



ORELAP Cert No. 4092-005
OLCC No. 1002158CD2E

**Marijuana Potency Analysis by
 High Performance Liquid Chromatography**

Testing Accreditation #: 4092-005

Test Certificate #: 136935-001

Client Name, Sample Details
CG Operations LLC
 Cottage Grove, OR 97424
Sample: Blood Orange
License: AG-R1055823IHG
Type: Industrial Hemp
Method: FE04U16 HPLC-UV
*****Moisture:** 11.05%

Test Conditions
Scale: XS205-OR1
Temp: 21.9 °C
Baro Pressure: 1004 hPa
Analyst: TMR
Technician: TMR

Sample ID#: 136935
Harvest/Process Date: 06/01/2022
Date Received: 06/01/2022
Test Date: 06/01/2022



Test Compounds	Δ9-THC	THCA	Δ8-THC	CBD	CBDA	CBG	CBGA	CBN	CBNA	CBC	CBCA	CBL	THCV	THCVA	CBDV	CBDVA	Total Cannabinoids*	Total THC	Total CBD	Calc Max Total Cannabinoids*
Amount (%)	0.07	0.10	N/D	N/D	0.81	1.50	14.94	N/D	N/D	0.16	N/D	N/D	N/D	N/D	N/D	N/D	17.57	0.15	0.71	17.46
Amount (mg/g)	0.70	0.95	N/D	N/D	8.05	14.96	149.39	N/D	N/D	1.61	N/D	N/D	N/D	N/D	N/D	N/D	175.66	1.53	7.06	174.55
Amount per Serving (mg)	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	Serving Size~ (g):		N/D
LOQ (mg/g)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1		%Decarb.	THC	CBD
±%RPD	+/-5%	+/-5%	+/-5%	+/-5%	+/-5%	+/-5%	+/-5%	+/-5%	+/-5%	+/-5%	+/-5%	+/-5%	+/-5%	+/-5%	+/-5%	+/-5%			42	0

The amount of each test compound in the table above has been correct for moisture content and are reported on a "dry weight basis."

LOQ = Limit of Quantitation; %RPD = Relative Percent Deviation; %RSD = Relative Standard Deviation; N/D = Not Detected

*Designates values that are not currently included in the accredited scope of Iron Laboratories.

*** Designates tests that use the method FE-45. FE-45 is performed using AOAC 966.02 and 32.004-32.009. FE-45 has relative expanded (k=2) uncertainties of 1.098% for moisture, 1.754% for water activity for unprocessed plant materials, and 13.102% for water activity for infused products. Vitamin E acetate analysis has a relative expanded (k=2) uncertainty of 18.614%.

Total THC and CBD is the calculated sum of THC or CBD and the amount of THC or CBD derived from THCA or CBDA, respectively. These values are calculated by applying a molar correction factor of 0.877 to the THCA or the CBDA value. Calc Max Total Cannabinoids is the sum of Total THC, Total CBD, CBN, CBG, CBC, THCV, and CBDV.

%Decarb. THC and CBD refer to the percentage of THC or CBD relative to THCA or CBDA, respectively.

This sample has not been tested according to OAR 333-007. These results should therefore be used for research and development or quality control purposes only.

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Terry Rabinowitz, Quality Manager



Himashi Mead, Technical Manager

Iron Labs Oregon complies with 2009 TNI Environmental Laboratory Standards.

Tested by Iron Laboratories Oregon, 71 Centennial Loop Suite D Eugene, OR 97401

Client Name, Sample Details
CG Operations LLC
 Cottage Grove, OR 97424
Sample: Blood Orange
License: AG-R1055823IHG
Type: Industrial Hemp
Method: FE-52 (EN 15662 & AOAC 2007.01)

Test Conditions
Prepsheet ID#: ORPS210601a
Scale: XS205-OR1
Temp: 22.3 °C
Baro PE: 996.3 hPa
Analyst: HRM
Technician: JBS

Sample ID#: 136935
Harvest/Process Date: 06/01/2022
Date Received: 06/01/2022
Test Date: 05/31/2022



Compound	MRL (µg/g)	LOD (µg/g)	Status (µg/g)	Compound	MRL (µg/g)	LOD (µg/g)	Status (µg/g)
Aldicarb	0.400	0.121	Pass/<LOD	Abamectin****	0.500	0.121	Pass/<LOD
Acephate	0.400	0.121	Pass/<LOD	Acequinocyl	2.000	0.242	Pass/<LOD
Acetamiprid	0.200	0.121	Pass/<LOD	Azoxystrobin	0.200	0.121	Pass/<LOD
Bifenazate	0.200	0.121	Pass/<LOD	Bifenthrin	0.200	0.121	Pass/<LOD
Boscalid	0.400	0.121	Pass/<LOD	Carbaryl	0.200	0.121	Pass/<LOD
Carbofuran	0.200	0.121	Pass/<LOD	Chlorantranilprole	0.200	0.121	Pass/<LOD
Chlorfenapyr	1.000	0.485	Pass/<LOD	Chlorpyrifos	0.200	0.121	Pass/<LOD
Clofentezine	0.200	0.121	Pass/<LOD	Cyfluthrin**	1.000	0.485	Pass/<LOD
Cypermethrin***	1.000	0.485	Pass/<LOD	Daminozide	1.000	0.121	Pass/<LOD
DDVP (Dichlorvos)	1.000	0.242	Pass/<LOD	Diazinon	0.200	0.121	Pass/<LOD
Dimethoate	0.200	0.121	Pass/<LOD	Ethoprophos	0.200	0.121	Pass/<LOD
Etofenprox	0.400	0.121	Pass/<LOD	Etoxazole	0.200	0.121	Pass/<LOD
Fenoxycarb	0.200	0.121	Pass/<LOD	Fenpyroximate	0.400	0.121	Pass/<LOD
Fipronil	0.400	0.121	Pass/<LOD	Fonicamid	1.000	0.121	Pass/<LOD
Fludioxonil	0.400	0.121	Pass/<LOD	Hexythiazox	1.000	0.121	Pass/<LOD
Imazalil	0.200	0.121	Pass/<LOD	Imidacloprid	0.400	0.121	Pass/<LOD
Kresoxim Methyl	0.400	0.121	Pass/<LOD	Malathion	0.200	0.121	Pass/<LOD
Metalaxyl	0.200	0.121	Pass/<LOD	Methiocarb	0.200	0.121	Pass/<LOD
Methomyl	0.400	0.121	Pass/<LOD	Methyl Parathion	0.200	0.121	Pass/<LOD
MGK-264‡	0.200	0.121	Pass/<LOD	Myclobutanil	0.000	0.121	Pass/<LOD
Naled	0.500	0.121	Pass/<LOD	Oxamyl	1.000	0.121	Pass/<LOD
Paclobutrazol	0.400	0.121	Pass/<LOD	Permethrin†	0.200	0.121	Pass/<LOD
Phosmet	0.200	0.121	Pass/<LOD	Piperonyl Butoxide	2.000	0.121	Pass/<LOD
Prallethrin	0.200	0.121	Pass/<LOD	Propiconazole	0.400	0.121	Pass/<LOD
Propoxur	0.200	0.121	Pass/<LOD	Pyrethrins*	1.000	0.121	Pass/<LOD
Pyridaben	0.200	0.121	Pass/<LOD	Spinosad*****	0.200	0.121	Pass/<LOD
Spiromesifen	0.200	0.121	Pass/<LOD	Spirotetramat	0.200	0.121	Pass/<LOD
Spiroxamine‡	0.400	0.121	Pass/<LOD	Tebuconazole	0.400	0.121	Pass/<LOD
Thiacloprid	0.200	0.121	Pass/<LOD	Thiamethoxam	0.200	0.121	Pass/<LOD
Trifloxystrobin	0.200	0.121	Pass/<LOD				

* Pyrethrins are reported as the sum of Jasmolin I, Cinerin I, and Pyrethrin I
 ** Cyfluthrins are reported as the sum of isomers Cyfluthrin I, II, III, and IV
 *** Cypermethrins are reported as the sum of isomers Cypermethrin I, II, III, and IV
 **** Abamectin is reported as the sum of Avermectin B1a and Avermectin B1b
 ***** Spinosad is reported as the sum of Spinosyn A and Spinosyn D
 † Permethrin and Prallethrin are reported as the sum of cis and trans isomers
 ‡ MGK-264 and Spiroximine are reported as the sum of isomers I and II
 MRL - Maximum Residue Limit; LOD - Limit of Detection

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 Himashi Mead, Technical Manager




 Terry Rabinowitz, Quality Manager

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Analyst: HRM
Technician: JBS

Sample ID#: 136935
Harvest/Process Date: 06/01/2022
Date Received: 06/01/2022
Test Date: 05/31/2022



Target Compound Name	Method Blank (µg/g)	QC Spike (µg/g)	Matrix Spike (µg/g)	Matrix Spike Duplicate (µg/g)	MS recovery%	MSD recovery%	Relative Percent Difference (%)	QC Flag
Acephate	N.D.	1	1.31	1.23	131.00	123.00	6.30	HR
Acequinocyl	N.D.	1	0.703	0.637	70.30	63.70	9.85	LR
Acetamiprid	N.D.	1	1.52	1.58	152.00	158.00	3.87	HR
Aldicarb	N.D.	1	1.47	1.54	147.00	154.00	4.65	HR
Avermectin B1a	N.D.	0.97	1.57	1.66	161.86	171.13	5.57	HR
Azoxystrobin	N.D.	1	1.37	1.38	137.00	138.00	0.73	HR
Bifenazate	N.D.	1	1.07	1.12	107.00	112.00	4.57	
Bifenthrin	N.D.	1	1.38	1.36	138.00	136.00	1.46	HR
Boscalid	N.D.	1	0.992	1	99.20	100.00	0.80	
Carbaryl	N.D.	1	1.41	1.33	141.00	133.00	5.84	HR
Carbofuran	N.D.	1	1.49	1.51	149.00	151.00	1.33	HR
Chlorantraniliprole	N.D.	1	1.13	1.13	113.00	113.00	0.00	
Chlorfenapyr	N.D.	1	1.13	1.14	113.00	114.00	0.88	
Chlorpyrifos	N.D.	1	1.21	1.35	121.00	135.00	10.94	HR
Clofentezine	N.D.	1	1.08	1.06	108.00	106.00	1.87	
Cyfluthrin	N.D.	1	1.49	1.56	149.00	156.00	4.59	HR
Cypermethrin	N.D.	1	1.57	1.61	157.00	161.00	2.52	HR
Daminozide	N.D.	1	0.282	0.322	28.20	32.20	13.25	LR
Diazanone	N.D.	1	41.8	42.5	4,180.00	4,250.00	1.66	HR
Dichlorvos	N.D.	1	1.27	1.09	127.00	109.00	15.25	
Dimethoate	N.D.	1	1.44	1.51	144.00	151.00	4.75	HR
Ethoprophos	N.D.	1	1.09	1.13	109.00	113.00	3.60	
Etofenprox	N.D.	1	1.64	1.66	164.00	166.00	1.21	HR
Etoxazole	N.D.	1	1.55	1.62	155.00	162.00	4.42	HR
Fenoxycarb	N.D.	1	0.977	1.1	97.70	110.00	11.84	
Fenpyroximate	N.D.	1	1.6	1.66	160.00	166.00	3.68	HR
Fipronil	N.D.	1	1.68	1.75	168.00	175.00	4.08	HR
Flonicamid	N.D.	1	1.6	1.6	160.00	160.00	0.00	HR
Fludioxonil	N.D.	1	1.74	1.78	174.00	178.00	2.27	HR
Hexythiazox	N.D.	1	0.622	0.831	62.20	83.10	28.77	LR Q
Imazalil	N.D.	1	1.08	1.1	108.00	110.00	1.83	
Imidacloprid	N.D.	1	1.33	1.36	133.00	136.00	2.23	HR
Kresoxim-methyl	N.D.	1	1.06	1.03	106.00	103.00	2.87	
Malathion	N.D.	1	0.942	0.948	94.20	94.80	0.63	
Metalaxyl	N.D.	1	1.19	1.25	119.00	125.00	4.92	
Methiocarb	N.D.	1	1.44	1.42	144.00	142.00	1.40	HR
Methomyl	N.D.	1	1.1	1.21	110.00	121.00	9.52	
MGK-264	N.D.	1	1.05	1.06	105.00	106.00	0.95	
Myclobutanil	N.D.	1	1.12	1.2	112.00	120.00	6.90	
Naled (dibrom)	N.D.	1	0.279	0.261	27.90	26.10	6.67	LR
Oxamyl	N.D.	1	1.49	1.48	149.00	148.00	0.67	HR

Paclobutrazol	N.D.	1	1.16	1.19	116.00	119.00	2.55	
Parathion-methyl	N.D.	1	1.36	1.34	136.00	134.00	1.48	HR
Permethrins	N.D.	1	1.527	1.534	152.70	153.40	0.46	HR
Phosmet	N.D.	1	1.03	1.02	103.00	102.00	0.98	
Piperonyl butoxide	N.D.	1	1.35	1.43	135.00	143.00	5.76	HR
Prallethrin	N.D.	1	1.11	1.13	111.00	113.00	1.79	
Propiconazole	N.D.	1	0.977	1.03	97.70	103.00	5.28	
Propoxur	N.D.	1	1.44	1.26	144.00	126.00	13.33	HR
Pyrethrin	N.D.	0.65	0.708	0.698	108.92	107.38	1.42	
Pyridaben	N.D.	1	1.37	1.42	137.00	142.00	3.58	HR
SpinosynA	N.D.	0.84	0.811	0.787	96.55	93.69	3.00	
SpinosynD	N.D.	0.16	0.165	0.174	103.13	108.75	5.31	
Spiromesifen	N.D.	1	0.108	0.114	10.80	11.40	5.41	LR
Spirotetramat	N.D.	1	0.861	0.924	86.10	92.40	7.06	
Spiroxamine	N.D.	1	1.12	1.15	112.00	115.00	2.64	
Tebuconazole	N.D.	1	1.01	1.01	101.00	101.00	0.00	
Thiacloprid	N.D.	1	1.28	1.33	128.00	133.00	3.83	HR
Thiamethoxam	N.D.	1	1.13	1.16	113.00	116.00	2.62	
Trifloxystrobin	N.D.	1	1.55	1.58	155.00	158.00	1.92	HR

N.D. = Not Detected

I = indicates that an amount of an interfering compound greater than the methods limit of detection was detected in the method blank sample. May indicate contamination of analytical system or consumables.

Q = indicates that the relative percent difference of two identically prepared Matrix Spike samples for a target analyte was greater than 30%

R = indicates compound recovery of matrix spike was outside the methods acceptable limits. (60-120%) Low recovery could indicate there is actually more compound present than detected; while high recoveries should be scrutinized for possible fails as more compound may be detected than is actually residual on the sample.

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CG Operations LLC
 Cottage Grove, OR 97424
Sample: Blood Orange
License: AG-R1055823IHG
Type: Industrial Hemp

Test Conditions

Sample ID#: 136935
Harvest/Process Date: 06/01/2022
Date Received: 06/01/2022
Test Date: 05/31/2022



Test Compound	MRL (PPM)	LOD (PPM)	Status (PPM)
Arsenic			Not Tested
Copper			Not Tested
Cadmium	0.2	0.01	Pass/0.0215
Chromium			Not Tested
Lead	0.5	0.05	Pass/0.0632
Mercury	0.1	0.01	Pass/0.1030
Nickel			Not Tested

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