

New Mexico Environment Department DOE Oversight Bureau, Sandia Oversight Office

First Calendar Quarter 2013

AIRNET SAMPLING PROGRAM

The result in the "Activity" column is shaded blue when it is above the detection limit (MDA) established for the sample batch. Where both Gamma Spec. and Alpha-Spec. methods are used for the same analyte the Alpha-Spec result should be used. The Upper Tolerance Limit using 3 standard deviations (UTL 3sd) for long term data are shown for all Alpha-Spec results and quantifiable detections for other data. The entries in the column headed "40CFR61" are reference standards from the Code of Federal Regulations, Part 61 – National Emission Standards for Hazardous Air Pollutants. Activity values are not blank corrected and will be higher than blank corrected values. Lab Qualifiers: U-Not Detected. J-Value is estimated. NQ-Data not quantifiable. LT-Result is less than requested Minimum Detectable Activity (MDA) and greater than sample specific MDA.

NMED DOE Oversight Bureau Data Release		RADIOLOGICAL PARTICULATES IN AIR at SNL						Avg. Air Volume		
Activity	Units	MDA	UTL 3sd	40CFR61	Lab Qualifier	Sample ID	M ³	Analytical Method		
KAIR-01 Four Hills										
Ac-228										
3/26/2013 1:30:00 PM	2.88E+03 ± 1.62E+03	aCi/m3	2.54E+03	3.70E+06	NQ	01Q113	5912.24	Gamma Spec.		
Am-241										
3/26/2013 1:30:00 PM	-3.04E+00 ± 3.04E+00	aCi/m3	7.10E+00	9.26E+00	1.90E+03	U	01Q113	5912.24	Alpha-Spec	
Be-7										
3/26/2013 1:30:00 PM	1.59E+05 ± 2.03E+04	aCi/m3	7.78E+03	2.30E+07		01Q113	5912.24	Gamma Spec.		
Bi-212										
3/26/2013 1:30:00 PM	-1.62E+03 ± 1.54E+04	aCi/m3	2.54E+04	5.60E+07	U	01Q113	5912.24	Gamma Spec.		
Bi-214										
3/26/2013 1:30:00 PM	-6.60E+02 ± 2.03E+03	aCi/m3	3.38E+03	1.40E+08	U,J	01Q113	5912.24	Gamma Spec.		
Co-60										
3/26/2013 1:30:00 PM	-4.91E+02 ± 4.40E+02	aCi/m3	8.12E+02	1.70E+04	U	01Q113	5912.24	Gamma Spec.		
Cs-134										
3/26/2013 1:30:00 PM	-7.95E+01 ± 4.23E+02	aCi/m3	7.27E+02	2.70E+04	U	01Q113	5912.24	Gamma Spec.		
Cs-137										
3/26/2013 1:30:00 PM	-4.06E+02 ± 4.23E+02	aCi/m3	7.27E+02	1.90E+04	U	01Q113	5912.24	Gamma Spec.		
GROSSA										
3/26/2013 1:30:00 PM	2.71E+03 ± 4.57E+02	aCi/m3	1.86E+02	4.98E+03		01Q113	5912.24	Gas Proportional Cou		
GROSSB										
3/26/2013 1:30:00 PM	3.21E+04 ± 5.24E+03	aCi/m3	1.86E+02	3.76E+04		01Q113	5912.24	Gas Proportional Cou		
I-131										
3/26/2013 1:30:00 PM	1.30E+03 ± 9.81E+03	aCi/m3	1.64E+04	2.10E+05	U	01Q113	5912.24	Gamma Spec.		
K-40										
3/26/2013 1:30:00 PM	4.40E+03 ± 1.18E+04	aCi/m3	2.03E+04	2.70E+04	U	01Q113	5912.24	Gamma Spec.		
Na-22										
3/26/2013 1:30:00 PM	-1.62E+02 ± 4.40E+02	aCi/m3	7.78E+02	2.60E+04	U	01Q113	5912.24	Gamma Spec.		
Pa-234M										

Blue shaded are values above detection limit. A Lab Qualifier of "U" also indicates "Not Detected."

UTL 3sd is shaded brown where result exceeds UTL 3sd

NMED DOE Oversight Bureau Data Release

RADIOLOGICAL PARTICULATES IN AIR at SNL

Avg. Air Volume

Activity	Units	MDA	UTL 3sd	40CFR61	Lab Qualfier	Sample ID	M ³	Analytical Method	
3/26/2013 1:30:00 PM Pb-212	3.89E+04 ± 7.10E+04	aCi/m3	1.20E+05		U	01Q113	5912.24	Gamma Spec.	
3/26/2013 1:30:00 PM Pb-214	1.86E+02 ± 1.30E+03	aCi/m3	2.20E+03	6.30E+06	U	01Q113	5912.24	Gamma Spec.	
3/26/2013 1:30:00 PM Pu-238	-4.40E+02 ± 1.67E+03	aCi/m3	2.88E+03	1.20E+08	U,J	01Q113	5912.24	Gamma Spec.	
3/26/2013 1:30:00 PM Pu-239,240	5.07E+00 ± 5.41E+00	aCi/m3	7.78E+00	6.90E+00	2.10E+03	U	01Q113	5912.24	Alpha-Spec
3/26/2013 1:30:00 PM Th-234	1.86E+00 ± 4.40E+00	aCi/m3	6.43E+00	7.22E+00	2.00E+03	U	01Q113	5912.24	Alpha-Spec
3/26/2013 1:30:00 PM Tl-208	2.03E+02 ± 1.20E+04	aCi/m3	2.03E+04	2.20E+06	U	01Q113	5912.24	Gamma Spec.	
3/26/2013 1:30:00 PM U-234	7.78E+01 ± 8.80E+02	aCi/m3	1.47E+03		U	01Q113	5912.24	Gamma Spec.	
3/26/2013 1:30:00 PM U-235	2.03E+01 ± 1.15E+01	aCi/m3	1.45E+01	1.89E+02	7.70E+03	LT	01Q113	5912.24	Alpha-Spec
3/26/2013 1:30:00 PM U-238	7.61E+00 ± 6.77E+00	aCi/m3	7.27E+00	1.25E+01	7.10E+03	LT	01Q113	5912.24	Alpha-Spec
3/26/2013 1:30:00 PM	2.88E+01 ± 1.29E+01	aCi/m3	1.01E+01	2.11E+02	8.30E+03	LT	01Q113	5912.24	Alpha-Spec
KAIR-02 USGS									
Ac-228									
3/26/2013 1:52:00 PM Am-241	1.06E+03 ± 1.52E+03	aCi/m3	2.48E+03	3.70E+06	U	02Q113	7256.75	Gamma Spec.	
3/26/2013 1:52:00 PM Be-7	-1.38E+00 ± 2.48E+00	aCi/m3	5.37E+00	9.26E+00	1.90E+03	U	02Q113	7256.75	Alpha-Spec
3/26/2013 1:52:00 PM Bi-212	1.35E+05 ± 1.79E+04	aCi/m3	7.72E+03	2.30E+07		02Q113	7256.75	Gamma Spec.	
3/26/2013 1:52:00 PM Bi-214	2.34E+03 ± 5.79E+03	aCi/m3	9.65E+03	5.60E+07	U	02Q113	7256.75	Gamma Spec.	
3/26/2013 1:52:00 PM Co-60	4.69E+02 ± 1.79E+03	aCi/m3	2.89E+03	1.40E+08	U,J	02Q113	7256.75	Gamma Spec.	
3/26/2013 1:52:00 PM Cs-134	2.34E+02 ± 4.00E+02	aCi/m3	6.61E+02	1.70E+04	U	02Q113	7256.75	Gamma Spec.	
3/26/2013 1:52:00 PM Cs-137	1.79E+02 ± 5.24E+02	aCi/m3	8.68E+02	2.70E+04	U	02Q113	7256.75	Gamma Spec.	

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NMED DOE Oversight Bureau Data Release

RADIOLOGICAL PARTICULATES IN AIR at SNL

Avg. Air Volume

Activity	Units	MDA	UTL 3sd	40CFR61	Lab Qualfier	Sample ID	M ³	Analytical Method
3/26/2013 1:52:00 PM GROSSA	2.20E+02 ± 3.72E+02 aCi/m3	6.20E+02		1.90E+04	U	02Q113	7256.75	Gamma Spec.
3/26/2013 1:52:00 PM GROSSB	2.07E+03 ± 3.58E+02 aCi/m3	1.36E+02	4.98E+03			02Q113	7256.75	Gas Proportional Cou
3/26/2013 1:52:00 PM I-131	2.48E+04 ± 4.00E+03 aCi/m3	1.52E+02	3.76E+04			02Q113	7256.75	Gas Proportional Cou
3/26/2013 1:52:00 PM K-40	3.45E+03 ± 1.16E+04 aCi/m3	1.93E+04		2.10E+05	U	02Q113	7256.75	Gamma Spec.
3/26/2013 1:52:00 PM Na-22	1.03E+03 ± 1.32E+04 aCi/m3	2.20E+04		2.70E+04	U	02Q113	7256.75	Gamma Spec.
3/26/2013 1:52:00 PM Pa-234M	3.31E+02 ± 4.27E+02 aCi/m3	7.03E+02		2.60E+04	U	02Q113	7256.75	Gamma Spec.
3/26/2013 1:52:00 PM Pb-212	-2.62E+04 ± 1.14E+05 aCi/m3	1.93E+05			U	02Q113	7256.75	Gamma Spec.
3/26/2013 1:52:00 PM Pb-214	-2.20E+02 ± 1.06E+03 aCi/m3	1.79E+03		6.30E+06	U	02Q113	7256.75	Gamma Spec.
3/26/2013 1:52:00 PM Pu-238	-1.12E+03 ± 1.65E+03 aCi/m3	2.62E+03		1.20E+08	U,J	02Q113	7256.75	Gamma Spec.
3/26/2013 1:52:00 PM Pu-239,240	1.12E+00 ± 6.34E+00 aCi/m3	9.51E+00	6.90E+00	2.10E+03	U	02Q113	7256.75	Alpha-Spec
3/26/2013 1:52:00 PM Th-234	1.79E+00 ± 6.34E+00 aCi/m3	4.69E+00	7.22E+00	2.00E+03	U	02Q113	7256.75	Alpha-Spec
3/26/2013 1:52:00 PM Tl-208	4.41E+03 ± 1.38E+04 aCi/m3	2.34E+04		2.20E+06	U	02Q113	7256.75	Gamma Spec.
3/26/2013 1:52:00 PM U-234	6.34E+02 ± 4.27E+02 aCi/m3	6.75E+02			U	02Q113	7256.75	Gamma Spec.
3/26/2013 1:52:00 PM U-235	5.93E+00 ± 5.24E+00 aCi/m3	7.44E+00	1.89E+02	7.70E+03	U	02Q113	7256.75	Alpha-Spec
3/26/2013 1:52:00 PM U-238	-1.79E+00 ± 3.58E+00 aCi/m3	8.68E+00	1.25E+01	7.10E+03	U	02Q113	7256.75	Alpha-Spec
3/26/2013 1:52:00 PM KAIR-03 Southwest Base	1.38E+01 ± 7.17E+00 aCi/m3	4.55E+00	2.11E+02	8.30E+03	LT	02Q113	7256.75	Alpha-Spec
3/26/2013 2:12:00 PM Ac-228	1.00E+03 ± 1.18E+03 aCi/m3	1.88E+03		3.70E+06	U	03Q113	8501.64	Gamma Spec.
3/26/2013 2:12:00 PM Am-241								

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RADIOLOGICAL PARTICULATES IN AIR at SNL

Avg. Air Volume

Activity	Units	MDA	UTL 3sd	40CFR61	Lab Qualfier	Sample ID	M ³	Analytical Method	
3/26/2013 2:12:00 PM Be-7	-9.88E-01 ± 2.35E+00	aCi/m3	4.82E+00	9.26E+00	1.90E+03	U	03Q113	8501.64	Alpha-Spec
3/26/2013 2:12:00 PM Bi-212	1.18E+05 ± 1.65E+04	aCi/m3	7.88E+03		2.30E+07		03Q113	8501.64	Gamma Spec.
3/26/2013 2:12:00 PM Bi-214	9.41E+01 ± 5.53E+03	aCi/m3	9.53E+03		5.60E+07	U	03Q113	8501.64	Gamma Spec.
3/26/2013 2:12:00 PM Co-60	1.65E+03 ± 8.70E+02	aCi/m3	1.41E+03		1.40E+08	J,NQ	03Q113	8501.64	Gamma Spec.
3/26/2013 2:12:00 PM Cs-134	-3.41E+01 ± 4.47E+02	aCi/m3	7.76E+02		1.70E+04	U	03Q113	8501.64	Gamma Spec.
3/26/2013 2:12:00 PM Cs-137	-5.06E+02 ± 4.23E+02	aCi/m3	7.29E+02		2.70E+04	U	03Q113	8501.64	Gamma Spec.
3/26/2013 2:12:00 PM GROSSA	-8.94E+01 ± 3.65E+02	aCi/m3	6.35E+02		1.90E+04	U,M	03Q113	8501.64	Gamma Spec.
3/26/2013 2:12:00 PM GROSSB	3.18E+03 ± 5.29E+02	aCi/m3	1.29E+02	4.98E+03			03Q113	8501.64	Gas Proportional Cou
3/26/2013 2:12:00 PM I-131	2.23E+04 ± 3.65E+03	aCi/m3	1.41E+02	3.76E+04			03Q113	8501.64	Gas Proportional Cou
3/26/2013 2:12:00 PM K-40	1.04E+04 ± 1.01E+04	aCi/m3	1.65E+04		2.10E+05	U	03Q113	8501.64	Gamma Spec.
3/26/2013 2:12:00 PM Na-22	-2.94E+03 ± 1.18E+04	aCi/m3	2.00E+04		2.70E+04	U	03Q113	8501.64	Gamma Spec.
3/26/2013 2:12:00 PM Pa-234M	3.29E+02 ± 4.23E+02	aCi/m3	7.06E+02		2.60E+04	U	03Q113	8501.64	Gamma Spec.
3/26/2013 2:12:00 PM Pb-212	3.53E+04 ± 6.23E+04	aCi/m3	1.05E+05			U	03Q113	8501.64	Gamma Spec.
3/26/2013 2:12:00 PM Pb-214	4.70E+01 ± 9.53E+02	aCi/m3	1.65E+03		6.30E+06	U	03Q113	8501.64	Gamma Spec.
3/26/2013 2:12:00 PM Pu-238	1.02E+03 ± 7.41E+02	aCi/m3	1.18E+03		1.20E+08	U,J	03Q113	8501.64	Gamma Spec.
3/26/2013 2:12:00 PM Pu-239,240	1.41E+00 ± 2.71E+00	aCi/m3	2.00E+00	6.90E+00	2.10E+03	U	03Q113	8501.64	Alpha-Spec
3/26/2013 2:12:00 PM Th-234	1.18E+00 ± 2.71E+00	aCi/m3	4.00E+00	7.22E+00	2.00E+03	U	03Q113	8501.64	Alpha-Spec
3/26/2013 2:12:00 PM Tl-208	-2.71E+03 ± 1.05E+04	aCi/m3	1.76E+04		2.20E+06	U	03Q113	8501.64	Gamma Spec.

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RADIOLOGICAL PARTICULATES IN AIR at SNL

Avg. Air Volume

Activity	Units	MDA	UTL 3sd	40CFR61	Lab Qualfier	Sample ID	M ³	Analytical Method
3/26/2013 2:12:00 PM U-234	-3.06E+01 ± 6.94E+02 aCi/m3	1.18E+03			U	03Q113	8501.64	Gamma Spec.
3/26/2013 2:12:00 PM U-235	1.76E+01 ± 8.12E+00 aCi/m3	7.88E+00	1.89E+02	7.70E+03	LT	03Q113	8501.64	Alpha-Spec
3/26/2013 2:12:00 PM U-238	2.71E+00 ± 3.41E+00 aCi/m3	5.41E+00	1.25E+01	7.10E+03	U	03Q113	8501.64	Alpha-Spec
3/26/2013 2:12:00 PM	2.00E+01 ± 8.23E+00 aCi/m3	6.12E+00	2.11E+02	8.30E+03	LT	03Q113	8501.64	Alpha-Spec
KAIR-04 Mixed Waste Landfill								
3/26/2013 2:38:00 PM Ac-228	7.84E+02 ± 1.26E+03 aCi/m3	2.15E+03		3.70E+06	U	04Q113	7912.06	Gamma Spec.
3/26/2013 2:38:00 PM Am-241	1.05E+00 ± 2.91E+00 aCi/m3	5.31E+00	9.26E+00	1.90E+03	U	04Q113	7912.06	Alpha-Spec
3/26/2013 2:38:00 PM Be-7	1.20E+05 ± 1.64E+04 aCi/m3	6.83E+03		2.30E+07		04Q113	7912.06	Gamma Spec.
3/26/2013 2:38:00 PM Bi-212	5.31E+03 ± 5.31E+03 aCi/m3	8.59E+03		5.60E+07	U	04Q113	7912.06	Gamma Spec.
3/26/2013 2:38:00 PM Bi-214	7.33E+02 ± 1.52E+03 aCi/m3	2.65E+03		1.40E+08	U,J	04Q113	7912.06	Gamma Spec.
3/26/2013 2:38:00 PM Co-60	5.94E+01 ± 3.41E+02 aCi/m3	5.81E+02		1.70E+04	U	04Q113	7912.06	Gamma Spec.
3/26/2013 2:38:00 PM Cs-134	-7.46E+02 ± 3.67E+02 aCi/m3	6.45E+02		2.70E+04	U	04Q113	7912.06	Gamma Spec.
3/26/2013 2:38:00 PM Cs-137	-2.78E+02 ± 3.29E+02 aCi/m3	5.94E+02		1.90E+04	U	04Q113	7912.06	Gamma Spec.
3/26/2013 2:38:00 PM GROSSA	2.15E+03 ± 3.67E+02 aCi/m3	1.39E+02	4.98E+03			04Q113	7912.06	Gas Proportional Cou
3/26/2013 2:38:00 PM GROSSB	2.28E+04 ± 3.67E+03 aCi/m3	1.39E+02	3.76E+04			04Q113	7912.06	Gas Proportional Cou
3/26/2013 2:38:00 PM I-131	1.24E+03 ± 1.14E+04 aCi/m3	1.90E+04		2.10E+05	U	04Q113	7912.06	Gamma Spec.
3/26/2013 2:38:00 PM K-40	-7.96E+03 ± 1.19E+04 aCi/m3	2.02E+04		2.70E+04	U	04Q113	7912.06	Gamma Spec.
3/26/2013 2:38:00 PM Na-22	3.79E+02 ± 3.92E+02 aCi/m3	6.32E+02		2.60E+04	U	04Q113	7912.06	Gamma Spec.
3/26/2013 2:38:00 PM Pa-234M								

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NMED DOE Oversight Bureau Data Release		RADIOLOGICAL PARTICULATES IN AIR at SNL						Avg. Air Volume		
	Activity	Units	MDA	UTL 3sd	40CFR61	Lab Qualfier	Sample ID	M ³	Analytical Method	
3/26/2013 2:38:00 PM	-3.67E+04 ± 1.05E+05	aCi/m3	1.77E+05			U	04Q113	7912.06	Gamma Spec.	
	Pb-212									
3/26/2013 2:38:00 PM	4.30E+02 ± 5.69E+02	aCi/m3	9.23E+02		6.30E+06	U	04Q113	7912.06	Gamma Spec.	
	Pb-214									
3/26/2013 2:38:00 PM	1.11E+03 ± 7.58E+02	aCi/m3	1.20E+03		1.20E+08	U,J	04Q113	7912.06	Gamma Spec.	
	Pu-238									
3/26/2013 2:38:00 PM	2.91E+00 ± 3.67E+00	aCi/m3	2.65E+00	6.90E+00	2.10E+03	LT	04Q113	7912.06	Alpha-Spec	
	Pu-239,240									
3/26/2013 2:38:00 PM	3.16E+00 ± 4.04E+00	aCi/m3	6.45E+00	7.22E+00	2.00E+03	U	04Q113	7912.06	Alpha-Spec	
	Th-234									
3/26/2013 2:38:00 PM	9.23E+03 ± 5.31E+03	aCi/m3	8.47E+03		2.20E+06	NQ	04Q113	7912.06	Gamma Spec.	
	Tl-208									
3/26/2013 2:38:00 PM	6.95E+02 ± 3.92E+02	aCi/m3	6.19E+02			NQ	04Q113	7912.06	Gamma Spec.	
	U-234									
3/26/2013 2:38:00 PM	2.15E+01 ± 9.23E+00	aCi/m3	7.96E+00	1.89E+02	7.70E+03	LT	04Q113	7912.06	Alpha-Spec	
	U-235									
3/26/2013 2:38:00 PM	1.77E-01 ± 3.29E+00	aCi/m3	7.84E+00	1.25E+01	7.10E+03	U	04Q113	7912.06	Alpha-Spec	
	U-238									
3/26/2013 2:38:00 PM	2.02E+01 ± 8.47E+00	aCi/m3	2.02E+00	2.11E+02	8.30E+03	LT	04Q113	7912.06	Alpha-Spec	

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