ORELAP Cert No. 4092-002
OLCC No. 1002158CD2E

Oregon Compliant Marijuana Potency Analysis by High Performance Liquid Chromatography

Testing Accreditation #: 4092-002

Test Certificate #: 119309-001

Client Name, Sample Details
Northwest Artisan Coalition
St. Helens, OR 97051
Sample: NW Artisan Blue Nightmare
License: 020-1007523E373
Type: Usable Marijuana
Method: FE04U
Metrc Test Pkg#: 1A4010200013DF9000000785
Metrc Source Pkg#: 1A4010200013DF9000000783
***Water Activity:** 0.5347
***Moisture:** 12.03%

Test Conditions
Prepsheet ID#: ORP190905a
Scale: XS205-OR1
Temp: 20.4 °C
Baro PE: 1003 hPa
Analyst: HRM
Technician: EDT

Sample ID#: 119309
Lot #: NW Artisan Blue Nightmare 8/14/19
Batch #: 119309
Batch Weight (g): 4044
Harvest/Process Date: 08/14/2019
Serving Size (g): 1
Date Received: 09/03/2019
Test Date: 09/05/2019

Test Compounds	THC	THCA	CBD	CBDA	CBN	CBG	CBC	THCV*	CBDV	Total Cannabinoids*	Total THC	Total CBD	Calc Max Total Cannabinoids*
Amount (%)	0.84	19.37	N/D	0.55	0.09	0.11	N/D	N/D	0.06	21.03	17.83	0.49	18.58
Amount (mg/g)	8.44	193.66	N/D	5.53	0.94	1.14	N/D	N/D	0.57	210.28	178.28	4.85	185.78
Amount per Serving (mg)	8.44	193.66	N\D	5.53	0.94	1.14	N\D	N\D	0.57	210.28	**Serving Size~** (g):		1.00
LOQ (mg/g)	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05		**%Decarb.**	**THC**	**CBD**
±%RPD	7.50	6.20	+/-5%	6.28	6.45	12.50	66.67	+/-5%	+/-5%			4	0%

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.

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 refers to the percentage of THC or CBD relative to THCA or CBDA, respectively.

SOP FE-01-OR9 was used in accordance with OAR 333-007 for sampling. All marijuana items are sampled and tested in accordance with OAR 333-007-0300 to 333-007-490 and OAR 333-064-0100 to 333-064-0110.

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Joseph Rutkowski, 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

ORELAP Cert No. 4092-002
OLCC No. 1002158CD2E

Oregon Compliant QC Report

Testing Accreditation #: 4092-002

Test Certificate #: 119309-001

Client Name, Sample Details
Northwest Artisan Coalition
St. Helens, OR 97051
Sample: NW Artisan Blue Nightmare
License: 020-1007523E373
Type: Usable Marijuana
Method: FE04U
Metrc Test Pkg#: 1A4010200013DF9000000785
Metrc Source Pkg#: 1A4010200013DF9000000783
***Water Activity:** 0.5347
***Moisture:** 12.03%

Test Conditions
Prepsheet ID#: ORP190905a
Scale: XS205-OR1
Temp: 20.4 °C
Baro PE: 1003 hPa
Analyst: HRM
Technician: EDT

Sample ID#: 119309
Lot #: NW Artisan Blue Nightmare 8/14/19
Batch #: 119309
Batch Weight (g): 4044
Harvest/Process Date: 08/14/2019
Serving Size (g): 1
Date Received: 09/03/2019
Test Date: 09/05/2019

Target Compound Name	Method Blank (µg/g)	LCS Spike (µg/g)	LCS Amount (µg/g)	Percent Recovery (%) LCS	LCS Duplicate Amount (µg/g)	Percent Recovery (%) LCSD	Relative Percent Difference (%)	QC Flag
Cannabidivarin (CBDV)	N.D.	N.D.	N.D.	0.00	N.D.	0.00	0.00%	
Cannabidiolic Acid (CBDA)	N.D.	1.29	1.15	89.15	1.08	83.72	6.28%	
Cannabigerol (CBG)	N.D.	0.16	0.17	106.25	0.15	93.75	12.50%	
Cannabidiol (CBD)	N.D.	N.D.	N.D.	0.00	N.D.	0.00	0.00%	
Δ9-Tetrahydrocannabivarin (THCV)	N.D.	N.D.	N.D.	0.00	N.D.	0.00	0.00%	
Cannabinol (CBN)	N.D.	0.11	0.16	145.45	0.15	136.36	6.45%	
Δ9-Tetrahydrocannabinol (THC)	N.D.	3.31	3.32	100.30	3.08	93.05	7.50%	
Cannabichromene (CBC)	N.D.	0.08	0.16	200.00	0.08	100.00	66.67%	Q
Tetrahydrocannabinolic acid (THCA)	N.D.	18.31	16.47	89.95	15.48	84.54	6.20%	

N.D. = Not Detected

LR = indicates compound recovery of matrix spike was outside the methods acceptable limits. (70-130%) Low recovery should be scrutinized for possible fail as it could indicate more compound present than is 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 diference of two identicly prepared Matrix Spike samples for a target analyte was greater than 20%

HR = indicates compound recovery of matrix spike was outside the methods acceptable limits. (70-130%) high recoveries should be scrutinized for passing as more compound may be detected than is actually present in the sample.

SOP FE-01-OR9 was used in accordance with OAR 333-007 for sampling. All marijuana items are sampled and tested in accordance with OAR 333-007-0300 to 333-007-490 and OAR 333-064-0100 to 333-064-0110.

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ORELAP Cert No. 4092-002
OLCC No. 1002158CD2E

Oregon Compliant Pesticide Analysis by Mass Spectrometer

Testing Accreditation #: 4092-002

Test Certificate #: 119309-001

Client Name, Sample Details
Northwest Artisan Coalition
St. Helens, OR 97051
Sample: NW Artisan Blue Nightmare
License: 020-1007523E373
Type: Usable Marijuana
Method: FE-52 (EN 15662 & AOAC 2007.01)
Metrc Test Pkg#: 1A4010200013DF9000000785
Metrc Source Pkg#: 1A4010200013DF9000000783

Test Conditions
Prepsheet ID#: ORPS190906a
Scale: XS205-OR1
Temp: 20.7 °C
Baro PE: 1003 hPa
Analyst: JER
Technician: JER

Sample ID#: 119309
Lot #: NW Artisan Blue Nightmare 8/14/19
Batch #: 119309
Batch Weight (g): 4044
Harvest/Process Date: 08/14/2019
Serving Size (g): 1
Date Received: 09/03/2019
Test Date: 09/07/2019

Compound	MRL (µg/g)	LOD (µg/g)	Status (µg/g)	Compound	MRL (µg/g)	LOD (µg/g)	Status (µg/g)
Aldicarb	0.400	0.116	Pass/<LOD	Abamectin****	0.500	0.116	Pass/<LOD
Acephate	0.400	0.116	Pass/<LOD	Acequinocyl	2.000	0.232	Pass/<LOD
Acetamiprid	0.200	0.116	Pass/<LOD	Azoxystrobin	0.200	0.116	Pass/<LOD
Bifenazate	0.200	0.116	Pass/<LOD	Bifenthrin	0.200	0.116	Pass/<LOD
Boscalid	0.400	0.116	Pass/<LOD	Carbaryl	0.200	0.116	Pass/<LOD
Carbofuran	0.200	0.116	Pass/<LOD	Chlorantraniliprole	0.200	0.116	Pass/<LOD
Chlorfenapyr	1.000	0.464	Pass/<LOD	Chlorpyrifos	0.200	0.116	Pass/<LOD
Clofentezine	0.200	0.116	Pass/<LOD	Cyfluthrin**	1.000	0.464	Pass/<LOD
Cypermethrin***	1.000	0.464	Pass/<LOD	Daminozide	1.000	0.116	Pass/<LOD
DDVP (Dichlorvos)	1.000	0.232	Pass/<LOD	Diazinon	0.200	0.116	Pass/<LOD
Dimethoate	0.200	0.116	Pass/<LOD	Ethoprophos	0.200	0.116	Pass/<LOD
Etofenprox	0.400	0.116	Pass/<LOD	Etoxazole	0.200	0.116	Pass/<LOD
Fenoxycarb	0.200	0.116	Pass/<LOD	Fenpyroximate	0.400	0.116	Pass/<LOD
Fipronil	0.400	0.116	Pass/<LOD	Flonicamid	1.000	0.116	Pass/<LOD
Fludioxonil	0.400	0.116	Pass/<LOD	Hexythiazox	1.000	0.116	Pass/<LOD
Imazalil	0.200	0.116	Pass/<LOD	Imidacloprid	0.400	0.116	Pass/<LOD
Kresoxim Methyl	0.400	0.116	Pass/<LOD	Malathion	0.200	0.116	Pass/<LOD
Metalaxyl	0.200	0.116	Pass/<LOD	Methiocarb	0.200	0.116	Pass/<LOD
Methomyl	0.400	0.116	Pass/<LOD	Methyl Parathion	0.200	0.116	Pass/<LOD
MGK-264‡	0.200	0.116	Pass/<LOD	Myclobutanil	0.000	0.116	Pass/<LOD
Naled	0.500	0.116	Pass/<LOD	Oxamyl	1.000	0.116	Pass/<LOD
Paclobutrazol	0.400	0.116	Pass/<LOD	Permethrins†	0.200	0.116	Pass/<LOD
Phosmet	0.200	0.116	Pass/<LOD	Piperonyl Butoxide	2.000	0.116	Pass/<LOD
Prallethrin	0.200	0.116	Pass/<LOD	Propiconazole	0.400	0.116	Pass/<LOD
Propoxur	0.200	0.116	Pass/<LOD	Pyrethrins*	1.000	0.116	Pass/<LOD
Pyridaben	0.200	0.116	Pass/<LOD	Spinosad*****	0.200	0.116	Pass/<LOD
Spiromesifen	0.200	0.116	Pass/<LOD	Spirotetramat	0.200	0.116	Pass/<LOD
Spiroxamine‡	0.400	0.116	Pass/<LOD	Tebuconazole	0.400	0.116	Pass/<LOD
Thiacloprid	0.200	0.116	Pass/<LOD	Thiamethoxam	0.200	0.116	Pass/<LOD
Trifloxystrobin	0.200	0.116	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

SOP FE-01-OR9 was used in accordance with OAR 333-007 for sampling. All marijuana items are sampled and tested in accordance with OAR 333-007-0300 to 333-007-490 and OAR 333-064-0100 to 333-064-0110.

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ORELAP Cert No. 4092-002
OLCC No. 1002158CD2E

Oregon Compliant Pesticide QC Report

Testing Accreditation #: 4092-002

Test Certificate #: 119309-001

Client Name, Sample Details
Northwest Artisan Coalition
St. Helens, OR 97051
Sample: NW Artisan Blue Nightmare
License: 020-1007523E373
Type: Usable Marijuana
Method: FE-52 (EN 15662 & AOAC 2007.01)
Metrc Test Pkg#: 1A4010200013DF9000000785
Metrc Source Pkg#: 1A4010200013DF9000000783

Test Conditions
Prepsheet ID#: ORPS190906a
Scale: XS205-OR1
Temp: 20.7 °C
Baro PE: 1003 hPa
Analyst: JER
Technician: JER

Sample ID#: 119309
Lot #: NW Artisan Blue Nightmare 8/14/19
Batch #: 119309
Batch Weight (g): 4044
Harvest/Process Date: 08/14/2019
Serving Size (g): 1
Date Received: 09/03/2019
Test Date: 09/07/2019

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	1.15	1.11	115.00	111.00	3.54	
Acequinocyl	N.D.	1	0.824	0.723	82.40	72.30	13.06	
Acetamiprid	N.D.	1	1.16	1.15	116.00	115.00	0.87	
Aldicarb	N.D.	1	1.12	1.13	112.00	113.00	0.89	
Avermectin B1a	N.D.	0.97	1.21	1.23	124.74	126.80	1.64	
Azoxystrobin	N.D.	1	1.17	1.18	117.00	118.00	0.85	
Bifenazate	N.D.	1	0.83	0.837	83.00	83.70	0.84	
Bifenthrin	N.D.	1	1.12	1.21	112.00	121.00	7.73	
Boscalid	N.D.	1	0.951	1.01	95.10	101.00	6.02	
Carbaryl	N.D.	1	1.18	1.1	118.00	110.00	7.02	
Carbofuran	N.D.	1	1.17	1.22	117.00	122.00	4.18	
Chlorantraniliprole	N.D.	1	1.12	1.11	112.00	111.00	0.90	
Chlorfenapyr	N.D.	1	1.09	0.869	109.00	86.90	22.56	Q
Chlorpyriphos	N.D.	1	0.961	1.03	96.10	103.00	6.93	
Clofentezine	N.D.	1	0.953	1	95.30	100.00	4.81	
Cyfluthrin	N.D.	1	1.29	1.31	129.00	131.00	1.54	HR
Cypermethrin	N.D.	1	1.28	1.35	128.00	135.00	5.32	
Daminoside	N.D.	1	0.493	0.576	49.30	57.60	15.53	LR
Diazanon	N.D.	1	2.44	2.68	244.00	268.00	9.38	HR
Dichlorvos	N.D.	1	1.23	1.21	123.00	121.00	1.64	
Dimethoate	N.D.	1	1.21	1.18	121.00	118.00	2.51	
Ethoprophos	N.D.	1	1.07	1.09	107.00	109.00	1.85	
Etofenprox	N.D.	1	1.12	1.11	112.00	111.00	0.90	
Etoxazole	N.D.	1	1.1	1.17	110.00	117.00	6.17	
Fenoxycarb	N.D.	1	1.04	1.07	104.00	107.00	2.84	
Fenpyroximate	N.D.	1	1.36	1.34	136.00	134.00	1.48	HR
Fipronil	N.D.	1	1.14	1.1	114.00	110.00	3.57	
Flonicamid	N.D.	1	1.19	1.22	119.00	122.00	2.49	
Fludioxonil	N.D.	1	1.14	1.2	114.00	120.00	5.13	
Hexythiazox	N.D.	1	0.998	0.97	99.80	97.00	2.85	
Imazalil	N.D.	1	1.06	1.14	106.00	114.00	7.27	
Imidacloprid	N.D.	1	1.22	1.34	122.00	134.00	9.38	HR
Kresoxim-methyl	N.D.	1	1.04	1.06	104.00	106.00	1.90	
Malathion	N.D.	1	0.919	1.12	91.90	112.00	19.72	
Metalaxyl	N.D.	1	1.11	1.22	111.00	122.00	9.44	
Methiocarb	N.D.	1	1.13	1.17	113.00	117.00	3.48	
Methomyl	N.D.	1	1.1	1.19	110.00	119.00	7.86	
MGK-264	N.D.	1	1.04	0.992	104.00	99.20	4.72	
Myclobutanil	N.D.	1	1.14	1.16	114.00	116.00	1.74	
Naled (dibrom)	N.D.	1	0.44	0.404	44.00	40.40	8.53	LR
Oxamyl	N.D.	1	1.37	1.36	137.00	136.00	0.73	HR

Paclobutrazol	N.D.	1	1.12	1.16	112.00	116.00	3.51	
Parathion-methyl	N.D.	1	0.997	0.986	99.70	98.60	1.11	
Permethrins	N.D.	1	1.18	1.15	118.00	115.00	2.58	
Phosmet	N.D.	1	1.02	1.05	102.00	105.00	2.90	
Piperonyl butoxide	N.D.	1	1.16	1.16	116.00	116.00	0.00	
Prallethrin	N.D.	1	1.01	1.02	101.00	102.00	0.99	
Propiconazole	N.D.	1	1	0.97	100.00	97.00	3.05	
Propoxur	N.D.	1	1.12	1.02	112.00	102.00	9.35	
Pyrethrin	N.D.	0.65	0.67	0.727	103.08	111.85	8.16	
Pyridaben	N.D.	1	1.04	1.05	104.00	105.00	0.96	
SpinosynA	N.D.	0.84	0.764	0.703	90.95	83.69	8.32	
SpinosynD	N.D.	0.16	0.142	0.161	88.75	100.63	12.54	
Spiromesifen	N.D.	1	0.275	0.301	27.50	30.10	9.03	LR
Spirotetramat	N.D.	1	0.878	0.872	87.80	87.20	0.69	
Spiroxamine	N.D.	1	1.18	1.21	118.00	121.00	2.51	
Tebuconazole	N.D.	1	1.04	1.04	104.00	104.00	0.00	
Thiacloprid	N.D.	1	1.21	1.26	121.00	126.00	4.05	
Thiamethoxam	N.D.	1	1.1	1.2	110.00	120.00	8.70	
Trifloxystrobin	N.D.	1	1.13	1.17	113.00	117.00	3.48	

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 diference of two identicly prepared Matrix Spike samples for a target analyte was greater than 20%

R = indicates compound recovery of matrix spike was outside the methods acceptable limits. (70-130%) 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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