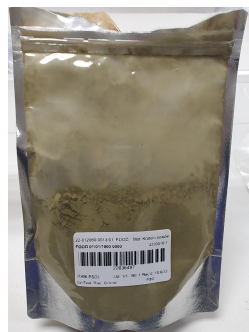




Customer: Viable Solutions
 62 6 St N
 Nampa Idaho 83687
 United States of America (USA)

Sample ID: 3220510-1
Sample Matrix: Kratom powder
Laboratory ID: 22-012080-0013
Evidence of Cooling: No
Temp: 20.1 °C
Relinquished by: Fedex



Sample Results

Metals

Heavy Metals Profile K

Analyte	Result	Units	LOQ	Analyzed Method	Threshold	Pass/Fail	Notes
Arsenic	0.219	mg/kg	0.0192	10/11/22 AOAC 2013.06 (mod.) ^b ₁	1.50	pass	
Cadmium	0.0357	mg/kg	0.0192	10/11/22 AOAC 2013.06 (mod.) ^b ₁	0.500	pass	
Lead	0.390	mg/kg	0.0192	10/11/22 AOAC 2013.06 (mod.) ^b ₁	1.00	pass	
Mercury	0.0218	mg/kg	0.00960	10/11/22 AOAC 2013.06 (mod.) ^b ₁	0.200	pass	
Nickel	2.62	mg/kg	0.0192	10/11/22 AOAC 2013.06 (mod.) ^b ₁	20.0	pass	

1) trace metals in food by Inductively Coupled Mass Spectrometry

Microbiology

Micro Profile L Rapid (M6000)

Analyte	Result	Units	LOQ	Analyzed Method	Threshold	Pass/Fail	Notes
Aerobic Plate Count	600	cfu/g	100	10/10/22 AOAC 990.12 (Petrifilm) ^b	10,000,000	pass	
E.coli	< LOQ	cfu/g	100	10/10/22 AOAC 991.14 (Petrifilm) ^b	100	pass	
Total Coliforms	< LOQ	cfu/g	100	10/10/22 AOAC 991.14 (Petrifilm) ^b	10,000	pass	
Staphylococcus aureus	< LOQ	cfu/g	100	10/09/22 AOAC 2003.07 ^b			
Mold (RAPID Petrifilm)	< LOQ	cfu/g	100	10/11/22 AOAC 2014.05 (RAPID) ^b	50,000	pass	
Yeast (RAPID Petrifilm)	< LOQ	cfu/g	100	10/11/22 AOAC 2014.05 (RAPID) ^b	50,000	pass	
Listeria spp.	Negative	/25g	-	10/09/22 AOAC 2019.10 ^b ₂			
Salmonella spp. by PCR	Negative	/25g	-	10/09/22 AOAC 2020.02 ^b ₃	Negative	pass	

2) GENE-UP® Assay

3) GENE-UP® Assay

Mitragynine



Mitragynine

Mitragynine + 7-Hydroxymitragynine (S3200)

Analyte	Result	Units	LOQ	Analyzed Method	Threshold	Pass/Fail	Notes
7-Hydroxymitragynine	0.0177	%	0.0100	10/13/22 In house method by HPLC-DAD			
Mitragynine	1.37	%	0.0500	10/13/22 In house method by HPLC-DAD			

Abbreviations

Limit(s) of Quantitation (LOQ): The minimum levels, concentrations, or quantities of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence.

Threshold Note: limits based on AHPA recommended limits for unprocessed herbs and supplements and ingredients

Units of Measure

/25g = Per 25g

cfu/g = Colony forming units per gram

mg/kg = Milligram per kilogram = parts per million (ppm)

% = Percentage of sample

Approved Signatory



Derrick Tanner
General Manager