# **Certificate of Analysis Cover Page**

# **Twin Arbor Analytical**

3990 Ruth Way Suite D Paso Robles, CA 93446 (805) 369-2123



#### PREPARED FOR:

Hempsi 815 Grand Blvd Vancouver, WA 98661 Report Date Sample ID Sample Name 1/21/2022 Full Spectrum Sativa Gummy #010422

Results			
Analysis			
Cannabinoids CBD (mg/g To	gummy) tal THC	28.8 PASS	
Pesticides and	Mycotox Result	ns PASS	
Residual Solver		PASS	
Heavy Metals	Result	PASS	
Microbial	Result	PASS	
Water Activity	Result	PASS	

Forrest Richmond Laboratory Manager

NT = Not Tested

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#### PREPARED FOR:

Hempsi 815 Grand Blvd Vancouver, WA 98661 Report Date1/21/2022Sample IDFull Spectrum Sativa GummyCultivar Name#010422Internal Sample ID220113-049-6Lab Batch ID220114-4Date of Analysis1/17/2022

## Analysis: Cannabinoids

Instrumentation: HPLC/DAD

Intrument ID: HPLC 1

C 1 Method: TM0002 (Twin Arbor Analytical Proprietary)

	LOD / LOQ (mg/g)	mg/g	%	mg/ gummy
CBD	0.23 / 0.69	6.8	0.68	28.8
CBDA	0.14/0.41	ND	ND	ND
Total CBD *		6.8	0.68	28.8
∆9-THC	0.18/0.54	1.3	0.13	5.5
ТНСА	0.21 / 0.62	ND	ND	ND
Total THC *		1.3	0.13	5.5
CBG	0.26 / 0.78	ND	ND	ND
CBGA	0.17 / 0.5	ND	ND	ND
Total CBG *		N/A	N/A	N/A
СВС	0.13 / 0.4	< LOQ	< LOQ	< LOQ
CBDV	0.14 / 0.43	ND	ND	ND
CBN	0.13 / 0.4	ND	ND	ND
∆8-THC	0.22 / 0.65	ND	ND	ND
THCV	0.19/0.56	ND	ND	ND
Total Tested Cannabinoids		8.1	0.81	34.35

# mg/gummy 28.8 CBD ND CBDA 5.5 Δ9-THC ND THCA ND CBG ND CBGA < LOQ CBC</td> ND CBN ND Δ8-THC ND THCV

Moisture Content: NT

NOTE: This revision supercedes all previous versions Percentage added to report for compliance - 1/21/2022 - CG

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\* Totals account for decarboxilation of the acid and equal XXX + (XXXA \* 0.877) For example: Total THC =  $\Delta$ 9-THC + (THCA \* 0.877)

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#### PREPARED FOR:

Hempsi 815 Grand Blvd Vancouver, WA 98661 Report Date1/21/2022Sample IDFull Spectrum Sativa GummyBatch / LOT ##010422Internal Sample ID220113-049-6Lab Batch ID220119-3Date of Analysis1/19/2022

# Analysis: Pesticides and Mycotoxins

Instrumentation: LC-Mass Spectrometer Intrument ID: LCMS 1

LCMS 1 Method: TM0004 (Twin Arbor Analytical Proprietary)

		Results	Action Limit	
Mycotoxins	Pass / Fail	(µg/g)	(µg/g)	LOD / LOQ (µg/g)
Aflatoxin B1	Pass	ND	0.02	0.000 / 0.001
Aflatoxin B2	Pass	ND	0.02	0.001 / 0.004
Aflatoxin G1	Pass	ND	0.02	0.000 / 0.001
Aflatoxin G2	Pass	ND	0.02	0.001 / 0.004
Ochratoxin A	Pass	ND	0.02	0.004 / 0.013

Category I	Pass / Fail	Results (µg/g)	Action Limit (µg/g)	LOD / LOQ (µg/g)
Aldicarb	Pass	ND	ND	0.033 / 0.100
Carbofuran	Pass	ND	ND	0.033 / 0.100
Chlordane	Pass	ND	ND	0.100 / 0.300
Chlorfenapyr	Pass	ND	ND	0.033 / 0.100
Chlorpyrifos	Pass	ND	ND	0.033 / 0.100
Coumaphos	Pass	ND	ND	0.033 / 0.100
Daminozide	Pass	ND	ND	0.033 / 0.100
DDVP (Dichlorvos)	Pass	ND	ND	0.033 / 0.100
Dimethoate	Pass	ND	ND	0.033 / 0.100
Ethoprop(hos)	Pass	ND	ND	0.033 / 0.100
Etofenprox	Pass	ND	ND	0.033 / 0.100
Fenoxycarb	Pass	ND	ND	0.033 / 0.100
Fipronil	Pass	ND	ND	0.033 / 0.100
Imazalil	Pass	ND	ND	0.033 / 0.100
Methiocarb	Pass	ND	ND	0.033 / 0.100
Methyl parathion	Pass	ND	ND	0.033 / 0.100
Mevinphos	Pass	ND	ND	0.017 / 0.050
Paclobutrazol	Pass	ND	ND	0.033 / 0.100
Propoxur	Pass	ND	ND	0.033 / 0.100
Spiroxamine	Pass	ND	ND	0.033 / 0.100
Thiacloprid	Pass	ND	ND	0.033 / 0.100

## Continued on page 4

# Analysis: Pesticides and Mycotoxins (continued)

Instrumentation: LC-Mass Spectrometer Intrument ID: LCMS 1

Method: TM0004 (Twin Arbor Analytical Proprietary)

Category II	Pass / Fail	Results (µg/g)	Action Limit (µg/g)	LOD / LOQ (µg/g)
Abamectin	Pass	ND	0.30	0.017 / 0.050
Acephate	Pass	ND	5.00	0.017 / 0.050
Acequinocyl	Pass	ND	4.00	0.017 / 0.050
Acetamiprid	Pass	ND	5.00	0.017 / 0.050
Azoxystrobin	Pass	ND	40.00	0.017 / 0.050
Bifenazate	Pass	ND	5.00	0.017 / 0.050
Bifenthrin	Pass	ND	0.50	0.017 / 0.050
Boscalid	Pass	ND	10.00	0.017 / 0.050
Captan	Pass	ND	5.00	0.033 / 0.100
Carbaryl	Pass	ND	0.50	0.017 / 0.050
Chlorantraniliprole	Pass	ND	40.00	0.017 / 0.050
Clofentezine	Pass	ND	0.50	0.017 / 0.050
Cyfluthrin	Pass	ND	1.00	0.033 / 0.100
Cypermethrin	Pass	ND	1.00	0.017 / 0.050
Diazinon	Pass	ND	0.20	0.017 / 0.050
Dimethomorph	Pass	ND	20.00	0.017 / 0.050
Etoxazole	Pass	ND	1.50	0.017 / 0.050
Fenhexamid	Pass	ND	10.00	0.017 / 0.050
Fenpyroximate	Pass	ND	2.00	0.017 / 0.050
Flonicamid	Pass	ND	2.00	0.017 / 0.050
Fludioxonil	Pass	ND	30.00	0.017 / 0.050
Hexythiazox	Pass	ND	2.00	0.017 / 0.050
Imidacloprid	Pass	ND	3.00	0.017 / 0.050
Kresoxim-methyl	Pass	ND	1.00	0.017 / 0.050
Malathion	Pass	ND	5.00	0.017 / 0.050
Metalaxyl	Pass	ND	15.00	0.017 / 0.050
Methomyl	Pass	ND	0.10	0.017 / 0.050
Myclobutanil	Pass	ND	9.00	0.017 / 0.050
Naled	Pass	ND	0.50	0.017 / 0.050
Oxamyl	Pass	ND	0.20	0.017 / 0.050
Pentachloronitrobenzene	Pass	ND	0.20	0.017 / 0.050
Permethrin	Pass	ND	20.00	0.017 / 0.050
Phosmet	Pass	ND	0.20	0.017 / 0.050
Piperonylbutoxide	Pass	ND	8.00	0.017 / 0.050
Prallethrin	Pass	ND	0.40	0.017 / 0.050
Propiconazole	Pass	ND	20.00	0.017 / 0.050
Pyrethrins	Pass	ND	1.00	0.017 / 0.050
Pyridaben	Pass	ND	3.00	0.017 / 0.050
Spinetoram	Pass	ND	3.00	0.017 / 0.050
Spinosad	Pass	ND	3.00	0.017 / 0.050
Spiromesifen	Pass	ND	12.00	0.017 / 0.050
Spirotetramat	Pass	ND	13.00	0.017 / 0.050
Tebuconazole	Pass	ND	2.00	0.017 / 0.050
Thiamethoxam	Pass	ND	4.50	0.017 / 0.050
Trifloxystrobin	Pass	ND	30.00	0.017 / 0.050

LOD = Limit of Detection

LOQ = Limit of Quantification

ND = Not Detected

NT = Not Tested

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#### PREPARED FOR:

Hempsi 815 Grand Blvd Vancouver, WA 98661 Report Date1/21/2022Sample IDFull Spectrum Sativa GummyBatch / LOT ##010422Internal Sample ID220113-049-6Lab Batch ID220118-2Date of Analysis1/18/2022

# Analysis: Residual Solvents

Instrumentation: GC-MS

Intrument ID: GCMS1

Method: TM0006 (Twin Arbor Analytical Proprietary)

			Action Limit	
	Pass / Fail	Results (µg/g)	(µg/g)	LOQ (µg/g)
1,2-Dichloroethane	PASS	< LOQ	1.0	0.41
Benzene	PASS	< LOQ	1.0	0.42
Chloroform	PASS	< LOQ	1.0	0.41
Ethylene oxide	PASS	< LOQ	1.0	0.42
Methylene chloride	PASS	< LOQ	1.0	0.4
Trichloroethylene	PASS	< LOQ	1.0	0.43
Acetone	PASS	< LOQ	5000	59.2
Acetonitrile	PASS	< LOQ	410	60.92
Butane	PASS	< LOQ	5000	39.64
Ethanol	PASS	< LOQ	5000	59.54
Ethyl acetate	PASS	< LOQ	5000	59.96
Ethyl ether	PASS	< LOQ	5000	59.1
Heptane	PASS	< LOQ	5000	59.24
Hexane	PASS	< LOQ	290	59.28
lsopropyl alcohol	PASS	< LOQ	5000	59.3
Methanol	PASS	< LOQ	3000	59.3
Pentane	PASS	< LOQ	5000	59.56
Propane	PASS	< LOQ	5000	40
Toluene	PASS	< LOQ	890	59.3
Total xylenes				
(ortho-, meta-, para-)	PASS	< LOQ	2170	59.2

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#### PREPARED FOR:

Hempsi 815 Grand Blvd Vancouver, WA 98661 Report Date1/21/2022Sample IDFull Spectrum Sativa GummyBatch / LOT ##010422Internal Sample ID220113-049-6Lab Batch ID220121-2Date of Analysis1/21/2022

## Analysis: Heavy Metals

Instrumentation: ICP-MS

Intrument ID: ICPMS1

Method: TM0005 (Twin Arbor Analytical Proprietary)

	Pass / Fail	Results (µg/g)	Action Limit (µg/g)	LOQ (µg/g)
Arsenic	PASS	< LOQ	0.2	0.013
Cadmium	PASS	< LOQ	0.2	0.013
Lead	PASS	< LOQ	0.5	0.013
Mercury	PASS	< LOQ	0.1	0.013

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LOQ = Limit of Quantiication

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Hempsi 815 Grand Blvd Vancouver, WA 98661 Report Date1/21/2022Sample IDFull Spectrum Sativa GummyBatch / LOT ##010422Internal Sample ID220113-049-6Lab Batch ID220113-049Date of Analysis1/17/2022

# Analysis: Microbial Impurities

Instrumentation: RT-PCR

Intrument ID: qPCR2 Method: AOAC-RI 091301 (modified)

	Action Limit	Pass / Fail
STEC (Shiga-toxigenic E. coli)	ND	PASS
Salmonella sp.	ND	PASS
Pathogenic Aspergillus	ND	NT

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## PREPARED FOR:

Hempsi 815 Grand Blvd Vancouver, WA 98661 Report Date1/21/2022Sample IDFull Spectrum Sativa GummyBatch / LOT ##010422Internal Sample ID220113-049-6Lab Batch ID210121-4Date of Analysis1/21/2022

# Analysis: Water Activity

Instrumentation: Water Activity Meter

Intrument ID: WA1 Method: TM0011 (Twin Arbor Analytical Proprietary)

Action Limit	LOQ	Result	Pass / Fail
0.8500 Aw	0.0028 Aw	0.6207 Aw	PASS

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