

Client: Mother Labs  
#115 343 70th STREET,  
SASKATOON, SK, CANADA,  
Saskatoon, SK, S7P0E3

Name: [REDACTED]


Strain: Orange Tingz  
Lot: SAM2012-173  
Matrix: Flower  
Sampled: 2020-12-18  
Received: 2020-12-21

## Certificate of Analysis

Cannabinoid Analysis	LOD (%)	LOQ (%)	wt%	mg/g
<b>Total THC [(THCA x 0.877) + D9-THC]</b>			<b>21.929</b>	<b>219.286</b>
Total CBD [(CBDA x 0.877) + CBD]			0.055	0.55
THCA-A	0.0090	0.03	24.299	242.995
CBGA	0.0041	0.03	0.989	9.889
D9-THC	0.0093	0.03	0.618	6.179
CBG	0.0094	0.03	0.273	2.735
CBDA	0.0100	0.03	0.063	0.627
CBC	0.0060	0.03	0.056	0.562
D8-THC	0.0137	0.03	ND	ND
THCV	0.0093	0.03	ND	ND
CBN	0.0067	0.03	ND	ND
CBD	0.0069	0.03	ND	ND
CBDV	0.0090	0.03	ND	ND

Terpene Analysis	LOD (%)	LOQ (%)	wt%
Farnesene-2	0.0001	0.01	0.523
(R)-(+)-Limonene	0.0001	0.01	0.489
Trans-Caryophyllene	0.0001	0.01	0.328
Linalool	0.0001	0.01	0.314
Ocimene (mixture of	0.0001	0.01	0.219
Terpineol (mix of isomers)	0.0001	0.01	0.113
beta-Myrcene	0.0001	0.01	0.103
alpha-Humulene	0.0001	0.01	0.088
beta-Pinene	0.0001	0.01	0.084
alpha-Bisabolol	0.0001	0.01	0.081
(R)-Endo-(+)-Fenchyl	0.0001	0.01	0.081
alpha-Pinene	0.0001	0.01	0.074


Abbreviations: wt% = percentage of dry weight, CFU = colony forming units, ppm = Parts per million, ppb = Parts per billion, ND = None Detected, BLQ = Below Limit of Quantification, LOQ = Limit of Quantification, LOD = Limit of Detection, RL = Reporting Limit

Authorized by:   
Bernie Mangiola  
Laboratory Manager

<b>Terpene Analysis</b>	LOD (%)	LOQ (%)	wt%
Phytol	0.0001	0.06	BLQ
Camphene	0.0001	0.01	0.019
(+)-Cedrol	0.0001	0.01	ND
Guaiol	0.0001	0.01	ND
Caryophyllene oxide	0.0001	0.01	ND
cis-Nerolidol	0.0001	0.01	ND
trans-Nerolidol	0.0001	0.01	ND
Valencene	0.0001	0.01	ND
Farnesene-1	0.0001	0.01	ND
alpha-Cedrene	0.0001	0.01	ND
Pulegone	0.0001	0.01	ND
Geraniol acetate	0.0001	0.01	ND
Nerol	0.0001	0.01	ND
Geraniol	0.0001	0.01	ND
gamma-Terpineol	0.0001	0.01	ND
Hexahydrothymol	0.0001	0.01	ND
Borneol (isomers)	0.0001	0.01	ND
Camphor (mix of isomers)	0.0001	0.01	ND
Isoborneol	0.0001	0.01	ND
Isopulegol	0.0001	0.01	ND
Fenchone (mix of isomers)	0.0001	0.01	ND
Terpinolene	0.0001	0.01	ND
Sabinene Hydrate	0.0001	0.01	ND
Eucalyptol	0.0001	0.01	ND
gamma-Terpinene	0.0001	0.01	ND
alpha-Terpinene	0.0001	0.01	ND
trans-beta-Ocimene	0.0001	0.01	ND
alpha-Phellandrene	0.0001	0.01	ND
(1S)-3-Carene	0.0001	0.01	ND
Sabinene	0.0001	0.01	ND
<b>Total of all quantified terpenes:</b>			<b>2.516</b>

**Moisture Analysis**      9.71%

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## Details of Testing

### **Cannabinoid Analysis**

Analysis of 11 cannabinoids by HPLC & UHPLC  
LOQ is 0.3% for resins/distillates/isolates, 0.03% for flower/oil samples  
HIGH NORTH Laboratories Method: LAB-MTD-020 & LAB-MTD-023

### **Terpene Analysis**

Profiling for 42 terpenes by GC-MS/MS  
HIGH NORTH Laboratories Method: LAB-MTD-018

### **Moisture Analysis**

Water Activity & Moisture Content  
HIGH NORTH Laboratories Method: LAB-MTD-031

### **Microbial Analysis, Powdery Mildew & Gender Determination**

Molecular detection and quantitation by qPCR  
HIGH NORTH Laboratories Method: MIC-MTD-001 & MIC-MTD-005

### **Mycotoxin Analysis**

Determination of Aflatoxins B1, B2, G1, G2 and Ochratoxin A by LC-MS/MS  
HIGH NORTH Laboratories Method: LAB-MTD-010

### **Heavy Metal Analysis**

Determination of Heavy Metal contamination (Arsenic, Cadmium, Lead & Mercury) by ICP-MS  
HIGH NORTH Laboratories Method: LAB-MTD-027

### **Residual Solvents Analysis**

Determination of 24 Residual Solvents in Cannabis Oil and Tablets by GC-MS/MS  
HIGH NORTH Laboratories Method: LAB-MTD-005 & LAB-MTD-028

### **Pesticide Analysis**

Determination of 96 Pesticide Residues by LC-MS/MS and GC-MS/MS  
HIGH NORTH Laboratories Method: LAB-MTD-010

### **Foreign Matter Analysis**

Visual/Magnified Detection of Foreign Matter  
HIGH NORTH Laboratories Method: LAB-MTD-022

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