Table 1
1H2019 Sediment Validated Results
American Cyanamid Superfund Site
Bridgewater Township, New Jersey

			Sample ID	CB-02				CB-03				CB-04				CB-05				CB-06				CB-08			
			Sample Date	7/2/2019				7/2/2019				7/3/2019				7/3/2019				7/3/2019				7/3/2019			
			N=Normal, FD=Field Duplicate	N				N				N				N				N				N			
Parameter	Units	EPCs[1]	NJDEP SELs[2]	Result	Qual	MDL	RL	Result	Qual	MDL	RL	Result	Qual	MDL	RL	Result	Qual	MDL	RL	Result	Qual	MDL	RL	Result	Qual	MDL	RL
Volatile Organic Compounds																											
Naphthalene	ug/kg	NS	NS	< 3.8	U	3.4	3.8	24000000		81000	92000	29		3.3	3.7	480		1.9	2.2	2600		110	120	< 1.6	U	1.4	1.6
Total Metals																											
Aluminum	mg/kg	24000	NS	13800	J	15.1	44.2	4460		11.2	32.6	14100	J	13.4	39.2	10400		9.3	27	9590		6.9	20.1	11200		6.4	18.7
Arsenic	mg/kg	90	33	**37.6**	J	0.71	2.2	**132**	J	0.52	1.6	9.1	J	0.63	2	2.8	J	0.43	1.4	1.6	J	0.32	1	3.2	J	0.3	0.93
Barium	mg/kg	1100	NS	856	J	1.5	4.4	371		1.1	3.3	236	J	1.3	3.9	115		0.9	2.7	87.7		0.67	2	68.8		0.62	1.9
Cadmium	mg/kg	1.6	10	< 2.2	UJ	0.74	2.2	3.1		0.55	1.6	0.68	J	0.66	2	< 1.4	U	0.45	1.4	< 1	U	0.34	1	< 0.93	U	0.31	0.93
Chromium	mg/kg	470	110	**917**	J	1.3	4.4	**15800**	J	4.9	16.3	81.2	J	1.2	3.9	46.5	J	0.81	2.7	29.4	J	0.6	2	29.6	J	0.56	1.9
Cobalt	mg/kg	67	NS	20.9	J	1.3	4.4	71	J	0.98	3.3	10.7	J	1.2	3.9	11.5	J	0.81	2.7	13.1	J	0.6	2	13.8	J	0.56	1.9
Copper	mg/kg	1400	110	**1070**	J	1.3	4.4	**4460**		4.7	16.3	**113**	J	1.1	3.9	41		0.77	2.7	11		0.57	2	15.7		0.53	1.9
Iron	mg/kg	600000	NS	173000	J	46.4	133	473000		171	489	28500	J	41.1	118	21800		28.4	81.1	20400		21.1	60.2	28400		19.6	56
Lead	mg/kg	270	250	148	J	0.42	1.3	**1220**		0.31	0.98	87.8	J	0.37	1.2	36.8		0.26	0.81	19.3		0.19	0.6	22.1		0.18	0.56
Manganese	mg/kg	2500	1100	**1910**	J	2.7	8.8	**1750**		2	6.5	396	J	2.4	7.8	200		1.6	5.4	240		1.2	4	379		1.1	3.7
Mercury	mg/kg	2.5	2	1.9	J	0.026	0.044	**31.9**		1.1	1.8	1.5	J	0.025	0.043	0.4		0.015	0.025	0.048		0.013	0.023	0.021		0.012	0.02
Vanadium	mg/kg	210	NS	85.7	J	1.3	4.4	126		0.93	3.3	44.4	J	1.1	3.9	22.9		0.77	2.7	14.8		0.57	2	25.3		0.53	1.9
Zinc	mg/kg	830	820	394	J	8.6	17.7	**1110**	J	6.4	13	223	J	7.6	15.7	236	J	5.3	10.8	158	J	3.9	8	128	J	3.6	7.5
General Chemistry																											
Methyl Mercury	ug/kg	26	NS	16	J	0.2	0.27	8.5		0.71	0.98	16	J	0.18	0.25	NA				NA				NA			
pH	pH units	NS	NS	7.1	J			6.4	J			7.1	J			6.7	J			7.2	J			6.9	J		
Total Organic Carbon	mg/kg	NS	NS	28500	J	185	270	50800		135	197	48400	J	176	257	< 165	U	113	165	< 134	U	92	134	< 126	U	86.2	126
Grain Size																											
Gravel	%	NS	NS	12.6				1.3				1.8				3.7				31.2				59.5			
Sand	%	NS	NS	79.7				23.9				30.6				85.1				56.8				39			
Silt, Clay, & Colloids	%	NS	NS	7.7				74.8				67.6				11.2				12				1.5			

Notes:

1. EPCs: Exposure Point Concentrations from the Baseline Ecological Risk Assessment.
2. NJDEP SELs: New Jersey Department of Environmental Protection Ecological Screening Criteria for Sediment, Severe Effects Level for Fresh Water. As agreed upon with USEPA, sediment results are compared to the NJDEP SELs because a Baseline Ecological Risk Assessment (BERA) has been conducted and USEPA has issued a ROD for the Site.
3. Exceedances of the EPCs are shown in underline and exceedances of the NJDEP SELs are bold.

Abbreviations:
MDL = method detection limit
mg/kg = milligrams per kilogram
NA = not analyzed
NS = no standard available
Qual = qualifier
RL = reporting limit
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Quals:
J = estimated result
U = not detected above RL
UJ = estimated result; not detected above RL

Table 1
1H2019 Sediment Validated Results
American Cyanamid Superfund Site
Bridgewater Township, New Jersey

			Sample ID	CB-09				CB-10				RR-01				MB-01				RR-03				RR-03			
			Sample Date	7/3/2019				7/3/2019				7/1/2019				7/1/2019				7/2/2019				7/2/2019			
			N=Normal, FD=Field Duplicate	N				N				N				N				N				FD			
Parameter	Units	EPCs[1]	NJDEP SELs[2]	Result	Qual	MDL	RL	Result	Qual	MDL	RL	Result	Qual	MDL	RL	Result	Qual	MDL	RL	Result	Qual	MDL	RL	Result	Qual	MDL	RL
Volatile Organic Compounds																											
Naphthalene	ug/kg	NS	NS	< 1.6	U	1.4	1.6	< 1.7	U	1.5	1.7	< 1.8	U	1.6	1.8	< 1.8	U	1.6	1.8	< 1.8	U	1.6	1.8	< 1.9	U	1.7	1.9
Total Metals																											
Aluminum	mg/kg	24000	NS	10300		5.7	16.8	13000		6.7	19.6	8440		7.2	21.1	10100		6.5	18.9	5200		7.3	21.4	6910		7.2	20.9
Arsenic	mg/kg	90	33	4.4	J	0.27	0.84	2.2	J	0.31	0.98	17.8	J	0.34	1.1	**49.8**	J	0.3	0.95	3.1	J	0.34	1.1	4.6	J	0.34	1
Barium	mg/kg	1100	NS	169		0.56	1.7	121		0.65	2	92.3		0.7	2.1	58.7		0.63	1.9	63.1		0.71	2.1	56.4		0.69	2.1
Cadmium	mg/kg	1.6	10	< 0.84	U	0.28	0.84	< 0.98	U	0.33	0.98	< 1.1	U	0.35	1.1	0.82	J	0.32	0.95	< 1.1	U	0.36	1.1	< 1	U	0.35	1
Chromium	mg/kg	470	110	24.2	J	0.5	1.7	25.2	J	0.59	2	37.4	J	0.63	2.1	64.7	J	0.57	1.9	12.5	J	0.64	2.1	18.4	J	0.63	2.1
Cobalt	mg/kg	67	NS	17.9	J	0.51	1.7	17.9	J	0.59	2	16.2	J	0.63	2.1	17.7	J	0.57	1.9	11.9	J	0.65	2.1	11.2	J	0.63	2.1
Copper	mg/kg	1400	110	23.4		0.48	1.7	12.8		0.56	2	49.8	J	0.6	2.1	32.8		0.54	1.9	8.7		0.61	2.1	9.8		0.6	2.1
Iron	mg/kg	600000	NS	30600		17.6	50.3	29500		20.6	58.8	40200	J	22.1	63.2	38700		19.9	56.8	17600		22.5	64.3	20300		21.9	62.7
Lead	mg/kg	270	250	25.5		0.16	0.5	16.7		0.19	0.59	17.9		0.2	0.63	6.6		0.18	0.57	7.9	J	0.2	0.64	13.7	J	0.2	0.63
Manganese	mg/kg	2500	1100	**1430**		1	3.4	584		1.2	3.9	505	J	1.3	4.2	950		1.2	3.8	389		1.3	4.3	349		1.3	4.2
Mercury	mg/kg	2.5	2	0.014	J	0.01	0.017	0.016	J	0.013	0.021	0.026		0.013	0.022	0.027		0.011	0.018	0.078		0.014	0.024	0.06		0.013	0.023
Vanadium	mg/kg	210	NS	27.4		0.48	1.7	20.9		0.56	2	77.8		0.6	2.1	83.3		0.54	1.9	18.9		0.61	2.1	14.8		0.59	2.1
Zinc	mg/kg	830	820	138	J	3.3	6.7	143	J	3.8	7.8	86.9	J	4.1	8.4	39	J	3.7	7.6	47.6	J	4.2	8.6	62.2	J	4.1	8.4
General Chemistry																											
Methyl Mercury	ug/kg	26	NS	NA				NA				0.23		0.097	0.13	NA				0.34		0.1	0.14	0.56		0.097	0.13
pH	pH units	NS	NS	6.9	J			6.7	J			7.5	J			7.2	J			7.3	J			7.2	J		
Total Organic Carbon	mg/kg	NS	NS	< 112	U	76.4	112	< 127	U	87.3	127	< 133	U	90.9	133	888		83.1	121	269		96.9	141	266		94.6	138
Grain Size																											
Gravel	%	NS	NS	66.7				55				43.8				56.6				24.2				NA			
Sand	%	NS	NS	27.6				42.7				50.4				37.4				46.3				NA			
Silt, Clay, & Colloids	%	NS	NS	5.7				2.3				5.8				6.1				29.5				NA			

Notes:
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American Cyanamid Superfund Site
Bridgewater Township, New Jersey

			Sample ID	RR-04				RR-05				RR-06				RR-09				RR-10			
			Sample Date	7/2/2019				7/2/2019				7/2/2019				7/2/2019				7/2/2019			
			N=Normal, FD=Field Duplicate	N				N				N				N				N			
Parameter	Units	EPCs[1]	NJDEP SELs[2]	Result	Qual	MDL	RL	Result	Qual	MDL	RL	Result	Qual	MDL	RL	Result	Qual	MDL	RL	Result	Qual	MDL	RL
Volatile Organic Compounds																							
Naphthalene	ug/kg	NS	NS	< 1.9	U	1.7	1.9	< 1.5	U	1.4	1.5	< 1.8	U	1.6	1.8	< 2.9	U	2.6	2.9	< 1.6	U	1.4	1.6
Total Metals																							
Aluminum	mg/kg	24000	NS	18200		7.5	21.8	10900		6.3	18.4	1650		6.6	19.4	16300		10.5	30.8	6930		5.6	16.4
Arsenic	mg/kg	90	33	2.4	J	0.35	1.1	4.7	J	0.3	0.92	0.92	J	0.31	0.97	5.3	J	0.49	1.5	2.9	J	0.26	0.82
Barium	mg/kg	1100	NS	138		0.73	2.2	66.1		0.61	1.8	8.6		0.64	1.9	168		1	3.1	91.2		0.55	1.6
Cadmium	mg/kg	1.6	10	< 1.1	U	0.37	1.1	< 0.92	U	0.31	0.92	< 0.97	U	0.33	0.97	< 1.5	U	0.52	1.5	< 0.82	U	0.28	0.82
Chromium	mg/kg	470	110	33.4	J	0.66	2.2	25.6	J	0.55	1.8	6.8	J	0.58	1.9	30.2	J	0.92	3.1	15.1	J	0.49	1.6
Cobalt	mg/kg	67	NS	5.8	J	0.66	2.2	10.5	J	0.55	1.8	0.83	J	0.58	1.9	12.7	J	0.93	3.1	9	J	0.49	1.6
Copper	mg/kg	1400	110	9.8		0.63	2.2	22.9		0.53	1.8	3.3		0.55	1.9	30.5		0.88	3.1	13.4		0.47	1.6
Iron	mg/kg	600000	NS	20800		22.9	65.5	33300		19.3	55.3	5340		20.3	58.1	28800		32.3	92.3	21100		17.3	49.3
Lead	mg/kg	270	250	12.6		0.21	0.66	14.9		0.17	0.55	0.91		0.18	0.58	63.2		0.29	0.92	13.7		0.16	0.49
Manganese	mg/kg	2500	1100	87.8		1.3	4.4	651		1.1	3.7	29.9		1.2	3.9	768		1.9	6.2	236		1	3.3
Mercury	mg/kg	2.5	2	< 0.024	U	0.014	0.024	0.015	J	0.01	0.017	< 0.022	U	0.013	0.022	0.069		0.02	0.034	0.017		0.01	0.017
Vanadium	mg/kg	210	NS	43.4		0.62	2.2	26.8		0.52	1.8	5		0.55	1.9	37.6		0.88	3.1	22.7		0.47	1.6
Zinc	mg/kg	830	820	39.1	J	4.3	8.7	69.9	J	3.6	7.4	7.5	J	3.8	7.7	110	J	6	12.3	58.5	J	3.2	6.6
General Chemistry																							
Methyl Mercury	ug/kg	26	NS	NA				< 0.11	U	0.083	0.11	NA				NA				NA			
pH	pH units	NS	NS	4.7	J			6.9	J			6.4	J			7	J			7	J		
Total Organic Carbon	mg/kg	NS	NS	1300		98	143	278		78.9	115	662		87.6	128	26000		137	200	3940		76	111
Grain Size																							
Gravel	%	NS	NS	0				37.9				50.6				1.3				56.6			
Sand	%	NS	NS	27.3				59.1				45.6				37				40.2			
Silt, Clay, & Colloids	%	NS	NS	72.7				3				3.8				61.7				3.2			

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