10427 Cogdill Road, Suite 500
Knoxville, TN, 37932, US

Kaycha Labs
F.E.C.O. RSO
N/A
Matrix: Derivative

Certificate of Analysis

Sample:KN10303010-001
Harvest/Lot ID: 21-533
Seed to Sale #N/A
Batch Date :03/02/21
Batch#: 001
Sample Size Received: 11 gram
Total Weight/Volume: N/A
Retail Product Size: 1 gram
Ordered : 03/02/21
sampled : 03/02/21
Completed: 03/09/21 Expires: 03/09/22
Sampling Method: SOP Client Method

Mar 09, 2021 | Sir Hemp Co.

640 Clematis Street
West Palm Beach, FL, 33402, US

SIR HEMP CO.

PASSED

PRODUCT IMAGE

SAFETY RESULTS

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

MISC.

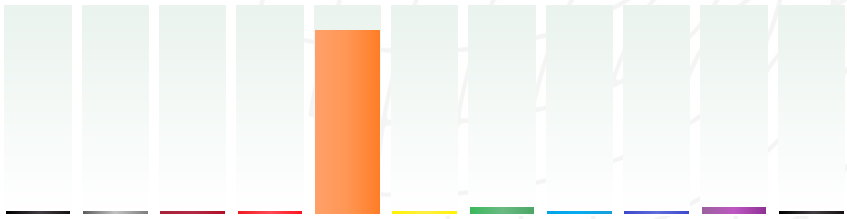
Terpenes
TESTED

CANNABINOID RESULTS

Total THC
0.189%

Total CBD
56.813%

Total Cannabinoids
62.365%



	CBDV	CBDA	CBGA	CBG	CBD	THCV	CBN	D9-THC	D8-THC	CBC	THCA
	0.316%	0.287%	0.019%	0.715%	56.561 %	ND	1.857%	0.174%	0.090%	2.324%	0.017%
	3.160 mg/g	2.870 mg/g	0.190 mg/g	7.150 mg/g	565.610 mg/g	ND	18.570 mg/g	1.740 mg/g	0.900 mg/g	23.240 mg/g	0.170 mg/g
LOD	0.01 %	0.01 %	0.01 %	0.01 %	0.01 %	0.01 %	0.01 %	0.01 %	0.01 %	0.01 %	0.01 %

Cannabinoid Profile Test

Analyzed by	Weight	Extraction date :	Extracted By :
113	0.2434g	NA	NA

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.
Reviewed On - 03/08/21 13:21:12
Batch Date : 03/03/21 14:12:42
Analytical Batch -KN000511POT
Instrument Used : HPLC E-SHI-008

Reagent	Dilution	Consums. ID
120320.R02	40	00298878
030321.R02		190909059
030321.R01		947.217

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.

Filth — PASSED

Analyzed By	Weight	Extraction date	Extracted By
142	0.5229g	NA	NA

Analyte	LOD	Result
Filth and Foreign Material	0.3	ND

Analysis Method -SOP.T.40.013
Batch Date : 03/04/21 09:59:34
Analytical Batch -KN000518FIL
Reviewed On - 03/04/21 13:12:14
Instrument Used : E-AMS-138 Microscope

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.

Sue Ferguson
Lab Director

State License # n/a
ISO Accreditation # 17025:2017

Signature

03/09/2021
Signed On

10427 Cogdill Road, Suite 500
Knoxville, TN, 37932, US

Kaycha Labs
F.E.C.O. RSO
N/A
Matrix : Derivative

Certificate of Analysis

PASSED

Sir Hemp Co.

640 Clematis Street
West Palm Beach, FL, 33402, US
Telephone: 8008365820
Email: admin@sirhempco.com

Sample : KN10303010-001
Harvest/LOT ID: 21-533
Batch# : 001
Sampled : 03/02/21
Ordered : 03/02/21
Sample Size Received : 11 gram
Total Weight/Volume : N/A
Completed : 03/09/21 **Expires:** 03/09/22
Sample Method : SOP Client Method

Terpenes

TESTED

Terpenes	LOD (%)	mg/g	%	Result (%)
ALPHA-PHELLANDRENE	.02	ND	ND	
FENCHONE	.02	ND	ND	
GAMMA-TERPINENE	.02	ND	ND	
GERANIOL	.02	ND	ND	
GERANYL ACETATE	.02	ND	ND	
GUAIOL	.02	2.281	0.228	
LIMONENE	.02	ND	ND	
LINALOOL	.02	0.320	0.032	
NEROL	.02	ND	ND	
OCIMENE	.02	ND	ND	
FARNESENE	.02	ND	ND	
PULEGONE	.02	ND	ND	
SABINENE	.02	ND	ND	
SABINENE HYDRATE	.02	ND	ND	
TERPINEOL	.02	0.340	0.034	
TERPINOLENE	.02	ND	ND	
TRANS-CARYOPHYLLENE	.02	1.173	0.117	
TRANS-NEROLIDOL	.02	0.462	0.046	
VALENCENE	.02	ND	ND	
CEDROL	.02	ND	ND	
ALPHA-HUMULENE	.02	0.462	0.046	
ALPHA-PINENE	.02	ND	ND	
ALPHA-TERPINENE	.02	ND	ND	
BETA-MYRCENE	.02	ND	ND	
BETA-PINENE	.02	ND	ND	
BORNEOL	.04	ND	ND	
CAMPHENE	.02	ND	ND	
CAMPHOR	.04	ND	ND	
CARYOPHYLLENE OXIDE	.02	1.292	0.129	
ALPHA-CEDRENE	.02	ND	ND	
ALPHA-BISABOLOL	.02	5.526	0.552	
Total (%)		1.185		

Terpenes	LOD(%)	mg/g	%	Result (%)
ISOPULEGOL	.02	ND	ND	
CIS-NEROLIDOL	.02	ND	ND	
3-CARENE	.02	ND	ND	
FENCHYL ALCOHOL	.02	ND	ND	
HEXAHYDROTHYMOL	.02	ND	ND	
EUCALYPTOL	.02	ND	ND	
ISOBORNEOL	.02	ND	ND	

Terpenes

TESTED

Analyzed by	Weight	Extraction date	Extracted By
138	0.98672g	NA	NA

Analysis Method -SOP.T.40.090
Analytical Batch -KN000516TER **Reviewed On - 03/09/21 19:34:35**
Instrument Used : E-SHI-109 Terpenes
Running On :
Batch Date : 03/04/21 09:43:06

Reagent	Dilution	Consums. ID

Terpenoid profile screening is performed using GC-MS with Liquid Injection (Gas Chromatography – Mass Spectrometer) which can screen 38 terpenes using Method SOP.T.40.090 Terpenoid Analysis Via GC-MS. Analytes ISO Pending

Sue Ferguson
Lab Director

State License # n/a
ISO Accreditation # 17025:2017

Signature

03/09/2021
Signed On

10427 Cogdill Road, Suite 500
Knoxville, TN, 37932, US

Kaycha Labs
F.E.C.O. RSO
N/A
Matrix : Derivative

Certificate of Analysis

PASSED

Sir Hemp Co.

640 Clematis Street
West Palm Beach, FL, 33402, US
Telephone: 8008365820
Email: admin@sirhempco.com

Sample : KN10303010-001
Harvest/LOT ID: 21-533
Batch# : 001
Sampled : 03/02/21
Ordered : 03/02/21
Sample Size Received : 11 gram
Total Weight/Volume : N/A
Completed : 03/09/21 **Expires:** 03/09/22
Sample Method : SOP Client Method

Pesticides

PASSED

Pesticides	LOD	Units	Action Level	Result
ABAMECTIN B1A	0.05	ppm	0.3	ND
ACEPHATE	0.05	ppm	3	ND
ACEQUINOCYL	0.05	ppm	2	ND
ACETAMIPRID	0.05	ppm	3	ND
ALDICARB	0.05	ppm	0.1	ND
AZOXYSTROBIN	0.05	ppm	3	ND
BIFENAZATE	0.05	ppm	3	ND
BIFENTHRIN	0.05	ppm	0.5	ND
BOSCALID	0.05	ppm	3	ND
CARBARYL	0.05	ppm	0.5	ND
CARBOFURAN	0.05	ppm	0.1	ND
CHLORANTRANILIPROLE	0.05	ppm	3	ND
CHLORMEQUAT CHLORIDE	0.05	ppm	3	ND
CHLORPYRIFOS	0.05	ppm	0.1	ND
CLOFENTEZINE	0.10	ppm	0.5	ND
COUMAPHOS	0.05	ppm	0.1	ND
CYPERMETHRIN	0.05	ppm	1	ND
DAMINOZIDE	0.05	ppm	0.1	ND
DIAZANON	0.05	ppm	0.2	ND
DICHLORVOS	0.05	ppm	0.1	ND
DIMETHOATE	0.05	ppm	0.1	ND
DIMETHOMORPH	0.10	ppm	3	ND
ETHOPROPHOS	0.05	ppm	0.1	ND
ETOFENPROX	0.05	ppm	0.1	ND
ETOXAZOLE	0.05	ppm	1.5	ND
FENHEXAMID	0.05	ppm	3	ND
FENOXYCARB	0.05	ppm	0.1	ND
FENPYROXIMATE	0.05	ppm	2	ND
FIPRONIL	0.05	ppm	0.1	ND
FLONICAMID	0.05	ppm	2	ND
FLUDIOXONIL	0.05	ppm	3	ND
HEXYTHIAZOX	0.05	ppm	2	ND
IMAZALIL	0.05	ppm	0.1	ND
IMIDACLOPRID	0.05	ppm	3	ND
KRESOXIM-METHYL	0.05	ppm	1	ND
MALATHION	0.05	ppm	2	ND
METALAXYL	0.05	ppm	3	ND
METHIOCARB	0.05	ppm	0.1	ND
METHOMYL	0.05	ppm	0.1	ND
MEVINPHOS	0.05	ppm	0.1	ND
MYCLOBUTANIL	0.05	ppm	3	ND
NALED	0.05	ppm	0.5	ND
OXAMYL	0.05	ppm	0.5	ND
PACLOBUTRAZOL	0.05	ppm	0.1	ND
PERMETHRINS	0.05	ppm	1	ND
PHOSMET	0.05	ppm	0.2	ND

Pesticides	LOD	Units	Action Level	Result
PIPERONYL BUTOXIDE	0.05	ppm	3	ND
PRALLETHRIN	0.05	ppm	0.4	ND
PROPICONAZOLE	0.05	ppm	1	ND
PROPOXUR	0.05	ppm	0.1	ND
PYRETHRINS	0.05	ppm	1	ND
PYRIDABEN	0.10	ppm	3	ND
SPINETORAM	0.05	ppm	3	ND
SPIROMESIFEN	0.05	ppm	3	ND
SPIROTETRAMAT	0.05	ppm	3	ND
SPIROXAMINE	0.05	ppm	0.1	ND
TEBUCONAZOLE	0.05	ppm	1	ND
THIACLOPRID	0.05	ppm	0.1	ND
THIAMETHOXAM	0.05	ppm	1	ND
TOTAL SPINOSAD	0.02	ppm	3	ND
TRIFLOXYSTROBIN	0.05	ppm	3	ND

Pesticides — PASSED

Analyzed by
143

Weight
1.0303g

Extraction date
03/04/21 04:03:52

Extracted By
143

Analysis Method - SOP.T.30.060, SOP.T.40.060 ,
Analytical Batch - KN000519PES

Reviewed On- 03/04/21 13:12:14

Instrument Used : E-SHI-125 Pesticides
Running On :

Batch Date : 03/04/21 10:51:10

Reagent	Dilution	Consums. ID
022221.R20 022521.R11 030121.R31 030221.R01	10	P7364369 00302193

Pesticide screen is performed using LC-MS which can screen down to below single digit ppb concentrations for regulated Pesticides. Currently we analyze for 57 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

03/09/2021
Signed On

10427 Cogdill Road, Suite 500
Knoxville, TN, 37932, US

Kaycha Labs
F.E.C.O. RSO
N/A
Matrix : Derivative

Certificate of Analysis

PASSED

Sir Hemp Co.

640 Clematis Street
West Palm Beach, FL, 33402, US
Telephone: 8008365820
Email: admin@sirhempco.com

Sample : KN10303010-001
Harvest/LOT ID: 21-533
Batch# : 001
Sampled : 03/02/21
Ordered : 03/02/21

Sample Size Received : 11 gram
Total Weight/Volume : N/A
Completed : 03/09/21 **Expires:** 03/09/22
Sample Method : SOP Client Method

Residual Solvents — PASSED

Solvent	LOD	Units	Action Level (PPM)	Pass/Fail	Result
PROPANE	500	ppm	5000	PASS	ND
BUTANES (N-BUTANE)	500	ppm	5000	PASS	ND
METHANOL	25	ppm	3000	PASS	<125.000
ETHYLENE OXIDE	0.5	ppm	5	PASS	ND
PENTANES (N-PENTANE)	75	ppm	750	PASS	ND
ETHANOL	500	ppm	5000	PASS	ND
ETHYL ETHER	50	ppm	500	PASS	ND
1,1-DICHLOROETHENE	0.8	ppm	8	PASS	ND
ACETONE	75	ppm	750	PASS	ND
2-PROPANOL	50	ppm	500	PASS	ND
ACETONITRILE	6	ppm	60	PASS	ND
DICHLOROMETHANE	12.5	ppm	125	PASS	ND
N-HEXANE	25	ppm	250	PASS	ND
ETHYL ACETATE	40	ppm	400	PASS	ND
CHLOROFORM	0.2	ppm	2	PASS	ND
BENZENE	0.1	ppm	1	PASS	ND
1,2-DICHLOROETHANE	0.2	ppm	2	PASS	ND
HEPTANE	500	ppm	5000	PASS	ND
TRICHLOROETHYLENE	2.5	ppm	25	PASS	ND
TOLUENE	15	ppm	150	PASS	ND
XYLENES-M&P (1,3&1,4-DIMETHYLBENZENE)	10	ppm	150	PASS	ND
XYLENES-O (1,2-DIMETHYLBENZENE)	5	ppm	150	PASS	ND

Residual Solvents — PASSED

Analyzed by	Weight	Extraction date	Extracted By
138	0.02329g	NA	NA

Analysis Method - SOP.T.40.032
Analytical Batch - KN000535SOL **Reviewed On -** 03/09/21 19:13:41
Instrument Used : E-SHI-106 Residual Solvents
Running On : 03/09/21 08:52:56
Batch Date : 03/08/21 14:07:46

Reagent	Dilution	Consums. ID

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

03/09/2021
Signed On

10427 Cogdill Road, Suite 500
Knoxville, TN, 37932, US

Kaycha Labs
F.E.C.O. RSO
N/A
Matrix : Derivative

Certificate of Analysis

PASSED

Sir Hemp Co.

640 Clematis Street
West Palm Beach, FL, 33402, US
Telephone: 8008365820
Email: admin@sirhempco.com

Sample : KN10303010-001
Harvest/LOT ID: 21-533
Batch# : 001
Sampled : 03/02/21
Ordered : 03/02/21

Sample Size Received : 11 gram
Total Weight/Volume : N/A
Completed : 03/09/21 **Expires:** 03/09/22
Sample Method : SOP Client Method

Microbials — PASSED

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

Analysis Method -SOP.T.40.043
Analytical Batch -KN000522MIC Batch Date : 03/04/21
Instrument Used : Micro E-HEW-069
Running On : 03/04/21

Analyzed by	Weight	Extraction date	Extracted By
142	0.9979g	NA	NA

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	0.005	ppm	ND	0.02
AFLATOXIN G1	0.005	ppm	ND	0.02
AFLATOXIN B2	0.005	ppm	ND	0.02
AFLATOXIN B1	0.005	ppm	ND	0.02
OCHRATOXIN A+	0.005	ppm	ND	0.02
TOTAL MYCOTOXINS		ppm	0.000	

Analysis Method -SOP.T.30.060, SOP.T.40.060
Analytical Batch -KN000520MYC | Reviewed On - 03/05/21 14:59:35
Instrument Used : E-SHI-125 Mycotoxins
Running On :
Batch Date : 03/04/21 11:27:22

Analyzed by	Weight	Extraction date	Extracted By
143	1.0303g	NA	NA

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	Consums. ID
030121.R30	7226/0030021
011521.R01	201015060
020921.R14	
012221.R12	
030121.R29	

Metal	LOD	Unit	Result	Action Level (PPM)
ARSENIC-AS	0.04	ppm	ND	1.5
CADMIUM-CD	0.04	ppm	ND	0.5
MERCURY-HG	0.04	ppm	ND	3
LEAD-PB	0.04	ppm	ND	0.5

Analyzed by	Weight	Extraction date	Extracted By
12	10g	NA	NA

Analysis Method -SOP.T.40.050, SOP.T.30.052
Analytical Batch -KN000526HEA | Reviewed On - 03/06/21 13:39:42
Instrument Used : Metals ICP/MS
Running On :
Batch Date : 03/04/21 18:32:45

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

03/09/2021
Signed On