

Montour Trail Sampling Results

On July 21, 2026, personnel from the Bureau of Radiation Protection met with representatives from the Montour Trail Association and 5D Field Services at the Westland Branch of the Montour Trail adjacent to 5D's storage lot. Soil samples were collected along the Westland Branch of the Montour Trail on July 21, 2026. Sample results were obtained on September 26, 2026.

The detailed sample results can be reviewed in the corresponding reports, "Analytical Report for Radiation Protection." The results are reported in picoCuries per kilogram (pCi/kg), but will be discussed below in picoCuries per gram (pCi/g) to allow for comparison to typical environmental levels and regulatory values. Soil samples were primarily composed of a sandy soil mixed with some gravel. All samples were collected within the first 15 centimeters of soil below the surface.

Sample Point:	1	Sample ID:	5918 600
	2		5918 601
	3		5918 602
	4		5918 603
	5		5918 604

Values from the laboratory results all fall within normal background ranges of Radium-226 (Ra-226), Radium-228 (Ra-228), and total radium (Ra-226 + Ra-228) across the state of Pennsylvania, with some variations.

The lowest laboratory results were 0.244 pCi/g Ra-226 and 0.524 pCi/g total radium at sample point 1.

The highest laboratory results were 1.730 pCi/g Ra-226 and 2.626 pCi/g total radium at sample point 4.

The EPA has established, in 40 CFR § 192.12(a), a protective level for cleanup of soil in the top 15 centimeters of former Uranium Mill Tailing Sites at 5 pCi/g above natural background. This standard remains as a commonly used standard across the country, including radium impacted radiological sites in Pennsylvania as being protective of the public health and safety. The sample results all fall below the protective standard even without the subtraction of site-specific background levels.

As a note on the data sheets: The reported levels of Ra-226 were inferred from Bi-214. Direct measurement of Ra-226 is difficult because its primary gamma emission can have interference from U-235 gamma emissions. These samples were sealed by the laboratory for greater than 21 days per procedure to be able to use progeny that have better detection levels. Bi-214 falls into the decay chain of Ra-226 and emits an easily identifiable energy peak, making it a useful proxy for Ra-226.

Ra-228 was inferred from Ac-228 for similar reasons.

Sample 1:

7/21/26, 10:13

Sample taken on the Montour Trail next to the gate at the western-most end of 5D's property.

Corresponding ground surveys: 8020 cpm (2221 and 44-10), 9 urem/hr (Bicron Microrem), 5.4 urem/hr (Flir R200)

Sample 2:

7/21/26, 10:19

Sample taken on the Montour Trail along the fenceline closest to 5D's property, next to some black pipes on 5D's side of the fence.

Corresponding ground surveys: 11066 cpm (2221 and 44-10), 14 urem/hr (Bicron Microrem), 4.8 urem/hr (Flir R200)



Sample 3:

7/21/26, 10:28

Sample taken on the Montour Trail along the fenceline closest to 5D's property, next to an area with 5D's property above grade of the trail. There is a small hill between the trail and the pipes stored on 5D's property.

Corresponding ground surveys: 7 urem/hr (Flir R200)



Sample 4:

7/21/26 10:33

Sample taken on the Montour Trail along the fenceline closest to 5D's property, next to an area that appears to be washed out with 5D's property above grade of the trail, with a pile of black pipes on 5D's property behind a small hill in between the pipes and the trail.

Corresponding ground surveys: 7.8 urem/hr (Flir R200)



Sample 5:

7/21/26, 10:43

Sample taken on the Montour Trail next to the gate in the middle of 5D's lot, towards the eastern end.

Corresponding ground surveys: 9831 cpm (2221 and 44-10), 7 urem/hr (Bicron Microrem), 4.2 urem/hr (Flir R200)



Survey Equipment Information

<u>Make</u>	<u>Model</u>	<u>Serial Number</u>	<u>Calibration Date</u>
Ludlum	2221 and 44-10	67413, PR081702	9/22/2025
Bircon	Microrem	19215	9/22/2025
Flir	R200	104615000355	1/13/2026
Flir	R200	104615000157	1/7/2026

Bureau of Radiation Protection Personnel

Barbara Bookser, Radiation Protection Program Manager
Grace Schoeniger, Radiation Protection Program Supervisor
Jocelyn Thwaite, Radiation Health Physicist

Montour Trail Association Personnel

Julian Wolfe, President
David Wright, Trails Chief Engineer
Ned Williams, Former President

5D Field Services Personnel

Eric Davis, Owner and CEO
Jaylynn Davis, CFO
Chad Trenney, Safety Manager