Table 3: Validated Soil Analytical Results - Radioisotopes Summary Table
Canadian Radium and Uranium Corp. Site
Mount Kisco, New York
September 2019

		Location No.	C008-SB001									C008-SB002						C008-SB003						C008-SB004		
		START V Sample No.	C008-SB001-036048-01			C008-SB001-036048-02			C008-SB001-108120-01			C008-SB002-024036-01			C008-SB002-060072-01			C008-SB003-000012-01			C008-SB003-072084-01			C008-SB004-012024-01		
		Sample Depth (inches)	36-48			36-48			108-120			24-36			60-72			0-12			72-84			12-24		
		Sample Matrix	Soil			Soil			Soil			Soil			Soil			Soil			Soil			Soil		
		Sample Date	9/8/2019			9/8/2019			9/8/2019			9/8/2019			9/8/2019			9/8/2019			9/8/2019			9/8/2019		
Radioisotope	Analytical Method	[1]EPA SSAL (pCi/g)	Result (pCi/g)	Qualifier	Total Uncertainty	Result (pCi/g)	Qualifier	Total Uncertainty	Result (pCi/g)	Qualifier	Total Uncertainty	Result (pCi/g)	Qualifier	Total Uncertainty	Result (pCi/g)	Qualifier	Total Uncertainty	Result (pCi/g)	Qualifier	Total Uncertainty	Result (pCi/g)	Qualifier	Total Uncertainty	Result (pCi/g)	Qualifier	Total Uncertainty
Bismuth-212 (Bi-212)*	NAREL GAM-01-RA	6,440,000	0.841	J	0.162	0.846	J	0.14	1.01	J	0.16	1.05	J	0.186	0.845	J	0.172	0.908	J	0.171	2.34	J	0.302	0.79	J	0.134
Bismuth-214 (Bi-214)*		1,310,000	1.66	J	0.181	2.09	J	0.227	0.598	J	0.0702	4.24	J	0.457	1.87	J	0.207	0.932	J	0.104	1.71	J	0.189	0.585	J	0.066
Cesium-137 (Cs-137)*		11.20	0.0182		0.00516	0.0208		0.0088	-0.00525		0.00736	0.0929		0.0143	0.0286		0.0101	0.0276		0.00712	-0.0063		0.0103	0.0287		0.00649
Potassium-40 (K-40)*		26.7	17.1		1.860	17.2		1.87	11.2		1.23	12.4		1.36	10.5		1.18	15.2		1.66	11		1.23	12.8		1.39
Lead-210 (Pb-210)*		418	1.91	J	0.318	2.00	J	0.314	0.55	J	0.135	4.52	J	0.596	2.3	J	0.36	1.03	J	0.243	1.17	J	0.196	0.676	J	0.177
Lead-212 (Pb-212)*		657,000	0.953	J	0.106	0.719	J	0.0803	0.974	J	0.109	0.899	J	0.101	0.746	J	0.0837	0.887	J	0.100	2.22	J	0.245	0.858	J	0.0953
Lead-214 (Pb-214)*		7,330,000	1.94	J	0.211	2.40	J	0.261	0.716	J	0.0815	4.83	J	0.522	2.15	J	0.237	1.07	J	0.119	1.92	J	0.226	0.687	J	0.0769
Radium-226 (Ra-226)*		2.52	2.44	J	0.315	**3.03**	**J**	**0.393**	1.48	J	0.227	**5.86**	**J**	**0.694**	**2.63**	**J**	**0.363**	1.84	J	0.268	**3.51**	**J**	**0.46**	1.18	J	0.184
Radium-228 (Ra-228)*		16.2	0.683		0.0789	0.787		0.0937	0.855		0.0993	0.97		0.116	0.778		0.0926	0.8		0.0949	2.29		0.255	0.727		0.0821
Thorium-228 (Th-228)*		13,300	NA			NA			NA			NA			NA			NA			NA			NA		
Thorium-234 Th-234)*		47,500	0.491	J	0.213	0.532	J	0.193	0.753	J	0.168	0.977	J	0.283	0.731	J	0.232	0.573	J	0.225	1.74	J	0.245	0.646	J	0.185
Thallium-208 (Tl-208)*		3,400,000	0.222	J	0.0268	0.270	J	0.0318	0.261	J	0.032	0.328	J	0.0393	0.229	J	0.027	0.238	J	0.028	0.722	J	0.0811	0.227	J	0.0258
Uranium-235 (U-235)*		37.7	0.0215		0.046	0.0493	J	0.0556	0.0933	J	0.0502	0.0851	J	0.0707	-0.0273		0.0548	0.00506		0.0346	0.187	J	0.0657	0.0181		0.036
Thorium-227 (Th-227)	NAREL ACT-02F-TH	NS	0.0293		0.0263	0.0603		0.039	0.025		0.025	0.049		0.0346	0.0671		0.0397	0.0123		0.022	0.168		0.086	0.0403		0.0324
Thorium-228 (Th-228)		13,300	0.632		0.102	0.597		0.104	0.817		0.123	0.951		0.139	0.641		0.106	0.703		0.114	1.94		0.325	0.844		0.128
Thorium-230 (Th-230)		2,060	0.601		0.105	0.643		0.114	0.76		0.122	1.25		0.174	0.741		0.122	0.493		0.0964	1.87		0.319	0.619		0.11
Thorium-232 Th-232)		5	0.573		0.0956	0.567		0.100	0.756		0.117	0.906		0.134	0.621		0.104	0.637		0.106	2.14		0.352	0.838		0.128
Uranium-234 (U-234)	NAREL ACT-02F-U	3,260	0.444	U	0.092	0.420	U	0.0856	0.815	U	0.124	0.688	U	0.125	0.527	U	0.102	0.407	U	0.0853	1.75	U	0.242	0.506	U	0.107
Uranium-235 (U-235)		37.7	0.0287		0.025	0.0357		0.0258	0.0503		0.0286	0.0412		0.0298	0.0225		0.0231	0.048		0.0308	0.0999		0.0446	0.0261		0.0312
Uranium-238 (U-238)		158	0.556		0.106	0.355		0.0776	0.696		0.111	0.782		0.137	0.604		0.111	0.433		0.0883	1.78		0.246	0.529		0.11

		Location No.	C008-SB004			C008-SB005						C008-SB006						C008-SB007						C008-SB008		
		START V Sample No.	C008-SB004-084096-01			C008-SB005-036048-01			C008-SB005-060072-01			C008-SB006-024036-01			C008-SB006-060072-01			C008-SB007-024036-01			C008-SB007-060072-01			C008-SB008-048060-01		
		Sample Depth (inches)	84-96			36-48			60-72			24-36			60-72			24-36			60-72			48-60		
		Sample Matrix	Soil			Soil			Soil			Soil			Soil			Soil			Soil			Soil		
		Sample Date	9/8/2019			9/8/2019			9/8/2019			9/8/2019			9/8/2019			9/9/2019			9/9/2019			9/9/2019		
Radioisotope	Analytical Method	[1]EPA SSAL (pCi/g)	Result (pCi/g)	Qualifier	Total Uncertainty	Result (pCi/g)	Qualifier	Total Uncertainty	Result (pCi/g)	Qualifier	Total Uncertainty	Result (pCi/g)	Qualifier	Total Uncertainty	Result (pCi/g)	Qualifier	Total Uncertainty	Result (pCi/g)	Qualifier	Total Uncertainty	Result (pCi/g)	Qualifier	Total Uncertainty	Result (pCi/g)	Qualifier	Total Uncertainty
Bismuth-212 (Bi-212)*	NAREL GAM-01-RA	6,440,000	2.45	J	0.349	0.98	J	0.195	1.08	J	0.158	0.84	J	0.13	1.38	J	0.19	1.04	J	0.198	1.05	J	0.196	0.769	J	0.147
Bismuth-214 (Bi-214)*		1,310,000	1.6	J	0.176	4.54	J	0.489	1.81	J	0.197	0.371	J	0.044	1.2	J	0.132	5.34	J	0.586	2.97	J	0.327	0.888	J	0.0983
Cesium-137 (Cs-137)*		11.20	-0.00876		0.0115	0.0548		0.0118	0.0164		0.00731	0.00378		0.00589	0.0101		0.00566	-0.00692		0.0136	0.0124		0.0061	0.00917		0.00514
Potassium-40 (K-40)*		26.7	9.98		1.12	13.1		1.42	14.2		1.55	23.6		2.56	14.1		1.53	5.01		0.582	12.1		1.34	13.9		1.51
Lead-210 (Pb-210)*		418	1.46	J	0.236	4.81	J	0.621	2.03	J	0.34	0.424	J	0.18	0.618	J	0.126	4.27	J	0.528	3.53	J	0.49	0.873	J	0.184
Lead-212 (Pb-212)*		657,000	2.25	J	0.244	0.797	J	0.0904	0.927	J	0.103	0.875	J	0.0973	1.24	J	0.135	0.989	J	0.114	0.887	J	0.0998	0.771	J	0.0868
Lead-214 (Pb-214)*		7,330,000	1.98	J	0.217	5.23	J	0.565	2.06	J	0.224	0.446	J	0.0522	1.37	J	0.158	6.44	J	0.705	3.41	J	0.376	1.02	J	0.113
Radium-226 (Ra-226)*		2.52	**3.9**	**J**	**0.506**	**5.88**	**J**	**0.685**	**2.81**	**J**	**0.371**	0.803	J	0.152	2.23	J	0.3	**7.39**	**J**	**0.864**	**4.32**	**J**	**0.536**	1.62	J	0.242
Radium-228 (Ra-228)*		16.2	2.17		0.24	0.85		0.0994	1.01		0.117	0.754		0.0851	1.27		0.142	0.939		0.109	0.891		0.105	0.718		0.0861
Thorium-228 (Th-228)*		13,300	5.45		2.81	NA			NA			NA			NA			NA			NA			NA		
Thorium-234 Th-234)*		47,500	1.91	J	0.269	0.742	J	0.254	0.976	J	0.26	0.545	J	0.183	0.863	J	0.191	0.98	J	0.191	0.89	J	0.209	0.363	J	0.166
Thallium-208 (Tl-208)*		3,400,000	0.669	J	0.075	0.282	J	0.0319	0.321	J	0.0366	0.237	J	0.0273	0.396	J	0.0447	0.264	J	0.0306	0.291	J	0.0364	0.212	J	0.0255
Uranium-235 (U-235)*		37.7	0.159	J	0.0597	0.0773	J	0.0673	0.0773	J	0.048	0.0149		0.0369	0.102	J	0.0495	-0.0423		0.076	-0.0217		0.0707	0.0383	J	0.0402
Thorium-227 (Th-227)	NAREL ACT-02F-TH	NS	0.0592		0.039	0.0558		0.033	0.0534		0.0363	0.032		0.0333	0.0849		0.0449	0.0874		0.0316	0.0481		0.0321	0.0276		0.0283
Thorium-228 (Th-228)		13,300	1.67		0.221	0.684		0.103	0.966		0.143	0.679		0.114	1.4		0.186	0.882		0.111	0.733		0.11	0.603		0.102
Thorium-230 (Th-230)		2,060	1.49		0.205	1.82		0.216	0.961		0.147	0.398		0.0887	1.31		0.18	2.07		0.231	1.29		0.17	0.419		0.0878
Thorium-232 Th-232)		5	1.76		0.23	0.735		0.108	0.984		0.145	0.551		0.0994	1.26		0.171	0.85		0.108	0.628		0.0995	0.538		0.0939
Uranium-234 (U-234)	NAREL ACT-02F-U	3,260	1.91	U	0.252	0.725	U	0.128	0.921	U	0.163	0.377	U	0.0855	1.10	U	0.181	0.92		0.124	0.591		0.108	0.439		0.0971
Uranium-235 (U-235)		37.7	0.0641		0.0351	0.0265		0.0239	0.0304		0.0292	0.00911		0.0193	0.0371		0.0314	0.04		0.0194	0.0134		0.0187	0.0445		0.0322
Uranium-238 (U-238)		158	1.96		0.258	0.673		0.122	0.823		0.151	0.379		0.0855	1.09		0.179	0.848		0.116	0.567		0.105	0.441		0.0971

Notes:

START V - Superfund Technical Assessment & Response Team V

No. - Number; U - Not detected; J - Estimated result

pCi/g - picocuries per gram; NA - Not analyzed; NS - Not specified

*Analysis via 21-days ingrowth Method

[1]U.S. Environmental Protection Agency (EPA) Site-Specific Action Levels (SSAL) are presented in pCi/g

Result equals or exceeds the EPA SSAL

Table 3: Validated Soil Analytical Results - Radioisotopes Summary Table
Canadian Radium and Uranium Corp. Site
Mount Kisco, New York
September 2019

		Location No.	C008-SB008			C008-SB009					
		START V Sample No.	C008-SB008-084096-01			C008-SB009-000012-01			C008-SB009-072084-01		
		Sample Depth (inches)	84-96			0-12			72-84		
		Sample Matrix	Soil			Soil			Soil		
		Sample Date	9/9/2019			9/9/2019			9/9/2019		
Radioisotope	Analytical Method	[1]EPA SSAL (pCi/g)	Result (pCi/g)	Qualifier	Total Uncertainty	Result (pCi/g)	Qualifier	Total Uncertainty	Result (pCi/g)	Qualifier	Total Uncertainty
Bismuth-212 (Bi-212)*	NAREL GAM-01-RA	6,440,000	0.889	J	0.334	1.04	J	0.189	0.803	J	0.132
Bismuth-214 (Bi-214)*		1,310,000	2.02	J	0.228	0.981	J	0.109	0.628	J	0.0705
Cesium-137 (Cs-137)*		11.20	0.0127		0.0169	0.0304		0.00802	-0.00369		0.00549
Potassium-40 (K-40)*		26.7	4.32		0.572	14.2		1.55	13.2		1.43
Lead-210 (Pb-210)*		418	2.76	J	0.41	1.06	J	0.232	0.776	J	0.201
Lead-212 (Pb-212)*		657,000	0.525	J	0.0687	0.934	J	0.105	0.809	J	0.0903
Lead-214 (Pb-214)*		7,330,000	2.55	J	0.284	1.11	J	0.124	0.747	J	0.0834
Radium-226 (Ra-226)*		2.52	**4.57**	**J**	**0.711**	1.93	J	0.293	1.27	J	0.199
Radium-228 (Ra-228)*		16.2	0.541		0.105	0.817		0.0943	0.692		0.0784
Thorium-228 (Th-228)*		13,300	NA			NA			NA		
Thorium-234 Th-234)*		47,500	1.57	J	0.365	0.665	J	0.187	0.471	J	0.17
Thallium-208 (Tl-208)*		3,400,000	0.203	J	0.0358	0.258	J	0.0304	0.213	J	0.0248
Uranium-235 (U-235)*		37.7	0.0325		0.0809	0.0355	J	0.0431	0.00258		0.0363
Thorium-227 (Th-227)	NAREL ACT-02F-TH	NS	0.0356		0.018	0.0273		0.0272	0.0196		0.0211
Thorium-228 (Th-228)		13,300	0.482		0.0681	0.913		0.137	0.447		0.0765
Thorium-230 (Th-230)		2,060	0.709		0.0934	0.744		0.125	0.769		0.114
Thorium-232 Th-232)		5	0.455		0.0651	0.829		0.129	0.463		0.0783
Uranium-234 (U-234)	NAREL ACT-02F-U	3,260	2.02		0.219	0.456		0.0956	0.452		0.0939
Uranium-235 (U-235)		37.7	0.0776		0.023	0.0684		0.0381	0.0279		0.0258
Uranium-238 (U-238)		158	1.47		0.164	0.54		0.106	0.427		0.0906

Notes:
START V - Superfund Technical Assessment & Response Team V
No. - Number; U - Not detected; J - Estimated result
pCi/g - picocuries per gram; NA - Not analyzed; NS - Not specified
*Analysis via 21-days ingrowth Method
[1]U.S. Environmental Protection Agency (EPA) Site-Specific Action Levels (SSAL) are presented in pCi/g
Result equals or exceeds the EPA SSAL

	Location No.	Rinsate Blank						
	START V Sample No.	RB-190908			RB-190909			
	Sample Depth (inches)	NA			NA			
	Sample Matrix	Aqueous			Aqueous			
	Sample Date	9/8/2019			9/9/2019			
Radioisotope	Analytical Method	[1]EPA SSAL (pCi/L)	Result (pCi/L)	Qualifier	Total Uncertainty	Result (pCi/L)	Qualifier	Total Uncertainty
Bismuth-212 (Bi-212)	NAREL GAM-01	15	1.69		10.4	3.52		6.65
Bismuth-214 (Bi-214)		15	1.53	J	2	0.522		1.61
Cesium-137 (Cs-137)		12.3	0.169		0.793	-0.0554		0.594
Potassium-40 (K-40)		29.7	-1.05		9.76	3.83		5.73
Lead-210 (Pb-210)		15	-0.411		15.1	-1.46		17.2
Lead-212 (Pb-212)		15	-0.252		1.29	0.223		1.22
Lead-214 (Pb-214)		15	-0.559		1.93	1.01		1.47
Radium-226 (Ra-226)		5	13.5	J	14.3	-4.56		23.4
Radium-228 (Ra-228)		0.702	1.87		2.85	-1.71		10.9
Thorium-228 (Th-228)		15	NA			NA		
Thorium-234 Th-234)		135	8.47		18.2	8.31		16.9
Thallium-208 (Tl-208)		4	0.207		0.777	0.387		0.626
Uranium-235 (U-235)		15	-2.54		5.7	0.719		4.36
Thorium-227 (Th-227)	NAREL TH-EICHROM	NS	0		0.0562	0		0.0582
Thorium-228 (Th-228)		15	0.0143		0.0559	0.072		0.0859
Thorium-230 (Th-230)		15	-0.0856		0.151	-0.016		0.164
Thorium-232 Th-232)		15	0.0213		0.0541	0.0117		0.0453
Uranium-234 (U-234)	NAREL U-EICHROM	15	0.136		0.097	0.0193		0.0529
Uranium-235 (U-235)		15	0		0.0382	0.0347		0.0733
Uranium-238 (U-238)		15	0.0656		0.0764	0.0386		0.0596

Notes:
START V - Superfund Technical Assessment & Response Team V
No. - Number; J - Estimated result
pCi/L - picocuries per liter; NA - Not analyzed; NS - Not specified
[1]U.S. Environmental Protection Agency (EPA) Site-Specific Action Levels (SSAL)
Result equals or exceeds the EPA SSAL