

NC Controlled Substance License #:
NC-DHHS-1002881
DEA Controlled Substance License #:
RD0577986
ISO 17025 Certification:
PENDING
Proficiency Testing Enrolled:
Hemp PT Program U of Kentucky
Regulatory Services



Laboratory Location
6308 Angus Drive, Ste B
Raleigh NC 27617
919-673-7153 / 919-450-1870
frank@delta9analytical.com
michael@delta9analytical.com

Client Name: **Carolina Hemp Refinery**
Client Address: 800 Union Ridge Rd
Burlington, NC 27217
Grower/Processor Lic#: **NC HP908**

Sample ID: **5029**
Received Date: 03092022
Reported Date: 03172022
Test(s) Ordered: **Full Panel**

Sample Name: **CHR-THCO-Purekana-dualbar-ssdnl-001**
Sample Type: Extract
Sample Matrix: **Concentrate**
Sample Size: 24g Test Size: 8g

CANNABINOID SUMMARY

TOTAL CANNABINOIDS: 3.124%
***Δ9-THC-O-Ac: 1.972%**
TOTAL THC: 0.1080%
Δ9-THC: 0.1080%

***Total estimated Δ8-THC-O-Acetate:**
~93%

BATCH PHOTO



CANNABINOIDS (Liquid Chromatography Mass Spectrometry - LCMS)

ANALYTE	MASS (%)	MASS (mg/g)	LOQ (%)	ANALYTE	MASS (%)	MASS (mg/g)	LOQ (%)
Cannabinol (CBN)	ND	ND	0.02	Δ9-THC-O-Acetate	1.972	19.72	0.02
Δ8-THC	0.5525	5.525	0.02	Cannabicitran (CBT)	0.4914	4.914	0.02
Cannabichromene (CBC)	ND	ND	0.02	Cannabidivarin Acid (CBDVA)	NA	NA	0.02
Cannabigerol (CBG)	ND	ND	0.02	Cannabidolic Acid (CBDA)	ND	ND	0.02
Cannabidiol (CBD)	ND	ND	0.02	Δ9-THC Acid (THCA)	ND	ND	0.02
Cannabigerolic Acid (CBGA)	ND	ND	0.02	THC-varian (THCV)	ND	ND	0.02
Cannabidivarin (CBDV)	ND	ND	0.02	***Δ9-THC	0.1080	1.080	0.02
6aR,9S-Δ10-THC	NA	NA	0.02	**TOTAL CANNABINOIDS	3.124	31.24	
6aR,9R-Δ10-THC	NA	NA	0.02	*TOTAL THC	0.1080	1.080	

*Calculated as follows: Total CBD/G/V = CBD/GA/VA% (0.877) + CBD/G/V%. Total THC = THCA% (0.877) + Δ9-THC %. **Total Cannabinoids is the absolute sum of all cannabinoids detected. ND = Not Detected

RESULT CERTIFICATION

 03172022
Frank P. Mauro COO/Michael R. Horton CSO & Date



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TERPENE SUMMARY

TOTAL: 2.350%

PRIMARY AROMAS

Citrusy, Floral, Piney,
Spicy, Woody, Earthy

SUN – SUPER SOUR DIESEL

TERPENES (GC FID)

ANALYTE	MASS (%)	MASS (mg/g)	LOQ (%)	ANALYTE	MASS (%)	MASS (mg/g)	LOQ (%)
Terpinolene	1.454	14.54	0.005	α -Bisabolol	<0.005	<0.05	0.005
δ -Limonene	0.199	1.989	0.005	cis-Nerolidol 1	<0.005	<0.05	0.005
β -Caryophyllene	0.186	1.858	0.005	γ -Terpinene	<0.005	<0.05	0.005
β -Myrcene	0.145	1.452	0.005	p-Cymene	<0.005	<0.05	0.005
α -Humulene	0.106	1.0571	0.005	Eucalyptol	ND	ND	0.005
α -Ocimene 1	0.103	1.030	0.005	3-Carene	ND	ND	0.005
Linalool	0.063	0.6255	0.005	α -Terpinene	ND	ND	0.005
β -Pinene	0.043	0.4303	0.005	Camphene	ND	ND	0.005
α -Pinene	0.019	0.1870	0.005	trans-Nerolidol 2	ND	ND	0.005
Geraniol	0.015	0.1487	0.005	β -Ocimene 2	ND	ND	0.005
Caryophyllene Oxide	0.010	0.1045	0.005	Isopulegol	ND	ND	0.005
Guaiol	0.008	0.0757	0.005				

HEAVY METALS

Analyte	Mass (PPM)	LOQ (PPM)
Arsenic	<0.001	0.001
Cadmium	<0.015	0.015
Lead	<0.015	0.015
Mercury	0.010	0.001

Method: ICP-MS **ND** = Not Detected

MICROBIALS

Organism	Results (CFU)
Aspergillus fumigatus	PASS
Aspergillus terreus	PASS
Aspergillus niger	PASS
Aspergillus flavus	PASS
TOTAL Entero bacteriaceae	PASS
E. Coli	PASS

Method: DRBC agar, Total Aerobic Dip slide; Total Enterobacteriaceae & E. coli Petrifilm

MYCOTOXINS

Toxin	LOQ PPM	Units PPM
Aflatoxin B1	20	ND
Aflatoxin B2	20	ND
Aflatoxin G1	20	ND
Aflatoxin G2	20	ND
TOTAL Aflatoxins	20	ND
Ochratoxin A	20	ND

Method: LCMS **ND** = Not Detected

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Michael Horton Frank Mauro



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RESIDUAL SOLVENTS

Solvent	Result (PPM)	LOQ (PPM)	Solvent	Result (PPM)	LOQ (PPM)	Solvent	Result (PPM)	LOQ (PPM)
Acetone	ND	25	Ethanol	ND	100	2-Propanol	ND	25
Acetonitrile	ND	5	Ethyl Acetate	ND	5	Toluene	ND	1
Benzene	ND	1	(C7) <i>n</i> -Heptane	ND	5	Trichloroethene	ND	1
Chloroform	ND	1	(C6) <i>n</i> -Hexane	ND	5	<i>m</i> -Xylene	ND	5 total
Cyclohexane	ND	6	Methanol	ND	25	<i>o</i> -Xylene	ND	5 total
1,2-Dichloroethane	ND	1	Methylene Chloride	ND	1	<i>p</i> -Xylene	ND	5 total
Diethyl ether	ND	20	(C5) <i>n</i> -Pentane	ND	5			

Performed on GC FID

ND = Not Detected

PESTICIDES (62 pesticides by Liquid Chromatography Mass Spectrometry – LCMS; ND = Not Detected)

ANALYTE	LOQ (PPB)	MASS (PPB)	ANALYTE	LOQ (PPB)	MASS (PPB)	ANALYTE	LOQ (PPB)	MASS (PPB)
Abamectin	100	ND	Diazinon	100	ND	Myclobutanil	100	ND
Acephate	100	ND	Dimethoate	100	ND	Oxamyl	100	ND
Acequinocyl	100	ND	Dimethomorph	100	ND	Paclobutrazol	100	ND
Acetamiprid	100	ND	Ethoprophos	100	ND	Permethrin	100	ND
Aldicarb	100	ND	Etofenprox	100	ND	Phosmet	100	ND
Azoxystrobin	100	ND	Etoxazole	100	ND	Piperonyl Butoxide	100	ND
Bifenazate	100	ND	Fenhexamid	100	ND	Prallethrin	100	ND
Bifenthrin	100	ND	Fenoxycarb	100	ND	Propiconazole	100	ND
Boscalid	100	ND	Fenpyrozimate	100	ND	Propoxur	100	ND
Carbaryl	100	ND	Fipronil	100	ND	Pyrethrins	100	ND
Carbofuran	100	ND	Flonicamid	100	ND	Pyridaben	100	ND
Chlorantraniliprole	100	ND	Fludioxonil	100	ND	Spinetoram	100	ND
Chlordane	100	ND	Hexythiazox	100	ND	Spinosad	100	ND
Chlorfenapyr	100	ND	Imazalil	100	ND	Spinoxamine	100	ND
Chlorpyrifos	100	ND	Imidacloprid	100	ND	Spiromesifen	100	ND
Clofentezine	100	ND	Kresoxim Methyl	100	ND	Spirotetramat	100	ND
Coumaphos	100	ND	Malathion	100	ND	Tebuconazole	100	ND
Cyfluthrin	100	ND	Metaxyl	100	ND	Thiacloprid	100	ND
Cypermethrin	100	ND	Methiocarb	100	ND	Thiamethoxam	100	ND
Daminozide	100	ND	Methomyl	100	ND	Trifloxystrobin	100	ND
DDVP Dichlorvos	100	ND	Mevinphos	100	ND			

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TERPENE SUMMARY
TOTAL: 1.734%
PRIMARY AROMAS Citrusy, Floral, Piney, Sweet, Herbal, Woody
MOON – NORTHERN LIGHTS

TERPENES (GC FID)

ANALYTE	MASS (%)	MASS (mg/g)	LOQ (%)	ANALYTE	MASS (%)	MASS (mg/g)	LOQ (%)
Terpinolene	0.9220	9.220	0.005	γ -Terpinene	0.0073	0.0726	0.005
δ -Limonene	0.1748	1.748	0.005	Guaiol	<0.005	<0.05	0.005
α -Ocimene 1	0.1298	1.298	0.005	α -Bisabolol	<0.005	<0.05	0.005
β -Myrcene	0.1271	1.271	0.005	<i>p</i> -Cymene	<0.005	<0.05	0.005
β -Caryophyllene	0.0959	0.9585	0.005	α -Terpinene	<0.005	<0.05	0.005
β -Pinene	0.0851	0.8507	0.005	Camphene	<0.005	<0.05	0.005
α -Pinene	0.0574	0.5744	0.005	Caryophyllene Oxide	ND	ND	0.005
Linalool	0.0481	0.4805	0.005	<i>cis</i> -Nerolidol 1	ND	ND	0.005
Eucalyptol	0.0438	0.4382	0.005	<i>trans</i> -Nerolidol 2	ND	ND	0.005
Geraniol	0.0194	0.1942	0.005	β -Ocimene 2	ND	ND	0.005
3-Carene	0.0129	0.1291	0.005	Isopulegol	ND	ND	0.005
α -Humulene	0.0101	0.1006	0.005				

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