



Certificate of Analysis

Customer Information

Client: Sunstone Organics
Attention: secure@sunstoneorganics.com
Address: 4061 Main St., Suite D
Springfield, OR 97478

Testing Facility

Lab: Cora Science, LLC
Address 8000 Anderson Square, STE 113
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Sample Image(s)



Sample Information

Name: 161 E 1
Lot Number: 161 E 1
Description: Finely ground plant material
Condition: Good
Job ID: ISO05497
Sample ID: I15199
Received: 10NOV2025
Completed: 19NOV2025
Issued: 19NOV2025

Test Results

Elemental Impurities (ICP-MS)

Method Code: T301

Tested: 11NOV2025 | 1142

| PARAMETER | SPECIFICATION | RESULT | UNIT | LOQ | NOTES |
|-----------|---------------|--------|------|-------|-------|
| Arsenic | NMT 2.00 | 0.450 | ug/g | 0.006 | PASS |
| Cadmium | NMT 0.50 | 0.020 | ug/g | 0.002 | PASS |
| Mercury | NMT 0.20 | 0.024 | ug/g | 0.002 | PASS |
| Lead | NMT 5.00 | 0.507 | ug/g | 0.002 | PASS |

Microbiological Examination

Method Code: T005

Tested: 11NOV2025 | 0902

| PARAMETER | SPECIFICATION | RESULT | UNIT | LOQ | NOTES |
|---------------------------|----------------------|--------------|-------|-----------|-------|
| Total Aerobic Plate Count | NMT 10,000,000 CFU/g | 310 | CFU/g | 20 CFU/g | PASS |
| Total Yeast and Mold | NMT 100,000 CFU/g | <LOQ | CFU/g | 20 CFU/g | PASS |
| Total Coliforms | NMT 10,000 CFU/g | <LOQ | CFU/g | 20 CFU/g | PASS |
| Escherichia coli | Not Detected in 10 g | Not Detected | N/A | 1 CFU/10g | PASS |
| Salmonella spp. | Not Detected in 25 g | Not Detected | N/A | 1 CFU/25g | PASS |

Residual Solvents: Class I (GC-MS)

Method Code: T201

Tested: 11NOV2025 | 2154

| PARAMETER | SPECIFICATION | RESULT | UNIT | LOQ | NOTES |
|-----------------------|---------------|--------|------|------|-------|
| 1,1-Dichloroethene | NMT 8 | <LOQ | ug/g | 0.40 | PASS |
| 1,1,1-Trichloroethane | NMT 1500 | <LOQ | ug/g | 75 | PASS |
| Tetrachloromethane | NMT 4 | <LOQ | ug/g | 0.20 | PASS |
| Benzene | NMT 2 | <LOQ | ug/g | 0.10 | PASS |
| 1,2-Dichloroethane | NMT 5 | <LOQ | ug/g | 0.25 | PASS |

Residual Solvents: Class II (GC-MS)

Method Code: T201

Tested: 11NOV2025 | 2154

| PARAMETER | SPECIFICATION | RESULT | UNIT | LOQ | NOTES |
|-------------------------|---------------|--------|------|-----|-------|
| Methanol | NMT 3000 | <LOQ | ug/g | 75 | PASS |
| Acetonitrile | NMT 410 | <LOQ | ug/g | 41 | PASS |
| Dichloromethane | NMT 600 | <LOQ | ug/g | 15 | PASS |
| 1,2-Dichloroethene, (E) | NMT 1870 | <LOQ | ug/g | 47 | PASS |
| 1,2-Dichloroethene, (Z) | NMT 1870 | <LOQ | ug/g | 47 | PASS |
| Tetrahydrofuran | NMT 720 | <LOQ | ug/g | 18 | PASS |
| Cyclohexane | NMT 3880 | <LOQ | ug/g | 97 | PASS |
| Methylcyclohexane | NMT 1180 | <LOQ | ug/g | 30 | PASS |
| 1,4-Dioxane | NMT 380 | <LOQ | ug/g | 38 | PASS |
| Toluene | NMT 890 | <LOQ | ug/g | 22 | PASS |
| Chlorobenzene | NMT 360 | <LOQ | ug/g | 9.0 | PASS |
| Ethylbenzene | NMT 2170 | <LOQ | ug/g | 54 | PASS |
| o/p-Xylene | NMT 2170 | <LOQ | ug/g | 54 | PASS |
| m-Xylene | NMT 2170 | <LOQ | ug/g | 54 | PASS |
| Isopropylbenzene | NMT 70 | <LOQ | ug/g | 1.8 | PASS |
| Hexane | NMT 290 | <LOQ | ug/g | 7.3 | PASS |
| Nitromethane | NMT 50 | <LOQ | ug/g | 1.3 | PASS |
| Chloroform | NMT 60 | <LOQ | ug/g | 1.5 | PASS |
| 1,2-Dimethoxyethane | NMT 100 | <LOQ | ug/g | 2.5 | PASS |
| Trichloroethene | NMT 80 | <LOQ | ug/g | 2.0 | PASS |
| Pyridine | NMT 200 | <LOQ | ug/g | 5.0 | PASS |
| 2-Hexanone | NMT 50 | <LOQ | ug/g | 5.0 | PASS |
| Tetralin | NMT 100 | <LOQ | ug/g | 2.5 | PASS |

| Residual Solvents: Class III (GC-MS) | | Method Code: T201 | | Tested: 11NOV2025 2154 | | |
|--------------------------------------|---------------|-------------------|------|--------------------------|-------|--|
| PARAMETER | SPECIFICATION | RESULT | UNIT | LOQ | NOTES | |
| Pentane | NMT 5000 | <LOQ | ug/g | 125 | PASS | |
| Ethanol | NMT 5000 | <LOQ | ug/g | 125 | PASS | |
| Diethyl Ether | NMT 5000 | <LOQ | ug/g | 125 | PASS | |
| Acetone | NMT 5000 | <LOQ | ug/g | 125 | PASS | |
| Ethyl Formate | NMT 5000 | <LOQ | ug/g | 125 | PASS | |
| Isopropanol | NMT 5000 | <LOQ | ug/g | 125 | PASS | |
| Methyl Acetate | NMT 5000 | <LOQ | ug/g | 125 | PASS | |
| Methyl tert-Butyl Ether | NMT 5000 | <LOQ | ug/g | 125 | PASS | |
| 1-Propanol | NMT 5000 | <LOQ | ug/g | 125 | PASS | |
| 2-Butanone | NMT 5000 | <LOQ | ug/g | 125 | PASS | |
| Ethyl Acetate | NMT 5000 | <LOQ | ug/g | 125 | PASS | |
| 2-Butanol | NMT 5000 | <LOQ | ug/g | 125 | PASS | |
| 2-Methyl-1-Propanol | NMT 5000 | <LOQ | ug/g | 125 | PASS | |
| Isopropyl Acetate | NMT 5000 | <LOQ | ug/g | 125 | PASS | |
| Heptane | NMT 5000 | <LOQ | ug/g | 125 | PASS | |
| 1-Butanol | NMT 5000 | <LOQ | ug/g | 125 | PASS | |
| Propyl Acetate | NMT 5000 | <LOQ | ug/g | 125 | PASS | |
| 4-Methyl-2-Pentanone | NMT 5000 | <LOQ | ug/g | 125 | PASS | |
| Isoamyl Alcohol | NMT 5000 | <LOQ | ug/g | 125 | PASS | |
| Isobutyl Acetate | NMT 5000 | <LOQ | ug/g | 125 | PASS | |

| PARAMETER | SPECIFICATION | RESULT | UNIT | LOQ | NOTES |
|-------------------|---------------|--------|------|-----|-------|
| 1-Pentanol | NMT 5000 | <LOQ | ug/g | 125 | PASS |
| Butyl Acetate | NMT 5000 | <LOQ | ug/g | 125 | PASS |
| Dimethylsulfoxide | NMT 5000 | <LOQ | ug/g | 125 | PASS |
| Anisole | NMT 5000 | <LOQ | ug/g | 125 | PASS |

| Pesticides (GC-MS/MS) | Method Code: T401 | Tested: 14NOV2025 1701 | | | | |
|---------------------------------|-------------------|--------------------------|-------|------|-------|--|
| PARAMETER | SPECIFICATION | RESULT | UNIT | LOQ | NOTES | |
| Acephate | NMT 0.1 | ND | mg/Kg | 0.01 | PASS | |
| Azinphos-ethyl | NMT 0.1 | ND | mg/Kg | 0.01 | PASS | |
| Azinphos-methyl | NMT 1 | ND | mg/Kg | 0.01 | PASS | |
| Bromophos-ethyl | NMT 0.05 | ND | mg/Kg | 0.01 | PASS | |
| Bromophos-methyl | NMT 0.05 | ND | mg/Kg | 0.01 | PASS | |
| Chlorfenvinphos | NMT 0.5 | ND | mg/Kg | 0.01 | PASS | |
| Deltamethrin | NMT 0.5 | ND | mg/Kg | 0.01 | PASS | |
| Diazinon | NMT 0.5 | ND | mg/Kg | 0.01 | PASS | |
| Dichlofluanid | NMT 0.1 | ND | mg/Kg | 0.01 | PASS | |
| Dichlorvos | NMT 1 | ND | mg/Kg | 0.02 | PASS | |
| Dimethoate (and Omethoate, sum) | NMT 0.1 | ND | mg/Kg | 0.01 | PASS | |
| Omethaote | Report Results | ND | mg/Kg | 0.01 | N/A | |
| Dithiocarbamates (sum, as CS2) | NMT 2 | ND | mg/Kg | 0.10 | PASS | |
| Dithiocarbamate, manganese | Report Results | ND | mg/Kg | 0.05 | N/A | |
| Dithiocarbamate, zinc | Report Results | ND | mg/Kg | 0.05 | N/A | |
| Ethion | NMT 2 | ND | mg/Kg | 0.01 | PASS | |
| Etrimphos | NMT 0.05 | ND | mg/Kg | 0.01 | PASS | |
| Fenchlorphos | NMT 0.1 | ND | mg/Kg | 0.02 | PASS | |
| Fenchlorphos oxon | Report Results | ND | mg/Kg | 0.01 | N/A | |
| Fenitrothion | NMT 0.5 | ND | mg/Kg | 0.01 | PASS | |
| Fenpropathrin | NMT 0.03 | ND | mg/Kg | 0.01 | PASS | |
| Fensulfothions (sum) | NMT 0.05 | ND | mg/Kg | 0.04 | PASS | |
| Fensulfothion-oxon | Report Results | ND | mg/Kg | 0.01 | N/A | |
| Fensulfothion-oxonsulfone | Report Results | ND | mg/Kg | 0.01 | N/A | |
| Fensulfothion-sulfone | Report Results | ND | mg/Kg | 0.01 | N/A | |
| Fenthions (sum) | NMT 0.05 | ND | mg/Kg | 0.02 | PASS | |
| Fenthion oxon | Report Results | ND | mg/Kg | 0.02 | N/A | |
| Fenthion oxonsulfone | Report Results | ND | mg/Kg | 0.02 | N/A | |
| Fenthion oxonsulfoxide | Report Results | ND | mg/Kg | 0.02 | N/A | |
| Fenthion sulfone | Report Results | ND | mg/Kg | 0.02 | N/A | |
| Fenthion sulfoxide | Report Results | ND | mg/Kg | 0.02 | N/A | |
| Flucythrinate | NMT 0.05 | ND | mg/Kg | 0.01 | PASS | |
| Fluvalinate | NMT 0.05 | ND | mg/Kg | 0.01 | PASS | |
| Fonophos | NMT 0.05 | ND | mg/Kg | 0.01 | PASS | |
| Malathion (and oxon, sum) | NMT 1 | ND | mg/Kg | 0.02 | PASS | |
| Malathion oxon | Report Results | ND | mg/Kg | 0.01 | N/A | |
| Mecarbam | NMT 0.05 | ND | mg/Kg | 0.01 | PASS | |
| Methacriphos | NMT 0.05 | ND | mg/Kg | 0.01 | PASS | |
| Methamidophos | NMT 0.05 | ND | mg/Kg | 0.01 | PASS | |

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| PARAMETER | SPECIFICATION | RESULT | UNIT | LOQ | NOTES |
|---|----------------|--------|-------|------|-------|
| Methadathion | NMT 0.2 | ND | mg/Kg | 0.01 | PASS |
| Monocrotophos | NMT 0.1 | ND | mg/Kg | 0.01 | PASS |
| Parathion-ethyl (and oxon, sum) | NMT 0.5 | ND | mg/Kg | 0.02 | PASS |
| Paraoxon ethyl | Report Results | ND | mg/Kg | 0.01 | N/A |
| Parathion-methyl (and oxon, sum) | NMT 0.2 | ND | mg/Kg | 0.02 | PASS |
| Paraoxon methyl | Report Results | ND | mg/Kg | 0.01 | N/A |
| Pendimethalin | NMT 0.1 | ND | mg/Kg | 0.01 | PASS |
| Phosalone | NMT 0.1 | ND | mg/Kg | 0.01 | PASS |
| Pirimiphos ethyl | NMT 0.05 | ND | mg/Kg | 0.01 | PASS |
| Pirimphos methyl (and N-desethyl-, sum) | NMT 4 | ND | mg/Kg | 0.03 | PASS |
| N-desethylpirimiphos methyl | Report Results | ND | mg/Kg | 0.02 | N/A |
| Procymidone | NMT 0.1 | ND | mg/Kg | 0.01 | PASS |
| Profenofos | NMT 0.1 | ND | mg/Kg | 0.01 | PASS |
| Prothiophos | NMT 0.05 | ND | mg/Kg | 0.01 | PASS |
| Pyrethrum (sum of following six) | NMT 3 | ND | mg/Kg | 0.05 | PASS |
| Cinerin I | Report Results | ND | mg/Kg | 0.05 | N/A |
| Cinerin II | Report Results | ND | mg/Kg | 0.05 | N/A |
| Jasmoline I | Report Results | ND | mg/Kg | 0.05 | N/A |
| Jasmoline II | Report Results | ND | mg/Kg | 0.05 | N/A |
| Pyrethrin I | Report Results | ND | mg/Kg | 0.05 | N/A |
| Pyrethrin II | Report Results | ND | mg/Kg | 0.05 | N/A |
| Quinalphos | NMT 0.05 | ND | mg/Kg | 0.01 | PASS |
| Tetradifon | NMT 0.3 | ND | mg/Kg | 0.01 | PASS |
| Vinclozolin | NMT 0.4 | ND | mg/Kg | 0.01 | PASS |
| Aldrin (and Dieldrin, sum) | NMT 0.05 | ND | mg/Kg | 0.02 | PASS |
| Dieldrin | Report Results | ND | mg/Kg | 0.01 | N/A |
| Alachlor | NMT 0.05 | ND | mg/Kg | 0.01 | PASS |
| Bromopropylate | NMT 3 | ND | mg/Kg | 0.01 | PASS |
| Chlordanes (sum) | NMT 0.05 | ND | mg/Kg | 0.02 | PASS |
| cis-Chlordane | Report Results | ND | mg/Kg | 0.01 | N/A |
| trans-Chlordane | Report Results | ND | mg/Kg | 0.01 | N/A |
| oxy-Chlordane | Report Results | ND | mg/Kg | 0.02 | N/A |
| Chlorpyrifos-ethyl | NMT 0.2 | ND | mg/Kg | 0.01 | PASS |
| Chlorpyrifos-methyl | NMT 0.1 | ND | mg/Kg | 0.01 | PASS |
| Chlorthal-dimethyl | NMT 0.01 | ND | mg/Kg | 0.01 | PASS |
| Cyfluthrin | NMT 0.1 | ND | mg/Kg | 0.02 | PASS |
| lambda-Cyhalothrin | NMT 1 | ND | mg/Kg | 0.01 | PASS |
| Cypermethrins | NMT 1 | ND | mg/Kg | 0.02 | PASS |
| DDT (sum of DDT, DDE, DDD) | NMT 1 | ND | mg/Kg | 0.01 | PASS |
| o,p-DDT | Report Results | ND | mg/Kg | 0.01 | N/A |
| p,p-DDT | Report Results | ND | mg/Kg | 0.01 | N/A |
| o,p-DDE | Report Results | ND | mg/Kg | 0.01 | N/A |
| p,p-DDE | Report Results | ND | mg/Kg | 0.01 | N/A |
| o,p-DDD | Report Results | ND | mg/Kg | 0.01 | N/A |
| p,p-DDD | Report Results | ND | mg/Kg | 0.01 | N/A |
| Dicofol | NMT 0.5 | ND | mg/Kg | 0.01 | PASS |

| PARAMETER | SPECIFICATION | RESULT | UNIT | LOQ | NOTES |
|-----------------------------------|----------------|--------|-------|------|-------|
| Endosulfans | NMT 3 | ND | mg/Kg | 0.01 | PASS |
| Endosulfan I | Report Results | ND | mg/Kg | 0.01 | N/A |
| Endosulfan II | Report Results | ND | mg/Kg | 0.01 | N/A |
| Endosulfan sulfate | Report Results | ND | mg/Kg | 0.01 | N/A |
| Endrin | NMT 0.05 | ND | mg/Kg | 0.01 | PASS |
| Fenvalderate (and esfen-, sum) | NMT 1.5 | ND | mg/Kg | 0.02 | PASS |
| Esfenvalerate | Report Results | ND | mg/Kg | 0.02 | N/A |
| Heptachlor (and epoxide, sum) | NMT 0.05 | ND | mg/Kg | 0.02 | PASS |
| Heptachlor epoxide (cis/trans) | Report Results | ND | mg/Kg | 0.01 | N/A |
| Hexachlorobenzene | NMT 0.1 | ND | mg/Kg | 0.01 | PASS |
| Hexachlorohexanes (sum) | NMT 0.3 | ND | mg/Kg | 0.01 | PASS |
| alpha-Hexachlorocyclohexane | Report Results | ND | mg/Kg | 0.01 | N/A |
| beta-Hexachlorocyclohexane | Report Results | ND | mg/Kg | 0.01 | N/A |
| delta-Hexachlorocyclohexane | Report Results | ND | mg/Kg | 0.01 | N/A |
| Lindane | NMT 0.6 | ND | mg/Kg | 0.01 | PASS |
| Methoxychlor | NMT 0.05 | ND | mg/Kg | 0.01 | PASS |
| Mirex | NMT 0.01 | ND | mg/Kg | 0.01 | PASS |
| Pentachloroanisole | NMT 0.01 | ND | mg/Kg | 0.01 | PASS |
| Permethrins (sum) | NMT 1 | ND | mg/Kg | 0.01 | PASS |
| cis-Permethrin | Report Results | ND | mg/Kg | 0.01 | N/A |
| trans-Permethrin | Report Results | ND | mg/Kg | 0.01 | N/A |
| Piperonyl butoxide | NMT 3 | ND | mg/Kg | 0.01 | PASS |
| Quintozene (sum of following two) | NMT 1 | ND | mg/Kg | 0.09 | PASS |
| Pentachloroaniline | Report Results | ND | mg/Kg | 0.02 | N/A |
| Methyl pentachlorophenyl sulfide | Report Results | ND | mg/Kg | 0.05 | N/A |
| Tecnazene | NMT 0.05 | ND | mg/Kg | 0.01 | PASS |
| S-421 | NMT 0.02 | ND | mg/Kg | 0.01 | PASS |

| Mitragyna Alkaloids (UHPLC-DAD) | Method Code: T102 | | Tested: 19NOV2025 0104 | | |
|---------------------------------|-------------------|---------|--------------------------|--------|-------|
| PARAMETER | SPECIFICATION | RESULT | UNIT | LOQ | NOTES |
| Mitragynine | Report Results | 1.32 | w/w% | 0.0053 | N/A |
| 7-Hydroxymitragynine | Report Results | 0.00233 | w/w% | 0.0014 | N/A |
| Paynantheine | Report Results | 0.240 | w/w% | 0.0053 | N/A |
| Speciogynine | Report Results | 0.184 | w/w% | 0.0053 | N/A |
| Speciociliatine | Report Results | 0.438 | w/w% | 0.0053 | N/A |
| Total Mitragyna Alkaloids | Report Results | 2.18 | w/w% | 0.0053 | N/A |

Additional Report Notes

T401 performed by a registered outsourcing facility.

Revision History

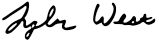
- rev 00 - Initial release.
- rev 01 - T102 table added.

Abbreviations

ID: identification, **N/A:** not applicable, **LOQ:** limit of quantitation, **CFU:** colony forming units, **w/w%:** weight by weight percent, **mg:** milligrams, **g:** grams, **ug:** micrograms, **mL:** milliliters, **ND:** not detected, **<LOQ:** below limit of quantitation, **NMT:** no more than, **NLT:** no less than, **UHPLC:** ultra-high performance liquid chromatography, **GC:** gas chromatography, **DAD:** diode array detection/detector, **MS:** mass spectroscopy/spectrometer, **ICP:** inductively coupled plasma, **ISO:** International Organization for Standardization, **USP:** United States Pharmacopeia

Authorization

This report has been authorized for release from Cora Science by:

| | | | |
|-------------------|---|--------------------|---------------------|
| Signature: |  | Position: | Laboratory Director |
| Name: | Tyler West | Department: | Management |
| | | Date: | 19NOV2025 |