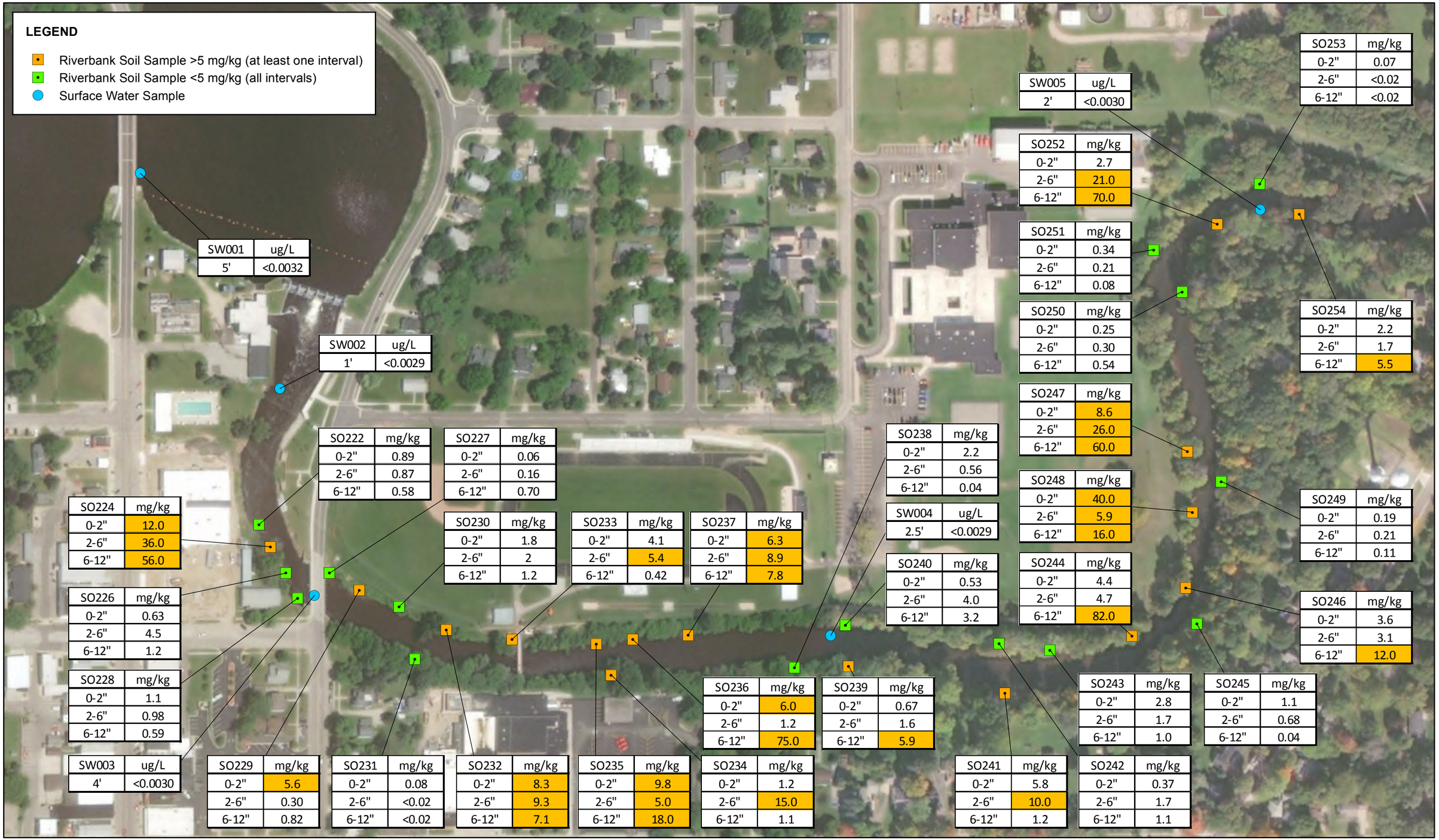

0 100 200 400
Feet

Coordinate System: NAD 1983 State Plane Michigan South FIPS 2113 Feet Intl

FIGURE 1
Riverbank Sample Locations - November 2018
Velsicol Chemical Corporation Superfund Site
St. Louis, Michigan

JACOBS

Velsicol Chemical Company - Operable Unit 3
Surface Water Samples
November 2018

			Parameter	2,4'-DDD	2,4'-DDE	2,4'-DDT	4,4'-DDD	4,4'-DDE	4,4'-DDT	DDT Totoal
			Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Location	Sample Name	Sample ID	Date							
001	VCS-OU3-SW001/5-1118	19CE02-11	28 Nov 2018	0.0075 U	0.0097 U	0.0056 U	0.0055 U	0.01 U	0.0098 U	0.01 U
002	VCS-OU3-SW002/1-1118	19CE02-12	28 Nov 2018	0.0069 U	0.0089 U	0.0051 U	0.005 U	0.0096 U	0.009 U	0.0096 U
003	VCS-OU3-SW003/4-1118	19CE02-15	28 Nov 2018	0.0071 U	0.0092 U	0.0053 U	0.0052 U	0.0099 U	0.0093 U	0.0099 U
004	VCS-OU3-SW004/2.5-1118	19CE02-14	28 Nov 2018	0.0069 U	0.0089 U	0.0051 U	0.005 U	0.0096 U	0.009 U	0.0096 U
005	VCS-OU3-SW005/4-1118	19CE02-13	28 Nov 2018	0.0072 U	0.0093 U	0.0054 U	0.0053 U	0.01 U	0.0094 U	0.01 U

Velsicol Chemical Company - Operable Unit 3
Riverbank Soil/Sediment Samples
November 2018

			Parameter Units	Percent Solids percent	Total Organic Carbon mg/kg	2,4'-DDD ug/kg	2,4'-DDE ug/kg	2,4'-DDT ug/kg	4,4'-DDD ug/kg	4,4'-DDE ug/kg	4,4'-DDT ug/kg	DDT Totoal ug/kg
Location	Sample Name	Sample ID	Date									
222	VCS-OU3-SO222/0-2/1118	19CE01-01	28 Nov 2018	76.1	24400	229	62 U	54.6 J	187	130	291	890
222	VCS-OU3-SO222/2-6-1118	19CE01-02	28 Nov 2018	82.5		48.2 J	58 U	74.7	69.9	147	535	870
222	VCS-OU3-SO222/6-12-1118	19CE01-03	28 Nov 2018	73.5		65 U	65 U	35 J	45.7 J	180	320	580
224	VCS-OU3-SO224/0-2-1118	19CE01-07	28 Nov 2018	69.3		680 U	680 U	1940	398 J	2650	7140	12000
224	VCS-OU3-SO224/2-6-1118	19CE01-08	28 Nov 2018	69.3		616 J	1300 U	6440	784 J	6050	21800	36000
224	VCS-OU3-SO224/6-12-1118	19CE01-09	28 Nov 2018	71.1	43700	3200 U	3200 U	11500	1340 J	8020	35600	56000
226	VCS-OU3-SO226/0-2-1118	19CE01-14	26 Nov 2018	84.6		116	39.5 J	74.3	225	499	632	1600
226	VCS-OU3-SO226/2-6-1118	19CE01-15	26 Nov 2018	81.5		281	121	383	422	669	2650	4500
226	VCS-OU3-SO226/6-12-1118	19CE01-16	26 Nov 2018	81.8		183	68.5 J	48.9 J	203	340	342	1200
227	VCS-OU3-SO227/0-2-1118	19CE01-17	26 Nov 2018	89.1		53 U	53 U	51 U	17.8 J	69 U	40.1 J	58 J
227	VCS-OU3-SO227/2-6-1118	19CE01-18	26 Nov 2018	87.5		18.1 J	54 U	24.8 J	22.6 J	70 U	99.4	160
227	VCS-OU3-SO227/6-12-1118	19CE01-19	26 Nov 2018	73.9		147	64 U	62 U	174	32.1 J	345	700
228	VCS-OU3-SO228/0-2-1118	19CE01-20	26 Nov 2018	78.3	20500	34.6 J	19.8 J	64.2	66.7	541	390	1100
228	VCS-OU3-SO228/2-6-1118	19CE01-21	26 Nov 2018	85.9		44.2 J	21 J	90.8	62.9	454	310	980
228	VCS-OU3-SO228/6-12-1118	19CE01-23	26 Nov 2018	87.1		27.4 J	55 U	43.4 J	43.4 J	128	345	590
229	VCS-OU3-SO229/0-2-1118	19CE01-24	26 Nov 2018	63.7		380 U	380 U	125 J	297 J	407 J	4800	5600
229	VCS-OU3-SO229/2-6-1118	19CE01-25	26 Nov 2018	75.5		73.4	63 U	28.8 J	65.5	44.5 J	89.1	300
229	VCS-OU3-SO229/6-12-1118	19CE01-26	26 Nov 2018	92		64.7	25.1 J	56.4	115	251	311	820
230	VCS-OU3-SO230/0-2-11181	19CE01-27	26 Nov 2018	81.2		103	24.6 J	78.6	226	580	776	1800
230	VCS-OU3-SO230/2-6-1118	19CE01-28	26 Nov 2018	81.3		85.2	34.1 J	124	202	833	770	2000
230	VCS-OU3-SO230/6-12-1118	19CE01-29	26 Nov 2018	86.1		249	92.1 J	62.2	193	419	223	1200
231	VCS-OU3-SO231/0-2-1118	19CE01-30	26 Nov 2018	90.1		52 U	52 U	50 U	52 U	52 J	32.5 J	85
231	VCS-OU3-SO231/2-6-1118	19CE01-31	26 Nov 2018	92.6	2330	52 U	52 U	49 U	52 U	67 U	58 U	67 U
231	VCS-OU3-SO231/6-12-1118	19CE01-32	26 Nov 2018	83.7		57 U	57 U	55 U	57 U	74 U	64 U	74 U
232	VCS-OU3-SO232/0-2-1118	19CE01-34	26 Nov 2018	77.9		706	128 J	770	1210	1780	3710	8300
232	VCS-OU3-SO232/2-6-1118	19CE01-36	26 Nov 2018	78.5		300	100 J	1380	750	1340	5410	9300
232	VCS-OU3-SO232/6-12-1118	19CE01-35	26 Nov 2018	83.6		320	83 J	830	593	1060	4230	7100
233	VCS-OU3-SO233/0-2-1118	19CE01-37	27 Nov 2018	81.3		290 U	290 U	134 J	255 J	534	3140 J	4100
233	VCS-OU3-SO233/2-6-1118	19CE01-38	27 Nov 2018	79.4		112 J	300 U	275 J	250 J	1100	3650	5400
233	VCS-OU3-SO233/6-12-1118	19CE01-39	27 Nov 2018	77.1		62 U	62 U	25.7 J	36 J	208	147	420
234	VCS-OU3-SO234/0-2-1118	19CE01-40	27 Nov 2018	76		38.3 J	61 U	61.3	128	503	434	1200
234	VCS-OU3-SO234/2-6-1118	19CE01-41	27 Nov 2018	75.7		630 U	630 U	3460	498 J	367 J	10700	15000
234	VCS-OU3-SO234/6-12-1118	19CE01-42	27 Nov 2018	80.7	38100	53.9 J	59 U	75.9	115	41.6 J	835	1100
235	VCS-OU3-SO235/0-2-1118	19CE01-43	27 Nov 2018	77.7		393	114 J	571 J	1310	1990	5360 J	9700
235	VCS-OU3-SO235/2-6-1118	19CE01-45	27 Nov 2018	86.4		148 J	270 U	1100	331	662	2730	5000
235	VCS-OU3-SO235/6-12-1118	19CE01-46	27 Nov 2018	78.4		444 J	590 U	6700	838	1380	9120	18000
236	VCS-OU3-SO236/0-2-1118	19CE01-47	27 Nov 2018	78.6		251	85.4 J	322	849	1930	2590	6000
236	VCS-OU3-SO236/2-6-1118	19CE01-48	27 Nov 2018	97.1		185	40.6 J	118	215	262	349	1200
236	VCS-OU3-SO236/6-12-1118	19CE01-49	27 Nov 2018	78		2400 J	3000 U	10900	3420	3900 U	58000	75000
237	VCS-OU3-SO237/0-2-1118	19CE01-50	27 Nov 2018	75.5		258 J	310 U	413	723	1340	3600	6300
237	VCS-OU3-SO237/2-6-1118	19CE01-51	27 Nov 2018	76.1		352	117 J	742	768	1980	4940	8900
237	VCS-OU3-SO237/6-12-1118	19CE01-52	27 Nov 2018	80		250 J	87.3 J	499	711	1520	4720	7800
238	VCS-OU3-SO238/0-2-1118	19CE01-53	27 Nov 2018	79.2	7930	425 J	107 J	89.6 J	356 J	619 J	575 J	2200 J
238	VCS-OU3-SO238/2-6-1118	19CE01-54	27 Nov 2018	77.5		143 J	43.3 J	59 U	94.2 J	199 J	81.4 J	560 J
238	VCS-OU3-SO238/6-12-1118	19CE01-56	27 Nov 2018	74.1		61 U	61 U	58 U	61 U	43 J	68 U	43 J

Velsicol Chemical Company - Operable Unit 3
Riverbank Soil/Sediment Samples
November 2018

			Parameter Units	Percent Solids percent	Total Organic Carbon mg/kg	2,4'-DDD ug/kg	2,4'-DDE ug/kg	2,4'-DDT ug/kg	4,4'-DDD ug/kg	4,4'-DDE ug/kg	4,4'-DDT ug/kg	DDT Totoal ug/kg
Location	Sample Name	Sample ID	Date									
239	VCS-OU3-SO239/0-2-1118	19CE01-57	27 Nov 2018	65.9		32 J	70 U	26.2 J	55.2 J	416 J	142 J	670 J
239	VCS-OU3-SO239/2-6-1118	19CE01-58	27 Nov 2018	66.8		113 J	43.5 J	46.4 J	157 J	638 J	626 J	1600 J
239	VCS-OU3-SO239/6-12-1118	19CE01-59	27 Nov 2018	54.3		1330 J	406 J	80.4 J	1030 J	1430 J	1620 J	5900 J
240	VCS-OU3-SO240/0-2-1118	19CE01-60	27 Nov 2018	74		51.9 J	62 U	23.3 J	80.4 J	210 J	166 J	530 J
240	VCS-OU3-SO240/2-6-1118	19CE01-61	27 Nov 2018	83.5		228	57.1 J	266	328	457	2660	4000
240	VCS-OU3-SO240/6-12-1118	19CE01-62	27 Nov 2018	81.8		448	85.7 J	210	509	305	1690	3200
241	VCS-OU3-SO241/0-2-1118	19CE01-63	27 Nov 2018	63		1740 J	461 J	117 J	1050 J	1510 J	950 J	5800 J
241	VCS-OU3-SO241/2-6-1118	19CE01-64	27 Nov 2018	67.5		2960	541	229	1850	1650	2810	10000
241	VCS-OU3-SO241/6-12-1118	19CE01-65	27 Nov 2018	69.5		374 J	105 J	28.4 J	179 J	388 J	130 J	1200 J
242	VCS-OU3-SO242/0-2-1118	19CE01-67	27 Nov 2018	75.4		31.3 J	63 U	60 U	52.2 J	203 J	80.9 J	370 J
242	VCS-OU3-SO242/2-6-1118	19CE01-68	27 Nov 2018	74.3		34.6 J	64 U	349 J	117 J	264 J	889 J	1700 J
242	VCS-OU3-SO242/6-12-1118	19CE01-69	27 Nov 2018	80.1		40.9 J	58 U	24.1 J	64.9 J	52.9 J	904 J	1100 J
243	VCS-OU3-SO243/0-2-1118	19CE01-70	27 Nov 2018	66.1		108 J	140 U	90.2 J	301	313	2020	2800
243	VCS-OU3-SO243/2-6-1118	19CE01-71	27 Nov 2018	74		67.5	65 U	86.4	203	243	1080	1700
243	VCS-OU3-SO243/6-12-1118	19CE01-72	27 Nov 2018	69.2		94.3 J	22.2 J	25 J	144 J	122 J	607 J	1000 J
244	VCS-OU3-SO244/0-2-1118	19CE01-73	27 Nov 2018	76.3		179 J	310 U	332	460	1110	2350	4400
244	VCS-OU3-SO244/2-6-1118	19CE01-74	27 Nov 2018	82.2		632	109 J	255 J	523	365 J	2770	4700
244	VCS-OU3-SO244/6-12-1118	19CE01-75	27 Nov 2018	77.2	11800	1410 J	3100 U	11100	2810 J	4000 U	66600	82000
245	VCS-OU3-SO245/0-2-1118	19CE01-76	27 Nov 2018	78.8		30.3 J	61 U	98.6	73.3	157	726	1100
245	VCS-OU3-SO245/2-6-1118	19CE01-78	27 Nov 2018	81.6		58.6 J	22 J	31.7 J	95.2	195	278	680
245	VCS-OU3-SO245/6-12-1118	19CE01-79	27 Nov 2018	86		20.2 J	54 U	52 U	22.4 J	70 U	61 U	43 J
246	VCS-OU3-SO246/0-2-1118	19CE01-80	27 Nov 2018	69.4		167	130 U	357	374	697	2040 J	3600 J
246	VCS-OU3-SO246/2-6-1118	19CE01-81	27 Nov 2018	74.9		534	98.4	98.4	655	692	1020	3100
246	VCS-OU3-SO246/6-12-1118	19CE01-82	27 Nov 2018	75		1310	1300 U	682 J	1310	1600 U	8440	12000
247	VCS-OU3-SO247/0-2-1118	19CE01-83	27 Nov 2018	86.7		437	150 J	714	414	3250	3680	8600
247	VCS-OU3-SO247/2-6-1118	19CE01-84	27 Nov 2018	94.9		879 J	1000 U	5190	1050	963 J	17700	26000
247	VCS-OU3-SO247/6-12-1118	19CE01-85	27 Nov 2018	82.6		2240 J	2800 U	6240	2710 J	3600 U	48700	60000
248	VCS-OU3-SO248/0-2-1118	19CE01-86	27 Nov 2018	80	27700 J	2900 U	2900 U	5270 J	1590 J	1100 J	32000 J	40000
248	VCS-OU3-SO248/2-6-1118	19CE01-87	27 Nov 2018	89.8		600 J	270 U	611	522	511 J	3610 J	5900 J
248	VCS-OU3-SO248/6-12-1118	19CE01-89	27 Nov 2018	80		678	580 U	1160	895	266 J	12600	16000
249	VCS-OU3-SO249/0-2-1118	19CE01-90	27 Nov 2018	83.8		56 U	56 U	53 U	25.5 J	62.5 J	104	190
249	VCS-OU3-SO249/2-6-1118	19CE01-91	27 Nov 2018	83.9		56 U	56 U	53 U	25.5 J	109	71.7	210
249	VCS-OU3-SO249/6-12-1118	19CE01-92	27 Nov 2018	85.8		54 U	54 U	52 U	54 U	67.8 J	38.4 J	110
250	VCS-OU3-SO250/0-2-1118	19CE01-93	27 Nov 2018	75		64 U	64 U	61 U	39.8 J	101	106	250
250	VCS-OU3-SO250/2-6-1118	19CE01-94	27 Nov 2018	79.2		27.2 J	59 U	57 U	51.9 J	128	93.9	300
250	VCS-OU3-SO250/6-12-1118	19CE01-95	27 Nov 2018	81.7		83.2	57 U	55 U	119	107	235	540
251	VCS-OU3-SO251/0-2-1118	19CE01-96	27 Nov 2018	77.6		61 U	61 U	22.8 J	35.5 J	122	160	340
251	VCS-OU3-SO251/2-6-1118	19CE01-97	27 Nov 2018	77.6	21600	60 U	60 U	57 U	20 J	115	72.4	210
251	VCS-OU3-SO251/6-12-1118	19CE01-98	27 Nov 2018	80.5		58 U	58 U	56 U	58 U	50.7 J	36.2 J	87
252	VCS-OU3-SO252/0-2-1118	19CE02-01	27 Nov 2018	74.6		165	120 U	414	341	352	1400	2700
252	VCS-OU3-SO252/2-6-1118	19CE02-02	27 Nov 2018	75.9		659 J	1200 U	3700	1370	1270 J	13600	21000
252	VCS-OU3-SO252/6-12-1118	19CE02-03	27 Nov 2018	73.9		1720 J	3200 U	9110	3960	2640 J	52500	70000
253	VCS-OU3-SO253/0-2-1118	19CE02-04	27 Nov 2018	85.3		55 U	55 U	53 U	55 U	71 U	75.3	75
253	VCS-OU3-SO253/2-6-1118	19CE02-05	27 Nov 2018	87.4		54 U	54 U	52 U	54 U	70 U	61 U	70 U
253	VCS-OU3-SO253/6-12-1118	19CE02-06	27 Nov 2018	90.1		52 U	52 U	50 U	52 U	67 U	58 U	67 U

Velsicol Chemical Company - Operable Unit 3
Riverbank Soil/Sediment Samples
November 2018

			Parameter	Percent Solids	Total Organic Carbon	2,4'-DDD	2,4'-DDE	2,4'-DDT	4,4'-DDD	4,4'-DDE	4,4'-DDT	DDT Totoal
			Units	percent	mg/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Location	Sample Name	Sample ID	Date									
254	VCS-OU3-SO254/0-2-1118	19CE02-07	27 Nov 2018	67.5	25100	114 J	70 U	117 J	275	666	1050	2200
254	VCS-OU3-SO254/2-6-1118	19CE02-08	27 Nov 2018	79.2		58.7 J	120 U	68.5 J	103 J	343	1150 J	1700
254	VCS-OU3-SO254/6-12-1118	19CE02-09	27 Nov 2018	78.4		600 U	600 U	853 J	600 U	780 U	4640	5500 J