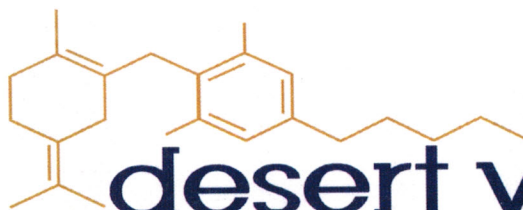


Desert Valley Testing
 51 W. Weldon Ave
 Phoenix, Arizona 85013
 Phone#: 480-788-6644
 www.desertvalleytesting.com



Analysis Date: 09/05/19
 Chemist: EG

desert valley TESTING

Quality Assurance Report

Residual Solvents Quality Control Report

GCMS Analysis

LRB			Opening CCV				Closing CCV			
Analyte List	Recovery (ppm)	Reporting Limit	Analyte List	Recovery (ppm)	True Value (ppm)	Recovery %	Analyte List	Recovery (ppm)	True Value (ppm)	Recovery %
Propane	<5.0	5.0 ppm	Propane	NA	100.00	NA	Propane	NA	100.00	NA
Isobutane	<5.0	5.0 ppm	Isobutane	NA	100.00	NA	Isobutane	NA	100.00	NA
n-Butane	<5.0	5.0 ppm	n-Butane	NA	100.00	NA	n-Butane	NA	100.00	NA
Ethanol	<5.0	5.0 ppm	Ethanol	91.34	100.00	111	Ethanol	NA	100.00	NA
Isopentane	<5.0	5.0 ppm	Isopentane	129.07	100.00	NA	Isopentane	NA	100.00	NA
Acetonitrile	<5.0	5.0 ppm	Acetonitrile	94.20	100.00	94	Acetonitrile	NA	100.00	NA
Acetone	<5.0	5.0 ppm	Acetone	99.60	100.00	100	Acetone	NA	100.00	NA
2-Propanol	<5.0	5.0 ppm	2-Propanol	85.94	100.00	86	2-Propanol	NA	100.00	NA
n-Pentane	<5.0	5.0 ppm	n-Pentane	96.25	100.00	96	n-Pentane	NA	100.00	NA
n-Hexane	<5.0	5.0 ppm	n-Hexane	96.91	100.00	97	n-Hexane	NA	100.00	NA
Chloroform	<5.0	5.0 ppm	Chloroform	85.91	100.00	86	Chloroform	NA	100.00	NA
Tetrahydrofuran	<5.0	5.0 ppm	Tetrahydrofuran	97.84	100.00	98	Tetrahydrofuran	NA	100.00	NA
Benzene	<5.0	5.0 ppm	Benzene	110.26	100.00	110	Benzene	NA	100.00	NA
Carbon Tetrachloride	<5.0	5.0 ppm	Carbon Tetrachloride	87.60	100.00	88	Carbon Tetrachloride	NA	100.00	NA
n-Heptane	<5.0	5.0 ppm	n-Heptane	98.03	100.00	98	n-Heptane	NA	100.00	NA
Toluene	<5.0	5.0 ppm	Toluene	110.71	100.00	111	Toluene	NA	100.00	NA
Xylenes	<10.0	10.0 ppm	Xylenes	209.76	200.00	105	Xylenes	NA	200.00	NA

Potency Quality Control Report

HPLC Analysis

LRB			Opening CCV				Closing CCV			
Analyte List	Recovery (ppm)	Reporting Limit	Analyte List	Recovery (ppm)	True Value (ppm)	Recovery %	Analyte List	Recovery (ppm)	True Value (ppm)	Recovery %
CBD-V	<2.0	2.0 ppm	CBD-V	112.29	100.00	112	CBD-V	264.12	250.00	106
CBD-A	<10.0	10.0 ppm	CBD-A	99.57	100.00	100	CBD-A	251.22	250.00	100
CBG	<2.0	2.0 ppm	CBG	22.10	100.00	111	CBG	53.30	50.00	107
CBD	<10.0	10.0 ppm	CBD	93.67	100.00	94	CBD	235.12	250.00	94
THC-V	<10.0	10.0 ppm	THC-V	105.06	100.00	105	THC-V	250.74	250.00	100
CBN	<10.0	10.0 ppm	CBN	100.11	100.00	100	CBN	255.37	250.00	102
Delta 9-THC	<10.0	10.0 ppm	Delta 9-THC	91.58	100.00	92	Delta 9-THC	230.68	250.00	92
CBG	<2.0	2.0 ppm	CBG	112.32	100.00	112	CBG	266.31	250.00	107
THC-A	<10.0	10.0 ppm	THC-A	95.89	100.00	96	THC-A	243.92	250.00	98
Delta 8-THC	<100.0	100.0 ppm	Delta 8-THC	107.90	100.00	108	Delta 8-THC	254.86	250.00	102

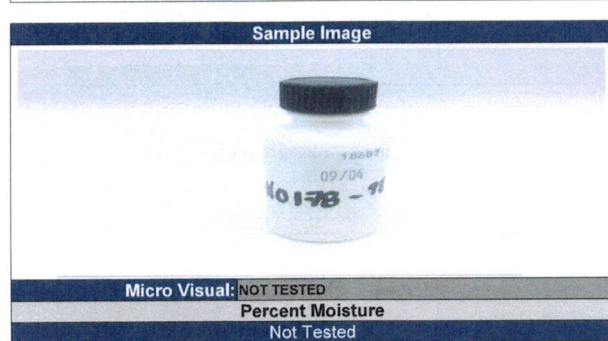
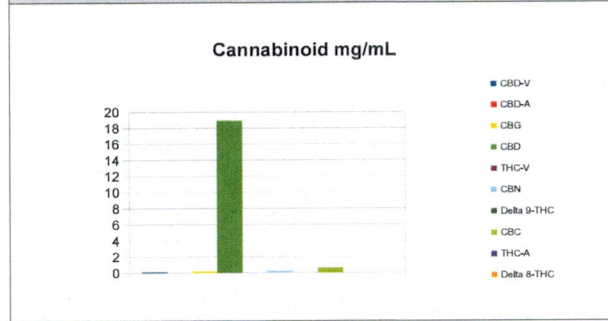
Terpene Quality Control Report

GCMS Analysis

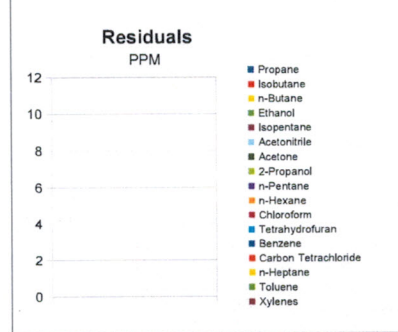
LRB			Opening CCV				Closing CCV			
Analyte List	Recovery (ppm)	Reporting Limit	Analyte List	True Value (ppm)	Recovery %	Analyte List	Recovery (ppm)	True Value (ppm)	Recovery %	
alpha-Pinene	<1.0	1.0 ppm	alpha-Pinene	48.47	50.00	97	alpha-Pinene	NA	50.00	NA
Camphene	<1.0	1.0 ppm	Camphene	44.74	50.00	89	Camphene	NA	50.00	NA
Sabinene	<1.0	1.0 ppm	Sabinene	46.23	50.00	92	Sabinene	NA	50.00	NA
beta-Myrcene	<1.0	1.0 ppm	beta-Myrcene	42.70	50.00	85	beta-Myrcene	NA	50.00	NA
Beta-Pinene	<1.0	1.0 ppm	Beta-Pinene	47.07	50.00	94	Beta-Pinene	NA	50.00	NA
p-mentha-1-5-diene	<1.0	1.0 ppm	p-mentha-1-5-diene	47.83	50.00	96	p-mentha-1-5-diene	NA	50.00	NA
(1S)-(+)-3-Carene	<1.0	1.0 ppm	(1S)-(+)-3-Carene	45.40	50.00	91	(1S)-(+)-3-Carene	NA	50.00	NA
Alpha-Terpinene	<1.0	1.0 ppm	Alpha-Terpinene	53.79	50.00	108	Alpha-Terpinene	NA	50.00	NA
Ocimene Isomer 1	<1.0	1.0 ppm	Ocimene Isomer 1	44.78	50.00	90	Ocimene Isomer 1	NA	50.00	NA
(R)-(+)-Limonene	<1.0	1.0 ppm	(R)-(+)-Limonene	43.96	50.00	87	(R)-(+)-Limonene	NA	50.00	NA
Ocimene Isomer 2	<1.0	1.0 ppm	Ocimene Isomer 2	44.24	50.00	88	Ocimene Isomer 2	NA	50.00	NA
Eucalyptol (1,8-Cineol)	<1.0	1.0 ppm	Eucalyptol (1,8-Cineol)	45.07	50.00	90	Eucalyptol (1,8-Cineol)	NA	50.00	NA
gamma-Terpinene	<1.0	1.0 ppm	gamma-Terpinene	45.96	50.00	92	gamma-Terpinene	NA	50.00	NA
Sabinene Hydrate	<1.0	1.0 ppm	Sabinene Hydrate	36.57	50.00	73	Sabinene Hydrate	NA	50.00	NA
Terpinolene	<1.0	1.0 ppm	Terpinolene	45.22	50.00	90	Terpinolene	NA	50.00	NA
Linalool	<1.0	1.0 ppm	Linalool	55.13	50.00	110	Linalool	NA	50.00	NA
(+)-Fenchone and L(-)-Fenchone	<1.0	1.0 ppm	(+)-Fenchone and L(-)-Fenchone	93.10	100.00	93	(+)-Fenchone and L(-)-Fenchone	NA	100.00	NA
1R)-Endo-(+)-Fenchyl (-)-Isopulegol	<1.0	1.0 ppm	1R)-Endo-(+)-Fenchyl (-)-Isopulegol	47.73	50.00	95	1R)-Endo-(+)-Fenchyl (-)-Isopulegol	NA	50.00	NA
Camphor	<1.0	1.0 ppm	Camphor	51.04	50.00	102	Camphor	NA	50.00	NA
Isoborneol	<1.0	1.0 ppm	Isoborneol	95.75	100.00	96	Isoborneol	NA	100.00	NA
Hexahydrothymol	<1.0	1.0 ppm	Hexahydrothymol	50.98	50.00	102	Hexahydrothymol	NA	50.00	NA
(+)-Borneol and (-) Borneol	<1.0	1.0 ppm	(+)-Borneol and (-) Borneol	47.86	50.00	96	(+)-Borneol and (-) Borneol	NA	50.00	NA
alpha-Terpineol	<1.0	1.0 ppm	alpha-Terpineol	49.79	50.00	100	alpha-Terpineol	NA	50.00	NA
gamma-Terpineol	<1.0	1.0 ppm	gamma-Terpineol	50.00	50.00	100	gamma-Terpineol	NA	50.00	NA
Nerol	<1.0	1.0 ppm	Nerol	48.95	50.00	98	Nerol	NA	50.00	NA
Geraniol	<1.0	1.0 ppm	Geraniol	53.09	50.00	106	Geraniol	NA	50.00	NA
(+)-Pulegone	<1.0	1.0 ppm	(+)-Pulegone	66.70	50.00	133	(+)-Pulegone	NA	50.00	NA
Geranyl Acetate	<1.0	1.0 ppm	Geranyl Acetate	64.16	50.00	128	Geranyl Acetate	NA	50.00	NA
alpha-Cedrene	<1.0	1.0 ppm	alpha-Cedrene	33.28	50.00	87	alpha-Cedrene	NA	50.00	NA
trans-Caryophyllene	<1.0	1.0 ppm	trans-Caryophyllene	47.61	50.00	95	trans-Caryophyllene	NA	50.00	NA
alpha-Humulene	<1.0	1.0 ppm	alpha-Humulene	45.02	50.00	90	alpha-Humulene	NA	50.00	NA
Valencene	<1.0	1.0 ppm	Valencene	47.95	50.00	96	Valencene	NA	50.00	NA
cis-Nerolidol	<1.0	1.0 ppm	cis-Nerolidol	50.07	50.00	100	cis-Nerolidol	NA	50.00	NA
trans-Nerolidol	<1.0	1.0 ppm	trans-Nerolidol	46.58	50.00	93	trans-Nerolidol	NA	50.00	NA
Guaiol	<1.0	1.0 ppm	Guaiol	50.07	50.00	89	Guaiol	NA	50.00	NA
(-)-Caryophyllene Oxide	<1.0	1.0 ppm	(-)-Caryophyllene Oxide	44.48	50.00	89	(-)-Caryophyllene Oxide	NA	50.00	NA
(+)-Cedrol	<1.0	1.0 ppm	(+)-Cedrol	57.97	50.00	116	(+)-Cedrol	NA	50.00	NA
(-)-alpha-Bisabolol	<1.0	1.0 ppm	(-)-alpha-Bisabolol	53.20	50.00	106	(-)-alpha-Bisabolol	NA	50.00	NA
				53.75	50.00	108				
				51.91	50.00	104				

Sample Information			
Sample Identification	CONO178-98OIL		
Laboratory Number	2019018687		
Batch Number	CONO178-98OIL		
Matrix	Oil		
Analyzed Date	09/05/19		
Extraction Date	09/05/19		
Cannabinoid (HPLC)	mg/mL	mg/Bottle	%
Compound			
CBD-V	0.1	NA	0.01%
CBD-A	ND	NA	ND
CBG	0.16	NA	0.02%
CBD	18.93	NA	1.99%
THC-V	ND	NA	ND
CBN	0.23	NA	0.02%
Delta 9-THC	ND	NA	ND
CBC	0.67	NA	0.07%
THC-A	ND	NA	ND
Delta 8-THC	ND	NA	ND
Cannabinoids Total			
Max Active THC	ND	NA	ND
Max Active CBD	18.93	NA	1.99%
T. Active Cannabinoids	20.09	NA	2.11%
Total Cannabinoids	20.09	NA	2.11%

Max Active Ratios			
NA :1 CBD to THC			
ND :1 THC to CBD			



RS (GCMS-MS)	PPM	RL
Compound		
Propane	NT	5.0
Isobutane	NT	5.0
n-Butane	NT	5.0
Ethanol	NT	5.0
Isopentane	NT	5.0
Acetonitrile	NT	5.0
Acetone	NT	50.0
2-Propanol	NT	5.0
n-Pentane	NT	5.0
n-Hexane	NT	5.0
Chloroform	NT	5.0
Tetrahydrofuran	NT	5.0
Benzene	NT	5.0
Carbon Tetrachloride	NT	5.0
n-Heptane	NT	5.0
Toluene	NT	5.0
Xylenes	NT	10.0

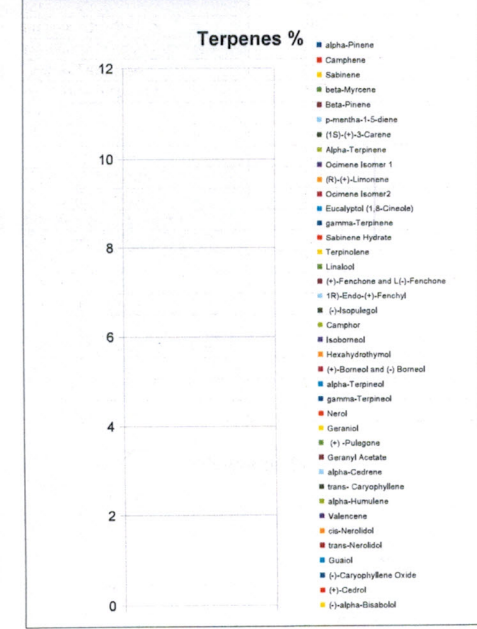


mL/Bottle	NA
mg THC/Bottle	NA
mg CBD/Bottle	NA
(mg) total cannabinoids/bottle	NA

Metals	PPM	RL
Compound		
Lead	NT	0.018
Arsenic	NT	0.007
Cadmium	NT	0.004
Mercury	NT	0.020

Microbial	CFU/g
Compound	
Enterobacteriaceae	NT
Coliform	NT
Ecoli	NT
Aerobic	NT
Yeast	NT
Mold	NT

Terpene (GC-MS)	mg/mL	mg/Bottle
Compound		
alpha-Pinene	NT	NT
Camphene	NT	NT
Sabinene	NT	NT
beta-Myrcene	NT	NT
Beta-Pinene	NT	NT
p-mentha-1-5-diene	NT	NT
(1S)-(+)-3-Carene	NT	NT
Alpha-Terpinene	NT	NT
Ocimene Isomer 1	NT	NT
(R)-(+)-Limonene	NT	NT
Ocimene Isomer2	NT	NT
Eucalyptol (1,8-Cineole)	NT	NT
gamma-Terpinene	NT	NT
Sabinene Hydrate	NT	NT
Terpinolene	NT	NT
Linalool	NT	NT
(+)-Fenchone and L(-)-Fenchone	NT	NT
1R)-Endo-(+)-Fenchyl	NT	NT
(-)-Isopulegol	NT	NT
Camphor	NT	NT
Isoborneol	NT	NT
Hexahydrothymol	NT	NT
(+)-Borneol and (-) Borneol	NT	NT
alpha-Terpineol	NT	NT
gamma-Terpineol	NT	NT
Nerol	NT	NT
Geraniol	NT	NT
(+)-Pulegone	NT	NT
Geranyl Acetate	NT	NT
alpha-Cedrene	NT	NT
trans- Caryophyllene	NT	NT
alpha-Humulene	NT	NT
Valencene	NT	NT
cis-Nerolidol	NT	NT
trans-Nerolidol	NT	NT
Guaiol	NT	NT
(-)-Caryophyllene Oxide	NT	NT
(+)-Cedrol	NT	NT
(-)-alpha-Bisabolol	NT	NT
Total Terpenes	NT	NT

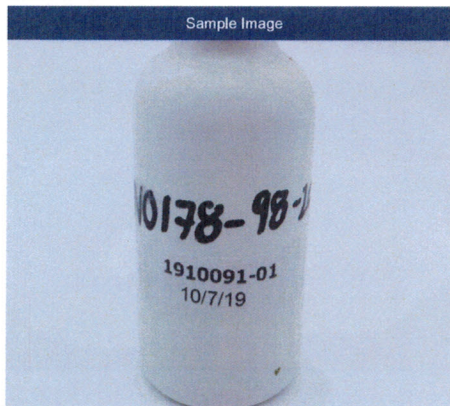
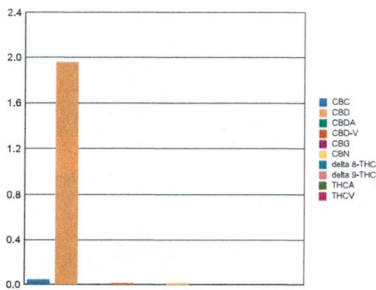


Chemist: EG
 Report Expires: 12/04/19

RL=Reporting Limit
 NA=Not Applicable
 NT=Not Tested
 ND=Non Detected
 TNTC=Too Numerous to Count

Sample Information			RS (GCMS-MS)	ppm	RL	Terpenes (HPLC)
Sample Identification	CONO178-98-20		Compound			Compound
Laboratory Number	1910091-01		Acetone	NT	NT	
Batch Number			Acetonitrile	NT	NT	
Matrix	Oil		Benzene	NT	NT	
			n-Butane	NT	NT	
Cannabinoid (HPLC)	%	mg/mL	Carbon Tetrachloride	NT	NT	
Compound			Chloroform	NT	NT	
THCA	ND	ND	1,2-Dichloroethane	NT	NT	
delta 9-THC	ND	ND	Ethanol	NT	NT	
delta 8-THC	ND	ND	Ethyl acetate	NT	NT	
THCV	ND	ND	Ethylene oxide	NT	NT	
CBDA	ND	ND	n-Heptane	NT	NT	
CBD	1.96	19.6	n-Hexane	NT	NT	
CBD-V	0.02	0.151	iso-Butane	NT	NT	
CBN	0.02	0.200	iso-Pentane	NT	NT	
CBG	ND	ND	Methylene Chloride	NT	NT	
CBC	0.05	0.457	n-Pentane	NT	NT	
Cannabinoids Total			Propane	NT	NT	
Max Active THC	0.00	0.00	2-Propanol (IPA)	NT	NT	
Max Active CBD	1.96	19.60	Tetrahydrofuran	NT	NT	
T.Active Cannabinoids	2.03	20.30	Toluene	NT	NT	
Total Cannabinoids	2.04	20.40	Trichloroethane	NT	NT	
			o-xylene	NT	NT	
			Xylenes (m,p)	NT	NT	

Cannabinoid (%)



Metals	ppm	RL
Compound		
Arsenic	NT	NT
Cadmium	NT	NT
Mercury	NT	NT
Lead	NT	NT
Percent Moisture		
NT %		
Water Activity		
NT		

RL = Reporting Limit
 NA = Not Applicable
 NT = Not Tested
 ND = Non Detected