

CERTIFICATE OF ANALYSIS

PRODUCED: JUL 22, 2022

SAMPLE: ASTRONAUT OG (FLOWER) // CLIENT: ALKHEMIST DM LLC // BATCH: PASS



BATCH NO.: GHFAOG0718
 METRC UID: 1A406030000A423000005353
 MATRIX: FLOWER
 CATEGORY: INHALABLE
 SAMPLE ID: BCL-220719-054
 COLLECTED ON: JUL 19, 2022
 RECEIVED ON: JUL 19, 2022
 BATCH/SAMPLE SIZE: 7264 G / 26 G

CANNABINOID OVERVIEW

TOTAL THC:	24.81072 %
TOTAL CBD:	0.05216 %
SUM OF CANNABINOIDS:	31.5846 %

CULTIVATOR INFO

CULTIVATOR
 MISSION HEALTH ASSOCIATES, INC.
 DBA GLASS HOUSE FARMS
 5601 CASITAS PASS RD
 CARPINTERIA, CA 93013

LICENSE
 CCL18-0003034
 ADULT-USE - CULTIVATOR LICENSE

DISTRIBUTOR INFO

DISTRIBUTOR
 ALKHEMIST DM LLC
 2211 DAMON STREET
 LOS ANGELES, CA 90021

LICENSE
 C11-0001456-LIC
 ADULT-USE - DISTRIBUTOR LICENSE



BCL-03: CANNABINOID POTENCY BY HPLC-UV // JUL 22, 2022

ANALYTE	AMT	AMT	LOD/LOQ (mg/g)	PASS/FAIL
CBC	< LOQ	< LOQ	0.01057/0.24029	N/A
CBCA	1.26302 %	12.6302 mg/g	0.03028/0.24029	N/A
CBD	ND	ND	0.0149/0.24029	N/A
CBDA	0.05947 %	0.5947 mg/g	0.00769/0.24029	N/A
CBDV	0.08428 %	0.8428 mg/g	0.01153/0.24029	N/A
CBDVA	ND	ND	0.00769/0.24029	N/A
CBG	0.14089 %	1.4089 mg/g	0.01394/0.24029	N/A
CBGA	1.81022 %	18.1022 mg/g	0.00961/0.24029	N/A
CBN	ND	ND	0.00769/0.24029	N/A
Δ ⁸ -THC	ND	ND	0.02787/0.24029	N/A
Δ ⁹ -THC	1.47303 %	14.7303 mg/g	0.02018/0.24029	N/A
THCA	26.61082 %	266.1082 mg/g	0.01442/0.24029	N/A
THCV	ND	ND	0.01586/0.24029	N/A
THCVA	0.14287 %	1.4287 mg/g	0.01105/0.24029	N/A
TOT THC**	24.81072 %	248.1072 mg/g	N/A	N/A
TOT CBD**	0.05216 %	0.5216 mg/g	N/A	N/A

BCL-09: TERPENOID TESTING BY HS-GC/FID // JUL 22, 2022

ANALYTE	AMT	AMT	LOD/LOQ (mg/g)	PASS/FAIL
TOTAL TERPENES	1.12648 %	11.2648 mg/g		N/A
β-CARYOPHYLLENE	0.53421 %	5.3421 mg/g	0.00184/0.13389	N/A
D-LIMONENE	0.19828 %	1.9828 mg/g	0.00024/0.13389	N/A
α-HUMULENE	0.15108 %	1.5108 mg/g	0.00045/0.13389	N/A
LINALOOL	0.08508 %	0.8508 mg/g	0.00035/0.13389	N/A
β-MYRCENE	0.05859 %	0.5859 mg/g	0.00036/0.13389	N/A
α-BISABOLOL	0.05135 %	0.5135 mg/g	0.00418/0.13389	N/A
β-PINENE	0.02895 %	0.2895 mg/g	0.00217/0.13389	N/A
α-PINENE	0.01894 %	0.1894 mg/g	0.00021/0.13389	N/A
TERPINOLENE	< LOQ	< LOQ	0.00028/0.13389	N/A
CAMPHENE	< LOQ	< LOQ	0.00021/0.13389	N/A
GUAIOL	ND	ND	0.00262/0.13389	N/A
P-CYMENE	ND	ND	0.00026/0.13389	N/A
ISOPULEGOL	ND	ND	0.00052/0.13389	N/A
Δ ³ -CARENE	ND	ND	0.00044/0.13389	N/A
GERANIOL	ND	ND	0.00028/0.13389	N/A
γ-TERPINENE	ND	ND	0.00045/0.13389	N/A
EUCALYPTOL	ND	ND	0.00045/0.13389	N/A
CIS-β-OCIMENE	ND	ND	0.00129/0.04151	N/A
α-TERPINENE	ND	ND	0.00029/0.13389	N/A
TRANS-β-OCIMENE	ND	ND	0.00048/0.09239	N/A

** TOTAL CBD = (CBDA X 0.877) + CBD
 ** TOTAL THC = (THCA X 0.877) + THC
 DRY-WEIGHT AMOUNTS SHOWN

SAMPLE WAS TESTED AS RECEIVED. ALL LQC SAMPLES REQUIRED BY SECTION 15730 OF CALIFORNIA CODE OF REGULATIONS TITLE 4 DIVISION 19 DEPARTMENT OF CANNABIS CONTROL WERE PERFORMED AND MET THE ACCEPTANCE CRITERIA. ALL DECISION RULES ARE ESTABLISHED BY THE DCC.

RESULTS CERTIFIED BY: CODY SHEPPARD, PH.D.
 SCIENCE DIRECTOR, BELCOSTA LABS
 JUL 22, 2022



BCL-13: PESTICIDE TESTING BY GC/MS // JUL 21, 2022

ANALYTE	LIMIT	AMT (µg/g)	LOD/LOQ (µg/g)	PASS/FAIL
CAPTAN	0.7 µg/g	ND	0.03077/0.09318	PASS
CHLORDANE	Any amt	ND		PASS
CHLORDANE CIS		ND	0.01088/0.03299	N/A
CHLORDANE TRANS		ND	0.01041/0.03147	N/A
CHLORFENAPYR	Any amt	ND	0.02345/0.07101	PASS

ANALYTE	LIMIT	AMT (µg/g)	LOD/LOQ (µg/g)	PASS/FAIL
CHLORPYRIFOS	Any amt	ND	0.01094/0.03322	PASS
DICHLORVOS	Any amt	ND	0.01152/0.03492	PASS
METHYL PARATHION	Any amt	ND	0.01322/0.04007	PASS
PENTACHLORONI-TROBENZENE	0.1 µg/g	ND	0.01375/0.0417	PASS

BCL-05: RESIDUAL PESTICIDE ANALYSIS BY LC-MS/MS ESI // JUL 21, 2022

ANALYTE	LIMIT	AMT (µg/g)	LOD/LOQ (µg/g)	PASS/FAIL
ABAMECTIN	0.1 µg/g	ND	0.01153/0.04	PASS
ACEPHATE	0.1 µg/g	ND	0.00368/0.02	PASS
ACEQUINOCYL	0.1 µg/g	ND	0.00417/0.02	PASS
ACETAMIPRID	0.1 µg/g	ND	0.00464/0.02	PASS
ALDICARB	Any amt	ND	0.01109/0.04	PASS
AZOXYSTROBIN	0.1 µg/g	ND	0.00639/0.02	PASS
BIFENAZATE	0.1 µg/g	ND	0.00355/0.02	PASS
BIFENTHRIN	3 µg/g	ND	0.00473/0.04	PASS
BOSCALID	0.1 µg/g	ND	0.00494/0.02	PASS
CARBARYL	0.5 µg/g	ND	0.00295/0.02	PASS
CARBOFURAN	Any amt	ND	0.00613/0.02	PASS
CHLORANTRANIL-IPROLE	10 µg/g	ND	0.00697/0.04	PASS
CLOFENTEZINE	0.1 µg/g	ND	0.0054/0.02	PASS
COUMAPHOS	Any amt	ND	0.00215/0.02	PASS
CYFLUTHRIN	2 µg/g	ND	0.05508/0.2	PASS
CYPERMETHRIN	1 µg/g	ND	0.00556/0.04	PASS
DAMINOZIDE	Any amt	ND	0.00227/0.04	PASS
DIAZINON	0.1 µg/g	ND	0.00487/0.02	PASS
DIMETHOATE	Any amt	ND	0.00354/0.02	PASS
DIMETHOMORPH	2 µg/g	ND		PASS
DIMETHOMORPH I		ND	0.00109/0.0078	N/A
DIMETHOMORPH II		ND	0.0015/0.0122	N/A
ETHOPROPHOS	Any amt	ND	0.0041/0.02	PASS
ETOFENPROX	Any amt	ND	0.00274/0.02	PASS
ETOXAZOLE	0.1 µg/g	ND	0.00385/0.02	PASS
FENHEXAMID	0.1 µg/g	ND	0.01055/0.02	PASS
FENOXYCARB	Any amt	ND	0.00175/0.02	PASS
FENPYROXIMATE	0.1 µg/g	ND	0.00481/0.02	PASS
FIPRONIL	Any amt	ND	0.00478/0.02	PASS
FLONICAMID	0.1 µg/g	ND	0.00398/0.02	PASS
FLUDIOXONIL	0.1 µg/g	ND	0.01369/0.04	PASS
HEXYTHIAZOX	0.1 µg/g	ND	0.00297/0.02	PASS
IMAZALIL	Any amt	ND	0.0056/0.02	PASS
IMIDACLOPRID	5 µg/g	ND	0.00645/0.02	PASS
KRESOXIM-METHYL	0.1 µg/g	ND	0.00339/0.02	PASS

ANALYTE	LIMIT	AMT (µg/g)	LOD/LOQ (µg/g)	PASS/FAIL
METALAXYL	2 µg/g	ND	0.00503/0.02	PASS
METHIOCARB	Any amt	ND	0.00503/0.02	PASS
METHOMYL	1 µg/g	ND	0.00494/0.02	PASS
MEVINPHOS	Any amt	ND		PASS
MEVINPHOS I		ND	0.00163/0.0084	N/A
MEVINPHOS II		ND	0.00542/0.0316	N/A
MYCLOBUTANIL	0.1 µg/g	ND	0.00867/0.04	PASS
NALED	0.1 µg/g	ND	0.00328/0.02	PASS
OXAMYL	0.5 µg/g	ND	0.00455/0.02	PASS
PACLOBUTRAZOL	Any amt	ND	0.00714/0.04	PASS
PERMETHRIN	0.5 µg/g	ND		PASS
PERMETHRIN CIS		ND	0.00237/0.0082	N/A
PERMETHRIN TRANS		ND	0.00245/0.0118	N/A
PHOSMET	0.1 µg/g	ND	0.0043/0.02	PASS
PIPERONYLBUTO-XIDE	3 µg/g	ND	0.00247/0.02	PASS
PRALLETHRIN	0.1 µg/g	ND	0.00392/0.02	PASS
PROPICONAZOLE	0.1 µg/g	< LOQ	0.0024/0.02	PASS
PROPOXUR	Any amt	ND	0.00374/0.02	PASS
PYRETHRINS	0.5 µg/g	ND		PASS
PYRETHRINS PYRETHRIN I		ND	0.00726/0.04	N/A
PYRETHRINS PYRETHRIN II		ND	0.00754/0.02284	N/A
PYRIDABEN	0.1 µg/g	ND	0.0034/0.02	PASS
SPINETORAM	0.1 µg/g	ND		PASS
SPINETORAM J		ND	0.00329/0.016	N/A
SPINETORAM L		ND	0.00157/0.016	N/A
SPINOSAD	0.1 µg/g	ND		PASS
SPINOSAD A		ND	0.00205/0.01438	N/A
SPINOSAD D		ND	0.00104/0.00498	N/A
SPIROMESIFEN	0.1 µg/g	ND	0.00944/0.04	PASS
SPIROTETRAMAT	0.1 µg/g	ND	0.00208/0.02	PASS
SPIROXAMINE	Any amt	ND	0.00344/0.02	PASS
TEBUCONAZOLE	0.1 µg/g	ND	0.00816/0.04	PASS
THIACLOPRID	Any amt	ND	0.0039/0.02	PASS
THIAMETHOXAM	5 µg/g	ND	0.00358/0.02	PASS
TRIFLOXYSTROB-IN	0.1 µg/g	ND	0.00421/0.02	PASS



MALATHION 0.5 µg/g ND 0.00472/0.02 PASS

BCL-07: FOREIGN MATERIAL TESTING BY MICROSCOPY // JUL 20, 2022

ANALYTE	LIMIT	AMT (%)	PASS/FAIL
IMBEDDED FOREIGN MATERIAL	25 %	ND	PASS
INSECT FRAGMENTS, HAIR, MAMMAL EXCREMENT	1 Unit	ND	PASS
MOLD	25 %	ND	PASS
SAND, SOIL, CINDERS, DIRT	25 %	ND	PASS

BCL-020: HEAVY METAL TESTING BY ICP-MS // JUL 21, 2022

ANALYTE	LIMIT	AMT (µg/g)	LOD/LOQ (µg/g)	PASS/FAIL
ARSENIC	0.2 µg/g	< LOQ	0.001/0.05	PASS
CADMIUM	0.2 µg/g	< LOQ	0.0002/0.05	PASS
LEAD	0.5 µg/g	< LOQ	0.0003/0.05	PASS
MERCURY	0.1 µg/g	< LOQ	0.0001/0.01	PASS

BCL-12: WATER ACTIVITY BY HUMIDITY EQUILIBRIUM // JUL 21, 2022

ANALYTE	LIMIT	AMT (Aw)	PASS/FAIL
WATER ACTIVITY	0.65 Aw	0.55	PASS

BCL-06: MICROBIOLOGICAL ANALYSIS BY QPCR // JUL 21, 2022

ANALYTE	LIMIT	AMT (CFU)	PASS/FAIL
ASPERGILLUS FLAVUS	Any amt in 1 gram	ND	PASS
ASPERGILLUS FUMIGATUS	Any amt in 1 gram	ND	PASS
ASPERGILLUS NIGER	Any amt in 1 gram	ND	PASS
ASPERGILLUS TERREUS	Any amt in 1 gram	ND	PASS
ESCHERICHIA COLI	Any amt in 1 gram	ND	PASS
SALMONELLA SPP.	Any amt in 1 gram	ND	PASS

BCL-11: MYCOTOXIN TESTING BY LC-MS/MS // JUL 21, 2022

ANALYTE	LIMIT	AMT (µg/kg)	LOD/LOQ (µg/kg)	PASS/FAIL
AFLATOXIN B1		ND	0.23/4	N/A
AFLATOXIN B2		ND	0.181/4	N/A
AFLATOXIN G1		ND	0.155/4	N/A
AFLATOXIN G2		ND	0.934/4	N/A
AFLATOXINS	20 µg/kg	ND		PASS
OCHRATOXIN A	20 µg/kg	ND	0.385/4	PASS

BCL-02: MOISTURE CONTENT BY GRAVIMETRY // JUL 20, 2022

ANALYTE	LIMIT	AMT (%)	PASS/FAIL
MOISTURE		7.80	N/A

