



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



**Job Number:** 19-001344  
**Report Number:** 19-001344-00  
**Report Date:** 02/14/2019  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 02/07/19 16:15

This report cannot be used for ODA, OHA or OLCC compliance requirements.

**Product identity:** Combined: Roasted Hazelnut (19031H and 19031H-B)  
**Laboratory ID:** 19-001344-0003

### Summary

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**Microbiology:**

Less than LOQ for all analytes.



This report cannot be used for ODA, OHA or OLCC compliance requirements.

**Customer:** 4207 SE Woodstock Blvd  
#507  
Portland, Oregon 97206  
United States

**Product identity:** Combined: Roasted Hazelnut (19031H and 19031)

**Client/Metric ID:** .

**Sample Date:**

**Laboratory ID:** 19-001344-0003

**Relinquished by:** Tait Christensen

**Temp:** 17.8 °C

### Sample Results

Microbiology								
Analyte	Result	Limits	Units	LOQ	Batch	Analyze	Method	Notes
E.coli	< LOQ		cfu/g	10	1901185	02/10/19	AOAC 991.14 (Petrifilm)	X
Total Coliforms	< LOQ		cfu/g	10	1901185	02/10/19	AOAC 991.14 (Petrifilm)	X
Mold	< LOQ		cfu/g	10	1901187	02/12/19	AOAC 997.02 (Petrifilm)	X
Yeast	< LOQ		cfu/g	10	1901187	02/12/19	AOAC 997.02 (Petrifilm)	X



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**Abbreviations**

**Limits:** Action Levels per OAR-333-007-0400, OAR-333-007-0210, OAR-333-007-0220

**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**

cfu/g = Colony forming units per gram

% wt =  $\mu\text{g/g}$  divided by 10,000

**Glossary of Qualifiers**

X = Not ORELAP accredited.

Approved Signatory

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Derrick Tanner  
General Manager



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Explanation of QC Flag Comments:

Code	Explanation
Q	Matrix interferences affecting spike or surrogate recoveries.
Q1	Quality control result biased high. Only non-detect samples reported.
Q2	Quality control outside QC limits. Data considered estimate.
Q3	Sample concentration greater than four times the amount spiked.
Q4	Non-homogenous sample matrix, affecting RPD result and/or % recoveries.
Q5	Spike results above calibration curve.
Q6	Quality control outside QC limits. Data acceptable based on remaining QC.
R	Relative percent difference (RPD) outside control limit.
R1	RPD non-calculable, as sample or duplicate results are less than five times the LOQ.
R2	Sample replicates RPD non-calculable, as only one replicate is within the analytical range.
LOQ1	Quantitation level raised due to low sample volume and/or dilution.
LOQ2	Quantitaion level raised due to matrix interference.
B	Analyte detected in method blank, but not in associated samples.
B1	The sample concentration is greater than 5 times the blank concentration.
B2	The sample concentration is less than 5 times the blank concentration.



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



**Job Number:** 19-001346  
**Report Number:** 19-001346-00  
**Report Date:** 02/13/2019  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 02/07/19 16:15

This report cannot be used for ODA, OHA or OLCC compliance requirements.

**Product identity:** Hazelnut & Sea Salt Batch 19031h      **Client/Metric ID:** .  
**Laboratory ID:** 19-001346-0002      **Sample Date:** 02/07/19

### Summary

**Potency:**

Analyte per 17.7g	Result	Limits	Units	LOQ	
CBD per 17.7g	30.8		mg/17.7g	0.590	CBD-Total per 17.7g 34.2 mg/17.7g
CBD-A per 17.7g	3.82		mg/17.7g	0.590	THC-Total per 17.7g < 1.108 mg/17.7
(Reported in milligrams per serving)					



This report cannot be used for ODA, OHA or OLCC compliance requirements.

**Customer:** Sovereign Medicinals Inc  
4207 SE Woodstock Blvd #507  
Portland, Oregon 97206  
United States

**Product identity:** Hazelnut & Sea Salt Batch 19031h

**Client/Metric ID:** .

**Sample Date:** 02/07/19

**Laboratory ID:** 19-001346-0002

**Relinquished by:** Tait Christensen

**Temp:** 17.8 °C

**Weight Received:** 17.7 g

**Serving Size #1:** 17.7 g

### Sample Results

Potency per 17.7g		Batch: 1901255					
Analyte	Result	Limits	Units	LOQ	Analyze	Method	Notes
CBC per 17.7g†	< LOQ		mg/17.7g	0.590	02/12/19	J AOAC 2015 V98-6	
CBC-A per 17.7g†	< LOQ		mg/17.7g	0.590	02/12/19	J AOAC 2015 V98-6	
CBC-Total per 17.7g†	< LOQ		mg/17.7g	1.11	02/12/19	J AOAC 2015 V98-6	
CBD per 17.7g	30.8		mg/17.7g	0.590	02/12/19	J AOAC 2015 V98-6	
CBD-A per 17.7g	3.82		mg/17.7g	0.590	02/12/19	J AOAC 2015 V98-6	
CBD-Total per 17.7g	34.2		mg/17.7g	1.11	02/12/19	J AOAC 2015 V98-6	
CBDV per 17.7g†	< LOQ		mg/17.7g	0.590	02/12/19	J AOAC 2015 V98-6	
CBDV-A per 17.7g†	< LOQ		mg/17.7g	0.590	02/12/19	J AOAC 2015 V98-6	
CBDV-Total per 17.7g†	< LOQ		mg/17.7g	1.10	02/12/19	J AOAC 2015 V98-6	
CBG per 17.7g†	< LOQ		mg/17.7g	0.590	02/12/19	J AOAC 2015 V98-6	
CBG-A per 17.7g†	< LOQ		mg/17.7g	0.590	02/12/19	J AOAC 2015 V98-6	
CBG-Total per 17.7g†	< LOQ		mg/17.7g	1.11	02/12/19	J AOAC 2015 V98-6	
CBL per 17.7g†	< LOQ		mg/17.7g	0.590	02/12/19	J AOAC 2015 V98-6	
CBN per 17.7g	< LOQ		mg/17.7g	0.590	02/12/19	J AOAC 2015 V98-6	
Δ8-THC per 17.7g†	< LOQ		mg/17.7g	0.590	02/12/19	J AOAC 2015 V98-6	
Δ9-THC per 17.7g	< LOQ		mg/17.7g	0.590	02/12/19	J AOAC 2015 V98-6	
THC-A per 17.7g	< LOQ		mg/17.7g	0.590	02/12/19	J AOAC 2015 V98-6	
THC-Total per 17.7g	< LOQ	5.00	mg/17.7g	1.11	02/12/19	J AOAC 2015 V98-6	
THCV per 17.7g†	< LOQ		mg/17.7g	0.590	02/12/19	J AOAC 2015 V98-6	
THCV-A per 17.7g†	< LOQ		mg/17.7g	0.590	02/12/19	J AOAC 2015 V98-6	
THCV-Total per 17.7g†	< LOQ		mg/17.7g	1.10	02/12/19	J AOAC 2015 V98-6	



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**Abbreviations**

**Limits:** Action Levels per OAR-333-007-0400, OAR-333-007-0210, OAR-333-007-0220

**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**

g = Gram

mg/17.7g = Milligram per 17.7g

% = Percentage of sample

% wt =  $\mu\text{g/g}$  divided by 10,000

Approved Signatory

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Derrick Tanner  
General Manager



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**Laboratory Quality Control Results**

J AOAC 2015 V98-6		Batch ID: 1901255						
Laboratory Control Sample								
Analyte	Result	Spike	Units	% Rec	Limits	Evaluation	Notes	
CBDV-A	0.00897	0.01	%	89.7	85 - 115	Acceptable		
CBDV	0.00957	0.01	%	95.7	85 - 115	Acceptable		
CBD-A	0.00882	0.01	%	88.2	85 - 115	Acceptable		
CBG-A	0.00910	0.01	%	91.0	85 - 115	Acceptable		
CBG	0.0102	0.01	%	102	85 - 115	Acceptable		
CBD	0.00876	0.01	%	87.6	85 - 115	Acceptable		
THCV	0.00958	0.01	%	95.8	85 - 115	Acceptable		
THCVA	0.00886	0.01	%	88.6	85 - 115	Acceptable		
CBN	0.00988	0.01	%	98.8	85 - 115	Acceptable		
THC	0.00949	0.01	%	94.9	85 - 115	Acceptable		
D8THC	0.00938	0.01	%	93.8	85 - 115	Acceptable		
CBL	0.00903	0.01	%	90.3	85 - 115	Acceptable		
CBC	0.0101	0.01	%	101	85 - 115	Acceptable		
THCA	0.00927	0.01	%	92.7	85 - 115	Acceptable		
CBCA	0.00854	0.01	%	85.4	85 - 115	Acceptable		

**Method Blank**

Analyte	Result	LOQ	Units	Limits	Evaluation	Notes
CBDV-A	ND	0.003	%	< 0.003	Acceptable	
CBDV	ND	0.003	%	< 0.003	Acceptable	
CBD-A	ND	0.003	%	< 0.003	Acceptable	
CBG-A	ND	0.003	%	< 0.003	Acceptable	
CBG	ND	0.003	%	< 0.003	Acceptable	
CBD	ND	0.003	%	< 0.003	Acceptable	
THCV	ND	0.003	%	< 0.003	Acceptable	
THCVA	ND	0.003	%	< 0.003	Acceptable	
CBN	ND	0.003	%	< 0.003	Acceptable	
THC	ND	0.003	%	< 0.003	Acceptable	
D8THC	ND	0.003	%	< 0.003	Acceptable	
CBL	ND	0.003	%	< 0.003	Acceptable	
CBC	ND	0.003	%	< 0.003	Acceptable	
THCA	ND	0.003	%	< 0.003	Acceptable	
CBCA	ND	0.003	%	< 0.003	Acceptable	

**Abbreviations**

ND - None Detected at or above MRL  
RPD - Relative Percent Difference  
LOQ - Limit of Quantitation

**Units of Measure:**

% - Percent





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J AOAC 2015 V98-6		Batch ID: 1901255						
Sample Duplicate		Sample ID: 19-001322-0001						
Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes
CBDV-A	ND	ND	0.003	%	0	< 20	Acceptable	
CBDV	0.00329	0.00331	0.003	%	0.606	< 20	Acceptable	
CBD-A	ND	ND	0.003	%	0	< 20	Acceptable	
CBG-A	ND	ND	0.003	%	0	< 20	Acceptable	
CBG	0.00786	0.00775	0.003	%	1.41	< 20	Acceptable	
CBD	0.426	0.420	0.003	%	1.42	< 20	Acceptable	
THCV	ND	ND	0.003	%	0	< 20	Acceptable	
THCVA	ND	ND	0.003	%	0	< 20	Acceptable	
CBN	ND	ND	0.003	%	0	< 20	Acceptable	
THC	0.0241	0.0238	0.003	%	1.25	< 20	Acceptable	
D8THC	ND	ND	0.003	%	0	< 20	Acceptable	
CBL	ND	ND	0.003	%	0	< 20	Acceptable	
CBC	0.0233	0.0230	0.003	%	1.30	< 20	Acceptable	
THCA	ND	ND	0.003	%	0	< 20	Acceptable	
CBCA	ND	ND	0.003	%	0	< 20	Acceptable	

**Abbreviations**

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RPD - Relative Percent Difference  
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