

July 02, 2019

GARDEN OF LIFE

4200 Northcorp Parkway
Palm Beach Gardens, FL 33410

Order No. 506947
Sample No. 1029099

SAMPLE INFORMATION

Description Dr. Formulated CBD 30 mg 30ct (103619)
Lot Number B1900363
Category (Type) Other
Received June 27, 2019



ANALYTICAL RESULTS

Analysis Cannabinoid Profile ✔ Pass
Instrument Liquid Chromatography Diode Array Detector (LC-DAD)
Method American Herbal Pharmacopoeia
Analysis Date June 27, 2019 to July 02, 2019

Analyte	mg/g	mg/g (dry)	% (dry)	mg/serving	mg/unit	Listed Value (mg/ serving)	% Difference	Status
Total THC	ND	ND	ND	ND	ND	-	-	Pass
Total CBD	77.76	83.7841	8.37841	32.5426	976.278	30	8.475	-
Moisture	7.19 %							
Label Claims	n/p							
Measured Serving Weight (g)	0.4185							
Servings / Unit	30							

Reported by
Anresco, Inc.

Limit of Quantitation: 1.0 mg/g
Limit of Detection: 0.4 mg/g
ND = None Detected
<LOQ = Below Limit of Quantitation
<LOD = Below Limit of Detection

Mark Rosasco
Analyst

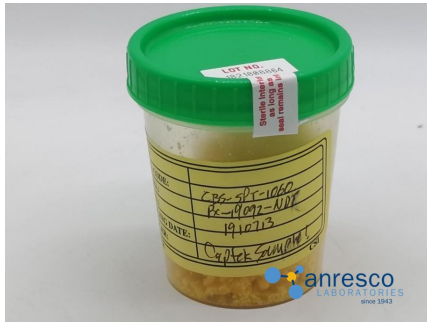
July 02, 2019

ANALYZED BY:

Anresco Laboratories
1375 Van Dyke Avenue,
San Francisco, CA 94124
C8-18-0000020-TEMP

CLIENT:

Garden of Life
4200 Northcorp Parkway
Palm Beach Gardens, FL 33410



SAMPLE INFORMATION

Sample No.: 1025711
Product Name: Whole Plant Hemp Oil Extract
Matrix: Concentrate (Other)
Batch #: PX-19092-NDT

Date Received: 04/19/2019
Date Reported: 04/30/2019

TEST SUMMARY

Cannabinoid Profile:
Microbiological Screen:
Pesticide Residue Screen: ✔ Pass

Terpenoid Profile:
Residual Solvent Screen: ✔ Pass
Heavy Metal Screen: ✔ Pass
Other Analyses: ✔ Pass
Overall: ✔ Pass

CANNABINOID PROFILE

04/23/2019

Method: American Herbal Pharmacopoeia
Instrument: Liquid Chromatography Diode Array Detector (LC-DAD)
Limit of Quantitation 1.0 mg/g
Limit of Detection 0.4 mg/g

Analyte	mg/g	mg/g (dry)	% (dry)	Listed Value (mg/g)	% Difference	Status
δ8 THC	ND	ND	ND	-	-	-
δ9 THC	ND	ND	ND	-	-	-
THCV	1.4	1.42219	0.142	-	-	-
THCVA	ND	ND	ND	-	-	-
THCA	ND	ND	ND	-	-	-
CBD	883.9	897.907	89.791	-	-	-
CBDA	ND	ND	ND	-	-	-
CBC	2.0	2.03169	0.203	-	-	-
CBCA	ND	ND	ND	-	-	-
CBDV	4.0	4.06339	0.406	-	-	-
CBG	ND	ND	ND	-	-	-
CBGA	ND	ND	ND	-	-	-
CBN	ND	ND	ND	-	-	-
Total THC	ND	ND	ND	-	-	-
Total CBD	883.9	897.907	89.791	-	-	-
Total Cannabinoids	891.3	905.425	90.543	-	-	-
Total Active Cannabinoids	891.3	905.425	90.543	-	-	-

Label Claims N/P

TERPENOID PROFILE

04/23/2019

Method: American Herbal Pharmacopoeia
Instrument: Gas Chromatography Mass Spectrometry (GC/MS)

Terpene	mg/g	%	Listed Value	% Difference	Status
α-Pinene	0.385	0.0385	-	-	-
Isopulegol	ND	ND	-	-	-
Camphene	0.032	0.0032	-	-	-
Menthol	ND	ND	-	-	-
β-Myrcene	1.514	0.1514	-	-	-
(-)-Borneol	0.038	0.0038	-	-	-
β-Pinene	0.165	0.0165	-	-	-
Terpineol	0.201	0.0201	-	-	-
δ-3-Carene	ND	ND	-	-	-
Citronellol	ND	<LOQ	-	-	-
Limonene	0.398	0.0398	-	-	-
Geraniol	ND	<LOQ	-	-	-
α-Terpinene	ND	<LOQ	-	-	-
β-Caryophyllene	1.892	0.1892	-	-	-
trans-beta-Ocimene	0.059	0.0059	-	-	-
α-Humulene	0.586	0.0586	-	-	-
cis-beta-Ocimene	0.133	0.0133	-	-	-
cis-Nerolidol	ND	ND	-	-	-
p-Cymene	ND	ND	-	-	-
trans-Nerolidol	0.047	0.0047	-	-	-

Terpene	mg/g	%	Listed Value	% Difference	Status
Eucalyptol	0.016	0.0016	-	-	-
Guaiol	1.381	0.1381	-	-	-
γ-Terpinene	ND	<LOQ	-	-	-
Caryophyllene Oxide	0.027	0.0027	-	-	-
Terpinolene	ND	<LOQ	-	-	-
α-Bisabolol	1.661	0.1661	-	-	-
Linalool	0.276	0.0276	-	-	-
Eudesmol	1.238	0.1238	-	-	-
Total Terpenes	10.049	1.0049	-	-	-

MICROBIOLOGICAL SCREEN

04/23/2019

Analysis	Method	Findings	Limit	Status
SPC	AOAC 2015.13	<10	NA	-
Yeast	AOAC 2014.05	<10	NA	-
Mold	AOAC 2014.05	<10	NA	-
Coliforms	AOAC 991.14	<10	NA	-
E. coli	AOAC 991.14	<10	NA	-

Comments:

 Salmonella AOAC 2016.01 - Negative/1g
 Staph AOAC 2003.07 - <10 cfu/g

PESTICIDE RESIDUE SCREEN ✔ Pass

04/23/2019

Method: MF 21P030

Instrument: Liquid Chromatography Tandem Mass Spectrometry (LC-MS/MS) & Gas Chromatography Tandem Mass Spectrometry (GC-MS/MS)

Analyte	LOD / LOQ (µg/g)	Findings (µg/g)	Limit (µg/g)	Status
Abamectin	0.04/0.10	ND	0.1	Pass
Acephate	0.04/0.10	ND	0.1	Pass
Acequinocyl	0.04/0.10	ND	0.1	Pass
Acetamiprid	0.04/0.10	ND	0.1	Pass
Aldicarb	0.04/0.10	ND	0.0	Pass
Azoxystrobin	0.04/0.10	ND	0.1	Pass
Bifenazate	0.04/0.10	ND	0.1	Pass
Bifenthrin	0.20/0.50	0.0475	3.0	Pass
Boscalid	0.04/0.10	ND	0.1	Pass
Captan	0.25/0.70	ND	0.7	Pass
Carbaryl	0.20/0.50	ND	0.5	Pass
Carbofuran	0.04/0.10	ND	0.0	Pass
Chlorantraniliprole	0.04/0.10	ND	10.0	Pass
Chlordane	0.04/0.10	ND	0.0	Pass
Chlorfenapyr	0.04/0.10	ND	0.0	Pass
Chlorpyrifos	0.04/0.10	ND	0.0	Pass
Clofentezine	0.04/0.10	ND	0.1	Pass
Coumaphos	0.04/0.10	ND	0.0	Pass
Cyfluthrin	0.70/2.00	ND	2.0	Pass
Cypermethrin	0.35/1.00	ND	1.0	Pass
Daminozide	0.04/0.10	ND	0.0	Pass
DDVP (Dichlorvos)	0.04/0.10	ND	0.0	Pass
Diazinon	0.04/0.10	ND	0.1	Pass
Dimethoate	0.04/0.10	ND	0.0	Pass
Dimethomorph	0.04/0.10	ND	2.0	Pass
Ethoprop(hos)	0.04/0.10	ND	0.0	Pass
Etofenprox	0.04/0.10	ND	0.0	Pass
Etoxazole	0.04/0.10	ND	0.1	Pass
Fenhexamid	0.04/0.10	ND	0.1	Pass
Fenoxycarb	0.04/0.10	ND	0.0	Pass
Fenpyroximate	0.04/0.10	ND	0.1	Pass
Fipronil	0.04/0.10	ND	0.0	Pass
Flonicamid	0.04/0.10	ND	0.1	Pass
Fludioxanil	0.04/0.10	ND	0.1	Pass
Hexythiazox	0.04/0.10	ND	0.1	Pass
Imazalil	0.04/0.10	ND	0.0	Pass
Imidacloprid	0.04/0.10	ND	5.0	Pass
Kresoxim Methyl	0.04/0.10	ND	0.1	Pass
Malathion	0.20/0.50	ND	0.5	Pass
Metalaxyl	0.04/0.10	ND	2.0	Pass
Methiocarb	0.04/0.10	ND	0.0	Pass
Methomyl	0.04/1.00	ND	1.0	Pass
Methyl parathion	0.04/0.10	ND	0.0	Pass
Mevinphos	0.04/0.10	ND	0.0	Pass
Myclobutanil	0.04/0.10	ND	0.1	Pass
Naled	0.50/1.50	ND	0.1	Pass
Oxamyl	0.20/0.50	ND	0.5	Pass
Pacllobutrazol	0.04/0.10	ND	0.0	Pass
Pentachloronitrobenzene	0.04/0.10	ND	0.1	Pass
Permethrins	0.20/0.50	ND	0.5	Pass
Phosmet	0.04/0.10	ND	0.1	Pass

Analyte	LOD / LOQ (µg/g)	Findings (µg/g)	Limit (µg/g)	Status
Piperonyl Butoxide	0.04/0.10	ND	3.0	Pass
Prallethrin	0.50/1.50	ND	0.1	Pass
Propiconazole	0.04/0.10	ND	0.1	Pass
Propoxur	0.04/0.10	ND	0.0	Pass
Pyrethrins	0.20/0.50	ND	0.5	Pass
Pyridaben	0.04/0.10	ND	0.1	Pass
Spinetoram	0.04/0.10	ND	0.1	Pass
Spinosad	0.04/0.10	ND	0.1	Pass
Spiromesifen	0.04/0.10	ND	0.1	Pass
Spirotetramat	0.04/0.10	ND	0.1	Pass
Spiroxamine	0.04/0.10	ND	0.0	Pass
Tebuconazole	0.04/0.10	ND	0.1	Pass
Thiacloprid	0.04/0.10	ND	0.0	Pass
Thiamethoxam	0.35/1.00	ND	5.0	Pass
Trifloxystrobin	0.04/0.10	ND	0.1	Pass
Acetochlor	0.04-0.20 / 0.1-0.5	ND	-	-
Alachlor	0.04-0.20 / 0.1-0.5	ND	-	-
Aldicarb Sulfone	0.04-0.20 / 0.1-0.5	ND	-	-
Aldicarb sulfoxide*	0.04-0.20 / 0.1-0.5	ND	-	-
Aldrin*	0.04-0.20 / 0.1-0.5	ND	-	-
Atrazine	0.04-0.20 / 0.1-0.5	ND	-	-
Benfluralin	0.04-0.20 / 0.1-0.5	ND	-	-
BHC alpha	0.04-0.20 / 0.1-0.5	ND	-	-
BHC beta	0.04-0.20 / 0.1-0.5	ND	-	-
Bitertanol	0.04-0.20 / 0.1-0.5	ND	-	-
Buprofezin	0.04-0.20 / 0.1-0.5	ND	-	-
Carbendazim (MBC)	0.04-0.20 / 0.1-0.5	ND	-	-
Carfentrazone ethyl	0.04-0.20 / 0.1-0.5	ND	-	-
Chlorobenzilate	0.04-0.20 / 0.1-0.5	ND	-	-
Chlorotoluron	0.04-0.20 / 0.1-0.5	ND	-	-
Chlorpropham	0.04-0.20 / 0.1-0.5	ND	-	-
Chlorpyrifos methyl	0.04-0.20 / 0.1-0.5	ND	-	-
Chlorthiophos	0.04-0.20 / 0.1-0.5	ND	-	-
Clethodim	0.04-0.20 / 0.1-0.5	ND	-	-
Clomazone	0.04-0.20 / 0.1-0.5	ND	-	-
Clothianidin	0.04-0.20 / 0.1-0.5	ND	-	-
Cyazofamid*	0.04-0.20 / 0.1-0.5	ND	-	-
Cymoxanil*	0.04-0.20 / 0.1-0.5	ND	-	-
Cyprodinil*	0.04-0.20 / 0.1-0.5	ND	-	-
Cyromazine	0.04-0.20 / 0.1-0.5	ND	-	-
DCPA (Dacthal)	0.04-0.20 / 0.1-0.5	ND	-	-
Diallate	0.04-0.20 / 0.1-0.5	ND	-	-
Dieldrin	0.04-0.20 / 0.1-0.5	ND	-	-
Diflubenzuron	0.04-0.20 / 0.1-0.5	ND	-	-
Dimethachlor	0.04-0.20 / 0.1-0.5	ND	-	-
Diniconazole	0.04-0.20 / 0.1-0.5	ND	-	-
Dinotefuran	0.04-0.20 / 0.1-0.5	ND	-	-
Diphenamid	0.04-0.20 / 0.1-0.5	ND	-	-
Diphenylamine (DPA)	0.04-0.20 / 0.1-0.5	ND	-	-
Diuron	0.04-0.20 / 0.1-0.5	ND	-	-
Esfenvalerate	0.04-0.20 / 0.1-0.5	ND	-	-
Ethalfuralin	0.04-0.20 / 0.1-0.5	ND	-	-
Ethylan	0.04-0.20 / 0.1-0.5	ND	-	-
Etridazole*	0.04-0.20 / 0.1-0.5	ND	-	-
Fenarimol	0.04-0.20 / 0.1-0.5	ND	-	-
Fenbuconazole	0.04-0.20 / 0.1-0.5	ND	-	-
Fenpropimorph	0.04-0.20 / 0.1-0.5	ND	-	-
Fenthion	0.04-0.20 / 0.1-0.5	ND	-	-
Fenvalerate	0.04-0.20 / 0.1-0.5	ND	-	-
Fluazifop-P-butyl	0.04-0.20 / 0.1-0.5	ND	-	-
Flubendiamide	0.04-0.20 / 0.1-0.5	ND	-	-
Fluchloralin	0.04-0.20 / 0.1-0.5	ND	-	-
Flucythrinate	0.04-0.20 / 0.1-0.5	ND	-	-
Fluoxastrobin	0.04-0.20 / 0.1-0.5	ND	-	-
Flusilazole	0.04-0.20 / 0.1-0.5	ND	-	-
Flutolanil	0.04-0.20 / 0.1-0.5	ND	-	-
Flutriafol	0.04-0.20 / 0.1-0.5	ND	-	-
Fonofos*	0.04-0.20 / 0.1-0.5	ND	-	-
Formetanate Hydrochloride	0.04-0.20 / 0.1-0.5	ND	-	-
Heptachlor	0.04-0.20 / 0.1-0.5	ND	-	-
Hexachlorobenzene	0.04-0.20 / 0.1-0.5	ND	-	-
Hexaconazole	0.04-0.20 / 0.1-0.5	ND	-	-
Hexazinone	0.04-0.20 / 0.1-0.5	ND	-	-
3-Hydroxycarbofuran	0.04-0.20 / 0.1-0.5	ND	-	-
Indoxacarb*	0.04-0.20 / 0.1-0.5	ND	-	-
Isazophos	0.04-0.20 / 0.1-0.5	ND	-	-
Isopropalin	0.04-0.20 / 0.1-0.5	ND	-	-
Isoproturon	0.04-0.20 / 0.1-0.5	ND	-	-

Analyte	LOD / LOQ (µg/g)	Findings (µg/g)	Limit (µg/g)	Status
Lindane	0.04-0.20 / 0.1-0.5	ND	-	-
Linuron*	0.04-0.20 / 0.1-0.5	ND	-	-
Mandipropamid	0.04-0.20 / 0.1-0.5	ND	-	-
Methamidophos	0.04-0.20 / 0.1-0.5	ND	-	-
Methoxychlor*	0.04-0.20 / 0.1-0.5	ND	-	-
4-4'-Methoxychlor olefin	0.04-0.20 / 0.1-0.5	ND	-	-
Methoxyfenozide	0.04-0.20 / 0.1-0.5	ND	-	-
Metolachlor	0.04-0.20 / 0.1-0.5	ND	-	-
MGK 264*	0.04-0.20 / 0.1-0.5	ND	-	-
Mirex*	0.04-0.20 / 0.1-0.5	ND	-	-
Novaluron	0.04-0.20 / 0.1-0.5	ND	-	-
5-OH Thiabendazole*	0.04-0.20 / 0.1-0.5	ND	-	-
Omethoate*	0.04-0.20 / 0.1-0.5	ND	-	-
Oxadiazon	0.04-0.20 / 0.1-0.5	ND	-	-
Oxyflourfen	0.04-0.20 / 0.1-0.5	ND	-	-
Parathion	0.04-0.20 / 0.1-0.5	ND	-	-
Pebulate*	0.04-0.20 / 0.1-0.5	ND	-	-
Penconazole	0.04-0.20 / 0.1-0.5	ND	-	-
Pendimethalin	0.04-0.20 / 0.1-0.5	0.049	-	-
Pentachloroaniline	0.04-0.20 / 0.1-0.5	ND	-	-
Pentachloroanisole	0.04-0.20 / 0.1-0.5	ND	-	-
Pentachlorobenzene	0.04-0.20 / 0.1-0.5	ND	-	-
Pentachlorobenzonitrile	0.04-0.20 / 0.1-0.5	ND	-	-
2-Phenylphenol	0.04-0.20 / 0.1-0.5	ND	-	-
Pirimicarb	0.04-0.20 / 0.1-0.5	ND	-	-
Pirimiphos-ethyl	0.04-0.20 / 0.1-0.5	ND	-	-
Pirimiphos methyl	0.04-0.20 / 0.1-0.5	ND	-	-
Pretilachlor	0.04-0.20 / 0.1-0.5	0.023	-	-
Prochloraz*	0.04-0.20 / 0.1-0.5	ND	-	-
Procymidone	0.04-0.20 / 0.1-0.5	ND	-	-
Propamocarb	0.04-0.20 / 0.1-0.5	ND	-	-
Propargite	0.04-0.20 / 0.1-0.5	ND	-	-
Propisochlor	0.04-0.20 / 0.1-0.5	ND	-	-
Propyzamide	0.04-0.20 / 0.1-0.5	ND	-	-
Prothiofos	0.04-0.20 / 0.1-0.5	ND	-	-
Pymetrozine	0.04-0.20 / 0.1-0.5	ND	-	-
Pyraclostrobin	0.04-0.20 / 0.1-0.5	ND	-	-
Pyrimethanil	0.04-0.20 / 0.1-0.5	ND	-	-
Pyriproxyfen	0.04-0.20 / 0.1-0.5	ND	-	-
Quinalphos	0.04-0.20 / 0.1-0.5	ND	-	-
Quintozene	0.04-0.20 / 0.1-0.5	ND	-	-
Sulfentrazone	0.04-0.20 / 0.1-0.5	ND	-	-
Sulfotep	0.04-0.20 / 0.1-0.5	ND	-	-
Tau-Fluvalinate	0.04-0.20 / 0.1-0.5	ND	-	-
Tebufenozide	0.04-0.20 / 0.1-0.5	ND	-	-
Tecnazene	0.04-0.20 / 0.1-0.5	ND	-	-
Tefluthrin	0.04-0.20 / 0.1-0.5	ND	-	-
Terbutylazine	0.04-0.20 / 0.1-0.5	ND	-	-
Tetrachloroaniline	0.04-0.20 / 0.1-0.5	ND	-	-
Tetradifon	0.04-0.20 / 0.1-0.5	ND	-	-
Thiobencarb	0.04-0.20 / 0.1-0.5	ND	-	-
Tolclofos-methyl	0.04-0.20 / 0.1-0.5	ND	-	-
Transfluthrin	0.04-0.20 / 0.1-0.5	ND	-	-
Triadimefon	0.04-0.20 / 0.1-0.5	ND	-	-
Triallate	0.04-0.20 / 0.1-0.5	ND	-	-
Trichlorfon	0.04-0.20 / 0.1-0.5	ND	-	-
Tricyclazole	0.04-0.20 / 0.1-0.5	ND	-	-
Triflumizole	0.04-0.20 / 0.1-0.5	ND	-	-
Trifluralin	0.04-0.20 / 0.1-0.5	ND	-	-
Vamidothion	0.04-0.20 / 0.1-0.5	ND	-	-
Vinclozolin	0.04-0.20 / 0.1-0.5	ND	-	-

RESIDUAL SOLVENT SCREEN ✔ Pass

04/23/2019

Method: USP OVI<467>

Instrument: Gas Chromatography Mass Spectrometry (GC/MS)

Analyte	LOD / LOQ (µg/g)	Findings (µg/g)	Limit (µg/g)	Status
1,2-Dichloroethane	0.40/1.00	ND	1.0	Pass
Acetone	17/75	<LOQ	5000	Pass
Acetonitrile	1/6	ND	410	Pass
Benzene	0.40/1.00	ND	1.0	Pass
n-Butane	200/600	ND	5000	Pass
Chloroform	0.40/1.00	ND	1.0	Pass
Ethanol	22/100	ND	5000	Pass
Ethyl Acetate	9/40	ND	5000	Pass
Ethyl Ether	11/50	ND	5000	Pass
Ethylene Oxide	0.40/1.00	ND	1.0	Pass
n-Heptane	11/50	ND	5000	Pass
n-Hexane	1/5	ND	290	Pass
Isopropyl Alcohol	11/50	<LOQ	5000	Pass
Methanol	6/25	ND	3000	Pass
Methylene Chloride	0.40/1.00	ND	1.0	Pass
n-Pentane	17/75	ND	5000	Pass
Propane	125/250	ND	5000	Pass
Toluene	3/15	ND	890	Pass
Total Xylenes	1/3	ND	2170	Pass
Trichloroethylene	0.40/1.00	ND	1.0	Pass

HEAVY METAL SCREEN ✔ Pass

04/23/2019

Method: MF 24E020

Instrument: ICP-MS

Analyte	LOD / LOQ (µg/g)	Findings (µg/g)	Limit (µg/g)	Status
Arsenic	0.02/0.05	ND	0.2	Pass
Cadmium	0.02/0.05	ND	0.2	Pass
Mercury	0.02/0.05	ND	0.1	Pass
Lead	0.02/0.05	ND	0.5	Pass

OTHER ANALYSES ✔ Pass

Analyte	Method	Instrument	Findings	Date Completed	Limit	Status
Moisture	AOAC 930.04	Vacuum or Forced Air Oven	1.56	04/19/2019	-	-
Water Activity	MF 14G051	Decagon	0.468	04/19/2019	0.65	Pass
Gluten	-	-	None Detected	04/24/2019	-	-

(-) = Not Tested, ND = None Detected, <LOQ = Below Limit of Quantitation, LOD = Limit of Detection

Reported by


Vu Lam
Lab Co Director



Scan to verify



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



Job Number: 19-003591
Report Number: 19-003591-00
Report Date: 04/10/2019
ORELAP#: OR100028
Purchase Order:
Received: 04/03/19 11:12

This report cannot be used for ODA, OHA or OLCC compliance requirements.

Customer: Klersun
3448 NE Broadway St
Portland Oregon 97232
United States
Product identity: PX-19092-NDT
Client/Metric ID: .
Sample Date:
Laboratory ID: 19-003591-0001-02
Temp: 21.3 °C
Relinquished by: Received by mail

Sample Results

Individual Analyses								
Analyte	Result	Limits	Units	LOQ	Batch	Analyze	Method	Notes
Glyphosate	< LOQ		mg/kg	0.0500	1902978	04/09/19	QuPPE-method, EURL-SR	

Test results relate only to the parameters tested and to the samples as received by the laboratory. Test results meet all requirements of NELAP and the Pixis quality assurance plan unless otherwise noted. This report shall not be reproduced, except in full, without the written consent of this laboratory. Samples will be kept a maximum of 15 days from the report date unless prior arrangements have been made.

Testing in accordance with:



This report cannot be used for ODA, OHA or OLCC compliance requirements.

Abbreviations

Limits: Action Levels per OAR-333-007-0400, OAR-333-007-0210, OAR-333-007-0220

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.

Units of Measure

mg/kg = Milligram per kilogram

% wt = $\mu\text{g/g}$ divided by 10,000

Approved Signatory

Derrick Tanner
General Manager