	3.89E+03	2.19E+04
$EDTA^{4-}$	1.85E-02	3.42E+03	1.92E+04
$HEDTA^{3-}$	3.21E-02	5.65E+03	3.18E+04
$glycolate^{-}$	0.196	9.43E+03	5.31E+04
$acetate^{-}$	1.56E-02	592	3.33E+03
$oxalate^{2-}$	1.15E-05	0.649	3.65
DBP	2.26E-02	2.33E+03	1.31E+04
butanol	2.26E-02	1.07E+03	6.03E+03
NH_3	0.445	4.85E+03	2.73E+04
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		7.17E-02 (µCi/g)	6.72 (kg)
U	1.44E-02 (M)	2.19E+03 (µg/g)	1.23E+04 (kg)
Cs	0.240 (Ci/L)	154 (µCi/g)	8.65E+05 (Ci)
Sr	0.138 (Ci/L)	88.4 (µCi/g)	4.97E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

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Double-Shell Tank 241-AN-104			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density	0 (g/cc)		
Void Fraction	0		
Water wt%	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0 (µCi/g)	0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Double-Shell Tank 241-AN-104			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	5.82E+06 kg	(1.06E+03 kgal)	
Heat Load	6.50 kW	(2.22E+04 BTU/hr)	
Bulk Density*	1.45 (g/cc)		
Water wt%†	44.7		
TOC wt% C (wet)	1.08		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	9.76	1.54E+05	8.97E+05
Al^{3+}	1.31	2.43E+04	1.41E+05
Fe^{3+} (total Fe)	7.07E-03	271	1.58E+03
Cr^{3+}	4.05E-02	1.45E+03	8.42E+03
Bi^{3+}	9.56E-04	137	799
La^{3+}	1.29E-05	1.23	7.16
Hg^{2+}	9.15E-06	1.26	7.34
Zr (as $ZrO(OH)_2$)	1.16E-03	72.9	424
Pb^{2+}	9.44E-04	134	781
Ni^{2+}	5.69E-03	230	1.34E+03
Sr^{2+}	4.30E-06	0.259	1.51
Mn^{4+}	6.72E-03	254	1.47E+03
Ca^{2+}	3.20E-02	880	5.12E+03
K^{+}	9.52E-02	2.56E+03	1.49E+04
OH^{-}	5.75	6.71E+04	3.90E+05
$NO3^{-}$	4.05	1.73E+05	1.00E+06
$NO2^{-}$	1.68	5.32E+04	3.09E+05
$CO3^{2-}$	0.506	2.09E+04	1.21E+05
$PO4^{3-}$	0.116	7.55E+03	4.39E+04
$SO4^{2-}$	0.208	1.38E+04	8.00E+04
Si (as SiO_3^{2-})	6.10E-02	1.18E+03	6.85E+03
F^{-}	0.106	1.39E+03	8.08E+03
Cl^{-}	0.172	4.18E+03	2.43E+04
$C_6H_5O_7^{3-}$	2.63E-02	3.41E+03	1.98E+04
$EDTA^{4-}$	2.15E-02	4.25E+03	2.47E+04
$HEDTA^{3-}$	3.84E-02	7.23E+03	4.20E+04
$glycolate^{-}$	0.143	7.37E+03	4.28E+04
$acetate^{-}$	1.47E-02	597	3.47E+03
$oxalate^{2-}$	1.10E-05	0.668	3.88
DBP	1.98E-02	2.19E+03	1.28E+04
butanol	1.98E-02	1.01E+03	5.87E+03
NH_3	0.191	2.23E+03	1.30E+04
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	70.5 (µCi/L)		4.70 (kg)
U	9.47E-03 (M)	1.55E+03 (µg/g)	9.01E+03 (kg)
Cs	0.204 (Ci/L)	140 (µCi/g)	8.17E+05 (Ci)
Sr	9.94E-02 (Ci/L)	68.3 (µCi/g)	3.97E+05 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.
†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Double-Shell Tank 241-AN-104			
Total Inventory Estimate*			
Physical Properties			
Total Waste	5.82E+06 kg	(1.06E+03 kgal)	
Heat Load	6.50 kW	(2.22E+04 BTU/hr)	
Bulk Density†	1.45 (g/cc)		
Water wt%†	44.7		
TOC wt% C (wet)†	1.08		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	9.76	1.54E+05	8.97E+05
Al^{3+}	1.31	2.43E+04	1.41E+05
Fe^{3+} (total Fe)	7.07E-03	271	1.58E+03
Cr^{3+}	4.05E-02	1.45E+03	8.42E+03
Bi^{3+}	9.56E-04	137	799
La^{3+}	1.29E-05	1.23	7.16
Hg^{2+}	9.15E-06	1.26	7.34
Zr (as $ZrO(OH)_2$)	1.16E-03	72.9	424
Pb^{2+}	9.44E-04	134	781
Ni^{2+}	5.69E-03	230	1.34E+03
Sr^{2+}	4.30E-06	0.259	1.51
Mn^{4+}	6.72E-03	254	1.47E+03
Ca^{2+}	3.20E-02	880	5.12E+03
K^{+}	9.52E-02	2.56E+03	1.49E+04
OH^{-}	5.75	6.71E+04	3.90E+05
$NO3^{-}$	4.05	1.73E+05	1.00E+06
$NO2^{-}$	1.68	5.32E+04	3.09E+05
$CO3^{2-}$	0.506	2.09E+04	1.21E+05
$PO4^{3-}$	0.116	7.55E+03	4.39E+04
$SO4^{2-}$	0.208	1.38E+04	8.00E+04
Si (as SiO_3^{2-})	6.10E-02	1.18E+03	6.85E+03
F^{-}	0.106	1.39E+03	8.08E+03
Cl^{-}	0.172	4.18E+03	2.43E+04
$C_6H_5O_7^{3-}$	2.63E-02	3.41E+03	1.98E+04
$EDTA^{4-}$	2.15E-02	4.25E+03	2.47E+04
$HEDTA^{3-}$	3.84E-02	7.23E+03	4.20E+04
$glycolate^{-}$	0.143	7.37E+03	4.28E+04
$acetate^{-}$	1.47E-02	597	3.47E+03
$oxalate^{2-}$	1.10E-05	0.668	3.88
DBP	1.98E-02	2.19E+03	1.28E+04
butanol	1.98E-02	1.01E+03	5.87E+03
NH_3	0.191	2.23E+03	1.30E+04
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		4.85E-02 (µCi/g)	4.70 (kg)
U	9.47E-03 (M)	1.55E+03 (µg/g)	9.01E+03 (kg)
Cs	0.204 (Ci/L)	140 (µCi/g)	8.17E+05 (Ci)
Sr	9.94E-02 (Ci/L)	68.3 (µCi/g)	3.97E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).
†Volume average for density, mass average Water wt% and TOC wt% C.

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Double-Shell Tank 241-AN-105			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density	0 (g/cc)		
Void Fraction	0		
Water wt%	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0 (µCi/g)	0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Double-Shell Tank 241-AN-105			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	7.89E+06 kg	(1.13E+03 kgal)	
Heat Load	11.9 kW	(4.07E+04 BTU/hr)	
Bulk Density*	1.84 (g/cc)		
Water wt%†	19.4		
TOC wt% C (wet)	1.38		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	18.1	2.25E+05	1.78E+06
Al^{3+}	2.45	3.59E+04	2.83E+05
Fe^{3+} (total Fe)	1.23E-02	374	2.95E+03
Cr^{3+}	7.22E-02	2.04E+03	1.61E+04
Bi^{3+}	1.91E-03	216	1.70E+03
La^{3+}	2.08E-05	1.57	12.4
Hg^{2+}	1.39E-05	1.52	12.0
Zr (as $ZrO(OH)_2$)	1.23E-03	60.7	479
Pb^{2+}	1.73E-03	195	1.54E+03
Ni^{2+}	1.06E-02	336	2.65E+03
Sr^{2+}	6.93E-06	0.329	2.60
Mn^{4+}	9.30E-03	277	2.18E+03
Ca^{2+}	5.57E-02	1.21E+03	9.56E+03
K^{+}	9.82E-02	2.08E+03	1.64E+04
OH^{-}	10.8	9.92E+04	7.82E+05
$NO3^{-}$	7.76	2.61E+05	2.06E+06
$NO2^{-}$	3.02	7.53E+04	5.94E+05
$CO3^{2-}$	0.904	2.94E+04	2.32E+05
$PO4^{3-}$	0.185	9.54E+03	7.52E+04
$SO4^{2-}$	0.379	1.98E+04	1.56E+05
Si (as SiO_3^{2-})	0.112	1.71E+03	1.35E+04
F^{-}	0.122	1.25E+03	9.89E+03
Cl^{-}	0.330	6.34E+03	5.00E+04
$C_6H_5O_7^{3-}$	4.74E-02	4.86E+03	3.83E+04
$EDTA^{4-}$	3.13E-02	4.89E+03	3.85E+04
$HEDTA^{3-}$	5.45E-02	8.10E+03	6.38E+04
$glycolate^{-}$	0.260	1.06E+04	8.33E+04
$acetate^{-}$	2.59E-02	829	6.53E+03
$oxalate^{2-}$	1.78E-05	0.849	6.70
DBP	3.38E-02	2.96E+03	2.33E+04
butanol	3.38E-02	1.36E+03	1.07E+04
NH_3	8.63E-02	795	6.27E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	122 (µCi/L)		8.70 (kg)
U	1.62E-02 (M)	2.10E+03 (µg/g)	1.65E+04 (kg)
Cs	0.358 (Ci/L)	194 (µCi/g)	1.53E+06 (Ci)
Sr	0.164 (Ci/L)	89.1 (µCi/g)	7.02E+05 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.
†Water wt% derived from the difference of density and total dissolved species.

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Double-Shell Tank 241-AN-105			
Total Inventory Estimate*			
Physical Properties			
Total Waste	7.89E+06 kg	(1.13E+03 kgal)	
Heat Load	11.9 kW	(4.07E+04 BTU/hr)	
Bulk Density†	1.84 (g/cc)		
Water wt%†	19.4		
TOC wt% C (wet)†	1.38		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	18.1	2.25E+05	1.78E+06
Al^{3+}	2.45	3.59E+04	2.83E+05
Fe^{3+} (total Fe)	1.23E-02	374	2.95E+03
Cr^{3+}	7.22E-02	2.04E+03	1.61E+04
Bi^{3+}	1.91E-03	216	1.70E+03
La^{3+}	2.08E-05	1.57	12.4
Hg^{2+}	1.39E-05	1.52	12.0
Zr (as $ZrO(OH)_2$)	1.23E-03	60.7	479
Pb^{2+}	1.73E-03	195	1.54E+03
Ni^{2+}	1.06E-02	336	2.65E+03
Sr^{2+}	6.93E-06	0.329	2.60
Mn^{4+}	9.30E-03	277	2.18E+03
Ca^{2+}	5.57E-02	1.21E+03	9.56E+03
K^{+}	9.82E-02	2.08E+03	1.64E+04
OH^{-}	10.8	9.92E+04	7.82E+05
$NO3^{-}$	7.76	2.61E+05	2.06E+06
$NO2^{-}$	3.02	7.53E+04	5.94E+05
$CO3^{2-}$	0.904	2.94E+04	2.32E+05
$PO4^{3-}$	0.185	9.54E+03	7.52E+04
$SO4^{2-}$	0.379	1.98E+04	1.56E+05
Si (as SiO_3^{2-})	0.112	1.71E+03	1.35E+04
F^{-}	0.122	1.25E+03	9.89E+03
Cl^{-}	0.330	6.34E+03	5.00E+04
$C_6H_5O_7^{3-}$	4.74E-02	4.86E+03	3.83E+04
$EDTA^{4-}$	3.13E-02	4.89E+03	3.85E+04
$HEDTA^{3-}$	5.45E-02	8.10E+03	6.38E+04
$glycolate^{-}$	0.260	1.06E+04	8.33E+04
$acetate^{-}$	2.59E-02	829	6.53E+03
$oxalate^{2-}$	1.78E-05	0.849	6.70
DBP	3.38E-02	2.96E+03	2.33E+04
butanol	3.38E-02	1.36E+03	1.07E+04
NH_3	8.63E-02	795	6.27E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		6.62E-02 (µCi/g)	8.70 (kg)
U	1.62E-02 (M)	2.10E+03 (µg/g)	1.65E+04 (kg)
Cs	0.358 (Ci/L)	194 (µCi/g)	1.53E+06 (Ci)
Sr	0.164 (Ci/L)	89.1 (µCi/g)	7.02E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).
†Volume average for density, mass average Water wt% and TOC wt% C.

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Double-Shell Tank 241-AN-106			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density	0 (g/cc)		
Void Fraction	0		
Water wt%	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0 (µCi/g)	0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Double-Shell Tank 241-AN-106			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	1.10E+05 kg	(21.0 kgal)	
Heat Load	0.109 kW	(374 BTU/hr)	
Bulk Density*	1.39 (g/cc)		
Water wt%†	50.6		
TOC wt% C (wet)	0.857		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	8.41	1.39E+05	1.54E+04
Al^{3+}	1.10	2.14E+04	2.36E+03
Fe^{3+} (total Fe)	6.33E-03	254	28.1
Cr^{3+}	4.18E-02	1.57E+03	173
Bi^{3+}	8.41E-04	126	14.0
La^{3+}	1.86E-05	1.86	0.205
Hg^{2+}	6.28E-06	0.906	0.100
Zr (as $ZrO(OH)_2$)	5.23E-04	34.3	3.79
Pb^{2+}	7.78E-04	116	12.8
Ni^{2+}	5.43E-03	229	25.4
Sr^{2+}	6.20E-06	0.391	4.32E-02
Mn^{4+}	2.86E-03	113	12.5
Ca^{2+}	2.87E-02	826	91.3
K^{+}	3.99E-02	1.12E+03	124
OH^{-}	4.84	5.92E+04	6.54E+03
$NO3^{-}$	3.40	1.51E+05	1.67E+04
$NO2^{-}$	1.59	5.26E+04	5.81E+03
$CO3^{2-}$	0.337	1.46E+04	1.61E+03
$PO4^{3-}$	0.180	1.23E+04	1.36E+03
$SO4^{2-}$	0.181	1.25E+04	1.38E+03
Si (as SiO_3^{2-})	5.26E-02	1.06E+03	117
F^{-}	5.04E-02	689	76.2
Cl^{-}	0.144	3.67E+03	405
$C_6H_5O_7^{3-}$	2.12E-02	2.89E+03	319
$EDTA^{4-}$	1.73E-02	3.59E+03	397
$HEDTA^{3-}$	3.13E-02	6.16E+03	681
$glycolate^{-}$	8.42E-02	4.55E+03	502
$acetate^{-}$	1.09E-02	462	51.0
$oxalate^{2-}$	1.59E-05	1.01	0.111
DBP	1.58E-02	1.83E+03	202
butanol	1.58E-02	841	92.9
NH_3	3.48E-02	425	47.0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	53.4 (µCi/L)		7.08E-02 (kg)
U	7.71E-03 (M)	1.32E+03 (µg/g)	146 (kg)
Cs	0.184 (Ci/L)	132 (µCi/g)	1.46E+04 (Ci)
Sr	7.65E-02 (Ci/L)	55.0 (µCi/g)	6.08E+03 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.
†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Double-Shell Tank 241-AN-106			
Total Inventory Estimate*			
Physical Properties			
Total Waste	1.10E+05 kg	(21.0 kgal)	
Heat Load	0.109 kW	(374 BTU/hr)	
Bulk Density†	1.39 (g/cc)		
Water wt%†	50.6		
TOC wt% C (wet)†	0.857		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	8.41	1.39E+05	1.54E+04
Al^{3+}	1.10	2.14E+04	2.36E+03
Fe^{3+} (total Fe)	6.33E-03	254	28.1
Cr^{3+}	4.18E-02	1.57E+03	173
Bi^{3+}	8.41E-04	126	14.0
La^{3+}	1.86E-05	1.86	0.205
Hg^{2+}	6.28E-06	0.906	0.100
Zr (as $ZrO(OH)_2$)	5.23E-04	34.3	3.79
Pb^{2+}	7.78E-04	116	12.8
Ni^{2+}	5.43E-03	229	25.4
Sr^{2+}	6.20E-06	0.391	4.32E-02
Mn^{4+}	2.86E-03	113	12.5
Ca^{2+}	2.87E-02	826	91.3
K^{+}	3.99E-02	1.12E+03	124
OH^{-}	4.84	5.92E+04	6.54E+03
$NO3^{-}$	3.40	1.51E+05	1.67E+04
$NO2^{-}$	1.59	5.26E+04	5.81E+03
$CO3^{2-}$	0.337	1.46E+04	1.61E+03
$PO4^{3-}$	0.180	1.23E+04	1.36E+03
$SO4^{2-}$	0.181	1.25E+04	1.38E+03
Si (as SiO_3^{2-})	5.26E-02	1.06E+03	117
F^{-}	5.04E-02	689	76.2
Cl^{-}	0.144	3.67E+03	405
$C_6H_5O_7^{3-}$	2.12E-02	2.89E+03	319
$EDTA^{4-}$	1.73E-02	3.59E+03	397
$HEDTA^{3-}$	3.13E-02	6.16E+03	681
$glycolate^{-}$	8.42E-02	4.55E+03	502
$acetate^{-}$	1.09E-02	462	51.0
$oxalate^{2-}$	1.59E-05	1.01	0.111
DBP	1.58E-02	1.83E+03	202
butanol	1.58E-02	841	92.9
NH_3	3.48E-02	425	47.0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		3.84E-02 (µCi/g)	7.08E-02 (kg)
U	7.71E-03 (M)	1.32E+03 (µg/g)	146 (kg)
Cs	0.184 (Ci/L)	132 (µCi/g)	1.46E+04 (Ci)
Sr	7.65E-02 (Ci/L)	55.0 (µCi/g)	6.08E+03 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).
†Volume average for density, mass average Water wt% and TOC wt% C.

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Double-Shell Tank 241-AN-107			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density	0 (g/cc)		
Void Fraction	0		
Water wt%	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0 (µCi/g)	0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Double-Shell Tank 241-AN-107			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	6.21E+06 kg	(1.06E+03 kgal)	
Heat Load	7.50 kW	(2.56E+04 BTU/hr)	
Bulk Density*	1.54 (g/cc)		
Water wt%†	39.0		
TOC wt% C (wet)	1.48		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	11.4	1.70E+05	1.06E+06
Al^{3+}	1.68	2.94E+04	1.82E+05
Fe^{3+} (total Fe)	5.71E-03	206	1.28E+03
Cr^{3+}	4.30E-02	1.45E+03	9.00E+03
Bi^{3+}	1.22E-03	166	1.03E+03
La^{3+}	1.22E-05	1.10	6.81
Hg^{2+}	1.02E-05	1.33	8.24
Zr (as $ZrO(OH)_2$)	5.85E-04	34.6	215
Pb^{2+}	1.47E-03	197	1.23E+03
Ni^{2+}	4.69E-03	178	1.11E+03
Sr^{2+}	4.06E-06	0.231	1.43
Mn^{4+}	4.94E-03	176	1.09E+03
Ca^{2+}	2.58E-02	670	4.16E+03
K^{+}	5.82E-02	1.47E+03	9.15E+03
OH^{-}	7.31	8.05E+04	5.00E+05
$NO3^{-}$	4.21	1.69E+05	1.05E+06
$NO2^{-}$	2.32	6.90E+04	4.29E+05
$CO3^{2-}$	0.542	2.11E+04	1.31E+05
$PO4^{3-}$	9.81E-02	6.03E+03	3.75E+04
$SO4^{2-}$	0.287	1.79E+04	1.11E+05
Si (as SiO_3^{2-})	6.91E-02	1.26E+03	7.82E+03
F^{-}	7.66E-02	943	5.86E+03
Cl^{-}	0.207	4.74E+03	2.95E+04
$C_6H_5O_7^{3-}$	3.43E-02	4.21E+03	2.61E+04
$EDTA^{4-}$	3.67E-02	6.85E+03	4.25E+04
$HEDTA^{3-}$	6.38E-02	1.13E+04	7.04E+04
$glycolate^{-}$	0.142	6.91E+03	4.29E+04
$acetate^{-}$	3.04E-02	1.16E+03	7.22E+03
$oxalate^{2-}$	1.04E-05	0.595	3.69
DBP	2.91E-02	3.03E+03	1.88E+04
butanol	2.91E-02	1.40E+03	8.67E+03
NH_3	3.20E-02	352	2.19E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	68.3 (µCi/L)		4.58 (kg)
U	9.29E-03 (M)	1.43E+03 (µg/g)	8.90E+03 (kg)
Cs	0.260 (Ci/L)	168 (µCi/g)	1.05E+06 (Ci)
Sr	9.63E-02 (Ci/L)	62.4 (µCi/g)	3.87E+05 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.
†Water wt% derived from the difference of density and total dissolved species.

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Double-Shell Tank 241-AN-107			
Total Inventory Estimate*			
Physical Properties			
Total Waste	6.21E+06 kg	(1.06E+03 kgal)	
Heat Load	7.50 kW	(2.56E+04 BTU/hr)	
Bulk Density†	1.54 (g/cc)		
Water wt%†	39.0		
TOC wt% C (wet)†	1.48		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	11.4	1.70E+05	1.06E+06
Al^{3+}	1.68	2.94E+04	1.82E+05
Fe^{3+} (total Fe)	5.71E-03	206	1.28E+03
Cr^{3+}	4.30E-02	1.45E+03	9.00E+03
Bi^{3+}	1.22E-03	166	1.03E+03
La^{3+}	1.22E-05	1.10	6.81
Hg^{2+}	1.02E-05	1.33	8.24
Zr (as $ZrO(OH)_2$)	5.85E-04	34.6	215
Pb^{2+}	1.47E-03	197	1.23E+03
Ni^{2+}	4.69E-03	178	1.11E+03
Sr^{2+}	4.06E-06	0.231	1.43
Mn^{4+}	4.94E-03	176	1.09E+03
Ca^{2+}	2.58E-02	670	4.16E+03
K^{+}	5.82E-02	1.47E+03	9.15E+03
OH^{-}	7.31	8.05E+04	5.00E+05
$NO3^{-}$	4.21	1.69E+05	1.05E+06
$NO2^{-}$	2.32	6.90E+04	4.29E+05
$CO3^{2-}$	0.542	2.11E+04	1.31E+05
$PO4^{3-}$	9.81E-02	6.03E+03	3.75E+04
$SO4^{2-}$	0.287	1.79E+04	1.11E+05
Si (as SiO_3^{2-})	6.91E-02	1.26E+03	7.82E+03
F^{-}	7.66E-02	943	5.86E+03
Cl^{-}	0.207	4.74E+03	2.95E+04
$C_6H_5O_7^{3-}$	3.43E-02	4.21E+03	2.61E+04
$EDTA^{4-}$	3.67E-02	6.85E+03	4.25E+04
$HEDTA^{3-}$	6.38E-02	1.13E+04	7.04E+04
$glycolate^{-}$	0.142	6.91E+03	4.29E+04
$acetate^{-}$	3.04E-02	1.16E+03	7.22E+03
$oxalate^{2-}$	1.04E-05	0.595	3.69
DBP	2.91E-02	3.03E+03	1.88E+04
butanol	2.91E-02	1.40E+03	8.67E+03
NH_3	3.20E-02	352	2.19E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		4.43E-02 (µCi/g)	4.58 (kg)
U	9.29E-03 (M)	1.43E+03 (µg/g)	8.90E+03 (kg)
Cs	0.260 (Ci/L)	168 (µCi/g)	1.05E+06 (Ci)
Sr	9.63E-02 (Ci/L)	62.4 (µCi/g)	3.87E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).
†Volume average for density, mass average Water wt% and TOC wt% C.

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Double-Shell Tank 241-AP-101			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density	0 (g/cc)		
Void Fraction	0		
Water wt%	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0 (µCi/g)	0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Double-Shell Tank 241-AP-101			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	4.15E+06 kg	(1.06E+03 kgal)	
Heat Load	0.434 kW	(1.48E+03 BTU/hr)	
Bulk Density*	1.03 (g/cc)		
Water wt%†	93.8		
TOC wt% C (wet)	8.92E-02		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0.755	1.68E+04	6.96E+04
Al^{3+}	8.14E-02	2.13E+03	8.82E+03
Fe^{3+} (total Fe)	2.64E-03	142	590
Cr^{3+}	2.67E-03	134	556
Bi^{3+}	3.86E-05	7.81	32.4
La^{3+}	1.11E-06	0.149	0.619
Hg^{2+}	9.62E-07	0.187	0.774
Zr (as $ZrO(OH)_2$)	2.22E-04	19.6	81.3
Pb^{2+}	4.32E-05	8.66	35.9
Ni^{2+}	5.52E-04	31.3	130
Sr^{2+}	3.70E-07	3.14E-02	0.130
Mn^{4+}	8.49E-04	45.1	187
Ca^{2+}	1.19E-02	460	1.91E+03
K^{+}	1.86E-02	705	2.92E+03
OH^{-}	0.382	6.29E+03	2.61E+04
$NO3^{-}$	0.390	2.34E+04	9.70E+04
$NO2^{-}$	7.43E-02	3.31E+03	1.37E+04
$CO3^{2-}$	4.75E-02	2.76E+03	1.14E+04
$PO4^{3-}$	1.20E-02	1.10E+03	4.58E+03
$SO4^{2-}$	1.10E-02	1.02E+03	4.25E+03
Si (as SiO_3^{2-})	4.21E-03	114	475
F^{-}	1.82E-02	335	1.39E+03
Cl^{-}	1.27E-02	435	1.81E+03
$C_6H_5O_7^{3-}$	1.82E-03	332	1.38E+03
$EDTA^{4-}$	7.28E-04	203	841
$HEDTA^{3-}$	1.29E-03	341	1.41E+03
$glycolate^{-}$	1.58E-02	1.14E+03	4.74E+03
$acetate^{-}$	5.44E-04	31.1	129
$oxalate^{2-}$	9.50E-07	8.09E-02	0.335
DBP	1.10E-03	171	708
butanol	1.10E-03	78.6	326
NH_3	0.100	1.65E+03	6.84E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	6.93 (µCi/L)		0.463 (kg)
U	8.35E-04 (M)	192 (µg/g)	798 (kg)
Cs	1.09E-02 (Ci/L)	10.6 (µCi/g)	4.39E+04 (Ci)
Sr	8.46E-03 (Ci/L)	8.18 (µCi/g)	3.39E+04 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.
†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Double-Shell Tank 241-AP-101			
Total Inventory Estimate*			
Physical Properties			
Total Waste	4.15E+06 kg	(1.06E+03 kgal)	
Heat Load	0.434 kW	(1.48E+03 BTU/hr)	
Bulk Density†	1.03 (g/cc)		
Water wt%†	93.8		
TOC wt% C (wet)†	8.92E-02		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0.755	1.68E+04	6.96E+04
Al^{3+}	8.14E-02	2.13E+03	8.82E+03
Fe^{3+} (total Fe)	2.64E-03	142	590
Cr^{3+}	2.67E-03	134	556
Bi^{3+}	3.86E-05	7.81	32.4
La^{3+}	1.11E-06	0.149	0.619
Hg^{2+}	9.62E-07	0.187	0.774
Zr (as $ZrO(OH)_2$)	2.22E-04	19.6	81.3
Pb^{2+}	4.32E-05	8.66	35.9
Ni^{2+}	5.52E-04	31.3	130
Sr^{2+}	3.70E-07	3.14E-02	0.130
Mn^{4+}	8.49E-04	45.1	187
Ca^{2+}	1.19E-02	460	1.91E+03
K^{+}	1.86E-02	705	2.92E+03
OH^{-}	0.382	6.29E+03	2.61E+04
$NO3^{-}$	0.390	2.34E+04	9.70E+04
$NO2^{-}$	7.43E-02	3.31E+03	1.37E+04
$CO3^{2-}$	4.75E-02	2.76E+03	1.14E+04
$PO4^{3-}$	1.20E-02	1.10E+03	4.58E+03
$SO4^{2-}$	1.10E-02	1.02E+03	4.25E+03
Si (as SiO_3^{2-})	4.21E-03	114	475
F^{-}	1.82E-02	335	1.39E+03
Cl^{-}	1.27E-02	435	1.81E+03
$C_6H_5O_7^{3-}$	1.82E-03	332	1.38E+03
$EDTA^{4-}$	7.28E-04	203	841
$HEDTA^{3-}$	1.29E-03	341	1.41E+03
$glycolate^{-}$	1.58E-02	1.14E+03	4.74E+03
$acetate^{-}$	5.44E-04	31.1	129
$oxalate^{2-}$	9.50E-07	8.09E-02	0.335
DBP	1.10E-03	171	708
butanol	1.10E-03	78.6	326
NH_3	0.100	1.65E+03	6.84E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		6.71E-03 (µCi/g)	0.463 (kg)
U	8.35E-04 (M)	192 (µg/g)	798 (kg)
Cs	1.09E-02 (Ci/L)	10.6 (µCi/g)	4.39E+04 (Ci)
Sr	8.46E-03 (Ci/L)	8.18 (µCi/g)	3.39E+04 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).
†Volume average for density, mass average Water wt% and TOC wt% C.

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Double-Shell Tank 241-AP-102			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density	0 (g/cc)		
Void Fraction	0		
Water wt%	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0 (µCi/g)	0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Double-Shell Tank 241-AP-102			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	5.33E+06 kg	(1.10E+03 kgal)	
Heat Load	4.06 kW	(1.39E+04 BTU/hr)	
Bulk Density*	1.28 (g/cc)		
Water wt%†	61.9		
TOC wt% C (wet)	0.659		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	5.96	1.07E+05	5.72E+05
Al^{3+}	0.776	1.64E+04	8.74E+04
Fe^{3+} (total Fe)	4.57E-03	200	1.07E+03
Cr^{3+}	2.99E-02	1.22E+03	6.49E+03
Bi^{3+}	5.93E-04	97.1	517
La^{3+}	1.31E-05	1.43	7.61
Hg^{2+}	4.43E-06	0.696	3.71
Zr (as $ZrO(OH)_2$)	3.69E-04	26.4	140
Pb^{2+}	5.49E-04	89.1	475
Ni^{2+}	3.92E-03	180	960
Sr^{2+}	4.37E-06	0.300	1.60
Mn^{4+}	2.02E-03	87.0	463
Ca^{2+}	2.07E-02	650	3.46E+03
K^{+}	2.82E-02	863	4.60E+03
OH^{-}	3.42	4.55E+04	2.43E+05
$NO3^{-}$	2.40	1.17E+05	6.22E+05
$NO2^{-}$	1.12	4.05E+04	2.16E+05
$CO3^{2-}$	0.238	1.12E+04	5.96E+04
$PO4^{3-}$	0.134	1.00E+04	5.33E+04
$SO4^{2-}$	0.128	9.61E+03	5.12E+04
Si (as SiO_3^{2-})	3.71E-02	817	4.35E+03
F^{-}	3.56E-02	530	2.82E+03
Cl^{-}	0.102	2.82E+03	1.50E+04
$C_6H_5O_7^{3-}$	1.50E-02	2.22E+03	1.18E+04
$EDTA^{4-}$	1.22E-02	2.76E+03	1.47E+04
$HEDTA^{3-}$	2.21E-02	4.74E+03	2.52E+04
$glycolate^{-}$	5.94E-02	3.49E+03	1.86E+04
$acetate^{-}$	7.67E-03	355	1.89E+03
$oxalate^{2-}$	1.12E-05	0.774	4.12
DBP	1.11E-02	1.40E+03	7.48E+03
butanol	1.11E-02	646	3.44E+03
NH_3	2.48E-02	330	1.76E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	37.7 (µCi/L)		2.62 (kg)
U	5.44E-03 (M)	1.01E+03 (µg/g)	5.41E+03 (kg)
Cs	0.130 (Ci/L)	102 (µCi/g)	5.42E+05 (Ci)
Sr	5.40E-02 (Ci/L)	42.3 (µCi/g)	2.25E+05 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.
†Water wt% derived from the difference of density and total dissolved species.

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Double-Shell Tank 241-AP-102			
Total Inventory Estimate*			
Physical Properties			
Total Waste	5.33E+06 kg	(1.10E+03 kgal)	
Heat Load	4.06 kW	(1.39E+04 BTU/hr)	
Bulk Density†	1.28 (g/cc)		
Water wt%†	61.9		
TOC wt% C (wet)†	0.659		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	5.96	1.07E+05	5.72E+05
Al^{3+}	0.776	1.64E+04	8.74E+04
Fe^{3+} (total Fe)	4.57E-03	200	1.07E+03
Cr^{3+}	2.99E-02	1.22E+03	6.49E+03
Bi^{3+}	5.93E-04	97.1	517
La^{3+}	1.31E-05	1.43	7.61
Hg^{2+}	4.43E-06	0.696	3.71
Zr (as $ZrO(OH)_2$)	3.69E-04	26.4	140
Pb^{2+}	5.49E-04	89.1	475
Ni^{2+}	3.92E-03	180	960
Sr^{2+}	4.37E-06	0.300	1.60
Mn^{4+}	2.02E-03	87.0	463
Ca^{2+}	2.07E-02	650	3.46E+03
K^{+}	2.82E-02	863	4.60E+03
OH^{-}	3.42	4.55E+04	2.43E+05
$NO3^{-}$	2.40	1.17E+05	6.22E+05
$NO2^{-}$	1.12	4.05E+04	2.16E+05
$CO3^{2-}$	0.238	1.12E+04	5.96E+04
$PO4^{3-}$	0.134	1.00E+04	5.33E+04
$SO4^{2-}$	0.128	9.61E+03	5.12E+04
Si (as SiO_3^{2-})	3.71E-02	817	4.35E+03
F^{-}	3.56E-02	530	2.82E+03
Cl^{-}	0.102	2.82E+03	1.50E+04
$C_6H_5O_7^{3-}$	1.50E-02	2.22E+03	1.18E+04
$EDTA^{4-}$	1.22E-02	2.76E+03	1.47E+04
$HEDTA^{3-}$	2.21E-02	4.74E+03	2.52E+04
$glycolate^{-}$	5.94E-02	3.49E+03	1.86E+04
$acetate^{-}$	7.67E-03	355	1.89E+03
$oxalate^{2-}$	1.12E-05	0.774	4.12
DBP	1.11E-02	1.40E+03	7.48E+03
butanol	1.11E-02	646	3.44E+03
NH_3	2.48E-02	330	1.76E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		2.95E-02 (µCi/g)	2.62 (kg)
U	5.44E-03 (M)	1.01E+03 (µg/g)	5.41E+03 (kg)
Cs	0.130 (Ci/L)	102 (µCi/g)	5.42E+05 (Ci)
Sr	5.40E-02 (Ci/L)	42.3 (µCi/g)	2.25E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).
†Volume average for density, mass average Water wt% and TOC wt% C.

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Double-Shell Tank 241-AP-103			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density	0 (g/cc)		
Void Fraction	0		
Water wt%	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0 (µCi/g)	0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Double-Shell Tank 241-AP-103			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	4.59E+06 kg	(1.13E+03 kgal)	
Heat Load	1.63 kW	(5.57E+03 BTU/hr)	
Bulk Density*	1.07 (g/cc)		
Water wt%†	88.2		
TOC wt% C (wet)	0.192		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	1.55	3.32E+04	1.52E+05
Al^{3+}	0.204	5.13E+03	2.35E+04
Fe^{3+} (total Fe)	1.41E-03	73.4	337
Cr^{3+}	2.68E-03	130	597
Bi^{3+}	8.85E-06	1.73	7.92
La^{3+}	1.95E-07	2.52E-02	0.116
Hg^{2+}	2.04E-07	3.82E-02	0.175
Zr (as $ZrO(OH)_2$)	4.61E-05	3.92	18.0
Pb^{2+}	9.89E-06	1.91	8.77
Ni^{2+}	1.13E-03	62.2	285
Sr^{2+}	6.49E-08	5.31E-03	2.43E-02
Mn^{4+}	1.97E-04	10.1	46.4
Ca^{2+}	6.34E-03	237	1.09E+03
K^{+}	9.53E-03	348	1.60E+03
OH^{-}	0.945	1.50E+04	6.88E+04
$NO3^{-}$	0.782	4.53E+04	2.08E+05
$NO2^{-}$	6.24E-02	2.68E+03	1.23E+04
$CO3^{2-}$	0.107	5.98E+03	2.74E+04
$PO4^{3-}$	5.93E-03	525	2.41E+03
$SO4^{2-}$	2.06E-02	1.84E+03	8.45E+03
Si (as SiO_3^{2-})	1.24E-02	324	1.49E+03
F^{-}	4.47E-03	79.3	364
Cl^{-}	3.06E-02	1.01E+03	4.63E+03
$C_6H_5O_7^{3-}$	5.12E-03	904	4.14E+03
$EDTA^{4-}$	1.77E-04	47.7	219
$HEDTA^{3-}$	3.15E-04	80.6	370
$glycolate^{-}$	6.63E-02	4.65E+03	2.13E+04
$acetate^{-}$	1.27E-04	6.99	32.1
$oxalate^{2-}$	1.66E-07	1.37E-02	6.27E-02
DBP	2.55E-04	38.3	176
butanol	2.55E-04	17.6	80.9
NH_3	1.32E-02	210	963
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	12.4 (µCi/L)		0.887 (kg)
U	1.53E-03 (M)	339 (µg/g)	1.56E+03 (kg)
Cs	6.21E-02 (Ci/L)	58.0 (µCi/g)	2.66E+05 (Ci)
Sr	1.34E-02 (Ci/L)	12.5 (µCi/g)	5.72E+04 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

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Double-Shell Tank 241-AP-103			
Total Inventory Estimate*			
Physical Properties			
Total Waste	4.59E+06 kg	(1.13E+03 kgal)	
Heat Load	1.63 kW	(5.57E+03 BTU/hr)	
Bulk Density†	1.07 (g/cc)		
Water wt%†	88.2		
TOC wt% C (wet)†	0.192		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	1.55	3.32E+04	1.52E+05
Al^{3+}	0.204	5.13E+03	2.35E+04
Fe^{3+} (total Fe)	1.41E-03	73.4	337
Cr^{3+}	2.68E-03	130	597
Bi^{3+}	8.85E-06	1.73	7.92
La^{3+}	1.95E-07	2.52E-02	0.116
Hg^{2+}	2.04E-07	3.82E-02	0.175
Zr (as $ZrO(OH)_2$)	4.61E-05	3.92	18.0
Pb^{2+}	9.89E-06	1.91	8.77
Ni^{2+}	1.13E-03	62.2	285
Sr^{2+}	6.49E-08	5.31E-03	2.43E-02
Mn^{4+}	1.97E-04	10.1	46.4
Ca^{2+}	6.34E-03	237	1.09E+03
K^{+}	9.53E-03	348	1.60E+03
OH^{-}	0.945	1.50E+04	6.88E+04
$NO3^{-}$	0.782	4.53E+04	2.08E+05
$NO2^{-}$	6.24E-02	2.68E+03	1.23E+04
$CO3^{2-}$	0.107	5.98E+03	2.74E+04
$PO4^{3-}$	5.93E-03	525	2.41E+03
$SO4^{2-}$	2.06E-02	1.84E+03	8.45E+03
Si (as SiO_3^{2-})	1.24E-02	324	1.49E+03
F^{-}	4.47E-03	79.3	364
Cl^{-}	3.06E-02	1.01E+03	4.63E+03
$C_6H_5O_7^{3-}$	5.12E-03	904	4.14E+03
$EDTA^{4-}$	1.77E-04	47.7	219
$HEDTA^{3-}$	3.15E-04	80.6	370
$glycolate^{-}$	6.63E-02	4.65E+03	2.13E+04
$acetate^{-}$	1.27E-04	6.99	32.1
$oxalate^{2-}$	1.66E-07	1.37E-02	6.27E-02
DBP	2.55E-04	38.3	176
butanol	2.55E-04	17.6	80.9
NH_3	1.32E-02	210	963
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.16E-02 (µCi/g)	0.887 (kg)
U	1.53E-03 (M)	339 (µg/g)	1.56E+03 (kg)
Cs	6.21E-02 (Ci/L)	58.0 (µCi/g)	2.66E+05 (Ci)
Sr	1.34E-02 (Ci/L)	12.5 (µCi/g)	5.72E+04 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Double-Shell Tank 241-AP-104			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density	0 (g/cc)		
Void Fraction	0		
Water wt%	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0 (µCi/g)	0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Double-Shell Tank 241-AP-104			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	6.95E+04 kg	(18.0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	1.02 (g/cc)		
Water wt%†	96.5		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0.550	1.24E+04	861
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	1.73E-03	94.7	6.58
Cr^{3+}	6.93E-03	353	24.6
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	1.56E-03	89.6	6.23
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	7.78E-03	306	21.2
K^{+}	5.98E-04	22.9	1.59
OH^{-}	4.47E-02	745	51.8
$NO3^{-}$	0.136	8.25E+03	574
$NO2^{-}$	1.21E-02	547	38.0
$CO3^{2-}$	1.70E-03	100	6.96
$PO4^{3-}$	0.130	1.21E+04	839
$SO4^{2-}$	3.47E-03	326	22.7
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	2.75E-03	95.5	6.64
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.
†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Double-Shell Tank 241-AP-104			
Total Inventory Estimate*			
Physical Properties			
Total Waste	6.95E+04 kg	(18.0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density†	1.02 (g/cc)		
Water wt%†	96.5		
TOC wt% C (wet)†	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0.550	1.24E+04	861
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	1.73E-03	94.7	6.58
Cr^{3+}	6.93E-03	353	24.6
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	1.56E-03	89.6	6.23
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	7.78E-03	306	21.2
K^{+}	5.98E-04	22.9	1.59
OH^{-}	4.47E-02	745	51.8
$NO3^{-}$	0.136	8.25E+03	574
$NO2^{-}$	1.21E-02	547	38.0
$CO3^{2-}$	1.70E-03	100	6.96
$PO4^{3-}$	0.130	1.21E+04	839
$SO4^{2-}$	3.47E-03	326	22.7
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	2.75E-03	95.5	6.64
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0 (µCi/g)	0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).
†Volume average for density, mass average Water wt% and TOC wt% C.

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Double-Shell Tank 241-AP-105			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density	0 (g/cc)		
Void Fraction	0		
Water wt%	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0 (µCi/g)	0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Double-Shell Tank 241-AP-105			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	4.43E+06 kg	(820 kgal)	
Heat Load	4.67 kW	(1.60E+04 BTU/hr)	
Bulk Density*	1.43 (g/cc)		
Water wt%†	45.0		
TOC wt% C (wet)	0.861		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	9.47	1.53E+05	6.76E+05
Al^{3+}	1.08	2.03E+04	9.00E+04
Fe^{3+} (total Fe)	1.23E-02	480	2.13E+03
Cr^{3+}	3.71E-02	1.35E+03	5.99E+03
Bi^{3+}	5.07E-04	74.3	329
La^{3+}	1.36E-05	1.33	5.88
Hg^{2+}	1.36E-05	1.91	8.48
Zr (as $ZrO(OH)_2$)	3.21E-03	205	909
Pb^{2+}	5.78E-04	84.0	372
Ni^{2+}	7.73E-03	318	1.41E+03
Sr^{2+}	4.54E-06	0.279	1.24
Mn^{4+}	1.26E-02	486	2.15E+03
Ca^{2+}	5.53E-02	1.55E+03	6.88E+03
K^{+}	0.266	7.30E+03	3.23E+04
OH^{-}	4.88	5.81E+04	2.57E+05
$NO3^{-}$	4.48	1.95E+05	8.63E+05
$NO2^{-}$	0.984	3.17E+04	1.40E+05
$CO3^{2-}$	0.649	2.73E+04	1.21E+05
$PO4^{3-}$	0.175	1.17E+04	5.16E+04
$SO4^{2-}$	0.146	9.84E+03	4.36E+04
Si (as SiO_3^{2-})	5.56E-02	1.09E+03	4.84E+03
F^{-}	0.263	3.50E+03	1.55E+04
Cl^{-}	0.159	3.94E+03	1.74E+04
$C_6H_5O_7^{3-}$	2.39E-02	3.17E+03	1.40E+04
$EDTA^{4-}$	9.60E-03	1.94E+03	8.58E+03
$HEDTA^{3-}$	1.69E-02	3.26E+03	1.44E+04
$glycolate^{-}$	0.208	1.10E+04	4.85E+04
$acetate^{-}$	7.17E-03	297	1.31E+03
$oxalate^{2-}$	1.17E-05	0.720	3.19
DBP	1.52E-02	1.72E+03	7.61E+03
butanol	1.52E-02	792	3.51E+03
NH_3	0.816	9.73E+03	4.31E+04
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	95.4 (µCi/L)		4.94 (kg)
U	1.14E-02 (M)	1.91E+03 (µg/g)	8.44E+03 (kg)
Cs	0.152 (Ci/L)	106 (µCi/g)	4.71E+05 (Ci)
Sr	0.118 (Ci/L)	82.7 (µCi/g)	3.66E+05 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.
†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Double-Shell Tank 241-AP-105			
Total Inventory Estimate*			
Physical Properties			
Total Waste	4.43E+06 kg	(820 kgal)	
Heat Load	4.67 kW	(1.60E+04 BTU/hr)	
Bulk Density†	1.43 (g/cc)		
Water wt%†	45.0		
TOC wt% C (wet)†	0.861		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	9.47	1.53E+05	6.76E+05
Al^{3+}	1.08	2.03E+04	9.00E+04
Fe^{3+} (total Fe)	1.23E-02	480	2.13E+03
Cr^{3+}	3.71E-02	1.35E+03	5.99E+03
Bi^{3+}	5.07E-04	74.3	329
La^{3+}	1.36E-05	1.33	5.88
Hg^{2+}	1.36E-05	1.91	8.48
Zr (as $ZrO(OH)_2$)	3.21E-03	205	909
Pb^{2+}	5.78E-04	84.0	372
Ni^{2+}	7.73E-03	318	1.41E+03
Sr^{2+}	4.54E-06	0.279	1.24
Mn^{4+}	1.26E-02	486	2.15E+03
Ca^{2+}	5.53E-02	1.55E+03	6.88E+03
K^{+}	0.266	7.30E+03	3.23E+04
OH^{-}	4.88	5.81E+04	2.57E+05
$NO3^{-}$	4.48	1.95E+05	8.63E+05
$NO2^{-}$	0.984	3.17E+04	1.40E+05
$CO3^{2-}$	0.649	2.73E+04	1.21E+05
$PO4^{3-}$	0.175	1.17E+04	5.16E+04
$SO4^{2-}$	0.146	9.84E+03	4.36E+04
Si (as SiO_3^{2-})	5.56E-02	1.09E+03	4.84E+03
F^{-}	0.263	3.50E+03	1.55E+04
Cl^{-}	0.159	3.94E+03	1.74E+04
$C_6H_5O_7^{3-}$	2.39E-02	3.17E+03	1.40E+04
$EDTA^{4-}$	9.60E-03	1.94E+03	8.58E+03
$HEDTA^{3-}$	1.69E-02	3.26E+03	1.44E+04
$glycolate^{-}$	0.208	1.10E+04	4.85E+04
$acetate^{-}$	7.17E-03	297	1.31E+03
$oxalate^{2-}$	1.17E-05	0.720	3.19
DBP	1.52E-02	1.72E+03	7.61E+03
butanol	1.52E-02	792	3.51E+03
NH_3	0.816	9.73E+03	4.31E+04
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		6.69E-02 (µCi/g)	4.94 (kg)
U	1.14E-02 (M)	1.91E+03 (µg/g)	8.44E+03 (kg)
Cs	0.152 (Ci/L)	106 (µCi/g)	4.71E+05 (Ci)
Sr	0.118 (Ci/L)	82.7 (µCi/g)	3.66E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).
†Volume average for density, mass average Water wt% and TOC wt% C.

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Double-Shell Tank 241-AP-106			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density	0 (g/cc)		
Void Fraction	0		
Water wt%	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0 (µCi/g)	0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Double-Shell Tank 241-AP-106			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	4.91E+06 kg	(1.13E+03 kgal)	
Heat Load	2.02 kW	(6.89E+03 BTU/hr)	
Bulk Density*	1.15 (g/cc)		
Water wt%†	76.2		
TOC wt% C (wet)	0.390		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	3.31	6.62E+04	3.25E+05
Al^{3+}	0.400	9.38E+03	4.60E+04
Fe^{3+} (total Fe)	3.90E-03	189	930
Cr^{3+}	1.05E-02	473	2.32E+03
Bi^{3+}	1.33E-04	24.2	119
La^{3+}	3.41E-06	0.411	2.02
Hg^{2+}	3.53E-06	0.616	3.02
Zr (as $ZrO(OH)_2$)	8.31E-04	65.9	323
Pb^{2+}	1.52E-04	27.3	134
Ni^{2+}	2.57E-03	131	643
Sr^{2+}	1.14E-06	8.65E-02	0.425
Mn^{4+}	3.34E-03	159	782
Ca^{2+}	1.76E-02	613	3.01E+03
K^{+}	7.23E-02	2.46E+03	1.21E+04
OH^{-}	1.81	2.67E+04	1.31E+05
$NO3^{-}$	1.59	8.58E+04	4.21E+05
$NO2^{-}$	0.282	1.13E+04	5.53E+04
$CO3^{2-}$	0.233	1.21E+04	5.95E+04
$PO4^{3-}$	4.84E-02	3.99E+03	1.96E+04
$SO4^{2-}$	4.86E-02	4.05E+03	1.99E+04
Si (as SiO_3^{2-})	2.20E-02	536	2.63E+03
F^{-}	6.81E-02	1.13E+03	5.52E+03
Cl^{-}	5.75E-02	1.77E+03	8.69E+03
$C_6H_5O_7^{3-}$	9.51E-03	1.56E+03	7.67E+03
$EDTA^{4-}$	2.53E-03	632	3.10E+03
$HEDTA^{3-}$	4.46E-03	1.06E+03	5.22E+03
$glycolate^{-}$	9.78E-02	6.37E+03	3.13E+04
$acetate^{-}$	1.88E-03	96.4	473
$oxalate^{2-}$	2.92E-06	0.223	1.09
DBP	4.01E-03	561	2.75E+03
butanol	4.01E-03	258	1.27E+03
NH_3	0.213	3.15E+03	1.55E+04
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	32.0 (µCi/L)		2.28 (kg)
U	3.86E-03 (M)	798 (µg/g)	3.92E+03 (kg)
Cs	4.58E-02 (Ci/L)	39.8 (µCi/g)	1.95E+05 (Ci)
Sr	3.84E-02 (Ci/L)	33.4 (µCi/g)	1.64E+05 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.
†Water wt% derived from the difference of density and total dissolved species.

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Double-Shell Tank 241-AP-106			
Total Inventory Estimate*			
Physical Properties			
Total Waste	4.91E+06 kg	(1.13E+03 kgal)	
Heat Load	2.02 kW	(6.89E+03 BTU/hr)	
Bulk Density†	1.15 (g/cc)		
Water wt%†	76.2		
TOC wt% C (wet)†	0.390		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	3.31	6.62E+04	3.25E+05
Al^{3+}	0.400	9.38E+03	4.60E+04
Fe^{3+} (total Fe)	3.90E-03	189	930
Cr^{3+}	1.05E-02	473	2.32E+03
Bi^{3+}	1.33E-04	24.2	119
La^{3+}	3.41E-06	0.411	2.02
Hg^{2+}	3.53E-06	0.616	3.02
Zr (as $ZrO(OH)_2$)	8.31E-04	65.9	323
Pb^{2+}	1.52E-04	27.3	134
Ni^{2+}	2.57E-03	131	643
Sr^{2+}	1.14E-06	8.65E-02	0.425
Mn^{4+}	3.34E-03	159	782
Ca^{2+}	1.76E-02	613	3.01E+03
K^{+}	7.23E-02	2.46E+03	1.21E+04
OH^{-}	1.81	2.67E+04	1.31E+05
$NO3^{-}$	1.59	8.58E+04	4.21E+05
$NO2^{-}$	0.282	1.13E+04	5.53E+04
$CO3^{2-}$	0.233	1.21E+04	5.95E+04
$PO4^{3-}$	4.84E-02	3.99E+03	1.96E+04
$SO4^{2-}$	4.86E-02	4.05E+03	1.99E+04
Si (as SiO_3^{2-})	2.20E-02	536	2.63E+03
F^{-}	6.81E-02	1.13E+03	5.52E+03
Cl^{-}	5.75E-02	1.77E+03	8.69E+03
$C_6H_5O_7^{3-}$	9.51E-03	1.56E+03	7.67E+03
$EDTA^{4-}$	2.53E-03	632	3.10E+03
$HEDTA^{3-}$	4.46E-03	1.06E+03	5.22E+03
$glycolate^{-}$	9.78E-02	6.37E+03	3.13E+04
$acetate^{-}$	1.88E-03	96.4	473
$oxalate^{2-}$	2.92E-06	0.223	1.09
DBP	4.01E-03	561	2.75E+03
butanol	4.01E-03	258	1.27E+03
NH_3	0.213	3.15E+03	1.55E+04
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		2.78E-02 (µCi/g)	2.28 (kg)
U	3.86E-03 (M)	798 (µg/g)	3.92E+03 (kg)
Cs	4.58E-02 (Ci/L)	39.8 (µCi/g)	1.95E+05 (Ci)
Sr	3.84E-02 (Ci/L)	33.4 (µCi/g)	1.64E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).
†Volume average for density, mass average Water wt% and TOC wt% C.

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Double-Shell Tank 241-AP-107			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density	0 (g/cc)		
Void Fraction	0		
Water wt%	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0 (µCi/g)	0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Double-Shell Tank 241-AP-107			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	4.21E+06 kg	(1.11E+03 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density*	1.00 (g/cc)		
Water wt%†	99.4		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	6.03E-02	1.38E+03	5.82E+03
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	2.01E-03	112	472
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	9.05E-03	362	1.52E+03
K^{+}	2.01E-04	7.85	33.0
OH^{-}	1.61E-02	273	1.15E+03
$NO3^{-}$	6.66E-02	4.12E+03	1.73E+04
$NO2^{-}$	0	0	0
$CO3^{2-}$	4.92E-04	29.4	124
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	9.25E-04	32.7	138
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	5.03E-02	853	3.59E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	0 (µCi/L)		0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.
†Water wt% derived from the difference of density and total dissolved species.

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Double-Shell Tank 241-AP-107			
Total Inventory Estimate*			
Physical Properties			
Total Waste	4.21E+06 kg	(1.11E+03 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density†	1.00 (g/cc)		
Water wt%†	99.4		
TOC wt% C (wet)†	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	6.03E-02	1.38E+03	5.82E+03
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	2.01E-03	112	472
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	9.05E-03	362	1.52E+03
K^{+}	2.01E-04	7.85	33.0
OH^{-}	1.61E-02	273	1.15E+03
$NO3^{-}$	6.66E-02	4.12E+03	1.73E+04
$NO2^{-}$	0	0	0
$CO3^{2-}$	4.92E-04	29.4	124
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	9.25E-04	32.7	138
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	5.03E-02	853	3.59E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0 (µCi/g)	0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).
†Volume average for density, mass average Water wt% and TOC wt% C.

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Double-Shell Tank 241-AP-108			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density	0 (g/cc)		
Void Fraction	0		
Water wt%	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0 (µCi/g)	0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Double-Shell Tank 241-AP-108			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	4.59E+06 kg	(1.13E+03 kgal)	
Heat Load	1.21 kW	(4.14E+03 BTU/hr)	
Bulk Density*	1.07 (g/cc)		
Water wt%†	88.3		
TOC wt% C (wet)	0.228		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	1.53	3.29E+04	1.51E+05
Al^{3+}	0.219	5.51E+03	2.53E+04
Fe^{3+} (total Fe)	1.39E-03	72.4	332
Cr^{3+}	1.45E-03	70.4	323
Bi^{3+}	1.57E-06	0.306	1.40
La^{3+}	3.36E-08	4.35E-03	2.00E-02
Hg^{2+}	2.81E-08	5.26E-03	2.41E-02
Zr (as $ZrO(OH)_2$)	5.72E-06	0.487	2.23
Pb^{2+}	5.25E-06	1.01	4.66
Ni^{2+}	1.04E-03	57.2	262
Sr^{2+}	1.12E-08	9.15E-04	4.20E-03
Mn^{4+}	5.15E-04	26.4	121
Ca^{2+}	6.25E-03	234	1.07E+03
K^{+}	6.82E-03	249	1.14E+03
OH^{-}	0.983	1.56E+04	7.15E+04
$NO3^{-}$	0.729	4.22E+04	1.94E+05
$NO2^{-}$	5.03E-02	2.16E+03	9.91E+03
$CO3^{2-}$	0.121	6.75E+03	3.10E+04
$PO4^{3-}$	1.01E-02	893	4.10E+03
$SO4^{2-}$	2.06E-02	1.85E+03	8.48E+03
Si (as SiO_3^{2-})	1.43E-02	374	1.72E+03
F^{-}	8.64E-04	15.3	70.3
Cl^{-}	2.75E-02	910	4.17E+03
$C_6H_5O_7^{3-}$	6.12E-03	1.08E+03	4.95E+03
$EDTA^{4-}$	3.51E-05	9.43	43.3
$HEDTA^{3-}$	6.28E-05	16.1	73.7
$glycolate^{-}$	8.12E-02	5.68E+03	2.61E+04
$acetate^{-}$	2.36E-05	1.30	5.96
$oxalate^{2-}$	2.87E-08	2.36E-03	1.08E-02
DBP	3.19E-04	47.9	220
butanol	3.19E-04	22.1	101
NH_3	6.60E-03	105	480
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	13.3 (µCi/L)		0.946 (kg)
U	1.73E-03 (M)	383 (µg/g)	1.76E+03 (kg)
Cs	3.67E-02 (Ci/L)	34.2 (µCi/g)	1.57E+05 (Ci)
Sr	1.65E-02 (Ci/L)	15.4 (µCi/g)	7.07E+04 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

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Double-Shell Tank 241-AP-108			
Total Inventory Estimate*			
Physical Properties			
Total Waste	4.59E+06 kg	(1.13E+03 kgal)	
Heat Load	1.21 kW	(4.14E+03 BTU/hr)	
Bulk Density†	1.07 (g/cc)		
Water wt%†	88.3		
TOC wt% C (wet)†	0.228		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	1.53	3.29E+04	1.51E+05
Al^{3+}	0.219	5.51E+03	2.53E+04
Fe^{3+} (total Fe)	1.39E-03	72.4	332
Cr^{3+}	1.45E-03	70.4	323
Bi^{3+}	1.57E-06	0.306	1.40
La^{3+}	3.36E-08	4.35E-03	2.00E-02
Hg^{2+}	2.81E-08	5.26E-03	2.41E-02
Zr (as $ZrO(OH)_2$)	5.72E-06	0.487	2.23
Pb^{2+}	5.25E-06	1.01	4.66
Ni^{2+}	1.04E-03	57.2	262
Sr^{2+}	1.12E-08	9.15E-04	4.20E-03
Mn^{4+}	5.15E-04	26.4	121
Ca^{2+}	6.25E-03	234	1.07E+03
K^{+}	6.82E-03	249	1.14E+03
OH^{-}	0.983	1.56E+04	7.15E+04
$NO3^{-}$	0.729	4.22E+04	1.94E+05
$NO2^{-}$	5.03E-02	2.16E+03	9.91E+03
$CO3^{2-}$	0.121	6.75E+03	3.10E+04
$PO4^{3-}$	1.01E-02	893	4.10E+03
$SO4^{2-}$	2.06E-02	1.85E+03	8.48E+03
Si (as SiO_3^{2-})	1.43E-02	374	1.72E+03
F^{-}	8.64E-04	15.3	70.3
Cl^{-}	2.75E-02	910	4.17E+03
$C_6H_5O_7^{3-}$	6.12E-03	1.08E+03	4.95E+03
$EDTA^{4-}$	3.51E-05	9.43	43.3
$HEDTA^{3-}$	6.28E-05	16.1	73.7
$glycolate^{-}$	8.12E-02	5.68E+03	2.61E+04
$acetate^{-}$	2.36E-05	1.30	5.96
$oxalate^{2-}$	2.87E-08	2.36E-03	1.08E-02
DBP	3.19E-04	47.9	220
butanol	3.19E-04	22.1	101
NH_3	6.60E-03	105	480
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		1.24E-02 (µCi/g)	0.946 (kg)
U	1.73E-03 (M)	383 (µg/g)	1.76E+03 (kg)
Cs	3.67E-02 (Ci/L)	34.2 (µCi/g)	1.57E+05 (Ci)
Sr	1.65E-02 (Ci/L)	15.4 (µCi/g)	7.07E+04 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

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Double-Shell Tank 241-AW-101			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	2.73E+05 kg	(61.0 kgal)	
Heat Load	6.49E-02 kW	(222 BTU/hr)	
Bulk Density	1.18 (g/cc)		
Void Fraction	0.888		
Water wt%	74.6		
TOC wt% C (wet)	3.69E-02		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0.570	1.11E+04	3.03E+03
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	1.90	8.98E+04	2.45E+04
Cr^{3+}	7.12E-03	313	85.5
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	3.87E-05	6.78	1.85
Ni^{2+}	0.112	5.55E+03	1.52E+03
Sr^{2+}	0	0	0
Mn^{4+}	5.34E-03	248	67.7
Ca^{2+}	0.460	1.56E+04	4.25E+03
K^{+}	6.10E-03	202	55.0
OH^{-}	5.94	8.53E+04	2.33E+04
$NO3^{-}$	0.218	1.14E+04	3.11E+03
$NO2^{-}$	2.00E-02	779	213
$CO3^{2-}$	0.551	2.79E+04	7.63E+03
$PO4^{3-}$	6.19E-02	4.97E+03	1.36E+03
$SO4^{2-}$	3.60E-03	292	79.8
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	3.48E-03	104	28.5
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	3.03E-03	682	186
butanol	3.03E-03	190	51.9
NH_3	1.26E-05	0.180	4.93E-02
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		4.03E-03 (µCi/g)	1.84E-02 (kg)
U	4.11E-04 (M)	82.8 (µg/g)	22.6 (kg)
Cs	2.67E-02 (Ci/L)	22.6 (µCi/g)	6.16E+03 (Ci)
Sr	2.31E-02 (Ci/L)	19.6 (µCi/g)	5.34E+03 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Double-Shell Tank 241-AW-101			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	6.80E+06 kg	(1.08E+03 kgal)	
Heat Load	9.77 kW	(3.34E+04 BTU/hr)	
Bulk Density*	1.67 (g/cc)		
Water wt%†	27.5		
TOC wt% C (wet)	1.14		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	14.6	2.02E+05	1.37E+06
Al^{3+}	1.77	2.86E+04	1.95E+05
Fe^{3+} (total Fe)	1.44E-02	482	3.28E+03
Cr^{3+}	6.24E-02	1.95E+03	1.32E+04
Bi^{3+}	1.15E-03	144	980
La^{3+}	1.64E-05	1.37	9.31
Hg^{2+}	1.96E-05	2.36	16.0
Zr (as $ZrO(OH)_2$)	3.82E-03	209	1.42E+03
Pb^{2+}	1.27E-03	157	1.07E+03
Ni^{2+}	1.07E-02	377	2.56E+03
Sr^{2+}	5.47E-06	0.288	1.96
Mn^{4+}	1.60E-02	526	3.58E+03
Ca^{2+}	6.49E-02	1.56E+03	1.06E+04
K^{+}	0.311	7.30E+03	4.96E+04
OH^{-}	7.90	8.06E+04	5.48E+05
$NO3^{-}$	6.62	2.46E+05	1.67E+06
$NO2^{-}$	2.03	5.59E+04	3.80E+05
$CO3^{2-}$	0.871	3.13E+04	2.13E+05
$PO4^{3-}$	0.240	1.37E+04	9.31E+04
$SO4^{2-}$	0.262	1.51E+04	1.03E+05
Si (as SiO_3^{2-})	8.19E-02	1.38E+03	9.39E+03
F^{-}	0.321	3.66E+03	2.49E+04
Cl^{-}	0.251	5.34E+03	3.63E+04
$C_6H_5O_7^{3-}$	3.50E-02	3.97E+03	2.70E+04
$EDTA^{4-}$	2.08E-02	3.60E+03	2.45E+04
$HEDTA^{3-}$	3.62E-02	5.95E+03	4.04E+04
$glycolate^{-}$	0.223	1.00E+04	6.83E+04
$acetate^{-}$	1.76E-02	622	4.23E+03
$oxalate^{2-}$	1.41E-05	0.742	5.05
DBP	2.74E-02	2.65E+03	1.80E+04
butanol	2.74E-02	1.22E+03	8.29E+03
NH_3	0.861	8.78E+03	5.97E+04
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	130 (µCi/L)		8.87 (kg)
U	1.61E-02 (M)	2.30E+03 (µg/g)	1.56E+04 (kg)
Cs	0.276 (Ci/L)	165 (µCi/g)	1.12E+06 (Ci)
Sr	0.164 (Ci/L)	98.4 (µCi/g)	6.69E+05 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Double-Shell Tank 241-AW-101			
Total Inventory Estimate*			
Physical Properties			
Total Waste	7.08E+06 kg	(1.14E+03 kgal)	
Heat Load	9.84 kW	(3.36E+04 BTU/hr)	
Bulk Density†	1.64 (g/cc)		
Water wt%†	30.0		
TOC wt% C (wet)†	1.09		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	13.9	1.94E+05	1.37E+06
Al^{3+}	1.67	2.75E+04	1.95E+05
Fe^{3+} (total Fe)	0.115	3.93E+03	2.78E+04
Cr^{3+}	5.95E-02	1.88E+03	1.33E+04
Bi^{3+}	1.09E-03	139	980
La^{3+}	1.55E-05	1.32	9.31
Hg^{2+}	1.85E-05	2.27	16.0
Zr (as $ZrO(OH)_2$)	3.62E-03	201	1.42E+03
Pb^{2+}	1.20E-03	152	1.07E+03
Ni^{2+}	1.61E-02	577	4.08E+03
Sr^{2+}	5.18E-06	0.277	1.96
Mn^{4+}	1.54E-02	515	3.65E+03
Ca^{2+}	8.60E-02	2.10E+03	1.49E+04
K^{+}	0.295	7.02E+03	4.97E+04
OH^{-}	7.80	8.08E+04	5.71E+05
$NO3^{-}$	6.28	2.37E+05	1.68E+06
$NO2^{-}$	1.92	5.37E+04	3.80E+05
$CO3^{2-}$	0.854	3.12E+04	2.21E+05
$PO4^{3-}$	0.231	1.34E+04	9.45E+04
$SO4^{2-}$	0.248	1.45E+04	1.03E+05
Si (as SiO_3^{2-})	7.75E-02	1.33E+03	9.39E+03
F^{-}	0.304	3.52E+03	2.49E+04
Cl^{-}	0.238	5.13E+03	3.63E+04
$C_6H_5O_7^{3-}$	3.31E-02	3.81E+03	2.70E+04
$EDTA^{4-}$	1.97E-02	3.46E+03	2.45E+04
$HEDTA^{3-}$	3.42E-02	5.72E+03	4.04E+04
$glycolate^{-}$	0.211	9.66E+03	6.83E+04
$acetate^{-}$	1.66E-02	598	4.23E+03
$oxalate^{2-}$	1.33E-05	0.713	5.05
DBP	2.61E-02	2.57E+03	1.82E+04
butanol	2.61E-02	1.18E+03	8.34E+03
NH_3	0.815	8.44E+03	5.97E+04
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		7.54E-02 (µCi/g)	8.89 (kg)
U	1.52E-02 (M)	2.21E+03 (µg/g)	1.56E+04 (kg)
Cs	0.262 (Ci/L)	160 (µCi/g)	1.13E+06 (Ci)
Sr	0.156 (Ci/L)	95.3 (µCi/g)	6.75E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

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Double-Shell Tank 241-AW-102			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density	0 (g/cc)		
Void Fraction	0		
Water wt%	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0 (µCi/g)	0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Double-Shell Tank 241-AW-102			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	4.65E+06 kg	(979 kgal)	
Heat Load	3.47 kW	(1.18E+04 BTU/hr)	
Bulk Density*	1.25 (g/cc)		
Water wt%†	62.7		
TOC wt% C (wet)	0.573		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	5.65	1.04E+05	4.82E+05
Al^{3+}	0.638	1.37E+04	6.38E+04
Fe^{3+} (total Fe)	7.30E-03	325	1.51E+03
Cr^{3+}	2.34E-02	968	4.50E+03
Bi^{3+}	3.49E-04	58.1	270
La^{3+}	8.46E-06	0.937	4.36
Hg^{2+}	7.99E-06	1.28	5.94
Zr (as $ZrO(OH)_2$)	1.88E-03	136	634
Pb^{2+}	3.47E-04	57.3	266
Ni^{2+}	4.69E-03	220	1.02E+03
Sr^{2+}	2.82E-06	0.197	0.916
Mn^{4+}	7.90E-03	346	1.61E+03
Ca^{2+}	3.29E-02	1.05E+03	4.89E+03
K^{+}	0.153	4.78E+03	2.22E+04
OH^{-}	2.89	3.91E+04	1.82E+05
$NO3^{-}$	2.66	1.31E+05	6.10E+05
$NO2^{-}$	0.617	2.26E+04	1.05E+05
$CO3^{2-}$	0.385	1.84E+04	8.55E+04
$PO4^{3-}$	0.110	8.33E+03	3.87E+04
$SO4^{2-}$	8.82E-02	6.75E+03	3.14E+04
Si (as SiO_3^{2-})	3.33E-02	745	3.46E+03
F^{-}	0.153	2.32E+03	1.08E+04
Cl^{-}	9.37E-02	2.65E+03	1.23E+04
$C_6H_5O_7^{3-}$	1.40E-02	2.11E+03	9.78E+03
$EDTA^{4-}$	5.76E-03	1.32E+03	6.15E+03
$HEDTA^{3-}$	1.03E-02	2.24E+03	1.04E+04
$glycolate^{-}$	0.117	7.02E+03	3.26E+04
$acetate^{-}$	4.02E-03	189	879
$oxalate^{2-}$	7.24E-06	0.508	2.36
DBP	9.34E-03	1.20E+03	5.57E+03
butanol	9.34E-03	552	2.57E+03
NH_3	0.466	6.31E+03	2.93E+04
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	56.3 (µCi/L)		3.47 (kg)
U	6.80E-03 (M)	1.29E+03 (µg/g)	5.99E+03 (kg)
Cs	9.57E-02 (Ci/L)	76.3 (µCi/g)	3.55E+05 (Ci)
Sr	7.24E-02 (Ci/L)	57.7 (µCi/g)	2.68E+05 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.
†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Double-Shell Tank 241-AW-102			
Total Inventory Estimate*			
Physical Properties			
Total Waste	4.65E+06 kg	(979 kgal)	
Heat Load	3.47 kW	(1.18E+04 BTU/hr)	
Bulk Density†	1.25 (g/cc)		
Water wt%†	62.7		
TOC wt% C (wet)†	0.573		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	5.65	1.04E+05	4.82E+05
Al^{3+}	0.638	1.37E+04	6.38E+04
Fe^{3+} (total Fe)	7.30E-03	325	1.51E+03
Cr^{3+}	2.34E-02	968	4.50E+03
Bi^{3+}	3.49E-04	58.1	270
La^{3+}	8.46E-06	0.937	4.36
Hg^{2+}	7.99E-06	1.28	5.94
Zr (as $ZrO(OH)_2$)	1.88E-03	136	634
Pb^{2+}	3.47E-04	57.3	266
Ni^{2+}	4.69E-03	220	1.02E+03
Sr^{2+}	2.82E-06	0.197	0.916
Mn^{4+}	7.90E-03	346	1.61E+03
Ca^{2+}	3.29E-02	1.05E+03	4.89E+03
K^{+}	0.153	4.78E+03	2.22E+04
OH^{-}	2.89	3.91E+04	1.82E+05
$NO3^{-}$	2.66	1.31E+05	6.10E+05
$NO2^{-}$	0.617	2.26E+04	1.05E+05
$CO3^{2-}$	0.385	1.84E+04	8.55E+04
$PO4^{3-}$	0.110	8.33E+03	3.87E+04
$SO4^{2-}$	8.82E-02	6.75E+03	3.14E+04
Si (as SiO_3^{2-})	3.33E-02	745	3.46E+03
F^{-}	0.153	2.32E+03	1.08E+04
Cl^{-}	9.37E-02	2.65E+03	1.23E+04
$C_6H_5O_7^{3-}$	1.40E-02	2.11E+03	9.78E+03
$EDTA^{4-}$	5.76E-03	1.32E+03	6.15E+03
$HEDTA^{3-}$	1.03E-02	2.24E+03	1.04E+04
$glycolate^{-}$	0.117	7.02E+03	3.26E+04
$acetate^{-}$	4.02E-03	189	879
$oxalate^{2-}$	7.24E-06	0.508	2.36
DBP	9.34E-03	1.20E+03	5.57E+03
butanol	9.34E-03	552	2.57E+03
NH_3	0.466	6.31E+03	2.93E+04
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		4.49E-02 (µCi/g)	3.47 (kg)
U	6.80E-03 (M)	1.29E+03 (µg/g)	5.99E+03 (kg)
Cs	9.57E-02 (Ci/L)	76.3 (µCi/g)	3.55E+05 (Ci)
Sr	7.24E-02 (Ci/L)	57.7 (µCi/g)	2.68E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).
†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Double-Shell Tank 241-AW-103			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	1.75E+06 kg	(363 kgal)	
Heat Load	2.74E-02 kW	(93.4 BTU/hr)	
Bulk Density	1.28 (g/cc)		
Void Fraction	0.850		
Water wt%	64.5		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	5.50	9.91E+04	1.74E+05
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0.364	1.59E+04	2.79E+04
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	2.10E-03	330	578
Zr (as $ZrO(OH)_2$)	0.927	6.62E+04	1.16E+05
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	9.49E-02	2.98E+03	5.23E+03
K^{+}	0.191	5.85E+03	1.03E+04
OH^{-}	4.88	6.50E+04	1.14E+05
$NO3^{-}$	0.334	1.62E+04	2.84E+04
$NO2^{-}$	7.26E-03	262	459
$CO3^{2-}$	9.49E-02	4.46E+03	7.82E+03
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	5.29	7.87E+04	1.38E+05
Cl^{-}	3.97E-03	110	193
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0.655	8.72E+03	1.53E+04
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0.606 (µCi/g)	17.7 (kg)
U	2.70E-03 (M)	504 (µg/g)	883 (kg)
Cs	1.91E-03 (Ci/L)	1.50 (µCi/g)	2.63E+03 (Ci)
Sr	1.63E-03 (Ci/L)	1.27 (µCi/g)	2.24E+03 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Double-Shell Tank 241-AW-103			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	1.09E+06 kg	(283 kgal)	
Heat Load	3.34E-02 kW	(114 BTU/hr)	
Bulk Density*	1.01 (g/cc)		
Water wt%†	95.6		
TOC wt% C (wet)	3.08E-03		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0.417	9.44E+03	1.03E+04
Al^{3+}	1.52E-03	40.4	43.9
Fe^{3+} (total Fe)	1.64E-03	90.1	98.0
Cr^{3+}	3.28E-04	16.8	18.3
Bi^{3+}	9.93E-07	0.205	0.222
La^{3+}	8.42E-09	1.15E-03	1.25E-03
Hg^{2+}	7.80E-06	1.54	1.68
Zr (as $ZrO(OH)_2$)	2.34E-03	210	228
Pb^{2+}	2.73E-06	0.558	0.607
Ni^{2+}	7.14E-05	4.13	4.49
Sr^{2+}	2.81E-09	2.42E-04	2.63E-04
Mn^{4+}	2.22E-04	12.0	13.1
Ca^{2+}	7.37E-03	291	317
K^{+}	0.175	6.75E+03	7.34E+03
OH^{-}	9.11E-02	1.53E+03	1.66E+03
$NO3^{-}$	0.320	1.95E+04	2.12E+04
$NO2^{-}$	8.37E-03	379	412
$CO3^{2-}$	1.16E-02	686	745
$PO4^{3-}$	2.62E-03	245	267
$SO4^{2-}$	3.53E-04	33.4	36.3
Si (as SiO_3^{2-})	7.01E-05	1.94	2.11
F^{-}	0.187	3.50E+03	3.81E+03
Cl^{-}	3.97E-03	139	151
$C_6H_5O_7^{3-}$	2.99E-05	5.56	6.05
$EDTA^{4-}$	1.20E-05	3.42	3.72
$HEDTA^{3-}$	1.94E-05	5.23	5.68
$glycolate^{-}$	1.92E-04	14.2	15.4
$acetate^{-}$	1.51E-05	0.878	0.954
$oxalate^{2-}$	7.20E-09	6.25E-04	6.79E-04
DBP	1.41E-04	22.4	24.4
butanol	1.41E-04	10.3	11.2
NH_3	0.609	1.02E+04	1.11E+04
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	23.6 (µCi/L)		0.422 (kg)
U	2.50E-03 (M)	587 (µg/g)	638 (kg)
Cs	3.01E-03 (Ci/L)	2.97 (µCi/g)	3.23E+03 (Ci)
Sr	2.53E-03 (Ci/L)	2.50 (µCi/g)	2.71E+03 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.
†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Double-Shell Tank 241-AW-103			
Total Inventory Estimate*			
Physical Properties			
Total Waste	2.84E+06 kg	(646 kgal)	
Heat Load	6.08E-02 kW	(207 BTU/hr)	
Bulk Density†	1.16 (g/cc)		
Water wt%†	78.1		
TOC wt% C (wet)†	1.35E-03		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	3.27	6.48E+04	1.84E+05
Al^{3+}	6.66E-04	15.5	43.9
Fe^{3+} (total Fe)	0.205	9.86E+03	2.80E+04
Cr^{3+}	1.44E-04	6.44	18.3
Bi^{3+}	4.35E-07	7.83E-02	0.222
La^{3+}	3.69E-09	4.41E-04	1.25E-03
Hg^{2+}	1.18E-03	204	580
Zr (as $ZrO(OH)_2$)	0.522	4.10E+04	1.16E+05
Pb^{2+}	1.20E-06	0.214	0.607
Ni^{2+}	3.13E-05	1.58	4.49
Sr^{2+}	1.23E-09	9.27E-05	2.63E-04
Mn^{4+}	9.74E-05	4.61	13.1
Ca^{2+}	5.65E-02	1.95E+03	5.54E+03
K^{+}	0.184	6.19E+03	1.76E+04
OH^{-}	2.78	4.07E+04	1.16E+05
$NO3^{-}$	0.328	1.75E+04	4.97E+04
$NO2^{-}$	7.75E-03	307	871
$CO3^{2-}$	5.84E-02	3.02E+03	8.57E+03
$PO4^{3-}$	1.15E-03	93.9	267
$SO4^{2-}$	1.55E-04	12.8	36.3
Si (as SiO_3^{2-})	3.07E-05	0.743	2.11
F^{-}	3.05	4.99E+04	1.42E+05
Cl^{-}	3.97E-03	121	344
$C_6H_5O_7^{3-}$	1.31E-05	2.13	6.05
$EDTA^{4-}$	5.28E-06	1.31	3.72
$HEDTA^{3-}$	8.48E-06	2.00	5.68
$glycolate^{-}$	8.41E-05	5.43	15.4
$acetate^{-}$	6.61E-06	0.336	0.954
$oxalate^{2-}$	3.16E-09	2.39E-04	6.79E-04
DBP	6.19E-05	8.58	24.4
butanol	6.19E-05	3.95	11.2
NH_3	0.635	9.29E+03	2.64E+04
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0.383 (µCi/g)	18.1 (kg)
U	2.61E-03 (M)	536 (µg/g)	1.52E+03 (kg)
Cs	2.39E-03 (Ci/L)	2.06 (µCi/g)	5.85E+03 (Ci)
Sr	2.02E-03 (Ci/L)	1.74 (µCi/g)	4.95E+03 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).
†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Double-Shell Tank 241-AW-104			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	4.63E+05 kg	(103 kgal)	
Heat Load	0.105 kW	(357 BTU/hr)	
Bulk Density	1.19 (g/cc)		
Void Fraction	0.886		
Water wt%	74.1		
TOC wt% C (wet)	3.50E-02		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0.810	1.57E+04	7.25E+03
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	1.83	8.60E+04	3.98E+04
Cr^{3+}	6.78E-03	297	137
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	1.02E-04	17.2	7.96
Zr (as $ZrO(OH)_2$)	4.50E-02	3.46E+03	1.60E+03
Pb^{2+}	3.68E-05	6.42	2.97
Ni^{2+}	0.106	5.26E+03	2.43E+03
Sr^{2+}	0	0	0
Mn^{4+}	5.08E-03	235	109
Ca^{2+}	0.442	1.49E+04	6.91E+03
K^{+}	1.51E-02	496	230
OH^{-}	5.88	8.43E+04	3.90E+04
$NO3^{-}$	0.223	1.17E+04	5.39E+03
$NO2^{-}$	1.94E-02	752	348
$CO3^{2-}$	0.528	2.67E+04	1.24E+04
$PO4^{3-}$	5.89E-02	4.71E+03	2.18E+03
$SO4^{2-}$	3.42E-03	277	128
Si (as SiO_3^{2-})	0	0	0
F^{-}	0.257	4.11E+03	1.90E+03
Cl^{-}	3.50E-03	105	48.4
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	2.89E-03	647	299
butanol	2.89E-03	180	83.4
NH_3	3.18E-02	455	211
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		3.55E-02 (µCi/g)	0.274 (kg)
U	5.22E-04 (M)	105 (µg/g)	48.5 (kg)
Cs	2.55E-02 (Ci/L)	21.5 (µCi/g)	9.94E+03 (Ci)
Sr	2.21E-02 (Ci/L)	18.6 (µCi/g)	8.61E+03 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Double-Shell Tank 241-AW-104			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	3.95E+06 kg	(1.02E+03 kgal)	
Heat Load	1.12 kW	(3.83E+03 BTU/hr)	
Bulk Density*	1.02 (g/cc)		
Water wt%†	95.7		
TOC wt% C (wet)	4.49E-02		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0.594	1.33E+04	5.27E+04
Al^{3+}	7.60E-04	20.1	79.2
Fe^{3+} (total Fe)	1.84E-03	100	396
Cr^{3+}	7.37E-03	375	1.48E+03
Bi^{3+}	5.22E-07	0.107	0.422
La^{3+}	7.63E-09	1.04E-03	4.09E-03
Hg^{2+}	6.58E-09	1.29E-03	5.10E-03
Zr (as $ZrO(OH)_2$)	1.06E-06	9.43E-02	0.372
Pb^{2+}	4.04E-05	8.19	32.3
Ni^{2+}	1.65E-03	94.8	374
Sr^{2+}	2.54E-09	2.18E-04	8.60E-04
Mn^{4+}	5.51E-03	296	1.17E+03
Ca^{2+}	8.27E-03	324	1.28E+03
K^{+}	6.37E-03	244	962
OH^{-}	1.84E-02	305	1.21E+03
$NO3^{-}$	0.232	1.41E+04	5.55E+04
$NO2^{-}$	1.63E-02	732	2.89E+03
$CO3^{2-}$	0.102	6.00E+03	2.37E+04
$PO4^{3-}$	6.39E-02	5.93E+03	2.34E+04
$SO4^{2-}$	3.83E-03	360	1.42E+03
Si (as SiO_3^{2-})	3.57E-05	0.982	3.88
F^{-}	9.20E-05	1.71	6.75
Cl^{-}	3.69E-03	128	505
$C_6H_5O_7^{3-}$	1.54E-05	2.85	11.2
$EDTA^{4-}$	1.21E-05	3.41	13.5
$HEDTA^{3-}$	2.16E-05	5.78	22.8
$glycolate^{-}$	8.84E-05	6.49	25.6
$acetate^{-}$	8.40E-06	0.485	1.91
$oxalate^{2-}$	6.52E-09	5.62E-04	2.22E-03
DBP	3.14E-03	494	1.95E+03
butanol	3.14E-03	228	898
NH_3	2.29E-04	3.80	15.0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	4.31 (µCi/L)		0.277 (kg)
U	4.30E-04 (M)	100 (µg/g)	395 (kg)
Cs	2.76E-02 (Ci/L)	27.0 (µCi/g)	1.07E+05 (Ci)
Sr	2.39E-02 (Ci/L)	23.4 (µCi/g)	9.24E+04 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.
†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Double-Shell Tank 241-AW-104			
Total Inventory Estimate*			
Physical Properties			
Total Waste	4.41E+06 kg	(1.12E+03 kgal)	
Heat Load	1.23 kW	(4.19E+03 BTU/hr)	
Bulk Density†	1.04 (g/cc)		
Water wt%†	93.7		
TOC wt% C (wet)†	4.40E-02		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0.613	1.36E+04	5.99E+04
Al^{3+}	6.90E-04	18.0	79.2
Fe^{3+} (total Fe)	0.169	9.11E+03	4.02E+04
Cr^{3+}	7.31E-03	366	1.62E+03
Bi^{3+}	4.75E-07	9.56E-02	0.422
La^{3+}	6.93E-09	9.27E-04	4.09E-03
Hg^{2+}	9.34E-06	1.81	7.96
Zr (as $ZrO(OH)_2$)	4.13E-03	363	1.60E+03
Pb^{2+}	4.01E-05	8.01	35.3
Ni^{2+}	1.13E-02	637	2.81E+03
Sr^{2+}	2.31E-09	1.95E-04	8.60E-04
Mn^{4+}	5.47E-03	290	1.28E+03
Ca^{2+}	4.80E-02	1.86E+03	8.18E+03
K^{+}	7.17E-03	270	1.19E+03
OH^{-}	0.556	9.11E+03	4.02E+04
$NO3^{-}$	0.231	1.38E+04	6.09E+04
$NO2^{-}$	1.66E-02	735	3.24E+03
$CO3^{2-}$	0.141	8.17E+03	3.60E+04
$PO4^{3-}$	6.34E-02	5.80E+03	2.56E+04
$SO4^{2-}$	3.79E-03	351	1.55E+03
Si (as SiO_3^{2-})	3.25E-05	0.879	3.88
F^{-}	2.36E-02	433	1.91E+03
Cl^{-}	3.67E-03	125	553
$C_6H_5O_7^{3-}$	1.40E-05	2.55	11.2
$EDTA^{4-}$	1.10E-05	3.05	13.5
$HEDTA^{3-}$	1.96E-05	5.18	22.8
$glycolate^{-}$	8.03E-05	5.81	25.6
$acetate^{-}$	7.63E-06	0.434	1.91
$oxalate^{2-}$	5.93E-09	5.03E-04	2.22E-03
DBP	3.12E-03	510	2.25E+03
butanol	3.12E-03	223	981
NH_3	3.12E-03	51.2	226
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		7.49E-03 (µCi/g)	0.551 (kg)
U	4.39E-04 (M)	101 (µg/g)	444 (kg)
Cs	2.75E-02 (Ci/L)	26.5 (µCi/g)	1.17E+05 (Ci)
Sr	2.38E-02 (Ci/L)	22.9 (µCi/g)	1.01E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).
†Volume average for density, mass average Water wt% and TOC wt% C.

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Double-Shell Tank 241-AW-105			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	1.15E+06 kg	(240 kgal)	
Heat Load	4.28E-02 kW	(146 BTU/hr)	
Bulk Density	1.27 (g/cc)		
Void Fraction	0.854		
Water wt%	65.5		
TOC wt% C (wet)	3.59E-03		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	4.99	9.05E+04	1.04E+05
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0.524	2.31E+04	2.66E+04
Cr^{3+}	7.42E-04	30.5	35.0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	1.88E-03	298	342
Zr (as $ZrO(OH)_2$)	0.830	5.98E+04	6.88E+04
Pb^{2+}	4.03E-06	0.659	0.758
Ni^{2+}	1.16E-02	540	621
Sr^{2+}	0	0	0
Mn^{4+}	5.56E-04	24.1	27.8
Ca^{2+}	0.133	4.21E+03	4.84E+03
K^{+}	0.172	5.30E+03	6.10E+03
OH^{-}	4.99	7.14E+04	7.70E+04
$NO3^{-}$	0.321	1.68E+04	1.81E+04
$NO2^{-}$	8.59E-03	333	359
$CO3^{2-}$	0.142	7.19E+03	7.76E+03
$PO4^{3-}$	6.44E-03	516	556
$SO4^{2-}$	3.75E-04	30.3	32.7
Si (as SiO_3^{2-})	0	0	0
F^{-}	4.74	7.58E+04	8.17E+04
Cl^{-}	3.92E-03	117	126
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	3.16E-04	70.8	76.3
butanol	3.16E-04	19.7	21.3
NH_3	0.587	8.40E+03	9.06E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0.548 (µCi/g)	10.5 (kg)
U	2.46E-03 (M)	463 (µg/g)	532 (kg)
Cs	4.49E-03 (Ci/L)	3.55 (µCi/g)	4.08E+03 (Ci)
Sr	3.87E-03 (Ci/L)	3.05 (µCi/g)	3.51E+03 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Double-Shell Tank 241-AW-105			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	3.47E+06 kg	(800 kgal)	
Heat Load	1.61 kW	(5.50E+03 BTU/hr)	
Bulk Density*	1.15 (g/cc)		
Water wt%†	75.7		
TOC wt% C (wet)	0.353		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	3.32	6.65E+04	2.31E+05
Al^{3+}	0.352	8.28E+03	2.88E+04
Fe^{3+} (total Fe)	4.51E-03	219	762
Cr^{3+}	1.32E-02	596	2.07E+03
Bi^{3+}	1.78E-04	32.4	112
La^{3+}	3.30E-06	0.400	1.39
Hg^{2+}	7.81E-06	1.37	4.74
Zr (as $ZrO(OH)_2$)	2.03E-03	161	561
Pb^{2+}	2.09E-04	37.7	131
Ni^{2+}	2.66E-03	136	473
Sr^{2+}	1.10E-06	8.40E-02	0.292
Mn^{4+}	4.62E-03	221	769
Ca^{2+}	2.03E-02	709	2.46E+03
K^{+}	0.161	5.47E+03	1.90E+04
OH^{-}	1.63	2.71E+04	8.41E+04
$NO3^{-}$	1.61	9.76E+04	3.02E+05
$NO2^{-}$	0.343	1.54E+04	4.78E+04
$CO3^{2-}$	0.221	1.30E+04	4.02E+04
$PO4^{3-}$	6.35E-02	5.90E+03	1.83E+04
$SO4^{2-}$	4.94E-02	4.64E+03	1.44E+04
Si (as SiO_3^{2-})	1.76E-02	483	1.50E+03
F^{-}	0.165	3.06E+03	9.47E+03
Cl^{-}	5.43E-02	1.88E+03	5.82E+03
$C_6H_5O_7^{3-}$	7.59E-03	1.40E+03	4.35E+03
$EDTA^{4-}$	3.45E-03	974	3.01E+03
$HEDTA^{3-}$	6.06E-03	1.62E+03	5.03E+03
$glycolate^{-}$	6.27E-02	4.60E+03	1.43E+04
$acetate^{-}$	2.71E-03	157	485
$oxalate^{2-}$	2.82E-06	0.243	0.753
DBP	5.50E-03	866	2.68E+03
butanol	5.50E-03	399	1.23E+03
NH_3	0.513	8.54E+03	2.64E+04
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	41.1 (µCi/L)		2.07 (kg)
U	4.76E-03 (M)	987 (µg/g)	3.43E+03 (kg)
Cs	5.50E-02 (Ci/L)	48.0 (µCi/g)	1.67E+05 (Ci)
Sr	4.08E-02 (Ci/L)	35.5 (µCi/g)	1.23E+05 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

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Double-Shell Tank 241-AW-105			
Total Inventory Estimate*			
Physical Properties			
Total Waste	4.63E+06 kg	(1.04E+03 kgal)	
Heat Load	1.65 kW	(5.65E+03 BTU/hr)	
Bulk Density†	1.17 (g/cc)		
Water wt%†	73.4		
TOC wt% C (wet)†	0.272		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	3.70	7.25E+04	3.35E+05
Al^{3+}	0.271	6.22E+03	2.88E+04
Fe^{3+} (total Fe)	0.124	5.91E+03	2.73E+04
Cr^{3+}	1.03E-02	456	2.11E+03
Bi^{3+}	1.37E-04	24.3	112
La^{3+}	2.54E-06	0.300	1.39
Hg^{2+}	4.40E-04	75.0	347
Zr (as $ZrO(OH)_2$)	0.193	1.50E+04	6.93E+04
Pb^{2+}	1.61E-04	28.5	132
Ni^{2+}	4.73E-03	237	1.09E+03
Sr^{2+}	8.47E-07	6.31E-02	0.292
Mn^{4+}	3.68E-03	172	797
Ca^{2+}	4.63E-02	1.58E+03	7.30E+03
K^{+}	0.163	5.43E+03	2.51E+04
OH^{-}	2.41	3.82E+04	1.61E+05
$NO3^{-}$	1.31	7.75E+04	3.20E+05
$NO2^{-}$	0.266	1.17E+04	4.82E+04
$CO3^{2-}$	0.203	1.15E+04	4.80E+04
$PO4^{3-}$	5.04E-02	4.56E+03	1.88E+04
$SO4^{2-}$	3.81E-02	3.49E+03	1.44E+04
Si (as SiO_3^{2-})	1.35E-02	363	1.50E+03
F^{-}	1.22	2.12E+04	9.12E+04
Cl^{-}	4.27E-02	1.44E+03	5.95E+03
$C_6H_5O_7^{3-}$	5.84E-03	1.05E+03	4.35E+03
$EDTA^{4-}$	2.66E-03	731	3.01E+03
$HEDTA^{3-}$	4.66E-03	1.22E+03	5.03E+03
$glycolate^{-}$	4.83E-02	3.46E+03	1.43E+04
$acetate^{-}$	2.09E-03	118	485
$oxalate^{2-}$	2.17E-06	0.183	0.753
DBP	4.30E-03	668	2.76E+03
butanol	4.30E-03	304	1.26E+03
NH_3	0.530	8.50E+03	3.55E+04
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0.163 (µCi/g)	12.6 (kg)
U	4.23E-03 (M)	856 (µg/g)	3.96E+03 (kg)
Cs	4.34E-02 (Ci/L)	36.9 (µCi/g)	1.71E+05 (Ci)
Sr	3.22E-02 (Ci/L)	27.4 (µCi/g)	1.27E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

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Double-Shell Tank 241-AW-106			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	7.51E+03 kg	(0.999 kgal)	
Heat Load	0.120 kW	(409 BTU/hr)	
Bulk Density	1.99 (g/cc)		
Void Fraction	0.575		
Water wt%	33.6		
TOC wt% C (wet)	0.171		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	6.70	7.75E+04	582
Al^{3+}	6.07	8.24E+04	619
Fe^{3+} (total Fe)	2.21	6.21E+04	466
Cr^{3+}	1.15E-07	3.02E-03	2.27E-05
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	1.21	3.57E+04	268
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0.203	4.10E+03	30.8
K^{+}	7.77E-03	153	1.15
OH^{-}	31.0	4.16E+05	1.99E+03
$NO3^{-}$	8.61E-04	42.1	0.202
$NO2^{-}$	0.993	3.61E+04	173
$CO3^{2-}$	0.353	1.67E+04	80.1
$PO4^{3-}$	5.77E-03	432	2.07
$SO4^{2-}$	2.54E-02	1.92E+03	9.22
Si (as SiO_3^{2-})	2.39	5.29E+04	253
F^{-}	0	0	0
Cl^{-}	3.57E-02	1000	4.79
$C_6H_5O_7^{3-}$	8.65E-03	1.29E+03	6.18
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0.115	6.83E+03	32.7
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	8.83E-02	1.19E+03	5.68
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		2.61 (µCi/g)	0.327 (kg)
U	0.560 (M)	6.71E+04 (µg/g)	504 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	4.70 (Ci/L)	2.37E+03 (µCi/g)	1.78E+04 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Double-Shell Tank 241-AW-106			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	5.30E+06 kg	(1.11E+03 kgal)	
Heat Load	3.92 kW	(1.34E+04 BTU/hr)	
Bulk Density*	1.26 (g/cc)		
Water wt%†	61.8		
TOC wt% C (wet)	0.585		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	5.83	1.06E+05	5.61E+05
Al^{3+}	0.678	1.45E+04	7.66E+04
Fe^{3+} (total Fe)	7.35E-03	325	1.72E+03
Cr^{3+}	2.30E-02	945	5.01E+03
Bi^{3+}	3.10E-04	51.3	272
La^{3+}	8.04E-06	0.884	4.68
Hg^{2+}	7.74E-06	1.23	6.51
Zr (as $ZrO(OH)_2$)	1.80E-03	130	689
Pb^{2+}	3.45E-04	56.5	299
Ni^{2+}	4.70E-03	218	1.16E+03
Sr^{2+}	2.68E-06	0.186	0.984
Mn^{4+}	7.60E-03	330	1.75E+03
Ca^{2+}	3.31E-02	1.05E+03	5.57E+03
K^{+}	0.151	4.66E+03	2.47E+04
OH^{-}	3.06	4.53E+04	2.18E+05
$NO3^{-}$	2.75	1.48E+05	7.14E+05
$NO2^{-}$	0.629	2.52E+04	1.21E+05
$CO3^{2-}$	0.394	2.06E+04	9.92E+04
$PO4^{3-}$	0.106	8.77E+03	4.22E+04
$SO4^{2-}$	8.98E-02	7.52E+03	3.62E+04
Si (as SiO_3^{2-})	3.49E-02	854	4.11E+03
F^{-}	0.148	2.44E+03	1.18E+04
Cl^{-}	9.77E-02	3.02E+03	1.45E+04
$C_6H_5O_7^{3-}$	1.48E-02	2.43E+03	1.17E+04
$EDTA^{4-}$	5.46E-03	1.37E+03	6.60E+03
$HEDTA^{3-}$	9.65E-03	2.30E+03	1.11E+04
$glycolate^{-}$	0.129	8.44E+03	4.06E+04
$acetate^{-}$	4.10E-03	211	1.01E+03
$oxalate^{2-}$	6.88E-06	0.528	2.54
DBP	9.14E-03	1.28E+03	6.16E+03
butanol	9.14E-03	590	2.84E+03
NH_3	0.457	6.77E+03	3.25E+04
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	57.0 (µCi/L)		3.98 (kg)
U	6.94E-03 (M)	1.31E+03 (µg/g)	6.92E+03 (kg)
Cs	9.51E-02 (Ci/L)	75.2 (µCi/g)	3.98E+05 (Ci)
Sr	7.27E-02 (Ci/L)	57.5 (µCi/g)	3.05E+05 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Double-Shell Tank 241-AW-106			
Total Inventory Estimate*			
Physical Properties			
Total Waste	5.30E+06 kg	(1.11E+03 kgal)	
Heat Load	4.04 kW	(1.38E+04 BTU/hr)	
Bulk Density†	1.26 (g/cc)		
Water wt%†	61.8		
TOC wt% C (wet)†	0.584		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	5.83	1.06E+05	5.62E+05
Al^{3+}	0.683	1.46E+04	7.73E+04
Fe^{3+} (total Fe)	9.34E-03	412	2.19E+03
Cr^{3+}	2.30E-02	944	5.01E+03
Bi^{3+}	3.10E-04	51.2	272
La^{3+}	8.04E-06	0.883	4.68
Hg^{2+}	7.74E-06	1.23	6.51
Zr (as $ZrO(OH)_2$)	1.80E-03	130	689
Pb^{2+}	3.45E-04	56.5	299
Ni^{2+}	5.78E-03	268	1.42E+03
Sr^{2+}	2.68E-06	0.186	0.984
Mn^{4+}	7.59E-03	330	1.75E+03
Ca^{2+}	3.33E-02	1.06E+03	5.60E+03
K^{+}	0.150	4.65E+03	2.47E+04
OH^{-}	3.08	4.58E+04	2.20E+05
$NO3^{-}$	2.74	1.48E+05	7.14E+05
$NO2^{-}$	0.629	2.52E+04	1.21E+05
$CO3^{2-}$	0.394	2.06E+04	9.92E+04
$PO4^{3-}$	0.106	8.76E+03	4.22E+04
$SO4^{2-}$	8.98E-02	7.51E+03	3.62E+04
Si (as SiO_3^{2-})	3.70E-02	928	4.36E+03
F^{-}	0.147	2.44E+03	1.18E+04
Cl^{-}	9.76E-02	3.01E+03	1.45E+04
$C_6H_5O_7^{3-}$	1.48E-02	2.43E+03	1.17E+04
$EDTA^{4-}$	5.46E-03	1.37E+03	6.60E+03
$HEDTA^{3-}$	9.64E-03	2.30E+03	1.11E+04
$glycolate^{-}$	0.129	8.44E+03	4.06E+04
$acetate^{-}$	4.10E-03	211	1.01E+03
$oxalate^{2-}$	6.88E-06	0.527	2.54
DBP	9.13E-03	1.28E+03	6.16E+03
butanol	9.13E-03	589	2.84E+03
NH_3	0.456	6.76E+03	3.25E+04
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		4.88E-02 (µCi/g)	4.31 (kg)
U	7.44E-03 (M)	1.40E+03 (µg/g)	7.43E+03 (kg)
Cs	9.50E-02 (Ci/L)	75.1 (µCi/g)	3.98E+05 (Ci)
Sr	7.69E-02 (Ci/L)	60.8 (µCi/g)	3.22E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Double-Shell Tank 241-AY-101			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	2.06E+05 kg	(33.0 kgal)	
Heat Load	12.5 kW	(4.25E+04 BTU/hr)	
Bulk Density	1.65 (g/cc)		
Void Fraction	0.763		
Water wt%	53.0		
TOC wt% C (wet)	0.849		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	5.65	7.89E+04	1.62E+04
Al^{3+}	1.46	2.39E+04	4.91E+03
Fe^{3+} (total Fe)	1.17	3.96E+04	8.13E+03
Cr^{3+}	4.52E-03	143	29.3
Bi^{3+}	1.65E-05	2.09	0.430
La^{3+}	3.11E-10	2.62E-05	5.39E-06
Hg^{2+}	1.72E-07	2.09E-02	4.30E-03
Zr (as $ZrO(OH)_2$)	9.51E-06	0.527	0.108
Pb^{2+}	2.32E-05	2.91	0.599
Ni^{2+}	0.265	9.44E+03	1.94E+03
Sr^{2+}	1.62E-08	8.61E-04	1.77E-04
Mn^{4+}	5.24E-04	17.5	3.59
Ca^{2+}	0.475	1.16E+04	2.37E+03
K^{+}	7.77E-03	184	37.9
OH^{-}	12.3	1.27E+05	2.60E+04
$NO3^{-}$	0.198	7.47E+03	1.54E+03
$NO2^{-}$	0.519	1.45E+04	2.98E+03
$CO3^{2-}$	0.576	2.10E+04	4.32E+03
$PO4^{3-}$	2.73E-03	157	32.4
$SO4^{2-}$	4.78E-02	2.79E+03	573
Si (as SiO_3^{2-})	1.96	3.34E+04	6.87E+03
F^{-}	8.35E-04	9.63	1.98
Cl^{-}	3.25E-02	699	144
$C_6H_5O_7^{3-}$	8.47E-03	972	200
$EDTA^{4-}$	3.11E-02	5.45E+03	1.12E+03
$HEDTA^{3-}$	6.23E-02	1.04E+04	2.13E+03
$glycolate^{-}$	8.05E-02	3.67E+03	753
$acetate^{-}$	0	0	0
$oxalate^{2-}$	2.66E-10	1.42E-05	2.92E-06
DBP	2.43E-03	393	80.7
butanol	6.29E-06	0.283	5.81E-02
NH_3	0.101	1.04E+03	214
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		6.34 (µCi/g)	21.7 (kg)
U	0.597 (M)	8.63E+04 (µg/g)	1.77E+04 (kg)
Cs	0.123 (Ci/L)	75.0 (µCi/g)	1.54E+04 (Ci)
Sr	14.7 (Ci/L)	8.94E+03 (µCi/g)	1.84E+06 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Double-Shell Tank 241-AY-101			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	3.70E+06 kg	(848 kgal)	
Heat Load	2.01 kW	(6.88E+03 BTU/hr)	
Bulk Density*	1.15 (g/cc)		
Water wt%†	75.4		
TOC wt% C (wet)	1.22		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	3.49	6.95E+04	2.57E+05
Al^{3+}	0.354	8.29E+03	3.07E+04
Fe^{3+} (total Fe)	1.84E-03	89.1	330
Cr^{3+}	1.61E-02	724	2.68E+03
Bi^{3+}	1.87E-04	33.9	126
La^{3+}	3.70E-06	0.446	1.65
Hg^{2+}	1.57E-06	0.273	1.01
Zr (as $ZrO(OH)_2$)	1.06E-04	8.42	31.2
Pb^{2+}	2.09E-04	37.5	139
Ni^{2+}	1.32E-03	67.1	248
Sr^{2+}	1.23E-06	9.38E-02	0.347
Mn^{4+}	2.06E-03	98.3	364
Ca^{2+}	8.45E-03	294	1.09E+03
K^{+}	1.70E-02	578	2.14E+03
OH^{-}	1.68	2.47E+04	9.16E+04
$NO3^{-}$	1.18	6.34E+04	2.35E+05
$NO2^{-}$	0.670	2.67E+04	9.90E+04
$CO3^{2-}$	0.188	9.80E+03	3.63E+04
$PO4^{3-}$	1.74E-02	1.43E+03	5.31E+03
$SO4^{2-}$	9.63E-02	8.02E+03	2.97E+04
Si (as SiO_3^{2-})	2.74E-02	668	2.47E+03
F^{-}	1.09E-02	179	664
Cl^{-}	6.25E-02	1.92E+03	7.10E+03
$C_6H_5O_7^{3-}$	1.44E-02	2.36E+03	8.74E+03
$EDTA^{4-}$	2.79E-02	6.98E+03	2.58E+04
$HEDTA^{3-}$	5.51E-02	1.31E+04	4.85E+04
$glycolate^{-}$	6.85E-02	4.45E+03	1.65E+04
$acetate^{-}$	2.41E-03	123	456
$oxalate^{2-}$	3.17E-06	0.242	0.895
DBP	9.56E-03	1.33E+03	4.94E+03
butanol	9.56E-03	614	2.27E+03
NH_3	1.46E-02	215	795
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	25.1 (µCi/L)		1.34 (kg)
U	3.46E-03 (M)	713 (µg/g)	2.64E+03 (kg)
Cs	5.64E-02 (Ci/L)	48.9 (µCi/g)	1.81E+05 (Ci)
Sr	5.40E-02 (Ci/L)	46.8 (µCi/g)	1.73E+05 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Double-Shell Tank 241-AY-101			
Total Inventory Estimate*			
Physical Properties			
Total Waste	3.91E+06 kg	(881 kgal)	
Heat Load	14.5 kW	(4.94E+04 BTU/hr)	
Bulk Density†	1.17 (g/cc)		
Water wt%†	74.3		
TOC wt% C (wet)†	1.20		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	3.57	7.00E+04	2.73E+05
Al^{3+}	0.396	9.11E+03	3.56E+04
Fe^{3+} (total Fe)	4.55E-02	2.17E+03	8.46E+03
Cr^{3+}	1.56E-02	694	2.71E+03
Bi^{3+}	1.81E-04	32.3	126
La^{3+}	3.56E-06	0.422	1.65
Hg^{2+}	1.52E-06	0.260	1.02
Zr (as $ZrO(OH)_2$)	1.03E-04	8.00	31.3
Pb^{2+}	2.02E-04	35.6	139
Ni^{2+}	1.12E-02	560	2.19E+03
Sr^{2+}	1.19E-06	8.89E-02	0.347
Mn^{4+}	2.01E-03	94.0	367
Ca^{2+}	2.59E-02	886	3.46E+03
K^{+}	1.67E-02	557	2.18E+03
OH^{-}	2.08	3.01E+04	1.18E+05
$NO3^{-}$	1.14	6.05E+04	2.36E+05
$NO2^{-}$	0.665	2.61E+04	1.02E+05
$CO3^{2-}$	0.203	1.04E+04	4.06E+04
$PO4^{3-}$	1.69E-02	1.37E+03	5.34E+03
$SO4^{2-}$	9.44E-02	7.74E+03	3.03E+04
Si (as SiO_3^{2-})	9.97E-02	2.39E+03	9.34E+03
F^{-}	1.05E-02	170	666
Cl^{-}	6.13E-02	1.85E+03	7.25E+03
$C_6H_5O_7^{3-}$	1.42E-02	2.29E+03	8.94E+03
$EDTA^{4-}$	2.81E-02	6.90E+03	2.70E+04
$HEDTA^{3-}$	5.54E-02	1.30E+04	5.06E+04
$glycolate^{-}$	6.89E-02	4.41E+03	1.72E+04
$acetate^{-}$	2.32E-03	117	456
$oxalate^{2-}$	3.05E-06	0.229	0.895
DBP	9.29E-03	1.29E+03	5.02E+03
butanol	9.20E-03	582	2.27E+03
NH_3	1.78E-02	258	1.01E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0.354 (µCi/g)	23.1 (kg)
U	2.57E-02 (M)	5.21E+03 (µg/g)	2.04E+04 (kg)
Cs	5.89E-02 (Ci/L)	50.2 (µCi/g)	1.96E+05 (Ci)
Sr	0.603 (Ci/L)	515 (µCi/g)	2.01E+06 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

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Double-Shell Tank 241-AY-102			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	2.28E+05 kg	(31.9 kgal)	
Heat Load	3.35 kW	(1.14E+04 BTU/hr)	
Bulk Density	1.89 (g/cc)		
Void Fraction	0.614		
Water wt%	36.8		
TOC wt% C (wet)	0.160		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	5.93	7.23E+04	1.65E+04
Al^{3+}	5.31	7.59E+04	1.73E+04
Fe^{3+} (total Fe)	2.17	6.42E+04	1.46E+04
Cr^{3+}	8.91E-04	24.6	5.60
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	4.84E-06	0.531	0.121
Ni^{2+}	1.07	3.33E+04	7.59E+03
Sr^{2+}	0	0	0
Mn^{4+}	6.68E-04	19.5	4.43
Ca^{2+}	0.235	5.00E+03	1.14E+03
K^{+}	7.56E-03	157	35.7
OH^{-}	27.9	2.51E+05	5.72E+04
$NO3^{-}$	2.80E-02	919	209
$NO2^{-}$	0.872	2.13E+04	4.84E+03
$CO3^{2-}$	0.378	1.20E+04	2.74E+03
$PO4^{3-}$	1.28E-02	644	147
$SO4^{2-}$	2.26E-02	1.15E+03	263
Si (as SiO_3^{2-})	2.09	3.11E+04	7.09E+03
F^{-}	0	0	0
Cl^{-}	3.17E-02	595	136
$C_6H_5O_7^{3-}$	7.57E-03	759	173
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0.101	4.01E+03	915
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	3.79E-04	53.5	12.2
butanol	3.79E-04	14.9	3.40
NH_3	7.73E-02	697	159
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		2.41 (µCi/g)	9.14 (kg)
U	0.490 (M)	6.19E+04 (µg/g)	1.41E+04 (kg)
Cs	3.34E-03 (Ci/L)	1.77 (µCi/g)	404 (Ci)
Sr	4.12 (Ci/L)	2.18E+03 (µCi/g)	4.97E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Double-Shell Tank 241-AY-102			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	2.74E+06 kg	(679 kgal)	
Heat Load	0.429 kW	(1.46E+03 BTU/hr)	
Bulk Density*	1.07 (g/cc)		
Water wt%†	89.4		
TOC wt% C (wet)	0.214		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	1.37	2.96E+04	8.10E+04
Al^{3+}	0.204	5.17E+03	1.42E+04
Fe^{3+} (total Fe)	1.03E-03	54.2	148
Cr^{3+}	1.02E-03	49.6	136
Bi^{3+}	7.52E-07	0.148	0.404
La^{3+}	1.61E-08	2.10E-03	5.74E-03
Hg^{2+}	1.35E-08	2.53E-03	6.94E-03
Zr (as $ZrO(OH)_2$)	2.74E-06	0.235	0.642
Pb^{2+}	8.18E-07	0.159	0.435
Ni^{2+}	9.15E-04	50.4	138
Sr^{2+}	5.36E-09	4.41E-04	1.21E-03
Mn^{4+}	1.26E-05	0.648	1.77
Ca^{2+}	4.65E-03	175	479
K^{+}	5.61E-03	206	564
OH^{-}	0.908	1.45E+04	3.97E+04
$NO3^{-}$	0.660	3.84E+04	1.05E+05
$NO2^{-}$	4.34E-02	1.87E+03	5.13E+03
$CO3^{2-}$	0.105	5.91E+03	1.62E+04
$PO4^{3-}$	4.02E-03	359	982
$SO4^{2-}$	1.84E-02	1.66E+03	4.55E+03
Si (as SiO_3^{2-})	1.33E-02	351	961
F^{-}	4.14E-04	7.39	20.2
Cl^{-}	2.51E-02	834	2.28E+03
$C_6H_5O_7^{3-}$	5.79E-03	1.03E+03	2.81E+03
$EDTA^{4-}$	1.68E-05	4.55	12.5
$HEDTA^{3-}$	3.01E-05	7.75	21.2
$glycolate^{-}$	7.71E-02	5.43E+03	1.49E+04
$acetate^{-}$	1.13E-05	0.626	1.71
$oxalate^{2-}$	1.38E-08	1.14E-03	3.11E-03
DBP	1.98E-05	2.99	8.19
butanol	1.98E-05	1.38	3.77
NH_3	8.69E-04	13.9	38.0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	11.9 (µCi/L)		0.509 (kg)
U	1.57E-03 (M)	351 (µg/g)	960 (kg)
Cs	1.64E-02 (Ci/L)	15.4 (µCi/g)	4.21E+04 (Ci)
Sr	1.34E-02 (Ci/L)	12.6 (µCi/g)	3.44E+04 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Double-Shell Tank 241-AY-102			
Total Inventory Estimate*			
Physical Properties			
Total Waste	2.97E+06 kg	(711 kgal)	
Heat Load	3.78 kW	(1.29E+04 BTU/hr)	
Bulk Density†	1.10 (g/cc)		
Water wt%†	85.4		
TOC wt% C (wet)†	0.210		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	1.58	3.29E+04	9.75E+04
Al^{3+}	0.433	1.06E+04	3.15E+04
Fe^{3+} (total Fe)	9.84E-02	4.99E+03	1.48E+04
Cr^{3+}	1.01E-03	47.7	142
Bi^{3+}	7.18E-07	0.136	0.404
La^{3+}	1.54E-08	1.94E-03	5.74E-03
Hg^{2+}	1.29E-08	2.34E-03	6.94E-03
Zr (as $ZrO(OH)_2$)	2.62E-06	0.217	0.642
Pb^{2+}	9.98E-07	0.188	0.557
Ni^{2+}	4.89E-02	2.61E+03	7.73E+03
Sr^{2+}	5.12E-09	4.07E-04	1.21E-03
Mn^{4+}	4.20E-05	2.09	6.21
Ca^{2+}	1.50E-02	546	1.62E+03
K^{+}	5.70E-03	202	600
OH^{-}	2.12	3.27E+04	9.69E+04
$NO3^{-}$	0.631	3.55E+04	1.05E+05
$NO2^{-}$	8.06E-02	3.36E+03	9.97E+03
$CO3^{2-}$	0.117	6.38E+03	1.89E+04
$PO4^{3-}$	4.42E-03	381	1.13E+03
$SO4^{2-}$	1.86E-02	1.62E+03	4.81E+03
Si (as SiO_3^{2-})	0.106	2.71E+03	8.05E+03
F^{-}	3.95E-04	6.82	20.2
Cl^{-}	2.54E-02	815	2.42E+03
$C_6H_5O_7^{3-}$	5.87E-03	1.01E+03	2.99E+03
$EDTA^{4-}$	1.61E-05	4.20	12.5
$HEDTA^{3-}$	2.87E-05	7.15	21.2
$glycolate^{-}$	7.81E-02	5.32E+03	1.58E+04
$acetate^{-}$	1.08E-05	0.578	1.71
$oxalate^{2-}$	1.31E-08	1.05E-03	3.11E-03
DBP	3.59E-05	6.88	20.4
butanol	3.59E-05	2.42	7.17
NH_3	4.30E-03	66.3	197
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0.195 (µCi/g)	9.65 (kg)
U	2.35E-02 (M)	5.08E+03 (µg/g)	1.51E+04 (kg)
Cs	1.58E-02 (Ci/L)	14.3 (µCi/g)	4.25E+04 (Ci)
Sr	0.198 (Ci/L)	179 (µCi/g)	5.32E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

Rev. 3

Double-Shell Tank 241-AZ-101			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	1.94E+05 kg	(29.0 kgal)	
Heat Load	42.4 kW	(1.45E+05 BTU/hr)	
Bulk Density	1.77 (g/cc)		
Void Fraction	0.785		
Water wt%	49.3		
TOC wt% C (wet)	7.47E-03		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	5.07	6.60E+04	1.28E+04
Al^{3+}	1.01	1.55E+04	2.99E+03
Fe^{3+} (total Fe)	2.90	9.17E+04	1.78E+04
Cr^{3+}	2.44E-04	7.19	1.39
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	1.33E-06	0.156	3.01E-02
Ni^{2+}	4.55E-02	1.51E+03	293
Sr^{2+}	0	0	0
Mn^{4+}	1.83E-04	5.70	1.10
Ca^{2+}	0.252	5.73E+03	1.11E+03
K^{+}	8.63E-03	191	37.0
OH^{-}	18.2	1.75E+05	3.39E+04
$NO3^{-}$	7.49E-03	263	50.9
$NO2^{-}$	0.492	1.28E+04	2.48E+03
$CO3^{2-}$	0.261	8.86E+03	1.72E+03
$PO4^{3-}$	2.32E-03	125	24.2
$SO4^{2-}$	0.101	5.49E+03	1.06E+03
Si (as SiO_3^{2-})	1.50	2.39E+04	4.63E+03
F^{-}	2.22E-02	239	46.3
Cl^{-}	3.88E-02	779	151
$C_6H_5O_7^{3-}$	2.98E-04	32.0	6.19
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	3.98E-03	169	32.7
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	1.04E-04	15.7	3.04
butanol	1.04E-04	4.37	0.846
NH_3	0.187	1.80E+03	348
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		2.57 (µCi/g)	8.30 (kg)
U	0.843 (M)	1.14E+05 (µg/g)	2.20E+04 (kg)
Cs	4.15 (Ci/L)	2.35E+03 (µCi/g)	4.55E+05 (Ci)
Sr	54.6 (Ci/L)	3.09E+04 (µCi/g)	5.98E+06 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Double-Shell Tank 241-AZ-101			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	3.87E+06 kg	(931 kgal)	
Heat Load	32.0 kW	(1.09E+05 BTU/hr)	
Bulk Density*	1.10 (g/cc)		
Water wt%†	85.4		
TOC wt% C (wet)	7.91E-02		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	2.46	5.14E+04	1.99E+05
Al^{3+}	0.295	7.26E+03	2.81E+04
Fe^{3+} (total Fe)	1.72E-03	87.4	338
Cr^{3+}	2.02E-03	95.6	370
Bi^{3+}	4.74E-05	9.02	34.9
La^{3+}	9.66E-07	0.122	0.473
Hg^{2+}	3.66E-07	6.69E-02	0.259
Zr (as $ZrO(OH)_2$)	2.71E-05	2.25	8.71
Pb^{2+}	4.83E-05	9.12	35.3
Ni^{2+}	2.48E-04	13.2	51.2
Sr^{2+}	3.22E-07	2.57E-02	9.94E-02
Mn^{4+}	2.39E-04	11.9	46.2
Ca^{2+}	7.75E-03	283	1.09E+03
K^{+}	1.03E-02	367	1.42E+03
OH^{-}	2.23	3.45E+04	1.34E+05
$NO3^{-}$	0.321	1.81E+04	7.01E+04
$NO2^{-}$	0.412	1.73E+04	6.68E+04
$CO3^{2-}$	3.00E-02	1.64E+03	6.35E+03
$PO4^{3-}$	4.46E-03	385	1.49E+03
$SO4^{2-}$	0.108	9.44E+03	3.65E+04
Si (as SiO_3^{2-})	2.76E-02	705	2.73E+03
F^{-}	2.44E-02	422	1.63E+03
Cl^{-}	4.50E-02	1.45E+03	5.62E+03
$C_6H_5O_7^{3-}$	1.41E-03	243	940
$EDTA^{4-}$	1.28E-03	336	1.30E+03
$HEDTA^{3-}$	2.32E-03	579	2.24E+03
$glycolate^{-}$	7.21E-03	492	1.91E+03
$acetate^{-}$	7.69E-04	41.3	160
$oxalate^{2-}$	8.27E-07	6.62E-02	0.256
DBP	9.99E-04	146	567
butanol	9.99E-04	67.4	261
NH_3	1.40E-02	216	836
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	24.7 (µCi/L)		1.45 (kg)
U	3.32E-03 (M)	720 (µg/g)	2.79E+03 (kg)
Cs	1.90 (Ci/L)	1.73E+03 (µCi/g)	6.68E+06 (Ci)
Sr	2.92E-02 (Ci/L)	26.6 (µCi/g)	1.03E+05 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Double-Shell Tank 241-AZ-101			
Total Inventory Estimate*			
Physical Properties			
Total Waste	4.06E+06 kg	(960 kgal)	
Heat Load	74.4 kW	(2.54E+05 BTU/hr)	
Bulk Density†	1.12 (g/cc)		
Water wt%†	83.7		
TOC wt% C (wet)†	7.57E-02		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	2.53	5.21E+04	2.12E+05
Al^{3+}	0.317	7.65E+03	3.11E+04
Fe^{3+} (total Fe)	8.92E-02	4.45E+03	1.81E+04
Cr^{3+}	1.97E-03	91.4	371
Bi^{3+}	4.60E-05	8.59	34.9
La^{3+}	9.37E-07	0.116	0.473
Hg^{2+}	3.55E-07	6.37E-02	0.259
Zr (as $ZrO(OH)_2$)	2.63E-05	2.14	8.71
Pb^{2+}	4.69E-05	8.69	35.3
Ni^{2+}	1.61E-03	84.7	344
Sr^{2+}	3.12E-07	2.45E-02	9.94E-02
Mn^{4+}	2.37E-04	11.6	47.3
Ca^{2+}	1.51E-02	542	2.20E+03
K^{+}	1.03E-02	359	1.46E+03
OH^{-}	2.71	4.12E+04	1.67E+05
$NO3^{-}$	0.311	1.73E+04	7.01E+04
$NO2^{-}$	0.414	1.70E+04	6.93E+04
$CO3^{2-}$	3.70E-02	1.99E+03	8.07E+03
$PO4^{3-}$	4.39E-03	373	1.52E+03
$SO4^{2-}$	0.108	9.25E+03	3.76E+04
Si (as SiO_3^{2-})	7.21E-02	1.81E+03	7.36E+03
F^{-}	2.43E-02	413	1.68E+03
Cl^{-}	4.49E-02	1.42E+03	5.77E+03
$C_6H_5O_7^{3-}$	1.38E-03	233	946
$EDTA^{4-}$	1.24E-03	320	1.30E+03
$HEDTA^{3-}$	2.25E-03	551	2.24E+03
$glycolate^{-}$	7.11E-03	477	1.94E+03
$acetate^{-}$	7.46E-04	39.4	160
$oxalate^{2-}$	8.02E-07	6.31E-02	0.256
DBP	9.72E-04	140	570
butanol	9.72E-04	64.4	262
NH_3	1.92E-02	291	1.18E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0.144 (µCi/g)	9.75 (kg)
U	2.87E-02 (M)	6.10E+03 (µg/g)	2.48E+04 (kg)
Cs	1.96 (Ci/L)	1.76E+03 (µCi/g)	7.13E+06 (Ci)
Sr	1.68 (Ci/L)	1.50E+03 (µCi/g)	6.09E+06 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

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Double-Shell Tank 241-AZ-102			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	2.79E+05 kg	(43.0 kgal)	
Heat Load	25.9 kW	(8.83E+04 BTU/hr)	
Bulk Density	1.72 (g/cc)		
Void Fraction	0.828		
Water wt%	50.0		
TOC wt% C (wet)	1.84		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	5.55	7.43E+04	2.08E+04
Al^{3+}	0.516	8.11E+03	2.27E+03
Fe^{3+} (total Fe)	1.97	6.42E+04	1.79E+04
Cr^{3+}	6.18E-04	18.7	5.23
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	2.70E-06	0.326	9.09E-02
Ni^{2+}	1.01E-02	344	96.1
Sr^{2+}	0	0	0
Mn^{4+}	3.73E-04	11.9	3.33
Ca^{2+}	0.199	4.65E+03	1.30E+03
K^{+}	1.03E-02	235	65.5
OH^{-}	13.2	1.31E+05	3.66E+04
$NO3^{-}$	5.09E-02	1.84E+03	514
$NO2^{-}$	0.485	1.30E+04	3.63E+03
$CO3^{2-}$	0.330	1.15E+04	3.23E+03
$PO4^{3-}$	4.32E-03	239	66.7
$SO4^{2-}$	8.54E-02	4.78E+03	1.33E+03
Si (as SiO_3^{2-})	1.55	2.54E+04	7.09E+03
F^{-}	7.21E-03	79.8	22.3
Cl^{-}	4.61E-02	951	266
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	7.75E-02	1.30E+04	3.63E+03
$HEDTA^{3-}$	0.155	2.47E+04	6.91E+03
$glycolate^{-}$	0.155	6.77E+03	1.89E+03
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	2.27E-04	35.2	9.84
butanol	2.27E-04	9.81	2.74
NH_3	0.129	1.28E+03	357
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		2.52 (µCi/g)	11.7 (kg)
U	0.874 (M)	8.66E+03 (µg/g)	3.39E+04 (kg)
Cs	1.37 (Ci/L)	799 (µCi/g)	2.23E+05 (Ci)
Sr	22.6 (Ci/L)	1.32E+04 (µCi/g)	3.68E+06 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Double-Shell Tank 241-AZ-102			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	3.65E+06 kg	(920 kgal)	
Heat Load	18.1 kW	(6.19E+04 BTU/hr)	
Bulk Density*	1.05 (g/cc)		
Water wt%†	92.4		
TOC wt% C (wet)	1.89E-02		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	1.26	2.77E+04	1.01E+05
Al^{3+}	0.149	3.82E+03	1.40E+04
Fe^{3+} (total Fe)	9.23E-04	49.1	179
Cr^{3+}	2.23E-04	11.0	40.3
Bi^{3+}	2.14E-06	0.427	1.56
La^{3+}	2.50E-08	3.30E-03	1.21E-02
Hg^{2+}	1.77E-08	3.39E-03	1.24E-02
Zr (as $ZrO(OH)_2$)	1.19E-06	0.103	0.377
Pb^{2+}	2.99E-06	0.591	2.16
Ni^{2+}	8.93E-05	5.00	18.3
Sr^{2+}	8.32E-09	6.94E-04	2.54E-03
Mn^{4+}	8.66E-05	4.54	16.6
Ca^{2+}	4.15E-03	159	580
K^{+}	5.16E-03	192	703
OH^{-}	1.19	1.93E+04	7.06E+04
$NO3^{-}$	0.133	7.86E+03	2.87E+04
$NO2^{-}$	0.192	8.39E+03	3.07E+04
$CO3^{2-}$	1.38E-02	788	2.88E+03
$PO4^{3-}$	1.37E-03	124	453
$SO4^{2-}$	5.76E-02	5.28E+03	1.93E+04
Si (as SiO_3^{2-})	1.50E-02	402	1.47E+03
F^{-}	1.26E-02	228	832
Cl^{-}	2.33E-02	788	2.88E+03
$C_6H_5O_7^{3-}$	4.62E-04	83.2	304
$EDTA^{4-}$	4.76E-05	13.1	47.8
$HEDTA^{3-}$	8.13E-05	21.2	77.6
$glycolate^{-}$	5.64E-03	403	1.47E+03
$acetate^{-}$	4.44E-05	2.50	9.13
$oxalate^{2-}$	2.13E-08	1.79E-03	6.54E-03
DBP	9.07E-05	13.9	50.8
butanol	9.07E-05	6.40	23.4
NH_3	7.18E-03	116	425
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	13.4 (µCi/L)		0.778 (kg)
U	1.78E-03 (M)	403 (µg/g)	1.47E+03 (kg)
Cs	1.09 (Ci/L)	1.04E+03 (µCi/g)	3.79E+06 (Ci)
Sr	1.54E-02 (Ci/L)	14.7 (µCi/g)	5.37E+04 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

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Double-Shell Tank 241-AZ-102			
Total Inventory Estimate*			
Physical Properties			
Total Waste	3.93E+06 kg	(963 kgal)	
Heat Load	44.0 kW	(1.50E+05 BTU/hr)	
Bulk Density†	1.08 (g/cc)		
Water wt%†	89.4		
TOC wt% C (wet)†	0.148		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	1.45	3.10E+04	1.22E+05
Al^{3+}	0.165	4.13E+03	1.62E+04
Fe^{3+} (total Fe)	8.90E-02	4.61E+03	1.81E+04
Cr^{3+}	2.40E-04	11.6	45.6
Bi^{3+}	2.05E-06	0.397	1.56
La^{3+}	2.38E-08	3.07E-03	1.21E-02
Hg^{2+}	1.69E-08	3.15E-03	1.24E-02
Zr (as $ZrO(OH)_2$)	1.13E-06	9.58E-02	0.377
Pb^{2+}	2.98E-06	0.572	2.25
Ni^{2+}	5.35E-04	29.1	114
Sr^{2+}	7.95E-09	6.45E-04	2.54E-03
Mn^{4+}	9.94E-05	5.06	19.9
Ca^{2+}	1.28E-02	477	1.88E+03
K^{+}	5.39E-03	195	769
OH^{-}	1.73	2.72E+04	1.07E+05
$NO3^{-}$	0.129	7.43E+03	2.92E+04
$NO2^{-}$	0.205	8.72E+03	3.43E+04
$CO3^{2-}$	2.79E-02	1.55E+03	6.10E+03
$PO4^{3-}$	1.50E-03	132	520
$SO4^{2-}$	5.89E-02	5.24E+03	2.06E+04
Si (as SiO_3^{2-})	8.36E-02	2.18E+03	8.56E+03
F^{-}	1.23E-02	217	855
Cl^{-}	2.44E-02	799	3.14E+03
$C_6H_5O_7^{3-}$	4.41E-04	77.3	304
$EDTA^{4-}$	3.50E-03	935	3.68E+03
$HEDTA^{3-}$	6.99E-03	1.78E+03	6.99E+03
$glycolate^{-}$	1.23E-02	855	3.36E+03
$acetate^{-}$	4.24E-05	2.32	9.13
$oxalate^{2-}$	2.04E-08	1.66E-03	6.54E-03
DBP	9.68E-05	15.4	60.7
butanol	9.68E-05	6.65	26.1
NH_3	1.26E-02	199	782
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0.191 (µCi/g)	12.5 (kg)
U	4.07E-02 (M)	989 (µg/g)	3.53E+04 (kg)
Cs	1.10 (Ci/L)	1.02E+03 (µCi/g)	4.01E+06 (Ci)
Sr	1.03 (Ci/L)	950 (µCi/g)	3.74E+06 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

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Double-Shell Tank 241-SY-101			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density	0 (g/cc)		
Void Fraction	0		
Water wt%	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0 (µCi/g)	0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Double-Shell Tank 241-SY-101			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	7.07E+06 kg	(1.10E+03 kgal)	
Heat Load	10.7 kW	(3.66E+04 BTU/hr)	
Bulk Density*	1.70 (g/cc)		
Water wt%†	26.9		
TOC wt% C (wet)	1.14		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	15.0	2.03E+05	1.44E+06
Al^{3+}	1.97	3.14E+04	2.22E+05
Fe^{3+} (total Fe)	9.80E-03	322	2.28E+03
Cr^{3+}	7.30E-02	2.24E+03	1.58E+04
Bi^{3+}	1.74E-03	215	1.52E+03
La^{3+}	6.09E-05	4.99	35.2
Hg^{2+}	1.17E-05	1.38	9.75
Zr (as $ZrO(OH)_2$)	1.20E-03	64.7	457
Pb^{2+}	1.27E-03	155	1.10E+03
Ni^{2+}	8.33E-03	288	2.04E+03
Sr^{2+}	2.03E-05	1.05	7.41
Mn^{4+}	5.14E-03	166	1.18E+03
Ca^{2+}	4.45E-02	1.05E+03	7.43E+03
K^{+}	7.21E-02	1.66E+03	1.17E+04
OH^{-}	8.61	8.63E+04	6.10E+05
$NO3^{-}$	6.63	2.42E+05	1.71E+06
$NO2^{-}$	2.93	7.94E+04	5.61E+05
$CO3^{2-}$	0.597	2.11E+04	1.49E+05
$PO4^{3-}$	0.121	6.76E+03	4.78E+04
$SO4^{2-}$	0.322	1.82E+04	1.29E+05
Si (as SiO_3^{2-})	0.104	1.72E+03	1.21E+04
F^{-}	9.85E-02	1.10E+03	7.79E+03
Cl^{-}	0.266	5.55E+03	3.92E+04
$C_6H_5O_7^{3-}$	3.83E-02	4.26E+03	3.01E+04
$EDTA^{4-}$	2.69E-02	4.56E+03	3.22E+04
$HEDTA^{3-}$	5.09E-02	8.21E+03	5.80E+04
$glycolate^{-}$	0.139	6.16E+03	4.36E+04
$acetate^{-}$	9.26E-03	322	2.27E+03
$oxalate^{2-}$	5.21E-05	2.70	19.1
DBP	2.52E-02	2.39E+03	1.69E+04
butanol	2.52E-02	1.10E+03	7.77E+03
NH_3	7.27E-02	728	5.14E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	108 (µCi/L)		7.47 (kg)
U	1.60E-02 (M)	2.24E+03 (µg/g)	1.58E+04 (kg)
Cs	0.321 (Ci/L)	189 (µCi/g)	1.34E+06 (Ci)
Sr	0.159 (Ci/L)	93.4 (µCi/g)	6.60E+05 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

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Double-Shell Tank 241-SY-101			
Total Inventory Estimate*			
Physical Properties			
Total Waste	7.07E+06 kg	(1.10E+03 kgal)	
Heat Load	10.7 kW	(3.66E+04 BTU/hr)	
Bulk Density†	1.70 (g/cc)		
Water wt%†	26.9		
TOC wt% C (wet)†	1.14		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	15.0	2.03E+05	1.44E+06
Al^{3+}	1.97	3.14E+04	2.22E+05
Fe^{3+} (total Fe)	9.80E-03	322	2.28E+03
Cr^{3+}	7.30E-02	2.24E+03	1.58E+04
Bi^{3+}	1.74E-03	215	1.52E+03
La^{3+}	6.09E-05	4.99	35.2
Hg^{2+}	1.17E-05	1.38	9.75
Zr (as $ZrO(OH)_2$)	1.20E-03	64.7	457
Pb^{2+}	1.27E-03	155	1.10E+03
Ni^{2+}	8.33E-03	288	2.04E+03
Sr^{2+}	2.03E-05	1.05	7.41
Mn^{4+}	5.14E-03	166	1.18E+03
Ca^{2+}	4.45E-02	1.05E+03	7.43E+03
K^{+}	7.21E-02	1.66E+03	1.17E+04
OH^{-}	8.61	8.63E+04	6.10E+05
$NO3^{-}$	6.63	2.42E+05	1.71E+06
$NO2^{-}$	2.93	7.94E+04	5.61E+05
$CO3^{2-}$	0.597	2.11E+04	1.49E+05
$PO4^{3-}$	0.121	6.76E+03	4.78E+04
$SO4^{2-}$	0.322	1.82E+04	1.29E+05
Si (as SiO_3^{2-})	0.104	1.72E+03	1.21E+04
F^{-}	9.85E-02	1.10E+03	7.79E+03
Cl^{-}	0.266	5.55E+03	3.92E+04
$C_6H_5O_7^{3-}$	3.83E-02	4.26E+03	3.01E+04
$EDTA^{4-}$	2.69E-02	4.56E+03	3.22E+04
$HEDTA^{3-}$	5.09E-02	8.21E+03	5.80E+04
$glycolate^{-}$	0.139	6.16E+03	4.36E+04
$acetate^{-}$	9.26E-03	322	2.27E+03
$oxalate^{2-}$	5.21E-05	2.70	19.1
DBP	2.52E-02	2.39E+03	1.69E+04
butanol	2.52E-02	1.10E+03	7.77E+03
NH_3	7.27E-02	728	5.14E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		6.34E-02 (µCi/g)	7.47 (kg)
U	1.60E-02 (M)	2.24E+03 (µg/g)	1.58E+04 (kg)
Cs	0.321 (Ci/L)	189 (µCi/g)	1.34E+06 (Ci)
Sr	0.159 (Ci/L)	93.4 (µCi/g)	6.60E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

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Double-Shell Tank 241-SY-102			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	4.70E+05 kg	(70.9 kgal)	
Heat Load	0.477 kW	(1.63E+03 BTU/hr)	
Bulk Density	1.75 (g/cc)		
Void Fraction	0.568		
Water wt%	28.4		
TOC wt% C (wet)	0.833		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	10.7	1.40E+05	6.61E+04
Al^{3+}	5.33	8.21E+04	3.86E+04
Fe^{3+} (total Fe)	0.873	2.78E+04	1.31E+04
Cr^{3+}	8.93E-02	2.65E+03	1.25E+03
Bi^{3+}	3.30E-03	394	185
La^{3+}	1.49E-05	1.18	0.555
Hg^{2+}	1.39E-05	1.59	0.747
Zr (as $ZrO(OH)_2$)	2.24E-03	116	54.8
Pb^{2+}	1.25E-03	148	69.4
Ni^{2+}	6.43E-02	2.15E+03	1.01E+03
Sr^{2+}	1.00E-05	0.501	0.235
Mn^{4+}	1.36E-03	42.5	20.0
Ca^{2+}	0.222	5.07E+03	2.39E+03
K^{+}	6.24E-02	1.39E+03	655
OH^{-}	20.9	2.03E+05	9.53E+04
$NO3^{-}$	3.39	1.20E+05	5.64E+04
$NO2^{-}$	2.77	7.27E+04	3.42E+04
$CO3^{2-}$	0.641	2.20E+04	1.03E+04
$PO4^{3-}$	0.193	1.05E+04	4.93E+03
$SO4^{2-}$	0.363	1.99E+04	9.36E+03
Si (as SiO_3^{2-})	4.26E-02	683	321
F^{-}	8.34E-02	904	425
Cl^{-}	8.18E-02	1.65E+03	778
$C_6H_5O_7^{3-}$	3.10E-02	3.35E+03	1.57E+03
$EDTA^{4-}$	1.89E-02	3.10E+03	1.46E+03
$HEDTA^{3-}$	3.53E-02	5.53E+03	2.60E+03
$glycolate^{-}$	0.101	4.34E+03	2.04E+03
$acetate^{-}$	7.62E-03	257	121
$oxalate^{2-}$	1.27E-05	0.640	0.301
DBP	2.25E-02	3.42E+03	1.61E+03
butanol	2.25E-02	953	448
NH_3	1.47E-02	142	66.9
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		5.23 (µCi/g)	41.0 (kg)
U	3.98E-03 (M)	541 (µg/g)	254 (kg)
Cs	0.329 (Ci/L)	188 (µCi/g)	8.82E+04 (Ci)
Sr	3.54E-02 (Ci/L)	20.2 (µCi/g)	9.51E+03 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Double-Shell Tank 241-SY-102			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	2.63E+06 kg	(676 kgal)	
Heat Load	1.70E-03 kW	(5.80 BTU/hr)	
Bulk Density*	1.03 (g/cc)		
Water wt%†	94.7		
TOC wt% C (wet)	5.77E-04		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0.662	1.48E+04	3.89E+04
Al^{3+}	3.81E-02	1.00E+03	2.63E+03
Fe^{3+} (total Fe)	1.24E-03	67.4	177
Cr^{3+}	5.19E-03	263	691
Bi^{3+}	3.83E-07	7.80E-02	0.205
La^{3+}	3.96E-09	5.36E-04	1.41E-03
Hg^{2+}	2.86E-09	5.59E-04	1.47E-03
Zr (as $ZrO(OH)_2$)	2.73E-07	2.42E-02	6.37E-02
Pb^{2+}	3.55E-07	7.16E-02	0.188
Ni^{2+}	1.11E-03	63.7	167
Sr^{2+}	1.32E-09	1.13E-04	2.96E-04
Mn^{4+}	3.52E-06	0.188	0.494
Ca^{2+}	5.57E-03	218	572
K^{+}	3.08E-03	117	308
OH^{-}	0.221	3.66E+03	9.62E+03
$NO3^{-}$	0.492	2.97E+04	7.81E+04
$NO2^{-}$	1.40E-02	628	1.65E+03
$CO3^{2-}$	2.98E-02	1.74E+03	4.57E+03
$PO4^{3-}$	7.83E-05	7.24	19.0
$SO4^{2-}$	2.98E-03	279	733
Si (as SiO_3^{2-})	2.48E-05	0.678	1.78
F^{-}	2.62E-05	0.485	1.27
Cl^{-}	1.88E-02	648	1.70E+03
$C_6H_5O_7^{3-}$	1.03E-05	1.90	5.00
$EDTA^{4-}$	7.17E-06	2.01	5.28
$HEDTA^{3-}$	1.28E-05	3.42	8.98
$glycolate^{-}$	6.52E-05	4.76	12.5
$acetate^{-}$	4.90E-06	0.281	0.740
$oxalate^{2-}$	3.39E-09	2.91E-04	7.63E-04
DBP	7.66E-06	1.20	3.16
butanol	7.66E-06	0.553	1.45
NH_3	2.37E-05	0.393	1.03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	4.49 (µCi/L)		0.192 (kg)
U	3.70E-06 (M)	0.859 (µg/g)	2.26 (kg)
Cs	7.97E-05 (Ci/L)	7.76E-02 (µCi/g)	204 (Ci)
Sr	4.31E-05 (Ci/L)	4.20E-02 (µCi/g)	110 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.

†Water wt% derived from the difference of density and total dissolved species.

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Double-Shell Tank 241-SY-102			
Total Inventory Estimate*			
Physical Properties			
Total Waste	3.10E+06 kg	(747 kgal)	
Heat Load	0.479 kW	(1.64E+03 BTU/hr)	
Bulk Density†	1.10 (g/cc)		
Water wt%†	84.6		
TOC wt% C (wet)†	0.127		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	1.62	3.39E+04	1.05E+05
Al^{3+}	0.540	1.33E+04	4.12E+04
Fe^{3+} (total Fe)	8.40E-02	4.28E+03	1.33E+04
Cr^{3+}	1.32E-02	625	1.94E+03
Bi^{3+}	3.14E-04	59.8	185
La^{3+}	1.42E-06	0.180	0.556
Hg^{2+}	1.32E-06	0.242	0.749
Zr (as $ZrO(OH)_2$)	2.13E-04	17.7	54.8
Pb^{2+}	1.19E-04	22.5	69.6
Ni^{2+}	7.11E-03	381	1.18E+03
Sr^{2+}	9.52E-07	7.61E-02	0.236
Mn^{4+}	1.32E-04	6.61	20.5
Ca^{2+}	2.61E-02	955	2.96E+03
K^{+}	8.70E-03	311	962
OH^{-}	2.18	3.39E+04	1.05E+05
$NO3^{-}$	0.767	4.34E+04	1.34E+05
$NO2^{-}$	0.276	1.16E+04	3.59E+04
$CO3^{2-}$	8.78E-02	4.81E+03	1.49E+04
$PO4^{3-}$	1.84E-02	1.60E+03	4.94E+03
$SO4^{2-}$	3.72E-02	3.26E+03	1.01E+04
Si (as SiO_3^{2-})	4.07E-03	104	323
F^{-}	7.94E-03	138	426
Cl^{-}	2.47E-02	800	2.48E+03
$C_6H_5O_7^{3-}$	2.95E-03	510	1.58E+03
$EDTA^{4-}$	1.80E-03	472	1.46E+03
$HEDTA^{3-}$	3.36E-03	842	2.61E+03
$glycolate^{-}$	9.67E-03	662	2.05E+03
$acetate^{-}$	7.28E-04	39.2	121
$oxalate^{2-}$	1.21E-06	9.73E-02	0.302
DBP	2.15E-03	521	1.61E+03
butanol	2.15E-03	145	450
NH_3	1.41E-03	21.9	67.9
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0.797 (µCi/g)	41.2 (kg)
U	3.81E-04 (M)	82.8 (µg/g)	257 (kg)
Cs	3.13E-02 (Ci/L)	28.5 (µCi/g)	8.84E+04 (Ci)
Sr	3.40E-03 (Ci/L)	3.11 (µCi/g)	9.62E+03 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

†Volume average for density, mass average Water wt% and TOC wt% C.

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Double-Shell Tank 241-SY-103			
TLM Solids Composite Inventory Estimate*			
Physical Properties			
Total Solid Waste	0 kg	(0 kgal)	
Heat Load	0 kW	(0 BTU/hr)	
Bulk Density	0 (g/cc)		
Void Fraction	0		
Water wt%	0		
TOC wt% C (wet)	0		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	0	0	0
Al^{3+}	0	0	0
Fe^{3+} (total Fe)	0	0	0
Cr^{3+}	0	0	0
Bi^{3+}	0	0	0
La^{3+}	0	0	0
Hg^{2+}	0	0	0
Zr (as $ZrO(OH)_2$)	0	0	0
Pb^{2+}	0	0	0
Ni^{2+}	0	0	0
Sr^{2+}	0	0	0
Mn^{4+}	0	0	0
Ca^{2+}	0	0	0
K^{+}	0	0	0
OH^{-}	0	0	0
$NO3^{-}$	0	0	0
$NO2^{-}$	0	0	0
$CO3^{2-}$	0	0	0
$PO4^{3-}$	0	0	0
$SO4^{2-}$	0	0	0
Si (as SiO_3^{2-})	0	0	0
F^{-}	0	0	0
Cl^{-}	0	0	0
$C_6H_5O_7^{3-}$	0	0	0
$EDTA^{4-}$	0	0	0
$HEDTA^{3-}$	0	0	0
$glycolate^{-}$	0	0	0
$acetate^{-}$	0	0	0
$oxalate^{2-}$	0	0	0
DBP	0	0	0
butanol	0	0	0
NH_3	0	0	0
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		0 (µCi/g)	0 (kg)
U	0 (M)	0 (µg/g)	0 (kg)
Cs	0 (Ci/L)	0 (µCi/g)	0 (Ci)
Sr	0 (Ci/L)	0 (µCi/g)	0 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).

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Double-Shell Tank 241-SY-103			
SMM Composite Inventory Estimate			
Physical Properties			
Total Supernatant Wa	4.32E+06 kg	(744 kgal)	
Heat Load	5.55 kW	(1.90E+04 BTU/hr)	
Bulk Density*	1.54 (g/cc)		
Water wt%†	38.2		
TOC wt% C (wet)	0.985		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	11.4	1.71E+05	7.41E+05
Al^{3+}	1.55	2.72E+04	1.18E+05
Fe^{3+} (total Fe)	7.19E-03	262	1.13E+03
Cr^{3+}	5.52E-02	1.87E+03	8.08E+03
Bi^{3+}	1.30E-03	177	766
La^{3+}	3.84E-05	3.47	15.0
Hg^{2+}	8.98E-06	1.17	5.08
Zr (as $ZrO(OH)_2$)	8.63E-04	51.3	222
Pb^{2+}	1.02E-03	138	597
Ni^{2+}	6.11E-03	234	1.01E+03
Sr^{2+}	1.28E-05	0.730	3.16
Mn^{4+}	3.99E-03	143	617
Ca^{2+}	3.27E-02	853	3.69E+03
K^{+}	5.51E-02	1.40E+03	6.06E+03
OH^{-}	6.73	7.45E+04	3.22E+05
$NO3^{-}$	4.97	2.01E+05	8.67E+05
$NO2^{-}$	2.29	6.88E+04	2.97E+05
$CO3^{2-}$	0.454	1.77E+04	7.67E+04
$PO4^{3-}$	9.09E-02	5.62E+03	2.43E+04
$SO4^{2-}$	0.248	1.55E+04	6.71E+04
Si (as SiO_3^{2-})	7.77E-02	1.42E+03	6.14E+03
F^{-}	7.43E-02	920	3.98E+03
Cl^{-}	0.203	4.68E+03	2.02E+04
$C_6H_5O_7^{3-}$	2.93E-02	3.61E+03	1.56E+04
$EDTA^{4-}$	2.14E-02	4.02E+03	1.74E+04
$HEDTA^{3-}$	3.98E-02	7.11E+03	3.07E+04
$glycolate^{-}$	0.104	5.10E+03	2.21E+04
$acetate^{-}$	9.71E-03	373	1.61E+03
$oxalate^{2-}$	3.28E-05	1.88	8.14
DBP	2.03E-02	2.12E+03	9.19E+03
butanol	2.03E-02	978	4.23E+03
NH_3	5.31E-02	588	2.54E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu	79.8 (µCi/L)		3.75 (kg)
U	1.18E-02 (M)	1.84E+03 (µg/g)	7.94E+03 (kg)
Cs	0.252 (Ci/L)	164 (µCi/g)	7.10E+05 (Ci)
Sr	0.117 (Ci/L)	76.5 (µCi/g)	3.31E+05 (Ci)

*Density is calculated based on Na, OH^{-}, and AlO_2^{-}.
†Water wt% derived from the difference of density and total dissolved species.

Rev. 3

Double-Shell Tank 241-SY-103			
Total Inventory Estimate*			
Physical Properties			
Total Waste	4.32E+06 kg	(744 kgal)	
Heat Load	5.55 kW	(1.90E+04 BTU/hr)	
Bulk Density†	1.54 (g/cc)		
Water wt%†	38.2		
TOC wt% C (wet)†	0.985		
Chemical Constituent	mole/L	ppm	kg
Na^{+}	11.4	1.71E+05	7.41E+05
Al^{3+}	1.55	2.72E+04	1.18E+05
Fe^{3+} (total Fe)	7.19E-03	262	1.13E+03
Cr^{3+}	5.52E-02	1.87E+03	8.08E+03
Bi^{3+}	1.30E-03	177	766
La^{3+}	3.84E-05	3.47	15.0
Hg^{2+}	8.98E-06	1.17	5.08
Zr (as $ZrO(OH)_2$)	8.63E-04	51.3	222
Pb^{2+}	1.02E-03	138	597
Ni^{2+}	6.11E-03	234	1.01E+03
Sr^{2+}	1.28E-05	0.730	3.16
Mn^{4+}	3.99E-03	143	617
Ca^{2+}	3.27E-02	853	3.69E+03
K^{+}	5.51E-02	1.40E+03	6.06E+03
OH^{-}	6.73	7.45E+04	3.22E+05
$NO3^{-}$	4.97	2.01E+05	8.67E+05
$NO2^{-}$	2.29	6.88E+04	2.97E+05
$CO3^{2-}$	0.454	1.77E+04	7.67E+04
$PO4^{3-}$	9.09E-02	5.62E+03	2.43E+04
$SO4^{2-}$	0.248	1.55E+04	6.71E+04
Si (as SiO_3^{2-})	7.77E-02	1.42E+03	6.14E+03
F^{-}	7.43E-02	920	3.98E+03
Cl^{-}	0.203	4.68E+03	2.02E+04
$C_6H_5O_7^{3-}$	2.93E-02	3.61E+03	1.56E+04
$EDTA^{4-}$	2.14E-02	4.02E+03	1.74E+04
$HEDTA^{3-}$	3.98E-02	7.11E+03	3.07E+04
$glycolate^{-}$	0.104	5.10E+03	2.21E+04
$acetate^{-}$	9.71E-03	373	1.61E+03
$oxalate^{2-}$	3.28E-05	1.88	8.14
DBP	2.03E-02	2.12E+03	9.19E+03
butanol	2.03E-02	978	4.23E+03
NH_3	5.31E-02	588	2.54E+03
$Fe(CN)_6^{4-}$	0	0	0
Radiological Constituents			
Pu		5.20E-02 (µCi/g)	3.75 (kg)
U	1.18E-02 (M)	1.84E+03 (µg/g)	7.94E+03 (kg)
Cs	0.252 (Ci/L)	164 (µCi/g)	7.10E+05 (Ci)
Sr	0.117 (Ci/L)	76.5 (µCi/g)	3.31E+05 (Ci)

*Unknowns in tank solids inventory are assigned by Tank Layering Model (TLM).
†Volume average for density, mass average Water wt% and TOC wt% C.