

Certification of Analysis

labservices@ionizationlabs.com 737.231.0772





RAZAD Enterprises LLC Plano, TX 75024

Sample Information

ZAR Muscle gel
28L2016E

Sample Type:	Topicals
IL Unique ID:	ILCTS634-3

Sample Description: Orange gel

Notes: Unit weight is 1 bottle = 28 grams

Analyst Name:	Enrique Orci IV		
Analyst Signature:	Enrique Orci II		

Reviewer Name:	Ted Barton
Reviewer Signature:	Ted Barta

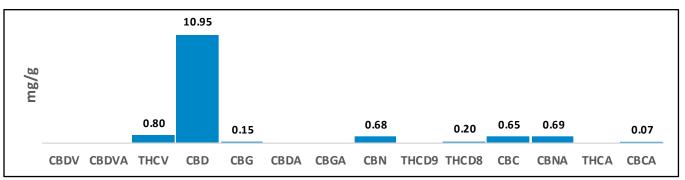
Cannabinoid Potency and Profile

Cannabinoid	Result (%)	Result (mg/g)	mg/bottle
CBDV	N/D	N/D	N/D
CBDVA	N/D	N/D	N/D
THCV	0.08%	0.80	22.40
CBD	1.10%	10.95	306.60
CBG	0.02%	0.15	4.20
CBDA	N/D	N/D	N/D
CBGA	N/D	N/D	N/D
CBN	0.07%	0.68	19.04
THCD9	N/D	N/D	N/D
THCD8	0.02%	0.20	5.60
CBC	0.07%	0.65	18.20
CBNA	0.07%	0.69	19.32
THCA	N/D	N/D	N/D
CBCA	0.01%	0.07	1.96
Totals	1.44%	14.19	397.32



Total THC %	0.00%
Total THC mg / bottle	0.00

Total CBD %	1.10%
Total CBD mg / bottle	306.60



THC Total = % of THCD9 + (% of THCA x 0.877), CBD Total = % of CBD + (% of CBDA x 0.877), CBG Total = % of CBG + (% of CBGA x 0.876), CBN Total = % of CBN + (% of CBNA x 0.876), CBC Total = % of CBC + (% of CBCA x 0.877), CBDV Total = % of CBDV + (% of CBDVA x 0.867), N/D = Not Detected

** Bud/Flower potency results are presented on a dry weight basis

Testing results are based solely upon the samples submitted to Ionization Labs, LLC. Ionization Labs warrants that all analytical work is conducted in accordance with all applicable standard laboratory practices uisng validated methods. This report may not be reproduced without the written consent of Ionization Labs.

ISO 17025 Accredited
A2LA Certificate #: 5756.01

Texas Dept of Ag Account #: TL2020003





Report Number: 20-010426/D03.R00

Report Date: 10/02/2020 ORELAP#: OR100028

Purchase Order:

Received: 09/28/20 10:35

Customer: Deschutes Labs

1060418-2020-TFC-03-2TFD-01 Product identity:

Client/Metrc ID:

Laboratory ID: Sample Date: 09/25/20 13:08 20-010426-0001

Summary

Potency:

otericy.				
Analyte	Result (%)			
CBD	59.2		CBD-Total	59.2%
CBC	3.53	• CBD		
CBN	3.41	• CBC	THC-Total	<loq< td=""></loq<>
CBG [†]	0.709	CBN		
CBL [†]	0.680	CBG	(Reported in pe	ercent of total sample
CBDV [†]	0.545	• CBL		
		• CBDV		

Residual Solvents:

All analytes passing and less than LOQ.

Pesticides:

All analytes passing and less than LOQ.

Metals:

Less than LOQ for all analytes.





Report Number: 20-010426/D03.R00

10/02/2020 Report Date: ORELAP#: OR100028

Purchase Order:

09/28/20 10:35 Received:

Customer: Deschutes Labs

Product identity: 1060418-2020-TFC-03-2TFD-01

Client/Metrc ID:

Sample Date: 09/25/20 13:08 Laboratory ID: 20-010426-0001 Relinquished by: Received By Mail

Temp: 20.3 °C

Sample Results

Potency	Method	J AOAC 2015	V98-6 (mod)	Batch: 2008111	Analyze: 10/1/20 7:37:00 PM
Analyte		Dry LOQ	Notes		
	Received w	veight			
CBC	3.53	0.0892			
CBC-A [†]	< LOQ	0.0892			• CBD
CBC-Total [†]	3.53	0.167			• CBC
CBD	59.2	0.892			CBN CBG
CBD-A	< LOQ	0.0892			• CBG
CBD-Total	59.2	0.970			• CBDV
CBDV [†]	0.545	0.0892			
CBDV-A [†]	< LOQ	0.0892			
CBDV-Total [†]	0.545	0.167			
CBG [†]	0.709	0.0892			
CBG-A [†]	< LOQ	0.0892			
CBG-Total	0.709	0.167			
CBL [†]	0.680	0.0892			
CBN	3.41	0.0892			
$\Delta 8\text{-THC}^{\dagger}$	< LOQ	0.0892			
Δ9-THC	< LOQ	0.0892			
THC-A	< LOQ	0.0892			
THC-Total	< LOQ	0.167			
THCV [†]	< LOQ	0.0892			
THCV-A [†]	< LOQ	0.0892			
THCV-Total [†]	< LOQ	0.167			
Total Cannabinoids†	68.1				





20-010426/D03.R00 **Report Number:**

Report Date: 10/02/2020 ORELAP#: OR100028

Purchase Order:

09/28/20 10:35 Received:

Solvents	Method	EPA502	21A		Units µg/g Batch 20	007980	Analyz	e 09/2	9/20 09:59 AM
Analyte	Result	Limits	LOQ	Status Notes	Analyte	Result	Limits	LOQ S	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	
2-Methylpentane	< LOQ		30.0		2-Propanol (IPA)	< LOQ	5000	200	pass
2,2-Dimethylbutane	< LOQ		30.0		2,2-Dimethylpropane	< LOQ		200	
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	30.0	pass
Hexanes (sum)	< LOQ	290	150	pass	Isopropyl acetate	< LOQ	5000	200	pass
Isopropylbenzene	< LOQ	70.0	30.0	pass	m,p-Xylene	< LOQ		200	
Methanol	< LOQ	3000	200	pass	Methylene chloride	< LOQ	600	200	pass
Methylpropane	< LOQ		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	600	pass





20-010426/D03.R00 **Report Number:**

Report Date: 10/02/2020 ORELAP#: OR100028

Purchase Order:

09/28/20 10:35 Received:

Pesticides	Method	AOAC	2007.01 & EN	15662 (mod)	Units mg/kg Ba	atch 2008049	Analy	ze 09/30/20 04:56 PM
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	e < 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 butoxid	le < 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
Thiacloprid	< LOQ	0.20	0.100 pass		Thiamethoxam	< LOQ	0.20	0.100 pass
Trifloxystrobin	< LOQ	0.20	0.100 pass					

Metals								
Analyte	Result	Limits	Units	LOQ	Batch	Analyze	Method	Notes
Arsenic	< LOQ		mg/kg	0.0418	2008092	10/01/20	AOAC 2013.06 (mod.)	X
Cadmium	< LOQ		mg/kg	0.0418	2008092	10/01/20	AOAC 2013.06 (mod.)	X
Lead	< LOQ		mg/kg	0.0418	2008092	10/01/20	AOAC 2013.06 (mod.)	X
Mercury	< LOQ		mg/kg	0.0209	2008092	10/01/20	AOAC 2013.06 (mod.)	X





Report Number: 20-010426/D03.R00

Report Date: 10/02/2020 **ORELAP#:** OR100028

Purchase Order:

Received: 09/28/20 10:35

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

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

Glossary of Qualifiers

X: Not ORELAP accredited.

Approved Signatory

Derrick Tanner General Manager





Report Number:

20-010426/D03.R00

Report Date:

10/02/2020

ORELAP#:

OR100028

Purchase Order:

Received:

09/28/20 10:35



Hemp / Cannabis Usable / Extract **Chain of Custody Record**

Revision: 3.01 Control#: CF023 Rev 02/26/2020 Eff: 02/27/2020 ORELAP ID: OR100028

20-010424

0	ompany: Deschutes Labs			Analysis Requested									PO Number:					
1	Contact: Drew Van Roekel																	
1	reet: 2020 NW Industrial Park Rd																	
	y: Prineville State:	OR Zin: 9	97754															
1	Email Results: Drew@DeschutesLabs.com													100		IETRC or Other:		
			- 0															
	(503) 809-9798				Ħ									Turnarou	nd time: ∐ S	tandard Rush * Priority Rush *		
Bil	ing (if different):				Residual Solvent		tals							*Ask for availability Sampled by:				
Lab				ncy	lan	cides	y Me											
ID	Client Sample Identification	Date	Time	Potency	Resid	Pesticides	Heavy Metals							Sample Type †	Weight (Units)	Comments/Metrc ID		
١	1060418-2020-TFC-03-2TFD-01	9/25/20	1308	V	V	V	/							C		Comments/Wet/CID		
2	1060418-2020-Kler-53-Iso-	9/25/20	1308	V	V	V	V							S	5g 5g	-		
		9/25/20	37							1)				
		9/25/20								1			1					
		9/25/20							+	+-								
		9/25/20							_	+			-					
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		9/25/20			_				-	-			-					
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	Relinquished By:	9/25/20 Date	Time			Po	ceived	D.		Da								
	Drew Van Ruersch 9/25/20 1309				7	7	Leiveu	Dy:		-		Time		Chinne	d Viia.	Lab Use Only:		
40			1309		-	1				of	128	103)	☐ Shipped Via: or ☐ Client drop Evidence of cooling: ☐ Yes ☐ No - Temp (°C):				
)								Sample in good condition. Lifes Life				
													\dashv	☐ Cash I	☐ Check ☐ 0	CC Net:		
	N		- 4		ode T		1	/:k-k:						rieiog sto	rage:			

Sample Type Codes: Vegitation (V); Isolates (S); Extract/Concentrate (C)

Samples submitted to Columbia Laboratories with testing requirements constitute an agreement for services in accordance with the current terms of service associated with this COC. By signing "Relinquished by" you are agreeing to these to fast 12423 NE Whitaker Way Portland, OR 97230 P: (503) 254-1794 | Fax: (503) 254-1452 Page of www.columbialaboratories.com





Report Number: 20-010426/D03.R00

Report Date: 10/02/2020 ORELAP#: OR100028

Purchase Order:

Received: 09/28/20 10:35



Columbia Laboratories Sample Receipt Form

Revision: 1.01 Document Control: CF015 Revised: 02/28/2020 Effective: 02/28/2020

Job Number: 20-01042 Search Name:									
Package/Cooler opened on (if different than received date/time) Date.	Time: 1535								
Received By (Initials):									
Were custody seals on outside of the package/cooler? If YES, how many and where?	YES NO NA								
Were signature and date correct?									
2) Were custody papers included in the package/cooler?	YEŞ NO NA								
3) Were custody papers properly filled out (ink, sign, date)?	YES) NO NA								
4) Did you sign custody papers in the appropriate place?	YES) NO NA								
5) How was the package/cooler delivered?									
UPS FEDEX USPS CLIENT COURIER	OTHER:								
Tracking Number (written in or copy of shipping label):	2640395194743								
6) Was packing material used?	YES (NO NA								
Peanuts Bubble Wrap Foam Paper Other:									
7) Was sufficient ice used (if appropriate)? What kind?	YES NO NA								
Blue Ice Cooler Packs Dry Ice									
8) Were all sample containers sealed in separate plastic bags?	YES NO NA								
9) Did all sample containers arrive in good condition?	YEŞ NO NA								
10) Were all sample container labels complete?	YES NO NA								
11) Did all sample container labels and tags agree with the coc?	YES NO NA								
12) Were correct sample containers used for the tests indicated?	CYES ₂ NO NA								
13) Were VOA vials checked for absence of air bubbles (note if found)?	YES NO NA								
14) Was a sufficient amount of sample sent in each sample container?	YES NO NA								
15) Temperature of the samples upon receipt (See SOP for proper temps)	20.3								
16) Sample location prior to login: R25 R39 R44 F44 Ambient Shelf	Cannabis Table Other:								
Explain any discrepancies:	Outer								
Page Z of Z									





20-010426/D03.R00 **Report Number:**

Report Date: 10/02/2020 ORELAP#: OR100028

Purchase Order:

Received: 09/28/20 10:35

Laboratory Quality Control Results

EPA 5021	Lai	JO: 810	. y Qu	uncy Com	roi Result		ch ID:	200798	30		
Method Blank					Laborato	ry Control S	ample	2			
Analyte	Result		LOQ	Notes	Result	Spike	Units	% Rec	L	imits	Notes
Propane	ND	<	200		1100	1,190	µg/g	92.4	70	- 1	80
Isobutane	ND	<	200		1390	1,520	µg/g	91.4	70	- 1	80
Butane	ND	<	200		1410	1,520	µg/g	92.8	70	- 1	80
2,2-Dimethylpropane	ND	<	200		1720	1,910	µg/g	90.1	70	- 1	80
Methanol	ND	٧	200		3000	3,240	µg/g	92.6	70	- 1	80
Ethylene Oxide	ND	<	30		113	117	µg/g	96.6	70	- 1	80
2-Methylbutane	ND	<	200		2990	3,220	µg/g	92.9	70	- 1	80
Pentane	ND	<	200		2960	3,210	µg/g	92.2	70	- 1	00
Ethanol	ND	<	200		2850	3,220	µg/g	88.5	70	- 1	80
Ethyl Ether	ND	٧	200		3010	3,260	µg/g	92.3	70	- 1	80
2,2-Dimethylbutane	ND	٧	30		380	431	µg/g	88.2	70	- 1	80
Acetone	ND	٧	200		3040	3,210	µg/g	94.7	70	- 1	80
2-Propanol	ND	<	200		2780	3,180	µg/g	87.4	70	- 1	80
Acetonitrile	ND	<	100		920	983	µg/g	93.6	70	- 1	80
2,3-Dimethylbutane	ND	<	30		307	373	µg/g	82.3	70	- 1	80
Dichloromethane	ND	<	200		926	1,010	µg/g	91.7	70	- 1	80
2-Methylpentane	ND	<	30		285	330	µg/g	86.4	70	- 1	80
3-Methylpentane	ND	<	30		303	342	µg/g	88.6	70	- 1	80
Hexane	ND	<	30		287	321	µg/g	89.4	70	- 1	00
Ethyl acetate	ND	<	200		3000	3,260	µg/g	92.0	70	- 1	80
2-Butanol	ND	<	200		2720	3,210	µg/g	84.7	70	- 1	80
Tetrahydrofuran	ND	<	100		878	982	µg/g	89.4	70	- 1	80
Cyclohexane	ND	<	200		2950	3,210	µg/g	91.9	70	- 1	00
Benzene	ND	<	1		47.3	55.4	µg/g	85.4	70	- 1	80
Isopropyl Acetate	ND	<	200		2810	3,200	µg/g	87.8	70	- 1	80
Heptane	ND	٧	200		3080	3,210	µg/g	96.0	70	- 1	80
1,4-Dioxane	ND	٧	100		871	1,010	µg/g	86.2	70	- 1	80
2-Ethoxyethanol	ND	<	30		496	681	µg/g	72.8	70	- 1	80
Ethylene Glycol	ND	<	200		965	1,170	µg/g	82.5	70	- 1	80
Toluene	ND	٧	200		867	980	µg/g	88.5	70	- 1	80
Ethylbenzene	ND	<	200		1660	1,970	µg/g	84.3	70	- 1	80
m,p-Xylene	ND	<	200		1700	1,950	µg/g	87.2	70	- 1	80
o-Xylene	ND	<	200		1700	1,940	µg/g	87.6	70	- 1	80
Cumene	ND	<	30		298	336	µg/g	88.7	70	- 1	80





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Report Date: 10/02/2020 ORELAP#: OR100028

Purchase Order:

Received: 09/28/20 10:35

QC - Sample Duplicate

Sample ID: 20-010197-0001

Analyte	Result	Org. Result	LOQ U	Jnits	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 µ	µg/g	0.0	< 20	Acceptable	
Ethylene Oxide	ND	ND	30 J	µg/g	0.0	< 20	Acceptable	
2-Methylbutane	ND	ND	200 µ	µg/g	0.0	< 20	Acceptable	
Pentane	ND	ND	200 µ	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	
Acetonitrile	ND	ND	100 µ	µg/g	0.0	< 20	Acceptable	
2,3-Dimethylbutane	ND	ND	30 J	µg/g	0.0	< 20	Acceptable	
Dichloromethane	ND	ND	200 µ	µg/g	0.0	< 20	Acceptable	
2-Methylpentane	ND	ND	30 J	µg/g	0.0	< 20	Acceptable	
3-Methylpentane	ND	ND	30 J	µg/g	0.0	< 20	Acceptable	
Hexane	ND	ND	30 J	µg/g	0.0	< 20	Acceptable	
Ethyl acetate	ND	ND	200 µ	µg/g	0.0	< 20	Acceptable	
2-Butanol	ND	ND	200 µ	µg/g	0.0	< 20	Acceptable	
Tetrahydrofuran	ND	ND	100 µ	µg/g	0.0	< 20	Acceptable	
Cyclohexane	ND	ND	200 µ	µg/g	0.0	< 20	Acceptable	
Benzene	ND	ND	1 1	µg/g	0.0	< 20	Acceptable	
Isopropyl Acetate	ND	ND	200 µ	µg/g	0.0	< 20	Acceptable	
Heptane	ND	ND	200 µ	µg/g	0.0	< 20	Acceptable	
1,4-Dioxane	ND	ND	100 µ	µg/g	0.0	< 20	Acceptable	
2-Ethoxyethanol	ND	ND	30 J	µg/g	0.0	< 20	Acceptable	
Ethylene Glycol	ND	ND	200 µ	µg/g	0.0	< 20	Acceptable	
Toluene	ND	ND	200 µ	µg/g	0.0	< 20	Acceptable	
Ethylbenzene	ND	ND	200 µ	µg/g	0.0	< 20	Acceptable	
m,p-Xylene	ND	ND	200 µ	µg/g	0.0	< 20	Acceptable	
o-Xylene	ND	ND	200 µ	µg/g	0.0	< 20	Acceptable	
Cumene	ND	ND	30 J	µg/g	0.0	< 20	Acceptable	

Abbreviations

RPD - Relative Percent Difference LOQ - Limit of Quantitation

* Screening only

Q1 Quality Control result biased high. Only non detect samples reported.

μg/g- Microgram per gram or ppm mg/Kg - Milligrams per Kilogram Aw- Water Activity unit





Report Number: 20-010426/D03.R00

Report Date: 10/02/2020 ORELAP#: OR100028

Purchase Order:

Received: 09/28/20 10:35

Revision: 1.00 Control: CFL-C21 Revised: 08/12/2019 Effective: 08/15/2019

Laboratory Pesticide Quality Control Results

AOAC 2007.1 & EN 1566:		Units: mg/Kg Batch ID: 2008049 Laboratory Control Sample											
Analyte	Blank Result	Blank Limits	Notes	LCS Result	LCS Spike	LCS % Rec	Notes						
Acephate	0.025	< 0.200	T	0.935	1.000	93.5	Limits 68.1 - 126	I					
Acequinocyl	0.041	< 1.000	1	3.664	4.000	91.6	69.5 - 129						
Acetamiprid	0.000	< 0.100	1	0.374	0.400	93.6	69.0 - 128	1					
Aldicarb	0.000	< 0.200	1	0.705	0.800	88.1	67.8 - 126	1					
Abamectin	0.000	< 0.288	+	0.774	1.000	77.4	69.1 - 128	-					
Azoxystrobin	0.012	< 0.100	1	0.362	0.400	90.5	68.9 - 128						
Bifenazate	0.009	< 0.100	1 -	0.378	0.400	94.6	68.1 - 126						
Bifenthrin	0.019	< 0.100	1	0.376	0.400	94.1	71.1 - 132						
Boscalid	0.084	< 0.100	1	0.735	0.800	91.8	68.5 - 127	-					
Carbaryl	0.013	< 0.100	1	0.383	0.400	95.9	69.4 - 129						
Carbofuran	0.017	< 0.100	1	0.380	0.400	95.0	69.1 - 128						
Chlorantraniliprol	0.022	< 0.100	+	0.370	0.400	92.4	69.5 - 129	-					
Chlorfenapyr	0.000	< 1.000	1	1.714	2.000	85.7	68.1 - 126	-					
Chlorpyrifos	0.000	< 0.100	1	0.375	0.400	93.6	68.9 - 128	-					
Clofentezine	0.019	< 0.100	1	0.370	0.400	92.5	67.0 - 124						
Cyfluthrin	0.000	< 1.000	1	1.530	2.000	76.5	71.1 - 132						
Cypermethrin	0.004	< 1.000	1	1.530	2.000	89.7	71.1 - 132	-					
Cypermetnin Daminozide	0.004	< 1.000	-	1.794	2.000	91.8	66.0 - 123						
Daminozide Diazinon	0.046	< 0.100	1	0.382	0.400	91.8	68.3 - 127						
			1		2.000	95.6		1					
Dichlorvos	0.045	< 0.500	-	1.824 0.382	0.400	91.2							
Dimethoat Ethoprophos	0.007	< 0.100 < 0.100		0.382	0.400	95.5	68.6 - 127 67.9 - 126						
	0.000	< 0.100	1	0.752	0.400	94.0	68.9 - 128						
Etofenprox Etoxazol	0.017	< 0.100	1	0.752	0.800	94.0							
			1		i contra	0.0000000000000000000000000000000000000							
Fenoxycarb	0.009	< 0.100	1	0.380	0.400	94.9	68.8 - 128						
Fenpyroximat	0.008	< 0.100		0.794	0.800	99.2	70.2 - 130						
Fipronil	0.014	< 0.100		0.720	0.800	90.0	71.4 - 133						
Flonicamid	0.000	< 0.400	1	0.936	1.000	93.6	69.4 - 129						
Fludioxonil	0.000	< 0.100		0.914	0.800	114.3	69.2 - 128						
Hexythiazox	0.021	< 0.400		0.982	1.000	98.2	71.0 - 132						
Imazalil	0.006	< 0.100		0.408	0.400	102.1	71.6 - 133	ļ					
Imidacloprid	0.003	< 0.200		0.728	0.800	91.0	67.8 - 126						
Kresoxim-Methyl	0.034	< 0.100		0.726	0.800	90.7	69.1 - 128						
Malathion	0.008	< 0.100		0.377	0.400	94.3	68.8 - 128						
Metalaxyl	0.010	< 0.100		0.351	0.400	87.8	68.2 - 127						
Methiocarb	0.062	< 0.100		0.407	0.400	101.7	68.7 - 128						
Methomyl	0.091	< 0.200		0.790	0.800	98.7	67.7 - 126						
MGK 264	0.009	< 0.100		0.366	0.400	91.5	69.8 - 130						
Myclobutanil	0.020	< 0.100		0.389	0.400	97.3	67.7 - 126						
Naled	0.034	< 0.200		0.967	1.000	96.7	68.7 - 128						
Oxamyl	0.000	< 0.400		1.838	2.000	91.9	67.7 - 126						
Paclobutrazol	0.036	< 0.200		0.751	0.800	93.9	67.5 - 125						
Parathion Methyl	0.000	< 0.200		0.849	0.800	106.2	71.4 - 133						
Permethrin	0.023	< 0.100		0.372	0.400	93.1	70.2 - 130						
Phosmet	0.004	< 0.100		0.397	0.400	99.3	69.2 - 128						
Piperonyl butoxide	0.125	< 1.000		1.916	2.000	95.8	69.9 - 130						
Prallethrin	0.146	< 0.200		0.450	0.400	112.4	70.5 - 131						
Propiconazole	0.008	< 0.200		0.791	0.800	98.9	68.8 - 128						
Propoxur	0.017	< 0.100		0.381	0.400	95.3	68.0 - 126						
Pyrethrins	0.174	< 0.500		0.408	0.413	98.8	69.9 - 130						
Pyridaben	0.000	< 0.100	1	0.397	0.400	99.2	74.7 - 139	Ī					
Spinosad	0.000	< 0.100		0.410	0.388	105.6	75.8 - 141						
Spiromesifen	0.035	< 0.100	1	0.381	0.400	95.4	69.2 - 129	Ì					
Spirotetramat	0.009	< 0.100	1	0.375	0.400	93.8	69.0 - 128	1					
Spiroxamine	0.021	< 0.100	1	0.759	0.800	94.9	68.8 - 128	i –					
Tebuconazol	0.009	< 0.200		0.733	0.800	91.6	68.3 - 127						
Thiacloprid	0.000	< 0.100	1	0.371	0.400	92.7	68.3 - 127						
Thiamethoxam	0.000	< 0.100	1	0.404	0.400	100.9	67.9 - 126						
Trifloxystrobin	0.004	< 0.100	1	0.394	0.400	98.6	69.3 - 129						





Report Number: 20-010426/D03.R00

Report Date: 10/02/2020 ORELAP#: OR100028

Purchase Order:

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Revision: 1.00 Control: CFL-C21 Revised: 08/12/2019 Effective: 08/15/2019

Laboratory Pesticide Quality Control Results

Laboratory Pesticide Quality Control Results										
AOAC 2007.1 & EN 15662			Units:	mg/Kg					ch ID: 200804	9
Matrix Spike/Matrix Spike I								20-010263-0		
Analyte	Result	MS Res	MSD Res	Spike	RPD%	Limit		MSD % Rec	Limits	Notes
Acephate	0.019	1.001	0.890	1.000	11.8	< 30	98.2	87.0	50 - 150	
Acequinocyl	0.000	3.878	1.997	4.000	64.0	< 30 < 30	96.9	49.9	50 - 150	R,Q
Acetamiprid Aldicarb	0.000	0.371	0.330	0.400	11.6 54.8	< 30	92.6 72.8	82.5 41.5	50 - 150 50 - 150	R,Q
		1.499		1.000	6.6	< 30	149.9	140.3		R,Q
Abamectin	0.000		1.403		4.5					
Azoxystrobin	0.010	0.494	0.472	0.400	10/10/04/05	< 30	120.9	115.5		
Bifenazate	0.000	0.373	0.353	0.400	5.5	< 30	93.1	88.2	50 - 150 50 - 150	
Bifenthrin	0.000	0.733		0.400	14.8		183.2	212.6		Q1
Boscalid	0.063	0.952	0.721	0.800	27.5	< 30	111.1	82.3	50 - 150 50 - 150	
Carbaryl	0.012	0.396	0.336		16.3		96.0	81.1		
Carbofuran	0.014	0.419	0.359	0.400	15.3	< 30	101.3	86.4	50 - 150	
Chlorantraniliprol	0.020	0.425	0.416	0.400	1.9	< 30	101.2	99.2	50 - 150	
Chlorfenapyr	0.000	2.047	2.119	2.000	3.4	< 30	102.3	105.9	50 - 150	
Chlorpyrifos	0.000	0.413	0.473	0.400	13.6	< 30	103.3	118.4	50 - 150	
Clofentezine	0.016	0.438	0.430	0.400	1.7	< 30	105.4	103.5	50 - 150	
Cyfluthrin	0.000	3.845	3.370	2.000	13.2	< 30	192.3	168.5	30 - 150	Q1
Cypermethrin	0.003	1.802	1.824	2.000	1.2	< 30	89.9	91.0	50 - 150	
Daminozide	0.126	1.905	1.694	2.000	11.8	< 30	89.0	78.4	30 - 150	
Diazinon	0.007	0.428	0.436	0.400	2.0	< 30	105.2	107.3	50 - 150	
Dichlorvos	0.040	1.933	1.846	2.000	4.6	< 30	94.7	90.3	50 - 150	
Dimethoat	0.007	0.365	0.332	0.400	9.4	< 30	89.6	81.3	50 - 150	
Ethoprophos	0.000	0.320	0.275	0.400	15.0	< 30	79.9	68.7	50 - 150	
Etofenprox	0.000	0.872	1.347	0.800	42.8	< 30	109.0	168.4	50 - 150	R,Q1
Etoxazol	0.002	0.398	0.428	0.400	7.4	< 30	98.8	106.5	50 - 150	
Fenoxycarb	0.000	0.397	0.373	0.400	6.3	< 30	99.2	93.1	50 - 150	
Fenpyroximat	0.000	0.763	0.781	0.800	2.3	< 30	95.4	97.7	50 - 150	
Fipronil	0.008	1.036	0.837	0.800	21.3	< 30	128.4	103.6	50 - 150	
Flonicamid	0.006	0.950	0.867	1.000	9.2	< 30	94.4	86.1	50 - 150	
Fludioxonil	0.000	0.509	0.707	0.800	32.7	< 30	63.6	88.4	50 - 150	
Hexythiazox	0.000	1.675	1.662	1.000	0.8	< 30	167.5	166.2	50 - 150	Q1
Imazalil	0.005	0.314	0.303	0.400	3.3	< 30	77.1	74.5	50 - 150	
Imidacloprid	0.002	0.771	0.716	0.800	7.3	< 30	96.1	89.3	50 - 150	
Kresoxim-Methyl	0.000	0.698	0.700	0.800	0.3	< 30	87.3	87.5	50 - 150	
Malathion	0.006	0.431	0.406	0.400	6.0	< 30	106.3	100.0	50 - 150	
Metalaxyl	0.008	0.375	0.367	0.400	2.2	< 30	91.7	89.7	50 - 150	
Methiocarb	0.049	0.375	0.310	0.400	18.8	< 30	81.4	65.3	50 - 150	
Methomyl	0.000	0.673	0.722	0.800	7.1	< 30	84.1	90.3	50 - 150	
MGK 264	0.000	0.393	0.394	0.400	0.3	< 30	98.3	98.5	50 - 150	
Myclobutanil	0.016	0.355	0.383	0.400	7.5	< 30	84.9	91.8	50 - 150	
Naled	0.029	1.020	0.933	1.000	8.8	< 30	99.1	90.4	50 - 150	
Oxamyl	0.000	1.890	1.648	2.000	13.7	< 30	94.5	82.4	50 - 150	
Paclobutrazol	0.030	0.784	0.729	0.800	7.3	< 30	94.3	87.4	50 - 150	
Parathion Methyl	0.000	0.980	0.783	0.800	22.4	< 30	122.4	97.8	30 - 150	
Permethrin	0.015	0.378	0.378	0.400	0.2	< 30	90.7	90.8	50 - 150	
Phosmet	0.007	0.393	0.334	0.400	16.2	< 30	96.5	81.8	50 - 150	
Piperonyl butoxide	0.077	2.068	2.079	2.000	0.5	< 30	99.6	100.1	50 - 150	
Prallethrin	0.064	0.564	0.616	0.400	8.8	< 30	125.1	138.1	50 - 150	
Propiconazole	0.005	0.839	0.807	0.800	3.9	< 30	104.3	100.3	50 - 150	
Propoxur	0.013	0.384	0.325	0.400	16.6	< 30	92.7	78.0	50 - 150	
Pyrethrins	0.003	0.378	0.375	0.413	0.9	< 30	90.9	90.0	50 - 150	
Pyridaben	0.004	0.260	0.258	0.400	0.7	< 30	63.9	63.4	50 - 150	
Spinosad	0.000	0.413	0.418	0.388	1.3	< 30	106.5	107.8	50 - 150	
Spiromesifen	0.037	0.398	0.391	0.400	1.8	< 30	90.5	88.7	50 - 150	
Spirotetramat	0.007	0.354	0.336	0.400	5.3	< 30	86.7	82.1	50 - 150	
Spiroxamine	0.018	0.731	0.713	0.800	2.5	< 30	89.0	86.8	50 - 150	
Tebuconazol	0.000	0.698	0.695	0.800	0.4	< 30	87.3	86.9	50 - 150	
Thiacloprid	0.000	0.374	0.343	0.400	8.5	< 30	93.4	85.8	50 - 150	
Thiamethoxam	0.000	0.372	0.337	0.400	10.0	< 30	93.1	84.3	50 - 150	Ī
Trifloxystrobin	0.000	0.457	0.436	0.400	3.0	< 30	114.1	109.0	50 - 150	





Report Number: 20-010426/D03.R00

Report Date: 10/02/2020 ORELAP#: OR100028

Purchase Order:

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Revision #: 0.00 Control : CFL-D06 Revision Date: 05/31/2019 Effective Date: 05/31/2019

Laboratory Quality Control Results

J AOAC 2015	5 V98-6		Batch ID: 2008087/2008111									
Laboratory C	ontrol Sample											
Analyte	Result	Spike	Units	% Rec	Limits	Evaluation	Notes					
CBDV-A	0.196	0.2	%	98.0	85.0 - 115	Acceptable						
CBDV	0.203	0.2	%	102	85.0 - 115	Acceptable						
CBD-A	0.199	0.2	%	99.6	85.0 - 115	Acceptable						
CBG-A	0.191	0.2	%	95.3	85.0 - 115	Acceptable						
CBG	0.199	0.2	%	99.6	85.0 - 115	Acceptable						
CBD	0.219	0.2	%	110	85.0 - 115	Acceptable						
THCV	0.196	0.2	%	98.0	85.0 - 115	Acceptable						
THCVA	0.178	0.2	%	88.9	85.0 - 115	Acceptable						
CBN	0.199	0.2	%	99.3	85.0 - 115	Acceptable						
THC	0.187	0.2	%	93.5	85.0 - 115	Acceptable						
D8THC	0.196	0.2	%	97.9	85.0 - 115	Acceptable						
CBL	0.183	0.2	%	91.6	85.0 - 115	Acceptable						
CBC	0.201	0.2	%	101	85.0 - 115	Acceptable						
THCA	0.180	0.2	%	89.9	85.0 - 115	Acceptable						
CBCA	0.183	0.2	%	91.6	85.0 - 115	Acceptable						

Method Blank

Analyte	Result	LOQ	Units	Limits	Evaluation	Notes
CBDV-A	<l0q< td=""><td>0.1</td><td>%</td><td>< 0.1</td><td>Acceptable</td><td></td></l0q<>	0.1	%	< 0.1	Acceptable	
CBDV	<l0q< td=""><td>0.1</td><td>%</td><td>< 0.1</td><td>Acceptable</td><td></td></l0q<>	0.1	%	< 0.1	Acceptable	
CBD-A	<l0q< td=""><td>0.1</td><td>%</td><td>< 0.1</td><td>Acceptable</td><td></td></l0q<>	0.1	%	< 0.1	Acceptable	
CBG-A	<loq< td=""><td>0.1</td><td>%</td><td>< 0.1</td><td>Acceptable</td><td></td></loq<>	0.1	%	< 0.1	Acceptable	
CBG	<loq< td=""><td>0.1</td><td>%</td><td>< 0.1</td><td>Acceptable</td><td></td></loq<>	0.1	%	< 0.1	Acceptable	
CBD	<loq< td=""><td>0.1</td><td>%</td><td>< 0.1</td><td>Acceptable</td><td></td></loq<>	0.1	%	< 0.1	Acceptable	
THCV	<loq< td=""><td>0.1</td><td>%</td><td>< 0.1</td><td>Acceptable</td><td></td></loq<>	0.1	%	< 0.1	Acceptable	
THCVA	<loq< td=""><td>0.1</td><td>%</td><td>< 0.1</td><td>Acceptable</td><td></td></loq<>	0.1	%	< 0.1	Acceptable	
CBN	<loq< td=""><td>0.1</td><td>%</td><td>< 0.1</td><td>Acceptable</td><td></td></loq<>	0.1	%	< 0.1	Acceptable	
THC	<loq< td=""><td>0.1</td><td>%</td><td>< 0.1</td><td>Acceptable</td><td></td></loq<>	0.1	%	< 0.1	Acceptable	
D8THC	<l0q< td=""><td>0.1</td><td>%</td><td>< 0.1</td><td>Acceptable</td><td></td></l0q<>	0.1	%	< 0.1	Acceptable	
CBL	<loq< td=""><td>0.1</td><td>%</td><td>< 0.1</td><td>Acceptable</td><td></td></loq<>	0.1	%	< 0.1	Acceptable	
CBC	<loq< td=""><td>0.1</td><td>%</td><td>< 0.1</td><td>Acceptable</td><td></td></loq<>	0.1	%	< 0.1	Acceptable	
THCA	<loq< td=""><td>0.1</td><td>%</td><td>< 0.1</td><td>Acceptable</td><td></td></loq<>	0.1	%	< 0.1	Acceptable	
CBCA	<loq< td=""><td>0.1</td><td>%</td><td>< 0.1</td><td>Acceptable</td><td></td></loq<>	0.1	%	< 0.1	Acceptable	

Abbreviations

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

Units of Measure:

% - Percent





Report Number: 20-010426/D03.R00

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Revision #: 0.00 Control : CFL-D06 Revision Date: 05/31/2019 Effective Date: 05/31/2019

Laboratory Quality Control Results

J AOAC 2015	V98-6			Batch ID: 2008087/2008111						
Sample Dupli	cate				Samı	ole ID: 20-0103	25-0001			
Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes		
CBDV-A	<loq< td=""><td><loq< td=""><td>0.1</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.1</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.1	%	NA	< 20	Acceptable			
CBDV	0.147	0.147	0.1	%	0.188	< 20	Acceptable			
CBD-A	<loq< td=""><td><loq< td=""><td>0.1</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.1</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.1	%	NA	< 20	Acceptable			
CBG-A	<loq< td=""><td><loq< td=""><td>0.1</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.1</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.1	%	NA	< 20	Acceptable			
CBG	<loq< td=""><td><loq< td=""><td>0.1</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.1</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.1	%	NA	< 20	Acceptable			
CBD	36.4	36.5	0.1	%	0.357	< 20	Acceptable			
THCV	<loq< td=""><td><loq< td=""><td>0.1</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.1</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.1	%	NA	< 20	Acceptable			
THCVA	<loq< td=""><td><loq< td=""><td>0.1</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.1</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.1	%	NA	< 20	Acceptable			
CBN	0.210	0.210	0.1	%	0.0903	< 20	Acceptable			
THC	<loq< td=""><td><loq< td=""><td>0.1</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.1</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.1	%	NA	< 20	Acceptable			
D8THC	<loq< td=""><td><loq< td=""><td>0.1</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.1</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.1	%	NA	< 20	Acceptable			
CBL	<loq< td=""><td><loq< td=""><td>0.1</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.1</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.1	%	NA	< 20	Acceptable			
CBC	0.294	0.294	0.1	%	0.131	< 20	Acceptable			
THCA	<loq< td=""><td><loq< td=""><td>0.1</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.1</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.1	%	NA	< 20	Acceptable			
CBCA	<loq< td=""><td><loq< td=""><td>0.1</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.1</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.1	%	NA	< 20	Acceptable			

Abbreviations

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

NA - Calculation Not Applicable given non-numerical results

Units of Measure:

% - Percent





20-010426/D03.R00 **Report Number:**

Report Date: 10/02/2020 ORELAP#: OR100028

Purchase Order:

Received: 09/28/20 10:35

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.
В	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.