



DESERT VALLEY TESTING
 51 W. Weldon Ave
 Phoenix, Arizona 85013
 480-788-6644
 www.desertvalleytesting.com

Sample Information

Sample Identification	CBD Oil		
Laboratory Number	2019002368		
Batch Number	NA		
Matrix	Oil		
Analyzed Date	01/30/19		
Extraction Date	01/30/19		
Cannabinoid (HPLC)	mg/mL	mg/Bottle	%
Compound			
CBD-V	0.29	NA	0.03%
CBD-A	ND	NA	ND
CBG	ND	NA	ND
CBD	16.6	NA	1.79%
THC-V	ND	NA	ND
CBN	ND	NA	ND
Delta 9-THC	ND	NA	ND
CBC	ND	NA	ND
THC-A	ND	NA	ND
Delta 8-THC	ND	NA	ND
Cannabinoids Total			
Max Active THC	ND	NA	ND
Max Active CBD	16.60	NA	1.79%
T. Active Cannabinoids	16.89	NA	1.82%
Total Cannabinoids	16.89	NA	1.82%

Max Active Ratios

NA:1 CBD to THC

NA:1 THC to CBD

Cannabinoid %



RS (GCMS-MS) Compound	PPM	RL
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

Residuals



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

Metals Compound	PPM	RL
Lead	NT	0.010
Arsenic	NT	0.010
Cadmium	NT	0.010
Mercury	NT	0.001

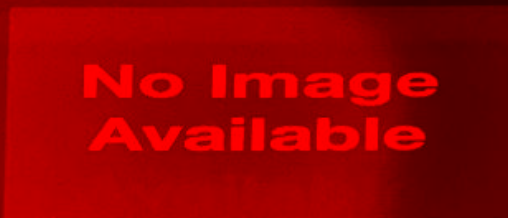
RL=Reporting Limit
 NA=Not Applicable
 NT=Not Tested
 ND=Non Detected

Terpene (GC-MS) Compound	mg/mL	mg/Bottle
alpha-Pinene	0.06	NA
Camphene	ND	NA
Sabinene	ND	NA
beta-Myrcene	0.18	NA
Beta-Pinene	ND	NA
p-mentha-1,5-diene	ND	NA
(1S)-(+)-3-Carene	0.02	NA
Alpha-Terpinene	ND	NA
Ocimene Isomer 1	ND	NA
(R)-(+)-Limonene	13.58	NA
Ocimene Isomer 2	ND	NA
Eucalyptol (1,8-Cineole)	ND	NA
gamma-Terpinene	ND	NA
Sabinene Hydrate	ND	NA
Terpinolene	ND	NA
Linalool	0.2	NA
(+)-Fenchone and L(-)-Fenchone	ND	NA
1R)-Endo-(+)-Fenchyl	ND	NA
(-)-Isopulegol	ND	NA
Camphor	ND	NA
Isoborneol	ND	NA
Hexahydrothymol	ND	NA
(+)-Borneol and (-) Borneol	ND	NA
alpha-Terpineol	0.05	NA
gamma-Terpineol	ND	NA
Nerol	ND	NA
Geraniol	ND	NA
(+) -Pulegone	ND	NA
Geranyl Acetate	ND	NA
alpha-Cedrene	1.27	NA
trans-Caryophyllene	7.92	NA
alpha-Humulene	0.77	NA
Valencene	0.02	NA
cis-Nerolidol	ND	NA
trans-Nerolidol	ND	NA
Guaiol	0.15	NA
(-)-Caryophyllene Oxide	0.52	NA
(+)-Cedrol	ND	NA
(-)-alpha-Bisabolol	ND	NA
Total Terpenes	24.74	NA

Terpenes %



Sample Image

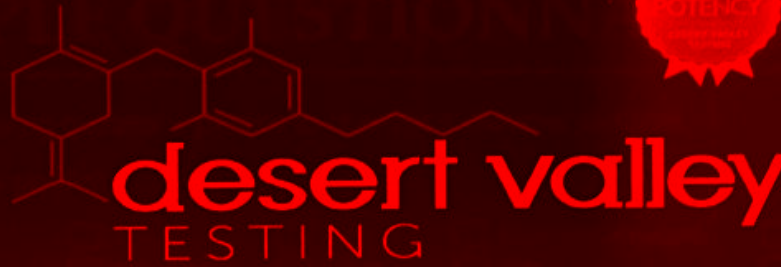


Micro Visual **TESTED**
 Percent Moisture **NOT TESTED**

Chemist: JW
 Report Expires: 02/28/19



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Analysis Date: 6/13/19
 Chemist: JW

Quality Assurance Report

Residual Solvents Quality Control Report GCMS Analysis

Opening CCV			Closing CCV			
Analyte List	Recovery (ppm)	Reporting Limit	Analyte List	Recovery (ppm)	True Value (ppm)	Recovery %
Acetone	<5.0	5.0 ppm	Propane	NA	100.00	NA
Benzene	<5.0	5.0 ppm	Isobutane	NA	100.00	NA
n-Butane	<5.0	5.0 ppm	n-Butane	NA	100.00	NA
Ethanol	<5.0	5.0 ppm	Ethanol	94.25	100.00	94
Acetonitrile	<5.0	5.0 ppm	Acetonitrile	98.38	100.00	98
Methanol	<5.0	5.0 ppm	Methanol	83.36	100.00	83
Acetone	<50.0	50.0 ppm	Acetone	102.70	100.00	103
n-Propylal	<5.0	5.0 ppm	n-Propylal	92.45	100.00	92
n-Butane	<5.0	5.0 ppm	n-Butane	97.52	100.00	98
n-Pentane	<5.0	5.0 ppm	n-Pentane	102.61	100.00	103
n-Hexane	<5.0	5.0 ppm	n-Hexane	80.12	100.00	80
Chloroform	<5.0	5.0 ppm	Chloroform	94.58	100.00	95
Tetrahydrofuran	<5.0	5.0 ppm	Tetrahydrofuran	91.51	100.00	92
Benzene	<5.0	5.0 ppm	Benzene	82.58	100.00	83
Carbon Tetrachloride	<5.0	5.0 ppm	Carbon Tetrachloride	88.72	100.00	89
n-Hexane	<5.0	5.0 ppm	n-Hexane	87.58	100.00	88
Toluene	<5.0	5.0 ppm	Toluene	214.45	200.00	107
Diethyl Ether	<10.0	10.0 ppm	Diethyl Ether			

Potency Quality Control Report HPLC Analysis

Opening CCV			Closing CCV			
Analyte List	Recovery (ppm)	Reporting Limit	Analyte List	Recovery (ppm)	True Value (ppm)	Recovery %
CBN-V	<2.0	2.0 ppm	CBN-V	9.71	10.00	102
CBN-A	<10.0	10.0 ppm	CBN-A	48.18	50.00	100
CBG	<2.0	2.0 ppm	CBG	9.67	10.00	96
CBH	<10.0	10.0 ppm	CBH	47.79	50.00	101
THC-V	<2.0	2.0 ppm	THC-V	10.23	10.00	103
CBN	<10.0	10.0 ppm	CBN	48.21	50.00	101
Delta 9-THC	<10.0	10.0 ppm	Delta 9-THC	48.75	50.00	102
THC	<2.0	2.0 ppm	THC	9.80	10.00	99
THCA	<10.0	10.0 ppm	THCA	47.91	50.00	100
Delta 8-THC	<10.0	10.0 ppm	Delta 8-THC	190.02	1000.00	109

Terpene Quality Control Report GCMS Analysis

Opening CCV			Closing CCV			
Analyte List	Recovery (ppm)	Reporting Limit	Analyte List	Recovery (ppm)	True Value (ppm)	Recovery %
alpha-Pinene	<1.0	1.0 ppm	alpha-Pinene	44.70	50.00	89
Camphene	<1.0	1.0 ppm	Camphene	46.17	50.00	92
beta-Pinene	<1.0	1.0 ppm	beta-Pinene	39.87	50.00	80
beta-Myrcene	<1.0	1.0 ppm	beta-Myrcene	42.97	50.00	86
beta-Phellandrene	<1.0	1.0 ppm	beta-Phellandrene	44.88	50.00	90
gamma-Terpinene	<1.0	1.0 ppm	gamma-Terpinene	45.45	50.00	91
limonene	<1.0	1.0 ppm	limonene	45.29	50.00	91
(1R,2S)-1,8-Cineol	<1.0	1.0 ppm	(1R,2S)-1,8-Cineol	44.63	50.00	89
alpha-Terpinene	<1.0	1.0 ppm	alpha-Terpinene	45.57	50.00	91
Oocimene Isomer 1	<1.0	1.0 ppm	Oocimene Isomer 1	44.52	50.00	89
(R)-(+)-Limonene	<1.0	1.0 ppm	(R)-(+)-Limonene	43.59	50.00	87
Oocimene Isomer 2	<1.0	1.0 ppm	Oocimene Isomer 2	44.63	50.00	89
Eucalyptol (1,8-Cineol)	<1.0	1.0 ppm	Eucalyptol (1,8-Cineol)	43.90	50.00	88
gamma-Terpinene	<1.0	1.0 ppm	gamma-Terpinene	44.03	50.00	88
Sabinene Hydrate	<1.0	1.0 ppm	Sabinene Hydrate	43.41	50.00	87
Terpinolene	<1.0	1.0 ppm	Terpinolene	47.32	50.00	95
Linalool	<1.0	1.0 ppm	Linalool	87.85	100.00	88
(1R)-(+)-alpha-Terpinene	<1.0	1.0 ppm	(1R)-(+)-alpha-Terpinene	48.30	50.00	97
(1R)-(+)-beta-Pinene	<1.0	1.0 ppm	(1R)-(+)-beta-Pinene	48.76	50.00	97
(1S)-alpha-Terpinene	<1.0	1.0 ppm	(1S)-alpha-Terpinene	87.59	100.00	88
Camphor	<1.0	1.0 ppm	Camphor	43.24	50.00	86
Isoborneol	<1.0	1.0 ppm	Isoborneol	46.52	50.00	93
Hexahydrothymol	<1.0	1.0 ppm	Hexahydrothymol	41.92	50.00	84
(+)-Borneol and (-)-Borneol	<1.0	1.0 ppm	(+)-Borneol and (-)-Borneol	44.39	50.00	89
alpha-Terpinolol	<1.0	1.0 ppm	alpha-Terpinolol	42.70	50.00	85
gamma-Terpinolol	<1.0	1.0 ppm	gamma-Terpinolol	49.64	50.00	99
Nerol	<1.0	1.0 ppm	Nerol	51.74	50.00	103
Geraniol	<1.0	1.0 ppm	Geraniol	39.62	50.00	79
(+)-Pulegone	<1.0	1.0 ppm	(+)-Pulegone	38.72	50.00	77
Geranyl Acetate	<1.0	1.0 ppm	Geranyl Acetate	49.54	50.00	99
alpha-Cedrene	<1.0	1.0 ppm	alpha-Cedrene	48.97	50.00	100
trans-Caryophyllene	<1.0	1.0 ppm	trans-Caryophyllene	44.06	50.00	88
alpha-Humulene	<1.0	1.0 ppm	alpha-Humulene	43.98	50.00	88
Valencene	<1.0	1.0 ppm	Valencene	50.34	50.00	101
beta-Humulol	<1.0	1.0 ppm	beta-Humulol	49.89	50.00	100
Quinone	<1.0	1.0 ppm	Quinone	43.81	50.00	88
(-)-Caryophyllene Oxide	<1.0	1.0 ppm	(-)-Caryophyllene Oxide	47.71	50.00	95
(+)-Cedrol	<1.0	1.0 ppm	(+)-Cedrol	46.25	50.00	93
(-)-Linalyl Acetate	<1.0	1.0 ppm	(-)-Linalyl Acetate	47.01	50.00	94