kaycha LABS
10427 Cogdill Road, Suite 500
Knoxville, TN, 37932, US
DEA Number: RK0595249

Certificate of Analysis

Sample:KN10729001-003
Harvest/Lot ID: B005-020
Seed to Sale# N/A
Batch Date: 07/27/21
Batch#: B006
Sample Size Received: 8 gram
Total Weight/Volume: N/A
Retail Product Size: 1000 gram
Ordered : 07/27/21
sampled : 07/27/21
Completed: 08/02/21 Expires: 08/02/22 **Sampling Method:** SOP Client Method

Aug 02, 2021 | Vapen KY, LLC

PASSED

PRODUCT IMAGE

SAFETY RESULTS

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

MISC.

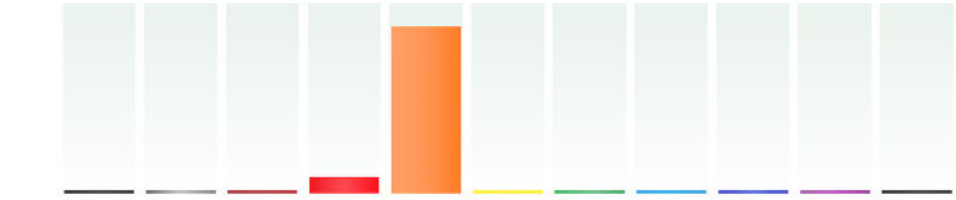
Terpenes
NOT TESTED

CANNABINOID RESULTS

Total THC
0.235%

Total CBD
55.128%

Total Cannabinoids
61.195%



	CBDV	CBDA	CBGA	CBG	CBD	THCV	CBN	D9-THC	D8-THC	CBC	THCA
%	0.3420	ND	0.0230	5.2000	55.1280	<0.010	0.0140	0.2350	ND	0.2490	<0.010
mg/g	3.4200	ND	0.2300	52.0000	551.2800	<0.010	0.1400	2.3500	ND	2.4900	<0.010
LOD	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010
	%	%	%	%	%	%	%	%	%	%	%

Filth PASSED

Analyzed By	Weight	Extraction date	Extracted By
142	0.6869g	NA	NA

Analyte LOD Result
Filth and Foreign Material0.3ND
Analysis Method -SOP.T.40.013**Batch Date :** 07/30/21 14:25:02
Analytical Batch -KN001166FIL**Reviewed On -** 07/30/21 15:05:23
Instrument Used : E-AMS-138 Microscope
Running On :

This includes but is not limited to hair, insects, feces, packaging contaminants, and manufacturing waste and by-products. A SW-2T13 Stereo Microscope is use for inspection.

Cannabinoid Profile Test

Analyzed by	Weight	Extraction date :	Extracted By :
113	0.2054g	07/29/21 12:07:38	946

Analysis Method -Expanded Measurement of Uncertainty: Flower Matrix d9-THC:12.7%, THCa: 9.5%, TOTAL THC 11. 1%. These uncertainties represent an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor k=2 for a normal distribution.10:27:03**Reviewed On -** 07/30/21
Analytical Batch -KN001153POT**Instrument Used :** HPLC E-SHI-008**Running On :**
Batch Date : 07/29/21 08:17:04

Reagent	Dilution	Consums. ID
120320.R02	40	94789291.217
072621.R01		0030220
071421.R01		

Full spectrum cannabinoid analysis utilizing High Performance Liquid Chromatography with UV detection (HPLC-UV). (Method: SOP.T.30.050 for sample prep and Shimadzu High Sensitivity Method SOP.T.40.020 for analysis.). *Based on FL action limits.

Sue Ferguson
Lab Director
State License # n/a
ISO Accreditation # 17025:2017

Signature

08/02/21
Signed On

10427 Cogdill Road, Suite 500
Knoxville, TN, 37932, US
DEA Number: RK0595249

Certificate of Analysis

PASSED

Sample :KN10729001-003
Harvest/LOT ID:B005-020
Batch# :B006 **Sample Size Received :** 8 gram
Sampled : 07/27/21 **Total Weight/Volume :** N/A
Ordered : 07/27/21 **Completed :** 08/02/21 **Expires:** 08/02/22
Sample Method : SOP Client Method

Pesticides

PASSED

Pesticides	LOD	Units	Action Level	Result
ABAMECTIN B1A	0.01	pp	0.3	ND
ACEPHATE	0.01	m	3	ND
ACEQUINOCYL	0.01	pp	2	0.132
ACETAMIPRID	0.01	m	3	ND
ALDICARB	0.01	pp	0.1	ND
AZOXYSTROBIN	0.01	m	3	ND
BIFENAZATE	0.01	pp	3	ND
BIFENTHRIN	0.01	m	0.5	ND
BOSCALID	0.01	pp	3	ND
CARBARYL	0.01	m	0.5	ND
CARBOFURAN	0.01	pp	0.1	ND
CHLORANTRANILIPROLE	0.01	m	3	ND
CHLORMEQUAT CHLORIDE	0.01	pp	3	ND
CHLORPYRIFOS	0.01	m	0.1	ND
CLOFENTEZINE	0.01	pp	0.5	ND
COUMAPHOS	0.01	m	0.1	ND
CYPERMETHRIN	0.01	pp	1	ND
DAMINOZIDE	0.01	m	0.1	ND
DIAZANON	0.01	pp	0.2	ND
DICHLORVOS	0.01	m	0.1	ND
DIMETHOATE	0.01	pp	0.1	ND
DIMETHOMORPH	0.01	m	3	ND
ETHOPROPHOS	0.01	pp	0.1	ND
ETOFENPROX	0.01	m	0.1	ND
ETOXAZOLE	0.01	pp	1.5	ND
FENHEXAMID	0.01	m	3	ND
FENOXYCARB	0.01	pp	0.1	ND
FENPYROXIMATE	0.01	m	2	ND
FIPRONIL	0.01	pp	0.1	ND
FLONICAMID	0.01	m	2	ND
FLUDIOXONIL	0.01	pp	3	ND
HEXYTHIAZOX	0.01	m	2	ND
IMAZALIL	0.01	pp	0.1	ND
IMIDACLOPRID	0.01	m	3	ND
KRESOXIM-METHYL	0.01	pp	1	ND
MALATHION	0.01	m	2	ND
METALAXYL	0.01	pp	3	ND
METHIOCARB	0.01	m	0.1	ND
METHOMYL	0.01	pp	0.1	ND
MEVINPHOS	0.01	m	0.1	ND
MYCLOBUTANIL	0.01	pp	3	ND
NALED	0.01	m	0.5	ND
OXAMYL	0.01	pp	0.5	ND
PACLOBUTRAZOL	0.01	m	0.1	ND
PERMETHRINS	0.01	pp	1	ND
PHOSMET	0.01	m	0.2	ND

Pesticides	LOD	Units	Action Level	Result
PIPERONYL BUTOXIDE	0.01	pp	3	ND
PRALLETHRIN	0.01	m	0.4	ND
PROPICONAZOLE	0.01	pp	1	ND
PROPOXUR	0.01	m	0.1	ND
PYRETHRINS	0.01	pp	1	ND
PYRIDABEN	0.01	m	3	ND
SPINETORAM	0.01	pp	3	ND
SPIROMESIFEN	0.01	m	3	ND
SPIROTETRAMAT	0.01	pp	3	ND
SPIROXAMINE	0.01	m	0.1	ND
TEBUCONAZOLE	0.01	pp	1	ND
THIACLOPRID	0.01	m	0.1	ND
THIAMETHOXAM	0.01	pp	1	ND
TOTAL SPINOSAD	0.01	m	3	ND
TRIFLOXYSTROBIN	0.01	pp	3	0.095

Pesticides

PASSED

Analyzed by	Weight	Extraction date	Extracted By
143	[illegible]5g	07/29/21 12:07:40	143

Analysis Method - SOP.T.30.060, SOP.T.40.060 ,
Analytical Batch - KN001145PES
Instrument Used : E-SHI-125 Pesticides
Running On : 07/29/21 12:06:56
Reviewed On- 07/30/21 15:05:23
Batch Date : 07/27/21 13:31:47

Reagent	Dilution	Consums. ID
112428.03 060221.R02 061421.R14 072321.R03 072321.R04	10	200618634 94789291.217

Pesticide screen is performed using LC-MS which can screen down to below single digit ppb concentrations for regulated Pesticides. Currently we analyze fo[illegible]7 Pesticides. (Method: SOP.T.30.060 Sample Preparation for Pesticides Analysis via LCMSMS and SOP.T40.060 Procedure for Pesticide Quantification Using LCMS). Analytes ISO pending. *Based on FL action limits. *

Sue Ferguson
Lab Director
State License # n/a
ISO Accreditation # 17025:2017

Signature

08/02/21
Signed On

kaycha LABS

10427 Cogdill Road, Suite 500
Knoxville, TN, 37932, US
DEA Number: RK0595249

Certificate of Analysis

PASSED

Sample : KN10729001-003
Harvest/LOT ID: B005-020
Batch# : B006 **Sample Size Received :** 8 gram
Sampled : 07/27/21 **Total Weight/Volume :** N/A
Ordered : 07/27/21 **Completed :** 08/02/21 **Expires:** 08/02/22
Sample Method : SOP Client Method

Residual Solvents PASSED

Solvent	LOD	Units	Action Level (PPM)	Pass/Fail	Result
PROPANE	500	pp	2100	PASS	N
BUTANES (N-BUTANE)	500	m	2000	PASS	D
METHANOL	25	pp	3000	PASS	N
ETHYLENE OXIDE	0.5	m	5	PASS	D
PENTANES (N-PENTANE)	75	pp	5000	PASS	N
ETHANOL	500	m	5000	PASS	D
ETHYL ETHER	50	pp	5000	PASS	N
1,1-DICHLOROETHENE	0.8	m	8	PASS	D
ACETONE	75	pp	5000	PASS	N
2-PROPANOL	50	m	500	PASS	D
ACETONITRILE	6	pp	410	PASS	N
DICHLOROMETHANE	12.5	m	600	PASS	D
N-HEXANE	25	pp	290	PASS	N
ETHYL ACETATE	40	m	5000	PASS	D
CHLOROFORM	0.2	pp	60	PASS	N
BENZENE	0.1	m	2	PASS	D
1,2-DICHLOROETHANE	0.2	pp	5	PASS	N
HEPTANE	500	m	5000	PASS	D
TRICHLOROETHYLENE	2.5	pp	80	PASS	N
TOLUENE	15	m	890	PASS	D
TOTAL XYLENES - M, P & O - DIMETHYLBENZENE	15	pp		PASS	N
		m			D
		pp			N
		m			D
		pp			N
		m			D
		pp			N
		m			D
		pp			N
		m			D
		pp			N
		m			D
		pp			N
		m			D
		pp			N
		m			D
		pp			N
		m			D
		pp			N
		m			D
		pp			N
		m			D

Residual Solvents PASSED

Analyzed by	Weight	Extraction date	Extracted By
138	0.02466g	07/29/21 02:07:00	138

Analysis Method -SOP.T.40.032
Analytical Batch -KN001158SOL **Reviewed On** - 08/02/21 14:56:07
Instrument Used : E-SHI-106 Residual Solvents
Running On : 07/29/21 16:59:25
Batch Date : 07/29/21 11:32:52

Reagent	Dilution	Consums. ID
		1065518282V1393

Residual solvents screening is performed using GC-MS which can detect below single digit ppm concentrations. Currently we analyze for 22 residual solvents. (Method: SOP.T.40.032 Residual Solvents Analysis via GC-MS). Analytes ISO pending. *Based on FL action limits.

Sue Ferguson
Lab Director
State License # n/a
ISO Accreditation # 17025:2017

Signature: [signature]

Signed On: 08/02/21

kaycha LABS
10427 Cogdill Road, Suite 500
Knoxville, TN, 37932, US
DEA Number: RK0595249

Certificate of Analysis

PASSED

Sample :KN10729001-003
Harvest/LOT ID:B005-020
Batch# :B006 **Sample Size Received :** 8 gram
Sampled : 07/27/21 **Total Weight/Volume :** N/A
Ordered : 07/27/21 **Completed :** 08/02/21 **Expires:** 08/02/22
Sample Method : SOP Client Method

Microbials — PASSED

Analyte	LOD	Result
ESCHERICHIA_COLI_SHIGELLA_SPP		not present in 1 gram. not present in 1 gram. not present in 1 gram. not present in 1 gram. not present in 1 gram.
SALMONELLA_SPECIFIC_GENE		
ASPERGILLUS_FLAVUS		
ASPERGILLUS_FUMIGATUS		
ASPERGILLUS_NIGER		
ASPERGILLUS_TERREUS		

Analysis Method -SOP.T.40.043
Analytical Batch -KN001160MIC **Batch Date :** 07/30/21
Instrument Used : Micro E-HEW-069
Running On : 07/30/21

Analyzed by	Weight	Extraction date	Extracted By
142	1.0302g	NA	NA

Reagent	Consums. ID
061821.01	003102
020821.04	
030421.01	

Microbiological testing for Fungal and Bacterial Identification via Polymerase Chain Reaction (PCR) method consisting of sample DNA amplified via tandem Polymerase Chain Reaction (PCR) as a crude lysate which avoids purification. (Method SOP.T.40.043) If a pathogenic Escherichia Coli, Salmonella, Aspergillus fumigatus, Aspergillus flavus, Aspergillus niger, or Aspergillus terreus is detected in 1g of a sample, the sample fails the microbiological-impurity testing.

Mycotoxins — PASSED

Analyte	LOD	Units	Result	Action Level (PPM)
AFLATOXIN G2	0.002ppm		ND	0.02
AFLATOXIN G1	0.002ppm		ND	0.02
AFLATOXIN B2	0.002ppm		ND	0.02
AFLATOXIN B1	0.002ppm		ND	0.02
OCHRATOXIN A	+0.002ppm		ND	0.02
TOTAL MYCOTOXINS	0.002ppm		ND	

Analysis Method -SOP.T.30.060, SOP.T.40.060
Analytical Batch -KN001154MYC | **Reviewed On -** 07/30/21 13:26:07
Instrument Used : E-SHI-125 Mycotoxins
Running On : 07/29/21 13:15:49
Batch Date : 07/29/21 09:00:45

Analyzed by	Weight	Extraction date	Extracted By
143	1.0205g	07/29/21 01:07:23	143

Aflatoxins B1, B2, G1, G2, and Ochratoxins A testing using LC-MS. (Method: SOP.T.30.060 for Sample Preparation and SOP.T40.060 Procedure for Mycotoxins Quantification Using LCMS. LOQ 1.0 ppb). Total Aflatoxins (Aflotoxin B1, B2, G1, G2) must be <20µg/Kg. Ochratoxins must be <20µg/Kg. Analytes ISO pending. *Based on FL action limits.

Heavy Metals — PASSED

Reagent	Dilution	Consums. ID
060221.R29	50	7226/003002
052021.R19		1 210117060
040521.R03		
040521.R04		

Metal	LOD	Unit	Result	Action Level (PPM)
ARSENIC-AS	0.02	ppm	ND	1.5
CADMIUM-CD	0.02	ppm	ND	0.5
MERCURY-HG	0.02	ppm	ND	3
LEAD-PB	0.02	ppm	<LOQ	0.5

Analyzed by	Weight	Extraction date	Extracted By
120	0.2607g	07/30/21 06:07:15	12

Analysis Method -SOP.T.40.050, SOP.T.30.052
Analytical Batch -KN001151HEA | **Reviewed On -** 08/02/21 14:45:09
Instrument Used : Metals ICP/MS
Running On :
Batch Date : 07/28/21 15:36:56

Heavy Metals screening is performed using ICP-MS (Inductively Coupled Plasma – Mass Spectrometer) which can screen down to below single digit ppb concentrations for regulated heavy metals using Method SOP.T.30.052 Sample Preparation for Heavy Metals Analysis via ICP-MS and SOP.T.40.050 Heavy Metals Analysis via ICP-MS. Analytes ISO Pending. *Based on FL action limits.

Sue Ferguson
Lab Director
State License # n/a
ISO Accreditation # 17025:2017

Signature

08/02/21
Signed On