

Potency Results

Sample Name: 13-GF-23
Client: Great Harvest Logistics LLC
Client Batch ID:

Pinnacle-Analytics.com
3549 Lear Way, Suite 101
Medford OR 97504
P:(541)300-8217

Sample ID: rC-H-372-D2164

Matrix: Flower

Prep Analyst: Jeff A.

Analysis Method: 0630322+1 H4 4-21-2022 #1.lcm

Sampling Method: N/A

Reference Method: JCB 2009: HPLC/DAD

Analysis Batch: 12-6-2023 H4 101, 185, 205, 372, 390, 415 Flower

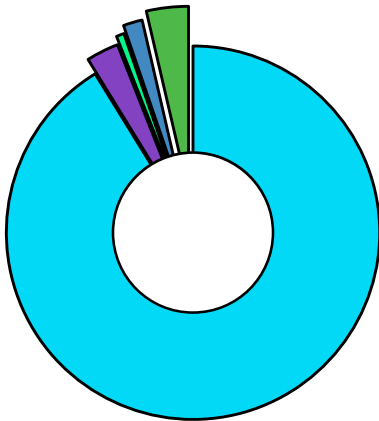
Date Sampled: 12/5/2023

Date Reported: 12/15/2023

Client License: AG-R1065116-IHH

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Total THC (THCA*0.877+d9-THC)	0.748%
Total CBD (CBDA*0.877+CBD)	19.2%
Moisture Content	10.9%
Water Activity	0.407



Cannabinoid	% Weight	mg/g
CBDVA	<LOQ	<LOQ
CBDV	<LOQ	<LOQ
CBDA*	21.5	215.0
CBGA	0.665	6.65
CBG	0.163	1.63
CBD*	0.39	3.9
THCV	<LOQ	<LOQ
CBN	<LOQ	<LOQ
d9-THC*	<LOQ	<LOQ
d8-THC*	<LOQ	<LOQ
CBC	<LOQ	<LOQ
THCA*	0.853	8.53
Total Cannabinoids	23.57	236.0

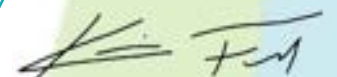
*ORELAP Accredited Analyte

Limit Of Quantitation: 0.1%, analyte not measured

 CBDA*	 CBD*
 CBGA	 THCA*
 CBG	



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Report generated by Routine_Potency_Rev13_8-1-2023



Kris Ford, PhD
Lab Director



Quality Control Results

Analyst: Jeff A.

Pinnacle-Analytics.com
3549 Lear Way, Suite 101
Medford OR 97504

Analysis Batch: 12-6-2023 H4 101, 185, 205, 372, 390, 415 Flower P:(541)300-8217

	Duplicate RPD		LCS % Recovery		Method Blank	
	H-0-D2119-b	Limit	C-FL-120623	Limits	C-FB-120623	Limit
CBDA	9.91%	10%	97.9%	90-110%	<LOQ/2	LOQ/2
CBD	8.86%	30%	102.0%	90-110%	<LOQ/2	LOQ/2
d9-THC	<LOQ%	30%	102.0%	90-110%	<LOQ/2	LOQ/2
d8-THC	<LOQ%	30%	103.0%	90-110%	<LOQ/2	LOQ/2
THCA	7.56%	10%	92.9%	90-110%	<LOQ/2	LOQ/2

RPD: Relative Percent Difference between unknown sample and its duplicate

LCS: Laboratory Control Sample with known concentration

Case Comments: There were no divergences from ordinary Quality Control procedures or SOPs.



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Report generated by Routine_Potency_Rev13_8-1-2023

Kris Ford, PhD
Lab Director

PREE Laboratories - South
545 SW 2nd St, #202, Corvallis, OR 97333
541-257-5002 / OLCC 010-10087092BDA / www.PREElab.com

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13-GF-23 D2164

Pinnacle Analytics

010-101599328A3

Sample ID: C231789-09 METRC Batch #:

Matrix: Hemp

Date Sampled: NA

Date Accepted: 12/07/23

Batch ID:

Batch Size:

Sampling Method/SOP: Client

Terpene Analysis

Date/Time Extracted: 12/12/23 09:13

Analysis Method/SOP: SOP.T.40.092

Date/Time Analyzed: 12/13/23 00:45

Sample extracted and analyzed at PREE Lab - North

Analyte	LOQ (mg/g)	Mass (mg/g)	Mass (%)	Analyte	LOQ (mg/g)	Mass (mg/g)	Mass (%)
alpha-Pinene	0.100	< LOQ	< LOQ	beta-Pinene	0.100	< LOQ	< LOQ
Camphene	0.100	< LOQ	< LOQ	Sabinene	0.100	< LOQ	< LOQ
Sabinene hydrate	0.100	< LOQ	< LOQ	beta-Myrcene	0.100	0.353	0.0353
p-Mentha-1,5-diene	0.100	< LOQ	< LOQ	(+)-3-Carene	0.100	< LOQ	< LOQ
alpha-Terpinene	0.100	< LOQ	< LOQ	gamma-Terpinene	0.100	< LOQ	< LOQ
Limonene	0.100	< LOQ	< LOQ	Eucalyptol	0.100	< LOQ	< LOQ
Guaiol	0.100	0.213	0.0213	Terpinolene	0.100	< LOQ	< LOQ
Linalool	0.100	0.289	0.0289	Camphor	0.100	< LOQ	< LOQ
(+)-Camphor	0.100	< LOQ	< LOQ	(-)-Camphor	0.100	< LOQ	< LOQ
Isopulegol	0.100	< LOQ	< LOQ	Isoborneol	0.100	< LOQ	< LOQ
Borneol	0.100	< LOQ	< LOQ	Hexahydrothymol	0.100	< LOQ	< LOQ
Geraniol	0.100	< LOQ	< LOQ	(+)-Pulegone	0.100	< LOQ	< LOQ
Nerol	0.100	< LOQ	< LOQ	cis-Nerolidol	0.100	< LOQ	< LOQ
trans-Nerolidol	0.100	0.178	0.0178	Geranyl acetate	0.100	< LOQ	< LOQ
alpha-Cedrene	0.100	< LOQ	< LOQ	trans-Caryophyllene	0.100	0.983	0.0983
Caryophyllene Oxide	0.100	0.225	0.0225	alpha-Humulene	0.100	0.586	0.0586
Valencene	0.100	< LOQ	< LOQ	alpha-Farnesene	0.100	< LOQ	< LOQ
beta-Farnesene	0.100	< LOQ	< LOQ	Cedrol	0.100	< LOQ	< LOQ
alpha-Bisabolol	0.100	0.638	0.0638	Fenchone	0.100	< LOQ	< LOQ
Fenchyl Alcohol	0.100	< LOQ	< LOQ	trans, beta- Ocimene	0.100	< LOQ	< LOQ
beta, cis- Ocimene	0.100	0.144	0.0144	Terpineol	0.100	< LOQ	< LOQ
Total (Sum):						3.61	0.36

Analysis performed on GCMS with confirmation ion identification. Terpene analysis is not ORELAP accredited. Results reported as dry weight. LOQ = Limit of Quantitation.



Carson Newkirk
Laboratory Manager - 12/14/2023

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13-GF-23 D2164

Pinnacle Analytics

010-101599328A3

Sample ID: C231789-09

METRC Batch Package #:

Matrix: Hemp

Date Sampled: 12/07/23 16:15

Date Accepted: 12/07/23 16:15

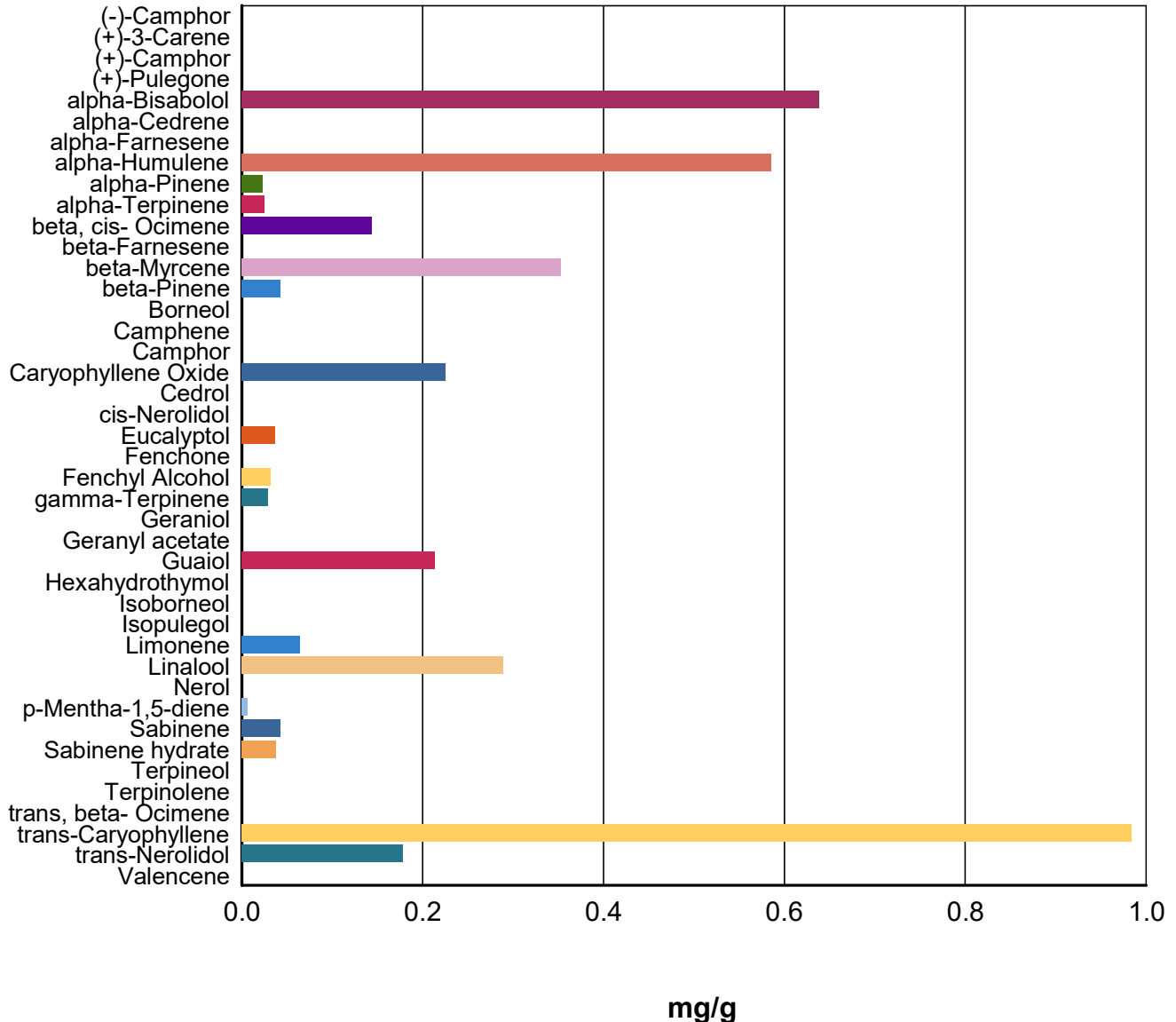
Results Valid Until: 12/06/24

Batch ID:

Batch Size:

Sampling Method/SOP: SOP.T.20.010

Terpene Profile



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Notes and Definitions

Item	Definition
HIGH BIAS	High analyte recovery, yet no detection of that analyte in samples.



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Pest/Myco/HM/Mirco Comp- D2164-216

Pinnacle Analytics

010-101599328A3

Sample ID: C231789-14

METRC Batch #:

Matrix: Hemp

Date Accepted: 12/07/23

Batch ID:

Batch Size:

Sampling Method/SOP: Client

Pesticides

Date/Time Extracted: 12/11/23 15:11

Date/Time Analyzed: 12/12/2023 8:30:57PM

Analysis Method/SOP: LSOP #307

Sample extracted and analyzed at PREE Lab - South

Analyte	LOQ	Action Level	Result	Units	Type
Acephate	0.200	0.4	< LOQ	ppm	Organophosphate insecticide
Acequinocyl	0.500	2	< LOQ	ppm	
Acetamiprid	0.100	0.2	< LOQ	ppm	Neonicotinoid insecticide
Aldicarb	0.200	0.4	< LOQ	ppm	Carbamate insecticide
Avermectin B1	0.200	0.5	< LOQ	ppm	
Azoxystrobin	0.100	0.2	< LOQ	ppm	
Bifenazate	0.100	0.2	< LOQ	ppm	Unclassified insecticide
Bifenthrin	0.100	0.2	< LOQ	ppm	
Boscalid	0.200	0.4	< LOQ	ppm	Anilide fungicide
Carbaryl	0.100	0.2	< LOQ	ppm	Carbamate insecticide
Carbofuran	0.100	0.2	< LOQ	ppm	Carbamate insecticide
Chlorantraniliprole	0.100	0.2	< LOQ	ppm	Anthranilic diamide insecticide
Chlorfenapyr	0.500	1	< LOQ	ppm	Pyrazole insecticide
Chlorpyrifos	0.100	0.2	< LOQ	ppm	Organophosphate insecticide
Clofentezine	0.100	0.2	< LOQ	ppm	
Cyfluthrin	0.500	1	< LOQ	ppm	
Cypermethrin	0.500	1	< LOQ	ppm	
Daminozide	0.500	1	< LOQ	ppm	
DDVP (Dichlorvos)	0.500	1	< LOQ	ppm	
Diazinon	0.100	0.2	< LOQ	ppm	Organophosphate insecticide
Dimethoate	0.100	0.2	< LOQ	ppm	
Ethoprophos	0.100	0.2	< LOQ	ppm	
Etofenprox	0.200	0.4	< LOQ	ppm	
Etoxazole	0.100	0.2	< LOQ	ppm	Unclassified miticide
Fenoxycarb	0.100	0.2	< LOQ	ppm	
Fenpyroximate	0.200	0.4	< LOQ	ppm	
Fipronil	0.200	0.4	< LOQ	ppm	Pyrazole insecticide
Flonicamid	0.500	1	< LOQ	ppm	Pyridinecarboxamide insecticide
Fludioxonil	0.200	0.4	< LOQ	ppm	non-systemic fungicide
Hexythiazox	0.500	1	< LOQ	ppm	
Imazalil	0.100	0.2	< LOQ	ppm	Azole fungicide
Imidacloprid	0.200	0.4	< LOQ	ppm	Neonicotinoid insecticide
Kresoxim-methyl	0.200	0.4	< LOQ	ppm	
Malathion	0.100	0.2	< LOQ	ppm	
Metalaxyl	0.100	0.2	< LOQ	ppm	
Methiocarb	0.100	0.2	< LOQ	ppm	Carbamate insecticide
Methomyl	0.200	0.4	< LOQ	ppm	Carbamate insecticide



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Pest/Myco/HM/Mirco Comp- D2164-216

Pinnacle Analytics
010-101599328A3

Sample ID: C231789-14

METRC Batch #:

Matrix: Hemp

Date Accepted: 12/07/23

Batch ID:

Batch Size:

Sampling Method/SOP: Client

Pesticides

Date/Time Extracted: 12/11/23 15:11

Date/Time Analyzed: 12/12/2023 8:30:57PM

Analysis Method/SOP: LSOP #307

Sample extracted and analyzed at PREE Lab - South

Analyte	LOQ	Action Level	Result	Units	Type
Methyl parathion	0.100	0.2	< LOQ	ppm	
MGK I	0.100	0.2	< LOQ	ppm	
MGK II	0.100	0.2	< LOQ	ppm	
MGK-264 (Both)	0.100	0.2	< LOQ	ppm	
Myclobutanil	0.100	0.2	< LOQ	ppm	Azole fungicide
Naled	0.200	0.5	< LOQ	ppm	
Oxamyl	0.500	1	< LOQ	ppm	Carbamate insecticide
Paclobutrazol	0.200	0.4	< LOQ	ppm	Azole plant growth regulator
Permethrins (Both)	0.100	0.2	< LOQ	ppm	
Permethrins Cis	0.100	0.2	< LOQ	ppm	
Permethrins Trans	0.100	0.2	< LOQ	ppm	
Phosmet	0.100	0.2	< LOQ	ppm	Organophosphate insecticide
Piperonyl butoxide	0.500	2	< LOQ	ppm	
Prallethrin	0.100	0.2	< LOQ	ppm	
Propiconazole	0.200	0.4	< LOQ	ppm	
Propoxur	0.100	0.2	< LOQ	ppm	Carbamate insecticide
Pyrethrins (All 3)	0.500	1	< LOQ	ppm	
Pyrethrins Cinerin	0.500	1	< LOQ	ppm	
Pyrethrins Jasmolin	0.500	1	< LOQ	ppm	
Pyrethrins Pyrethrin	0.500	1	< LOQ	ppm	
Pyridaben	0.100	0.2	< LOQ	ppm	Unclassified insecticide
Spinosad (Both)	0.100	0.2	< LOQ	ppm	
Spinosyn A	0.100	0.2	< LOQ	ppm	
Spinosyn D	0.100	0.2	< LOQ	ppm	
Spiromesifen	0.100	0.2	< LOQ	ppm	Keto-enol insecticide
Spirotetramat	0.100	0.2	< LOQ	ppm	Keto-enol insecticide
Spiroxamine	0.200	0.4	< LOQ	ppm	Unclassified fungicide
Tebuconazole	0.200	0.4	< LOQ	ppm	
Thiacloprid	0.100	0.2	< LOQ	ppm	
Thiamethoxam	0.100	0.2	< LOQ	ppm	Neonicotinoid insectide
Trifloxystrobin	0.100	0.2	< LOQ	ppm	Strobin fungicide

Results above the action level fail Oregon state testing requirements and will be highlighted **RED**.

LOQ= Limit of Quantitation; PPM= Parts per million; ND= Not detected; NT= Not tested; AC= Above calibration range. PASS/FAIL status based on OAR 333-007.



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Pest/Myco/HM/Mirco Comp- D2164-216 Date Sampled: NA
Pinnacle Analytics Date Accepted: 12/07/23
010-101599328A3 Batch ID:
Sample ID: C231789-14 METRC Batch #: Batch Size:
Matrix: Hemp Sampling Method/SOP: Client

Microbial Analysis

Date/Time Extracted: 12/11/23 15:04 Date/Time Analyzed: 12/13/2023 2:31:26PM
 Analysis Method/SOP: LSOP #310 Sample extracted and analyzed at PREE Lab - South

Analyte	Result	Units	Pass/Fail
Salmonella spp.	Absent	/g	PASS
STEC E. coli	Absent	/g	PASS

Analytical instrumentation: Thomas Scientific Applied Biosystem qPCR located at PREE Lab - South



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Pest/Myco/HM/Mirco Comp- D2164-216 Date Sampled: NA
Pinnacle Analytics Date Accepted: 12/07/23
010-101599328A3 Batch ID:
Sample ID: C231789-14 METRC Batch #: Batch Size:
Matrix: Hemp Sampling Method/SOP: Client

Heavy Metals Analysis

Date Extracted: 12/11/23

Date Analyzed: 12/12/23

Analysis Method/SOP: LSOP #309

Sample extracted and analyzed at PREE Lab - South

Analyte	LOQ (ug/g)	Action Level (ug/g)	Result (ug/g)
Mercury	0.040	0.1	ND
Lead	0.160	0.5	ND
Cadmium	0.080	0.2	ND
Arsenic	0.080	0.2	ND

LOQ= Limit of Quantitation; ND= Not Detected;
 The reported result is based on sample weight for this sample;
 Analytical instrumentation: Agilent 7850 ICP-MS located at PREE Lab - South



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Pest/Myco/HM/Mirco Comp- D2164-216		Date Sampled: NA
Pinnacle Analytics		Date Accepted: 12/07/23
010-101599328A3		Batch ID:
Sample ID: C231789-14	METRC Batch #:	Batch Size:
Matrix: Hemp		Sampling Method/SOP: Client

Mycotoxins

Date Extracted: 12/12/23

Date Analyzed: 12/13/23

Analysis Method/SOP: LSOP #308

Sample extracted and analyzed at PREE Lab - South

Analyte	LOQ (ug/g)	Action Level	Result (ug/g)
Total Aflatoxins	0.0100	0.02	ND
Ochratoxin A	0.0100	0.02	ND
Aflatoxin G2	0.0100	0.02	ND
Aflatoxin G1	0.0100	0.02	ND
Aflatoxin B2	0.0100	0.02	ND
Aflatoxin B1	0.0100	0.02	ND

LOQ= Limit of Quantitation; ND= Not Detected;
The reported result is based on sample weight for this sample;
Analytical instrumentation: Sciex Triple Quad 6500



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Quality Control

Batch: C23L041 - LSOP #309 Heavy Metal Quantification

Blank(C23L041-BLK1)			Extracted: 12/11/23 10:38			Analyzed: 12/12/23 12:16			
Analyte	Result	LOQ	Recovery Limits	Notes	Analyte	Result	LOQ	Recovery Limits	Notes
Arsenic	< LOQ	0.080 (ug/g)	< LOQ		Lead	< LOQ	0.160 (ug/g)	< LOQ	
Mercury	< LOQ	0.040 (ug/g)	< LOQ		Cadmium	< LOQ	0.080 (ug/g)	< LOQ	

LCS(C23L041-BS1)			Extracted: 12/11/23 10:38			Analyzed: 12/12/23 12:20			
Analyte	% Recovery	LOQ	Recovery Limits	Notes	Analyte	% Recovery	LOQ	Recovery Limits	Notes
Arsenic	96.4	0.080 (ug/g)	80-115		Lead	100	0.160 (ug/g)	80-115	
Mercury	80.8	0.040 (ug/g)	80-115		Cadmium	88.6	0.080 (ug/g)	80-115	

LCS Dup(C23L041-BSD1)			Extracted: 12/11/23 10:38			Analyzed: 12/12/23 13:55			
Analyte	% Recovery	LOQ	Recovery Limits	Notes	Analyte	% Recovery	LOQ	Recovery Limits	Notes
Arsenic	92.7	0.080 (ug/g)	80-115		Lead	97.0	0.160 (ug/g)	80-115	
Mercury	81.3	0.040 (ug/g)	80-115		Cadmium	87.9	0.080 (ug/g)	80-115	

Batch: C23L047 - LSOP #310 Microbial Analysis

Blank(C23L047-BLK1)			Extracted: 12/11/23 15:04			Analyzed: 12/13/23 14:31			
Analyte	Result	LOQ	Recovery Limits	Notes	Analyte	Result	LOQ	Recovery Limits	Notes
STEC E. coli	Absent	0.500 (/g)	< LOQ		Salmonella spp.	Absent	0.500 (/g)	< LOQ	

Reference(C23L047-SRM1)			Extracted: 12/11/23 15:04			Analyzed: 12/13/23 14:31			
Analyte	Result	LOQ	Recovery Limits	Notes	Analyte	Result	LOQ	Recovery Limits	Notes
STEC E. coli	Present	(/g)	100-100		Salmonella spp.	Present	(/g)	100-100	

Batch: C23L048 - LSOP #307 Pesticide Quantification by LCMS

Blank(C23L048-BLK1)			Extracted: 12/11/23 15:11			Analyzed: 12/12/23 19:31			
Analyte	Result	LOQ	Recovery Limits	Notes	Analyte	Result	LOQ	Recovery Limits	Notes
Acephate	< LOQ	0.200 (ppm)	< LOQ		Acequinocyl	< LOQ	0.500 (ppm)	< LOQ	
Acetamiprid	< LOQ	0.100 (ppm)	< LOQ		Aldicarb	< LOQ	0.200 (ppm)	< LOQ	
Avermectin B1	< LOQ	0.200 (ppm)	< LOQ		Azoxystrobin	< LOQ	0.100 (ppm)	< LOQ	
Bifenazate	< LOQ	0.100 (ppm)	< LOQ		Bifenthrin	< LOQ	0.100 (ppm)	< LOQ	
Boscalid	< LOQ	0.200 (ppm)	< LOQ		Carbaryl	< LOQ	0.100 (ppm)	< LOQ	
Carbofuran	< LOQ	0.100 (ppm)	< LOQ		Chlorantraniliprole	< LOQ	0.100 (ppm)	< LOQ	
Chlorfenapyr	< LOQ	0.500 (ppm)	< LOQ		Chlorpyrifos	< LOQ	0.100 (ppm)	< LOQ	
Clofentezine	< LOQ	0.100 (ppm)	< LOQ		Cyfluthrin	< LOQ	0.500 (ppm)	< LOQ	
Cypermethrin	< LOQ	0.500 (ppm)	< LOQ		Daminozide	< LOQ	0.500 (ppm)	< LOQ	
DDVP (Dichlorvos)	< LOQ	0.500 (ppm)	< LOQ		Diazinon	< LOQ	0.100 (ppm)	< LOQ	
Dimethoate	< LOQ	0.100 (ppm)	< LOQ		Ethoprophos	< LOQ	0.100 (ppm)	< LOQ	
Etofenprox	< LOQ	0.200 (ppm)	< LOQ		Etoazole	< LOQ	0.100 (ppm)	< LOQ	
Fenoxycarb	< LOQ	0.100 (ppm)	< LOQ		Fenpyroximate	< LOQ	0.200 (ppm)	< LOQ	



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Quality Control

Batch: C23L048 - LSOP #307 Pesticide Quantification by LCMS (Continued)

Blank(C23L048-BLK1)			Extracted: 12/11/23 15:11			Analyzed: 12/12/23 19:31			
Analyte	Result	LOQ	Recovery Limits	Notes	Analyte	Result	LOQ	Recovery Limits	Notes
Fipronil	< LOQ	0.200 (ppm)	< LOQ		Flonicamid	< LOQ	0.500 (ppm)	< LOQ	
Fludioxonil	< LOQ	0.200 (ppm)	< LOQ		Hexythiazox	< LOQ	0.500 (ppm)	< LOQ	
Imazalil	< LOQ	0.100 (ppm)	< LOQ		Imidacloprid	< LOQ	0.200 (ppm)	< LOQ	
Kresoxim-methyl	< LOQ	0.200 (ppm)	< LOQ		Malathion	< LOQ	0.100 (ppm)	< LOQ	
Metalaxyl	< LOQ	0.100 (ppm)	< LOQ		Methiocarb	< LOQ	0.100 (ppm)	< LOQ	
Methomyl	< LOQ	0.200 (ppm)	< LOQ		Methyl parathion	< LOQ	0.100 (ppm)	< LOQ	
MGK I	< LOQ	0.100 (ppm)	< LOQ		MGK II	< LOQ	0.100 (ppm)	< LOQ	
MGK-264 (Both)	< LOQ	0.100 (ppm)	< LOQ		Myclobutanil	< LOQ	0.100 (ppm)	< LOQ	
Naled	< LOQ	0.200 (ppm)	< LOQ		Oxamyl	< LOQ	0.500 (ppm)	< LOQ	
Paclobutrazol	< LOQ	0.200 (ppm)	< LOQ		Permethrins (Both)	< LOQ	0.100 (ppm)	< LOQ	
Permethrins Cis	< LOQ	0.100 (ppm)	< LOQ		Permethrins Trans	< LOQ	0.100 (ppm)	< LOQ	
Phosmet	< LOQ	0.100 (ppm)	< LOQ		Piperonyl butoxide	< LOQ	0.500 (ppm)	< LOQ	
Prallethrin	< LOQ	0.100 (ppm)	< LOQ		Propiconazole	< LOQ	0.200 (ppm)	< LOQ	
Propoxur	< LOQ	0.100 (ppm)	< LOQ		Pyrethrins (All 3)	< LOQ	0.500 (ppm)	< LOQ	
Pyrethrins Cinerin	< LOQ	0.500 (ppm)	< LOQ		Pyrethrins Jasmolin	< LOQ	0.500 (ppm)	< LOQ	
Pyrethrins Pyrethrin	< LOQ	0.500 (ppm)	< LOQ		Pyridaben	< LOQ	0.100 (ppm)	< LOQ	
Spinosad (Both)	< LOQ	0.100 (ppm)	< LOQ		Spinosyn A	< LOQ	0.100 (ppm)	< LOQ	
Spinosyn D	< LOQ	0.100 (ppm)	< LOQ		Spiromesifen	< LOQ	0.100 (ppm)	< LOQ	
Spirotetramat	< LOQ	0.100 (ppm)	< LOQ		Spiroxamine	< LOQ	0.200 (ppm)	< LOQ	
Tebuconazole	< LOQ	0.200 (ppm)	< LOQ		Thiacloprid	< LOQ	0.100 (ppm)	< LOQ	
Thiamethoxam	< LOQ	0.100 (ppm)	< LOQ		Trifloxystrobin	< LOQ	0.100 (ppm)	< LOQ	

LCS(C23L048-BS1)			Extracted: 12/11/23 15:11			Analyzed: 12/12/23 19:46			
Analyte	% Recovery	LOQ	Recovery Limits	Notes	Analyte	% Recovery	LOQ	Recovery Limits	Notes
Acephate	101	(ppm)	60-120		Acequinocyl	110	(ppm)	40-160	
Acetamiprid	102	(ppm)	60-120		Aldicarb	90.5	(ppm)	60-120	
Avermectin B1	119	(ppm)	50-150		Azoxystrobin	107	(ppm)	60-120	
Bifentazate	97.7	(ppm)	60-120		Bifenthrin	106	(ppm)	50-150	
Boscalid	101	(ppm)	60-120		Carbaryl	105	(ppm)	60-120	
Carbofuran	101	(ppm)	60-120		Chlorantraniliprole	101	(ppm)	60-120	
Chlorfenapyr	99.7	(ppm)	60-120		Chlorpyrifos	99.8	(ppm)	60-120	
Clofentezine	101	(ppm)	60-120		Cyfluthrin	105	(ppm)	50-150	
Cypermethrin	100	(ppm)	50-150		Daminozide	113	(ppm)	60-120	
DDVP (Dichlorvos)	101	(ppm)	60-120		Diazinon	98.8	(ppm)	60-120	
Dimethoate	100	(ppm)	60-120		Ethoprophos	97.8	(ppm)	60-120	
Etofenprox	101	(ppm)	50-150		Etoazole	101	(ppm)	60-120	
Fenoxycarb	102	(ppm)	60-120		Fenproximate	97.8	(ppm)	60-120	



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Quality Control

Batch: C23L048 - LSOP #307 Pesticide Quantification by LCMS (Continued)

LCS(C23L048-BS1)			Extracted: 12/11/23 15:11			Analyzed: 12/12/23 19:46			
Analyte	% Recovery	LOQ	Recovery Limits	Notes	Analyte	% Recovery	LOQ	Recovery Limits	Notes
Fipronil	100	(ppm)	60-120		Flonicamid	102	(ppm)	60-120	
Fludioxonil	101	(ppm)	50-150		Hexythiazox	99.3	(ppm)	60-120	
Imazalil	99.2	(ppm)	60-120		Imidacloprid	99.8	(ppm)	60-120	
Kresoxim-methyl	102	(ppm)	60-120		Malathion	101	(ppm)	60-120	
Metaxyl	100	(ppm)	60-120		Methiocarb	98.7	(ppm)	60-120	
Methomyl	103	(ppm)	60-120		Methyl parathion	118	(ppm)	50-150	
MGK I	99.8	(ppm)	50-150		MGK II	105	(ppm)	50-150	
Myclobutanil	98.2	(ppm)	60-120		Naled	103	(ppm)	50-150	
Oxamyl	103	(ppm)	60-120		Paclobutrazol	98.0	(ppm)	60-120	
Permethrins Cis	102	(ppm)	50-150		Permethrins Trans	107	(ppm)	50-150	
Phosmet	101	(ppm)	50-150		Piperonyl butoxide	103	(ppm)	60-120	
Prallethrin	99.0	(ppm)	60-120		Propiconazole	95.0	(ppm)	60-120	
Propoxur	103	(ppm)	60-120		Pyrethrins Cinerin	98.5	(ppm)	60-120	
Pyrethrins Jasmolin	90.5	(ppm)	60-120		Pyrethrins Pyrethrin	103	(ppm)	60-120	
Pyridaben	101	(ppm)	50-150		Spinosyn A	100	(ppm)	50-150	
Spinosyn D	99.0	(ppm)	50-150		Spiromesifen	117	(ppm)	60-120	
Spirotetramat	93.8	(ppm)	60-120		Spiroxamine	104	(ppm)	60-120	
Tebuconazole	103	(ppm)	60-120		Thiacloprid	101	(ppm)	60-120	
Thiamethoxam	100	(ppm)	60-120		Trifloxystrobin	98.7	(ppm)	60-120	

LCS Dup(C23L048-BSD1)			Extracted: 12/11/23 15:11			Analyzed: 12/12/23 21:00			
Analyte	% Recovery	LOQ	Recovery Limits	Notes	Analyte	% Recovery	LOQ	Recovery Limits	Notes
Acephate	97.7	(ppm)	60-120		Acequinocyl	104	(ppm)	40-160	
Acetamiprid	98.7	(ppm)	60-120		Aldicarb	92.5	(ppm)	60-120	
Avermectin B1	93.8	(ppm)	50-150		Azoxystrobin	99.8	(ppm)	60-120	
Bifentazate	110	(ppm)	60-120		Bifenthrin	109	(ppm)	50-150	
Boscalid	106	(ppm)	60-120		Carbaryl	99.5	(ppm)	60-120	
Carbofuran	100	(ppm)	60-120		Chlorantraniliprole	95.0	(ppm)	60-120	
Chlorfenapyr	89.7	(ppm)	60-120		Chlorpyrifos	95.8	(ppm)	60-120	
Clofentezine	99.5	(ppm)	60-120		Cyfluthrin	102	(ppm)	50-150	
Cypermethrin	97.3	(ppm)	50-150		Daminozide	111	(ppm)	60-120	
DDVP (Dichlorvos)	100	(ppm)	60-120		Diazinon	93.8	(ppm)	60-120	
Dimethoate	100	(ppm)	60-120		Ethoprophos	95.8	(ppm)	60-120	
Etofenprox	101	(ppm)	50-150		Etoxazole	101	(ppm)	60-120	
Fenoxycarb	94.2	(ppm)	60-120		Fenpyroximate	98.8	(ppm)	60-120	
Fipronil	96.4	(ppm)	60-120		Flonicamid	99.2	(ppm)	60-120	
Fludioxonil	110	(ppm)	50-150		Hexythiazox	93.4	(ppm)	60-120	



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Quality Control

Batch: C23L048 - LSOP #307 Pesticide Quantification by LCMS (Continued)

LCS Dup(C23L048-BSD1)			Extracted: 12/11/23 15:11			Analyzed: 12/12/23 21:00			
Analyte	% Recovery	LOQ	Recovery Limits	Notes	Analyte	% Recovery	LOQ	Recovery Limits	Notes
Imazalil	101	(ppm)	60-120		Imidacloprid	98.8	(ppm)	60-120	
Kresoxim-methyl	98.8	(ppm)	60-120		Malathion	97.8	(ppm)	60-120	
Metalaxyl	95.5	(ppm)	60-120		Methiocarb	105	(ppm)	60-120	
Methomyl	97.7	(ppm)	60-120		Methyl parathion	94.8	(ppm)	50-150	
MGK I	104	(ppm)	50-150		MGK II	103	(ppm)	50-150	
Myclobutanil	105	(ppm)	60-120		Naled	101	(ppm)	50-150	
Oxamyl	98.5	(ppm)	60-120		Paclobutrazol	108	(ppm)	60-120	
Permethrins Cis	94.4	(ppm)	50-150		Permethrins Trans	92.4	(ppm)	50-150	
Phosmet	98.0	(ppm)	50-150		Piperonyl butoxide	96.7	(ppm)	60-120	
Prallethrin	102	(ppm)	60-120		Propiconazole	102	(ppm)	60-120	
Propoxur	100	(ppm)	60-120		Pyrethrins Cinerin	112	(ppm)	60-120	
Pyrethrins Jasmolin	87.6	(ppm)	60-120		Pyrethrins Pyrethrin	100	(ppm)	60-120	
Pyridaben	103	(ppm)	50-150		Spinosyn A	100	(ppm)	50-150	
Spinosyn D	97.0	(ppm)	50-150		Spiromesifen	111	(ppm)	60-120	
Spirotetramat	107	(ppm)	60-120		Spiroxamine	101	(ppm)	60-120	
Tebuconazole	105	(ppm)	60-120		Thiacloprid	100	(ppm)	60-120	
Thiamethoxam	97.3	(ppm)	60-120		Trifloxystrobin	94.7	(ppm)	60-120	

Batch: C23L052 - LSOP #308 Mycotoxin Quantification by LCMS

Blank(C23L052-BLK1)			Extracted: 12/12/23 09:03			Analyzed: 12/13/23 12:30			
Analyte	Result	LOQ	Recovery Limits	Notes	Analyte	Result	LOQ	Recovery Limits	Notes
Ochratoxin A	< LOQ	0.0100 (ppm)	< LOQ		Aflatoxin G2	< LOQ	0.0100 (ppm)	< LOQ	
Aflatoxin G1	< LOQ	0.0100 (ppm)	< LOQ		Aflatoxin B2	< LOQ	0.0100 (ppm)	< LOQ	
Aflatoxin B1	< LOQ	0.0100 (ppm)	< LOQ		Total Aflatoxins	< LOQ	0.0100 (ppm)	< LOQ	

LCS(C23L052-BS1)			Extracted: 12/12/23 09:03			Analyzed: 12/13/23 12:30			
Analyte	% Recovery	LOQ	Recovery Limits	Notes	Analyte	% Recovery	LOQ	Recovery Limits	Notes
Ochratoxin A	326	(ppm)	60-120	HIGH BIAS	Aflatoxin G2	244	(ppm)	60-120	HIGH BIAS
Aflatoxin G1	233	(ppm)	60-120	HIGH BIAS	Aflatoxin B2	210	(ppm)	60-120	HIGH BIAS
Aflatoxin B1	236	(ppm)	60-120	HIGH BIAS					

LCS Dup(C23L052-BSD1)			Extracted: 12/12/23 09:03			Analyzed: 12/13/23 12:30			
Analyte	% Recovery	LOQ	Recovery Limits	Notes	Analyte	% Recovery	LOQ	Recovery Limits	Notes
Ochratoxin A	286	(ppm)	60-120	HIGH BIAS	Aflatoxin G2	256	(ppm)	60-120	HIGH BIAS
Aflatoxin G1	260	(ppm)	60-120	HIGH BIAS	Aflatoxin B2	224	(ppm)	60-120	HIGH BIAS
Aflatoxin B1	253	(ppm)	60-120	HIGH BIAS					

Notes and Definitions



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Item	Definition
HIGH BIAS	High analyte recovery, yet no detection of that analyte in samples.



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