

Farmer's Friend Extracts 6451 NE Colwood Wy Portland, OR 97218 503-442-8653 Sample Type: Extracts
Sample Date: 1/8/2020
Analysis Date: 1/9/2020
Report Date: 1/15/2020

Metrc Batch ID: 1A4010300016315000020895 Metrc Sample ID: 1A4010300016315000020980 Harvest/Process Date: 1/7/2020 Report ID:

LS-200115-4

#### **Potency**

Potency Analysis Date: 1/10/2020 Potency Batch ID: CAN\_011020E Potency Method: JAOAC 2015.1

65.4%

Total THC

0.0888%

Total CBD

Samples: ZGC-CRT-XWD, JHH-WRR-CMS



Analyte	Description	LOQ	RPD	Min.	Max.	Avg.	Un
<b>Д9ТНС</b>	Delta-9 Tetrahydrocannabinol	0.16	1.70	64.9	66.0	65.4	
THCA	Tetrahydrocannabinolic acid	0.16	0.00	ND	ND	ND	
CBD	Cannabidiol	0.16	10.4	ND	0.178	0.0888	•
CBDA	Cannabidiolic acid	0.16	0.00	ND	<l0q< td=""><td><l0q< td=""><td></td></l0q<></td></l0q<>	<l0q< td=""><td></td></l0q<>	
Δ8ΤΗC	Delta-8 Tetrahydrocannabinol*	0.16	0.00	ND	ND	ND	
THCV	Tetrahydrocannabivarin*	0.16	34.9	ND	0.228	0.114	•
CBG	Cannabigerol*	0.16	6.84	1.52	1.63	1.58	•
CBGA	Cannabigerolic acid*	0.16	0.00	ND	<l0q< td=""><td><l0q< td=""><td></td></l0q<></td></l0q<>	<l0q< td=""><td></td></l0q<>	
CBC	Cannabichromene*	0.16	23.0	7.28	9.17	8.23	
CBCA	Cannabichromenic acid*	0.16	0.00	ND	ND	ND	
CBN	Cannabinol	0.16	4.47	1.10	1.15	1.12	•
Total THC	Δ9THC + (THCA × 0.877)		1.70	64.9	66.0	65.4	
Total CBD	CBD + (CBDA × 0.877)		10.4	ND	0.178	0.0888	•
Total			4.38	74.8	78.3	76.6	

### **Compliance**

Pesticides	Within limits	Analysis Date: 1/9/2020	Pass 🕢
Solvents	Within limits	Analysis Date: 1/14/2020	Pass 🕢
Potency	Within limits	Analysis Date: 1/10/2020	Pass 🕢

Bryce Kidd, Ph.D.
Lab Director

Aaron Troyer
Chief Science Officer



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

Sample Type: Extracts Sample Date: 1/8/2020 Analysis Date: 1/9/2020 Report Date: 1/15/2020

1A4010300016315000020895 Metrc Sample ID: 1A4010300016315000020980 Harvest/Process Date: 1/7/2020 Report ID:

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Method: JAOAC 2015.1

Unit: %

**Terpenes\*** Sample Data

Analyte	Avg.	Notes
β-Farnesene 2	4.05%	
β-Caryophyllene	1.74%	
Selinadiene	0.387%	
Fenchol	0.239%	
Linalool	0.219%	
α-Terpineol	0.210%	
β-Myrcene	0.173%	
Limonene	0.172%	
α-Bisabolol	0.132%	
β-Ocimene	0.0518%	
Terpinolene	0.0502%	
β-Pinene	0.0480%	
α-Pinene	0.0302%	
Caryophyllene Oxide	0.0218%	
Borneol	0.0208%	
Geraniol	0.0198%	
α-Ocimene	0.0136%	
Humulene	0.00989%	
Eucalyptol	0.00957%	
Fenchone	0.00881%	
α-Terpinene	0.00842%	
γ-Terpinene	0.00555%	
Δ3-Carene	0.00543%	
Camphene	0.00535%	
Nerol	0.00130%	
Azulene	ND	
Camphore	ND	
Cedrol	ND	
Cymene	ND	
-,		

Terpene Analysis Date: 1/9/2020 Terpene Batch ID: TRP 010920A

Total

Analyte	Avg.	Notes
Geranyl Acetate	ND	
Guaiol	ND	
Isoborneol	ND	
Isopulegol	ND	
Pulegone	ND	
Sabinene	ND	
Sabinene Hydrate	ND	
Valencene	ND	
cis-Nerolidol	ND	
trans-Nerolidol	ND	
α-Cedrene	ND	
α-Phellandrene	ND	
β-Farnesene 1	ND	
γ-Terpineol	ND	

7.63%



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Pesticides Analysis Date: 1/9/2020 Pesticides Batch ID: PST 010920A Method: EN 15662 Unit: μg/g (ppm) Pass 🕢

Analyte	ZGC-CRT-XWD	JHH-WRR-CMS	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	0.133	0.138	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	ZGC-CRT-XWD	JHH-WRR-CMS	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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Fludioxonil

Hexythiazox

Imidacloprid

Kresoxim-methyl

Imazalil

Malathion

ND

ND

ND

ND

ND

ND

0.1 1.02

0.1 0.939

0.1 1.03

0.1 1.14

0.1 1.10

0.921

1.00

1.00

1.00

1.00

1.00

1.00

102

92.1

110

93.9

103

114

50 - 150

50 - 150

50 - 150

50 - 150

50 - 150

50 - 150

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Blank LOQ LCS LCS Spike LCS Rec (%) Limits (%) Analyte Abamectin 0.1 0.915 1.00 91.5 50 - 150 Acenhate ND 0.1 0.732 1 99 73.2 50 - 150 Acequinocyl ND 1.5 0.584 1.00 58.4 50 - 150 Acetamiprid ND 0.1 1.14 1 99 114 50 - 150 Aldicarb 0.953 95.3 50 - 150 1.00 Azoxystrobin ND 0.1 1.13 1.00 113 50 - 150 50 - 150 Bifenazate ND Bifenthrin 0.1 0.803 80 3 ND 1.00 50 - 150 Boscalid 0.1 0.844 84.4 50 - 150 1.00 Carbarvl ND 0.1 0.947 1 99 94.7 50 - 150 1.00 50 - 150 Chlorantraniliprole ND 0.1 1.10 1.00 110 50 - 150 Chlorfenapyr 1.16 1.00 50 - 150 Chlorpyrifos 92.3 50 - 150 ND 0.1 0.923 1.00 Clofentezine ND 0.855 1.00 50 - 150 Cyfluthrin ND 9.5 1.92 1 99 192 50 - 150 Cypermethrin 1.00 50 - 150 Daminozide 4.29 10 - 150 ND 0.5 ND 1 99 ND 0.1 1.09 1.00 109 50 - 150 Dichlorvos (DDVP) ND 0.5 0.973 1.00 97.3 50 - 150 Dimethoate ND 0.1 0.950 1.00 95.0 50 - 150 Ethoprophos ND 0.1 1.12 1.00 112 50 - 150 Etofenprox ND 0.771 1.00 77.1 50 - 150 0.1 0.972 97.2 Etoxazole ND 1 99 50 - 150 Fenoxycarb ND 1.12 1.00 50 - 150 Fenpyroximate ND 0.1 0.895 1 99 89.5 50 - 150 Fipronil ND 0.1 1.16 1.00 116 50 - 150 Flonicamid ND 0.1 0.966 1.00 96.6 50 - 150

Pesticides QC Analysis Date: 1/9/2020 Pesticides QC Batch ID: PST 010920A Method: EN 15662 Unit: µg/g (ppm)

Analyte	Blank	LOQ	LCS	LCS Spike	LCS Rec (%)	Limits (%)	Notes
Metalaxyl	ND	0.1	1.02	1.00	102	50 - 150	
Methiocarb	ND	0.1	1.05	1.00	105	50 - 150	
Methomyl	ND	0.1	0.937	1.00	93.7	50 - 150	
Methyl Parathion	ND	0.2	0.562	1.00	56.2	30 - 150	
MGK-264	ND	0.2	0.661	0.600	110	50 - 150	
Myclobutanil	ND	0.1	1.05	1.00	105	50 - 150	
Naled	ND	0.2	0.883	1.00	88.3	50 - 150	
0xamy1	ND	0.1	0.968	1.00	96.8	50 - 150	
Paclobutrazol	ND	0.1	1.00	1.00	100	50 - 150	
Permethrins	ND	0.1	0.818	1.00	81.8	50 - 150	
Phosmet	ND	0.1	0.976	1.00	97.6	50 - 150	
Piperonyl Butoxide	ND	0.1	0.915	1.00	91.5	50 - 150	
Prallethrin	ND	0.1	0.963	1.00	96.3	50 - 150	
Propiconazole	ND	0.1	1.05	1.00	105	50 - 150	
Propoxur	ND	0.1	0.974	1.00	97.4	50 - 150	
Pyrethrins	ND	0.5	1.01	1.00	101	50 - 150	
Pyridaben	ND	0.1	0.872	1.00	87.2	50 - 150	
Spinosad	ND	0.1	0.857	1.00	85.7	50 - 150	
Spiromesifen	ND	0.1	0.937	1.00	93.7	50 - 150	
Spirotetramat	ND	0.1	1.03	1.00	103	50 - 150	
Spiroxamine	ND	0.1	0.298	1.00	29.8	50 - 150	LR
Tebuconazole	ND	0.1	1.11	1.00	111	50 - 150	
Thiacloprid	ND	0.1	0.974	1.00	97.4	50 - 150	
Thiamethoxam	ND	0.1	1.06	1.00	106	50 - 150	
Trifloxystrobin	ND	0.1	1.23	1.00	123	50 - 150	



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1A4010300016315000020895 Metrc Sample ID: 1A4010300016315000020980

Report ID:

LS-200115-4

Harvest/Process Date: 1/7/2020

**Residual Solvents** Sample Data

Solvents Analysis Date: 1/14/2020 Solvents Batch ID: RES 011420A

Method: EPA 5021A Unit: µg/g (ppm)

Pass 🕢

Analyte	ZGC-CRT-XWD	JHH-WRR-CMS	RPD (%)	Limits	LOQ	Notes	Status
1,4-Dioxane	ND	ND	0.00	380.0	50.0		Pass
2-Butanol	ND	ND	0.00	5000.0	250.0		Pass
2-Ethoxyethanol	ND	ND	0.00	160.0	50.0		Pass
Acetone	ND	ND	0.00	5000.0	250.0		Pass
Acetonitrile	ND	ND	0.00	410.0	50.0		Pass
Benzene	ND	ND	0.00	2.0	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	ND	ND	0.00	5000.0	250.0		Pass
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	ND	0.00	50.0	50.0		Pass
Heptane	ND	ND	0.00	5000.0	250.0		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	ND	ND	0.00	5000.0	250.0		Pass
Methanol	ND	ND	0.00	3000.0	250.0		Pass
Dichloromethane	ND	ND	0.00	600.0	50.0		Pass
Pentanes	ND	ND	0.00	5000.0	250.0		Pass
Propane	ND	ND	0.00	5000.0	250.0		Pass
Tetrahydrofuran	ND	ND	0.00	720.0	50.0		Pass
Toluene	ND	ND	0.00	890.0	50.0		Pass
Xylenes	ND	ND	0.00	2170.0	50.0		Pass



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LS-200115-4



Solvents QC Analysis Date: 1/14/2020 Solvents QC Batch ID: RES\_011420A Method: EPA 5021A Unit: μg/g (ppm)

Analyte	Blank	LOQ	LCS	LCS Spike	LCS Rec (%)	Limits (%)	Notes
1,4-Dioxane	ND	50.0	921	1000	92.1	70 - 130	
2-Butanol	ND	250.0	908	1000	90.8	70 - 130	
2-Ethoxyethanol	ND	50.0	867	1000	86.7	70 - 130	
Acetone	ND	250.0	898	1000	89.8	70 - 130	
Acetonitrile	ND	50.0	894	1000	89.4	70 - 130	
Benzene	ND	2.0	18.8	20.0	94.2	70 - 130	
Butanes	ND	250.0	1720	2000	86.0	70 - 130	
Cumene	ND	50.0	949	1000	94.9	70 - 130	
Cyclohexane	ND	50.0	903	1000	90.3	70 - 130	
Ethyl Acetate	ND	250.0	917	1000	91.7	70 - 130	
Ethyl Ether	ND	250.0	885	1000	88.5	70 - 130	
Ethylene Glycol	ND	250.0	849	1000	84.9	70 - 130	
Ethylene Oxide	ND	50.0	878	1000	87.8	70 - 130	
Heptane	ND	250.0	903	1000	90.3	70 - 130	
Hexanes	ND	50.0	4440	5000	88.9	70 - 130	
Isopropanol (2-Propanol)	ND	50.0	901	1000	90.1	70 - 130	
Isopropyl Acetate	ND	250.0	908	1000	90.8	70 - 130	
Methanol	ND	250.0	882	1000	88.2	70 - 130	
Dichloromethane	ND	50.0	903	1000	90.3	70 - 130	
Pentanes	ND	250.0	2620	3000	87.4	70 - 130	
Propane	ND	250.0	817	1000	81.7	70 - 130	
Tetrahydrofuran	ND	50.0	905	1000	90.5	70 - 130	
Toluene	ND	50.0	922	1000	92.2	70 - 130	
Xylenes	ND	50.0	3750	4000	93.7	70 - 130	



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### **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
В	Analyte found in sample and associated blank
С	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
М	Manual integration
PS	Peaks split
НВ	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