

AMBIENT AIR MONITORING RESULTS AT THE WASTE ISOLATION PILOT PLANT (WIPP) AND VICINITY, CARLSBAD, NEW MEXICO

Example table of results

Analyte	Result	pCi/sample			Bq/sample		
		Lab Flag	MDA	±2 s TPU	Result	MDA	±2 s TPU
Gross alpha and beta activity							
Gross beta	1.9E+01		1.1E+00	3.2E+00	7.0E-01	4.1E-02	1.2E-01

How to interpret the table

The **Lab Flag** is a qualifier to the result. A "U" flag means the material was analyzed for, but was not detected above the **MDA** (or MDC). A U flag may be interpreted as a non-detection. A "J" flag means the associated numerical value is an estimated quantity. A J flag may be interpreted to mean the material was detected but is too small to quantify. Multiple flags may be used.

MDA is the **minimum detectable activity** (or concentration) defined as the smallest concentration of radioactivity in a sample that can be detected with a 5% probability of erroneously detecting radioactivity, when in fact none was present (Type I error) and also, a 5% probability of not detecting radioactivity, when in fact it is present (Type II error). Often used interchangeably with **Minimum Detectable Concentration (MDC)**, since the difference between the two terms is only one of units. The MDC

TPU is the **total propagated uncertainty**. The values of experimental measurements have uncertainties due to measurement limitations (e.g., instrument precision, chemical separation, etc.). These uncertainties propagate with the combination of variables in the function. The **uncertainty** is usually defined by the absolute error Δx . In measurements of radioactivity, TPU is an expression of the confidence that the actual value lies within a plus or minus range. "1 TPU" is plus or minus one standard deviation. This means that the true value of the measurement (the result) is within the range of plus or minus the TPU of the value with a certainty or confidence of about **68.3%**. The confidence that the actual measurement lies within the range of **2 TPU** (plus or minus 2 standard deviations) is about **95.5%**. Three standard deviations provides about 99.7% confidence that There is a 95.5% probability that the actual measurement for gross beta in the chart above exists within the range of 15.8 to 22.2 pico Curies per sample (pCi/Sample). In other words, we can say with 95.5% confidence that the actual measurement of beta activity is between 15.8 and 22.2 pCi/sample, or about 19 pCi.

The **Becquerel (Bq)** is the International System of Units (SI) derived unit of radioactivity and is defined as the activity of a quantity of radioactive material in which one nucleus decays per second.

- | | |
|----------------------------|---------------------------|
| 1 Becquerel (Bq) equals | 2.70E-11 Curies (Ci) |
| 1 pico curies (pCi) equals | 0.037 Becquerel (Bq) |
| 1 pico curies (pCi) equals | one trillionth of a curie |

**AMBIENT AIR MONITORING RESULTS AT THE WASTE ISOLATION PILOT
PLANT (WIPP) AND THE VICINITY CARLSBAD, NEW MEXICO**

WPL01 WIPP Salt Shaft

March 11, 2014 to March 25, 2014

Analyte	pCi/sample				Bq/sample		
	Lab Result	Lab Flag	Lab MDA	±2 s TPU	Lab Result	Lab MDA	±2 s TPU
Gross alpha and beta activity							
Gross alpha	4.6E+00		7.0E-01	9.8E-01	1.7E-01	2.6E-02	3.6E-02
Gross beta	1.7E+01		1.1E+00	3.0E+00	6.3E-01	4.1E-02	1.1E-01
Alpha and beta emitters							
Americium-241	3.1E-03	U	2.8E-02	1.5E-02	1.1E-04	1.0E-03	5.4E-04
Plutonium-238	4.2E-03	U	1.5E-02	1.0E-02	1.6E-04	5.6E-04	3.8E-04
Plutonium-239/240	1.5E-02		5.7E-03	1.1E-02	5.6E-04	2.1E-04	4.2E-04
Strontium-90	7.8E-02	U	4.2E-01	2.0E-01	2.9E-03	1.6E-02	7.3E-03
Gamma emitters							
Actinium-228	-4.2E+00	U	3.0E+01	1.6E+01	-1.6E-01	1.1E+00	6.0E-01
Americium-241	-2.8E+01	U	1.1E+02	6.4E+01	-1.0E+00	4.1E+00	2.4E+00
Beryllium-7	1.5E+02		6.9E+01	5.4E+01	5.6E+00	2.6E+00	2.0E+00
Bismuth-212	3.7E+01	U	9.6E+01	5.8E+01	1.4E+00	3.6E+00	2.1E+00
Bismuth-214	-3.9E+00	UJ	1.9E+01	1.0E+01	-1.4E-01	7.0E-01	3.8E-01
Cesium-134	-1.6E+00	U	8.1E+00	4.4E+00	-5.9E-02	3.0E-01	1.6E-01
Cesium-137	-1.4E+00	U	7.2E+00	3.8E+00	-5.2E-02	2.7E-01	1.4E-01
Cobalt-60	-3.0E+00	U	8.2E+00	3.8E+00	-1.1E-01	3.0E-01	1.4E-01
Iodine-131	-1.2E+01	U	7.4E+01	4.0E+01	-4.4E-01	2.7E+00	1.5E+00
Lead-212	7.2E-01	U	7.9E+00	4.6E+00	2.7E-02	2.9E-01	1.7E-01
Lead-214	5.4E-01	UJ	1.2E+01	6.6E+00	2.0E-02	4.4E-01	2.4E-01
Potassium-40	-9.0E+00	U	1.1E+02	6.0E+01	-3.3E-01	4.1E+00	2.2E+00
Protactinium-234m	-5.1E+02	U	1.4E+03	6.8E+02	-1.9E+01	5.2E+01	2.5E+01
Sodium-22	-3.3E+00	U	9.7E+00	4.8E+00	-1.2E-01	3.6E-01	1.8E-01
Thallium-208	-9.5E-01	U	8.8E+00	5.0E+00	-3.5E-02	3.3E-01	1.9E-01
Thorium-234	-1.8E+01	U	1.1E+02	6.2E+01	-6.7E-01	4.1E+00	2.3E+00

**AMBIENT AIR MONITORING RESULTS AT THE WASTE ISOLATION PILOT
PLANT (WIPP) AND THE VICINITY CARLSBAD, NEW MEXICO**

WPL02 Far Field

March 11, 2014 to March 25, 2014

Analyte	pCi/sample				Bq/sample		
	Lab Result	Lab Flag	Lab MDA	±2 s TPU	Lab Result	Lab MDA	±2 s TPU
Gross alpha and beta activity							
Gross alpha	4.9E+00		7.0E-01	1.0E+00	1.8E-01	2.6E-02	3.8E-02
Gross beta	1.9E+01		1.1E+00	3.2E+00	7.0E-01	4.1E-02	1.2E-01
Alpha and beta emitters							
Americium-241	-1.2E-03	U	3.5E-02	1.7E-02	-4.4E-05	1.3E-03	6.3E-04
Plutonium-238	1.0E-02		5.4E-03	9.8E-03	3.7E-04	2.0E-04	3.6E-04
Plutonium-239/240	1.8E-02		1.5E-02	1.4E-02	6.7E-04	5.6E-04	5.0E-04
Strontium-90	-2.4E-01	U	5.4E-01	2.4E-01	-8.9E-03	2.0E-02	8.9E-03
Gamma emitters							
Actinium-228	6.0E+00	U	2.7E+01	1.6E+01	2.2E-01	1.0E+00	5.8E-01
Americium-241	-2.2E+01	U	7.5E+01	4.0E+01	-8.1E-01	2.8E+00	1.5E+00
Beryllium-7	1.4E+02		6.7E+01	5.4E+01	5.2E+00	2.5E+00	2.0E+00
Bismuth-212	2.6E+01	U	8.0E+01	4.8E+01	9.6E-01	3.0E+00	1.8E+00
Bismuth-214	2.7E+00	UJ	1.5E+01	8.8E+00	1.0E-01	5.6E-01	3.3E-01
Cesium-134	-3.4E-01	U	6.7E+00	3.8E+00	-1.3E-02	2.5E-01	1.4E-01
Cesium-137	1.1E+00	U	5.6E+00	3.2E+00	4.1E-02	2.1E-01	1.2E-01
Cobalt-60	-2.0E+00	U	8.2E+00	4.0E+00	-7.4E-02	3.0E-01	1.5E-01
Iodine-131	0.0E+00	U	6.7E+01	3.8E+01	0.0E+00	2.5E+00	1.4E+00
Lead-212	3.5E-02	U	9.9E+00	5.8E+00	1.3E-03	3.7E-01	2.1E-01
Lead-214	3.1E+00	UJ	1.2E+01	7.4E+00	1.1E-01	4.4E-01	2.7E-01
Potassium-40	-5.3E+01	U	1.1E+02	5.2E+01	-2.0E+00	4.1E+00	1.9E+00
Protactinium-234m	2.6E+02	U	1.3E+03	7.4E+02	9.6E+00	4.8E+01	2.7E+01
Sodium-22	-1.4E+00	U	7.5E+00	3.8E+00	-5.2E-02	2.8E-01	1.4E-01
Thallium-208	1.0E+00	U	6.5E+00	3.8E+00	3.7E-02	2.4E-01	1.4E-01
Thorium-234	-1.5E+01	U	9.4E+01	5.2E+01	-5.6E-01	3.5E+00	1.9E+00

**AMBIENT AIR MONITORING RESULTS AT THE WASTE ISOLATION PILOT
PLANT (WIPP) AND THE VICINITY CARLSBAD, NEW MEXICO**

WPL03 Met Tower

March 11, 2014 to March 25, 2014

Analyte	pCi/sample				Bq/sample		
	Lab Result	Lab Flag	Lab MDA	±2 s TPU	Lab Result	Lab MDA	±2 s TPU
Gross alpha and beta activity							
Gross alpha	4.5E+00		7.5E-01	9.8E-01	1.7E-01	2.8E-02	3.6E-02
Gross beta	1.7E+01		1.0E+00	2.8E+00	6.3E-01	3.7E-02	1.0E-01
Alpha and beta emitters							
Americium-241	-1.7E-03	U	3.3E-02	1.6E-02	-6.3E-05	1.2E-03	6.1E-04
Plutonium-238	4.3E-03	U	5.8E-03	1.1E-02	1.6E-04	2.1E-04	3.9E-04
Plutonium-239/240	6.4E-03	U	1.6E-02	1.1E-02	2.4E-04	5.9E-04	3.9E-04
Strontium-90	2.8E-01	U	5.7E-01	2.8E-01	1.0E-02	2.1E-02	1.0E-02
Gamma emitters							
Actinium-228	-1.7E+01	U	3.4E+01	1.7E+01	-6.3E-01	1.3E+00	6.4E-01
Americium-241	-1.5E+00	U	3.6E+01	2.0E+01	-5.6E-02	1.3E+00	7.4E-01
Beryllium-7	1.3E+02		5.6E+01	4.8E+01	4.8E+00	2.1E+00	1.8E+00
Bismuth-212	1.8E+01	U	9.2E+01	5.2E+01	6.7E-01	3.4E+00	1.9E+00
Bismuth-214	9.1E-01	UJ	1.9E+01	1.1E+01	3.4E-02	7.0E-01	3.9E-01
Cesium-134	-1.1E+00	U	8.1E+00	4.4E+00	-4.1E-02	3.0E-01	1.6E-01
Cesium-137	-1.2E-01	U	6.0E+00	3.2E+00	-4.4E-03	2.2E-01	1.2E-01
Cobalt-60	-3.4E-01	U	9.9E+00	5.2E+00	-1.3E-02	3.7E-01	1.9E-01
Iodine-131	-1.6E+01	U	7.5E+01	4.0E+01	-5.9E-01	2.8E+00	1.5E+00
Lead-212	-2.3E+00	U	9.8E+00	5.4E+00	-8.5E-02	3.6E-01	2.0E-01
Lead-214	1.1E+00	UJ	1.0E+01	6.0E+00	4.1E-02	3.7E-01	2.2E-01
Potassium-40	2.0E+01	U	1.3E+02	7.4E+01	7.4E-01	4.8E+00	2.7E+00
Protactinium-234m	1.2E+02	U	1.3E+03	7.4E+02	4.4E+00	4.8E+01	2.7E+01
Sodium-22	-2.2E+00	U	9.1E+00	4.6E+00	-8.1E-02	3.4E-01	1.7E-01
Thallium-208	-3.8E-01	U	8.0E+00	4.4E+00	-1.4E-02	3.0E-01	1.6E-01
Thorium-234	2.3E+01	U	8.3E+01	5.0E+01	8.5E-01	3.1E+00	1.9E+00

**AMBIENT AIR MONITORING RESULTS AT THE WASTE ISOLATION PILOT
PLANT (WIPP) AND THE VICINITY CARLSBAD, NEW MEXICO**

WPL09 Southeast Control

March 11, 2014 to March 25, 2014

Analyte	pCi/sample				Bq/sample		
	Lab Result	Lab Flag	Lab MDA	±2 s TPU	Lab Result	Lab MDA	±2 s TPU
Gross alpha and beta activity							
Gross alpha	5.0E+00		7.0E-01	1.0E+00	1.9E-01	2.6E-02	3.8E-02
Gross beta	1.9E+01		1.1E+00	3.2E+00	7.0E-01	4.1E-02	1.2E-01
Alpha and beta emitters							
Americium-241	-1.3E-02	U	3.4E-02	1.4E-02	-4.8E-04	1.3E-03	5.2E-04
Plutonium-238	6.1E-03	U	1.9E-02	1.1E-02	2.3E-04	7.0E-04	4.0E-04
Plutonium-239/240	1.0E-02	U	1.9E-02	1.2E-02	3.7E-04	7.0E-04	4.6E-04
Strontium-90	-5.9E-02	U	5.0E-01	2.2E-01	-2.2E-03	1.9E-02	8.1E-03
Gamma emitters							
Actinium-228	2.5E+00	U	3.8E+01	2.2E+01	9.3E-02	1.4E+00	8.1E-01
Americium-241	1.0E+00	U	7.4E+00	4.2E+00	3.7E-02	2.7E-01	1.6E-01
Beryllium-7	1.2E+02		7.0E+01	5.4E+01	4.4E+00	2.6E+00	2.0E+00
Bismuth-212	8.0E+01	U	1.0E+02	6.6E+01	3.0E+00	3.7E+00	2.4E+00
Bismuth-214	-4.1E+00	UJ	2.0E+01	1.1E+01	-1.5E-01	7.4E-01	4.1E-01
Cesium-134	4.5E+00	U	7.0E+00	4.4E+00	1.7E-01	2.6E-01	1.6E-01
Cesium-137	5.8E-01	U	7.5E+00	4.2E+00	2.1E-02	2.8E-01	1.6E-01
Cobalt-60	2.8E+00	U	7.6E+00	4.6E+00	1.0E-01	2.8E-01	1.7E-01
Iodine-131	-1.1E+01	U	8.8E+01	4.8E+01	-4.1E-01	3.3E+00	1.8E+00
Lead-212	3.2E+00	U	8.6E+00	5.2E+00	1.2E-01	3.2E-01	1.9E-01
Lead-214	2.2E-02	UJ	1.5E+01	8.4E+00	8.1E-04	5.6E-01	3.1E-01
Potassium-40	-5.9E+00	U	1.3E+02	6.8E+01	-2.2E-01	4.8E+00	2.5E+00
Protactinium-234m	-1.2E+02	U	1.3E+03	6.6E+02	-4.4E+00	4.8E+01	2.4E+01
Sodium-22	3.8E+00	U	8.7E+00	5.2E+00	1.4E-01	3.2E-01	1.9E-01
Thallium-208	1.8E+00	U	8.3E+00	4.8E+00	6.7E-02	3.1E-01	1.8E-01
Thorium-234	6.9E+00	U	6.1E+01	3.6E+01	2.6E-01	2.3E+00	1.3E+00

**AMBIENT AIR MONITORING RESULTS AT THE WASTE ISOLATION PILOT
PLANT (WIPP) AND THE VICINITY CARLSBAD, NEW MEXICO**

WPL10 Carlsbad (Guadalupe St.)

March 11, 2014 to March 25, 2014

Analyte	pCi/sample				Bq/sample		
	Lab Result	Lab Flag	Lab MDA	±2 s TPU	Lab Result	Lab MDA	±2 s TPU
Gross alpha and beta activity							
Gross alpha	2.0E+00		7.1E-01	6.0E-01	7.4E-02	2.6E-02	2.2E-02
Gross beta	7.2E+00		1.0E+00	1.4E+00	2.7E-01	3.7E-02	5.0E-02
Alpha and beta emitters							
Americium-241	-8.0E-03	U	3.4E-02	1.5E-02	-3.0E-04	1.3E-03	5.6E-04
Plutonium-238	1.8E-02		6.0E-03	1.3E-02	6.7E-04	2.2E-04	4.7E-04
Plutonium-239/240	8.9E-03	U	2.1E-02	1.3E-02	3.3E-04	7.8E-04	4.7E-04
Strontium-90	-1.1E-01	U	5.5E-01	2.4E-01	-4.1E-03	2.0E-02	8.9E-03
Gamma emitters							
Actinium-228	-9.9E+00	U	3.8E+01	1.9E+01	-3.7E-01	1.4E+00	7.2E-01
Americium-241	9.3E+00	U	7.8E+01	4.4E+01	3.4E-01	2.9E+00	1.6E+00
Beryllium-7	4.2E+01	U	8.6E+01	5.2E+01	1.6E+00	3.2E+00	1.9E+00
Bismuth-212	8.9E+00	U	1.0E+02	5.6E+01	3.3E-01	3.7E+00	2.1E+00
Bismuth-214	-4.2E+00	UJ	2.1E+01	1.1E+01	-1.6E-01	7.8E-01	4.2E-01
Cesium-134	-2.0E+00	U	8.7E+00	4.6E+00	-7.4E-02	3.2E-01	1.7E-01
Cesium-137	6.1E-01	U	8.2E+00	4.6E+00	2.3E-02	3.0E-01	1.7E-01
Cobalt-60	1.5E+00	U	8.9E+00	5.0E+00	5.6E-02	3.3E-01	1.9E-01
Iodine-131	1.0E+01	U	9.5E+01	5.4E+01	3.7E-01	3.5E+00	2.0E+00
Lead-212	2.2E+00	U	9.6E+00	5.6E+00	8.1E-02	3.6E-01	2.1E-01
Lead-214	1.4E+00	UJ	1.6E+01	9.0E+00	5.2E-02	5.9E-01	3.3E-01
Potassium-40	-5.8E+01	U	1.5E+02	6.8E+01	-2.1E+00	5.6E+00	2.5E+00
Protactinium-234m	1.9E+02	U	1.4E+03	6.6E+02	7.0E+00	5.2E+01	2.4E+01
Sodium-22	-1.6E-01	U	7.3E+00	5.2E+00	-5.9E-03	2.7E-01	1.9E-01
Thallium-208	-4.5E+00	U	1.1E+01	4.8E+00	-1.7E-01	4.1E-01	1.8E-01
Thorium-234	-1.2E+01	U	1.2E+02	3.6E+01	-4.4E-01	4.4E+00	1.3E+00

**AMBIENT AIR MONITORING RESULTS AT THE WASTE ISOLATION PILOT
PLANT (WIPP) AND THE VICINITY CARLSBAD, NEW MEXICO**

WPL11 Carlsbad Mobile Solar

March 11, 2014 to March 25, 2014

Analyte	pCi/sample				Bq/sample		
	Lab Result	Lab Flag	Lab MDA	±2 s TPU	Lab Result	Lab MDA	±2 s TPU
Gross alpha and beta activity							
Gross alpha	8.7E+00		7.7E-01	1.6E+00	3.2E-01	2.8E-02	6.1E-02
Gross beta	3.2E+01		1.1E+00	5.2E+00	1.2E+00	4.1E-02	1.9E-01
Alpha and beta emitters							
Americium-241	1.8E-04	U	3.8E-02	1.8E-02	6.7E-06	1.4E-03	6.6E-04
Plutonium-238	8.4E-03		7.6E-03	1.4E-02	3.1E-04	2.8E-04	5.1E-04
Plutonium-239/240	3.1E-02		2.1E-02	2.0E-02	1.1E-03	7.8E-04	7.4E-04
Strontium-90	-9.2E-03	U	6.5E-01	2.8E-01	-3.4E-04	2.4E-02	1.0E-02
Gamma emitters							
Actinium-228	2.0E+01	U	2.7E+01	1.7E+01	7.4E-01	1.0E+00	6.4E-01
Americium-241	9.9E+01	U	1.9E+02	1.2E+02	3.7E+00	7.0E+00	4.3E+00
Beryllium-7	2.0E+02		9.0E+01	6.8E+01	7.4E+00	3.3E+00	2.5E+00
Bismuth-212	4.1E+01	U	1.4E+02	8.0E+01	1.5E+00	5.2E+00	3.0E+00
Bismuth-214	1.9E+01	J	1.7E+01	1.1E+01	7.0E-01	6.3E-01	4.1E-01
Cesium-134	-2.4E+00	U	9.1E+00	5.2E+00	-8.9E-02	3.4E-01	1.9E-01
Cesium-137	3.5E+00	U	7.9E+00	4.8E+00	1.3E-01	2.9E-01	1.8E-01
Cobalt-60	4.6E+00	U	7.4E+00	4.6E+00	1.7E-01	2.7E-01	1.7E-01
Iodine-131	-3.5E+01	U	1.4E+02	7.8E+01	-1.3E+00	5.2E+00	2.9E+00
Lead-212	3.3E+00	U	1.6E+01	9.4E+00	1.2E-01	5.9E-01	3.5E-01
Lead-214	-1.2E-01	UJ	2.0E+01	1.2E+01	-4.4E-03	7.4E-01	4.3E-01
Potassium-40	6.0E-01	U	1.5E+02	8.8E+01	2.2E-02	5.6E+00	3.3E+00
Protactinium-234m	1.1E+03	U	1.2E+03	7.8E+02	4.1E+01	4.4E+01	2.9E+01
Sodium-22	-9.0E-01	U	9.0E+00	5.0E+00	-3.3E-02	3.3E-01	1.9E-01
Thallium-208	4.3E+00	U	8.3E+00	5.0E+00	1.6E-01	3.1E-01	1.9E-01
Thorium-234	1.5E+02		1.5E+02	9.4E+01	5.6E+00	5.6E+00	3.5E+00

**AMBIENT AIR MONITORING RESULTS AT THE WASTE ISOLATION PILOT
PLANT (WIPP) AND THE VICINITY CARLSBAD, NEW MEXICO**

Filter Blank

March 11, 2014 to March 25, 2014

Analyte	pCi/sample				Bq/sample		
	Lab Result	Lab Flag	Lab MDA	±2 s TPU	Lab Result	Lab MDA	±2 s TPU
Gross alpha and beta activity							
Gross alpha	-1.6E-01	U	6.4E-01	3.6E-01	-5.9E-03	2.4E-02	1.3E-02
Gross beta	-1.1E-01	U	9.9E-01	6.0E-01	-4.1E-03	3.7E-02	2.2E-02
Alpha and beta emitters							
Americium-241	1.3E-02	U	4.5E-02	2.6E-02	4.8E-04	1.7E-03	9.6E-04
Plutonium-238	4.8E-03	U	6.5E-03	1.2E-02	1.8E-04	2.4E-04	4.4E-04
Plutonium-239/240	7.2E-03	U	2.6E-02	1.4E-02	2.7E-04	9.6E-04	5.3E-04
Strontium-90	-3.7E-02	U	6.2E-01	2.8E-01	-1.4E-03	2.3E-02	1.0E-02
Gamma emitters							
Actinium-228	2.8E+01		2.8E+01	2.0E+01	1.0E+00	1.0E+00	7.3E-01
Americium-241	-4.1E+01	U	8.5E+01	4.4E+01	-1.5E+00	3.1E+00	1.6E+00
Beryllium-7	-8.3E+00	U	8.8E+01	4.8E+01	-3.1E-01	3.3E+00	1.8E+00
Bismuth-212	7.2E+00	U	1.1E+02	6.2E+01	2.7E-01	4.1E+00	2.3E+00
Bismuth-214	-4.2E+00	UJ	2.0E+01	1.1E+01	-1.6E-01	7.4E-01	4.1E-01
Cesium-134	5.1E-01	U	8.0E+00	4.6E+00	1.9E-02	3.0E-01	1.7E-01
Cesium-137	-4.3E+00	U	8.8E+00	4.2E+00	-1.6E-01	3.3E-01	1.6E-01
Cobalt-60	2.4E+00	U	8.3E+00	4.8E+00	8.9E-02	3.1E-01	1.8E-01
Iodine-131	5.5E+01	U	8.1E+01	5.2E+01	2.0E+00	3.0E+00	1.9E+00
Lead-212	4.8E+00	U	9.6E+00	5.8E+00	1.8E-01	3.6E-01	2.1E-01
Lead-214	3.1E+00	UJ	1.7E+01	1.0E+01	1.1E-01	6.3E-01	3.7E-01
Potassium-40	-4.0E+01	U	1.5E+02	7.6E+01	-1.5E+00	5.6E+00	2.8E+00
Protactinium-234m	6.5E+01	U	1.1E+03	6.0E+02	2.4E+00	4.1E+01	2.2E+01
Sodium-22	2.8E+00	U	7.7E+00	4.6E+00	1.0E-01	2.8E-01	1.7E-01
Thallium-208	-2.8E+00	U	1.1E+01	5.8E+00	-1.0E-01	4.1E-01	2.1E-01
Thorium-234	3.3E+01	U	1.1E+02	6.8E+01	1.2E+00	4.1E+00	2.5E+00

**AMBIENT AIR MONITORING RESULTS AT THE WASTE ISOLATION PILOT
PLANT (WIPP) AND THE VICINITY CARLSBAD, NEW MEXICO**

Filter Blank (laboratory duplicate)

March 11, 2014 to March 25, 2014

Analyte	pCi/sample				Bq/sample		
	Lab Result	Lab Flag	Lab MDA	±2 s TPU	Lab Result	Lab MDA	±2 s TPU
Gamma emitters							
Actinium-228	9.9E-01	U	2.8E+01	1.5E+01	3.7E-02	1.0E+00	5.7E-01
Americium-241	3.1E+00	U	1.1E+02	6.2E+01	1.1E-01	4.1E+00	2.3E+00
Beryllium-7	0.0E+00	U	6.8E+01	3.8E+01	0.0E+00	2.5E+00	1.4E+00
Bismuth-212	5.4E-01	U	9.7E+01	5.4E+01	2.0E-02	3.6E+00	2.0E+00
Bismuth-214	-1.7E+00	UJ	1.8E+01	1.0E+01	-6.3E-02	6.7E-01	3.8E-01
Cesium-134	3.0E+00	U	7.1E+00	4.2E+00	1.1E-01	2.6E-01	1.6E-01
Cesium-137	7.0E-01	U	5.4E+00	3.0E+00	2.6E-02	2.0E-01	1.1E-01
Cobalt-60	3.4E+00	U	6.0E+00	3.8E+00	1.3E-01	2.2E-01	1.4E-01
Iodine-131	1.3E+01	U	7.0E+01	4.0E+01	4.8E-01	2.6E+00	1.5E+00
Lead-212	-2.0E+00	U	1.0E+01	5.8E+00	-7.4E-02	3.7E-01	2.1E-01
Lead-214	2.0E+00	UJ	1.2E+01	7.0E+00	7.4E-02	4.4E-01	2.6E-01
Potassium-40	-3.4E+01	U	1.1E+02	5.4E+01	-1.3E+00	4.1E+00	2.0E+00
Protactinium-234m	3.4E+02	U	9.4E+02	5.6E+02	1.3E+01	3.5E+01	2.1E+01
Sodium-22	-1.5E+00	U	8.0E+00	4.0E+00	-5.6E-02	3.0E-01	1.5E-01
Thallium-208	2.5E+00	U	7.7E+00	4.6E+00	9.3E-02	2.8E-01	1.7E-01
Thorium-234	-3.2E+01	U	1.1E+02	6.2E+01	-1.2E+00	4.1E+00	2.3E+00

**AMBIENT AIR MONITORING RESULTS AT THE WASTE ISOLATION PILOT
PLANT (WIPP) AND THE VICINITY CARLSBAD, NEW MEXICO**

Laboratory Method Blank

March 11, 2014 to March 25, 2014

Analyte	pCi/sample				Bq/sample		
	Lab Result	Lab Flag	Lab MDA	±2 s TPU	Lab Result	Lab MDA	±2 s TPU
Gross alpha and beta activity							
Gross alpha	-1.1E-01	U	6.2E-01	3.4E-01	-4.1E-03	2.3E-02	1.3E-02
Gross beta	-8.1E-02	U	1.0E+00	6.2E-01	-3.0E-03	3.7E-02	2.3E-02
Alpha and beta emitters							
Americium-241	-8.4E-03	U	2.6E-02	1.1E-02	-3.1E-04	9.6E-04	4.2E-04
Plutonium-238	1.8E-03	U	4.8E-03	8.6E-03	6.7E-05	1.8E-04	3.2E-04
Plutonium-239/240	1.2E-02		4.8E-03	9.4E-03	4.4E-04	1.8E-04	3.5E-04
Strontium-90	-6.2E-03	U	5.3E-01	2.4E-01	-2.3E-04	2.0E-02	8.9E-03
Gamma emitters							
Actinium-228	1.2E+01	U	3.7E+01	2.2E+01	4.4E-01	1.4E+00	8.1E-01
Americium-241	-6.9E-01	U	3.2E+01	1.9E+01	-2.6E-02	1.2E+00	7.0E-01
Beryllium-7	2.1E+00	U	3.9E+01	2.2E+01	7.8E-02	1.4E+00	8.1E-01
Bismuth-212	-4.0E+00	U	8.4E+01	4.8E+01	-1.5E-01	3.1E+00	1.8E+00
Bismuth-214	1.4E+01	J	1.2E+01	8.0E+00	5.2E-01	4.4E-01	3.0E-01
Cesium-134	-6.2E-01	U	5.7E+00	3.2E+00	-2.3E-02	2.1E-01	1.2E-01
Cesium-137	8.4E-01	U	6.4E+00	3.8E+00	3.1E-02	2.4E-01	1.4E-01
Cobalt-60	-2.2E+00	U	6.9E+00	3.8E+00	-8.1E-02	2.6E-01	1.4E-01
Iodine-131	3.5E+00	U	4.9E+00	3.0E+00	1.3E-01	1.8E-01	1.1E-01
Lead-212	2.0E+00	U	1.3E+01	7.8E+00	7.4E-02	4.8E-01	2.9E-01
Lead-214	3.5E+00	UJ	2.1E+01	1.2E+01	1.3E-01	7.8E-01	4.6E-01
Potassium-40	-2.6E+00	U	1.3E+02	7.6E+01	-9.6E-02	4.8E+00	2.8E+00
Protactinium-234	-1.1E+02	U	1.1E+03	6.4E+02	-4.1E+00	4.1E+01	2.4E+01
Sodium-22	1.7E+00	U	6.6E+00	3.8E+00	6.3E-02	2.4E-01	1.4E-01
Thallium-208	5.4E+00	U	5.6E+00	3.6E+00	2.0E-01	2.1E-01	1.3E-01
Thorium-234	2.4E+01	U	1.4E+02	8.2E+01	8.9E-01	5.2E+00	3.0E+00

**AMBIENT AIR MONITORING RESULTS AT THE WASTE ISOLATION PILOT
PLANT (WIPP) AND THE VICINITY CARLSBAD, NEW MEXICO**

Laboratory Method Blank (duplicate)

March 11, 2014 to March 25, 2014

Analyte	pCi/sample				Bq/sample		
	Lab Result	Lab Flag	Lab MDA	±2 s TPU	Lab Result	Lab MDA	±2 s TPU
Gross alpha and beta activity							
Gross alpha	5.8E-02	U	1.4E-01	8.4E-02	2.1E-03	5.2E-03	3.1E-03
Gross beta	1.1E-03	U	2.1E-01	1.2E-01	4.1E-05	7.8E-03	4.6E-03
Alpha and beta emitters							
Americium-241	-8.2E-03	U	2.5E-02	1.0E-02	-3.0E-04	9.3E-04	3.7E-04
Plutonium-238	1.1E-02	U	1.3E-02	1.0E-02	4.1E-04	4.8E-04	3.8E-04
Plutonium-239/240	1.8E-03	U	1.7E-02	8.8E-03	6.7E-05	6.3E-04	3.3E-04
Strontium-90	-6.5E-02	U	6.6E-01	2.8E-01	-2.4E-03	2.4E-02	1.0E-02
Gamma emitters							
Actinium-228	-1.2E+01	U	3.8E+01	1.9E+01	-4.4E-01	1.4E+00	7.1E-01
Americium-241	9.6E-01	U	7.2E+00	4.2E+00	3.6E-02	2.7E-01	1.6E-01
Beryllium-7	1.6E+01	U	4.6E+01	2.8E+01	5.9E-01	1.7E+00	1.0E+00
Bismuth-212	1.2E+01	U	1.0E+02	5.8E+01	4.4E-01	3.7E+00	2.1E+00
Bismuth-214	5.0E-01	UJ	1.6E+01	8.8E+00	1.9E-02	5.9E-01	3.3E-01
Cesium-134	2.3E-01	U	8.1E+00	4.6E+00	8.5E-03	3.0E-01	1.7E-01
Cesium-137	-2.9E+00	U	8.3E+00	4.2E+00	-1.1E-01	3.1E-01	1.6E-01
Cobalt-60	-1.9E+00	U	8.5E+00	4.0E+00	-7.0E-02	3.1E-01	1.5E-01
Iodine-131	-3.5E-01	U	5.2E+00	2.8E+00	-1.3E-02	1.9E-01	1.0E-01
Lead-212	1.4E+00	U	8.8E+00	5.0E+00	5.2E-02	3.3E-01	1.9E-01
Lead-214	-3.7E+00	UJ	1.4E+01	7.8E+00	-1.4E-01	5.2E-01	2.9E-01
Potassium-40	-3.8E+01	U	1.3E+02	6.2E+01	-1.4E+00	4.8E+00	2.3E+00
Protactinium-234m	-3.1E+02	U	1.4E+03	7.2E+02	-1.1E+01	5.2E+01	2.7E+01
Sodium-22	2.1E+00	U	9.8E+00	5.6E+00	7.8E-02	3.6E-01	2.1E-01
Thallium-208	4.8E-01	U	8.4E+00	4.8E+00	1.8E-02	3.1E-01	1.8E-01
Thorium-234	6.8E+00	U	5.5E+01	3.2E+01	2.5E-01	2.0E+00	1.2E+00

**AMBIENT AIR MONITORING RESULTS AT THE WASTE ISOLATION PILOT PLANT
(WIPP) AND THE VICINITY CARLSBAD, NEW MEXICO**

WPL01 WIPP Salt Shaft

March 25, 2014 to April 22, 2014

Analyte	pCi/sample				Bq/sample		
	Lab Result	Lab Flag	Lab MDA	±2 s TPU	Lab Result	Lab MDA	±2 s TPU
Gross alpha and beta activity							
Gross alpha	1.8E+00		3.0E-01	1.4E+00	6.7E-02	1.1E-02	5.3E-02
Gross beta	2.8E+01		2.3E+00	2.2E+00	1.0E+00	8.5E-02	8.1E-02
Alpha and beta emitters							
Americium-241	-5.2E-03	U	6.9E-03	6.4E-02	-1.9E-04	2.6E-04	2.4E-03
Plutonium-238	4.5E-03	U	6.4E-03	4.8E-02	1.7E-04	2.4E-04	1.8E-03
Plutonium-239/240	4.5E-03	U	5.5E-03	1.2E-02	1.7E-04	2.0E-04	4.5E-04
Strontium-90	-2.3E-01	U	1.6E-01	1.5E+00	-8.5E-03	5.9E-03	5.5E-02
Gamma emitters							
Actinium-228	2.9E+00	U	1.3E+01	9.2E+01	1.1E-01	4.8E-01	3.4E+00
Americium-241	-2.6E+01	U	2.2E+01	1.5E+02	-9.6E-01	8.1E-01	5.6E+00
Beryllium-7	4.5E+02		4.0E+01	1.4E+02	1.7E+01	1.5E+00	5.0E+00
Bismuth-212	2.6E+01	U	3.4E+01	2.4E+02	9.6E-01	1.3E+00	8.9E+00
Bismuth-214	1.4E+01	UJ	5.6E+00	3.6E+01	5.2E-01	2.1E-01	1.3E+00
Cesium-134	-6.2E+00	U	2.7E+00	1.9E+01	-2.3E-01	1.0E-01	7.1E-01
Cesium-137	-1.2E+00	U	2.6E+00	1.8E+01	-4.4E-02	9.6E-02	6.7E-01
Cobalt-60	-1.2E+00	U	3.3E+00	2.4E+01	-4.4E-02	1.2E-01	8.9E-01
Iodine-131	-5.7E+00	U	3.0E+00	2.2E+01	-2.1E-01	1.1E-01	8.1E-01
Lead-212	1.5E+00	U	4.8E+00	3.2E+01	5.6E-02	1.8E-01	1.2E+00
Lead-214	-4.9E+00	UJ	6.1E+00	4.2E+01	-1.8E-01	2.3E-01	1.6E+00
Potassium-40	-2.4E+01	U	4.8E+01	3.4E+02	-8.9E-01	1.8E+00	1.3E+01
Protactinium-234m	6.1E+02	U	4.1E+02	2.6E+03	2.3E+01	1.5E+01	9.6E+01
Sodium-22	-4.1E+00	U	3.0E+00	2.2E+01	-1.5E-01	1.1E-01	8.1E-01
Thallium-208	-4.2E-01	U	3.2E+00	2.2E+01	-1.6E-02	1.2E-01	8.1E-01
Thorium-234	2.3E+00	U	4.9E+01	3.2E+02	8.5E-02	1.8E+00	1.2E+01

**AMBIENT AIR MONITORING RESULTS AT THE WASTE ISOLATION PILOT PLANT
(WIPP) AND THE VICINITY CARLSBAD, NEW MEXICO**

WPL02 Far Field

March 25, 2014 to April 22, 2014

Analyte	pCi/sample				Bq/sample		
	Lab Result	Lab Flag	Lab MDA	±2 s TPU	Lab Result	Lab MDA	±2 s TPU
Gross alpha and beta activity							
Gross alpha	4.4E+00		4.6E-01	1.4E+00	1.6E-01	1.7E-02	5.0E-02
Gross beta	5.8E+01		4.6E+00	2.0E+00	2.1E+00	1.7E-01	7.4E-02
Alpha and beta emitters							
Americium-241	8.9E-04	U	9.2E-03	7.8E-02	3.3E-05	3.4E-04	2.9E-03
Plutonium-238	1.6E+00		1.3E-01	4.4E-02	5.9E-02	4.8E-03	1.6E-03
Plutonium-239/240	1.7E-02	U	9.6E-03	5.8E-02	6.3E-04	3.6E-04	2.1E-03
Strontium-90	2.4E-02	U	1.3E-01	1.2E+00	8.9E-04	4.8E-03	4.3E-02
Gamma emitters							
Actinium-228	1.3E+00	U	1.3E+01	8.6E+01	4.8E-02	4.8E-01	3.2E+00
Americium-241	9.7E+00	U	1.6E+01	1.1E+02	3.6E-01	5.9E-01	4.1E+00
Beryllium-7	4.4E+02		3.5E+01	1.0E+02	1.6E+01	1.3E+00	3.8E+00
Bismuth-212	6.4E+01	U	3.6E+01	2.4E+02	2.4E+00	1.3E+00	8.9E+00
Bismuth-214	-1.3E+00	UJ	7.3E+00	5.0E+01	-4.8E-02	2.7E-01	1.9E+00
Cesium-134	1.5E+00	U	2.0E+00	1.3E+01	5.6E-02	7.4E-02	5.0E-01
Cesium-137	6.7E-01	U	2.0E+00	1.3E+01	2.5E-02	7.4E-02	5.0E-01
Cobalt-60	-5.7E-01	U	2.2E+00	1.6E+01	-2.1E-02	8.1E-02	5.8E-01
Iodine-131	3.9E-01	U	3.0E+00	2.0E+01	1.4E-02	1.1E-01	7.4E-01
Lead-212	-8.6E-01	U	4.0E+00	2.6E+01	-3.2E-02	1.5E-01	9.6E-01
Lead-214	3.8E+00	UJ	2.3E+00	1.5E+01	1.4E-01	8.5E-02	5.6E-01
Potassium-40	-2.0E+00	U	4.7E+01	3.2E+02	-7.4E-02	1.7E+00	1.2E+01
Protactinium-234m	1.1E+02	U	3.1E+02	2.2E+03	4.1E+00	1.1E+01	8.1E+01
Sodium-22	1.1E+00	U	2.1E+00	1.4E+01	4.1E-02	7.8E-02	5.3E-01
Thallium-208	6.5E+00		1.9E+00	1.2E+01	2.4E-01	7.0E-02	4.4E-01
Thorium-234	-7.9E+00	U	4.2E+01	2.8E+02	-2.9E-01	1.6E+00	1.0E+01

**AMBIENT AIR MONITORING RESULTS AT THE WASTE ISOLATION PILOT PLANT
(WIPP) AND THE VICINITY CARLSBAD, NEW MEXICO**

WPL03 Met Tower

March 25, 2014 to April 22, 2014

Analyte	pCi/sample				Bq/sample		
	Lab Result	Lab Flag	Lab MDA	±2 s TPU	Lab Result	Lab MDA	±2 s TPU
Gross alpha and beta activity							
Gross alpha	5.5E+00		5.5E-01	1.4E+00	2.0E-01	2.0E-02	5.3E-02
Gross beta	5.8E+01		4.7E+00	2.2E+00	2.1E+00	1.7E-01	8.1E-02
Alpha and beta emitters							
Americium-241	6.0E-03	U	8.4E-03	6.2E-02	2.2E-04	3.1E-04	2.3E-03
Plutonium-238	0.0E+00	U	5.7E-03	5.0E-02	0.0E+00	2.1E-04	1.9E-03
Plutonium-239/240	1.2E-02	U	6.2E-03	3.4E-02	4.4E-04	2.3E-04	1.3E-03
Strontium-90	9.2E-02	U	1.3E-01	1.2E+00	3.4E-03	4.8E-03	4.4E-02
Gamma emitters							
Actinium-228	-3.9E+00	U	1.2E+01	8.2E+01	-1.4E-01	4.4E-01	3.0E+00
Americium-241	3.1E-01	U	2.3E+00	1.5E+01	1.1E-02	8.5E-02	5.7E-01
Beryllium-7	3.8E+02		3.4E+01	1.2E+02	1.4E+01	1.3E+00	4.4E+00
Bismuth-212	5.4E+01	U	2.7E+01	1.8E+02	2.0E+00	1.0E+00	6.5E+00
Bismuth-214	6.1E-01	UJ	7.6E+00	5.2E+01	2.3E-02	2.8E-01	1.9E+00
Cesium-134	-1.2E+00	U	2.5E+00	1.7E+01	-4.4E-02	9.3E-02	6.4E-01
Cesium-137	1.5E+00	U	2.1E+00	1.4E+01	5.6E-02	7.8E-02	5.3E-01
Cobalt-60	-6.5E-01	U	1.8E+00	1.3E+01	-2.4E-02	6.7E-02	5.0E-01
Iodine-131	2.0E+00	U	2.4E+00	1.6E+01	7.4E-02	8.9E-02	5.9E-01
Lead-212	9.2E-01	U	4.0E+00	2.6E+01	3.4E-02	1.5E-01	9.6E-01
Lead-214	2.7E+00	UJ	5.9E+00	4.0E+01	1.0E-01	2.2E-01	1.5E+00
Potassium-40	-5.7E+01	U	3.7E+01	2.6E+02	-2.1E+00	1.4E+00	9.6E+00
Protactinium-234m	5.1E+02	U	3.7E+02	2.4E+03	1.9E+01	1.4E+01	8.9E+01
Sodium-22	-2.6E+00	U	2.1E+00	1.6E+01	-9.6E-02	7.8E-02	6.0E-01
Thallium-208	1.8E+00	U	2.8E+00	1.9E+01	6.7E-02	1.0E-01	6.9E-01
Thorium-234	2.5E+01	U	2.5E+01	1.7E+02	9.3E-01	9.3E-01	6.2E+00

**AMBIENT AIR MONITORING RESULTS AT THE WASTE ISOLATION PILOT PLANT
(WIPP) AND THE VICINITY CARLSBAD, NEW MEXICO**

WPL09 Southeast Control

March 25, 2014 to April 22, 2014

Analyte	pCi/sample				Bq/sample		
	Lab Result	Lab Flag	Lab MDA	±2 s TPU	Lab Result	Lab MDA	±2 s TPU
Gross alpha and beta activity							
Gross alpha	4.5E+00		4.9E-01	1.5E+00	1.7E-01	1.8E-02	5.6E-02
Gross beta	5.7E+01		4.6E+00	2.2E+00	2.1E+00	1.7E-01	8.1E-02
Alpha and beta emitters							
Americium-241	-1.0E-02	U	5.3E-03	5.6E-02	-3.7E-04	2.0E-04	2.1E-03
Plutonium-238	5.6E-03	U	6.8E-03	4.0E-02	2.1E-04	2.5E-04	1.5E-03
Plutonium-239/240	2.5E-02	U	1.0E-02	5.2E-02	9.3E-04	3.7E-04	1.9E-03
Strontium-90	9.8E-02	U	1.4E-01	1.3E+00	3.6E-03	5.2E-03	4.7E-02
Gamma emitters							
Actinium-228	2.7E+00	U	1.3E+01	9.0E+01	1.0E-01	4.8E-01	3.3E+00
Americium-241	-1.2E+00	U	2.8E+00	2.0E+01	-4.4E-02	1.0E-01	7.3E-01
Beryllium-7	4.5E+02		3.9E+01	1.2E+02	1.7E+01	1.4E+00	4.4E+00
Bismuth-212	3.3E+01	U	3.6E+01	2.4E+02	1.2E+00	1.3E+00	8.9E+00
Bismuth-214	3.4E+00	UJ	6.9E+00	4.6E+01	1.3E-01	2.6E-01	1.7E+00
Cesium-134	-1.1E+00	U	2.2E+00	1.6E+01	-4.1E-02	8.1E-02	5.8E-01
Cesium-137	-2.6E+00	U	2.2E+00	1.6E+01	-9.6E-02	8.1E-02	6.1E-01
Cobalt-60	3.1E-01	U	2.8E+00	2.0E+01	1.1E-02	1.0E-01	7.4E-01
Iodine-131	-1.7E+00	U	2.9E+00	2.0E+01	-6.3E-02	1.1E-01	7.4E-01
Lead-212	2.9E+00	U	4.9E+00	3.2E+01	1.1E-01	1.8E-01	1.2E+00
Lead-214	-8.5E+00	UJ	6.4E+00	4.4E+01	-3.1E-01	2.4E-01	1.6E+00
Potassium-40	-4.8E+01	U	4.3E+01	3.2E+02	-1.8E+00	1.6E+00	1.2E+01
Protactinium-234m	4.8E+02	U	4.2E+02	2.8E+03	1.8E+01	1.6E+01	1.0E+02
Sodium-22	-1.8E+00	U	2.8E+00	2.0E+01	-6.7E-02	1.0E-01	7.4E-01
Thallium-208	4.4E+00	U	2.3E+00	1.5E+01	1.6E-01	8.5E-02	5.6E-01
Thorium-234	-1.2E+01	U	2.9E+01	2.0E+02	-4.4E-01	1.1E+00	7.3E+00

**AMBIENT AIR MONITORING RESULTS AT THE WASTE ISOLATION PILOT PLANT
(WIPP) AND THE VICINITY CARLSBAD, NEW MEXICO**

WPL10 Carlsbad (Guadalupe St.)

March 25, 2014 to April 8, 2014

Analyte	pCi/sample				Bq/sample		
	Lab Result	Lab Flag	Lab MDA	±2 s TPU	Lab Result	Lab MDA	±2 s TPU
Gross alpha and beta activity							
Gross alpha	5.9E+00		5.8E-01	1.4E+00	2.2E-01	2.1E-02	5.3E-02
Gross beta	5.3E+01		4.3E+00	2.2E+00	2.0E+00	1.6E-01	8.1E-02
Alpha and beta emitters							
Americium-241	9.3E-04	U	9.3E-03	7.8E-02	3.4E-05	3.4E-04	2.9E-03
Plutonium-238	1.7E-02	U	1.0E-02	6.2E-02	6.3E-04	3.7E-04	2.3E-03
Plutonium-239/240	2.5E-02	U	1.3E-02	7.8E-02	9.3E-04	4.8E-04	2.9E-03
Strontium-90	-1.2E-01	U	1.7E-01	1.6E+00	-4.4E-03	6.3E-03	6.0E-02
Gamma emitters							
Actinium-228	8.7E+00	U	1.1E+01	7.6E+01	3.2E-01	4.1E-01	2.8E+00
Americium-241	-1.3E+01	U	1.3E+01	8.8E+01	-4.8E-01	4.8E-01	3.3E+00
Beryllium-7	4.2E+02		3.7E+01	1.2E+02	1.6E+01	1.4E+00	4.4E+00
Bismuth-212	4.5E+01	U	3.2E+01	2.0E+02	1.7E+00	1.2E+00	7.4E+00
Bismuth-214	1.7E+00	UJ	6.9E+00	4.6E+01	6.3E-02	2.6E-01	1.7E+00
Cesium-134	-1.0E+00	U	2.1E+00	1.5E+01	-3.7E-02	7.8E-02	5.6E-01
Cesium-137	-5.6E-01	U	2.5E+00	1.7E+01	-2.1E-02	9.3E-02	6.4E-01
Cobalt-60	-6.6E-01	U	2.6E+00	1.8E+01	-2.4E-02	9.6E-02	6.8E-01
Iodine-131	-2.4E+00	U	3.4E+00	2.4E+01	-8.9E-02	1.3E-01	8.9E-01
Lead-212	2.4E+00	U	4.8E+00	3.2E+01	8.9E-02	1.8E-01	1.2E+00
Lead-214	4.4E+00	UJ	6.4E+00	4.4E+01	1.6E-01	2.4E-01	1.6E+00
Potassium-40	-2.9E+01	U	4.0E+01	2.8E+02	-1.1E+00	1.5E+00	1.0E+01
Protactinium-234m	-1.1E+01	U	4.0E+02	2.8E+03	-4.1E-01	1.5E+01	1.0E+02
Sodium-22	2.1E+00	U	2.4E+00	1.6E+01	7.8E-02	8.9E-02	6.0E-01
Thallium-208	-3.4E+00	U	3.5E+00	2.4E+01	-1.3E-01	1.3E-01	8.9E-01
Thorium-234	8.1E+00	U	4.1E+01	2.8E+02	3.0E-01	1.5E+00	1.0E+01

**AMBIENT AIR MONITORING RESULTS AT THE WASTE ISOLATION PILOT PLANT
(WIPP) AND THE VICINITY CARLSBAD, NEW MEXICO**

WPL11 Carlsbad Mobile Solar

March 25, 2014 to April 8, 2014

Analyte	pCi/sample				Bq/sample		
	Lab Result	Lab Flag	Lab MDA	±2 s TPU	Lab Result	Lab MDA	±2 s TPU
Gross alpha and beta activity							
Gross alpha	3.9E+00		4.3E-01	1.3E+00	1.4E-01	1.6E-02	4.7E-02
Gross beta	2.9E+01		2.3E+00	2.2E+00	1.1E+00	8.5E-02	8.1E-02
Alpha and beta emitters							
Americium-241	-1.0E-02	U	6.5E-03	6.4E-02	-3.7E-04	2.4E-04	2.4E-03
Plutonium-238	2.3E-02	U	9.9E-03	4.8E-02	8.5E-04	3.7E-04	1.8E-03
Plutonium-239/240	1.6E-02	U	8.7E-03	4.8E-02	5.9E-04	3.2E-04	1.8E-03
Strontium-90	-9.5E-02	U	1.3E-01	1.2E+00	-3.5E-03	4.8E-03	4.4E-02
Gamma emitters							
Actinium-228	1.5E+00	U	1.4E+01	9.6E+01	5.6E-02	5.2E-01	3.6E+00
Americium-241	-4.5E+01	U	2.4E+01	1.7E+02	-1.7E+00	8.9E-01	6.4E+00
Beryllium-7	1.8E+02		2.5E+01	1.2E+02	6.7E+00	9.3E-01	4.4E+00
Bismuth-212	5.6E+01	U	3.9E+01	2.6E+02	2.1E+00	1.4E+00	9.6E+00
Bismuth-214	9.8E+00	UJ	5.4E+00	3.6E+01	3.6E-01	2.0E-01	1.3E+00
Cesium-134	-3.3E+00	U	2.4E+00	1.8E+01	-1.2E-01	8.9E-02	6.5E-01
Cesium-137	-8.1E-01	U	2.7E+00	1.9E+01	-3.0E-02	1.0E-01	7.0E-01
Cobalt-60	-4.5E-01	U	2.6E+00	1.9E+01	-1.7E-02	9.6E-02	6.9E-01
Iodine-131	3.3E+00	U	3.6E+00	2.4E+01	1.2E-01	1.3E-01	8.9E-01
Lead-212	-4.2E+00	U	4.5E+00	3.2E+01	-1.6E-01	1.7E-01	1.2E+00
Lead-214	-1.8E+00	UJ	8.3E+00	5.6E+01	-6.7E-02	3.1E-01	2.1E+00
Potassium-40	-3.6E+01	U	5.7E+01	4.0E+02	-1.3E+00	2.1E+00	1.5E+01
Protactinium-234m	4.5E+02	U	4.2E+02	2.8E+03	1.7E+01	1.6E+01	1.0E+02
Sodium-22	1.9E+00	U	2.6E+00	1.8E+01	7.0E-02	9.6E-02	6.7E-01
Thallium-208	-4.7E-01	U	4.7E+00	3.2E+01	-1.7E-02	1.7E-01	1.2E+00
Thorium-234	8.3E+01	U	3.5E+01	2.2E+02	3.1E+00	1.3E+00	8.1E+00

**AMBIENT AIR MONITORING RESULTS AT THE WASTE ISOLATION PILOT PLANT
(WIPP) AND THE VICINITY CARLSBAD, NEW MEXICO**

Filter Blank

March 25, 2014 to April 8, 2014

Analyte	pCi/sample				Bq/sample		
	Lab Result	Lab Flag	Lab MDA	±2 s TPU	Lab Result	Lab MDA	±2 s TPU
Gross alpha and beta activity							
Gross alpha	7.6E-02	U	2.0E-01	1.4E+00	2.8E-03	7.4E-03	5.0E-02
Gross beta	-2.7E-01	U	3.1E-01	2.0E+00	-1.0E-02	1.1E-02	7.4E-02
Alpha and beta emitters							
Americium-241	-8.8E-06	U	8.7E-03	7.4E-02	-3.3E-07	3.2E-04	2.7E-03
Plutonium-238	-4.1E-03	U	1.0E-02	8.8E-02	-1.5E-04	3.7E-04	3.3E-03
Plutonium-239/240	8.2E-03	U	1.5E-02	1.2E-01	3.0E-04	5.6E-04	4.3E-03
Strontium-90	8.4E-02	U	1.7E-01	1.6E+00	3.1E-03	6.3E-03	5.8E-02
Gamma emitters							
Actinium-228	-1.0E+01	U	1.1E+01	8.0E+01	-3.7E-01	4.1E-01	3.0E+00
Americium-241	8.1E+01	U	7.2E+01	4.8E+02	3.0E+00	2.7E+00	1.8E+01
Beryllium-7	-2.8E+01	U	1.7E+01	1.2E+02	-1.0E+00	6.3E-01	4.4E+00
Bismuth-212	-1.5E+01	U	2.7E+01	2.0E+02	-5.6E-01	1.0E+00	7.3E+00
Bismuth-214	1.3E+00	UJ	7.3E+00	5.0E+01	4.8E-02	2.7E-01	1.9E+00
Cesium-134	-5.0E-01	U	2.2E+00	1.5E+01	-1.9E-02	8.1E-02	5.6E-01
Cesium-137	-1.5E+00	U	2.1E+00	1.5E+01	-5.6E-02	7.8E-02	5.6E-01
Cobalt-60	1.7E-01	U	2.0E+00	1.4E+01	6.3E-03	7.4E-02	5.3E-01
Iodine-131	6.8E+00	U	2.7E+00	1.7E+01	2.5E-01	1.0E-01	6.1E-01
Lead-212	-6.0E+01	U	4.4E+01	3.0E+02	-2.2E+00	1.6E+00	1.1E+01
Lead-214	-1.3E+00	U	2.0E+00	1.5E+01	-4.8E-02	7.4E-02	5.4E-01
Potassium-40	2.2E+02	U	5.3E+02	3.6E+03	8.1E+00	2.0E+01	1.3E+02
Protactinium-234m	-3.0E+00	U	3.6E+00	2.4E+01	-1.1E-01	1.3E-01	8.9E-01
Sodium-22	-2.7E+00	UJ	6.7E+00	4.6E+01	-1.0E-01	2.5E-01	1.7E+00
Thallium-208	2.8E+00	U	2.6E+00	1.7E+01	1.0E-01	9.6E-02	6.4E-01
Thorium-234	1.1E+02	U	5.2E+01	3.4E+02	4.1E+00	1.9E+00	1.3E+01

**AMBIENT AIR MONITORING RESULTS AT THE WASTE ISOLATION PILOT PLANT
(WIPP) AND THE VICINITY CARLSBAD, NEW MEXICO**

Filter Blank (laboratory duplicate)

March 25, 2014 to April 8, 2014

Analyte	pCi/sample				Bq/sample		
	Lab Result	Lab Flag	Lab MDA	±2 s TPU	Lab Result	Lab MDA	±2 s TPU
Gamma emitters							
Actinium-228	-1.3E+01	U	1.2E+01	8.6E+01	-4.8E-01	4.4E-01	3.2E+00
Americium-241	1.3E+01	U	1.9E+01	1.3E+02	4.8E-01	7.0E-01	4.7E+00
Beryllium-7	2.0E+01	U	1.6E+01	1.0E+02	7.4E-01	5.9E-01	3.8E+00
Bismuth-212	-5.8E+00	U	2.7E+01	1.9E+02	-2.1E-01	1.0E+00	7.0E+00
Bismuth-214	1.1E+01	UJ	4.3E+00	2.8E+01	4.1E-01	1.6E-01	1.0E+00
Cesium-134	-3.4E+00	U	1.9E+00	1.4E+01	-1.3E-01	7.0E-02	5.1E-01
Cesium-137	3.7E-01	U	1.9E+00	1.3E+01	1.4E-02	7.0E-02	5.0E-01
Cobalt-60	-2.4E+00	U	1.7E+00	1.3E+01	-8.9E-02	6.3E-02	4.8E-01
Iodine-131	-2.1E+00	U	2.9E+00	2.0E+01	-7.8E-02	1.1E-01	7.3E-01
Lead-212	3.9E+00	U	4.0E+00	2.6E+01	1.4E-01	1.5E-01	9.6E-01
Lead-214	8.8E+00	UJ	4.2E+00	2.6E+01	3.3E-01	1.6E-01	9.6E-01
Potassium-40	-5.1E+01	U	5.2E+01	3.6E+02	-1.9E+00	1.9E+00	1.3E+01
Protactinium-234m	5.6E+02	U	3.3E+02	2.2E+03	2.1E+01	1.2E+01	8.1E+01
Sodium-22	-1.8E+00	U	2.0E+00	1.4E+01	-6.7E-02	7.4E-02	5.3E-01
Thallium-208	-3.1E+00	U	4.3E+00	3.0E+01	-1.1E-01	1.6E-01	1.1E+00
Thorium-234	7.0E+01	U	2.7E+01	1.8E+02	2.6E+00	1.0E+00	6.5E+00

**AMBIENT AIR MONITORING RESULTS AT THE WASTE ISOLATION PILOT PLANT
(WIPP) AND THE VICINITY CARLSBAD, NEW MEXICO**

Laboratory Method Blank

March 25, 2014 to April 8, 2014

Analyte	pCi/sample				Bq/sample		
	Lab Result	Lab Flag	Lab MDA	±2 s TPU	Lab Result	Lab MDA	±2 s TPU
Gross alpha and beta activity							
Gross alpha	5.8E-02	U	4.2E-02	2.8E-01	2.1E-03	1.6E-03	1.0E-02
Gross beta	1.1E-03	U	6.2E-02	4.2E-01	4.1E-05	2.3E-03	1.6E-02
Alpha and beta emitters							
Americium-241	-8.2E-03	U	5.0E-03	5.0E-02	-3.0E-04	1.9E-04	1.9E-03
Plutonium-238	1.1E-02	U	5.1E-03	2.6E-02	4.1E-04	1.9E-04	9.6E-04
Plutonium-239/240	1.8E-03	U	4.4E-03	3.4E-02	6.7E-05	1.6E-04	1.3E-03
Strontium-90	-6.5E-02	U	1.4E-01	1.3E+00	-2.4E-03	5.2E-03	4.9E-02
Gamma emitters							
Actinium-228	1.2E+01	U	1.1E+01	7.4E+01	4.4E-01	4.1E-01	2.7E+00
Americium-241	-6.9E-01	U	9.4E+00	6.4E+01	-2.6E-02	3.5E-01	2.4E+00
Beryllium-7	2.1E+00	U	1.1E+01	7.8E+01	7.8E-02	4.1E-01	2.9E+00
Bismuth-212	-4.0E+00	U	2.4E+01	1.7E+02	-1.5E-01	8.9E-01	6.2E+00
Bismuth-214	1.4E+01	J	4.0E+00	2.4E+01	5.2E-01	1.5E-01	8.9E-01
Cesium-134	-6.2E-01	U	1.6E+00	1.1E+01	-2.3E-02	5.9E-02	4.2E-01
Cesium-137	8.4E-01	U	1.9E+00	1.3E+01	3.1E-02	7.0E-02	4.7E-01
Cobalt-60	-2.2E+00	U	1.9E+00	1.4E+01	-8.1E-02	7.0E-02	5.1E-01
Iodine-131	3.5E+00	U	1.5E+00	9.8E+00	1.3E-01	5.6E-02	3.6E-01
Lead-212	2.0E+00	U	3.9E+00	2.6E+01	7.4E-02	1.4E-01	9.6E-01
Lead-214	3.5E+00	UJ	6.2E+00	4.2E+01	1.3E-01	2.3E-01	1.6E+00
Potassium-40	-2.6E+00	U	3.8E+01	2.6E+02	-9.6E-02	1.4E+00	9.6E+00
Protactinium-234	-1.1E+02	U	3.2E+02	2.2E+03	-4.1E+00	1.2E+01	8.1E+01
Sodium-22	1.7E+00	U	1.9E+00	1.3E+01	6.3E-02	7.0E-02	4.9E-01
Thallium-208	5.4E+00	U	1.8E+00	1.1E+01	2.0E-01	6.7E-02	4.1E-01
Thorium-234	2.4E+01	U	4.1E+01	2.8E+02	8.9E-01	1.5E+00	1.0E+01

**AMBIENT AIR MONITORING RESULTS AT THE WASTE ISOLATION PILOT PLANT
(WIPP) AND THE VICINITY CARLSBAD, NEW MEXICO**

WPL01 WIPP Salt Shaft

April 22, 2014 to May 20, 2014

Analyte	pCi/sample				Bq/sample		
	Lab Result	Lab Flag	Lab MDA	±2 s TPU	Lab Result	Lab MDA	±2 s TPU
Gross alpha and beta activity							
Gross alpha	7.4E+00		6.9E-01	1.4E+00	2.7E-01	2.6E-02	5.3E-02
Gross beta	4.3E+01		3.5E+00	2.2E+00	1.6E+00	1.3E-01	8.1E-02
Alpha and beta emitters							
Americium-241	1.8E-02	U	1.1E-02	6.8E-02	6.7E-04	4.1E-04	2.5E-03
Plutonium-238	2.9E-03	U	7.1E-03	1.6E-02	1.1E-04	2.6E-04	5.8E-04
Plutonium-239/240	1.4E-02	U	8.8E-03	5.4E-02	5.2E-04	3.3E-04	2.0E-03
Strontium-90	2.5E-01	U	1.5E-01	1.2E+00	9.3E-03	5.6E-03	4.5E-02
Gamma emitters							
Actinium-228	1.1E+01	U	7.8E+00	5.2E+01	4.1E-01	2.9E-01	1.9E+00
Americium-241	1.8E+01	U	3.1E+01	2.0E+02	6.7E-01	1.1E+00	7.4E+00
Beryllium-7	4.0E+02		2.8E+01	7.6E+01	1.5E+01	1.0E+00	2.8E+00
Bismuth-212	2.3E+01	U	1.7E+01	1.1E+02	8.5E-01	6.3E-01	4.1E+00
Bismuth-214	5.6E+00	UJ	5.6E+00	3.6E+01	2.1E-01	2.1E-01	1.3E+00
Cesium-134	3.3E-01	U	2.1E+00	1.4E+01	1.2E-02	7.8E-02	5.2E-01
Cesium-137	1.1E-01	U	1.3E+00	8.8E+00	4.1E-03	4.8E-02	3.3E-01
Cobalt-60	-3.4E-01	U	1.3E+00	8.6E+00	-1.3E-02	4.8E-02	3.2E-01
Iodine-131	4.7E+00	U	4.3E+00	2.8E+01	1.7E-01	1.6E-01	1.0E+00
Lead-212	-5.1E+00	U	4.0E+00	2.6E+01	-1.9E-01	1.5E-01	9.6E-01
Lead-214	1.0E+01	J	2.5E+00	1.5E+01	3.7E-01	9.3E-02	5.7E-01
Potassium-40	-3.1E+00	U	3.5E+01	2.4E+02	-1.1E-01	1.3E+00	8.9E+00
Protactinium-234m	2.9E+02	U	2.1E+02	1.4E+03	1.1E+01	7.8E+00	5.2E+01
Sodium-22	1.1E+00	U	1.2E+00	8.2E+00	4.1E-02	4.4E-02	3.0E-01
Thallium-208	1.0E+00	U	3.0E+00	2.0E+01	3.7E-02	1.1E-01	7.3E-01
Thorium-234	-6.3E+01	U	6.5E+01	4.4E+02	-2.3E+00	2.4E+00	1.6E+01

**AMBIENT AIR MONITORING RESULTS AT THE WASTE ISOLATION PILOT PLANT
(WIPP) AND THE VICINITY CARLSBAD, NEW MEXICO**

WPL02 Far Field

April 22, 2014 to May 20, 2014

Analyte	pCi/sample				Bq/sample		
	Lab Result	Lab Flag	Lab MDA	±2 s TPU	Lab Result	Lab MDA	±2 s TPU
Gross alpha and beta activity							
Gross alpha	7.5E+00		7.0E-01	1.4E+00	2.8E-01	2.6E-02	5.0E-02
Gross beta	5.2E+01		4.2E+00	2.0E+00	1.9E+00	1.6E-01	7.4E-02
Alpha and beta emitters							
Americium-241	-7.2E-03	U	8.5E-03	7.6E-02	-2.7E-04	3.1E-04	2.8E-03
Plutonium-238	-2.3E-03	U	6.1E-03	5.6E-02	-8.5E-05	2.3E-04	2.1E-03
Plutonium-239/240	4.6E-03	U	6.6E-03	5.0E-02	1.7E-04	2.4E-04	1.9E-03
Strontium-90	9.9E-02	U	1.4E-01	1.2E+00	3.7E-03	5.2E-03	4.5E-02
Gamma emitters							
Actinium-228	5.3E+00	U	9.6E+00	6.4E+01	2.0E-01	3.6E-01	2.4E+00
Americium-241	1.4E+00	U	1.3E+01	9.0E+01	5.2E-02	4.8E-01	3.3E+00
Beryllium-7	4.6E+02		3.4E+01	9.0E+01	1.7E+01	1.3E+00	3.3E+00
Bismuth-212	-6.9E+00	U	2.0E+01	1.4E+02	-2.6E-01	7.4E-01	5.1E+00
Bismuth-214	-1.6E+00	UJ	6.2E+00	4.2E+01	-5.9E-02	2.3E-01	1.6E+00
Cesium-134	8.0E-01	U	1.4E+00	9.6E+00	3.0E-02	5.2E-02	3.6E-01
Cesium-137	-6.1E-01	U	1.4E+00	9.6E+00	-2.3E-02	5.2E-02	3.6E-01
Cobalt-60	3.6E+00	U	1.4E+00	8.8E+00	1.3E-01	5.2E-02	3.3E-01
Iodine-131	-6.0E-01	U	5.9E+00	4.0E+01	-2.2E-02	2.2E-01	1.5E+00
Lead-212	3.6E+00	U	4.0E+00	2.6E+01	1.3E-01	1.5E-01	9.6E-01
Lead-214	2.3E+00	UJ	4.7E+00	3.0E+01	8.5E-02	1.7E-01	1.1E+00
Potassium-40	-4.7E+01	U	4.8E+01	3.2E+02	-1.7E+00	1.8E+00	1.2E+01
Protactinium-234m	8.5E+01	U	2.3E+02	1.5E+03	3.1E+00	8.5E+00	5.7E+01
Sodium-22	4.7E-01	U	1.3E+00	9.0E+00	1.7E-02	4.8E-02	3.3E-01
Thallium-208	4.0E+00	U	1.5E+00	9.2E+00	1.5E-01	5.6E-02	3.4E-01
Thorium-234	1.0E+02		2.1E+01	1.2E+02	3.7E+00	7.8E-01	4.6E+00

**AMBIENT AIR MONITORING RESULTS AT THE WASTE ISOLATION PILOT PLANT
(WIPP) AND THE VICINITY CARLSBAD, NEW MEXICO**

WPL03 Met Tower

April 22, 2014 to May 20, 2014

Analyte	pCi/sample				Bq/sample		
	Lab Result	Lab Flag	Lab MDA	±2 s TPU	Lab Result	Lab MDA	±2 s TPU
Gross alpha and beta activity							
Gross alpha	7.3E+00		6.8E-01	1.3E+00	2.7E-01	2.5E-02	4.8E-02
Gross beta	4.6E+01		3.7E+00	2.0E+00	1.7E+00	1.4E-01	7.4E-02
Alpha and beta emitters							
Americium-241	-1.4E-02	U	6.9E-03	6.8E-02	-5.2E-04	2.6E-04	2.5E-03
Plutonium-238	9.3E-03	U	7.6E-03	4.6E-02	3.4E-04	2.8E-04	1.7E-03
Plutonium-239/240	9.3E-03	U	1.4E-02	9.8E-02	3.4E-04	5.2E-04	3.6E-03
Strontium-90	2.1E-01	U	1.4E-01	1.2E+00	7.8E-03	5.2E-03	4.4E-02
Gamma emitters							
Actinium-228	1.0E+01	U	7.1E+00	4.6E+01	3.7E-01	2.6E-01	1.7E+00
Americium-241	5.1E+00	U	7.5E+00	5.0E+01	1.9E-01	2.8E-01	1.9E+00
Beryllium-7	4.3E+02		3.2E+01	9.4E+01	1.6E+01	1.2E+00	3.5E+00
Bismuth-212	2.4E+01	U	2.3E+01	1.5E+02	8.9E-01	8.5E-01	5.6E+00
Bismuth-214	2.5E+00	UJ	8.3E+00	5.6E+01	9.3E-02	3.1E-01	2.1E+00
Cesium-134	-3.6E+00	U	1.7E+00	1.2E+01	-1.3E-01	6.3E-02	4.4E-01
Cesium-137	-1.1E+00	U	1.8E+00	1.2E+01	-4.1E-02	6.7E-02	4.4E-01
Cobalt-60	0.0E+00	U	2.1E+00	1.5E+01	0.0E+00	7.8E-02	5.4E-01
Iodine-131	6.8E-01	U	5.3E+00	3.6E+01	2.5E-02	2.0E-01	1.3E+00
Lead-212	4.8E+00	U	4.3E+00	2.8E+01	1.8E-01	1.6E-01	1.0E+00
Lead-214	-1.6E+00	UJ	6.3E+00	4.2E+01	-5.9E-02	2.3E-01	1.6E+00
Potassium-40	1.6E+00	U	5.5E+01	3.6E+02	5.9E-02	2.0E+00	1.3E+01
Protactinium-234m	3.4E+02	U	2.9E+02	1.9E+03	1.3E+01	1.1E+01	7.1E+01
Sodium-22	-9.3E-01	U	2.0E+00	1.4E+01	-3.4E-02	7.4E-02	5.1E-01
Thallium-208	3.6E+00	U	2.1E+00	1.4E+01	1.3E-01	7.8E-02	5.0E-01
Thorium-234	-2.3E+01	U	4.7E+01	3.2E+02	-8.5E-01	1.7E+00	1.2E+01

**AMBIENT AIR MONITORING RESULTS AT THE WASTE ISOLATION PILOT PLANT
(WIPP) AND THE VICINITY CARLSBAD, NEW MEXICO**

WPL09 Southeast Control

April 22, 2014 to May 20, 2014

Analyte	pCi/sample				Bq/sample		
	Lab Result	Lab Flag	Lab MDA	±2 s TPU	Lab Result	Lab MDA	±2 s TPU
Gross alpha and beta activity							
Gross alpha	9.2E+00		8.4E-01	1.4E+00	3.4E-01	3.1E-02	5.2E-02
Gross beta	5.0E+01		4.1E+00	2.2E+00	1.9E+00	1.5E-01	8.1E-02
Alpha and beta emitters							
Americium-241	-8.4E-03	U	5.7E-03	5.6E-02	-3.1E-04	2.1E-04	2.1E-03
Plutonium-238	9.2E-03	U	8.2E-03	5.8E-02	3.4E-04	3.0E-04	2.1E-03
Plutonium-239/240	2.2E-02		8.3E-03	1.7E-02	8.1E-04	3.1E-04	6.1E-04
Strontium-90	8.4E-02	U	1.4E-01	1.2E+00	3.1E-03	5.2E-03	4.5E-02
Gamma emitters							
Actinium-228	4.2E+00	U	7.1E+00	4.8E+01	1.6E-01	2.6E-01	1.8E+00
Americium-241	-2.2E+01	U	4.1E+01	2.8E+02	-8.1E-01	1.5E+00	1.0E+01
Beryllium-7	4.5E+02		3.4E+01	1.2E+02	1.7E+01	1.3E+00	4.4E+00
Bismuth-212	2.7E+01	U	1.5E+01	9.8E+01	1.0E+00	5.6E-01	3.6E+00
Bismuth-214	1.2E+01	J	2.4E+00	1.6E+01	4.4E-01	8.9E-02	5.8E-01
Cesium-134	-5.6E-01	U	1.2E+00	8.2E+00	-2.1E-02	4.4E-02	3.0E-01
Cesium-137	9.0E-02	U	1.1E+00	7.8E+00	3.3E-03	4.1E-02	2.9E-01
Cobalt-60	1.1E+00	U	1.2E+00	8.0E+00	4.1E-02	4.4E-02	3.0E-01
Iodine-131	6.1E+00	U	4.0E+00	2.6E+01	2.3E-01	1.5E-01	9.6E-01
Lead-212	6.3E-01	U	3.6E+00	2.4E+01	2.3E-02	1.3E-01	8.9E-01
Lead-214	-2.3E-01	UJ	4.5E+00	3.0E+01	-8.5E-03	1.7E-01	1.1E+00
Potassium-40	2.3E+01	U	3.5E+01	2.4E+02	8.5E-01	1.3E+00	8.9E+00
Protactinium-234m	1.3E+02	U	3.3E+02	2.2E+03	4.8E+00	1.2E+01	8.1E+01
Sodium-22	-1.5E+00	U	1.2E+00	8.8E+00	-5.6E-02	4.4E-02	3.3E-01
Thallium-208	-1.5E+00	U	3.3E+00	2.2E+01	-5.6E-02	1.2E-01	8.1E-01
Thorium-234	-2.8E+01	U	5.8E+01	3.8E+02	-1.0E+00	2.1E+00	1.4E+01

**AMBIENT AIR MONITORING RESULTS AT THE WASTE ISOLATION PILOT PLANT
(WIPP) AND THE VICINITY CARLSBAD, NEW MEXICO**

WPL10 Carlsbad (Guadalupe St.)

April 22, 2014 to May 20, 2014

Analyte	pCi/sample				Bq/sample		
	Lab Result	Lab Flag	Lab MDA	±2 s TPU	Lab Result	Lab MDA	±2 s TPU
Gross alpha and beta activity							
Gross alpha	3.9E+00		4.4E-01	1.5E+00	1.4E-01	1.6E-02	5.6E-02
Gross beta	4.6E+01		3.7E+00	2.2E+00	1.7E+00	1.4E-01	8.1E-02
Alpha and beta emitters							
Americium-241	-1.0E-02	U	5.5E-03	7.8E-02	-3.7E-04	2.0E-04	2.9E-03
Plutonium-238	6.1E-03	U	7.5E-03	6.2E-02	2.3E-04	2.8E-04	2.3E-03
Plutonium-239/240	0.0E+00	U	7.4E-03	7.8E-02	0.0E+00	2.7E-04	2.9E-03
Strontium-90	-1.1E-01	U	1.4E-01	1.3E+00	-4.1E-03	5.2E-03	4.7E-02
Gamma emitters							
Actinium-228	1.7E+01		4.9E+00	3.0E+01	6.3E-01	1.8E-01	1.1E+00
Americium-241	-5.0E+00	U	7.7E+00	5.2E+01	-1.9E-01	2.8E-01	1.9E+00
Beryllium-7	4.1E+02		2.9E+01	6.4E+01	1.5E+01	1.1E+00	2.4E+00
Bismuth-212	1.5E+00	U	1.8E+01	1.2E+02	5.6E-02	6.7E-01	4.5E+00
Bismuth-214	4.9E+00	UJ	5.7E+00	3.8E+01	1.8E-01	2.1E-01	1.4E+00
Cesium-134	-2.0E+00	U	1.3E+00	9.0E+00	-7.4E-02	4.8E-02	3.3E-01
Cesium-137	-4.3E-01	U	1.2E+00	8.2E+00	-1.6E-02	4.4E-02	3.0E-01
Cobalt-60	1.6E+00	U	1.3E+00	8.8E+00	5.9E-02	4.8E-02	3.3E-01
Iodine-131	5.9E+00	U	4.1E+00	2.6E+01	2.2E-01	1.5E-01	9.6E-01
Lead-212	-4.1E-01	U	3.5E+00	2.4E+01	-1.5E-02	1.3E-01	8.9E-01
Lead-214	-4.1E+00	UJ	5.1E+00	3.4E+01	-1.5E-01	1.9E-01	1.3E+00
Potassium-40	-4.5E+01	U	3.7E+01	2.4E+02	-1.7E+00	1.4E+00	8.9E+00
Protactinium-234m	3.5E+02	U	2.2E+02	1.4E+03	1.3E+01	8.1E+00	5.3E+01
Sodium-22	-8.7E-01	U	1.4E+00	9.4E+00	-3.2E-02	5.2E-02	3.5E-01
Thallium-208	-1.0E+00	U	2.9E+00	1.9E+01	-3.7E-02	1.1E-01	7.1E-01
Thorium-234	6.5E+00	U	3.8E+01	2.6E+02	2.4E-01	1.4E+00	9.6E+00

**AMBIENT AIR MONITORING RESULTS AT THE WASTE ISOLATION PILOT PLANT
(WIPP) AND THE VICINITY CARLSBAD, NEW MEXICO**

WPL10 Carlsbad (Guadalupe St.) (*laboratory duplicate*)

April 22, 2014 to May 20, 2014

Analyte	pCi/sample				Bq/sample		
	Lab Result	Lab Flag	Lab MDA	±2 s TPU	Lab Result	Lab MDA	±2 s TPU
Gamma emitters							
Actinium-228	8.1E+00	U	7.7E+00	5.2E+01	3.0E-01	2.8E-01	1.9E+00
Americium-241	-5.7E+01	U	3.1E+01	2.2E+02	-2.1E+00	1.1E+00	8.1E+00
Beryllium-7	4.4E+02		3.1E+01	8.0E+01	1.6E+01	1.1E+00	3.0E+00
Bismuth-212	2.2E+01	U	1.6E+01	1.1E+02	8.1E-01	5.9E-01	4.0E+00
Bismuth-214	-1.3E+00	UJ	5.4E+00	3.6E+01	-4.8E-02	2.0E-01	1.3E+00
Cesium-134	-2.8E+00	U	1.4E+00	9.6E+00	-1.0E-01	5.2E-02	3.6E-01
Cesium-137	-1.0E+00	U	1.3E+00	9.0E+00	-3.7E-02	4.8E-02	3.3E-01
Cobalt-60	-4.1E-01	U	1.3E+00	8.8E+00	-1.5E-02	4.8E-02	3.3E-01
Iodine-131	-5.3E+00	U	4.6E+00	3.2E+01	-2.0E-01	1.7E-01	1.2E+00
Lead-212	-2.2E+00	U	4.1E+00	2.8E+01	-8.1E-02	1.5E-01	1.0E+00
Lead-214	-9.3E-02	UJ	5.9E+00	4.0E+01	-3.4E-03	2.2E-01	1.5E+00
Potassium-40	-2.7E+01	U	3.5E+01	2.4E+02	-1.0E+00	1.3E+00	8.9E+00
Protactinium-234m	2.7E+02	U	2.2E+02	1.5E+03	1.0E+01	8.1E+00	5.4E+01
Sodium-22	-8.7E-01	U	1.3E+00	9.0E+00	-3.2E-02	4.8E-02	3.3E-01
Thallium-208	5.6E-01	U	3.1E+00	2.0E+01	2.1E-02	1.1E-01	7.4E-01
Thorium-234	-4.8E+01	U	6.5E+01	4.4E+02	-1.8E+00	2.4E+00	1.6E+01

**AMBIENT AIR MONITORING RESULTS AT THE WASTE ISOLATION PILOT PLANT
(WIPP) AND THE VICINITY CARLSBAD, NEW MEXICO**

WPL11 Carlsbad Mobile Solar

April 22, 2014 to May 20, 2014

Analyte	pCi/sample				Bq/sample		
	Lab Result	Lab Flag	Lab MDA	±2 s TPU	Lab Result	Lab MDA	±2 s TPU
Gross alpha and beta activity							
Gross alpha	3.4E+00		4.0E-01	1.4E+00	1.3E-01	1.5E-02	5.3E-02
Gross beta	3.0E+01		2.4E+00	2.2E+00	1.1E+00	8.9E-02	8.1E-02
Alpha and beta emitters							
Americium-241	-3.8E-03	U	6.7E-03	6.0E-02	-1.4E-04	2.5E-04	2.2E-03
Plutonium-238	-2.1E-02	U	9.0E-03	9.4E-02	-7.8E-04	3.3E-04	3.5E-03
Plutonium-239/240	1.2E-02		7.2E-03	1.6E-02	4.4E-04	2.7E-04	5.8E-04
Strontium-90	-1.1E-01	U	1.6E-01	1.4E+00	-4.1E-03	5.9E-03	5.3E-02
Gamma emitters							
Actinium-228	3.5E+00	U	7.4E+00	5.0E+01	1.3E-01	2.7E-01	1.9E+00
Americium-241	-9.7E-01	U	1.2E+00	8.4E+00	-3.6E-02	4.4E-02	3.1E-01
Beryllium-7	2.6E+02		2.0E+01	6.6E+01	9.6E+00	7.4E-01	2.4E+00
Bismuth-212	3.7E+01	U	1.5E+01	9.8E+01	1.4E+00	5.6E-01	3.6E+00
Bismuth-214	5.2E+00	UJ	4.5E+00	3.0E+01	1.9E-01	1.7E-01	1.1E+00
Cesium-134	-1.5E+00	U	1.1E+00	7.6E+00	-5.6E-02	4.1E-02	2.8E-01
Cesium-137	4.4E-01	U	1.1E+00	7.2E+00	1.6E-02	4.1E-02	2.7E-01
Cobalt-60	7.4E-02	U	1.2E+00	8.4E+00	2.7E-03	4.4E-02	3.1E-01
Iodine-131	4.8E+00	U	2.2E+00	1.4E+01	1.8E-01	8.1E-02	5.3E-01
Lead-212	3.7E+00	U	3.0E+00	2.0E+01	1.4E-01	1.1E-01	7.4E-01
Lead-214	6.2E+00	UJ	2.2E+00	1.7E+01	2.3E-01	8.1E-02	6.4E-01
Potassium-40	-1.6E+01	U	3.2E+01	2.2E+02	-5.9E-01	1.2E+00	8.1E+00
Protactinium-234m	-8.2E+01	U	1.9E+02	1.3E+03	-3.0E+00	7.0E+00	4.8E+01
Sodium-22	-8.0E-01	U	1.2E+00	8.2E+00	-3.0E-02	4.4E-02	3.0E-01
Thallium-208	2.0E+00	U	2.5E+00	1.6E+01	7.4E-02	9.3E-02	6.1E-01
Thorium-234	-1.7E+01	U	2.1E+01	1.4E+02	-6.3E-01	7.8E-01	5.2E+00

**AMBIENT AIR MONITORING RESULTS AT THE WASTE ISOLATION PILOT PLANT
(WIPP) AND THE VICINITY CARLSBAD, NEW MEXICO**

Filter Blank

April 22, 2014 to May 20, 2014

Analyte	pCi/sample				Bq/sample		
	Lab Result	Lab Flag	Lab MDA	±2 s TPU	Lab Result	Lab MDA	±2 s TPU
Gross alpha and beta activity							
Gross alpha	3.0E-01	U	1.6E-01	1.0E+00	1.1E-02	5.9E-03	3.8E-02
Gross beta	4.1E-01	U	2.9E-01	1.9E+00	1.5E-02	1.1E-02	7.1E-02
Alpha and beta emitters							
Americium-241	1.6E-02	U	1.0E-02	6.8E-02	5.9E-04	3.7E-04	2.5E-03
Plutonium-238	-2.7E-03	U	6.6E-03	5.0E-02	-1.0E-04	2.4E-04	1.9E-03
Plutonium-239/240	3.2E-02		1.1E-02	5.0E-02	1.2E-03	4.1E-04	1.9E-03
Strontium-90	2.3E-01	U	1.4E-01	1.2E+00	8.5E-03	5.2E-03	4.5E-02
Gamma emitters							
Actinium-228	1.5E+01	U	5.7E+00	3.6E+01	5.6E-01	2.1E-01	1.3E+00
Americium-241	4.7E+00	U	1.3E+01	9.0E+01	1.7E-01	4.8E-01	3.3E+00
Beryllium-7	1.4E+00	U	1.3E+01	9.0E+01	5.2E-02	4.8E-01	3.3E+00
Bismuth-212	3.6E+01	U	2.1E+01	1.4E+02	1.3E+00	7.8E-01	5.0E+00
Bismuth-214	-3.5E-01	UJ	6.6E+00	4.4E+01	-1.3E-02	2.4E-01	1.6E+00
Cesium-134	-2.1E+00	U	1.4E+00	1.0E+01	-7.8E-02	5.2E-02	3.7E-01
Cesium-137	-2.4E-01	U	1.4E+00	9.8E+00	-8.9E-03	5.2E-02	3.6E-01
Cobalt-60	8.0E-01	U	1.4E+00	9.4E+00	3.0E-02	5.2E-02	3.5E-01
Iodine-131	1.4E+00	U	5.3E+00	3.6E+01	5.2E-02	2.0E-01	1.3E+00
Lead-212	4.7E+00	U	4.1E+00	2.6E+01	1.7E-01	1.5E-01	9.6E-01
Lead-214	1.9E+00	UJ	4.5E+00	3.0E+01	7.0E-02	1.7E-01	1.1E+00
Potassium-40	-1.4E+01	U	4.8E+01	3.2E+02	-5.2E-01	1.8E+00	1.2E+01
Protactinium-234m	1.6E+02	U	2.4E+02	1.6E+03	5.9E+00	8.9E+00	5.9E+01
Sodium-22	-7.0E-01	U	1.4E+00	9.8E+00	-2.6E-02	5.2E-02	3.6E-01
Thallium-208	-2.5E+00	U	3.2E+00	2.2E+01	-9.3E-02	1.2E-01	8.1E-01
Thorium-234	7.2E+01		2.0E+01	1.3E+02	2.7E+00	7.4E-01	4.7E+00

**AMBIENT AIR MONITORING RESULTS AT THE WASTE ISOLATION PILOT PLANT
(WIPP) AND THE VICINITY CARLSBAD, NEW MEXICO**

Solar Filter Blank

April 22, 2014 to May 20, 2014

Analyte	pCi/sample				Bq/sample		
	Lab Result	Lab Flag	Lab MDA	±2 s TPU	Lab Result	Lab MDA	±2 s TPU
Gross alpha and beta activity							
Gross alpha	3.6E-01	U	2.2E-01	1.4E+00	1.3E-02	8.1E-03	5.3E-02
Gross beta	1.6E-01	U	3.1E-01	2.0E+00	5.9E-03	1.1E-02	7.4E-02
Alpha and beta emitters							
Americium-241	2.0E-03	U	8.7E-03	6.8E-02	7.4E-05	3.2E-04	2.5E-03
Plutonium-238	2.0E-02		1.6E-02	3.6E-02	7.4E-04	5.9E-04	1.3E-03
Plutonium-239/240	-6.7E-03	U	1.6E-02	1.4E-01	-2.5E-04	5.9E-04	5.3E-03
Strontium-90	5.9E-02	U	1.5E-01	1.4E+00	2.2E-03	5.6E-03	5.1E-02
Gamma emitters							
Actinium-228	1.3E+01	U	4.3E+00	3.2E+01	4.8E-01	1.6E-01	1.2E+00
Americium-241	6.8E+00	U	6.5E+00	4.4E+01	2.5E-01	2.4E-01	1.6E+00
Beryllium-7	-1.1E+01	U	9.9E+00	6.8E+01	-4.1E-01	3.7E-01	2.5E+00
Bismuth-212	3.1E+01	U	1.8E+01	1.2E+02	1.1E+00	6.7E-01	4.4E+00
Bismuth-214	4.4E+00	UJ	5.9E+00	3.8E+01	1.6E-01	2.2E-01	1.4E+00
Cesium-134	1.6E+00	U	1.3E+00	8.4E+00	5.9E-02	4.8E-02	3.1E-01
Cesium-137	-2.2E-01	U	1.3E+00	8.6E+00	-8.1E-03	4.8E-02	3.2E-01
Cobalt-60	-2.3E+00	U	1.4E+00	1.0E+01	-8.5E-02	5.2E-02	3.7E-01
Iodine-131	1.0E+00	U	4.3E+00	2.8E+01	3.7E-02	1.6E-01	1.0E+00
Lead-212	-1.8E+00	U	3.6E+00	2.4E+01	-6.7E-02	1.3E-01	8.9E-01
Lead-214	9.8E-01	UJ	4.9E+00	3.2E+01	3.6E-02	1.8E-01	1.2E+00
Potassium-40	4.0E+00	U	3.5E+01	2.4E+02	1.5E-01	1.3E+00	8.9E+00
Protactinium-234m	2.2E+02	U	2.1E+02	1.4E+03	8.1E+00	7.8E+00	5.2E+01
Sodium-22	2.2E+00	U	1.3E+00	8.4E+00	8.1E-02	4.8E-02	3.1E-01
Thallium-208	-5.7E-01	U	2.9E+00	1.9E+01	-2.1E-02	1.1E-01	7.1E-01
Thorium-234	6.3E+01	U	3.1E+01	2.2E+02	2.3E+00	1.1E+00	8.1E+00

**AMBIENT AIR MONITORING RESULTS AT THE WASTE ISOLATION PILOT PLANT
(WIPP) AND THE VICINITY CARLSBAD, NEW MEXICO**

Laboratory Method Blank

April 22, 2014 to May 20, 2014

Analyte	pCi/sample				Bq/sample		
	Lab Result	Lab Flag	Lab MDA	±2 s TPU	Lab Result	Lab MDA	±2 s TPU
Gross alpha and beta activity							
Gross alpha	4.7E-01	U	1.9E-01	1.2E+00	1.7E-02	7.0E-03	4.4E-02
Gross beta	5.9E-01	U	3.1E-01	2.0E+00	2.2E-02	1.1E-02	7.4E-02
Alpha and beta emitters							
Americium-241	4.3E-03	U	7.0E-03	5.2E-02	1.6E-04	2.6E-04	1.9E-03
Plutonium-238	0.0E+00	U	7.1E-03	4.2E-02	0.0E+00	2.6E-04	1.6E-03
Plutonium-239/240	5.8E-03	U	7.1E-03	5.4E-02	2.1E-04	2.6E-04	2.0E-03
Strontium-90	-1.6E-01	U	1.1E-01	1.0E+00	-5.9E-03	4.1E-03	3.8E-02
Gamma emitters							
Actinium-228	1.8E+01	U	6.5E+00	4.2E+01	6.7E-01	2.4E-01	1.6E+00
Americium-241	9.1E+00	U	7.5E+00	5.0E+01	3.4E-01	2.8E-01	1.9E+00
Beryllium-7	4.8E+00	U	1.1E+01	7.2E+01	1.8E-01	4.1E-01	2.7E+00
Bismuth-212	-6.2E+00	U	2.2E+01	1.5E+02	-2.3E-01	8.1E-01	5.6E+00
Bismuth-214	5.4E+00	UJ	8.6E+00	5.6E+01	2.0E-01	3.2E-01	2.1E+00
Cesium-134	-1.7E+00	U	2.3E+00	1.6E+01	-6.3E-02	8.5E-02	5.8E-01
Cesium-137	-6.5E+00	U	1.8E+00	1.2E+01	-2.4E-01	6.7E-02	4.6E-01
Cobalt-60	-1.1E+00	U	2.1E+00	1.5E+01	-4.1E-02	7.8E-02	5.5E-01
Iodine-131	2.0E+00	U	1.3E+00	8.4E+00	7.4E-02	4.8E-02	3.1E-01
Lead-212	2.4E+00	U	4.3E+00	2.8E+01	8.9E-02	1.6E-01	1.0E+00
Lead-214	9.6E-01	UJ	6.4E+00	4.2E+01	3.6E-02	2.4E-01	1.6E+00
Potassium-40	-6.8E+01	U	5.2E+01	3.6E+02	-2.5E+00	1.9E+00	1.3E+01
Protactinium-234	4.1E+02	U	2.9E+02	1.9E+03	1.5E+01	1.1E+01	7.1E+01
Sodium-22	1.3E+00	U	6.2E+00	-3.6E+00	4.8E-02	2.3E-01	-1.3E-01
Thallium-208	4.2E+00	U	1.6E+00	1.0E+01	1.6E-01	5.9E-02	3.8E-01
Thorium-234	-9.2E+00	U	4.7E+01	3.2E+02	-3.4E-01	1.7E+00	1.2E+01