



Atlas Agriscience, LLC

Certificate of Analysis



ATLAS HEMP, LLC

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1-800-801-ATLAS

LAB#:210124

Received: 09/25/2021
Analyzed: 09/28/2021
Reported: 09/30/2021

HEMP STAR

The is the lab results for the HEMP STAR Terpene Sample, ID:267

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
Tukwila, WA 98188
(253) 277-3563
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Jim Roe
Scientific Director

Ben Hanson
Director QA/QC

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FLAVORS & AROMATIC COMPOUNDS

HPLC-F

60.942% Total	µg/g	LOD	LOQ		µg/g	a	LOD	LOQ
Cis-3-Hexen-1-ol	0	0.001	0.001	Methyl hexanoate	0		0.001	0.001
Methyl anthranilate	0	0.001	0.001	Ethyl propionate	0		0.001	0.001
Isoamyl butyrate	0	0.001	0.001	Furaneol	0		0.001	0.001
Octanal	0	0.001	0.001	Propionate	0		0.001	0.001
Citral	0	0.001	0.001	Decanal	0		0.001	0.001
Isoamyl acetate	0	0.001	0.001		0		0.001	0.001

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TERPENES

GCMS

60.942% Total	mass %	mg/g	LOD	LOQ		mass %	mg/g	LOD	LOQ	
Eucalyptol	0.204	2.04	0.05	0.19		Borneol	0.03	0.3	0.03	0.09
D-Menthol	0.028	0.28	0.03	0.09		D-Limonene	5.056	50.56	0.03	0.09
Caryophyllene oxide	0.053	0.53	0.03	0.09		Bisabolene	0.206	2.06	0.03	0.11
BetaCaryophyllene	3.952	39.52	0.03	0.05		alpha-Farnesene	0.106	1.06	0.03	0.09
beta-Farnesene	0.233	2.33	0.03	0.09		Humulene	0.884	8.84	0.03	0.11
Nerolidol	0.027	0.27	0.03	0.09		cis-Nerolidol	0.079	0.79	0.03	0.09
alpha-Ocimene	0.239	2.39	0.03	0.09		trans-beta-Ocimene	4.813	48.13		
Valencene	0.223	2.23	0.03	0.09		Myrcene	36.817	368.17	0.02	0.07
3-Carene	0.078	0.78	0.01	0.09		Terpineol	0.069	0.69	0.07	0.23
Linalool	0.315	3.15	0.04	0.13		Camphene	0.148	1.48	0.008	0.09
alpha-Pinene	2.936	29.36	0.006	0.02		alpha-Phellandrene	0.135	1.35	0.01	0.05
gamma-Terpinene	0.08	0.8	0.01	0.05		alpha-Terpinene	0.082	0.82	0.03	0.09
p-Cymene	0.021	0.21	0.01	0.09		cinole	0.201	2.01	0.03	0.09
alpha-Bisabolol	0.026	0.26	0.03	0.09		4-Carvomenthenol	0.027	0.27	0.03	0.09
Terpinolene	1.874	18.74	0.00016	0.0013		Fenchone	0.03	0.3	0.01	0.09
beta-Pinene	1.77	17.7	0.03	0.05		Fenchol	0.194	1.94	0.02	0.09
Sabinene Hydrate	0.008	0.08	0.03	0.09						
Octane	< LOD	< LOD				1-Octanol	< LOD	< LOD		
Toluene	< LOD	< LOD				Menthol	< LOD	< LOD	0.03	0.09
Camphor	< LOD	< LOD	0.01	0.09		CBN	< LOD	< LOD		
THC	< LOD	< LOD				Bornyl acetate	< LOD	< LOD		
Pulegone	< LOD	< LOD	0.03	0.09		Thymol	< LOD	< LOD		
Methyl eugenol	< LOD	< LOD				Butyl butyrate	< LOD	< LOD		
2-Heptanone	< LOD	< LOD				1-Hexanol	< LOD	< LOD		
1-Heptanol	< LOD	< LOD				Heptanal	< LOD	< LOD		
Methyl chavicol	< LOD	< LOD				Citronellol	< LOD	< LOD	0.04	0.09
Hexyl acetate	< LOD	< LOD				6-Methyl-5-hepten-2-one	< LOD	< LOD		
cis-2-Pinanol	< LOD	< LOD	0.03	0.09		Carvacrol	< LOD	< LOD		
Cycloheptanone	< LOD	< LOD				beta-Cadinene	< LOD	< LOD		
gamma-Terpineol	< LOD	< LOD	0.03	0.09		1,1-Dimethoxycyclohexane	< LOD	< LOD		
Dronabinol	< LOD	< LOD	0.03	0.09		Hexyl isobutyrate	< LOD	< LOD		
Hexyl butyrate	< LOD	< LOD				alpha-Thujene	< LOD	< LOD		
Sabinene	< LOD	< LOD	0.1	0.32		Limonene	< LOD	< LOD	0.03	0.05
Hexyl hexanoate	< LOD	< LOD				CBC	< LOD	< LOD		
Nonanal	< LOD	< LOD				4-Thujanol	< LOD	< LOD	0.08	0.27
Cedrol	< LOD	< LOD	0.03	0.09		Perillene	< LOD	< LOD		
alpha-Bergamotene	< LOD	< LOD	0.03	0.09		Hexyl propanoate	< LOD	< LOD		
Bulnesol	< LOD	< LOD				Alloaromadendrene	< LOD	< LOD	0.03	0.09
beta-Thujone	< LOD	< LOD	0.03	0.09		beta-Eudesmol	< LOD	< LOD	0.02	0.09
Elemol	< LOD	< LOD				gamma-Cadinene	< LOD	< LOD		
Ledol	< LOD	< LOD				THCV	< LOD	< LOD		
delta-Guaiene	< LOD	< LOD	0.03	0.09		THCA	< LOD	< LOD		
Camphene hydrate	< LOD	< LOD				CBDA	< LOD	< LOD		
Isopulegol	< LOD	< LOD	0.03	0.09		Guaiol	< LOD	< LOD	0.01	0.09
Longifolene	< LOD	< LOD				Hinesol	< LOD	< LOD		
Carvone	< LOD	< LOD	0.03	0.09		alpha-Cedrene	< LOD	< LOD	0.03	0.32
alpha-Cubebene	< LOD	< LOD				beta-Selinene	< LOD	< LOD		
alpha-Ylangene	< LOD	< LOD				(+)-trans-Limonene oxide	< LOD	< LOD		
beta-Thujene	< LOD	< LOD	0.03	0.09		Junipercamphor	< LOD	< LOD		
gamma-Patchoulene	< LOD	< LOD				gamma-Selinene	< LOD	< LOD		

Eudesmadiene	< LOD	< LOD	0.03	0.09	6:9-Guaiadiene	< LOD	< LOD		
alpha-Panasinsen	< LOD	< LOD			Geraniol	< LOD	< LOD	0.03	0.09
delta8-THC	< LOD	< LOD	0.03	0.09	Nerol	< LOD	< LOD	0.03	0.09
CBD	< LOD	< LOD	0.03	0.09	Geranyl Acetate	< LOD	< LOD	0.03	0.09
Phytol	< LOD	< LOD	0.03	0.09	5.78 Ethyl tiglate	< LOD	< LOD		
Germacrene B	< LOD	< LOD	0.03	0.09	beta-Ocimene	< LOD	< LOD	0.03	0.09
CBG	< LOD	< LOD	0.03	0.09	alpha-Guaiene	< LOD	< LOD	0.03	0.09
cis-beta-ocimene	< LOD	< LOD	0.03	0.09	Caryophyllene	< LOD	< LOD	0.03	0.09
trans-2-Pinanol	< LOD	< LOD	0.03	0.09	(Z)-3-Hexenyl butyrate	< LOD	< LOD		
Hotrienol	< LOD	< LOD			Isoborneol, (-)-	< LOD	< LOD	0.008	0.09
Zonarene	< LOD	< LOD			Selina-3:7(11)-diene	< LOD	< LOD		
trans-alpha-Bergamotene	< LOD	< LOD			10-epi-gamma-Eudesmol	< LOD	< LOD		
beta-Acorenol	< LOD	< LOD			gamma-Eudesmol	< LOD	< LOD		
gamma-Murolene	< LOD	< LOD			gamma-Elemene	< LOD	< LOD	0.03	0.09
alpha-Bulnesene	< LOD	< LOD			Cannabigerolic Acid	< LOD	< LOD	0.03	0.09
beta-Elemene	< LOD	< LOD	0.03	0.09	beta-Bisabolene	< LOD	< LOD		
Allohimachalol	< LOD	< LOD			Humulene epoxide II	< LOD	< LOD		
alpha-Selinene	< LOD	< LOD			Sativene	< LOD	< LOD		
beta-Himachalene	< LOD	< LOD			CBDV	< LOD	< LOD		
beta-Pinene oxide	< LOD	< LOD			alpha-Thujone	< LOD	< LOD	0.03	0.09
alpha-Murolene	< LOD	< LOD			alpha-Amorphene	< LOD	< LOD		
Bicyclogermacrene	< LOD	< LOD			beta-Guaiene	< LOD	< LOD		
alpha-Gurjunene	< LOD	< LOD			allo-Aromadendrene	< LOD	< LOD		
CBGVA	< LOD	< LOD			CBDVA	< LOD	< LOD		
alpha-Copaene	< LOD	< LOD			gamma-Vetivenene	< LOD	< LOD		
cis-alpha-Bergamotene	< LOD	< LOD			6:7-Epoxymyrcene	< LOD	< LOD		
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-Hydroxycarbofura	< 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-etf	< 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	Diclotophos	< 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	Etoazole	< 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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