

**Certificate of Analysis**

Testing for Compliance

Sample ID: EFF3102  
 Report ID: TR-EFF3102

Report Date: 10/21/2019

Test RFID: 1A401030000F105000003102

**Client Name:**  
 Epic Family Farms

**License No:**  
 020-10041847FC2

**Date Sampled:** 10/17/2019  
**Sampled by:** Shuguo Ma  
**Sample Name:** Jack The Ripper buds  
**Sample Type:** Usable marijuana  
**Harvest Time:** 9/25/2019  
**Sample Weight:** 35.00 g

**Description of the sample, sampling condition. Environmental conditions that may impact interpretation of the test result:**  
 Dry usable marijuana. Sample appeared normal. There were no any environmental conditions that may impact interpretation of the test result.

**Summary of Test Results**

Items	Value	Pass/Fail
Total THC:	22.0%	N/A
Total CBD:	< LOQ	N/A
Water Activity:	0.521 at 23.9 °C	Pass
Moisture Content:	11.3%	Pass
Pesticides:	< LOQ	Pass
Total Terpene	2.15%	N/A

State limit for water activity is 0.65 and 15% for moisture content.

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## Moisture Content Analysis

Testing method: SOP-004      Analyzed by: Yujing Wen      Analyzed date: 10/19/2019

Batch ID: MC101919

Analyte	Result
Water	11.3%

## Water Activity Analysis

Testing method: SOP-009      Analyzed by: Yujing Wen      Analyzed date: 10/19/2019

Batch ID: WA101919

Analyte	Result	Temperature
Water Activity	0.521	23.9 °C

## Potency Analysis

Testing method: SOP-002      Analyzed by: Yujing Wen      Analyzed date: 10/18/2019

Batch ID: PO101819

Analyte	Result, %	LOQ, %
THCV	< LOQ	0.1
THCA	22.9	0.1
DEALTA9-THC	1.8	0.1
DEALTA8-THC	< LOQ	0.1
CBN	< LOQ	0.1
CBG	< LOQ	0.1
CBDA	< LOQ	0.1
CBD	< LOQ	0.1
CBC	< LOQ	0.1
Total THC: $\Delta 9+0.877 \times \text{THCA}$	22.0	N/A
Total CBD: $\text{CBD}+0.877 \times \text{CBDA}$	< LOQ	N/A
Total Cannabinoids:	24.8	N/A

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**Pesticides Analysis (Unit: ppm)**

Testing method: SOP-010 Analyzed by: Yujing Wen Analyzed date: 10/19/2019

Batch ID: PE101919

Analyte	Result	LOQ	State Action Level
Abamectin	< LOQ	0.25	0.5
Acephate	< LOQ	0.20	0.4
Acequinocyl	< LOQ	1.00	2.0
Acetamiprid	< LOQ	0.10	0.2
Aldicarb	< LOQ	0.20	0.4
Azoxystrobin	< LOQ	0.10	0.2
Bifenazate	< LOQ	0.10	0.2
Bifenthrin	< LOQ	0.10	0.2
Boscalid	< LOQ	0.20	0.4
Carbaryl	< LOQ	0.10	0.2
Carbofuran	< LOQ	0.10	0.2
Chloranthraniliprole	< LOQ	0.10	0.2
Chlorfenapyr	< LOQ	1.00	1.0
Chlorpyrifos	< LOQ	0.10	0.2
Clofentezine	< LOQ	0.10	0.2
Cyfluthrin	< LOQ	0.50	1.0
Cypermethrin	< LOQ	0.50	1.0
Daminozide	< LOQ	0.50	1.0
DDVP (Dichlorvos)	< LOQ	0.50	1.0
Diazinon	< LOQ	0.10	0.2
Dimethoate	< LOQ	0.10	0.2
Ethoprophos	< LOQ	0.10	0.2
Etofenprox	< LOQ	0.20	0.4
Etoxazole	< LOQ	0.10	0.2
Fenoxycarb	< LOQ	0.10	0.2
Fenpyroximate	< LOQ	0.20	0.4
Fipronil	< LOQ	0.20	0.4
Flonicamid	< LOQ	0.50	1.0
Fludioxonil	< LOQ	0.20	0.4
Hexythiazox	< LOQ	0.50	1.0

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Source RFID: 1A401030000F105000003101

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Imazalil	< LOQ	0.10	0.2
Imidacloprid	< LOQ	0.20	0.4
Kresoxim-Methyl	< LOQ	0.20	0.4
Malathion	< LOQ	0.10	0.2
Metalaxyl	< LOQ	0.10	0.2
Methiocarb	< LOQ	0.10	0.2
Methomyl	< LOQ	0.20	0.4
Methyl_Parathion	< LOQ	0.20	0.2
MGK-264	< LOQ	0.10	0.2
Myclobutanil	< LOQ	0.10	0.2
NALED (Dibrom)	< LOQ	0.25	0.5
Oxamyl	< LOQ	0.50	1.0
Paclobutrazol	< LOQ	0.20	0.4
Permethrins	< LOQ	0.10	0.2
Phosmet	< LOQ	0.10	0.2
Piperonyl_Butoxide	< LOQ	1.00	2.0
Prallethrin	< LOQ	0.10	0.2
Propiconazole	< LOQ	0.20	0.4
Propoxur	< LOQ	0.10	0.2
Pyrethrin	< LOQ	0.50	1.0
Pyridaben	< LOQ	0.10	0.2
Spinosad	< LOQ	0.10	0.2
Spiromesifen	< LOQ	0.10	0.2
Spirotetramat	< LOQ	0.10	0.2
Spiroxamine	< LOQ	0.20	0.4
Tebuconazole	< LOQ	0.20	0.4
Thiacloprid	< LOQ	0.10	0.2
Thiamethoxam	< LOQ	0.10	0.2
Trifloxystrobin	< LOQ	0.10	0.2

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**Terpene Analysis**

Testing method: SOP-011

Analyzed by: Yujing Wen

Analyzed date: 10/18/2019

Batch ID: TP101819

Analyte	Result, %	LOQ, %
<b>Monoterpenes</b>		
Alpha-Pinene	0.03	0.01
Camphene	< LOQ	0.01
Beta-Myrcene	0.21	0.01
Beta-Pinene	0.04	0.01
3-Carene	< LOQ	0.01
alpha-Terpinene	< LOQ	0.01
D-Limonene	0.49	0.01
P-Cymene	< LOQ	0.01
Ocimene	0.42	0.01
gamma-Terpinene	< LOQ	0.01
Terpinolene	0.01	0.01
Linalool	0.30	0.01
Isopulegol	< LOQ	0.01
Geraniol	< LOQ	0.01
<b>Sesquiterpenes</b>		
Beta-Caryophyllene	0.35	0.01
alpha-Humulene	0.17	0.01
Nerolidol	0.06	0.01
Guaiol	0.03	0.01
alpha-Bisabolol	0.05	0.01
<b>Total Terpenes</b>	2.15	N/A

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**Quality Control Results**

**Potency Analysis**

Test Method: SOP-002 by LC/MS/MS

Blank: MBLK-PO101819		Date analyzed: 10/18/2019
Analyte	Result, %	LOQ, %
THCV	< LOQ	0.1
CBD	< LOQ	0.1
CBG	< LOQ	0.1
CBDA	< LOQ	0.1
CBN	< LOQ	0.1
Delta-9 THC	< LOQ	0.1
Delta-8 THC	< LOQ	0.1
CBC	< LOQ	0.1
THCA	< LOQ	0.1

LCS: LCS- PO101819		Date analyzed: 10/18/2019
Analyte	% Recovery	% Recovery Criteria
THCV	98	70-130
THCA	96	70-130
DEALTA9-THC	102	70-130
DEALTA8-THC	109	70-130
CBN	97	70-130
CBG	101	70-130
CBDA	73	70-130
CBD	103	70-130
CBC	112	70-130

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**Quality Control Results**

**Pesticide Analysis (Unit: ppm)**

Testing method: SOP-010 by LC/MS/MS

Blank: MBLK-PE101919		Date analyzed: 10/19/2019	
Analyte	Result	LOQ	State Action Level
Abamectin	< LOQ	0.25	0.5
Acephate	< LOQ	0.20	0.4
Acequinocyl	< LOQ	1.00	2.0
Acetamiprid	< LOQ	0.10	0.2
Aldicarb	< LOQ	0.20	0.4
Azoxystrobin	< LOQ	0.10	0.2
Bifenazate	< LOQ	0.10	0.2
Bifenthrin	< LOQ	0.10	0.2
Boscalid	< LOQ	0.20	0.4
Carbaryl	< LOQ	0.10	0.2
Carbofuran	< LOQ	0.10	0.2
Chloranthraniliprole	< LOQ	0.10	0.2
Chlorfenapyr	< LOQ	1.00	1.0
Chlorpyrifos	< LOQ	0.10	0.2
Clofentezine	< LOQ	0.10	0.2
Cyfluthrin	< LOQ	0.50	1.0
Cypermethrin	< LOQ	0.50	1.0
Daminozide	< LOQ	0.50	1.0
DDVP (Dichlorvos)	< LOQ	0.50	1.0
Diazinon	< LOQ	0.10	0.2
Dimethoate	< LOQ	0.10	0.2
Ethoprophos	< LOQ	0.10	0.2
Etofenprox	< LOQ	0.20	0.4
Etoxazole	< LOQ	0.10	0.2
Fenoxycarb	< LOQ	0.10	0.2
Fenpyroximate	< LOQ	0.20	0.4

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Fipronil	< LOQ	0.20	0.4
Flonicamid	< LOQ	0.50	1.0
Fludioxonil	< LOQ	0.20	0.4
Hexythiazox	< LOQ	0.50	1.0
Imazalil	< LOQ	0.10	0.2
Imidacloprid	< LOQ	0.20	0.4
Kresoxim-Methyl	< LOQ	0.20	0.4
Malathion	< LOQ	0.10	0.2
Metalaxyl	< LOQ	0.10	0.2
Methiocarb	< LOQ	0.10	0.2
Methomyl	< LOQ	0.20	0.4
Methyl_Parathion	< LOQ	0.20	0.2
MGK-264	< LOQ	0.10	0.2
Myclobutanil	< LOQ	0.10	0.2
NALED (Dibrom)	< LOQ	0.25	0.5
Oxamyl	< LOQ	0.50	1.0
Paclobutrazol	< LOQ	0.20	0.4
Permethrins	< LOQ	0.10	0.2
Phosmet	< LOQ	0.10	0.2
Piperonyl_Butoxide	< LOQ	1.00	2.0
Prallethrin	< LOQ	0.10	0.2
Propiconazole	< LOQ	0.20	0.4
Propoxur	< LOQ	0.10	0.2
Pyrethrin	< LOQ	0.50	1.0
Pyridaben	< LOQ	0.10	0.2
Spinosad	< LOQ	0.10	0.2
Spiromesifen	< LOQ	0.10	0.2
Spirotetramat	< LOQ	0.10	0.2
Spiroxamine	< LOQ	0.20	0.4
Tebuconazole	< LOQ	0.20	0.4
Thiacloprid	< LOQ	0.10	0.2
Thiamethoxam	< LOQ	0.10	0.2
Trifloxystrobin	< LOQ	0.10	0.2

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LCS: LCS-PE101919		Date analyzed: 10/19/2019		
Analyte	% Recovery	% Recovery Criteria	LOQ	State Action Level
Abamectin	103	10-190	0.25	0.5
Acephate	89	30-170	0.20	0.4
Acequinocyl	91	10-190	1.00	2.0
Acetamiprid	82	30-170	0.10	0.2
Aldicarb	115	30-170	0.20	0.4
Azoxystrobin	108	30-170	0.10	0.2
Bifenazate	111	10-190	0.10	0.2
Bifenthrin	58	30-170	0.10	0.2
Boscalid	106	30-170	0.20	0.4
Carbaryl	99	30-170	0.10	0.2
Carbofuran	116	30-170	0.10	0.2
Chloranthraniliprole	139	30-170	0.10	0.2
Chlorfenapyr	140	10-190	1.00	1.0
Chlorpyrifos	81	30-170	0.10	0.2
Clofentezine	106	30-170	0.10	0.2
Cyfluthrin	92	30-170	0.50	1.0
Cypermethrin	98	30-170	0.50	1.0
Daminozide	122	30-170	0.50	1.0
DDVP (Dichlorvos)	126	30-170	0.50	1.0
Diazinon	139	30-170	0.10	0.2
Dimethoate	100	30-170	0.10	0.2
Ethoprophos	129	30-170	0.10	0.2
Etofenprox	106	30-170	0.20	0.4
Etoxazole	143	30-170	0.10	0.2
Fenoxycarb	120	30-170	0.10	0.2
Fenpyroximate	152	30-170	0.20	0.4
Fipronil	139	10-190	0.20	0.4
Flonicamid	107	10-190	0.50	1.0
Fludioxonil	108	10-190	0.20	0.4
Hexythiazox	87	30-170	0.50	1.0
Imazalil	131	30-170	0.10	0.2

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Imidacloprid	86	30-170	0.20	0.4
Kresoxim-Methyl	141	30-170	0.20	0.4
Malathion	130	30-170	0.10	0.2
Metalaxyl	141	30-170	0.10	0.2
Methiocarb	109	30-170	0.10	0.2
Methomyl	96	30-170	0.20	0.4
Methyl_Parathion	71	10-190	0.20	0.2
MGK-264	57	10-190	0.10	0.2
Myclobutanil	126	30-170	0.10	0.2
NALED (Dibrom)	78	30-170	0.25	0.5
Oxamyl	75	10-190	0.50	1.0
Paclobutrazol	119	30-170	0.20	0.4
Permethrins	111	30-170	0.10	0.2
Phosmet	113	30-170	0.10	0.2
Piperonyl_Butoxide	99	30-170	1.00	2.0
Prallethrin	113	30-170	0.10	0.2
Propiconazole	139	30-170	0.20	0.4
Propoxur	112	30-170	0.10	0.2
Pyrethrin	125	30-170	0.50	1.0
Pyridaben	148	30-170	0.10	0.2
Spinosad	141	10-190	0.10	0.2
Spiromesifen	136	30-170	0.10	0.2
Spirotetramat	99	30-170	0.10	0.2
Spiroxamine	134	30-170	0.20	0.4
Tebuconazole	119	30-170	0.20	0.4
Thiacloprid	74	30-170	0.10	0.2
Thiamethoxam	86	30-170	0.10	0.2
Trifloxystrobin	106	30-170	0.10	0.2

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Attachments:

Note: if answer is Yes for following items, statement is attached. Otherwise, no attachment.

Deviation occurred in test? Answer: No	Opinion and interpretation provided? Answer: No
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Comments: "N/A" if there is no comment made  
N/A

Shuguo Ma, Ph.D, Quality Manager

Signature:



Date:

21Oct2019

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