Data Dictionary for Radon-222 Measurements

The table below describes the attributes (data columns) for the processed Radon-222 data presented in this data release. The metadata is not complete if they are not distributed with this document.

Attribute Label	**Attribute Definition**
Sample ID	Sample identification number. Follows XXXXXXX-YYY-DDDu-RnJ format. XXXXXXX represents field identification number. YYY represents the sampling location where “AJH” is the Amberjack Hole, “GBS” is the Green Banana Sink, and “WFS” is the West Florida Shelf control site. DDD represents the depth and u represents the depth units in either “m” for meters or “f” for feet.
Date Collected	Date when sample was collected. Follows MM/DD/YYYY format.
Latitude (WGS 84)	Latitude where sample was collected in World Geodetic System of 1984 (WGS 84).
Longitude (WGS 84)	Longitude where sample was collected in World Geodetic System of 1984 (WGS 84).
Depth (m)	Depth at which sample was collected. Measured in meters.
Salinity (ppt)	Salinity of sample. Measured in parts per thousand.
Measured Activity of Radon-222 in air (dpm/L air)	Measurement of RAD7 unit efficiency, count rate of analysis, and decay factor during analysis. Measured in disintegrations per minute per liter of air (dpm/L air).
Radon-222 Activity CSU (dpm/L air)	Combined standard uncertainty of measured activity of Radon-222 in air disintegrations per minute per liter of air. Combined standard uncertainty is defined as the statistical standard deviation of an individual radiological result.
Decay Corrected Activity of Radon-222 in water (dpm/L water)	Final measurement of Radon-222 activity after correcting for decay from sample collection to start of analysis. Measured in disintegrations per minute per liter of water.
Decay Corrected Radon-222 Activity CSU (dpm/L water)	Combined standard uncertainty of Decay Corrected Rn222 Activity Standard Deviation. Measured in disintegrations per minute per liter of water.
Sample Counts	Total amount of 6.00 mega electron-volt signals corresponding to Polonium-218 throughout the analysis.
Background Counts	An estimation of the number of signals if the background analysis was measured for the same amount of time as the sample analysis.
Standard Deviation of Net Instrument Background Counts (dpm)	The standard deviation of the net instrument background as defined by McCurdy and others (2008). Measured in disintegrations per minute.
Sample Specific Critical Limit (dpm)	The critical level is the smallest measured concentration that is statistically different from the instrument background or analytical blank, and it serves as the detection threshold for deciding whether the radionuclide is present in a sample. Measured in disintegrations per minute.
Sample Specific Minimum Detectable Activity (dpm)	The lowest true concentration that gives a specified probability that the measured concentration will exceed its critical level concentration. Measured in disintegrations per minute.
QA Flag	Quality assurance code where values of zero indicate data passed all validation tests and recorded values are assumed to be accurate. Values of one translate to samples that have an estimated salinity. Values of two translate to samples that have and estimated salinity and have potentially been exposed to atmospheric air.