

PR WH PB Carob M/L Breed

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CERTIFICATE OF ANALYSIS

# Prepared for: **PET RELEAF**

8100 SOUTHPARK WAY A3

LITTLETON, CO USA 80120

Batch ID or Lot Number:	Test:	Reported:	USDA License:	
Lot: 152395	<b>Potency</b>	<b>14Nov2023</b>	N/A	
Matrix:	Test ID:	Started:	Sampler ID:	
Unit	T000261298	12Nov2023	N/A	
	Method(s): TM14 (HPLC-DAD)	Received: 09Nov2023	Status: N/A	

Cannabinoids	LOD (mg)	<b>LOQ</b> (mg)	Result (mg)	<b>Result</b> (mg/g)	Notes
Cannabichromene (CBC)	0.147	0.483	<loq< td=""><td><loq< td=""><td># of Servings = 1,</td></loq<></td></loq<>	<loq< td=""><td># of Servings = 1,</td></loq<>	# of Servings = 1,
Cannabichromenic Acid (CBCA)	0.134	0.442	ND	ND	Sample
Cannabidiol (CBD)	0.407	1.079	7.210	1.00	Weight=7.586g
Cannabidiolic Acid (CBDA)	0.418	1.107	ND	ND	
Cannabidivarin (CBDV)	0.096	0.255	ND	ND	
Cannabidivarinic Acid (CBDVA)	0.174	0.462	ND	ND	
Cannabigerol (CBG)	0.083	0.274	<loq< td=""><td><loq< td=""><td></td></loq<></td></loq<>	<loq< td=""><td></td></loq<>	
Cannabigerolic Acid (CBGA)	0.348	1.146	ND	ND	
Cannabinol (CBN)	0.109	0.358	ND	ND	
Cannabinolic Acid (CBNA)	0.237	0.782	ND	ND	, ,
Delta 8-Tetrahydrocannabinol (Delta 8-THC)	0.415	1.366	ND	ND	
Delta 9-Tetrahydrocannabinol (Delta 9-THC)	0.377	1.240	ND	ND	
Delta 9-Tetrahydrocannabinolic Acid (THCA-A)	0.334	1.099	ND	ND	,
Tetrahydrocannabivarin (THCV)	0.076	0.249	ND	ND	9
Tetrahydrocannabivarinic Acid (THCVA)	0.294	0.969	ND	ND	
Total Cannabinoids			7.210	1.00	
Total Potential THC			ND	ND	-
Total Potential CBD			7.210	1.00	
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# Approved: Paul Gennings QC 11-14-23

#### **Final Approval**

PREPARED BY / DATE

Karen Winternheimer 14Nov2023 11:35:00 AM MST

amantha

Sam Smith 14Nov2023 11:36:00 AM MST



APPROVED BY / DATE

https://results.botanacor.com/api/v1/coas/uuid/759cc3db-45bd-48b2-9b20-c8c901a94446

#### Definitions

% = % (w/w) = Percent (weight of analyte / weight of product). ND = None Detected (defined by dynamic range of the method). Total Potential Delta 9-THC or CBD is calculated to take into account the loss of a carboxyl group during decarboxylation step, using the following formulas: Total Potential Delta 9-THC = Delta 9-THC + (Delta 9-THCa \*(0.877)) and Total CBD = CBD + (CBDa \*(0.877)).

Testing results are based solely upon the sample submitted to SC Laboratories, Inc., in the condition it was received. SC Laboratories, Inc., warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices using validated methods. Data was generated using an unbroken chain of comparison to NIST traceable Reference Standards and Certified Reference Materials. This report may not be reproduced, except in full, without the written approval of SC Laboratories, Inc. ISO/IEC 17025:2017 A2LA Cert #: 4329.02 Chemical; 4329.03 Biological.





Utah Department of Agriculture and Food **Division of Laboratory Services** 4451 South 2700 West Taylorsville, Utah 84129 (801) 816-3840

#### **CERTIFICATE OF ANALYSIS**

#### Sample Information

UDAF Lab	HP24088-9	Issue Date:	04/08/2024
Client:	Altmed Pets dba Pet Releaf	Client Email:	jennk@petreleaf.com
Producer:	Altmed Pets dba Pet Releaf	Sample Type:	Pet Food
Description:	Stress PB Carob 6mg		
Batch/Lot Number:	152395	Date Received:	03/28/2024
Date Collected:		Collected By:	Self-Submitted



Notes:

#### Testing Summary

Testing Summary				Status:	PASS
Analysis:	Testing Date:	Status:	Notes:		
Cannabinoids	04/03/2024	PASS			
Foreign Matter	03/29/2024	PASS			
Microbials	Plating: 04/01/2024 PCR: 04/02/2024	PASS			
Pesticides	04/04/2024	PASS			
Heavy Metals	04/01/2024	PASS			
Residual Solvents	04/02/2024	PASS			
Mycotoxins	04/03/2024	PASS			

Date: 04/08/2024 Approved By: Brandon Forsyth, Ph.D State Chemist



Cannabinoid Analysis			Status: PASS
Sample ID:	HP24088-9	Description:	Stress PB Carob 6mg
Testing Date:	04/03/2024	Reviewed By:	Cameron Cheyne

Method: ACL.AM.003 Analysis performed using High-Performance Liquid Chromatography (HPLC-DAD)

Analyte	Abbreviation	CAS Number	% (w/w)	mg/g
Δ9-Tetrahydrocannabidiol	Δ9-ΤΗΟ	1972-08-03	ND	ND
Δ8-Tetrahydrocannabidiol	Δ8-THC	5957-75-5	ND	ND
Δ9-Tetrahydrocannabinolic acid	THCA	23978-85-0	ND	ND
Δ9-Tetrahydrocannabivarin	THCV	31262-37-0	ND	ND
Cannabidiol	CBD	13956-29-1	0.10%	1
Cannabidiolic acid	CBDA	1244-58-2	ND	ND
Cannabidivarin	CBDV	24274-48-4	ND	ND
Cannabinol	CBN	521-35-7	ND	ND
Cannabigerol	CBG	25654-31-3	ND	ND
Cannabichromene	CBC	20675-51-8	ND	ND
Cannabigerolic acid	CBGA	25555-57-1	ND	ND
Cannabichromenic acid	CBCA	20408-52-0	ND	ND
Cannabicitran	CBTC	31508-71-1	ND	ND
9(R+S)-∆6a,10a-Tetrahydrocannabidiol	Δ3-THC	95720-01-07, 95720- 02-8	ND	ND
(6aR,9R)-Δ10-Tetrahydrocannabidiol	(6aR,9R)-Δ10-THC	95543-62-7	ND	ND
(6aR,9S)-Δ10-Tetrahydrocannabidiol	(6aR,9S)-Δ10-THC	95588-87-7	ND	ND
Total Cannabinoids			0.10%	1.00
Total THC			ND	ND
Total CBD			0.10%	1.00
Total THC Analogs			ND	ND

Mass Per Piece:

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Notes:

Total Cannabinoids is calculated as the direct sum of each of the cannabinoid values. Total THC is calculated as  $\Delta 9$ -THC + (THCA x 0.877) | Total CBD is calculated as CBD + (CBDA x 0.877). Total THC Analogs is calculated as  $\Delta 9$ -THC + (THCA x 0.877) +  $\Delta 8$ -THC + CBTC.

Status:

PASS

ND = Not Detected, NQ = Not Quantifiable, NT = Not Tested, <LOQ = Below the limit of quantification



Foreign Matter Analys	is		Status:	PASS
Sample ID:	HP24088-9	Description:	Stress PB Carob 6mg	
Testing Date:	03/29/2024	Reviewed By:	Brooke Smith	

Method: Analysis performed by visual inspection aided by magnification

Analyte	Foreign Matter Found	Status
Foreign Matter		PASS

Notes:



Microbial Analysis			Status:	PASS
Sample ID:	HP24088-9	Description:	Stress PB Carob 6mg	
Testing Date:	Plating: 04/01/2024 PCR: 04/02/2024	Reviewed By:	Brooke Smith	

Method: Analysis performed using plating methods

Analyte	Result (cfu/g)	Allowed Limit	Status
TAC	<250	10,000	PASS
ТҮМ	<250	1,000	PASS

Method: Analysis performed using Polymerase Chain Reaction (PCR)

Organism	Result	Required	Status
E. Coli	ND	$\checkmark$	PASS
Salmonella	ND	$\checkmark$	PASS
STEC	NT		
Pseudomonas	NT		
Aspergillus	NT		
Staph	ND	$\checkmark$	PASS

Notes:

TNTC = To Numerous To Count, NT = Not Tested, ND = Not Detected, DET = Detected



Pesticide Analysis			Status:	PASS
Sample ID:	HP24088-9	Description:	Stress PB Carob 6mg	
Testing Date:	04/04/2024	Reviewed By:	Cameron Cheyne	

#### Method: ACL.AM.008 Analysis performed using Liquid Chromatography - Mass Spectrometry (LC-MS/MS)

Analyte	CAS Number	Result (ppm)	Action Level (ppm)	Status	Analyte	CAS Number	Result (ppm)	Action Level (ppm)	Status
Abamectin	71751-41-2	ND	0.5	PASS	Imazlil	35554-44-0	ND	0.2	PASS
Acephate	30560-19-1	ND	0.4	PASS	Imidacloprid	138261-41-3	ND	0.4	PASS
Acequinocyl	57960-19-7	ND	2	PASS	Kresoxim-methyl	143390-89-0	ND	0.4	PASS
Acetamiprid	135410-20-7	ND	0.2	PASS	Malathion	121-75-5	ND	0.2	PASS
Aldicarb	0116-06-03	ND	0.4	PASS	Metalaxyl	57837-19-1	ND	0.2	PASS
Azoxystrobin	131860-33-8	ND	0.2	PASS	Methiocarb	2032-65-7	ND	0.2	PASS
Bifenazate	149877-41-8	ND	0.2	PASS	Methomyl	16752-77-5	ND	0.4	PASS
Bifenthrin	82657-04-03	ND	0.2	PASS	Methyl parathion	298-00-0	ND	0.2	PASS
Boscalid	188425-85-6	ND	0.4	PASS	MGK-264	113-48-4	ND	0.2	PASS
Carbaryl	63-25-2	ND	0.2	PASS	Myclobutanil	88671-89-0	ND	0.2	PASS
Carbofuran	1563-66-2	ND	0.2	PASS	Naled	300-76-5	ND	0.5	PASS
Chlorantraniliprole	500008-45-7	ND	0.2	PASS	Oxamyl	23135-22-0	ND	1	PASS
Chlorfenapyr	122453-73-0	ND	1	PASS	Paclobutrazol	76738-62-0	ND	0.4	PASS
Chlorpyrifos	2921-88-2	ND	0.2	PASS	Permethrins	52645-53-1	ND	0.2	PASS
Clofentezine	74115-24-5	ND	0.2	PASS	Phosmet	0732-11-6	ND	0.2	PASS
Cyfluthrin	68359-37-5	ND	1	PASS	Piperonyl Butoxide	51-03-6	ND	2	PASS
Cypermethrin	52315-07-08	ND	1	PASS	Prallethrin	23031-36-9	ND	0.2	PASS
Daminozide	1596-84-5	ND	1	PASS	Propiconazole	60207-90-1	ND	0.4	PASS
Dichlorvos	62-73-7	ND	0.1	PASS	Propoxur	114-26-1	ND	0.2	PASS
Diazinon	333-41-5	ND	0.2	PASS	Pyrethrins	8003-34-7	ND	1	PASS
Dimethoate	60-51-5	ND	0.2	PASS	Pyridaben	96489-71-3	ND	0.2	PASS
Ethoprophos	13194-48-4	ND	0.2	PASS	Spinosad	168316-95-8	ND	0.2	PASS
Etofenprox	80844-07-01	ND	0.4	PASS	Spiromesifen	283594-90-1	ND	0.2	PASS
Etoxazole	153233-91-1	ND	0.2	PASS	Spirotetramat	203313-25-1	ND	0.2	PASS
Fenoxycarb	72490-01-08	ND	0.2	PASS	Spiroxamine	118134-30-8	ND	0.4	PASS
Fenpyroximate	134098-61-6	ND	0.4	PASS	Tebuconazole	80443-41-0	ND	0.4	PASS
Fipronil	120068-37-3	ND	0.4	PASS	Thiacloprid	111988-49-9	ND	0.2	PASS
Flonicamid	158062-67-0	ND	1	PASS	Thiamethoxam	153719-23-4	ND	0.2	PASS
Fludioxonil	131341-86-1	ND	0.4	PASS	Trifloxystrobin	141517-21-7	ND	0.2	PASS
Hexythiazox	78587-05-0	ND	1	PASS					

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Heavy Metal Analysis			Status:	PASS
Sample ID:	HP24088-9	Description:	Stress PB Carob 6mg	
Testing Date:	04/01/2024	Reviewed By:	Cameron Cheyne	

Method: ACL.AM.004 Analysis performed using Inductively Coupled Plasma - Mass Spectrometry (ICP-MS)

Analyte	CAS Number	Result (ppm)	Action Level (ppm)	Status
Arsenic	7440-38-2	ND	2	PASS
Cadmium	7440-43-9	ND	0.82	PASS
Lead	7439-92-1	ND	1.2	PASS
Mercury	7439-97-6	ND	0.4	PASS

Notes:

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Residual Solvent Ana	lysis		Status:	PASS
Sample ID:	HP24088-9	Description:	Stress PB Carob 6mg	
Testing Date:	04/02/2024	Reviewed By:	Cameron Cheyne	

#### Method: ACL.AM.007 Analysis performed using Gas Chromatography - Mass Spectrometry (GC-MS/FID)

Analyte	CAS Number	Result (ppm)	Action Level (ppm)	Status	Analyte	CAS Number	Result (ppm)	Action Level (ppm)	Status
Acetone	67-64-1	ND	5000	PASS	Ethyl Ether	60-29-7	ND	5000	PASS
Acetonitrile	75-05-8	ND	410	PASS	Ethylbenzene	100-41-4	ND	See Xylenes	
Benzene	71-43-2	ND	2	PASS	Ethylene Glycol	107-21-1	ND	620	PASS
Butane	106-97-8	ND	5000	PASS	Ethylene Oxide	75-21-8	ND	50	PASS
1-Butanol	71-36-3	ND	5000	PASS	Heptane	142-82-5	ND	5000	PASS
2-Butanol	78-92-2	ND	5000	PASS	n-Hexane	110-54-3	ND	290	PASS
2-Butanone	78-93-3	ND	5000	PASS	Isopropyl Acetate	108-21-4	ND	5000	PASS
Cumene	98-82-8	ND	70	PASS	Methanol	67-56-1	ND	3000	PASS
Cyclohexane	110-82-7	ND	3880	PASS	2-Methylbutane	78-78-4	ND	5000	PASS
Dichloromethane	75-09-2	ND	600	PASS	2-Methylpentane	107-83-5	ND	290	PASS
1,2-Dimethoxyethane	110-71-4	ND	100	PASS	3-Methylpentane	96-14-0	ND	290	PASS
Dimethyl Sulfoxide	67-68-5	ND	5000	PASS	Methylpropane	75-28-5	ND	5000	PASS
N,N-Dimethylacetamide	127-19-5	ND	1090	PASS	Pentane	109-66-0	ND	5000	PASS
1,2-Dimethylbenzene	95-47-6	ND	See Xylenes		1-Pentanol	71-41-0	ND	5000	PASS
1,3-Dimethylbenzene	108-38-3	ND	See Xylenes		Propane	74-98-6	ND	5000	PASS
1,4-Dimethylbenzene	106-42-3	ND	See Xylenes		1-Propanol	71-23-8	ND	5000	PASS
2,2-Dimethylbutane	75-83-2	ND	290	PASS	2-Propanol	67-63-0	ND	5000	PASS
2,3-Dimethylbutane	79-29-8	ND	290	PASS	Pyridine	110-86-1	ND	100	PASS
N,N-Dimethylformamide	68-12-2	ND	880	PASS	Sulfolane	126-33-0	ND	160	PASS
1,4-Dioxane	123-9	ND	380	PASS	Tetrahydrofuran	109-99-9	ND	720	PASS
Ethanol	64-17-5	<loq< td=""><td>5000</td><td>PASS</td><td>Toluene</td><td>108-88-3</td><td>ND</td><td>890</td><td>PASS</td></loq<>	5000	PASS	Toluene	108-88-3	ND	890	PASS
2-Ethoxyethanol	110-80-5	ND	160	PASS	Xylenes	1330-20-7	ND	2170	PASS
Ethyl Acetate	141-78-6	ND	5000	PASS					

Notes:

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Mycotoxin Analysis			Status:	PASS
Sample ID:	HP24088-9	Description:	Stress PB Carob 6mg	
Testing Date:	04/03/2024	Reviewed By:	Cameron Cheyne	

#### Method: ACL.AM.004 Analysis performed using Inductively Coupled Plasma - Mass Spectrometry (ICP-MS)

Analyte	Result (ppb)	Action Level (ppb)	Status
AflatoxinB1	ND	See Total Aflatoxin	
AflatoxinB2	ND	See Total Aflatoxin	
AflatoxinG1	ND	See Total Aflatoxin	
AflatoxinG2	ND	See Total Aflatoxin	
Total Aflatoxin	0	20	PASS
Ochratoxin A	ND	20	PASS

Notes:

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