

# CERTIFICATE OF ANALYSIS



## SAMPLE INFORMATION

Sample Name: Jack Herer  
Sample Id: 68823  
Collected: 12/13/2018 10:54  
Batch Size: 1956 units  
Overall Result: Pass

Sample Matrix: Concentrate  
Batch Id: 120618JH  
Received: 12/14/2018 10:43  
Sample Size: 13 units

## MANUFACTURER INFO

Business Name: Cypress Manufacturing Co.  
Street Address: 20 Quail Run Circle  
City: Salinas  
Zip Code: 93907

Street Addr. Cont.: Unit B  
State: CA  
License: CDPH-T00000344

## CANNABINOID ANALYSIS

**i** Total THC,CBD value(s) have been decarboxylated.

TOTAL THC: 807.9 mg/g (80.79 %)  
TOTAL CBD: ND (ND)  
TOTAL CANNABINOIDS: 853.9 mg/g (85.39 %)

TEST TYPE RESULT: N/A  
UNIT OF MEASUREMENT: Milligrams per Gram(mg/g)

ANALYTE	RESULT	LOD	LLOQ	ANALYTE	RESULT	LOD	LLOQ
D9THC	802.3 mg/g (80.24 %)	1.0000	2.000	D8THC	ND	1.0000	2.000
THCa	ND	1.0000	2.000	CBG	20.61 mg/g (2.061 %)	1.0000	2.000
CBN	15.19 mg/g (1.519 %)	1.0000	2.000	CBD	ND	1.0000	2.000
CBDa	ND	1.0000	2.000	CBGa	ND	1.0000	2.000
THCv	5.544 mg/g (0.5544 %)	1.0000	2.000	CBC	10.24 mg/g (1.024 %)	1.0000	2.000
CBDv	ND	1.0000	2.000				

### ADDITIONAL INFORMATION

Method: SOP-TECH-001  
Instrument: HPLC-DAD

Sample Prepped 12/17/2018 20:45  
Sample Analyzed 12/18/2018 11:09

Sample Approved 12/19/2018 12:40



 **CHEMICAL RESIDUE ANALYSIS**

TEST TYPE RESULT: **Pass**  
 UNIT OF MEASUREMENT: **Micrograms per Gram(ug/g)**

ANALYTE	RESULT	LOD	LLOQ	ACTION LEVEL	ANALYTE	RESULT	LOD	LLOQ	ACTION LEVEL
Acephate	ND	0.0040	0.0100	0.1000 <b>Pass</b>	Acequinocyl	ND	0.0004	0.0020	0.1000 <b>Pass</b>
Acetamiprid	ND	0.0020	0.0040	0.1000 <b>Pass</b>	Aldicarb	ND	0.0100	0.0200	0.0 <b>Pass</b>
Azoxystrobin	ND	0.0100	0.0200	0.2000 <b>Pass</b>	Bifenazate	ND	0.0040	0.0100	0.1000 <b>Pass</b>
Bifenthrin	ND	0.0100	0.0200	3.000 <b>Pass</b>	Boscalid	ND	0.0200	0.0400	0.1000 <b>Pass</b>
Carbaryl	ND	0.0020	0.0040	0.5000 <b>Pass</b>	Carbofuran	ND	0.0100	0.0200	0.0 <b>Pass</b>
Chlorantraniliprole	ND	0.0400	0.1000	10.00 <b>Pass</b>	Chlorfenapyr	ND	0.0400	0.1000	0.0 <b>Pass</b>
Chlorpyrifos	ND	0.0400	0.1000	0.0 <b>Pass</b>	Clofentezine	ND	0.0040	0.0100	0.1000 <b>Pass</b>
Cypermethrin	ND	0.0400	0.1000	1.000 <b>Pass</b>	Daminozide	ND	0.0400	0.1000	0.0 <b>Pass</b>
Dichlorvos	ND	0.0100	0.0200	0.0 <b>Pass</b>	Diazinon	ND	0.0020	0.0040	0.1000 <b>Pass</b>
Dimethoate	ND	0.0100	0.0400	0.0 <b>Pass</b>	Ethoprophos	ND	0.0040	0.0100	0.0 <b>Pass</b>
Etofenprox	ND	0.0040	0.0100	0.0 <b>Pass</b>	Etoxazole	ND	0.0040	0.0100	0.1000 <b>Pass</b>
Fenoxycarb	ND	0.0040	0.0100	0.0 <b>Pass</b>	Fenpyroximate	ND	0.0100	0.0200	0.1000 <b>Pass</b>
Fipronil	ND	0.0400	0.1000	0.0 <b>Pass</b>	Fonicamid	ND	0.0200	0.0400	0.1000 <b>Pass</b>
Fludioxonil	ND	0.0100	0.0200	0.1000 <b>Pass</b>	Hexythiazox	ND	0.0040	0.0100	0.1000 <b>Pass</b>
Imazalil	ND	0.0100	0.0200	0.0 <b>Pass</b>	Imidacloprid	ND	0.0040	0.0100	5.000 <b>Pass</b>
KresoximMethyl	ND	0.0200	0.0400	0.1000 <b>Pass</b>	Malathion	ND	0.0040	0.0100	5.000 <b>Pass</b>
Metalaxyl	ND	0.0040	0.0100	2.000 <b>Pass</b>	Methiocarb	ND	0.0020	0.0040	0.0 <b>Pass</b>
Methomyl	ND	0.0020	0.0040	1.000 <b>Pass</b>	Myclobutanil	ND	0.0200	0.0400	0.1000 <b>Pass</b>
Naled	ND	0.0040	0.0100	0.1000 <b>Pass</b>	Oxamyl	ND	0.0100	0.0200	0.5000 <b>Pass</b>
Paclobutrazol	ND	0.0040	0.0100	0.0 <b>Pass</b>	Phosmet	ND	0.0040	0.0100	0.1000 <b>Pass</b>
PiperonylButoxide	ND	0.0020	0.0040	3.000 <b>Pass</b>	Prallethrin	ND	0.0400	0.1000	0.1000 <b>Pass</b>
Propoxur	ND	0.0040	0.0100	0.0 <b>Pass</b>	Pyridaben	ND	0.0100	0.0200	0.1000 <b>Pass</b>
Spiromesifen	ND	0.0400	0.1000	0.1000 <b>Pass</b>	Spirotetramat	ND	0.0200	0.0400	0.1000 <b>Pass</b>
Spiroxamine	ND	0.0020	0.0040	0.4000 <b>Pass</b>	Tebuconazole	ND	0.0040	0.0100	0.1000 <b>Pass</b>
Thiacloprid	ND	0.0004	0.0020	0.0 <b>Pass</b>	Thiamethoxam	ND	0.0040	0.0100	5.000 <b>Pass</b>
Trifloxystrobin	ND	0.0020	0.0040	0.1000 <b>Pass</b>	Abamectin	ND	0.0400	0.1000	0.1000 <b>Pass</b>
Cyfluthrin	ND	0.4000	2.000	2.000 <b>Pass</b>	Permethrins	ND	0.0100	0.0200	0.5000 <b>Pass</b>
Propiconazole	ND	0.0270	0.0610	0.1000 <b>Pass</b>	Pyrethrins	ND	0.0656	0.1570	0.5000 <b>Pass</b>
Spinosad	ND	0.0100	0.0200	0.1000 <b>Pass</b>	Coumaphos	ND	0.0100	0.0200	0.0 <b>Pass</b>
Fenhexamid	ND	0.0400	0.1000	0.1000 <b>Pass</b>	Spinetoram	ND	0.0040	0.0100	0.1000 <b>Pass</b>
Dimethomorph	ND	0.0070	0.0149	2.000 <b>Pass</b>	Mevinphos	ND	0.0100	0.0200	0.0 <b>Pass</b>

**ADDITIONAL INFORMATION**

Method: SOP-TECH-002  
 Instrument: UPLC-MSMS

Sample Prepped 12/17/2018 20:47  
 Sample Analyzed 12/18/2018 11:09

Sample Approved 12/18/2018 18:50



# CERTIFICATE OF ANALYSIS

## CHEMICAL RESIDUE GC ANALYSIS

TEST TYPE RESULT: **Pass**  
UNIT OF MEASUREMENT: Micrograms per Gram(ug/g)

ANALYTE	RESULT	LOD	LLOQ	ACTION LEVEL	ANALYTE	RESULT	LOD	LLOQ	ACTION LEVEL
Chlordane	ND	0.0400	0.1000	0.0 <b>Pass</b>	Captan	ND	0.2000	0.4000	0.7000 <b>Pass</b>
PCNB	ND	0.0200	0.0400	0.1000 <b>Pass</b>	MethylParathion	ND	0.0400	0.1000	0.0 <b>Pass</b>

### ADDITIONAL INFORMATION

Method: SOP-LAB-007      Sample Prepped 12/18/2018 09:48      Sample Approved 12/19/2018 22:00  
Instrument: GC-MS/MS      Sample Analyzed 12/18/2018 19:33

## RESIDUAL SOLVENT ANALYSIS

TEST TYPE RESULT: **Pass**  
UNIT OF MEASUREMENT: Micrograms per Gram(ug/g)

ANALYTE	RESULT	LOD	LLOQ	ACTION LEVEL	ANALYTE	RESULT	LOD	LLOQ	ACTION LEVEL
Chloroform	ND	0.5000	1.000	0.0 <b>Pass</b>	Acetone	25.75 ug/g	5.000	10.00	3100 <b>Pass</b>
Methanol	ND	50.00	100.0	400.0 <b>Pass</b>	Ethanol	ND	10.00	50.00	5000 <b>Pass</b>
Benzene	ND	0.5000	1.000	0.0 <b>Pass</b>	Toluene	ND	1.000	2.500	30.00 <b>Pass</b>
Pentane	ND	50.00	100.0	5000 <b>Pass</b>	Hexane	ND	0.5000	1.000	70.00 <b>Pass</b>
Heptane	ND	5.000	10.00	5000 <b>Pass</b>	Ethyl Acetate	ND	10.00	50.00	5000 <b>Pass</b>
Propane	ND	100.0	200.0	5000 <b>Pass</b>	Acetonitrile	ND	1.000	2.500	6.000 <b>Pass</b>
Ethyl Ether	ND	10.00	50.00	5000 <b>Pass</b>	1,2-Dichloroethane	ND	0.5000	1.000	0.0 <b>Pass</b>
Butane	ND	96.00	192.0	5000 <b>Pass</b>	Methylene chloride	ND	0.5000	1.000	0.0 <b>Pass</b>
Ethylene oxide	ND	0.5000	1.000	0.0 <b>Pass</b>	Isopropyl Alcohol	23.22 ug/g	5.000	10.00	320.0 <b>Pass</b>
Trichloroethylene	ND	0.5000	1.000	0.0 <b>Pass</b>	Xylenes	ND	1.000	2.000	10.00 <b>Pass</b>

### ADDITIONAL INFORMATION

Method: SOP-TECH-003      Sample Prepped 12/17/2018 19:26      Sample Approved 12/19/2018 22:00  
Instrument: HS-GC-FID      Sample Analyzed 12/17/2018 21:26



 **MICROBIAL ANALYSIS**

TEST TYPE RESULT: **Pass**  
 UNIT OF MEASUREMENT: Cycle Threshold (Ct)

ANALYTE	RESULT	LOD	LLOQ	ACTION LEVEL	ANALYTE	RESULT	LOD	LLOQ	ACTION LEVEL
A.fumigatus	ND	0.0	0.0	33.00 <b>Pass</b>	A. flavus	ND	0.0	0.0	33.00 <b>Pass</b>
A. niger	ND	0.0	0.0	33.00 <b>Pass</b>	A. terreus	ND	0.0	0.0	33.00 <b>Pass</b>
STEC	ND	0.0	0.0	33.00 <b>Pass</b>	Salmonella spp	ND	0.0	0.0	33.00 <b>Pass</b>

**ADDITIONAL INFORMATION**

Method: SOP-LAB--00?      Sample Prepped 12/16/2018 16:12      Sample Approved 12/19/2018 09:16  
 Instrument: qPCR      Sample Analyzed 12/17/2018 13:31

 **FILTH & FOREIGN MATERIAL**

TEST TYPE RESULT: **Pass**  
 UNIT OF MEASUREMENT: Filth and Foreign Matter (%)

ANALYTE	RESULT	LOD	LLOQ	ACTION LEVEL	ANALYTE	RESULT	LOD	LLOQ	ACTION LEVEL
SSCD	ND	0.0	0.0	25.00 <b>Pass</b>	Mold	ND	0.0	0.0	25.00 <b>Pass</b>
IF RH ME	ND	0.0	0.0	3.000 <b>Pass</b>	IFM	ND	0.0	0.0	25.00 <b>Pass</b>

**ADDITIONAL INFORMATION**

Method: SOP-LAB-007      Sample Prepped 12/17/2018 14:10      Sample Approved 12/17/2018 14:34  
 Instrument: Magnifying Glass      Sample Analyzed 12/17/2018 14:14

 **HEAVY METALS**

TEST TYPE RESULT: **Pass**  
 UNIT OF MEASUREMENT: Micrograms per Gram(ug/g)

ANALYTE	RESULT	LOD	LLOQ	ACTION LEVEL	ANALYTE	RESULT	LOD	LLOQ	ACTION LEVEL
Lead	0.0862 ug/g	0.0	0.0050	500.0 <b>Pass</b>	Mercury	<LLOQ	0.0	0.0050	100.0 <b>Pass</b>
Arsenic	0.0083 ug/g	0.0	0.0050	200.0 <b>Pass</b>	Cadmium	<LLOQ	0.0	0.0050	200.0 <b>Pass</b>

**ADDITIONAL INFORMATION**

Method: SOP-TECH-008      Sample Prepped 12/21/2018 12:46      Sample Approved 12/26/2018 09:03  
 Instrument: ICP-MS      Sample Analyzed 12/21/2018 14:19



# CERTIFICATE OF ANALYSIS



## MYCOTOXINS

TEST TYPE RESULT: **Pass**  
UNIT OF MEASUREMENT: Micrograms per Kilogram(ug/kg)

ANALYTE	RESULT	LOD	LLOQ	ACTION LEVEL	ANALYTE	RESULT	LOD	LLOQ	ACTION LEVEL
Aflatoxins-B1-2-G1-2	ND	1.002E+9	2.005E+9	0.0200 <b>Pass</b>	Ochratoxin A	ND	1.000	2.000	0.0200 <b>Pass</b>

### ADDITIONAL INFORMATION

Method: SOP-TECH-009  
Instrument: UPLC-MSMS  
Sample Prepped 12/21/2018 15:15  
Sample Analyzed 12/21/2018 18:12  
Sample Approved 12/26/2018 09:03

This report applies to the sample investigated and is not necessarily indicative of the quality or condition of apparently identical or similar products. This report provides technical results for a specific sample and the report shall not be altered, modified, supplemented, or abstracted in any manner. Any violation of these conditions renders the report and its results void.

### DATA REVIEWED AND APPROVED BY



12/26/2018

Swetha Kaul, PhD  
Chief Scientific Officer

Date

