

## Medicine Creek Analytics Certificate of Analysis

3700 Pacific HWY E, Ste 400, Fife, WA 98424  
 WA State I502 Certification 0018 | ISO 17025 91428 | Accreditation #91428

Sample **Tropicana Cookies**



#COC/INVOICE:

Laboratory ID 190228-037

Matrix Other

Tested for Atlas Technology LLC

Sampled -

Received Feb 28, 2019

Reported Mar 08, 2019

Analyses executed TER, RES, PES

## RES - Residual Solvents Testing Analysis

Analyzed Mar 07, 2019 | Instrument HS-GC-FID

| Analyte                  | Result PPM | WRL PPM | Analyte                 | Result PPM | WRL PPM |
|--------------------------|------------|---------|-------------------------|------------|---------|
| Propane (Prop)           | <LOD       | 5000    | Isobutane (iso-But)     | <LOD       | 5000    |
| n-Butane (n-But)         | <LOD       | 5000    | Methanol (Meth)         | <LOD       | 3000    |
| n-Pentane (n-Pen)        | <LOD       | 5000    | Ethanol (Eth)           | <LOD       |         |
| Ethyl Ether (EthEt)      | <LOD       | 5000    | Acetone (Acet)          | <LOD       | 5000    |
| 2-Propanol (2-Prop)      | <LOD       | 5000    | Acetonitrile (Acetonit) | <LOD       | 50      |
| Dichloromethane (Dichme) | <LOD       | 600     | n-Hexane (nHexa)        | <LOD       | 290     |
| Ethyl Acetate (EthAc)    | <LOD       | 5000    | Chloroform (Chlfrm)     | <LOD       | 2       |
| Cyclohexane (Cycex)      | <LOD       | 3880    | Benzene (Benz)          | <LOD       | 2       |
| n-Heptane (nHept)        | <LOD       | 5000    | Toluene (Tol)           | <LOD       | 890     |
| Xylene (Xyl)             | <LOD       | 2170    |                         |            |         |

\*The limit of 2170 ug/g for Xylene is to be intended as the combined concentration of Ethyl Benzene, m-Xylene, o-Xylene, p-Xylene.

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 CFU/g Colony Forming Units per 1 gram  
 TNTC Too Numerous to Count  
 mg/g Milligrams per gram  
 ppm Parts per million  
 WRL Washington Regulatory Limit



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Authorized Signature

Kyle Shelton  
 Fri, 08 Mar 2019 08:51:53 -0800

## PES - Pesticides Screening Analysis

Analyzed Mar 04, 2019 | Instrument LCMS 8050

| Analyte             | LOD ppm | LOQ ppm | Result PPM | WRL PPM | Analyte             | LOD ppm | LOQ ppm | Result PPM | WRL PPM |
|---------------------|---------|---------|------------|---------|---------------------|---------|---------|------------|---------|
| 3-Hydroxycarbofuran | 0.075   | 0.25    | <LOD       | 0.2     | Abamectin B1a       | 0.15    | 0.45    | <LOD       | 0.5     |
| Acephate            | 0.1     | 0.3     | <LOD       | 0.4     | Acetamiprid         | 0.033   | 0.1     | <LOD       | 0.2     |
| Aldicarb Sulfone    | 0.05    | 0.2     | <LOD       | 0.4     | Aminocarb           | 0.033   | 0.1     | <LOD       | 0.1     |
| Azoxystrobin        | 0.05    | 0.2     | <LOD       | 0.2     | Benalaxyl           | 0.05    | 0.15    | <LOD       | 0.1     |
| Bifenazate          | 0.05    | 0.2     | <LOD       | 0.2     | Butafenacil         | 0.05    | 0.15    | <LOD       | 0.1     |
| Carbaryl            | 0.05    | 0.2     | <LOD       | 0.2     | Carbetamide         | 0.05    | 0.15    | <LOD       | 0.1     |
| Carbofuran          | 0.05    | 0.15    | <LOD       | 0.2     | Carboxin            | 0.05    | 0.15    | <LOD       | 0.1     |
| Carfentrazone-ethyl | 0.05    | 0.2     | <LOD       | 0.1     | Chlorantraniliprole | 0.075   | 0.25    | <LOD       | 0.2     |
| Chlorotoluron       | 0.05    | 0.2     | <LOD       | 0.1     | Chloroxuron         | 0.05    | 0.15    | <LOD       | 0.1     |
| Chlorpyrifos        | 0.075   | 0.25    | <LOD       | 0.2     | Clofentezine        |         |         | <LOD       | 0.2     |
| Clothianidin        | 0.05    | 0.15    | <LOD       | 0.1     | Cyazofamid          | 0.05    | 0.15    | <LOD       | 0.1     |
| Cycluron            | 0.05    | 0.15    | <LOD       | 0.1     | Dicrotophos         | 0.05    | 0.15    | <LOD       | 0.1     |
| Diethofencarb       | 0.05    | 0.15    | <LOD       | 0.1     | Dimethoate          | 0.05    | 0.2     | <LOD       | 0.2     |
| Dimethomorph        | 0.05    | 0.2     | <LOD       | 0.1     | Dimoxystrobin       | 0.05    | 0.15    | <LOD       | 0.1     |
| Diuron              | 0.1     | 0.3     | <LOD       | 0.1     | Epoxiconazole       | 0.075   | 0.25    | <LOD       | 0.1     |
| Ethiofencarb        | 0.075   | 0.25    | <LOD       | 0.1     | Ethoprophos         | 0.1     | 0.4     | <LOD       | 0.2     |
| Etoxazole           | 0.05    | 0.2     | <LOD       | 0.2     | Fenamidone          | 0.05    | 0.15    | <LOD       | 0.1     |
| Fenazaquin          | 0.05    | 0.2     | <LOD       | 0.1     | Fenoxy carb         | 0.05    | 0.2     | <LOD       | 0.2     |
| Fenpyroximate       | 0.04    | 0.125   | <LOD       | 0.4     | Fenuron             | 0.033   | 0.1     | <LOD       | 0.1     |
| Fipronil            | 0.1     | 0.3     | <LOD       | 0.4     | Flonicamid          |         |         | <LOD       | 1       |
| Fluazinam           | 0.075   | 0.25    | <LOD       | 0.1     | Fludioxonil         |         |         | <LOD       | 0.4     |
| Flufenacet          | 0.05    | 0.2     | <LOD       | 0.1     | Fluometuron         | 0.05    | 0.2     | <LOD       | 0.1     |
| Flutolanil          | 0.05    | 0.2     | <LOD       | 0.1     | Fuberidazole        | 0.033   | 0.1     | <LOD       | 0.1     |
| Furalaxy            | 0.05    | 0.15    | <LOD       | 0.1     | Furathiocarb        | 0.05    | 0.2     | <LOD       | 0.1     |
| Hexythiazox         | 0.05    | 0.2     | <LOD       | 1       | Imazalil            | 0.1     | 0.4     | <LOD       | 0.2     |
| Imidacloprid        | 0.05    | 0.2     | <LOD       | 0.4     | Indoxacarb          | 0.05    | 0.2     | <LOD       | 0.1     |
| Iprovalicarb        | 0.05    | 0.2     | <LOD       | 0.1     | Isopropcarb         | 0.05    | 0.2     | <LOD       | 0.1     |
| Isoproturon         | 0.05    | 0.15    | <LOD       | 0.1     | Kresoxym-methyl     | 0.05    | 0.15    | <LOD       | 0.4     |
| Mandipropamid       | 0.05    | 0.2     | <LOD       | 0.1     | Mefenacet           | 0.05    | 0.15    | <LOD       | 0.1     |
| Metalaxy            | 0.05    | 0.15    | <LOD       | 0.2     | Methabenzthiazuron  | 0.05    | 0.15    | <LOD       | 0.1     |
| Methamidophos       | 0.033   | 0.1     | <LOD       | 0.1     | Methiocarb          |         |         | <LOD       | 0.2     |
| Methoprotryne       | 0.05    | 0.2     | <LOD       | 0.1     | Methoxyfenozide     | 0.05    | 0.15    | <LOD       | 0.1     |
| Mexacarbate         | 0.033   | 0.1     | <LOD       | 0.1     | Monocrotophos       |         |         | <LOD       | 0.1     |
| Myclobutanil        | 0.075   | 0.25    | <LOD       | 0.2     | Nitenpyram          | 0.05    | 0.2     | <LOD       | 0.1     |
| Omethoate           | 0.05    | 0.2     | <LOD       | 0.1     | Oxadixyl            | 0.05    | 0.2     | <LOD       | 0.1     |
| Oxamyl              | 0.033   | 0.1     | <LOD       | 1       | Paclobutrazol       | 0.05    | 0.2     | <LOD       | 0.4     |
| Permethrin          | 0.05    | 0.2     | <LOD       | 0.2     | Picoxystrobin       | 0.05    | 0.2     | <LOD       | 0.1     |
| Piperonyl Butoxide  | 0.05    | 0.15    | <LOD       | 2       | Pirimicarb          | 0.05    | 0.15    | <LOD       | 0.1     |
| Prometon            | 0.05    | 0.15    | <LOD       | 0.1     | Propamocarb         | 0.04    | 0.125   | <LOD       | 0.1     |
| Propargite          | 0.04    | 0.125   | <LOD       | 0.1     | Propoxur            | 0.04    | 0.125   | <LOD       | 0.2     |
| Pymetrozine         | 0.05    | 0.2     | <LOD       | 0.1     | Pyracarbolid        | 0.04    | 0.125   | <LOD       | 0.1     |
| Pyraclostrobin      | 0.05    | 0.15    | <LOD       | 0.1     | Pyrethrin I         |         |         | <LOD       | 1       |
| Pyrethrin II        |         |         | <LOD       | 1       | Pyridaben           | 0.05    | 0.2     | <LOD       | 0.2     |
| Pyriproxyfen        | 0.05    | 0.15    | <LOD       | 0.1     | Quinoxifen          | 0.033   | 0.1     | <LOD       | 0.1     |
| Rotenone            | 0.05    | 0.2     | <LOD       | 0.1     | Spinosad A          | 0.05    | 0.2     | <LOD       | 0.2     |
| Spinosad D          | 0.05    | 0.2     | <LOD       | 0.2     | Spiromesifen        | 0.04    | 0.125   | <LOD       | 0.2     |
| Spirotetramat       | 0.05    | 0.2     | <LOD       | 0.2     | Tebuconazole        | 0.05    | 0.2     | <LOD       | 0.4     |
| Tebufenozide        | 0.05    | 0.15    | <LOD       | 0.1     | Tebuthiuron         | 0.04    | 0.125   | <LOD       | 0.1     |
| Thiacloprid         | 0.05    | 0.15    | <LOD       | 0.2     | Thiamethoxam        | 0.05    | 0.2     | <LOD       | 0.2     |
| Thiobencarb         | 0.05    | 0.2     | <LOD       | 0.1     | Thiophanate-Methyl  | 0.05    | 0.15    | <LOD       | 0.1     |
| Tricyclazole        | 0.05    | 0.15    | <LOD       | 0.1     | Trifloxystrobin     | 0.04    | 0.125   | <LOD       | 0.2     |

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|                    |      |      |      |     |                         |       |     |      |     |
|--------------------|------|------|------|-----|-------------------------|-------|-----|------|-----|
| Triflumizole       | 0.05 | 0.15 | <LOD | 0.1 | Vamidothion             | 0.033 | 0.1 | <LOD | 0.1 |
| Zoxamide           | 0.05 | 0.2  | <LOD | 0.1 | Cryomazine              |       |     | <LOD | 0.1 |
| Formetanate HCl    |      |      | <LOD | 0.1 | Metribuzin              |       |     | <LOD | 0.1 |
| Thidiazuron        |      |      | <LOD | 0.1 | Monolinuron             |       |     | <LOD | 0.1 |
| Metobromuron       |      |      | <LOD | 0.1 | Triadimefon             |       |     | <LOD | 0.1 |
| Fenhexamid         |      |      | <LOD | 0.1 | Linuron                 |       |     | <LOD | 0.1 |
| Ethiprole          |      |      | <LOD | 0.1 | Fenarimol               |       |     | <LOD | 0.1 |
| Triticonazole      |      |      | <LOD | 0.1 | Fluquinconazole         |       |     | <LOD | 0.1 |
| Diflubenzuron      |      |      | <LOD | 0.1 | Diniconazole            |       |     | <LOD | 0.1 |
| Bitertanol         |      |      | <LOD | 0.1 | Triflumuron             |       |     | <LOD | 0.1 |
| Tebufenpyrad       |      |      | <LOD | 0.1 | Sulfentrazone           |       |     | <LOD | 0.1 |
| Hexaflumuron       |      |      | <LOD | 0.1 | Metaflumizone           |       |     | <LOD | 0.1 |
| Bromacil           |      |      | NT   | 0.1 | Pentachloronitrobenzene |       |     | NT   | 0.1 |
| Dinotefuran        |      |      | <LOD | 0.1 | Bendiocarb              |       |     | <LOD | 0.1 |
| Flutriafol         |      |      | <LOD | 0.1 | Fenobucarb              |       |     | <LOD | 0.1 |
| Siduron            |      |      | <LOD | 0.1 | Promecarb               |       |     | <LOD | 0.1 |
| Mepanipyrim        |      |      | <LOD | 0.1 | Triadimenol             |       |     | <LOD | 0.1 |
| Fluoxastrobin      |      |      | <LOD | 0.1 | Fenbuconazole           |       |     | <LOD | 0.1 |
| Tetraconazole      |      |      | <LOD | 0.1 | Penconazole             |       |     | <LOD | 0.1 |
| Neburon            |      |      | <LOD | 0.1 | Metconazole             |       |     | <LOD | 0.1 |
| Bupirimate         |      |      | <LOD | 0.1 | Flusilazole             |       |     | <LOD | 0.1 |
| Temephos           |      |      | <LOD | 0.1 | Emamectin-benzoate b1a  |       |     | <LOD | 0.1 |
| AbamectinB1a 890.5 |      |      | <LOD | 0.5 | Disulfoton Sulfone      |       |     | <LOD | 0.1 |
| Tetrachlorvinphos  |      |      | <LOD | 0.1 | Daminozide              |       |     | <LOD | 1   |
| Mepronil           |      |      | <LOD | 0.1 |                         |       |     |      |     |

## TER - Terpenes Testing Analysis

Analyzed Mar 04, 2019 | Instrument GC-FID

| Analyte                           | LOD mg/g | LOQ mg/g | (%)   | (mg/g) | Analyte                               | LOD mg/g | LOQ mg/g    | (%)   | (mg/g) |
|-----------------------------------|----------|----------|-------|--------|---------------------------------------|----------|-------------|-------|--------|
| $\alpha$ -Pinene ( $\alpha$ -Pin) | 0.05     | 0.12     | 2.97  | 29.70  | Camphene (Cam)                        | 0.05     | 0.12        | 0.65  | 6.50   |
| b-Myrcene (Myr)                   | 0.05     | 0.12     | 11.56 | 115.56 | b-Pinene (b-Pin)                      | 0.05     | 0.12        | 4.79  | 47.89  |
| $\Delta^3$ -Carene (3-Car)        | 0.05     | 0.12     | ND    | ND     | $\alpha$ -Terpinene ( $\alpha$ -Ter)  | 0.05     | 0.12        | ND    | ND     |
| Limonene (Lim)                    | 0.05     | 0.12     | 46.28 | 462.80 | p-Cymene (p-Cym)                      | 0.05     | 0.12        | ND    | ND     |
| Ocimene 1 (Oci1)                  | 0.05     | 0.12     | 0.16  | 1.63   | Eucalyptol (Euca)                     | 0.05     | 0.12        | ND    | ND     |
| g-Terpinene (g-Ter)               | 0.05     | 0.12     | ND    | ND     | Terpinolene (Terp)                    | 0.05     | 0.12        | 0.59  | 5.87   |
| Linalool (Lin)                    | 0.05     | 0.12     | 13.34 | 133.42 | Geraniol (Gera)                       | 0.05     | 0.12        | ND    | ND     |
| Isopulegol (Isop)                 | 0.05     | 0.12     | ND    | ND     | b-Caryophyllene (b-Cary)              | 0.05     | 0.12        | 13.57 | 135.65 |
| $\alpha$ -Humulene (Hum)          | 0.05     | 0.12     | 3.95  | 39.45  | cis-Nerolidol (ci-Ner)                | 0.05     | 0.12        | ND    | ND     |
| trans-Nerolidol (tr-Ner)          | 0.05     | 0.12     | ND    | ND     | Guaiol (Gua)                          | 0.05     | 0.12        | ND    | ND     |
| Caryophyllene Oxide (ca-Oxi)      | 0.05     | 0.12     | 0.25  | 2.53   | $\alpha$ -bisabolol ( $\alpha$ -Bbis) | 0.05     | 0.12        | ND    | ND     |
| Total Terpene Concentration       |          |          |       |        |                                       | 98.10 %  | 981.00 mg/g |       |        |

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