

## UTAH DEPARTMENT OF AGRICULTURE AND FOOD

UNIFIED STATE LABORATORY 4451 SOUTH 2700 WEST TAYLORSVILLE, UTAH 84129

## **CERTIFICATE OF ANALYSIS**

Sample Information			Authorization:	
Producer:	Standard Wellness of Utah	Sample Number:	F0359	3nth)
Description:	MAC ByProduct	MJ Batch Number:	MAC1210820H	
Collected By:	<b>Ries Trenary</b>	Date Received:	10/04/2021	Brandon Forsyth, PhD
Date Collected:	10/01/2021	Issue Date:	10/07/2021	State Chemist
Requested Testing:				
Cannabinoids	$\checkmark$	Pesticide	$\checkmark$	
Foreign Matter	$\checkmark$	Heavy Metals	$\checkmark$	
Microbial Life	$\checkmark$	<b>Residual Solvents</b>		
Water Activity	$\checkmark$	Mycotoxin		
Moisture	$\checkmark$			

## Cannabinoid Analysis

Analysis performed us	sing High Performance Li	quid Chromatogra	aphy (HPLC)		
Analyte	% (w/w)	mg/g			
Δ9-THC	0.98%	9.80			
THCA	21.66%	216.60	Flower		
Δ8-THC	0.18%	1.80			% from COA
	0.16%	1.00	Total Weight of Finished Product	Total THC	20.0408
THCV	NQ	NQ	3.5 g	D9THC	0.98
CBD	0.10%	1.00		D9THCA	21.66
				D8THC	0.18
CBDA	0.06%	0.60		cbn	
CBDV	ND	ND		CBD	0.1
				CBGA	0.59
CBN	ND	ND		CBDA	0.06
CBG	ND	ND		CBGA	
				CBCA	0.31
CBGA	0.59%	5.90		CBG	
CBC	0.02%	0.20			
CBCA	0.31%	3.10		Total Cannabinoids for LT	23.88

Foreign Matter Analysis					
Analysis performed by visual inspection aided by magnification					
Analyte	Result	Foreign Matter Found	Status		
Foreign Matter	ND	NA	PASS		

Moisture Content & Water Activity					
Analysis performed using thermo - gravametric analysis					
Measurement	Result				
Moisture Content (%)	12.38%				
Analysis performed using chilled mirror dew point sensor					
Measurement	Result	Action Level	Status		
Water Activity	0.43	0.65	PASS		

## Pesticide Analysis

Analysis performed using Liquid Chromatography - Mass Spectrometry (LC-MS/MS)

Analysis perionneu u	ising Liquid Chiomalography	- wass speciforne		
Analyte	CAS Number	Result (ppm)	Action Level (ppm)	Status
Abamectin	71751-41-2	ND	0.5	PASS
Acephate	30560-19-1	ND	0.4	PASS
Acequinocyl	57960-19-7	ND	2	PASS
Acetamiprid	135410-20-7	ND	0.2	PASS
Aldicarb	0116-06-03	ND	0.4	PASS
Azoxystrobin	131860-33-8	ND	0.2	PASS
Bifenazate	149877-41-8	ND	0.2	PASS
Bifenthrin	82657-04-03	ND	0.2	PASS
Boscalid	188425-85-6	ND	0.4	PASS
Carbaryl	63-25-2	ND	0.2	PASS
Carbofuran	1563-66-2	ND	0.2	PASS
Chlorantraniliprole	500008-45-7	ND	0.2	PASS
Chlorfenapyr	122453-73-0	ND	1	PASS
Chlorpyrifos	2921-88-2	ND	0.2	PASS
Clofentezine	74115-24-5	ND	0.2	PASS
Cyfluthrin	68359-37-5	ND	1	PASS
Cypermethrin	52315-07-08	ND	1	PASS
Daminozide	1596-84-5	ND	1	PASS
Dichlorvos	62-73-7	ND	0.1	PASS
Diazinon	333-41-5	ND	0.2	PASS
Dimethoate	60-51-5	ND	0.2	PASS
Ethoprophos	13194-48-4	ND	0.2	PASS
Etofenprox	80844-07-01	ND	0.4	PASS
Etoxazole	153233-91-1	ND	0.2	PASS
Fenoxycarb	72490-01-08	ND	0.2	PASS
Fenpyroximate	134098-61-6	ND	0.4	PASS
Fipronil	120068-37-3	ND	0.4	PASS
Flonicamid	158062-67-0	ND	1	PASS
Fludioxonil	131341-86-1	ND	0.4	PASS
Hexythiazox	78587-05-0	ND	1	PASS
Imazlil	35554-44-0	ND	0.2	PASS

Pesticide Analysis (	Pesticide Analysis (cont.)				
Analyte	CAS Number	Result (ppm)	Action Level (ppm)	Status	
Imidacloprid	138261-41-3	ND	0.4	PASS	
Kresoxim-methyl	143390-89-0	ND	0.4	PASS	
Malathion	121-75-5	ND	0.2	PASS	
Metalaxyl	57837-19-1	ND	0.2	PASS	
Methiocarb	2032-65-7	ND	0.2	PASS	
Methomyl	16752-77-5	ND	0.4	PASS	
Methyl parathion	298-00-0	ND	0.2	PASS	
MGK-264	113-48-4	ND	0.2	PASS	
Myclobutanil	88671-89-0	ND	0.2	PASS	
Naled	300-76-5	ND	0.5	PASS	
Oxamyl	23135-22-0	ND	1	PASS	
Paclobutrazol	76738-62-0	ND	0.4	PASS	
Permethrins	52645-53-1	ND	0.2	PASS	
Phosmet	0732-11-6	ND	0.2	PASS	
Piperonyl Butoxide	51-03-6	ND	2	PASS	
Prallethrin	23031-36-9	ND	0.2	PASS	
Propiconazole	60207-90-1	ND	0.4	PASS	
Propoxur	114-26-1	ND	0.2	PASS	
Pyrethrins	8003-34-7	ND	1	PASS	
Pyridaben	96489-71-3	ND	0.2	PASS	
Spinosad	168316-95-8	ND	0.2	PASS	
Spiromesifen	283594-90-1	ND	0.2	PASS	
Spirotetramat	203313-25-1	ND	0.2	PASS	
Spiroxamine	118134-30-8	ND	0.4	PASS	
Tebuconazole	80443-41-0	ND	0.4	PASS	
Thiacloprid	111988-49-9	ND	0.2	PASS	
Thiamethoxam	153719-23-4	ND	0.2	PASS	
Trifloxystrobin	141517-21-7	ND	0.2	PASS	

Heavy Metal Analysis					
Analysis performed using Inductively Coupled Plasma - Mass Spectrometry (ICP-MS)					
Analyte		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	

Microbial Analysis					
Analysis performed using plating methods	5				
Analyte	Result (cfu/g)	Allowed Limit	Status		
TAC	200	100,000	PASS		
ТҮМ	NT				
Analysis performed using Polymerase Ch	ain Reaction (PCR) methods				
Organism	Result	Required	Status		
E. coli	NT	$\checkmark$			
Salmonella	NT	$\checkmark$			
STEC	NT				
Pseudomonas	NT				
Aspergillus	NT	$\checkmark$			
Staph	NT				

Notes: Pathogen testing was not performed due to the global shortage of PCR clean pipette tips. For more information see https://ag.utah.gov/2021/04/29/udaf-temporarily-adjusts-medical-cannabis-testing-protocols-due-to-global-shortages-of-laboratory-supplies/.

ND = Not Detected NA = Not Applicable NT = Not Tested NQ = Not Quantifiable

- Results pertain only to the test sample listed in this report.

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The analysis given above was made under applicable provisions of the Utah Code and is a true statement of the results of an examination of a sample submitted to the laboratory under the identification herein recorded. The results here recorded may not be used as an endorsement for a product.