



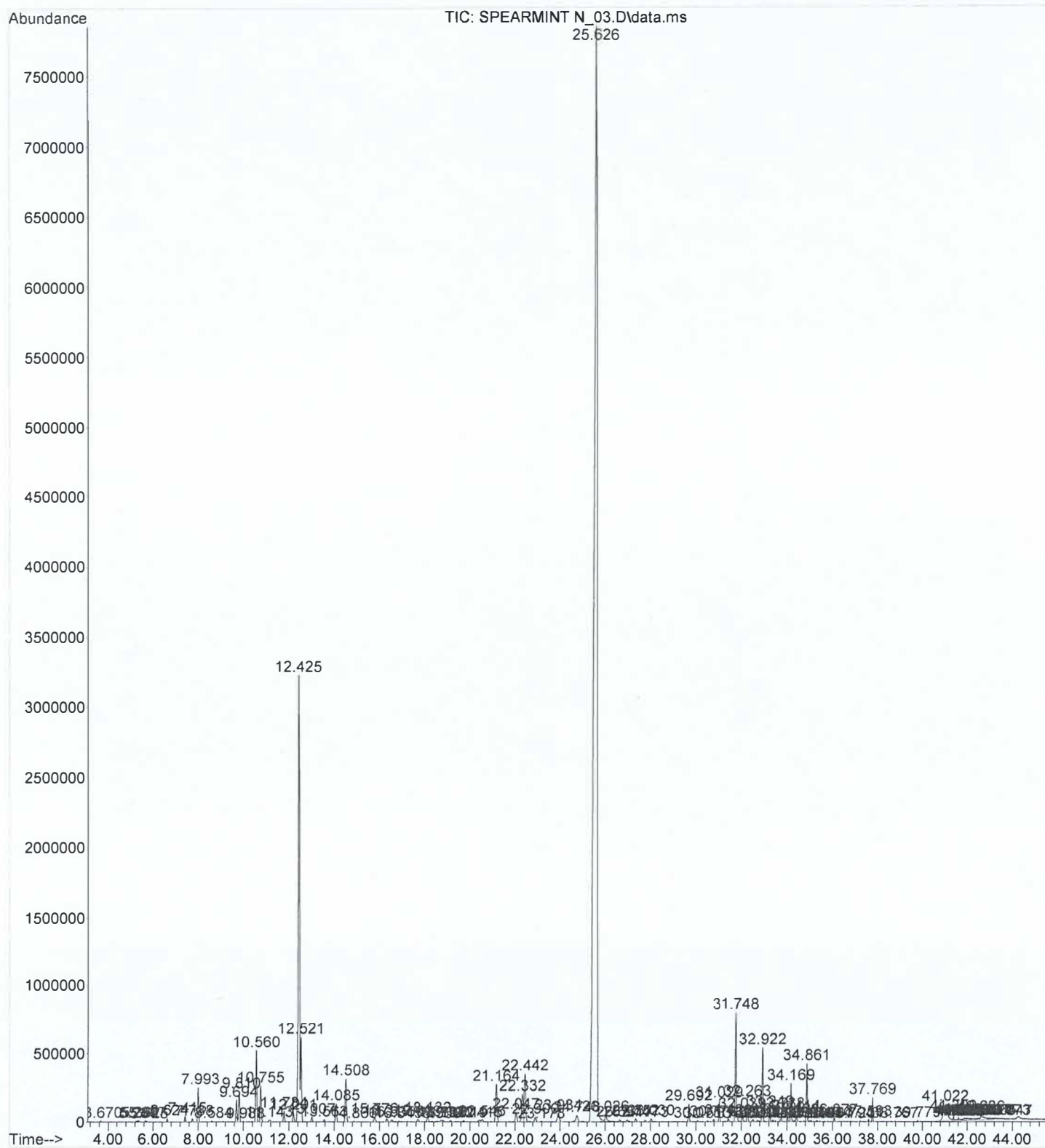
## **SPEARMINT ESSENTIAL OIL**

### **CHEMICAL COMPOSITION (GC-MS)**

**LOT NO. 13283**

| <b>PEAK RT</b> | <b>COMPOUND</b> | <b>CONTENT (%)</b> | <b>SPECIFICATION</b> |
|----------------|-----------------|--------------------|----------------------|
| 7.993          | ALPHA PINENE    | 0.60               |                      |
| 9.810          | BETA PINENE     | 0.63               |                      |
| 10.755         | 3-OCTANOL       | 0.74               |                      |
| 12.425         | LIMONENE        | 10.58              | 10 - 20 %            |
| 22.442         | DIHYDROCARVONE  | 1.41               |                      |
| 31.748         | B-BURBONENE     | 2.23               |                      |
| 32.263         | CIS-JASMONE     | 0.41               |                      |
| 25.626         | L-CARVONE       | 64.84              | 60 – 75 %            |
| 32.922         | CARYOPHYLLENE   | 1.39               |                      |

File :C:\msdchem\1\data\2025\02-13-25\SPEARMINT N\_03.D  
Operator : SS  
Acquired : 14 Feb 2025 00:00 using AcqMethod METHOD\_7.M  
Instrument : GCMS  
Sample Name: SPEARMINT FARWEST NATIVE  
Misc Info : RCB  
Vial Number: 3



## Area Percent Report

Data Path : C:\msdchem\1\data\2025\02-13-25\  
Data File : SPEARMINT N\_03.D  
Acq On : 14 Feb 2025 00:00  
Operator : SS  
Sample : SPEARMINT FARWEST NATIVE  
Misc : LOT 13283  
ALS Vial : Sample Multiplier: 1

Integration Parameters: autoint1.e  
Integrator: ChemStation

Method : C:\msdchem\1\methods\METHOD\_7.M  
Title : Eoil Qualitative

Signal : TIC: SPEARMINT N\_03.D\data.ms

| peak<br># | R.T.<br>min | first<br>scan | max<br>scan | last<br>scan | PK<br>TY | peak<br>height | corr.<br>area | corr.<br>% max. | % of<br>total |
|-----------|-------------|---------------|-------------|--------------|----------|----------------|---------------|-----------------|---------------|
| 1         | 3.670       | 96            | 103         | 112          | PV 2     | 9176           | 148547        | 0.02%           | 0.012%        |
| 2         | 5.231       | 360           | 376         | 382          | BV 4     | 5307           | 109709        | 0.01%           | 0.009%        |
| 3         | 5.299       | 382           | 388         | 394          | VV 5     | 10089          | 199834        | 0.03%           | 0.017%        |
| 4         | 5.362       | 394           | 399         | 410          | VV 2     | 10738          | 259093        | 0.03%           | 0.022%        |
| 5         | 5.657       | 442           | 450         | 458          | BV 2     | 10211          | 236911        | 0.03%           | 0.020%        |
| 6         | 5.725       | 458           | 462         | 475          | VV 2     | 4923           | 127047        | 0.02%           | 0.011%        |
| 7         | 6.624       | 603           | 619         | 638          | VV 2     | 27134          | 717287        | 0.09%           | 0.060%        |
| 8         | 7.415       | 740           | 757         | 773          | BV 3     | 44659          | 1213786       | 0.16%           | 0.101%        |
| 9         | 7.738       | 803           | 814         | 827          | PV 3     | 24658          | 690337        | 0.09%           | 0.057%        |
| 10        | 7.993       | 838           | 858         | 873          | PV 2     | 249743         | 7234940       | 0.93%           | 0.602%        |
| 11        | 8.584       | 943           | 962         | 972          | VV 6     | 7546           | 228464        | 0.03%           | 0.019%        |
| 12        | 9.694       | 1136          | 1156        | 1166         | VV       | 160390         | 5040792       | 0.65%           | 0.420%        |
| 13        | 9.810       | 1166          | 1176        | 1193         | VV       | 224134         | 7524380       | 0.97%           | 0.626%        |
| 14        | 9.988       | 1193          | 1207        | 1226         | PB 2     | 3771           | 110736        | 0.01%           | 0.009%        |
| 15        | 10.560      | 1286          | 1307        | 1327         | PV       | 522044         | 17168986      | 2.20%           | 1.429%        |
| 16        | 10.755      | 1327          | 1341        | 1371         | PV 2     | 264025         | 8884685       | 1.14%           | 0.740%        |
| 17        | 11.143      | 1382          | 1409        | 1428         | PV 2     | 13808          | 844650        | 0.11%           | 0.070%        |
| 18        | 11.784      | 1496          | 1521        | 1537         | BV 3     | 81570          | 2912654       | 0.37%           | 0.242%        |
| 19        | 12.201      | 1574          | 1594        | 1610         | BV 2     | 66273          | 2470666       | 0.32%           | 0.206%        |
| 20        | 12.425      | 1610          | 1633        | 1643         | VV       | 3224892        | 127044151     | 16.31%          | 10.575%       |
| 21        | 12.521      | 1643          | 1650        | 1670         | VV 2     | 618383         | 21856951      | 2.81%           | 1.819%        |
| 22        | 13.007      | 1717          | 1735        | 1750         | PB 2     | 37028          | 1272425       | 0.16%           | 0.106%        |
| 23        | 13.563      | 1807          | 1832        | 1846         | BB 6     | 17288          | 625195        | 0.08%           | 0.052%        |
| 24        | 14.085      | 1909          | 1923        | 1940         | VV 2     | 134064         | 5155560       | 0.66%           | 0.429%        |
| 25        | 14.508      | 1982          | 1997        | 2026         | BV 3     | 316087         | 12665579      | 1.63%           | 1.054%        |
| 26        | 14.866      | 2044          | 2060        | 2072         | BV 7     | 5097           | 198492        | 0.03%           | 0.017%        |
| 27        | 15.776      | 2205          | 2219        | 2240         | VB 7     | 38129          | 1721761       | 0.22%           | 0.143%        |
| 28        | 16.319      | 2293          | 2314        | 2331         | BV 6     | 25300          | 1045101       | 0.13%           | 0.087%        |
| 29        | 16.535      | 2331          | 2351        | 2377         | PV 10    | 16151          | 743231        | 0.10%           | 0.062%        |
| 30        | 16.845      | 2394          | 2405        | 2417         | PV 4     | 5305           | 211076        | 0.03%           | 0.018%        |
| 31        | 17.693      | 2531          | 2554        | 2576         | BV 10    | 18811          | 957790        | 0.12%           | 0.080%        |
| 32        | 18.132      | 2598          | 2630        | 2648         | BV 3     | 44444          | 1946818       | 0.25%           | 0.162%        |
| 33        | 18.568      | 2696          | 2707        | 2719         | VV 6     | 4285           | 170203        | 0.02%           | 0.014%        |
| 34        | 18.737      | 2719          | 2736        | 2747         | VV 9     | 12809          | 781562        | 0.10%           | 0.065%        |
| 35        | 18.809      | 2747          | 2749        | 2765         | VV 7     | 9100           | 305971        | 0.04%           | 0.025%        |
| 36        | 19.142      | 2793          | 2807        | 2831         | VV 7     | 8832           | 400516        | 0.05%           | 0.033%        |
| 37        | 19.719      | 2879          | 2908        | 2921         | BV 6     | 8899           | 362662        | 0.05%           | 0.030%        |
| 38        | 20.415      | 3010          | 3029        | 3042         | BV 8     | 12296          | 797097        | 0.10%           | 0.066%        |
| 39        | 20.546      | 3042          | 3052        | 3069         | VV 5     | 19752          | 918104        | 0.12%           | 0.076%        |
| 40        | 21.164      | 3141          | 3160        | 3190         | VV 2     | 276560         | 12950664      | 1.66%           | 1.078%        |

|    |        |      |      |      |    |    |         |           |         |         |
|----|--------|------|------|------|----|----|---------|-----------|---------|---------|
| 41 | 22.047 | 3298 | 3315 | 3337 | VV | 5  | 73657   | 3479595   | 0.45%   | 0.290%  |
| 42 | 22.332 | 3337 | 3364 | 3373 | PV | 3  | 202595  | 9773488   | 1.25%   | 0.814%  |
| 43 | 22.442 | 3373 | 3384 | 3406 | VV | 3  | 349299  | 16936078  | 2.17%   | 1.410%  |
| 44 | 22.900 | 3448 | 3464 | 3490 | PV | 7  | 35867   | 1725793   | 0.22%   | 0.144%  |
| 45 | 23.178 | 3494 | 3512 | 3529 | BB | 8  | 4496    | 232858    | 0.03%   | 0.019%  |
| 46 | 23.934 | 3619 | 3644 | 3676 | PV | 6  | 63049   | 4141830   | 0.53%   | 0.345%  |
| 47 | 24.748 | 3738 | 3787 | 3814 | BV | 10 | 49899   | 3449973   | 0.44%   | 0.287%  |
| 48 | 25.626 | 3868 | 3940 | 3996 | PV |    | 7853498 | 778860697 | 100.00% | 64.833% |
| 49 | 26.026 | 3996 | 4010 | 4049 | VV | 4  | 49940   | 2749203   | 0.35%   | 0.229%  |
| 50 | 26.651 | 4104 | 4119 | 4138 | PV | 6  | 14273   | 616306    | 0.08%   | 0.051%  |
| 51 | 26.974 | 4163 | 4176 | 4189 | VV | 2  | 15600   | 662759    | 0.09%   | 0.055%  |
| 52 | 27.352 | 4228 | 4242 | 4265 | PV | 7  | 25361   | 971327    | 0.12%   | 0.081%  |
| 53 | 27.773 | 4293 | 4315 | 4331 | BV | 6  | 13276   | 535137    | 0.07%   | 0.045%  |
| 54 | 28.030 | 4347 | 4360 | 4373 | VV | 3  | 24945   | 870295    | 0.11%   | 0.072%  |
| 55 | 29.692 | 4636 | 4651 | 4667 | BV | 2  | 131785  | 4181592   | 0.54%   | 0.348%  |
| 56 | 30.075 | 4704 | 4718 | 4730 | BV | 6  | 8290    | 271610    | 0.03%   | 0.023%  |
| 57 | 30.513 | 4764 | 4794 | 4809 | BB | 6  | 4944    | 161955    | 0.02%   | 0.013%  |
| 58 | 30.774 | 4819 | 4840 | 4861 | BV | 5  | 18576   | 576846    | 0.07%   | 0.048%  |
| 59 | 31.029 | 4861 | 4884 | 4902 | PV | 2  | 152246  | 4480664   | 0.58%   | 0.373%  |
| 60 | 31.428 | 4940 | 4954 | 4967 | VV | 6  | 26690   | 842272    | 0.11%   | 0.070%  |
| 61 | 31.748 | 4990 | 5010 | 5040 | BV | 2  | 786839  | 26748749  | 3.43%   | 2.227%  |
| 62 | 31.968 | 5040 | 5048 | 5051 | VV | 4  | 3454    | 79931     | 0.01%   | 0.007%  |
| 63 | 32.039 | 5051 | 5061 | 5088 | VV | 6  | 74263   | 2461344   | 0.32%   | 0.205%  |
| 64 | 32.263 | 5088 | 5100 | 5123 | VV | 2  | 164482  | 4914395   | 0.63%   | 0.409%  |
| 65 | 32.512 | 5123 | 5143 | 5159 | VV | 9  | 17348   | 712584    | 0.09%   | 0.059%  |
| 66 | 32.714 | 5166 | 5179 | 5185 | VV | 6  | 10262   | 327816    | 0.04%   | 0.027%  |
| 67 | 32.790 | 5185 | 5192 | 5201 | VV | 5  | 6290    | 176844    | 0.02%   | 0.015%  |
| 68 | 32.922 | 5201 | 5215 | 5229 | VV | 2  | 537936  | 16717884  | 2.15%   | 1.392%  |
| 69 | 33.249 | 5251 | 5272 | 5285 | BV | 2  | 88561   | 2489596   | 0.32%   | 0.207%  |
| 70 | 33.380 | 5285 | 5295 | 5304 | VV | 6  | 12798   | 352610    | 0.05%   | 0.029%  |
| 71 | 33.479 | 5304 | 5313 | 5326 | VB | 7  | 6462    | 169192    | 0.02%   | 0.014%  |
| 72 | 33.738 | 5347 | 5358 | 5371 | VV | 2  | 74556   | 2112387   | 0.27%   | 0.176%  |
| 73 | 34.013 | 5390 | 5406 | 5420 | PV | 3  | 33204   | 1062550   | 0.14%   | 0.088%  |
| 74 | 34.169 | 5420 | 5433 | 5453 | VV |    | 278646  | 7323268   | 0.94%   | 0.610%  |
| 75 | 34.335 | 5453 | 5462 | 5467 | VV | 8  | 9112    | 272180    | 0.03%   | 0.023%  |
| 76 | 34.414 | 5467 | 5476 | 5494 | VV | 4  | 56948   | 1744185   | 0.22%   | 0.145%  |
| 77 | 34.738 | 5521 | 5532 | 5540 | BV | 4  | 4681    | 128115    | 0.02%   | 0.011%  |
| 78 | 34.861 | 5540 | 5554 | 5569 | PV |    | 424052  | 11969908  | 1.54%   | 0.996%  |
| 79 | 34.974 | 5569 | 5574 | 5580 | VV | 7  | 4763    | 150756    | 0.02%   | 0.013%  |
| 80 | 35.054 | 5580 | 5588 | 5597 | VV | 2  | 10917   | 333444    | 0.04%   | 0.028%  |
| 81 | 35.315 | 5616 | 5633 | 5647 | VV | 10 | 7961    | 352921    | 0.05%   | 0.029%  |
| 82 | 35.424 | 5647 | 5652 | 5669 | VV | 6  | 3945    | 125077    | 0.02%   | 0.010%  |
| 83 | 35.814 | 5699 | 5720 | 5732 | PV | 3  | 3675    | 90691     | 0.01%   | 0.008%  |
| 84 | 36.077 | 5750 | 5767 | 5790 | BB | 4  | 30324   | 823065    | 0.11%   | 0.069%  |
| 85 | 36.794 | 5876 | 5892 | 5901 | BV | 3  | 3799    | 81569     | 0.01%   | 0.007%  |
| 86 | 37.231 | 5950 | 5968 | 5974 | BV | 4  | 5257    | 104449    | 0.01%   | 0.009%  |
| 87 | 37.593 | 6016 | 6032 | 6043 | BV | 4  | 18886   | 405077    | 0.05%   | 0.034%  |
| 88 | 37.769 | 6053 | 6062 | 6082 | VV | 2  | 176614  | 3816516   | 0.49%   | 0.318%  |
| 89 | 38.767 | 6223 | 6237 | 6244 | PV | 4  | 4954    | 78931     | 0.01%   | 0.007%  |
| 90 | 39.779 | 6409 | 6414 | 6425 | VV | 4  | 12415   | 199603    | 0.03%   | 0.017%  |
| 91 | 41.022 | 6578 | 6631 | 6689 | PV | 6  | 124621  | 16331392  | 2.10%   | 1.359%  |
| 92 | 41.390 | 6689 | 6695 | 6713 | VV |    | 51707   | 1385474   | 0.18%   | 0.115%  |
| 93 | 41.524 | 6713 | 6718 | 6721 | VV | 5  | 12417   | 319779    | 0.04%   | 0.027%  |
| 94 | 41.610 | 6721 | 6733 | 6737 | VV | 7  | 25463   | 726965    | 0.09%   | 0.061%  |
| 95 | 41.645 | 6737 | 6740 | 6745 | VV | 7  | 11932   | 311273    | 0.04%   | 0.026%  |
| 96 | 41.707 | 6745 | 6750 | 6760 | VV | 7  | 13385   | 551809    | 0.07%   | 0.046%  |

|     |        |      |      |      |    |    |       |         |       |        |
|-----|--------|------|------|------|----|----|-------|---------|-------|--------|
| 97  | 41.784 | 6760 | 6764 | 6767 | VV | 6  | 11133 | 228328  | 0.03% | 0.019% |
| 98  | 41.888 | 6767 | 6782 | 6784 | VV | 6  | 18342 | 898795  | 0.12% | 0.075% |
| 99  | 41.912 | 6784 | 6786 | 6795 | VV | 10 | 18969 | 625838  | 0.08% | 0.052% |
| 100 | 41.998 | 6795 | 6801 | 6816 | VV | 10 | 19156 | 1072148 | 0.14% | 0.089% |
| 101 | 42.130 | 6816 | 6824 | 6830 | VV | 10 | 17182 | 643885  | 0.08% | 0.054% |
| 102 | 42.178 | 6830 | 6833 | 6835 | VV | 4  | 13956 | 243905  | 0.03% | 0.020% |
| 103 | 42.259 | 6835 | 6847 | 6864 | VV | 4  | 14017 | 1127310 | 0.14% | 0.094% |
| 104 | 42.366 | 6864 | 6866 | 6870 | VV | 5  | 12684 | 272374  | 0.03% | 0.023% |
| 105 | 42.492 | 6881 | 6888 | 6895 | VV | 5  | 14438 | 581219  | 0.07% | 0.048% |
| 106 | 42.636 | 6895 | 6913 | 6956 | VV | 5  | 39261 | 4076081 | 0.52% | 0.339% |
| 107 | 42.897 | 6956 | 6958 | 6968 | VV | 5  | 14276 | 470373  | 0.06% | 0.039% |
| 108 | 42.974 | 6968 | 6972 | 6974 | VV | 5  | 11132 | 246613  | 0.03% | 0.021% |
| 109 | 43.019 | 6974 | 6980 | 6982 | VV | 6  | 11803 | 272511  | 0.03% | 0.023% |
| 110 | 43.135 | 6990 | 7000 | 7009 | VV | 6  | 11442 | 628263  | 0.08% | 0.052% |
| 111 | 43.773 | 7106 | 7112 | 7121 | VV | 6  | 3947  | 129775  | 0.02% | 0.011% |
| 112 | 43.847 | 7121 | 7124 | 7142 | VB | 6  | 3631  | 96156   | 0.01% | 0.008% |

Sum of corrected areas: 1201340596

METHOD\_7.M Mon Feb 17 12:53:41 2025