

Science First. ORELAP ID: 4096 OLCC#: 010-1002112892C

7200 Johnson Creek Blvd., Portland, OR 97206 (503) 307-0096

CBD NYC Diesel

Lab ID: 2009129-06
Whole Circle Farms

Harvest / Process Lot: WCF-2020-NYCD-001

METRC Batch ID: NA

Date Sampled: 09/18/20

Date Printed: 09/23/20 Report cannot be used for OLCC/OHA compliance.

Potency Analysis

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

Cannabinoids (% we	eight)	Moisture Adjusted	LOQ
THCA	0.362	0.396	0.0778
delta 9-THC	< LOQ	< LOQ	0.0778
delta 8-THC	< LOQ	< LOQ	0.0778
CBGA	0.397	0.435	0.0778
CBDA	10.1	11.0	0.0778
CBD	0.289	0.317	0.0778
CBN	< LOQ	< LOQ	0.0778
CBG	< LOQ	< LOQ	0.0778
CBC	0.231	0.253	0.0778
Total CBG	0.348	0.382	0.0778
Total Cannabinoids	10.0	11.0	0.0778

Total THC 0.348 %

Total CBD 9.98 %

<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) + Δ 9THC] / (100%-MC)

Moisture

Analysis Method/SOP: SOP 7

Moisture: 8.75 %

EDIR WESTLER



Science First. ORELAP ID: 4096 OLCC#: 010-1002112892C

7200 Johnson Creek Blvd., Portland, OR 97206 (503) 307-0096

CBD NYC Diesel

Whole Circle Farms

Laboratory ID: 2009129-06

Terpene Test Report

Analysis Method/SOP: Terp	ı	
Analyte	Result µg/g	Result %
alpha-Bisabolol	470.1	0.04701
Camphene	136.6	0.01366
Camphor	< LOQ	< LOQ
delta-3-Carene	< LOQ	< LOQ
beta-Caryophyllene	1198	0.1198
Caryophyllene Oxide	< LOQ	< LOQ
alpha-Cedrene	< LOQ	< LOQ
Cedrol	< LOQ	< LOQ
p-Cymene	< LOQ	< LOQ
(1R)-endo-(+)-Fenchyl	alcor< LOQ	< LOQ
Eucalyptol	< LOQ	< LOQ
Geraniol	< LOQ	< LOQ
Geranyl acetate	< LOQ	< LOQ
Guaiol	480.5	0.04805
alpha-Humulene	478	0.04780
Isoborneol	< LOQ	< LOQ
Isopulegol	< LOQ	< LOQ
Limonene	259.6	0.02596
Linalool	< LOQ	< LOQ
beta-Myrcene	1006	0.1006
Nerolidol	< LOQ	< LOQ
Ocimene	< LOQ	< LOQ
alpha-Pinene	1177	0.1177
beta-Pinene	472.3	0.04723
Pulegone	< LOQ	< LOQ
Sabinene	< LOQ	< LOQ
Sabinene hydrate	< LOQ	< LOQ
gamma-Terpinene	< LOQ	< LOQ
alpha-Terpinene	< LOQ	< LOQ
Terpinolene	< LOQ	< LOQ
Valencene	< LOQ	< LOQ
Nerol	< LOQ	< LOQ
(+/-)-Borneol	< LOQ	< LOQ





Science First. ORELAP ID: 4096 OLCC#: 010-1002112892C

7200 Johnson Creek Blvd., Portland, OR 97206 (503) 307-0096

CBD NYC Diesel

Whole Circle Farms

Total Terpenes

Laboratory ID: 2009129-06

Analysis Method/SOP: Terp	1	
Analyte	Result μg/g	Result %
(+/-)-Fenchone	< LOQ	< LOQ
alpha-Phellandrene	< LOQ	< LOQ
cis-Farnesene	< LOQ	< LOQ
Menthol	< LOQ	< LOQ
trans-Farnesene	763.7	0.07637
alpha-Terpineol	< LOQ	< LOQ
gamma-Terpineol	< LOQ	< LOQ

6441

0.6441

EDIR LESTICE



Science First. ORELAP ID: 4096 OLCC#: 010-1002112892C

7200 Johnson Creek Blvd., Portland, OR 97206 (503) 307-0096

CBD NYC Diesel

Whole Circle Farms

Laboratory ID: 2009129-06

Quality Control Potency

Batch: B201074 - Potency

Blank(B20I074-BLK1)							
Analyte	Result	LOQ	Units	%Recovery Limits	Extracted	Analyzed	Notes
THCA	< LOQ	0.0729	%		09/21/20 15:44	09/21/20 19:43	
delta 9-THC	< LOQ	0.0729	%		09/21/20 15:44	09/21/20 19:43	
CBGA	< LOQ	0.0729	%		09/21/20 15:44	09/21/20 19:43	
CBDA	< LOQ	0.0729	%		09/21/20 15:44	09/21/20 19:43	
CBD	< LOQ	0.0729	%		09/21/20 15:44	09/21/20 19:43	
CBN	< LOQ	0.0729	%		09/21/20 15:44	09/21/20 19:43	
CBG	< LOQ	0.0729	%		09/21/20 15:44	09/21/20 19:43	
delta 8-THC	< LOQ	0.0729	%		09/21/20 15:44	09/21/20 19:43	
CBC	< LOQ	0.0729	%		09/21/20 15:44	09/21/20 19:43	

LCS(B20I074-BS1)							
Analyte	% Recovery	LOQ	Units	%Recovery Limits	Extracted	Analyzed	Notes
THCA	102	0.0728	%	85-115	09/21/20 15:44	09/21/20 19:52	
delta 9-THC	101	0.0728	%	85-115	09/21/20 15:44	09/21/20 19:52	
CBDA	99.7	0.0728	%	85-115	09/21/20 15:44	09/21/20 19:52	
CBD	98.7	0.0728	%	85-115	09/21/20 15:44	09/21/20 19:52	

EDIR LESTICE



Science First. ORELAP ID: 4096 OLCC#: 010-1002112892C

7200 Johnson Creek Blvd., Portland, OR 97206 (503) 307-0096

CBD NYC Diesel

Whole Circle Farms

Laboratory ID: 2009129-06

Quality Control Terpene Analysis

Batch: B201076 - Terp

Blank(B20I076-BLK1)						
Analyte	Result	LOQ	Units	%Recovery Limits	Extracted	Analyzed	Notes
alpha-Bisabolol	< LOQ	5.000E-4	%		09/21/20 19:36	09/22/20 12:03	
Camphene	< LOQ	5.000E-4	%		09/21/20 19:36	09/22/20 12:03	
Camphor	< LOQ	5.000E-4	%		09/21/20 19:36	09/22/20 12:03	
delta-3-Carene	< LOQ	5.000E-4	%		09/21/20 19:36	09/22/20 12:03	
beta-Caryophyllene	< LOQ	5.000E-4	%		09/21/20 19:36	09/22/20 12:03	
Caryophyllene Oxide	< LOQ	5.000E-4	%		09/21/20 19:36	09/22/20 12:03	
alpha-Cedrene	< LOQ	5.000E-4	%		09/21/20 19:36	09/22/20 12:03	
Cedrol	< LOQ	5.000E-4	%		09/21/20 19:36	09/22/20 12:03	
p-Cymene	< LOQ	5.000E-4	%		09/21/20 19:36	09/22/20 12:03	
(1R)-endo-(+)-Fenchyl alcoł	< LOQ	5.000E-4	%		09/21/20 19:36	09/22/20 12:03	
Eucalyptol	< LOQ	5.000E-4	%		09/21/20 19:36	09/22/20 12:03	
Geraniol	< LOQ	5.000E-4	%		09/21/20 19:36	09/22/20 12:03	
Geranyl acetate	< LOQ	5.000E-4	%		09/21/20 19:36	09/22/20 12:03	
Guaiol	< LOQ	5.000E-4	%		09/21/20 19:36	09/22/20 12:03	
alpha-Humulene	< LOQ	5.000E-4	%		09/21/20 19:36	09/22/20 12:03	
Isoborneol	< LOQ	5.000E-4	%		09/21/20 19:36	09/22/20 12:03	
Isopulegol	< LOQ	5.000E-4	%		09/21/20 19:36	09/22/20 12:03	
Limonene	< LOQ	5.000E-4	%		09/21/20 19:36	09/22/20 12:03	
Linalool	< LOQ	5.000E-4	%		09/21/20 19:36	09/22/20 12:03	
beta-Myrcene	< LOQ	5.000E-4	%		09/21/20 19:36	09/22/20 12:03	
Nerolidol	< LOQ	5.000E-4	%		09/21/20 19:36	09/22/20 12:03	
Ocimene	< LOQ	5.000E-4	%		09/21/20 19:36	09/22/20 12:03	
alpha-Pinene	< LOQ	5.000E-4	%		09/21/20 19:36	09/22/20 12:03	
beta-Pinene	< LOQ	5.000E-4	%		09/21/20 19:36	09/22/20 12:03	
Pulegone	< LOQ	5.000E-4	%		09/21/20 19:36	09/22/20 12:03	
Sabinene	< LOQ	5.000E-4	%		09/21/20 19:36	09/22/20 12:03	
Sabinene hydrate	< LOQ	5.000E-4	%		09/21/20 19:36	09/22/20 12:03	
gamma-Terpinene	< LOQ	5.000E-4	%		09/21/20 19:36	09/22/20 12:03	
alpha-Terpinene	< LOQ	5.000E-4	%		09/21/20 19:36	09/22/20 12:03	
Terpinolene	< LOQ	5.000E-4	%		09/21/20 19:36	09/22/20 12:03	
Valencene	< LOQ	5.000E-4	%		09/21/20 19:36	09/22/20 12:03	
Nerol	< LOQ	5.000E-4	%		09/21/20 19:36	09/22/20 12:03	
(+/-)-Borneol	< LOQ	5.000E-4	%		09/21/20 19:36	09/22/20 12:03	
(+/-)-Fenchone	< LOQ	5.000E-4	%		09/21/20 19:36	09/22/20 12:03	





Science First. ORELAP ID: 4096 OLCC#: 010-1002112892C

7200 Johnson Creek Blvd., Portland, OR 97206 (503) 307-0096

CBD NYC Diesel

Whole Circle Farms

Laboratory ID: 2009129-06

Quality Control

Terpene Analysis (Continued)

Batch: B201076 - Terp (Continued)

Blank(B20I076-BLK1)							
Analyte	Result	LOQ	Units	%Recovery Limits	Extracted	Analyzed	Notes
alpha-Phellandrene	< LOQ	5.000E-4	%		09/21/20 19:36	09/22/20 12:03	
cis-Farnesene	< LOQ	5.000E-4	%		09/21/20 19:36	09/22/20 12:03	
Menthol	< LOQ	5.000E-4	%		09/21/20 19:36	09/22/20 12:03	
trans-Farnesene	< LOQ	5.000E-4	%		09/21/20 19:36	09/22/20 12:03	
alpha-Terpineol	< LOQ	5.000E-4	%		09/21/20 19:36	09/22/20 12:03	
gamma-Terpineol	< LOQ	5.000E-4	%		09/21/20 19:36	09/22/20 12:03	
LCS(B20I076-BS1))						

LCS(B20I076-BS1)							
Analyte	% Recovery	LOQ	Units	%Recovery Limits	Extracted	Analyzed	Notes
alpha-Bisabolol	51.1	5.250E-4	%	50-150	09/21/20 19:36	09/22/20 12:35	
Camphene	95.5	5.250E-4	%	50-150	09/21/20 19:36	09/22/20 12:35	
beta-Caryophyllene	109	5.250E-4	%	50-150	09/21/20 19:36	09/22/20 12:35	
Caryophyllene Oxide	108	5.250E-4	%	50-150	09/21/20 19:36	09/22/20 12:35	
(1R)-endo-(+)-Fenchyl alcoł	83.1	5.250E-4	%	50-150	09/21/20 19:36	09/22/20 12:35	
Guaiol	58.5	5.250E-4	%	50-150	09/21/20 19:36	09/22/20 12:35	
alpha-Humulene	72.7	5.250E-4	%	50-150	09/21/20 19:36	09/22/20 12:35	
Limonene	86.1	5.250E-4	%	50-150	09/21/20 19:36	09/22/20 12:35	
Linalool	68.5	5.250E-4	%	50-150	09/21/20 19:36	09/22/20 12:35	
beta-Myrcene	124	5.250E-4	%	50-150	09/21/20 19:36	09/22/20 12:35	
Ocimene	85.3	5.250E-4	%	50-150	09/21/20 19:36	09/22/20 12:35	
alpha-Pinene	89.3	5.250E-4	%	50-150	09/21/20 19:36	09/22/20 12:35	
beta-Pinene	89.2	5.250E-4	%	50-150	09/21/20 19:36	09/22/20 12:35	
Terpinolene	86.2	5.250E-4	%	50-150	09/21/20 19:36	09/22/20 12:35	
(+/-)-Borneol	65.1	5.250E-4	%	50-150	09/21/20 19:36	09/22/20 12:35	
trans-Farnesene	78.1	5.250E-4	%	50-150	09/21/20 19:36	09/22/20 12:35	

Batch: B201077 - Moisture Content

Blank(B201077-BL	_K1)						
Analyte	Result	LOQ	Units	%Recovery Limits	Extracted	Analyzed	Notes
Percent Moisture	0.160	0.00	%		09/21/20 22:39	09/21/20 22:39	
LCS(B20I077-BS1)						

LCS(B20I077-BS1)							
Analyte	% Recovery	LOQ	Units	%Recovery Limits	Extracted	Analyzed	Notes
Percent Moisture	94 0	0.00	%	80-120	09/21/20 22:39	09/21/20 22:39	

EDIR LESTIES



Science First. ORELAP ID: 4096 OLCC#: 010-1002112892C

7200 Johnson Creek Blvd., Portland, OR 97206 (503) 307-0096

CBD NYC Diesel

Whole Circle Farms

Laboratory ID: 2009129-06

Notes and Definitions

- B Analyte detected in method blank, but not associated samples.
- B2 Analyte detected in sample and associate methold 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 samle matrix affecting RPD and/or QC.
- I Manual Integration was performed.
- L Duplicate sample relative precent 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</p>

EDIR LESTICE