

PRODUCT NAME

LabID: 1910192-01

Client Name
Client METRC ID

METRC Batch ID: xxxxx

METRC Sample Tag: XXXXXXXXXXXXXXXX

Date Sampled: 10/24/19

Date Printed: 10/31/19

Potency Analysis

Analytical Method: De Backer, Journal of Chromatography b.2009. 11.004 - SOP 102

Cannabinoids (% weight)		LOQ
THCA	86.6	0.195
delta 9-THC	1.66	0.195
delta 8-THC	< LOQ	0.195
CBGA	0.672	0.195
CBDA	1.94	0.195
CBD	< LOQ	0.195
CBN	< LOQ	0.195
CBG	< LOQ	0.195
CBC	< LOQ	0.195

Total THC
77.6 %

Total CBD
1.70 %

<LOQ - Results below the Limit of Quantitation

Acid form of THC/CBD are decarboxylated by heat, lose 12% of original mass as CO2. Result = *bioactive*

"Total" Cannabinoid accounts for decarboxylation and moisture content. Total THC = $[(THCA \times 0.877) + \Delta 9THC] / (100\% - MC)$



Erik Werstler
Lab Director

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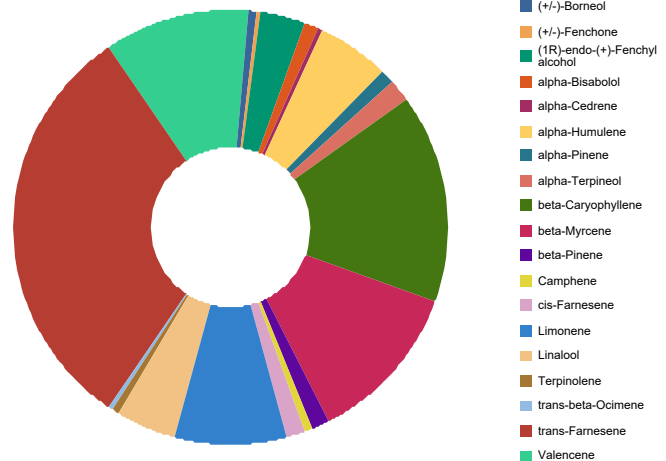
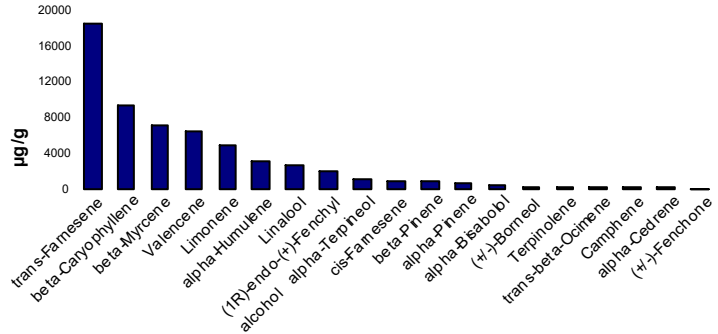
SAMPLE ID

Laboratory ID: 1910192-01

Terpene Test Report

Analysis Method/SOP: Terp

Analyte	Result µg/g	Result %
alpha-Bisabolol	552.8	0.05528
Camphene	214.6	0.02146
Camphor	< LOQ	< LOQ
delta-3-Carene	< LOQ	< LOQ
beta-Caryophyllene	9267	0.9267
Caryophyllene Oxide	< LOQ	< LOQ
alpha-Cedrene	208.4	0.02084
Cedrol	< LOQ	< LOQ
(1R)-endo-(+)-Fenchyl alcohol	2123	0.2123
Eucalyptol	< LOQ	< LOQ
Geraniol	< LOQ	< LOQ
Geranyl acetate	< LOQ	< LOQ
Guaiol	< LOQ	< LOQ
alpha-Humulene	3065	0.3065
Isoborneol	< LOQ	< LOQ
Isopulegol	< LOQ	< LOQ
Limonene	4903	0.4903
Linalool	2690	0.2690
beta-Myrcene	7038	0.7038
trans-Nerolidol	< LOQ	< LOQ
alpha-Pinene	664.7	0.06647
beta-Pinene	884.5	0.08845
Pulegone	< LOQ	< LOQ
Sabinene	< LOQ	< LOQ
Sabinene hydrate	< LOQ	< LOQ
gamma-Terpinene	< LOQ	< LOQ
alpha-Terpinene	< LOQ	< LOQ
Terpinolene	239.1	0.02391
Valencene	6385	0.6385
Nerol	< LOQ	< LOQ
cis-Nerolidol	< LOQ	< LOQ
(+/-)-Borneol	324.2	0.03242
(+/-)-Fenchone	106.3	0.01063



- (+/-)-Borneol
- (+/-)-Fenchone
- (1R)-endo-(+)-Fenchyl alcohol
- alpha-Bisabolol
- alpha-Cedrene
- alpha-Humulene
- alpha-Pinene
- alpha-Terpinene
- beta-Caryophyllene
- beta-Myrcene
- beta-Pinene
- Camphene
- cis-Farnesene
- Limonene
- Linalool
- Terpinolene
- trans-beta-Ocimene
- trans-Farnesene
- Valencene

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Analysis Method/SOP: Terp

Analyte	Result µg/g	Result %
alpha-Phellandrene	< LOQ	< LOQ
beta-Ocimene	< LOQ	< LOQ
cis-Farnesene	938	0.09380
Menthol	< LOQ	< LOQ
trans-beta-Ocimene	237.4	0.02374
trans-Farnesene	18550	1.855
alpha-Terpineol	1077	0.1077
gamma-Terpineol	< LOQ	< LOQ
Total Terpenes	59470	5.947



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Laboratory ID: 1910192-01

SAMPLE NAME

Date Sampled: 10/24/19 10:42

Date Accepted: 10/24/19

Results Valid Until: 10/23/20

CLIENT NAME

Sample ID: 1910192-01

Matrix: Extracts and Concentrates

M #:

Pesticide Analysis in PPM

Date/Time Extracted: 10/30/19 10:52

Date/Time Analyzed: 10/30/19 21:54

Analysis Method/SOP: SOP 33

Instrument: Selene

Batch Identification: B19J162

Analyte	Result	Action Level	LOQ	Type
Abamectin	< LOQ	0.5	0.2145	Avermectin insecticide
Acephate	< LOQ	0.4	0.1716	Organophosphate Insecticide
Acequinocyl	< LOQ	2	0.8581	Quinoline insecticide
Acetamiprid	< LOQ	0.2	0.08581	Neonicotinoid insecticide
Aldicarb	< LOQ	0.4	0.1716	Carbamate insecticide
Azoxystrobin	< LOQ	0.2	0.08581	Strobin fungicide
Bifenazate	< LOQ	0.2	0.08581	Carbazate miticide
Bifenthrin	< LOQ	0.2	0.08581	Pyrethroid insecticide
Boscalid	< LOQ	0.4	0.1716	Carboxamide fungicide
Carbaryl	< LOQ	0.2	0.08581	Carbamate insecticide
Carbofuran	< LOQ	0.2	0.08581	Carbamate insecticide
Chlorantraniliprole	< LOQ	0.2	0.08581	Anthranilic diamide insecticide
Chlorfenapyr	< LOQ	1	0.4290	Pyrrole insecticide
Chlorpyrifos	< LOQ	0.2	0.08581	Organophosphate Insecticide
Clofentezine	< LOQ	0.2	0.08581	Tetrazine miticide
Cyfluthrin	< LOQ	1	0.4290	Pyrethroid insecticide
Cypermethrin	< LOQ	1	0.4290	Pyrethroid insecticide
Daminozide	< LOQ	1	0.4290	Plant growth regulator
DDVP (Dichlorvos)	< LOQ	1	0.4290	Organophosphate insecticide
Diazinon	< LOQ	0.2	0.08581	Organophosphate Insecticide
Dimethoate	< LOQ	0.2	0.08581	Organophosphate insecticide
Ethoprophos	< LOQ	0.2	0.08581	Organophosphate insecticide
Etofenprox	< LOQ	0.4	0.1716	Pyrethroid insecticide
Etoxazole	< LOQ	0.2	0.08581	Oxazoline insecticide
Fenoxycarb	< LOQ	0.2	0.08581	Carbamate insecticide
Fenpyroximate	< LOQ	0.4	0.1716	Pyrazolium miticide
Fipronil	< LOQ	0.4	0.1716	Pyrazole insecticide
Fonicamid	< LOQ	1	0.4290	Pyridinecarboxamide insecticide



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Date/Time Analyzed: 10/30/19 21:54

Analysis Method/SOP: SOP 33

Instrument: Selene

Batch Identification: B19J162

Analyte	Result	Action Level	LOQ	Type
Fludioxonil	< LOQ	0.4	0.1716	Benzodioxole fungicide
Hexythiazox	< LOQ	1	0.4290	Heterocyclic miticide
Imazalil	< LOQ	0.2	0.08581	Imidazole fungicide
Imidacloprid	< LOQ	0.4	0.1716	Neonicotinoid insectide
Kresoxim-methyl	< LOQ	0.4	0.1716	Strobilurin fungicide
Malathion	< LOQ	0.2	0.08581	Organophosphate insecticide
Metalaxyl	< LOQ	0.2	0.08581	Benzenoid fungicide
Methiocarb	< LOQ	0.2	0.08581	Carbamate insecticide
Methomyl	< LOQ	0.4	0.1716	Carbamate insecticide
Methyl parathion	< LOQ	0.2	0.08581	Organophosphate insecticide
MGK-264	< LOQ	0.2	0.08581	Pesticide synergist
Myclobutanil	< LOQ	0.2	0.08581	Triazole fungicide
Naled	< LOQ	0.5	0.2145	Organophosphate insecticide
Oxamyl	< LOQ	1	0.4290	Carbamate insecticide
Paclobutrazol	< LOQ	0.4	0.1716	Triazole fungicide
Permethrins	< LOQ	0.2	0.08581	Pyrethroid insecticide
Phosmet	< LOQ	0.2	0.08581	Organophosphate insecticide
Piperonyl butoxide	< LOQ	2	0.8581	Pesticide synergist
Prallethrin	< LOQ	0.2	0.08581	Pyrethroid insecticide
Propiconazole	< LOQ	0.4	0.1716	Triazole fungicide
Propoxur	< LOQ	0.2	0.08581	Carbamate insecticide
Pyrethrins	< LOQ	1	0.4290	Pyrethroid insecticide
Pyridaben	< LOQ	0.2	0.08581	Pyridazinone insecticide
Spinosad	< LOQ	0.2	0.08581	Spinosyn insecticide
Spiromesifen	< LOQ	0.2	0.08581	Keto-enol insecticide
Spirotetramat	< LOQ	0.2	0.08581	Keto-enol insecticide
Spiroxamine	< LOQ	0.4	0.1716	Spiroketalamine fungicide
Tebuconazole	< LOQ	0.4	0.1716	Triazole fungicide



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Date/Time Extracted: 10/30/19 10:52

Date/Time Analyzed: 10/30/19 21:54

Analysis Method/SOP: SOP 33

Instrument: Selene

Batch Identification: B19J162

Analyte	Result	Action Level	LOQ	Type
Thiacloprid	< LOQ	0.2	0.08581	Neonicotinoid insecticide
Thiamethoxam	< LOQ	0.2	0.08581	Neonicotinoid insecticide
Trifloxystrobin	< LOQ	0.2	0.08581	Strobin fungicide

<LOQ - Results below the Limit of Quantitation - Compound not detected

Results above the Action Level fail state testing requirements and will be highlighted Red.



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Laboratory ID: 1910192-01

Residual Solvents

Analysis Method/SOP: RS

Solvent	Results in ppm	LOQ	Action Level	Notes
Acetone	< LOQ	2500	5000	
Acetonitrile	< LOQ	205.0	400	
Benzene	< LOQ	1.000	2	
2-Butanol	< LOQ	2500	5000	
Cumene	< LOQ	35.00	70	
Cyclohexane	< LOQ	1940	3880	
Dichloromethane	< LOQ	300.0	600	
1,4-Dioxane	< LOQ	190.0	380	
2-Ethoxyethanol	< LOQ	80.00	160	
Ethyl acetate	< LOQ	2500	5000	
Ethylene glycol	< LOQ	310.0	620	
Ethylene oxide	< LOQ	25.00	50	
Ethyl ether	< LOQ	2500	5000	
Heptane	< LOQ	2500	5000	
Isopropyl acetate	< LOQ	2500	5000	
Methanol	< LOQ	1500	3000	
Propane	< LOQ	2500	5000	
2-Propanol (IPA)	< LOQ	2500	5000	
Tetrahydrofuran	< LOQ	360.0	720	
Toluene	< LOQ	445.0	890	
Butanes	< LOQ	2500	5000	
Hexanes	< LOQ	145.0	290	
Pentanes	< LOQ	2500	5000	
Xylenes	< LOQ	1085	2170	

Results above the Action Level fail state testing requirements and will be highlighted **Red**.



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Laboratory ID: 1910192-01

Quality Control Potency

Batch: B19J142 - Potency

Blank(B19J142-BLK1)

Analyte	Result	LOQ	Units	%Recovery Limits	Extracted	Analyzed	Notes
THCA	< LOQ	0.199	%		10/27/19 14:55	10/27/19 18:00	
delta 9-THC	< LOQ	0.199	%		10/27/19 14:55	10/27/19 18:00	
CBGA	< LOQ	0.199	%		10/27/19 14:55	10/27/19 18:00	
CBDA	< LOQ	0.199	%		10/27/19 14:55	10/27/19 18:00	
CBD	< LOQ	0.199	%		10/27/19 14:55	10/27/19 18:00	
CBN	< LOQ	0.199	%		10/27/19 14:55	10/27/19 18:00	
CBG	< LOQ	0.199	%		10/27/19 14:55	10/27/19 18:00	
delta 8-THC	< LOQ	0.199	%		10/27/19 14:55	10/27/19 18:00	
CBC	< LOQ	0.199	%		10/27/19 14:55	10/27/19 18:00	

LCS(B19J142-BS1)

Analyte	% Recovery	LOQ	Units	%Recovery Limits	Extracted	Analyzed	Notes
THCA	98.0	0.185	%	85-115	10/27/19 14:55	10/27/19 18:14	
delta 9-THC	105	0.185	%	85-115	10/27/19 14:55	10/27/19 18:14	
CBDA	102	0.185	%	85-115	10/27/19 14:55	10/27/19 18:14	
CBD	104	0.185	%	85-115	10/27/19 14:55	10/27/19 18:14	



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SAMPLE NAME

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SAMPLE ID

Laboratory ID: 1910192-01

Quality Control Pesticide Analysis

Batch: B19J162 - Pest

Blank(B19J162-BLK1)

Analyte	Result	LOQ	Units	%Recovery Limits	Extracted	Analyzed	Notes
Abamectin	< LOQ	0.2500	ppm		10/30/19 10:52	10/30/19 20:49	
Acephate	< LOQ	0.2000	ppm		10/30/19 10:52	10/30/19 20:49	
Acequinocyl	< LOQ	1.000	ppm		10/30/19 10:52	10/30/19 20:49	
Acetamiprid	< LOQ	0.1000	ppm		10/30/19 10:52	10/30/19 20:49	
Aldicarb	< LOQ	0.2000	ppm		10/30/19 10:52	10/30/19 20:49	
Azoxystrobin	< LOQ	0.1000	ppm		10/30/19 10:52	10/30/19 20:49	
Bifenazate	< LOQ	0.1000	ppm		10/30/19 10:52	10/30/19 20:49	
Bifenthrin	< LOQ	0.1000	ppm		10/30/19 10:52	10/30/19 20:49	
Boscalid	< LOQ	0.2000	ppm		10/30/19 10:52	10/30/19 20:49	
Carbaryl	< LOQ	0.1000	ppm		10/30/19 10:52	10/30/19 20:49	
Carbofuran	< LOQ	0.1000	ppm		10/30/19 10:52	10/30/19 20:49	
Chlorantraniliprole	< LOQ	0.1000	ppm		10/30/19 10:52	10/30/19 20:49	
Chlorfenapyr	< LOQ	0.5000	ppm		10/30/19 10:52	10/30/19 20:49	
Chlorpyrifos	< LOQ	0.1000	ppm		10/30/19 10:52	10/30/19 20:49	
Clofentezine	< LOQ	0.1000	ppm		10/30/19 10:52	10/30/19 20:49	
Cyfluthrin	< LOQ	0.5000	ppm		10/30/19 10:52	10/30/19 20:49	
Cypermethrin	< LOQ	0.5000	ppm		10/30/19 10:52	10/30/19 20:49	
Daminozide	< LOQ	0.5000	ppm		10/30/19 10:52	10/30/19 20:49	
DDVP (Dichlorvos)	< LOQ	0.5000	ppm		10/30/19 10:52	10/30/19 20:49	
Diazinon	< LOQ	0.1000	ppm		10/30/19 10:52	10/30/19 20:49	
Dimethoate	< LOQ	0.1000	ppm		10/30/19 10:52	10/30/19 20:49	
Ethoprophos	< LOQ	0.1000	ppm		10/30/19 10:52	10/30/19 20:49	
Etofenprox	< LOQ	0.2000	ppm		10/30/19 10:52	10/30/19 20:49	
Etoxazole	< LOQ	0.1000	ppm		10/30/19 10:52	10/30/19 20:49	
Fenoxycarb	< LOQ	0.1000	ppm		10/30/19 10:52	10/30/19 20:49	
Fenpyroximate	< LOQ	0.2000	ppm		10/30/19 10:52	10/30/19 20:49	
Fipronil	< LOQ	0.2000	ppm		10/30/19 10:52	10/30/19 20:49	
Flonicamid	< LOQ	0.5000	ppm		10/30/19 10:52	10/30/19 20:49	
Fludioxonil	< LOQ	0.2000	ppm		10/30/19 10:52	10/30/19 20:49	
Hexythiazox	< LOQ	0.5000	ppm		10/30/19 10:52	10/30/19 20:49	
Imazalil	< LOQ	0.1000	ppm		10/30/19 10:52	10/30/19 20:49	
Imidacloprid	< LOQ	0.2000	ppm		10/30/19 10:52	10/30/19 20:49	
Kresoxim-methyl	< LOQ	0.2000	ppm		10/30/19 10:52	10/30/19 20:49	
Malathion	< LOQ	0.1000	ppm		10/30/19 10:52	10/30/19 20:49	



Erik Werstler
Lab Director

SAMPLE NAME

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SAMPLE ID

Laboratory ID: 1910192-01

Quality Control Pesticide Analysis (Continued)

Batch: B19J162 - Pest (Continued)

Blank(B19J162-BLK1)

Analyte	Result	LOQ	Units	%Recovery Limits	Extracted	Analyzed	Notes
Metalaxyl	< LOQ	0.1000	ppm		10/30/19 10:52	10/30/19 20:49	
Methiocarb	< LOQ	0.1000	ppm		10/30/19 10:52	10/30/19 20:49	
Methomyl	< LOQ	0.2000	ppm		10/30/19 10:52	10/30/19 20:49	
Methyl parathion	< LOQ	0.1000	ppm		10/30/19 10:52	10/30/19 20:49	
MGK-264	< LOQ	0.1000	ppm		10/30/19 10:52	10/30/19 20:49	
Myclobutanil	< LOQ	0.1000	ppm		10/30/19 10:52	10/30/19 20:49	
Naled	< LOQ	0.2500	ppm		10/30/19 10:52	10/30/19 20:49	
Oxamyl	< LOQ	0.5000	ppm		10/30/19 10:52	10/30/19 20:49	
Paclobutrazol	< LOQ	0.2000	ppm		10/30/19 10:52	10/30/19 20:49	
Permethrins	< LOQ	0.1000	ppm		10/30/19 10:52	10/30/19 20:49	
Phosmet	< LOQ	0.1000	ppm		10/30/19 10:52	10/30/19 20:49	
Piperonyl butoxide	< LOQ	1.000	ppm		10/30/19 10:52	10/30/19 20:49	
Prallethrin	< LOQ	0.1000	ppm		10/30/19 10:52	10/30/19 20:49	
Propiconazole	< LOQ	0.2000	ppm		10/30/19 10:52	10/30/19 20:49	
Propoxur	< LOQ	0.1000	ppm		10/30/19 10:52	10/30/19 20:49	
Pyrethrins	< LOQ	0.5000	ppm		10/30/19 10:52	10/30/19 20:49	
Pyridaben	< LOQ	0.1000	ppm		10/30/19 10:52	10/30/19 20:49	
Spinosad	< LOQ	0.1000	ppm		10/30/19 10:52	10/30/19 20:49	
Spiromesifen	< LOQ	0.1000	ppm		10/30/19 10:52	10/30/19 20:49	
Spirotetramat	< LOQ	0.1000	ppm		10/30/19 10:52	10/30/19 20:49	
Spiroxamine	< LOQ	0.2000	ppm		10/30/19 10:52	10/30/19 20:49	
Tebuconazole	< LOQ	0.2000	ppm		10/30/19 10:52	10/30/19 20:49	
Thiacloprid	< LOQ	0.1000	ppm		10/30/19 10:52	10/30/19 20:49	
Thiamethoxam	< LOQ	0.1000	ppm		10/30/19 10:52	10/30/19 20:49	
Trifloxystrobin	< LOQ	0.1000	ppm		10/30/19 10:52	10/30/19 20:49	

LCS(B19J162-BS1)

Analyte	% Recovery	LOQ	Units	%Recovery Limits	Extracted	Analyzed	Notes
Abamectin	90.1	0.2500	ppm	50-150	10/30/19 10:52	10/30/19 19:22	
Acephate	109	0.2000	ppm	50-150	10/30/19 10:52	10/30/19 19:22	
Acequinocyl	77.3	1.000	ppm	50-150	10/30/19 10:52	10/30/19 19:22	
Acetamiprid	108	0.1000	ppm	50-150	10/30/19 10:52	10/30/19 19:22	
Aldicarb	103	0.2000	ppm	50-150	10/30/19 10:52	10/30/19 19:22	
Azoxystrobin	95.8	0.1000	ppm	50-150	10/30/19 10:52	10/30/19 19:22	
Bifenazate	114	0.1000	ppm	50-150	10/30/19 10:52	10/30/19 19:22	



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Lab Director

SAMPLE NAME

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SAMPLE ID

Laboratory ID: 1910192-01

Quality Control Pesticide Analysis (Continued)

Batch: B19J162 - Pest (Continued)

LCS(B19J162-BS1)

Analyte	% Recovery	LOQ	Units	%Recovery Limits	Extracted	Analyzed	Notes
Bifenthrin	97.6	0.1000	ppm	50-150	10/30/19 10:52	10/30/19 19:22	
Boscalid	93.6	0.2000	ppm	50-150	10/30/19 10:52	10/30/19 19:22	
Carbaryl	107	0.1000	ppm	50-150	10/30/19 10:52	10/30/19 19:22	
Carbofuran	99.4	0.1000	ppm	50-150	10/30/19 10:52	10/30/19 19:22	
Chlorantraniliprole	95.8	0.1000	ppm	50-150	10/30/19 10:52	10/30/19 19:22	
Chlorfenapyr	104	0.5000	ppm	50-150	10/30/19 10:52	10/30/19 19:22	
Chlorpyrifos	101	0.1000	ppm	50-150	10/30/19 10:52	10/30/19 19:22	
Clofentezine	101	0.1000	ppm	50-150	10/30/19 10:52	10/30/19 19:22	
Cyfluthrin	108	0.5000	ppm	50-150	10/30/19 10:52	10/30/19 19:22	
Cypermethrin	98.3	0.5000	ppm	50-150	10/30/19 10:52	10/30/19 19:22	
Daminozide	140	0.5000	ppm	50-150	10/30/19 10:52	10/30/19 19:22	
DDVP (Dichlorvos)	105	0.5000	ppm	50-150	10/30/19 10:52	10/30/19 19:22	
Diazinon	104	0.1000	ppm	50-150	10/30/19 10:52	10/30/19 19:22	
Dimethoate	105	0.1000	ppm	50-150	10/30/19 10:52	10/30/19 19:22	
Ethoprophos	93.0	0.1000	ppm	50-150	10/30/19 10:52	10/30/19 19:22	
Etofenprox	95.2	0.2000	ppm	50-150	10/30/19 10:52	10/30/19 19:22	
Etoxazole	103	0.1000	ppm	50-150	10/30/19 10:52	10/30/19 19:22	
Fenoxycarb	89.2	0.1000	ppm	50-150	10/30/19 10:52	10/30/19 19:22	
Fenpyroximate	94.7	0.2000	ppm	50-150	10/30/19 10:52	10/30/19 19:22	
Fipronil	85.2	0.2000	ppm	50-150	10/30/19 10:52	10/30/19 19:22	
Flonicamid	110	0.5000	ppm	50-150	10/30/19 10:52	10/30/19 19:22	
Fludioxonil	98.9	0.2000	ppm	50-150	10/30/19 10:52	10/30/19 19:22	
Hexythiazox	101	0.5000	ppm	50-150	10/30/19 10:52	10/30/19 19:22	
Imazalil	101	0.1000	ppm	50-150	10/30/19 10:52	10/30/19 19:22	
Imidacloprid	113	0.2000	ppm	50-150	10/30/19 10:52	10/30/19 19:22	
Kresoxim-methyl	102	0.2000	ppm	50-150	10/30/19 10:52	10/30/19 19:22	
Malathion	99.0	0.1000	ppm	50-150	10/30/19 10:52	10/30/19 19:22	
Metalaxyl	101	0.1000	ppm	50-150	10/30/19 10:52	10/30/19 19:22	
Methiocarb	99.9	0.1000	ppm	50-150	10/30/19 10:52	10/30/19 19:22	
Methomyl	103	0.2000	ppm	50-150	10/30/19 10:52	10/30/19 19:22	
Methyl parathion	105	0.1000	ppm	50-150	10/30/19 10:52	10/30/19 19:22	
MGK-264	100	0.1000	ppm	50-150	10/30/19 10:52	10/30/19 19:22	
Myclobutanil	89.3	0.1000	ppm	50-150	10/30/19 10:52	10/30/19 19:22	
Naled	91.6	0.2500	ppm	50-150	10/30/19 10:52	10/30/19 19:22	



Erik Werstler
Lab Director

SAMPLE NAME

CLIENT NAME

SAMPLEID

Laboratory ID: 1910192-01

Quality Control Pesticide Analysis (Continued)

Batch: B19J162 - Pest (Continued)

LCS(B19J162-BS1)

Analyte	% Recovery	LOQ	Units	%Recovery Limits	Extracted	Analyzed	Notes
Oxamyl	103	0.5000	ppm	50-150	10/30/19 10:52	10/30/19 19:22	
Paclobutrazol	95.1	0.2000	ppm	50-150	10/30/19 10:52	10/30/19 19:22	
Permethrins	86.0	0.1000	ppm	50-150	10/30/19 10:52	10/30/19 19:22	
Phosmet	104	0.1000	ppm	50-150	10/30/19 10:52	10/30/19 19:22	
Piperonyl butoxide	87.4	1.000	ppm	50-150	10/30/19 10:52	10/30/19 19:22	
Prallethrin	99.1	0.1000	ppm	50-150	10/30/19 10:52	10/30/19 19:22	
Propiconazole	101	0.2000	ppm	50-150	10/30/19 10:52	10/30/19 19:22	
Propoxur	101	0.1000	ppm	50-150	10/30/19 10:52	10/30/19 19:22	
Pyrethrins	97.0	0.5000	ppm	50-150	10/30/19 10:52	10/30/19 19:22	
Pyridaben	84.0	0.1000	ppm	50-150	10/30/19 10:52	10/30/19 19:22	
Spinosad	101	0.1000	ppm	50-150	10/30/19 10:52	10/30/19 19:22	
Spiromesifen	95.9	0.1000	ppm	50-150	10/30/19 10:52	10/30/19 19:22	
Spirotetramat	93.2	0.1000	ppm	50-150	10/30/19 10:52	10/30/19 19:22	
Spiroxamine	104	0.2000	ppm	50-150	10/30/19 10:52	10/30/19 19:22	
Tebuconazole	101	0.2000	ppm	50-150	10/30/19 10:52	10/30/19 19:22	
Thiacloprid	112	0.1000	ppm	50-150	10/30/19 10:52	10/30/19 19:22	
Thiamethoxam	104	0.1000	ppm	50-150	10/30/19 10:52	10/30/19 19:22	
Trifloxystrobin	97.8	0.1000	ppm	50-150	10/30/19 10:52	10/30/19 19:22	



Erik Werstler
Lab Director

SAMPLE NAME

CLIENT NAME

SAMPLE ID

Laboratory ID: 1910192-01

Quality Control Solvent Analysis

Batch: B19J161 - ResSolv

Blank(B19J161-BLK1)

Analyte	Result	LOQ	Units	%Recovery Limits	Extracted	Analyzed	Notes
Acetone	< LOQ	2500	ppm		10/30/19 09:37	10/30/19 13:24	
Acetonitrile	< LOQ	205.0	ppm		10/30/19 09:37	10/30/19 13:24	
Benzene	< LOQ	1,000	ppm		10/30/19 09:37	10/30/19 13:24	
2-Butanol	< LOQ	2500	ppm		10/30/19 09:37	10/30/19 13:24	
Cumene	< LOQ	35.00	ppm		10/30/19 09:37	10/30/19 13:24	
Cyclohexane	< LOQ	1940	ppm		10/30/19 09:37	10/30/19 13:24	
Dichloromethane	< LOQ	300.0	ppm		10/30/19 09:37	10/30/19 13:24	
1,4-Dioxane	< LOQ	190.0	ppm		10/30/19 09:37	10/30/19 13:24	
2-Ethoxyethanol	< LOQ	80.00	ppm		10/30/19 09:37	10/30/19 13:24	
Ethyl acetate	< LOQ	2500	ppm		10/30/19 09:37	10/30/19 13:24	
Ethylene glycol	< LOQ	310.0	ppm		10/30/19 09:37	10/30/19 13:24	
Ethylene oxide	< LOQ	25.00	ppm		10/30/19 09:37	10/30/19 13:24	
Ethyl ether	< LOQ	2500	ppm		10/30/19 09:37	10/30/19 13:24	
Heptane	< LOQ	2500	ppm		10/30/19 09:37	10/30/19 13:24	
Isopropyl acetate	< LOQ	2500	ppm		10/30/19 09:37	10/30/19 13:24	
Methanol	< LOQ	1500	ppm		10/30/19 09:37	10/30/19 13:24	
Propane	< LOQ	2500	ppm		10/30/19 09:37	10/30/19 13:24	
2-Propanol (IPA)	< LOQ	2500	ppm		10/30/19 09:37	10/30/19 13:24	
Tetrahydrofuran	< LOQ	360.0	ppm		10/30/19 09:37	10/30/19 13:24	
Toluene	< LOQ	445.0	ppm		10/30/19 09:37	10/30/19 13:24	
Butanes	< LOQ	2500	ppm		10/30/19 09:37	10/30/19 13:24	
Hexanes	< LOQ	145.0	ppm		10/30/19 09:37	10/30/19 13:24	
Pentanes	< LOQ	2500	ppm		10/30/19 09:37	10/30/19 13:24	
Xylenes	< LOQ	1085	ppm		10/30/19 09:37	10/30/19 13:24	

Blank(B19J161-BLK2)

Analyte	Result	LOQ	Units	%Recovery Limits	Extracted	Analyzed	Notes
Acetone	< LOQ	2500	ppm		10/30/19 09:37	10/30/19 13:55	
Acetonitrile	< LOQ	205.0	ppm		10/30/19 09:37	10/30/19 13:55	
Benzene	< LOQ	1,000	ppm		10/30/19 09:37	10/30/19 13:55	
2-Butanol	< LOQ	2500	ppm		10/30/19 09:37	10/30/19 13:55	
Cumene	< LOQ	35.00	ppm		10/30/19 09:37	10/30/19 13:55	
Cyclohexane	< LOQ	1940	ppm		10/30/19 09:37	10/30/19 13:55	
Dichloromethane	< LOQ	300.0	ppm		10/30/19 09:37	10/30/19 13:55	
1,4-Dioxane	< LOQ	190.0	ppm		10/30/19 09:37	10/30/19 13:55	



Erik Werstler
Lab Director

SAMPLE NAME

CLIENT NAME

SAMPLE ID

Laboratory ID: 1910192-01

Quality Control Solvent Analysis (Continued)

Batch: B19J161 - ResSolv (Continued)

Blank(B19J161-BLK2)

Analyte	Result	LOQ	Units	%Recovery Limits	Extracted	Analyzed	Notes
2-Ethoxyethanol	< LOQ	80.00	ppm		10/30/19 09:37	10/30/19 13:55	
Ethyl acetate	< LOQ	2500	ppm		10/30/19 09:37	10/30/19 13:55	
Ethylene glycol	< LOQ	310.0	ppm		10/30/19 09:37	10/30/19 13:55	
Ethylene oxide	< LOQ	25.00	ppm		10/30/19 09:37	10/30/19 13:55	
Ethyl ether	< LOQ	2500	ppm		10/30/19 09:37	10/30/19 13:55	
Heptane	< LOQ	2500	ppm		10/30/19 09:37	10/30/19 13:55	
Isopropyl acetate	< LOQ	2500	ppm		10/30/19 09:37	10/30/19 13:55	
Methanol	< LOQ	1500	ppm		10/30/19 09:37	10/30/19 13:55	
Propane	< LOQ	2500	ppm		10/30/19 09:37	10/30/19 13:55	
2-Propanol (IPA)	< LOQ	2500	ppm		10/30/19 09:37	10/30/19 13:55	
Tetrahydrofuran	< LOQ	360.0	ppm		10/30/19 09:37	10/30/19 13:55	
Toluene	< LOQ	445.0	ppm		10/30/19 09:37	10/30/19 13:55	
Butanes	< LOQ	2500	ppm		10/30/19 09:37	10/30/19 13:55	
Hexanes	< LOQ	145.0	ppm		10/30/19 09:37	10/30/19 13:55	
Pentanes	< LOQ	2500	ppm		10/30/19 09:37	10/30/19 13:55	
Xylenes	< LOQ	1085	ppm		10/30/19 09:37	10/30/19 13:55	

LCS(B19J161-BS2)

Analyte	% Recovery	LOQ	Units	%Recovery Limits	Extracted	Analyzed	Notes
Acetone	121	2500	ppm	70-130	10/30/19 09:37	10/30/19 12:53	
Acetonitrile	96.4	205.0	ppm	70-130	10/30/19 09:37	10/30/19 12:53	
Benzene	114	1.000	ppm	70-130	10/30/19 09:37	10/30/19 12:53	
n-Butane	104	2500	ppm	70-130	10/30/19 09:37	10/30/19 12:53	
2-Butanol	103	2500	ppm	70-130	10/30/19 09:37	10/30/19 12:53	
Cumene	121	35.00	ppm	70-130	10/30/19 09:37	10/30/19 12:53	
Cyclohexane	121	1940	ppm	70-130	10/30/19 09:37	10/30/19 12:53	
Dichloromethane	116	300.0	ppm	70-130	10/30/19 09:37	10/30/19 12:53	
2,2-Dimethylbutane	131	145.0	ppm	70-130	10/30/19 09:37	10/30/19 12:53	Q3
2,3-Dimethylbutane 2-Methy	110	145.0	ppm	70-130	10/30/19 09:37	10/30/19 12:53	
1,4-Dioxane	156	190.0	ppm	70-130	10/30/19 09:37	10/30/19 12:53	Q3
2-Ethoxyethanol	140	80.00	ppm	70-130	10/30/19 09:37	10/30/19 12:53	Q3
Ethyl acetate	105	2500	ppm	70-130	10/30/19 09:37	10/30/19 12:53	
Ethyl benzene	140	1085	ppm	70-130	10/30/19 09:37	10/30/19 12:53	Q3
Ethylene glycol	141	310.0	ppm	70-130	10/30/19 09:37	10/30/19 12:53	Q3
Ethylene oxide	128	25.00	ppm	70-130	10/30/19 09:37	10/30/19 12:53	



Erik Werstler
Lab Director

SAMPLE NAME

CLIENT NAME

SAMPLE ID

Laboratory ID: 1910192-01

Quality Control Solvent Analysis (Continued)

Batch: B19J161 - ResSolv (Continued)

LCS(B19J161-BS2)

Analyte	% Recovery	LOQ	Units	%Recovery Limits	Extracted	Analyzed	Notes
Ethyl ether	127	2500	ppm	70-130	10/30/19 09:37	10/30/19 12:53	
Heptane	105	2500	ppm	70-130	10/30/19 09:37	10/30/19 12:53	
n-Hexane	130	145.0	ppm	70-130	10/30/19 09:37	10/30/19 12:53	
iso-Butane	108	2500	ppm	70-130	10/30/19 09:37	10/30/19 12:53	
Isopropyl acetate	108	2500	ppm	70-130	10/30/19 09:37	10/30/19 12:53	
iso-Pentane	103	2500	ppm	70-130	10/30/19 09:37	10/30/19 12:53	
Methanol	149	1500	ppm	70-130	10/30/19 09:37	10/30/19 12:53	Q3
3-Methylpentane	131	145.0	ppm	70-130	10/30/19 09:37	10/30/19 12:53	Q3
neo-Pentane	129	145.0	ppm	70-130	10/30/19 09:37	10/30/19 12:53	
n-Pentane	107	145.0	ppm	70-130	10/30/19 09:37	10/30/19 12:53	
Propane	107	2500	ppm	70-130	10/30/19 09:37	10/30/19 12:53	
2-Propanol (IPA)	104	2500	ppm	70-130	10/30/19 09:37	10/30/19 12:53	
Tetrahydrofuran	108	360.0	ppm	70-130	10/30/19 09:37	10/30/19 12:53	
Toluene	134	445.0	ppm	70-130	10/30/19 09:37	10/30/19 12:53	Q3
m,p Xylene	150	1085	ppm	70-130	10/30/19 09:37	10/30/19 12:53	Q3
o-Xylene	146	1085	ppm	70-130	10/30/19 09:37	10/30/19 12:53	Q3
Butanes		2500	ppm	70-130	10/30/19 09:37	10/30/19 12:53	
Hexanes		145.0	ppm	70-130	10/30/19 09:37	10/30/19 12:53	
Pentanes		2500	ppm	70-130	10/30/19 09:37	10/30/19 12:53	
Xylenes		1085	ppm	70-130	10/30/19 09:37	10/30/19 12:53	



Erik Werstler
Lab Director

SAMPLE NAME

CLIENT NAME

SAMPLE ID

Laboratory ID: 1910192-01

Quality Control Terpene Analysis

Batch: B19J140 - Terp

Blank(B19J140-BLK1)

Analyte	Result	LOQ	Units	%Recovery Limits	Extracted	Analyzed	Notes
alpha-Bisabolol	< LOQ	0.007500	%		10/25/19 18:25	10/26/19 00:30	
Camphene	< LOQ	0.007500	%		10/25/19 18:25	10/26/19 00:30	
Camphor	< LOQ	0.007500	%		10/25/19 18:25	10/26/19 00:30	
delta-3-Carene	< LOQ	0.007500	%		10/25/19 18:25	10/26/19 00:30	
beta-Caryophyllene	< LOQ	0.007500	%		10/25/19 18:25	10/26/19 00:30	
Caryophyllene Oxide	< LOQ	0.007500	%		10/25/19 18:25	10/26/19 00:30	
alpha-Cedrene	< LOQ	0.007500	%		10/25/19 18:25	10/26/19 00:30	
Cedrol	< LOQ	0.007500	%		10/25/19 18:25	10/26/19 00:30	
(1R)-endo-(+)-Fenchyl alcot	< LOQ	0.007500	%		10/25/19 18:25	10/26/19 00:30	
Eucalyptol	< LOQ	0.007500	%		10/25/19 18:25	10/26/19 00:30	
Geraniol	< LOQ	0.007500	%		10/25/19 18:25	10/26/19 00:30	
Geranyl acetate	< LOQ	0.007500	%		10/25/19 18:25	10/26/19 00:30	
Guaiol	< LOQ	0.007500	%		10/25/19 18:25	10/26/19 00:30	
alpha-Humulene	< LOQ	0.007500	%		10/25/19 18:25	10/26/19 00:30	
Isoborneol	< LOQ	0.007500	%		10/25/19 18:25	10/26/19 00:30	
Isopulegol	< LOQ	0.007500	%		10/25/19 18:25	10/26/19 00:30	
Limonene	< LOQ	0.007500	%		10/25/19 18:25	10/26/19 00:30	
Linalool	< LOQ	0.007500	%		10/25/19 18:25	10/26/19 00:30	
beta-Myrcene	< LOQ	0.007500	%		10/25/19 18:25	10/26/19 00:30	
trans-Nerolidol	< LOQ	0.007500	%		10/25/19 18:25	10/26/19 00:30	
alpha-Pinene	< LOQ	0.007500	%		10/25/19 18:25	10/26/19 00:30	
beta-Pinene	< LOQ	0.007500	%		10/25/19 18:25	10/26/19 00:30	
Pulegone	< LOQ	0.007500	%		10/25/19 18:25	10/26/19 00:30	
Sabinene	< LOQ	0.007500	%		10/25/19 18:25	10/26/19 00:30	
Sabinene hydrate	< LOQ	0.007500	%		10/25/19 18:25	10/26/19 00:30	
gamma-Terpinene	< LOQ	0.007500	%		10/25/19 18:25	10/26/19 00:30	
alpha-Terpinene	< LOQ	0.007500	%		10/25/19 18:25	10/26/19 00:30	
Terpinolene	< LOQ	0.007500	%		10/25/19 18:25	10/26/19 00:30	
Valencene	< LOQ	0.007500	%		10/25/19 18:25	10/26/19 00:30	
Nerol	< LOQ	0.007500	%		10/25/19 18:25	10/26/19 00:30	
cis-Nerolidol	< LOQ	0.007500	%		10/25/19 18:25	10/26/19 00:30	
(+/-)-Borneol	< LOQ	0.007500	%		10/25/19 18:25	10/26/19 00:30	
(+/-)-Fenchone	< LOQ	0.007500	%		10/25/19 18:25	10/26/19 00:30	
alpha-Phellandrene	< LOQ	0.007500	%		10/25/19 18:25	10/26/19 00:30	



Erik Werstler
Lab Director

SAMPLE NAME

CLIENT NAME

SAMPLE ID

Laboratory ID: 1910192-01

Quality Control

Terpene Analysis (Continued)

Batch: B19J140 - Terp (Continued)

Blank(B19J140-BLK1)

Analyte	Result	LOQ	Units	%Recovery Limits	Extracted	Analyzed	Notes
beta-Ocimene	< LOQ	0.007500	%		10/25/19 18:25	10/26/19 00:30	
cis-Farnesene	< LOQ	0.007500	%		10/25/19 18:25	10/26/19 00:30	
Menthol	< LOQ	0.007500	%		10/25/19 18:25	10/26/19 00:30	
trans-beta-Ocimene	< LOQ	0.007500	%		10/25/19 18:25	10/26/19 00:30	
trans-Farnesene	< LOQ	0.007500	%		10/25/19 18:25	10/26/19 00:30	
alpha-Terpineol	< LOQ	0.007500	%		10/25/19 18:25	10/26/19 00:30	
gamma-Terpineol	< LOQ	0.007500	%		10/25/19 18:25	10/26/19 00:30	

Notes and Definitions

- B Analyte detected in method blank, but not associated samples.
 - B2 Analyte detected in sample and associate method blank.
 - C Interference due to co-elution.
 - D Initial result exceeded calibration range, reported data are based on analysis of a dilution.
 - H Non-homogenous sample matrix affecting RPD and/or QC.
 - I Manual Integration was performed.
 - L Duplicate sample relative percent difference (RPD) exceeds QC limits.
 - M Anomalous results due to matrix interference
 - P Peaks manually split.
 - Q1 QC out of limits but still oK
 - Q2 Quality Control outside QC limits. Data considered estimate.
 - Q3 CCV was above the acceptance criteria. Non-detect samples are considered acceptable.
 - Q4 CCV was below the acceptance criteria, however the sample still exceeds the regulatory limit.
 - R Marginal Exceedence.
 - U Reported result is an estimate. The analyte was detected above the calibration range.
 - X Problems with initial analysis, reported data are from reinjection of prepared sample.
- <LOQ - Results below the Limit of Quantitation - Compound not detected



Erik Werstler
Lab Director