

APPENDIX F

Distribution Checks and Statistical Summaries of Data by Geographical Area and Medium

Appendix F

Distribution Checks and Statistical Summaries of Data by Geographical Area and Medium

This appendix contains the *MTCASat v.2.1* tables. *MTCASat v.2.1* was used in this risk assessment to determine the distribution of the data and to calculate a UCL_{95} for normally distributed data. If the data were lognormally distributed or neither lognormally nor normally distributed, *Systat v.9* was used to calculate the UCL_{95} (see Appendix G for *Systat v.9* results). The data in the Table 3 series in Appendix A are taken from the information in this appendix with the exception of the 95 percent UCL (UCL_{95}) for data with a lognormal distribution and data with neither a normal nor a lognormal distribution. UCL_{95} values for these two data distributions are provided in Appendix G.

Lower Basin Residential Surface S

Antimony

Analytical Results
 (mg/kg)

5.7
 0.1
 1
 12
 0.495
 16.7
 10
 22.2
 25.6
 10.5
 18.1
 0.47
 0.54
 0.21
 0.65
 0.21
 0.235
 0.345
 0.5
 0.5
 2.2
 1.6
 0.5
 1
 3.8
 0.6
 15.9

		MTCASat 2.1	
Number of samples		Uncensored values	
Uncensored	27	Mean	5.62
Censored		Lognormal mean	7.18
Detection limit or PQL		Std. devn.	7.767855
Method detection limit		Median	1
TOTAL	27	Min.	0.1
		Max.	25.6
Lognormal distribution? r-squared is:		Normal distribution? r-squared is:	
Recommendations: Reject lognormal distribution. W value is 0.9015. This is less than the tabled value of 0.923 Reject normal distribution. W value is 0.728. This is less than the tabled value of 0.923			
UCL (based on t-statistic) is 8.17			

Lower Basin Residential Surface Soil

Arsenic

Analytical Results
 (mg/kg)

108
 14.5
 90.9
 78.5
 4.8
 86.6
 65.2
 115
 95.6
 57.3
 93.3
 10.9
 13.6
 9
 4.8
 7.5
 6.1
 8.7
 10.3
 4.6
 5.6
 5.6
 9.5
 5.6
 4.3
 50.7
 8.3
 18.4

		MTCAS _{Stat} 2.1	
Number of samples		Uncensored values	
Uncensored	28	Mean	35.47
Censored		Lognormal mean	37.27
Detection limit or PQL		Std. devn.	39.00628
Method detection limit		Median	10.6
TOTAL	28	Min.	4.3
		Max.	115
Lognormal distribution? r-squared is:		Normal distribution? r-squared is:	
Recommendations: Reject lognormal distribution. W value is 0.8378. This is less than the tabled value of 0.924 Reject normal distribution. W value is 0.7487. This is less than the tabled value of 0.924			
UCL (based on t-statistic) is 48.03			

Lower Basin Residential Surface Soil

Cadmium

Analytical Results (mg/kg)	MTCAS _{Stat} 2.1		Uncensored values	
	10.8	Number of samples		Mean
0.35	Uncensored	28	Lognormal mean	16.16
12.5	Censored		Std. devn.	5.945193
15.2	Detection limit or PQL		Median	1.75
0.1	Method detection limit		Min.	0.04
15.5	TOTAL	28	Max.	15.5
5.7	Lognormal distribution? Normal distribution?			
14.6	r-squared is: r-squared is:			
12	Recommendations:			
9.4	Reject lognormal distribution.			
12.2	W value is 0.8388. This is less than the tabled value of 0.924			
0.04	Reject normal distribution.			
0.04	W value is 0.7648. This is less than the tabled value of 0.924			
0.04	UCL (based on t-statistic) is 6.88			
0.04				
0.09				
1.5				
0.5				
2				
2.4				
0.5				
2.3				
6.4				
0.1				
14.7				

Lower Basin Residential Surface Soil

Iron

Analytical Results (mg/kg)	MTCASat 2.1		Uncensored values	
	Number of samples		Mean	
60800	Uncensored	25	29992.00	
9710	Censored		Lognormal mean	29426.68
70100	Detection limit or PQL		Std. devn.	23945.95
34200	Method detection limit		Median	20000
93000	TOTAL	25	Min.	9710
83100			Max.	93000
45700	Lognormal distribution?	Normal distribution?		
57500	r-squared is:	r-squared is:		
21900	Recommendations:			
20000	Reject lognormal distribution.			
14900	W value is 0.8856. This is less than the tabled value of 0.918			
20000	Reject normal distribution.			
17000	W value is 0.7489. This is less than the tabled value of 0.918			
20300				
21500				
12690				
11740				
14190	UCL (based on t-statistic) is 38186.3			
16170				
13300				
12100				
27200				
15500				

Lower Basin Residential Surface Soil

Manganese

Analytical Results (mg/kg)	MTCASat 2.1		Uncensored values	
	Number of samples		Mean	
4560	Uncensored	25	1638.52	
260	Censored		Lognormal mean	1576.55
5300	Detection limit or PQL		Std. devn.	2054.94
2360	Method detection limit		Median	436
6620	TOTAL	25	Min.	259
6190			Max.	6620
3250				
3830				
360	Lognormal distribution?		Normal distribution?	
400	r-squared is:		r-squared is:	
356	Recommendations:			
283	Reject lognormal distribution.			
365	W value is 0.797. This is less than the tabled value of 0.918			
259	Reject normal distribution.			
371	W value is 0.6911. This is less than the tabled value of 0.918			
362				
533				
354				
436	UCL (based on t-statistic) is 2341.72			
681				
391				
535				
1890				
420				
597				

Lower Basin Residential Surface Soil

Zinc

Analytical Results (mg/kg)	MTCAS _{Stat} 2.1		Uncensored values	
		Number of samples		Mean
2670	Uncensored	28	Lognormal mean	1123.78
311	Censored		Std. devn.	1046.316
2430	Detection limit or PQL		Median	224.5
2420	Method detection limit		Min.	34.7
37.1	TOTAL	28	Max.	2900
2500				
1070				
2840				
2900	Lognormal distribution?	Normal distribution?		
1420	r-squared is:	r-squared is:		
1540	Recommendations:			
54.2	Reject lognormal distribution.			
54.4	W value is 0.8493. This is less than the tabled value of 0.924			
54.5	Reject normal distribution.			
34.7	W value is 0.7466. This is less than the tabled value of 0.924			
54.8				
39.4				
58				
52.4	UCL (based on t-statistic) is 1185.31			
158				
80.3				
217				
296				
56.9				
232				
937				
82.3				
1160				

**Lower Basin Residential Tap Water
Arsenic**

Site ID	Static Result (ug/L)	Purged Result (ug/L)	Average Result (ug/L)
R007	0.26	0.1 U	0.18
R025	0.17 U	0.1 U	0.135
R115	0.25 U	0.25 U	0.25
R144	0.83	1.1	0.965
			0.965 MAX
			0.3825 Average
			0.3912 Std Dev
			4 Count
			2 Count^0.5
			2.353 t-statistic
			0.8428 UCL₉₅normal

Lower Basin Neighborhood and Public Recreational Soil/Sediment

Antimony

Analytical Results											
(mg/kg)											
8.9	15.9	0.5	19	10.6	50.8	28	27.5	15	21	43	40
6.9	19.1	0.5	27	10.8	26.7	27.1	36.1	11	27	18	24
12.7	5.7	1.8	15	15	2	36.2	13.5	18	26	16	5.6
12.8	6	0.5	12	36.1	18.6	51.5	17	15	19	20	25
11	13.9	19.4	21	23.9	21.9	12.2	39.9	13	27	29	8.4
20.4	9	15.5	20	58.6	0.5	3.7	31.1	23	41	35	15
21.6	11.7	14.2	36	19.9	28.2	8.9	34.7	28	25	29	7.8
18.7	19.4	16.2	50	22.2	0.49	23.5	42.7	20	36	29	0.5
22.4	18.9	18.1	31	2.5	21.1	0.5	26.3	16	44	26	4.6
17.7	21.1	25.9	36	0.5	35.5	23.8	33	31	37	26	1.5
23.3	21.2	17.7	20	3	9	0.5	17	52	51	36	0.5
34.7	12	27.9	30	7	36.9	18.8	17.9	28	49	38	0.5
27	28.2	17.8	47	1.4	46	41.1	14.1	35	0.5	42	0.5
27.9	24.4	15.1	37	16.8	31	35.4	13.4	15	14	49	1
20.2	21.6	33.3	19	21.7	5.7	39.3	8.3	21	12	50	4.5
0.5	20.8	22.4	13	17.9	16.1	36.9	22.1	27	21	14	1.2
4.3	21.3	20.4	57	13.1	16.7	17.7	34.3	24	16	0.5	8
2.1	15.6	40.7	32	13.1	0.5	3.3	26.6	29	14	53	56
0.48	13.7	42.2	37	24	32.1	19.9	40	30	20	29	0.5
1.3	10.4	19.3	30	25.1	5.5	16	46.5	28	23	15	3.4
30.3	6.6	14.6	42	26.8	26.2	22.8	23.8	32	34	13	2.4
35.8	7.9	14.4	18	24.4	36.1	13.8	31	21	25	5.9	3.5
30.1	26.2	16.5	35	22	22	19.8	14.1	49	31	25	1.8
37.9	25.7	17.1	46	1.3	44.5	27.3	21	21	25	16	16
32.3	21.1	17.5	20	17.4	48.5	14.1	13	43	49	35	3.4
0.5	21.5	18.1	19	23.7	25.8	29.8	12.6	67	20	35	
2.4	20.9	23.5	18	0.5	2.1	20.8	11.7	49	52	27	
3.3	16.6	22.4	20	23	14.3	21	21	12	47	28	
0.5	54.6	20.5	18	0.5	20.7	38.8	29.7	16	43	46	
14.2	16.3	21	19	26.7	0.5	15.1	17.3	10	39	36	
19.3	22.3	14.7	17	33.1	25.5	24.7	29.2	30	13	25	
22.7	24.7	20.4	31	31.7	0.5	4.5	40.3	17	24	45	
20.7	1.2	18.4	10	44.2	21.6	15.4	28.7	11	74	39	

MTCASat 2.1			
Number of samples		Uncensored values	
Uncensored	388	Mean	22.08
Censored		Lognormal mean	29.41
Detection limit or PQL		Std. devn.	13.59137
Method detection limit		Median	20.85
TOTAL	388	Min.	0.48
		Max.	73.7
Lognormal distribution? Normal distribution?			
r-squared is:		r-squared is:	
Recommendations:			
Reject lognormal distribution.			
Y value is -26.7947. This lies outside the tabled values of 1.6275 and -2.275			
Assume normal distribution.			
Y value is -1.928. This lies within the tabled values of 1.6275 and -2.275			
UCL (based on t-statistic) is 23.22			

Lower Basin Neighborhood and Public Recreational Soil/Sediment

Arsenic

Analytical Results
 (mg/kg)

93.7	116	91	75	105	5.9	133	139	101	154	118	146	22
84.8	132	9.9	95	83	142	209	139	132	146	145	119	10
128	128	7.9	99	95	147	2.4	163	134	185	108	122	58
108	85	8.4	113	70	130	172	85	162	88	113	170	16
96.6	80	9.7	97	115	209	18	135	136	86	143	115	
135	100	8.9	92	83	375	136	19	126	45	126	127	
138	95	106	86	149	95	160	154	151	137	117	144	
110	117	139	119	256	9.4	105	166	109	93	72	56	
148	114	106	117	160	155	136	168	97	132	111	102	
102	105	103	217	492	250	304	128	64	105	84	123	
189	167	111	329	144	1.8	52	148	120	167	147	108	
351	110	112	213	151	188	14	178	142	118	79	129	
150	130	101	163	21	4.3	67	112	86	111	143	88	
216	132	151	115	14	130	154	143	122	155	98	26	
274	138	110	114	27	153	4	127	180	165	162	73	
5.4	150	111	163	60	45	179	126	120	138	153	95	
13.2	144	153	256	18	148	7	165	133	137	127	88	
17.5	139	121	104	73	162	152	96	107	111	123	79	
5.8	106	109	75	89	112	194	141	208	164	122	3	
36.4	88	219	154	84	22	138	161	132	137	111	8.4	
159	62	229	107	64	123	111	99	182	184	106	4.9	
167	41	97	110	72	132	146	124	85	9.5	132	2.6	
170	64	135	103	125	1.5	74	112	110	93	137	3.9	
203	121	84	123	135	148	20	172	124	46	143	3.8	
190	117	100	116	150	69	254	115	159	136	136	6.8	
15.3	103	98	150	127	118	122	150	318	80	74	12	
32.2	88	85	187	135	165	112	153	137	156	6.3	4.5	
75.4	102	94	109	3.9	100	128	135	148	113	68	35	
17.5	106	113	100	148	173	124	151	114	169	154	158	
263	114	97	86	168	146	164	81	123	143	69	3.3	
124	88	95	100	3.6	94	108	117	171	128	150	24	
121	94	111	98	153	10	141	152	84	129	18	16	

MTCAS _{Stat} 2.1			
Number of samples	Uncensored values		
Censored	388	Mean	114.51
Censored		Lognormal mean	140.92
Detection limit or PQL		Std. devn.	61.85832
Method detection limit		Median	116
TOTAL	388	Min.	1.5
		Max.	492
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Reject lognormal distribution.			
Y value is -35.3013. This lies outside the tabled values of 1.6275 and -2.275			
Reject normal distribution.			
Y value is -14.0119. This lies outside the tabled values of 1.6275 and -2.275			
UCL (based on t-statistic) is 119.72			

Lower Basin Neighborhood and Public Recreational Soil/Sediment

Cadmium

Analytical Results
 (mg/kg)

12.7	23	42	20	33	31	23	84	36
8.4	30	31	22	56	42	8.8	4.3	28
16.3	37	29	15	38	23	9.7	25	31
19.6	38	30	16	2.8	45	17	13	44
14.2	32	33	8.2	16	27	26	25	34
29.7	28	29	21	28	40	36	13	53
27.5	18	31	15	0.1	36	61	21	77
19.1	16	23	11	38	13	36	23	89
28.8	9.3	21	1.5	12	21	31	41	48
18	7.5	24	0.4	36	2.2	58	40	77
37.7	7.4	33	2.5	33	20	81	55	83
10.2	32	30	7.7	44	22	54	40	82
37.6	32	61	1.4	52	44	63	39	62
61.6	29	21	11	75	30	4.8	75	3.3
10.7	31	14	14	68	36	8.1	58	18
2.2	32	45	13	1.9	55	27	87	17
6.5	30	48	8.2	22	75	33	83	16
5.1	40	59	10	34	63	29	83	25
1.9	36	84	14	0.1	94	42	80	0.3
2.3	47	76	18	34	43	55	34	2.4
38.3	37	86	14	2.6	30	47	67	1.4
41.3	0.6	41	10	32	13	49	25	0.2
32.7	0.3	36	14	26	18	100	59	0.4
43.3	0.2	74	0.6	54	14	57	31	0.1
42.2	1	41	19	44	33	97	19	1.1
2.3	0.2	42	30	52	18	104	23	1.5
4.2	41	27	0.3	32	42	81	36	0.6
4.7	32	82	30	2.6	49	28	37	4.5
3.6	28	53	1.9	13	74	36	40	15
8.2	36	58	39	33	59	12	34	0.3
26.6	39	29	35	0.1	88	52	41	3.2
37	47	54	55	27	53	18	51	1.6
30.5	44	20	67	1.9	51	21	80	2.7
22.4	53	49	30	28	9.3	25	70	1.2
42.2	38	86	41	46	26	35	83	7.4
14.6	36	27	1.6	54	16	31	96	2
17.8	59	25	24	51	37	51	88	
23.7	38	41	28	50	35	47	33	
22.8	32	32	0.1	29	39	71	1	
27.4	54	35	37	4.8	39	61	4.7	
18	58	39	0.4	19	60	89	40	
25.4	28	32	42	19	64	86	24	
25.9	14	37	40	20	87	94	20	
35	30	21	20	26	57	105	3.6	

MTCASat 2.1			
Number of samples	Uncensored values		
Uncensored	388	Mean	33.14
Censored		Lognormal mean	51.80
Detection limit or PQL		Std. devn.	23.72412
Method detection limit		Median	30.5
TOTAL	388	Min.	0.1
		Max.	105
Lognormal distribution?	Normal distribution?		
r-squared is:	r-squared is:		
Recommendations:			
Reject lognormal distribution.			
Y value is -25.0406. This lies outside the tabled values of 1.6275 and -2.			
Reject normal distribution.			
Y value is -3.5563. This lies outside the tabled values of 1.6275 and -2.			
UCL (based on t-statistic) is 35.13			

Lower Basin Neighborhood and Public Recreational Soil/Sediment

Iron

Analytical Results

(mg/kg)

54800 1E+05 85300 67000 15900 18900 1E+05 2E+05 2E+05 17100
 51200 1E+05 76300 94800 1E+05 1E+05 2E+05 2E+05 75400
 74000 1E+05 96300 62200 1E+05 70900 1E+05 1E+05 11400
 69700 1E+05 83500 86100 48000 1E+05 1E+05 2E+05 1E+05
 64900 1E+05 87500 72000 1E+05 84500 2E+05 2E+05 1E+05
 97700 1E+05 95000 1E+05 2E+05 1E+05 1E+05 2E+05 47700
 93500 1E+05 1E+05 1E+05 93700 2E+05 81100 2E+05 65500
 78300 72600 85800 89200 27400 1E+05 39100 2E+05 38700
 ##### 81000 85400 1E+05 96500 1E+05 55200 13500 1E+05
 74300 60700 78400 80500 1E+05 1E+05 80100 72500 1E+05
 ##### 53300 62800 80900 4450 1E+05 1E+05 73000 1E+05
 ##### 68200 73500 38400 1E+05 2E+05 1E+05 85600 1E+05
 ##### 1E+05 86600 31600 55200 53500 2E+05 62000 2E+05
 ##### 1E+05 89900 31700 1E+05 62159 1E+05 71000 1E+05
 96700 1E+05 1E+05 29600 1E+05 17200 1E+05 92000 2E+05
 18100 97200 68300 31800 88100 90100 2E+05 1E+05 94500
 15900 1E+05 60500 46300 2E+05 1E+05 2E+05 1E+05 1E+05
 18600 79700 95300 62700 2E+05 2E+05 1E+05 1E+05 2E+05
 16700 79100 1E+05 54300 79600 1E+05 2E+05 1E+05 2E+05
 20900 79300 2E+05 38300 15400 1E+05 57000 1E+05 2E+05
 ##### 1E+05 2E+05 45800 1E+05 2E+05 69000 2E+05 1E+05
 ##### 82400 2E+05 76561 1E+05 2E+05 98700 86800 24800
 ##### 19900 2E+05 91800 7870 1E+05 1E+05 2E+05 98100
 ##### 17200 1E+05 85966 1E+05 2E+05 1E+05 2E+05 63700
 ##### 12700 98600 87495 21700 1E+05 2E+05 2E+05 54400
 25300 22200 2E+05 83007 1E+05 1E+05 2E+05 2E+05 48200
 29800 15700 1E+05 11500 1E+05 66400 1E+05 90100 12900
 43700 94800 1E+05 82200 1E+05 70286 1E+05 1E+05 15500
 22400 81800 74200 1E+05 1E+05 83000 2E+05 1E+05 17800
 80000 74900 2E+05 7370 2E+05 1E+05 1E+05 1E+05 12500
 95900 80600 1E+05 1E+05 50500 1E+05 2E+05 58100 16700
 ##### 98700 1E+05 17100 23900 1E+05 3E+05 70900 16100
 ##### 1E+05 1E+05 1E+05 55400 2E+05 2E+05 75600 16200
 94700 93200 1E+05 1E+05 1E+05 1E+05 2E+05 66500 2E+05 23100
 ##### 1E+05 81100 1E+05 10000 1E+05 87000 1E+05 14600
 75400 1E+05 1E+05 2E+05 1E+05 2E+05 58100 1E+05 27500
 82700 91400 2E+05 2E+05 16200 1E+05 1E+05 1E+05 54900
 79600 2E+05 82600 71800 2E+05 1E+05 64000 1E+05 11300
 93900 1E+05 75200 16200 2E+05 47000 79100 1E+05 20400
 ##### 1E+05 63700 1E+05 1E+05 53300 88200 2E+05 18800
 ##### 2E+05 85000 1E+05 1E+05 74200 2E+05 2E+05 20300
 95700 2E+05 70700 6080 1E+05 1E+05 83300 2E+05 17700
 ##### 78900 79500 2E+05 75800 1E+05 87700 2E+05 35500

MTCASat 2.1			
Number of samples	Uncensored values		
Uncensored	388	Mean	#####
Censored		Lognormal mean	#####
Detection limit or PQL		Std. devn.	50951.62
Method detection limit		Median	101000
TOTAL	388	Min.	4450
		Max.	256000
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Reject lognormal distribution.			
Y value is -15.2283. This lies outside the tabled values of 1.6275 and -2.275			
Reject normal distribution.			
Y value is 1.6645. This lies outside the tabled values of 1.6275 and -2.275			
UCL (based on t-statistic) is 105568.97			

Lower Basin Neighborhood and Public Recreational Soil/Sediment

Manganese

Analytical Results

(mg/kg)

4370	7470	####	5940	9470	####	6340	####	####
3810	8570	9590	5440	####	####	2980	708	8190
5510	9660	7520	6590	9140	####	4150	5130	9400
5800	9890	7930	####	759	####	6060	5210	####
4930	9700	8250	9180	7760	####	8950	8080	####
8470	9500	7090	####	8940	####	####	5490	####
8100	5480	7180	7810	141	####	####	6300	####
6900	6050	8290	7770	####	4830	####	8130	####
8940	4530	5960	1350	4120	6680	####	####	####
6600	3320	7710	979	9660	783	####	####	####
10300	4330	8780	1410	####	6850	####	8040	####
9370	9020	8860	1480	9310	8970	####	####	####
10200	8580	####	1150	####	####	####	####	8290
11600	8100	6780	3860	####	9410	3720	####	1280
5740	7920	5490	5920	7340	####	5560	9810	6140
1020	8280	####	4970	467	####	8650	####	4500
780	8510	####	3220	8510	####	####	####	5450
1200	8560	####	3730	9880	####	7740	####	5010
739	9240	####	5630	97.5	####	####	####	233
881	####	####	6910	####	####	####	7260	779
10000	9870	####	5750	1160	####	####	####	377
12800	722	8900	7290	####	6320	####	4430	197
9380	622	8040	7090	8040	7300	####	####	259
13900	511	####	195	####	5590	####	5000	256
13100	749	####	6900	####	9190	####	5800	341
1290	582	8400	####	####	7860	####	6810	805
2110	####	6150	271	4160	####	####	####	373
2880	9280	####	####	592	####	4930	####	1810
1450	7620	####	386	4650	####	6890	9470	4780
4810	9250	####	9970	####	####	3780	####	243
10100	####	8320	####	92.3	####	####	9000	875
13100	####	####	####	8200	####	6390	####	586
12100	####	8460	####	322	####	6560	####	797
9500	####	####	####	####	3940	7860	####	432
12100	####	####	6270	####	4500	####	####	2820
6870	####	9390	348	####	5670	6490	####	728
7240	####	7990	8380	####	8890	6650	####	
8010	9490	6680	9560	####	9740	####	5710	
9860	9030	9300	154	7280	####	####	112	
11000	####	7190	####	1700	####	####	3540	
7900	####	8730	138	6900	####	####	9840	
7570	6220	6790	####	5430	####	####	4100	
7840	5700	7120	####	8470	####	####	5660	
9020	8350	4810	4270	9040	####	####	1370	

MTCASat 2.1			
Number of samples	Uncensored values		
Uncensored	388	Mean	9402.87
Censored		Lognormal mean	12302.22
Detection limit or PQL		Std. devn.	5745.032
Method detection limit		Median	8875
TOTAL	388	Min.	92.3
		Max.	26400
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Reject lognormal distribution.			
Y value is -24.3552. This lies outside the tabled values of 1.6275 and -			
Assume normal distribution.			
Y value is 0.6914. This lies within the tabled values of 1.6275 and -			
UCL (based on t-statistic) is 9886.44			

Lower Basin Neighborhood and Public Recreational Soil/Sediment

Zinc

Analytical Results
 (mg/kg)

1800	4460	6670	###	5300	4700	4060	####	5720
1070	4630	4960	###	8780	7380	1440	589	4330
2290	5600	4630	###	6330	2630	1890	4210	5020
2940	5910	4670	###	577	7280	2580	2910	7810
1960	4990	5380	###	2330	3850	4450	3750	6380
4780	4330	4730	###	4340	6280	6570	1730	8760
4550	2370	4770	###	14.3	5580	####	2650	####
3160	2600	3340	###	5530	1690	6000	4030	####
4730	1520	2990	267	2550	2540	4920	6390	8360
3050	1160	3360	148	6490	562	9370	5750	####
5070	1350	5210	450	4610	3180	####	6650	####
1580	5810	4400	###	6920	3260	8010	7030	####
5830	5910	9630	315	8160	7920	####	7070	8260
6780	5280	2950	###	####	5270	1440	####	826
1120	5600	1890	###	7690	5240	1700	6950	4230
448	5690	6850	###	587	9620	4700	####	2840
800	4390	7520	###	3440	####	5310	####	1720
772	4480	####	###	4900	9950	4180	####	2930
370	5570	####	###	19.5	####	7400	####	75.1
411	7350	####	###	4870	6720	9230	5960	560
5360	5420	####	###	510	4400	8290	9850	215
5810	123	6700	###	6040	1920	8130	7340	45.1
4530	94.9	5650	###	3630	2250	####	9560	70
6030	65.7	####	184	8610	2360	9490	2790	37.7
5900	155	6710	###	5780	6300	####	2590	256
429	74.1	6810	###	8690	3010	####	3800	389
731	6600	4580	106	2870	6830	####	5610	90.9
848	4490	####	###	522	8800	3970	5430	1380
649	3930	8300	421	2090	####	5600	7160	4310
1370	5470	8910	###	5120	9320	2550	6280	69.3
4510	5730	4720	###	30.8	####	8340	7100	757
6150	7910	8550	###	3150	8030	1990	7120	462
5150	7240	2790	###	378	7170	2710	####	772
3730	8710	7480	###	5310	1400	4270	####	306
6540	6240	####	###	6830	2120	5680	####	1960
2030	5650	3720	452	8830	2430	4270	####	465
2700	9740	3310	###	8090	6500	5390	####	
3880	6930	6320	###	7730	6250	8180	5940	
3520	5810	5240	65	4400	6300	####	235	
4660	9690	5310	###	1010	7060	####	4900	
3720	####	6910	195	2990	7260	####	6140	
4520	4220	4830	###	2220	9260	####	2310	
4650	2280	6370	###	4020	####	####	2510	
6290	4690	3750	###	3790	8540	####	890	

MTCASat 2.1			
Number of samples	Uncensored values		
Uncensored	388	Mean	5337.10
Censored		Lognormal mean	7421.19
Detection limit or PQL		Std. devn.	3974.565
Method detection limit		Median	4750
TOTAL	388	Min.	14.3
		Max.	21800
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Reject lognormal distribution.			
Y value is -20.7149. This lies outside the tabled values of 1.6275 and 1.6275.			
Reject normal distribution.			
Y value is -7.7719. This lies outside the tabled values of 1.6275 and 1.6275.			
UCL (based on t-statistic) is 5671.65			

Lower Basin Neighborhood and Public Recreational Exposures to Surface Water

Arsenic

Analytical Results (ug/L)			
8.6	8.5	36.2	6.8
6.8	38.9	159	9.1
8	11.3	71.4	3.7
15.3	57	66.3	38
6.3	173	116	8.2
8.2	17.3	181	22.3
9.7	25.2	61.6	24.9
17.2	136	35.7	11.8
22.5	130	67.3	22.5
40.5	263	107	61.6
33.9	600	34	5.2
52	254	137	18.4
85.5	178	26.9	27.2
140	69.3	33	28.4
130	41.8	36.5	26.8
75.5	41.8	131	23.5
98.7	25.5	133	15
3.4	44	141	8.6
6.2	55.6	114	18.2
4	56.7	59	3.5
4.6	70.6	32.8	
3.8	67.3	53.3	
74.9	108	117	
54.1	139	125	
53.6	157	34.2	
128	108	45.1	
49.3	109	167	
34.6	66.2	27	
31.6	106	107	
31.8	117	149	
16.5	145	131	
9.3	116	60.4	
35.8	43.5	25.6	
8.4	69.9	135	

MTCAS _{Stat} 2.1			
Number of samples		Uncensored values	
Uncensored	122	Mean	68.02
Censored		Lognormal mean	75.64
Detection limit or PQL		Std. devn.	73.69277
Method detection limit		Median	43.75
TOTAL	122	Min.	3.4
		Max.	600
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:	Assume lognormal distribution.		
	Y value is 0.1902. This lies within the tabled values of 1.3558 and -2.508		
UCL (based on t-statistic) is 79.08			

Lower Basin Neighborhood and Public Recreational Exposures to Surface Water

Cadmium

Analytical Results (ug/L)			
3.6	3.7	16	9.6
1.8	23.2	68.4	16.3
1.3	7.4	41.7	8.5
2.4	7.6	34.1	14.7
0.5	14.1	95	9.5
1.8	4.6	83.5	19.9
2	2.8	58.5	24.7
3.7	15.7	15.8	8.9
4.7	56.8	34.9	26.3
7.3	338	20.3	65.4
7.1	1200	17	8.2
13.2	66.2	72.6	34.2
56.3	166	16.6	50.5
27.9	68.9	13.8	41.4
206	31	20.6	30.8
30.7	25.5	52.8	55.4
20.6	12.6	47.2	36.5
0.5	33.9	40.3	8.8
2.9	34	54	29.6
0.5	47.9	41.9	5.6
1.8	48.8	17.3	
0.5	45.8	44.9	
170	109	408	
26.5	60.4	84.9	
26.5	41.2	25	
75.8	49.4	11.9	
137	85.2	214	
65.8	46.5	30.1	
52.4	35.1	58	
59.8	44.7	115	
38.1	139	81.2	
11.6	41.9	44	
8.8	138	36.7	
3.5	23.9	25.6	

MTCASat 2.1			
Number of samples		Uncensored values	
Uncensored	122	Mean	54.82
Censored		Lognormal mean	62.86
Detection limit or PQL		Std. devn.	120.0504
Method detection limit		Median	30.75
TOTAL	122	Min.	0.5
		Max.	1200
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Reject lognormal distribution.			
Y value is -3.6937. This lies outside the tabled values of 1.3558 and -2.508			
Reject normal distribution.			
Y value is -51.7565. This lies outside the tabled values of 1.3558 and -2.508			
UCL (based on t-statistic) is 72.84			

Lower Basin Neighborhood and Public Recreational Exposures to Surface Water

Manganese

Analytical Results (ug/L)

517	816	9450	2600
187	10700	30600	4850
210	879	20500	2450
455	2310	11700	2590
124	4750	25900	3220
240	1320	19300	4190
285	1120	27200	6360
2460	5310	9140	1110
4960	13100	17800	1480
11100	22500	12900	4580
7730	84900	4780	576
12100	20600	26900	2270
13300	32100	3600	3170
23400	27100	5400	1530
35300	18100	25100	4720
13500	19700	50500	9350
17300	11100	55800	6520
357	17600	40600	1280
715	27900	50300	5130
636	32000	14100	680
961	34200	10800	
505	36500	16600	
40900	30000	45600	
9400	19500	31400	
17000	17500	4660	
33700	21200	4330	
47300	7040	46700	
10000	14600	13000	
13600	26700	14600	
16400	21500	18100	
9430	16700	18900	
2420	11000	6310	
13500	24200	3860	
614	10900	19600	

MTCASat 2.1			
Number of samples		Uncensored values	
Uncensored	122	Mean	14678.17
Censored		Lognormal mean	21268.93
Detection limit or PQL		Std. devn.	14652.28
Method detection limit		Median	11050
TOTAL	122	Min.	124
		Max.	84900
Lognormal distribution? Normal distribution?			
r-squared is:		r-squared is:	
Recommendations:			
Assume lognormal distribution.			
Y value is -2.3347. This lies within the tabled values of 1.3558 and -2.508			
UCL (based on t-statistic) is 16877.6			

Lower Basin Neighborhood and Public Recreational Exposures to Surface Water

Mercury

Analytical Results (ug/L)			
0.23	0.12	2.2	1.3
0.1	0.97	0.93	10.9
0.1	1.2	3.9	1.2
0.35	0.245	1.2	2.6
0.1	0.55	3.2	7.8
0.1	1.7	5	2.8
0.1	0.26	4.7	2.8
0.6	0.23	3.3	0.91
0.34	0.98	1.3	1.4
0.71	3.6	3.9	0.53
0.24	13.5	9	1
1.1	43.9	1.7	3
11.1	3.6	6.9	0.13
0.38	7.1	1.2	0.12
4.9	4	1.2	0.29
2	1.6	3.9	0.76
0.46	0.97	5.5	0.21
0.1	1.9	4.5	0.53
0.1	1.4	5.4	0.22
0.1	1.9	4.9	0.14
0.1	3	1.7	0.05
0.1	2.7	0.4	0.12
14.1	11.3	2.3	
1	3.7	16.7	
0.91	3	5.7	
6.3	3.4	1.8	
18	3.9	2.2	
4.3	3.1	32.2	
4.1	2.5	4.1	
6.8	3.3	2.5	
3.7	8.2	5.4	
1.8	1.6	5	
0.84	17.3	3.6	

MTCAS _{Stat} 2.1			
Number of samples		Uncensored values	
Uncensored	121	Mean	3.62
Censored		Lognormal mean	4.51
Detection limit or PQL		Std. devn.	5.82803
Method detection limit		Median	1.8
TOTAL	121	Min.	0.05
		Max.	43.9
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Assume lognormal distribution.			
Y value is -0.0322. This lies within the tabled values of 1.3534 and -2.51			
UCL (based on t-statistic) is 4.5			

Lower Basin Subsistence Sediment

Antimony

Analytical Results (mg/kg)					
1.3	28	17	32	13	0.5
17.4	27.1	17.9	21.4	24.4	4.6
23.7	36.2	14.1	48.5	73.7	1.5
0.5	51.5	13.35	20.9	42.7	0.5
23	12.2	8.3	42.8	17.8	0.5
0.5	3.7	22.1	67.4	15.5	0.5
26.7	8.9	34.3	49.4	20.4	1
33.1	23.5	26.6	11.8	28.6	4.5
31.7	0.495	40	16.1	34.7	1.2
44.2	23.8	46.5	10.4	28.5	8
50.8	0.5	23.8	29.6	28.9	55.6
26.7	18.8	31	16.6	25.6	0.49
2	41.1	14.1	10.5	25.6	3.4
18.6	35.4	21	20.8	36.1	2.4
21.9	39.3	13	27.3	37.9	3.5
0.495	36.9	12.55	25.8	41.9	1.8
28.2	17.7	11.65	18.5	48.6	15.6
0.49	3.3	21	27.4	50	3.4
21.1	19.9	29.7	40.7	13.7	
35.5	16	17.3	25.3	0.5	
9	22.8	29.2	36	53	
36.9	13.8	40.3	44.2	29.1	
46	19.8	28.7	36.5	14.7	
31	27.3	15.3	51.2	12.8	
5.7	14.1	10.9	48.6	5.9	
16.1	29.8	17.5	0.5	25.4	
16.7	20.8	15.2	13.5	16.2	
0.495	21	13.4	11.9	35.4	
32.1	38.8	22.6	20.9	35.3	
5.5	15.1	28	16.1	27	
26.2	24.7	19.6	13.9	28.3	
36.1	4.5	16.4	19.7	46	
22	15.4	31.4	23.3	35.8	
44.5	27.5	52.4	34.3	24.5	
48.5	36.1	28.4	25.3	44.5	
25.8	13.5	34.7	30.5	38.8	
2.1	17	14.8	25.3	39.5	
14.3	39.9	21	49.1	24.3	
20.7	31.1	26.5	19.8	5.6	
0.495	34.7	24	51.8	24.6	
25.5	42.7	29.2	47	8.35	
0.5	26.3	30.2	42.5	15.1	
21.6	33	28.3	39.3	7.8	

MTCAS _{Stat} 2.1			
Number of samples		Uncensored values	
Uncensored	233	Mean	23.62
Censored		Lognormal mean	32.73
Detection limit or PQL		Std. devn.	14.59707309
Method detection limit		Median	23.3
TOTAL	233	Min.	0.49
		Max.	73.7
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Reject lognormal distribution.			
Y value is -20.1835. This lies outside the tabled values of 1.5283 and -2.3626			
Assume normal distribution.			
Y value is 0.2467. This lies within the tabled values of 1.5283 and -2.3626			
UCL (based on t-statistic) is 25.2			

Lower Basin Subsistence Sediment
Arsenic

Analytical Results (mg/kg)					
3.9	160	95.8	114	72.1	3
148	105	141	123	111	8.4
168	136	161	171	84.3	4.9
3.6	304	99.1	84.4	147	2.6
153	51.8	124	154	78.6	3.9
5.9	14.2	112	146	143	3.8
26.7	67.3	172	185	98.1	6.8
147	154	115	87.9	162	11.6
130	4	150	85.5	153	4.5
209	179	153	45.2	127	35
375	7	135	137	123	158
94.7	152	151	92.8	122	3.3
9.4	194	81.4	132	111	23.8
155	138	117	105	106	16.3
250	111	152	167	132	22.2
1.8	146	101	118	137	10.2
188	73.6	132	111	143	58
4.3	20	134	155	136	16.3
130	254	162	165	73.9	
153	122	136	138	6.3	
44.7	112	126	137	68.1	
148	128	151	111	154	
162	124	109	164	69	
112	164	96.7	137	150	
22.3	108	63.5	184	18	
123	141	120	9.5	146	
132	139	142	93.2	119	
1.5	139	85.8	46.1	122	
148	163	122	136	170	
68.9	85.2	180	79.7	115	
118	135	120	156	127	
165	19	133	113	144	
99.8	154	107	169	56	
173	166	208	143	102	
146	168	132	128	123	
94.1	128	182	129	108	
10.4	148	84.8	118	129	
133	178	110	145	88.3	
209	112	124	108	25.6	
2.4	143	159	113	73.4	
172	127	318	143	94.6	
17.9	126	137	126	87.8	
136	165	148	117	79.3	

MTCASat 2.1			
Number of samples		Uncensored values	
Uncensored	233	Mean	113.77
Censored		Lognormal mean	150.52
Detection limit or PQL		Std. devn.	59.3703804
Method detection limit		Median	124
TOTAL	233	Min.	1.5
		Max.	375
Lognormal distribution? Normal distribution?			
r-squared is:		r-squared is:	
Recommendations:			
Reject lognormal distribution.			
Y value is -28.3113. This lies outside the tabled values of 1.5283 and -2.3626			
Reject normal distribution.			
Y value is -7.6397. This lies outside the tabled values of 1.5283 and -2.3626			
UCL (based on t-statistic) is 120.22			

Lower Basin Subsistence Sediment
Cadmium

Analytical Results (mg/kg)					
0.6	26.2	13.3	47.3	34.4	0.29
19.1	54.1	18.2	49.1	67	2.4
29.6	43.8	14.2	100	25.3	1.4
0.28	51.7	33.3	56.6	59.2	0.24
29.7	32.4	18.1	96.7	30.9	0.39
1.9	2.6	42.4	104	19.4	0.1
26.7	13.3	49.1	80.9	22.8	1.1
35.4	33	73.6	27.7	35.8	1.5
55.1	0.1	59	36.2	36.5	0.55
67.4	26.7	87.6	12.3	40.1	4.5
30.1	1.9	52.9	52.3	33.9	14.8
41.2	28	50.6	18.2	40.9	0.34
1.6	45.7	9.3	20.9	50.6	3.2
24.3	54.4	26.4	24.9	79.6	1.6
28.2	51.4	16	35.4	70.1	2.7
0.1	49.8	37.1	30.5	83.1	1.2
37.3	29.1	35.2	50.6	95.6	7.4
0.38	4.8	38.5	46.7	88	2
41.9	18.5	39	70.5	32.8	
40.1	18.7	59.6	60.6	1	
19.9	20.4	64	88.9	4.7	
32.8	25.7	87.2	85.9	40.3	
56.1	31	56.5	94.3	24.3	
38.2	42.2	23.1	105	19.7	
2.8	22.9	8.8	84.1	3.6	
15.6	44.7	9.7	4.3	36.1	
28.4	26.8	16.9	24.8	28.3	
0.1	39.6	25.5	12.9	30.9	
37.7	35.7	36.4	25	44.2	
11.9	12.5	60.7	13.2	33.6	
35.7	20.7	36.3	21	52.5	
33	2.2	31.3	23.3	77.3	
44.1	20.2	58	40.7	88.6	
51.6	22.3	80.9	40.3	48	
74.6	43.8	54.2	55	77.4	
67.5	30.3	62.7	40.1	83.3	
1.9	36.1	4.8	39.2	81.7	
22.1	54.9	8.1	74.7	62.3	
34.3	75.4	27.4	57.5	3.3	
0.1	63.1	33.1	87.1	17.5	
33.5	94.4	28.9	83	16.5	
2.6	42.9	42.3	82.9	15.6	
32.1	30.4	55.4	79.6	25.3	

MTCAS _{Stat} 2.1			
Number of samples		Uncensored values	
Uncensored	233	Mean	36.49
Censored		Lognormal mean	64.72
Detection limit or PQL		Std. devn.	26.15683314
Method detection limit		Median	33.3
TOTAL	233	Min.	0.1
		Max.	105
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Reject lognormal distribution.			
Y value is -19.7872. This lies outside the tabled values of 1.5283 and -2.3626			
Assume normal distribution.			
Y value is -0.5865. This lies within the tabled values of 1.5283 and -2.3626			
UCL (based on t-statistic) is 39.33			

**Lower Basin Subsistence Sediment
 Iron**

Analytical Results (mg/kg)

11500	111000	66400	142000	90100	12900
82200	115000	70286	134000	115000	15500
126000	132000	83000	197000	124000	17800
7370	189000	115000	121000	117000	12500
129000	50500	102000	194000	58100	16700
17100	23900	124000	256000	70900	16100
26.7	55400	176000	190000	75600	16200
127000	144000	157000	66500	159000	23100
125000	10000	149000	87000	125000	14600
162000	104000	178000	58100	129000	27500
152000	16200	148000	126000	143000	54900
71800	155000	135000	64000	114000	11300
16200	174000	47000	79100	102000	20400
102000	117000	53300	88200	188000	18800
123000	139000	74200	168000	170000	20300
6080	132000	110000	83300	174000	17700
165000	75800	125000	87700	212000	35500
15900	18900	136000	163000	176000	17100
138000	102000	162000	183000	75400	
131000	70900	133000	138000	11400	
48000	109000	143000	182000	116000	
120000	84500	183000	180000	111000	
182000	128000	146000	186000	47700	
93700	153000	81100	222000	65500	
27400	136000	39100	185000	38700	
96500	149000	55200	13500	146000	
106000	118000	80100	72500	102000	
4450	142000	114000	73000	116000	
144000	179000	132000	85600	140000	
55200	53500	159000	62000	154000	
127000	62159	131000	71000	136000	
144000	17200	112000	92000	169000	
88100	90100	154000	143000	94500	
150000	112000	203000	141000	123000	
217000	172000	138000	107000	155000	
79600	121000	168000	146000	206000	
15400	109000	57000	140000	179000	
104000	190000	69000	163000	105000	
125000	165000	98700	86800	24800	
7870	145000	128000	189000	98100	
126000	180000	103000	160000	63700	
21700	132000	150000	190000	54400	
139000	137000	150000	184000	48200	

MTCASat 2.1			
Number of samples		Uncensored values	
Uncensored	233	Mean	107364.01
Censored		Lognormal mean	119522.30
Detection limit or PQL		Std. devn.	55679.2942
Method detection limit		Median	115000
TOTAL	233	Min.	4450
		Max.	256000
Lognormal distribution? Normal distribution?			
r-squared is:		r-squared is:	
Recommendations:			
Reject lognormal distribution.			
Y value is -13.1521. This lies outside the tabled values of 1.5283 and -2.3626			
Reject normal distribution.			
Y value is 1.6478. This lies outside the tabled values of 1.5283 and -2.3626			
UCL (based on t-statistic) is 113411.85			

Lower Basin Subsistence Sediment

Manganese

Analytical Results (mg/kg)

195	8040	6320	14600	7260	233
6900	11800	7300	14600	13000	779
10000	13300	5590	22000	4430	377
271	18600	9190	13400	10900	197
10300	4160	7860	20400	5000	259
386	592	13400	25500	5800	256
26.7	4650	17700	20400	6810	341
12500	13000	17600	4930	14100	805
13100	92.3	15600	6890	10100	373
16900	8200	19600	3780	9470	1810
13700	322	26400	11400	14600	4780
6270	14000	13500	6390	9000	243
348	16400	3940	6560	10800	875
8380	11700	4500	7860	21600	586
9560	15000	5670	14800	18300	797
154	13000	8890	6490	17700	432
14200	7280	9740	6650	20900	2820
138	1700	14800	16300	18600	728
13900	6900	16200	18700	5710	
13300	5430	13600	15200	112	
4270	8470	13200	20500	3540	
9470	9040	20300	18900	9840	
18000	13800	14000	19900	4100	
9140	14800	6340	22200	5660	
759	15000	2980	19700	1370	
7760	15800	4150	708	13000	
8940	11500	6060	5130	8190	
141	15200	8950	5210	9400	
14300	19200	13300	8080	11900	
4120	4830	17100	5490	15700	
9660	6680	12900	6300	13700	
14000	783	11700	8130	18300	
9310	6850	16000	11400	11000	
15200	8970	18200	14100	12700	
21000	16800	14400	8040	15800	
7340	9410	16500	14500	20400	
467	11100	3720	14200	18900	
8510	18900	5560	17800	8290	
9880	18600	8650	9810	1280	
97.5	15300	10100	20200	6140	
12500	20000	7740	16500	4500	
1160	14000	14400	19200	5450	
13600	12700	15700	19800	5010	

MTCASat 2.1			
Number of samples		Uncensored values	
Uncensored	233	Mean	10081.75
Censored		Lognormal mean	14904.65
Detection limit or PQL		Std. devn.	6305.62504
Method detection limit		Median	9660
TOTAL	233	Min.	92.3
		Max.	26400
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Reject lognormal distribution.			
Y value is -18.8747. This lies outside the tabled values of 1.5283 and -2.3626			
Reject normal distribution.			
Y value is 2.3779. This lies outside the tabled values of 1.5283 and -2.3626			
UCL (based on t-statistic) is 10766.66			

Lower Basin Subsistence Sediment

Zinc

Analytical Results (mg/kg)					
184	3630	1920	8290	5960	75.1
2750	8610	2250	8130	9850	560
4400	5780	2360	17200	7340	215
106	8690	6300	9490	9560	45.1
4510	2870	3010	17800	2790	70
421	522	6830	21800	2590	37.7
26.7	2090	8800	13000	3800	256
4960	5120	12800	3970	5610	389
9410	30.8	9320	5600	5430	90.9
9530	3150	13700	2550	7160	1380
4650	378	8030	8340	6280	4310
6680	5310	7170	1990	7100	69.3
452	6830	1400	2710	7120	757
3680	8830	2120	4270	13300	462
3650	8090	2430	5680	11900	772
64.7	7730	6500	4270	12100	306
5880	4400	6250	5390	19000	1960
195	1010	6300	8180	17900	465
7410	2990	7060	11500	5940	
5720	2220	7260	10500	235	
3090	4020	9260	15000	4900	
5300	3790	14200	12200	6140	
8780	4700	8540	13900	2310	
6330	7380	4060	20900	2510	
577	2630	1440	12900	890	
2330	7280	1890	589	5720	
4340	3850	2580	4210	4330	
14.3	6280	4450	2910	5020	
5530	5580	6570	3750	7810	
2550	1690	10200	1730	6380	
6490	2540	6000	2650	8760	
4610	562	4920	4030	12700	
6920	3180	9370	6390	14000	
8160	3260	12800	5750	8360	
11300	7920	8010	6650	11400	
7690	5270	10700	7030	16800	
587	5240	1440	7070	13300	
3440	9620	1700	11900	8260	
4900	12800	4700	6950	826	
19.5	9950	5310	17400	4230	
4870	15300	4180	12100	2840	
510	6720	7400	13800	1720	
6040	4400	9230	13200	2930	

MTCASat 2.1			
Number of samples		Uncensored values	
Uncensored	233	Mean	5914.22
Censored		Lognormal mean	9066.45
Detection limit or PQL		Std. devn.	4450.102
Method detection limit		Median	5310
TOTAL	233	Min.	14.3
		Max.	21800
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Reject lognormal distribution.			
Y value is -16.8935. This lies outside the tabled values of 1.5283 and -2.3626			
Reject normal distribution.			
Y value is -4.0289. This lies outside the tabled values of 1.5283 and -2.3626			
UCL (based on t-statistic) is 6397.59			

Lower Basin Water Potatoes

Without Skin

Analytical Results
 (mg/kg)

0.0885	0.0722	0.2562
0.1105	0.0685	0.123
0.0852	0.0955	0.3734
0.0318	0.0906	0.2592
0.1223	0.4544	0.536
0.2468	0.2375	1.1874
0.1565	0.4041	1.1145
0.2471	0.03505	1.1186
0.0377	0.2995	2.7978
0.1269	0.03675	0.0706
0.6009	0.2587	0.2855
0.4595	0.03	0.0303
0.3846	0.203	0.1437
0.5244	0.0906	0.0913
0.124	0.0971	0.03685
0.0934	0.0286	0.2089
0.0882	0.03415	0.3302
0.03195	0.2045	0.2204
0.029	0.03145	0.03035
0.03205	0.0371	0.0249
0.3013	0.115	0.071
0.3526	0.0789	0.2437
0.1885	0.1564	0.03735
0.1055	0.0812	0.1109
0.0325	0.2907	0.0262
0.1422	0.0844	0.1343
0.212	0.0802	0.027
0.146	0.03055	0.0868
0.2562	0.03245	0.0659
0.3102	0.0809	0.1228
0.0324	0.1082	1.1944

MTCASat 2.1			
Number of samples		Uncensored values	
Uncensored	93	Mean	0.23
Censored		Lognormal mean	0.21
Detection limit or PQL		Std. devn.	0.362184
Method detection limit		Median	0.1109
TOTAL	93	Min.	0.0249
		Max.	2.7978
Lognormal distribution? r-squared is:		Normal distribution? r-squared is:	
Recommendations: Assume lognormal distribution. Y value is -0.3477. This lies within the tabled values of 1.2785 and -2.5716			
UCL (based on t-statistic) is 0.29			

Lower Basin Water Potatoes

With Skin

Analytical Results (mg/kg)		
0.1221	0.03775	0.1287
0.2886	0.1209	0.1043
0.115	0.14	0.1626
0.0402	0.1254	0.2733
0.0998	0.173	0.5275
0.2676	0.2514	0.4397
0.2634	0.3386	2.0417
0.2219	0.1633	1.8434
0.5581	0.0311	1.6312
0.0909	0.1136	1.8525
0.7281	0.5083	3.7092
1.5347	0.4767	0.4399
0.6027	0.0366	1.2285
0.4686	0.1595	0.2375
0.4862	0.1685	0.3375
0.3893	0.6096	0.733
0.1487	0.2855	0.7985
0.1483	0.2327	0.2424
0.1255	0.1562	0.3476
0.2728	0.036	0.1985
0.1256	0.0391	0.102
0.5317	0.1019	0.1764
0.6455	0.1169	0.3421
0.2172	0.1762	0.6386
0.1138	0.1473	0.1864
0.0976	0.1897	0.2404
0.1749	0.3034	0.6601
0.1645	0.0977	0.4189
0.3375	0.0823	0.0675
0.294	0.0351	0.3152
0.5973	0.1307	0.0721
		0.1128
		0.9914

MTCASat 2.1			
Number of samples		Uncensored values	
Uncensored	95	Mean	0.39
Censored		Lognormal mean	0.38
Detection limit or PQL		Std. devn.	0.531226
Method detection limit		Median	0.2219
TOTAL	95	Min.	0.0311
		Max.	3.7092
Lognormal distribution? r-squared is:		Normal distribution? r-squared is:	
Recommendations: Assume lognormal distribution. Y value is -0.9548. This lies within the tabled values of 1.2855 and -2.566			
UCL (based on t-statistic) is 0.48			

Lower Basin Occupational Exposure to Soil/Sediment

Antimony

Analytical Results										
(mg/kg)										
2.9	0.49	16.1	29.8	17.5	0.5	25.4	18.7	15.6	22.4	23.9
3.7	0.52	16.7	20.8	15.2	13.5	16.2	22.4	13.7	20.5	58.6
5	0.21	0.5	21	13.4	11.9	35.4	17.7	10.4	21	19.9
5.7	0.65	32.1	38.8	22.6	20.9	35.3	23.3	6.6	14.7	22.2
1	0.51	5.5	15.1	28	16.1	27	34.7	7.9	20.4	2.5
2.4	0.43	26.2	24.7	19.6	13.9	28.3	27	26.2	18.4	0.5
4	0.21	36.1	4.5	16.4	19.7	46	27.9	25.7	19.4	3
0.1	0.24	22	15.4	31.4	23.3	35.8	20.2	21.1	26.6	7
2.4	0.32	44.5	27.5	52.4	34.3	24.5	0.5	21.5	14.5	1.4
2.9	0.35	48.5	36.1	28.4	25.3	44.5	4.3	20.9	11.5	16.8
4.4	0.5	25.8	13.5	34.7	30.5	38.8	2.1	16.6	20.9	21.7
1	0.5	2.1	17	14.8	25.3	39.5	0.48	54.6	19.9	17.9
27.4	2.2	14.3	39.9	21	49.1	24.3	1.3	16.3	35.8	13.1
29.5	1.6	20.7	31.1	26.5	19.8	5.6	30.3	22.3	49.9	13.1
35.1	0.5	0.5	34.7	24	51.8	24.6	35.8	24.7	30.5	24
12	1	25.5	42.7	29.2	47	8.35	30.1	1.2	35.7	25.1
0.5	3.8	0.5	26.3	30.2	42.5	15.1	37.9	0.5	20.4	26.8
5.7	0.6	21.6	33	28.3	39.3	7.8	32.3	0.5	30.4	24.4
9.8	1.3	28	17	32	13	0.5	0.5	1.8	46.9	22
16.2	17.4	27.1	17.9	21.4	24.4	4.6	2.4	0.5	36.9	15.9
19	23.7	36.2	14.1	48.5	73.7	1.5	3.3	19.4	18.7	
16.7	0.5	51.5	13.4	20.9	42.7	0.5	0.5	15.5	12.5	
10	23	12.2	8.3	42.8	17.8	0.5	14.2	14.2	56.5	
5.4	0.5	3.7	22.1	67.4	15.5	0.5	19.3	16.2	31.8	
21.1	26.7	8.9	34.3	49.4	20.4	1	22.7	18.1	37.4	
31.2	33.1	23.5	26.6	11.8	28.6	4.5	20.7	25.9	29.8	
22.2	31.7	0.5	40	16.1	34.7	1.2	15.9	17.7	41.5	
25.6	44.2	23.8	46.5	10.4	28.5	8	19.1	27.9	17.8	
1.7	50.8	0.5	23.8	29.6	28.9	55.6	5.7	17.8	34.9	
12.8	26.7	18.8	31	16.6	25.6	0.49	6	15.1	45.9	
13.8	2	41.1	14.1	10.5	25.6	3.4	13.9	33.3	19.7	
10.5	18.6	35.4	21	20.8	36.1	2.4	9	22.4	19.3	
1.7	21.9	39.3	13	27.3	37.9	3.5	11.7	20.4	17.9	
5.7	0.5	36.9	12.6	25.8	41.9	1.8	19.4	40.7	20.4	
6.8	28.2	17.7	11.7	18.5	48.6	15.6	18.9	42.2	17.5	
18.1	0.49	3.3	21	27.4	50	3.4	21.1	19.3	18.8	
0.21	21.1	19.9	29.7	40.7	13.7	8.9	21.2	14.6	17.4	
0.21	35.5	16	17.3	25.3	0.5	6.9	12	14.4	30.9	
0.21	9	22.8	29.2	36	53	12.7	28.2	16.5	10.4	
0.47	36.9	13.8	40.3	44.2	29.1	12.8	24.4	17.1	10.6	
0.54	46	19.8	28.7	36.5	14.7	11	21.6	17.5	10.8	
0.21	31	27.3	15.3	51.2	12.8	20.4	20.8	18.1	15	
0.21	5.7	14.1	10.9	48.6	5.9	21.6	21.3	23.5	36.1	

MTCASat 2.1			
Number of samples		Uncensored values	
Uncensored	450	Mean	19.98
Censored		Lognormal mean	31.28
Detection limit or PQL		Std. devn.	14.0724
Method detection limit		Median	19.35
TOTAL	450	Min.	0.1
		Max.	73.7
Lognormal distribution? Normal distribution?			
r-squared is:		r-squared is:	
Recommendations:			
Reject lognormal distribution.			
Y value is -22.0133. This lies outside the tabled values of 1.652 and -2.2			
Assume normal distribution.			
Y value is -1.3214. This lies within the tabled values of 1.652 and -2.253			
UCL (based on t-statistic) is 21.08			

Lower Basin Occupational Exposure to Soil/Sediment
Arsenic

Analytical Results (mg/kg)										
87.3	7.2	130	254	162	165	73.9	93.7	110	135	82.5
101	5.9	153	122	136	138	6.3	84.8	130	83.9	94.8
107	9	44.7	112	126	137	68.1	128	132	100	70
108	4.8	148	128	151	111	154	108	138	97.8	115
119	8.2	162	124	109	164	69	96.6	150	84.8	82.5
123	7.3	112	164	96.7	137	150	135	144	94.3	149
125	7.4	22.3	108	63.5	184	18	138	139	113	256
14.5	7.5	123	141	120	9.5	146	110	106	96.9	160
92.2	6.1	132	139	142	93.2	119	148	87.9	95	492
95.3	9.6	1.5	139	85.8	46.1	122	102	62	111	144
103	8	148	163	122	136	170	189	40.9	75.1	151
90.9	8.5	68.9	85.2	180	79.7	115	351	64.1	94.5	21
112	8.7	118	135	120	156	127	150	121	98.7	13.5
115	8.9	165	19	133	113	144	216	117	113	27.2
142	8.5	99.8	154	107	169	56	274	103	97.3	59.7
78.5	11.7	173	166	208	143	102	5.4	87.9	91.8	17.9
4.8	10.3	146	168	132	128	123	13.2	102	86.1	72.9
28.4	4.6	94.1	128	182	129	108	17.5	106	119	88.8
65.7	5.6	10.4	148	84.8	118	129	5.8	114	117	83.8
88.4	5.6	133	178	110	145	88.3	36.4	87.9	217	64.3
113	9.5	209	112	124	108	25.6	159	94.2	329	72
86.6	5.6	2.4	143	159	113	73.4	167	91.4	213	125
65.2	4.3	172	127	318	143	94.6	170	9.9	163	135
40.6	50.7	17.9	126	137	126	87.8	203	7.9	115	150
132	8.3	136	165	148	117	79.3	190	8.4	114	127
135	3.9	160	95.8	114	72.1	3	15.3	9.7	163	135
115	148	105	141	123	111	8.4	32.2	8.9	256	18.4
95.6	168	136	161	171	84.3	4.9	75.4	106	104	
11.5	3.6	304	99.1	84.4	147	2.6	17.5	139	75.1	
50.3	153	51.8	124	154	78.6	3.9	263	106	154	
59.2	5.9	14.2	112	146	143	3.8	124	103	107	
57.3	142	67.3	172	185	98.1	6.8	121	111	110	
16.9	147	154	115	87.9	162	11.6	116	112	103	
22.6	130	4	150	85.5	153	4.5	132	101	123	
68.2	209	179	153	45.2	127	35	128	151	116	
93.3	375	7	135	137	123	158	85.4	110	150	
9.9	94.7	152	151	92.8	122	3.3	79.9	111	187	
10.5	9.4	194	81.4	132	111	23.8	100	153	109	
9.6	155	138	117	105	106	16.3	95.2	121	99.9	
10.9	250	111	152	167	132	22.2	117	109	86.1	
13.6	1.8	146	101	118	137	10.2	114	219	100	
7.7	188	73.6	132	111	143	58	105	229	97.6	
7.8	4.3	20	134	155	136	16.3	167	96.5	105	

MTCASat 2.1			
Number of samples		Uncensored values	
Uncensored	457	Mean	104.41
Censored		Lognormal mean	133.99
Detection limit or PQL		Std. devn.	64.3352305
Method detection limit		Median	111
TOTAL	457	Min.	1.5
		Max.	492
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Reject lognormal distribution.			
Y value is -26.2398. This lies outside the tabled values of 1.6542 and -2.251			
Reject normal distribution.			
Y value is -10.9881. This lies outside the tabled values of 1.6542 and -2.251			
UCL (based on t-statistic) is 109.4			

Lower Basin Occupational Exposure to Soil/Sediment
Cadmium

Analytical Results (mg/kg)											
12.3	0.04	41.9	18.5	39	70.5	32.8	12.7	35	13.7	31.5	
12.6	0.04	40.1	18.7	59.6	60.6	1	8.4	23.4	29.9	37	
14.7	0.04	19.9	20.4	64	88.9	4.7	16.3	29.7	41.8	21.4	
10.8	0.04	32.8	25.7	87.2	85.9	40.3	19.6	37	31	20.3	
7.3	0.04	56.1	31	56.5	94.3	24.3	14.2	38.4	28.9	22	
9.5	0.04	38.2	42.2	23.1	105	19.7	29.7	31.7	29.9	15.3	
15.6	0.16	2.8	22.9	8.8	84.1	3.6	27.5	28.2	33.4	15.5	
0.35	0.04	15.6	44.7	9.7	4.3	36.1	19.1	18.2	29.2	8.2	
13	0.04	28.4	26.8	16.9	24.8	28.3	28.8	16.3	30.6	21.3	
13.3	0.04	0.1	39.6	25.5	12.9	30.9	18	9.3	22.5	15	
14.6	0.04	37.7	35.7	36.4	25	44.2	37.7	7.5	21.1	11.4	
12.5	0.04	11.9	12.5	60.7	13.2	33.6	10.2	7.4	23.9	1.5	
11.8	0.09	35.7	20.7	36.3	21	52.5	37.6	32.1	32.5	0.38	
13.7	0.04	33	2.2	31.3	23.3	77.3	61.6	32.1	29.5	2.5	
14.5	0.13	44.1	20.2	58	40.7	88.6	10.7	29.2	60.8	7.7	
15.2	0.08	51.6	22.3	80.9	40.3	48	2.2	31.1	20.7	1.4	
0.1	0.09	74.6	43.8	54.2	55	77.4	6.5	32.2	14.1	10.8	
6.7	1.5	67.5	30.3	62.7	40.1	83.3	5.1	29.6	44.5	13.5	
7.7	0.5	1.9	36.1	4.8	39.2	81.7	1.9	39.8	48.2	12.6	
10.1	2	22.1	54.9	8.1	74.7	62.3	2.3	35.9	59.4	8.2	
15.9	2.4	34.3	75.4	27.4	57.5	3.3	38.3	46.7	84.1	10	
15.5	0.5	0.1	63.1	33.1	87.1	17.5	41.3	37.1	75.8	13.9	
5.7	2.3	33.5	94.4	28.9	83	16.5	32.7	0.6	85.8	17.6	
8.9	6.4	2.6	42.9	42.3	82.9	15.6	43.3	0.25	41.2	13.9	
10	0.1	32.1	30.4	55.4	79.6	25.3	42.2	0.21	36.2	10.2	
13.5	0.6	26.2	13.3	47.3	34.4	0.29	2.3	1	73.8	14	
14.6	19.1	54.1	18.2	49.1	67	2.4	4.2	0.23	41.3	14.7	
12	29.6	43.8	14.2	100	25.3	1.4	4.7	40.9	41.7		
6.1	0.28	51.7	33.3	56.6	59.2	0.24	3.6	31.6	26.7		
8.3	29.7	32.4	18.1	96.7	30.9	0.39	8.2	27.6	82.1		
9.4	1.9	2.6	42.4	104	19.4	0.1	26.6	36.4	53.3		
9.4	39.4	13.3	49.1	80.9	22.8	1.1	37	38.5	57.9		
1.3	35.4	33	73.6	27.7	35.8	1.5	30.5	47	29.1		
2.5	55.1	0.1	59	36.2	36.5	0.55	22.4	44.2	53.6		
3.3	67.4	26.7	87.6	12.3	40.1	4.5	42.2	52.8	19.8		
12.2	30.1	1.9	52.9	52.3	33.9	14.8	14.6	37.7	48.8		
0.04	41.2	28	50.6	18.2	40.9	0.34	17.8	35.7	86.4		
0.04	1.6	45.7	9.3	20.9	50.6	3.2	23.7	58.8	26.8		
0.04	24.3	54.4	26.4	24.9	79.6	1.6	22.8	38.1	24.9		
0.04	28.2	51.4	16	35.4	70.1	2.7	27.4	31.7	40.9		
0.04	0.1	49.8	37.1	30.5	83.1	1.2	18	54.2	32.3		
0.04	37.3	29.1	35.2	50.6	95.6	7.4	25.4	57.8	34.6		
0.04	0.38	4.8	38.5	46.7	88	2	25.9	27.9	38.5		

MTCASat 2.1			
Number of samples		Uncensored values	
Uncensored	457	Mean	29.00
Censored		Lognormal mean	80.50
Detection limit or PQL		Std. devn.	24.068877
Method detection limit		Median	26.6
TOTAL	457	Min.	0.04
		Max.	105
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Reject lognormal distribution.			
Y value is -26.6363. This lies outside the tabled values of 1.6542 and -2.251			
Reject normal distribution.			
Y value is -4.997. This lies outside the tabled values of 1.6542 and -2.251			
UCL (based on t-statistic) is 30.87			

**Lower Basin Occupational Exposure to Soil/Sediment
 Iron**

Analytical Results (mg/kg)															
94300	20500	88100	112000	138000	146000	105000	132000	17200	167000						
105000	19300	150000	172000	168000	140000	24800	118000	12700	144000						
106000	19400	217000	121000	57000	163000	98100	142000	22200	106000						
60800	21500	79600	109000	69000	86800	63700	133000	15700	74200						
9710	12690	15400	190000	98700	189000	54400	25300	94800	188000						
27500	11740	104000	165000	128000	160000	48200	29800	81800	131000						
50800	14190	125000	145000	103000	190000	12900	43700	74900	136000						
65000	16170	7870	180000	150000	184000	15500	22400	80600	104000						
75800	13300	126000	132000	150000	90100	17800	80000	98700	135000						
70100	12100	21700	137000	142000	115000	12500	95900	116000	81100						
34200	27200	139000	66400	134000	124000	16700	123000	93200	131000						
38600	15500	111000	70286	197000	117000	16100	114000	149000	184000						
89600	11500	115000	83000	121000	58100	16200	94700	100000	82600						
125000	82200	132000	115000	194000	70900	23100	115000	91400	75200						
93000	126000	189000	102000	256000	75600	14600	75400	166000	63700						
83100	7370	50500	124000	190000	159000	27500	82700	119000	85000						
17600	129000	23900	176000	66500	125000	54900	79600	112000	70700						
42000	17100	55400	157000	87000	129000	11300	93900	185000	79500						
50100	135000	144000	149000	58100	143000	20400	112000	195000	67000						
45700	127000	10000	178000	126000	114000	18800	110000	78900	94800						
19700	125000	104000	148000	64000	102000	20300	95700	85300	62200						
25900	162000	16200	135000	79100	188000	17700	108000	76300	86100						
33600	152000	155000	47000	88200	170000	35500	116000	96300	72000						
57500	71800	174000	53300	168000	174000	17100	105000	83500	100000						
23100	16200	117000	74200	83300	212000	54800	112000	87500	139000						
28600	102000	139000	110000	87700	176000	51200	126000	95000	89200						
26000	123000	132000	125000	163000	75400	74000	126000	102000	145000						
21900	6080	75800	136000	183000	11400	69700	126000	85800	80500						
20000	165000	18900	162000	138000	116000	64900	124000	85400	80900						
20100	15900	102000	133000	182000	111000	97700	72600	78400	38400						
19300	138000	70900	143000	180000	47700	93500	81000	62800	31600						
19100	131000	109000	183000	186000	65500	78300	60700	73500	31700						
18000	48000	84500	146000	222000	38700	104000	53300	86600	29600						
20000	120000	128000	81100	185000	146000	74300	68200	89900	31800						
14900	182000	153000	39100	13500	102000	138000	119000	119000	46300						
20600	93700	136000	55200	72500	116000	151000	110000	68300	62700						
20100	27400	149000	80100	73000	140000	128000	103000	60500	54300						
19900	96500	118000	114000	85600	154000	154000	97200	95300	38300						
20000	106000	142000	132000	62000	136000	96700	103000	113000	45800						
17000	4450	179000	159000	71000	169000	18100	79700	177000	76561						
21300	144000	53500	131000	92000	94500	15900	79100	222000	91800						
19200	55200	62159	112000	143000	123000	18600	79300	214000	85966						
20400	127000	17200	154000	141000	155000	16700	117000	190000	87495						
20300	144000	90100	203000	107000	206000	20900	82400	113000	83007						
					179000	121000	19900	98600	17200						

MTCASat 2.1			
Number of samples	Uncensored values	Mean	92916.73
Uncensored	445	Lognormal mean	100680.20
Censored		Std. devn.	53324.13
Detection limit or PQL		Median	92000
Method detection limit		Min.	4450
TOTAL	445	Max.	256000
Lognormal distribution?	Normal distribution?	r-squared is:	r-squared is:
Recommendations:			
Reject lognormal distribution.			
Y value is -8.5618. This lies outside the tabled values of 1.6501 and -2.25.			
Reject normal distribution.			
Y value is 2.402. This lies outside the tabled values of 1.6501 and -2.25.			
UCL (based on t-statistic) is 97107.82			

Lower Basin Occupational Exposure to Soil/Sediment
Manganese

Analytical Results (mg/kg)										
6410	350	9310	8970	14400	14500	8290	12800	622	17100	
7560	344	15200	16800	16500	14200	1280	9380	511	25200	
7830	379	21000	9410	3720	17800	6140	13900	749	8400	
4560	362	7340	11100	5560	9810	4500	13100	582	6150	
260	533	467	18900	8650	20200	5450	1290	10900	19300	
1410	354	8510	18600	10100	16500	5010	2110	9280	13300	
3520	436	9880	15300	7740	19200	233	2880	7620	14400	
3720	681	97.5	20000	14400	19800	779	1450	9250	8320	
5660	391	12500	14000	15700	7260	377	4810	11000	14200	
5300	535	1160	12700	14600	13000	197	10100	12700	8460	
2360	1890	13600	6320	14600	4430	259	13100	10200	13900	
2730	420	8040	7300	22000	10900	256	12100	16300	20000	
5820	195	11800	5590	13400	5000	341	9500	11200	9390	
8680	6900	13300	9190	20400	5800	805	12100	10000	7990	
6620	10000	18600	7860	25500	6810	373	6870	16300	6680	
6190	271	4160	13400	20400	14100	1810	7240	9490	9300	
807	10300	592	17700	4930	10100	4780	8010	9030	7190	
2900	386	4650	17600	6890	9470	243	9860	18400	8730	
3500	9970	13000	15600	3780	14600	875	11000	19100	6790	
3250	12500	92.3	19600	11400	9000	586	7900	6220	7120	
725	13100	8200	26400	6390	10800	797	7570	5700	4810	
1160	16900	322	13500	6560	21600	432	7840	8350	5940	
1780	13700	14000	3940	7860	18300	2820	9020	11000	5440	
3830	6270	16400	4500	14800	17700	728	7470	9590	6590	
404	348	11700	5670	6490	20900	4370	8570	7520	10900	
526	8380	15000	8890	6650	18600	3810	9660	7930	9180	
451	9560	13000	9740	16300	5710	5510	9890	8250	12800	
360	154	7280	14800	18700	112	5800	9700	7090	7810	
400	14200	1700	16200	15200	3540	4930	9500	7180	7770	
387	138	6900	13600	20500	9840	8470	5480	8290	1350	
375	13900	5430	13200	18900	4100	8100	6050	5960	979	
549	13300	8470	20300	19900	5660	6900	4530	7710	1410	
531	4270	9040	14000	22200	1370	8940	3320	8780	1480	
356	9470	13800	6340	19700	13000	6600	4330	8860	1150	
283	18000	14800	2980	708	8190	10300	9020	12900	3860	
367	9140	15000	4150	5130	9400	9370	8580	6780	5920	
344	759	15800	6060	5210	11900	10200	8100	5490	4970	
412	7760	11500	8950	8080	15700	11600	7920	10700	3220	
365	8940	15200	13300	5490	13700	5740	8280	12000	3730	
259	141	19200	17100	6300	18300	1020	8510	17700	5630	
354	14300	4830	12900	8130	11000	780	8560	21100	6910	
278	4120	6680	11700	11400	12700	1200	9240	21200	5750	
306	9660	783	16000	14100	15800	739	12800	19600	7290	
371	14000	6850	18200	8040	20400	881	9870	8900	7090	
				18900	10000	722	8040	597		

MTCASat 2.1			
Number of samples		Uncensored values	
Uncensored	445	Mean	8449.09
Censored		Lognormal mean	11873.11
Detection limit or PQL		Std. devn.	5973.72812
Method detection limit		Median	8040
TOTAL	445	Min.	92.3
		Max.	26400
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Reject lognormal distribution.			
Y value is -16.1585. This lies outside the tabled values of 1.6501 and -2.2547			
Assume normal distribution.			
Y value is 0.6709. This lies within the tabled values of 1.6501 and -2.2547			
UCL (based on t-statistic) is 8918.6			

Lower Basin Occupational Exposure to Soil/Sediment

Zinc

Analytical Results (mg/kg)										
2330	58.7	7410	2990	7060	11500	5940	1800	6290	2280	4830
2590	54.3	5720	2220	7260	10500	235	1070	4460	4690	6370
2940	54.5	3090	4020	9260	15000	4900	2290	4630	6670	3750
2670	34.7	5300	3790	14200	12200	6140	2940	5600	4960	3590
2450	53.3	8780	4700	8540	13900	2310	1960	5910	4630	3840
2700	50.3	6330	7380	4060	20900	2510	4780	4990	4670	3030
3280	51.7	577	2630	1440	12900	890	4550	4330	5380	2520
311	54.8	2330	7280	1890	589	5720	3160	2370	4730	5060
2880	39.4	4340	3850	2580	4210	4330	4730	2600	4770	3530
2900	47.4	14.3	6280	4450	2910	5020	3050	1520	3340	3190
2940	45.2	5530	5580	6570	3750	7810	5070	1160	2990	1850
2430	48	2550	1690	10200	1730	6380	1580	1350	3360	267
2720	58	6490	2540	6000	2650	8760	5830	5810	5210	148
3440	51.9	4610	562	4920	4030	12700	6780	5910	4400	450
3530	49.7	6920	3180	9370	6390	14000	1120	5280	9630	1470
2420	138	8160	3260	12800	5750	8360	448	5600	2950	315
37.1	52.4	11300	7920	8010	6650	11400	800	5690	1890	1640
903	158	7690	5270	10700	7030	16800	772	4390	6850	1940
1250	80.3	587	5240	1440	7070	13300	370	4480	7520	1780
1570	217	3440	9620	1700	11900	8260	411	5570	10100	1320
2660	296	4900	12800	4700	6950	826	5360	7350	13600	1590
2500	56.9	19.5	9950	5310	17400	4230	5810	5420	12500	2070
1070	232	4870	15300	4180	12100	2840	4530	123	13600	2530
1270	937	510	6720	7400	13800	1720	6030	94.9	6700	1770
2750	82.3	6040	4400	9230	13200	2930	5900	65.7	5650	1610
4180	184	3630	1920	8290	5960	75.1	429	155	10900	1680
2840	2750	8610	2250	8130	9850	560	731	74.1	6710	1160
2900	4400	5780	2360	17200	7340	215	848	6600	6810	
462	106	8690	6300	9490	9560	45.1	649	4490	4580	
1210	4510	2870	3010	17800	2790	70	1370	3930	12100	
1500	421	522	6830	21800	2590	37.7	4510	5470	8300	
1420	6990	2090	8800	13000	3800	256	6150	5730	8910	
353	4960	5120	12800	3970	5610	389	5150	7910	4720	
549	9410	30.8	9320	5600	5430	90.9	3730	7240	8550	
641	9530	3150	13700	2550	7160	1380	6540	8710	2790	
1540	4650	378	8030	8340	6280	4310	2030	6240	7480	
55.2	6680	5310	7170	1990	7100	69.3	2700	5650	14200	
67.8	452	6830	1400	2710	7120	757	3880	9740	3720	
60	3680	8830	2120	4270	13300	462	3520	6930	3310	
54.2	3650	8090	2430	5680	11900	772	4660	5810	6320	
54.4	64.7	7730	6500	4270	12100	306	3720	9690	5240	
52.1	5880	4400	6250	5390	19000	1960	4520	10200	5310	
50.3	195	1010	6300	8180	17900	465	4650	4220	6910	

MTCASat 2.1			
Number of samples		Uncensored values	
Uncensored	457	Mean	4703.47
Censored		Lognormal mean	8110.80
Detection limit or PQL		Std. devn.	3987.5019
Method detection limit		Median	4230
TOTAL	457	Min.	14.3
		Max.	21800
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Reject lognormal distribution.			
Y value is -17.4671. This lies outside the tabled values of 1.6542 and -2.2544.			
Reject normal distribution.			
Y value is -9.3486. This lies outside the tabled values of 1.6542 and -2.2544.			
UCL (based on t-statistic) is 5012.73			

Lower Basin Subsistence Surface Soil

Antimony

Analysis Value mg/kg	Site ID	Analysis Value mg/kg	Site ID	Analysis Value mg/kg	Site ID	Analysis Value mg/kg	Site ID
8.9	CUA033	28.2	CUA046	17.5	CUA055	36.1	CUA066
6.9	CUA033	24.4	CUA046	18.1	CUA055	23.9	CUA066
12.7	CUA033	21.6	CUA046	23.5	CUA055	58.6	CUA066
12.8	CUA033	20.8	CUA046	22.4	CUA055	19.9	CUA066
11	CUA033	21.3	CUA046	20.5	CUA055	22.2	CUA066
20.4	CUA035	15.6	CUA047	21	CUA056	2.5	CUA067
21.6	CUA035	13.7	CUA047	14.7	CUA056	0.5	CUA067
18.7	CUA035	10.4	CUA047	20.4	CUA056	3	CUA067
22.4	CUA035	6.6	CUA047	18.4	CUA056	7	CUA067
17.7	CUA035	7.9	CUA047	19.4	CUA056	1.4	CUA067
23.3	CUA036	26.2	CUA048	26.6	CUA057	16.8	CUA068
34.7	CUA036	25.7	CUA048	14.5	CUA057	21.7	CUA068
27	CUA036	21.1	CUA048	11.5	CUA057	17.9	CUA068
27.9	CUA036	21.5	CUA048	20.9	CUA057	13.1	CUA068
20.2	CUA036	20.9	CUA048	19.9	CUA057	13.1	CUA068
0.5	CUA038	16.6	CUA049	35.8	CUA058	24	CUA069
4.3	CUA038	54.6	CUA049	49.9	CUA058	25.1	CUA069
2.1	CUA038	16.3	CUA049	30.5	CUA058	26.8	CUA069
0.48	CUA038	22.3	CUA049	35.7	CUA058	24.4	CUA069
1.3	CUA038	24.7	CUA049	20.4	CUA058	22	CUA069
30.3	CUA039	1.2	CUA050	30.4	CUA059		
35.8	CUA039	0.495	CUA050	46.9	CUA059		
30.1	CUA039	0.5	CUA050	36.9	CUA059		
37.9	CUA039	1.8	CUA050	18.7	CUA059		
32.3	CUA039	0.5	CUA050	12.5	CUA059		
0.5	CUA041	19.4	CUA051	56.5	CUA060		
2.4	CUA041	15.5	CUA051	31.8	CUA060		
3.3	CUA041	14.2	CUA051	37.4	CUA060		
0.5	CUA041	16.2	CUA051	29.8	CUA060		
14.2	CUA041	18.1	CUA051	41.5	CUA060		
19.3	CUA043	25.9	CUA052	17.8	CUA063		
22.7	CUA043	17.7	CUA052	34.9	CUA063		
20.7	CUA043	27.9	CUA052	45.9	CUA063		
15.9	CUA043	17.8	CUA052	19.7	CUA063		
19.1	CUA043	15.1	CUA052	19.3	CUA063		
5.7	CUA044	33.3	CUA053	17.9	CUA064		
6	CUA044	22.4	CUA053	20.4	CUA064		
13.9	CUA044	20.4	CUA053	17.5	CUA064		
9	CUA044	40.7	CUA053	18.8	CUA064		
11.7	CUA044	42.2	CUA053	17.4	CUA064		
19.4	CUA045	19.3	CUA054	30.9	CUA065		
18.9	CUA045	14.6	CUA054	10.4	CUA065		
21.1	CUA045	14.4	CUA054	10.55	CUA065		
21.2	CUA045	16.5	CUA054	10.75	CUA065		
11.95	CUA045	17.1	CUA054	15	CUA065		

MTCASat 2.1			
Number of samples	Uncensored values		
Uncensored	155	Mean	19.76
Censored		Lognormal mean	25.07
Detection limit or PQL		Std. devn.	11.58687
Method detection limit		Median	19.3
TOTAL	155	Min.	0.48
		Max.	58.6
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Y value is -19.4769. This lies outside the tabled values of 1.4303 and -2.4459			
Reject lognormal distribution.			
Y value is -4.5552. This lies outside the tabled values of 1.4303 and -2.4459			
Reject normal distribution.			
UCL (based on t-statistic) is 21.31			

Lower Basin Subsistence Surface Soil

Arsenic

Analysis Value mg/kg	Site ID	Analysis Value mg/kg	Site ID	Analysis Value mg/kg	Site ID	Analysis Value mg/kg	Site ID
93.7	CUA033	132	CUA046	84.8	CUA055	256	CUA066
84.8	CUA033	138	CUA046	94.3	CUA055	160	CUA066
128	CUA033	150	CUA046	113	CUA055	492	CUA066
108	CUA033	144	CUA046	96.9	CUA055	144	CUA066
96.6	CUA033	139	CUA046	95	CUA055	151	CUA066
135	CUA035	106	CUA047	111	CUA056	21	CUA067
138	CUA035	87.9	CUA047	75.1	CUA056	13.5	CUA067
110	CUA035	62	CUA047	94.5	CUA056	27.2	CUA067
148	CUA035	40.9	CUA047	98.7	CUA056	59.7	CUA067
102	CUA035	64.1	CUA047	113	CUA056	17.9	CUA067
189	CUA036	121	CUA048	97.3	CUA057	72.9	CUA068
351	CUA036	117	CUA048	91.8	CUA057	88.8	CUA068
150	CUA036	103	CUA048	86.1	CUA057	83.8	CUA068
216	CUA036	87.9	CUA048	119	CUA057	64.3	CUA068
274	CUA036	102	CUA048	117	CUA057	72	CUA068
5.4	CUA038	106	CUA049	217	CUA058	125	CUA069
13.2	CUA038	114	CUA049	329	CUA058	135	CUA069
17.5	CUA038	87.9	CUA049	213	CUA058	150	CUA069
5.8	CUA038	94.2	CUA049	163	CUA058	127	CUA069
36.4	CUA038	91.4	CUA049	115	CUA058	135	CUA069
159	CUA039	9.9	CUA050	114	CUA059		
167	CUA039	7.9	CUA050	163	CUA059		
170	CUA039	8.4	CUA050	256	CUA059		
203	CUA039	9.7	CUA050	104	CUA059		
190	CUA039	8.9	CUA050	75.1	CUA059		
15.3	CUA041	106	CUA051	154	CUA060		
32.2	CUA041	139	CUA051	107	CUA060		
75.4	CUA041	106	CUA051	110	CUA060		
17.5	CUA041	103	CUA051	103	CUA060		
263	CUA041	111	CUA051	123	CUA060		
124	CUA043	112	CUA052	116	CUA063		
121	CUA043	101	CUA052	150	CUA063		
116	CUA043	151	CUA052	187	CUA063		
132	CUA043	110	CUA052	109	CUA063		
128	CUA043	111	CUA052	99.9	CUA063		
85.4	CUA044	153	CUA053	86.1	CUA064		
79.9	CUA044	121	CUA053	100	CUA064		
100	CUA044	109	CUA053	97.6	CUA064		
95.2	CUA044	219	CUA053	105	CUA064		
117	CUA044	229	CUA053	82.5	CUA064		
114	CUA045	96.5	CUA054	94.8	CUA065		
105	CUA045	135	CUA054	70	CUA065		
167	CUA045	83.9	CUA054	115	CUA065		
110	CUA045	100	CUA054	82.5	CUA065		
130	CUA045	97.8	CUA054	149	CUA065		

MTCASat 2.1			
Number of samples	Uncensored values		
Uncensored	155	Mean	115.62
Censored		Lognormal mean	127.31
Detection limit or PQL		Std. devn.	65.60195
Method detection limit		Median	109
TOTAL	155	Min.	5.4
		Max.	492
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Reject lognormal distribution.			
Y value is -19.0494. This lies outside the tabled values of 1.4303 and -2.4459			
Reject normal distribution.			
Y value is -14.74. This lies outside the tabled values of 1.4303 and -2.4459			
UCL (based on t-statistic) is 124.35			

Lower Basin Subsistence Surface Soil

Cadmium

Analysis Value mg/kg	Site ID	Analysis Value mg/kg	Site ID	Analysis Value mg/kg	Site ID	Analysis Value mg/kg	Site ID
12.7	CUA033	29.7	CUA046	28.9	CUA055	15.5	CUA066
8.4	CUA033	37	CUA046	29.9	CUA055	8.2	CUA066
16.3	CUA033	38.4	CUA046	33.4	CUA055	21.3	CUA066
19.6	CUA033	31.7	CUA046	29.2	CUA055	15	CUA066
14.2	CUA033	28.2	CUA046	30.6	CUA055	11.4	CUA066
29.7	CUA035	18.2	CUA047	22.5	CUA056	1.5	CUA067
27.5	CUA035	16.3	CUA047	21.1	CUA056	0.38	CUA067
19.1	CUA035	9.3	CUA047	23.9	CUA056	2.5	CUA067
28.8	CUA035	7.5	CUA047	32.5	CUA056	7.7	CUA067
18	CUA035	7.4	CUA047	29.5	CUA056	1.4	CUA067
37.7	CUA036	32.1	CUA048	60.8	CUA057	10.8	CUA068
10.2	CUA036	32.1	CUA048	20.7	CUA057	13.5	CUA068
37.6	CUA036	29.2	CUA048	14.1	CUA057	12.6	CUA068
61.6	CUA036	31.1	CUA048	44.5	CUA057	8.2	CUA068
10.7	CUA036	32.2	CUA048	48.2	CUA057	10	CUA068
2.2	CUA038	29.6	CUA049	59.4	CUA058	13.9	CUA069
6.5	CUA038	39.8	CUA049	84.1	CUA058	17.6	CUA069
5.1	CUA038	35.9	CUA049	75.8	CUA058	13.9	CUA069
1.9	CUA038	46.7	CUA049	85.8	CUA058	10.2	CUA069
2.3	CUA038	37.1	CUA049	41.2	CUA058	14	CUA069
38.3	CUA039	0.6	CUA050	36.2	CUA059		
41.3	CUA039	0.25	CUA050	73.8	CUA059		
32.7	CUA039	0.21	CUA050	41.3	CUA059		
43.3	CUA039	1	CUA050	41.7	CUA059		
42.2	CUA039	0.23	CUA050	26.7	CUA059		
2.3	CUA041	40.9	CUA051	82.1	CUA060		
4.2	CUA041	31.6	CUA051	53.3	CUA060		
4.7	CUA041	27.6	CUA051	57.9	CUA060		
3.6	CUA041	36.4	CUA051	29.1	CUA060		
8.2	CUA041	38.5	CUA051	53.6	CUA060		
26.6	CUA043	47	CUA052	19.8	CUA063		
37	CUA043	44.2	CUA052	48.8	CUA063		
30.5	CUA043	52.8	CUA052	86.4	CUA063		
22.4	CUA043	37.7	CUA052	26.8	CUA063		
42.2	CUA043	35.7	CUA052	24.9	CUA063		
14.6	CUA044	58.8	CUA053	40.9	CUA064		
17.8	CUA044	38.1	CUA053	32.3	CUA064		
23.7	CUA044	31.7	CUA053	34.6	CUA064		
22.8	CUA044	54.2	CUA053	38.5	CUA064		
27.4	CUA044	57.8	CUA053	31.5	CUA064		
18	CUA045	27.9	CUA054	37	CUA065		
25.4	CUA045	13.7	CUA054	21.4	CUA065		
25.9	CUA045	29.9	CUA054	20.3	CUA065		
35	CUA045	41.8	CUA054	22	CUA065		
23.4	CUA045	31	CUA054	15.3	CUA065		

MTCASat 2.1			
Number of samples	Uncensored values		
Uncensored	155	Mean	28.09
Censored		Lognormal mean	37.20
Detection limit or PQL		Std. devn.	18.46822
Method detection limit		Median	28.2
TOTAL	155	Min.	0.21
		Max.	86.4
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
		Reject lognormal distribution.	
		Y value is -15.8548. This lies outside the tabled values of 1.4303 and -2.4459	
		Reject normal distribution.	
		Y value is -3.1882. This lies outside the tabled values of 1.4303 and -2.4459	
		UCL (based on t-statistic) is 30.55	

Lower Basin Subsistence Surface Soil

Iron

Analysis Value mg/kg	Site ID	Analysis Value mg/kg	Site ID	Analysis Value mg/kg	Site ID	Analysis Value mg/kg	Site ID
54800	CUA033	112000	CUA046	87500	CUA055	139000	CUA066
51200	CUA033	126000	CUA046	95000	CUA055	89200	CUA066
74000	CUA033	126000	CUA046	102000	CUA055	145000	CUA066
69700	CUA033	126000	CUA046	85800	CUA055	80500	CUA066
64900	CUA033	124000	CUA046	85400	CUA055	80900	CUA066
97700	CUA035	72600	CUA047	78400	CUA056	38400	CUA067
93500	CUA035	81000	CUA047	62800	CUA056	31600	CUA067
78300	CUA035	60700	CUA047	73500	CUA056	31700	CUA067
104000	CUA035	53300	CUA047	86600	CUA056	29600	CUA067
74300	CUA035	68200	CUA047	89900	CUA056	31800	CUA067
138000	CUA036	119000	CUA048	119000	CUA057	46300	CUA068
151000	CUA036	110000	CUA048	68300	CUA057	62700	CUA068
128000	CUA036	103000	CUA048	60500	CUA057	54300	CUA068
154000	CUA036	97200	CUA048	95300	CUA057	38300	CUA068
96700	CUA036	103000	CUA048	113000	CUA057	45800	CUA068
18100	CUA038	79700	CUA049	177000	CUA058	76561	CUA069
15900	CUA038	79100	CUA049	222000	CUA058	91800	CUA069
18600	CUA038	79300	CUA049	214000	CUA058	85966	CUA069
16700	CUA038	117000	CUA049	190000	CUA058	87495	CUA069
20900	CUA038	82400	CUA049	113000	CUA058	83007	CUA069
121000	CUA039	19900	CUA050	98600	CUA059		
132000	CUA039	17200	CUA050	167000	CUA059		
118000	CUA039	12700	CUA050	144000	CUA059		
142000	CUA039	22200	CUA050	106000	CUA059		
133000	CUA039	15700	CUA050	74200	CUA059		
25300	CUA041	94800	CUA051	188000	CUA060		
29800	CUA041	81800	CUA051	131000	CUA060		
43700	CUA041	74900	CUA051	136000	CUA060		
22400	CUA041	80600	CUA051	104000	CUA060		
80000	CUA041	98700	CUA051	135000	CUA060		
95900	CUA043	116000	CUA052	81100	CUA063		
123000	CUA043	93200	CUA052	131000	CUA063		
114000	CUA043	149000	CUA052	184000	CUA063		
94700	CUA043	100000	CUA052	82600	CUA063		
115000	CUA043	91400	CUA052	75200	CUA063		
75400	CUA044	166000	CUA053	63700	CUA064		
82700	CUA044	119000	CUA053	85000	CUA064		
79600	CUA044	112000	CUA053	70700	CUA064		
93900	CUA044	185000	CUA053	79500	CUA064		
112000	CUA044	195000	CUA053	67000	CUA064		
110000	CUA045	78900	CUA054	94800	CUA065		
95700	CUA045	85300	CUA054	62200	CUA065		
108000	CUA045	76300	CUA054	86100	CUA065		
116000	CUA045	96300	CUA054	72000	CUA065		
105000	CUA045	83500	CUA054	100000	CUA065		

MTCASat 2.1			
Number of samples	Uncensored values		
Uncensored	155	Mean	92135.03
Censored		Lognormal mean	95235.05
Detection limit or PQL		Std. devn.	41392.02
Method detection limit		Median	87500
TOTAL	155	Min.	12700
		Max.	222000
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
		Reject lognormal distribution.	
		Y value is -9.4591. This lies outside the tabled values of 1.4303 and -2.4459	
		Reject normal distribution.	
		Y value is -3.118. This lies outside the tabled values of 1.4303 and -2.4459	
		UCL (based on t-statistic) is 97647.36	

Lower Basin Subsistence Surface Soil

Manganese

Analysis Value mg/kg	Site ID	Analysis Value mg/kg	Site ID	Analysis Value mg/kg	Site ID	Analysis Value mg/kg	Site ID
4370	CUA033	8570	CUA046	7520	CUA055	10900	CUA066
3810	CUA033	9660	CUA046	7930	CUA055	9180	CUA066
5510	CUA033	9890	CUA046	8250	CUA055	12800	CUA066
5800	CUA033	9700	CUA046	7090	CUA055	7810	CUA066
4930	CUA033	9500	CUA046	7180	CUA055	7770	CUA066
8470	CUA035	5480	CUA047	8290	CUA056	1350	CUA067
8100	CUA035	6050	CUA047	5960	CUA056	979	CUA067
6900	CUA035	4530	CUA047	7710	CUA056	1410	CUA067
8940	CUA035	3320	CUA047	8780	CUA056	1480	CUA067
6600	CUA035	4330	CUA047	8860	CUA056	1150	CUA067
10300	CUA036	9020	CUA048	12900	CUA057	3860	CUA068
9370	CUA036	8580	CUA048	6780	CUA057	5920	CUA068
10200	CUA036	8100	CUA048	5490	CUA057	4970	CUA068
11600	CUA036	7920	CUA048	10700	CUA057	3220	CUA068
5740	CUA036	8280	CUA048	12000	CUA057	3730	CUA068
1020	CUA038	8510	CUA049	17700	CUA058	5630	CUA069
780	CUA038	8560	CUA049	21100	CUA058	6910	CUA069
1200	CUA038	9240	CUA049	21200	CUA058	5750	CUA069
739	CUA038	12800	CUA049	19600	CUA058	7290	CUA069
881	CUA038	9870	CUA049	8900	CUA058	7090	CUA069
10000	CUA039	722	CUA050	8040	CUA059		
12800	CUA039	622	CUA050	17100	CUA059		
9380	CUA039	511	CUA050	25200	CUA059		
13900	CUA039	749	CUA050	8400	CUA059		
13100	CUA039	582	CUA050	6150	CUA059		
1290	CUA041	10900	CUA051	19300	CUA060		
2110	CUA041	9280	CUA051	13300	CUA060		
2880	CUA041	7620	CUA051	14400	CUA060		
1450	CUA041	9250	CUA051	8320	CUA060		
4810	CUA041	11000	CUA051	14200	CUA060		
10100	CUA043	12700	CUA052	8460	CUA063		
13100	CUA043	10200	CUA052	13900	CUA063		
12100	CUA043	16300	CUA052	20000	CUA063		
9500	CUA043	11200	CUA052	9390	CUA063		
12100	CUA043	10000	CUA052	7990	CUA063		
6870	CUA044	16300	CUA053	6680	CUA064		
7240	CUA044	9490	CUA053	9300	CUA064		
8010	CUA044	9030	CUA053	7190	CUA064		
9860	CUA044	18400	CUA053	8730	CUA064		
11000	CUA044	19100	CUA053	6790	CUA064		
7900	CUA045	6220	CUA054	7120	CUA065		
7570	CUA045	5700	CUA054	4810	CUA065		
7840	CUA045	8350	CUA054	5940	CUA065		
9020	CUA045	11000	CUA054	5440	CUA065		
7470	CUA045	9590	CUA054	6590	CUA065		

MTCASat 2.1			
Number of samples	Uncensored values		
Uncensored	155	Mean	8382.35
Censored		Lognormal mean	9245.81
Detection limit or PQL		Std. devn.	4614.873
Method detection limit		Median	8250
TOTAL	155	Min.	511
		Max.	25200
Lognormal distribution?	Normal distribution?		
r-squared is:	r-squared is:		
Recommendations:			
Reject lognormal distribution.			
Y value is -13.5781. This lies outside the tabled values of 1.4303 and -2.4459			
Reject normal distribution.			
Y value is -5.2218. This lies outside the tabled values of 1.4303 and -2.4459			
UCL (based on t-statistic) is 8996.93			

Lower Basin Subsistence Surface Soil

Zinc

Analysis Value mg/kg	Site ID	Analysis Value mg/kg	Site ID	Analysis Value mg/kg	Site ID	Analysis Value mg/kg	Site ID
1800	CUA033	4630	CUA046	4630	CUA055	2520	CUA066
1070	CUA033	5600	CUA046	4670	CUA055	5060	CUA066
2290	CUA033	5910	CUA046	5380	CUA055	3530	CUA066
2940	CUA033	4990	CUA046	4730	CUA055	3190	CUA066
1960	CUA033	4330	CUA046	4770	CUA055	1850	CUA066
4780	CUA035	2370	CUA047	3340	CUA056	267	CUA067
4550	CUA035	2600	CUA047	2990	CUA056	148	CUA067
3160	CUA035	1520	CUA047	3360	CUA056	450	CUA067
4730	CUA035	1160	CUA047	5210	CUA056	1470	CUA067
3050	CUA035	1350	CUA047	4400	CUA056	315	CUA067
5070	CUA036	5810	CUA048	9630	CUA057	1640	CUA068
1580	CUA036	5910	CUA048	2950	CUA057	1940	CUA068
5830	CUA036	5280	CUA048	1890	CUA057	1780	CUA068
6780	CUA036	5600	CUA048	6850	CUA057	1320	CUA068
1120	CUA036	5690	CUA048	7520	CUA057	1590	CUA068
448	CUA038	4390	CUA049	10100	CUA058	2070	CUA069
800	CUA038	4480	CUA049	13600	CUA058	2530	CUA069
772	CUA038	5570	CUA049	12500	CUA058	1770	CUA069
370	CUA038	7350	CUA049	13600	CUA058	1610	CUA069
411	CUA038	5420	CUA049	6700	CUA058	1680	CUA069
5360	CUA039	123	CUA050	5650	CUA059		
5810	CUA039	94.9	CUA050	10900	CUA059		
4530	CUA039	65.7	CUA050	6710	CUA059		
6030	CUA039	155	CUA050	6810	CUA059		
5900	CUA039	74.1	CUA050	4580	CUA059		
429	CUA041	6600	CUA051	12100	CUA060		
731	CUA041	4490	CUA051	8300	CUA060		
848	CUA041	3930	CUA051	8910	CUA060		
649	CUA041	5470	CUA051	4720	CUA060		
1370	CUA041	5730	CUA051	8550	CUA060		
4510	CUA043	7910	CUA052	2790	CUA063		
6150	CUA043	7240	CUA052	7480	CUA063		
5150	CUA043	8710	CUA052	14200	CUA063		
3730	CUA043	6240	CUA052	3720	CUA063		
6540	CUA043	5650	CUA052	3310	CUA063		
2030	CUA044	9740	CUA053	6320	CUA064		
2700	CUA044	6930	CUA053	5240	CUA064		
3880	CUA044	5810	CUA053	5310	CUA064		
3520	CUA044	9690	CUA053	6910	CUA064		
4660	CUA044	10200	CUA053	4830	CUA064		
3720	CUA045	4220	CUA054	6370	CUA065		
4520	CUA045	2280	CUA054	3750	CUA065		
4650	CUA045	4690	CUA054	3590	CUA065		
6290	CUA045	6670	CUA054	3840	CUA065		
4460	CUA045	4960	CUA054	3030	CUA065		

MTCASat 2.1			
Number of samples	Uncensored values		
Uncensored	155	Mean	4469.55
Censored		Lognormal mean	5495.17
Detection limit or PQL		Std. devn.	2933.074
Method detection limit		Median	4530
TOTAL	155	Min.	65.7
		Max.	14200
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Reject lognormal distribution.			
Y value is -12.3251. This lies outside the tabled values of 1.4303 and -2.445			
Reject normal distribution.			
Y value is -3.4414. This lies outside the tabled values of 1.4303 and -2.445			
UCL (based on t-statistic) is 4860.16			

Lower Basin Subsistence Undisturbed Surface Water

Zinc

Analysis Value ug/L	Site ID	Analysis Value ug/L	Site ID	Analysis Value ug/L	Site ID
156	LC3	396	LC55	202	LC55
392	LC3	290	LC60	320	LC55
454	LC55	262	LC55	334	LC60
444	LC60	212	LC60	309	LC60
592	LC60	209	LC55	369	LC55
613	LC55	222	LC60	281	LC60
494	LC60	179	LC55	440	LC55
489	LC55	500	LC55	521	LC55
382	LC60	420	LC55	345	LC60
434	LC55	420	LC55	627	LC55
436	LC60	690	LC55	500	LC60
328	LC55	180	LC55	363	LC55
238	LC60	140	LC55	410	LC60
247	LC55	120	LC55	207	LC55
244	LC60	570	LC60	206	LC60
196	LC55	600	LC60	237	LC55
300	LC55	380	LC60	258	LC60
281	LC60	210	LC60	368	LC55
278	LC55	300	LC60	369	LC60
401	LC60	120	LC60	265	LC55
368	LC55	240	LC60	280	LC60
428	LC60	140	LC60	431	LC2918
513	LC55	237	LC60	512	LC2919
454	LC60	312	LC60	410	LC2920
518	LC55	340	LC60	589	LC2921
373	LC60	126	LC55	6	LC8257
516	LC55	239	LC55	1.5	LC8261
441	LC60	313	LC55	1.5	LC8262
336	LC55	395	LC55		
391	LC60	222	LC60		
476	LC55	179	LC55		
466	LC60	234	LC60		

MTCAS _{Stat} 2.1			
Number of samples		Uncensored values	
Uncensored	92	Mean	339.54
Censored		Lognormal mean	444.28
Detection limit or PQL		Std. devn.	144.488576
Method detection limit		Median	338
TOTAL	92	Min.	1.5
		Max.	690
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Reject lognormal distribution.			
Y value is -28.8082. This lies outside the tabled values of 1.275 and -2.5744			
Assume normal distribution.			
Y value is 0.3149. This lies within the tabled values of 1.275 and -2.5744			
UCL (based on t-statistic) is 364.61			

Lower Basin Subsistence Undisturbed Surface Water
Manganese

Analysis Value ug/L	Site ID
46.3	LC3
122	LC3
210	LC55
380	LC60
6	LC8257
1	LC8261
1	LC8262

MTCAS _{Stat} 2.1		Uncensored values	
Number of samples		Mean	109.47
Uncensored	7	Lognormal mean	506.19
Censored		Std. devn.	142.406539
Detection limit or PQL		Median	46.3
Method detection limit		Min.	1
TOTAL	7	Max.	380

Lognormal distribution? r-squared is:	Normal distribution? r-squared is:
Recommendations: Assume lognormal distribution. W value is 0.8804. This exceeds the tabled value of 0.803	
UCL (based on t-statistic) is 214.05	

Lower Basin Subsistence Undisturbed Surface Water
Iron

Analysis Value ug/L	Site ID
82.5	LC3
174	LC3
2200	LC55
3700	LC60
18	LC8257
6	LC8261
6	LC8262

MTCAStat 2.1		Uncensored values	
Number of samples		Mean	883.79
Uncensored	7	Lognormal mean	3103.22
Censored		Std. devn.	1477.60718
Detection limit or PQL		Median	82.5
Method detection limit		Min.	6
TOTAL	7	Max.	3700
Lognormal distribution? r-squared is:		Normal distribution? r-squared is:	
Recommendations: Assume lognormal distribution. W value is 0.8958. This exceeds the tabled value of 0.803			
UCL (based on t-statistic) is 1968.92			

Lower Basin Subsistence Undisturbed Surface Water
 Arsenic

Analysis Value ug/L	Site ID
0.5	LC3
0.335	LC3
7	LC2918
20	LC2919
17	LC2920
16	LC2921
14.5	LC8257
14.5	LC8261
14.5	LC8262

MTCAS _{Stat} 2.1			
Number of samples		Uncensored values	
Uncensored	9	Mean	11.59
Censored		Lognormal mean	22.97
Detection limit or PQL		Std. devn.	7.20745929
Method detection limit		Median	14.5
TOTAL	9	Min.	0.335
		Max.	20
Lognormal distribution? r-squared is:		Normal distribution? r-squared is:	
Recommendations: Reject lognormal distribution. W value is 0.6796. This is less than the tabled value of 0.829 Assume normal distribution. W value is 0.8423. This exceeds the tabled value of 0.829			
UCL (based on t-statistic) is 16.06			

Lower Basin Subsistence Undisturbed Surface Water

Cadmium

Analysis Value ug/L	Site ID	Analysis Value ug/L	Site ID	Analysis Value ug/L	Site ID
1.1	LC3	2.4	LC55	3	LC60
1.9	LC3	1.2	LC55	2	LC60
2.3	LC55	1.6	LC55	2	LC60
3.3	LC55	2.1	LC55	2	LC60
4.5	LC55	2.2	LC55	1	LC60
2.4	LC55	2.2	LC55	2	LC60
2.9	LC55	3	LC55	1	LC60
1.7	LC55	2.9	LC55	1.6	LC60
1	LC55	2.7	LC55	2	LC60
1.6	LC55	1.5	LC55	2.1	LC60
1.4	LC55	1.4	LC55	1.3	LC60
1.8	LC55	2.4	LC55	1.5	LC60
2.3	LC55	2	LC55	2.4	LC60
2.6	LC55	1.9	LC60	1.8	LC60
2.6	LC55	3.6	LC60	1.4	LC60
1.8	LC55	4.8	LC60	1.6	LC60
2.3	LC55	2.1	LC60	2.4	LC60
2.7	LC55	1.9	LC60	2.4	LC60
1.6	LC55	1.5	LC60	2.1	LC60
1.3	LC55	1.4	LC60	2.2	LC60
1.2	LC55	1.3	LC60	2.3	LC60
3	LC55	2	LC60	2.2	LC60
3	LC55	2.1	LC60	6	LC2918
3	LC55	2.2	LC60	21	LC2919
3	LC55	2.1	LC60	11	LC2920
1	LC55	2.2	LC60	17	LC2921
1	LC55	2	LC60	10	LC8257
1	LC55	2.6	LC60	4	LC8261
2	LC55	1.6	LC60	1.5	LC8262
0.89	LC55	1.3	LC60		
1.5	LC55	1.3	LC60		
2.1	LC55	3	LC60		

MTCASat 2.1			
Number of samples		Uncensored values	
Censored	93	Mean	2.66
Detection limit or PQL		Lognormal mean	2.49
Method detection limit		Std. devn.	2.8688416
TOTAL	93	Median	2.1
		Min.	0.89
		Max.	21
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Reject lognormal distribution.			
Y value is -10.4105. This lies outside the tabled values of 1.2785 and -2.5716			
Reject normal distribution.			
Y value is -38.3913. This lies outside the tabled values of 1.2785 and -2.5716			
UCL (based on t-statistic) is 3.15			

Lower Basin Subsistence Undisturbed Surface Water

Lead

Analysis Value ug/L	Site ID	Analysis Value ug/L	Site ID	Analysis Value ug/L	Site ID
27.1	LC3	9	LC55	8	LC55
17.8	LC3	26	LC55	41	LC60
10	LC55	25	LC55	9	LC55
28	LC60	14	LC55	24	LC60
30	LC60	49	LC55	9	LC55
10	LC55	67	LC55	17	LC60
26	LC60	11	LC55	10	LC55
21	LC55	230	LC55	42	LC60
40	LC60	27	LC60	7	LC2918
11	LC55	27	LC60	12	LC2919
36	LC60	22	LC60	12	LC2920
46	LC55	110	LC60	13	LC2921
40	LC60	430	LC60	7.5	LC8257
24	LC55	22	LC60	7.5	LC8261
25	LC60	300	LC60	2	LC8262
8	LC55	32	LC60		
303	LC55	27.2	LC60		
31	LC60	30.4	LC60		
17	LC55	17.9	LC60		
83	LC60	36.1	LC55		
20	LC55	8.5	LC55		
32	LC60	24.4	LC55		
23	LC55	18	LC55		
25	LC60	30	LC60		
23	LC55	42	LC55		
30	LC60	21	LC60		
10	LC55	64	LC55		
18	LC60	11	LC55		
9	LC55	20	LC60		
56	LC60	47	LC60		
40	LC55	26	LC55		
27	LC60	19	LC60		
10	LC55	21	LC55		
16	LC60	8	LC55		
9	LC55	15	LC60		
44	LC60	12	LC55		
2.5	LC55	21	LC60		
30	LC60	28	LC55		
42	LC55	60	LC60		

MTCASat 2.1			
Number of samples		Uncensored values	
Uncensored	93	Mean	37.96
Censored		Lognormal mean	33.87
Detection limit or PQL		Std. devn.	63.5183686
Method detection limit		Median	24
TOTAL	93	Min.	2
		Max.	430
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Reject lognormal distribution.			
Y value is -5.5719. This lies outside the tabled values of 1.2785 and -2.5716			
Reject normal distribution.			
Y value is -39.2845. This lies outside the tabled values of 1.2785 and -2.5716			

Lower Basin Subsistence Undisturbed Surface Water
Mercury

Analysis Value ug/L	Site ID
0.1	LC3
0.05	LC3
2.5	LC8257
2.5	LC8261
2.5	LC8262

MTCAS <i>Stat</i> 2.1			
Number of samples		Uncensored values	
Uncensored	5	Mean	1.53
Censored		Lognormal mean	4.17
Detection limit or PQL		Std. devn.	1.32834483
Method detection limit		Median	2.5
TOTAL	5	Min.	0.05
		Max.	2.5
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Reject lognormal distribution.			
W value is 0.7358. This is less than the tabled value of 0.762			
Reject normal distribution.			
W value is 0.6904. This is less than the tabled value of 0.762			
UCL (based on t-statistic) is 2.8			

Kingston Residential Surface Soil
Antimony

Analytical Results
 (mg/kg)

0.35	1.7	1.6
0.74	1.05	0.77
0.84	0.87	1.4
0.54	1.2	0.44
0.56	0.8	
0.85	0.65	
0.495	2.8	
0.5	0.495	
1.05	1.05	
1.55	17.1	
3.2	1.3	
1.4	2.9	
10.9	2.6	
25.8	1.15	
1.2	1	
2.65	21.4	
0.85	0.73	
0.85	1.7	
0.65	3.1	
0.56	1	
6.1	1.1	
1.25	2.3	
1.9	1	
1.25	4.4	
1.75	1.9	
2.8	2.9	
11.6	2.5	
8.2	7.8	
1.4	1.1	
2	3.4	
9.4	0.6	

MTCASat 2.1			
Number of samples		Uncensored values	
Uncensored	66	Mean	3.05
Censored		Lognormal mean	2.68
Detection limit or PQL		Std. devn.	4.76739
Method detection limit		Median	1.275
TOTAL	66	Min.	0.35
		Max.	25.8
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Reject lognormal distribution.			
Y value is -2.8994. This lies outside the tabled values of 1.1516 and -2.6708			
Reject normal distribution.			
Y value is -24.8558. This lies outside the tabled values of 1.1516 and -2.6708			
UCL (based on t-statistic) is 4.03			

Kingston Residential Surface Soil

Arsenic

Analytical Results
(mg/kg)

25.6	10.3	28.4
25.5	15.5	16.6
35.4	14.7	15.8
11.7	10.5	66.7
12.1	19.1	8.1
11.9	103	12.3
12	27.2	8.6
10.3	8.1	7.2
15.6	10.2	10.9
6.6	11.4	
9.5	10.2	
10.7	8.2	
12.4	12.6	
105	84	
78.4	10.7	
13.2	10.2	
13.9	22.3	
9.3	19.7	
9.2	9.5	
7.1	95.2	
15.8	12.2	
34.6	9.9	
15.4	12.9	
7.8	14.7	
11.6	14.9	
20.6	12	
21.8	8.1	
14.6	5.1	
32.7	12.5	
14.2	7.2	
8.2	15.3	

MTCASat 2.1			
Number of samples		Uncensored values	
Uncensored	71	Mean	20.35
Censored		Lognormal mean	18.88
Detection limit or PQL		Std. devn.	22.25628
Method detection limit		Median	12.4
TOTAL	71	Min.	5.1
		Max.	105
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Reject lognormal distribution.			
Y value is -7.2413. This lies outside the tabled values of 1.181 and -2.6481			
Reject normal distribution.			
Y value is -24.0776. This lies outside the tabled values of 1.181 and -2.6481			
UCL (based on t-statistic) is 24.76			

Kingston Residential Surface Soil
Cadmium

Analytical Results
 (mg/kg)

4.8	3.9	4.1
4.6	0.58	2.5
5.6	13.9	2.5
2.2	0.55	3
3.2	3.3	0.47
1.5	0.77	1.3
0.1	0.13	0.75
0.34	1.9	1.7
0.4	1.3	0.08
1.2	0.31	
2.5	9.2	
3.7	0.72	
3.4	0.52	
2.8	3	
4.8	0.41	
2.1	0.44	
2.7	2.4	
2.5	1.4	
3.2	3.9	
1.8	26	
2.6	4.3	
3.1	0.96	
2.8	5.8	
1.8	7.6	
2	8.6	
6.4	8.8	
5	1	
0.86	0.5	
5.2	2.9	
6.8	1.9	
1.9	2.2	

MTCASat 2.1			
Number of samples		Uncensored values	
Uncensored	71	Mean	3.20
Censored		Lognormal mean	3.59
Detection limit or PQL		Std. devn.	3.738305
Method detection limit		Median	2.5
TOTAL	71	Min.	0.08
		Max.	26
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Assume lognormal distribution.			
Y value is -2.1395. This lies within the tabled values of 1.181 and -2.6481			
UCL (based on t-statistic) is 3.94			

Kingston Residential Surface Soil
Iron

Analytical Results
(mg/kg)

21500 14800
 20500 17500
 20600 16600
 13800 32800
 17100 17100
 18700 15400
 18400 16900
 16900 15500
 17700 96300
 17400 16900
 17100 17000
 17900 15500
 14100 17000
 16800 14900
 21300 15700
 20300 14600
 19200 17200
 21500 11600
 16200 12410
 16000 12930
 15800 14350
 35100 18500
 17800 14410
 17100 17000
 19700 22800
 23100 17500
 18800 15800
 13900 15500
 18400 13150
 34200 17300

MTCASat 2.1			
Number of samples		Uncensored values	
Uncensored	60	Mean	19197.50
Censored		Lognormal mean	18815.68
Detection limit or PQL		Std. devn.	11061.73
Method detection limit		Median	17100
TOTAL	60	Min.	11600
		Max.	96300
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Reject lognormal distribution.			
Y value is -16.4287. This lies outside the tabled values of 1.115 and -2.699			
Reject normal distribution.			
Y value is -34.1676. This lies outside the tabled values of 1.115 and -2.699			
UCL (based on t-statistic) is 21584.72			

Kingston Residential Surface Soil
Manganese

Analytical Results
 (mg/kg)

638 530
 774 492
 739 1440
 505 626
 629 473
 891 522
 611 431
 527 742
 445 9790
 477 850
 406 616
 624 595
 594 807
 533 423
 758 892
 680 441
 635 343
 1010 446
 1040 350
 485 759
 634 751
 625 643
 1130 716
 575 681
 710 596
 718 816
 471 583
 468 523
 564 232
 505
 478

MTCASat 2.1			
Number of samples		Uncensored values	
Uncensored	60	Mean	783.13
Censored		Lognormal mean	704.49
Detection limit or PQL		Std. devn.	1199.609
Method detection limit		Median	613.5
TOTAL	60	Min.	232
		Max.	9790
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Reject lognormal distribution.			
Y value is -15.6886. This lies outside the tabled values of 1.115 and -2.699			
Reject normal distribution.			
Y value is -45.4684. This lies outside the tabled values of 1.115 and -2.699			
UCL (based on t-statistic) is 1042.02			

Kingston Residential Surface Soil
 Zinc

Analytical Results (mg/kg)		
526	170	423
842	226	252
1060	1850	320
406	93.1	611
1190	598	126
166	745	167
74.3	95.8	131
258	145	217
81.8	418	49.6
259	1340	
333	452	
633	506	
273	128	
916	937	
455	129	
264	107	
282	407	
240	275	
250	415	
174	8150	
320	241	
543	257	
460	188	
246	536	
287	246	
698	270	
509	174	
122	78.7	
946	202	
900	175	
133	239	

MTCASat 2.1			
Number of samples		Uncensored values	
Uncensored	71	Mean	506.16
Censored		Lognormal mean	448.95
Detection limit or PQL		Std. devn.	978.7587
Method detection limit		Median	270
TOTAL	71	Min.	49.6
		Max.	8150
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Assume lognormal distribution.			
Y value is -2.331. This lies within the tabled values of 1.181 and -2.6481			
UCL (based on t-statistic) is 700.01			

Kingston Residential Tap Water

Arsenic

Analytical Results

(ug/L)
0.23
0.31
0.1
0.125
0.19
0.1
0.405

MTCAS _{Stat} 2.1			
Number of samples		Uncensored values	
Uncensored	7	Mean	0.21
Censored		Lognormal mean	0.21
Detection limit or PQL		Std. devn.	0.11564
Method detection limit		Median	0.19
TOTAL	7	Min.	0.1
		Max.	0.405
Lognormal distribution? r-squared is:		Normal distribution? r-squared is:	
Recommendations: Assume lognormal distribution. W value is 0.9196. This exceeds the tabled value of 0.803			
UCL (based on t-statistic) is 0.29			

Site ID	Static Result	Purged Result	Average Result
R015	0.36	0.1 U	0.23
R016	0.42	0.2	0.31
R018	0.1 UJ	0.1 UJ	0.1
R019	0.1 UJ	0.15 U	0.125
R063	0.1 U	0.28	0.19
R070	0.1 UJ	0.1 UJ	0.1
R089	0.1 U	0.71	0.405

Kingston Neighborhood Exposure to Sediments

Antimony

Analytical Results
(mg/kg)

1.01
 0.92
 0.93
 1.01
 0.963
 0.4745
 0.49
 0.51
 19.6
 29
 31.8
 1.02
 3.97

MTCAS ^{Stat} 2.1				
Number of samples		Uncensored values		
Uncensored	13	Mean	7.05	
Censored		Lognormal mean	6.78	
Detection limit or PQL		Std. devn.	11.58952	
Method detection limit		Median	1.01	
TOTAL	13	Min.	0.4745	
		Max.	31.8	
Lognormal distribution?		Normal distribution?		
r-squared is:		r-squared is:		
Recommendations:				
Reject lognormal distribution.				
W value is 0.7655. This is less than the tabled value of 0.866				
Reject normal distribution.				
W value is 0.6119. This is less than the tabled value of 0.866				
UCL (based on t-statistic) is 12.78				

Kingston Neighborhood Exposure to Sediments

Arsenic

Analytical Results
 (mg/kg)

5.98
 2.79
 2.95
 10.8
 2.95
 13.4
 8.34
 16.6
 60.6
 11.1
 34.4
 14
 15.5

MTCAS _{Stat} 2.1				
Number of samples			Uncensored values	
Uncensored	13		Mean	15.34
Censored			Lognormal mean	15.84
Detection limit or PQL			Std. devn.	15.96519
Method detection limit			Median	11.1
TOTAL	13		Min.	2.79
			Max.	60.6
Lognormal distribution?		Normal distribution?		
r-squared is:		r-squared is:		
Recommendations:				
Assume lognormal distribution.				
W value is 0.9385. This exceeds the tabled value of 0.866				
UCL (based on t-statistic) is 23.23				

Kingston Neighborhood Exposure to Sediments

Cadmium

Analytical Results
 (mg/kg)

0.912
 0.82
 0.55
 1.25
 0.581
 0.809
 0.738
 1.14
 0.417
 1.02
 0.959
 0.378
 0.982

MTCAS _{Stat} 2.1	
Number of samples	Uncensored values
Uncensored	Mean
Censored	Lognormal mean
Detection limit or PQL	Std. devn.
Method detection limit	Median
TOTAL	Min.
	Max.
Lognormal distribution? r-squared is:	Normal distribution? r-squared is:
Recommendations: Assume lognormal distribution. W value is 0.9253. This exceeds the tabled value of 0.866	
UCL (based on t-statistic) is 0.95	

Kingston Neighborhood Exposure to Sediments

Iron

Analytical Results
 (mg/kg)

15600
 9170
 12300
 13600
 16000
 17100
 17600
 17900
 14400
 10100
 24200
 8200
 13100

MTCAS _{Stat} 2.1	
Number of samples	Uncensored values
Uncensored	Mean 14559.23
Censored	Lognormal mean 14622.35
Detection limit or PQL	Std. devn. 4286.736
Method detection limit	Median 14400
TOTAL	Min. 8200
	Max. 24200
Lognormal distribution? r-squared is:	Normal distribution? r-squared is:
Recommendations: Assume lognormal distribution. W value is 0.9702. This exceeds the tabled value of 0.866	
UCL (based on t-statistic) is 16677.9	

Kingston Neighborhood Exposure to Sediments

Manganese

Analytical Results
 (mg/kg)

420
 739
 223
 338
 355
 316
 271
 438
 319
 604
 424
 162
 449

MTCAS _{Stat} 2.1	
Number of samples	Uncensored values
Uncensored	Mean
Censored	Lognormal mean
Detection limit or PQL	Std. devn.
Method detection limit	Median
TOTAL	Min.
	Max.
Lognormal distribution? r-squared is:	Normal distribution? r-squared is:
Recommendations: Assume lognormal distribution. W value is 0.9779. This exceeds the tabled value of 0.866	
UCL (based on t-statistic) is 465.1	

Kingston Neighborhood Exposure to Sediments

Zinc

Analytical Results (mg/kg)	MTCAS _{Stat} 2.1		Uncensored values	
		Number of samples		Mean
	Uncensored	13	Lognormal mean	285.89
	Censored		Std. devn.	93.04169
320	Detection limit or PQL		Median	262
235	Method detection limit		Min.	166
211	TOTAL	13	Max.	452
393				
237				
262				
310				
404	Lognormal distribution?		Normal distribution?	
182	r-squared is:		r-squared is:	
187	Recommendations:			
452	Assume lognormal distribution.			
166	W value is 0.953. This exceeds the tabled value of 0.866			
341				
	UCL (based on t-statistic) is 330.6			

Kingston Neighborhood Exposure to Surface Water

Arsenic

Analytical Results (ug/L) 1 0.5 0.08 1 1 0.08 1 0.39 0.15 1 0.5 0.115	MTCAS ^{Star} 2.1			
	Number of samples		Uncensored values	
	Uncensored	12	Mean	0.57
	Censored		Lognormal mean	0.66
	Detection limit or PQL		Std. devn.	0.407907
	Method detection limit		Median	0.5
	TOTAL	12	Min.	0.08
			Max.	1
	Lognormal distribution?		Normal distribution?	
	r-squared is:		r-squared is:	
Recommendations: Reject lognormal distribution. W value is 0.8116. This is less than the tabled value of 0.859 Reject normal distribution. W value is 0.7977. This is less than the tabled value of 0.859				
UCL (based on t-statistic) is 0.78				

Kingston Neighborhood Exposure to Surface Water

Cadmium

Analytical Results
 (ug/L)

3.7
 1.2
 0.0345
 0.1
 0.2
 0.0345
 0.1
 0.29
 0.26
 0.5
 0.32
 0.25

MTCAS ^{Stat} 2.1	
Number of samples	Uncensored values
Uncensored	Mean
Censored	Lognormal mean
Detection limit or PQL	Std. devn.
Method detection limit	Median
TOTAL	Min.
	Max.
Lognormal distribution?	Normal distribution?
r-squared is:	r-squared is:
Recommendations:	
Assume lognormal distribution.	
W value is 0.9488. This exceeds the tabled value of 0.859	
UCL (based on t-statistic) is 1.12	

Kingston Neighborhood Exposure to Surface Water

Manganese

Analytical Results (ug/L)	MTCAS _{Stat} 2.1		Uncensored values	
	144	Uncensored	12	Mean
18.1	Censored		Lognormal mean	10.51
2.3	Detection limit or PQL		Std. devn.	40.48565
2.5	Method detection limit		Median	2.75
2.5	TOTAL	12	Min.	1.7
4.3			Max.	144
8	Lognormal distribution?		Normal distribution?	
3.7	r-squared is:		r-squared is:	
3	Recommendations:			
2.5	Reject lognormal distribution.			
2.5	W value is 0.7187. This is less than the tabled value of 0.859			
1.7	Reject normal distribution.			
	W value is 0.3994. This is less than the tabled value of 0.859			
	UCL (based on t-statistic) is 37.25			

Kingston Neighborhood Exposure to Surface Water

Mercury

Analytical Results
 (ug/L)

0.05
 0.1
 0.05
 0.1
 0.1
 0.05
 0.1
 0.05
 0.05
 0.1
 0.1
 0.08

all nondetects

MTCASat 2.1				
Number of samples			Uncensored values	
Uncensored	12		Mean	0.08
Censored			Lognormal mean	0.08
Detection limit or PQL			Std. devn.	0.024909
Method detection limit			Median	0.09
TOTAL	12		Min.	0.05
			Max.	0.1
Lognormal distribution?		Normal distribution?		
r-squared is:		r-squared is:		
Recommendations:				
Reject lognormal distribution.				
W value is 0.6894. This is less than the tabled value of 0.859				
Reject normal distribution.				
W value is 0.6886. This is less than the tabled value of 0.859				
UCL (based on t-statistic) is 0.09				

Kingston Neighborhood and Public Recreational Exposures to Soil/Sediment

Antimony

Analytical Results
 (mg/kg)

33.3
 16.5
 26.7
 21.8
 23.9
 64.3
 53.9
 46.6
 31.9
 44.9
 45.1
 49.5
 36.7
 36.1
 26.6
 23.2
 28.7
 24.8
 17.8

MTCAS _{Stat} 2.1				
Number of samples		Uncensored values		
Uncensored	19	Mean		34.33
Censored		Lognormal mean		34.47
Detection limit or PQL		Std. devn.	13.17953	
Method detection limit		Median		31.9
TOTAL	19	Min.		16.5
		Max.		64.3
Lognormal distribution? r-squared is:		Normal distribution? r-squared is:		
Recommendations: Assume lognormal distribution. W value is 0.975. This exceeds the tabled value of 0.901				
UCL (based on t-statistic) is 39.57				

Kingston Neighborhood and Public Recreational Exposures to Soil/Sediment

Arsenic

Analytical Results
 (mg/kg)

128
 73
 151
 133
 155
 266
 209
 134
 136
 166
 174
 209
 143
 140
 107
 113
 123
 104
 93.9

MTCAS _{Stat} 2.1			
Number of samples		Uncensored values	
Uncensored	19	Mean	145.15
Censored		Lognormal mean	145.44
Detection limit or PQL		Std. devn.	45.54776
Method detection limit		Median	136
TOTAL	19	Min.	73
		Max.	266
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Assume lognormal distribution.			
W value is 0.9848. This exceeds the tabled value of 0.901			
UCL (based on t-statistic) is 163.27			

Kingston Neighborhood and Public Recreational Exposures to Soil/Sediment

Cadmium

Analytical Results
 (mg/kg)

18
 13.9
 15.2
 14.6
 17.2
 63.3
 29.6
 23
 13.7
 18.6
 31.6
 23
 18.2
 18.4
 23.5
 13.6
 21.4
 22.7
 19

MTCAS _{Stat} 2.1				
Number of samples		Uncensored values		
Uncensored	19	Mean		22.03
Censored		Lognormal mean		21.81
Detection limit or PQL		Std. devn.	11.18967	
Method detection limit		Median		18.6
TOTAL	19	Min.		13.6
		Max.		63.3
Lognormal distribution? r-squared is:		Normal distribution? r-squared is:		
Recommendations: Reject lognormal distribution. W value is 0.8532. This is less than the tabled value of 0.901 Reject normal distribution. W value is 0.6476. This is less than the tabled value of 0.901				
UCL (based on t-statistic) is 26.48				

Kingston Neighborhood and Public Recreational Exposures to Soil/Sediment

Iron

Analytical Results
 (mg/kg)

87200
 39900
 76600
 68400
 83800
 174000
 120000
 91700
 74900
 99000
 118000
 120000
 93500
 89200
 75500
 77700
 77000
 76400
 49200

MTCAS _{Stat} 2.1			
Number of samples		Uncensored values	
Uncensored	19	Mean	89052.63
Censored		Lognormal mean	89353.78
Detection limit or PQL		Std. devn.	29373.35
Method detection limit		Median	83800
TOTAL	19	Min.	39900
		Max.	174000
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Assume lognormal distribution.			
W value is 0.9414. This exceeds the tabled value of 0.901			
UCL (based on t-statistic) is 100737.55			

Kingston Neighborhood and Public Recreational Exposures to Soil/Sediment

Manganese

Analytical Results
 (mg/kg)

6690
 3000
 5830
 5450
 6440
 14800
 9510
 7460
 6120
 7810
 14300
 9360
 7540
 7420
 6830
 6130
 6290
 6960
 3240

MTCAS _{Stat} 2.1			
Number of samples		Uncensored values	
Uncensored	19	Mean	7430.53
Censored		Lognormal mean	7466.51
Detection limit or PQL		Std. devn.	2983.271
Method detection limit		Median	6830
TOTAL	19	Min.	3000
		Max.	14800
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Assume lognormal distribution.			
W value is 0.9118. This exceeds the tabled value of 0.901			
UCL (based on t-statistic) is 8617.29			

Kingston Neighborhood and Public Recreational Exposures to Soil/Sediment

Zinc

Analytical Results
 (mg/kg)

2950
 1740
 2470
 2290
 2780
 6260
 4810
 3480
 2470
 3250
 5040
 4130
 3040
 2960
 3450
 2240
 3320
 3420
 2280

MTCAS ^{Stat} 2.1	
Number of samples	Uncensored values
Uncensored	Mean
Censored	Lognormal mean
Detection limit or PQL	Std. devn.
Method detection limit	Median
TOTAL	Min.
	Max.
Lognormal distribution?	Normal distribution?
r-squared is:	r-squared is:
Recommendations:	
Assume lognormal distribution.	
W value is 0.9706. This exceeds the tabled value of 0.901	
UCL (based on t-statistic) is 3726.9	

Kingston Public Recreational Exposure to Surface Water

Arsenic

Analytical Results
 (ug/L)

3.6
 26.7
 7.2
 10.5
 134

		MTCAS _{tat} 2.1	
Number of samples		Uncensored values	
Uncensored	5	Mean	36.40
Censored		Lognormal mean	41.89
Detection limit or PQL		Std. devn.	55.27011
Method detection limit		Median	10.5
TOTAL	5	Min.	3.6
		Max.	134
Lognormal distribution? r-squared is:		Normal distribution? r-squared is:	
Recommendations: Assume lognormal distribution. W value is 0.9464. This exceeds the tabled value of 0.762			
UCL (based on t-statistic) is 89.1			

Kingston Public Recreational Exposure to Surface Water

Cadmium

Analytical Results
 (ug/L)

11.6
 26
 13.4
 12.7
 83.8

MTCAS ^{Stat} 2.1	
Number of samples	Uncensored values
Uncensored	Mean
Censored	Lognormal mean
Detection limit or PQL	Std. devn.
Method detection limit	Median
TOTAL	Min.
	Max.
Lognormal distribution? r-squared is:	Normal distribution? r-squared is:
Recommendations: Assume lognormal distribution. W value is 0.7991. This exceeds the tabled value of 0.762	
UCL (based on t-statistic) is 58.97	

Kingston Public Recreational Exposure to Surface Water

Manganese

Analytical Results
 (ug/L)

857
 3020
 1280
 1100
 9470

		MTCAS ^{Stat} 2.1	
Number of samples		Uncensored values	
Uncensored	5	Mean	3145.40
Censored		Lognormal mean	3290.13
Detection limit or PQL		Std. devn.	3637.184
Method detection limit		Median	1280
TOTAL	5	Min.	857
		Max.	9470
Lognormal distribution? r-squared is:		Normal distribution? r-squared is:	
Recommendations: Assume lognormal distribution. W value is 0.8771. This exceeds the tabled value of 0.762			
UCL (based on t-statistic) is 6613.31			

Kingston Public Recreational Exposure to Surface Water

Mercury

Analytical Results
 (ug/L)

0.1
 1.5
 0.2
 0.1
 4.6

		MTCAS ^{Stat} 2.1	
Number of samples		Uncensored values	
Uncensored	5	Mean	1.30
Censored		Lognormal mean	1.91
Detection limit or PQL		Std. devn.	1.937782
Method detection limit		Median	0.2
TOTAL	5	Min.	0.1
		Max.	4.6
Lognormal distribution? r-squared is:		Normal distribution? r-squared is:	
Recommendations: Assume lognormal distribution. W value is 0.8509. This exceeds the tabled value of 0.762			
UCL (based on t-statistic) is 3.15			

Kingston Occupational Exposure to Soil

Antimony

Analytical Results (mg/kg)					
0.1	0.6	0.495	2.2	0.72	31.9
0.21	2.1	0.6	1.35	1.2	44.9
0.27	3.2	1	1.7	1	45.1
0.39	0.56	1.05	1.05	1	49.5
0.35	0.59	1.25	0.87	21.4	36.7
0.21	1.4	0.5	0.49	1.1	36.1
0.64	3.9	0.5	0.5	1.1	26.6
0.74	25.9	0.7	0.5	0.65	23.2
0.1	10.9	1.9	1.2	0.73	28.7
0.25	7.8	0.7	0.85	1.4	24.8
0.84	26	1.1	0.85	1.7	17.8
0.37	25.8	1.1	0.9	3.1	33.3
0.64	0.5	1.25	1.05	0.7	16.5
0.66	0.65	1	0.8	0.85	26.7
0.69	1.25	6.9	0.65	0.275	21.8
0.54	1.7	30.4	1	1	23.9
0.44	1.2	1.75	1.1	3.7	
1.2	0.75	1.2	2	1.35	
0.56	2.4	1.25	2.8	1.35	
0.64	18	1.9	0.495	1.1	
0.86	2.65	2.8	1.35	2.3	
0.85	0.8	1.5	1.4	1	
0.55	0.95	1.7	1.05	4.4	
0.495	1.05	2.4	17.1	1.9	
0.65	0.85	11.6	0.5	2.9	
1.15	0.8	7.5	1	2.5	
1.35	0.9	9.3	1.3	7.8	
0.5	1	12.2	1.8	1.1	
1.2	0.85	8.2	2.5	3.4	
1.5	0.485	1	2.9	0.6	
1.7	0.5	1.2	0.485	1.6	
1.05	0.55	1.4	0.9	0.77	
1.8	0.65	2	2	1.4	
1.85	0.3	5.7	2.6	0.44	
1.9	0.56	6.2	0.65	64.3	
1.55	1.1	7.7	0.9	53.9	
0.485	1.7	9.4	1.65	46.6	
0.5	6.1	0.8	1.15		

MTCASat 2.1			
Number of samples		Uncensored values	
Uncensored	205	Mean	5.51
Censored		Lognormal mean	4.30
Detection limit or PQL		Std. devn.	10.99858
Method detection limit		Median	1.2
TOTAL	205	Min.	0.1
		Max.	64.3
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Reject lognormal distribution.			
Y value is -7.987. This lies outside the tabled values of 1.5009 and -2.3867			
Reject normal distribution.			
Y value is -46.5017. This lies outside the tabled values of 1.5009 and -2.3867			
UCL (based on t-statistic) is 6.78			

Kingston Occupational Exposure to Soil

Arsenic

	Analytical Results (mg/kg)				
266	16.1	13.2	9.4	6.4	12.1
209	19.8	6.4	17.5	10.8	9.5
134	11.9	10.5	184	27.2	95.2
136	9.8	43.6	20.6	6.4	13.4
166	12	13.9	19.4	6.9	11.8
174	13.5	8.8	21.6	7.5	8.3
209	13.9	8.9	27.2	8.1	8.5
143	15.7	9.4	21.8	8.3	12.2
140	10.3	9.3	18.1	8.3	9.9
107	15.6	7.4	19.8	10.9	13.2
113	8.5	7.9	28.2	11.7	13.3
123	21.8	8	14.6	10.2	13.2
104	25.4	9.2	32.7	11.4	12.9
93.9	6.6	5.8	12.8	6.4	14.7
128	10.1	6.4	14.3	10.3	19.2
73	19.3	6.8	23.4	11	19.9
151	34.2	7.1	14.2	10.2	22.2
133	9.5	4.8	7.6	8.2	14.9
155	7.8	10.7	7.8	14.8	17.7
10	8.9	11.2	7.8	40.3	15.3
20.4	10.6	14.7	8.2	12.6	15.5
27.3	13.1	15.8	6.9	84	12
32.1	10.7	24.8	7.8	7.8	8.1
25.6	6.1	28.3	9.3	9.8	5.1
20.6	8.3	34.6	10.3	10.7	12.5
38.7	8.8	7	10.3	9.4	7.2
25.5	10	9.5	15.5	13.8	15.3
11.9	12.4	11.8	13.4	10.2	28.4
18.2	32.3	14	13.4	14	16.6
35.4	133	15.4	13.4	22.5	15.8
14.9	105	4.1	14.7	24.8	66.7
15.6	30.6	6.2	10.5	22.3	8.1
21.4	93.1	6.6	9.6	20.4	12.3
28.4	78.4	7.8	17.7	49.6	8.6
11.7	5.1	8.6	19.2	51.5	7.2
12.7	7.1	8.6	19.1	19.7	10.9
17.5	10.7	11.7	103	10.3	
12.1	14.8	11.6	5.8	11	

MTCASat 2.1			
Number of samples		Uncensored values	
Uncensored	226	Mean	29.06
Censored		Lognormal mean	25.13
Detection limit or PQL		Std. devn.	42.70652
Method detection limit		Median	13.2
TOTAL	226	Min.	4.1
		Max.	266
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Reject lognormal distribution.			
Y value is -11.1267. This lies outside the tabled values of 1.5215 and -2.3686			
Reject normal distribution.			
Y value is -45.3618. This lies outside the tabled values of 1.5215 and -2.3686			
UCL (based on t-statistic) is 33.77			

Kingston Occupational Exposure to Soil

Cadmium

Analytical Results (mg/kg)					
63.3	1.2	2.1	3.4	0.04	3
29.6	1.6	1.8	4.7	0.04	3.9
23	1.5	3.3	12.2	0.13	26
13.7	10.9	5.7	6.4	0.44	4.3
18.6	0.1	2.7	2.3	0.91	2.7
31.6	1.7	1.4	2.4	1.5	0.9
23	1.9	1.5	3.2	1.9	0.26
18.2	2.8	1.6	5	0.095	4.3
18.4	0.34	2.5	1.9	0.1	0.96
23.5	0.4	2.1	2	0.61	2.4
13.6	0.58	2.2	2.3	1.7	0.75
21.4	0.88	2.6	0.86	1.3	0.25
22.7	1.4	3.2	5.2	0.31	5.8
19	1.2	0.095	2.4	0.65	7.6
18	0.69	0.1	6.9	2.1	3.5
13.9	0.88	0.24	7.8	5.9	1.9
15.2	1.8	1.8	6.8	9.2	0.59
14.6	2.5	0.35	0.53	0.72	8.6
17.2	0.1	1.5	0.78	0.1	9.2
0.75	0.1	1.8	1.6	0.37	5
3.6	0.83	2.1	1.9	0.52	6.2
4	2.3	2.6	0.23	3	8.8
4.6	3.7	1.9	0.23	0.1	1
4.8	0.235	2.6	1.4	0.33	0.5
1.9	1.3	3.1	2.6	0.41	2.9
4.1	1.4	0.1	3.9	0.1	1.9
4.6	2.1	0.1	0.58	0.41	2.2
1.9	3.4	1.5	6.1	0.44	4.1
2.9	4.3	1.9	11.1	0.33	2.5
5.6	5.2	2.8	14	0.74	2.5
3.4	2.8	0.095	13.9	1.1	3
3.8	2	0.1	0.55	2.4	0.47
4	6.4	0.105	0.1	0.095	1.3
5.2	4.8	1.8	0.9	0.1	0.75
2.2	0.1	0.69	2	0.95	1.7
2.8	0.47	0.98	3.3	1.4	0.08
12.4	1.3	2	0.77	4	
3.2	2.1	2	0.04	3.6	

MTCASat 2.1			
Number of samples		Uncensored values	
Uncensored	226	Mean	4.24
Censored		Lognormal mean	5.14
Detection limit or PQL		Std. devn.	6.918806
Method detection limit		Median	2
TOTAL	226	Min.	0.04
		Max.	63.3
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Assume lognormal distribution.			
Y value is -1.7908. This lies within the tabled values of 1.5215 and -2.3686			
UCL (based on t-statistic) is 5.01			

Kingston Occupational Exposure to Soil

Iron

	Analytical Results (mg/kg)			
2E+05	15200	20100	15400	18300
1E+05	15900	20500	16300	18300
91700	16500	22700	13900	19900
74900	18300	20300	15800	16900
99000	18400	19800	17400	17000
1E+05	15400	20000	19800	18600
1E+05	16000	21400	20900	21200
93500	21300	19200	18400	21600
89200	16900	21500	34200	15500
75500	19700	14400	15000	17000
77700	19800	18900	15200	18500
77000	20000	19100	16500	19800
76400	17700	16200	14800	21300
49200	16500	16200	17500	14900
87200	17000	16300	16800	20800
39900	17000	16600	19400	22600
76600	17400	16000	16600	22500
68400	17700	15400	32800	15700
83800	17800	16300	17600	14600
21500	18500	16500	18500	11600
16200	17100	16600	17100	12410
17300	16700	15800	15600	12930
17900	17600	35100	19800	14350
20500	19000	19200	15400	18500
20600	19800	19900	16300	14410
17100	17900	21500	17500	17000
17500	12800	17800	18200	22800
18300	15400	17100	16900	17500
13800	16900	16500	19700	15800
18000	14100	17700	22400	15500
21500	14400	18100	25000	13150
21700	14800	19700	17200	17300
17100	17900	23100	17000	
15300	16800	14200	17000	
15800	17300	14700	18900	
18300	17400	17800	15500	
28500	20300	18800	96300	
18700	21300	15300	18000	

MTCASat 2.1			
Number of samples		Uncensored values	
Uncensored	184	Mean	25811.14
Censored		Lognormal mean	24201.13
Detection limit or PQL		Std. devn.	24312.66
Method detection limit		Median	17800
TOTAL	184	Min.	11600
		Max.	174000
Lognormal distribution? Normal distribution?			
r-squared is:		r-squared is:	
Recommendations:			
Reject lognormal distribution.			
Y value is -30.9251. This lies outside the tabled values of 1.4726 and -2.4105			
Reject normal distribution.			
Y value is -49.4006. This lies outside the tabled values of 1.4726 and -2.4105			
UCL (based on t-statistic) is 28782.86			

Kingston Occupational Exposure to Soil

Manganese

	Analytical Results (mg/kg)			
14800	202	776	407	891
9510	310	789	464	673
7460	491	792	468	373
6120	631	680	324	850
7810	611	507	352	616
14300	284	603	654	917
9360	498	664	847	874
7540	796	635	564	609
7420	527	1010	505	595
6830	491	548	278	807
6130	495	1330	455	820
6290	499	1340	469	823
6960	445	1040	478	630
3240	444	400	530	423
6690	474	445	404	1360
3000	492	451	538	1060
5830	477	485	492	1090
5450	236	265	1440	892
6440	272	454	316	441
638	360	635	609	343
566	406	662	626	446
683	534	634	534	350
715	538	625	604	759
774	600	803	473	751
739	692	1230	514	643
539	624	1300	569	716
617	573	1130	773	681
691	674	575	522	596
505	681	420	466	816
638	594	607	474	583
652	535	647	545	523
700	546	710	431	232
629	585	718	785	
553	533	183	796	
562	661	200	830	
792	701	278	742	
1400	898	471	9790	
891	758	397	966	

MTCASat 2.1			
Number of samples		Uncensored values	
Uncensored	184	Mean	1376.57
Censored		Lognormal mean	1110.24
Detection limit or PQL		Std. devn.	2371.79
Method detection limit		Median	624.5
TOTAL	184	Min.	183
		Max.	14800
Lognormal distribution? Normal distribution?			
r-squared is:		r-squared is:	
Recommendations:			
Reject lognormal distribution.			
Y value is -20.543. This lies outside the tabled values of 1.4726 and -2.4105			
Reject normal distribution.			
Y value is -52.2377. This lies outside the tabled values of 1.4726 and -2.4105			
UCL (based on t-statistic) is 1666.47			

Kingston Occupational Exposure to Soil

Zinc

Analytical Results (mg/kg)					
6260	140	264	415	43.8	158
4810	159	101	473	44.5	415
3480	166	187	676	95.8	8150
2470	24300	308	698	82.1	238
3250	74.3	282	463	108	172
5040	354	189	483	132	97.5
4130	413	194	528	145	77.1
3040	427	205	509	77.4	241
2960	258	240	230	82.4	257
3450	81.8	168	264	207	141
2240	131	174	433	238	95.3
3320	140	181	122	418	78
3420	154	250	946	1340	188
2280	259	52.7	329	74.3	536
2950	131	60.4	990	165	203
1740	189	103	1090	322	126
2470	290	174	900	452	84.1
2290	333	74.7	56	506	246
2780	196	273	74.8	97.9	291
211	220	292	116	108	207
598	484	293	133	128	224
650	1310	320	51.9	937	270
694	633	397	66.6	62	174
526	71.3	436	103	99.3	78.7
429	136	543	143	129	202
789	143	139	170	82.5	175
842	191	252	226	82.6	239
900	273	327	1010	107	423
1370	842	349	1760	98.9	252
1060	1240	460	2130	106	320
649	916	60.2	1850	245	611
951	307	79.8	93.1	407	126
1510	929	80.2	144	110	167
1820	455	246	346	131	131
406	59.2	210	392	256	217
967	113	230	598	275	49.6
11600	189	284	745	383	
1190	275	287	37	210	

MTCASat 2.1			
Number of samples		Uncensored values	
Uncensored	226	Mean	793.51
Censored		Lognormal mean	632.85
Detection limit or PQL		Std. devn.	2032.807
Method detection limit		Median	254
TOTAL	226	Min.	37
		Max.	24300
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Reject lognormal distribution.			
Y value is -3.3951. This lies outside the tabled values of 1.5215 and -2.3686			
Reject normal distribution.			
Y value is -73.3778. This lies outside the tabled values of 1.5215 and -2.3686			
UCL (based on t-statistic) is 1017.71			

Side Gulches Residential Tap Water

Arsenic

MTCAS _{Stat} 2.1			
Number of samples		Uncensored values	
Uncensored	8	Mean	1.92
Censored		Lognormal mean	2.18
Detection limit or PQL		Std. devn.	2.784822
Method detection limit		Median	0.72625
TOTAL	8	Min.	0.19
		Max.	8.4
Lognormal distribution? r-squared is:		Normal distribution? r-squared is:	
Recommendations: Assume lognormal distribution. W value is 0.8903. This exceeds the tabled value of 0.818			
UCL (based on t-statistic) is 3.78			

Site ID	Static Result (ug/L)	Purged Result (ug/L)	Average Result (ug/L)
R048	0.85 U	1.4 J	1.125
R057	0.2 J	0.29 J	0.245
R064	0.37	0.285 U	0.3275
R066	2	3.2	2.6
R072	2.3	2.1	2.2
R085	7.6	9.2	8.4
R088	0.28	0.1 U	0.19
R120	0.25 U	0.25 U	0.25

Side Gulches Neighborhood Exposure to Surface Soil

Antimony

Analytical Result
 (mg/kg)

31.2
 53.3
 41.9
 54.9
 49.8

MTCAS ^{Stat} 2.1			
Number of samples		Uncensored values	
Uncensored	5	Mean	46.22
Censored		Lognormal mean	46.54
Detection limit or PQL		Std. devn.	9.779417
Method detection limit		Median	49.8
TOTAL	5	Min.	31.2
		Max.	54.9
Lognormal distribution? r-squared is:		Normal distribution? r-squared is:	
Recommendations: Assume lognormal distribution. W value is 0.8644. This exceeds the tabled value of 0.762			
UCL (based on t-statistic) is 55.54			

Side Gulches Neighborhood Exposure to Surface Soil

Arsenic

Analytical Result
 (mg/kg)
 68.9
 87.2
 98.5
 72.1
 73.1

MTCAS _{Stat} 2.1				
Number of samples		Uncensored values		
Uncensored	5	Mean	79.96	
Censored		Lognormal mean	80.13	
Detection limit or PQL		Std. devn.	12.5231	
Method detection limit		Median	73.1	
TOTAL	5	Min.	68.9	
		Max.	98.5	
Lognormal distribution? r-squared is:		Normal distribution? r-squared is:		
Recommendations: Assume lognormal distribution. W value is 0.8778. This exceeds the tabled value of 0.762				
UCL (based on t-statistic) is 91.9				

Side Gulches Neighborhood Exposure to Surface Soil

Cadmium

Analytical Result
 (mg/kg)
 8.1
 64.5
 11.7
 14.4
 10.3

MTCAS ^{Stat} 2.1			
Number of samples		Uncensored values	
Uncensored	5	Mean	21.80
Censored		Lognormal mean	21.80
Detection limit or PQL		Std. devn.	23.97916
Method detection limit		Median	11.7
TOTAL	5	Min.	8.1
		Max.	64.5
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Assume lognormal distribution.			
W value is 0.7876. This exceeds the tabled value of 0.762			
UCL (based on t-statistic) is 44.66			

Side Gulches Neighborhood Exposure to Surface Soil

Iron

Analytical Result
(mg/kg)

67053
 99928
 84077
 88771
 88119

MTCAS ^{Stat} 2.1			
Number of samples		Uncensored values	
Uncensored	5	Mean	85589.60
Censored		Lognormal mean	85798.19
Detection limit or PQL		Std. devn.	11916.4
Method detection limit		Median	88119
TOTAL	5	Min.	67053
		Max.	99928
Lognormal distribution? r-squared is:		Normal distribution? r-squared is:	
Recommendations: Assume lognormal distribution. W value is 0.9029. This exceeds the tabled value of 0.762			
UCL (based on t-statistic) is 96951.4			

Side Gulches Neighborhood Exposure to Surface Soil

Manganese

Analytical Result
(mg/kg)

3590
 9280
 5060
 8470
 7530

MTCAS ^{Stat} 2.1			
Number of samples		Uncensored values	
Uncensored	5	Mean	6786.00
Censored		Lognormal mean	6928.34
Detection limit or PQL		Std. devn.	2387.62
Method detection limit		Median	7530
TOTAL	5	Min.	3590
		Max.	9280
Lognormal distribution? r-squared is:		Normal distribution? r-squared is:	
Recommendations: Assume lognormal distribution. W value is 0.9025. This exceeds the tabled value of 0.762			
UCL (based on t-statistic) is 9062.5			

Side Gulches Neighborhood Exposure to Surface Soil

Zinc

Analytical Result
 (mg/kg)

1960
 6130
 2210
 3410
 2930

MTCAS ^{Stat} 2.1			
Number of samples		Uncensored values	
Uncensored	5	Mean	3328.00
Censored		Lognormal mean	3374.51
Detection limit or PQL		Std. devn.	1668.658
Method detection limit		Median	2930
TOTAL	5	Min.	1960
		Max.	6130
Lognormal distribution? r-squared is:		Normal distribution? r-squared is:	
Recommendations: Assume lognormal distribution. W value is 0.929. This exceeds the tabled value of 0.762			
UCL (based on t-statistic) is 4919			

Side Gulches Neighborhood Exposure to Sediments

Antimony

Analytical Result
 (mg/kg)

27
 0.49
 28.7
 0.5
 36.1
 27.9
 2.7
 5.4
 0.93
 47.1

MTCAS _{Stat} 2.1				
Number of samples		Uncensored values		
Uncensored	10	Mean	17.68	
Censored		Lognormal mean	36.16	
Detection limit or PQL		Std. devn.	17.52457	
Method detection limit		Median	16.2	
TOTAL	10	Min.	0.49	
		Max.	47.1	
Lognormal distribution?		Normal distribution?		
r-squared is:		r-squared is:		
Recommendations: Reject lognormal distribution. W value is 0.8415. This is less than the tabled value of 0.842 Assume normal distribution. W value is 0.846. This exceeds the tabled value of 0.842				
UCL (based on t-statistic) is 27.84				

Side Gulches Neighborhood Exposure to Sediments

Arsenic

Analytical Result
 (mg/kg)

53.9
 41.8
 98.5
 29.6
 81.2
 74.7
 43.7
 64.6
 21.8
 113

MTCAS _{Stat} 2.1				
Number of samples		Uncensored values		
Uncensored	10	Mean	62.28	
Censored		Lognormal mean	63.76	
Detection limit or PQL		Std. devn.	29.70876	
Method detection limit		Median	59.25	
TOTAL	10	Min.	21.8	
		Max.	113	
Lognormal distribution?		Normal distribution?		
r-squared is:		r-squared is:		
Recommendations: Assume lognormal distribution. W value is 0.9682. This exceeds the tabled value of 0.842				
UCL (based on t-statistic) is 79.5				

Side Gulches Neighborhood Exposure to Sediments

Cadmium

Analytical Result
 (mg/kg)

5.6
 0.1
 3
 0.1
 15.8
 112
 1.7
 1.6
 1.1
 45.6

MTCAS _{Stat} 2.1				
Number of samples		Uncensored values		
Uncensored	10	Mean	18.66	
Censored		Lognormal mean	42.77	
Detection limit or PQL		Std. devn.	35.64966	
Method detection limit		Median	2.35	
TOTAL	10	Min.	0.1	
		Max.	112	
Lognormal distribution?		Normal distribution?		
r-squared is:		r-squared is:		
Recommendations: Assume lognormal distribution. W value is 0.9507. This exceeds the tabled value of 0.842				
UCL (based on t-statistic) is 39.32				

Side Gulches Neighborhood Exposure to Sediments

Iron

Analytical Result
 (mg/kg)

43200
 19500
 41700
 20500
 52200
 23800
 21000
 26100
 25233
 21000

MTCAS _{Stat} 2.1			
Number of samples		Uncensored values	
Uncensored	10	Mean	29423.30
Censored		Lognormal mean	29489.62
Detection limit or PQL		Std. devn.	11735.6
Method detection limit		Median	24516.5
TOTAL	10	Min.	19500
		Max.	52200
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations: Reject lognormal distribution. W value is 0.8322. This is less than the tabled value of 0.842 Reject normal distribution. W value is 0.7929. This is less than the tabled value of 0.842			
UCL (based on t-statistic) is 36225.79			

Side Gulches Neighborhood Exposure to Sediments

Manganese

Analytical Result
 (mg/kg)

2610
 469
 3040
 640
 4410
 654
 394
 546
 665
 1250

MTCAS _{Stat} 2.1			
Number of samples		Uncensored values	
Uncensored	10	Mean	1467.80
Censored		Lognormal mean	1485.79
Detection limit or PQL		Std. devn.	1393.349
Method detection limit		Median	659.5
TOTAL	10	Min.	394
		Max.	4410
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations: Assume lognormal distribution. W value is 0.8658. This exceeds the tabled value of 0.842			
UCL (based on t-statistic) is 2275.45			

Side Gulches Neighborhood Exposure to Sediments

Zinc

Analytical Result
 (mg/kg)

1300
 66.4
 1450
 112
 3990
 10500
 639
 615
 276
 9340

MTCAS ^{Stat} 2.1			
Number of samples		Uncensored values	
Uncensored	10	Mean	2828.84
Censored		Lognormal mean	4221.52
Detection limit or PQL		Std. devn.	3916.553
Method detection limit		Median	969.5
TOTAL	10	Min.	66.4
		Max.	10500
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations: Assume lognormal distribution. W value is 0.9559. This exceeds the tabled value of 0.842			
UCL (based on t-statistic) is 5099.05			

Side Gulches Neighborhood Exposure to Surface Water

Arsenic

Analytical Results
 (ug/L)
 12.2
 5.5
 32
 7.8
 25.7

MTCAS ^{Stat} 2.1	
Number of samples	Uncensored values
Uncensored	Mean
Censored	Lognormal mean
Detection limit or PQL	Std. devn.
Method detection limit	Median
TOTAL	Min.
	Max.
Lognormal distribution? r-squared is:	Normal distribution? r-squared is:
Recommendations: Assume lognormal distribution. W value is 0.9339. This exceeds the tabled value of 0.762	
UCL (based on t-statistic) is 27.72	

Side Gulches Neighborhood Exposure to Surface Water

Cadmium

Analytical Results
 (ug/L)
 60.3
 5.8
 20.9
 12.1
 33.1

MTCAS _{Stat} 2.1	
Number of samples	Uncensored values
Uncensored	Mean
Censored	Lognormal mean
Detection limit or PQL	Std. devn.
Method detection limit	Median
TOTAL	Min.
	Max.
Lognormal distribution? r-squared is:	Normal distribution? r-squared is:
Recommendations: Assume lognormal distribution. W value is 0.9937. This exceeds the tabled value of 0.762	
UCL (based on t-statistic) is 46.96	

Side Gulches Neighborhood Exposure to Surface Water

Manganese

Analytical Results
 (ug/L)
 122
 152
 1520
 1120
 8570

MTCAS ^{Stat} 2.1	
Number of samples	Uncensored values
Uncensored	Mean
Censored	Lognormal mean
Detection limit or PQL	Std. devn.
Method detection limit	Median
TOTAL	Min.
	Max.
Lognormal distribution? r-squared is:	Normal distribution? r-squared is:
Recommendations: Assume lognormal distribution. W value is 0.9195. This exceeds the tabled value of 0.762	
UCL (based on t-statistic) is 5690.34	

Side Gulches Neighborhood Exposure to Surface Water

Mercury

Analytical Results
 (ug/L)
 0.22
 0.05
 0.31
 0.18
 3.5

MTCAS _{stat} 2.1				
Number of samples		Uncensored values		
Uncensored	5	Mean		0.85
Censored		Lognormal mean		0.97
Detection limit or PQL		Std. devn.	1.48323	
Method detection limit		Median		0.22
TOTAL	5	Min.		0.05
		Max.		3.5
Lognormal distribution? r-squared is:		Normal distribution? r-squared is:		
Recommendations: Assume lognormal distribution. W value is 0.9093. This exceeds the tabled value of 0.762				
UCL (based on t-statistic) is 2.27				

Osburn Residential Exposure to Surface Soil

Antimony

Analytical Results (mg/kg)

0.32	0.1	35.7	5.8	2.8	9.1	170	0.485	1.2
0.22	0.24	1.6	2.7	2.35	3.5	0.48	0.75	1.05
2.9	0.31	2.55	103	2.1	14.3	0.485	0.49	0.5
8.7	0.1	1	3.6	2.2	1.65	0.65	3.1	4.3
2.6	2.9	1.4	2.6	2.2	7.8	0.485	7.4	1.1
2.1	11.5	43.9	5.4	190	48	0.48	1	14.7
6.9	1.6	5.8	5.4	4.9	1.75	0.95	8.2	1.45
3.6	2.4	2.1	2.1	2.9	8.8	0.5	1.05	13.2
2	2.2	10.6	8.8	1.6	29.8	19.3	1.4	6.9
1.2	2.2	2.4	3	0.9	4.1	0.75	0.9	0.7
1.7	2	5	3	2.4	4.9	2.9	1.9	0.75
1.9	2.6	6.6	2.2	2	248	3.5	2	7.3
10	7	3.1	2.7	42.8	1.1	3.2	1.6	0.75
9.8	2.3	3	3.1	10	1.55	1.15	0.65	0.6
13.2	2.3	3.8	3	25.5	5.5	0.8	1.45	0.65
2.85	3.1	4.6	2.2	57.1	1.55	5.4	5.2	6.2
4.8	0.78	4.1	2.3	6.8	10.7	0.56	3.3	0.41
4.5	1.7	5.9	5.4	38.8	1.05	10.4	1.05	0.7
0.34	1.9	3.4	27.8	4.5	4.7	5.8	1.45	1.6
0.36	0.63	5.5	6.9	72.4	19.6	5.1	0.75	8.3
1.9	47.2	0.5	16	5.8	2.4	2	1.2	1.35
3	3.7	96.6	6.1	8.3	2.2	4.4	0.8	11.3
13.8	3.9	2.2	4.4	4.6	18.9	1.45	21.2	1.9
1	3.5	0.495	3.3	3.7	2.4	5.6	1	4.7
0.55	1.7	28.4	6	2.3	4.1	1.1	114	12.8
1.8	3	4.1	1.45	174	2	7.1	10.4	1.2
1.2	11	46.3	0.5	2	1.25	5.7	1.05	22.1
2.2	2.8	5.8	1.15	4.4	24.6	8.7	8.7	
2.2	102	6.5	2.7	3	1.25	10.1	9.9	
3.9	17.3	4.3	1.25	4.8	14.4	8.3	1.05	
3.2	25.3	6.7	2.35	2.4	1.2	1.15	29.4	
0.85	19	3.5	4.3	7.2	10.6	0.75	7.6	
4.2	2.2	12.2	2.1	1.6	1.4	1.1	3.7	
3.4	0.9	12.9	1.7	2.5	1.15	1.05	3.4	
3.8	138	4.6	1.6	5.5	0.7	0.55	0.8	

MTCASat 2.1			
Number of samples		Uncensored values	
Uncensored	307	Mean	10.10
Censored		Lognormal mean	7.81
Detection limit or PQL		Std. devn.	27.06608372
Method detection limit		Median	2.9
TOTAL	307	Min.	0.1
		Max.	248
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
7.3		Reject lognormal distribution.	
0.75		Y value is -4.427. This lies outside the tabled values of 1.5816 and -2.3125	
0.6		Reject normal distribution.	
0.65		Y value is -84.2673. This lies outside the tabled values of 1.5816 and -2.3125	
6.2			
0.41			
0.7			
1.6		UCL (based on t-statistic) is 12.66	
8.3			
1.35			
11.3			
1.9			
4.7			
12.8			
1.2			
22.1			

Osburn Residential Tap Water

Arsenic

Site ID	Static Result (ug/L)	Purged Result (ug/L)	Average Result (ug/L)
R001	0.22 J	0.28 J	0.25
R003	0.1 U	0.1 U	0.1
R004	0.1 U	0.1 U	0.1
R005	0.27 U	0.22 U	0.245
R008	0.25	0.31	0.28
R012	0.3	0.47	0.385
R013	0.22	0.1 U	0.16
R014	0.23	0.1 U	0.165
R017	0.1 U	0.1 U	0.1
R020	0.3 J	0.34 J	0.32
R021	0.34	0.31	0.325
R024	0.31	0.21	0.26
R028	0.35	0.44	0.395
R029	0.1 U	0.1 U	0.1
R033	0.1 U	0.1 U	0.1
R036	0.1 U	0.1 U	0.1
R043	0.39	1.4	0.895
R047	0.31 J	0.29 J	0.3
R051	0.195 U	0.35 U	0.2725
R058	0.1 U	0.24	0.17
R059	0.235 U	0.34 J	0.2875
R060	0.1 U	0.1 U	0.1
R061	0.1 U	0.1 U	0.1
R062	0.1 U	0.1 U	0.1
R073	0.21 U	0.32 U	0.265
R084	0.1 U	0.24	0.17
R090	0.25	0.1 U	0.175
R109	0.25 U	0.25 U	0.25
R121	0.25 U	0.25 U	0.25
R128	0.25 U	0.25 U	0.25
R129	0.25 U	0.25 U	0.25
R130	0.25 U	0.25 U	0.25

MTCASat 2.1			
Number of samples		Uncensored values	
Uncensored	32	Mean	0.23
Censored		Lognormal mean	0.23
Detection limit or PQL		Std. devn.	0.150154
Method detection limit		Median	0.25
TOTAL	32	Min.	0.1
		Max.	0.895
Lognormal distribution? Normal distribution?			
r-squared is:		r-squared is:	
Recommendations:			
Reject lognormal distribution.			
W value is 0.8837. This is less than the tabled value of 0.93			
Reject normal distribution.			
W value is 0.7185. This is less than the tabled value of 0.93			
UCL (based on t-statistic) is 0.28			

Silverton Residential Surface Soil

Antimony

Analytical Results
(mg/kg)

0.35 30.7
 2.5 0.48
 22.4 1.45
 6.1 0.85
 2.9 0.84
 4 0.67
 3.3 0.84
 2.2 1
 82.5 4.2
 2 4.8
 2.2 2.7
 2.1 11
 4 5.8
 1.4 1.9
 0.5 3.7
 0.55 1.2
 23 0.5
 2 3.9
 3.9 4.3
 1.8 0.5
 4.3 0.5
 1.4 1.8
 4.3
 28
 0.9
 1.7
 6.1
 1.8
 2.5
 3.6
 0.31

MTCAS _{Stat} 2.1	
Number of samples	Uncensored values
Uncensored 53	Mean 5.82
Censored	Lognormal mean 4.89
Detection limit or PQL	Std. devn. 12.6157
Method detection limit	Median 2.2
TOTAL 53	Min. 0.31
	Max. 82.5
Lognormal distribution? r-squared is:	Normal distribution? r-squared is:
Recommendations: Assume lognormal distribution. Y value is -1.9509. This lies within the tabled values of 1.0611 and -2.7396	
UCL (based on t-statistic) is 8.72	

Silverton Residential Surface Soil

Arsenic

Analytical Results
 (mg/kg)

12.4 4.6
 10.1 133
 30.5 4.8
 16.3 7.1
 10.8 19.1
 33.5 4.1
 11 4.6
 17 5.3
 25.6 8.5
 19.8 8.7
 15.7 17.3
 7.2 13.4
 15.7 12
 6.25 15.7
 13.6 14.3
 10.8 4.61
 11.7 15.3
 38.9 7.8
 12.8 4.6
 17.5 10.7
 10.4 12.2
 16.5 14.9
 11.3 15.6
 18.5 17.4
 51.5
 13.9
 17.9
 20.1
 8.8
 11.9
 15.1

MTCAS _{Stat} 2.1			
Number of samples		Uncensored values	
Uncensored	55	Mean	16.52
Censored		Lognormal mean	15.79
Detection limit or PQL		Std. devn.	18.16282
Method detection limit		Median	13.4
TOTAL	55	Min.	4.1
		Max.	133
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Reject lognormal distribution.			
Y value is -4.2128. This lies outside the tabled values of 1.0765 and -2.728			
Reject normal distribution.			
Y value is -27.3967. This lies outside the tabled values of 1.0765 and -2.728			
UCL (based on t-statistic) is 20.62			

Silverton Residential Surface Soil

Cadmium

Analytical Results
 (mg/kg)

6 0.5
 3 7.2
 1.2 0.55
 5.3 0.66
 3.1 1.7
 3.9 1.6
 4 2.9
 4.9 2.7
 7.9 2.1
 1.9 1.5
 2.2 1.7
 2 4.1
 4.1 3.9
 23.8 11.9
 1.4 7.8
 1.6 1.8
 2.9 3.9
 1.7 3.7
 2.8 1.4
 6.5 2.8
 3.6 3.8
 7.6 3.3
 2.5 3.9
 9 3.5
 14.6
 5.3
 3.6
 12.7
 2.2
 3.7
 8.1

MTCAS _{Stat} 2.1	
Number of samples	Uncensored values
Uncensored	Mean 4.40
Censored	Lognormal mean 4.41
Detection limit or PQL	Std. devn. 4.011165
Method detection limit	Median 3.5
TOTAL 55	Min. 0.5
	Max. 23.8
Lognormal distribution?	Normal distribution?
r-squared is:	r-squared is:
Recommendations:	
Assume lognormal distribution.	
Y value is -1.3422. This lies within the tabled values of 1.0765 and -2.728	
UCL (based on t-statistic) is 5.31	

Silverton Residential Surface Soil

Iron

Analytical Results
 (mg/kg)

15300 56700
 25200 13900
 17000 16000
 14400 16800
 9690 15300
 16200 13500
 16400 12900
 47000 16100
 25500 18300
 22400 16900
 18500 16940
 20400 15140
 15100 18600
 19900 15540
 18800 12540
 15200 13430
 14800 14220
 17000 11890
 14300 12490
 13900 16200
 19300 14460
 16000 15970
 17500 16610
 38500
 21500
 20000
 21100
 14800
 19200
 21100
 15100

MTCAS _{Stat} 2.1			
Number of samples		Uncensored values	
Uncensored	54	Mean	18361.48
Censored		Lognormal mean	18182.72
Detection limit or PQL		Std. devn.	7957.572
Method detection limit		Median	16200
TOTAL	54	Min.	9690
		Max.	56700
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Reject lognormal distribution.			
Y value is -9.5761. This lies outside the tabled values of 1.0688 and -2.7338			
Reject normal distribution.			
Y value is -19.8476. This lies outside the tabled values of 1.0688 and -2.7338			
UCL (based on t-statistic) is 20175.92			

Silverton Residential Surface Soil

Manganese

Analytical Results
 (mg/kg)

601 3440
 1460 436
 1010 574
 623 798
 793 797
 690 472
 885 381
 3390 486
 1080 598
 973 699
 859 793
 1040 923
 594 1230
 1060 785
 923 501
 785 727
 662 722
 596 472
 679 284
 569 918
 1160 640
 610 588
 1030 706
 2270
 1080
 1570
 1510
 678
 1050
 1480
 427

MTCAS _{Stat} 2.1			
Number of samples		Uncensored values	
Uncensored	54	Mean	927.91
Censored		Lognormal mean	912.43
Detection limit or PQL		Std. devn.	605.1059
Method detection limit		Median	785
TOTAL	54	Min.	284
		Max.	3440
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Reject lognormal distribution.			
Y value is -3.4124. This lies outside the tabled values of 1.0688 and -2.7338			
Reject normal distribution.			
Y value is -15.479. This lies outside the tabled values of 1.0688 and -2.7338			
UCL (based on t-statistic) is 1065.88			

Silverton Residential Surface Soil

Zinc

Analytical Results
 (mg/kg)

496	62.3
274	5000
1530	71.8
672	154
328	208
548	101
379	200
558	162
1460	214
427	154
409	148
471	635
489	274
596	1010
269	748
253	116
373	287
309	288
420	119
1290	173
304	396
1190	316
313	298
763	403
3500	
545	
405	
1020	
323	
391	
903	

MTCAS _{Stat} 2.1			
Number of samples		Uncensored values	
Uncensored	55	Mean	595.38
Censored		Lognormal mean	561.02
Detection limit or PQL		Std. devn.	805.4685
Method detection limit		Median	379
TOTAL	55	Min.	62.3
		Max.	5000
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Assume lognormal distribution.			
Y value is -2.1282. This lies within the tabled values of 1.0765 and -2.728			
UCL (based on t-statistic) is 777.29			

**Silverton Residential Tap Water
Arsenic**

Site ID	Static Result (ug/L)	Purged Result (ug/L)	Average Result (ug/L)
R022	0.56	0.53	0.545
R027	0.33	0.23	0.280
R045	0.31	0.39	0.350
R075	0.38	0.3	0.340
			0.545 MAX
			0.37875 Average
			0.1151 Std Dev
			4 Count
			2 Count^0.5
			2.353 t-statistic
			0.5141 UCL₉₅normal

Silverton Public Recreational Exposure to Soil

Antimony	LN[Sb]	Arsenic	LN[As]	Cadmium	LN[Cd]	Iron	LN[Fe]	Manganese	LN[Mn]	Zinc	LN[Zn]
0.34	-1.0788	6	1.7918	0.39	-0.9416	14600	9.5888	613	6.4184	42.3	3.7448
0.95	-0.0513	6.2	1.8245	0.53	-0.6349	16400	9.7050	633	6.4505	57.4	4.0500
1.3	0.2624	7.7	2.0412	0.83	-0.1863	17800	9.7870	735	6.5999	113	4.7274
1.4	0.3365	8.7	2.1633	2.4	0.8755	17900	9.7926	1110	7.0121	273	5.6095
1.6	0.4700	9.6	2.2618	3.6	1.2809	16400	9.7050	931	6.8363	236	5.4638
1.6	0.4700	8.7	2.1633	2.1	0.7419	18800	9.8416	1030	6.9373	275	5.6168
2.2	0.7885	10.2	2.3224	3.3	1.1939	19000	9.8522	1180	7.0733	358	5.8805
2.5	0.9163	14.9	2.7014	3.4	1.2238	19500	9.8782	1260	7.1389	400	5.9915
1.9	0.6419	10.7	2.3702	3.6	1.2809	16700	9.7232	1120	7.0211	327	5.7900
1	0.0000	6	1.7918	0.03	-3.5066	14700	9.5956	444	6.0958	43.6	3.7751
1.9	0.6419	7.2	1.9741	0.03	-3.5066	15500	9.6486	645	6.4693	59.5	4.0860
1.5	0.4055	7.9	2.0669	0.93	-0.0726	15900	9.6741	705	6.5582	152	5.0239
1.3	0.2624	9.7	2.2721	2.8	1.0296	14800	9.6024	771	6.6477	226	5.4205
0.82	-0.1985	6.1	1.8083	0.03	-3.5066	14000	9.5468	552	6.3135	37.4	3.6217
1.3	0.2624	7.6	2.0281	0.03	-3.5066	14600	9.5888	589	6.3784	43.9	3.7819
1.3	0.2624	7.9	2.0669	1.3	0.2624	16600	9.7172	813	6.7007	212	5.3566
1.6	0.4700	8.6	2.1518	2.3	0.8329	15800	9.6678	833	6.7250	272	5.6058
0.97	-0.0305	8	2.0794	0.74	-0.3011	18100	9.8037	846	6.7405	140	4.9416
2.2	0.7885	11.2	2.4159	1.6	0.4700	19400	9.8730	1120	7.0211	332	5.8051
2.9	1.0647	12.1	2.4932	2.3	0.8329	20100	9.9085	1140	7.0388	354	5.8693
1.1	0.0953	10	2.3026	2.9	1.0647	16400	9.7050	1020	6.9276	316	5.7557
1.4	0.3365	7.7	2.0412	0.03	-3.5066	18200	9.8092	556	6.3208	79.6	4.3770
0.75	-0.2877	8.8	2.1748	0.95	-0.0513	19400	9.8730	861	6.7581	284	5.6490
1.8	0.5878	10.7	2.3702	4.1	1.4110	19900	9.8985	1130	7.0300	679	6.5206
1.8	0.5878	12.7	2.5416	3.9	1.3610	16800	9.7291	724	6.5848	431	6.0661
2.2	0.7885	3.6	1.2809	0.03	-3.5066	7420	8.9119	202	5.3083	19.8	2.9857
0.69	-0.3711	3.8	1.3350	0.03	-3.5066	8310	9.0252	212	5.3566	39.5	3.6763
0.77	-0.2614	8.3	2.1163	1.1	0.0953	16600	9.7172	782	6.6619	229	5.4337
1.5	0.4055	9.4	2.2407	2.8	1.0296	16000	9.6803	761	6.6346	276	5.6204
1.8	0.5878	5.8	1.7579	0.03	-3.5066	13100	9.4804	402	5.9965	94.8	4.5518
1.6	0.4700	10.6	2.3609	2.2	0.7885	17500	9.7700	934	6.8395	345	5.8435
1.7	0.5306	11	2.3979	2.6	0.9555	18000	9.7981	938	6.8437	350	5.8579
2.1	0.7419	11.5	2.4423	3.8	1.3350	16000	9.6803	826	6.7166	320	5.7683
1.7	0.5306	4.7	1.5476	0.03	-3.5066	11500	9.3501	350	5.8579	46.5	3.8395
0.485	-0.7236	6.4	1.8563	0.18	-1.7148	15900	9.6741	557	6.3226	130	4.8675
0.5	-0.6931	8.2	2.1041	2.6	0.9555	17400	9.7642	772	6.6490	460	6.1312
1.3	0.2624	8.6	2.1518	3.8	1.3350	15700	9.6614	786	6.6670	375	5.9269
1.1	0.0953	10.8	2.3795	1.9	0.6419	18800	9.8416	1060	6.9660	358	5.8805
0.485	-0.7236	11.3	2.4248	2	0.6931	19600	9.8833	1120	7.0211	370	5.9135
0.5	-0.6931	11.7	2.4596	2.1	0.7419	20200	9.9134	1160	7.0562	403	5.9989
1.3	0.2624	9.8	2.2824	2.5	0.9163	16500	9.7111	1010	6.9177	287	5.6595
1.4	0.3365	6.9	1.9315	0.095	-2.3539	13300	9.4955	419	6.0379	43.8	3.7796
1.3	0.2624	6.9	1.9315	0.1	-2.3026	14900	9.6091	451	6.1115	63	4.1431
1.4	0.3365	8.1	2.0919	0.56	-0.5798	19600	9.8833	735	6.5999	224	5.4116
1.5	0.4055	8.7	2.1633	2	0.6931	16200	9.6928	685	6.5294	266	5.5835
1.7	0.5306	6.2	1.8245	0.095	-2.3539	13500	9.5104	473	6.1591	46.1	3.8308
1.7	0.5306	6.9	1.9315	0.1	-2.3026	15800	9.6678	499	6.2126	62	4.1271
2	0.6931	8.1	2.0919	1.1	0.0953	18000	9.7981	774	6.6516	279	5.6312
2.4	0.8755	9.5	2.2513	3.3	1.1939	18100	9.8037	921	6.8255	428	6.0591
3	1.0986	10.7	2.3702	1.3	0.2624	18000	9.7981	1060	6.9660	327	5.7900
0.495	-0.7032	10.9	2.3888	1.9	0.6419	19100	9.8574	1150	7.0475	352	5.8636
0.5	-0.6931	12.2	2.5014	1.9	0.6419	20100	9.9085	1160	7.0562	364	5.8972
1.7	0.5306	10.1	2.3125	2.5	0.9163	17000	9.7410	1110	7.0121	332	5.8051
1.8	0.5878	10.3	2.3321	1.9	0.6419	16900	9.7351	1050	6.9565	335	5.8141
0.495	-0.7032	11.8	2.4681	2.4	0.8755	18700	9.8363	1110	7.0121	381	5.9428
0.5	-0.6931	12.9	2.5572	3.6	1.2809	22300	10.0123	1160	7.0562	420	6.0403
0.5	-0.6931	13.2	2.5802	2.7	0.9933	17400	9.7642	1020	6.9276	358	5.8805
2.1	0.7419	7.2	1.9741	0.68	-0.3857	15800	9.6678	589	6.3784	39.2	3.6687
1.6	0.4700	7.4	2.0015	1.4	0.3365	17100	9.7468	601	6.3986	125	4.8283
2	0.6931	9.6	2.2618	3.4	1.2238	19000	9.8522	1020	6.9276	347	5.8493
4.8	1.5686	9.9	2.2925	4.6	1.5261	19300	9.8679	1070	6.9754	363	5.8944
4.9	1.5892	7	1.9459	0.78	-0.2485	16000	9.6803	765	6.6399	70.5	4.2556
0.495	-0.7032	7.6	2.0281	1.1	0.0953	18000	9.7981	874	6.7731	108	4.6821
1.6	0.4700	7.9	2.0669	2	0.6931	20900	9.9475	1210	7.0984	214	5.3660
2	0.6931	9.2	2.2192	4.5	1.5041	17000	9.7410	807	6.6933	458	6.1269
5.4	1.6864	9.5	2.2513	3.5	1.2528	18100	9.8037	820	6.7093	476	6.1654
1.6	0.4700	10.4	2.3418	4	1.3863	18100	9.8037	868	6.7662	497	6.2086
6.1	1.8083	23	3.1355	4.9	1.5892	18300	9.8147	982	6.8896	516	6.2461
23.7	3.1655	38.9	3.6610	5	1.6094	24700	10.1146	1170	7.0648	602	6.4003
18.1	2.8959	7	1.9459	1.9	0.6419	14600	9.5888	471	6.1549	245	5.5013
0.5	-0.6931	9.8	2.2824	2.8	1.0296	18900	9.8469	891	6.7923	333	5.8081
0.5	-0.6931	19.5	2.9704	4	1.3863	21500	9.9758	949	6.8554	350	5.8579
1.2	0.1823	34.3	3.5351	4	1.3863	24300	10.0982	990	6.8977	466	6.1442
1.9	0.6419	11.1	2.4069	2.7	0.9933	18100	9.8037	1030	6.9373	379	5.9375
1.8	0.5878	32.7	3.4874	4.8	1.5686	23500	10.0648	1840	7.5175	1100	7.0031
0.5	-0.6931	145	4.9767	6.4	1.8563	40900	10.6189	2600	7.8633	2900	7.9725
1.2	0.1823	68.6	4.2283	7.9	2.0669	44200	10.6965	2530	7.8360	4070	8.3114
1.6	0.4700	8.1	2.0919	0.1	-2.3026	17800	9.7870	587	6.3750	88.7	4.4853
1.5	0.4055	10.1	2.3125	1	0.0000	19800	9.8934	960	6.8669	296	5.6904

Silverton Public Recreational Exposure to Soil

Antimony	LN[Sb]	Arsenic	LN[As]	Cadmium	LN[Cd]	Iron	LN[Fe]	Manganese	LN[Mn]	Zinc	LN[Zn]
1	0.0000	10.7	2.3702	1.8	0.5878	19800	9.8934	1050	6.9565	386	5.9558
0.5	-0.6931	11.4	2.4336	2.5	0.9163	20100	9.9085	1140	7.0388	386	5.9558
1.3	0.2624	11.2	2.4159	2.1	0.7419	19600	9.8833	1090	6.9939	407	6.0088
1.9	0.6419	10.7	2.3702	2	0.6931	19300	9.8679	1040	6.9470	311	5.7398
2.3	0.8329	11.2	2.4159	2	0.6931	20200	9.9134	1110	7.0121	329	5.7961
2.4	0.8755	12.1	2.4932	2.6	0.9555	21700	9.9851	1160	7.0562	342	5.8348
2.6	0.9555	9.2	2.2192	3.6	1.2809	16600	9.7172	954	6.8607	338	5.8230
1.7	0.5306	7.7	2.0412	0.1	-2.3026	16300	9.6989	596	6.3902	68.3	4.2239
0.72	-0.3285	9	2.1972	0.28	-1.2730	17900	9.7926	699	6.5497	84.2	4.4332
0.9	-0.1054	9.2	2.2192	1.2	0.1823	18400	9.8201	836	6.7286	181	5.1985
1.2	0.1823	10.2	2.3224	2.8	1.0296	18400	9.8201	1000	6.9078	280	5.6348
0.5	-0.6931	11	2.3979	3.1	1.1314	18800	9.8416	1050	6.9565	406	6.0064
1.3	0.2624	12	2.4849	4.1	1.4110	20200	9.9134	1130	7.0300	435	6.0753
1.4	0.3365	12.3	2.5096	4.2	1.4351	21600	9.9804	1240	7.1229	441	6.0890
2.3	0.8329	10.7	2.3702	3.8	1.3350	18600	9.8309	996	6.9037	372	5.9189
1.9	0.6419	7	1.9459	0.03	-3.5066	15100	9.6225	479	6.1717	58.6	4.0707
0.88	-0.1278	7.3	1.9879	0.03	-3.5066	15600	9.6550	481	6.1759	62.3	4.1320
1.1	0.0953	9.6	2.2618	1.2	0.1823	20500	9.9282	810	6.6970	276	5.6204
1.8	0.5878	9.3	2.2300	1.5	0.4055	17200	9.7527	803	6.6884	246	5.5053
3.1	1.1314	10.6	2.3609	0.36	-1.0217	20100	9.9085	771	6.6477	183	5.2095
1	0.0000	11	2.3979	1.9	0.6419	20800	9.9427	1120	7.0211	339	5.8260
2.1	0.7419	11.9	2.4765	3	1.0986	20900	9.9475	1150	7.0475	343	5.8377
1.8	0.5878	10.5	2.3514	3.6	1.2809	18800	9.8416	1030	6.9373	342	5.8348
0.89	-0.1165	7.6	2.0281	0.03	-3.5066	15100	9.6225	658	6.4892	44.1	3.7865
1.3	0.2624	7.9	2.0669	0.03	-3.5066	15900	9.6741	733	6.5971	86.2	4.4567
1.4	0.3365	10.1	2.3125	2	0.6931	18100	9.8037	950	6.8565	353	5.8665
1.7	0.5306	14.8	2.6946	3.6	1.2809	18600	9.8309	1090	6.9939	523	6.2596
0.49	-0.7133	7.6	2.0281	0.03	-3.5066	17800	9.7870	584	6.3699	81.4	4.3994
0.5	-0.6931	9.2	2.2192	0.03	-3.5066	21100	9.9570	910	6.8134	168	5.1240
1.4	0.3365	11.2	2.4159	2	0.6931	21900	9.9942	1150	7.0475	388	5.9610
2.2	0.7885	9.9	2.2925	2.7	0.9933	17300	9.7585	1010	6.9177	304	5.7170
0.495	-0.7032	8.2	2.1041	0.22	-1.5141	18700	9.8363	894	6.7957	100	4.6052
1	0.0000	9.5	2.2513	0.33	-1.1087	20400	9.9233	934	6.8395	127	4.8442
0.5	-0.6931	10.2	2.3224	1.6	0.4700	20600	9.9330	945	6.8512	230	5.4381
1.6	0.4700	9.6	2.2618	3.1	1.1314	17400	9.7642	969	6.8763	257	5.5491
0.5	-0.6931	9.3	2.2300	0.1	-2.3026	19400	9.8730	617	6.4249	54.8	4.0037
1.7	0.5306	9.4	2.2407	0.1	-2.3026	19500	9.8782	640	6.4615	62.3	4.1320
2.2	0.7885	10.2	2.3224	1.8	0.5878	21600	9.9804	810	6.6970	319	5.7652
2.1	0.7419	11.1	2.4069	3.5	1.2528	18800	9.8416	766	6.6412	385	5.9532
1.1	0.0953	9.3	2.2300	0.37	-0.9943	22800	10.0345	766	6.6412	135	4.9053
2.1	0.7419	12.9	2.5572	2.2	0.7885	23700	10.0732	1140	7.0388	399	5.9890
3.5	1.2528	13	2.5649	2.7	0.9933	25600	10.1503	1150	7.0475	420	6.0403
7.2	1.9741	12.9	2.5572	4.7	1.5476	22600	10.0257	1070	6.9754	429	6.0615
1.4	0.3365	9.6	2.2618	0.33	-1.1087	23800	10.0774	631	6.4473	136	4.9127
1.8	0.5878	12.4	2.5177	2.4	0.8755	24400	10.1023	1060	6.9660	479	6.1717
2.2	0.7885	14.2	2.6532	4.8	1.5686	24600	10.1105	1360	7.2152	762	6.6359
0.99	-0.0101	12.9	2.5572	5.3	1.6677	23000	10.0432	1190	7.0817	703	6.5554
0.92	-0.0834	11.4	2.4336	0.96	-0.0408	23300	10.0562	1370	7.2226	207	5.3327
1.8	0.5878	16	2.7726	2.9	1.0647	24000	10.0858	1390	7.2371	448	6.1048
3.8	1.3350	21	3.0445	3.3	1.1939	24200	10.0941	2040	7.6207	450	6.1092
4.2	1.4351	38.4	3.6481	4.2	1.4351	25900	10.1620	1420	7.2584	452	6.1137
1.4	0.3365	10.8	2.3795	1.7	0.5306	19200	9.8627	1040	6.9470	331	5.8021
1.7	0.5306	10.8	2.3795	2.2	0.7885	19300	9.8679	1090	6.9939	370	5.9135
1.8	0.5878	12.3	2.5096	4.2	1.4351	22300	10.0123	1190	7.0817	441	6.0890
1.8	0.5878	12.5	2.5257	4.4	1.4816	21700	9.9851	1170	7.0648	435	6.0753
10	2.3026	6.2	1.8245	0.03	-3.5066	16400	9.7050	671	6.5088	77.8	4.3541
19	2.9444	8.6	2.1518	0.87	-0.1393	18200	9.8092	1090	6.9939	273	5.6095
32.8	3.4904	15.1	2.7147	4.5	1.5041	19400	9.8730	1210	7.0984	695	6.5439
6.9	1.9315	17.7	2.8736	4.6	1.5261	18000	9.7981	1120	7.0211	632	6.4489
0.335	-1.0936	10.3	2.3321	2.2	0.7885	18500	9.8255	1060	6.9660	361	5.8889
0.7	-0.3567	10.8	2.3795	2.4	0.8755	19200	9.8627	1140	7.0388	377	5.9322
1	0.0000	11.1	2.4069	2.7	0.9933	19700	9.8884	1180	7.0733	390	5.9661
1.2	0.1823	9.8	2.2824	3.1	1.1314	16900	9.7351	1010	6.9177	335	5.8141
0.76	-0.2744	80.3	4.3858	3.5	1.2528	24700	10.1146	1480	7.2998	362	5.8916
1.1	0.0953	24.1	5.4848	3.6	1.2809	30000	10.3090	1900	7.5496	553	6.3154
1.3	0.2624	41.5	6.0283	3.9	1.3610	35900	10.4885	2590	7.8594	560	6.3279
2	0.6931	53.9	3.9871	1.9	0.6419	23700	10.0732	1190	7.0817	350	5.8579
5.8	1.7579	5.2	1.6487	0.03	-3.5066	12700	9.4494	253	5.5334	31.9	3.4626
7.2	1.9741	6.3	1.8405	0.1	-2.3026	16900	9.7351	582	6.3665	55.9	4.0236
24.7	3.2068	8.6	2.1518	0.85	-0.1625	18800	9.8416	938	6.8437	176	5.1705
53.5	3.9797	8.8	2.1748	2.4	0.8755	16900	9.7351	1060	6.9660	268	5.5910
27	3.2958	6.8	1.9169	0.33	-1.1087	15600	9.6550	638	6.4583	49.3	3.8979
51	3.9318	7.4	2.0015	0.57	-0.5621	16100	9.6866	695	6.5439	75.3	4.3215
137	4.9200	7.5	2.0149	1.2	0.1823	16700	9.7232	737	6.6026	121	4.7958
72.8	4.2877	8.4	2.1282	2.7	0.9933	15500	9.6486	855	6.7511	177	5.1761
13.8	2.6247	26.5	3.2771	7.1	1.9601	22500	10.0213	1380	7.2298	1510	7.3199
17.8	2.8792	37.7	3.6297	11.7	2.4596	24100	10.0900	1470	7.2930	1760	7.4731
22.3	3.1046	129	4.8598	14.6	2.6810	32100	10.3766	2030	7.6158	2040	7.6207
19.9	2.9907	175	5.1648	8.4	2.1282	44800	10.7100	3140	8.0520	2390	7.7790

Silverton Public Recreational Exposure to Soil

Antimony	LN[Sb]	Arsenic	LN[As]	Cadmium	LN[Cd]	Iron	LN[Fe]	Manganese	LN[Mn]	Zinc	LN[Zn]
3.7	1.3083	202	5.3083	4.2	1.4351	33300	10.4133	2480	7.8160	445	6.0981
4.3	1.4586	464	6.1399	4.4	1.4816	39300	10.5790	3680	8.2107	598	6.3936
5.8	1.7579	796	6.6796	4.5	1.5041	79800	11.2873	5940	8.6895	949	6.8554
12	2.4849	422	6.0450	4.3	1.4586	55400	10.9223	3980	8.2890	1420	7.2584
1.3	0.2624	43.1	3.7635	5.4	1.6864	26200	10.1735	2110	7.6544	1370	7.2226
1.4	0.3365	69.6	4.2428	7	1.9459	30800	10.3353	2230	7.7098	2160	7.7779
1.6	0.4700	73.1	4.2918	7.5	2.0149	34300	10.4429	2280	7.7319	2780	7.9302
2.4	0.8755	43.9	3.7819	6.5	1.8718	36300	10.4996	2410	7.7874	3080	8.0327
4	1.3863	13.9	2.6319	1.5	0.4055	12500	9.4335	666	6.5013	501	6.2166
2.25	0.8109	17.8	2.8792	1.7	0.5306	17300	9.7585	883	6.7833	635	6.4536
2.4	0.8755	21.9	3.0865	2.6	0.9555	21900	9.9942	1250	7.1309	884	6.7845
11.5	2.4423	51.5	3.9416	6.6	1.8871	23100	10.0476	1330	7.1929	1470	7.2930
32.8	3.4904	8.8	2.1748	0.41	-0.8916	14300	9.5680	524	6.2615	192	5.2575
2.1	0.7419	9.8	2.2824	0.56	-0.5798	15700	9.6614	550	6.3099	224	5.4116
3.4	1.2238	10.1	2.3125	0.8	-0.2231	16100	9.6866	717	6.5751	287	5.6595
3.8	1.3350	10.9	2.3888	2	0.6931	17000	9.7410	720	6.5793	511	6.2364
10.4	2.3418	14.3	2.6603	3.9	1.3610	16300	9.6989	670	6.5073	923	6.8276
7.9	2.0669	13.5	2.6027	2.5	0.9163	20100	9.9085	925	6.8298	659	6.4907
13	2.5649	17.4	2.8565	4	1.3863	23600	10.0690	1170	7.0648	1040	6.9470
23.4	3.1527	26.9	3.2921	7.5	2.0149	25400	10.1425	1460	7.2862	1730	7.4559
109	4.6913	59.5	4.0860	8.6	2.1518	41900	10.6430	2590	7.8594	4180	8.3381
1.3	0.2624	12.2	2.5014	0.55	-0.5978	19300	9.8679	781	6.6606	337	5.8201
1.6	0.4700	14.6	2.6810	2.5	0.9163	19500	9.8782	1050	6.9565	567	6.3404
2.5	0.9163	27	3.2958	7.8	2.0541	21400	9.9711	1580	7.3652	1190	7.0817
7.6	2.0281	34.4	3.5381	1.9	0.6419	20400	9.9233	1460	7.2862	854	6.7499
3.1	1.1314	22.9	3.1311	15.6	2.7473	22800	10.0345	1350	7.2079	2590	7.8594
3.3	1.1939	26.5	3.2771	16.4	2.7973	23800	10.0774	1420	7.2584	2710	7.9047
134	4.8978	38.1	3.6402	16.6	2.8094	35100	10.4660	2580	7.8555	2750	7.9194
17.7	2.8736	240	5.4806	2.4	0.8755	42200	10.6502	2730	7.9121	1220	7.1066
1.7	0.5306	8.8	2.1748	0.1	-2.3026	17000	9.7410	621	6.4313	145	4.9767
1.8	0.5878	9.1	2.2083	0.61	-0.4943	17000	9.7410	835	6.7274	235	5.4596
7.1	1.9601	9.2	2.2192	1.8	0.5878	17900	9.7926	857	6.7534	386	5.9558
18	2.8904	22	3.0910	1.4	0.3365	18200	9.8092	1230	7.1148	775	6.6529
18.6	2.9232	10	2.3026	1.6	0.4700	17100	9.7468	650	6.4770	352	5.8636
45.2	3.8111	11.4	2.4336	1.9	0.6419	19700	9.8884	861	6.7581	460	6.1312
166	5.1120	282	5.6419	4	1.3863	41900	10.6430	2780	7.9302	1150	7.0475
233	5.4510	31.5	3.4500	11	2.3979	30300	10.3189	2180	7.6871	2220	7.7053
0.55	-0.5978	12	2.4849	0.1	-2.3026	23400	10.0605	1400	7.2442	253	5.5334
1.7	0.5306	16.3	2.7912	0.1	-2.3026	24700	10.1146	1620	7.3902	262	5.5683
7.8	2.0541	20.2	3.0057	0.86	-0.1508	25600	10.1503	1670	7.4206	541	6.2934
8.8	2.1748	49.8	3.9080	3.3	1.1939	30000	10.3090	1640	7.4025	1810	7.5011
0.7	-0.3567	132	4.8828	2.1	0.7419	28600	10.2612	1760	7.4731	645	6.4693
1.2	0.1823	308	5.7301	2.1	0.7419	34600	10.4516	2230	7.7098	693	6.5410
2.25	0.8109	681	6.5236	4.2	1.4351	51900	10.8571	3350	8.1167	1230	7.1148
7.5	2.0149	1060	6.9660	6.3	1.8405	69700	11.1520	4580	8.4295	1760	7.4731
7.6	2.0281	11.4	2.4336	2.3	0.8329	14400	9.5750	227	5.4250	438	6.0822
26.4	3.2734	14.1	2.6462	3.7	1.3083	21900	9.9942	276	5.6204	566	6.3386
26.8	3.2884	93.1	4.5337	9.6	2.2618	27500	10.2219	1210	7.0984	2140	7.6686
22.8	3.1268	66.3	4.1942	12.1	2.4932	28200	10.2471	1320	7.1854	2840	7.9516
8.6	2.1518	13.7	2.6174	0.1	-2.3026	18500	9.8255	791	6.6733	183	5.2095
46.1	3.8308	14.8	2.6946	0.1	-2.3026	19700	9.8884	1040	6.9470	250	5.5215
53.8	3.9853	15	2.7081	0.66	-0.4155	19800	9.8934	1240	7.1229	374	5.9243
27.3	3.3069	21.7	3.0773	1.5	0.4055	18600	9.8309	1220	7.1066	675	6.5147
2.9	1.0647	14.8	2.6946	0.77	-0.2614	8860	9.0893	186	5.2257	200	5.2983
3.6	1.2809	51.5	3.9416	4.3	1.4586	19200	9.8627	686	6.5309	840	6.7334
4.3	1.4586	54.1	3.9908	5.4	1.6864	20500	9.9282	761	6.6346	1070	6.9754
6.9	1.9315	48	3.8712	5.6	1.7228	17900	9.7926	795	6.6783	1150	7.0475
1.8	0.5878	21.5	3.0681	5.2	1.6487	18300	9.8147	775	6.6529	1190	7.0817
2.3	0.8329	121	4.7958	6.1	1.8083	22200	10.0078	1620	7.3902	1250	7.1309
3	1.0986	133	4.8903	8.2	2.1041	27700	10.2292	1860	7.5283	1340	7.2004
4.6	1.5261	58.7	4.0724	3	1.0986	23100	10.0476	1450	7.2793	1330	7.1929
0.86	-0.1508	16.5	2.8034	3.3	1.1939	21100	9.9570	1080	6.9847	565	6.3368
0.99	-0.0101	20.2	3.0057	5.5	1.7047	21200	9.9618	1230	7.1148	964	6.8711
7.9	2.0669	20.4	3.0155	9.2	2.2192	21500	9.9758	1260	7.1389	1540	7.3395
0.5	-0.6931	26.8	3.2884	12.5	2.5257	23100	10.0476	1380	7.2298	2000	7.6009
0.5	-0.6931	6.8	1.9169	0.81	-0.2107	19400	9.8730	934	6.8395	160	5.0752
1.15	0.1398	11.1	2.4069	3.9	1.3610	21300	9.9665	1270	7.1468	530	6.2729
1.3	0.2624	11.5	2.4423	8	2.0794	21500	9.9758	1530	7.3330	1150	7.0475
0.495	-0.7032	18.9	2.9392	2	0.6931	19300	9.8679	1400	7.2442	668	6.5043
0.495	-0.7032	8.3	2.1163	1.4	0.3365	19500	9.8782	1200	7.0901	203	5.3132
0.5	-0.6931	12.8	2.5494	1.6	0.4700	20300	9.9184	1520	7.3265	257	5.5491
1.4	0.3365	20.7	3.0301	2.4	0.8755	18700	9.8363	1440	7.2724	815	6.7032
0.5	-0.6931	3.9	1.3610	0.105	-2.2538	11400	9.3414	354	5.8693	49.5	3.9020
0.55	-0.5978	4.4	1.4816	0.36	-1.0217	12300	9.4174	427	6.0568	67.5	4.2121
0.55	-0.5978	6.6	1.8871	5.4	1.6864	13500	9.5104	567	6.3404	591	6.3818
4.1	1.4110	5.5	1.7047	2.4	0.8755	14100	9.5539	603	6.4019	156	5.0499
0.49	-0.7133	3.1	1.1314	0.1	-2.3026	11400	9.3414	279	5.6312	37.6	3.6270
0.495	-0.7032	3.7	1.3083	0.1	-2.3026	11800	9.3759	285	5.6525	40.2	3.6939
0.5	-0.6931	3.8	1.3350	0.66	-0.4155	11900	9.3843	408	6.0113	76.2	4.3334

Silverton Public Recreational Exposure to Soil

Antimony	LN[Sb]	Arsenic	LN[As]	Cadmium	LN[Cd]	Iron	LN[Fe]	Manganese	LN[Mn]	Zinc	LN[Zn]
1.7	0.5306	6.2	1.8245	3.7	1.3083	14500	9.5819	532	6.2766	185	5.2204
0.49	-0.7133	5.1	1.6292	0.1	-2.3026	13500	9.5104	645	6.4693	72.8	4.2877
0.495	-0.7032	7.3	1.9879	0.89	-0.1165	14600	9.5888	1010	6.9177	120	4.7875
1.2	0.1823	9.8	2.2824	2.6	0.9555	14700	9.5956	1160	7.0562	226	5.4205
8	2.0794	8	2.0794	3.2	1.1632	11500	9.3501	798	6.6821	285	5.6525
0.49	-0.7133	4.6	1.5261	0.1	-2.3026	10500	9.2591	527	6.2672	53.6	3.9815
0.5	-0.6931	5.3	1.6677	0.71	-0.3425	11100	9.3147	758	6.6307	91.7	4.5185
0.5	-0.6931	5.4	1.6864	1.7	0.5306	11900	9.3843	762	6.6359	136	4.9127
1.5	0.4055	6.5	1.8718	3.2	1.1632	10900	9.2965	663	6.4968	182	5.2040
0.5	-0.6931	7.1	1.9601	0.1	-2.3026	16900	9.7351	1470	7.2930	83.1	4.4200
0.8	-0.2231	7.6	2.0281	0.21	-1.5606	17200	9.7527	2080	7.6401	108	4.6821
1.7	0.5306	12.3	2.5096	1.4	0.3365	23300	10.0562	2360	7.7664	280	5.6348
5.6	1.7228	25.5	3.2387	4.8	1.5686	27800	10.2328	2640	7.8785	829	6.7202
0.485	-0.7236	4.8	1.5686	0.1	-2.3026	12000	9.3927	528	6.2691	46.2	3.8330
0.495	-0.7032	5.6	1.7228	0.1	-2.3026	13400	9.5030	652	6.4800	54.6	4.0000
0.65	-0.4308	6.8	1.9169	0.86	-0.1508	13500	9.5104	1010	6.9177	116	4.7536
1.5	0.4055	8.4	2.1282	2.9	1.0647	12100	9.4010	952	6.8586	206	5.3279
0.495	-0.7032	7.1	1.9601	1.4	0.3365	14200	9.5610	897	6.7991	218	5.3845
0.5	-0.6931	9.7	2.2721	1.7	0.5306	15600	9.6550	1180	7.0733	231	5.4424
1	0.0000	18.7	2.9285	3.7	1.3083	16800	9.7291	1190	7.0817	527	6.2672
1.2	0.1823	4.4	1.4816	3.9	1.3610	7420	8.9119	359	5.8833	860	6.7569
0.76	-0.2744	4.2	1.4351	0.095	-2.3539	12200	9.4092	261	5.5645	45.7	3.8221
1	0.0000	6.1	1.8083	0.45	-0.7985	12600	9.4415	307	5.7268	77.9	4.3554
3	1.0986	9.6	2.2618	1.2	0.1823	12600	9.4415	395	5.9789	145	4.9767
0.5	-0.6931	12.7	2.5416	1.6	0.4700	14800	9.6024	495	6.2046	214	5.3660
0.66	-0.4155	3.2	1.1632	0.54	-0.6162	5980	8.6962	372	5.9189	68.7	4.2297
0.88	-0.1278	4.4	1.4816	0.69	-0.3711	12100	9.4010	500	6.2146	97.3	4.5778
2.7	0.9933	6.3	1.8405	2	0.6931	16300	9.6989	890	6.7912	157	5.0562
1.5	0.4055	5.8	1.7579	0.96	-0.0408	14000	9.5468	582	6.3665	177	5.1761
1.6	0.4700	6.6	1.8871	1.1	0.0953	15300	9.6356	820	6.7093	76.1	4.3320
1.8	0.5878	7	1.9459	1.1	0.0953	16700	9.7232	849	6.7441	77.7	4.3529
2.9	1.0647	7.9	2.0669	1.1	0.0953	17500	9.7700	851	6.7464	96.5	4.5695
0.73	-0.3147	8.3	2.1163	1.9	0.6419	17900	9.7926	984	6.8916	141	4.9488
0.495	-0.7032	11.8	2.4681	5.3	1.6677	13300	9.4955	1110	7.0121	384	5.9506
1.5	0.4055	4	1.3863	1	0.0000	14600	9.5888	409	6.0137	58.8	4.0741
2	0.6931	4.4	1.4816	1.4	0.3365	15000	9.6158	473	6.1591	75.3	4.3215
0.5	-0.6931	4.6	1.5261	1.7	0.5306	16300	9.6989	618	6.4265	88.2	4.4796
1	0.0000	7.3	1.9879	2.1	0.7419	14400	9.5750	565	6.3368	136	4.9127
1.3	0.2624	7.5	2.0149	1.2	0.1823	17200	9.7527	1240	7.1229	107	4.6728
2	0.6931	7.8	2.0541	2.1	0.7419	17300	9.7585	1260	7.1389	115	4.7449
4	1.3863	8.4	2.1282	2.6	0.9555	19000	9.8522	1440	7.2724	138	4.9273
3	1.0986	10	2.3026	4.1	1.4110	14200	9.5610	988	6.8957	203	5.3132
4.5	1.5041	6.8	1.9169	1.8	0.5878	17000	9.7410	927	6.8320	151	5.0173
12.7	2.5416	7.5	2.0149	1.9	0.6419	17100	9.7468	1010	6.9177	159	5.0689
16.6	2.8094	7.8	2.0541	2	0.6931	17700	9.7813	1020	6.9276	168	5.1240
0.49	-0.7133	10.3	2.3321	3.9	1.3610	13300	9.4955	584	6.3699	232	5.4467
0.49	-0.7133	4.2	1.4351	0.03	-3.5066	15700	9.6614	126	4.8363	23.3	3.1485
0.49	-0.7133	4.2	1.4351	0.04	-3.2189	16000	9.6803	158	5.0626	27.9	3.3286
1.4	0.3365	5.3	1.6677	0.34	-1.0788	16400	9.7050	427	6.0568	63.9	4.1573
0.49	-0.7133	6.3	1.8405	0.98	-0.0202	14100	9.5539	616	6.4232	138	4.9273
0.5	-0.6931	6.3	1.8405	0.49	-0.7133	16700	9.7232	888	6.7890	84.3	4.4344
1.3	0.2624	7.3	1.9879	1.4	0.3365	17400	9.7642	996	6.9037	123	4.8122
0.5	-0.6931	7.9	2.0669	1.7	0.5306	19800	9.8934	1390	7.2371	151	5.0173
0.5	-0.6931	9.4	2.2407	2.7	0.9933	13600	9.5178	698	6.5482	178	5.1818
0.5	-0.6931	5.8	1.7579	0.79	-0.2357	11600	9.3588	772	6.6490	149	5.0039
1.9	0.6419	7.4	2.0015	2.3	0.8329	17300	9.7585	1260	7.1389	255	5.5413
0.485	-0.7236	8.7	2.1633	3.2	1.1632	18100	9.8037	1370	7.2226	261	5.5645
0.5	-0.6931	9.9	2.2925	5.8	1.7579	13700	9.5252	959	6.8659	304	5.7170
0.5	-0.6931	8.2	2.1041	1.3	0.2624	16000	9.6803	1490	7.3065	150	5.0106
6.4	1.8563	8.9	2.1861	1.4	0.3365	19100	9.8574	2110	7.6544	185	5.2204
0.49	-0.7133	15.6	2.7473	4.3	1.4586	20200	9.9134	3080	8.0327	432	6.0684
1.1	0.0953	15.4	2.7344	3.3	1.1939	24200	10.0941	1880	7.5390	412	6.0210
1.2	0.1823	21.6	3.0727	5.7	1.7405	27000	10.2036	2330	7.7536	791	6.6733
3.1	1.1314	49.8	3.9080	10.7	2.3702	42600	10.6596	5050	8.5271	1760	7.4731
0.5	-0.6931	16	2.7726	3.2	1.1632	12800	9.4572	1140	7.0388	448	6.1048
2.6	0.9555	3.9	1.3610	0.48	-0.7340	15700	9.6614	529	6.2710	72.3	4.2808
5.9	1.7750	5.1	1.6292	0.53	-0.6349	16200	9.6928	691	6.5381	74.5	4.3108
0.94	-0.0619	5.3	1.6677	0.97	-0.0305	16500	9.7111	755	6.6267	88.1	4.4785
2	0.6931	5.7	1.7405	1.8	0.5878	16700	9.7232	781	6.6606	138	4.9273
7	1.9459	6.9	1.9315	2.1	0.7419	16100	9.6866	755	6.6267	145	4.9767
0.72	-0.3285	7.1	1.9601	0.35	-1.0498	16000	9.6803	1190	7.0817	82.9	4.4176
1.9	0.6419	10.8	2.3795	0.77	-0.2614	19000	9.8522	1620	7.3902	106	4.6634
5.8	1.7579	12.8	2.5494	2.6	0.9555	22100	10.0033	3590	8.1859	251	5.5255
3.5	1.2528	5.8	1.7579	0.56	-0.5798	13300	9.4955	1260	7.1389	55.7	4.0200
0.82	-0.1985	9.3	2.2300	1.1	0.0953	19900	9.8985	1420	7.2584	115	4.7449
0.49	-0.7133	10.7	2.3702	1.7	0.5306	21100	9.9570	1720	7.4501	149	5.0039
3.8	1.3350	11.7	2.4596	4.3	1.4586	16900	9.7351	1260	7.1389	246	5.5053
0.495	-0.7032	11.8	2.4681	0.9	-0.1054	24900	10.1226	1870	7.5337	136	4.9127
6.2	1.8245	13.4	2.5953	1.3	0.2624	27000	10.2036	1970	7.5858	188	5.2364

Silverton Public Recreational Exposure to Soil

Antimony	LN[Sb]	Arsenic	LN[As]	Cadmium	LN[Cd]	Iron	LN[Fe]	Manganese	LN[Mn]	Zinc	LN[Zn]
19.8	2.9857	14.3	2.6603	2.2	0.7885	27600	10.2256	2010	7.6059	242	5.4889
9.1	2.2083	20.7	3.0301	8.7	2.1633	25700	10.1542	1820	7.5066	968	6.8752
0.495	-0.7032	6.9	1.9315	0.93	-0.0726	16000	9.6803	612	6.4167	121	4.7958
0.5	-0.6931	9.5	2.2513	1.8	0.5878	20100	9.9085	1090	6.9939	238	5.4723
0.5	-0.6931	10.8	2.3795	3.8	1.3350	20200	9.9134	1360	7.2152	391	5.9687
0.325	-1.1239	11.7	2.4596	7.6	2.0281	16400	9.7050	1310	7.1778	487	6.1883
0.485	-0.7236	5.3	1.6677	1.1	0.0953	13500	9.5104	918	6.8222	112	4.7185
0.49	-0.7133	10.7	2.3702	4	1.3863	20000	9.9035	1460	7.2862	407	6.0088
0.5	-0.6931	15.5	2.7408	17.4	2.8565	21000	9.9523	1730	7.4559	790	6.6720
0.97	-0.0305	10.5	2.3514	13.5	2.6027	12000	9.3927	1320	7.1854	592	6.3835
1.4	0.3365	5.3	1.6677	0.79	-0.2357	14900	9.6091	653	6.4816	100	4.6052
1.5	0.4055	9.3	2.2300	3.3	1.1939	17200	9.7527	1270	7.1468	256	5.5452
1.7	0.5306	12.4	2.5177	6	1.7918	17800	9.7870	1340	7.2004	373	5.9216
1.3	0.2624	14.7	2.6878	5.7	1.7405	14800	9.6024	1090	6.9939	374	5.9243
1.4	0.3365	9.6	2.2618	1.3	0.2624	18600	9.8309	1590	7.3715	148	4.9972
1.4	0.3365	10.6	2.3609	2	0.6931	19600	9.8833	1980	7.5909	216	5.3753
8.9	2.1861	11.6	2.4510	3.3	1.1939	22400	10.0168	2380	7.7749	346	5.8464
3.8	1.3350	10.2	2.3224	3.4	1.2238	13800	9.5324	1160	7.0562	351	5.8608
0.49	-0.7133	4.3	1.4586	0.22	-1.5141	15100	9.6225	482	6.1779	105	4.6540
2.4	0.8755	4.4	1.4816	0.73	-0.3147	16200	9.6928	757	6.6294	113	4.7274
2.8	1.0296	6	1.7918	1.7	0.5306	16300	9.6989	854	6.7499	269	5.5947
3.6	1.2809	16.3	2.7912	3.9	1.3610	21100	9.9570	1410	7.2513	622	6.4329
0.49	-0.7133	4.8	1.5686	0.1	-2.3026	11200	9.3237	472	6.1570	52.8	3.9665
3.5	1.2528	20.9	3.0397	2.4	0.8755	26000	10.1659	2050	7.6256	637	6.4568
9.6	2.2618	51.7	3.9455	7.5	2.0149	43300	10.6759	4130	8.3260	1850	7.5229
14.2	2.6532	12.7	2.5416	3.4	1.2238	8680	9.0688	1140	7.0388	418	6.0355
6.8	1.9169	4	1.3863	0.29	-1.2379	13400	9.5030	510	6.2344	92.2	4.5240
8.7	2.1633	6	1.7918	0.3	-1.2040	14300	9.5680	545	6.3008	93.5	4.5380
18.3	2.9069	9.5	2.2513	0.49	-0.7133	16100	9.6866	604	6.4036	109	4.6913
4.1	1.4110	5.9	1.7750	1.7	0.5306	15300	9.6356	675	6.5147	128	4.8520
0.5	-0.6931	4.1	1.4110	0.1	-2.3026	13100	9.4804	412	6.0210	64.2	4.1620
0.5	-0.6931	4.2	1.4351	0.32	-1.1394	14400	9.5750	500	6.2146	80.9	4.3932
3.5	1.2528	4.2	1.4351	0.42	-0.8675	14400	9.5750	508	6.2305	96.3	4.5675
5.8	1.7579	4.3	1.4586	1.4	0.3365	15200	9.6291	634	6.4520	107	4.6728
0.49	-0.7133	9.1	2.2083	2.1	0.7419	14800	9.6024	713	6.5695	190	5.2470
0.5	-0.6931	13.9	2.6319	2.3	0.8329	14900	9.6091	955	6.8617	204	5.3181
6	1.7918	25.4	3.2347	3.6	1.2809	16900	9.7351	1070	6.9754	270	5.5984
2.1	0.7419	49	3.8918	0.77	-0.2614	28000	10.2400	785	6.6657	120	4.7875
0.55	-0.5978	4	1.3863	1.2	0.1823	11700	9.3673	213	5.3613	213	5.3613
1.6	0.4700	6.7	1.9021	2.5	0.9163	13300	9.4955	404	6.0014	364	5.8972
3.7	1.3083	12.6	2.5337	8.9	2.1861	17200	9.7527	1870	7.5337	1240	7.1229
0.5	-0.6931	13	2.5649	8.2	2.1041	18600	9.8309	816	6.7044	648	6.4739
0.485	-0.7236	4.8	1.5686	0.33	-1.1087	13900	9.5396	220	5.3936	59.8	4.0910
0.49	-0.7133	5.8	1.7579	2	0.6931	13900	9.5396	532	6.2766	340	5.8289
1.1	0.0953	6.4	1.8563	2.4	0.8755	15500	9.6486	721	6.5806	471	6.1549
1.4	0.3365	8.8	2.1748	6.5	1.8718	18400	9.8201	854	6.7499	655	6.4846
0.485	-0.7236	3.7	1.3083	0.39	-0.9416	12500	9.4335	219	5.3891	69.5	4.2413
0.5	-0.6931	10.1	2.3125	6	1.7918	15900	9.6741	766	6.6412	967	6.8742
0.5	-0.6931	19.7	2.9806	11.9	2.4765	21100	9.9570	1920	7.5601	1870	7.5337
1	0.0000	15.4	2.7344	10.7	2.3702	22200	10.0078	1870	7.5337	1420	7.2584
1.7	0.5306	12.4	2.5177	2.8	1.0296	18600	9.8309	1330	7.1929	538	6.2879
0.485	-0.7236	14.6	2.6810	6.6	1.8871	19000	9.8522	2200	7.6962	994	6.9017
0.49	-0.7133	24.4	3.1946	7.1	1.9601	22800	10.0345	2690	7.8973	1160	7.0562
0.5	-0.6931	8.4	2.1282	7.2	1.9741	19800	9.8934	887	6.7878	950	6.8565
0.495	-0.7032	1.8	0.5878	0.1	-2.3026	5360	8.5867	122	4.8040	80.9	4.3932
0.485	-0.7236	5.3	1.6677	0.48	-0.7340	9130	9.1193	287	5.6595	91	4.5109
0.495	-0.7032	5.4	1.6864	3.9	1.3610	16800	9.7291	684	6.5280	536	6.2841
0.5	-0.6931	8.7	2.1633	7.5	2.0149	18900	9.8469	806	6.6921	907	6.8101
1.4	0.3365	4.1	1.4110	0.1	-2.3026	16200	9.6928	266	5.5835	89.4	4.4931
0.335	-1.0936	5.1	1.6292	0.23	-1.4697	17500	9.7700	282	5.6419	159	5.0689
0.485	-0.7236	7.9	2.0669	5.4	1.6864	18400	9.8201	809	6.6958	832	6.7238
1.3	0.2624	7.1	1.9601	4	1.3863	10900	9.2965	358	5.8805	463	6.1377
0.495	-0.7032	3	1.0986	0.11	-2.2073	11300	9.3326	286	5.6560	65.6	4.1836
0.67	-0.4005	5.6	1.7228	2.3	0.8329	15500	9.6486	481	6.1759	405	6.0039
0.92	-0.0834	8.2	2.1041	6.5	1.8718	17200	9.7527	824	6.7142	893	6.7946
0.99	-0.0101	4.2	1.4351	0.78	-0.2485	11500	9.3501	563	6.3333	83.1	4.4200
0.93	-0.0726	8.1	2.0919	2.2	0.7885	14800	9.6024	1140	7.0388	159	5.0689
0.8	-0.2231	9.1	2.2083	2.5	0.9163	15900	9.6741	1500	7.3132	179	5.1874
1.7	0.5306	9.9	2.2925	2.7	0.9933	16800	9.7291	1570	7.3588	188	5.2364
0.83	-0.1863	9.4	2.2407	21.6	3.0727	13100	9.4804	772	6.6490	259	5.5568
0.87	-0.1393	7.8	2.0541	0.29	-1.2379	14700	9.5956	1060	6.9660	106	4.6634
1.1	0.0953	8.1	2.0919	1.3	0.2624	16100	9.6866	1080	6.9847	160	5.0752
2.1	0.7419	8.2	2.1041	2.3	0.8329	16700	9.7232	1520	7.3265	185	5.2204
1.5	0.4055	10.7	2.3702	2.9	1.0647	19000	9.8522	1760	7.4731	248	5.5134
0.82	-0.1985	7.6	2.0281	9.4	2.2407	13400	9.5030	735	6.5999	200	5.2983
0.88	-0.1278	5.7	1.7405	0.49	-0.7133	12600	9.4415	890	6.7912	106	4.6634
0.94	-0.0619	6.6	1.8871	0.57	-0.5621	15400	9.6421	928	6.8330	108	4.6821
1.9	0.6419	10.3	2.3321	0.73	-0.3147	16100	9.6866	950	6.8565	124	4.8203
1	0.0000	7.6	2.0281	3.6	1.2809	11500	9.3501	588	6.3767	218	5.3845

Silverton Public Recreational Exposure to Soil

Antimony	LN[Sb]	Arsenic	LN[As]	Cadmium	LN[Cd]	Iron	LN[Fe]	Manganese	LN[Mn]	Zinc	LN[Zn]
1.7	0.5306	5	1.6094	0.1	-2.3026	10400	9.2496	299	5.7004	36.9	3.6082
1.7	0.5306	5.3	1.6677	0.1	-2.3026	13800	9.5324	458	6.1269	55.3	4.0128
0.92	-0.0834	7.3	1.9879	0.49	-0.7133	14300	9.5680	602	6.4003	80.9	4.3932
1.3	0.2624	8.5	2.1401	2.9	1.0647	13800	9.5324	587	6.3750	166	5.1120
2	0.6931	5.6	1.7228	0.03	-3.5066	14600	9.5888	720	6.5793	94.2	4.5454
3.8	1.3350	6.2	1.8245	0.73	-0.3147	18500	9.8255	935	6.8405	121	4.7958
43.2	3.7658	7.9	2.0669	1.1	0.0953	18600	9.8309	1190	7.0817	135	4.9053
0.5	-0.6931	4.6	1.5261	1.5	0.4055	10400	9.2496	460	6.1312	107	4.6728
0.5	-0.6931	7	1.9459	0.03	-3.5066	15400	9.6421	943	6.8491	90.8	4.5087
1	0.0000	7.5	2.0149	0.21	-1.5606	16500	9.7111	1040	6.9470	102	4.6250
1.6	0.4700	8	2.0794	0.94	-0.0619	16900	9.7351	1100	7.0031	152	5.0239
0.5	-0.6931	8.3	2.1163	2	0.6931	20100	9.9085	1360	7.2152	156	5.0499
0.5	-0.6931	7.4	2.0015	1	0.0000	16400	9.7050	619	6.4281	110	4.7005
1.9	0.6419	8.1	2.0919	0.03	-3.5066	17500	9.7700	595	6.3886	62.7	4.1384
2.4	0.8755	8.2	2.1041	0.03	-3.5066	18800	9.8416	722	6.5820	68.4	4.2254
0.49	-0.7133	13	2.5649	0.5	-0.6931	21000	9.9523	1170	7.0648	143	4.9628
1	0.0000	7.4	2.0015	0.17	-1.7720	17300	9.7585	582	6.3665	87.1	4.4671
1.5	0.4055	8	2.0794	0.03	-3.5066	16900	9.7351	365	5.8999	78.4	4.3618
0.5	-0.6931	8.1	2.0919	0.34	-1.0788	17500	9.7700	683	6.5265	97	4.5747
0.98	-0.0202	9.5	2.2513	1.6	0.4700	19500	9.8782	1140	7.0388	185	5.2204
1.2	0.1823	10.1	2.3125	4.5	1.5041	16800	9.7291	1590	7.3715	356	5.8749
1.8	0.5878	4.8	1.5686	0.03	-3.5066	14500	9.5819	211	5.3519	38.3	3.6454
2.9	1.0647	5	1.6094	0.14	-1.9661	16500	9.7111	270	5.5984	46.3	3.8351
1.4	0.3365	5.4	1.6864	0.14	-1.9661	17000	9.7410	430	6.0638	80.8	4.3920
2.2	0.7885	6.5	1.8718	2.4	0.8755	14400	9.5750	498	6.2106	210	5.3471
3.7	1.3083	6.6	1.8871	0.24	-1.4271	15700	9.6614	738	6.6039	78.1	4.3580
20.9	3.0397	7.5	2.0149	1	0.0000	16200	9.6928	1250	7.1309	143	4.9628
2.9	1.0647	8.3	2.1163	2.1	0.7419	16500	9.7111	1310	7.1778	166	5.1120
3.4	1.2238	7.3	1.9879	7.7	2.0412	12200	9.4092	698	6.5482	208	5.3375
4.1	1.4110	6.3	1.8405	1.1	0.0953	16400	9.7050	560	6.3279	86.4	4.4590
8.5	2.1401	7.8	2.0541	1.5	0.4055	17200	9.7527	757	6.6294	105	4.6540
4.1	1.4110	8.4	2.1282	1.9	0.6419	17600	9.7757	770	6.6464	149	5.0039
21.6	3.0727	9.1	2.2083	5.5	1.7047	14900	9.6091	975	6.8824	270	5.5984
25.6	3.2426	8.4	2.1282	0.37	-0.9943	16500	9.7111	1270	7.1468	179	5.1874
3.6	1.2809	9.7	2.2721	2	0.6931	17200	9.7527	1670	7.4206	187	5.2311
2.6	0.9555	10	2.3026	2.5	0.9163	24200	10.0941	2000	7.6009	218	5.3845
3.1	1.1314	8	2.0794	6.2	1.8245	13700	9.5252	975	6.8824	247	5.5094
3.7	1.3083	6.4	1.8563	0.03	-3.5066	16400	9.7050	736	6.6012	68.8	4.2312
3.5	1.2528	6.6	1.8871	0.09	-2.4079	17100	9.7468	1080	6.9847	79.6	4.3770
0.87	-0.1393	8.3	2.1163	1.2	0.1823	19600	9.8833	1590	7.3715	109	4.6913
1.6	0.4700	6.6	1.8871	0.72	-0.3285	16600	9.7172	577	6.3578	94.5	4.5486
3.8	1.3350	9.9	2.2925	1.4	0.3365	16600	9.7172	1400	7.2442	218	5.3845
3.1	1.1314	12.5	2.5257	2.2	0.7885	17600	9.7757	1810	7.5011	230	5.4381
1.1	0.0953	13.8	2.6247	3.2	1.1632	18600	9.8309	1820	7.5066	316	5.7557
1.3	0.2624	42.2	3.7424	17.2	2.8449	18800	9.8416	1800	7.4955	2030	7.6158
2.7	0.9933	6.4	1.8563	0.55	-0.5978	14700	9.5956	830	6.7214	78.9	4.3682
3	1.0986	6.7	1.9021	0.61	-0.4943	15100	9.6225	904	6.8068	79	4.3694
0.5	-0.6931	6.7	1.9021	1.4	0.3365	16100	9.6866	1060	6.9660	120	4.7875
0.5	-0.6931	6.7	1.9021	2.3	0.8329	14900	9.6091	535	6.2823	125	4.8283
1.4	0.3365	5.2	1.6487	0.1	-2.3026	12100	9.4010	473	6.1591	45.1	3.8089
2.2	0.7885	6.9	1.9315	0.71	-0.3425	16100	9.6866	896	6.7979	109	4.6913
2.2	0.7885	8.2	2.1041	0.92	-0.0834	16200	9.6928	1210	7.0984	143	4.9628
1.8	0.5878	9.2	2.2192	3.6	1.2809	15400	9.6421	819	6.7081	272	5.6058
2.8	1.0296	7.2	1.9741	0.81	-0.2107	14800	9.6024	689	6.5352	120	4.7875
32.8	3.4904	7.3	1.9879	1.2	0.1823	14900	9.6091	712	6.5681	150	5.0106
0.49	-0.7133	8.5	2.1401	2.6	0.9555	17000	9.7410	1080	6.9847	158	5.0626
0.5	-0.6931	9.1	2.2083	5.1	1.6292	15100	9.6225	522	6.2577	131	4.8752
0.5	-0.6931	7.9	2.0669	0.65	-0.4308	15900	9.6741	1070	6.9754	128	4.8520
0.5	-0.6931	8	2.0794	1.8	0.5878	17800	9.7870	1200	7.0901	180	5.1930
1.3	0.2624	9.4	2.2407	2.4	0.8755	18600	9.8309	1450	7.2793	212	5.3566
1	0.0000	12	2.4849	54.4	3.9964	12700	9.4494	605	6.4052	268	5.5910
1.5	0.4055	10.9	2.3888	0.54	-0.6162	18400	9.8201	912	6.8156	168	5.1240
3.3	1.1939	12.7	2.5416	1.4	0.3365	21500	9.9758	1370	7.2226	274	5.6131
0.5	-0.6931	14.9	2.7014	2.9	1.0647	23400	10.0605	1650	7.4085	387	5.9584
1.2	0.1823	31.2	3.4404	7.3	1.9879	23700	10.0732	1670	7.4206	1100	7.0031
1.4	0.3365	17.1	2.8391	3.5	1.2528	22400	10.0168	545	6.3008	433	6.0707
1.8	0.5878	19.1	2.9497	3.6	1.2809	26800	10.1962	876	6.7754	436	6.0776
3.1	1.1314	19.2	2.9549	7.9	2.0669	29700	10.2989	927	6.8320	728	6.5903
1.6	0.4700	19.9	2.9907	7	1.9459	15900	9.6741	906	6.8090	1030	6.9373
1.9	0.6419	16.3	2.7912	5.2	1.6487	28200	10.2471	1240	7.1229	519	6.2519
3.3	1.1939	30.4	3.4144	19.5	2.9704	46400	10.7451	3410	8.1345	3370	8.1227
2.8	1.0296	32.8	3.4904	31.9	3.4626	86000	11.3621	10000	9.2103	4450	8.4007
3.6	1.2809	12.9	2.5572	6.6	1.8871	26000	10.1659	1110	7.0121	346	5.8464
1.1	0.0953	17.2	2.8449	4.7	1.5476	19000	9.8522	978	6.8855	509	6.2324
1.5	0.4055	19.2	2.9549	5.1	1.6292	20300	9.9184	1100	7.0031	690	6.5367
1.7	0.5306	21.6	3.0727	6.6	1.8871	24400	10.1023	1250	7.1309	841	6.7346
3.6	1.2809	18.6	2.9232	2.3	0.8329	21500	9.9758	840	6.7334	313	5.7462
1.1	0.0953	12.5	2.5257	0.72	-0.3285	16000	9.6803	692	6.5396	182	5.2040
1.7	0.5306	17.8	2.8792	2.7	0.9933	22000	9.9988	703	6.5554	205	5.3230

Silverton Public Recreational Exposure to Soil

Antimony	LN[Sb]	Arsenic	LN[As]	Cadmium	LN[Cd]	Iron	LN[Fe]	Manganese	LN[Mn]	Zinc	LN[Zn]
2.4	0.8755	18.5	2.9178	6.5	1.8718	24600	10.1105	964	6.8711	1080	6.9847
1.4	0.3365	12.5	2.5257	7.8	2.0541	14100	9.5539	568	6.3421	585	6.3716
1.5	0.4055	6.8	1.9169	0.33	-1.1087	14800	9.6024	557	6.3226	132	4.8828
1.7	0.5306	10.3	2.3321	0.84	-0.1744	21600	9.9804	900	6.8024	240	5.4806
6.7	1.9021	17.4	2.8565	3.1	1.1314	22400	10.0168	923	6.8276	504	6.2226
11.5	2.4423	13.3	2.5878	4.3	1.4586	17000	9.7410	712	6.5681	567	6.3404
0.93	-0.0726	6.7	1.9021	0.1	-2.3026	14600	9.5888	392	5.9713	78.7	4.3656
1.6	0.4700	7.3	1.9879	0.1	-2.3026	15800	9.6678	399	5.9890	112	4.7185
2.1	0.7419	7.7	2.0412	1.5	0.4055	18000	9.7981	416	6.0307	319	5.7652
3.4	1.2238	8.8	2.1748	1.7	0.5306	18700	9.8363	463	6.1377	361	5.8889
0.76	-0.2744	10.5	2.3514	3.8	1.3350	18100	9.8037	560	6.3279	359	5.8833
1.1	0.0953	14.8	2.6946	0.62	-0.4780	21400	9.9711	357	5.8777	173	5.1533
2.3	0.8329	20.4	3.0155	0.68	-0.3857	22900	10.0389	604	6.4036	189	5.2417
5.3	1.6677	32.4	3.4782	2.3	0.8329	25900	10.1620	730	6.5930	204	5.3181
1.3	0.2624	3.5	1.2528	1.6	0.4700	7890	8.9734	150	5.0106	151	5.0173
3.4	1.2238	6.4	1.8563	0.1	-2.3026	15000	9.6158	418	6.0355	55.2	4.0110
3.5	1.2528	7.7	2.0412	0.105	-2.2538	16000	9.6803	526	6.2653	64.7	4.1698
5.4	1.6864	8.9	2.1861	1.1	0.0953	16200	9.6928	602	6.4003	149	5.0039
2	0.6931	9	2.1972	2.5	0.9163	14300	9.5680	655	6.4846	209	5.3423
2.2	0.7885	6.4	1.8563	1	0.0000	14500	9.5819	374	5.9243	123	4.8122
4.5	1.5041	13.6	2.6101	2.9	1.0647	14900	9.6091	387	5.9584	321	5.7714
1.6	0.4700	19.4	2.9653	4.3	1.4586	26700	10.1924	763	6.6373	504	6.2226
3.5	1.2528	22	3.0910	0.73	-0.3147	21800	9.9897	728	6.5903	407	6.0088
3.7	1.3083	6	1.7918	0.29	-1.2379	14000	9.5468	570	6.3456	35.8	3.5779
12.9	2.5572	6.6	1.8871	0.99	-0.0101	16100	9.6866	676	6.5162	74.3	4.3081
5.7	1.7405	11.8	2.4681	2.2	0.7885	21400	9.9711	707	6.5610	169	5.1299
0.495	-0.7032	13	2.5649	4.7	1.5476	17800	9.7870	506	6.2265	257	5.5491
2.6	0.9555	11.2	2.4159	2.6	0.9555	19200	9.8627	674	6.5132	367	5.9054
6.8	1.9169	15.1	2.7147	3	1.0986	20700	9.9379	953	6.8596	383	5.9480
1.3	0.2624	16.4	2.7973	3.3	1.1939	24000	10.0858	1160	7.0562	399	5.9890
2	0.6931	9.2	2.2192	5.8	1.7579	14800	9.6024	491	6.1964	408	6.0113
4.2	1.4351	11.8	2.4681	5.9	1.7750	15400	9.6421	786	6.6670	459	6.1291
12.8	2.5494	8.6	2.1518	1.1	0.0953	17500	9.7700	515	6.2442	114	4.7362
15.3	2.7279	9.3	2.2300	1.2	0.1823	18100	9.8037	691	6.5381	129	4.8598
6.4	1.8563	10.2	2.3224	3	1.0986	18900	9.8469	746	6.6147	271	5.6021
14.5	2.6741	12.3	2.5096	5.4	1.6864	17900	9.7926	749	6.6187	297	5.6937
20.8	3.0350	7.4	2.0015	1.2	0.1823	13200	9.4880	224	5.4116	126	4.8363
5.1	1.6292	7.7	2.0412	2	0.6931	16900	9.7351	306	5.7236	248	5.5134
2.8	1.0296	17.2	2.8449	7	1.9459	25200	10.1346	605	6.4052	982	6.8896
7.2	1.9741	2.8	1.0296	3.3	1.1939	6370	8.7594	125	4.8283	445	6.0981
7.7	2.0412	11	2.3979	0.56	-0.5798	22600	10.0257	736	6.6012	225	5.4161
3.9	1.3610	12	2.4849	0.96	-0.0408	23000	10.0432	891	6.7923	324	5.7807
0.5	-0.6931	23.5	3.1570	6.8	1.9169	26400	10.1811	1800	7.4955	991	6.8987
1.5	0.4055	35.3	3.5639	10	2.3026	29900	10.3056	2910	7.9759	1290	7.1624
2.1	0.7419	18.6	2.9232	0.65	-0.4308	23200	10.0519	497	6.2086	240	5.4806
4.9	1.5892	21.6	3.0727	1.1	0.0953	27300	10.2146	586	6.3733	447	6.1026
2.3	0.8329	25.1	3.2229	1.8	0.5878	41800	10.6407	688	6.5338	540	6.2916
2.35	0.8544	16.7	2.8154	6.4	1.8563	16500	9.7111	550	6.3099	364	5.8972
11.8	2.4681	6.8	1.9169	0.83	-0.1863	14400	9.5750	437	6.0799	101	4.6151
4.5	1.5041	7.1	1.9601	1.3	0.2624	15600	9.6550	440	6.0868	138	4.9273
0.48	-0.7340	9.1	2.2083	1.4	0.3365	19500	9.8782	538	6.2879	280	5.6348
1.4	0.3365	12.1	2.4932	5.5	1.7047	18300	9.8147	665	6.4998	529	6.2710
0.8	-0.2231	9.1	2.2083	1.7	0.5306	18400	9.8201	591	6.3818	239	5.4765
1.5	0.4055	13.3	2.5878	4	1.3863	19800	9.8934	647	6.4723	719	6.5779
0.94	-0.0619	14.2	2.6532	4.5	1.5041	20400	9.9233	948	6.8544	818	6.7069
1.2	0.1823	13.6	2.6101	4.7	1.5476	17100	9.7468	558	6.3244	676	6.5162
1.3	0.2624	12.1	2.4932	1.4	0.3365	18800	9.8416	733	6.5971	380	5.9402
1.3	0.2624	12.6	2.5337	3.2	1.1632	19900	9.8985	986	6.8937	598	6.3936
2.7	0.9933	19.8	2.9857	5.2	1.6487	22000	9.9988	1270	7.1468	798	6.6821
1.7	0.5306	11.2	2.4159	2.6	0.9555	18000	9.7981	728	6.5903	445	6.0981
3.3	1.1939	12.5	2.5257	2.4	0.8755	22600	10.0257	1400	7.2442	429	6.0615
3.8	1.3350	13.6	2.6101	4.4	1.4816	25300	10.1386	1600	7.3778	642	6.4646
1.6	0.4700	40.8	3.7087	6.5	1.8718	29100	10.2785	2000	7.6009	1190	7.0817
1.9	0.6419	18.9	2.9392	5	1.6094	17800	9.7870	1110	7.0121	756	6.6280
1.9	0.6419	20.2	3.0057	0.1	-2.3026	23400	10.0605	668	6.5043	96.9	4.5737
2.1	0.7419	20.3	3.0106	1.4	0.3365	25200	10.1346	694	6.5425	245	5.5013
4.4	1.4816	20.8	3.0350	2.9	1.0647	27300	10.2146	785	6.6657	539	6.2897
4.6	1.5261	15.3	2.7279	2.6	0.9555	16600	9.7172	485	6.1841	328	5.7930
6.1	1.8083	9.1	2.2083	0.64	-0.4463	18300	9.8147	635	6.4536	238	5.4723
6.4	1.8563	20.3	3.0106	5.4	1.6864	20700	9.9379	639	6.4599	710	6.5653
4.3	1.4586	29.2	3.3742	7.5	2.0149	29000	10.2751	1550	7.3460	1500	7.3132
2.8	1.0296	21.8	3.0819	7.5	2.0149	22400	10.0168	986	6.8937	1290	7.1624
5.2	1.6487	22.8	3.1268	6.2	1.8245	24200	10.0941	817	6.7056	1620	7.3902
8.3	2.1163	36.9	3.6082	12.7	2.5416	26700	10.1924	1320	7.1854	2810	7.9409
10.5	2.3514	50.4	3.9200	14.2	2.6532	28300	10.2506	2010	7.6059	3010	8.0097
0.5	-0.6931	29	3.3673	5.3	1.6677	22000	9.9988	620	6.4297	737	6.6026
0.55	-0.5978	9.7	2.2721	0.44	-0.8210	16900	9.7351	175	5.1648	138	4.9273
0.55	-0.5978	12	2.4849	0.55	-0.5978	19500	9.8782	184	5.2149	198	5.2883
1.9	0.6419	12.1	2.4932	0.87	-0.1393	20200	9.9134	201	5.3033	232	5.4467

Silverton Public Recreational Exposure to Soil

Antimony	LN[Sb]	Arsenic	LN[As]	Cadmium	LN[Cd]	Iron	LN[Fe]	Manganese	LN[Mn]	Zinc	LN[Zn]
0.495	-0.7032	9.9	2.2925	2.6	0.9555	15000	9.6158	312	5.7430	328	5.7930
2.1	0.7419	9.2	2.2192	0.1	-2.3026	18700	9.8363	421	6.0426	144	4.9698
2.2	0.7885	9.4	2.2407	0.1	-2.3026	19200	9.8627	453	6.1159	156	5.0499
1.6	0.4700	10	2.3026	0.6	-0.5108	20400	9.9233	611	6.4151	232	5.4467
18.3	2.9069	12.3	2.5096	2.4	0.8755	17300	9.7585	392	5.9713	378	5.9349
22.3	3.1046	15.3	2.7279	3.3	1.1939	21200	9.9618	536	6.2841	706	6.5596
28.4	3.3464	17.7	2.8736	4.8	1.5686	23800	10.0774	670	6.5073	939	6.8448
20.7	3.0301	24.7	3.2068	6	1.7918	25500	10.1464	761	6.6346	1490	7.3065
11.1	2.4069	15.5	2.7408	12.3	2.5096	17400	9.7642	823	6.7130	3280	8.0956
22	3.0910	7.7	2.0412	0.095	-2.3539	14800	9.6024	528	6.2691	71.8	4.2739
25.1	3.2229	9	2.1972	0.48	-0.7340	16600	9.7172	534	6.2804	182	5.2040
19.1	2.9497	9.9	2.2925	1	0.0000	19200	9.8627	640	6.4615	316	5.7557
0.94	-0.0619	13.7	2.6174	2.5	0.9163	19000	9.8522	346	5.8464	387	5.9584
1.7	0.5306	7.4	2.0015	0.42	-0.8675	15700	9.6614	498	6.2106	68.9	4.2327
6.6	1.8871	7.7	2.0412	0.49	-0.7133	15800	9.6678	521	6.2558	115	4.7449
10.1	2.3125	8.7	2.1633	0.77	-0.2614	16600	9.7172	537	6.2860	133	4.8903
13.5	2.6027	9.1	2.2083	1.7	0.5306	16800	9.7291	553	6.3154	258	5.5530
14.6	2.6810	11.9	2.4765	4	1.3863	18300	9.8147	754	6.6254	350	5.8579
15.4	2.7344	14.6	2.6810	1.7	0.5306	24000	10.0858	751	6.6214	221	5.3982
18.7	2.9285	17.9	2.8848	2.3	0.8329	26900	10.1999	789	6.6708	276	5.6204
4.7	1.5476	18.1	2.8959	3.2	1.1632	28100	10.2435	1280	7.1546	566	6.3386
4.8	1.5686	16.8	2.8214	2.3	0.8329	22500	10.0213	643	6.4661	196	5.2781
38.1	3.6402	11.3	2.4248	1.8	0.5878	22200	10.0078	494	6.2025	220	5.3936
26.2	3.2658	17.7	2.8736	2.6	0.9555	22300	10.0123	667	6.5028	283	5.6454
		19.6	2.9755	2.8	1.0296	24500	10.1064	994	6.9017	358	5.8805
		17	2.8332	5.2	1.6487	17000	9.7410	608	6.4102	368	5.9081
		36.2	3.5891	3.4	1.2238	23500	10.0648	744	6.6120	488	6.1903
		43.2	3.7658	7.6	2.0281	29300	10.2853	772	6.6490	1140	7.0388
		43.5	3.7728	8.1	2.0919	32400	10.3859	888	6.7890	1220	7.1066
		35.5	3.5695	4.2	1.4351	19700	9.8884	647	6.4723	414	6.0259
		11.7	2.4596	2.8	1.0296	17800	9.7870	329	5.7961	323	5.7777
		14.7	2.6878	3.2	1.1632	24100	10.0900	404	6.0014	455	6.1203
		25.9	3.2542	6.9	1.9315	24200	10.0941	847	6.7417	1050	6.9565
		23.6	3.1612	17.3	2.8507	16700	9.7232	1050	6.9565	2100	7.6497
		6.5	1.8718	0.1	-2.3026	15300	9.6356	441	6.0890	45.8	3.8243
		6.5	1.8718	0.105	-2.2538	15400	9.6421	642	6.4646	50.5	3.9220
		6.6	1.8871	0.29	-1.2379	16700	9.7232	693	6.5410	80.4	4.3870
		6.3	1.8405	2	0.6931	10900	9.2965	222	5.4027	170	5.1358
		6	1.7918	0.49	-0.7133	10800	9.2873	407	6.0088	202	5.3083
		16	2.7726	0.84	-0.1744	23200	10.0519	609	6.4118	245	5.5013
		17.3	2.8507	1.2	0.1823	25100	10.1306	656	6.4862	263	5.5722
		11.3	2.4248	1.8	0.5878	18200	9.8092	466	6.1442	199	5.2933
		17.2	2.8449	7.7	2.0412	20600	9.9330	735	6.5999	1990	7.5959
		25	3.2189	17.8	2.8792	30800	10.3353	1070	6.9754	3720	8.2215
		34.5	3.5410	32.9	3.4935	31200	10.3482	1720	7.4501	7100	8.8679
		38.3	3.6454	47.4	3.8586	27400	10.2183	2630	7.8747	10600	9.2686
		32.8	3.4904	48.3	3.8774	27100	10.2073	1620	7.3902	9920	9.2023
		41.2	3.7184	68.4	4.2254	28400	10.2541	2460	7.8079	11000	9.3057
		52.2	3.9551	81	4.3944	33600	10.4223	2730	7.9121	12100	9.4010
		41.7	3.7305	90.8	4.5087	33600	10.4223	2470	7.8120	18000	9.7981
		9.9	2.2925	1.4	0.3365	22500	10.0213	394	5.9764	276	5.6204
		10.2	2.3224	4	1.3863	25300	10.1386	500	6.2146	488	6.1903
		17.2	2.8449	16.7	2.8154	27500	10.2219	1040	6.9470	2440	7.7998
		20.9	3.0397	23	3.1355	19900	9.8985	1180	7.0733	3210	8.0740
		34	3.5264	18.9	2.9392	21900	9.9942	1380	7.2298	2570	7.8517
		49.2	3.8959	24.5	3.1987	23300	10.0562	1480	7.2998	3540	8.1719
		71.3	4.2669	35.5	3.5695	26200	10.1735	1560	7.3524	5110	8.5390
		73.6	4.2986	17.7	2.8736	21000	9.9523	1690	7.4325	2350	7.7622
		23.6	3.1612	9.9	2.2925	26800	10.1962	836	6.7286	1580	7.3652
		27.6	3.3178	10.1	2.3125	28400	10.2541	906	6.8090	1590	7.3715
		30.6	3.4210	53.1	3.9722	31500	10.3577	1340	7.2004	7960	8.9822
		49	3.8918	64.9	4.1728	29800	10.3023	3610	8.1915	15900	9.6741
Antimony	Arsenic	Cadmium	Iron	Manganese	Zinc						
Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average
5.7239	0.7339	23.1793	2.4925	3.9923	0.4584	19535.4797	9.8288	1038.7935	6.7668	633.4094	5.6621
Std Dev	Std Dev	Std Dev	Std Dev	Std Dev	Std Dev	Std Dev	Std Dev	Std Dev	Std Dev	Std Dev	Std Dev
16.603	1.199	71.144	0.817	8.148	1.530	7374.056	0.307	757.704	0.592	1477.588	1.117
Count	Std Dev^2	Count	Std Dev^2	Count	Std Dev^2	Count	Std Dev^2	Count	Std Dev^2	Count	Std Dev^2
577	1.44	615	0.67	615	2.34	615	0.09	615	0.35	615	1.25
Max	(Std Dev^2)/2	Max	(Std Dev^2)/2	Max	(Std Dev^2)/2	Max	(Std Dev^2)/2	Max	(Std Dev^2)/2	Max	(Std Dev^2)/2
233	0.7193	1060	0.3337	90.8	1.171	86000	0.0471	10000	0.1754	18000	0.6243
Min	1.45	Min	2.83	Min	1.63	Min	9.88	Min	6.94	Min	6.29
0.325	Mean _{lognormal}	1.8	Mean _{lognormal}	0.03	Mean _{lognormal}	5360	Mean _{lognormal}	122	Mean _{lognormal}	19.8	Mean _{lognormal}
Count^0.5	4.2767	Count^0.5	16.8823	Count^0.5	5.1011	Count^0.5	19454.91	Count^0.5	1035.02	Count^0.5	537.23
24.0208		24.7992		24.7992		24.7992		24.7992		24.7992	
t-statistic		t-statistic		t-statistic		t-statistic		t-statistic		t-statistic	
1.645		1.645		1.645		1.645		1.645		1.645	
UCL ₉₅ normal		UCL ₉₅ normal		UCL ₉₅ normal		UCL ₉₅ normal		UCL ₉₅ normal		UCL ₉₅ normal	
6.8609		27.8985		4.5327		20024.6215		1089.0541		731.4220	

Wallace Residential Surface Soil

Zinc

Analytical Results (mg/kg)		
723	2200	2080
721	674	733
2040	1810	636
201	419	530
387	1840	156
475	468	545
218	302	531
464	603	473
341	634	
249	1290	
766	579	
531	1610	
1310	643	
655	935	
1190	985	
548	593	
434	1260	
1180	352	
1360	896	
544	383	
396	238	
633	102	
2120	376	
531	490	
1680	548	
1750	1250	
2600	2190	
3150	604	
2210	574	
680	392	
1600	509	
920	337	
193	419	
749	518	
780	453	
539	826	
1050	437	

MTCAS _{Stat} 2.1			
Number of samples		Uncensored values	
Uncensored	82	Mean	857.82
Censored		Lognormal mean	860.22
Detection limit or PQL		Std. devn.	635.6446
Method detection limit		Median	603.5
TOTAL	82	Min.	102
		Max.	3150
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Assume lognormal distribution.			
Y value is -0.9031. This lies within the tabled values of 1.2344 and -2.6064			
UCL (based on t-statistic) is 974.79			

Wallace Residential Surface Soil

Antimony

Analytical Results (mg/kg)		
3.3	2.4	3.2
2.4	13.6	1.1
4.9	2.1	1.4
2.2	2	9.3
2.4	1.9	8.2
2.4	6.2	13.5
1.1	2.5	8
1.9	2.1	13.3
3.3	4.5	1.65
1.4	3.9	7.9
0.55	1.5	
4.6	2.6	
4.1	6.4	
4	2.3	
1.55	3.9	
2.7	4.2	
1.7	2.3	
4	9.9	
1.9	2.6	
0.8	4.4	
1.1	1.6	
6	1.2	
8	0.88	
1.3	1.3	
42.6	2.1	
43.8	1.55	
137	4.8	
161	1.4	
75.1	1	
2	0.8	
6.2	0.9	
4.2	1	
0.49	1.5	
6.1	1.15	
1.6	1.45	
2.4	0.8	

MTCAS _{stat} 2.1			
Number of samples		Uncensored values	
Uncensored	82	Mean	8.81
Censored		Lognormal mean	5.85
Detection limit or PQL		Std. devn.	24.66527
Method detection limit		Median	2.4
TOTAL	82	Min.	0.49
		Max.	161
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Reject lognormal distribution.			
Y value is -6.5821. This lies outside the tabled values of 1.2344 and -2.6064			
Reject normal distribution.			
Y value is -45.4442. This lies outside the tabled values of 1.2344 and -2.6064			
UCL (based on t-statistic) is 13.35			

Wallace Residential Surface Soil

Manganese

Analytical Results (mg/kg)		
432	587	1060
525	476	770
608	438	982
600	875	889
554	1720	800
544	806	772
447	1230	739
1100	650	186
1280	1380	794
878	598	650
1010	556	750
1030	845	724
769	899	834
772	849	818
609	934	782
994	955	873
800	1790	689
1070	807	1100
627	533	541
2290	538	
775	1340	
2130	437	
1760	560	
3470	746	
2260	533	
1770	362	
535	590	
900	614	
720	837	
304	871	

MTCAS _{Stat} 2.1			
Number of samples		Uncensored values	
Uncensored	79	Mean	894.58
Censored		Lognormal mean	888.07
Detection limit or PQL		Std. devn.	510.953
Method detection limit		Median	782
TOTAL	79	Min.	186
		Max.	3470
Lognormal distribution? r-squared is:		Normal distribution? r-squared is:	
Recommendations:			
Reject lognormal distribution. Y value is -4.1594. This lies outside the tabled values of 1.221 and -2.6169			
Reject normal distribution. Y value is -14.67. This lies outside the tabled values of 1.221 and -2.6169			
UCL (based on t-statistic) is 990.42			

Wallace Residential Surface Soil

Iron

Analytical Results
 (mg/kg)

13900 27100 16700
 17800 14900 19000
 17900 11200 18700
 16500 19600
 18000 19100
 17000 24400
 16200 25300
 24700 27300
 25800 17800
 24000 19600
 19600 19400
 24800 21300
 20300 26700
 19800 15000
 22100 20200
 22600 17400
 23000 17800
 27000 24600
 19400 19000
 24200 19400
 20600 18100
 32900 19400
 28800 14000
 46700 17000
 45800 18000
 34100 15000
 21000 19200
 23400 17100
 25600 20600
 23900 17000
 21200 20000
 21900 17200
 14900 20000
 17600 18800
 34100 18500
 19200 18600
 25300 15700
 15700 17800

MTCAS _{Stat} 2.1			
Number of samples		Uncensored values	
Uncensored	79	Mean	21149.37
Censored		Lognormal mean	21103.66
Detection limit or PQL		Std. devn.	6035.151
Method detection limit		Median	19400
TOTAL	79	Min.	11200
		Max.	46700
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Reject lognormal distribution.			
Y value is -4.4477. This lies outside the tabled values of 1.221 and -2.6169			
Reject normal distribution.			
Y value is -11.1207. This lies outside the tabled values of 1.221 and -2.6169			
UCL (based on t-statistic) is 22281.34			

Wallace Residential Surface Soil

Cadmium

Analytical Results
 (mg/kg)

6.9	2.9	4.5
5.9	3.8	6.1
14.8	3.1	1.2
1.8	8.8	5.8
2.8	3.3	1.4
3.2	3.2	3.7
2.3	5.9	
2.1	5.3	
3.3	7.5	
1.7	4.3	
6.2	5.9	
3.9	4.8	
7.9	5.1	
5.7	13.3	
5.8	4.9	
6.9	46.8	
4.3	2.9	
21.9	6.4	
4.1	4.5	
3	2.5	
3.2	0.28	
2.7	1.6	
13.3	2	
2.2	6	
13.4	16.4	
14.8	5.5	
17	7	
22.9	3	
25.8	3.9	
4.8	4.3	
6.6	3.9	
4.2	4.5	
1.1	5.1	
3.3	5.3	
3.3	6.5	
2.2	4.5	
6.4	9.9	
3	7.1	

MTCAS _{Stat} 2.1			
Number of samples		Uncensored values	
Uncensored	82	Mean	6.46
Censored		Lognormal mean	6.37
Detection limit or PQL		Std. devn.	6.650971
Method detection limit		Median	4.5
TOTAL	82	Min.	0.28
		Max.	46.8
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Reject lognormal distribution.			
Y value is -4.4969. This lies outside the tabled values of 1.2344 and -2.6064			
Reject normal distribution.			
Y value is -23.0252. This lies outside the tabled values of 1.2344 and -2.6064			
UCL (based on t-statistic) is 7.68			

Wallace Residential Surface Soil

Arsenic

Analytical Results
(mg/kg)

8.8	9.4	19
6.8	26	24.4
8.6	13.1	28.3
12.1	14.9	5.7
6.2	14.3	9.2
25.3	25.2	22.3
26.6	16.7	19.1
19.7	14.8	12.1
43.3	56.5	23.4
26.3	28.8	15.5
32.9	66.1	19.6
20.6	11.4	38.4
14.3	37.5	21.8
18.3	20.6	18.1
14.9	8.3	14.2
14.5	8.4	19.1
8.8	9.4	53.9
28.9	10.6	27.9
13.8	19.1	7.8
37.7	19.1	15.8
32	11.7	15.7
50.7	17.2	14.2
46.9	16.6	
36.4	13	
8.8	22	
13.7	20.7	
16.7	18	
8.2	18.7	
11.9	15.9	
9.9	18.4	

		MTCASat 2.1	
Number of samples		Uncensored values	
Uncensored	82	Mean	20.38
Censored		Lognormal mean	20.32
Detection limit or PQL		Std. devn.	12.11973668
Method detection limit		Median	17.6
TOTAL	82	Min.	5.7
		Max.	66.1
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Assume lognormal distribution.			
Y value is -0.0191. This lies within the tabled values of 1.2344 and -2.6064			
UCL (based on t-statistic) is 22.61			

Wallace Residential Tap Water

Arsenic

Site ID	Static Result (ug/L)	Purged Result (ug/L)	Average Result (ug/L)
R006	0.29 J	0.44	0.365
R030	0.48	0.34	0.41
R031	0.28	0.23	0.255
R032	0.46	0.36	0.41
R049	0.1 U	0.38	0.24
R056	0.53	0.48	0.505
R069	0.4 U	0.31 U	0.355
R076	1.1	0.51	0.805
R079	0.27	0.59	0.43
R081	0.6	0.48	0.54
R145	0.25 U	0.25 U	0.25

MTCASat 2.1			
Number of samples		Uncensored values	
Uncensored	11	Mean	0.42
Censored		Lognormal mean	0.42
Detection limit or PQL		Std. devn.	0.162988
Method detection limit		Median	0.41
TOTAL	11	Min.	0.24
		Max.	0.805
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Assume lognormal distribution.			
W value is 0.9415. This exceeds the tabled value of 0.85			
UCL (based on t-statistic) is 0.5			

Wallace Public Recreational Exposure to Soil

Antimony

Analytical Results (mg/kg)

9	0.33	3.1	7.6	7.5	28.1	1.35
9.1	17.1	64.1	7.1	45	1.8	8.6
18.1	53.4	3.2	9.9	48.2	5.1	10.1
15.6	6.1	2.1	10.5	9.7	5.2	22.1
14.4	9.8	50.7	1.1	6.5	13.7	27.3
56	10.4	60.9	4.5	6.6	15.2	17.9
73.8	58.2	1.9	4.5	7.6	0.75	8.2
10	8.6	1.4	4.5	1.9	18.1	11.7
12.5	6	1.4	3	13.3	20	13.3
27.6	16.3	2.5	10.7	15.5	33.1	19.7
37.5	74.1	1.1	21.9	17	4.5	1.8
15.3	7.3	1.3	59.8	1.3	2.8	1.9
13.5	4.9	1.3	66.4	8.2	11.4	6.8
34.4	7.2	1.6	29.2	9.1	18.6	17.4
41.8	8.3	0.67	15.2	10.4	0.67	1.2
24	16.5	20.2	39.8	9.3	25.7	1.3
93.2	8.4	2	46.6	12.4	29.7	2
261	1.4	9.1	9.8	18.2	31.3	0.335
20.7	26.5	9.1	3.1	28.8	0.49	0.335
33.3	34.4	11	5.2	7.2	0.495	0.335
48.1	2.2	23.1	8.1	0.5	3.95	0.76
60.7	5.2	1.1	0.5	2.5	9.2	0.85
17.7	48.8	2.4	5.4	5.9	0.5	0.335
5.1	108	6.5	6.2	0.495	12.4	0.335
11.2	1.1	6.4	8.4	4	13.7	5.4
26.3	0.5	7.8	4.4	6	14.4	14.1
163	17	9	9.3	8.1	12.1	0.335
7.4	27.4	1.7	9.7	155	0.5	0.335
3.8	2.4	2.5	9.7	5.2	1.3	1.3
7.8	2.3	3.3	5.6	6.4	2.4	4.6
9.2	5.8	6.3	31.3	8.1	6.7	0.335
9.9	65.4	3.7	41.9	6.3	2.7	2.8
6.8	1.6	4.4	77.8	2.5	1.45	2
21.4	1.5	5.6	12.9	2.7	3.2	3.2
7.2	18.7	5.6	14.3	5.2	3.3	4.1
55.7	22.6	5.9	39.9	0.5	6	4.3
77.7	2.7	2.1	49.1	4.9	2	0.335
12.9	2.7	6.6	7.7	15.4	2.6	

MTCASat 2.1			
Number of samples		Uncensored values	
Censored	265	Mean	16.03
Censored		Lognormal mean	17.83
Detection limit or PQL		Std. devn.	26.62976
Method detection limit		Median	7.6
TOTAL	265	Min.	0.33
		Max.	261
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Assume lognormal distribution.			
Y value is 0.0104. This lies within the tabled values of 1.5546 and -2.3384			
UCL (based on t-statistic) is 18.74			

Wallace Public Recreational Exposure to Soil

Arsenic

Analytical Results (mg/kg)							
17.9	5.3	9.5	39.2	16.2	11.8	14.3	29.3
18.5	13.7	50.6	21	19.3	15.1	16.7	33.5
27	21.7	11.4	21.4	23.2	12.3	20.6	35.6
31.3	7	8.9	25.4	24	18.5	22.4	12.5
22.2	11.7	103	33.2	13.4	36	22.9	
41.4	15.5	168	12.9	15.8	37.9	24	
53	22.5	7.7	18.3	23.7	13.8	21.2	
18.5	16.3	13.4	55.9	24.1	9.9	64.8	
20.7	12.5	14.5	168	15.8	14.6	77.7	
27.3	16.4	20.9	13.2	28.5	17.5	87.7	
45.4	28.7	13.7	24.9	32.2	19.8	33.5	
20.7	18.8	13.8	28.9	34.4	11.2	33.8	
26.8	8.9	16.5	30.3	14.9	24.7	41	
36.4	10.1	19.3	13	24.4	28.4	47.4	
62.3	12.3	13.1	17.1	28.3	31.5	30.9	
38.1	13.1	14.4	26.9	29.3	15.8	22.3	
61.2	20	17.2	29	15.8	15.2	22.3	
120	11	23.9	30.4	30.8	30.4	26.5	
34.1	50.9	14.9	22.7	34.8	32.5	31.2	
18.6	52.6	23.4	19.9	43.5	10.8	10.8	
21.5	13.7	24	23.1	33.5	40	12.8	
30	18.7	24.8	24.6	30.5	45.8	12.9	
25.6	58.8	45.5	15.5	34.1	49.1	11	
11	67	14	22.1	40	11.2	11.7	
13.5	10.7	10.6	22.2	18	10.4	12.5	
19.9	9.9	17.2	22.2	17.4	21.9	11	
49.5	32.3	19	11.2	23.5	36.6	14.3	
16.1	64.9	14	21.3	24	11.7	11.2	
6.2	10.9	22.4	45.4	12.8	22.2	9.9	
10.4	16.2	23.1	56.5	26.5	22.7	25.4	
13.4	19.3	28.1	19.2	27.7	23.9	30.9	
16.5	51.2	13.7	27.7	30.2	23	10.8	
16.5	15.5	18.9	28.8	41.3	11.9	6.5	
32.7	10.8	19.3	30.3	26.7	13.6	11	
26.5	39.7	21.4	17.4	37.4	18.1	18.1	
26.9	53.5	18.9	18.5	39	20	10.7	
47.3	10.9	23.6	22.4	21.6	13.8	22.8	
30.4	9.2	28.8	31.8	10.8	14.1	20.2	

MTCASat 2.1			
Number of samples		Uncensored values	
Uncensored	270	Mean	25.80
Censored		Lognormal mean	25.30
Detection limit or PQL		Std. devn.	19.56057
Method detection limit		Median	21.55
TOTAL	270	Min.	5.3
		Max.	168
Lognormal distribution? Normal distribution?			
r-squared is:		r-squared is:	
Recommendations:			
Reject lognormal distribution.			
Y value is -2.6915. This lies outside the tabled values of 1.5578 and -2.3352			
Reject normal distribution.			
Y value is -36.9325. This lies outside the tabled values of 1.5578 and -2.3352			
UCL (based on t-statistic) is 27.78			

Wallace Public Recreational Exposure to Soil

Cadmium

Analytical Results (mg/kg)

10.7	2.3	3.3	7.4	7.2	9.1	2.9
11.3	6.4	23.8	7.4	11	12.4	3.3
13.7	7.4	2.7	0.96	18.9	0.1	4
10.8	4.5	3.6	7.3	28.2	5.1	1.1
15.6	2.7	20.9	9	7.3	14.6	1.3
25.9	3.2	34.8	0.06	7.2	20.7	1.6
26.3	5.9	2.4	7.5	30.2	0.52	5.1
12.9	6.6	0.15	8.7	42.4	5.4	22.9
14.5	1.9	0.87	10.7	2.7	5.5	27
17.3	4.4	0.96	1.2	4.2	14.8	36.3
18.6	6.8	0.38	5.5	5	15.1	10.7
13.1	8.1	0.03	5.7	7	0.49	9.1
14.6	3.7	0.03	5.7	1.5	12.8	13
23.4	4.2	1.1	1.4	16.3	22	15.1
44.8	4.5	0.15	18.5	19	30.7	9.2
12.9	4.8	0.62	18.7	21.4	2.9	4.8
18.5	8.6	1.1	39.8	1.1	2.1	5.2
61.3	3.4	6.1	63.9	5.3	17.7	5.3
17	19.8	0.38	10.1	5.6	28	13
5.7	37.1	7.1	18.3	7.2	0.3	0.98
6	2.5	7.5	26.7	5.6	30.8	1.7
6.6	4.3	9.6	28.9	7.8	55.3	2.6
16.1	12	9.7	9.9	12.1	64.1	0.39
4.7	26.1	1.3	1.8	20.2	0.1	1.2
7.3	1.8	2.7	3	6.4	0.1	0.44
9.4	3	3.1	5.2	0.76	6.7	0.83
11.4	13.3	7.5	1.8	1.8	15.8	1.4
7.5	16.6	0.06	4.8	3.6	0.1	0.74
1.3	3.9	9.4	4.8	0.4	24.6	0.55
2.6	1.6	17.2	8.3	4.6	25.1	4.1
6.7	4.9	22.4	3.6	5.1	28.5	8.2
7.1	15.3	2.5	7.6	5.5	22.5	0.52
9.4	1.3	3.1	8.2	2.4	1.1	0.76
9.6	3.6	3.5	9.3	5.7	1.2	2.1
6.1	9.8	4.2	3.7	7.7	1.7	5.8
10.5	11.8	2.9	14.4	8.5	4.2	0.34
22.4	2.1	5.9	26.2	6.2	2.7	2.1
13.8	2.8	7.1	26.7	3.3	2.7	1.6

2.2
2.4
2.5
0.285

MTCASat 2.1			
Number of samples		Uncensored values	
Uncensored	270	Mean	9.64
Censored		Lognormal mean	12.96
Detection limit or PQL		Std. devn.	10.83417
Method detection limit		Median	5.95
TOTAL	270	Min.	0.03
		Max.	64.1
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Reject lognormal distribution.			
Y value is -6.3096. This lies outside the tabled values of 1.5578 and -2.3352			
Reject normal distribution.			
Y value is -23.7644. This lies outside the tabled values of 1.5578 and -2.3352			
UCL (based on t-statistic) is 10.73			

Wallace Public Recreational Exposure to Soil

Iron

Analytical Results (mg/kg)

23500	15900	16400	28400	22900	20900	22700	22200
23900	20600	42400	21400	19300	23500	22800	23700
28700	38200	17600	22500	27000	20800	22000	24000
34700	16700	16400	23100	27300	22900	18900	19600
27400	18900	37400	25200	17600	34500	19700	
46800	20100	49200	21500	23900	40800	19900	
60000	43700	13900	19600	27300	21400	21300	
23100	20000	20200	22197	30000	17600	69400	
25300	19500	23800	23266	21900	21200	71900	
28700	20400	24100	21500	22300	21700	143000	
31500	45400	20400	22538	23500	24100	30300	
25800	18400	20100	24200	23600	19400	38100	
28100	18300	20200	24300	19000	34400	50100	
38300	19800	23200	13762	37900	42300	53900	
51300	20900	21400	23200	43000	45200	28200	
34700	21800	22400	32400	48600	19800	19800	
76600	19600	23900	34600	21000	25800	20400	
152000	20500	50600	42100	23000	37000	22400	
33000	51100	22400	24800	24100	37400	28600	
25900	52900	20500	23800	24300	20000	17600	
29000	20900	20600	25900	23700	37100	18200	
33100	30900	20700	28400	22700	51100	18600	
24800	44400	26400	18400	24600	51900	21900	
15600	77300	23400	20300	27400	21400	20300	
21100	18700	21000	20600	19200	20500	22900	
25600	18900	21600	21400	17600	26400	18700	
70300	30200	35900	17400	20600	33400	18900	
17700	37400	21700	18600	21900	19700	21300	
10800	18900	21000	21000	19800	25100	19100	
15800	24600	21600	22200	22000	27100	21900	
16000	26300	24200	16800	22500	29100	21900	
17100	43700	20200	23600	23000	24600	22100	
18400	24500	18000	24400	19000	17400	18800	
23900	20000	21900	25700	22700	18700	18800	
17500	24100	25400	15800	23700	19900	19300	
29700	31500	26200	23400	24300	21200	21000	
38100	20300	21300	28100	21300	21000	22500	
20900	15000	25100	35000	19600	22600	22000	

MTCASat 2.1			
Number of samples		Uncensored values	
Uncensored	270	Mean	27036.16
Censored		Lognormal mean	26589.18
Detection limit or PQL		Std. devn.	14897.63
Method detection limit		Median	22650
TOTAL	270	Min.	10800
		Max.	152000
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Reject lognormal distribution.			
Y value is -17.1969. This lies outside the tabled values of 1.5578 and -2.3352			
Reject normal distribution.			
Y value is -48.8187. This lies outside the tabled values of 1.5578 and -2.3352			
UCL (based on t-statistic) is 28539.37			

Wallace Public Recreational Exposure to Soil

Manganese

Analytical Results (mg/kg)

1340	551	454	1970	860	805	795	828
1400	1100	2960	1120	939	861	832	855
1810	3060	615	720	979	665	830	861
2150	613	311	925	1300	1180	592	577
1800	801	2070	1290	614	1930	604	
3820	1020	3140	837	1090	2640	608	
5150	3000	390	1050	1130	802	837	
1360	959	463	1220	1240	846	3160	
1140	936	708	1350	894	1140	3450	
1790	1190	721	953	1110	1160	7230	
1840	3790	753	980	1200	1180	1390	
1780	892	366	1010	1240	694	1980	
1630	696	378	1230	714	1990	2890	
2880	901	647	462	2570	2640	3210	
4880	1010	711	672	2960	2990	1330	
1930	1170	662	1280	3670	1020	592	
9030	945	751	1380	840	911	619	
18200	510	2800	2980	1100	1640	667	
2730	1940	789	1050	1160	1640	1220	
1320	3230	871	872	1320	717	589	
1540	329	1060	1090	1170	1990	634	
1710	789	1110	1230	1040	2730	693	
1310	2810	1430	762	1060	2860	861	
806	5990	917	746	1230	660	671	
1090	398	742	774	601	639	690	
1430	465	1150	867	559	1230	579	
5340	1290	1730	602	817	2040	607	
920	1670	534	829	915	690	679	
341	467	1020	1220	713	1390	697	
785	811	1020	1310	885	1410	710	
787	975	1270	739	956	1530	843	
858	2740	717	1290	1080	1230	684	
760	768	832	1320	479	555	654	
1180	553	975	1400	1200	655	782	
491	1170	1010	633	1260	706	791	
1890	1260	1020	948	1420	923	819	
2870	462	1020	1000	1000	709	767	
840	331	1390	1090	672	716	752	

MTCASat 2.1			
Number of samples		Uncensored values	
Censored	270	Mean	1365.88
Censored		Lognormal mean	1297.84
Detection limit or PQL		Std. devn.	1473.46
Method detection limit		Median	990
TOTAL	270	Min.	311
		Max.	18200
Lognormal distribution? Normal distribution?			
r-squared is:		r-squared is:	
Recommendations:			
Reject lognormal distribution.			
Y value is -7.8751. This lies outside the tabled values of 1.5578 and -2.3352			
Reject normal distribution.			
Y value is -59.4389. This lies outside the tabled values of 1.5578 and -2.3352			
UCL (based on t-statistic) is 1514.56			

Wallace Public Recreational Exposure to Soil

Zinc

Analytical Results (mg/kg)

1760	164	323	1500	887	1950	805	342
1960	710	4050	1120	1640	2040	840	391
2430	968	369	236	2440	173	917	392
3680	317	201	1300	2810	871	538	97.7
1960	471	2440	1630	968	2320	584	
2650	691	4260	110	1430	2730	606	
2900	742	180	876	2340	381	1050	
1680	797	96.7	1410	3160	586	7160	
3941	682	149	1440	616	1150	7290	
11602	861	297	224	1040	2240	13800	
14655	868	138	805	1080	2310	2400	
1930	703	76.3	897	1460	106	2870	
2660	483	105	949	240	2150	4750	
5677	509	160	221	6320	3160	5020	
10623	546	114	2360	8800	3660	1780	
3345	695	141	2380	9350	688	892	
2910	991	391	3150	303	471	992	
9120	261	4280	4280	1080	2630	1160	
2411	3850	118	1620	1130	3850	2180	
1200	7550	1010	2020	1530	120	209	
1210	358	1040	2720	1130	4050	350	
1260	453	1090	2840	1260	6240	458	
1920	2370	1210	1070	2320	7110	85	
599	5370	385	515	2850	166	206	
1100	211	149	634	823	112	88.6	
1540	1030	432	698	328	1000	240	
1640	2260	2340	159	348	2480	257	
899	3360	107	707	614	226	117	
375	380	1190	1070	183	3930	98.6	
546	333	2010	1700	733	4100	767	
930	800	2470	523	794	4240	1330	
1050	3360	359	1270	795	3360	99.2	
1790	256	551	1330	505	436	102	
1900	282	570	1370	1030	482	307	
727	1620	720	839	1030	585	971	
1700	2130	481	1950	1390	1110	80.7	
2720	286	857	2600	777	780	213	
1220	229	1470	3070	469	796	194	

MTCASat 2.1			
Number of samples		Uncensored values	
Uncensored	270	Mean	1681.15
Censored		Lognormal mean	1774.94
Detection limit or PQL		Std. devn.	2123.855
Method detection limit		Median	991.5
TOTAL	270	Min.	76.3
		Max.	14655
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Assume lognormal distribution.			
Y value is 1.0928. This lies within the tabled values of 1.5578 and -2.3352			
UCL (based on t-statistic) is 1895.46			

Nine Mile Residential Surface Soil

Arsenic

Analytical Results (mg/kg)						
23.4	18.5	11	19.3	8.4	9.5	49.7
99.6	53.8	47.8	14.1	8.3	14.2	15.6
26.5	12.9	35.5	16.8	8.3	31.7	61.3
30.8	13.9	18.2	15.4	8.3	14.3	11.5
20.5	9.1	26.9	17.1	9.7	27.3	19
10.9	30.9	19.2	32	151	14.9	15.2
6.8	24	18	49	8.9	31.5	11.3
10.5	10.8	22.5	59.6	10.7	13.1	12.8
7.5	19.7	28.9	20.6	15.1	17	12.9
9.8	16.4	24.9	19.2	12.5	92.6	16.5
535	32.2	38.5	15.3	14.6	6.9	11.8
13	10.8	46.6	36.2	10.3	5.8	11.2
484	26.3	12.9	21.7	16.7	10.2	15.3
19.7	8.1	43.3	19.5	289	14.8	14.8
19.9	7.3	29.4	8	11.5	11.9	12.4
153	35	35.9	16.9	13.2	18.3	14.1
20.4	10.2	33.6	5.8	23.7	13.2	
11.6	10.8	13.9	16.5	19.7	7.7	
10.9	13.7	100	4.7	30.9	15.5	
28.2	16.5	16.5	9.7	16.6	11.6	
13.2	35	11	7.9	9.9	8.8	
11.7	34.1	10	18.5	53	14.7	
8.8	12.6	12.3	25	13	17.5	
23	6.95	22.5	17.1	15.6	2.9	
3.95	11	1150	36.2	26.1	27.1	
9.2	16.1	37.7	10.2	9	14.3	
8.5	12	13.2	14.1	15.6	8.9	
8.5	9.6	8.8	45.5	24.4	19.1	
7.8	38.6	13.3	15.8	13.7	10.7	
9.1	14.4	8.6	18.4	15.2	6.1	
14.4	10.8	8.7	33	11.2	10.7	
4	47.9	12.9	19.4	14.7	9	
18.2	11.1	37.6	9.6	10.4	11.6	
131	17.8	10.9	19.8	8.7	9.4	

MTCAS _{stat} 2.1			
Number of samples		Uncensored values	
Uncensored	220	Mean	31.58
Censored		Lognormal mean	23.62
Detection limit or PQL		Std. devn.	92.94891635
Method detection limit		Median	14.8
TOTAL	220	Min.	2.9
		Max.	1150
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Reject lognormal distribution.			
Y value is -15.9308. This lies outside the tabled values of 1.5156 and -2.3738			
Reject normal distribution.			
Y value is -90.3503. This lies outside the tabled values of 1.5156 and -2.3738			
UCL (based on t-statistic) is 41.97			

Nine Mile Residential Surface Soil

Cadmium

Analytical Results (mg/kg)						
7.3	5.9	0.22	5.6	15.3	4	12.8
13.8	20.9	6.5	5.6	4.3	2.9	5.8
3.9	3.6	6.1	21.3	7.9	4.7	4.3
9.4	3.8	12.1	5	12.3	0.37	1.7
3.6	5.3	6.4	8.4	1.8	6.8	1.5
0.85	13.5	4.2	9.6	18.2	0.88	2.1
3.8	4	5.3	7.8	2.3	5.8	1.9
0.1	7	7.5	7.4	3.6	5.7	1.2
2.4	2.5	9.1	5.3	1.3	9.8	1.4
1.4	4.3	5.6	5.2	2.6	12.8	7.9
0.86	4.6	7.9	6.9	1.4	9.4	4.5
4.1	7.1	8.8	11.4	2.6	2.2	0.88
4.4	14.7	4.7	7	7.2	19.8	7.1
3	5.6	6.8	6.6	8.1	19.8	6.3
0.51	5.6	7.8	15.1	5.8	12.2	3.7
12	4	12.5	0.1	4.8	13.3	4.2
1.2	8.6	11.3	13.4	5.4	2.3	
1	4.9	4.2	0.1	6.5	2.7	
20.7	5.5	12.5	16.9	10.9	2.8	
1.8	3	1.1	8.2	8.1	2.5	
7	5.9	2	15.3	0.35	2.5	
16.2	27.1	1.5	0.1	11.8	2.6	
8.6	0.2	1.9	4.4	4.2	3.6	
17.5	7.9	6.3	5	3.7	0.87	
5.7	0.59	0.04	24.1	12	6.2	
5.9	4.8	5.8	3.8	0.56	2.2	
3.8	2.3	2.7	6.2	6.1	1.1	
6.3	0.04	1.5	5.8	1.6	7.9	
4.2	10.5	1.6	11.5	4.1	2	
14.3	0.33	1.4	12.2	5.6	1.4	
1.9	0.235	1.6	6.6	4	3.3	
0.04	4.6	4.3	2.4	4.1	1.9	
7.9	0.5	20.3	4.7	5.7	1.5	
4.8	3.2	8.4	1.3	5.3	1.6	

MTCAS _{Stat} 2.1			
Number of samples		Uncensored values	
Uncensored	220	Mean	6.00
Censored		Lognormal mean	7.66
Detection limit or PQL		Std. devn.	5.034372381
Method detection limit		Median	4.8
TOTAL	220	Min.	0.04
		Max.	27.1
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Reject lognormal distribution.			
Y value is -11.2272. This lies outside the tabled values of 1.5156 and -2.3738			
Reject normal distribution.			
Y value is -10.5229. This lies outside the tabled values of 1.5156 and -2.3738			
UCL (based on t-statistic) is 6.56			

Nine Mile Residential Surface Soil

Iron

Analytical Results (mg/kg)						
15200	39700	25400	16300	14800	20000	31600
29800	23500	37400	20900	16200	21400	17500
15800	22600	22800	28100	18300	20400	26200
13700	21700	35600	38600	25800	18100	12100
64300	18600	28600	34800	18400	20300	17500
19400	17700	32900	28100	20000	22200	13300
55400	16600	30300	26200	19600	28200	12800
16900	35100	41700	23900	19100	14000	12800
29800	15200	26700	39000	19800	22400	12600
33200	17200	31200	24600	17900	10100	18700
27000	23100	28400	24200	20400	5910	15800
21100	17600	41100	11000	42900	9770	18200
22600	16300	37300	21500	18400	11300	20300
19700	16900	16000	8120	24300	9880	17900
25800	23600	34100	20000	22800	6600	18600
27700	37300	15500	7160	28000	12400	17300
12600	21800	15300	11100	25900	12400	
15800	19500	14800	11400	21800	16300	
11500	18900	15100	22700	17000	17000	
13700	19600	32900	23600	30200	14200	
10100	20000	123000	22100	18200	13600	
12700	20900	31600	88400	15500	16400	
10400	19800	20300	16700	17600	8780	
12400	26800	20600	19800	16100	22400	
20000	18600	18400	40900	18300	22000	
9270	19200	22000	18600	22400	14900	
23800	30800	22400	27600	18300	20200	
15500	19500	17800	20600	17100	18200	
25500	23800	38200	17800	16600	19100	
19900	18600	17300	19900	19300	18600	
20300	25100	19400	19900	20300	19000	
17100	24300	13800	17100	16900	20700	
18400	24400	18100	17800	17000	19400	

MTCAS _{Stat} 2.1			
Number of samples		Uncensored values	
Uncensored	214	Mean	21867.71
Censored		Lognormal mean	21677.62
Detection limit or PQL		Std. devn.	11606.26178
Method detection limit		Median	19550
TOTAL	214	Min.	5910
		Max.	123000
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Reject lognormal distribution.			
Y value is -8.4723. This lies outside the tabled values of 1.5097 and -2.379			
Reject normal distribution.			
Y value is -35.0103. This lies outside the tabled values of 1.5097 and -2.379			
UCL (based on t-statistic) is 23183.15			

Nine Mile Residential Surface Soil

Manganese

Analytical Results (mg/kg)						
752	1620	1150	613	800	1860	1770
566	972	1130	607	697	1650	1070
750	635	1030	1970	692	1110	1500
401	707	1310	1820	2220	1820	789
4010	1350	1060	1740	803	1160	747
664	552	1530	920	948	2720	937
4000	1190	1980	923	617	1680	705
543	2030	2100	1130	807	710	771
1010	1600	930	1800	626	987	749
1980	1420	1640	922	793	542	1140
1100	1070	1610	763	1250	665	1000
838	1570	2320	353	2760	413	644
917	1540	1600	655	1020	480	1140
1490	1150	1130	227	1240	472	1060
869	1110	2300	469	787	342	1000
916	2560	961	242	1000	747	819
947	1180	984	641	1020	897	
1530	385	1070	432	986	924	
550	1030	935	466	558	1140	
1240	644	871	889	1730	1060	
587	1100	6580	1160	802	745	
1220	848	1070	7540	754	869	
608	606	872	647	1250	867	
889	1730	541	1480	436	1960	
758	873	828	3390	762	1400	
980	817	591	1130	753	1070	
1200	1880	661	1760	1030	2500	
1510	812	744	737	790	1650	
1210	1120	2530	800	802	1730	
2000	757	758	973	1190	732	
818	1530	807	945	829	734	
768	1530	401	768	597	863	
753	1110	580	755	760	865	

MTCAS _{Stat} 2.1			
Number of samples		Uncensored values	
Uncensored	214	Mean	1154.14
Censored		Lognormal mean	1134.18
Detection limit or PQL		Std. devn.	821.7610041
Method detection limit		Median	941
TOTAL	214	Min.	227
		Max.	7540
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Reject lognormal distribution.			
Y value is -5.4607. This lies outside the tabled values of 1.5097 and -2.379			
Reject normal distribution.			
Y value is -35.7354. This lies outside the tabled values of 1.5097 and -2.379			
UCL (based on t-statistic) is 1247.28			

Nine Mile Residential Surface Soil

Antimony

Analytical Results
 (mg/kg)

4.4	2.5	14.7	3.4	1.35	5.3	15.8
20.4	4.2	17.3	3.1	4.3	8.7	5.8
3.9	1.4	12	3.3	1.1	5.3	76.8
5.3	34.4	19.1	4.6	2.1	20.2	1.8
2.1	2.6	6.4	12.2	3.8	7.4	7.2
1.2	2.05	20.2	20.7	54.5	20.2	2.3
1.3	10.1	32.4	36.4	2.9	5.4	2.6
145	5.2	11.6	7.2	4.3	4.5	1.8
1.8	4.9	16.7	9	2.4	24.6	1.9
105	5.8	16	3.4	3.3	1.3	5.5
4.7	30.4	9.2	17.5	4.2	2.4	1.45
0.5	2.8	14.6	24.9	44.2	4.3	0.55
17.5	2.3	17.9	4.5	11.7	7.3	3.9
1.5	8.5	19.9	3.2	4.4	8.4	4.7
0.5	3.9	29	1	41.8	2.6	0.95
1.6	1.35	3.3	1.3	22	0.7	0.9
1.5	3.6	24.5	0.5	25.1	0.95	
1	2.3	1.5	2.4	8.2	1.15	
1	20.9	1.2	2.4	0.55	1.1	
2.6	7.1	1.5	4.2	18.5	0.65	
3.7	0.5	1.5	0.5	1.6	0.6	
2	1.1	4.4	3.7	3.4	1.2	
2.3	1.3	222	5.5	8.7	0.8	
1.7	1.8	5.9	30.8	0.265	8.7	
2.4	1.8	1.5	1.3	4.4	1.4	
1.5	0.84	1.6	4.3	0.8	3.7	
2.8	17.1	1.2	16.9	1.15	5.4	
8	1.5	0.5	7.5	1.05	3.8	
1.6	1.1	0.495	5	1.1	1.3	
5.3	13.7	4.7	1.4	1	2	
22.2	1.3	12.1	3.6	1.5	1.7	
6.2	2.3	1.9	1.2	1.15	0.67	
17.8	9.7	2.9	5.5	1.3	0.335	

MTCAS _{stat} 2.1			
Number of samples		Uncensored values	
Uncensored	214	Mean	9.34
Censored		Lognormal mean	8.21
Detection limit or PQL		Std. devn.	21.15274779
Method detection limit		Median	3.5
TOTAL	214	Min.	0.265
		Max.	222
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Assume lognormal distribution.			
Y value is -0.5207. This lies within the tabled values of 1.5097 and -2.379			
UCL (based on t-statistic) is 11.74			

Nine Mile Residential Surface Soil

Zinc

Analytical Results (mg/kg)						
972	1370	173	502	1240	511	2150
3580	3360	1860	716	781	615	875
677	926	1940	894	947	1090	1560
1460	877	1930	646	1060	324	212
495	651	1580	899	295	756	371
221	1900	734	2060	2580	401	281
469	1030	1140	3100	246	1420	345
159	1020	1240	2910	380	1210	232
317	604	1540	1120	107	1520	203
360	806	2050	1340	461	2300	1040
373	762	2720	972	107	1590	726
544	1050	2880	3110	297	459	537
751	4130	927	1380	1120	2510	970
425	740	1780	1190	2230	803	839
245	866	2050	2440	914	1800	498
1590	944	2300	96	1020	1820	649
351	1180	1870	2010	759	424	
242	1620	622	115	1030	382	
3020	693	1650	2680	1790	513	
401	1300	198	1330	1170	440	
953	3530	307	2230	89	442	
2000	1940	226	80.6	2380	346	
1310	162	235	474	586	545	
3180	782	1300	1620	471	299	
997	529	421	4370	1590	1320	
989	1010	926	166	109	2270	
730	576	390	830	648	408	
1110	102	287	1860	387	4420	
792	2280	848	1550	428	468	
1060	279	242	2210	667	344	
899	350	328	979	400	618	
86.6	2070	435	594	394	356	
1280	196	3030	765	524	238	
1020	545	792	732	492	350	

MTCAS _{stat} 2.1			
Number of samples		Uncensored values	
Uncensored	220	Mean	1066.63
Censored		Lognormal mean	1112.24
Detection limit or PQL		Std. devn.	872.5293297
Method detection limit		Median	804.5
TOTAL	220	Min.	80.6
		Max.	4420
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Assume lognormal distribution.			
Y value is 0.6886. This lies within the tabled values of 1.5156 and -2.3738			
UCL (based on t-statistic) is 1164.17			

Nine Mile Residential Tap Water

Arsenic

MTCAS _t at 2.1			
Number of samples		Uncensored values	
Uncensored	26	Mean	0.45
Censored		Lognormal mean	0.37
Detection limit or PQL		Std. devn.	0.825072794
Method detection limit		Median	0.22
TOTAL	26	Min.	0.1
		Max.	3.8
Lognormal distribution? r-squared is:		Normal distribution? r-squared is:	
Recommendations: Reject lognormal distribution. W value is 0.8047. This is less than the tabled value of 0.92 Reject normal distribution. W value is 0.4459. This is less than the tabled value of 0.92			
UCL (based on t-statistic) is 0.73			

Site ID	Static Result (ug/L)	Purged Result (ug/L)	Average Result (ug/L)
R010	0.1 U	0.1 U	0.1
R011	0.1 U	0.26	0.18
R026	0.4	0.1 U	0.25
R034	0.26	0.1 U	0.18
R035	0.1 U	0.41	0.255
R037	0.1 U	0.1 U	0.1
R039	3.4	4.2	3.8
R040	0.1 U	0.1 U	0.1
R042	0.1 U	0.24	0.17
R044	0.1 U	0.1 U	0.1
R050	0.395 U	0.3 U	0.3475
R052	0.24	0.21	0.225
R053	0.1 U	0.1 U	0.1
R054	0.1 U	0.1 U	0.1
R055	2.3	2.6	2.45
R065	0.29	0.26	0.275
R067	0.25 J	0.43	0.34
R068	0.1 U	0.1 U	0.1
R071	0.33	0.1 U	0.215
R077	0.1 U	0.1 U	0.1
R078	0.1 U	0.22	0.16
R080	0.26 U	0.345 U	0.3025
R087	0.92	0.8	0.86
R126	0.25 U	0.25 U	0.25
R133	0.25 U	0.25 U	0.25
R143	0.59	0.25 U	0.42

Nine Mile Future Residential Tap Water (GW data)

Antimony

Analytical Results

	(ug/L)
1.8	0.195
2	0.07
0.5	0.075
0.5	0.08
0.5	0.08
0.5	0.095
0.5	0.115
1.6	0.75
1.8	1.6
5.5	1.7
0.0245	0.225
0.0495	0.265
0.15	0.27
0.06	0.26
0.06	0.05
0.07	0.355
0.26	0.37
0.27	1.2
0.81	1.2
18	0.075
2	0.165
4.8	0.18
6.8	2.1
7	2.7
8.6	5
10.5	0.325
0.055	0.345
0.095	0.335
7	0.36
7.1	0.5
2.1	2.4
0.5	2.4
0.5	0.5
0.5	0.5
0.5	1
0.5	1.6
1.4	1.6
0.5	0.5
0.18	0.5
0.185	0.5

MTCASat 2.1			
Number of samples		Uncensored values	
Uncensored	80	Mean	1.60
Censored		Lognormal mean	1.67
Detection limit or PQL		Std. devn.	2.853618
Method detection limit		Median	0.5
TOTAL	80	Min.	0.0245
		Max.	18
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Assume lognormal distribution.			
Y value is 0.311. This lies within the tabled values of 1.226 and -2.613			
UCL (based on t-statistic) is 2.14			

Nine Mile Future Residential Tap Water (GW data)

Arsenic

Analytical Results

(ug/L)	
0.5	0.205
0.5	0.16
0.5	0.165
0.5	0.195
0.5	0.26
0.5	0.29
0.5	0.305
2.2	0.1
3.8	0.15
2.2	0.235
0.1	0.13
0.1	0.185
0.26	0.195
0.1	1.3
0.1	0.37
0.25	0.57
0.97	0.62
1	0.38
1.1	0.39
0.28	0.1
0.1	0.28
0.1	0.37
0.1	0.1
0.1	0.21
0.1	0.27
0.1	0.1
0.1	0.1
0.1	12.8
0.5	16.1
0.5	0.5
0.5	0.5
0.5	1.1
0.5	0.5
0.5	0.5
0.5	0.5
0.5	0.5
0.5	0.5
0.5	0.5
0.1	0.5
0.105	0.5

MTCASat 2.1			
Number of samples		Uncensored values	
Uncensored	80	Mean	0.81
Censored		Lognormal mean	0.58
Detection limit or PQL		Std. devn.	2.278307
Method detection limit		Median	0.385
TOTAL	80	Min.	0.1
		Max.	16.1
Lognormal distribution? Normal distribution?			
r-squared is:		r-squared is:	
Recommendations:			
Reject lognormal distribution.			
Y value is -6.6759. This lies outside the tabled values of 1.226 and -2.613			
Reject normal distribution.			
Y value is -48.4185. This lies outside the tabled values of 1.226 and -2.613			
UCL (based on t-statistic) is 1.23			

Nine Mile Future Residential Tap Water (GW data)

Cadmium

Analytical Results

(ug/L)	
5.1	1.3
6.7	4.4
5.9	4.5
7	4.8
0.5	157
0.5	222
0.5	226
3	42.3
0.69	50.2
3.2	56.5
0.0395	138
0.0395	147
0.1	149
13.7	0.35
13.7	240
19.2	246
770	258
944	185
996	186
0.34	131
19.3	211
48.1	262
29.6	20.5
29.7	25.4
28.7	48.1
28.9	11.2
0.14	11.6
0.48	0.0395
207	0.2
209	4.7
8.2	4.8
0.5	5
0.5	50.6
0.5	51
0.5	52.6
7.3	43.4
9.4	44.5
43.1	7.3
1.1	572
1.1	4.8

MTCASat 2.1			
Number of samples		Uncensored values	
Uncensored	80	Mean	91.79
Censored		Lognormal mean	310.09
Detection limit or PQL		Std. devn.	188.9217
Method detection limit		Median	13.7
TOTAL	80	Min.	0.0395
		Max.	996
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Assume lognormal distribution.			
Y value is 0.5129. This lies within the tabled values of 1.226 and -2.613			
UCL (based on t-statistic) is 127			

Nine Mile Future Residential Tap Water (GW data)

Zinc

Analytical Results

(ug/L)	
817	227
4600	495
1480	495
1730	498
45.8	35100
59.8	35400
61.9	36300
610	5640
76.1	6340
442	6970
2.8	16400
5	18400
3.5	19200
3170	68.6
3370	41900
4730	43100
101000	45400
135000	37700
145000	38500
35.7	14400
2870	39200
7950	42500
4350	2990
4400	3690
4280	6870
4380	3020
36.6	3020
76.2	17.4
33600	36.5
33800	966
1110	972
5.3	1190
11	9170
16.1	9220
2.5	9270
1080	6040
1240	6190
5360	1690
194	82100
212	1190

MTCASat 2.1			
Number of samples		Uncensored values	
Uncensored	80	Mean	14238.61
Censored		Lognormal mean	86970.91
Detection limit or PQL		Std. devn.	27547.22
Method detection limit		Median	3095
TOTAL	80	Min.	2.5
		Max.	145000
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Assume lognormal distribution.			
Y value is -0.6579. This lies within the tabled values of 1.226 and -2.613			
UCL (based on t-statistic) is 19372.4			

Nine Mile Neighborhood Exposure to Waste Piles

Antimony

Analytical Results
 (mg/kg)

79.3
 12.7
 25.3
 242
 3.2
 2.3
 1.8
 2.7
 3.7
 1.7
 2.2
 1.7
 51.6
 0.21
 2.8
 10.6
 9.3
 6.6
 4.2
 10.5
 3.1

MTCAS ^{Stat} 2.1		Uncensored values	
Number of samples		Mean	22.74
Uncensored	21	Lognormal mean	19.81
Censored		Std. devn.	53.80367
Detection limit or PQL		Median	3.7
Method detection limit		Min.	0.21
TOTAL	21	Max.	242
Lognormal distribution?	Normal distribution?	r-squared is:	r-squared is:
Recommendations: Assume lognormal distribution. W value is 0.9361. This exceeds the tabled value of 0.908			
UCL (based on t-statistic) is 42.99			

Nine Mile Neighborhood Exposure to Waste Piles

Arsenic

Analytical Results
 (mg/kg)

44.6
 103
 141
 3610
 84.7
 14.1
 12.8
 75.3
 20.1
 49.8
 5.8
 6.8
 6.9
 1.6
 97
 10
 25.8
 23.8
 7.5
 5.4
 43.6
 14.5

MTCAS _{Stat} 2.1			
Number of samples		Uncensored values	
Uncensored	22	Mean	200.19
Censored		Lognormal mean	95.57
Detection limit or PQL		Std. devn.	762.5801137
Method detection limit		Median	21.95
TOTAL	22	Min.	1.6
		Max.	3610
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations: Assume lognormal distribution. W value is 0.9162. This exceeds the tabled value of 0.911			
UCL (based on t-statistic) is 479.99			

Nine Mile Neighborhood Exposure to Waste Piles

Cadmium

Analytical Results
 (mg/kg)

17.3
 53
 15.7
 1.9
 21.8
 6.4
 10.9
 19.3
 13.5
 3.3
 1.8
 0.175
 3.4
 146
 0.12
 9.4
 16.4
 19.9
 3.1
 40.1
 14.5
 8.5

MTCAS _{Stat} 2.1			
Number of samples		Uncensored values	
Uncensored	22	Mean	19.39
Censored		Lognormal mean	31.00
Detection limit or PQL		Std. devn.	31.07229266
Method detection limit		Median	12.2
TOTAL	22	Min.	0.12
		Max.	146
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Reject lognormal distribution.			
W value is 0.9085. This is less than the tabled value of 0.911			
Reject normal distribution.			
W value is 0.5555. This is less than the tabled value of 0.911			
UCL (based on t-statistic) is 30.79			

Nine Mile Neighborhood Exposure to Waste Piles

Iron

Analytical Results
 (mg/kg)

23400
 87900
 25200
 46300
 77400
 32700
 31800
 36000
 34900
 35300
 18800
 19300
 16000
 18500
 46000
 27900
 20100
 49500
 37700
 28400
 64400
 29300

MTCAS _{Stat} 2.1			
Number of samples		Uncensored values	
Uncensored	22	Mean	36672.73
Censored		Lognormal mean	36628.74
Detection limit or PQL		Std. devn.	19027.65361
Method detection limit		Median	32250
TOTAL	22	Min.	16000
		Max.	87900
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Assume lognormal distribution.			
W value is 0.9609. This exceeds the tabled value of 0.911			
UCL (based on t-statistic) is 43654.32			

Nine Mile Neighborhood Exposure to Waste Piles

Manganese

Analytical Results
 (mg/kg)

2580
 3360
 1020
 1800
 2930
 1270
 1250
 810
 1360
 910
 882
 503
 799
 2570
 3020
 798
 1270
 326
 351
 1560
 1340
 1080

MTCAS _{Stat} 2.1			
Number of samples		Uncensored values	
Uncensored	22	Mean	1444.95
Censored		Lognormal mean	1477.70
Detection limit or PQL		Std. devn.	890.5924982
Method detection limit		Median	1260
TOTAL	22	Min.	326
		Max.	3360
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Assume lognormal distribution.			
W value is 0.9541. This exceeds the tabled value of 0.911			
UCL (based on t-statistic) is 1771.73			

Nine Mile Neighborhood Exposure to Waste Piles

Zinc

Analytical Results
 (mg/kg)

1810
 7180
 2680
 591
 4340
 2440
 2560
 5840
 5050
 1110
 251
 145
 245
 109
 25800
 2870
 3160
 3980
 1090
 9300
 4110
 2970

MTCAS _{Stat} 2.1			
Number of samples		Uncensored values	
Uncensored	22	Mean	3983.23
Censored		Lognormal mean	5146.98
Detection limit or PQL		Std. devn.	5428.052899
Method detection limit		Median	2775
TOTAL	22	Min.	109
		Max.	25800
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Assume lognormal distribution.			
W value is 0.9303. This exceeds the tabled value of 0.911			
UCL (based on t-statistic) is 5974.88			

Nine Mile Neighborhood Exposure to Sediments

Antimony

Analytical Results

(mg/kg)

1.1
 1.7
 2.45
 288
 4.25
 18.6
 1.53
 1.1
 5.7
 37.1
 2.33
 53
 72.3
 169
 9.74
 1.14
 0.605

MTCAS _{Stat} 2.1		Uncensored values	
Number of samples		Mean	39.39
Uncensored	17	Lognormal mean	47.54
Censored		Std. devn.	77.07623
Detection limit or PQL		Median	4.25
Method detection limit		Min.	0.605
TOTAL	17	Max.	288
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Assume lognormal distribution.			
W value is 0.9122. This exceeds the tabled value of 0.892			
UCL (based on t-statistic) is 72.03			

Nine Mile Neighborhood Exposure to Sediments
Arsenic

Analytical Results

(mg/kg)

- 3.6
- 4.5
- 4.5
- 8.4
- 15.9
- 14.3
- 1.91
- 8.9
- 13.2
- 30.3
- 3.11
- 9.12
- 112
- 216
- 11.5
- 11.4
- 2.34

MTCAS _{Stat} 2.1			
Number of samples		Uncensored values	
Uncensored	17	Mean	27.70
Censored		Lognormal mean	23.12
Detection limit or PQL		Std. devn.	54.92533445
Method detection limit		Median	9.12
TOTAL	17	Min.	1.91
		Max.	216
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Assume lognormal distribution.			
W value is 0.9087. This exceeds the tabled value of 0.892			
UCL (based on t-statistic) is 50.96			

Nine Mile Neighborhood Exposure to Sediments
Cadmium

Analytical Results

(mg/kg)

- 0.52
- 0.65
- 8.2
- 132
- 5.3
- 6.3
- 34.7
- 13.3
- 55
- 40.9
- 27.3
- 1.26
- 85.6
- 194
- 22.1
- 4.89
- 3.01

MTCAS _{Stat} 2.1			
Number of samples		Uncensored values	
Uncensored	17	Mean	37.35
Censored		Lognormal mean	58.80
Detection limit or PQL		Std. devn.	53.70565835
Method detection limit		Median	13.3
TOTAL	17	Min.	0.52
		Max.	194
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Assume lognormal distribution.			
W value is 0.9668. This exceeds the tabled value of 0.892			
UCL (based on t-statistic) is 60.1			

**Nine Mile Neighborhood Exposure to Sediments
 Iron**

Analytical Results

(mg/kg)

- 11600
- 11700
- 8090
- 28100
- 20200
- 13000
- 14300
- 98700
- 29200
- 37100
- 14200
- 15500
- 35200
- 47800
- 28800
- 21900
- 21600

MTCAS _{Stat} 2.1			
Number of samples		Uncensored values	
Uncensored	17	Mean	26881.76
Censored		Lognormal mean	26574.83
Detection limit or PQL		Std. devn.	21411.82566
Method detection limit		Median	21600
TOTAL	17	Min.	8090
		Max.	98700
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations: Assume lognormal distribution. W value is 0.96. This exceeds the tabled value of 0.892			
UCL (based on t-statistic) is 35948.97			

Nine Mile Neighborhood Exposure to Sediments Manganese

Analytical Results (mg/kg)

428
 665
 330
 1820
 1130
 1130
 575
 6810
 2700
 6830
 759
 1250
 1600
 2690
 1920
 693
 529

MTCAS _{Stat} 2.1			
Number of samples		Uncensored values	
Uncensored	17	Mean	1874.06
Censored		Lognormal mean	1855.61
Detection limit or PQL		Std. devn.	1998.776
Method detection limit		Median	1130
TOTAL	17	Min.	330
		Max.	6830
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Assume lognormal distribution.			
W value is 0.9487. This exceeds the tabled value of 0.892			
UCL (based on t-statistic) is 2720.47			

Nine Mile Neighborhood Exposure to Sediments
Zinc

Analytical Results

(mg/kg)

- 220
- 162
- 1480
- 22400
- 972
- 844
- 6940
- 12200
- 7310
- 6300
- 5130
- 405
- 17600
- 15900
- 2470
- 1120
- 1170

MTCAS _{Stat} 2.1		Uncensored values	
Number of samples		Mean	6036.65
Uncensored	17	Lognormal mean	8396.23
Censored		Std. devn.	6955.61
Detection limit or PQL		Median	2470
Method detection limit		Min.	162
TOTAL	17	Max.	22400
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Assume lognormal distribution.			
W value is 0.9449. This exceeds the tabled value of 0.892			
UCL (based on t-statistic) is 8982.12			

Nine Mile Neighborhood Exposure to Surface Water

Arsenic

Analytical Results

(ug/L)	
0.3	0.62
10.9	1.8
8.1	0.42
0.28	1
0.42	0.12
0.96	0.5
0.31	0.1
0.84	0.1
0.5	0.08
0.08	0.5
0.5	0.08
0.08	1
0.235	0.19
1.4	1
1	2
0.255	0.26
0.34	0.115
0.5	0.08
0.28	0.5
0.37	0.115
0.5	0.08
0.175	1
0.23	0.08
1	1
0.165	0.25
0.55	1
1	0.18
0.195	1
0.33	0.24
1	0.5
0.115	0.37
0.21	1
0.45	0.08
1	0.5
0.385	0.115
0.55	0.5
2.7	0.31
1	1
0.32	0.5
1	1

MTCASat 2.1			
Number of samples		Uncensored values	
Uncensored	80	Mean	0.77
Censored		Lognormal mean	0.70
Detection limit or PQL		Std. devn.	1.500935146
Method detection limit		Median	0.435
TOTAL	80	Min.	0.08
		Max.	10.9
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Assume lognormal distribution.			
Y value is -1.685. This lies within the tabled values of 1.226 and -2.613			
UCL (based on t-statistic) is 1.05			

Nine Mile Neighborhood Exposure to Surface Water

Cadmium

Analytical Results

(ug/L)	
52.9	0.79
1520	0.35
1810	0.35
13.1	0.26
15.9	40.4
156	11.4
13.5	38
20.7	10
4.9	16.4
0.0345	6.5
0.05	15.8
0.0345	5.4
7.1	1.1
10.4	0.1
2.1	2
7.8	0.87
12.7	0.41
2.5	27.4
7.7	11.2
13.9	12.5
2.8	29.5
9.6	10.2
17.7	0.0345
3.3	0.2
17.8	16
31	13.2
5.1	42.7
18.2	10.5
31.5	33
5.2	11.1
6.7	0.5
4.3	0.3
5.4	0.0345
1.4	0.05
3.2	28.2
3.9	11.3
0.0345	0.0345
0.9	0.4
2.2	0.05
0.3	1.5

MTCAS _{Stat} 2.1			
Number of samples		Uncensored values	
Uncensored	80	Mean	53.15
Censored		Lognormal mean	58.92
Detection limit or PQL		Std. devn.	261.5187284
Method detection limit		Median	6.6
TOTAL	80	Min.	0.0345
		Max.	1810
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Assume lognormal distribution.			
Y value is -2.5864. This lies within the tabled values of 1.226 and -2.613			
UCL (based on t-statistic) is 101.89			

Nine Mile Neighborhood Exposure to Surface Water

Manganese

Analytical Results

	(ug/L)
3170	33.3
26800	14.2
25300	10
1090	12.7
8.6	42.2
216	47.3
60	51.3
135	66.6
39.1	37.4
2	51.5
2.5	94.1
0.5	61
69.3	2.8
139	2.5
30	81.1
67.3	0.5
81.4	0.4
34.6	44.6
67.5	36.8
84.8	35.6
34.3	59.3
59.9	37
80.5	7.4
31	2.5
70.8	126
118	141
35	45.1
69.6	42
108	72
37	43.9
42.9	72.8
29.4	52
32.2	1.1
15	2.5
35	52.8
37.6	39
23.6	35
14	11
27.6	2.5
13	23

MTCAS _{Stat} 2.1			
Number of samples		Uncensored values	
Uncensored	80	Mean	748.82
Censored		Lognormal mean	195.63
Detection limit or PQL		Std. devn.	4095.369786
Method detection limit		Median	39.05
TOTAL	80	Min.	0.4
		Max.	26800
Lognormal distribution? r-squared is:		Normal distribution? r-squared is:	
Recommendations: Reject lognormal distribution. Y value is -10.5431. This lies outside the tabled values of 1.226 and -2.613 Reject normal distribution. Y value is -58.4507. This lies outside the tabled values of 1.226 and -2.613			
UCL (based on t-statistic) is 1512.05			

Nine Mile Neighborhood Exposure to Surface Water

Mercury

Analytical Results

0.1	0.5	
0.175	0.1	
0.1	0.5	
0.5	0.1	
0.08	0.5	
0.08	0.1	
0.5	0.5	
0.17	0.1	
0.1	0.5	
0.5	0.1	
0.1	0.5	
0.5	0.1	
0.5	0.5	
0.15	0.1	
0.1	0.1	
0.5	0.5	
0.5	0.08	
0.1	0.06	
0.5	0.1	
0.5	0.08	
0.1	0.055	
0.5	0.1	
0.5	0.5	
0.1	0.1	
0.5	0.5	
0.1	0.1	
0.5	0.5	
0.1	0.15	
0.5	0.1	
0.5	0.5	
0.1	0.1	
0.08	0.055	
0.5	0.1	
0.5	0.5	
0.1	0.1	
0.5	0.5	
0.2	0.1	
0.5	0.5	
0.1	0.1	
0.5	0.1	
0.1	0.1	
0.5	0.1	
0.1	0.1	only 4 detects

MTCAS _{Stat} 2.1			
Number of samples		Uncensored values	
Uncensored	80	Mean	0.27
Censored		Lognormal mean	0.28
Detection limit or PQL		Std. devn.	0.198790956
Method detection limit		Median	0.1
TOTAL	80	Min.	0.055
		Max.	0.5
Lognormal distribution? r-squared is:		Normal distribution? r-squared is:	
Recommendations: Reject lognormal distribution. Y value is -5.9708. This lies outside the tabled values of 1.226 and -2.613 Reject normal distribution. Y value is -8.0348. This lies outside the tabled values of 1.226 and -2.613			
UCL (based on t-statistic) is 0.31			

Nine Mile Occupational Soil (mg/kg)

Antimony	LN[Sb]	Arsenic	LN[As]	Cadmium	LN[Cd]	Iron	LN[Fe]	Manganese	LN[Mn]	Zinc	LN[Zn]
4.4	1.4816	23.4	3.1527	7.3	1.9879	15200	9.6291	752	6.6227	972	6.8794
20.4	3.0155	99.6	4.6012	13.8	2.6247	29800	10.3023	566	6.3386	3580	8.1831
3.9	1.3610	26.5	3.2771	3.9	1.3610	15800	9.6678	750	6.6201	677	6.5177
5.3	1.6677	30.8	3.4275	9.4	2.2407	13700	9.5252	401	5.9940	1460	7.2862
2.1	0.7419	20.5	3.0204	3.6	1.2809	64300	11.0713	4010	8.2965	495	6.2046
1.2	0.1823	10.9	2.3888	0.85	-0.1625	19400	9.8730	664	6.4983	221	5.3982
1.3	0.2624	6.8	1.9169	3.8	1.3350	55400	10.9223	4000	8.2940	469	6.1506
145	4.9767	10.5	2.3514	0.1	-2.3026	16900	9.7351	543	6.2971	159	5.0689
1.8	0.5878	7.5	2.0149	2.4	0.8755	29800	10.3023	1010	6.9177	317	5.7589
105	4.6540	9.8	2.2824	1.4	0.3365	33200	10.4103	1980	7.5909	360	5.8861
4.7	1.5476	535	6.2823	0.86	-0.1508	27000	10.2036	1100	7.0031	373	5.9216
0.5	-0.6931	13	2.5649	4.1	1.4110	21100	9.9570	838	6.7310	544	6.2989
17.5	2.8622	484	6.1821	4.4	1.4816	22600	10.0257	917	6.8211	751	6.6214
1.5	0.4055	19.7	2.9806	3	1.0986	19700	9.8884	1490	7.3065	425	6.0521
0.5	-0.6931	19.9	2.9907	0.51	-0.6733	25800	10.1581	869	6.7673	245	5.5013
1.6	0.4700	153	5.0304	12	2.4849	27700	10.2292	916	6.8200	1590	7.3715
1.5	0.4055	20.4	3.0155	1.2	0.1823	12600	9.4415	947	6.8533	351	5.8608
1	0.0000	11.6	2.4510	1	0.0000	15800	9.6678	1530	7.3330	242	5.4889
1	0.0000	10.9	2.3888	20.7	3.0301	11500	9.3501	550	6.3099	3020	8.0130
2.6	0.9555	28.2	3.3393	1.8	0.5878	13700	9.5252	1240	7.1229	401	5.9940
3.7	1.3083	13.2	2.5802	7	1.9459	10100	9.2203	587	6.3750	953	6.8596
2	0.6931	11.7	2.4596	16.2	2.7850	12700	9.4494	1220	7.1066	2000	7.6009
2.3	0.8329	8.8	2.1748	8.6	2.1518	10400	9.2496	608	6.4102	1310	7.1778
1.7	0.5306	23	3.1355	17.5	2.8622	12400	9.4255	889	6.7901	3180	8.0646
2.4	0.8755	3.95	1.3737	5.7	1.7405	20000	9.9035	758	6.6307	997	6.9048
1.5	0.4055	9.2	2.2192	5.9	1.7750	9270	9.1345	980	6.8876	989	6.8967
2.8	1.0296	8.5	2.1401	3.8	1.3350	23800	10.0774	1200	7.0901	730	6.5930
8	2.0794	8.5	2.1401	6.3	1.8405	15500	9.6486	1510	7.3199	1110	7.0121
1.6	0.4700	7.8	2.0541	4.2	1.4351	25500	10.1464	1210	7.0984	792	6.6746
5.3	1.6677	9.1	2.2083	14.3	2.6603	19900	9.8985	2000	7.6009	1060	6.9660
22.2	3.1001	14.4	2.6672	1.9	0.6419	20300	9.9184	818	6.7069	899	6.8013
6.2	1.8245	4	1.3863	0.04	-3.2189	17100	9.7468	768	6.6438	86.6	4.4613
17.8	2.8792	18.2	2.9014	7.9	2.0669	18400	9.8201	753	6.6241	1280	7.1546
2.5	0.9163	131	4.8752	4.8	1.5686	39700	10.5891	1620	7.3902	1020	6.9276
4.2	1.4351	18.5	2.9178	5.9	1.7750	23500	10.0648	972	6.8794	1370	7.2226
1.4	0.3365	53.8	3.9853	20.9	3.0397	22600	10.0257	635	6.4536	3360	8.1197
34.4	3.5381	12.9	2.5572	3.6	1.2809	21700	9.9851	707	6.5610	926	6.8309
2.6	0.9555	13.9	2.6319	3.8	1.3350	18600	9.8309	1350	7.2079	877	6.7765
2.05	0.7178	9.1	2.2083	5.3	1.6677	17700	9.7813	552	6.3135	651	6.4785
10.1	2.3125	30.9	3.4308	13.5	2.6027	16600	9.7172	1190	7.0817	1900	7.5496
5.2	1.6487	24	3.1781	4	1.3863	35100	10.4660	2030	7.6158	1030	6.9373
4.9	1.5892	10.8	2.3795	7	1.9459	15200	9.6291	1600	7.3778	1020	6.9276
5.8	1.7579	19.7	2.9806	2.5	0.9163	17200	9.7527	1420	7.2584	604	6.4036
30.4	3.4144	16.4	2.7973	4.3	1.4586	23100	10.0476	1070	6.9754	806	6.6921
2.8	1.0296	32.2	3.4720	4.6	1.5261	17600	9.7757	1570	7.3588	762	6.6359
2.3	0.8329	10.8	2.3795	7.1	1.9601	16300	9.6989	1540	7.3395	1050	6.9565
8.5	2.1401	26.3	3.2696	14.7	2.6878	16900	9.7351	1150	7.0475	4130	8.3260
3.9	1.3610	8.1	2.0919	5.6	1.7228	23600	10.0690	1110	7.0121	740	6.6067
1.35	0.3001	7.3	1.9879	5.6	1.7228	37300	10.5267	2560	7.8478	866	6.7639
3.6	1.2809	35	3.5553	4	1.3863	21800	9.9897	1180	7.0733	944	6.8501
2.3	0.8329	10.2	2.3224	8.6	2.1518	19500	9.8782	385	5.9532	1180	7.0733
20.9	3.0397	10.8	2.3795	4.9	1.5892	18900	9.8469	1030	6.9373	1620	7.3902
7.1	1.9601	13.7	2.6174	5.5	1.7047	19600	9.8833	644	6.4677	693	6.5410
0.5	-0.6931	16.5	2.8034	3	1.0986	20000	9.9035	1100	7.0031	1300	7.1701
1.1	0.0953	35	3.5553	5.9	1.7750	20900	9.9475	848	6.7429	3530	8.1691
1.3	0.2624	34.1	3.5293	27.1	3.2995	19800	9.8934	606	6.4069	1940	7.5704
1.8	0.5878	12.6	2.5337	0.2	-1.6094	26800	10.1962	1730	7.4559	162	5.0876
1.8	0.5878	6.95	1.9387	7.9	2.0669	18600	9.8309	873	6.7719	782	6.6619
0.84	-0.1744	11	2.3979	0.59	-0.5276	19200	9.8627	817	6.7056	529	6.2710
17.1	2.8391	16.1	2.7788	4.8	1.5686	30800	10.3353	1880	7.5390	1010	6.9177
1.5	0.4055	12	2.4849	2.3	0.8329	19500	9.8782	812	6.6995	576	6.3561
1.1	0.0953	9.6	2.2618	0.04	-3.2189	23800	10.0774	1120	7.0211	102	4.6250
13.7	2.6174	38.6	3.6533	10.5	2.3514	18600	9.8309	757	6.6294	2280	7.7319
1.3	0.2624	14.4	2.6672	0.33	-1.1087	25100	10.1306	1530	7.3330	279	5.6312
2.3	0.8329	10.8	2.3795	0.235	-1.4482	24300	10.0982	1530	7.3330	350	5.8579
9.7	2.2721	47.9	3.8691	4.6	1.5261	24400	10.1023	1110	7.0121	2070	7.6353
14.7	2.6878	11.1	2.4069	0.5	-0.6931	25400	10.1425	1150	7.0475	196	5.2781
17.3	2.8507	17.8	2.8792	3.2	1.1632	37400	10.5294	1130	7.0300	545	6.3008
12	2.4849	11	2.3979	0.22	-1.5141	22800	10.0345	1030	6.9373	173	5.1533
19.1	2.9497	47.8	3.8670	6.5	1.8718	35600	10.4801	1310	7.1778	1860	7.5283
6.4	1.8563	35.5	3.5695	6.1	1.8083	28600	10.2612	1060	6.9660	1940	7.5704
20.2	3.0057	18.2	2.9014	12.1	2.4932	32900	10.4012	1530	7.3330	1930	7.5653
32.4	3.4782	26.9	3.2921	6.4	1.8563	30300	10.3189	1980	7.5909	1580	7.3652
11.6	2.4510	19.2	2.9549	4.2	1.4351	41700	10.6383	2100	7.6497	734	6.5985
16.7	2.8154	18	2.8904	5.3	1.6677	26700	10.1924	930	6.8352	1140	7.0388
16	2.7726	22.5	3.1135	7.5	2.0149	31200	10.3482	1640	7.4025	1240	7.1229
9.2	2.2192	28.9	3.3638	9.1	2.2083	28400	10.2541	1610	7.3840	1540	7.3395
14.6	2.6810	24.9	3.2149	5.6	1.7228	41100	10.6238	2320	7.7493	2050	7.6256

Nine Mile Occupational Soil (mg/kg)

Antimony	LN[Sb]	Arsenic	LN[As]	Cadmium	LN[Cd]	Iron	LN[Fe]	Manganese	LN[Mn]	Zinc	LN[Zn]
17.9	2.8848	38.5	3.6507	7.9	2.0669	37300	10.5267	1600	7.3778	2720	7.9084
19.9	2.9907	46.6	3.8416	8.8	2.1748	16000	9.6803	1130	7.0300	2880	7.9655
29	3.3673	12.9	2.5572	4.7	1.5476	34100	10.4371	2300	7.7407	927	6.8320
3.3	1.1939	43.3	3.7682	6.8	1.9169	15500	9.6486	961	6.8680	1780	7.4844
24.5	3.1987	29.4	3.3810	7.8	2.0541	15300	9.6356	984	6.8916	2050	7.6256
1.5	0.4055	35.9	3.5807	12.5	2.5257	14800	9.6024	1070	6.9754	2300	7.7407
1.2	0.1823	33.6	3.5145	11.3	2.4248	15100	9.6225	935	6.8405	1870	7.5337
1.5	0.4055	13.9	2.6319	4.2	1.4351	32900	10.4012	871	6.7696	622	6.4329
1.5	0.4055	100	4.6052	12.5	2.5257	123000	11.7199	6580	8.7918	1650	7.4085
4.4	1.4816	16.5	2.8034	1.1	0.0953	31600	10.3609	1070	6.9754	198	5.2883
222	5.4027	11	2.3979	2	0.6931	20300	9.9184	872	6.7708	307	5.7268
5.9	1.7750	10	2.3026	1.5	0.4055	20600	9.9330	541	6.2934	226	5.4205
1.5	0.4055	12.3	2.5096	1.9	0.6419	18400	9.8201	828	6.7190	235	5.4596
1.6	0.4700	22.5	3.1135	6.3	1.8405	22000	9.9988	591	6.3818	1300	7.1701
1.2	0.1823	1150	7.0475	0.04	-3.2189	22400	10.0168	661	6.4938	421	6.0426
0.5	-0.6931	37.7	3.6297	5.8	1.7579	17800	9.7870	744	6.6120	926	6.8309
0.495	-0.7032	13.2	2.5802	2.7	0.9933	38200	10.5506	2530	7.8360	390	5.9661
4.7	1.5476	8.8	2.1748	1.5	0.4055	17300	9.7585	758	6.6307	287	5.6595
12.1	2.4932	13.3	2.5878	1.6	0.4700	19400	9.8730	807	6.6933	848	6.7429
1.9	0.6419	8.6	2.1518	1.4	0.3365	13800	9.5324	401	5.9940	242	5.4889
2.9	1.0647	8.7	2.1633	1.6	0.4700	18100	9.8037	580	6.3630	328	5.7930
3.4	1.2238	12.9	2.5572	4.3	1.4586	16300	9.6989	613	6.4184	435	6.0753
3.1	1.1314	37.6	3.6270	20.3	3.0106	20900	9.9475	607	6.4085	3030	8.0163
3.3	1.1939	10.9	2.3888	8.4	2.1282	28100	10.2435	1970	7.5858	792	6.6746
4.6	1.5261	19.3	2.9601	5.6	1.7228	38600	10.5610	1820	7.5066	502	6.2186
12.2	2.5014	14.1	2.6462	5.6	1.7228	34800	10.4574	1740	7.4616	716	6.5737
20.7	3.0301	16.8	2.8214	21.3	3.0587	28100	10.2435	920	6.8244	894	6.7957
36.4	3.5946	15.4	2.7344	5	1.6094	26200	10.1735	923	6.8276	646	6.4708
7.2	1.9741	17.1	2.8391	8.4	2.1282	23900	10.0816	1130	7.0300	899	6.8013
9	2.1972	32	3.4657	9.6	2.2618	39000	10.5713	1800	7.4955	2060	7.6305
3.4	1.2238	49	3.8918	7.8	2.0541	24600	10.1105	922	6.8265	3100	8.0392
17.5	2.8622	59.6	4.0877	7.4	2.0015	24200	10.0941	763	6.6373	2910	7.9759
24.9	3.2149	20.6	3.0253	5.3	1.6677	11000	9.3057	353	5.8665	1120	7.0211
4.5	1.5041	19.2	2.9549	5.2	1.6487	21500	9.9758	655	6.4846	1340	7.2004
3.2	1.1632	15.3	2.7279	6.9	1.9315	8120	9.0021	227	5.4250	972	6.8794
1	0.0000	36.2	3.5891	11.4	2.4336	20000	9.9035	469	6.1506	3110	8.0424
1.3	0.2624	21.7	3.0773	7	1.9459	7160	8.8763	242	5.4889	1380	7.2298
0.5	-0.6931	19.5	2.9704	6.6	1.8871	11100	9.3147	641	6.4630	1190	7.0817
2.4	0.8755	8	2.0794	15.1	2.7147	11400	9.3414	432	6.0684	2440	7.7998
2.4	0.8755	16.9	2.8273	0.1	-2.3026	22700	10.0301	466	6.1442	96	4.5643
4.2	1.4351	5.8	1.7579	13.4	2.5953	23600	10.0690	889	6.7901	2010	7.6059
0.5	-0.6931	16.5	2.8034	0.1	-2.3026	22100	10.0033	1160	7.0562	115	4.7449
3.7	1.3083	4.7	1.5476	16.9	2.8273	88400	11.3896	7540	8.9280	2680	7.8936
5.5	1.7047	9.7	2.2721	8.2	2.1041	16700	9.7232	647	6.4723	1330	7.1929
30.8	3.4275	7.9	2.0669	15.3	2.7279	19800	9.8934	1480	7.2998	2230	7.7098
1.3	0.2624	18.5	2.9178	0.1	-2.3026	40900	10.6189	3390	8.1286	80.6	4.3895
4.3	1.4586	25	3.2189	4.4	1.4816	18600	9.8309	1130	7.0300	474	6.1612
16.9	2.8273	17.1	2.8391	5	1.6094	27600	10.2256	1760	7.4731	1620	7.3902
7.5	2.0149	36.2	3.5891	24.1	3.1822	20600	9.9330	737	6.6026	4370	8.3825
5	1.6094	10.2	2.3224	3.8	1.3350	17800	9.7870	800	6.6846	166	5.1120
1.4	0.3365	14.1	2.6462	6.2	1.8245	19900	9.8985	973	6.8804	830	6.7214
3.6	1.2809	45.5	3.8177	5.8	1.7579	19900	9.8985	945	6.8512	1860	7.5283
1.2	0.1823	15.8	2.7600	11.5	2.4423	17100	9.7468	768	6.6438	1550	7.3460
5.5	1.7047	18.4	2.9124	12.2	2.5014	17800	9.7870	755	6.6267	2210	7.7007
1.35	0.3001	33	3.4965	6.6	1.8871	14800	9.6024	800	6.6846	979	6.8865
4.3	1.4586	19.4	2.9653	2.4	0.8755	16200	9.6928	697	6.5468	594	6.3869
1.1	0.0953	9.6	2.2618	4.7	1.5476	18300	9.8147	692	6.5396	765	6.6399
2.1	0.7419	19.8	2.9857	1.3	0.2624	25800	10.1581	2220	7.7053	732	6.5958
3.8	1.3350	8.4	2.1282	15.3	2.7279	18400	9.8201	803	6.6884	1240	7.1229
54.5	3.9982	8.3	2.1163	4.3	1.4586	20000	9.9035	948	6.8544	781	6.6606
2.9	1.0647	8.3	2.1163	7.9	2.0669	19600	9.8833	617	6.4249	947	6.8533
4.3	1.4586	8.3	2.1163	12.3	2.5096	19100	9.8574	807	6.6933	1060	6.9660
2.4	0.8755	9.7	2.2721	1.8	0.5878	19800	9.8934	626	6.4394	295	5.6870
3.3	1.1939	151	5.0173	18.2	2.9014	17900	9.7926	793	6.6758	2580	7.8555
4.2	1.4351	8.9	2.1861	2.3	0.8329	20400	9.9233	1250	7.1309	246	5.5053
44.2	3.7887	10.7	2.3702	3.6	1.2809	42900	10.6666	2760	7.9230	380	5.9402
11.7	2.4596	15.1	2.7147	1.3	0.2624	18400	9.8201	1020	6.9276	107	4.6728
4.4	1.4816	12.5	2.5257	2.6	0.9555	24300	10.0982	1240	7.1229	461	6.1334
41.8	3.7329	14.6	2.6810	1.4	0.3365	22800	10.0345	787	6.6682	107	4.6728
22	3.0910	10.3	2.3321	2.6	0.9555	28000	10.2400	1000	6.9078	297	5.6937
25.1	3.2229	16.7	2.8154	7.2	1.9741	25900	10.1620	1020	6.9276	1120	7.0211
8.2	2.1041	289	5.6664	8.1	2.0919	21800	9.9897	986	6.8937	2230	7.7098
0.55	-0.5978	11.5	2.4423	5.8	1.7579	17000	9.7410	558	6.3244	914	6.8178
18.5	2.9178	13.2	2.5802	4.8	1.5686	30200	10.3156	1730	7.4559	1020	6.9276
1.6	0.4700	23.7	3.1655	5.4	1.6864	18200	9.8092	802	6.6871	759	6.6320
3.4	1.2238	19.7	2.9806	6.5	1.8718	15500	9.6486	754	6.6254	1030	6.9373
8.7	2.1633	30.9	3.4308	10.9	2.3888	17600	9.7757	1250	7.1309	1790	7.4900
0.265	-1.3280	16.6	2.8094	8.1	2.0919	16100	9.6866	436	6.0776	1170	7.0648

Nine Mile Occupational Soil (mg/kg)

Antimony	LN[Sb]	Arsenic	LN[As]	Cadmium	LN[Cd]	Iron	LN[Fe]	Manganese	LN[Mn]	Zinc	LN[Zn]
4.4	1.4816	9.9	2.2925	0.35	-1.0498	18300	9.8147	762	6.6359	89	4.4886
0.8	-0.2231	53	3.9703	11.8	2.4681	22400	10.0168	753	6.6241	2380	7.7749
1.15	0.1398	13	2.5649	4.2	1.4351	18300	9.8147	1030	6.9373	586	6.3733
1.05	0.0488	15.6	2.7473	3.7	1.3083	17100	9.7468	790	6.6720	471	6.1549
1.1	0.0953	26.1	3.2619	12	2.4849	16600	9.7172	802	6.6871	1590	7.3715
1	0.0000	9	2.1972	0.56	-0.5798	19300	9.8679	1190	7.0817	109	4.6913
1.5	0.4055	15.6	2.7473	6.1	1.8083	20300	9.9184	829	6.7202	648	6.4739
1.15	0.1398	24.4	3.1946	1.6	0.4700	16900	9.7351	597	6.3919	387	5.9584
1.3	0.2624	13.7	2.6174	4.1	1.4110	17000	9.7410	760	6.6333	428	6.0591
5.3	1.6677	15.2	2.7213	5.6	1.7228	20000	9.9035	1860	7.5283	667	6.5028
8.7	2.1633	11.2	2.4159	4	1.3863	21400	9.9711	1650	7.4085	400	5.9915
5.3	1.6677	14.7	2.6878	4.1	1.4110	20400	9.9233	1110	7.0121	394	5.9764
20.2	3.0057	10.4	2.3418	5.7	1.7405	18100	9.8037	1820	7.5066	524	6.2615
7.4	2.0015	8.7	2.1633	5.3	1.6677	20300	9.9184	1160	7.0562	492	6.1985
20.2	3.0057	9.5	2.2513	4	1.3863	22200	10.0078	2720	7.9084	511	6.2364
5.4	1.6864	14.2	2.6532	2.9	1.0647	28200	10.2471	1680	7.4265	615	6.4216
4.5	1.5041	31.7	3.4563	4.7	1.5476	14000	9.5468	710	6.5653	1090	6.9939
24.6	3.2027	14.3	2.6603	0.37	-0.9943	22400	10.0168	987	6.8947	324	5.7807
1.3	0.2624	27.3	3.3069	6.8	1.9169	10100	9.2203	542	6.2953	756	6.6280
2.4	0.8755	14.9	2.7014	0.88	-0.1278	5910	8.6844	665	6.4998	401	5.9940
4.3	1.4586	31.5	3.4500	5.8	1.7579	9770	9.1871	413	6.0234	1420	7.2584
7.3	1.9879	13.1	2.5726	5.7	1.7405	11300	9.3326	480	6.1738	1210	7.0984
8.4	2.1282	17	2.8332	9.8	2.2824	9880	9.1983	472	6.1570	1520	7.3265
2.6	0.9555	92.6	4.5283	12.8	2.5494	6600	8.7948	342	5.8348	2300	7.7407
0.7	-0.3567	6.9	1.9315	9.4	2.2407	12400	9.4255	747	6.6161	1590	7.3715
0.95	-0.0513	5.8	1.7579	2.2	0.7885	12400	9.4255	897	6.7991	459	6.1291
1.15	0.1398	10.2	2.3224	19.8	2.9857	16300	9.6989	924	6.8287	2510	7.8280
1.1	0.0953	14.8	2.6946	19.8	2.9857	17000	9.7410	1140	7.0388	803	6.6884
0.65	-0.4308	11.9	2.4765	12.2	2.5014	14200	9.5610	1060	6.9660	1800	7.4955
0.6	-0.5108	18.3	2.9069	13.3	2.5878	13600	9.5178	745	6.6134	1820	7.5066
1.2	0.1823	13.2	2.5802	2.3	0.8329	16400	9.7050	869	6.7673	424	6.0497
0.8	-0.2231	7.7	2.0412	2.7	0.9933	8780	9.0802	867	6.7650	382	5.9454
8.7	2.1633	15.5	2.7408	2.8	1.0296	22400	10.0168	1960	7.5807	513	6.2403
1.4	0.3365	11.6	2.4510	2.5	0.9163	22000	9.9988	1400	7.2442	440	6.0868
3.7	1.3083	8.8	2.1748	2.5	0.9163	14900	9.6091	1070	6.9754	442	6.0913
5.4	1.6864	14.7	2.6878	2.6	0.9555	20200	9.9134	2500	7.8240	346	5.8464
3.8	1.3350	17.5	2.8622	3.6	1.2809	18200	9.8092	1650	7.4085	545	6.3008
1.3	0.2624	2.9	1.0647	0.87	-0.1393	19100	9.8574	1730	7.4559	299	5.7004
2.2	0.7885	27.1	3.2995	6.2	1.8245	15400	9.6421	455	6.1203	1320	7.1854
3.1	1.1314	14.3	2.6603	2.2	0.7885	15700	9.6614	518	6.2500	2270	7.7275
3.4	1.2238	8.9	2.1861	1.1	0.0953	16200	9.6928	745	6.6134	408	6.0113
6.3	1.8405	19.1	2.9497	7.9	2.0669	15100	9.6225	508	6.2305	4420	8.3939
19.4	2.9653	10.7	2.3702	2	0.6931	16000	9.6803	521	6.2558	468	6.1485
22.9	3.1311	6.1	1.8083	1.4	0.3365	16100	9.6866	728	6.5903	344	5.8406
1.8	0.5878	14.5	2.6741	3.4	1.2238	15900	9.6741	539	6.2897	550	6.3099
2.1	0.7419	17.3	2.8507	3.7	1.3083	19300	9.8679	578	6.3596	647	6.4723
2.5	0.9163	17.7	2.8736	3.9	1.3610	20000	9.9035	754	6.6254	662	6.4953
4.2	1.4351	31.6	3.4532	5.6	1.7228	21600	9.9804	849	6.7441	773	6.6503
4.5	1.5041	62.6	4.1368	28.1	3.3358	17900	9.7926	639	6.4599	4550	8.4229
4.6	1.5261	73.1	4.2918	29.8	3.3945	18300	9.8147	652	6.4800	5160	8.5487
1.4	0.3365	14.1	2.6462	1.3	0.2624	24900	10.1226	1140	7.0388	309	5.7333
1.7	0.5306	22.9	3.1311	2.6	0.9555	14800	9.6024	551	6.3117	523	6.2596
2	0.6931	26.3	3.2696	3.3	1.1939	16200	9.6928	552	6.3135	601	6.3986
0.77	-0.2614	29	3.3673	4.8	1.5686	17100	9.7468	556	6.3208	825	6.7154
0.92	-0.0834	36.2	3.5891	12.5	2.5257	24400	10.1023	973	6.8804	2080	7.6401
1.2	0.1823	40.1	3.6914	13.5	2.6027	25100	10.1306	1310	7.1778	2280	7.7319
0.88	-0.1278	18.9	2.9392	2.1	0.7419	28200	10.2471	1580	7.3652	310	5.7366
0.95	-0.0513	19.5	2.9704	3.1	1.1314	22300	10.0123	1110	7.0121	423	6.0474
2.3	0.8329	19.9	2.9907	3.4	1.2238	22800	10.0345	1360	7.2152	472	6.1570
2.9	1.0647	10.9	2.3888	0.25	-1.3863	24600	10.1105	1390	7.2371	182	5.2040
13.7	2.6174	11	2.3979	0.54	-0.6162	26400	10.1811	1610	7.3840	188	5.2364
2.25	0.8109	21	3.0445	0.58	-0.5447	14100	9.5539	366	5.9026	224	5.4116
6.1	1.8083	7.1	1.9601	0.18	-1.7148	14600	9.5888	442	6.0913	130	4.8675
6.6	1.8871	7.3	1.9879	0.6	-0.5108	16300	9.6989	590	6.3801	183	5.2095
1	0.0000	7.6	2.0281	2.4	0.8755	20400	9.9233	961	6.8680	385	5.9532
1.1	0.0953	7.1	1.9601	0.56	-0.5798	24500	10.1064	963	6.8701	130	4.8675
1.5	0.4055	7.8	2.0541	0.69	-0.3711	26800	10.1962	1060	6.9660	154	5.0370
1	0.0000	10.4	2.3418	2.4	0.8755	12000	9.3927	831	6.7226	306	5.7236
1.5	0.4055	12.4	2.5177	0.9	-0.1054	16700	9.7232	950	6.8565	420	6.0403
1.7	0.5306	18.1	2.8959	1.3	0.2624	20500	9.9282	1060	6.9660	496	6.2066
2.1	0.7419	20.1	3.0007	3.8	1.3350	10400	9.2496	958	6.8648	799	6.6834
0.49	-0.7133	24.8	3.2108	4	1.3863	10500	9.2591	973	6.8804	1090	6.9939
0.49	-0.7133	15.2	2.7213	8.7	2.1633	10900	9.2965	1070	6.9754	1290	7.1624
1.7	0.5306	15.9	2.7663	12.2	2.5014	10300	9.2399	307	5.7268	1910	7.5549
0.97	-0.0305	29.4	3.3810	34	3.5264	11400	9.3414	378	5.9349	2460	7.8079
1	0.0000	19.7	2.9806	2.1	0.7419	11600	9.3588	520	6.2538	378	5.9349
1	0.0000	23.8	3.1697	2.9	1.0647	12200	9.4092	524	6.2615	440	6.0868
0.9	-0.1054	24	3.1781	3	1.0986	9790	9.1891	539	6.2897	443	6.0936

Nine Mile Occupational Soil (mg/kg)

Antimony	LN[Sb]	Arsenic	LN[As]	Cadmium	LN[Cd]	Iron	LN[Fe]	Manganese	LN[Mn]	Zinc	LN[Zn]
1	0.0000	13.9	2.6319	0.1	-2.3026	10600	9.2686	545	6.3008	173	5.1533
1.75	0.5596	15.8	2.7600	1.8	0.5878	10900	9.2965	598	6.3936	468	6.1485
3.1	1.1314	20.3	3.0106	5.1	1.6292	11000	9.3057	606	6.4069	1030	6.9373
3.3	1.1939	10.4	2.3418	1.3	0.2624	11200	9.3237	658	6.4892	361	5.8889
3.6	1.2809	11.1	2.4069	2	0.6931	13100	9.4804	743	6.6107	411	6.0186
0.9	-0.1054	16.3	2.7912	3.3	1.1939	6340	8.7546	400	5.9915	502	6.2186
1.3	0.2624	19.8	2.9857	4.2	1.4351	7910	8.9759	518	6.2500	729	6.5917
1.4	0.3365	7.3	1.9879	5.3	1.6677	11800	9.3759	876	6.7754	1020	6.9276
1.5	0.4055	7.4	2.0015	5.6	1.7228	39800	10.5916	2140	7.6686	1050	6.9565
1.5	0.4055	7.7	2.0412	10.3	2.3321	41400	10.6310	2180	7.6871	1710	7.4442
1.7	0.5306	7.5	2.0149	3.1	1.1314	56800	10.9473	3050	8.0229	519	6.2519
1.9	0.6419	11.2	2.4159	5.9	1.7750	15700	9.6614	886	6.7867	739	6.6053
1.1	0.0953	12.1	2.4932	7.6	2.0281	19000	9.8522	958	6.8648	1110	7.0121
1.6	0.4700	6.2	1.8245	12.6	2.5337	19100	9.8574	1040	6.9470	1620	7.3902
2.3	0.8329	8	2.0794	15.3	2.7279	21500	9.9758	1140	7.0388	1760	7.4731
0.85	-0.1625	9.9	2.2925	19.5	2.9704	19100	9.8574	960	6.8669	2180	7.6871
0.95	-0.0513	7.7	2.0412	9.4	2.2407	19500	9.8782	969	6.8763	1540	7.3395
1.35	0.3001	11.7	2.4596	9.6	2.2618	20700	9.9379	1030	6.9373	1560	7.3524
6.6	1.8871	6.2	1.8245	11.2	2.4159	15000	9.6158	842	6.7358	1780	7.4844
57.4	4.0500	4.3	1.4586	4.2	1.4351	16600	9.7172	1020	6.9276	740	6.6067
72	4.2767	2.6	0.9555	4.6	1.5261	20000	9.9035	1030	6.9373	813	6.7007
1.8	0.5878	3.85	1.3481	4.8	1.5686	17700	9.7813	864	6.7616	900	6.8024
2.4	0.8755	3.95	1.3737	5.1	1.6292	18100	9.8037	1040	6.9470	958	6.8648
3	1.0986	6.9	1.9315	3.8	1.3350	18300	9.8147	1050	6.9565	683	6.5265
3.9	1.3610	8.3	2.1163	3.9	1.3610	20400	9.9233	663	6.4968	683	6.5265
6.8	1.9169	8.6	2.1518	3.9	1.3610	20900	9.9475	720	6.5793	747	6.6161
9.4	2.2407	6.1	1.8083	5.2	1.6487	22100	10.0033	784	6.6644	902	6.8046
9.9	2.2925	7.8	2.0541	6.3	1.8405	22200	10.0078	812	6.6995	982	6.8896
3	1.0986	10.1	2.3125	13	2.5649	51200	10.8435	2990	8.0030	1800	7.4955
4.1	1.4110	4.4	1.4816	1.9	0.6419	52000	10.8590	3020	8.0130	323	5.7777
5.7	1.7405	5.6	1.7228	3.3	1.1939	55400	10.9223	3210	8.0740	561	6.3297
3.2	1.1632	8.9	2.1861	7.7	2.0412	16500	9.7111	798	6.6821	1120	7.0211
4.3	1.4586	16.4	2.7973	3.8	1.3350	17100	9.7468	803	6.6884	2770	7.9266
4.8	1.5686	135	4.9053	23.5	3.1570	18000	9.7981	984	6.8916	7490	8.9213
1	0.0000	172	5.1475	38.1	3.6402	22100	10.0033	338	5.8230	8090	8.9984
1.3	0.2624	6.6	1.8871	1.5	0.4055	22200	10.0078	410	6.0162	362	5.8916
1.55	0.4383	9.6	2.2618	1.6	0.4700	25200	10.1346	540	6.2916	407	6.0088
3.7	1.3083	9.7	2.2721	1.8	0.5878	21700	9.9851	1540	7.3395	441	6.0890
94.4	4.5475	15	2.7081	3.7	1.3083	22000	9.9988	1720	7.4501	776	6.6542
117	4.7622	17.6	2.8679	2.3	0.8329	22800	10.0345	1820	7.5066	462	6.1356
118	4.7707	25.8	3.2504	3.2	1.1632	17400	9.7642	899	6.8013	480	6.1738
1.4	0.3365	33.3	3.5056	3.2	1.1632	18700	9.8363	1210	7.0984	656	6.4862
1.8	0.5878	9	2.1972	2.4	0.8755	19200	9.8627	1410	7.2513	725	6.5862
2.5	0.9163	10.4	2.3418	3.5	1.2528	16900	9.7351	1690	7.4325	762	6.6359
1.2	0.1823	15.3	2.7279	6.4	1.8563	18100	9.8037	1710	7.4442	1490	7.3065
0.8	-0.2231	13	2.5649	2.3	0.8329	19000	9.8522	1740	7.4616	508	6.2305
1.6	0.4700	13.6	2.6101	2.7	0.9933	16800	9.7291	1030	6.9373	616	6.4232
2.4	0.8755	15.1	2.7147	2.8	1.0296	17800	9.7870	1270	7.1468	696	6.5453
4.2	1.4351	9.2	2.2192	1.2	0.1823	17900	9.7926	1390	7.2371	305	5.7203
6.3	1.8405	10	2.3026	1.4	0.3365	18600	9.8309	1440	7.2724	420	6.0403
2.1	0.7419	10.1	2.3125	2.2	0.7885	18100	9.8037	1340	7.2004	434	6.0730
2.5	0.9163	11.1	2.4069	4.8	1.5686	18300	9.8147	1530	7.3330	633	6.4505
3.4	1.2238	50.6	3.9240	19.6	2.9755	18300	9.8147	1620	7.3902	3790	8.2401
1.8	0.5878	55.8	4.0218	24.6	3.2027	16000	9.6803	1210	7.0984	4150	8.3309
2.4	0.8755	57.8	4.0570	25.3	3.2308	19600	9.8833	1300	7.1701	4720	8.4596
2.8	1.0296	7.4	2.0015	1.2	0.1823	20000	9.9035	1590	7.3715	363	5.8944
0.405	-0.9039	8.2	2.1041	3	1.0986	30000	10.3090	1720	7.4501	675	6.5147
1	0.0000	12.8	2.5494	3.8	1.3350	30200	10.3156	1840	7.5175	871	6.7696
1.9	0.6419	6.2	1.8245	0.61	-0.4943	32400	10.3859	1890	7.5443	223	5.4072
2	0.6931	6.4	1.8563	0.91	-0.0943	23200	10.0519	1030	6.9373	229	5.4337
1.4	0.3365	8.7	2.1633	4.5	1.5041	27200	10.2110	1320	7.1854	683	6.5265
2.1	0.7419	11.8	2.4681	1.8	0.5878	37800	10.5401	1920	7.5601	621	6.4313
3.4	1.2238	13.6	2.6101	3.2	1.1632	16200	9.6928	1120	7.0211	770	6.6464
2.2	0.7885	14.4	2.6672	5.6	1.7228	16400	9.7050	1140	7.0388	1160	7.0562
3	1.0986	10.3	2.3321	2.5	0.9163	17500	9.7700	1150	7.0475	420	6.0403
1.85	0.6152	10.5	2.3514	4.8	1.5686	19400	9.8730	1020	6.9276	851	6.7464
2.8	1.0296	13.2	2.5802	5	1.6094	21200	9.9618	1030	6.9373	937	6.8427
2.9	1.0647	8.8	2.1748	4.5	1.5041	21200	9.9618	1040	6.9470	596	6.3902
3.7	1.3083	8.8	2.1748	5.1	1.6292	21300	9.9665	1090	6.9939	667	6.5028
1.5	0.4055	12.6	2.5337	6	1.7918	18600	9.8309	1020	6.9276	789	6.6708
4.8	1.5686	5.7	1.7405	1.4	0.3365	19800	9.8934	1360	7.2152	215	5.3706
9.3	2.2300	6	1.7918	1.9	0.6419	20000	9.9035	1380	7.2298	325	5.7838
0.68	-0.3857	6.4	1.8563	4.1	1.4110	16500	9.7111	673	6.5117	680	6.5221
1.5	0.4055	7.1	1.9601	5.6	1.7228	17500	9.7700	856	6.7523	827	6.7178
1.6	0.4700	7	1.9459	2.6	0.9555	18300	9.8147	1010	6.9177	370	5.9135
2.1	0.7419	7.2	1.9741	3.5	1.2528	24000	10.0858	1270	7.1468	499	6.2126
2.6	0.9555	8.2	2.1041	6.2	1.8245	25800	10.1581	1540	7.3395	933	6.8384
1.5	0.4055	9.4	2.2407	2.4	0.8755	28100	10.2435	1750	7.4674	412	6.0210

Nine Mile Occupational Soil (mg/kg)

Antimony	LN[Sb]	Arsenic	LN[As]	Cadmium	LN[Cd]	Iron	LN[Fe]	Manganese	LN[Mn]	Zinc	LN[Zn]
1.9	0.6419	11	2.3979	2.4	0.8755	15100	9.6225	708	6.5624	428	6.0591
2.5	0.9163	18.9	2.9392	2.6	0.9555	15300	9.6356	812	6.6995	569	6.3439
0.95	-0.0513	13.9	2.6319	5.8	1.7579	16600	9.7172	1100	7.0031	2570	7.8517
1.1	0.0953	20.6	3.0253	8.5	2.1401	18800	9.8416	1160	7.0562	2830	7.9480
2	0.6931	22.8	3.1268	9.6	2.2618	16400	9.7050	712	6.5681	3270	8.0925
6.4	1.8563	18	2.8904	8.1	2.0919	17900	9.7926	819	6.7081	1360	7.2152
11.2	2.4159	19.3	2.9601	13.4	2.5953	18100	9.8037	1040	6.9470	3080	8.0327
13.2	2.5802	24.3	3.1905	15.8	2.7600	16400	9.7050	734	6.5985	3390	8.1286
1.2	0.1823	6.1	1.8083	0.03	-3.5066	16900	9.7351	947	6.8533	97.4	4.5788
1.2	0.1823	3.75	1.3218	0.66	-0.4155	19600	9.8833	1070	6.9754	202	5.3083
1.1	0.0953	4.2	1.4351	1.5	0.4055	27800	10.2328	1080	6.9847	278	5.6276
0.92	-0.0834	4.7	1.5476	4.8	1.5686	30000	10.3090	1240	7.1229	859	6.7558
9.3	2.2300	15.7	2.7537	6.3	1.8405	42200	10.6502	2170	7.6825	1290	7.1624
13.7	2.6174	16.5	2.8034	6.9	1.9315	23500	10.0648	1050	6.9565	1340	7.2004
17.8	2.8792	17.3	2.8507	7.6	2.0281	23800	10.0774	1080	6.9847	1390	7.2371
7.6	2.0281	8.7	2.1633	1.9	0.6419	24100	10.0900	1210	7.0984	495	6.2046
7.6	2.0281	9.4	2.2407	2.3	0.8329	20100	9.9085	656	6.4862	536	6.2841
14.4	2.6672	9.6	2.2618	3.3	1.1939	23700	10.0732	825	6.7154	681	6.5236
4.6	1.5261	7.1	1.9601	0.13	-2.0402	27700	10.2292	826	6.7166	116	4.7536
10.4	2.3418	10.4	2.3418	0.21	-1.5606	28200	10.2471	1300	7.1701	118	4.7707
11.5	2.4423	13.5	2.6027	0.29	-1.2379	23500	10.0648	679	6.5206	171	5.1417
19.7	2.9806	24.5	3.1987	4.1	1.4110	25300	10.1386	737	6.6026	1360	7.2152
2.5	0.9163	40.4	3.6988	5.1	1.6292	27200	10.2110	1110	7.0121	1440	7.2724
2.9	1.0647	40.5	3.7013	6.9	1.9315	23400	10.0605	1150	7.0475	1790	7.4900
8.9	2.1861	5.2	1.6487	0.08	-2.5257	23900	10.0816	1160	7.0562	174	5.1591
20.8	3.0350	6.2	1.8245	0.215	-1.5371	27000	10.2036	1240	7.1229	228	5.4293
28.4	3.3464	7.9	2.0669	0.78	-0.2485	31300	10.3514	792	6.6746	238	5.4723
29.2	3.3742	10.9	2.3888	1.9	0.6419	33500	10.4193	924	6.8287	388	5.9610
18.5	2.9178	10.7	2.3702	0.39	-0.9416	34900	10.4602	984	6.8916	162	5.0876
29.2	3.3742	11.3	2.4248	0.76	-0.2744	26200	10.1735	635	6.4536	202	5.3083
31.5	3.4500	12.8	2.5494	0.9	-0.1054	28600	10.2612	750	6.6201	220	5.3936
4	1.3863	6.1	1.8083	0.29	-1.2379	30400	10.3222	1340	7.2004	181	5.1985
5.7	1.7405	6.7	1.9021	0.39	-0.9416	36000	10.4913	1770	7.4787	217	5.3799
14.6	2.6810	11.4	2.4336	0.82	-0.1985	26600	10.1887	1410	7.2513	293	5.6802
19.9	2.9907	16.5	2.8034	7.5	2.0149	26900	10.1999	1520	7.3265	1120	7.0211
10.1	2.3125	17.5	2.8622	8.2	2.1041	41000	10.6213	2200	7.6962	1320	7.1854
20.6	3.0253	23	3.1355	9.2	2.2192	27700	10.2292	1300	7.1701	3530	8.1691
68.1	4.2210	18.6	2.9232	5.6	1.7228	37400	10.5294	2090	7.6449	993	6.9007
14.2	2.6532	19.8	2.9857	5.9	1.7750	42000	10.6454	2390	7.7790	1100	7.0031
18.2	2.9014	20.1	3.0007	10.9	2.3888	23900	10.0816	1110	7.0121	1570	7.3588
18.9	2.9392	5.3	1.6677	3.1	1.1314	34000	10.4341	1640	7.4025	613	6.4184
33.2	3.5025	7.4	2.0015	5.9	1.7750	47200	10.7621	1690	7.4325	953	6.8596
48.8	3.8877	9.5	2.2513	7.7	2.0412	19600	9.8833	1360	7.2152	1050	6.9565
124	4.8203	33.6	3.5145	11.8	2.4681	20500	9.9282	1440	7.2724	2140	7.6686
2.1	0.7419	7.1	1.9601	2.8	1.0296	21000	9.9523	1440	7.2724	501	6.2166
3.1	1.1314	7.7	2.0412	3.6	1.2809	18500	9.8255	1240	7.1229	568	6.3421
4.7	1.5476	13.2	2.5802	6.2	1.8245	19500	9.8782	1420	7.2584	966	6.8732
2.5	0.9163	14.8	2.6946	5.9	1.7750	21300	9.9665	1490	7.3065	1200	7.0901
3.4	1.2238	21.7	3.0773	7.2	1.9741	21600	9.9804	1560	7.3524	1570	7.3588
4.2	1.4351	25	3.2189	12.2	2.5014	15700	9.6614	731	6.5944	1660	7.4146
4.4	1.4816	9.7	2.2721	2.3	0.8329	17100	9.7468	889	6.7901	678	6.5191
0.5	-0.6931	11.9	2.4765	3	1.0986	17200	9.7527	1130	7.0300	710	6.5653
1.3	0.2624	12.4	2.5177	3.3	1.1939	14900	9.6091	780	6.6593	714	6.5709
1.7	0.5306	10.4	2.3418	3.6	1.2809	15800	9.6678	1080	6.9847	792	6.6746
1.2	0.1823	11.6	2.4510	7	1.9459	16100	9.6866	1110	7.0121	1060	6.9660
1.3	0.2624	26.7	3.2847	8.9	2.1861	16300	9.6989	592	6.3835	1340	7.2004
1.5	0.4055	47.6	3.8628	10.4	2.3418	16700	9.7232	703	6.5554	1750	7.4674
0.91	-0.0943	20.6	3.0253	4.4	1.4816	17000	9.7410	1040	6.9470	835	6.7274
1.1	0.0953	26.2	3.2658	4.8	1.5686	25300	10.1386	676	6.5162	949	6.8554
1.8	0.5878	40.1	3.6914	5.9	1.7750	29000	10.2751	1040	6.9470	1380	7.2298
1.4	0.3365	18.5	2.9178	9.9	2.2925	33600	10.4223	1170	7.0648	1350	7.2079
3.1	1.1314	23.6	3.1612	11.9	2.4765	29600	10.2955	963	6.8701	1680	7.4265
6.4	1.8563	25.6	3.2426	12.9	2.5572	33000	10.4043	984	6.8916	1890	7.5443
1.7	0.5306	21.4	3.0634	4.8	1.5686	38000	10.5453	1060	6.9660	924	6.8287
3.2	1.1632	35	3.5553	8.2	2.1041	39900	10.5941	1230	7.1148	1490	7.3065
4.1	1.4110	51.1	3.9338	8.5	2.1401	30800	10.3353	852	6.7476	1820	7.5066
4.6	1.5261	13.9	2.6319	1.5	0.4055	64400	11.0729	2040	7.6207	377	5.9322
2.3	0.8329	14	2.6391	3.4	1.2238	83300	11.3302	3360	8.1197	656	6.4862
5.4	1.6864	17.5	2.8622	6.2	1.8245	26400	10.1811	730	6.5930	881	6.7811
8.1	2.0919	16.9	2.8273	4.5	1.5041	54800	10.9114	1480	7.2998	621	6.4313
1.1	0.0953	18.4	2.9124	5.3	1.6677	89500	11.4020	2520	7.8320	640	6.4615
1.1	0.0953	19.6	2.9755	5.4	1.6864	17900	9.7926	575	6.3544	675	6.5147
2	0.6931	20.3	3.0106	7.2	1.9741	20400	9.9233	775	6.6529	755	6.6267
3.5	1.2528	10.5	2.3514	0.1	-2.3026	25900	10.1620	1110	7.0121	126	4.8363
7.9	2.0669	12.7	2.5416	0.95	-0.0513	31100	10.3450	1610	7.3840	268	5.5910
19	2.9444	12.9	2.5572	2.2	0.7885	31700	10.3641	2310	7.7450	339	5.8260
21.4	3.0634	10.8	2.3795	0.1	-2.3026	32200	10.3797	2400	7.7832	88.5	4.4830
48	3.8712	10.9	2.3888	0.59	-0.5276	11800	9.3759	114	4.7362	162	5.0876

Nine Mile Occupational Soil (mg/kg)

Antimony	LN[Sb]	Arsenic	LN[As]	Cadmium	LN[Cd]	Iron	LN[Fe]	Manganese	LN[Mn]	Zinc	LN[Zn]
1.2	0.1823	11.5	2.4423	1.4	0.3365	11900	9.3843	220	5.3936	220	5.3936
1.7	0.5306	13.8	2.6247	0.04	-3.2189	14600	9.5888	546	6.3026	84.2	4.4332
2.1	0.7419	15	2.7081	0.04	-3.2189	16100	9.6866	712	6.5681	107	4.6728
3.2	1.1632	15	2.7081	1.7	0.5306	8910	9.0949	111	4.7095	237	5.4681
0.5	-0.6931	11.4	2.4336	2.8	1.0296	12800	9.4572	142	4.9558	915	6.8189
0.5	-0.6931	20.3	3.0106	5.1	1.6292	14100	9.5539	399	5.9890	1240	7.1229
3.1	1.1314	37.4	3.6217	8	2.0794	16400	9.7050	355	5.8721	1940	7.5704
2.1	0.7419	17.4	2.8565	1.8	0.5878	17100	9.7468	637	6.4568	616	6.4232
3	1.0986	18.4	2.9124	5.2	1.6487	21700	9.9851	660	6.4922	916	6.8200
8.1	2.0919	26.2	3.2658	5.8	1.7579	19700	9.8884	705	6.5582	964	6.8711
2.7	0.9933	26.8	3.2884	6.2	1.8245	27700	10.2292	851	6.7464	1150	7.0475
4.4	1.4816	14.7	2.6878	2	0.6931	31200	10.3482	885	6.7856	483	6.1800
9.9	2.2925	26.4	3.2734	2.1	0.7419	27200	10.2110	1440	7.2724	809	6.6958
9.2	2.2192	28.2	3.3393	5.6	1.7228	33000	10.4043	1950	7.5756	1020	6.9276
12.9	2.5572	10.8	2.3795	0.94	-0.0619	33400	10.4163	1980	7.5909	285	5.6525
14.8	2.6946	18.6	2.9232	4.4	1.4816	21400	9.9711	734	6.5985	802	6.6871
1.9	0.6419	22	3.0910	11.8	2.4681	24100	10.0900	851	6.7464	1530	7.3330
2.9	1.0647	6.4	1.8563	0.61	-0.4943	25000	10.1266	1060	6.9660	212	5.3566
3.7	1.3083	12.4	2.5177	5	1.6094	25000	10.1266	1410	7.2513	991	6.8987
5.9	1.7750	18.9	2.9392	15.2	2.7213	24400	10.1023	752	6.6227	2200	7.6962
1.8	0.5878	20.5	3.0204	10.4	2.3418	25500	10.1464	931	6.8363	1360	7.2152
3.1	1.1314	21.3	3.0587	14.7	2.6878	29200	10.2819	1480	7.2998	1520	7.3265
7.9	2.0669	26.5	3.2771	14.8	2.6946	23600	10.0690	811	6.6983	1570	7.3588
2.8	1.0296	8.8	2.1748	2.5	0.9163	23600	10.0690	1250	7.1309	530	6.2729
1.7	0.5306	8.9	2.1861	2.9	1.0647	39300	10.5790	1540	7.3395	692	6.5396
90.2	4.5020	9	2.1972	7.2	1.9741	21100	9.9570	592	6.3835	787	6.6682
2.15	0.7655	10	2.3026	9.8	2.2824	42000	10.6454	828	6.7190	823	6.7130
65.4	4.1805	9.8	2.2824	1.4	0.3365	49500	10.8097	1640	7.4025	307	5.7268
237	5.4681	12.5	2.5257	1.9	0.6419	7440	8.9146	141	4.9488	434	6.0730
1.6	0.4700	14.1	2.6462	5.7	1.7405	9050	9.1105	193	5.2627	775	6.6529
2.3	0.8329	12.5	2.5257	3.8	1.3350	9560	9.1653	273	5.6095	599	6.3953
3.3	1.1939	15.4	2.7344	6.8	1.9169	6930	8.8436	102	4.6250	1150	7.0475
0.5	-0.6931	23.8	3.1697	10.4	2.3418	7180	8.8791	103	4.6347	1350	7.2079
0.5	-0.6931	18	2.8904	11.7	2.4596	7600	8.9359	141	4.9488	1090	6.9939
0.5	-0.6931	19.8	2.9857	30.1	3.4045	4160	8.3333	70.8	4.2599	2050	7.6256
0.5	-0.6931	20.9	3.0397	31.9	3.4626	4420	8.3939	86.1	4.4555	3090	8.0359
1.4	0.3365	23.3	3.1485	7.4	2.0015	5120	8.5409	152	5.0239	1380	7.2298
2	0.6931	29.6	3.3878	12.9	2.5572	5950	8.6911	169	5.1299	2010	7.6059
2.5	0.9163	35.8	3.5779	21.2	3.0540	5310	8.5773	85.5	4.4485	2830	7.9480
0.485	-0.7236	16.4	2.7973	2.4	0.8755	6150	8.7242	110	4.7005	435	6.0753
1.3	0.2624	16.5	2.8034	3.1	1.1314	9430	9.1517	182	5.2040	607	6.4085
2.4	0.8755	17.3	2.8507	3.2	1.1632	18800	9.8416	492	6.1985	638	6.4583
0.485	-0.7236	21.9	3.0865	4.2	1.4351	22000	9.9988	547	6.3044	751	6.6214
0.5	-0.6931	15.9	2.7663	2.5	0.9163	24800	10.1186	559	6.3261	477	6.1675
0.5	-0.6931	16.8	2.8214	3.2	1.1632	20200	9.9134	580	6.3630	549	6.3081
2	0.6931	19.4	2.9653	9.5	2.2513	21000	9.9523	675	6.5147	1210	7.0984
2.4	0.8755	16.7	2.8154	3.5	1.2528	21200	9.9618	904	6.8068	664	6.4983
2.5	0.9163	17.8	2.8792	5	1.6094	21100	9.9570	1710	7.4442	1020	6.9276
6.2	1.8245	51.3	3.9377	9.1	2.2083	26900	10.1999	2260	7.7231	1660	7.4146
8.3	2.1163	14.3	2.6603	2.8	1.0296	75200	11.2279	6500	8.7796	443	6.0936
26.8	3.2884	32.5	3.4812	2.9	1.0647	16800	9.7291	651	6.4785	1250	7.1309
1.3	0.2624	56.7	4.0378	7.6	2.0281	17400	9.7642	668	6.5043	1570	7.3588
1.5	0.4055	6.2	1.8245	12.7	2.5416	20200	9.9134	1110	7.0121	2360	7.7664
6	1.7918	6.3	1.8405	15.5	2.7408	36000	10.4913	3010	8.0097	2450	7.8038
13.6	2.6101	7.9	2.0669	17.1	2.8391	19600	9.8833	841	6.7346	2750	7.9194
1.2	0.1823	2.9	1.0647	4.3	1.4586	21500	9.9758	995	6.9027	1100	7.0031
1.3	0.2624	3.1	1.1314	5.8	1.7579	21900	9.9942	1100	7.0031	1250	7.1309
3.3	1.1939	4.1	1.4110	6	1.7918	9350	9.1431	414	6.0259	1570	7.3588
1	0.0000	1.9	0.6419	11.7	2.4596	23700	10.0732	1320	7.1854	1550	7.3460
1.2	0.1823	3.3	1.1939	14.8	2.6946	24200	10.0941	1390	7.2371	1980	7.5909
0.8	-0.2231	4.1	1.4110	17.5	2.8622	18400	9.8201	495	6.2046	2430	7.7956
0.85	-0.1625	4.2	1.4351	27	3.2958	18500	9.8255	727	6.5889	3370	8.1227
1.1	0.0953	1.8	0.5878	6.7	1.9021	20600	9.9330	866	6.7639	1220	7.1066
0.55	-0.5978	2.1	0.7419	13.5	2.6027	14600	9.5888	441	6.0890	2270	7.7275
0.6	-0.5108	5.8	1.7579	15.1	2.7147	15600	9.6550	501	6.2166	2480	7.8160
0.6	-0.5108	13.2	2.5802	0.1	-2.3026	15700	9.6614	557	6.3226	79.6	4.3770
0.7	-0.3567	16.6	2.8094	1.1	0.0953	16000	9.6803	876	6.7754	195	5.2730
0.95	-0.0513	17.9	2.8848	6.2	1.8245	16800	9.7291	752	6.6227	1150	7.0475
1.5	0.4055	16.1	2.7788	2.7	0.9933	17400	9.7642	789	6.6708	317	5.7589
1.6	0.4700	17.4	2.8565	3.8	1.3350	18200	9.8092	844	6.7382	399	5.9890
1.05	0.0488	18.2	2.9014	3.9	1.3610	15100	9.6225	709	6.5639	451	6.1115
1.15	0.1398	12.4	2.5177	5.5	1.7047	17500	9.7700	987	6.8947	871	6.7696
2	0.6931	13.6	2.6101	7.1	1.9601	17500	9.7700	1220	7.1066	1190	7.0817
1.2	0.1823	31	3.4340	21.8	3.0819	18000	9.7981	600	6.3969	3830	8.2506
1.3	0.2624	10.4	2.3418	2.5	0.9163	18900	9.8469	849	6.7441	149	5.0039
1.7	0.5306	11.2	2.4159	2.7	0.9933	20300	9.9184	899	6.8013	165	5.1059
1.8	0.5878	14.5	2.6741	3.4	1.2238	17800	9.7870	676	6.5162	897	6.7991
2.3	0.8329	39.5	3.6763	5.4	1.6864	19000	9.8522	740	6.6067	1640	7.4025

Nine Mile Occupational Soil (mg/kg)

Antimony	LN[Sb]	Arsenic	LN[As]	Cadmium	LN[Cd]	Iron	LN[Fe]	Manganese	LN[Mn]	Zinc	LN[Zn]
2.4	0.8755	11.8	2.4681	1.4	0.3365	20100	9.9085	845	6.7393	170	5.1358
2.4	0.8755	14.9	2.7014	1.9	0.6419	17300	9.7585	1060	6.9660	217	5.3799
3.3	1.1939	15.1	2.7147	4.9	1.5892	17900	9.7926	1230	7.1148	733	6.5971
4.6	1.5261	8.4	2.1282	0.045	-3.1011	18700	9.8363	1270	7.1468	32.8	3.4904
3.5	1.2528	18.4	2.9124	3	1.0986	19200	9.8627	1340	7.2004	194	5.2679
4.6	1.5261	18.4	2.9124	3.4	1.2238	19500	9.8782	628	6.4425	204	5.3181
7.8	2.0541	8.1	2.0919	2.4	0.8755	20900	9.9475	737	6.6026	653	6.4816
3.1	1.1314	16.7	2.8154	3.6	1.2809	21700	9.9851	901	6.8035	718	6.5765
3.2	1.1632	49.2	3.8959	4.7	1.5476	19100	9.8574	907	6.8101	780	6.6593
3.4	1.2238	5.5	1.7047	0.49	-0.7133	20400	9.9233	924	6.8287	181	5.1985
2.7	0.9933	5.9	1.7750	0.54	-0.6162	20400	9.9233	1010	6.9177	188	5.2364
14.6	2.6810	6.2	1.8245	0.54	-0.6162	18800	9.8416	900	6.8024	191	5.2523
28.2	3.3393	6.6	1.8871	2.6	0.9555	19600	9.8833	1010	6.9177	432	6.0684
9.8	2.2824	8	2.0794	15.4	2.7344	20100	9.9085	1050	6.9565	1210	7.0984
25.3	3.2308	8.5	2.1401	24.8	3.2108	21100	9.9570	1350	7.2079	1710	7.4442
29.1	3.3707	8.7	2.1633	27.5	3.3142	24600	10.1105	1600	7.3778	2040	7.6207
1.7	0.5306	5.9	1.7750	7.5	2.0149	25500	10.1464	2010	7.6059	1260	7.1389
4	1.3863	6.5	1.8718	8.4	2.1282	13200	9.4880	557	6.3226	1440	7.2724
29.3	3.3776	11.2	2.4159	31.8	3.4595	16400	9.7050	641	6.4630	2510	7.8280
13.3	2.5878	5.3	1.6677	0.94	-0.0619	23300	10.0562	917	6.8211	393	5.9738
59.2	4.0809	5.6	1.7228	2.4	0.8755	18900	9.8469	608	6.4102	685	6.5294
69.7	4.2442	6.9	1.9315	5.3	1.6677	23300	10.0562	1180	7.0733	972	6.8794
96.6	4.5706	9.4	2.2407	0.58	-0.5447	23600	10.0690	1320	7.1854	81.1	4.3957
24.6	3.2027	11.5	2.4423	1.1	0.0953	21900	9.9942	914	6.8178	166	5.1120
242	5.4889	12.4	2.5177	2	0.6931	26400	10.1811	1180	7.0733	323	5.7777
256	5.5452	9.5	2.2513	2.5	0.9163	27600	10.2256	1250	7.1309	353	5.8665
1.15	0.1398	10.1	2.3125	3.9	1.3610	29800	10.3023	1380	7.2298	418	6.0355
2	0.6931	10.2	2.3224	4.2	1.4351	41200	10.6262	1370	7.2226	443	6.0936
2.7	0.9933	10.5	2.3514	4.5	1.5041	48000	10.7790	1990	7.5959	477	6.1675
0.9	-0.1054	16.5	2.8034	0.77	-0.2614	49900	10.8178	2200	7.6962	70.9	4.2613
1.1	0.0953	20.2	3.0057	1.2	0.1823	18900	9.8469	712	6.5681	102	4.6250
2.05	0.7178	21.9	3.0865	2.5	0.9163	29500	10.2921	953	6.8596	191	5.2523
1.4	0.3365	12.3	2.5096	1.9	0.6419	27200	10.2110	993	6.9007	280	5.6348
6.4	1.8563	13	2.5649	18.4	2.9124	19000	9.8522	679	6.5206	793	6.6758
3.2	1.1632	15.1	2.7147	97	4.5747	19500	9.8782	666	6.5013	2700	7.9010
5.7	1.7405	10	2.3026	3.9	1.3610	23000	10.0432	1050	6.9565	389	5.9636
1.1	0.0953	10.2	2.3224	6.1	1.8083	25100	10.1306	1000	6.9078	444	6.0958
0.9	-0.1054	10.4	2.3418	6.4	1.8563	23500	10.0648	1060	6.9660	460	6.1312
0.75	-0.2877	13.3	2.5878	5.9	1.7750	21200	9.9618	843	6.7370	1020	6.9276
0.55	-0.5978	17.8	2.8792	23.3	3.1485	28000	10.2400	941	6.8469	2810	7.9409
2	0.6931	26	3.2581	27.9	3.3286	17800	9.7870	563	6.3333	2910	7.9759
2.9	1.0647	8.2	2.1041	11.2	2.4159	36000	10.4913	919	6.8233	1600	7.3778
0.95	-0.0513	16.5	2.8034	22.4	3.1091	30700	10.3320	768	6.6438	2300	7.7407
0.75	-0.2877	18.9	2.9392	30.4	3.4144	21800	9.9897	723	6.5834	3720	8.2215
0.85	-0.1625	11.2	2.4159	2.8	1.0296	33400	10.4163	1080	6.9847	434	6.0730
1.3	0.2624	18.5	2.9178	4.2	1.4351	24100	10.0900	816	6.7044	845	6.7393
1.3	0.2624	35.2	3.5610	16.7	2.8154	18700	9.8363	948	6.8544	1970	7.5858
1.15	0.1398	15.5	2.7408	3.7	1.3083	16600	9.7172	619	6.4281	523	6.2596
0.55	-0.5978	28.4	3.3464	5.4	1.6864	19900	9.8985	989	6.8967	1170	7.0648
1.1	0.0953	30.7	3.4243	15.7	2.7537	16900	9.7351	784	6.6644	1470	7.2930
0.65	-0.4308	45.3	3.8133	18.4	2.9124	15600	9.6550	767	6.6425	1600	7.3778
0.8	-0.2231	31.4	3.4468	7.1	1.9601	20100	9.9085	862	6.7593	2920	7.9793
1.05	0.0488	94.2	4.5454	20.2	3.0057	19500	9.8782	724	6.5848	3000	8.0064
0.6	-0.5108	121	4.7958	24.6	3.2027	21400	9.9711	1260	7.1389	4340	8.3756
0.65	-0.4308	12.9	2.5572	2.2	0.7885	18200	9.8092	805	6.6908	386	5.9558
1.25	0.2231	13.8	2.6247	6.1	1.8083	16200	9.6928	723	6.5834	1040	6.9470
0.8	-0.2231	15.2	2.7213	7.9	2.0669	20000	9.9035	718	6.5765	1220	7.1066
0.9	-0.1054	11.8	2.4681	2.7	0.9933	20400	9.9233	730	6.5930	347	5.8493
4.5	1.5041	13	2.5649	2.9	1.0647	21700	9.9851	759	6.6320	389	5.9636
3.3	1.1939	14	2.6391	12.1	2.4932	18400	9.8201	821	6.7105	1480	7.2998
3.6	1.2809	11.1	2.4069	8.1	2.0919	21200	9.9618	905	6.8079	1130	7.0300
14.5	2.6741	25.2	3.2268	9	2.1972	19200	9.8627	715	6.5723	1190	7.0817
7.1	1.9601	15.9	2.7663	2.9	1.0647	19900	9.8985	2110	7.6544	357	5.8777
3.3	1.1939	14.3	2.6603	22.1	3.0956	21400	9.9711	1350	7.2079	2520	7.8320
3.2	1.1632	9.9	2.2925	2.8	1.0296	20500	9.9282	836	6.7286	407	6.0088
84.1	4.4320	9.4	2.2407	2.6	0.9555	22400	10.0168	2490	7.8200	423	6.0474
25	3.2189	9.4	2.2407	1.9	0.6419	22200	10.0078	2050	7.6256	333	5.8081
35.4	3.5667	16.7	2.8154	1.4	0.3365	20400	9.9233	1430	7.2654	364	5.8972
8.8	2.1748	49	3.8918	7	1.9459	18900	9.8469	1080	6.9847	1630	7.3963
15.6	2.7473	26.2	3.2658	8.2	2.1041	19100	9.8574	2630	7.8747	1620	7.3902
10.8	2.3795	11.8	2.4681	3	1.0986	21600	9.9804	2630	7.8747	390	5.9661
6.4	1.8563	8	2.0794	1.2	0.1823	21600	9.9804	2080	7.6401	285	5.6525
4.3	1.4586	12.5	2.5257	3.8	1.3350	19800	9.8934	2220	7.7053	470	6.1527
1.8	0.5878	14.4	2.6672	4.9	1.5892	21000	9.9523	3070	8.0294	593	6.3852
1.25	0.2231	13	2.5649	2.9	1.0647	21400	9.9711	3070	8.0294	400	5.9915
1	0.0000	11.3	2.4248	3.4	1.2238	34700	10.4545	1860	7.5283	599	6.3953
0.255	-1.3665	12.4	2.5177	3.2	1.1632	31600	10.3609	2270	7.7275	489	6.1924
1.3	0.2624	14.7	2.6878	3.4	1.2238	31100	10.3450	2010	7.6059	414	6.0259

Nine Mile Occupational Soil (mg/kg)

Antimony	LN[Sb]	Arsenic	LN[As]	Cadmium	LN[Cd]	Iron	LN[Fe]	Manganese	LN[Mn]	Zinc	LN[Zn]
0.475	-0.7444	9.6	2.2618	1.6	0.4700	13100	9.4804	543	6.2971	302	5.7104
0.445	-0.8097	7.1	1.9601	1.7	0.5306	11200	9.3237	440	6.0868	317	5.7589
15.9	2.7663	8.1	2.0919	2.6	0.9555	7410	8.9106	205	5.3230	419	6.0379
26.7	3.2847	8.5	2.1401	1.6	0.4700	10800	9.2873	339	5.8260	383	5.9480
3.7	1.3083	8.4	2.1282	1.4	0.3365	6360	8.7578	166	5.1120	386	5.9558
8.4	2.1282	9.2	2.2192	3.5	1.2528	6250	8.7403	133	4.8903	484	6.1821
7.4	2.0015	9.3	2.2300	2.8	1.0296	5410	8.5960	45.6	3.8199	501	6.2166
2.7	0.9933	7.7	2.0412	1.7	0.5306	12600	9.4415	462	6.1356	377	5.9322
4	1.3863	12.2	2.5014	2.5	0.9163	19500	9.8782	790	6.6720	618	6.4265
1.2	0.1823	12.5	2.5257	1.4	0.3365	6300	8.7483	164	5.0999	423	6.0474
0.55	-0.5978	14.4	2.6672	0.99	-0.0101	10100	9.2203	552	6.3135	260	5.5607
0.7	-0.3567	45	3.8067	10.2	2.3224	9760	9.1860	350	5.8579	1530	7.3330
0.55	-0.5978	22.1	3.0956	5.5	1.7047	8550	9.0537	1470	7.2930	986	6.8937
0.49	-0.7133	13.1	2.5726	2.3	0.8329	7830	8.9657	1850	7.5229	483	6.1800
0.42	-0.8675	11.6	2.4510	1.2	0.1823	6650	8.8024	281	5.6384	264	5.5759
0.485	-0.7236	46.1	3.8308	11.1	2.4069	4780	8.4722	84.4	4.4356	952	6.8586
0.435	-0.8324	29.9	3.3979	4.7	1.5476	14500	9.5819	868	6.7662	714	6.5709
0.33	-1.1087	29.5	3.3844	6.2	1.8245	16000	9.6803	664	6.4983	661	6.4938
0.55	-0.5978	20.9	3.0397	8.2	2.1041	15500	9.6486	360	5.8861	1460	7.2862
0.55	-0.5978	23.7	3.1655	4.4	1.4816	15500	9.6486	1000	6.9078	1140	7.0388
6.4	1.8563	15.2	2.7213	1.9	0.6419	15900	9.6741	1100	7.0031	699	6.5497
0.6	-0.5108	12.5	2.5257	6	1.7918	16200	9.6928	786	6.6670	1410	7.2513
0.395	-0.9289	10.7	2.3702	3.8	1.3350	15900	9.6741	797	6.6809	1120	7.0211
0.65	-0.4308	10.1	2.3125	3.8	1.3350	16200	9.6928	1160	7.0562	1090	6.9939
0.6	-0.5108	11.8	2.4681	6.3	1.8405	16600	9.7172	855	6.7511	1130	7.0300
0.315	-1.1552	9.8	2.2824	5	1.6094	18800	9.8416	789	6.6708	850	6.7452
1.1	0.0953	5.3	1.6677	7.4	2.0015	15800	9.6678	891	6.7923	992	6.8997
1.35	0.3001	6.7	1.9021	8.2	2.1041	15600	9.6550	655	6.4846	1230	7.1148
1.05	0.0488	5.7	1.7405	6.2	1.8245	14600	9.5888	348	5.8522	866	6.7639
1.8	0.5878	4.4	1.4816	4.8	1.5686	16800	9.7291	814	6.7020	809	6.6958
1.5	0.4055	5	1.6094	4.1	1.4110	16500	9.7111	707	6.5610	708	6.5624
4.6	1.5261	16	2.7726	16.7	2.8154	16900	9.7351	1450	7.2793	2480	7.8160
5	1.6094	28.7	3.3569	21.4	3.0634	13800	9.5324	1130	7.0300	3030	8.0163
5.9	1.7750	5.9	1.7750	19.5	2.9704	16000	9.6803	835	6.7274	2220	7.7053
4.6	1.5261	15.5	2.7408	15.1	2.7147	15200	9.6291	778	6.6567	2330	7.7536
3.4	1.2238	11.1	2.4069	13.6	2.6101	20300	9.9184	1250	7.1309	2040	7.6207
4	1.3863	8.1	2.0919	14.2	2.6532	15400	9.6421	924	6.8287	2290	7.7363
3.7	1.3083	18.1	2.8959	20.6	3.0253	19700	9.8884	1000	6.9078	3080	8.0327
2.4	0.8755	11.9	2.4765	17.7	2.8736	20100	9.9085	1460	7.2862	2160	7.6779
9.5	2.2513	5.7	1.7405	11.1	2.4069	19900	9.8985	1400	7.2442	1430	7.2654
1.35	0.3001	16.5	2.8034	2.2	0.7885	19100	9.8574	1370	7.2226	417	6.0331
0.95	-0.0513	10.9	2.3888	0.68	-0.3857	18700	9.8363	1300	7.1701	217	5.3799
1	0.0000	8	2.0794	0.27	-1.3093	18700	9.8363	1930	7.5653	254	5.5373
2.5	0.9163	8.5	2.1401	1.9	0.6419	21800	9.9897	2520	7.8320	339	5.8260
2	0.6931	7.9	2.0669	1.6	0.4700	24100	10.0900	1820	7.5066	456	6.1225
1.7	0.5306	7.4	2.0015	0.83	-0.1863	23700	10.0732	1840	7.5175	310	5.7366
0.67	-0.4005	6.7	1.9021	0.66	-0.4155	25600	10.1503	2470	7.8120	329	5.7961
1.6	0.4700	9.8	2.2824	1.6	0.4700	25000	10.1266	2230	7.7098	345	5.8435
1.7	0.5306	8.6	2.1518	0.58	-0.5447	17900	9.7926	379	5.9375	211	5.3519
0.67	-0.4005	97.7	4.5819	0.42	-0.8675	18800	9.8416	788	6.6695	200	5.2983
0.335	-1.0936	20.6	3.0253	1.6	0.4700	18600	9.8309	732	6.5958	327	5.7900
15.8	2.7600	9	2.1972	0.14	-1.9661	19000	9.8522	734	6.5985	183	5.2095
3.4	1.2238	6.7	1.9021	0.04	-3.2189	18300	9.8147	702	6.5539	169	5.1299
3.8	1.3350	16.8	2.8214	3.7	1.3083	18400	9.8201	750	6.6201	600	6.3969
3.9	1.3610	11.9	2.4765	0.7	-0.3567	21400	9.9711	833	6.7250	277	5.6240
5.8	1.7579	8.1	2.0919	0.18	-1.7148	20700	9.9379	863	6.7604	177	5.1761
76.8	4.3412	6.7	1.9021	0.35	-1.0498	19400	9.8730	865	6.7627	244	5.4972
0.95	-0.0513	9.6	2.2618	0.08	-2.5257	31600	10.3609	1770	7.4787	192	5.2575
0.95	-0.0513	8.4	2.1282	0.04	-3.2189	19300	9.8679	1230	7.1148	162	5.0876
1.3	0.2624	14.4	2.6672	1	0.0000	20200	9.9134	1370	7.2226	824	6.7142
1.8	0.5878	10.7	2.3702	0.52	-0.6539	20600	9.9330	1490	7.3065	395	5.9789
1.8	0.5878	13.7	2.6174	0.56	-0.5798	17500	9.7700	1070	6.9754	533	6.2785
7.2	1.9741	12.6	2.5337	0.66	-0.4155	26200	10.1735	1500	7.3132	370	5.9135
0.405	-0.9039	12.4	2.5177	0.53	-0.6349	11100	9.3147	468	6.1485	329	5.7961
1.3	0.2624	12.5	2.5257	0.66	-0.4155	12200	9.4092	613	6.4184	334	5.8111
2.3	0.8329	11.4	2.4336	0.83	-0.1863	12200	9.4092	813	6.7007	401	5.9940
2.3	0.8329	10.4	2.3418	3.1	1.1314	12300	9.4174	846	6.7405	586	6.3733
2.6	0.9555	9.5	2.2513	3.8	1.3350	12100	9.4010	789	6.6708	807	6.6933
1.3	0.2624	10.3	2.3321	1.9	0.6419	17500	9.7700	747	6.6161	681	6.5236
1.6	0.4700	12	2.4849	1.7	0.5306	3190	8.0678	212	5.3566	461	6.1334
1.8	0.5878	10.1	2.3125	1.6	0.4700	13500	9.5104	749	6.6187	516	6.2461
1.8	0.5878	10	2.3026	1.2	0.1823	13600	9.5178	937	6.8427	390	5.9661
1.3	0.2624	9.1	2.2083	2	0.6931	13300	9.4955	937	6.8427	473	6.1591
1.6	0.4700	10	2.3026	2.2	0.7885	12800	9.4572	705	6.5582	524	6.2615
1.8	0.5878	10.7	2.3702	3.3	1.1939	13500	9.5104	842	6.7358	618	6.4265
1.9	0.6419	9	2.1972	1.9	0.6419	14300	9.5680	907	6.8101	356	5.8749
4.5	1.5041	9.8	2.2824	1.3	0.2624	14300	9.5680	942	6.8480	242	5.4889
8.1	2.0919	11.6	2.4510	2.5	0.9163	12800	9.4572	771	6.6477	562	6.3315

Nine Mile Occupational Soil (mg/kg)

Antimony	LN[Sb]	Arsenic	LN[As]	Cadmium	LN[Cd]	Iron	LN[Fe]	Manganese	LN[Mn]	Zinc	LN[Zn]
6.2	1.8245	14.9	2.7014	3.4	1.2238	13000	9.4727	780	6.6593	720	6.5793
5.5	1.7047	11.6	2.4510	1.5	0.4055	13400	9.5030	780	6.6593	238	5.4723
1	0.0000	9.4	2.2407	1.6	0.4700	13600	9.5178	799	6.6834	350	5.8579
1.05	0.0488	49.7	3.9060	12.8	2.5494	12600	9.4415	749	6.6187	2150	7.6732
0.255	-1.3665	14.2	2.6532	7.9	2.0669	20800	9.9427	1300	7.1701	1090	6.9939
0.475	-0.7444	15.3	2.7279	8.1	2.0919	24200	10.0941	1430	7.2654	1130	7.0300
1.45	0.3716	15.5	2.7408	9.4	2.2407	24400	10.1023	1410	7.2513	1340	7.2004
0.55	-0.5978	15.6	2.7473	5.8	1.7579	18700	9.8363	1140	7.0388	875	6.7742
1.65	0.5008	61.3	4.1158	4.3	1.4586	17100	9.7468	1050	6.9565	1560	7.3524
4.3	1.4586	10	2.3026	0.09	-2.4079	16300	9.6989	1040	6.9470	91.8	4.5196
1.55	0.4383	12.1	2.4932	0.1	-2.3026	17000	9.7410	766	6.6412	102	4.6250
3.9	1.3610	12.4	2.5177	0.68	-0.3857	15100	9.6225	1150	7.0475	131	4.8752
4.7	1.5476	12.6	2.5337	1.5	0.4055	15800	9.6678	1000	6.9078	192	5.2575
0.95	-0.0513	11.5	2.4423	1.7	0.5306	18200	9.8092	644	6.4677	212	5.3566
0.8	-0.2231	19	2.9444	1.5	0.4055	20600	9.9330	1230	7.1148	371	5.9162
1.15	0.1398	3.2	1.1632	0.04	-3.2189	20400	9.9233	1230	7.1148	44.6	3.7977
0.95	-0.0513	15.5	2.7408	0.13	-2.0402	18500	9.8255	1150	7.0475	116	4.7536
1.15	0.1398	16.5	2.8034	1.7	0.5306	20300	9.9184	1140	7.0388	237	5.4681
1.4	0.3365	15.2	2.7213	2.1	0.7419	17900	9.7926	1060	6.9660	281	5.6384
1.15	0.1398	11.3	2.4248	1.9	0.6419	18300	9.8147	993	6.9007	345	5.8435
0.9	-0.1054	13.7	2.6174	0.18	-1.7148	19000	9.8522	1040	6.9470	134	4.8978
7.4	2.0015	14.4	2.6672	0.73	-0.3147	21900	9.9942	1230	7.1148	166	5.1120
7.1	1.9601	14.5	2.6741	1.2	0.1823	18600	9.8309	1000	6.9078	187	5.2311
		12.8	2.5494	1.2	0.1823	19500	9.8782	1090	6.9939	232	5.4467
		14.2	2.6532	0.31	-1.1712	18900	9.8469	1150	7.0475	119	4.7791
		14.4	2.6672	0.69	-0.3711	16500	9.7111	910	6.8134	139	4.9345
		15.8	2.7600	1.1	0.0953	17300	9.7585	819	6.7081	169	5.1299
		12.9	2.5572	1.4	0.3365	13650	9.5215	661	6.4938	203	5.3132
		17.3	2.8507	10.7	2.3702	19520	9.8792	776	6.6542	1400	7.2442
		18.8	2.9339	16.3	2.7912					2020	7.6109
		19.5	2.9704	15.4	2.7344					1830	7.5121
		16.5	2.8034	7.9	2.0669					1040	6.9470
		12	2.4849	4.9	1.5892					814	6.7020
		11	2.3979	3.9	1.3610					707	6.5610
		5.8	1.7579	0.1	-2.3026					177	5.1761
		10.1	2.3125	1.2	0.1823					284	5.6490
		11.8	2.4681	4.5	1.5041					726	6.5876
		11.2	2.4159	0.88	-0.1278					537	6.2860
		15.4	2.7344	7	1.9459					1080	6.9847
		13.6	2.6101	6.2	1.8245					939	6.8448
		12.8	2.5494	4.8	1.5686					793	6.6758
		15.3	2.7279	7.1	1.9601					970	6.8773
		14.8	2.6946	6.3	1.8405					839	6.7322
		10.7	2.3702	3.2	1.1632					485	6.1841
		12.8	2.5494	3.2	1.1632					515	6.2442
		15.4	2.7344	3.6	1.2809					677	6.5177
		12.4	2.5177	3.7	1.3083					498	6.2106
		13.5	2.6027	5.4	1.6864					873	6.7719
		14.6	2.6810	4.9	1.5892					819	6.7081
		11.9	2.4765	5	1.6094					1090	6.9939
		14.1	2.6462	4.2	1.4351					649	6.4754
		11.2	2.4159	3.4	1.2238					464	6.1399
		11.8	2.4681	4.1	1.4110					364	5.8972
Antimony	Arsenic	Cadmium	Iron	Manganese	Zinc						
Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average
8.94	1.13	21.24	2.66	6.06	1.22	21336.52	9.88	1092.21	6.83	1000.06	6.53
Std Dev	Std Dev	Std Dev	Std Dev	Std Dev	Std Dev	Std Dev	Std Dev	Std Dev	Std Dev	Std Dev	Std Dev
24.04	1.26	54.85	0.69	6.95	1.28	10498.23	0.42	697.63	0.61	929.01	0.90
Count	Std Dev^2	Count	Std Dev^2	Count	Std Dev^2	Count	Std Dev^2	Count	Std Dev^2	Count	Std Dev^2
647	1.60	677	0.48	677	1.63	653	0.18	653	0.37	677	0.81
SQRT	(Std Dev^2)/2	SQRT	(Std Dev^2)/2	SQRT	(Std Dev^2)/2	SQRT	(Std Dev^2)/2	SQRT	(Std Dev^2)/2	SQRT	(Std Dev^2)/2
25.3968502	0.79959844	25.9807621	0.23953067	25.9807621	0.8149894	25.5147016	0.08939246	25.5147016	0.18663857	25.9807621	0.40270831
UCL₉₅normal	1.93	UCL₉₅normal	2.90	UCL₉₅normal	2.03	UCL₉₅normal	9.97	UCL₉₅normal	7.02	UCL₉₅normal	6.94
10.5011607	Mean _{lognormal}	24.7139873	Mean _{lognormal}	6.49594209	Mean _{lognormal}	22013.3722	Mean _{lognormal}	1137.18385	Mean _{lognormal}	1058.88363	Mean _{lognormal}
	6.8894		18.1617		7.6441		21307.72		1114.52		1030.30

Sb	As	Cd	Fe	Mn	Zn
1	9.1	2	17900	379	473
2.5	10	2.2	18800	788	524
2	10.7	3.3	18600	732	618
1.7	9	1.9	19000	734	356
0.67	9.8	1.3	18300	702	242
1.6	11.6	2.5	18400	750	562
1.7	14.9	3.4	21400	833	720
0.67	11.6	1.5	20700	863	238
0.335	9.4	1.6	19400	865	350
15.8	49.7	12.8	31600	1770	2150
3.4	14.2	7.9	19300	1230	1090
3.8	15.3	8.1	20200	1370	1130
3.9	15.5	9.4	20600	1490	1340
5.8	15.6	5.8	17500	1070	875
76.8	61.3	4.3	26200	1500	1560
0.95	10	0.09	11100	468	91.8
0.95	12.1	0.1	12200	613	102
1.3	12.4	0.68	12200	813	131
1.8	12.6	1.5	12300	846	192
1.8	11.5	1.7	12100	789	212
7.2	19	1.5	17500	747	371
0.405	3.2	0.04	3190	212	44.6
1.3	15.5	0.13	13500	749	116
2.3	16.5	1.7	13600	937	237
2.3	15.2	2.1	13300	937	281
2.6	11.3	1.9	12800	705	345
1.3	13.7	0.18	13500	842	134
1.6	14.4	0.73	14300	907	166
1.8	14.5	1.2	14300	942	187
1.8	12.8	1.2	12800	771	232
1.3	14.2	0.31	13000	780	119
1.6	14.4	0.69	13400	780	139
1.8	15.8	1.1	13600	799	169
1.9	12.9	1.4	12600	749	203
4.5	17.3	10.7	20800	1300	1400
8.1	18.8	16.3	24200	1430	2020
6.2	19.5	15.4	24400	1410	1830
5.5	16.5	7.9	18700	1140	1040
1	12	4.9	17100	1050	814
1.05	11	3.9	16300	1040	707
0.255	5.8	0.1	17000	766	177
0.475	10.1	1.2	15100	1150	284
1.45	11.8	4.5	15800	1000	726
0.55	11.2	0.88	18200	644	537
1.65	15.4	7	20600	1230	1080
4.3	13.6	6.2	20400	1230	939
1.55	12.8	4.8	18500	1150	793
3.9	15.3	7.1	20300	1140	970
4.7	14.8	6.3	17900	1060	839
0.95	10.7	3.2	18300	993	485

0.8	12.8	3.2	19000	1040	515
1.15	15.4	3.6	21900	1230	677
0.95	12.4	3.7	18600	1000	498
1.15	13.5	5.4	19500	1090	873
1.4	14.6	4.9	18900	1150	819
1.15	11.9	5	16500	910	1090
0.9	14.1	4.2	17300	819	649

Mullan Residential Soil

Antimony

Analytical Results (mg/kg)		
2.6	2.3	4.4
2.5	1	0.6
2.3	3.4	1.15
133	1.9	1.2
5	9.1	1.4
11.7	28.4	4.5
7	5.9	1.4
1.5	13.4	4
7.1	2.6	3.7
12.9	23.5	6.2
2.5	79.3	5.7
28.8	6.2	9
3.4	19	1.3
2.1	57.3	10.4
2.5	68.4	1.5
2.3	18.1	12.4
2.3	2.1	4
2.2	31	14.5
3.4	3.9	2.1
63.3	201	2
3.2	1.25	16.4
4.2	3	
12	1.55	
6.3	15	
12.6	4.9	
1.5	2.05	
7.8	0.5	
2.1	0.55	
5.7	0.39	
1	0.9	

MTCAS _{Stat} 2.1			
Number of samples		Uncensored values	
Uncensored	81	Mean	13.22
Censored		Lognormal mean	11.04
Detection limit or PQL		Std. devn.	29.29594
Method detection limit		Median	3.9
TOTAL	81	Min.	0.39
		Max.	201
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Assume lognormal distribution.			
Y value is -1.4982. This lies within the tabled values of 1.2302 and -2.6097			
UCL (based on t-statistic) is 18.64			

Mullan Residential Soil

Arsenic

Analytical Results (mg/kg)		
21.4	9.5	14.2
45.8	10.8	7.9
15.8	13.7	7.8
92.1	12.5	8.5
10.9	18	7.3
30.6	87.2	15.2
12.3	14.2	8.1
10.4	37.7	19.7
11.3	11.7	8.4
37.9	56.8	24.2
9.9	138	6.2
24.4	30.6	32.5
9.4	41.2	6.4
10.3	433	18.8
10.7	55.1	8
11.1	26.9	24
8.2	26.8	9
10.8	37.5	13.6
5.1	12	6.6
50.9	165	19.3
7.7	11	17.2
12.3	11.3	
17.5	11.6	
22.1	23.2	
20.4	16.5	
3.4	13.9	
16.5	6.8	
14.3	6.3	
9.8	6.9	
12.9	6.5	

MTCAS _{Stat} 2.1			
Number of samples		Uncensored values	
Uncensored	81	Mean	27.30
Censored		Lognormal mean	23.05
Detection limit or PQL		Std. devn.	52.70697
Method detection limit		Median	13.6
TOTAL	81	Min.	3.4
		Max.	433
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Reject lognormal distribution.			
Y value is -5.6296. This lies outside the tabled values of 1.2302 and -2.6097			
Reject normal distribution.			
Y value is -41.4803. This lies outside the tabled values of 1.2302 and -2.6097			
UCL (based on t-statistic) is 37.06			

Mullan Residential Soil

Cadmium

Analytical Results (mg/kg)		
2.7	1.9	3.7
2.7	4.8	9
1.6	8.1	2
6.6	6.1	12.2
2.7	9.1	0.5
1.8	1.8	2.7
2.1	4.9	1.7
1.8	4.6	13.4
1.8	0.21	5.2
3	3.1	6.1
0.61	4.3	1.5
7.2	42.5	3.1
1.9	1.5	10.5
0.58	1.6	5.2
2.2	3.4	39.2
1.1	4.1	7.9
4.2	2.8	29.3
1.7	2.2	6.2
8	1.2	0.97
3.1	1.2	7.1
5	0.86	16.2
2.9	1.7	
3	1.4	
2.9	1.1	
4.5	2.1	
2.1	2.2	
5.6	3.5	
5.9	2.8	
3.1	2.7	
2.9	3.9	

MTCAS _{Stat} 2.1			
Number of samples		Uncensored values	
Uncensored	81	Mean	5.07
Censored		Lognormal mean	4.82
Detection limit or PQL		Std. devn.	7.060986
Method detection limit		Median	2.9
TOTAL	81	Min.	0.21
		Max.	42.5
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Reject lognormal distribution.			
Y value is -2.9171. This lies outside the tabled values of 1.2302 and -2.6097			
Reject normal distribution.			
Y value is -28.9652. This lies outside the tabled values of 1.2302 and -2.6097			
UCL (based on t-statistic) is 6.38			

Mullan Residential Soil

Iron

Analytical Results
(mg/kg)

26500	23400	15700
32300	19600	16200
15000	21000	14600
37600	41900	22300
19200	19200	11100
17800	25900	22100
18600	15400	12500
35900	31000	25400
22500	53600	8730
24300	18700	23220
17900	36100	13390
18600	70400	19790
18100	60300	13410
20700	31300	22000
13500	25100	17320
16500	51100	18870
15800	16700	14660
21600	48400	14940
17100	18400	21770
13700	17900	
14300	17600	
15300	16800	
17100	18100	
17500	17900	
43300	16800	
35700	15800	
27400	16700	
17800	17100	
22700	15500	
18300	15700	

MTCAS _{Stat} 2.1		
Number of samples		Uncensored values
Uncensored	79	Mean 22708.86
Censored		Lognormal mean 22473.77
Detection limit or PQL		Std. devn. 11382.2
Method detection limit		Median 18400
TOTAL	79	Min. 8730
		Max. 70400
Lognormal distribution?		Normal distribution?
r-squared is:		r-squared is:
Recommendations:		
Reject lognormal distribution.		
Y value is -5.176. This lies outside the tabled values of 1.221 and -2.6169		
Reject normal distribution.		
Y value is -14.2084. This lies outside the tabled values of 1.221 and -2.6169		
UCL (based on t-statistic) is 24843.75		

Mullan Residential Soil

Manganese

Analytical Results (mg/kg)		
1440	1400	799
2570	773	879
934	1180	1460
3530	3210	1330
1330	1380	914
454	1680	1200
1280	984	1310
3310	1980	2430
1040	3640	505
882	1550	1920
1400	2490	414
1120	3900	1300
986	4830	535
877	2290	1770
718	912	1930
1070	4010	1360
594	787	657
1270	4170	796
818	778	2400
622	679	
834	781	
749	913	
1300	735	
791	679	
2470	589	
2160	658	
1560	754	
806	552	
1540	650	
1090	590	

MTCAS _{Stat} 2.1			
Number of samples		Uncensored values	
Uncensored	79	Mean	1430.10
Censored		Lognormal mean	1412.30
Detection limit or PQL		Std. devn.	978.4843
Method detection limit		Median	1090
TOTAL	79	Min.	414
		Max.	4830
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Assume lognormal distribution.			
Y value is -0.3121. This lies within the tabled values of 1.221 and -2.6169			
UCL (based on t-statistic) is 1613.63			

Mullan Residential Soil

Zinc

Analytical Results (mg/kg)		
580	611	369
620	4450	301
944	1130	510
6280	446	511
987	1200	486
2530	2680	787
932	665	481
265	1060	1220
953	439	559
2610	1170	1390
497	1040	302
845	1150	1890
600	1650	88.5
708	266	488
407	762	167
379	706	1650
467	127	619
621	697	874
236	524	171
1870	6450	449
371	289	1510
1290	277	
444	557	
2840	815	
922	586	
426	379	
3780	258	
2840	384	
1470	299	
3690	344	

MTCAS _{Stat} 2.1			
Number of samples		Uncensored values	
Uncensored	81	Mean	1081.94
Censored		Lognormal mean	1048.74
Detection limit or PQL		Std. devn.	1213.294
Method detection limit		Median	620
TOTAL	81	Min.	88.5
		Max.	6450
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations: Assume lognormal distribution. Y value is -1.1209. This lies within the tabled values of 1.2302 and -2.6097			
UCL (based on t-statistic) is 1306.63			

Mullan Residential Tap Water

Arsenic

Site ID	Static Result (ug/L)	Purged Result (ug/L)	Average Result (ug/L)	MTCASat 2.1			
R009	0.1 U	0.1 U	0.1	Number of samples	8	Uncensored values	
R023	0.1 U	0.1 U	0.1	Uncensored		Mean	0.13
R038	0.1 U	0.1 U	0.1	Censored		Lognormal mean	0.13
R041	0.1 U	0.1 U	0.1	Detection limit or PQL		Std. devn.	0.064
R046	0.1 U	0.1 U	0.1	Method detection limit		Median	0.1
R074	0.1 U	0.1 U	0.1	TOTAL	8	Min.	0.1
R086	0.1 U	0.35	0.225			Max.	0.25
R105	0.25 U	0.25 U	0.25	Lognormal distribution?		Normal distribution?	
				r-squared is:		r-squared is:	
				Recommendations: Reject lognormal distribution. W value is 0.5852. This is less than the tabled value of 0.818 Reject normal distribution. W value is 0.5929. This is less than the tabled value of 0.818			
				UCL (based on t-statistic) is 0.18			

Mullan Neighborhood Exposure to Waste Piles

Antimony

Analytical Results (mg/kg)		MTCAS _{Stat} 2.1			
		Number of samples	Uncensored values	Mean	Lognormal mean
19.7	16.5	5	11.84	18.66	
20.3	1.5		9.684937	16.5	
1.5	1.2		1.2	20.3	
		5			
Detection limit or PQL					
Method detection limit					
TOTAL					
Lognormal distribution? r-squared is:		Normal distribution? r-squared is:			
Recommendations: Reject lognormal distribution. W value is 0.7448. This is less than the tabled value of 0.762 Assume normal distribution. W value is 0.778. This exceeds the tabled value of 0.762					
UCL (based on t-statistic) is 21.07					

Mullan Neighborhood Exposure to Waste Piles

Arsenic

Analytical Results (mg/kg)	MTCAS _{Stat} 2.1			
	Number of samples	Uncensored values	Mean	Std. devn.
42.1	Uncensored	5	23.60	
35.4	Censored		Lognormal mean	27.62
28.2	Detection limit or PQL		Median	28.2
5.6	Method detection limit		Min.	5.6
6.7	TOTAL	5	Max.	42.1
Lognormal distribution? Normal distribution? r-squared is: r-squared is:				
Recommendations: Assume lognormal distribution. W value is 0.8173. This exceeds the tabled value of 0.762				
UCL (based on t-statistic) is 39.5				

Mullan Neighborhood Exposure to Waste Piles

Cadmium

Analytical Results (mg/kg)	MTCAS _{Stat} 2.1			
	Number of samples	Uncensored values	Mean	5.57
11.9	Uncensored	5	Lognormal mean	8.42
13.8	Censored		Std. devn.	6.681816
1.1	Detection limit or PQL		Median	1.1
0.55	Method detection limit		Min.	0.51
0.51	TOTAL	5	Max.	13.8
Lognormal distribution? Normal distribution? r-squared is: r-squared is:				
Recommendations: Assume lognormal distribution. W value is 0.7998. This exceeds the tabled value of 0.762				
UCL (based on t-statistic) is 11.94				

Mullan Neighborhood Exposure to Waste Piles

Iron

Analytical Results (mg/kg)	MTCAS _{Stat} 2.1			
	Number of samples	Uncensored values	Mean	22180.00
29700	Uncensored	5	Lognormal mean	22731.52
33200	Censored		Std. devn.	9460.285
22600	Detection limit or PQL		Median	22600
12900	Method detection limit		Min.	12500
12500	TOTAL	5	Max.	33200
Lognormal distribution? Normal distribution? r-squared is: r-squared is:				
Recommendations: Assume lognormal distribution. W value is 0.8623. This exceeds the tabled value of 0.762				
UCL (based on t-statistic) is 31200				

Mullan Neighborhood Exposure to Waste Piles

Manganese

Analytical Results (mg/kg)	MTCAS _{Stat} 2.1		Uncensored values	
	2130	Number of samples	5	Mean
2100	Uncensored		Lognormal mean	2183.03
864	Censored		Std. devn.	754.3137
2750	Detection limit or PQL		Median	2130
2670	Method detection limit		Min.	864
	TOTAL	5	Max.	2750
Lognormal distribution? Normal distribution? r-squared is: r-squared is:				
Recommendations: Assume lognormal distribution. W value is 0.7668. This exceeds the tabled value of 0.762				
UCL (based on t-statistic) is 2822.01				

Mullan Neighborhood Exposure to Waste Piles

Zinc

Analytical Results (mg/kg)	MTCAS _{Stat} 2.1		Uncensored values	
	1820	Uncensored	5	Mean
2880	Censored		Lognormal mean	1589.22
324	Detection limit or PQL		Std. devn.	1254.848
97.2	Method detection limit		Median	324
89.7	TOTAL	5	Min.	89.7
			Max.	2880
Lognormal distribution? Normal distribution? r-squared is: r-squared is:				
Recommendations: Assume lognormal distribution. W value is 0.8688. This exceeds the tabled value of 0.762				
UCL (based on t-statistic) is 2238.63				

Mullan Neighborhood Exposure to Sediments

Antimony

Analytical Results

(mg/kg)

4.54
 2.035
 1.555
 1.165
 2.62
0.948
 1.35
 2.27
 0.56
 0.505
 1.595
 3.755
14.7
 0.498

MTCAS _{Stat} 2.1				
Number of samples		Uncensored values		
Uncensored	14	Mean		2.72
Censored		Lognormal mean		2.61
Detection limit or PQL		Std. devn.	3.64958	
Method detection limit		Median	1.575	
TOTAL	14	Min.	0.498	
		Max.	14.7	
Lognormal distribution?		Normal distribution?		
r-squared is:		r-squared is:		
Recommendations:				
Assume lognormal distribution.				
W value is 0.9456. This exceeds the tabled value of 0.874				
UCL (based on t-statistic) is 4.45				

Mullan Neighborhood Exposure to Sediments

Arsenic

Analytical Results

(mg/kg)

15.1
 9.62
 11
 10.1
 11
 9.93
 8.95
 18
 3.19
 15.7
 24.4
 10.3
 28.4
 4.43

MTCAS _{Stat} 2.1				
Number of samples		Uncensored values		
Uncensored	14	Mean		12.87
Censored		Lognormal mean		13.21
Detection limit or PQL		Std. devn.		6.9846
Method detection limit		Median		10.65
TOTAL	14	Min.		3.19
		Max.		28.4
Lognormal distribution?		Normal distribution?		
r-squared is:		r-squared is:		
Recommendations:				
Assume lognormal distribution.				
W value is 0.9311. This exceeds the tabled value of 0.874				
UCL (based on t-statistic) is 16.17				

Mullan Neighborhood Exposure to Sediments

Cadmium

Analytical Results

(mg/kg)

21.8
 7.1
 2.58
 3.83
 2.49
 4.56
 2.89
 5.92
 1.61
 0.873
 1.17
 2.66
 81
 0.143

MTCAS _{Stat} 2.1				
Number of samples			Uncensored values	
Uncensored	14		Mean	9.90
Censored			Lognormal mean	9.66
Detection limit or PQL			Std. devn.	21.15425
Method detection limit			Median	2.775
TOTAL	14		Min.	0.143
			Max.	81
Lognormal distribution?		Normal distribution?		
r-squared is:		r-squared is:		
Recommendations:				
Assume lognormal distribution.				
W value is 0.9491. This exceeds the tabled value of 0.874				
UCL (based on t-statistic) is 19.91				

Mullan Neighborhood Exposure to Sediments

Iron

Analytical Results

(mg/kg)

53100
 55300
 18200
 21000
 42500
 33700
 33400
 28300
 6160
 18800
 12800
 15000
 121000
 10700

MTCAS _{Stat} 2.1			
Number of samples		Uncensored values	
Uncensored	14	Mean	33568.57
Censored		Lognormal mean	34078.54
Detection limit or PQL		Std. devn.	29441.15
Method detection limit		Median	24650
TOTAL	14	Min.	6160
		Max.	121000
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Assume lognormal distribution.			
W value is 0.9904. This exceeds the tabled value of 0.874			
UCL (based on t-statistic) is 47503.65			

Mullan Neighborhood Exposure to Sediments

Manganese

Analytical Results

(mg/kg)

4900
 6030
 1310
 1600
 3880
 3070
 2700
 1430
 391
 1420
 1960
 3060
 15700
 628

MTCAS _{Stat} 2.1			
Number of samples		Uncensored values	
Uncensored	14	Mean	3434.21
Censored		Lognormal mean	3512.59
Detection limit or PQL		Std. devn.	3879.001
Method detection limit		Median	2330
TOTAL	14	Min.	391
		Max.	15700
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Assume lognormal distribution.			
W value is 0.9806. This exceeds the tabled value of 0.874			
UCL (based on t-statistic) is 5270.22			

Mullan Neighborhood Exposure to Sediments

Zinc

Analytical Results

(mg/kg)

5570
 2530
 439
 1180
 1890
 1630
 1510
 1820
 305
 636
 428
 560
 13700
 471

MTCAS _{Stat} 2.1			
Number of samples		Uncensored values	
Uncensored	14	Mean	2333.50
Censored		Lognormal mean	2207.74
Detection limit or PQL		Std. devn.	3546.455
Method detection limit		Median	1345
TOTAL	14	Min.	305
		Max.	13700
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Assume lognormal distribution.			
W value is 0.9276. This exceeds the tabled value of 0.874			
UCL (based on t-statistic) is 4012.11			

Mullan Neighborhood Exposure to Surface Water

Arsenic

Analytical Results

(ug/L)	
0.45	1
1	0.08
0.22	1
1	0.1
0.16	1.8
0.31	1
0.5	0.34
0.41	0.5
0.28	0.2
0.57	0.5
0.37	0.08
0.34	0.5
1.4	0.41
0.5	0.5
0.135	0.32
0.5	0.5
0.08	0.08
0.5	1
0.6	0.08
1	1
0.31	0.08
1	1
0.47	0.23
0.5	1
0.91	0.33
1	1
0.27	0.115
0.22	0.115
1	0.115
0.315	0.115
1	0.115
0.215	0.23
1	0.115
0.08	

MTCAS _{Stat} 2.1			
Number of samples		Uncensored values	
Uncensored	67	Mean	0.51
Censored		Lognormal mean	0.54
Detection limit or PQL		Std. devn.	0.390026
Method detection limit		Median	0.41
TOTAL	67	Min.	0.08
		Max.	1.8
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Assume lognormal distribution.			
Y value is 0.3145. This lies within the tabled values of 1.1577 and -2.6661			
UCL (based on t-statistic) is 0.59			

Mullan Neighborhood Exposure to Surface Water Cadmium

Analytical Results

(ug/L)

0.64 0.1
 3.6 0.0345
 0.0345 0.1
 0.1 0.08
 4.4 0.92
 0.021 0.9
 0.56 0.0345
 0.17 0.05
 0.79 0.0345
 0.36 0.05
 0.88 0.0345
 0.32 0.05
 0.0345 7.3
 0.62 8.8
 0.0345 0.0345
 0.05 0.05
 0.0345 0.0345
 0.05 0.1
 0.0345 0.0345
 0.1 0.1
 0.0345 0.0345
 0.1 0.1
 0.0345 0.0345
 0.05 0.1
 0.0345 0.4
 0.1 0.1
 0.0205 0.021
 0.0345 15.2
 0.1 2.5
 0.145 0.021
 0.1 0.021
 2.9 0.0345
 0.1 0.16
 0.0345

MTCAS _{Stat} 2.1			
Number of samples		Uncensored values	
Uncensored	67	Mean	0.81
Censored		Lognormal mean	0.48
Detection limit or PQL		Std. devn.	2.366885
Method detection limit		Median	0.1
TOTAL	67	Min.	0.0205
		Max.	15.2
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Reject lognormal distribution.			
Y value is -6.3479. This lies outside the tabled values of 1.1577 and -2.6661			
Reject normal distribution.			
Y value is -37.2298. This lies outside the tabled values of 1.1577 and -2.6661			
UCL (based on t-statistic) is 1.29			

Mullan Neighborhood Exposure to Surface Water Manganese

Analytical Results (ug/L)

1.9	7
6	2.6
12.1	2.5
13	5.8
60.2	17.8
18.9	6
81.6	0.5
11.75	11.5
50.6	0.5
21.7	2.5
60.9	0.5
19.1	2.5
2	1.55
6.3	7.5
1	0.6
2.5	6
1.1	0.5
42.2	2.5
0.5	4.6
2.5	2.5
1.2	0.5
2.5	2.5
127	0.5
27.5	2.5
1.3	19
2.5	28
38.5	3.2
0.5	107
2.5	31.6
1.4	1
2.5	0.65
1.8	0.5
2.5	4
3.4	

MTCASat 2.1			
Number of samples		Uncensored values	
Uncensored	67	Mean	13.69
Censored		Lognormal mean	13.66
Detection limit or PQL		Std. devn.	24.7081
Method detection limit		Median	2.5
TOTAL	67	Min.	0.5
		Max.	127
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Assume lognormal distribution.			
Y value is -0.0227. This lies within the tabled values of 1.1577 and -2.6661			
UCL (based on t-statistic) is 18.73			

Mullan Neighborhood Exposure to Surface Water Mercury

Analytical Results
 (ug/L)

0.05 0.1
 0.1 0.05
 0.05 0.1
 0.1 0.05
 0.05 0.05
 0.08 0.1
 0.05 0.05
 0.08 **0.32**
 0.05 0.05
 0.08 0.1
 0.05 0.05
 0.08 0.1
 0.05 0.05
 0.1 0.1
 0.05 0.05
 0.1 0.1
 0.05 0.05
 0.1 0.1
 0.145 0.05
 0.1 0.1
 0.05 0.05
 0.1 0.1
 0.05 0.05
 0.1 0.1
 0.05 0.08
 0.1 0.1
 0.08 0.08
 0.05 0.08
 0.1 0.08
 0.05 0.08
 0.1 0.08
 0.05 0.05
 0.1 0.08

0.05 all nondetects except for one (detect is bolded)

MTCAS _{Stat} 2.1			
Number of samples		Uncensored values	
Uncensored	67	Mean	0.08
Censored		Lognormal mean	0.08
Detection limit or PQL		Std. devn.	0.038418975
Method detection limit		Median	0.08
TOTAL	67	Min.	0.05
		Max.	0.32
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Reject lognormal distribution.			
Y value is -7.0632. This lies outside the tabled values of 1.1577 and -2.6661			
Reject normal distribution.			
Y value is -19.769. This lies outside the tabled values of 1.1577 and -2.6661			
UCL (based on t-statistic) is 0.09			

Mullan Occupational Exposure to Soil

Antimony

Analytical Results (mg/kg)					
0.28	3.1	4.8	174	2.05	6.2
0.72	3.6	5.7	19	0.42	5.7
9.3	4.5	6.5	57.3	0.27	9
17.4	2.5	5.7	35	0.5	1.3
2.6	2.3	1	88.5	0.365	10.4
2.9	4.2	2.4	99.4	0.435	1.5
7.3	6.2	3.1	167	0.35	12.4
2.5	8.5	3.4	68.4	0.55	4
2.25	2.3	2.3	16.9	0.39	14.5
10.2	0.49	1	20.7	0.75	2
10.7	0.5	1.8	18.1	0.395	16.4
2.3	1.5	2.2	2.1	0.48	
133	2.2	3.4	2.7	0.9	
4.4	1.1	3.4	23.8	4.4	
4.5	1.4	1.1	24.4	0.95	
5.2	2.4	1.4	2.1	7.1	
5	3.4	1.9	26.7	1.55	
1.8	63.3	3.3	71.8	0.6	
1.5	0.33	4.2	76.8	1.1	
1.6	0.335	5.4	31	0.27	
1.75	0.335	9.1	3	0.75	
11.7	1.3	28.4	1.15	1.15	
7	3.2	2.5	1.15	0.9	
6.3	4.2	3.9	3.9	0.65	
12	0.34	4.2	201	0.9	
14.1	0.345	4.7	1.35	1.2	
1.5	2.1	5.9	2.5	0.75	
7.1	12	13.4	0.8	0.385	
1.3	6.3	0.5	1.25	0.7	
5.2	1.3	1.5	1.25	1.4	
15	1.4	4.9	1.5	4.5	
12.9	7.7	2.6	1.15	1.3	
0.5	12.6	23.5	0.75	0.95	
0.5	0.49	121	3	1	
3	1.3	278	1.55	1.4	
2.5	1.6	295	1.95	4	
28.8	1.5	79.3	1.65	4.2	
0.5	3.4	20.7	1.8	3.9	
0.5	3.7	25.2	15	1.4	
0.55	4.7	35.4	4.9	3.7	
2	7.8	6.2	1.55	3.2	
3.4	2.1	23.2	0.9	7.9	
2.1	4.3	131	0.7	3.9	

MTCASat 2.1			
Number of samples		Uncensored values	
Uncensored	226	Mean	14.09
Censored		Lognormal mean	10.49
Detection limit or PQL		Std. devn.	38.29095
Method detection limit		Median	2.8
TOTAL	226	Min.	0.27
		Max.	295
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Reject lognormal distribution.			
Y value is -2.734. This lies outside the tabled values of 1.5215 and -2.3686			
Reject normal distribution.			
Y value is -68.3815. This lies outside the tabled values of 1.5215 and -2.3686			
UCL (based on t-statistic) is 18.31			

Mullan Occupational Exposure to Soil

Arsenic

Analytical Results

(mg/kg)					
2.5	11.7	12.7	104	11.5	8.4
10.1	11.9	14	125	13.9	57.1
40.1	13.2	14.2	41.2	6.7	19.3
62.6	10.7	9.8	433	4.2	9.4
21.4	11.1	12.9	36.9	5	24.2
75.7	12.9	10.4	85.9	6.8	6.2
76	17.5	11.5	88.3	6	32.5
45.8	25.7	11.8	101	4.3	6.4
18.7	8.2	9.5	55.1	3.9	18.8
40.3	8.1	10.8	18.7	3.8	8
92.9	8.5	10	25.7	6.3	24
15.8	9	13.2	26.9	6.9	9
92.1	10.8	16.2	30.1	7.9	13.6
9.7	7.6	13.7	38.7	5.8	6.6
10.8	4.25	9.8	38.9	4.9	19.3
14.3	5.4	12.6	26.8	6.5	17.2
10.9	5.1	13	55	14.2	
10.5	50.9	12.5	123	8	
11.1	4.8	9	193	11.3	
11.3	4.9	10.7	37.5	8.9	
12.7	5.3	11.4	10.7	7.9	
30.6	6.6	18	9.3	7.5	
12.3	7.7	87.2	10.3	6.8	
23.4	12.3	10.4	12	10.1	
33.8	4.6	12.2	165	7.8	
115	5.3	13.7	11.1	8.1	
10.4	15.7	13.9	10.1	8	
11.3	17.5	14.2	9.8	6.6	
8.1	22.1	37.7	11	8.5	
15.7	10.1	11.4	11.6	5.1	
31.4	10.5	13.4	11	7.4	
37.9	18.7	18.5	10.7	8	
5.4	20.4	11.7	12.8	6.8	
6.2	6	56.8	11.3	7.3	
9.3	6.9	163	11.6	15.2	
9.9	8.8	260	11.2	9.1	
24.4	3.4	379	9.7	6.7	
5.1	11.1	138	10.5	5	
5.4	11.4	57.2	23.2	8.1	
6	11.8	64.8	16.5	19.7	
6.8	16.5	71.9	11.6	9.2	
9.4	14.3	30.6	9.7	8.8	
10.3	10.9	27	5.9		

MTCASat 2.1				
Number of samples		Uncensored values		
Uncensored	230	Mean	26.48	
Censored		Lognormal mean	22.17	
Detection limit or PQL		Std. devn.	48.80138913	
Method detection limit		Median	11.35	
TOTAL	230	Min.	2.5	
		Max.	433	
Lognormal distribution?		Normal distribution?		
r-squared is:		r-squared is:		
Recommendations:				
Reject lognormal distribution.				
Y value is -9.9427. This lies outside the tabled values of 1.5254 and -2.3652				
Reject normal distribution.				
Y value is -61.9861. This lies outside the tabled values of 1.5254 and -2.3652				
UCL (based on t-statistic) is 31.81				

Mullan Occupational Exposure to Soil

Cadmium

Analytical Results

(mg/kg)					
5.4	0.03	3.3	4.3	2.1	2.3
7.1	0.35	3.4	42.5	1.4	8.6
7.1	4.5	4.2	1.6	0.91	14.9
8	2.2	3.1	1	1.1	4.7
2.7	1.1	2.9	0.55	2.2	8.2
4.5	3.1	0.105	1.5	3.1	8.9
8.7	3.2	0.73	1.5	0.44	2.9
2.7	5.2	2.2	1.4	1.1	3
0.66	4.2	1.9	0.78	1.4	3.3
1.9	0.76	4.8	0.57	3.5	3.4
2	1.2	6.5	1.6	2.8	2.9
1.6	1.3	9.7	3.4	2.8	4.1
6.6	1.7	10.8	1.2	1.9	4.6
0.48	3.3	8.1	1.1	1.1	0.52
0.58	3.3	2.6	1.4	2.7	2.6
0.82	5.8	6.3	4.1	3.9	10.6
1.6	8	8.1	2.8	3.1	
2.7	3.1	6.1	1.6	2.3	
1.8	4	9	0.6	2	
3.3	4.1	34.3	0.53	3.7	
3.7	4.6	73.4	2.2	9.7	
3.9	4.9	9.1	0.74	4.5	
2.1	5	1.8	0.04	2.9	
1.8	2.9	0.67	1.2	9	
2.8	2.5	4.1	0.96	2	
5.2	4	4.4	0.22	12.2	
6.7	4	12.2	0.04	0.5	
1.8	3	4.9	0.04	2.7	
1.3	2.9	3.9	1.2	1.7	
1.8	1.1	7.5	0.86	13.4	
1.9	2.8	4.6	1.7	5.2	
3	3.4	0.1	0.64	6.1	
0.13	4.5	0.1	0.46	1.5	
0.15	0.39	2.7	1.7	3.1	
1.5	1.1	3	1.4	10.5	
0.61	1.4	0.21	2.3	5.2	
7.2	2.1	4.4	4.2	39.2	
0.17	1.5	5.8	6.7	7.9	
0.47	2.3	7.4	1.1	29.3	
0.5	3.1	3.1	1.4	6.2	
1.8	5.6	3	0.045	0.97	
1.9	5.9	1.4	2.2	7.1	
0.58	2.1	1.5		16.2	

MTCASat 2.1			
Number of samples		Uncensored values	
Uncensored	230	Mean	4.22
Censored		Lognormal mean	4.73
Detection limit or PQL		Std. devn.	6.95649
Method detection limit		Median	2.75
TOTAL	230	Min.	0.03
		Max.	73.4
Lognormal distribution? Normal distribution?			
r-squared is:		r-squared is:	
Recommendations:			
Reject lognormal distribution.			
Y value is -8.5282. This lies outside the tabled values of 1.5254 and -2.3652			
Reject normal distribution.			
Y value is -58.8842. This lies outside the tabled values of 1.5254 and -2.3652			
UCL (based on t-statistic) is 4.99			

Mullan Occupational Exposure to Soil
Iron

Analytical Results

(mg/kg)					
30200	13500	22700	60300	13300	19790
38500	12900	18300	22900	13200	13410
49300	15200	21200	30200	15800	22000
26500	15500	21400	31300	16700	17320
32300	16500	23500	26100	17900	18870
13600	14800	23400	32400	17200	14660
15400	15900	19200	39200	17700	14940
16500	18700	21000	25100	17100	21770
15000	15800	23600	56500	15500	
17500	21600	19600	113000	17100	
18400	17900	17900	124000	21800	
19600	18000	18400	51100	20000	
21500	18800	18800	17500	15700	
37600	19400	21000	17100	15100	
19200	17100	41900	16400	18100	
19900	13700	14800	16700	15900	
24000	16500	16800	48400	15700	
42100	18700	17300	17000	18200	
17800	21100	19200	18000	18200	
18600	14300	19200	18700	14600	
16300	15300	25900	18400	16200	
16500	18600	11800	17900	16000	
26800	19300	14200	18600	20100	
35900	19900	18500	18700	19200	
11800	17100	15400	21100	16800	
13100	16300	31000	17900	14600	
14600	17600	62000	17600	22300	
22500	18100	113000	13000	12300	
24300	17500	147000	12000	11000	
11200	25800	53600	15700	8080	
11900	26500	36400	16800	11100	
12400	35700	50400	18100	22100	
14300	43300	60300	17500	13700	
17900	35700	18700	18500	13400	
18600	26700	31800	20100	10900	
16600	28900	88400	17900	12500	
18000	28900	117000	20400	20300	
18600	39600	36100	14000	17700	
18100	27400	70400	14900	14000	
20700	17800	35100	16800	25400	
16900	22200	73700	16800	8730	
19700	22800	77200	14900	23220	
22800	22900	99700		13390	

MTCASat 2.1					
Number of samples			Uncensored values		
Uncensored	222	Mean		24863.42	
Censored		Lognormal mean		23899.14	
Detection limit or PQL		Std. devn.		19945.56533	
Method detection limit		Median		18450	
TOTAL	222	Min.		8080	
		Max.		147000	
Lognormal distribution?			Normal distribution?		
r-squared is:			r-squared is:		
Recommendations:					
Reject lognormal distribution.					
Y value is -16.4666. This lies outside the tabled values of 1.5176 and -2.3721					
Reject normal distribution.					
Y value is -45.2725. This lies outside the tabled values of 1.5176 and -2.3721					
UCL (based on t-statistic) is 27082.92					

Mullan Occupational Exposure to Soil

Manganese

Analytical Results

(mg/kg)					
1920	718	1540	4830	209	1300
2010	429	1090	1730	137	535
4720	673	1510	2330	658	1770
1440	890	1650	2290	754	1930
2570	1070	1660	867	597	1360
888	804	1400	2300	502	657
1110	892	678	2810	618	796
1150	1020	722	912	552	2400
934	594	742	5090	650	
903	1270	773	9270	680	
1100	367	859	9960	1150	
1140	503	938	4010	941	
1300	657	1020	696	590	
3530	1020	1180	619	735	
1330	818	3210	655	769	
1240	622	419	787	993	
1680	305	790	4170	799	
3680	657	872	780	775	
454	1580	1370	700	879	
1280	834	1380	618	613	
602	749	1680	778	879	
914	1010	188	681	1470	
2290	1220	339	639	430	
3310	1640	917	572	509	
599	1300	984	597	730	
691	518	1980	679	1460	
982	732	4770	781	1330	
1040	735	8410	468	817	
882	791	17300	445	474	
525	1400	3640	626	319	
549	1520	3560	913	914	
559	1900	6500	735	1200	
909	2470	7360	641	1170	
1400	2160	1550	569	810	
1120	1350	2450	685	666	
891	1590	15600	679	1310	
896	2560	20200	585	2400	
1170	2620	2490	243	1240	
986	1560	3900	243	1120	
877	806	3680	589	2430	
818	1550	5080	702	505	
972	1670	6000	427	1920	
1270	1970	6720		414	

MTCASat 2.1			
Number of samples		Uncensored values	
Uncensored	222	Mean	1688.48
Censored		Lognormal mean	1536.48
Detection limit or PQL		Std. devn.	2411.869
Method detection limit		Median	925.5
TOTAL	222	Min.	137
		Max.	20200
Lognormal distribution? Normal distribution?			
r-squared is:		r-squared is:	
Recommendations:			
Reject lognormal distribution.			
Y value is -7.2461. This lies outside the tabled values of 1.5176 and -2.3721			
Reject normal distribution.			
Y value is -54.0855. This lies outside the tabled values of 1.5176 and -2.3721			
UCL (based on t-statistic) is 1956.87			

Mullan Occupational Exposure to Soil

Zinc

Analytical Results

(mg/kg)					
1130	703	1090	4290	127	559
1250	721	1190	9250	379	1110
1280	799	1640	1650	187	681
1550	407	1470	266	54.7	484
580	379	3690	501	51.5	1390
820	644	706	1010	258	302
1620	1110	793	1060	265	1890
620	1310	1040	1130	92.8	88.5
555	467	611	762	49.5	488
1560	375	4450	525	32.6	167
2430	423	305	836	384	1650
944	482	623	706	299	619
6280	621	836	142	361	874
701	127	1130	498	257	171
1070	136	198	545	231	449
1140	353	249	127	344	1510
987	236	282	881	369	
474	1870	446	965	672	
480	106	531	1150	1010	
603	145	604	697	995	
643	145	769	375	301	
2530	346	1200	213	318	
932	371	2680	256	180	
502	1290	515	524	447	
624	106	627	6450	510	
770	203	648	277	378	
265	1080	785	189	326	
953	444	665	144	232	
174	2840	1060	289	511	
512	743	88.7	261	459	
1750	848	189	244	164	
2610	1090	419	149	180	
237	922	439	147	252	
462	185	1170	277	486	
573	255	1050	557	787	
497	290	1850	256	484	
845	426	2340	190	337	
127	931	1040	237	236	
188	1090	805	815	481	
235	2620	944	586	1220	
351	3780	1490	266	501	
600	2840	1150	139	387	
708	895	1300		318	

MTCASat 2.1			
Number of samples		Uncensored values	
Uncensored	230	Mean	833.05
Censored		Lognormal mean	823.04
Detection limit or PQL		Std. devn.	1040.644
Method detection limit		Median	538
TOTAL	230	Min.	32.6
		Max.	9250
Lognormal distribution? Normal distribution?			
r-squared is:		r-squared is:	
Recommendations:			
Assume lognormal distribution.			
Y value is -1.5253. This lies within the tabled values of 1.5254 and -2.3652			
UCL (based on t-statistic) is 946.82			

Blackwell Island Public Recreational Exposure to Soil/Sediments

Antimony

Analytical Results
(mg/kg)

5.5
 5
 3.4
 1.4
 3.1
 2.3
 4.2
 1.2
 1.8
 1.5
 1.2
 3.1
 1.1
 1.9
 4.1
 2.3
 3.1
 3.5
 2.4
 3.3
 2.4

MTCAS _{Stat} 2.1				
Number of samples		Uncensored values		
Uncensored	21	Mean	2.75	
Censored		Lognormal mean	2.78	
Detection limit or PQL		Std. devn.	1.252844	
Method detection limit		Median	2.4	
TOTAL	21	Min.	1.1	
		Max.	5.5	
Lognormal distribution?		Normal distribution?		
r-squared is:		r-squared is:		
Recommendations:				
Assume lognormal distribution.				
W value is 0.9571. This exceeds the tabled value of 0.908				
UCL (based on t-statistic) is 3.22				

Blackwell Island Public Recreational Exposure to Soil/Sediments

Arsenic

Analytical Results
(mg/kg)

59.3
74
77
53.4
59.2
37.2
56.7
9.7
12.4
16.7
12.5
20.3
15.7
14.2
39.8
63.5
83.4
52.2
19.8
45.8
38.8

MTCAS _{Stat} 2.1				
Number of samples		Uncensored values		
Uncensored	21	Mean	41.03	
Censored		Lognormal mean	42.75	
Detection limit or PQL		Std. devn.	23.83403	
Method detection limit		Median	39.8	
TOTAL	21	Min.	9.7	
		Max.	83.4	
Lognormal distribution?		Normal distribution?		
r-squared is:		r-squared is:		
Recommendations:				
Reject lognormal distribution.				
W value is 0.8981. This is less than the tabled value of 0.908				
Assume normal distribution.				
W value is 0.9208. This exceeds the tabled value of 0.908				
UCL (based on t-statistic) is 50				

Blackwell Island Public Recreational Exposure to Soil/Sediments

Cadmium

Analytical Results
(mg/kg)

17
7.7
11.1
2.1
12.6
9.6
8.7
2.2
9.5
3.2
6.1
13.7
2.8
12.5
21.6
17.6
17.2
11.3
16.6
17.3
15.5

MTCAS _{Stat} 2.1				
Number of samples		Uncensored values		
Uncensored	21	Mean	11.23	
Censored		Lognormal mean	12.01	
Detection limit or PQL		Std. devn.	5.752594	
Method detection limit		Median	11.3	
TOTAL	21	Min.	2.1	
		Max.	21.6	
Lognormal distribution?		Normal distribution?		
r-squared is:		r-squared is:		
Recommendations:				
Reject lognormal distribution.				
W value is 0.8514. This is less than the tabled value of 0.908				
Assume normal distribution.				
W value is 0.9501. This exceeds the tabled value of 0.908				
UCL (based on t-statistic) is 13.4				

Blackwell Island Public Recreational Exposure to Soil/Sediments

Iron

Analytical Results
(mg/kg)

61100
66800
64100
58300
53300
41700
61300
19500
19900
29600
24800
29100
28600
26300
41000
51500
65600
48000
31600
41500
42200

MTCAS _{Stat} 2.1			
Number of samples		Uncensored values	
Uncensored	21	Mean	43133.33
Censored		Lognormal mean	43484.59
Detection limit or PQL		Std. devn.	15869.19
Method detection limit		Median	41700
TOTAL	21	Min.	19500
		Max.	66800
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Assume lognormal distribution.			
W value is 0.9249. This exceeds the tabled value of 0.908			
UCL (based on t-statistic) is 49106.91			

Blackwell Island Public Recreational Exposure to Soil/Sediments

Manganese

Analytical Results
(mg/kg)

2920
 3040
 5470
 3330
 3920
 2180
 2320
 859
 1210
 1300
 1260
 1780
 1160
 1380
 4380
 6300
 7480
 3720
 1380
 3850
 2840

MTCAS _{Stat} 2.1			
Number of samples		Uncensored values	
Uncensored	21	Mean	2956.14
Censored		Lognormal mean	2996.41
Detection limit or PQL		Std. devn.	1818.217
Method detection limit		Median	2840
TOTAL	21	Min.	859
		Max.	7480
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Assume lognormal distribution.			
W value is 0.9582. This exceeds the tabled value of 0.908			
UCL (based on t-statistic) is 3640.57			

Blackwell Island Public Recreational Exposure to Soil/Sediments

Zinc

Analytical Results
(mg/kg)

2460
2030
2080
441
1910
1590
1880
265
1040
577
777
1640
448
1530
2020
2020
2170
1900
2080
2050
2170

MTCAS _{Stat} 2.1		Uncensored values	
Number of samples		Mean	1575.14
Uncensored	21	Lognormal mean	1672.13
Censored		Std. devn.	683.3225
Detection limit or PQL		Median	1900
Method detection limit		Min.	265
TOTAL	21	Max.	2460
Lognormal distribution?	Normal distribution?		
r-squared is:	r-squared is:		
Recommendations:			
Reject lognormal distribution.			
W value is 0.7645. This is less than the tabled value of 0.908			
Reject normal distribution.			
W value is 0.8454. This is less than the tabled value of 0.908			
UCL (based on t-statistic) is 1832.36			

Blackwell Island Public Recreational Exposure to Surface Water

Arsenic

Analytical Results

(ug/L)

- 5.6
- 2.9
- 20.8
- 7.6
- 14.8
- 9.8
- 12.4

MTCAS ^{Stat} 2.1	
Number of samples	Uncensored values
Uncensored	Mean
Censored	Lognormal mean
Detection limit or PQL	Std. devn.
Method detection limit	Median
TOTAL	Min.
	Max.
Lognormal distribution? r-squared is:	Normal distribution? r-squared is:
Recommendations: Assume lognormal distribution. W value is 0.9756. This exceeds the tabled value of 0.803	
UCL (based on t-statistic) is 14.99	

Blackwell Island Public Recreational Exposure to Surface Water

Cadmium

Analytical Results

(ug/L)

7
 4.2
 47.9
 4.9
 42.5
 13.3
 20.3

MTCAS ^{Stat} 2.1	
Number of samples	Uncensored values
Uncensored	Mean 20.01
Censored	Lognormal mean 21.99
Detection limit or PQL	Std. devn. 18.14887
Method detection limit	Median 13.3
TOTAL	Min. 4.2
	Max. 47.9
Lognormal distribution? r-squared is:	Normal distribution? r-squared is:
Recommendations: Assume lognormal distribution. W value is 0.912. This exceeds the tabled value of 0.803	
UCL (based on t-statistic) is 33.34	

Blackwell Island Public Recreational Exposure to Surface Water

Manganese

Analytical Results
 (ug/L)
 890
 561
 6980
 942
 6300
 1340
 2530

MTCAS ^{Stat} 2.1	
Number of samples	Uncensored values
Uncensored	Mean 2791.86
Censored	Lognormal mean 2995.92
Detection limit or PQL	Std. devn. 2709.238
Method detection limit	Median 1340
TOTAL	Min. 561
	Max. 6980
Lognormal distribution? r-squared is:	Normal distribution? r-squared is:
Recommendations: Assume lognormal distribution. W value is 0.9019. This exceeds the tabled value of 0.803	
UCL (based on t-statistic) is 4781.48	

Blackwell Island Public Recreational Exposure to Surface Water

Mercury

Analytical Results

(ug/L)

0.05

0.05

0.1

0.1

0.1

0.1

0.1

all nondetects

MTCAS _{Stat} 2.1				
Number of samples		Uncensored values		
Uncensored	7	Mean		0.09
Censored		Lognormal mean		0.09
Detection limit or PQL		Std. devn.	0.024398	
Method detection limit		Median		0.1
TOTAL	7	Min.		0.05
		Max.		0.1
Lognormal distribution?		Normal distribution?		
r-squared is:		r-squared is:		
Recommendations:				
Reject lognormal distribution.				
W value is 0.6007. This is less than the tabled value of 0.803				
Reject normal distribution.				
W value is 0.588. This is less than the tabled value of 0.803				
UCL (based on t-statistic) is 0.1				

All Geographical Areas Vegetable Data

Arsenic

Analytical Results
(mg/kg)

0.048 0.003
0.012 0.002
0.026 0.016
0.003 0.017
0.005 0.011
0.009 0.016
0.026 0.008
0.008 0.053
0.020 0.003
0.018 0.006
0.005 0.011
0.007 0.074
0.003 0.113
0.015 0.004
0.004 0.010
0.029 0.019
0.021 0.034
0.012

MTCAS ^{Stat} 2.1	
Number of samples	Uncensored values
Uncensored	Mean
Censored	Lognormal mean
Detection limit or PQL	Std. devn.
Method detection limit	Median
TOTAL	Min.
	Max.
Lognormal distribution?	Normal distribution?
r-squared is:	r-squared is:
Recommendations:	
Assume lognormal distribution.	
W value is 0.9728. This exceeds the tabled value of 0.934	
UCL (based on t-statistic) is 0.03	

All Geographical Areas Vegetable Data

Cadmium

Analytical Results
(mg/kg)

0.603 0.023
0.089 0.032
0.187 0.225
0.021 0.325
0.095 0.208
0.043 0.379
0.103 0.166
0.053 1.849
0.465 0.086
0.209 0.222
0.232 0.113
0.086 0.039
0.118 0.102
0.762 0.048
0.153 0.192
0.068 0.072
0.128 0.165
0.123

MTCAS _{Stat} 2.1			
Number of samples		Uncensored values	
Uncensored	35	Mean	0.22
Censored		Lognormal mean	0.21
Detection limit or PQL		Std. devn.	0.326296
Method detection limit		Median	0.12267
TOTAL	35	Min.	0.02128
		Max.	1.84898
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Assume lognormal distribution.			
W value is 0.9799. This exceeds the tabled value of 0.934			
UCL (based on t-statistic) is 0.32			

All Geographical Areas Bullhead Fish Data

Cadmium

Analytical Results (mg/kg)				
0.05	0.005	0.005	0.03	0.014
0.005	0.015	0.005	0.005	0.005
0.005	0.005	0.005	0.005	0.005
0.005	0.015	0.005	0.02	0.005
0.005	0.013	0.005	0.005	0.005
0.005	0.005	0.005	0.005	0.005
0.005	0.014	0.005	0.005	0.005
0.005	0.012	0.005	0.005	0.005
0.005	0.069	0.005	0.005	0.005
0.005	0.011	0.005	0.005	0.005
0.005	0.017	0.005	0.005	0.005
0.005	0.01	0.005	0.025	0.005
0.005	0.005	0.005	0.005	0.005
0.005	0.005	0.005	0.005	0.005
0.015	0.005	0.005	0.005	0.005
0.012	0.005	0.005	0.005	0.005
0.005	0.005	0.005	0.005	0.005
0.005	0.005	0.005	0.01	0.005
0.005	0.005	0.005	0.005	0.005
0.005	0.005	0.005	0.005	0.005
0.005	0.005	0.005	0.005	0.005
0.005	0.005	0.005	0.005	0.005
0.005	0.005	0.005	0.012	0.005
0.005	0.005	0.005	0.005	0.005
0.005	0.005	0.005	0.005	0.005
0.005	0.005	0.005	0.005	0.005
0.005	0.005	0.005	0.005	0.005
0.005	0.005	0.005	0.005	0.005
0.005	0.005	0.005	0.005	0.005
0.005	0.005	0.005	0.005	0.005
0.005	0.005	0.005	0.005	0.005

MTCAS _{Stat} 2.1				
Number of samples	Uncensored values		Uncensored values	
Uncensored	126	Mean	0.01	
Censored		Lognormal mean	0.01	
Detection limit or PQL		Std. devn.	0.007837	
Method detection limit		Median	0.005	
TOTAL	126	Min.	0.005	
		Max.	0.069	
Lognormal distribution?		Normal distribution?		
r-squared is:		r-squared is:		
Recommendations:				
Reject lognormal distribution.				
Y value is -43.9846. This lies outside the tabled values of 1.3654 and -2.5				
Reject normal distribution.				
Y value is -57.7151. This lies outside the tabled values of 1.3654 and -2.5				
UCL (based on t-statistic) is 0.01				

All Geographical Areas Bullhead Fish Data

Mercury

Analytical Results (mg/kg)			
0.025	0.05	0.025	0.025
0.05	0.05	0.03	0.025
0.025	0.05	0.05	0.025
0.025	0.08	0.025	0.025
0.025	0.06	0.05	0.025
0.025	0.025	0.05	0.025
0.025	0.09	0.06	0.025
0.07	0.025	0.025	0.025
0.05	0.11	0.025	0.025
0.025	0.09	0.025	0.025
0.05	0.21	0.03	0.08
0.025	0.025	0.025	0.025
0.025	0.05	0.05	0.025
0.025	0.03	0.025	0.025
0.09	0.03	0.025	0.025
0.06	0.08	0.025	0.025
0.06	0.05	0.025	0.07
0.025	0.025	0.05	0.12
0.025	0.05	0.06	0.05
0.025	0.05	0.03	0.025
0.025	0.03	0.05	0.025
0.025	0.025	0.07	0.06
0.06	0.07	0.1	0.11
0.05	0.025	0.025	0.025
0.025	0.06	0.07	0.06
0.06	0.05	0.025	0.025
0.05	0.05	0.07	0.09
0.06	0.05	0.025	0.025
0.05	0.06	0.025	0.09
0.06	0.05	0.025	0.18

MTCAS _{Stat} 2.1			
Number of samples	Uncensored	125	Uncensored values
	Censored		Mean
			0.05
			Lognormal mean
			0.05
			Std. devn.
			0.030096
			Median
			0.03
			Min.
			0.025
			Max.
			0.21
Lognormal distribution?	Normal distribution?		
r-squared is:	r-squared is:		
Recommendations:			
Reject lognormal distribution.			
Y value is -5.6295. This lies outside the tabled values of 1.363 and -2.502			
Reject normal distribution.			
Y value is -17.0153. This lies outside the tabled values of 1.363 and -2.502			
UCL (based on t-statistic) is 0.05			

All Geographical Areas Northern Pike Fish Data

Cadmium

Analytical Results
(mg/kg)

0.005 0.005 0.015
 0.005 0.005 0.014
 0.005 0.005 0.005
 0.005 0.005
 0.011 0.005
 0.005 0.005
 0.005 0.005
 0.005 0.005
 0.005 0.005
 0.005 0.005
 0.005 0.005
 0.005 0.005
 0.005 0.005
 0.005 0.005
 0.005 0.005
 0.005 0.02
 0.005 0.005
 0.005 0.014
 0.005 0.005
 0.005 0.005
 0.005 0.005
 0.005 0.005
 0.005 0.005
 0.005 0.005
 0.014 0.005
 0.005 0.005
 0.005 0.005
 0.005 0.005
 0.005 0.005
 0.005 0.005
 0.005 0.005
 0.005 0.005

MTCAS _{Stat} 2.1				
Number of samples			Uncensored values	
Uncensored	63		Mean	0.01
Censored			Lognormal mean	0.01
Detection limit or PQL			Std. devn.	0.00298
Method detection limit			Median	0.005
TOTAL	63		Min.	0.005
			Max.	0.02
Lognormal distribution?		Normal distribution?		
r-squared is:		r-squared is:		
Recommendations:				
Reject lognormal distribution.				
Y value is -36.0566. This lies outside the tabled values of 1.1333 and -2.6849				
Reject normal distribution.				
Y value is -36.8385. This lies outside the tabled values of 1.1333 and -2.6849				
UCL (based on t-statistic) is 0.01				

All Geographical Areas Northern Pike Fish Data

Mercury

Analytical Results
(mg/kg)

0.11	0.07	0.025
0.03	0.03	0.48
0.08	0.16	0.4
0.1	0.11	
0.11	0.025	
0.12	0.09	
0.1	0.025	
0.09	0.12	
0.12	0.025	
0.12	0.19	
0.19	0.08	
0.025	0.3	
0.09	0.025	
0.1	0.05	
0.12	0.025	
0.15	0.025	
0.15	0.1	
0.09	0.08	
0.13	0.11	
0.2	0.06	
0.22	0.17	
0.025	0.05	
0.025	0.1	
0.22	0.11	
0.11	0.07	
0.24	0.025	
0.15	0.1	
0.1	0.06	
0.09	0.18	
0.13	0.19	

MTCASat 2.1				
Number of samples			Uncensored values	
Uncensored	63		Mean	0.11
Censored			Lognormal mean	0.12
Detection limit or PQL			Std. devn.	0.085625
Method detection limit			Median	0.1
TOTAL	63		Min.	0.025
			Max.	0.48
Lognormal distribution?		Normal distribution?		
r-squared is:		r-squared is:		
Recommendations:				
Assume lognormal distribution.				
Y value is -1.6301. This lies within the tabled values of 1.1333 and -2.6849				
UCL (based on t-statistic) is 0.13				

All Geographical Areas Perch Fish Data

Cadmium

Analytical Results (mg/kg)			
0.06	0.058	0.011	0.005
0.05	0.1	0.022	0.064
0.034	0.061	0.014	0.019
0.016	0.019	0.005	0.005
0.133	0.005	0.013	0.005
0.033	0.037	0.016	0.021
0.012	0.097	0.09	0.005
0.028	0.014	0.115	0.005
0.011	0.005	0.099	0.005
0.041	0.005	0.038	0.013
0.02	0.005	0.035	0.015
0.016	0.049	0.039	0.01
0.015	0.015	0.027	0.04
0.049	0.005	0.01	0.005
0.014	0.078	0.015	0.012
0.035	0.081	0.011	0.005
0.021	0.056	0.012	0.005
0.055	0.045	0.054	0.005
0.038	0.061	0.052	0.005
0.064	0.034	0.052	0.005
0.047	0.071	0.038	0.036
0.075	0.082	0.01	0.005
0.169	0.061	0.005	0.005
0.011	0.05	0.005	0.02
0.065	0.109	0.119	0.022
0.015	0.045	0.005	0.005
0.005	0.092	0.042	0.005
0.01	0.039	0.018	0.005
0.005	0.016	0.012	0.005
0.039	0.011	0.019	0.005

MTCAS _{Stat} 2.1			
Number of samples	Uncensored	123	Uncensored values
	Censored		Mean
			0.03
			Lognormal mean
			0.03
			Std. devn.
			0.032234
			Median
			0.019
			Min.
			0.005
			Max.
			0.169
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Assume lognormal distribution.			
Y value is 1.1584. This lies within the tabled values of 1.3582 and -2.506			
UCL (based on t-statistic) is 0.04			

All Geographical Areas Perch Fish Data

Mercury

Analytical Results (mg/kg)			
0.05	0.11	0.025	0.025
0.04	0.2	0.025	0.025
0.05	0.09	0.08	0.025
0.14	0.06	0.06	0.025
0.06	0.2	0.09	0.025
0.025	0.21	0.08	0.05
0.15	0.07	0.025	0.07
0.11	0.07	0.05	0.06
0.07	0.025	0.025	0.025
0.13	0.2	0.2	0.05
0.08	0.21	0.025	0.05
0.08	0.05	0.1	0.14
0.12	0.045	0.17	0.08
0.05	0.025	0.025	0.05
0.15	0.025	0.09	0.12
0.17	0.03	0.05	0.16
0.06	0.025	0.025	0.05
0.12	0.045	0.17	0.025
0.1	0.17	0.11	0.06
0.13	0.03	0.23	0.15
0.08	0.025	0.2	0.025
0.15	0.12	0.025	0.05
0.11	0.08	0.025	0.16
0.1	0.08	0.025	0.17
0.05	0.025	0.025	0.025
0.07	0.025	0.025	0.07
0.055	0.025	0.15	0.08
0.07	0.16	0.07	0.09
0.12	0.05	0.025	
0.025	0.09	0.035	

MTCAS _{Stat} 2.1			
Number of samples		Uncensored values	
Uncensored	118	Mean	0.08
Censored		Lognormal mean	0.08
Detection limit or PQL		Std. devn.	0.055646
Method detection limit		Median	0.065
TOTAL	118	Min.	0.025
		Max.	0.23
Lognormal distribution?		Normal distribution?	
r-squared is:		r-squared is:	
Recommendations:			
Assume lognormal distribution.			
Y value is 0.9808. This lies within the tabled values of 1.3462 and -2.516			
UCL (based on t-statistic) is 0.09			