Columbia LABORATORIES
A Tentamus Company

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

Report Number: 23-010570/D003.R000
Report Date: 09/13/2023
ORELAP#: OR100028
Purchase Order:
Received: 09/06/23 11:15

Customer: Whole Leaf Health, LLC
Product identity: CBDPure 300, Batch #0723T401
Client/Metrc ID: .
Laboratory ID: 23-010570-0001

Summary

Potency:

Analyte	Result	Limits	Units	Status
CBC	0.00984		%	
CBD	0.582		%	
CBD-A	0.00725		%	
CBDV	0.00455		%	
CBG	0.00538		%	
Δ9-THC	0.0201		%	

Analyte per 60ml	Result	Limits	Units	Status
CBC per 60ml	5.43		mg/60ml	
CBD per 60ml	321		mg/60ml	
CBD-A per 60ml	4.00		mg/60ml	
CBDV per 60ml	2.51		mg/60ml	
CBG per 60ml	2.97		mg/60ml	
Δ9-THC per 60ml	11.1		mg/60ml	

CBD-Total per Serving Size 325 mg/60ml

THC-Total per Serving Size 11.1 mg/60ml

(Reported in milligrams per serving)

Residual Solvents:

All analytes passing and less than LOQ.

Pesticides:

All analytes passing and less than LOQ.

Terpenes:

Less than LOQ for all analytes.

Metals:

Less than LOQ for all analytes.

Microbiology:

Less than LOQ for all analytes.

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Customer: Whole Leaf Health, LLC
2621 NE 134th St, Suite 200
Vancouver Washington 98686
United States of America (USA)

Product identity: CBDPure 300, Batch #0723T401
Client/Metrc ID: .
Sample Date:
Laboratory ID: 23-010570-0001
Evidence of Cooling: No
Temp: 21.9 °C
Relinquished by: client
Serving Size #1: 55.2 g
Density: 0.9200 g/ml

Sample Results

Potency **Method:** J AOAC 2015 V98-6 (mod)[þ] **Units** % **Batch:** 2310760 **Analyze:** 9/8/23 11:13:00 PM

Analyte	Result	Limits	Units	LOQ	Notes
CBC	0.00984		%	0.00322	
CBC-A	< LOQ		%	0.00322	
CBC-Total	0.00984		%	0.00605	
CBD	0.582		%	0.00322	
CBD-A	0.00725		%	0.00322	
CBD-Total	0.588		%	0.00605	
CBDV	0.00455		%	0.00322	
CBDV-A	< LOQ		%	0.00322	
CBDV-Total	< LOQ		%	0.00601	
CBE	< LOQ		%	0.00322	
CBG	0.00538		%	0.00322	
CBG-A	< LOQ		%	0.00322	
CBG-Total	< LOQ		%	0.00601	
CBL	< LOQ		%	0.00322	
CBL-A	< LOQ		%	0.00322	
CBL-Total	< LOQ		%	0.00605	
CBN	< LOQ		%	0.00322	
CBT	< LOQ		%	0.00322	
Δ8-THCV	< LOQ		%	0.00322	
Δ10-THC-9R	< LOQ		%	0.00322	
Δ10-THC-9S	< LOQ		%	0.00322	
Δ10-THC-Total	< LOQ		%	0.00644	
Δ8-THC	< LOQ		%	0.00322	
Δ9-THC	0.0201		%	0.00322	
delta-9-THCP	< LOQ		%	0.00322	
exo-THC	< LOQ		%	0.00322	
THC-A	< LOQ		%	0.00322	
THC-Total	0.0201		%	0.00605	
THCV	< LOQ		%	0.00322	

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Potency	**Method:** J AOAC 2015 V98-6 (mod)þ		**Units** %	**Batch:** 2310760	**Analyze:** 9/8/23 11:13:00 PM
Analyte	**Result**	**Limits**	**Units**	**LOQ**	**Notes**
THCV-A	< LOQ		%	0.00322	
THCV-Total	< LOQ		%	0.00601	
Total Cannabinoids	**0.629**		%		

Potency per 60ml	**Method:** J AOAC 2015 V98-6 (mod)þ		**Units** mg/se	**Batch:** 2310760	**Analyze:** 9/8/23 11:13:00 PM
Analyte	**Result**	**Limits**	**Units**	**LOQ**	**Notes**
CBC per 60ml	5.43		mg/60ml	1.78	
CBC-A per 60ml	< LOQ		mg/60ml	1.78	
CBC-Total per 60ml	5.43		mg/60ml	3.34	
CBD per 60ml	321		mg/60ml	1.78	
CBD-A per 60ml	4.00		mg/60ml	1.78	
CBD-Total per 60ml	325		mg/60ml	3.34	
CBDV per 60ml	2.51		mg/60ml	1.78	
CBDV-A per 60ml	< LOQ		mg/60ml	1.78	
CBDV-Total per 60ml	< LOQ		mg/60ml	3.32	
CBE per 60ml	< LOQ		mg/60ml	1.78	
CBG per 60ml	2.97		mg/60ml	1.78	
CBG-A per 60ml	< LOQ		mg/60ml	1.78	
CBG-Total per 60ml	< LOQ		mg/60ml	3.32	
CBL per 60ml	< LOQ		mg/60ml	1.78	
CBL-A per 60ml	< LOQ		mg/60ml	1.78	
CBL-Total per 60ml	< LOQ		mg/60ml	3.34	
CBN per 60ml	< LOQ		mg/60ml	1.78	
CBT per 60ml	< LOQ		mg/60ml	1.78	
Δ8-THCV per 60ml	< LOQ		mg/60ml	1.78	
Δ10-THC-9R per 60ml	< LOQ		mg/60ml	1.78	
Δ10-THC-9S per 60ml	< LOQ		mg/60ml	1.78	
Δ10-THC-Total per 60ml	< LOQ		mg/60ml	3.56	
Δ8-THC per 60ml	< LOQ		mg/60ml	1.78	
Δ9-THC per 60ml	11.1		mg/60ml	1.78	
delta-9-THCP per 60ml	< LOQ		mg/60ml	1.78	
exo-THC per 60ml	< LOQ		mg/60ml	1.78	
THC-A per 60ml	< LOQ		mg/60ml	1.78	
THC-Total per 60ml	11.1		mg/60ml	3.34	
THCV per 60ml	< LOQ		mg/60ml	1.78	
THCV-A per 60ml	< LOQ		mg/60ml	1.78	
THCV-Total per 60ml	< LOQ		mg/60ml	3.34	
Total Cannabinoids per 60ml	347		mg/60ml		

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Microbiology

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed	Method	Status	Notes
Aerobic Plate Count	< LOQ		cfu/g	10	2310667	09/09/23	AOAC 990.12 (Petrifilm)þ		
E.coli	< LOQ		cfu/g	10	2310664	09/09/23	AOAC 991.14 (Petrifilm)þ		
Total Coliforms	< LOQ		cfu/g	10	2310664	09/09/23	AOAC 991.14 (Petrifilm)þ		
Staphylococcus aureus	< LOQ		cfu/g	10	2310669	09/08/23	AOAC 2003.07		
Mold (RAPID Petrifilm)	< LOQ		cfu/g	10	2310666	09/09/23	AOAC 2014.05 (RAPID)þ		
Yeast (RAPID Petrifilm)	< LOQ		cfu/g	10	2310666	09/09/23	AOAC 2014.05 (RAPID)þ		
E. coli, O157:H7 (by PCR)	Negative		/25g		2310672	09/08/23	AOAC 2019.03þ		
Listeria spp.	Negative		/25g		2310673	09/08/23	AOAC 2019.10		
Salmonella spp. by PCR¥	Negative		/25g		2310671	09/08/23	AOAC 2020.02þ		

Solvents

Method: Residual Solvents by GC/MSþ **Units** µg/g **Batch** 2310772 **Analyze** 09/11/23 01:41 PM

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 (Isopentane)	< LOQ		200		
2-Methylpentane	< LOQ		30.0			2-Propanol (IPA)	< LOQ	5000	200	pass	
2,2-Dimethylbutane	< LOQ		30.0			2,2-Dimethylpropane (neo-pentane)	< 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	20.0	pass	
Hexanes (sum)	< LOQ	290	150	pass		Isopropyl acetate	< LOQ	5000	200	pass	
Isopropylbenzene (Cumene)	< LOQ	70.0	30.0	pass		m,p-Xylene	< LOQ		200		
Methanol	< LOQ	3000	200	pass		Methylene chloride	< LOQ	600	60.0	pass	
Methylpropane (Isobutane)	< 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 benzene	< LOQ	2170	600	pass	

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Pesticides **Method:** AOAC 2007.01 & EN 15662 (mod)þ **Units** mg/kg **Batch** 2310697 **Analyze** 09/08/23 07:40 AM

Analyte	Result	Limits	LOQ	Status	Notes	Analyte	Result	Limits	LOQ	Status	Notes
Abamectin¥	< LOQ	0.50	0.250	pass		Acephate¥	< LOQ	0.40	0.200	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	0.100	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	0.100	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							

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Terpenes

Method: J AOAC 2015 V98-6 **Units** % **Batch** 2310752 **Analyze** 09/08/23 08:29 AM

Analyte	Result	LOQ	% of Total	Notes	Analyte	Result	LOQ	% of Total	Notes
farnesene	< LOQ	0.018	0.00%		a-cedrene	< LOQ	0.018	0.00%	
Geraniol	< LOQ	0.018	0.00%		a-Bisabolol	< LOQ	0.018	0.00%	
ß-Caryophyllene	< LOQ	0.018	0.00%		(±)-trans-Nerolidol	< LOQ	0.018	0.00%	
Humulene	< LOQ	0.018	0.00%		nerol	< LOQ	0.018	0.00%	
valencene	< LOQ	0.018	0.00%		gamma-Terpinene	< LOQ	0.018	0.00%	
(±)-cis-Nerolidol	< LOQ	0.018	0.00%		(+)-Pulegone	< LOQ	0.018	0.00%	
trans-ß-Ocimene	< LOQ	0.012	0.00%		Sabinene hydrate	< LOQ	0.018	0.00%	
cis-ß-Ocimene	< LOQ	0.006	0.00%		(-)-caryophyllene oxide	< LOQ	0.018	0.00%	
(-)-a-Terpineol	< LOQ	0.018	0.00%		(-)-Guaiol	< LOQ	0.018	0.00%	
(-)-Isopulegol	< LOQ	0.018	0.00%		(-)-ß-Pinene	< LOQ	0.018	0.00%	
(+)-Borneol	< LOQ	0.018	0.00%		(+)-Cedrol	< LOQ	0.018	0.00%	
(+)-fenchol	< LOQ	0.018	0.00%		(±)-Camphor	< LOQ	0.018	0.00%	
(±)-fenchone	< LOQ	0.018	0.00%		(R)-(+)-Limonene	< LOQ	0.018	0.00%	
a-phellandrene	< LOQ	0.018	0.00%		a-pinene	< LOQ	0.018	0.00%	
a-Terpinene	< LOQ	0.018	0.00%		Camphene	< LOQ	0.018	0.00%	
d-3-Carene	< LOQ	0.018	0.00%		Eucalyptol	< LOQ	0.018	0.00%	
Geranyl acetate	< LOQ	0.018	0.00%		Isoborneol	< LOQ	0.018	0.00%	
Linalool	< LOQ	0.018	0.00%		Menthol	< LOQ	0.018	0.00%	
p-Cymene	< LOQ	0.018	0.00%		Sabinene	< LOQ	0.018	0.00%	
ß-Myrcene	< LOQ	0.018	0.00%		Terpinolene	< LOQ	0.018	0.00%	
Total Terpenes	**< LOQ**								

Metals

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed	Method	Status	Notes
Arsenic¥	< LOQ	0.200	mg/kg	0.0901	2310792	09/11/23	AOAC 2013.06 (mod.)þ	pass	
Cadmium¥	< LOQ	0.200	mg/kg	0.0901	2310792	09/11/23	AOAC 2013.06 (mod.)þ	pass	
Lead¥	< LOQ	0.500	mg/kg	0.0901	2310792	09/11/23	AOAC 2013.06 (mod.)þ	pass	
Mercury¥	< LOQ	0.100	mg/kg	0.0450	2310792	09/11/23	AOAC 2013.06 (mod.)þ	pass	

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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.

ᵇ = ISO/IEC 17025:2017 accredited method.
¥ = TNI accredited analyte.

Units of Measure

/25g = Per 25g
cfu/g = Colony forming units per gram
g = g
g/ml = Gram per milliliter
µg/g = Microgram per gram
mg/kg = Milligram per kilogram = parts per million (ppm)
mg/60ml = Milligram per 60ml
% = Percentage of sample
% wt = µg/g divided by 10,000

Approved Signatory

Derrick Tanner
General Manager

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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:** 2310697

Method Blank				Laboratory Control Sample					
Analyte	**Blank Result**	**Blank Limits**	**Notes**	**LCS Result**	**LCS Spike**	**LCS % Rec**	**Limits**		**Notes**
Abamectin	0.000	< 0.250		0.920	1.000	92.0	50.0	150	
Acephate	0.016	< 0.200		0.736	0.800	92.1	60.0	120	
Acequinocyl	0.000	< 1.000		3.785	4.000	94.6	40.0	160	
Acetamiprid	0.001	< 0.100		0.369	0.400	92.3	60.0	120	
Aldicarb	0.000	< 0.200		0.816	0.800	102.0	60.0	120	
Azoxystrobin	0.004	< 0.100		0.362	0.400	90.5	60.0	120	
Bifenazate	0.000	< 0.100		0.394	0.400	98.6	60.0	120	
Bifenthrin	0.000	< 0.100		0.359	0.400	89.8	50.0	150	
Boscalid	0.000	< 0.200		0.748	0.800	93.5	60.0	120	
Carbaryl	0.001	< 0.100		0.375	0.400	93.7	60.0	120	
Carbofuran	0.000	< 0.100		0.369	0.400	92.3	60.0	120	
Chlorantraniliprole	0.000	< 0.100		0.379	0.400	94.8	60.0	120	
Chlorfenapyr	0.000	< 0.500		1.688	2.000	84.4	60.0	120	
Chlorpyrifos	0.005	< 0.100		0.369	0.400	92.2	60.0	120	
Clofentezine	0.000	< 0.100		0.351	0.400	87.9	60.0	120	
Cyfluthrin	0.000	< 0.500		1.896	2.000	94.8	50.0	150	
Cypermethrin	0.000	< 0.500		1.901	2.000	95.0	50.0	150	
Daminozide	0.024	< 0.500		0.874	2.000	***43.7***	60.0	120	**Q6**
Diazinon	0.000	< 0.100		0.408	0.400	102.1	60.0	120	
Dichlorvos	0.000	< 0.500		1.858	2.000	92.9	60.0	120	
Dimethoate	0.000	< 0.100		0.370	0.400	92.6	60.0	120	
Ethoprophos	0.000	< 0.100		0.374	0.400	93.5	60.0	120	
Etofenprox	0.004	< 0.200		0.725	0.800	90.7	50.0	150	
Etoxazole	0.006	< 0.100		0.413	0.400	103.3	60.0	120	
Fenoxycarb	0.000	< 0.100		0.366	0.400	91.5	60.0	120	
Fenpyroximate	0.000	< 0.200		0.770	0.800	96.3	60.0	120	
Fipronil	0.000	< 0.200		0.726	0.800	90.8	60.0	120	
Flonicamid	0.000	< 0.250		0.923	1.000	92.3	60.0	120	
Fludioxonil	0.000	< 0.200		0.742	0.800	92.7	50.0	150	
Hexythiazox	0.006	< 0.250		0.929	1.000	92.9	60.0	120	
Imazalil	0.009	< 0.100		0.371	0.400	92.7	60.0	120	
Imidacloprid	0.000	< 0.200		0.751	0.800	93.9	60.0	120	
Kresoxim-methyl	0.000	< 0.200		0.768	0.800	95.9	60.0	120	
Malathion	0.000	< 0.100		0.371	0.400	92.8	60.0	120	
Metalaxyl	0.004	< 0.100		0.373	0.400	93.3	60.0	120	
Methiocarb	0.000	< 0.100		0.368	0.400	91.9	60.0	120	
Methomyl	0.000	< 0.200		0.739	0.800	92.4	60.0	120	
MGK-264	0.002	< 0.100		0.377	0.400	94.2	50.0	150	
Myclobutanil	0.000	< 0.100		0.376	0.400	94.1	60.0	120	
Naled	0.000	< 0.250		0.889	1.000	88.9	50.0	150	
Oxamyl	0.000	< 0.500		1.900	2.000	95.0	60.0	120	
Paclobutrazole	0.000	< 0.200		0.746	0.800	93.2	60.0	120	
Parathion-Methyl	0.000	< 0.100		0.329	0.400	82.2	50.0	150	
Permethrin	0.000	< 0.100		0.377	0.400	94.2	50.0	150	
Phosmet	0.000	< 0.100		0.378	0.400	94.6	50.0	150	
Piperonyl butoxide	0.000	< 0.500		1.889	2.000	94.4	60.0	120	
Prallethrin	0.000	< 0.100		0.397	0.400	99.1	60.0	120	
Propiconazole	0.000	< 0.200		0.725	0.800	90.7	60.0	120	
Propoxur	0.002	< 0.100		0.361	0.400	90.4	60.0	120	
Pyrethrin (Summe)	0.003	< 0.100		0.462	0.488	94.6	60.0	120	
Pyridaben	0.002	< 0.100		0.377	0.400	94.3	50.0	150	
Spinosad	0.000	< 0.100		0.359	0.388	92.6	50.0	150	
Spiromesifen	0.000	< 0.100		0.374	0.400	93.4	60.0	120	
Spirotetramat	0.001	< 0.100		0.379	0.400	94.7	60.0	120	
Spiroxamine	0.007	< 0.200		0.736	0.800	92.0	60.0	120	
Tebuconazole	0.000	< 0.200		0.725	0.800	90.7	60.0	120	
Thiacloprid	0.000	< 0.100		0.376	0.400	94.1	60.0	120	
Thiamethoxam	0.000	< 0.100		0.365	0.400	91.3	60.0	120	
Trifloxystrobin	0.000	< 0.100		0.365	0.400	91.3	60.0	120	

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Laboratory Pesticide Quality Control Results

AOAC 2007.1 & EN 15662 **Units:** mg/Kg **Batch ID:** 2310697

Matrix Spike/Matrix Spike Duplicate Recoveries **Sample ID: 23-010539-0001**

Analyte	Result	MS Res	MSD Res	Spike	RPD%	Limit	MS % Rec	MSD % Rec	Limits	Notes
Abamectin	0.000	0.967	0.973	1.000	0.6%	< 30	96.7%	97.3%	50 - 150	
Acephate	0.018	0.764	0.734	0.800	4.1%	< 30	93.2%	89.4%	50 - 150	
Acequinocyl	0.000	3.265	4.912	4.000	40.3%	< 30	81.6%	122.8%	50 - 150	R
Acetamiprid	0.001	0.395	0.396	0.400	0.2%	< 30	98.5%	98.8%	50 - 150	
Aldicarb	0.000	0.814	0.815	0.800	0.1%	< 30	101.7%	101.8%	50 - 150	
Azoxystrobin	0.003	0.387	0.378	0.400	2.4%	< 30	96.0%	93.8%	50 - 150	
Bifenazate	0.000	0.405	0.397	0.400	2.1%	< 30	101.4%	99.3%	50 - 150	
Bifenthrin	0.000	0.376	0.402	0.400	6.6%	< 30	94.0%	100.4%	50 - 150	
Boscalid	0.000	0.726	0.746	0.800	2.7%	< 30	90.7%	93.2%	50 - 150	
Carbaryl	0.000	0.383	0.385	0.400	0.4%	< 30	95.8%	96.2%	50 - 150	
Carbofuran	0.005	0.376	0.372	0.400	1.0%	< 30	92.7%	91.8%	50 - 150	
Chlorantraniliprole	0.000	0.382	0.391	0.400	2.3%	< 30	95.6%	97.7%	50 - 150	
Chlorfenapyr	0.000	1.957	1.977	2.000	1.0%	< 30	97.9%	98.9%	50 - 150	
Chlorpyrifos	0.006	0.353	0.350	0.400	0.9%	< 30	86.9%	86.1%	50 - 150	
Clofentezine	0.000	0.299	0.311	0.400	4.0%	< 30	74.7%	77.8%	50 - 150	
Cyfluthrin	0.000	1.986	1.926	2.000	3.1%	< 30	99.3%	96.3%	30 - 150	
Cypermethrin	0.000	1.827	1.912	2.000	4.5%	< 30	91.4%	95.6%	50 - 150	
Daminozide	0.034	0.847	0.817	2.000	3.7%	< 30	40.7%	39.2%	30 - 150	
Diazinon	0.000	0.416	0.428	0.400	2.9%	< 30	103.9%	107.0%	50 - 150	
Dichlorvos	0.000	1.946	1.929	2.000	0.9%	< 30	97.3%	96.5%	50 - 150	
Dimethoate	0.001	0.382	0.378	0.400	1.0%	< 30	95.3%	94.3%	50 - 150	
Ethoprophos	0.000	0.375	0.385	0.400	2.7%	< 30	93.8%	96.4%	50 - 150	
Etofenprox	0.004	0.736	0.770	0.800	4.6%	< 30	91.5%	95.8%	50 - 150	
Etoxazole	0.006	0.410	0.427	0.400	4.0%	< 30	101.1%	105.2%	50 - 150	
Fenoxycarb	0.000	0.372	0.385	0.400	3.5%	< 30	92.9%	96.2%	50 - 150	
Fenpyroximate	0.000	0.772	0.799	0.800	3.5%	< 30	96.5%	99.9%	50 - 150	
Fipronil	0.000	0.733	0.757	0.800	3.2%	< 30	91.6%	94.6%	50 - 150	
Flonicamid	0.000	0.939	0.922	1.000	1.9%	< 30	93.9%	92.2%	50 - 150	
Fludioxonil	0.000	0.777	0.790	0.800	1.6%	< 30	97.2%	98.8%	50 - 150	
Hexythiazox	0.006	1.308	1.325	1.000	1.3%	< 30	130.3%	131.9%	50 - 150	
Imazalil	0.009	0.381	0.383	0.400	0.6%	< 30	92.8%	93.4%	50 - 150	
Imidacloprid	0.000	0.764	0.749	0.800	1.9%	< 30	95.4%	93.7%	50 - 150	
Kresoxim-methyl	0.000	0.791	0.780	0.800	1.4%	< 30	98.9%	97.5%	50 - 150	
Malathion	0.000	0.384	0.385	0.400	0.2%	< 30	96.1%	96.2%	50 - 150	
Metalaxyl	0.004	0.368	0.376	0.400	2.3%	< 30	91.0%	93.1%	50 - 150	
Methiocarb	0.000	0.385	0.381	0.400	1.0%	< 30	96.3%	95.3%	50 - 150	
Methomyl	0.000	0.744	0.729	0.800	1.9%	< 30	93.0%	91.2%	50 - 150	
MGK-264	0.000	0.388	0.393	0.400	1.4%	< 30	96.9%	98.3%	50 - 150	
Myclobutanil	0.000	0.368	0.361	0.400	1.7%	< 30	91.9%	90.4%	50 - 150	
Naled	0.000	0.917	0.977	1.000	6.3%	< 30	91.7%	97.7%	50 - 150	
Oxamyl	0.000	1.925	1.871	2.000	2.9%	< 30	96.3%	93.5%	50 - 150	
Paclobutrazole	0.000	0.770	0.738	0.800	4.3%	< 30	96.3%	92.2%	50 - 150	
Parathion-Methyl	0.000	0.366	0.409	0.400	11.2%	< 30	91.4%	102.3%	30 - 150	
Permethrin	0.000	0.360	0.379	0.400	5.3%	< 30	90.0%	94.9%	50 - 150	
Phosmet	0.000	0.390	0.394	0.400	0.9%	< 30	97.5%	98.4%	50 - 150	
Piperonyl butoxide	0.000	1.873	1.882	2.000	0.5%	< 30	93.7%	94.1%	50 - 150	
Prallethrin	0.000	0.376	0.378	0.400	0.6%	< 30	94.0%	94.6%	50 - 150	
Propiconazole	0.000	0.761	0.756	0.800	0.7%	< 30	95.2%	94.5%	50 - 150	
Propoxur	0.002	0.374	0.365	0.400	2.3%	< 30	92.9%	90.8%	50 - 150	
Pyrethrin (Summe)	0.001	0.465	0.475	0.488	2.2%	< 30	95.0%	97.1%	50 - 150	
Pyridaben	0.002	0.409	0.413	0.400	0.8%	< 30	101.8%	102.7%	50 - 150	
Spinosad	0.000	0.363	0.374	0.388	3.1%	< 30	93.5%	96.4%	50 - 150	
Spiromesifen	0.000	0.381	0.377	0.400	1.0%	< 30	95.3%	94.3%	50 - 150	
Spirotetramat	0.000	0.378	0.385	0.400	1.9%	< 30	94.5%	96.3%	50 - 150	
Spiroxamine	0.000	0.739	0.743	0.800	0.6%	< 30	92.3%	92.9%	50 - 150	
Tebuconazole	0.000	0.726	0.752	0.800	3.6%	< 30	90.8%	94.1%	50 - 150	
Thiacloprid	0.002	0.375	0.383	0.400	2.2%	< 30	93.3%	95.4%	50 - 150	
Thiamethoxam	0.000	0.384	0.363	0.400	5.7%	< 30	96.0%	90.7%	50 - 150	
Trifloxystrobin	0.000	0.381	0.381	0.400	0.1%	< 30	95.3%	95.2%	50 - 150	

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Terpenes Quality Control Results

Method Reference: EPA 5035 **Batch ID:** 2310752

Method Blank					Laboratory Control Sample					
Analyte	**Result**	**LOQ**		**Notes**	**Result**	**LCS**	**Units**	**LCS % Rec**	**Limits**	**Notes**
a-pinene	<LOQ	<	200		422	500	µg/g	***84%***	70 - 130	
Camphene	<LOQ	<	200		517	500	µg/g	***103%***	70 - 130	
Sabinene	<LOQ	<	200		416	500	µg/g	***83%***	70 - 130	
b-Pinene	<LOQ	<	200		417	500	µg/g	***83%***	70 - 130	
b-Myrcene	<LOQ	<	200		544	500	µg/g	***109%***	70 - 130	
a-phelllandrene	<LOQ	<	200		555	500	µg/g	***111%***	70 - 130	
d-3-Carene	<LOQ	<	200		530	500	µg/g	***106%***	70 - 130	
a-Terpinene	<LOQ	<	200		435	500	µg/g	***87%***	70 - 130	
p-Cymene	<LOQ	<	200		538	500	µg/g	***108%***	70 - 130	
D-Limonene	<LOQ	<	200		448	500	µg/g	***90%***	70 - 130	
Eucalyptol	<LOQ	<	200		552	500	µg/g	***110%***	70 - 130	
b-cis-Ocimene	<LOQ	<	67		186	167	µg/g	***111%***	70 - 130	
b-trans-Ocimene	<LOQ	<	133		375	333	µg/g	***113%***	70 - 130	
g-Terpinene	<LOQ	<	200		450	500	µg/g	***90%***	70 - 130	
Sabinene_Hydrate	<LOQ	<	200		434	500	µg/g	***87%***	70 - 130	
Terpinolene	<LOQ	<	200		442	500	µg/g	***88%***	70 - 130	
D-Fenchone	<LOQ	<	200		426	500	µg/g	***85%***	70 - 130	
Linalool	<LOQ	<	200		642	500	µg/g	***128%***	70 - 130	
Fenchol	<LOQ	<	200		461	500	µg/g	***92%***	70 - 130	
Camphor	<LOQ	<	200		557	500	µg/g	***111%***	70 - 130	
Isopulego	<LOQ	<	200		591	500	µg/g	***118%***	70 - 130	
Isoborneol	<LOQ	<	200		592	500	µg/g	***118%***	70 - 130	
Borneol	<LOQ	<	200		449	500	µg/g	***90%***	70 - 130	
DL-Menthol	<LOQ	<	200		620	500	µg/g	***124%***	70 - 130	
Terpineol	<LOQ	<	200		459	500	µg/g	***92%***	70 - 130	
Nerol	<LOQ	<	200		564	500	µg/g	***113%***	70 - 130	
Pulegone	<LOQ	<	200		480	500	µg/g	***96%***	70 - 130	
Gereniol	<LOQ	<	200		483	500	µg/g	***97%***	70 - 130	
Geranyl_Acetate	<LOQ	<	200		571	500	µg/g	***114%***	70 - 130	
a-Cedrene	<LOQ	<	200		425	500	µg/g	***85%***	70 - 130	
b-Caryophyllene	<LOQ	<	200		570	500	µg/g	***114%***	70 - 130	
a-Humulene	<LOQ	<	200		478	500	µg/g	***96%***	70 - 130	
Valenene	<LOQ	<	200		543	500	µg/g	***109%***	70 - 130	
cis-Nerolidol	<LOQ	<	200		613	500	µg/g	***123%***	70 - 130	
a-Farnesene	<LOQ	<	200		640	500	µg/g	***128%***	70 - 130	
trans-Nerolidol	<LOQ	<	200		479	500	µg/g	***96%***	70 - 130	
Caryophyllene_Oxide	<LOQ	<	200		585	500	µg/g	***117%***	70 - 130	
Guaiol	<LOQ	<	200		468	500	µg/g	***94%***	70 - 130	
Cedrol	<LOQ	<	200		625	500	µg/g	***125%***	70 - 130	
a-Bisabolol	<LOQ	<	200		626	500	µg/g	***125%***	70 - 130	

Definitions

LOQ	Limit of Quantitation
LCS	Laboratory Control Sample
% REC	Percent Recovery

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Terpenes Quality Control Results

Method Reference: EPA 5035 **Batch ID:** 2310752

Sample/Sample Duplicate **Sample ID: 23-009990-0001**

Analyte	Result	Org. Result	LOQ	Units	% RPD	LIMIT	Notes
a-pinene	<LOQ	<LOQ	194	µg/g	0%	< 20	
Camphene	<LOQ	<LOQ	194	µg/g	0%	< 20	
Sabinene	<LOQ	<LOQ	194	µg/g	0%	< 20	
b-Pinene	<LOQ	<LOQ	194	µg/g	0%	< 20	
b-Myrcene	<LOQ	<LOQ	194	µg/g	0%	< 20	
a-phelllandrene	<LOQ	<LOQ	194	µg/g	0%	< 20	
d-3-Carene	<LOQ	<LOQ	194	µg/g	0%	< 20	
a-Terpinene	<LOQ	<LOQ	194	µg/g	0%	< 20	
p-Cymene	<LOQ	<LOQ	194	µg/g	0%	< 20	
D-Limonene	<LOQ	<LOQ	194	µg/g	0%	< 20	
Eucalyptol	<LOQ	<LOQ	194	µg/g	0%	< 20	
b-cis-Ocimene	<LOQ	<LOQ	64.8	µg/g	0%	< 20	
b-trans-Ocimene	<LOQ	<LOQ	130	µg/g	0%	< 20	
g-Terpinene	<LOQ	<LOQ	194	µg/g	0%	< 20	
Sabinene_Hydrate	<LOQ	<LOQ	194	µg/g	0%	< 20	
Terpinolene	<LOQ	<LOQ	194	µg/g	0%	< 20	
D-Fenchone	<LOQ	<LOQ	194	µg/g	0%	< 20	
Linalool	<LOQ	<LOQ	194	µg/g	0%	< 20	
Fenchol	<LOQ	<LOQ	194	µg/g	0%	< 20	
Camphor	<LOQ	<LOQ	194	µg/g	0%	< 20	
Isopulego	<LOQ	<LOQ	194	µg/g	0%	< 20	
Isoborneol	<LOQ	<LOQ	194	µg/g	0%	< 20	
Borneol	<LOQ	<LOQ	194	µg/g	0%	< 20	
DL-Menthol	<LOQ	<LOQ	194	µg/g	0%	< 20	
Terpineol	<LOQ	<LOQ	194	µg/g	0%	< 20	
Nerol	<LOQ	<LOQ	194	µg/g	0%	< 20	
Pulegone	<LOQ	<LOQ	194	µg/g	0%	< 20	
Gereniol	<LOQ	<LOQ	194	µg/g	0%	< 20	
Geranyl_Acetate	<LOQ	<LOQ	194	µg/g	0%	< 20	
a-Cedrene	<LOQ	<LOQ	194	µg/g	0%	< 20	
b-Caryophyllene	594	599	194	µg/g	1%	< 20	
a-Humulene	229	233	194	µg/g	2%	< 20	
Valenene	<LOQ	<LOQ	194	µg/g	0%	< 20	
cis-Nerolidol	<LOQ	<LOQ	194	µg/g	0%	< 20	
a-Farnesene	<LOQ	<LOQ	194	µg/g	0%	< 20	
trans-Nerolidol	<LOQ	<LOQ	194	µg/g	0%	< 20	
Caryophyllene_Oxide	432	436	194	µg/g	1%	< 20	
Guaiol	318	324	194	µg/g	2%	< 20	
Cedrol	<LOQ	<LOQ	194	µg/g	0%	< 20	
a-Bisabolol	200	202	194	µg/g	1%	< 20	

Definitions

RPD Relative Percent Difference

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Laboratory Quality Control Results

J AOAC 2015 V98-6 **Batch ID: 2310760**

Laboratory Control Sample

Analyte	LCS	Result	Spike	Units	% Rec	Limits	Evaluation	Notes
CBDVA	2	0.0312	0.0309	%	101	80.0 - 120	Acceptable	
CBDV	2	0.0288	0.0313	%	92.1	80.0 - 120	Acceptable	
CBE	2	0.0336	0.0329	%	102	80.0 - 120	Acceptable	
CBDA	1	0.0336	0.0338	%	99.4	90.0 - 110	Acceptable	
CBGA	1	0.0370	0.0343	%	108	80.0 - 120	Acceptable	
CBG	1	0.0387	0.0363	%	106	80.0 - 120	Acceptable	
CBD	1	0.0363	0.0351	%	103	90.0 - 110	Acceptable	
THCV	2	0.0198	0.0200	%	99.0	80.0 - 120	Acceptable	
d8THCV	2	0.0299	0.0276	%	108	80.0 - 120	Acceptable	
THCVA	2	0.0319	0.0307	%	104	80.0 - 120	Acceptable	
CBN	1	0.0375	0.0343	%	109	80.0 - 120	Acceptable	
exo-THC	2	0.0314	0.0302	%	104	80.0 - 120	Acceptable	
d9THC	1	0.0363	0.0355	%	102	90.0 - 110	Acceptable	
d8THC	1	0.0397	0.0364	%	109	90.0 - 110	Acceptable	
9S-d10THC	1	0.0378	0.0354	%	107	80.0 - 120	Acceptable	
CBL	2	0.0313	0.0311	%	100	80.0 - 120	Acceptable	
9R-d10THC	1	0.0124	0.0115	%	108	80.0 - 120	Acceptable	
CBC	2	0.0349	0.0335	%	104	80.0 - 120	Acceptable	
THCA	1	0.0368	0.0344	%	107	90.0 - 110	Acceptable	
CBCA	2	0.0343	0.0319	%	107	80.0 - 120	Acceptable	
CBLA	2	0.0693	0.0647	%	107	80.0 - 120	Acceptable	
d9THCP	2	0.0312	0.0316	%	98.5	80.0 - 120	Acceptable	
CBT	2	0.0327	0.0308	%	106	80.0 - 120	Acceptable	

Method Blank

Analyte	Result	LOQ	Units	Limits	Evaluation	Notes
CBDVA	<LOQ	0.00326	%	< 0.00326	Acceptable	
CBDV	<LOQ	0.00326	%	< 0.00326	Acceptable	
CBE	<LOQ	0.00326	%	< 0.00326	Acceptable	
CBDA	<LOQ	0.00326	%	< 0.00326	Acceptable	
CBGA	<LOQ	0.00326	%	< 0.00326	Acceptable	
CBG	<LOQ	0.00326	%	< 0.00326	Acceptable	
CBD	<LOQ	0.00326	%	< 0.00326	Acceptable	
THCV	<LOQ	0.00326	%	< 0.00326	Acceptable	
d8THCV	<LOQ	0.00326	%	< 0.00326	Acceptable	
THCVA	<LOQ	0.00326	%	< 0.00326	Acceptable	
CBN	<LOQ	0.00326	%	< 0.00326	Acceptable	
exo-THC	<LOQ	0.00326	%	< 0.00326	Acceptable	
d9THC	<LOQ	0.00326	%	< 0.00326	Acceptable	
d8THC	<LOQ	0.00326	%	< 0.00326	Acceptable	
9S-d10THC	<LOQ	0.00326	%	< 0.00326	Acceptable	
CBL	<LOQ	0.00326	%	< 0.00326	Acceptable	
9R-d10THC	<LOQ	0.00326	%	< 0.00326	Acceptable	
CBC	<LOQ	0.00326	%	< 0.00326	Acceptable	
THCA	<LOQ	0.00326	%	< 0.00326	Acceptable	
CBCA	<LOQ	0.00326	%	< 0.00326	Acceptable	
CBLA	<LOQ	0.00326	%	< 0.00326	Acceptable	
d9THCP	<LOQ	0.00326	%	< 0.00326	Acceptable	
CBT	<LOQ	0.00326	%	< 0.00326	Acceptable	

Abbreviations

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

Units of Measure:

% - Percent

Columbia LABORATORIES
A Tentamus Company

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

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ORELAP#: OR100028
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Laboratory Quality Control Results

J AOAC 2015 V98-6 **Batch ID: 2310760**
Sample Duplicate Sample ID: **23-010504-0001**

Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes
CBDVA	<LOQ	<LOQ	0.00326	%	NA	< 20	Acceptable	
CBDV	0.0562	0.0563	0.00326	%	0.208	< 20	Acceptable	
CBE	0.231	0.230	0.00326	%	0.311	< 20	Acceptable	
CBDA	0.0695	0.0695	0.00326	%	0.0473	< 20	Acceptable	
CBGA	<LOQ	<LOQ	0.00326	%	NA	< 20	Acceptable	
CBG	0.187	0.186	0.00326	%	0.0952	< 20	Acceptable	
CBD	13.3	13.2	0.00326	%	0.780	< 20	Acceptable	
THCV	<LOQ	<LOQ	0.00326	%	NA	< 20	Acceptable	
d8THCV	<LOQ	<LOQ	0.00326	%	NA	< 20	Acceptable	
THCVA	<LOQ	<LOQ	0.00326	%	NA	< 20	Acceptable	
CBN	0.152	0.152	0.00326	%	0.0294	< 20	Acceptable	
exo-THC	<LOQ	<LOQ	0.00326	%	NA	< 20	Acceptable	
d9THC	0.159	0.155	0.00326	%	2.18	< 20	Acceptable	
d8THC	<LOQ	<LOQ	0.00326	%	NA	< 20	Acceptable	
9S-d10THC	<LOQ	<LOQ	0.00326	%	NA	< 20	Acceptable	
CBL	0.0249	0.0245	0.00326	%	1.67	< 20	Acceptable	
9R-d10THC	<LOQ	<LOQ	0.00326	%	NA	< 20	Acceptable	
CBC	0.525	0.522	0.00326	%	0.519	< 20	Acceptable	
THCA	<LOQ	<LOQ	0.00326	%	NA	< 20	Acceptable	
CBCA	<LOQ	<LOQ	0.00326	%	NA	< 20	Acceptable	
CBLA	<LOQ	<LOQ	0.00326	%	NA	< 20	Acceptable	
d9THCP	<LOQ	<LOQ	0.00326	%	NA	< 20	Acceptable	
CBT	0.190	0.199	0.00326	%	4.60	< 20	Acceptable	

Abbreviations

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

Units of Measure:

% - Percent

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Laboratory Quality Control Results

Residual Solvents **Batch ID:** 2310772

Method Blank					Laboratory Control Sample							
Analyte	**Result**		**LOQ**	**Notes**	**Result**	**Spike**	**Units**	**% Rec**	**Limits**			**Notes**
Propane	ND	<	200		560	584	µg/g	95.9	60	-	120	
Isobutane	ND	<	200		711	767	µg/g	92.7	60	-	120	
Butane	ND	<	200		688	782	µg/g	88.0	60	-	120	
2,2-Dimethylpropane	ND	<	200		854	939	µg/g	90.9	60	-	120	
Methanol	ND	<	200		1630	1670	µg/g	97.6	60	-	120	
Ethylene Oxide	ND	<	30		54.7	57.1	µg/g	95.8	60	-	120	
2-Methylbutane	ND	<	200		1470	1680	µg/g	87.5	60	-	120	
Pentane	ND	<	200		1480	1670	µg/g	88.6	60	-	120	
Ethanol	ND	<	200		1610	1660	µg/g	97.0	70	-	130	
Ethyl Ether	ND	<	200		1520	1670	µg/g	91.0	60	-	120	
2,2-Dimethylbutane	ND	<	30		168	189	µg/g	88.9	60	-	120	
Acetone	ND	<	200		1550	1670	µg/g	92.8	60	-	120	
2-Propanol	ND	<	200		1530	1630	µg/g	93.9	60	-	120	
Ethyl Formate	ND	<	500		1390	1600	µg/g	86.9	70	-	130	
Acetonitrile	ND	<	100		447	492	µg/g	90.9	60	-	120	
Methyl Acetate	ND	<	500		1560	1600	µg/g	97.5	70	-	130	
2,3-Dimethylbutane	ND	<	30		159	180	µg/g	88.3	60	-	120	
Dichloromethane	ND	<	60		451	488	µg/g	92.4	60	-	120	
2-Methylpentane	ND	<	30		151	182	µg/g	83.0	60	-	120	
MTBE	ND	<	500		1560	1610	µg/g	96.9	70	-	130	
3-Methylpentane	ND	<	30		155	177	µg/g	87.6	60	-	120	
Hexane	ND	<	30		160	177	µg/g	90.4	60	-	120	
1-Propanol	ND	<	500		1520	1600	µg/g	95.0	70	-	130	
Methylethylketone	ND	<	500		1530	1610	µg/g	95.0	70	-	130	
Ethyl acetate	ND	<	200		1500	1630	µg/g	92.0	60	-	120	
2-Butanol	ND	<	200		1470	1630	µg/g	90.2	60	-	120	
Tetrahydrofuran	ND	<	100		456	488	µg/g	93.4	60	-	120	
Cyclohexane	ND	<	200		1410	1610	µg/g	87.6	60	-	120	
2-methyl-1-propanol	ND	<	500		1410	1610	µg/g	87.6	70	-	130	
Benzene	ND	<	1		4.39	4.79	µg/g	91.6	60	-	120	
Isopropyl Acetate	ND	<	200		1510	1650	µg/g	91.5	60	-	120	
Heptane	ND	<	200		1420	1630	µg/g	87.1	60	-	120	
1-Butanol	ND	<	500		1360	1600	µg/g	85.0	70	-	130	
Propyl Acetate	ND	<	500		1440	1600	µg/g	90.0	70	-	130	
1,4-Dioxane	ND	<	100		421	523	µg/g	80.5	60	-	120	
2-Ethoxyethanol	ND	<	30		155	179	µg/g	86.6	60	-	120	
Methylisobutylketone	ND	<	500		1370	1600	µg/g	85.6	70	-	130	
3-Methyl-1-butanol	ND	<	500		1250	1600	µg/g	78.1	70	-	130	
Ethylene Glycol	ND	<	200		311	506	µg/g	61.5	60	-	120	
Toluene	ND	<	100		414	496	µg/g	83.5	60	-	120	
Isobutyl Acetate	ND	<	500		1420	1610	µg/g	88.2	70	-	130	
1-Pentanol	ND	<	500		1440	1600	µg/g	90.0	70	-	130	
Butyl Acetate	ND	<	500		1330	1610	µg/g	82.6	70	-	130	
Ethylbenzene	ND	<	200		732	978	µg/g	74.8	60	-	120	
m,p-Xylene	ND	<	200		742	994	µg/g	74.6	60	-	120	
o-Xylene	ND	<	200		719	982	µg/g	73.2	60	-	120	
Cumene	ND	<	30		111	171	µg/g	64.9	60	-	120	
Anisole	ND	<	500		1200	1600	µg/g	75.0	70	-	130	
DMSO	ND	<	500		1240	1620	µg/g	76.5	70	-	130	
1,2-dimethoxyethane	ND	<	50		171	186	µg/g	91.9	70	-	130	
Triethylamine	ND	<	500		1310	1600	µg/g	81.9	70	-	130	
N,N-dimethylformamide	ND	<	150		393	480	µg/g	81.9	70	-	130	
N,N-dimethylacetamide	ND	<	150		323	483	µg/g	66.9	70	-	130	Q6
Pyridine	ND	<	50		140	168	µg/g	83.3	70	-	130	
Sulfolane	ND	<	50		69.5	161	µg/g	43.2	70	-	130	Q6
1,2-Dichloroethane	ND	<	1		0.873	1	µg/g	87.3	70	-	130	
Chloroform	ND	<	1		0.842	1	µg/g	84.2	70	-	130	
Trichloroethylene	ND	<	1		0.846	1	µg/g	84.6	70	-	130	
1,1-Dichloroethane	ND	<	1		0.898	1	µg/g	89.8	70	-	130	

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QC - Sample Duplicate **Sample ID: 23-010300-0001**

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	200	µg/g	0.0	< 20	Acceptable	
Toluene	ND	ND	100	µg/g	0.0	< 20	Acceptable	
Isobutyl Acetate	ND	ND	500	µg/g	0.0	< 20	Acceptable	
1-Pentanol	ND	ND	500	µg/g	0.0	< 20	Acceptable	
Butyl Acetate	ND	ND	500	µg/g	0.0	< 20	Acceptable	
Ethylbenzene	ND	ND	200	µg/g	0.0	< 20	Acceptable	
m,p-Xylene	ND	ND	200	µg/g	0.0	< 20	Acceptable	
o-Xylene	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Cumene	ND	ND	30	µg/g	0.0	< 20	Acceptable	
Anisole	ND	ND	500	µg/g	0.0	< 20	Acceptable	
DMSO	ND	ND	500	µg/g	0.0	< 20	Acceptable	
1,2-dimethoxyethane	ND	ND	50	µg/g	0.0	< 20	Acceptable	
Triethylamine	ND	ND	500	µg/g	0.0	< 20	Acceptable	
N,N-dimethylformamide	ND	ND	150	µg/g	0.0	< 20	Acceptable	
N,N-dimethylacetamide	ND	ND	150	µg/g	0.0	< 20	Acceptable	
Pyridine	ND	ND	50	µg/g	0.0	< 20	Acceptable	
Sulfolane	ND	ND	50	µg/g	0.0	< 20	Acceptable	
1,2-Dichloroethane	ND	ND	1	µg/g	0.0	< 20	Acceptable	
Chloroform	ND	ND	1	µg/g	0.0	< 20	Acceptable	
Trichloroethylene	ND	ND	1	µg/g	0.0	< 20	Acceptable	
1,1-Dichloroethane	ND	ND	1	µg/g	0.0	< 20	Acceptable	

Abbreviations

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

Units of Measure:

µg/g- Microgram per gram or ppm

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Explanation of QC Flag Comments:

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