botanacor

CERTIFICATE OF ANALYSIS

prepared for: HEMPLUCID
4844 N 300 W
PROVO, UT 84604

O-CO2-YP5-04021-BULK86

Batch ID:		**Test ID:**	T000137227
Type:	Concentrate	**Submitted:**	04/23/2021 @ 04:43 PM
Test:	Pesticides	**Started:**	4/26/2021
Method:	TM17	**Reported:**	4/29/2021

PESTICIDE RESIDUE

Compound	Dynamic Range (ppb)	Result (ppb)
Acephate	36 - 2567	ND*
Acetamiprid	40 - 2567	ND*
Abamectin	>420	ND*
Azoxystrobin	58 - 2567	ND*
Bifenazate	39 - 2567	ND*
Boscalid	67 - 2567	ND*
Carbaryl	40 - 2567	ND*
Carbofuran	47 - 2567	ND*
Chlorantraniliprole	53 - 2567	ND*
Chlorpyrifos	48 - 2567	ND*
Clofentezine	289 - 2567	ND*
Diazinon	280 - 2567	ND*
Dichlorvos	>285	ND*
Dimethoate	38 - 2567	ND*
E-Fenpyroximate	282 - 2567	ND*
Etofenprox	42 - 2567	ND*
Etoxazole	318 - 2567	ND*
Fenoxycarb	>39	ND*
Fipronil	55 - 2567	ND*
Flonicamid	41 - 2567	ND*
Fludioxonil	>352	ND*
Hexythiazox	38 - 2567	ND*
Imazalil	293 - 2567	ND*
Imidacloprid	41 - 2567	ND*
Kresoxim-methyl	57 - 2567	ND*

Compound	Dynamic Range (ppb)	Result (ppb)
Malathion	280 - 2567	ND*
Metalaxyl	50 - 2567	ND*
Methiocarb	37 - 2567	ND*
Methomyl	46 - 2567	ND*
MGK 264 1	155 - 2567	ND*
MGK 264 2	113 - 2567	ND*
Myclobutanil	44 - 2567	ND*
Naled	58 - 2567	ND*
Oxamyl	36 - 2567	ND*
Paclobutrazol	45 - 2567	ND*
Permethrin	271 - 2567	ND*
Phosmet	45 - 2567	ND*
Prophos	336 - 2567	ND*
Propoxur	44 - 2567	ND*
Pyridaben	272 - 2567	ND*
Spinosad A	37 - 2567	ND*
Spinosad D	105 - 2567	ND*
Spiromesifen	>264	ND*
Spirotetramat	>313	ND*
Spiroxamine 1	22 - 2567	ND*
Spiroxamine 2	22 - 2567	ND*
Tebuconazole	288 - 2567	ND*
Thiacloprid	40 - 2567	ND*
Thiamethoxam	41 - 2567	ND*
Trifloxystrobin	58 - 2567	ND*

* ND = None Detected (Defined by Dynamic Range of the method)

N/A

FINAL APPROVAL

Tyler Wiese
29-Apr-2021
7:58 AM

PREPARED BY / DATE

Taylor Brevik
29-Apr-2021
8:01 AM

APPROVED BY / DATE

879 Federal Blvd
Denver, CO, 80204, USA

Kaycha Labs
RAW-ORGFS-CBD
N/A
Matrix: Concentrate

Certificate of Analysis

Sample:DE10319018-002
Harvest/Lot ID: O-CO2-YP5-04021-BULK86
Seed to Sale #1A400031269FB2B000001128
Batch Date :02/09/21
Batch#: 2021-94A
Sample Size Received: 7 gram
Total Weight/Volume: N/A
Retail Product Size: 1 gram
Ordered : 03/19/21
sampled : 03/19/21
Completed: 03/26/21 Expires: 03/26/22
Sampling Method: SOP-024

Apr 19, 2021 | Hemplucid

License # NA
4844 N. 300 W. Ste. 202
Provo, CO, 84604, US

TESTED

SAFETY RESULTS

Pesticides	Heavy Metals	Microbials	Mycotoxins	Residuals Solvents	Filth	Water Activity	Moisture	Homogeneity
TESTED	PASSED	PASSED	NOT TESTED	PASSED	NOT TESTED	NOT TESTED	NOT TESTED	NOT TESTED

MISC.

Terpenes
TESTED

CANNABINOID RESULTS

Total THC
2.563%

Total CBD
54.577%

Total Cannabinoids
60.088%

	CBDV	CBDVA	CBG	CBD	CBDA	THCV	CBGA	CBN	EXO-THC	CBDQ	D9-THC	D8-THC	CBL	THCVA	CBC	D10-THC	CBNA	THCA	CBCA	CBLA
	0.65%	ND	ND	54.58%	ND	ND	ND	0.10%	0.59%	ND	2.56%	ND	ND	ND	1.61%	ND	ND	ND	ND	ND
	6.46 mg/g	ND	ND	545.77 mg/g	ND	ND	ND	1.01 mg/g	5.89 mg/g	ND	25.63 mg/g	ND	ND	ND	16.09 mg/g	ND	ND	ND	ND	ND
LOD	0.00265 %	0.00070 %	0.00219 %	0.00333 %	0.00125 %	0.00205 %	0.00192 %	0.00183 %	0.00401 %	0.01480 %	0.00084 %	0.00268 %	0.00092 %	0.00071 %	0.00286 %		0.00091 %	0.00045 %	0.00210 %	0.00116 %

Cannabinoid Profile Test

Analyzed by	Weight	Extraction date :	Extracted By :
1253	0.18g	03/23/21 05:03:34	667

Analysis Method -SOP-020 (R15) **Reviewed On -** 03/25/21 11:03:18 **Batch Date :** 03/23/21 12:21:06
Analytical Batch -DE001652POT **Instrument Used :** Agilent 1100 "Liger" **Running On :**

Reagent	Dilution	Consums. ID	Consums. ID
111620.12	200	24161320	R0BB28597
021921.R14		9234640	
032321.R07		00302923	
032021.R05		12123-046CC-046	
		923C4-923AK	
		5079-525C6-525E	

Full spectrum cannabinoid analysis utilizing High Performance Liquid Chromatography with DAD detection (HPLC-UV). Method SOP-022 (R13) for reporting. Lower limit of linearity for all cannabinoids is 1 mg/L.

Stephen Goldman
Lab Director

State License #
405R-00011 405-00008
ISO Accreditation # 4331.01

Signature

04/19/2021
Signed On

879 Federal Blvd
Denver, CO, 80204, USA

Kaycha Labs
RAW-ORGFS-CBD
N/A
Matrix : Concentrate

Certificate of Analysis

TESTED

Hemplucid

4844 N. 300 W. Ste. 202
Provo, CO, 84604, US
Telephone: 7192318261
Email: sarah@hemplucid.com
License #: NA

Sample : DE10319018-002
Harvest/LOT ID: O-CO2-YP5-04021-BULK86
Batch# : 2021-94A
Sampled : 03/19/21
Ordered : 03/19/21
Sample Size Received : 7 gram
Total Weight/Volume : N/A
Completed : 03/26/21 **Expires:** 03/26/22
Sample Method : SOP-024

Terpenes

TESTED

Terpenes	LOD(%)	mg/g	%	Result (%)
ALPHA-PINENE	0.002	ND	ND	
CAMPHENE	0.002	ND	ND	
BETA-PINENE	0.002	ND	ND	
MYRCENE	0.002	ND	ND	
DELTA-3-CARENE	0.002	ND	ND	
ALPHA-TERPINENE	0.002	ND	ND	
P-CYMENE	0.002	ND	ND	
LIMONENE	0.002	ND	ND	
EUCALYPTOL	0.002	ND	ND	
CIS-OCIMENE	0.002	ND	ND	
GAMMA-TERPINENE	0.002	ND	ND	
TERPINOLENE	0.002	ND	ND	
LINALOOL	0.002	< 0.2	< 0.020	
(-)-ISOPULEGOL	0.002	ND	ND	
BORNEOL	0.002	ND	ND	
MENTHOL	0.002	ND	ND	
ALPHA-TERPINEOL	0.002	ND	ND	
PULEGONE	0.002	ND	ND	
GERANIOL	0.002	ND	ND	
2-ETHYL-FENCHOL	0.002	ND	ND	
BETA-CARYOPHYLLENE	0.002	6.537	0.653	
HUMULENE	0.002	2.613	0.261	
BISABOLENE	0.002	ND	ND	
NEROLIDOL	0.002	ND	ND	
(-)-CARYOPHYLLENE OXIDE	0.002	ND	ND	
(-)-GUAIOL	0.002	3.261	0.326	
(-)-ALPHA-BISABOLOL	0.002	11.476	1.147	

Total (%) 2.388

Terpenes

TESTED

Analyzed by 7
Weight 0.18g
Extraction date 03/24/21 07:03:49
Extracted By 7

Analysis Method - SOP-067 (R0)
Analytical Batch - DE001653TER
Reviewed On - 03/25/21 09:06:47
Instrument Used : GC 6890
Running On : 03/24/21 07:45:51
Batch Date : 03/23/21 12:36:29

Reagent	Dilution	Consums. ID
032321.R08	40	24161320 HWK-TP3ML 00302923 12123-046CC-046 280674667

Terpenoid profile screening is performed by GC-FID with liquid injection via SOP-067 (R0) which can screen for 28 terpenes.

Stephen Goldman
Lab Director

State License #
405R-00011 405-00008
ISO Accreditation # 4331.01

Signature

04/19/2021
Signed On

879 Federal Blvd
Denver, CO, 80204, USA

Kaycha Labs
RAW-ORGFS-CBD
N/A
Matrix : Concentrate

Certificate of Analysis

TESTED

Hemplucid

4844 N. 300 W. Ste. 202
Provo, CO, 84604, US
Telephone: 7192318261
Email: sarah@hemplucid.com
License #: NA

Sample : DE10319018-002
Harvest/LOT ID: O-CO2-YP5-04021-BULK86

Batch# : 2021-94A
Sampled : 03/19/21
Ordered : 03/19/21

Sample Size Received : 7 gram
Total Weight/Volume : N/A
Completed : 03/26/21 **Expires:** 03/26/22
Sample Method : SOP-024

Pesticides

TESTED

Pesticides	LOD	Units	Action Level	Result
OTHER PESTICIDES	0.1	ppb	100	ND
AVERMECTINS	0.0271	ppb	70	ND
AZOXYSTROBIN	0.0149	ppb	20	ND
BIFENAZATE	0.0118	ppb	20	ND
ETOXAZOLE	0.00645	ppb	10	ND
IMAZALIL	0.0646	ppb	40	ND
IMIDACLOPRID	0.00748	ppb	20	ND
MALATHION	0.01108	ppb	50	ND
MYCLOBUTANIL	0.0135	ppb	40	ND
PERMETHRINS	0.0131	ppb	40	ND
SPINOSADS	0.0134	ppb	60	ND
SPIROMESIFEN	0.0499	ppb	30	ND
SPIROTETRAMAT	0.0301	ppb	20	32.447
TEBUCONAZOLE	0.0103	ppb	10	ND

Pesticides	LOD	Units	Action Level	Result

Pesticides — TESTED

Analyzed by
7
Weight
0.1526g
Extraction date
NA
Extracted By
NA

Analysis Method - SOP-060 (R5) ,
Analytical Batch - DE001648PES
Instrument Used : Sciex 6500 Qtrap - Pesticides
Running On :
Batch Date : 03/23/21 07:07:29

Reagent	Dilution	Consums. ID
030921.R05	25	24161320
031821.R09		9234640
030921.R09		00302923
032421.R06		280674667
030421.R15		213685

Pesticide screen is performed using LC-MS which can screen down to below single digit ppb concentrations for regulated Pesticides via SOP-060 (R5). *

Stephen Goldman
Lab Director

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ISO Accreditation # 4331.01

Signature

04/19/2021
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879 Federal Blvd
Denver, CO, 80204, USA

Kaycha Labs

RAW-ORGFS-CBD
N/A
Matrix : Concentrate

Certificate of Analysis

TESTED

Hemplucid

4844 N. 300 W. Ste. 202
Provo, CO, 84604, US
Telephone: 7192318261
Email: sarah@hemplucid.com
License #: NA

Sample : DE10319018-002
Harvest/LOT ID: O-CO2-YP5-04021-BULK86

Batch# : 2021-94A
Sampled : 03/19/21
Ordered : 03/19/21

Sample Size Received : 7 gram
Total Weight/Volume : N/A
Completed : 03/26/21 **Expires:** 03/26/22
Sample Method : SOP-024

Residual Solvents — PASSED

Solvent	LOD	Units	Action Level (PPM)	Pass/Fail	Result
PROPANE	4.21421	ppm	1000	PASS	ND
BUTANES	15.794	ppm	1000	PASS	ND
METHANOL	1.27868	ppm	600	PASS	6.227
PENTANES	13.828	ppm	1000	PASS	ND
ETHANOL	2.70106	ppm	10000	PASS	38.621
ACETONE	1.708	ppm	1000	PASS	9.722
2-PROPANOL	1.58756	ppm	1000	PASS	36.887
HEXANES	1.92798	ppm	60	PASS	ND
ETHYL ACETATE	2.79218	ppm	1000	PASS	ND
BENZENE	0.47491	ppm	2	PASS	ND
HEPTANE	3.25945	ppm	1000	PASS	ND
TOLUENE	2.10881	ppm	180	PASS	ND
XYLENES	7.115	ppm	430	PASS	ND

Residual Solvents — PASSED

Analyzed by	Weight	Extraction date	Extracted By
666	0.14g	03/20/21 11:03:59	7

Analysis Method -SOP-032 (R18)
Analytical Batch -DE001642SOL **Reviewed On - 03/22/21 13:41:42**
Instrument Used : GC 5890
Running On :
Batch Date : 03/20/21 08:58:46

Reagent	Dilution	Consums. ID
031821.R05	1	24160453 31726-2-1 5079-525C6-525E HWK-TP3ML

Residual solvents screening is performed using GCwhich can detect below single digit ppm concentrations. Currently we analyze for 15 Residual solvents.

Stephen Goldman
Lab Director

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ISO Accreditation # 4331.01

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Kaycha Labs
RAW-ORGFS-CBD
N/A
Matrix : Concentrate

Certificate of Analysis

TESTED

Hemplucid

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Provo, CO, 84604, US
Telephone: 7192318261
Email: sarah@hemplucid.com
License #: NA

Sample : DE10319018-002
Harvest/LOT ID: O-CO2-YP5-04021-BULK86
Batch# : 2021-94A
Sampled : 03/19/21
Ordered : 03/19/21
Sample Size Received : 7 gram
Total Weight/Volume : N/A
Completed : 03/26/21 **Expires:** 03/26/22
Sample Method : SOP-024

Microbials — PASSED

Analyte	LOD	Result
SALMONELLA_SPECIES		0
SHIGA_TOXIN_PRODUCING_ESCHERICHIA_COLI_STEC		0
TOTAL_YEAST_AND_MOLD		0

Analysis Method -SOP-061 (R2); SOP-062 (R2); SOP-063 (R1)
Analytical Batch -DE001645MIC Batch Date : 03/22/21
Instrument Used : Microbial - Full Panel
Running On : 03/23/21

Analyzed by	Weight	Extraction date	Extracted By
5	0.91g	03/23/21	5

Reagent	Reagent	Reagent	Reagent	Consums. ID	Consums. ID
021221.03	022221.08	022321.R13	020821.01	40898-021C4-021AI	NT10-1212
022321.02	030421.R12	031821.R11	032521.R07	MKCN2192	040C7-0142
030421.R11	031821.R14	030521.R07	030121.04	12123-046CC-046	00100
021021.R12	032221.R06	121720.01	030121.05	0	00019
021021.R13	031621.R06	081220.03	031621.01	06520022	CH_2048055
022221.07	032421.R05	100419.03		1	61464-041C6-041H

Microbiological testing for Fungal and Bacterial Identification via Polymerase Chain Reaction (PCR) methods and plating methods. If a pathogenic Escherichia Coli (STEC) or Salmonella is detected in 1g of a sample, the sample fails the microbiological-impurity testing.

Heavy Metals — PASSED

Reagent	Dilution	Consums. ID
111020.01	50	018C4-018D
032321.R03		040CB-040D
032321.R02		12123-046CC-046
011521.01		923C4-923AK
031221.R08		
032221.01		

Metal	LOD	Unit	Result	Action Level (PPM)
ARSENIC	0.0020	ppm	ND	0.2
CADMIUM	0.0016	ppm	ND	0.2
MERCURY	0.0035	ppm	ND	0.1
LEAD	0.0101	ppm	ND	0.5

Analyzed by	Weight	Extraction date	Extracted By
7	0.219g	03/23/21 02:03:06	666

Analysis Method -SOP-050 (R5)
Analytical Batch -DE001649HEA | Reviewed On - 03/24/21 08:39:05
Instrument Used : Shimadzu 2030 ICP-MS
Running On : 03/24/21 07:53:50
Batch Date : 03/23/21 08:21:39

Heavy Metals screening is performed using ICP-MS (Inductively Coupled Plasma – Mass Spectrometer) which can screen to below single digit ppb concentrations for regulated heavy metals using method SOP-050 (R5). Sample preparation for Heavy Metals Analysis via SOP-050 (R5).

Stephen Goldman
Lab Director

State License #
405R-00011 405-00008
ISO Accreditation # 4331.01

Signature

04/19/2021
Signed On