



12423 NE Whitaker Way
Portland, OR 97230

503-254-1794
Purchase Order:
Report 22-005351/D004.R000
Number: 05/16/2022
Report Date: OR100028

Retest Date:

5/9/2022
5/9/2024
22-005351-0001



Customer:

Product identity: Manufactured Date: GVB Oregon CBDA GVL-TST258

Received: 05/10/22 11:27

Laboratory ID: Summary

Potency:

Analyte Result (%) CBD-A 92.2 CBD 1.87 CBG-A 1.18 † CBDV-A 0.740 †	CBD-A CBD CBG-A CBDV-A	
		CBD-Total 82.8%
		THC-Total <LOQ
		(Reported in percent of total sample)

Residual Solvents:

All analytes passing and less than LOQ.

Pesticides:

All analytes passing and less than LOQ.

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Page 1 of 14

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Testing in accordance with: OAR 333-007-0430



Report
Number:
Report Date:
ORELAP#:

Purchase Order:
22-005351/D004.R000

05/16/2022

OR100028



Received: 05/10/22 11:27

Customer: GVB Oregon

United States of America (USA)

Product identity: CBDA GVL-TST258

Client/Metric ID: .

Sample Date:

Laboratory ID: 22-005351-0001

Evidence of Cooling: No

Temp: 10 °C

Relinquished by: Giuffrida

Sample Results

Potency **Method** J AOAC 2015 V98-6 (mod) **Units** % **Batch:** 2204070 **Analyze:** 5/12/22 12:11:00 AM

Analyte As Received **weight**
Dry **LOQ Notes**

CBC < LOQ 0.0758	
CBC-A [†] < LOQ 0.0758	CBD-A
CBC-Total [†] < LOQ 0.142	CBD
CBD 1.87 0.0758	CBG-A
CBD-A 92.2 0.758	CBDV-A
CBD-Total 82.8 0.741	
CBDV [†] < LOQ 0.0758	
CBDV-A 0.740 [†] 0.0758	
CBDV-Total 0.641 [†] 0.142	
CBE [†] < LOQ 0.0758	
CBG [†] < LOQ 0.0758	
CBG-A 1.18 [†] 0.0758	
CBG-Total 1.04 0.142	
CBL [†] < LOQ 0.0758	
CBL-A [†] < LOQ 0.0758	
CBL-Total [†] < LOQ 0.142	
CBN < LOQ 0.0758	
CBT [†] < LOQ 0.0758	
Δ8-THC < LOQ 0.0758	
Δ8-THCV < LOQ 0.0758	
Δ9-THC < LOQ 0.0758	
exo-THC < LOQ 0.0758	
THC-A < LOQ 0.0758	
THC-Total < LOQ 0.142	
THCV [†] < LOQ 0.0758	
THCV-A [†] < LOQ 0.0758	
THCV-Total [†] < LOQ 0.142	
Total Cannabinoids 96.0 [†]	



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Solvents Method Residual Solvents by GC/MS **Units** µg/g **Batch** 2204159 **Analyze** 05/16/22 10:49 AM **Analyte Result Limits LOQ**

Status Notes Analyte Result Limits LOQ Status Notes 1,4-Dioxane < LOQ 380 100 pass 2-Butanol < LOQ 5000 200 pass

2-Ethoxyethanol < LOQ 160 30.0 pass 2-Methylbutane < LOQ

200

(Isopentane)

2-Methylpentane < LOQ 30.0 2-Propanol (IPA) < LOQ 5000 200 pass

2,2-Dimethylbutane < LOQ 30.0 2,2-Dimethylpropane < LOQ

200

(neo-pentane)

2,3-Dimethylbutane < LOQ 30.0 3-Methylpentane < LOQ 30.0 Acetone < LOQ 5000 200 pass Acetonitrile < LOQ 410 100 pass

Benzene < LOQ 2.00 1.00 pass Butanes (sum) < LOQ 5000 400 pass Cyclohexane < LOQ 3880 200 pass Ethyl acetate < LOQ 5000

200 pass Ethyl benzene < LOQ 200 Ethyl ether < LOQ 5000 200 pass Ethylene glycol < LOQ 620 200 pass Ethylene oxide < LOQ

50.0 20.0 pass Hexanes (sum) < LOQ 290 150 pass Isopropyl acetate < LOQ 5000 200 pass Isopropylbenzene < LOQ 70.0 pass

30.0 m,p-Xylene < LOQ 200

(Cumene)

Methanol < LOQ 3000 200 pass Methylene chloride < LOQ 600 60.0 pass

Methylpropane < LOQ (Isobutane)

200 n-Butane < LOQ 200

n-Heptane < LOQ 5000 200 pass n-Hexane < LOQ 30.0 n-Pentane < LOQ 200 o-Xylene < LOQ 200 Pentanes (sum) < LOQ 5000 600

pass Propane < LOQ 5000 200 pass Tetrahydrofuran < LOQ 720 100 pass Toluene < LOQ 890 100 pass Total Xylenes < LOQ 400

Total Xylenes and Ethyl < LOQ 2170 pass

600

benzene

Page 3 of 14

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Testing in accordance with: OAR 333-007-0400 OAR 333-007-0410 OAR 333-007-0430



503-254-1794 **Purchase Order:**
Report 22-005351/D004.R000
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Received: 05/10/22 11:27

Pesticides **Method** AOAC 2007.01 & EN 15662 (mod) **Units** mg/kg **Batch** 2204110 **Analyze** 05/13/22 11:48 AM **Analyte Result**
Limits LOQ Status Notes Analyte Result Limits LOQ Status Notes Abamectin < LOQ 0.50 0.250 pass Acephate < LOQ 0.40 0.250 pass
Acequinocyl < LOQ 2.0 1.00 pass Acetamiprid < LOQ 0.20 0.100 pass Aldicarb < LOQ 0.40 0.200 pass Azoxystrobin < LOQ 0.20 0.100 pass
Bifenazate < LOQ 0.20 0.100 pass Bifenthrin < LOQ 0.20 0.100 pass Boscalid < LOQ 0.40 0.200 pass Carbaryl < LOQ 0.20 0.100 pass
Carbofuran < LOQ 0.20 0.100 pass Chlorantraniliprole < LOQ 0.20 0.100 pass Chlorfenapyr < LOQ 1.0 0.500 pass Chlorpyrifos < LOQ 0.20 0.100
pass Clofentezine < LOQ 0.20 0.100 pass Cyfluthrin < LOQ 1.0 0.500 pass Cypermethrin < LOQ 1.0 0.500 pass Daminozide < LOQ 1.0 0.500
pass Diazinon < LOQ 0.20 0.100 pass Dichlorvos < LOQ 1.0 0.500 pass Dimethoate < LOQ 0.20 0.100 pass Ethoprophos < LOQ 0.20 0.100 pass
Etofenprox < LOQ 0.40 0.200 pass Etoxazole < LOQ 0.20 0.100 pass Fenoxycarb < LOQ 0.20 0.100 pass Fenpyroximate < LOQ 0.40 0.200 pass
Fipronil < LOQ 0.40 0.200 pass Flonicamid < LOQ 1.0 0.400 pass Fludioxonil < LOQ 0.40 0.200 pass Hexythiazox < LOQ 1.0 0.400 pass Imazalil
< LOQ 0.20 0.100 pass Imidacloprid < LOQ 0.40 0.200 pass Kresoxim-methyl < LOQ 0.40 0.200 pass Malathion < LOQ 0.20 0.100 pass
Metalaxyl < LOQ 0.20 0.100 pass Methiocarb < LOQ 0.20 0.100 pass Methomyl < LOQ 0.40 0.200 pass MGK-264 < LOQ 0.20 0.100 pass
Myclobutanil < LOQ 0.20 0.100 pass Naled < LOQ 0.50 0.250 pass Oxamyl < LOQ 1.0 0.500 pass Paclobutrazole < LOQ 0.40 0.200 pass
Parathion-Methyl < LOQ 0.20 0.200 pass Permethrin < LOQ 0.20 0.100 pass Phosmet < LOQ 0.20 0.100 pass Piperonyl butoxide < LOQ 2.0 1.00
pass Prallethrin < LOQ 0.20 0.200 pass Propiconazole < LOQ 0.40 0.200 pass Propoxur < LOQ 0.20 0.100 pass Pyrethrin I (total) < LOQ 1.0
0.500 pass Pyridaben < LOQ 0.20 0.100 pass Spinosad < LOQ 0.20 0.100 pass Spiromesifen < LOQ 0.20 0.100 pass Spirotetramat < LOQ 0.20
0.100 pass Spiroxamine < LOQ 0.40 0.200 pass Tebuconazole < LOQ 0.40 0.200 pass Thiocloprid < LOQ 0.20 0.100 pass Thiamethoxam < LOQ
0.20 0.100 pass Trifloxystrobin < LOQ 0.20 0.100 pass

Page 4 of 14

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These test results are representative of the individual sample selected and submitted by the client.

Abbreviations

Limits: Action Levels per OAR-333-007-0400, OAR-333-007-0210, OAR-333-007-0220, CCR title 16-division 42. BCC-section 5723

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 NELAP accredited.

Units of Measure

µg/g = Microgram per gram

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

% = Percentage of sample

% wt = µg/g divided by 10,000

Approved Signatory

Derrick Tanner
General Manager

Page 5 of 14

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Testing in accordance with: OAR 333-007-0400 OAR 333-007-0410 OAR 333-007-0430



Portland, OR
97230

503-254-1794

Report Number: Report

Date: ORELAP#:

Purchase Order:

22-005351/D004.R000

05/16/2022

OR100028



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Portland, OR **Report Date: ORELAP#:**

97230

503-254-1794

Report

Number:

Purchase Order:

22-005351/D004.R000

05/16/2022

OR100028



Received: 05/10/22 11:27

Revision: 1 Document ID: 7148
Legacy ID: Worksheet Validated 04/20/2021

J AOAC 2015 V98-6 Batch ID: 2204070
Laboratory Control Sample

Laboratory Quality Control Results

Analyte LCS Result Spike Units
% Rec Evaluation Notes

						Limits		
CBDVA	1	0.104	0.100	%	104	80.0 - 120	Acceptable	
CBDV	1	0.106	0.100	%	106	80.0 - 120	Acceptable	
CBE	1	0.0983	0.100	%	98.3	80.0 - 120	Acceptable	
CBDA	1	0.103	0.100	%	103	90.0 - 110	Acceptable	
CBGA	1	0.0983	0.100	%	98.3	90.0 - 110	Acceptable	
CBG	1	0.0963	0.100	%	96.3	90.0 - 110	Acceptable	
CBD	1	0.0996	0.100	%	99.6	80.0 - 120	Acceptable	
THCV	1	0.1000	0.100	%	100.0	80.0 - 120	Acceptable	
d8THCV	1	0.101	0.100	%	101	80.0 - 120	Acceptable	
THCVA	1	0.0980	0.100	%	98.0	80.0 - 120	Acceptable	
CBN	1	0.100	0.100	%	100	90.0 - 110	Acceptable	
exo-THC	1	0.0979	0.100	%	97.9	80.0 - 120	Acceptable	
d9THC	1	0.0995	0.100	%	99.5	80.0 - 120	Acceptable	
d8THC	1	0.0966	0.100	%	96.6	80.0 - 120	Acceptable	
CBL	1	0.0988	0.100	%	98.8	80.0 - 120	Acceptable	
CBC	1	0.0941	0.100	%	94.1	80.0 - 120	Acceptable	
THCA	1	0.0999	0.100	%	99.9	90.0 - 110	Acceptable	
CBCA	1	0.100	0.100	%	100	80.0 - 120	Acceptable	
CBLA	1	0.0979	0.100	%	97.9	80.0 - 120	Acceptable	
CBT	1	0.0955	0.100	%	95.5	80.0 - 120	Acceptable	

Method Blank

Analyte LOQ Evaluation Notes

Analyte LOQ Evaluation Notes					
Result		Units		Limits	
CBDVA	<LOQ	0.077	%	< 0.077	Acceptable
CBDV	<LOQ	0.077	%	< 0.077	Acceptable
CBE	<LOQ	0.077	%	< 0.077	Acceptable
CBDA	<LOQ	0.077	%	< 0.077	Acceptable
CBGA	<LOQ	0.077	%	< 0.077	Acceptable
CBG	<LOQ	0.077	%	< 0.077	Acceptable
CBD	<LOQ	0.077	%	< 0.077	Acceptable
THCV	<LOQ	0.077	%	< 0.077	Acceptable
d8THCV	<LOQ	0.077	%	< 0.077	Acceptable
THCVA	<LOQ	0.077	%	< 0.077	Acceptable
CBN	<LOQ	0.077	%	< 0.077	Acceptable
exo-THC	<LOQ	0.077	%	< 0.077	Acceptable
d9THC	<LOQ	0.077	%	< 0.077	Acceptable
d8THC	<LOQ	0.077	%	< 0.077	Acceptable

CBL	<LOQ	0.077	%	< 0.077	Acce
CBC	<LOQ	0.077	%	< 0.077	Acce
THCA	<LOQ	0.077	%	< 0.077	Acce
CBCA	<LOQ	0.077	%	< 0.077	Acce
CBLA	<LOQ	0.077	%	< 0.077	Acce
CBT	<LOQ	0.077	%	< 0.077	Acce

Abbreviations

ND - None Detected at or above MRL

RPD - Relative Percent Difference

LOQ - Limit of Quantitation

Units of Measure:

% - Percent

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Page 7 of 14

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Number: 05/16/2022
Report Date: OR100028

12423 NE Whitaker Way **ORELAP#:**
Portland, OR 97230



Received: 05/10/22 11:27

Revision: 1 Document ID: 7148
Legacy ID: Worksheet Validated 04/20/2021

Laboratory Quality Control Results

J AOAC 2015 V98-6 Batch ID: **Sample**

2204070

Duplicate Sample ID:

22-005321-0001

Analyte Result Org. Result LOQ Units

RPD Evaluation Notes

Limits

									CBG	0.943	0.937	0.077	%	0.656	< 20	Acceptable	
CBDVA	<LOQ	<LOQ	0.077	%	NA	< 20	Acce	CBD	68.3	68.4	0.077	%	0.116	< 20	Acceptable		
CBDV	0.434	0.425	0.077	%	2.30	< 20	Acce	THCV	<LOQ	<LOQ	0.077	%	NA	< 20	Acceptable		
CBE	2.50	2.39	0.077	%	4.63	< 20	Acce	d8THCV	<LOQ	<LOQ	0.077	%	NA	< 20	Acceptable		
CBDA	<LOQ	<LOQ	0.077	%	NA	< 20	Acce	THCVA	<LOQ	<LOQ	0.077	%	NA	< 20	Acceptable		
CBGA	<LOQ	<LOQ	0.077	%	NA	< 20	Acce	CBN	1.97	1.86	0.077	%	5.39	< 20	Acceptable		

exo-THC	<LOQ	<LOQ	0.077	%	NA	< 20	Acce
d9THC	<LOQ	<LOQ	0.077	%	NA	< 20	Acce
d8THC	<LOQ	<LOQ	0.077	%	NA	< 20	Acce
CBL	<LOQ	<LOQ	0.077	%	NA	< 20	Acce
CBC	1.82	1.71	0.077	%	5.86	< 20	Acce
THCA	<LOQ	<LOQ	0.077	%	NA	< 20	Acce
CBCA	<LOQ	<LOQ	0.077	%	NA	< 20	Acce
CBLA	<LOQ	<LOQ	0.077	%	NA	< 20	Acce
CBT	1.16	1.08	0.077	%	7.33	< 20	Acce
d9THCO	<LOQ	<LOQ	0.077	%	NA	< 20	Acce

Abbreviations

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Units of Measure:

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97230
503-254-1794 **Purchase Order:**
22-005351/D004.R000
Report 05/16/2022
Number: OR100028



Received: 05/10/22 11:27

Revision: 3 Document ID: 3120
Legacy ID: CFL-C21 Worksheet Validated 10/30/2020

Laboratory Pesticide Quality Control Results

AOAC 2007.1 & EN 15662 Units: mg/Kg Batch ID: Method 2204110
Blank Laboratory Control Sample

Analyte Blank Result Notes LCS Spike LCS % Rec Notes
Blank Limits LCS Result Limits
Abamectin 0.000 < 0.250 1.000 90.2 50.0 150 0.902

Acephate	0.000	Fipronil	0.000	Spinosad	0.000	< 0.100	
Acequinocyl	0.000	Flonicamid	0.000	Spiromesifen	0.000	< 0.100	
Acetamiprid	0.000	Fludioxonil	0.000	Spirotetramat	0.000	< 0.100	
Aldicarb	0.000	Hexythiazox	0.000	Spiroxamine	0.000	< 0.200	
Azoxystrobin	0.000	Imazalil	0.000	Tebuconazole	0.000	< 0.200	
Bifenazate	0.000	Imidacloprid	0.000	Thiacloprid	0.000	< 0.100	
Bifenthrin	0.000	Kresoxim-methyl	0.000	Thiamethoxam	0.000	< 0.100	
Boscalid	0.000	Malathion	0.000				
Carbaryl	0.000	Metalaxyl	0.000				
Carbofuran	0.000	Methiocarb	0.000				
Chlorantraniliprole	0.000	Methomyl	0.000				
Chlorfenapyr	0.140	MGK-264	0.000				
Chlorpyrifos	0.000	Myclobutanil	0.000				
Clofentezine	0.000	Naled	0.000				
Cyfluthrin	0.000	Oxamyl	0.000				
Cypermethrin	0.000	Paclobutrazole	0.000				
Daminozide	0.092	Parathion-Methyl	0.000				
Diazinon	0.000	Permethrin	0.000				
Dichlorvos	0.000	Phosmet	0.000				
Dimethoate	0.000	Piperonyl butoxide	0.000				
Ethoprophos	0.000	Prallethrin	0.000				
Etofenprox	0.000	Propiconazole	0.000				
Etoxazole	0.000	Propoxur	0.000				
Fenoxycarb	0.000	Pyrethrin (Summe)	0.000				
Fenpyroximate	0.000	Pyridaben	0.000				

Trifloxystrobin 0.000 < 0.100 0.400 97.5 60.0 120 0.390

Page 9 of 14

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Revision: 3 Document ID: 3120

Legacy ID: CFL-C21 Worksheet Validated 10/30/2020

Laboratory Pesticide Quality Control Results

AOAC 2007.1 & EN 15662 Units: mg/Kg Batch ID: 2204110 Matrix Spike/Matrix Spike Duplicate Recoveries Sample ID: 22-005278-0001

Analyte Result MS Res MSD Res Spike RPD% MS % Rec MSD % Rec Notes
Abamectin 0.000 0.695 0.674 1.000 3.1% < 30 69.5% 67.4% 50 - 150

Acephate
Acequinocyl
Acetamiprid
Aldicarb
Azoxystrobin
Bifenazate
Bifenthrin
Boscalid
Carbaryl

Carbofuran
Chlorantraniliprole
Chlorfenapyr
Chlorpyrifos
Clofentezine
Cyfluthrin
Cypermethrin
Daminozide
Diazinon
Dichlorvos

Dimethoate
Ethoprophos
Etofenprox
Etoxazole
Fenoxycarb
Fenpyroximate
Fipronil
Flonicamid
Fludioxonil
Hexythiazox
Imazalil
Imidacloprid
Kresoxim-methyl
Malathion
Metalaxyl
Methiocarb
Methomyl
MGK-264
Myclobutanil
Naled
Oxamyl
Paclobutrazole
Parathion-Methyl
Permethrin
Phosmet
Piperonyl butoxide
Prallethrin
Propiconazole
Propoxur
Pyrethrin (Summe)
Pyridaben
Spinosad

Spiromesifen
Spirotetramat
Spiroxamine
Tebuconazole
Thiacloprid
Thiamethoxam

0.000 0.998 0.967 1.000 3.2% < 30 99.8% 96.7% 50 - 150
 0.000 3.737 3.798 4.000 1.6% < 30 93.4% 95.0% 50 - 150
 0.000 0.397 0.390 0.400 1.7% < 30 99.2% 97.6% 50 - 150
 0.000 0.802 0.783 0.800 2.4% < 30 100.3% 97.9% 50 - 150
 0.000 0.401 0.476 0.400 17.1% < 30 100.2% 119.0% 50 - 150
 0.000 0.452 0.466 0.400 2.9% < 30 113.1% 116.4% 50 - 150
 0.000 0.347 0.364 0.400 4.7% < 30 86.8% 91.0% 50 - 150
 0.000 0.738 0.878 0.800 17.4% < 30 92.2% 109.7% 50 - 150
 0.000 0.388 0.417 0.400 7.2% < 30 97.0% 104.3% 50 - 150
 0.000 0.398 0.398 0.400 0.1% < 30 99.5% 99.4% 50 - 150
 0.000 0.413 0.413 0.400 0.2% < 30 103.1% 103.3% 50 - 150
 0.000 2.016 2.085 2.000 3.4% < 30 100.8% 104.3% 50 - 150
 0.000 0.382 0.390 0.400 2.2% < 30 95.4% 97.5% 50 - 150
 0.000 0.384 0.398 0.400 3.6% < 30 96.0% 99.6% 50 - 150
 0.000 2.277 2.151 2.000 5.7% < 30 113.8% 107.5% 30 - 150
 0.000 2.297 2.214 2.000 3.7% < 30 114.8% 110.7% 50 - 150
 0.000 2.121 2.168 2.000 2.2% < 30 106.0% 108.4% 30 - 150
 0.000 0.388 0.405 0.400 4.2% < 30 97.1% 101.2% 50 - 150
 0.000 1.894 2.003 2.000 5.6% < 30 94.7% 100.1% 50 - 150
 0.000 0.403 0.396 0.400 1.7% < 30 100.8% 99.1% 50 - 150
 0.000 0.387 0.391 0.400 0.8% < 30 96.8% 97.6% 50 - 150
 0.000 0.779 0.756 0.800 3.0% < 30 97.3% 94.5% 50 - 150
 0.000 0.350 0.442 0.400 23.3% < 30 87.5% 110.5% 50 - 150
 0.000 0.385 0.377 0.400 2.2% < 30 96.3% 94.2% 50 - 150
 0.000 0.548 0.512 0.800 6.8% < 30 68.4% 63.9% 50 - 150
 0.000 0.724 0.741 0.800 2.2% < 30 90.6% 92.6% 50 - 150
 0.000 0.997 0.885 1.000 11.9% < 30 99.7% 88.5% 50 - 150
 0.000 0.903 0.966 0.800 6.8% < 30 112.8% 120.8% 50 - 150
 0.000 1.037 1.025 1.000 1.2% < 30 103.7% 102.5% 50 - 150
 0.000 0.403 0.421 0.400 4.2% < 30 100.9% 105.2% 50 - 150
 0.000 0.774 0.767 0.800 0.9% < 30 96.7% 95.9% 50 - 150
 0.000 0.747 0.774 0.800 3.6% < 30 93.4% 96.8% 50 - 150
 0.000 0.393 0.410 0.400 4.3% < 30 98.3% 102.6% 50 - 150
 0.000 0.383 0.398 0.400 4.0% < 30 95.7% 99.6% 50 - 150
 0.000 0.397 0.456 0.400 13.7% < 30 99.3% 113.9% 50 - 150
 0.000 0.749 0.695 0.800 7.4% < 30 93.6% 86.9% 50 - 150
 0.000 0.371 0.386 0.400 3.9% < 30 92.8% 96.5% 50 - 150
 0.000 0.424 0.432 0.400 2.1% < 30 105.9% 108.1% 50 - 150
 0.000 0.930 1.003 1.000 7.6% < 30 93.0% 100.3% 50 - 150
 0.000 1.946 1.705 2.000 13.2% < 30 97.3% 85.3% 50 - 150
 0.000 0.779 0.831 0.800 6.4% < 30 97.4% 103.8% 50 - 150
 0.000 0.708 0.630 0.800 11.6% < 30 88.5% 78.8% 30 - 150
 0.000 0.489 0.532 0.400 6.3% < 30 122.3% 132.9% 50 - 150
 0.000 0.409 0.395 0.400 3.4% < 30 102.3% 98.9% 50 - 150
 0.000 1.790 1.897 2.000 5.8% < 30 89.5% 94.8% 50 - 150
 0.000 0.400 0.388 0.400 3.2% < 30 100.0% 96.9% 50 - 150
 0.000 0.780 0.766 0.800 1.8% < 30 97.5% 95.7% 50 - 150
 0.000 0.391 0.380 0.400 2.7% < 30 97.7% 95.1% 50 - 150
 0.014 0.527 0.508 0.413 3.9% < 30 124.3% 119.6% 50 - 150
 0.000 0.412 0.411 0.400 0.1% < 30 102.9% 102.8% 50 - 150
 0.000 0.396 0.407 0.388 2.6% < 30 102.2% 104.8% 50 - 150
 0.000 0.366 0.386 0.400 5.3% < 30 91.6% 96.6% 50 - 150
 0.000 0.390 0.403 0.400 3.1% < 30 97.6% 100.7% 50 - 150
 0.000 0.749 0.757 0.800 1.0% < 30 93.6% 94.6% 50 - 150
 0.000 0.801 0.823 0.800 2.7% < 30 100.1% 102.9% 50 - 150
 0.000 0.391 0.391 0.400 0.2% < 30 97.8% 97.6% 50 - 150
 0.000 0.379 0.365 0.400 3.7% < 30 94.7% 91.2% 50 - 150

Page 10 of 14

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Testing in accordance with: OAR 333-007-0400 OAR 333-007-0410 OAR 333-007-0430



503-254-1794 **Purchase Order:**
Report 22-005351/D004.R000
Number: 05/16/2022
Report Date: OR100028

12423 NE Whitaker Way **ORELAP#:**
 Portland, OR 97230



Revision: Document ID:
 Legacy ID: Effective:

2204159

Laboratory Quality Control Results

Residual Solvents Batch ID:

Received: 05/10/22 11:27

Laboratory Control Sample

Method Blank

Analyte LOQ Notes Result Spike Units % Rec Notes
 Result

Limits								Limits										
Propane	ND	<	2 0 0		554	572	µg /g	Ethanol	ND	<	2 0 0		1390	1630	µg /g	85.3	7 0	-
Isobutane	ND	<	2 0 0		718	731	µg /g	Ethyl Ether	ND	<	2 0 0		1350	1620	µg /g	83.3	6 0	-
Butane	ND	<	2 0 0		689	731	µg /g	2,2-Dimethylbutane	ND	<	3 0		147	174	µg /g	84.5	6 0	-
2,2-Dimethylpropane	ND	<	2 0 0		955	936	µg /g	Acetone	ND	<	2 0 0		1390	1650	µg /g	84.2	6 0	-
Methanol	ND	<	2 0 0		1350	1620	µg /g	2-Propanol	ND	<	2 0 0		1350	1610	µg /g	83.9	6 0	-
Ethylene Oxide	ND	<	3 0		54	56.2	µg /g	Ethyl Formate	ND	<	5 0 0		1330	1600	µg /g	83.1	7 0	-
2-Methylbutane	ND	<	2 0 0		1380	1620	µg /g	Acetonitrile	ND	<	1 0 0		397	498	µg /g	79.7	6 0	-
Pentane	ND	<	2 0 0		1360	1610	µg /g	Methyl Acetate	ND	<	5 0 0		1380	1610	µg /g	85.7	7 0	-

[illegible]

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Testing in accordance with: OAR 333-007-0400 OAR 333-007-0410 OAR 333-007-0430



503-254-1794 **Purchase Order:**
Report 22-005351/D004.R000
Number: 05/16/2022
Report Date: OR100028

12423 NE Whitaker Way **ORELAP#:**
Portland, OR 97230

QC - Sample Duplicate Sample ID:



Revision: Document ID:
Legacy ID: Effective:

22-005247-0010

Received: 05/10/22 11:27

Analyte Result Org. Result LOQ Units RPD Limits Accept/Fail Notes

Propane	ND	ND	200	μg/g	0.0	< 20	Acceptable	
Isobutane	ND	ND	200	μg/g	0.0	< 20	Acceptable	
Butane	ND	ND	200	μg/g	0.0	< 20	Acceptable	
2,2-Dimethylpropane	ND	ND	200	μg/g	0.0	< 20	Acceptable	
Methanol	ND	ND	200	μg/g	0.0	< 20	Acceptable	
Ethylene Oxide	ND	ND	30	μg/g	0.0	< 20	Acceptable	
2-Methylbutane	ND	ND	200	μg/g	0.0	< 20	Acceptable	
Pentane	ND	ND	200	μg/g	0.0	< 20	Acceptable	
Ethanol	ND	ND	200	μg/g	0.0	< 20	Acceptable	
Ethyl Ether	ND	ND	200	μg/g	0.0	< 20	Acceptable	
2,2-Dimethylbutane	ND	ND	30	μg/g	0.0	< 20	Acceptable	
Acetone	ND	ND	200	μg/g	0.0	< 20	Acceptable	
2-Propanol	ND	ND	200	μg/g	0.0	< 20	Acceptable	
Ethyl Formate	ND	ND	500	μg/g	0.0	< 20	Acceptable	
Acetonitrile	ND	ND	100	μg/g	0.0	< 20	Acceptable	
Methyl Acetate	ND	ND	500	μg/g	0.0	< 20	Acceptable	
2,3-Dimethylbutane	ND	ND	30	μg/g	0.0	< 20	Acceptable	
Dichloromethane	ND	ND	60	μg/g	0.0	< 20	Acceptable	
2-Methylpentane	ND	ND	30	μg/g	0.0	< 20	Acceptable	
MTBE	ND	ND	500	μg/g	0.0	< 20	Acceptable	
3-Methylpentane	ND	ND	30	μg/g	0.0	< 20	Acceptable	
Hexane	ND	ND	30	μg/g	0.0	< 20	Acceptable	
1-Propanol	ND	ND	500	μg/g	0.0	< 20	Acceptable	
Methylethylketone	ND	ND	500	μg/g	0.0	< 20	Acceptable	
Ethyl acetate	ND	ND	200	μg/g	0.0	< 20	Acceptable	
2-Butanol	ND	ND	200	μg/g	0.0	< 20	Acceptable	
Tetrahydrofuran	ND	ND	100	μg/g	0.0	< 20	Acceptable	
Cyclohexane	ND	ND	200	μg/g	0.0	< 20	Acceptable	
2-methyl-1-propanol	ND	ND	500	μg/g	0.0	< 20	Acceptable	
Benzene	ND	ND	1	μg/g	0.0	< 20	Acceptable	
Isopropyl Acetate	ND	ND	200	μg/g	0.0	< 20	Acceptable	
Heptane	ND	ND	200	μg/g	0.0	< 20	Acceptable	
1-Butanol	ND	ND	500	μg/g	0.0	< 20	Acceptable	
Propyl Acetate	ND	ND	500	μg/g	0.0	< 20	Acceptable	
1,4-Dioxane	ND	ND	100	μg/g	0.0	< 20	Acceptable	
2-Ethoxyethanol	ND	ND	30	μg/g	0.0	< 20	Acceptable	
Methylisobutylketone	ND	ND	500	μg/g	0.0	< 20	Acceptable	
3-Methyl-1-butanol	ND	ND	500	μg/g	0.0	< 20	Acceptable	
Ethylene Glycol	ND	ND	20	μ	0.0	< 20	Acceptable	

			0	g/ g			
Toluene	ND	ND	10 0	μ g/ g	0.0	< 20	Ac
Isobutyl Acetate	ND	ND	50 0	μ g/ g	0.0	< 20	Ac
1-Pentanol	ND	ND	50 0	μ g/ g	0.0	< 20	Ac
Butyl Acetate	ND	ND	50 0	μ g/ g	0.0	< 20	Ac
Ethylbenzene	ND	ND	20 0	μ g/ g	0.0	< 20	Ac
m,p-Xylene	ND	ND	20 0	μ g/ g	0.0	< 20	Ac
o-Xylene	ND	ND	20 0	μ g/ g	0.0	< 20	Ac
Cumene	ND	ND	30	μ g/ g	0.0	< 20	Ac
Anisole	ND	ND	50 0	μ g/ g	0.0	< 20	Ac
DMSO	ND	ND	50 0	μ g/ g	0.0	< 20	Ac
1,2-dimethoxyethane	ND	ND	50	μ g/ g	0.0	< 20	Ac
Triethylamine	ND	ND	50 0	μ g/ g	0.0	< 20	Ac
N,N-dimethylformamide	ND	ND	15 0	μ g/ g	0.0	< 20	Ac
N,N-dimethylacetamide	ND	ND	15 0	μ g/ g	0.0	< 20	Ac
Pyridine	ND	ND	50	μ g/ g	0.0	< 20	Ac
1,2-Dichloroethane	ND	ND	1	μ g/ g	0.0	< 20	Ac
Chloroform	ND	ND	1	μ g/ g	0.0	< 20	Ac
Trichloroethylene	ND	ND	1	μ g/ g	0.0	< 20	Ac

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Abbreviations Units of Measure:

ND - None Detected at or above MRL μg/g; Microgram per gram or ppm

RPD - Relative Percent Difference

LOQ - Limit of Quantitation

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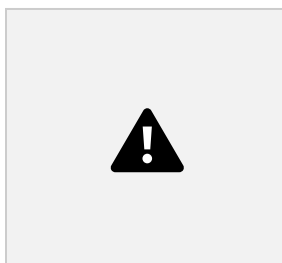
Testing in accordance with: OAR 333-007-0400 OAR 333-007-0410 OAR 333-007-0430



503-254-1794 **Purchase Order:**
Report 22-005351/D004.R000
Number: 05/16/2022
Report Date: OR100028

12423 NE Whitaker Way **ORELAP#:**
Portland, OR 97230





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Testing in accordance with: OAR 333-007-0400 OAR 333-007-0410 OAR 333-007-0430



12423 NE Whitaker Way

Portland, OR **Report Date: ORELAP#:**
97230
503-254-1794 **Purchase Order:**
Report 22-005351/D004.R000
Number: 05/16/2022
OR100028



Explanation of QC Flag Comments:

Received: 05/10/22 11:27

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	Quantitation 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.

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