

# Report: COA Evaluation Summary

OLCC License No. 10087092BDA | ORELAP ID. 4147

545 SW 2nd Street, Corvallis OR. 97333 | 541.257.5002 | services@preelab.com | Preelab.com

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## Product Description

Product Name: **CBG Iso GVL-TST328**

Matrix: Hemp Concentrate

Metrc Source ID: n/a

Metrc Package ID: n/a

License Number:

Date Collected: 2022-09-23

Date Received: 2022-09-23

Report Date: 2022-09-26

Report ID: A7915-03

Tests Requested: Cannabinoid Potency Analysis  
Pesticide Analysis  
Mycotoxin Analysis  
Residual Solvent Analysis

## Evaluation Summary

Moisture Analysis

Test Not Required

### Cannabinoid Potency Analysis

**Total THC \***

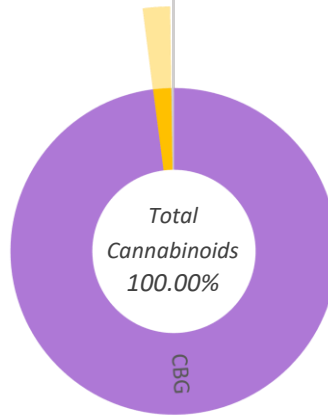
< LOQ

< LOQ

**Total CBD \***

1.82 %

18.2 mg/g



Abbr.

Dry Wt. %

Dry Wt. mg/g

THCA	< LOQ	< LOQ
Δ-9-THC	< LOQ	< LOQ
Δ-8-THC	< LOQ	< LOQ
THCV	< LOQ	< LOQ
CBDA	< LOQ	< LOQ
CBD	1.82 %	18.2 mg/g
CBGA	< LOQ	< LOQ
CBG	99.15 %	991.5 mg/g
CBDVA	< LOQ	< LOQ
CBDV	< LOQ	< LOQ
CBN	< LOQ	< LOQ
CBL	< LOQ	< LOQ
CBC	0.25 %	2.5 mg/g

Pesticide Analysis

Pesticide Status

Pass

No pesticides were detected above Oregon's action limit as stated in OAR 333-007-0400.

# Report: Case Narrative

This report presents the analytical findings for the sample collected on 2022-09-23 by Bharath Pogula and received by PREE Laboratory on 2022-09-23. The sample was assigned a laboratory ID of A7915-03. The results in this report only apply to sample A7915-03.

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The testing methods used are of sufficient sensitivity to meet the compliance criteria set in OAR 333-007. However, it is the responsibility of the client to utilize the data to comply with standards set in OAR 333-007.

All analyses were performed in accordance with PREE Laboratory's NELAP/TNI approved quality control system and all quality control data was within the laboratory's predefined acceptance criteria unless otherwise noted in the case narrative of this report. General comments are also recorded below.

**Notes:**

The Oregon Department of Agriculture requires hemp products to not contain more than 0.35% total THC, per OAR 603-048. Residual solvent analysis was subcontracted. The report from the subcontracting laboratory is attached. R&D sample results may not be used for compliance purposes.



Newkirk, Carson | Laboratory Manager  
PREE South: Corvallis, Oregon



If you have any questions regarding the information in this report, please feel free to call 541-257-5002 or email PREE at services@preelab.com.

# Report: Evaluation Detail

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<b>Moisture Analysis</b>	<b>Evaluation Detail</b>						
	Moisture Analysis		Test Not Requested/Required				
<b>Cannabinoid Potency Analysis</b>	<b>Evaluation Detail</b>						
Product Name: <b>CBG Iso GVL-TST328</b>	Cannabinoid Potency Analysis		Compound	Abrv.	Dry Wt. (%)	Dry Wt. (mg/g)	RL (%)
Analysis Date: 2022-09-25	<b>Total THC *</b>		Tetrahydro-cannabinolic acid	THCA	< LOQ	< LOQ	0.15
Testing Batch ID: POM220925B	< LOQ		Delta9 Tetrahydro-cannabinol	Δ-9-THC	< LOQ	< LOQ	0.15
Testing Method: LSOP #303 Cannabinoid Quantification	< LOQ		Delta8 Tetrahydro-cannabinol	Δ-8-THC	< LOQ	< LOQ	0.15
			Tetrahydrocannabivarin	THCV	< LOQ	< LOQ	0.15
	<b>Total CBD *</b>		Cannabidiolic acid	CBDA	< LOQ	< LOQ	0.15
	1.82 %		Cannabidiol	CBD	1.82 %	18.2	0.15
	18.2 mg/g		Cannabigerolic acid	CBGA	< LOQ	< LOQ	0.15
			Cannabigerol	CBG	99.15 %	991.5	0.15
			Cannabidivarinic acid	CBDVA	< LOQ	< LOQ	0.15
			Cannabidivarin	CBDV	< LOQ	< LOQ	0.15
			Cannabinol	CBN	< LOQ	< LOQ	0.15
			Cannabicyclol	CBL	< LOQ	< LOQ	0.15
			Cannabichromene	CBC	0.25 %	2.5	0.15

Newkirk,  
Carson |  
Laboratory

CBGA, CBG, CBDVA, CBDV, CBL, CBC, AP and therefore are not accredited tests.

\* moisture compensated & adjusted for the loss of carboxylic acid group - OAR 333-064-0100

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## Pesticide Analysis

Product Name: **CBG Iso GVL-TST328**

Analysis Date: 2022-09-25

Testing Batch ID: PEE220925A

Testing Method: LSOP #307 Pesticides by LCMS/MS

## Evaluation Detail

Pesticide Name	Tested Value (ppm)	Pass Criteria (ppm)	LOQ (ppm)	Status Pass/Unsatisfactory
Abamectin	< LOQ	0.50	0.10	Pass
Acephate	< LOQ	0.40	0.02	Pass
Acequinocyl	< LOQ	2.00	0.10	Pass
Acetamiprid	< LOQ	0.20	0.02	Pass
Aldicarb	< LOQ	0.40	0.02	Pass
Azoxystrobin	< LOQ	0.20	0.02	Pass
Bifenazate	< LOQ	0.20	0.02	Pass
Bifenthrin	< LOQ	0.20	0.10	Pass
Boscalid	< LOQ	0.40	0.02	Pass
Carbaryl	< LOQ	0.20	0.02	Pass
Carbofuran	< LOQ	0.20	0.10	Pass
Chlorantraniliprole	< LOQ	0.20	0.02	Pass
Chlorfenapyr	< LOQ	1.00	0.50	Pass
Chlorpyrifos	< LOQ	0.20	0.02	Pass
Clofentezine	< LOQ	0.20	0.10	Pass
Cyfluthrin	< LOQ	1.00	0.50	Pass
Cypermethrin	< LOQ	1.00	0.50	Pass
Daminozide	< LOQ	1.00	0.10	Pass
Diazinon	< LOQ	0.20	0.02	Pass
Dichlorvos	< LOQ	1.00	0.10	Pass
Dimethoate	< LOQ	0.20	0.02	Pass
Ethoprophos	< LOQ	0.20	0.02	Pass
Etofenprox	< LOQ	0.40	0.10	Pass
Etoxazole	< LOQ	0.20	0.02	Pass
Fenoxycarb	< LOQ	0.20	0.02	Pass
Fenpyroximate	< LOQ	0.40	0.10	Pass
Fipronil	< LOQ	0.40	0.02	Pass
Flonicamid	< LOQ	1.00	0.02	Pass
Fludioxonil	< LOQ	0.40	0.10	Pass
Hexythiazox	< LOQ	1.00	0.02	Pass
Imazalil	< LOQ	0.20	0.02	Pass
Imidacloprid	< LOQ	0.40	0.02	Pass
Kresoxim-methyl	< LOQ	0.40	0.10	Pass

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# Report: Evaluation Detail

## Pesticide Analysis

## Evaluation Detail

Pesticide Name	Tested Value (ppm)	Pass Criteria (ppm)	LOQ (ppm)	Status Pass/Unsatisfactory
Malathion	< LOQ	0.20	0.02	Pass
Metalaxyl	< LOQ	0.20	0.02	Pass
Methiocarb	< LOQ	0.20	0.02	Pass
Methomyl	< LOQ	0.40	0.02	Pass
Methyl-Parathion	< LOQ	0.20	0.10	Pass
MGK-264 Total	< LOQ	0.20	0.10	Pass
Myclobutanil	< LOQ	0.20	0.10	Pass
Naled	< LOQ	0.50	0.02	Pass
Oxamyl	< LOQ	1.00	0.02	Pass
Paclobutrazol	< LOQ	0.40	0.02	Pass
Permethrins	< LOQ	0.20	0.10	Pass
Phosmet	< LOQ	0.20	0.02	Pass
Piperonyl butoxide	< LOQ	2.00	0.02	Pass
Prallethrin	< LOQ	0.20	0.10	Pass
Propiconazole	< LOQ	0.40	0.10	Pass
Propoxur	< LOQ	0.20	0.02	Pass
Pyrethrins	< LOQ	1.00	0.50	Pass
Pyridaben	< LOQ	0.20	0.02	Pass
Spinosad	< LOQ	0.20	0.10	Pass
Spiromesifen	< LOQ	0.20	0.10	Pass
Spirotetramat	< LOQ	0.20	0.02	Pass
Spiroxamine	< LOQ	0.40	0.10	Pass
Tebuconazole	< LOQ	0.40	0.02	Pass
Thiacloprid	< LOQ	0.20	0.02	Pass
Thiamethoxam	< LOQ	0.20	0.02	Pass
Trifloxystrobin	< LOQ	0.20	0.02	Pass

# Report: Quality Check

<b>Moisture Analysis</b>	<b>Quality Control Detail</b>						
	Moisture Analysis						
<b>Cannabinoid Potency Analysis</b>	<b>Quality Control Detail</b>						
Analysis Date: 2022-09-25	Cannabinoid Potency Analysis		MB	LCS	Expected Value (%)	Tested Value (%)	Pass Criteria
Testing Batch ID: POM220925B	Tetrahydro-cannabinolic acid	○			< 0.1%	< 0.1%	< 0.1%
	Delta9 Tetrahydro-cannabinol	○			< 0.1%	< 0.1%	< 0.1%
	Delta8 Tetrahydro-cannabinol	○			< 0.1%	< 0.1%	< 0.1%
	Cannabidiolic acid	○			< 0.1%	< 0.1%	< 0.1%
	Cannabidiol	○			< 0.1%	< 0.1%	< 0.1%
	Tetrahydro-cannabinolic acid		●		100.0%	92.4%	± 10%
	Delta9 Tetrahydro-cannabinol		●		100.0%	94.6%	± 10%
	Delta8 Tetrahydro-cannabinol		●		100.0%	94.3%	± 10%
	Cannabidiolic acid		●		100.0%	92.3%	± 10%
	Cannabidiol		●		100.0%	95.2%	± 10%
<p><i>Note: Accreditation for THCV, CBGA, CBG, CBDVA, CBDV, CBL, CBC, CBN is not offered by ORELAP and therefore are not accredited tests.</i></p>							

# Report: Quality Check



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## Pesticide Analysis

Analysis Date: 2022-09-25

Testing Batch ID: PEE220925A

## Quality Control Detail

Pesticide Name	MB	Expected Value (ppm)	Tested Value (ppm)	Pass Criteria (ppm)
Abamectin	o	< 0.1	< 0.1	< 0.1
Acephate	o	< 0.02	< 0.02	< 0.02
Acequinocyl	o	< 0.1	< 0.1	< 0.1
Acetamiprid	o	< 0.02	< 0.02	< 0.02
Aldicarb	o	< 0.02	< 0.02	< 0.02
Azoxystrobin	o	< 0.02	< 0.02	< 0.02
Bifenazate	o	< 0.02	< 0.02	< 0.02
Bifenthrin	o	< 0.1	< 0.1	< 0.1
Boscalid	o	< 0.02	< 0.02	< 0.02
Carbaryl	o	< 0.02	< 0.02	< 0.02
Carbofuran	o	< 0.1	< 0.1	< 0.1
Chlorantraniliprole	o	< 0.02	< 0.02	< 0.02
Chlorfenapyr	o	< 0.5	< 0.5	< 0.5
Chlorpyrifos	o	< 0.02	< 0.02	< 0.02
Clofentezine	o	< 0.1	< 0.1	< 0.1
Cyfluthrin	o	< 0.5	< 0.5	< 0.5
Cypermethrin	o	< 0.5	< 0.5	< 0.5
Daminozide	o	< 0.1	< 0.1	< 0.1
Diazinon	o	< 0.02	< 0.02	< 0.02
Dichlorvos	o	< 0.1	< 0.1	< 0.1
Dimethoate	o	< 0.02	< 0.02	< 0.02
Ethoprophos	o	< 0.02	< 0.02	< 0.02
Etofenprox	o	< 0.1	< 0.1	< 0.1
Etoxazole	o	< 0.02	< 0.02	< 0.02
Fenoxycarb	o	< 0.02	< 0.02	< 0.02
Fenpyroximate	o	< 0.1	< 0.1	< 0.1
Fipronil	o	< 0.02	< 0.02	< 0.02
Flonicamid	o	< 0.02	< 0.02	< 0.02
Fludioxonil	o	< 0.1	< 0.1	< 0.1
Hexythiazox	o	< 0.02	< 0.02	< 0.02
Imazalil	o	< 0.02	< 0.02	< 0.02
Imidacloprid	o	< 0.02	< 0.02	< 0.02
Kresoxim-methyl	o	< 0.1	< 0.1	< 0.1

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## Pesticide Analysis

## Quality Control Detail

Pesticide Name	MB	Expected Value (ppm)	Tested Value (ppm)	Pass Criteria (ppm)
Malathion	o	< 0.02	< 0.02	< 0.02
Metalaxyl	o	< 0.02	< 0.02	< 0.02
Methiocarb	o	< 0.02	< 0.02	< 0.02
Methomyl	o	< 0.02	< 0.02	< 0.02
Methyl-Parathion	o	< 0.1	< 0.1	< 0.1
MGK-264 I	o	< 0.1	< 0.1	< 0.1
MGK-264 II	o	< 0.1	< 0.1	< 0.1
Myclobutanil	o	< 0.1	< 0.1	< 0.1
Naled	o	< 0.02	< 0.02	< 0.02
Oxamyl	o	< 0.02	< 0.02	< 0.02
Paclobutrazol	o	< 0.02	< 0.02	< 0.02
Permethrin - trans	o	< 0.1	< 0.1	< 0.1
Permethrin - cis	o	< 0.1	< 0.1	< 0.1
Phosmet	o	< 0.02	< 0.02	< 0.02
Piperonyl butoxide	o	< 0.02	< 0.02	< 0.02
Prallethrin	o	< 0.1	< 0.1	< 0.1
Propiconazole	o	< 0.1	< 0.1	< 0.1
Propoxur	o	< 0.02	< 0.02	< 0.02
Pyrethrin - Cinerin	o	< 0.5	< 0.5	< 0.5
Pyrethrin - Jasmolin	o	< 0.5	< 0.5	< 0.5
Pyrethrin - Pyrethrins	o	< 0.5	< 0.5	< 0.5
Pyridaben	o	< 0.02	< 0.02	< 0.02
Spinosyn A	o	< 0.1	< 0.1	< 0.1
Spinosyn D	o	< 0.1	< 0.1	< 0.1
Spiromesifen	o	< 0.1	< 0.1	< 0.1
Spirotetramat	o	< 0.02	< 0.02	< 0.02
Spiroxamine	o	< 0.1	< 0.1	< 0.1
Tebuconazole	o	< 0.02	< 0.02	< 0.02
Thiacloprid	o	< 0.02	< 0.02	< 0.02
Thiamethoxam	o	< 0.02	< 0.02	< 0.02
Trifloxystrobin	o	< 0.02	< 0.02	< 0.02

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# Report: Quality Check



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## Pesticide Analysis

## Quality Control Detail

Pesticide Name	LCS	Expected Recovery (%)	Actual Recovery (%)	Pass Criteria (%)
Abamectin	●	100.00	72.97	50 - 150
Acephate	●	100.00	84.92	60 - 120
Acequinocyl	●	100.00	80.61	40 - 160
Acetamiprid	●	100.00	93.60	60 - 120
Aldicarb	●	100.00	75.57	60 - 120
Azoxystrobin	●	100.00	87.58	60 - 120
Bifenazate	●	100.00	86.07	60 - 120
Bifenthrin	●	100.00	107.72	50 - 150
Boscalid	●	100.00	89.19	60 - 120
Carbaryl	●	100.00	86.76	60 - 120
Carbofuran	●	100.00	88.71	60 - 120
Chlorantraniliprole	●	100.00	101.14	60 - 120
Chlorfenapyr	●	100.00	82.93	60 - 120
Chlorpyrifos	●	100.00	89.62	60 - 120
Clofentezine	●	100.00	89.07	60 - 120
Cyfluthrin	●	100.00	92.47	50 - 150
Cypermethrin	●	100.00	99.07	50 - 150
Daminozide	●	100.00	84.40	60 - 120
Diazinon	●	100.00	98.57	60 - 120
Dichlorvos	●	100.00	76.13	60 - 120
Dimethoate	●	100.00	84.74	60 - 120
Ethoprophos	●	100.00	93.56	60 - 120
Etofenprox	●	100.00	96.90	50 - 150
Etoxazole	●	100.00	98.68	60 - 120
Fenoxycarb	●	100.00	95.09	60 - 120
Fenpyroximate	●	100.00	104.16	60 - 120
Fipronil	●	100.00	88.04	60 - 120
Flonicamid	●	100.00	95.25	60 - 120
Fludioxonil	●	100.00	75.89	50 - 150
Hexythiazox	●	100.00	91.98	60 - 120
Imazalil	●	100.00	91.89	60 - 120
Imidacloprid	●	100.00	88.46	60 - 120
Kresoxim-methyl	●	100.00	87.58	60 - 120

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## Pesticide Analysis

## Quality Control Detail

Pesticide Name	LCS	Expected Recovery (%)	Actual Recovery (%)	Pass Criteria (%)
Malathion	•	100.00	94.99	60 - 120
Metalaxyl	•	100.00	89.82	60 - 120
Methiocarb	•	100.00	86.27	60 - 120
Methomyl	•	100.00	79.53	60 - 120
Methyl-Parathion	•	100.00	80.71	50 - 150
MGK-264 I	•	100.00	83.04	50 - 150
MGK-264 II	•	100.00	89.91	50 - 150
Myclobutanil	•	100.00	93.33	60 - 120
Naled	•	100.00	94.40	50 - 150
Oxamyl	•	100.00	84.86	60 - 120
Paclobutrazol	•	100.00	92.01	60 - 120
Permethrin - trans	•	100.00	86.32	50 - 150
Permethrin - cis	•	100.00	88.10	50 - 150
Phosmet	•	100.00	89.62	50 - 150
Piperonyl butoxide	•	100.00	97.91	60 - 120
Prallethrin	•	100.00	93.29	60 - 120
Propiconazole	•	100.00	102.42	60 - 120
Propoxur	•	100.00	85.33	60 - 120
Pyrethrin - Cinerin	•	100.00	92.84	60 - 120
Pyrethrin - Jasmolin	•	100.00	94.29	60 - 120
Pyrethrin - Pyrethrins	•	100.00	93.32	60 - 120
Pyridaben	•	100.00	92.88	50 - 150
Spinosyn A	•	100.00	83.88	50 - 150
Spinosyn D	•	100.00	78.21	50 - 150
Spiromesifen	•	100.00	103.15	60 - 120
Spirotetramat	•	100.00	91.53	60 - 120
Spiroxamine	•	100.00	90.64	60 - 120
Tebuconazole	•	100.00	94.05	60 - 120
Thiacloprid	•	100.00	101.09	60 - 120
Thiamethoxam	•	100.00	86.95	60 - 120
Trifloxystrobin	•	100.00	82.36	60 - 120

## Definitions

- Limit of Quantitation (LOQ) : The minimum level, concentration, or quantity of a target analyte that can be reported with a specific degree of confidence.
- Method Blank (MB) : A quality control sample that is free of the analyte being measured.
- Laboratory Control Sample (LCS) : A quality control sample with a known amount of the analyte used to demonstrate accuracy.
- Field Duplicate : A second sample collected in the field using the same sampling method as the primary sample.
- Action Limit : Analyte levels set by the state of Oregon (OAR 333-007) indicating that follow-up action is necessary.
- ppm : parts per million, equivalent to 1 µg/g and 1 µg/L or 0.001 mg/g and 0.001 mg/L
- COA : Certificate of Analysis.
- Report Flag (A) : Compound tested over 100% or 1000 mg/g. The test result is within the method uncertainty and instrument result is not above the upper limit of quantitation. Value will be adjusted down to 100% or 1000 mg/mg in the reporting process.
- Report Flag (B) : Blank contamination - The analyte was detected above one-half the reporting limit in an associated blank.
- Report Flag (E) : Compound tested above the upper limit of quantitation.
- Report Flag (Q) : One or more quality control criteria (for example, LCS recovery, surrogate spike recovery) failed.

## Calculations

- Cannabinoid Potency :  
$$\text{Wet WT\%} = (\text{Exported concentration ppm}) \times (\text{Dilution}) \times (\text{Extraction Vol./Wet wt mg}) \times 100$$
$$\text{Total THC\%} = (\% \text{THCA}) \times 0.877 + (\% \text{THC})$$
$$\text{Total CBD\%} = (\% \text{CBDA}) \times 0.877 + (\% \text{CBD})$$
$$\text{Total THC (Dry WT)\%} = \% \text{ total THC(wet)} / [1 - (\% \text{moisture}/100)]$$
$$\text{Total CBD (Dry WT)\%} = \% \text{ total CBD(wet)} / [1 - (\% \text{moisture}/100)]$$
- Percentage Recovery :  
$$\% \text{ Rec.} = [(\text{Amount measured}) / (\text{Known amount})] \times 100$$

## Disclaimers

- Disposal : All marijuana and hemp products received by PREE will be disposed of following the OLCC's rules for Marijuana Waste Management, regardless of product type, unless PREE is given specific disposal instructions for a product based on test results from state regulatory agencies.

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## Product Description

Client:

Product Name: **CBG Iso GVL-TST328**

Matrix: Hemp Concentrate

Metrc Source ID: n/a

Metrc Package ID: n/a

License Number:

Date Collected: 2022-09-23

Date Received: 2022-09-23

Report Date: 2022-09-26

Report ID: A7915-03

Tests Requested: Mycotoxin Analysis

## Evaluation Summary

Mycotoxin Analysis

Mycotoxin Status

**Pass**

No mycotoxins were detected above Oregon's action limit as stated in OAR 333-007.

# Report: Case Narrative

This report presents the analytical findings for the sample collected on 2022-09-23 by Bharath Pogula and received by PREE Laboratory on 2022-09-23. The sample was assigned a laboratory ID of A7915-03. The results in this report only apply to sample A7915-03.

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All analyses were performed in accordance with PREE Laboratory's NELAP/TNI approved quality control system and all quality control data was within the laboratory's predefined acceptance criteria unless otherwise noted in the case narrative of this report. General comments are also recorded below.

**Notes:**

The Oregon Department of Agriculture requires hemp products to not contain more than 0.35% total THC, per OAR 603-048. R&D sample results may not be used for compliance purposes.



Newkirk, Carson | Laboratory Manager  
PREE South: Corvallis, Oregon



If you have any questions regarding the information in this report, please feel free to call 541-257-5002 or email PREE at services@preelab.com.

# Report: Evaluation Detail

## Mycotoxin Analysis

Product Name: **CBG Iso GVL-TST328**

Analysis Date: 2022-09-25

Testing Batch ID: MYV220925A

Testing Method: *LSOP #308 Mycotoxin by LCMS/MS*

## Evaluation Detail

Mycotoxin Name	Tested Value (ppb)	Pass Criteria (ppb)	LOQ (ppb)	Status Pass/Unsatisfactory
Aflatoxin (Total)	< LOQ	20.00	10.00	Pass
Aflatoxin B1	< LOQ	20.00	10.00	Pass
Aflatoxin B2	< LOQ	20.00	10.00	Pass
Aflatoxin G1	< LOQ	20.00	10.00	Pass
Aflatoxin G2	< LOQ	20.00	10.00	Pass
Ochratoxin A	< LOQ	20.00	10.00	Pass

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# Report: Quality Check



OLCC License No. 10087092BDA | ORELAP ID. 4147

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*For R&D Purposes Only.*

## Mycotoxin Analysis

Analysis Date: 2022-09-25

Testing Batch ID: MYV220925A

*Note: PREE's accreditation through ORELAP for Mycotoxin Analysis is pending and therefore is not an accredited test. Results may only be used for non-compliance reasons.*

## Quality Control Detail

Mycotoxin Name	MB	LCS	Expected Value	Tested Value	Pass Criteria
Aflatoxin B1	○		< 10.0 ppb	< 10 ppb	< 10.0 ppb
Aflatoxin B2	○		< 10.0 ppb	< 10 ppb	< 10.0 ppb
Aflatoxin G1	○		< 10.0 ppb	< 10 ppb	< 10.0 ppb
Aflatoxin G2	○		< 10.0 ppb	< 10 ppb	< 10.0 ppb
Ochratoxin A	○		< 10.0 ppb	< 10 ppb	< 10.0 ppb
Aflatoxin B1		●	100.0%	91.6%	60% - 120%
Aflatoxin B2		●	100.0%	92.2%	60% - 120%
Aflatoxin G1		●	100.0%	92.9%	60% - 120%
Aflatoxin G2		●	100.0%	93.3%	60% - 120%
Ochratoxin A		●	100.0%	90.1%	60% - 120%

## Definitions

- Limit of Quantitation (LOQ) : The minimum level, concentration, or quantity of a target analyte that can be reported with a specific degree of confidence.
- Method Blank (MB) : A quality control sample that is free of the analyte being measured.
- Laboratory Control Sample (LCS) : A quality control sample with a known amount of the analyte used to demonstrate accuracy.
- Field Duplicate : A second sample collected in the field using the same sampling method as the primary sample.
- Action Limit : Analyte levels set by the state of Oregon (OAR 333-007) indicating that follow-up action is necessary.
- ppm : parts per million, equivalent to 1 µg/g and 1 µg/L or 0.001 mg/g and 0.001 mg/L
- COA : Certificate of Analysis.
- Report Flag (A) : Compound tested over 100% or 1000 mg/g. The test result is within the method uncertainty and instrument result is not above the upper limit of quantitation. Value will be adjusted down to 100% or 1000 mg/mg in the reporting process.
- Report Flag (B) : Blank contamination - The analyte was detected above one-half the reporting limit in an associated blank.
- Report Flag (E) : Compound tested above the upper limit of quantitation.
- Report Flag (Q) : One or more quality control criteria (for example, LCS recovery, surrogate spike recovery) failed.

## Calculations

- Cannabinoid Potency :  
$$\text{Wet WT\%} = (\text{Exported concentration ppm}) \times (\text{Dilution}) \times (\text{Extraction Vol./Wet wt mg}) \times 100$$
$$\text{Total THC\%} = (\% \text{THCA}) \times 0.877 + (\% \text{THC})$$
$$\text{Total CBD\%} = (\% \text{CBDA}) \times 0.877 + (\% \text{CBD})$$
$$\text{Total THC (Dry WT)\%} = \% \text{ total THC(wet)} / [1 - (\% \text{ moisture}/100)]$$
$$\text{Total CBD (Dry WT)\%} = \% \text{ total CBD(wet)} / [1 - (\% \text{ moisture}/100)]$$
- Percentage Recovery :  
$$\% \text{ Rec.} = [(\text{Amount measured}) / (\text{Known amount})] \times 100$$

## Disclaimers

- Disposal : All marijuana and hemp products received by PREE will be disposed of following the OLCC's rules for Marijuana Waste Management, regardless of product type, unless PREE is given specific disposal instructions for a product based on test results from state regulatory agencies.



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**CBG Iso GVL - TST328**

PREE Lab - South

010-10087092BDA

Sample ID: P220337-03 METRC Batch #:

Matrix: Extract/Concentrate

Date Sampled: NA

Date Accepted: 09/23/22

Batch ID:

Batch Size:

Sampling Method/SOP: Client

**Residual Solvents**

Analyte	LOQ	Action Level	Result	Units
<b>Butanes</b>	2500	5000 <sup>3</sup>	< LOQ	ppm
n-Butane	1250	5000	< LOQ	ppm
iso-Butane	1250	5000	< LOQ	ppm
<b>Hexanes</b>	145	290 <sup>4</sup>	< LOQ	ppm
n-Hexane	145	290	< LOQ	ppm
2-Methylpentane	145	290	< LOQ	ppm
3-Methylpentane	145	290	< LOQ	ppm
2,2-Dimethylbutane	145	290	< LOQ	ppm
2,3-Dimethylbutane	145	290	< LOQ	ppm
<b>Pentanes</b>	2500	5000 <sup>5</sup>	< LOQ	ppm
n-Pentane	833.33	5000	< LOQ	ppm
iso-Pentane	833.33	5000	< LOQ	ppm
Neopentane	833.33	5000	< LOQ	ppm
<b>Xylenes</b>	1085	2170	< LOQ	ppm
1,2-Dimethylbenzene	271.25	2170	< LOQ	ppm
1,3-Dimethylbenzene	271.25	2170	< LOQ	ppm
1,4-Dimethylbenzene	271.25	2170	< LOQ	ppm
Xylenes MP	1085	2170	< LOQ	ppm
Ethyl benzene	271.25	NA	< LOQ	ppm
2-Propanol (IPA)	2500	5000	< LOQ	ppm
Acetone	2500	5000	< LOQ	ppm
Acetonitrile	205	410	< LOQ	ppm
Benzene	1	2	< LOQ	ppm
Methanol	1500	3000	< LOQ	ppm
Propane	2500	5000	< LOQ	ppm
Toluene	445	890	< LOQ	ppm
Dichloromethane	300	600	< LOQ	ppm
1,4-Dioxane	190	380	< LOQ	ppm
2-Butanol	2500	5000	< LOQ	ppm
2-Ethoxyethanol	80	160	< LOQ	ppm
Cumene	35	70	< LOQ	ppm
Cyclohexane	1940	3880	< LOQ	ppm
Ethyl acetate	2500	5000	< LOQ	ppm
Ethyl ether	2500	5000	< LOQ	ppm
Ethylene glycol	310	620	< LOQ	ppm
Ethylene oxide	25	50	< LOQ	ppm
Heptane	2500	5000	< LOQ	ppm
Isopropyl acetate	2500	5000	< LOQ	ppm
Tetrahydrofuran	360	720	< LOQ	ppm
Ethanol	500	NA <sup>7</sup>	< LOQ	ppm

Date/Time Extracted: 09/26/22 09:29

Date/Time Analyzed: 09/26/22 22:15

Analysis Method/SOP: SOP.T.40.031

**3** - Total butanes are calculated as sum of n-butanes (CAS# 106-97-8) and iso-butane (CAS# 75-28-5)

**4** - Total hexanes are calculated as sum of n-hexane (CAS# 110-54-3), 2-methylpentane (CAS# 107-83-5), 3-methylpentane (CAS# 96-14-0), 2,2-dimethylbutane (CAS# 75-83-2), 2,3-dimethylbutane (CAS# 79-29-8)

**5** - Total pentanes are calculated as sum of n-pentane (CAS# 109-66-0), iso-pentane (CAS# 78-78-4), and neo-pentane (CAS# 463-82-1)

**6** - Total xylenes are calculated as 1,2-dimethylbenzene (CAS# 95-47-6), 1,3-dimethylbenzene (CAS# 106-42-3), and 1-4-dimethylbenzene (CAS# 106-42-3)

**7** - Ethanol is not regulated under OAR-333-007-0410.

**TIC** - Tentatively Identified Compound not regulated under OAR-333-007-0410

Results above the action level fail Oregon state testing requirements and will be highlighted **RED**. LOQ=Limit of Quantitation; PPM=Parts per million; ND=Not detected; NT=Not tested; AC=Above calibration range. PASS/FAIL status based on OAR 333-007.



Kawai Medeiros  
Lab Director - 9/27/2022

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**Quality Control**

**Batch: P221045 - SOP.T.40.031 Solvents**

<b>Blank(P221045-BLK1)</b>			<b>Extracted: 09/26/22 09:29</b>		<b>Analyzed: 09/26/22 14:02</b>		
<b>Analyte</b>	<b>Result</b>	<b>LOQ</b>	<b>Recovery Limits</b>	<b>Analyte</b>	<b>Result</b>	<b>LOQ</b>	<b>Recovery Limits</b>
Butanes	< LOQ	2500 (ppm)	< LOQ	n-Butane	< LOQ	1250 (ppm)	< LOQ
iso-Butane	< LOQ	1250 (ppm)	< LOQ	Hexanes	< LOQ	145 (ppm)	< LOQ
n-Hexane	< LOQ	145 (ppm)	< LOQ	2-Methylpentane	< LOQ	145 (ppm)	< LOQ
3-Methylpentane	< LOQ	145 (ppm)	< LOQ	2,2-Dimethylbutane	< LOQ	145 (ppm)	< LOQ
2,3-Dimethylbutane	< LOQ	145 (ppm)	< LOQ	Pentanes	< LOQ	2500 (ppm)	< LOQ
n-Pentane	< LOQ	833.33 (ppm)	< LOQ	iso-Pentane	< LOQ	833.33 (ppm)	< LOQ
Neopentane	< LOQ	833.33 (ppm)	< LOQ	Xylenes	< LOQ	1085 (ppm)	< LOQ
1,2-Dimethylbenzene	< LOQ	271.25 (ppm)	< LOQ	1,3-Dimethylbenzene	< LOQ	271.25 (ppm)	< LOQ
1,4-Dimethylbenzene	< LOQ	271.25 (ppm)	< LOQ	Xylenes MP	< LOQ	1085 (ppm)	< LOQ
Ethyl benzene	< LOQ	271.25 (ppm)	< LOQ	2-Propanol (IPA)	< LOQ	2500 (ppm)	< LOQ
Acetone	< LOQ	2500 (ppm)	< LOQ	Acetonitrile	< LOQ	205 (ppm)	< LOQ
Benzene	< LOQ	1 (ppm)	< LOQ	Methanol	< LOQ	1500 (ppm)	< LOQ
Propane	< LOQ	2500 (ppm)	< LOQ	Toluene	< LOQ	445 (ppm)	< LOQ
Dichloromethane	< LOQ	300 (ppm)	< LOQ	1,4-Dioxane	< LOQ	190 (ppm)	< LOQ
2-Butanol	< LOQ	2500 (ppm)	< LOQ	2-Ethoxyethanol	< LOQ	80 (ppm)	< LOQ
Cumene	< LOQ	35 (ppm)	< LOQ	Cyclohexane	< LOQ	1940 (ppm)	< LOQ
Ethyl acetate	< LOQ	2500 (ppm)	< LOQ	Ethyl ether	< LOQ	2500 (ppm)	< LOQ
Ethylene glycol	< LOQ	310 (ppm)	< LOQ	Ethylene oxide	< LOQ	25 (ppm)	< LOQ
Heptane	< LOQ	2500 (ppm)	< LOQ	Isopropyl acetate	< LOQ	2500 (ppm)	< LOQ
Tetrahydrofuran	< LOQ	360 (ppm)	< LOQ	Ethanol	< LOQ	500 (ppm)	< LOQ

<b>LCS(P221045-BS1)</b>			<b>Extracted: 09/26/22 09:29</b>		<b>Analyzed: 09/26/22 14:31</b>		
<b>Analyte</b>	<b>% Recovery</b>	<b>LOQ</b>	<b>Recovery Limits</b>	<b>Analyte</b>	<b>% Recovery</b>	<b>LOQ</b>	<b>Recovery Limits</b>
Butanes	63.5	(ppm)	0-200	n-Butane	64.0	(ppm)	60-120
iso-Butane	63.0	(ppm)	60-120	Hexanes	94.0	(ppm)	0-200
n-Hexane	95.4	(ppm)	60-120	2-Methylpentane	93.8	(ppm)	60-120
3-Methylpentane	94.0	(ppm)	60-120	2,2-Dimethylbutane	92.9	(ppm)	60-120
2,3-Dimethylbutane	95.4	(ppm)	60-120	Pentanes	107	(ppm)	0-200
n-Pentane	91.8	(ppm)	60-120	iso-Pentane	90.0	(ppm)	60-120
Neopentane	69.4	(ppm)	60-120	Xylenes	85.5	(ppm)	60-120
1,2-Dimethylbenzene	84.0	(ppm)	60-120	1,3-Dimethylbenzene	86.9	(ppm)	60-120
1,4-Dimethylbenzene	86.9	(ppm)	60-120	Xylenes MP	85.5	(ppm)	0-200
Ethyl benzene	87.0	(ppm)	60-120	2-Propanol (IPA)	99.6	(ppm)	60-120
Acetone	96.9	(ppm)	60-120	Acetonitrile	96.5	(ppm)	60-120
Benzene	88.3	(ppm)	60-120	Methanol	95.7	(ppm)	60-120
Propane	50.9	(ppm)	60-120	Toluene	93.2	(ppm)	60-120
Dichloromethane	97.7	(ppm)	60-120	1,4-Dioxane	94.3	(ppm)	60-120



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**Quality Control**

**Batch: P22I045 - SOP.T.40.031 Solvents (Continued)**

LCS(P22I045-BS1)			Extracted: 09/26/22 09:29		Analyzed: 09/26/22 14:31		
Analyte	% Recovery	LOQ	Recovery Limits	Analyte	% Recovery	LOQ	Recovery Limits
2-Butanol	97.1	(ppm)	60-120	2-Ethoxyethanol	93.5	(ppm)	60-120
Cumene	89.1	(ppm)	60-120	Cyclohexane	93.0	(ppm)	60-120
Ethyl acetate	97.6	(ppm)	60-120	Ethyl ether	92.5	(ppm)	60-120
Ethylene glycol	87.3	(ppm)	60-120	Ethylene oxide	87.1	(ppm)	60-120
Heptane	95.8	(ppm)	60-120	Isopropyl acetate	93.2	(ppm)	60-120
Tetrahydrofuran	94.6	(ppm)	60-120	Ethanol	95.7	(ppm)	60-120



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