



### Oregon Frost F1 Light Dep

Sample ID: G9I0598-01 Matrix: Industrial Hemp

Test ID: 1012312

Source ID:

Date Sampled: 09/23/19 Date Accepted: 09/23/19

Arete Hemp LLC

### Potency Analysis

Date/Time Extracted: 09/26/19 10:34

Analysis Method/SOP: 215

Batch Identification: 1939061

	LOQ (%)	% by Wt.	mg/g	Cannabinoids Profile	
Total THC	0.0098	0.5516	5.516		
Total CBD	0.0089	15.73	157.3		
THCA	0.0031	0.5611	5.611		
delta 9-THC	0.0098	0.0595	0.595		
delta 8-THC	0.0048	< LOQ	< LOQ		
THCV	0.0054	< LOQ	< LOQ		
THCVA	0.0020	< LOQ	< LOQ		
CBD	0.0067	0.3052	3.052		
CBDA	0.0089	17.59	175.9		
CBDV	0.0054	< LOQ	< LOQ		
CBDVA	0.0018	0.2345	2.345		
CBN	0.0032	< LOQ	< LOQ		
CBG	0.0008	0.1740	1.74		
CBGA	0.0008	1.681	16.81		
CBC	0.0096	0.0743	0.743		

Cannabinoid	Value
THCA	0.6
delta 9-THC	0.1
CBGA	1.7
CBDA	17.6
CBD	0.3
CBG	0.2
CBC	0.1
CBDVA	0.2
<b>Total</b>	<b>20.7</b>

### Moisture

Date/Time Extracted: 09/25/19 17:32

Analysis Method/SOP: 103

Moisture: 6.93 %

Potency Results are reported on a dry weight basis.

Total THC = delta 9-THC + (THCA \* 0.877)

Total CBD = CBD + (CBDA \* 0.877)

For Potency only delta 9-THC, THCA, CBD, CBDA are ORELAP accredited analytes.

Water Activity Action Level is 0.65. Results above 0.65 fail state testing requirements and will be highlighted Red.

Russell Kuhfeld  
Quality Officer - 9/27/2019



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### Terpene Analysis

Date/Time Extracted: 09/26/19 10:34

Analysis Method/SOP: 204

Monoterpenes	%	mg/g	Monoterpenes	%	mg/g
Camphene	< LOQ	< LOQ	Camphor	< LOQ	< LOQ
3-Carene	< LOQ	< LOQ	alpha-Cedrene	< LOQ	< LOQ
Cedrol	< LOQ	< LOQ	Endo-fenchyl alcohol	0.02859	0.2859
Eucalyptol	< LOQ	< LOQ	Fenchone	< LOQ	< LOQ
Geraniol	< LOQ	< LOQ	Geranyl acetate	< LOQ	< LOQ
Hexahydrothymol	< LOQ	< LOQ	Isoborneol	< LOQ	< LOQ
Isopulegol	< LOQ	< LOQ	Limonene	0.1027	1.027
Linalool	0.08422	0.8422	p-Mentha-1,5-diene	< LOQ	< LOQ
beta-Myrcene	0.1717	1.717	Ocimene	< LOQ	< LOQ
alpha-Pinene	0.05992	0.5992	beta-Pinene	0.02800	0.28
Pulegone	< LOQ	< LOQ	Sabinene	< LOQ	< LOQ
Sabinene hydrate	< LOQ	< LOQ	gamma-Terpinene	< LOQ	< LOQ
alpha-Terpinene	< LOQ	< LOQ	Terpineol	0.04211	0.4211
Terpinolene	< LOQ	< LOQ	B Y-Terpineol	< LOQ	< LOQ
Nerol	< LOQ	< LOQ	A-Terpineol	0.04211	0.4211
Borneol	< LOQ	< LOQ	Ocimene isomer II	< LOQ	< LOQ
Ocimene isomer I	< LOQ	< LOQ			
Sesquiterpenes	%	mg/g	Sesquiterpenes	%	mg/g
alpha-Bisabolol	0.07190	0.719	beta-Caryophyllene	0.1323	1.323
Caryophyllene Oxide	< LOQ	< LOQ	Guaiol	0.07520	0.752
alpha-Humulene	0.03621	0.3621	Nerolidol	0.1799	1.799
Valencene	0.01295	0.1295			
<b>Total Terpenes</b>	<b>1.026</b>	<b>10.26</b>			

<LOQ - Results below the Limit of Quantitation - Terpenes profile/analysis are not accredited to ORELAP TNI 2009 Quality Standards.

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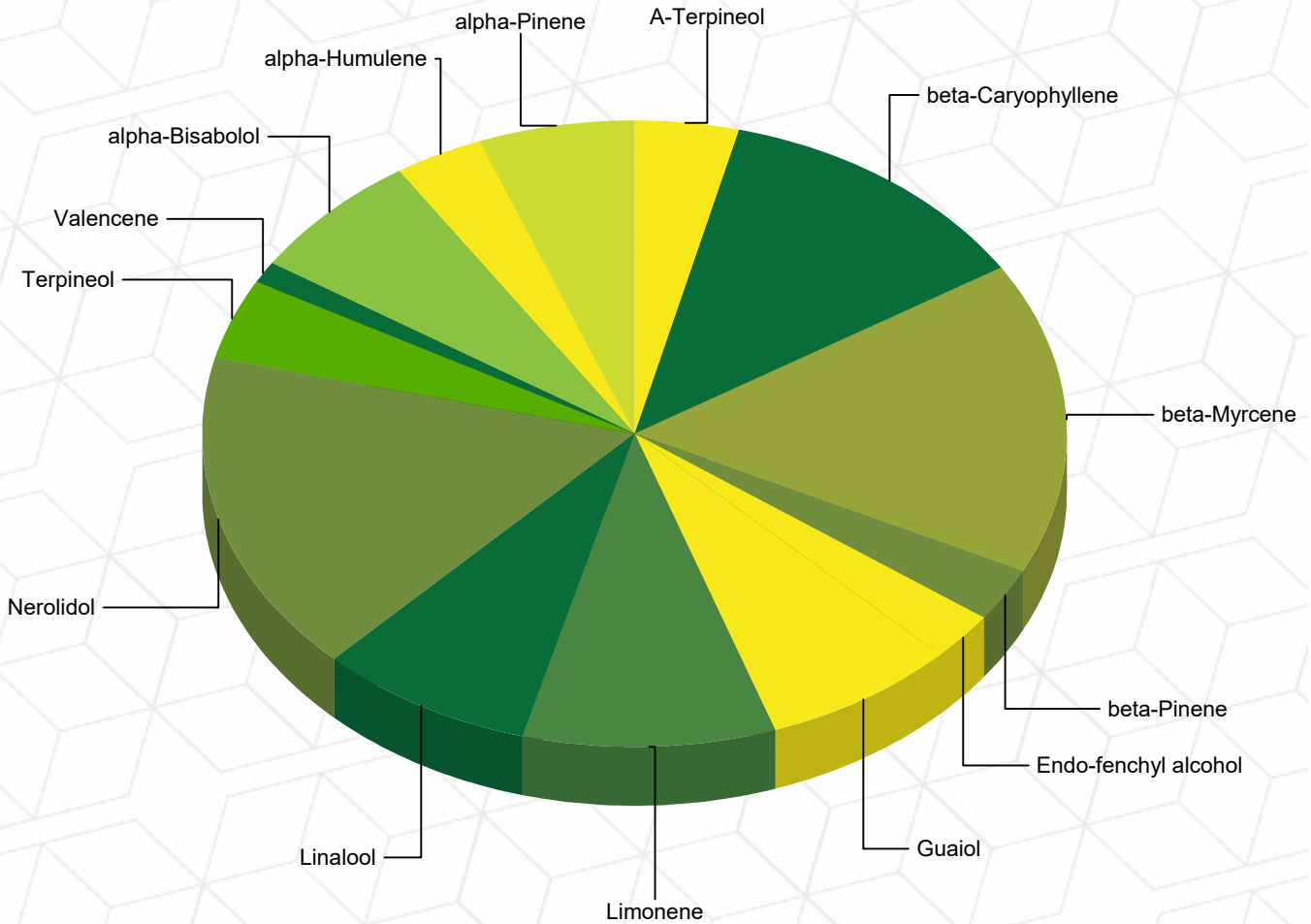
Source ID:

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Arete Hemp LLC

### Terpene Profile



### Percentage of Total Terpenes Identified

*Russell Kuhfeld*

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### Quality Control Potency

Batch: 1939061 - 215-Hemp

Blank(1939061-BLK1)						
Analyte	Result	LOQ	Units	%Recovery Limits	Extracted	Analyzed
THCA	< LOQ	0.0029	%		09/26/19 10:34	09/26/19 18:58
delta 9-THC	< LOQ	0.0091	%		09/26/19 10:34	09/26/19 18:58
delta 8-THC	< LOQ	0.0045	%		09/26/19 10:34	09/26/19 18:58
THCV	< LOQ	0.0051	%		09/26/19 10:34	09/26/19 18:58
THCVA	< LOQ	0.0019	%		09/26/19 10:34	09/26/19 18:58
CBD	< LOQ	0.0016	%		09/26/19 10:34	09/26/19 18:58
CBDA	< LOQ	0.0021	%		09/26/19 10:34	09/26/19 18:58
CBDV	< LOQ	0.0050	%		09/26/19 10:34	09/26/19 18:58
CBDVA	< LOQ	0.0016	%		09/26/19 10:34	09/26/19 18:58
CBN	< LOQ	0.0030	%		09/26/19 10:34	09/26/19 18:58
CBG	< LOQ	0.000790	%		09/26/19 10:34	09/26/19 18:58
CBGA	< LOQ	0.000790	%		09/26/19 10:34	09/26/19 18:58
CBC	< LOQ	0.0090	%		09/26/19 10:34	09/26/19 18:58

Reference(1939061-SRM1)						
Analyte	% Recovery	LOQ	Units	%Recovery Limits	Extracted	Analyzed
THCA	94.6	0.0029	%	80-120	09/26/19 10:34	09/26/19 19:20
delta 9-THC	103	0.0091	%	80-120	09/26/19 10:34	09/26/19 19:20
CBD	102	0.0016	%	80-120	09/26/19 10:34	09/26/19 19:20
CBDA	94.0	0.0021	%	80-120	09/26/19 10:34	09/26/19 19:20

### Moisture Content

Batch: 1939054 - 103

Reference(1939054-SRM1)						
Analyte	% Recovery	LOQ	Units	%Recovery Limits	Extracted	Analyzed
Percent Moisture	87.1		%	80-120	09/25/19 17:32	09/25/19 17:32

Reference(1939054-SRM2)						
Analyte	% Recovery	LOQ	Units	%Recovery Limits	Extracted	Analyzed
Percent Moisture	90.5		%	80-120	09/25/19 17:32	09/25/19 17:32

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