



Atlas Agriscience, LLC

Certificate of Analysis



ATLAS HEMP, LLC

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LAB#:129-March-2020

Received: 03/08/2019
Analyzed: 07/16/2019
Reported: 11/18/2019

DUTCHBERRY

This is the lab results for the Dutchberry Terpene Sample, ID:129

POTENCY

Total potential THC: 0
Total potential CBD: 0
Total cannabinoids: 0

Laboratory note : This product contains terpenes and terpenoids. It does not contain cannabinoids.



18251 Cascade Avenue S
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James P. Roe

Jim Roe
Scientific Director

Ben Hanson

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Director QA/QC

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TERPENES

1.64% Total	mass %	mg/g	LOD	LOQ
β-Eudesmol	0.062	0.62	0.02	0.09
alpha-Bisabolol	0.011	0.11	0.03	0.09
Linalool	0.01	0.1	0.04	0.13
alpha-Phellandrene	0.037	0.37	0.01	0.05
alpha-Terpinene	0.022	0.22	0.03	0.09
Terpinolene	0.512	5.12	0.00016	0.0013
Fenchol	0.003	0.03	0.02	0.09
3-Carene	0.025	0.25	0.01	0.09
D-Menthol	0.006	0.06	0.03	0.09
BetaCaryophyllene	0.108	1.08	0.03	0.05
Humulene	0.027	0.27	0.03	0.11
Menthol	< LOD	< LOD	0.03	0.09
Eucalyptol	< LOD	< LOD	0.05	0.19
Pulegone	< LOD	< LOD	0.03	0.09
Citronellol	< LOD	< LOD	0.04	0.09
cis-2-Pinanol	< LOD	< LOD	0.03	0.09
gamma-Terpineol	< LOD	< LOD	0.03	0.09
Dronabinol	< LOD	< LOD	0.03	0.09
Limonene	< LOD	< LOD	0.03	0.05
Borneol	< LOD	< LOD	0.03	0.09
alpha-Bergamotene	< LOD	< LOD	0.03	0.09
beta-Thujone	< LOD	< LOD	0.03	0.09
Isopulegol	< LOD	< LOD	0.03	0.09
alpha-Cedrene	< LOD	< LOD	0.03	0.32
Eudesmadiene	< LOD	< LOD	0.03	0.09
delta8-THC	< LOD	< LOD	0.03	0.09
Cannabidiol	< LOD	< LOD	0.03	0.09
Caryophyllene oxide	< LOD	< LOD	0.03	0.09
beta-Farnesene	< LOD	< LOD	0.03	0.09
Nerolidol	< LOD	< LOD	0.03	0.09
alpha-Guaiene	< LOD	< LOD	0.03	0.09
alpha-Ocimene	< LOD	< LOD	0.03	0.09
Caryophyllene	< LOD	< LOD	0.03	0.09
trans-beta-Ocimene	< LOD	< LOD		
gamma-Elemene	< LOD	< LOD	0.03	0.09
beta-Elemene	< LOD	< LOD	0.03	0.09
α-Thujone	< LOD	< LOD	0.03	0.09
d9-THC	< LOD	< LOD	0.03	0.09

	GCMS			
	mass %	mg/g	LOD	LOQ
Guaiol	0.044	0.44	0.01	0.09
Bisabolene	0.054	0.54	0.03	0.11
alpha-Pinene	0.045	0.45	0.006	0.02
gamma-Terpinene	0.012	0.12	0.01	0.05
4-Carvomenthenol	0.005	0.05	0.03	0.09
beta-Pinene	0.064	0.64	0.03	0.05
Sabinene	0.007	0.07	0.1	0.32
Myrcene	0.399	3.99	0.02	0.07
D-Limonene	0.027	0.27	0.03	0.09
alpha-Farnesene	0.017	0.17	0.03	0.09
beta-Ocimene	0.142	1.42	0.03	0.09
Camphor	< LOD	< LOD	0.01	0.09
Camphene	< LOD	< LOD	0.008	0.09
p-Cymene	< LOD	< LOD	0.01	0.09
cineole	< LOD	< LOD	0.03	0.09
Cycloheptanone	< LOD	< LOD		
Fenchone	< LOD	< LOD	0.01	0.09
Terpineol	< LOD	< LOD	0.07	0.23
4-Thujanol	< LOD	< LOD	0.08	0.27
Cedrol	< LOD	< LOD	0.03	0.09
Alloaromadendrene	< LOD	< LOD	0.03	0.09
alpha-Bulnesene	< LOD	< LOD	0.03	0.09
Carvone	< LOD	< LOD	0.03	0.09
beta-Thujene	< LOD	< LOD	0.03	0.09
Geraniol	< LOD	< LOD	0.03	0.09
Nerol	< LOD	< LOD	0.03	0.09
Geranyl Acetate	< LOD	< LOD	0.03	0.09
Phytol	< LOD	< LOD	0.03	0.09
Germacrene B	< LOD	< LOD	0.03	0.09
Cannabigerol	< LOD	< LOD	0.03	0.09
cis-Nerolidol	< LOD	< LOD	0.03	0.09
cis-beta-ocimene	< LOD	< LOD	0.03	0.09
trans-2-Pinanol	< LOD	< LOD	0.03	0.09
Isoborneol, (-)	< LOD	< LOD	0.008	0.09
Cannabigerolic Acid	< LOD	< LOD	0.03	0.09
Valencene	< LOD	< LOD	0.03	0.09
Sabinene Hydrate	< LOD	< LOD	0.03	0.09

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CANNABINOIDs

	mass %	mg/g	LOD	LOQ		mass %	mg/g	LOD	LOQ
Δ9-THC	0	0	0.01	0.03	Δ8-THC	0	0	0.01	0.03
THCa	0	0	0.01	0.03	THCV	0	0	0.01	0.03
CBD	0	0	0.01	0.03	THCVA	0	0	0.01	0.03
CBDa	0	0	0.01	0.03	CBDV	0	0	0.01	0.03
CBG	0	0	0.01	0.03	CBDVA	0	0	0.01	0.03
CBGa	0	0	0.01	0.03	CBCV	0	0	0.01	0.03
CBN	0	0	0.01	0.03	CBCO	0	0	0.01	0.03
CBNa	0	0	0.01	0.03	CBL	0	0	0.01	0.03
CBC	0	0	0.01	0.03	CBLA	0	0	0.01	0.03
CBCa	0	0	0.01	0.03	CBT	0	0	0.01	0.03

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PESTICIDES

3-Hydroxycarbofur	< LOD	0.075	0.25	Abamectin B1a	< LOD	0.15	0.45
Acephate	< LOD	0.1	0.3	Acetamiprid	< LOD	0.033	0.1
Aldicarb Sulfone	< LOD	0.05	0.2	Aldicarb	< LOD	0.075	0.25
Aminocarb	< LOD	0.033	0.1	Azoxystrobin	< LOD	0.05	0.2
Benalaxyd	< LOD	0.05	0.15	Bifenthrin	< LOD	0.05	0.2
Bifenazate	< LOD	0.05	0.2	Boscalid	< LOD		
Butafenacil	< LOD	0.05	0.15	Carbaryl	< LOD	0.05	0.2
Carbetamide	< LOD	0.05	0.15	Carbofuran	< LOD	0.05	0.15
Carboxin	< LOD	0.05	0.15	Carfentrazone-et	< LOD	0.05	0.2
Chlorantraniliprole	< LOD	0.075	0.25	Chlorotoluron	< LOD	0.05	0.2
Chloroxuron	< LOD	0.05	0.15	Chlorpyrifos	< LOD	0.075	0.25
Clofentezine	< LOD			Clothianidin	< LOD	0.05	0.15
Cyazofamid	< LOD	0.05	0.15	Cycluron	< LOD	0.05	0.15
Diazinon	< LOD	0.05	0.2	Dicrotophos	< LOD	0.05	0.15
Diethofencarb	< LOD	0.05	0.15	Dimethoate	< LOD	0.05	0.2
Dimethomorph	< LOD	0.05	0.2	Dimoxystrobin	< LOD	0.05	0.15
Diuron	< LOD	0.1	0.3	Epoxiconazole	< LOD	0.075	0.25
Ethiofencarb	< LOD	0.075	0.25	Ethoprophos	< LOD	0.1	0.4
Etofenprox	< LOD	0.04	0.125	Etoxazole	< LOD	0.05	0.2
Fenamidone	< LOD	0.05	0.15	Fenazaquin	< LOD	0.05	0.2
Fenoxy carb	< LOD	0.05	0.2	Fenpyroximate	< LOD	0.04	0.125
Fenuron	< LOD	0.033	0.1	Fipronil	< LOD	0.1	0.3
Flonicamid	< LOD			Fluazinam	< LOD	0.075	0.25
Fludioxonil	< LOD			Flufenacet	< LOD	0.05	0.2
Fluometuron	< LOD	0.05	0.2	Flutolanil	< LOD	0.05	0.2
Fuberidazole	< LOD	0.033	0.1	Furalaxyd	< LOD	0.05	0.15
Furathiocarb	< LOD	0.05	0.2	Hexythiazox	< LOD	0.05	0.2
Imazalil	< LOD	0.1	0.4	Imidacloprid	< LOD	0.05	0.2
Indoxacarb	< LOD	0.05	0.2	Iprovalicarb	< LOD	0.05	0.2
Isopropcarb	< LOD	0.075	0.25	Isoproturon	< LOD	0.05	0.15
Kresoxym-methyl	< LOD	0.1	0.3	Malathion	< LOD	0.05	0.2
Mandipropamid	< LOD	0.05	0.2	Mefenacet	< LOD	0.05	0.15
Metalaxyd	< LOD	0.033	0.1	Methabenzthiazu	< LOD	0.05	0.15
Methamidophos	< LOD	0.05	0.15	Methiocarb	< LOD		
Methomyl	< LOD	0.05	0.2	Methoprotryne	< LOD	0.05	0.2
Methoxyfenozide	< LOD	0.05	0.15	Mexacarbate	< LOD	0.033	0.1
Monocrotophos	< LOD	0.05	0.15	Myclobutanil	< LOD	0.075	0.25
Nitenpyram	< LOD	0.05	0.15	Omethoate	< LOD	0.05	0.2
Oxadixyl	< LOD	0.075	0.25	Oxamyl	< LOD	0.033	0.1
Paclobutrazol	< LOD	0.05	0.15	Permethrin	< LOD	0.05	0.2
Phosmet	< LOD			Picoxytostrobin	< LOD	0.05	0.2
Piperonyl Butoxide	< LOD	0.05	0.15	Pirimicarb	< LOD	0.05	0.15
Prometon	< LOD	0.05	0.2	Propamocarb	< LOD	0.04	0.125
Propargite	< LOD	0.05	0.15	Propoxur	< LOD	0.04	0.125
Pymetrozine	< LOD	0.05	0.2	Pyracarbolid	< LOD	0.04	0.125
Pyraclostrobin	< LOD	0.1	0.3	Pyrethrin I	< LOD		
Pyrethrin II	< LOD	0.075	0.25	Pyridaben	< LOD	0.05	0.2
Pyriproxyfen	< LOD	0.04	0.125	Quinoxyfen	< LOD	0.033	0.1
Rotenone	< LOD	0.05	0.15	Spinosad A	< LOD	0.05	0.2
Spinosad D	< LOD	0.05	0.2	Spiromesifen	< LOD	0.04	0.125
Spirotetramat	< LOD	0.033	0.1	Spiroxamine	< LOD	0.05	0.15
Tebuconazole	< LOD			Tebufenozide	< LOD	0.05	0.15
Tebuthiuron	< LOD			Thiacloprid	< LOD	0.05	0.15
Thiamethoxam	< LOD	0.05	0.2	Thiobencarb	< LOD	0.05	0.2
Thiophanate-Meth	< LOD	0.033	0.1	Tricyclazole	< LOD	0.05	0.15
Trifloxystrobin	< LOD	0.05	0.2	Triflumizole	< LOD	0.05	0.15
Uniconazole	< LOD	0.1	0.4	Vamidothion	< LOD	0.033	0.1
Zoxamide	< LOD	0.05	0.2				



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HEAVY METALS

	<u>µg/g</u>	LOD	LOQ
Arsenic (As)	< LOD	0.004	0.012
Cadmium (Cd)	< LOD	0.002	0.008
Lead (Pb)	< LOD	0.002	0.004
Mercury (Hg)	< LOD	0.004	0.018

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