

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 #	HP24093-9	Issue Date:	04/08/2024	
Client:	Gold Naturals	Client Email:	jake@goldnaturalshemp.com	
Producer:	Gold Naturals	Sample Type:	Gelatinous Cubes	
Description:	Muscle + Joint Gummy's			
Batch/Lot Number:	Gumjbo2308	Date Received:	04/02/2024	
Date Collected:		Collected By:	Self-Submitted	



Notes:

#### **Testing Summary**

		Status: PASS
Testing Date:	Status:	Notes:
04/08/2024	PASS	

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

The results reported herein pertain only to the indicated sample and may not be used as an endorsement of a product. The results are given under applicable provisions of the Utah Code and represent a true statement of the outcomes of the analyses conducted on the sample received by the laboratory. This report may not be reproduced, except in its entirety. © 2024 All Rights Reserved.



#### **CERTIFICATE OF ANALYSIS**

Cannabinoid Analysis			Status: PASS	S
Sample ID:	HP24093-9	Description:	<b>Description:</b> Muscle + Joint Gummy's	
Testing Date:	04/08/2024	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	<loq< td=""><td><loq< td=""></loq<></td></loq<>	<loq< td=""></loq<>
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	0.62%	6.2
Cannabidiolic acid	CBDA	1244-58-2	ND	ND
Cannabidivarin	CBDV	24274-48-4	ND	ND
Cannabinol	CBN	521-35-7	0.08%	0.8
Cannabigerol	CBG	25654-31-3	0.31%	3.1
Cannabichromene	CBC	20675-51-8	<loq< td=""><td><loq< td=""></loq<></td></loq<>	<loq< td=""></loq<>
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)-∆10-Tetrahydrocannabidiol	(6aR,9R)-Δ10-THC	95543-62-7	ND	ND
(6aR,9S)-∆10-Tetrahydrocannabidiol	(6aR,9S)-∆10-THC	95588-87-7	ND	ND
Total Cannabinoids			1.01%	10.10
Total THC			ND	ND
Total CBD			0.62%	6.20
Total THC Analogs			ND	ND
Unknown	Cannabinoid Peak Area	: 0.0%		
	Mass Per Piece	e.028 g	Status:	PASS

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.

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

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# **Comprehensive Analysis Report**

## Sample Overview

Client: Gold Naturals None

Sample Name: Muscle + Joint Sample Matrix: Gelatinous Cube Sample Lot: GUMJB02408 Date Received: 04/03/2024 APRC #: GOL240404C

Assay	Disposition	Date Tested
Heavy Metals - Utah State Cannabis Panel	Tested	04-08-2024
Microbial: Quantitative and Pathogen Detection Combo	Tested	04-05-2024
Pesticide Screen (APRC Panel)	Tested	04/04/2024
Hemp or R&D Residual Solvents	Tested	04-04-2024
Mycotoxin Quantitation	Tested	04/04/2024



Accreditation #115229 Aromatic Plant Research Center is an ISO 17025:2017 certified laboratory.

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# Heavy Metals



Method: CTLA	Sample N	Name: Muscle + Joint APRC Lo		mber: GOL240404C
Analyte	Result (ppm)	LOD (ppm)	Threshold (ppm)	Pass/Fail
Arsenic	<0.001	0.001	2.00	Pass
Cadmium	<0.001	0.001	0.82	Pass
Lead	0.051	0.001	1.20	Pass
Mercury	<0.001	0.001	0.40	Pass

Heavy metal analysis is completed in partnership with Contract Testing Laboratories of America, Orem UT.

Performed by: CTLA

Reviewed by: Sophie Pearson

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## **Microbial Impurities**

Method: SOP 1-2034.01 and 1-2035.01 Sample Name: Muscle + Joint APRC Lot Number: GOL240404C

Total Counts						
Microbial Group:	Result (CFU/g):	Specification:	Disposition:			
Total Aerobic Bacteria	<10	≤10,000	Pass			
Total Yeast and Mold	<10	≤1,000	Pass			

Specific Organism Identification					
Microbial Organism:	Result:	Specification:	Disposition		
Aspergillus flavus	NT	NT	Not Tested		
Aspergillus fumigatus	NT	NT	Not Tested		
Aspergillus niger	NT	NT	Not Tested		
Aspergillus terreus	NT	NT	Not Tested		
E. coli	Not Detected	Not Detected	Pass		
STEC	NT	NT	Not Tested		
Salmonella - Specific Gene	Not Detected	Not Detected	Pass		
Staphylococcus aureus	Not Detected	Not Detected	Pass		
Pseudomonas aeruginosa	Not Detected	Report Only	Tested		

Performed by: Jordan Morley

Notes: Foreign Matter: Not Detected.

Reviewed by: <u>Tessa Crook</u>

## Pesticides

Method:



#### Sample Name: Muscle + Joint

APRC Lot Number:	GOL240404C
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Pesticide:	Finding	Action Limit (µg/g)	Pass/Fail	Pesticide:	Finding	Action Limit (µg/g)	Pass/Fai
Abamectin	ND	0.5	Pass	Hexythiazon	ND	1.0	Pass
Acephate	ND	0.4	Pass	Imazal	ND	0.2	Pass
Acequinocyl	ND	2.0	Pass	Imidacloprid	ND	0.4	Pass
Acetamiprid	ND	0.2	Pass	Kresoxim-methyl	ND	0.4	Pass
Aldicarb	ND	0.4	Pass	Malathion A	ND	0.2	Pass
Azoxystrobin	ND	0.2	Pass	Metalaxyl	ND	0.2	Pass
Bifenazate	ND	0.2	Pass	Methiocarb	ND	0.2	Pass
Bifenthrin	ND	0.2	Pass	Methomyl	ND	0.4	Pass
Boscalid	ND	0.4	Pass	Methylparathion	ND	0.2	Pass
Carbaryl	ND	0.2	Pass	MGK-264	ND	0.2	Pass
Carbofuran	ND	0.2	Pass	Myclobutanil	ND	0.2	Pass
Chlorantraniliprole	ND	0.2	Pass	Naled	ND	0.5	Pass
Chlorfenapyr	ND	1.0	Pass	Oxamyl	ND	1.0	Pass
Chlorpyrifos	ND	0.2	Pass	Paclobutrazol	ND	0.4	Pass
Clofentezine	ND	0.2	Pass	Permethrins	ND	0.2	Pass
Cyfluthrin	ND	1.0	Pass	Phosmet	ND	0.2	Pass
Cypermethrin	ND	1.0	Pass	Piperonylbutoxide	ND	2.0	Pass
Daminozide	ND	1.0	Pass	Prallethrin	ND	0.2	Pass
Dichlorvos	ND	0.1	Pass	Propiconazole	ND	0.4	Pass
Diazinon	ND	0.2	Pass	Propoxur	ND	0.2	Pass
Dimethoate	ND	0.2	Pass	Pyrethrin	ND	1.0	Pass
Ethoprophos	ND	0.2	Pass	Pyridaben	ND	0.2	Pass
Etofenprox	ND	0.4	Pass	Spinosad	ND	0.2	Pass
Etoxazole	ND	0.2	Pass	Spinetoram	ND	0.1	Pass
Fenoxycarb	ND	0.2	Pass	Spirotetramat	ND	0.2	Pass
Fenpyroximate	ND	0.4	Pass	Spiroxamine	ND	0.4	Pass
Fipronil	ND	0.4	Pass	Tebuconazole	ND	0.4	Pass
Flonicamid	ND	1.0	Pass	Thiacloprid	ND	0.2	Pass
Fludioxonil	ND	0.4	Pass	Thiamethoxam	ND	0.2	Pass
	1			Trifloxystrobin	ND	0.2	Pass

Performed <u>Nicholas</u> by: <u>Saichek</u> Reviewed <u>William</u> by: <u>Deutschman</u>

Pesticide testing performed in a non-ISO 17025:2017 accredited facility. Pass/Fail determinations based on Utah Administrative Rule R68-29.

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## **Residual Solvents**

# APRC

#### Method: SOP 1-2027.03

Sample Name: Muscle + Joint

#### APRC Lot Number: GOL240404C

<b>Residual Solvent</b>	Finding (µg/g)	Action Level (µg/g)	Pass/Fai
Dimethyl sulfoxide	ND	5000	Pass
N,N-dimethylacetamide	ND	1090	Pass
1,2 Dimethoxyethane	ND	100	Pass
1,4 Dioxane	ND	380	Pass
1-Butanol	ND	5000	Pass
1-Pentanol	ND	5000	Pass
1-Propanol	ND	5000	Pass
2-Butanone	ND	5000	Pass
2-Butanol	ND	5000	Pass
2-Ethoxyethanol	ND	160	Pass
2-Methylbutane	ND	5000	Pass
2-Propanol	ND	5000	Pass
Acetone	ND	5000	Pass
Acetonitrile	ND	410	Pass
Benzene	ND	2	Pass
Butane	ND	5000	Pass
Cumene	ND	70	Pass
Cyclohexane	ND	3880	Pass
Dichloromethane	ND	600	Pass
2,2-Dimethylbutane	ND	290	Pass
2,3-Dimethylbutane	ND	290	Pass
m,p-Xylene	ND	See Total Xylenes	Pass
o-Xylene	ND	See Total Xylenes	Pass
Ethanol	ND	5000	Pass
Ethyl Acetate	ND	5000	Pass
Ethyl Benzene	ND	See Total Xylenes	Pass
Ethyl Ether	ND	5000	Pass
Ethylene Glycol	ND	620	Pass
Ethylene Oxide	ND	50	Pass

<b>Residual Solvent</b>	Finding (µg/g)	Action Level (µg/g)	Pass/Fail
Heptane	ND	5000	Pass
Hexane	ND	290	Pass
Isopropyl Acetate	ND	5000	Pass
Methanol	8.493	3000	Pass
Methylpropane	ND	5000	Pass
2-Methylpentane	ND	290	Pass
3-Methylpentane	ND	290	Pass
N,N-Dimethylformamide	ND	880	Pass
Pentane	ND	5000	Pass
Propane	ND	5000	Pass
Pyridine	ND	100	Pass
Sulfolane	ND	160	Pass
Tetrahydrofuran	ND	720	Pass
Toluene	ND	890	Pass
Total Xylenes	ND	2170	Pass

† Per Utah state code 4-41a-701(3) Section R68-29-6 ‡ Total Xylenes is a combination of the following: o-Xylene, m-Xylene, p-Xylene, and Ethylbenzene

> Overall Disposition: <u>Pass</u> Performed By: <u>Anil Rokaya</u> Reviewed By: <u>Tessa Crook</u>



## **Mycotoxins**

lethod: Mycotoxin	Sample Name: Muscle +	Joint APRC	APRC Lot Number: GOL2404040	
Mycotoxin	Finding (µg/kg)	Limit(µg/kg)	Pass/Fail	
Aflatoxin B1:	ND	- Br		
Aflatoxin B2:	ND			
Aflatoxin G1:	ND			
Aflatoxin G2:	ND			
Total Aflatoxins:	0	20	Pass	
Ochratoxin A:	ND	20	Pass	

#### Performed by: Nicholas Saichek

Reviewed by: William Deutschman

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Approved By: Jordan Morley Laboratory Supervisor 04/10/2024