



# 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  
Austin, Texas 78757  
**Contact:** info@corascience.com  
(512) 856-5007

## Sample Image(s)



## Sample Information

**Name:** 161 A8  
**Lot Number:** 161 A8  
**Description:** Finely ground plant material  
**Condition:** Good  
**Job ID:** ISO06395  
**Sample ID:** I17876  
**Received:** 24FEB2026  
**Completed:** 02MAR2026  
**Issued:** 03MAR2026

## Test Results

### Mitragyna Alkaloids (UHPLC-DAD)

Method Code: T102

Tested: 28FEB2026 | 0307

| PARAMETER                 | SPECIFICATION  | RESULT | UNIT | LOQ     | NOTES |
|---------------------------|----------------|--------|------|---------|-------|
| Mitragynine               | Report Results | 1.26   | w/w% | 0.0055  | N/A   |
| 7-Hydroxymitragynine      | Report Results | 0.0102 | w/w% | 0.00074 | N/A   |
| Paynantheine              | Report Results | 0.232  | w/w% | 0.0055  | N/A   |
| Speciogynine              | Report Results | 0.177  | w/w% | 0.0055  | N/A   |
| Speciociliatine           | Report Results | 0.416  | w/w% | 0.0055  | N/A   |
| Total Mitragyna Alkaloids | Report Results | 2.09   | w/w% | 0.0055  | N/A   |

### Elemental Impurities (ICP-MS)

Method Code: T301

Tested: 27FEB2026 | 1213

| PARAMETER | SPECIFICATION | RESULT | UNIT | LOQ   | NOTES |
|-----------|---------------|--------|------|-------|-------|
| Arsenic   | NMT 2.00      | 0.249  | ug/g | 0.006 | PASS  |
| Cadmium   | NMT 0.50      | 0.016  | ug/g | 0.002 | PASS  |
| Mercury   | NMT 0.20      | 0.017  | ug/g | 0.002 | PASS  |
| Lead      | NMT 5.00      | 0.511  | ug/g | 0.002 | PASS  |

### Microbial Examination

Method Code: T005

Tested: 02MAR2026 | 0953

| PARAMETER                 | SPECIFICATION        | RESULT       | UNIT  | LOQ       | NOTES |
|---------------------------|----------------------|--------------|-------|-----------|-------|
| Total Aerobic Plate Count | NMT 10,000,000 CFU/g | 100          | 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/15g | PASS  |

### Residual Solvents: Class I (GC-MS)

Method Code: T201

Tested: 01MAR2026 | 2129

| 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: 01MAR2026   2129 |       |  |
|-------------------------------------|---------------|-------------------|------|--------------------------|-------|--|
| 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 | 46.75                    | PASS  |  |
| 1,2-Dichloroethene, (Z)             | NMT 1870      | <LOQ              | ug/g | 46.75                    | PASS  |  |
| Tetrahydrofuran                     | NMT 720       | <LOQ              | ug/g | 18                       | PASS  |  |
| Cyclohexane                         | NMT 3880      | <LOQ              | ug/g | 97                       | PASS  |  |
| Methylcyclohexane                   | NMT 1180      | <LOQ              | ug/g | 29.5                     | PASS  |  |
| 1,4-Dioxane                         | NMT 380       | <LOQ              | ug/g | 38                       | PASS  |  |
| Toluene                             | NMT 890       | <LOQ              | ug/g | 22.25                    | PASS  |  |
| Chlorobenzene                       | NMT 360       | <LOQ              | ug/g | 9                        | PASS  |  |
| Ethylbenzene                        | NMT 2170      | <LOQ              | ug/g | 54.25                    | PASS  |  |
| o/p-Xylene                          | NMT 2170      | <LOQ              | ug/g | 54.25                    | PASS  |  |
| m-Xylene                            | NMT 2170      | <LOQ              | ug/g | 54.25                    | PASS  |  |
| Isopropylbenzene                    | NMT 70        | <LOQ              | ug/g | 1.75                     | PASS  |  |
| Hexane                              | NMT 290       | <LOQ              | ug/g | 7.25                     | PASS  |  |
| Nitromethane                        | NMT 50        | <LOQ              | ug/g | 1.25                     | 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                        | PASS  |  |
| Pyridine                            | NMT 200       | <LOQ              | ug/g | 5                        | PASS  |  |
| 2-Hexanone                          | NMT 50        | <LOQ              | ug/g | 5                        | PASS  |  |
| Tetralin                            | NMT 100       | <LOQ              | ug/g | 2.5                      | PASS  |  |
| Total Xylenes                       | NMT 2170      | <LOQ              | ug/g | 54                       | PASS  |  |

| Residual Solvents: Class III (GC-MS) |               | Method Code: T201 |      | Tested: 01MAR2026   2129 |       |  |
|--------------------------------------|---------------|-------------------|------|--------------------------|-------|--|
| 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  |  |

| PARAMETER            | SPECIFICATION | RESULT | UNIT | LOQ | NOTES |
|----------------------|---------------|--------|------|-----|-------|
| 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  |
| 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: 27FEB2026   0409 |       |  |
|---------------------------------|----------------|-------------------|-------|--------------------------|-------|--|
| 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   |  |

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| PARAMETER                               | SPECIFICATION  | RESULT | UNIT  | LOQ  | NOTES |
|-----------------------------------------|----------------|--------|-------|------|-------|
| 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  |
| 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  |

| PARAMETER                         | SPECIFICATION  | RESULT | UNIT  | LOQ  | NOTES |
|-----------------------------------|----------------|--------|-------|------|-------|
| 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  |
| 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 | 0.011  | mg/Kg | 0.01 | N/A   |
| trans-Permethin                   | Report Results | 0.035  | 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  |

## Additional Report Notes

T401 performed by a registered outsourcing facility.

## Revision History

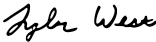
Report ID: 0fc91e34-c455-412e-8622-df2eff4de98c  
rev 00 - Initial release.

## 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:

|                   |                                                                                   |                    |                     |
|-------------------|-----------------------------------------------------------------------------------|--------------------|---------------------|
| <b>Signature:</b> |  | <b>Position:</b>   | Laboratory Director |
|                   |                                                                                   | <b>Department:</b> | Management          |
| <b>Name:</b>      | Tyler West                                                                        | <b>Date:</b>       | 03MAR2026           |