



12423 NE Whitaker Way
 Portland, OR 97230
 503-254-1794

Report Number: 21-001479/D29.R00
Report Date: 02/18/2021
Purchase Order:
Received: 02/10/21 07:00 AM



Customer: Lamp Nutraceutical

Sample ID: LNK20-1
Sample Matrix: Kratom powder
Laboratory ID: 21-001479-0001-01
Evidence of Cooling: No
Temp: 14 °C
Relinquished by: UPS

Sample Results

Mitragynine						
Mitragynine + 7-Hydroxymitragynine (Basic Plus)						
Analyte	Result	Units	LOQ	Analyzed	Method	Notes
7-Hydroxymitragynine [†]	0.0366	%	0.0100	02/17/21	In house method by HPLC-DAD	
Mitragynine [†]	1.22	%	0.0500	02/17/21	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.

[†] = Analyte not ISO accredited.

Units of Measure

% = Percentage of sample

Approved Signatory

Derrick Tanner
 General Manager



12423 NE Whitaker Way
 Portland, OR 97230
 503-254-1794

Report Number: 21-001479/D43.R00
Report Date: 02/18/2021
Purchase Order:
Received: 02/10/21 07:00 AM



Customer: Lamp Nutraceutical

Sample ID: LNK20-1
Sample Matrix: Kratom powder
Laboratory ID: 21-001479-0001-00
Evidence of Cooling: No
Temp: 14 °C
Relinquished by: UPS

Sample Results

Microbiology

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
Salmonella spp. by PCR	Negative	/25g		02/12/21	AOAC 2020.02 ₁	

E. coli/Coliform Count (EC) Plate

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
E.coli	< LOQ	cfu/g	100	02/18/21	AOAC 991.14 (Petrifilm)	
Total Coliforms	200	cfu/g	100	02/18/21	AOAC 991.14 (Petrifilm)	

1) GENE-UP® Assay

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.

Units of Measure

/25g = Per 25g
 cfu/g = Colony forming units per gram

Approved Signatory

Derrick Tanner
 General Manager



12423 NE Whitaker Way
 Portland, OR 97230
 503-254-1794

Report Number: 21-001479/D36.R00
Report Date: 02/18/2021
Purchase Order:
Received: 02/10/21 07:00 AM



Customer: Lamp Nutraceutical

Sample ID: LNK20-2
Sample Matrix: Kratom powder
Laboratory ID: 21-001479-0002-01
Evidence of Cooling: No
Temp: 14 °C
Relinquished by: UPS

Sample Results

Mitragynine

Mitragynine + 7-Hydroxymitragynine (Basic Plus)

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
7-Hydroxymitragynine [†]	0.0476	%	0.0100	02/17/21	In house method by HPLC-DAD	
Mitragynine [†]	1.17	%	0.0500	02/17/21	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.

[†] = Analyte not ISO accredited.

Units of Measure

% = Percentage of sample

Approved Signatory

Derrick Tanner
 General Manager



12423 NE Whitaker Way
 Portland, OR 97230
 503-254-1794

Report Number: 21-001479/D40.R00
Report Date: 02/18/2021
Purchase Order:
Received: 02/10/21 07:00 AM



Customer: Lamp Nutraceutical

Sample ID: LNK20-2
Sample Matrix: Kratom powder
Laboratory ID: 21-001479-0002-00
Evidence of Cooling: No
Temp: 14 °C
Relinquished by: UPS

Sample Results

Microbiology

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
Salmonella spp. by PCR	Negative	/25g		02/12/21	AOAC 2020.02 ₁	

E. coli/Coliform Count (EC) Plate

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
E. coli	< LOQ	cfu/g	100	02/18/21	AOAC 991.14 (Petrifilm)	
Total Coliforms	200	cfu/g	100	02/18/21	AOAC 991.14 (Petrifilm)	

1) GENE-UP® Assay

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.

Units of Measure

/25g = Per 25g
 cfu/g = Colony forming units per gram

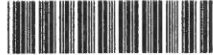
Approved Signatory

Derrick Tanner
 General Manager



12423 NE Whitaker Way
Portland, OR 97230
503-254-1794

Report Number: 21-001479/D37.R00
Report Date: 02/18/2021
Purchase Order:
Received: 02/10/21 07:00 AM



Customer: Lamp Nutraceutical

Sample ID: LNK20-3
Sample Matrix: Kratom powder
Laboratory ID: 21-001479-0003-01
Evidence of Cooling: No
Temp: 14 °C
Relinquished by: UPS

Sample Results

Mitragynine

Mitragynine + 7-Hydroxymitragynine (Basic Plus)

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
7-Hydroxymitragynine [†]	0.0443	%	0.0100	02/17/21	In house method by HPLC-DAD	
Mitragynine [†]	1.09	%	0.0500	02/17/21	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.

[†] = Analyte not ISO accredited.

Units of Measure

% = Percentage of sample

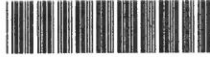
Approved Signatory

Derrick Tanner
General Manager



12423 NE Whitaker Way
 Portland, OR 97230
 503-254-1794

Report Number: 21-001479/D38.R00
Report Date: 02/18/2021
Purchase Order:
Received: 02/10/21 07:00 AM



Customer: Lamp Nutraceutical

Sample ID: LNK20-3
Sample Matrix: Kratom powder
Laboratory ID: 21-001479-0003-00
Evidence of Cooling: No
Temp: 14 °C
Relinquished by: UPS

Sample Results

Microbiology

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
Salmonella spp. by PCR	Negative	/25g		02/12/21	AOAC 2020.02 ₁	

E. coli/Coliform Count (EC) Plate

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
E. coli	< LOQ	cfu/g	100	02/18/21	AOAC 991.14 (Petrifilm)	
Total Coliforms	300	cfu/g	100	02/18/21	AOAC 991.14 (Petrifilm)	

1) GENE-UP® Assay

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.

Units of Measure

/25g = Per 25g
 cfu/g = Colony forming units per gram

Approved Signatory

Derrick Tanner
 General Manager



12423 NE Whitaker Way
 Portland, OR 97230
 503-254-1794

Report Number: 21-001479/D39.R00
Report Date: 02/18/2021
Purchase Order:
Received: 02/10/21 07:00 AM



Customer: Lamp Nutraceutical

Sample ID: LNK20-4
Sample Matrix: Kratom powder
Laboratory ID: 21-001479-0004-01
Evidence of Cooling: No
Temp: 14 °C
Relinquished by: UPS

Sample Results

Mitragynine

Mitragynine + 7-Hydroxymitragynine (Basic Plus)

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
7-Hydroxymitragynine†	0.0331	%	0.0100	02/17/21	In house method by HPLC-DAD	
Mitragynine†	1.21	%	0.0500	02/17/21	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.

† = Analyte not ISO accredited.

Units of Measure

% = Percentage of sample

Approved Signatory

Derrick Tanner
 General Manager



12423 NE Whitaker Way
 Portland, OR 97230
 503-254-1794

Report Number: 21-001479/D41.R00
Report Date: 02/18/2021
Purchase Order:
Received: 02/10/21 07:00 AM



Customer: Lamp Nutraceutical

Sample ID: LNK20-4
Sample Matrix: Kratom powder
Laboratory ID: 21-001479-0004-00
Evidence of Cooling: No
Temp: 14 °C
Relinquished by: UPS

Sample Results

Microbiology						
Analyte	Result	Units	LOQ	Analyzed	Method	Notes
Salmonella spp. by PCR	Negative	/25g		02/12/21	AOAC 2020.02 ₁	
E. coli/Coliform Count (EC) Plate						
Analyte	Result	Units	LOQ	Analyzed	Method	Notes
E.coli	< LOQ	cfu/g	100	02/18/21	AOAC 991.14 (Petrifilm)	
Total Coliforms	< LOQ	cfu/g	100	02/18/21	AOAC 991.14 (Petrifilm)	

1) GENE-UP® Assay

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.

Units of Measure

/25g = Per 25g
 cfu/g = Colony forming units per gram

Approved Signatory

Derrick Tanner
 General Manager

Test results relate only to the parameters tested and to the samples as received by the laboratory. Test results meet all requirements of Columbia Laboratories quality assurance plan unless otherwise noted. This report shall not be reproduced, except in full, without the written consent of this laboratory. Samples will be retained for a maximum of 30 days from the receipt date unless prior arrangements have been made.



12423 NE Whitaker Way
Portland, OR 97230
503-254-1794

Report Number: 21-001479/D31.R00
Report Date: 02/18/2021
Purchase Order:
Received: 02/10/21 07:00 AM



Customer: Lamp Nutraceutical

Sample ID: LNK20-5
Sample Matrix: Kratom powder
Laboratory ID: 21-001479-0005-01
Evidence of Cooling: No
Temp: 14 °C
Relinquished by: UPS

Sample Results

Mitragynine

Mitragynine + 7-Hydroxymitragynine (Basic Plus)

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
7-Hydroxymitragynine†	0.0460	%	0.0100	02/17/21	In house method by HPLC-DAD	
Mitragynine†	1.04	%	0.0500	02/17/21	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.

† = Analyte not ISO accredited.

Units of Measure

% = Percentage of sample

Approved Signatory

Derrick Tanner
General Manager



12423 NE Whitaker Way
 Portland, OR 97230
 503-254-1794

Report Number: 21-001479/D35.R00
Report Date: 02/18/2021
Purchase Order:
Received: 02/10/21 07:00 AM



Customer: Lamp Nutraceutical

Sample ID: LNK20-5
Sample Matrix: Kratom powder
Laboratory ID: 21-001479-0005-00
Evidence of Cooling: No
Temp: 14 °C
Relinquished by: UPS

Sample Results

Microbiology

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
Salmonella spp. by PCR	Negative	/25g		02/12/21	AOAC 2020.02 ₁	

E. coli/Coliform Count (EC) Plate

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
E.coli	< LOQ	cfu/g	100	02/18/21	AOAC 991.14 (Petrifilm)	
Total Coliforms	2,900	cfu/g	100	02/18/21	AOAC 991.14 (Petrifilm)	

1) GENE-UP® Assay

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.

Units of Measure

/25g = Per 25g
 cfu/g = Colony forming units per gram

Approved Signatory

Derrick Tanner
 General Manager



12423 NE Whitaker Way
 Portland, OR 97230
 503-254-1794

Report Number: 21-001479/D34.R00
Report Date: 02/18/2021
Purchase Order:
Received: 02/10/21 07:00 AM



Customer: Lamp Nutraceutical

Sample ID: LNK20-6
Sample Matrix: Kratom powder
Laboratory ID: 21-001479-0006-01
Evidence of Cooling: No
Temp: 14 °C
Relinquished by: UPS

Sample Results

Mitragynine

Mitragynine + 7-Hydroxymitragynine (Basic Plus)

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
7-Hydroxymitragynine†	0.0548	%	0.0100	02/17/21	In house method by HPLC-DAD	
Mitragynine†	1.26	%	0.0500	02/17/21	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.

† = Analyte not ISO accredited.

Units of Measure

% = Percentage of sample

Approved Signatory

Derrick Tanner
 General Manager



12423 NE Whitaker Way
Portland, OR 97230
503-254-1794

Report Number: 21-001479/D30.R00
Report Date: 02/18/2021
Purchase Order:
Received: 02/10/21 07:00 AM



Customer: Lamp Nutraceutical

Sample ID: LNK20-6
Sample Matrix: Kratom powder
Laboratory ID: 21-001479-0006-00
Evidence of Cooling: No
Temp: 14 °C
Relinquished by: UPS

Sample Results

Microbiology

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
Salmonella spp. by PCR	Negative	/25g		02/12/21	AOAC 2020.02 ₁	
E. coli/Coliform Count (EC) Plate						
Analyte	Result	Units	LOQ	Analyzed	Method	Notes
E.coli	< LOQ	cfu/g	100	02/18/21	AOAC 991.14 (Petrifilm)	
Total Coliforms	< LOQ	cfu/g	100	02/18/21	AOAC 991.14 (Petrifilm)	

1) GENE-UP® Assay

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.

Units of Measure

/25g = Per 25g
cfu/g = Colony forming units per gram

Approved Signatory

Derrick Tanner
General Manager



12423 NE Whitaker Way
Portland, OR 97230
503-254-1794

Report Number: 21-001479/D33.R00
Report Date: 02/18/2021
Purchase Order:
Received: 02/10/21 07:00 AM



Customer: Lamp Nutraceutical

Sample ID: LNK20-7
Sample Matrix: Kratom powder
Laboratory ID: 21-001479-0007-01
Evidence of Cooling: No
Temp: 14 °C
Relinquished by: UPS

Sample Results

Mitragynine

Mitragynine + 7-Hydroxymitragynine (Basic Plus)

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
7-Hydroxymitragynine†	0.0408	%	0.0100	02/17/21	In house method by HPLC-DAD	
Mitragynine†	1.12	%	0.0500	02/17/21	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.

† = Analyte not ISO accredited.

Units of Measure

% = Percentage of sample

Approved Signatory

Derrick Tanner
General Manager



12423 NE Whitaker Way
 Portland, OR 97230
 503-254-1794

Report Number: 21-001479/D32.R00
Report Date: 02/18/2021
Purchase Order:
Received: 02/10/21 07:00 AM



Customer: Lamp Nutraceutical

Sample ID: LNK20-7
Sample Matrix: Kratom powder
Laboratory ID: 21-001479-0007-00
Evidence of Cooling: No
Temp: 14 °C
Relinquished by: UPS

Sample Results

Microbiology						
Analyte	Result	Units	LOQ	Analyzed	Method	Notes
Salmonella spp. by PCR	Negative	/25g		02/12/21	AOAC 2020.02 ₁	
E. coli/Coliform Count (EC) Plate						
Analyte	Result	Units	LOQ	Analyzed	Method	Notes
E.coli	< LOQ	cfu/g	100	02/18/21	AOAC 991.14 (Petrifilm)	
Total Coliforms	500	cfu/g	100	02/18/21	AOAC 991.14 (Petrifilm)	

1) GENE-UP® Assay

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.

Units of Measure

/25g = Per 25g
 cfu/g = Colony forming units per gram

Approved Signatory

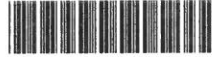
Derrick Tanner
 General Manager

Test results relate only to the parameters tested and to the samples as received by the laboratory. Test results meet all requirements of Columbia Laboratories quality assurance plan unless otherwise noted. This report shall not be reproduced, except in full, without the written consent of this laboratory. Samples will be retained for a maximum of 30 days from the receipt date unless prior arrangements have been made.



12423 NE Whitaker Way
 Portland, OR 97230
 503-254-1794

Report Number: 21-001479/D50.R00
Report Date: 02/18/2021
Purchase Order:
Received: 02/10/21 07:00 AM



Customer: Lamp Nutraceutical

Sample ID: LNK20-8
Sample Matrix: Kratom powder
Laboratory ID: 21-001479-0008-01
Evidence of Cooling: No
Temp: 14 °C
Relinquished by: UPS

Sample Results

Mitragynine						
Mitragynine + 7-Hydroxymitragynine (Basic Plus)						
Analyte	Result	Units	LOQ	Analyzed	Method	Notes
7-Hydroxymitragynine†	0.0361	%	0.0100	02/17/21	In house method by HPLC-DAD	
Mitragynine†	1.29	%	0.0500	02/17/21	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.

† = Analyte not ISO accredited.

Units of Measure

% = Percentage of sample

Approved Signatory

Derrick Tanner
 General Manager



12423 NE Whitaker Way
 Portland, OR 97230
 503-254-1794

Report Number: 21-001479/D42.R00
Report Date: 02/18/2021
Purchase Order:
Received: 02/10/21 07:00 AM



Customer: Lamp Nutraceutical

Sample ID: LNK20-8
Sample Matrix: Kratom powder
Laboratory ID: 21-001479-0008-00
Evidence of Cooling: No
Temp: 14 °C
Relinquished by: UPS

Sample Results

Microbiology

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
Salmonella spp. by PCR	Negative	/25g		02/12/21	AOAC 2020.02 ₁	

E. coli/Coliform Count (EC) Plate

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
E.coli	< LOQ	cfu/g	100	02/18/21	AOAC 991.14 (Petrifilm)	
Total Coliforms	< LOQ	cfu/g	100	02/18/21	AOAC 991.14 (Petrifilm)	

1) GENE-UP® Assay

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.

Units of Measure

/25g = Per 25g
 cfu/g = Colony forming units per gram

Approved Signatory

Derrick Tanner
 General Manager



12423 NE Whitaker Way
 Portland, OR 97230
 503-254-1794

Report Number: 21-001479/D52.R00
Report Date: 02/18/2021
Purchase Order:
Received: 02/10/21 07:00 AM



Customer: Lamp Nutraceutical

Sample ID: LNK20-9
Sample Matrix: Kratom powder
Laboratory ID: 21-001479-0009-00
Evidence of Cooling: No
Temp: 14 °C
Relinquished by: UPS

Sample Results

Microbiology						
Analyte	Result	Units	LOQ	Analyzed	Method	Notes
Salmonella spp. by PCR	Negative	/25g		02/12/21	AOAC 2020.02 ₁	
E. coli/Coliform Count (EC) Plate						
Analyte	Result	Units	LOQ	Analyzed	Method	Notes
E.coli	< LOQ	cfu/g	100	02/18/21	AOAC 991.14 (Petrifilm)	
Total Coliforms	100	cfu/g	100	02/18/21	AOAC 991.14 (Petrifilm)	

1) GENE-UP® Assay

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.

Units of Measure

/25g = Per 25g
 cfu/g = Colony forming units per gram

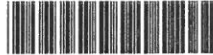
Approved Signatory

Derrick Tanner
 General Manager



12423 NE Whitaker Way
 Portland, OR 97230
 503-254-1794

Report Number: 21-001479/D51.R00
Report Date: 02/18/2021
Purchase Order:
Received: 02/10/21 07:00 AM



Customer: Lamp Nutraceutical

Sample ID: LNK20-9
Sample Matrix: Kratom powder
Laboratory ID: 21-001479-0009-01
Evidence of Cooling: No
Temp: 14 °C
Relinquished by: UPS

Sample Results

Mitragynine

Mitragynine + 7-Hydroxymitragynine (Basic Plus)

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
7-Hydroxymitragynine†	0.0323	%	0.0100	02/17/21	In house method by HPLC-DAD	
Mitragynine†	1.22	%	0.0500	02/17/21	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.

† = Analyte not ISO accredited.

Units of Measure

% = Percentage of sample

Approved Signatory

Derrick Tanner
 General Manager



12423 NE Whitaker Way
 Portland, OR 97230
 503-254-1794

Report Number: 21-001479/D53.R00
Report Date: 02/18/2021
Purchase Order:
Received: 02/10/21 07:00 AM



Customer: Lamp Nutraceutical

Sample ID: LNK20-10
Sample Matrix: Kratom powder
Laboratory ID: 21-001479-0010-01
Evidence of Cooling: No
Temp: 14 °C
Relinquished by: UPS

Sample Results

Mitragynine

Mitragynine + 7-Hydroxymitragynine (Basic Plus)

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
7-Hydroxymitragynine [†]	0.0400	%	0.0100	02/17/21	In house method by HPLC-DAD	
Mitragynine [†]	1.21	%	0.0500	02/17/21	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.

[†] = Analyte not ISO accredited.

Units of Measure

% = Percentage of sample

Approved Signatory

Derrick Tanner
 General Manager



12423 NE Whitaker Way
 Portland, OR 97230
 503-254-1794

Report Number: 21-001479/D55.R00
Report Date: 02/18/2021
Purchase Order:
Received: 02/10/21 07:00 AM



Customer: Lamp Nutraceutical

Sample ID: LNK20-10
Sample Matrix: Kratom powder
Laboratory ID: 21-001479-0010-00
Evidence of Cooling: No
Temp: 14 °C
Relinquished by: UPS

Sample Results

Microbiology						
Analyte	Result	Units	LOQ	Analyzed	Method	Notes
Salmonella spp. by PCR	Negative	/25g		02/12/21	AOAC 2020.02 ₁	
E. coli/Coliform Count (EC) Plate						
Analyte	Result	Units	LOQ	Analyzed	Method	Notes
E.coli	< LOQ	cfu/g	100	02/18/21	AOAC 991.14 (Petrifilm)	
Total Coliforms	1,400	cfu/g	100	02/18/21	AOAC 991.14 (Petrifilm)	

1) GENE-UP® Assay

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.

Units of Measure

/25g = Per 25g
 cfu/g = Colony forming units per gram

Approved Signatory

Derrick Tanner
 General Manager



12423 NE Whitaker Way
 Portland, OR 97230
 503-254-1794

Report Number: 21-001479/D45.R00
Report Date: 02/18/2021
Purchase Order:
Received: 02/10/21 07:00 AM



Customer: Lamp Nutraceutical

Sample ID: LNK20-11
Sample Matrix: Kratom powder
Laboratory ID: 21-001479-0011-01
Evidence of Cooling: No
Temp: 14 °C
Relinquished by: UPS

Sample Results

Mitragynine

Mitragynine + 7-Hydroxymitragynine (Basic Plus)

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
7-Hydroxymitragynine†	0.0409	%	0.0100	02/17/21	In house method by HPLC-DAD	
Mitragynine†	1.14	%	0.0500	02/17/21	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.

† = Analyte not ISO accredited.

Units of Measure

% = Percentage of sample

Approved Signatory

Derrick Tanner
 General Manager



12423 NE Whitaker Way
 Portland, OR 97230
 503-254-1794

Report Number: 21-001479/D49.R00
Report Date: 02/18/2021
Purchase Order:
Received: 02/10/21 07:00 AM



Customer: Lamp Nutraceutical

Sample ID: LNK20-11
Sample Matrix: Kratom powder
Laboratory ID: 21-001479-0011-00
Evidence of Cooling: No
Temp: 14 °C
Relinquished by: UPS

Sample Results

Microbiology

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
Salmonella spp. by PCR	Negative	/25g		02/12/21	AOAC 2020.02 ₁	

E. coli/Coliform Count (EC) Plate

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
E. coli	< LOQ	cfu/g	100	02/18/21	AOAC 991.14 (Petrifilm)	
Total Coliforms	< LOQ	cfu/g	100	02/18/21	AOAC 991.14 (Petrifilm)	

1) GENE-UP® Assay

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.

Units of Measure

/25g = Per 25g
 cfu/g = Colony forming units per gram

Approved Signatory

Derrick Tanner
 General Manager



12423 NE Whitaker Way
 Portland, OR 97230
 503-254-1794

Report Number: 21-001479/D48.R00
Report Date: 02/18/2021
Purchase Order:
Received: 02/10/21 07:00 AM



Customer: Lamp Nutraceutical

Sample ID: LNK20-12
Sample Matrix: Kratom powder
Laboratory ID: 21-001479-0012-01
Evidence of Cooling: No
Temp: 14 °C
Relinquished by: UPS

Sample Results

Mitragynine						
Mitragynine + 7-Hydroxymitragynine (Basic Plus)						
Analyte	Result	Units	LOQ	Analyzed	Method	Notes
7-Hydroxymitragynine†	0.0512	%	0.0100	02/17/21	In house method by HPLC-DAD	
Mitragynine†	1.28	%	0.0500	02/17/21	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.

† = Analyte not ISO accredited.

Units of Measure

% = Percentage of sample

Approved Signatory

Derrick Tanner
 General Manager



12423 NE Whitaker Way
 Portland, OR 97230
 503-254-1794

Report Number: 21-001479/D44.R00
Report Date: 02/18/2021
Purchase Order:
Received: 02/10/21 07:00 AM



Customer: Lamp Nutraceutical

Sample ID: LNK20-12
Sample Matrix: Kratom powder
Laboratory ID: 21-001479-0012-00
Evidence of Cooling: No
Temp: 14 °C
Relinquished by: UPS

Sample Results

Microbiology						
Analyte	Result	Units	LOQ	Analyzed	Method	Notes
Salmonella spp. by PCR	Negative	/25g		02/12/21	AOAC 2020.02 ₁	
E. coli/Coliform Count (EC) Plate						
Analyte	Result	Units	LOQ	Analyzed	Method	Notes
E.coli	< LOQ	cfu/g	100	02/18/21	AOAC 991.14 (Petrifilm)	
Total Coliforms	< LOQ	cfu/g	100	02/18/21	AOAC 991.14 (Petrifilm)	

1) GENE-UP® Assay

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.

Units of Measure

/25g = Per 25g
 cfu/g = Colony forming units per gram

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Derrick Tanner
 General Manager

Test results relate only to the parameters tested and to the samples as received by the laboratory. Test results meet all requirements of Columbia Laboratories quality assurance plan unless otherwise noted. This report shall not be reproduced, except in full, without the written consent of this laboratory. Samples will be retained for a maximum of 30 days from the receipt date unless prior arrangements have been made.



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 503-254-1794

Report Number: 21-001479/D47.R00
Report Date: 02/18/2021
Purchase Order:
Received: 02/10/21 07:00 AM



Customer: Lamp Nutraceutical

Sample ID: LNK20-13
Sample Matrix: Kratom powder
Laboratory ID: 21-001479-0013-01
Evidence of Cooling: No
Temp: 14 °C
Relinquished by: UPS

Sample Results

Mitragynine

Mitragynine + 7-Hydroxymitragynine (Basic Plus)

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
7-Hydroxymitragynine†	0.0313	%	0.0100	02/17/21	In house method by HPLC-DAD	
Mitragynine†	1.24	%	0.0500	02/17/21	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.

† = Analyte not ISO accredited.

Units of Measure

% = Percentage of sample

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 General Manager



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 503-254-1794

Report Number: 21-001479/D46.R00
Report Date: 02/18/2021
Purchase Order:
Received: 02/10/21 07:00 AM



Customer: Lamp Nutraceutical

Sample ID: LNK20-13
Sample Matrix: Kratom powder
Laboratory ID: 21-001479-0013-00
Evidence of Cooling: No
Temp: 14 °C
Relinquished by: UPS

Sample Results

Microbiology

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
Salmonella spp. by PCR	Negative	/25g		02/12/21	AOAC 2020.02 ₁	

E. coli/Coliform Count (EC) Plate

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
E.coli	< LOQ	cfu/g	100	02/18/21	AOAC 991.14 (Petrifilm)	
Total Coliforms	200	cfu/g	100	02/18/21	AOAC 991.14 (Petrifilm)	

1) GENE-UP® Assay

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.

Units of Measure

/25g = Per 25g
 cfu/g = Colony forming units per gram

Approved Signatory

Derrick Tanner
 General Manager



12423 NE Whitaker Way
 Portland, OR 97230
 503-254-1794

Report Number: 21-001479/D13.R00
Report Date: 02/18/2021
Purchase Order:
Received: 02/10/21 07:00 AM



Customer: Lamp Nutraceutical

Sample ID: LNK20-14
Sample Matrix: Kratom powder
Laboratory ID: 21-001479-0014-00
Evidence of Cooling: No
Temp: 14 °C
Relinquished by: UPS

Sample Results

Microbiology

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
Salmonella spp. by PCR	Negative	/25g		02/12/21	AOAC 2020.02 ₁	

E. coli/Coliform Count (EC) Plate

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
E.coli	< LOQ	cfu/g	100	02/18/21	AOAC 991.14 (Petrifilm)	
Total Coliforms	< LOQ	cfu/g	100	02/18/21	AOAC 991.14 (Petrifilm)	

1) GENE-UP® Assay

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.

Units of Measure

/25g = Per 25g
 cfu/g = Colony forming units per gram

Approved Signatory

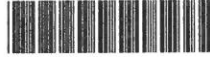
Derrick Tanner
 General Manager

Test results relate only to the parameters tested and to the samples as received by the laboratory. Test results meet all requirements of Columbia Laboratories quality assurance plan unless otherwise noted. This report shall not be reproduced, except in full, without the written consent of this laboratory. Samples will be retained for a maximum of 30 days from the receipt date unless prior arrangements have been made.



12423 NE Whitaker Way
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 503-254-1794

Report Number: 21-001479/D54.R00
Report Date: 02/18/2021
Purchase Order:
Received: 02/10/21 07:00 AM



Customer: Lamp Nutraceutical

Sample ID: LNK20-14
Sample Matrix: Kratom powder
Laboratory ID: 21-001479-0014-01
Evidence of Cooling: No
Temp: 14 °C
Relinquished by: UPS

Sample Results

Mitragynine

Mitragynine + 7-Hydroxymitragynine (Basic Plus)

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
7-Hydroxymitragynine†	0.0450	%	0.0100	02/17/21	In house method by HPLC-DAD	
Mitragynine†	1.44	%	0.0500	02/17/21	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.

† = Analyte not ISO accredited.

Units of Measure

% = Percentage of sample

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 General Manager



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 503-254-1794

Report Number: 21-001479/D09.R00
Report Date: 02/18/2021
Purchase Order:
Received: 02/10/21 07:00 AM



Customer: Lamp Nutraceutical

Sample ID: LNK20-15
Sample Matrix: Kratom powder
Laboratory ID: 21-001479-0015-01
Evidence of Cooling: No
Temp: 14 °C
Relinquished by: UPS

Sample Results

Mitragynine

Mitragynine + 7-Hydroxymitragynine (Basic Plus)

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
7-Hydroxymitragynine†	0.0343	%	0.0100	02/17/21	In house method by HPLC-DAD	
Mitragynine†	1.21	%	0.0500	02/17/21	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.

† = Analyte not ISO accredited.

Units of Measure

% = Percentage of sample

Approved Signatory

Derrick Tanner
 General Manager



12423 NE Whitaker Way
 Portland, OR 97230
 503-254-1794

Report Number: 21-001479/D11.R00
Report Date: 02/18/2021
Purchase Order:
Received: 02/10/21 07:00 AM



Customer: Lamp Nutraceutical

Sample ID: LNK20-15
Sample Matrix: Kratom powder
Laboratory ID: 21-001479-0015-00
Evidence of Cooling: No
Temp: 14 °C
Relinquished by: UPS

Sample Results

Microbiology

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
Salmonella spp. by PCR	Negative	/25g		02/12/21	AOAC 2020.02 ₁	

E. coli/Coliform Count (EC) Plate

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
E. coli	< LOQ	cfu/g	100	02/18/21	AOAC 991.14 (Petrifilm)	
Total Coliforms	400	cfu/g	100	02/18/21	AOAC 991.14 (Petrifilm)	

1) GENE-UP® Assay

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.

Units of Measure

/25g = Per 25g
 cfu/g = Colony forming units per gram

Approved Signatory

Derrick Tanner
 General Manager



12423 NE Whitaker Way
 Portland, OR 97230
 503-254-1794

Report Number: 21-001479/D14.R00
Report Date: 02/18/2021
Purchase Order:
Received: 02/10/21 07:00 AM



Customer: Lamp Nutraceutical

Sample ID: LNK20-16
Sample Matrix: Kratom powder
Laboratory ID: 21-001479-0016-01
Evidence of Cooling: No
Temp: 14 °C
Relinquished by: UPS

Sample Results

Mitragynine

Mitragynine + 7-Hydroxymitragynine (Basic Plus)

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
7-Hydroxymitragynine†	0.0547	%	0.0100	02/17/21	In house method by HPLC-DAD	
Mitragynine†	1.38	%	0.0500	02/17/21	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.

† = Analyte not ISO accredited.

Units of Measure

% = Percentage of sample

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Derrick Tanner
 General Manager



12423 NE Whitaker Way
 Portland, OR 97230
 503-254-1794

Report Number: 21-001479/D10.R00
Report Date: 02/18/2021
Purchase Order:
Received: 02/10/21 07:00 AM



Customer: Lamp Nutraceutical

Sample ID: LNK20-16
Sample Matrix: Kratom powder
Laboratory ID: 21-001479-0016-00
Evidence of Cooling: No
Temp: 14 °C
Relinquished by: UPS

Sample Results

Microbiology

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
Salmonella spp. by PCR	Negative	/25g		02/12/21	AOAC 2020.02 ₁	

E. coli/Coliform Count (EC) Plate

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
E.coli	< LOQ	cfu/g	100	02/18/21	AOAC 991.14 (Petrifilm)	
Total Coliforms	600	cfu/g	100	02/18/21	AOAC 991.14 (Petrifilm)	

1) GENE-UP® Assay

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.

Units of Measure

/25g = Per 25g
 cfu/g = Colony forming units per gram

Approved Signatory

Derrick Tanner
 General Manager

Test results relate only to the parameters tested and to the samples as received by the laboratory. Test results meet all requirements of Columbia Laboratories quality assurance plan unless otherwise noted. This report shall not be reproduced, except in full, without the written consent of this laboratory. Samples will be retained for a maximum of 30 days from the receipt date unless prior arrangements have been made.



12423 NE Whitaker Way
 Portland, OR 97230
 503-254-1794

Report Number: 21-001479/D12.R00
Report Date: 02/18/2021
Purchase Order:
Received: 02/10/21 07:00 AM



Customer: Lamp Nutraceutical

Sample ID: LNK20-17
Sample Matrix: Kratom powder
Laboratory ID: 21-001479-0017-01
Evidence of Cooling: No
Temp: 14 °C
Relinquished by: UPS

Sample Results

Mitragynine

Mitragynine + 7-Hydroxymitragynine (Basic Plus)

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
7-Hydroxymitragynine†	0.0410	%	0.0100	02/17/21	In house method by HPLC-DAD	
Mitragynine†	1.27	%	0.0500	02/17/21	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.

† = Analyte not ISO accredited.

Units of Measure

% = Percentage of sample

Approved Signatory

Derrick Tanner
 General Manager



12423 NE Whitaker Way
 Portland, OR 97230
 503-254-1794

Report Number: 21-001479/D08.R00
Report Date: 02/18/2021
Purchase Order:
Received: 02/10/21 07:00 AM



Customer: Lamp Nutraceutical

Sample ID: LNK20-17
Sample Matrix: Kratom powder
Laboratory ID: 21-001479-0017-00
Evidence of Cooling: No
Temp: 14 °C
Relinquished by: UPS

Sample Results

Microbiology						
Analyte	Result	Units	LOQ	Analyzed	Method	Notes
Salmonella spp. by PCR	Negative	/25g		02/12/21	AOAC 2020.02 ₁	
E. coli/Coliform Count (EC) Plate						
Analyte	Result	Units	LOQ	Analyzed	Method	Notes
E.coli	< LOQ	cfu/g	100	02/18/21	AOAC 991.14 (Petrifilm)	
Total Coliforms	< LOQ	cfu/g	100	02/18/21	AOAC 991.14 (Petrifilm)	

1) GENE-UP® Assay

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.

Units of Measure

/25g = Per 25g
 cfu/g = Colony forming units per gram

Approved Signatory

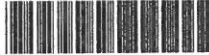
Derrick Tanner
 General Manager

Test results relate only to the parameters tested and to the samples as received by the laboratory. Test results meet all requirements of Columbia Laboratories quality assurance plan unless otherwise noted. This report shall not be reproduced, except in full, without the written consent of this laboratory. Samples will be retained for a maximum of 30 days from the receipt date unless prior arrangements have been made.



12423 NE Whitaker Way
 Portland, OR 97230
 503-254-1794

Report Number: 21-001479/D04.R00
Report Date: 02/18/2021
Purchase Order:
Received: 02/10/21 07:00 AM



Customer: Lamp Nutraceutical

Sample ID: LNK20-18
Sample Matrix: Kratom powder
Laboratory ID: 21-001479-0018-01
Evidence of Cooling: No
Temp: 14 °C
Relinquished by: UPS

Sample Results

Mitragynine

Mitragynine + 7-Hydroxymitragynine (Basic Plus)

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
7-Hydroxymitragynine†	0.0236	%	0.0100	02/17/21	In house method by HPLC-DAD	
Mitragynine†	1.09	%	0.0500	02/17/21	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.

† = Analyte not ISO accredited.

Units of Measure

% = Percentage of sample

Approved Signatory

Derrick Tanner
 General Manager



12423 NE Whitaker Way
 Portland, OR 97230
 503-254-1794

Report Number: 21-001479/D03.R00
Report Date: 02/18/2021
Purchase Order:
Received: 02/10/21 07:00 AM



Customer: Lamp Nutraceutical

Sample ID: LNK20-18
Sample Matrix: Kratom powder
Laboratory ID: 21-001479-0018-00
Evidence of Cooling: No
Temp: 14 °C
Relinquished by: UPS

Sample Results

Microbiology

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
Salmonella spp. by PCR	Negative	/25g		02/12/21	AOAC 2020.02 ₁	

E. coli/Coliform Count (EC) Plate

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
E.coli	< LOQ	cfu/g	100	02/18/21	AOAC 991.14 (Petrifilm)	
Total Coliforms	3,100	cfu/g	100	02/18/21	AOAC 991.14 (Petrifilm)	

1) GENE-UP® Assay

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.

Units of Measure

/25g = Per 25g
 cfu/g = Colony forming units per gram

Approved Signatory

Derrick Tanner
 General Manager

Test results relate only to the parameters tested and to the samples as received by the laboratory. Test results meet all requirements of Columbia Laboratories quality assurance plan unless otherwise noted. This report shall not be reproduced, except in full, without the written consent of this laboratory. Samples will be retained for a maximum of 30 days from the receipt date unless prior arrangements have been made.



12423 NE Whitaker Way
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Report Number: 21-001479/D05.R00
Report Date: 02/18/2021
Purchase Order:
Received: 02/10/21 07:00 AM



Customer: Lamp Nutraceutical

Sample ID: LNK20-19
Sample Matrix: Kratom powder
Laboratory ID: 21-001479-0019-01
Evidence of Cooling: No
Temp: 14 °C
Relinquished by: UPS

Sample Results

Mitragynine

Mitragynine + 7-Hydroxymitragynine (Basic Plus)

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
7-Hydroxymitragynine†	0.0308	%	0.0100	02/17/21	In house method by HPLC-DAD	
Mitragynine†	1.19	%	0.0500	02/17/21	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.

† = Analyte not ISO accredited.

Units of Measure

% = Percentage of sample

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Derrick Tanner
 General Manager



12423 NE Whitaker Way
 Portland, OR 97230
 503-254-1794

Report Number: 21-001479/D07.R00
Report Date: 02/18/2021
Purchase Order:
Received: 02/10/21 07:00 AM



Customer: Lamp Nutraceutical

Sample ID: LNK20-19
Sample Matrix: Kratom powder
Laboratory ID: 21-001479-0019-00
Evidence of Cooling: No
Temp: 14 °C
Relinquished by: UPS

Sample Results

Microbiology

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
Salmonella spp. by PCR	Negative	/25g		02/12/21	AOAC 2020.02 ₁	

E. coli/Coliform Count (EC) Plate

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
E.coli	< LOQ	cfu/g	100	02/18/21	AOAC 991.14 (Petrifilm)	
Total Coliforms	< LOQ	cfu/g	100	02/18/21	AOAC 991.14 (Petrifilm)	

1) GENE-UP® Assay

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.

Units of Measure

/25g = Per 25g
 cfu/g = Colony forming units per gram

Approved Signatory

Derrick Tanner
 General Manager



12423 NE Whitaker Way
 Portland, OR 97230
 503-254-1794

Report Number: 21-001479/D15.R00
Report Date: 02/18/2021
Purchase Order:
Received: 02/10/21 07:00 AM



Customer: Lamp Nutraceutical

Sample ID: LNK20-20
Sample Matrix: Kratom powder
Laboratory ID: 21-001479-0020-01
Evidence of Cooling: No
Temp: 14 °C
Relinquished by: UPS

Sample Results

Mitragynine

Mitragynine + 7-Hydroxymitragynine (Basic Plus)

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
7-Hydroxymitragynine [†]	0.0508	%	0.0100	02/17/21	In house method by HPLC-DAD	
Mitragynine [†]	1.37	%	0.0500	02/17/21	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.

[†] = Analyte not ISO accredited.

Units of Measure

% = Percentage of sample

Approved Signatory

Derrick Tanner
 General Manager



12423 NE Whitaker Way
 Portland, OR 97230
 503-254-1794

Report Number: 21-001479/D06.R00
Report Date: 02/18/2021
Purchase Order:
Received: 02/10/21 07:00 AM



Customer: Lamp Nutraceutical

Sample ID: LNK20-20
Sample Matrix: Kratom powder
Laboratory ID: 21-001479-0020-00
Evidence of Cooling: No
Temp: 14 °C
Relinquished by: UPS

Sample Results

Microbiology

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
Salmonella spp. by PCR	Negative	/25g		02/12/21	AOAC 2020.02 ₁	

E. coli/Coliform Count (EC) Plate

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
E.coli	< LOQ	cfu/g	100	02/18/21	AOAC 991.14 (Petrifilm)	
Total Coliforms	< LOQ	cfu/g	100	02/18/21	AOAC 991.14 (Petrifilm)	

1) GENE-UP® Assay

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.

Units of Measure

/25g = Per 25g
 cfu/g = Colony forming units per gram

Approved Signatory

Derrick Tanner
 General Manager



12423 NE Whitaker Way
Portland, OR 97230
503-254-1794

Report Number: 21-001479/D25.R00
Report Date: 02/18/2021
Purchase Order:
Received: 02/10/21 07:00 AM



Customer: Lamp Nutraceutical

Sample ID: LNK20-21
Sample Matrix: Kratom powder
Laboratory ID: 21-001479-0021-01
Evidence of Cooling: No
Temp: 14 °C
Relinquished by: UPS

Sample Results

Mitragynine

Mitragynine + 7-Hydroxymitragynine (Basic Plus)

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
7-Hydroxymitragynine [†]	0.0347	%	0.0100	02/17/21	In house method by HPLC-DAD	
Mitragynine [†]	1.27	%	0.0500	02/17/21	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.

[†] = Analyte not ISO accredited.

Units of Measure

% = Percentage of sample

Approved Signatory

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General Manager



12423 NE Whitaker Way
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 503-254-1794

Report Number: 21-001479/D23.R00
Report Date: 02/18/2021
Purchase Order:
Received: 02/10/21 07:00 AM



Customer: Lamp Nutraceutical

Sample ID: LNK20-21
Sample Matrix: Kratom powder
Laboratory ID: 21-001479-0021-00
Evidence of Cooling: No
Temp: 14 °C
Relinquished by: UPS

Sample Results

Microbiology						
Analyte	Result	Units	LOQ	Analyzed	Method	Notes
Salmonella spp. by PCR	Negative	/25g		02/12/21	AOAC 2020.02 ₁	
E. coli/Coliform Count (EC) Plate						
Analyte	Result	Units	LOQ	Analyzed	Method	Notes
E.coli	< LOQ	cfu/g	100	02/18/21	AOAC 991.14 (Petrifilm)	
Total Coliforms	200	cfu/g	100	02/18/21	AOAC 991.14 (Petrifilm)	

1) GENE-UP® Assay

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.

Units of Measure

/25g = Per 25g
 cfu/g = Colony forming units per gram

Approved Signatory

Derrick Tanner
 General Manager

Test results relate only to the parameters tested and to the samples as received by the laboratory. Test results meet all requirements of Columbia Laboratories quality assurance plan unless otherwise noted. This report shall not be reproduced, except in full, without the written consent of this laboratory. Samples will be retained for a maximum of 30 days from the receipt date unless prior arrangements have been made.



12423 NE Whitaker Way
 Portland, OR 97230
 503-254-1794

Report Number: 21-001479/D28.R00
Report Date: 02/18/2021
Purchase Order:
Received: 02/10/21 07:00 AM



Customer: Lamp Nutraceutical

Sample ID: LNK20-22
Sample Matrix: Kratom powder
Laboratory ID: 21-001479-0022-01
Evidence of Cooling: No
Temp: 14 °C
Relinquished by: UPS

Sample Results

Mitragynine

Mitragynine + 7-Hydroxymitragynine (Basic Plus)

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
7-Hydroxymitragynine†	0.0593	%	0.0100	02/17/21	In house method by HPLC-DAD	
Mitragynine†	1.59	%	0.0500	02/17/21	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.

† = Analyte not ISO accredited.

Units of Measure

% = Percentage of sample

Approved Signatory

Derrick Tanner
 General Manager



12423 NE Whitaker Way
 Portland, OR 97230
 503-254-1794

Report Number: 21-001479/D24.R00
Report Date: 02/18/2021
Purchase Order:
Received: 02/10/21 07:00 AM



Customer: Lamp Nutraceutical

Sample ID: LNK20-22
Sample Matrix: Kratom powder
Laboratory ID: 21-001479-0022-00
Evidence of Cooling: No
Temp: 14 °C
Relinquished by: UPS

Sample Results

Microbiology

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
Salmonella spp. by PCR	Negative	/25g		02/12/21	AOAC 2020.02 ₁	

E. coli/Coliform Count (EC) Plate

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
E.coli	< LOQ	cfu/g	100	02/18/21	AOAC 991.14 (Petrifilm)	
Total Coliforms	300	cfu/g	100	02/18/21	AOAC 991.14 (Petrifilm)	

1) GENE-UP® Assay

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.

Units of Measure

/25g = Per 25g
 cfu/g = Colony forming units per gram

Approved Signatory

Derrick Tanner
 General Manager



12423 NE Whitaker Way
 Portland, OR 97230
 503-254-1794

Report Number: 21-001479/D22.R00
Report Date: 02/18/2021
Purchase Order:
Received: 02/10/21 07:00 AM



Customer: Lamp Nutraceutical

Sample ID: LNK20-23
Sample Matrix: Kratom powder
Laboratory ID: 21-001479-0023-01
Evidence of Cooling: No
Temp: 14 °C
Relinquished by: UPS

Sample Results

Mitragynine

Mitragynine + 7-Hydroxymitragynine (Basic Plus)

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
7-Hydroxymitragynine†	0.0468	%	0.0100	02/17/21	In house method by HPLC-DAD	
Mitragynine†	1.34	%	0.0500	02/17/21	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.

† = Analyte not ISO accredited.

Units of Measure

% = Percentage of sample

Approved Signatory

Derrick Tanner
 General Manager



12423 NE Whitaker Way
 Portland, OR 97230
 503-254-1794

Report Number: 21-001479/D26.R00
Report Date: 02/18/2021
Purchase Order:
Received: 02/10/21 07:00 AM



Customer: Lamp Nutraceutical

Sample ID: LNK20-23
Sample Matrix: Kratom powder
Laboratory ID: 21-001479-0023-00
Evidence of Cooling: No
Temp: 14 °C
Relinquished by: UPS

Sample Results

Microbiology						
Analyte	Result	Units	LOQ	Analyzed	Method	Notes
Salmonella spp. by PCR	Negative	/25g		02/12/21	AOAC 2020.02 ₁	
E. coli/Coliform Count (EC) Plate						
Analyte	Result	Units	LOQ	Analyzed	Method	Notes
E.coli	< LOQ	cfu/g	100	02/18/21	AOAC 991.14 (Petrifilm)	
Total Coliforms	300	cfu/g	100	02/18/21	AOAC 991.14 (Petrifilm)	

1) GENE-UP® Assay

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.

Units of Measure

/25g = Per 25g
 cfu/g = Colony forming units per gram

Approved Signatory

Derrick Tanner
 General Manager



12423 NE Whitaker Way
 Portland, OR 97230
 503-254-1794

Report Number: 21-001479/D17.R00
Report Date: 02/18/2021
Purchase Order:
Received: 02/10/21 07:00 AM



Customer: Lamp Nutraceutical

Sample ID: LNK20-24
Sample Matrix: Kratom powder
Laboratory ID: 21-001479-0024-01
Evidence of Cooling: No
Temp: 14 °C
Relinquished by: UPS

Sample Results

Mitragynine

Mitragynine + 7-Hydroxymitragynine (Basic Plus)

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
7-Hydroxymitragynine†	0.0296	%	0.0100	02/17/21	In house method by HPLC-DAD	
Mitragynine†	1.25	%	0.0500	02/17/21	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.

† = Analyte not ISO accredited.

Units of Measure

% = Percentage of sample

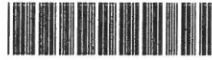
Approved Signatory

Derrick Tanner
 General Manager



12423 NE Whitaker Way
 Portland, OR 97230
 503-254-1794

Report Number: 21-001479/D18.R00
Report Date: 02/18/2021
Purchase Order:
Received: 02/10/21 07:00 AM



Customer: Lamp Nutraceutical

Sample ID: LNK20-24
Sample Matrix: Kratom powder
Laboratory ID: 21-001479-0024-00
Evidence of Cooling: No
Temp: 14 °C
Relinquished by: UPS

Sample Results

Microbiology

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
Salmonella spp. by PCR	Negative	/25g		02/12/21	AOAC 2020.02 ₁	
E. coli/Coliform Count (EC) Plate						
Analyte	Result	Units	LOQ	Analyzed	Method	Notes
E.coli	< LOQ	cfu/g	100	02/18/21	AOAC 991.14 (Petrifilm)	
Total Coliforms	600	cfu/g	100	02/18/21	AOAC 991.14 (Petrifilm)	

1) GENE-UP® Assay

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.

Units of Measure

/25g = Per 25g
 cfu/g = Colony forming units per gram

Approved Signatory

Derrick Tanner
 General Manager



12423 NE Whitaker Way
 Portland, OR 97230
 503-254-1794

Report Number: 21-001479/D19.R00
Report Date: 02/18/2021
Purchase Order:
Received: 02/10/21 07:00 AM



Customer: Lamp Nutraceutical

Sample ID: LNK20-25
Sample Matrix: Kratom powder
Laboratory ID: 21-001479-0025-01
Evidence of Cooling: No
Temp: 14 °C
Relinquished by: UPS

Sample Results

Mitragynine

Mitragynine + 7-Hydroxymitragynine (Basic Plus)

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
7-Hydroxymitragynine†	0.0387	%	0.0100	02/17/21	In house method by HPLC-DAD	
Mitragynine†	1.29	%	0.0500	02/17/21	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.

† = Analyte not ISO accredited.

Units of Measure

% = Percentage of sample

Approved Signatory

Derrick Tanner
 General Manager



12423 NE Whitaker Way
 Portland, OR 97230
 503-254-1794

Report Number: 21-001479/D21.R00
Report Date: 02/18/2021
Purchase Order:
Received: 02/10/21 07:00 AM



Customer: Lamp Nutraceutical

Sample ID: LNK20-25
Sample Matrix: Kratom powder
Laboratory ID: 21-001479-0025-00
Evidence of Cooling: No
Temp: 14 °C
Relinquished by: UPS

Sample Results

Microbiology						
Analyte	Result	Units	LOQ	Analyzed	Method	Notes
Salmonella spp. by PCR	Negative	/25g		02/12/21	AOAC 2020.02 ₁	
E. coli/Coliform Count (EC) Plate						
Analyte	Result	Units	LOQ	Analyzed	Method	Notes
E.coli	< LOQ	cfu/g	100	02/18/21	AOAC 991.14 (Petrifilm)	
Total Coliforms	200	cfu/g	100	02/18/21	AOAC 991.14 (Petrifilm)	

1) GENE-UP® Assay

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.

Units of Measure

/25g = Per 25g
 cfu/g = Colony forming units per gram

Approved Signatory

Derrick Tanner
 General Manager



12423 NE Whitaker Way
 Portland, OR 97230
 503-254-1794

Report Number: 21-001479/D16.R00
Report Date: 02/18/2021
Purchase Order:
Received: 02/10/21 07:00 AM



Customer: Lamp Nutraceutical

Sample ID: LNK20-26
Sample Matrix: Kratom powder
Laboratory ID: 21-001479-0026-01
Evidence of Cooling: No
Temp: 14 °C
Relinquished by: UPS

Sample Results

Mitragynine

Mitragynine + 7-Hydroxymitragynine (Basic Plus)

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
7-Hydroxymitragynine†	0.0381	%	0.0100	02/17/21	In house method by HPLC-DAD	
Mitragynine†	1.30	%	0.0500	02/17/21	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.

† = Analyte not ISO accredited.

Units of Measure

% = Percentage of sample

Approved Signatory

Derrick Tanner
 General Manager



12423 NE Whitaker Way
 Portland, OR 97230
 503-254-1794

Report Number: 21-001479/D20.R00
Report Date: 02/18/2021
Purchase Order:
Received: 02/10/21 07:00 AM



Customer: Lamp Nutraceutical

Sample ID: LNK20-26
Sample Matrix: Kratom powder
Laboratory ID: 21-001479-0026-00
Evidence of Cooling: No
Temp: 14 °C
Relinquished by: UPS

Sample Results

Microbiology

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
Salmonella spp. by PCR	Negative	/25g		02/12/21	AOAC 2020.02 ₁	
E. coli/Coliform Count (EC) Plate						
Analyte	Result	Units	LOQ	Analyzed	Method	Notes
E.coli	< LOQ	cfu/g	100	02/18/21	AOAC 991.14 (Petrifilm)	
Total Coliforms	500	cfu/g	100	02/18/21	AOAC 991.14 (Petrifilm)	

1) GENE-UP® Assay

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.

Units of Measure

/25g = Per 25g

cfu/g = Colony forming units per gram

Approved Signatory

Derrick Tanner
 General Manager



12423 NE Whitaker Way
 Portland, OR 97230
 503-254-1794

Report Number: 21-001479/D02.R00
Report Date: 02/18/2021
Purchase Order:
Received: 02/10/21 07:00 AM



Customer: Lamp Nutraceutical

Sample ID: LNK20-27
Sample Matrix: Kratom powder
Laboratory ID: 21-001479-0027-01
Evidence of Cooling: No
Temp: 14 °C
Relinquished by: UPS

Sample Results

Mitragynine

Mitragynine + 7-Hydroxymitragynine (Basic Plus)

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
7-Hydroxymitragynine†	0.0321	%	0.0100	02/17/21	In house method by HPLC-DAD	
Mitragynine†	1.39	%	0.0500	02/17/21	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.

† = Analyte not ISO accredited.

Units of Measure

% = Percentage of sample

Approved Signatory

Derrick Tanner
 General Manager



12423 NE Whitaker Way
 Portland, OR 97230
 503-254-1794

Report Number: 21-001479/D27.R00
Report Date: 02/18/2021
Purchase Order:
Received: 02/10/21 07:00 AM



Customer: Lamp Nutraceutical

Sample ID: LNK20-27
Sample Matrix: Kratom powder
Laboratory ID: 21-001479-0027-00
Evidence of Cooling: No
Temp: 14 °C
Relinquished by: UPS

Sample Results

Microbiology

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
Salmonella spp. by PCR	Negative	/25g		02/12/21	AOAC 2020.02 ₁	

E. coli/Coliform Count (EC) Plate

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
E.coli	< LOQ	cfu/g	100	02/18/21	AOAC 991.14 (Petrifilm)	
Total Coliforms	< LOQ	cfu/g	100	02/18/21	AOAC 991.14 (Petrifilm)	

1) GENE-UP® Assay

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.

Units of Measure

/25g = Per 25g
 cfu/g = Colony forming units per gram

Approved Signatory

Derrick Tanner
 General Manager