

**TABLE 5B**  
**Area I - Radionuclides Comparison with BRC/TIMET Shallow Background Dataset<sup>1,2</sup>**  
**Phase B**

Decay Chain	Chemical Name	Site Data Depths (underline = inclusive)	BRC/TIMET Background Depths Used	BRC/TIMET Recommended Background Data Set Use <sup>2</sup>	Gilbert's Tool Box Results ( <i>p</i> -values) Test fails (shaded) if <i>p</i> -value for test < $\alpha = 0.025$					Quantile Test at 0.75 vs 0.90 Confidence Interval?		Max # tests failed
					Two-Sample t-test	Gehan Test	Quantile Test (0.75)	Quantile Test (0.90)	Slippage Test	# Tests Failed w/QT(0.75)	# Tests Failed w/QT(0.90)	
Th-232	Th-232	All Depths	All (0, 5, & 10 ft)	All (0, 5, & 10 ft)	1.00E+00	1.00E+00	9.86E-01	9.41E-01	1.43E-01	0	0	0
	Th-232	0-10 ft	All (0, 5, & 10 ft)	All (0, 5, & 10 ft)	8.90E-01	7.26E-01	5.98E-01	5.45E-01	7.69E-02	0	0	0
	Th-232	>10 ft	All (0, 5, & 10 ft)	All (0, 5, & 10 ft)	1	1	1	0.9947	0.4979	0	0	0
	Ra-228	All Depths	All (0, 5, & 10 ft)	All (0, 5, & 10 ft)	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.34E-01	0	0	0
	Ra-228	0-10 ft	All (0, 5, & 10 ft)	All (0, 5, & 10 ft)	1.00E+00	1.00E+00	1.00E+00	1.00E+00	2.32E-01	0	0	0
	Ra-228	>10 ft	All (0, 5, & 10 ft)	All (0, 5, & 10 ft)	1	1	1	0.9999	0.1173	0	0	0
	Th-228	All Depths	All (0, 5, & 10 ft)	All (0, 5, & 10 ft)	7.78E-01	7.54E-01	5.70E-01	3.17E-02	5.91E-03	1	1	1
	Th-228	0-2 ft	All (0, 5, & 10 ft)	All (0, 5, & 10 ft)	1.32E-03	1.25E-04	1.62E-03	5.31E-04	2.22E-04	4	4	4
	Th-228	2-10 ft	All (0, 5, & 10 ft)	All (0, 5, & 10 ft)	0.2585	0.2642	0.9313	0.7305	0.1247	0	0	0
Th-228	>10 ft	All (0, 5, & 10 ft)	All (0, 5, & 10 ft)	1	1	0.9963	0.9319	0.1219	0	0	0	
U-235	U-235	0-5 ft	Near-Surf (0 & 5ft)	Near-Surf (0 & 5ft), Subsurf (10 ft)	5.01E-03	4.03E-01	4.62E-01	9.60E-01	8.44E-02	1	1	1
	U-235	10 ft	Sub-Surf (10 ft)	Near-Surf (0 & 5ft), Subsurf (10 ft)	1.64E-02	1.10E-01	1.85E-01	5.59E-01	1.92E-01	1	1	1
	U-235	>10 ft	Sub-Surf (10 ft)	Near-Surf (0 & 5ft), Subsurf (10 ft)	1.809E-11	4.075E-09	0.002338	0.02069	0.0008718	4	4	4
U-238	U-238	0-5 ft	Near-Surf (0 & 5ft)	Near-Surf (0 & 5ft), Subsurf (10 ft)	3.92E-01	6.10E-01	9.69E-01	5.26E-01	4.42E-01	0	0	0
	U-238	10 ft	Sub-Surf (10 ft)	Near-Surf (0 & 5ft), Subsurf (10 ft)	7.70E-01	9.71E-01	9.86E-01	9.34E-01	1.25E-01	0	0	0
	U-238	>10 ft	Sub-Surf (10 ft)	Near-Surf (0 & 5ft), Subsurf (10 ft)	1.567E-07	1.409E-09	0.00001865	0.01571	0.00001865	4	4	4
	U-234	0-5 ft	Near-Surf (0 & 5ft)	Near-Surf (0 & 5ft), Subsurf (10 ft)	1.59E-07	1.04E-01	5.71E-02	3.46E-02	1.00E+00	1	1	1
	U-234	10 ft	Sub-Surf (10 ft)	Near-Surf (0 & 5ft), Subsurf (10 ft)	1.25E-01	5.59E-01	9.38E-01	7.98E-01	2.92E-01	0	0	0
	U-234	>10 ft	Sub-Surf (10 ft)	Near-Surf (0 & 5ft), Subsurf (10 ft)	2.262E-09	4.628E-08	0.01135	0.01571	0.001178	4	4	4
	Th-230	0-5 ft	Near-Surf (0 & 5ft)	Near-Surf (0 & 5ft), Subsurf (10 ft)	2.12E-01	3.78E-01	8.59E-02	9.93E-02	1.00E+00	0	0	0
	Th-230	10 ft	Sub-Surf (10 ft)	Near-Surf (0 & 5ft), Subsurf (10 ft)	1.06E-01	5.84E-01	8.23E-01	2.87E-01	8.11E-02	0	0	0
	Th-230	>10 ft	Sub-Surf (10 ft)	Near-Surf (0 & 5ft), Subsurf (10 ft)	1.24E-10	1.159E-08	0.0003039	0.01571	0.0006434	4	4	4
	Ra-226	0-5 ft	Near-Surf (0 & 5ft)	Near-Surf (0 & 5ft), Subsurf (10 ft)	9.98E-01	1.00E+00	8.13E-01	9.13E-01	4.93E-01	0	0	0
	Ra-226	10 ft	Sub-Surf (10 ft)	Near-Surf (0 & 5ft), Subsurf (10 ft)	8.72E-01	9.81E-01	9.38E-01	7.98E-01	4.42E-01	0	0	0
	Ra-226	>10 ft	Sub-Surf (10 ft)	Near-Surf (0 & 5ft), Subsurf (10 ft)	6.873E-07	0.000141	0.0005536	0.01571	0.0003475	4	4	4

= failed single test  
 = failed multiple tests

<sup>1</sup> Analyzed using the EnviroGISdT software tool from Neptune & Company, Inc.

<sup>2</sup> Background Shallow Soil Summary Report, BMI Complex and Common Areas Vicinity, TIMET and BRC, July 2007. Approved by NDEP on July 26, 2007.