
S P E C T R U M A N A L Y S I S R E P O R T

Spectrum file Analysed: 06_fukushima_04.dat : 6
Sample Title : Fukushima 04 Soil
Analysed by : basama
Sample type : Soil

Measured on Detector: 1 Geometry: 1
Live Time: 3076 Secs. True Time: 3600 Secs. Dead Time: 14.55 %

Spectrum saved on 16-Apr-2012 at 14:20 Collected on 8-Apr-2012 at 12:41
Sample Taken on 10-Jul-2011 at 12:41 Decayed 273 Days, 0 mins.
Sampling Uncertainty 5.0 % Calibration Uncertainty 10.0 %
Sample Size is 0.4338 kg

Geometry Description: ZipLock
Detector file number used: 1
Energy Calibration Performed on 16-Apr-2012 at 16:12
Peak Shape Calibration Performed on 15-Apr-2012 at 7:13
Efficiency Calibration Performed on 14-Apr-2012 at 11:40

Analysis Parameters

Energy Tolerance: 25.00 Kev. Confidence Discriminator: 0.700
Peak Area Error Sigma value: 1.645 Activity Error Sigma value: 2.000
LOD Calculation Sigma value: 2.000

Library driven Peak Search included using Library File: NaI_basama.lib

Background Subtraction performed using data from: air.bkg
Created from Spectrum Filename: 10_air.dat
Spectrum Title: Air carib
Data saved on: 7-Apr-2012 at 11:48 Count-Time was 6427 Seconds

DENS Density Correction was performed
Reported Activity values were rounded
Interpolated Efficiency Calibration was used

NOPK No Pulser Peak was found
The Pulser Correction of Count Rate was PCOR %
The Pulser Peak has drifted up by PCHU channels
The Pulser Peak has drifted down by PCHD channels
The Pulser Peak FWHM was PFWH keV, the calibration value was PCFW keV.
The Pulser Peak was calibrated on DATP at TIMP

Analysis Library Used: NaI_basama.lib
LOD Library Used: NaI_basama.lib

FitzPeaks Version: 3.50 18th May 2011

The following Radionuclides were found :-

Nuclide	Confidence Value	Activity - Bq/kg			
		Measured		Decay	Corrected
Cs-134	0.99	12100.0 +/-	17.0 %	15500.0 +/-	2500.0
Activation product: Cs-133(n,g)					
Cs-137	1.00	18300.0 +/-	37.0 %	18600.0 +/-	6900.0
Calibration Source; Fission Product					
K-40	1.00	3200.0 +/-	41.0 %	3200.0 +/-	1300.0
Natural source					

S U M M A R Y R E P O R T

Sample: Fukushima 04 Soil
Sample Taken on 10-Jul-2011 at 12:41

Nuclide		Activity - Bq/kg	
		Measured	Decay Corrected
Cs-134	:	12100.0	15500.0 +/- 2500.0
Cs-137	:	18300.0	18600.0 +/- 6900.0
I-131	:	0.0	0.0
K-40	:	3200.0	3200.0 +/- 1300.0

L I M I T O F D E T E C T I O N R E P O R T

Sample: Fukushima 04 Soil
Sample Taken on 10-Jul-2011 at 12:41

Nuclide	Critical Limit or LLD Measured	- Bq/kg Decay Corrected
Cs-134 :	74.0	95.0
Cs-137 :	200.0	200.0
The Sample age is > 20 times the Halflife of I-131		
K-40 :	540.0	540.0

End of Report