



Customer: Grassroots Harvest
321 W. Ben White Blvd Ste 103
Austin Texas 78704
United States

Sample ID: Joy Powder
Sample Matrix: Kratom powder
Laboratory ID: 19-015279-0001
Evidence of Cooling: No
Temp: 16 °C

Sample Results

Metals

Heavy Metals Profile K

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
Arsenic	0.0771	mg/kg	0.0199	12/23/19	AOAC 2013.06 (mod.) ₁	
Cadmium	0.0464	mg/kg	0.0199	12/23/19	AOAC 2013.06 (mod.) ₁	
Lead	0.198	mg/kg	0.0199	12/23/19	AOAC 2013.06 (mod.) ₁	
Mercury	0.0180	mg/kg	0.00996	12/23/19	AOAC 2013.06 (mod.) ₁	
Nickel	1.89	mg/kg	0.0399	12/23/19	AOAC 2013.06 (mod.) ₁	

1) trace metals in food by Inductively Coupled Mass Spectrometry

Microbiology

Micro Profile A (E.col O157/List./Salm.)

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
Salmonella spp.	Negative	/25g		12/18/19	AOAC 2016.01 ₂	
Listeria monocytogenes	Negative	/25g		12/18/19	AOAC 2016.08 ₃	
E.coli O157:H7	Negative	/25g		12/18/19	AOAC 2017.01 ₄	

- 2) 3M Molecular Detection of Salmonella
3) 3M Molecular Detection of Listeria monocytogenes
4) 3M Molecular Detection of E.coli O157

Mitragynine

Mitragynine + 7-Hydroxymitragynine (Basic Plus)

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
7-Hydroxymitragynine ¹	0.0326	%	0.0100	12/20/19	Japanese Association of Forensic Toxicology (2009) 27:67-74	
Mitragynine ¹	1.46	%	0.250	12/20/19	Japanese Association of Forensic Toxicology (2009) 27:67-74	