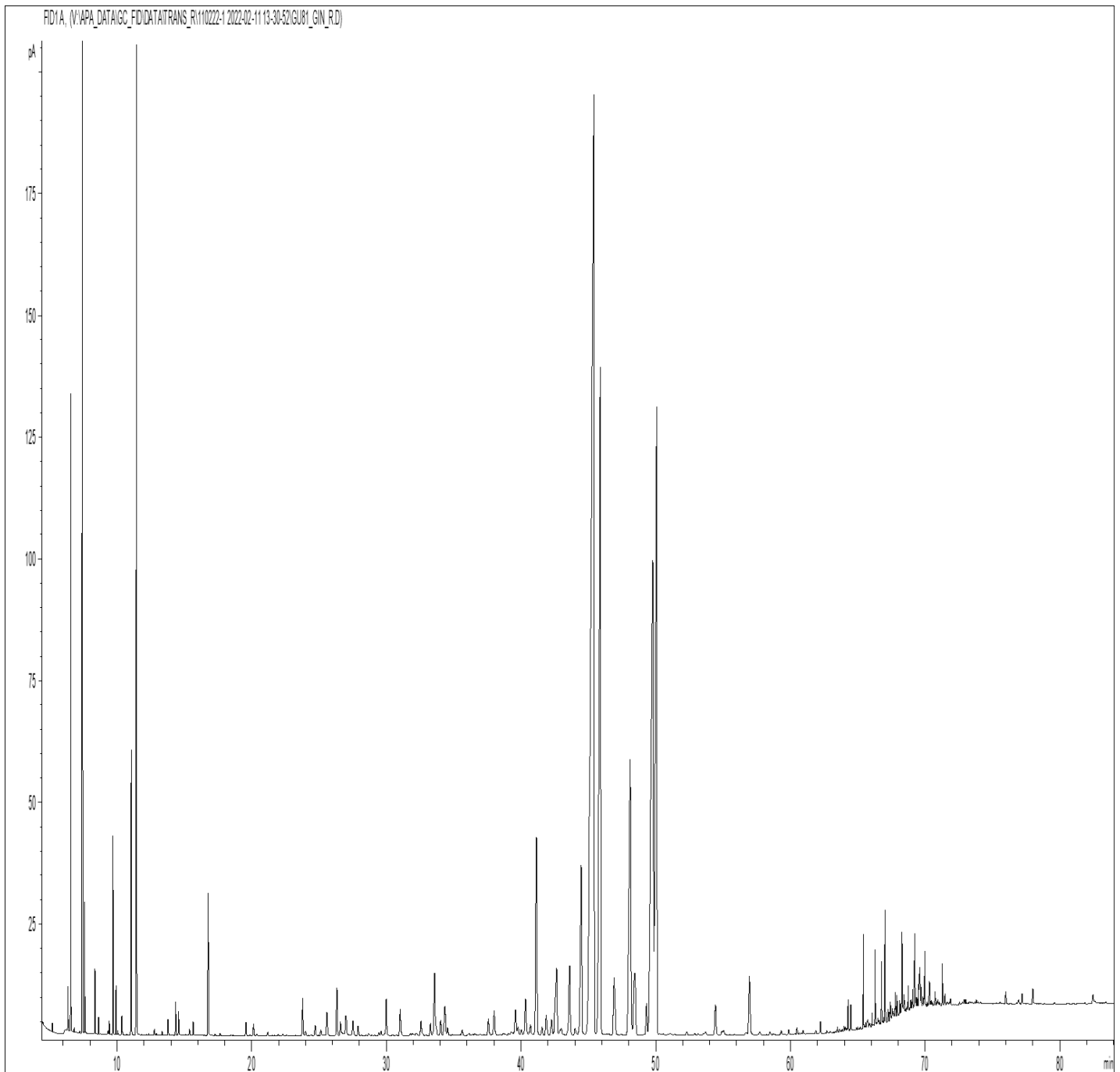


GCMS ANALYSIS

PRODUCT NAME: GINGER ROOT ESSENTIAL OIL - FRESH- 11314

DATE: March 9, 2022



Due to volume turnover, this report is not lot specific, It is representative of the quality of this oil produced by the manufacturer of this product, Specific lots may vary slightly as is the case in natural products,

GCMS ANALYSIS (cont'd.)

PRODUCT NAME: GINGER ROOT ESSENTIAL OIL - FRESH- 11314

| Peak | RT (min) | Compound name | % |
|------|----------|---------------------------------|-------------|
| 1 | 5,20 | ETHANOL | 0,03 |
| 2 | 6,36 | TRICYCLENENE | 0,13 |
| 3 | 6,58 | alpha-PINENE | 1,91 |
| 4 | 7,44 | CAMPHENE | 6,13 |
| 5 | 7,60 | HEXANAL | 0,45 |
| 6 | 8,36 | beta-PINENE | 0,24 |
| 7 | 8,64 | SABINENE | 0,06 |
| 8 | 9,43 | delta3-CARENE | 0,06 |
| 9 | 9,70 | beta-MYRCENE | 0,79 |
| 10 | 9,92 | alpha-PHELLANDRENE | 0,20 |
| 11 | 10,34 | 2-HEPTANONE | 0,09 |
| 12 | 11,04 | LIMONENE | 1,29 |
| 13 | 11,44 | 1,8-CINEOLE | 4,94 |
| 14 | | beta-PHELLANDRENE | |
| 15 | 12,77 | gamma-TERPINENE | 0,03 |
| 16 | 13,78 | p-CYMENE | 0,09 |
| 17 | 14,35 | TERPINOLENE | 0,18 |
| 18 | 14,56 | OCTANAL | 0,13 |
| 19 | 15,37 | 1,3,7-NONATRIENE, 4,8-DIMETHYL- | 0,03 |
| 20 | 15,65 | 2-HEPTANOL | 0,08 |
| 21 | 16,76 | 5-HEPTEN-2-ONE, 6-METHYL- | 0,81 |
| 22 | 19,57 | 2-NONANONE | 0,09 |
| 23 | 20,13 | ROSEFURAN | 0,08 |
| 24 | 21,17 | PERILLENE | 0,03 |
| 25 | 23,77 | 5-HEPTEN-2-OL, 6-METHYL- | 0,28 |
| 26 | 23,99 | alpha-CUBEBENE | 0,04 |
| 27 | 24,71 | delta-ELEMENE | 0,08 |
| 28 | 25,13 | SESQUITERPENE | 0,04 |
| 29 | 25,57 | ISOLEDENE | 0,23 |
| 30 | 26,32 | alpha-COPAENE | 0,41 |

Disclaimer & Caution

Please refer to all relevant technical information specific to the product, prior to use. The information contained in this document is obtained from current and reliable sources. New Directions Aromatics Inc. provides the information contained herein, but makes no representation as to its comprehensiveness or accuracy. Individuals receiving this information must exercise their independent judgment in determining its appropriateness for a particular purpose. The user of the product is solely responsible for compliance with all laws and regulations applying to the use of the products, including intellectual property rights of third parties. As the ordinary or otherwise use(s) of this product is outside the control of New Directions Aromatics Inc., no representation or warranty, expressed or implied, is made as to the effect(s) of such use(s), (including damage or injury), or the results obtained. The liability of New Directions Aromatics Inc. is limited to the value of the goods and does not include any consequential loss. New Directions Aromatics Inc. shall not be liable for any errors or delays in the content, or for any actions taken in reliance thereon. New Directions Aromatics Inc. shall not be responsible for any damages resulting from use of or reliance upon this information. In the event of any dispute, the Customer hereby agrees that Jurisdiction is limited to the province of Ontario, Canada

GCMS ANALYSIS (cont'd.)

PRODUCT NAME: GINGER ROOT ESSENTIAL OIL - FRESH- 11314

| Peak | RT (min) | Compound name | % |
|------|----------|-------------------------|-------------|
| 31 | 26,59 | DECANAL | 0,13 |
| 32 | 26,99 | CAMPHOR | 0,23 |
| 33 | 27,51 | PENTADECANE | 0,14 |
| 34 | 27,90 | 2-NONANOL | 0,08 |
| 35 | 29,44 | SESQUITERPENE | 0,03 |
| 36 | 29,60 | beta1-CUBEBENE | 0,04 |
| 37 | 29,98 | LINALOOL | 0,33 |
| 38 | 31,02 | alpha-cis-BERGAMOTENE | 0,25 |
| 39 | 32,55 | BORNYL ACETATE | 0,15 |
| 40 | 32,64 | SESQUITERPENE | 0,03 |
| 41 | 33,26 | alpha-trans-BERGAMOTENE | 0,12 |
| 42 | 33,57 | beta-ELEMENE | 0,67 |
| 43 | 33,66 | beta-CARYOPHYLLENE | 0,08 |
| 44 | 34,03 | TERPINENE-4-OL | 0,16 |
| 45 | 34,34 | 2-UNDECANONE | 0,39 |
| 46 | 34,54 | ROSEFURAN OXIDE | 0,08 |
| 47 | 35,62 | CADINA-3,5-DIENE | 0,06 |
| 48 | 37,58 | GERMACRENE A | 0,18 |
| 49 | 38,01 | ALLO-AROMADENDRENE | 0,29 |
| 50 | 39,27 | SESQUITERPENE | 0,04 |
| 51 | 39,37 | SESQUITERPENE | 0,03 |
| 52 | 39,60 | FARNESENE ISOMER | 0,31 |
| 53 | 39,78 | CITRONELLYL ACETATE | 0,10 |
| 54 | 40,03 | SESQUITERPENE | 0,06 |
| 55 | 40,34 | E-beta-FARNESENE | 0,45 |
| 56 | 40,70 | gamma-SELINENE | 0,14 |
| 57 | 41,15 | NERAL | 2,25 |
| 58 | 41,56 | gamma-MUUROLENE | 0,09 |
| 59 | 41,87 | Z-beta-FARNESENE | 0,24 |
| 60 | 42,27 | gamma-CURCUMENE | 0,18 |

Disclaimer & Caution

Please refer to all relevant technical information specific to the product, prior to use, The information contained in this document is obtained from current and reliable sources, New Directions Aromatics Inc, provides the information contained herein, but makes no representation as to its comprehensiveness or accuracy, Individuals receiving this information must exercise their independent judgment in determining its appropriateness for a particular purpose, The user of the product is solely responsible for compliance with all laws and regulations applying to the use of the products, including intellectual property rights of third parties, As the ordinary or otherwise use(s) of this product is outside the control of New Directions Aromatics Inc, no representation or warranty, expressed or implied, is made as to the effect(s) of such use(s), (including damage or injury), or the results obtained, The liability of New Directions Aromatics Inc, is limited to the value of the goods and does not include any consequential loss, New Directions Aromatics Inc, shall not be liable for any errors or delays in the content, or for any actions taken in reliance thereon, New Directions Aromatics Inc, shall not be responsible for any damages resulting from use of or reliance upon this information, In the event of any dispute, the Customer hereby agrees that Jurisdiction is limited to the province of Ontario, Canada

GCMS ANALYSIS (cont'd.)

PRODUCT NAME: GINGER ROOT ESSENTIAL OIL - FRESH- 11314

| Peak | RT (min) | Compound name | % |
|------|----------|-------------------------|-------|
| 61 | 42,58 | alpha-TERPINEOL | 0,36 |
| 62 | 42,64 | BORNEOL | 0,78 |
| 63 | 43,62 | GERMACRENE D | 0,88 |
| 64 | 44,02 | beta-SELINENE | 0,09 |
| 65 | 44,48 | alpha-MUUROLENE | 2,26 |
| 66 | 45,42 | SELINENE ISOMER | 25,55 |
| 67 | | alpha-ZINGIBERENE | |
| 68 | 45,89 | GERANIAL | 9,08 |
| 69 | | beta-BISABOLENE | |
| 70 | 46,92 | beta-CURCUMENE | 0,84 |
| 71 | 48,12 | E,E-alpha-FARNESENE | 4,72 |
| 72 | | delta-CADINENE | |
| 73 | 48,44 | GERANYL ACETATE | 1,19 |
| 74 | 49,32 | CITRONELLOL | 0,35 |
| 75 | 49,79 | beta-SESQUIPHELLANDRENE | 10,44 |
| 76 | 50,08 | alpha-CURCUMENE | 9,52 |
| 77 | 51,08 | MYRTENOL | 0,03 |
| 78 | 52,32 | NEROL | 0,04 |
| 79 | 53,71 | GERANYL PROPIONATE | 0,04 |
| 80 | 54,45 | GERMACRENE B | 0,39 |
| 81 | 54,93 | AROMATIC COMPOUND | 0,05 |
| 82 | 55,06 | CALAMENENE | 0,06 |
| 83 | 56,74 | CAPROIC ACID | 0,05 |
| 84 | 56,97 | GERANIOL | 0,75 |
| 85 | 57,74 | E-GERANYL ACETONE | 0,04 |
| 86 | 58,49 | COMPOUND Mw=216 | 0,04 |
| 87 | 59,34 | DEHYDROCURCUMENE | 0,04 |
| 88 | 59,89 | Epi-CUBEBOL | 0,04 |
| 89 | 60,49 | NERYL ISOVALERATE | 0,05 |
| 90 | 60,95 | alpha-CALACORENE | 0,03 |

Disclaimer & Caution

Please refer to all relevant technical information specific to the product, prior to use, The information contained in this document is obtained from current and reliable sources, New Directions Aromatics Inc, provides the information contained herein, but makes no representation as to its comprehensiveness or accuracy, Individuals receiving this information must exercise their independent judgment in determining its appropriateness for a particular purpose, The user of the product is solely responsible for compliance with all laws and regulations applying to the use of the products, including intellectual property rights of third parties, As the ordinary or otherwise use(s) of this product is outside the control of New Directions Aromatics Inc, no representation or warranty, expressed or implied, is made as to the effect(s) of such use(s), (including damage or injury), or the results obtained, The liability of New Directions Aromatics Inc, is limited to the value of the goods and does not include any consequential loss, New Directions Aromatics Inc, shall not be liable for any errors or delays in the content, or for any actions taken in reliance thereon, New Directions Aromatics Inc, shall not be responsible for any damages resulting from use of or reliance upon this information, In the event of any dispute, the Customer hereby agrees that Jurisdiction is limited to the province of Ontario, Canada

GCMS ANALYSIS (cont'd.)

PRODUCT NAME: GINGER ROOT ESSENTIAL OIL - FRESH- 11314

| Peak | RT (min) | Compound name | % |
|------|----------|--------------------------------|------|
| 91 | 61,90 | SESQUITERPENIC EPOXIDE | 0,03 |
| 92 | 62,25 | CUBEBOL | 0,07 |
| 93 | 63,50 | SESQUITERPENOL | 0,03 |
| 94 | 63,99 | beta-IONONE | 0,03 |
| 95 | 64,11 | TERPENIC ESTER | 0,03 |
| 96 | 64,29 | CARYOPHYLLENE OXIDE | 0,16 |
| 97 | 64,49 | AROMATIC COMPOUND | 0,15 |
| 98 | 65,42 | NEROLIDOL | 0,39 |
| 99 | 65,59 | GERMACRENE D-4-OL | 0,03 |
| 100 | 65,69 | SESQUITERPENOL | 0,03 |
| 101 | 65,76 | CAPRYLIC ACID | 0,07 |
| 102 | 66,08 | GERANYL-alpha-TERPINENE ISOMER | 0,06 |
| 103 | 66,30 | ELEMOL | 0,32 |
| 104 | 66,51 | AROMATIC COMPOUND | 0,04 |
| 105 | 66,78 | 10-epi-gamma-EUDESOL | 0,29 |
| 106 | | SESQUITERPENOL | |
| 107 | 66,96 | AROMATIC COMPOUND | 0,03 |
| 108 | 67,03 | beta-SESQUIPELLANDROL | 0,45 |
| 109 | 67,27 | ETHYL E-CINNAMATE | 0,06 |
| 110 | 67,41 | SESQUITERPENOL | 0,08 |
| 111 | 67,47 | SESQUITERPENOL | 0,06 |
| 112 | 67,59 | SESQUITERPENONE | 0,06 |
| 113 | 67,75 | beta-COPAEN-4-alpha-OL | 0,03 |
| 114 | 67,80 | EUGENOL | 0,10 |
| 115 | 67,82 | MINT SULFIDE | 0,03 |
| 116 | 67,92 | beta-BISABOLOL | 0,11 |
| 117 | 68,12 | gamma-EUDESOL | 0,09 |
| 118 | 68,25 | AROMATIC COMPOUND | 0,04 |
| 119 | 68,30 | SESQUIPELLANDROL ISOMER | 0,40 |
| 120 | 68,45 | alpha-MUROLOL | 0,12 |

Disclaimer & Caution

Please refer to all relevant technical information specific to the product, prior to use, The information contained in this document is obtained from current and reliable sources, New Directions Aromatics Inc, provides the information contained herein, but makes no representation as to its comprehensiveness or accuracy, Individuals receiving this information must exercise their independent judgment in determining its appropriateness for a particular purpose, The user of the product is solely responsible for compliance with all laws and regulations applying to the use of the products, including intellectual property rights of third parties, As the ordinary or otherwise use(s) of this product is outside the control of New Directions Aromatics Inc, no representation or warranty, expressed or implied, is made as to the effect(s) of such use(s), (including damage or injury), or the results obtained, The liability of New Directions Aromatics Inc, is limited to the value of the goods and does not include any consequential loss, New Directions Aromatics Inc, shall not be liable for any errors or delays in the content, or for any actions taken in reliance thereon, New Directions Aromatics Inc, shall not be responsible for any damages resulting from use of or reliance upon this information, In the event of any dispute, the Customer hereby agrees that Jurisdiction is limited to the province of Ontario, Canada

GCMS ANALYSIS (cont'd.)

PRODUCT NAME: GINGER ROOT ESSENTIAL OIL - FRESH- 11314

| Peak | RT (min) | Compound name | % |
|------|----------|---------------------------------|--------------|
| 121 | 68,76 | AROMATIC COMPOUND | 0,12 |
| 122 | 68,94 | alpha-BISABOLOL | 0,04 |
| 123 | 68,98 | SESQUITERPENOL | 0,04 |
| 124 | 69,09 | alpha-EUDESOL | 0,10 |
| 125 | 69,24 | beta-EUDESOL | 0,39 |
| 126 | 69,31 | SESQUITERPENIC EPOXIDE | 0,07 |
| 127 | 69,43 | beta-TUMERONE Mw=218 (CURLONE) | 0,06 |
| 128 | 69,56 | AROMATIC COMPOUND | 0,16 |
| 129 | 69,62 | Ar-TURMERONE | 0,25 |
| 130 | 69,72 | GERANYL-p-CYMENE ISOMER | 0,08 |
| 131 | 69,84 | SESQUITERPENIC EPOXIDE | 0,05 |
| 132 | 69,92 | ZINGIBERENONE | 0,04 |
| 133 | 69,98 | AROMATIC COMPOUND | 0,23 |
| 134 | 70,30 | SESQUITERPENONE | 0,05 |
| 135 | 70,34 | GERANYL-p-CYMENE ISOMER | 0,13 |
| 136 | 70,47 | SESQUITERPENIC EPOXIDE | 0,05 |
| 137 | 70,75 | NERIC ACID | 0,07 |
| 138 | 70,95 | ISOEUGENOL | 0,03 |
| 139 | 71,29 | ZINGIBERENOL | 0,20 |
| 140 | 71,49 | AROMATIC COMPOUND | 0,06 |
| 141 | 71,90 | SESQUITERPENIC EPOXIDE | 0,03 |
| 142 | 76,00 | ETHYL p-METHOXYCINNAMATE ISOMER | 0,08 |
| 143 | 77,21 | XANTHORRHIZOL | 0,07 |
| 144 | 78,01 | ACORENONE | 0,10 |
| 145 | 82,48 | ZINGIBEROL | 0,09 |
| | | TOTAL | 99,88 |

Disclaimer & Caution

Please refer to all relevant technical information specific to the product, prior to use, The information contained in this document is obtained from current and reliable sources, New Directions Aromatics Inc, provides the information contained herein, but makes no representation as to its comprehensiveness or accuracy, Individuals receiving this information must exercise their independent judgment in determining its appropriateness for a particular purpose, The user of the product is solely responsible for compliance with all laws and regulations applying to the use of the products, including intellectual property rights of third parties, As the ordinary or otherwise use(s) of this product is outside the control of New Directions Aromatics Inc., no representation or warranty, expressed or implied, is made as to the effect(s) of such use(s), (including damage or injury), or the results obtained, The liability of New Directions Aromatics Inc, is limited to the value of the goods and does not include any consequential loss, New Directions Aromatics Inc, shall not be liable for any errors or delays in the content, or for any actions taken in reliance thereon, New Directions Aromatics Inc, shall not be responsible for any damages resulting from use of or reliance upon this information, In the event of any dispute, the Customer hereby agrees that Jurisdiction is limited to the province of Ontario, Canada