

Characterization and Lixiviant Extraction Data for Cs-137 Contaminated

Moisture Content and Cs-137 Activity		
Soil Sample	Moisture Content (%)	Cs-137 Activity - Oven Dry Soil (pCi/g)
Bag-1	22.3*	462.7
Bag-2	12.8	639.3
Bag-3	12.9	684.2
Av (Calc)	16.8	595.4
Composite (Counted)		609.2
	*Dup 19.1	

Soil in Bag-1 contained more roots than the soils in Bags 2 and 3

Cs-137 Extraction with PNNL Lixiviant				
Soil	Wt of Soil Extracted - Oven Dry Basis (g)	Cs-137 Activity (pCi/g)	Total Cs-137 Activity in Soil Sample	
Composite	42.8	609.2	26080	
Extraction #	Wt of Lixiviant (g)	Cs-137 Activity in extract (pCi/g)	Cs-137 Activity extracted (pCi)	Cs-137 Activity Removed (%)
1	200	29.1	5824	22.3
2	200	28.0	5592	21.4
3	200	20.0	4008	15.4
DI water rinse	513	3.2	1657	6.4
		Total Cs-137 Activity Extracted	17081	65.5

Each extraction conducted at 90C for 3 h

Cs-137 Extraction with Deionized Distilled Water				
Soil	Wt of Soil Extracted - Oven Dry Basis (g)	Cs-137 Activity (pCi/g)	Total Cs-137 Activity in Soil Sample	
Composite	128.4	609.2	78233	
Extraction #	Wt of DI water (g)	Cs-137 Activity in DI Water Extract (pCi/g)	Cs-137 Activity extracted (pCi)	Cs-137 Activity Removed (%)
1	600	ND	0	0
		Total Cs-137 Activity Extracted	0	0

Extraction conducted at 90C for 3 h

ed Soil Sample from West Jefferson, Ohio

