

info@lightscale.com ORELAP #4112 OLCC #010-1003340D344

317 - Cindy 99 RSO 10.4.19

Farmer's Friend Extracts 6451 NF Colwood Wy Portland, OR 97218 503-442-8653

Sample Type: Extracts Sample Date: 10/7/2019 Analysis Date: 10/8/2019 Report Date: 10/11/2019

Metrc Batch ID: 1A4010300016315000016082 Metrc Sample ID: 1A4010300016315000016261

Harvest/Process Date: 10/4/2019 Report ID:

LS-191011-11

Potency

Potency Analysis Date: 10/8/2019 Potency Batch ID: CAN_100819A Potency Method: JAOAC 2015.1

62.0%	Total THC
14.8%	Total CBD

Samples: DFJ-MRP-ZJW, THC-RTG-CMH

Analyte	Description	LOQ	RPD	Min.	Max.	Avg.
Δ9THC	Delta-9 Tetrahydrocannabinol	0.16	0.129	61.4	61.5	61.4
THCA	Tetrahydrocannabinolic acid	0.16	21.9	0.552	0.687	0.620
CBD	Cannabidiol	0.16	1.04	12.5	12.6	12.6
CBDA	Cannabidiolic acid	0.16	8.72	2.40	2.62	2.51
∆8THC	Delta-8 Tetrahydrocannabinol*	0.16	82.8	ND	0.386	0.193
THCV	Tetrahydrocannabivarin*	0.16	77.0	ND	0.361	0.180
CBG	Cannabigerol*	0.16	0.405	1.75	1.76	1.75
CBGA	Cannabigerolic acid*	0.16	5.00	0.591	0.621	0.606
CBC	Cannabichromene*	0.16	8.39	1.39	1.51	1.45
CBCA	Cannabichromenic acid*	0.16	0.00	ND	ND	ND
CBN	Cannabinol	0.16	32.7	0.472	0.656	0.564
Total THC	Δ9THC + (THCA × 0.877)		0.320	61.9	62.1	62.0
Total CBD	CBD + (CBDA × 0.877)		0.422	14.6	14.9	14.8
Total			1.61	81.0	82.7	81.8

Compliance

Pesticides	Within limits	Analysis Date: 10/8/2019	Pass ⊘
Solvents	Within limits	Analysis Date: 10/8/2019	Pass ⊘
Potency	Within limits	Analysis Date: 10/8/2019	Pass ⊘

n det Bryce Kidd, Ph.D. Lab Director

Aaron Troyer

Chief Science Officer



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Terpenes* Sample Data

Sample Type: Extracts Sample Date: 10/7/2019 Analysis Date: 10/8/2019 Report Date: 10/11/2019 Metrc Batch ID: 1A4010300016315000016082

Metrc Sample ID:

1A4010300016315000016261

Terpene Analysis Date: 10/8/2019 Terpene Batch ID: TRP_100819A Harvest/Process Date: 10/4/2019 Report ID:

LS-191011-11

Method: JAOAC 2015.1 Unit: %

Analyte	Avg.	Notes
α-Bisabolol	0.388%	
Azulene	ND	
Borneol	ND	
Camphene	ND	
Camphore	ND	
Caryophyllene Oxide	ND	
Cedrol	ND	
Cymene	ND	
Eucalyptol	ND	
Fenchol	ND	
Fenchone	ND	
Geraniol	ND	
Geranyl Acetate	ND	
Guaiol	ND	
Humulene	ND	
Isoborneol	ND	
Isopulegol	ND	
Limonene	ND	
Linalool	ND	
Nerol	ND	
Pulegone	ND	
Sabinene	ND	
Sabinene Hydrate	ND	
Selinadiene	ND	
Terpinolene	ND	
Valencene	ND	
cis-Nerolidol	ND	
trans-Nerolidol	ND	
∆3-Carene	ND	

Analyte	Avg.	Notes
a-Cedrene	ND	
a-Ocimene	ND	
α-Phellandrene	ND	
a-Pinene	ND	
a-Terpinene	ND	
a-Terpineol	ND	
β-Caryophyllene	ND	
β-Farnesene 1	ND	
β-Farnesene 2	ND	
β-Myrcene	ND	
β-Ocimene	ND	
β-Pinene	ND	
γ-Terpinene	ND	
γ-Terpineol	ND	
Total	0.388%	



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Farmer's Friend Extracts 6451 NF Colwood Wy Portland, OR 97218 503-442-8653

Sample Type: Extracts Sample Date: 10/7/2019 Analysis Date: 10/8/2019 Report Date: 10/11/2019

Metrc Batch ID: 1A4010300016315000016082 Metrc Sample ID: 1A4010300016315000016261

Harvest/Process Date: 10/4/2019 Report ID:

LS-191011-11

Pesticides Analysis Date: 10/8/2019 Pesticides Batch ID: PST 100819A

Method: EN 15662 Unit: µg/g (ppm)

Pass 🥪



Pesticides Sample Data

Analyte	DFJ-MRP-ZJW	THC-RTG-CMH	Limits	LOQ	Notes	Status
Abamectin	ND	ND	0.5	0.1		Pass
Acephate	ND	ND	0.4	0.1		Pass
Acequinocyl	ND	ND	2.0	1.5		Pass
Acetamiprid	ND	ND	0.2	0.1		Pass
Aldicarb	ND	ND	0.4	0.1		Pass
Azoxystrobin	ND	ND	0.2	0.1		Pass
Bifenazate	ND	ND	0.2	0.1		Pass
Bifenthrin	ND	ND	0.2	0.1		Pass
Boscalid	ND	ND	0.4	0.1		Pass
Carbaryl	ND	ND	0.2	0.1		Pass
Carbofuran	ND	ND	0.2	0.1		Pass
Chlorantraniliprole	ND	ND	0.2	0.1		Pass
Chlorfenapyr	ND	ND	1.0	0.1		Pass
Chlorpyrifos	ND	ND	0.2	0.1		Pass
Clofentezine	ND	ND	0.2	0.1		Pass
Cyfluthrin	ND	ND	1.0	0.5		Pass
Cypermethrin	ND	ND	1.0	0.1		Pass
Daminozide	ND	ND	1.0	0.5		Pass
Diazinon	ND	ND	0.2	0.1		Pass
Dichlorvos (DDVP)	ND	ND	1.0	0.5		Pass
Dimethoate	ND	ND	0.2	0.1		Pass
Ethoprophos	ND	ND	0.2	0.1		Pass
Etofenprox	ND	ND	0.4	0.1		Pass
Etoxazole	ND	ND	0.2	0.1		Pass
Fenoxycarb	ND	ND	0.2	0.1		Pass
Fenpyroximate	ND	ND	0.4	0.1		Pass
Fipronil	ND	ND	0.4	0.1		Pass
Flonicamid	ND	ND	1.0	0.1		Pass
Fludioxonil	ND	ND	0.4	0.1		Pass
Hexythiazox	ND	ND	1.0	0.1		Pass
Imazalil	ND	ND	0.2	0.1		Pass
Imidacloprid	ND	ND	0.4	0.1		Pass
Kresoxim-methyl	ND	ND	0.4	0.1		Pass
Malathion	ND	ND	0.2	0.1		Pass

Analyte	DFJ-MRP-ZJW	THC-RTG-CMH	Limits	LOQ	Notes	Status
Metalaxyl	ND	ND	0.2	0.1		Pass
Methiocarb	ND	ND	0.2	0.1		Pass
Methomyl	ND	ND	0.4	0.1		Pass
Methyl Parathion	ND	ND	0.2	0.2		Pass
MGK-264	ND	ND	0.2	0.2		Pass
Myclobutanil	ND	ND	0.2	0.1		Pass
Naled	ND	ND	0.5	0.2		Pass
Oxamyl	ND	ND	1.0	0.1		Pass
Paclobutrazol	ND	ND	0.4	0.1		Pass
Permethrins	ND	ND	0.2	0.1		Pass
Phosmet	ND	ND	0.2	0.1		Pass
Piperonyl Butoxide	ND	ND	2.0	0.1		Pass
Prallethrin	ND	ND	0.2	0.1		Pass
Propiconazole	ND	ND	0.4	0.1		Pass
Propoxur	ND	ND	0.2	0.1		Pass
Pyrethrins	ND	ND	1.0	0.5		Pass
Pyridaben	ND	ND	0.2	0.1		Pass
Spinosad	ND	ND	0.2	0.1		Pass
Spiromesifen	ND	ND	0.2	0.1		Pass
Spirotetramat	ND	ND	0.2	0.1		Pass
Spiroxamine	ND	ND	0.4	0.1		Pass
Tebuconazole	ND	ND	0.4	0.1		Pass
Thiacloprid	ND	ND	0.2	0.1		Pass
Thiamethoxam	ND	ND	0.2	0.1		Pass
Trifloxystrobin	ND	ND	0.2	0.1		Pass



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IJ

Sample Type: Extracts Sample Date: 10/7/2019 Analysis Date: 10/8/2019 Report Date: 10/11/2019 Metrc Batch ID: 1A4010300016315000016082 Metrc Sample ID: 1A4010300016315000016261

Pesticides QC Analysis Date: 10/8/2019 Pesticides QC Batch ID: PST_100819A Harvest/Process Date: 10/4/2019 Report ID:

LS-191011-11

Method: EN 15662 Unit: μg/g (ppm)

Pesticides Quality Control Data

Analyte	Blank	LOQ	LCS	LCS Spike	LCS Rec (%)	Limits (%)	Notes
Abamectin	ND	0.1	0.899	1.00	89.9	50 - 150	
Acephate	ND	0.1	0.732	1.00	73.2	50 - 150	
Acequinocyl	ND	1.5	0.669	1.00	66.9	50 - 150	
Acetamiprid	ND	0.1	0.913	1.00	91.3	50 - 150	
Aldicarb	ND	0.1	0.997	1.00	99.7	50 - 150	
Azoxystrobin	ND	0.1	0.969	1.00	96.9	50 - 150	
Bifenazate	ND	0.1	1.09	1.00	109	50 - 150	
Bifenthrin	ND	0.1	1.48	1.00	148	50 - 150	
Boscalid	ND	0.1	1.13	1.00	113	50 - 150	
Carbaryl	ND	0.1	1.10	1.00	110	50 - 150	
Carbofuran	ND	0.1	1.05	1.00	105	50 - 150	
Chlorantraniliprole	ND	0.1	0.982	1.00	98.2	50 - 150	
Chlorfenapyr	ND	0.1	1.06	1.00	106	50 - 150	
Chlorpyrifos	ND	0.1	0.984	1.00	98.4	50 - 150	
Clofentezine	ND	0.1	0.937	1.00	93.7	50 - 150	
Cyfluthrin	ND	0.5	1.46	1.00	146	50 - 150	
Cypermethrin	ND	0.1	0.982	1.00	98.2	50 - 150	
Daminozide	ND	0.5	ND	1.00	1.64	10 - 150	LR
Diazinon	ND	0.1	0.953	1.00	95.3	50 - 150	
Dichlorvos (DDVP)	ND	0.5	1.45	1.00	145	50 - 150	
Dimethoate	ND	0.1	0.948	1.00	94.8	50 - 150	
Ethoprophos	ND	0.1	1.07	1.00	107	50 - 150	
Etofenprox	ND	0.1	0.950	1.00	95.0	50 - 150	
Etoxazole	ND	0.1	0.978	1.00	97.8	50 - 150	
Fenoxycarb	ND	0.1	1.00	1.00	100	50 - 150	
Fenpyroximate	ND	0.1	1.21	1.00	121	50 - 150	
Fipronil	ND	0.1	1.03	1.00	103	50 - 150	
Flonicamid	ND	0.1	1.04	1.00	104	50 - 150	
Fludioxonil	ND	0.1	1.17	1.00	117	50 - 150	
Hexythiazox	ND	0.1	1.01	1.00	101	50 - 150	
Imazalil	ND	0.1	0.878	1.00	87.8	50 - 150	
Imidacloprid	ND	0.1	0.943	1.00	94.3	50 - 150	
Kresoxim-methyl	ND	0.1	0.976	1.00	97.6	50 - 150	
Malathion	ND	0.1	1.04	1.00	104	50 - 150	

Analyte	Blank	LOQ	LCS	LCS Spike	LCS Rec (%)	Limits (%)	Notes
Metalaxyl	ND	0.1	0.989	1.00	98.9	50 - 150	
Methiocarb	ND	0.1	1.15	1.00	115	50 - 150	
Methomyl	ND	0.1	1.03	1.00	103	50 - 150	
Methyl Parathion	ND	0.2	0.371	1.00	37.1	30 - 150	
MGK-264	ND	0.2	0.776	0.600	129	50 - 150	
Myclobutanil	ND	0.1	1.23	1.00	123	50 - 150	
Naled	ND	0.2	1.04	1.00	104	50 - 150	
Oxamyl	ND	0.1	0.920	1.00	92.0	50 - 150	
Paclobutrazol	ND	0.1	0.799	1.00	79.9	50 - 150	
Permethrins	ND	0.1	1.09	1.00	109	50 - 150	
Phosmet	ND	0.1	1.02	1.00	102	50 - 150	
Piperonyl Butoxide	ND	0.1	1.05	1.00	105	50 - 150	
Prallethrin	ND	0.1	0.995	1.00	99.5	50 - 150	
Propiconazole	ND	0.1	0.996	1.00	99.6	50 - 150	
Propoxur	ND	0.1	1.09	1.00	109	50 - 150	
Pyrethrins	ND	0.5	1.06	1.00	106	50 - 150	
Pyridaben	ND	0.1	0.944	1.00	94.4	50 - 150	
Spinosad	ND	0.1	0.729	1.00	72.9	50 - 150	
Spiromesifen	ND	0.1	1.07	1.00	107	50 - 150	
Spirotetramat	ND	0.1	1.03	1.00	103	50 - 150	
Spiroxamine	ND	0.1	0.748	1.00	74.8	50 - 150	
Tebuconazole	ND	0.1	1.01	1.00	101	50 - 150	
Thiacloprid	ND	0.1	1.00	1.00	100	50 - 150	
Thiamethoxam	ND	0.1	0.944	1.00	94.4	50 - 150	
Trifloxystrobin	ND	0.1	0.928	1.00	92.8	50 - 150	

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Farmer's Friend Extracts 6451 NE Colwood Wy Portland, OR 97218 503-442-8653

Xylenes

Sample Type: Extracts Sample Date: 10/7/2019 Analysis Date: 10/8/2019 Report Date: 10/11/2019

ND



Metrc Batch ID: 1A4010300016315000016082 Metrc Sample ID: 1A4010300016315000016261

ents Analysis Date: 10/8/2019

LS-191011-11

Report ID:

Harvest/Process Date: 10/4/2019

Solvents Analysis Date: 10/8/2019 Method: EPA 5021A Pass ⊘ **Residual Solvents** Solvents Batch ID: RES 100819A Unit: µg/g (ppm) Sample Data Analyte DFJ-MRP-ZJW THC-RTG-CMH RPD (%) Limits LOQ Notes Status 1,4-Dioxane 0.00 380.0 50.0 ND ND Pass 2-Butanol ND ND 0.00 5000.0 250.0 Pass 50.0 2-Ethoxvethanol ND 0.00 160.0 ND Pass Acetone <L0Q <L0Q 0.00 5000.0 250.0 Pass Acetonitrile ND ND 0.00 410.0 50.0 Pass 0.00 2.0 Benzene ND ND 2.0 Pass Butanes ND ND 0.00 5000.0 250.0 Pass Cumene ND ND 0.00 70.0 50.0 Pass Cyclohexane ND ND 0.00 3880.0 50.0 Pass Ethyl Acetate 5000 0 250.0 Pass ND 0.00 ND Ethyl Ether ND ND 0.00 5000.0 250.0 Pass Ethylene Glycol ND ND 0.00 620.0 250.0 Pass Ethylene Oxide ND 0.00 50.0 50.0 Pass ND 5000 0 250.0 Heptane ND 0.00 ND Pass Hexanes ND ND 0.00 290.0 50.0 Pass Isopropanol (2-Propanol) ND ND 0.00 5000.0 50.0 Pass Isopropyl Acetate 5000.0 250.0 ND 0.00 Pass ND Methanol ND ND 0.00 3000.0 250.0 Pass Dichloromethane ND ND 0.00 600.0 50.0 Pass Pentanes ND 0.00 5000.0 250.0 Pass ND 5000.0 Propage ND ND 0.00 250.0 Pass Tetrahydrofuran ND ND 0.00 720.0 50.0 Pass Toluene ND ND 0.00 890.0 50.0 Pass

0.00

2170.0

50.0

ND

Pass



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Farmer's Friend Extracts 6451 NF Colwood Wy Portland, OR 97218 503-442-8653

Toluene

Xylenes

Sample Type: Extracts Sample Date: 10/7/2019 Analysis Date: 10/8/2019 Report Date: 10/11/2019

ND

ND

50.0

50.0

Metrc Batch ID: 1A4010300016315000016082 Metrc Sample ID: 1A4010300016315000016261

Harvest/Process Date: 10/4/2019 Report ID:

LS-191011-11

Residual Solvents Quality Control Data	Solvents QC Analysis D Solvents QC Batch ID: F		Method : EPA 5021A Unit: μg/g (ppm)				
Analyte	Blank	LOQ	LCS	LCS Spike	LCS Rec (%)	Limits (%)	Notes
1,4-Dioxane	ND	50.0	929	1000	92.9	70 - 130	
2-Butanol	ND	250.0	992	1000	99.2	70 - 130	
2-Ethoxyethanol	ND	50.0	997	1000	99.7	70 - 130	
Acetone	ND	250.0	915	1000	91.5	70 - 130	
Acetonitrile	<l0q< td=""><td>50.0</td><td>1010</td><td>1000</td><td>101</td><td>70 - 130</td><td></td></l0q<>	50.0	1010	1000	101	70 - 130	
Benzene	ND	2.0	16.6	20.0	83.1	70 - 130	
Butanes	ND	250.0	2000	2000	100	70 - 130	
Cumene	ND	50.0	942	1000	94.2	70 - 130	
Cyclohexane	ND	50.0	902	1000	90.2	70 - 130	
Ethyl Acetate	ND	250.0	989	1000	98.9	70 - 130	
Ethyl Ether	ND	250.0	941	1000	94.1	70 - 130	
Ethylene Glycol	ND	250.0	939	1000	93.9	70 - 130	
Ethylene Oxide	ND	50.0	929	1000	92.9	70 - 130	
Heptane	ND	250.0	983	1000	98.3	70 - 130	
Hexanes	ND	50.0	4730	5000	94.7	70 - 130	
Isopropanol (2-Propanol)	<l0q< td=""><td>50.0</td><td>982</td><td>1000</td><td>98.2</td><td>70 - 130</td><td></td></l0q<>	50.0	982	1000	98.2	70 - 130	
Isopropyl Acetate	ND	250.0	1020	1000	102	70 - 130	
Methanol	ND	250.0	936	1000	93.6	70 - 130	
Dichloromethane	ND	50.0	951	1000	95.1	70 - 130	
Pentanes	ND	250.0	2890	3000	96.3	70 - 130	
Propane	ND	250.0	971	1000	97.1	70 - 130	
Tetrahydrofuran	ND	50.0	1000	1000	100	70 - 130	

928

3820

1000

4000

92.8

95.5

70 - 130

70 - 130



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LS-191011-11

Qualifier Flag Descriptions

- J Reported result is an estimate the value is less than the minimum calibration level but greater than the estimated detection limit (EDL)
- U The analyte was not detected in the sample at the estimated detection limit (EDL)
- E Exceeds calibration range
- D Dilution data result was obtained from the analysis of a dilution
- B Analyte found in sample and associated blank
- C Co-eluting compound
- R Relative Percent Difference (RPD) outside control limits
- NR Analyte not reported because of problems in sample preparation or analysis
- ND Non-Detect
- X Results from reinjection/repeat/re-column data
- EMC Estimated maximum possible concentration indicates that a peak is detected but did not meet the method required criteria
- M Manual integration
- PS Peaks split
- HB Control acceptance criteria are exceeded high and the associated sample is below the detection limit
- LB Control acceptance criteria are exceeded low and the associated sample exceeds the regulatory limit
- ME Marginal Exceedance
- LR Low Recovery Analyte
- LOQ Limit of Quantitation