

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

For OLCC/OHA Compliance Purposes.

Product Description

Client:

Product Name: **CBN Isolate B#GVL-TST114 Dup**

Production Date: 12/22/2021

Retest Date: 12/22/2023

Matrix: Hemp Concentrate

Metrc Source ID: n/a

Metrc Package ID: n/a

License Number: n/a

Date Collected: 2021-12-22

Date Received: 2021-12-22

Report Date: 2021-10-27

Report ID: A5503-04

Tests Requested: Cannabinoid Potency Analysis
Pesticide Analysis
Residual Solvent Analysis

Evaluation Summary

Moisture Analysis

Test Not Required

Cannabinoid Potency Analysis

Total THC *

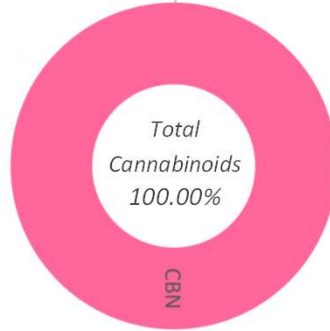
< LOQ

< LOQ

Total CBD *

< LOQ

< LOQ



Abv.

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	< LOQ	< LOQ
CBGA	< LOQ	< LOQ
CBG	< LOQ	< LOQ
CBDVA	< LOQ	< LOQ
CBDV	< LOQ	< LOQ
CBN	100.00 % (A)	1000.0 mg/g
CBL	< LOQ	< LOQ
CBC	< LOQ	< LOQ

CBN Isolate B#GVL-TST114 Dup

Pesticide Analysis

Pesticide Status

Pass

No Pesticides Were Detected above Oregon's action limit as stated in OAR 333-007-0400.

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

Report: Case Narrative

This certificate of analysis is prepared for...

This report presents the analytical findings for the sample collected on 2021-12-22 by Skyler Smith using sampling plan A5503 and received by PREE Laboratory on 2021-12-22. The sample was assigned a laboratory ID of A5503-04. The results in this report only apply to sample A5503-04.

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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. The tested value of CBN was found to be 101.15 %. This is within the method uncertainty and, as a result, the reported concentration was adjusted to 100.00%.

TOTAL CANNABINOIDS - 1017.9mg/g | 101.79% THC TOTAL - 0mg/g | 0% CBD TOTAL - 0mg/g | 0% THC RPD value - None CBD RPD value - None

The Laboratory Control Sample (LCS) for analytes Abamectin, Chlorfenapyr, Cyfluthrin, Cypermethrin, Methyl-Parathion, Spiromesifen and Spirotetramat exceed acceptance criteria. All samples associated with the extraction batch are non-detect and may be reported.

The Continuing Calibration Verification (CCV) for analytes Chlorfenapyr, Cypermethrin, Methyl-Parathion, Spiromesifen exceeds acceptance criteria. All samples associated with the analysis batch are non-detect and may be reported.



Sardar, Tamzid M. | Laboratory Director
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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Moisture Analysis	Evaluation Detail					
	Moisture Analysis	Test Not Requested/Required				
Cannabinoid Potency Analysis	Evaluation Detail					
Product Name: CBN Isolate B#GVL-TST114 Dup	Cannabinoid Potency Analysis	Compound	Abrv.	Dry Wt. (%)	Dry Wt. (mg/g)	RL (%)
Analysis Date: 2021-12-23	Total THC *	Tetrahydro-cannabinolic acid	THCA	< LOQ	< LOQ	0.5 %
Testing Batch ID: POM211223C	< LOQ	Delta9 Tetrahydro-cannabinol	Δ-9-THC	< LOQ	< LOQ	0.5 %
Testing Method: LSOP #303 Cannabinoid Quantification	< LOQ	Delta8 Tetrahydro-cannabinol	Δ-8-THC	< LOQ	< LOQ	0.5 %
		Tetrahydrocannabivarin	THCV	< LOQ	< LOQ	0.5 %
	Total CBD *	Cannabidiolic acid	CBDA	< LOQ	< LOQ	0.5 %
	< LOQ	Cannabidiol	CBD	< LOQ	< LOQ	0.5 %
	< LOQ	Cannabigerolic acid	CBGA	< LOQ	< LOQ	0.5 %
		Cannabigerol	CBG	< LOQ	< LOQ	0.5 %
		Cannabidivarinic acid	CBDVA	< LOQ	< LOQ	0.5 %
		Cannabidivarin	CBDV	< LOQ	< LOQ	0.5 %
		Cannabinol	CBN	100.00 % (A)	1000.0	0.5 %
		Cannabicyclol	CBL	< LOQ	< LOQ	0.5 %
		Cannabichromene	CBC	< LOQ	< LOQ	0.5 %

Note: Accreditation for Δ-8-THC, THCV, CBGA,CBG, CBDVA, CBDV, CBL, CBC, CBN is not offered by ORELAP 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: **CBN Isolate B#GVL-TST114 Dup**

Analysis Date: 2021-12-23

Testing Batch ID: PEE211223ABCD

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	0.02	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	< 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	0.02	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



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Moisture Analysis	Quality Control Detail						
	Moisture Analysis						
Cannabinoid Potency Analysis	Quality Control Detail						
Analysis Date: 2021-12-23	Cannabinoid Potency Analysis		MB	LCS	Expected Value (%)	Tested Value (%)	Pass Criteria
Testing Batch ID: POM211223C	Tetrahydro-cannabinolic acid		○		< 0.1%	< 0.1%	< 0.1%
	Delta9 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%	80.2%	± 20%
	Delta9 Tetrahydro-cannabinol			●	100.0%	88.2%	± 20%
	Cannabidiolic acid			●	100.0%	83.2%	± 20%
	Cannabidiol			●	100.0%	94.6%	± 20%

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Pesticide Analysis

Analysis Date: 2021-12-23

Testing Batch ID: PEE211223ABCD

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	< 0.02	< 0.02	< 0.02
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 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	< 0.02	< 0.02	< 0.02
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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Pesticide Analysis

Quality Control Detail

Pesticide Name	LCS	Expected Recovery (%)	Actual Recovery (%)	Pass Criteria (%)
Abamectin	●	100.00	148.62 (Q)	60 - 140
Acephate	●	100.00	109.57	60 - 140
Acequinocyl	●	100.00	139.85	60 - 140
Acetamiprid	●	100.00	107.11	60 - 140
Aldicarb	●	100.00	93.97	60 - 140
Azoxystrobin	●	100.00	107.14	60 - 140
Bifenazate	●	100.00	117.71	60 - 140
Bifenthrin	●	100.00	129.22	60 - 140
Boscalid	●	100.00	125.38	60 - 140
Carbaryl	●	100.00	112.00	60 - 140
Carbofuran	●	100.00	100.68	60 - 140
Chlorantraniliprole	●	100.00	123.43	60 - 140
Chlorfenapyr	●	100.00	167.01 (Q)	60 - 140
Chlorpyrifos	●	100.00	116.17	60 - 140
Clofentezine	●	100.00	134.99	60 - 140
Cyfluthrin	●	100.00	149.74 (Q)	60 - 140
Cypermethrin	●	100.00	159.99 (Q)	60 - 140
Daminozide	●	100.00	107.10	60 - 140
Diazinon	●	100.00	114.37	60 - 140
Dichlorvos	●	100.00	98.04	60 - 140
Dimethoate	●	100.00	108.67	60 - 140
Ethoprophos	●	100.00	109.63	60 - 140
Etofenprox	●	100.00	121.70	60 - 140
Etoxazole	●	100.00	135.36	60 - 140
Fenoxycarb	●	100.00	123.90	60 - 140
Fenpyroximate	●	100.00	138.71	60 - 140
Fipronil	●	100.00	119.03	60 - 140
Flonicamid	●	100.00	104.65	60 - 140
Fludioxonil	●	100.00	114.63	60 - 140
Hexythiazox	●	100.00	122.07	60 - 140
Imazalil	●	100.00	105.37	60 - 140
Imidacloprid	●	100.00	106.15	60 - 140
Kresoxim-methyl	●	100.00	96.57	60 - 140

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Pesticide Analysis

Quality Control Detail

Pesticide Name	LCS	Expected Recovery (%)	Actual Recovery (%)	Pass Criteria (%)
Malathion	•	100.00	101.58	60 - 140
Metalaxyl	•	100.00	119.79	60 - 140
Methiocarb	•	100.00	106.65	60 - 140
Methomyl	•	100.00	116.19	60 - 140
Methyl-Parathion	•	100.00	119.73	60 - 140
MGK-264 I	•	100.00	155.10 (Q)	60 - 140
MGK-264 II	•	100.00	138.55	60 - 140
Myclobutanil	•	100.00	123.29	60 - 140
Naled	•	100.00	111.00	60 - 140
Oxamyl	•	100.00	111.07	60 - 140
Paclobutrazol	•	100.00	119.31	60 - 140
Permethrin - trans	•	100.00	95.80	60 - 140
Permethrin - cis	•	100.00	137.80	60 - 140
Phosmet	•	100.00	110.04	60 - 140
Piperonyl butoxide	•	100.00	126.79	60 - 140
Prallethrin	•	100.00	139.73	60 - 140
Propiconazole	•	100.00	131.10	60 - 140
Propoxur	•	100.00	107.53	60 - 140
Pyrethrin - Cinerin	•	100.00	116.58	60 - 140
Pyrethrin - Jasmolin	•	100.00	85.59	60 - 140
Pyrethrin - Pyrethrins	•	100.00	122.43	60 - 140
Pyridaben	•	100.00	92.69	60 - 140
Spinosyn A	•	100.00	121.78	60 - 140
Spinosyn D	•	100.00	122.18	60 - 140
Spiromesifen	•	100.00	156.62 (Q)	60 - 140
Spirotetramat	•	100.00	148.74 (Q)	60 - 140
Spiroxamine	•	100.00	107.54	60 - 140
Tebuconazole	•	100.00	91.23	60 - 140
Thiacloprid	•	100.00	107.29	60 - 140
Thiamethoxam	•	100.00	109.65	60 - 140
Trifloxystrobin	•	100.00	121.16	61 - 140

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.

EVIO Labs Portland
 14775 SW 74th Ave, Tigard, OR 97224
 503-954-2562 / OLCC 010-10046111391 / www.EVIOLabs.com

A5503-04

FREE Labs

010-10087092BDA

Sample ID: P211150-04 METRC Batch #:

Matrix: Extract/Concentrate

Date Sampled: 12/22/21 09:00

Date Accepted: 12/22/21

Batch ID:

Batch Size:

Sampling Method/SOP: SOP.T.20.010

Residual Solvents

Analyte	LOQ	Action Level	Result	Units
Butanes	250	5000 ³	< LOQ	ppm
n-Butane	250	5000	< LOQ	ppm
iso-Butane	250	5000	< LOQ	ppm
Hexanes	174	290 ⁴	< LOQ	ppm
n-Hexane	174	290	< LOQ	ppm
2-Methylpentane	174	290	< LOQ	ppm
3-Methylpentane	174	290	< LOQ	ppm
2,2-Dimethylbutane	174	290	< LOQ	ppm
2,3-Dimethylbutane	174	290	< LOQ	ppm
Pentanes	1400	5000 ⁵	< LOQ	ppm
n-Pentane	1400	5000	< LOQ	ppm
iso-Pentane	1400	5000	< LOQ	ppm
Neopentane	250	5000	< LOQ	ppm
Xylenes	1302	2170	< LOQ	ppm
1,2-Dimethylbenzene	1302	2170	< LOQ	ppm
1,3-Dimethylbenzene	1302	2170	< LOQ	ppm
1,4-Dimethylbenzene	1302	2170	< LOQ	ppm
Ethyl benzene	1302	NA	< LOQ	ppm
2-Propanol (IPA)	1400	5000	< LOQ	ppm
Acetone	1400	5000	< LOQ	ppm
Acetonitrile	246	410	< LOQ	ppm
Benzene	1.2	2	< LOQ	ppm
Methanol	1000	3000	< LOQ	ppm
Propane	250	5000	< LOQ	ppm
Toluene	534	890	< LOQ	ppm
Dichloromethane	360	600	< LOQ	ppm
1,4-Dioxane	228	380	< LOQ	ppm
2-Butanol	1400	5000	< LOQ	ppm
2-Ethoxyethanol	96	160	< LOQ	ppm
Cumene	42	70	< LOQ	ppm
Cyclohexane	2278	3880	< LOQ	ppm
Ethyl acetate	1400	5000	< LOQ	ppm
Ethyl ether	1400	5000	< LOQ	ppm
Ethylene glycol	558	620	< LOQ	ppm
Ethylene oxide	30	50	< LOQ	ppm
Heptane	1400	5000	< LOQ	ppm
Isopropyl acetate	1400	5000	< LOQ	ppm
Tetrahydrofuran	432	720	< LOQ	ppm
Ethanol	1400	NA ⁷	< LOQ	ppm
cyclopentane, methyl	NA	TIC	NA	
Water	NA	TIC	NA	

Date/Time Extracted: 12/23/21 15:40

Date/Time Analyzed: 12/27/21 15:07

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
Laboratory Manager - 12/27/2021

EVIO Labs Portland
14775 SW 74th Ave, Tigard, OR 97224
503-954-2562 / OLCC 010-10046111391 / www.EVIOLabs.com

Quality Control

Batch: P21L098 - SOP.T.40.031 Solvents

Blank(P21L098-BLK1)			Extracted: 12/23/21 15:40		Analyzed: 12/27/21 15:07		
Analyte	Result	LOQ	Recovery Limits	Analyte	Result	LOQ	Recovery Limits
Butanes	< LOQ	250 (ppm)	< LOQ	n-Butane	< LOQ	250 (ppm)	< LOQ
iso-Butane	< LOQ	250 (ppm)	< LOQ	Hexanes	< LOQ	174 (ppm)	< LOQ
n-Hexane	< LOQ	174 (ppm)	< LOQ	2-Methylpentane	< LOQ	174 (ppm)	< LOQ
3-Methylpentane	< LOQ	174 (ppm)	< LOQ	2,2-Dimethylbutane	< LOQ	174 (ppm)	< LOQ
2,3-Dimethylbutane	< LOQ	174 (ppm)	< LOQ	Pentanes	< LOQ	1400 (ppm)	< LOQ
n-Pentane	< LOQ	1400 (ppm)	< LOQ	iso-Pentane	< LOQ	1400 (ppm)	< LOQ
Neopentane	< LOQ	250 (ppm)	< LOQ	Xylenes	< LOQ	1302 (ppm)	< LOQ
1,2-Dimethylbenzene	< LOQ	1302 (ppm)	< LOQ	1,3-Dimethylbenzene	< LOQ	1302 (ppm)	< LOQ
1,4-Dimethylbenzene	< LOQ	1302 (ppm)	< LOQ	Ethyl benzene	< LOQ	1302 (ppm)	< LOQ
2-Propanol (IPA)	< LOQ	1400 (ppm)	< LOQ	Acetone	< LOQ	1400 (ppm)	< LOQ
Acetonitrile	< LOQ	246 (ppm)	< LOQ	Benzene	< LOQ	1.2 (ppm)	< LOQ
Methanol	< LOQ	1000 (ppm)	< LOQ	Propane	< LOQ	250 (ppm)	< LOQ
Toluene	< LOQ	534 (ppm)	< LOQ	Dichloromethane	< LOQ	360 (ppm)	< LOQ
1,4-Dioxane	< LOQ	228 (ppm)	< LOQ	2-Butanol	< LOQ	1400 (ppm)	< LOQ
2-Ethoxyethanol	< LOQ	96 (ppm)	< LOQ	Cumene	< LOQ	42 (ppm)	< LOQ
Cyclohexane	< LOQ	2278 (ppm)	< LOQ	Ethyl acetate	< LOQ	1400 (ppm)	< LOQ
Ethyl ether	< LOQ	1400 (ppm)	< LOQ	Ethylene glycol	< LOQ	558 (ppm)	< LOQ
Ethylene oxide	< LOQ	30 (ppm)	< LOQ	Heptane	< LOQ	1400 (ppm)	< LOQ
Isopropyl acetate	< LOQ	1400 (ppm)	< LOQ	Tetrahydrofuran	< LOQ	432 (ppm)	< LOQ
Ethanol	< LOQ	1400 (ppm)	< LOQ				

LCS(P21L098-BS1)			Extracted: 12/23/21 15:40		Analyzed: 12/27/21 15:07		
Analyte	% Recovery	LOQ	Recovery Limits	Analyte	% Recovery	LOQ	Recovery Limits
Butanes	60.5	(ppm)	0-200	n-Butane	68.0	(ppm)	50-150
iso-Butane	53.0	(ppm)	50-150	Hexanes	108	(ppm)	0-200
n-Hexane	112	(ppm)	70-130	2-Methylpentane	110	(ppm)	70-130
3-Methylpentane	110	(ppm)	70-130	2,2-Dimethylbutane	111	(ppm)	70-130
2,3-Dimethylbutane	104	(ppm)	70-130	Pentanes	125	(ppm)	0-200
n-Pentane	105	(ppm)	70-130	iso-Pentane	96.8	(ppm)	70-130
Neopentane	105	(ppm)	50-150	Xylenes	98.8	(ppm)	0-200
1,2-Dimethylbenzene	99.0	(ppm)	70-130	1,3-Dimethylbenzene	99.8	(ppm)	70-130
1,4-Dimethylbenzene	99.8	(ppm)	70-130	Ethyl benzene	101	(ppm)	70-130
2-Propanol (IPA)	100	(ppm)	70-130	Acetone	92.8	(ppm)	70-130
Acetonitrile	113	(ppm)	70-130	Benzene	113	(ppm)	70-130
Methanol	108	(ppm)	70-130	Propane	75.8	(ppm)	50-150
Toluene	108	(ppm)	70-130	Dichloromethane	111	(ppm)	70-130
1,4-Dioxane	112	(ppm)	70-130	2-Butanol	101	(ppm)	70-130



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Quality Control

Batch: P21L098 - SOP.T.40.031 Solvents (Continued)

LCS(P21L098-BS1)			Extracted: 12/23/21 15:40		Analyzed: 12/27/21 15:07		
Analyte	% Recovery	LOQ	Recovery Limits	Analyte	% Recovery	LOQ	Recovery Limits
2-Ethoxyethanol	99.2	(ppm)	70-130	Cumene	107	(ppm)	50-150
Cyclohexane	109	(ppm)	70-130	Ethyl acetate	99.8	(ppm)	70-130
Ethyl ether	107	(ppm)	70-130	Ethylene glycol	90.9	(ppm)	50-150
Ethylene oxide	84.9	(ppm)	50-150	Heptane	108	(ppm)	70-130
Isopropyl acetate	108	(ppm)	70-130	Tetrahydrofuran	102	(ppm)	70-130



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