



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



Report Number: 21-014456/D002.R000
Report Date: 12/20/2021
ORELAP#: OR100028
Purchase Order:
Received: 12/10/21 10:55

Customer: Lifted Made
Product identity: Grape
Client/Metric ID: .
Laboratory ID: 21-014456-0002

Summary

Residual Solvents:

All analytes passing and less than LOQ.

Pesticides:

All analytes passing and less than LOQ.

Metals:

Less than LOQ for all analytes.



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Report Number: 21-014456/D002.R000
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Received: 12/10/21 10:55

Customer: Lifted Made
 43360 N US HWY 41 Unit H
 Zion Illinois 60099
 United States of America (USA)

Product identity: Grape

Client/Metric ID: .

Sample Date:

Laboratory ID: 21-014456-0002

Evidence of Cooling: No

Temp: 18 °C

Relinquished by: Fedex

Sample Results

Solvents		Method Residual Solvents by GC/MS				Units µg/g	Batch 2111159	Analyze 12/16/21 08:10 AM			
Analyte	Result	Limits	LOQ	Status	Notes	Analyte	Result	Limits	LOQ	Status	Notes
1,2-Dichloroethane [†]	< LOQ	1	1.00			2-Propanol (IPA)	< LOQ	5000	200		
Acetone	< LOQ	5000	200			Acetonitrile	< LOQ	410	100		
Benzene	< LOQ	1.00	1.00			Chloroform [†]	< LOQ	1.00	1.00		
Ethyl acetate	< LOQ	5000	200			Ethyl ether	< LOQ	5000	200		
Ethylene oxide	< LOQ	1.00	1.00			m,p-Xylene	< LOQ		200		
Methanol	< LOQ	3000	200			Methylene chloride	< LOQ	1.00	1.00		
n-Butane	< LOQ	5000	200			n-Heptane	< LOQ	5000	200		
n-Hexane	< LOQ	290	30.0			n-Pentane	< LOQ	5000	200		
o-Xylene	< LOQ		200			Propane	< LOQ	5000	200		
Toluene	< LOQ	890	100			Total Xylenes	< LOQ	2170	400		
Trichloroethylene [†]	< LOQ	1.00	1.00								



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Pesticides Method In-house method by LC MS/MS and GC MS/MS Units mg/kg Batch 2111206 Analyze 12/17/21 11:53 AM

Analyte	Result	Limits	LOQ	Status	Notes	Analyte	Result	Limits	LOQ	Status	Notes
Abamectin	< LOQ	0.300	0.100			Acephate	< LOQ	5.00	0.100		
Acequinocyl	< LOQ	4.00	0.100			Acetamiprid	< LOQ	5.00	0.100		
Aldicarb	< LOQ	0.100	0.100			Azoxystrobin	< LOQ	40.0	0.100		
Bifenazate	< LOQ	5.00	0.100			Bifenthrin	< LOQ	0.500	3.00		
Boscalid	< LOQ	10.0	0.100			Captan	< LOQ	5.00	0.700		
Carbaryl	< LOQ	0.500	0.500			Carbofuran	< LOQ	0.100	0.100		
Chlorantraniliprole	< LOQ	40.0	3.00			Chlordane	< LOQ	0.1	0.100		
Chlorfenapyr	< LOQ	0.100	0.100			Chlorpyrifos	< LOQ	0.100	0.100		
Clofentezine	< LOQ	0.500	0.100			Coumaphos	< LOQ	0.100	0.100		
Cyfluthrin	< LOQ	1.00	2.00			Cypermethrin	< LOQ	1.00	1.00		
Daminozide	< LOQ	0.100	0.100			Diazinon	< LOQ	0.200	0.100		
Dichlorvos	< LOQ	0.100	0.100			Dimethoate	< LOQ	0.100	0.100		
Dimethomorph	< LOQ	20.0	2.00			Ethoprophos	< LOQ	0.100	0.100		
Etofenprox	< LOQ	0.100	0.100			Etoxazole	< LOQ	1.50	0.100		
Fenhexamid	< LOQ	10.0	0.100			Fenoxycarb	< LOQ	0.100	0.100		
Fenpyroximate	< LOQ	2.00	0.100			Fipronil	< LOQ	0.100	0.100		
Flonicamid	< LOQ	2.00	0.100			Fludioxonil	< LOQ	30.0	0.100		
Hexythiazox	< LOQ	2.00	0.100			Imazalil	< LOQ	0.100	0.100		
Imidacloprid	< LOQ	3.00	3.00			Kresoxim-methyl	< LOQ	1.00	0.100		
Malathion	< LOQ	5.00	0.500			Metalaxyl	< LOQ	15.0	2.00		
Methiocarb	< LOQ	0.100	0.100			Methomyl	< LOQ	0.100	1.00		
Mevinphos	< LOQ	0.100	0.100			Myclobutanil	< LOQ	9.00	0.100		
Naled	< LOQ	0.500	0.100			Oxamyl	< LOQ	0.200	0.500		
Paclobutrazole	< LOQ	0.100	0.100			Parathion-Methyl	< LOQ	0.100	0.100		
Permethrin	< LOQ	20.0	0.500			Phosmet	< LOQ	0.200	0.100		
Piperonyl butoxide	< LOQ	8.00	3.00			Prallethrin	< LOQ	0.400	0.100		
Propiconazole	< LOQ	20.0	0.100			Propoxur	< LOQ	0.100	0.100		
Pyrethrins (total)	< LOQ	1.00	0.500			Pyridaben	< LOQ	3.00	0.100		
Quintozene	< LOQ	0.200	0.100			Spinetoram	< LOQ	3.00	0.100		
Spinosad	< LOQ	3.00	0.100			Spiromesifen	< LOQ	12.0	0.100		
Spirotetramat	< LOQ	13.0	0.100			Spiroxamine	< LOQ	0.100	0.100		
Tebuconazole	< LOQ	2.00	0.100			Thiacloprid	< LOQ	0.100	0.100		
Thiamethoxam	< LOQ	4.50	3.00			Trifloxystrobin	< LOQ	30.0	0.100		

Metals

Analyte	Result	Limits	Units	LOQ	Batch	Analyze	Method	Status	Notes
Arsenic	< LOQ	0.20	mg/kg	0.00870	2111198	12/16/21	AOAC 2013.06 (mod.)	pass	X
Cadmium	< LOQ	0.20	mg/kg	0.00870	2111198	12/16/21	AOAC 2013.06 (mod.)	pass	X
Lead	< LOQ	0.50	mg/kg	0.00870	2111198	12/16/21	AOAC 2013.06 (mod.)	pass	X
Mercury	< LOQ	0.10	mg/kg	0.00435	2111198	12/16/21	AOAC 2013.06 (mod.)	pass	X



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

Abbreviations

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

Limit(s) of Quantitation (LOQ): The minimum levels, concentrations, or quantities of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence.

† = Analyte not NELAP accredited.

Units of Measure

µg/g = Microgram per gram

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

% wt = µg/g divided by 10,000

Glossary of Qualifiers

X: Not ORELAP accredited.

Approved Signatory

Derrick Tanner
General Manager



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Laboratory Quality Control Results									
Residual Solvents					Batch ID: 2111159				
Method Blank			Laboratory Control Sample						
Analyte	Result	LOQ	Notes	Result	Spike	Units	% Rec	Limits	Notes
Propane	ND	< 200		1070	948	µg/g	112.9	70	130
Isobutane	ND	< 200		1200	1260	µg/g	95.2	70	130
Butane	ND	< 200		1190	1260	µg/g	94.4	70	130
2,2-Dimethylpropane	ND	< 200		2010	1600	µg/g	125.6	70	130
Methanol	ND	< 200		1700	1610	µg/g	105.6	70	130
Ethylene Oxide	ND	< 30		107	95.7	µg/g	111.8	70	130
2-Methylbutane	ND	< 200		1790	1630	µg/g	109.8	70	130
Pentane	ND	< 200		1810	1610	µg/g	112.4	70	130
Ethanol	ND	< 200		1930	1630	µg/g	118.4	70	130
Ethyl Ether	ND	< 200		1730	1610	µg/g	107.5	70	130
2,2-Dimethylbutane	ND	< 30		195	165	µg/g	118.2	70	130
Acetone	ND	< 200		1860	1610	µg/g	115.5	70	130
2-Propanol	ND	< 200		1950	1610	µg/g	121.1	70	130
Ethyl Formate	ND	< 500		1450	1620	µg/g	89.5	70	130
Acetonitrile	ND	< 100		622	498	µg/g	124.9	70	130
Methyl Acetate	ND	< 500		1820	1810	µg/g	100.6	70	130
2,3-Dimethylbutane	ND	< 30		171	162	µg/g	105.6	70	130
Dichloromethane	ND	< 60		555	498	µg/g	111.4	70	130
2-Methylpentane	ND	< 30		199	167	µg/g	119.2	70	130
MTBE	ND	< 500		1750	1610	µg/g	108.7	70	130
3-Methylpentane	ND	< 30		211	179	µg/g	117.9	70	130
Hexane	ND	< 30		171	164	µg/g	104.3	70	130
1-Propanol	ND	< 500		1960	1620	µg/g	121.0	70	130
Methylethylketone	ND	< 500		1790	1770	µg/g	101.1	70	130
Ethyl acetate	ND	< 200		1710	1620	µg/g	105.6	70	130
2-Butanol	ND	< 200		1740	1600	µg/g	108.8	70	130
Tetrahydrofuran	ND	< 100		547	500	µg/g	109.4	70	130
Cyclohexane	ND	< 200		1690	1610	µg/g	105.0	70	130
2-methyl-1-propanol	ND	< 500		1730	1610	µg/g	107.5	70	130
Benzene	ND	< 1		6.6	5.63	µg/g	117.4	70	130
Isopropyl Acetate	ND	< 200		1980	1610	µg/g	123.0	70	130
Heptane	ND	< 200		1830	1610	µg/g	113.7	70	130
1-Butanol	ND	< 500		1820	1620	µg/g	112.3	70	130
Propyl Acetate	ND	< 500		1910	1620	µg/g	117.9	70	130
1,4-Dioxane	ND	< 100		527	502	µg/g	105.0	70	130
2-Ethoxyethanol	ND	< 30		176	164	µg/g	107.3	70	130
Methylisobutylketone	ND	< 500		1890	1620	µg/g	116.7	70	130
3-Methyl-1-butanol	ND	< 500		1850	1620	µg/g	114.2	70	130
Ethylene Glycol	ND	< 200		520	502	µg/g	103.6	70	130
Toluene	ND	< 200		434	488	µg/g	88.9	70	130
Isobutyl Acetate	ND	< 500		1750	1700	µg/g	102.9	70	130
1-Pentanol	ND	< 500		1700	1630	µg/g	104.3	70	130
Butyl Acetate	ND	< 500		1840	1660	µg/g	110.8	70	130
Ethylbenzene	ND	< 200		832	965	µg/g	86.2	70	130
m,p-Xylene	ND	< 200		863	990	µg/g	87.2	70	130
o-Xylene	ND	< 200		819	971	µg/g	84.3	70	130
Cumene	ND	< 30		147	179	µg/g	82.1	70	130
Anisole	ND	< 500		1490	1650	µg/g	90.3	70	130
DMSO	ND	< 500		1630	1630	µg/g	100.0	70	130
1,2-dimethoxyethane	ND	< 50		192	183	µg/g	104.9	70	130
Triethylamine	ND	< 500		1720	1620	µg/g	106.2	70	130
N,N-dimethylformamide	ND	< 150		497	495	µg/g	100.4	70	130
N,N-dimethylacetamide	ND	< 150		544	502	µg/g	108.4	70	130
Pyridine	ND	< 50		166	186	µg/g	89.2	70	130
1,2-Dichloroethane	ND	< 1		1.02	1	µg/g	102.0	70	130
Chloroform	ND	< 1		0.926	1	µg/g	92.6	70	130
Trichloroethylene	ND	< 1		0.822	1	µg/g	82.2	70	130
Ethylene Oxide	ND	< 1		1.09	1	µg/g	109.0	70	130
Dichloromethane	ND	< 1		0.892	1	µg/g	89.2	70	130
Benzene	ND	< 1		0.827	1	µg/g	82.7	70	130



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Received: 12/10/21 10:55

Revision: Document ID:
Legacy ID: Effective:

QC - Sample Duplicate Sample ID: 21-014444-0003

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	
Methylcyclohexane	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	200	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	
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	
Ethylene Oxide	ND	ND	1	µg/g	0.0	< 20	Acceptable	
Dichloromethane	ND	ND	1	µg/g	0.0	< 20	Acceptable	
Benzene	ND	ND	1	µg/g	0.0	< 21	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	Quantitation level raised due to matrix interference.
B	Analyte detected in method blank, but not in associated samples.
B1	The sample concentration is greater than 5 times the blank concentration.
B2	The sample concentration is less than 5 times the blank concentration.



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Customer: Lifted Made
Product identity: Pineapple
Client/Metric ID: .
Laboratory ID: 21-014456-0001

Summary

Residual Solvents:

All analytes passing and less than LOQ.

Pesticides:

All analytes passing and less than LOQ.

Metals:

Less than LOQ for all analytes.



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Customer: Lifted Made
 43360 N US HWY 41 Unit H
 Zion Illinois 60099
 United States of America (USA)

Product identity: Pineapple
Client/Metric ID: .
Sample Date:
Laboratory ID: 21-014456-0001
Evidence of Cooling: No
Temp: 18 °C
Relinquished by: Fedex

Sample Results

Solvents		Method Residual Solvents by GC/MS				Units µg/g	Batch 2111159	Analyze 12/16/21 08:10 AM			
Analyte	Result	Limits	LOQ	Status	Notes	Analyte	Result	Limits	LOQ	Status	Notes
1,2-Dichloroethane†	< LOQ	1	1.00			2-Propanol (IPA)	< LOQ	5000	200		
Acetone	< LOQ	5000	200			Acetonitrile	< LOQ	410	100		
Benzene	< LOQ	1.00	1.00			Chloroform†	< LOQ	1.00	1.00		
Ethyl acetate	< LOQ	5000	200			Ethyl ether	< LOQ	5000	200		
Ethylene oxide	< LOQ	1.00	1.00			m,p-Xylene	< LOQ		200		
Methanol	< LOQ	3000	200			Methylene chloride	< LOQ	1.00	1.00		
n-Butane	< LOQ	5000	200			n-Heptane	< LOQ	5000	200		
n-Hexane	< LOQ	290	30.0			n-Pentane	< LOQ	5000	200		
o-Xylene	< LOQ		200			Propane	< LOQ	5000	200		
Toluene	< LOQ	890	100			Total Xylenes	< LOQ	2170	400		
Trichloroethylene†	< LOQ	1.00	1.00								



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Pesticides **Method** In-house method by LC MS/MS and GC MS/MS **Units** mg/kg **Batch** 2111206 **Analyze** 12/17/21 11:53 AM

Analyte	Result	Limits	LOQ	Status	Notes	Analyte	Result	Limits	LOQ	Status	Notes
Abamectin	< LOQ	0.300	0.100			Acephate	< LOQ	5.00	0.100		
Acequinocyl	< LOQ	4.00	0.100			Acetamiprid	< LOQ	5.00	0.100		
Aldicarb	< LOQ	0.100	0.100			Azoxystrobin	< LOQ	40.0	0.100		
Bifenazate	< LOQ	5.00	0.100			Bifenthrin	< LOQ	0.500	3.00		
Boscalid	< LOQ	10.0	0.100			Captan	< LOQ	5.00	0.700		
Carbaryl	< LOQ	0.500	0.500			Carbofuran	< LOQ	0.100	0.100		
Chlorantraniliprole	< LOQ	40.0	3.00			Chlordane	< LOQ	0.1	0.100		
Chlorfenapyr	< LOQ	0.100	0.100			Chlorpyrifos	< LOQ	0.100	0.100		
Clofentezine	< LOQ	0.500	0.100			Coumaphos	< LOQ	0.100	0.100		
Cyfluthrin	< LOQ	1.00	2.00			Cypermethrin	< LOQ	1.00	1.00		
Daminozide	< LOQ	0.100	0.100			Diazinon	< LOQ	0.200	0.100		
Dichlorvos	< LOQ	0.100	0.100			Dimethoate	< LOQ	0.100	0.100		
Dimethomorph	< LOQ	20.0	2.00			Ethoprophos	< LOQ	0.100	0.100		
Etofenprox	< LOQ	0.100	0.100			Etoxazole	< LOQ	1.50	0.100		
Fenhexamid	< LOQ	10.0	0.100			Fenoxycarb	< LOQ	0.100	0.100		
Fenpyroximate	< LOQ	2.00	0.100			Fipronil	< LOQ	0.100	0.100		
Flonicamid	< LOQ	2.00	0.100			Fludioxonil	< LOQ	30.0	0.100		
Hexythiazox	< LOQ	2.00	0.100			Imazalil	< LOQ	0.100	0.100		
Imidacloprid	< LOQ	3.00	3.00			Kresoxim-methyl	< LOQ	1.00	0.100		
Malathion	< LOQ	5.00	0.500			Metalaxyl	< LOQ	15.0	2.00		
Methiocarb	< LOQ	0.100	0.100			Methomyl	< LOQ	0.100	1.00		
Mevinphos	< LOQ	0.100	0.100			Myclobutanil	< LOQ	9.00	0.100		
Naled	< LOQ	0.500	0.100			Oxamyl	< LOQ	0.200	0.500		
Paclobutrazole	< LOQ	0.100	0.100			Parathion-Methyl	< LOQ	0.100	0.100		
Permethrin	< LOQ	20.0	0.500			Phosmet	< LOQ	0.200	0.100		
Piperonyl butoxide	< LOQ	8.00	3.00			Prallethrin	< LOQ	0.400	0.100		
Propiconazole	< LOQ	20.0	0.100			Propoxur	< LOQ	0.100	0.100		
Pyrethrins (total)	< LOQ	1.00	0.500			Pyridaben	< LOQ	3.00	0.100		
Quintozene	< LOQ	0.200	0.100			Spinetoram	< LOQ	3.00	0.100		
Spinosad	< LOQ	3.00	0.100			Spiromesifen	< LOQ	12.0	0.100		
Spirotetramat	< LOQ	13.0	0.100			Spiroxamine	< LOQ	0.100	0.100		
Tebuconazole	< LOQ	2.00	0.100			Thiacloprid	< LOQ	0.100	0.100		
Thiamethoxam	< LOQ	4.50	3.00			Trifloxystrobin	< LOQ	30.0	0.100		

Metals

Analyte	Result	Limits	Units	LOQ	Batch	Analyze	Method	Status	Notes
Arsenic	< LOQ	0.20	mg/kg	0.00724	2111198	12/16/21	AOAC 2013.06 (mod.)	pass	X
Cadmium	< LOQ	0.20	mg/kg	0.00724	2111198	12/16/21	AOAC 2013.06 (mod.)	pass	X
Lead	< LOQ	0.50	mg/kg	0.00724	2111198	12/16/21	AOAC 2013.06 (mod.)	pass	X
Mercury	< LOQ	0.10	mg/kg	0.00362	2111198	12/16/21	AOAC 2013.06 (mod.)	pass	X

Test results relate only to the parameters tested and to the samples as received by the laboratory. Test results meet all requirements of NELAP and the Columbia Laboratories quality assurance plan unless otherwise noted. This report shall not be reproduced, except in full, without the written consent of this laboratory. Samples will be retained for a maximum of 30 days from the receipt date unless prior arrangements have been made.

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



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



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

Abbreviations

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

Limit(s) of Quantitation (LOQ): The minimum levels, concentrations, or quantities of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence.

† = Analyte not NELAP accredited.

Units of Measure

µg/g = Microgram per gram

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

% wt = µg/g divided by 10,000

Glossary of Qualifiers

X: Not ORELAP accredited.

Approved Signatory

Derrick Tanner
General Manager



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



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Laboratory Quality Control Results									
Residual Solvents					Batch ID: 2111159				
Method Blank			Laboratory Control Sample						
Analyte	Result	LOQ	Notes	Result	Spike	Units	% Rec	Limits	Notes
Propane	ND	< 200		1070	948	µg/g	112.9	70	130
Isobutane	ND	< 200		1200	1260	µg/g	95.2	70	130
Butane	ND	< 200		1190	1260	µg/g	94.4	70	130
2,2-Dimethylpropane	ND	< 200		2010	1600	µg/g	125.6	70	130
Methanol	ND	< 200		1700	1610	µg/g	105.6	70	130
Ethylene Oxide	ND	< 30		107	95.7	µg/g	111.8	70	130
2-Methylbutane	ND	< 200		1790	1630	µg/g	109.8	70	130
Pentane	ND	< 200		1810	1610	µg/g	112.4	70	130
Ethanol	ND	< 200		1930	1630	µg/g	118.4	70	130
Ethyl Ether	ND	< 200		1730	1610	µg/g	107.5	70	130
2,2-Dimethylbutane	ND	< 30		195	165	µg/g	118.2	70	130
Acetone	ND	< 200		1860	1610	µg/g	115.5	70	130
2-Propanol	ND	< 200		1950	1610	µg/g	121.1	70	130
Ethyl Formate	ND	< 500		1450	1620	µg/g	89.5	70	130
Acetonitrile	ND	< 100		622	498	µg/g	124.9	70	130
Methyl Acetate	ND	< 500		1820	1810	µg/g	100.6	70	130
2,3-Dimethylbutane	ND	< 30		171	162	µg/g	105.6	70	130
Dichloromethane	ND	< 60		555	498	µg/g	111.4	70	130
2-Methylpentane	ND	< 30		199	167	µg/g	119.2	70	130
MTBE	ND	< 500		1750	1610	µg/g	108.7	70	130
3-Methylpentane	ND	< 30		211	179	µg/g	117.9	70	130
Hexane	ND	< 30		171	164	µg/g	104.3	70	130
1-Propanol	ND	< 500		1960	1620	µg/g	121.0	70	130
Methylethylketone	ND	< 500		1790	1770	µg/g	101.1	70	130
Ethyl acetate	ND	< 200		1710	1620	µg/g	105.6	70	130
2-Butanol	ND	< 200		1740	1600	µg/g	108.8	70	130
Tetrahydrofuran	ND	< 100		547	500	µg/g	109.4	70	130
Cyclohexane	ND	< 200		1690	1610	µg/g	105.0	70	130
2-methyl-1-propanol	ND	< 500		1730	1610	µg/g	107.5	70	130
Benzene	ND	< 1		6.6	5.63	µg/g	117.4	70	130
Isopropyl Acetate	ND	< 200		1980	1610	µg/g	123.0	70	130
Heptane	ND	< 200		1830	1610	µg/g	113.7	70	130
1-Butanol	ND	< 500		1820	1620	µg/g	112.3	70	130
Propyl Acetate	ND	< 500		1910	1620	µg/g	117.9	70	130
1,4-Dioxane	ND	< 100		527	502	µg/g	105.0	70	130
2-Ethoxyethanol	ND	< 30		176	164	µg/g	107.3	70	130
Methylisobutylketone	ND	< 500		1890	1620	µg/g	116.7	70	130
3-Methyl-1-butanol	ND	< 500		1850	1620	µg/g	114.2	70	130
Ethylene Glycol	ND	< 200		520	502	µg/g	103.6	70	130
Toluene	ND	< 200		434	488	µg/g	88.9	70	130
Isobutyl Acetate	ND	< 500		1750	1700	µg/g	102.9	70	130
1-Pentanol	ND	< 500		1700	1630	µg/g	104.3	70	130
Butyl Acetate	ND	< 500		1840	1660	µg/g	110.8	70	130
Ethylbenzene	ND	< 200		832	965	µg/g	86.2	70	130
m,p-Xylene	ND	< 200		863	990	µg/g	87.2	70	130
o-Xylene	ND	< 200		819	971	µg/g	84.3	70	130
Cumene	ND	< 30		147	179	µg/g	82.1	70	130
Anisole	ND	< 500		1490	1650	µg/g	90.3	70	130
DMSO	ND	< 500		1630	1630	µg/g	100.0	70	130
1,2-dimethoxyethane	ND	< 50		192	183	µg/g	104.9	70	130
Triethylamine	ND	< 500		1720	1620	µg/g	106.2	70	130
N,N-dimethylformamide	ND	< 150		497	495	µg/g	100.4	70	130
N,N-dimethylacetamide	ND	< 150		544	502	µg/g	108.4	70	130
Pyridine	ND	< 50		166	186	µg/g	89.2	70	130
1,2-Dichloroethane	ND	< 1		1.02	1	µg/g	102.0	70	130
Chloroform	ND	< 1		0.926	1	µg/g	92.6	70	130
Trichloroethylene	ND	< 1		0.822	1	µg/g	82.2	70	130
Ethylene Oxide	ND	< 1		1.09	1	µg/g	109.0	70	130
Dichloromethane	ND	< 1		0.892	1	µg/g	89.2	70	130
Benzene	ND	< 1		0.827	1	µg/g	82.7	70	130



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QC - Sample Duplicate Sample ID: 21-014444-0003

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	
Methylcyclohexane	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	200	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	
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	
Ethylene Oxide	ND	ND	1	µg/g	0.0	< 20	Acceptable	
Dichloromethane	ND	ND	1	µg/g	0.0	< 20	Acceptable	
Benzene	ND	ND	1	µg/g	0.0	< 21	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	Quantitation level raised due to matrix interference.
B	Analyte detected in method blank, but not in associated samples.
B1	The sample concentration is greater than 5 times the blank concentration.
B2	The sample concentration is less than 5 times the blank concentration.