Columbia LABORATORIES
A Tentamus Company

12423 NE Whitaker Way
Portland, OR 97230
503-254-1794

Report Number: 24-008146/D001.R000
Report Date: 08/02/2024
ORELAP#: OR100028
Purchase Order:
Received: 07/26/24 11:59

Customer: NW Natural Goods
Product identity: HEMP-SB DSB0001
Client/Metrc ID: .
Laboratory ID: 24-008146-0001

Summary

Potency:

Analyte per 4g	Result	Limits	Units	Status
CBD per 4g	17.6		mg/4g	
Δ9-THC per 4g	1.93		mg/4g	

CBD-Total per Serving Size	17.6 mg/4g
Delta-9-THC-Total per	1.93 mg/4g

(Reported in milligrams per serving)

Residual Solvents:

All analytes passing and less than LOQ.

Pesticides:

Analyte	Result (mg/kg)	Limits (mg/kg)	Status
Multi-Residue Pesticide Profile	< LOQ for all analytes		

Metals:

Less than LOQ for all analytes.

Microbiology:

Less than LOQ for all analytes.

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Customer: NW Natural Goods

Product identity: HEMP-SB DSB0001
Client/Metrc ID: .
Sample Date:
Laboratory ID: 24-008146-0001
Evidence of Cooling: No
Temp: 20 °C
Relinquished by: BR
Serving Size #1: 4 g

Sample Results

Potency per 4g **Method:** J AOAC 2015 V98-6 (mod)[þ] **Units** mg/se **Batch:** 2405723 **Analyze:** 7/29/24 8:46:00 PM

Analyte	Result	Limits	Units	LOQ	Notes
CBC per 4g	< LOQ		mg/4g	0.133	
CBC-A per 4g	< LOQ		mg/4g	0.133	
CBC-Total per 4g	< LOQ		mg/4g	0.250	
CBD per 4g	17.6		mg/4g	0.133	
CBD-A per 4g[⊥]	< LOQ		mg/4g	0.133	
CBD-Total per 4g[⊥]	17.6		mg/4g	0.250	
CBDV per 4g	< LOQ		mg/4g	0.133	
CBDV-A per 4g	< LOQ		mg/4g	0.133	
CBDV-Total per 4g	< LOQ		mg/4g	0.249	
CBE per 4g	< LOQ		mg/4g	0.133	
CBG per 4g	< LOQ		mg/4g	0.133	
CBG-A per 4g	< LOQ		mg/4g	0.133	
CBG-Total per 4g	< LOQ		mg/4g	0.249	
CBL per 4g	< LOQ		mg/4g	0.133	
CBL-A per 4g	< LOQ		mg/4g	0.133	
CBL-Total per 4g	< LOQ		mg/4g	0.250	
CBN per 4g	< LOQ		mg/4g	0.133	
CBT per 4g	< LOQ		mg/4g	0.133	
Δ10-THC-9R per 4g	< LOQ		mg/4g	0.133	
Δ10-THC-9S per 4g	< LOQ		mg/4g	0.133	
Δ10-THC-Total per 4g	< LOQ		mg/4g	0.266	
Δ8-THC per 4g[⊥]	< LOQ		mg/4g	0.133	
Δ8-THCV per 4g	< LOQ		mg/4g	0.133	
Δ9-THC per 4g[⊥]	1.93		mg/4g	0.133	
Δ9-THC-Total per 4g	1.93		mg/4g	0.250	
Δ9-THCP per 4g	< LOQ		mg/4g	0.133	
Δ9-THCV per 4g	< LOQ		mg/4g	0.133	
Δ9-THCV-A per 4g	< LOQ		mg/4g	0.133	
Δ9-THCV-Total per 4g	< LOQ		mg/4g	0.250	
exo-THC per 4g	< LOQ		mg/4g	0.133	
THC-A per 4g[⊥]	< LOQ		mg/4g	0.133	
Total Cannabinoids per 4g	19.5		mg/4g		

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Microbiology

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed	Method	Status	Notes
E.coli	< LOQ		cfu/g	10	2405688	07/29/24	AOAC 991.14 (Petrifilm)		
Total Coliforms	< LOQ		cfu/g	10	2405688	07/29/24	AOAC 991.14 (Petrifilm)		
Mold (RAPID Petrifilm)	< LOQ		cfu/g	10	2405689	07/30/24	AOAC 2014.05 (RAPID)		
Yeast (RAPID Petrifilm)	< LOQ		cfu/g	10	2405689	07/30/24	AOAC 2014.05 (RAPID)		

Solvents

Method: Residual Solvents by HS-GC-MS^{b} **Units** µg/g **Batch** 2405786 **Analyze** 07/31/24 03:20 PM

Analyte	Result	Limits	LOQ	Status	Notes	Analyte	Result	Limits	LOQ	Status	Notes
1,4-Dioxane$^{\perp}$	< LOQ	380	100	pass		2-Butanol$^{\perp}$	< LOQ	5000	200	pass	
2-Ethoxyethanol$^{\perp}$	< LOQ	160	30.0	pass		2-Methylbutane (Isopentane)$^{\perp}$	< LOQ		200		
2-Methylpentane$^{\perp}$	< LOQ		30.0			2-Propanol (IPA)$^{\perp}$	< LOQ	5000	200	pass	
2,2-Dimethylbutane$^{\perp}$	< LOQ		30.0			2,2-Dimethylpropane (neo-pentane)$^{\perp}$	< LOQ		200		
2,3-Dimethylbutane$^{\perp}$	< LOQ		30.0			3-Methylpentane$^{\perp}$	< LOQ		30.0		
Acetone$^{\perp}$	< LOQ	5000	200	pass		Acetonitrile$^{\perp}$	< LOQ	410	100	pass	
Benzene$^{\perp}$	< LOQ	2.00	1.00	pass		Butanes (sum)$^{\perp}$	< LOQ	5000	400	pass	
Cyclohexane$^{\perp}$	< LOQ	3880	200	pass		Ethyl acetate$^{\perp}$	< LOQ	5000	200	pass	
Ethyl benzene	< LOQ		200			Ethyl ether$^{\perp}$	< LOQ	5000	200	pass	
Ethylene glycol$^{\perp}$	< LOQ	620	200	pass		Ethylene oxide$^{\perp}$	< LOQ	50.0	20.0	pass	
Hexanes (sum)$^{\perp}$	< LOQ	290	150	pass		Isopropyl acetate$^{\perp}$	< LOQ	5000	200	pass	
Isopropylbenzene (Cumene)$^{\perp}$	< LOQ	70.0	30.0	pass		m,p-Xylene$^{\perp}$	< LOQ		200		
Methanol$^{\perp}$	< LOQ	3000	200	pass		Methylene chloride$^{\perp}$	< LOQ	600	60.0	pass	
Methylpropane (Isobutane)$^{\perp}$	< LOQ		200			n-Butane$^{\perp}$	< LOQ		200		
n-Heptane$^{\perp}$	< LOQ	5000	200	pass		n-Hexane$^{\perp}$	< LOQ		30.0		
n-Pentane$^{\perp}$	< LOQ		200			o-Xylene$^{\perp}$	< LOQ		200		
Pentanes (sum)	< LOQ	5000	600	pass		Propane	< LOQ	5000	200	pass	
Tetrahydrofuran$^{\perp}$	< LOQ	720	100	pass		Toluene$^{\perp}$	< LOQ	890	100	pass	
Total Xylenes$^{\perp}$	< LOQ		400			Total Xylenes and Ethyl benzene	< LOQ	2170	600	pass	

Pesticides

Method: AOAC 2007.01 & EN 15662 (mod) **Units** mg/kg **Batch** 2405783 **Analyze** 08/01/24 12:43 PM

Analyte	Result	Limits	Status	Notes
Multi-Residue Pesticide Profile	< LOQ for all analytes			

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Metals

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed	Method	Status	Notes
Arsenic[⊥]	< LOQ	0.200	mg/kg	0.0187	2405791	07/31/24	AOAC 2013.06 (mod.)[Þ]	pass	
Cadmium[⊥]	< LOQ	0.200	mg/kg	0.0187	2405791	07/31/24	AOAC 2013.06 (mod.)[Þ]	pass	
Lead[⊥]	< LOQ	0.500	mg/kg	0.0187	2405791	07/31/24	AOAC 2013.06 (mod.)[Þ]	pass	
Mercury[⊥]	< LOQ	0.100	mg/kg	0.00935	2405791	07/31/24	AOAC 2013.06 (mod.)[Þ]	pass	

Nutrition

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed	Method	Status	Notes
Moisture (Loss on Drying)	17.9		g/100g	0.10	2405757	07/30/24	AOAC 925.10 (mod.)		
Water Activity	0.704		Aw	0.030	2405774	07/31/24	AOAC 978.18		

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Abbreviations

Limits: Action Levels per OAR-333-007-0400, OAR-333-007-0210, OAR-333-007-0220, CCR title 16-division 42. BCC-section 5723

Limit(s) of Quantitation (LOQ): The minimum levels, concentrations, or quantities of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence.

þ = ISO/IEC 17025:2017 accredited method.
⊥ = TNI accredited analyte.

Units of Measure

cfu/g = Colony forming units per gram
g = Gram
g/100g = Grams per 100 Grams
µg/g = Microgram per gram
mg/kg = Milligram per kilogram = parts per million (ppm)
mg/4g = Milligram per 4g
% = Percentage of sample
Aw = Water Activity
% wt = µg/g divided by 10,000

Approved Signatory

Derrick Tanner
General Manager

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Columbia LABORATORIES
A Tentamus Company

Hemp & Cannabis Chain of Custody

Northwest-Natural-Goods-1721949201

Company Details
Company: Northwest Natural Goods
[redacted]

Project Details
Turnaround Time: 2 Business Days | Surcharges Apply
Relinquishment | Sampling, Courier & Shipping Options: Pick-Up Courier Service
Compliance: Compliance
Project Name / ID: HEMP-SB DSB0001
Pick-Up Details
Pick-Up Location Name: Northwest Natural Goods
[redacted]
Receipt Information
Prelog Storage: Canna Shelves
Sample Condition: Satisfactory

#	Sample Name	Material	Amount Provided	Reporting Unit	Serving Size	Testing: N3600 - Water Activity & Moisture (as Loss on Drying) | Food	M283 - RAPID Yeast and Mold Count (RM) Petri Im	H0013 - Cannabis Heavy Metals Profile OR	H0010 - Potency Cannabis (Basic+Expanded)	P2320 - Multi-Residue Pesticide Profile (Cannabis)	H0008 - Residual Solvents (Cannabis - Oregon)	M075 - E. coli/Coliform Count (EC) Petri Im
1	HEMP-SB DSB0001	Cannabinoid Edible	20 each	mg/g & mg/serving	4 g	✓	✓	✓	✓	✓	✓	✓

Relinquished By	Date	Time		Received By	Date	Time	Received Temp., °C	Evidence of Cooling?
KRISTEN JOHNSON	07/25/2024	16:13	Temp., °C	BR	07/26/2024	10:25	25.00	No
BR	07/26/2024	10:56	20.00	dot	07/26/2024	11:59	20.00	No

Samples submitted to Columbia Laboratories with testing requirements constitute an agreement for services in accordance with the current terms of services associated with this COC. By signing "Relinquished by" you are agreeing to these terms.

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P2320 Multi-Residue Pesticide Profile
Cannabis

Analyte	LOQ (mg/kg)
2,4-D	0.1
Abamectin	0.1
Acephate	0.2
Acequinocyl	0.2
Acetamiprid	0.1
Acetochlor	0.2
Acrinathrin	0.1
Alachlor	0.1
Aldicarb	0.1
Aldoxycarb	0.1
Aldrin	0.1
Ametoctradin	0.1
Ametryn	0.1
Anilazine	0.1
Aspon	0.1
Asulam	0.1
Atrazine	0.1
Atrazine-desethyl	0.1
Azinphos-ethyl	0.1
Azinphos-methyl	0.1
Azoxystrobin	0.1
Benalaxyl	0.1
Bendiocarb	0.1
Benoxacor	0.1
Bensulide	0.1
Bentazon	0.1
Bifenazate	0.1
Bifenox	0.1
Bifenthrin	0.1
Binapacryl	0.1
Boscalid	0.1
Bromacil	0.1
Bromophos-ethyl	0.1
Bromopropylate	0.1
Bromoxynil	0.1
Bupirimate	0.1
Buprofezin	0.1
Butachlor	0.1
Butylate	0.1
Cadusafos	0.1
Captan	0.2
Carbaryl	0.1
Carbendazim	0.1
Carbofuran	0.1
Carbofuran 3-hydroxy	0.1
Carbophenothion	0.1
Carbophenothion-methyl	0.1
Carboxin	0.1

Analyte	LOQ (mg/kg)
Chlorantraniliprol	0.1
Chlordane, cis-	0.1
Chlordane, trans-	0.1
Chlorfenapyr	0.1
Chlorfenvinphos	0.1
Chlorobenzilate	0.1
Chlorpyrifos-ethyl	0.1
Chlorpyrifos-methyl	0.1
Chlorthal-dimethyl (Dacthal)	0.1
Clethodim	0.1
Clethodim sulfone	0.1
Clethodim sulfoxide	0.1
Clofentezine	0.1
Clomazone	0.1
Clopyralid	0.1
Clothianidin	0.1
Coumaphos	0.1
Crotoxyphos	0.1
Cyanofenphos	0.1
Cyanophos	0.1
Cyantraniliprole	0.1
Cyazofamid	0.1
Cyfluthrin	0.1
Cyhalothrin, lambda	0.1
Cymoxanil	0.1
Cypermethrin	0.1
Cyprodinil	0.1
DDD, o,p'-	0.1
DDD, p,p'-	0.1
DDE, o,p'-	0.1
DDE, p,p'-	0.1
DDT, o,p'-	0.1
DDT, p,p'-	0.1
DEET	0.1
Deltamethrin	0.1
Demeton-S	0.1
Demeton-s-methyl	0.1
Demeton-S-methyl-sulfone	0.1
Desmedipham	0.1
Diazinon	0.1
Dicamba	0.1
Dichlofenthion	0.1
Dichlofluanid	0.1
Dichlorbenzamid	0.1
Dichlorvos	0.1
Diclofop	0.1
Diclofop-methyl	0.1
Dicrotophos	0.1

Analyte	LOQ (mg/kg)
Dieldrin	0.1
Diethofencarb	0.1
Difenoconazol	0.1
Diflubenzuron	0.1
Diflufenzopyr	0.1
Dimethenamid	0.1
Dimethoat	0.1
Dimethomorph	0.1
Dinoseb	0.1
Dinotefuran	0.1
Dioxathion	0.1
Diphenamid	0.1
Diphenylamine (DPA)	0.1
Disulfoton	0.1
Disulfoton-sulfone	0.1
Disulfoton-Sulfoxide	0.1
Diuron	0.1
DNOC	0.1
Edifenphos	0.1
Endosulfan (alpha isomer)	0.1
Endosulfan (beta isomer)	0.1
Endosulfan-sulfate	0.1
Endrin	0.1
EPN	0.1
EPTC	0.1
Esfenvalerate/Fenvalerate	0.1
Ethiofencarb	0.1
Ethion	0.1
Ethofumesate	0.1
Ethoprophos	0.1
Etofenprox	0.1
Etoxazole	0.1
Etrimfos	0.1
Famoxadone	0.1
Famphur	0.1
Fenamiphos	0.1
Fenamiphos-Sulfone	0.1
Fenamiphos-Sulfoxide	0.1
Fenazaquin	0.1
Fenbuconazole	0.1
Fenhexamid	0.1
Fenobucarb	0.1
Fenoxycarb	0.1
Fenpropathrin	0.1
Fensulfothion	0.1
Fenthion	0.1
Fenuron	0.1
Fipronil	0.1

LOQ= Limit of Quantitation
mg/kg= milligram per kilogram (ppm)

Updated: 09.12.2022

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P2320 Multi-Residue Pesticide Profile
Cannabis

Analyte	LOQ (mg/kg)
Flonicamid	0.1
Fluazifop	0.1
Fluazinam	0.1
Flucythrinate	0.1
Fludioxonil	0.1
Flufenacet	0.1
Flumioxazin	0.1
Fluopicolide	0.1
Fluopyram	0.1
Fluoxastrobin	0.1
Flupyradifurone	0.1
Fluridone	0.1
Fluroxypyr	0.1
Fluthiacet-methyl	0.1
Flutolanil	0.1
Flutriafol	0.1
Fluvalinate	0.1
Fluxapyroxad	0.1
Fomesafen	0.1
Formetanate	0.1
Furathiocarb	0.1
Haloxyfop	0.1
Heptachlor	0.1
Heptachlor epoxide	0.1
Hexaconazole	0.1
Hexazinone	0.1
Hexythiazox	0.1
Hydropene	0.1
Imazalil	0.1
Imazethapyr	0.1
Imidacloprid	0.1
Indaziflam	0.1
Indoxacarb	0.1
Iprobenfos	0.1
Iprodion	0.1
Isobenzan	0.1
Isofenphos	0.1
Isofenphos-methyl	0.1
Isofenphos-oxon	0.1
Isoprocarb	0.1
Isoprothiolane	0.1
Isoproturon	0.1
Isoxaben	0.1
Kresoxim-methyl	0.1
Lindane	0.1
Linuron	0.1
Malaoxon	0.1
Malathion	0.1

Analyte	LOQ (mg/kg)
Mandipropamid	0.1
MCPA	0.1
MCPB	0.1
MCPP	0.1
Mecabarm	0.1
Mepanipyrim	0.1
Mesotrione	0.1
Metalaxyl	0.1
Methamidophos	0.1
Methiocarb	0.1
Methiocarb sulfone	0.1
Methiocarb sulfoxide	0.1
Methomyl	0.1
Methoxyfenozide	0.1
Metolachlor	0.1
Metolcarb	0.1
Metrafenone	0.1
Mevinphos	0.1
MGK 264	0.1
Molinat	0.1
Monocrotophos	0.1
Monolinuron	0.1
Myclobutanil	0.1
Naled	0.1
Napropamide	0.1
Neburon	0.1
Norflurazon	0.1
Novaluron	0.1
Omethoat	0.1
Oryzalin	0.1
Oxadiazon	0.1
Oxadixyl	0.1
Oxamyl	0.1
Oxamyl-oxime	0.1
Oxychlordane	0.1
Oxydemeton-Methyl	0.1
Oxyfluorfen	0.1
Paclobutrazol	0.1
Paraoxon-ethyl	0.1
Paraoxon-methyl	0.1
Parathion-methyl	0.1
Penconazole	0.1
Pendimethalin	0.1
Penflufen	0.1
Penthiopyrad	0.1
Permethrin	0.1
Perthane	0.1
Phenmedipham	0.1

Analyte	LOQ (mg/kg)
Phenothrin	0.1
Phenthoate	0.1
Phorate	0.1
Phorate-Sulfone	0.1
Phorate-Sulfoxide	0.1
Phosalone	0.1
Phosmet	0.1
Phosphamidon	0.1
Phoxim	0.1
Pinoxaden	0.1
Piperonyl Butoxide	0.1
Pirimicarb	0.1
Pirimiphos-ethyl	0.1
Pirimiphos-methyl	0.1
Prallethrin	0.1
Prochloraz	0.1
Procymidone	0.1
Profenofos	0.1
Promecarb	0.1
Prometon	0.1
Prometryn	0.1
Propachlor	0.1
Propamocarb	0.1
Propanil	0.1
Propazine	0.1
Propetamophos	0.1
Propham	0.1
Propiconazole	0.1
Propoxur	0.1
Propyzamide	0.1
Prothiofos	0.1
Pyraclostrobin	0.1
Pyraflufen Ethyl	0.1
Pyrazophos	0.1
Pyrethrin	0.1
Pyridaben	0.1
Pyrimethanil	0.1
Pyriproxifen	0.1
Pyroxasulfone	0.1
Pyroxsulam	0.1
Quinalphos	0.1
Quinclorac	0.1
Quinoxyfen	0.1
Quintozene(PCNB)	0.2
Quizalofop	0.1
Resmethrin	0.1
Rotenone	0.1
Saflufenacil	0.1

LOQ= Limit of Quantitation
mg/kg= milligram per kilogram (ppm)

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P2320 Multi-Residue Pesticide Profile
Cannabis

Analyte	LOQ (mg/kg)
Sebuthylazin	0.1
Sethoxydim	0.1
Simazine	0.1
Simetryn	0.1
Spinetoram J/L	0.1
Spinosyn A/D	0.1
Spirodiclofen	0.1
Spiromesifen	0.1
Spirotetramat	0.1
Spiroxamine	0.1
Sulfentrazone	0.1
Sulfotep	0.1
Sulfoxaflor	0.1
Sulprofos	0.1
Tebuconazole	0.1
Tebufenozide	0.1
Terbufos	0.1
Terbuthylazine	0.1
Terbutryn	0.1
Tetrachlorvinphos	0.1
Tetraconazole	0.1
Tetramethrin	0.1
Thiabendazol	0.1
Thiabendazol-5-hydroxy	0.1
Thiacloprid	0.1
Thiamethoxam	0.1
Thiobencarb	0.1
Thiodicarb	0.1
Thiometon	0.1
Thiophanate-methyl	0.2
Tolfenpyrad	0.1
Tolylfluanid	0.1
Triadimefon	0.1
Triadimenol	0.1
Triazophos	0.1
Trifloxystrobin	0.1
Triflumizole	0.1
Triticonazole	0.1
Zoxamid	0.1

LOQ= Limit of Quantitation
mg/kg= milligram per kilogram (ppm)

Updated: 09.12.2022

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Purchase Order:
Received: 07/26/24 11:59

Revision: 2 Document ID: 7087
Legacy ID: CFL-E33Effective:

Laboratory Quality Control Results

Residual Solvents — Batch ID: 2405741

Method Blank					Laboratory Control Sample							
Analyte	Result		LOQ	Notes	Result	Spike	Units	% Rec	Limits			Notes
Propane	ND	<	200		563	584	µg/g	96.4	60	-	120	
Isobutane	ND	<	200		716	767	µg/g	93.4	60	-	120	
Butane	ND	<	200		728	782	µg/g	93.1	60	-	120	
2,2-Dimethylpropane	ND	<	200		903	939	µg/g	96.2	60	-	120	
Methanol	ND	<	200		1480	1600	µg/g	92.5	60	-	120	
Ethylene Oxide	ND	<	30		55.6	57.1	µg/g	97.4	60	-	120	
2-Methylbutane	ND	<	200		1530	1620	µg/g	94.4	60	-	120	
Pentane	ND	<	200		1480	1610	µg/g	91.9	60	-	120	
Ethanol	ND	<	200		1410	1600	µg/g	88.1	70	-	130	
Ethyl Ether	ND	<	200		1450	1610	µg/g	90.1	60	-	120	
2,2-Dimethylbutane	ND	<	30		164	190	µg/g	86.3	60	-	120	
Acetone	ND	<	200		1460	1610	µg/g	90.7	60	-	120	
2-Propanol	ND	<	200		1440	1610	µg/g	89.4	60	-	120	
Ethyl Formate	ND	<	500		1220	1630	µg/g	74.8	70	-	130	
Acetonitrile	ND	<	100		429	486	µg/g	88.3	60	-	120	
Methyl Acetate	ND	<	500		1300	1610	µg/g	80.7	70	-	130	
2,3-Dimethylbutane	ND	<	30		148	163	µg/g	90.8	60	-	120	
Dichloromethane	ND	<	60		438	482	µg/g	90.9	60	-	120	
2-Methylpentane	ND	<	30		161	178	µg/g	90.4	60	-	120	
MTBE	ND	<	500		1260	1610	µg/g	78.3	70	-	130	
3-Methylpentane	ND	<	30		438	490	µg/g	89.4	60	-	120	
Hexane	ND	<	30		159	175	µg/g	90.9	60	-	120	
1-Propanol	ND	<	500		1420	1610	µg/g	88.2	70	-	130	
Methylethylketone	ND	<	500		1310	1610	µg/g	81.4	70	-	130	
Ethyl acetate	ND	<	200		1440	1600	µg/g	90.0	60	-	120	
2-Butanol	ND	<	200		1460	1610	µg/g	90.7	60	-	120	
Tetrahydrofuran	ND	<	100		456	504	µg/g	90.5	60	-	120	
Cyclohexane	ND	<	200		1510	1620	µg/g	93.2	60	-	120	
2-methyl-1-propanol	ND	<	500		1390	1610	µg/g	86.3	70	-	130	
Benzene	ND	<	1		4.6	5.08	µg/g	90.6	60	-	120	
Isopropyl Acetate	ND	<	200		1610	1610	µg/g	100.0	60	-	120	
Heptane	ND	<	200		1600	1610	µg/g	99.4	60	-	120	
1-Butanol	ND	<	500		1500	1610	µg/g	93.2	70	-	130	
Propyl Acetate	ND	<	500		1610	1610	µg/g	100.0	70	-	130	
1,4-Dioxane	ND	<	100		464	488	µg/g	95.1	60	-	120	
2-Ethoxyethanol	ND	<	30		168	163	µg/g	103.1	60	-	120	
Methylisobutylketone	ND	<	500		1630	1620	µg/g	100.6	70	-	130	
3-Methyl-1-butanol	ND	<	500		1570	1610	µg/g	97.5	70	-	130	
Ethylene Glycol	ND	<	200		476	488	µg/g	97.5	60	-	120	
Toluene	ND	<	100		468	492	µg/g	95.1	60	-	120	
Isobutyl Acetate	ND	<	500		1620	1620	µg/g	100.0	70	-	130	
1-Pentanol	ND	<	500		1620	1610	µg/g	100.6	70	-	130	
Butyl Acetate	ND	<	500		1690	1650	µg/g	102.4	70	-	130	
Ethylbenzene	ND	<	200		933	969	µg/g	96.3	60	-	120	
m,p-Xylene	ND	<	200		936	981	µg/g	95.4	60	-	120	
o-Xylene	ND	<	200		1010	966	µg/g	104.6	60	-	120	
Cumene	ND	<	30		178	167	µg/g	106.6	60	-	120	
Anisole	ND	<	500		1760	1610	µg/g	109.3	70	-	130	
DMSO	ND	<	500		1890	1610	µg/g	117.4	70	-	130	
1,2-dimethoxyethane	ND	<	50		178	170	µg/g	104.7	70	-	130	
Triethylamine	ND	<	500		1410	1620	µg/g	87.0	70	-	130	
N,N-dimethylformamide	ND	<	150		494	499	µg/g	99.0	70	-	130	
N,N-dimethylacetamide	ND	<	150		501	489	µg/g	102.5	70	-	130	
Pyridine	ND	<	50		150	167	µg/g	89.8	70	-	130	
Sulfolane	ND	<	50		151	169	µg/g	89.3	70	-	130	
1,2-Dichloroethane	ND	<	1		0.971	1	µg/g	97.1	70	-	130	
Chloroform	ND	<	1		0.839	1	µg/g	83.9	70	-	130	
Trichloroethylene	ND	<	1		0.901	1	µg/g	90.1	70	-	130	
1,1-Dichloroethane	ND	<	1		0.752	1	µg/g	75.2	70	-	130	

Columbia LABORATORIES
A Tentamus Company

12423 NE Whitaker Way
Portland, OR 97230
503-254-1794

Report Number: 24-008146/D001.R000
Report Date: 08/02/2024
ORELAP#: OR100028
Purchase Order:
Received: 07/26/24 11:59

Revision: 2 Document ID: 7087
Legacy ID: CFL-E33Effective:

QC- Sample Duplicate — Sample ID: 24-007941-0001

Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Accept/ Fail	Notes
Propane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Isobutane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Butane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
2,2-Dimethylpropane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Methanol	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Ethylene Oxide	ND	ND	30	µg/g	0.0	< 20	Acceptable	
2-Methylbutane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Pentane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Ethanol	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Ethyl Ether	ND	ND	200	µg/g	0.0	< 20	Acceptable	
2,2-Dimethylbutane	ND	ND	30	µg/g	0.0	< 20	Acceptable	
Acetone	ND	ND	200	µg/g	0.0	< 20	Acceptable	
2-Propanol	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Ethyl Formate	ND	ND	500	µg/g	0.0	< 20	Acceptable	
Acetonitrile	ND	ND	100	µg/g	0.0	< 20	Acceptable	
Methyl Acetate	ND	ND	500	µg/g	0.0	< 20	Acceptable	
2,3-Dimethylbutane	ND	ND	30	µg/g	0.0	< 20	Acceptable	
Dichloromethane	ND	ND	60	µg/g	0.0	< 20	Acceptable	
2-Methylpentane	ND	ND	30	µg/g	0.0	< 20	Acceptable	
MTBE	ND	ND	500	µg/g	0.0	< 20	Acceptable	
3-Methylpentane	ND	ND	30	µg/g	0.0	< 20	Acceptable	
Hexane	ND	ND	30	µg/g	0.0	< 20	Acceptable	
1-Propanol	ND	ND	500	µg/g	0.0	< 20	Acceptable	
Methylethylketone	ND	ND	500	µg/g	0.0	< 20	Acceptable	
Ethyl acetate	ND	ND	200	µg/g	0.0	< 20	Acceptable	
2-Butanol	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Tetrahydrofuran	ND	ND	100	µg/g	0.0	< 20	Acceptable	
Cyclohexane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
2-methyl-1-propanol	ND	ND	500	µg/g	0.0	< 20	Acceptable	
Benzene	ND	ND	1	µg/g	0.0	< 20	Acceptable	
Isopropyl Acetate	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Heptane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
1-Butanol	ND	ND	500	µg/g	0.0	< 20	Acceptable	
Propyl Acetate	ND	ND	500	µg/g	0.0	< 20	Acceptable	
1,4-Dioxane	ND	ND	100	µg/g	0.0	< 20	Acceptable	
2-Ethoxyethanol	ND	ND	30	µg/g	0.0	< 20	Acceptable	
Methylisobutylketone	ND	ND	500	µg/g	0.0	< 20	Acceptable	
3-Methyl-1-butanol	ND	ND	500	µg/g	0.0	< 20	Acceptable	
Ethylene Glycol	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Toluene	ND	ND	100	µg/g	0.0	< 20	Acceptable	
Isobutyl Acetate	ND	ND	500	µg/g	0.0	< 20	Acceptable	
1-Pentanol	ND	ND	500	µg/g	0.0	< 20	Acceptable	
Butyl Acetate	ND	ND	500	µg/g	0.0	< 20	Acceptable	
Ethylbenzene	ND	ND	200	µg/g	0.0	< 20	Acceptable	
m,p-Xylene	ND	ND	200	µg/g	0.0	< 20	Acceptable	
o-Xylene	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Cumene	ND	ND	30	µg/g	0.0	< 20	Acceptable	
Anisole	ND	ND	500	µg/g	0.0	< 20	Acceptable	
DMSO	ND	ND	500	µg/g	0.0	< 20	Acceptable	
1,2-dimethoxyethane	ND	ND	50	µg/g	0.0	< 20	Acceptable	
Triethylamine	ND	ND	500	µg/g	0.0	< 20	Acceptable	
N,N-dimethylformamide	ND	ND	150	µg/g	0.0	< 20	Acceptable	
N,N-dimethylacetamide	ND	ND	150	µg/g	0.0	< 20	Acceptable	
Pyridine	ND	ND	50	µg/g	0.0	< 20	Acceptable	
Sulfolane	ND	ND	50	µg/g	0.0	< 20	Acceptable	
1,2-Dichloroethane	ND	ND	1	µg/g	0.0	< 20	Acceptable	
Chloroform	ND	ND	1	µg/g	0.0	< 20	Acceptable	
Trichloroethylene	ND	ND	1	µg/g	0.0	< 20	Acceptable	
1,1-Dichloroethane	ND	ND	1	µg/g	0.0	< 20	Acceptable	

Abbreviations

ND - None Detected at or above MRL
RPD - Relative Percent Difference
LOQ - Limit of Quantitation

Units of Measure:

µg/g- Microgram per gram or ppm

Columbia LABORATORIES
A Tentamus Company

12423 NE Whitaker Way
Portland, OR 97230
503-254-1794

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ORELAP#: OR100028
Purchase Order:
Received: 07/26/24 11:59

Revision: 2 Document ID: 7087
Legacy ID: CFL-E33Effective:

Laboratory Quality Control Results

Residual Solvents **Batch ID:** 2405786

Method Blank					Laboratory Control Sample							
Analyte	**Result**		**LOQ**	**Notes**	**Result**	**Spike**	**Units**	**% Rec**	**Limits**			**Notes**
Propane	ND	<	200		487	584	µg/g	83.4	60	-	120	
Isobutane	ND	<	200		582	767	µg/g	75.9	60	-	120	
Butane	ND	<	200		592	782	µg/g	75.7	60	-	120	
2,2-Dimethylpropane	ND	<	200		705	939	µg/g	75.1	60	-	120	
Methanol	ND	<	200		1320	1600	µg/g	82.5	60	-	120	
Ethylene Oxide	ND	<	30		47.9	57.1	µg/g	83.9	60	-	120	
2-Methylbutane	ND	<	200		1260	1620	µg/g	77.8	60	-	120	
Pentane	ND	<	200		1210	1610	µg/g	75.2	60	-	120	
Ethanol	ND	<	200		1150	1600	µg/g	71.9	70	-	130	
Ethyl Ether	ND	<	200		1200	1610	µg/g	74.5	60	-	120	
2,2-Dimethylbutane	ND	<	30		131	190	µg/g	68.9	60	-	120	
Acetone	ND	<	200		1220	1610	µg/g	75.8	60	-	120	
2-Propanol	ND	<	200		1180	1610	µg/g	73.3	60	-	120	
Ethyl Formate	ND	<	500		996	1630	µg/g	61.1	70	-	130	Q6
Acetonitrile	ND	<	100		353	486	µg/g	72.6	60	-	120	
Methyl Acetate	ND	<	500		1090	1610	µg/g	67.7	70	-	130	Q6
2,3-Dimethylbutane	ND	<	30		119	163	µg/g	73.0	60	-	120	
Dichloromethane	ND	<	60		369	482	µg/g	76.6	60	-	120	
2-Methylpentane	ND	<	30		129	178	µg/g	72.5	60	-	120	
MTBE	ND	<	500		1030	1610	µg/g	64.0	70	-	130	Q6
3-Methylpentane	ND	<	30		347	490	µg/g	70.8	60	-	120	
Hexane	ND	<	30		124	175	µg/g	70.9	60	-	120	
1-Propanol	ND	<	500		1190	1610	µg/g	73.9	70	-	130	
Methylethylketone	ND	<	500		1050	1610	µg/g	65.2	70	-	130	Q6
Ethyl acetate	ND	<	200		1180	1600	µg/g	73.8	60	-	120	
2-Butanol	ND	<	200		1170	1610	µg/g	72.7	60	-	120	
Tetrahydrofuran	ND	<	100		371	504	µg/g	73.6	60	-	120	
Cyclohexane	ND	<	200		1220	1620	µg/g	75.3	60	-	120	
2-methyl-1-propanol	ND	<	500		1130	1610	µg/g	70.2	70	-	130	
Benzene	ND	<	1		3.71	5.08	µg/g	73.0	60	-	120	
Isopropyl Acetate	ND	<	200		1420	1610	µg/g	88.2	60	-	120	
Heptane	ND	<	200		1400	1610	µg/g	87.0	60	-	120	
1-Butanol	ND	<	500		1240	1610	µg/g	77.0	70	-	130	
Propyl Acetate	ND	<	500		1410	1610	µg/g	87.6	70	-	130	
1,4-Dioxane	ND	<	100		368	488	µg/g	75.4	60	-	120	
2-Ethoxyethanol	ND	<	30		143	163	µg/g	87.7	60	-	120	
Methylisobutylketone	ND	<	500		1400	1620	µg/g	86.4	70	-	130	
3-Methyl-1-butanol	ND	<	500		1240	1610	µg/g	77.0	70	-	130	
Ethylene Glycol	ND	<	200		375	488	µg/g	76.8	60	-	120	
Toluene	ND	<	100		365	492	µg/g	74.2	60	-	120	
Isobutyl Acetate	ND	<	500		1360	1620	µg/g	84.0	70	-	130	
1-Pentanol	ND	<	500		1320	1610	µg/g	82.0	70	-	130	
Butyl Acetate	ND	<	500		1410	1650	µg/g	85.5	70	-	130	
Ethylbenzene	ND	<	200		696	969	µg/g	71.8	60	-	120	
m,p-Xylene	ND	<	200		677	981	µg/g	69.0	60	-	120	
o-Xylene	ND	<	200		777	966	µg/g	80.4	60	-	120	
Cumene	ND	<	30		144	167	µg/g	86.2	60	-	120	
Anisole	ND	<	500		1430	1610	µg/g	88.8	70	-	130	
DMSO	ND	<	500		1420	1610	µg/g	88.2	70	-	130	
1,2-dimethoxyethane	ND	<	50		142	170	µg/g	83.5	70	-	130	
Triethylamine	ND	<	500		1170	1620	µg/g	72.2	70	-	130	
N,N-dimethylformamide	ND	<	150		377	499	µg/g	75.6	70	-	130	
N,N-dimethylacetamide	ND	<	150		377	489	µg/g	77.1	70	-	130	
Pyridine	ND	<	50		113	167	µg/g	67.7	70	-	130	Q6
Sulfolane	ND	<	50		112	169	µg/g	66.3	70	-	130	Q6
1,2-Dichloroethane	ND	<	1		0.807	1	µg/g	80.7	70	-	130	
Chloroform	ND	<	1		0.686	1	µg/g	68.6	70	-	130	Q6
Trichloroethylene	ND	<	1		0.769	1	µg/g	76.9	70	-	130	
1,1-Dichloroethane	ND	<	1		0.614	1	µg/g	61.4	70	-	130	Q6

Columbia LABORATORIES
A Tentamus Company

12423 NE Whitaker Way
Portland, OR 97230
503-254-1794

Report Number: 24-008146/D001.R000
Report Date: 08/02/2024
ORELAP#: OR100028
Purchase Order:
Received: 07/26/24 11:59

QC - Sample Duplicate **Sample ID: 24-007850-0001-01**

Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Accept/Fail	Notes
Propane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Isobutane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Butane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
2,2-Dimethylpropane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Methanol	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Ethylene Oxide	ND	ND	30	µg/g	0.0	< 20	Acceptable	
2-Methylbutane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Pentane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Ethanol	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Ethyl Ether	ND	ND	200	µg/g	0.0	< 20	Acceptable	
2,2-Dimethylbutane	ND	ND	30	µg/g	0.0	< 20	Acceptable	
Acetone	ND	ND	200	µg/g	0.0	< 20	Acceptable	
2-Propanol	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Ethyl Formate	ND	ND	500	µg/g	0.0	< 20	Acceptable	
Acetonitrile	ND	ND	100	µg/g	0.0	< 20	Acceptable	
Methyl Acetate	ND	ND	500	µg/g	0.0	< 20	Acceptable	
2,3-Dimethylbutane	ND	ND	30	µg/g	0.0	< 20	Acceptable	
Dichloromethane	ND	ND	60	µg/g	0.0	< 20	Acceptable	
2-Methylpentane	ND	ND	30	µg/g	0.0	< 20	Acceptable	
MTBE	ND	ND	500	µg/g	0.0	< 20	Acceptable	
3-Methylpentane	ND	ND	30	µg/g	0.0	< 20	Acceptable	
Hexane	ND	ND	30	µg/g	0.0	< 20	Acceptable	
1-Propanol	ND	ND	500	µg/g	0.0	< 20	Acceptable	
Methylethylketone	ND	ND	500	µg/g	0.0	< 20	Acceptable	
Ethyl acetate	ND	ND	200	µg/g	0.0	< 20	Acceptable	
2-Butanol	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Tetrahydrofuran	ND	ND	100	µg/g	0.0	< 20	Acceptable	
Cyclohexane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
2-methyl-1-propanol	ND	ND	500	µg/g	0.0	< 20	Acceptable	
Benzene	ND	ND	1	µg/g	0.0	< 20	Acceptable	
Isopropyl Acetate	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Heptane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
1-Butanol	ND	ND	500	µg/g	0.0	< 20	Acceptable	
Propyl Acetate	ND	ND	500	µg/g	0.0	< 20	Acceptable	
1,4-Dioxane	ND	ND	100	µg/g	0.0	< 20	Acceptable	
2-Ethoxyethanol	ND	ND	30	µg/g	0.0	< 20	Acceptable	
Methylisobutylketone	ND	ND	500	µg/g	0.0	< 20	Acceptable	
3-Methyl-1-butanol	ND	ND	500	µg/g	0.0	< 20	Acceptable	
Ethylene Glycol	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Toluene	ND	ND	100	µg/g	0.0	< 20	Acceptable	
Isobutyl Acetate	ND	ND	500	µg/g	0.0	< 20	Acceptable	
1-Pentanol	ND	ND	500	µg/g	0.0	< 20	Acceptable	
Butyl Acetate	ND	ND	500	µg/g	0.0	< 20	Acceptable	
Ethylbenzene	ND	ND	200	µg/g	0.0	< 20	Acceptable	
m,p-Xylene	ND	ND	200	µg/g	0.0	< 20	Acceptable	
o-Xylene	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Cumene	ND	ND	30	µg/g	0.0	< 20	Acceptable	
Anisole	ND	ND	500	µg/g	0.0	< 20	Acceptable	
DMSO	ND	ND	500	µg/g	0.0	< 20	Acceptable	
1,2-dimethoxyethane	ND	ND	50	µg/g	0.0	< 20	Acceptable	
Triethylamine	ND	ND	500	µg/g	0.0	< 20	Acceptable	
N,N-dimethylformamide	ND	ND	150	µg/g	0.0	< 20	Acceptable	
N,N-dimethylacetamide	ND	ND	150	µg/g	0.0	< 20	Acceptable	
Pyridine	ND	ND	50	µg/g	0.0	< 20	Acceptable	
Sulfolane	ND	ND	50	µg/g	0.0	< 20	Acceptable	
1,2-Dichloroethane	ND	ND	1	µg/g	0.0	< 20	Acceptable	
Chloroform	ND	ND	1	µg/g	0.0	< 20	Acceptable	
Trichloroethylene	ND	ND	1	µg/g	0.0	< 20	Acceptable	
1,1-Dichloroethane	ND	ND	1	µg/g	0.0	< 20	Acceptable	

Abbreviations

ND - None Detected at or above MRL
RPD - Relative Percent Difference
LOQ - Limit of Quantitation

Units of Measure:

µg/g- Microgram per gram or ppm

Columbia LABORATORIES
A Tentamus Company

12423 NE Whitaker Way
Portland, OR 97230
503-254-1794

Report Number:	24-008146/D001.R000
Report Date:	08/02/2024
ORELAP#:	OR100028
Purchase Order:	
Received:	07/26/24 11:59

Columbia LABORATORIES
A Tentamus Company

12423 NE Whitaker Way
Portland, OR 97230
503-254-1794

Report Number: 24-008146/D001.R000
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Purchase Order:
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Explanation of QC Flag Comments:

Code	Explanation
Q	Matrix interferences affecting spike or surrogate recoveries.
Q1	Quality control result biased high. Only non-detect samples reported.
Q2	Quality control outside QC limits. Data considered estimate.
Q3	Sample concentration greater than four times the amount spiked.
Q4	Non-homogenous sample matrix, affecting RPD result and/or % recoveries.
Q5	Spike results above calibration curve.
Q6	Quality control outside QC limits. Data acceptable based on remaining QC.
R	Relative percent difference (RPD) outside control limit.
R1	RPD non-calculable, as sample or duplicate results are less than five times the LOQ.
R2	Sample replicates RPD non-calculable, as only one replicate is within the analytical range.
LOQ1	Quantitation level raised due to low sample volume and/or dilution.
LOQ2	Quantitaion level raised due to matrix interference.
B	Analyte detected in method blank, but not in associated samples.
B1	The sample concentration is greater than 5 times the blank concentration.
B2	The sample concentration is less than 5 times the blank concentration.