

Prepared for:
PET RELIEF

8100 SOUTHPARK WAY A3
LITTLETON, CO USA 80120

PR WH PB Banana S Breed

Batch ID or Lot Number: Lot: 152392	Test: Potency	Reported: 16Nov2023	USDA License: N/A
Matrix: Unit	Test ID: T000261769	Started: 14Nov2023	Sampler ID: N/A
	Method(s): TM14 (HPLC-DAD)	Received: 13Nov2023	Status: N/A

Cannabinoids

	LOD (mg)	LOQ (mg)	Result (mg)	Result (mg/g)	Notes
Cannabichromene (CBC)	0.137	0.449	ND	ND	# of Servings = 1, Sample Weight=7.323g
Cannabichromenic Acid (CBCA)	0.125	0.411	ND	ND	
Cannabidiol (CBD)	0.384	0.987	3.470	0.50	
Cannabidiolic Acid (CBDA)	0.394	1.012	ND	ND	
Cannabidivarin (CBDV)	0.091	0.233	ND	ND	
Cannabidivarinic Acid (CBDVA)	0.164	0.422	ND	ND	
Cannabigerol (CBG)	0.078	0.255	<LOQ	<LOQ	
Cannabigerolic Acid (CBGA)	0.325	1.066	ND	ND	
Cannabinol (CBN)	0.101	0.333	ND	ND	
Cannabinolic Acid (CBNA)	0.222	0.727	ND	ND	
Delta 8-Tetrahydrocannabinol (Delta 8-THC)	0.387	1.270	ND	ND	
Delta 9-Tetrahydrocannabinol (Delta 9-THC)	0.352	1.153	ND	ND	
Delta 9-Tetrahydrocannabinolic Acid (THCA-A)	0.312	1.022	ND	ND	
Tetrahydrocannabivarin (THCV)	0.071	0.232	ND	ND	
Tetrahydrocannabivarinic Acid (THCVA)	0.275	0.901	ND	ND	
Total Cannabinoids			3.470	0.50	
Total Potential THC			ND	ND	
Total Potential CBD			3.470	0.50	


Approved: Paul Gennings QC 11-16-23

Final Approval



Karen Winternheimer
16Nov2023
01:29:00 PM MST

PREPARED BY / DATE



Sam Smith
16Nov2023
01:31:00 PM MST

APPROVED BY / DATE



<https://results.botanacor.com/api/v1/coas/uuid/08bdfdc4-0118-4643-b73b-230167bfe235>

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.



Cert #4329.02
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 Division of Laboratory Services
 4451 South 2700 West
 Taylorsville, Utah 84129
 (801) 816-3840

CERTIFICATE OF ANALYSIS

Sample Information

UDAF Lab	HP24088-12	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:	Hip & Joint PB 3mg		
Batch/Lot Number:	152392	Date Received:	03/28/2024
Date Collected:		Collected By:	Self-Submitted




Notes:

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	

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

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CERTIFICATE OF ANALYSIS

Cannabinoid Analysis

Status: PASS

Sample ID:	HP24088-12	Description:	Hip & Joint PB 3mg
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-Tetrahydrocannabinidiol	Δ9-THC	1972-08-03	ND	ND
Δ8-Tetrahydrocannabinidiol	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	0.07%	0.7
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)-Δ6a,10a-Tetrahydrocannabinidiol	Δ3-THC	95720-01-07, 95720-02-8	ND	ND
(6aR,9R)-Δ10-Tetrahydrocannabinidiol	(6aR,9R)-Δ10-THC	95543-62-7	ND	ND
(6aR,9S)-Δ10-Tetrahydrocannabinidiol	(6aR,9S)-Δ10-THC	95588-87-7	ND	ND
Total Cannabinoids			0.07%	0.70
Total THC			ND	ND
Total CBD			0.07%	0.70
Total THC Analogs			ND	ND

Unknown Cannabinoid Peak Area: 0.0%

Mass Per Piece: --

Status: PASS

Notes:

Total Cannabinoids is calculated as the direct sum of each of the cannabinoid values.
 Total THC is calculated as Δ9-THC + (THCA x 0.877) | Total CBD is calculated as CBD + (CBDA x 0.877).
 Total THC Analogs is calculated as Δ9-THC + (THCA x 0.877) + Δ8-THC + CBTC.
 ND = Not Detected, NQ = Not Quantifiable, NT = Not Tested, <LOQ = Below the limit of quantification

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CERTIFICATE OF ANALYSIS

Foreign Matter Analysis

Status: PASS

Sample ID: HP24088-12	Description: Hip & Joint PB 3mg
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:

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CERTIFICATE OF ANALYSIS

Microbial Analysis

Status: PASS

Sample ID:	HP24088-12	Description:	Hip & Joint PB 3mg
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
TYM	<250	1,000	PASS

Method: Analysis performed using Polymerase Chain Reaction (PCR)

Organism	Result	Required	Status
E. Coli	ND	<input checked="" type="checkbox"/>	PASS
Salmonella	ND	<input checked="" type="checkbox"/>	PASS
STEC	NT	<input type="checkbox"/>	--
Pseudomonas	NT	<input type="checkbox"/>	--
Aspergillus	NT	<input type="checkbox"/>	--
Staph	ND	<input checked="" type="checkbox"/>	PASS

Notes:

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

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CERTIFICATE OF ANALYSIS

Pesticide Analysis

Status: PASS

Sample ID:	HP24088-12	Description:	Hip & Joint PB 3mg
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	Imazilil	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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CERTIFICATE OF ANALYSIS

Heavy Metal Analysis

Status: PASS

Sample ID: HP24088-12	Description: Hip & Joint PB 3mg
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

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CERTIFICATE OF ANALYSIS

Residual Solvent Analysis

Status: PASS

Sample ID:	HP24088-12	Description:	Hip & Joint PB 3mg
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	ND	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					

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CERTIFICATE OF ANALYSIS

Mycotoxin Analysis

Status: PASS

Sample ID: HP24088-12	Description: Hip & Joint PB 3mg
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

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