



Atlas Agriscience, LLC

Certificate of Analysis



ATLAS HEMP, LLC

LAB#:WA58444-2

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

JACK HERER

The is the lab results for the Jack Herer Terpene Sample, ID:40

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.



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Ben Hanson
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TERPENES

% Total	mass %	mg/g	LOD	LOQ	GCMS				
					mass %	mg/g	LOD	LOQ	
Menthol	0	0	0.03	0.09	Camphor	0	0	0.01	0.09
Eucalyptol	0.0022	0.022	0.05	0.19	Linalool	0.0064	0.064	0.04	0.13
Camphene	0.0018	0.018	0.008	0.09	alpha-Pinene	0.0741	0.741	0.006	0.02
Pulegone	0	0	0.03	0.09	alpha-Phellandrene	0.0117	0.117	0.01	0.05
gamma-Terpinene	0.0029	0.029	0.01	0.05	alpha-Terpinene	0.0049	0.049	0.03	0.09
p-Cymene	0.0051	0.051	0.01	0.09	Citronellol	0	0	0.04	0.09
Terpinolene	0.2752	2.752	0.00016	0.0013	Fenchone	0.0001	0.001	0.01	0.09
beta-Pinene	0.07	0.7	0.03	0.05	Fenchol	0.0017	0.017	0.02	0.09
Terpineol	0.0007	0.007	0.07	0.23	Sabinene	0.0011	0.011	0.1	0.32
3-Carene	0.0142	0.142	0.01	0.09	Myrcene	0.3946	3.946	0.02	0.07
Borneol	0.0001	0.001	0.03	0.09	Cedrol	0.0001	0.001	0.03	0.09
Alloaromadendrene	0	0	0.03	0.09	Isopulegol	0	0	0.03	0.09
Guaiol	0	0	0.01	0.09	D-Limonene	0.0544	0.544	0.03	0.09
alpha-Cedrene	0	0	0.03	0.32	Geraniol	0	0	0.03	0.09
Nerol	0	0	0.03	0.09	Geranyl Acetate	0	0	0.03	0.09
alpha-Bisabolol	0	0	0.03	0.09	Caryophyllene oxide	0.0018	0.018	0.03	0.09
Phytol	0	0	0.03	0.09	BetaCaryophyllene	0.0172	0.172	0.03	0.05
alpha-Farnesene	0	0	0.03	0.09	beta-Farnesene	0.0016	0.016	0.03	0.09
Humulene	0.0036	0.036	0.03	0.11	beta-Ocimene	0.0525	0.525	0.03	0.09
Nerolidol	0	0	0.03	0.09	cis-Nerolidol	0	0	0.03	0.09
alpha-Ocimene	0.0007	0.007	0.03	0.09	cis-beta-ocimene	0	0	0.03	0.09
Isoborneol, (-)-	0	0	0.008	0.09	Valencene	0	0	0.03	0.09
Sabinene Hydrate	0	0	0.03	0.09					
cineole	< LOD	< LOD	0.03	0.09	cis-2-Pinanol	< LOD	< LOD	0.03	0.09
4-Carvomenthenol	< 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
4-Thujanol	< LOD	< LOD	0.08	0.27	alpha-Bergamotene	< LOD	< LOD	0.03	0.09
beta-Thujone	< LOD	< LOD	0.03	0.09	β-Eudesmol	< LOD	< LOD	0.02	0.09
alpha-Bulnesene	< LOD	< LOD	0.03	0.09	D-Menthol	< LOD	< LOD	0.03	0.09
Carvone	< LOD	< LOD	0.03	0.09	beta-Thujene	< LOD	< LOD	0.03	0.09
Eudesmadiene	< LOD	< LOD	0.03	0.09	delta8-THC	< LOD	< LOD	0.03	0.09
Cannabidiol	< LOD	< LOD	0.03	0.09	Bisabolene	< LOD	< LOD	0.03	0.11
Germacrene B	< LOD	< LOD	0.03	0.09	Cannabigerol	< LOD	< LOD	0.03	0.09
alpha-Guaiene	< LOD	< LOD	0.03	0.09	Caryophyllene	< LOD	< LOD	0.03	0.09
trans-2-Pinanol	< LOD	< LOD	0.03	0.09	gamma-Elemene	< LOD	< LOD	0.03	0.09
Cannabigerolic Acid	< 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

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



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CANNABINOIDS

									HPLC-PDA		
	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
Benalaxyl	< 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
Fenoxycarb	< 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	Furalaxyl	< 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
Isoprocarb	< 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
Metalaxyl	< 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			Picoxystrobin	< 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	Quinoxifen	< 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-Methy	< 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

	µg/g	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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