

EXON IDENTITY AND AMBIGUOUS TYPING COMBINATIONS

APRIL 2009

James Robinson

Kavita Mistry

Simon Richardson

Steven G. E. Marsh

The algorithm used to generate the ambiguous combinations has been updated to better represent alleles, which contain unsequenced regions. For the alleles in question, the sequence of an alternate allele has been used to extend the sequence over this region. The choice of alternate allele has been determined by sequence homology to the closest known full exon 2 (or 3) sequence and only used when there is a high probability that the sequence used would be shown to be correct if the region was fully sequenced. The list of alleles containing unsequenced regions and the alternate alleles used to infer the missing sequence are detailed in the file.

Several DRB1 alleles are not sequenced for the diamorphic nucleotide at position 357. It would therefore be inaccurate to assign a base to these sequences at this position. For this reason the sequences have been truncated to include only nucleotides 101 to 356, in the DRB1 analysis.

In the case of unsequenced regions that cannot be accurately inferred from known sequences with a high level of confidence the allele has been omitted from the analysis. Currently this applies only to DQB1\*0606.

We recognise that future sequencing of unsequenced regions may reveal disparity between the predicted sequence and the newly sequenced region. We therefore welcome any further information, which will help improve analysis of these regions

# HLA-A Ambiguities, Release 2.25.0

## Sequences identical over exons 2+3

| Allele 1                                                                                                                 | Allele 2                                                                                                                                        | Allele 3                                                        | Allele 4                                           | Allele 5                                         | Allele 6                               | Allele 7                              | Allele 8                              | Allele 9                             | Code in table                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|----------------------------------------------------|--------------------------------------------------|----------------------------------------|---------------------------------------|---------------------------------------|--------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A*01010101<br>A*02010101                                                                                                 | A*01010102N<br>A*02010102L<br>A*0243N<br>A*9240<br>A*9226                                                                                       | A*0104N<br>A*02010103<br>A*0266                                 | A*0122N<br>A*020108<br>A*0275                      | A*0132<br>A*020111<br>A*0283N                    | A*0134N<br>A*020114<br>A*0289          | A*020115<br>A*0297                    | A*020121<br>A*9232                    | A*0209<br>A*9234                     | A*01G1<br>A*02G1<br><br><br><br>A*020601/9226                                                                                                                                                                                                                                                                                                                                                                                                                    |
| A*0207<br>A*0211<br>A*0216<br>A*021701<br>A*0222<br>A*0281<br>A*03010101<br>A*110101<br>A*110201<br>A*2301<br>A*24020101 | A*0215N<br>A*0269<br>A*9231<br>A*021702<br>A*9204<br>A*9224<br>A*03010102N<br>A*1121N<br>A*110203<br>A*2307N<br>A*24020102L<br>A*2479<br>A*2433 | A*03010103<br><br><br><br><br><br>A*2317<br>A*240203<br>A*2483N | A*030107<br><br><br><br><br><br>A*2318<br>A*240210 | A*0320<br><br><br><br><br><br>A*2320<br>A*240213 | A*0321N<br><br><br><br><br><br>A*2409N | A*0326<br><br><br><br><br><br>A*2411N | A*0337<br><br><br><br><br><br>A*2440N | A*0345<br><br><br><br><br><br>A*2476 | A*0207/0215N<br>A*0211/0269<br>A*0216/9231<br>A*021701/021702<br>A*0222/9204<br>A*0281/9224<br>A*03G1<br>A*110101/1121N<br>A*110201/110203<br>A*2301/2307N/2317/2318/2320<br>A*24G1<br><br><br>A*240301/2433<br>A*2507<br>A*260101/260107/2624/2626<br>A*290101<br>A*300101/300102/3024<br>A*300201/300202<br>A*310102/3114N/3123<br>A*320101/320102<br>A*330301/330303/3315<br>A*6601/6608<br>A*680101/680107<br>A*680102/6811N/6833<br>A*680201<br>A*7401/7402 |

## Alleles extended due to unsequenced regions

The following alleles do not contain the complete exon 2 + 3 sequence. For these alleles, the sequence of an alternate allele has been used to extend the sequence to cover this region.

| Incomplete allele | Sequence extended with |
|-------------------|------------------------|
| A*0208            | A*02010101             |

## Alleles removed from analysis due to insertions or deletions

| Allele                                                                                                                                                 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| A*0115N<br>A*0116N<br>A*0294N<br>A*0303N<br>A*0336N<br>A*2311N<br>A*2436N<br>A*2445N<br>A*2486N<br>A*2611N<br>A*2625N<br>A*6818N<br>A*7412N<br>A*9225N |

## Ambiguous typing combinations over exon 2 + 3

| Combination 1                                     | Combination 2                                     | Combination 3 | Combination 4 |
|---------------------------------------------------|---------------------------------------------------|---------------|---------------|
| A*01G1+A*0113<br>A*01G1+A*02G1<br>A*01G1+A*020118 | A*0117+A*0128<br>A*0114+A*9201<br>A*010103+A*02G1 | A*0236+A*3604 |               |

|                                    |                                    |               |               |
|------------------------------------|------------------------------------|---------------|---------------|
| A*01G1+A*020501                    | A*0114+A*9254                      |               |               |
| A*01G1+A*020602                    | A*010104+A*020601/9226             |               |               |
| A*01G1+A*0212                      | A*0125+A*0249                      | A*0237+A*3604 |               |
| A*01G1+A*0234                      | A*0117+A*02G1                      |               |               |
| A*01G1+A*023501                    | A*0113+A*9246                      | A*0117+A*0290 |               |
| A*01G1+A*0262                      | A*0117+A*022001                    |               |               |
| A*01G1+A*0290                      | A*0128+A*9246                      |               |               |
| A*01G1+A*0295                      | A*0130+A*9214                      |               |               |
| A*01G1+A*03G1                      | A*0117+A*0308                      |               |               |
| A*01G1+A*0319                      | A*0130+A*0315                      |               |               |
| A*01G1+A*110101/1121N              | A*0113+A*1140                      | A*0117+A*1119 | A*1139+A*3604 |
| A*01G1+A*110201/110203             | A*1138+A*3604                      |               |               |
| A*01G1+A*1104                      | A*0114+A*110101/1121N              | A*1127+A*3604 | A*1139+A*3601 |
| A*01G1+A*1119                      | A*0128+A*1140                      |               |               |
| A*01G1+A*1120                      | A*0125+A*1108                      |               |               |
| A*01G1+A*1127                      | A*0114+A*1139                      |               |               |
| A*01G1+A*1140                      | A*0123+A*1117                      |               |               |
| A*01G1+A*2301/2307N/2317/2318/2320 | A*0114+A*2310                      |               |               |
| A*01G1+A*2304                      | A*2301/2307N/2317/2318/2320+A*3604 | A*2310+A*3601 |               |
| A*01G1+A*2313                      | A*0117+A*2301/2307N/2317/2318/2320 |               |               |
| A*01G1+A*24G1                      | A*0114+A*2446                      | A*0125+A*2487 | A*0130+A*2417 |
| A*01G1+A*240212                    | A*010104+A*24G1                    |               |               |
| A*01G1+A*240301/2433               | A*0114+A*2410                      | A*24G1+A*3604 | A*2446+A*3601 |
| A*01G1+A*240302                    | A*010103+A*240301/2433             |               |               |
| A*01G1+A*2407                      | A*0117+A*24G1                      |               |               |
| A*01G1+A*2410                      | A*2446+A*3604                      |               |               |
| A*01G1+A*2415                      | A*0103+A*2451                      |               |               |
| A*01G1+A*2419                      | A*0117+A*2444                      |               |               |
| A*01G1+A*2502                      | A*0117+A*2507/A*2507               |               |               |
| A*01G1+A*2506                      | A*0114+A*2507/A*2507               |               |               |
| A*01G1+A*260103                    | A*010103+A*260101/260107/2624/2626 |               |               |
| A*01G1+A*2603                      | A*0128+A*2636                      |               |               |
| A*01G1+A*2609                      | A*0114+A*260101/260107/2624/2626   |               |               |
| A*01G1+A*2613                      | A*0117+A*260101/260107/2624/2626   |               |               |
| A*01G1+A*2615                      | A*2629+A*3604                      |               |               |
| A*01G1+A*2634                      | A*0108+A*260101/260107/2624/2626   |               |               |
| A*01G1+A*290201                    | A*2903+A*3604                      |               |               |
| A*01G1+A*3025                      | A*0117+A*300201/300202             |               |               |
| A*01G1+A*310102/3114N/3123         | A*3105+A*3604                      |               |               |
| A*01G1+A*320101/320102             | A*3213+A*3604                      |               |               |
| A*01G1+A*3217                      | A*0117+A*320101/320102             |               |               |
| A*01G1+A*330301/330303/3315        | A*3310+A*3604                      |               |               |
| A*01G1+A*3601                      | A*0114+A*3604                      |               |               |
| A*01G1+A*6601/6608                 | A*0113+A*260101/260107/2624/2626   | A*0117+A*6605 | A*0128+A*2613 |
| A*01G1+A*6602                      | A*0117+A*6603                      |               |               |
| A*01G1+A*6605                      | A*0128+A*260101/260107/2624/2626   |               |               |
| A*01G1+A*6609                      | A*0113+A*2622                      |               |               |
| A*01G1+A*680102/6811N/6833         | A*0117+A*680301                    | A*0126+A*6841 |               |
| A*01G1+A*680104                    | A*010103+A*680101/680107           |               |               |
| A*01G1+A*680201                    | A*0117+A*6831                      |               |               |
| A*01G1+A*680202                    | A*010103+A*680201                  |               |               |
| A*01G1+A*7409                      | A*0129+A*7401/7402                 |               |               |
| A*01G1+A*7413                      | A*0117+A*7401/7402                 |               |               |
| A*01G1+A*9213N                     | A*0131N+A*02G1                     |               |               |
| A*01G1+A*9242                      | A*0254+A*3604                      |               |               |
| A*010103+A*0234                    | A*0117+A*020118                    |               |               |
| A*010103+A*2609                    | A*0114+A*260103                    |               |               |
| A*010103+A*2613                    | A*0117+A*260103                    |               |               |
| A*010103+A*2634                    | A*0108+A*260103                    |               |               |
| A*010103+A*6601/6608               | A*0113+A*260103                    |               |               |
| A*010103+A*6605                    | A*0128+A*260103                    |               |               |
| A*010103+A*9213N                   | A*0131N+A*020118                   |               |               |
| A*010104+A*240301/2433             | A*240212+A*3604                    |               |               |
| A*010104+A*2407                    | A*0117+A*240212                    |               |               |
| A*0102+A*0293                      | A*0120+A*9256                      |               |               |
| A*0108+A*2609                      | A*0114+A*2634                      |               |               |
| A*0108+A*2613                      | A*0117+A*2634                      |               |               |
| A*0108+A*6601/6608                 | A*0113+A*2634                      |               |               |
| A*0108+A*6605                      | A*0128+A*2634                      |               |               |
| A*0110+A*110201/110203             | A*0126+A*1114                      |               |               |
| A*0112+A*3120                      | A*0119+A*310102/3114N/3123         |               |               |
| A*0113+A*02G1                      | A*0128+A*0234                      |               |               |
| A*0113+A*022001                    | A*0128+A*0262                      |               |               |
| A*0113+A*0290                      | A*0128+A*023501                    |               |               |
| A*0113+A*0308                      | A*0128+A*03G1                      |               |               |
| A*0113+A*1119                      | A*0128+A*110101/1121N              |               |               |
| A*0113+A*2301/2307N/2317/2318/2320 | A*0128+A*2313                      |               |               |
| A*0113+A*24G1                      | A*0128+A*2407                      |               |               |
| A*0113+A*2444                      | A*0128+A*2419                      |               |               |
| A*0113+A*2507/A*2507               | A*0128+A*2502                      |               |               |
| A*0113+A*2609                      | A*0114+A*6601/6608                 |               |               |
| A*0113+A*2613                      | A*0117+A*6601/6608                 |               |               |
| A*0113+A*2636                      | A*0117+A*2603                      |               |               |
| A*0113+A*300201/300202             | A*0128+A*3025                      |               |               |
| A*0113+A*320101/320102             | A*0128+A*3217                      |               |               |
| A*0113+A*6603                      | A*0128+A*6602                      |               |               |
| A*0113+A*6605                      | A*0128+A*6601/6608                 |               |               |
| A*0113+A*680301                    | A*0128+A*680102/6811N/6833         |               |               |
| A*0113+A*6831                      | A*0128+A*680201                    |               |               |
| A*0113+A*7401/7402                 | A*0128+A*7413                      |               |               |
| A*0114+A*02G1                      | A*0236+A*3601                      |               |               |
| A*0114+A*0212                      | A*0237+A*3601                      |               |               |
| A*0114+A*110201/110203             | A*1138+A*3601                      |               |               |
| A*0114+A*1104                      | A*1127+A*3601                      |               |               |
| A*0114+A*2304                      | A*2301/2307N/2317/2318/2320+A*3601 |               |               |
| A*0114+A*240301/2433               | A*24G1+A*3601                      |               |               |
| A*0114+A*2502                      | A*0117+A*2506                      |               |               |
| A*0114+A*2613                      | A*0117+A*2609                      |               |               |
| A*0114+A*2615                      | A*2629+A*3601                      |               |               |
| A*0114+A*290201                    | A*2903+A*3601                      |               |               |
| A*0114+A*310102/3114N/3123         | A*3105+A*3601                      |               |               |
| A*0114+A*320101/320102             | A*3213+A*3601                      |               |               |
| A*0114+A*330301/330303/3315        | A*3310+A*3601                      |               |               |
| A*0114+A*6605                      | A*0128+A*2609                      |               |               |

|                                    |                                         |                      |                 |
|------------------------------------|-----------------------------------------|----------------------|-----------------|
| A*0114+A*9242                      | A*0254+A*3601                           |                      |                 |
| A*0117+A*2304                      | A*2313+A*3604                           |                      |                 |
| A*0117+A*240301/2433               | A*2407+A*3604                           |                      |                 |
| A*0117+A*7409                      | A*0129+A*7413                           |                      |                 |
| A*0117+A*9213N                     | A*0131N+A*0234                          |                      |                 |
| A*0121+A*0227                      | A*0126+A*0212                           |                      |                 |
| A*0121+A*112402                    | A*0126+A*1131                           |                      |                 |
| A*0121+A*2459                      | A*0126+A*24G1                           |                      |                 |
| A*02G1+A*020501                    | A*0202+A*020601/9226                    | A*0214+A*0222/9204   |                 |
| A*02G1+A*020604                    | A*020122+A*020601/9226                  |                      |                 |
| A*02G1+A*0208                      | A*020501+A*022001                       |                      |                 |
| A*02G1+A*0213                      | A*0212+A*0226                           |                      |                 |
| A*02G1+A*023501                    | A*0234+A*0290                           |                      |                 |
| A*02G1+A*023503                    | A*020109+A*023501                       |                      |                 |
| A*02G1+A*0237                      | A*0212+A*0236                           |                      |                 |
| A*02G1+A*0246                      | A*0270+A*0292                           |                      |                 |
| A*02G1+A*0249                      | A*020122+A*0222/9204                    |                      |                 |
| A*02G1+A*0251                      | A*020601/9226+A*0240                    |                      |                 |
| A*02G1+A*0254                      | A*020601/9226+A*0237                    | A*0236+A*9242        |                 |
| A*02G1+A*025601                    | A*0245+A*0262                           |                      |                 |
| A*02G1+A*0262                      | A*022001+A*0234                         |                      |                 |
| A*02G1+A*0279                      | A*020601/9226+A*0286                    |                      |                 |
| A*02G1+A*0299                      | A*020601/9226+A*0226                    |                      |                 |
| A*02G1+A*03G1                      | A*0224+A*0317                           | A*0226+A*0307        | A*0234+A*0308   |
|                                    | A*0290+A*0309                           |                      |                 |
| A*02G1+A*030102                    | A*020122+A*03G1                         |                      |                 |
| A*02G1+A*030104                    | A*020113+A*03G1                         |                      |                 |
| A*02G1+A*030109                    | A*020112+A*03G1                         |                      |                 |
| A*02G1+A*0302                      | A*0212+A*0307                           |                      |                 |
| A*02G1+A*0304                      | A*027402+A*03G1                         |                      |                 |
| A*02G1+A*0312                      | A*020601/9226+A*03G1                    | A*0299+A*0307        | A*0317+A*9237   |
| A*02G1+A*0324                      | A*0255+A*0323                           |                      |                 |
| A*02G1+A*0350                      | A*0222/9204+A*03G1                      |                      |                 |
| A*02G1+A*110101/1121N              | A*0212+A*112402                         | A*0227+A*1131        | A*0234+A*1119   |
|                                    | A*0290+A*1106                           | A*1104+A*9201        |                 |
|                                    | A*020104+A*110101/1121N                 |                      |                 |
| A*02G1+A*110105                    | A*0286+A*1116                           |                      |                 |
| A*02G1+A*110201/110203             | A*0240+A*1120                           |                      |                 |
| A*02G1+A*1103                      | A*0249+A*1125                           |                      |                 |
| A*02G1+A*1108                      | A*023501+A*1118                         |                      |                 |
| A*02G1+A*1112                      | A*0212+A*1125                           | A*0213+A*1131        |                 |
| A*02G1+A*1120                      | A*020122+A*112402                       |                      |                 |
| A*02G1+A*112401                    | A*0226+A*1131                           |                      |                 |
| A*02G1+A*1125                      | A*0236+A*1104                           |                      |                 |
| A*02G1+A*1127                      | A*110101/1121N+A*9221                   |                      |                 |
| A*02G1+A*1132                      | A*110101/1121N+A*9253                   |                      |                 |
| A*02G1+A*1134                      | A*0207/0215N+A*110101/1121N             |                      |                 |
| A*02G1+A*1136                      | A*0236+A*110201/110203                  |                      |                 |
| A*02G1+A*1138                      | A*0236+A*110101/1121N                   | A*0237+A*112402      | A*1127+A*9201   |
| A*02G1+A*1139                      | A*0236+A*2304                           | A*0290+A*2312        |                 |
| A*02G1+A*2301/2307N/2317/2318/2320 | A*0222/9204+A*2301/2307N/2317/2318/2320 |                      |                 |
| A*02G1+A*2302                      | A*0224+A*2301/2307N/2317/2318/2320      |                      |                 |
| A*02G1+A*230302                    | A*0282N+A*2301/2307N/2317/2318/2320     |                      |                 |
| A*02G1+A*2308N                     | A*2301/2307N/2317/2318/2320+A*9201      |                      |                 |
| A*02G1+A*2310                      | A*0234+A*2301/2307N/2317/2318/2320      | A*023501+A*2312      |                 |
| A*02G1+A*2313                      | A*0240+A*241302                         |                      |                 |
| A*02G1+A*2314                      | A*020109+A*240206                       | A*0204+A*2452        | A*0212+A*241301 |
| A*02G1+A*24G1                      | A*0236+A*240301/2433                    | A*0258+A*2493        | A*0270+A*2429   |
|                                    | A*0287+A*2428                           | A*0290+A*2430        | A*2414+A*9210   |
|                                    | A*020118+A*240301/2433                  |                      |                 |
| A*02G1+A*240302                    | A*2428+A*9246                           |                      |                 |
| A*02G1+A*2404                      | A*0222/9204+A*241301                    |                      |                 |
| A*02G1+A*2406                      | A*0234+A*24G1                           | A*023501+A*2430      |                 |
| A*02G1+A*2407                      | A*240301/2433+A*9201                    |                      |                 |
| A*02G1+A*2410                      | A*020122+A*241301                       |                      |                 |
| A*02G1+A*241302                    | A*0234+A*2444                           |                      |                 |
| A*02G1+A*2419                      | A*0246+A*2408                           | A*0276+A*2488        |                 |
| A*02G1+A*2420                      | A*0224+A*24G1                           |                      |                 |
| A*02G1+A*2421                      | A*0246+A*2489                           |                      |                 |
| A*02G1+A*2428                      | A*0246+A*2442                           |                      |                 |
| A*02G1+A*2430                      | A*0281/9224+A*2428                      |                      |                 |
| A*02G1+A*2432                      | A*0211/0269+A*2430                      |                      |                 |
| A*02G1+A*2434                      | A*0236+A*2410                           | A*24G1+A*9201        |                 |
| A*02G1+A*2446                      | A*0216/9231+A*24G1                      |                      |                 |
| A*02G1+A*2455                      | A*0213+A*241301                         | A*0226+A*24G1        |                 |
| A*02G1+A*2456                      | A*24G1+A*9207                           |                      |                 |
| A*02G1+A*2458                      | A*0227+A*241301                         |                      |                 |
| A*02G1+A*2459                      | A*0280+A*24G1                           |                      |                 |
| A*02G1+A*2462                      | A*0240+A*24G1                           |                      |                 |
| A*02G1+A*2471                      | A*24G1+A*9245                           |                      |                 |
| A*02G1+A*2472                      | A*24G1+A*9247                           |                      |                 |
| A*02G1+A*2473                      | A*020122+A*2406                         | A*0222/9204+A*241302 | A*0249+A*241301 |
| A*02G1+A*2487                      | A*0288N+A*24G1                          |                      |                 |
| A*02G1+A*2490N                     | A*0268+A*24G1                           |                      |                 |
| A*02G1+A*2491                      | A*2414+A*9256                           |                      |                 |
| A*02G1+A*2492                      | A*0225+A*24G1                           |                      |                 |
| A*02G1+A*2499                      | A*020601/9226+A*2503                    | A*0281/9224+A*2603   | A*2505+A*9218   |
| A*02G1+A*2507/A*2507               | A*2506+A*9201                           |                      |                 |
|                                    | A*0234+A*2507/A*2507                    |                      |                 |
| A*02G1+A*2502                      | A*0285+A*2507/A*2507                    |                      |                 |
| A*02G1+A*2508                      | A*0224+A*2610                           | A*0225+A*2614        | A*0226+A*2612   |
| A*02G1+A*260101/260107/2624/2626   | A*0255+A*260702                         | A*0290+A*2636        | A*2603+A*9246   |
|                                    | A*2609+A*9201                           |                      |                 |
| A*02G1+A*260103                    | A*020118+A*260101/260107/2624/2626      |                      |                 |
| A*02G1+A*2613                      | A*0234+A*260101/260107/2624/2626        | A*023501+A*2636      |                 |
| A*02G1+A*2627                      | A*0268+A*260101/260107/2624/2626        |                      |                 |
| A*02G1+A*2628                      | A*0226+A*2618                           | A*0240+A*2614        |                 |
| A*02G1+A*2629                      | A*0236+A*2615                           |                      |                 |
| A*02G1+A*2903                      | A*0236+A*290201                         |                      |                 |
| A*02G1+A*2904                      | A*0229+A*290201                         |                      |                 |
| A*02G1+A*2906                      | A*290201+A*9221                         |                      |                 |
| A*02G1+A*2912                      | A*290101+A*9207                         |                      |                 |
| A*02G1+A*300101/300102/3024        | A*0290+A*3016                           |                      |                 |
| A*02G1+A*3025                      | A*0234+A*300201/300202                  |                      |                 |

|                              |                                    |                      |                 |
|------------------------------|------------------------------------|----------------------|-----------------|
| A*02G1+A*310102/3114N/3123   | A*022001+A*3102                    |                      |                 |
| A*02G1+A*3105                | A*0236+A*310102/3114N/3123         |                      |                 |
| A*02G1+A*3110                | A*022001+A*3107                    |                      |                 |
| A*02G1+A*3116                | A*310102/3114N/3123+A*9207         |                      |                 |
| A*02G1+A*320101/320102       | A*0240+A*3206                      | A*0281/9224+A*7406   | A*0290+A*3208   |
| A*02G1+A*3202                | A*0212+A*3206                      |                      |                 |
| A*02G1+A*3203                | A*0287+A*7406                      |                      |                 |
| A*02G1+A*3207                | A*0276+A*320101/320102             |                      |                 |
| A*02G1+A*3212                | A*320101/320102+A*9221             |                      |                 |
| A*02G1+A*3213                | A*0236+A*320101/320102             |                      |                 |
| A*02G1+A*3217                | A*0234+A*320101/320102             | A*023501+A*3208      |                 |
| A*02G1+A*330301/330303/3315  | A*0255+A*3308                      |                      |                 |
| A*02G1+A*3309                | A*022001+A*3308                    |                      |                 |
| A*02G1+A*3310                | A*0236+A*330301/330303/3315        |                      |                 |
| A*02G1+A*3402                | A*020601/9226+A*3408               | A*0225+A*3403        |                 |
| A*02G1+A*3404                | A*0228+A*3408                      |                      |                 |
| A*02G1+A*3604                | A*3601+A*9201                      |                      |                 |
| A*02G1+A*6601/6608           | A*0234+A*6605                      | A*023501+A*2603      |                 |
| A*02G1+A*6602                | A*0234+A*6603                      |                      |                 |
| A*02G1+A*6605                | A*0290+A*2603                      |                      |                 |
| A*02G1+A*680102/6811N/6833   | A*0204+A*6823                      | A*0222/9204+A*680802 | A*0234+A*680301 |
|                              | A*023501+A*6805                    |                      |                 |
| A*02G1+A*680104              | A*020118+A*680101/680107           |                      |                 |
| A*02G1+A*680201              | A*0234+A*6831                      | A*023501+A*6815      |                 |
| A*02G1+A*680202              | A*020118+A*680201                  |                      |                 |
| A*02G1+A*680301              | A*020102+A*680302                  | A*0290+A*6805        |                 |
| A*02G1+A*6809                | A*0212+A*680802                    |                      |                 |
| A*02G1+A*6812                | A*0286+A*680102/6811N/6833         |                      |                 |
| A*02G1+A*6814                | A*6810+A*9221                      |                      |                 |
| A*02G1+A*6817                | A*0260+A*680102/6811N/6833         |                      |                 |
| A*02G1+A*6821                | A*027402+A*680102/6811N/6833       |                      |                 |
| A*02G1+A*6828                | A*020122+A*680201                  |                      |                 |
| A*02G1+A*6831                | A*0290+A*6815                      |                      |                 |
| A*02G1+A*6835                | A*680101/680107+A*9223             |                      |                 |
| A*02G1+A*6842                | A*0226+A*680101/680107             |                      |                 |
| A*02G1+A*7401/7402           | A*0290+A*7406                      |                      |                 |
| A*02G1+A*7407                | A*0211/0269+A*7406                 |                      |                 |
| A*02G1+A*7413                | A*0234+A*7401/7402                 | A*023501+A*7406      | A*025602+A*7404 |
| A*02G1+A*9203                | A*0207/0215N+A*025602              |                      |                 |
| A*02G1+A*9206                | A*020601/9226+A*9245               |                      |                 |
| A*02G1+A*9208                | A*020601/9226+A*021701/021702      |                      |                 |
| A*02G1+A*9210                | A*021701/021702+A*0295             |                      |                 |
| A*02G1+A*9212                | A*0207/0215N+A*0287                |                      |                 |
| A*02G1+A*9222                | A*020601/9226+A*0250               |                      |                 |
| A*02G1+A*9228                | A*0211/0269+A*022001               |                      |                 |
| A*02G1+A*9230                | A*0207/0215N+A*0240                |                      |                 |
| A*02G1+A*9236                | A*0222/9204+A*0287                 |                      |                 |
| A*02G1+A*9237                | A*020601/9226+A*0224               |                      |                 |
| A*02G1+A*9242                | A*020601/9226+A*0212               |                      |                 |
| A*02G1+A*9254                | A*020501+A*9201                    |                      |                 |
| A*020104+A*023502            | A*020117+A*023501                  |                      |                 |
| A*020104+A*025602            | A*020117+A*025601                  |                      |                 |
| A*020104+A*03G1              | A*020117+A*030103                  |                      |                 |
| A*020104+A*1132              | A*110105+A*9221                    |                      |                 |
| A*020104+A*1134              | A*110105+A*9253                    |                      |                 |
| A*020104+A*1136              | A*0207/0215N+A*110105              |                      |                 |
| A*020104+A*1139              | A*0236+A*110105                    |                      |                 |
| A*020104+A*260701            | A*020117+A*260702                  |                      |                 |
| A*020109+A*1112              | A*023503+A*1118                    |                      |                 |
| A*020109+A*2313              | A*023503+A*2312                    |                      |                 |
| A*020109+A*2407              | A*023503+A*2430                    |                      |                 |
| A*020109+A*2613              | A*023503+A*2636                    |                      |                 |
| A*020109+A*3217              | A*023503+A*3208                    |                      |                 |
| A*020109+A*6601/6608         | A*023503+A*2603                    |                      |                 |
| A*020109+A*680102/6811N/6833 | A*023503+A*6805                    |                      |                 |
| A*020109+A*680201            | A*023503+A*6815                    |                      |                 |
| A*020109+A*7413              | A*023503+A*7406                    |                      |                 |
| A*020112+A*030102            | A*020122+A*030109                  |                      |                 |
| A*020112+A*030104            | A*020113+A*030109                  |                      |                 |
| A*020112+A*0304              | A*027402+A*030109                  |                      |                 |
| A*020112+A*0312              | A*020601/9226+A*030109             |                      |                 |
| A*020112+A*0350              | A*0222/9204+A*030109               |                      |                 |
| A*020113+A*030102            | A*020122+A*030104                  |                      |                 |
| A*020113+A*0304              | A*027402+A*030104                  |                      |                 |
| A*020113+A*0312              | A*020601/9226+A*030104             |                      |                 |
| A*020113+A*0350              | A*0222/9204+A*030104               |                      |                 |
| A*020118+A*24G1              | A*0236+A*240302                    |                      |                 |
| A*020118+A*2410              | A*240302+A*9201                    |                      |                 |
| A*020118+A*2613              | A*0234+A*260103                    |                      |                 |
| A*020118+A*2627              | A*0268+A*260103                    |                      |                 |
| A*020118+A*6828              | A*020122+A*680202                  |                      |                 |
| A*020118+A*6835              | A*680104+A*9223                    |                      |                 |
| A*020118+A*6842              | A*0226+A*680104                    |                      |                 |
| A*020122+A*020501            | A*0202+A*020604                    | A*0214+A*0249        |                 |
| A*020122+A*0251              | A*020604+A*0240                    |                      |                 |
| A*020122+A*0254              | A*020604+A*0237                    |                      |                 |
| A*020122+A*0279              | A*020604+A*0286                    |                      |                 |
| A*020122+A*0299              | A*020604+A*0226                    |                      |                 |
| A*020122+A*0304              | A*027402+A*030102                  |                      |                 |
| A*020122+A*0312              | A*020601/9226+A*030102             | A*020604+A*03G1      |                 |
| A*020122+A*0350              | A*0222/9204+A*030102               | A*0249+A*03G1        |                 |
| A*020122+A*110101/1121N      | A*0212+A*112401                    |                      |                 |
| A*020122+A*1139              | A*0237+A*112401                    |                      |                 |
| A*020122+A*2302              | A*0249+A*2301/2307N/2317/2318/2320 |                      |                 |
| A*020122+A*24G1              | A*0212+A*241302                    |                      |                 |
| A*020122+A*2456              | A*0213+A*241302                    |                      |                 |
| A*020122+A*2459              | A*0227+A*241302                    |                      |                 |
| A*020122+A*2471              | A*0212+A*2314                      |                      |                 |
| A*020122+A*2487              | A*0249+A*241302                    |                      |                 |
| A*020122+A*2507/A*2507       | A*020604+A*2503                    |                      |                 |
| A*020122+A*3402              | A*020604+A*3408                    |                      |                 |
| A*020122+A*680101/680107     | A*0222/9204+A*680801               |                      |                 |
| A*020122+A*680102/6811N/6833 | A*0249+A*680802                    |                      |                 |
| A*020122+A*6826              | A*0237+A*680801                    |                      |                 |

|                                         |                                    |                 |
|-----------------------------------------|------------------------------------|-----------------|
| A*020122+A*9206                         | A*020604+A*9245                    |                 |
| A*020122+A*9208                         | A*020604+A*021701/021702           |                 |
| A*020122+A*9222                         | A*020604+A*0250                    |                 |
| A*020122+A*9236                         | A*0249+A*0287                      |                 |
| A*020122+A*9237                         | A*020604+A*0224                    |                 |
| A*020122+A*9242                         | A*020604+A*0212                    |                 |
| A*0202+A*0228                           | A*020601/9226+A*9255               |                 |
| A*0202+A*0251                           | A*020501+A*0240                    |                 |
| A*0202+A*0254                           | A*020501+A*0237                    |                 |
| A*0202+A*0279                           | A*020501+A*0286                    |                 |
| A*0202+A*0299                           | A*020501+A*0226                    |                 |
| A*0202+A*0312                           | A*020501+A*03G1                    | A*0214+A*0350   |
| A*0202+A*2321                           | A*2301/2307N/2317/2318/2320+A*9255 |                 |
| A*0202+A*2507/A*2507                    | A*020501+A*2503                    |                 |
| A*0202+A*300101/300102/3024             | A*301102+A*9255                    |                 |
| A*0202+A*3402                           | A*020501+A*3408                    |                 |
| A*0202+A*3404                           | A*3402+A*9255                      |                 |
| A*0202+A*9206                           | A*020501+A*9245                    |                 |
| A*0202+A*9208                           | A*020501+A*021701/021702           |                 |
| A*0202+A*9222                           | A*020501+A*0250                    |                 |
| A*0202+A*9237                           | A*020501+A*0224                    |                 |
| A*0202+A*9242                           | A*020501+A*0212                    |                 |
| A*020301+A*0307                         | A*0225+A*0350                      |                 |
| A*020301+A*0315                         | A*03G1+A*9248                      |                 |
| A*020301+A*24G1                         | A*2453+A*9248                      |                 |
| A*020301+A*2446                         | A*0238+A*2406                      |                 |
| A*020301+A*2504                         | A*0238+A*2506                      |                 |
| A*020301+A*2608                         | A*0238+A*2609                      |                 |
| A*020301+A*3206                         | A*0225+A*3210                      |                 |
| A*020301+A*6606                         | A*0225+A*6601/6608                 |                 |
| A*020301+A*9208                         | A*0257+A*9248                      |                 |
| A*020501+A*0262                         | A*0208+A*0234                      |                 |
| A*020501+A*0287                         | A*0214+A*9236                      |                 |
| A*020501+A*110101/1121N                 | A*1104+A*9254                      |                 |
| A*020501+A*1139                         | A*1127+A*9254                      |                 |
| A*020501+A*2301/2307N/2317/2318/2320    | A*0214+A*2302                      |                 |
| A*020501+A*2310                         | A*2301/2307N/2317/2318/2320+A*9254 |                 |
| A*020501+A*2410                         | A*240301/2433+A*9254               |                 |
| A*020501+A*241301                       | A*0214+A*2406                      |                 |
| A*020501+A*241302                       | A*0214+A*2487                      |                 |
| A*020501+A*2446                         | A*24G1+A*9254                      |                 |
| A*020501+A*2507/A*2507                  | A*2506+A*9254                      |                 |
| A*020501+A*260101/260107/2624/2626      | A*2609+A*9254                      |                 |
| A*020501+A*310102/3114N/3123            | A*0208+A*3102                      |                 |
| A*020501+A*3110                         | A*0208+A*3107                      |                 |
| A*020501+A*3309                         | A*0208+A*3308                      |                 |
| A*020501+A*3604                         | A*3601+A*9254                      |                 |
| A*020501+A*680802                       | A*0214+A*680102/6811N/6833         |                 |
| A*020501+A*9228                         | A*0208+A*0211/0269                 | A*0226+A*9242   |
| A*020601/9226+A*0213                    | A*0212+A*0299                      |                 |
| A*020601/9226+A*0249                    | A*020604+A*0222/9204               |                 |
| A*020601/9226+A*0302                    | A*0307+A*9242                      |                 |
| A*020601/9226+A*0304                    | A*027402+A*0312                    |                 |
| A*020601/9226+A*0350                    | A*0222/9204+A*0312                 |                 |
| A*020601/9226+A*110101/1121N            | A*112402+A*9242                    |                 |
| A*020601/9226+A*110102                  | A*020606+A*110101/1121N            |                 |
| A*020601/9226+A*110201/110203           | A*0279+A*1116                      |                 |
| A*020601/9226+A*1103                    | A*0251+A*1120                      |                 |
| A*020601/9226+A*1120                    | A*1125+A*9242                      |                 |
| A*020601/9226+A*112401                  | A*020604+A*112402                  |                 |
| A*020601/9226+A*1125                    | A*0299+A*1131                      |                 |
| A*020601/9226+A*1139                    | A*0254+A*112402                    |                 |
| A*020601/9226+A*230302                  | A*2301/2307N/2317/2318/2320+A*9237 |                 |
| A*020601/9226+A*2314                    | A*0251+A*241302                    |                 |
| A*020601/9226+A*2321                    | A*0228+A*2301/2307N/2317/2318/2320 |                 |
| A*020601/9226+A*24G1                    | A*0276+A*2450                      | A*241301+A*9242 |
| A*020601/9226+A*240212                  | A*020602+A*24G1                    |                 |
| A*020601/9226+A*240214                  | A*020603+A*24G1                    |                 |
| A*020601/9226+A*241302                  | A*020604+A*241301                  |                 |
| A*020601/9226+A*2421                    | A*24G1+A*9237                      |                 |
| A*020601/9226+A*2447                    | A*24G1+A*9244                      |                 |
| A*020601/9226+A*2456                    | A*0299+A*24G1                      |                 |
| A*020601/9226+A*2471                    | A*0251+A*24G1                      |                 |
| A*020601/9226+A*2472                    | A*24G1+A*9206                      |                 |
| A*020601/9226+A*2487                    | A*020604+A*2406                    |                 |
| A*020601/9226+A*260101/260107/2624/2626 | A*0299+A*2612                      | A*2610+A*9237   |
| A*020601/9226+A*2616                    | A*0276+A*260101/260107/2624/2626   |                 |
| A*020601/9226+A*2628                    | A*0251+A*2614                      | A*0299+A*2618   |
| A*020601/9226+A*300101/300102/3024      | A*0228+A*301102                    |                 |
| A*020601/9226+A*310103                  | A*020606+A*310102/3114N/3123       |                 |
| A*020601/9226+A*320101/320102           | A*0251+A*3206                      |                 |
| A*020601/9226+A*3202                    | A*3206+A*9242                      |                 |
| A*020601/9226+A*3404                    | A*0228+A*3402                      |                 |
| A*020601/9226+A*3405                    | A*0291+A*340101                    |                 |
| A*020601/9226+A*6809                    | A*680802+A*9242                    |                 |
| A*020601/9226+A*6812                    | A*0279+A*680102/6811N/6833         |                 |
| A*020601/9226+A*6828                    | A*020604+A*680201                  |                 |
| A*020601/9226+A*6842                    | A*0299+A*680101/680107             |                 |
| A*020601/9226+A*6845                    | A*0276+A*680101/680107             |                 |
| A*020601/9226+A*9210                    | A*0295+A*9208                      |                 |
| A*020601/9226+A*9230                    | A*0207/0215N+A*0251                |                 |
| A*020602+A*240214                       | A*020603+A*240212                  |                 |
| A*020602+A*2421                         | A*240212+A*9237                    |                 |
| A*020602+A*2447                         | A*240212+A*9244                    |                 |
| A*020602+A*2456                         | A*0299+A*240212                    |                 |
| A*020602+A*2471                         | A*0251+A*240212                    |                 |
| A*020602+A*2472                         | A*240212+A*9206                    |                 |
| A*020603+A*2421                         | A*240214+A*9237                    |                 |
| A*020603+A*2447                         | A*240214+A*9244                    |                 |
| A*020603+A*2456                         | A*0299+A*240214                    |                 |
| A*020603+A*2471                         | A*0251+A*240214                    |                 |
| A*020603+A*2472                         | A*240214+A*9206                    |                 |
| A*020604+A*0350                         | A*0249+A*0312                      |                 |
| A*020604+A*110101/1121N                 | A*112401+A*9242                    |                 |

|                                    |                                    |                    |
|------------------------------------|------------------------------------|--------------------|
| A*020604+A*1139                    | A*0254+A*112401                    |                    |
| A*020604+A*24G1                    | A*241302+A*9242                    |                    |
| A*020604+A*2471                    | A*2314+A*9242                      |                    |
| A*020604+A*6826                    | A*0254+A*680801                    |                    |
| A*0207/0215N+A*1103                | A*1120+A*9230                      |                    |
| A*0207/0215N+A*1132                | A*1136+A*9221                      |                    |
| A*0207/0215N+A*1134                | A*1136+A*9253                      |                    |
| A*0207/0215N+A*1139                | A*0236+A*1136                      |                    |
| A*0207/0215N+A*2314                | A*241302+A*9230                    |                    |
| A*0207/0215N+A*24G1                | A*2428+A*9212                      |                    |
| A*0207/0215N+A*2471                | A*24G1+A*9230                      |                    |
| A*0207/0215N+A*2628                | A*2614+A*9230                      |                    |
| A*0207/0215N+A*320101/320102       | A*3206+A*9230                      |                    |
| A*0207/0215N+A*3203                | A*7406+A*9212                      |                    |
| A*0207/0215N+A*7413                | A*7404+A*9203                      |                    |
| A*0207/0215N+A*9236                | A*0222/9204+A*9212                 |                    |
| A*0208+A*9201                      | A*022001+A*9254                    |                    |
| A*0211/0269+A*0262                 | A*0234+A*9228                      |                    |
| A*0211/0269+A*0302                 | A*023501+A*0332                    |                    |
| A*0211/0269+A*24G1                 | A*0290+A*2434                      |                    |
| A*0211/0269+A*2407                 | A*023501+A*2434                    |                    |
| A*0211/0269+A*310102/3114N/3123    | A*3102+A*9228                      |                    |
| A*0211/0269+A*3107                 | A*0287+A*3102                      |                    |
| A*0211/0269+A*3110                 | A*0287+A*310102/3114N/3123         | A*3107+A*9228      |
| A*0211/0269+A*320101/320102        | A*0281/9224+A*7407                 |                    |
| A*0211/0269+A*3203                 | A*0287+A*7407                      |                    |
| A*0211/0269+A*3309                 | A*3308+A*9228                      |                    |
| A*0211/0269+A*3311                 | A*0290+A*330301/330303/3315        |                    |
| A*0211/0269+A*680101/680107        | A*023501+A*6804                    |                    |
| A*0211/0269+A*7401/7402            | A*0290+A*7407                      |                    |
| A*0211/0269+A*7413                 | A*023501+A*7407                    |                    |
| A*0212+A*0251                      | A*0240+A*9242                      |                    |
| A*0212+A*0254                      | A*0237+A*9242                      |                    |
| A*0212+A*0279                      | A*0286+A*9242                      |                    |
| A*0212+A*03G1                      | A*0213+A*0307                      | A*0226+A*0302      |
| A*0212+A*0305                      | A*0226+A*0310                      |                    |
| A*0212+A*0312                      | A*0299+A*0302                      | A*03G1+A*9242      |
| A*0212+A*1108                      | A*0249+A*1120                      |                    |
| A*0212+A*1127                      | A*0237+A*1104                      |                    |
| A*0212+A*1138                      | A*0237+A*110201/110203             |                    |
| A*0212+A*1139                      | A*0237+A*110101/1121N              |                    |
| A*0212+A*2301/2307N/2317/2318/2320 | A*0237+A*2304                      | A*0240+A*2405      |
| A*0212+A*24G1                      | A*0237+A*240301/2433               |                    |
| A*0212+A*2406                      | A*0222/9204+A*24G1                 | A*2428+A*9236      |
| A*0212+A*2446                      | A*0237+A*2410                      |                    |
| A*0212+A*2456                      | A*0213+A*24G1                      |                    |
| A*0212+A*2459                      | A*0227+A*24G1                      |                    |
| A*0212+A*2487                      | A*0249+A*24G1                      |                    |
| A*0212+A*2507/A*2507               | A*0222/9204+A*2504                 | A*2503+A*9242      |
| A*0212+A*260101/260107/2624/2626   | A*0213+A*2612                      | A*0222/9204+A*2608 |
| A*0212+A*2628                      | A*0213+A*2618                      |                    |
| A*0212+A*2629                      | A*0237+A*2615                      |                    |
| A*0212+A*2903                      | A*0237+A*290201                    |                    |
| A*0212+A*3105                      | A*0237+A*310102/3114N/3123         |                    |
| A*0212+A*320101/320102             | A*0240+A*3202                      |                    |
| A*0212+A*3213                      | A*0237+A*320101/320102             |                    |
| A*0212+A*3310                      | A*0237+A*330301/330303/3315        |                    |
| A*0212+A*3402                      | A*3408+A*9242                      |                    |
| A*0212+A*680102/6811N/6833         | A*0222/9204+A*6809                 |                    |
| A*0212+A*6842                      | A*0213+A*680101/680107             |                    |
| A*0212+A*9206                      | A*9242+A*9245                      |                    |
| A*0212+A*9208                      | A*021701/021702+A*9242             |                    |
| A*0212+A*9222                      | A*0250+A*9242                      |                    |
| A*0212+A*9237                      | A*0224+A*9242                      |                    |
| A*0213+A*0236                      | A*0226+A*0237                      |                    |
| A*0213+A*110101/1121N              | A*0227+A*1120                      |                    |
| A*0213+A*112402                    | A*0226+A*110101/1121N              | A*0227+A*1125      |
| A*0213+A*1125                      | A*0226+A*1120                      |                    |
| A*0213+A*2406                      | A*0222/9204+A*2456                 |                    |
| A*0213+A*2459                      | A*0227+A*2456                      |                    |
| A*0213+A*2487                      | A*0249+A*2456                      |                    |
| A*0213+A*290201                    | A*0240+A*2905                      |                    |
| A*0213+A*3206                      | A*0226+A*3202                      |                    |
| A*0213+A*680802                    | A*0226+A*6809                      |                    |
| A*0216/9231+A*2407                 | A*0234+A*2455                      |                    |
| A*0216/9231+A*2421                 | A*0224+A*2455                      |                    |
| A*0216/9231+A*2446                 | A*2455+A*9201                      |                    |
| A*0216/9231+A*2456                 | A*0226+A*2455                      |                    |
| A*0216/9231+A*2458                 | A*2455+A*9207                      |                    |
| A*0216/9231+A*2462                 | A*0280+A*2455                      |                    |
| A*0216/9231+A*2471                 | A*0240+A*2455                      |                    |
| A*0216/9231+A*2472                 | A*2455+A*9245                      |                    |
| A*0216/9231+A*2473                 | A*2455+A*9247                      |                    |
| A*0216/9231+A*2490N                | A*0288N+A*2455                     |                    |
| A*0216/9231+A*2491                 | A*0268+A*2455                      |                    |
| A*0216/9231+A*2499                 | A*0225+A*2455                      |                    |
| A*021701/021702+A*0251             | A*0240+A*9208                      |                    |
| A*021701/021702+A*0254             | A*0237+A*9208                      |                    |
| A*021701/021702+A*0279             | A*0286+A*9208                      |                    |
| A*021701/021702+A*0299             | A*0226+A*9208                      |                    |
| A*021701/021702+A*0312             | A*0257+A*0315                      | A*03G1+A*9208      |
| A*021701/021702+A*2507/A*2507      | A*2503+A*9208                      |                    |
| A*021701/021702+A*3402             | A*3408+A*9208                      |                    |
| A*021701/021702+A*9206             | A*9208+A*9245                      |                    |
| A*021701/021702+A*9222             | A*0250+A*9208                      |                    |
| A*021701/021702+A*9237             | A*0224+A*9208                      |                    |
| A*022001+A*023501                  | A*0262+A*0290                      |                    |
| A*022001+A*03G1                    | A*0262+A*0308                      |                    |
| A*022001+A*110101/1121N            | A*0262+A*1119                      |                    |
| A*022001+A*2313                    | A*0262+A*2301/2307N/2317/2318/2320 |                    |
| A*022001+A*2407                    | A*0262+A*24G1                      |                    |
| A*022001+A*2419                    | A*0262+A*2444                      |                    |
| A*022001+A*2434                    | A*2430+A*9228                      |                    |
| A*022001+A*2502                    | A*0262+A*2507/A*2507               |                    |

|                               |                                  |                 |
|-------------------------------|----------------------------------|-----------------|
| A*022001+A*2613               | A*0262+A*260101/260107/2624/2626 |                 |
| A*022001+A*3025               | A*0262+A*300201/300202           |                 |
| A*022001+A*3205               | A*0270+A*320101/320102           |                 |
| A*022001+A*3217               | A*0262+A*320101/320102           |                 |
| A*022001+A*330301/330303/3315 | A*0255+A*3309                    |                 |
| A*022001+A*6601/6608          | A*0262+A*6605                    |                 |
| A*022001+A*6602               | A*0262+A*6603                    |                 |
| A*022001+A*680102/6811N/6833  | A*0255+A*6830                    | A*0262+A*680301 |
| A*022001+A*680201             | A*0262+A*6831                    |                 |
| A*022001+A*7407               | A*7406+A*9228                    |                 |
| A*022001+A*7413               | A*0262+A*7401/7402               |                 |
| A*0222/9204+A*0304            | A*027402+A*0350                  |                 |
| A*0222/9204+A*112401          | A*0249+A*112402                  |                 |
| A*0222/9204+A*230302          | A*0224+A*2302                    |                 |
| A*0222/9204+A*2308N           | A*0282N+A*2302                   |                 |
| A*0222/9204+A*2310            | A*2302+A*9201                    |                 |
| A*0222/9204+A*2313            | A*0234+A*2302                    |                 |
| A*0222/9204+A*2314            | A*0240+A*2487                    |                 |
| A*0222/9204+A*2459            | A*0227+A*2406                    |                 |
| A*0222/9204+A*2487            | A*0249+A*2406                    |                 |
| A*0222/9204+A*3009            | A*0240+A*3004                    |                 |
| A*0222/9204+A*3203            | A*7406+A*9236                    |                 |
| A*0222/9204+A*6826            | A*0237+A*680101/680107           |                 |
| A*0222/9204+A*6828            | A*0249+A*680201                  |                 |
| A*0224+A*0251                 | A*0240+A*9237                    |                 |
| A*0224+A*0254                 | A*0237+A*9237                    |                 |
| A*0224+A*0279                 | A*0286+A*9237                    |                 |
| A*0224+A*0299                 | A*0226+A*9237                    |                 |
| A*0224+A*0312                 | A*03G1+A*9237                    |                 |
| A*0224+A*2308N                | A*0282N+A*230302                 |                 |
| A*0224+A*2310                 | A*230302+A*9201                  |                 |
| A*0224+A*2313                 | A*0234+A*230302                  |                 |
| A*0224+A*2407                 | A*0234+A*2421                    |                 |
| A*0224+A*2446                 | A*2421+A*9201                    |                 |
| A*0224+A*2456                 | A*0226+A*2421                    |                 |
| A*0224+A*2458                 | A*2421+A*9207                    |                 |
| A*0224+A*2462                 | A*0280+A*2421                    |                 |
| A*0224+A*2471                 | A*0240+A*2421                    |                 |
| A*0224+A*2472                 | A*2421+A*9245                    |                 |
| A*0224+A*2473                 | A*2421+A*9247                    |                 |
| A*0224+A*2490N                | A*0288N+A*2421                   |                 |
| A*0224+A*2491                 | A*0268+A*2421                    |                 |
| A*0224+A*2499                 | A*0225+A*2421                    |                 |
| A*0224+A*2507/A*2507          | A*2503+A*9237                    |                 |
| A*0224+A*3402                 | A*3408+A*9237                    |                 |
| A*0224+A*9206                 | A*9237+A*9245                    |                 |
| A*0224+A*9222                 | A*0250+A*9237                    |                 |
| A*0225+A*2407                 | A*0234+A*2499                    |                 |
| A*0225+A*2446                 | A*2499+A*9201                    |                 |
| A*0225+A*2456                 | A*0226+A*2499                    |                 |
| A*0225+A*2458                 | A*2499+A*9207                    |                 |
| A*0225+A*2462                 | A*0280+A*2499                    |                 |
| A*0225+A*2471                 | A*0240+A*2499                    |                 |
| A*0225+A*2472                 | A*2499+A*9245                    |                 |
| A*0225+A*2473                 | A*2499+A*9247                    |                 |
| A*0225+A*2490N                | A*0288N+A*2499                   |                 |
| A*0225+A*2491                 | A*0268+A*2499                    |                 |
| A*0225+A*2618                 | A*0240+A*2612                    |                 |
| A*0225+A*2628                 | A*0240+A*260101/260107/2624/2626 |                 |
| A*0226+A*0251                 | A*0240+A*0299                    |                 |
| A*0226+A*0254                 | A*0237+A*0299                    |                 |
| A*0226+A*0279                 | A*0286+A*0299                    |                 |
| A*0226+A*0312                 | A*0299+A*03G1                    |                 |
| A*0226+A*2407                 | A*0234+A*2456                    |                 |
| A*0226+A*2446                 | A*2456+A*9201                    |                 |
| A*0226+A*2458                 | A*2456+A*9207                    |                 |
| A*0226+A*2462                 | A*0280+A*2456                    |                 |
| A*0226+A*2471                 | A*0240+A*2456                    |                 |
| A*0226+A*2472                 | A*2456+A*9245                    |                 |
| A*0226+A*2473                 | A*2456+A*9247                    |                 |
| A*0226+A*2490N                | A*0288N+A*2456                   |                 |
| A*0226+A*2491                 | A*0268+A*2456                    |                 |
| A*0226+A*2507/A*2507          | A*0299+A*2503                    |                 |
| A*0226+A*3402                 | A*0299+A*3408                    |                 |
| A*0226+A*6835                 | A*6842+A*9223                    |                 |
| A*0226+A*9206                 | A*0299+A*9245                    |                 |
| A*0226+A*9222                 | A*0250+A*0299                    |                 |
| A*0227+A*2487                 | A*0249+A*2459                    |                 |
| A*0228+A*230302               | A*2321+A*9237                    |                 |
| A*0229+A*2903                 | A*0236+A*2904                    |                 |
| A*0229+A*2906                 | A*2904+A*9221                    |                 |
| A*0234+A*0248                 | A*023502+A*0246                  |                 |
| A*0234+A*03G1                 | A*023501+A*0309                  |                 |
| A*0234+A*030103               | A*025601+A*0323                  | A*025602+A*0323 |
| A*0234+A*110101/1121N         | A*023501+A*1106                  |                 |
| A*0234+A*1140                 | A*1106+A*9246                    |                 |
| A*0234+A*2308N                | A*0282N+A*2313                   |                 |
| A*0234+A*2310                 | A*2313+A*9201                    |                 |
| A*0234+A*2446                 | A*2407+A*9201                    |                 |
| A*0234+A*2458                 | A*2407+A*9207                    |                 |
| A*0234+A*2462                 | A*0280+A*2407                    |                 |
| A*0234+A*2471                 | A*0240+A*2407                    |                 |
| A*0234+A*2472                 | A*2407+A*9245                    |                 |
| A*0234+A*2473                 | A*2407+A*9247                    |                 |
| A*0234+A*2490N                | A*0288N+A*2407                   |                 |
| A*0234+A*2491                 | A*0268+A*2407                    |                 |
| A*0234+A*2508                 | A*0285+A*2502                    |                 |
| A*0234+A*2627                 | A*0268+A*2613                    |                 |
| A*0234+A*300101/300102/3024   | A*023501+A*3016                  |                 |
| A*0234+A*310102/3114N/3123    | A*0262+A*3102                    |                 |
| A*0234+A*3110                 | A*0262+A*3107                    |                 |
| A*0234+A*3204                 | A*0281/9224+A*0309               |                 |
| A*0234+A*3207                 | A*0276+A*3217                    |                 |
| A*0234+A*3212                 | A*3217+A*9221                    |                 |

|                                      |                             |                                    |
|--------------------------------------|-----------------------------|------------------------------------|
| A*0234+A*3213                        | A*0236+A*3217               |                                    |
| A*0234+A*3309                        | A*0262+A*3308               |                                    |
| A*023501+A*025602                    | A*023502+A*025601           |                                    |
| A*023501+A*03G1                      | A*023502+A*030103           |                                    |
| A*023501+A*0308                      | A*0290+A*03G1               |                                    |
| A*023501+A*1119                      | A*0290+A*110101/1121N       |                                    |
| A*023501+A*1140                      | A*110101/1121N+A*9246       |                                    |
| A*023501+A*2301/2307N/2317/2318/2320 | A*0290+A*2313               |                                    |
| A*023501+A*24G1                      | A*023503+A*240206           | A*0290+A*2407                      |
| A*023501+A*2444                      | A*0290+A*2419               |                                    |
| A*023501+A*2507/A*2507               | A*0281/9224+A*6601/6608     | A*0290+A*2502                      |
| A*023501+A*260101/260107/2624/2626   | A*0290+A*2613               | A*6601/6608+A*9246                 |
| A*023501+A*260701                    | A*023502+A*260702           |                                    |
| A*023501+A*2622                      | A*6609+A*9246               |                                    |
| A*023501+A*2630                      | A*6901+A*9235               |                                    |
| A*023501+A*300201/300202             | A*0290+A*3025               |                                    |
| A*023501+A*320101/320102             | A*0281/9224+A*7413          | A*0290+A*3217                      |
| A*023501+A*3203                      | A*0287+A*7413               |                                    |
| A*023501+A*3204                      | A*0281/9224+A*03G1          |                                    |
| A*023501+A*6603                      | A*0290+A*6602               |                                    |
| A*023501+A*6605                      | A*0290+A*6601/6608          |                                    |
| A*023501+A*680301                    | A*0290+A*680102/6811N/6833  |                                    |
| A*023501+A*6831                      | A*0290+A*680201             |                                    |
| A*023501+A*7401/7402                 | A*0290+A*7413               |                                    |
| A*0236+A*0302                        | A*0237+A*0307               |                                    |
| A*0236+A*1120                        | A*0237+A*1125               |                                    |
| A*0236+A*1132                        | A*1139+A*9221               |                                    |
| A*0236+A*1134                        | A*1139+A*9253               |                                    |
| A*0236+A*24G1                        | A*0237+A*241301             |                                    |
| A*0236+A*2906                        | A*2903+A*9221               |                                    |
| A*0236+A*3116                        | A*3105+A*9207               |                                    |
| A*0236+A*3202                        | A*0237+A*3206               |                                    |
| A*0236+A*3207                        | A*0276+A*3213               |                                    |
| A*0236+A*3212                        | A*3213+A*9221               |                                    |
| A*0236+A*6809                        | A*0237+A*680802             |                                    |
| A*0237+A*0251                        | A*0240+A*0254               |                                    |
| A*0237+A*0279                        | A*0254+A*0286               |                                    |
| A*0237+A*0312                        | A*0254+A*03G1               |                                    |
| A*0237+A*2507/A*2507                 | A*0254+A*2503               |                                    |
| A*0237+A*3402                        | A*0254+A*3408               |                                    |
| A*0237+A*9206                        | A*0254+A*9245               |                                    |
| A*0237+A*9222                        | A*0250+A*0254               |                                    |
| A*0240+A*0279                        | A*0251+A*0286               |                                    |
| A*0240+A*0312                        | A*0251+A*03G1               |                                    |
| A*0240+A*1136                        | A*110101/1121N+A*9230       |                                    |
| A*0240+A*2446                        | A*2471+A*9201               |                                    |
| A*0240+A*2458                        | A*2471+A*9207               |                                    |
| A*0240+A*2462                        | A*0280+A*2471               |                                    |
| A*0240+A*2472                        | A*2471+A*9245               |                                    |
| A*0240+A*2473                        | A*2471+A*9247               |                                    |
| A*0240+A*2490N                       | A*0288N+A*2471              |                                    |
| A*0240+A*2491                        | A*0268+A*2471               |                                    |
| A*0240+A*2507/A*2507                 | A*0251+A*2503               |                                    |
| A*0240+A*3402                        | A*0251+A*3408               |                                    |
| A*0240+A*9203                        | A*025602+A*9230             |                                    |
| A*0240+A*9206                        | A*0251+A*9245               |                                    |
| A*0240+A*9212                        | A*0287+A*9230               |                                    |
| A*0240+A*9222                        | A*0250+A*0251               |                                    |
| A*0244+A*2494                        | A*0279+A*240301/2433        |                                    |
| A*0245+A*24G1                        | A*0292+A*2477               |                                    |
| A*0246+A*2429                        | A*0292+A*24G1               |                                    |
| A*0246+A*3025                        | A*025601+A*3007             |                                    |
| A*0248+A*0323                        | A*0290+A*0330               |                                    |
| A*0248+A*3309                        | A*0290+A*3321               |                                    |
| A*0250+A*0279                        | A*0286+A*9222               |                                    |
| A*0250+A*0312                        | A*03G1+A*9222               |                                    |
| A*0250+A*2507/A*2507                 | A*2503+A*9222               |                                    |
| A*0250+A*3402                        | A*3408+A*9222               |                                    |
| A*0250+A*9206                        | A*9222+A*9245               |                                    |
| A*0251+A*2405                        | A*0254+A*2304               | A*2301/2307N/2317/2318/2320+A*9242 |
| A*0251+A*2421                        | A*2471+A*9237               |                                    |
| A*0251+A*2447                        | A*2471+A*9244               |                                    |
| A*0251+A*2456                        | A*0299+A*2471               |                                    |
| A*0251+A*2472                        | A*2471+A*9206               |                                    |
| A*0251+A*3202                        | A*320101/320102+A*9242      |                                    |
| A*0252+A*03G1                        | A*0343+A*9214               |                                    |
| A*0252+A*24G1                        | A*0295+A*2466               |                                    |
| A*0252+A*2417                        | A*2466+A*9214               |                                    |
| A*0252+A*3026                        | A*300101/300102/3024+A*9214 |                                    |
| A*0252+A*680102/6811N/6833           | A*6806+A*9214               |                                    |
| A*0254+A*110101/1121N                | A*1139+A*9242               |                                    |
| A*0254+A*110201/110203               | A*1138+A*9242               |                                    |
| A*0254+A*1104                        | A*1127+A*9242               |                                    |
| A*0254+A*240301/2433                 | A*24G1+A*9242               |                                    |
| A*0254+A*2410                        | A*2446+A*9242               |                                    |
| A*0254+A*2615                        | A*2629+A*9242               |                                    |
| A*0254+A*290201                      | A*2903+A*9242               |                                    |
| A*0254+A*310102/3114N/3123           | A*3105+A*9242               |                                    |
| A*0254+A*320101/320102               | A*3213+A*9242               |                                    |
| A*0254+A*330301/330303/3315          | A*3310+A*9242               |                                    |
| A*0255+A*3217                        | A*025602+A*3215             |                                    |
| A*025601+A*03G1                      | A*025602+A*030103           |                                    |
| A*025601+A*0312                      | A*0278+A*0309               |                                    |
| A*025601+A*260701                    | A*025602+A*260702           |                                    |
| A*025602+A*1136                      | A*110101/1121N+A*9203       |                                    |
| A*025602+A*9212                      | A*0287+A*9203               |                                    |
| A*0257+A*24G1                        | A*2453+A*9208               |                                    |
| A*0260+A*6812                        | A*0286+A*6817               |                                    |
| A*0260+A*6821                        | A*027402+A*6817             |                                    |
| A*0262+A*3205                        | A*0270+A*3217               |                                    |
| A*0265+A*680101/680107               | A*6825+A*9252               |                                    |
| A*0268+A*2446                        | A*2491+A*9201               |                                    |
| A*0268+A*2458                        | A*2491+A*9207               |                                    |
| A*0268+A*2462                        | A*0280+A*2491               |                                    |

|                                       |                                    |                 |                    |
|---------------------------------------|------------------------------------|-----------------|--------------------|
| A*0268+A*2472                         | A*2491+A*9245                      |                 |                    |
| A*0268+A*2473                         | A*2491+A*9247                      |                 |                    |
| A*0268+A*2490N                        | A*0288N+A*2491                     |                 |                    |
| A*0273+A*2622                         | A*0293+A*260101/260107/2624/2626   |                 |                    |
| A*0273+A*6609                         | A*0293+A*6601/6608                 |                 |                    |
| A*027402+A*6812                       | A*0286+A*6821                      |                 |                    |
| A*0276+A*3212                         | A*3207+A*9221                      |                 |                    |
| A*0276+A*6842                         | A*0299+A*6845                      |                 |                    |
| A*0279+A*03G1                         | A*0286+A*0312                      |                 |                    |
| A*0279+A*2503                         | A*0286+A*2507/A*2507               |                 |                    |
| A*0279+A*3408                         | A*0286+A*3402                      |                 |                    |
| A*0279+A*9245                         | A*0286+A*9206                      |                 |                    |
| A*0280+A*2446                         | A*2462+A*9201                      |                 |                    |
| A*0280+A*2458                         | A*2462+A*9207                      |                 |                    |
| A*0280+A*2472                         | A*2462+A*9245                      |                 |                    |
| A*0280+A*2473                         | A*2462+A*9247                      |                 |                    |
| A*0280+A*2490N                        | A*0288N+A*2462                     |                 |                    |
| A*0281/9224+A*0308                    | A*0290+A*3204                      |                 |                    |
| A*0281/9224+A*24G1                    | A*0287+A*2432                      |                 |                    |
| A*0281/9224+A*2404                    | A*2432+A*9246                      |                 |                    |
| A*0281/9224+A*260101/260107/2624/2626 | A*2507/A*2507+A*9246               |                 |                    |
| A*0281/9224+A*2608                    | A*2504+A*9246                      |                 |                    |
| A*0281/9224+A*2609                    | A*2506+A*9246                      |                 |                    |
| A*0281/9224+A*2613                    | A*2502+A*9246                      |                 |                    |
| A*0281/9224+A*290201                  | A*2913+A*9246                      |                 |                    |
| A*0281/9224+A*3203                    | A*0287+A*320101/320102             |                 |                    |
| A*0281/9224+A*6605                    | A*0290+A*2507/A*2507               |                 |                    |
| A*0281/9224+A*7401/7402               | A*0290+A*320101/320102             |                 |                    |
| A*0282N+A*2310                        | A*2308N+A*9201                     |                 |                    |
| A*0287+A*0350                         | A*03G1+A*9236                      |                 |                    |
| A*0287+A*1136                         | A*110101/1121N+A*9212              |                 |                    |
| A*0287+A*2302                         | A*2301/2307N/2317/2318/2320+A*9236 |                 |                    |
| A*0287+A*2404                         | A*24G1+A*9246                      |                 |                    |
| A*0287+A*2406                         | A*241301+A*9236                    |                 |                    |
| A*0287+A*2487                         | A*241302+A*9236                    |                 |                    |
| A*0287+A*2489                         | A*0290+A*2442                      |                 |                    |
| A*0287+A*3321                         | A*3108+A*9228                      |                 |                    |
| A*0287+A*680102/6811N/6833            | A*0290+A*6836                      | A*680802+A*9236 |                    |
| A*0287+A*7401/7402                    | A*0290+A*3203                      |                 |                    |
| A*0288N+A*2446                        | A*2490N+A*9201                     |                 |                    |
| A*0288N+A*2458                        | A*2490N+A*9207                     |                 |                    |
| A*0288N+A*2472                        | A*2490N+A*9245                     |                 |                    |
| A*0288N+A*2473                        | A*2490N+A*9247                     |                 |                    |
| A*0290+A*1140                         | A*1119+A*9246                      |                 |                    |
| A*0290+A*260101/260107/2624/2626      | A*6605+A*9246                      |                 |                    |
| A*0293+A*2417                         | A*0295+A*2441                      |                 |                    |
| A*0293+A*2453                         | A*0295+A*2415                      |                 |                    |
| A*0295+A*0315                         | A*0319+A*9214                      |                 |                    |
| A*0295+A*2417                         | A*24G1+A*9214                      |                 |                    |
| A*0299+A*0310                         | A*0305+A*9242                      |                 |                    |
| A*0299+A*2421                         | A*2456+A*9237                      |                 |                    |
| A*0299+A*2447                         | A*2456+A*9244                      |                 |                    |
| A*0299+A*2472                         | A*2456+A*9206                      |                 |                    |
| A*03G1+A*0310                         | A*0302+A*0305                      |                 |                    |
| A*03G1+A*1106                         | A*0309+A*110101/1121N              |                 |                    |
| A*03G1+A*1110                         | A*0324+A*110101/1121N              |                 |                    |
| A*03G1+A*1119                         | A*0308+A*110101/1121N              |                 |                    |
| A*03G1+A*112401                       | A*030102+A*112402                  |                 |                    |
| A*03G1+A*1131                         | A*0307+A*1125                      |                 |                    |
| A*03G1+A*1133                         | A*0322+A*110107                    |                 |                    |
| A*03G1+A*1140                         | A*0341+A*1112                      |                 |                    |
| A*03G1+A*2301/2307N/2317/2318/2320    | A*0308+A*2313                      | A*0317+A*230302 |                    |
| A*03G1+A*2302                         | A*0350+A*2301/2307N/2317/2318/2320 |                 |                    |
| A*03G1+A*2304                         | A*0342+A*2418                      |                 |                    |
| A*03G1+A*2312                         | A*0309+A*2301/2307N/2317/2318/2320 |                 |                    |
| A*03G1+A*24G1                         | A*0307+A*2456                      | A*0308+A*2407   | A*0315+A*2453      |
|                                       | A*0317+A*2421                      |                 |                    |
| A*03G1+A*240301/2433                  | A*0310+A*2418                      |                 |                    |
| A*03G1+A*2405                         | A*0322+A*24G1                      |                 |                    |
| A*03G1+A*2406                         | A*0350+A*241301                    |                 |                    |
| A*03G1+A*241302                       | A*030102+A*241301                  |                 |                    |
| A*03G1+A*2430                         | A*0309+A*24G1                      |                 |                    |
| A*03G1+A*2444                         | A*0308+A*2419                      |                 |                    |
| A*03G1+A*2466                         | A*0343+A*2417                      |                 |                    |
| A*03G1+A*2484N                        | A*0311N+A*24G1                     |                 |                    |
| A*03G1+A*2487                         | A*030102+A*2406                    | A*0350+A*241302 |                    |
| A*03G1+A*2507/A*2507                  | A*0308+A*2502                      | A*0312+A*2503   | A*3204+A*6601/6608 |
| A*03G1+A*260101/260107/2624/2626      | A*0308+A*2613                      |                 |                    |
| A*03G1+A*2603                         | A*0309+A*6605                      |                 |                    |
| A*03G1+A*260702                       | A*030103+A*260701                  |                 |                    |
| A*03G1+A*2610                         | A*0317+A*260101/260107/2624/2626   |                 |                    |
| A*03G1+A*2612                         | A*0307+A*260101/260107/2624/2626   |                 |                    |
| A*03G1+A*2618                         | A*0307+A*2628                      |                 |                    |
| A*03G1+A*2636                         | A*0309+A*260101/260107/2624/2626   |                 |                    |
| A*03G1+A*290201                       | A*0322+A*2909                      |                 |                    |
| A*03G1+A*2916                         | A*0327+A*290101                    |                 |                    |
| A*03G1+A*300101/300102/3024           | A*0343+A*3026                      |                 |                    |
| A*03G1+A*300201/300202                | A*0308+A*3025                      |                 |                    |
| A*03G1+A*3007                         | A*0330+A*300201/300202             |                 |                    |
| A*03G1+A*3016                         | A*0309+A*300101/300102/3024        |                 |                    |
| A*03G1+A*320101/320102                | A*0308+A*3217                      | A*3204+A*7413   |                    |
| A*03G1+A*3208                         | A*0309+A*320101/320102             |                 |                    |
| A*03G1+A*3215                         | A*0324+A*320101/320102             |                 |                    |
| A*03G1+A*3402                         | A*0312+A*3408                      |                 |                    |
| A*03G1+A*6603                         | A*0308+A*6602                      |                 |                    |
| A*03G1+A*6605                         | A*0308+A*6601/6608                 |                 |                    |
| A*03G1+A*680101/680107                | A*0307+A*6842                      |                 |                    |
| A*03G1+A*680102/6811N/6833            | A*0305+A*6819                      | A*0350+A*680802 |                    |
| A*03G1+A*680301                       | A*0308+A*680102/6811N/6833         |                 |                    |
| A*03G1+A*6805                         | A*0309+A*680301                    |                 |                    |
| A*03G1+A*6806                         | A*0343+A*680102/6811N/6833         |                 |                    |
| A*03G1+A*6815                         | A*0309+A*6831                      |                 |                    |
| A*03G1+A*6821                         | A*0304+A*680102/6811N/6833         |                 |                    |
| A*03G1+A*6828                         | A*030102+A*680201                  |                 |                    |

|                                            |                                    |                      |               |
|--------------------------------------------|------------------------------------|----------------------|---------------|
| A*03G1+A*6831                              | A*0308+A*680201                    |                      |               |
| A*03G1+A*7401/7402                         | A*0308+A*7413                      |                      |               |
| A*03G1+A*7404                              | A*0323+A*7401/7402                 |                      |               |
| A*03G1+A*7406                              | A*0309+A*7401/7402                 |                      |               |
| A*03G1+A*7410                              | A*0341+A*7413                      |                      |               |
| A*03G1+A*9206                              | A*0312+A*9245                      |                      |               |
| A*030102+A*2301/2307N/2317/2318/2320       | A*0322+A*2314                      |                      |               |
| A*030102+A*680101/680107                   | A*0350+A*680801                    |                      |               |
| A*030102+A*6831                            | A*0308+A*6828                      |                      |               |
| A*0302+A*112402                            | A*0307+A*110101/1121N              |                      |               |
| A*0302+A*1125                              | A*0307+A*1120                      |                      |               |
| A*0302+A*241301                            | A*0307+A*24G1                      |                      |               |
| A*0302+A*2434                              | A*0332+A*2407                      |                      |               |
| A*0302+A*3206                              | A*0307+A*3202                      |                      |               |
| A*0302+A*3210                              | A*0350+A*3202                      |                      |               |
| A*0302+A*680102/6811N/6833                 | A*0310+A*6819                      |                      |               |
| A*0302+A*6804                              | A*0332+A*680101/680107             |                      |               |
| A*0302+A*680802                            | A*0307+A*6809                      |                      |               |
| A*0302+A*7407                              | A*0332+A*7413                      |                      |               |
| A*0304+A*680301                            | A*0308+A*6821                      |                      |               |
| A*0304+A*6806                              | A*0343+A*6821                      |                      |               |
| A*0307+A*2610                              | A*0317+A*2612                      |                      |               |
| A*0307+A*2636                              | A*0309+A*2612                      |                      |               |
| A*0307+A*3210                              | A*0350+A*3206                      |                      |               |
| A*0307+A*6601/6608                         | A*0350+A*6606                      |                      |               |
| A*0308+A*1106                              | A*0309+A*1119                      |                      |               |
| A*0308+A*1110                              | A*0324+A*1119                      |                      |               |
| A*0308+A*2507/A*2507                       | A*3204+A*6605                      |                      |               |
| A*0308+A*2636                              | A*0341+A*2630                      |                      |               |
| A*0308+A*320101/320102                     | A*3204+A*7401/7402                 |                      |               |
| A*0308+A*3208                              | A*3204+A*7406                      |                      |               |
| A*0308+A*3313                              | A*0341+A*3311                      |                      |               |
| A*0308+A*6806                              | A*0343+A*680301                    |                      |               |
| A*0308+A*7410                              | A*0341+A*7401/7402                 |                      |               |
| A*0309+A*1110                              | A*0324+A*1106                      |                      |               |
| A*0309+A*2302                              | A*0350+A*2312                      |                      |               |
| A*0309+A*2405                              | A*0322+A*2430                      |                      |               |
| A*0309+A*2484N                             | A*0311N+A*2430                     |                      |               |
| A*0309+A*2610                              | A*0317+A*2636                      |                      |               |
| A*0309+A*3215                              | A*0324+A*3208                      |                      |               |
| A*0309+A*7404                              | A*0323+A*7406                      |                      |               |
| A*0310+A*2301/2307N/2317/2318/2320         | A*0342+A*24G1                      |                      |               |
| A*0310+A*230302                            | A*0342+A*2421                      |                      |               |
| A*0310+A*2304                              | A*0342+A*240301/2433               |                      |               |
| A*0310+A*2305                              | A*0342+A*2425                      |                      |               |
| A*0310+A*2310                              | A*0342+A*2446                      |                      |               |
| A*0310+A*2312                              | A*0342+A*2430                      |                      |               |
| A*0310+A*2313                              | A*0342+A*2407                      |                      |               |
| A*0311N+A*2405                             | A*0322+A*2484N                     |                      |               |
| A*0315+A*24G1                              | A*0319+A*2417                      |                      |               |
| A*0323+A*260101/260107/2624/2626           | A*0324+A*260702                    |                      |               |
| A*0323+A*330301/330303/3315                | A*0324+A*3308                      |                      |               |
| A*0323+A*3321                              | A*0330+A*3309                      |                      |               |
| A*0324+A*2313                              | A*0330+A*2424                      |                      |               |
| A*0324+A*24G1                              | A*0330+A*2467                      |                      |               |
| A*0341+A*320101/320102                     | A*3204+A*7410                      |                      |               |
| A*110101/1121N+A*1125                      | A*1120+A*112402                    |                      |               |
| A*110101/1121N+A*1127                      | A*1104+A*1139                      |                      |               |
| A*110101/1121N+A*1138                      | A*110201/110203+A*1139             |                      |               |
| A*110101/1121N+A*2301/2307N/2317/2318/2320 | A*1104+A*2310                      | A*1119+A*2313        | A*1139+A*2304 |
| A*110101/1121N+A*2312                      | A*1106+A*2301/2307N/2317/2318/2320 |                      |               |
| A*110101/1121N+A*2314                      | A*112401+A*2471                    |                      |               |
| A*110101/1121N+A*24G1                      | A*110107+A*240202                  |                      |               |
|                                            | A*1127+A*2410                      | A*1104+A*2446        | A*1119+A*2407 |
|                                            | A*1104+A*2410                      | A*1139+A*240301/2433 |               |
| A*110101/1121N+A*240301/2433               | A*1133+A*240202                    |                      |               |
| A*110101/1121N+A*2405                      | A*112402+A*24G1                    |                      |               |
| A*110101/1121N+A*241301                    | A*112401+A*24G1                    | A*1131+A*2459        |               |
| A*110101/1121N+A*241302                    | A*1118+A*2419                      |                      |               |
| A*110101/1121N+A*2428                      | A*1106+A*24G1                      |                      |               |
| A*110101/1121N+A*2430                      | A*1137+A*24G1                      |                      |               |
| A*110101/1121N+A*2435                      | A*1119+A*2419                      |                      |               |
| A*110101/1121N+A*2444                      | A*1139+A*2410                      |                      |               |
| A*110101/1121N+A*2446                      | A*1126+A*2451                      |                      |               |
| A*110101/1121N+A*2453                      | A*1120+A*2459                      |                      |               |
| A*110101/1121N+A*2456                      | A*1126+A*2492                      |                      |               |
| A*110101/1121N+A*2457                      | A*110201/110203+A*24G1             | A*1138+A*240301/2433 |               |
| A*110101/1121N+A*2463                      | A*1119+A*2502                      |                      |               |
| A*110101/1121N+A*2507/A*2507               | A*1104+A*2507/A*2507               |                      |               |
| A*110101/1121N+A*2506                      | A*1119+A*2613                      | A*1140+A*6601/6608   |               |
| A*110101/1121N+A*260101/260107/2624/2626   | A*1106+A*6605                      |                      |               |
| A*110101/1121N+A*2603                      | A*1104+A*260101/260107/2624/2626   |                      |               |
| A*110101/1121N+A*2609                      | A*1140+A*6609                      |                      |               |
| A*110101/1121N+A*2622                      | A*1139+A*2615                      |                      |               |
| A*110101/1121N+A*2629                      | A*1112+A*2603                      | A*1118+A*6601/6608   |               |
| A*110101/1121N+A*2630                      | A*1106+A*260101/260107/2624/2626   |                      |               |
| A*110101/1121N+A*2636                      | A*1139+A*290201                    |                      |               |
| A*110101/1121N+A*2903                      | A*1132+A*290201                    |                      |               |
| A*110101/1121N+A*2906                      | A*1119+A*3025                      |                      |               |
| A*110101/1121N+A*300201/300202             | A*1106+A*300101/300102/3024        |                      |               |
| A*110101/1121N+A*3016                      | A*110102+A*310102/3114N/3123       |                      |               |
| A*110101/1121N+A*310103                    | A*1112+A*3103                      |                      |               |
| A*110101/1121N+A*3104                      | A*1139+A*310102/3114N/3123         |                      |               |
| A*110101/1121N+A*3105                      | A*111501+A*310102/3114N/3123       |                      |               |
| A*110101/1121N+A*3111                      | A*1119+A*3217                      |                      |               |
| A*110101/1121N+A*320101/320102             | A*112402+A*3202                    |                      |               |
| A*110101/1121N+A*3206                      | A*1106+A*320101/320102             |                      |               |
| A*110101/1121N+A*3208                      | A*1132+A*320101/320102             |                      |               |
| A*110101/1121N+A*3212                      | A*1139+A*320101/320102             |                      |               |
| A*110101/1121N+A*3213                      | A*1110+A*320101/320102             |                      |               |
| A*110101/1121N+A*3215                      | A*1139+A*330301/330303/3315        |                      |               |
| A*110101/1121N+A*3310                      | A*1104+A*3604                      |                      |               |
| A*110101/1121N+A*3601                      | A*1119+A*6602                      |                      |               |
| A*110101/1121N+A*6603                      | A*1119+A*6601/6608                 |                      |               |
| A*110101/1121N+A*6605                      |                                    |                      |               |

|                                                       |                                    |                      |
|-------------------------------------------------------|------------------------------------|----------------------|
| A*110101/1121N+A*680105                               | A*110107+A*680101/680107           |                      |
| A*110101/1121N+A*680301                               | A*1119+A*680102/6811N/6833         |                      |
| A*110101/1121N+A*6805                                 | A*1106+A*680301                    |                      |
| A*110101/1121N+A*680802                               | A*112402+A*6809                    |                      |
| A*110101/1121N+A*6814                                 | A*1132+A*6810                      |                      |
| A*110101/1121N+A*6815                                 | A*1106+A*6831                      |                      |
| A*110101/1121N+A*6831                                 | A*1119+A*680201                    |                      |
| A*110101/1121N+A*7401/7402                            | A*1119+A*7413                      |                      |
| A*110101/1121N+A*7406                                 | A*1106+A*7401/7402                 |                      |
| A*110102+A*3105                                       | A*1139+A*310103                    |                      |
| A*110102+A*3111                                       | A*111501+A*310103                  |                      |
| A*110107+A*2405                                       | A*1133+A*24G1                      |                      |
| A*110107+A*290201                                     | A*1133+A*2909                      |                      |
| A*110201/110203+A*1127                                | A*1104+A*1138                      |                      |
| A*110201/110203+A*2301/2307N/2317/2318/2320           | A*1138+A*2304                      |                      |
| A*110201/110203+A*241301                              | A*112402+A*2463                    |                      |
| A*110201/110203+A*241302                              | A*112401+A*2463                    |                      |
| A*110201/110203+A*2430                                | A*1106+A*2463                      |                      |
| A*110201/110203+A*2435                                | A*1137+A*2463                      |                      |
| A*110201/110203+A*2446                                | A*1138+A*2410                      |                      |
| A*110201/110203+A*2629                                | A*1138+A*2615                      |                      |
| A*110201/110203+A*2903                                | A*1138+A*290201                    |                      |
| A*110201/110203+A*3105                                | A*1138+A*310102/3114N/3123         |                      |
| A*110201/110203+A*3213                                | A*1138+A*320101/320102             |                      |
| A*110201/110203+A*3310                                | A*1138+A*330301/330303/3315        |                      |
| A*110201/110203+A*680102/6811N/6833                   | A*1116+A*6812                      |                      |
| A*1103+A*24G1                                         | A*1120+A*2471                      |                      |
| A*1103+A*241301                                       | A*1125+A*2471                      |                      |
| A*1103+A*241302                                       | A*1120+A*2314                      |                      |
| A*1103+A*2487                                         | A*1108+A*2471                      |                      |
| A*1103+A*2614                                         | A*1120+A*2628                      |                      |
| A*1103+A*3206                                         | A*1120+A*320101/320102             |                      |
| A*1104+A*2301/2307N/2317/2318/2320                    | A*1127+A*2304                      |                      |
| A*1104+A*24G1                                         | A*1127+A*240301/2433               |                      |
| A*1104+A*2629                                         | A*1127+A*2615                      |                      |
| A*1104+A*2636                                         | A*1106+A*2609                      |                      |
| A*1104+A*2903                                         | A*1127+A*290201                    |                      |
| A*1104+A*3105                                         | A*1127+A*310102/3114N/3123         |                      |
| A*1104+A*3213                                         | A*1127+A*320101/320102             |                      |
| A*1104+A*3310                                         | A*1127+A*330301/330303/3315        |                      |
| A*1106+A*241301                                       | A*112402+A*2430                    |                      |
| A*1106+A*241302                                       | A*112401+A*2430                    |                      |
| A*1106+A*2435                                         | A*1137+A*2430                      |                      |
| A*1106+A*3212                                         | A*1132+A*3208                      |                      |
| A*1106+A*3213                                         | A*1139+A*3208                      |                      |
| A*1106+A*3215                                         | A*1110+A*3208                      |                      |
| A*1108+A*24G1                                         | A*1120+A*2487                      |                      |
| A*1108+A*241301                                       | A*1125+A*2487                      |                      |
| A*1110+A*3212                                         | A*1132+A*3215                      |                      |
| A*1110+A*3213                                         | A*1139+A*3215                      |                      |
| A*1110+A*4301                                         | A*1111+A*260101/260107/2624/2626   |                      |
| A*1112+A*2312                                         | A*1118+A*2313                      |                      |
| A*1112+A*2430                                         | A*1118+A*2407                      |                      |
| A*1112+A*2636                                         | A*1118+A*2613                      |                      |
| A*1112+A*3208                                         | A*1118+A*3217                      |                      |
| A*1112+A*6805                                         | A*1118+A*680102/6811N/6833         |                      |
| A*1112+A*6815                                         | A*1118+A*680201                    |                      |
| A*1112+A*7406                                         | A*1118+A*7413                      |                      |
| A*1112+A*7410                                         | A*1140+A*7413                      |                      |
| A*111501+A*3105                                       | A*1139+A*3111                      |                      |
| A*1118+A*2444                                         | A*1119+A*2428                      |                      |
| A*1118+A*260101/260107/2624/2626                      | A*1140+A*2630                      |                      |
| A*1118+A*6605                                         | A*1119+A*2630                      |                      |
| A*1118+A*7410                                         | A*1140+A*7406                      |                      |
| A*1119+A*260101/260107/2624/2626                      | A*1140+A*6605                      |                      |
| A*1119+A*2636                                         | A*1140+A*2603                      |                      |
| A*1120+A*241301                                       | A*1125+A*24G1                      | A*1131+A*2456        |
| A*1120+A*3206                                         | A*1125+A*3202                      |                      |
| A*1120+A*680802                                       | A*1125+A*6809                      |                      |
| A*112401+A*2406                                       | A*112402+A*2487                    |                      |
| A*112401+A*241301                                     | A*112402+A*241302                  |                      |
| A*112401+A*2435                                       | A*1137+A*241302                    |                      |
| A*112401+A*680201                                     | A*112402+A*6828                    |                      |
| A*112401+A*6826                                       | A*1139+A*680801                    |                      |
| A*112402+A*2435                                       | A*1137+A*241301                    |                      |
| A*112402+A*2456                                       | A*1125+A*2459                      |                      |
| A*1125+A*2612                                         | A*1131+A*260101/260107/2624/2626   |                      |
| A*1125+A*2618                                         | A*1131+A*2628                      |                      |
| A*1125+A*680101/680107                                | A*1131+A*6842                      |                      |
| A*1127+A*2310                                         | A*1139+A*2301/2307N/2317/2318/2320 |                      |
| A*1127+A*2446                                         | A*1139+A*24G1                      |                      |
| A*1127+A*2507/A*2507                                  | A*1139+A*2506                      |                      |
| A*1127+A*260101/260107/2624/2626                      | A*1139+A*2609                      |                      |
| A*1132+A*2903                                         | A*1139+A*2906                      |                      |
| A*1132+A*3213                                         | A*1139+A*3212                      |                      |
| A*1132+A*9253                                         | A*1134+A*9221                      |                      |
| A*1138+A*24G1                                         | A*1139+A*2463                      |                      |
| A*2301/2307N/2317/2318/2320+A*240301/2433             | A*2304+A*24G1                      |                      |
| A*2301/2307N/2317/2318/2320+A*2406                    | A*2302+A*241301                    |                      |
| A*2301/2307N/2317/2318/2320+A*2407                    | A*2313+A*24G1                      |                      |
| A*2301/2307N/2317/2318/2320+A*2410                    | A*2304+A*2446                      | A*2310+A*240301/2433 |
| A*2301/2307N/2317/2318/2320+A*2419                    | A*2313+A*2444                      |                      |
| A*2301/2307N/2317/2318/2320+A*2421                    | A*230302+A*24G1                    |                      |
| A*2301/2307N/2317/2318/2320+A*2425                    | A*2305+A*24G1                      |                      |
| A*2301/2307N/2317/2318/2320+A*2430                    | A*2312+A*24G1                      |                      |
| A*2301/2307N/2317/2318/2320+A*2446                    | A*2310+A*24G1                      |                      |
| A*2301/2307N/2317/2318/2320+A*2487                    | A*2302+A*241302                    |                      |
| A*2301/2307N/2317/2318/2320+A*2507/A*2507             | A*2310+A*2506                      |                      |
| A*2301/2307N/2317/2318/2320+A*2502                    | A*2313+A*2507/A*2507               |                      |
| A*2301/2307N/2317/2318/2320+A*260101/260107/2624/2626 | A*230302+A*2610                    | A*2310+A*2609        |
| A*2301/2307N/2317/2318/2320+A*2603                    | A*2312+A*6605                      |                      |
| A*2301/2307N/2317/2318/2320+A*2613                    | A*2313+A*260101/260107/2624/2626   |                      |
| A*2301/2307N/2317/2318/2320+A*2615                    | A*2304+A*2629                      |                      |
| A*2301/2307N/2317/2318/2320+A*2636                    | A*2312+A*260101/260107/2624/2626   |                      |

|                                                  |                                    |                    |               |
|--------------------------------------------------|------------------------------------|--------------------|---------------|
| A*2301/2307N/2317/2318/2320+A*290201             | A*2304+A*2903                      |                    |               |
| A*2301/2307N/2317/2318/2320+A*300101/300102/3024 | A*2321+A*301102                    |                    |               |
| A*2301/2307N/2317/2318/2320+A*3016               | A*2312+A*300101/300102/3024        |                    |               |
| A*2301/2307N/2317/2318/2320+A*3025               | A*2313+A*300201/300202             |                    |               |
| A*2301/2307N/2317/2318/2320+A*310102/3114N/3123  | A*2304+A*3105                      |                    |               |
| A*2301/2307N/2317/2318/2320+A*320101/320102      | A*2304+A*3213                      |                    |               |
| A*2301/2307N/2317/2318/2320+A*3202               | A*2405+A*320101/320102             |                    |               |
| A*2301/2307N/2317/2318/2320+A*3208               | A*2312+A*320101/320102             |                    |               |
| A*2301/2307N/2317/2318/2320+A*3217               | A*2313+A*320101/320102             |                    |               |
| A*2301/2307N/2317/2318/2320+A*330301/330303/3315 | A*2304+A*3310                      |                    |               |
| A*2301/2307N/2317/2318/2320+A*3404               | A*2321+A*3402                      |                    |               |
| A*2301/2307N/2317/2318/2320+A*6601/6608          | A*2313+A*6605                      |                    |               |
| A*2301/2307N/2317/2318/2320+A*6602               | A*2313+A*6603                      |                    |               |
| A*2301/2307N/2317/2318/2320+A*680102/6811N/6833  | A*2302+A*680802                    | A*2313+A*680301    |               |
| A*2301/2307N/2317/2318/2320+A*680201             | A*2313+A*6831                      |                    |               |
| A*2301/2307N/2317/2318/2320+A*6805               | A*2312+A*680301                    |                    |               |
| A*2301/2307N/2317/2318/2320+A*6815               | A*2312+A*6831                      |                    |               |
| A*2301/2307N/2317/2318/2320+A*7406               | A*2312+A*7401/7402                 |                    |               |
| A*2301/2307N/2317/2318/2320+A*7413               | A*2313+A*7401/7402                 |                    |               |
| A*230301+A*290102                                | A*230302+A*290101                  |                    |               |
| A*230302+A*240301/2433                           | A*2304+A*2421                      |                    |               |
| A*230302+A*2407                                  | A*2313+A*2421                      |                    |               |
| A*230302+A*2425                                  | A*2305+A*2421                      |                    |               |
| A*230302+A*2430                                  | A*2312+A*2421                      |                    |               |
| A*230302+A*2446                                  | A*2310+A*2421                      |                    |               |
| A*2304+A*2407                                    | A*2313+A*240301/2433               |                    |               |
| A*2304+A*2425                                    | A*2305+A*240301/2433               |                    |               |
| A*2304+A*2430                                    | A*2312+A*240301/2433               |                    |               |
| A*2305+A*2407                                    | A*2313+A*2425                      |                    |               |
| A*2305+A*2430                                    | A*2312+A*2425                      |                    |               |
| A*2305+A*2446                                    | A*2310+A*2425                      |                    |               |
| A*2310+A*2407                                    | A*2313+A*2446                      |                    |               |
| A*2310+A*2430                                    | A*2312+A*2446                      |                    |               |
| A*2312+A*2407                                    | A*2313+A*2430                      |                    |               |
| A*2312+A*2613                                    | A*2313+A*2636                      |                    |               |
| A*2312+A*3202                                    | A*2405+A*3208                      |                    |               |
| A*2312+A*3217                                    | A*2313+A*3208                      |                    |               |
| A*2312+A*6601/6608                               | A*2313+A*2603                      |                    |               |
| A*2312+A*680102/6811N/6833                       | A*2313+A*6805                      |                    |               |
| A*2312+A*680201                                  | A*2313+A*6815                      |                    |               |
| A*2312+A*7413                                    | A*2313+A*7406                      |                    |               |
| A*2313+A*2467                                    | A*24G1+A*2424                      |                    |               |
| A*2313+A*3202                                    | A*2405+A*3217                      |                    |               |
| A*2314+A*24G1                                    | A*241302+A*2471                    |                    |               |
| A*2314+A*2614                                    | A*241302+A*2628                    |                    |               |
| A*2314+A*3004                                    | A*2487+A*3009                      |                    |               |
| A*2314+A*3206                                    | A*241302+A*320101/320102           |                    |               |
| A*24G1+A*2410                                    | A*240301/2433+A*2446               |                    |               |
| A*24G1+A*2419                                    | A*2407+A*2444                      |                    |               |
| A*24G1+A*2507/A*2507                             | A*2406+A*2504                      | A*2446+A*2506      |               |
| A*24G1+A*2502                                    | A*2407+A*2507/A*2507               |                    |               |
| A*24G1+A*260101/260107/2624/2626                 | A*2406+A*2608                      | A*2421+A*2610      | A*2446+A*2609 |
|                                                  | A*2450+A*2616                      | A*2456+A*2612      | A*2499+A*2614 |
| A*24G1+A*260102                                  | A*240207+A*260101/260107/2624/2626 |                    |               |
| A*24G1+A*260105                                  | A*240216+A*260101/260107/2624/2626 |                    |               |
| A*24G1+A*2603                                    | A*2430+A*6605                      |                    |               |
| A*24G1+A*2613                                    | A*2407+A*260101/260107/2624/2626   |                    |               |
| A*24G1+A*2615                                    | A*240301/2433+A*2629               |                    |               |
| A*24G1+A*2627                                    | A*2491+A*260101/260107/2624/2626   |                    |               |
| A*24G1+A*2628                                    | A*2456+A*2618                      | A*2471+A*2614      |               |
| A*24G1+A*2636                                    | A*2430+A*260101/260107/2624/2626   |                    |               |
| A*24G1+A*2638                                    | A*2449+A*260101/260107/2624/2626   |                    |               |
| A*24G1+A*290201                                  | A*240301/2433+A*2903               | A*2405+A*2909      | A*2457+A*2907 |
| A*24G1+A*2912                                    | A*2458+A*290101                    |                    |               |
| A*24G1+A*3016                                    | A*2430+A*300101/300102/3024        |                    |               |
| A*24G1+A*3025                                    | A*2407+A*300201/300202             |                    |               |
| A*24G1+A*310102/3114N/3123                       | A*240301/2433+A*3105               |                    |               |
| A*24G1+A*3116                                    | A*2458+A*310102/3114N/3123         |                    |               |
| A*24G1+A*320101/320102                           | A*240301/2433+A*3213               | A*2432+A*3203      | A*2471+A*3206 |
| A*24G1+A*320103                                  | A*2485+A*320101/320102             |                    |               |
| A*24G1+A*3206                                    | A*241301+A*3202                    |                    |               |
| A*24G1+A*3208                                    | A*2430+A*320101/320102             |                    |               |
| A*24G1+A*3217                                    | A*2407+A*320101/320102             |                    |               |
| A*24G1+A*330301/330303/3315                      | A*240301/2433+A*3310               | A*2434+A*3311      |               |
| A*24G1+A*3402                                    | A*2499+A*3403                      |                    |               |
| A*24G1+A*6601/6608                               | A*2407+A*6605                      |                    |               |
| A*24G1+A*6602                                    | A*2407+A*6603                      |                    |               |
| A*24G1+A*680101/680107                           | A*240202+A*680105                  | A*2450+A*6845      |               |
| A*24G1+A*680102/6811N/6833                       | A*2406+A*6809                      | A*2407+A*680301    |               |
| A*24G1+A*680201                                  | A*2407+A*6831                      |                    |               |
| A*24G1+A*6805                                    | A*2430+A*680301                    |                    |               |
| A*24G1+A*680802                                  | A*241301+A*6809                    |                    |               |
| A*24G1+A*6815                                    | A*2430+A*6831                      |                    |               |
| A*24G1+A*6823                                    | A*2452+A*680102/6811N/6833         |                    |               |
| A*24G1+A*6829                                    | A*2482+A*6845                      |                    |               |
| A*24G1+A*6842                                    | A*2456+A*680101/680107             |                    |               |
| A*24G1+A*7406                                    | A*2428+A*3203                      | A*2430+A*7401/7402 |               |
| A*24G1+A*7407                                    | A*2434+A*7401/7402                 |                    |               |
| A*24G1+A*7413                                    | A*2407+A*7401/7402                 |                    |               |
| A*24G1+A*9256                                    | A*2492+A*9210                      |                    |               |
| A*240207+A*260105                                | A*240216+A*260102                  |                    |               |
| A*240207+A*2613                                  | A*2407+A*260102                    |                    |               |
| A*240207+A*2627                                  | A*2491+A*260102                    |                    |               |
| A*240207+A*2636                                  | A*2430+A*260102                    |                    |               |
| A*240207+A*2638                                  | A*2449+A*260102                    |                    |               |
| A*240216+A*2613                                  | A*2407+A*260105                    |                    |               |
| A*240216+A*2627                                  | A*2491+A*260105                    |                    |               |
| A*240216+A*2636                                  | A*2430+A*260105                    |                    |               |
| A*240216+A*2638                                  | A*2449+A*260105                    |                    |               |
| A*240301/2433+A*2507/A*2507                      | A*2410+A*2506                      |                    |               |
| A*240301/2433+A*260101/260107/2624/2626          | A*2410+A*2609                      |                    |               |
| A*240301/2433+A*260103                           | A*240302+A*260101/260107/2624/2626 |                    |               |
| A*240301/2433+A*3604                             | A*2410+A*3601                      |                    |               |
| A*240301/2433+A*680104                           | A*240302+A*680101/680107           |                    |               |

|                                   |                                  |                             |               |
|-----------------------------------|----------------------------------|-----------------------------|---------------|
| A*240301/2433+A*680202            | A*240302+A*680201                |                             |               |
| A*2404+A*2507/A*2507              | A*2432+A*260101/260107/2624/2626 |                             |               |
| A*2404+A*2502                     | A*2432+A*2613                    |                             |               |
| A*2404+A*2504                     | A*2432+A*2608                    |                             |               |
| A*2404+A*2506                     | A*2432+A*2609                    |                             |               |
| A*2404+A*2603                     | A*2428+A*260101/260107/2624/2626 |                             |               |
| A*2404+A*2913                     | A*2432+A*290201                  |                             |               |
| A*2406+A*241302                   | A*241301+A*2487                  |                             |               |
| A*2406+A*680801                   | A*241302+A*680101/680107         |                             |               |
| A*2406+A*680802                   | A*241301+A*680102/6811N/6833     |                             |               |
| A*2406+A*6828                     | A*2487+A*680201                  |                             |               |
| A*2407+A*2603                     | A*2430+A*6601/6608               |                             |               |
| A*2407+A*2627                     | A*2491+A*2613                    |                             |               |
| A*2407+A*2636                     | A*2430+A*2613                    |                             |               |
| A*2407+A*2638                     | A*2449+A*2613                    |                             |               |
| A*2407+A*320103                   | A*2485+A*3217                    |                             |               |
| A*2407+A*3208                     | A*2430+A*3217                    |                             |               |
| A*2407+A*6804                     | A*2434+A*680101/680107           |                             |               |
| A*2407+A*6805                     | A*2428+A*6836                    | A*2430+A*680102/6811N/6833  |               |
| A*2407+A*6815                     | A*2430+A*680201                  |                             |               |
| A*2407+A*7406                     | A*2430+A*7413                    |                             |               |
| A*2407+A*7407                     | A*2434+A*7413                    |                             |               |
| A*2408+A*2428                     | A*2420+A*2489                    |                             |               |
| A*2408+A*2430                     | A*2420+A*2442                    |                             |               |
| A*2410+A*2629                     | A*2446+A*2615                    |                             |               |
| A*2410+A*2903                     | A*2446+A*290201                  |                             |               |
| A*2410+A*3105                     | A*2446+A*310102/3114N/3123       |                             |               |
| A*2410+A*3213                     | A*2446+A*320101/320102           |                             |               |
| A*2410+A*3310                     | A*2446+A*330301/330303/3315      |                             |               |
| A*241301+A*6828                   | A*241302+A*680201                |                             |               |
| A*241302+A*680102/6811N/6833      | A*2487+A*680802                  |                             |               |
| A*2415+A*2417                     | A*2441+A*2453                    |                             |               |
| A*2415+A*3601                     | A*2492+A*3603                    |                             |               |
| A*2417+A*300101/300102/3024       | A*2466+A*3026                    |                             |               |
| A*2417+A*310102/3114N/3123        | A*2462+A*3106                    |                             |               |
| A*2417+A*330301/330303/3315       | A*2462+A*3318                    |                             |               |
| A*2417+A*6806                     | A*2466+A*680102/6811N/6833       |                             |               |
| A*2419+A*2507/A*2507              | A*2444+A*2502                    |                             |               |
| A*2419+A*260101/260107/2624/2626  | A*2444+A*2613                    |                             |               |
| A*2419+A*2630                     | A*2428+A*6601/6608               |                             |               |
| A*2419+A*300201/300202            | A*2444+A*3025                    |                             |               |
| A*2419+A*320101/320102            | A*2444+A*3217                    |                             |               |
| A*2419+A*6603                     | A*2444+A*6602                    |                             |               |
| A*2419+A*6605                     | A*2444+A*6601/6608               |                             |               |
| A*2419+A*680301                   | A*2444+A*680102/6811N/6833       |                             |               |
| A*2419+A*6831                     | A*2444+A*680201                  |                             |               |
| A*2419+A*7401/7402                | A*2444+A*7413                    |                             |               |
| A*2420+A*320101/320102            | A*2488+A*3207                    |                             |               |
| A*2421+A*9206                     | A*2472+A*9237                    |                             |               |
| A*2421+A*9244                     | A*2447+A*9237                    |                             |               |
| A*2428+A*2442                     | A*2430+A*2489                    |                             |               |
| A*2428+A*2507/A*2507              | A*2432+A*2603                    |                             |               |
| A*2428+A*320101/320102            | A*2432+A*7406                    |                             |               |
| A*2428+A*6605                     | A*2444+A*2630                    |                             |               |
| A*2430+A*2627                     | A*2491+A*2636                    |                             |               |
| A*2430+A*2638                     | A*2449+A*2636                    |                             |               |
| A*2430+A*320103                   | A*2485+A*3208                    |                             |               |
| A*2430+A*7407                     | A*2434+A*7406                    |                             |               |
| A*2442+A*680102/6811N/6833        | A*2489+A*6836                    |                             |               |
| A*2442+A*6831                     | A*2467+A*9222                    |                             |               |
| A*2442+A*7401/7402                | A*2489+A*3203                    |                             |               |
| A*2446+A*9207                     | A*2458+A*9201                    |                             |               |
| A*2446+A*9245                     | A*2472+A*9201                    |                             |               |
| A*2446+A*9247                     | A*2473+A*9201                    |                             |               |
| A*2447+A*9206                     | A*2472+A*9244                    |                             |               |
| A*2449+A*2627                     | A*2491+A*2638                    |                             |               |
| A*2450+A*6829                     | A*2482+A*680101/680107           |                             |               |
| A*2451+A*2457                     | A*2453+A*2492                    |                             |               |
| A*2458+A*9245                     | A*2472+A*9207                    |                             |               |
| A*2458+A*9247                     | A*2473+A*9207                    |                             |               |
| A*2467+A*3205                     | A*2477+A*3215                    |                             |               |
| A*2471+A*260101/260107/2624/2626  | A*2499+A*2628                    |                             |               |
| A*2471+A*2612                     | A*2499+A*2618                    |                             |               |
| A*2472+A*9247                     | A*2473+A*9245                    |                             |               |
| A*2482+A*330301/330303/3315       | A*3108+A*3319                    |                             |               |
| A*2507/A*2507+A*2608              | A*2504+A*260101/260107/2624/2626 |                             |               |
| A*2507/A*2507+A*2609              | A*2506+A*260101/260107/2624/2626 |                             |               |
| A*2507/A*2507+A*2613              | A*2502+A*260101/260107/2624/2626 |                             |               |
| A*2507/A*2507+A*290201            | A*260101/260107/2624/2626+A*2913 |                             |               |
| A*2507/A*2507+A*3025              | A*2502+A*300201/300202           |                             |               |
| A*2507/A*2507+A*3217              | A*2502+A*320101/320102           |                             |               |
| A*2507/A*2507+A*3408              | A*2503+A*3402                    |                             |               |
| A*2507/A*2507+A*3601              | A*2506+A*3604                    |                             |               |
| A*2507/A*2507+A*6601/6608         | A*2502+A*6605                    |                             |               |
| A*2507/A*2507+A*6602              | A*2502+A*6603                    |                             |               |
| A*2507/A*2507+A*680102/6811N/6833 | A*2502+A*680301                  |                             |               |
| A*2507/A*2507+A*680201            | A*2502+A*6831                    |                             |               |
| A*2507/A*2507+A*6809              | A*2504+A*680102/6811N/6833       |                             |               |
| A*2507/A*2507+A*7401/7402         | A*320101/320102+A*6605           | A*3208+A*6605               |               |
| A*2507/A*2507+A*7406              | A*2603+A*320101/320102           | A*320101/320102+A*6601/6608 | A*3217+A*6605 |
| A*2507/A*2507+A*7413              | A*2502+A*7401/7402               |                             |               |
| A*2507/A*2507+A*9245              | A*2503+A*9206                    |                             |               |
| A*2502+A*2608                     | A*2504+A*2613                    |                             |               |
| A*2502+A*2609                     | A*2506+A*2613                    |                             |               |
| A*2502+A*290201                   | A*2613+A*2913                    |                             |               |
| A*2502+A*2919                     | A*2603+A*2913                    |                             |               |
| A*2502+A*7406                     | A*2603+A*3217                    | A*3208+A*6601/6608          |               |
| A*2502+A*7413                     | A*3217+A*6601/6608               |                             |               |
| A*2504+A*2609                     | A*2506+A*2608                    |                             |               |
| A*2504+A*290201                   | A*2608+A*2913                    |                             |               |
| A*2506+A*290201                   | A*2609+A*2913                    |                             |               |
| A*260101/260107/2624/2626+A*2603  | A*2636+A*6605                    |                             |               |
| A*260101/260107/2624/2626+A*2618  | A*2612+A*2628                    |                             |               |
| A*260101/260107/2624/2626+A*3016  | A*2636+A*300101/300102/3024      |                             |               |

|                                               |                               |                    |
|-----------------------------------------------|-------------------------------|--------------------|
| A*260101/260107/2624/2626+A*3025              | A*2613+A*300201/300202        |                    |
| A*260101/260107/2624/2626+A*3208              | A*2636+A*320101/320102        |                    |
| A*260101/260107/2624/2626+A*3217              | A*2613+A*320101/320102        |                    |
| A*260101/260107/2624/2626+A*3308              | A*260702+A*330301/330303/3315 |                    |
| A*260101/260107/2624/2626+A*3403              | A*2614+A*3402                 |                    |
| A*260101/260107/2624/2626+A*3601              | A*2609+A*3604                 |                    |
| A*260101/260107/2624/2626+A*6601/6608         | A*2613+A*6605                 |                    |
| A*260101/260107/2624/2626+A*6602              | A*2613+A*6603                 |                    |
| A*260101/260107/2624/2626+A*6609              | A*2622+A*6601/6608            |                    |
| A*260101/260107/2624/2626+A*680101/680107     | A*2612+A*6842                 |                    |
| A*260101/260107/2624/2626+A*680102/6811N/6833 | A*2613+A*680301               |                    |
| A*260101/260107/2624/2626+A*680104            | A*260103+A*680101/680107      |                    |
| A*260101/260107/2624/2626+A*680201            | A*2613+A*6831                 |                    |
| A*260101/260107/2624/2626+A*680202            | A*260103+A*680201             |                    |
| A*260101/260107/2624/2626+A*6805              | A*2636+A*680301               |                    |
| A*260101/260107/2624/2626+A*6809              | A*2608+A*680102/6811N/6833    |                    |
| A*260101/260107/2624/2626+A*6815              | A*2636+A*6831                 |                    |
| A*260101/260107/2624/2626+A*6845              | A*2616+A*680101/680107        |                    |
| A*260101/260107/2624/2626+A*7406              | A*2630+A*7410                 | A*2636+A*7401/7402 |
| A*260101/260107/2624/2626+A*7413              | A*2613+A*7401/7402            |                    |
| A*260101/260107/2624/2626+A*9222              | A*260701+A*6815               |                    |
| A*260103+A*6845                               | A*2616+A*680104               |                    |
| A*2603+A*2613                                 | A*2636+A*6601/6608            |                    |
| A*2603+A*290201                               | A*2613+A*2919                 |                    |
| A*2603+A*300101/300102/3024                   | A*3016+A*6605                 |                    |
| A*2603+A*300201/300202                        | A*2605+A*3013                 |                    |
| A*2603+A*3104                                 | A*2630+A*3103                 |                    |
| A*2603+A*680102/6811N/6833                    | A*6601/6608+A*6805            |                    |
| A*2603+A*680201                               | A*6601/6608+A*6815            |                    |
| A*2603+A*680301                               | A*6605+A*6805                 |                    |
| A*2603+A*6831                                 | A*6605+A*6815                 |                    |
| A*2603+A*7401/7402                            | A*6605+A*7406                 |                    |
| A*2603+A*7413                                 | A*6601/6608+A*7406            |                    |
| A*2605+A*3017                                 | A*3004+A*6601/6608            |                    |
| A*2613+A*310102/3114N/3123                    | A*2619+A*330301/330303/3315   |                    |
| A*2613+A*3105                                 | A*2619+A*3310                 |                    |
| A*2613+A*3106                                 | A*2619+A*3318                 |                    |
| A*2613+A*3208                                 | A*2636+A*3217                 |                    |
| A*2613+A*6805                                 | A*2636+A*680102/6811N/6833    |                    |
| A*2613+A*6815                                 | A*2636+A*680201               |                    |
| A*2613+A*7406                                 | A*2636+A*7413                 |                    |
| A*2614+A*320101/320102                        | A*2628+A*3206                 |                    |
| A*2615+A*2903                                 | A*2629+A*290201               |                    |
| A*2615+A*3105                                 | A*2629+A*310102/3114N/3123    |                    |
| A*2615+A*3213                                 | A*2629+A*320101/320102        |                    |
| A*2615+A*3310                                 | A*2629+A*330301/330303/3315   |                    |
| A*2618+A*6842                                 | A*2628+A*680101/680107        |                    |
| A*2630+A*3313                                 | A*2636+A*3311                 |                    |
| A*290101+A*3116                               | A*2912+A*310102/3114N/3123    |                    |
| A*290201+A*3105                               | A*2903+A*310102/3114N/3123    |                    |
| A*290201+A*3212                               | A*2906+A*320101/320102        |                    |
| A*290201+A*3213                               | A*2903+A*320101/320102        |                    |
| A*290201+A*3310                               | A*2903+A*330301/330303/3315   |                    |
| A*290201+A*6814                               | A*2906+A*6810                 |                    |
| A*2903+A*3212                                 | A*2906+A*3213                 |                    |
| A*2913+A*7406                                 | A*2919+A*3217                 |                    |
| A*300101/300102/3024+A*3003                   | A*300201/300202+A*301101      |                    |
| A*300101/300102/3024+A*3012                   | A*300201/300202+A*3018        |                    |
| A*300101/300102/3024+A*3208                   | A*3016+A*320101/320102        |                    |
| A*300101/300102/3024+A*3307                   | A*3023+A*3301                 |                    |
| A*300101/300102/3024+A*3402                   | A*301102+A*3404               |                    |
| A*300101/300102/3024+A*680102/6811N/6833      | A*3026+A*6806                 |                    |
| A*300101/300102/3024+A*6805                   | A*3016+A*680301               |                    |
| A*300101/300102/3024+A*6815                   | A*3016+A*6831                 |                    |
| A*300101/300102/3024+A*7406                   | A*3016+A*7401/7402            |                    |
| A*300201/300202+A*3217                        | A*3025+A*320101/320102        |                    |
| A*300201/300202+A*6601/6608                   | A*3025+A*6605                 |                    |
| A*300201/300202+A*6602                        | A*3025+A*6603                 |                    |
| A*300201/300202+A*680102/6811N/6833           | A*3025+A*680301               |                    |
| A*300201/300202+A*680201                      | A*3025+A*6831                 |                    |
| A*300201/300202+A*7413                        | A*3025+A*7401/7402            |                    |
| A*3003+A*3018                                 | A*301101+A*3012               |                    |
| A*310102/3114N/3123+A*3107                    | A*3102+A*3110                 |                    |
| A*310102/3114N/3123+A*3108                    | A*3107+A*3321                 |                    |
| A*310102/3114N/3123+A*3203                    | A*3110+A*7407                 |                    |
| A*310102/3114N/3123+A*3213                    | A*3105+A*320101/320102        |                    |
| A*310102/3114N/3123+A*3308                    | A*3102+A*3309                 |                    |
| A*310102/3114N/3123+A*3310                    | A*3105+A*330301/330303/3315   |                    |
| A*310102/3114N/3123+A*3318                    | A*3106+A*330301/330303/3315   |                    |
| A*310102/3114N/3123+A*6840                    | A*3109+A*680201               |                    |
| A*3102+A*3203                                 | A*3107+A*7407                 |                    |
| A*3105+A*3318                                 | A*3106+A*3310                 |                    |
| A*3107+A*3309                                 | A*3110+A*3308                 |                    |
| A*320101/320102+A*3310                        | A*3213+A*330301/330303/3315   |                    |
| A*320101/320102+A*6602                        | A*3217+A*6603                 |                    |
| A*320101/320102+A*680102/6811N/6833           | A*3217+A*680301               |                    |
| A*320101/320102+A*680201                      | A*3217+A*6831                 |                    |
| A*320101/320102+A*6805                        | A*3208+A*680301               |                    |
| A*320101/320102+A*6814                        | A*3212+A*6810                 |                    |
| A*320101/320102+A*6815                        | A*3208+A*6831                 |                    |
| A*320101/320102+A*7406                        | A*3208+A*7401/7402            |                    |
| A*320101/320102+A*7413                        | A*3217+A*7401/7402            |                    |
| A*3202+A*680802                               | A*3206+A*6809                 |                    |
| A*3203+A*680102/6811N/6833                    | A*6836+A*7401/7402            |                    |
| A*3206+A*6601/6608                            | A*3210+A*6606                 |                    |
| A*3208+A*680102/6811N/6833                    | A*3217+A*6805                 |                    |
| A*3208+A*680201                               | A*3217+A*6815                 |                    |
| A*3208+A*7413                                 | A*3217+A*7406                 |                    |
| A*3301+A*6601/6608                            | A*330301/330303/3315+A*6604   |                    |
| A*330301/330303/3315+A*6830                   | A*3309+A*680102/6811N/6833    |                    |
| A*330301/330303/3315+A*7401/7402              | A*3311+A*7407                 |                    |
| A*330301/330303/3315+A*7410                   | A*3313+A*7407                 |                    |
| A*3311+A*7410                                 | A*3313+A*7401/7402            |                    |
| A*3402+A*9245                                 | A*3408+A*9206                 |                    |

---

|                                 |                            |
|---------------------------------|----------------------------|
| A*6601/6608+A*6603              | A*6602+A*6605              |
| A*6601/6608+A*680301            | A*6605+A*680102/6811N/6833 |
| A*6601/6608+A*6831              | A*6605+A*680201            |
| A*6601/6608+A*7401/7402         | A*6605+A*7413              |
| A*6602+A*680301                 | A*6603+A*680102/6811N/6833 |
| A*6602+A*6831                   | A*6603+A*680201            |
| A*6602+A*7401/7402              | A*6603+A*7413              |
| A*680101/680107+A*680201        | A*6827+A*6839              |
| A*680101/680107+A*680202        | A*680104+A*680201          |
| A*680101/680107+A*7407          | A*6804+A*7413              |
| A*680102/6811N/6833+A*6815      | A*680201+A*6805            |
| A*680102/6811N/6833+A*6831      | A*680201+A*680301          |
| A*680102/6811N/6833+A*7401/7402 | A*680301+A*7413            |
| A*680102/6811N/6833+A*7406      | A*6805+A*7413              |
| A*680201+A*7401/7402            | A*6831+A*7413              |
| A*680201+A*7406                 | A*6815+A*7413              |
| A*680301+A*6815                 | A*6805+A*6831              |
| A*680301+A*7406                 | A*6805+A*7401/7402         |
| A*6815+A*7401/7402              | A*6831+A*7406              |

---

# HLA-B Ambiguities, Release 2.25.0

## Sequences identical over exons 2+3

| Allele 1   | Allele 2    | Allele 3 | Allele 4 | Allele 5 | Allele 6 | Allele 7 | Allele 8 | Code in table        |
|------------|-------------|----------|----------|----------|----------|----------|----------|----------------------|
| B*070201   | B*070206    | B*0744   | B*0749N  | B*0758   | B*0759   | B*0761   |          | B*07G1               |
| B*070501   | B*0706      |          |          |          |          |          |          | B*070501/0706        |
| B*080101   | B*0819N     |          |          |          |          |          |          | B*080101/0819N       |
| B*130201   | B*130205    |          |          |          |          |          |          | B*130201/130205      |
| B*15010101 | B*15010102N | B*150106 | B*150107 | B*9502   | B*9504   | B*9540   | B*9546   | B*15G1               |
| B*1503     | B*9503      |          |          |          |          |          |          | B*1503/9503          |
| B*1512     | B*1519      |          |          |          |          |          |          | B*1512/1519          |
| B*15170101 | B*15170102  |          |          |          |          |          |          | B*151701             |
| B*180101   | B*180103    | B*1817N  |          |          |          |          |          | B*18G1               |
| B*270502   | B*270504    | B*2713   |          |          |          |          |          | B*270502/270504/2713 |
| B*350101   | B*350103    | B*3540N  | B*3542   | B*3557   | B*3594   |          |          | B*35G1               |
| B*350301   | B*3570      |          |          |          |          |          |          | B*350301/3570        |
| B*3543     | B*3567      | B*3579   |          |          |          |          |          | B*3543/3567/3579     |
| B*380201   | B*3818      |          |          |          |          |          |          | B*380201/3818        |
| B*39010101 | B*39010102L | B*390103 | B*3946   |          |          |          |          | B*3901G1             |
| B*400101   | B*400102    | B*4055   |          |          |          |          |          | B*40G1               |
| B*400201   | B*4056      |          |          |          |          |          |          | B*400201/4056        |
| B*40060101 | B*40060102  |          |          |          |          |          |          | B*400601             |
| B*44020101 | B*44020102S | B*4419N  | B*4427   | B*4466   |          |          |          | B*44G1               |
| B*440301   | B*440303    |          |          |          |          |          |          | B*440301/440303      |
| B*4501     | B*4507      |          |          |          |          |          |          | B*4501/4507          |
| B*460101   | B*4615N     |          |          |          |          |          |          | B*460101/4615N       |
| B*47010101 | B*47010102  |          |          |          |          |          |          | B*470101             |
| B*480101   | B*4809      |          |          |          |          |          |          | B*480101/4809        |
| B*510101   | B*510105    | B*510107 | B*5111N  | B*5130   | B*5132   | B*5148   | B*5151   | B*51G1               |
| B*520101   | B*5207      |          |          |          |          |          |          | B*520101/5207        |
| B*5401     | B*5417      |          |          |          |          |          |          | B*5401/5417          |
| B*550101   | B*550103    |          |          |          |          |          |          | B*550101/550103      |
| B*5601     | B*5624      |          |          |          |          |          |          | B*5601/5624          |
| B*580101   | B*5811      |          |          |          |          |          |          | B*580101/5811        |
| B*8101     | B*8102      | B*8103   |          |          |          |          |          | B*8101/8102/8103     |
| B*9523     | B*9551      |          |          |          |          |          |          | B*9523/9551          |

## Alleles extended due to unsequenced regions

The following alleles do not contain the complete exon 2 + 3 sequence. For these alleles, the sequence of an alternate allele has been used to extend the sequence to cover this region.

| Incomplete allele | Sequence extended with |
|-------------------|------------------------|
| B*0708            | B*070201               |
| B*0803            | B*080101               |
| B*3510            | B*350101               |
| B*3907            | B*39010101             |
| B*4505            | B*4501                 |
| B*5110            | B*510101               |

## Alleles removed from analysis due to insertions or deletions

| Allele  |
|---------|
| B*0767N |
| B*0808N |
| B*1307N |
| B*1579N |
| B*3553N |
| B*3925N |
| B*4452N |
| B*5405N |
| B*5810N |
| B*5817N |
| B*9511N |
| B*9549N |

## Ambiguous typing combinations over exon 2 + 3

| Combination 1               | Combination 2               | Combination 3         | Combination 4   |
|-----------------------------|-----------------------------|-----------------------|-----------------|
| B*07G1+B*0711               | B*0709+B*0757               |                       |                 |
| B*07G1+B*0732               | B*070501/0706+B*0708        |                       |                 |
| B*07G1+B*0734               | B*070501/0706+B*0743        |                       |                 |
| B*07G1+B*0743               | B*0726+B*0731               |                       |                 |
| B*07G1+B*0753               | B*070501/0706+B*0733        |                       |                 |
| B*07G1+B*0760               | B*0724+B*0733               |                       |                 |
| B*07G1+B*080101/0819N       | B*070501/0706+B*0807        |                       |                 |
| B*07G1+B*0803               | B*0736+B*0823               |                       |                 |
| B*07G1+B*0806               | B*0757+B*0820               |                       |                 |
| B*07G1+B*0812               | B*0707+B*080101/0819N       |                       |                 |
| B*07G1+B*0813               | B*0743+B*0840               |                       |                 |
| B*07G1+B*0828               | B*0717+B*0807               |                       |                 |
| B*07G1+B*0835               | B*070501/0706+B*0837        | B*0709+B*080101/0819N |                 |
| B*07G1+B*0837               | B*0709+B*0807               |                       |                 |
| B*07G1+B*130201/B*130205    | B*0726+B*1318               |                       |                 |
| B*07G1+B*1306               | B*0731+B*1301               |                       |                 |
| B*07G1+B*140201             | B*0726+B*1403               |                       |                 |
| B*07G1+B*140601             | B*0707+B*1405               |                       |                 |
| B*07G1+B*15G1               | B*0707+B*1507               | B*0709+B*1563         | B*0724+B*9517   |
|                             | B*0750+B*9501               | B*0754+B*1515         | B*0755+B*1565   |
|                             | B*1576+B*4808               |                       |                 |
| B*07G1+B*150103             | B*070207+B*15G1             |                       |                 |
| B*07G1+B*1503/9503          | B*0754+B*1564               |                       |                 |
| B*07G1+B*1505               | B*0748+B*1565               | B*0768+B*9507         |                 |
| B*07G1+B*1507               | B*0709+B*1545               |                       |                 |
| B*07G1+B*1509               | B*070503+B*1510             |                       |                 |
| B*07G1+B*1510               | B*0726+B*1599               |                       |                 |
| B*07G1+B*151101             | B*0716+B*1576               |                       |                 |
| B*07G1+B*1512/1519          | B*0764+B*15G1               |                       |                 |
| B*07G1+B*1513               | B*0736+B*1502               |                       |                 |
| B*07G1+B*1514               | B*0720+B*9517               |                       |                 |
| B*07G1+B*1515               | B*0750+B*1576               |                       |                 |
| B*07G1+B*1518               | B*0709+B*1510               |                       |                 |
| B*07G1+B*1523               | B*0736+B*1518               |                       |                 |
| B*07G1+B*1524               | B*0736+B*15G1               | B*0757+B*1587         |                 |
| B*07G1+B*1525               | B*0754+B*1502               |                       |                 |
| B*07G1+B*1530               | B*070501/0706+B*1563        | B*0768+B*9550         |                 |
| B*07G1+B*1531               | B*0707+B*1555               |                       |                 |
| B*07G1+B*1535               | B*0768+B*9541               |                       |                 |
| B*07G1+B*1536               | B*0754+B*1589               |                       |                 |
| B*07G1+B*1539               | B*0724+B*1540               | B*0726+B*1565         | B*0760+B*9538   |
| B*07G1+B*1540               | B*0733+B*9538               |                       |                 |
| B*07G1+B*1543               | B*0727+B*9501               |                       |                 |
| B*07G1+B*1549               | B*0747+B*1547               |                       |                 |
| B*07G1+B*1550               | B*0731+B*9517               |                       |                 |
| B*07G1+B*1556               | B*0754+B*1508               |                       |                 |
| B*07G1+B*1563               | B*0707+B*1545               |                       |                 |
| B*07G1+B*1566               | B*0710+B*9552               |                       |                 |
| B*07G1+B*1585               | B*0712+B*1507               |                       |                 |
| B*07G1+B*1590               | B*0752+B*1510               |                       |                 |
| B*07G1+B*18G1               | B*0707+B*1814               | B*0726+B*1813         | B*0748+B*1830   |
| B*07G1+B*1811               | B*0731+B*1810               |                       |                 |
| B*07G1+B*1812               | B*0754+B*18G1               |                       |                 |
| B*07G1+B*1815               | B*0726+B*1830               |                       |                 |
| B*07G1+B*1819               | B*0755+B*1830               |                       |                 |
| B*07G1+B*2702               | B*0736+B*2708               |                       |                 |
| B*07G1+B*270502/270504/2713 | B*0726+B*2745               |                       |                 |
| B*07G1+B*2712               | B*0703+B*2726               |                       |                 |
| B*07G1+B*2715               | B*0731+B*270401             |                       |                 |
| B*07G1+B*2719               | B*071802+B*2732             |                       |                 |
| B*07G1+B*2738               | B*0724+B*270502/270504/2713 |                       |                 |
| B*07G1+B*35G1               | B*0709+B*3534               | B*0712+B*3551         | B*071801+B*3505 |
|                             | B*0724+B*3515               | B*0726+B*350801       |                 |
| B*07G1+B*350104             | B*0707+B*3530               | B*071802+B*3505       | B*0726+B*350803 |
| B*07G1+B*350301/3570        | B*0724+B*3533               |                       |                 |
| B*07G1+B*350401             | B*070501/0706+B*3534        | B*0712+B*3522         |                 |
| B*07G1+B*350402             | B*070503+B*3534             |                       |                 |
| B*07G1+B*3506               | B*070501/0706+B*350301/3570 |                       |                 |
| B*07G1+B*350902             | B*0726+B*3518               |                       |                 |
| B*07G1+B*3510               | B*0726+B*3580               | B*0754+B*35G1         |                 |
| B*07G1+B*3511               | B*071801+B*3558             |                       |                 |
| B*07G1+B*3512               | B*070501/0706+B*3539        | B*071802+B*3522       |                 |
| B*07G1+B*3513               | B*0754+B*350301/3570        |                       |                 |
| B*07G1+B*3516               | B*0754+B*3517               |                       |                 |
| B*07G1+B*352001             | B*071801+B*3572             | B*0750+B*3576         |                 |
| B*07G1+B*3527               | B*0711+B*3534               | B*0757+B*35G1         | B*0775+B*3529   |
| B*07G1+B*3528               | B*0754+B*352001             | B*3576+B*4808         |                 |
| B*07G1+B*3529               | B*0708+B*3576               |                       |                 |
| B*07G1+B*3535               | B*0745+B*3593               |                       |                 |
| B*07G1+B*3543/3567/3579     | B*0724+B*3586               | B*0755+B*3599         |                 |
| B*07G1+B*3556               | B*0757+B*350301/3570        |                       |                 |
| B*07G1+B*3562               | B*0755+B*350801             |                       |                 |
| B*07G1+B*356802             | B*0707+B*3505               |                       |                 |
| B*07G1+B*3569               | B*0754+B*3529               |                       |                 |
| B*07G1+B*3571               | B*0720+B*3515               | B*0726+B*3545         |                 |
| B*07G1+B*3580               | B*0754+B*350801             |                       |                 |
| B*07G1+B*3593               | B*0731+B*3515               |                       |                 |
| B*07G1+B*380101             | B*0707+B*3819               | B*0736+B*3905         |                 |
| B*07G1+B*3814               | B*0736+B*3901G1             |                       |                 |
| B*07G1+B*3819               | B*0736+B*3937               |                       |                 |
| B*07G1+B*3901G1             | B*070501/0706+B*3915        | B*0707+B*3903         | B*0731+B*3947   |
|                             | B*0745+B*3930               |                       |                 |
| B*07G1+B*390201             | B*0754+B*3939               |                       |                 |
| B*07G1+B*3905               | B*0707+B*3937               | B*0726+B*3911         |                 |
| B*07G1+B*390602             | B*0745+B*3934               |                       |                 |
| B*07G1+B*3910               | B*0703+B*670102             |                       |                 |
| B*07G1+B*391301             | B*070203+B*391302           | B*4808+B*670102       |                 |
| B*07G1+B*3914               | B*070501/0706+B*3929        |                       |                 |

|                        |                         |                         |                 |
|------------------------|-------------------------|-------------------------|-----------------|
| B*07G1+B*3920          | B*0775+B*3910           |                         |                 |
| B*07G1+B*3922          | B*0754+B*3901G1         |                         |                 |
| B*07G1+B*3942          | B*071802+B*3903         |                         |                 |
| B*07G1+B*40G1          | B*070501/0706+B*4033    | B*0707+B*4080           | B*0754+B*4025   |
| B*07G1+B*400106        | B*070503+B*4033         |                         |                 |
| B*07G1+B*400201/4056   | B*070203+B*400204       | B*070501/0706+B*4018    |                 |
| B*07G1+B*4003          | B*0709+B*4018           |                         |                 |
| B*07G1+B*400601        | B*070501/0706+B*4044    |                         |                 |
| B*07G1+B*4011          | B*0707+B*400201/4056    |                         |                 |
| B*07G1+B*4016          | B*070501/0706+B*4032    |                         |                 |
| B*07G1+B*4019          | B*0736+B*400201/4056    |                         |                 |
| B*07G1+B*4020          | B*0707+B*4003           |                         |                 |
| B*07G1+B*4033          | B*0707+B*4031           |                         |                 |
| B*07G1+B*4037          | B*0757+B*400201/4056    | B*0775+B*4050           |                 |
| B*07G1+B*4038          | B*070501/0706+B*4052    | B*0709+B*40G1           |                 |
| B*07G1+B*4039          | B*0731+B*400201/4056    |                         |                 |
| B*07G1+B*4052          | B*0709+B*4033           |                         |                 |
| B*07G1+B*4057          | B*0771+B*400201/4056    |                         |                 |
| B*07G1+B*4063          | B*0724+B*40G1           |                         |                 |
| B*07G1+B*4064          | B*071801+B*400201/4056  |                         |                 |
| B*07G1+B*4079          | B*0723+B*40G1           |                         |                 |
| B*07G1+B*4080          | B*070501/0706+B*4031    | B*4032+B*8101/8102/8103 |                 |
| B*07G1+B*4087          | B*0768+B*40G1           |                         |                 |
| B*07G1+B*4089          | B*070501/0706+B*4009    |                         |                 |
| B*07G1+B*4092          | B*0733+B*4063           | B*0760+B*40G1           |                 |
| B*07G1+B*4102          | B*4032+B*4201           |                         |                 |
| B*07G1+B*410301        | B*070205+B*410302       |                         |                 |
| B*07G1+B*410302        | B*0707+B*4102           |                         |                 |
| B*07G1+B*4207          | B*0703+B*4201           |                         |                 |
| B*07G1+B*4208          | B*0733+B*420501         |                         |                 |
| B*07G1+B*44G1/B*4466   | B*0704+B*442802         | B*0720+B*4416           | B*0724+B*4421   |
|                        | B*0754+B*4412           |                         |                 |
| B*07G1+B*440301/440303 | B*071802+B*4454         | B*0720+B*446402         | B*0726+B*442802 |
| B*07G1+B*440302        | B*071801+B*4454         | B*0720+B*446401         | B*0726+B*442801 |
| B*07G1+B*4414          | B*070501/0706+B*4451    |                         |                 |
| B*07G1+B*4418          | B*0736+B*4501/4507      |                         |                 |
| B*07G1+B*4429          | B*0745+B*440301/440303  |                         |                 |
| B*07G1+B*4437          | B*0724+B*446402         |                         |                 |
| B*07G1+B*4450          | B*0736+B*4446           |                         |                 |
| B*07G1+B*4465          | B*0707+B*4454           |                         |                 |
| B*07G1+B*4501/4507     | B*0750+B*4506           |                         |                 |
| B*07G1+B*4505          | B*0752+B*4501/4507      |                         |                 |
| B*07G1+B*460101/4615N  | B*0707+B*4612           |                         |                 |
| B*07G1+B*480101/4809   | B*4808+B*8101/8102/8103 |                         |                 |
| B*07G1+B*480301        | B*0707+B*480101/4809    |                         |                 |
| B*07G1+B*4804          | B*0733+B*480101/4809    |                         |                 |
| B*07G1+B*4808          | B*0750+B*0754           |                         |                 |
| B*07G1+B*4813          | B*0733+B*4810           |                         |                 |
| B*07G1+B*490101        | B*0736+B*5001           |                         |                 |
| B*07G1+B*51G1          | B*0724+B*5116           | B*0726+B*5129           | B*0736+B*780202 |
|                        | B*0738+B*5606           |                         |                 |
| B*07G1+B*510102        | B*0736+B*780201         |                         |                 |
| B*07G1+B*510201        | B*0724+B*5134           |                         |                 |
| B*07G1+B*5104          | B*071801+B*5164         |                         |                 |
| B*07G1+B*5106          | B*0707+B*5164           |                         |                 |
| B*07G1+B*5108          | B*0725+B*5129           |                         |                 |
| B*07G1+B*510901        | B*0724+B*5131           | B*0748+B*5129           |                 |
| B*07G1+B*5119          | B*0745+B*510901         |                         |                 |
| B*07G1+B*5121          | B*0731+B*5116           |                         |                 |
| B*07G1+B*5123          | B*0720+B*5134           |                         |                 |
| B*07G1+B*5155          | B*0766+B*5129           |                         |                 |
| B*07G1+B*5163          | B*070501/0706+B*5137    | B*0709+B*51G1           |                 |
| B*07G1+B*520101/5207   | B*070501/0706+B*5212    | B*0724+B*5208           | B*0736+B*7805   |
| B*07G1+B*520102        | B*0754+B*5107           | B*0757+B*5209           |                 |
| B*07G1+B*520602        | B*0754+B*51G1           |                         |                 |
| B*07G1+B*530101        | B*071801+B*5314         | B*0736+B*35G1           | B*0738+B*3576   |
|                        | B*0757+B*5305           |                         |                 |
| B*07G1+B*5302          | B*0736+B*3524           |                         |                 |
| B*07G1+B*5304          | B*0736+B*350301/3570    |                         |                 |
| B*07G1+B*5305          | B*0726+B*5316           |                         |                 |
| B*07G1+B*5308          | B*0736+B*3511           |                         |                 |
| B*07G1+B*5313          | B*0726+B*5311           | B*0757+B*5312           |                 |
| B*07G1+B*5314          | B*0736+B*3505           |                         |                 |
| B*07G1+B*5401/5417     | B*070501/0706+B*5416    | B*0726+B*5410           |                 |
| B*07G1+B*5412          | B*0736+B*5401/5417      |                         |                 |
| B*07G1+B*550101/550103 | B*0731+B*5524           | B*0743+B*5509           |                 |
| B*07G1+B*550201        | B*0731+B*5522           | B*0772+B*5510           |                 |
| B*07G1+B*550202        | B*070205+B*550201       |                         |                 |
| B*07G1+B*5512          | B*0757+B*550201         |                         |                 |
| B*07G1+B*5522          | B*0748+B*5509           |                         |                 |
| B*07G1+B*5524          | B*0726+B*5509           |                         |                 |
| B*07G1+B*5532          | B*070501/0706+B*5523    |                         |                 |
| B*07G1+B*5601/5624     | B*0724+B*5522           |                         |                 |
| B*07G1+B*5621          | B*0736+B*560502         |                         |                 |
| B*07G1+B*5623          | B*0737+B*550201         |                         |                 |
| B*07G1+B*570101        | B*0726+B*5719           |                         |                 |
| B*07G1+B*5702          | B*0736+B*5712           |                         |                 |
| B*07G1+B*570301        | B*0726+B*5702           |                         |                 |
| B*07G1+B*580101/5811   | B*071801+B*5818         |                         |                 |
| B*07G1+B*5816          | B*0707+B*5818           |                         |                 |
| B*07G1+B*5901          | B*0738+B*550201         |                         |                 |
| B*07G1+B*5903          | B*0738+B*5513           |                         |                 |
| B*07G1+B*5904          | B*0738+B*5601/5624      |                         |                 |
| B*07G1+B*7801          | B*0708+B*5606           |                         |                 |
| B*07G1+B*7806          | B*0757+B*7805           |                         |                 |
| B*07G1+B*9501          | B*0754+B*1576           |                         |                 |
| B*07G1+B*9508          | B*0745+B*1518           |                         |                 |
| B*07G1+B*9528          | B*0717+B*1563           |                         |                 |
| B*07G1+B*9535          | B*0711+B*1563           | B*0757+B*15G1           | B*0775+B*1570   |
| B*07G1+B*9536          | B*0745+B*1505           |                         |                 |
| B*07G1+B*9552          | B*0716+B*9501           | B*0754+B*151101         |                 |
| B*07G1+B*9554          | B*071802+B*1507         |                         |                 |
| B*07G1+B*9557          | B*0746+B*1524           |                         |                 |
| B*07G1+B*9559          | B*0723+B*15G1           |                         |                 |

|                                |                         |               |
|--------------------------------|-------------------------|---------------|
| B*070203+B*5601/5624           | B*0756+B*5616           |               |
| B*070203+B*580101/5811         | B*0756+B*5812           |               |
| B*070205+B*5512                | B*0757+B*550202         |               |
| B*070205+B*5623                | B*0737+B*550202         |               |
| B*070205+B*5901                | B*0738+B*550202         |               |
| B*070207+B*1512/1519           | B*0764+B*150103         |               |
| B*070207+B*1524                | B*0736+B*150103         |               |
| B*070207+B*9535                | B*0757+B*150103         |               |
| B*070207+B*9559                | B*0723+B*150103         |               |
| B*0703+B*0775                  | B*0716+B*0757           |               |
| B*0703+B*0823                  | B*0716+B*080101/0819N   |               |
| B*0703+B*15G1                  | B*0716+B*1570           |               |
| B*0703+B*1503/9503             | B*0716+B*1561           |               |
| B*0703+B*1508                  | B*0708+B*151101         |               |
| B*0703+B*1556                  | B*0708+B*9552           |               |
| B*0703+B*18G1                  | B*0716+B*1803           |               |
| B*0703+B*2744                  | B*0716+B*2708           |               |
| B*0703+B*35G1                  | B*0716+B*3529           |               |
| B*0703+B*3510                  | B*0716+B*3569           |               |
| B*0703+B*3578                  | B*0737+B*3529           |               |
| B*0703+B*380101                | B*0716+B*3814           |               |
| B*0703+B*3905                  | B*0716+B*3901G1         |               |
| B*0703+B*391301                | B*0716+B*390202         | B*3910+B*4808 |
| B*0703+B*3937                  | B*0716+B*3903           |               |
| B*0703+B*40G1                  | B*0716+B*4043           |               |
| B*0703+B*400201/4056           | B*0716+B*4050           |               |
| B*0703+B*4007                  | B*0708+B*4061           |               |
| B*0703+B*4102                  | B*4032+B*4207           |               |
| B*0703+B*4616                  | B*0708+B*460101/4615N   |               |
| B*0703+B*5108                  | B*0716+B*5120           |               |
| B*0703+B*5531                  | B*0716+B*550101/550103  |               |
| B*0703+B*780202                | B*0716+B*7801           |               |
| B*0704+B*0748                  | B*0725+B*0726           |               |
| B*0704+B*0813                  | B*0726+B*080101/0819N   |               |
| B*0704+B*0825                  | B*0726+B*0821           |               |
| B*0704+B*1301                  | B*0725+B*1320           |               |
| B*0704+B*130201/B*130205       | B*0725+B*1316           |               |
| B*0704+B*1505                  | B*0725+B*1539           |               |
| B*0704+B*1591                  | B*0725+B*9531           |               |
| B*0704+B*18G1                  | B*0725+B*1815           |               |
| B*0704+B*1813                  | B*0725+B*1830           |               |
| B*0704+B*270502/270504/2713    | B*0725+B*2710           |               |
| B*0704+B*2708                  | B*0725+B*2740           |               |
| B*0704+B*35G1                  | B*0725+B*3511           |               |
| B*0704+B*350301/3570           | B*0726+B*3538           |               |
| B*0704+B*3505                  | B*0725+B*3558           |               |
| B*0704+B*3524                  | B*0725+B*3521           |               |
| B*0704+B*3562                  | B*0725+B*351401         |               |
| B*0704+B*370101                | B*0725+B*3713           |               |
| B*0704+B*3901G1                | B*0725+B*3935           |               |
| B*0704+B*440301/440303         | B*0726+B*44G1/B*4466    |               |
| B*0704+B*4404                  | B*0731+B*4421           |               |
| B*0704+B*4413                  | B*0726+B*4467           |               |
| B*0704+B*4440                  | B*0726+B*4444           |               |
| B*0704+B*4443                  | B*0726+B*4417           |               |
| B*0704+B*4445                  | B*0726+B*4451           |               |
| B*0704+B*4446                  | B*0726+B*4409           |               |
| B*0704+B*4447                  | B*0726+B*4420           |               |
| B*0704+B*4457                  | B*0726+B*4408           |               |
| B*0704+B*446402                | B*0726+B*4416           |               |
| B*0704+B*4465                  | B*0726+B*4441           |               |
| B*0704+B*4609                  | B*0725+B*460101/4615N   |               |
| B*0704+B*480101/4809           | B*0725+B*4815           |               |
| B*0704+B*510901                | B*0725+B*51G1           | B*0726+B*5108 |
| B*0704+B*510902                | B*0725+B*510102         |               |
| B*0704+B*5131                  | B*0725+B*5116           |               |
| B*0704+B*5142                  | B*0726+B*4406           |               |
| B*0704+B*5210                  | B*0725+B*520101/5207    |               |
| B*0704+B*530101                | B*0725+B*5308           |               |
| B*0704+B*550201                | B*0725+B*550101/550103  |               |
| B*0704+B*5522                  | B*0725+B*5524           |               |
| B*0704+B*5601/5624             | B*0726+B*5613           |               |
| B*0704+B*570301                | B*0748+B*5709           |               |
| B*0704+B*580101/5811           | B*0725+B*5819           |               |
| B*0704+B*5802                  | B*0725+B*5806           |               |
| B*0704+B*9523/9551             | B*0725+B*1503/9503      |               |
| B*070501/0706+B*0760           | B*0724+B*0753           |               |
| B*070501/0706+B*0813           | B*0734+B*0840           |               |
| B*070501/0706+B*0828           | B*0717+B*080101/0819N   |               |
| B*070501/0706+B*15G1           | B*0709+B*1530           |               |
| B*070501/0706+B*150102         | B*070503+B*15G1         |               |
| B*070501/0706+B*1540           | B*0753+B*9538           |               |
| B*070501/0706+B*18G1           | B*0709+B*1826           |               |
| B*070501/0706+B*1820           | B*0717+B*1826           |               |
| B*070501/0706+B*2741           | B*0709+B*2727           |               |
| B*070501/0706+B*35G1           | B*0709+B*350401         |               |
| B*070501/0706+B*350402         | B*070503+B*350401       |               |
| B*070501/0706+B*3513           | B*0754+B*3506           |               |
| B*070501/0706+B*3527           | B*0711+B*350401         |               |
| B*070501/0706+B*3529           | B*0732+B*3576           |               |
| B*070501/0706+B*3543/3567/3579 | B*0709+B*3544           |               |
| B*070501/0706+B*3551           | B*0709+B*3522           |               |
| B*070501/0706+B*3556           | B*0757+B*3506           |               |
| B*070501/0706+B*3564           | B*0709+B*350902         |               |
| B*070501/0706+B*3901G1         | B*0769+B*670101         |               |
| B*070501/0706+B*400106         | B*070503+B*40G1         |               |
| B*070501/0706+B*4003           | B*0709+B*400201/4056    |               |
| B*070501/0706+B*4020           | B*0709+B*4011           |               |
| B*070501/0706+B*4080           | B*4016+B*8101/8102/8103 |               |
| B*070501/0706+B*4092           | B*0753+B*4063           |               |
| B*070501/0706+B*4102           | B*4016+B*4201           |               |
| B*070501/0706+B*4208           | B*0753+B*420501         |               |
| B*070501/0706+B*4209           | B*0709+B*4202           |               |
| B*070501/0706+B*4804           | B*0753+B*480101/4809    |               |

|                               |                          |                   |
|-------------------------------|--------------------------|-------------------|
| B*070501/0706+B*4813          | B*0753+B*4810            |                   |
| B*070501/0706+B*51G1          | B*070503+B*510104        |                   |
| B*070501/0706+B*510201        | B*070503+B*510204        |                   |
| B*070501/0706+B*511302        | B*070503+B*511301        |                   |
| B*070501/0706+B*5304          | B*0736+B*3506            |                   |
| B*070501/0706+B*5414          | B*0709+B*5404            |                   |
| B*070501/0706+B*550101/550103 | B*0734+B*5509            |                   |
| B*070501/0706+B*550104        | B*070503+B*550101/550103 |                   |
| B*070501/0706+B*570101        | B*0709+B*570301          |                   |
| B*070501/0706+B*5704          | B*0728+B*5702            |                   |
| B*070501/0706+B*5719          | B*0709+B*5702            |                   |
| B*070501/0706+B*7801          | B*0732+B*5606            |                   |
| B*070501/0706+B*7803          | B*0769+B*5606            |                   |
| B*070501/0706+B*9528          | B*0717+B*1530            |                   |
| B*070501/0706+B*9535          | B*0711+B*1530            |                   |
| B*070503+B*1518               | B*0709+B*1509            |                   |
| B*070503+B*1590               | B*0752+B*1509            |                   |
| B*070503+B*35G1               | B*0709+B*350402          |                   |
| B*070503+B*3527               | B*0711+B*350402          |                   |
| B*070503+B*4052               | B*0709+B*400106          |                   |
| B*070503+B*44G1/B*4466        | B*0728+B*4462            |                   |
| B*070503+B*4417               | B*0709+B*4462            |                   |
| B*070503+B*5145               | B*0709+B*5106            |                   |
| B*0707+B*0835                 | B*0709+B*0812            |                   |
| B*0707+B*1301                 | B*071801+B*1311          |                   |
| B*0707+B*1562                 | B*0712+B*1503/9503       |                   |
| B*0707+B*1580                 | B*071802+B*1518          |                   |
| B*0707+B*1585                 | B*0712+B*15G1            |                   |
| B*0707+B*35G1                 | B*071801+B*356802        | B*071802+B*356801 |
| B*0707+B*350104               | B*071802+B*356802        |                   |
| B*0707+B*351402               | B*0712+B*3543/3567/3579  |                   |
| B*0707+B*3942                 | B*071802+B*3901G1        |                   |
| B*0707+B*4019                 | B*0736+B*4011            |                   |
| B*0707+B*4037                 | B*0757+B*4011            |                   |
| B*0707+B*4039                 | B*0731+B*4011            |                   |
| B*0707+B*4045                 | B*0748+B*4023            |                   |
| B*0707+B*4057                 | B*0771+B*4011            |                   |
| B*0707+B*4059                 | B*0712+B*4052            |                   |
| B*0707+B*4064                 | B*071801+B*4011          |                   |
| B*0707+B*44G1/B*4466          | B*071802+B*4441          |                   |
| B*0707+B*440301/440303        | B*071802+B*4465          |                   |
| B*0707+B*440302               | B*071801+B*4465          |                   |
| B*0707+B*4804                 | B*0733+B*480301          |                   |
| B*0707+B*5104                 | B*071801+B*5106          |                   |
| B*0707+B*5306                 | B*0712+B*5145            |                   |
| B*0707+B*5314                 | B*0736+B*356802          |                   |
| B*0707+B*580101/5811          | B*071801+B*5816          |                   |
| B*0707+B*9554                 | B*071802+B*15G1          |                   |
| B*0708+B*0734                 | B*0732+B*0743            |                   |
| B*0708+B*0753                 | B*0732+B*0733            |                   |
| B*0708+B*080101/0819N         | B*0732+B*0807            |                   |
| B*0708+B*0803                 | B*0738+B*080101/0819N    |                   |
| B*0708+B*0835                 | B*0732+B*0837            |                   |
| B*0708+B*1524                 | B*0738+B*1570            |                   |
| B*0708+B*1530                 | B*0732+B*1563            |                   |
| B*0708+B*350401               | B*0732+B*3534            |                   |
| B*0708+B*3506                 | B*0732+B*350301/3570     |                   |
| B*0708+B*3512                 | B*0732+B*3539            |                   |
| B*0708+B*352001               | B*0750+B*3529            |                   |
| B*0708+B*3528                 | B*0750+B*3569            | B*3529+B*4808     |
| B*0708+B*380101               | B*0738+B*3901G1          |                   |
| B*0708+B*3819                 | B*0738+B*3903            |                   |
| B*0708+B*3901G1               | B*0732+B*3915            |                   |
| B*0708+B*3914                 | B*0732+B*3929            |                   |
| B*0708+B*40G1                 | B*0732+B*4033            |                   |
| B*0708+B*400201/4056          | B*0732+B*4018            |                   |
| B*0708+B*400601               | B*0732+B*4044            |                   |
| B*0708+B*4016                 | B*0732+B*4032            |                   |
| B*0708+B*4019                 | B*0738+B*4050            |                   |
| B*0708+B*4038                 | B*0732+B*4052            |                   |
| B*0708+B*4080                 | B*0732+B*4031            |                   |
| B*0708+B*4089                 | B*0732+B*4009            |                   |
| B*0708+B*4414                 | B*0732+B*4451            |                   |
| B*0708+B*51G1                 | B*0738+B*7801            |                   |
| B*0708+B*5122                 | B*0738+B*7803            |                   |
| B*0708+B*5163                 | B*0732+B*5137            |                   |
| B*0708+B*520101/5207          | B*0732+B*5212            |                   |
| B*0708+B*530101               | B*0738+B*3529            |                   |
| B*0708+B*5401/5417            | B*0732+B*5416            |                   |
| B*0708+B*5532                 | B*0732+B*5523            |                   |
| B*0709+B*0714                 | B*0717+B*071802          |                   |
| B*0709+B*0806                 | B*0711+B*0820            |                   |
| B*0709+B*0828                 | B*0717+B*0837            |                   |
| B*0709+B*1524                 | B*0711+B*1587            |                   |
| B*0709+B*1577                 | B*0728+B*9554            |                   |
| B*0709+B*1590                 | B*0752+B*1518            |                   |
| B*0709+B*1820                 | B*0717+B*18G1            |                   |
| B*0709+B*3527                 | B*0711+B*35G1            |                   |
| B*0709+B*3539                 | B*071802+B*3551          | B*0726+B*3561     |
| B*0709+B*3556                 | B*0711+B*350301/3570     |                   |
| B*0709+B*4009                 | B*0717+B*4018            |                   |
| B*0709+B*4037                 | B*0711+B*400201/4056     |                   |
| B*0709+B*4042                 | B*0717+B*4033            |                   |
| B*0709+B*4063                 | B*0724+B*4038            |                   |
| B*0709+B*4079                 | B*0723+B*4038            |                   |
| B*0709+B*4087                 | B*0768+B*4038            |                   |
| B*0709+B*4089                 | B*0717+B*400201/4056     |                   |
| B*0709+B*4092                 | B*0760+B*4038            |                   |
| B*0709+B*44G1/B*4466          | B*0717+B*4451            | B*0728+B*4417     |
| B*0709+B*440301/440303        | B*0717+B*4445            | B*0728+B*4443     |
| B*0709+B*520102               | B*0711+B*5209            |                   |
| B*0709+B*520602               | B*0754+B*5163            |                   |
| B*0709+B*530101               | B*0711+B*5305            |                   |
| B*0709+B*5313                 | B*0711+B*5312            |                   |

|                          |                          |                   |
|--------------------------|--------------------------|-------------------|
| B*0709+B*5512            | B*0711+B*550201          |                   |
| B*0709+B*5704            | B*0728+B*5719            |                   |
| B*0709+B*7806            | B*0711+B*7805            |                   |
| B*0709+B*9528            | B*0717+B*15G1            |                   |
| B*0709+B*9535            | B*0711+B*15G1            |                   |
| B*0709+B*9556            | B*0717+B*1503/9503       |                   |
| B*0710+B*2729            | B*0727+B*2726            |                   |
| B*0711+B*080101/0819N    | B*0757+B*0835            |                   |
| B*0711+B*0807            | B*0757+B*0837            |                   |
| B*0711+B*0823            | B*0775+B*0835            |                   |
| B*0711+B*1510            | B*0757+B*1518            |                   |
| B*0711+B*1545            | B*0757+B*1507            |                   |
| B*0711+B*40G1            | B*0757+B*4038            |                   |
| B*0711+B*4018            | B*0757+B*4003            |                   |
| B*0711+B*4033            | B*0757+B*4052            |                   |
| B*0711+B*4089            | B*0717+B*4037            |                   |
| B*0711+B*51G1            | B*0757+B*5163            |                   |
| B*0711+B*9528            | B*0717+B*9535            |                   |
| B*0712+B*3512            | B*071802+B*350401        |                   |
| B*0712+B*3539            | B*071802+B*3534          |                   |
| B*0712+B*3559            | B*071802+B*3506          |                   |
| B*0712+B*3561            | B*071801+B*350803        | B*071802+B*350801 |
| B*0712+B*4018            | B*071801+B*4024          |                   |
| B*0712+B*9554            | B*071802+B*1585          |                   |
| B*0714+B*0837            | B*071802+B*0828          |                   |
| B*0714+B*15G1            | B*071802+B*9528          |                   |
| B*0714+B*1503/9503       | B*071802+B*9556          |                   |
| B*0714+B*18G1            | B*071802+B*1820          |                   |
| B*0714+B*3551            | B*0717+B*3539            |                   |
| B*0714+B*400201/4056     | B*071802+B*4089          |                   |
| B*0714+B*4018            | B*071802+B*4009          |                   |
| B*0714+B*4033            | B*071802+B*4042          |                   |
| B*0714+B*4445            | B*071802+B*440301/440303 |                   |
| B*0714+B*4451            | B*071802+B*44G1/B*4466   |                   |
| B*0716+B*15G1            | B*0750+B*9552            | B*151101+B*4808   |
| B*0716+B*1515            | B*0750+B*151101          |                   |
| B*0716+B*1543            | B*0727+B*9552            |                   |
| B*0716+B*3578            | B*0737+B*35G1            |                   |
| B*0716+B*40G1            | B*0750+B*4061            |                   |
| B*0716+B*5534            | B*4808+B*550201          |                   |
| B*0716+B*9539            | B*0737+B*1502            |                   |
| B*071801+B*140601        | B*071802+B*140602        |                   |
| B*071801+B*151101        | B*071802+B*151103        |                   |
| B*071801+B*152702        | B*071802+B*152701        |                   |
| B*071801+B*350104        | B*071802+B*35G1          |                   |
| B*071801+B*390601        | B*071802+B*390602        |                   |
| B*071801+B*40G1          | B*071802+B*400104        |                   |
| B*071801+B*4019          | B*0736+B*4064            |                   |
| B*071801+B*4037          | B*0757+B*4064            |                   |
| B*071801+B*4039          | B*0731+B*4064            |                   |
| B*071801+B*4057          | B*0771+B*4064            |                   |
| B*071801+B*440301/440303 | B*071802+B*440302        |                   |
| B*071801+B*442802        | B*071802+B*442801        |                   |
| B*071801+B*446402        | B*071802+B*446401        |                   |
| B*071801+B*480301        | B*071802+B*480302        |                   |
| B*071802+B*5314          | B*0736+B*350104          |                   |
| B*0720+B*15G1            | B*0724+B*1514            |                   |
| B*0720+B*1503/9503       | B*0724+B*9531            |                   |
| B*0720+B*1550            | B*0731+B*1514            |                   |
| B*0720+B*270503          | B*0724+B*2750            |                   |
| B*0720+B*35G1            | B*0724+B*3571            |                   |
| B*0720+B*350801          | B*0724+B*3545            |                   |
| B*0720+B*3593            | B*0731+B*3571            | B*0743+B*3545     |
| B*0720+B*4437            | B*0724+B*440301/440303   |                   |
| B*0720+B*4442            | B*0724+B*4405            |                   |
| B*0720+B*4504            | B*0724+B*4501/4507       |                   |
| B*0720+B*4508            | B*0731+B*4501/4507       |                   |
| B*0720+B*460101/4615N    | B*0724+B*4617            |                   |
| B*0720+B*5001            | B*0724+B*5002            |                   |
| B*0720+B*510201          | B*0724+B*5123            |                   |
| B*0720+B*570301          | B*0724+B*5707            |                   |
| B*0720+B*5802            | B*0724+B*5807            |                   |
| B*0720+B*9523/9551       | B*0724+B*1591            |                   |
| B*072201+B*1324          | B*072202+B*1322          |                   |
| B*072201+B*152703        | B*072202+B*152701        |                   |
| B*072201+B*350301/3570   | B*072202+B*350302        |                   |
| B*072201+B*351401        | B*072202+B*351402        |                   |
| B*072201+B*3901G1        | B*072202+B*390105        |                   |
| B*072201+B*401401        | B*072202+B*401402        |                   |
| B*072201+B*530101        | B*072202+B*530103        |                   |
| B*0723+B*1512/1519       | B*0764+B*9559            |                   |
| B*0723+B*1524            | B*0736+B*9559            |                   |
| B*0723+B*4063            | B*0724+B*4079            |                   |
| B*0723+B*4087            | B*0768+B*4079            |                   |
| B*0723+B*4092            | B*0760+B*4079            |                   |
| B*0723+B*9535            | B*0757+B*9559            |                   |
| B*0724+B*080101/0819N    | B*0731+B*0821            |                   |
| B*0724+B*0813            | B*0731+B*0825            |                   |
| B*0724+B*1544            | B*0731+B*1521            |                   |
| B*0724+B*1550            | B*0731+B*15G1            |                   |
| B*0724+B*1593            | B*0731+B*1518            |                   |
| B*0724+B*3593            | B*0731+B*35G1            | B*0743+B*350801   |
| B*0724+B*3934            | B*0743+B*3933            |                   |
| B*0724+B*3948            | B*0731+B*3932            |                   |
| B*0724+B*4087            | B*0768+B*4063            |                   |
| B*0724+B*4092            | B*0760+B*4063            |                   |
| B*0724+B*4208            | B*0760+B*420501          |                   |
| B*0724+B*4404            | B*0731+B*442802          |                   |
| B*0724+B*4508            | B*0731+B*4504            |                   |
| B*0724+B*4618            | B*0731+B*4611            |                   |
| B*0724+B*4804            | B*0760+B*480101/4809     |                   |
| B*0724+B*4813            | B*0760+B*4810            |                   |
| B*0724+B*5121            | B*0731+B*51G1            | B*0743+B*5129     |
| B*0724+B*5401/5417       | B*0731+B*5403            |                   |

|                             |                             |                        |
|-----------------------------|-----------------------------|------------------------|
| B*0724+B*550201             | B*0731+B*5601/5624          |                        |
| B*0724+B*5513               | B*0731+B*5622               |                        |
| B*0724+B*5610               | B*0731+B*5602               |                        |
| B*0724+B*5901               | B*0731+B*5904               |                        |
| B*0724+B*9521               | B*0731+B*1502               |                        |
| B*0725+B*0813               | B*0748+B*080101/0819N       |                        |
| B*0725+B*0825               | B*0748+B*0821               |                        |
| B*0725+B*1518               | B*0726+B*1551               |                        |
| B*0725+B*350301/3570        | B*0748+B*3538               |                        |
| B*0725+B*440301/440303      | B*0748+B*44G1/B*4466        |                        |
| B*0725+B*4413               | B*0748+B*4467               |                        |
| B*0725+B*4440               | B*0748+B*4444               |                        |
| B*0725+B*4443               | B*0748+B*4417               |                        |
| B*0725+B*4445               | B*0748+B*4451               |                        |
| B*0725+B*4446               | B*0748+B*4409               |                        |
| B*0725+B*4447               | B*0748+B*4420               |                        |
| B*0725+B*4457               | B*0748+B*4408               |                        |
| B*0725+B*446402             | B*0748+B*4416               |                        |
| B*0725+B*4465               | B*0748+B*4441               |                        |
| B*0725+B*5001               | B*0726+B*4504               |                        |
| B*0725+B*5002               | B*0726+B*4501/4507          |                        |
| B*0725+B*510901             | B*0748+B*5108               |                        |
| B*0725+B*5142               | B*0748+B*4406               |                        |
| B*0725+B*5155               | B*0766+B*5108               |                        |
| B*0725+B*5601/5624          | B*0748+B*5613               |                        |
| B*0726+B*1301               | B*0748+B*1320               |                        |
| B*0726+B*130201/B*130205    | B*0748+B*1316               |                        |
| B*0726+B*1306               | B*0743+B*1301               |                        |
| B*0726+B*15G1               | B*0755+B*1539               |                        |
| B*0726+B*1505               | B*0748+B*1539               |                        |
| B*0726+B*1550               | B*0743+B*9517               |                        |
| B*0726+B*1554               | B*0755+B*1503/9503          |                        |
| B*0726+B*1591               | B*0748+B*9531               |                        |
| B*0726+B*18G1               | B*0748+B*1815               |                        |
| B*0726+B*1811               | B*0743+B*1810               |                        |
| B*0726+B*1819               | B*0755+B*1815               |                        |
| B*0726+B*270502/270504/2713 | B*0748+B*2710               |                        |
| B*0726+B*2708               | B*0748+B*2740               |                        |
| B*0726+B*2715               | B*0743+B*270401             |                        |
| B*0726+B*35G1               | B*0748+B*3511               |                        |
| B*0726+B*3505               | B*0748+B*3558               |                        |
| B*0726+B*351401             | B*0755+B*3511               |                        |
| B*0726+B*3524               | B*0748+B*3521               |                        |
| B*0726+B*3562               | B*0748+B*351401             | B*0755+B*35G1          |
| B*0726+B*3593               | B*0743+B*3515               |                        |
| B*0726+B*370101             | B*0748+B*3713               |                        |
| B*0726+B*3901G1             | B*0743+B*3947               | B*0748+B*3935          |
| B*0726+B*3908               | B*4808+B*670101             |                        |
| B*0726+B*4039               | B*0734+B*4018               | B*0743+B*400201/4056   |
| B*0726+B*460101/4615N       | B*0755+B*4608               |                        |
| B*0726+B*4609               | B*0748+B*460101/4615N       |                        |
| B*0726+B*480101/4809        | B*0748+B*4815               |                        |
| B*0726+B*4819               | B*0755+B*480101/4809        |                        |
| B*0726+B*5105               | B*0736+B*7804               |                        |
| B*0726+B*510901             | B*0748+B*51G1               |                        |
| B*0726+B*510902             | B*0748+B*510102             |                        |
| B*0726+B*5121               | B*0743+B*5116               |                        |
| B*0726+B*5131               | B*0748+B*5116               |                        |
| B*0726+B*5155               | B*0766+B*51G1               |                        |
| B*0726+B*5210               | B*0748+B*520101/5207        |                        |
| B*0726+B*530101             | B*0748+B*5308               |                        |
| B*0726+B*550101/550103      | B*0743+B*5524               |                        |
| B*0726+B*550201             | B*0743+B*5522               | B*0748+B*550101/550103 |
| B*0726+B*5521               | B*0755+B*550101/550103      |                        |
| B*0726+B*5522               | B*0748+B*5524               |                        |
| B*0726+B*580101/5811        | B*0748+B*5819               |                        |
| B*0726+B*5802               | B*0748+B*5806               |                        |
| B*0726+B*9517               | B*0755+B*1540               |                        |
| B*0726+B*9523/9551          | B*0748+B*1503/9503          |                        |
| B*0726+B*9544               | B*0755+B*1502               |                        |
| B*0727+B*15G1               | B*0750+B*1543               |                        |
| B*0727+B*2708               | B*0750+B*270502/270504/2713 |                        |
| B*0727+B*2712               | B*0750+B*2716               |                        |
| B*0727+B*2733               | B*0750+B*2707               |                        |
| B*0727+B*2740               | B*0750+B*2710               |                        |
| B*0727+B*35G1               | B*0750+B*5303               |                        |
| B*0727+B*3510               | B*4808+B*5303               |                        |
| B*0727+B*3711               | B*0750+B*370101             |                        |
| B*0727+B*3905               | B*0750+B*3817               |                        |
| B*0727+B*4702               | B*0750+B*470101             |                        |
| B*0729+B*0826               | B*0772+B*080101/0819N       |                        |
| B*0731+B*130201/B*130205    | B*0743+B*1318               |                        |
| B*0731+B*140201             | B*0743+B*1403               |                        |
| B*0731+B*1510               | B*0743+B*1599               |                        |
| B*0731+B*1539               | B*0743+B*1565               |                        |
| B*0731+B*18G1               | B*0743+B*1813               |                        |
| B*0731+B*1815               | B*0743+B*1830               |                        |
| B*0731+B*270502/270504/2713 | B*0743+B*2745               |                        |
| B*0731+B*350104             | B*0743+B*350803             |                        |
| B*0731+B*350902             | B*0743+B*3518               |                        |
| B*0731+B*3510               | B*0743+B*3580               |                        |
| B*0731+B*3905               | B*0743+B*3911               |                        |
| B*0731+B*4019               | B*0736+B*4039               |                        |
| B*0731+B*4037               | B*0757+B*4039               |                        |
| B*0731+B*4057               | B*0771+B*4039               |                        |
| B*0731+B*440301/440303      | B*0743+B*442802             |                        |
| B*0731+B*440302             | B*0743+B*442801             |                        |
| B*0731+B*5305               | B*0743+B*5316               |                        |
| B*0731+B*5313               | B*0743+B*5311               |                        |
| B*0731+B*5401/5417          | B*0743+B*5410               |                        |
| B*0731+B*570101             | B*0743+B*5719               |                        |
| B*0731+B*570301             | B*0743+B*5702               |                        |
| B*0732+B*1518               | B*0769+B*1529               |                        |
| B*0732+B*1566               | B*0769+B*1556               |                        |

|                         |                             |
|-------------------------|-----------------------------|
| B*0732+B*1833           | B*0769+B*1807               |
| B*0732+B*3582           | B*0769+B*35G1               |
| B*0732+B*3585           | B*0769+B*350301/3570        |
| B*0732+B*5122           | B*0769+B*51G1               |
| B*0732+B*7803           | B*0769+B*7801               |
| B*0733+B*0734           | B*0743+B*0753               |
| B*0733+B*080101/0819N   | B*0753+B*0807               |
| B*0733+B*0835           | B*0753+B*0837               |
| B*0733+B*15G1           | B*0760+B*9517               |
| B*0733+B*1530           | B*0753+B*1563               |
| B*0733+B*1539           | B*0760+B*1540               |
| B*0733+B*2738           | B*0760+B*270502/270504/2713 |
| B*0733+B*35G1           | B*0760+B*3515               |
| B*0733+B*350301/3570    | B*0760+B*3533               |
| B*0733+B*350401         | B*0753+B*3534               |
| B*0733+B*3506           | B*0753+B*350301/3570        |
| B*0733+B*3512           | B*0753+B*3539               |
| B*0733+B*3543/3567/3579 | B*0760+B*3586               |
| B*0733+B*3901G1         | B*0753+B*3915               |
| B*0733+B*3914           | B*0753+B*3929               |
| B*0733+B*40G1           | B*0753+B*4033               |
| B*0733+B*400201/4056    | B*0753+B*4018               |
| B*0733+B*400601         | B*0753+B*4044               |
| B*0733+B*4016           | B*0753+B*4032               |
| B*0733+B*4038           | B*0753+B*4052               |
| B*0733+B*4080           | B*0753+B*4031               |
| B*0733+B*4089           | B*0753+B*4009               |
| B*0733+B*44G1/B*4466    | B*0760+B*4421               |
| B*0733+B*4414           | B*0753+B*4451               |
| B*0733+B*4437           | B*0760+B*446402             |
| B*0733+B*51G1           | B*0760+B*5116               |
| B*0733+B*510201         | B*0760+B*5134               |
| B*0733+B*510901         | B*0760+B*5131               |
| B*0733+B*5163           | B*0753+B*5137               |
| B*0733+B*520101/5207    | B*0753+B*5212               |
| B*0733+B*5401/5417      | B*0753+B*5416               |
| B*0733+B*5532           | B*0753+B*5523               |
| B*0733+B*5601/5624      | B*0760+B*5522               |
| B*0734+B*0807           | B*0743+B*080101/0819N       |
| B*0734+B*0837           | B*0743+B*0835               |
| B*0734+B*1563           | B*0743+B*1530               |
| B*0734+B*350301/3570    | B*0743+B*3506               |
| B*0734+B*3534           | B*0743+B*350401             |
| B*0734+B*3539           | B*0743+B*3512               |
| B*0734+B*3915           | B*0743+B*3901G1             |
| B*0734+B*3929           | B*0743+B*3914               |
| B*0734+B*4009           | B*0743+B*4089               |
| B*0734+B*4031           | B*0743+B*4080               |
| B*0734+B*4032           | B*0743+B*4016               |
| B*0734+B*4033           | B*0743+B*40G1               |
| B*0734+B*4044           | B*0743+B*400601             |
| B*0734+B*4052           | B*0743+B*4038               |
| B*0734+B*4451           | B*0743+B*4414               |
| B*0734+B*5137           | B*0743+B*5163               |
| B*0734+B*5212           | B*0743+B*520101/5207        |
| B*0734+B*5416           | B*0743+B*5401/5417          |
| B*0734+B*5523           | B*0743+B*5532               |
| B*0734+B*9524           | B*1593+B*8101/8102/8103     |
| B*0736+B*1508           | B*0738+B*1576               |
| B*0736+B*1512/1519      | B*0764+B*1524               |
| B*0736+B*1525           | B*0754+B*1513               |
| B*0736+B*1556           | B*0738+B*9501               |
| B*0736+B*350801         | B*0757+B*5316               |
| B*0736+B*3510           | B*0754+B*530101             |
| B*0736+B*3513           | B*0754+B*5304               |
| B*0736+B*3527           | B*0757+B*530101             |
| B*0736+B*3556           | B*0757+B*5304               |
| B*0736+B*3922           | B*0754+B*3814               |
| B*0736+B*4037           | B*0757+B*4019               |
| B*0736+B*4057           | B*0771+B*4019               |
| B*0736+B*4505           | B*0752+B*4418               |
| B*0736+B*480101/4809    | B*0757+B*4818               |
| B*0736+B*4806           | B*0738+B*8101/8102/8103     |
| B*0736+B*7806           | B*0757+B*520101/5207        |
| B*0736+B*9508           | B*0745+B*1523               |
| B*0736+B*9535           | B*0757+B*1524               |
| B*0737+B*5512           | B*0757+B*5623               |
| B*0737+B*5901           | B*0738+B*5623               |
| B*0738+B*352001         | B*0750+B*530101             |
| B*0738+B*3528           | B*4808+B*530101             |
| B*0738+B*3572           | B*0750+B*5314               |
| B*0738+B*400201/4056    | B*0750+B*4013               |
| B*0738+B*5512           | B*0757+B*5901               |
| B*0738+B*7805           | B*4808+B*510102             |
| B*0743+B*1552           | B*0748+B*1593               |
| B*0743+B*5131           | B*0748+B*5121               |
| B*0748+B*15G1           | B*0755+B*1505               |
| B*0748+B*1504           | B*0755+B*9555               |
| B*0748+B*1554           | B*0755+B*9523/9551          |
| B*0748+B*1819           | B*0755+B*18G1               |
| B*0748+B*3918           | B*0755+B*390105             |
| B*0748+B*3936           | B*0755+B*3930               |
| B*0748+B*5155           | B*0766+B*510901             |
| B*0748+B*5521           | B*0755+B*550201             |
| B*0750+B*15G1           | B*1515+B*4808               |
| B*0750+B*1503/9503      | B*1564+B*4808               |
| B*0750+B*1525           | B*1502+B*4808               |
| B*0750+B*1536           | B*1589+B*4808               |
| B*0750+B*1556           | B*1508+B*4808               |
| B*0750+B*1812           | B*18G1+B*4808               |
| B*0750+B*3510           | B*35G1+B*4808               |
| B*0750+B*3513           | B*350301/3570+B*4808        |
| B*0750+B*3516           | B*3517+B*4808               |
| B*0750+B*3528           | B*352001+B*4808             |

B\*0760+B\*5208

|                                     |                        |                      |               |
|-------------------------------------|------------------------|----------------------|---------------|
| B*0750+B*3580                       | B*350801+B*4808        |                      |               |
| B*0750+B*390201                     | B*3939+B*4808          |                      |               |
| B*0750+B*3922                       | B*3901G1+B*4808        |                      |               |
| B*0750+B*40G1                       | B*4025+B*4808          |                      |               |
| B*0750+B*44G1/B*4466                | B*4412+B*4808          |                      |               |
| B*0750+B*520102                     | B*4808+B*5107          |                      |               |
| B*0750+B*520602                     | B*4808+B*51G1          |                      |               |
| B*0754+B*15G1                       | B*4808+B*9501          |                      |               |
| B*0754+B*3527                       | B*0757+B*3510          | B*0775+B*3569        |               |
| B*0754+B*3556                       | B*0757+B*3513          |                      |               |
| B*0754+B*3562                       | B*0755+B*3580          |                      |               |
| B*0754+B*4501/4507                  | B*4506+B*4808          |                      |               |
| B*0757+B*0823                       | B*0775+B*080101/0819N  |                      |               |
| B*0757+B*1503/9503                  | B*0775+B*1561          |                      |               |
| B*0757+B*1512/1519                  | B*0764+B*9535          |                      |               |
| B*0757+B*18G1                       | B*0775+B*1803          |                      |               |
| B*0757+B*2744                       | B*0775+B*2708          |                      |               |
| B*0757+B*380101                     | B*0775+B*3814          |                      |               |
| B*0757+B*3905                       | B*0775+B*3901G1        |                      |               |
| B*0757+B*391301                     | B*0775+B*390202        |                      |               |
| B*0757+B*3937                       | B*0775+B*3903          |                      |               |
| B*0757+B*40G1                       | B*0775+B*4043          |                      |               |
| B*0757+B*4057                       | B*0771+B*4037          |                      |               |
| B*0757+B*5108                       | B*0775+B*5120          |                      |               |
| B*0757+B*5531                       | B*0775+B*550101/550103 |                      |               |
| B*0757+B*780202                     | B*0775+B*7801          |                      |               |
| B*0760+B*4087                       | B*0768+B*4092          |                      |               |
| B*080101/0819N+B*0825               | B*0813+B*0821          |                      |               |
| B*080101/0819N+B*0837               | B*0807+B*0835          |                      |               |
| B*080101/0819N+B*130201/B*130205    | B*0802+B*1309          |                      |               |
| B*080101/0819N+B*140601             | B*0812+B*1405          |                      |               |
| B*080101/0819N+B*15G1               | B*0804+B*1556          | B*0812+B*1507        | B*0821+B*1550 |
|                                     | B*0823+B*1570          | B*0835+B*1563        | B*0837+B*1530 |
| B*080101/0819N+B*1502               | B*0821+B*9521          |                      |               |
| B*080101/0819N+B*1503/9503          | B*0823+B*1561          |                      |               |
| B*080101/0819N+B*1504               | B*0809+B*1507          |                      |               |
| B*080101/0819N+B*1507               | B*0835+B*1545          |                      |               |
| B*080101/0819N+B*1515               | B*0804+B*1508          |                      |               |
| B*080101/0819N+B*1518               | B*0821+B*1593          | B*0835+B*1510        |               |
| B*080101/0819N+B*1521               | B*0821+B*1544          |                      |               |
| B*080101/0819N+B*1524               | B*0803+B*1570          |                      |               |
| B*080101/0819N+B*1531               | B*0812+B*1555          |                      |               |
| B*080101/0819N+B*1536               | B*0802+B*1525          |                      |               |
| B*080101/0819N+B*1557               | B*0815+B*9535          |                      |               |
| B*080101/0819N+B*1563               | B*0807+B*1530          | B*0812+B*1545        |               |
| B*080101/0819N+B*1564               | B*0804+B*1529          |                      |               |
| B*080101/0819N+B*1589               | B*0802+B*1502          |                      |               |
| B*080101/0819N+B*18G1               | B*0804+B*1807          | B*0812+B*1814        | B*0823+B*1803 |
|                                     | B*0837+B*1826          |                      |               |
| B*080101/0819N+B*1806               | B*0815+B*18G1          |                      |               |
| B*080101/0819N+B*1809               | B*0802+B*18G1          |                      |               |
| B*080101/0819N+B*1820               | B*0828+B*1826          |                      |               |
| B*080101/0819N+B*2701               | B*0802+B*2744          |                      |               |
| B*080101/0819N+B*270502/270504/2713 | B*0814+B*2727          |                      |               |
| B*080101/0819N+B*2741               | B*0837+B*2727          |                      |               |
| B*080101/0819N+B*2744               | B*0823+B*2708          |                      |               |
| B*080101/0819N+B*35G1               | B*0821+B*3593          | B*0823+B*3529        | B*0832+B*3549 |
|                                     | B*0835+B*3534          | B*0837+B*350401      |               |
| B*080101/0819N+B*350104             | B*0812+B*3530          |                      |               |
| B*080101/0819N+B*350301/3570        | B*0807+B*3506          | B*0813+B*3538        |               |
| B*080101/0819N+B*350902             | B*080102+B*350901      |                      |               |
| B*080101/0819N+B*3510               | B*0823+B*3569          |                      |               |
| B*080101/0819N+B*352001             | B*0804+B*35G1          |                      |               |
| B*080101/0819N+B*3528               | B*0804+B*3510          |                      |               |
| B*080101/0819N+B*3534               | B*0807+B*350401        |                      |               |
| B*080101/0819N+B*3537               | B*0809+B*3505          |                      |               |
| B*080101/0819N+B*3539               | B*0807+B*3512          |                      |               |
| B*080101/0819N+B*3543/3567/3579     | B*0837+B*3544          |                      |               |
| B*080101/0819N+B*3551               | B*0837+B*3522          |                      |               |
| B*080101/0819N+B*3564               | B*0837+B*350902        |                      |               |
| B*080101/0819N+B*356802             | B*0812+B*3505          |                      |               |
| B*080101/0819N+B*3572               | B*0804+B*3505          |                      |               |
| B*080101/0819N+B*3574               | B*0815+B*350301/3570   |                      |               |
| B*080101/0819N+B*3595               | B*0804+B*350201        |                      |               |
| B*080101/0819N+B*3710               | B*0802+B*3711          |                      |               |
| B*080101/0819N+B*380101             | B*0803+B*3901G1        | B*0812+B*3819        | B*0823+B*3814 |
| B*080101/0819N+B*380201/3818        | B*0802+B*3905          |                      |               |
| B*080101/0819N+B*3819               | B*0803+B*3903          |                      |               |
| B*080101/0819N+B*3901G1             | B*0812+B*3903          |                      |               |
| B*080101/0819N+B*3905               | B*0812+B*3937          | B*0823+B*3901G1      |               |
| B*080101/0819N+B*390602             | B*0809+B*3903          |                      |               |
| B*080101/0819N+B*391301             | B*0823+B*390202        |                      |               |
| B*080101/0819N+B*3915               | B*0807+B*3901G1        |                      |               |
| B*080101/0819N+B*3927               | B*0815+B*3901G1        |                      |               |
| B*080101/0819N+B*3929               | B*0807+B*3914          |                      |               |
| B*080101/0819N+B*3932               | B*0821+B*3948          |                      |               |
| B*080101/0819N+B*3937               | B*0823+B*3903          |                      |               |
| B*080101/0819N+B*40G1               | B*0804+B*4007          | B*0812+B*4080        | B*0823+B*4043 |
| B*080101/0819N+B*400105             | B*080104+B*40G1        |                      |               |
| B*080101/0819N+B*400201/4056        | B*0823+B*4050          |                      |               |
| B*080101/0819N+B*4003               | B*0835+B*4018          | B*0837+B*400201/4056 |               |
| B*080101/0819N+B*400601             | B*0809+B*400201/4056   |                      |               |
| B*080101/0819N+B*4009               | B*0807+B*4089          |                      |               |
| B*080101/0819N+B*4011               | B*0812+B*400201/4056   |                      |               |
| B*080101/0819N+B*401403             | B*080102+B*401401      |                      |               |
| B*080101/0819N+B*4018               | B*0807+B*400201/4056   |                      |               |
| B*080101/0819N+B*4019               | B*0803+B*4050          | B*0804+B*4013        |               |
| B*080101/0819N+B*4020               | B*0812+B*4003          | B*0837+B*4011        |               |
| B*080101/0819N+B*4031               | B*0807+B*4080          |                      |               |
| B*080101/0819N+B*4032               | B*0807+B*4016          |                      |               |
| B*080101/0819N+B*4033               | B*0807+B*40G1          | B*0812+B*4031        |               |
| B*080101/0819N+B*4037               | B*0817+B*4008          |                      |               |
| B*080101/0819N+B*4038               | B*0835+B*40G1          |                      |               |
| B*080101/0819N+B*4044               | B*0807+B*400601        | B*0809+B*4018        |               |

|                                |                        |                      |               |
|--------------------------------|------------------------|----------------------|---------------|
| B*080101/0819N+B*4047          | B*0802+B*40G1          |                      |               |
| B*080101/0819N+B*4052          | B*0807+B*4038          | B*0835+B*4033        | B*0837+B*40G1 |
| B*080101/0819N+B*407202        | B*080102+B*407201      |                      |               |
| B*080101/0819N+B*4073          | B*0815+B*40G1          |                      |               |
| B*080101/0819N+B*4084          | B*0824+B*40G1          |                      |               |
| B*080101/0819N+B*4096          | B*0802+B*400601        |                      |               |
| B*080101/0819N+B*410302        | B*0812+B*4102          |                      |               |
| B*080101/0819N+B*4204          | B*0809+B*4201          |                      |               |
| B*080101/0819N+B*4209          | B*0837+B*4202          |                      |               |
| B*080101/0819N+B*44G1/B*4466   | B*0802+B*4409          |                      |               |
| B*080101/0819N+B*440301/440303 | B*0802+B*4446          | B*0813+B*44G1/B*4466 |               |
| B*080101/0819N+B*4413          | B*0813+B*4467          |                      |               |
| B*080101/0819N+B*442802        | B*0821+B*4404          |                      |               |
| B*080101/0819N+B*4440          | B*0813+B*4444          |                      |               |
| B*080101/0819N+B*4443          | B*0813+B*4417          |                      |               |
| B*080101/0819N+B*4445          | B*0813+B*4451          |                      |               |
| B*080101/0819N+B*4446          | B*0813+B*4409          |                      |               |
| B*080101/0819N+B*4447          | B*0809+B*4454          | B*0813+B*4420        |               |
| B*080101/0819N+B*4451          | B*0807+B*4414          |                      |               |
| B*080101/0819N+B*4457          | B*0813+B*4408          |                      |               |
| B*080101/0819N+B*446402        | B*0813+B*4416          |                      |               |
| B*080101/0819N+B*4465          | B*0812+B*4454          | B*0813+B*4441        |               |
| B*080101/0819N+B*4504          | B*0821+B*4508          |                      |               |
| B*080101/0819N+B*460101/4615N  | B*0812+B*4612          |                      |               |
| B*080101/0819N+B*4611          | B*0821+B*4618          |                      |               |
| B*080101/0819N+B*480301        | B*0812+B*480101/4809   |                      |               |
| B*080101/0819N+B*4902          | B*0802+B*5001          |                      |               |
| B*080101/0819N+B*51G1          | B*0803+B*7801          | B*0809+B*5164        | B*0821+B*5121 |
| B*080101/0819N+B*510201        | B*0825+B*5136          |                      |               |
| B*080101/0819N+B*5106          | B*0812+B*5164          |                      |               |
| B*080101/0819N+B*5107          | B*0804+B*51G1          |                      |               |
| B*080101/0819N+B*5108          | B*0823+B*5120          |                      |               |
| B*080101/0819N+B*510901        | B*0813+B*5108          |                      |               |
| B*080101/0819N+B*5122          | B*0803+B*7803          |                      |               |
| B*080101/0819N+B*512402        | B*080102+B*512401      |                      |               |
| B*080101/0819N+B*5137          | B*0807+B*5163          | B*0837+B*51G1        |               |
| B*080101/0819N+B*5142          | B*0813+B*4406          |                      |               |
| B*080101/0819N+B*5163          | B*0835+B*51G1          |                      |               |
| B*080101/0819N+B*520102        | B*0804+B*520602        |                      |               |
| B*080101/0819N+B*520104        | B*080104+B*520102      |                      |               |
| B*080101/0819N+B*520602        | B*0838+B*510103        |                      |               |
| B*080101/0819N+B*5212          | B*0807+B*520101/5207   |                      |               |
| B*080101/0819N+B*530101        | B*0803+B*3529          |                      |               |
| B*080101/0819N+B*5309          | B*0802+B*352001        | B*0804+B*5313        |               |
| B*080101/0819N+B*5311          | B*0802+B*350801        |                      |               |
| B*080101/0819N+B*5313          | B*0802+B*35G1          |                      |               |
| B*080101/0819N+B*5403          | B*0821+B*5401/5417     |                      |               |
| B*080101/0819N+B*5414          | B*0837+B*5404          |                      |               |
| B*080101/0819N+B*5416          | B*0807+B*5401/5417     |                      |               |
| B*080101/0819N+B*5503          | B*0815+B*550101/550103 |                      |               |
| B*080101/0819N+B*5523          | B*0807+B*5532          |                      |               |
| B*080101/0819N+B*5531          | B*0823+B*550101/550103 |                      |               |
| B*080101/0819N+B*5601/5624     | B*0813+B*5613          | B*0821+B*550201      |               |
| B*080101/0819N+B*5602          | B*0821+B*5610          |                      |               |
| B*080101/0819N+B*5607          | B*0802+B*5601/5624     |                      |               |
| B*080101/0819N+B*5622          | B*0821+B*5513          |                      |               |
| B*080101/0819N+B*570101        | B*0837+B*570301        |                      |               |
| B*080101/0819N+B*5719          | B*0837+B*5702          |                      |               |
| B*080101/0819N+B*5816          | B*0812+B*5818          |                      |               |
| B*080101/0819N+B*5904          | B*0821+B*5901          |                      |               |
| B*080101/0819N+B*780202        | B*0823+B*7801          |                      |               |
| B*080101/0819N+B*7806          | B*0817+B*780201        |                      |               |
| B*080101/0819N+B*9528          | B*0828+B*1530          |                      |               |
| B*080101/0819N+B*9535          | B*0817+B*1508          |                      |               |
| B*080104+B*4033                | B*0807+B*400105        |                      |               |
| B*080104+B*4038                | B*0835+B*400105        |                      |               |
| B*080104+B*4047                | B*0802+B*400105        |                      |               |
| B*080104+B*4052                | B*0837+B*400105        |                      |               |
| B*080104+B*4073                | B*0815+B*400105        |                      |               |
| B*080104+B*4084                | B*0824+B*400105        |                      |               |
| B*0802+B*1806                  | B*0815+B*1809          |                      |               |
| B*0802+B*3528                  | B*0817+B*5312          |                      |               |
| B*0802+B*4033                  | B*0807+B*4047          |                      |               |
| B*0802+B*4038                  | B*0835+B*4047          |                      |               |
| B*0802+B*4044                  | B*0807+B*4096          |                      |               |
| B*0802+B*4052                  | B*0837+B*4047          |                      |               |
| B*0802+B*4073                  | B*0815+B*4047          |                      |               |
| B*0802+B*4084                  | B*0824+B*4047          |                      |               |
| B*0803+B*15G1                  | B*0823+B*1524          |                      |               |
| B*0803+B*1502                  | B*0823+B*1513          |                      |               |
| B*0803+B*1518                  | B*0823+B*1523          |                      |               |
| B*0803+B*2708                  | B*0823+B*2702          |                      |               |
| B*0803+B*35G1                  | B*0823+B*530101        |                      |               |
| B*0803+B*350301/3570           | B*0823+B*5304          |                      |               |
| B*0803+B*3505                  | B*0823+B*5314          |                      |               |
| B*0803+B*3511                  | B*0823+B*5308          |                      |               |
| B*0803+B*3524                  | B*0823+B*5302          |                      |               |
| B*0803+B*3905                  | B*0823+B*380101        |                      |               |
| B*0803+B*390602                | B*0809+B*3819          |                      |               |
| B*0803+B*3915                  | B*0807+B*380101        |                      |               |
| B*0803+B*3927                  | B*0815+B*380101        |                      |               |
| B*0803+B*3937                  | B*0823+B*3819          |                      |               |
| B*0803+B*400201/4056           | B*0823+B*4019          |                      |               |
| B*0803+B*4446                  | B*0823+B*4450          |                      |               |
| B*0803+B*4501/4507             | B*0823+B*4418          |                      |               |
| B*0803+B*5001                  | B*0823+B*490101        |                      |               |
| B*0803+B*5401/5417             | B*0823+B*5412          |                      |               |
| B*0803+B*560502                | B*0823+B*5621          |                      |               |
| B*0803+B*5712                  | B*0823+B*5702          |                      |               |
| B*0803+B*780201                | B*0823+B*510102        |                      |               |
| B*0803+B*780202                | B*0823+B*51G1          |                      |               |
| B*0803+B*7805                  | B*0823+B*520101/5207   |                      |               |
| B*0804+B*3537                  | B*0809+B*3572          |                      |               |
| B*0804+B*356802                | B*0812+B*3572          |                      |               |

|                        |                             |                 |
|------------------------|-----------------------------|-----------------|
| B*0804+B*5137          | B*0837+B*5107               |                 |
| B*0804+B*5163          | B*0835+B*5107               |                 |
| B*0804+B*9535          | B*0817+B*1515               |                 |
| B*0806+B*15G1          | B*0820+B*9535               |                 |
| B*0806+B*1587          | B*0820+B*1524               |                 |
| B*0806+B*35G1          | B*0820+B*3527               |                 |
| B*0806+B*350301/3570   | B*0820+B*3556               |                 |
| B*0806+B*400201/4056   | B*0820+B*4037               |                 |
| B*0806+B*5209          | B*0820+B*520102             |                 |
| B*0806+B*5305          | B*0820+B*530101             |                 |
| B*0806+B*5312          | B*0820+B*5313               |                 |
| B*0806+B*550201        | B*0820+B*5512               |                 |
| B*0806+B*7805          | B*0820+B*7806               |                 |
| B*0807+B*15G1          | B*0837+B*1563               |                 |
| B*0807+B*1507          | B*0837+B*1545               |                 |
| B*0807+B*1518          | B*0837+B*1510               |                 |
| B*0807+B*35G1          | B*0837+B*3534               |                 |
| B*0807+B*3905          | B*0823+B*3915               |                 |
| B*0807+B*3927          | B*0815+B*3915               |                 |
| B*0807+B*4003          | B*0837+B*4018               |                 |
| B*0807+B*4011          | B*0812+B*4018               |                 |
| B*0807+B*4052          | B*0837+B*4033               |                 |
| B*0807+B*4073          | B*0815+B*4033               |                 |
| B*0807+B*4084          | B*0824+B*4033               |                 |
| B*0807+B*5403          | B*0821+B*5416               |                 |
| B*0807+B*9528          | B*0828+B*1563               |                 |
| B*0809+B*1311          | B*0812+B*130201/B*130205    |                 |
| B*0809+B*15G1          | B*0812+B*1504               |                 |
| B*0809+B*1505          | B*0812+B*9555               |                 |
| B*0809+B*356802        | B*0812+B*3537               |                 |
| B*0809+B*3901G1        | B*0812+B*390602             |                 |
| B*0809+B*3930          | B*0812+B*3934               |                 |
| B*0809+B*3937          | B*0823+B*390602             |                 |
| B*0809+B*4003          | B*0835+B*4044               | B*0837+B*400601 |
| B*0809+B*4011          | B*0812+B*400601             |                 |
| B*0809+B*4441          | B*0812+B*4420               |                 |
| B*0809+B*4465          | B*0812+B*4447               |                 |
| B*0809+B*5106          | B*0812+B*51G1               |                 |
| B*0809+B*5159          | B*0812+B*510201             |                 |
| B*0809+B*5602          | B*0812+B*5601/5624          |                 |
| B*0809+B*5610          | B*0812+B*550201             |                 |
| B*0812+B*3592          | B*0816+B*35G1               |                 |
| B*0813+B*15G1          | B*0825+B*1550               |                 |
| B*0813+B*1502          | B*0825+B*9521               |                 |
| B*0813+B*1518          | B*0825+B*1593               |                 |
| B*0813+B*1521          | B*0825+B*1544               |                 |
| B*0813+B*35G1          | B*0825+B*3593               |                 |
| B*0813+B*3932          | B*0825+B*3948               |                 |
| B*0813+B*442802        | B*0825+B*4404               |                 |
| B*0813+B*4504          | B*0825+B*4508               |                 |
| B*0813+B*4611          | B*0825+B*4618               |                 |
| B*0813+B*51G1          | B*0825+B*5121               |                 |
| B*0813+B*5403          | B*0825+B*5401/5417          |                 |
| B*0813+B*5509          | B*0840+B*550101/550103      |                 |
| B*0813+B*5601/5624     | B*0825+B*550201             |                 |
| B*0813+B*5602          | B*0825+B*5610               |                 |
| B*0813+B*5622          | B*0825+B*5513               |                 |
| B*0813+B*5904          | B*0825+B*5901               |                 |
| B*0814+B*2741          | B*0837+B*270502/270504/2713 |                 |
| B*0815+B*3905          | B*0823+B*3927               |                 |
| B*0815+B*4038          | B*0835+B*4073               |                 |
| B*0815+B*4052          | B*0837+B*4073               |                 |
| B*0815+B*4084          | B*0824+B*4073               |                 |
| B*0815+B*5531          | B*0823+B*5503               |                 |
| B*0821+B*350301/3570   | B*0825+B*3538               |                 |
| B*0821+B*440301/440303 | B*0825+B*44G1/B*4466        |                 |
| B*0821+B*4413          | B*0825+B*4467               |                 |
| B*0821+B*4440          | B*0825+B*4444               |                 |
| B*0821+B*4443          | B*0825+B*4417               |                 |
| B*0821+B*4445          | B*0825+B*4451               |                 |
| B*0821+B*4446          | B*0825+B*4409               |                 |
| B*0821+B*4447          | B*0825+B*4420               |                 |
| B*0821+B*4457          | B*0825+B*4408               |                 |
| B*0821+B*446402        | B*0825+B*4416               |                 |
| B*0821+B*4465          | B*0825+B*4441               |                 |
| B*0821+B*510901        | B*0825+B*5108               |                 |
| B*0821+B*5142          | B*0825+B*4406               |                 |
| B*0821+B*5523          | B*0837+B*5615               |                 |
| B*0821+B*5532          | B*0835+B*5615               |                 |
| B*0821+B*5601/5624     | B*0825+B*5613               |                 |
| B*0821+B*5623          | B*0823+B*5617               |                 |
| B*0824+B*4038          | B*0835+B*4084               |                 |
| B*0824+B*4052          | B*0837+B*4084               |                 |
| B*0825+B*1547          | B*0840+B*1503/9503          |                 |
| B*0825+B*2745          | B*0840+B*2738               |                 |
| B*0828+B*15G1          | B*0837+B*9528               |                 |
| B*0828+B*1503/9503     | B*0837+B*9556               |                 |
| B*0828+B*18G1          | B*0837+B*1820               |                 |
| B*0828+B*40G1          | B*0835+B*4042               |                 |
| B*0828+B*400201/4056   | B*0835+B*4009               | B*0837+B*4089   |
| B*0828+B*4018          | B*0837+B*4009               |                 |
| B*0828+B*4033          | B*0837+B*4042               |                 |
| B*0828+B*4414          | B*0835+B*44G1/B*4466        |                 |
| B*0828+B*4445          | B*0837+B*440301/440303      |                 |
| B*0828+B*4451          | B*0837+B*44G1/B*4466        |                 |
| B*0835+B*350301/3570   | B*0837+B*3506               |                 |
| B*0835+B*3539          | B*0837+B*3512               |                 |
| B*0835+B*3915          | B*0837+B*3901G1             |                 |
| B*0835+B*3929          | B*0837+B*3914               |                 |
| B*0835+B*4031          | B*0837+B*4080               |                 |
| B*0835+B*4032          | B*0837+B*4016               |                 |
| B*0835+B*4052          | B*0837+B*4038               |                 |
| B*0835+B*4451          | B*0837+B*4414               |                 |
| B*0835+B*5137          | B*0837+B*5163               |                 |

|                               |                               |                 |
|-------------------------------|-------------------------------|-----------------|
| B*0835+B*5212                 | B*0837+B*520101/5207          |                 |
| B*0835+B*5416                 | B*0837+B*5401/5417            |                 |
| B*0835+B*5523                 | B*0837+B*5532                 |                 |
| B*1301+B*1316                 | B*130201/B*130205+B*1320      |                 |
| B*1301+B*1503/9503            | B*1320+B*9523/9551            |                 |
| B*1301+B*1530                 | B*1313+B*1573                 |                 |
| B*1301+B*1539                 | B*1320+B*1505                 |                 |
| B*1301+B*1550                 | B*1306+B*9517                 |                 |
| B*1301+B*1811                 | B*1306+B*1810                 |                 |
| B*1301+B*1815                 | B*1320+B*18G1                 |                 |
| B*1301+B*1830                 | B*1320+B*1813                 |                 |
| B*1301+B*270502/270504/2713   | B*1323+B*2737                 |                 |
| B*1301+B*2710                 | B*1320+B*270502/270504/2713   |                 |
| B*1301+B*2715                 | B*1306+B*270401               |                 |
| B*1301+B*2740                 | B*1320+B*2708                 |                 |
| B*1301+B*35G1                 | B*1317+B*3590                 |                 |
| B*1301+B*3511                 | B*1320+B*35G1                 |                 |
| B*1301+B*351401               | B*1320+B*3562                 |                 |
| B*1301+B*3521                 | B*1320+B*3524                 |                 |
| B*1301+B*3537                 | B*130201/B*130205+B*35G1      | B*1309+B*5313   |
| B*1301+B*3558                 | B*1320+B*3505                 |                 |
| B*1301+B*356802               | B*1311+B*35G1                 |                 |
| B*1301+B*3593                 | B*1306+B*3515                 |                 |
| B*1301+B*3713                 | B*1320+B*370101               |                 |
| B*1301+B*3901G1               | B*1306+B*3947                 |                 |
| B*1301+B*390601               | B*130201/B*130205+B*3942      |                 |
| B*1301+B*3931                 | B*1323+B*3901G1               |                 |
| B*1301+B*3935                 | B*1320+B*3901G1               |                 |
| B*1301+B*40G1                 | B*1313+B*4048                 | B*1323+B*4049   |
| B*1301+B*400201/4056          | B*1323+B*4040                 | B*1324+B*4091   |
| B*1301+B*400601               | B*130201/B*130205+B*4064      |                 |
| B*1301+B*4011                 | B*1311+B*4064                 |                 |
| B*1301+B*4039                 | B*1306+B*400201/4056          |                 |
| B*1301+B*4070                 | B*130201/B*130205+B*4004      |                 |
| B*1301+B*4202                 | B*1323+B*4201                 |                 |
| B*1301+B*4447                 | B*130201/B*130205+B*440302    |                 |
| B*1301+B*4455                 | B*1323+B*44G1/B*4466          |                 |
| B*1301+B*4465                 | B*1311+B*440302               |                 |
| B*1301+B*460101/4615N         | B*1317+B*4610                 | B*1320+B*4609   |
| B*1301+B*4614                 | B*1323+B*460101/4615N         |                 |
| B*1301+B*4815                 | B*1320+B*480101/4809          |                 |
| B*1301+B*51G1                 | B*130201/B*130205+B*5104      | B*1320+B*510901 |
| B*1301+B*510102               | B*1320+B*510902               |                 |
| B*1301+B*5106                 | B*1311+B*5104                 |                 |
| B*1301+B*5116                 | B*1320+B*5131                 |                 |
| B*1301+B*5121                 | B*1306+B*5116                 |                 |
| B*1301+B*5129                 | B*1318+B*5104                 |                 |
| B*1301+B*5157                 | B*1314+B*5104                 |                 |
| B*1301+B*520101/5207          | B*1320+B*5210                 |                 |
| B*1301+B*5308                 | B*1320+B*530101               |                 |
| B*1301+B*5404                 | B*1313+B*5401/5417            |                 |
| B*1301+B*550101/550103        | B*1306+B*5524                 | B*1320+B*550201 |
| B*1301+B*550201               | B*1306+B*5522                 |                 |
| B*1301+B*5516                 | B*1323+B*550201               |                 |
| B*1301+B*5524                 | B*1320+B*5522                 |                 |
| B*1301+B*5528                 | B*1313+B*550101/550103        |                 |
| B*1301+B*5615                 | B*1313+B*5601/5624            |                 |
| B*1301+B*5806                 | B*1320+B*5802                 |                 |
| B*1301+B*5816                 | B*1311+B*580101/5811          |                 |
| B*1301+B*5819                 | B*1320+B*580101/5811          |                 |
| B*1301+B*9531                 | B*1320+B*1591                 |                 |
| B*130201/B*130205+B*1403      | B*1318+B*140201               |                 |
| B*130201/B*130205+B*15G1      | B*1311+B*1504                 |                 |
| B*130201/B*130205+B*1502      | B*1309+B*1589                 |                 |
| B*130201/B*130205+B*1503/9503 | B*1316+B*9523/9551            |                 |
| B*130201/B*130205+B*1505      | B*1311+B*9555                 |                 |
| B*130201/B*130205+B*1525      | B*1309+B*1536                 |                 |
| B*130201/B*130205+B*1537      | B*1315+B*1510                 |                 |
| B*130201/B*130205+B*1538      | B*1315+B*15G1                 |                 |
| B*130201/B*130205+B*1539      | B*1316+B*1505                 |                 |
| B*130201/B*130205+B*1565      | B*1318+B*1539                 |                 |
| B*130201/B*130205+B*1599      | B*1318+B*1510                 |                 |
| B*130201/B*130205+B*18G1      | B*1309+B*1809                 | B*1315+B*1811   |
| B*130201/B*130205+B*1813      | B*1318+B*18G1                 |                 |
| B*130201/B*130205+B*1815      | B*1316+B*18G1                 |                 |
| B*130201/B*130205+B*1830      | B*1316+B*1813                 | B*1318+B*1815   |
| B*130201/B*130205+B*270506    | B*130203+B*270502/270504/2713 |                 |
| B*130201/B*130205+B*270510    | B*130204+B*270502/270504/2713 |                 |
| B*130201/B*130205+B*2710      | B*1316+B*270502/270504/2713   |                 |
| B*130201/B*130205+B*2740      | B*1316+B*2708                 |                 |
| B*130201/B*130205+B*2744      | B*1309+B*2701                 |                 |
| B*130201/B*130205+B*2745      | B*1318+B*270502/270504/2713   |                 |
| B*130201/B*130205+B*350801    | B*1309+B*5311                 | B*1318+B*35G1   |
| B*130201/B*130205+B*350803    | B*1318+B*350104               |                 |
| B*130201/B*130205+B*3511      | B*1316+B*35G1                 | B*1320+B*3537   |
| B*130201/B*130205+B*351401    | B*1316+B*3562                 |                 |
| B*130201/B*130205+B*3518      | B*1318+B*350902               |                 |
| B*130201/B*130205+B*352001    | B*1309+B*5309                 |                 |
| B*130201/B*130205+B*3521      | B*1315+B*3511                 | B*1316+B*3524   |
| B*130201/B*130205+B*3524      | B*1315+B*35G1                 |                 |
| B*130201/B*130205+B*3545      | B*1318+B*3571                 |                 |
| B*130201/B*130205+B*3558      | B*1316+B*3505                 |                 |
| B*130201/B*130205+B*356802    | B*1311+B*3537                 |                 |
| B*130201/B*130205+B*3580      | B*1318+B*3510                 |                 |
| B*130201/B*130205+B*3581      | B*1315+B*350201               |                 |
| B*130201/B*130205+B*3704      | B*1315+B*370101               |                 |
| B*130201/B*130205+B*3711      | B*1309+B*3710                 |                 |
| B*130201/B*130205+B*3713      | B*1316+B*370101               |                 |
| B*130201/B*130205+B*3901G1    | B*1311+B*390602               | B*1314+B*3904   |
| B*130201/B*130205+B*3905      | B*1309+B*380201/3818          |                 |
| B*130201/B*130205+B*3911      | B*1318+B*3905                 |                 |
| B*130201/B*130205+B*3930      | B*1311+B*3934                 |                 |
| B*130201/B*130205+B*3935      | B*1316+B*3901G1               |                 |
| B*130201/B*130205+B*3948      | B*1315+B*3901G1               |                 |

|                                   |                             |                 |
|-----------------------------------|-----------------------------|-----------------|
| B*130201/B*130205+B*40G1          | B*1309+B*4047               |                 |
| B*130201/B*130205+B*400601        | B*1309+B*4096               | B*1314+B*4053   |
| B*130201/B*130205+B*4011          | B*1311+B*400601             |                 |
| B*130201/B*130205+B*4074          | B*1314+B*40G1               |                 |
| B*130201/B*130205+B*4409          | B*1309+B*44G1/B*4466        |                 |
| B*130201/B*130205+B*442801        | B*1318+B*440302             |                 |
| B*130201/B*130205+B*442802        | B*1318+B*440301/440303      |                 |
| B*130201/B*130205+B*4441          | B*1311+B*4420               |                 |
| B*130201/B*130205+B*4446          | B*1309+B*440301/440303      |                 |
| B*130201/B*130205+B*4465          | B*1311+B*4447               |                 |
| B*130201/B*130205+B*460101/4615N  | B*1316+B*4609               |                 |
| B*130201/B*130205+B*4815          | B*1316+B*480101/4809        |                 |
| B*130201/B*130205+B*5001          | B*1309+B*4902               |                 |
| B*130201/B*130205+B*51G1          | B*1315+B*510201             | B*1316+B*510901 |
| B*130201/B*130205+B*510102        | B*1315+B*510202             | B*1316+B*510902 |
| B*130201/B*130205+B*510104        | B*1315+B*510204             |                 |
| B*130201/B*130205+B*5106          | B*1311+B*51G1               | B*1315+B*5159   |
| B*130201/B*130205+B*5116          | B*1315+B*5134               | B*1316+B*5131   |
| B*130201/B*130205+B*5129          | B*1318+B*51G1               |                 |
| B*130201/B*130205+B*5157          | B*1314+B*51G1               |                 |
| B*130201/B*130205+B*5159          | B*1311+B*510201             |                 |
| B*130201/B*130205+B*520101/5207   | B*1315+B*5211               | B*1316+B*5210   |
| B*130201/B*130205+B*5302          | B*1315+B*530101             |                 |
| B*130201/B*130205+B*5308          | B*1316+B*530101             |                 |
| B*130201/B*130205+B*5311          | B*1318+B*5313               |                 |
| B*130201/B*130205+B*5316          | B*1318+B*5305               |                 |
| B*130201/B*130205+B*5410          | B*1318+B*5401/5417          |                 |
| B*130201/B*130205+B*550101/550103 | B*1316+B*550201             |                 |
| B*130201/B*130205+B*5509          | B*1318+B*5524               |                 |
| B*130201/B*130205+B*5524          | B*1316+B*5522               |                 |
| B*130201/B*130205+B*5601/5624     | B*1309+B*5607               |                 |
| B*130201/B*130205+B*5602          | B*1311+B*5601/5624          |                 |
| B*130201/B*130205+B*5610          | B*1311+B*550201             |                 |
| B*130201/B*130205+B*5702          | B*1318+B*570301             |                 |
| B*130201/B*130205+B*5710          | B*1314+B*570101             |                 |
| B*130201/B*130205+B*5719          | B*1318+B*570101             |                 |
| B*130201/B*130205+B*5806          | B*1316+B*5802               |                 |
| B*130201/B*130205+B*5809          | B*1315+B*580101/5811        |                 |
| B*130201/B*130205+B*5819          | B*1316+B*580101/5811        |                 |
| B*130201/B*130205+B*9531          | B*1316+B*1591               |                 |
| B*130203+B*270510                 | B*130204+B*270506           |                 |
| B*130203+B*2710                   | B*1316+B*270506             |                 |
| B*130203+B*2745                   | B*1318+B*270506             |                 |
| B*130204+B*2710                   | B*1316+B*270510             |                 |
| B*130204+B*2745                   | B*1318+B*270510             |                 |
| B*1303+B*3515                     | B*1324+B*3537               |                 |
| B*1309+B*442802                   | B*1318+B*4446               |                 |
| B*1309+B*5154                     | B*1318+B*7804               |                 |
| B*1311+B*1502                     | B*1320+B*1531               |                 |
| B*1311+B*3511                     | B*1320+B*356802             |                 |
| B*1311+B*5129                     | B*1318+B*5106               |                 |
| B*1311+B*5157                     | B*1314+B*5106               |                 |
| B*1311+B*550101/550103            | B*1316+B*5610               |                 |
| B*1311+B*5819                     | B*1320+B*5816               |                 |
| B*1314+B*5129                     | B*1318+B*5157               |                 |
| B*1314+B*5719                     | B*1318+B*5710               |                 |
| B*1315+B*1599                     | B*1318+B*1537               |                 |
| B*1315+B*350801                   | B*1318+B*3524               |                 |
| B*1315+B*3713                     | B*1316+B*3704               |                 |
| B*1315+B*3935                     | B*1316+B*3948               |                 |
| B*1315+B*5105                     | B*1318+B*510902             |                 |
| B*1315+B*5308                     | B*1316+B*5302               |                 |
| B*1315+B*5819                     | B*1316+B*5809               |                 |
| B*1316+B*2745                     | B*1318+B*2710               |                 |
| B*1316+B*350801                   | B*1318+B*3511               |                 |
| B*1316+B*3942                     | B*1320+B*390601             |                 |
| B*1316+B*4004                     | B*1320+B*4070               |                 |
| B*1316+B*4064                     | B*1320+B*400601             |                 |
| B*1316+B*440302                   | B*1320+B*4447               |                 |
| B*1316+B*5104                     | B*1320+B*51G1               |                 |
| B*1316+B*5105                     | B*1318+B*510202             |                 |
| B*1320+B*3931                     | B*1323+B*3935               |                 |
| B*1320+B*5516                     | B*1323+B*550101/550103      |                 |
| B*1322+B*152703                   | B*1324+B*152701             |                 |
| B*1322+B*350301/3570              | B*1324+B*350302             |                 |
| B*1322+B*351401                   | B*1324+B*351402             |                 |
| B*1322+B*3901G1                   | B*1324+B*390105             |                 |
| B*1322+B*401401                   | B*1324+B*401402             |                 |
| B*1322+B*530101                   | B*1324+B*530103             |                 |
| B*1401+B*140602                   | B*140201+B*1408             |                 |
| B*1401+B*3805                     | B*140201+B*380101           |                 |
| B*1401+B*3940N                    | B*1407N+B*3901G1            |                 |
| B*1401+B*4607N                    | B*1407N+B*460101/4615N      |                 |
| B*1401+B*5619N                    | B*1407N+B*5601/5624         |                 |
| B*140201+B*1565                   | B*1403+B*1539               |                 |
| B*140201+B*1599                   | B*1403+B*1510               |                 |
| B*140201+B*1813                   | B*1403+B*18G1               |                 |
| B*140201+B*1830                   | B*1403+B*1815               |                 |
| B*140201+B*2745                   | B*1403+B*270502/270504/2713 |                 |
| B*140201+B*350801                 | B*1403+B*35G1               |                 |
| B*140201+B*350803                 | B*1403+B*350104             |                 |
| B*140201+B*3518                   | B*1403+B*350902             |                 |
| B*140201+B*3545                   | B*1403+B*3571               |                 |
| B*140201+B*3580                   | B*1403+B*3510               |                 |
| B*140201+B*3911                   | B*1403+B*3905               |                 |
| B*140201+B*442801                 | B*1403+B*440302             |                 |
| B*140201+B*442802                 | B*1403+B*440301/440303      |                 |
| B*140201+B*5129                   | B*1403+B*51G1               |                 |
| B*140201+B*5311                   | B*1403+B*5313               |                 |
| B*140201+B*5316                   | B*1403+B*5305               |                 |
| B*140201+B*5410                   | B*1403+B*5401/5417          |                 |
| B*140201+B*5509                   | B*1403+B*5524               |                 |
| B*140201+B*5702                   | B*1403+B*570301             |                 |
| B*140201+B*5719                   | B*1403+B*570101             |                 |

|                             |                             |               |                 |
|-----------------------------|-----------------------------|---------------|-----------------|
| B*140201+B*5816             | B*140601+B*5802             |               |                 |
| B*140201+B*5818             | B*1405+B*5802               |               |                 |
| B*1405+B*15G1               | B*140601+B*1507             |               |                 |
| B*1405+B*1531               | B*140601+B*1555             |               |                 |
| B*1405+B*1563               | B*140601+B*1545             |               |                 |
| B*1405+B*18G1               | B*140601+B*1814             |               |                 |
| B*1405+B*35G1               | B*140602+B*3530             |               |                 |
| B*1405+B*350104             | B*140601+B*3530             |               |                 |
| B*1405+B*356801             | B*140602+B*3505             |               |                 |
| B*1405+B*356802             | B*140601+B*3505             |               |                 |
| B*1405+B*380101             | B*140601+B*3819             |               |                 |
| B*1405+B*3901G1             | B*140601+B*3903             |               |                 |
| B*1405+B*3905               | B*140601+B*3937             |               |                 |
| B*1405+B*40G1               | B*140601+B*4080             |               |                 |
| B*1405+B*400104             | B*140602+B*4080             |               |                 |
| B*1405+B*4011               | B*140601+B*400201/4056      |               |                 |
| B*1405+B*4020               | B*140601+B*4003             |               |                 |
| B*1405+B*4033               | B*140601+B*4031             |               |                 |
| B*1405+B*410302             | B*140601+B*4102             |               |                 |
| B*1405+B*4465               | B*140601+B*4454             |               |                 |
| B*1405+B*460101/4615N       | B*140601+B*4612             |               |                 |
| B*1405+B*480301             | B*140601+B*480101/4809      |               |                 |
| B*1405+B*480302             | B*140602+B*480101/4809      |               |                 |
| B*1405+B*5106               | B*140601+B*5164             |               |                 |
| B*1405+B*5816               | B*140601+B*5818             |               |                 |
| B*140601+B*151103           | B*140602+B*151101           |               |                 |
| B*140601+B*152701           | B*140602+B*152702           |               |                 |
| B*140601+B*35G1             | B*140602+B*350104           |               |                 |
| B*140601+B*350801           | B*140602+B*350803           |               |                 |
| B*140601+B*356801           | B*140602+B*356802           |               |                 |
| B*140601+B*390602           | B*140602+B*390601           |               |                 |
| B*140601+B*400104           | B*140602+B*40G1             |               |                 |
| B*140601+B*440302           | B*140602+B*440301/440303    |               |                 |
| B*140601+B*442801           | B*140602+B*442802           |               |                 |
| B*140601+B*446401           | B*140602+B*446402           |               |                 |
| B*140601+B*480302           | B*140602+B*480301           |               |                 |
| B*140602+B*380101           | B*1408+B*3805               |               |                 |
| B*1408+B*350104             | B*1410+B*356801             |               |                 |
| B*15G1+B*1502               | B*1515+B*1525               | B*1539+B*9544 |                 |
| B*15G1+B*1503/9503          | B*1539+B*1554               |               |                 |
| B*15G1+B*1508               | B*1515+B*1556               |               |                 |
| B*15G1+B*1510               | B*1518+B*1563               |               |                 |
| B*15G1+B*151101             | B*1515+B*9552               |               |                 |
| B*15G1+B*1513               | B*1502+B*1524               |               |                 |
| B*15G1+B*1518               | B*1564+B*1566               |               |                 |
| B*15G1+B*1521               | B*1502+B*1566               |               |                 |
| B*15G1+B*1523               | B*1518+B*1524               |               |                 |
| B*15G1+B*1524               | B*1587+B*9535               |               |                 |
| B*15G1+B*1529               | B*1503/9503+B*1508          | B*1556+B*1564 |                 |
| B*15G1+B*1537               | B*1510+B*1538               |               |                 |
| B*15G1+B*1540               | B*1539+B*9517               |               |                 |
| B*15G1+B*1544               | B*1521+B*1550               | B*1566+B*9521 |                 |
| B*15G1+B*1545               | B*1507+B*1563               |               |                 |
| B*15G1+B*1555               | B*1507+B*1531               |               |                 |
| B*15G1+B*1561               | B*1503/9503+B*1570          |               |                 |
| B*15G1+B*1562               | B*1503/9503+B*1585          |               |                 |
| B*15G1+B*1564               | B*1503/9503+B*1515          |               |                 |
| B*15G1+B*1572               | B*1518+B*1578               |               |                 |
| B*15G1+B*1576               | B*1515+B*9501               |               |                 |
| B*15G1+B*1580               | B*1518+B*9554               |               |                 |
| B*15G1+B*1589               | B*1515+B*1536               |               |                 |
| B*15G1+B*1591               | B*1514+B*9523/9551          |               |                 |
| B*15G1+B*1593               | B*1518+B*1550               |               |                 |
| B*15G1+B*18G1               | B*1505+B*1819               | B*1515+B*1812 | B*1538+B*1811   |
|                             | B*1571+B*1825               |               |                 |
| B*15G1+B*1802               | B*18G1+B*9529               |               |                 |
| B*15G1+B*1803               | B*1570+B*18G1               |               |                 |
| B*15G1+B*1807               | B*1508+B*1812               | B*1556+B*18G1 |                 |
| B*15G1+B*1808               | B*18G1+B*9510               |               |                 |
| B*15G1+B*1814               | B*1507+B*18G1               |               |                 |
| B*15G1+B*1815               | B*1539+B*1819               |               |                 |
| B*15G1+B*1818               | B*1532+B*18G1               |               |                 |
| B*15G1+B*1820               | B*18G1+B*9528               |               |                 |
| B*15G1+B*1826               | B*1530+B*18G1               |               |                 |
| B*15G1+B*1830               | B*1565+B*1819               |               |                 |
| B*15G1+B*1831               | B*18G1+B*9545               |               |                 |
| B*15G1+B*1833               | B*1566+B*18G1               |               |                 |
| B*15G1+B*2702               | B*1524+B*2708               |               |                 |
| B*15G1+B*2703               | B*270502/270504/2713+B*9560 |               |                 |
| B*15G1+B*270401             | B*1540+B*2725               |               |                 |
| B*15G1+B*270502/270504/2713 | B*1543+B*2708               | B*2738+B*9517 |                 |
| B*15G1+B*2706               | B*2721+B*9529               |               |                 |
| B*15G1+B*2707               | B*1543+B*2733               |               |                 |
| B*15G1+B*2708               | B*1570+B*2744               |               |                 |
| B*15G1+B*2710               | B*1543+B*2740               |               |                 |
| B*15G1+B*2716               | B*1543+B*2712               |               |                 |
| B*15G1+B*2727               | B*1530+B*2741               |               |                 |
| B*15G1+B*2750               | B*1514+B*270503             |               |                 |
| B*15G1+B*35G1               | B*1505+B*351401             | B*1508+B*3528 | B*1515+B*3510   |
|                             | B*1520+B*3543/3567/3579     | B*1539+B*3562 | B*1556+B*352001 |
|                             | B*356801+B*9554             |               |                 |
| B*15G1+B*350104             | B*356802+B*9554             |               |                 |
| B*15G1+B*350201             | B*1556+B*3595               |               |                 |
| B*15G1+B*350301/3570        | B*1515+B*3513               |               |                 |
| B*15G1+B*350401             | B*1520+B*3544               | B*1530+B*35G1 |                 |
| B*15G1+B*350402             | B*150102+B*350401           |               |                 |
| B*15G1+B*3505               | B*1507+B*356802             | B*1556+B*3572 |                 |
| B*15G1+B*3506               | B*1558+B*35G1               |               |                 |
| B*15G1+B*350801             | B*1515+B*3580               | B*1565+B*3562 |                 |
| B*15G1+B*350901             | B*1578+B*350401             |               |                 |
| B*15G1+B*350902             | B*1530+B*3564               |               |                 |
| B*15G1+B*3510               | B*1556+B*3528               |               |                 |
| B*15G1+B*3511               | B*1539+B*351401             |               |                 |
| B*15G1+B*351402             | B*1585+B*3543/3567/3579     |               |                 |

|                        |                         |                      |               |
|------------------------|-------------------------|----------------------|---------------|
| B*15G1+B*3515          | B*1520+B*3586           | B*1540+B*3562        | B*35G1+B*9517 |
| B*15G1+B*3517          | B*1515+B*3516           |                      |               |
| B*15G1+B*352001        | B*1515+B*3528           |                      |               |
| B*15G1+B*3521          | B*1538+B*3511           |                      |               |
| B*15G1+B*3522          | B*1530+B*3551           |                      |               |
| B*15G1+B*3523          | B*152701+B*350104       | B*152702+B*35G1      |               |
| B*15G1+B*3524          | B*1538+B*35G1           |                      |               |
| B*15G1+B*3527          | B*35G1+B*9535           |                      |               |
| B*15G1+B*3529          | B*1515+B*3569           | B*1570+B*35G1        |               |
| B*15G1+B*3530          | B*1507+B*350104         | B*1534+B*3517        | B*3505+B*9554 |
| B*15G1+B*3533          | B*350301/3570+B*9517    |                      |               |
| B*15G1+B*3534          | B*1563+B*35G1           |                      |               |
| B*15G1+B*3537          | B*1504+B*356802         |                      |               |
| B*15G1+B*3544          | B*1530+B*3543/3567/3579 |                      |               |
| B*15G1+B*3545          | B*1514+B*350801         |                      |               |
| B*15G1+B*3548          | B*1532+B*350104         |                      |               |
| B*15G1+B*3550          | B*1571+B*35G1           |                      |               |
| B*15G1+B*3554          | B*35G1+B*9525           |                      |               |
| B*15G1+B*3556          | B*350301/3570+B*9535    |                      |               |
| B*15G1+B*3564          | B*351402+B*9507         |                      |               |
| B*15G1+B*356802        | B*1534+B*3532           |                      |               |
| B*15G1+B*3569          | B*1570+B*3510           |                      |               |
| B*15G1+B*3571          | B*1514+B*35G1           |                      |               |
| B*15G1+B*3576          | B*1576+B*3528           | B*352001+B*9501      |               |
| B*15G1+B*3581          | B*1538+B*350201         |                      |               |
| B*15G1+B*3582          | B*1566+B*352001         |                      |               |
| B*15G1+B*3586          | B*3543/3567/3579+B*9517 |                      |               |
| B*15G1+B*3593          | B*1550+B*35G1           |                      |               |
| B*15G1+B*3599          | B*1565+B*3543/3567/3579 |                      |               |
| B*15G1+B*370101        | B*1543+B*3711           |                      |               |
| B*15G1+B*3704          | B*1538+B*370101         |                      |               |
| B*15G1+B*380101        | B*1524+B*3905           |                      |               |
| B*15G1+B*3814          | B*1524+B*3901G1         | B*1570+B*380101      |               |
| B*15G1+B*3817          | B*1543+B*3905           |                      |               |
| B*15G1+B*3819          | B*1507+B*380101         | B*1524+B*3937        |               |
| B*15G1+B*3901G1        | B*1515+B*3922           | B*1566+B*3939        | B*1570+B*3905 |
|                        | B*3936+B*9536           |                      |               |
|                        | B*1505+B*3918           |                      |               |
| B*15G1+B*390105        | B*1570+B*391301         |                      |               |
| B*15G1+B*390202        | B*1507+B*3901G1         | B*1570+B*3937        |               |
| B*15G1+B*3903          | B*1558+B*3907           |                      |               |
| B*15G1+B*3905          | B*1504+B*3901G1         |                      |               |
| B*15G1+B*390602        | B*1532+B*3901G1         |                      |               |
| B*15G1+B*3909          | B*151101+B*390202       |                      |               |
| B*15G1+B*3910          | B*1566+B*390201         |                      |               |
| B*15G1+B*3922          | B*1535+B*3901G1         |                      |               |
| B*15G1+B*3928          | B*1505+B*3936           |                      |               |
| B*15G1+B*3930          | B*1571+B*3904           |                      |               |
| B*15G1+B*3931          | B*1504+B*3930           | B*3936+B*9555        |               |
| B*15G1+B*3934          | B*1507+B*3905           |                      |               |
| B*15G1+B*3937          | B*1515+B*390201         |                      |               |
| B*15G1+B*3939          | B*3901G1+B*9554         |                      |               |
| B*15G1+B*3942          | B*1538+B*3901G1         | B*1550+B*3932        |               |
| B*15G1+B*3948          | B*1530+B*4052           | B*1563+B*4038        | B*4063+B*9517 |
| B*15G1+B*40G1          | B*150102+B*40G1         |                      |               |
| B*15G1+B*400106        | B*1507+B*4011           | B*1530+B*4003        | B*1578+B*4035 |
| B*15G1+B*400201/4056   | B*1507+B*4020           |                      |               |
| B*15G1+B*4003          | B*1534+B*4064           |                      |               |
| B*15G1+B*4004          | B*1504+B*4011           |                      |               |
| B*15G1+B*400601        | B*1556+B*40G1           |                      |               |
| B*15G1+B*4007          | B*1508+B*400201/4056    |                      |               |
| B*15G1+B*4008          | B*4018+B*9528           |                      |               |
| B*15G1+B*4009          | B*1530+B*4020           |                      |               |
| B*15G1+B*4011          | B*1556+B*4019           |                      |               |
| B*15G1+B*4013          | B*1545+B*4020           | B*1563+B*4003        |               |
| B*15G1+B*4018          | B*1524+B*400201/4056    | B*1587+B*4037        |               |
| B*15G1+B*4019          | B*1515+B*40G1           |                      |               |
| B*15G1+B*4025          | B*1507+B*4033           | B*1545+B*4052        |               |
| B*15G1+B*4031          | B*1563+B*4052           |                      |               |
| B*15G1+B*4033          | B*1558+B*4052           |                      |               |
| B*15G1+B*4036          | B*400201/4056+B*9535    |                      |               |
| B*15G1+B*4037          | B*4033+B*9528           |                      |               |
| B*15G1+B*4042          | B*1570+B*40G1           |                      |               |
| B*15G1+B*4043          | B*1573+B*4052           |                      |               |
| B*15G1+B*4048          | B*1553+B*4021           |                      |               |
| B*15G1+B*4049          | B*1570+B*400201/4056    |                      |               |
| B*15G1+B*4050          | B*1585+B*4052           |                      |               |
| B*15G1+B*4059          | B*40G1+B*9552           |                      |               |
| B*15G1+B*4061          | B*40G1+B*9545           |                      |               |
| B*15G1+B*4067          | B*1508+B*4004           |                      |               |
| B*15G1+B*4068          | B*1528+B*40G1           |                      |               |
| B*15G1+B*4069          | B*1534+B*400601         |                      |               |
| B*15G1+B*4070          | B*1571+B*4049           |                      |               |
| B*15G1+B*4074          | B*1566+B*400601         |                      |               |
| B*15G1+B*4075          | B*40G1+B*9559           |                      |               |
| B*15G1+B*4079          | B*1507+B*40G1           | B*1545+B*4038        |               |
| B*15G1+B*4080          | B*400201/4056+B*9528    |                      |               |
| B*15G1+B*4089          | B*1507+B*410302         |                      |               |
| B*15G1+B*4102          | B*1534+B*4101           |                      |               |
| B*15G1+B*4107          | B*1578+B*4210           |                      |               |
| B*15G1+B*4201          | B*1530+B*4209           |                      |               |
| B*15G1+B*4202          | B*1546+B*4408           | B*4441+B*9554        | B*4451+B*9528 |
| B*15G1+B*44G1/B*4466   | B*1514+B*4437           | B*1546+B*4457        | B*4445+B*9528 |
| B*15G1+B*440301/440303 | B*4465+B*9554           |                      |               |
|                        | B*1550+B*442802         |                      |               |
| B*15G1+B*4404          | B*1514+B*4442           |                      |               |
| B*15G1+B*4405          | B*1515+B*44G1/B*4466    |                      |               |
| B*15G1+B*4412          | B*1524+B*4501/4507      |                      |               |
| B*15G1+B*4418          | B*1504+B*4441           |                      |               |
| B*15G1+B*4420          | B*1514+B*4416           | B*44G1/B*4466+B*9517 |               |
| B*15G1+B*4421          | B*44G1/B*4466+B*9525    |                      |               |
| B*15G1+B*4422          | B*1504+B*4465           |                      |               |
| B*15G1+B*4447          | B*44G1/B*4466+B*9542    |                      |               |
| B*15G1+B*4449          | B*1524+B*4446           |                      |               |
| B*15G1+B*4450          |                         |                      |               |

|                         |                          |                 |                 |
|-------------------------|--------------------------|-----------------|-----------------|
| B*15G1+B*4453           | B*1578+B*44G1/B*4466     |                 |                 |
| B*15G1+B*4454           | B*1507+B*4465            |                 |                 |
| B*15G1+B*4456N          | B*1526N+B*4404           |                 |                 |
| B*15G1+B*4458N          | B*1594N+B*4405           |                 |                 |
| B*15G1+B*446402         | B*4437+B*9517            |                 |                 |
| B*15G1+B*4501/4507      | B*1514+B*4504            |                 |                 |
| B*15G1+B*4506           | B*4501/4507+B*9501       |                 |                 |
| B*15G1+B*4508           | B*1550+B*4504            |                 |                 |
| B*15G1+B*4605           | B*460101/4615N+B*9525    |                 |                 |
| B*15G1+B*4608           | B*1539+B*460101/4615N    |                 |                 |
| B*15G1+B*4612           | B*1507+B*460101/4615N    |                 |                 |
| B*15G1+B*4617           | B*1514+B*460101/4615N    |                 |                 |
| B*15G1+B*4618           | B*1542+B*4609            | B*1550+B*4611   |                 |
| B*15G1+B*470101         | B*1543+B*4702            |                 |                 |
| B*15G1+B*480101/4809    | B*1507+B*480301          | B*1539+B*4819   | B*1568+B*4021   |
| B*15G1+B*4806           | B*1508+B*480101/4809     |                 |                 |
| B*15G1+B*4818           | B*1587+B*480101/4809     |                 |                 |
| B*15G1+B*490101         | B*1524+B*5001            |                 |                 |
| B*15G1+B*5002           | B*1514+B*5001            |                 |                 |
| B*15G1+B*51G1           | B*150102+B*510104        | B*1504+B*5106   | B*1508+B*520102 |
|                         | B*1538+B*510201          | B*1556+B*5107   | B*1563+B*5163   |
|                         | B*3543/3567/3579+B*5202  |                 |                 |
| B*15G1+B*510102         | B*1508+B*520101/5207     | B*1524+B*780201 | B*1538+B*510202 |
| B*15G1+B*510104         | B*1538+B*510204          |                 |                 |
| B*15G1+B*510201         | B*150102+B*510204        | B*1504+B*5159   |                 |
| B*15G1+B*510202         | B*1508+B*5211            |                 |                 |
| B*15G1+B*5106           | B*1538+B*5159            |                 |                 |
| B*15G1+B*5107           | B*1515+B*520102          |                 |                 |
| B*15G1+B*510902         | B*1508+B*5210            |                 |                 |
| B*15G1+B*511302         | B*150102+B*511301        | B*1558+B*5137   |                 |
| B*15G1+B*5116           | B*1538+B*5134            | B*3586+B*5202   | B*51G1+B*9517   |
| B*15G1+B*5120           | B*1570+B*5108            |                 |                 |
| B*15G1+B*5121           | B*1550+B*51G1            |                 |                 |
| B*15G1+B*5122           | B*1566+B*5107            |                 |                 |
| B*15G1+B*5123           | B*1514+B*510201          |                 |                 |
| B*15G1+B*512401         | B*1578+B*510104          |                 |                 |
| B*15G1+B*5131           | B*510901+B*9517          |                 |                 |
| B*15G1+B*5134           | B*510201+B*9517          |                 |                 |
| B*15G1+B*5141N          | B*1594N+B*51G1           |                 |                 |
| B*15G1+B*5146           | B*1535+B*5104            |                 |                 |
| B*15G1+B*5153           | B*51G1+B*9505            |                 |                 |
| B*15G1+B*5162           | B*1573+B*5145            |                 |                 |
| B*15G1+B*5164           | B*1507+B*5106            |                 |                 |
| B*15G1+B*520101/5207    | B*1524+B*7805            | B*1538+B*5211   | B*1587+B*7806   |
| B*15G1+B*520102         | B*5209+B*9535            |                 |                 |
| B*15G1+B*520602         | B*1556+B*520102          |                 |                 |
| B*15G1+B*5208           | B*520101/5207+B*9517     |                 |                 |
| B*15G1+B*530101         | B*1524+B*35G1            | B*1587+B*3527   | B*5305+B*9535   |
| B*15G1+B*5302           | B*1524+B*3524            | B*1538+B*530101 |                 |
| B*15G1+B*5303           | B*1543+B*35G1            |                 |                 |
| B*15G1+B*5304           | B*1524+B*350301/3570     | B*1587+B*3556   |                 |
| B*15G1+B*5305           | B*1587+B*35G1            |                 |                 |
| B*15G1+B*5306           | B*1585+B*5145            |                 |                 |
| B*15G1+B*5308           | B*1524+B*3511            |                 |                 |
| B*15G1+B*5313           | B*1556+B*5309            | B*5312+B*9535   |                 |
| B*15G1+B*5314           | B*1524+B*3505            |                 |                 |
| B*15G1+B*5316           | B*1587+B*350801          |                 |                 |
| B*15G1+B*5401/5417      | B*1550+B*5403            | B*1573+B*5414   |                 |
| B*15G1+B*5402           | B*1571+B*5401/5417       |                 |                 |
| B*15G1+B*5404           | B*1530+B*5414            |                 |                 |
| B*15G1+B*5412           | B*1524+B*5401/5417       |                 |                 |
| B*15G1+B*550101/550103  | B*1539+B*5521            | B*1570+B*5531   |                 |
| B*15G1+B*550104         | B*150102+B*550101/550103 |                 |                 |
| B*15G1+B*550201         | B*1504+B*5610            | B*1505+B*5521   | B*151101+B*5534 |
|                         | B*1550+B*5601/5624       | B*1573+B*5523   |                 |
| B*15G1+B*5512           | B*550201+B*9535          |                 |                 |
| B*15G1+B*5513           | B*1550+B*5622            | B*1558+B*5523   |                 |
| B*15G1+B*5522           | B*5601/5624+B*9517       |                 |                 |
| B*15G1+B*5528           | B*1534+B*5517            |                 |                 |
| B*15G1+B*5601/5624      | B*1504+B*5602            |                 |                 |
| B*15G1+B*5602           | B*1534+B*5604            |                 |                 |
| B*15G1+B*5610           | B*1550+B*5602            |                 |                 |
| B*15G1+B*5620           | B*1578+B*5601/5624       |                 |                 |
| B*15G1+B*5621           | B*1524+B*560502          |                 |                 |
| B*15G1+B*5702           | B*1524+B*5712            | B*1530+B*5719   |                 |
| B*15G1+B*570301         | B*1530+B*570101          |                 |                 |
| B*15G1+B*5707           | B*1514+B*570301          |                 |                 |
| B*15G1+B*5807           | B*1514+B*5802            |                 |                 |
| B*15G1+B*5809           | B*1538+B*580101/5811     |                 |                 |
| B*15G1+B*5818           | B*1507+B*5816            |                 |                 |
| B*15G1+B*5901           | B*1550+B*5904            |                 |                 |
| B*15G1+B*670102         | B*1576+B*391301          |                 |                 |
| B*15G1+B*7801           | B*1570+B*780202          |                 |                 |
| B*15G1+B*780201         | B*1508+B*7805            |                 |                 |
| B*15G1+B*7806           | B*7805+B*9535            |                 |                 |
| B*15G1+B*8101/8102/8103 | B*1576+B*480101/4809     |                 |                 |
| B*15G1+B*9506           | B*1525+B*1546            |                 |                 |
| B*15G1+B*9521           | B*1502+B*1550            |                 |                 |
| B*15G1+B*9523/9551      | B*1505+B*1554            |                 |                 |
| B*15G1+B*9531           | B*1503/9503+B*1514       |                 |                 |
| B*15G1+B*9555           | B*1504+B*1505            |                 |                 |
| B*15G1+B*9556           | B*1503/9503+B*9528       |                 |                 |
| B*150102+B*350901       | B*1578+B*350402          |                 |                 |
| B*150102+B*4007         | B*1556+B*400106          |                 |                 |
| B*150102+B*4025         | B*1515+B*400106          |                 |                 |
| B*150102+B*4043         | B*1570+B*400106          |                 |                 |
| B*150102+B*4061         | B*400106+B*9552          |                 |                 |
| B*150102+B*4067         | B*400106+B*9545          |                 |                 |
| B*150102+B*4069         | B*1528+B*400106          |                 |                 |
| B*150102+B*4079         | B*400106+B*9559          |                 |                 |
| B*150102+B*4080         | B*1507+B*400106          |                 |                 |
| B*150102+B*512401       | B*1578+B*51G1            |                 |                 |
| B*1502+B*1503/9503      | B*1525+B*1564            |                 |                 |
| B*1502+B*1518           | B*1521+B*1564            |                 |                 |

|                                  |                        |                    |
|----------------------------------|------------------------|--------------------|
| B*1502+B*1523                    | B*1513+B*1518          |                    |
| B*1502+B*1536                    | B*1525+B*1589          |                    |
| B*1502+B*1544                    | B*1521+B*9521          |                    |
| B*1502+B*1546                    | B*1515+B*9506          |                    |
| B*1502+B*1554                    | B*1503/9503+B*9544     |                    |
| B*1502+B*1556                    | B*1508+B*1525          |                    |
| B*1502+B*1593                    | B*1518+B*9521          | B*1544+B*1564      |
| B*1502+B*1809                    | B*1589+B*18G1          |                    |
| B*1502+B*1812                    | B*1525+B*18G1          |                    |
| B*1502+B*1819                    | B*1815+B*9544          |                    |
| B*1502+B*1833                    | B*1521+B*18G1          |                    |
| B*1502+B*2701                    | B*1589+B*2744          |                    |
| B*1502+B*2702                    | B*1513+B*2708          |                    |
| B*1502+B*3505                    | B*1555+B*3511          |                    |
| B*1502+B*3510                    | B*1525+B*35G1          |                    |
| B*1502+B*3513                    | B*1525+B*350301/3570   |                    |
| B*1502+B*351401                  | B*3511+B*9544          |                    |
| B*1502+B*3516                    | B*1525+B*3517          |                    |
| B*1502+B*3528                    | B*1525+B*352001        |                    |
| B*1502+B*3562                    | B*35G1+B*9544          |                    |
| B*1502+B*356802                  | B*1531+B*3511          |                    |
| B*1502+B*3569                    | B*1525+B*3529          |                    |
| B*1502+B*3578                    | B*35G1+B*9539          |                    |
| B*1502+B*3580                    | B*1525+B*350801        |                    |
| B*1502+B*3582                    | B*1521+B*352001        |                    |
| B*1502+B*3593                    | B*35G1+B*9521          |                    |
| B*1502+B*3710                    | B*1589+B*3711          |                    |
| B*1502+B*380101                  | B*1513+B*3905          |                    |
| B*1502+B*380201/3818             | B*1589+B*3905          |                    |
| B*1502+B*3814                    | B*1513+B*3901G1        |                    |
| B*1502+B*3819                    | B*1513+B*3937          |                    |
| B*1502+B*3901G1                  | B*1521+B*3939          |                    |
| B*1502+B*390201                  | B*1525+B*3939          |                    |
| B*1502+B*3916                    | B*3910+B*9512          |                    |
| B*1502+B*3922                    | B*1521+B*390201        | B*1525+B*3901G1    |
| B*1502+B*3948                    | B*3932+B*9521          |                    |
| B*1502+B*40G1                    | B*1525+B*4025          |                    |
| B*1502+B*4019                    | B*1513+B*400201/4056   |                    |
| B*1502+B*4047                    | B*1536+B*4025          | B*1589+B*40G1      |
| B*1502+B*4075                    | B*1521+B*400601        |                    |
| B*1502+B*4096                    | B*1589+B*400601        |                    |
| B*1502+B*44G1/B*4466             | B*1525+B*4412          | B*1589+B*4409      |
| B*1502+B*440301/440303           | B*1589+B*4446          |                    |
| B*1502+B*4404                    | B*442802+B*9521        |                    |
| B*1502+B*4418                    | B*1513+B*4501/4507     |                    |
| B*1502+B*4450                    | B*1513+B*4446          |                    |
| B*1502+B*4508                    | B*4504+B*9521          |                    |
| B*1502+B*460101/4615N            | B*4608+B*9544          |                    |
| B*1502+B*4618                    | B*4611+B*9521          |                    |
| B*1502+B*4819                    | B*480101/4809+B*9544   |                    |
| B*1502+B*490101                  | B*1513+B*5001          |                    |
| B*1502+B*4902                    | B*1589+B*5001          |                    |
| B*1502+B*51G1                    | B*1513+B*780202        |                    |
| B*1502+B*510102                  | B*1513+B*780201        |                    |
| B*1502+B*5121                    | B*51G1+B*9521          |                    |
| B*1502+B*5122                    | B*1521+B*5107          |                    |
| B*1502+B*520101/5207             | B*1513+B*7805          |                    |
| B*1502+B*520102                  | B*1525+B*5107          |                    |
| B*1502+B*520602                  | B*1525+B*51G1          |                    |
| B*1502+B*530101                  | B*1513+B*35G1          |                    |
| B*1502+B*5302                    | B*1513+B*3524          |                    |
| B*1502+B*5304                    | B*1513+B*350301/3570   |                    |
| B*1502+B*5308                    | B*1513+B*3511          |                    |
| B*1502+B*5309                    | B*1589+B*352001        |                    |
| B*1502+B*5311                    | B*1589+B*350801        |                    |
| B*1502+B*5313                    | B*1589+B*35G1          |                    |
| B*1502+B*5314                    | B*1513+B*3505          | B*1555+B*5308      |
| B*1502+B*5401/5417               | B*5403+B*9521          |                    |
| B*1502+B*5412                    | B*1513+B*5401/5417     |                    |
| B*1502+B*550201                  | B*5601/5624+B*9521     |                    |
| B*1502+B*5513                    | B*5622+B*9521          |                    |
| B*1502+B*5521                    | B*550101/550103+B*9544 |                    |
| B*1502+B*5607                    | B*1589+B*5601/5624     |                    |
| B*1502+B*5610                    | B*5602+B*9521          |                    |
| B*1502+B*5621                    | B*1513+B*560502        |                    |
| B*1502+B*5702                    | B*1513+B*5712          |                    |
| B*1502+B*5816                    | B*1531+B*5819          |                    |
| B*1502+B*5818                    | B*1555+B*5819          |                    |
| B*1502+B*5901                    | B*5904+B*9521          |                    |
| B*1502+B*9501                    | B*1525+B*1576          |                    |
| B*1502+B*9517                    | B*1540+B*9544          |                    |
| B*1502+B*9552                    | B*151101+B*1525        |                    |
| B*1503/9503+B*1505               | B*1539+B*9523/9551     |                    |
| B*1503/9503+B*151101             | B*1564+B*9552          |                    |
| B*1503/9503+B*1521               | B*1518+B*1525          |                    |
| B*1503/9503+B*1544               | B*1525+B*1593          |                    |
| B*1503/9503+B*1576               | B*1564+B*9501          |                    |
| B*1503/9503+B*1589               | B*1536+B*1564          |                    |
| B*1503/9503+B*1591               | B*9523/9551+B*9531     |                    |
| B*1503/9503+B*18G1               | B*1564+B*1812          | B*1815+B*9523/9551 |
| B*1503/9503+B*1803               | B*1561+B*18G1          |                    |
| B*1503/9503+B*1807               | B*1529+B*1812          |                    |
| B*1503/9503+B*1813               | B*1830+B*9523/9551     |                    |
| B*1503/9503+B*1819               | B*1554+B*1815          |                    |
| B*1503/9503+B*1820               | B*18G1+B*9556          |                    |
| B*1503/9503+B*1833               | B*1518+B*1812          |                    |
| B*1503/9503+B*270502/270504/2713 | B*2710+B*9523/9551     |                    |
| B*1503/9503+B*2708               | B*1561+B*2744          | B*2740+B*9523/9551 |
| B*1503/9503+B*2745               | B*1547+B*2738          |                    |
| B*1503/9503+B*2750               | B*270503+B*9531        |                    |
| B*1503/9503+B*35G1               | B*1529+B*3528          | B*1564+B*3510      |
| B*1503/9503+B*350301/3570        | B*1564+B*3513          | B*3511+B*9523/9551 |
| B*1503/9503+B*3505               | B*3558+B*9523/9551     |                    |
| B*1503/9503+B*350801             | B*1564+B*3580          |                    |

|                             |                             |                      |               |
|-----------------------------|-----------------------------|----------------------|---------------|
| B*1503/9503+B*351401        | B*1554+B*3511               |                      |               |
| B*1503/9503+B*351402        | B*1562+B*3543/3567/3579     |                      |               |
| B*1503/9503+B*3517          | B*1564+B*3516               |                      |               |
| B*1503/9503+B*352001        | B*1564+B*3528               |                      |               |
| B*1503/9503+B*3524          | B*3521+B*9523/9551          |                      |               |
| B*1503/9503+B*35 29         | B*1561+B*35G1               | B*1564+B*3569        |               |
| B*1503/9503+B*3535          | B*1569+B*35G1               |                      |               |
| B*1503/9503+B*3545          | B*350801+B*9531             |                      |               |
| B*1503/9503+B*3562          | B*1554+B*35G1               | B*351401+B*9523/9551 |               |
| B*1503/9503+B*3569          | B*1561+B*3510               |                      |               |
| B*1503/9503+B*3571          | B*1591+B*3511               | B*35G1+B*9531        |               |
| B*1503/9503+B*3582          | B*1518+B*3528               |                      |               |
| B*1503/9503+B*3585          | B*3528+B*9533               |                      |               |
| B*1503/9503+B*370101        | B*3713+B*9523/9551          |                      |               |
| B*1503/9503+B*3814          | B*1523+B*390201             | B*1561+B*380101      |               |
| B*1503/9503+B*3901G1        | B*1518+B*390201             | B*1561+B*3905        | B*1564+B*3922 |
|                             | B*3935+B*9523/9551          |                      |               |
| B*1503/9503+B*390202        | B*1561+B*391301             |                      |               |
| B*1503/9503+B*3903          | B*1561+B*3937               |                      |               |
| B*1503/9503+B*3911          | B*1518+B*3908               |                      |               |
| B*1503/9503+B*3939          | B*1564+B*390201             |                      |               |
| B*1503/9503+B*3942          | B*1580+B*390201             |                      |               |
| B*1503/9503+B*4008          | B*1529+B*400201/4056        |                      |               |
| B*1503/9503+B*4009          | B*4018+B*9556               |                      |               |
| B*1503/9503+B*4025          | B*1564+B*40G1               |                      |               |
| B*1503/9503+B*4042          | B*4033+B*9556               |                      |               |
| B*1503/9503+B*4043          | B*1561+B*40G1               |                      |               |
| B*1503/9503+B*4050          | B*1561+B*400201/4056        |                      |               |
| B*1503/9503+B*4059          | B*1562+B*4052               |                      |               |
| B*1503/9503+B*4068          | B*1529+B*4004               |                      |               |
| B*1503/9503+B*4089          | B*400201/4056+B*9556        |                      |               |
| B*1503/9503+B*44G1/B*4466   | B*4451+B*9556               |                      |               |
| B*1503/9503+B*440301/440303 | B*4437+B*9531               | B*4445+B*9556        |               |
| B*1503/9503+B*4405          | B*4442+B*9531               |                      |               |
| B*1503/9503+B*4412          | B*1564+B*44G1/B*4466        |                      |               |
| B*1503/9503+B*4421          | B*4416+B*9531               |                      |               |
| B*1503/9503+B*4501/4507     | B*4504+B*9531               |                      |               |
| B*1503/9503+B*460101/4615N  | B*1554+B*4608               |                      |               |
| B*1503/9503+B*4609          | B*460101/4615N+B*9523/9551  |                      |               |
| B*1503/9503+B*4617          | B*460101/4615N+B*9531       |                      |               |
| B*1503/9503+B*480101/4809   | B*4815+B*9523/9551          |                      |               |
| B*1503/9503+B*4806          | B*1529+B*480101/4809        |                      |               |
| B*1503/9503+B*4819          | B*1554+B*480101/4809        |                      |               |
| B*1503/9503+B*5002          | B*5001+B*9531               |                      |               |
| B*1503/9503+B*51G1          | B*1529+B*520102             | B*1564+B*520602      |               |
| B*1503/9503+B*510102        | B*1529+B*520101/5207        |                      |               |
| B*1503/9503+B*510202        | B*1529+B*5211               |                      |               |
| B*1503/9503+B*5107          | B*1564+B*520102             |                      |               |
| B*1503/9503+B*51 0901       | B*51G1+B*9523/9551          |                      |               |
| B*1503/9503+B*510902        | B*1529+B*5210               | B*510102+B*9523/9551 |               |
| B*1503/9503+B*5120          | B*1561+B*5108               |                      |               |
| B*1503/9503+B*5122          | B*1518+B*520102             |                      |               |
| B*1503/9503+B*5123          | B*510201+B*9531             |                      |               |
| B*1503/9503+B*5131          | B*5116+B*9523/9551          |                      |               |
| B*1503/9503+B*5210          | B*520101/5207+B*9523/9551   |                      |               |
| B*1503/9503+B*530101        | B*5308+B*9523/9551          |                      |               |
| B*1503/9503+B*5306          | B*1562+B*5145               |                      |               |
| B*1503/9503+B*550101/550103 | B*1561+B*5531               |                      |               |
| B*1503/9503+B*550201        | B*550101/550103+B*9523/9551 |                      |               |
| B*1503/9503+B*5521          | B*1554+B*550101/550103      |                      |               |
| B*1503/9503+B*5522          | B*5524+B*9523/9551          |                      |               |
| B*1503/9503+B*5707          | B*570301+B*9531             |                      |               |
| B*1503/9503+B*580101/5811   | B*5819+B*9523/9551          |                      |               |
| B*1503/9503+B*5802          | B*5806+B*9523/9551          |                      |               |
| B*1503/9503+B*5807          | B*1591+B*5806               | B*5802+B*9531        |               |
| B*1503/9503+B*7801          | B*1561+B*780202             |                      |               |
| B*1503/9503+B*780201        | B*1529+B*7805               |                      |               |
| B*1503/9503+B*9509          | B*152701+B*1598             |                      |               |
| B*1503/9503+B*9517          | B*1540+B*1554               |                      |               |
| B*1504+B*18G1               | B*1819+B*9555               |                      |               |
| B*1504+B*35G1               | B*351401+B*9555             |                      |               |
| B*1504+B*350104             | B*3537+B*9554               |                      |               |
| B*1504+B*350402             | B*1585+B*7804               |                      |               |
| B*1504+B*3505               | B*1507+B*3537               |                      |               |
| B*1504+B*3814               | B*1524+B*390602             |                      |               |
| B*1504+B*390105             | B*3918+B*9555               |                      |               |
| B*1504+B*3903               | B*1507+B*390602             |                      |               |
| B*1504+B*3909               | B*1532+B*390602             |                      |               |
| B*1504+B*3928               | B*1535+B*390602             |                      |               |
| B*1504+B*3942               | B*390602+B*9554             |                      |               |
| B*1504+B*3948               | B*1538+B*390602             |                      |               |
| B*1504+B*400201/4056        | B*1507+B*400601             |                      |               |
| B*1504+B*4018               | B*1507+B*4044               |                      |               |
| B*1504+B*410302             | B*1535+B*4101               |                      |               |
| B*1504+B*4201               | B*1507+B*4204               |                      |               |
| B*1504+B*44G1/B*4466        | B*4420+B*9554               |                      |               |
| B*1504+B*440301/440303      | B*4447+B*9554               |                      |               |
| B*1504+B*4454               | B*1507+B*4447               |                      |               |
| B*1504+B*5164               | B*1507+B*51G1               | B*1545+B*5163        |               |
| B*1504+B*550201             | B*5521+B*9555               |                      |               |
| B*1504+B*9523/9551          | B*1554+B*9555               |                      |               |
| B*1505+B*1815               | B*1539+B*18G1               |                      |               |
| B*1505+B*1820               | B*1531+B*1812               |                      |               |
| B*1505+B*1830               | B*1539+B*1813               | B*1565+B*18G1        |               |
| B*1505+B*2710               | B*1539+B*270502/270504/2713 | B*1540+B*2738        |               |
| B*1505+B*2740               | B*1539+B*2708               |                      |               |
| B*1505+B*3511               | B*1539+B*35G1               |                      |               |
| B*1505+B*3521               | B*1539+B*3524               |                      |               |
| B*1505+B*3535               | B*3593+B*9536               |                      |               |
| B*1505+B*3537               | B*356802+B*9555             |                      |               |
| B*1505+B*3558               | B*1539+B*3505               |                      |               |
| B*1505+B*3713               | B*1539+B*370101             |                      |               |
| B*1505+B*3901G1             | B*3930+B*9536               |                      |               |
| B*1505+B*390602             | B*3901G1+B*9555             | B*3934+B*9536        |               |

|                             |                        |                    |
|-----------------------------|------------------------|--------------------|
| B*1505+B*3934               | B*3930+B*9555          |                    |
| B*1505+B*3935               | B*1539+B*3901G1        |                    |
| B*1505+B*40G1               | B*4087+B*9507          |                    |
| B*1505+B*400601             | B*4011+B*9555          |                    |
| B*1505+B*4412               | B*1531+B*4451          |                    |
| B*1505+B*4420               | B*4441+B*9555          |                    |
| B*1505+B*4429               | B*440301/440303+B*9536 |                    |
| B*1505+B*4447               | B*4465+B*9555          |                    |
| B*1505+B*460101/4615N       | B*1539+B*4609          |                    |
| B*1505+B*4815               | B*1539+B*480101/4809   |                    |
| B*1505+B*51G1               | B*1539+B*510901        | B*5106+B*9555      |
| B*1505+B*510102             | B*1539+B*510902        |                    |
| B*1505+B*510201             | B*5159+B*9555          |                    |
| B*1505+B*5116               | B*1539+B*5131          | B*1540+B*510901    |
| B*1505+B*5119               | B*510901+B*9536        |                    |
| B*1505+B*5129               | B*1565+B*510901        |                    |
| B*1505+B*5161               | B*1538+B*5140          |                    |
| B*1505+B*520101/5207        | B*1539+B*5210          |                    |
| B*1505+B*5208               | B*1540+B*5210          |                    |
| B*1505+B*5308               | B*1539+B*530101        |                    |
| B*1505+B*550101/550103      | B*1539+B*550201        |                    |
| B*1505+B*550201             | B*5610+B*9555          |                    |
| B*1505+B*5509               | B*1565+B*5522          |                    |
| B*1505+B*5524               | B*1539+B*5522          | B*1540+B*5601/5624 |
| B*1505+B*5601/5624          | B*5602+B*9555          |                    |
| B*1505+B*5806               | B*1539+B*5802          |                    |
| B*1505+B*5819               | B*1539+B*580101/5811   |                    |
| B*1505+B*9508               | B*1518+B*9536          |                    |
| B*1505+B*9531               | B*1539+B*1591          |                    |
| B*1505+B*9541               | B*1535+B*9507          |                    |
| B*1505+B*9550               | B*1530+B*9507          |                    |
| B*1506+B*1554               | B*152701+B*9556        |                    |
| B*1506+B*9554               | B*1525+B*152702        |                    |
| B*1507+B*1510               | B*1518+B*1545          |                    |
| B*1507+B*1802               | B*1814+B*9529          |                    |
| B*1507+B*1803               | B*1570+B*1814          |                    |
| B*1507+B*1807               | B*1556+B*1814          |                    |
| B*1507+B*1808               | B*1814+B*9510          |                    |
| B*1507+B*1818               | B*1532+B*1814          |                    |
| B*1507+B*1820               | B*1814+B*9528          |                    |
| B*1507+B*1826               | B*1530+B*1814          |                    |
| B*1507+B*1831               | B*1814+B*9545          |                    |
| B*1507+B*1833               | B*1566+B*1814          |                    |
| B*1507+B*270502/270504/2713 | B*2732+B*9529          |                    |
| B*1507+B*2719               | B*2732+B*9554          |                    |
| B*1507+B*35G1               | B*1585+B*3551          |                    |
| B*1507+B*350401             | B*1585+B*3522          |                    |
| B*1507+B*3512               | B*3522+B*9554          |                    |
| B*1507+B*3523               | B*152701+B*3530        |                    |
| B*1507+B*3534               | B*1545+B*35G1          |                    |
| B*1507+B*3541               | B*35G1+B*9526          |                    |
| B*1507+B*3548               | B*1532+B*3530          |                    |
| B*1507+B*3814               | B*1524+B*3903          | B*1570+B*3819      |
| B*1507+B*3817               | B*1543+B*3937          |                    |
| B*1507+B*3909               | B*1532+B*3903          |                    |
| B*1507+B*3928               | B*1535+B*3903          |                    |
| B*1507+B*3942               | B*3903+B*9554          |                    |
| B*1507+B*3948               | B*1538+B*3903          |                    |
| B*1507+B*4007               | B*1556+B*4080          |                    |
| B*1507+B*4018               | B*1545+B*4003          |                    |
| B*1507+B*4025               | B*1515+B*4080          |                    |
| B*1507+B*4042               | B*4031+B*9528          |                    |
| B*1507+B*4043               | B*1570+B*4080          |                    |
| B*1507+B*4061               | B*4080+B*9552          |                    |
| B*1507+B*4067               | B*4080+B*9545          |                    |
| B*1507+B*4069               | B*1528+B*4080          |                    |
| B*1507+B*4079               | B*4080+B*9559          |                    |
| B*1507+B*440301/440303      | B*4454+B*9554          |                    |
| B*1507+B*4605               | B*4612+B*9525          |                    |
| B*1507+B*4608               | B*1539+B*4612          |                    |
| B*1507+B*4617               | B*1514+B*4612          |                    |
| B*1507+B*4802               | B*1520+B*1568          |                    |
| B*1508+B*1536               | B*1556+B*1589          |                    |
| B*1508+B*1561               | B*1529+B*1570          |                    |
| B*1508+B*1562               | B*1529+B*1585          |                    |
| B*1508+B*1564               | B*1515+B*1529          |                    |
| B*1508+B*18G1               | B*1515+B*1807          |                    |
| B*1508+B*3510               | B*1556+B*35G1          |                    |
| B*1508+B*3513               | B*1556+B*350301/3570   |                    |
| B*1508+B*3516               | B*1556+B*3517          |                    |
| B*1508+B*352001             | B*1515+B*35G1          |                    |
| B*1508+B*3569               | B*1556+B*3529          |                    |
| B*1508+B*3572               | B*1515+B*3505          |                    |
| B*1508+B*3576               | B*1576+B*35G1          |                    |
| B*1508+B*3580               | B*1556+B*350801        |                    |
| B*1508+B*3595               | B*1515+B*350201        |                    |
| B*1508+B*390201             | B*1556+B*3939          |                    |
| B*1508+B*3922               | B*1556+B*3901G1        |                    |
| B*1508+B*40G1               | B*1515+B*4007          | B*1556+B*4025      |
| B*1508+B*4019               | B*1515+B*4013          | B*1524+B*4008      |
| B*1508+B*4037               | B*4008+B*9535          |                    |
| B*1508+B*4050               | B*1570+B*4008          |                    |
| B*1508+B*4061               | B*151101+B*4007        |                    |
| B*1508+B*4089               | B*4008+B*9528          |                    |
| B*1508+B*44G1/B*4466        | B*1556+B*4412          |                    |
| B*1508+B*460101/4615N       | B*151101+B*4616        |                    |
| B*1508+B*4818               | B*1587+B*4806          |                    |
| B*1508+B*5107               | B*1515+B*51G1          |                    |
| B*1508+B*520602             | B*1556+B*51G1          |                    |
| B*1508+B*5208               | B*510102+B*9517        |                    |
| B*1508+B*5209               | B*1587+B*780202        |                    |
| B*1508+B*5309               | B*1515+B*5313          |                    |
| B*1508+B*5606               | B*1576+B*780202        |                    |
| B*1508+B*7806               | B*780201+B*9535        |                    |

|                         |                             |                 |               |
|-------------------------|-----------------------------|-----------------|---------------|
| B*1508+B*8101/8102/8103 | B*1576+B*4806               |                 |               |
| B*1508+B*9501           | B*1556+B*1576               |                 |               |
| B*1508+B*9531           | B*1514+B*1529               |                 |               |
| B*1508+B*9552           | B*151101+B*1556             |                 |               |
| B*1508+B*9556           | B*1529+B*9528               |                 |               |
| B*1509+B*35G1           | B*1518+B*350402             |                 |               |
| B*1509+B*350301/3570    | B*350402+B*9533             |                 |               |
| B*1509+B*3534           | B*1510+B*350402             |                 |               |
| B*1509+B*3593           | B*1593+B*350402             |                 |               |
| B*1509+B*4033           | B*1510+B*400106             |                 |               |
| B*1509+B*4052           | B*1518+B*400106             |                 |               |
| B*1509+B*4417           | B*1518+B*4462               |                 |               |
| B*1509+B*5145           | B*1518+B*5106               |                 |               |
| B*1509+B*530101         | B*1523+B*350402             |                 |               |
| B*1509+B*5312           | B*350402+B*9515             |                 |               |
| B*1510+B*1524           | B*1523+B*1563               |                 |               |
| B*1510+B*1550           | B*1563+B*1593               |                 |               |
| B*1510+B*1558           | B*1530+B*9533               |                 |               |
| B*1510+B*1565           | B*1539+B*1599               |                 |               |
| B*1510+B*1578           | B*1563+B*1572               |                 |               |
| B*1510+B*18G1           | B*1537+B*1811               |                 |               |
| B*1510+B*1813           | B*1599+B*18G1               |                 |               |
| B*1510+B*1830           | B*1599+B*1815               |                 |               |
| B*1510+B*2745           | B*1599+B*270502/270504/2713 |                 |               |
| B*1510+B*35G1           | B*1518+B*3534               |                 |               |
| B*1510+B*350301/3570    | B*3534+B*9533               |                 |               |
| B*1510+B*3506           | B*350401+B*9533             |                 |               |
| B*1510+B*350801         | B*1599+B*35G1               |                 |               |
| B*1510+B*350803         | B*1599+B*350104             |                 |               |
| B*1510+B*3518           | B*1599+B*350902             |                 |               |
| B*1510+B*3521           | B*1537+B*3511               |                 |               |
| B*1510+B*3524           | B*1537+B*35G1               |                 |               |
| B*1510+B*3545           | B*1599+B*3571               |                 |               |
| B*1510+B*3559           | B*3512+B*9533               |                 |               |
| B*1510+B*3580           | B*1599+B*3510               |                 |               |
| B*1510+B*3581           | B*1537+B*350201             |                 |               |
| B*1510+B*3593           | B*1593+B*3534               |                 |               |
| B*1510+B*3704           | B*1537+B*370101             |                 |               |
| B*1510+B*3903           | B*3914+B*9533               |                 |               |
| B*1510+B*3911           | B*1599+B*3905               |                 |               |
| B*1510+B*3948           | B*1537+B*3901G1             |                 |               |
| B*1510+B*4003           | B*1518+B*4018               |                 |               |
| B*1510+B*4036           | B*40G1+B*9533               |                 |               |
| B*1510+B*4038           | B*1518+B*40G1               |                 |               |
| B*1510+B*4052           | B*1518+B*4033               |                 |               |
| B*1510+B*4086           | B*400601+B*9533             |                 |               |
| B*1510+B*4206           | B*4201+B*9533               |                 |               |
| B*1510+B*442801         | B*1599+B*440302             |                 |               |
| B*1510+B*442802         | B*1599+B*440301/440303      |                 |               |
| B*1510+B*4505           | B*1590+B*4501/4507          |                 |               |
| B*1510+B*4807           | B*480101/4809+B*9533        |                 |               |
| B*1510+B*51G1           | B*1537+B*510201             |                 |               |
| B*1510+B*510102         | B*1537+B*510202             |                 |               |
| B*1510+B*510104         | B*1537+B*510204             |                 |               |
| B*1510+B*5106           | B*1537+B*5159               |                 |               |
| B*1510+B*511301         | B*510104+B*9533             |                 |               |
| B*1510+B*511302         | B*51G1+B*9533               |                 |               |
| B*1510+B*5116           | B*1537+B*5134               |                 |               |
| B*1510+B*5129           | B*1599+B*51G1               |                 |               |
| B*1510+B*5163           | B*1518+B*51G1               | B*1523+B*780202 | B*1529+B*5122 |
| B*1510+B*520101/5207    | B*1537+B*5211               |                 |               |
| B*1510+B*530101         | B*1523+B*3534               |                 |               |
| B*1510+B*5302           | B*1537+B*530101             |                 |               |
| B*1510+B*5311           | B*1599+B*5313               |                 |               |
| B*1510+B*5312           | B*3534+B*9515               |                 |               |
| B*1510+B*5316           | B*1599+B*5305               |                 |               |
| B*1510+B*5410           | B*1599+B*5401/5417          |                 |               |
| B*1510+B*5509           | B*1599+B*5524               |                 |               |
| B*1510+B*5532           | B*1593+B*5615               |                 |               |
| B*1510+B*5622           | B*5615+B*9533               |                 |               |
| B*1510+B*5702           | B*1599+B*570301             |                 |               |
| B*1510+B*5719           | B*1599+B*570101             |                 |               |
| B*1510+B*5809           | B*1537+B*580101/5811        |                 |               |
| B*1510+B*9554           | B*1563+B*1580               |                 |               |
| B*151101+B*152701       | B*151103+B*152702           |                 |               |
| B*151101+B*1536         | B*1589+B*9552               |                 |               |
| B*151101+B*1812         | B*18G1+B*9552               |                 |               |
| B*151101+B*35G1         | B*151103+B*350104           |                 |               |
| B*151101+B*350801       | B*151103+B*350803           |                 |               |
| B*151101+B*3510         | B*35G1+B*9552               |                 |               |
| B*151101+B*3513         | B*350301/3570+B*9552        |                 |               |
| B*151101+B*3516         | B*3517+B*9552               |                 |               |
| B*151101+B*3528         | B*352001+B*9552             |                 |               |
| B*151101+B*3547         | B*3546+B*9543               |                 |               |
| B*151101+B*356801       | B*151103+B*356802           |                 |               |
| B*151101+B*3569         | B*3529+B*9552               |                 |               |
| B*151101+B*3580         | B*350801+B*9552             |                 |               |
| B*151101+B*390201       | B*3939+B*9552               |                 |               |
| B*151101+B*390602       | B*151103+B*390601           |                 |               |
| B*151101+B*3922         | B*3901G1+B*9552             |                 |               |
| B*151101+B*40G1         | B*1515+B*4061               | B*4025+B*9552   |               |
| B*151101+B*400104       | B*151103+B*40G1             |                 |               |
| B*151101+B*4066         | B*40G1+B*9548               |                 |               |
| B*151101+B*44G1/B*4466  | B*4412+B*9552               |                 |               |
| B*151101+B*440302       | B*151103+B*440301/440303    |                 |               |
| B*151101+B*442801       | B*151103+B*442802           |                 |               |
| B*151101+B*446401       | B*151103+B*446402           |                 |               |
| B*151101+B*480302       | B*151103+B*480301           |                 |               |
| B*151101+B*520102       | B*5107+B*9552               |                 |               |
| B*151101+B*520602       | B*51G1+B*9552               |                 |               |
| B*151101+B*9501         | B*1576+B*9552               |                 |               |
| B*151103+B*4066         | B*400104+B*9548             |                 |               |
| B*1513+B*1550           | B*1524+B*9521               |                 |               |
| B*1513+B*1566           | B*1521+B*1524               |                 |               |

|                        |                        |                 |
|------------------------|------------------------|-----------------|
| B*1513+B*1593          | B*1523+B*9521          |                 |
| B*1513+B*3510          | B*1525+B*530101        |                 |
| B*1513+B*3513          | B*1525+B*5304          |                 |
| B*1513+B*351401        | B*5308+B*9544          |                 |
| B*1513+B*3560          | B*5115+B*9521          |                 |
| B*1513+B*3562          | B*530101+B*9544        |                 |
| B*1513+B*356802        | B*1531+B*5308          |                 |
| B*1513+B*3578          | B*530101+B*9539        |                 |
| B*1513+B*3593          | B*530101+B*9521        |                 |
| B*1513+B*380201/3818   | B*1589+B*380101        |                 |
| B*1513+B*3922          | B*1525+B*3814          |                 |
| B*1513+B*440301/440303 | B*1589+B*4450          |                 |
| B*1513+B*4405          | B*1589+B*4425          |                 |
| B*1513+B*4902          | B*1589+B*490101        |                 |
| B*1513+B*5154          | B*1589+B*5105          |                 |
| B*1513+B*5312          | B*1589+B*5305          |                 |
| B*1513+B*5313          | B*1589+B*530101        |                 |
| B*1514+B*1561          | B*1570+B*9531          |                 |
| B*1514+B*1562          | B*1585+B*9531          |                 |
| B*1514+B*1564          | B*1515+B*9531          |                 |
| B*1514+B*350401        | B*1530+B*3571          |                 |
| B*1514+B*3506          | B*1558+B*3571          |                 |
| B*1514+B*3515          | B*3571+B*9517          |                 |
| B*1514+B*3523          | B*152702+B*3571        |                 |
| B*1514+B*3524          | B*1538+B*3571          |                 |
| B*1514+B*3527          | B*3571+B*9535          |                 |
| B*1514+B*3529          | B*1570+B*3571          |                 |
| B*1514+B*3534          | B*1563+B*3571          |                 |
| B*1514+B*3550          | B*1571+B*3571          |                 |
| B*1514+B*3554          | B*3571+B*9525          |                 |
| B*1514+B*3593          | B*1550+B*3571          |                 |
| B*1514+B*446401        | B*440302+B*9517        |                 |
| B*1514+B*446402        | B*440301/440303+B*9517 |                 |
| B*1514+B*4508          | B*1550+B*4501/4507     |                 |
| B*1514+B*4605          | B*4617+B*9525          |                 |
| B*1514+B*4608          | B*1539+B*4617          |                 |
| B*1514+B*490101        | B*1524+B*5002          |                 |
| B*1514+B*51G1          | B*1538+B*5123          |                 |
| B*1514+B*5134          | B*5123+B*9517          |                 |
| B*1514+B*530101        | B*1524+B*3571          |                 |
| B*1514+B*5303          | B*1543+B*3571          |                 |
| B*1514+B*5305          | B*1587+B*3571          |                 |
| B*1514+B*5316          | B*1587+B*3545          |                 |
| B*1514+B*9556          | B*9528+B*9531          |                 |
| B*1515+B*1561          | B*1564+B*1570          |                 |
| B*1515+B*1562          | B*1564+B*1585          |                 |
| B*1515+B*1820          | B*1531+B*1819          |                 |
| B*1515+B*3576          | B*1576+B*352001        |                 |
| B*1515+B*4043          | B*1570+B*4025          |                 |
| B*1515+B*4067          | B*4025+B*9545          |                 |
| B*1515+B*4069          | B*1528+B*4025          |                 |
| B*1515+B*4079          | B*4025+B*9559          |                 |
| B*1515+B*4421          | B*4412+B*9517          |                 |
| B*1515+B*4422          | B*4412+B*9525          |                 |
| B*1515+B*4449          | B*4412+B*9542          |                 |
| B*1515+B*4453          | B*1578+B*4412          |                 |
| B*1515+B*4506          | B*1576+B*4501/4507     |                 |
| B*1515+B*9556          | B*1564+B*9528          |                 |
| B*1516+B*5804          | B*1595+B*580101/5811   |                 |
| B*1518+B*1544          | B*1521+B*1593          |                 |
| B*1518+B*1556          | B*1529+B*1566          |                 |
| B*1518+B*18G1          | B*1564+B*1833          |                 |
| B*1518+B*1807          | B*1529+B*1833          |                 |
| B*1518+B*2702          | B*1523+B*2708          |                 |
| B*1518+B*35G1          | B*1529+B*3582          | B*1580+B*356801 |
| B*1518+B*350104        | B*1580+B*356802        |                 |
| B*1518+B*350301/3570   | B*1529+B*3585          | B*35G1+B*9533   |
| B*1518+B*350901        | B*1572+B*350401        |                 |
| B*1518+B*3513          | B*3510+B*9533          |                 |
| B*1518+B*3515          | B*1552+B*3511          |                 |
| B*1518+B*352001        | B*1564+B*3582          |                 |
| B*1518+B*3530          | B*1580+B*3505          |                 |
| B*1518+B*3533          | B*3515+B*9533          |                 |
| B*1518+B*3535          | B*3593+B*9508          |                 |
| B*1518+B*3556          | B*3527+B*9533          |                 |
| B*1518+B*3585          | B*3582+B*9533          |                 |
| B*1518+B*3593          | B*1593+B*35G1          |                 |
| B*1518+B*380101        | B*1523+B*3905          |                 |
| B*1518+B*3803          | B*390201+B*9515        |                 |
| B*1518+B*3814          | B*1523+B*3901G1        |                 |
| B*1518+B*3819          | B*1523+B*3937          |                 |
| B*1518+B*3901G1        | B*3930+B*9508          |                 |
| B*1518+B*390602        | B*3934+B*9508          |                 |
| B*1518+B*3939          | B*1564+B*3901G1        |                 |
| B*1518+B*3942          | B*1580+B*3901G1        |                 |
| B*1518+B*3948          | B*1593+B*3932          |                 |
| B*1518+B*400201/4056   | B*1552+B*4005          | B*1572+B*4035   |
| B*1518+B*400601        | B*1564+B*4075          |                 |
| B*1518+B*4019          | B*1523+B*400201/4056   |                 |
| B*1518+B*4036          | B*4038+B*9533          |                 |
| B*1518+B*4201          | B*1572+B*4210          |                 |
| B*1518+B*44G1/B*4466   | B*1580+B*4441          |                 |
| B*1518+B*440301/440303 | B*1580+B*4465          |                 |
| B*1518+B*4404          | B*1593+B*442802        |                 |
| B*1518+B*4415          | B*4501/4507+B*9515     |                 |
| B*1518+B*4418          | B*1523+B*4501/4507     |                 |
| B*1518+B*4429          | B*440301/440303+B*9508 |                 |
| B*1518+B*4450          | B*1523+B*4446          |                 |
| B*1518+B*4453          | B*1572+B*44G1/B*4466   |                 |
| B*1518+B*4501/4507     | B*1551+B*5002          |                 |
| B*1518+B*4504          | B*1551+B*5001          |                 |
| B*1518+B*4508          | B*1593+B*4504          |                 |
| B*1518+B*4618          | B*1593+B*4611          |                 |
| B*1518+B*490101        | B*1523+B*5001          |                 |

|                             |                      |                 |
|-----------------------------|----------------------|-----------------|
| B*1518+B*510102             | B*1523+B*780201      |                 |
| B*1518+B*5107               | B*1564+B*5122        |                 |
| B*1518+B*5108               | B*1551+B*51G1        |                 |
| B*1518+B*511302             | B*5163+B*9533        |                 |
| B*1518+B*5119               | B*510901+B*9508      |                 |
| B*1518+B*5121               | B*1593+B*51G1        |                 |
| B*1518+B*512401             | B*1572+B*510104      |                 |
| B*1518+B*5129               | B*1599+B*5163        |                 |
| B*1518+B*5131               | B*1552+B*51G1        |                 |
| B*1518+B*5149               | B*51G1+B*9553        |                 |
| B*1518+B*520101/5207        | B*1523+B*7805        |                 |
| B*1518+B*530101             | B*1523+B*35G1        |                 |
| B*1518+B*5302               | B*1523+B*3524        |                 |
| B*1518+B*5304               | B*1523+B*350301/3570 | B*530101+B*9533 |
| B*1518+B*5308               | B*1523+B*3511        |                 |
| B*1518+B*5312               | B*35G1+B*9515        |                 |
| B*1518+B*5313               | B*3527+B*9515        |                 |
| B*1518+B*5314               | B*1523+B*3505        |                 |
| B*1518+B*5401/5417          | B*1593+B*5403        |                 |
| B*1518+B*5412               | B*1523+B*5401/5417   |                 |
| B*1518+B*550201             | B*1593+B*5601/5624   |                 |
| B*1518+B*5513               | B*1593+B*5622        | B*5532+B*9533   |
| B*1518+B*5610               | B*1593+B*5602        |                 |
| B*1518+B*5611               | B*5609+B*9533        |                 |
| B*1518+B*5620               | B*1572+B*5601/5624   |                 |
| B*1518+B*5621               | B*1523+B*560502      |                 |
| B*1518+B*5702               | B*1523+B*5712        |                 |
| B*1518+B*5901               | B*1593+B*5904        |                 |
| B*1518+B*7801               | B*1529+B*7803        |                 |
| B*1518+B*9514               | B*1552+B*9553        |                 |
| B*1520+B*1529               | B*1539+B*3525        |                 |
| B*1520+B*351402             | B*1585+B*35G1        |                 |
| B*1520+B*3599               | B*1539+B*350801      | B*1565+B*35G1   |
| B*1520+B*3918               | B*1585+B*3901G1      |                 |
| B*1520+B*40G1               | B*3563+B*4021        |                 |
| B*1520+B*460101/4615N       | B*1585+B*461301      |                 |
| B*1520+B*480301             | B*4021+B*4802        |                 |
| B*1520+B*51G1               | B*35G1+B*5202        |                 |
| B*1520+B*5107               | B*352001+B*5202      |                 |
| B*1520+B*5116               | B*3515+B*5202        |                 |
| B*1520+B*5121               | B*3593+B*5202        |                 |
| B*1520+B*5122               | B*3582+B*5202        |                 |
| B*1520+B*5129               | B*350801+B*5202      |                 |
| B*1520+B*5161               | B*1585+B*510901      |                 |
| B*1520+B*520102             | B*3528+B*5202        |                 |
| B*1520+B*520602             | B*3510+B*5202        |                 |
| B*1520+B*550101/550103      | B*1542+B*5609        |                 |
| B*1521+B*1809               | B*1589+B*1833        |                 |
| B*1521+B*1812               | B*1525+B*1833        |                 |
| B*1521+B*3528               | B*1525+B*3582        |                 |
| B*1521+B*3593               | B*1544+B*35G1        |                 |
| B*1521+B*3908               | B*1525+B*3911        |                 |
| B*1521+B*3948               | B*1544+B*3932        |                 |
| B*1521+B*4096               | B*1589+B*4075        |                 |
| B*1521+B*4404               | B*1544+B*442802      |                 |
| B*1521+B*4508               | B*1544+B*4504        |                 |
| B*1521+B*4618               | B*1544+B*4611        |                 |
| B*1521+B*5121               | B*1544+B*51G1        |                 |
| B*1521+B*520102             | B*1525+B*5122        |                 |
| B*1521+B*5309               | B*1589+B*3582        |                 |
| B*1521+B*5401/5417          | B*1544+B*5403        |                 |
| B*1521+B*550201             | B*1544+B*5601/5624   |                 |
| B*1521+B*5513               | B*1544+B*5622        |                 |
| B*1521+B*5610               | B*1544+B*5602        |                 |
| B*1521+B*5901               | B*1544+B*5904        |                 |
| B*1523+B*1550               | B*1524+B*1593        |                 |
| B*1523+B*1578               | B*1524+B*1572        |                 |
| B*1523+B*350302             | B*530103+B*9533      |                 |
| B*1523+B*3515               | B*1552+B*5308        |                 |
| B*1523+B*3530               | B*1580+B*5314        |                 |
| B*1523+B*3560               | B*1593+B*5115        |                 |
| B*1523+B*3593               | B*1593+B*530101      |                 |
| B*1523+B*3939               | B*1564+B*3814        |                 |
| B*1523+B*3942               | B*1580+B*3814        |                 |
| B*1523+B*4415               | B*4418+B*9515        |                 |
| B*1523+B*4504               | B*1551+B*490101      |                 |
| B*1523+B*5312               | B*530101+B*9515      |                 |
| B*1523+B*9554               | B*1524+B*1580        |                 |
| B*1524+B*270502/270504/2713 | B*1543+B*2702        |                 |
| B*1524+B*2719               | B*1543+B*2730        |                 |
| B*1524+B*350401             | B*1530+B*530101      |                 |
| B*1524+B*3506               | B*1558+B*530101      |                 |
| B*1524+B*350801             | B*5316+B*9535        |                 |
| B*1524+B*350902             | B*530103+B*9550      |                 |
| B*1524+B*3515               | B*530101+B*9517      |                 |
| B*1524+B*3521               | B*1538+B*5308        |                 |
| B*1524+B*3523               | B*152702+B*530101    |                 |
| B*1524+B*3527               | B*530101+B*9535      |                 |
| B*1524+B*3529               | B*1570+B*530101      |                 |
| B*1524+B*3530               | B*5314+B*9554        |                 |
| B*1524+B*3533               | B*5304+B*9517        |                 |
| B*1524+B*3534               | B*1563+B*530101      |                 |
| B*1524+B*3550               | B*1571+B*530101      |                 |
| B*1524+B*3554               | B*530101+B*9525      |                 |
| B*1524+B*3556               | B*5304+B*9535        |                 |
| B*1524+B*3560               | B*1550+B*5115        |                 |
| B*1524+B*3593               | B*1550+B*530101      |                 |
| B*1524+B*3817               | B*1543+B*380101      |                 |
| B*1524+B*3909               | B*1532+B*3814        |                 |
| B*1524+B*3928               | B*1535+B*3814        |                 |
| B*1524+B*3942               | B*3814+B*9554        |                 |
| B*1524+B*3948               | B*1538+B*3814        |                 |
| B*1524+B*4037               | B*4019+B*9535        |                 |
| B*1524+B*4050               | B*1570+B*4019        |                 |

|                          |                         |               |
|--------------------------|-------------------------|---------------|
| B*1524+B*4089            | B*4019+B*9528           |               |
| B*1524+B*4506            | B*4418+B*9501           |               |
| B*1524+B*480101/4809     | B*4818+B*9535           |               |
| B*1524+B*5209            | B*1587+B*520102         |               |
| B*1524+B*5303            | B*1543+B*530101         |               |
| B*1524+B*5305            | B*1587+B*530101         |               |
| B*1524+B*5312            | B*1587+B*5313           |               |
| B*1524+B*5402            | B*1571+B*5412           |               |
| B*1524+B*550201          | B*1587+B*5512           |               |
| B*1524+B*5606            | B*1576+B*520102         | B*5107+B*9501 |
| B*1524+B*7801            | B*1570+B*51G1           |               |
| B*1524+B*7803            | B*1570+B*5122           |               |
| B*1524+B*7806            | B*520101/5207+B*9535    |               |
| B*1525+B*1809            | B*1536+B*18G1           | B*1589+B*1812 |
| B*1525+B*2701            | B*1536+B*2744           |               |
| B*1525+B*3562            | B*3510+B*9544           |               |
| B*1525+B*3578            | B*3510+B*9539           |               |
| B*1525+B*3593            | B*3510+B*9521           |               |
| B*1525+B*3710            | B*1536+B*3711           |               |
| B*1525+B*380201/3818     | B*1536+B*3905           |               |
| B*1525+B*4047            | B*1536+B*40G1           |               |
| B*1525+B*4096            | B*1536+B*400601         |               |
| B*1525+B*44G1/B*4466     | B*1536+B*4409           | B*4408+B*9506 |
| B*1525+B*440301/440303   | B*1536+B*4446           | B*4457+B*9506 |
| B*1525+B*4902            | B*1536+B*5001           |               |
| B*1525+B*5121            | B*520602+B*9521         |               |
| B*1525+B*5309            | B*1536+B*352001         | B*1589+B*3528 |
| B*1525+B*5311            | B*1536+B*350801         | B*1589+B*3580 |
| B*1525+B*5313            | B*1536+B*35G1           | B*1589+B*3510 |
| B*1525+B*5607            | B*1536+B*5601/5624      |               |
| B*152701+B*1813          | B*1584+B*1819           |               |
| B*152701+B*350301/3570   | B*152703+B*350302       |               |
| B*152701+B*350801        | B*1584+B*351401         |               |
| B*152701+B*350803        | B*152702+B*350801       |               |
| B*152701+B*351401        | B*152703+B*351402       |               |
| B*152701+B*3548          | B*1532+B*3523           |               |
| B*152701+B*356802        | B*152702+B*356801       |               |
| B*152701+B*3901G1        | B*152703+B*390105       |               |
| B*152701+B*390601        | B*152702+B*390602       |               |
| B*152701+B*40G1          | B*152702+B*400104       |               |
| B*152701+B*401401        | B*152703+B*401402       |               |
| B*152701+B*440301/440303 | B*152702+B*440302       |               |
| B*152701+B*442802        | B*152702+B*442801       |               |
| B*152701+B*446402        | B*152702+B*446401       |               |
| B*152701+B*4705          | B*470101+B*9529         |               |
| B*152701+B*480301        | B*152702+B*480302       |               |
| B*152701+B*530101        | B*152703+B*530103       |               |
| B*152702+B*350401        | B*1530+B*3523           |               |
| B*152702+B*3506          | B*1558+B*3523           |               |
| B*152702+B*3515          | B*3523+B*9517           |               |
| B*152702+B*3524          | B*1538+B*3523           |               |
| B*152702+B*3527          | B*3523+B*9535           |               |
| B*152702+B*3529          | B*1570+B*3523           |               |
| B*152702+B*3534          | B*1563+B*3523           |               |
| B*152702+B*3550          | B*1571+B*3523           |               |
| B*152702+B*3554          | B*3523+B*9525           |               |
| B*152702+B*3593          | B*1550+B*3523           |               |
| B*152702+B*5303          | B*1543+B*3523           |               |
| B*152702+B*5305          | B*1587+B*3523           |               |
| B*1528+B*4007            | B*1556+B*4069           |               |
| B*1528+B*4043            | B*1570+B*4069           |               |
| B*1528+B*4061            | B*4069+B*9552           |               |
| B*1528+B*4067            | B*4069+B*9545           |               |
| B*1528+B*4079            | B*4069+B*9559           |               |
| B*1529+B*18G1            | B*1564+B*1807           |               |
| B*1529+B*350801          | B*3525+B*3599           |               |
| B*1529+B*352001          | B*1564+B*35G1           |               |
| B*1529+B*3562            | B*3525+B*3543/3567/3579 |               |
| B*1529+B*3572            | B*1564+B*3505           |               |
| B*1529+B*3595            | B*1564+B*350201         |               |
| B*1529+B*40G1            | B*1564+B*4007           |               |
| B*1529+B*4019            | B*1564+B*4013           |               |
| B*1529+B*4050            | B*1561+B*4008           |               |
| B*1529+B*4089            | B*4008+B*9556           |               |
| B*1529+B*4819            | B*1554+B*4806           |               |
| B*1529+B*5107            | B*1564+B*51G1           |               |
| B*1529+B*5203            | B*510201+B*9523/9551    |               |
| B*1529+B*5309            | B*1564+B*5313           |               |
| B*1530+B*1802            | B*1826+B*9529           |               |
| B*1530+B*1803            | B*1570+B*1826           |               |
| B*1530+B*1807            | B*1556+B*1826           |               |
| B*1530+B*1808            | B*1826+B*9510           |               |
| B*1530+B*1818            | B*1532+B*1826           |               |
| B*1530+B*1820            | B*1826+B*9528           |               |
| B*1530+B*1831            | B*1826+B*9545           |               |
| B*1530+B*1833            | B*1566+B*1826           |               |
| B*1530+B*350301/3570     | B*1558+B*3534           | B*1563+B*3506 |
| B*1530+B*3506            | B*1558+B*350401         |               |
| B*1530+B*351402          | B*1585+B*3544           |               |
| B*1530+B*3515            | B*350401+B*9517         |               |
| B*1530+B*3524            | B*1538+B*350401         |               |
| B*1530+B*3527            | B*350401+B*9535         |               |
| B*1530+B*3529            | B*1570+B*350401         |               |
| B*1530+B*3534            | B*1563+B*350401         |               |
| B*1530+B*3539            | B*1563+B*3512           |               |
| B*1530+B*3550            | B*1571+B*350401         |               |
| B*1530+B*3554            | B*350401+B*9525         |               |
| B*1530+B*3559            | B*1558+B*3512           |               |
| B*1530+B*3586            | B*3544+B*9517           |               |
| B*1530+B*3593            | B*1550+B*350401         |               |
| B*1530+B*3599            | B*1565+B*3544           |               |
| B*1530+B*3903            | B*1558+B*3914           |               |
| B*1530+B*3915            | B*1563+B*3901G1         |               |
| B*1530+B*3929            | B*1563+B*3914           |               |

|                        |                             |                      |
|------------------------|-----------------------------|----------------------|
| B*1530+B*40G1          | B*4087+B*9550               |                      |
| B*1530+B*4009          | B*1563+B*4089               |                      |
| B*1530+B*4018          | B*1545+B*4011               | B*1563+B*400201/4056 |
| B*1530+B*4031          | B*1545+B*40G1               | B*1563+B*4080        |
| B*1530+B*4032          | B*1563+B*4016               |                      |
| B*1530+B*4033          | B*1563+B*40G1               |                      |
| B*1530+B*4036          | B*1558+B*40G1               |                      |
| B*1530+B*4044          | B*1563+B*400601             |                      |
| B*1530+B*4048          | B*1573+B*40G1               |                      |
| B*1530+B*4059          | B*1585+B*40G1               |                      |
| B*1530+B*4086          | B*1558+B*400601             |                      |
| B*1530+B*4206          | B*1558+B*4201               |                      |
| B*1530+B*4451          | B*1563+B*4414               |                      |
| B*1530+B*4606          | B*4021+B*460101/4615N       |                      |
| B*1530+B*4807          | B*1558+B*480101/4809        |                      |
| B*1530+B*51G1          | B*3544+B*5202               |                      |
| B*1530+B*511301        | B*1558+B*510104             |                      |
| B*1530+B*511302        | B*1558+B*51G1               |                      |
| B*1530+B*5119          | B*1548+B*5161               |                      |
| B*1530+B*5212          | B*1563+B*520101/5207        |                      |
| B*1530+B*5303          | B*1543+B*350401             |                      |
| B*1530+B*5305          | B*1587+B*350401             |                      |
| B*1530+B*5401/5417     | B*1573+B*5404               |                      |
| B*1530+B*5416          | B*1563+B*5401/5417          |                      |
| B*1530+B*550101/550103 | B*1573+B*5528               |                      |
| B*1530+B*5523          | B*1550+B*5615               | B*1563+B*5532        |
| B*1530+B*5601/5624     | B*1573+B*5615               |                      |
| B*1530+B*5622          | B*1558+B*5615               |                      |
| B*1530+B*9541          | B*1535+B*9550               |                      |
| B*1531+B*1545          | B*1555+B*1563               |                      |
| B*1531+B*1814          | B*1555+B*18G1               |                      |
| B*1531+B*3505          | B*1555+B*356802             |                      |
| B*1531+B*351401        | B*356802+B*9544             |                      |
| B*1531+B*3530          | B*1555+B*350104             |                      |
| B*1531+B*3819          | B*1555+B*380101             |                      |
| B*1531+B*3903          | B*1555+B*3901G1             |                      |
| B*1531+B*3937          | B*1555+B*3905               |                      |
| B*1531+B*400201/4056   | B*1555+B*4011               |                      |
| B*1531+B*4003          | B*1555+B*4020               |                      |
| B*1531+B*4031          | B*1555+B*4033               |                      |
| B*1531+B*4080          | B*1555+B*40G1               |                      |
| B*1531+B*4102          | B*1555+B*410302             |                      |
| B*1531+B*4454          | B*1555+B*4465               |                      |
| B*1531+B*4612          | B*1555+B*460101/4615N       |                      |
| B*1531+B*480101/4809   | B*1555+B*480301             |                      |
| B*1531+B*5164          | B*1555+B*5106               |                      |
| B*1531+B*5818          | B*1555+B*5816               |                      |
| B*1532+B*1802          | B*1818+B*9529               |                      |
| B*1532+B*1803          | B*1570+B*1818               |                      |
| B*1532+B*1807          | B*1556+B*1818               |                      |
| B*1532+B*1808          | B*1818+B*9510               |                      |
| B*1532+B*1820          | B*1818+B*9528               |                      |
| B*1532+B*1831          | B*1818+B*9545               |                      |
| B*1532+B*1833          | B*1566+B*1818               |                      |
| B*1532+B*3928          | B*1535+B*3909               |                      |
| B*1532+B*3942          | B*3909+B*9554               |                      |
| B*1532+B*3948          | B*1538+B*3909               |                      |
| B*1534+B*4075          | B*1566+B*4070               |                      |
| B*1535+B*3942          | B*3928+B*9554               |                      |
| B*1535+B*3948          | B*1538+B*3928               |                      |
| B*1535+B*40G1          | B*4087+B*9541               |                      |
| B*1535+B*5511          | B*550101/550103+B*9518      |                      |
| B*1536+B*1576          | B*1589+B*9501               |                      |
| B*1536+B*350301/3570   | B*1589+B*3513               |                      |
| B*1536+B*3517          | B*1589+B*3516               |                      |
| B*1536+B*3529          | B*1589+B*3569               |                      |
| B*1536+B*3901G1        | B*1589+B*3922               |                      |
| B*1536+B*3939          | B*1589+B*390201             |                      |
| B*1536+B*4412          | B*1589+B*44G1/B*4466        |                      |
| B*1536+B*51G1          | B*1589+B*520602             |                      |
| B*1536+B*5107          | B*1589+B*520102             |                      |
| B*1537+B*350801        | B*1599+B*3524               |                      |
| B*1537+B*5105          | B*1599+B*510902             |                      |
| B*1538+B*3506          | B*1558+B*3524               |                      |
| B*1538+B*3515          | B*3524+B*9517               |                      |
| B*1538+B*3527          | B*3524+B*9535               |                      |
| B*1538+B*3529          | B*1570+B*3524               |                      |
| B*1538+B*3534          | B*1563+B*3524               |                      |
| B*1538+B*3550          | B*1571+B*3524               |                      |
| B*1538+B*3554          | B*3524+B*9525               |                      |
| B*1538+B*3593          | B*1550+B*3524               |                      |
| B*1538+B*3930          | B*1558+B*3943               |                      |
| B*1538+B*3942          | B*3948+B*9554               |                      |
| B*1538+B*3947          | B*3932+B*9517               |                      |
| B*1538+B*5303          | B*1543+B*3524               |                      |
| B*1538+B*5305          | B*1587+B*3524               |                      |
| B*1539+B*1830          | B*1565+B*1815               |                      |
| B*1539+B*2745          | B*1565+B*270502/270504/2713 |                      |
| B*1539+B*350803        | B*1565+B*350104             |                      |
| B*1539+B*3515          | B*1540+B*35G1               |                      |
| B*1539+B*3518          | B*1565+B*350902             |                      |
| B*1539+B*3533          | B*1540+B*350301/3570        |                      |
| B*1539+B*3545          | B*1565+B*3571               |                      |
| B*1539+B*3580          | B*1565+B*3510               |                      |
| B*1539+B*3586          | B*1540+B*3543/3567/3579     |                      |
| B*1539+B*380101        | B*3810+B*9536               |                      |
| B*1539+B*390602        | B*3935+B*9555               |                      |
| B*1539+B*3911          | B*1565+B*3905               |                      |
| B*1539+B*40G1          | B*1540+B*4063               | B*4092+B*9538        |
| B*1539+B*4421          | B*1540+B*44G1/B*4466        |                      |
| B*1539+B*442801        | B*1565+B*440302             |                      |
| B*1539+B*442802        | B*1565+B*440301/440303      |                      |
| B*1539+B*446402        | B*1540+B*4437               |                      |
| B*1539+B*4605          | B*4608+B*9525               |                      |

|                        |                      |                        |
|------------------------|----------------------|------------------------|
| B*1539+B*5116          | B*1540+B*51G1        |                        |
| B*1539+B*5119          | B*51G1+B*9536        |                        |
| B*1539+B*5129          | B*1565+B*51G1        | B*3599+B*5202          |
| B*1539+B*5134          | B*1540+B*510201      |                        |
| B*1539+B*5208          | B*1540+B*520101/5207 |                        |
| B*1539+B*5311          | B*1565+B*5313        |                        |
| B*1539+B*5316          | B*1565+B*5305        |                        |
| B*1539+B*5410          | B*1565+B*5401/5417   |                        |
| B*1539+B*5509          | B*1565+B*5524        |                        |
| B*1539+B*5702          | B*1565+B*570301      |                        |
| B*1539+B*5719          | B*1565+B*570101      |                        |
| B*1540+B*1819          | B*1815+B*9517        |                        |
| B*1540+B*350801        | B*1565+B*3515        |                        |
| B*1540+B*351401        | B*3511+B*9517        |                        |
| B*1540+B*420501        | B*4208+B*9538        |                        |
| B*1540+B*460101/4615N  | B*4608+B*9517        |                        |
| B*1540+B*480101/4809   | B*4804+B*9538        |                        |
| B*1540+B*4810          | B*4813+B*9538        |                        |
| B*1540+B*4819          | B*480101/4809+B*9517 |                        |
| B*1540+B*5119          | B*5116+B*9536        |                        |
| B*1540+B*5129          | B*1565+B*5116        |                        |
| B*1540+B*5521          | B*1550+B*5524        | B*550101/550103+B*9517 |
| B*1542+B*510901        | B*3560+B*5202        |                        |
| B*1543+B*3506          | B*1558+B*5303        |                        |
| B*1543+B*3515          | B*5303+B*9517        |                        |
| B*1543+B*3527          | B*5303+B*9535        |                        |
| B*1543+B*3529          | B*1570+B*5303        |                        |
| B*1543+B*3534          | B*1563+B*5303        |                        |
| B*1543+B*3550          | B*1571+B*5303        |                        |
| B*1543+B*3554          | B*5303+B*9525        |                        |
| B*1543+B*3593          | B*1550+B*5303        |                        |
| B*1543+B*3901G1        | B*1570+B*3817        |                        |
| B*1543+B*5305          | B*1587+B*5303        |                        |
| B*1544+B*18G1          | B*1833+B*9521        |                        |
| B*1544+B*352001        | B*3582+B*9521        |                        |
| B*1544+B*390201        | B*3922+B*9521        |                        |
| B*1544+B*3939          | B*3901G1+B*9521      |                        |
| B*1544+B*400601        | B*4075+B*9521        |                        |
| B*1544+B*5107          | B*5122+B*9521        |                        |
| B*1545+B*18G1          | B*1563+B*1814        |                        |
| B*1545+B*350104        | B*1563+B*3530        |                        |
| B*1545+B*3541          | B*3534+B*9526        |                        |
| B*1545+B*356802        | B*1563+B*3505        |                        |
| B*1545+B*380101        | B*1563+B*3819        |                        |
| B*1545+B*3901G1        | B*1558+B*3929        | B*1563+B*3903          |
| B*1545+B*3905          | B*1563+B*3937        |                        |
| B*1545+B*4033          | B*1563+B*4031        |                        |
| B*1545+B*4036          | B*1558+B*4031        |                        |
| B*1545+B*4048          | B*1573+B*4031        |                        |
| B*1545+B*4059          | B*1585+B*4031        |                        |
| B*1545+B*410302        | B*1563+B*4102        |                        |
| B*1545+B*4465          | B*1563+B*4454        |                        |
| B*1545+B*460101/4615N  | B*1563+B*4612        |                        |
| B*1545+B*480301        | B*1563+B*480101/4809 |                        |
| B*1545+B*5106          | B*1563+B*5164        |                        |
| B*1545+B*5816          | B*1563+B*5818        |                        |
| B*1546+B*3525          | B*1554+B*3547        |                        |
| B*1547+B*5601/5624     | B*5509+B*9523/9551   |                        |
| B*1550+B*1572          | B*1578+B*1593        |                        |
| B*1550+B*1580          | B*1593+B*9554        |                        |
| B*1550+B*1810          | B*1811+B*9517        |                        |
| B*1550+B*270401        | B*2715+B*9517        |                        |
| B*1550+B*3506          | B*1558+B*3593        |                        |
| B*1550+B*3515          | B*3593+B*9517        |                        |
| B*1550+B*3527          | B*3593+B*9535        |                        |
| B*1550+B*3529          | B*1570+B*3593        |                        |
| B*1550+B*3534          | B*1563+B*3593        |                        |
| B*1550+B*3550          | B*1571+B*3593        |                        |
| B*1550+B*3554          | B*3593+B*9525        |                        |
| B*1550+B*3947          | B*3901G1+B*9517      |                        |
| B*1550+B*400201/4056   | B*4039+B*9517        |                        |
| B*1550+B*5116          | B*5121+B*9517        |                        |
| B*1550+B*5141N         | B*1594N+B*5121       |                        |
| B*1550+B*5153          | B*5121+B*9505        |                        |
| B*1550+B*5305          | B*1587+B*3593        |                        |
| B*1550+B*5508          | B*5618+B*9550        |                        |
| B*1550+B*5522          | B*550201+B*9517      |                        |
| B*1550+B*5604          | B*1573+B*5618        |                        |
| B*1550+B*5609          | B*1585+B*5618        |                        |
| B*1550+B*5617          | B*1570+B*5623        |                        |
| B*1550+B*5620          | B*1578+B*550201      |                        |
| B*1551+B*3533          | B*1552+B*3538        |                        |
| B*1551+B*5121          | B*1593+B*5108        |                        |
| B*1551+B*5131          | B*1552+B*5108        |                        |
| B*1551+B*5149          | B*5108+B*9553        |                        |
| B*1551+B*550101/550103 | B*1593+B*5613        |                        |
| B*1551+B*5522          | B*1552+B*5613        |                        |
| B*1552+B*3935          | B*1593+B*3947        |                        |
| B*1552+B*40G1          | B*401403+B*9524      |                        |
| B*1552+B*480101/4809   | B*4810+B*9524        |                        |
| B*1552+B*4804          | B*4813+B*9524        |                        |
| B*1552+B*5121          | B*1593+B*5131        |                        |
| B*1552+B*5149          | B*51G1+B*9514        | B*5131+B*9553          |
| B*1552+B*550101/550103 | B*1593+B*5522        |                        |
| B*1553+B*480101/4809   | B*1568+B*4049        |                        |
| B*1554+B*18G1          | B*1819+B*9523/9551   |                        |
| B*1554+B*3529          | B*1561+B*3562        |                        |
| B*1554+B*3535          | B*1569+B*3562        |                        |
| B*1554+B*3571          | B*1591+B*351401      | B*3562+B*9531          |
| B*1554+B*390105        | B*3918+B*9523/9551   |                        |
| B*1554+B*3930          | B*3936+B*9523/9551   |                        |
| B*1554+B*550201        | B*5521+B*9523/9551   |                        |
| B*1555+B*351401        | B*3505+B*9544        |                        |
| B*1556+B*1802          | B*1807+B*9529        |                        |

|                         |                         |               |
|-------------------------|-------------------------|---------------|
| B*1556+B*1803           | B*1570+B*1807           |               |
| B*1556+B*1808           | B*1807+B*9510           |               |
| B*1556+B*1820           | B*1807+B*9528           |               |
| B*1556+B*1831           | B*1807+B*9545           |               |
| B*1556+B*1833           | B*1566+B*1807           |               |
| B*1556+B*3576           | B*1576+B*3510           | B*35G1+B*9501 |
| B*1556+B*3582           | B*1566+B*35G1           |               |
| B*1556+B*3585           | B*1566+B*350301/3570    |               |
| B*1556+B*4043           | B*1570+B*4007           |               |
| B*1556+B*4061           | B*4007+B*9552           |               |
| B*1556+B*4067           | B*4007+B*9545           |               |
| B*1556+B*4079           | B*4007+B*9559           |               |
| B*1556+B*460101/4615N   | B*4616+B*9552           |               |
| B*1556+B*5122           | B*1566+B*51G1           |               |
| B*1556+B*5606           | B*780202+B*9501         |               |
| B*1556+B*7803           | B*1566+B*7801           |               |
| B*1556+B*8101/8102/8103 | B*4806+B*9501           |               |
| B*1557+B*18G1           | B*1806+B*9535           |               |
| B*1557+B*350301/3570    | B*3574+B*9535           |               |
| B*1557+B*3901G1         | B*3927+B*9535           |               |
| B*1557+B*40G1           | B*4073+B*9535           |               |
| B*1557+B*550101/550103  | B*5503+B*9535           |               |
| B*1558+B*3515           | B*3506+B*9517           |               |
| B*1558+B*3527           | B*3506+B*9535           |               |
| B*1558+B*3529           | B*1570+B*3506           |               |
| B*1558+B*3539           | B*1563+B*3559           |               |
| B*1558+B*3550           | B*1571+B*3506           |               |
| B*1558+B*3554           | B*3506+B*9525           |               |
| B*1558+B*4033           | B*1563+B*4036           |               |
| B*1558+B*4044           | B*1563+B*4086           |               |
| B*1558+B*4048           | B*1573+B*4036           |               |
| B*1558+B*4059           | B*1585+B*4036           |               |
| B*1558+B*4501/4507      | B*1573+B*4502           |               |
| B*1558+B*5305           | B*1587+B*3506           |               |
| B*1558+B*550201         | B*1573+B*5513           |               |
| B*1558+B*5601/5624      | B*1573+B*5622           |               |
| B*1558+B*5901           | B*1573+B*5903           |               |
| B*1561+B*1585           | B*1562+B*1570           |               |
| B*1561+B*1820           | B*1803+B*9556           |               |
| B*1561+B*3535           | B*1569+B*3529           |               |
| B*1561+B*3571           | B*3529+B*9531           |               |
| B*1561+B*4025           | B*1564+B*4043           |               |
| B*1561+B*4089           | B*4050+B*9556           |               |
| B*1561+B*9528           | B*1570+B*9556           |               |
| B*1562+B*9528           | B*1585+B*9556           |               |
| B*1563+B*3515           | B*3534+B*9517           |               |
| B*1563+B*3527           | B*3534+B*9535           |               |
| B*1563+B*3529           | B*1570+B*3534           |               |
| B*1563+B*3550           | B*1571+B*3534           |               |
| B*1563+B*3554           | B*3534+B*9525           |               |
| B*1563+B*4048           | B*1573+B*4033           |               |
| B*1563+B*4059           | B*1585+B*4033           |               |
| B*1563+B*5305           | B*1587+B*3534           |               |
| B*1564+B*3585           | B*352001+B*9533         |               |
| B*1564+B*3942           | B*1580+B*3939           |               |
| B*1565+B*351402         | B*1585+B*3599           |               |
| B*1565+B*3586           | B*3599+B*9517           |               |
| B*1565+B*5119           | B*5129+B*9536           |               |
| B*1566+B*1802           | B*1833+B*9529           |               |
| B*1566+B*1803           | B*1570+B*1833           |               |
| B*1566+B*1808           | B*1833+B*9510           |               |
| B*1566+B*1820           | B*1833+B*9528           |               |
| B*1566+B*1831           | B*1833+B*9545           |               |
| B*1566+B*3576           | B*3582+B*9501           |               |
| B*1566+B*670101         | B*3905+B*9501           |               |
| B*1569+B*3571           | B*3535+B*9531           |               |
| B*1569+B*3930           | B*1593+B*390201         |               |
| B*1570+B*1802           | B*1803+B*9529           |               |
| B*1570+B*1808           | B*1803+B*9510           |               |
| B*1570+B*1820           | B*1803+B*9528           |               |
| B*1570+B*1831           | B*1803+B*9545           |               |
| B*1570+B*3515           | B*3529+B*9517           |               |
| B*1570+B*3527           | B*3529+B*9535           |               |
| B*1570+B*3550           | B*1571+B*3529           |               |
| B*1570+B*3554           | B*3529+B*9525           |               |
| B*1570+B*3920           | B*3910+B*9535           |               |
| B*1570+B*4037           | B*4050+B*9535           |               |
| B*1570+B*4061           | B*4043+B*9552           |               |
| B*1570+B*4067           | B*4043+B*9545           |               |
| B*1570+B*4079           | B*4043+B*9559           |               |
| B*1570+B*4089           | B*4050+B*9528           |               |
| B*1570+B*5305           | B*1587+B*3529           |               |
| B*1570+B*670101         | B*1576+B*390201         | B*3939+B*9501 |
| B*1570+B*670102         | B*1576+B*390202         |               |
| B*1571+B*3515           | B*3550+B*9517           |               |
| B*1571+B*3527           | B*3550+B*9535           |               |
| B*1571+B*3554           | B*3550+B*9525           |               |
| B*1571+B*5305           | B*1587+B*3550           |               |
| B*1572+B*550201         | B*1593+B*5620           |               |
| B*1572+B*9554           | B*1578+B*1580           |               |
| B*1573+B*4059           | B*1585+B*4048           |               |
| B*1573+B*5306           | B*1585+B*5162           |               |
| B*1573+B*5508           | B*5604+B*9550           |               |
| B*1573+B*5609           | B*1585+B*5604           |               |
| B*1576+B*1812           | B*18G1+B*9501           |               |
| B*1576+B*3513           | B*350301/3570+B*9501    |               |
| B*1576+B*3516           | B*3517+B*9501           |               |
| B*1576+B*3569           | B*3529+B*9501           |               |
| B*1576+B*3580           | B*350801+B*9501         |               |
| B*1576+B*3922           | B*3901G1+B*9501         |               |
| B*1576+B*40G1           | B*4025+B*9501           |               |
| B*1576+B*44G1/B*4466    | B*4412+B*9501           |               |
| B*1576+B*4818           | B*1587+B*8101/8102/8103 |               |
| B*1576+B*520602         | B*51G1+B*9501           |               |

|                             |                             |                    |               |
|-----------------------------|-----------------------------|--------------------|---------------|
| B*1576+B*5209               | B*1587+B*5606               |                    |               |
| B*1577+B*4417               | B*44G1/B*4466+B*9554        |                    |               |
| B*1577+B*4443               | B*440301/440303+B*9554      |                    |               |
| B*1577+B*5719               | B*5704+B*9554               |                    |               |
| B*1578+B*40G1               | B*401402+B*9516             |                    |               |
| B*1578+B*4421               | B*4453+B*9517               |                    |               |
| B*1578+B*4422               | B*4453+B*9525               |                    |               |
| B*1578+B*4449               | B*4453+B*9542               |                    |               |
| B*1578+B*5522               | B*5620+B*9517               |                    |               |
| B*1585+B*3512               | B*350401+B*9554             |                    |               |
| B*1585+B*3539               | B*3534+B*9554               |                    |               |
| B*1585+B*3559               | B*3506+B*9554               |                    |               |
| B*1585+B*3561               | B*350801+B*9554             |                    |               |
| B*1585+B*3586               | B*351402+B*9517             |                    |               |
| B*1585+B*51G1               | B*351402+B*5202             |                    |               |
| B*1585+B*5508               | B*5609+B*9550               |                    |               |
| B*1587+B*3515               | B*5305+B*9517               |                    |               |
| B*1587+B*3554               | B*5305+B*9525               |                    |               |
| B*1589+B*3562               | B*5313+B*9544               |                    |               |
| B*1589+B*3578               | B*5313+B*9539               |                    |               |
| B*1589+B*3593               | B*5313+B*9521               |                    |               |
| B*1589+B*550201             | B*5607+B*9521               |                    |               |
| B*1591+B*1815               | B*18G1+B*9531               |                    |               |
| B*1591+B*1830               | B*1813+B*9531               |                    |               |
| B*1591+B*270503             | B*2750+B*9523/9551          |                    |               |
| B*1591+B*2710               | B*270502/270504/2713+B*9531 |                    |               |
| B*1591+B*2740               | B*2708+B*9531               |                    |               |
| B*1591+B*35G1               | B*3571+B*9523/9551          |                    |               |
| B*1591+B*350801             | B*3545+B*9523/9551          |                    |               |
| B*1591+B*3521               | B*3524+B*9531               |                    |               |
| B*1591+B*3558               | B*3505+B*9531               |                    |               |
| B*1591+B*3713               | B*370101+B*9531             |                    |               |
| B*1591+B*3935               | B*3901G1+B*9531             |                    |               |
| B*1591+B*4416               | B*4421+B*9523/9551          |                    |               |
| B*1591+B*4437               | B*440301/440303+B*9523/9551 |                    |               |
| B*1591+B*4442               | B*4405+B*9523/9551          |                    |               |
| B*1591+B*4504               | B*4501/4507+B*9523/9551     |                    |               |
| B*1591+B*460101/4615N       | B*4609+B*9531               | B*4617+B*9523/9551 |               |
| B*1591+B*4815               | B*480101/4809+B*9531        |                    |               |
| B*1591+B*5001               | B*5002+B*9523/9551          |                    |               |
| B*1591+B*51G1               | B*510901+B*9531             |                    |               |
| B*1591+B*510102             | B*510902+B*9531             |                    |               |
| B*1591+B*510201             | B*5123+B*9523/9551          |                    |               |
| B*1591+B*5116               | B*5131+B*9531               |                    |               |
| B*1591+B*520101/5207        | B*5210+B*9531               |                    |               |
| B*1591+B*5308               | B*530101+B*9531             |                    |               |
| B*1591+B*550101/550103      | B*550201+B*9531             |                    |               |
| B*1591+B*5524               | B*5522+B*9531               |                    |               |
| B*1591+B*570301             | B*5707+B*9523/9551          |                    |               |
| B*1591+B*5802               | B*5807+B*9523/9551          |                    |               |
| B*1591+B*5819               | B*580101/5811+B*9531        |                    |               |
| B*1593+B*350301/3570        | B*3593+B*9533               |                    |               |
| B*1593+B*5149               | B*5121+B*9553               |                    |               |
| B*1593+B*5312               | B*3593+B*9515               |                    |               |
| B*1593+B*5607               | B*5512+B*9515               |                    |               |
| B*1594N+B*5116              | B*5141N+B*9517              |                    |               |
| B*1594N+B*5153              | B*5141N+B*9505              |                    |               |
| B*1599+B*511302             | B*5129+B*9533               |                    |               |
| B*18G1+B*1830               | B*1813+B*1815               |                    |               |
| B*18G1+B*2701               | B*1809+B*2744               |                    |               |
| B*18G1+B*270502/270504/2713 | B*1810+B*2728               |                    |               |
| B*18G1+B*2706               | B*1802+B*2721               |                    |               |
| B*18G1+B*2708               | B*1803+B*2744               |                    |               |
| B*18G1+B*2710               | B*1815+B*270502/270504/2713 |                    |               |
| B*18G1+B*2727               | B*1826+B*2741               |                    |               |
| B*18G1+B*2740               | B*1815+B*2708               |                    |               |
| B*18G1+B*2745               | B*1813+B*270502/270504/2713 |                    |               |
| B*18G1+B*35G1               | B*1807+B*352001             | B*1811+B*3524      | B*1825+B*3550 |
| B*18G1+B*350201             | B*1807+B*3595               | B*1811+B*3581      |               |
| B*18G1+B*350401             | B*1826+B*35G1               |                    |               |
| B*18G1+B*3505               | B*1807+B*3572               | B*1814+B*356802    |               |
| B*18G1+B*350801             | B*1813+B*35G1               |                    |               |
| B*18G1+B*350803             | B*1813+B*350104             |                    |               |
| B*18G1+B*350902             | B*1826+B*3564               |                    |               |
| B*18G1+B*3510               | B*1807+B*3528               | B*1812+B*35G1      |               |
| B*18G1+B*3511               | B*1811+B*3521               | B*1815+B*35G1      |               |
| B*18G1+B*3513               | B*1812+B*350301/3570        |                    |               |
| B*18G1+B*351401             | B*1815+B*3562               | B*1819+B*35G1      |               |
| B*18G1+B*3516               | B*1812+B*3517               |                    |               |
| B*18G1+B*3518               | B*1813+B*350902             |                    |               |
| B*18G1+B*3521               | B*1815+B*3524               |                    |               |
| B*18G1+B*3522               | B*1826+B*3551               |                    |               |
| B*18G1+B*3528               | B*1812+B*352001             |                    |               |
| B*18G1+B*3529               | B*1803+B*35G1               |                    |               |
| B*18G1+B*3530               | B*1814+B*350104             |                    |               |
| B*18G1+B*3544               | B*1826+B*3543/3567/3579     |                    |               |
| B*18G1+B*3545               | B*1813+B*3571               |                    |               |
| B*18G1+B*3548               | B*1818+B*350104             |                    |               |
| B*18G1+B*3558               | B*1815+B*3505               |                    |               |
| B*18G1+B*3569               | B*1803+B*3510               | B*1812+B*3529      |               |
| B*18G1+B*3574               | B*1806+B*350301/3570        |                    |               |
| B*18G1+B*3580               | B*1812+B*350801             | B*1813+B*3510      |               |
| B*18G1+B*3582               | B*1833+B*352001             |                    |               |
| B*18G1+B*3591               | B*1832+B*35G1               |                    |               |
| B*18G1+B*370101             | B*1811+B*3704               |                    |               |
| B*18G1+B*3710               | B*1809+B*3711               |                    |               |
| B*18G1+B*3713               | B*1815+B*370101             |                    |               |
| B*18G1+B*380201/3818        | B*1809+B*3905               |                    |               |
| B*18G1+B*3814               | B*1803+B*380101             |                    |               |
| B*18G1+B*3819               | B*1814+B*380101             |                    |               |
| B*18G1+B*3901G1             | B*1803+B*3905               | B*1811+B*3948      | B*1833+B*3939 |
| B*18G1+B*390201             | B*1812+B*3939               |                    |               |
| B*18G1+B*390202             | B*1803+B*391301             |                    |               |
| B*18G1+B*3903               | B*1803+B*3937               | B*1814+B*3901G1    |               |

|                        |                             |                 |               |
|------------------------|-----------------------------|-----------------|---------------|
| B*18G1+B*3904          | B*1825+B*3931               |                 |               |
| B*18G1+B*3909          | B*1818+B*3901G1             |                 |               |
| B*18G1+B*3911          | B*1813+B*3905               |                 |               |
| B*18G1+B*3918          | B*1819+B*390105             |                 |               |
| B*18G1+B*3922          | B*1812+B*3901G1             | B*1833+B*390201 |               |
| B*18G1+B*3927          | B*1806+B*3901G1             |                 |               |
| B*18G1+B*3935          | B*1815+B*3901G1             |                 |               |
| B*18G1+B*3936          | B*1819+B*3930               |                 |               |
| B*18G1+B*3937          | B*1814+B*3905               |                 |               |
| B*18G1+B*3947          | B*1810+B*3948               |                 |               |
| B*18G1+B*40G1          | B*1812+B*4025               | B*1826+B*4052   |               |
| B*18G1+B*400201/4056   | B*1814+B*4011               | B*1826+B*4003   |               |
| B*18G1+B*4003          | B*1814+B*4020               |                 |               |
| B*18G1+B*4007          | B*1807+B*40G1               |                 |               |
| B*18G1+B*4009          | B*1820+B*4018               |                 |               |
| B*18G1+B*4011          | B*1826+B*4020               |                 |               |
| B*18G1+B*4013          | B*1807+B*4019               |                 |               |
| B*18G1+B*4031          | B*1814+B*4033               |                 |               |
| B*18G1+B*4042          | B*1820+B*4033               |                 |               |
| B*18G1+B*4043          | B*1803+B*40G1               |                 |               |
| B*18G1+B*4047          | B*1809+B*40G1               |                 |               |
| B*18G1+B*4049          | B*1825+B*4074               |                 |               |
| B*18G1+B*4050          | B*1803+B*400201/4056        |                 |               |
| B*18G1+B*4067          | B*1831+B*40G1               |                 |               |
| B*18G1+B*4073          | B*1806+B*40G1               |                 |               |
| B*18G1+B*4075          | B*1833+B*400601             |                 |               |
| B*18G1+B*4080          | B*1814+B*40G1               |                 |               |
| B*18G1+B*4089          | B*1820+B*400201/4056        |                 |               |
| B*18G1+B*4096          | B*1809+B*400601             |                 |               |
| B*18G1+B*4102          | B*1814+B*410302             |                 |               |
| B*18G1+B*4202          | B*1826+B*4209               |                 |               |
| B*18G1+B*44G1/B*4466   | B*1809+B*4409               | B*1812+B*4412   | B*1820+B*4451 |
| B*18G1+B*440301/440303 | B*1809+B*4446               | B*1820+B*4445   |               |
| B*18G1+B*442801        | B*1813+B*440302             |                 |               |
| B*18G1+B*442802        | B*1813+B*440301/440303      |                 |               |
| B*18G1+B*4454          | B*1814+B*4465               |                 |               |
| B*18G1+B*4459          | B*1805+B*44G1/B*4466        |                 |               |
| B*18G1+B*460101/4615N  | B*1815+B*4609               |                 |               |
| B*18G1+B*4612          | B*1814+B*460101/4615N       |                 |               |
| B*18G1+B*480101/4809   | B*1814+B*480301             |                 |               |
| B*18G1+B*4815          | B*1815+B*480101/4809        |                 |               |
| B*18G1+B*4902          | B*1809+B*5001               |                 |               |
| B*18G1+B*51G1          | B*1807+B*5107               | B*1815+B*510901 | B*1826+B*5137 |
| B*18G1+B*510102        | B*1815+B*510902             |                 |               |
| B*18G1+B*510201        | B*1811+B*51G1               |                 |               |
| B*18G1+B*510202        | B*1811+B*510102             |                 |               |
| B*18G1+B*510204        | B*1811+B*510104             |                 |               |
| B*18G1+B*5116          | B*1815+B*5131               |                 |               |
| B*18G1+B*5120          | B*1803+B*5108               |                 |               |
| B*18G1+B*5122          | B*1833+B*5107               |                 |               |
| B*18G1+B*5129          | B*1813+B*51G1               | B*1830+B*510901 |               |
| B*18G1+B*5134          | B*1810+B*5121               | B*1811+B*5116   |               |
| B*18G1+B*5159          | B*1811+B*5106               |                 |               |
| B*18G1+B*5164          | B*1814+B*5106               |                 |               |
| B*18G1+B*520101/5207   | B*1815+B*5210               |                 |               |
| B*18G1+B*520102        | B*1812+B*5107               |                 |               |
| B*18G1+B*520602        | B*1807+B*520102             | B*1812+B*51G1   |               |
| B*18G1+B*5211          | B*1811+B*520101/5207        |                 |               |
| B*18G1+B*530101        | B*1811+B*5302               |                 |               |
| B*18G1+B*5308          | B*1815+B*530101             |                 |               |
| B*18G1+B*5309          | B*1809+B*352001             |                 |               |
| B*18G1+B*5311          | B*1809+B*350801             | B*1813+B*5313   |               |
| B*18G1+B*5313          | B*1807+B*5309               | B*1809+B*35G1   |               |
| B*18G1+B*5316          | B*1813+B*5305               |                 |               |
| B*18G1+B*5401/5417     | B*1825+B*5402               |                 |               |
| B*18G1+B*5404          | B*1826+B*5414               |                 |               |
| B*18G1+B*5410          | B*1813+B*5401/5417          |                 |               |
| B*18G1+B*550101/550103 | B*1803+B*5531               | B*1815+B*550201 |               |
| B*18G1+B*5503          | B*1806+B*550101/550103      |                 |               |
| B*18G1+B*5509          | B*1813+B*5524               | B*1830+B*5522   |               |
| B*18G1+B*5521          | B*1819+B*550201             |                 |               |
| B*18G1+B*5524          | B*1815+B*5522               |                 |               |
| B*18G1+B*5607          | B*1809+B*5601/5624          |                 |               |
| B*18G1+B*5702          | B*1813+B*570301             | B*1826+B*5719   |               |
| B*18G1+B*570301        | B*1826+B*570101             |                 |               |
| B*18G1+B*5719          | B*1813+B*570101             |                 |               |
| B*18G1+B*580101/5811   | B*1811+B*5809               |                 |               |
| B*18G1+B*5806          | B*1815+B*5802               |                 |               |
| B*18G1+B*5818          | B*1814+B*5816               |                 |               |
| B*18G1+B*5819          | B*1815+B*580101/5811        |                 |               |
| B*18G1+B*7801          | B*1803+B*780202             |                 |               |
| B*1802+B*2732          | B*1814+B*270502/270504/2713 |                 |               |
| B*1802+B*9510          | B*1808+B*9529               |                 |               |
| B*1802+B*9528          | B*1820+B*9529               |                 |               |
| B*1802+B*9545          | B*1831+B*9529               |                 |               |
| B*1803+B*2701          | B*1809+B*2708               |                 |               |
| B*1803+B*350401        | B*1826+B*3529               |                 |               |
| B*1803+B*350801        | B*1813+B*3529               |                 |               |
| B*1803+B*3511          | B*1815+B*3529               |                 |               |
| B*1803+B*351401        | B*1819+B*3529               |                 |               |
| B*1803+B*3580          | B*1813+B*3569               |                 |               |
| B*1803+B*3591          | B*1832+B*3529               |                 |               |
| B*1803+B*380201/3818   | B*1809+B*3901G1             |                 |               |
| B*1803+B*3819          | B*1814+B*3814               |                 |               |
| B*1803+B*3908          | B*1813+B*390201             |                 |               |
| B*1803+B*3911          | B*1813+B*3901G1             |                 |               |
| B*1803+B*4007          | B*1807+B*4043               |                 |               |
| B*1803+B*4047          | B*1809+B*4043               |                 |               |
| B*1803+B*4067          | B*1831+B*4043               |                 |               |
| B*1803+B*4073          | B*1806+B*4043               |                 |               |
| B*1803+B*4080          | B*1814+B*4043               |                 |               |
| B*1803+B*4089          | B*1820+B*4050               |                 |               |
| B*1803+B*5313          | B*1809+B*3529               |                 |               |
| B*1806+B*3513          | B*1812+B*3574               |                 |               |

|                        |                        |                             |
|------------------------|------------------------|-----------------------------|
| B*1806+B*3903          | B*1814+B*3927          |                             |
| B*1806+B*3909          | B*1818+B*3927          |                             |
| B*1806+B*3922          | B*1812+B*3927          |                             |
| B*1806+B*3935          | B*1815+B*3927          |                             |
| B*1806+B*4007          | B*1807+B*4073          |                             |
| B*1806+B*4047          | B*1809+B*4073          |                             |
| B*1806+B*4067          | B*1831+B*4073          |                             |
| B*1806+B*4080          | B*1814+B*4073          |                             |
| B*1807+B*3582          | B*1833+B*35G1          |                             |
| B*1807+B*3585          | B*1833+B*350301/3570   |                             |
| B*1807+B*400201/4056   | B*1812+B*4008          |                             |
| B*1807+B*4004          | B*1812+B*4068          |                             |
| B*1807+B*4047          | B*1809+B*4007          |                             |
| B*1807+B*4067          | B*1831+B*4007          |                             |
| B*1807+B*4080          | B*1814+B*4007          |                             |
| B*1807+B*480101/4809   | B*1812+B*4806          |                             |
| B*1807+B*5122          | B*1833+B*51G1          |                             |
| B*1807+B*520101/5207   | B*1812+B*510102        |                             |
| B*1807+B*5210          | B*1812+B*510902        |                             |
| B*1807+B*5211          | B*1812+B*510202        |                             |
| B*1807+B*7803          | B*1833+B*7801          |                             |
| B*1807+B*7805          | B*1812+B*780201        |                             |
| B*1808+B*9528          | B*1820+B*9510          |                             |
| B*1808+B*9545          | B*1831+B*9510          |                             |
| B*1809+B*350401        | B*1826+B*5313          |                             |
| B*1809+B*3510          | B*1812+B*5313          |                             |
| B*1809+B*3511          | B*1815+B*5313          |                             |
| B*1809+B*351401        | B*1819+B*5313          |                             |
| B*1809+B*3528          | B*1812+B*5309          |                             |
| B*1809+B*3580          | B*1812+B*5311          |                             |
| B*1809+B*3582          | B*1833+B*5309          |                             |
| B*1809+B*3591          | B*1832+B*5313          |                             |
| B*1809+B*3911          | B*1813+B*380201/3818   |                             |
| B*1809+B*3937          | B*1814+B*380201/3818   |                             |
| B*1809+B*4067          | B*1831+B*4047          |                             |
| B*1809+B*4075          | B*1833+B*4096          |                             |
| B*1809+B*4080          | B*1814+B*4047          |                             |
| B*1810+B*2715          | B*1811+B*270401        |                             |
| B*1810+B*3593          | B*1811+B*3515          |                             |
| B*1810+B*3901G1        | B*1811+B*3947          |                             |
| B*1810+B*4039          | B*1811+B*400201/4056   |                             |
| B*1810+B*550101/550103 | B*1811+B*5524          |                             |
| B*1810+B*550201        | B*1811+B*5522          |                             |
| B*1811+B*5129          | B*1813+B*510201        |                             |
| B*1811+B*5161          | B*1819+B*5140          |                             |
| B*1811+B*5164          | B*1814+B*5159          |                             |
| B*1811+B*520102        | B*1815+B*5203          |                             |
| B*1811+B*520602        | B*1812+B*510201        |                             |
| B*1811+B*780201        | B*1815+B*7804          |                             |
| B*1812+B*350401        | B*1826+B*3510          |                             |
| B*1812+B*3511          | B*1815+B*3510          |                             |
| B*1812+B*351401        | B*1819+B*3510          |                             |
| B*1812+B*3582          | B*1833+B*3528          |                             |
| B*1812+B*3591          | B*1832+B*3510          |                             |
| B*1812+B*3903          | B*1814+B*3922          |                             |
| B*1812+B*3909          | B*1818+B*3922          |                             |
| B*1812+B*3911          | B*1833+B*3908          |                             |
| B*1812+B*3935          | B*1815+B*3922          |                             |
| B*1812+B*5122          | B*1833+B*520102        |                             |
| B*1812+B*5129          | B*1813+B*520602        |                             |
| B*1813+B*2710          | B*1815+B*2745          | B*1830+B*270502/270504/2713 |
| B*1813+B*2740          | B*1830+B*2708          |                             |
| B*1813+B*350401        | B*1826+B*350801        |                             |
| B*1813+B*3511          | B*1815+B*350801        | B*1830+B*35G1               |
| B*1813+B*3512          | B*1826+B*3561          |                             |
| B*1813+B*351401        | B*1819+B*350801        | B*1830+B*3562               |
| B*1813+B*3521          | B*1830+B*3524          |                             |
| B*1813+B*3530          | B*1814+B*350803        |                             |
| B*1813+B*3548          | B*1818+B*350803        |                             |
| B*1813+B*3558          | B*1830+B*3505          |                             |
| B*1813+B*3591          | B*1832+B*350801        |                             |
| B*1813+B*3713          | B*1830+B*370101        |                             |
| B*1813+B*3935          | B*1830+B*3901G1        |                             |
| B*1813+B*3937          | B*1814+B*3911          |                             |
| B*1813+B*460101/4615N  | B*1830+B*4609          |                             |
| B*1813+B*4815          | B*1830+B*480101/4809   |                             |
| B*1813+B*510102        | B*1830+B*510902        |                             |
| B*1813+B*510202        | B*1815+B*5105          |                             |
| B*1813+B*5116          | B*1830+B*5131          |                             |
| B*1813+B*520101/5207   | B*1830+B*5210          |                             |
| B*1813+B*5308          | B*1830+B*530101        |                             |
| B*1813+B*550101/550103 | B*1830+B*550201        |                             |
| B*1813+B*5806          | B*1830+B*5802          |                             |
| B*1813+B*5819          | B*1830+B*580101/5811   |                             |
| B*1814+B*3530          | B*1822+B*3551          |                             |
| B*1814+B*3548          | B*1818+B*3530          |                             |
| B*1814+B*3909          | B*1818+B*3903          |                             |
| B*1814+B*3935          | B*1815+B*3903          |                             |
| B*1814+B*4023          | B*1830+B*4045          |                             |
| B*1814+B*4042          | B*1820+B*4031          |                             |
| B*1814+B*4067          | B*1831+B*4080          |                             |
| B*1815+B*350401        | B*1826+B*3511          |                             |
| B*1815+B*350803        | B*1830+B*350104        |                             |
| B*1815+B*351401        | B*1819+B*3511          |                             |
| B*1815+B*3518          | B*1830+B*350902        |                             |
| B*1815+B*3545          | B*1830+B*3571          |                             |
| B*1815+B*3580          | B*1830+B*3510          |                             |
| B*1815+B*3591          | B*1832+B*3511          |                             |
| B*1815+B*3909          | B*1818+B*3935          |                             |
| B*1815+B*3911          | B*1830+B*3905          |                             |
| B*1815+B*442801        | B*1830+B*440302        |                             |
| B*1815+B*442802        | B*1830+B*440301/440303 |                             |
| B*1815+B*460101/4615N  | B*1819+B*4608          |                             |
| B*1815+B*4819          | B*1819+B*480101/4809   |                             |

|                                       |                               |                 |
|---------------------------------------|-------------------------------|-----------------|
| B*1815+B*5129                         | B*1830+B*51G1                 |                 |
| B*1815+B*5311                         | B*1830+B*5313                 |                 |
| B*1815+B*5316                         | B*1830+B*5305                 |                 |
| B*1815+B*5410                         | B*1830+B*5401/5417            |                 |
| B*1815+B*5509                         | B*1830+B*5524                 |                 |
| B*1815+B*5521                         | B*1819+B*550101/550103        |                 |
| B*1815+B*5702                         | B*1830+B*570301               |                 |
| B*1815+B*5719                         | B*1830+B*570101               |                 |
| B*1819+B*350401                       | B*1826+B*351401               |                 |
| B*1819+B*3591                         | B*1832+B*351401               |                 |
| B*1819+B*3599                         | B*1830+B*3543/3567/3579       |                 |
| B*1820+B*9545                         | B*1831+B*9528                 |                 |
| B*1826+B*3591                         | B*1832+B*350401               |                 |
| B*2701+B*35G1                         | B*2744+B*5313                 |                 |
| B*2701+B*350801                       | B*2744+B*5311                 |                 |
| B*2701+B*352001                       | B*2744+B*5309                 |                 |
| B*2701+B*3529                         | B*2708+B*5313                 |                 |
| B*2701+B*3711                         | B*2744+B*3710                 |                 |
| B*2701+B*3814                         | B*2702+B*380201/3818          |                 |
| B*2701+B*3901G1                       | B*2708+B*380201/3818          |                 |
| B*2701+B*3905                         | B*2744+B*380201/3818          |                 |
| B*2701+B*3935                         | B*2740+B*380201/3818          |                 |
| B*2701+B*40G1                         | B*2744+B*4047                 |                 |
| B*2701+B*400601                       | B*2744+B*4096                 |                 |
| B*2701+B*4043                         | B*2708+B*4047                 |                 |
| B*2701+B*4409                         | B*2744+B*44G1/B*4466          |                 |
| B*2701+B*4446                         | B*2744+B*440301/440303        |                 |
| B*2701+B*5001                         | B*2744+B*4902                 |                 |
| B*2701+B*5601/5624                    | B*2744+B*5607                 |                 |
| B*2702+B*2719                         | B*270502/270504/2713+B*2730   |                 |
| B*2702+B*35G1                         | B*2708+B*530101               |                 |
| B*2702+B*350301/3570                  | B*2708+B*5304                 |                 |
| B*2702+B*3505                         | B*2708+B*5314                 | B*2740+B*530101 |
| B*2702+B*3511                         | B*2708+B*5308                 |                 |
| B*2702+B*3521                         | B*2740+B*5302                 |                 |
| B*2702+B*3524                         | B*2708+B*5302                 |                 |
| B*2702+B*3558                         | B*2740+B*5314                 |                 |
| B*2702+B*3817                         | B*270502/270504/2713+B*380101 |                 |
| B*2702+B*3901G1                       | B*2708+B*3814                 |                 |
| B*2702+B*3905                         | B*2708+B*380101               | B*2744+B*3814   |
| B*2702+B*3935                         | B*2740+B*3814                 |                 |
| B*2702+B*3937                         | B*2708+B*3819                 |                 |
| B*2702+B*400201/4056                  | B*2708+B*4019                 |                 |
| B*2702+B*4446                         | B*2708+B*4450                 |                 |
| B*2702+B*4501/4507                    | B*2708+B*4418                 |                 |
| B*2702+B*5001                         | B*2708+B*490101               |                 |
| B*2702+B*5303                         | B*270502/270504/2713+B*530101 |                 |
| B*2702+B*5401/5417                    | B*2708+B*5412                 |                 |
| B*2702+B*560502                       | B*2708+B*5621                 |                 |
| B*2702+B*5712                         | B*2708+B*5702                 |                 |
| B*2702+B*780201                       | B*2708+B*510102               | B*2740+B*510902 |
| B*2702+B*780202                       | B*2708+B*51G1                 | B*2740+B*510901 |
| B*2702+B*7805                         | B*2708+B*520101/5207          | B*2740+B*5210   |
| B*2702+B*9554                         | B*2730+B*9529                 |                 |
| B*270401+B*2707                       | B*2710+B*2711                 |                 |
| B*270401+B*2726                       | B*2731+B*2740                 |                 |
| B*270401+B*2733                       | B*2711+B*2740                 |                 |
| B*270401+B*2742                       | B*270502/270504/2713+B*2740   | B*2708+B*2710   |
| B*270401+B*3562                       | B*2725+B*3515                 |                 |
| B*270401+B*3593                       | B*2715+B*3515                 |                 |
| B*270401+B*3705                       | B*2708+B*3713                 | B*2710+B*3711   |
| B*270401+B*3901G1                     | B*2715+B*3947                 | B*2740+B*370101 |
| B*270401+B*4039                       | B*2715+B*400201/4056          |                 |
| B*270401+B*5121                       | B*2715+B*5116                 |                 |
| B*270401+B*550101/550103              | B*2715+B*5524                 |                 |
| B*270401+B*550201                     | B*2715+B*5522                 |                 |
| B*270502/270504/2713+B*2712           | B*2708+B*2716                 |                 |
| B*270502/270504/2713+B*2718           | B*2729+B*2740                 |                 |
| B*270502/270504/2713+B*2726           | B*2731+B*2742                 |                 |
| B*270502/270504/2713+B*2733           | B*2707+B*2708                 | B*2711+B*2742   |
| B*270502/270504/2713+B*35G1           | B*2708+B*5303                 | B*2738+B*3515   |
| B*270502/270504/2713+B*350301/3570    | B*2738+B*3533                 |                 |
| B*270502/270504/2713+B*350801         | B*2745+B*35G1                 |                 |
| B*270502/270504/2713+B*350803         | B*2745+B*350104               |                 |
| B*270502/270504/2713+B*3511           | B*2710+B*35G1                 | B*2740+B*5303   |
| B*270502/270504/2713+B*351401         | B*2710+B*3562                 |                 |
| B*270502/270504/2713+B*3518           | B*2745+B*350902               |                 |
| B*270502/270504/2713+B*3521           | B*2710+B*3524                 |                 |
| B*270502/270504/2713+B*3543/3567/3579 | B*2738+B*3586                 |                 |
| B*270502/270504/2713+B*3545           | B*2745+B*3571                 |                 |
| B*270502/270504/2713+B*3558           | B*2710+B*3505                 |                 |
| B*270502/270504/2713+B*3580           | B*2745+B*3510                 |                 |
| B*270502/270504/2713+B*3705           | B*2742+B*370101               |                 |
| B*270502/270504/2713+B*3711           | B*2708+B*370101               |                 |
| B*270502/270504/2713+B*3713           | B*2710+B*370101               |                 |
| B*270502/270504/2713+B*3901G1         | B*2737+B*3931                 |                 |
| B*270502/270504/2713+B*3905           | B*2708+B*3817                 |                 |
| B*270502/270504/2713+B*3911           | B*2745+B*3905                 |                 |
| B*270502/270504/2713+B*3935           | B*2710+B*3901G1               |                 |
| B*270502/270504/2713+B*3948           | B*2728+B*3947                 |                 |
| B*270502/270504/2713+B*4040           | B*2737+B*400201/4056          |                 |
| B*270502/270504/2713+B*4049           | B*2737+B*40G1                 |                 |
| B*270502/270504/2713+B*4063           | B*2738+B*40G1                 |                 |
| B*270502/270504/2713+B*4201           | B*2737+B*4202                 |                 |
| B*270502/270504/2713+B*44G1/B*4466    | B*2737+B*4455                 | B*2738+B*4421   |
| B*270502/270504/2713+B*4405           | B*2746+B*44G1/B*4466          |                 |
| B*270502/270504/2713+B*442801         | B*2745+B*440302               |                 |
| B*270502/270504/2713+B*442802         | B*2745+B*440301/440303        |                 |
| B*270502/270504/2713+B*4437           | B*2738+B*446402               |                 |
| B*270502/270504/2713+B*460101/4615N   | B*2710+B*4609                 | B*2737+B*4614   |
| B*270502/270504/2713+B*4702           | B*2708+B*470101               |                 |
| B*270502/270504/2713+B*4815           | B*2710+B*480101/4809          |                 |
| B*270502/270504/2713+B*51G1           | B*2710+B*510901               | B*2738+B*5116   |
| B*270502/270504/2713+B*510102         | B*2710+B*510902               |                 |

|                                      |                        |                 |
|--------------------------------------|------------------------|-----------------|
| B*270502/270504/2713+B*510201        | B*2738+B*5134          |                 |
| B*270502/270504/2713+B*510901        | B*2738+B*5131          |                 |
| B*270502/270504/2713+B*5116          | B*2710+B*5131          |                 |
| B*270502/270504/2713+B*5121          | B*2728+B*5134          |                 |
| B*270502/270504/2713+B*5129          | B*2745+B*51G1          |                 |
| B*270502/270504/2713+B*520101/5207   | B*2710+B*5210          | B*2738+B*5208   |
| B*270502/270504/2713+B*5308          | B*2710+B*530101        |                 |
| B*270502/270504/2713+B*5311          | B*2745+B*5313          |                 |
| B*270502/270504/2713+B*5316          | B*2745+B*5305          |                 |
| B*270502/270504/2713+B*5410          | B*2745+B*5401/5417     |                 |
| B*270502/270504/2713+B*550101/550103 | B*2710+B*550201        |                 |
| B*270502/270504/2713+B*550201        | B*2737+B*5516          |                 |
| B*270502/270504/2713+B*5509          | B*2745+B*5524          |                 |
| B*270502/270504/2713+B*5524          | B*2710+B*5522          |                 |
| B*270502/270504/2713+B*5601/5624     | B*2738+B*5522          |                 |
| B*270502/270504/2713+B*5702          | B*2745+B*570301        |                 |
| B*270502/270504/2713+B*5719          | B*2745+B*570101        |                 |
| B*270502/270504/2713+B*5806          | B*2710+B*5802          |                 |
| B*270502/270504/2713+B*5819          | B*2710+B*580101/5811   |                 |
| B*270502/270504/2713+B*9554          | B*2719+B*9529          |                 |
| B*270503+B*3545                      | B*2750+B*350801        |                 |
| B*270503+B*3571                      | B*2750+B*35G1          |                 |
| B*270503+B*440301/440303             | B*2750+B*4437          |                 |
| B*270503+B*4405                      | B*2750+B*4442          |                 |
| B*270503+B*4421                      | B*2750+B*4416          |                 |
| B*270503+B*4501/4507                 | B*2750+B*4504          |                 |
| B*270503+B*4617                      | B*2750+B*460101/4615N  |                 |
| B*270503+B*5002                      | B*2750+B*5001          |                 |
| B*270503+B*5123                      | B*2750+B*510201        |                 |
| B*270503+B*5707                      | B*2750+B*570301        |                 |
| B*270503+B*5807                      | B*2750+B*5802          |                 |
| B*2707+B*2712                        | B*2716+B*2733          |                 |
| B*2707+B*2740                        | B*2710+B*2733          |                 |
| B*2707+B*35G1                        | B*2733+B*5303          |                 |
| B*2707+B*3711                        | B*2711+B*3705          | B*2733+B*370101 |
| B*2707+B*3905                        | B*2733+B*3817          |                 |
| B*2707+B*4702                        | B*2733+B*470101        |                 |
| B*2708+B*35G1                        | B*2744+B*3529          |                 |
| B*2708+B*3510                        | B*2744+B*3569          |                 |
| B*2708+B*3511                        | B*2740+B*35G1          |                 |
| B*2708+B*351401                      | B*2740+B*3562          |                 |
| B*2708+B*3521                        | B*2740+B*3524          |                 |
| B*2708+B*3558                        | B*2740+B*3505          |                 |
| B*2708+B*3705                        | B*2742+B*3711          |                 |
| B*2708+B*3905                        | B*2744+B*3901G1        |                 |
| B*2708+B*391301                      | B*2744+B*390202        |                 |
| B*2708+B*3935                        | B*2740+B*3901G1        |                 |
| B*2708+B*3937                        | B*2744+B*3903          |                 |
| B*2708+B*40G1                        | B*2744+B*4043          |                 |
| B*2708+B*400201/4056                 | B*2744+B*4050          |                 |
| B*2708+B*460101/4615N                | B*2740+B*4609          |                 |
| B*2708+B*4815                        | B*2740+B*480101/4809   |                 |
| B*2708+B*5108                        | B*2744+B*5120          |                 |
| B*2708+B*5116                        | B*2740+B*5131          |                 |
| B*2708+B*550101/550103               | B*2740+B*550201        |                 |
| B*2708+B*5524                        | B*2740+B*5522          |                 |
| B*2708+B*5531                        | B*2744+B*550101/550103 |                 |
| B*2708+B*5806                        | B*2740+B*5802          |                 |
| B*2708+B*5819                        | B*2740+B*580101/5811   |                 |
| B*2708+B*780202                      | B*2744+B*7801          |                 |
| B*2710+B*2712                        | B*2716+B*2740          |                 |
| B*2710+B*350801                      | B*2745+B*3511          |                 |
| B*2710+B*3705                        | B*2742+B*3713          |                 |
| B*2710+B*3905                        | B*2740+B*3817          |                 |
| B*2710+B*4702                        | B*2740+B*470101        |                 |
| B*2710+B*5105                        | B*2745+B*510202        |                 |
| B*2710+B*5601/5624                   | B*2738+B*5524          |                 |
| B*2711+B*2726                        | B*2731+B*2733          |                 |
| B*2712+B*370101                      | B*2716+B*3711          |                 |
| B*2712+B*3817                        | B*2716+B*3905          |                 |
| B*2712+B*4201                        | B*2726+B*4207          |                 |
| B*2712+B*470101                      | B*2716+B*4702          |                 |
| B*2712+B*5303                        | B*2716+B*35G1          |                 |
| B*2712+B*670102                      | B*2726+B*3910          |                 |
| B*2714+B*400201/4056                 | B*2732+B*4070          |                 |
| B*2715+B*3562                        | B*2725+B*3593          |                 |
| B*2715+B*9544                        | B*2725+B*9521          |                 |
| B*2718+B*5303                        | B*2729+B*3511          |                 |
| B*2719+B*3505                        | B*2732+B*350104        |                 |
| B*2719+B*3522                        | B*2732+B*3512          |                 |
| B*2719+B*380101                      | B*2730+B*3817          |                 |
| B*2719+B*3903                        | B*2732+B*3942          |                 |
| B*2719+B*4454                        | B*2732+B*440301/440303 |                 |
| B*2719+B*530101                      | B*2730+B*5303          |                 |
| B*2726+B*370101                      | B*2731+B*3705          |                 |
| B*2727+B*35G1                        | B*2741+B*350401        |                 |
| B*2727+B*3543/3567/3579              | B*2741+B*3544          |                 |
| B*2727+B*3551                        | B*2741+B*3522          |                 |
| B*2727+B*3564                        | B*2741+B*350902        |                 |
| B*2727+B*4003                        | B*2741+B*400201/4056   |                 |
| B*2727+B*4020                        | B*2741+B*4011          |                 |
| B*2727+B*4052                        | B*2741+B*40G1          |                 |
| B*2727+B*4209                        | B*2741+B*4202          |                 |
| B*2727+B*5137                        | B*2741+B*51G1          |                 |
| B*2727+B*5414                        | B*2741+B*5404          |                 |
| B*2727+B*570101                      | B*2741+B*570301        |                 |
| B*2727+B*5719                        | B*2741+B*5702          |                 |
| B*2728+B*510201                      | B*2738+B*5121          |                 |
| B*2735+B*4509                        | B*2741+B*4502          |                 |
| B*2737+B*4063                        | B*2738+B*4049          |                 |
| B*2740+B*3905                        | B*2744+B*3935          |                 |
| B*35G1+B*3505                        | B*3530+B*356801        |                 |
| B*35G1+B*350803                      | B*350104+B*350801      |                 |
| B*35G1+B*350902                      | B*350401+B*3564        |                 |

|                        |                           |                          |                   |
|------------------------|---------------------------|--------------------------|-------------------|
| B*35G1+B*3513          | B*350301/3570+B*3510      |                          |                   |
| B*35G1+B*351401        | B*3511+B*3562             |                          |                   |
| B*35G1+B*3516          | B*3510+B*3517             |                          |                   |
| B*35G1+B*3518          | B*350801+B*350902         |                          |                   |
| B*35G1+B*3521          | B*3511+B*3524             |                          |                   |
| B*35G1+B*3522          | B*350401+B*3551           |                          |                   |
| B*35G1+B*3528          | B*3510+B*352001           |                          |                   |
| B*35G1+B*3533          | B*350301/3570+B*3515      |                          |                   |
| B*35G1+B*3544          | B*350401+B*3543/3567/3579 |                          |                   |
| B*35G1+B*3545          | B*350801+B*3571           |                          |                   |
| B*35G1+B*3556          | B*350301/3570+B*3527      |                          |                   |
| B*35G1+B*3558          | B*3505+B*3511             |                          |                   |
| B*35G1+B*356802        | B*350104+B*356801         |                          |                   |
| B*35G1+B*3569          | B*3510+B*3529             |                          |                   |
| B*35G1+B*3572          | B*3505+B*352001           |                          |                   |
| B*35G1+B*3580          | B*350801+B*3510           |                          |                   |
| B*35G1+B*3581          | B*350201+B*3524           |                          |                   |
| B*35G1+B*3585          | B*350301/3570+B*3582      |                          |                   |
| B*35G1+B*3586          | B*3515+B*3543/3567/3579   |                          |                   |
| B*35G1+B*3595          | B*350201+B*352001         |                          |                   |
| B*35G1+B*370101        | B*3711+B*5303             |                          |                   |
| B*35G1+B*3704          | B*3524+B*370101           |                          |                   |
| B*35G1+B*3710          | B*3711+B*5313             |                          |                   |
| B*35G1+B*3713          | B*3511+B*370101           |                          |                   |
| B*35G1+B*380101        | B*3905+B*530101           |                          |                   |
| B*35G1+B*380201/3818   | B*3905+B*5313             |                          |                   |
| B*35G1+B*3803          | B*390201+B*5312           |                          |                   |
| B*35G1+B*3814          | B*3529+B*380101           | B*3901G1+B*530101        |                   |
| B*35G1+B*3817          | B*3905+B*5303             |                          |                   |
| B*35G1+B*3819          | B*3937+B*530101           |                          |                   |
| B*35G1+B*3901G1        | B*3529+B*3905             | B*356801+B*3942          |                   |
| B*35G1+B*390201        | B*3510+B*3939             |                          |                   |
| B*35G1+B*390202        | B*3529+B*391301           |                          |                   |
| B*35G1+B*3903          | B*3529+B*3937             |                          |                   |
| B*35G1+B*3905          | B*3506+B*3907             |                          |                   |
| B*35G1+B*390601        | B*350104+B*390602         | B*3537+B*3942            |                   |
| B*35G1+B*3911          | B*350801+B*3905           |                          |                   |
| B*35G1+B*3918          | B*351401+B*390105         | B*351402+B*3901G1        |                   |
| B*35G1+B*3922          | B*3510+B*3901G1           | B*3569+B*3905            |                   |
| B*35G1+B*3931          | B*3550+B*3904             |                          |                   |
| B*35G1+B*3935          | B*3511+B*3901G1           |                          |                   |
| B*35G1+B*3936          | B*351401+B*3930           |                          |                   |
| B*35G1+B*3948          | B*3524+B*3901G1           | B*3593+B*3932            |                   |
| B*35G1+B*40G1          | B*350104+B*400104         | B*350401+B*4052          | B*3510+B*4025     |
|                        | B*3515+B*4063             | B*352001+B*4007          | B*3534+B*4038     |
| B*35G1+B*400106        | B*350402+B*4052           |                          |                   |
| B*35G1+B*400201/4056   | B*350401+B*4003           | B*3505+B*4064            | B*3528+B*4008     |
| B*35G1+B*4004          | B*3528+B*4068             |                          |                   |
| B*35G1+B*400601        | B*3537+B*4064             |                          |                   |
| B*35G1+B*4011          | B*350401+B*4020           | B*3532+B*4004            | B*356802+B*4064   |
| B*35G1+B*4018          | B*3534+B*4003             |                          |                   |
| B*35G1+B*4019          | B*352001+B*4013           | B*400201/4056+B*530101   | B*4037+B*5305     |
|                        | B*4064+B*5314             |                          |                   |
| B*35G1+B*4033          | B*3534+B*4052             |                          |                   |
| B*35G1+B*4036          | B*350301/3570+B*4038      | B*3506+B*4052            |                   |
| B*35G1+B*4037          | B*3527+B*400201/4056      |                          |                   |
| B*35G1+B*4043          | B*3529+B*40G1             | B*3569+B*4025            |                   |
| B*35G1+B*4047          | B*40G1+B*5313             | B*4007+B*5309            |                   |
| B*35G1+B*4050          | B*3529+B*400201/4056      |                          |                   |
| B*35G1+B*4070          | B*3537+B*4004             |                          |                   |
| B*35G1+B*4074          | B*3550+B*4049             |                          |                   |
| B*35G1+B*4080          | B*3522+B*4059             | B*3530+B*400104          |                   |
| B*35G1+B*4096          | B*400601+B*5313           |                          |                   |
| B*35G1+B*4102          | B*3563+B*3587             |                          |                   |
| B*35G1+B*4202          | B*350401+B*4209           |                          |                   |
| B*35G1+B*44G1/B*4466   | B*3510+B*4412             | B*4409+B*5313            |                   |
| B*35G1+B*440301/440303 | B*350104+B*440302         | B*3571+B*4437            | B*4446+B*5313     |
| B*35G1+B*4404          | B*3593+B*442802           |                          |                   |
| B*35G1+B*4405          | B*3571+B*4442             |                          |                   |
| B*35G1+B*4415          | B*4501/4507+B*5312        |                          |                   |
| B*35G1+B*4418          | B*4501/4507+B*530101      |                          |                   |
| B*35G1+B*4421          | B*3515+B*44G1/B*4466      | B*3571+B*4416            |                   |
| B*35G1+B*4422          | B*3554+B*44G1/B*4466      |                          |                   |
| B*35G1+B*442801        | B*350801+B*440302         |                          |                   |
| B*35G1+B*442802        | B*350104+B*442801         | B*350801+B*440301/440303 | B*350803+B*440302 |
|                        | B*3545+B*4437             | B*4446+B*5311            |                   |
| B*35G1+B*4441          | B*3532+B*4448             | B*356801+B*44G1/B*4466   |                   |
| B*35G1+B*4447          | B*3537+B*440302           |                          |                   |
| B*35G1+B*4450          | B*4446+B*530101           |                          |                   |
| B*35G1+B*4454          | B*3505+B*440302           |                          |                   |
| B*35G1+B*4462          | B*350402+B*4417           |                          |                   |
| B*35G1+B*446402        | B*350104+B*446401         | B*3515+B*4437            |                   |
| B*35G1+B*4465          | B*356801+B*440301/440303  | B*356802+B*440302        |                   |
| B*35G1+B*4501/4507     | B*3571+B*4504             |                          |                   |
| B*35G1+B*4508          | B*3593+B*4504             |                          |                   |
| B*35G1+B*460101/4615N  | B*3511+B*4609             | B*351402+B*461301        | B*3562+B*4608     |
| B*35G1+B*4605          | B*3554+B*460101/4615N     |                          |                   |
| B*35G1+B*4610          | B*3590+B*460101/4615N     |                          |                   |
| B*35G1+B*4617          | B*3571+B*460101/4615N     |                          |                   |
| B*35G1+B*4618          | B*3593+B*4611             |                          |                   |
| B*35G1+B*470101        | B*4702+B*5303             |                          |                   |
| B*35G1+B*480101/4809   | B*3528+B*4806             | B*3530+B*480302          |                   |
| B*35G1+B*480301        | B*350104+B*480302         |                          |                   |
| B*35G1+B*4810          | B*3564+B*4812             |                          |                   |
| B*35G1+B*4813          | B*3531+B*4802             |                          |                   |
| B*35G1+B*4815          | B*3511+B*480101/4809      |                          |                   |
| B*35G1+B*4818          | B*480101/4809+B*5305      |                          |                   |
| B*35G1+B*4819          | B*3562+B*480101/4809      |                          |                   |
| B*35G1+B*490101        | B*5001+B*530101           |                          |                   |
| B*35G1+B*4902          | B*5001+B*5313             |                          |                   |
| B*35G1+B*5002          | B*3571+B*5001             |                          |                   |
| B*35G1+B*51G1          | B*350401+B*5137           | B*3511+B*510901          | B*3524+B*510201   |
|                        | B*3534+B*5163             | B*3537+B*5104            | B*530101+B*780202 |
|                        | B*5306+B*7804             |                          |                   |

|                         |                          |                        |                   |
|-------------------------|--------------------------|------------------------|-------------------|
| B*35G1+B*510102         | B*3511+B*510902          | B*3524+B*510202        | B*530101+B*780201 |
| B*35G1+B*510104         | B*3524+B*510204          |                        |                   |
| B*35G1+B*510202         | B*5308+B*7804            |                        |                   |
| B*35G1+B*5106           | B*350402+B*5145          | B*3524+B*5159          | B*356802+B*5104   |
| B*35G1+B*5107           | B*352001+B*51G1          |                        |                   |
| B*35G1+B*510902         | B*5302+B*7804            |                        |                   |
| B*35G1+B*511302         | B*350301/3570+B*5163     | B*3506+B*5137          |                   |
| B*35G1+B*5116           | B*3511+B*5131            | B*3515+B*51G1          | B*3524+B*5134     |
| B*35G1+B*5120           | B*3529+B*5108            |                        |                   |
| B*35G1+B*5121           | B*3593+B*51G1            |                        |                   |
| B*35G1+B*5122           | B*3582+B*51G1            |                        |                   |
| B*35G1+B*5123           | B*3571+B*510201          |                        |                   |
| B*35G1+B*512402         | B*3564+B*510104          |                        |                   |
| B*35G1+B*5129           | B*350801+B*51G1          |                        |                   |
| B*35G1+B*5131           | B*3515+B*510901          |                        |                   |
| B*35G1+B*5134           | B*3515+B*510201          |                        |                   |
| B*35G1+B*5154           | B*5311+B*7804            |                        |                   |
| B*35G1+B*5161           | B*351402+B*510901        |                        |                   |
| B*35G1+B*5164           | B*3505+B*5104            |                        |                   |
| B*35G1+B*520101/5207    | B*3511+B*5210            | B*3524+B*5211          | B*3528+B*510102   |
|                         | B*530101+B*7805          | B*5305+B*7806          |                   |
|                         | B*3510+B*5107            | B*352001+B*520602      | B*3521+B*5203     |
|                         | B*3527+B*5209            | B*3528+B*51G1          |                   |
| B*35G1+B*520102         | B*3510+B*51G1            |                        |                   |
| B*35G1+B*520602         | B*3515+B*520101/5207     |                        |                   |
| B*35G1+B*5208           | B*3528+B*510902          |                        |                   |
| B*35G1+B*5210           | B*3528+B*510202          |                        |                   |
| B*35G1+B*5211           | B*3527+B*5305            |                        |                   |
| B*35G1+B*530101         | B*3524+B*530101          |                        |                   |
| B*35G1+B*5302           | B*350301/3570+B*530101   | B*3556+B*5305          |                   |
| B*35G1+B*5304           | B*3511+B*530101          |                        |                   |
| B*35G1+B*5308           | B*352001+B*5313          |                        |                   |
| B*35G1+B*5309           | B*350801+B*5313          |                        |                   |
| B*35G1+B*5311           | B*3527+B*5312            |                        |                   |
| B*35G1+B*5313           | B*3505+B*530101          |                        |                   |
| B*35G1+B*5314           | B*350801+B*5305          |                        |                   |
| B*35G1+B*5316           | B*3593+B*5403            |                        |                   |
| B*35G1+B*5401/5417      | B*3550+B*5401/5417       |                        |                   |
| B*35G1+B*5402           | B*350401+B*5414          |                        |                   |
| B*35G1+B*5404           | B*350801+B*5401/5417     |                        |                   |
| B*35G1+B*5410           | B*530101+B*5401/5417     |                        |                   |
| B*35G1+B*5412           | B*3511+B*550201          | B*3529+B*5531          |                   |
| B*35G1+B*550101/550103  | B*3560+B*5609            | B*3593+B*5601/5624     |                   |
| B*35G1+B*550201         | B*350801+B*5524          |                        |                   |
| B*35G1+B*5509           | B*3527+B*550201          |                        |                   |
| B*35G1+B*5512           | B*350301/3570+B*5532     | B*3506+B*5523          | B*3593+B*5622     |
| B*35G1+B*5513           | B*351401+B*550201        | B*3562+B*550101/550103 |                   |
| B*35G1+B*5521           | B*3515+B*5601/5624       |                        |                   |
| B*35G1+B*5522           | B*3511+B*5522            |                        |                   |
| B*35G1+B*5524           | B*5609+B*780202          |                        |                   |
| B*35G1+B*560501         | B*5609+B*780201          |                        |                   |
| B*35G1+B*560502         | B*3576+B*780202          |                        |                   |
| B*35G1+B*5606           | B*5313+B*5601/5624       |                        |                   |
| B*35G1+B*5607           | B*3593+B*5602            |                        |                   |
| B*35G1+B*5610           | B*350301/3570+B*5609     |                        |                   |
| B*35G1+B*5611           | B*510102+B*5609          | B*530101+B*560502      |                   |
| B*35G1+B*5621           | B*350401+B*5719          | B*350801+B*570301      | B*530101+B*5712   |
| B*35G1+B*5702           | B*350401+B*570101        |                        |                   |
| B*35G1+B*570301         | B*3571+B*570301          |                        |                   |
| B*35G1+B*5707           | B*350801+B*570101        |                        |                   |
| B*35G1+B*5719           | B*3511+B*5802            |                        |                   |
| B*35G1+B*5806           | B*3571+B*5802            |                        |                   |
| B*35G1+B*5807           | B*580101/5811+B*780202   |                        |                   |
| B*35G1+B*5808           | B*3524+B*580101/5811     |                        |                   |
| B*35G1+B*5809           | B*356802+B*580101/5811   |                        |                   |
| B*35G1+B*5816           | B*3505+B*580101/5811     |                        |                   |
| B*35G1+B*5818           | B*3511+B*580101/5811     |                        |                   |
| B*35G1+B*5819           | B*3593+B*5904            |                        |                   |
| B*35G1+B*5901           | B*3529+B*780202          |                        |                   |
| B*35G1+B*7801           | B*3521+B*7804            |                        |                   |
| B*35G1+B*780201         | B*3582+B*7801            |                        |                   |
| B*35G1+B*7803           | B*3528+B*780201          |                        |                   |
| B*35G1+B*7805           | B*3527+B*7805            |                        |                   |
| B*35G1+B*7806           | B*3576+B*4806            |                        |                   |
| B*35G1+B*8101/8102/8103 | B*3530+B*356802          |                        |                   |
| B*350104+B*3505         | B*350803+B*350902        |                        |                   |
| B*350104+B*3518         | B*3505+B*3512            |                        |                   |
| B*350104+B*3522         | B*350803+B*3571          |                        |                   |
| B*350104+B*3545         | B*350803+B*3510          |                        |                   |
| B*350104+B*3580         | B*3530+B*380101          |                        |                   |
| B*350104+B*3819         | B*356802+B*3942          |                        |                   |
| B*350104+B*3901G1       | B*3505+B*3942            | B*3530+B*3901G1        |                   |
| B*350104+B*3903         | B*3548+B*3901G1          |                        |                   |
| B*350104+B*3909         | B*350803+B*3905          |                        |                   |
| B*350104+B*3911         | B*3530+B*3905            |                        |                   |
| B*350104+B*3937         | B*3530+B*4011            |                        |                   |
| B*350104+B*400201/4056  | B*3530+B*4020            |                        |                   |
| B*350104+B*4003         | B*3530+B*4033            |                        |                   |
| B*350104+B*4031         | B*3530+B*40G1            |                        |                   |
| B*350104+B*4080         | B*3530+B*410302          |                        |                   |
| B*350104+B*4102         | B*3537+B*44G1/B*4466     |                        |                   |
| B*350104+B*4420         | B*350803+B*440301/440303 |                        |                   |
| B*350104+B*442802       | B*356802+B*44G1/B*4466   |                        |                   |
| B*350104+B*4441         | B*3537+B*440301/440303   |                        |                   |
| B*350104+B*4447         | B*3505+B*440301/440303   | B*3530+B*4465          |                   |
| B*350104+B*4454         | B*356802+B*440301/440303 |                        |                   |
| B*350104+B*4465         | B*3530+B*460101/4615N    |                        |                   |
| B*350104+B*4612         | B*3530+B*480301          |                        |                   |
| B*350104+B*480101/4809  | B*3532+B*5156            |                        |                   |
| B*350104+B*5106         | B*350803+B*51G1          |                        |                   |
| B*350104+B*5129         | B*3530+B*5106            |                        |                   |
| B*350104+B*5164         | B*350803+B*5313          |                        |                   |
| B*350104+B*5311         | B*350803+B*5305          |                        |                   |
| B*350104+B*5316         | B*350803+B*5401/5417     |                        |                   |
| B*350104+B*5410         |                          |                        |                   |

|                             |                         |                        |               |
|-----------------------------|-------------------------|------------------------|---------------|
| B*350104+B*5509             | B*350803+B*5524         |                        |               |
| B*350104+B*5702             | B*350803+B*570301       |                        |               |
| B*350104+B*5719             | B*350803+B*570101       |                        |               |
| B*350104+B*5818             | B*3530+B*5816           |                        |               |
| B*350201+B*352002           | B*350202+B*352001       |                        |               |
| B*350201+B*3521             | B*3511+B*3581           |                        |               |
| B*350201+B*3528             | B*3510+B*3595           |                        |               |
| B*350201+B*3572             | B*3505+B*3595           |                        |               |
| B*350201+B*3704             | B*3581+B*370101         |                        |               |
| B*350201+B*3948             | B*3581+B*3901G1         |                        |               |
| B*350201+B*40G1             | B*3595+B*4007           |                        |               |
| B*350201+B*4019             | B*3595+B*4013           |                        |               |
| B*350201+B*51G1             | B*3581+B*510201         |                        |               |
| B*350201+B*510102           | B*3581+B*510202         |                        |               |
| B*350201+B*510104           | B*3581+B*510204         |                        |               |
| B*350201+B*5106             | B*3581+B*5159           |                        |               |
| B*350201+B*5107             | B*3595+B*51G1           |                        |               |
| B*350201+B*5116             | B*3581+B*5134           |                        |               |
| B*350201+B*520101/5207      | B*3581+B*5211           |                        |               |
| B*350201+B*520102           | B*3595+B*520602         |                        |               |
| B*350201+B*5302             | B*3581+B*530101         |                        |               |
| B*350201+B*5309             | B*3595+B*5313           |                        |               |
| B*350201+B*5809             | B*3581+B*580101/5811    |                        |               |
| B*350301/3570+B*350401      | B*3506+B*3534           |                        |               |
| B*350301/3570+B*3512        | B*3506+B*3539           | B*3534+B*3559          |               |
| B*350301/3570+B*351402      | B*350302+B*351401       |                        |               |
| B*350301/3570+B*3516        | B*3513+B*3517           |                        |               |
| B*350301/3570+B*3528        | B*3513+B*352001         |                        |               |
| B*350301/3570+B*3569        | B*3513+B*3529           |                        |               |
| B*350301/3570+B*3580        | B*350801+B*3513         |                        |               |
| B*350301/3570+B*3586        | B*3533+B*3543/3567/3579 |                        |               |
| B*350301/3570+B*380101      | B*3905+B*5304           |                        |               |
| B*350301/3570+B*3814        | B*3901G1+B*5304         |                        |               |
| B*350301/3570+B*3819        | B*3937+B*5304           |                        |               |
| B*350301/3570+B*3901G1      | B*3506+B*3915           |                        |               |
| B*350301/3570+B*390105      | B*350302+B*3901G1       |                        |               |
| B*350301/3570+B*390201      | B*3513+B*3939           |                        |               |
| B*350301/3570+B*3914        | B*3506+B*3929           | B*3534+B*3903          |               |
| B*350301/3570+B*3922        | B*3513+B*3901G1         |                        |               |
| B*350301/3570+B*3927        | B*3574+B*3901G1         |                        |               |
| B*350301/3570+B*40G1        | B*3506+B*4033           | B*3513+B*4025          | B*3533+B*4063 |
|                             | B*3534+B*4036           |                        |               |
| B*350301/3570+B*400201/4056 | B*3506+B*4018           |                        |               |
| B*350301/3570+B*400601      | B*3506+B*4044           | B*3534+B*4086          |               |
| B*350301/3570+B*401402      | B*350302+B*401401       |                        |               |
| B*350301/3570+B*4016        | B*3506+B*4032           |                        |               |
| B*350301/3570+B*4019        | B*400201/4056+B*5304    |                        |               |
| B*350301/3570+B*4037        | B*3556+B*400201/4056    |                        |               |
| B*350301/3570+B*4073        | B*3574+B*40G1           |                        |               |
| B*350301/3570+B*4080        | B*3506+B*4031           |                        |               |
| B*350301/3570+B*4089        | B*3506+B*4009           |                        |               |
| B*350301/3570+B*4201        | B*3534+B*4206           |                        |               |
| B*350301/3570+B*44G1/B*4466 | B*3513+B*4412           | B*3538+B*440301/440303 |               |
| B*350301/3570+B*4406        | B*3538+B*5142           |                        |               |
| B*350301/3570+B*4408        | B*3538+B*4457           |                        |               |
| B*350301/3570+B*4409        | B*3538+B*4446           |                        |               |
| B*350301/3570+B*4414        | B*3506+B*4451           |                        |               |
| B*350301/3570+B*4416        | B*3538+B*446402         |                        |               |
| B*350301/3570+B*4417        | B*3538+B*4443           |                        |               |
| B*350301/3570+B*4418        | B*4501/4507+B*5304      |                        |               |
| B*350301/3570+B*4420        | B*3538+B*4447           |                        |               |
| B*350301/3570+B*4421        | B*3533+B*44G1/B*4466    |                        |               |
| B*350301/3570+B*4441        | B*3538+B*4465           |                        |               |
| B*350301/3570+B*4444        | B*3538+B*4440           |                        |               |
| B*350301/3570+B*4450        | B*4446+B*5304           |                        |               |
| B*350301/3570+B*4451        | B*3538+B*4445           |                        |               |
| B*350301/3570+B*446402      | B*3533+B*4437           |                        |               |
| B*350301/3570+B*4467        | B*3538+B*4413           |                        |               |
| B*350301/3570+B*480101/4809 | B*3534+B*4807           |                        |               |
| B*350301/3570+B*490101      | B*5001+B*5304           |                        |               |
| B*350301/3570+B*51G1        | B*3534+B*511302         | B*5304+B*780202        |               |
| B*350301/3570+B*510102      | B*5304+B*780201         |                        |               |
| B*350301/3570+B*510104      | B*3534+B*511301         |                        |               |
| B*350301/3570+B*5108        | B*3538+B*510901         |                        |               |
| B*350301/3570+B*5116        | B*3533+B*51G1           |                        |               |
| B*350301/3570+B*5122        | B*3585+B*51G1           |                        |               |
| B*350301/3570+B*5131        | B*3533+B*510901         |                        |               |
| B*350301/3570+B*5134        | B*3533+B*510201         |                        |               |
| B*350301/3570+B*520101/5207 | B*3506+B*5212           | B*5304+B*7805          |               |
| B*350301/3570+B*520102      | B*3513+B*5107           | B*3556+B*5209          |               |
| B*350301/3570+B*520602      | B*3513+B*51G1           |                        |               |
| B*350301/3570+B*5208        | B*3533+B*520101/5207    |                        |               |
| B*350301/3570+B*530103      | B*350302+B*530101       |                        |               |
| B*350301/3570+B*5302        | B*3524+B*5304           |                        |               |
| B*350301/3570+B*5308        | B*3511+B*5304           |                        |               |
| B*350301/3570+B*5313        | B*3556+B*5312           |                        |               |
| B*350301/3570+B*5314        | B*3505+B*5304           |                        |               |
| B*350301/3570+B*5401/5417   | B*3506+B*5416           |                        |               |
| B*350301/3570+B*5412        | B*5304+B*5401/5417      |                        |               |
| B*350301/3570+B*550201      | B*3560+B*5611           |                        |               |
| B*350301/3570+B*5503        | B*3574+B*550101/550103  |                        |               |
| B*350301/3570+B*5512        | B*3556+B*550201         |                        |               |
| B*350301/3570+B*5522        | B*3533+B*5601/5624      |                        |               |
| B*350301/3570+B*560501      | B*5611+B*780202         |                        |               |
| B*350301/3570+B*560502      | B*5611+B*780201         |                        |               |
| B*350301/3570+B*5613        | B*3538+B*5601/5624      |                        |               |
| B*350301/3570+B*5615        | B*3534+B*5622           |                        |               |
| B*350301/3570+B*5621        | B*510102+B*5611         | B*5304+B*560502        |               |
| B*350301/3570+B*5702        | B*5304+B*5712           |                        |               |
| B*350301/3570+B*7803        | B*3585+B*7801           |                        |               |
| B*350301/3570+B*7806        | B*3556+B*7805           |                        |               |
| B*350301/3570+B*9515        | B*5312+B*9533           |                        |               |
| B*350302+B*3814             | B*390105+B*5304         |                        |               |
| B*350302+B*3922             | B*3513+B*390105         |                        |               |

|                        |                          |                      |                 |
|------------------------|--------------------------|----------------------|-----------------|
| B*350302+B*3927        | B*3574+B*390105          |                      |                 |
| B*350401+B*3539        | B*3512+B*3534            |                      |                 |
| B*350401+B*3559        | B*3506+B*3512            |                      |                 |
| B*350401+B*3561        | B*350801+B*3512          |                      |                 |
| B*350401+B*3586        | B*3515+B*3544            |                      |                 |
| B*350401+B*3903        | B*3506+B*3914            |                      |                 |
| B*350401+B*3915        | B*3534+B*3901G1          |                      |                 |
| B*350401+B*3929        | B*3534+B*3914            |                      |                 |
| B*350401+B*400106      | B*350402+B*40G1          |                      |                 |
| B*350401+B*400201/4056 | B*350901+B*4035          |                      |                 |
| B*350401+B*4009        | B*3534+B*4089            |                      |                 |
| B*350401+B*4018        | B*3534+B*400201/4056     |                      |                 |
| B*350401+B*4031        | B*3534+B*4080            |                      |                 |
| B*350401+B*4032        | B*3534+B*4016            |                      |                 |
| B*350401+B*4033        | B*3534+B*40G1            |                      |                 |
| B*350401+B*4036        | B*3506+B*40G1            |                      |                 |
| B*350401+B*4044        | B*3534+B*400601          |                      |                 |
| B*350401+B*4086        | B*3506+B*400601          |                      |                 |
| B*350401+B*4201        | B*350901+B*4210          |                      |                 |
| B*350401+B*4206        | B*3506+B*4201            |                      |                 |
| B*350401+B*4451        | B*3534+B*4414            |                      |                 |
| B*350401+B*4453        | B*350901+B*44G1/B*4466   |                      |                 |
| B*350401+B*4807        | B*3506+B*480101/4809     |                      |                 |
| B*350401+B*4810        | B*350902+B*4812          |                      |                 |
| B*350401+B*51G1        | B*350402+B*510104        |                      |                 |
| B*350401+B*510201      | B*350402+B*510204        |                      |                 |
| B*350401+B*511301      | B*3506+B*510104          |                      |                 |
| B*350401+B*511302      | B*350402+B*511301        | B*3506+B*51G1        |                 |
| B*350401+B*512401      | B*350901+B*510104        |                      |                 |
| B*350401+B*512402      | B*350902+B*510104        |                      |                 |
| B*350401+B*5212        | B*3534+B*520101/5207     |                      |                 |
| B*350401+B*5416        | B*3534+B*5401/5417       |                      |                 |
| B*350401+B*550104      | B*350402+B*550101/550103 |                      |                 |
| B*350401+B*5523        | B*3534+B*5532            | B*3593+B*5615        |                 |
| B*350401+B*5618        | B*356801+B*5612          |                      |                 |
| B*350401+B*5620        | B*350901+B*5601/5624     |                      |                 |
| B*350401+B*5622        | B*3506+B*5615            |                      |                 |
| B*350402+B*4033        | B*3534+B*400106          |                      |                 |
| B*350402+B*4036        | B*3506+B*400106          |                      |                 |
| B*350402+B*512401      | B*350901+B*51G1          |                      |                 |
| B*350402+B*512402      | B*350902+B*51G1          |                      |                 |
| B*350402+B*5214        | B*3506+B*520101/5207     |                      |                 |
| B*350403+B*3531        | B*3522+B*3588            |                      |                 |
| B*350403+B*3532        | B*3512+B*356801          |                      |                 |
| B*350403+B*400201/4056 | B*3522+B*4004            |                      |                 |
| B*350403+B*4003        | B*3551+B*4004            |                      |                 |
| B*350403+B*4008        | B*3522+B*4068            |                      |                 |
| B*350403+B*44G1/B*4466 | B*3512+B*4448            |                      |                 |
| B*350403+B*5004        | B*3512+B*5001            |                      |                 |
| B*3505+B*351401        | B*3558+B*3562            |                      |                 |
| B*3505+B*3521          | B*3524+B*3558            |                      |                 |
| B*3505+B*3528          | B*3510+B*3572            |                      |                 |
| B*3505+B*3561          | B*350803+B*3551          |                      |                 |
| B*3505+B*3713          | B*3558+B*370101          |                      |                 |
| B*3505+B*380101        | B*356802+B*3819          | B*3905+B*5314        |                 |
| B*3505+B*3814          | B*3901G1+B*5314          |                      |                 |
| B*3505+B*3819          | B*3937+B*5314            |                      |                 |
| B*3505+B*3901G1        | B*356802+B*3903          |                      |                 |
| B*3505+B*3905          | B*356802+B*3937          |                      |                 |
| B*3505+B*390602        | B*3537+B*3903            |                      |                 |
| B*3505+B*3935          | B*3558+B*3901G1          |                      |                 |
| B*3505+B*40G1          | B*356802+B*4080          | B*3572+B*4007        |                 |
| B*3505+B*400104        | B*356801+B*4080          |                      |                 |
| B*3505+B*400601        | B*3537+B*400201/4056     |                      |                 |
| B*3505+B*4011          | B*356802+B*400201/4056   |                      |                 |
| B*3505+B*4018          | B*3551+B*4024            |                      |                 |
| B*3505+B*4019          | B*3572+B*4013            | B*400201/4056+B*5314 |                 |
| B*3505+B*4020          | B*356802+B*4003          |                      |                 |
| B*3505+B*4033          | B*356802+B*4031          |                      |                 |
| B*3505+B*4044          | B*3537+B*4018            |                      |                 |
| B*3505+B*410302        | B*356802+B*4102          |                      |                 |
| B*3505+B*4204          | B*3537+B*4201            |                      |                 |
| B*3505+B*44G1/B*4466   | B*3530+B*4441            |                      |                 |
| B*3505+B*4418          | B*4501/4507+B*5314       |                      |                 |
| B*3505+B*442801        | B*350801+B*4454          |                      |                 |
| B*3505+B*442802        | B*350803+B*4454          |                      |                 |
| B*3505+B*4447          | B*3537+B*4454            |                      |                 |
| B*3505+B*4450          | B*4446+B*5314            |                      |                 |
| B*3505+B*4465          | B*356802+B*4454          |                      |                 |
| B*3505+B*460101/4615N  | B*3558+B*4609            | B*356802+B*4612      |                 |
| B*3505+B*480301        | B*356802+B*480101/4809   |                      |                 |
| B*3505+B*480302        | B*356801+B*480101/4809   |                      |                 |
| B*3505+B*4815          | B*3558+B*480101/4809     |                      |                 |
| B*3505+B*490101        | B*5001+B*5314            |                      |                 |
| B*3505+B*51G1          | B*3537+B*5164            | B*3558+B*510901      | B*5314+B*780202 |
| B*3505+B*510102        | B*3558+B*510902          | B*5314+B*780201      |                 |
| B*3505+B*5106          | B*356802+B*5164          |                      |                 |
| B*3505+B*5107          | B*3572+B*51G1            |                      |                 |
| B*3505+B*5116          | B*3558+B*5131            |                      |                 |
| B*3505+B*520101/5207   | B*3558+B*5210            | B*5314+B*7805        |                 |
| B*3505+B*520102        | B*3572+B*520602          |                      |                 |
| B*3505+B*5302          | B*3524+B*5314            |                      |                 |
| B*3505+B*5308          | B*3511+B*5314            | B*3558+B*530101      |                 |
| B*3505+B*5309          | B*3572+B*5313            |                      |                 |
| B*3505+B*5412          | B*5314+B*5401/5417       |                      |                 |
| B*3505+B*550101/550103 | B*3558+B*550201          |                      |                 |
| B*3505+B*5524          | B*3558+B*5522            |                      |                 |
| B*3505+B*5621          | B*5314+B*560502          |                      |                 |
| B*3505+B*5702          | B*5314+B*5712            |                      |                 |
| B*3505+B*5806          | B*3558+B*5802            |                      |                 |
| B*3505+B*5808          | B*5818+B*780202          |                      |                 |
| B*3505+B*5809          | B*3524+B*5818            |                      |                 |
| B*3505+B*5816          | B*356802+B*5818          |                      |                 |
| B*3505+B*5819          | B*3511+B*5818            | B*3558+B*580101/5811 |                 |

|                           |                        |                   |
|---------------------------|------------------------|-------------------|
| B*3506+B*3561             | B*350801+B*3559        |                   |
| B*3506+B*3943             | B*3524+B*3930          |                   |
| B*3506+B*407201           | B*350901+B*4077        |                   |
| B*3506+B*407202           | B*350902+B*4077        |                   |
| B*3506+B*512401           | B*350901+B*511301      |                   |
| B*3506+B*512402           | B*350902+B*511301      |                   |
| B*3506+B*5902             | B*350901+B*5903        |                   |
| B*350801+B*3516           | B*3517+B*3580          |                   |
| B*350801+B*3528           | B*352001+B*3580        |                   |
| B*350801+B*3539           | B*3534+B*3561          |                   |
| B*350801+B*3543/3567/3579 | B*3562+B*3599          |                   |
| B*350801+B*356802         | B*350803+B*356801      |                   |
| B*350801+B*3569           | B*3529+B*3580          |                   |
| B*350801+B*3710           | B*3711+B*5311          |                   |
| B*350801+B*380101         | B*3911+B*530101        |                   |
| B*350801+B*380201/3818    | B*3905+B*5311          | B*3911+B*5313     |
| B*350801+B*3817           | B*3911+B*5303          |                   |
| B*350801+B*3901G1         | B*3529+B*3911          |                   |
| B*350801+B*390201         | B*3529+B*3908          | B*3580+B*3939     |
| B*350801+B*390601         | B*350803+B*390602      |                   |
| B*350801+B*390602         | B*3535+B*3933          |                   |
| B*350801+B*3922           | B*3569+B*3911          | B*3580+B*3901G1   |
| B*350801+B*3934           | B*3593+B*3933          |                   |
| B*350801+B*40G1           | B*350803+B*400104      | B*3580+B*4025     |
| B*350801+B*4019           | B*4037+B*5316          |                   |
| B*350801+B*4047           | B*40G1+B*5311          |                   |
| B*350801+B*4096           | B*400601+B*5311        |                   |
| B*350801+B*44G1/B*4466    | B*3580+B*4412          | B*4409+B*5311     |
| B*350801+B*4405           | B*3545+B*4442          |                   |
| B*350801+B*4421           | B*3545+B*4416          |                   |
| B*350801+B*442802         | B*350803+B*442801      |                   |
| B*350801+B*4447           | B*3537+B*442801        |                   |
| B*350801+B*446402         | B*350803+B*446401      |                   |
| B*350801+B*4465           | B*356801+B*442802      | B*356802+B*442801 |
| B*350801+B*4501/4507      | B*3545+B*4504          |                   |
| B*350801+B*4617           | B*3545+B*460101/4615N  |                   |
| B*350801+B*480301         | B*350803+B*480302      |                   |
| B*350801+B*4818           | B*480101/4809+B*5316   |                   |
| B*350801+B*4902           | B*5001+B*5311          |                   |
| B*350801+B*5002           | B*3545+B*5001          |                   |
| B*350801+B*510102         | B*3521+B*5105          |                   |
| B*350801+B*510202         | B*3511+B*5105          |                   |
| B*350801+B*5107           | B*352001+B*5129        |                   |
| B*350801+B*510902         | B*3524+B*5105          |                   |
| B*350801+B*5116           | B*3515+B*5129          |                   |
| B*350801+B*5121           | B*3593+B*5129          |                   |
| B*350801+B*5122           | B*3582+B*5129          |                   |
| B*350801+B*5123           | B*3545+B*510201        |                   |
| B*350801+B*520101/5207    | B*5316+B*7806          |                   |
| B*350801+B*520102         | B*3528+B*5129          | B*3580+B*5107     |
| B*350801+B*520602         | B*3510+B*5129          | B*3580+B*51G1     |
| B*350801+B*530101         | B*3527+B*5316          |                   |
| B*350801+B*5304           | B*3556+B*5316          |                   |
| B*350801+B*5309           | B*352001+B*5311        |                   |
| B*350801+B*5402           | B*3550+B*5410          |                   |
| B*350801+B*5412           | B*530101+B*5410        |                   |
| B*350801+B*5607           | B*5311+B*5601/5624     |                   |
| B*350801+B*5707           | B*3545+B*570301        | B*3571+B*5702     |
| B*350801+B*5807           | B*3545+B*5802          |                   |
| B*350803+B*3937           | B*3530+B*3911          |                   |
| B*350803+B*4018           | B*3561+B*4024          |                   |
| B*350803+B*4447           | B*3537+B*442802        |                   |
| B*350803+B*4465           | B*356802+B*442802      |                   |
| B*350901+B*401403         | B*350902+B*401401      |                   |
| B*350901+B*407202         | B*350902+B*407201      |                   |
| B*350901+B*512402         | B*350902+B*512401      |                   |
| B*350902+B*3543/3567/3579 | B*3544+B*3564          |                   |
| B*350902+B*3545           | B*3518+B*3571          |                   |
| B*350902+B*3551           | B*3522+B*3564          |                   |
| B*350902+B*3580           | B*3510+B*3518          |                   |
| B*350902+B*3911           | B*3518+B*3905          |                   |
| B*350902+B*4003           | B*3564+B*400201/4056   |                   |
| B*350902+B*4020           | B*3564+B*4011          |                   |
| B*350902+B*4052           | B*3564+B*40G1          |                   |
| B*350902+B*4209           | B*3564+B*4202          |                   |
| B*350902+B*442801         | B*3518+B*440302        |                   |
| B*350902+B*442802         | B*3518+B*440301/440303 |                   |
| B*350902+B*5129           | B*3518+B*51G1          |                   |
| B*350902+B*5137           | B*3564+B*51G1          |                   |
| B*350902+B*5311           | B*3518+B*5313          |                   |
| B*350902+B*5316           | B*3518+B*5305          |                   |
| B*350902+B*5410           | B*3518+B*5401/5417     |                   |
| B*350902+B*5414           | B*3564+B*5404          |                   |
| B*350902+B*5509           | B*3518+B*5524          |                   |
| B*350902+B*570101         | B*3564+B*570301        |                   |
| B*350902+B*5702           | B*3518+B*570301        |                   |
| B*350902+B*5719           | B*3518+B*570101        | B*3564+B*5702     |
| B*3510+B*3533             | B*3513+B*3515          |                   |
| B*3510+B*3545             | B*3571+B*3580          |                   |
| B*3510+B*3556             | B*3513+B*3527          |                   |
| B*3510+B*3585             | B*3513+B*3582          |                   |
| B*3510+B*3814             | B*3569+B*380101        | B*3922+B*530101   |
| B*3510+B*390202           | B*3569+B*391301        |                   |
| B*3510+B*3903             | B*3569+B*3937          |                   |
| B*3510+B*3911             | B*3580+B*3905          |                   |
| B*3510+B*3918             | B*351402+B*3922        |                   |
| B*3510+B*3935             | B*3511+B*3922          |                   |
| B*3510+B*3948             | B*3524+B*3922          |                   |
| B*3510+B*40G1             | B*3528+B*4007          |                   |
| B*3510+B*4019             | B*3528+B*4013          |                   |
| B*3510+B*4036             | B*3513+B*4038          |                   |
| B*3510+B*4043             | B*3569+B*40G1          |                   |
| B*3510+B*4050             | B*3569+B*400201/4056   |                   |
| B*3510+B*442801           | B*3580+B*440302        |                   |

|                        |                          |                 |
|------------------------|--------------------------|-----------------|
| B*3510+B*442802        | B*3580+B*440301/440303   |                 |
| B*3510+B*511302        | B*3513+B*5163            |                 |
| B*3510+B*5116          | B*3515+B*520602          |                 |
| B*3510+B*5120          | B*3569+B*5108            |                 |
| B*3510+B*5121          | B*3593+B*520602          |                 |
| B*3510+B*5122          | B*3582+B*520602          |                 |
| B*3510+B*520102        | B*3528+B*520602          |                 |
| B*3510+B*5304          | B*3513+B*530101          |                 |
| B*3510+B*5309          | B*3528+B*5313            |                 |
| B*3510+B*5311          | B*3580+B*5313            |                 |
| B*3510+B*5316          | B*3580+B*5305            |                 |
| B*3510+B*5410          | B*3580+B*5401/5417       |                 |
| B*3510+B*550101/550103 | B*3569+B*5531            |                 |
| B*3510+B*5509          | B*3580+B*5524            |                 |
| B*3510+B*5513          | B*3513+B*5532            |                 |
| B*3510+B*5611          | B*3513+B*5609            |                 |
| B*3510+B*5702          | B*3580+B*570301          |                 |
| B*3510+B*5719          | B*3580+B*570101          |                 |
| B*3510+B*7801          | B*3569+B*780202          |                 |
| B*3511+B*3572          | B*352001+B*3558          |                 |
| B*3511+B*3704          | B*3521+B*370101          | B*3524+B*3713   |
| B*3511+B*380101        | B*3905+B*5308            |                 |
| B*3511+B*3814          | B*3901G1+B*5308          | B*3935+B*530101 |
| B*3511+B*3819          | B*3937+B*5308            |                 |
| B*3511+B*3918          | B*351402+B*3935          |                 |
| B*3511+B*3948          | B*3521+B*3901G1          | B*3524+B*3935   |
| B*3511+B*400201/4056   | B*3515+B*4005            | B*3558+B*4064   |
| B*3511+B*4019          | B*400201/4056+B*5308     |                 |
| B*3511+B*4039          | B*3593+B*4005            |                 |
| B*3511+B*4418          | B*4501/4507+B*5308       |                 |
| B*3511+B*4450          | B*4446+B*5308            |                 |
| B*3511+B*4454          | B*3558+B*440302          |                 |
| B*3511+B*460101/4615N  | B*351401+B*4608          |                 |
| B*3511+B*4818          | B*4815+B*5305            |                 |
| B*3511+B*4819          | B*351401+B*480101/4809   | B*3562+B*4815   |
| B*3511+B*490101        | B*5001+B*5308            |                 |
| B*3511+B*51G1          | B*3521+B*510201          | B*5308+B*780202 |
| B*3511+B*510102        | B*3521+B*510202          | B*5308+B*780201 |
| B*3511+B*510104        | B*3521+B*510204          |                 |
| B*3511+B*5106          | B*3521+B*5159            |                 |
| B*3511+B*5116          | B*3521+B*5134            |                 |
| B*3511+B*5161          | B*351402+B*51G1          |                 |
| B*3511+B*5164          | B*3558+B*5104            |                 |
| B*3511+B*520101/5207   | B*3521+B*5211            | B*5308+B*7805   |
| B*3511+B*5203          | B*3528+B*510201          |                 |
| B*3511+B*5302          | B*3521+B*530101          | B*3524+B*5308   |
| B*3511+B*5412          | B*5308+B*5401/5417       |                 |
| B*3511+B*5512          | B*3527+B*550101/550103   |                 |
| B*3511+B*5521          | B*351401+B*550101/550103 |                 |
| B*3511+B*5621          | B*5308+B*560502          |                 |
| B*3511+B*5702          | B*5308+B*5712            |                 |
| B*3511+B*5807          | B*3571+B*5806            |                 |
| B*3511+B*5808          | B*5819+B*780202          |                 |
| B*3511+B*5809          | B*3521+B*580101/5811     | B*3524+B*5819   |
| B*3511+B*5816          | B*356802+B*5819          |                 |
| B*3511+B*9514          | B*3515+B*9553            |                 |
| B*3512+B*3903          | B*3522+B*3942            | B*3559+B*3914   |
| B*3512+B*3915          | B*3539+B*3901G1          |                 |
| B*3512+B*3918          | B*3544+B*3942            |                 |
| B*3512+B*3929          | B*3539+B*3914            |                 |
| B*3512+B*4009          | B*3539+B*4089            |                 |
| B*3512+B*4018          | B*3539+B*400201/4056     |                 |
| B*3512+B*4031          | B*3539+B*4080            |                 |
| B*3512+B*4032          | B*3539+B*4016            |                 |
| B*3512+B*4033          | B*3539+B*40G1            |                 |
| B*3512+B*4036          | B*3559+B*40G1            |                 |
| B*3512+B*4044          | B*3539+B*400601          |                 |
| B*3512+B*4052          | B*3539+B*4038            |                 |
| B*3512+B*4086          | B*3559+B*400601          |                 |
| B*3512+B*4206          | B*3559+B*4201            |                 |
| B*3512+B*4451          | B*3539+B*4414            |                 |
| B*3512+B*4454          | B*3522+B*440301/440303   |                 |
| B*3512+B*4807          | B*3559+B*480101/4809     |                 |
| B*3512+B*511301        | B*3559+B*510104          |                 |
| B*3512+B*511302        | B*3559+B*51G1            |                 |
| B*3512+B*5137          | B*3539+B*5163            |                 |
| B*3512+B*5212          | B*3539+B*520101/5207     |                 |
| B*3512+B*5416          | B*3539+B*5401/5417       |                 |
| B*3512+B*5523          | B*3539+B*5532            |                 |
| B*3512+B*5622          | B*3559+B*5615            |                 |
| B*3512+B*5719          | B*3561+B*570301          |                 |
| B*3513+B*3814          | B*3922+B*5304            |                 |
| B*3513+B*3927          | B*3574+B*3922            |                 |
| B*3513+B*5116          | B*3533+B*520602          |                 |
| B*3513+B*5122          | B*3585+B*520602          |                 |
| B*351401+B*3524        | B*3521+B*3562            |                 |
| B*351401+B*370101      | B*3562+B*3713            |                 |
| B*351401+B*3901G1      | B*3562+B*3935            |                 |
| B*351401+B*401402      | B*351402+B*401401        |                 |
| B*351401+B*4609        | B*3562+B*460101/4615N    |                 |
| B*351401+B*510901      | B*3562+B*51G1            |                 |
| B*351401+B*510902      | B*3562+B*510102          |                 |
| B*351401+B*5131        | B*3562+B*5116            |                 |
| B*351401+B*5210        | B*3562+B*520101/5207     |                 |
| B*351401+B*530101      | B*3562+B*5308            |                 |
| B*351401+B*530103      | B*351402+B*530101        |                 |
| B*351401+B*5512        | B*3527+B*5521            |                 |
| B*351401+B*5522        | B*3562+B*5524            |                 |
| B*351401+B*580101/5811 | B*3562+B*5819            |                 |
| B*351401+B*5802        | B*3562+B*5806            |                 |
| B*351402+B*3814        | B*3918+B*530101          |                 |
| B*351402+B*3948        | B*3524+B*3918            |                 |
| B*351402+B*40G1        | B*3544+B*4059            |                 |
| B*351402+B*4052        | B*3543/3567/3579+B*4059  |                 |

|                          |                         |                 |
|--------------------------|-------------------------|-----------------|
| B*351402+B*5131          | B*3515+B*5161           |                 |
| B*351402+B*5145          | B*3543/3567/3579+B*5306 |                 |
| B*351402+B*5409          | B*3593+B*5406           |                 |
| B*3515+B*3556            | B*3527+B*3533           |                 |
| B*3515+B*3585            | B*3533+B*3582           |                 |
| B*3515+B*3901G1          | B*3593+B*3947           |                 |
| B*3515+B*3932            | B*3524+B*3947           |                 |
| B*3515+B*4036            | B*3533+B*4038           |                 |
| B*3515+B*4039            | B*3593+B*400201/4056    |                 |
| B*3515+B*440301/440303   | B*3571+B*446402         |                 |
| B*3515+B*440302          | B*3571+B*446401         |                 |
| B*3515+B*4422            | B*3554+B*4421           |                 |
| B*3515+B*442801          | B*3545+B*446401         |                 |
| B*3515+B*442802          | B*3545+B*446402         |                 |
| B*3515+B*4441            | B*356801+B*4421         |                 |
| B*3515+B*5107            | B*352001+B*5116         |                 |
| B*3515+B*511302          | B*3533+B*5163           |                 |
| B*3515+B*5121            | B*3593+B*5116           |                 |
| B*3515+B*5122            | B*3582+B*5116           |                 |
| B*3515+B*5123            | B*3571+B*5134           |                 |
| B*3515+B*512402          | B*3521+B*5110           |                 |
| B*3515+B*520102          | B*3528+B*5116           |                 |
| B*3515+B*5304            | B*3533+B*530101         |                 |
| B*3515+B*550101/550103   | B*3593+B*5524           |                 |
| B*3515+B*550201          | B*3593+B*5522           |                 |
| B*3515+B*5513            | B*3533+B*5532           |                 |
| B*3515+B*5607            | B*5313+B*5522           |                 |
| B*3515+B*5611            | B*3533+B*5609           |                 |
| B*3515+B*9525            | B*3554+B*9517           |                 |
| B*3515+B*9535            | B*3527+B*9517           |                 |
| B*3516+B*352001          | B*3517+B*3528           |                 |
| B*3516+B*3529            | B*3517+B*3569           |                 |
| B*3516+B*3901G1          | B*3517+B*3922           |                 |
| B*3516+B*3939            | B*3517+B*390201         |                 |
| B*3516+B*4025            | B*3517+B*40G1           |                 |
| B*3516+B*4412            | B*3517+B*44G1/B*4466    |                 |
| B*3516+B*51G1            | B*3517+B*520602         |                 |
| B*3516+B*5107            | B*3517+B*520102         |                 |
| B*3517+B*356802          | B*3530+B*3532           |                 |
| B*3517+B*4004            | B*3530+B*4064           |                 |
| B*3517+B*4070            | B*3530+B*400601         |                 |
| B*3517+B*4107            | B*3530+B*4101           |                 |
| B*3517+B*5528            | B*3530+B*5517           |                 |
| B*3517+B*5602            | B*3530+B*5604           |                 |
| B*3518+B*5137            | B*3564+B*5129           |                 |
| B*3519+B*3812            | B*3547+B*380101         |                 |
| B*3519+B*440302          | B*3547+B*4407           |                 |
| B*3519+B*4440            | B*3549+B*440301/440303  |                 |
| B*3519+B*4444            | B*3549+B*44G1/B*4466    |                 |
| B*352001+B*3569          | B*3528+B*3529           |                 |
| B*352001+B*3581          | B*3524+B*3595           |                 |
| B*352001+B*3710          | B*3711+B*5309           |                 |
| B*352001+B*380201/3818   | B*3905+B*5309           |                 |
| B*352001+B*3901G1        | B*3582+B*3939           |                 |
| B*352001+B*390201        | B*3528+B*3939           |                 |
| B*352001+B*3922          | B*3528+B*3901G1         | B*3582+B*390201 |
| B*352001+B*40G1          | B*3528+B*4025           |                 |
| B*352001+B*400201/4056   | B*3572+B*4064           |                 |
| B*352001+B*4047          | B*40G1+B*5309           |                 |
| B*352001+B*4075          | B*3582+B*400601         |                 |
| B*352001+B*4096          | B*400601+B*5309         |                 |
| B*352001+B*44G1/B*4466   | B*3528+B*4412           | B*4409+B*5309   |
| B*352001+B*440301/440303 | B*4446+B*5309           |                 |
| B*352001+B*4454          | B*3572+B*440302         |                 |
| B*352001+B*4506          | B*3576+B*4501/4507      |                 |
| B*352001+B*4902          | B*5001+B*5309           |                 |
| B*352001+B*5121          | B*3593+B*5107           |                 |
| B*352001+B*5122          | B*3582+B*5107           |                 |
| B*352001+B*5164          | B*3572+B*5104           |                 |
| B*352001+B*520102        | B*3528+B*5107           |                 |
| B*352001+B*5314          | B*3572+B*530101         |                 |
| B*352001+B*5607          | B*5309+B*5601/5624      |                 |
| B*352001+B*5818          | B*3572+B*580101/5811    |                 |
| B*3521+B*3814            | B*3935+B*5302           | B*3948+B*5308   |
| B*3521+B*4609            | B*3524+B*460101/4615N   |                 |
| B*3521+B*480101/4809     | B*3524+B*4815           |                 |
| B*3521+B*51G1            | B*5306+B*780201         |                 |
| B*3521+B*510901          | B*3524+B*51G1           | B*5302+B*780202 |
| B*3521+B*510902          | B*3524+B*510102         | B*5302+B*780201 |
| B*3521+B*5131            | B*3524+B*5116           |                 |
| B*3521+B*5140            | B*530103+B*780202       |                 |
| B*3521+B*5154            | B*5311+B*780201         |                 |
| B*3521+B*520102          | B*5306+B*7805           |                 |
| B*3521+B*5210            | B*3524+B*520101/5207    | B*5302+B*7805   |
| B*3521+B*5314            | B*3558+B*5302           |                 |
| B*3521+B*550201          | B*3524+B*550101/550103  |                 |
| B*3521+B*5522            | B*3524+B*5524           |                 |
| B*3521+B*5802            | B*3524+B*5806           |                 |
| B*3521+B*5818            | B*3558+B*5809           |                 |
| B*3522+B*3543/3567/3579  | B*3544+B*3551           |                 |
| B*3522+B*3918            | B*3544+B*3903           |                 |
| B*3522+B*4003            | B*3551+B*400201/4056    |                 |
| B*3522+B*4020            | B*3551+B*4011           |                 |
| B*3522+B*4052            | B*3551+B*40G1           |                 |
| B*3522+B*4209            | B*3551+B*4202           |                 |
| B*3522+B*5137            | B*3551+B*51G1           |                 |
| B*3522+B*5414            | B*3551+B*5404           |                 |
| B*3522+B*5520            | B*3587+B*5615           |                 |
| B*3522+B*570101          | B*3551+B*570301         |                 |
| B*3522+B*5719            | B*3551+B*5702           |                 |
| B*3524+B*380101          | B*3905+B*5302           |                 |
| B*3524+B*3814            | B*3901G1+B*5302         | B*3948+B*530101 |
| B*3524+B*3819            | B*3937+B*5302           |                 |
| B*3524+B*4019            | B*400201/4056+B*5302    |                 |

|                                |                        |                   |
|--------------------------------|------------------------|-------------------|
| B*3524+B*4418                  | B*4501/4507+B*5302     |                   |
| B*3524+B*4450                  | B*4446+B*5302          |                   |
| B*3524+B*490101                | B*5001+B*5302          |                   |
| B*3524+B*5123                  | B*3571+B*51G1          |                   |
| B*3524+B*5203                  | B*3528+B*510901        |                   |
| B*3524+B*5412                  | B*5302+B*5401/5417     |                   |
| B*3524+B*5621                  | B*5302+B*560502        |                   |
| B*3524+B*5702                  | B*5302+B*5712          |                   |
| B*3524+B*5808                  | B*5809+B*780202        |                   |
| B*3524+B*5816                  | B*356802+B*5809        |                   |
| B*3527+B*3585                  | B*3556+B*3582          |                   |
| B*3527+B*3803                  | B*390201+B*5313        |                   |
| B*3527+B*3910                  | B*3529+B*3920          |                   |
| B*3527+B*4019                  | B*4037+B*530101        |                   |
| B*3527+B*4036                  | B*3556+B*4038          |                   |
| B*3527+B*4050                  | B*3529+B*4037          |                   |
| B*3527+B*4415                  | B*4501/4507+B*5313     |                   |
| B*3527+B*4818                  | B*480101/4809+B*530101 |                   |
| B*3527+B*511302                | B*3556+B*5163          |                   |
| B*3527+B*520101/5207           | B*530101+B*7806        |                   |
| B*3527+B*5304                  | B*3556+B*530101        |                   |
| B*3527+B*5513                  | B*3556+B*5532          |                   |
| B*3527+B*5611                  | B*3556+B*5609          |                   |
| B*3527+B*9525                  | B*3554+B*9535          |                   |
| B*3528+B*3911                  | B*3582+B*3908          |                   |
| B*3528+B*5121                  | B*3593+B*520102        |                   |
| B*3528+B*5122                  | B*3582+B*520102        |                   |
| B*3528+B*5311                  | B*3580+B*5309          |                   |
| B*3528+B*560502                | B*5609+B*7805          |                   |
| B*3528+B*5621                  | B*520101/5207+B*5609   |                   |
| B*3528+B*670102                | B*3576+B*391301        |                   |
| B*3528+B*8101/8102/8103        | B*3576+B*480101/4809   |                   |
| B*3529+B*380201/3818           | B*3901G1+B*5313        |                   |
| B*3529+B*3810                  | B*3930+B*5308          |                   |
| B*3529+B*3817                  | B*3901G1+B*5303        |                   |
| B*3529+B*3819                  | B*3903+B*530101        |                   |
| B*3529+B*390201                | B*3569+B*3939          |                   |
| B*3529+B*3922                  | B*3569+B*3901G1        |                   |
| B*3529+B*4019                  | B*4050+B*530101        |                   |
| B*3529+B*4047                  | B*4043+B*5313          |                   |
| B*3529+B*44G1/B*4466           | B*3569+B*4412          |                   |
| B*3529+B*51G1                  | B*530101+B*7801        |                   |
| B*3529+B*5122                  | B*530101+B*7803        |                   |
| B*3529+B*520102                | B*3569+B*5107          |                   |
| B*3529+B*520602                | B*3569+B*51G1          |                   |
| B*3529+B*560501                | B*5609+B*7801          |                   |
| B*3529+B*5606                  | B*3576+B*7801          |                   |
| B*3529+B*5623                  | B*3593+B*5617          |                   |
| B*3529+B*5808                  | B*580101/5811+B*7801   |                   |
| B*3530+B*3814                  | B*3942+B*5314          |                   |
| B*3530+B*3909                  | B*3548+B*3903          |                   |
| B*3530+B*3935                  | B*3558+B*3942          |                   |
| B*3531+B*4004                  | B*3588+B*400201/4056   |                   |
| B*3531+B*4068                  | B*3588+B*4008          |                   |
| B*3532+B*4070                  | B*3537+B*4011          | B*356802+B*400601 |
| B*3532+B*4107                  | B*356802+B*4101        |                   |
| B*3532+B*5001                  | B*356801+B*5004        |                   |
| B*3532+B*5414                  | B*3537+B*5409          |                   |
| B*3532+B*5523                  | B*3537+B*5618          |                   |
| B*3532+B*5528                  | B*356802+B*5517        |                   |
| B*3532+B*5601/5624             | B*3537+B*5604          |                   |
| B*3532+B*5602                  | B*356802+B*5604        |                   |
| B*3533+B*5108                  | B*3538+B*5131          |                   |
| B*3533+B*5122                  | B*3585+B*5116          |                   |
| B*3533+B*5613                  | B*3538+B*5522          |                   |
| B*3533+B*9535                  | B*3556+B*9517          |                   |
| B*3535+B*3930                  | B*3593+B*3901G1        |                   |
| B*3535+B*3934                  | B*3593+B*390602        |                   |
| B*3535+B*440301/440303         | B*3593+B*4429          |                   |
| B*3535+B*510901                | B*3593+B*5119          |                   |
| B*3537+B*3901G1                | B*356801+B*390601      | B*356802+B*390602 |
| B*3537+B*3930                  | B*356802+B*3934        |                   |
| B*3537+B*4019                  | B*400601+B*5314        |                   |
| B*3537+B*4441                  | B*356802+B*4420        |                   |
| B*3537+B*4465                  | B*356802+B*4447        |                   |
| B*3537+B*5106                  | B*356802+B*51G1        |                   |
| B*3537+B*5159                  | B*356802+B*510201      |                   |
| B*3537+B*5602                  | B*356802+B*5601/5624   |                   |
| B*3537+B*5610                  | B*356802+B*550201      |                   |
| B*3538+B*4450                  | B*4409+B*5304          |                   |
| B*3539+B*3903                  | B*3559+B*3929          |                   |
| B*3539+B*4036                  | B*3559+B*4033          |                   |
| B*3539+B*4060                  | B*3548+B*4042          |                   |
| B*3539+B*4086                  | B*3559+B*4044          |                   |
| B*3543/3567/3579+B*3903        | B*3551+B*3918          |                   |
| B*3543/3567/3579+B*40G1        | B*3544+B*4052          | B*3586+B*4063     |
| B*3543/3567/3579+B*400201/4056 | B*3544+B*4003          |                   |
| B*3543/3567/3579+B*4011        | B*3544+B*4020          |                   |
| B*3543/3567/3579+B*4202        | B*3544+B*4209          |                   |
| B*3543/3567/3579+B*4421        | B*3586+B*44G1/B*4466   |                   |
| B*3543/3567/3579+B*446402      | B*3586+B*4437          |                   |
| B*3543/3567/3579+B*4618        | B*3560+B*460101/4615N  |                   |
| B*3543/3567/3579+B*51G1        | B*3544+B*5137          |                   |
| B*3543/3567/3579+B*5116        | B*3586+B*51G1          |                   |
| B*3543/3567/3579+B*5131        | B*3586+B*510901        |                   |
| B*3543/3567/3579+B*5134        | B*3586+B*510201        |                   |
| B*3543/3567/3579+B*5208        | B*3586+B*520101/5207   |                   |
| B*3543/3567/3579+B*5401/5417   | B*3560+B*5406          |                   |
| B*3543/3567/3579+B*5404        | B*3544+B*5414          |                   |
| B*3543/3567/3579+B*5522        | B*3586+B*5601/5624     |                   |
| B*3543/3567/3579+B*5702        | B*3544+B*5719          |                   |
| B*3543/3567/3579+B*570301      | B*3544+B*570101        |                   |
| B*3545+B*3905                  | B*3571+B*3911          |                   |
| B*3545+B*440301/440303         | B*3571+B*442802        |                   |

|                          |                        |                          |
|--------------------------|------------------------|--------------------------|
| B*3545+B*440302          | B*3571+B*442801        |                          |
| B*3545+B*4902            | B*5002+B*5311          |                          |
| B*3545+B*51G1            | B*3571+B*5129          |                          |
| B*3545+B*5305            | B*3571+B*5316          |                          |
| B*3545+B*5313            | B*3571+B*5311          |                          |
| B*3545+B*5401/5417       | B*3571+B*5410          |                          |
| B*3545+B*5524            | B*3571+B*5509          |                          |
| B*3545+B*570101          | B*3571+B*5719          |                          |
| B*3547+B*4046            | B*3549+B*40G1          |                          |
| B*3547+B*4093            | B*3549+B*400601        |                          |
| B*3550+B*5412            | B*530101+B*5402        |                          |
| B*3551+B*442802          | B*3561+B*4454          |                          |
| B*3554+B*4441            | B*356801+B*4422        |                          |
| B*3554+B*4610            | B*3590+B*4605          |                          |
| B*3554+B*4617            | B*3571+B*4605          |                          |
| B*3556+B*4019            | B*4037+B*5304          |                          |
| B*3556+B*4818            | B*480101/4809+B*5304   |                          |
| B*3556+B*520101/5207     | B*5304+B*7806          |                          |
| B*3556+B*9515            | B*5313+B*9533          |                          |
| B*3558+B*3814            | B*3935+B*5314          |                          |
| B*3558+B*480301          | B*356802+B*4815        |                          |
| B*3558+B*480302          | B*356801+B*4815        |                          |
| B*3560+B*530101          | B*3593+B*5115          |                          |
| B*3560+B*560501          | B*550201+B*780202      |                          |
| B*3560+B*560502          | B*550201+B*780201      |                          |
| B*3560+B*5621            | B*510102+B*550201      | B*510902+B*550101/550103 |
| B*3562+B*4818            | B*4819+B*5305          |                          |
| B*3562+B*9521            | B*3593+B*9544          |                          |
| B*3562+B*9539            | B*3578+B*9544          |                          |
| B*3563+B*4606            | B*4059+B*461301        |                          |
| B*3563+B*480101/4809     | B*4080+B*4802          |                          |
| B*3563+B*480301          | B*40G1+B*4802          |                          |
| B*3563+B*480302          | B*400104+B*4802        |                          |
| B*3563+B*4808            | B*4032+B*4802          |                          |
| B*356801+B*40G1          | B*356802+B*400104      |                          |
| B*356801+B*446402        | B*356802+B*446401      |                          |
| B*356801+B*480301        | B*356802+B*480302      |                          |
| B*356802+B*4019          | B*4011+B*5314          |                          |
| B*356802+B*5808          | B*5816+B*780202        |                          |
| B*3569+B*380201/3818     | B*3922+B*5313          |                          |
| B*3569+B*3817            | B*3922+B*5303          |                          |
| B*3569+B*3908            | B*3580+B*390201        |                          |
| B*3571+B*4508            | B*3593+B*4501/4507     |                          |
| B*3571+B*4610            | B*3590+B*4617          |                          |
| B*3571+B*490101          | B*5002+B*530101        |                          |
| B*3571+B*4902            | B*5002+B*5313          |                          |
| B*3574+B*3814            | B*3927+B*5304          |                          |
| B*3576+B*3905            | B*3582+B*670101        |                          |
| B*3576+B*51G1            | B*530101+B*5606        |                          |
| B*3576+B*560501          | B*5606+B*5609          |                          |
| B*3576+B*5808            | B*5606+B*580101/5811   |                          |
| B*3576+B*5901            | B*530101+B*550201      | B*5305+B*5512            |
| B*3576+B*5903            | B*530101+B*5513        | B*5304+B*5532            |
| B*3576+B*5904            | B*5115+B*5609          | B*530101+B*5601/5624     |
| B*3578+B*9521            | B*3593+B*9539          |                          |
| B*3582+B*4036            | B*3585+B*4038          |                          |
| B*3582+B*4096            | B*4075+B*5309          |                          |
| B*3582+B*511302          | B*3585+B*5163          |                          |
| B*3582+B*5121            | B*3593+B*5122          |                          |
| B*3582+B*5304            | B*3585+B*530101        |                          |
| B*3582+B*5513            | B*3585+B*5532          |                          |
| B*3582+B*5611            | B*3585+B*5609          |                          |
| B*3593+B*5607            | B*5312+B*5512          | B*5313+B*550201          |
| B*370101+B*380201/3818   | B*3710+B*3817          |                          |
| B*370101+B*3905          | B*3711+B*3817          |                          |
| B*370101+B*3935          | B*3713+B*3901G1        |                          |
| B*370101+B*3948          | B*3704+B*3901G1        |                          |
| B*370101+B*4025          | B*3708+B*400103        |                          |
| B*370101+B*460101/4615N  | B*3713+B*4609          |                          |
| B*370101+B*4702          | B*3711+B*470101        |                          |
| B*370101+B*4703          | B*3714+B*470101        |                          |
| B*370101+B*4704          | B*3710+B*4705          |                          |
| B*370101+B*4815          | B*3713+B*480101/4809   |                          |
| B*370101+B*51G1          | B*3704+B*510201        | B*3713+B*510901          |
| B*370101+B*510102        | B*3704+B*510202        | B*3713+B*510902          |
| B*370101+B*510104        | B*3704+B*510204        |                          |
| B*370101+B*5106          | B*3704+B*5159          |                          |
| B*370101+B*5116          | B*3704+B*5134          | B*3713+B*5131            |
| B*370101+B*520101/5207   | B*3704+B*5211          | B*3713+B*5210            |
| B*370101+B*5302          | B*3704+B*530101        |                          |
| B*370101+B*5308          | B*3713+B*530101        |                          |
| B*370101+B*5313          | B*3710+B*5303          |                          |
| B*370101+B*550101/550103 | B*3713+B*550201        |                          |
| B*370101+B*5524          | B*3713+B*5522          |                          |
| B*370101+B*5806          | B*3713+B*5802          |                          |
| B*370101+B*5809          | B*3704+B*580101/5811   |                          |
| B*370101+B*5819          | B*3713+B*580101/5811   |                          |
| B*3704+B*3935            | B*3713+B*3948          |                          |
| B*3704+B*5308            | B*3713+B*5302          |                          |
| B*3704+B*5819            | B*3713+B*5809          |                          |
| B*3710+B*3905            | B*3711+B*380201/3818   |                          |
| B*3710+B*40G1            | B*3711+B*4047          |                          |
| B*3710+B*400601          | B*3711+B*4096          |                          |
| B*3710+B*4409            | B*3711+B*44G1/B*4466   |                          |
| B*3710+B*4446            | B*3711+B*440301/440303 |                          |
| B*3710+B*5001            | B*3711+B*4902          |                          |
| B*3710+B*5601/5624       | B*3711+B*5607          |                          |
| B*3711+B*4703            | B*3714+B*4702          |                          |
| B*380101+B*3901G1        | B*3814+B*3905          |                          |
| B*380101+B*390202        | B*3814+B*391301        |                          |
| B*380101+B*3903          | B*3814+B*3937          | B*3819+B*3901G1          |
| B*380101+B*3937          | B*3819+B*3905          |                          |
| B*380101+B*400201/4056   | B*3819+B*4011          | B*3905+B*4019            |
| B*380101+B*4003          | B*3819+B*4020          |                          |

|                           |                        |                 |                 |
|---------------------------|------------------------|-----------------|-----------------|
| B*380101+B*4031           | B*3819+B*4033          |                 |                 |
| B*380101+B*4043           | B*3814+B*40G1          |                 |                 |
| B*380101+B*4050           | B*3814+B*400201/4056   | B*3901G1+B*4019 |                 |
| B*380101+B*4080           | B*3819+B*40G1          |                 |                 |
| B*380101+B*4102           | B*3819+B*410302        |                 |                 |
| B*380101+B*440301/440303  | B*380201/3818+B*4450   |                 |                 |
| B*380101+B*440302         | B*3812+B*4407          |                 |                 |
| B*380101+B*4405           | B*380201/3818+B*4425   |                 |                 |
| B*380101+B*4446           | B*3905+B*4450          |                 |                 |
| B*380101+B*4454           | B*3819+B*4465          |                 |                 |
| B*380101+B*4501/4507      | B*3905+B*4418          |                 |                 |
| B*380101+B*4612           | B*3819+B*460101/4615N  |                 |                 |
| B*380101+B*480101/4809    | B*3819+B*480301        |                 |                 |
| B*380101+B*4902           | B*380201/3818+B*490101 |                 |                 |
| B*380101+B*5001           | B*3905+B*490101        |                 |                 |
| B*380101+B*51G1           | B*3810+B*5119          |                 |                 |
| B*380101+B*510203         | B*380102+B*510201      |                 |                 |
| B*380101+B*5120           | B*3814+B*5108          |                 |                 |
| B*380101+B*5139           | B*3811+B*510103        |                 |                 |
| B*380101+B*5154           | B*380201/3818+B*5105   |                 |                 |
| B*380101+B*5164           | B*3819+B*5106          |                 |                 |
| B*380101+B*5303           | B*3817+B*530101        |                 |                 |
| B*380101+B*5312           | B*380201/3818+B*5305   |                 |                 |
| B*380101+B*5313           | B*380201/3818+B*530101 |                 |                 |
| B*380101+B*5401/5417      | B*3905+B*5412          |                 |                 |
| B*380101+B*5410           | B*3911+B*5412          |                 |                 |
| B*380101+B*550101/550103  | B*3814+B*5531          |                 |                 |
| B*380101+B*560502         | B*3905+B*5621          |                 |                 |
| B*380101+B*5606           | B*5122+B*670101        |                 |                 |
| B*380101+B*5712           | B*3905+B*5702          | B*3911+B*570301 |                 |
| B*380101+B*5818           | B*3819+B*5816          |                 |                 |
| B*380101+B*7801           | B*3814+B*780202        |                 |                 |
|                           | B*390602+B*5106        | B*3901G1+B*51G1 | B*3904+B*5157   |
|                           | B*3905+B*510102        | B*3935+B*510901 | B*3948+B*510201 |
|                           | B*3905+B*51G1          |                 |                 |
| B*380101+B*780201         | B*3901G1+B*5122        |                 |                 |
| B*380101+B*780202         | B*3905+B*520101/5207   |                 |                 |
| B*380101+B*7803           | B*3948+B*510203        |                 |                 |
| B*380101+B*7805           | B*3804+B*3939          |                 |                 |
| B*380102+B*7801           | B*3905+B*4047          |                 |                 |
| B*380201/3818+B*390202    | B*3905+B*4096          |                 |                 |
| B*380201/3818+B*40G1      | B*3901G1+B*4047        |                 |                 |
| B*380201/3818+B*400601    | B*3937+B*4047          |                 |                 |
| B*380201/3818+B*4043      | B*3905+B*44G1/B*4466   |                 |                 |
| B*380201/3818+B*4080      | B*3905+B*440301/440303 |                 |                 |
| B*380201/3818+B*4409      | B*3817+B*4704          |                 |                 |
| B*380201/3818+B*4446      | B*3905+B*4902          |                 |                 |
| B*380201/3818+B*4705      | B*3817+B*5313          |                 |                 |
| B*380201/3818+B*5001      | B*3905+B*5607          |                 |                 |
| B*380201/3818+B*5303      | B*390201+B*4415        |                 |                 |
| B*380201/3818+B*5601/5624 | B*391901+B*51G1        |                 |                 |
| B*3803+B*4501/4507        | B*3915+B*4019          |                 |                 |
| B*3806+B*7803             | B*3819+B*4043          |                 |                 |
| B*3814+B*4018             | B*3901G1+B*4450        |                 |                 |
| B*3814+B*4080             | B*3901G1+B*4418        |                 |                 |
| B*3814+B*4446             | B*3901G1+B*490101      |                 |                 |
| B*3814+B*4501/4507        | B*3901G1+B*5412        |                 |                 |
| B*3814+B*5001             | B*3915+B*5412          |                 |                 |
| B*3814+B*5401/5417        | B*3901G1+B*5621        |                 |                 |
| B*3814+B*5416             | B*3901G1+B*5702        |                 |                 |
| B*3814+B*560502           | B*3901G1+B*510102      | B*3935+B*510902 | B*3948+B*510202 |
| B*3814+B*5712             | B*3901G1+B*520101/5207 | B*3935+B*5210   | B*3948+B*5211   |
| B*3814+B*780201           | B*3905+B*470101        |                 |                 |
| B*3814+B*7805             | B*3937+B*4019          |                 |                 |
| B*3817+B*4702             | B*3903+B*4019          |                 |                 |
| B*3819+B*400201/4056      | B*3937+B*4450          |                 |                 |
| B*3819+B*4050             | B*3937+B*4418          |                 |                 |
| B*3819+B*4446             | B*3937+B*490101        |                 |                 |
| B*3819+B*4501/4507        | B*3937+B*5412          |                 |                 |
| B*3819+B*5001             | B*3937+B*5621          |                 |                 |
| B*3819+B*5401/5417        | B*3937+B*5702          |                 |                 |
| B*3819+B*560502           | B*3903+B*51G1          | B*390602+B*5164 | B*3914+B*511302 |
| B*3819+B*5712             | B*3937+B*510102        |                 |                 |
| B*3819+B*7801             | B*3937+B*5122          |                 |                 |
| B*3819+B*780201           | B*3937+B*51G1          |                 |                 |
| B*3819+B*780202           | B*3903+B*5122          |                 |                 |
| B*3819+B*7803             | B*3937+B*520101/5207   |                 |                 |
| B*3819+B*7805             | B*3922+B*3939          |                 |                 |
| B*3901G1+B*390201         | B*390201+B*3911        |                 |                 |
| B*3901G1+B*3908           | B*390202+B*3905        |                 |                 |
| B*3901G1+B*391301         | B*390202+B*3944        |                 |                 |
| B*3901G1+B*3923           | B*3914+B*3915          |                 |                 |
| B*3901G1+B*3929           | B*390602+B*3930        |                 |                 |
| B*3901G1+B*3934           | B*3903+B*3905          |                 |                 |
| B*3901G1+B*3937           | B*3904+B*4074          | B*3905+B*4043   | B*3922+B*4025   |
| B*3901G1+B*40G1           | B*3931+B*4049          |                 |                 |
|                           | B*3903+B*4011          | B*3905+B*4050   | B*3931+B*4040   |
| B*3901G1+B*400201/4056    | B*3947+B*4039          |                 |                 |
|                           | B*3903+B*4020          |                 |                 |
| B*3901G1+B*4003           | B*390602+B*4011        | B*3939+B*4075   |                 |
| B*3901G1+B*400601         | B*3915+B*4089          |                 |                 |
| B*3901G1+B*4009           | B*390105+B*401401      |                 |                 |
| B*3901G1+B*401402         | B*3915+B*400201/4056   |                 |                 |
| B*3901G1+B*4018           | B*3903+B*4033          | B*3915+B*4080   | B*3929+B*4036   |
| B*3901G1+B*4031           | B*3915+B*4016          |                 |                 |
| B*3901G1+B*4032           | B*3915+B*40G1          |                 |                 |
| B*3901G1+B*4033           | B*3915+B*400601        |                 |                 |
| B*3901G1+B*4044           | B*3915+B*4038          |                 |                 |
| B*3901G1+B*4052           | B*3904+B*400601        |                 |                 |
| B*3901G1+B*4053           | B*3927+B*40G1          |                 |                 |
| B*3901G1+B*4073           | B*3903+B*40G1          | B*3914+B*4036   | B*3937+B*4043   |
| B*3901G1+B*4080           | B*3903+B*410302        |                 |                 |
| B*3901G1+B*4102           | B*3931+B*4201          |                 |                 |
| B*3901G1+B*4202           | B*3922+B*4412          | B*3942+B*4441   |                 |
| B*3901G1+B*44G1/B*4466    | B*3930+B*4429          | B*3942+B*4465   |                 |
| B*3901G1+B*440301/440303  |                        |                 |                 |

|                          |                          |                        |               |
|--------------------------|--------------------------|------------------------|---------------|
| B*3901G1+B*4420          | B*390602+B*4441          |                        |               |
| B*3901G1+B*4447          | B*390602+B*4465          |                        |               |
| B*3901G1+B*4451          | B*3915+B*4414            |                        |               |
| B*3901G1+B*4454          | B*3903+B*4465            |                        |               |
| B*3901G1+B*4455          | B*3931+B*44G1/B*4466     |                        |               |
| B*3901G1+B*460101/4615N  | B*3918+B*461301          | B*3935+B*4609          |               |
| B*3901G1+B*4607N         | B*3940N+B*460101/4615N   |                        |               |
| B*3901G1+B*4612          | B*3903+B*460101/4615N    |                        |               |
| B*3901G1+B*4614          | B*3931+B*460101/4615N    |                        |               |
| B*3901G1+B*480101/4809   | B*3903+B*480301          |                        |               |
| B*3901G1+B*4815          | B*3935+B*480101/4809     |                        |               |
| B*3901G1+B*510104        | B*3948+B*510204          |                        |               |
| B*3901G1+B*510201        | B*390602+B*5159          |                        |               |
| B*3901G1+B*5106          | B*3948+B*5159            |                        |               |
| B*3901G1+B*5107          | B*3939+B*5122            |                        |               |
| B*3901G1+B*5108          | B*3905+B*5120            |                        |               |
| B*3901G1+B*510901        | B*3930+B*5119            |                        |               |
| B*3901G1+B*5116          | B*3935+B*5131            | B*3947+B*5121          | B*3948+B*5134 |
| B*3901G1+B*5137          | B*3915+B*5163            |                        |               |
| B*3901G1+B*5146          | B*3928+B*5104            |                        |               |
| B*3901G1+B*5161          | B*3918+B*510901          |                        |               |
| B*3901G1+B*5164          | B*3903+B*5106            |                        |               |
| B*3901G1+B*520102        | B*390201+B*5122          | B*3922+B*5107          |               |
| B*3901G1+B*520602        | B*3922+B*51G1            |                        |               |
| B*3901G1+B*5212          | B*3915+B*520101/5207     |                        |               |
| B*3901G1+B*530103        | B*390105+B*530101        |                        |               |
| B*3901G1+B*5416          | B*3915+B*5401/5417       |                        |               |
| B*3901G1+B*550101/550103 | B*3935+B*550201          |                        |               |
| B*3901G1+B*550201        | B*390602+B*5610          |                        |               |
| B*3901G1+B*5503          | B*3927+B*550101/550103   |                        |               |
| B*3901G1+B*5516          | B*3931+B*550201          |                        |               |
| B*3901G1+B*5522          | B*3947+B*550201          |                        |               |
| B*3901G1+B*5523          | B*3915+B*5532            |                        |               |
| B*3901G1+B*5524          | B*3935+B*5522            | B*3947+B*550101/550103 |               |
| B*3901G1+B*5531          | B*3905+B*550101/550103   |                        |               |
| B*3901G1+B*5601/5624     | B*390602+B*5602          |                        |               |
| B*3901G1+B*5606          | B*670101+B*7803          |                        |               |
| B*3901G1+B*5619N         | B*3940N+B*5601/5624      |                        |               |
| B*3901G1+B*570101        | B*3904+B*5710            |                        |               |
| B*3901G1+B*5806          | B*3935+B*5802            |                        |               |
| B*3901G1+B*5809          | B*3948+B*580101/5811     |                        |               |
| B*3901G1+B*5818          | B*3903+B*5816            |                        |               |
| B*3901G1+B*5819          | B*3935+B*580101/5811     |                        |               |
| B*3901G1+B*780202        | B*3905+B*7801            |                        |               |
| B*390105+B*3936          | B*3918+B*3930            |                        |               |
| B*390105+B*510201        | B*3935+B*5140            |                        |               |
| B*390105+B*510901        | B*3948+B*5140            |                        |               |
| B*390105+B*5302          | B*3948+B*530103          |                        |               |
| B*390105+B*5308          | B*3935+B*530103          |                        |               |
| B*390105+B*5521          | B*3918+B*550201          |                        |               |
| B*390105+B*5714          | B*3948+B*570101          |                        |               |
| B*390201+B*4025          | B*3939+B*40G1            |                        |               |
| B*390201+B*4075          | B*3922+B*400601          |                        |               |
| B*390201+B*4412          | B*3939+B*44G1/B*4466     |                        |               |
| B*390201+B*51G1          | B*3939+B*520602          |                        |               |
| B*390201+B*5107          | B*3939+B*520102          |                        |               |
| B*390201+B*670102        | B*390202+B*670101        |                        |               |
| B*390202+B*3937          | B*3903+B*391301          |                        |               |
| B*390202+B*40G1          | B*391301+B*4043          |                        |               |
| B*390202+B*400201/4056   | B*391301+B*4050          |                        |               |
| B*390202+B*400204        | B*391302+B*4050          |                        |               |
| B*390202+B*5108          | B*391301+B*5120          |                        |               |
| B*390202+B*550201        | B*3910+B*5534            |                        |               |
| B*390202+B*5531          | B*391301+B*550101/550103 |                        |               |
| B*390202+B*780202        | B*391301+B*7801          |                        |               |
| B*3903+B*400201/4056     | B*3937+B*4050            |                        |               |
| B*3903+B*400601          | B*390602+B*400201/4056   | B*3914+B*4086          |               |
| B*3903+B*4044            | B*390602+B*4018          | B*3929+B*4086          |               |
| B*3903+B*4073            | B*3927+B*4080            |                        |               |
| B*3903+B*4201            | B*3914+B*4206            |                        |               |
| B*3903+B*4204            | B*390602+B*4201          |                        |               |
| B*3903+B*440301/440303   | B*3942+B*4454            |                        |               |
| B*3903+B*4447            | B*390602+B*4454          |                        |               |
| B*3903+B*4607N           | B*3940N+B*4612           |                        |               |
| B*3903+B*4614            | B*3931+B*4612            |                        |               |
| B*3903+B*480101/4809     | B*3914+B*4807            |                        |               |
| B*3903+B*510104          | B*3914+B*511301          |                        |               |
| B*3903+B*5108            | B*3937+B*5120            |                        |               |
| B*3903+B*5531            | B*3937+B*550101/550103   |                        |               |
| B*3903+B*5615            | B*3914+B*5622            |                        |               |
| B*3903+B*780202          | B*3937+B*7801            |                        |               |
| B*3904+B*4044            | B*3915+B*4053            |                        |               |
| B*3904+B*5402            | B*3931+B*5401/5417       |                        |               |
| B*3905+B*3923            | B*391301+B*3944          |                        |               |
| B*3905+B*400201/4056     | B*3937+B*4011            |                        |               |
| B*3905+B*4003            | B*3937+B*4020            |                        |               |
| B*3905+B*4031            | B*3937+B*4033            |                        |               |
| B*3905+B*4052            | B*3907+B*4036            |                        |               |
| B*3905+B*4080            | B*3937+B*40G1            |                        |               |
| B*3905+B*4102            | B*3937+B*410302          |                        |               |
| B*3905+B*442801          | B*3911+B*440302          |                        |               |
| B*3905+B*442802          | B*3911+B*440301/440303   |                        |               |
| B*3905+B*4454            | B*3937+B*4465            |                        |               |
| B*3905+B*4612            | B*3937+B*460101/4615N    |                        |               |
| B*3905+B*480101/4809     | B*3937+B*480301          |                        |               |
| B*3905+B*5129            | B*3911+B*51G1            |                        |               |
| B*3905+B*5137            | B*3907+B*511302          |                        |               |
| B*3905+B*5164            | B*3937+B*5106            |                        |               |
| B*3905+B*5316            | B*3911+B*5305            |                        |               |
| B*3905+B*5410            | B*3911+B*5401/5417       |                        |               |
| B*3905+B*5503            | B*3927+B*5531            |                        |               |
| B*3905+B*5509            | B*3911+B*5524            |                        |               |
| B*3905+B*5523            | B*3907+B*5513            |                        |               |
| B*3905+B*5524            | B*3947+B*5531            |                        |               |

|                           |                          |                           |                 |
|---------------------------|--------------------------|---------------------------|-----------------|
| B*3905+B*5719             | B*3911+B*570101          |                           |                 |
| B*3905+B*5818             | B*3937+B*5816            |                           |                 |
| B*390601+B*400104         | B*390602+B*40G1          |                           |                 |
| B*390601+B*4004           | B*3942+B*4070            |                           |                 |
| B*390601+B*4064           | B*3942+B*400601          |                           |                 |
| B*390601+B*440302         | B*390602+B*440301/440303 | B*3934+B*4429             | B*3942+B*4447   |
| B*390601+B*442801         | B*390602+B*442802        |                           |                 |
| B*390601+B*446401         | B*390602+B*446402        |                           |                 |
| B*390601+B*480302         | B*390602+B*480301        |                           |                 |
| B*390601+B*5104           | B*3942+B*51G1            |                           |                 |
| B*390602+B*410302         | B*3928+B*4101            |                           |                 |
| B*390602+B*44G1/B*4466    | B*3942+B*4420            |                           |                 |
| B*390602+B*510901         | B*3934+B*5119            |                           |                 |
| B*3907+B*4050             | B*3914+B*4020            |                           |                 |
| B*3908+B*5122             | B*3911+B*520102          |                           |                 |
| B*3910+B*4037             | B*3920+B*4050            |                           |                 |
| B*3910+B*4201             | B*4207+B*670102          |                           |                 |
| B*391301+B*400204         | B*391302+B*400201/4056   |                           |                 |
| B*391301+B*5512           | B*3920+B*5534            |                           |                 |
| B*391301+B*8101/8102/8103 | B*480101/4809+B*670102   |                           |                 |
| B*391302+B*580101/5811    | B*4802+B*5820            |                           |                 |
| B*3914+B*4009             | B*3929+B*4089            |                           |                 |
| B*3914+B*4018             | B*3929+B*400201/4056     |                           |                 |
| B*3914+B*4031             | B*3929+B*4080            |                           |                 |
| B*3914+B*4032             | B*3929+B*4016            |                           |                 |
| B*3914+B*4033             | B*3929+B*40G1            |                           |                 |
| B*3914+B*4044             | B*3929+B*400601          |                           |                 |
| B*3914+B*4052             | B*3929+B*4038            |                           |                 |
| B*3914+B*4451             | B*3929+B*4414            |                           |                 |
| B*3914+B*5137             | B*3929+B*5163            |                           |                 |
| B*3914+B*5212             | B*3929+B*520101/5207     |                           |                 |
| B*3914+B*5416             | B*3929+B*5401/5417       |                           |                 |
| B*3914+B*5523             | B*3929+B*5532            |                           |                 |
| B*3915+B*4073             | B*3927+B*4033            |                           |                 |
| B*3918+B*51G1             | B*3935+B*5161            |                           |                 |
| B*3927+B*5524             | B*3947+B*5503            |                           |                 |
| B*3930+B*400601           | B*3934+B*4011            |                           |                 |
| B*3930+B*4420             | B*3934+B*4441            |                           |                 |
| B*3930+B*4447             | B*3934+B*4465            |                           |                 |
| B*3930+B*51G1             | B*3934+B*5106            |                           |                 |
| B*3930+B*510201           | B*3934+B*5159            |                           |                 |
| B*3930+B*550201           | B*3934+B*5610            |                           |                 |
| B*3930+B*5521             | B*3936+B*550201          |                           |                 |
| B*3930+B*5601/5624        | B*3934+B*5602            |                           |                 |
| B*3931+B*4607N            | B*3940N+B*4614           |                           |                 |
| B*3931+B*550101/550103    | B*3935+B*5516            |                           |                 |
| B*3931+B*5522             | B*3947+B*5516            |                           |                 |
| B*3932+B*4404             | B*3948+B*442802          |                           |                 |
| B*3932+B*4508             | B*3948+B*4504            |                           |                 |
| B*3932+B*4618             | B*3948+B*4611            |                           |                 |
| B*3932+B*5121             | B*3948+B*51G1            |                           |                 |
| B*3932+B*5134             | B*3947+B*51G1            |                           |                 |
| B*3932+B*5136             | B*3935+B*5108            |                           |                 |
| B*3932+B*5401/5417        | B*3948+B*5403            |                           |                 |
| B*3932+B*550201           | B*3948+B*5601/5624       |                           |                 |
| B*3932+B*5513             | B*3948+B*5622            |                           |                 |
| B*3932+B*5610             | B*3948+B*5602            |                           |                 |
| B*3932+B*5901             | B*3948+B*5904            |                           |                 |
| B*3933+B*5121             | B*3934+B*5129            |                           |                 |
| B*3935+B*5809             | B*3948+B*5819            |                           |                 |
| B*40G1+B*400201/4056      | B*4011+B*4080            |                           |                 |
| B*40G1+B*4003             | B*400201/4056+B*4052     | B*4018+B*4038             | B*4020+B*4080   |
| B*40G1+B*400601           | B*4053+B*4074            |                           |                 |
| B*40G1+B*4009             | B*400201/4056+B*4042     | B*4033+B*4089             |                 |
| B*40G1+B*4013             | B*4007+B*4019            |                           |                 |
| B*40G1+B*4018             | B*400201/4056+B*4033     | B*4011+B*4031             |                 |
| B*40G1+B*4020             | B*4011+B*4052            |                           |                 |
| B*40G1+B*4031             | B*4033+B*4080            |                           |                 |
| B*40G1+B*4032             | B*4016+B*4033            |                           |                 |
| B*40G1+B*4040             | B*400201/4056+B*4049     |                           |                 |
| B*40G1+B*4044             | B*400601+B*4033          |                           |                 |
| B*40G1+B*4050             | B*400201/4056+B*4043     |                           |                 |
| B*40G1+B*4052             | B*4033+B*4038            |                           |                 |
| B*40G1+B*4086             | B*400601+B*4036          |                           |                 |
| B*40G1+B*4093             | B*400601+B*4046          |                           |                 |
| B*40G1+B*4096             | B*400601+B*4047          |                           |                 |
| B*40G1+B*4102             | B*4080+B*410302          |                           |                 |
| B*40G1+B*4201             | B*4049+B*4202            | B*410302+B*8101/8102/8103 |                 |
| B*40G1+B*4206             | B*4036+B*4201            |                           |                 |
| B*40G1+B*4209             | B*4052+B*4202            |                           |                 |
| B*40G1+B*44G1/B*4466      | B*4042+B*4414            | B*4047+B*4409             | B*4049+B*4455   |
|                           | B*4063+B*4421            |                           |                 |
|                           | B*4047+B*4446            |                           |                 |
| B*40G1+B*440301/440303    | B*400104+B*440301/440303 |                           |                 |
| B*40G1+B*440302           | B*4025+B*44G1/B*4466     |                           |                 |
| B*40G1+B*4412             | B*400104+B*442802        |                           |                 |
| B*40G1+B*442801           | B*4063+B*446402          |                           |                 |
| B*40G1+B*4437             | B*4033+B*4414            |                           |                 |
| B*40G1+B*4451             | B*4080+B*4465            |                           |                 |
| B*40G1+B*4454             | B*400104+B*446402        |                           |                 |
| B*40G1+B*446401           | B*4049+B*4614            |                           |                 |
| B*40G1+B*460101/4615N     | B*4080+B*460101/4615N    |                           |                 |
| B*40G1+B*4612             | B*4080+B*480301          |                           |                 |
| B*40G1+B*480101/4809      | B*400104+B*480301        |                           |                 |
| B*40G1+B*480302           | B*4036+B*480101/4809     |                           |                 |
| B*40G1+B*4807             | B*4032+B*480301          |                           |                 |
| B*40G1+B*4808             | B*401403+B*480101/4809   |                           |                 |
| B*40G1+B*4810             | B*401403+B*4804          |                           |                 |
| B*40G1+B*4813             | B*4047+B*5001            |                           |                 |
| B*40G1+B*4902             | B*400106+B*510104        | B*4007+B*5107             | B*4025+B*520602 |
| B*40G1+B*51G1             | B*4063+B*5116            |                           |                 |
|                           | B*400103+B*51G1          |                           |                 |
| B*40G1+B*510103           | B*400106+B*510204        | B*4063+B*5134             |                 |
| B*40G1+B*510201           | B*4025+B*520102          |                           |                 |
| B*40G1+B*5107             |                          |                           |                 |

|                               |                          |                 |                 |
|-------------------------------|--------------------------|-----------------|-----------------|
| B*40G1+B*510901               | B*4063+B*5131            |                 |                 |
| B*40G1+B*511301               | B*4036+B*510104          |                 |                 |
| B*40G1+B*511302               | B*400106+B*511301        | B*4036+B*51G1   |                 |
| B*40G1+B*5120                 | B*4043+B*5108            |                 |                 |
| B*40G1+B*5137                 | B*4033+B*5163            | B*4052+B*51G1   |                 |
| B*40G1+B*5157                 | B*4074+B*51G1            |                 |                 |
| B*40G1+B*5163                 | B*4038+B*51G1            |                 |                 |
| B*40G1+B*5164                 | B*4080+B*5106            |                 |                 |
| B*40G1+B*520101/5207          | B*4063+B*5208            |                 |                 |
| B*40G1+B*520104               | B*400105+B*520102        |                 |                 |
| B*40G1+B*520602               | B*4007+B*520102          |                 |                 |
| B*40G1+B*5212                 | B*4033+B*520101/5207     |                 |                 |
| B*40G1+B*5401/5417            | B*4048+B*5404            |                 |                 |
| B*40G1+B*5414                 | B*4052+B*5404            |                 |                 |
| B*40G1+B*5416                 | B*4033+B*5401/5417       |                 |                 |
| B*40G1+B*550101/550103        | B*4043+B*5531            | B*4048+B*5528   |                 |
| B*40G1+B*550104               | B*400106+B*550101/550103 |                 |                 |
| B*40G1+B*550201               | B*4049+B*5516            |                 |                 |
| B*40G1+B*5503                 | B*4073+B*550101/550103   |                 |                 |
| B*40G1+B*5523                 | B*4033+B*5532            |                 |                 |
| B*40G1+B*5601/5624            | B*4048+B*5615            | B*4063+B*5522   |                 |
| B*40G1+B*5607                 | B*4047+B*5601/5624       |                 |                 |
| B*40G1+B*5622                 | B*4036+B*5615            |                 |                 |
| B*40G1+B*570101               | B*4052+B*570301          |                 |                 |
| B*40G1+B*5710                 | B*4074+B*570101          |                 |                 |
| B*40G1+B*5719                 | B*4052+B*5702            |                 |                 |
| B*40G1+B*5814                 | B*4030+B*5816            |                 |                 |
| B*40G1+B*5818                 | B*4080+B*5816            |                 |                 |
| B*40G1+B*7801                 | B*4043+B*780202          |                 |                 |
| B*400103+B*511302             | B*4036+B*510103          |                 |                 |
| B*400103+B*5137               | B*4052+B*510103          |                 |                 |
| B*400103+B*5157               | B*4074+B*510103          |                 |                 |
| B*400103+B*5163               | B*4038+B*510103          |                 |                 |
| B*400104+B*4437               | B*4063+B*446401          |                 |                 |
| B*400104+B*480101/4809        | B*4080+B*480302          |                 |                 |
| B*400104+B*4808               | B*4032+B*480302          |                 |                 |
| B*400105+B*5107               | B*4025+B*520104          |                 |                 |
| B*400105+B*520602             | B*4007+B*520104          |                 |                 |
| B*400106+B*4405               | B*4042+B*4462            |                 |                 |
| B*400106+B*4417               | B*4052+B*4462            |                 |                 |
| B*400106+B*5145               | B*4052+B*5106            |                 |                 |
| B*400106+B*5162               | B*4048+B*5106            |                 |                 |
| B*400106+B*5214               | B*4036+B*520101/5207     |                 |                 |
| B*400106+B*5306               | B*4059+B*5106            |                 |                 |
| B*400106+B*5503               | B*4073+B*550104          |                 |                 |
| B*400201/4056+B*4009          | B*4018+B*4089            |                 |                 |
| B*400201/4056+B*4020          | B*4003+B*4011            |                 |                 |
| B*400201/4056+B*4031          | B*4018+B*4080            |                 |                 |
| B*400201/4056+B*4032          | B*4016+B*4018            |                 |                 |
| B*400201/4056+B*4044          | B*400601+B*4018          |                 |                 |
| B*400201/4056+B*4068          | B*4004+B*4008            |                 |                 |
| B*400201/4056+B*410302        | B*4011+B*4102            |                 |                 |
| B*400201/4056+B*4104          | B*4024+B*4102            |                 |                 |
| B*400201/4056+B*4201          | B*4040+B*4202            |                 |                 |
| B*400201/4056+B*4204          | B*400601+B*4201          |                 |                 |
| B*400201/4056+B*4209          | B*4003+B*4202            |                 |                 |
| B*400201/4056+B*4210          | B*4035+B*4201            |                 |                 |
| B*400201/4056+B*44G1/B*4466   | B*4009+B*4414            | B*4035+B*4453   | B*4040+B*4455   |
|                               | B*4089+B*4451            |                 |                 |
| B*400201/4056+B*440202        | B*400203+B*44G1/B*4466   |                 |                 |
| B*400201/4056+B*440301/440303 | B*4089+B*4445            |                 |                 |
| B*400201/4056+B*440302        | B*4064+B*4454            |                 |                 |
| B*400201/4056+B*4418          | B*4019+B*4501/4507       |                 |                 |
| B*400201/4056+B*4432          | B*4029+B*440301/440303   |                 |                 |
| B*400201/4056+B*4447          | B*400601+B*4454          |                 |                 |
| B*400201/4056+B*4450          | B*4019+B*4446            |                 |                 |
| B*400201/4056+B*4451          | B*4018+B*4414            |                 |                 |
| B*400201/4056+B*4465          | B*4011+B*4454            |                 |                 |
| B*400201/4056+B*460101/4615N  | B*4011+B*4612            | B*4040+B*4614   |                 |
| B*400201/4056+B*480301        | B*4011+B*480101/4809     | B*4074+B*4813   |                 |
| B*400201/4056+B*4806          | B*4008+B*480101/4809     |                 |                 |
| B*400201/4056+B*490101        | B*4019+B*5001            |                 |                 |
| B*400201/4056+B*51G1          | B*4005+B*5131            | B*400601+B*5164 | B*4008+B*520102 |
|                               | B*4019+B*780202          |                 |                 |
| B*400201/4056+B*510102        | B*4008+B*520101/5207     | B*4019+B*780201 |                 |
| B*400201/4056+B*510104        | B*4035+B*512401          |                 |                 |
| B*400201/4056+B*510202        | B*4008+B*5211            |                 |                 |
| B*400201/4056+B*5104          | B*4064+B*5164            |                 |                 |
| B*400201/4056+B*5106          | B*4011+B*5164            |                 |                 |
| B*400201/4056+B*510902        | B*4008+B*5210            |                 |                 |
| B*400201/4056+B*511302        | B*4086+B*5164            |                 |                 |
| B*400201/4056+B*5120          | B*4050+B*5108            |                 |                 |
| B*400201/4056+B*5121          | B*4039+B*5116            |                 |                 |
| B*400201/4056+B*5137          | B*4003+B*51G1            | B*4018+B*5163   |                 |
| B*400201/4056+B*520101/5207   | B*4019+B*7805            |                 |                 |
| B*400201/4056+B*520102        | B*4037+B*5209            |                 |                 |
| B*400201/4056+B*5212          | B*4018+B*520101/5207     |                 |                 |
| B*400201/4056+B*5313          | B*4037+B*5312            |                 |                 |
| B*400201/4056+B*5412          | B*4019+B*5401/5417       |                 |                 |
| B*400201/4056+B*5414          | B*4003+B*5404            |                 |                 |
| B*400201/4056+B*5416          | B*4018+B*5401/5417       |                 |                 |
| B*400201/4056+B*550101/550103 | B*4039+B*5524            | B*4050+B*5531   |                 |
| B*400201/4056+B*550201        | B*4039+B*5522            | B*4040+B*5516   |                 |
| B*400201/4056+B*5512          | B*4037+B*550201          |                 |                 |
| B*400201/4056+B*5523          | B*4018+B*5532            |                 |                 |
| B*400201/4056+B*5529          | B*4078+B*550101/550103   |                 |                 |
| B*400201/4056+B*5601/5624     | B*4035+B*5620            |                 |                 |
| B*400201/4056+B*5621          | B*4019+B*560502          |                 |                 |
| B*400201/4056+B*570101        | B*4003+B*570301          |                 |                 |
| B*400201/4056+B*5702          | B*4019+B*5712            |                 |                 |
| B*400201/4056+B*5706          | B*4085+B*570101          |                 |                 |
| B*400201/4056+B*5719          | B*4003+B*5702            |                 |                 |
| B*400201/4056+B*580101/5811   | B*4064+B*5818            |                 |                 |
| B*400201/4056+B*5816          | B*4011+B*5818            |                 |                 |

|                          |                        |                 |               |
|--------------------------|------------------------|-----------------|---------------|
| B*400201/4056+B*7801     | B*4050+B*780202        |                 |               |
| B*400201/4056+B*780201   | B*4008+B*7805          |                 |               |
| B*400201/4056+B*7806     | B*4037+B*7805          |                 |               |
| B*400201/4056+B*9553     | B*4005+B*9514          |                 |               |
| B*4003+B*4033            | B*4018+B*4052          | B*4020+B*4031   |               |
| B*4003+B*4042            | B*4009+B*4052          |                 |               |
| B*4003+B*4043            | B*4050+B*4052          |                 |               |
| B*4003+B*4049            | B*4040+B*4052          |                 |               |
| B*4003+B*410302          | B*4020+B*4102          |                 |               |
| B*4003+B*4201            | B*4040+B*4209          |                 |               |
| B*4003+B*4405            | B*4009+B*4417          |                 |               |
| B*4003+B*4465            | B*4020+B*4454          |                 |               |
| B*4003+B*460101/4615N    | B*4020+B*4612          |                 |               |
| B*4003+B*480301          | B*4020+B*480101/4809   |                 |               |
| B*4003+B*5106            | B*4020+B*5164          |                 |               |
| B*4003+B*5816            | B*4020+B*5818          |                 |               |
| B*4004+B*400601          | B*4064+B*4070          |                 |               |
| B*4004+B*4101            | B*4064+B*4107          |                 |               |
| B*4004+B*4420            | B*400601+B*4448        |                 |               |
| B*4004+B*4441            | B*4011+B*4448          |                 |               |
| B*4004+B*4447            | B*4070+B*440302        |                 |               |
| B*4004+B*4806            | B*4068+B*480101/4809   |                 |               |
| B*4004+B*51G1            | B*4028+B*5110          | B*4068+B*520102 | B*4070+B*5104 |
| B*4004+B*510102          | B*4068+B*520101/5207   |                 |               |
| B*4004+B*510202          | B*4068+B*5211          |                 |               |
| B*4004+B*510902          | B*4068+B*5210          |                 |               |
| B*4004+B*5517            | B*4064+B*5528          |                 |               |
| B*4004+B*5604            | B*4064+B*5602          |                 |               |
| B*4004+B*780201          | B*4068+B*7805          |                 |               |
| B*400601+B*4009          | B*4044+B*4089          |                 |               |
| B*400601+B*4031          | B*4044+B*4080          |                 |               |
| B*400601+B*4032          | B*4016+B*4044          |                 |               |
| B*400601+B*4052          | B*4038+B*4044          |                 |               |
| B*400601+B*4107          | B*4070+B*4101          |                 |               |
| B*400601+B*4206          | B*4086+B*4201          |                 |               |
| B*400601+B*4210          | B*4035+B*4204          |                 |               |
| B*400601+B*44G1/B*4466   | B*4096+B*4409          |                 |               |
| B*400601+B*440301/440303 | B*4096+B*4446          |                 |               |
| B*400601+B*440302        | B*4064+B*4447          |                 |               |
| B*400601+B*4441          | B*4011+B*4420          |                 |               |
| B*400601+B*4451          | B*4044+B*4414          |                 |               |
| B*400601+B*4465          | B*4011+B*4447          |                 |               |
| B*400601+B*4807          | B*4086+B*480101/4809   |                 |               |
| B*400601+B*4902          | B*4096+B*5001          |                 |               |
| B*400601+B*51G1          | B*4053+B*5157          |                 |               |
| B*400601+B*5104          | B*4064+B*51G1          |                 |               |
| B*400601+B*5106          | B*4011+B*51G1          |                 |               |
| B*400601+B*511301        | B*4086+B*510104        |                 |               |
| B*400601+B*511302        | B*4086+B*51G1          |                 |               |
| B*400601+B*5122          | B*4075+B*5107          |                 |               |
| B*400601+B*5134          | B*4095+B*5110          |                 |               |
| B*400601+B*5137          | B*4044+B*5163          |                 |               |
| B*400601+B*5145          | B*4020+B*510104        |                 |               |
| B*400601+B*5159          | B*4011+B*510201        |                 |               |
| B*400601+B*5212          | B*4044+B*520101/5207   |                 |               |
| B*400601+B*5416          | B*4044+B*5401/5417     |                 |               |
| B*400601+B*5523          | B*4044+B*5532          |                 |               |
| B*400601+B*5528          | B*4070+B*5517          |                 |               |
| B*400601+B*5602          | B*4011+B*5601/5624     | B*4070+B*5604   |               |
| B*400601+B*5607          | B*4096+B*5601/5624     |                 |               |
| B*400601+B*5610          | B*4011+B*550201        |                 |               |
| B*400601+B*5622          | B*4086+B*5615          |                 |               |
| B*400601+B*570101        | B*4053+B*5710          |                 |               |
| B*400601+B*570302        | B*400602+B*570301      |                 |               |
| B*4007+B*460101/4615N    | B*4061+B*4616          |                 |               |
| B*4008+B*480301          | B*4011+B*4806          |                 |               |
| B*4008+B*520602          | B*4013+B*780202        |                 |               |
| B*4008+B*5212            | B*4018+B*510102        |                 |               |
| B*4008+B*7806            | B*4037+B*780201        |                 |               |
| B*4009+B*4016            | B*4032+B*4089          |                 |               |
| B*4009+B*4033            | B*4018+B*4042          |                 |               |
| B*4009+B*4038            | B*4052+B*4089          |                 |               |
| B*4009+B*4043            | B*4042+B*4050          |                 |               |
| B*4009+B*4049            | B*4040+B*4042          |                 |               |
| B*4009+B*4080            | B*4031+B*4089          |                 |               |
| B*4009+B*4445            | B*4018+B*440301/440303 |                 |               |
| B*4009+B*4451            | B*4018+B*44G1/B*4466   |                 |               |
| B*4009+B*5163            | B*4089+B*5137          |                 |               |
| B*4009+B*520101/5207     | B*4089+B*5212          |                 |               |
| B*4009+B*5401/5417       | B*4089+B*5416          |                 |               |
| B*4009+B*5532            | B*4089+B*5523          |                 |               |
| B*4011+B*4104            | B*4024+B*410302        |                 |               |
| B*4011+B*4209            | B*4020+B*4202          |                 |               |
| B*4011+B*440302          | B*4064+B*4465          |                 |               |
| B*4011+B*5104            | B*4064+B*5106          |                 |               |
| B*4011+B*511302          | B*4086+B*5106          |                 |               |
| B*4011+B*5137            | B*4020+B*51G1          |                 |               |
| B*4011+B*5414            | B*4020+B*5404          | B*4070+B*5409   |               |
| B*4011+B*5523            | B*4070+B*5618          |                 |               |
| B*4011+B*5607            | B*4096+B*5602          |                 |               |
| B*4011+B*570101          | B*4020+B*570301        |                 |               |
| B*4011+B*5719            | B*4020+B*5702          |                 |               |
| B*4011+B*580101/5811     | B*4064+B*5816          |                 |               |
| B*4013+B*5107            | B*4019+B*51G1          |                 |               |
| B*4013+B*520102          | B*4019+B*520602        |                 |               |
| B*4013+B*5309            | B*4019+B*5313          |                 |               |
| B*401401+B*407202        | B*401403+B*407201      |                 |               |
| B*401401+B*4080          | B*4045+B*407201        |                 |               |
| B*401401+B*512402        | B*401403+B*512401      |                 |               |
| B*401401+B*530103        | B*401402+B*530101      |                 |               |
| B*401402+B*510109        | B*401403+B*510102      |                 |               |
| B*401403+B*4080          | B*4045+B*407202        |                 |               |
| B*401403+B*4807          | B*4036+B*4810          |                 |               |
| B*401403+B*5136          | B*4108+B*5134          |                 |               |

|                        |                         |  |
|------------------------|-------------------------|--|
| B*401403+B*9516        | B*4052+B*9550           |  |
| B*4016+B*4031          | B*4032+B*4080           |  |
| B*4016+B*4052          | B*4032+B*4038           |  |
| B*4016+B*4451          | B*4032+B*4414           |  |
| B*4016+B*5137          | B*4032+B*5163           |  |
| B*4016+B*5212          | B*4032+B*520101/5207    |  |
| B*4016+B*5416          | B*4032+B*5401/5417      |  |
| B*4016+B*5523          | B*4032+B*5532           |  |
| B*4018+B*4043          | B*4033+B*4050           |  |
| B*4018+B*4049          | B*4033+B*4040           |  |
| B*4018+B*4204          | B*4044+B*4201           |  |
| B*4018+B*4447          | B*4044+B*4454           |  |
| B*4018+B*51G1          | B*4044+B*5164           |  |
| B*4018+B*5412          | B*4019+B*5416           |  |
| B*4019+B*480101/4809   | B*4037+B*4818           |  |
| B*4019+B*7801          | B*4050+B*51G1           |  |
| B*4019+B*7803          | B*4050+B*5122           |  |
| B*4019+B*7806          | B*4037+B*520101/5207    |  |
| B*4020+B*511301        | B*4086+B*5145           |  |
| B*4030+B*5818          | B*4080+B*5814           |  |
| B*4031+B*4038          | B*4052+B*4080           |  |
| B*4031+B*410302        | B*4033+B*4102           |  |
| B*4031+B*4414          | B*4080+B*4451           |  |
| B*4031+B*4465          | B*4033+B*4454           |  |
| B*4031+B*460101/4615N  | B*4033+B*4612           |  |
| B*4031+B*480301        | B*4033+B*480101/4809    |  |
| B*4031+B*5106          | B*4033+B*5164           |  |
| B*4031+B*5163          | B*4080+B*5137           |  |
| B*4031+B*520101/5207   | B*4080+B*5212           |  |
| B*4031+B*5401/5417     | B*4080+B*5416           |  |
| B*4031+B*5532          | B*4080+B*5523           |  |
| B*4031+B*5816          | B*4033+B*5818           |  |
| B*4032+B*480101/4809   | B*4080+B*4808           |  |
| B*4033+B*4086          | B*4036+B*4044           |  |
| B*4033+B*4093          | B*4044+B*4046           |  |
| B*4033+B*4096          | B*4044+B*4047           |  |
| B*4033+B*44G1/B*4466   | B*4042+B*4451           |  |
| B*4033+B*440301/440303 | B*4042+B*4445           |  |
| B*4036+B*4093          | B*4046+B*4086           |  |
| B*4036+B*4096          | B*4047+B*4086           |  |
| B*4036+B*4501/4507     | B*4048+B*4502           |  |
| B*4036+B*5137          | B*4052+B*511302         |  |
| B*4036+B*5157          | B*4074+B*511302         |  |
| B*4036+B*5163          | B*4038+B*511302         |  |
| B*4036+B*530101        | B*4038+B*5304           |  |
| B*4036+B*5404          | B*4077+B*5411           |  |
| B*4036+B*550201        | B*4048+B*5513           |  |
| B*4036+B*5523          | B*4052+B*5513           |  |
| B*4036+B*5532          | B*4038+B*5513           |  |
| B*4036+B*5601/5624     | B*4048+B*5622           |  |
| B*4036+B*5609          | B*4038+B*5611           |  |
| B*4036+B*5901          | B*4048+B*5903           |  |
| B*4037+B*9528          | B*4089+B*9535           |  |
| B*4038+B*4451          | B*4052+B*4414           |  |
| B*4038+B*5137          | B*4052+B*5163           |  |
| B*4038+B*5157          | B*4074+B*5163           |  |
| B*4038+B*5212          | B*4052+B*520101/5207    |  |
| B*4038+B*5416          | B*4048+B*5414           |  |
| B*4038+B*550201        | B*4048+B*5532           |  |
| B*4038+B*5523          | B*4052+B*5532           |  |
| B*4040+B*4043          | B*4049+B*4050           |  |
| B*4042+B*4417          | B*4052+B*4405           |  |
| B*4046+B*4096          | B*4047+B*4093           |  |
| B*4047+B*4617          | B*4431+B*4614           |  |
| B*4048+B*5145          | B*4052+B*5162           |  |
| B*4048+B*5306          | B*4059+B*5162           |  |
| B*4048+B*5523          | B*4052+B*550201         |  |
| B*4048+B*5609          | B*4059+B*5604           |  |
| B*4049+B*4209          | B*4052+B*4201           |  |
| B*4049+B*5402          | B*4074+B*5401/5417      |  |
| B*4052+B*5157          | B*4074+B*5137           |  |
| B*4052+B*5306          | B*4059+B*5145           |  |
| B*4061+B*9545          | B*4067+B*9552           |  |
| B*4061+B*9559          | B*4079+B*9552           |  |
| B*4063+B*4208          | B*4092+B*420501         |  |
| B*4063+B*4804          | B*4092+B*480101/4809    |  |
| B*4063+B*4813          | B*4092+B*4810           |  |
| B*4064+B*511302        | B*4086+B*5104           |  |
| B*4067+B*9559          | B*4079+B*9545           |  |
| B*407201+B*511301      | B*4077+B*512401         |  |
| B*407201+B*512402      | B*407202+B*512401       |  |
| B*407201+B*5903        | B*4077+B*5902           |  |
| B*407202+B*511301      | B*4077+B*512402         |  |
| B*4080+B*4201          | B*4102+B*8101/8102/8103 |  |
| B*4101+B*5528          | B*4107+B*5517           |  |
| B*4101+B*5602          | B*4107+B*5604           |  |
| B*4102+B*4465          | B*410302+B*4454         |  |
| B*4102+B*460101/4615N  | B*410302+B*4612         |  |
| B*4102+B*480301        | B*410302+B*480101/4809  |  |
| B*4102+B*5106          | B*410302+B*5164         |  |
| B*4102+B*5816          | B*410302+B*5818         |  |
| B*410301+B*550201      | B*410302+B*550202       |  |
| B*4201+B*44G1/B*4466   | B*4210+B*4453           |  |
| B*4201+B*4447          | B*4204+B*4454           |  |
| B*4201+B*4455          | B*4202+B*44G1/B*4466    |  |
| B*4201+B*4614          | B*4202+B*460101/4615N   |  |
| B*4201+B*4807          | B*4206+B*480101/4809    |  |
| B*4201+B*51G1          | B*4204+B*5164           |  |
| B*4201+B*510104        | B*4210+B*512401         |  |
| B*4201+B*511301        | B*4206+B*510104         |  |
| B*4201+B*511302        | B*4206+B*51G1           |  |
| B*4201+B*530101        | B*4208+B*5315           |  |
| B*4201+B*5516          | B*4202+B*550201         |  |
| B*4201+B*5601/5624     | B*4210+B*5620           |  |

B\*4052+B\*5401/5417

|                                |                        |                      |
|--------------------------------|------------------------|----------------------|
| B*4201+B*5622                  | B*4206+B*5615          |                      |
| B*4202+B*5137                  | B*4209+B*51G1          |                      |
| B*4202+B*5414                  | B*4209+B*5404          |                      |
| B*4202+B*570101                | B*4209+B*570301        |                      |
| B*4202+B*5719                  | B*4209+B*5702          |                      |
| B*420501+B*4804                | B*4208+B*480101/4809   |                      |
| B*420501+B*4813                | B*4208+B*4810          |                      |
| B*44G1/B*4466+B*4413           | B*440301/440303+B*4467 |                      |
| B*44G1/B*4466+B*4440           | B*440301/440303+B*4444 |                      |
| B*44G1/B*4466+B*4443           | B*440301/440303+B*4417 |                      |
| B*44G1/B*4466+B*4445           | B*440301/440303+B*4451 |                      |
| B*44G1/B*4466+B*4446           | B*440301/440303+B*4409 |                      |
| B*44G1/B*4466+B*4447           | B*440301/440303+B*4420 |                      |
| B*44G1/B*4466+B*4457           | B*440301/440303+B*4408 |                      |
| B*44G1/B*4466+B*446401         | B*440302+B*4416        |                      |
| B*44G1/B*4466+B*446402         | B*440301/440303+B*4416 | B*4421+B*4437        |
| B*44G1/B*4466+B*4465           | B*440301/440303+B*4441 |                      |
| B*44G1/B*4466+B*4605           | B*4422+B*460101/4615N  |                      |
| B*44G1/B*4466+B*4614           | B*4455+B*460101/4615N  |                      |
| B*44G1/B*4466+B*5001           | B*4409+B*4902          | B*4448+B*5004        |
| B*44G1/B*4466+B*51G1           | B*4412+B*520602        |                      |
| B*44G1/B*4466+B*5107           | B*4412+B*520102        |                      |
| B*44G1/B*4466+B*510901         | B*440301/440303+B*5108 |                      |
| B*44G1/B*4466+B*5116           | B*4421+B*51G1          |                      |
| B*44G1/B*4466+B*5119           | B*4429+B*5108          |                      |
| B*44G1/B*4466+B*512401         | B*4453+B*510104        |                      |
| B*44G1/B*4466+B*5131           | B*4421+B*510901        |                      |
| B*44G1/B*4466+B*5134           | B*4416+B*5123          | B*4421+B*510201      |
| B*44G1/B*4466+B*5139           | B*4424+B*51G1          |                      |
| B*44G1/B*4466+B*5142           | B*440301/440303+B*4406 |                      |
| B*44G1/B*4466+B*5208           | B*4421+B*520101/5207   |                      |
| B*44G1/B*4466+B*5516           | B*4455+B*550201        |                      |
| B*44G1/B*4466+B*5522           | B*4421+B*5601/5624     |                      |
| B*44G1/B*4466+B*5601/5624      | B*440301/440303+B*5613 | B*4409+B*5607        |
| B*44G1/B*4466+B*5620           | B*4453+B*5601/5624     |                      |
| B*44G1/B*4466+B*5719           | B*4417+B*5704          |                      |
| B*440301/440303+B*4425         | B*4405+B*4450          |                      |
| B*440301/440303+B*442801       | B*440302+B*442802      |                      |
| B*440301/440303+B*4442         | B*4405+B*4437          |                      |
| B*440301/440303+B*446401       | B*440302+B*446402      |                      |
| B*440301/440303+B*4504         | B*4437+B*4501/4507     |                      |
| B*440301/440303+B*460101/4615N | B*4437+B*4617          |                      |
| B*440301/440303+B*4603         | B*4404+B*4608          |                      |
| B*440301/440303+B*480302       | B*440302+B*480301      |                      |
| B*440301/440303+B*490101       | B*4450+B*4902          |                      |
| B*440301/440303+B*5001         | B*4437+B*5002          | B*4446+B*4902        |
| B*440301/440303+B*510201       | B*4437+B*5123          |                      |
| B*440301/440303+B*5105         | B*4450+B*5154          |                      |
| B*440301/440303+B*5119         | B*4429+B*510901        |                      |
| B*440301/440303+B*5129         | B*442802+B*51G1        |                      |
| B*440301/440303+B*5134         | B*446402+B*5123        |                      |
| B*440301/440303+B*530101       | B*4450+B*5313          |                      |
| B*440301/440303+B*5305         | B*4450+B*5312          |                      |
| B*440301/440303+B*5311         | B*442802+B*5313        |                      |
| B*440301/440303+B*5316         | B*442802+B*5305        |                      |
| B*440301/440303+B*5410         | B*4404+B*5403          | B*442802+B*5401/5417 |
| B*440301/440303+B*5509         | B*442802+B*5524        |                      |
| B*440301/440303+B*5601/5624    | B*4446+B*5607          |                      |
| B*440301/440303+B*5702         | B*442802+B*570301      |                      |
| B*440301/440303+B*570301       | B*4437+B*5707          |                      |
| B*440301/440303+B*5719         | B*442802+B*570101      | B*4443+B*5704        |
| B*440301/440303+B*5802         | B*4437+B*5807          |                      |
| B*440302+B*51G1                | B*4447+B*5104          |                      |
| B*440302+B*5106                | B*4465+B*5104          |                      |
| B*440302+B*5129                | B*442801+B*51G1        |                      |
| B*440302+B*5134                | B*446401+B*5123        |                      |
| B*440302+B*5164                | B*4454+B*5104          |                      |
| B*440302+B*5311                | B*442801+B*5313        |                      |
| B*440302+B*5314                | B*4454+B*530101        |                      |
| B*440302+B*5316                | B*442801+B*5305        |                      |
| B*440302+B*5410                | B*442801+B*5401/5417   |                      |
| B*440302+B*5509                | B*442801+B*5524        |                      |
| B*440302+B*5702                | B*442801+B*570301      |                      |
| B*440302+B*5719                | B*442801+B*570101      |                      |
| B*440302+B*5816                | B*4465+B*580101/5811   |                      |
| B*440302+B*5818                | B*4454+B*580101/5811   |                      |
| B*4404+B*4504                  | B*442802+B*4508        |                      |
| B*4404+B*4611                  | B*442802+B*4618        |                      |
| B*4404+B*51G1                  | B*442802+B*5121        |                      |
| B*4404+B*5601/5624             | B*442802+B*550201      |                      |
| B*4404+B*5602                  | B*442802+B*5610        |                      |
| B*4404+B*5622                  | B*442802+B*5513        |                      |
| B*4404+B*5904                  | B*442802+B*5901        |                      |
| B*4405+B*4416                  | B*4421+B*4442          |                      |
| B*4405+B*4504                  | B*4442+B*4501/4507     |                      |
| B*4405+B*460101/4615N          | B*4442+B*4617          |                      |
| B*4405+B*490101                | B*4425+B*4902          |                      |
| B*4405+B*5001                  | B*4442+B*5002          |                      |
| B*4405+B*510201                | B*4442+B*5123          |                      |
| B*4405+B*5105                  | B*4425+B*5154          |                      |
| B*4405+B*5141N                 | B*4458N+B*51G1         |                      |
| B*4405+B*530101                | B*4425+B*5313          |                      |
| B*4405+B*5305                  | B*4425+B*5312          |                      |
| B*4405+B*570301                | B*4442+B*5707          |                      |
| B*4405+B*5802                  | B*4442+B*5807          |                      |
| B*4406+B*4413                  | B*4467+B*5142          |                      |
| B*4406+B*4440                  | B*4444+B*5142          |                      |
| B*4406+B*4443                  | B*4417+B*5142          |                      |
| B*4406+B*4445                  | B*4451+B*5142          |                      |
| B*4406+B*4446                  | B*4409+B*5142          |                      |
| B*4406+B*4447                  | B*4420+B*5142          |                      |
| B*4406+B*4457                  | B*4408+B*5142          |                      |
| B*4406+B*446402                | B*4416+B*5142          |                      |
| B*4406+B*4465                  | B*4441+B*5142          |                      |

|                      |                           |               |
|----------------------|---------------------------|---------------|
| B*4406+B*510901      | B*5108+B*5142             |               |
| B*4406+B*5601/5624   | B*5142+B*5613             |               |
| B*4408+B*4413        | B*4457+B*4467             |               |
| B*4408+B*4440        | B*4444+B*4457             |               |
| B*4408+B*4443        | B*4417+B*4457             |               |
| B*4408+B*4445        | B*4451+B*4457             |               |
| B*4408+B*4446        | B*4409+B*4457             |               |
| B*4408+B*4447        | B*4420+B*4457             |               |
| B*4408+B*446402      | B*4416+B*4457             |               |
| B*4408+B*4465        | B*4441+B*4457             |               |
| B*4408+B*510901      | B*4457+B*5108             |               |
| B*4408+B*5601/5624   | B*4457+B*5613             |               |
| B*4409+B*4413        | B*4446+B*4467             |               |
| B*4409+B*4440        | B*4444+B*4446             |               |
| B*4409+B*4443        | B*4417+B*4446             |               |
| B*4409+B*4445        | B*4446+B*4451             |               |
| B*4409+B*4447        | B*4420+B*4446             |               |
| B*4409+B*446402      | B*4416+B*4446             |               |
| B*4409+B*4465        | B*4441+B*4446             |               |
| B*4409+B*510901      | B*4446+B*5108             |               |
| B*4409+B*5601/5624   | B*4446+B*5613             |               |
| B*4413+B*4416        | B*446402+B*4467           |               |
| B*4413+B*4417        | B*4443+B*4467             |               |
| B*4413+B*4420        | B*4447+B*4467             |               |
| B*4413+B*4441        | B*4465+B*4467             |               |
| B*4413+B*4444        | B*4440+B*4467             |               |
| B*4413+B*4451        | B*4445+B*4467             |               |
| B*4413+B*5108        | B*4467+B*510901           |               |
| B*4413+B*5613        | B*4467+B*5601/5624        |               |
| B*4414+B*5137        | B*4451+B*5163             |               |
| B*4414+B*5212        | B*4451+B*520101/5207      |               |
| B*4414+B*5416        | B*4451+B*5401/5417        |               |
| B*4414+B*5523        | B*4451+B*5532             |               |
| B*4415+B*530101      | B*4418+B*5312             |               |
| B*4416+B*4440        | B*4444+B*446402           |               |
| B*4416+B*4443        | B*4417+B*446402           |               |
| B*4416+B*4445        | B*4451+B*446402           |               |
| B*4416+B*4447        | B*4420+B*446402           |               |
| B*4416+B*4465        | B*4441+B*446402           |               |
| B*4416+B*4501/4507   | B*4421+B*4504             |               |
| B*4416+B*4617        | B*4421+B*460101/4615N     |               |
| B*4416+B*5002        | B*4421+B*5001             |               |
| B*4416+B*510901      | B*446402+B*5108           |               |
| B*4416+B*5601/5624   | B*446402+B*5613           |               |
| B*4416+B*5707        | B*4421+B*570301           |               |
| B*4416+B*5807        | B*4421+B*5802             |               |
| B*4417+B*4440        | B*4443+B*4444             |               |
| B*4417+B*4445        | B*4443+B*4451             |               |
| B*4417+B*4447        | B*4420+B*4443             |               |
| B*4417+B*4465        | B*4441+B*4443             |               |
| B*4417+B*5106        | B*4462+B*5145             |               |
| B*4417+B*510901      | B*4443+B*5108             |               |
| B*4417+B*5601/5624   | B*4443+B*5613             |               |
| B*4418+B*4446        | B*4450+B*4501/4507        |               |
| B*4418+B*5001        | B*4501/4507+B*490101      |               |
| B*4418+B*5401/5417   | B*4501/4507+B*5412        |               |
| B*4418+B*560502      | B*4501/4507+B*5621        |               |
| B*4418+B*5606        | B*4506+B*5107             |               |
| B*4418+B*5712        | B*4501/4507+B*5702        |               |
| B*4418+B*7801        | B*5002+B*5120             |               |
| B*4418+B*780201      | B*4501/4507+B*510102      |               |
| B*4418+B*780202      | B*4501/4507+B*51G1        | B*5002+B*5108 |
| B*4418+B*7805        | B*4501/4507+B*520101/5207 |               |
| B*4420+B*4440        | B*4444+B*4447             |               |
| B*4420+B*4445        | B*4447+B*4451             |               |
| B*4420+B*4465        | B*4441+B*4447             |               |
| B*4420+B*5106        | B*4441+B*51G1             |               |
| B*4420+B*510901      | B*4447+B*5108             |               |
| B*4420+B*5159        | B*4441+B*510201           |               |
| B*4420+B*5601/5624   | B*4447+B*5613             |               |
| B*4420+B*5602        | B*4441+B*5601/5624        | B*4465+B*5613 |
| B*4420+B*5610        | B*4441+B*550201           |               |
| B*4421+B*5139        | B*4424+B*5116             |               |
| B*4421+B*5620        | B*4453+B*5522             |               |
| B*4421+B*9525        | B*4422+B*9517             |               |
| B*4421+B*9542        | B*4449+B*9517             |               |
| B*4422+B*94614       | B*4455+B*4605             |               |
| B*4422+B*9542        | B*4449+B*9525             |               |
| B*4425+B*4437        | B*4442+B*4450             |               |
| B*442801+B*446402    | B*442802+B*446401         |               |
| B*442801+B*480301    | B*442802+B*480302         |               |
| B*442802+B*530101    | B*4450+B*5311             |               |
| B*442802+B*7804      | B*4446+B*5154             |               |
| B*4437+B*5116        | B*446402+B*51G1           |               |
| B*4437+B*5131        | B*446402+B*510901         |               |
| B*4437+B*5134        | B*446402+B*510201         |               |
| B*4437+B*5208        | B*446402+B*520101/5207    |               |
| B*4437+B*5522        | B*446402+B*5601/5624      |               |
| B*4440+B*4441        | B*4444+B*4465             |               |
| B*4440+B*4451        | B*4444+B*4445             |               |
| B*4440+B*5108        | B*4444+B*510901           |               |
| B*4440+B*5613        | B*4444+B*5601/5624        |               |
| B*4441+B*4445        | B*4451+B*4465             |               |
| B*4441+B*510901      | B*4465+B*5108             |               |
| B*4445+B*5108        | B*4451+B*510901           |               |
| B*4445+B*5613        | B*4451+B*5601/5624        |               |
| B*4446+B*490101      | B*4450+B*5001             |               |
| B*4446+B*51G1        | B*4450+B*780202           |               |
| B*4446+B*510102      | B*4450+B*780201           |               |
| B*4446+B*520101/5207 | B*4450+B*7805             |               |
| B*4446+B*5412        | B*4450+B*5401/5417        |               |
| B*4446+B*5621        | B*4450+B*560502           |               |
| B*4446+B*5702        | B*4450+B*5712             |               |
| B*4447+B*5106        | B*4465+B*51G1             |               |

|                                |                           |                 |                 |
|--------------------------------|---------------------------|-----------------|-----------------|
| B*4447+B*5159                  | B*4465+B*510201           |                 |                 |
| B*4447+B*5164                  | B*4454+B*51G1             |                 |                 |
| B*4447+B*5602                  | B*4465+B*5601/5624        |                 |                 |
| B*4447+B*5610                  | B*4465+B*550201           |                 |                 |
| B*4454+B*460101/4615N          | B*4465+B*4612             |                 |                 |
| B*4454+B*480301                | B*4465+B*480101/4809      |                 |                 |
| B*4454+B*5106                  | B*4465+B*5164             |                 |                 |
| B*4454+B*5816                  | B*4465+B*5818             |                 |                 |
| B*446401+B*480301              | B*446402+B*480302         |                 |                 |
| B*4501/4507+B*460101/4615N     | B*4504+B*4617             |                 |                 |
| B*4501/4507+B*4904             | B*4509+B*490101           |                 |                 |
| B*4501/4507+B*5001             | B*4504+B*5002             |                 |                 |
| B*4501/4507+B*510201           | B*4504+B*5123             |                 |                 |
| B*4501/4507+B*5513             | B*4502+B*550201           |                 |                 |
| B*4501/4507+B*5622             | B*4502+B*5601/5624        |                 |                 |
| B*4501/4507+B*570301           | B*4504+B*5707             |                 |                 |
| B*4501/4507+B*5802             | B*4504+B*5807             |                 |                 |
| B*4501/4507+B*5903             | B*4502+B*5901             |                 |                 |
| B*4504+B*4618                  | B*4508+B*4611             |                 |                 |
| B*4504+B*51G1                  | B*5001+B*5108             |                 |                 |
| B*4504+B*5121                  | B*4508+B*51G1             |                 |                 |
| B*4504+B*5401/5417             | B*4508+B*5403             |                 |                 |
| B*4504+B*550201                | B*4508+B*5601/5624        |                 |                 |
| B*4504+B*5513                  | B*4508+B*5622             |                 |                 |
| B*4504+B*5610                  | B*4508+B*5602             |                 |                 |
| B*4504+B*5901                  | B*4508+B*5904             |                 |                 |
| B*460101/4615N+B*480101/4809   | B*4608+B*4819             | B*4609+B*4815   | B*4612+B*480301 |
| B*460101/4615N+B*5002          | B*4617+B*5001             |                 |                 |
| B*460101/4615N+B*510901        | B*4609+B*51G1             | B*461301+B*5161 |                 |
| B*460101/4615N+B*510902        | B*4609+B*510102           |                 |                 |
| B*460101/4615N+B*5123          | B*4617+B*510201           |                 |                 |
| B*460101/4615N+B*5131          | B*4609+B*5116             |                 |                 |
| B*460101/4615N+B*5164          | B*4612+B*5106             |                 |                 |
| B*460101/4615N+B*5210          | B*4609+B*520101/5207      |                 |                 |
| B*460101/4615N+B*530101        | B*4609+B*5308             |                 |                 |
| B*460101/4615N+B*5401/5417     | B*4618+B*5406             |                 |                 |
| B*460101/4615N+B*5403          | B*4611+B*5406             |                 |                 |
| B*460101/4615N+B*550101/550103 | B*4608+B*5521             |                 |                 |
| B*460101/4615N+B*550201        | B*4609+B*550101/550103    |                 |                 |
| B*460101/4615N+B*5516          | B*4614+B*550201           |                 |                 |
| B*460101/4615N+B*5522          | B*4609+B*5524             |                 |                 |
| B*460101/4615N+B*5619N         | B*4607N+B*5601/5624       |                 |                 |
| B*460101/4615N+B*5707          | B*4617+B*570301           |                 |                 |
| B*460101/4615N+B*580101/5811   | B*4609+B*5819             |                 |                 |
| B*460101/4615N+B*5802          | B*4609+B*5806             |                 |                 |
| B*460101/4615N+B*5807          | B*4617+B*5802             |                 |                 |
| B*460101/4615N+B*5818          | B*4612+B*5816             |                 |                 |
| B*4603+B*5403                  | B*4608+B*5410             |                 |                 |
| B*4611+B*5121                  | B*4618+B*51G1             |                 |                 |
| B*4611+B*5401/5417             | B*4618+B*5403             |                 |                 |
| B*4611+B*5409                  | B*461301+B*5401/5417      |                 |                 |
| B*4611+B*550201                | B*4618+B*5601/5624        |                 |                 |
| B*4611+B*5513                  | B*4618+B*5622             |                 |                 |
| B*4611+B*5610                  | B*4618+B*5602             |                 |                 |
| B*4611+B*5618                  | B*461301+B*550201         |                 |                 |
| B*4611+B*5901                  | B*4618+B*5904             |                 |                 |
| B*4704+B*5303                  | B*4705+B*5313             |                 |                 |
| B*480101/4809+B*4813           | B*4804+B*4810             |                 |                 |
| B*480101/4809+B*51G1           | B*4806+B*520102           | B*4815+B*510901 |                 |
| B*480101/4809+B*510102         | B*4806+B*520101/5207      | B*4815+B*510902 |                 |
| B*480101/4809+B*510202         | B*4806+B*5211             |                 |                 |
| B*480101/4809+B*5106           | B*480301+B*5164           |                 |                 |
| B*480101/4809+B*510902         | B*4806+B*5210             |                 |                 |
| B*480101/4809+B*511301         | B*4807+B*510104           |                 |                 |
| B*480101/4809+B*511302         | B*4807+B*51G1             |                 |                 |
| B*480101/4809+B*5116           | B*4815+B*5131             |                 |                 |
| B*480101/4809+B*520101/5207    | B*4815+B*5210             | B*4818+B*7806   |                 |
| B*480101/4809+B*5308           | B*4815+B*530101           |                 |                 |
| B*480101/4809+B*550101/550103  | B*4815+B*550201           |                 |                 |
| B*480101/4809+B*5521           | B*4819+B*550101/550103    |                 |                 |
| B*480101/4809+B*5524           | B*4815+B*5522             |                 |                 |
| B*480101/4809+B*5622           | B*4807+B*5615             |                 |                 |
| B*480101/4809+B*5806           | B*4815+B*5802             |                 |                 |
| B*480101/4809+B*5816           | B*480301+B*5818           |                 |                 |
| B*480101/4809+B*5819           | B*4815+B*580101/5811      |                 |                 |
| B*480101/4809+B*780201         | B*4806+B*7805             |                 |                 |
| B*4806+B*5209                  | B*4818+B*780202           |                 |                 |
| B*4806+B*5606                  | B*780202+B*8101/8102/8103 |                 |                 |
| B*4807+B*5528                  | B*4815+B*5513             |                 |                 |
| B*4810+B*510104                | B*4812+B*512402           |                 |                 |
| B*4818+B*5606                  | B*5209+B*8101/8102/8103   |                 |                 |
| B*490101+B*5154                | B*4902+B*5105             |                 |                 |
| B*490101+B*5312                | B*4902+B*5305             |                 |                 |
| B*490101+B*5313                | B*4902+B*530101           |                 |                 |
| B*490101+B*5401/5417           | B*5001+B*5412             |                 |                 |
| B*490101+B*560502              | B*5001+B*5621             |                 |                 |
| B*490101+B*5712                | B*5001+B*5702             |                 |                 |
| B*490101+B*780201              | B*5001+B*510102           |                 |                 |
| B*490101+B*780202              | B*5001+B*51G1             |                 |                 |
| B*490101+B*7805                | B*5001+B*520101/5207      |                 |                 |
| B*4902+B*5601/5624             | B*5001+B*5607             |                 |                 |
| B*5001+B*5123                  | B*5002+B*510201           |                 |                 |
| B*5001+B*5707                  | B*5002+B*570301           |                 |                 |
| B*5001+B*5807                  | B*5002+B*5802             |                 |                 |
| B*51G1+B*510202                | B*510102+B*510201         |                 |                 |
| B*51G1+B*510204                | B*510104+B*510201         |                 |                 |
| B*51G1+B*510902                | B*510102+B*510901         |                 |                 |
| B*51G1+B*511301                | B*510104+B*511302         |                 |                 |
| B*51G1+B*5131                  | B*510901+B*5116           |                 |                 |
| B*51G1+B*5134                  | B*510201+B*5116           |                 |                 |
| B*51G1+B*5159                  | B*510201+B*5106           |                 |                 |
| B*51G1+B*520101/5207           | B*510102+B*520102         |                 |                 |
| B*51G1+B*520102                | B*5107+B*520602           |                 |                 |
| B*51G1+B*5208                  | B*5116+B*520101/5207      |                 |                 |

|                          |                          |                      |                 |
|--------------------------|--------------------------|----------------------|-----------------|
| B*51G1+B*5210            | B*510901+B*520101/5207   | B*510902+B*520102    |                 |
| B*51G1+B*5211            | B*510201+B*520101/5207   | B*510202+B*520102    |                 |
| B*51G1+B*5214            | B*511301+B*520101/5207   |                      |                 |
| B*51G1+B*530101          | B*510201+B*5302          | B*510901+B*5308      |                 |
| B*51G1+B*5302            | B*510902+B*5306          |                      |                 |
| B*51G1+B*5308            | B*510202+B*5306          |                      |                 |
| B*51G1+B*5309            | B*5107+B*5313            |                      |                 |
| B*51G1+B*5311            | B*5129+B*5313            | B*5154+B*5306        |                 |
| B*51G1+B*5316            | B*5129+B*5305            |                      |                 |
| B*51G1+B*5401/5417       | B*5121+B*5403            | B*5412+B*780202      |                 |
| B*51G1+B*5410            | B*5129+B*5401/5417       |                      |                 |
| B*51G1+B*5413            | B*5143+B*5401/5417       |                      |                 |
| B*51G1+B*5414            | B*5137+B*5404            |                      |                 |
| B*51G1+B*550101/550103   | B*510104+B*550104        |                      |                 |
| B*51G1+B*550201          | B*510901+B*550101/550103 | B*5121+B*5601/5624   | B*5606+B*5901   |
| B*51G1+B*5509            | B*5129+B*5524            |                      |                 |
| B*51G1+B*5513            | B*5121+B*5622            | B*5606+B*5903        |                 |
| B*51G1+B*5522            | B*510901+B*5524          | B*5116+B*5601/5624   |                 |
| B*51G1+B*5601/5624       | B*5115+B*560501          | B*5606+B*5904        |                 |
| B*51G1+B*5602            | B*5106+B*5601/5624       |                      |                 |
| B*51G1+B*560502          | B*510102+B*560501        | B*5621+B*780202      |                 |
| B*51G1+B*5609            | B*530101+B*560501        |                      |                 |
| B*51G1+B*5610            | B*5106+B*550201          | B*5121+B*5602        |                 |
| B*51G1+B*5611            | B*5304+B*560501          |                      |                 |
| B*51G1+B*5622            | B*511302+B*5615          |                      |                 |
| B*51G1+B*570101          | B*5137+B*570301          |                      |                 |
| B*51G1+B*5702            | B*5129+B*570301          |                      |                 |
| B*51G1+B*5710            | B*5157+B*570101          |                      |                 |
| B*51G1+B*5712            | B*5702+B*780202          |                      |                 |
| B*51G1+B*5719            | B*5129+B*570101          | B*5137+B*5702        |                 |
| B*51G1+B*580101/5811     | B*510201+B*5809          | B*510901+B*5819      | B*530101+B*5808 |
| B*51G1+B*5802            | B*510901+B*5806          |                      |                 |
| B*51G1+B*5809            | B*5302+B*5808            |                      |                 |
| B*51G1+B*5818            | B*5314+B*5808            |                      |                 |
| B*51G1+B*5819            | B*5308+B*5808            |                      |                 |
| B*51G1+B*5901            | B*5121+B*5904            |                      |                 |
| B*51G1+B*780201          | B*510102+B*780202        |                      |                 |
| B*51G1+B*7803            | B*5122+B*7801            |                      |                 |
| B*51G1+B*7805            | B*520101/5207+B*780202   |                      |                 |
| B*510102+B*510204        | B*510104+B*510202        | B*520102+B*780201    |                 |
| B*510102+B*5131          | B*510902+B*5116          |                      |                 |
| B*510102+B*5134          | B*510202+B*5116          |                      |                 |
| B*510102+B*5159          | B*510202+B*5106          |                      |                 |
| B*510102+B*5203          | B*510201+B*5210          | B*510901+B*5211      |                 |
| B*510102+B*5210          | B*510902+B*520101/5207   |                      |                 |
| B*510102+B*5211          | B*510202+B*520101/5207   |                      |                 |
| B*510102+B*530101        | B*510202+B*5302          | B*510902+B*5308      |                 |
| B*510102+B*5401/5417     | B*5412+B*780201          |                      |                 |
| B*510102+B*5522          | B*510902+B*5524          |                      |                 |
| B*510102+B*5601/5624     | B*5115+B*560502          |                      |                 |
| B*510102+B*560502        | B*5621+B*780201          |                      |                 |
| B*510102+B*5712          | B*5702+B*780201          |                      |                 |
| B*510102+B*580101/5811   | B*510202+B*5809          | B*510902+B*5819      |                 |
| B*510102+B*5802          | B*510902+B*5806          |                      |                 |
| B*510102+B*7805          | B*520101/5207+B*780201   |                      |                 |
| B*510104+B*5134          | B*510204+B*5116          |                      |                 |
| B*510104+B*5159          | B*510204+B*5106          |                      |                 |
| B*510104+B*5211          | B*510204+B*520101/5207   |                      |                 |
| B*510104+B*530101        | B*510204+B*5302          |                      |                 |
| B*510104+B*5602          | B*5162+B*5615            |                      |                 |
| B*510104+B*5620          | B*512401+B*5601/5624     |                      |                 |
| B*510104+B*5622          | B*511301+B*5615          |                      |                 |
| B*510104+B*580101/5811   | B*510204+B*5809          |                      |                 |
| B*510201+B*510902        | B*510202+B*510901        |                      |                 |
| B*510201+B*511301        | B*510204+B*511302        |                      |                 |
| B*510201+B*5131          | B*510901+B*5134          |                      |                 |
| B*510201+B*5208          | B*5116+B*5211            | B*5134+B*520101/5207 |                 |
| B*510201+B*5214          | B*511301+B*5211          |                      |                 |
| B*510201+B*530103        | B*5140+B*5308            |                      |                 |
| B*510201+B*550101/550103 | B*510204+B*550104        |                      |                 |
| B*510201+B*5522          | B*5134+B*5601/5624       |                      |                 |
| B*510201+B*5602          | B*5159+B*5601/5624       |                      |                 |
| B*510201+B*560502        | B*510202+B*560501        |                      |                 |
| B*510201+B*5610          | B*5159+B*550201          |                      |                 |
| B*510201+B*5707          | B*5123+B*570301          |                      |                 |
| B*510201+B*5807          | B*5123+B*5802            |                      |                 |
| B*510201+B*780201        | B*510202+B*780202        |                      |                 |
| B*510201+B*7805          | B*5211+B*780202          |                      |                 |
| B*510202+B*5131          | B*510902+B*5134          |                      |                 |
| B*510202+B*5210          | B*510902+B*5211          |                      |                 |
| B*510202+B*5311          | B*5154+B*5308            |                      |                 |
| B*510202+B*7805          | B*5211+B*780201          |                      |                 |
| B*5104+B*5314            | B*5164+B*530101          |                      |                 |
| B*5104+B*5816            | B*5106+B*580101/5811     | B*5159+B*5809        |                 |
| B*5104+B*5818            | B*5164+B*580101/5811     |                      |                 |
| B*5105+B*5306            | B*5129+B*530101          |                      |                 |
| B*5105+B*5312            | B*5154+B*5305            |                      |                 |
| B*5105+B*5313            | B*5154+B*530101          |                      |                 |
| B*5105+B*780202          | B*5129+B*7804            |                      |                 |
| B*5106+B*5134            | B*5116+B*5159            |                      |                 |
| B*5106+B*5211            | B*5159+B*520101/5207     |                      |                 |
| B*5106+B*530101          | B*5159+B*5302            |                      |                 |
| B*5106+B*5522            | B*5116+B*5602            |                      |                 |
| B*5106+B*5818            | B*5164+B*5816            |                      |                 |
| B*5107+B*5311            | B*5129+B*5309            |                      |                 |
| B*5108+B*550101/550103   | B*5120+B*5531            | B*5121+B*5613        |                 |
| B*5108+B*5522            | B*5131+B*5613            |                      |                 |
| B*5108+B*5524            | B*5116+B*5613            |                      |                 |
| B*5108+B*5601/5624       | B*510901+B*5613          |                      |                 |
| B*5108+B*7801            | B*5120+B*780202          |                      |                 |
| B*510901+B*5208          | B*5116+B*5210            | B*5131+B*520101/5207 |                 |
| B*510901+B*5214          | B*511301+B*5210          |                      |                 |
| B*510901+B*530103        | B*5140+B*5302            |                      |                 |
| B*510901+B*5509          | B*5129+B*5522            |                      |                 |

|                               |                          |                        |
|-------------------------------|--------------------------|------------------------|
| B*510901+B*5522               | B*5131+B*5601/5624       |                        |
| B*510901+B*5528               | B*5121+B*5615            |                        |
| B*510901+B*560502             | B*510902+B*560501        |                        |
| B*510901+B*570101             | B*5140+B*5714            |                        |
| B*510901+B*780201             | B*510902+B*780202        |                        |
| B*510901+B*7805               | B*5210+B*780202          |                        |
| B*510902+B*5311               | B*5154+B*5302            |                        |
| B*510902+B*7805               | B*5210+B*780201          |                        |
| B*511301+B*5208               | B*5116+B*5214            |                        |
| B*511301+B*550104             | B*511302+B*550101/550103 |                        |
| B*511301+B*5602               | B*5162+B*5622            |                        |
| B*511301+B*5610               | B*5162+B*5513            |                        |
| B*511301+B*5902               | B*512401+B*5903          |                        |
| B*511301+B*7805               | B*5214+B*780202          |                        |
| B*511302+B*530101             | B*5163+B*5304            |                        |
| B*511302+B*5523               | B*5137+B*5513            |                        |
| B*511302+B*5532               | B*5163+B*5513            |                        |
| B*511302+B*5609               | B*5163+B*5611            |                        |
| B*5115+B*5611                 | B*5304+B*5601/5624       |                        |
| B*5116+B*530101               | B*5131+B*5308            | B*5134+B*5302          |
| B*5116+B*550101/550103        | B*5121+B*5524            |                        |
| B*5116+B*550201               | B*5121+B*5522            | B*5131+B*550101/550103 |
| B*5116+B*5522                 | B*5131+B*5524            |                        |
| B*5116+B*580101/5811          | B*5131+B*5819            | B*5134+B*5809          |
| B*5116+B*5802                 | B*5131+B*5806            |                        |
| B*5116+B*7805                 | B*5208+B*780202          |                        |
| B*5116+B*9505                 | B*5153+B*9517            |                        |
| B*5129+B*5413                 | B*5143+B*5410            |                        |
| B*5129+B*5710                 | B*5157+B*5719            |                        |
| B*5131+B*5211                 | B*5134+B*5210            |                        |
| B*5134+B*5602                 | B*5159+B*5522            |                        |
| B*5137+B*520101/5207          | B*5163+B*5212            |                        |
| B*5137+B*5401/5417            | B*5163+B*5416            |                        |
| B*5137+B*5532                 | B*5163+B*5523            |                        |
| B*5137+B*5712                 | B*5719+B*780202          |                        |
| B*5145+B*5401/5417            | B*5162+B*5414            |                        |
| B*5145+B*550201               | B*5162+B*5523            |                        |
| B*5162+B*5609                 | B*5306+B*5604            |                        |
| B*520101/5207+B*520601        | B*520103+B*520602        |                        |
| B*520101/5207+B*530101        | B*5210+B*5308            | B*5211+B*5302          |
| B*520101/5207+B*5401/5417     | B*5412+B*7805            |                        |
| B*520101/5207+B*5416          | B*5212+B*5401/5417       |                        |
| B*520101/5207+B*550201        | B*5210+B*550101/550103   |                        |
| B*520101/5207+B*5522          | B*5208+B*5601/5624       | B*5210+B*5524          |
| B*520101/5207+B*5523          | B*5212+B*5532            |                        |
| B*520101/5207+B*560501        | B*520102+B*560502        |                        |
| B*520101/5207+B*560502        | B*5621+B*7805            |                        |
| B*520101/5207+B*5712          | B*5702+B*7805            |                        |
| B*520101/5207+B*580101/5811   | B*5210+B*5819            | B*5211+B*5809          |
| B*520101/5207+B*5802          | B*5210+B*5806            |                        |
| B*520102+B*5302               | B*5210+B*5306            |                        |
| B*520102+B*5305               | B*5209+B*530101          |                        |
| B*520102+B*5308               | B*5211+B*5306            |                        |
| B*520102+B*5312               | B*5209+B*5313            |                        |
| B*520102+B*5313               | B*520602+B*5309          |                        |
| B*520102+B*550201             | B*5209+B*5512            |                        |
| B*520102+B*7804               | B*5203+B*780201          |                        |
| B*520102+B*7805               | B*5209+B*7806            |                        |
| B*530101+B*5312               | B*5305+B*5313            |                        |
| B*530101+B*550101/550103      | B*5308+B*550201          |                        |
| B*530101+B*5524               | B*5308+B*5522            |                        |
| B*530101+B*5611               | B*5304+B*5609            |                        |
| B*530101+B*5806               | B*5308+B*5802            |                        |
| B*530101+B*5809               | B*5302+B*580101/5811     |                        |
| B*530101+B*5818               | B*5314+B*580101/5811     |                        |
| B*530101+B*5819               | B*5308+B*580101/5811     |                        |
| B*530103+B*5714               | B*5302+B*570101          |                        |
| B*5302+B*5818                 | B*5314+B*5809            |                        |
| B*5302+B*5819                 | B*5308+B*5809            |                        |
| B*5305+B*5311                 | B*5313+B*5316            |                        |
| B*5305+B*5410                 | B*5316+B*5401/5417       |                        |
| B*5305+B*5509                 | B*5316+B*5524            |                        |
| B*5305+B*5702                 | B*5316+B*570301          |                        |
| B*5305+B*5719                 | B*5316+B*570101          |                        |
| B*5308+B*5818                 | B*5314+B*5819            |                        |
| B*5311+B*5401/5417            | B*5313+B*5410            |                        |
| B*5311+B*5524                 | B*5313+B*5509            |                        |
| B*5311+B*570101               | B*5313+B*5719            |                        |
| B*5311+B*570301               | B*5313+B*5702            |                        |
| B*5312+B*7806                 | B*5313+B*7805            |                        |
| B*5401/5417+B*5509            | B*5410+B*5524            |                        |
| B*5401/5417+B*5523            | B*5414+B*550201          | B*5416+B*5532          |
| B*5401/5417+B*5528            | B*5404+B*550101/550103   |                        |
| B*5401/5417+B*5601/5624       | B*5403+B*550201          |                        |
| B*5401/5417+B*5602            | B*5403+B*5610            |                        |
| B*5401/5417+B*5615            | B*5404+B*5601/5624       |                        |
| B*5401/5417+B*5618            | B*5409+B*550201          |                        |
| B*5401/5417+B*5621            | B*5412+B*560502          |                        |
| B*5401/5417+B*5622            | B*5403+B*5513            |                        |
| B*5401/5417+B*5702            | B*5410+B*570301          | B*5412+B*5712          |
| B*5401/5417+B*5719            | B*5410+B*570101          |                        |
| B*5401/5417+B*5904            | B*5403+B*5901            |                        |
| B*5403+B*5523                 | B*5414+B*5601/5624       |                        |
| B*5403+B*5618                 | B*5409+B*5601/5624       | B*5414+B*5604          |
| B*5404+B*570101               | B*5414+B*570301          |                        |
| B*5404+B*5719                 | B*5414+B*5702            |                        |
| B*5409+B*5523                 | B*5414+B*5618            |                        |
| B*550101/550103+B*5522        | B*550201+B*5524          |                        |
| B*550101/550103+B*5615        | B*5528+B*5601/5624       |                        |
| B*550101/550103+B*580101/5811 | B*550201+B*5819          |                        |
| B*550101/550103+B*5802        | B*550201+B*5806          |                        |
| B*550101/550103+B*780202      | B*5531+B*7801            |                        |
| B*550201+B*5602               | B*5601/5624+B*5610       |                        |
| B*550201+B*5622               | B*5513+B*5601/5624       |                        |

---

|                        |                      |               |
|------------------------|----------------------|---------------|
| B*550201+B*5903        | B*5513+B*5901        |               |
| B*550201+B*5904        | B*5601/5624+B*5901   |               |
| B*550201+B*7806        | B*5512+B*7805        |               |
| B*5509+B*570101        | B*5524+B*5719        |               |
| B*5509+B*570301        | B*5524+B*5702        |               |
| B*5513+B*5602          | B*5610+B*5622        |               |
| B*5513+B*5609          | B*5532+B*5611        |               |
| B*5513+B*5904          | B*5601/5624+B*5903   | B*5622+B*5901 |
| B*5513+B*9528          | B*5618+B*9537        |               |
| B*5517+B*5602          | B*5528+B*5604        |               |
| B*5522+B*5806          | B*5524+B*5802        |               |
| B*5522+B*5819          | B*5524+B*580101/5811 |               |
| B*5523+B*5604          | B*5601/5624+B*5618   |               |
| B*5601/5624+B*5812     | B*5616+B*580101/5811 |               |
| B*5602+B*5901          | B*5610+B*5904        |               |
| B*560501+B*580101/5811 | B*5609+B*5808        |               |
| B*560501+B*780201      | B*560502+B*780202    |               |
| B*560502+B*5702        | B*5621+B*5712        |               |
| B*570101+B*5702        | B*570301+B*5719      |               |
| B*570101+B*5802        | B*5711+B*5814        |               |
| B*570301+B*5807        | B*5707+B*5802        |               |
| B*580101/5811+B*5806   | B*5802+B*5819        |               |

---

## HLA-C Ambiguities, Release 2.25.0

### Sequences identical over exons 2+3

| Allele 1    | Allele 2    | Allele 3    | Allele 4 | Allele 5 | Allele 6 | Code in table         |
|-------------|-------------|-------------|----------|----------|----------|-----------------------|
| Cw*010201   | Cw*010202   | Cw*0125     |          |          |          | Cw*010201/010202/0125 |
| Cw*0103     | Cw*0124     |             |          |          |          | Cw*0103/0124          |
| Cw*021602   | Cw*021603   |             |          |          |          | Cw*021602/021603      |
| Cw*030201   | Cw*030202   | Cw*030203   |          |          |          | Cw*0302G1             |
| Cw*030301   | Cw*0320N    |             |          |          |          | Cw*030301/0320N       |
| Cw*030401   | Cw*030403   |             |          |          |          | Cw*030401/030403      |
| Cw*04010101 | Cw*04010102 | Cw*04010103 | Cw*0409N | Cw*0428  | Cw*0430  | Cw*04G1               |
| Cw*05010101 | Cw*05010102 | Cw*050104   | Cw*0503  |          |          | Cw*050101/050104/0503 |
| Cw*06020101 | Cw*06020102 | Cw*060203   |          |          |          | Cw*060201/060203      |
| Cw*070101   | Cw*070102   | Cw*070109   | Cw*0706  | Cw*0718  | Cw*0752  | Cw*07G1               |
| Cw*07020101 | Cw*07020102 | Cw*07020103 | Cw*0750  | Cw*0766  |          | Cw*07G2               |
| Cw*070401   | Cw*0711     |             |          |          |          | Cw*070401/0711        |
| Cw*080101   | Cw*0820     | Cw*0822     |          |          |          | Cw*080101/0820/0822   |
| Cw*120201   | Cw*120202   |             |          |          |          | Cw*120201/120202      |
| Cw*12030101 | Cw*12030102 | Cw*120306   |          |          |          | Cw*120301/120306      |
| Cw*150201   | Cw*1513     |             |          |          |          | Cw*150201/1513        |
| Cw*150501   | Cw*150502   | Cw*150503   |          |          |          | Cw*1505G1             |
| Cw*1701     | Cw*1702     | Cw*1703     |          |          |          | Cw*1701/1702/1703     |
| Cw*1801     | Cw*1802     |             |          |          |          | Cw*1801/1802          |

### Alleles extended due to unsequenced regions

The following alleles do not contain the complete exon 2 + 3 sequence. For these alleles, the sequence of an alternate allele has been used to extend the sequence to cover this region.

| Incomplete allele | Sequence extended with |
|-------------------|------------------------|
| Cw*0765           | Cw*0760                |

### Alleles removed from analysis due to insertions or deletions

| Allele   |
|----------|
| Cw*0346  |
| Cw*0507N |
| Cw*0616N |
| Cw*0732N |
| Cw*0733N |

### Ambiguous typing combinations over exon 2 + 3

| Combination 1                               | Combination 2                 | Combination 3                 | Combination 4   |
|---------------------------------------------|-------------------------------|-------------------------------|-----------------|
| Cw*010201/010202/0125+Cw*020202             | Cw*0114+Cw*0227               |                               |                 |
| Cw*010201/010202/0125+Cw*0203               | Cw*0106+Cw*021602/021603      |                               |                 |
| Cw*010201/010202/0125+Cw*030301/0320N       | Cw*0122+Cw*0349               |                               |                 |
| Cw*010201/010202/0125+Cw*030401/030403      | Cw*0122+Cw*0328               |                               |                 |
| Cw*010201/010202/0125+Cw*0307               | Cw*0114+Cw*030401/030403      |                               |                 |
| Cw*010201/010202/0125+Cw*0323               | Cw*0107+Cw*030401/030403      |                               |                 |
| Cw*010201/010202/0125+Cw*0327               | Cw*0117+Cw*0305               |                               |                 |
| Cw*010201/010202/0125+Cw*0336               | Cw*0106+Cw*0302G1             |                               |                 |
| Cw*010201/010202/0125+Cw*033801             | Cw*0117+Cw*030402             |                               |                 |
| Cw*010201/010202/0125+Cw*033802             | Cw*0117+Cw*030401/030403      |                               |                 |
| Cw*010201/010202/0125+Cw*0345               | Cw*0114+Cw*0332               |                               |                 |
| Cw*010201/010202/0125+Cw*04G1               | Cw*0114+Cw*0429               | Cw*0117+Cw*0410               |                 |
| Cw*010201/010202/0125+Cw*040401             | Cw*0122+Cw*04G1               |                               |                 |
| Cw*010201/010202/0125+Cw*0406               | Cw*0122+Cw*0403               |                               |                 |
| Cw*010201/010202/0125+Cw*0410               | Cw*0114+Cw*0436               |                               |                 |
| Cw*010201/010202/0125+Cw*0429               | Cw*0117+Cw*0436               | Cw*0123+Cw*0411               |                 |
| Cw*010201/010202/0125+Cw*0432               | Cw*0110+Cw*04G1               |                               |                 |
| Cw*010201/010202/0125+Cw*050101/050104/0503 | Cw*0114+Cw*0802               |                               |                 |
| Cw*010201/010202/0125+Cw*0508               | Cw*0109+Cw*050101/050104/0503 |                               |                 |
| Cw*010201/010202/0125+Cw*0509               | Cw*0114+Cw*0815               |                               |                 |
| Cw*010201/010202/0125+Cw*0511               | Cw*0114+Cw*0804               | Cw*0122+Cw*050101/050104/0503 |                 |
| Cw*010201/010202/0125+Cw*0512               | Cw*0106+Cw*0518               |                               |                 |
| Cw*010201/010202/0125+Cw*0516               | Cw*0114+Cw*0812               |                               |                 |
| Cw*010201/010202/0125+Cw*0523               | Cw*0114+Cw*0807               |                               |                 |
| Cw*010201/010202/0125+Cw*060201/060203      | Cw*0109+Cw*0606               | Cw*0112+Cw*0623               | Cw*0114+Cw*0611 |

|                                      |                                   |                          |                   |
|--------------------------------------|-----------------------------------|--------------------------|-------------------|
| Cw*010201/010202/0125+Cw*0604        | Cw*0122+Cw*0606                   |                          |                   |
| Cw*010201/010202/0125+Cw*0608        | Cw*0110+Cw*060201/060203          |                          |                   |
| Cw*010201/010202/0125+Cw*07G1        | Cw*0117+Cw*0740                   |                          |                   |
| Cw*010201/010202/0125+Cw*07G2        | Cw*0117+Cw*0739                   | Cw*0122+Cw*0737          |                   |
| Cw*010201/010202/0125+Cw*0707        | Cw*0114+Cw*0716                   |                          |                   |
| Cw*010201/010202/0125+Cw*0709        | Cw*0114+Cw*07G1                   |                          |                   |
| Cw*010201/010202/0125+Cw*0715        | Cw*0110+Cw*07G2                   |                          |                   |
| Cw*010201/010202/0125+Cw*0803        | Cw*0115+Cw*080101/0820/0822       |                          |                   |
| Cw*010201/010202/0125+Cw*0804        | Cw*0122+Cw*0802                   |                          |                   |
| Cw*010201/010202/0125+Cw*0805        | Cw*0117+Cw*0802                   |                          |                   |
| Cw*010201/010202/0125+Cw*0810        | Cw*0114+Cw*080101/0820/0822       |                          |                   |
| Cw*010201/010202/0125+Cw*0821        | Cw*0117+Cw*080101/0820/0822       |                          |                   |
| Cw*010201/010202/0125+Cw*120402      | Cw*0114+Cw*120301/120306          | Cw*0117+Cw*1205          |                   |
| Cw*010201/010202/0125+Cw*1406        | Cw*0122+Cw*140201                 |                          |                   |
| Cw*010201/010202/0125+Cw*1411        | Cw*0111+Cw*140201                 |                          |                   |
| Cw*010201/010202/0125+Cw*150201/1513 | Cw*0114+Cw*1507                   | Cw*0122+Cw*1508          |                   |
| Cw*010201/010202/0125+Cw*1503        | Cw*0117+Cw*150201/1513            |                          |                   |
| Cw*010201/010202/0125+Cw*1516        | Cw*0117+Cw*1517                   |                          |                   |
| Cw*010201/010202/0125+Cw*1602        | Cw*0114+Cw*160101                 |                          |                   |
| Cw*010201/010202/0125+Cw*1609        | Cw*0126+Cw*1602                   |                          |                   |
| Cw*010206+Cw*050101/050104/0503      | Cw*0113+Cw*0518                   |                          |                   |
| Cw*0105+Cw*0731                      | Cw*0112+Cw*07G2                   |                          |                   |
| Cw*0105+Cw*160101                    | Cw*0112+Cw*1606                   |                          |                   |
| Cw*0107+Cw*0307                      | Cw*0114+Cw*0323                   |                          |                   |
| Cw*0107+Cw*033802                    | Cw*0117+Cw*0323                   |                          |                   |
| Cw*0109+Cw*021601                    | Cw*0122+Cw*0210                   |                          |                   |
| Cw*0109+Cw*021602/021603             | Cw*0122+Cw*020202                 |                          |                   |
| Cw*0109+Cw*0218                      | Cw*0122+Cw*0213                   |                          |                   |
| Cw*0109+Cw*0511                      | Cw*0122+Cw*0508                   |                          |                   |
| Cw*0109+Cw*0604                      | Cw*0122+Cw*060201/060203          |                          |                   |
| Cw*0109+Cw*07G1                      | Cw*0122+Cw*0722                   |                          |                   |
| Cw*0109+Cw*1218                      | Cw*0122+Cw*120201/120202          |                          |                   |
| Cw*0109+Cw*1220                      | Cw*0122+Cw*120301/120306          |                          |                   |
| Cw*0110+Cw*040401                    | Cw*0122+Cw*0432                   |                          |                   |
| Cw*0111+Cw*1406                      | Cw*0122+Cw*1411                   |                          |                   |
| Cw*0114+Cw*033802                    | Cw*0117+Cw*0307                   |                          |                   |
| Cw*0114+Cw*0803                      | Cw*0115+Cw*0810                   |                          |                   |
| Cw*0114+Cw*0805                      | Cw*0117+Cw*050101/050104/0503     |                          |                   |
| Cw*0114+Cw*0821                      | Cw*0117+Cw*0810                   |                          |                   |
| Cw*0115+Cw*0821                      | Cw*0117+Cw*0803                   |                          |                   |
| Cw*0117+Cw*0332                      | Cw*0123+Cw*030401/030403          |                          |                   |
| Cw*0117+Cw*0345                      | Cw*0123+Cw*0307                   |                          |                   |
| Cw*0117+Cw*04G1                      | Cw*0123+Cw*0433                   |                          |                   |
| Cw*0117+Cw*0525                      | Cw*0123+Cw*050101/050104/0503     |                          |                   |
| Cw*0117+Cw*07G1                      | Cw*0123+Cw*0716                   |                          |                   |
| Cw*0117+Cw*07G2                      | Cw*0123+Cw*0751                   |                          |                   |
| Cw*0117+Cw*0709                      | Cw*0123+Cw*0707                   |                          |                   |
| Cw*0117+Cw*0804                      | Cw*0122+Cw*0805                   |                          |                   |
| Cw*020202+Cw*020205                  | Cw*020203+Cw*0210                 |                          |                   |
| Cw*020202+Cw*021601                  | Cw*0210+Cw*021602/021603          |                          |                   |
| Cw*020202+Cw*0218                    | Cw*0213+Cw*021602/021603          |                          |                   |
| Cw*020202+Cw*030301/0320N            | Cw*020203+Cw*030304               | Cw*0219+Cw*034301        |                   |
| Cw*020202+Cw*030401/030403           | Cw*020203+Cw*030402               | Cw*0219+Cw*0340          | Cw*0227+Cw*0307   |
| Cw*020202+Cw*0309                    | Cw*0219+Cw*0342                   |                          |                   |
| Cw*020202+Cw*0332                    | Cw*0227+Cw*0345                   |                          |                   |
| Cw*020202+Cw*033802                  | Cw*020203+Cw*033801               |                          |                   |
| Cw*020202+Cw*0413                    | Cw*0213+Cw*040401                 |                          |                   |
| Cw*020202+Cw*0429                    | Cw*0227+Cw*04G1                   |                          |                   |
| Cw*020202+Cw*0436                    | Cw*0227+Cw*0410                   |                          |                   |
| Cw*020202+Cw*050101/050104/0503      | Cw*020203+Cw*050103               |                          |                   |
| Cw*020202+Cw*0511                    | Cw*021602/021603+Cw*0508          |                          |                   |
| Cw*020202+Cw*0604                    | Cw*021602/021603+Cw*060201/060203 |                          |                   |
| Cw*020202+Cw*0611                    | Cw*0227+Cw*060201/060203          |                          |                   |
| Cw*020202+Cw*0618                    | Cw*0221+Cw*060201/060203          |                          |                   |
| Cw*020202+Cw*07G1                    | Cw*020203+Cw*070107               | Cw*021602/021603+Cw*0722 | Cw*0227+Cw*0709   |
| Cw*020202+Cw*070401/0711             | Cw*020203+Cw*070403               |                          |                   |
| Cw*020202+Cw*0716                    | Cw*0227+Cw*0707                   |                          |                   |
| Cw*020202+Cw*072701                  | Cw*020203+Cw*072702               |                          |                   |
| Cw*020202+Cw*0729                    | Cw*0219+Cw*07G2                   |                          |                   |
| Cw*020202+Cw*080101/0820/0822        | Cw*020203+Cw*080102               | Cw*0227+Cw*0810          |                   |
| Cw*020202+Cw*0802                    | Cw*0227+Cw*050101/050104/0503     |                          |                   |
| Cw*020202+Cw*0804                    | Cw*0227+Cw*0511                   |                          |                   |
| Cw*020202+Cw*0807                    | Cw*0227+Cw*0523                   |                          |                   |
| Cw*020202+Cw*0812                    | Cw*0227+Cw*0516                   |                          |                   |
| Cw*020202+Cw*0815                    | Cw*0227+Cw*0509                   |                          |                   |
| Cw*020202+Cw*120203                  | Cw*020203+Cw*120201/120202        |                          |                   |
| Cw*020202+Cw*120301/120306           | Cw*0227+Cw*120402                 |                          |                   |
| Cw*020202+Cw*1218                    | Cw*021602/021603+Cw*120201/120202 |                          |                   |
| Cw*020202+Cw*1220                    | Cw*021602/021603+Cw*120301/120306 |                          |                   |
| Cw*020202+Cw*140203                  | Cw*0208+Cw*1403                   |                          |                   |
| Cw*020202+Cw*1506                    | Cw*0219+Cw*1509                   |                          |                   |
| Cw*020202+Cw*1507                    | Cw*0227+Cw*150201/1513            |                          |                   |
| Cw*020202+Cw*151002                  | Cw*0208+Cw*150201/1513            |                          |                   |
| Cw*020202+Cw*160101                  | Cw*0227+Cw*1602                   |                          |                   |
| Cw*020202+Cw*1611                    | Cw*0221+Cw*160101                 |                          |                   |
| Cw*020203+Cw*021601                  | Cw*020205+Cw*021602/021603        |                          |                   |
| Cw*020203+Cw*1218                    | Cw*021602/021603+Cw*120203        |                          |                   |
| Cw*020205+Cw*030304                  | Cw*0210+Cw*030301/0320N           |                          |                   |
| Cw*020205+Cw*030402                  | Cw*0210+Cw*030401/030403          |                          |                   |
| Cw*020205+Cw*0317                    | Cw*0205+Cw*0335                   |                          |                   |
| Cw*020205+Cw*033801                  | Cw*0210+Cw*033802                 |                          |                   |
| Cw*020205+Cw*050103                  | Cw*0210+Cw*050101/050104/0503     |                          |                   |
| Cw*020205+Cw*0516                    | Cw*0205+Cw*050101/050104/0503     |                          |                   |
| Cw*020205+Cw*070107                  | Cw*0210+Cw*07G1                   | Cw*0214+Cw*0726          | Cw*021601+Cw*0722 |
| Cw*020205+Cw*070403                  | Cw*0210+Cw*070401/0711            |                          |                   |
| Cw*020205+Cw*072702                  | Cw*0210+Cw*072701                 |                          |                   |
| Cw*020205+Cw*0731                    | Cw*0205+Cw*072701                 |                          |                   |
| Cw*020205+Cw*080102                  | Cw*0210+Cw*080101/0820/0822       |                          |                   |
| Cw*020205+Cw*0812                    | Cw*0205+Cw*0802                   |                          |                   |
| Cw*020205+Cw*120201/120202           | Cw*0210+Cw*120203                 |                          |                   |
| Cw*020205+Cw*1218                    | Cw*021601+Cw*120203               |                          |                   |
| Cw*0203+Cw*0302G1                    | Cw*021602/021603+Cw*0336          |                          |                   |
| Cw*0203+Cw*0518                      | Cw*021602/021603+Cw*0512          |                          |                   |
| Cw*0205+Cw*04G1                      | Cw*0217+Cw*041502                 |                          |                   |

|                                        |                                 |                        |                   |
|----------------------------------------|---------------------------------|------------------------|-------------------|
| Cw*0205+Cw*050103                      | Cw*0210+Cw*0516                 |                        |                   |
| Cw*0205+Cw*0708                        | Cw*0217+Cw*072701               |                        |                   |
| Cw*0205+Cw*072702                      | Cw*0210+Cw*0731                 |                        |                   |
| Cw*0205+Cw*140201                      | Cw*0217+Cw*1405                 |                        |                   |
| Cw*0205+Cw*1409                        | Cw*0210+Cw*1405                 |                        |                   |
| Cw*0205+Cw*1607                        | Cw*0210+Cw*160101               |                        |                   |
| Cw*0206+Cw*120301/120306               | Cw*0210+Cw*1215                 |                        |                   |
| Cw*0206+Cw*1220                        | Cw*021601+Cw*1215               |                        |                   |
| Cw*0206+Cw*1504                        | Cw*0210+Cw*150201/1513          |                        |                   |
| Cw*0208+Cw*1507                        | Cw*0227+Cw*151002               |                        |                   |
| Cw*0210+Cw*0218                        | Cw*0213+Cw*021601               |                        |                   |
| Cw*0210+Cw*0511                        | Cw*021601+Cw*0508               |                        |                   |
| Cw*0210+Cw*0604                        | Cw*021601+Cw*060201/060203      |                        |                   |
| Cw*0210+Cw*0805                        | Cw*0212+Cw*0520                 |                        |                   |
| Cw*0210+Cw*1218                        | Cw*021601+Cw*120201/120202      |                        |                   |
| Cw*0210+Cw*1220                        | Cw*021601+Cw*120301/120306      |                        |                   |
| Cw*0210+Cw*140201                      | Cw*0217+Cw*1409                 |                        |                   |
| Cw*0213+Cw*0511                        | Cw*0218+Cw*0508                 |                        |                   |
| Cw*0213+Cw*0604                        | Cw*0218+Cw*060201/060203        |                        |                   |
| Cw*0213+Cw*07G1                        | Cw*0218+Cw*0722                 |                        |                   |
| Cw*0213+Cw*1218                        | Cw*0218+Cw*120201/120202        |                        |                   |
| Cw*0213+Cw*1220                        | Cw*0218+Cw*120301/120306        |                        |                   |
| Cw*021602/021603+Cw*0413               | Cw*0218+Cw*040401               |                        |                   |
| Cw*021602/021603+Cw*0611               | Cw*0227+Cw*0604                 |                        |                   |
| Cw*021602/021603+Cw*0618               | Cw*0221+Cw*0604                 |                        |                   |
| Cw*0221+Cw*0611                        | Cw*0227+Cw*0618                 |                        |                   |
| Cw*0302G1+Cw*04G1                      | Cw*0315+Cw*0411                 |                        |                   |
| Cw*0302G1+Cw*0512                      | Cw*0336+Cw*0518                 |                        |                   |
| Cw*030301/0320N+Cw*030402              | Cw*030304+Cw*030401/030403      |                        |                   |
| Cw*030301/0320N+Cw*0308                | Cw*030401/030403+Cw*0331        |                        |                   |
| Cw*030301/0320N+Cw*0319                | Cw*030401/030403+Cw*0312        |                        |                   |
| Cw*030301/0320N+Cw*0328                | Cw*030401/030403+Cw*0349        |                        |                   |
| Cw*030301/0320N+Cw*0329                | Cw*0310+Cw*0331                 |                        |                   |
| Cw*030301/0320N+Cw*0335                | Cw*030401/030403+Cw*0313        |                        |                   |
| Cw*030301/0320N+Cw*0337                | Cw*030401/030403+Cw*031102      |                        |                   |
| Cw*030301/0320N+Cw*033801              | Cw*030304+Cw*033802             |                        |                   |
| Cw*030301/0320N+Cw*0340                | Cw*030401/030403+Cw*034301      |                        |                   |
| Cw*030301/0320N+Cw*0342                | Cw*0309+Cw*034301               |                        |                   |
| Cw*030301/0320N+Cw*04G1                | Cw*0349+Cw*040401               |                        |                   |
| Cw*030301/0320N+Cw*0403                | Cw*0349+Cw*0406                 |                        |                   |
| Cw*030301/0320N+Cw*0418                | Cw*0330+Cw*04G1                 |                        |                   |
| Cw*030301/0320N+Cw*050101/050104/0503  | Cw*0313+Cw*0510                 | Cw*0349+Cw*0511        |                   |
| Cw*030301/0320N+Cw*050103              | Cw*030304+Cw*050101/050104/0503 |                        |                   |
| Cw*030301/0320N+Cw*060201/060203       | Cw*0313+Cw*0614                 |                        |                   |
| Cw*030301/0320N+Cw*0606                | Cw*0349+Cw*0604                 |                        |                   |
| Cw*030301/0320N+Cw*07G1                | Cw*031101+Cw*0720               | Cw*0331+Cw*072701      | Cw*0332+Cw*0760   |
| Cw*030301/0320N+Cw*070107              | Cw*030304+Cw*07G1               | Cw*0331+Cw*072702      |                   |
| Cw*030301/0320N+Cw*07G2                | Cw*030401/030403+Cw*0756        | Cw*0313+Cw*0710        | Cw*034301+Cw*0729 |
| Cw*030301/0320N+Cw*070403              | Cw*030304+Cw*070401/0711        |                        |                   |
| Cw*030301/0320N+Cw*0707                | Cw*0307+Cw*0760                 |                        |                   |
| Cw*030301/0320N+Cw*0709                | Cw*0345+Cw*0760                 |                        |                   |
| Cw*030301/0320N+Cw*0716                | Cw*030401/030403+Cw*0760        |                        |                   |
| Cw*030301/0320N+Cw*0719                | Cw*0308+Cw*0756                 | Cw*0331+Cw*07G2        |                   |
| Cw*030301/0320N+Cw*072701              | Cw*0313+Cw*0743                 |                        |                   |
| Cw*030301/0320N+Cw*072702              | Cw*030304+Cw*072701             |                        |                   |
| Cw*030301/0320N+Cw*0737                | Cw*0328+Cw*0756                 | Cw*0349+Cw*07G2        |                   |
| Cw*030301/0320N+Cw*080102              | Cw*030304+Cw*080101/0820/0822   |                        |                   |
| Cw*030301/0320N+Cw*0802                | Cw*0349+Cw*0804                 |                        |                   |
| Cw*030301/0320N+Cw*120201/120202       | Cw*030304+Cw*120203             |                        |                   |
| Cw*030301/0320N+Cw*1208                | Cw*0331+Cw*120201/120202        |                        |                   |
| Cw*030301/0320N+Cw*140201              | Cw*0349+Cw*1406                 |                        |                   |
| Cw*030301/0320N+Cw*1403                | Cw*030401/030403+Cw*1410        |                        |                   |
| Cw*030301/0320N+Cw*150201/1513         | Cw*030401/030403+Cw*1512        | Cw*0312+Cw*1506        | Cw*0331+Cw*1517   |
| Cw*030301/0320N+Cw*1503                | Cw*0331+Cw*1516                 | Cw*033802+Cw*1512      |                   |
| Cw*030301/0320N+Cw*1508                | Cw*0328+Cw*1512                 | Cw*0349+Cw*150201/1513 |                   |
| Cw*030301/0320N+Cw*1509                | Cw*0331+Cw*1520                 | Cw*034301+Cw*1506      |                   |
| Cw*030304+Cw*0308                      | Cw*030402+Cw*0331               |                        |                   |
| Cw*030304+Cw*0319                      | Cw*030402+Cw*0312               |                        |                   |
| Cw*030304+Cw*0328                      | Cw*030402+Cw*0349               |                        |                   |
| Cw*030304+Cw*0335                      | Cw*030402+Cw*0313               |                        |                   |
| Cw*030304+Cw*0337                      | Cw*030402+Cw*031102             |                        |                   |
| Cw*030304+Cw*0340                      | Cw*030402+Cw*034301             |                        |                   |
| Cw*030304+Cw*041502                    | Cw*030305+Cw*041501             |                        |                   |
| Cw*030304+Cw*07G2                      | Cw*030402+Cw*0756               |                        |                   |
| Cw*030304+Cw*0716                      | Cw*030402+Cw*0760               |                        |                   |
| Cw*030304+Cw*1403                      | Cw*030402+Cw*1410               |                        |                   |
| Cw*030304+Cw*150201/1513               | Cw*030402+Cw*1512               |                        |                   |
| Cw*030304+Cw*1503                      | Cw*033801+Cw*1512               |                        |                   |
| Cw*030401/030403+Cw*0327               | Cw*0305+Cw*033802               |                        |                   |
| Cw*030401/030403+Cw*0329               | Cw*0308+Cw*0310                 |                        |                   |
| Cw*030401/030403+Cw*033801             | Cw*030402+Cw*033802             |                        |                   |
| Cw*030401/030403+Cw*0342               | Cw*0309+Cw*0340                 |                        |                   |
| Cw*030401/030403+Cw*0345               | Cw*0307+Cw*0332                 |                        |                   |
| Cw*030401/030403+Cw*04G1               | Cw*0307+Cw*0429                 | Cw*0328+Cw*040401      | Cw*0332+Cw*0433   |
|                                        | Cw*033802+Cw*0410               |                        |                   |
| Cw*030401/030403+Cw*0403               | Cw*0328+Cw*0406                 |                        |                   |
| Cw*030401/030403+Cw*0410               | Cw*0307+Cw*0436                 | Cw*0345+Cw*0411        |                   |
| Cw*030401/030403+Cw*041502             | Cw*0309+Cw*0417                 |                        |                   |
| Cw*030401/030403+Cw*0429               | Cw*033802+Cw*0436               |                        |                   |
| Cw*030401/030403+Cw*0432               | Cw*0334+Cw*0408                 |                        |                   |
| Cw*030401/030403+Cw*0436               | Cw*0332+Cw*0411                 |                        |                   |
| Cw*030401/030403+Cw*050101/050104/0503 | Cw*0307+Cw*0802                 | Cw*0309+Cw*0505        | Cw*0310+Cw*0520   |
|                                        | Cw*0328+Cw*0511                 | Cw*0335+Cw*0510        |                   |
| Cw*030401/030403+Cw*050103             | Cw*030402+Cw*050101/050104/0503 |                        |                   |
| Cw*030401/030403+Cw*0509               | Cw*0307+Cw*0815                 |                        |                   |
| Cw*030401/030403+Cw*0511               | Cw*0307+Cw*0804                 |                        |                   |
| Cw*030401/030403+Cw*0516               | Cw*0307+Cw*0812                 | Cw*0317+Cw*0510        |                   |
| Cw*030401/030403+Cw*0523               | Cw*0307+Cw*0807                 |                        |                   |
| Cw*030401/030403+Cw*0525               | Cw*0332+Cw*050101/050104/0503   | Cw*0345+Cw*0802        |                   |
| Cw*030401/030403+Cw*060201/060203      | Cw*0307+Cw*0611                 | Cw*0335+Cw*0614        |                   |
| Cw*030401/030403+Cw*0606               | Cw*0328+Cw*0604                 |                        |                   |
| Cw*030401/030403+Cw*07G1               | Cw*0308+Cw*072701               | Cw*0332+Cw*0716        | Cw*033802+Cw*0740 |
| Cw*030401/030403+Cw*070107             | Cw*030402+Cw*07G1               | Cw*0308+Cw*072702      | Cw*033801+Cw*0740 |
| Cw*030401/030403+Cw*07G2               | Cw*0332+Cw*0751                 | Cw*0335+Cw*0710        | Cw*033802+Cw*0739 |

|                                   |                                 |                          |                 |
|-----------------------------------|---------------------------------|--------------------------|-----------------|
| Cw*030401/030403+Cw*070403        | Cw*0340+Cw*0729                 |                          |                 |
| Cw*030401/030403+Cw*0707          | Cw*030402+Cw*070401/0711        |                          |                 |
| Cw*030401/030403+Cw*0709          | Cw*0307+Cw*0716                 |                          |                 |
| Cw*030401/030403+Cw*0713          | Cw*0307+Cw*07G1                 | Cw*0332+Cw*0707          | Cw*0345+Cw*0716 |
| Cw*030401/030403+Cw*0719          | Cw*0326+Cw*0729                 |                          |                 |
| Cw*030401/030403+Cw*072701        | Cw*0308+Cw*07G2                 |                          |                 |
| Cw*030401/030403+Cw*072702        | Cw*0335+Cw*0743                 |                          |                 |
| Cw*030401/030403+Cw*0731          | Cw*030402+Cw*072701             |                          |                 |
| Cw*030401/030403+Cw*0737          | Cw*0317+Cw*0743                 |                          |                 |
| Cw*030401/030403+Cw*080102        | Cw*0328+Cw*07G2                 |                          |                 |
| Cw*030401/030403+Cw*0802          | Cw*030402+Cw*080101/0820/0822   |                          |                 |
| Cw*030401/030403+Cw*0805          | Cw*0328+Cw*0804                 |                          |                 |
| Cw*030401/030403+Cw*0810          | Cw*033802+Cw*0802               |                          |                 |
| Cw*030401/030403+Cw*0821          | Cw*0307+Cw*080101/0820/0822     |                          |                 |
| Cw*030401/030403+Cw*120201/120202 | Cw*033802+Cw*080101/0820/0822   |                          |                 |
| Cw*030401/030403+Cw*120402        | Cw*030402+Cw*120203             |                          |                 |
| Cw*030401/030403+Cw*1208          | Cw*0307+Cw*120301/120306        | Cw*033802+Cw*1205        |                 |
| Cw*030401/030403+Cw*140201        | Cw*0308+Cw*120201/120202        |                          |                 |
| Cw*030401/030403+Cw*150201/1513   | Cw*0328+Cw*1406                 |                          |                 |
| Cw*030401/030403+Cw*1503          | Cw*0307+Cw*1507                 | Cw*0308+Cw*1517          | Cw*0319+Cw*1506 |
| Cw*030401/030403+Cw*1505G1        | Cw*0308+Cw*1516                 | Cw*033802+Cw*150201/1513 |                 |
| Cw*030401/030403+Cw*1508          | Cw*0326+Cw*1506                 |                          |                 |
| Cw*030401/030403+Cw*1509          | Cw*0328+Cw*150201/1513          |                          |                 |
| Cw*030401/030403+Cw*1516          | Cw*0308+Cw*1520                 | Cw*0340+Cw*1506          |                 |
| Cw*030401/030403+Cw*1521          | Cw*033802+Cw*1517               |                          |                 |
| Cw*030401/030403+Cw*1602          | Cw*0310+Cw*1507                 |                          |                 |
| Cw*030402+Cw*0327                 | Cw*0307+Cw*160101               |                          |                 |
| Cw*030402+Cw*04G1                 | Cw*0305+Cw*033801               |                          |                 |
| Cw*030402+Cw*040102               | Cw*033801+Cw*0410               |                          |                 |
| Cw*030402+Cw*0429                 | Cw*030406+Cw*04G1               |                          |                 |
| Cw*030402+Cw*0525                 | Cw*033801+Cw*0436               |                          |                 |
| Cw*030402+Cw*07G2                 | Cw*0332+Cw*050103               |                          |                 |
| Cw*030402+Cw*0709                 | Cw*033801+Cw*0739               |                          |                 |
| Cw*030402+Cw*0805                 | Cw*0307+Cw*070107               |                          |                 |
| Cw*030402+Cw*0810                 | Cw*033801+Cw*0802               |                          |                 |
| Cw*030402+Cw*0821                 | Cw*0307+Cw*080102               |                          |                 |
| Cw*030402+Cw*120402               | Cw*033801+Cw*080101/0820/0822   | Cw*033802+Cw*080102      |                 |
| Cw*030402+Cw*1503                 | Cw*033801+Cw*1205               |                          |                 |
| Cw*030402+Cw*1516                 | Cw*033801+Cw*150201/1513        |                          |                 |
| Cw*0305+Cw*04G1                   | Cw*033801+Cw*1517               |                          |                 |
| Cw*0305+Cw*0429                   | Cw*0327+Cw*0410                 |                          |                 |
| Cw*0305+Cw*07G1                   | Cw*0327+Cw*0436                 |                          |                 |
| Cw*0305+Cw*07G2                   | Cw*0327+Cw*0740                 |                          |                 |
| Cw*0305+Cw*0805                   | Cw*0327+Cw*0739                 |                          |                 |
| Cw*0305+Cw*0821                   | Cw*0327+Cw*0802                 |                          |                 |
| Cw*0305+Cw*120402                 | Cw*0327+Cw*080101/0820/0822     |                          |                 |
| Cw*0305+Cw*1503                   | Cw*0327+Cw*1205                 |                          |                 |
| Cw*0305+Cw*1516                   | Cw*0327+Cw*150201/1513          |                          |                 |
| Cw*0307+Cw*04G1                   | Cw*0327+Cw*1517                 |                          |                 |
| Cw*0307+Cw*0525                   | Cw*0345+Cw*0433                 |                          |                 |
| Cw*0307+Cw*07G2                   | Cw*0345+Cw*050101/050104/0503   |                          |                 |
| Cw*0307+Cw*0709                   | Cw*0310+Cw*0749                 | Cw*0345+Cw*0751          |                 |
| Cw*0307+Cw*0719                   | Cw*0345+Cw*0707                 |                          |                 |
| Cw*0307+Cw*0805                   | Cw*0329+Cw*0749                 |                          |                 |
| Cw*0307+Cw*0821                   | Cw*033802+Cw*050101/050104/0503 |                          |                 |
| Cw*0307+Cw*1521                   | Cw*033802+Cw*0810               |                          |                 |
| Cw*0308+Cw*031102                 | Cw*0310+Cw*150201/1513          | Cw*0329+Cw*1517          |                 |
| Cw*0308+Cw*0312                   | Cw*0331+Cw*0337                 |                          |                 |
| Cw*0308+Cw*0313                   | Cw*0319+Cw*0331                 |                          |                 |
| Cw*0308+Cw*034301                 | Cw*0331+Cw*0335                 |                          |                 |
| Cw*0308+Cw*0349                   | Cw*0331+Cw*0340                 |                          |                 |
| Cw*0308+Cw*050101/050104/0503     | Cw*0328+Cw*0331                 |                          |                 |
| Cw*0308+Cw*0737                   | Cw*0329+Cw*0520                 |                          |                 |
| Cw*0308+Cw*0760                   | Cw*0328+Cw*0719                 |                          |                 |
| Cw*0308+Cw*1410                   | Cw*0331+Cw*0716                 |                          |                 |
| Cw*0308+Cw*1512                   | Cw*0331+Cw*1403                 |                          |                 |
| Cw*0309+Cw*07G2                   | Cw*0331+Cw*150201/1513          |                          |                 |
| Cw*0309+Cw*1509                   | Cw*0329+Cw*1507                 |                          |                 |
| Cw*0310+Cw*07G1                   | Cw*0342+Cw*0729                 |                          |                 |
| Cw*0310+Cw*070107                 | Cw*0342+Cw*1506                 |                          |                 |
| Cw*0310+Cw*0719                   | Cw*0329+Cw*072701               |                          |                 |
| Cw*0310+Cw*1208                   | Cw*0329+Cw*072702               |                          |                 |
| Cw*0310+Cw*1503                   | Cw*0329+Cw*07G2                 |                          |                 |
| Cw*0310+Cw*1509                   | Cw*0329+Cw*120201/120202        |                          |                 |
| Cw*031101+Cw*060201/060203        | Cw*0329+Cw*1516                 |                          |                 |
| Cw*031102+Cw*0319                 | Cw*0329+Cw*1520                 |                          |                 |
| Cw*031102+Cw*0328                 | Cw*0339+Cw*0603                 |                          |                 |
| Cw*031102+Cw*0335                 | Cw*0312+Cw*0337                 |                          |                 |
| Cw*031102+Cw*0340                 | Cw*0337+Cw*0349                 |                          |                 |
| Cw*031102+Cw*07G2                 | Cw*0313+Cw*0337                 |                          |                 |
| Cw*031102+Cw*0716                 | Cw*0337+Cw*034301               |                          |                 |
| Cw*031102+Cw*1403                 | Cw*0337+Cw*0756                 |                          |                 |
| Cw*031102+Cw*150201/1513          | Cw*0337+Cw*0760                 |                          |                 |
| Cw*0312+Cw*0328                   | Cw*0337+Cw*1410                 |                          |                 |
| Cw*0312+Cw*0335                   | Cw*0337+Cw*1512                 |                          |                 |
| Cw*0312+Cw*0340                   | Cw*0319+Cw*0349                 |                          |                 |
| Cw*0312+Cw*07G2                   | Cw*0313+Cw*0319                 |                          |                 |
| Cw*0312+Cw*0716                   | Cw*0319+Cw*034301               |                          |                 |
| Cw*0312+Cw*1403                   | Cw*0319+Cw*0756                 |                          |                 |
| Cw*0312+Cw*150201/1513            | Cw*0319+Cw*0760                 |                          |                 |
| Cw*0312+Cw*1505G1                 | Cw*0319+Cw*1410                 |                          |                 |
| Cw*0312+Cw*1509                   | Cw*0319+Cw*1512                 |                          |                 |
| Cw*0312+Cw*1520                   | Cw*0326+Cw*1512                 |                          |                 |
| Cw*0313+Cw*0328                   | Cw*0340+Cw*1512                 | Cw*034301+Cw*150201/1513 |                 |
| Cw*0313+Cw*0340                   | Cw*034301+Cw*1517               |                          |                 |
| Cw*0313+Cw*07G2                   | Cw*0335+Cw*0349                 |                          |                 |
| Cw*0313+Cw*0716                   | Cw*0335+Cw*034301               |                          |                 |
| Cw*0313+Cw*1403                   | Cw*0335+Cw*0756                 |                          |                 |
| Cw*0313+Cw*150201/1513            | Cw*0335+Cw*0760                 |                          |                 |
| Cw*0317+Cw*050101/050104/0503     | Cw*0335+Cw*1410                 |                          |                 |
| Cw*0317+Cw*072701                 | Cw*0335+Cw*1512                 |                          |                 |
| Cw*0317+Cw*0802                   | Cw*0335+Cw*0516                 |                          |                 |
|                                   | Cw*0335+Cw*0731                 |                          |                 |
|                                   | Cw*0335+Cw*0812                 |                          |                 |

|                                 |                                 |                               |                 |
|---------------------------------|---------------------------------|-------------------------------|-----------------|
| Cw*0318+Cw*1216                 | Cw*0339+Cw*120201/120202        |                               |                 |
| Cw*0319+Cw*1505G1               | Cw*0326+Cw*150201/1513          |                               |                 |
| Cw*0319+Cw*1509                 | Cw*0340+Cw*150201/1513          |                               |                 |
| Cw*0319+Cw*1520                 | Cw*0340+Cw*1517                 |                               |                 |
| Cw*0326+Cw*0504                 | Cw*0340+Cw*0522                 |                               |                 |
| Cw*0326+Cw*07G2                 | Cw*0340+Cw*0713                 |                               |                 |
| Cw*0326+Cw*0756                 | Cw*034301+Cw*0713               |                               |                 |
| Cw*0326+Cw*1509                 | Cw*0340+Cw*1505G1               |                               |                 |
| Cw*0328+Cw*034301               | Cw*0340+Cw*0349                 |                               |                 |
| Cw*0328+Cw*0760                 | Cw*0349+Cw*0716                 |                               |                 |
| Cw*0328+Cw*1410                 | Cw*0349+Cw*1403                 |                               |                 |
| Cw*0328+Cw*1503                 | Cw*033802+Cw*1508               |                               |                 |
| Cw*0331+Cw*0737                 | Cw*0349+Cw*0719                 |                               |                 |
| Cw*0332+Cw*04G1                 | Cw*0345+Cw*0429                 |                               |                 |
| Cw*0332+Cw*0410                 | Cw*0345+Cw*0436                 |                               |                 |
| Cw*0332+Cw*0509                 | Cw*0345+Cw*0815                 |                               |                 |
| Cw*0332+Cw*0511                 | Cw*0345+Cw*0804                 |                               |                 |
| Cw*0332+Cw*0516                 | Cw*0345+Cw*0812                 |                               |                 |
| Cw*0332+Cw*0523                 | Cw*0345+Cw*0807                 |                               |                 |
| Cw*0332+Cw*060201/060203        | Cw*0345+Cw*0611                 |                               |                 |
| Cw*0332+Cw*0709                 | Cw*0345+Cw*07G1                 |                               |                 |
| Cw*0332+Cw*0810                 | Cw*0345+Cw*080101/0820/0822     |                               |                 |
| Cw*0332+Cw*120402               | Cw*0345+Cw*120301/120306        |                               |                 |
| Cw*0332+Cw*150201/1513          | Cw*0345+Cw*1507                 |                               |                 |
| Cw*0332+Cw*1602                 | Cw*0345+Cw*160101               |                               |                 |
| Cw*033801+Cw*050101/050104/0503 | Cw*033802+Cw*050103             |                               |                 |
| Cw*033801+Cw*07G1               | Cw*033802+Cw*070107             |                               |                 |
| Cw*033801+Cw*070401/0711        | Cw*033802+Cw*070403             |                               |                 |
| Cw*033801+Cw*072701             | Cw*033802+Cw*072702             |                               |                 |
| Cw*033801+Cw*120203             | Cw*033802+Cw*120201/120202      |                               |                 |
| Cw*033802+Cw*0525               | Cw*0345+Cw*0805                 |                               |                 |
| Cw*0340+Cw*041502               | Cw*0342+Cw*0417                 |                               |                 |
| Cw*0340+Cw*050101/050104/0503   | Cw*0342+Cw*0505                 |                               |                 |
| Cw*0340+Cw*0756                 | Cw*034301+Cw*07G2               |                               |                 |
| Cw*0340+Cw*0760                 | Cw*034301+Cw*0716               |                               |                 |
| Cw*0340+Cw*1410                 | Cw*034301+Cw*1403               |                               |                 |
| Cw*034301+Cw*040402             | Cw*034302+Cw*040401             |                               |                 |
| Cw*034301+Cw*140202             | Cw*034302+Cw*140201             |                               |                 |
| Cw*04G1+Cw*0406                 | Cw*0403+Cw*040401               |                               |                 |
| Cw*04G1+Cw*0411                 | Cw*0433+Cw*0436                 |                               |                 |
| Cw*04G1+Cw*0436                 | Cw*0410+Cw*0429                 |                               |                 |
| Cw*04G1+Cw*050101/050104/0503   | Cw*0433+Cw*0525                 |                               |                 |
| Cw*04G1+Cw*0511                 | Cw*040401+Cw*050101/050104/0503 |                               |                 |
| Cw*04G1+Cw*0522                 | Cw*0423+Cw*050101/050104/0503   |                               |                 |
| Cw*04G1+Cw*0604                 | Cw*040401+Cw*0606               |                               |                 |
| Cw*04G1+Cw*0608                 | Cw*0432+Cw*060201/060203        |                               |                 |
| Cw*04G1+Cw*0611                 | Cw*0429+Cw*060201/060203        |                               |                 |
| Cw*04G1+Cw*07G1                 | Cw*0429+Cw*0709                 |                               |                 |
| Cw*04G1+Cw*07G2                 | Cw*040401+Cw*0737               |                               |                 |
| Cw*04G1+Cw*0707                 | Cw*0433+Cw*0709                 |                               |                 |
| Cw*04G1+Cw*0715                 | Cw*0432+Cw*07G2                 |                               |                 |
| Cw*04G1+Cw*0716                 | Cw*0429+Cw*0707                 | Cw*0433+Cw*07G1               |                 |
| Cw*04G1+Cw*072701               | Cw*041502+Cw*0708               |                               |                 |
| Cw*04G1+Cw*0739                 | Cw*0410+Cw*07G2                 |                               |                 |
| Cw*04G1+Cw*0740                 | Cw*0410+Cw*07G1                 | Cw*0436+Cw*0709               |                 |
| Cw*04G1+Cw*0751                 | Cw*0433+Cw*07G2                 |                               |                 |
| Cw*04G1+Cw*080101/0820/0822     | Cw*0410+Cw*0821                 |                               |                 |
| Cw*04G1+Cw*0802                 | Cw*0410+Cw*0805                 | Cw*0429+Cw*0810               |                 |
| Cw*04G1+Cw*0804                 | Cw*040401+Cw*0802               | Cw*0429+Cw*050101/050104/0503 |                 |
| Cw*04G1+Cw*0807                 | Cw*0429+Cw*0523                 | Cw*0429+Cw*0511               |                 |
| Cw*04G1+Cw*0812                 | Cw*0429+Cw*0516                 |                               |                 |
| Cw*04G1+Cw*0815                 | Cw*0429+Cw*0509                 |                               |                 |
| Cw*04G1+Cw*120201/120202        | Cw*041501+Cw*1210               |                               |                 |
| Cw*04G1+Cw*120301/120306        | Cw*0429+Cw*120402               |                               |                 |
| Cw*04G1+Cw*1205                 | Cw*0410+Cw*120402               |                               |                 |
| Cw*04G1+Cw*1217                 | Cw*0412+Cw*120201/120202        |                               |                 |
| Cw*04G1+Cw*1405                 | Cw*041502+Cw*140201             |                               |                 |
| Cw*04G1+Cw*1406                 | Cw*040401+Cw*140201             |                               |                 |
| Cw*04G1+Cw*150201/1513          | Cw*040401+Cw*1508               | Cw*0410+Cw*1503               |                 |
| Cw*04G1+Cw*1507                 | Cw*0429+Cw*150201/1513          | Cw*0436+Cw*1503               |                 |
| Cw*04G1+Cw*1515                 | Cw*0408+Cw*150201/1513          |                               |                 |
| Cw*04G1+Cw*1517                 | Cw*0410+Cw*1516                 |                               |                 |
| Cw*04G1+Cw*160101               | Cw*0429+Cw*1602                 |                               |                 |
| Cw*0403+Cw*0511                 | Cw*0406+Cw*050101/050104/0503   |                               |                 |
| Cw*0403+Cw*0604                 | Cw*0406+Cw*0606                 |                               |                 |
| Cw*0403+Cw*07G2                 | Cw*0406+Cw*0737                 |                               |                 |
| Cw*0403+Cw*0804                 | Cw*0406+Cw*0802                 |                               |                 |
| Cw*0403+Cw*1406                 | Cw*0406+Cw*140201               |                               |                 |
| Cw*0403+Cw*150201/1513          | Cw*0406+Cw*1508                 |                               |                 |
| Cw*040401+Cw*0522               | Cw*0423+Cw*0511                 |                               |                 |
| Cw*040401+Cw*0753               | Cw*0414+Cw*07G1                 |                               |                 |
| Cw*040401+Cw*140202             | Cw*040402+Cw*140201             |                               |                 |
| Cw*040401+Cw*1405               | Cw*041502+Cw*1406               |                               |                 |
| Cw*0408+Cw*1507                 | Cw*0429+Cw*1515                 |                               |                 |
| Cw*0410+Cw*0611                 | Cw*0436+Cw*060201/060203        |                               |                 |
| Cw*0410+Cw*0715                 | Cw*0432+Cw*0739                 |                               |                 |
| Cw*0410+Cw*0716                 | Cw*0411+Cw*0709                 | Cw*0433+Cw*0740               | Cw*0436+Cw*0707 |
| Cw*0410+Cw*0751                 | Cw*0433+Cw*0739                 |                               |                 |
| Cw*0410+Cw*080101/0820/0822     | Cw*0436+Cw*0810                 |                               |                 |
| Cw*0410+Cw*0802                 | Cw*0411+Cw*0525                 | Cw*0436+Cw*050101/050104/0503 |                 |
| Cw*0410+Cw*0804                 | Cw*0436+Cw*0511                 |                               |                 |
| Cw*0410+Cw*0807                 | Cw*0436+Cw*0523                 |                               |                 |
| Cw*0410+Cw*0812                 | Cw*0436+Cw*0516                 |                               |                 |
| Cw*0410+Cw*0815                 | Cw*0436+Cw*0509                 |                               |                 |
| Cw*0410+Cw*120301/120306        | Cw*0429+Cw*1205                 | Cw*0436+Cw*120402             |                 |
| Cw*0410+Cw*1507                 | Cw*0436+Cw*150201/1513          |                               |                 |
| Cw*0410+Cw*160101               | Cw*0436+Cw*1602                 |                               |                 |
| Cw*0411+Cw*07G1                 | Cw*0436+Cw*0716                 |                               |                 |
| Cw*0411+Cw*07G2                 | Cw*0436+Cw*0751                 |                               |                 |
| Cw*0411+Cw*1503                 | Cw*0433+Cw*1507                 |                               |                 |
| Cw*041501+Cw*0819               | Cw*0429+Cw*050103               |                               |                 |
| Cw*041502+Cw*0505               | Cw*0417+Cw*050101/050104/0503   |                               |                 |
| Cw*0423+Cw*0802                 | Cw*0429+Cw*0522                 |                               |                 |
| Cw*0429+Cw*0608                 | Cw*0432+Cw*0611                 |                               |                 |

|                                           |                               |                        |                 |
|-------------------------------------------|-------------------------------|------------------------|-----------------|
| Cw*0429+Cw*0739                           | Cw*0436+Cw*07G2               |                        |                 |
| Cw*0429+Cw*0740                           | Cw*0436+Cw*07G1               |                        |                 |
| Cw*0429+Cw*080101/0820/0822               | Cw*0436+Cw*0821               |                        |                 |
| Cw*0429+Cw*0802                           | Cw*0436+Cw*0805               |                        |                 |
| Cw*0429+Cw*1517                           | Cw*0436+Cw*1516               |                        |                 |
| Cw*0432+Cw*0751                           | Cw*0433+Cw*0715               |                        |                 |
| Cw*050101/050104/0503+Cw*060201/060203    | Cw*0504+Cw*0609               | Cw*0508+Cw*0606        |                 |
| Cw*050101/050104/0503+Cw*0604             | Cw*0511+Cw*0606               |                        |                 |
| Cw*050101/050104/0503+Cw*0611             | Cw*060201/060203+Cw*0802      |                        |                 |
| Cw*050101/050104/0503+Cw*0614             | Cw*0510+Cw*060201/060203      |                        |                 |
| Cw*050101/050104/0503+Cw*07G1             | Cw*0504+Cw*0728               | Cw*0525+Cw*0716        | Cw*0709+Cw*0802 |
| Cw*050101/050104/0503+Cw*070107           | Cw*050103+Cw*07G1             |                        |                 |
| Cw*050101/050104/0503+Cw*07G2             | Cw*0511+Cw*0737               | Cw*0523+Cw*0717        | Cw*0525+Cw*0751 |
| Cw*050101/050104/0503+Cw*070401/0711      | Cw*0523+Cw*0712               |                        |                 |
| Cw*050101/050104/0503+Cw*070403           | Cw*050103+Cw*070401/0711      |                        |                 |
| Cw*050101/050104/0503+Cw*0709             | Cw*0525+Cw*0707               |                        |                 |
| Cw*050101/050104/0503+Cw*0710             | Cw*0510+Cw*07G2               |                        |                 |
| Cw*050101/050104/0503+Cw*0716             | Cw*0707+Cw*0802               |                        |                 |
| Cw*050101/050104/0503+Cw*072702           | Cw*050103+Cw*072701           |                        |                 |
| Cw*050101/050104/0503+Cw*0731             | Cw*0516+Cw*072701             |                        |                 |
| Cw*050101/050104/0503+Cw*0743             | Cw*0510+Cw*072701             |                        |                 |
| Cw*050101/050104/0503+Cw*0745             | Cw*0509+Cw*070401/0711        |                        |                 |
| Cw*050101/050104/0503+Cw*080101/0820/0822 | Cw*0802+Cw*0810               |                        |                 |
| Cw*050101/050104/0503+Cw*080102           | Cw*050103+Cw*080101/0820/0822 |                        |                 |
| Cw*050101/050104/0503+Cw*0804             | Cw*0511+Cw*0802               |                        |                 |
| Cw*050101/050104/0503+Cw*0807             | Cw*0523+Cw*0802               |                        |                 |
| Cw*050101/050104/0503+Cw*0811             | Cw*0504+Cw*080101/0820/0822   |                        |                 |
| Cw*050101/050104/0503+Cw*0812             | Cw*0516+Cw*0802               |                        |                 |
| Cw*050101/050104/0503+Cw*0815             | Cw*0509+Cw*0802               |                        |                 |
| Cw*050101/050104/0503+Cw*0821             | Cw*0805+Cw*0810               |                        |                 |
| Cw*050101/050104/0503+Cw*120201/120202    | Cw*050103+Cw*120203           |                        |                 |
| Cw*050101/050104/0503+Cw*120301/120306    | Cw*0802+Cw*120402             | Cw*0805+Cw*1205        |                 |
| Cw*050101/050104/0503+Cw*1406             | Cw*0511+Cw*140201             |                        |                 |
| Cw*050101/050104/0503+Cw*150201/1513      | Cw*0511+Cw*1508               |                        |                 |
| Cw*050101/050104/0503+Cw*1507             | Cw*0520+Cw*1521               | Cw*0802+Cw*150201/1513 | Cw*0804+Cw*1508 |
| Cw*050101/050104/0503+Cw*160101           | Cw*0802+Cw*1602               |                        |                 |
| Cw*050103+Cw*0731                         | Cw*0516+Cw*072702             |                        |                 |
| Cw*050103+Cw*0743                         | Cw*0510+Cw*072702             |                        |                 |
| Cw*050103+Cw*0745                         | Cw*0509+Cw*070403             |                        |                 |
| Cw*050103+Cw*0811                         | Cw*0504+Cw*080102             |                        |                 |
| Cw*050103+Cw*1405                         | Cw*0516+Cw*1409               |                        |                 |
| Cw*050103+Cw*160101                       | Cw*0516+Cw*1607               |                        |                 |
| Cw*0504+Cw*0713                           | Cw*0522+Cw*07G2               |                        |                 |
| Cw*0504+Cw*1505G1                         | Cw*0522+Cw*1509               |                        |                 |
| Cw*0508+Cw*0604                           | Cw*0511+Cw*060201/060203      |                        |                 |
| Cw*0508+Cw*07G1                           | Cw*0511+Cw*0722               |                        |                 |
| Cw*0508+Cw*1218                           | Cw*0511+Cw*120201/120202      |                        |                 |
| Cw*0508+Cw*1220                           | Cw*0511+Cw*120301/120306      | Cw*0804+Cw*120402      |                 |
| Cw*0509+Cw*0611                           | Cw*060201/060203+Cw*0815      |                        |                 |
| Cw*0509+Cw*07G1                           | Cw*0709+Cw*0815               |                        |                 |
| Cw*0509+Cw*0716                           | Cw*0707+Cw*0815               |                        |                 |
| Cw*0509+Cw*080101/0820/0822               | Cw*0810+Cw*0815               |                        |                 |
| Cw*0509+Cw*0804                           | Cw*0511+Cw*0815               |                        |                 |
| Cw*0509+Cw*0807                           | Cw*0523+Cw*0815               |                        |                 |
| Cw*0509+Cw*0812                           | Cw*0516+Cw*0815               |                        |                 |
| Cw*0509+Cw*120301/120306                  | Cw*0815+Cw*120402             |                        |                 |
| Cw*0509+Cw*1507                           | Cw*0815+Cw*150201/1513        |                        |                 |
| Cw*0509+Cw*160101                         | Cw*0815+Cw*1602               |                        |                 |
| Cw*0510+Cw*0611                           | Cw*0614+Cw*0802               |                        |                 |
| Cw*0510+Cw*0731                           | Cw*0516+Cw*0743               |                        |                 |
| Cw*0511+Cw*0611                           | Cw*060201/060203+Cw*0804      |                        |                 |
| Cw*0511+Cw*07G1                           | Cw*0709+Cw*0804               |                        |                 |
| Cw*0511+Cw*0716                           | Cw*0707+Cw*0804               |                        |                 |
| Cw*0511+Cw*080101/0820/0822               | Cw*0804+Cw*0810               |                        |                 |
| Cw*0511+Cw*0807                           | Cw*0523+Cw*0804               |                        |                 |
| Cw*0511+Cw*0812                           | Cw*0516+Cw*0804               |                        |                 |
| Cw*0511+Cw*0816                           | Cw*0810+Cw*0813               |                        |                 |
| Cw*0511+Cw*1507                           | Cw*0804+Cw*150201/1513        |                        |                 |
| Cw*0511+Cw*160101                         | Cw*0804+Cw*1602               |                        |                 |
| Cw*0516+Cw*0611                           | Cw*060201/060203+Cw*0812      |                        |                 |
| Cw*0516+Cw*07G1                           | Cw*0709+Cw*0812               |                        |                 |
| Cw*0516+Cw*0716                           | Cw*0707+Cw*0812               |                        |                 |
| Cw*0516+Cw*080101/0820/0822               | Cw*0810+Cw*0812               |                        |                 |
| Cw*0516+Cw*0807                           | Cw*0523+Cw*0812               |                        |                 |
| Cw*0516+Cw*120301/120306                  | Cw*0812+Cw*120402             |                        |                 |
| Cw*0516+Cw*1507                           | Cw*0812+Cw*150201/1513        |                        |                 |
| Cw*0516+Cw*160101                         | Cw*0812+Cw*1602               |                        |                 |
| Cw*0520+Cw*07G2                           | Cw*0749+Cw*0802               |                        |                 |
| Cw*0523+Cw*0611                           | Cw*060201/060203+Cw*0807      |                        |                 |
| Cw*0523+Cw*07G1                           | Cw*0709+Cw*0807               |                        |                 |
| Cw*0523+Cw*0716                           | Cw*0707+Cw*0807               |                        |                 |
| Cw*0523+Cw*080101/0820/0822               | Cw*0807+Cw*0810               |                        |                 |
| Cw*0523+Cw*120301/120306                  | Cw*0807+Cw*120402             |                        |                 |
| Cw*0523+Cw*1507                           | Cw*0807+Cw*150201/1513        |                        |                 |
| Cw*0523+Cw*160101                         | Cw*0807+Cw*1602               |                        |                 |
| Cw*060201/060203+Cw*07G1                  | Cw*0604+Cw*0722               | Cw*0611+Cw*0709        |                 |
| Cw*060201/060203+Cw*0710                  | Cw*0614+Cw*07G2               |                        |                 |
| Cw*060201/060203+Cw*0715                  | Cw*0608+Cw*07G2               |                        |                 |
| Cw*060201/060203+Cw*0716                  | Cw*0611+Cw*0707               |                        |                 |
| Cw*060201/060203+Cw*0728                  | Cw*0609+Cw*07G1               |                        |                 |
| Cw*060201/060203+Cw*0743                  | Cw*0614+Cw*072701             |                        |                 |
| Cw*060201/060203+Cw*080101/0820/0822      | Cw*0609+Cw*0811               | Cw*0611+Cw*0810        |                 |
| Cw*060201/060203+Cw*120301/120306         | Cw*0611+Cw*120402             |                        |                 |
| Cw*060201/060203+Cw*1218                  | Cw*0604+Cw*120201/120202      |                        |                 |
| Cw*060201/060203+Cw*1220                  | Cw*0604+Cw*120301/120306      |                        |                 |
| Cw*060201/060203+Cw*1507                  | Cw*0611+Cw*150201/1513        |                        |                 |
| Cw*060201/060203+Cw*160101                | Cw*0611+Cw*1602               |                        |                 |
| Cw*060201/060203+Cw*1611                  | Cw*0618+Cw*160101             |                        |                 |
| Cw*0604+Cw*0737                           | Cw*0606+Cw*07G2               |                        |                 |
| Cw*0604+Cw*0802                           | Cw*0606+Cw*0804               |                        |                 |
| Cw*0604+Cw*140201                         | Cw*0606+Cw*1406               |                        |                 |
| Cw*0604+Cw*1508                           | Cw*0606+Cw*150201/1513        |                        |                 |
| Cw*0606+Cw*1803                           | Cw*0608+Cw*1801/1802          |                        |                 |
| Cw*0608+Cw*0710                           | Cw*0614+Cw*0715               |                        |                 |

|                                       |                               |                 |                   |
|---------------------------------------|-------------------------------|-----------------|-------------------|
| Cw*07G1+Cw*07G2                       | Cw*0719+Cw*072701             |                 |                   |
| Cw*07G1+Cw*070204                     | Cw*070105+Cw*07G2             |                 |                   |
| Cw*07G1+Cw*070403                     | Cw*070107+Cw*070401/0711      |                 |                   |
| Cw*07G1+Cw*0707                       | Cw*0709+Cw*0716               |                 |                   |
| Cw*07G1+Cw*0710                       | Cw*0719+Cw*0743               |                 |                   |
| Cw*07G1+Cw*072702                     | Cw*070107+Cw*072701           |                 |                   |
| Cw*07G1+Cw*0739                       | Cw*07G2+Cw*0740               |                 |                   |
| Cw*07G1+Cw*0751                       | Cw*07G2+Cw*0716               |                 |                   |
| Cw*07G1+Cw*080101/0820/0822           | Cw*0728+Cw*0811               | Cw*0740+Cw*0821 |                   |
| Cw*07G1+Cw*080102                     | Cw*070107+Cw*080101/0820/0822 |                 |                   |
| Cw*07G1+Cw*0802                       | Cw*0740+Cw*0805               |                 |                   |
| Cw*07G1+Cw*0810                       | Cw*0709+Cw*080101/0820/0822   |                 |                   |
| Cw*07G1+Cw*120201/120202              | Cw*070107+Cw*120203           | Cw*0722+Cw*1218 | Cw*072701+Cw*1208 |
| Cw*07G1+Cw*120301/120306              | Cw*0722+Cw*1220               |                 |                   |
| Cw*07G1+Cw*120402                     | Cw*0709+Cw*120301/120306      |                 |                   |
| Cw*07G1+Cw*1205                       | Cw*0740+Cw*120402             |                 |                   |
| Cw*07G1+Cw*1211                       | Cw*0719+Cw*120301/120306      |                 |                   |
| Cw*07G1+Cw*150201/1513                | Cw*0709+Cw*1507               | Cw*0740+Cw*1503 |                   |
| Cw*07G1+Cw*1516                       | Cw*072701+Cw*1503             |                 |                   |
| Cw*07G1+Cw*1517                       | Cw*072701+Cw*150201/1513      | Cw*0740+Cw*1516 |                   |
| Cw*07G1+Cw*1520                       | Cw*072701+Cw*1509             |                 |                   |
| Cw*07G1+Cw*1602                       | Cw*0709+Cw*160101             |                 |                   |
| Cw*070105+Cw*0714                     | Cw*072702+Cw*0757             |                 |                   |
| Cw*070105+Cw*0739                     | Cw*070204+Cw*0740             |                 |                   |
| Cw*070105+Cw*0751                     | Cw*070204+Cw*0716             |                 |                   |
| Cw*070107+Cw*07G2                     | Cw*0719+Cw*072702             |                 |                   |
| Cw*070107+Cw*0810                     | Cw*0709+Cw*080102             |                 |                   |
| Cw*070107+Cw*120201/120202            | Cw*072702+Cw*1208             |                 |                   |
| Cw*070107+Cw*1516                     | Cw*072702+Cw*1503             |                 |                   |
| Cw*070107+Cw*1517                     | Cw*072702+Cw*150201/1513      |                 |                   |
| Cw*070107+Cw*1520                     | Cw*072702+Cw*1509             |                 |                   |
| Cw*070107+Cw*1606                     | Cw*0719+Cw*1607               |                 |                   |
| Cw*07G2+Cw*0707                       | Cw*0709+Cw*0751               |                 |                   |
| Cw*07G2+Cw*0712                       | Cw*070401/0711+Cw*0717        |                 |                   |
| Cw*07G2+Cw*0743                       | Cw*0710+Cw*072701             |                 |                   |
| Cw*07G2+Cw*0760                       | Cw*0716+Cw*0756               |                 |                   |
| Cw*07G2+Cw*080101/0820/0822           | Cw*0739+Cw*0821               |                 |                   |
| Cw*07G2+Cw*0802                       | Cw*0717+Cw*0807               | Cw*0737+Cw*0804 | Cw*0739+Cw*0805   |
| Cw*07G2+Cw*120301/120306              | Cw*072701+Cw*1211             |                 |                   |
| Cw*07G2+Cw*1205                       | Cw*0739+Cw*120402             |                 |                   |
| Cw*07G2+Cw*1208                       | Cw*0719+Cw*120201/120202      |                 |                   |
| Cw*07G2+Cw*140201                     | Cw*0737+Cw*1406               |                 |                   |
| Cw*07G2+Cw*1410                       | Cw*0756+Cw*1403               |                 |                   |
| Cw*07G2+Cw*150201/1513                | Cw*0719+Cw*1517               | Cw*0739+Cw*1503 | Cw*0749+Cw*1521   |
| Cw*07G2+Cw*1503                       | Cw*0719+Cw*1516               |                 |                   |
| Cw*07G2+Cw*1505G1                     | Cw*0713+Cw*1509               |                 |                   |
| Cw*07G2+Cw*1506                       | Cw*0729+Cw*1509               |                 |                   |
| Cw*07G2+Cw*1508                       | Cw*0737+Cw*150201/1513        |                 |                   |
| Cw*07G2+Cw*1509                       | Cw*0719+Cw*1520               |                 |                   |
| Cw*07G2+Cw*1512                       | Cw*0756+Cw*150201/1513        |                 |                   |
| Cw*07G2+Cw*1517                       | Cw*0739+Cw*1516               |                 |                   |
| Cw*07G2+Cw*160101                     | Cw*0731+Cw*1606               |                 |                   |
| Cw*07G2+Cw*1607                       | Cw*072702+Cw*1606             |                 |                   |
| Cw*070401/0711+Cw*072702              | Cw*070403+Cw*072701           |                 |                   |
| Cw*070401/0711+Cw*080102              | Cw*070403+Cw*080101/0820/0822 |                 |                   |
| Cw*070401/0711+Cw*0802                | Cw*0712+Cw*0807               |                 |                   |
| Cw*070401/0711+Cw*0815                | Cw*0745+Cw*0802               |                 |                   |
| Cw*070401/0711+Cw*120201/120202       | Cw*070403+Cw*120203           |                 |                   |
| Cw*0707+Cw*080101/0820/0822           | Cw*0716+Cw*0810               |                 |                   |
| Cw*0707+Cw*120301/120306              | Cw*0716+Cw*120402             |                 |                   |
| Cw*0707+Cw*1507                       | Cw*0716+Cw*150201/1513        |                 |                   |
| Cw*0707+Cw*160101                     | Cw*0716+Cw*1602               |                 |                   |
| Cw*0708+Cw*1405                       | Cw*072701+Cw*140201           |                 |                   |
| Cw*0709+Cw*1211                       | Cw*0719+Cw*120402             |                 |                   |
| Cw*0710+Cw*120301/120306              | Cw*0743+Cw*1211               |                 |                   |
| Cw*0713+Cw*1506                       | Cw*0729+Cw*1505G1             |                 |                   |
| Cw*0716+Cw*0739                       | Cw*0740+Cw*0751               |                 |                   |
| Cw*0716+Cw*1410                       | Cw*0760+Cw*1403               |                 |                   |
| Cw*0716+Cw*1512                       | Cw*0760+Cw*150201/1513        |                 |                   |
| Cw*0722+Cw*160101                     | Cw*0753+Cw*160401             |                 |                   |
| Cw*072701+Cw*080102                   | Cw*072702+Cw*080101/0820/0822 |                 |                   |
| Cw*072701+Cw*0812                     | Cw*0731+Cw*0802               |                 |                   |
| Cw*072701+Cw*120201/120202            | Cw*072702+Cw*120203           |                 |                   |
| Cw*072702+Cw*1405                     | Cw*0731+Cw*1409               |                 |                   |
| Cw*072702+Cw*160101                   | Cw*0731+Cw*1607               |                 |                   |
| Cw*0737+Cw*1512                       | Cw*0756+Cw*1508               |                 |                   |
| Cw*0739+Cw*1404                       | Cw*0749+Cw*140201             |                 |                   |
| Cw*080101/0820/0822+Cw*0805           | Cw*0802+Cw*0821               |                 |                   |
| Cw*080101/0820/0822+Cw*0813           | Cw*0804+Cw*0816               |                 |                   |
| Cw*080101/0820/0822+Cw*120201/120202  | Cw*080102+Cw*120203           |                 |                   |
| Cw*080101/0820/0822+Cw*120402         | Cw*0810+Cw*120301/120306      | Cw*0821+Cw*1205 |                   |
| Cw*080101/0820/0822+Cw*150201/1513    | Cw*0810+Cw*1507               |                 |                   |
| Cw*080101/0820/0822+Cw*1503           | Cw*0821+Cw*150201/1513        |                 |                   |
| Cw*080101/0820/0822+Cw*1516           | Cw*0821+Cw*1517               |                 |                   |
| Cw*080101/0820/0822+Cw*1602           | Cw*0810+Cw*160101             |                 |                   |
| Cw*080101/0820/0822+Cw*1701/1702/1703 | Cw*0816+Cw*1705               |                 |                   |
| Cw*0802+Cw*1210                       | Cw*0819+Cw*120203             |                 |                   |
| Cw*0802+Cw*1406                       | Cw*0804+Cw*140201             |                 |                   |
| Cw*0802+Cw*1503                       | Cw*0805+Cw*150201/1513        |                 |                   |
| Cw*0802+Cw*1516                       | Cw*0805+Cw*1517               |                 |                   |
| Cw*0804+Cw*1701/1702/1703             | Cw*0813+Cw*1705               |                 |                   |
| Cw*120201/120202+Cw*1220              | Cw*120301/120306+Cw*1218      |                 |                   |
| Cw*120201/120202+Cw*150201/1513       | Cw*1208+Cw*1517               |                 |                   |
| Cw*120201/120202+Cw*1503              | Cw*1208+Cw*1516               |                 |                   |
| Cw*120201/120202+Cw*1509              | Cw*1208+Cw*1520               |                 |                   |
| Cw*120301/120306+Cw*140201            | Cw*120304+Cw*140203           |                 |                   |
| Cw*120301/120306+Cw*150201/1513       | Cw*120402+Cw*1507             | Cw*1215+Cw*1504 |                   |
| Cw*120301/120306+Cw*160102            | Cw*120304+Cw*160101           |                 |                   |
| Cw*120301/120306+Cw*1602              | Cw*120402+Cw*160101           |                 |                   |
| Cw*120304+Cw*1602                     | Cw*120402+Cw*160102           |                 |                   |
| Cw*120402+Cw*150201/1513              | Cw*1205+Cw*1503               |                 |                   |
| Cw*120402+Cw*1517                     | Cw*1205+Cw*1516               |                 |                   |
| Cw*140201+Cw*150201/1513              | Cw*1406+Cw*1508               |                 |                   |
| Cw*140201+Cw*1503                     | Cw*1404+Cw*1521               |                 |                   |

---

|                          |                        |
|--------------------------|------------------------|
| Cw*140201+Cw*160101      | Cw*140203+Cw*160102    |
| Cw*140203+Cw*150201/1513 | Cw*1403+Cw*151002      |
| Cw*140203+Cw*1512        | Cw*1410+Cw*151002      |
| Cw*1403+Cw*1512          | Cw*1410+Cw*150201/1513 |
| Cw*1405+Cw*1607          | Cw*1409+Cw*160101      |
| Cw*150201/1513+Cw*1516   | Cw*1503+Cw*1517        |
| Cw*150201/1513+Cw*1520   | Cw*1509+Cw*1517        |
| Cw*150201/1513+Cw*160101 | Cw*1507+Cw*1602        |
| Cw*1503+Cw*1520          | Cw*1509+Cw*1516        |

---

## **HLA-DPA1 Ambiguities, Release 2.25.0**

### ***Sequences identical over exons 2***

| <i>Allele 1</i> | <i>Code in table</i> |
|-----------------|----------------------|
| None            |                      |

### ***Alleles extended due to unsequenced regions***

The following alleles do not contain the complete exon 2 sequence. For these alleles, the sequence of an alternate allele has been used to extend the sequence to cover this region.

| <i>Incomplete allele</i> | <i>Sequence extended with</i> |
|--------------------------|-------------------------------|
| DPA1*010302              | DPA1*010301                   |
| DPA1*0104                | DPA1*010301                   |
| DPA1*0105                | DPA1*010301                   |
| DPA1*0107                | DPA1*010301                   |
| DPA1*020104              | DPA1*020101                   |
| DPA1*020201              | DPA1*020101                   |
| DPA1*020203              | DPA1*020101                   |
| DPA1*0203                | DPA1*020101                   |
| DPA1*0301                | DPA1*010301                   |
| DPA1*0302                | DPA1*010301                   |
| DPA1*0401                | DPA1*010301                   |

### ***Alleles removed from analysis due to insertions or deletions***

| <i>Allele</i> |
|---------------|
| None          |

### ***Ambiguous typing combinations over exon 2***

| <i>Combination 1</i>    | <i>Combination 2</i>    | <i>Combination 3</i>  | <i>Combination 4</i> |
|-------------------------|-------------------------|-----------------------|----------------------|
| DPA1*010301+DPA1*020101 | DPA1*010303+DPA1*020102 | DPA1*010601+DPA1*0203 |                      |
| DPA1*010301+DPA1*020105 | DPA1*010302+DPA1*020103 |                       |                      |
| DPA1*010301+DPA1*020202 | DPA1*010302+DPA1*020203 | DPA1*020105+DPA1*0302 |                      |
| DPA1*010301+DPA1*020203 | DPA1*020103+DPA1*0302   |                       |                      |
| DPA1*010301+DPA1*0303   | DPA1*0104+DPA1*0301     |                       |                      |
| DPA1*010303+DPA1*020103 | DPA1*010602+DPA1*0203   |                       |                      |
| DPA1*010601+DPA1*020103 | DPA1*010602+DPA1*020102 |                       |                      |
| DPA1*020103+DPA1*020202 | DPA1*020105+DPA1*020203 |                       |                      |

## **HLA-DPB1 Ambiguities, Release 2.25.0**

### ***Sequences identical over exons 2***

| <i>Allele 1</i> | <i>Allele 2</i> | <i>Code in table</i> |
|-----------------|-----------------|----------------------|
| DPB1*030101     | DPB1*0502       | DPB1*030101/0502     |
| DPB1*0402       | DPB1*0602       | DPB1*0402/0602       |
| DPB1*050101     | DPB1*050102     | DPB1*050101/050102   |
| DPB1*0802       | DPB1*1901       | DPB1*0802/1901       |
| DPB1*0902       | DPB1*1301       | DPB1*0902/1301       |

### ***Alleles extended due to unsequenced regions***

The following alleles do not contain the complete exon 2 sequence. For these alleles, the sequence of an alternate allele has been used to extend the sequence to cover this region.

| <i>Incomplete allele</i> | <i>Sequence extended with</i> |
|--------------------------|-------------------------------|
| DPB1*020104              | DPB1*010101                   |
| DPB1*0302                | DPB1*010101                   |
| DPB1*0801                | DPB1*010101                   |
| DPB1*110102              | DPB1*010101                   |
| DPB1*200102              | DPB1*010101                   |
| DPB1*260101              | DPB1*010101                   |
| DPB1*260102              | DPB1*010101                   |
| DPB1*3001                | DPB1*010101                   |
| DPB1*3301                | DPB1*010101                   |
| DPB1*3401                | DPB1*010101                   |
| DPB1*3501                | DPB1*010101                   |
| DPB1*3701                | DPB1*010101                   |
| DPB1*3801                | DPB1*010101                   |
| DPB1*3901                | DPB1*010101                   |
| DPB1*4001                | DPB1*010101                   |
| DPB1*410101              | DPB1*010101                   |
| DPB1*4501                | DPB1*010101                   |
| DPB1*4801                | DPB1*010101                   |
| DPB1*4901                | DPB1*010101                   |
| DPB1*5001                | DPB1*010101                   |
| DPB1*5201                | DPB1*010101                   |
| DPB1*5301                | DPB1*010101                   |
| DPB1*5401                | DPB1*010101                   |
| DPB1*5501                | DPB1*010101                   |
| DPB1*5601                | DPB1*010101                   |
| DPB1*5701                | DPB1*010101                   |
| DPB1*5801                | DPB1*010101                   |
| DPB1*5901                | DPB1*010101                   |
| DPB1*6001                | DPB1*010101                   |
| DPB1*6101N               | DPB1*010101                   |
| DPB1*6201                | DPB1*010101                   |
| DPB1*6301                | DPB1*010101                   |
| DPB1*6401N               | DPB1*010101                   |
| DPB1*6801                | DPB1*010101                   |
| DPB1*6901                | DPB1*010101                   |
| DPB1*7001                | DPB1*010101                   |
| DPB1*7101                | DPB1*010101                   |
| DPB1*7201                | DPB1*010101                   |
| DPB1*7301                | DPB1*010101                   |
| DPB1*7401                | DPB1*010101                   |
| DPB1*7501                | DPB1*010101                   |
| DPB1*7601                | DPB1*010101                   |
| DPB1*8401                | DPB1*010101                   |
| DPB1*8601                | DPB1*010101                   |

### ***Alleles removed from analysis due to insertions or deletions***

| <i>Allele</i> |
|---------------|
| None          |

## Ambiguous typing combinations over exon 2

| Combination 1                | Combination 2                  | Combination 3                | Combination 4                |
|------------------------------|--------------------------------|------------------------------|------------------------------|
| DPB1*010101+DPB1*030101/0502 | DPB1*260102+DPB1*5001          |                              |                              |
| DPB1*010101+DPB1*040101      | DPB1*3901+DPB1*9001            |                              |                              |
| DPB1*010101+DPB1*0402/0602   | DPB1*7501+DPB1*8901            |                              |                              |
| DPB1*010101+DPB1*0601        | DPB1*2901+DPB1*8901            |                              |                              |
| DPB1*010101+DPB1*1002        | DPB1*3901+DPB1*5001            |                              |                              |
| DPB1*010101+DPB1*1302        | DPB1*0902/1301+DPB1*9001       |                              |                              |
| DPB1*010101+DPB1*1402        | DPB1*030101/0502+DPB1*2102     |                              |                              |
| DPB1*010101+DPB1*1601        | DPB1*0801+DPB1*8901            |                              |                              |
| DPB1*010101+DPB1*1701        | DPB1*0901+DPB1*8901            |                              |                              |
| DPB1*010101+DPB1*200101      | DPB1*030101/0502+DPB1*8901     | DPB1*2701+DPB1*5001          |                              |
| DPB1*010101+DPB1*2701        | DPB1*260102+DPB1*8901          |                              |                              |
| DPB1*010101+DPB1*3001        | DPB1*5401+DPB1*8901            |                              |                              |
| DPB1*010101+DPB1*5101        | DPB1*4901+DPB1*9001            |                              |                              |
| DPB1*010101+DPB1*5701        | DPB1*5001+DPB1*6501            |                              |                              |
| DPB1*010101+DPB1*5901        | DPB1*7301+DPB1*8901            |                              |                              |
| DPB1*010101+DPB1*7401        | DPB1*1501+DPB1*260102          |                              |                              |
| DPB1*010101+DPB1*8701        | DPB1*5201+DPB1*8901            |                              |                              |
| DPB1*010101+DPB1*9101        | DPB1*1401+DPB1*8901            |                              |                              |
| DPB1*010101+DPB1*9301        | DPB1*3701+DPB1*8901            |                              |                              |
| DPB1*010101+DPB1*9801        | DPB1*3501+DPB1*8901            |                              |                              |
| DPB1*0102+DPB1*020102        | DPB1*0202+DPB1*0402/0602       | DPB1*1902+DPB1*4701          |                              |
| DPB1*0102+DPB1*030101/0502   | DPB1*1702+DPB1*8001            |                              |                              |
| DPB1*0102+DPB1*0302          | DPB1*050101/050102+DPB1*7201   |                              |                              |
| DPB1*0102+DPB1*040101        | DPB1*1502+DPB1*2401            |                              |                              |
| DPB1*0102+DPB1*0403          | DPB1*050101/050102+DPB1*7101   | DPB1*2201+DPB1*2301          | DPB1*4701+DPB1*6301          |
| DPB1*0102+DPB1*0601          | DPB1*0202+DPB1*200101          | DPB1*1002+DPB1*2101          |                              |
| DPB1*0102+DPB1*0801          | DPB1*0202+DPB1*6801            | DPB1*2201+DPB1*7501          |                              |
| DPB1*0102+DPB1*0901          | DPB1*0202+DPB1*3501            |                              |                              |
| DPB1*0102+DPB1*1001          | DPB1*1902+DPB1*5401            |                              |                              |
| DPB1*0102+DPB1*1601          | DPB1*020102+DPB1*050101/050102 | DPB1*0402/0602+DPB1*2201     |                              |
| DPB1*0102+DPB1*1701          | DPB1*0202+DPB1*9801            | DPB1*050101/050102+DPB1*8601 |                              |
| DPB1*0102+DPB1*200101        | DPB1*1002+DPB1*3601            |                              |                              |
| DPB1*0102+DPB1*2101          | DPB1*0202+DPB1*3601            |                              |                              |
| DPB1*0102+DPB1*2201          | DPB1*0202+DPB1*050101/050102   |                              |                              |
| DPB1*0102+DPB1*2501          | DPB1*0402/0602+DPB1*1702       | DPB1*3601+DPB1*7301          |                              |
| DPB1*0102+DPB1*2701          | DPB1*3601+DPB1*3901            |                              |                              |
| DPB1*0102+DPB1*2901          | DPB1*0202+DPB1*030101/0502     | DPB1*1702+DPB1*4601          |                              |
| DPB1*0102+DPB1*3301          | DPB1*0202+DPB1*040101          |                              |                              |
| DPB1*0102+DPB1*3701          | DPB1*0202+DPB1*7901            | DPB1*2101+DPB1*7501          |                              |
| DPB1*0102+DPB1*410101        | DPB1*0202+DPB1*8301            |                              |                              |
| DPB1*0102+DPB1*4601          | DPB1*0202+DPB1*8001            |                              |                              |
| DPB1*0102+DPB1*4801          | DPB1*0202+DPB1*1902            |                              |                              |
| DPB1*0102+DPB1*5101          | DPB1*1902+DPB1*2401            |                              |                              |
| DPB1*0102+DPB1*5201          | DPB1*1702+DPB1*2301            |                              |                              |
| DPB1*0102+DPB1*5501          | DPB1*1502+DPB1*3001            |                              |                              |
| DPB1*0102+DPB1*5601          | DPB1*040101+DPB1*1702          |                              |                              |
| DPB1*0102+DPB1*6301          | DPB1*050101/050102+DPB1*1502   |                              |                              |
| DPB1*0102+DPB1*6801          | DPB1*050101/050102+DPB1*7501   |                              |                              |
| DPB1*0102+DPB1*7101          | DPB1*0202+DPB1*2301            | DPB1*1502+DPB1*4701          |                              |
| DPB1*0102+DPB1*7901          | DPB1*3601+DPB1*7501            |                              |                              |
| DPB1*0102+DPB1*8101          | DPB1*0202+DPB1*5101            | DPB1*2401+DPB1*4801          |                              |
| DPB1*0102+DPB1*9301          | DPB1*020102+DPB1*3601          | DPB1*0402/0602+DPB1*2101     | DPB1*050101/050102+DPB1*1102 |
| DPB1*020102+DPB1*0202        | DPB1*4701+DPB1*4801            |                              |                              |
| DPB1*020102+DPB1*030101/0502 | DPB1*0402/0602+DPB1*2901       | DPB1*0601+DPB1*7501          | DPB1*1002+DPB1*3701          |
|                              | DPB1*1102+DPB1*5701            | DPB1*2501+DPB1*4601          | DPB1*5901+DPB1*8801          |
|                              | DPB1*1601+DPB1*7201            |                              |                              |
| DPB1*020102+DPB1*040101      | DPB1*0402/0602+DPB1*3301       | DPB1*2301+DPB1*8101          | DPB1*5101+DPB1*7101          |
| DPB1*020102+DPB1*0403        | DPB1*1601+DPB1*7101            |                              |                              |
| DPB1*020102+DPB1*0901        | DPB1*0801+DPB1*8601            | DPB1*1001+DPB1*4601          |                              |
| DPB1*020102+DPB1*1001        | DPB1*0801+DPB1*1602            |                              |                              |
| DPB1*020102+DPB1*1002        | DPB1*4601+DPB1*5901            |                              |                              |
| DPB1*020102+DPB1*1401        | DPB1*0901+DPB1*5901            | DPB1*1001+DPB1*1002          | DPB1*1602+DPB1*5701          |
|                              | DPB1*1701+DPB1*7301            | DPB1*4501+DPB1*4601          |                              |
| DPB1*020102+DPB1*1502        | DPB1*1902+DPB1*7101            | DPB1*2301+DPB1*4801          |                              |
| DPB1*020102+DPB1*1701        | DPB1*1601+DPB1*8601            |                              |                              |
| DPB1*020102+DPB1*1702        | DPB1*0202+DPB1*2501            | DPB1*2101+DPB1*7301          |                              |
| DPB1*020102+DPB1*1902        | DPB1*0402/0602+DPB1*4801       |                              |                              |
| DPB1*020102+DPB1*200101      | DPB1*0402/0602+DPB1*0601       | DPB1*1002+DPB1*9301          |                              |
| DPB1*020102+DPB1*2101        | DPB1*0202+DPB1*9301            | DPB1*1102+DPB1*2201          |                              |
| DPB1*020102+DPB1*2201        | DPB1*0202+DPB1*1601            |                              |                              |
| DPB1*020102+DPB1*2301        | DPB1*0402/0602+DPB1*7101       |                              |                              |
| DPB1*020102+DPB1*2401        | DPB1*4701+DPB1*5101            |                              |                              |
| DPB1*020102+DPB1*2501        | DPB1*3701+DPB1*5901            | DPB1*7301+DPB1*9301          |                              |
| DPB1*020102+DPB1*260102      | DPB1*1102+DPB1*6501            | DPB1*2002+DPB1*6801          | DPB1*3701+DPB1*3901          |
| DPB1*020102+DPB1*2701        | DPB1*3901+DPB1*9301            |                              |                              |
| DPB1*020102+DPB1*3301        | DPB1*7101+DPB1*8101            |                              |                              |
| DPB1*020102+DPB1*3501        | DPB1*0402/0602+DPB1*0901       | DPB1*1001+DPB1*8001          | DPB1*1701+DPB1*7501          |
|                              | DPB1*6801+DPB1*8601            |                              |                              |
| DPB1*020102+DPB1*3701        | DPB1*0801+DPB1*1102            |                              |                              |
| DPB1*020102+DPB1*3901        | DPB1*4901+DPB1*7101            |                              |                              |
| DPB1*020102+DPB1*4001        | DPB1*5301+DPB1*7101            |                              |                              |
| DPB1*020102+DPB1*4401        | DPB1*2901+DPB1*4801            |                              |                              |
| DPB1*020102+DPB1*4501        | DPB1*1001+DPB1*5901            |                              |                              |
| DPB1*020102+DPB1*5101        | DPB1*0402/0602+DPB1*8101       |                              |                              |
| DPB1*020102+DPB1*5201        | DPB1*2501+DPB1*7101            |                              |                              |
| DPB1*020102+DPB1*5401        | DPB1*1001+DPB1*4701            |                              |                              |
| DPB1*020102+DPB1*5501        | DPB1*0403+DPB1*1602            |                              |                              |
| DPB1*020102+DPB1*5601        | DPB1*2501+DPB1*3301            | DPB1*3701+DPB1*7201          | DPB1*5201+DPB1*8101          |
| DPB1*020102+DPB1*5701        | DPB1*0801+DPB1*1002            |                              |                              |
| DPB1*020102+DPB1*5801        | DPB1*4801+DPB1*5501            |                              |                              |
| DPB1*020102+DPB1*6301        | DPB1*0403+DPB1*1902            | DPB1*1502+DPB1*1601          |                              |
| DPB1*020102+DPB1*6501        | DPB1*0801+DPB1*3901            |                              |                              |
| DPB1*020102+DPB1*6601        | DPB1*040101+DPB1*1602          |                              |                              |
| DPB1*020102+DPB1*6701        | DPB1*4501+DPB1*7101            | DPB1*5501+DPB1*7301          |                              |
| DPB1*020102+DPB1*6801        | DPB1*0402/0602+DPB1*0801       | DPB1*1601+DPB1*7501          |                              |
| DPB1*020102+DPB1*7201        | DPB1*3301+DPB1*5901            |                              |                              |
| DPB1*020102+DPB1*7601        | DPB1*1401+DPB1*8101            |                              |                              |
| DPB1*020102+DPB1*7901        | DPB1*0402/0602+DPB1*3701       | DPB1*1102+DPB1*6801          | DPB1*7501+DPB1*9301          |

|                                     |                              |                       |                     |
|-------------------------------------|------------------------------|-----------------------|---------------------|
| DPB1*020102+DPB1*8001               | DPB1*0402/0602+DPB1*4601     |                       |                     |
| DPB1*020102+DPB1*8301               | DPB1*0402/0602+DPB1*410101   |                       |                     |
| DPB1*020102+DPB1*8601               | DPB1*1602+DPB1*4601          |                       |                     |
| DPB1*020102+DPB1*8801               | DPB1*3701+DPB1*4601          |                       |                     |
| DPB1*020102+DPB1*9101               | DPB1*1701+DPB1*5901          |                       |                     |
| DPB1*020102+DPB1*9201               | DPB1*030101/0502+DPB1*8101   | DPB1*2901+DPB1*5101   |                     |
| DPB1*020102+DPB1*9301               | DPB1*1102+DPB1*1601          |                       |                     |
| DPB1*020102+DPB1*9801               | DPB1*0402/0602+DPB1*1701     |                       |                     |
| DPB1*0202+DPB1*0302                 | DPB1*2201+DPB1*7201          |                       |                     |
| DPB1*0202+DPB1*0403                 | DPB1*2201+DPB1*7101          |                       |                     |
| DPB1*0202+DPB1*1001                 | DPB1*4801+DPB1*5401          |                       |                     |
| DPB1*0202+DPB1*1701                 | DPB1*2201+DPB1*8601          |                       |                     |
| DPB1*0202+DPB1*2701                 | DPB1*050101/050102+DPB1*2002 | DPB1*2101+DPB1*3901   |                     |
| DPB1*0202+DPB1*2901                 | DPB1*4401+DPB1*4701          |                       |                     |
| DPB1*0202+DPB1*5201                 | DPB1*1702+DPB1*7101          |                       |                     |
| DPB1*0202+DPB1*5501                 | DPB1*4701+DPB1*5801          |                       |                     |
| DPB1*0202+DPB1*5601                 | DPB1*1702+DPB1*3301          |                       |                     |
| DPB1*0202+DPB1*6301                 | DPB1*1502+DPB1*2201          |                       |                     |
| DPB1*0202+DPB1*7201                 | DPB1*2401+DPB1*9501          |                       |                     |
| DPB1*0202+DPB1*9201                 | DPB1*2401+DPB1*4401          |                       |                     |
| DPB1*030101/0502+DPB1*040101        | DPB1*2301+DPB1*9201          | DPB1*5601+DPB1*8001   |                     |
| DPB1*030101/0502+DPB1*0402/0602     | DPB1*1002+DPB1*7901          | DPB1*200101+DPB1*7501 | DPB1*2501+DPB1*8001 |
| DPB1*030101/0502+DPB1*050101/050102 | DPB1*3601+DPB1*5701          |                       |                     |
| DPB1*030101/0502+DPB1*0601          | DPB1*200101+DPB1*2901        |                       |                     |
| DPB1*030101/0502+DPB1*0801          | DPB1*2901+DPB1*6801          | DPB1*3701+DPB1*5701   |                     |
| DPB1*030101/0502+DPB1*0901          | DPB1*1401+DPB1*8801          | DPB1*2901+DPB1*3501   |                     |
| DPB1*030101/0502+DPB1*1001          | DPB1*0901+DPB1*2501          | DPB1*1401+DPB1*3701   | DPB1*4501+DPB1*8801 |
| DPB1*030101/0502+DPB1*1501          | DPB1*5001+DPB1*7401          |                       |                     |
| DPB1*030101/0502+DPB1*1601          | DPB1*0601+DPB1*6801          | DPB1*0801+DPB1*200101 | DPB1*5701+DPB1*9301 |
| DPB1*030101/0502+DPB1*1602          | DPB1*1102+DPB1*1401          | DPB1*2501+DPB1*8601   |                     |
| DPB1*030101/0502+DPB1*1701          | DPB1*0601+DPB1*3501          | DPB1*0901+DPB1*200101 | DPB1*2901+DPB1*9801 |
|                                     | DPB1*8801+DPB1*9101          |                       |                     |
| DPB1*030101/0502+DPB1*2101          | DPB1*2901+DPB1*3601          |                       |                     |
| DPB1*030101/0502+DPB1*2201          | DPB1*050101/050102+DPB1*2901 | DPB1*2101+DPB1*5701   |                     |
| DPB1*030101/0502+DPB1*2301          | DPB1*5201+DPB1*8001          |                       |                     |
| DPB1*030101/0502+DPB1*2701          | DPB1*200101+DPB1*260102      |                       |                     |
| DPB1*030101/0502+DPB1*3001          | DPB1*200101+DPB1*5401        |                       |                     |
| DPB1*030101/0502+DPB1*3301          | DPB1*040101+DPB1*2901        | DPB1*4601+DPB1*5601   | DPB1*7101+DPB1*9201 |
|                                     | DPB1*7201+DPB1*8801          |                       |                     |
| DPB1*030101/0502+DPB1*3701          | DPB1*2501+DPB1*8801          | DPB1*2901+DPB1*7901   |                     |
| DPB1*030101/0502+DPB1*3901          | DPB1*1002+DPB1*260102        |                       |                     |
| DPB1*030101/0502+DPB1*410101        | DPB1*2901+DPB1*8301          |                       |                     |
| DPB1*030101/0502+DPB1*4501          | DPB1*1401+DPB1*2501          |                       |                     |
| DPB1*030101/0502+DPB1*4601          | DPB1*1002+DPB1*8801          | DPB1*2901+DPB1*8001   |                     |
| DPB1*030101/0502+DPB1*4801          | DPB1*0402/0602+DPB1*4401     | DPB1*1902+DPB1*2901   |                     |
| DPB1*030101/0502+DPB1*5101          | DPB1*0402/0602+DPB1*9201     |                       |                     |
| DPB1*030101/0502+DPB1*5501          | DPB1*0901+DPB1*8701          | DPB1*1701+DPB1*5201   |                     |
| DPB1*030101/0502+DPB1*5601          | DPB1*5201+DPB1*9201          |                       |                     |
| DPB1*030101/0502+DPB1*5901          | DPB1*1002+DPB1*2501          | DPB1*200101+DPB1*7301 |                     |
| DPB1*030101/0502+DPB1*6501          | DPB1*260102+DPB1*5701        |                       |                     |
| DPB1*030101/0502+DPB1*6701          | DPB1*1401+DPB1*5201          |                       |                     |
| DPB1*030101/0502+DPB1*6801          | DPB1*5701+DPB1*7901          |                       |                     |
| DPB1*030101/0502+DPB1*7101          | DPB1*2301+DPB1*2901          | DPB1*4601+DPB1*5201   |                     |
| DPB1*030101/0502+DPB1*7201          | DPB1*1002+DPB1*5601          |                       |                     |
| DPB1*030101/0502+DPB1*7601          | DPB1*1401+DPB1*9201          |                       |                     |
| DPB1*030101/0502+DPB1*8701          | DPB1*200101+DPB1*5201        |                       |                     |
| DPB1*030101/0502+DPB1*9101          | DPB1*1401+DPB1*200101        |                       |                     |
| DPB1*030101/0502+DPB1*9301          | DPB1*0601+DPB1*7901          | DPB1*200101+DPB1*3701 |                     |
| DPB1*030101/0502+DPB1*9801          | DPB1*200101+DPB1*3501        |                       |                     |
| DPB1*0302+DPB1*0901                 | DPB1*0403+DPB1*7601          |                       |                     |
| DPB1*0302+DPB1*1102                 | DPB1*7201+DPB1*9301          | DPB1*8101+DPB1*8701   |                     |
| DPB1*0302+DPB1*1502                 | DPB1*6301+DPB1*7201          |                       |                     |
| DPB1*0302+DPB1*3701                 | DPB1*1601+DPB1*5601          |                       |                     |
| DPB1*0302+DPB1*7101                 | DPB1*0403+DPB1*7201          |                       |                     |
| DPB1*0302+DPB1*7501                 | DPB1*6801+DPB1*7201          |                       |                     |
| DPB1*0302+DPB1*8601                 | DPB1*1701+DPB1*7201          | DPB1*3301+DPB1*9101   |                     |
| DPB1*0302+DPB1*8801                 | DPB1*0403+DPB1*9201          |                       |                     |
| DPB1*040101+DPB1*0402/0602          | DPB1*2301+DPB1*5101          |                       |                     |
| DPB1*040101+DPB1*050101/050102      | DPB1*2401+DPB1*6301          |                       |                     |
| DPB1*040101+DPB1*0601               | DPB1*200101+DPB1*3301        |                       |                     |
| DPB1*040101+DPB1*0801               | DPB1*3301+DPB1*6801          |                       |                     |
| DPB1*040101+DPB1*0901               | DPB1*3301+DPB1*3501          |                       |                     |
| DPB1*040101+DPB1*0902/1301          | DPB1*1302+DPB1*3901          |                       |                     |
| DPB1*040101+DPB1*1001               | DPB1*0801+DPB1*6601          |                       |                     |
| DPB1*040101+DPB1*1002               | DPB1*7201+DPB1*8001          |                       |                     |
| DPB1*040101+DPB1*1401               | DPB1*2301+DPB1*7601          | DPB1*3501+DPB1*7201   | DPB1*5701+DPB1*6601 |
| DPB1*040101+DPB1*1601               | DPB1*0403+DPB1*5101          |                       |                     |
| DPB1*040101+DPB1*1701               | DPB1*3301+DPB1*9801          |                       |                     |
| DPB1*040101+DPB1*1902               | DPB1*1502+DPB1*5101          |                       |                     |
| DPB1*040101+DPB1*2101               | DPB1*3301+DPB1*3601          |                       |                     |
| DPB1*040101+DPB1*2201               | DPB1*050101/050102+DPB1*3301 |                       |                     |
| DPB1*040101+DPB1*2501               | DPB1*0402/0602+DPB1*5601     | DPB1*5101+DPB1*5201   | DPB1*7201+DPB1*7901 |
| DPB1*040101+DPB1*3001               | DPB1*2401+DPB1*5501          |                       |                     |
| DPB1*040101+DPB1*3701               | DPB1*3301+DPB1*7901          |                       |                     |
| DPB1*040101+DPB1*410101             | DPB1*3301+DPB1*8301          |                       |                     |
| DPB1*040101+DPB1*4501               | DPB1*5101+DPB1*6701          |                       |                     |
| DPB1*040101+DPB1*4601               | DPB1*3301+DPB1*8001          |                       |                     |
| DPB1*040101+DPB1*4701               | DPB1*2401+DPB1*7101          |                       |                     |
| DPB1*040101+DPB1*4801               | DPB1*1502+DPB1*8101          | DPB1*1902+DPB1*3301   |                     |
| DPB1*040101+DPB1*4901               | DPB1*3901+DPB1*5101          |                       |                     |
| DPB1*040101+DPB1*5001               | DPB1*1002+DPB1*9001          |                       |                     |
| DPB1*040101+DPB1*5201               | DPB1*2301+DPB1*5601          |                       |                     |
| DPB1*040101+DPB1*5301               | DPB1*4Q01+DPB1*5101          |                       |                     |
| DPB1*040101+DPB1*5501               | DPB1*0403+DPB1*6601          |                       |                     |
| DPB1*040101+DPB1*5901               | DPB1*0402/0602+DPB1*7201     |                       |                     |
| DPB1*040101+DPB1*7101               | DPB1*2301+DPB1*3301          |                       |                     |
| DPB1*040101+DPB1*7301               | DPB1*7201+DPB1*7501          |                       |                     |
| DPB1*040101+DPB1*8101               | DPB1*3301+DPB1*5101          |                       |                     |
| DPB1*040101+DPB1*8601               | DPB1*4601+DPB1*6601          |                       |                     |
| DPB1*040101+DPB1*9101               | DPB1*7201+DPB1*9801          |                       |                     |
| DPB1*0402/0602+DPB1*0403            | DPB1*1601+DPB1*2301          |                       |                     |
| DPB1*0402/0602+DPB1*1001            | DPB1*1602+DPB1*6801          |                       |                     |
| DPB1*0402/0602+DPB1*1002            | DPB1*5901+DPB1*8001          |                       |                     |
| DPB1*0402/0602+DPB1*1401            | DPB1*3501+DPB1*5901          | DPB1*4501+DPB1*8001   | DPB1*7301+DPB1*9801 |

|                                |                          |                     |
|--------------------------------|--------------------------|---------------------|
| DPB1*0402/0602+DPB1*1502       | DPB1*7501+DPB1*9101      |                     |
| DPB1*0402/0602+DPB1*2002       | DPB1*1902+DPB1*2301      |                     |
| DPB1*0402/0602+DPB1*2501       | DPB1*1102+DPB1*3901      |                     |
| DPB1*0402/0602+DPB1*260102     | DPB1*5901+DPB1*7901      |                     |
| DPB1*0402/0602+DPB1*3501       | DPB1*2701+DPB1*7501      | DPB1*3901+DPB1*7901 |
| DPB1*0402/0602+DPB1*3901       | DPB1*7501+DPB1*9801      |                     |
| DPB1*0402/0602+DPB1*4001       | DPB1*2301+DPB1*4901      |                     |
| DPB1*0402/0602+DPB1*5201       | DPB1*2301+DPB1*5301      | DPB1*7501+DPB1*8701 |
| DPB1*0402/0602+DPB1*5401       | DPB1*2301+DPB1*2501      |                     |
| DPB1*0402/0602+DPB1*5701       | DPB1*3001+DPB1*7501      |                     |
| DPB1*0402/0602+DPB1*5801       | DPB1*1002+DPB1*6801      |                     |
| DPB1*0402/0602+DPB1*6501       | DPB1*1602+DPB1*6301      | DPB1*1902+DPB1*5501 |
| DPB1*0402/0602+DPB1*6701       | DPB1*3901+DPB1*6801      |                     |
| DPB1*0402/0602+DPB1*7301       | DPB1*2301+DPB1*4501      |                     |
| DPB1*0402/0602+DPB1*7601       | DPB1*5901+DPB1*7501      |                     |
| DPB1*0402/0602+DPB1*8501       | DPB1*1401+DPB1*5101      |                     |
| DPB1*0402/0602+DPB1*8601       | DPB1*2701+DPB1*8201      |                     |
| DPB1*0402/0602+DPB1*8801       | DPB1*1602+DPB1*8001      |                     |
| DPB1*0402/0602+DPB1*9101       | DPB1*3701+DPB1*8001      | DPB1*4601+DPB1*7901 |
| DPB1*0403+DPB1*1001            | DPB1*5901+DPB1*9801      |                     |
| DPB1*0403+DPB1*1102            | DPB1*0801+DPB1*5501      |                     |
| DPB1*0403+DPB1*1401            | DPB1*7101+DPB1*9301      |                     |
| DPB1*0403+DPB1*1502            | DPB1*5501+DPB1*5701      |                     |
| DPB1*0403+DPB1*1702            | DPB1*6301+DPB1*7101      |                     |
| DPB1*0403+DPB1*2501            | DPB1*2201+DPB1*5201      |                     |
| DPB1*0403+DPB1*4501            | DPB1*0801+DPB1*8701      | DPB1*1601+DPB1*5201 |
| DPB1*0403+DPB1*4901            | DPB1*1601+DPB1*6701      |                     |
| DPB1*0403+DPB1*5301            | DPB1*1601+DPB1*3901      |                     |
| DPB1*0403+DPB1*7501            | DPB1*1601+DPB1*4001      |                     |
| DPB1*0403+DPB1*8101            | DPB1*0801+DPB1*2301      | DPB1*6801+DPB1*7101 |
| DPB1*0403+DPB1*8601            | DPB1*1601+DPB1*3301      |                     |
| DPB1*050101/050102+DPB1*0601   | DPB1*1701+DPB1*7101      | DPB1*4601+DPB1*5501 |
| DPB1*050101/050102+DPB1*0801   | DPB1*200101+DPB1*2201    |                     |
| DPB1*050101/050102+DPB1*0901   | DPB1*2201+DPB1*6801      |                     |
| DPB1*050101/050102+DPB1*1602   | DPB1*2201+DPB1*3501      |                     |
| DPB1*050101/050102+DPB1*1701   | DPB1*1902+DPB1*3001      |                     |
| DPB1*050101/050102+DPB1*2101   | DPB1*2201+DPB1*9801      |                     |
| DPB1*050101/050102+DPB1*260102 | DPB1*2201+DPB1*3601      |                     |
| DPB1*050101/050102+DPB1*3701   | DPB1*3601+DPB1*6501      | DPB1*2101+DPB1*6801 |
| DPB1*050101/050102+DPB1*410101 | DPB1*0801+DPB1*3601      | DPB1*2201+DPB1*7901 |
| DPB1*050101/050102+DPB1*4601   | DPB1*2201+DPB1*8301      |                     |
| DPB1*050101/050102+DPB1*4801   | DPB1*2201+DPB1*8001      |                     |
| DPB1*050101/050102+DPB1*5501   | DPB1*1902+DPB1*2201      |                     |
| DPB1*050101/050102+DPB1*7901   | DPB1*3001+DPB1*6301      |                     |
| DPB1*050101/050102+DPB1*8101   | DPB1*3601+DPB1*6801      |                     |
| DPB1*050101/050102+DPB1*9301   | DPB1*2201+DPB1*5101      |                     |
| DPB1*0601+DPB1*0801            | DPB1*1601+DPB1*3601      |                     |
| DPB1*0601+DPB1*0901            | DPB1*1601+DPB1*2901      |                     |
| DPB1*0601+DPB1*1401            | DPB1*1701+DPB1*2901      |                     |
| DPB1*0601+DPB1*1902            | DPB1*2901+DPB1*9101      |                     |
| DPB1*0601+DPB1*2301            | DPB1*200101+DPB1*4801    |                     |
| DPB1*0601+DPB1*260102          | DPB1*200101+DPB1*7101    | DPB1*4601+DPB1*8701 |
| DPB1*0601+DPB1*3601            | DPB1*2701+DPB1*2901      |                     |
| DPB1*0601+DPB1*3701            | DPB1*200101+DPB1*2101    |                     |
| DPB1*0601+DPB1*5101            | DPB1*2901+DPB1*9301      |                     |
| DPB1*0601+DPB1*5201            | DPB1*200101+DPB1*8101    |                     |
| DPB1*0601+DPB1*5401            | DPB1*2901+DPB1*8701      |                     |
| DPB1*0601+DPB1*7301            | DPB1*2901+DPB1*3001      |                     |
| DPB1*0601+DPB1*8001            | DPB1*2901+DPB1*5901      |                     |
| DPB1*0601+DPB1*8301            | DPB1*200101+DPB1*4601    |                     |
| DPB1*0601+DPB1*9801            | DPB1*200101+DPB1*410101  |                     |
| DPB1*0801+DPB1*1401            | DPB1*1701+DPB1*200101    |                     |
| DPB1*0801+DPB1*1701            | DPB1*1001+DPB1*5701      |                     |
| DPB1*0801+DPB1*1902            | DPB1*0901+DPB1*1601      |                     |
| DPB1*0801+DPB1*2101            | DPB1*4801+DPB1*6801      |                     |
| DPB1*0801+DPB1*260102          | DPB1*2201+DPB1*3701      |                     |
| DPB1*0801+DPB1*2701            | DPB1*3701+DPB1*6501      |                     |
| DPB1*0801+DPB1*3001            | DPB1*1601+DPB1*260102    | DPB1*6501+DPB1*9301 |
| DPB1*0801+DPB1*3501            | DPB1*1601+DPB1*5401      |                     |
| DPB1*0801+DPB1*5101            | DPB1*0901+DPB1*6801      |                     |
| DPB1*0801+DPB1*5901            | DPB1*6801+DPB1*8101      |                     |
| DPB1*0801+DPB1*7901            | DPB1*1601+DPB1*7301      |                     |
| DPB1*0801+DPB1*8001            | DPB1*3701+DPB1*6801      |                     |
| DPB1*0801+DPB1*8301            | DPB1*4601+DPB1*6801      |                     |
| DPB1*0801+DPB1*9101            | DPB1*410101+DPB1*6801    |                     |
| DPB1*0801+DPB1*9301            | DPB1*1401+DPB1*1601      |                     |
| DPB1*0801+DPB1*9801            | DPB1*1601+DPB1*3701      | DPB1*1701+DPB1*6801 |
| DPB1*0802/1901+DPB1*2002       | DPB1*1601+DPB1*3501      |                     |
| DPB1*0901+DPB1*1002            | DPB1*0902/1301+DPB1*4701 |                     |
| DPB1*0901+DPB1*1102            | DPB1*1401+DPB1*4601      | DPB1*5701+DPB1*8601 |
| DPB1*0901+DPB1*1602            | DPB1*1602+DPB1*8801      | DPB1*3701+DPB1*8601 |
| DPB1*0901+DPB1*1902            | DPB1*1001+DPB1*8601      |                     |
| DPB1*0901+DPB1*2301            | DPB1*3501+DPB1*4801      |                     |
| DPB1*0901+DPB1*2701            | DPB1*3501+DPB1*7101      |                     |
| DPB1*0901+DPB1*3001            | DPB1*1701+DPB1*260102    |                     |
| DPB1*0901+DPB1*3601            | DPB1*1701+DPB1*5401      |                     |
| DPB1*0901+DPB1*3701            | DPB1*2101+DPB1*3501      |                     |
| DPB1*0901+DPB1*3901            | DPB1*1001+DPB1*8801      |                     |
| DPB1*0901+DPB1*4501            | DPB1*6501+DPB1*8601      |                     |
| DPB1*0901+DPB1*4701            | DPB1*1001+DPB1*1401      |                     |
| DPB1*0901+DPB1*5101            | DPB1*4601+DPB1*5401      |                     |
| DPB1*0901+DPB1*5201            | DPB1*3501+DPB1*8101      |                     |
| DPB1*0901+DPB1*7201            | DPB1*6701+DPB1*8801      |                     |
| DPB1*0901+DPB1*7901            | DPB1*1401+DPB1*3301      | DPB1*7101+DPB1*7601 |
| DPB1*0901+DPB1*8001            | DPB1*3501+DPB1*3701      |                     |
| DPB1*0901+DPB1*8301            | DPB1*3501+DPB1*4601      |                     |
| DPB1*0901+DPB1*9101            | DPB1*3501+DPB1*410101    |                     |
| DPB1*0901+DPB1*9201            | DPB1*1401+DPB1*1701      |                     |
| DPB1*0901+DPB1*9301            | DPB1*7601+DPB1*8801      |                     |
| DPB1*0901+DPB1*9801            | DPB1*1701+DPB1*3701      |                     |
| DPB1*0902/1301+DPB1*5101       | DPB1*1701+DPB1*3501      |                     |
| DPB1*1001+DPB1*1102            | DPB1*1302+DPB1*4901      |                     |
| DPB1*1001+DPB1*1502            | DPB1*1602+DPB1*3701      |                     |
|                                | DPB1*5801+DPB1*7501      |                     |

|                       |                       |                     |                     |
|-----------------------|-----------------------|---------------------|---------------------|
| DPB1*1001+DPB1*200101 | DPB1*1401+DPB1*9301   | DPB1*1701+DPB1*2501 | DPB1*3701+DPB1*9101 |
| DPB1*1001+DPB1*2301   | DPB1*5501+DPB1*7501   |                     |                     |
| DPB1*1001+DPB1*2401   | DPB1*5101+DPB1*5401   |                     |                     |
| DPB1*1001+DPB1*2501   | DPB1*3701+DPB1*4501   |                     |                     |
| DPB1*1001+DPB1*3901   | DPB1*1602+DPB1*6501   |                     |                     |
| DPB1*1001+DPB1*5201   | DPB1*3701+DPB1*6701   |                     |                     |
| DPB1*1001+DPB1*6301   | DPB1*5801+DPB1*6801   |                     |                     |
| DPB1*1001+DPB1*7201   | DPB1*3301+DPB1*4501   | DPB1*6701+DPB1*8101 |                     |
| DPB1*1001+DPB1*8701   | DPB1*2501+DPB1*5501   | DPB1*6701+DPB1*9301 |                     |
| DPB1*1001+DPB1*9101   | DPB1*1701+DPB1*4501   |                     |                     |
| DPB1*1001+DPB1*9201   | DPB1*3701+DPB1*7601   |                     |                     |
| DPB1*1002+DPB1*1602   | DPB1*5901+DPB1*8601   |                     |                     |
| DPB1*1002+DPB1*1701   | DPB1*4601+DPB1*9101   |                     |                     |
| DPB1*1002+DPB1*2701   | DPB1*200101+DPB1*3901 |                     |                     |
| DPB1*1002+DPB1*3001   | DPB1*4701+DPB1*9101   |                     |                     |
| DPB1*1002+DPB1*3301   | DPB1*4601+DPB1*7201   |                     |                     |
| DPB1*1002+DPB1*3501   | DPB1*1401+DPB1*8001   |                     |                     |
| DPB1*1002+DPB1*4501   | DPB1*1401+DPB1*5901   | DPB1*7301+DPB1*9101 |                     |
| DPB1*1002+DPB1*5401   | DPB1*1401+DPB1*4701   |                     |                     |
| DPB1*1002+DPB1*5501   | DPB1*7101+DPB1*9101   |                     |                     |
| DPB1*1002+DPB1*5801   | DPB1*9501+DPB1*9801   |                     |                     |
| DPB1*1002+DPB1*6501   | DPB1*3901+DPB1*5701   |                     |                     |
| DPB1*1002+DPB1*7501   | DPB1*7301+DPB1*8001   |                     |                     |
| DPB1*1002+DPB1*9801   | DPB1*8001+DPB1*9101   |                     |                     |
| DPB1*110101+DPB1*6201 | DPB1*6301+DPB1*7401   |                     |                     |
| DPB1*1102+DPB1*1701   | DPB1*8601+DPB1*9301   |                     |                     |
| DPB1*1102+DPB1*260102 | DPB1*2002+DPB1*7901   |                     |                     |
| DPB1*1102+DPB1*3501   | DPB1*7901+DPB1*8601   |                     |                     |
| DPB1*1102+DPB1*4501   | DPB1*1602+DPB1*2501   |                     |                     |
| DPB1*1102+DPB1*6301   | DPB1*1502+DPB1*9301   |                     |                     |
| DPB1*1102+DPB1*6701   | DPB1*1602+DPB1*5201   |                     |                     |
| DPB1*1102+DPB1*7601   | DPB1*1602+DPB1*9201   |                     |                     |
| DPB1*1102+DPB1*9101   | DPB1*1602+DPB1*200101 |                     |                     |
| DPB1*1401+DPB1*1602   | DPB1*4501+DPB1*8601   |                     |                     |
| DPB1*1401+DPB1*2101   | DPB1*1701+DPB1*1702   |                     |                     |
| DPB1*1401+DPB1*2301   | DPB1*6701+DPB1*8001   |                     |                     |
| DPB1*1401+DPB1*2701   | DPB1*260102+DPB1*9101 |                     |                     |
| DPB1*1401+DPB1*3001   | DPB1*5401+DPB1*9101   |                     |                     |
| DPB1*1401+DPB1*3601   | DPB1*1702+DPB1*9801   |                     |                     |
| DPB1*1401+DPB1*5501   | DPB1*1701+DPB1*6701   |                     |                     |
| DPB1*1401+DPB1*5601   | DPB1*5201+DPB1*7601   | DPB1*6701+DPB1*9201 |                     |
| DPB1*1401+DPB1*7101   | DPB1*4601+DPB1*6701   |                     |                     |
| DPB1*1401+DPB1*7501   | DPB1*3501+DPB1*7301   |                     |                     |
| DPB1*1401+DPB1*7901   | DPB1*2501+DPB1*3501   |                     |                     |
| DPB1*1401+DPB1*8701   | DPB1*200101+DPB1*6701 | DPB1*5201+DPB1*9101 |                     |
| DPB1*1401+DPB1*9801   | DPB1*3501+DPB1*9101   |                     |                     |
| DPB1*1402+DPB1*8901   | DPB1*200101+DPB1*2102 |                     |                     |
| DPB1*1501+DPB1*2701   | DPB1*7401+DPB1*8901   |                     |                     |
| DPB1*1502+DPB1*1701   | DPB1*5801+DPB1*8001   | DPB1*6301+DPB1*8601 |                     |
| DPB1*1502+DPB1*2501   | DPB1*1902+DPB1*5201   |                     |                     |
| DPB1*1502+DPB1*2901   | DPB1*2301+DPB1*4401   |                     |                     |
| DPB1*1502+DPB1*4001   | DPB1*3901+DPB1*6201   |                     |                     |
| DPB1*1502+DPB1*4501   | DPB1*1902+DPB1*6701   |                     |                     |
| DPB1*1502+DPB1*4901   | DPB1*1902+DPB1*3901   |                     |                     |
| DPB1*1502+DPB1*5301   | DPB1*1902+DPB1*4001   | DPB1*4901+DPB1*6201 |                     |
| DPB1*1502+DPB1*5501   | DPB1*2301+DPB1*5801   |                     |                     |
| DPB1*1502+DPB1*6801   | DPB1*6301+DPB1*7501   |                     |                     |
| DPB1*1601+DPB1*1702   | DPB1*2201+DPB1*2501   |                     |                     |
| DPB1*1601+DPB1*2101   | DPB1*2201+DPB1*9301   |                     |                     |
| DPB1*1601+DPB1*6601   | DPB1*5101+DPB1*5501   |                     |                     |
| DPB1*1601+DPB1*7901   | DPB1*6801+DPB1*9301   |                     |                     |
| DPB1*1602+DPB1*2201   | DPB1*3001+DPB1*4801   |                     |                     |
| DPB1*1701+DPB1*1902   | DPB1*4801+DPB1*9801   |                     |                     |
| DPB1*1701+DPB1*2301   | DPB1*5501+DPB1*8001   | DPB1*7101+DPB1*9801 |                     |
| DPB1*1701+DPB1*3601   | DPB1*2101+DPB1*9801   |                     |                     |
| DPB1*1701+DPB1*4701   | DPB1*3001+DPB1*4601   |                     |                     |
| DPB1*1701+DPB1*5101   | DPB1*8101+DPB1*9801   |                     |                     |
| DPB1*1701+DPB1*5601   | DPB1*5501+DPB1*9201   |                     |                     |
| DPB1*1701+DPB1*7901   | DPB1*3501+DPB1*9301   | DPB1*3701+DPB1*9801 |                     |
| DPB1*1701+DPB1*8001   | DPB1*4601+DPB1*9801   |                     |                     |
| DPB1*1701+DPB1*8301   | DPB1*410101+DPB1*9801 |                     |                     |
| DPB1*1701+DPB1*8701   | DPB1*200101+DPB1*5501 |                     |                     |
| DPB1*1702+DPB1*5501   | DPB1*2101+DPB1*6701   |                     |                     |
| DPB1*1702+DPB1*9301   | DPB1*2101+DPB1*2501   |                     |                     |
| DPB1*1902+DPB1*2101   | DPB1*3601+DPB1*4801   |                     |                     |
| DPB1*1902+DPB1*3701   | DPB1*4801+DPB1*7901   |                     |                     |
| DPB1*1902+DPB1*410101 | DPB1*4801+DPB1*8301   |                     |                     |
| DPB1*1902+DPB1*4601   | DPB1*4801+DPB1*8001   |                     |                     |
| DPB1*1902+DPB1*8101   | DPB1*4801+DPB1*5101   |                     |                     |
| DPB1*200101+DPB1*2301 | DPB1*8001+DPB1*8701   |                     |                     |
| DPB1*200101+DPB1*4501 | DPB1*2501+DPB1*9101   |                     |                     |
| DPB1*200101+DPB1*5601 | DPB1*8701+DPB1*9201   |                     |                     |
| DPB1*200101+DPB1*6501 | DPB1*2701+DPB1*5701   |                     |                     |
| DPB1*200101+DPB1*7601 | DPB1*9101+DPB1*9201   |                     |                     |
| DPB1*2002+DPB1*3501   | DPB1*260102+DPB1*8601 |                     |                     |
| DPB1*2002+DPB1*5701   | DPB1*2901+DPB1*3901   |                     |                     |
| DPB1*2002+DPB1*9801   | DPB1*2701+DPB1*8601   |                     |                     |
| DPB1*2101+DPB1*2301   | DPB1*3601+DPB1*7101   |                     |                     |
| DPB1*2101+DPB1*5101   | DPB1*3601+DPB1*8101   |                     |                     |
| DPB1*2101+DPB1*6501   | DPB1*2201+DPB1*260102 |                     |                     |
| DPB1*2101+DPB1*7901   | DPB1*3601+DPB1*3701   |                     |                     |
| DPB1*2101+DPB1*8001   | DPB1*3601+DPB1*4601   |                     |                     |
| DPB1*2101+DPB1*8301   | DPB1*3601+DPB1*410101 |                     |                     |
| DPB1*2201+DPB1*6601   | DPB1*2401+DPB1*5801   |                     |                     |
| DPB1*2301+DPB1*3701   | DPB1*7101+DPB1*7901   |                     |                     |
| DPB1*2301+DPB1*410101 | DPB1*7101+DPB1*8301   |                     |                     |
| DPB1*2301+DPB1*4601   | DPB1*7101+DPB1*8001   |                     |                     |
| DPB1*2401+DPB1*2901   | DPB1*4701+DPB1*9201   |                     |                     |
| DPB1*2501+DPB1*3901   | DPB1*260102+DPB1*5901 | DPB1*2701+DPB1*7301 | DPB1*4901+DPB1*5201 |
| DPB1*2501+DPB1*4001   | DPB1*5201+DPB1*5301   |                     |                     |
| DPB1*2501+DPB1*6701   | DPB1*4501+DPB1*5201   |                     |                     |
| DPB1*2501+DPB1*7201   | DPB1*5601+DPB1*5901   |                     |                     |
| DPB1*2501+DPB1*7501   | DPB1*7301+DPB1*7901   |                     |                     |
| DPB1*2501+DPB1*7601   | DPB1*4501+DPB1*9201   |                     |                     |

|                       |                       |                     |
|-----------------------|-----------------------|---------------------|
| DPB1*2501+DPB1*9801   | DPB1*7901+DPB1*9101   |                     |
| DPB1*260102+DPB1*2801 | DPB1*5301+DPB1*5601   |                     |
| DPB1*260102+DPB1*3001 | DPB1*2701+DPB1*5401   |                     |
| DPB1*260102+DPB1*4601 | DPB1*3901+DPB1*8801   |                     |
| DPB1*260102+DPB1*6801 | DPB1*6501+DPB1*7901   |                     |
| DPB1*260102+DPB1*7201 | DPB1*3901+DPB1*5601   |                     |
| DPB1*260102+DPB1*8201 | DPB1*7501+DPB1*8501   |                     |
| DPB1*260102+DPB1*8701 | DPB1*2701+DPB1*5201   |                     |
| DPB1*260102+DPB1*9301 | DPB1*2701+DPB1*3701   |                     |
| DPB1*260102+DPB1*9801 | DPB1*2701+DPB1*3501   |                     |
| DPB1*2701+DPB1*5901   | DPB1*4901+DPB1*8701   |                     |
| DPB1*2801+DPB1*3901   | DPB1*5301+DPB1*7201   |                     |
| DPB1*2901+DPB1*5801   | DPB1*4401+DPB1*5501   |                     |
| DPB1*2901+DPB1*6601   | DPB1*5601+DPB1*8601   |                     |
| DPB1*2901+DPB1*7501   | DPB1*7301+DPB1*8801   |                     |
| DPB1*3001+DPB1*3501   | DPB1*5401+DPB1*9801   |                     |
| DPB1*3001+DPB1*3701   | DPB1*5401+DPB1*9301   |                     |
| DPB1*3001+DPB1*5201   | DPB1*5401+DPB1*8701   |                     |
| DPB1*3001+DPB1*7101   | DPB1*4701+DPB1*5501   |                     |
| DPB1*3001+DPB1*7301   | DPB1*4501+DPB1*4701   | DPB1*5401+DPB1*5901 |
| DPB1*3001+DPB1*8001   | DPB1*4701+DPB1*9801   |                     |
| DPB1*3301+DPB1*4901   | DPB1*3901+DPB1*8101   |                     |
| DPB1*3301+DPB1*5201   | DPB1*5601+DPB1*7101   |                     |
| DPB1*3301+DPB1*5301   | DPB1*4001+DPB1*8101   |                     |
| DPB1*3501+DPB1*4701   | DPB1*5401+DPB1*8001   |                     |
| DPB1*3501+DPB1*8701   | DPB1*5201+DPB1*9801   |                     |
| DPB1*3701+DPB1*5101   | DPB1*7901+DPB1*8101   |                     |
| DPB1*3701+DPB1*8301   | DPB1*410101+DPB1*7901 |                     |
| DPB1*3701+DPB1*8701   | DPB1*5201+DPB1*9301   |                     |
| DPB1*3901+DPB1*4501   | DPB1*4901+DPB1*6701   |                     |
| DPB1*3901+DPB1*5301   | DPB1*4001+DPB1*4901   |                     |
| DPB1*4001+DPB1*4501   | DPB1*5301+DPB1*6701   |                     |
| DPB1*410101+DPB1*5101 | DPB1*8101+DPB1*8301   |                     |
| DPB1*410101+DPB1*8001 | DPB1*4601+DPB1*8301   |                     |
| DPB1*4401+DPB1*5101   | DPB1*4801+DPB1*9201   |                     |
| DPB1*4401+DPB1*7101   | DPB1*8801+DPB1*9501   |                     |
| DPB1*4401+DPB1*7201   | DPB1*9201+DPB1*9501   |                     |
| DPB1*4601+DPB1*5101   | DPB1*8001+DPB1*8101   |                     |
| DPB1*4801+DPB1*5201   | DPB1*7901+DPB1*9501   |                     |
| DPB1*4801+DPB1*6701   | DPB1*5801+DPB1*7301   |                     |
| DPB1*4801+DPB1*7201   | DPB1*5101+DPB1*9501   |                     |
| DPB1*5201+DPB1*5901   | DPB1*7301+DPB1*8701   |                     |
| DPB1*5601+DPB1*9101   | DPB1*7601+DPB1*8701   |                     |

## **HLA-DQA1 Ambiguities, Release 2.25.0**

### ***Sequences identical over exons 2***

| <i>Allele 1</i> | <i>Allele 2</i> | <i>Allele 3</i> | <i>Allele 4</i> | <i>Allele 5</i> | <i>Allele 6</i> | <i>Allele 7</i> | <i>Code in table</i>             |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|----------------------------------|
| DQA1*010101     | DQA1*010102     | DQA1*010401     | DQA1*010402     | DQA1*0105       |                 |                 | DQA1*01G1                        |
| DQA1*010201     | DQA1*010202     | DQA1*010203     | DQA1*010204     |                 |                 |                 | DQA1*010201/010202/010203/010204 |
| DQA1*030101     | DQA1*0302       | DQA1*0303       |                 |                 |                 |                 | DQA1*030101/0302/0303            |
| DQA1*040101     | DQA1*040102     | DQA1*0402       | DQA1*0404       |                 |                 |                 | DQA1*040101/040102/0402/0404     |
| DQA1*050101     | DQA1*0503       | DQA1*0505       | DQA1*0506       | DQA1*0507       | DQA1*0508       | DQA1*0509       | DQA1*05G1                        |
| DQA1*060101     | DQA1*0602       |                 |                 |                 |                 |                 | DQA1*060101/0602                 |

### ***Alleles extended due to unsequenced regions***

The following alleles do not contain the complete exon 2 sequence. For these alleles, the sequence of an alternate allele has been used to extend the sequence to cover this region.

| <i>Incomplete allele</i> | <i>Sequence extended with</i> |
|--------------------------|-------------------------------|
| DQA1*050102              | DQA1*050101                   |
| DQA1*0502                | DQA1*050101                   |
| DQA1*060102              | DQA1*060101                   |

### ***Alleles removed from analysis due to insertions or deletions***

| <i>Allele</i> |
|---------------|
| None          |

### ***Ambiguous typing combinations over exon 2***

| <i>Combination 1</i> | <i>Combination 2</i> |
|----------------------|----------------------|
| None                 |                      |

# HLA-DQB1 Ambiguities, Release 2.25.0

## Sequences identical over exons 2

| Allele 1    | Allele 2    | Allele 3  | Allele 4  | Allele 5  | Allele 6  | Allele 7  | Code in table         |
|-------------|-------------|-----------|-----------|-----------|-----------|-----------|-----------------------|
| DQB1*020101 | DQB1*0202   | DQB1*0204 |           |           |           |           | DQB1*020101/0202/0204 |
| DQB1*030101 | DQB1*030104 | DQB1*0309 | DQB1*0319 | DQB1*0321 | DQB1*0322 | DQB1*0324 | DQB1*03G1             |
| DQB1*060101 | DQB1*060103 |           |           |           |           |           | DQB1*060101/060103    |
| DQB1*060401 | DQB1*0634   |           |           |           |           |           | DQB1*060401/0634      |

## Alleles extended due to unsequenced regions

The following alleles do not contain the complete exon 2 sequence. For these alleles, the sequence of an alternate allele has been used to extend the sequence to cover this region.

| Incomplete allele | Sequence extended with |
|-------------------|------------------------|
| DQB1*0203         | DQB1*020101            |
| DQB1*030102       | DQB1*030101            |
| DQB1*0307         | DQB1*030101            |
| DQB1*050102       | DQB1*050101            |
| DQB1*050202       | DQB1*050201            |
| DQB1*050302       | DQB1*050301            |
| DQB1*0504         | DQB1*050101            |
| DQB1*060102       | DQB1*060101            |
| DQB1*060502       | DQB1*060501            |
| DQB1*0607         | DQB1*060401            |
| DQB1*060801       | DQB1*060101            |
| DQB1*061101       | DQB1*060101            |
| DQB1*0613         | DQB1*060101            |
| DQB1*061401       | DQB1*060101            |
| DQB1*0618         | DQB1*060101            |
| DQB1*0620         | DQB1*060101            |

## Alleles removed from analysis due to insertions or deletions

| Allele |
|--------|
| None   |

## Ambiguous typing combinations over exon 2

| Combination 1                     | Combination 2              | Combination 3           | Combination 4 |
|-----------------------------------|----------------------------|-------------------------|---------------|
| DQB1*020101/0202/0204+DQB1*03G1   | DQB1*0203+DQB1*0304        |                         |               |
| DQB1*020101/0202/0204+DQB1*030302 | DQB1*0203+DQB1*030201      |                         |               |
| DQB1*020101/0202/0204+DQB1*030303 | DQB1*0203+DQB1*030203      |                         |               |
| DQB1*020101/0202/0204+DQB1*0317   | DQB1*0203+DQB1*030503      |                         |               |
| DQB1*03G1+DQB1*030201             | DQB1*030302+DQB1*0304      |                         |               |
| DQB1*03G1+DQB1*030203             | DQB1*030102+DQB1*030201    | DQB1*030303+DQB1*0304   |               |
| DQB1*03G1+DQB1*030303             | DQB1*030102+DQB1*030302    |                         |               |
| DQB1*03G1+DQB1*030501             | DQB1*030102+DQB1*030503    |                         |               |
| DQB1*03G1+DQB1*030502             | DQB1*030102+DQB1*030504    |                         |               |
| DQB1*03G1+DQB1*030503             | DQB1*0304+DQB1*0317        |                         |               |
| DQB1*03G1+DQB1*060201             | DQB1*030102+DQB1*060202    |                         |               |
| DQB1*03G1+DQB1*060301             | DQB1*030102+DQB1*060302    |                         |               |
| DQB1*030201+DQB1*030303           | DQB1*030203+DQB1*030302    |                         |               |
| DQB1*030201+DQB1*030501           | DQB1*030203+DQB1*030503    |                         |               |
| DQB1*030201+DQB1*030502           | DQB1*030203+DQB1*030504    |                         |               |
| DQB1*030201+DQB1*0317             | DQB1*030302+DQB1*030503    |                         |               |
| DQB1*030201+DQB1*0402             | DQB1*030504+DQB1*0403      |                         |               |
| DQB1*030201+DQB1*060201           | DQB1*030203+DQB1*060202    |                         |               |
| DQB1*030201+DQB1*060301           | DQB1*030203+DQB1*060302    | DQB1*0308+DQB1*0632     |               |
| DQB1*030201+DQB1*060501           | DQB1*0311+DQB1*0609        |                         |               |
| DQB1*030201+DQB1*0606             | DQB1*0311+DQB1*0606        |                         |               |
| DQB1*030201+DQB1*060802           | DQB1*0308+DQB1*0627        |                         |               |
| DQB1*030201+DQB1*0612             | DQB1*0308+DQB1*0609        |                         |               |
| DQB1*030201+DQB1*0620             | DQB1*0311+DQB1*060201      |                         |               |
| DQB1*030201+DQB1*0621             | DQB1*0308+DQB1*060401/0634 |                         |               |
| DQB1*030201+DQB1*0623             | DQB1*030502+DQB1*060202    | DQB1*030504+DQB1*060201 |               |
| DQB1*030201+DQB1*0631             | DQB1*0311+DQB1*060301      |                         |               |
| DQB1*030203+DQB1*0317             | DQB1*030302+DQB1*030501    | DQB1*030303+DQB1*030503 |               |
| DQB1*030203+DQB1*0402             | DQB1*030502+DQB1*0403      |                         |               |

|                              |                              |                         |                       |
|------------------------------|------------------------------|-------------------------|-----------------------|
| DQB1*030203+DQB1*0623        | DQB1*030502+DQB1*060201      |                         |                       |
| DQB1*030302+DQB1*030502      | DQB1*030303+DQB1*030504      |                         |                       |
| DQB1*030302+DQB1*060201      | DQB1*030303+DQB1*060202      |                         |                       |
| DQB1*030302+DQB1*060301      | DQB1*030303+DQB1*060302      |                         |                       |
| DQB1*030302+DQB1*0606        | DQB1*0312+DQB1*0606          |                         |                       |
| DQB1*030501+DQB1*030504      | DQB1*030502+DQB1*030503      |                         |                       |
| DQB1*030501+DQB1*060202      | DQB1*030503+DQB1*060201      |                         |                       |
| DQB1*030501+DQB1*060302      | DQB1*030503+DQB1*060301      |                         |                       |
| DQB1*030502+DQB1*060302      | DQB1*030504+DQB1*060301      |                         |                       |
| DQB1*030504+DQB1*0620        | DQB1*0311+DQB1*0623          |                         |                       |
| DQB1*0308+DQB1*060501        | DQB1*0311+DQB1*0612          |                         |                       |
| DQB1*0323+DQB1*0606          | DQB1*0606+DQB1*0615          |                         |                       |
| DQB1*0402+DQB1*060201        | DQB1*0403+DQB1*0623          |                         |                       |
| DQB1*050102+DQB1*0610        | DQB1*050201+DQB1*0613        |                         |                       |
| DQB1*050102+DQB1*0625        | DQB1*050201+DQB1*060401/0634 |                         |                       |
| DQB1*050201+DQB1*060301      | DQB1*0505+DQB1*0628          |                         |                       |
| DQB1*050202+DQB1*060201      | DQB1*050302+DQB1*0610        |                         |                       |
| DQB1*050301+DQB1*060501      | DQB1*050302+DQB1*060502      |                         |                       |
| DQB1*060201+DQB1*060301      | DQB1*061101+DQB1*061401      | DQB1*061102+DQB1*061402 |                       |
| DQB1*060201+DQB1*060302      | DQB1*060202+DQB1*060301      |                         |                       |
| DQB1*060201+DQB1*060401/0634 | DQB1*060301+DQB1*0622        | DQB1*060802+DQB1*0615   | DQB1*0609+DQB1*061402 |
| DQB1*060201+DQB1*060402      | DQB1*0607+DQB1*0613          | DQB1*060801+DQB1*0615   |                       |
| DQB1*060201+DQB1*060501      | DQB1*0609+DQB1*0620          |                         |                       |
| DQB1*060201+DQB1*0606        | DQB1*0606+DQB1*061101        | DQB1*0606+DQB1*0620     | DQB1*0606+DQB1*0633   |
| DQB1*060201+DQB1*0607        | DQB1*060301+DQB1*0615        |                         |                       |
| DQB1*060201+DQB1*060801      | DQB1*060301+DQB1*0613        |                         |                       |
| DQB1*060201+DQB1*0609        | DQB1*061102+DQB1*0622        |                         |                       |
| DQB1*060201+DQB1*0617        | DQB1*0621+DQB1*0624          |                         |                       |
| DQB1*060201+DQB1*0621        | DQB1*0612+DQB1*061402        |                         |                       |
| DQB1*060201+DQB1*0627        | DQB1*061402+DQB1*0618        |                         |                       |
| DQB1*060201+DQB1*0630        | DQB1*060301+DQB1*0624        |                         |                       |
| DQB1*060201+DQB1*0631        | DQB1*060301+DQB1*0620        |                         |                       |
| DQB1*060202+DQB1*060401/0634 | DQB1*060302+DQB1*0622        |                         |                       |
| DQB1*060202+DQB1*0607        | DQB1*060302+DQB1*0615        |                         |                       |
| DQB1*060202+DQB1*060801      | DQB1*060302+DQB1*0613        |                         |                       |
| DQB1*060202+DQB1*0630        | DQB1*060302+DQB1*0624        |                         |                       |
| DQB1*060202+DQB1*0631        | DQB1*060302+DQB1*0620        |                         |                       |
| DQB1*060301+DQB1*060401/0634 | DQB1*0607+DQB1*060802        | DQB1*0621+DQB1*0632     |                       |
| DQB1*060301+DQB1*060402      | DQB1*0607+DQB1*060801        |                         |                       |
| DQB1*060301+DQB1*060501      | DQB1*0609+DQB1*0631          |                         |                       |
| DQB1*060301+DQB1*0606        | DQB1*0606+DQB1*061401        | DQB1*0606+DQB1*0631     |                       |
| DQB1*060301+DQB1*0609        | DQB1*060401/0634+DQB1*061102 | DQB1*0612+DQB1*0632     |                       |
| DQB1*060301+DQB1*0612        | DQB1*061102+DQB1*0621        |                         |                       |
| DQB1*060301+DQB1*0617        | DQB1*0621+DQB1*0630          |                         |                       |
| DQB1*060301+DQB1*0618        | DQB1*061102+DQB1*0627        |                         |                       |
| DQB1*060301+DQB1*0627        | DQB1*060802+DQB1*0632        |                         |                       |
| DQB1*060401/0634+DQB1*0606   | DQB1*0606+DQB1*0627          |                         |                       |
| DQB1*060401/0634+DQB1*060801 | DQB1*060402+DQB1*060802      |                         |                       |
| DQB1*060401/0634+DQB1*060802 | DQB1*0621+DQB1*0627          |                         |                       |
| DQB1*060401/0634+DQB1*0610   | DQB1*0613+DQB1*0625          |                         |                       |
| DQB1*060401/0634+DQB1*0612   | DQB1*0609+DQB1*0621          |                         |                       |
| DQB1*060401/0634+DQB1*0613   | DQB1*060801+DQB1*0622        |                         |                       |
| DQB1*060401/0634+DQB1*0615   | DQB1*0607+DQB1*0622          |                         |                       |
| DQB1*060401/0634+DQB1*0618   | DQB1*0609+DQB1*0627          |                         |                       |
| DQB1*060401/0634+DQB1*0620   | DQB1*060501+DQB1*061402      | DQB1*0622+DQB1*0631     |                       |
| DQB1*060401/0634+DQB1*0624   | DQB1*0622+DQB1*0630          |                         |                       |
| DQB1*060401/0634+DQB1*0630   | DQB1*0617+DQB1*0632          |                         |                       |
| DQB1*060401/0634+DQB1*0632   | DQB1*0607+DQB1*0627          |                         |                       |
| DQB1*060501+DQB1*0606        | DQB1*0606+DQB1*0609          | DQB1*0606+DQB1*0618     |                       |
| DQB1*0606+DQB1*0607          | DQB1*0606+DQB1*0632          |                         |                       |
| DQB1*0606+DQB1*060802        | DQB1*0606+DQB1*0621          |                         |                       |
| DQB1*0606+DQB1*0609          | DQB1*0606+DQB1*0618          |                         |                       |
| DQB1*0606+DQB1*061101        | DQB1*0606+DQB1*0620          | DQB1*0606+DQB1*0633     |                       |
| DQB1*0606+DQB1*061401        | DQB1*0606+DQB1*0631          |                         |                       |
| DQB1*0606+DQB1*0620          | DQB1*0606+DQB1*0633          |                         |                       |
| DQB1*0607+DQB1*0618          | DQB1*0609+DQB1*0632          |                         |                       |
| DQB1*0607+DQB1*0620          | DQB1*0615+DQB1*0631          |                         |                       |
| DQB1*0607+DQB1*0624          | DQB1*0615+DQB1*0630          |                         |                       |
| DQB1*060801+DQB1*0620        | DQB1*0613+DQB1*0631          |                         |                       |
| DQB1*060801+DQB1*0624        | DQB1*0613+DQB1*0630          |                         |                       |
| DQB1*060802+DQB1*0609        | DQB1*0612+DQB1*0627          | DQB1*0618+DQB1*0621     |                       |
| DQB1*061102+DQB1*0617        | DQB1*0612+DQB1*0630          |                         |                       |
| DQB1*0615+DQB1*0627          | DQB1*0622+DQB1*0632          |                         |                       |
| DQB1*0620+DQB1*0630          | DQB1*0624+DQB1*0631          |                         |                       |

## HLA-DRB1 Ambiguities, Release 2.25.0

### Sequences identical over exons 2 (nucleotides 101 to 356)

| Allele 1      | Allele 2      | Allele 3    | Allele 4  | Code in table              |
|---------------|---------------|-------------|-----------|----------------------------|
| DRB1*010101   | DRB1*010105   | DRB1*040504 |           | DRB1*010101/010105         |
| DRB1*03010101 | DRB1*03010102 |             |           | DRB1*03010101/03010102     |
| DRB1*030501   | DRB1*030502   |             |           | DRB1*030501/030502         |
| DRB1*040301   | DRB1*040303   |             |           | DRB1*040301/040303         |
| DRB1*040501   | DRB1*040503   |             |           | DRB1*0405G1                |
| DRB1*040601   | DRB1*040602   |             |           | DRB1*040601/040602         |
| DRB1*040701   | DRB1*040703   |             |           | DRB1*040701/040703         |
| DRB1*07010101 | DRB1*07010102 |             |           | DRB1*07010101/07010102     |
| DRB1*080101   | DRB1*080103   |             |           | DRB1*080101/080103         |
| DRB1*080201   | DRB1*080202   |             |           | DRB1*080201/080202         |
| DRB1*080401   | DRB1*080404   | DRB1*110106 |           | DRB1*080401/080404         |
| DRB1*080402   | DRB1*080403   |             |           | DRB1*080402/080403         |
| DRB1*110101   | DRB1*110102   |             |           | DRB1*1101G1                |
| DRB1*110401   | DRB1*110402   |             |           | DRB1*110401/110402         |
| DRB1*110801   | DRB1*110802   |             |           | DRB1*110801/110802         |
| DRB1*111001   | DRB1*111002   |             |           | DRB1*111001/111002         |
| DRB1*111101   | DRB1*111102   |             |           | DRB1*111101/111102         |
| DRB1*111301   | DRB1*111302   |             |           | DRB1*111301/111302         |
| DRB1*111401   | DRB1*111402   |             |           | DRB1*111401/111402         |
| DRB1*116501   | DRB1*116502   |             |           | DRB1*116501/116502         |
| DRB1*120101   | DRB1*1206     | DRB1*1210   | DRB1*1217 | DRB1*120101/1206/1210/1217 |
| DRB1*130301   | DRB1*130302   |             |           | DRB1*130301/130302         |
| DRB1*130501   | DRB1*130502   |             |           | DRB1*130501/130502         |
| DRB1*131401   | DRB1*131403   |             |           | DRB1*131401/131403         |
| DRB1*140101   | DRB1*1454     |             |           | DRB1*140101/1454           |
| DRB1*140701   | DRB1*140702   |             |           | DRB1*140701/140702         |
| DRB1*15010101 | DRB1*15010102 |             |           | DRB1*15010101/15010102     |
| DRB1*150202   | DRB1*150205   |             |           | DRB1*150202/150205         |
| DRB1*15030101 | DRB1*15030102 |             |           | DRB1*15030101/15030102     |

### Alleles extended due to unsequenced regions

The following alleles do not contain the complete sequence in the region nucleotide 101 to 356. For these alleles, the sequence of an alternate allele has been used to extend the sequence to cover this region.

| Incomplete allele | Sequence extended with |
|-------------------|------------------------|
| DRB1*010202       | DRB1*010201            |
| DRB1*0309         | DRB1*03010101          |
| DRB1*0312         | DRB1*03010101          |
| DRB1*0316         | DRB1*03010101          |
| DRB1*0321         | DRB1*03010101          |
| DRB1*0413         | DRB1*040101            |
| DRB1*0419         | DRB1*040101            |
| DRB1*0420         | DRB1*040101            |
| DRB1*0421         | DRB1*040101            |
| DRB1*0422         | DRB1*040101            |
| DRB1*0425         | DRB1*040101            |
| DRB1*0432         | DRB1*040101            |
| DRB1*070102       | DRB1*07010101          |
| DRB1*0703         | DRB1*07010101          |
| DRB1*080203       | DRB1*080201            |
| DRB1*080402       | DRB1*080401            |
| DRB1*0805         | DRB1*080101            |
| DRB1*0817         | DRB1*080101            |
| DRB1*0819         | DRB1*080101            |
| DRB1*110104       | DRB1*110101            |
| DRB1*110602       | DRB1*110101            |
| DRB1*1118         | DRB1*110101            |
| DRB1*1120         | DRB1*110101            |
| DRB1*1122         | DRB1*110101            |
| DRB1*1123         | DRB1*110101            |
| DRB1*1124         | DRB1*110101            |
| DRB1*1126         | DRB1*110101            |
| DRB1*112701       | DRB1*110101            |
| DRB1*1140         | DRB1*110101            |
| DRB1*1149         | DRB1*110101            |
| DRB1*120202       | DRB1*120201            |
| DRB1*130302       | DRB1*130301            |
| DRB1*1309         | DRB1*130101            |
| DRB1*1315         | DRB1*130101            |
| DRB1*1323         | DRB1*130101            |
| DRB1*1324         | DRB1*130101            |
| DRB1*1325         | DRB1*130101            |
| DRB1*1328         | DRB1*130101            |
| DRB1*1330         | DRB1*130101            |
| DRB1*1333         | DRB1*130101            |
| DRB1*1340         | DRB1*130101            |
| DRB1*1345         | DRB1*130101            |
| DRB1*1355         | DRB1*130101            |

|             |               |
|-------------|---------------|
| DRB1*140102 | DRB1*140101   |
| DRB1*1409   | DRB1*140101   |
| DRB1*1420   | DRB1*140101   |
| DRB1*1431   | DRB1*140101   |
| DRB1*150203 | DRB1*150201   |
| DRB1*1505   | DRB1*15010101 |
| DRB1*1506   | DRB1*15010101 |
| DRB1*160102 | DRB1*160101   |
| DRB1*160202 | DRB1*160201   |
| DRB1*160501 | DRB1*160101   |

## Alleles removed from analysis due to insertions or deletions

| Allele     |
|------------|
| DRB1*0710N |
| DRB1*1513  |
| DRB1*1517N |

## Ambiguous typing combinations over exon 2 (nucleotides 101 to 356)

| Combination 1                             | Combination 2                    | Combination 3                | Combination 4                |
|-------------------------------------------|----------------------------------|------------------------------|------------------------------|
| DRB1*010101/010105+DRB1*010205            | DRB1*010107+DRB1*010201          |                              |                              |
| DRB1*010101/010105+DRB1*0104              | DRB1*0111+DRB1*0120              |                              |                              |
| DRB1*010101/010105+DRB1*0106              | DRB1*0109+DRB1*0120              |                              |                              |
| DRB1*010101/010105+DRB1*03010101/03010102 | DRB1*0118+DRB1*0306              | DRB1*0120+DRB1*030501/030502 |                              |
| DRB1*010101/010105+DRB1*030102            | DRB1*0104+DRB1*0314              | DRB1*0111+DRB1*0315          |                              |
| DRB1*010101/010105+DRB1*030201            | DRB1*0116+DRB1*1402              |                              |                              |
| DRB1*010101/010105+DRB1*0303              | DRB1*0116+DRB1*1406              | DRB1*0120+DRB1*030201        |                              |
| DRB1*010101/010105+DRB1*0307              | DRB1*0116+DRB1*1417              |                              |                              |
| DRB1*010101/010105+DRB1*0310              | DRB1*0114+DRB1*03010101/03010102 |                              |                              |
| DRB1*010101/010105+DRB1*0315              | DRB1*0120+DRB1*0314              |                              |                              |
| DRB1*010101/010105+DRB1*0323              | DRB1*0120+DRB1*0309              |                              |                              |
| DRB1*010101/010105+DRB1*0325              | DRB1*0108+DRB1*0304              | DRB1*0118+DRB1*0331          |                              |
| DRB1*010101/010105+DRB1*0329              | DRB1*0118+DRB1*030201            |                              |                              |
| DRB1*010101/010105+DRB1*0333              | DRB1*0118+DRB1*0326              |                              |                              |
| DRB1*010101/010105+DRB1*0334              | DRB1*0119+DRB1*03010101/03010102 |                              |                              |
| DRB1*010101/010105+DRB1*0338              | DRB1*0116+DRB1*1448              |                              |                              |
| DRB1*010101/010105+DRB1*0340              | DRB1*0118+DRB1*0341              |                              |                              |
| DRB1*010101/010105+DRB1*040101            | DRB1*0108+DRB1*0421              | DRB1*0110+DRB1*0408          |                              |
| DRB1*010101/010105+DRB1*0402              | DRB1*0103+DRB1*0404              | DRB1*0120+DRB1*0414          |                              |
| DRB1*010101/010105+DRB1*040301/040303     | DRB1*0108+DRB1*040601/040602     | DRB1*0117+DRB1*0404          | DRB1*0120+DRB1*040701/040703 |
| DRB1*010101/010105+DRB1*0404              | DRB1*0108+DRB1*0468              | DRB1*0120+DRB1*0408          |                              |
| DRB1*010101/010105+DRB1*040601/040602     | DRB1*0117+DRB1*0468              | DRB1*0120+DRB1*0420          |                              |
| DRB1*010101/010105+DRB1*040701/040703     | DRB1*0108+DRB1*0420              | DRB1*0117+DRB1*0408          |                              |
| DRB1*010101/010105+DRB1*0408              | DRB1*0108+DRB1*0419              |                              |                              |
| DRB1*010101/010105+DRB1*0409              | DRB1*0110+DRB1*0405G1            |                              |                              |
| DRB1*010101/010105+DRB1*0410              | DRB1*0120+DRB1*0405G1            |                              |                              |
| DRB1*010101/010105+DRB1*0411              | DRB1*0117+DRB1*0410              | DRB1*0120+DRB1*0417          |                              |
| DRB1*010101/010105+DRB1*0413              | DRB1*0110+DRB1*0404              | DRB1*0120+DRB1*040101        |                              |
| DRB1*010101/010105+DRB1*0414              | DRB1*0103+DRB1*0408              |                              |                              |
| DRB1*010101/010105+DRB1*0417              | DRB1*0117+DRB1*0405G1            |                              |                              |
| DRB1*010101/010105+DRB1*0420              | DRB1*0117+DRB1*0419              |                              |                              |
| DRB1*010101/010105+DRB1*0421              | DRB1*0110+DRB1*0419              |                              |                              |
| DRB1*010101/010105+DRB1*0422              | DRB1*0116+DRB1*0404              |                              |                              |
| DRB1*010101/010105+DRB1*0425              | DRB1*0120+DRB1*0454              |                              |                              |
| DRB1*010101/010105+DRB1*0428              | DRB1*0118+DRB1*0405G1            |                              |                              |
| DRB1*010101/010105+DRB1*0435              | DRB1*0110+DRB1*0443              | DRB1*0118+DRB1*040101        |                              |
| DRB1*010101/010105+DRB1*0442              | DRB1*0118+DRB1*0404              | DRB1*0120+DRB1*0443          |                              |
| DRB1*010101/010105+DRB1*0443              | DRB1*0118+DRB1*0408              |                              |                              |
| DRB1*010101/010105+DRB1*0444              | DRB1*0104+DRB1*0408              | DRB1*0111+DRB1*0404          |                              |
| DRB1*010101/010105+DRB1*0451              | DRB1*0117+DRB1*0470              |                              |                              |
| DRB1*010101/010105+DRB1*0452              | DRB1*0117+DRB1*0423              |                              |                              |
| DRB1*010101/010105+DRB1*0455              | DRB1*0120+DRB1*0431              |                              |                              |
| DRB1*010101/010105+DRB1*0459              | DRB1*0117+DRB1*0442              | DRB1*0118+DRB1*040301/040303 |                              |
| DRB1*010101/010105+DRB1*0462              | DRB1*0114+DRB1*040101            |                              |                              |
| DRB1*010101/010105+DRB1*0467              | DRB1*0110+DRB1*0410              | DRB1*0120+DRB1*0409          |                              |
| DRB1*010101/010105+DRB1*0468              | DRB1*0120+DRB1*0419              |                              |                              |
| DRB1*010101/010105+DRB1*0474              | DRB1*0111+DRB1*040701/040703     |                              |                              |
| DRB1*010101/010105+DRB1*07010101/07010102 | DRB1*0121+DRB1*0711              |                              |                              |
| DRB1*010101/010105+DRB1*0704              | DRB1*0111+DRB1*0711              |                              |                              |
| DRB1*010101/010105+DRB1*080401/080404     | DRB1*0120+DRB1*080201/080202     |                              |                              |
| DRB1*010101/010105+DRB1*0806              | DRB1*0120+DRB1*080101/080103     |                              |                              |
| DRB1*010101/010105+DRB1*0808              | DRB1*0114+DRB1*080201/080202     |                              |                              |
| DRB1*010101/010105+DRB1*0810              | DRB1*0120+DRB1*080302            |                              |                              |
| DRB1*010101/010105+DRB1*0817              | DRB1*0118+DRB1*080101/080103     |                              |                              |
| DRB1*010101/010105+DRB1*0820              | DRB1*0120+DRB1*1347              |                              |                              |
| DRB1*010101/010105+DRB1*0823              | DRB1*0105+DRB1*080302            |                              |                              |
| DRB1*010101/010105+DRB1*0828              | DRB1*0118+DRB1*080401/080404     |                              |                              |
| DRB1*010101/010105+DRB1*0829              | DRB1*0117+DRB1*0818              |                              |                              |
| DRB1*010101/010105+DRB1*090102            | DRB1*0121+DRB1*0905              |                              |                              |
| DRB1*010101/010105+DRB1*0906              | DRB1*0120+DRB1*090102            |                              |                              |
| DRB1*010101/010105+DRB1*1002              | DRB1*0120+DRB1*100101            |                              |                              |
| DRB1*010101/010105+DRB1*1101G1            | DRB1*0108+DRB1*1129              | DRB1*0118+DRB1*1137          |                              |
| DRB1*010101/010105+DRB1*110201            | DRB1*0103+DRB1*1134              | DRB1*0118+DRB1*1148          | DRB1*0120+DRB1*111401/111402 |
| DRB1*010101/010105+DRB1*1103              | DRB1*0108+DRB1*1163              | DRB1*0118+DRB1*1141          | DRB1*0120+DRB1*111101/111102 |
| DRB1*010101/010105+DRB1*110401/110402     | DRB1*0118+DRB1*1156              | DRB1*0120+DRB1*1101G1        |                              |
| DRB1*010101/010105+DRB1*110403            | DRB1*0120+DRB1*110105            |                              |                              |
| DRB1*010101/010105+DRB1*110601            | DRB1*0108+DRB1*1147              |                              |                              |
| DRB1*010101/010105+DRB1*110602            | DRB1*010201+DRB1*1101G1          |                              |                              |
| DRB1*010101/010105+DRB1*1107              | DRB1*0116+DRB1*1134              |                              |                              |
| DRB1*010101/010105+DRB1*111401/111402     | DRB1*0103+DRB1*1126              |                              |                              |
| DRB1*010101/010105+DRB1*1116              | DRB1*0120+DRB1*1120              |                              |                              |
| DRB1*010101/010105+DRB1*1118              | DRB1*0120+DRB1*111901            |                              |                              |
| DRB1*010101/010105+DRB1*1125              | DRB1*0120+DRB1*1123              |                              |                              |
| DRB1*010101/010105+DRB1*112701            | DRB1*0111+DRB1*1101G1            |                              |                              |
| DRB1*010101/010105+DRB1*1134              | DRB1*0120+DRB1*1126              |                              |                              |
| DRB1*010101/010105+DRB1*1135              | DRB1*0120+DRB1*1133              |                              |                              |
| DRB1*010101/010105+DRB1*1136              | DRB1*0120+DRB1*1168              |                              |                              |
| DRB1*010101/010105+DRB1*1142              | DRB1*0120+DRB1*110801/110802     |                              |                              |
| DRB1*010101/010105+DRB1*1143              | DRB1*0120+DRB1*1139              |                              |                              |
| DRB1*010101/010105+DRB1*1144              | DRB1*0120+DRB1*1149              |                              |                              |
| DRB1*010101/010105+DRB1*115401            | DRB1*0117+DRB1*110403            |                              |                              |
| DRB1*010101/010105+DRB1*115402            | DRB1*0117+DRB1*110401/110402     |                              |                              |
| DRB1*010101/010105+DRB1*1156              | DRB1*0120+DRB1*1137              |                              |                              |

|                                           |                                      |                              |                              |
|-------------------------------------------|--------------------------------------|------------------------------|------------------------------|
| DRB1*010101/010105+DRB1*120204            | DRB1*010201+DRB1*1216                |                              |                              |
| DRB1*010101/010105+DRB1*130101            | DRB1*0103+DRB1*1417                  | DRB1*0118+DRB1*1340          | DRB1*0120+DRB1*130201        |
| DRB1*010101/010105+DRB1*130201            | DRB1*0103+DRB1*1430                  | DRB1*0118+DRB1*1336          |                              |
| DRB1*010101/010105+DRB1*130301/130302     | DRB1*0110+DRB1*1312                  |                              |                              |
| DRB1*010101/010105+DRB1*1304              | DRB1*0118+DRB1*1348                  |                              |                              |
| DRB1*010101/010105+DRB1*1309              | DRB1*0115+DRB1*1417                  |                              |                              |
| DRB1*010101/010105+DRB1*1310              | DRB1*0110+DRB1*1306                  |                              |                              |
| DRB1*010101/010105+DRB1*131101            | DRB1*0120+DRB1*131401/131403         |                              |                              |
| DRB1*010101/010105+DRB1*131102            | DRB1*0120+DRB1*131402                |                              |                              |
| DRB1*010101/010105+DRB1*131401/131403     | DRB1*0118+DRB1*130701                |                              |                              |
| DRB1*010101/010105+DRB1*131402            | DRB1*0118+DRB1*130702                |                              |                              |
| DRB1*010101/010105+DRB1*1315              | DRB1*0118+DRB1*1353                  |                              |                              |
| DRB1*010101/010105+DRB1*1319              | DRB1*0103+DRB1*1420                  |                              |                              |
| DRB1*010101/010105+DRB1*1320              | DRB1*0120+DRB1*1329                  |                              |                              |
| DRB1*010101/010105+DRB1*1321              | DRB1*0118+DRB1*1349                  |                              |                              |
| DRB1*010101/010105+DRB1*1322              | DRB1*0103+DRB1*1344                  | DRB1*0118+DRB1*1370          | DRB1*0120+DRB1*1323          |
| DRB1*010101/010105+DRB1*1327              | DRB1*0120+DRB1*1341                  |                              |                              |
| DRB1*010101/010105+DRB1*1330              | DRB1*0118+DRB1*1312                  |                              |                              |
| DRB1*010101/010105+DRB1*1332              | DRB1*0120+DRB1*1365                  |                              |                              |
| DRB1*010101/010105+DRB1*1336              | DRB1*0103+DRB1*1409                  |                              |                              |
| DRB1*010101/010105+DRB1*1340              | DRB1*0103+DRB1*1480                  | DRB1*0120+DRB1*1336          |                              |
| DRB1*010101/010105+DRB1*1342              | DRB1*0120+DRB1*130501/130502         |                              |                              |
| DRB1*010101/010105+DRB1*1343              | DRB1*0114+DRB1*1320                  |                              |                              |
| DRB1*010101/010105+DRB1*1345              | DRB1*0114+DRB1*1323                  |                              |                              |
| DRB1*010101/010105+DRB1*1348              | DRB1*0120+DRB1*1338                  |                              |                              |
| DRB1*010101/010105+DRB1*1353              | DRB1*0103+DRB1*1406                  |                              |                              |
| DRB1*010101/010105+DRB1*1357              | DRB1*0118+DRB1*1319                  |                              |                              |
| DRB1*010101/010105+DRB1*1361              | DRB1*0104+DRB1*130201                | DRB1*0111+DRB1*130101        |                              |
| DRB1*010101/010105+DRB1*1366              | DRB1*0110+DRB1*1330                  | DRB1*0118+DRB1*130301/130302 |                              |
| DRB1*010101/010105+DRB1*1379              | DRB1*0120+DRB1*1339                  |                              |                              |
| DRB1*010101/010105+DRB1*1381              | DRB1*0110+DRB1*1358                  |                              |                              |
| DRB1*010101/010105+DRB1*1383              | DRB1*0118+DRB1*1308                  |                              |                              |
| DRB1*010101/010105+DRB1*140101/1454       | DRB1*0114+DRB1*142301                | DRB1*0117+DRB1*143202        | DRB1*0120+DRB1*140701/140702 |
| DRB1*010101/010105+DRB1*140102            | DRB1*0117+DRB1*143201                |                              |                              |
| DRB1*010101/010105+DRB1*1404              | DRB1*0117+DRB1*1431                  | DRB1*0120+DRB1*1468          |                              |
| DRB1*010101/010105+DRB1*140501            | DRB1*0120+DRB1*144401                |                              |                              |
| DRB1*010101/010105+DRB1*140503            | DRB1*0120+DRB1*144402                |                              |                              |
| DRB1*010101/010105+DRB1*1406              | DRB1*0120+DRB1*1402                  |                              |                              |
| DRB1*010101/010105+DRB1*140701/140702     | DRB1*0114+DRB1*1414                  |                              |                              |
| DRB1*010101/010105+DRB1*1408              | DRB1*0117+DRB1*1434                  |                              |                              |
| DRB1*010101/010105+DRB1*1412              | DRB1*0120+DRB1*140301                |                              |                              |
| DRB1*010101/010105+DRB1*1415              | DRB1*0120+DRB1*0809                  |                              |                              |
| DRB1*010101/010105+DRB1*1416              | DRB1*0114+DRB1*1308                  |                              |                              |
| DRB1*010101/010105+DRB1*1417              | DRB1*0118+DRB1*1480                  | DRB1*0120+DRB1*1430          |                              |
| DRB1*010101/010105+DRB1*1419              | DRB1*0110+DRB1*1402                  |                              |                              |
| DRB1*010101/010105+DRB1*1421              | DRB1*0110+DRB1*1417                  |                              |                              |
| DRB1*010101/010105+DRB1*142301            | DRB1*0120+DRB1*1414                  |                              |                              |
| DRB1*010101/010105+DRB1*1424              | DRB1*0115+DRB1*1402                  |                              |                              |
| DRB1*010101/010105+DRB1*1425              | DRB1*0114+DRB1*130701                |                              |                              |
| DRB1*010101/010105+DRB1*1430              | DRB1*0118+DRB1*1409                  |                              |                              |
| DRB1*010101/010105+DRB1*1433              | DRB1*0117+DRB1*1417                  |                              |                              |
| DRB1*010101/010105+DRB1*1435              | DRB1*0118+DRB1*140101/1454           |                              |                              |
| DRB1*010101/010105+DRB1*1438              | DRB1*0111+DRB1*140102                |                              |                              |
| DRB1*010101/010105+DRB1*1447              | DRB1*0111+DRB1*1402                  |                              |                              |
| DRB1*010101/010105+DRB1*1451              | DRB1*0117+DRB1*1402                  |                              |                              |
| DRB1*010101/010105+DRB1*1453              | DRB1*0114+DRB1*131401/131403         | DRB1*0118+DRB1*1425          |                              |
| DRB1*010101/010105+DRB1*1460              | DRB1*0105+DRB1*140101/1454           |                              |                              |
| DRB1*010101/010105+DRB1*1478              | DRB1*0120+DRB1*1463                  |                              |                              |
| DRB1*010101/010105+DRB1*1480              | DRB1*0120+DRB1*1409                  |                              |                              |
| DRB1*010101/010105+DRB1*15010101/15010102 | DRB1*0118+DRB1*1507                  | DRB1*0120+DRB1*150201        |                              |
| DRB1*010101/010105+DRB1*150103            | DRB1*0120+DRB1*150206                |                              |                              |
| DRB1*010101/010105+DRB1*150104            | DRB1*0120+DRB1*150202/150205         |                              |                              |
| DRB1*010101/010105+DRB1*150201            | DRB1*0115+DRB1*1527                  | DRB1*0118+DRB1*1511          |                              |
| DRB1*010101/010105+DRB1*150203            | DRB1*010104+DRB1*150201              |                              |                              |
| DRB1*010101/010105+DRB1*1504              | DRB1*0120+DRB1*1515                  |                              |                              |
| DRB1*010101/010105+DRB1*1505              | DRB1*0106+DRB1*1527                  | DRB1*0120+DRB1*1531          |                              |
| DRB1*010101/010105+DRB1*1507              | DRB1*0120+DRB1*1511                  |                              |                              |
| DRB1*010101/010105+DRB1*1516              | DRB1*0105+DRB1*15010101/15010102     |                              |                              |
| DRB1*010101/010105+DRB1*1531              | DRB1*0109+DRB1*1527                  |                              |                              |
| DRB1*010101/010105+DRB1*1609              | DRB1*0118+DRB1*160101                |                              |                              |
| DRB1*010101/010105+DRB1*1610              | DRB1*0118+DRB1*160201                |                              |                              |
| DRB1*010104+DRB1*15010101/15010102        | DRB1*0120+DRB1*150203                |                              |                              |
| DRB1*010107+DRB1*110602                   | DRB1*010205+DRB1*1101G1              |                              |                              |
| DRB1*010107+DRB1*120204                   | DRB1*010205+DRB1*1216                |                              |                              |
| DRB1*010201+DRB1*040103                   | DRB1*010203+DRB1*040101              |                              |                              |
| DRB1*010201+DRB1*040304                   | DRB1*010204+DRB1*040301/040303       |                              |                              |
| DRB1*010201+DRB1*090104                   | DRB1*010203+DRB1*090102              |                              |                              |
| DRB1*010201+DRB1*110401/110402            | DRB1*0120+DRB1*110602                |                              |                              |
| DRB1*010201+DRB1*110404                   | DRB1*010203+DRB1*110401/110402       |                              |                              |
| DRB1*010201+DRB1*111202                   | DRB1*010203+DRB1*111201              |                              |                              |
| DRB1*010201+DRB1*112701                   | DRB1*0111+DRB1*110602                |                              |                              |
| DRB1*010201+DRB1*120302                   | DRB1*0120+DRB1*120101/1206/1210/1217 |                              |                              |
| DRB1*010201+DRB1*135002                   | DRB1*010203+DRB1*135001              |                              |                              |
| DRB1*010201+DRB1*140501                   | DRB1*010204+DRB1*140502              |                              |                              |
| DRB1*010201+DRB1*1450                     | DRB1*0104+DRB1*1428                  |                              |                              |
| DRB1*0103+DRB1*03010101/03010102          | DRB1*0116+DRB1*1327                  |                              |                              |
| DRB1*0103+DRB1*0303                       | DRB1*0116+DRB1*1353                  |                              |                              |
| DRB1*0103+DRB1*030501/030502              | DRB1*0116+DRB1*1341                  |                              |                              |
| DRB1*0103+DRB1*0307                       | DRB1*0116+DRB1*130101                |                              |                              |
| DRB1*0103+DRB1*0321                       | DRB1*0116+DRB1*1363                  |                              |                              |
| DRB1*0103+DRB1*0340                       | DRB1*0116+DRB1*1323                  |                              |                              |
| DRB1*0103+DRB1*040101                     | DRB1*0110+DRB1*0414                  |                              |                              |
| DRB1*0103+DRB1*040301/040303              | DRB1*0117+DRB1*0402                  |                              |                              |
| DRB1*0103+DRB1*040701/040703              | DRB1*0117+DRB1*0414                  |                              |                              |
| DRB1*0103+DRB1*0413                       | DRB1*0110+DRB1*0402                  |                              |                              |
| DRB1*0103+DRB1*0422                       | DRB1*0116+DRB1*0402                  |                              |                              |
| DRB1*0103+DRB1*0442                       | DRB1*0118+DRB1*0402                  |                              |                              |
| DRB1*0103+DRB1*0443                       | DRB1*0118+DRB1*0414                  |                              |                              |
| DRB1*0103+DRB1*0444                       | DRB1*0104+DRB1*0414                  | DRB1*0111+DRB1*0402          |                              |
| DRB1*0103+DRB1*1107                       | DRB1*0116+DRB1*110201                |                              |                              |
| DRB1*0103+DRB1*1169                       | DRB1*0115+DRB1*111101/111102         |                              |                              |
| DRB1*0103+DRB1*1309                       | DRB1*0115+DRB1*130101                |                              |                              |
| DRB1*0103+DRB1*1421                       | DRB1*0110+DRB1*130101                |                              |                              |
| DRB1*0103+DRB1*1433                       | DRB1*0117+DRB1*130101                |                              |                              |
| DRB1*0103+DRB1*1437                       | DRB1*0115+DRB1*1372                  |                              |                              |
| DRB1*0103+DRB1*15010101/15010102          | DRB1*0115+DRB1*1510                  |                              |                              |
| DRB1*0103+DRB1*1505                       | DRB1*0109+DRB1*1510                  |                              |                              |
| DRB1*0103+DRB1*1525                       | DRB1*0116+DRB1*1510                  |                              |                              |
| DRB1*0104+DRB1*0109                       | DRB1*0106+DRB1*0111                  |                              |                              |
| DRB1*0104+DRB1*030201                     | DRB1*0111+DRB1*0303                  |                              |                              |
| DRB1*0104+DRB1*030501/030502              | DRB1*0111+DRB1*03010101/03010102     |                              |                              |
| DRB1*0104+DRB1*0309                       | DRB1*0111+DRB1*0323                  |                              |                              |
| DRB1*0104+DRB1*0315                       | DRB1*0120+DRB1*030102                | DRB1*0111+DRB1*0413          |                              |
| DRB1*0104+DRB1*040101                     | DRB1*0110+DRB1*0444                  |                              |                              |
| DRB1*0104+DRB1*0404                       | DRB1*0120+DRB1*0444                  |                              |                              |
| DRB1*0104+DRB1*0405G1                     | DRB1*0111+DRB1*0410                  |                              |                              |
| DRB1*0104+DRB1*040701/040703              | DRB1*0111+DRB1*040301/040303         | DRB1*0117+DRB1*0444          | DRB1*0120+DRB1*0474          |
| DRB1*0104+DRB1*0409                       | DRB1*0111+DRB1*0467                  |                              |                              |
| DRB1*0104+DRB1*0417                       | DRB1*0111+DRB1*0411                  |                              |                              |
| DRB1*0104+DRB1*0419                       | DRB1*0111+DRB1*0468                  |                              |                              |
| DRB1*0104+DRB1*0420                       | DRB1*0111+DRB1*040601/040602         |                              |                              |
| DRB1*0104+DRB1*0431                       | DRB1*0111+DRB1*0455                  |                              |                              |
| DRB1*0104+DRB1*0443                       | DRB1*0111+DRB1*0442                  | DRB1*0118+DRB1*0444          |                              |
| DRB1*0104+DRB1*0454                       | DRB1*0111+DRB1*0425                  |                              |                              |

|                              |                                  |                       |
|------------------------------|----------------------------------|-----------------------|
| DRB1*0104+DRB1*0711          | DRB1*0120+DRB1*0704              |                       |
| DRB1*0104+DRB1*080101/080103 | DRB1*0111+DRB1*0806              |                       |
| DRB1*0104+DRB1*080201/080202 | DRB1*0111+DRB1*080401/080404     |                       |
| DRB1*0104+DRB1*080302        | DRB1*0111+DRB1*0810              |                       |
| DRB1*0104+DRB1*0809          | DRB1*0111+DRB1*1415              |                       |
| DRB1*0104+DRB1*090102        | DRB1*0111+DRB1*0906              |                       |
| DRB1*0104+DRB1*100101        | DRB1*0111+DRB1*1002              |                       |
| DRB1*0104+DRB1*1101G1        | DRB1*0111+DRB1*110401/110402     | DRB1*0120+DRB1*112701 |
| DRB1*0104+DRB1*110105        | DRB1*0111+DRB1*110403            |                       |
| DRB1*0104+DRB1*110801/110802 | DRB1*0111+DRB1*1142              |                       |
| DRB1*0104+DRB1*111101/111102 | DRB1*0111+DRB1*1103              |                       |
| DRB1*0104+DRB1*111401/111402 | DRB1*0111+DRB1*110201            |                       |
| DRB1*0104+DRB1*111901        | DRB1*0111+DRB1*1118              |                       |
| DRB1*0104+DRB1*1120          | DRB1*0111+DRB1*1116              |                       |
| DRB1*0104+DRB1*1123          | DRB1*0111+DRB1*1125              |                       |
| DRB1*0104+DRB1*1126          | DRB1*0111+DRB1*1134              |                       |
| DRB1*0104+DRB1*1133          | DRB1*0111+DRB1*1135              |                       |
| DRB1*0104+DRB1*1137          | DRB1*0111+DRB1*1156              |                       |
| DRB1*0104+DRB1*1139          | DRB1*0111+DRB1*1143              |                       |
| DRB1*0104+DRB1*1149          | DRB1*0111+DRB1*1144              |                       |
| DRB1*0104+DRB1*1168          | DRB1*0111+DRB1*1136              |                       |
| DRB1*0104+DRB1*130101        | DRB1*0120+DRB1*1361              |                       |
| DRB1*0104+DRB1*130501/130502 | DRB1*0111+DRB1*1342              |                       |
| DRB1*0104+DRB1*131401/131403 | DRB1*0111+DRB1*131101            |                       |
| DRB1*0104+DRB1*131402        | DRB1*0111+DRB1*131102            |                       |
| DRB1*0104+DRB1*1323          | DRB1*0111+DRB1*1322              |                       |
| DRB1*0104+DRB1*1329          | DRB1*0111+DRB1*1320              |                       |
| DRB1*0104+DRB1*1336          | DRB1*0111+DRB1*1340              |                       |
| DRB1*0104+DRB1*1338          | DRB1*0111+DRB1*1348              |                       |
| DRB1*0104+DRB1*1339          | DRB1*0111+DRB1*1379              |                       |
| DRB1*0104+DRB1*1341          | DRB1*0111+DRB1*1327              |                       |
| DRB1*0104+DRB1*1347          | DRB1*0111+DRB1*0820              |                       |
| DRB1*0104+DRB1*1365          | DRB1*0111+DRB1*1332              |                       |
| DRB1*0104+DRB1*140102        | DRB1*0120+DRB1*1438              |                       |
| DRB1*0104+DRB1*1402          | DRB1*0111+DRB1*1406              | DRB1*0120+DRB1*1447   |
| DRB1*0104+DRB1*140301        | DRB1*0111+DRB1*1412              |                       |
| DRB1*0104+DRB1*140701/140702 | DRB1*0111+DRB1*140101/1454       |                       |
| DRB1*0104+DRB1*1409          | DRB1*0111+DRB1*1480              |                       |
| DRB1*0104+DRB1*1414          | DRB1*0111+DRB1*142301            |                       |
| DRB1*0104+DRB1*1430          | DRB1*0111+DRB1*1417              |                       |
| DRB1*0104+DRB1*144401        | DRB1*0111+DRB1*140501            |                       |
| DRB1*0104+DRB1*144402        | DRB1*0111+DRB1*140503            |                       |
| DRB1*0104+DRB1*1463          | DRB1*0111+DRB1*1478              |                       |
| DRB1*0104+DRB1*1468          | DRB1*0111+DRB1*1404              |                       |
| DRB1*0104+DRB1*150201        | DRB1*0111+DRB1*15010101/15010102 |                       |
| DRB1*0104+DRB1*150202/150205 | DRB1*0111+DRB1*150104            |                       |
| DRB1*0104+DRB1*150206        | DRB1*0111+DRB1*150103            |                       |
| DRB1*0104+DRB1*1511          | DRB1*0111+DRB1*1507              |                       |
| DRB1*0104+DRB1*1515          | DRB1*0111+DRB1*1504              |                       |
| DRB1*0104+DRB1*1531          | DRB1*0111+DRB1*1505              |                       |
| DRB1*0105+DRB1*0810          | DRB1*0120+DRB1*0823              |                       |
| DRB1*0105+DRB1*1435          | DRB1*0118+DRB1*1460              |                       |
| DRB1*0106+DRB1*030201        | DRB1*0109+DRB1*0303              |                       |
| DRB1*0106+DRB1*030501/030502 | DRB1*0109+DRB1*03010101/03010102 |                       |
| DRB1*0106+DRB1*0309          | DRB1*0109+DRB1*0323              |                       |
| DRB1*0106+DRB1*0314          | DRB1*0109+DRB1*0315              |                       |
| DRB1*0106+DRB1*040101        | DRB1*0109+DRB1*0413              |                       |
| DRB1*0106+DRB1*0405G1        | DRB1*0109+DRB1*0410              |                       |
| DRB1*0106+DRB1*040701/040703 | DRB1*0109+DRB1*040301/040303     |                       |
| DRB1*0106+DRB1*0408          | DRB1*0109+DRB1*0404              |                       |
| DRB1*0106+DRB1*0409          | DRB1*0109+DRB1*0467              |                       |
| DRB1*0106+DRB1*0414          | DRB1*0109+DRB1*0402              | DRB1*0115+DRB1*0437   |
| DRB1*0106+DRB1*0417          | DRB1*0109+DRB1*0411              |                       |
| DRB1*0106+DRB1*0419          | DRB1*0109+DRB1*0468              |                       |
| DRB1*0106+DRB1*0420          | DRB1*0109+DRB1*040601/040602     |                       |
| DRB1*0106+DRB1*0431          | DRB1*0109+DRB1*0455              |                       |
| DRB1*0106+DRB1*0438          | DRB1*0115+DRB1*0413              |                       |
| DRB1*0106+DRB1*0443          | DRB1*0109+DRB1*0442              |                       |
| DRB1*0106+DRB1*0454          | DRB1*0109+DRB1*0425              |                       |
| DRB1*0106+DRB1*080101/080103 | DRB1*0109+DRB1*0806              |                       |
| DRB1*0106+DRB1*080201/080202 | DRB1*0109+DRB1*080401/080404     |                       |
| DRB1*0106+DRB1*080302        | DRB1*0109+DRB1*0810              |                       |
| DRB1*0106+DRB1*0809          | DRB1*0109+DRB1*1415              |                       |
| DRB1*0106+DRB1*090102        | DRB1*0109+DRB1*0906              |                       |
| DRB1*0106+DRB1*100101        | DRB1*0109+DRB1*1002              |                       |
| DRB1*0106+DRB1*1101G1        | DRB1*0109+DRB1*110401/110402     |                       |
| DRB1*0106+DRB1*110105        | DRB1*0109+DRB1*110403            |                       |
| DRB1*0106+DRB1*110801/110802 | DRB1*0109+DRB1*1142              |                       |
| DRB1*0106+DRB1*111101/111102 | DRB1*0109+DRB1*1103              |                       |
| DRB1*0106+DRB1*111401/111402 | DRB1*0109+DRB1*110201            | DRB1*0115+DRB1*1136   |
| DRB1*0106+DRB1*111901        | DRB1*0109+DRB1*1118              | DRB1*0115+DRB1*1142   |
| DRB1*0106+DRB1*1120          | DRB1*0109+DRB1*1116              |                       |
| DRB1*0106+DRB1*1123          | DRB1*0109+DRB1*1125              |                       |
| DRB1*0106+DRB1*1126          | DRB1*0109+DRB1*1134              |                       |
| DRB1*0106+DRB1*1133          | DRB1*0109+DRB1*1135              |                       |
| DRB1*0106+DRB1*1137          | DRB1*0109+DRB1*1156              |                       |
| DRB1*0106+DRB1*1139          | DRB1*0109+DRB1*1143              |                       |
| DRB1*0106+DRB1*1149          | DRB1*0109+DRB1*1144              |                       |
| DRB1*0106+DRB1*1168          | DRB1*0109+DRB1*1136              |                       |
| DRB1*0106+DRB1*130201        | DRB1*0109+DRB1*130101            | DRB1*0115+DRB1*1320   |
| DRB1*0106+DRB1*130501/130502 | DRB1*0109+DRB1*1342              |                       |
| DRB1*0106+DRB1*131401/131403 | DRB1*0109+DRB1*131101            |                       |
| DRB1*0106+DRB1*131402        | DRB1*0109+DRB1*131102            |                       |
| DRB1*0106+DRB1*1323          | DRB1*0109+DRB1*1322              |                       |
| DRB1*0106+DRB1*1329          | DRB1*0109+DRB1*1320              |                       |
| DRB1*0106+DRB1*1336          | DRB1*0109+DRB1*1340              |                       |
| DRB1*0106+DRB1*1338          | DRB1*0109+DRB1*1348              |                       |
| DRB1*0106+DRB1*1339          | DRB1*0109+DRB1*1379              | DRB1*0115+DRB1*1378   |
| DRB1*0106+DRB1*1341          | DRB1*0109+DRB1*1327              | DRB1*0115+DRB1*1371   |
| DRB1*0106+DRB1*1347          | DRB1*0109+DRB1*0820              |                       |
| DRB1*0106+DRB1*1365          | DRB1*0109+DRB1*1332              |                       |
| DRB1*0106+DRB1*1402          | DRB1*0109+DRB1*1406              |                       |
| DRB1*0106+DRB1*140301        | DRB1*0109+DRB1*1412              |                       |
| DRB1*0106+DRB1*140701/140702 | DRB1*0109+DRB1*140101/1454       |                       |
| DRB1*0106+DRB1*1409          | DRB1*0109+DRB1*1480              |                       |
| DRB1*0106+DRB1*1414          | DRB1*0109+DRB1*142301            |                       |
| DRB1*0106+DRB1*1430          | DRB1*0109+DRB1*1417              |                       |
| DRB1*0106+DRB1*144401        | DRB1*0109+DRB1*140501            |                       |
| DRB1*0106+DRB1*144402        | DRB1*0109+DRB1*140503            |                       |
| DRB1*0106+DRB1*1463          | DRB1*0109+DRB1*1478              |                       |
| DRB1*0106+DRB1*1467          | DRB1*0115+DRB1*1412              |                       |
| DRB1*0106+DRB1*1468          | DRB1*0109+DRB1*1404              |                       |
| DRB1*0106+DRB1*150201        | DRB1*0109+DRB1*15010101/15010102 | DRB1*0115+DRB1*1505   |
| DRB1*0106+DRB1*150202/150205 | DRB1*0109+DRB1*150104            |                       |
| DRB1*0106+DRB1*150206        | DRB1*0109+DRB1*150103            |                       |
| DRB1*0106+DRB1*1511          | DRB1*0109+DRB1*1507              |                       |
| DRB1*0106+DRB1*1515          | DRB1*0109+DRB1*1504              |                       |
| DRB1*0106+DRB1*1531          | DRB1*0109+DRB1*1505              |                       |
| DRB1*0109+DRB1*0319          | DRB1*0115+DRB1*03010101/03010102 |                       |
| DRB1*0109+DRB1*0418          | DRB1*0115+DRB1*0458              |                       |
| DRB1*0109+DRB1*0438          | DRB1*0115+DRB1*040101            |                       |
| DRB1*0109+DRB1*0456          | DRB1*0115+DRB1*0404              |                       |
| DRB1*0109+DRB1*0830          | DRB1*0115+DRB1*0813              |                       |
| DRB1*0109+DRB1*111401/111402 | DRB1*0115+DRB1*1168              |                       |

|                                           |                                       |                              |
|-------------------------------------------|---------------------------------------|------------------------------|
| DRB1*0109+DRB1*111801                     | DRB1*0115+DRB1*110801/110802          |                              |
| DRB1*0109+DRB1*1115                       | DRB1*0115+DRB1*1164                   |                              |
| DRB1*0109+DRB1*120101/1206/1210/1217      | DRB1*0115+DRB1*1212                   |                              |
| DRB1*0109+DRB1*130201                     | DRB1*0115+DRB1*1329                   |                              |
| DRB1*0109+DRB1*130301/130302              | DRB1*0115+DRB1*1388                   |                              |
| DRB1*0109+DRB1*1382                       | DRB1*0115+DRB1*1325                   |                              |
| DRB1*0109+DRB1*1445                       | DRB1*0115+DRB1*140501                 |                              |
| DRB1*0109+DRB1*1463                       | DRB1*0115+DRB1*1485                   |                              |
| DRB1*0109+DRB1*1467                       | DRB1*0115+DRB1*140301                 |                              |
| DRB1*0109+DRB1*150201                     | DRB1*0115+DRB1*1531                   |                              |
| DRB1*0109+DRB1*15030101/15030102          | DRB1*0115+DRB1*1523                   |                              |
| DRB1*0109+DRB1*1525                       | DRB1*0116+DRB1*1505                   |                              |
| DRB1*0109+DRB1*160501                     | DRB1*0115+DRB1*160201                 |                              |
| DRB1*0110+DRB1*030201                     | DRB1*0116+DRB1*1419                   |                              |
| DRB1*0110+DRB1*0307                       | DRB1*0116+DRB1*1421                   |                              |
| DRB1*0110+DRB1*040301/040303              | DRB1*0117+DRB1*0413                   |                              |
| DRB1*0110+DRB1*040701/040703              | DRB1*0117+DRB1*040101                 |                              |
| DRB1*0110+DRB1*0411                       | DRB1*0117+DRB1*0467                   |                              |
| DRB1*0110+DRB1*0417                       | DRB1*0117+DRB1*0409                   |                              |
| DRB1*0110+DRB1*0420                       | DRB1*0117+DRB1*0421                   |                              |
| DRB1*0110+DRB1*0422                       | DRB1*0116+DRB1*0413                   |                              |
| DRB1*0110+DRB1*0428                       | DRB1*0118+DRB1*0409                   |                              |
| DRB1*0110+DRB1*0442                       | DRB1*0118+DRB1*0413                   | DRB1*0120+DRB1*0435          |
| DRB1*0110+DRB1*0456                       | DRB1*0120+DRB1*0438                   |                              |
| DRB1*0110+DRB1*0468                       | DRB1*0120+DRB1*0421                   |                              |
| DRB1*0110+DRB1*1309                       | DRB1*0115+DRB1*1421                   |                              |
| DRB1*0110+DRB1*1382                       | DRB1*0118+DRB1*1337                   |                              |
| DRB1*0110+DRB1*1406                       | DRB1*0120+DRB1*1419                   |                              |
| DRB1*0110+DRB1*1424                       | DRB1*0115+DRB1*1419                   |                              |
| DRB1*0110+DRB1*1433                       | DRB1*0117+DRB1*1421                   |                              |
| DRB1*0110+DRB1*1447                       | DRB1*0111+DRB1*1419                   |                              |
| DRB1*0110+DRB1*1451                       | DRB1*0117+DRB1*1419                   |                              |
| DRB1*0111+DRB1*030201                     | DRB1*0116+DRB1*1447                   |                              |
| DRB1*0111+DRB1*0422                       | DRB1*0116+DRB1*0444                   |                              |
| DRB1*0111+DRB1*07010101/07010102          | DRB1*0121+DRB1*0704                   |                              |
| DRB1*0111+DRB1*1424                       | DRB1*0115+DRB1*1447                   |                              |
| DRB1*0111+DRB1*1451                       | DRB1*0117+DRB1*1447                   |                              |
| DRB1*0114+DRB1*0334                       | DRB1*0119+DRB1*0310                   |                              |
| DRB1*0114+DRB1*0413                       | DRB1*0120+DRB1*0462                   |                              |
| DRB1*0114+DRB1*0435                       | DRB1*0118+DRB1*0462                   |                              |
| DRB1*0114+DRB1*080401/080404              | DRB1*0120+DRB1*0808                   |                              |
| DRB1*0114+DRB1*131101                     | DRB1*0120+DRB1*1453                   |                              |
| DRB1*0114+DRB1*1322                       | DRB1*0120+DRB1*1345                   |                              |
| DRB1*0114+DRB1*1325                       | DRB1*0118+DRB1*1469                   |                              |
| DRB1*0114+DRB1*1383                       | DRB1*0118+DRB1*1416                   |                              |
| DRB1*0114+DRB1*1420                       | DRB1*0120+DRB1*1449                   |                              |
| DRB1*0115+DRB1*030201                     | DRB1*0116+DRB1*1424                   |                              |
| DRB1*0115+DRB1*0307                       | DRB1*0116+DRB1*1309                   |                              |
| DRB1*0115+DRB1*040302                     | DRB1*0117+DRB1*0473                   |                              |
| DRB1*0115+DRB1*1406                       | DRB1*0120+DRB1*1424                   |                              |
| DRB1*0115+DRB1*1433                       | DRB1*0117+DRB1*1309                   |                              |
| DRB1*0115+DRB1*1451                       | DRB1*0117+DRB1*1424                   |                              |
| DRB1*0115+DRB1*1525                       | DRB1*0116+DRB1*15010101/15010102      |                              |
| DRB1*0116+DRB1*040301/040303              | DRB1*0117+DRB1*0422                   |                              |
| DRB1*0116+DRB1*0442                       | DRB1*0118+DRB1*0422                   |                              |
| DRB1*0116+DRB1*1344                       | DRB1*0120+DRB1*0340                   |                              |
| DRB1*0116+DRB1*1433                       | DRB1*0117+DRB1*0307                   |                              |
| DRB1*0116+DRB1*1451                       | DRB1*0117+DRB1*030201                 |                              |
| DRB1*0117+DRB1*0428                       | DRB1*0118+DRB1*0417                   |                              |
| DRB1*0117+DRB1*04443                      | DRB1*0118+DRB1*040701/040703          |                              |
| DRB1*0117+DRB1*111301/111302              | DRB1*0118+DRB1*1117                   |                              |
| DRB1*0117+DRB1*1406                       | DRB1*0120+DRB1*1451                   |                              |
| DRB1*0118+DRB1*0303                       | DRB1*0120+DRB1*0329                   |                              |
| DRB1*0118+DRB1*0410                       | DRB1*0120+DRB1*0428                   |                              |
| DRB1*0118+DRB1*0806                       | DRB1*0120+DRB1*0817                   |                              |
| DRB1*03010101/03010102+DRB1*030201        | DRB1*0303+DRB1*030501/030502          | DRB1*0306+DRB1*0329          |
| DRB1*03010101/03010102+DRB1*030202        | DRB1*030102+DRB1*030201               |                              |
| DRB1*03010101/03010102+DRB1*0309          | DRB1*030501/030502+DRB1*0323          |                              |
| DRB1*03010101/03010102+DRB1*031302        | DRB1*030102+DRB1*031301               |                              |
| DRB1*03010101/03010102+DRB1*0314          | DRB1*030501/030502+DRB1*0315          |                              |
| DRB1*03010101/03010102+DRB1*0321          | DRB1*0307+DRB1*0330                   |                              |
| DRB1*03010101/03010102+DRB1*0326          | DRB1*0306+DRB1*0333                   |                              |
| DRB1*03010101/03010102+DRB1*0327          | DRB1*030202+DRB1*0311                 |                              |
| DRB1*03010101/03010102+DRB1*0331          | DRB1*0306+DRB1*0325                   |                              |
| DRB1*03010101/03010102+DRB1*0341          | DRB1*0306+DRB1*0340                   |                              |
| DRB1*03010101/03010102+DRB1*040101        | DRB1*030501/030502+DRB1*0413          | DRB1*0306+DRB1*0435          |
| DRB1*03010101/03010102+DRB1*0414          | DRB1*0319+DRB1*0437                   | DRB1*0422+DRB1*1327          |
| DRB1*03010101/03010102+DRB1*0415          | DRB1*0306+DRB1*0459                   | DRB1*0325+DRB1*0441          |
| DRB1*03010101/03010102+DRB1*040301/040303 | DRB1*0306+DRB1*0442                   |                              |
| DRB1*03010101/03010102+DRB1*0404          | DRB1*030501/030502+DRB1*0410          | DRB1*0306+DRB1*0428          |
| DRB1*03010101/03010102+DRB1*0405G1        | DRB1*0325+DRB1*0477                   | DRB1*0312+DRB1*0408          |
| DRB1*03010101/03010102+DRB1*040601/040602 | DRB1*0304+DRB1*0441                   |                              |
| DRB1*03010101/03010102+DRB1*040701/040703 | DRB1*030501/030502+DRB1*040301/040303 |                              |
| DRB1*03010101/03010102+DRB1*0408          | DRB1*030501/030502+DRB1*0404          | DRB1*0306+DRB1*0443          |
| DRB1*03010101/03010102+DRB1*0409          | DRB1*030501/030502+DRB1*0467          | DRB1*0312+DRB1*040101        |
| DRB1*03010101/03010102+DRB1*0410          | DRB1*0312+DRB1*0404                   |                              |
| DRB1*03010101/03010102+DRB1*0411          | DRB1*0312+DRB1*040301/040303          |                              |
| DRB1*03010101/03010102+DRB1*0412          | DRB1*0312+DRB1*0418                   |                              |
| DRB1*03010101/03010102+DRB1*0414          | DRB1*030501/030502+DRB1*0402          | DRB1*0422+DRB1*1341          |
| DRB1*03010101/03010102+DRB1*0415          | DRB1*0308+DRB1*0436                   |                              |
| DRB1*03010101/03010102+DRB1*0417          | DRB1*030501/030502+DRB1*0411          | DRB1*0312+DRB1*040701/040703 |
| DRB1*03010101/03010102+DRB1*0418          | DRB1*0319+DRB1*0458                   |                              |
| DRB1*03010101/03010102+DRB1*0419          | DRB1*030501/030502+DRB1*0468          |                              |
| DRB1*03010101/03010102+DRB1*0420          | DRB1*030501/030502+DRB1*040601/040602 |                              |
| DRB1*03010101/03010102+DRB1*0427          | DRB1*0320+DRB1*040301/040303          |                              |
| DRB1*03010101/03010102+DRB1*0428          | DRB1*0312+DRB1*0443                   |                              |
| DRB1*03010101/03010102+DRB1*0431          | DRB1*030501/030502+DRB1*0455          |                              |
| DRB1*03010101/03010102+DRB1*0437          | DRB1*0422+DRB1*1371                   |                              |
| DRB1*03010101/03010102+DRB1*0438          | DRB1*0319+DRB1*040101                 |                              |
| DRB1*03010101/03010102+DRB1*0443          | DRB1*030501/030502+DRB1*0442          |                              |
| DRB1*03010101/03010102+DRB1*0454          | DRB1*030501/030502+DRB1*0425          |                              |
| DRB1*03010101/03010102+DRB1*0456          | DRB1*0319+DRB1*0404                   |                              |
| DRB1*03010101/03010102+DRB1*0461          | DRB1*0308+DRB1*0408                   |                              |
| DRB1*03010101/03010102+DRB1*0462          | DRB1*0310+DRB1*040101                 |                              |
| DRB1*03010101/03010102+DRB1*0467          | DRB1*0312+DRB1*0413                   |                              |
| DRB1*03010101/03010102+DRB1*080101/080103 | DRB1*030501/030502+DRB1*0806          | DRB1*0306+DRB1*0817          |
| DRB1*03010101/03010102+DRB1*080201/080202 | DRB1*030501/030502+DRB1*080401/080404 |                              |
| DRB1*03010101/03010102+DRB1*080203        | DRB1*030105+DRB1*080201/080202        |                              |
| DRB1*03010101/03010102+DRB1*080302        | DRB1*030501/030502+DRB1*0810          | DRB1*0312+DRB1*0830          |
| DRB1*03010101/03010102+DRB1*080401/080404 | DRB1*0306+DRB1*0828                   |                              |
| DRB1*03010101/03010102+DRB1*0805          | DRB1*0312+DRB1*0824                   |                              |
| DRB1*03010101/03010102+DRB1*0806          | DRB1*0312+DRB1*080401/080404          |                              |
| DRB1*03010101/03010102+DRB1*0808          | DRB1*0310+DRB1*080201/080202          |                              |
| DRB1*03010101/03010102+DRB1*0809          | DRB1*030501/030502+DRB1*1415          |                              |
| DRB1*03010101/03010102+DRB1*0812          | DRB1*0320+DRB1*0810                   |                              |
| DRB1*03010101/03010102+DRB1*0822          | DRB1*0320+DRB1*0806                   | DRB1*0323+DRB1*080302        |
| DRB1*03010101/03010102+DRB1*0827          | DRB1*0309+DRB1*0810                   |                              |
| DRB1*03010101/03010102+DRB1*0830          | DRB1*0319+DRB1*0813                   |                              |
| DRB1*03010101/03010102+DRB1*0833          | DRB1*0316+DRB1*080302                 |                              |
| DRB1*03010101/03010102+DRB1*090102        | DRB1*030501/030502+DRB1*0906          |                              |
| DRB1*03010101/03010102+DRB1*100101        | DRB1*030501/030502+DRB1*1002          |                              |
| DRB1*03010101/03010102+DRB1*1101G1        | DRB1*030501/030502+DRB1*110401/110402 | DRB1*0308+DRB1*131401/131403 |
|                                           | DRB1*0325+DRB1*1128                   | DRB1*0315+DRB1*112702        |
| DRB1*03010101/03010102+DRB1*110105        | DRB1*030501/030502+DRB1*110403        |                              |

|                                                   |                                           |                         |                              |
|---------------------------------------------------|-------------------------------------------|-------------------------|------------------------------|
| DRB1*03010101/03010102+DRB1*110201                | DRB1*0308+DRB1*1322                       | DRB1*0319+DRB1*1136     | DRB1*1107+DRB1*1327          |
| DRB1*03010101/03010102+DRB1*1103                  | DRB1*0308+DRB1*1324                       |                         |                              |
| DRB1*03010101/03010102+DRB1*110401/110402         | DRB1*0308+DRB1*131101                     |                         |                              |
| DRB1*03010101/03010102+DRB1*110404                | DRB1*0325+DRB1*1158                       |                         |                              |
| DRB1*03010101/03010102+DRB1*110601                | DRB1*0320+DRB1*110401/110402              |                         |                              |
| DRB1*03010101/03010102+DRB1*110602                | DRB1*0320+DRB1*110403                     |                         |                              |
| DRB1*03010101/03010102+DRB1*110801/110802         | DRB1*030501/030502+DRB1*1142              | DRB1*0308+DRB1*1325     |                              |
| DRB1*03010101/03010102+DRB1*1109                  | DRB1*0308+DRB1*130501/130502              |                         |                              |
| DRB1*03010101/03010102+DRB1*111001/111002         | DRB1*0330+DRB1*1109                       |                         |                              |
| DRB1*03010101/03010102+DRB1*111101/111102         | DRB1*030501/030502+DRB1*1103              | DRB1*0340+DRB1*1159     |                              |
| DRB1*03010101/03010102+DRB1*111201                | DRB1*0330+DRB1*1128                       |                         |                              |
| DRB1*03010101/03010102+DRB1*111401/111402         | DRB1*030501/030502+DRB1*110201            | DRB1*0308+DRB1*1323     | DRB1*0319+DRB1*1168          |
|                                                   | DRB1*1107+DRB1*1341                       |                         |                              |
| DRB1*03010101/03010102+DRB1*1115                  | DRB1*0308+DRB1*1362                       |                         |                              |
| DRB1*03010101/03010102+DRB1*1116                  | DRB1*0308+DRB1*130101                     |                         |                              |
| DRB1*03010101/03010102+DRB1*1117                  | DRB1*0308+DRB1*142301                     |                         |                              |
| DRB1*03010101/03010102+DRB1*1118                  | DRB1*0319+DRB1*1142                       |                         |                              |
| DRB1*03010101/03010102+DRB1*111901                | DRB1*030501/030502+DRB1*1118              | DRB1*0308+DRB1*1382     | DRB1*0319+DRB1*110801/110802 |
| DRB1*03010101/03010102+DRB1*1120                  | DRB1*030501/030502+DRB1*1116              | DRB1*0308+DRB1*130201   |                              |
| DRB1*03010101/03010102+DRB1*1121                  | DRB1*0320+DRB1*110201                     |                         |                              |
| DRB1*03010101/03010102+DRB1*1123                  | DRB1*030501/030502+DRB1*1125              |                         |                              |
| DRB1*03010101/03010102+DRB1*1126                  | DRB1*030501/030502+DRB1*1134              |                         |                              |
| DRB1*03010101/03010102+DRB1*112701                | DRB1*030102+DRB1*112702                   |                         |                              |
| DRB1*03010101/03010102+DRB1*1128                  | DRB1*0308+DRB1*135001                     |                         |                              |
| DRB1*03010101/03010102+DRB1*1129                  | DRB1*0304+DRB1*1128                       |                         |                              |
| DRB1*03010101/03010102+DRB1*1133                  | DRB1*030501/030502+DRB1*1135              |                         |                              |
| DRB1*03010101/03010102+DRB1*1134                  | DRB1*0308+DRB1*1344                       |                         |                              |
| DRB1*03010101/03010102+DRB1*1136                  | DRB1*1107+DRB1*1371                       |                         |                              |
| DRB1*03010101/03010102+DRB1*1137                  | DRB1*030501/030502+DRB1*1156              | DRB1*0306+DRB1*1101G1   | DRB1*0308+DRB1*130701        |
|                                                   | DRB1*0331+DRB1*1128                       |                         |                              |
| DRB1*03010101/03010102+DRB1*1139                  | DRB1*030501/030502+DRB1*1143              | DRB1*0337+DRB1*1101G1   |                              |
| DRB1*03010101/03010102+DRB1*1140                  | DRB1*0307+DRB1*1159                       |                         |                              |
| DRB1*03010101/03010102+DRB1*1141                  | DRB1*0306+DRB1*1103                       |                         |                              |
| DRB1*03010101/03010102+DRB1*1143                  | DRB1*0337+DRB1*110401/110402              |                         |                              |
| DRB1*03010101/03010102+DRB1*1144                  | DRB1*0333+DRB1*110401/110402              |                         |                              |
| DRB1*03010101/03010102+DRB1*1145                  | DRB1*0319+DRB1*1164                       |                         |                              |
| DRB1*03010101/03010102+DRB1*1148                  | DRB1*0306+DRB1*110201                     | DRB1*0308+DRB1*1370     |                              |
| DRB1*03010101/03010102+DRB1*1149                  | DRB1*030501/030502+DRB1*1144              | DRB1*0333+DRB1*1101G1   |                              |
| DRB1*03010101/03010102+DRB1*1150                  | DRB1*0326+DRB1*1143                       |                         |                              |
| DRB1*03010101/03010102+DRB1*1156                  | DRB1*0306+DRB1*110401/110402              |                         |                              |
| DRB1*03010101/03010102+DRB1*1157                  | DRB1*0320+DRB1*1142                       |                         |                              |
| DRB1*03010101/03010102+DRB1*1167                  | DRB1*0308+DRB1*0828                       |                         |                              |
| DRB1*03010101/03010102+DRB1*1168                  | DRB1*030501/030502+DRB1*1136              |                         |                              |
| DRB1*03010101/03010102+DRB1*120101/1206/1210/1217 | DRB1*0319+DRB1*1212                       |                         |                              |
| DRB1*03010101/03010102+DRB1*120201                | DRB1*0320+DRB1*1219                       |                         |                              |
| DRB1*03010101/03010102+DRB1*1204                  | DRB1*0308+DRB1*1209                       |                         |                              |
| DRB1*03010101/03010102+DRB1*130101                | DRB1*0307+DRB1*1327                       | DRB1*0319+DRB1*1320     |                              |
| DRB1*03010101/03010102+DRB1*130201                | DRB1*030501/030502+DRB1*130101            | DRB1*0307+DRB1*1341     | DRB1*0319+DRB1*1329          |
| DRB1*03010101/03010102+DRB1*130301/130302         | DRB1*0306+DRB1*1366                       | DRB1*0312+DRB1*1337     | DRB1*0315+DRB1*1333          |
|                                                   | DRB1*0319+DRB1*1388                       |                         |                              |
| DRB1*03010101/03010102+DRB1*1304                  | DRB1*0312+DRB1*1322                       |                         |                              |
| DRB1*03010101/03010102+DRB1*130501/130502         | DRB1*030501/030502+DRB1*1342              |                         |                              |
| DRB1*03010101/03010102+DRB1*130701                | DRB1*0306+DRB1*131401/131403              | DRB1*0331+DRB1*135001   |                              |
| DRB1*03010101/03010102+DRB1*130702                | DRB1*0306+DRB1*131402                     |                         |                              |
| DRB1*03010101/03010102+DRB1*1308                  | DRB1*0306+DRB1*1383                       | DRB1*0330+DRB1*1340     | DRB1*0331+DRB1*1387          |
| DRB1*03010101/03010102+DRB1*1312                  | DRB1*0306+DRB1*1330                       |                         |                              |
| DRB1*03010101/03010102+DRB1*131401/131403         | DRB1*030501/030502+DRB1*131101            | DRB1*0325+DRB1*135001   |                              |
| DRB1*03010101/03010102+DRB1*131402                | DRB1*030501/030502+DRB1*131102            |                         |                              |
| DRB1*03010101/03010102+DRB1*1319                  | DRB1*0306+DRB1*1357                       | DRB1*0330+DRB1*1353     |                              |
| DRB1*03010101/03010102+DRB1*1320                  | DRB1*0307+DRB1*1311                       |                         |                              |
| DRB1*03010101/03010102+DRB1*1321                  | DRB1*0312+DRB1*131401/131403              |                         |                              |
| DRB1*03010101/03010102+DRB1*1323                  | DRB1*030501/030502+DRB1*1322              | DRB1*0340+DRB1*1327     |                              |
| DRB1*03010101/03010102+DRB1*1327                  | DRB1*0319+DRB1*1371                       |                         |                              |
| DRB1*03010101/03010102+DRB1*1329                  | DRB1*030501/030502+DRB1*1320              |                         |                              |
| DRB1*03010101/03010102+DRB1*1330                  | DRB1*0312+DRB1*1382                       |                         |                              |
| DRB1*03010101/03010102+DRB1*1332                  | DRB1*0312+DRB1*1340                       |                         |                              |
| DRB1*03010101/03010102+DRB1*1336                  | DRB1*030501/030502+DRB1*1340              | DRB1*0306+DRB1*130201   |                              |
| DRB1*03010101/03010102+DRB1*1338                  | DRB1*030501/030502+DRB1*1348              |                         |                              |
| DRB1*03010101/03010102+DRB1*1339                  | DRB1*030501/030502+DRB1*1379              | DRB1*031301+DRB1*130201 |                              |
| DRB1*03010101/03010102+DRB1*1340                  | DRB1*0306+DRB1*130101                     |                         |                              |
| DRB1*03010101/03010102+DRB1*1341                  | DRB1*030501/030502+DRB1*1327              |                         |                              |
| DRB1*03010101/03010102+DRB1*1343                  | DRB1*0310+DRB1*1320                       |                         |                              |
| DRB1*03010101/03010102+DRB1*1345                  | DRB1*0310+DRB1*1323                       |                         |                              |
| DRB1*03010101/03010102+DRB1*1347                  | DRB1*030501/030502+DRB1*0820              |                         |                              |
| DRB1*03010101/03010102+DRB1*1348                  | DRB1*0306+DRB1*1304                       | DRB1*0312+DRB1*1370     |                              |
| DRB1*03010101/03010102+DRB1*1349                  | DRB1*0306+DRB1*1321                       | DRB1*0312+DRB1*130701   |                              |
| DRB1*03010101/03010102+DRB1*1352                  | DRB1*0325+DRB1*130101                     |                         |                              |
| DRB1*03010101/03010102+DRB1*1353                  | DRB1*0303+DRB1*1327                       | DRB1*0306+DRB1*1315     |                              |
| DRB1*03010101/03010102+DRB1*1355                  | DRB1*0312+DRB1*1347                       |                         |                              |
| DRB1*03010101/03010102+DRB1*1357                  | DRB1*0330+DRB1*1315                       |                         |                              |
| DRB1*03010101/03010102+DRB1*1365                  | DRB1*030501/030502+DRB1*1332              | DRB1*0312+DRB1*1336     |                              |
| DRB1*03010101/03010102+DRB1*1370                  | DRB1*0306+DRB1*1322                       |                         |                              |
| DRB1*03010101/03010102+DRB1*1375                  | DRB1*0312+DRB1*1324                       |                         |                              |
| DRB1*03010101/03010102+DRB1*1378                  | DRB1*031301+DRB1*1320                     |                         |                              |
| DRB1*03010101/03010102+DRB1*1379                  | DRB1*031301+DRB1*130101                   | DRB1*0319+DRB1*1378     |                              |
| DRB1*03010101/03010102+DRB1*1380                  | DRB1*0316+DRB1*130101                     |                         |                              |
| DRB1*03010101/03010102+DRB1*1382                  | DRB1*0319+DRB1*1325                       | DRB1*0325+DRB1*1387     | DRB1*0330+DRB1*130101        |
| DRB1*03010101/03010102+DRB1*1383                  | DRB1*0321+DRB1*1327                       |                         |                              |
| DRB1*03010101/03010102+DRB1*1384                  | DRB1*0304+DRB1*1340                       |                         |                              |
| DRB1*03010101/03010102+DRB1*140101/1454           | DRB1*0306+DRB1*1435                       | DRB1*0307+DRB1*1482     | DRB1*0310+DRB1*142301        |
| DRB1*03010101/03010102+DRB1*1402                  | DRB1*030501/030502+DRB1*1406              |                         |                              |
| DRB1*03010101/03010102+DRB1*140301                | DRB1*030501/030502+DRB1*1412              |                         |                              |
| DRB1*03010101/03010102+DRB1*140701/140702         | DRB1*030501/030502+DRB1*140101/1454       | DRB1*0310+DRB1*1414     |                              |
| DRB1*03010101/03010102+DRB1*1409                  | DRB1*030501/030502+DRB1*1480              | DRB1*0306+DRB1*1430     |                              |
| DRB1*03010101/03010102+DRB1*1413                  | DRB1*0312+DRB1*1402                       |                         |                              |
| DRB1*03010101/03010102+DRB1*1414                  | DRB1*030501/030502+DRB1*142301            |                         |                              |
| DRB1*03010101/03010102+DRB1*1416                  | DRB1*0310+DRB1*1308                       |                         |                              |
| DRB1*03010101/03010102+DRB1*1420                  | DRB1*0330+DRB1*1406                       |                         |                              |
| DRB1*03010101/03010102+DRB1*142302                | DRB1*030106+DRB1*142301                   | DRB1*0310+DRB1*130701   |                              |
| DRB1*03010101/03010102+DRB1*1425                  | DRB1*0306+DRB1*1453                       |                         |                              |
| DRB1*03010101/03010102+DRB1*1428                  | DRB1*0320+DRB1*1404                       |                         |                              |
| DRB1*03010101/03010102+DRB1*1429                  | DRB1*0320+DRB1*1406                       |                         |                              |
| DRB1*03010101/03010102+DRB1*1430                  | DRB1*030501/030502+DRB1*1417              |                         |                              |
| DRB1*03010101/03010102+DRB1*1436                  | DRB1*0318+DRB1*1414                       |                         |                              |
| DRB1*03010101/03010102+DRB1*1440                  | DRB1*0330+DRB1*140301                     |                         |                              |
| DRB1*03010101/03010102+DRB1*144401                | DRB1*030501/030502+DRB1*140501            |                         |                              |
| DRB1*03010101/03010102+DRB1*144402                | DRB1*030501/030502+DRB1*140503            |                         |                              |
| DRB1*03010101/03010102+DRB1*1445                  | DRB1*0319+DRB1*140501                     |                         |                              |
| DRB1*03010101/03010102+DRB1*1453                  | DRB1*0310+DRB1*131401/131403              | DRB1*0312+DRB1*1467     | DRB1*0319+DRB1*1485          |
| DRB1*03010101/03010102+DRB1*1463                  | DRB1*030501/030502+DRB1*1478              |                         |                              |
| DRB1*03010101/03010102+DRB1*1467                  | DRB1*0319+DRB1*140301                     |                         |                              |
| DRB1*03010101/03010102+DRB1*1468                  | DRB1*030501/030502+DRB1*1404              |                         |                              |
| DRB1*03010101/03010102+DRB1*1480                  | DRB1*0306+DRB1*1417                       |                         |                              |
| DRB1*03010101/03010102+DRB1*1485                  | DRB1*0312+DRB1*140301                     | DRB1*0325+DRB1*1532     | DRB1*0319+DRB1*1531          |
| DRB1*03010101/03010102+DRB1*15010101/15010102     | DRB1*0319+DRB1*1505                       |                         |                              |
| DRB1*03010101/03010102+DRB1*150201                | DRB1*030501/030502+DRB1*15010101/15010102 |                         |                              |
| DRB1*03010101/03010102+DRB1*150202/150205         | DRB1*030501/030502+DRB1*150104            |                         |                              |
| DRB1*03010101/03010102+DRB1*150206                | DRB1*030501/030502+DRB1*150103            |                         |                              |
| DRB1*03010101/03010102+DRB1*15030101/15030102     | DRB1*0319+DRB1*1523                       |                         |                              |
| DRB1*03010101/03010102+DRB1*1507                  | DRB1*0306+DRB1*15010101/15010102          | DRB1*0331+DRB1*1532     |                              |
| DRB1*03010101/03010102+DRB1*1510                  | DRB1*1327+DRB1*1525                       |                         |                              |
| DRB1*03010101/03010102+DRB1*1511                  | DRB1*030501/030502+DRB1*1507              | DRB1*0306+DRB1*150201   |                              |
| DRB1*03010101/03010102+DRB1*1512                  | DRB1*0312+DRB1*150104                     |                         |                              |
| DRB1*03010101/03010102+DRB1*1515                  | DRB1*030501/030502+DRB1*1504              |                         |                              |

|                                        |                                |                              |
|----------------------------------------|--------------------------------|------------------------------|
| DRB1*03010101/03010102+DRB1*1531       | DRB1*030501/030502+DRB1*1505   |                              |
| DRB1*03010101/03010102+DRB1*160101     | DRB1*0304+DRB1*1608            | DRB1*0306+DRB1*1609          |
| DRB1*03010101/03010102+DRB1*160201     | DRB1*0306+DRB1*1610            |                              |
| DRB1*03010101/03010102+DRB1*160501     | DRB1*0319+DRB1*160201          |                              |
| DRB1*030102+DRB1*0404                  | DRB1*0315+DRB1*0444            |                              |
| DRB1*030102+DRB1*040701/040703         | DRB1*0315+DRB1*0474            |                              |
| DRB1*030102+DRB1*0408                  | DRB1*0314+DRB1*0444            |                              |
| DRB1*030102+DRB1*0711                  | DRB1*0315+DRB1*0704            |                              |
| DRB1*030102+DRB1*1101G1                | DRB1*0315+DRB1*112701          |                              |
| DRB1*030102+DRB1*130101                | DRB1*0315+DRB1*1361            |                              |
| DRB1*030102+DRB1*130201                | DRB1*0314+DRB1*1361            |                              |
| DRB1*030102+DRB1*1339                  | DRB1*031302+DRB1*130201        |                              |
| DRB1*030102+DRB1*1378                  | DRB1*031302+DRB1*1320          |                              |
| DRB1*030102+DRB1*1379                  | DRB1*031302+DRB1*130101        |                              |
| DRB1*030102+DRB1*140102                | DRB1*0315+DRB1*1438            |                              |
| DRB1*030102+DRB1*1402                  | DRB1*0315+DRB1*1447            |                              |
| DRB1*030105+DRB1*080101/080103         | DRB1*0312+DRB1*080203          |                              |
| DRB1*030105+DRB1*0808                  | DRB1*0310+DRB1*080203          |                              |
| DRB1*030106+DRB1*1117                  | DRB1*0308+DRB1*142302          |                              |
| DRB1*030106+DRB1*1152                  | DRB1*0308+DRB1*1408            |                              |
| DRB1*030106+DRB1*140101/1454           | DRB1*0310+DRB1*142302          |                              |
| DRB1*030106+DRB1*1414                  | DRB1*030501/030502+DRB1*142302 |                              |
| DRB1*030201+DRB1*031302                | DRB1*030202+DRB1*031301        |                              |
| DRB1*030201+DRB1*0315                  | DRB1*0303+DRB1*0314            |                              |
| DRB1*030201+DRB1*0323                  | DRB1*0303+DRB1*0309            |                              |
| DRB1*030201+DRB1*0324                  | DRB1*0307+DRB1*0327            |                              |
| DRB1*030201+DRB1*0325                  | DRB1*0329+DRB1*0331            |                              |
| DRB1*030201+DRB1*0333                  | DRB1*0326+DRB1*0329            |                              |
| DRB1*030201+DRB1*0340                  | DRB1*0329+DRB1*0341            |                              |
| DRB1*030201+DRB1*0402                  | DRB1*0303+DRB1*0414            |                              |
| DRB1*030201+DRB1*040301/040303         | DRB1*0303+DRB1*040701/040703   | DRB1*0422+DRB1*1451          |
| DRB1*030201+DRB1*0404                  | DRB1*0303+DRB1*0408            | DRB1*0422+DRB1*1402          |
| DRB1*030201+DRB1*040601/040602         | DRB1*0303+DRB1*0420            |                              |
| DRB1*030201+DRB1*0410                  | DRB1*0303+DRB1*0405G1          | DRB1*0422+DRB1*1413          |
| DRB1*030201+DRB1*0411                  | DRB1*0303+DRB1*0417            |                              |
| DRB1*030201+DRB1*0412                  | DRB1*0422+DRB1*1463            |                              |
| DRB1*030201+DRB1*0413                  | DRB1*0303+DRB1*040101          | DRB1*0422+DRB1*1419          |
| DRB1*030201+DRB1*0418                  | DRB1*0422+DRB1*1467            |                              |
| DRB1*030201+DRB1*0425                  | DRB1*0303+DRB1*0454            | DRB1*0422+DRB1*1427          |
| DRB1*030201+DRB1*0428                  | DRB1*0329+DRB1*0405G1          |                              |
| DRB1*030201+DRB1*0435                  | DRB1*0329+DRB1*040101          |                              |
| DRB1*030201+DRB1*0442                  | DRB1*0303+DRB1*0443            | DRB1*0329+DRB1*0404          |
| DRB1*030201+DRB1*0443                  | DRB1*0329+DRB1*0408            |                              |
| DRB1*030201+DRB1*0444                  | DRB1*0422+DRB1*1447            |                              |
| DRB1*030201+DRB1*0455                  | DRB1*0303+DRB1*0431            |                              |
| DRB1*030201+DRB1*0458                  | DRB1*0422+DRB1*140301          |                              |
| DRB1*030201+DRB1*0459                  | DRB1*0329+DRB1*040301/040303   |                              |
| DRB1*030201+DRB1*0467                  | DRB1*0303+DRB1*0409            |                              |
| DRB1*030201+DRB1*0468                  | DRB1*0303+DRB1*0419            |                              |
| DRB1*030201+DRB1*080401/080404         | DRB1*0303+DRB1*080201/080202   |                              |
| DRB1*030201+DRB1*0806                  | DRB1*0303+DRB1*080101/080103   |                              |
| DRB1*030201+DRB1*0810                  | DRB1*0303+DRB1*080302          |                              |
| DRB1*030201+DRB1*0817                  | DRB1*0329+DRB1*080101/080103   |                              |
| DRB1*030201+DRB1*0820                  | DRB1*0303+DRB1*1347            |                              |
| DRB1*030201+DRB1*0828                  | DRB1*0329+DRB1*080401/080404   |                              |
| DRB1*030201+DRB1*0834                  | DRB1*0338+DRB1*0830            |                              |
| DRB1*030201+DRB1*090102                | DRB1*0338+DRB1*090202          |                              |
| DRB1*030201+DRB1*0906                  | DRB1*0303+DRB1*090102          |                              |
| DRB1*030201+DRB1*1002                  | DRB1*0303+DRB1*100101          |                              |
| DRB1*030201+DRB1*1101G1                | DRB1*0329+DRB1*1137            | DRB1*0329+DRB1*1148          |
| DRB1*030201+DRB1*110201                | DRB1*0303+DRB1*111401/111402   | DRB1*0329+DRB1*1141          |
| DRB1*030201+DRB1*1103                  | DRB1*0303+DRB1*111101/111102   | DRB1*0329+DRB1*1156          |
| DRB1*030201+DRB1*110401/110402         | DRB1*0303+DRB1*1101G1          |                              |
| DRB1*030201+DRB1*110403                | DRB1*0303+DRB1*110105          |                              |
| DRB1*030201+DRB1*1116                  | DRB1*0303+DRB1*1120            |                              |
| DRB1*030201+DRB1*1118                  | DRB1*0303+DRB1*111901          |                              |
| DRB1*030201+DRB1*1125                  | DRB1*0303+DRB1*1123            | DRB1*1107+DRB1*1427          |
| DRB1*030201+DRB1*112701                | DRB1*030202+DRB1*112702        |                              |
| DRB1*030201+DRB1*1134                  | DRB1*0303+DRB1*1126            | DRB1*1107+DRB1*1402          |
| DRB1*030201+DRB1*1135                  | DRB1*0303+DRB1*1133            |                              |
| DRB1*030201+DRB1*1136                  | DRB1*0303+DRB1*1168            |                              |
| DRB1*030201+DRB1*1142                  | DRB1*0303+DRB1*110801/110802   |                              |
| DRB1*030201+DRB1*1143                  | DRB1*0303+DRB1*1139            |                              |
| DRB1*030201+DRB1*1144                  | DRB1*0303+DRB1*1149            |                              |
| DRB1*030201+DRB1*1156                  | DRB1*0303+DRB1*1137            |                              |
| DRB1*030201+DRB1*120101/1206/1210/1217 | DRB1*0338+DRB1*1209            |                              |
| DRB1*030201+DRB1*130101                | DRB1*0303+DRB1*130201          | DRB1*0329+DRB1*1340          |
| DRB1*030201+DRB1*130201                | DRB1*0329+DRB1*1336            |                              |
| DRB1*030201+DRB1*1304                  | DRB1*0329+DRB1*1348            |                              |
| DRB1*030201+DRB1*1309                  | DRB1*0307+DRB1*1424            |                              |
| DRB1*030201+DRB1*1310                  | DRB1*0307+DRB1*1385            |                              |
| DRB1*030201+DRB1*131101                | DRB1*0303+DRB1*131401/131403   |                              |
| DRB1*030201+DRB1*131102                | DRB1*0303+DRB1*131402          |                              |
| DRB1*030201+DRB1*1313                  | DRB1*0341+DRB1*1463            |                              |
| DRB1*030201+DRB1*131401/131403         | DRB1*0329+DRB1*130701          |                              |
| DRB1*030201+DRB1*131402                | DRB1*0329+DRB1*130702          |                              |
| DRB1*030201+DRB1*1315                  | DRB1*0329+DRB1*1353            |                              |
| DRB1*030201+DRB1*1318                  | DRB1*0307+DRB1*1427            |                              |
| DRB1*030201+DRB1*1320                  | DRB1*0303+DRB1*1329            |                              |
| DRB1*030201+DRB1*1321                  | DRB1*0329+DRB1*1349            |                              |
| DRB1*030201+DRB1*1322                  | DRB1*0303+DRB1*1323            | DRB1*0329+DRB1*1370          |
|                                        | DRB1*0341+DRB1*1315            | DRB1*0340+DRB1*1353          |
| DRB1*030201+DRB1*1327                  | DRB1*0303+DRB1*1341            |                              |
| DRB1*030201+DRB1*1330                  | DRB1*0329+DRB1*1312            | DRB1*030501/030502+DRB1*1353 |
| DRB1*030201+DRB1*1332                  | DRB1*0303+DRB1*1365            |                              |
| DRB1*030201+DRB1*1337                  | DRB1*0341+DRB1*1385            |                              |
| DRB1*030201+DRB1*1340                  | DRB1*0303+DRB1*1336            |                              |
| DRB1*030201+DRB1*1342                  | DRB1*0303+DRB1*130501/130502   |                              |
| DRB1*030201+DRB1*1344                  | DRB1*0340+DRB1*1406            |                              |
| DRB1*030201+DRB1*1347                  | DRB1*0341+DRB1*1427            |                              |
| DRB1*030201+DRB1*1348                  | DRB1*0303+DRB1*1338            |                              |
| DRB1*030201+DRB1*1354                  | DRB1*0338+DRB1*1324            |                              |
| DRB1*030201+DRB1*1357                  | DRB1*0329+DRB1*1319            |                              |
| DRB1*030201+DRB1*1366                  | DRB1*0329+DRB1*130301/130302   |                              |
| DRB1*030201+DRB1*1370                  | DRB1*0341+DRB1*1353            |                              |
| DRB1*030201+DRB1*1379                  | DRB1*0303+DRB1*1339            |                              |
| DRB1*030201+DRB1*1383                  | DRB1*0329+DRB1*1308            |                              |
| DRB1*030201+DRB1*140101/1454           | DRB1*0303+DRB1*140701/140702   |                              |
| DRB1*030201+DRB1*1404                  | DRB1*0303+DRB1*1468            |                              |
| DRB1*030201+DRB1*140501                | DRB1*0303+DRB1*144401          |                              |
| DRB1*030201+DRB1*140503                | DRB1*0303+DRB1*144402          |                              |
| DRB1*030201+DRB1*1406                  | DRB1*0303+DRB1*1402            |                              |
| DRB1*030201+DRB1*1412                  | DRB1*0303+DRB1*140301          |                              |
| DRB1*030201+DRB1*1415                  | DRB1*0303+DRB1*0809            |                              |
| DRB1*030201+DRB1*1417                  | DRB1*0303+DRB1*1430            | DRB1*0307+DRB1*1402          |
| DRB1*030201+DRB1*1421                  | DRB1*0307+DRB1*1419            | DRB1*0329+DRB1*1480          |
| DRB1*030201+DRB1*142301                | DRB1*0303+DRB1*1414            |                              |
| DRB1*030201+DRB1*1430                  | DRB1*0329+DRB1*1409            |                              |
| DRB1*030201+DRB1*1433                  | DRB1*0307+DRB1*1451            |                              |
| DRB1*030201+DRB1*1435                  | DRB1*0329+DRB1*140101/1454     |                              |
| DRB1*030201+DRB1*1448                  | DRB1*0338+DRB1*1402            |                              |
| DRB1*030201+DRB1*1453                  | DRB1*0329+DRB1*1425            |                              |
| DRB1*030201+DRB1*1478                  | DRB1*0303+DRB1*1463            |                              |
| DRB1*030201+DRB1*1480                  | DRB1*0303+DRB1*1409            |                              |

|                                       |                              |                       |                     |
|---------------------------------------|------------------------------|-----------------------|---------------------|
| DRB1*030201+DRB1*15010101/15010102    | DRB1*0303+DRB1*150201        | DRB1*0329+DRB1*1507   | DRB1*1424+DRB1*1525 |
| DRB1*030201+DRB1*150103               | DRB1*0303+DRB1*150206        |                       |                     |
| DRB1*030201+DRB1*150104               | DRB1*0303+DRB1*150202/150205 |                       |                     |
| DRB1*030201+DRB1*150201               | DRB1*0329+DRB1*1511          |                       |                     |
| DRB1*030201+DRB1*1504                 | DRB1*0303+DRB1*1515          |                       |                     |
| DRB1*030201+DRB1*1505                 | DRB1*0303+DRB1*1531          |                       |                     |
| DRB1*030201+DRB1*1507                 | DRB1*0303+DRB1*1511          |                       |                     |
| DRB1*030201+DRB1*1521                 | DRB1*1467+DRB1*1525          |                       |                     |
| DRB1*030201+DRB1*1609                 | DRB1*0329+DRB1*160101        |                       |                     |
| DRB1*030201+DRB1*1610                 | DRB1*0329+DRB1*160201        |                       |                     |
| DRB1*0303+DRB1*0402                   | DRB1*0422+DRB1*1353          |                       |                     |
| DRB1*0303+DRB1*0404                   | DRB1*0422+DRB1*1406          |                       |                     |
| DRB1*0303+DRB1*0412                   | DRB1*0422+DRB1*1478          |                       |                     |
| DRB1*0303+DRB1*0428                   | DRB1*0329+DRB1*0410          |                       |                     |
| DRB1*0303+DRB1*0435                   | DRB1*0329+DRB1*0413          |                       |                     |
| DRB1*0303+DRB1*0458                   | DRB1*0422+DRB1*1412          |                       |                     |
| DRB1*0303+DRB1*0817                   | DRB1*0329+DRB1*0806          |                       |                     |
| DRB1*0303+DRB1*110201                 | DRB1*1107+DRB1*1353          |                       |                     |
| DRB1*0303+DRB1*1134                   | DRB1*1107+DRB1*1406          |                       |                     |
| DRB1*0303+DRB1*1145                   | DRB1*1107+DRB1*1467          |                       |                     |
| DRB1*0303+DRB1*1164                   | DRB1*1107+DRB1*140301        |                       |                     |
| DRB1*0303+DRB1*130101                 | DRB1*0307+DRB1*1353          |                       |                     |
| DRB1*0303+DRB1*1313                   | DRB1*0341+DRB1*1478          |                       |                     |
| DRB1*0303+DRB1*1383                   | DRB1*0307+DRB1*1319          | DRB1*0321+DRB1*1353   |                     |
| DRB1*0303+DRB1*1417                   | DRB1*0307+DRB1*1406          |                       |                     |
| DRB1*0303+DRB1*1448                   | DRB1*0338+DRB1*1406          |                       |                     |
| DRB1*0303+DRB1*1510                   | DRB1*1353+DRB1*1525          |                       |                     |
| DRB1*0303+DRB1*1527                   | DRB1*1402+DRB1*1525          |                       |                     |
| DRB1*0304+DRB1*040101                 | DRB1*0325+DRB1*0421          |                       |                     |
| DRB1*0304+DRB1*040301/040303          | DRB1*0325+DRB1*040601/040602 |                       |                     |
| DRB1*0304+DRB1*0404                   | DRB1*0325+DRB1*0468          |                       |                     |
| DRB1*0304+DRB1*040701/040703          | DRB1*0325+DRB1*0420          |                       |                     |
| DRB1*0304+DRB1*0408                   | DRB1*0325+DRB1*0419          |                       |                     |
| DRB1*0304+DRB1*0477                   | DRB1*0312+DRB1*0419          |                       |                     |
| DRB1*0304+DRB1*1101G1                 | DRB1*0325+DRB1*1129          |                       |                     |
| DRB1*0304+DRB1*1103                   | DRB1*0325+DRB1*1163          |                       |                     |
| DRB1*0304+DRB1*110601                 | DRB1*0325+DRB1*1147          |                       |                     |
| DRB1*0304+DRB1*11201                  | DRB1*0330+DRB1*1129          |                       |                     |
| DRB1*0304+DRB1*1137                   | DRB1*0331+DRB1*1129          |                       |                     |
| DRB1*0304+DRB1*1141                   | DRB1*0331+DRB1*1163          |                       |                     |
| DRB1*0304+DRB1*1308                   | DRB1*0330+DRB1*1384          |                       |                     |
| DRB1*0304+DRB1*1332                   | DRB1*0312+DRB1*1384          |                       |                     |
| DRB1*0304+DRB1*1336                   | DRB1*030501/030502+DRB1*1384 |                       |                     |
| DRB1*030501/030502+DRB1*040101        | DRB1*0314+DRB1*0472          |                       |                     |
| DRB1*030501/030502+DRB1*0427          | DRB1*0320+DRB1*040701/040703 |                       |                     |
| DRB1*030501/030502+DRB1*0456          | DRB1*0319+DRB1*0408          |                       |                     |
| DRB1*030501/030502+DRB1*0812          | DRB1*0320+DRB1*080302        |                       |                     |
| DRB1*030501/030502+DRB1*0822          | DRB1*0320+DRB1*080101/080103 |                       |                     |
| DRB1*030501/030502+DRB1*0827          | DRB1*0309+DRB1*080302        |                       |                     |
| DRB1*030501/030502+DRB1*0831          | DRB1*0308+DRB1*0824          |                       |                     |
| DRB1*030501/030502+DRB1*1101G1        | DRB1*0314+DRB1*112702        |                       |                     |
| DRB1*030501/030502+DRB1*110601        | DRB1*0320+DRB1*1101G1        |                       |                     |
| DRB1*030501/030502+DRB1*110602        | DRB1*0320+DRB1*110105        |                       |                     |
| DRB1*030501/030502+DRB1*1107          | DRB1*0308+DRB1*0340          |                       |                     |
| DRB1*030501/030502+DRB1*1117          | DRB1*0308+DRB1*1414          |                       |                     |
| DRB1*030501/030502+DRB1*1121          | DRB1*0320+DRB1*111401/111402 |                       |                     |
| DRB1*030501/030502+DRB1*1140          | DRB1*0308+DRB1*1363          |                       |                     |
| DRB1*030501/030502+DRB1*1141          | DRB1*0306+DRB1*111101/111102 | DRB1*0341+DRB1*1159   |                     |
| DRB1*030501/030502+DRB1*1146          | DRB1*0325+DRB1*1109          |                       |                     |
| DRB1*030501/030502+DRB1*1147          | DRB1*0320+DRB1*1129          |                       |                     |
| DRB1*030501/030502+DRB1*1148          | DRB1*0306+DRB1*111401/111402 |                       |                     |
| DRB1*030501/030502+DRB1*1150          | DRB1*0326+DRB1*1139          |                       |                     |
| DRB1*030501/030502+DRB1*1157          | DRB1*0320+DRB1*110801/110802 |                       |                     |
| DRB1*030501/030502+DRB1*1158          | DRB1*0308+DRB1*135002        |                       |                     |
| DRB1*030501/030502+DRB1*130301/130302 | DRB1*0314+DRB1*1333          |                       |                     |
| DRB1*030501/030502+DRB1*1304          | DRB1*0312+DRB1*1323          |                       |                     |
| DRB1*030501/030502+DRB1*1306          | DRB1*0319+DRB1*1356          |                       |                     |
| DRB1*030501/030502+DRB1*1308          | DRB1*0330+DRB1*1336          |                       |                     |
| DRB1*030501/030502+DRB1*1315          | DRB1*0329+DRB1*1327          |                       |                     |
| DRB1*030501/030502+DRB1*1323          | DRB1*0340+DRB1*1341          |                       |                     |
| DRB1*030501/030502+DRB1*1343          | DRB1*0310+DRB1*1329          |                       |                     |
| DRB1*030501/030502+DRB1*1352          | DRB1*0325+DRB1*130201        |                       |                     |
| DRB1*030501/030502+DRB1*1358          | DRB1*0320+DRB1*1312          |                       |                     |
| DRB1*030501/030502+DRB1*1364          | DRB1*0330+DRB1*1334          |                       |                     |
| DRB1*030501/030502+DRB1*1370          | DRB1*0306+DRB1*1323          | DRB1*0341+DRB1*1327   |                     |
| DRB1*030501/030502+DRB1*1378          | DRB1*031301+DRB1*1329        |                       |                     |
| DRB1*030501/030502+DRB1*1380          | DRB1*0316+DRB1*130201        |                       |                     |
| DRB1*030501/030502+DRB1*1381          | DRB1*0320+DRB1*130301/130302 |                       |                     |
| DRB1*030501/030502+DRB1*1383          | DRB1*0321+DRB1*1341          | DRB1*0330+DRB1*130201 |                     |
| DRB1*030501/030502+DRB1*1420          | DRB1*0330+DRB1*1402          |                       |                     |
| DRB1*030501/030502+DRB1*1428          | DRB1*0320+DRB1*1468          |                       |                     |
| DRB1*030501/030502+DRB1*1429          | DRB1*0320+DRB1*1402          |                       |                     |
| DRB1*030501/030502+DRB1*1445          | DRB1*0319+DRB1*144401        |                       |                     |
| DRB1*030501/030502+DRB1*1510          | DRB1*1341+DRB1*1525          |                       |                     |
| DRB1*030501/030502+DRB1*1512          | DRB1*0312+DRB1*150202/150205 |                       |                     |
| DRB1*0306+DRB1*040301/040303          | DRB1*0331+DRB1*0441          |                       |                     |
| DRB1*0306+DRB1*0405G1                 | DRB1*0331+DRB1*0477          |                       |                     |
| DRB1*0306+DRB1*110404                 | DRB1*0331+DRB1*1156          |                       |                     |
| DRB1*0306+DRB1*110601                 | DRB1*0320+DRB1*1156          |                       |                     |
| DRB1*0306+DRB1*1116                   | DRB1*0308+DRB1*1340          |                       |                     |
| DRB1*0306+DRB1*1120                   | DRB1*0308+DRB1*1336          |                       |                     |
| DRB1*0306+DRB1*1121                   | DRB1*0320+DRB1*1148          |                       |                     |
| DRB1*0306+DRB1*1123                   | DRB1*0308+DRB1*1347          |                       |                     |
| DRB1*0306+DRB1*1125                   | DRB1*0308+DRB1*0820          |                       |                     |
| DRB1*0306+DRB1*1139                   | DRB1*0337+DRB1*1137          |                       |                     |
| DRB1*0306+DRB1*1143                   | DRB1*0337+DRB1*1156          |                       |                     |
| DRB1*0306+DRB1*1144                   | DRB1*0326+DRB1*110401/110402 | DRB1*0333+DRB1*1156   |                     |
| DRB1*0306+DRB1*1149                   | DRB1*0326+DRB1*1101G1        | DRB1*0333+DRB1*1137   |                     |
| DRB1*0306+DRB1*1167                   | DRB1*0308+DRB1*080401/080404 |                       |                     |
| DRB1*0306+DRB1*1339                   | DRB1*031301+DRB1*1336        |                       |                     |
| DRB1*0306+DRB1*1352                   | DRB1*0325+DRB1*1340          |                       |                     |
| DRB1*0306+DRB1*1379                   | DRB1*031301+DRB1*1340        | DRB1*0331+DRB1*130101 |                     |
| DRB1*0306+DRB1*1380                   | DRB1*0316+DRB1*1340          |                       |                     |
| DRB1*0307+DRB1*0402                   | DRB1*0422+DRB1*130101        |                       |                     |
| DRB1*0307+DRB1*040301/040303          | DRB1*0422+DRB1*1433          |                       |                     |
| DRB1*0307+DRB1*0404                   | DRB1*0422+DRB1*1417          |                       |                     |
| DRB1*0307+DRB1*0408                   | DRB1*0422+DRB1*1430          |                       |                     |
| DRB1*0307+DRB1*0413                   | DRB1*0422+DRB1*1421          |                       |                     |
| DRB1*0307+DRB1*0414                   | DRB1*0422+DRB1*130201        |                       |                     |
| DRB1*0307+DRB1*0425                   | DRB1*0422+DRB1*1318          |                       |                     |
| DRB1*0307+DRB1*0436                   | DRB1*0422+DRB1*1342          |                       |                     |
| DRB1*0307+DRB1*0437                   | DRB1*0422+DRB1*1320          |                       |                     |
| DRB1*0307+DRB1*1101G1                 | DRB1*1107+DRB1*130501/130502 |                       |                     |
| DRB1*0307+DRB1*110201                 | DRB1*1107+DRB1*130101        |                       |                     |
| DRB1*0307+DRB1*110401/110402          | DRB1*1107+DRB1*1342          |                       |                     |
| DRB1*0307+DRB1*110801/110802          | DRB1*1107+DRB1*1356          |                       |                     |
| DRB1*0307+DRB1*111001/111002          | DRB1*0321+DRB1*1109          | DRB1*1107+DRB1*1363   |                     |
| DRB1*0307+DRB1*111011/111102          | DRB1*0340+DRB1*1140          |                       |                     |
| DRB1*0307+DRB1*111201                 | DRB1*0321+DRB1*1128          |                       |                     |
| DRB1*0307+DRB1*111401/111402          | DRB1*0340+DRB1*1116          | DRB1*1107+DRB1*130201 |                     |
| DRB1*0307+DRB1*1118                   | DRB1*1107+DRB1*1306          |                       |                     |
| DRB1*0307+DRB1*1125                   | DRB1*1107+DRB1*1318          |                       |                     |
| DRB1*0307+DRB1*1126                   | DRB1*1107+DRB1*1430          |                       |                     |
| DRB1*0307+DRB1*1134                   | DRB1*1107+DRB1*1417          |                       |                     |

DRB1\*0307+DRB1\*1136  
DRB1\*0307+DRB1\*1148  
DRB1\*0307+DRB1\*1168  
DRB1\*0307+DRB1\*130701  
DRB1\*0307+DRB1\*1308  
DRB1\*0307+DRB1\*131401/131403  
DRB1\*0307+DRB1\*1323  
DRB1\*0307+DRB1\*1337  
DRB1\*0307+DRB1\*1338  
DRB1\*0307+DRB1\*1347  
DRB1\*0307+DRB1\*1357  
DRB1\*0307+DRB1\*1382  
DRB1\*0307+DRB1\*1383  
DRB1\*0307+DRB1\*1386  
DRB1\*0307+DRB1\*1420  
DRB1\*0307+DRB1\*1440  
DRB1\*0307+DRB1\*1448  
DRB1\*0307+DRB1\*15010101/15010102  
DRB1\*0307+DRB1\*1510  
DRB1\*0307+DRB1\*1527  
DRB1\*0308+DRB1\*0405G1  
DRB1\*0308+DRB1\*1103  
DRB1\*0308+DRB1\*1304  
DRB1\*0308+DRB1\*1321  
DRB1\*0308+DRB1\*1330  
DRB1\*0308+DRB1\*1339  
DRB1\*0308+DRB1\*1345  
DRB1\*0308+DRB1\*1348  
DRB1\*0308+DRB1\*1349  
DRB1\*0308+DRB1\*1352  
DRB1\*0308+DRB1\*1375  
DRB1\*0308+DRB1\*1379  
DRB1\*0308+DRB1\*1380  
DRB1\*0308+DRB1\*1383  
DRB1\*0308+DRB1\*140101/1454  
DRB1\*0308+DRB1\*1404  
DRB1\*0308+DRB1\*1425  
DRB1\*0308+DRB1\*1453  
DRB1\*0308+DRB1\*1465  
DRB1\*0309+DRB1\*0315  
DRB1\*0309+DRB1\*0402  
DRB1\*0309+DRB1\*040301/040303  
DRB1\*0309+DRB1\*0404  
DRB1\*0309+DRB1\*040601/040602  
DRB1\*0309+DRB1\*0410  
DRB1\*0309+DRB1\*0411  
DRB1\*0309+DRB1\*0413  
DRB1\*0309+DRB1\*0425  
DRB1\*0309+DRB1\*0442  
DRB1\*0309+DRB1\*0455  
DRB1\*0309+DRB1\*0467  
DRB1\*0309+DRB1\*0468  
DRB1\*0309+DRB1\*080401/080404  
DRB1\*0309+DRB1\*0806  
DRB1\*0309+DRB1\*0812  
DRB1\*0309+DRB1\*0820  
DRB1\*0309+DRB1\*0906  
DRB1\*0309+DRB1\*1002  
DRB1\*0309+DRB1\*110201  
DRB1\*0309+DRB1\*1103  
DRB1\*0309+DRB1\*110401/110402  
DRB1\*0309+DRB1\*110403  
DRB1\*0309+DRB1\*1116  
DRB1\*0309+DRB1\*1118  
DRB1\*0309+DRB1\*1125  
DRB1\*0309+DRB1\*1134  
DRB1\*0309+DRB1\*1135  
DRB1\*0309+DRB1\*1136  
DRB1\*0309+DRB1\*1142  
DRB1\*0309+DRB1\*1143  
DRB1\*0309+DRB1\*1144  
DRB1\*0309+DRB1\*1156  
DRB1\*0309+DRB1\*130101  
DRB1\*0309+DRB1\*131101  
DRB1\*0309+DRB1\*131102  
DRB1\*0309+DRB1\*1320  
DRB1\*0309+DRB1\*1322  
DRB1\*0309+DRB1\*1327  
DRB1\*0309+DRB1\*1332  
DRB1\*0309+DRB1\*1340  
DRB1\*0309+DRB1\*1342  
DRB1\*0309+DRB1\*1348  
DRB1\*0309+DRB1\*1379  
DRB1\*0309+DRB1\*140101/1454  
DRB1\*0309+DRB1\*1404  
DRB1\*0309+DRB1\*140501  
DRB1\*0309+DRB1\*140503  
DRB1\*0309+DRB1\*1406  
DRB1\*0309+DRB1\*1412  
DRB1\*0309+DRB1\*1415  
DRB1\*0309+DRB1\*1417  
DRB1\*0309+DRB1\*142301  
DRB1\*0309+DRB1\*1478  
DRB1\*0309+DRB1\*1480  
DRB1\*0309+DRB1\*15010101/15010102  
DRB1\*0309+DRB1\*150103  
DRB1\*0309+DRB1\*150104  
DRB1\*0309+DRB1\*1504  
DRB1\*0309+DRB1\*1505  
DRB1\*0309+DRB1\*1507  
DRB1\*0310+DRB1\*0409  
DRB1\*0310+DRB1\*0438  
DRB1\*0310+DRB1\*080101/080103  
DRB1\*0310+DRB1\*130101  
DRB1\*0310+DRB1\*1321  
DRB1\*0310+DRB1\*1349  
DRB1\*0310+DRB1\*1378  
DRB1\*0310+DRB1\*1436  
DRB1\*0312+DRB1\*0427  
DRB1\*0312+DRB1\*0438  
DRB1\*0312+DRB1\*0456  
DRB1\*0312+DRB1\*1308  
DRB1\*0312+DRB1\*1440  
DRB1\*031301+DRB1\*112701  
DRB1\*031301+DRB1\*1352  
DRB1\*031301+DRB1\*1380  
DRB1\*031301+DRB1\*1383  
DRB1\*0314+DRB1\*0402  
DRB1\*0314+DRB1\*040301/040303  
DRB1\*0314+DRB1\*0404  
DRB1\*0314+DRB1\*040601/040602  
DRB1\*0314+DRB1\*0410  
DRB1\*0314+DRB1\*0411  
DRB1\*0314+DRB1\*0413

DRB1\*1107+DRB1\*1320  
DRB1\*1107+DRB1\*1340  
DRB1\*1107+DRB1\*1329  
DRB1\*0341+DRB1\*1342  
DRB1\*0321+DRB1\*1340  
DRB1\*0340+DRB1\*1342  
DRB1\*0340+DRB1\*130101  
DRB1\*0341+DRB1\*1310  
DRB1\*0340+DRB1\*1332  
DRB1\*0341+DRB1\*1318  
DRB1\*0321+DRB1\*1315  
DRB1\*0340+DRB1\*1306  
DRB1\*0321+DRB1\*130101  
DRB1\*0329+DRB1\*1344  
DRB1\*0321+DRB1\*1406  
DRB1\*0321+DRB1\*140301  
DRB1\*0338+DRB1\*1417  
DRB1\*1309+DRB1\*1525  
DRB1\*130101+DRB1\*1525  
DRB1\*1430+DRB1\*1525  
DRB1\*0312+DRB1\*0461  
DRB1\*1107+DRB1\*1159  
DRB1\*0312+DRB1\*110201  
DRB1\*0312+DRB1\*1101G1  
DRB1\*0312+DRB1\*111901  
DRB1\*031301+DRB1\*1120  
DRB1\*0310+DRB1\*111401/111402  
DRB1\*0312+DRB1\*1148  
DRB1\*0312+DRB1\*1137  
DRB1\*0325+DRB1\*1116  
DRB1\*0312+DRB1\*1103  
DRB1\*031301+DRB1\*1116  
DRB1\*0316+DRB1\*1116  
DRB1\*0330+DRB1\*1116  
DRB1\*0310+DRB1\*1117  
DRB1\*0310+DRB1\*1411  
DRB1\*0310+DRB1\*1137  
DRB1\*0310+DRB1\*1101G1  
DRB1\*0312+DRB1\*111301/111302  
DRB1\*0314+DRB1\*0323  
DRB1\*0323+DRB1\*0414  
DRB1\*0323+DRB1\*040701/040703  
DRB1\*0323+DRB1\*0408  
DRB1\*0323+DRB1\*0420  
DRB1\*0323+DRB1\*0405G1  
DRB1\*0323+DRB1\*0417  
DRB1\*0323+DRB1\*040101  
DRB1\*0323+DRB1\*0454  
DRB1\*0323+DRB1\*0443  
DRB1\*0323+DRB1\*0431  
DRB1\*0323+DRB1\*0409  
DRB1\*0323+DRB1\*0419  
DRB1\*0323+DRB1\*080201/080202  
DRB1\*0323+DRB1\*080101/080103  
DRB1\*0320+DRB1\*0827  
DRB1\*0323+DRB1\*1347  
DRB1\*0323+DRB1\*090102  
DRB1\*0323+DRB1\*100101  
DRB1\*0323+DRB1\*111401/111402  
DRB1\*0323+DRB1\*111101/111102  
DRB1\*0323+DRB1\*1101G1  
DRB1\*0323+DRB1\*110105  
DRB1\*0323+DRB1\*1120  
DRB1\*0323+DRB1\*111901  
DRB1\*0323+DRB1\*1123  
DRB1\*0323+DRB1\*1126  
DRB1\*0323+DRB1\*1133  
DRB1\*0323+DRB1\*1168  
DRB1\*0323+DRB1\*110801/110802  
DRB1\*0323+DRB1\*1139  
DRB1\*0323+DRB1\*1149  
DRB1\*0323+DRB1\*1137  
DRB1\*0323+DRB1\*130201  
DRB1\*0323+DRB1\*131401/131403  
DRB1\*0323+DRB1\*131402  
DRB1\*0323+DRB1\*1329  
DRB1\*0323+DRB1\*1323  
DRB1\*0323+DRB1\*1341  
DRB1\*0323+DRB1\*1365  
DRB1\*0323+DRB1\*1336  
DRB1\*0323+DRB1\*130501/130502  
DRB1\*0323+DRB1\*1338  
DRB1\*0323+DRB1\*1339  
DRB1\*0323+DRB1\*140701/140702  
DRB1\*0323+DRB1\*1468  
DRB1\*0323+DRB1\*144401  
DRB1\*0323+DRB1\*144402  
DRB1\*0323+DRB1\*140301  
DRB1\*0323+DRB1\*0809  
DRB1\*0323+DRB1\*1430  
DRB1\*0323+DRB1\*1414  
DRB1\*0323+DRB1\*1463  
DRB1\*0323+DRB1\*1409  
DRB1\*0323+DRB1\*150201  
DRB1\*0323+DRB1\*150206  
DRB1\*0323+DRB1\*150202/150205  
DRB1\*0323+DRB1\*1515  
DRB1\*0323+DRB1\*1531  
DRB1\*0323+DRB1\*1511  
DRB1\*0312+DRB1\*0462  
DRB1\*0319+DRB1\*0462  
DRB1\*0312+DRB1\*0808  
DRB1\*0319+DRB1\*1343  
DRB1\*0312+DRB1\*1453  
DRB1\*0312+DRB1\*1425  
DRB1\*031301+DRB1\*1343  
DRB1\*0318+DRB1\*140701/140702  
DRB1\*0320+DRB1\*0411  
DRB1\*0319+DRB1\*0409  
DRB1\*0319+DRB1\*0410  
DRB1\*0330+DRB1\*1332  
DRB1\*0330+DRB1\*1485  
DRB1\*031302+DRB1\*112702  
DRB1\*0325+DRB1\*1379  
DRB1\*0316+DRB1\*1379  
DRB1\*0330+DRB1\*1379  
DRB1\*0315+DRB1\*0414  
DRB1\*0315+DRB1\*040701/040703  
DRB1\*0315+DRB1\*0408  
DRB1\*0315+DRB1\*0420  
DRB1\*0315+DRB1\*0405G1  
DRB1\*0315+DRB1\*0417  
DRB1\*0315+DRB1\*040101

|                                  |                                  |
|----------------------------------|----------------------------------|
| DRB1*0314+DRB1*0425              | DRB1*0315+DRB1*0454              |
| DRB1*0314+DRB1*0442              | DRB1*0315+DRB1*0443              |
| DRB1*0314+DRB1*0455              | DRB1*0315+DRB1*0431              |
| DRB1*0314+DRB1*0467              | DRB1*0315+DRB1*0409              |
| DRB1*0314+DRB1*0468              | DRB1*0315+DRB1*0419              |
| DRB1*0314+DRB1*080401/080404     | DRB1*0315+DRB1*080201/080202     |
| DRB1*0314+DRB1*0806              | DRB1*0315+DRB1*080101/080103     |
| DRB1*0314+DRB1*0810              | DRB1*0315+DRB1*080302            |
| DRB1*0314+DRB1*0820              | DRB1*0315+DRB1*1347              |
| DRB1*0314+DRB1*0906              | DRB1*0315+DRB1*090102            |
| DRB1*0314+DRB1*1002              | DRB1*0315+DRB1*100101            |
| DRB1*0314+DRB1*110201            | DRB1*0315+DRB1*111401/111402     |
| DRB1*0314+DRB1*1103              | DRB1*0315+DRB1*111101/111102     |
| DRB1*0314+DRB1*110401/110402     | DRB1*0315+DRB1*1101G1            |
| DRB1*0314+DRB1*110403            | DRB1*0315+DRB1*110105            |
| DRB1*0314+DRB1*1116              | DRB1*0315+DRB1*1120              |
| DRB1*0314+DRB1*1118              | DRB1*0315+DRB1*111901            |
| DRB1*0314+DRB1*1125              | DRB1*0315+DRB1*1123              |
| DRB1*0314+DRB1*1134              | DRB1*0315+DRB1*1126              |
| DRB1*0314+DRB1*1135              | DRB1*0315+DRB1*1133              |
| DRB1*0314+DRB1*1136              | DRB1*0315+DRB1*1168              |
| DRB1*0314+DRB1*1142              | DRB1*0315+DRB1*110801/110802     |
| DRB1*0314+DRB1*1143              | DRB1*0315+DRB1*1139              |
| DRB1*0314+DRB1*1144              | DRB1*0315+DRB1*1149              |
| DRB1*0314+DRB1*1156              | DRB1*0315+DRB1*1137              |
| DRB1*0314+DRB1*130101            | DRB1*0315+DRB1*130201            |
| DRB1*0314+DRB1*131101            | DRB1*0315+DRB1*131401/131403     |
| DRB1*0314+DRB1*131102            | DRB1*0315+DRB1*131402            |
| DRB1*0314+DRB1*1320              | DRB1*0315+DRB1*1329              |
| DRB1*0314+DRB1*1322              | DRB1*0315+DRB1*1323              |
| DRB1*0314+DRB1*1327              | DRB1*0315+DRB1*1341              |
| DRB1*0314+DRB1*1332              | DRB1*0315+DRB1*1365              |
| DRB1*0314+DRB1*1340              | DRB1*0315+DRB1*1336              |
| DRB1*0314+DRB1*1342              | DRB1*0315+DRB1*130501/130502     |
| DRB1*0314+DRB1*1348              | DRB1*0315+DRB1*1338              |
| DRB1*0314+DRB1*1379              | DRB1*0315+DRB1*1339              |
| DRB1*0314+DRB1*140101/1454       | DRB1*0315+DRB1*140701/140702     |
| DRB1*0314+DRB1*1404              | DRB1*0315+DRB1*1468              |
| DRB1*0314+DRB1*140501            | DRB1*0315+DRB1*144401            |
| DRB1*0314+DRB1*140503            | DRB1*0315+DRB1*144402            |
| DRB1*0314+DRB1*1406              | DRB1*0315+DRB1*1402              |
| DRB1*0314+DRB1*1412              | DRB1*0315+DRB1*140301            |
| DRB1*0314+DRB1*1415              | DRB1*0315+DRB1*0809              |
| DRB1*0314+DRB1*1417              | DRB1*0315+DRB1*1430              |
| DRB1*0314+DRB1*142301            | DRB1*0315+DRB1*1414              |
| DRB1*0314+DRB1*1478              | DRB1*0315+DRB1*1463              |
| DRB1*0314+DRB1*1480              | DRB1*0315+DRB1*1409              |
| DRB1*0314+DRB1*15010101/15010102 | DRB1*0315+DRB1*150201            |
| DRB1*0314+DRB1*150103            | DRB1*0315+DRB1*150206            |
| DRB1*0314+DRB1*150104            | DRB1*0315+DRB1*150202/150205     |
| DRB1*0314+DRB1*1504              | DRB1*0315+DRB1*1515              |
| DRB1*0314+DRB1*1505              | DRB1*0315+DRB1*1531              |
| DRB1*0314+DRB1*1507              | DRB1*0315+DRB1*1511              |
| DRB1*0316+DRB1*0827              | DRB1*0323+DRB1*0833              |
| DRB1*0316+DRB1*1352              | DRB1*0325+DRB1*1380              |
| DRB1*0316+DRB1*1383              | DRB1*0330+DRB1*1380              |
| DRB1*0319+DRB1*1157              | DRB1*0320+DRB1*1118              |
| DRB1*0319+DRB1*1440              | DRB1*0330+DRB1*1467              |
| DRB1*0320+DRB1*1143              | DRB1*0337+DRB1*110601            |
| DRB1*0320+DRB1*1144              | DRB1*0333+DRB1*110601            |
| DRB1*0320+DRB1*1420              | DRB1*0330+DRB1*1429              |
| DRB1*0321+DRB1*0402              | DRB1*0422+DRB1*1383              |
| DRB1*0321+DRB1*080201/080202     | DRB1*0340+DRB1*1415              |
| DRB1*0321+DRB1*110201            | DRB1*1107+DRB1*1383              |
| DRB1*0321+DRB1*1148              | DRB1*1107+DRB1*1308              |
| DRB1*0321+DRB1*1159              | DRB1*0330+DRB1*1140              |
| DRB1*0321+DRB1*1323              | DRB1*0340+DRB1*1383              |
| DRB1*0321+DRB1*1371              | DRB1*0330+DRB1*1320              |
| DRB1*0321+DRB1*1404              | DRB1*1472+DRB1*1476              |
| DRB1*0321+DRB1*1469              | DRB1*0340+DRB1*1474              |
| DRB1*0321+DRB1*1482              | DRB1*0330+DRB1*140101/1454       |
| DRB1*0321+DRB1*1510              | DRB1*1383+DRB1*1525              |
| DRB1*0324+DRB1*1385              | DRB1*0327+DRB1*1310              |
| DRB1*0324+DRB1*1402              | DRB1*0327+DRB1*1417              |
| DRB1*0324+DRB1*1419              | DRB1*0327+DRB1*1421              |
| DRB1*0324+DRB1*1424              | DRB1*0327+DRB1*1309              |
| DRB1*0324+DRB1*1427              | DRB1*0327+DRB1*1318              |
| DRB1*0324+DRB1*1451              | DRB1*0327+DRB1*1433              |
| DRB1*0325+DRB1*0326              | DRB1*0331+DRB1*0333              |
| DRB1*0325+DRB1*0341              | DRB1*0331+DRB1*0340              |
| DRB1*0325+DRB1*040101            | DRB1*0331+DRB1*0435              |
| DRB1*0325+DRB1*040301/040303     | DRB1*0331+DRB1*0459              |
| DRB1*0325+DRB1*0404              | DRB1*0331+DRB1*0442              |
| DRB1*0325+DRB1*0405G1            | DRB1*0331+DRB1*0428              |
| DRB1*0325+DRB1*0408              | DRB1*0331+DRB1*0443              |
| DRB1*0325+DRB1*080101/080103     | DRB1*0331+DRB1*0817              |
| DRB1*0325+DRB1*080401/080404     | DRB1*0331+DRB1*0828              |
| DRB1*0325+DRB1*111201            | DRB1*0330+DRB1*1101G1            |
| DRB1*0325+DRB1*1137              | DRB1*0331+DRB1*1101G1            |
| DRB1*0325+DRB1*1141              | DRB1*0331+DRB1*1103              |
| DRB1*0325+DRB1*1148              | DRB1*0331+DRB1*110201            |
| DRB1*0325+DRB1*1156              | DRB1*0331+DRB1*110401/110402     |
| DRB1*0325+DRB1*130301/130302     | DRB1*0331+DRB1*1366              |
| DRB1*0325+DRB1*130701            | DRB1*0331+DRB1*131401/131403     |
| DRB1*0325+DRB1*130702            | DRB1*0331+DRB1*131402            |
| DRB1*0325+DRB1*1308              | DRB1*0331+DRB1*1383              |
| DRB1*0325+DRB1*1312              | DRB1*0331+DRB1*1330              |
| DRB1*0325+DRB1*1319              | DRB1*0331+DRB1*1357              |
| DRB1*0325+DRB1*1336              | DRB1*0331+DRB1*130201            |
| DRB1*0325+DRB1*1348              | DRB1*0331+DRB1*1304              |
| DRB1*0325+DRB1*1349              | DRB1*0331+DRB1*1321              |
| DRB1*0325+DRB1*1353              | DRB1*0331+DRB1*1315              |
| DRB1*0325+DRB1*1370              | DRB1*0331+DRB1*1322              |
| DRB1*0325+DRB1*1383              | DRB1*0330+DRB1*1352              |
| DRB1*0325+DRB1*140101/1454       | DRB1*0331+DRB1*1435              |
| DRB1*0325+DRB1*1409              | DRB1*0331+DRB1*1430              |
| DRB1*0325+DRB1*1425              | DRB1*0331+DRB1*1453              |
| DRB1*0325+DRB1*1480              | DRB1*0331+DRB1*1417              |
| DRB1*0325+DRB1*1507              | DRB1*0331+DRB1*15010101/15010102 |
| DRB1*0325+DRB1*1511              | DRB1*0331+DRB1*150201            |
| DRB1*0325+DRB1*160101            | DRB1*0331+DRB1*1609              |
| DRB1*0325+DRB1*160201            | DRB1*0331+DRB1*1610              |
| DRB1*0326+DRB1*0340              | DRB1*0333+DRB1*0341              |
| DRB1*0326+DRB1*0428              | DRB1*0333+DRB1*0405G1            |
| DRB1*0326+DRB1*0435              | DRB1*0333+DRB1*040101            |
| DRB1*0326+DRB1*0442              | DRB1*0333+DRB1*0404              |
| DRB1*0326+DRB1*0443              | DRB1*0333+DRB1*0408              |
| DRB1*0326+DRB1*0459              | DRB1*0333+DRB1*040301/040303     |
| DRB1*0326+DRB1*0817              | DRB1*0333+DRB1*080101/080103     |
| DRB1*0326+DRB1*0828              | DRB1*0333+DRB1*080401/080404     |
| DRB1*0326+DRB1*110201            | DRB1*0333+DRB1*1148              |
| DRB1*0326+DRB1*1103              | DRB1*0333+DRB1*1141              |
| DRB1*0326+DRB1*130101            | DRB1*0333+DRB1*1340              |
| DRB1*0326+DRB1*130201            | DRB1*0333+DRB1*1336              |

|                                  |                                  |                              |                              |
|----------------------------------|----------------------------------|------------------------------|------------------------------|
| DRB1*0326+DRB1*1304              | DRB1*0333+DRB1*1348              |                              |                              |
| DRB1*0326+DRB1*131401/131403     | DRB1*0333+DRB1*130701            |                              |                              |
| DRB1*0326+DRB1*131402            | DRB1*0333+DRB1*130702            |                              |                              |
| DRB1*0326+DRB1*1315              | DRB1*0333+DRB1*1353              |                              |                              |
| DRB1*0326+DRB1*1321              | DRB1*0333+DRB1*1349              |                              |                              |
| DRB1*0326+DRB1*1322              | DRB1*0333+DRB1*1370              |                              |                              |
| DRB1*0326+DRB1*1330              | DRB1*0333+DRB1*1312              |                              |                              |
| DRB1*0326+DRB1*1357              | DRB1*0333+DRB1*1319              |                              |                              |
| DRB1*0326+DRB1*1366              | DRB1*0333+DRB1*130301/130302     |                              |                              |
| DRB1*0326+DRB1*1383              | DRB1*0333+DRB1*1308              |                              |                              |
| DRB1*0326+DRB1*1417              | DRB1*0333+DRB1*1480              |                              |                              |
| DRB1*0326+DRB1*1430              | DRB1*0333+DRB1*1409              |                              |                              |
| DRB1*0326+DRB1*1435              | DRB1*0333+DRB1*140101/1454       |                              |                              |
| DRB1*0326+DRB1*1453              | DRB1*0333+DRB1*1425              |                              |                              |
| DRB1*0326+DRB1*15010101/15010102 | DRB1*0333+DRB1*1507              |                              |                              |
| DRB1*0326+DRB1*150201            | DRB1*0333+DRB1*1511              |                              |                              |
| DRB1*0326+DRB1*1609              | DRB1*0333+DRB1*160101            |                              |                              |
| DRB1*0326+DRB1*1610              | DRB1*0333+DRB1*160201            |                              |                              |
| DRB1*0327+DRB1*1372              | DRB1*0335+DRB1*1353              |                              |                              |
| DRB1*0329+DRB1*1313              | DRB1*0340+DRB1*1463              |                              |                              |
| DRB1*0329+DRB1*1322              | DRB1*0340+DRB1*1315              |                              |                              |
| DRB1*0329+DRB1*1337              | DRB1*0340+DRB1*1385              |                              |                              |
| DRB1*0329+DRB1*1347              | DRB1*0340+DRB1*1427              |                              |                              |
| DRB1*0330+DRB1*1137              | DRB1*0331+DRB1*111201            |                              |                              |
| DRB1*0330+DRB1*1459              | DRB1*0337+DRB1*142301            |                              |                              |
| DRB1*0333+DRB1*1139              | DRB1*0337+DRB1*1149              |                              |                              |
| DRB1*0333+DRB1*1143              | DRB1*0337+DRB1*1144              |                              |                              |
| DRB1*0338+DRB1*0404              | DRB1*0422+DRB1*1448              |                              |                              |
| DRB1*0338+DRB1*1134              | DRB1*1107+DRB1*1448              |                              |                              |
| DRB1*0340+DRB1*040101            | DRB1*0341+DRB1*0435              |                              |                              |
| DRB1*0340+DRB1*0402              | DRB1*0422+DRB1*1323              |                              |                              |
| DRB1*0340+DRB1*040301/040303     | DRB1*0341+DRB1*0459              |                              |                              |
| DRB1*0340+DRB1*0404              | DRB1*0341+DRB1*0442              |                              |                              |
| DRB1*0340+DRB1*0405G1            | DRB1*0341+DRB1*0428              |                              |                              |
| DRB1*0340+DRB1*0408              | DRB1*0341+DRB1*0443              |                              |                              |
| DRB1*0340+DRB1*0415              | DRB1*0422+DRB1*1101G1            |                              |                              |
| DRB1*0340+DRB1*0436              | DRB1*0422+DRB1*131401/131403     |                              |                              |
| DRB1*0340+DRB1*080101/080103     | DRB1*0341+DRB1*0817              |                              |                              |
| DRB1*0340+DRB1*080401/080404     | DRB1*0341+DRB1*0828              |                              |                              |
| DRB1*0340+DRB1*0831              | DRB1*0824+DRB1*1107              |                              |                              |
| DRB1*0340+DRB1*110201            | DRB1*1107+DRB1*1323              |                              |                              |
| DRB1*0340+DRB1*110401/110402     | DRB1*1107+DRB1*131401/131403     |                              |                              |
| DRB1*0340+DRB1*1117              | DRB1*1107+DRB1*1414              |                              |                              |
| DRB1*0340+DRB1*1118              | DRB1*1107+DRB1*1382              |                              |                              |
| DRB1*0340+DRB1*1137              | DRB1*0341+DRB1*1101G1            |                              |                              |
| DRB1*0340+DRB1*1141              | DRB1*0341+DRB1*1103              |                              |                              |
| DRB1*0340+DRB1*1142              | DRB1*1107+DRB1*1325              |                              |                              |
| DRB1*0340+DRB1*1148              | DRB1*0341+DRB1*110201            |                              |                              |
| DRB1*0340+DRB1*1156              | DRB1*0341+DRB1*110401/110402     | DRB1*1107+DRB1*130701        |                              |
| DRB1*0340+DRB1*1158              | DRB1*1107+DRB1*135002            |                              |                              |
| DRB1*0340+DRB1*130301/130302     | DRB1*0341+DRB1*1366              |                              |                              |
| DRB1*0340+DRB1*130701            | DRB1*0341+DRB1*131401/131403     |                              |                              |
| DRB1*0340+DRB1*130702            | DRB1*0341+DRB1*131402            |                              |                              |
| DRB1*0340+DRB1*1308              | DRB1*0341+DRB1*1383              |                              |                              |
| DRB1*0340+DRB1*1312              | DRB1*0341+DRB1*1330              |                              |                              |
| DRB1*0340+DRB1*1319              | DRB1*0341+DRB1*1357              |                              |                              |
| DRB1*0340+DRB1*1336              | DRB1*0341+DRB1*130201            |                              |                              |
| DRB1*0340+DRB1*1340              | DRB1*0341+DRB1*130101            |                              |                              |
| DRB1*0340+DRB1*1348              | DRB1*0341+DRB1*1304              |                              |                              |
| DRB1*0340+DRB1*1349              | DRB1*0341+DRB1*1321              |                              |                              |
| DRB1*0340+DRB1*1370              | DRB1*0341+DRB1*1322              |                              |                              |
| DRB1*0340+DRB1*140101/1454       | DRB1*0341+DRB1*1435              |                              |                              |
| DRB1*0340+DRB1*1404              | DRB1*1442+DRB1*1479              |                              |                              |
| DRB1*0340+DRB1*1409              | DRB1*0341+DRB1*1430              |                              |                              |
| DRB1*0340+DRB1*1425              | DRB1*0341+DRB1*1453              |                              |                              |
| DRB1*0340+DRB1*1480              | DRB1*0341+DRB1*1417              |                              |                              |
| DRB1*0340+DRB1*1507              | DRB1*0341+DRB1*15010101/15010102 |                              |                              |
| DRB1*0340+DRB1*1510              | DRB1*1323+DRB1*1525              |                              |                              |
| DRB1*0340+DRB1*1511              | DRB1*0341+DRB1*150201            |                              |                              |
| DRB1*0340+DRB1*160101            | DRB1*0341+DRB1*1609              |                              |                              |
| DRB1*0340+DRB1*160201            | DRB1*0341+DRB1*1610              |                              |                              |
| DRB1*0341+DRB1*0412              | DRB1*0422+DRB1*1313              |                              |                              |
| DRB1*0341+DRB1*0415              | DRB1*0422+DRB1*1137              |                              |                              |
| DRB1*0341+DRB1*0425              | DRB1*0422+DRB1*1347              |                              |                              |
| DRB1*0341+DRB1*0436              | DRB1*0422+DRB1*130701            |                              |                              |
| DRB1*0341+DRB1*1116              | DRB1*1107+DRB1*1336              |                              |                              |
| DRB1*0341+DRB1*1125              | DRB1*1107+DRB1*1347              |                              |                              |
| DRB1*0341+DRB1*1167              | DRB1*080201/080202+DRB1*1107     |                              |                              |
| DRB1*040101+DRB1*0402            | DRB1*0413+DRB1*0414              | DRB1*0437+DRB1*0438          |                              |
| DRB1*040101+DRB1*040301/040303   | DRB1*040701/040703+DRB1*0413     |                              |                              |
| DRB1*040101+DRB1*0404            | DRB1*0408+DRB1*0413              |                              |                              |
| DRB1*040101+DRB1*0405G1          | DRB1*0408+DRB1*0409              |                              |                              |
| DRB1*040101+DRB1*040601/040602   | DRB1*040301/040303+DRB1*0421     | DRB1*0413+DRB1*0420          |                              |
| DRB1*040101+DRB1*0410            | DRB1*0404+DRB1*0409              | DRB1*0405G1+DRB1*0413        | DRB1*0408+DRB1*0467          |
| DRB1*040101+DRB1*0411            | DRB1*040301/040303+DRB1*0409     | DRB1*040701/040703+DRB1*0467 | DRB1*0413+DRB1*0417          |
| DRB1*040101+DRB1*0412            | DRB1*0409+DRB1*0418              |                              |                              |
| DRB1*040101+DRB1*0417            | DRB1*040701/040703+DRB1*0409     |                              |                              |
| DRB1*040101+DRB1*0418            | DRB1*0438+DRB1*0458              |                              |                              |
| DRB1*040101+DRB1*0419            | DRB1*0408+DRB1*0421              |                              |                              |
| DRB1*040101+DRB1*0420            | DRB1*040701/040703+DRB1*0421     |                              |                              |
| DRB1*040101+DRB1*0425            | DRB1*0413+DRB1*0454              |                              |                              |
| DRB1*040101+DRB1*0428            | DRB1*0405G1+DRB1*0435            | DRB1*0409+DRB1*0443          |                              |
| DRB1*040101+DRB1*0442            | DRB1*0404+DRB1*0435              | DRB1*0413+DRB1*0443          |                              |
| DRB1*040101+DRB1*0443            | DRB1*0408+DRB1*0435              |                              |                              |
| DRB1*040101+DRB1*0455            | DRB1*0413+DRB1*0431              |                              |                              |
| DRB1*040101+DRB1*0456            | DRB1*0404+DRB1*0438              |                              |                              |
| DRB1*040101+DRB1*0459            | DRB1*040301/040303+DRB1*0435     |                              |                              |
| DRB1*040101+DRB1*0467            | DRB1*0409+DRB1*0413              |                              |                              |
| DRB1*040101+DRB1*0468            | DRB1*0404+DRB1*0421              | DRB1*0413+DRB1*0419          |                              |
| DRB1*040101+DRB1*080101/080103   | DRB1*0409+DRB1*080201/080202     |                              |                              |
| DRB1*040101+DRB1*080302          | DRB1*0409+DRB1*0830              |                              |                              |
| DRB1*040101+DRB1*080401/080404   | DRB1*0413+DRB1*080201/080202     |                              |                              |
| DRB1*040101+DRB1*0805            | DRB1*0409+DRB1*0824              |                              |                              |
| DRB1*040101+DRB1*0806            | DRB1*0409+DRB1*080401/080404     | DRB1*0413+DRB1*080101/080103 | DRB1*0467+DRB1*080201/080202 |
| DRB1*040101+DRB1*0808            | DRB1*0462+DRB1*080201/080202     |                              |                              |
| DRB1*040101+DRB1*0810            | DRB1*0413+DRB1*080302            | DRB1*0467+DRB1*0830          |                              |
| DRB1*040101+DRB1*0817            | DRB1*0435+DRB1*080101/080103     |                              |                              |
| DRB1*040101+DRB1*0820            | DRB1*0413+DRB1*1347              |                              |                              |
| DRB1*040101+DRB1*0828            | DRB1*0435+DRB1*080401/080404     |                              |                              |
| DRB1*040101+DRB1*0830            | DRB1*0438+DRB1*0813              |                              |                              |
| DRB1*040101+DRB1*090104          | DRB1*040103+DRB1*090102          |                              |                              |
| DRB1*040101+DRB1*0906            | DRB1*0413+DRB1*090102            |                              |                              |
| DRB1*040101+DRB1*1002            | DRB1*0413+DRB1*100101            |                              |                              |
| DRB1*040101+DRB1*1101G1          | DRB1*0435+DRB1*1137              |                              |                              |
| DRB1*040101+DRB1*110201          | DRB1*0413+DRB1*111401/111402     | DRB1*0435+DRB1*1148          | DRB1*0438+DRB1*1136          |
| DRB1*040101+DRB1*1103            | DRB1*0413+DRB1*111101/111102     | DRB1*0435+DRB1*1141          |                              |
| DRB1*040101+DRB1*110401/110402   | DRB1*0413+DRB1*1101G1            | DRB1*0435+DRB1*1156          |                              |
| DRB1*040101+DRB1*110403          | DRB1*0413+DRB1*110105            |                              |                              |
| DRB1*040101+DRB1*110404          | DRB1*040103+DRB1*110401/110402   |                              |                              |
| DRB1*040101+DRB1*111202          | DRB1*040103+DRB1*111201          |                              |                              |
| DRB1*040101+DRB1*111401/111402   | DRB1*0438+DRB1*1168              |                              |                              |
| DRB1*040101+DRB1*1116            | DRB1*0413+DRB1*1120              |                              |                              |
| DRB1*040101+DRB1*1118            | DRB1*0413+DRB1*111901            | DRB1*0438+DRB1*1142          |                              |
| DRB1*040101+DRB1*111901          | DRB1*0438+DRB1*110801/110802     |                              |                              |

|                                        |                              |                              |                              |
|----------------------------------------|------------------------------|------------------------------|------------------------------|
| DRB1*040101+DRB1*1125                  | DRB1*0413+DRB1*1123          |                              |                              |
| DRB1*040101+DRB1*112702                | DRB1*0472+DRB1*1101G1        |                              |                              |
| DRB1*040101+DRB1*1129                  | DRB1*0421+DRB1*1101G1        |                              |                              |
| DRB1*040101+DRB1*1134                  | DRB1*0413+DRB1*1126          |                              |                              |
| DRB1*040101+DRB1*1135                  | DRB1*0413+DRB1*1133          |                              |                              |
| DRB1*040101+DRB1*1136                  | DRB1*0413+DRB1*1168          |                              |                              |
| DRB1*040101+DRB1*1142                  | DRB1*0413+DRB1*110801/110802 |                              |                              |
| DRB1*040101+DRB1*1143                  | DRB1*0413+DRB1*1139          |                              |                              |
| DRB1*040101+DRB1*1144                  | DRB1*0413+DRB1*1149          |                              |                              |
| DRB1*040101+DRB1*1145                  | DRB1*0438+DRB1*1164          |                              |                              |
| DRB1*040101+DRB1*1147                  | DRB1*0421+DRB1*110601        |                              |                              |
| DRB1*040101+DRB1*1156                  | DRB1*0413+DRB1*1137          |                              |                              |
| DRB1*040101+DRB1*1163                  | DRB1*0421+DRB1*1103          |                              |                              |
| DRB1*040101+DRB1*120101/1206/1210/1217 | DRB1*0438+DRB1*1212          |                              |                              |
| DRB1*040101+DRB1*1218                  | DRB1*0416+DRB1*120201        |                              |                              |
| DRB1*040101+DRB1*130101                | DRB1*0413+DRB1*130201        | DRB1*0414+DRB1*1421          | DRB1*0435+DRB1*1340          |
|                                        | DRB1*0438+DRB1*1320          |                              |                              |
| DRB1*040101+DRB1*130201                | DRB1*0435+DRB1*1336          | DRB1*0438+DRB1*1329          |                              |
| DRB1*040101+DRB1*130301/130302         | DRB1*0409+DRB1*1337          | DRB1*0438+DRB1*1388          |                              |
| DRB1*040101+DRB1*1304                  | DRB1*0409+DRB1*1322          | DRB1*0435+DRB1*1348          | DRB1*0467+DRB1*1323          |
| DRB1*040101+DRB1*1306                  | DRB1*0408+DRB1*1310          |                              |                              |
| DRB1*040101+DRB1*131101                | DRB1*0413+DRB1*131401/131403 |                              |                              |
| DRB1*040101+DRB1*131102                | DRB1*0413+DRB1*131402        |                              |                              |
| DRB1*040101+DRB1*1312                  | DRB1*0405G1+DRB1*1337        | DRB1*0408+DRB1*130301/130302 |                              |
| DRB1*040101+DRB1*1313                  | DRB1*0431+DRB1*130301/130302 |                              |                              |
| DRB1*040101+DRB1*131401/131403         | DRB1*0435+DRB1*130701        |                              |                              |
| DRB1*040101+DRB1*131402                | DRB1*0435+DRB1*130702        |                              |                              |
| DRB1*040101+DRB1*1315                  | DRB1*0435+DRB1*1353          |                              |                              |
| DRB1*040101+DRB1*1318                  | DRB1*0454+DRB1*1421          |                              |                              |
| DRB1*040101+DRB1*1320                  | DRB1*0413+DRB1*1329          |                              |                              |
| DRB1*040101+DRB1*1321                  | DRB1*0409+DRB1*131401/131403 | DRB1*0435+DRB1*1349          |                              |
| DRB1*040101+DRB1*1322                  | DRB1*0413+DRB1*1323          | DRB1*0435+DRB1*1370          |                              |
| DRB1*040101+DRB1*1327                  | DRB1*0413+DRB1*1341          | DRB1*0438+DRB1*1371          |                              |
| DRB1*040101+DRB1*1330                  | DRB1*0408+DRB1*1366          | DRB1*0409+DRB1*1382          | DRB1*0428+DRB1*1337          |
|                                        | DRB1*0435+DRB1*1312          | DRB1*0443+DRB1*130301/130302 |                              |
| DRB1*040101+DRB1*1332                  | DRB1*0409+DRB1*1340          | DRB1*0413+DRB1*1365          | DRB1*0467+DRB1*1336          |
| DRB1*040101+DRB1*1333                  | DRB1*0472+DRB1*130301/130302 |                              |                              |
| DRB1*040101+DRB1*1340                  | DRB1*0413+DRB1*1336          |                              |                              |
| DRB1*040101+DRB1*1342                  | DRB1*0413+DRB1*130501/130502 |                              |                              |
| DRB1*040101+DRB1*1343                  | DRB1*0462+DRB1*1320          |                              |                              |
| DRB1*040101+DRB1*1345                  | DRB1*0462+DRB1*1323          |                              |                              |
| DRB1*040101+DRB1*1348                  | DRB1*0409+DRB1*1370          | DRB1*0413+DRB1*1338          |                              |
| DRB1*040101+DRB1*1349                  | DRB1*0409+DRB1*130701        |                              |                              |
| DRB1*040101+DRB1*135002                | DRB1*040103+DRB1*135001      |                              |                              |
| DRB1*040101+DRB1*1353                  | DRB1*0402+DRB1*1419          |                              |                              |
| DRB1*040101+DRB1*1355                  | DRB1*0409+DRB1*1347          |                              |                              |
| DRB1*040101+DRB1*1357                  | DRB1*0435+DRB1*1319          |                              |                              |
| DRB1*040101+DRB1*1358                  | DRB1*0408+DRB1*1381          |                              |                              |
| DRB1*040101+DRB1*1365                  | DRB1*0409+DRB1*1336          |                              |                              |
| DRB1*040101+DRB1*1366                  | DRB1*0435+DRB1*130301/130302 |                              |                              |
| DRB1*040101+DRB1*1375                  | DRB1*0409+DRB1*1324          | DRB1*0438+DRB1*1378          |                              |
| DRB1*040101+DRB1*1379                  | DRB1*0413+DRB1*1339          | DRB1*0443+DRB1*1337          |                              |
| DRB1*040101+DRB1*1382                  | DRB1*0438+DRB1*1325          |                              |                              |
| DRB1*040101+DRB1*1383                  | DRB1*0435+DRB1*1308          |                              |                              |
| DRB1*040101+DRB1*140101/1454           | DRB1*0413+DRB1*140701/140702 | DRB1*0462+DRB1*142301        |                              |
| DRB1*040101+DRB1*140103                | DRB1*040102+DRB1*140101/1454 |                              |                              |
| DRB1*040101+DRB1*1402                  | DRB1*0408+DRB1*1419          |                              |                              |
| DRB1*040101+DRB1*1404                  | DRB1*0413+DRB1*1468          |                              |                              |
| DRB1*040101+DRB1*140501                | DRB1*0413+DRB1*144401        |                              |                              |
| DRB1*040101+DRB1*140503                | DRB1*0413+DRB1*144402        | DRB1*0413+DRB1*1402          |                              |
| DRB1*040101+DRB1*1406                  | DRB1*0404+DRB1*1419          |                              |                              |
| DRB1*040101+DRB1*140701/140702         | DRB1*0462+DRB1*1414          |                              |                              |
| DRB1*040101+DRB1*1412                  | DRB1*0413+DRB1*140301        | DRB1*0458+DRB1*1419          |                              |
| DRB1*040101+DRB1*1413                  | DRB1*0405G1+DRB1*1419        | DRB1*0409+DRB1*1402          |                              |
| DRB1*040101+DRB1*1415                  | DRB1*0413+DRB1*0809          |                              |                              |
| DRB1*040101+DRB1*1416                  | DRB1*0462+DRB1*1308          |                              |                              |
| DRB1*040101+DRB1*1417                  | DRB1*0408+DRB1*1421          | DRB1*0413+DRB1*1430          | DRB1*0435+DRB1*1480          |
| DRB1*040101+DRB1*142301                | DRB1*0413+DRB1*1414          |                              |                              |
| DRB1*040101+DRB1*1425                  | DRB1*0462+DRB1*130701        |                              |                              |
| DRB1*040101+DRB1*1427                  | DRB1*0454+DRB1*1419          |                              |                              |
| DRB1*040101+DRB1*1430                  | DRB1*0435+DRB1*1409          |                              |                              |
| DRB1*040101+DRB1*1433                  | DRB1*040701/040703+DRB1*1421 |                              |                              |
| DRB1*040101+DRB1*1435                  | DRB1*0435+DRB1*140101/1454   |                              |                              |
| DRB1*040101+DRB1*1445                  | DRB1*0438+DRB1*140501        |                              |                              |
| DRB1*040101+DRB1*1451                  | DRB1*040701/040703+DRB1*1419 |                              |                              |
| DRB1*040101+DRB1*1453                  | DRB1*0435+DRB1*1425          | DRB1*0462+DRB1*131401/131403 |                              |
| DRB1*040101+DRB1*1463                  | DRB1*0409+DRB1*1467          | DRB1*0438+DRB1*1485          |                              |
| DRB1*040101+DRB1*1467                  | DRB1*0431+DRB1*1385          | DRB1*0438+DRB1*140301        |                              |
| DRB1*040101+DRB1*1478                  | DRB1*0412+DRB1*1419          | DRB1*0413+DRB1*1463          | DRB1*0467+DRB1*1467          |
| DRB1*040101+DRB1*1480                  | DRB1*0413+DRB1*1409          |                              |                              |
| DRB1*040101+DRB1*1485                  | DRB1*0409+DRB1*140301        |                              |                              |
| DRB1*040101+DRB1*15010101/15010102     | DRB1*0413+DRB1*150201        | DRB1*0435+DRB1*1507          | DRB1*0438+DRB1*1505          |
| DRB1*040101+DRB1*150103                | DRB1*0413+DRB1*150206        |                              |                              |
| DRB1*040101+DRB1*150104                | DRB1*0413+DRB1*150202/150205 |                              |                              |
| DRB1*040101+DRB1*150201                | DRB1*0435+DRB1*1511          | DRB1*0438+DRB1*1531          |                              |
| DRB1*040101+DRB1*15030101/15030102     | DRB1*0438+DRB1*1523          |                              |                              |
| DRB1*040101+DRB1*1504                  | DRB1*0413+DRB1*1515          |                              |                              |
| DRB1*040101+DRB1*1505                  | DRB1*0413+DRB1*1531          |                              |                              |
| DRB1*040101+DRB1*1507                  | DRB1*0413+DRB1*1511          |                              |                              |
| DRB1*040101+DRB1*1512                  | DRB1*0409+DRB1*150104        | DRB1*0467+DRB1*150202/150205 |                              |
| DRB1*040101+DRB1*160501                | DRB1*0438+DRB1*160201        |                              |                              |
| DRB1*040101+DRB1*1609                  | DRB1*0435+DRB1*160101        |                              |                              |
| DRB1*040101+DRB1*1610                  | DRB1*0435+DRB1*160201        |                              |                              |
| DRB1*040102+DRB1*1435                  | DRB1*0435+DRB1*140103        |                              |                              |
| DRB1*040103+DRB1*0906                  | DRB1*0413+DRB1*090104        |                              |                              |
| DRB1*0402+DRB1*0404                    | DRB1*0437+DRB1*0456          |                              |                              |
| DRB1*0402+DRB1*0405G1                  | DRB1*0410+DRB1*0414          |                              |                              |
| DRB1*0402+DRB1*040701/040703           | DRB1*040301/040303+DRB1*0414 |                              |                              |
| DRB1*0402+DRB1*0408                    | DRB1*0404+DRB1*0414          |                              |                              |
| DRB1*0402+DRB1*0409                    | DRB1*0414+DRB1*0467          |                              |                              |
| DRB1*0402+DRB1*0417                    | DRB1*0411+DRB1*0414          |                              |                              |
| DRB1*0402+DRB1*0419                    | DRB1*0414+DRB1*0468          |                              |                              |
| DRB1*0402+DRB1*0420                    | DRB1*040601/040602+DRB1*0414 |                              |                              |
| DRB1*0402+DRB1*0431                    | DRB1*0414+DRB1*0455          |                              |                              |
| DRB1*0402+DRB1*0443                    | DRB1*0414+DRB1*0442          |                              |                              |
| DRB1*0402+DRB1*0454                    | DRB1*0414+DRB1*0425          |                              |                              |
| DRB1*0402+DRB1*0458                    | DRB1*0418+DRB1*0437          |                              |                              |
| DRB1*0402+DRB1*080101/080103           | DRB1*0414+DRB1*0806          |                              |                              |
| DRB1*0402+DRB1*080201/080202           | DRB1*0414+DRB1*080401/080404 |                              |                              |
| DRB1*0402+DRB1*080302                  | DRB1*0414+DRB1*0810          |                              |                              |
| DRB1*0402+DRB1*0809                    | DRB1*0414+DRB1*1415          |                              |                              |
| DRB1*0402+DRB1*0813                    | DRB1*0437+DRB1*0830          |                              |                              |
| DRB1*0402+DRB1*0820                    | DRB1*0425+DRB1*1370          |                              |                              |
| DRB1*0402+DRB1*0828                    | DRB1*0425+DRB1*1317          |                              |                              |
| DRB1*0402+DRB1*090102                  | DRB1*0414+DRB1*0906          |                              |                              |
| DRB1*0402+DRB1*100101                  | DRB1*0414+DRB1*1002          |                              |                              |
| DRB1*0402+DRB1*1101G1                  | DRB1*0414+DRB1*110401/110402 | DRB1*0415+DRB1*1323          | DRB1*0436+DRB1*111401/111402 |
| DRB1*0402+DRB1*1110103                 | DRB1*0404+DRB1*110201        | DRB1*0453+DRB1*111101/111102 |                              |
| DRB1*0402+DRB1*110105                  | DRB1*0414+DRB1*110403        |                              |                              |
| DRB1*0402+DRB1*110401/110402           | DRB1*0415+DRB1*1322          | DRB1*0436+DRB1*110201        |                              |
| DRB1*0402+DRB1*110601                  | DRB1*0436+DRB1*1121          |                              |                              |
| DRB1*0402+DRB1*1107                    | DRB1*0422+DRB1*110201        |                              |                              |
| DRB1*0402+DRB1*110801/110802           | DRB1*0414+DRB1*1142          | DRB1*0437+DRB1*111901        |                              |
| DRB1*0402+DRB1*1109                    | DRB1*0415+DRB1*130201        | DRB1*0436+DRB1*1120          |                              |

|                                       |                                       |                              |                              |
|---------------------------------------|---------------------------------------|------------------------------|------------------------------|
| DRB1*0402+DRB1*111101/111102          | DRB1*0414+DRB1*1103                   |                              |                              |
| DRB1*0402+DRB1*111401/111402          | DRB1*0414+DRB1*110201                 |                              |                              |
| DRB1*0402+DRB1*111901                 | DRB1*0414+DRB1*1118                   |                              |                              |
| DRB1*0402+DRB1*111902                 | DRB1*0453+DRB1*11140 1/111402         |                              |                              |
| DRB1*0402+DRB1*1120                   | DRB1*0414+DRB1*1116                   |                              |                              |
| DRB1*0402+DRB1*1123                   | DRB1*0414+DRB1*1125                   | DRB1*0418+DRB1*111101/111102 | DRB1*0425+DRB1*111401/111402 |
|                                       | DRB1*0454+DRB1*110201                 |                              |                              |
| DRB1*0402+DRB1*1125                   | DRB1*0418+DRB1*1103                   | DRB1*0425+DRB1*110201        |                              |
| DRB1*0402+DRB1*1126                   | DRB1*0404+DRB1*111401/111402          | DRB1*0408+DRB1*110201        | DRB1*0414+DRB1*1134          |
|                                       | DRB1*0443+DRB1*1148                   | DRB1*0456+DRB1*1168          | DRB1*0461+DRB1*1322          |
| DRB1*0402+DRB1*1133                   | DRB1*0414+DRB1*1135                   |                              |                              |
| DRB1*0402+DRB1*1134                   | DRB1*0404+DRB1*110201                 |                              |                              |
| DRB1*0402+DRB1*1135                   | DRB1*0436+DRB1*116501/116502          | DRB1*0442+DRB1*1148          | DRB1*0456+DRB1*1136          |
| DRB1*0402+DRB1*1136                   | DRB1*0437+DRB1*110201                 |                              |                              |
| DRB1*0402+DRB1*1137                   | DRB1*0414+DRB1*1156                   |                              |                              |
| DRB1*0402+DRB1*1139                   | DRB1*0414+DRB1*1143                   |                              |                              |
| DRB1*0402+DRB1*1142                   | DRB1*0437+DRB1*1118                   |                              |                              |
| DRB1*0402+DRB1*1145                   | DRB1*0418+DRB1*111401/111402          |                              |                              |
| DRB1*0402+DRB1*1146                   | DRB1*0415+DRB1*1352                   |                              |                              |
| DRB1*0402+DRB1*1149                   | DRB1*0414+DRB1*1144                   | DRB1*0436+DRB1*1148          |                              |
| DRB1*0402+DRB1*1156                   | DRB1*0415+DRB1*1370                   |                              |                              |
| DRB1*0402+DRB1*1158                   | DRB1*0415+DRB1*1369                   |                              |                              |
| DRB1*0402+DRB1*1164                   | DRB1*0418+DRB1*1168                   | DRB1*0437+DRB1*1145          | DRB1*0458+DRB1*111401/111402 |
| DRB1*0402+DRB1*1168                   | DRB1*0414+DRB1*1136                   | DRB1*0437+DRB1*111401/111402 |                              |
| DRB1*0402+DRB1*1212                   | DRB1*0437+DRB1*120101/1206/1210/1217  |                              |                              |
| DRB1*0402+DRB1*130201                 | DRB1*0414+DRB1*130101                 |                              |                              |
| DRB1*0402+DRB1*130501/130502          | DRB1*0414+DRB1*1342                   | DRB1*0436+DRB1*130201        |                              |
| DRB1*0402+DRB1*131101                 | DRB1*0436+DRB1*1322                   |                              |                              |
| DRB1*0402+DRB1*1313                   | DRB1*0418+DRB1*1338                   |                              |                              |
| DRB1*0402+DRB1*131401/131403          | DRB1*0414+DRB1*131101                 | DRB1*0436+DRB1*1323          |                              |
| DRB1*0402+DRB1*131402                 | DRB1*0414+DRB1*131102                 |                              |                              |
| DRB1*0402+DRB1*1318                   | DRB1*0425+DRB1*130101                 |                              |                              |
| DRB1*0402+DRB1*1320                   | DRB1*0437+DRB1*130101                 |                              |                              |
| DRB1*0402+DRB1*1323                   | DRB1*0414+DRB1*1322                   |                              |                              |
| DRB1*0402+DRB1*1325                   | DRB1*0437+DRB1*1382                   |                              |                              |
| DRB1*0402+DRB1*1329                   | DRB1*0414+DRB1*1320                   | DRB1*0437+DRB1*130201        |                              |
| DRB1*0402+DRB1*1336                   | DRB1*0414+DRB1*1340                   |                              |                              |
| DRB1*0402+DRB1*1338                   | DRB1*0414+DRB1*1348                   |                              |                              |
| DRB1*0402+DRB1*1339                   | DRB1*0414+DRB1*1379                   |                              |                              |
| DRB1*0402+DRB1*1341                   | DRB1*0414+DRB1*1327                   |                              |                              |
| DRB1*0402+DRB1*1342                   | DRB1*0436+DRB1*130101                 |                              |                              |
| DRB1*0402+DRB1*1344                   | DRB1*0404+DRB1*1322                   | DRB1*0442+DRB1*1370          |                              |
| DRB1*0402+DRB1*1347                   | DRB1*0414+DRB1*0820                   | DRB1*0454+DRB1*1370          |                              |
| DRB1*0402+DRB1*1349                   | DRB1*0436+DRB1*1338                   |                              |                              |
| DRB1*0402+DRB1*1355                   | DRB1*0425+DRB1*1338                   | DRB1*0454+DRB1*1348          |                              |
| DRB1*0402+DRB1*1365                   | DRB1*0414+DRB1*1332                   |                              |                              |
| DRB1*0402+DRB1*1371                   | DRB1*0437+DRB1*1327                   |                              |                              |
| DRB1*0402+DRB1*1378                   | DRB1*0437+DRB1*1379                   |                              |                              |
| DRB1*0402+DRB1*1388                   | DRB1*0437+DRB1*130301/130302          |                              |                              |
| DRB1*0402+DRB1*1402                   | DRB1*0408+DRB1*1353                   | DRB1*0414+DRB1*1406          |                              |
| DRB1*0402+DRB1*140301                 | DRB1*0414+DRB1*1412                   | DRB1*0437+DRB1*1467          |                              |
| DRB1*0402+DRB1*140501                 | DRB1*0437+DRB1*1445                   |                              |                              |
| DRB1*0402+DRB1*1406                   | DRB1*0404+DRB1*1353                   |                              |                              |
| DRB1*0402+DRB1*140701/140702          | DRB1*0414+DRB1*140101/1454            |                              |                              |
| DRB1*0402+DRB1*1409                   | DRB1*0404+DRB1*1336                   | DRB1*0408+DRB1*1340          | DRB1*0414+DRB1*1480          |
| DRB1*0402+DRB1*1412                   | DRB1*0458+DRB1*1353                   |                              |                              |
| DRB1*0402+DRB1*1413                   | DRB1*0405G1+DRB1*1353                 |                              |                              |
| DRB1*0402+DRB1*1414                   | DRB1*0414+DRB1*142301                 | DRB1*0442+DRB1*1340          | DRB1*0456+DRB1*1320          |
| DRB1*0402+DRB1*1417                   | DRB1*0404+DRB1*130101                 |                              |                              |
| DRB1*0402+DRB1*1420                   | DRB1*0404+DRB1*1319                   |                              |                              |
| DRB1*0402+DRB1*1421                   | DRB1*0413+DRB1*130101                 |                              |                              |
| DRB1*0402+DRB1*1427                   | DRB1*0454+DRB1*1353                   |                              |                              |
| DRB1*0402+DRB1*1430                   | DRB1*0404+DRB1*130201                 | DRB1*0408+DRB1*130101        | DRB1*0414+DRB1*1417          |
|                                       | DRB1*0442+DRB1*1336                   | DRB1*0443+DRB1*1340          | DRB1*0456+DRB1*1329          |
| DRB1*0402+DRB1*1433                   | DRB1*040301/040303+DRB1*130101        | DRB1*0441+DRB1*1352          | DRB1*0459+DRB1*1340          |
| DRB1*0402+DRB1*144401                 | DRB1*0414+DRB1*140501                 |                              |                              |
| DRB1*0402+DRB1*144402                 | DRB1*0414+DRB1*140503                 |                              |                              |
| DRB1*0402+DRB1*1451                   | DRB1*040701/040703+DRB1*1353          |                              |                              |
| DRB1*0402+DRB1*1453                   | DRB1*0436+DRB1*1345                   |                              |                              |
| DRB1*0402+DRB1*1463                   | DRB1*0414+DRB1*1478                   |                              |                              |
| DRB1*0402+DRB1*1468                   | DRB1*0414+DRB1*1404                   |                              |                              |
| DRB1*0402+DRB1*1478                   | DRB1*0412+DRB1*1353                   |                              |                              |
| DRB1*0402+DRB1*1480                   | DRB1*0404+DRB1*1340                   |                              |                              |
| DRB1*0402+DRB1*1485                   | DRB1*0437+DRB1*1463                   |                              |                              |
| DRB1*0402+DRB1*150201                 | DRB1*0414+DRB1*15010101/15010102      |                              |                              |
| DRB1*0402+DRB1*150202/150205          | DRB1*0414+DRB1*150104                 |                              |                              |
| DRB1*0402+DRB1*150206                 | DRB1*0414+DRB1*150103                 |                              |                              |
| DRB1*0402+DRB1*1505                   | DRB1*0437+DRB1*15010101/15010102      |                              |                              |
| DRB1*0402+DRB1*1511                   | DRB1*0414+DRB1*1507                   |                              |                              |
| DRB1*0402+DRB1*1515                   | DRB1*0414+DRB1*1504                   |                              |                              |
| DRB1*0402+DRB1*1521                   | DRB1*0418+DRB1*1510                   |                              |                              |
| DRB1*0402+DRB1*1523                   | DRB1*0437+DRB1*15030101/15030102      |                              |                              |
| DRB1*0402+DRB1*1525                   | DRB1*0422+DRB1*1510                   |                              |                              |
| DRB1*0402+DRB1*1527                   | DRB1*0408+DRB1*1510                   |                              |                              |
| DRB1*0402+DRB1*1531                   | DRB1*0414+DRB1*1505                   | DRB1*0437+DRB1*150201        |                              |
| DRB1*0402+DRB1*160201                 | DRB1*0437+DRB1*160501                 |                              |                              |
| DRB1*0402+DRB1*1609                   | DRB1*0447+DRB1*1510                   | DRB1*040701/040703+DRB1*0410 | DRB1*0408+DRB1*0411          |
| DRB1*040301/040303+DRB1*0405G1        | DRB1*0404+DRB1*0417                   |                              |                              |
| DRB1*040301/040303+DRB1*0408          | DRB1*0404+DRB1*040701/040703          |                              |                              |
| DRB1*040301/040303+DRB1*0410          | DRB1*0404+DRB1*0411                   |                              |                              |
| DRB1*040301/040303+DRB1*0412          | DRB1*0411+DRB1*0418                   |                              |                              |
| DRB1*040301/040303+DRB1*0417          | DRB1*040701/040703+DRB1*0411          |                              |                              |
| DRB1*040301/040303+DRB1*0419          | DRB1*0404+DRB1*0420                   | DRB1*040601/040602+DRB1*0408 | DRB1*040701/040703+DRB1*0468 |
| DRB1*040301/040303+DRB1*0420          | DRB1*040601/040602+DRB1*040701/040703 |                              |                              |
| DRB1*040301/040303+DRB1*0423          | DRB1*0404+DRB1*0452                   |                              |                              |
| DRB1*040301/040303+DRB1*0428          | DRB1*0405G1+DRB1*0459                 | DRB1*0411+DRB1*0443          | DRB1*0417+DRB1*0442          |
| DRB1*040301/040303+DRB1*0431          | DRB1*040701/040703+DRB1*0455          |                              |                              |
| DRB1*040301/040303+DRB1*0442          | DRB1*0404+DRB1*0459                   |                              |                              |
| DRB1*040301/040303+DRB1*0443          | DRB1*040701/040703+DRB1*0442          | DRB1*0408+DRB1*0459          |                              |
| DRB1*040301/040303+DRB1*0454          | DRB1*040701/040703+DRB1*0425          |                              |                              |
| DRB1*040301/040303+DRB1*0467          | DRB1*0411+DRB1*0413                   |                              |                              |
| DRB1*040301/040303+DRB1*0468          | DRB1*0404+DRB1*040601/040602          |                              |                              |
| DRB1*040301/040303+DRB1*0470          | DRB1*0404+DRB1*0451                   |                              |                              |
| DRB1*040301/040303+DRB1*0477          | DRB1*0405G1+DRB1*0441                 |                              |                              |
| DRB1*040301/040303+DRB1*080101/080103 | DRB1*040701/040703+DRB1*0806          | DRB1*0411+DRB1*080201/080202 | DRB1*0417+DRB1*080401/080404 |
| DRB1*040301/040303+DRB1*100101/080202 | DRB1*040701/040703+DRB1*080401/080404 |                              |                              |
| DRB1*040301/040303+DRB1*080302        | DRB1*040701/040703+DRB1*0810          | DRB1*0411+DRB1*0830          | DRB1*0455+DRB1*0829          |
| DRB1*040301/040303+DRB1*0805          | DRB1*0411+DRB1*0824                   |                              |                              |
| DRB1*040301/040303+DRB1*0806          | DRB1*0411+DRB1*080401/080404          |                              |                              |
| DRB1*040301/040303+DRB1*0809          | DRB1*040701/040703+DRB1*1415          |                              |                              |
| DRB1*040301/040303+DRB1*0812          | DRB1*0427+DRB1*0810                   |                              |                              |
| DRB1*040301/040303+DRB1*0817          | DRB1*0417+DRB1*0828                   | DRB1*0459+DRB1*080101/080103 |                              |
| DRB1*040301/040303+DRB1*0818          | DRB1*0404+DRB1*0829                   |                              |                              |
| DRB1*040301/040303+DRB1*0822          | DRB1*0427+DRB1*0806                   |                              |                              |
| DRB1*040301/040303+DRB1*0828          | DRB1*0459+DRB1*080401/080404          |                              |                              |
| DRB1*040301/040303+DRB1*090102        | DRB1*040701/040703+DRB1*0906          |                              |                              |
| DRB1*040301/040303+DRB1*090201        | DRB1*040302+DRB1*090202               |                              |                              |
| DRB1*040301/040303+DRB1*100101        | DRB1*040701/040703+DRB1*1002          | DRB1*0408+DRB1*115402        | DRB1*0459+DRB1*1137          |
| DRB1*040301/040303+DRB1*1101G1        | DRB1*040701/040703+DRB1*110401/110402 | DRB1*0408+DRB1*115401        |                              |
| DRB1*040301/040303+DRB1*110105        | DRB1*040701/040703+DRB1*110403        |                              |                              |
| DRB1*040301/040303+DRB1*110201        | DRB1*0459+DRB1*1148                   |                              |                              |
| DRB1*040301/040303+DRB1*1103          | DRB1*0459+DRB1*1141                   |                              |                              |
| DRB1*040301/040303+DRB1*110401/110402 | DRB1*0404+DRB1*115402                 | DRB1*0459+DRB1*1156          |                              |
| DRB1*040301/040303+DRB1*110403        | DRB1*0404+DRB1*115401                 |                              |                              |

|                                           |                                     |                                           |                              |
|-------------------------------------------|-------------------------------------|-------------------------------------------|------------------------------|
| DRB1*040301/040303+DRB1*110601            | DRB1*0427+DRB1*110401/110402        |                                           |                              |
| DRB1*040301/040303+DRB1*110602            | DRB1*0427+DRB1*110403               |                                           |                              |
| DRB1*040301/040303+DRB1*110801/110802     | DRB1*040701/040703+DRB1*1142        |                                           |                              |
| DRB1*040301/040303+DRB1*111101/111102     | DRB1*040701/040703+DRB1*1103        |                                           |                              |
| DRB1*040301/040303+DRB1*111301/111302     | DRB1*0442+DRB1*1117                 |                                           |                              |
| DRB1*040301/040303+DRB1*111401/111402     | DRB1*040701/040703+DRB1*110201      |                                           |                              |
| DRB1*040301/040303+DRB1*111901            | DRB1*040701/040703+DRB1*1118        |                                           |                              |
| DRB1*040301/040303+DRB1*1120              | DRB1*040701/040703+DRB1*1116        |                                           |                              |
| DRB1*040301/040303+DRB1*1121              | DRB1*0427+DRB1*110201               |                                           |                              |
| DRB1*040301/040303+DRB1*1123              | DRB1*040701/040703+DRB1*1125        | DRB1*0431+DRB1*115402                     |                              |
| DRB1*040301/040303+DRB1*1125              | DRB1*0455+DRB1*115402               |                                           |                              |
| DRB1*040301/040303+DRB1*1126              | DRB1*040701/040703+DRB1*1134        |                                           |                              |
| DRB1*040301/040303+DRB1*112701            | DRB1*0474+DRB1*110401/110402        |                                           |                              |
| DRB1*040301/040303+DRB1*1128              | DRB1*0441+DRB1*1101G1               |                                           |                              |
| DRB1*040301/040303+DRB1*1129              | DRB1*040601/040602+DRB1*1101G1      | DRB1*0419+DRB1*115402                     | DRB1*0420+DRB1*110401/110402 |
| DRB1*040301/040303+DRB1*1133              | DRB1*040701/040703+DRB1*1135        |                                           |                              |
| DRB1*040301/040303+DRB1*1137              | DRB1*040701/040703+DRB1*1156        |                                           |                              |
| DRB1*040301/040303+DRB1*1139              | DRB1*040701/040703+DRB1*1143        |                                           |                              |
| DRB1*040301/040303+DRB1*1147              | DRB1*040601/040602+DRB1*110601      |                                           |                              |
| DRB1*040301/040303+DRB1*1149              | DRB1*040701/040703+DRB1*1144        |                                           |                              |
| DRB1*040301/040303+DRB1*1157              | DRB1*0427+DRB1*1142                 |                                           |                              |
| DRB1*040301/040303+DRB1*1158              | DRB1*0441+DRB1*110404               |                                           |                              |
| DRB1*040301/040303+DRB1*1163              | DRB1*040601/040602+DRB1*1103        |                                           |                              |
| DRB1*040301/040303+DRB1*1168              | DRB1*040701/040703+DRB1*1136        |                                           |                              |
| DRB1*040301/040303+DRB1*120201            | DRB1*0427+DRB1*1219                 |                                           |                              |
| DRB1*040301/040303+DRB1*130201            | DRB1*040701/040703+DRB1*130101      | DRB1*0414+DRB1*1433                       | DRB1*0459+DRB1*1336          |
| DRB1*040301/040303+DRB1*130203            | DRB1*040302+DRB1*130201             |                                           |                              |
| DRB1*040301/040303+DRB1*130301/130302     | DRB1*0411+DRB1*1337                 |                                           |                              |
| DRB1*040301/040303+DRB1*1304              | DRB1*0411+DRB1*1322                 | DRB1*0459+DRB1*1348                       |                              |
| DRB1*040301/040303+DRB1*130501/130502     | DRB1*040701/040703+DRB1*1342        |                                           |                              |
| DRB1*040301/040303+DRB1*130702            | DRB1*040302+DRB1*130701             |                                           |                              |
| DRB1*040301/040303+DRB1*131102            | DRB1*040302+DRB1*131101             | DRB1*0459+DRB1*130701                     |                              |
| DRB1*040301/040303+DRB1*131401/131403     | DRB1*040701/040703+DRB1*131101      | DRB1*040701/040703+DRB1*131102            | DRB1*0459+DRB1*130702        |
| DRB1*040301/040303+DRB1*131402            | DRB1*040302+DRB1*131401/131403      |                                           |                              |
| DRB1*040301/040303+DRB1*1315              | DRB1*0459+DRB1*1353                 |                                           |                              |
| DRB1*040301/040303+DRB1*1318              | DRB1*0425+DRB1*1433                 |                                           |                              |
| DRB1*040301/040303+DRB1*1320              | DRB1*0437+DRB1*1433                 |                                           |                              |
| DRB1*040301/040303+DRB1*1321              | DRB1*0411+DRB1*131401/131403        | DRB1*0417+DRB1*131101                     | DRB1*0459+DRB1*1349          |
| DRB1*040301/040303+DRB1*1322              | DRB1*0459+DRB1*1370                 |                                           |                              |
| DRB1*040301/040303+DRB1*1323              | DRB1*040701/040703+DRB1*1322        |                                           |                              |
| DRB1*040301/040303+DRB1*1329              | DRB1*040701/040703+DRB1*1320        |                                           |                              |
| DRB1*040301/040303+DRB1*1330              | DRB1*0411+DRB1*1382                 | DRB1*0459+DRB1*1312                       |                              |
| DRB1*040301/040303+DRB1*1332              | DRB1*0411+DRB1*1340                 |                                           |                              |
| DRB1*040301/040303+DRB1*1336              | DRB1*040701/040703+DRB1*1340        |                                           |                              |
| DRB1*040301/040303+DRB1*1338              | DRB1*040701/040703+DRB1*1348        | DRB1*0417+DRB1*1370                       |                              |
| DRB1*040301/040303+DRB1*1339              | DRB1*040701/040703+DRB1*1379        |                                           |                              |
| DRB1*040301/040303+DRB1*1341              | DRB1*040701/040703+DRB1*1327        |                                           |                              |
| DRB1*040301/040303+DRB1*1342              | DRB1*0436+DRB1*1433                 |                                           |                              |
| DRB1*040301/040303+DRB1*1347              | DRB1*040701/040703+DRB1*0820        |                                           |                              |
| DRB1*040301/040303+DRB1*1348              | DRB1*0411+DRB1*1370                 |                                           |                              |
| DRB1*040301/040303+DRB1*1349              | DRB1*0411+DRB1*130701               |                                           |                              |
| DRB1*040301/040303+DRB1*135001            | DRB1*0441+DRB1*131401/131403        |                                           |                              |
| DRB1*040301/040303+DRB1*1355              | DRB1*0411+DRB1*1347                 | DRB1*0417+DRB1*0820                       |                              |
| DRB1*040301/040303+DRB1*1357              | DRB1*0459+DRB1*1319                 |                                           |                              |
| DRB1*040301/040303+DRB1*1365              | DRB1*040701/040703+DRB1*1332        | DRB1*0411+DRB1*1336                       | DRB1*0417+DRB1*1340          |
| DRB1*040301/040303+DRB1*1366              | DRB1*0459+DRB1*130301/130302        |                                           |                              |
| DRB1*040301/040303+DRB1*1375              | DRB1*0411+DRB1*1324                 |                                           |                              |
| DRB1*040301/040303+DRB1*1383              | DRB1*0459+DRB1*1308                 |                                           |                              |
| DRB1*040301/040303+DRB1*1387              | DRB1*0441+DRB1*1383                 |                                           |                              |
| DRB1*040301/040303+DRB1*1402              | DRB1*0404+DRB1*1451                 | DRB1*040701/040703+DRB1*1406              |                              |
| DRB1*040301/040303+DRB1*140301            | DRB1*040701/040703+DRB1*1412        | DRB1*0458+DRB1*1451                       |                              |
| DRB1*040301/040303+DRB1*140501            | DRB1*040304+DRB1*140502             |                                           |                              |
| DRB1*040301/040303+DRB1*140701/140702     | DRB1*040701/040703+DRB1*140101/1454 |                                           |                              |
| DRB1*040301/040303+DRB1*1409              | DRB1*040701/040703+DRB1*1480        |                                           |                              |
| DRB1*040301/040303+DRB1*1413              | DRB1*0410+DRB1*1451                 | DRB1*0411+DRB1*1402                       | DRB1*0417+DRB1*1406          |
| DRB1*040301/040303+DRB1*1414              | DRB1*040701/040703+DRB1*142301      |                                           |                              |
| DRB1*040301/040303+DRB1*1417              | DRB1*0404+DRB1*1433                 | DRB1*0459+DRB1*1480                       |                              |
| DRB1*040301/040303+DRB1*1419              | DRB1*0413+DRB1*1451                 |                                           |                              |
| DRB1*040301/040303+DRB1*1421              | DRB1*0413+DRB1*1433                 |                                           |                              |
| DRB1*040301/040303+DRB1*1427              | DRB1*0425+DRB1*1451                 |                                           |                              |
| DRB1*040301/040303+DRB1*1428              | DRB1*0427+DRB1*1404                 |                                           |                              |
| DRB1*040301/040303+DRB1*1429              | DRB1*0427+DRB1*1406                 |                                           |                              |
| DRB1*040301/040303+DRB1*1430              | DRB1*040701/040703+DRB1*1417        | DRB1*0408+DRB1*1433                       | DRB1*0459+DRB1*1409          |
| DRB1*040301/040303+DRB1*1431              | DRB1*0404+DRB1*1404                 |                                           |                              |
| DRB1*040301/040303+DRB1*143201            | DRB1*0404+DRB1*140102               |                                           |                              |
| DRB1*040301/040303+DRB1*143202            | DRB1*0404+DRB1*140101/1454          |                                           |                              |
| DRB1*040301/040303+DRB1*1434              | DRB1*0404+DRB1*1408                 |                                           |                              |
| DRB1*040301/040303+DRB1*1435              | DRB1*0459+DRB1*140101/1454          |                                           |                              |
| DRB1*040301/040303+DRB1*144401            | DRB1*040701/040703+DRB1*140501      |                                           |                              |
| DRB1*040301/040303+DRB1*144402            | DRB1*040701/040703+DRB1*140503      |                                           |                              |
| DRB1*040301/040303+DRB1*1447              | DRB1*0444+DRB1*1451                 | DRB1*0474+DRB1*1406                       |                              |
| DRB1*040301/040303+DRB1*1453              | DRB1*0459+DRB1*1425                 |                                           |                              |
| DRB1*040301/040303+DRB1*1455              | DRB1*0455+DRB1*140101/1454          |                                           |                              |
| DRB1*040301/040303+DRB1*1463              | DRB1*040701/040703+DRB1*1478        | DRB1*0411+DRB1*1467                       | DRB1*0412+DRB1*1451          |
| DRB1*040301/040303+DRB1*1467              | DRB1*0418+DRB1*1451                 |                                           |                              |
| DRB1*040301/040303+DRB1*1468              | DRB1*040701/040703+DRB1*1404        |                                           |                              |
| DRB1*040301/040303+DRB1*1475              | DRB1*0451+DRB1*140102               |                                           |                              |
| DRB1*040301/040303+DRB1*1485              | DRB1*0411+DRB1*140301               | DRB1*0417+DRB1*1412                       |                              |
| DRB1*040301/040303+DRB1*15010101/15010102 | DRB1*040302+DRB1*150104             | DRB1*0459+DRB1*1507                       |                              |
| DRB1*040301/040303+DRB1*150201            | DRB1*040302+DRB1*150202/150205      | DRB1*040701/040703+DRB1*15010101/15010102 | DRB1*0459+DRB1*1511          |
| DRB1*040301/040303+DRB1*150202/150205     | DRB1*040701/040703+DRB1*150104      |                                           |                              |
| DRB1*040301/040303+DRB1*150206            | DRB1*040701/040703+DRB1*150103      |                                           |                              |
| DRB1*040301/040303+DRB1*1511              | DRB1*040701/040703+DRB1*1507        |                                           |                              |
| DRB1*040301/040303+DRB1*1512              | DRB1*0411+DRB1*150104               |                                           |                              |
| DRB1*040301/040303+DRB1*1515              | DRB1*040701/040703+DRB1*1504        |                                           |                              |
| DRB1*040301/040303+DRB1*1531              | DRB1*040701/040703+DRB1*1505        |                                           |                              |
| DRB1*040301/040303+DRB1*1532              | DRB1*0441+DRB1*15010101/15010102    |                                           |                              |
| DRB1*040301/040303+DRB1*1609              | DRB1*0459+DRB1*160101               |                                           |                              |
| DRB1*040301/040303+DRB1*1610              | DRB1*0459+DRB1*160201               |                                           |                              |
| DRB1*040302+DRB1*1309                     | DRB1*0473+DRB1*1433                 |                                           |                              |
| DRB1*040302+DRB1*1321                     | DRB1*0411+DRB1*131402               | DRB1*0417+DRB1*131102                     |                              |
| DRB1*040302+DRB1*1349                     | DRB1*0411+DRB1*130702               |                                           |                              |
| DRB1*040302+DRB1*135001                   | DRB1*0441+DRB1*131402               |                                           |                              |
| DRB1*040302+DRB1*1424                     | DRB1*0473+DRB1*1451                 |                                           |                              |
| DRB1*040302+DRB1*1512                     | DRB1*0411+DRB1*15010101/15010102    |                                           |                              |
| DRB1*0404+DRB1*0405G1                     | DRB1*0408+DRB1*0410                 |                                           |                              |
| DRB1*0404+DRB1*0412                       | DRB1*0410+DRB1*0418                 |                                           |                              |
| DRB1*0404+DRB1*0418                       | DRB1*0456+DRB1*0458                 |                                           |                              |
| DRB1*0404+DRB1*0419                       | DRB1*0408+DRB1*0468                 |                                           |                              |
| DRB1*0404+DRB1*0425                       | DRB1*0436+DRB1*0455                 |                                           |                              |
| DRB1*0404+DRB1*0428                       | DRB1*0405G1+DRB1*0442               | DRB1*0410+DRB1*0443                       |                              |
| DRB1*0404+DRB1*0431                       | DRB1*0408+DRB1*0455                 |                                           |                              |
| DRB1*0404+DRB1*0443                       | DRB1*0408+DRB1*0442                 |                                           |                              |
| DRB1*0404+DRB1*0454                       | DRB1*0408+DRB1*0425                 | DRB1*0431+DRB1*0436                       |                              |
| DRB1*0404+DRB1*0467                       | DRB1*0410+DRB1*0413                 |                                           |                              |
| DRB1*0404+DRB1*0474                       | DRB1*040701/040703+DRB1*0444        |                                           |                              |
| DRB1*0404+DRB1*0704                       | DRB1*0444+DRB1*0711                 |                                           |                              |
| DRB1*0404+DRB1*080101/080103              | DRB1*0405G1+DRB1*080401/080404      | DRB1*0408+DRB1*0806                       | DRB1*0410+DRB1*080201/080202 |
|                                           | DRB1*0455+DRB1*0805                 |                                           |                              |
| DRB1*0404+DRB1*080201/080202              | DRB1*0408+DRB1*080401/080404        | DRB1*0455+DRB1*0824                       |                              |
| DRB1*0404+DRB1*080302                     | DRB1*0408+DRB1*0810                 | DRB1*0410+DRB1*0830                       | DRB1*0455+DRB1*0818          |
| DRB1*0404+DRB1*0805                       | DRB1*0410+DRB1*0824                 |                                           |                              |
| DRB1*0404+DRB1*0806                       | DRB1*0410+DRB1*080401/080404        |                                           |                              |
| DRB1*0404+DRB1*0809                       | DRB1*0408+DRB1*1415                 |                                           |                              |

|                                      |                                  |                              |                              |
|--------------------------------------|----------------------------------|------------------------------|------------------------------|
| DRB1*0404+DRB1*0817                  | DRB1*0405G1+DRB1*0828            | DRB1*0428+DRB1*080401/080404 | DRB1*0442+DRB1*080101/080103 |
| DRB1*0404+DRB1*0828                  | DRB1*0443+DRB1*0806              |                              |                              |
| DRB1*0404+DRB1*0830                  | DRB1*0442+DRB1*080401/080404     |                              |                              |
| DRB1*0404+DRB1*090102                | DRB1*0456+DRB1*0813              |                              |                              |
| DRB1*0404+DRB1*100101                | DRB1*0408+DRB1*0906              |                              |                              |
| DRB1*0404+DRB1*1101G1                | DRB1*0408+DRB1*1002              | DRB1*0436+DRB1*1126          | DRB1*0442+DRB1*1137          |
|                                      | DRB1*0408+DRB1*110401/110402     | DRB1*0461+DRB1*131101        |                              |
| DRB1*0404+DRB1*110103                | DRB1*0443+DRB1*1156              |                              |                              |
| DRB1*0404+DRB1*110105                | DRB1*0447+DRB1*1134              |                              |                              |
| DRB1*0404+DRB1*1103                  | DRB1*0408+DRB1*110403            |                              |                              |
| DRB1*0404+DRB1*110401/110402         | DRB1*0442+DRB1*1141              | DRB1*0436+DRB1*1134          | DRB1*0442+DRB1*1156          |
| DRB1*0404+DRB1*1107                  | DRB1*0415+DRB1*1344              |                              |                              |
| DRB1*0404+DRB1*110801/110802         | DRB1*0422+DRB1*1134              |                              |                              |
| DRB1*0404+DRB1*1109                  | DRB1*0408+DRB1*1142              | DRB1*0461+DRB1*1342          |                              |
| DRB1*0404+DRB1*111011/111102         | DRB1*0415+DRB1*1430              | DRB1*0443+DRB1*1141          | DRB1*0461+DRB1*1324          |
| DRB1*0404+DRB1*1118                  | DRB1*0408+DRB1*1103              |                              |                              |
| DRB1*0404+DRB1*111901                | DRB1*0456+DRB1*1142              | DRB1*0456+DRB1*110801/110802 |                              |
| DRB1*0404+DRB1*111902                | DRB1*0408+DRB1*1118              |                              |                              |
| DRB1*0404+DRB1*1120                  | DRB1*0453+DRB1*1126              | DRB1*0461+DRB1*130101        |                              |
| DRB1*0404+DRB1*1123                  | DRB1*0408+DRB1*1116              | DRB1*0425+DRB1*1126          | DRB1*0431+DRB1*110401/110402 |
|                                      | DRB1*0454+DRB1*1134              | DRB1*0455+DRB1*1101G1        |                              |
| DRB1*0404+DRB1*1125                  | DRB1*0425+DRB1*1134              | DRB1*0455+DRB1*110401/110402 |                              |
| DRB1*0404+DRB1*1126                  | DRB1*0408+DRB1*1134              | DRB1*0461+DRB1*1344          |                              |
| DRB1*0404+DRB1*112701                | DRB1*0444+DRB1*1101G1            |                              |                              |
| DRB1*0404+DRB1*1129                  | DRB1*0419+DRB1*110401/110402     | DRB1*0468+DRB1*1101G1        |                              |
| DRB1*0404+DRB1*1133                  | DRB1*0408+DRB1*1135              |                              |                              |
| DRB1*0404+DRB1*1136                  | DRB1*0437+DRB1*1134              |                              |                              |
| DRB1*0404+DRB1*1137                  | DRB1*0408+DRB1*1156              |                              |                              |
| DRB1*0404+DRB1*1139                  | DRB1*0408+DRB1*1143              |                              |                              |
| DRB1*0404+DRB1*1145                  | DRB1*0418+DRB1*1126              | DRB1*0431+DRB1*1118          | DRB1*0455+DRB1*111901        |
|                                      | DRB1*0456+DRB1*1164              |                              |                              |
| DRB1*0404+DRB1*1147                  | DRB1*0468+DRB1*110601            |                              |                              |
| DRB1*0404+DRB1*1149                  | DRB1*0408+DRB1*1144              |                              |                              |
| DRB1*0404+DRB1*1151                  | DRB1*0432+DRB1*1101G1            |                              |                              |
| DRB1*0404+DRB1*1155                  | DRB1*0455+DRB1*1103              |                              |                              |
| DRB1*0404+DRB1*1163                  | DRB1*0468+DRB1*1103              |                              |                              |
| DRB1*0404+DRB1*1164                  | DRB1*0431+DRB1*1142              | DRB1*0455+DRB1*110801/110802 | DRB1*0458+DRB1*1126          |
| DRB1*0404+DRB1*1168                  | DRB1*0408+DRB1*1136              | DRB1*0437+DRB1*1126          |                              |
| DRB1*0404+DRB1*120101/1206/1210/1217 | DRB1*0456+DRB1*1212              |                              |                              |
| DRB1*0404+DRB1*130301/130302         | DRB1*0410+DRB1*1337              | DRB1*0413+DRB1*1312          | DRB1*0456+DRB1*1388          |
| DRB1*0404+DRB1*1304                  | DRB1*0410+DRB1*1322              | DRB1*0442+DRB1*1348          |                              |
| DRB1*0404+DRB1*130501/130502         | DRB1*0408+DRB1*1342              | DRB1*0436+DRB1*1430          |                              |
| DRB1*0404+DRB1*1310                  | DRB1*0413+DRB1*1306              |                              |                              |
| DRB1*0404+DRB1*131101                | DRB1*0436+DRB1*1344              |                              |                              |
| DRB1*0404+DRB1*1313                  | DRB1*0455+DRB1*1312              |                              |                              |
| DRB1*0404+DRB1*131401/131403         | DRB1*0408+DRB1*131101            | DRB1*0442+DRB1*130701        |                              |
| DRB1*0404+DRB1*131402                | DRB1*0408+DRB1*131102            | DRB1*0442+DRB1*130702        |                              |
| DRB1*0404+DRB1*1315                  | DRB1*0442+DRB1*1353              |                              |                              |
| DRB1*0404+DRB1*1318                  | DRB1*0425+DRB1*1417              | DRB1*0455+DRB1*1342          |                              |
| DRB1*0404+DRB1*1320                  | DRB1*0437+DRB1*1417              |                              |                              |
| DRB1*0404+DRB1*1321                  | DRB1*0405G1+DRB1*131101          | DRB1*0410+DRB1*131401/131403 | DRB1*0442+DRB1*1349          |
| DRB1*0404+DRB1*1323                  | DRB1*0408+DRB1*1322              | DRB1*0414+DRB1*1344          | DRB1*0443+DRB1*1370          |
| DRB1*0404+DRB1*1327                  | DRB1*0456+DRB1*1371              |                              |                              |
| DRB1*0404+DRB1*1329                  | DRB1*0408+DRB1*1320              | DRB1*0437+DRB1*1430          |                              |
| DRB1*0404+DRB1*1330                  | DRB1*0410+DRB1*1382              | DRB1*0442+DRB1*1312          |                              |
| DRB1*0404+DRB1*1332                  | DRB1*0410+DRB1*1340              |                              |                              |
| DRB1*0404+DRB1*1338                  | DRB1*0405G1+DRB1*1370            | DRB1*0408+DRB1*1348          |                              |
| DRB1*0404+DRB1*1339                  | DRB1*0408+DRB1*1379              |                              |                              |
| DRB1*0404+DRB1*1341                  | DRB1*0408+DRB1*1327              |                              |                              |
| DRB1*0404+DRB1*1342                  | DRB1*0436+DRB1*1417              |                              |                              |
| DRB1*0404+DRB1*1347                  | DRB1*0408+DRB1*0820              | DRB1*0455+DRB1*130701        |                              |
| DRB1*0404+DRB1*1348                  | DRB1*0410+DRB1*1370              |                              |                              |
| DRB1*0404+DRB1*1349                  | DRB1*0410+DRB1*130701            |                              |                              |
| DRB1*0404+DRB1*1355                  | DRB1*0405G1+DRB1*0820            | DRB1*0410+DRB1*1347          | DRB1*0455+DRB1*1349          |
| DRB1*0404+DRB1*1357                  | DRB1*0442+DRB1*1319              |                              |                              |
| DRB1*0404+DRB1*1361                  | DRB1*0444+DRB1*130101            |                              |                              |
| DRB1*0404+DRB1*1365                  | DRB1*0405G1+DRB1*1340            | DRB1*0408+DRB1*1332          | DRB1*0410+DRB1*1336          |
| DRB1*0404+DRB1*1366                  | DRB1*0413+DRB1*1330              | DRB1*0442+DRB1*130301/130302 | DRB1*0467+DRB1*1382          |
| DRB1*0404+DRB1*1375                  | DRB1*0410+DRB1*1324              |                              |                              |
| DRB1*0404+DRB1*1379                  | DRB1*0456+DRB1*1378              |                              |                              |
| DRB1*0404+DRB1*1381                  | DRB1*0413+DRB1*1358              |                              |                              |
| DRB1*0404+DRB1*1382                  | DRB1*0456+DRB1*1325              |                              |                              |
| DRB1*0404+DRB1*1383                  | DRB1*0442+DRB1*1308              |                              |                              |
| DRB1*0404+DRB1*1402                  | DRB1*0408+DRB1*1406              |                              |                              |
| DRB1*0404+DRB1*140301                | DRB1*0408+DRB1*1412              | DRB1*0458+DRB1*1402          |                              |
| DRB1*0404+DRB1*140701/140702         | DRB1*040701/040703+DRB1*143202   | DRB1*0408+DRB1*140101/1454   |                              |
| DRB1*0404+DRB1*1409                  | DRB1*0408+DRB1*1480              |                              |                              |
| DRB1*0404+DRB1*1412                  | DRB1*0458+DRB1*1406              |                              |                              |
| DRB1*0404+DRB1*1413                  | DRB1*0405G1+DRB1*1406            | DRB1*0410+DRB1*1402          |                              |
| DRB1*0404+DRB1*1414                  | DRB1*0408+DRB1*142301            |                              |                              |
| DRB1*0404+DRB1*1417                  | DRB1*0442+DRB1*1480              |                              |                              |
| DRB1*0404+DRB1*1421                  | DRB1*0413+DRB1*1417              |                              |                              |
| DRB1*0404+DRB1*1427                  | DRB1*0425+DRB1*1402              | DRB1*0454+DRB1*1406          |                              |
| DRB1*0404+DRB1*1428                  | DRB1*0427+DRB1*1431              |                              |                              |
| DRB1*0404+DRB1*1430                  | DRB1*0408+DRB1*1417              | DRB1*0442+DRB1*1409          | DRB1*0443+DRB1*1480          |
| DRB1*0404+DRB1*1435                  | DRB1*0442+DRB1*140101/1454       | DRB1*0459+DRB1*143202        |                              |
| DRB1*0404+DRB1*1438                  | DRB1*0444+DRB1*140102            |                              |                              |
| DRB1*0404+DRB1*144401                | DRB1*0408+DRB1*140501            |                              |                              |
| DRB1*0404+DRB1*144402                | DRB1*0408+DRB1*140503            |                              |                              |
| DRB1*0404+DRB1*1445                  | DRB1*0456+DRB1*140501            |                              |                              |
| DRB1*0404+DRB1*1447                  | DRB1*0444+DRB1*1402              |                              |                              |
| DRB1*0404+DRB1*1453                  | DRB1*0442+DRB1*1425              |                              |                              |
| DRB1*0404+DRB1*1455                  | DRB1*0455+DRB1*143202            |                              |                              |
| DRB1*0404+DRB1*1463                  | DRB1*0408+DRB1*1478              | DRB1*0410+DRB1*1467          | DRB1*0412+DRB1*1402          |
|                                      | DRB1*0418+DRB1*1413              | DRB1*0456+DRB1*1485          |                              |
| DRB1*0404+DRB1*1467                  | DRB1*0418+DRB1*1402              | DRB1*0456+DRB1*140301        |                              |
| DRB1*0404+DRB1*1468                  | DRB1*040701/040703+DRB1*1431     | DRB1*0408+DRB1*1404          |                              |
| DRB1*0404+DRB1*1475                  | DRB1*0451+DRB1*143201            | DRB1*0470+DRB1*140102        |                              |
| DRB1*0404+DRB1*1477                  | DRB1*0458+DRB1*1441              |                              |                              |
| DRB1*0404+DRB1*1478                  | DRB1*0412+DRB1*1406              |                              |                              |
| DRB1*0404+DRB1*1485                  | DRB1*0405G1+DRB1*1412            | DRB1*0410+DRB1*140301        | DRB1*0458+DRB1*1413          |
| DRB1*0404+DRB1*15010101/15010102     | DRB1*0442+DRB1*1507              | DRB1*0456+DRB1*1505          |                              |
| DRB1*0404+DRB1*150201                | DRB1*0408+DRB1*15010101/15010102 | DRB1*0442+DRB1*1511          | DRB1*0443+DRB1*1507          |
|                                      | DRB1*0456+DRB1*1531              |                              |                              |
| DRB1*0404+DRB1*150202/150205         | DRB1*0408+DRB1*150104            |                              |                              |
| DRB1*0404+DRB1*150206                | DRB1*0408+DRB1*150103            |                              |                              |
| DRB1*0404+DRB1*15030101/15030102     | DRB1*0456+DRB1*1523              |                              |                              |
| DRB1*0404+DRB1*1511                  | DRB1*0408+DRB1*1507              |                              |                              |
| DRB1*0404+DRB1*1512                  | DRB1*0410+DRB1*150104            |                              |                              |
| DRB1*0404+DRB1*1515                  | DRB1*0408+DRB1*1504              |                              |                              |
| DRB1*0404+DRB1*1531                  | DRB1*0408+DRB1*1505              |                              |                              |
| DRB1*0404+DRB1*1604                  | DRB1*0455+DRB1*160102            |                              |                              |
| DRB1*0404+DRB1*160501                | DRB1*0456+DRB1*160201            |                              |                              |
| DRB1*0404+DRB1*1609                  | DRB1*0442+DRB1*160101            |                              |                              |
| DRB1*0404+DRB1*1610                  | DRB1*0442+DRB1*160201            |                              |                              |
| DRB1*0405G1+DRB1*040601/040602       | DRB1*0410+DRB1*0420              | DRB1*0411+DRB1*0419          | DRB1*0417+DRB1*0468          |
| DRB1*0405G1+DRB1*040701/040703       | DRB1*0408+DRB1*0417              |                              |                              |
| DRB1*0405G1+DRB1*0411                | DRB1*0410+DRB1*0417              |                              |                              |
| DRB1*0405G1+DRB1*0418                | DRB1*0408+DRB1*0412              |                              |                              |
| DRB1*0405G1+DRB1*0420                | DRB1*0417+DRB1*0419              |                              |                              |
| DRB1*0405G1+DRB1*0421                | DRB1*0409+DRB1*0419              |                              |                              |
| DRB1*0405G1+DRB1*0425                | DRB1*0410+DRB1*0454              |                              |                              |
| DRB1*0405G1+DRB1*0443                | DRB1*0408+DRB1*0428              |                              |                              |

|                                       |                                  |                              |
|---------------------------------------|----------------------------------|------------------------------|
| DRB1*0405G1+DRB1*0451                 | DRB1*0417+DRB1*0470              |                              |
| DRB1*0405G1+DRB1*0452                 | DRB1*0417+DRB1*0423              |                              |
| DRB1*0405G1+DRB1*0455                 | DRB1*0410+DRB1*0431              |                              |
| DRB1*0405G1+DRB1*0467                 | DRB1*0409+DRB1*0410              |                              |
| DRB1*0405G1+DRB1*0468                 | DRB1*0410+DRB1*0419              |                              |
| DRB1*0405G1+DRB1*0478                 | DRB1*040601/040602+DRB1*0424     |                              |
| DRB1*0405G1+DRB1*080201/080202        | DRB1*0408+DRB1*080101/080103     | DRB1*0431+DRB1*0805          |
| DRB1*0405G1+DRB1*0806                 | DRB1*0410+DRB1*080101/080103     |                              |
| DRB1*0405G1+DRB1*0810                 | DRB1*0410+DRB1*080302            |                              |
| DRB1*0405G1+DRB1*0817                 | DRB1*0428+DRB1*080101/080103     |                              |
| DRB1*0405G1+DRB1*0824                 | DRB1*0408+DRB1*0805              |                              |
| DRB1*0405G1+DRB1*0829                 | DRB1*0417+DRB1*0818              |                              |
| DRB1*0405G1+DRB1*0830                 | DRB1*0408+DRB1*080302            | DRB1*0431+DRB1*0818          |
| DRB1*0405G1+DRB1*0906                 | DRB1*0410+DRB1*090102            |                              |
| DRB1*0405G1+DRB1*1002                 | DRB1*0410+DRB1*100101            |                              |
| DRB1*0405G1+DRB1*1101G1               | DRB1*0428+DRB1*1137              | DRB1*0461+DRB1*1321          |
| DRB1*0405G1+DRB1*110201               | DRB1*0410+DRB1*111401/111402     | DRB1*0428+DRB1*1148          |
| DRB1*0405G1+DRB1*1103                 | DRB1*0410+DRB1*111101/111102     | DRB1*0428+DRB1*1141          |
| DRB1*0405G1+DRB1*110401/110402        | DRB1*0410+DRB1*1101G1            | DRB1*0428+DRB1*1156          |
| DRB1*0405G1+DRB1*110403               | DRB1*0410+DRB1*110105            |                              |
| DRB1*0405G1+DRB1*111301/111302        | DRB1*0461+DRB1*1465              |                              |
| DRB1*0405G1+DRB1*1116                 | DRB1*0410+DRB1*1120              |                              |
| DRB1*0405G1+DRB1*1118                 | DRB1*0410+DRB1*111901            |                              |
| DRB1*0405G1+DRB1*111901               | DRB1*0461+DRB1*1330              |                              |
| DRB1*0405G1+DRB1*1125                 | DRB1*0410+DRB1*1123              |                              |
| DRB1*0405G1+DRB1*1128                 | DRB1*0477+DRB1*1101G1            |                              |
| DRB1*0405G1+DRB1*1134                 | DRB1*0410+DRB1*1126              |                              |
| DRB1*0405G1+DRB1*1135                 | DRB1*0410+DRB1*1133              |                              |
| DRB1*0405G1+DRB1*1136                 | DRB1*0410+DRB1*1168              |                              |
| DRB1*0405G1+DRB1*1137                 | DRB1*0461+DRB1*1349              |                              |
| DRB1*0405G1+DRB1*1142                 | DRB1*0410+DRB1*110801/110802     |                              |
| DRB1*0405G1+DRB1*1143                 | DRB1*0410+DRB1*1139              |                              |
| DRB1*0405G1+DRB1*1144                 | DRB1*0410+DRB1*1149              |                              |
| DRB1*0405G1+DRB1*1148                 | DRB1*0461+DRB1*1348              |                              |
| DRB1*0405G1+DRB1*115401               | DRB1*0411+DRB1*110105            | DRB1*0417+DRB1*110403        |
| DRB1*0405G1+DRB1*115402               | DRB1*0411+DRB1*1101G1            | DRB1*0417+DRB1*110401/110402 |
| DRB1*0405G1+DRB1*1156                 | DRB1*0410+DRB1*1137              |                              |
| DRB1*0405G1+DRB1*1158                 | DRB1*0477+DRB1*110404            |                              |
| DRB1*0405G1+DRB1*1166                 | DRB1*0429+DRB1*1101G1            |                              |
| DRB1*0405G1+DRB1*130101               | DRB1*0410+DRB1*130201            | DRB1*0428+DRB1*1340          |
|                                       | DRB1*0443+DRB1*1332              | DRB1*0477+DRB1*1352          |
| DRB1*0405G1+DRB1*130201               | DRB1*0428+DRB1*1336              | DRB1*0443+DRB1*1365          |
| DRB1*0405G1+DRB1*130301/130302        | DRB1*0409+DRB1*1312              |                              |
| DRB1*0405G1+DRB1*1304                 | DRB1*0428+DRB1*1348              |                              |
| DRB1*0405G1+DRB1*130701               | DRB1*0408+DRB1*1349              |                              |
| DRB1*0405G1+DRB1*1310                 | DRB1*0409+DRB1*1306              |                              |
| DRB1*0405G1+DRB1*131102               | DRB1*0410+DRB1*131402            |                              |
| DRB1*0405G1+DRB1*131401/131403        | DRB1*0408+DRB1*1321              | DRB1*0428+DRB1*130701        |
| DRB1*0405G1+DRB1*131402               | DRB1*0428+DRB1*130702            |                              |
| DRB1*0405G1+DRB1*1315                 | DRB1*0428+DRB1*1353              |                              |
| DRB1*0405G1+DRB1*1320                 | DRB1*0410+DRB1*1329              |                              |
| DRB1*0405G1+DRB1*1321                 | DRB1*0428+DRB1*1349              |                              |
| DRB1*0405G1+DRB1*1322                 | DRB1*0408+DRB1*1304              | DRB1*0410+DRB1*1323          |
|                                       | DRB1*0442+DRB1*1338              | DRB1*0443+DRB1*1348          |
| DRB1*0405G1+DRB1*1323                 | DRB1*0443+DRB1*1338              |                              |
| DRB1*0405G1+DRB1*1324                 | DRB1*0408+DRB1*1375              |                              |
| DRB1*0405G1+DRB1*1327                 | DRB1*0410+DRB1*1341              |                              |
| DRB1*0405G1+DRB1*1330                 | DRB1*0428+DRB1*1312              |                              |
| DRB1*0405G1+DRB1*1332                 | DRB1*0410+DRB1*1365              |                              |
| DRB1*0405G1+DRB1*1336                 | DRB1*0408+DRB1*1305              |                              |
| DRB1*0405G1+DRB1*1342                 | DRB1*0410+DRB1*130501/130502     |                              |
| DRB1*0405G1+DRB1*1347                 | DRB1*0408+DRB1*1355              | DRB1*0431+DRB1*1349          |
| DRB1*0405G1+DRB1*1348                 | DRB1*0410+DRB1*1338              |                              |
| DRB1*0405G1+DRB1*135001               | DRB1*0477+DRB1*131401/131403     |                              |
| DRB1*0405G1+DRB1*1357                 | DRB1*0428+DRB1*1319              |                              |
| DRB1*0405G1+DRB1*1366                 | DRB1*0409+DRB1*1330              | DRB1*0428+DRB1*130301/130302 |
| DRB1*0405G1+DRB1*1379                 | DRB1*0410+DRB1*1339              |                              |
| DRB1*0405G1+DRB1*1381                 | DRB1*0409+DRB1*1358              |                              |
| DRB1*0405G1+DRB1*1382                 | DRB1*0408+DRB1*1330              | DRB1*0443+DRB1*1312          |
| DRB1*0405G1+DRB1*1383                 | DRB1*0428+DRB1*1308              |                              |
| DRB1*0405G1+DRB1*1387                 | DRB1*0477+DRB1*1383              |                              |
| DRB1*0405G1+DRB1*140101/1454          | DRB1*0410+DRB1*140701/140702     | DRB1*0417+DRB1*143202        |
| DRB1*0405G1+DRB1*140102               | DRB1*0417+DRB1*143201            |                              |
| DRB1*0405G1+DRB1*1402                 | DRB1*0408+DRB1*1413              |                              |
| DRB1*0405G1+DRB1*140301               | DRB1*0408+DRB1*1485              |                              |
| DRB1*0405G1+DRB1*1404                 | DRB1*0410+DRB1*1468              | DRB1*0417+DRB1*1431          |
| DRB1*0405G1+DRB1*140501               | DRB1*0410+DRB1*144401            |                              |
| DRB1*0405G1+DRB1*140503               | DRB1*0410+DRB1*144402            |                              |
| DRB1*0405G1+DRB1*1408                 | DRB1*0417+DRB1*1434              |                              |
| DRB1*0405G1+DRB1*1415                 | DRB1*0410+DRB1*0809              |                              |
| DRB1*0405G1+DRB1*1417                 | DRB1*0410+DRB1*1430              | DRB1*0428+DRB1*1480          |
| DRB1*0405G1+DRB1*1421                 | DRB1*0409+DRB1*1417              | DRB1*0467+DRB1*1430          |
| DRB1*0405G1+DRB1*142301               | DRB1*0410+DRB1*1414              |                              |
| DRB1*0405G1+DRB1*1427                 | DRB1*0454+DRB1*1413              |                              |
| DRB1*0405G1+DRB1*1430                 | DRB1*0428+DRB1*1409              |                              |
| DRB1*0405G1+DRB1*1433                 | DRB1*0411+DRB1*1430              | DRB1*0417+DRB1*1417          |
| DRB1*0405G1+DRB1*1435                 | DRB1*0428+DRB1*140101/1454       |                              |
| DRB1*0405G1+DRB1*1451                 | DRB1*040701/040703+DRB1*1413     | DRB1*0417+DRB1*1402          |
| DRB1*0405G1+DRB1*1453                 | DRB1*0428+DRB1*1425              |                              |
| DRB1*0405G1+DRB1*1456                 | DRB1*0448+DRB1*140501            |                              |
| DRB1*0405G1+DRB1*1467                 | DRB1*0408+DRB1*1463              |                              |
| DRB1*0405G1+DRB1*1478                 | DRB1*0410+DRB1*1463              | DRB1*0412+DRB1*1413          |
| DRB1*0405G1+DRB1*1480                 | DRB1*0410+DRB1*1409              |                              |
| DRB1*0405G1+DRB1*1481                 | DRB1*0424+DRB1*1406              |                              |
| DRB1*0405G1+DRB1*15010101/15010102    | DRB1*0410+DRB1*150201            | DRB1*0428+DRB1*1507          |
| DRB1*0405G1+DRB1*150103               | DRB1*0410+DRB1*150206            |                              |
| DRB1*0405G1+DRB1*150104               | DRB1*0408+DRB1*1512              | DRB1*0410+DRB1*150202/150205 |
| DRB1*0405G1+DRB1*150201               | DRB1*0428+DRB1*1511              |                              |
| DRB1*0405G1+DRB1*1504                 | DRB1*0410+DRB1*1515              |                              |
| DRB1*0405G1+DRB1*1505                 | DRB1*0410+DRB1*1531              |                              |
| DRB1*0405G1+DRB1*1507                 | DRB1*0410+DRB1*1511              |                              |
| DRB1*0405G1+DRB1*1521                 | DRB1*0412+DRB1*1527              |                              |
| DRB1*0405G1+DRB1*1532                 | DRB1*0477+DRB1*15010101/15010102 |                              |
| DRB1*0405G1+DRB1*1609                 | DRB1*0428+DRB1*160101            |                              |
| DRB1*0405G1+DRB1*1610                 | DRB1*0428+DRB1*160201            |                              |
| DRB1*040601/040602+DRB1*0409          | DRB1*0411+DRB1*0421              | DRB1*0420+DRB1*0467          |
| DRB1*040601/040602+DRB1*0410          | DRB1*0411+DRB1*0468              |                              |
| DRB1*040601/040602+DRB1*0417          | DRB1*0411+DRB1*0420              |                              |
| DRB1*040601/040602+DRB1*0419          | DRB1*0420+DRB1*0468              |                              |
| DRB1*040601/040602+DRB1*0423          | DRB1*0452+DRB1*0468              |                              |
| DRB1*040601/040602+DRB1*0431          | DRB1*0420+DRB1*0455              |                              |
| DRB1*040601/040602+DRB1*0435          | DRB1*0421+DRB1*0459              |                              |
| DRB1*040601/040602+DRB1*0442          | DRB1*0459+DRB1*0468              | DRB1*0420+DRB1*0442          |
| DRB1*040601/040602+DRB1*0443          | DRB1*0419+DRB1*0459              |                              |
| DRB1*040601/040602+DRB1*0454          | DRB1*0420+DRB1*0425              |                              |
| DRB1*040601/040602+DRB1*0470          | DRB1*0451+DRB1*0468              |                              |
| DRB1*040601/040602+DRB1*080101/080103 | DRB1*0420+DRB1*0806              |                              |
| DRB1*040601/040602+DRB1*080201/080202 | DRB1*0420+DRB1*080401/080404     |                              |
| DRB1*040601/040602+DRB1*080302        | DRB1*0420+DRB1*0810              |                              |
| DRB1*040601/040602+DRB1*0809          | DRB1*0420+DRB1*1415              |                              |
| DRB1*040601/040602+DRB1*0818          | DRB1*0468+DRB1*0829              |                              |
| DRB1*040601/040602+DRB1*090102        | DRB1*0420+DRB1*0906              |                              |
| DRB1*040601/040602+DRB1*100101        | DRB1*0420+DRB1*1002              |                              |
| DRB1*040601/040602+DRB1*110105        | DRB1*0419+DRB1*115401            | DRB1*0420+DRB1*110403        |

|                                       |                                  |                              |
|---------------------------------------|----------------------------------|------------------------------|
| DRB1*040601/040602+DRB1*110401/110402 | DRB1*0468+DRB1*115402            |                              |
| DRB1*040601/040602+DRB1*110403        | DRB1*0468+DRB1*115401            |                              |
| DRB1*040601/040602+DRB1*110801/110802 | DRB1*0420+DRB1*1142              |                              |
| DRB1*040601/040602+DRB1*111101/111102 | DRB1*040701/040703+DRB1*1163     | DRB1*0420+DRB1*1103          |
| DRB1*040601/040602+DRB1*111401/111402 | DRB1*0420+DRB1*110201            |                              |
| DRB1*040601/040602+DRB1*111901        | DRB1*0420+DRB1*1118              |                              |
| DRB1*040601/040602+DRB1*1120          | DRB1*0420+DRB1*1116              |                              |
| DRB1*040601/040602+DRB1*1123          | DRB1*0420+DRB1*1125              |                              |
| DRB1*040601/040602+DRB1*1126          | DRB1*0420+DRB1*1134              |                              |
| DRB1*040601/040602+DRB1*1128          | DRB1*0441+DRB1*1129              |                              |
| DRB1*040601/040602+DRB1*1133          | DRB1*0420+DRB1*1135              |                              |
| DRB1*040601/040602+DRB1*1137          | DRB1*0420+DRB1*1156              |                              |
| DRB1*040601/040602+DRB1*1139          | DRB1*0420+DRB1*1143              |                              |
| DRB1*040601/040602+DRB1*1149          | DRB1*0420+DRB1*1144              |                              |
| DRB1*040601/040602+DRB1*1168          | DRB1*0420+DRB1*1136              |                              |
| DRB1*040601/040602+DRB1*130201        | DRB1*0420+DRB1*130101            |                              |
| DRB1*040601/040602+DRB1*130501/130502 | DRB1*0420+DRB1*1342              |                              |
| DRB1*040601/040602+DRB1*131401/131403 | DRB1*0420+DRB1*131101            |                              |
| DRB1*040601/040602+DRB1*131402        | DRB1*0420+DRB1*131102            |                              |
| DRB1*040601/040602+DRB1*1323          | DRB1*0420+DRB1*1322              |                              |
| DRB1*040601/040602+DRB1*1329          | DRB1*0420+DRB1*1320              |                              |
| DRB1*040601/040602+DRB1*1336          | DRB1*0420+DRB1*1340              |                              |
| DRB1*040601/040602+DRB1*1338          | DRB1*0420+DRB1*1348              |                              |
| DRB1*040601/040602+DRB1*1339          | DRB1*0420+DRB1*1379              |                              |
| DRB1*040601/040602+DRB1*1340          | DRB1*0441+DRB1*1384              |                              |
| DRB1*040601/040602+DRB1*1341          | DRB1*0420+DRB1*1327              |                              |
| DRB1*040601/040602+DRB1*1347          | DRB1*0420+DRB1*0820              |                              |
| DRB1*040601/040602+DRB1*1352          | DRB1*0459+DRB1*1384              |                              |
| DRB1*040601/040602+DRB1*1365          | DRB1*0420+DRB1*1332              |                              |
| DRB1*040601/040602+DRB1*1402          | DRB1*0420+DRB1*1406              | DRB1*0468+DRB1*1451          |
| DRB1*040601/040602+DRB1*140301        | DRB1*0420+DRB1*1412              |                              |
| DRB1*040601/040602+DRB1*140701/140702 | DRB1*0420+DRB1*140101/1454       |                              |
| DRB1*040601/040602+DRB1*1409          | DRB1*0420+DRB1*1480              |                              |
| DRB1*040601/040602+DRB1*1414          | DRB1*0420+DRB1*142301            |                              |
| DRB1*040601/040602+DRB1*1417          | DRB1*0468+DRB1*1433              |                              |
| DRB1*040601/040602+DRB1*1430          | DRB1*0419+DRB1*1433              | DRB1*0420+DRB1*1417          |
| DRB1*040601/040602+DRB1*1431          | DRB1*0468+DRB1*1404              |                              |
| DRB1*040601/040602+DRB1*143201        | DRB1*0468+DRB1*140102            |                              |
| DRB1*040601/040602+DRB1*143202        | DRB1*0468+DRB1*140101/1454       |                              |
| DRB1*040601/040602+DRB1*1434          | DRB1*0468+DRB1*1408              |                              |
| DRB1*040601/040602+DRB1*14401         | DRB1*0420+DRB1*140501            |                              |
| DRB1*040601/040602+DRB1*144402        | DRB1*0420+DRB1*140503            |                              |
| DRB1*040601/040602+DRB1*1463          | DRB1*0420+DRB1*1478              |                              |
| DRB1*040601/040602+DRB1*1468          | DRB1*0420+DRB1*1404              |                              |
| DRB1*040601/040602+DRB1*1481          | DRB1*0478+DRB1*1406              |                              |
| DRB1*040601/040602+DRB1*150201        | DRB1*0420+DRB1*15010101/15010102 |                              |
| DRB1*040601/040602+DRB1*150202/150205 | DRB1*0420+DRB1*150104            |                              |
| DRB1*040601/040602+DRB1*150206        | DRB1*0420+DRB1*150103            |                              |
| DRB1*040601/040602+DRB1*1511          | DRB1*0420+DRB1*1507              |                              |
| DRB1*040601/040602+DRB1*1515          | DRB1*0420+DRB1*1504              |                              |
| DRB1*040601/040602+DRB1*1531          | DRB1*0420+DRB1*1505              |                              |
| DRB1*040601/040602+DRB1*1608          | DRB1*0441+DRB1*160101            |                              |
| DRB1*040701/040703+DRB1*0412          | DRB1*0417+DRB1*0418              |                              |
| DRB1*040701/040703+DRB1*0419          | DRB1*0408+DRB1*0420              |                              |
| DRB1*040701/040703+DRB1*0423          | DRB1*0408+DRB1*0452              |                              |
| DRB1*040701/040703+DRB1*0428          | DRB1*0417+DRB1*0443              |                              |
| DRB1*040701/040703+DRB1*0470          | DRB1*0408+DRB1*0451              |                              |
| DRB1*040701/040703+DRB1*0704          | DRB1*0474+DRB1*0711              |                              |
| DRB1*040701/040703+DRB1*080101/080103 | DRB1*0417+DRB1*080201/080202     |                              |
| DRB1*040701/040703+DRB1*080302        | DRB1*0417+DRB1*0830              | DRB1*0431+DRB1*0829          |
| DRB1*040701/040703+DRB1*0805          | DRB1*0417+DRB1*0824              |                              |
| DRB1*040701/040703+DRB1*0812          | DRB1*0427+DRB1*080302            |                              |
| DRB1*040701/040703+DRB1*0818          | DRB1*0408+DRB1*0829              |                              |
| DRB1*040701/040703+DRB1*0822          | DRB1*0427+DRB1*080101/080103     |                              |
| DRB1*040701/040703+DRB1*0828          | DRB1*0459+DRB1*080201/080202     |                              |
| DRB1*040701/040703+DRB1*110601        | DRB1*0427+DRB1*1101G1            |                              |
| DRB1*040701/040703+DRB1*110602        | DRB1*0427+DRB1*110105            |                              |
| DRB1*040701/040703+DRB1*111301/111302 | DRB1*0443+DRB1*1117              |                              |
| DRB1*040701/040703+DRB1*1121          | DRB1*0427+DRB1*111401/111402     |                              |
| DRB1*040701/040703+DRB1*112701        | DRB1*0474+DRB1*1101G1            |                              |
| DRB1*040701/040703+DRB1*1129          | DRB1*0420+DRB1*1101G1            |                              |
| DRB1*040701/040703+DRB1*1147          | DRB1*0420+DRB1*110601            | DRB1*0427+DRB1*1129          |
| DRB1*040701/040703+DRB1*1157          | DRB1*0427+DRB1*110801/110802     |                              |
| DRB1*040701/040703+DRB1*130301/130302 | DRB1*0417+DRB1*1337              |                              |
| DRB1*040701/040703+DRB1*1304          | DRB1*0411+DRB1*1323              | DRB1*0417+DRB1*1322          |
| DRB1*040701/040703+DRB1*1318          | DRB1*0454+DRB1*1433              |                              |
| DRB1*040701/040703+DRB1*1321          | DRB1*0417+DRB1*131401/131403     |                              |
| DRB1*040701/040703+DRB1*1330          | DRB1*0417+DRB1*1382              |                              |
| DRB1*040701/040703+DRB1*1349          | DRB1*0417+DRB1*130701            |                              |
| DRB1*040701/040703+DRB1*1355          | DRB1*0417+DRB1*1347              |                              |
| DRB1*040701/040703+DRB1*1358          | DRB1*0427+DRB1*1312              |                              |
| DRB1*040701/040703+DRB1*1361          | DRB1*0474+DRB1*130101            |                              |
| DRB1*040701/040703+DRB1*1365          | DRB1*0417+DRB1*1336              |                              |
| DRB1*040701/040703+DRB1*1375          | DRB1*0417+DRB1*1324              |                              |
| DRB1*040701/040703+DRB1*1381          | DRB1*0427+DRB1*130301/130302     |                              |
| DRB1*040701/040703+DRB1*1402          | DRB1*0408+DRB1*1451              |                              |
| DRB1*040701/040703+DRB1*1427          | DRB1*0454+DRB1*1451              |                              |
| DRB1*040701/040703+DRB1*1428          | DRB1*0427+DRB1*1468              |                              |
| DRB1*040701/040703+DRB1*1429          | DRB1*0427+DRB1*1402              |                              |
| DRB1*040701/040703+DRB1*143201        | DRB1*0408+DRB1*140102            |                              |
| DRB1*040701/040703+DRB1*1434          | DRB1*0408+DRB1*1408              |                              |
| DRB1*040701/040703+DRB1*1435          | DRB1*0459+DRB1*140701/140702     |                              |
| DRB1*040701/040703+DRB1*1438          | DRB1*0474+DRB1*140102            |                              |
| DRB1*040701/040703+DRB1*1447          | DRB1*0474+DRB1*1402              |                              |
| DRB1*040701/040703+DRB1*1455          | DRB1*0431+DRB1*140101/1454       | DRB1*0455+DRB1*140701/140702 |
| DRB1*040701/040703+DRB1*1463          | DRB1*0417+DRB1*1467              |                              |
| DRB1*040701/040703+DRB1*1465          | DRB1*0428+DRB1*142301            |                              |
| DRB1*040701/040703+DRB1*1485          | DRB1*0417+DRB1*140301            |                              |
| DRB1*040701/040703+DRB1*1512          | DRB1*0411+DRB1*150202/150205     | DRB1*0417+DRB1*150104        |
| DRB1*040701/040703+DRB1*1532          | DRB1*0441+DRB1*150201            |                              |
| DRB1*0408+DRB1*0415                   | DRB1*0436+DRB1*0461              |                              |
| DRB1*0408+DRB1*080201/080202          | DRB1*0431+DRB1*0824              |                              |
| DRB1*0408+DRB1*0817                   | DRB1*0428+DRB1*080201/080202     | DRB1*0443+DRB1*080101/080103 |
| DRB1*0408+DRB1*0828                   | DRB1*0442+DRB1*080201/080202     | DRB1*0443+DRB1*080401/080404 |
| DRB1*0408+DRB1*1101G1                 | DRB1*0443+DRB1*1137              | DRB1*0461+DRB1*131401/131403 |
| DRB1*0408+DRB1*110103                 | DRB1*0447+DRB1*1126              |                              |
| DRB1*0408+DRB1*1107                   | DRB1*0422+DRB1*1126              |                              |
| DRB1*0408+DRB1*110801/110802          | DRB1*0461+DRB1*1325              |                              |
| DRB1*0408+DRB1*1109                   | DRB1*0461+DRB1*130501/130502     |                              |
| DRB1*0408+DRB1*111401/111402          | DRB1*0414+DRB1*1126              | DRB1*0461+DRB1*1323          |
| DRB1*0408+DRB1*1115                   | DRB1*0461+DRB1*1362              |                              |
| DRB1*0408+DRB1*1117                   | DRB1*0461+DRB1*142301            |                              |
| DRB1*0408+DRB1*111901                 | DRB1*0461+DRB1*1382              |                              |
| DRB1*0408+DRB1*1120                   | DRB1*0461+DRB1*130201            |                              |
| DRB1*0408+DRB1*1123                   | DRB1*0431+DRB1*1101G1            | DRB1*0454+DRB1*1126          |
| DRB1*0408+DRB1*1128                   | DRB1*0461+DRB1*135001            |                              |
| DRB1*0408+DRB1*1129                   | DRB1*0419+DRB1*1101G1            |                              |
| DRB1*0408+DRB1*11317                  | DRB1*0461+DRB1*130701            |                              |
| DRB1*0408+DRB1*1145                   | DRB1*0431+DRB1*111901            |                              |
| DRB1*0408+DRB1*1147                   | DRB1*0419+DRB1*110601            |                              |
| DRB1*0408+DRB1*1148                   | DRB1*0461+DRB1*1370              |                              |
| DRB1*0408+DRB1*1155                   | DRB1*0431+DRB1*1103              | DRB1*0455+DRB1*111101/111102 |
| DRB1*0408+DRB1*1163                   | DRB1*0419+DRB1*1103              | DRB1*0468+DRB1*111101/111102 |
| DRB1*0408+DRB1*1164                   | DRB1*0431+DRB1*110801/110802     |                              |

|                                  |                              |                              |                     |
|----------------------------------|------------------------------|------------------------------|---------------------|
| DRB1*0408+DRB1*1167              | DRB1*0461+DRB1*0828          |                              |                     |
| DRB1*0408+DRB1*1204              | DRB1*0461+DRB1*1209          |                              |                     |
| DRB1*0408+DRB1*130201            | DRB1*0414+DRB1*1430          | DRB1*0443+DRB1*1336          |                     |
| DRB1*0408+DRB1*1306              | DRB1*0456+DRB1*1356          |                              |                     |
| DRB1*0408+DRB1*1313              | DRB1*0431+DRB1*1312          |                              |                     |
| DRB1*0408+DRB1*131401/131403     | DRB1*0443+DRB1*130701        |                              |                     |
| DRB1*0408+DRB1*131402            | DRB1*0443+DRB1*130702        |                              |                     |
| DRB1*0408+DRB1*1315              | DRB1*0443+DRB1*1353          |                              |                     |
| DRB1*0408+DRB1*1318              | DRB1*0425+DRB1*1430          | DRB1*0431+DRB1*1342          | DRB1*0454+DRB1*1417 |
|                                  | DRB1*0455+DRB1*130501/130502 |                              |                     |
| DRB1*0408+DRB1*1319              | DRB1*0414+DRB1*1420          |                              |                     |
| DRB1*0408+DRB1*1333              | DRB1*0472+DRB1*1312          |                              |                     |
| DRB1*0408+DRB1*1336              | DRB1*0414+DRB1*1409          |                              |                     |
| DRB1*0408+DRB1*1347              | DRB1*0431+DRB1*130701        |                              |                     |
| DRB1*0408+DRB1*1357              | DRB1*0443+DRB1*1319          |                              |                     |
| DRB1*0408+DRB1*1361              | DRB1*0444+DRB1*130201        |                              |                     |
| DRB1*0408+DRB1*1383              | DRB1*0443+DRB1*1308          |                              |                     |
| DRB1*0408+DRB1*1427              | DRB1*0454+DRB1*1402          |                              |                     |
| DRB1*0408+DRB1*1430              | DRB1*0443+DRB1*1409          |                              |                     |
| DRB1*0408+DRB1*1435              | DRB1*0442+DRB1*140701/140702 | DRB1*0443+DRB1*140101/1454   |                     |
| DRB1*0408+DRB1*1438              | DRB1*0474+DRB1*143201        |                              |                     |
| DRB1*0408+DRB1*1445              | DRB1*0456+DRB1*144401        |                              |                     |
| DRB1*0408+DRB1*1453              | DRB1*0443+DRB1*1425          |                              |                     |
| DRB1*0408+DRB1*1455              | DRB1*0431+DRB1*143202        |                              |                     |
| DRB1*0408+DRB1*150201            | DRB1*0443+DRB1*1511          |                              |                     |
| DRB1*0408+DRB1*1521              | DRB1*0418+DRB1*1527          |                              |                     |
| DRB1*0408+DRB1*1525              | DRB1*0422+DRB1*1527          |                              |                     |
| DRB1*0408+DRB1*1604              | DRB1*0431+DRB1*160102        |                              |                     |
| DRB1*0408+DRB1*1609              | DRB1*0443+DRB1*160101        | DRB1*0447+DRB1*1527          |                     |
| DRB1*0408+DRB1*1610              | DRB1*0443+DRB1*160201        |                              |                     |
| DRB1*0409+DRB1*0411              | DRB1*0417+DRB1*0467          |                              |                     |
| DRB1*0409+DRB1*0420              | DRB1*0417+DRB1*0421          |                              |                     |
| DRB1*0409+DRB1*0425              | DRB1*0454+DRB1*0467          |                              |                     |
| DRB1*0409+DRB1*0442              | DRB1*0410+DRB1*0435          | DRB1*0413+DRB1*0428          | DRB1*0443+DRB1*0467 |
| DRB1*0409+DRB1*0455              | DRB1*0431+DRB1*0467          |                              |                     |
| DRB1*0409+DRB1*0456              | DRB1*0410+DRB1*0438          |                              |                     |
| DRB1*0409+DRB1*0459              | DRB1*0411+DRB1*0435          |                              |                     |
| DRB1*0409+DRB1*0468              | DRB1*0410+DRB1*0421          | DRB1*0419+DRB1*0467          |                     |
| DRB1*0409+DRB1*0806              | DRB1*0467+DRB1*080101/080103 |                              |                     |
| DRB1*0409+DRB1*0808              | DRB1*0462+DRB1*080101/080103 |                              |                     |
| DRB1*0409+DRB1*0810              | DRB1*0467+DRB1*080302        |                              |                     |
| DRB1*0409+DRB1*0820              | DRB1*0413+DRB1*1355          | DRB1*0467+DRB1*1347          |                     |
| DRB1*0409+DRB1*0828              | DRB1*0413+DRB1*0817          | DRB1*0435+DRB1*0806          |                     |
| DRB1*0409+DRB1*0906              | DRB1*0467+DRB1*090102        |                              |                     |
| DRB1*0409+DRB1*1002              | DRB1*0467+DRB1*100101        |                              |                     |
| DRB1*0409+DRB1*110201            | DRB1*0467+DRB1*111401/111402 |                              |                     |
| DRB1*0409+DRB1*1103              | DRB1*0467+DRB1*111101/111102 |                              |                     |
| DRB1*0409+DRB1*110401/110402     | DRB1*0467+DRB1*1101G1        |                              |                     |
| DRB1*0409+DRB1*110403            | DRB1*0467+DRB1*110105        |                              |                     |
| DRB1*0409+DRB1*1116              | DRB1*0467+DRB1*1120          |                              |                     |
| DRB1*0409+DRB1*1118              | DRB1*0467+DRB1*111901        |                              |                     |
| DRB1*0409+DRB1*111901            | DRB1*0461+DRB1*1366          |                              |                     |
| DRB1*0409+DRB1*1125              | DRB1*0467+DRB1*1123          |                              |                     |
| DRB1*0409+DRB1*1134              | DRB1*0467+DRB1*1126          |                              |                     |
| DRB1*0409+DRB1*1135              | DRB1*0467+DRB1*1133          |                              |                     |
| DRB1*0409+DRB1*1136              | DRB1*0467+DRB1*1168          |                              |                     |
| DRB1*0409+DRB1*1142              | DRB1*0467+DRB1*110801/110802 |                              |                     |
| DRB1*0409+DRB1*1143              | DRB1*0467+DRB1*1139          |                              |                     |
| DRB1*0409+DRB1*1144              | DRB1*0467+DRB1*1149          |                              |                     |
| DRB1*0409+DRB1*1156              | DRB1*0467+DRB1*1137          |                              |                     |
| DRB1*0409+DRB1*130101            | DRB1*0435+DRB1*1332          | DRB1*0467+DRB1*130201        |                     |
| DRB1*0409+DRB1*130201            | DRB1*0435+DRB1*1365          |                              |                     |
| DRB1*0409+DRB1*131101            | DRB1*0413+DRB1*1321          | DRB1*0467+DRB1*131401/131403 |                     |
| DRB1*0409+DRB1*131102            | DRB1*0467+DRB1*131402        |                              |                     |
| DRB1*0409+DRB1*1320              | DRB1*0467+DRB1*1329          |                              |                     |
| DRB1*0409+DRB1*1323              | DRB1*0435+DRB1*1338          |                              |                     |
| DRB1*0409+DRB1*1325              | DRB1*0443+DRB1*1388          |                              |                     |
| DRB1*0409+DRB1*1327              | DRB1*0467+DRB1*1341          |                              |                     |
| DRB1*0409+DRB1*1332              | DRB1*0467+DRB1*1365          |                              |                     |
| DRB1*0409+DRB1*1342              | DRB1*0467+DRB1*130501/130502 |                              |                     |
| DRB1*0409+DRB1*1348              | DRB1*0467+DRB1*1338          |                              |                     |
| DRB1*0409+DRB1*1379              | DRB1*0467+DRB1*1339          |                              |                     |
| DRB1*0409+DRB1*140101/1454       | DRB1*0467+DRB1*140701/140702 |                              |                     |
| DRB1*0409+DRB1*1404              | DRB1*0467+DRB1*1468          |                              |                     |
| DRB1*0409+DRB1*140501            | DRB1*0467+DRB1*144401        |                              |                     |
| DRB1*0409+DRB1*140503            | DRB1*0467+DRB1*144402        |                              |                     |
| DRB1*0409+DRB1*1406              | DRB1*0410+DRB1*1419          | DRB1*0413+DRB1*1413          | DRB1*0467+DRB1*1402 |
| DRB1*0409+DRB1*1412              | DRB1*0413+DRB1*1485          | DRB1*0467+DRB1*140301        |                     |
| DRB1*0409+DRB1*1415              | DRB1*0467+DRB1*0809          |                              |                     |
| DRB1*0409+DRB1*142301            | DRB1*0467+DRB1*1414          |                              |                     |
| DRB1*0409+DRB1*1425              | DRB1*0462+DRB1*1349          |                              |                     |
| DRB1*0409+DRB1*1433              | DRB1*0417+DRB1*1421          |                              |                     |
| DRB1*0409+DRB1*1451              | DRB1*0417+DRB1*1419          |                              |                     |
| DRB1*0409+DRB1*1453              | DRB1*0462+DRB1*1321          |                              |                     |
| DRB1*0409+DRB1*1478              | DRB1*0467+DRB1*1463          |                              |                     |
| DRB1*0409+DRB1*1480              | DRB1*0467+DRB1*1409          |                              |                     |
| DRB1*0409+DRB1*15010101/15010102 | DRB1*0467+DRB1*150201        |                              |                     |
| DRB1*0409+DRB1*150103            | DRB1*0467+DRB1*150206        |                              |                     |
| DRB1*0409+DRB1*1504              | DRB1*0467+DRB1*1515          |                              |                     |
| DRB1*0409+DRB1*1505              | DRB1*0467+DRB1*1531          |                              |                     |
| DRB1*0409+DRB1*1507              | DRB1*0467+DRB1*1511          |                              |                     |
| DRB1*0410+DRB1*0451              | DRB1*0411+DRB1*0470          |                              |                     |
| DRB1*0410+DRB1*0452              | DRB1*0411+DRB1*0423          |                              |                     |
| DRB1*0410+DRB1*0459              | DRB1*0411+DRB1*0442          |                              |                     |
| DRB1*0410+DRB1*0474              | DRB1*0417+DRB1*0444          |                              |                     |
| DRB1*0410+DRB1*0817              | DRB1*0428+DRB1*0806          |                              |                     |
| DRB1*0410+DRB1*0828              | DRB1*0442+DRB1*0806          |                              |                     |
| DRB1*0410+DRB1*0829              | DRB1*0411+DRB1*0818          |                              |                     |
| DRB1*0410+DRB1*1109              | DRB1*0477+DRB1*1146          |                              |                     |
| DRB1*0410+DRB1*1128              | DRB1*0477+DRB1*110401/110402 |                              |                     |
| DRB1*0410+DRB1*1145              | DRB1*0412+DRB1*1126          |                              |                     |
| DRB1*0410+DRB1*115401            | DRB1*0411+DRB1*110403        |                              |                     |
| DRB1*0410+DRB1*115402            | DRB1*0411+DRB1*110401/110402 |                              |                     |
| DRB1*0410+DRB1*1166              | DRB1*0429+DRB1*110401/110402 |                              |                     |
| DRB1*0410+DRB1*130101            | DRB1*0442+DRB1*1332          |                              |                     |
| DRB1*0410+DRB1*130301/130302     | DRB1*0467+DRB1*1312          |                              |                     |
| DRB1*0410+DRB1*1310              | DRB1*0467+DRB1*1306          |                              |                     |
| DRB1*0410+DRB1*135001            | DRB1*0477+DRB1*131101        |                              |                     |
| DRB1*0410+DRB1*1366              | DRB1*0467+DRB1*1330          |                              |                     |
| DRB1*0410+DRB1*1381              | DRB1*0467+DRB1*1358          |                              |                     |
| DRB1*0410+DRB1*140101/1454       | DRB1*0411+DRB1*143202        |                              |                     |
| DRB1*0410+DRB1*140102            | DRB1*0411+DRB1*143201        |                              |                     |
| DRB1*0410+DRB1*1404              | DRB1*0411+DRB1*1431          |                              |                     |
| DRB1*0410+DRB1*1408              | DRB1*0411+DRB1*1434          |                              |                     |
| DRB1*0410+DRB1*1421              | DRB1*0467+DRB1*1417          |                              |                     |
| DRB1*0410+DRB1*1427              | DRB1*0425+DRB1*1413          |                              |                     |
| DRB1*0410+DRB1*1433              | DRB1*0411+DRB1*1417          |                              |                     |
| DRB1*0410+DRB1*1447              | DRB1*0444+DRB1*1413          |                              |                     |
| DRB1*0411+DRB1*0431              | DRB1*0417+DRB1*0455          |                              |                     |
| DRB1*0411+DRB1*0454              | DRB1*0417+DRB1*0425          |                              |                     |
| DRB1*0411+DRB1*080101/080103     | DRB1*0417+DRB1*0806          |                              |                     |
| DRB1*0411+DRB1*080302            | DRB1*0417+DRB1*0810          |                              |                     |
| DRB1*0411+DRB1*0809              | DRB1*0417+DRB1*1415          |                              |                     |
| DRB1*0411+DRB1*0828              | DRB1*0459+DRB1*0806          |                              |                     |

|                              |                                  |                       |                       |
|------------------------------|----------------------------------|-----------------------|-----------------------|
| DRB1*0411+DRB1*080102        | DRB1*0417+DRB1*0906              |                       |                       |
| DRB1*0411+DRB1*100101        | DRB1*0417+DRB1*1002              |                       |                       |
| DRB1*0411+DRB1*110801/110802 | DRB1*0417+DRB1*1142              |                       |                       |
| DRB1*0411+DRB1*111101/111102 | DRB1*0417+DRB1*1103              |                       |                       |
| DRB1*0411+DRB1*111401/111402 | DRB1*0417+DRB1*110201            |                       |                       |
| DRB1*0411+DRB1*111901        | DRB1*0417+DRB1*1118              |                       |                       |
| DRB1*0411+DRB1*1120          | DRB1*0417+DRB1*1116              |                       |                       |
| DRB1*0411+DRB1*1123          | DRB1*0417+DRB1*1125              |                       |                       |
| DRB1*0411+DRB1*1126          | DRB1*0417+DRB1*1134              |                       |                       |
| DRB1*0411+DRB1*1128          | DRB1*0477+DRB1*115402            |                       |                       |
| DRB1*0411+DRB1*1133          | DRB1*0417+DRB1*1135              |                       |                       |
| DRB1*0411+DRB1*1137          | DRB1*0417+DRB1*1156              |                       |                       |
| DRB1*0411+DRB1*1139          | DRB1*0417+DRB1*1143              |                       |                       |
| DRB1*0411+DRB1*1149          | DRB1*0417+DRB1*1144              |                       |                       |
| DRB1*0411+DRB1*1166          | DRB1*0429+DRB1*115402            |                       |                       |
| DRB1*0411+DRB1*1168          | DRB1*0417+DRB1*1136              |                       |                       |
| DRB1*0411+DRB1*130101        | DRB1*0459+DRB1*1332              |                       |                       |
| DRB1*0411+DRB1*130201        | DRB1*0417+DRB1*130101            | DRB1*0459+DRB1*1365   |                       |
| DRB1*0411+DRB1*130501/130502 | DRB1*0417+DRB1*1342              |                       |                       |
| DRB1*0411+DRB1*1329          | DRB1*0417+DRB1*1320              |                       |                       |
| DRB1*0411+DRB1*1338          | DRB1*0417+DRB1*1348              |                       |                       |
| DRB1*0411+DRB1*1339          | DRB1*0417+DRB1*1379              |                       |                       |
| DRB1*0411+DRB1*1341          | DRB1*0417+DRB1*1327              |                       |                       |
| DRB1*0411+DRB1*135001        | DRB1*0441+DRB1*1321              |                       |                       |
| DRB1*0411+DRB1*1365          | DRB1*0417+DRB1*1332              |                       |                       |
| DRB1*0411+DRB1*140701/140702 | DRB1*0417+DRB1*140101/1454       |                       |                       |
| DRB1*0411+DRB1*1409          | DRB1*0417+DRB1*1480              |                       |                       |
| DRB1*0411+DRB1*1414          | DRB1*0417+DRB1*142301            |                       |                       |
| DRB1*0411+DRB1*1419          | DRB1*0467+DRB1*1451              |                       |                       |
| DRB1*0411+DRB1*1421          | DRB1*0467+DRB1*1433              |                       |                       |
| DRB1*0411+DRB1*144401        | DRB1*0417+DRB1*140501            |                       |                       |
| DRB1*0411+DRB1*144402        | DRB1*0417+DRB1*140503            |                       |                       |
| DRB1*0411+DRB1*1463          | DRB1*0417+DRB1*1478              |                       |                       |
| DRB1*0411+DRB1*1468          | DRB1*0417+DRB1*1404              |                       |                       |
| DRB1*0411+DRB1*150201        | DRB1*0417+DRB1*15010101/15010102 |                       |                       |
| DRB1*0411+DRB1*150206        | DRB1*0417+DRB1*150103            |                       |                       |
| DRB1*0411+DRB1*1511          | DRB1*0417+DRB1*1507              |                       |                       |
| DRB1*0411+DRB1*1515          | DRB1*0417+DRB1*1504              |                       |                       |
| DRB1*0411+DRB1*1531          | DRB1*0417+DRB1*1505              |                       |                       |
| DRB1*0412+DRB1*0413          | DRB1*0418+DRB1*0467              |                       |                       |
| DRB1*0412+DRB1*0443          | DRB1*0418+DRB1*0428              |                       |                       |
| DRB1*0412+DRB1*080201/080202 | DRB1*0418+DRB1*080101/080103     | DRB1*0425+DRB1*080302 | DRB1*0454+DRB1*0810   |
| DRB1*0412+DRB1*080401/080404 | DRB1*0418+DRB1*0806              | DRB1*0425+DRB1*0810   |                       |
| DRB1*0412+DRB1*0809          | DRB1*0425+DRB1*0835              |                       |                       |
| DRB1*0412+DRB1*0813          | DRB1*0458+DRB1*080302            |                       |                       |
| DRB1*0412+DRB1*0824          | DRB1*0418+DRB1*0805              | DRB1*0425+DRB1*0818   | DRB1*0436+DRB1*080302 |
| DRB1*0412+DRB1*0830          | DRB1*0418+DRB1*080302            |                       |                       |
| DRB1*0412+DRB1*0831          | DRB1*0415+DRB1*0810              |                       |                       |
| DRB1*0412+DRB1*1137          | DRB1*0415+DRB1*1313              |                       |                       |
| DRB1*0412+DRB1*130701        | DRB1*0418+DRB1*1349              | DRB1*0425+DRB1*1312   | DRB1*0436+DRB1*1313   |
| DRB1*0412+DRB1*131401/131403 | DRB1*0418+DRB1*1321              | DRB1*0425+DRB1*1330   |                       |
| DRB1*0412+DRB1*1322          | DRB1*0418+DRB1*1304              |                       |                       |
| DRB1*0412+DRB1*1324          | DRB1*0418+DRB1*1375              | DRB1*0425+DRB1*1304   |                       |
| DRB1*0412+DRB1*1325          | DRB1*0458+DRB1*1330              |                       |                       |
| DRB1*0412+DRB1*1336          | DRB1*0418+DRB1*1365              |                       |                       |
| DRB1*0412+DRB1*1337          | DRB1*0418+DRB1*130301/130302     |                       |                       |
| DRB1*0412+DRB1*1340          | DRB1*0418+DRB1*1332              |                       |                       |
| DRB1*0412+DRB1*1347          | DRB1*0418+DRB1*1355              | DRB1*0425+DRB1*1313   |                       |
| DRB1*0412+DRB1*1370          | DRB1*0418+DRB1*1348              |                       |                       |
| DRB1*0412+DRB1*1382          | DRB1*0418+DRB1*1330              |                       |                       |
| DRB1*0412+DRB1*140301        | DRB1*0418+DRB1*1485              | DRB1*0458+DRB1*1463   |                       |
| DRB1*0412+DRB1*1412          | DRB1*0458+DRB1*1478              |                       |                       |
| DRB1*0412+DRB1*1427          | DRB1*0425+DRB1*1463              | DRB1*0454+DRB1*1478   |                       |
| DRB1*0412+DRB1*1447          | DRB1*0444+DRB1*1463              |                       |                       |
| DRB1*0412+DRB1*1467          | DRB1*0418+DRB1*1463              |                       |                       |
| DRB1*0412+DRB1*150104        | DRB1*0418+DRB1*1512              |                       |                       |
| DRB1*0413+DRB1*0805          | DRB1*0467+DRB1*0824              |                       |                       |
| DRB1*0413+DRB1*0806          | DRB1*0467+DRB1*080401/080404     |                       |                       |
| DRB1*0413+DRB1*0808          | DRB1*0462+DRB1*080401/080404     |                       |                       |
| DRB1*0413+DRB1*112702        | DRB1*0472+DRB1*110401/110402     |                       |                       |
| DRB1*0413+DRB1*1129          | DRB1*0421+DRB1*110401/110402     |                       |                       |
| DRB1*0413+DRB1*130301/130302 | DRB1*0467+DRB1*1337              |                       |                       |
| DRB1*0413+DRB1*1304          | DRB1*0467+DRB1*1322              |                       |                       |
| DRB1*0413+DRB1*1313          | DRB1*0455+DRB1*130301/130302     |                       |                       |
| DRB1*0413+DRB1*1318          | DRB1*0425+DRB1*1421              |                       |                       |
| DRB1*0413+DRB1*1320          | DRB1*0437+DRB1*1421              |                       |                       |
| DRB1*0413+DRB1*1332          | DRB1*0467+DRB1*1340              |                       |                       |
| DRB1*0413+DRB1*1342          | DRB1*0436+DRB1*1421              |                       |                       |
| DRB1*0413+DRB1*1345          | DRB1*0462+DRB1*1322              |                       |                       |
| DRB1*0413+DRB1*1348          | DRB1*0467+DRB1*1370              |                       |                       |
| DRB1*0413+DRB1*1349          | DRB1*0467+DRB1*130701            |                       |                       |
| DRB1*0413+DRB1*1375          | DRB1*0467+DRB1*1324              |                       |                       |
| DRB1*0413+DRB1*1382          | DRB1*0442+DRB1*1337              |                       |                       |
| DRB1*0413+DRB1*1427          | DRB1*0425+DRB1*1419              |                       |                       |
| DRB1*0413+DRB1*1447          | DRB1*0444+DRB1*1419              |                       |                       |
| DRB1*0413+DRB1*1449          | DRB1*0462+DRB1*1420              |                       |                       |
| DRB1*0413+DRB1*1453          | DRB1*0462+DRB1*131101            | DRB1*0438+DRB1*1412   | DRB1*0455+DRB1*1385   |
| DRB1*0413+DRB1*1467          | DRB1*0418+DRB1*1419              |                       |                       |
| DRB1*0413+DRB1*1512          | DRB1*0467+DRB1*150104            |                       |                       |
| DRB1*0414+DRB1*0828          | DRB1*0454+DRB1*1317              |                       |                       |
| DRB1*0414+DRB1*110103        | DRB1*0447+DRB1*111401/111402     |                       |                       |
| DRB1*0414+DRB1*1107          | DRB1*0422+DRB1*111401/111402     |                       |                       |
| DRB1*0414+DRB1*1123          | DRB1*0454+DRB1*111401/111402     |                       |                       |
| DRB1*0414+DRB1*1318          | DRB1*0418+DRB1*1363              | DRB1*0425+DRB1*130201 | DRB1*0454+DRB1*130101 |
| DRB1*0414+DRB1*1355          | DRB1*0454+DRB1*1338              |                       |                       |
| DRB1*0414+DRB1*1371          | DRB1*0437+DRB1*1341              |                       |                       |
| DRB1*0414+DRB1*1378          | DRB1*0437+DRB1*1339              |                       |                       |
| DRB1*0414+DRB1*140102        | DRB1*0469+DRB1*1308              |                       |                       |
| DRB1*0415+DRB1*0431          | DRB1*0425+DRB1*0461              |                       |                       |
| DRB1*0415+DRB1*080201/080202 | DRB1*0454+DRB1*0831              |                       |                       |
| DRB1*0415+DRB1*080401/080404 | DRB1*0425+DRB1*0831              |                       |                       |
| DRB1*0415+DRB1*0820          | DRB1*0425+DRB1*1156              |                       |                       |
| DRB1*0415+DRB1*0828          | DRB1*0436+DRB1*1167              |                       |                       |
| DRB1*0415+DRB1*1126          | DRB1*0461+DRB1*110401/110402     |                       |                       |
| DRB1*0415+DRB1*1209          | DRB1*0436+DRB1*1204              |                       |                       |
| DRB1*0415+DRB1*130101        | DRB1*0436+DRB1*1116              |                       |                       |
| DRB1*0415+DRB1*130202        | DRB1*0447+DRB1*1116              |                       |                       |
| DRB1*0415+DRB1*130501/130502 | DRB1*0436+DRB1*1109              |                       |                       |
| DRB1*0415+DRB1*130701        | DRB1*0436+DRB1*1137              |                       |                       |
| DRB1*0415+DRB1*131101        | DRB1*0436+DRB1*110401/110402     |                       |                       |
| DRB1*0415+DRB1*131401/131403 | DRB1*0436+DRB1*1101G1            |                       |                       |
| DRB1*0415+DRB1*1324          | DRB1*0436+DRB1*1103              |                       |                       |
| DRB1*0415+DRB1*1325          | DRB1*0436+DRB1*110801/110802     |                       |                       |
| DRB1*0415+DRB1*1329          | DRB1*0437+DRB1*1109              | DRB1*0454+DRB1*1156   |                       |
| DRB1*0415+DRB1*1347          | DRB1*0425+DRB1*1137              |                       |                       |
| DRB1*0415+DRB1*135001        | DRB1*0436+DRB1*1128              |                       |                       |
| DRB1*0415+DRB1*1362          | DRB1*0436+DRB1*1115              |                       |                       |
| DRB1*0415+DRB1*1382          | DRB1*0436+DRB1*111901            |                       |                       |
| DRB1*0415+DRB1*142301        | DRB1*0436+DRB1*1117              |                       |                       |
| DRB1*0415+DRB1*1433          | DRB1*0441+DRB1*1146              |                       |                       |
| DRB1*0417+DRB1*111301/111302 | DRB1*0428+DRB1*1117              |                       |                       |
| DRB1*0417+DRB1*1429          | DRB1*0427+DRB1*1413              |                       |                       |
| DRB1*0417+DRB1*1447          | DRB1*0474+DRB1*1413              |                       |                       |
| DRB1*0418+DRB1*0447          | DRB1*0453+DRB1*0454              |                       |                       |

|                                  |                                      |                                  |                     |
|----------------------------------|--------------------------------------|----------------------------------|---------------------|
| DRB1*0418+DRB1*080201/080202     | DRB1*0425+DRB1*0830                  |                                  |                     |
| DRB1*0418+DRB1*0813              | DRB1*0458+DRB1*0830                  |                                  |                     |
| DRB1*0418+DRB1*0822              | DRB1*0425+DRB1*0812                  |                                  |                     |
| DRB1*0418+DRB1*0824              | DRB1*0436+DRB1*0830                  |                                  |                     |
| DRB1*0418+DRB1*0825              | DRB1*0453+DRB1*0834                  |                                  |                     |
| DRB1*0418+DRB1*1101G1            | DRB1*0425+DRB1*111901                | DRB1*0436+DRB1*1145              | DRB1*0454+DRB1*1118 |
| DRB1*0418+DRB1*110103            | DRB1*0425+DRB1*111902                | DRB1*0453+DRB1*1123              |                     |
| DRB1*0418+DRB1*110401/110402     | DRB1*0425+DRB1*1118                  |                                  |                     |
| DRB1*0418+DRB1*110801/110802     | DRB1*0458+DRB1*111901                |                                  |                     |
| DRB1*0418+DRB1*111902            | DRB1*0453+DRB1*1145                  |                                  |                     |
| DRB1*0418+DRB1*1123              | DRB1*0425+DRB1*1145                  |                                  |                     |
| DRB1*0418+DRB1*1134              | DRB1*0455+DRB1*1118                  |                                  |                     |
| DRB1*0418+DRB1*1136              | DRB1*0458+DRB1*110201                |                                  |                     |
| DRB1*0418+DRB1*1140              | DRB1*0425+DRB1*1116                  |                                  |                     |
| DRB1*0418+DRB1*1141              | DRB1*0425+DRB1*1148                  |                                  |                     |
| DRB1*0418+DRB1*1142              | DRB1*0458+DRB1*1118                  |                                  |                     |
| DRB1*0418+DRB1*1164              | DRB1*0458+DRB1*1145                  |                                  |                     |
| DRB1*0418+DRB1*120201            | DRB1*0425+DRB1*120101/1206/1210/1217 |                                  |                     |
| DRB1*0418+DRB1*1212              | DRB1*0458+DRB1*120101/1206/1210/1217 |                                  |                     |
| DRB1*0418+DRB1*1215              | DRB1*0425+DRB1*1205                  |                                  |                     |
| DRB1*0418+DRB1*130501/130502     | DRB1*0454+DRB1*1306                  |                                  |                     |
| DRB1*0418+DRB1*131401/131403     | DRB1*0425+DRB1*1382                  |                                  |                     |
| DRB1*0418+DRB1*1320              | DRB1*0458+DRB1*130101                |                                  |                     |
| DRB1*0418+DRB1*1324              | DRB1*0425+DRB1*1322                  |                                  |                     |
| DRB1*0418+DRB1*1325              | DRB1*0458+DRB1*1382                  |                                  |                     |
| DRB1*0418+DRB1*1329              | DRB1*0458+DRB1*130201                |                                  |                     |
| DRB1*0418+DRB1*1342              | DRB1*0425+DRB1*1306                  |                                  |                     |
| DRB1*0418+DRB1*1371              | DRB1*0458+DRB1*1327                  |                                  |                     |
| DRB1*0418+DRB1*1378              | DRB1*0458+DRB1*1379                  |                                  |                     |
| DRB1*0418+DRB1*1388              | DRB1*0458+DRB1*130301/130302         |                                  |                     |
| DRB1*0418+DRB1*140301            | DRB1*0458+DRB1*1467                  |                                  |                     |
| DRB1*0418+DRB1*140501            | DRB1*0458+DRB1*1445                  |                                  |                     |
| DRB1*0418+DRB1*1406              | DRB1*0456+DRB1*1412                  |                                  |                     |
| DRB1*0418+DRB1*1417              | DRB1*0455+DRB1*1306                  |                                  |                     |
| DRB1*0418+DRB1*1421              | DRB1*0455+DRB1*1310                  |                                  |                     |
| DRB1*0418+DRB1*1427              | DRB1*0425+DRB1*1467                  |                                  |                     |
| DRB1*0418+DRB1*1430              | DRB1*0431+DRB1*1306                  |                                  |                     |
| DRB1*0418+DRB1*1441              | DRB1*0456+DRB1*1477                  |                                  |                     |
| DRB1*0418+DRB1*1447              | DRB1*0444+DRB1*1467                  |                                  |                     |
| DRB1*0418+DRB1*1504              | DRB1*0425+DRB1*15010101/15010102     |                                  |                     |
| DRB1*0418+DRB1*1505              | DRB1*0458+DRB1*15010101/15010102     |                                  |                     |
| DRB1*0418+DRB1*1515              | DRB1*0425+DRB1*150201                | DRB1*0454+DRB1*15010101/15010102 |                     |
| DRB1*0418+DRB1*1523              | DRB1*0458+DRB1*15030101/15030102     |                                  |                     |
| DRB1*0418+DRB1*1525              | DRB1*0422+DRB1*1521                  |                                  |                     |
| DRB1*0418+DRB1*1531              | DRB1*0458+DRB1*150201                |                                  |                     |
| DRB1*0418+DRB1*160101            | DRB1*0425+DRB1*160501                | DRB1*0453+DRB1*1604              |                     |
| DRB1*0418+DRB1*160201            | DRB1*0458+DRB1*160501                |                                  |                     |
| DRB1*0418+DRB1*1609              | DRB1*0447+DRB1*1521                  |                                  |                     |
| DRB1*0419+DRB1*0425              | DRB1*0454+DRB1*0468                  |                                  |                     |
| DRB1*0419+DRB1*0435              | DRB1*0421+DRB1*0443                  |                                  |                     |
| DRB1*0419+DRB1*0442              | DRB1*0443+DRB1*0468                  |                                  |                     |
| DRB1*0419+DRB1*0451              | DRB1*0420+DRB1*0470                  |                                  |                     |
| DRB1*0419+DRB1*0452              | DRB1*0420+DRB1*0423                  |                                  |                     |
| DRB1*0419+DRB1*0455              | DRB1*0431+DRB1*0468                  |                                  |                     |
| DRB1*0419+DRB1*080401/080404     | DRB1*0468+DRB1*080201/080202         |                                  |                     |
| DRB1*0419+DRB1*0806              | DRB1*0468+DRB1*080101/080103         |                                  |                     |
| DRB1*0419+DRB1*0810              | DRB1*0468+DRB1*080302                |                                  |                     |
| DRB1*0419+DRB1*0820              | DRB1*0468+DRB1*1347                  |                                  |                     |
| DRB1*0419+DRB1*0829              | DRB1*0420+DRB1*0818                  |                                  |                     |
| DRB1*0419+DRB1*0806              | DRB1*0468+DRB1*090102                |                                  |                     |
| DRB1*0419+DRB1*1002              | DRB1*0468+DRB1*100101                |                                  |                     |
| DRB1*0419+DRB1*110201            | DRB1*0468+DRB1*111401/111402         |                                  |                     |
| DRB1*0419+DRB1*110403            | DRB1*0468+DRB1*110105                |                                  |                     |
| DRB1*0419+DRB1*1116              | DRB1*0468+DRB1*1120                  |                                  |                     |
| DRB1*0419+DRB1*1118              | DRB1*0468+DRB1*111901                |                                  |                     |
| DRB1*0419+DRB1*1123              | DRB1*0431+DRB1*1129                  |                                  |                     |
| DRB1*0419+DRB1*1125              | DRB1*0455+DRB1*1129                  | DRB1*0468+DRB1*1123              |                     |
| DRB1*0419+DRB1*1134              | DRB1*0468+DRB1*1126                  |                                  |                     |
| DRB1*0419+DRB1*1135              | DRB1*0468+DRB1*1133                  |                                  |                     |
| DRB1*0419+DRB1*1136              | DRB1*0468+DRB1*1168                  |                                  |                     |
| DRB1*0419+DRB1*1142              | DRB1*0468+DRB1*110801/110802         |                                  |                     |
| DRB1*0419+DRB1*1143              | DRB1*0468+DRB1*1139                  |                                  |                     |
| DRB1*0419+DRB1*1144              | DRB1*0468+DRB1*1149                  |                                  |                     |
| DRB1*0419+DRB1*1155              | DRB1*0431+DRB1*1163                  |                                  |                     |
| DRB1*0419+DRB1*1156              | DRB1*0468+DRB1*1137                  |                                  |                     |
| DRB1*0419+DRB1*130101            | DRB1*0468+DRB1*130201                |                                  |                     |
| DRB1*0419+DRB1*130301/130302     | DRB1*0421+DRB1*1312                  |                                  |                     |
| DRB1*0419+DRB1*1310              | DRB1*0421+DRB1*1306                  |                                  |                     |
| DRB1*0419+DRB1*131101            | DRB1*0468+DRB1*131401/131403         |                                  |                     |
| DRB1*0419+DRB1*131102            | DRB1*0468+DRB1*131402                |                                  |                     |
| DRB1*0419+DRB1*1320              | DRB1*0468+DRB1*1329                  |                                  |                     |
| DRB1*0419+DRB1*1322              | DRB1*0468+DRB1*1323                  |                                  |                     |
| DRB1*0419+DRB1*1327              | DRB1*0468+DRB1*1341                  |                                  |                     |
| DRB1*0419+DRB1*1332              | DRB1*0468+DRB1*1365                  | DRB1*0477+DRB1*1384              |                     |
| DRB1*0419+DRB1*1340              | DRB1*0468+DRB1*1336                  |                                  |                     |
| DRB1*0419+DRB1*1342              | DRB1*0468+DRB1*130501/130502         |                                  |                     |
| DRB1*0419+DRB1*1348              | DRB1*0468+DRB1*1338                  |                                  |                     |
| DRB1*0419+DRB1*1352              | DRB1*0443+DRB1*1384                  |                                  |                     |
| DRB1*0419+DRB1*1366              | DRB1*0421+DRB1*1330                  |                                  |                     |
| DRB1*0419+DRB1*1379              | DRB1*0468+DRB1*1339                  |                                  |                     |
| DRB1*0419+DRB1*1381              | DRB1*0421+DRB1*1358                  |                                  |                     |
| DRB1*0419+DRB1*140101/1454       | DRB1*0420+DRB1*143202                | DRB1*0468+DRB1*140701/140702     |                     |
| DRB1*0419+DRB1*140102            | DRB1*0420+DRB1*143201                |                                  |                     |
| DRB1*0419+DRB1*1404              | DRB1*0420+DRB1*1431                  |                                  |                     |
| DRB1*0419+DRB1*140501            | DRB1*0468+DRB1*144401                | DRB1*0468+DRB1*1468              |                     |
| DRB1*0419+DRB1*140503            | DRB1*0468+DRB1*144402                |                                  |                     |
| DRB1*0419+DRB1*1406              | DRB1*0468+DRB1*1402                  |                                  |                     |
| DRB1*0419+DRB1*1408              | DRB1*0420+DRB1*1434                  |                                  |                     |
| DRB1*0419+DRB1*1412              | DRB1*0468+DRB1*140301                |                                  |                     |
| DRB1*0419+DRB1*1415              | DRB1*0468+DRB1*0809                  |                                  |                     |
| DRB1*0419+DRB1*1417              | DRB1*0468+DRB1*1430                  |                                  |                     |
| DRB1*0419+DRB1*1419              | DRB1*0421+DRB1*1402                  |                                  |                     |
| DRB1*0419+DRB1*1421              | DRB1*0421+DRB1*1417                  |                                  |                     |
| DRB1*0419+DRB1*142301            | DRB1*0468+DRB1*1414                  |                                  |                     |
| DRB1*0419+DRB1*1451              | DRB1*0420+DRB1*1402                  |                                  |                     |
| DRB1*0419+DRB1*1478              | DRB1*0468+DRB1*1463                  |                                  |                     |
| DRB1*0419+DRB1*1480              | DRB1*0468+DRB1*1409                  |                                  |                     |
| DRB1*0419+DRB1*15010101/15010102 | DRB1*0468+DRB1*150201                |                                  |                     |
| DRB1*0419+DRB1*150103            | DRB1*0468+DRB1*150206                |                                  |                     |
| DRB1*0419+DRB1*150104            | DRB1*0468+DRB1*150202/150205         |                                  |                     |
| DRB1*0419+DRB1*1504              | DRB1*0468+DRB1*1515                  |                                  |                     |
| DRB1*0419+DRB1*1505              | DRB1*0468+DRB1*1531                  |                                  |                     |
| DRB1*0419+DRB1*1507              | DRB1*0468+DRB1*1511                  |                                  |                     |
| DRB1*0420+DRB1*0444              | DRB1*0468+DRB1*0474                  |                                  |                     |
| DRB1*0420+DRB1*112701            | DRB1*0474+DRB1*1129                  |                                  |                     |
| DRB1*0420+DRB1*1419              | DRB1*0421+DRB1*1451                  |                                  |                     |
| DRB1*0420+DRB1*1421              | DRB1*0421+DRB1*1433                  |                                  |                     |
| DRB1*0420+DRB1*1481              | DRB1*0478+DRB1*1402                  |                                  |                     |
| DRB1*0421+DRB1*0442              | DRB1*0435+DRB1*0468                  |                                  |                     |
| DRB1*0421+DRB1*0456              | DRB1*0438+DRB1*0468                  |                                  |                     |
| DRB1*0421+DRB1*112702            | DRB1*0472+DRB1*1129                  |                                  |                     |
| DRB1*0421+DRB1*1352              | DRB1*0435+DRB1*1384                  |                                  |                     |
| DRB1*0421+DRB1*1406              | DRB1*0468+DRB1*1419                  |                                  |                     |
| DRB1*0422+DRB1*110103            | DRB1*0447+DRB1*1107                  |                                  |                     |

|                              |                              |                              |                              |
|------------------------------|------------------------------|------------------------------|------------------------------|
| DRB1*0422+DRB1*110401/110402 | DRB1*0436+DRB1*1107          |                              |                              |
| DRB1*0422+DRB1*1123          | DRB1*0454+DRB1*1107          |                              |                              |
| DRB1*0422+DRB1*1125          | DRB1*0425+DRB1*1107          |                              |                              |
| DRB1*0422+DRB1*1136          | DRB1*0437+DRB1*1107          |                              |                              |
| DRB1*0422+DRB1*1609          | DRB1*0447+DRB1*1525          |                              |                              |
| DRB1*0423+DRB1*0451          | DRB1*0452+DRB1*0470          |                              |                              |
| DRB1*0423+DRB1*0459          | DRB1*0442+DRB1*0452          |                              |                              |
| DRB1*0423+DRB1*0829          | DRB1*0452+DRB1*0818          |                              |                              |
| DRB1*0423+DRB1*115401        | DRB1*0452+DRB1*110403        |                              |                              |
| DRB1*0423+DRB1*115402        | DRB1*0452+DRB1*110401/110402 |                              |                              |
| DRB1*0423+DRB1*140101/1454   | DRB1*0452+DRB1*143202        |                              |                              |
| DRB1*0423+DRB1*140102        | DRB1*0452+DRB1*143201        |                              |                              |
| DRB1*0423+DRB1*1404          | DRB1*0452+DRB1*1431          |                              |                              |
| DRB1*0423+DRB1*1408          | DRB1*0452+DRB1*1434          |                              |                              |
| DRB1*0423+DRB1*1433          | DRB1*0452+DRB1*1417          |                              |                              |
| DRB1*0423+DRB1*1451          | DRB1*0452+DRB1*1402          |                              |                              |
| DRB1*0424+DRB1*1435          | DRB1*0469+DRB1*1465          |                              |                              |
| DRB1*0425+DRB1*0431          | DRB1*0454+DRB1*0455          |                              |                              |
| DRB1*0425+DRB1*0443          | DRB1*0442+DRB1*0454          |                              |                              |
| DRB1*0425+DRB1*080101/080103 | DRB1*0454+DRB1*0806          |                              |                              |
| DRB1*0425+DRB1*080201/080202 | DRB1*0454+DRB1*080401/080404 |                              |                              |
| DRB1*0425+DRB1*0805          | DRB1*0436+DRB1*080101/080103 |                              |                              |
| DRB1*0425+DRB1*0809          | DRB1*0454+DRB1*1415          |                              |                              |
| DRB1*0425+DRB1*0813          | DRB1*0458+DRB1*080201/080202 |                              |                              |
| DRB1*0425+DRB1*0824          | DRB1*0436+DRB1*080201/080202 |                              |                              |
| DRB1*0425+DRB1*090102        | DRB1*0454+DRB1*0906          |                              |                              |
| DRB1*0425+DRB1*0904          | DRB1*0458+DRB1*090102        |                              |                              |
| DRB1*0425+DRB1*100101        | DRB1*0454+DRB1*1002          |                              |                              |
| DRB1*0425+DRB1*1101G1        | DRB1*0436+DRB1*1123          | DRB1*0454+DRB1*110401/110402 |                              |
| DRB1*0425+DRB1*110103        | DRB1*0447+DRB1*1125          |                              |                              |
| DRB1*0425+DRB1*110105        | DRB1*0454+DRB1*110403        |                              |                              |
| DRB1*0425+DRB1*1103          | DRB1*0436+DRB1*1155          |                              |                              |
| DRB1*0425+DRB1*110401/110402 | DRB1*0436+DRB1*1125          |                              |                              |
| DRB1*0425+DRB1*110801/110802 | DRB1*0436+DRB1*1164          | DRB1*0454+DRB1*1142          | DRB1*0458+DRB1*1101G1        |
| DRB1*0425+DRB1*111101/111102 | DRB1*0454+DRB1*1103          |                              |                              |
| DRB1*0425+DRB1*1120          | DRB1*0454+DRB1*1116          |                              |                              |
| DRB1*0425+DRB1*1123          | DRB1*0454+DRB1*1125          |                              |                              |
| DRB1*0425+DRB1*1133          | DRB1*0454+DRB1*1135          |                              |                              |
| DRB1*0425+DRB1*1136          | DRB1*0437+DRB1*1125          | DRB1*0458+DRB1*1103          |                              |
| DRB1*0425+DRB1*1139          | DRB1*0454+DRB1*1143          |                              |                              |
| DRB1*0425+DRB1*1142          | DRB1*0458+DRB1*110401/110402 |                              |                              |
| DRB1*0425+DRB1*1149          | DRB1*0454+DRB1*1144          |                              |                              |
| DRB1*0425+DRB1*1157          | DRB1*0458+DRB1*110601        |                              |                              |
| DRB1*0425+DRB1*1164          | DRB1*0458+DRB1*1123          |                              |                              |
| DRB1*0425+DRB1*1168          | DRB1*0437+DRB1*1123          | DRB1*0454+DRB1*1136          | DRB1*0458+DRB1*111101/111102 |
| DRB1*0425+DRB1*1212          | DRB1*0458+DRB1*120201        |                              |                              |
| DRB1*0425+DRB1*130501/130502 | DRB1*0454+DRB1*1342          |                              |                              |
| DRB1*0425+DRB1*130701        | DRB1*0436+DRB1*1347          |                              |                              |
| DRB1*0425+DRB1*131401/131403 | DRB1*0454+DRB1*131101        |                              |                              |
| DRB1*0425+DRB1*131402        | DRB1*0454+DRB1*131102        |                              |                              |
| DRB1*0425+DRB1*1320          | DRB1*0437+DRB1*1318          |                              |                              |
| DRB1*0425+DRB1*1323          | DRB1*0454+DRB1*1322          |                              |                              |
| DRB1*0425+DRB1*1325          | DRB1*0458+DRB1*131401/131403 |                              |                              |
| DRB1*0425+DRB1*1329          | DRB1*0454+DRB1*1320          | DRB1*0458+DRB1*1363          |                              |
| DRB1*0425+DRB1*1336          | DRB1*0454+DRB1*1340          |                              |                              |
| DRB1*0425+DRB1*1339          | DRB1*0454+DRB1*1379          |                              |                              |
| DRB1*0425+DRB1*1341          | DRB1*0454+DRB1*1327          |                              |                              |
| DRB1*0425+DRB1*1342          | DRB1*0436+DRB1*1318          | DRB1*0455+DRB1*131101        |                              |
| DRB1*0425+DRB1*1344          | DRB1*0442+DRB1*0820          |                              |                              |
| DRB1*0425+DRB1*1347          | DRB1*0454+DRB1*0820          |                              |                              |
| DRB1*0425+DRB1*1349          | DRB1*0436+DRB1*1355          |                              |                              |
| DRB1*0425+DRB1*1356          | DRB1*0458+DRB1*130501/130502 |                              |                              |
| DRB1*0425+DRB1*1365          | DRB1*0454+DRB1*1322          |                              |                              |
| DRB1*0425+DRB1*140301        | DRB1*0454+DRB1*1412          | DRB1*0458+DRB1*1427          |                              |
| DRB1*0425+DRB1*140701/140702 | DRB1*0454+DRB1*140101/1454   |                              |                              |
| DRB1*0425+DRB1*1409          | DRB1*0454+DRB1*1480          |                              |                              |
| DRB1*0425+DRB1*1414          | DRB1*0454+DRB1*142301        |                              |                              |
| DRB1*0425+DRB1*143202        | DRB1*0436+DRB1*1455          |                              |                              |
| DRB1*0425+DRB1*144401        | DRB1*0454+DRB1*140501        |                              |                              |
| DRB1*0425+DRB1*144402        | DRB1*0454+DRB1*140503        |                              |                              |
| DRB1*0425+DRB1*1447          | DRB1*0444+DRB1*1427          |                              |                              |
| DRB1*0425+DRB1*1468          | DRB1*0454+DRB1*1404          |                              |                              |
| DRB1*0425+DRB1*1469          | DRB1*0458+DRB1*1425          |                              |                              |
| DRB1*0425+DRB1*150202/150205 | DRB1*0454+DRB1*150104        |                              |                              |
| DRB1*0425+DRB1*150206        | DRB1*0454+DRB1*150103        |                              |                              |
| DRB1*0425+DRB1*1505          | DRB1*0458+DRB1*1504          |                              |                              |
| DRB1*0425+DRB1*1511          | DRB1*0454+DRB1*1507          |                              |                              |
| DRB1*0425+DRB1*1515          | DRB1*0454+DRB1*1504          |                              |                              |
| DRB1*0425+DRB1*1527          | DRB1*0442+DRB1*1604          | DRB1*0458+DRB1*1515          |                              |
| DRB1*0425+DRB1*1531          | DRB1*0454+DRB1*1505          |                              |                              |
| DRB1*0425+DRB1*160102        | DRB1*0436+DRB1*1604          |                              |                              |
| DRB1*0425+DRB1*160201        | DRB1*0458+DRB1*160101        |                              |                              |
| DRB1*0425+DRB1*160202        | DRB1*0458+DRB1*160102        |                              |                              |
| DRB1*0425+DRB1*1610          | DRB1*0458+DRB1*1609          |                              |                              |
| DRB1*0427+DRB1*112701        | DRB1*0474+DRB1*110601        |                              |                              |
| DRB1*0427+DRB1*1447          | DRB1*0474+DRB1*1429          |                              |                              |
| DRB1*0428+DRB1*0441          | DRB1*0459+DRB1*0477          | DRB1*0455+DRB1*1321          |                              |
| DRB1*0428+DRB1*0820          | DRB1*0442+DRB1*1355          |                              |                              |
| DRB1*0428+DRB1*0824          | DRB1*0443+DRB1*0805          |                              |                              |
| DRB1*0428+DRB1*0828          | DRB1*0442+DRB1*0817          |                              |                              |
| DRB1*0428+DRB1*0830          | DRB1*0443+DRB1*080302        |                              |                              |
| DRB1*0428+DRB1*131101        | DRB1*0442+DRB1*1321          |                              |                              |
| DRB1*0428+DRB1*131401/131403 | DRB1*0443+DRB1*1321          |                              |                              |
| DRB1*0428+DRB1*1322          | DRB1*0443+DRB1*1304          |                              |                              |
| DRB1*0428+DRB1*1324          | DRB1*0443+DRB1*1375          |                              |                              |
| DRB1*0428+DRB1*1347          | DRB1*0431+DRB1*1321          | DRB1*0443+DRB1*1355          |                              |
| DRB1*0428+DRB1*1382          | DRB1*0443+DRB1*1330          |                              |                              |
| DRB1*0428+DRB1*1402          | DRB1*0443+DRB1*1413          |                              |                              |
| DRB1*0428+DRB1*140301        | DRB1*0443+DRB1*1485          |                              |                              |
| DRB1*0428+DRB1*1406          | DRB1*0442+DRB1*1413          |                              |                              |
| DRB1*0428+DRB1*1412          | DRB1*0442+DRB1*1485          |                              |                              |
| DRB1*0428+DRB1*1419          | DRB1*0435+DRB1*1413          |                              |                              |
| DRB1*0428+DRB1*1467          | DRB1*0443+DRB1*1463          |                              |                              |
| DRB1*0428+DRB1*150104        | DRB1*0443+DRB1*1512          |                              |                              |
| DRB1*0429+DRB1*1128          | DRB1*0477+DRB1*1166          |                              |                              |
| DRB1*0431+DRB1*0442          | DRB1*0443+DRB1*0455          |                              |                              |
| DRB1*0431+DRB1*080401/080404 | DRB1*0455+DRB1*080201/080202 |                              |                              |
| DRB1*0431+DRB1*0806          | DRB1*0455+DRB1*080101/080103 |                              |                              |
| DRB1*0431+DRB1*0810          | DRB1*0455+DRB1*080302        |                              |                              |
| DRB1*0431+DRB1*0820          | DRB1*0455+DRB1*1347          |                              |                              |
| DRB1*0431+DRB1*0831          | DRB1*0461+DRB1*080401/080404 |                              |                              |
| DRB1*0431+DRB1*0906          | DRB1*0455+DRB1*090102        |                              |                              |
| DRB1*0431+DRB1*1002          | DRB1*0455+DRB1*100101        |                              |                              |
| DRB1*0431+DRB1*110201        | DRB1*0455+DRB1*111401/111402 |                              |                              |
| DRB1*0431+DRB1*110403        | DRB1*0455+DRB1*110105        |                              |                              |
| DRB1*0431+DRB1*1116          | DRB1*0455+DRB1*1120          |                              |                              |
| DRB1*0431+DRB1*1125          | DRB1*0455+DRB1*1123          |                              |                              |
| DRB1*0431+DRB1*1124          | DRB1*0455+DRB1*1126          |                              |                              |
| DRB1*0431+DRB1*1135          | DRB1*0455+DRB1*1133          |                              |                              |
| DRB1*0431+DRB1*1136          | DRB1*0455+DRB1*1168          |                              |                              |
| DRB1*0431+DRB1*1137          | DRB1*0461+DRB1*1347          |                              |                              |
| DRB1*0431+DRB1*1143          | DRB1*0455+DRB1*1139          |                              |                              |
| DRB1*0431+DRB1*1144          | DRB1*0455+DRB1*1149          |                              |                              |
| DRB1*0431+DRB1*1156          | DRB1*0455+DRB1*1137          | DRB1*0461+DRB1*0820          |                              |

|                                      |                                  |                       |                     |
|--------------------------------------|----------------------------------|-----------------------|---------------------|
| DRB1*0431+DRB1*130101                | DRB1*0455+DRB1*130201            |                       |                     |
| DRB1*0431+DRB1*130501/130502         | DRB1*0454+DRB1*1430              |                       |                     |
| DRB1*0431+DRB1*131101                | DRB1*0442+DRB1*1347              | DRB1*0443+DRB1*0820   | DRB1*0454+DRB1*1344 |
|                                      | DRB1*0455+DRB1*131401/131403     |                       |                     |
| DRB1*0431+DRB1*131102                | DRB1*0455+DRB1*131402            |                       |                     |
| DRB1*0431+DRB1*131401/131403         | DRB1*0443+DRB1*1347              |                       |                     |
| DRB1*0431+DRB1*1320                  | DRB1*0455+DRB1*1329              |                       |                     |
| DRB1*0431+DRB1*1322                  | DRB1*0455+DRB1*1323              |                       |                     |
| DRB1*0431+DRB1*1327                  | DRB1*0455+DRB1*1341              |                       |                     |
| DRB1*0431+DRB1*1330                  | DRB1*0443+DRB1*1313              |                       |                     |
| DRB1*0431+DRB1*1332                  | DRB1*0455+DRB1*1365              |                       |                     |
| DRB1*0431+DRB1*1333                  | DRB1*0472+DRB1*1313              |                       |                     |
| DRB1*0431+DRB1*1340                  | DRB1*0455+DRB1*1336              |                       |                     |
| DRB1*0431+DRB1*1348                  | DRB1*0455+DRB1*1338              |                       |                     |
| DRB1*0431+DRB1*1366                  | DRB1*0435+DRB1*1313              |                       |                     |
| DRB1*0431+DRB1*1379                  | DRB1*0455+DRB1*1339              |                       |                     |
| DRB1*0431+DRB1*1404                  | DRB1*0455+DRB1*1468              |                       |                     |
| DRB1*0431+DRB1*140501                | DRB1*0455+DRB1*144401            |                       |                     |
| DRB1*0431+DRB1*140503                | DRB1*0455+DRB1*144402            |                       |                     |
| DRB1*0431+DRB1*1406                  | DRB1*0455+DRB1*1402              |                       |                     |
| DRB1*0431+DRB1*1412                  | DRB1*0455+DRB1*140301            |                       |                     |
| DRB1*0431+DRB1*1415                  | DRB1*0455+DRB1*0809              |                       |                     |
| DRB1*0431+DRB1*1417                  | DRB1*0455+DRB1*1430              |                       |                     |
| DRB1*0431+DRB1*142301                | DRB1*0455+DRB1*1414              |                       |                     |
| DRB1*0431+DRB1*1478                  | DRB1*0455+DRB1*1463              |                       |                     |
| DRB1*0431+DRB1*1480                  | DRB1*0455+DRB1*1409              |                       |                     |
| DRB1*0431+DRB1*15010101/15010102     | DRB1*0455+DRB1*150201            |                       |                     |
| DRB1*0431+DRB1*150103                | DRB1*0455+DRB1*150206            |                       |                     |
| DRB1*0431+DRB1*150104                | DRB1*0455+DRB1*150202/150205     |                       |                     |
| DRB1*0431+DRB1*1504                  | DRB1*0455+DRB1*1515              |                       |                     |
| DRB1*0431+DRB1*1505                  | DRB1*0455+DRB1*1531              |                       |                     |
| DRB1*0431+DRB1*1507                  | DRB1*0455+DRB1*1511              |                       |                     |
| DRB1*0432+DRB1*1123                  | DRB1*0455+DRB1*1151              |                       |                     |
| DRB1*0432+DRB1*112701                | DRB1*0444+DRB1*1151              |                       |                     |
| DRB1*0432+DRB1*1129                  | DRB1*0468+DRB1*1151              |                       |                     |
| DRB1*0435+DRB1*0456                  | DRB1*0438+DRB1*0442              |                       |                     |
| DRB1*0435+DRB1*1306                  | DRB1*0443+DRB1*1310              |                       |                     |
| DRB1*0435+DRB1*1330                  | DRB1*0443+DRB1*1366              |                       |                     |
| DRB1*0435+DRB1*1333                  | DRB1*0472+DRB1*1366              |                       |                     |
| DRB1*0435+DRB1*1358                  | DRB1*0443+DRB1*1381              |                       |                     |
| DRB1*0435+DRB1*1402                  | DRB1*0443+DRB1*1419              |                       |                     |
| DRB1*0435+DRB1*1406                  | DRB1*0442+DRB1*1419              |                       |                     |
| DRB1*0435+DRB1*1416                  | DRB1*0462+DRB1*1383              |                       |                     |
| DRB1*0435+DRB1*1417                  | DRB1*0443+DRB1*1421              |                       |                     |
| DRB1*0435+DRB1*1469                  | DRB1*0462+DRB1*1325              |                       |                     |
| DRB1*0435+DRB1*160501                | DRB1*0438+DRB1*1610              |                       |                     |
| DRB1*0436+DRB1*0813                  | DRB1*0458+DRB1*0824              |                       |                     |
| DRB1*0436+DRB1*110103                | DRB1*0447+DRB1*110401/110402     |                       |                     |
| DRB1*0436+DRB1*111902                | DRB1*0447+DRB1*1118              | DRB1*0453+DRB1*1101G1 |                     |
| DRB1*0436+DRB1*1136                  | DRB1*0437+DRB1*110401/110402     |                       |                     |
| DRB1*0436+DRB1*1168                  | DRB1*0437+DRB1*1101G1            |                       |                     |
| DRB1*0436+DRB1*120101/1206/1210/1217 | DRB1*0453+DRB1*120204            |                       |                     |
| DRB1*0436+DRB1*130202                | DRB1*0447+DRB1*130101            | DRB1*0453+DRB1*1363   |                     |
| DRB1*0436+DRB1*1320                  | DRB1*0437+DRB1*1342              |                       |                     |
| DRB1*0436+DRB1*1329                  | DRB1*0437+DRB1*130501/130502     |                       |                     |
| DRB1*0436+DRB1*1527                  | DRB1*0442+DRB1*160102            |                       |                     |
| DRB1*0436+DRB1*160501                | DRB1*0453+DRB1*160102            |                       |                     |
| DRB1*0437+DRB1*110103                | DRB1*0447+DRB1*1136              |                       |                     |
| DRB1*0437+DRB1*111902                | DRB1*0453+DRB1*1168              |                       |                     |
| DRB1*0437+DRB1*1164                  | DRB1*0458+DRB1*1168              |                       |                     |
| DRB1*0437+DRB1*1313                  | DRB1*0458+DRB1*1338              |                       |                     |
| DRB1*0437+DRB1*1521                  | DRB1*0458+DRB1*1510              |                       |                     |
| DRB1*0438+DRB1*1343                  | DRB1*0462+DRB1*130101            |                       |                     |
| DRB1*0438+DRB1*1406                  | DRB1*0456+DRB1*1419              |                       |                     |
| DRB1*0442+DRB1*0451                  | DRB1*0459+DRB1*0470              |                       |                     |
| DRB1*0442+DRB1*080302                | DRB1*0443+DRB1*0810              |                       |                     |
| DRB1*0442+DRB1*0809                  | DRB1*0443+DRB1*1415              |                       |                     |
| DRB1*0442+DRB1*0829                  | DRB1*0459+DRB1*0818              |                       |                     |
| DRB1*0442+DRB1*090102                | DRB1*0443+DRB1*0906              |                       |                     |
| DRB1*0442+DRB1*100101                | DRB1*0443+DRB1*1002              |                       |                     |
| DRB1*0442+DRB1*1101G1                | DRB1*0443+DRB1*110401/110402     |                       |                     |
| DRB1*0442+DRB1*110105                | DRB1*0443+DRB1*110403            |                       |                     |
| DRB1*0442+DRB1*110801/110802         | DRB1*0443+DRB1*1142              |                       |                     |
| DRB1*0442+DRB1*111101/111102         | DRB1*0443+DRB1*1103              |                       |                     |
| DRB1*0442+DRB1*111401/111402         | DRB1*0443+DRB1*110201            |                       |                     |
| DRB1*0442+DRB1*111901                | DRB1*0443+DRB1*1118              |                       |                     |
| DRB1*0442+DRB1*1120                  | DRB1*0443+DRB1*1116              |                       |                     |
| DRB1*0442+DRB1*1123                  | DRB1*0443+DRB1*1125              |                       |                     |
| DRB1*0442+DRB1*1126                  | DRB1*0443+DRB1*1134              |                       |                     |
| DRB1*0442+DRB1*1133                  | DRB1*0443+DRB1*1135              |                       |                     |
| DRB1*0442+DRB1*1139                  | DRB1*0443+DRB1*1143              |                       |                     |
| DRB1*0442+DRB1*1149                  | DRB1*0443+DRB1*1144              |                       |                     |
| DRB1*0442+DRB1*115401                | DRB1*0459+DRB1*110403            |                       |                     |
| DRB1*0442+DRB1*115402                | DRB1*0459+DRB1*110401/110402     |                       |                     |
| DRB1*0442+DRB1*1168                  | DRB1*0443+DRB1*1136              |                       |                     |
| DRB1*0442+DRB1*130201                | DRB1*0443+DRB1*130101            |                       |                     |
| DRB1*0442+DRB1*130501/130502         | DRB1*0443+DRB1*1342              |                       |                     |
| DRB1*0442+DRB1*1313                  | DRB1*0455+DRB1*1330              |                       |                     |
| DRB1*0442+DRB1*131401/131403         | DRB1*0443+DRB1*131101            |                       |                     |
| DRB1*0442+DRB1*131402                | DRB1*0443+DRB1*131102            |                       |                     |
| DRB1*0442+DRB1*1323                  | DRB1*0443+DRB1*1322              |                       |                     |
| DRB1*0442+DRB1*1329                  | DRB1*0443+DRB1*1320              |                       |                     |
| DRB1*0442+DRB1*1339                  | DRB1*0443+DRB1*1379              |                       |                     |
| DRB1*0442+DRB1*1341                  | DRB1*0443+DRB1*1327              |                       |                     |
| DRB1*0442+DRB1*1384                  | DRB1*0468+DRB1*1352              |                       |                     |
| DRB1*0442+DRB1*1388                  | DRB1*0467+DRB1*1325              |                       |                     |
| DRB1*0442+DRB1*140102                | DRB1*0459+DRB1*143201            |                       |                     |
| DRB1*0442+DRB1*1402                  | DRB1*0443+DRB1*1406              |                       |                     |
| DRB1*0442+DRB1*140301                | DRB1*0443+DRB1*1412              |                       |                     |
| DRB1*0442+DRB1*1404                  | DRB1*0459+DRB1*1431              |                       |                     |
| DRB1*0442+DRB1*1408                  | DRB1*0459+DRB1*1434              |                       |                     |
| DRB1*0442+DRB1*1414                  | DRB1*0443+DRB1*142301            |                       |                     |
| DRB1*0442+DRB1*1430                  | DRB1*0443+DRB1*1417              |                       |                     |
| DRB1*0442+DRB1*1433                  | DRB1*0459+DRB1*1417              |                       |                     |
| DRB1*0442+DRB1*144401                | DRB1*0443+DRB1*140501            |                       |                     |
| DRB1*0442+DRB1*144402                | DRB1*0443+DRB1*140503            |                       |                     |
| DRB1*0442+DRB1*1451                  | DRB1*0459+DRB1*1402              |                       |                     |
| DRB1*0442+DRB1*1463                  | DRB1*0443+DRB1*1478              |                       |                     |
| DRB1*0442+DRB1*1468                  | DRB1*0443+DRB1*1404              |                       |                     |
| DRB1*0442+DRB1*150201                | DRB1*0443+DRB1*15010101/15010102 |                       |                     |
| DRB1*0442+DRB1*150202/150205         | DRB1*0443+DRB1*150104            |                       |                     |
| DRB1*0442+DRB1*150206                | DRB1*0443+DRB1*150103            |                       |                     |
| DRB1*0442+DRB1*1515                  | DRB1*0443+DRB1*1504              |                       |                     |
| DRB1*0442+DRB1*1531                  | DRB1*0443+DRB1*1505              |                       |                     |
| DRB1*0442+DRB1*160501                | DRB1*0453+DRB1*1527              | DRB1*0456+DRB1*1610   |                     |
| DRB1*0443+DRB1*1152                  | DRB1*0461+DRB1*1472              |                       |                     |
| DRB1*0443+DRB1*115401                | DRB1*0459+DRB1*110105            |                       |                     |
| DRB1*0443+DRB1*115402                | DRB1*0459+DRB1*1101G1            |                       |                     |
| DRB1*0443+DRB1*1333                  | DRB1*0472+DRB1*1330              |                       |                     |
| DRB1*0443+DRB1*1433                  | DRB1*0459+DRB1*1430              |                       |                     |
| DRB1*0443+DRB1*1604                  | DRB1*0454+DRB1*1527              |                       |                     |
| DRB1*0444+DRB1*1120                  | DRB1*0461+DRB1*1361              |                       |                     |
| DRB1*0444+DRB1*1123                  | DRB1*0455+DRB1*112701            |                       |                     |
| DRB1*0444+DRB1*1129                  | DRB1*0468+DRB1*112701            |                       |                     |

|                                               |                                       |                              |                              |
|-----------------------------------------------|---------------------------------------|------------------------------|------------------------------|
| DRB1*0444+DRB1*140301                         | DRB1*0458+DRB1*1447                   |                              |                              |
| DRB1*0444+DRB1*140701/140702                  | DRB1*0474+DRB1*143202                 |                              |                              |
| DRB1*0444+DRB1*1469                           | DRB1*0474+DRB1*1431                   |                              |                              |
| DRB1*0444+DRB1*1475                           | DRB1*0470+DRB1*1438                   |                              |                              |
| DRB1*0447+DRB1*0810                           | DRB1*0453+DRB1*080101/080103          |                              |                              |
| DRB1*0447+DRB1*0834                           | DRB1*0454+DRB1*0825                   |                              |                              |
| DRB1*0447+DRB1*1123                           | DRB1*0454+DRB1*110103                 |                              |                              |
| DRB1*0447+DRB1*1145                           | DRB1*0454+DRB1*111902                 |                              |                              |
| DRB1*0447+DRB1*1306                           | DRB1*0453+DRB1*130501/130502          |                              |                              |
| DRB1*0447+DRB1*15010101/15010102              | DRB1*0453+DRB1*1515                   |                              |                              |
| DRB1*0447+DRB1*1604                           | DRB1*0454+DRB1*160101                 |                              |                              |
| DRB1*0451+DRB1*0818                           | DRB1*0470+DRB1*0829                   |                              |                              |
| DRB1*0451+DRB1*110401/110402                  | DRB1*0470+DRB1*115402                 |                              |                              |
| DRB1*0451+DRB1*110403                         | DRB1*0470+DRB1*115401                 |                              |                              |
| DRB1*0451+DRB1*1402                           | DRB1*0470+DRB1*1451                   |                              |                              |
| DRB1*0451+DRB1*1417                           | DRB1*0470+DRB1*1433                   |                              |                              |
| DRB1*0451+DRB1*1431                           | DRB1*0470+DRB1*1404                   |                              |                              |
| DRB1*0451+DRB1*143202                         | DRB1*0470+DRB1*140101/1454            |                              |                              |
| DRB1*0451+DRB1*1434                           | DRB1*0470+DRB1*1408                   |                              |                              |
| DRB1*0453+DRB1*1164                           | DRB1*0458+DRB1*111902                 |                              |                              |
| DRB1*0454+DRB1*1474                           | DRB1*0458+DRB1*1422                   |                              |                              |
| DRB1*0455+DRB1*1109                           | DRB1*0461+DRB1*1318                   |                              |                              |
| DRB1*0455+DRB1*1142                           | DRB1*0458+DRB1*1134                   |                              |                              |
| DRB1*0455+DRB1*1163                           | DRB1*0468+DRB1*1155                   |                              |                              |
| DRB1*0455+DRB1*1356                           | DRB1*0458+DRB1*1430                   |                              |                              |
| DRB1*0455+DRB1*1435                           | DRB1*0459+DRB1*1455                   |                              |                              |
| DRB1*0462+DRB1*0806                           | DRB1*0467+DRB1*0808                   |                              |                              |
| DRB1*0462+DRB1*1304                           | DRB1*0467+DRB1*1345                   |                              |                              |
| DRB1*07010101/07010102+DRB1*0816              | DRB1*0708+DRB1*080101/080103          |                              |                              |
| DRB1*07010101/07010102+DRB1*0905              | DRB1*0711+DRB1*090102                 |                              |                              |
| DRB1*07010101/07010102+DRB1*1124              | DRB1*0708+DRB1*1101G1                 |                              |                              |
| DRB1*07010101/07010102+DRB1*1368              | DRB1*0708+DRB1*1352                   |                              |                              |
| DRB1*07010101/07010102+DRB1*140101/1454       | DRB1*0709+DRB1*1470                   |                              |                              |
| DRB1*07010101/07010102+DRB1*1462              | DRB1*0712+DRB1*140101/1454            |                              |                              |
| DRB1*07010101/07010102+DRB1*15010101/15010102 | DRB1*0709+DRB1*15030101/15030102      |                              |                              |
| DRB1*07010101/07010102+DRB1*1505              | DRB1*0709+DRB1*1523                   |                              |                              |
| DRB1*07010101/07010102+DRB1*1522              | DRB1*0713+DRB1*15010101/15010102      |                              |                              |
| DRB1*0704+DRB1*1101G1                         | DRB1*0711+DRB1*112701                 |                              |                              |
| DRB1*0704+DRB1*130101                         | DRB1*0711+DRB1*1361                   |                              |                              |
| DRB1*0704+DRB1*140102                         | DRB1*0711+DRB1*1438                   |                              |                              |
| DRB1*0704+DRB1*1402                           | DRB1*0711+DRB1*1447                   |                              |                              |
| DRB1*080101/080103+DRB1*080401/080404         | DRB1*080201/080202+DRB1*0806          |                              |                              |
| DRB1*080101/080103+DRB1*0810                  | DRB1*080302+DRB1*0806                 |                              |                              |
| DRB1*080101/080103+DRB1*0812                  | DRB1*080302+DRB1*0822                 |                              |                              |
| DRB1*080101/080103+DRB1*0818                  | DRB1*080302+DRB1*0805                 |                              |                              |
| DRB1*080101/080103+DRB1*0820                  | DRB1*080401/080404+DRB1*1355          | DRB1*0806+DRB1*1347          |                              |
| DRB1*080101/080103+DRB1*0824                  | DRB1*080201/080202+DRB1*0805          |                              |                              |
| DRB1*080101/080103+DRB1*0828                  | DRB1*080401/080404+DRB1*0817          |                              |                              |
| DRB1*080101/080103+DRB1*0830                  | DRB1*080201/080202+DRB1*080302        |                              |                              |
| DRB1*080101/080103+DRB1*0906                  | DRB1*0806+DRB1*090102                 |                              |                              |
| DRB1*080101/080103+DRB1*1002                  | DRB1*0806+DRB1*100101                 |                              |                              |
| DRB1*080101/080103+DRB1*1101G1                | DRB1*0805+DRB1*1123                   | DRB1*0817+DRB1*1137          |                              |
| DRB1*080101/080103+DRB1*110201                | DRB1*080302+DRB1*1103                 | DRB1*0806+DRB1*111401/111402 | DRB1*0810+DRB1*111101/111102 |
|                                               | DRB1*0817+DRB1*1148                   | DRB1*0818+DRB1*1155          | DRB1*1167+DRB1*1338          |
| DRB1*080101/080103+DRB1*1103                  | DRB1*0805+DRB1*1155                   | DRB1*0806+DRB1*111101/111102 | DRB1*0817+DRB1*1141          |
| DRB1*080101/080103+DRB1*110401/110402         | DRB1*0805+DRB1*1125                   | DRB1*0806+DRB1*1101G1        | DRB1*0817+DRB1*1156          |
|                                               | DRB1*1167+DRB1*1349                   |                              |                              |
|                                               | DRB1*0806+DRB1*110105                 |                              |                              |
| DRB1*080101/080103+DRB1*110403                | DRB1*0822+DRB1*1101G1                 |                              |                              |
| DRB1*080101/080103+DRB1*110601                | DRB1*0822+DRB1*110105                 |                              |                              |
| DRB1*080101/080103+DRB1*110602                | DRB1*0805+DRB1*1164                   |                              |                              |
| DRB1*080101/080103+DRB1*110801/110802         | DRB1*080302+DRB1*111101/111102        |                              |                              |
| DRB1*080101/080103+DRB1*111401/111402         | DRB1*080302+DRB1*1140                 | DRB1*0806+DRB1*1120          | DRB1*1167+DRB1*1365          |
| DRB1*080101/080103+DRB1*1116                  | DRB1*1355+DRB1*1411                   |                              |                              |
| DRB1*080101/080103+DRB1*1117                  | DRB1*080302+DRB1*110401/110402        | DRB1*0806+DRB1*111901        |                              |
| DRB1*080101/080103+DRB1*1118                  | DRB1*0818+DRB1*1125                   | DRB1*1167+DRB1*1312          | DRB1*0810+DRB1*1101G1        |
|                                               | DRB1*080302+DRB1*1101G1               | DRB1*0805+DRB1*1145          | DRB1*0818+DRB1*1123          |
| DRB1*080101/080103+DRB1*111901                | DRB1*080302+DRB1*110103               |                              |                              |
| DRB1*080101/080103+DRB1*111902                | DRB1*0812+DRB1*111101/111102          | DRB1*0822+DRB1*111401/111402 |                              |
| DRB1*080101/080103+DRB1*1121                  | DRB1*0816+DRB1*1101G1                 |                              |                              |
| DRB1*080101/080103+DRB1*1124                  | DRB1*0806+DRB1*1123                   | DRB1*1167+DRB1*1355          |                              |
| DRB1*080101/080103+DRB1*1125                  | DRB1*0806+DRB1*1126                   |                              |                              |
| DRB1*080101/080103+DRB1*1134                  | DRB1*0806+DRB1*1133                   |                              |                              |
| DRB1*080101/080103+DRB1*1135                  | DRB1*0806+DRB1*1168                   |                              |                              |
| DRB1*080101/080103+DRB1*1136                  | DRB1*0806+DRB1*110801/110802          |                              |                              |
| DRB1*080101/080103+DRB1*1142                  | DRB1*0806+DRB1*1139                   |                              |                              |
| DRB1*080101/080103+DRB1*1143                  | DRB1*0806+DRB1*1149                   |                              |                              |
| DRB1*080101/080103+DRB1*1144                  | DRB1*080302+DRB1*1123                 |                              |                              |
| DRB1*080101/080103+DRB1*1145                  | DRB1*0822+DRB1*1129                   |                              |                              |
| DRB1*080101/080103+DRB1*1147                  | DRB1*080302+DRB1*1141                 |                              |                              |
| DRB1*080101/080103+DRB1*1148                  | DRB1*0806+DRB1*1137                   | DRB1*0831+DRB1*1355          |                              |
| DRB1*080101/080103+DRB1*1156                  | DRB1*0822+DRB1*110801/110802          |                              |                              |
| DRB1*080101/080103+DRB1*1157                  | DRB1*080302+DRB1*120201               |                              |                              |
| DRB1*080101/080103+DRB1*120101/1206/1210/1217 | DRB1*0812+DRB1*1216                   |                              |                              |
| DRB1*080101/080103+DRB1*120102                | DRB1*080302+DRB1*1215                 |                              |                              |
| DRB1*080101/080103+DRB1*1205                  | DRB1*0828+DRB1*120201                 |                              |                              |
| DRB1*080101/080103+DRB1*1213                  | DRB1*0806+DRB1*130201                 | DRB1*0810+DRB1*1363          | DRB1*0817+DRB1*1340          |
| DRB1*080101/080103+DRB1*130101                | DRB1*0828+DRB1*1365                   |                              |                              |
|                                               | DRB1*080302+DRB1*1363                 | DRB1*0817+DRB1*1336          |                              |
| DRB1*080101/080103+DRB1*130201                | DRB1*080201/080202+DRB1*1375          | DRB1*0817+DRB1*1348          |                              |
| DRB1*080101/080103+DRB1*1304                  | DRB1*080302+DRB1*1342                 | DRB1*0810+DRB1*130501/130502 | DRB1*0818+DRB1*1318          |
| DRB1*080101/080103+DRB1*130701                | DRB1*080201/080202+DRB1*1349          | DRB1*0805+DRB1*1347          | DRB1*0824+DRB1*1355          |
| DRB1*080101/080103+DRB1*1308                  | DRB1*0809+DRB1*1348                   | DRB1*1338+DRB1*1415          |                              |
| DRB1*080101/080103+DRB1*13101                 | DRB1*080401/080404+DRB1*1321          | DRB1*0806+DRB1*131401/131403 | DRB1*0828+DRB1*1349          |
| DRB1*080101/080103+DRB1*131101                | DRB1*0806+DRB1*131402                 |                              |                              |
| DRB1*080101/080103+DRB1*131102                | DRB1*080302+DRB1*1349                 | DRB1*0805+DRB1*1313          | DRB1*0818+DRB1*1355          |
| DRB1*080101/080103+DRB1*1312                  | DRB1*080302+DRB1*1355                 |                              |                              |
| DRB1*080101/080103+DRB1*1313                  | DRB1*080201/080202+DRB1*1321          | DRB1*0817+DRB1*130701        |                              |
| DRB1*080101/080103+DRB1*131401/131403         | DRB1*0817+DRB1*130702                 |                              |                              |
| DRB1*080101/080103+DRB1*131402                | DRB1*0817+DRB1*1353                   |                              |                              |
| DRB1*080101/080103+DRB1*1315                  | DRB1*0806+DRB1*1329                   |                              |                              |
| DRB1*080101/080103+DRB1*1320                  | DRB1*0817+DRB1*1349                   |                              |                              |
| DRB1*080101/080103+DRB1*1321                  | DRB1*080201/080202+DRB1*1304          | DRB1*080302+DRB1*1324        | DRB1*0806+DRB1*1323          |
| DRB1*080101/080103+DRB1*1322                  | DRB1*0817+DRB1*1370                   | DRB1*0828+DRB1*1338          | DRB1*0830+DRB1*1375          |
|                                               | DRB1*1317+DRB1*1355                   |                              |                              |
| DRB1*080101/080103+DRB1*1324                  | DRB1*080201/080202+DRB1*1375          |                              |                              |
| DRB1*080101/080103+DRB1*1325                  | DRB1*0813+DRB1*1321                   |                              |                              |
| DRB1*080101/080103+DRB1*1327                  | DRB1*0806+DRB1*1341                   |                              |                              |
| DRB1*080101/080103+DRB1*1330                  | DRB1*080302+DRB1*1321                 | DRB1*0817+DRB1*1312          |                              |
| DRB1*080101/080103+DRB1*1332                  | DRB1*0806+DRB1*1365                   |                              |                              |
| DRB1*080101/080103+DRB1*1336                  | DRB1*080201/080202+DRB1*1365          |                              |                              |
| DRB1*080101/080103+DRB1*1337                  | DRB1*080201/080202+DRB1*130301/130302 |                              |                              |
| DRB1*080101/080103+DRB1*1340                  | DRB1*080201/080202+DRB1*1332          | DRB1*080401/080404+DRB1*1365 | DRB1*0806+DRB1*1336          |
| DRB1*080101/080103+DRB1*1342                  | DRB1*0805+DRB1*1318                   | DRB1*0806+DRB1*130501/130502 |                              |
| DRB1*080101/080103+DRB1*1347                  | DRB1*080201/080202+DRB1*1355          |                              |                              |
| DRB1*080101/080103+DRB1*1348                  | DRB1*0806+DRB1*1338                   |                              |                              |
| DRB1*080101/080103+DRB1*1349                  | DRB1*0805+DRB1*1355                   |                              |                              |
| DRB1*080101/080103+DRB1*1357                  | DRB1*0817+DRB1*1319                   |                              |                              |
| DRB1*080101/080103+DRB1*1358                  | DRB1*0812+DRB1*1349                   | DRB1*0822+DRB1*1312          |                              |
| DRB1*080101/080103+DRB1*1366                  | DRB1*0817+DRB1*130301/130302          |                              |                              |
| DRB1*080101/080103+DRB1*1368                  | DRB1*0816+DRB1*1352                   |                              |                              |
| DRB1*080101/080103+DRB1*1370                  | DRB1*080201/080202+DRB1*1348          | DRB1*080401/080404+DRB1*1338 |                              |
| DRB1*080101/080103+DRB1*1373                  | DRB1*0826+DRB1*130201                 |                              |                              |
| DRB1*080101/080103+DRB1*1379                  | DRB1*0806+DRB1*1339                   |                              |                              |

|                                               |                                       |                                |                     |
|-----------------------------------------------|---------------------------------------|--------------------------------|---------------------|
| DRB1*080101/080103+DRB1*1381                  | DRB1*0822+DRB1*130301/130302          |                                |                     |
| DRB1*080101/080102+DRB1*1382                  | DRB1*080201/080202+DRB1*1330          | DRB1*080302+DRB1*131401/131403 | DRB1*0830+DRB1*1321 |
| DRB1*080101/080103+DRB1*1383                  | DRB1*0809+DRB1*1304                   | DRB1*0817+DRB1*1308            | DRB1*0835+DRB1*1324 |
| DRB1*080101/080103+DRB1*140101/1454           | DRB1*0806+DRB1*140701/140702          | DRB1*1355+DRB1*1404            |                     |
| DRB1*080101/080103+DRB1*1402                  | DRB1*080201/080202+DRB1*1413          |                                |                     |
| DRB1*080101/080103+DRB1*140301                | DRB1*080201/080202+DRB1*1485          |                                |                     |
| DRB1*080101/080103+DRB1*1404                  | DRB1*0806+DRB1*1468                   |                                |                     |
| DRB1*080101/080103+DRB1*140501                | DRB1*0806+DRB1*144401                 |                                |                     |
| DRB1*080101/080103+DRB1*140503                | DRB1*0806+DRB1*144402                 |                                |                     |
| DRB1*080101/080103+DRB1*1406                  | DRB1*080401/080404+DRB1*1413          | DRB1*0806+DRB1*1402            | DRB1*1355+DRB1*1452 |
| DRB1*080101/080103+DRB1*140701/140702         | DRB1*1355+DRB1*1468                   |                                |                     |
| DRB1*080101/080103+DRB1*1412                  | DRB1*080401/080404+DRB1*1485          | DRB1*0806+DRB1*140301          |                     |
| DRB1*080101/080103+DRB1*1415                  | DRB1*0806+DRB1*0809                   |                                |                     |
| DRB1*080101/080103+DRB1*1417                  | DRB1*0806+DRB1*1430                   | DRB1*0817+DRB1*1480            |                     |
| DRB1*080101/080103+DRB1*142301                | DRB1*0806+DRB1*1414                   |                                |                     |
| DRB1*080101/080103+DRB1*1425                  | DRB1*0808+DRB1*1349                   |                                |                     |
| DRB1*080101/080103+DRB1*1428                  | DRB1*0822+DRB1*1468                   |                                |                     |
| DRB1*080101/080103+DRB1*1429                  | DRB1*0822+DRB1*1402                   |                                |                     |
| DRB1*080101/080103+DRB1*1430                  | DRB1*0817+DRB1*1409                   |                                |                     |
| DRB1*080101/080103+DRB1*143202                | DRB1*0805+DRB1*1455                   | DRB1*1355+DRB1*1431            |                     |
| DRB1*080101/080103+DRB1*1435                  | DRB1*0817+DRB1*140101/1454            |                                |                     |
| DRB1*080101/080103+DRB1*1438                  | DRB1*1355+DRB1*1450                   |                                |                     |
| DRB1*080101/080103+DRB1*1453                  | DRB1*0808+DRB1*1321                   | DRB1*0817+DRB1*1425            |                     |
| DRB1*080101/080103+DRB1*1467                  | DRB1*080201/080202+DRB1*1463          | DRB1*080302+DRB1*1427          |                     |
| DRB1*080101/080103+DRB1*1478                  | DRB1*0806+DRB1*1463                   |                                |                     |
| DRB1*080101/080103+DRB1*1480                  | DRB1*0806+DRB1*1409                   |                                |                     |
| DRB1*080101/080103+DRB1*15010101/15010102     | DRB1*080302+DRB1*1504                 | DRB1*0806+DRB1*150201          | DRB1*0810+DRB1*1515 |
|                                               | DRB1*0817+DRB1*1507                   |                                |                     |
|                                               | DRB1*0806+DRB1*150206                 |                                |                     |
| DRB1*080101/080103+DRB1*150103                | DRB1*080201/080202+DRB1*1512          | DRB1*0806+DRB1*150202/150205   |                     |
| DRB1*080101/080103+DRB1*150104                | DRB1*080302+DRB1*1515                 | DRB1*0817+DRB1*1511            |                     |
| DRB1*080101/080103+DRB1*150201                | DRB1*0806+DRB1*1515                   |                                |                     |
| DRB1*080101/080103+DRB1*1504                  | DRB1*0806+DRB1*1531                   |                                |                     |
| DRB1*080101/080103+DRB1*1505                  | DRB1*0806+DRB1*1511                   |                                |                     |
| DRB1*080101/080103+DRB1*1507                  | DRB1*0823+DRB1*1504                   |                                |                     |
| DRB1*080101/080103+DRB1*1516                  | DRB1*0805+DRB1*1604                   |                                |                     |
| DRB1*080101/080103+DRB1*160102                | DRB1*080302+DRB1*160101               |                                |                     |
| DRB1*080101/080103+DRB1*160501                | DRB1*0817+DRB1*160101                 |                                |                     |
| DRB1*080101/080103+DRB1*1609                  | DRB1*0817+DRB1*160201                 |                                |                     |
| DRB1*080101/080103+DRB1*1610                  | DRB1*080302+DRB1*080401/080404        | DRB1*0806+DRB1*0830            |                     |
| DRB1*080201/080202+DRB1*0810                  | DRB1*0822+DRB1*0830                   |                                |                     |
| DRB1*080201/080202+DRB1*0812                  | DRB1*080302+DRB1*0824                 | DRB1*0805+DRB1*0830            |                     |
| DRB1*080201/080202+DRB1*0818                  | DRB1*080401/080404+DRB1*1347          |                                |                     |
| DRB1*080201/080202+DRB1*0820                  | DRB1*080302+DRB1*0809                 |                                |                     |
| DRB1*080201/080202+DRB1*0835                  | DRB1*0813+DRB1*090102                 |                                |                     |
| DRB1*080201/080202+DRB1*0904                  | DRB1*080401/080404+DRB1*090102        |                                |                     |
| DRB1*080201/080202+DRB1*0906                  | DRB1*080401/080404+DRB1*100101        |                                |                     |
| DRB1*080201/080202+DRB1*1002                  | DRB1*0824+DRB1*1123                   |                                |                     |
| DRB1*080201/080202+DRB1*1101G1                | DRB1*080401/080404+DRB1*111401/111402 | DRB1*0830+DRB1*1103            |                     |
| DRB1*080201/080202+DRB1*110201                | DRB1*080401/080404+DRB1*111101/111102 | DRB1*0824+DRB1*1155            |                     |
| DRB1*080201/080202+DRB1*1103                  | DRB1*080401/080404+DRB1*1101G1        | DRB1*0824+DRB1*1125            | DRB1*0828+DRB1*1137 |
| DRB1*080201/080202+DRB1*110401/110402         | DRB1*1167+DRB1*130701                 |                                |                     |
|                                               | DRB1*080401/080404+DRB1*110105        |                                |                     |
| DRB1*080201/080202+DRB1*110403                | DRB1*0813+DRB1*1101G1                 | DRB1*0824+DRB1*1164            |                     |
| DRB1*080201/080202+DRB1*110801/110802         | DRB1*0809+DRB1*1101G1                 |                                |                     |
| DRB1*080201/080202+DRB1*111001/111002         | DRB1*0830+DRB1*111101/111102          |                                |                     |
| DRB1*080201/080202+DRB1*111401/111402         | DRB1*080401/080404+DRB1*1120          | DRB1*0830+DRB1*1140            | DRB1*1167+DRB1*1336 |
| DRB1*080201/080202+DRB1*1116                  | DRB1*1347+DRB1*1411                   |                                |                     |
| DRB1*080201/080202+DRB1*1117                  | DRB1*080401/080404+DRB1*111901        | DRB1*0830+DRB1*110401/110402   |                     |
| DRB1*080201/080202+DRB1*1118                  | DRB1*0804+DRB1*1145                   | DRB1*0830+DRB1*1101G1          |                     |
| DRB1*080201/080202+DRB1*11301                 | DRB1*0830+DRB1*110103                 |                                |                     |
| DRB1*080201/080202+DRB1*111902                | DRB1*080401/080404+DRB1*1123          | DRB1*1167+DRB1*1347            |                     |
| DRB1*080201/080202+DRB1*1125                  | DRB1*080401/080404+DRB1*1126          |                                |                     |
| DRB1*080201/080202+DRB1*1134                  | DRB1*080401/080404+DRB1*1133          |                                |                     |
| DRB1*080201/080202+DRB1*1135                  | DRB1*080401/080404+DRB1*1168          | DRB1*0813+DRB1*1103            |                     |
| DRB1*080201/080202+DRB1*1136                  | DRB1*080401/080404+DRB1*110801/110802 | DRB1*0813+DRB1*110401/110402   |                     |
| DRB1*080201/080202+DRB1*1142                  | DRB1*080401/080404+DRB1*1139          |                                |                     |
| DRB1*080201/080202+DRB1*1143                  | DRB1*080401/080404+DRB1*1149          |                                |                     |
| DRB1*080201/080202+DRB1*1144                  | DRB1*0830+DRB1*1123                   |                                |                     |
| DRB1*080201/080202+DRB1*1145                  | DRB1*0830+DRB1*1141                   |                                |                     |
| DRB1*080201/080202+DRB1*1148                  | DRB1*080401/080404+DRB1*1137          | DRB1*0831+DRB1*1347            |                     |
| DRB1*080201/080202+DRB1*1156                  | DRB1*0813+DRB1*110601                 |                                |                     |
| DRB1*080201/080202+DRB1*1157                  | DRB1*0813+DRB1*1123                   |                                |                     |
| DRB1*080201/080202+DRB1*1164                  | DRB1*0813+DRB1*111101/111102          |                                |                     |
| DRB1*080201/080202+DRB1*1168                  | DRB1*0830+DRB1*120201                 |                                |                     |
| DRB1*080201/080202+DRB1*120101/1206/1210/1217 | DRB1*0830+DRB1*1215                   |                                |                     |
| DRB1*080201/080202+DRB1*1205                  | DRB1*0813+DRB1*120201                 |                                |                     |
| DRB1*080201/080202+DRB1*1212                  | DRB1*080401/080404+DRB1*130201        | DRB1*0828+DRB1*1336            |                     |
| DRB1*080201/080202+DRB1*130101                | DRB1*0830+DRB1*1363                   |                                |                     |
| DRB1*080201/080202+DRB1*130201                | DRB1*0830+DRB1*1342                   |                                |                     |
| DRB1*080201/080202+DRB1*1306                  | DRB1*0824+DRB1*1347                   |                                |                     |
| DRB1*080201/080202+DRB1*130701                | DRB1*0809+DRB1*1370                   |                                |                     |
| DRB1*080201/080202+DRB1*1308                  | DRB1*080401/080404+DRB1*131401/131403 | DRB1*0828+DRB1*130701          |                     |
| DRB1*080201/080202+DRB1*131101                | DRB1*080401/080404+DRB1*131402        | DRB1*0828+DRB1*130702          |                     |
| DRB1*080201/080202+DRB1*131102                | DRB1*080302+DRB1*130701               | DRB1*0818+DRB1*1347            | DRB1*0824+DRB1*1313 |
| DRB1*080201/080202+DRB1*1312                  | DRB1*0830+DRB1*1349                   |                                |                     |
|                                               | DRB1*080302+DRB1*1347                 | DRB1*0830+DRB1*1355            |                     |
| DRB1*080201/080202+DRB1*1313                  | DRB1*1317+DRB1*1427                   |                                |                     |
| DRB1*080201/080202+DRB1*1315                  | DRB1*080401/080404+DRB1*1329          |                                |                     |
| DRB1*080201/080202+DRB1*1320                  | DRB1*080401/080404+DRB1*1323          | DRB1*0830+DRB1*1324            | DRB1*1317+DRB1*1347 |
| DRB1*080201/080202+DRB1*1322                  | DRB1*0813+DRB1*131401/131403          |                                |                     |
| DRB1*080201/080202+DRB1*1325                  | DRB1*080401/080404+DRB1*1341          |                                |                     |
| DRB1*080201/080202+DRB1*1327                  | DRB1*0813+DRB1*1363                   |                                |                     |
| DRB1*080201/080202+DRB1*1329                  | DRB1*080401/080404+DRB1*1336          |                                |                     |
| DRB1*080201/080202+DRB1*1340                  | DRB1*080401/080404+DRB1*130501/130502 | DRB1*0824+DRB1*1318            |                     |
| DRB1*080201/080202+DRB1*1342                  | DRB1*0808+DRB1*1320                   |                                |                     |
| DRB1*080201/080202+DRB1*1343                  | DRB1*0808+DRB1*1323                   |                                |                     |
| DRB1*080201/080202+DRB1*1345                  | DRB1*0813+DRB1*130501/130502          |                                |                     |
| DRB1*080201/080202+DRB1*1356                  | DRB1*0812+DRB1*130701                 |                                |                     |
| DRB1*080201/080202+DRB1*1358                  | DRB1*0817+DRB1*1337                   |                                |                     |
| DRB1*080201/080202+DRB1*1366                  | DRB1*0825+DRB1*1318                   |                                |                     |
| DRB1*080201/080202+DRB1*1377                  | DRB1*080401/080404+DRB1*1339          |                                |                     |
| DRB1*080201/080202+DRB1*1379                  | DRB1*0822+DRB1*1337                   |                                |                     |
| DRB1*080201/080202+DRB1*1381                  | DRB1*0830+DRB1*131401/131403          |                                |                     |
| DRB1*080201/080202+DRB1*1382                  | DRB1*0809+DRB1*1322                   | DRB1*1323+DRB1*1415            |                     |
| DRB1*080201/080202+DRB1*1383                  | DRB1*080401/080404+DRB1*140701/140702 | DRB1*0808+DRB1*142301          | DRB1*0809+DRB1*1458 |
| DRB1*080201/080202+DRB1*140101/1454           | DRB1*0811+DRB1*1408                   | DRB1*0820+DRB1*1468            | DRB1*1347+DRB1*1404 |
|                                               | DRB1*0813+DRB1*1427                   |                                |                     |
| DRB1*080201/080202+DRB1*140301                | DRB1*080401/080404+DRB1*1468          |                                |                     |
| DRB1*080201/080202+DRB1*1404                  | DRB1*080401/080404+DRB1*144401        |                                |                     |
| DRB1*080201/080202+DRB1*140501                | DRB1*080401/080404+DRB1*144402        |                                |                     |
| DRB1*080201/080202+DRB1*140503                | DRB1*080401/080404+DRB1*1402          | DRB1*1347+DRB1*1452            |                     |
| DRB1*080201/080202+DRB1*1406                  | DRB1*0808+DRB1*1414                   | DRB1*1347+DRB1*1468            |                     |
| DRB1*080201/080202+DRB1*140701/140702         | DRB1*080401/080404+DRB1*140301        |                                |                     |
| DRB1*080201/080202+DRB1*1412                  | DRB1*080401/080404+DRB1*0809          |                                |                     |
| DRB1*080201/080202+DRB1*1415                  | DRB1*0808+DRB1*1308                   |                                |                     |
| DRB1*080201/080202+DRB1*1416                  | DRB1*080401/080404+DRB1*1430          | DRB1*0828+DRB1*1409            |                     |
| DRB1*080201/080202+DRB1*1417                  | DRB1*0809+DRB1*1425                   |                                |                     |
| DRB1*080201/080202+DRB1*1422                  | DRB1*080401/080404+DRB1*1414          |                                |                     |
| DRB1*080201/080202+DRB1*142301                | DRB1*0808+DRB1*130701                 |                                |                     |
| DRB1*080201/080202+DRB1*1425                  | DRB1*0811+DRB1*1434                   | DRB1*0824+DRB1*1455            | DRB1*1347+DRB1*1431 |
| DRB1*080201/080202+DRB1*143202                | DRB1*0828+DRB1*140701/140702          |                                |                     |
| DRB1*080201/080202+DRB1*1435                  | DRB1*1347+DRB1*1450                   |                                |                     |
| DRB1*080201/080202+DRB1*1438                  | DRB1*0808+DRB1*131401/131403          |                                |                     |
| DRB1*080201/080202+DRB1*1453                  |                                       |                                |                     |

|                                           |                                       |                       |                              |
|-------------------------------------------|---------------------------------------|-----------------------|------------------------------|
| DRB1*080201/080202+DRB1*1467              | DRB1*0830+DRB1*1427                   |                       |                              |
| DRB1*080201/080202+DRB1*1469              | DRB1*0813+DRB1*1425                   |                       |                              |
| DRB1*080201/080202+DRB1*1474              | DRB1*1415+DRB1*1469                   |                       |                              |
| DRB1*080201/080202+DRB1*1478              | DRB1*080401/080404+DRB1*1463          | DRB1*0806+DRB1*1467   | DRB1*0810+DRB1*1427          |
| DRB1*080201/080202+DRB1*1480              | DRB1*080401/080404+DRB1*1409          |                       |                              |
| DRB1*080201/080202+DRB1*15010101/15010102 | DRB1*080401/080404+DRB1*150201        | DRB1*0828+DRB1*1511   | DRB1*0830+DRB1*1504          |
| DRB1*080201/080202+DRB1*150103            | DRB1*080401/080404+DRB1*150206        |                       |                              |
| DRB1*080201/080202+DRB1*150104            | DRB1*080401/080404+DRB1*150202/150205 |                       |                              |
| DRB1*080201/080202+DRB1*150201            | DRB1*0830+DRB1*1515                   |                       |                              |
| DRB1*080201/080202+DRB1*1504              | DRB1*080401/080404+DRB1*1515          |                       |                              |
| DRB1*080201/080202+DRB1*1505              | DRB1*080401/080404+DRB1*1531          | DRB1*0813+DRB1*1504   |                              |
| DRB1*080201/080202+DRB1*1507              | DRB1*080401/080404+DRB1*1511          |                       |                              |
| DRB1*080201/080202+DRB1*1510              | DRB1*1317+DRB1*1604                   |                       |                              |
| DRB1*080201/080202+DRB1*1529              | DRB1*0807+DRB1*150201                 |                       |                              |
| DRB1*080201/080202+DRB1*1531              | DRB1*0813+DRB1*1515                   |                       |                              |
| DRB1*080201/080202+DRB1*160102            | DRB1*0824+DRB1*1604                   |                       |                              |
| DRB1*080201/080202+DRB1*160201            | DRB1*0813+DRB1*160101                 |                       |                              |
| DRB1*080201/080202+DRB1*160202            | DRB1*0813+DRB1*160102                 |                       |                              |
| DRB1*080201/080202+DRB1*160501            | DRB1*0830+DRB1*160101                 |                       |                              |
| DRB1*080201/080202+DRB1*1610              | DRB1*0813+DRB1*1609                   |                       |                              |
| DRB1*080302+DRB1*0820                     | DRB1*080401/080404+DRB1*1313          | DRB1*0810+DRB1*1347   |                              |
| DRB1*080302+DRB1*0906                     | DRB1*0810+DRB1*090102                 |                       |                              |
| DRB1*080302+DRB1*1002                     | DRB1*0810+DRB1*100101                 |                       |                              |
| DRB1*080302+DRB1*110201                   | DRB1*0810+DRB1*111401/111402          |                       |                              |
| DRB1*080302+DRB1*110403                   | DRB1*0810+DRB1*110105                 |                       |                              |
| DRB1*080302+DRB1*110601                   | DRB1*0812+DRB1*1101G1                 | DRB1*0822+DRB1*111901 |                              |
| DRB1*080302+DRB1*110602                   | DRB1*0812+DRB1*110105                 |                       |                              |
| DRB1*080302+DRB1*110801/110802            | DRB1*0818+DRB1*1164                   |                       |                              |
| DRB1*080302+DRB1*111001/111002            | DRB1*0835+DRB1*1101G1                 | DRB1*0836+DRB1*111202 |                              |
| DRB1*080302+DRB1*1116                     | DRB1*0810+DRB1*1120                   |                       |                              |
| DRB1*080302+DRB1*1117                     | DRB1*1313+DRB1*1411                   |                       |                              |
| DRB1*080302+DRB1*1118                     | DRB1*0810+DRB1*111901                 |                       |                              |
| DRB1*080302+DRB1*111901                   | DRB1*0818+DRB1*1145                   |                       |                              |
| DRB1*080302+DRB1*1121                     | DRB1*0812+DRB1*111401/111402          |                       |                              |
| DRB1*080302+DRB1*1124                     | DRB1*0816+DRB1*111901                 |                       |                              |
| DRB1*080302+DRB1*1125                     | DRB1*0806+DRB1*1145                   | DRB1*0810+DRB1*1123   | DRB1*1167+DRB1*1313          |
| DRB1*080302+DRB1*1134                     | DRB1*0810+DRB1*1126                   |                       |                              |
| DRB1*080302+DRB1*1135                     | DRB1*0810+DRB1*1133                   |                       |                              |
| DRB1*080302+DRB1*1136                     | DRB1*0810+DRB1*1168                   |                       |                              |
| DRB1*080302+DRB1*1142                     | DRB1*0810+DRB1*110801/110802          |                       |                              |
| DRB1*080302+DRB1*1143                     | DRB1*0810+DRB1*1139                   |                       |                              |
| DRB1*080302+DRB1*1144                     | DRB1*0810+DRB1*1149                   |                       |                              |
| DRB1*080302+DRB1*1146                     | DRB1*0836+DRB1*110404                 |                       |                              |
| DRB1*080302+DRB1*1147                     | DRB1*0812+DRB1*1129                   |                       |                              |
| DRB1*080302+DRB1*115402                   | DRB1*0829+DRB1*1125                   |                       |                              |
| DRB1*080302+DRB1*1156                     | DRB1*0810+DRB1*1137                   | DRB1*0831+DRB1*1313   |                              |
| DRB1*080302+DRB1*1157                     | DRB1*0812+DRB1*110801/110802          |                       |                              |
| DRB1*080302+DRB1*1162                     | DRB1*0836+DRB1*1101G1                 |                       |                              |
| DRB1*080302+DRB1*1213                     | DRB1*0826+DRB1*120101/1206/1210/1217  | DRB1*0836+DRB1*1369   |                              |
| DRB1*080302+DRB1*130101                   | DRB1*0810+DRB1*130201                 |                       |                              |
| DRB1*080302+DRB1*130501/130502            | DRB1*0836+DRB1*135002                 |                       |                              |
| DRB1*080302+DRB1*1308                     | DRB1*0835+DRB1*1370                   |                       |                              |
| DRB1*080302+DRB1*131101                   | DRB1*080401/080404+DRB1*1330          | DRB1*0806+DRB1*1382   | DRB1*0810+DRB1*131401/131403 |
|                                           | DRB1*0828+DRB1*1312                   |                       |                              |
| DRB1*080302+DRB1*131102                   | DRB1*0810+DRB1*131402                 |                       |                              |
| DRB1*080302+DRB1*1312                     | DRB1*0818+DRB1*1313                   |                       |                              |
| DRB1*080302+DRB1*1315                     | DRB1*1317+DRB1*1463                   |                       |                              |
| DRB1*080302+DRB1*1320                     | DRB1*0810+DRB1*1329                   | DRB1*0830+DRB1*1304   | DRB1*1313+DRB1*1317          |
| DRB1*080302+DRB1*1322                     | DRB1*0810+DRB1*1323                   |                       |                              |
| DRB1*080302+DRB1*1325                     | DRB1*0813+DRB1*1330                   |                       |                              |
| DRB1*080302+DRB1*1327                     | DRB1*0810+DRB1*1341                   |                       |                              |
| DRB1*080302+DRB1*1332                     | DRB1*0810+DRB1*1365                   |                       |                              |
| DRB1*080302+DRB1*1336                     | DRB1*0830+DRB1*1365                   |                       |                              |
| DRB1*080302+DRB1*1337                     | DRB1*0830+DRB1*130301/130302          | DRB1*0830+DRB1*1332   |                              |
| DRB1*080302+DRB1*1340                     | DRB1*0810+DRB1*1336                   |                       |                              |
| DRB1*080302+DRB1*1348                     | DRB1*0810+DRB1*1338                   |                       |                              |
| DRB1*080302+DRB1*1354                     | DRB1*0834+DRB1*1375                   |                       |                              |
| DRB1*080302+DRB1*1358                     | DRB1*0812+DRB1*1312                   |                       |                              |
| DRB1*080302+DRB1*1370                     | DRB1*0830+DRB1*1348                   |                       |                              |
| DRB1*080302+DRB1*1379                     | DRB1*0810+DRB1*1339                   |                       |                              |
| DRB1*080302+DRB1*1380                     | DRB1*0833+DRB1*130101                 |                       |                              |
| DRB1*080302+DRB1*1381                     | DRB1*0812+DRB1*130301/130302          |                       |                              |
| DRB1*080302+DRB1*1382                     | DRB1*0830+DRB1*1330                   |                       |                              |
| DRB1*080302+DRB1*1383                     | DRB1*0835+DRB1*1322                   |                       |                              |
| DRB1*080302+DRB1*140101/1454              | DRB1*0810+DRB1*140701/140702          | DRB1*0829+DRB1*1455   | DRB1*0835+DRB1*1458          |
|                                           | DRB1*1313+DRB1*1404                   |                       |                              |
| DRB1*080302+DRB1*1402                     | DRB1*0830+DRB1*1413                   |                       |                              |
| DRB1*080302+DRB1*140301                   | DRB1*0813+DRB1*1463                   | DRB1*0830+DRB1*1485   |                              |
| DRB1*080302+DRB1*1404                     | DRB1*0810+DRB1*1468                   |                       |                              |
| DRB1*080302+DRB1*140501                   | DRB1*0810+DRB1*144401                 |                       |                              |
| DRB1*080302+DRB1*140503                   | DRB1*0810+DRB1*144402                 |                       |                              |
| DRB1*080302+DRB1*1406                     | DRB1*0810+DRB1*1402                   | DRB1*1313+DRB1*1452   |                              |
| DRB1*080302+DRB1*140701/140702            | DRB1*1313+DRB1*1468                   |                       |                              |
| DRB1*080302+DRB1*1412                     | DRB1*0810+DRB1*140301                 | DRB1*0813+DRB1*1478   | DRB1*0809+DRB1*0810          |
| DRB1*080302+DRB1*1415                     | DRB1*080401/080404+DRB1*0835          |                       |                              |
| DRB1*080302+DRB1*1417                     | DRB1*0810+DRB1*1430                   |                       |                              |
| DRB1*080302+DRB1*1422                     | DRB1*0835+DRB1*1425                   |                       |                              |
| DRB1*080302+DRB1*142301                   | DRB1*0810+DRB1*1414                   |                       |                              |
| DRB1*080302+DRB1*1425                     | DRB1*0808+DRB1*1312                   |                       |                              |
| DRB1*080302+DRB1*1428                     | DRB1*0812+DRB1*1468                   |                       |                              |
| DRB1*080302+DRB1*1429                     | DRB1*0812+DRB1*1402                   |                       |                              |
| DRB1*080302+DRB1*143202                   | DRB1*0818+DRB1*1455                   | DRB1*1313+DRB1*1431   |                              |
| DRB1*080302+DRB1*1438                     | DRB1*1313+DRB1*1450                   |                       |                              |
| DRB1*080302+DRB1*1448                     | DRB1*0834+DRB1*1413                   |                       |                              |
| DRB1*080302+DRB1*1453                     | DRB1*0808+DRB1*1330                   |                       |                              |
| DRB1*080302+DRB1*1460                     | DRB1*0823+DRB1*140101/1454            |                       |                              |
| DRB1*080302+DRB1*1467                     | DRB1*0830+DRB1*1463                   |                       |                              |
| DRB1*080302+DRB1*1478                     | DRB1*0810+DRB1*1463                   |                       |                              |
| DRB1*080302+DRB1*1480                     | DRB1*0810+DRB1*1409                   |                       |                              |
| DRB1*080302+DRB1*15010101/15010102        | DRB1*0810+DRB1*150201                 |                       |                              |
| DRB1*080302+DRB1*150103                   | DRB1*0810+DRB1*150206                 |                       |                              |
| DRB1*080302+DRB1*150104                   | DRB1*0810+DRB1*150202/150205          | DRB1*0830+DRB1*1512   |                              |
| DRB1*080302+DRB1*1505                     | DRB1*0810+DRB1*1531                   |                       |                              |
| DRB1*080302+DRB1*1507                     | DRB1*0810+DRB1*1511                   |                       |                              |
| DRB1*080302+DRB1*1516                     | DRB1*0823+DRB1*15010101/15010102      |                       |                              |
| DRB1*080302+DRB1*160102                   | DRB1*0818+DRB1*1604                   |                       |                              |
| DRB1*080302+DRB1*1609                     | DRB1*0817+DRB1*160501                 |                       |                              |
| DRB1*080401/080404+DRB1*0805              | DRB1*0806+DRB1*0824                   |                       |                              |
| DRB1*080401/080404+DRB1*0818              | DRB1*0810+DRB1*0824                   |                       |                              |
| DRB1*080401/080404+DRB1*0904              | DRB1*0813+DRB1*0906                   | DRB1*1167+DRB1*1370   |                              |
| DRB1*080401/080404+DRB1*110201            | DRB1*0828+DRB1*1148                   |                       |                              |
| DRB1*080401/080404+DRB1*1103              | DRB1*0828+DRB1*1141                   |                       |                              |
| DRB1*080401/080404+DRB1*110401/110402     | DRB1*0828+DRB1*1156                   |                       |                              |
| DRB1*080401/080404+DRB1*111001/111002     | DRB1*0809+DRB1*110401/110402          | DRB1*1101G1+DRB1*1415 |                              |
| DRB1*080401/080404+DRB1*1116              | DRB1*1167+DRB1*1340                   |                       |                              |
| DRB1*080401/080404+DRB1*1117              | DRB1*0820+DRB1*1411                   |                       |                              |
| DRB1*080401/080404+DRB1*1125              | DRB1*0820+DRB1*1167                   |                       |                              |
| DRB1*080401/080404+DRB1*1145              | DRB1*0830+DRB1*1125                   |                       |                              |
| DRB1*080401/080404+DRB1*1156              | DRB1*0820+DRB1*0831                   |                       |                              |
| DRB1*080401/080404+DRB1*1164              | DRB1*0813+DRB1*1125                   |                       |                              |
| DRB1*080401/080404+DRB1*130101            | DRB1*0828+DRB1*1340                   |                       |                              |
| DRB1*080401/080404+DRB1*130301/130302     | DRB1*0806+DRB1*1337                   |                       |                              |
| DRB1*080401/080404+DRB1*1304              | DRB1*0806+DRB1*1322                   | DRB1*0810+DRB1*1324   | DRB1*0828+DRB1*1348          |
| DRB1*080401/080404+DRB1*130701            | DRB1*0820+DRB1*0824                   |                       |                              |

|                                           |                                  |                       |                     |
|-------------------------------------------|----------------------------------|-----------------------|---------------------|
| DRB1*080401/080404+DRB1*1308              | DRB1*1370+DRB1*1415              |                       |                     |
| DRB1*080401/080404+DRB1*1312              | DRB1*0810+DRB1*130701            | DRB1*0818+DRB1*0820   |                     |
| DRB1*080401/080404+DRB1*1315              | DRB1*0828+DRB1*1353              |                       |                     |
| DRB1*080401/080404+DRB1*1322              | DRB1*0820+DRB1*1317              | DRB1*0828+DRB1*1370   |                     |
| DRB1*080401/080404+DRB1*1325              | DRB1*0813+DRB1*131101            |                       |                     |
| DRB1*080401/080404+DRB1*1332              | DRB1*0806+DRB1*1340              |                       |                     |
| DRB1*080401/080404+DRB1*1345              | DRB1*0808+DRB1*1322              |                       |                     |
| DRB1*080401/080404+DRB1*1348              | DRB1*0806+DRB1*1370              |                       |                     |
| DRB1*080401/080404+DRB1*1349              | DRB1*0805+DRB1*0820              | DRB1*0806+DRB1*130701 |                     |
| DRB1*080401/080404+DRB1*1356              | DRB1*0813+DRB1*1342              |                       |                     |
| DRB1*080401/080404+DRB1*1357              | DRB1*0828+DRB1*1319              |                       |                     |
| DRB1*080401/080404+DRB1*1366              | DRB1*0828+DRB1*130301/130302     |                       |                     |
| DRB1*080401/080404+DRB1*1375              | DRB1*0806+DRB1*1324              |                       |                     |
| DRB1*080401/080404+DRB1*1382              | DRB1*0830+DRB1*131101            |                       |                     |
| DRB1*080401/080404+DRB1*1383              | DRB1*0828+DRB1*1308              | DRB1*1322+DRB1*1415   |                     |
| DRB1*080401/080404+DRB1*140101/1454       | DRB1*0820+DRB1*1404              | DRB1*1415+DRB1*1458   |                     |
| DRB1*080401/080404+DRB1*1406              | DRB1*0820+DRB1*1452              |                       |                     |
| DRB1*080401/080404+DRB1*1417              | DRB1*0828+DRB1*1480              |                       |                     |
| DRB1*080401/080404+DRB1*1422              | DRB1*1415+DRB1*1425              |                       |                     |
| DRB1*080401/080404+DRB1*143202            | DRB1*0820+DRB1*1431              |                       |                     |
| DRB1*080401/080404+DRB1*1435              | DRB1*0828+DRB1*140101/1454       |                       |                     |
| DRB1*080401/080404+DRB1*1438              | DRB1*0820+DRB1*1450              |                       |                     |
| DRB1*080401/080404+DRB1*1449              | DRB1*0808+DRB1*1420              |                       |                     |
| DRB1*080401/080404+DRB1*1453              | DRB1*0808+DRB1*131101            | DRB1*0828+DRB1*1425   |                     |
| DRB1*080401/080404+DRB1*15010101/15010102 | DRB1*0828+DRB1*1507              |                       |                     |
| DRB1*080401/080404+DRB1*1512              | DRB1*0806+DRB1*150104            |                       |                     |
| DRB1*080401/080404+DRB1*1529              | DRB1*0807+DRB1*15010101/15010102 |                       |                     |
| DRB1*080401/080404+DRB1*1609              | DRB1*0828+DRB1*160101            |                       |                     |
| DRB1*080401/080404+DRB1*1610              | DRB1*0828+DRB1*160201            |                       |                     |
| DRB1*0805+DRB1*0810                       | DRB1*0806+DRB1*0818              |                       |                     |
| DRB1*0805+DRB1*0812                       | DRB1*0818+DRB1*0822              |                       |                     |
| DRB1*0805+DRB1*110201                     | DRB1*0818+DRB1*1103              |                       |                     |
| DRB1*0805+DRB1*110401/110402              | DRB1*0831+DRB1*1321              |                       |                     |
| DRB1*0805+DRB1*111401/111402              | DRB1*0818+DRB1*111101/111102     |                       |                     |
| DRB1*0805+DRB1*1116                       | DRB1*0818+DRB1*1140              |                       |                     |
| DRB1*0805+DRB1*1117                       | DRB1*1349+DRB1*1411              |                       |                     |
| DRB1*0805+DRB1*1118                       | DRB1*0818+DRB1*110401/110402     | DRB1*0831+DRB1*1330   |                     |
| DRB1*0805+DRB1*111901                     | DRB1*0818+DRB1*1101G1            |                       |                     |
| DRB1*0805+DRB1*111902                     | DRB1*0818+DRB1*110103            |                       |                     |
| DRB1*0805+DRB1*1148                       | DRB1*0818+DRB1*1141              | DRB1*0831+DRB1*1338   |                     |
| DRB1*0805+DRB1*1156                       | DRB1*0831+DRB1*1349              |                       |                     |
| DRB1*0805+DRB1*1167                       | DRB1*0817+DRB1*0831              |                       |                     |
| DRB1*0805+DRB1*120101/1206/1210/1217      | DRB1*0818+DRB1*120201            |                       |                     |
| DRB1*0805+DRB1*1205                       | DRB1*0818+DRB1*1215              |                       |                     |
| DRB1*0805+DRB1*130201                     | DRB1*0818+DRB1*1363              |                       |                     |
| DRB1*0805+DRB1*1304                       | DRB1*0818+DRB1*1375              |                       |                     |
| DRB1*0805+DRB1*1306                       | DRB1*0818+DRB1*1342              |                       |                     |
| DRB1*0805+DRB1*130701                     | DRB1*0824+DRB1*1349              |                       |                     |
| DRB1*0805+DRB1*1312                       | DRB1*0818+DRB1*1349              |                       |                     |
| DRB1*0805+DRB1*131401/131403              | DRB1*0824+DRB1*1321              |                       |                     |
| DRB1*0805+DRB1*1322                       | DRB1*0818+DRB1*1324              | DRB1*0824+DRB1*1304   | DRB1*1317+DRB1*1349 |
| DRB1*0805+DRB1*1324                       | DRB1*0824+DRB1*1375              |                       |                     |
| DRB1*0805+DRB1*1330                       | DRB1*0818+DRB1*1321              |                       |                     |
| DRB1*0805+DRB1*1336                       | DRB1*0824+DRB1*1365              |                       |                     |
| DRB1*0805+DRB1*1337                       | DRB1*0824+DRB1*130301/130302     |                       |                     |
| DRB1*0805+DRB1*1340                       | DRB1*0824+DRB1*1332              |                       |                     |
| DRB1*0805+DRB1*1370                       | DRB1*0824+DRB1*1348              |                       |                     |
| DRB1*0805+DRB1*1382                       | DRB1*0818+DRB1*131401/131403     | DRB1*0824+DRB1*1330   |                     |
| DRB1*0805+DRB1*140101/1454                | DRB1*1349+DRB1*1404              |                       |                     |
| DRB1*0805+DRB1*1402                       | DRB1*0824+DRB1*1413              |                       |                     |
| DRB1*0805+DRB1*140301                     | DRB1*0824+DRB1*1485              |                       |                     |
| DRB1*0805+DRB1*1406                       | DRB1*1349+DRB1*1452              |                       |                     |
| DRB1*0805+DRB1*140701/140702              | DRB1*1349+DRB1*1468              |                       |                     |
| DRB1*0805+DRB1*143202                     | DRB1*1349+DRB1*1431              |                       |                     |
| DRB1*0805+DRB1*1435                       | DRB1*1321+DRB1*1404              |                       |                     |
| DRB1*0805+DRB1*1438                       | DRB1*1349+DRB1*1450              |                       |                     |
| DRB1*0805+DRB1*1467                       | DRB1*0818+DRB1*1427              | DRB1*0824+DRB1*1463   |                     |
| DRB1*0805+DRB1*15010101/15010102          | DRB1*0818+DRB1*1504              |                       |                     |
| DRB1*0805+DRB1*150104                     | DRB1*0824+DRB1*1512              |                       |                     |
| DRB1*0805+DRB1*150201                     | DRB1*0818+DRB1*1515              |                       |                     |
| DRB1*0805+DRB1*160501                     | DRB1*0818+DRB1*160101            |                       |                     |
| DRB1*0806+DRB1*0812                       | DRB1*0810+DRB1*0822              |                       |                     |
| DRB1*0806+DRB1*110201                     | DRB1*0810+DRB1*1103              | DRB1*1167+DRB1*1348   |                     |
| DRB1*0806+DRB1*110601                     | DRB1*0822+DRB1*110401/110402     |                       |                     |
| DRB1*0806+DRB1*110602                     | DRB1*0822+DRB1*110403            |                       |                     |
| DRB1*0806+DRB1*1116                       | DRB1*0810+DRB1*1140              | DRB1*1167+DRB1*1332   |                     |
| DRB1*0806+DRB1*1118                       | DRB1*0810+DRB1*110401/110402     |                       |                     |
| DRB1*0806+DRB1*111902                     | DRB1*0810+DRB1*110103            |                       |                     |
| DRB1*0806+DRB1*1121                       | DRB1*0812+DRB1*1103              | DRB1*0822+DRB1*110201 |                     |
| DRB1*0806+DRB1*1124                       | DRB1*0816+DRB1*110401/110402     |                       |                     |
| DRB1*0806+DRB1*1148                       | DRB1*0810+DRB1*1141              |                       |                     |
| DRB1*0806+DRB1*1157                       | DRB1*0822+DRB1*1142              |                       |                     |
| DRB1*0806+DRB1*120101/1206/1210/1217      | DRB1*0810+DRB1*120201            | DRB1*0812+DRB1*1219   |                     |
| DRB1*0806+DRB1*120201                     | DRB1*0822+DRB1*1219              |                       |                     |
| DRB1*0806+DRB1*1205                       | DRB1*0810+DRB1*1215              |                       |                     |
| DRB1*0806+DRB1*130101                     | DRB1*0828+DRB1*1332              |                       |                     |
| DRB1*0806+DRB1*1304                       | DRB1*0810+DRB1*1375              |                       |                     |
| DRB1*0806+DRB1*1306                       | DRB1*0810+DRB1*1345              |                       |                     |
| DRB1*0806+DRB1*1308                       | DRB1*1348+DRB1*1415              |                       |                     |
| DRB1*0806+DRB1*1312                       | DRB1*0810+DRB1*1349              |                       |                     |
| DRB1*0806+DRB1*1313                       | DRB1*0810+DRB1*1355              |                       |                     |
| DRB1*0806+DRB1*1330                       | DRB1*0810+DRB1*1321              |                       |                     |
| DRB1*0806+DRB1*1345                       | DRB1*0808+DRB1*1304              |                       |                     |
| DRB1*0806+DRB1*1373                       | DRB1*0826+DRB1*130101            |                       |                     |
| DRB1*0806+DRB1*1383                       | DRB1*1304+DRB1*1415              |                       |                     |
| DRB1*0806+DRB1*1428                       | DRB1*0822+DRB1*1404              |                       |                     |
| DRB1*0806+DRB1*1429                       | DRB1*0822+DRB1*1406              |                       |                     |
| DRB1*0806+DRB1*15010101/15010102          | DRB1*0810+DRB1*1504              |                       |                     |
| DRB1*0806+DRB1*160501                     | DRB1*0810+DRB1*160101            |                       |                     |
| DRB1*0808+DRB1*0830                       | DRB1*0811+DRB1*0815              |                       |                     |
| DRB1*0808+DRB1*110401/110402              | DRB1*1167+DRB1*1425              |                       |                     |
| DRB1*0808+DRB1*111301/111302              | DRB1*1123+DRB1*1431              |                       |                     |
| DRB1*0808+DRB1*1142                       | DRB1*1167+DRB1*1469              |                       |                     |
| DRB1*0808+DRB1*1325                       | DRB1*0813+DRB1*1453              |                       |                     |
| DRB1*0808+DRB1*1358                       | DRB1*0812+DRB1*1425              |                       |                     |
| DRB1*0808+DRB1*1382                       | DRB1*0830+DRB1*1453              |                       |                     |
| DRB1*0808+DRB1*1383                       | DRB1*1345+DRB1*1415              |                       |                     |
| DRB1*0808+DRB1*1465                       | DRB1*0817+DRB1*143202            |                       |                     |
| DRB1*0809+DRB1*0818                       | DRB1*0824+DRB1*0835              |                       |                     |
| DRB1*0809+DRB1*0820                       | DRB1*1347+DRB1*1415              |                       |                     |
| DRB1*0809+DRB1*0906                       | DRB1*090102+DRB1*1415            |                       |                     |
| DRB1*0809+DRB1*1002                       | DRB1*100101+DRB1*1415            |                       |                     |
| DRB1*0809+DRB1*110201                     | DRB1*111401/111402+DRB1*1415     |                       |                     |
| DRB1*0809+DRB1*1103                       | DRB1*111101/111102+DRB1*1415     |                       |                     |
| DRB1*0809+DRB1*110403                     | DRB1*110105+DRB1*1415            |                       |                     |
| DRB1*0809+DRB1*110801/110802              | DRB1*0813+DRB1*111001/111002     |                       |                     |
| DRB1*0809+DRB1*1116                       | DRB1*1120+DRB1*1415              |                       |                     |
| DRB1*0809+DRB1*1118                       | DRB1*111901+DRB1*1415            |                       |                     |
| DRB1*0809+DRB1*111901                     | DRB1*0830+DRB1*111001/111002     |                       |                     |
| DRB1*0809+DRB1*1125                       | DRB1*1123+DRB1*1415              |                       |                     |
| DRB1*0809+DRB1*1134                       | DRB1*1126+DRB1*1415              |                       |                     |
| DRB1*0809+DRB1*1135                       | DRB1*1133+DRB1*1415              |                       |                     |
| DRB1*0809+DRB1*1136                       | DRB1*1168+DRB1*1415              |                       |                     |
| DRB1*0809+DRB1*1142                       | DRB1*110801/110802+DRB1*1415     |                       |                     |

|                                      |                                      |                       |                     |
|--------------------------------------|--------------------------------------|-----------------------|---------------------|
| DRB1*0809+DRB1*1143                  | DRB1*1139+DRB1*1415                  |                       |                     |
| DRB1*0809+DRB1*1144                  | DRB1*1149+DRB1*1415                  |                       |                     |
| DRB1*0809+DRB1*1156                  | DRB1*1137+DRB1*1415                  |                       |                     |
| DRB1*0809+DRB1*130101                | DRB1*130201+DRB1*1415                |                       |                     |
| DRB1*0809+DRB1*131101                | DRB1*131401/131403+DRB1*1415         |                       |                     |
| DRB1*0809+DRB1*131102                | DRB1*131402+DRB1*1415                |                       |                     |
| DRB1*0809+DRB1*1312                  | DRB1*0835+DRB1*130701                |                       |                     |
| DRB1*0809+DRB1*1313                  | DRB1*0835+DRB1*1347                  |                       |                     |
| DRB1*0809+DRB1*1320                  | DRB1*1329+DRB1*1415                  |                       |                     |
| DRB1*0809+DRB1*1327                  | DRB1*1341+DRB1*1415                  |                       |                     |
| DRB1*0809+DRB1*1330                  | DRB1*0835+DRB1*131401/131403         |                       |                     |
| DRB1*0809+DRB1*1332                  | DRB1*1365+DRB1*1415                  |                       |                     |
| DRB1*0809+DRB1*1340                  | DRB1*1336+DRB1*1415                  |                       |                     |
| DRB1*0809+DRB1*1342                  | DRB1*130501/130502+DRB1*1415         |                       |                     |
| DRB1*0809+DRB1*1379                  | DRB1*1339+DRB1*1415                  |                       |                     |
| DRB1*0809+DRB1*140101/1454           | DRB1*140701/140702+DRB1*1415         |                       |                     |
| DRB1*0809+DRB1*1404                  | DRB1*1415+DRB1*1468                  |                       |                     |
| DRB1*0809+DRB1*140501                | DRB1*1415+DRB1*144401                |                       |                     |
| DRB1*0809+DRB1*140503                | DRB1*1415+DRB1*144402                |                       |                     |
| DRB1*0809+DRB1*1406                  | DRB1*1402+DRB1*1415                  |                       |                     |
| DRB1*0809+DRB1*1412                  | DRB1*140301+DRB1*1415                |                       |                     |
| DRB1*0809+DRB1*1417                  | DRB1*1415+DRB1*1430                  |                       |                     |
| DRB1*0809+DRB1*142301                | DRB1*1414+DRB1*1415                  |                       |                     |
| DRB1*0809+DRB1*1463                  | DRB1*0835+DRB1*1427                  |                       |                     |
| DRB1*0809+DRB1*1469                  | DRB1*0813+DRB1*1422                  |                       |                     |
| DRB1*0809+DRB1*1478                  | DRB1*1415+DRB1*1463                  |                       |                     |
| DRB1*0809+DRB1*1480                  | DRB1*1409+DRB1*1415                  |                       |                     |
| DRB1*0809+DRB1*15010101/15010102     | DRB1*1415+DRB1*150201                |                       |                     |
| DRB1*0809+DRB1*150103                | DRB1*1415+DRB1*150206                |                       |                     |
| DRB1*0809+DRB1*150104                | DRB1*1415+DRB1*150202/150205         |                       |                     |
| DRB1*0809+DRB1*1504                  | DRB1*1415+DRB1*1515                  |                       |                     |
| DRB1*0809+DRB1*1505                  | DRB1*1415+DRB1*1531                  |                       |                     |
| DRB1*0809+DRB1*1507                  | DRB1*1415+DRB1*1511                  |                       |                     |
| DRB1*0810+DRB1*110601                | DRB1*0812+DRB1*110401/110402         | DRB1*0822+DRB1*1118   | DRB1*1167+DRB1*1358 |
| DRB1*0810+DRB1*110602                | DRB1*0812+DRB1*110403                |                       |                     |
| DRB1*0810+DRB1*1109                  | DRB1*0836+DRB1*1158                  |                       |                     |
| DRB1*0810+DRB1*111001/111002         | DRB1*0835+DRB1*110401/110402         |                       |                     |
| DRB1*0810+DRB1*1121                  | DRB1*0812+DRB1*110201                |                       |                     |
| DRB1*0810+DRB1*1124                  | DRB1*0816+DRB1*1118                  |                       |                     |
| DRB1*0810+DRB1*1157                  | DRB1*0812+DRB1*1142                  |                       |                     |
| DRB1*0810+DRB1*1162                  | DRB1*0836+DRB1*110401/110402         |                       |                     |
| DRB1*0810+DRB1*120202                | DRB1*0822+DRB1*120302                |                       |                     |
| DRB1*0810+DRB1*1315                  | DRB1*1317+DRB1*1478                  |                       |                     |
| DRB1*0810+DRB1*1428                  | DRB1*0812+DRB1*1404                  |                       |                     |
| DRB1*0810+DRB1*1429                  | DRB1*0812+DRB1*1406                  |                       |                     |
| DRB1*0810+DRB1*1467                  | DRB1*0830+DRB1*1478                  |                       |                     |
| DRB1*0812+DRB1*110103                | DRB1*0822+DRB1*111902                |                       |                     |
| DRB1*0812+DRB1*111001/111002         | DRB1*0835+DRB1*110601                |                       |                     |
| DRB1*0812+DRB1*1123                  | DRB1*0822+DRB1*1145                  |                       |                     |
| DRB1*0812+DRB1*1140                  | DRB1*0822+DRB1*1116                  |                       |                     |
| DRB1*0812+DRB1*1141                  | DRB1*0822+DRB1*1148                  |                       |                     |
| DRB1*0812+DRB1*1162                  | DRB1*0836+DRB1*110601                |                       |                     |
| DRB1*0812+DRB1*120201                | DRB1*0822+DRB1*120101/1206/1210/1217 |                       |                     |
| DRB1*0812+DRB1*1215                  | DRB1*0822+DRB1*1205                  |                       |                     |
| DRB1*0812+DRB1*131101                | DRB1*0828+DRB1*1358                  |                       |                     |
| DRB1*0812+DRB1*131401/131403         | DRB1*0822+DRB1*1382                  |                       |                     |
| DRB1*0812+DRB1*1321                  | DRB1*0817+DRB1*1358                  | DRB1*0822+DRB1*1330   |                     |
| DRB1*0812+DRB1*1324                  | DRB1*0822+DRB1*1322                  |                       |                     |
| DRB1*0812+DRB1*1337                  | DRB1*0830+DRB1*1381                  |                       |                     |
| DRB1*0812+DRB1*1342                  | DRB1*0822+DRB1*1306                  |                       |                     |
| DRB1*0812+DRB1*1365                  | DRB1*0822+DRB1*1313                  |                       |                     |
| DRB1*0812+DRB1*1363                  | DRB1*0822+DRB1*130201                |                       |                     |
| DRB1*0812+DRB1*1375                  | DRB1*0822+DRB1*1304                  |                       |                     |
| DRB1*0812+DRB1*140701/140702         | DRB1*1313+DRB1*1428                  |                       |                     |
| DRB1*0812+DRB1*1427                  | DRB1*0822+DRB1*1467                  |                       |                     |
| DRB1*0812+DRB1*1504                  | DRB1*0822+DRB1*15010101/15010102     |                       |                     |
| DRB1*0812+DRB1*1515                  | DRB1*0822+DRB1*150201                |                       |                     |
| DRB1*0812+DRB1*160101                | DRB1*0822+DRB1*160501                |                       |                     |
| DRB1*0813+DRB1*110201                | DRB1*0830+DRB1*1136                  |                       |                     |
| DRB1*0813+DRB1*111401/111402         | DRB1*0830+DRB1*1168                  |                       |                     |
| DRB1*0813+DRB1*1118                  | DRB1*0830+DRB1*1142                  |                       |                     |
| DRB1*0813+DRB1*111901                | DRB1*0830+DRB1*110801/110802         |                       |                     |
| DRB1*0813+DRB1*1145                  | DRB1*0830+DRB1*1164                  |                       |                     |
| DRB1*0813+DRB1*120101/1206/1210/1217 | DRB1*0830+DRB1*1212                  |                       |                     |
| DRB1*0813+DRB1*130101                | DRB1*0830+DRB1*1320                  |                       |                     |
| DRB1*0813+DRB1*130201                | DRB1*0830+DRB1*1329                  |                       |                     |
| DRB1*0813+DRB1*130301/130302         | DRB1*0830+DRB1*1388                  |                       |                     |
| DRB1*0813+DRB1*1315                  | DRB1*1317+DRB1*140301                |                       |                     |
| DRB1*0813+DRB1*1327                  | DRB1*0830+DRB1*1371                  |                       |                     |
| DRB1*0813+DRB1*1357                  | DRB1*1317+DRB1*1440                  |                       |                     |
| DRB1*0813+DRB1*1379                  | DRB1*0830+DRB1*1378                  |                       |                     |
| DRB1*0813+DRB1*1382                  | DRB1*0830+DRB1*1325                  |                       |                     |
| DRB1*0813+DRB1*1445                  | DRB1*0830+DRB1*140501                |                       |                     |
| DRB1*0813+DRB1*1467                  | DRB1*0830+DRB1*140301                |                       |                     |
| DRB1*0813+DRB1*15010101/15010102     | DRB1*0830+DRB1*1505                  |                       |                     |
| DRB1*0813+DRB1*150201                | DRB1*0830+DRB1*1531                  |                       |                     |
| DRB1*0813+DRB1*15030101/15030102     | DRB1*0830+DRB1*1523                  |                       |                     |
| DRB1*0813+DRB1*160501                | DRB1*0830+DRB1*160201                |                       |                     |
| DRB1*0815+DRB1*142301                | DRB1*0830+DRB1*1408                  |                       |                     |
| DRB1*0816+DRB1*110601                | DRB1*0822+DRB1*1124                  |                       |                     |
| DRB1*0817+DRB1*0820                  | DRB1*0828+DRB1*1355                  |                       |                     |
| DRB1*0817+DRB1*110401/110402         | DRB1*1167+DRB1*1321                  |                       |                     |
| DRB1*0817+DRB1*1118                  | DRB1*1167+DRB1*1330                  |                       |                     |
| DRB1*0817+DRB1*131101                | DRB1*0828+DRB1*1321                  |                       |                     |
| DRB1*0817+DRB1*1381                  | DRB1*0822+DRB1*1366                  |                       |                     |
| DRB1*0817+DRB1*1406                  | DRB1*0828+DRB1*1413                  |                       |                     |
| DRB1*0817+DRB1*1412                  | DRB1*0828+DRB1*1485                  |                       |                     |
| DRB1*0818+DRB1*1117                  | DRB1*1312+DRB1*1411                  |                       |                     |
| DRB1*0818+DRB1*115401                | DRB1*0829+DRB1*110403                |                       |                     |
| DRB1*0818+DRB1*115402                | DRB1*0829+DRB1*110401/110402         |                       |                     |
| DRB1*0818+DRB1*1156                  | DRB1*0831+DRB1*1312                  |                       |                     |
| DRB1*0818+DRB1*130701                | DRB1*0824+DRB1*1312                  |                       |                     |
| DRB1*0818+DRB1*1322                  | DRB1*1312+DRB1*1317                  |                       |                     |
| DRB1*0818+DRB1*140101/1454           | DRB1*0829+DRB1*143202                | DRB1*1312+DRB1*1404   |                     |
| DRB1*0818+DRB1*140102                | DRB1*0829+DRB1*143201                |                       |                     |
| DRB1*0818+DRB1*1404                  | DRB1*0829+DRB1*1431                  |                       |                     |
| DRB1*0818+DRB1*1406                  | DRB1*1312+DRB1*1452                  |                       |                     |
| DRB1*0818+DRB1*140701/140702         | DRB1*1312+DRB1*1468                  |                       |                     |
| DRB1*0818+DRB1*1408                  | DRB1*0829+DRB1*1434                  |                       |                     |
| DRB1*0818+DRB1*143202                | DRB1*1312+DRB1*1431                  |                       |                     |
| DRB1*0818+DRB1*1433                  | DRB1*0829+DRB1*1417                  |                       |                     |
| DRB1*0818+DRB1*1435                  | DRB1*1330+DRB1*1404                  |                       |                     |
| DRB1*0818+DRB1*1438                  | DRB1*1312+DRB1*1450                  |                       |                     |
| DRB1*0818+DRB1*1451                  | DRB1*0829+DRB1*1402                  |                       |                     |
| DRB1*0820+DRB1*0835                  | DRB1*1313+DRB1*1415                  |                       |                     |
| DRB1*0820+DRB1*090102                | DRB1*0906+DRB1*1347                  |                       |                     |
| DRB1*0820+DRB1*100101                | DRB1*1002+DRB1*1347                  |                       |                     |
| DRB1*0820+DRB1*111010/111011         | DRB1*110401/110402+DRB1*1347         | DRB1*1125+DRB1*130701 |                     |
| DRB1*0820+DRB1*110105                | DRB1*110403+DRB1*1347                |                       |                     |
| DRB1*0820+DRB1*110201                | DRB1*1125+DRB1*1370                  |                       |                     |
| DRB1*0820+DRB1*110801/110802         | DRB1*1142+DRB1*1347                  |                       |                     |
| DRB1*0820+DRB1*1109                  | DRB1*1137+DRB1*1318                  |                       |                     |
| DRB1*0820+DRB1*111101/111102         | DRB1*1103+DRB1*1347                  | DRB1*1155+DRB1*130701 |                     |
| DRB1*0820+DRB1*111401/111402         | DRB1*110201+DRB1*1347                | DRB1*1123+DRB1*1370   |                     |

|                                      |                                  |                              |                     |
|--------------------------------------|----------------------------------|------------------------------|---------------------|
| DRB1*0820+DRB1*1116                  | DRB1*1125+DRB1*1340              | DRB1*1148+DRB1*1318          |                     |
| DRB1*0820+DRB1*111901                | DRB1*1118+DRB1*1347              |                              |                     |
| DRB1*0820+DRB1*1120                  | DRB1*1116+DRB1*1347              | DRB1*1123+DRB1*1340          | DRB1*1125+DRB1*1336 |
| DRB1*0820+DRB1*1123                  | DRB1*1125+DRB1*1347              |                              |                     |
| DRB1*0820+DRB1*1126                  | DRB1*1134+DRB1*1347              |                              |                     |
| DRB1*0820+DRB1*1133                  | DRB1*1135+DRB1*1347              |                              |                     |
| DRB1*0820+DRB1*1137                  | DRB1*1156+DRB1*1347              |                              |                     |
| DRB1*0820+DRB1*1139                  | DRB1*1143+DRB1*1347              |                              |                     |
| DRB1*0820+DRB1*1140                  | DRB1*1141+DRB1*1318              |                              |                     |
| DRB1*0820+DRB1*1149                  | DRB1*1144+DRB1*1347              |                              |                     |
| DRB1*0820+DRB1*1168                  | DRB1*1136+DRB1*1347              |                              |                     |
| DRB1*0820+DRB1*130101                | DRB1*1318+DRB1*1370              |                              |                     |
| DRB1*0820+DRB1*130201                | DRB1*130101+DRB1*1347            |                              |                     |
| DRB1*0820+DRB1*130501/130502         | DRB1*130701+DRB1*1318            | DRB1*1342+DRB1*1347          |                     |
| DRB1*0820+DRB1*131401/131403         | DRB1*131101+DRB1*1347            |                              |                     |
| DRB1*0820+DRB1*131402                | DRB1*131102+DRB1*1347            |                              |                     |
| DRB1*0820+DRB1*1321                  | DRB1*131101+DRB1*1355            |                              |                     |
| DRB1*0820+DRB1*1323                  | DRB1*1322+DRB1*1347              |                              |                     |
| DRB1*0820+DRB1*1329                  | DRB1*1320+DRB1*1347              |                              |                     |
| DRB1*0820+DRB1*1330                  | DRB1*131101+DRB1*1313            |                              |                     |
| DRB1*0820+DRB1*1336                  | DRB1*1340+DRB1*1347              |                              |                     |
| DRB1*0820+DRB1*1338                  | DRB1*1347+DRB1*1348              | DRB1*1355+DRB1*1370          |                     |
| DRB1*0820+DRB1*1339                  | DRB1*1347+DRB1*1379              |                              |                     |
| DRB1*0820+DRB1*1341                  | DRB1*1327+DRB1*1347              |                              |                     |
| DRB1*0820+DRB1*1365                  | DRB1*1332+DRB1*1347              | DRB1*1340+DRB1*1355          |                     |
| DRB1*0820+DRB1*1402                  | DRB1*1347+DRB1*1406              |                              |                     |
| DRB1*0820+DRB1*140301                | DRB1*1347+DRB1*1412              |                              |                     |
| DRB1*0820+DRB1*140701/140702         | DRB1*1347+DRB1*140101/1454       |                              |                     |
| DRB1*0820+DRB1*1409                  | DRB1*1347+DRB1*1480              |                              |                     |
| DRB1*0820+DRB1*1413                  | DRB1*1355+DRB1*1406              |                              |                     |
| DRB1*0820+DRB1*1414                  | DRB1*1347+DRB1*142301            |                              |                     |
| DRB1*0820+DRB1*1430                  | DRB1*1347+DRB1*1417              |                              |                     |
| DRB1*0820+DRB1*144401                | DRB1*1347+DRB1*140501            |                              |                     |
| DRB1*0820+DRB1*144402                | DRB1*1347+DRB1*140503            |                              |                     |
| DRB1*0820+DRB1*1463                  | DRB1*1347+DRB1*1478              |                              |                     |
| DRB1*0820+DRB1*1485                  | DRB1*1355+DRB1*1412              |                              |                     |
| DRB1*0820+DRB1*150201                | DRB1*1347+DRB1*15010101/15010102 |                              |                     |
| DRB1*0820+DRB1*150202/150205         | DRB1*1347+DRB1*150104            |                              |                     |
| DRB1*0820+DRB1*150206                | DRB1*1347+DRB1*150103            |                              |                     |
| DRB1*0820+DRB1*1511                  | DRB1*1347+DRB1*1507              |                              |                     |
| DRB1*0820+DRB1*1515                  | DRB1*1347+DRB1*1504              |                              |                     |
| DRB1*0820+DRB1*1527                  | DRB1*1344+DRB1*1604              |                              |                     |
| DRB1*0820+DRB1*1531                  | DRB1*1347+DRB1*1505              |                              |                     |
| DRB1*0822+DRB1*140701/140702         | DRB1*1355+DRB1*1428              |                              |                     |
| DRB1*0824+DRB1*110201                | DRB1*0831+DRB1*1323              | DRB1*1137+DRB1*1317          |                     |
| DRB1*0824+DRB1*110401/110402         | DRB1*0831+DRB1*131401/131403     |                              |                     |
| DRB1*0824+DRB1*1116                  | DRB1*0831+DRB1*130201            |                              |                     |
| DRB1*0824+DRB1*1117                  | DRB1*0831+DRB1*1414              | DRB1*130701+DRB1*1411        |                     |
| DRB1*0824+DRB1*1118                  | DRB1*0831+DRB1*1382              |                              |                     |
| DRB1*0824+DRB1*1140                  | DRB1*0831+DRB1*1363              |                              |                     |
| DRB1*0824+DRB1*1142                  | DRB1*0831+DRB1*1325              |                              |                     |
| DRB1*0824+DRB1*1156                  | DRB1*0831+DRB1*130701            |                              |                     |
| DRB1*0824+DRB1*1158                  | DRB1*0831+DRB1*135002            |                              |                     |
| DRB1*0824+DRB1*1322                  | DRB1*130701+DRB1*1317            |                              |                     |
| DRB1*0824+DRB1*1377                  | DRB1*0825+DRB1*1342              |                              |                     |
| DRB1*0824+DRB1*140101/1454           | DRB1*130701+DRB1*1404            |                              |                     |
| DRB1*0824+DRB1*1406                  | DRB1*130701+DRB1*1452            |                              |                     |
| DRB1*0824+DRB1*140701/140702         | DRB1*130701+DRB1*1468            |                              |                     |
| DRB1*0824+DRB1*143202                | DRB1*130701+DRB1*1431            | DRB1*131401/131403+DRB1*1404 |                     |
| DRB1*0824+DRB1*1435                  | DRB1*131101+DRB1*1468            |                              |                     |
| DRB1*0824+DRB1*1438                  | DRB1*130701+DRB1*1450            |                              |                     |
| DRB1*0824+DRB1*1510                  | DRB1*1317+DRB1*160102            |                              |                     |
| DRB1*0825+DRB1*1123                  | DRB1*0834+DRB1*110103            |                              |                     |
| DRB1*0825+DRB1*1145                  | DRB1*0834+DRB1*111902            |                              |                     |
| DRB1*0825+DRB1*1604                  | DRB1*0834+DRB1*160101            |                              |                     |
| DRB1*0828+DRB1*1101G1                | DRB1*1167+DRB1*131401/131403     |                              |                     |
| DRB1*0828+DRB1*110201                | DRB1*1125+DRB1*1317              | DRB1*1167+DRB1*1322          |                     |
| DRB1*0828+DRB1*1103                  | DRB1*1167+DRB1*1324              |                              |                     |
| DRB1*0828+DRB1*110401/110402         | DRB1*1167+DRB1*131101            |                              |                     |
| DRB1*0828+DRB1*110801/110802         | DRB1*1167+DRB1*1325              |                              |                     |
| DRB1*0828+DRB1*1109                  | DRB1*1167+DRB1*130501/130502     |                              |                     |
| DRB1*0828+DRB1*111401/111402         | DRB1*1123+DRB1*1317              | DRB1*1167+DRB1*1323          |                     |
| DRB1*0828+DRB1*1115                  | DRB1*1167+DRB1*1362              |                              |                     |
| DRB1*0828+DRB1*1116                  | DRB1*1167+DRB1*130101            |                              |                     |
| DRB1*0828+DRB1*1117                  | DRB1*1167+DRB1*142301            |                              |                     |
| DRB1*0828+DRB1*111901                | DRB1*1167+DRB1*1382              |                              |                     |
| DRB1*0828+DRB1*1120                  | DRB1*1167+DRB1*130201            |                              |                     |
| DRB1*0828+DRB1*1128                  | DRB1*1167+DRB1*135001            |                              |                     |
| DRB1*0828+DRB1*1134                  | DRB1*1167+DRB1*1344              |                              |                     |
| DRB1*0828+DRB1*1204                  | DRB1*1167+DRB1*1209              |                              |                     |
| DRB1*0828+DRB1*130101                | DRB1*1317+DRB1*1318              |                              |                     |
| DRB1*0828+DRB1*1414                  | DRB1*1415+DRB1*1442              |                              |                     |
| DRB1*0828+DRB1*1422                  | DRB1*1415+DRB1*1453              |                              |                     |
| DRB1*0829+DRB1*111301/111302         | DRB1*1330+DRB1*1411              |                              |                     |
| DRB1*0830+DRB1*090102                | DRB1*0834+DRB1*090202            |                              |                     |
| DRB1*0830+DRB1*120101/1206/1210/1217 | DRB1*0834+DRB1*1209              |                              |                     |
| DRB1*0830+DRB1*1315                  | DRB1*1317+DRB1*1467              |                              |                     |
| DRB1*0830+DRB1*1354                  | DRB1*0834+DRB1*1324              |                              |                     |
| DRB1*0830+DRB1*1448                  | DRB1*0834+DRB1*1402              |                              |                     |
| DRB1*0831+DRB1*1117                  | DRB1*1156+DRB1*1411              |                              |                     |
| DRB1*0831+DRB1*1123                  | DRB1*1137+DRB1*1167              |                              |                     |
| DRB1*0831+DRB1*1125                  | DRB1*1156+DRB1*1167              |                              |                     |
| DRB1*0831+DRB1*1155                  | DRB1*1141+DRB1*1167              |                              |                     |
| DRB1*0831+DRB1*1322                  | DRB1*1156+DRB1*1317              |                              |                     |
| DRB1*0831+DRB1*140101/1454           | DRB1*1156+DRB1*1404              |                              |                     |
| DRB1*0831+DRB1*1402                  | DRB1*1137+DRB1*1452              |                              |                     |
| DRB1*0831+DRB1*1406                  | DRB1*1156+DRB1*1452              |                              |                     |
| DRB1*0831+DRB1*140701/140702         | DRB1*1137+DRB1*1404              | DRB1*1156+DRB1*1468          | DRB1*1411+DRB1*1425 |
| DRB1*0831+DRB1*143202                | DRB1*1156+DRB1*1431              |                              |                     |
| DRB1*0831+DRB1*1435                  | DRB1*110401/110402+DRB1*1404     | DRB1*115402+DRB1*1431        |                     |
| DRB1*0831+DRB1*1438                  | DRB1*1156+DRB1*1450              |                              |                     |
| DRB1*0835+DRB1*1162                  | DRB1*0836+DRB1*111001/111002     |                              |                     |
| DRB1*0835+DRB1*131101                | DRB1*1330+DRB1*1415              |                              |                     |
| DRB1*090102+DRB1*1002                | DRB1*0906+DRB1*100101            |                              |                     |
| DRB1*090102+DRB1*110201              | DRB1*0906+DRB1*111401/111402     |                              |                     |
| DRB1*090102+DRB1*1103                | DRB1*0906+DRB1*111101/111102     |                              |                     |
| DRB1*090102+DRB1*110401/110402       | DRB1*0906+DRB1*1101G1            |                              |                     |
| DRB1*090102+DRB1*110403              | DRB1*0906+DRB1*110105            |                              |                     |
| DRB1*090102+DRB1*110404              | DRB1*090104+DRB1*110401/110402   |                              |                     |
| DRB1*090102+DRB1*110801/110802       | DRB1*0904+DRB1*1101G1            |                              |                     |
| DRB1*090102+DRB1*111202              | DRB1*090104+DRB1*111201          |                              |                     |
| DRB1*090102+DRB1*1116                | DRB1*0906+DRB1*1120              |                              |                     |
| DRB1*090102+DRB1*1118                | DRB1*0906+DRB1*111901            |                              |                     |
| DRB1*090102+DRB1*1125                | DRB1*0906+DRB1*1123              |                              |                     |
| DRB1*090102+DRB1*1134                | DRB1*0906+DRB1*1126              |                              |                     |
| DRB1*090102+DRB1*1135                | DRB1*0906+DRB1*1133              | DRB1*0906+DRB1*1168          |                     |
| DRB1*090102+DRB1*1136                | DRB1*0904+DRB1*1103              | DRB1*0906+DRB1*110801/110802 |                     |
| DRB1*090102+DRB1*1142                | DRB1*0904+DRB1*110401/110402     |                              |                     |
| DRB1*090102+DRB1*1143                | DRB1*0906+DRB1*1139              |                              |                     |
| DRB1*090102+DRB1*1144                | DRB1*0906+DRB1*1149              |                              |                     |
| DRB1*090102+DRB1*1156                | DRB1*0906+DRB1*1137              |                              |                     |
| DRB1*090102+DRB1*1157                | DRB1*0904+DRB1*110601            |                              |                     |
| DRB1*090102+DRB1*1164                | DRB1*0904+DRB1*1123              |                              |                     |
| DRB1*090102+DRB1*1168                | DRB1*0904+DRB1*111101/111102     |                              |                     |

|                                    |                                        |                                       |                              |
|------------------------------------|----------------------------------------|---------------------------------------|------------------------------|
| DRB1*090102+DRB1*1209              | DRB1*090202+DRB1*120101/1206/1210/1217 |                                       |                              |
| DRB1*090102+DRB1*1212              | DRB1*0904+DRB1*120201                  |                                       |                              |
| DRB1*090102+DRB1*130101            | DRB1*0906+DRB1*130201                  |                                       |                              |
| DRB1*090102+DRB1*131101            | DRB1*0906+DRB1*131401/131403           |                                       |                              |
| DRB1*090102+DRB1*131102            | DRB1*0906+DRB1*131402                  |                                       |                              |
| DRB1*090102+DRB1*1320              | DRB1*0906+DRB1*1329                    |                                       |                              |
| DRB1*090102+DRB1*1321              | DRB1*0908+DRB1*1346                    |                                       |                              |
| DRB1*090102+DRB1*1322              | DRB1*0906+DRB1*1323                    |                                       |                              |
| DRB1*090102+DRB1*1324              | DRB1*090202+DRB1*1354                  |                                       |                              |
| DRB1*090102+DRB1*1325              | DRB1*0904+DRB1*131401/131403           |                                       |                              |
| DRB1*090102+DRB1*1327              | DRB1*0906+DRB1*1341                    |                                       |                              |
| DRB1*090102+DRB1*1329              | DRB1*0904+DRB1*1363                    |                                       |                              |
| DRB1*090102+DRB1*1332              | DRB1*0906+DRB1*1365                    |                                       |                              |
| DRB1*090102+DRB1*1340              | DRB1*0906+DRB1*1336                    |                                       |                              |
| DRB1*090102+DRB1*1342              | DRB1*0906+DRB1*130501/130502           |                                       |                              |
| DRB1*090102+DRB1*1348              | DRB1*0906+DRB1*1338                    |                                       |                              |
| DRB1*090102+DRB1*135002            | DRB1*090104+DRB1*135001                |                                       |                              |
| DRB1*090102+DRB1*1356              | DRB1*0904+DRB1*130501/130502           |                                       |                              |
| DRB1*090102+DRB1*1379              | DRB1*0906+DRB1*1339                    |                                       |                              |
| DRB1*090102+DRB1*140101/1454       | DRB1*0906+DRB1*140701/140702           |                                       |                              |
| DRB1*090102+DRB1*1402              | DRB1*090202+DRB1*1448                  |                                       |                              |
| DRB1*090102+DRB1*140301            | DRB1*0904+DRB1*1427                    |                                       |                              |
| DRB1*090102+DRB1*1404              | DRB1*0906+DRB1*1468                    |                                       |                              |
| DRB1*090102+DRB1*140501            | DRB1*0906+DRB1*144401                  |                                       |                              |
| DRB1*090102+DRB1*140503            | DRB1*0906+DRB1*144402                  |                                       |                              |
| DRB1*090102+DRB1*1406              | DRB1*0906+DRB1*1402                    |                                       |                              |
| DRB1*090102+DRB1*1412              | DRB1*0906+DRB1*140301                  |                                       |                              |
| DRB1*090102+DRB1*1417              | DRB1*0906+DRB1*1430                    |                                       |                              |
| DRB1*090102+DRB1*142301            | DRB1*0906+DRB1*1414                    |                                       |                              |
| DRB1*090102+DRB1*1469              | DRB1*0904+DRB1*1425                    |                                       |                              |
| DRB1*090102+DRB1*1478              | DRB1*0906+DRB1*1463                    |                                       |                              |
| DRB1*090102+DRB1*1480              | DRB1*0906+DRB1*1409                    |                                       |                              |
| DRB1*090102+DRB1*15010101/15010102 | DRB1*0906+DRB1*150201                  |                                       |                              |
| DRB1*090102+DRB1*150103            | DRB1*0906+DRB1*150206                  |                                       |                              |
| DRB1*090102+DRB1*150104            | DRB1*0906+DRB1*150202/150205           |                                       |                              |
| DRB1*090102+DRB1*150105            | DRB1*090103+DRB1*15010101/15010102     |                                       |                              |
| DRB1*090102+DRB1*1504              | DRB1*0906+DRB1*1515                    |                                       |                              |
| DRB1*090102+DRB1*1505              | DRB1*0904+DRB1*1504                    | DRB1*0906+DRB1*1531                   |                              |
| DRB1*090102+DRB1*1507              | DRB1*0906+DRB1*1511                    |                                       |                              |
| DRB1*090102+DRB1*1531              | DRB1*0904+DRB1*1515                    |                                       |                              |
| DRB1*090102+DRB1*160201            | DRB1*0904+DRB1*160101                  |                                       |                              |
| DRB1*090102+DRB1*160202            | DRB1*0904+DRB1*160102                  |                                       |                              |
| DRB1*090102+DRB1*1610              | DRB1*0904+DRB1*1609                    |                                       |                              |
| DRB1*090104+DRB1*1142              | DRB1*0904+DRB1*110404                  |                                       |                              |
| DRB1*090201+DRB1*130201            | DRB1*090202+DRB1*130203                |                                       |                              |
| DRB1*090201+DRB1*130701            | DRB1*090202+DRB1*130702                |                                       |                              |
| DRB1*090201+DRB1*131101            | DRB1*090202+DRB1*131102                |                                       |                              |
| DRB1*090201+DRB1*131401/131403     | DRB1*090202+DRB1*131402                |                                       |                              |
| DRB1*090201+DRB1*150104            | DRB1*090202+DRB1*15010101/15010102     |                                       |                              |
| DRB1*090201+DRB1*150202/150205     | DRB1*090202+DRB1*150201                |                                       |                              |
| DRB1*0904+DRB1*1125                | DRB1*0906+DRB1*1164                    |                                       |                              |
| DRB1*0904+DRB1*131101              | DRB1*0906+DRB1*1325                    |                                       |                              |
| DRB1*0904+DRB1*1342                | DRB1*0906+DRB1*1356                    |                                       |                              |
| DRB1*100101+DRB1*110201            | DRB1*1002+DRB1*111401/111402           |                                       |                              |
| DRB1*100101+DRB1*1103              | DRB1*1002+DRB1*111101/111102           |                                       |                              |
| DRB1*100101+DRB1*110401/110402     | DRB1*1002+DRB1*1101G1                  |                                       |                              |
| DRB1*100101+DRB1*110403            | DRB1*1002+DRB1*110105                  |                                       |                              |
| DRB1*100101+DRB1*1116              | DRB1*1002+DRB1*1120                    |                                       |                              |
| DRB1*100101+DRB1*1118              | DRB1*1002+DRB1*111901                  |                                       |                              |
| DRB1*100101+DRB1*1125              | DRB1*1002+DRB1*1123                    |                                       |                              |
| DRB1*100101+DRB1*1134              | DRB1*1002+DRB1*1126                    |                                       |                              |
| DRB1*100101+DRB1*1135              | DRB1*1002+DRB1*1133                    |                                       |                              |
| DRB1*100101+DRB1*1136              | DRB1*1002+DRB1*1168                    |                                       |                              |
| DRB1*100101+DRB1*1142              | DRB1*1002+DRB1*110801/110802           |                                       |                              |
| DRB1*100101+DRB1*1143              | DRB1*1002+DRB1*1139                    |                                       |                              |
| DRB1*100101+DRB1*1144              | DRB1*1002+DRB1*1149                    |                                       |                              |
| DRB1*100101+DRB1*1156              | DRB1*1002+DRB1*1137                    |                                       |                              |
| DRB1*100101+DRB1*130101            | DRB1*1002+DRB1*130201                  |                                       |                              |
| DRB1*100101+DRB1*131101            | DRB1*1002+DRB1*131401/131403           |                                       |                              |
| DRB1*100101+DRB1*131102            | DRB1*1002+DRB1*131402                  |                                       |                              |
| DRB1*100101+DRB1*1320              | DRB1*1002+DRB1*1329                    |                                       |                              |
| DRB1*100101+DRB1*1322              | DRB1*1002+DRB1*1323                    |                                       |                              |
| DRB1*100101+DRB1*1327              | DRB1*1002+DRB1*1341                    |                                       |                              |
| DRB1*100101+DRB1*1332              | DRB1*1002+DRB1*1365                    |                                       |                              |
| DRB1*100101+DRB1*1340              | DRB1*1002+DRB1*1336                    |                                       |                              |
| DRB1*100101+DRB1*1342              | DRB1*1002+DRB1*130501/130502           |                                       |                              |
| DRB1*100101+DRB1*1348              | DRB1*1002+DRB1*1338                    |                                       |                              |
| DRB1*100101+DRB1*1379              | DRB1*1002+DRB1*1339                    |                                       |                              |
| DRB1*100101+DRB1*140101/1454       | DRB1*1002+DRB1*140701/140702           |                                       |                              |
| DRB1*100101+DRB1*1404              | DRB1*1002+DRB1*1468                    |                                       |                              |
| DRB1*100101+DRB1*140501            | DRB1*1002+DRB1*144401                  |                                       |                              |
| DRB1*100101+DRB1*140503            | DRB1*1002+DRB1*144402                  |                                       |                              |
| DRB1*100101+DRB1*1406              | DRB1*1002+DRB1*1402                    |                                       |                              |
| DRB1*100101+DRB1*1412              | DRB1*1002+DRB1*140301                  |                                       |                              |
| DRB1*100101+DRB1*1417              | DRB1*1002+DRB1*1430                    |                                       |                              |
| DRB1*100101+DRB1*142301            | DRB1*1002+DRB1*1414                    |                                       |                              |
| DRB1*100101+DRB1*1478              | DRB1*1002+DRB1*1463                    |                                       |                              |
| DRB1*100101+DRB1*1480              | DRB1*1002+DRB1*1409                    |                                       |                              |
| DRB1*100101+DRB1*15010101/15010102 | DRB1*1002+DRB1*150201                  |                                       |                              |
| DRB1*100101+DRB1*150103            | DRB1*1002+DRB1*150206                  |                                       |                              |
| DRB1*100101+DRB1*150104            | DRB1*1002+DRB1*150202/150205           |                                       |                              |
| DRB1*100101+DRB1*1504              | DRB1*1002+DRB1*1515                    |                                       |                              |
| DRB1*100101+DRB1*1505              | DRB1*1002+DRB1*1531                    |                                       |                              |
| DRB1*100101+DRB1*1507              | DRB1*1002+DRB1*1511                    |                                       |                              |
| DRB1*100102+DRB1*1101G1            | DRB1*100103+DRB1*110103                |                                       |                              |
| DRB1*100102+DRB1*111901            | DRB1*100103+DRB1*111902                |                                       |                              |
| DRB1*100102+DRB1*120204            | DRB1*100103+DRB1*120201                |                                       |                              |
| DRB1*100102+DRB1*130201            | DRB1*100103+DRB1*130202                |                                       |                              |
| DRB1*100102+DRB1*160102            | DRB1*100103+DRB1*160101                |                                       |                              |
| DRB1*100102+DRB1*160202            | DRB1*100103+DRB1*160201                |                                       |                              |
| DRB1*1101G1+DRB1*110201            | DRB1*1103+DRB1*111901                  | DRB1*110401/110402+DRB1*111401/111402 | DRB1*111101/111102+DRB1*1118 |
| DRB1*1101G1+DRB1*1103              | DRB1*110401/110402+DRB1*111101/111102  |                                       |                              |
| DRB1*1101G1+DRB1*110403            | DRB1*110105+DRB1*110401/110402         |                                       |                              |
| DRB1*1101G1+DRB1*110602            | DRB1*110105+DRB1*110601                |                                       |                              |
| DRB1*1101G1+DRB1*111001/111002     | DRB1*111202+DRB1*1162                  |                                       |                              |
| DRB1*1101G1+DRB1*111401/111402     | DRB1*111101/111102+DRB1*111901         |                                       |                              |
| DRB1*1101G1+DRB1*1116              | DRB1*110201+DRB1*1109                  | DRB1*110401/110402+DRB1*1120          | DRB1*111901+DRB1*1140        |
| DRB1*1101G1+DRB1*1118              | DRB1*110401/110402+DRB1*111901         |                                       |                              |
| DRB1*1101G1+DRB1*111902            | DRB1*110103+DRB1*111901                |                                       |                              |
| DRB1*1101G1+DRB1*1120              | DRB1*1109+DRB1*111401/111402           |                                       |                              |
| DRB1*1101G1+DRB1*1121              | DRB1*110601+DRB1*111401/111402         |                                       |                              |
| DRB1*1101G1+DRB1*1125              | DRB1*110401/110402+DRB1*1123           |                                       |                              |
| DRB1*1101G1+DRB1*1134              | DRB1*110401/110402+DRB1*1126           |                                       |                              |
| DRB1*1101G1+DRB1*1135              | DRB1*110401/110402+DRB1*1133           |                                       |                              |
| DRB1*1101G1+DRB1*1136              | DRB1*1103+DRB1*110801/110802           | DRB1*110401/110402+DRB1*1168          | DRB1*111101/111102+DRB1*1142 |
| DRB1*1101G1+DRB1*1140              | DRB1*1103+DRB1*1109                    |                                       |                              |
| DRB1*1101G1+DRB1*1141              | DRB1*1103+DRB1*1137                    | DRB1*111101/111102+DRB1*1156          |                              |
| DRB1*1101G1+DRB1*1142              | DRB1*110401/110402+DRB1*110801/110802  |                                       |                              |
| DRB1*1101G1+DRB1*1143              | DRB1*110401/110402+DRB1*1139           |                                       |                              |
| DRB1*1101G1+DRB1*1144              | DRB1*110401/110402+DRB1*1149           |                                       |                              |
| DRB1*1101G1+DRB1*1145              | DRB1*111901+DRB1*1123                  |                                       |                              |
| DRB1*1101G1+DRB1*1146              | DRB1*110404+DRB1*1162                  |                                       |                              |
| DRB1*1101G1+DRB1*1147              | DRB1*110601+DRB1*1129                  | DRB1*111401/111402+DRB1*1156          | DRB1*111901+DRB1*1141        |
| DRB1*1101G1+DRB1*1148              | DRB1*110201+DRB1*1137                  |                                       |                              |

|                                        |                                       |                                       |                              |
|----------------------------------------|---------------------------------------|---------------------------------------|------------------------------|
| DRB1*1101G1+DRB1*115401                | DRB1*110105+DRB1*115402               |                                       |                              |
| DRB1*1101G1+DRB1*1155                  | DRB1*1103+DRB1*1123                   | DRB1*111101/111102+DRB1*1125          |                              |
| DRB1*1101G1+DRB1*1156                  | DRB1*110401/110402+DRB1*1137          |                                       |                              |
| DRB1*1101G1+DRB1*1157                  | DRB1*110601+DRB1*110801/110802        |                                       |                              |
| DRB1*1101G1+DRB1*1158                  | DRB1*110404+DRB1*1128                 |                                       |                              |
| DRB1*1101G1+DRB1*1163                  | DRB1*1103+DRB1*1129                   |                                       |                              |
| DRB1*1101G1+DRB1*1164                  | DRB1*110801/110802+DRB1*1123          |                                       |                              |
| DRB1*1101G1+DRB1*116501/116502         | DRB1*110201+DRB1*1133                 | DRB1*111401/111402+DRB1*1135          |                              |
| DRB1*1101G1+DRB1*1168                  | DRB1*110801/110802+DRB1*111101/111102 |                                       |                              |
| DRB1*1101G1+DRB1*1170                  | DRB1*110201+DRB1*1132                 |                                       |                              |
| DRB1*1101G1+DRB1*120101/1206/1210/1217 | DRB1*111901+DRB1*120201               | DRB1*111902+DRB1*120204               |                              |
| DRB1*1101G1+DRB1*120201                | DRB1*110103+DRB1*120204               | DRB1*110105+DRB1*120202               |                              |
| DRB1*1101G1+DRB1*120204                | DRB1*110602+DRB1*1216                 |                                       |                              |
| DRB1*1101G1+DRB1*1205                  | DRB1*111901+DRB1*1215                 |                                       |                              |
| DRB1*1101G1+DRB1*1209                  | DRB1*1204+DRB1*131401/131403          |                                       |                              |
| DRB1*1101G1+DRB1*1212                  | DRB1*110801/110802+DRB1*120201        |                                       |                              |
| DRB1*1101G1+DRB1*130101                | DRB1*110201+DRB1*130501/130502        | DRB1*110401/110402+DRB1*130201        | DRB1*1109+DRB1*1322          |
|                                        | DRB1*1118+DRB1*1363                   | DRB1*1120+DRB1*131101                 | DRB1*1128+DRB1*1352          |
|                                        | DRB1*1140+DRB1*1382                   | DRB1*1162+DRB1*1369                   |                              |
| DRB1*1101G1+DRB1*130103                | DRB1*110105+DRB1*130101               | DRB1*110403+DRB1*130201               |                              |
| DRB1*1101G1+DRB1*130201                | DRB1*1109+DRB1*1323                   | DRB1*111401/111402+DRB1*130501/130502 | DRB1*111901+DRB1*1363        |
|                                        | DRB1*1120+DRB1*131401/131403          |                                       |                              |
| DRB1*1101G1+DRB1*130202                | DRB1*110103+DRB1*130201               | DRB1*111902+DRB1*1363                 |                              |
| DRB1*1101G1+DRB1*130203                | DRB1*1120+DRB1*131402                 |                                       |                              |
| DRB1*1101G1+DRB1*130301/130302         | DRB1*1137+DRB1*1366                   |                                       |                              |
| DRB1*1101G1+DRB1*1304                  | DRB1*110201+DRB1*1321                 | DRB1*1103+DRB1*1330                   | DRB1*111901+DRB1*1375        |
| DRB1*1101G1+DRB1*130501/130502         | DRB1*1109+DRB1*131401/131403          | DRB1*1162+DRB1*135002                 |                              |
| DRB1*1101G1+DRB1*1306                  | DRB1*1118+DRB1*130501/130502          | DRB1*111901+DRB1*1342                 |                              |
| DRB1*1101G1+DRB1*130701                | DRB1*1137+DRB1*131401/131403          |                                       |                              |
| DRB1*1101G1+DRB1*130702                | DRB1*1137+DRB1*131402                 |                                       |                              |
| DRB1*1101G1+DRB1*1308                  | DRB1*11001/111002+DRB1*1370           | DRB1*1137+DRB1*1383                   |                              |
| DRB1*1101G1+DRB1*1309                  | DRB1*1169+DRB1*1306                   |                                       |                              |
| DRB1*1101G1+DRB1*13101                 | DRB1*110401/110402+DRB1*131401/131403 |                                       |                              |
| DRB1*1101G1+DRB1*131102                | DRB1*110401/110402+DRB1*131402        |                                       |                              |
| DRB1*1101G1+DRB1*1312                  | DRB1*111901+DRB1*1349                 | DRB1*1137+DRB1*1330                   |                              |
| DRB1*1101G1+DRB1*1313                  | DRB1*111901+DRB1*1355                 | DRB1*1123+DRB1*1312                   | DRB1*1145+DRB1*1349          |
| DRB1*1101G1+DRB1*1318                  | DRB1*1123+DRB1*1342                   | DRB1*1125+DRB1*130501/130502          |                              |
| DRB1*1101G1+DRB1*1319                  | DRB1*1137+DRB1*1357                   |                                       |                              |
| DRB1*1101G1+DRB1*1320                  | DRB1*1103+DRB1*1356                   | DRB1*110401/110402+DRB1*1329          | DRB1*1136+DRB1*130501/130502 |
|                                        | DRB1*1140+DRB1*1325                   | DRB1*1142+DRB1*1363                   | DRB1*1168+DRB1*1342          |
| DRB1*1101G1+DRB1*1322                  | DRB1*110201+DRB1*131401/131403        | DRB1*1103+DRB1*1382                   | DRB1*110401/110402+DRB1*1323 |
|                                        | DRB1*111401/111402+DRB1*131101        | DRB1*111901+DRB1*1324                 |                              |
| DRB1*1101G1+DRB1*1323                  | DRB1*111101/111102+DRB1*1382          | DRB1*111401/111402+DRB1*131401/131403 |                              |
| DRB1*1101G1+DRB1*1324                  | DRB1*1103+DRB1*131401/131403          | DRB1*111101/111102+DRB1*131101        |                              |
| DRB1*1101G1+DRB1*1325                  | DRB1*110801/110802+DRB1*131401/131403 |                                       |                              |
| DRB1*1101G1+DRB1*1327                  | DRB1*110401/110402+DRB1*1341          | DRB1*1159+DRB1*1382                   |                              |
| DRB1*1101G1+DRB1*1329                  | DRB1*110801/110802+DRB1*1363          | DRB1*111101/111102+DRB1*1356          | DRB1*1168+DRB1*130501/130502 |
| DRB1*1101G1+DRB1*1330                  | DRB1*111901+DRB1*1321                 |                                       |                              |
| DRB1*1101G1+DRB1*1331                  | DRB1*1120+DRB1*1346                   |                                       |                              |
| DRB1*1101G1+DRB1*1332                  | DRB1*110401/110402+DRB1*1365          | DRB1*1109+DRB1*1348                   | DRB1*1116+DRB1*1349          |
|                                        | DRB1*1140+DRB1*1312                   |                                       |                              |
| DRB1*1101G1+DRB1*1333                  | DRB1*112702+DRB1*130301/130302        |                                       |                              |
| DRB1*1101G1+DRB1*1336                  | DRB1*1120+DRB1*130701                 | DRB1*1137+DRB1*130201                 |                              |
| DRB1*1101G1+DRB1*1338                  | DRB1*111101/111102+DRB1*1312          | DRB1*111401/111402+DRB1*1349          |                              |
| DRB1*1101G1+DRB1*1340                  | DRB1*110401/110402+DRB1*1336          | DRB1*1109+DRB1*1370                   | DRB1*1116+DRB1*130701        |
|                                        | DRB1*1137+DRB1*130101                 | DRB1*1148+DRB1*130501/130502          | DRB1*1156+DRB1*130201        |
| DRB1*1101G1+DRB1*1342                  | DRB1*110401/110402+DRB1*130501/130502 | DRB1*1109+DRB1*131101                 | DRB1*1146+DRB1*135001        |
| DRB1*1101G1+DRB1*1344                  | DRB1*1128+DRB1*131101                 | DRB1*1134+DRB1*131401/131403          |                              |
| DRB1*1101G1+DRB1*1345                  | DRB1*111401/111402+DRB1*1453          |                                       |                              |
| DRB1*1101G1+DRB1*1347                  | DRB1*1123+DRB1*130701                 | DRB1*1103+DRB1*1312                   | DRB1*110401/110402+DRB1*1338 |
| DRB1*1101G1+DRB1*1348                  | DRB1*110201+DRB1*1349                 | DRB1*1141+DRB1*1330                   | DRB1*1148+DRB1*1321          |
|                                        | DRB1*1137+DRB1*1304                   |                                       |                              |
| DRB1*1101G1+DRB1*1349                  | DRB1*1137+DRB1*1321                   |                                       |                              |
| DRB1*1101G1+DRB1*135001                | DRB1*1128+DRB1*131401/131403          |                                       |                              |
| DRB1*1101G1+DRB1*1352                  | DRB1*1146+DRB1*1323                   |                                       |                              |
| DRB1*1101G1+DRB1*1353                  | DRB1*1137+DRB1*1315                   |                                       |                              |
| DRB1*1101G1+DRB1*1355                  | DRB1*1123+DRB1*1349                   |                                       |                              |
| DRB1*1101G1+DRB1*1356                  | DRB1*110801/110802+DRB1*130501/130502 | DRB1*1109+DRB1*1325                   |                              |
| DRB1*1101G1+DRB1*1358                  | DRB1*110601+DRB1*1312                 |                                       |                              |
| DRB1*1101G1+DRB1*1361                  | DRB1*112701+DRB1*130101               |                                       |                              |
| DRB1*1101G1+DRB1*1362                  | DRB1*1115+DRB1*131401/131403          |                                       |                              |
| DRB1*1101G1+DRB1*1363                  | DRB1*111101/111102+DRB1*130501/130502 |                                       |                              |
| DRB1*1101G1+DRB1*1365                  | DRB1*1109+DRB1*1338                   | DRB1*1120+DRB1*1349                   |                              |
| DRB1*1101G1+DRB1*1367                  | DRB1*1130+DRB1*130201                 |                                       |                              |
| DRB1*1101G1+DRB1*1368                  | DRB1*1124+DRB1*1352                   |                                       |                              |
| DRB1*1101G1+DRB1*1369                  | DRB1*110201+DRB1*135001               | DRB1*1158+DRB1*1323                   |                              |
| DRB1*1101G1+DRB1*1370                  | DRB1*110201+DRB1*130701               | DRB1*1137+DRB1*1322                   | DRB1*1141+DRB1*1382          |
|                                        | DRB1*1148+DRB1*131401/131403          | DRB1*1156+DRB1*1323                   |                              |
| DRB1*1101G1+DRB1*1371                  | DRB1*1159+DRB1*1325                   |                                       |                              |
| DRB1*1101G1+DRB1*1375                  | DRB1*1103+DRB1*1321                   |                                       |                              |
| DRB1*1101G1+DRB1*1379                  | DRB1*110401/110402+DRB1*1339          |                                       |                              |
| DRB1*1101G1+DRB1*1381                  | DRB1*110601+DRB1*130301/130302        |                                       |                              |
| DRB1*1101G1+DRB1*1382                  | DRB1*111901+DRB1*131401/131403        |                                       |                              |
| DRB1*1101G1+DRB1*1383                  | DRB1*111001/111002+DRB1*1322          | DRB1*111201+DRB1*1352                 |                              |
| DRB1*1101G1+DRB1*1387                  | DRB1*111201+DRB1*130101               | DRB1*1128+DRB1*1383                   |                              |
| DRB1*1101G1+DRB1*140101/1454           | DRB1*110105+DRB1*140102               | DRB1*110401/110402+DRB1*140701/140702 | DRB1*111001/111002+DRB1*1458 |
|                                        | DRB1*1117+DRB1*1453                   | DRB1*1137+DRB1*1435                   |                              |
| DRB1*1101G1+DRB1*140301                | DRB1*110801/110802+DRB1*1427          |                                       |                              |
| DRB1*1101G1+DRB1*1404                  | DRB1*110401/110402+DRB1*1468          | DRB1*1411+DRB1*1453                   |                              |
| DRB1*1101G1+DRB1*140501                | DRB1*110105+DRB1*140503               | DRB1*110401/110402+DRB1*144401        | DRB1*110403+DRB1*144402      |
| DRB1*1101G1+DRB1*140503                | DRB1*110401/110402+DRB1*144402        |                                       |                              |
| DRB1*1101G1+DRB1*1406                  | DRB1*110401/110402+DRB1*1402          |                                       |                              |
| DRB1*1101G1+DRB1*1409                  | DRB1*1137+DRB1*1430                   |                                       |                              |
| DRB1*1101G1+DRB1*1412                  | DRB1*110401/110402+DRB1*140301        | DRB1*1142+DRB1*1427                   |                              |
| DRB1*1101G1+DRB1*1416                  | DRB1*110201+DRB1*1422                 |                                       |                              |
| DRB1*1101G1+DRB1*1417                  | DRB1*110401/110402+DRB1*1430          | DRB1*1109+DRB1*1344                   | DRB1*1126+DRB1*1342          |
|                                        | DRB1*1134+DRB1*130501/130502          |                                       |                              |
| DRB1*1101G1+DRB1*1422                  | DRB1*111001/111002+DRB1*1425          |                                       |                              |
| DRB1*1101G1+DRB1*142301                | DRB1*110401/110402+DRB1*1414          | DRB1*1117+DRB1*131401/131403          |                              |
| DRB1*1101G1+DRB1*1425                  | DRB1*1137+DRB1*1453                   |                                       |                              |
| DRB1*1101G1+DRB1*1428                  | DRB1*110601+DRB1*1468                 |                                       |                              |
| DRB1*1101G1+DRB1*1429                  | DRB1*110601+DRB1*1402                 |                                       |                              |
| DRB1*1101G1+DRB1*1430                  | DRB1*1126+DRB1*130501/130502          |                                       |                              |
| DRB1*1101G1+DRB1*143202                | DRB1*110105+DRB1*143201               | DRB1*111301/111302+DRB1*1425          |                              |
| DRB1*1101G1+DRB1*1433                  | DRB1*115402+DRB1*1430                 |                                       |                              |
| DRB1*1101G1+DRB1*1438                  | DRB1*112701+DRB1*140102               |                                       |                              |
| DRB1*1101G1+DRB1*144401                | DRB1*110105+DRB1*144402               |                                       |                              |
| DRB1*1101G1+DRB1*1447                  | DRB1*112701+DRB1*1402                 |                                       |                              |
| DRB1*1101G1+DRB1*1455                  | DRB1*1123+DRB1*143202                 |                                       |                              |
| DRB1*1101G1+DRB1*1461                  | DRB1*1105+DRB1*140101/1454            |                                       |                              |
| DRB1*1101G1+DRB1*1465                  | DRB1*111301/111302+DRB1*1321          |                                       |                              |
| DRB1*1101G1+DRB1*1467                  | DRB1*111901+DRB1*1427                 |                                       |                              |
| DRB1*1101G1+DRB1*1469                  | DRB1*110801/110802+DRB1*1425          |                                       |                              |
| DRB1*1101G1+DRB1*1474                  | DRB1*1142+DRB1*1422                   |                                       |                              |
| DRB1*1101G1+DRB1*1478                  | DRB1*110401/110402+DRB1*1463          |                                       |                              |
| DRB1*1101G1+DRB1*1480                  | DRB1*110401/110402+DRB1*1409          | DRB1*1137+DRB1*1417                   | DRB1*1156+DRB1*1430          |
| DRB1*1101G1+DRB1*15010101/15010102     | DRB1*110401/110402+DRB1*150201        | DRB1*1118+DRB1*1515                   | DRB1*111901+DRB1*1504        |
| DRB1*1101G1+DRB1*150103                | DRB1*110105+DRB1*15010101/15010102    | DRB1*110401/110402+DRB1*150206        | DRB1*110403+DRB1*150201      |
| DRB1*1101G1+DRB1*150104                | DRB1*110401/110402+DRB1*150202/150205 |                                       |                              |
| DRB1*1101G1+DRB1*150201                | DRB1*111901+DRB1*1515                 |                                       |                              |
| DRB1*1101G1+DRB1*150206                | DRB1*110105+DRB1*150201               |                                       |                              |
| DRB1*1101G1+DRB1*1504                  | DRB1*110401/110402+DRB1*1515          |                                       |                              |
| DRB1*1101G1+DRB1*1505                  | DRB1*110401/110402+DRB1*1531          | DRB1*110801/110802+DRB1*1504          | DRB1*1142+DRB1*1515          |
| DRB1*1101G1+DRB1*1507                  | DRB1*110401/110402+DRB1*1511          | DRB1*1137+DRB1*15010101/15010102      | DRB1*1156+DRB1*150201        |

|                                        |                                       |                                |                       |
|----------------------------------------|---------------------------------------|--------------------------------|-----------------------|
| DRB1*1101G1+DRB1*1511                  | DRB1*1137+DRB1*150201                 |                                |                       |
| DRB1*1101G1+DRB1*1531                  | DRB1*110801/110802+DRB1*1515          |                                |                       |
| DRB1*1101G1+DRB1*1532                  | DRB1*1128+DRB1*15010101/15010102      |                                |                       |
| DRB1*1101G1+DRB1*160101                | DRB1*110103+DRB1*160102               | DRB1*1137+DRB1*1609            |                       |
| DRB1*1101G1+DRB1*160201                | DRB1*110103+DRB1*160202               | DRB1*110801/110802+DRB1*160101 | DRB1*1137+DRB1*1610   |
| DRB1*1101G1+DRB1*160202                | DRB1*110801/110802+DRB1*160102        |                                |                       |
| DRB1*1101G1+DRB1*1604                  | DRB1*1123+DRB1*160102                 |                                |                       |
| DRB1*1101G1+DRB1*160501                | DRB1*111901+DRB1*160101               | DRB1*111902+DRB1*160102        |                       |
| DRB1*1101G1+DRB1*1610                  | DRB1*110801/110802+DRB1*1609          |                                |                       |
| DRB1*110103+DRB1*110201                | DRB1*1103+DRB1*111902                 |                                |                       |
| DRB1*110103+DRB1*111401/111402         | DRB1*111101/111102+DRB1*111902        |                                |                       |
| DRB1*110103+DRB1*1116                  | DRB1*111902+DRB1*1140                 |                                |                       |
| DRB1*110103+DRB1*1118                  | DRB1*110401/110402+DRB1*111902        |                                |                       |
| DRB1*110103+DRB1*1145                  | DRB1*111902+DRB1*1123                 |                                |                       |
| DRB1*110103+DRB1*1148                  | DRB1*111902+DRB1*1141                 |                                |                       |
| DRB1*110103+DRB1*120101/1206/1210/1217 | DRB1*111902+DRB1*120201               |                                |                       |
| DRB1*110103+DRB1*120102                | DRB1*111901+DRB1*120202               |                                |                       |
| DRB1*110103+DRB1*1205                  | DRB1*111902+DRB1*1215                 |                                |                       |
| DRB1*110103+DRB1*130101                | DRB1*110401/110402+DRB1*130202        |                                |                       |
| DRB1*110103+DRB1*130103                | DRB1*110403+DRB1*130202               |                                |                       |
| DRB1*110103+DRB1*1304                  | DRB1*111902+DRB1*1375                 |                                |                       |
| DRB1*110103+DRB1*1306                  | DRB1*111902+DRB1*1342                 |                                |                       |
| DRB1*110103+DRB1*1312                  | DRB1*111902+DRB1*1349                 |                                |                       |
| DRB1*110103+DRB1*1313                  | DRB1*111902+DRB1*1355                 |                                |                       |
| DRB1*110103+DRB1*1322                  | DRB1*111902+DRB1*1324                 |                                |                       |
| DRB1*110103+DRB1*1330                  | DRB1*111902+DRB1*1321                 |                                |                       |
| DRB1*110103+DRB1*1336                  | DRB1*1137+DRB1*130202                 |                                |                       |
| DRB1*110103+DRB1*1340                  | DRB1*1156+DRB1*130202                 |                                |                       |
| DRB1*110103+DRB1*1367                  | DRB1*1130+DRB1*130202                 |                                |                       |
| DRB1*110103+DRB1*1382                  | DRB1*111902+DRB1*131401/131403        |                                |                       |
| DRB1*110103+DRB1*1467                  | DRB1*111902+DRB1*1427                 |                                |                       |
| DRB1*110103+DRB1*15010101/15010102     | DRB1*111902+DRB1*1504                 |                                |                       |
| DRB1*110103+DRB1*150201                | DRB1*111902+DRB1*1515                 |                                |                       |
| DRB1*110103+DRB1*1510                  | DRB1*110201+DRB1*1609                 |                                |                       |
| DRB1*110103+DRB1*1511                  | DRB1*1169+DRB1*160501                 |                                |                       |
| DRB1*110103+DRB1*1515                  | DRB1*1169+DRB1*1609                   |                                |                       |
| DRB1*110103+DRB1*1525                  | DRB1*1107+DRB1*1609                   |                                |                       |
| DRB1*110103+DRB1*1527                  | DRB1*1126+DRB1*1609                   |                                |                       |
| DRB1*110103+DRB1*1531                  | DRB1*1169+DRB1*1610                   |                                |                       |
| DRB1*110103+DRB1*1604                  | DRB1*1123+DRB1*160101                 |                                |                       |
| DRB1*110103+DRB1*160501                | DRB1*111902+DRB1*160101               |                                |                       |
| DRB1*110105+DRB1*110201                | DRB1*110403+DRB1*111401/111402        |                                |                       |
| DRB1*110105+DRB1*1103                  | DRB1*110403+DRB1*111101/111102        |                                |                       |
| DRB1*110105+DRB1*1116                  | DRB1*110403+DRB1*1120                 |                                |                       |
| DRB1*110105+DRB1*1118                  | DRB1*110403+DRB1*111901               |                                |                       |
| DRB1*110105+DRB1*1121                  | DRB1*110602+DRB1*111401/111402        |                                |                       |
| DRB1*110105+DRB1*1125                  | DRB1*110403+DRB1*1123                 |                                |                       |
| DRB1*110105+DRB1*1134                  | DRB1*110403+DRB1*1126                 |                                |                       |
| DRB1*110105+DRB1*1135                  | DRB1*110403+DRB1*1133                 |                                |                       |
| DRB1*110105+DRB1*1136                  | DRB1*110403+DRB1*1168                 |                                |                       |
| DRB1*110105+DRB1*1142                  | DRB1*110403+DRB1*110801/110802        |                                |                       |
| DRB1*110105+DRB1*1143                  | DRB1*110403+DRB1*1139                 |                                |                       |
| DRB1*110105+DRB1*1144                  | DRB1*110403+DRB1*1149                 |                                |                       |
| DRB1*110105+DRB1*1147                  | DRB1*110602+DRB1*1129                 |                                |                       |
| DRB1*110105+DRB1*1156                  | DRB1*110403+DRB1*1137                 |                                |                       |
| DRB1*110105+DRB1*1157                  | DRB1*110602+DRB1*110801/110802        |                                |                       |
| DRB1*110105+DRB1*120102                | DRB1*111901+DRB1*120204               |                                |                       |
| DRB1*110105+DRB1*120302                | DRB1*111901+DRB1*1219                 |                                |                       |
| DRB1*110105+DRB1*131101                | DRB1*110403+DRB1*131401/131403        |                                |                       |
| DRB1*110105+DRB1*131102                | DRB1*110403+DRB1*131402               |                                |                       |
| DRB1*110105+DRB1*1320                  | DRB1*110403+DRB1*1329                 |                                |                       |
| DRB1*110105+DRB1*1322                  | DRB1*110403+DRB1*1323                 |                                |                       |
| DRB1*110105+DRB1*1327                  | DRB1*110403+DRB1*1341                 |                                |                       |
| DRB1*110105+DRB1*1332                  | DRB1*110403+DRB1*1365                 |                                |                       |
| DRB1*110105+DRB1*1340                  | DRB1*110403+DRB1*1336                 | DRB1*1137+DRB1*130103          |                       |
| DRB1*110105+DRB1*1342                  | DRB1*110403+DRB1*130501/130502        |                                |                       |
| DRB1*110105+DRB1*1348                  | DRB1*110403+DRB1*1338                 |                                |                       |
| DRB1*110105+DRB1*1358                  | DRB1*110602+DRB1*1312                 |                                |                       |
| DRB1*110105+DRB1*1361                  | DRB1*112701+DRB1*130103               |                                |                       |
| DRB1*110105+DRB1*1379                  | DRB1*110403+DRB1*1339                 |                                |                       |
| DRB1*110105+DRB1*1381                  | DRB1*110602+DRB1*130301/130302        |                                |                       |
| DRB1*110105+DRB1*1387                  | DRB1*111201+DRB1*130103               |                                |                       |
| DRB1*110105+DRB1*140101/1454           | DRB1*110403+DRB1*140701/140702        |                                |                       |
| DRB1*110105+DRB1*1404                  | DRB1*110403+DRB1*1468                 |                                |                       |
| DRB1*110105+DRB1*140501                | DRB1*110403+DRB1*144401               |                                |                       |
| DRB1*110105+DRB1*1406                  | DRB1*110403+DRB1*1402                 |                                |                       |
| DRB1*110105+DRB1*1412                  | DRB1*110403+DRB1*140301               |                                |                       |
| DRB1*110105+DRB1*1417                  | DRB1*110403+DRB1*1430                 |                                |                       |
| DRB1*110105+DRB1*142301                | DRB1*110403+DRB1*1414                 |                                |                       |
| DRB1*110105+DRB1*1428                  | DRB1*110602+DRB1*1468                 |                                |                       |
| DRB1*110105+DRB1*1429                  | DRB1*110602+DRB1*1402                 |                                |                       |
| DRB1*110105+DRB1*1433                  | DRB1*115401+DRB1*1430                 |                                |                       |
| DRB1*110105+DRB1*1438                  | DRB1*112701+DRB1*140101/1454          |                                |                       |
| DRB1*110105+DRB1*1450                  | DRB1*112701+DRB1*1404                 |                                |                       |
| DRB1*110105+DRB1*1478                  | DRB1*110403+DRB1*1463                 |                                |                       |
| DRB1*110105+DRB1*1480                  | DRB1*110403+DRB1*1409                 |                                |                       |
| DRB1*110105+DRB1*150103                | DRB1*110403+DRB1*150206               |                                |                       |
| DRB1*110105+DRB1*150104                | DRB1*110403+DRB1*150202/150205        |                                |                       |
| DRB1*110105+DRB1*1504                  | DRB1*110403+DRB1*1515                 |                                |                       |
| DRB1*110105+DRB1*1505                  | DRB1*110403+DRB1*1531                 | DRB1*1137+DRB1*150103          | DRB1*1156+DRB1*150206 |
| DRB1*110105+DRB1*1507                  | DRB1*110403+DRB1*1511                 |                                |                       |
| DRB1*110105+DRB1*1511                  | DRB1*1137+DRB1*150206                 |                                |                       |
| DRB1*110105+DRB1*1532                  | DRB1*1128+DRB1*150103                 |                                |                       |
| DRB1*110201+DRB1*110401/110402         | DRB1*1103+DRB1*1118                   |                                |                       |
| DRB1*110201+DRB1*110601                | DRB1*110401/110402+DRB1*1121          |                                |                       |
| DRB1*110201+DRB1*110602                | DRB1*110403+DRB1*1121                 |                                |                       |
| DRB1*110201+DRB1*110801/110802         | DRB1*111401/111402+DRB1*1142          | DRB1*1118+DRB1*1168            | DRB1*111901+DRB1*1136 |
| DRB1*110201+DRB1*111101/111102         | DRB1*1103+DRB1*111401/111402          |                                |                       |
| DRB1*110201+DRB1*111901                | DRB1*111401/111402+DRB1*1116          |                                |                       |
| DRB1*110201+DRB1*1120                  | DRB1*111401/111402+DRB1*1116          |                                |                       |
| DRB1*110201+DRB1*1123                  | DRB1*1103+DRB1*1145                   | DRB1*111401/111402+DRB1*1125   | DRB1*111901+DRB1*1155 |
| DRB1*110201+DRB1*1125                  | DRB1*1118+DRB1*1155                   |                                |                       |
| DRB1*110201+DRB1*1126                  | DRB1*111401/111402+DRB1*1134          |                                |                       |
| DRB1*110201+DRB1*1129                  | DRB1*111901+DRB1*1163                 |                                |                       |
| DRB1*110201+DRB1*1135                  | DRB1*110401/110402+DRB1*116501/116502 |                                |                       |
| DRB1*110201+DRB1*1139                  | DRB1*111401/111402+DRB1*1143          |                                |                       |
| DRB1*110201+DRB1*1140                  | DRB1*1103+DRB1*1116                   |                                |                       |
| DRB1*110201+DRB1*1141                  | DRB1*1103+DRB1*1148                   |                                |                       |
| DRB1*110201+DRB1*1142                  | DRB1*1118+DRB1*1136                   |                                |                       |
| DRB1*110201+DRB1*1149                  | DRB1*111401/111402+DRB1*1144          | DRB1*1118+DRB1*1141            |                       |
| DRB1*110201+DRB1*1156                  | DRB1*110401/110402+DRB1*1148          |                                |                       |
| DRB1*110201+DRB1*1157                  | DRB1*1121+DRB1*1142                   |                                |                       |
| DRB1*110201+DRB1*1164                  | DRB1*1136+DRB1*1145                   |                                |                       |
| DRB1*110201+DRB1*1168                  | DRB1*111401/111402+DRB1*1136          | DRB1*1121+DRB1*1219            | DRB1*1204+DRB1*1354   |
| DRB1*110201+DRB1*120201                | DRB1*1103+DRB1*120101/1206/1210/1217  |                                |                       |
| DRB1*110201+DRB1*1209                  | DRB1*1204+DRB1*1322                   |                                |                       |
| DRB1*110201+DRB1*1212                  | DRB1*1136+DRB1*120101/1206/1210/1217  |                                |                       |
| DRB1*110201+DRB1*1215                  | DRB1*1103+DRB1*1205                   |                                |                       |
| DRB1*110201+DRB1*130101                | DRB1*1116+DRB1*1322                   |                                |                       |
| DRB1*110201+DRB1*130201                | DRB1*111401/111402+DRB1*130101        | DRB1*1116+DRB1*1323            | DRB1*1120+DRB1*1322   |
| DRB1*110201+DRB1*130301/130302         | DRB1*1148+DRB1*1366                   |                                |                       |
| DRB1*110201+DRB1*1306                  | DRB1*1118+DRB1*130101                 |                                |                       |
| DRB1*110201+DRB1*130702                | DRB1*1148+DRB1*131402                 |                                |                       |
| DRB1*110201+DRB1*1308                  | DRB1*1148+DRB1*1383                   |                                |                       |

|                                |                                           |                                           |                                  |
|--------------------------------|-------------------------------------------|-------------------------------------------|----------------------------------|
| DRB1*110201+DRB1*131101        | DRB1*110401/110402+DRB1*1322              | DRB1*1118+DRB1*1324                       |                                  |
| DRB1*110201+DRB1*1312          | DRB1*1118+DRB1*1338                       | DRB1*111901+DRB1*1348                     | DRB1*1148+DRB1*1330              |
| DRB1*110201+DRB1*1313          | DRB1*1145+DRB1*1348                       |                                           |                                  |
| DRB1*110201+DRB1*131402        | DRB1*111401/111402+DRB1*131102            |                                           |                                  |
| DRB1*110201+DRB1*1318          | DRB1*1125+DRB1*130101                     | DRB1*1155+DRB1*1306                       |                                  |
| DRB1*110201+DRB1*1319          | DRB1*1148+DRB1*1357                       |                                           |                                  |
| DRB1*110201+DRB1*1320          | DRB1*1136+DRB1*130101                     |                                           |                                  |
| DRB1*110201+DRB1*1323          | DRB1*111401/111402+DRB1*1322              |                                           |                                  |
| DRB1*110201+DRB1*1324          | DRB1*1103+DRB1*1322                       |                                           |                                  |
| DRB1*110201+DRB1*1325          | DRB1*110801/110802+DRB1*1322              | DRB1*1136+DRB1*1382                       | DRB1*1142+DRB1*1323              |
| DRB1*110201+DRB1*1329          | DRB1*111401/111402+DRB1*1320              | DRB1*1136+DRB1*130201                     | DRB1*1168+DRB1*130101            |
| DRB1*110201+DRB1*1330          | DRB1*111901+DRB1*1304                     |                                           |                                  |
| DRB1*110201+DRB1*1332          | DRB1*1116+DRB1*1348                       |                                           |                                  |
| DRB1*110201+DRB1*1336          | DRB1*111401/111402+DRB1*1340              | DRB1*1120+DRB1*1370                       | DRB1*1148+DRB1*130201            |
| DRB1*110201+DRB1*1338          | DRB1*111401/111402+DRB1*1348              |                                           |                                  |
| DRB1*110201+DRB1*1339          | DRB1*111401/111402+DRB1*1379              |                                           |                                  |
| DRB1*110201+DRB1*1340          | DRB1*1116+DRB1*1370                       | DRB1*1148+DRB1*130101                     |                                  |
| DRB1*110201+DRB1*1341          | DRB1*111401/111402+DRB1*1327              |                                           |                                  |
| DRB1*110201+DRB1*1342          | DRB1*1103+DRB1*1306                       | DRB1*110401/110402+DRB1*130101            | DRB1*1116+DRB1*131101            |
| DRB1*110201+DRB1*1344          | DRB1*1134+DRB1*1322                       |                                           |                                  |
| DRB1*110201+DRB1*1348          | DRB1*1148+DRB1*1304                       |                                           |                                  |
| DRB1*110201+DRB1*135001        | DRB1*1128+DRB1*1322                       |                                           |                                  |
| DRB1*110201+DRB1*1353          | DRB1*1148+DRB1*1315                       |                                           |                                  |
| DRB1*110201+DRB1*1355          | DRB1*1103+DRB1*1313                       | DRB1*1123+DRB1*1348                       | DRB1*1125+DRB1*1338              |
|                                | DRB1*1155+DRB1*1312                       |                                           |                                  |
| DRB1*110201+DRB1*1356          | DRB1*110801/110802+DRB1*130101            | DRB1*1116+DRB1*1325                       | DRB1*1118+DRB1*1329              |
|                                | DRB1*111901+DRB1*1320                     | DRB1*1142+DRB1*130201                     | DRB1*1168+DRB1*1306              |
| DRB1*110201+DRB1*1362          | DRB1*1115+DRB1*1322                       |                                           |                                  |
| DRB1*110201+DRB1*1363          | DRB1*1103+DRB1*130201                     | DRB1*111101/111102+DRB1*130101            | DRB1*1120+DRB1*1324              |
|                                | DRB1*1140+DRB1*1323                       |                                           |                                  |
| DRB1*110201+DRB1*1365          | DRB1*111401/111402+DRB1*1332              | DRB1*1116+DRB1*1338                       | DRB1*1120+DRB1*1348              |
| DRB1*110201+DRB1*1370          | DRB1*1148+DRB1*1322                       |                                           |                                  |
| DRB1*110201+DRB1*1371          | DRB1*1136+DRB1*1327                       |                                           |                                  |
| DRB1*110201+DRB1*1375          | DRB1*1103+DRB1*1304                       |                                           |                                  |
| DRB1*110201+DRB1*1378          | DRB1*1136+DRB1*1379                       |                                           |                                  |
| DRB1*110201+DRB1*1382          | DRB1*1118+DRB1*1323                       | DRB1*111901+DRB1*1322                     |                                  |
| DRB1*110201+DRB1*1388          | DRB1*1136+DRB1*130301/130302              |                                           |                                  |
| DRB1*110201+DRB1*140101/1454   | DRB1*1148+DRB1*1435                       |                                           |                                  |
| DRB1*110201+DRB1*1402          | DRB1*111401/111402+DRB1*1406              | DRB1*1126+DRB1*1353                       |                                  |
| DRB1*110201+DRB1*140301        | DRB1*111401/111402+DRB1*1412              | DRB1*1136+DRB1*1467                       | DRB1*1164+DRB1*1353              |
| DRB1*110201+DRB1*140501        | DRB1*1136+DRB1*1445                       |                                           |                                  |
| DRB1*110201+DRB1*1406          | DRB1*1134+DRB1*1353                       |                                           |                                  |
| DRB1*110201+DRB1*140701/140702 | DRB1*111401/111402+DRB1*140101/1454       | DRB1*1117+DRB1*1345                       |                                  |
| DRB1*110201+DRB1*1409          | DRB1*111401/111402+DRB1*1480              | DRB1*1126+DRB1*1340                       | DRB1*1134+DRB1*1336              |
|                                | DRB1*1148+DRB1*1430                       |                                           |                                  |
| DRB1*110201+DRB1*1414          | DRB1*111401/111402+DRB1*142301            | DRB1*1117+DRB1*1323                       |                                  |
| DRB1*110201+DRB1*1415          | DRB1*1167+DRB1*1308                       |                                           |                                  |
| DRB1*110201+DRB1*1417          | DRB1*1116+DRB1*1344                       | DRB1*1134+DRB1*130101                     |                                  |
| DRB1*110201+DRB1*1420          | DRB1*1134+DRB1*1319                       |                                           |                                  |
| DRB1*110201+DRB1*142301        | DRB1*1117+DRB1*1322                       |                                           |                                  |
| DRB1*110201+DRB1*1425          | DRB1*1148+DRB1*1453                       | DRB1*1156+DRB1*1345                       |                                  |
| DRB1*110201+DRB1*1427          | DRB1*1103+DRB1*1467                       | DRB1*1123+DRB1*1353                       |                                  |
| DRB1*110201+DRB1*1428          | DRB1*1121+DRB1*1404                       |                                           |                                  |
| DRB1*110201+DRB1*1429          | DRB1*1121+DRB1*1406                       |                                           |                                  |
| DRB1*110201+DRB1*1430          | DRB1*111401/111402+DRB1*1417              | DRB1*1120+DRB1*1344                       | DRB1*1126+DRB1*130101            |
|                                | DRB1*1134+DRB1*130201                     |                                           |                                  |
| DRB1*110201+DRB1*1440          | DRB1*1164+DRB1*1319                       |                                           |                                  |
| DRB1*110201+DRB1*144401        | DRB1*111401/111402+DRB1*140501            | DRB1*1168+DRB1*1445                       |                                  |
| DRB1*110201+DRB1*144402        | DRB1*111401/111402+DRB1*140503            |                                           |                                  |
| DRB1*110201+DRB1*14453         | DRB1*110401/110402+DRB1*1345              |                                           |                                  |
| DRB1*110201+DRB1*1463          | DRB1*111401/111402+DRB1*1478              |                                           |                                  |
| DRB1*110201+DRB1*1465          | DRB1*111301/111302+DRB1*1304              |                                           |                                  |
| DRB1*110201+DRB1*1467          | DRB1*1145+DRB1*1353                       |                                           |                                  |
| DRB1*110201+DRB1*1468          | DRB1*111401/111402+DRB1*1404              | DRB1*1345+DRB1*1411                       |                                  |
| DRB1*110201+DRB1*1474          | DRB1*1142+DRB1*1416                       |                                           |                                  |
| DRB1*110201+DRB1*1480          | DRB1*1134+DRB1*1340                       | DRB1*1148+DRB1*1417                       |                                  |
| DRB1*110201+DRB1*1485          | DRB1*1136+DRB1*1463                       | DRB1*1168+DRB1*1478                       |                                  |
| DRB1*110201+DRB1*150201        | DRB1*111401/111402+DRB1*15010101/15010102 |                                           |                                  |
| DRB1*110201+DRB1*150202/150205 | DRB1*111401/111402+DRB1*150104            |                                           |                                  |
| DRB1*110201+DRB1*150206        | DRB1*111401/111402+DRB1*150103            |                                           |                                  |
| DRB1*110201+DRB1*1504          | DRB1*1103+DRB1*15010101/15010102          |                                           |                                  |
| DRB1*110201+DRB1*1505          | DRB1*1136+DRB1*15010101/15010102          |                                           |                                  |
| DRB1*110201+DRB1*1507          | DRB1*1148+DRB1*15010101/15010102          |                                           |                                  |
| DRB1*110201+DRB1*1511          | DRB1*111401/111402+DRB1*1507              | DRB1*1148+DRB1*150201                     |                                  |
| DRB1*110201+DRB1*1515          | DRB1*1103+DRB1*150201                     | DRB1*111101/111102+DRB1*15010101/15010102 | DRB1*111401/111402+DRB1*1504     |
|                                | DRB1*1169+DRB1*1510                       |                                           |                                  |
| DRB1*110201+DRB1*1523          | DRB1*1136+DRB1*15030101/15030102          |                                           |                                  |
| DRB1*110201+DRB1*1525          | DRB1*1107+DRB1*1510                       |                                           |                                  |
| DRB1*110201+DRB1*1527          | DRB1*1126+DRB1*1510                       |                                           |                                  |
| DRB1*110201+DRB1*1531          | DRB1*111401/111402+DRB1*1505              | DRB1*1136+DRB1*150201                     | DRB1*1168+DRB1*15010101/15010102 |
| DRB1*110201+DRB1*160101        | DRB1*1103+DRB1*160501                     | DRB1*1148+DRB1*1609                       |                                  |
| DRB1*110201+DRB1*160102        | DRB1*1137+DRB1*1510                       |                                           |                                  |
| DRB1*110201+DRB1*160201        | DRB1*1136+DRB1*160501                     | DRB1*1148+DRB1*1610                       |                                  |
| DRB1*1103+DRB1*1120            | DRB1*111101/111102+DRB1*1116              | DRB1*111401/111402+DRB1*1140              |                                  |
| DRB1*1103+DRB1*1125            | DRB1*110401/110402+DRB1*1155              |                                           |                                  |
| DRB1*1103+DRB1*1126            | DRB1*111101/111102+DRB1*1134              |                                           |                                  |
| DRB1*1103+DRB1*1133            | DRB1*111101/111102+DRB1*1135              |                                           |                                  |
| DRB1*1103+DRB1*1139            | DRB1*111101/111102+DRB1*1143              |                                           |                                  |
| DRB1*1103+DRB1*1142            | DRB1*110401/110402+DRB1*1136              |                                           |                                  |
| DRB1*1103+DRB1*1147            | DRB1*110601+DRB1*1163                     |                                           |                                  |
| DRB1*1103+DRB1*1149            | DRB1*111101/111102+DRB1*1144              |                                           |                                  |
| DRB1*1103+DRB1*1156            | DRB1*110401/110402+DRB1*1141              |                                           |                                  |
| DRB1*1103+DRB1*1157            | DRB1*110601+DRB1*1136                     |                                           |                                  |
| DRB1*1103+DRB1*1164            | DRB1*110801/110802+DRB1*1155              | DRB1*1123+DRB1*1136                       | DRB1*1125+DRB1*1168              |
| DRB1*1103+DRB1*1168            | DRB1*111101/111102+DRB1*1136              |                                           |                                  |
| DRB1*1103+DRB1*1209            | DRB1*1204+DRB1*1324                       |                                           |                                  |
| DRB1*1103+DRB1*1212            | DRB1*1136+DRB1*120201                     |                                           |                                  |
| DRB1*1103+DRB1*130101          | DRB1*1116+DRB1*1324                       | DRB1*1140+DRB1*1322                       |                                  |
| DRB1*1103+DRB1*130301/130302   | DRB1*1141+DRB1*1366                       |                                           |                                  |
| DRB1*1103+DRB1*130501/130502   | DRB1*110401/110402+DRB1*1363              | DRB1*1109+DRB1*1324                       | DRB1*111101/111102+DRB1*1342     |
|                                | DRB1*1140+DRB1*131401/131403              |                                           |                                  |
| DRB1*1103+DRB1*130701          | DRB1*1137+DRB1*1324                       | DRB1*1141+DRB1*131401/131403              |                                  |
| DRB1*1103+DRB1*130702          | DRB1*1141+DRB1*131402                     |                                           |                                  |
| DRB1*1103+DRB1*1308            | DRB1*1141+DRB1*1383                       |                                           |                                  |
| DRB1*1103+DRB1*131101          | DRB1*110401/110402+DRB1*1324              |                                           |                                  |
| DRB1*1103+DRB1*131402          | DRB1*111101/111102+DRB1*131102            |                                           |                                  |
| DRB1*1103+DRB1*1318            | DRB1*1155+DRB1*1342                       |                                           |                                  |
| DRB1*1103+DRB1*1319            | DRB1*1141+DRB1*1357                       |                                           |                                  |
| DRB1*1103+DRB1*1323            | DRB1*111101/111102+DRB1*1322              | DRB1*111401/111402+DRB1*1324              | DRB1*1168+DRB1*131101            |
| DRB1*1103+DRB1*1325            | DRB1*110801/110802+DRB1*1324              | DRB1*1136+DRB1*131401/131403              |                                  |
| DRB1*1103+DRB1*1327            | DRB1*1159+DRB1*1322                       |                                           |                                  |
| DRB1*1103+DRB1*1329            | DRB1*111101/111102+DRB1*1320              | DRB1*1136+DRB1*1363                       |                                  |
| DRB1*1103+DRB1*1332            | DRB1*1140+DRB1*1348                       |                                           |                                  |
| DRB1*1103+DRB1*1336            | DRB1*111101/111102+DRB1*1340              | DRB1*1141+DRB1*130201                     | DRB1*1148+DRB1*1363              |
| DRB1*1103+DRB1*1338            | DRB1*111101/111102+DRB1*1348              |                                           |                                  |
| DRB1*1103+DRB1*1339            | DRB1*111101/111102+DRB1*1379              |                                           |                                  |
| DRB1*1103+DRB1*1340            | DRB1*1140+DRB1*1370                       | DRB1*1141+DRB1*130101                     |                                  |
| DRB1*1103+DRB1*1341            | DRB1*111101/111102+DRB1*1327              | DRB1*1159+DRB1*1323                       |                                  |
| DRB1*1103+DRB1*1342            | DRB1*1140+DRB1*131101                     |                                           |                                  |
| DRB1*1103+DRB1*1344            | DRB1*1134+DRB1*1324                       |                                           |                                  |
| DRB1*1103+DRB1*1348            | DRB1*1141+DRB1*1304                       | DRB1*1148+DRB1*1375                       |                                  |
| DRB1*1103+DRB1*1349            | DRB1*1137+DRB1*1375                       | DRB1*1141+DRB1*1321                       |                                  |
| DRB1*1103+DRB1*135001          | DRB1*1128+DRB1*1324                       |                                           |                                  |
| DRB1*1103+DRB1*1353            | DRB1*1141+DRB1*1315                       |                                           |                                  |

|                                               |                                     |                              |                         |
|-----------------------------------------------|-------------------------------------|------------------------------|-------------------------|
| DRB1*1103+DRB1*1355                           | DRB1*1155+DRB1*1349                 |                              |                         |
| DRB1*1103+DRB1*1358                           | DRB1*110601+DRB1*1348               |                              |                         |
| DRB1*1103+DRB1*1362                           | DRB1*1115+DRB1*1324                 |                              |                         |
| DRB1*1103+DRB1*1365                           | DRB1*111101/111102+DRB1*1332        | DRB1*1140+DRB1*1338          |                         |
| DRB1*1103+DRB1*1370                           | DRB1*1141+DRB1*1322                 | DRB1*1148+DRB1*1324          |                         |
| DRB1*1103+DRB1*140101/1454                    | DRB1*1141+DRB1*1435                 |                              |                         |
| DRB1*1103+DRB1*1402                           | DRB1*111101/111102+DRB1*1406        |                              |                         |
| DRB1*1103+DRB1*140301                         | DRB1*111101/111102+DRB1*1412        | DRB1*1136+DRB1*1427          |                         |
| DRB1*1103+DRB1*140701/140702                  | DRB1*111101/111102+DRB1*140101/1454 |                              |                         |
| DRB1*1103+DRB1*1409                           | DRB1*111101/111102+DRB1*1480        | DRB1*1141+DRB1*1430          |                         |
| DRB1*1103+DRB1*1414                           | DRB1*111101/111102+DRB1*142301      |                              |                         |
| DRB1*1103+DRB1*1417                           | DRB1*1140+DRB1*1344                 |                              |                         |
| DRB1*1103+DRB1*142301                         | DRB1*1117+DRB1*1324                 |                              |                         |
| DRB1*1103+DRB1*1424                           | DRB1*1169+DRB1*1353                 |                              |                         |
| DRB1*1103+DRB1*1425                           | DRB1*1141+DRB1*1453                 |                              |                         |
| DRB1*1103+DRB1*1430                           | DRB1*111101/111102+DRB1*1417        | DRB1*1134+DRB1*1363          |                         |
| DRB1*1103+DRB1*144401                         | DRB1*111101/111102+DRB1*140501      |                              |                         |
| DRB1*1103+DRB1*144402                         | DRB1*111101/111102+DRB1*140503      |                              |                         |
| DRB1*1103+DRB1*1455                           | DRB1*1155+DRB1*143202               |                              |                         |
| DRB1*1103+DRB1*1463                           | DRB1*111101/111102+DRB1*1478        |                              |                         |
| DRB1*1103+DRB1*1465                           | DRB1*111301/111302+DRB1*1375        |                              |                         |
| DRB1*1103+DRB1*1468                           | DRB1*111101/111102+DRB1*1404        |                              |                         |
| DRB1*1103+DRB1*1469                           | DRB1*1136+DRB1*1425                 |                              |                         |
| DRB1*1103+DRB1*1480                           | DRB1*1141+DRB1*1417                 |                              |                         |
| DRB1*1103+DRB1*150202/150205                  | DRB1*111101/111102+DRB1*150104      |                              |                         |
| DRB1*1103+DRB1*150206                         | DRB1*111101/111102+DRB1*150103      |                              |                         |
| DRB1*1103+DRB1*1505                           | DRB1*1136+DRB1*1504                 |                              |                         |
| DRB1*1103+DRB1*1507                           | DRB1*1141+DRB1*15010101/15010102    | DRB1*1148+DRB1*1504          |                         |
| DRB1*1103+DRB1*1511                           | DRB1*111101/111102+DRB1*1507        | DRB1*1141+DRB1*150201        | DRB1*1148+DRB1*1515     |
| DRB1*1103+DRB1*1515                           | DRB1*111101/111102+DRB1*1504        |                              |                         |
| DRB1*1103+DRB1*1521                           | DRB1*1125+DRB1*1510                 |                              |                         |
| DRB1*1103+DRB1*1531                           | DRB1*111101/111102+DRB1*1505        | DRB1*1136+DRB1*1515          | DRB1*1168+DRB1*1504     |
| DRB1*1103+DRB1*151001                         | DRB1*1141+DRB1*1609                 |                              |                         |
| DRB1*1103+DRB1*160201                         | DRB1*1136+DRB1*160101               | DRB1*1141+DRB1*1610          |                         |
| DRB1*1103+DRB1*160202                         | DRB1*1136+DRB1*160102               |                              |                         |
| DRB1*1103+DRB1*1604                           | DRB1*1155+DRB1*160102               |                              |                         |
| DRB1*1103+DRB1*1610                           | DRB1*1136+DRB1*1609                 |                              |                         |
| DRB1*110401/110402+DRB1*110602                | DRB1*110403+DRB1*110601             |                              |                         |
| DRB1*110401/110402+DRB1*1109                  | DRB1*1128+DRB1*1146                 | DRB1*1158+DRB1*1162          |                         |
| DRB1*110401/110402+DRB1*111001/111002         | DRB1*11201+DRB1*1146                |                              |                         |
| DRB1*110401/110402+DRB1*111202                | DRB1*110404+DRB1*111201             |                              |                         |
| DRB1*110401/110402+DRB1*1116                  | DRB1*1118+DRB1*1140                 |                              |                         |
| DRB1*110401/110402+DRB1*1145                  | DRB1*1118+DRB1*1123                 | DRB1*111901+DRB1*1125        |                         |
| DRB1*110401/110402+DRB1*115401                | DRB1*110403+DRB1*115402             |                              |                         |
| DRB1*110401/110402+DRB1*1157                  | DRB1*110601+DRB1*1142               |                              |                         |
| DRB1*110401/110402+DRB1*1164                  | DRB1*110801/110802+DRB1*1125        | DRB1*1123+DRB1*1142          |                         |
| DRB1*110401/110402+DRB1*120101/1206/1210/1217 | DRB1*110602+DRB1*120302             | DRB1*1118+DRB1*120201        |                         |
| DRB1*110401/110402+DRB1*120201                | DRB1*110403+DRB1*120202             | DRB1*110601+DRB1*1219        |                         |
| DRB1*110401/110402+DRB1*1205                  | DRB1*1118+DRB1*1215                 |                              |                         |
| DRB1*110401/110402+DRB1*1209                  | DRB1*1204+DRB1*131101               |                              |                         |
| DRB1*110401/110402+DRB1*1212                  | DRB1*1142+DRB1*120201               | DRB1*1157+DRB1*1219          |                         |
| DRB1*110401/110402+DRB1*130103                | DRB1*110403+DRB1*130101             |                              |                         |
| DRB1*110401/110402+DRB1*130203                | DRB1*1116+DRB1*131402               | DRB1*1120+DRB1*131102        |                         |
| DRB1*110401/110402+DRB1*130301/130302         | DRB1*1156+DRB1*1366                 |                              |                         |
| DRB1*110401/110402+DRB1*1304                  | DRB1*1118+DRB1*1375                 |                              |                         |
| DRB1*110401/110402+DRB1*1306                  | DRB1*1118+DRB1*1342                 |                              |                         |
| DRB1*110401/110402+DRB1*130701                | DRB1*1137+DRB1*131101               | DRB1*1156+DRB1*131401/131403 |                         |
| DRB1*110401/110402+DRB1*130702                | DRB1*1137+DRB1*131102               | DRB1*1156+DRB1*131402        |                         |
| DRB1*110401/110402+DRB1*1308                  | DRB1*1156+DRB1*1383                 |                              |                         |
| DRB1*110401/110402+DRB1*1312                  | DRB1*1118+DRB1*1349                 | DRB1*1156+DRB1*1330          |                         |
| DRB1*110401/110402+DRB1*1313                  | DRB1*1118+DRB1*1355                 | DRB1*1125+DRB1*1312          |                         |
| DRB1*110401/110402+DRB1*1318                  | DRB1*1125+DRB1*1342                 |                              |                         |
| DRB1*110401/110402+DRB1*1319                  | DRB1*1156+DRB1*1357                 |                              |                         |
| DRB1*110401/110402+DRB1*1320                  | DRB1*1136+DRB1*1342                 |                              |                         |
| DRB1*110401/110402+DRB1*1325                  | DRB1*110801/110802+DRB1*131101      | DRB1*1142+DRB1*131401/131403 |                         |
| DRB1*110401/110402+DRB1*1330                  | DRB1*1118+DRB1*1321                 |                              |                         |
| DRB1*110401/110402+DRB1*1331                  | DRB1*1116+DRB1*1346                 |                              |                         |
| DRB1*110401/110402+DRB1*1340                  | DRB1*1141+DRB1*1306                 | DRB1*1148+DRB1*1342          | DRB1*1156+DRB1*130101   |
| DRB1*110401/110402+DRB1*1344                  | DRB1*1134+DRB1*131101               |                              |                         |
| DRB1*110401/110402+DRB1*1348                  | DRB1*1156+DRB1*1304                 |                              |                         |
| DRB1*110401/110402+DRB1*1349                  | DRB1*1156+DRB1*1321                 |                              |                         |
| DRB1*110401/110402+DRB1*135001                | DRB1*1128+DRB1*131101               |                              |                         |
| DRB1*110401/110402+DRB1*135002                | DRB1*110404+DRB1*135001             | DRB1*1158+DRB1*131401/131403 |                         |
| DRB1*110401/110402+DRB1*1352                  | DRB1*1146+DRB1*1322                 |                              |                         |
| DRB1*110401/110402+DRB1*1353                  | DRB1*1156+DRB1*1315                 |                              |                         |
| DRB1*110401/110402+DRB1*1355                  | DRB1*1125+DRB1*1349                 |                              |                         |
| DRB1*110401/110402+DRB1*1356                  | DRB1*110801/110802+DRB1*1342        | DRB1*1142+DRB1*130501/130502 |                         |
| DRB1*110401/110402+DRB1*1362                  | DRB1*1115+DRB1*131101               |                              |                         |
| DRB1*110401/110402+DRB1*1367                  | DRB1*1130+DRB1*130101               |                              |                         |
| DRB1*110401/110402+DRB1*1369                  | DRB1*1158+DRB1*1322                 |                              |                         |
| DRB1*110401/110402+DRB1*1370                  | DRB1*1148+DRB1*131101               | DRB1*1156+DRB1*1322          |                         |
| DRB1*110401/110402+DRB1*1376                  | DRB1*115401+DRB1*1308               |                              |                         |
| DRB1*110401/110402+DRB1*1382                  | DRB1*1118+DRB1*131401/131403        | DRB1*111901+DRB1*131101      |                         |
| DRB1*110401/110402+DRB1*140101/1454           | DRB1*110403+DRB1*140102             | DRB1*115401+DRB1*143201      | DRB1*115402+DRB1*143202 |
|                                               | DRB1*1156+DRB1*1435                 |                              |                         |
| DRB1*110401/110402+DRB1*140102                | DRB1*115402+DRB1*143201             |                              |                         |
| DRB1*110401/110402+DRB1*140501                | DRB1*110403+DRB1*140503             |                              |                         |
| DRB1*110401/110402+DRB1*1408                  | DRB1*115402+DRB1*1434               |                              |                         |
| DRB1*110401/110402+DRB1*1417                  | DRB1*1134+DRB1*1342                 |                              |                         |
| DRB1*110401/110402+DRB1*142301                | DRB1*1117+DRB1*131101               |                              |                         |
| DRB1*110401/110402+DRB1*1425                  | DRB1*1156+DRB1*1453                 |                              |                         |
| DRB1*110401/110402+DRB1*1428                  | DRB1*110601+DRB1*1404               |                              |                         |
| DRB1*110401/110402+DRB1*1429                  | DRB1*110601+DRB1*1406               |                              |                         |
| DRB1*110401/110402+DRB1*143202                | DRB1*110403+DRB1*143201             |                              |                         |
| DRB1*110401/110402+DRB1*1433                  | DRB1*115402+DRB1*1417               |                              |                         |
| DRB1*110401/110402+DRB1*1447                  | DRB1*112701+DRB1*1406               |                              |                         |
| DRB1*110401/110402+DRB1*1451                  | DRB1*115402+DRB1*1402               |                              |                         |
| DRB1*110401/110402+DRB1*1455                  | DRB1*1125+DRB1*143202               |                              |                         |
| DRB1*110401/110402+DRB1*1467                  | DRB1*1118+DRB1*1427                 |                              |                         |
| DRB1*110401/110402+DRB1*1469                  | DRB1*1142+DRB1*1425                 |                              |                         |
| DRB1*110401/110402+DRB1*1480                  | DRB1*1156+DRB1*1417                 |                              |                         |
| DRB1*110401/110402+DRB1*15010101/15010102     | DRB1*1118+DRB1*1504                 |                              |                         |
| DRB1*110401/110402+DRB1*150103                | DRB1*110403+DRB1*15010101/15010102  |                              |                         |
| DRB1*110401/110402+DRB1*1505                  | DRB1*1142+DRB1*1504                 |                              |                         |
| DRB1*110401/110402+DRB1*1507                  | DRB1*1156+DRB1*15010101/15010102    |                              |                         |
| DRB1*110401/110402+DRB1*160101                | DRB1*1156+DRB1*1609                 |                              |                         |
| DRB1*110401/110402+DRB1*160201                | DRB1*1142+DRB1*160101               | DRB1*1156+DRB1*1610          |                         |
| DRB1*110401/110402+DRB1*160202                | DRB1*1142+DRB1*160102               |                              |                         |
| DRB1*110401/110402+DRB1*1604                  | DRB1*1125+DRB1*160102               |                              |                         |
| DRB1*110401/110402+DRB1*160501                | DRB1*1118+DRB1*160101               |                              |                         |
| DRB1*110401/110402+DRB1*1610                  | DRB1*1142+DRB1*1609                 |                              |                         |
| DRB1*110403+DRB1*1157                         | DRB1*110602+DRB1*1142               |                              |                         |
| DRB1*110403+DRB1*120102                       | DRB1*1118+DRB1*120204               |                              |                         |
| DRB1*110403+DRB1*120201                       | DRB1*110602+DRB1*1219               |                              |                         |
| DRB1*110403+DRB1*120302                       | DRB1*1118+DRB1*1219                 |                              |                         |
| DRB1*110403+DRB1*1340                         | DRB1*1156+DRB1*130103               |                              |                         |
| DRB1*110403+DRB1*1367                         | DRB1*1130+DRB1*130103               |                              |                         |
| DRB1*110403+DRB1*140101/1454                  | DRB1*115401+DRB1*143202             |                              |                         |
| DRB1*110403+DRB1*1404                         | DRB1*115401+DRB1*1431               |                              |                         |
| DRB1*110403+DRB1*1408                         | DRB1*115401+DRB1*1434               |                              |                         |
| DRB1*110403+DRB1*1428                         | DRB1*110602+DRB1*1404               |                              |                         |
| DRB1*110403+DRB1*1429                         | DRB1*110602+DRB1*1406               |                              |                         |
| DRB1*110403+DRB1*1433                         | DRB1*115401+DRB1*1417               |                              |                         |
| DRB1*110403+DRB1*1451                         | DRB1*115401+DRB1*1402               |                              |                         |

|                                               |                                    |                         |                       |
|-----------------------------------------------|------------------------------------|-------------------------|-----------------------|
| DRB1*110403+DRB1*1507                         | DRB1*1156+DRB1*150103              |                         |                       |
| DRB1*110404+DRB1*111001/111002                | DRB1*11202+DRB1*1146               |                         |                       |
| DRB1*110404+DRB1*130101                       | DRB1*1146+DRB1*1369                | DRB1*1158+DRB1*1352     |                       |
| DRB1*110404+DRB1*130501/130502                | DRB1*1146+DRB1*135002              |                         |                       |
| DRB1*110404+DRB1*1387                         | DRB1*1158+DRB1*1383                |                         |                       |
| DRB1*110404+DRB1*1532                         | DRB1*1158+DRB1*15010101/15010102   |                         |                       |
| DRB1*110601+DRB1*1120                         | DRB1*1109+DRB1*1121                |                         |                       |
| DRB1*110601+DRB1*1148                         | DRB1*1121+DRB1*1156                |                         |                       |
| DRB1*110601+DRB1*115401                       | DRB1*110602+DRB1*115402            |                         |                       |
| DRB1*110601+DRB1*1164                         | DRB1*1123+DRB1*1157                |                         |                       |
| DRB1*110601+DRB1*116501/116502                | DRB1*1121+DRB1*1135                |                         |                       |
| DRB1*110601+DRB1*1168                         | DRB1*111101/111102+DRB1*1157       |                         |                       |
| DRB1*110601+DRB1*120201                       | DRB1*110602+DRB1*120202            |                         |                       |
| DRB1*110601+DRB1*120302                       | DRB1*1118+DRB1*120202              |                         |                       |
| DRB1*110601+DRB1*1212                         | DRB1*1157+DRB1*120201              |                         |                       |
| DRB1*110601+DRB1*130101                       | DRB1*1121+DRB1*1342                |                         |                       |
| DRB1*110601+DRB1*130103                       | DRB1*110602+DRB1*130101            |                         |                       |
| DRB1*110601+DRB1*130201                       | DRB1*1121+DRB1*130501/130502       |                         |                       |
| DRB1*110601+DRB1*1313                         | DRB1*1123+DRB1*1358                |                         |                       |
| DRB1*110601+DRB1*1322                         | DRB1*1121+DRB1*131101              |                         |                       |
| DRB1*110601+DRB1*1323                         | DRB1*1121+DRB1*131401/131403       |                         |                       |
| DRB1*110601+DRB1*1325                         | DRB1*1157+DRB1*131401/131403       |                         |                       |
| DRB1*110601+DRB1*1329                         | DRB1*1157+DRB1*1363                |                         |                       |
| DRB1*110601+DRB1*1332                         | DRB1*1140+DRB1*1358                |                         |                       |
| DRB1*110601+DRB1*1333                         | DRB1*112702+DRB1*1381              |                         |                       |
| DRB1*110601+DRB1*1338                         | DRB1*111101/111102+DRB1*1358       | DRB1*1121+DRB1*1349     |                       |
| DRB1*110601+DRB1*1345                         | DRB1*1121+DRB1*1453                |                         |                       |
| DRB1*110601+DRB1*1356                         | DRB1*1157+DRB1*130501/130502       |                         |                       |
| DRB1*110601+DRB1*140101/1454                  | DRB1*110602+DRB1*140102            |                         |                       |
| DRB1*110601+DRB1*140301                       | DRB1*1157+DRB1*1427                |                         |                       |
| DRB1*110601+DRB1*140501                       | DRB1*110602+DRB1*140503            |                         |                       |
| DRB1*110601+DRB1*143202                       | DRB1*110602+DRB1*143201            |                         |                       |
| DRB1*110601+DRB1*144401                       | DRB1*110602+DRB1*144402            |                         |                       |
| DRB1*110601+DRB1*1447                         | DRB1*112701+DRB1*1429              |                         |                       |
| DRB1*110601+DRB1*1469                         | DRB1*1157+DRB1*1425                |                         |                       |
| DRB1*110601+DRB1*150103                       | DRB1*110602+DRB1*15010101/15010102 |                         |                       |
| DRB1*110601+DRB1*150206                       | DRB1*110602+DRB1*150201            |                         |                       |
| DRB1*110601+DRB1*1505                         | DRB1*1157+DRB1*1504                |                         |                       |
| DRB1*110601+DRB1*1531                         | DRB1*1157+DRB1*1515                |                         |                       |
| DRB1*110601+DRB1*160201                       | DRB1*1157+DRB1*160101              |                         |                       |
| DRB1*110601+DRB1*160202                       | DRB1*1157+DRB1*160102              |                         |                       |
| DRB1*110601+DRB1*1610                         | DRB1*1157+DRB1*1609                |                         |                       |
| DRB1*1107+DRB1*1473                           | DRB1*115401+DRB1*1479              |                         |                       |
| DRB1*1107+DRB1*1515                           | DRB1*1169+DRB1*1525                |                         |                       |
| DRB1*1107+DRB1*1527                           | DRB1*1126+DRB1*1525                |                         |                       |
| DRB1*1107+DRB1*160102                         | DRB1*1137+DRB1*1525                |                         |                       |
| DRB1*110801/110802+DRB1*111401/111402         | DRB1*111901+DRB1*1168              |                         |                       |
| DRB1*110801/110802+DRB1*1116                  | DRB1*1120+DRB1*1142                |                         |                       |
| DRB1*110801/110802+DRB1*1118                  | DRB1*111901+DRB1*1142              |                         |                       |
| DRB1*110801/110802+DRB1*1121                  | DRB1*111401/111402+DRB1*1157       |                         |                       |
| DRB1*110801/110802+DRB1*1134                  | DRB1*1126+DRB1*1142                |                         |                       |
| DRB1*110801/110802+DRB1*1135                  | DRB1*1133+DRB1*1142                |                         |                       |
| DRB1*110801/110802+DRB1*1136                  | DRB1*1142+DRB1*1168                |                         |                       |
| DRB1*110801/110802+DRB1*1140                  | DRB1*1109+DRB1*1136                |                         |                       |
| DRB1*110801/110802+DRB1*1141                  | DRB1*1136+DRB1*1137                | DRB1*1156+DRB1*1168     |                       |
| DRB1*110801/110802+DRB1*1143                  | DRB1*1139+DRB1*1142                |                         |                       |
| DRB1*110801/110802+DRB1*1144                  | DRB1*1142+DRB1*1149                |                         |                       |
| DRB1*110801/110802+DRB1*1145                  | DRB1*111901+DRB1*1164              |                         |                       |
| DRB1*110801/110802+DRB1*1147                  | DRB1*1129+DRB1*1157                |                         |                       |
| DRB1*110801/110802+DRB1*1156                  | DRB1*1137+DRB1*1142                |                         |                       |
| DRB1*110801/110802+DRB1*1163                  | DRB1*1129+DRB1*1136                |                         |                       |
| DRB1*110801/110802+DRB1*120101/1206/1210/1217 | DRB1*111901+DRB1*1212              |                         |                       |
| DRB1*110801/110802+DRB1*1209                  | DRB1*1204+DRB1*1325                |                         |                       |
| DRB1*110801/110802+DRB1*130201                | DRB1*111401/111402+DRB1*1356       | DRB1*111901+DRB1*1329   | DRB1*1120+DRB1*1325   |
| DRB1*110801/110802+DRB1*130202                | DRB1*111902+DRB1*1329              |                         |                       |
| DRB1*110801/110802+DRB1*130301/130302         | DRB1*111901+DRB1*1388              |                         |                       |
| DRB1*110801/110802+DRB1*1304                  | DRB1*1136+DRB1*1330                |                         |                       |
| DRB1*110801/110802+DRB1*1306                  | DRB1*1118+DRB1*1356                |                         |                       |
| DRB1*110801/110802+DRB1*130701                | DRB1*1137+DRB1*1325                |                         |                       |
| DRB1*110801/110802+DRB1*131102                | DRB1*1142+DRB1*131402              |                         |                       |
| DRB1*110801/110802+DRB1*1313                  | DRB1*1164+DRB1*1312                |                         |                       |
| DRB1*110801/110802+DRB1*1318                  | DRB1*1125+DRB1*1356                | DRB1*1164+DRB1*1342     |                       |
| DRB1*110801/110802+DRB1*1320                  | DRB1*1136+DRB1*1356                | DRB1*1142+DRB1*1329     |                       |
| DRB1*110801/110802+DRB1*1323                  | DRB1*111401/111402+DRB1*1325       | DRB1*1168+DRB1*1382     |                       |
| DRB1*110801/110802+DRB1*1327                  | DRB1*111901+DRB1*1371              | DRB1*1142+DRB1*1341     |                       |
| DRB1*110801/110802+DRB1*1329                  | DRB1*1168+DRB1*1356                |                         |                       |
| DRB1*110801/110802+DRB1*1332                  | DRB1*1142+DRB1*1365                |                         |                       |
| DRB1*110801/110802+DRB1*1338                  | DRB1*1168+DRB1*1312                |                         |                       |
| DRB1*110801/110802+DRB1*1340                  | DRB1*1142+DRB1*1336                | DRB1*1148+DRB1*1356     |                       |
| DRB1*110801/110802+DRB1*1344                  | DRB1*1134+DRB1*1325                |                         |                       |
| DRB1*110801/110802+DRB1*1347                  | DRB1*1164+DRB1*130701              |                         |                       |
| DRB1*110801/110802+DRB1*1348                  | DRB1*1136+DRB1*1312                | DRB1*1142+DRB1*1338     |                       |
| DRB1*110801/110802+DRB1*135001                | DRB1*1128+DRB1*1325                |                         |                       |
| DRB1*110801/110802+DRB1*1355                  | DRB1*1164+DRB1*1349                |                         |                       |
| DRB1*110801/110802+DRB1*1358                  | DRB1*1157+DRB1*1312                |                         |                       |
| DRB1*110801/110802+DRB1*1362                  | DRB1*1115+DRB1*1325                |                         |                       |
| DRB1*110801/110802+DRB1*1370                  | DRB1*1148+DRB1*1325                |                         |                       |
| DRB1*110801/110802+DRB1*1375                  | DRB1*1136+DRB1*1321                |                         |                       |
| DRB1*110801/110802+DRB1*1379                  | DRB1*111901+DRB1*1378              | DRB1*1142+DRB1*1339     |                       |
| DRB1*110801/110802+DRB1*1381                  | DRB1*1137+DRB1*130301/130302       |                         |                       |
| DRB1*110801/110802+DRB1*1382                  | DRB1*111901+DRB1*1325              |                         |                       |
| DRB1*110801/110802+DRB1*140101/1454           | DRB1*1142+DRB1*140701/140702       |                         |                       |
| DRB1*110801/110802+DRB1*1404                  | DRB1*1142+DRB1*1468                |                         |                       |
| DRB1*110801/110802+DRB1*140501                | DRB1*1142+DRB1*144401              |                         |                       |
| DRB1*110801/110802+DRB1*140503                | DRB1*1142+DRB1*144402              |                         |                       |
| DRB1*110801/110802+DRB1*1406                  | DRB1*1142+DRB1*1402                |                         |                       |
| DRB1*110801/110802+DRB1*1412                  | DRB1*1142+DRB1*140301              |                         |                       |
| DRB1*110801/110802+DRB1*1416                  | DRB1*111401/111402+DRB1*1474       |                         |                       |
| DRB1*110801/110802+DRB1*1417                  | DRB1*1134+DRB1*1356                | DRB1*1142+DRB1*1430     |                       |
| DRB1*110801/110802+DRB1*1422                  | DRB1*111001/111002+DRB1*1469       |                         |                       |
| DRB1*110801/110802+DRB1*142301                | DRB1*1117+DRB1*1325                | DRB1*1142+DRB1*1414     |                       |
| DRB1*110801/110802+DRB1*1428                  | DRB1*1157+DRB1*1468                |                         |                       |
| DRB1*110801/110802+DRB1*1429                  | DRB1*1157+DRB1*1402                |                         |                       |
| DRB1*110801/110802+DRB1*1430                  | DRB1*1126+DRB1*1356                |                         |                       |
| DRB1*110801/110802+DRB1*143202                | DRB1*111301/111302+DRB1*1469       |                         |                       |
| DRB1*110801/110802+DRB1*1445                  | DRB1*1118+DRB1*144401              | DRB1*111901+DRB1*140501 |                       |
| DRB1*110801/110802+DRB1*1455                  | DRB1*1164+DRB1*143202              |                         |                       |
| DRB1*110801/110802+DRB1*1463                  | DRB1*111901+DRB1*1485              |                         |                       |
| DRB1*110801/110802+DRB1*1467                  | DRB1*111901+DRB1*140301            |                         |                       |
| DRB1*110801/110802+DRB1*1478                  | DRB1*1118+DRB1*1485                | DRB1*1142+DRB1*1463     |                       |
| DRB1*110801/110802+DRB1*1480                  | DRB1*1142+DRB1*1409                |                         |                       |
| DRB1*110801/110802+DRB1*15010101/15010102     | DRB1*1118+DRB1*1531                | DRB1*111901+DRB1*1505   | DRB1*1142+DRB1*150201 |
| DRB1*110801/110802+DRB1*150103                | DRB1*1142+DRB1*150206              |                         |                       |
| DRB1*110801/110802+DRB1*150104                | DRB1*1142+DRB1*150202/150205       |                         |                       |
| DRB1*110801/110802+DRB1*150201                | DRB1*111901+DRB1*1531              |                         |                       |
| DRB1*110801/110802+DRB1*15030101/15030102     | DRB1*111901+DRB1*1523              |                         |                       |
| DRB1*110801/110802+DRB1*1505                  | DRB1*1142+DRB1*1531                |                         |                       |
| DRB1*110801/110802+DRB1*1507                  | DRB1*1112+DRB1*1511                | DRB1*1164+DRB1*160102   |                       |
| DRB1*110801/110802+DRB1*1604                  | DRB1*1123+DRB1*160202              | DRB1*111902+DRB1*160202 |                       |
| DRB1*110801/110802+DRB1*160501                | DRB1*111901+DRB1*160201            |                         |                       |
| DRB1*1109+DRB1*111201                         | DRB1*111001/111002+DRB1*1128       |                         |                       |
| DRB1*1109+DRB1*1141                           | DRB1*1137+DRB1*1140                |                         |                       |
| DRB1*1109+DRB1*1148                           | DRB1*1116+DRB1*1137                | DRB1*1120+DRB1*1156     |                       |
| DRB1*1109+DRB1*1155                           | DRB1*1123+DRB1*1140                |                         |                       |

|                                               |                                      |                              |
|-----------------------------------------------|--------------------------------------|------------------------------|
| DRB1*1109+DRB1*1163                           | DRB1*1129+DRB1*1140                  |                              |
| DRB1*1109+DRB1*116501/116502                  | DRB1*1116+DRB1*1133                  | DRB1*1120+DRB1*1135          |
| DRB1*1109+DRB1*1170                           | DRB1*1116+DRB1*1132                  |                              |
| DRB1*1109+DRB1*1209                           | DRB1*1204+DRB1*130501/130502         |                              |
| DRB1*1109+DRB1*130101                         | DRB1*1116+DRB1*130501/130502         | DRB1*1120+DRB1*1342          |
| DRB1*1109+DRB1*130201                         | DRB1*1120+DRB1*130501/130502         |                              |
| DRB1*1109+DRB1*1304                           | DRB1*1116+DRB1*1321                  | DRB1*1140+DRB1*1330          |
| DRB1*1109+DRB1*130701                         | DRB1*1137+DRB1*130501/130502         |                              |
| DRB1*1109+DRB1*1308                           | DRB1*111001/111002+DRB1*1340         |                              |
| DRB1*1109+DRB1*1319                           | DRB1*111001/111002+DRB1*1353         |                              |
| DRB1*1109+DRB1*1320                           | DRB1*1140+DRB1*1356                  |                              |
| DRB1*1109+DRB1*1345                           | DRB1*1120+DRB1*1453                  |                              |
| DRB1*1109+DRB1*135001                         | DRB1*1128+DRB1*130501/130502         |                              |
| DRB1*1109+DRB1*1352                           | DRB1*1146+DRB1*130201                |                              |
| DRB1*1109+DRB1*1357                           | DRB1*111001/111002+DRB1*1315         |                              |
| DRB1*1109+DRB1*1362                           | DRB1*1115+DRB1*130501/130502         |                              |
| DRB1*1109+DRB1*1369                           | DRB1*1116+DRB1*135002                | DRB1*1158+DRB1*130201        |
| DRB1*1109+DRB1*1371                           | DRB1*1159+DRB1*1356                  |                              |
| DRB1*1109+DRB1*1375                           | DRB1*1140+DRB1*1321                  |                              |
| DRB1*1109+DRB1*1382                           | DRB1*111901+DRB1*130501/130502       |                              |
| DRB1*1109+DRB1*1383                           | DRB1*111001/111002+DRB1*130101       |                              |
| DRB1*1109+DRB1*1416                           | DRB1*1116+DRB1*1422                  |                              |
| DRB1*1109+DRB1*1420                           | DRB1*111001/111002+DRB1*1406         |                              |
| DRB1*1109+DRB1*142301                         | DRB1*1117+DRB1*130501/130502         |                              |
| DRB1*1109+DRB1*1440                           | DRB1*111001/111002+DRB1*140301       |                              |
| DRB1*111001/111002+DRB1*135001                | DRB1*111201+DRB1*130501/130502       |                              |
| DRB1*111001/111002+DRB1*135002                | DRB1*111202+DRB1*130501/130502       |                              |
| DRB1*111001/111002+DRB1*1369                  | DRB1*111202+DRB1*130101              |                              |
| DRB1*111001/111002+DRB1*143202                | DRB1*111301/111302+DRB1*1422         |                              |
| DRB1*111101/111102+DRB1*1145                  | DRB1*111401/111402+DRB1*1123         |                              |
| DRB1*111101/111102+DRB1*1148                  | DRB1*111401/111402+DRB1*1141         |                              |
| DRB1*111101/111102+DRB1*1164                  | DRB1*1123+DRB1*1168                  |                              |
| DRB1*111101/111102+DRB1*120101/1206/1210/1217 | DRB1*11401/111402+DRB1*120201        |                              |
| DRB1*111101/111102+DRB1*120102                | DRB1*1121+DRB1*1216                  |                              |
| DRB1*111101/111102+DRB1*1205                  | DRB1*111401/111402+DRB1*1215         |                              |
| DRB1*111101/111102+DRB1*1212                  | DRB1*1168+DRB1*120201                |                              |
| DRB1*111101/111102+DRB1*130201                | DRB1*111401/111402+DRB1*1363         |                              |
| DRB1*111101/111102+DRB1*1304                  | DRB1*111401/111402+DRB1*1375         |                              |
| DRB1*111101/111102+DRB1*1309                  | DRB1*1169+DRB1*130101                |                              |
| DRB1*111101/111102+DRB1*1313                  | DRB1*111401/111402+DRB1*1355         | DRB1*1123+DRB1*1338          |
| DRB1*111101/111102+DRB1*1318                  | DRB1*1125+DRB1*1363                  | DRB1*1155+DRB1*130501/130502 |
| DRB1*111101/111102+DRB1*1325                  | DRB1*1168+DRB1*131401/131403         |                              |
| DRB1*111101/111102+DRB1*1329                  | DRB1*1168+DRB1*1363                  |                              |
| DRB1*111101/111102+DRB1*1330                  | DRB1*111401/111402+DRB1*1321         |                              |
| DRB1*111101/111102+DRB1*1344                  | DRB1*1126+DRB1*1324                  |                              |
| DRB1*111101/111102+DRB1*1370                  | DRB1*1141+DRB1*1323                  |                              |
| DRB1*111101/111102+DRB1*140301                | DRB1*1168+DRB1*1427                  |                              |
| DRB1*111101/111102+DRB1*1430                  | DRB1*1126+DRB1*1363                  |                              |
| DRB1*111101/111102+DRB1*1437                  | DRB1*1169+DRB1*1372                  |                              |
| DRB1*111101/111102+DRB1*1467                  | DRB1*111401/111402+DRB1*1427         |                              |
| DRB1*111101/111102+DRB1*1469                  | DRB1*1168+DRB1*1425                  |                              |
| DRB1*111101/111102+DRB1*1474                  | DRB1*1136+DRB1*1422                  |                              |
| DRB1*111101/111102+DRB1*150201                | DRB1*111401/111402+DRB1*1515         |                              |
| DRB1*111101/111102+DRB1*1521                  | DRB1*1123+DRB1*1510                  |                              |
| DRB1*111101/111102+DRB1*1531                  | DRB1*1168+DRB1*1515                  |                              |
| DRB1*111101/111102+DRB1*160201                | DRB1*1168+DRB1*160101                |                              |
| DRB1*111101/111102+DRB1*160202                | DRB1*1168+DRB1*160102                |                              |
| DRB1*111101/111102+DRB1*160501                | DRB1*111401/111402+DRB1*160101       |                              |
| DRB1*111101/111102+DRB1*1610                  | DRB1*1168+DRB1*1609                  |                              |
| DRB1*111201+DRB1*1315                         | DRB1*1128+DRB1*1357                  |                              |
| DRB1*111201+DRB1*1340                         | DRB1*1128+DRB1*1308                  | DRB1*1137+DRB1*1387          |
| DRB1*111201+DRB1*135002                       | DRB1*111202+DRB1*135001              |                              |
| DRB1*111201+DRB1*1353                         | DRB1*1128+DRB1*1319                  |                              |
| DRB1*111201+DRB1*1361                         | DRB1*112701+DRB1*1387                |                              |
| DRB1*111201+DRB1*1368                         | DRB1*1124+DRB1*1383                  |                              |
| DRB1*111201+DRB1*1384                         | DRB1*1129+DRB1*1308                  |                              |
| DRB1*111201+DRB1*140301                       | DRB1*1128+DRB1*1440                  |                              |
| DRB1*111201+DRB1*1406                         | DRB1*1128+DRB1*1420                  |                              |
| DRB1*111202+DRB1*1412                         | DRB1*1158+DRB1*1440                  |                              |
| DRB1*111301/111302+DRB1*1330                  | DRB1*111901+DRB1*1465                |                              |
| DRB1*111301/111302+DRB1*1348                  | DRB1*1148+DRB1*1465                  |                              |
| DRB1*111301/111302+DRB1*1349                  | DRB1*1137+DRB1*1465                  |                              |
| DRB1*111401/111402+DRB1*1147                  | DRB1*1121+DRB1*1129                  |                              |
| DRB1*111401/111402+DRB1*1164                  | DRB1*1145+DRB1*1168                  |                              |
| DRB1*111401/111402+DRB1*1209                  | DRB1*1204+DRB1*1323                  |                              |
| DRB1*111401/111402+DRB1*1212                  | DRB1*1168+DRB1*120101/1206/1210/1217 |                              |
| DRB1*111401/111402+DRB1*130201                | DRB1*1120+DRB1*1323                  |                              |
| DRB1*111401/111402+DRB1*1306                  | DRB1*1116+DRB1*1382                  | DRB1*1118+DRB1*130201        |
| DRB1*111401/111402+DRB1*130701                | DRB1*1137+DRB1*1323                  | DRB1*111901+DRB1*130101      |
| DRB1*111401/111402+DRB1*1312                  | DRB1*111901+DRB1*1338                |                              |
| DRB1*111401/111402+DRB1*1313                  | DRB1*1145+DRB1*1338                  |                              |
| DRB1*111401/111402+DRB1*1318                  | DRB1*1123+DRB1*130101                | DRB1*1125+DRB1*130201        |
| DRB1*111401/111402+DRB1*1329                  | DRB1*1168+DRB1*130201                |                              |
| DRB1*111401/111402+DRB1*1344                  | DRB1*1126+DRB1*1322                  | DRB1*1134+DRB1*1323          |
| DRB1*111401/111402+DRB1*135001                | DRB1*1128+DRB1*1323                  |                              |
| DRB1*111401/111402+DRB1*1358                  | DRB1*1121+DRB1*1312                  |                              |
| DRB1*111401/111402+DRB1*1362                  | DRB1*1115+DRB1*1323                  |                              |
| DRB1*111401/111402+DRB1*1365                  | DRB1*1120+DRB1*1338                  |                              |
| DRB1*111401/111402+DRB1*1370                  | DRB1*1148+DRB1*1323                  |                              |
| DRB1*111401/111402+DRB1*1371                  | DRB1*1136+DRB1*1341                  | DRB1*1168+DRB1*1327          |
| DRB1*111401/111402+DRB1*1378                  | DRB1*1136+DRB1*1339                  | DRB1*1168+DRB1*1379          |
| DRB1*111401/111402+DRB1*1381                  | DRB1*1121+DRB1*130301/130302         |                              |
| DRB1*111401/111402+DRB1*1382                  | DRB1*111901+DRB1*1323                |                              |
| DRB1*111401/111402+DRB1*1388                  | DRB1*1168+DRB1*130301/130302         |                              |
| DRB1*111401/111402+DRB1*140301                | DRB1*1168+DRB1*1467                  |                              |
| DRB1*111401/111402+DRB1*1409                  | DRB1*1126+DRB1*1336                  |                              |
| DRB1*111401/111402+DRB1*1420                  | DRB1*1126+DRB1*1319                  |                              |
| DRB1*111401/111402+DRB1*1425                  | DRB1*1137+DRB1*1345                  |                              |
| DRB1*111401/111402+DRB1*1428                  | DRB1*1121+DRB1*1468                  |                              |
| DRB1*111401/111402+DRB1*1429                  | DRB1*1121+DRB1*1402                  |                              |
| DRB1*111401/111402+DRB1*1430                  | DRB1*1126+DRB1*130201                |                              |
| DRB1*111401/111402+DRB1*1485                  | DRB1*1168+DRB1*1463                  |                              |
| DRB1*111401/111402+DRB1*1521                  | DRB1*1145+DRB1*1510                  |                              |
| DRB1*111401/111402+DRB1*1523                  | DRB1*1168+DRB1*15030101/15030102     |                              |
| DRB1*111401/111402+DRB1*1531                  | DRB1*1168+DRB1*150201                |                              |
| DRB1*111401/111402+DRB1*160201                | DRB1*1168+DRB1*160501                |                              |
| DRB1*1115+DRB1*1209                           | DRB1*1204+DRB1*1362                  |                              |
| DRB1*1115+DRB1*130101                         | DRB1*1116+DRB1*1362                  |                              |
| DRB1*1115+DRB1*130201                         | DRB1*1120+DRB1*1362                  |                              |
| DRB1*1115+DRB1*130701                         | DRB1*1137+DRB1*1362                  |                              |
| DRB1*1115+DRB1*1344                           | DRB1*1134+DRB1*1362                  |                              |
| DRB1*1115+DRB1*135001                         | DRB1*1128+DRB1*1362                  |                              |
| DRB1*1115+DRB1*1370                           | DRB1*1148+DRB1*1362                  |                              |
| DRB1*1115+DRB1*1382                           | DRB1*111901+DRB1*1362                |                              |
| DRB1*1115+DRB1*142301                         | DRB1*1117+DRB1*1362                  |                              |
| DRB1*1116+DRB1*111901                         | DRB1*1118+DRB1*1120                  |                              |
| DRB1*1116+DRB1*1123                           | DRB1*1120+DRB1*1125                  | DRB1*1140+DRB1*1145          |
| DRB1*1116+DRB1*1126                           | DRB1*1120+DRB1*1134                  |                              |
| DRB1*1116+DRB1*1139                           | DRB1*1120+DRB1*1143                  |                              |
| DRB1*1116+DRB1*1141                           | DRB1*1140+DRB1*1148                  |                              |
| DRB1*1116+DRB1*1149                           | DRB1*1120+DRB1*1144                  |                              |
| DRB1*1116+DRB1*1168                           | DRB1*1120+DRB1*1136                  |                              |
| DRB1*1116+DRB1*120201                         | DRB1*1140+DRB1*120101/1206/1210/1217 |                              |
| DRB1*1116+DRB1*1209                           | DRB1*1204+DRB1*130101                |                              |

|                              |                                      |                              |
|------------------------------|--------------------------------------|------------------------------|
| DRB1*1116+DRB1*1215          | DRB1*1140+DRB1*1205                  |                              |
| DRB1*1116+DRB1*130201        | DRB1*1120+DRB1*130101                |                              |
| DRB1*1116+DRB1*130702        | DRB1*1156+DRB1*130203                |                              |
| DRB1*1116+DRB1*1312          | DRB1*1118+DRB1*1365                  | DRB1*111901+DRB1*1332        |
| DRB1*1116+DRB1*1313          | DRB1*1145+DRB1*1332                  |                              |
| DRB1*1116+DRB1*1329          | DRB1*1120+DRB1*1320                  |                              |
| DRB1*1116+DRB1*1336          | DRB1*1120+DRB1*1340                  |                              |
| DRB1*1116+DRB1*1339          | DRB1*1120+DRB1*1379                  |                              |
| DRB1*1116+DRB1*1341          | DRB1*1120+DRB1*1327                  |                              |
| DRB1*1116+DRB1*1342          | DRB1*1140+DRB1*1306                  |                              |
| DRB1*1116+DRB1*135001        | DRB1*1128+DRB1*130101                |                              |
| DRB1*1116+DRB1*1355          | DRB1*1123+DRB1*1332                  | DRB1*1125+DRB1*1365          |
| DRB1*1116+DRB1*1363          | DRB1*1140+DRB1*130201                | DRB1*1140+DRB1*1313          |
| DRB1*1116+DRB1*1365          | DRB1*1120+DRB1*1332                  |                              |
| DRB1*1116+DRB1*1375          | DRB1*1140+DRB1*1304                  |                              |
| DRB1*1116+DRB1*1386          | DRB1*1126+DRB1*1315                  |                              |
| DRB1*1116+DRB1*1402          | DRB1*1120+DRB1*1406                  |                              |
| DRB1*1116+DRB1*140301        | DRB1*1120+DRB1*1412                  |                              |
| DRB1*1116+DRB1*140701/140702 | DRB1*1120+DRB1*140101/1454           |                              |
| DRB1*1116+DRB1*1409          | DRB1*1120+DRB1*1480                  |                              |
| DRB1*1116+DRB1*1414          | DRB1*1117+DRB1*130201                | DRB1*1120+DRB1*142301        |
| DRB1*1116+DRB1*142301        | DRB1*1117+DRB1*130101                |                              |
| DRB1*1116+DRB1*1427          | DRB1*1140+DRB1*1467                  |                              |
| DRB1*1116+DRB1*1430          | DRB1*1120+DRB1*1417                  |                              |
| DRB1*1116+DRB1*144401        | DRB1*1120+DRB1*140501                |                              |
| DRB1*1116+DRB1*144402        | DRB1*1120+DRB1*140503                |                              |
| DRB1*1116+DRB1*1463          | DRB1*1120+DRB1*1478                  |                              |
| DRB1*1116+DRB1*1468          | DRB1*1120+DRB1*1404                  |                              |
| DRB1*1116+DRB1*150201        | DRB1*1120+DRB1*15010101/15010102     |                              |
| DRB1*1116+DRB1*150202/150205 | DRB1*1120+DRB1*150104                |                              |
| DRB1*1116+DRB1*150206        | DRB1*1120+DRB1*150103                |                              |
| DRB1*1116+DRB1*1504          | DRB1*1140+DRB1*15010101/15010102     |                              |
| DRB1*1116+DRB1*1511          | DRB1*1120+DRB1*1507                  |                              |
| DRB1*1116+DRB1*1515          | DRB1*1120+DRB1*1504                  | DRB1*1140+DRB1*150201        |
| DRB1*1116+DRB1*1531          | DRB1*1120+DRB1*1505                  |                              |
| DRB1*1116+DRB1*160101        | DRB1*1140+DRB1*160501                |                              |
| DRB1*1117+DRB1*1131          | DRB1*111901+DRB1*1152                |                              |
| DRB1*1117+DRB1*1167          | DRB1*1125+DRB1*1411                  |                              |
| DRB1*1117+DRB1*1209          | DRB1*1204+DRB1*142301                |                              |
| DRB1*1117+DRB1*130701        | DRB1*1137+DRB1*142301                | DRB1*1156+DRB1*1414          |
| DRB1*1117+DRB1*1317          | DRB1*1322+DRB1*1411                  |                              |
| DRB1*1117+DRB1*1344          | DRB1*1134+DRB1*142301                |                              |
| DRB1*1117+DRB1*135001        | DRB1*1128+DRB1*142301                |                              |
| DRB1*1117+DRB1*135002        | DRB1*1158+DRB1*1414                  |                              |
| DRB1*1117+DRB1*1363          | DRB1*1140+DRB1*1414                  |                              |
| DRB1*1117+DRB1*1370          | DRB1*1148+DRB1*142301                |                              |
| DRB1*1117+DRB1*1382          | DRB1*1118+DRB1*1414                  | DRB1*111901+DRB1*142301      |
| DRB1*1117+DRB1*1404          | DRB1*140101/1454+DRB1*1411           |                              |
| DRB1*1117+DRB1*1408          | DRB1*1152+DRB1*142302                |                              |
| DRB1*1117+DRB1*1425          | DRB1*1137+DRB1*140101/1454           | DRB1*1156+DRB1*140701/140702 |
| DRB1*1117+DRB1*1431          | DRB1*1411+DRB1*143202                |                              |
| DRB1*1117+DRB1*1450          | DRB1*1411+DRB1*1438                  |                              |
| DRB1*1117+DRB1*1452          | DRB1*1406+DRB1*1411                  |                              |
| DRB1*1117+DRB1*1468          | DRB1*140701/140702+DRB1*1411         |                              |
| DRB1*1117+DRB1*1479          | DRB1*1152+DRB1*1476                  |                              |
| DRB1*1118+DRB1*1126          | DRB1*111901+DRB1*1134                |                              |
| DRB1*1118+DRB1*1133          | DRB1*111901+DRB1*1135                |                              |
| DRB1*1118+DRB1*1137          | DRB1*111901+DRB1*1156                |                              |
| DRB1*1118+DRB1*1139          | DRB1*111901+DRB1*1143                |                              |
| DRB1*1118+DRB1*1149          | DRB1*111901+DRB1*1144                |                              |
| DRB1*1118+DRB1*1164          | DRB1*1142+DRB1*1145                  |                              |
| DRB1*1118+DRB1*1212          | DRB1*1142+DRB1*120101/1206/1210/1217 |                              |
| DRB1*1118+DRB1*130202        | DRB1*111902+DRB1*130101              |                              |
| DRB1*1118+DRB1*130701        | DRB1*1156+DRB1*1382                  |                              |
| DRB1*1118+DRB1*131402        | DRB1*111901+DRB1*131102              |                              |
| DRB1*1118+DRB1*1318          | DRB1*1125+DRB1*1306                  |                              |
| DRB1*1118+DRB1*1320          | DRB1*1136+DRB1*1306                  | DRB1*1142+DRB1*130101        |
| DRB1*1118+DRB1*1325          | DRB1*1142+DRB1*1382                  |                              |
| DRB1*1118+DRB1*1336          | DRB1*111901+DRB1*1340                |                              |
| DRB1*1118+DRB1*1339          | DRB1*111901+DRB1*1379                |                              |
| DRB1*1118+DRB1*1340          | DRB1*1148+DRB1*1306                  |                              |
| DRB1*1118+DRB1*1341          | DRB1*111901+DRB1*1327                |                              |
| DRB1*1118+DRB1*135002        | DRB1*1158+DRB1*1382                  |                              |
| DRB1*1118+DRB1*1371          | DRB1*1142+DRB1*1327                  |                              |
| DRB1*1118+DRB1*1378          | DRB1*1142+DRB1*1379                  |                              |
| DRB1*1118+DRB1*1388          | DRB1*1142+DRB1*130301/130302         |                              |
| DRB1*1118+DRB1*1402          | DRB1*111901+DRB1*1406                |                              |
| DRB1*1118+DRB1*140301        | DRB1*111901+DRB1*1412                | DRB1*1142+DRB1*1467          |
| DRB1*1118+DRB1*140501        | DRB1*1142+DRB1*1445                  |                              |
| DRB1*1118+DRB1*140701/140702 | DRB1*111901+DRB1*140101/1454         |                              |
| DRB1*1118+DRB1*1409          | DRB1*111901+DRB1*1480                |                              |
| DRB1*1118+DRB1*1417          | DRB1*1134+DRB1*1306                  |                              |
| DRB1*1118+DRB1*1419          | DRB1*1134+DRB1*1385                  |                              |
| DRB1*1118+DRB1*1421          | DRB1*1134+DRB1*1310                  |                              |
| DRB1*1118+DRB1*1430          | DRB1*111901+DRB1*1417                | DRB1*1126+DRB1*1306          |
| DRB1*1118+DRB1*144402        | DRB1*111901+DRB1*140503              |                              |
| DRB1*1118+DRB1*1463          | DRB1*111901+DRB1*1478                |                              |
| DRB1*1118+DRB1*1468          | DRB1*111901+DRB1*1404                |                              |
| DRB1*1118+DRB1*150201        | DRB1*111901+DRB1*15010101/15010102   |                              |
| DRB1*1118+DRB1*150202/150205 | DRB1*111901+DRB1*150104              |                              |
| DRB1*1118+DRB1*150206        | DRB1*111901+DRB1*150103              |                              |
| DRB1*1118+DRB1*1505          | DRB1*1142+DRB1*15010101/15010102     |                              |
| DRB1*1118+DRB1*1511          | DRB1*111901+DRB1*1507                |                              |
| DRB1*1118+DRB1*1523          | DRB1*1142+DRB1*15030101/15030102     |                              |
| DRB1*1118+DRB1*160201        | DRB1*1142+DRB1*160501                |                              |
| DRB1*1118+DRB1*1604          | DRB1*1137+DRB1*1521                  |                              |
| DRB1*111901+DRB1*1209        | DRB1*1204+DRB1*1382                  |                              |
| DRB1*111901+DRB1*130201      | DRB1*1120+DRB1*1382                  |                              |
| DRB1*111901+DRB1*130202      | DRB1*111902+DRB1*130201              |                              |
| DRB1*111901+DRB1*130701      | DRB1*1137+DRB1*1382                  |                              |
| DRB1*111901+DRB1*1313        | DRB1*1145+DRB1*1312                  | DRB1*1145+DRB1*1342          |
| DRB1*111901+DRB1*1318        | DRB1*1123+DRB1*1306                  |                              |
| DRB1*111901+DRB1*1344        | DRB1*1134+DRB1*1382                  |                              |
| DRB1*111901+DRB1*1347        | DRB1*1145+DRB1*130701                |                              |
| DRB1*111901+DRB1*135001      | DRB1*1128+DRB1*1382                  |                              |
| DRB1*111901+DRB1*1365        | DRB1*1120+DRB1*1312                  |                              |
| DRB1*111901+DRB1*1370        | DRB1*1148+DRB1*1382                  |                              |
| DRB1*111901+DRB1*1408        | DRB1*1131+DRB1*142302                |                              |
| DRB1*111901+DRB1*1419        | DRB1*1126+DRB1*1385                  |                              |
| DRB1*111901+DRB1*1421        | DRB1*1126+DRB1*1310                  |                              |
| DRB1*111901+DRB1*1455        | DRB1*1145+DRB1*143202                |                              |
| DRB1*111901+DRB1*1479        | DRB1*1131+DRB1*1476                  |                              |
| DRB1*111901+DRB1*1604        | DRB1*1145+DRB1*160102                |                              |
| DRB1*111902+DRB1*1320        | DRB1*1142+DRB1*130202                | DRB1*1145+DRB1*160101        |
| DRB1*111902+DRB1*1604        | DRB1*1123+DRB1*160501                |                              |
| DRB1*1120+DRB1*1209          | DRB1*1204+DRB1*130201                |                              |
| DRB1*1120+DRB1*130702        | DRB1*1137+DRB1*130203                |                              |
| DRB1*1120+DRB1*1313          | DRB1*1145+DRB1*1365                  |                              |
| DRB1*1120+DRB1*1347          | DRB1*1123+DRB1*1336                  |                              |
| DRB1*1120+DRB1*135001        | DRB1*1128+DRB1*130201                |                              |
| DRB1*1120+DRB1*1355          | DRB1*1123+DRB1*1365                  |                              |
| DRB1*1121+DRB1*1325          | DRB1*1157+DRB1*1323                  |                              |
| DRB1*1121+DRB1*1356          | DRB1*1157+DRB1*130201                |                              |
| DRB1*1121+DRB1*1388          | DRB1*1168+DRB1*1381                  |                              |

|                                      |                              |                              |                     |
|--------------------------------------|------------------------------|------------------------------|---------------------|
| DRB1*1121+DRB1*1474                  | DRB1*1157+DRB1*1416          |                              |                     |
| DRB1*1123+DRB1*1124                  | DRB1*1125+DRB1*1126          |                              |                     |
| DRB1*1123+DRB1*1135                  | DRB1*1125+DRB1*1133          |                              |                     |
| DRB1*1123+DRB1*1141                  | DRB1*1137+DRB1*1155          |                              |                     |
| DRB1*1123+DRB1*1143                  | DRB1*1125+DRB1*1139          |                              |                     |
| DRB1*1123+DRB1*1144                  | DRB1*1125+DRB1*1149          |                              |                     |
| DRB1*1123+DRB1*1148                  | DRB1*1141+DRB1*1145          |                              |                     |
| DRB1*1123+DRB1*1156                  | DRB1*1125+DRB1*1137          |                              |                     |
| DRB1*1123+DRB1*1163                  | DRB1*1129+DRB1*1155          |                              |                     |
| DRB1*1123+DRB1*120101/1206/1210/1217 | DRB1*1145+DRB1*120201        |                              |                     |
| DRB1*1123+DRB1*1205                  | DRB1*1145+DRB1*1215          |                              |                     |
| DRB1*1123+DRB1*1212                  | DRB1*1164+DRB1*120201        |                              |                     |
| DRB1*1123+DRB1*130201                | DRB1*1145+DRB1*1363          |                              |                     |
| DRB1*1123+DRB1*1304                  | DRB1*1145+DRB1*1375          | DRB1*1155+DRB1*1330          |                     |
| DRB1*1123+DRB1*131101                | DRB1*1125+DRB1*131401/131403 |                              |                     |
| DRB1*1123+DRB1*131102                | DRB1*1125+DRB1*131402        |                              |                     |
| DRB1*1123+DRB1*1313                  | DRB1*1145+DRB1*1355          |                              |                     |
| DRB1*1123+DRB1*1320                  | DRB1*1125+DRB1*1329          | DRB1*1155+DRB1*1356          | DRB1*1168+DRB1*1318 |
| DRB1*1123+DRB1*1322                  | DRB1*1125+DRB1*1323          | DRB1*1145+DRB1*1324          | DRB1*1155+DRB1*1382 |
| DRB1*1123+DRB1*1324                  | DRB1*1155+DRB1*131401/131403 |                              |                     |
| DRB1*1123+DRB1*1325                  | DRB1*1164+DRB1*131401/131403 |                              |                     |
| DRB1*1123+DRB1*1327                  | DRB1*1125+DRB1*1341          |                              |                     |
| DRB1*1123+DRB1*1329                  | DRB1*1164+DRB1*1363          |                              |                     |
| DRB1*1123+DRB1*1330                  | DRB1*1145+DRB1*1321          |                              |                     |
| DRB1*1123+DRB1*1356                  | DRB1*1164+DRB1*130501/130502 |                              |                     |
| DRB1*1123+DRB1*1375                  | DRB1*1155+DRB1*1321          |                              |                     |
| DRB1*1123+DRB1*1379                  | DRB1*1125+DRB1*1339          |                              |                     |
| DRB1*1123+DRB1*1382                  | DRB1*1145+DRB1*131401/131403 |                              |                     |
| DRB1*1123+DRB1*140101/1454           | DRB1*1125+DRB1*140701/140702 |                              |                     |
| DRB1*1123+DRB1*1402                  | DRB1*1126+DRB1*1427          |                              |                     |
| DRB1*1123+DRB1*140301                | DRB1*1164+DRB1*1427          |                              |                     |
| DRB1*1123+DRB1*1404                  | DRB1*1125+DRB1*1468          | DRB1*1167+DRB1*140701/140702 |                     |
| DRB1*1123+DRB1*140501                | DRB1*1125+DRB1*144401        |                              |                     |
| DRB1*1123+DRB1*140503                | DRB1*1125+DRB1*144402        |                              |                     |
| DRB1*1123+DRB1*1406                  | DRB1*1125+DRB1*1402          | DRB1*1134+DRB1*1427          |                     |
| DRB1*1123+DRB1*1412                  | DRB1*1125+DRB1*140301        |                              |                     |
| DRB1*1123+DRB1*1417                  | DRB1*1125+DRB1*1430          | DRB1*1126+DRB1*1318          |                     |
| DRB1*1123+DRB1*142301                | DRB1*1125+DRB1*1414          |                              |                     |
| DRB1*1123+DRB1*1424                  | DRB1*1169+DRB1*1467          |                              |                     |
| DRB1*1123+DRB1*1452                  | DRB1*1167+DRB1*1402          |                              |                     |
| DRB1*1123+DRB1*1467                  | DRB1*1145+DRB1*1427          |                              |                     |
| DRB1*1123+DRB1*1469                  | DRB1*1164+DRB1*1425          |                              |                     |
| DRB1*1123+DRB1*1478                  | DRB1*1125+DRB1*1463          |                              |                     |
| DRB1*1123+DRB1*1480                  | DRB1*1125+DRB1*1409          |                              |                     |
| DRB1*1123+DRB1*15010101/15010102     | DRB1*1125+DRB1*150201        | DRB1*1145+DRB1*1504          | DRB1*1169+DRB1*1521 |
| DRB1*1123+DRB1*150103                | DRB1*1125+DRB1*150206        |                              |                     |
| DRB1*1123+DRB1*150104                | DRB1*1125+DRB1*150202/150205 |                              |                     |
| DRB1*1123+DRB1*150201                | DRB1*1145+DRB1*1515          |                              |                     |
| DRB1*1123+DRB1*1504                  | DRB1*1125+DRB1*1515          |                              |                     |
| DRB1*1123+DRB1*1505                  | DRB1*1125+DRB1*1531          | DRB1*1164+DRB1*1504          |                     |
| DRB1*1123+DRB1*1507                  | DRB1*1125+DRB1*1511          |                              |                     |
| DRB1*1123+DRB1*1531                  | DRB1*1164+DRB1*1515          |                              |                     |
| DRB1*1123+DRB1*160201                | DRB1*1164+DRB1*160101        |                              |                     |
| DRB1*1123+DRB1*1610                  | DRB1*1164+DRB1*1609          |                              |                     |
| DRB1*1124+DRB1*130101                | DRB1*1128+DRB1*1368          |                              |                     |
| DRB1*1125+DRB1*1136                  | DRB1*1142+DRB1*1155          |                              |                     |
| DRB1*1125+DRB1*1141                  | DRB1*1155+DRB1*1156          |                              |                     |
| DRB1*1125+DRB1*1320                  | DRB1*1136+DRB1*1318          |                              |                     |
| DRB1*1125+DRB1*1324                  | DRB1*1155+DRB1*131101        |                              |                     |
| DRB1*1125+DRB1*1325                  | DRB1*1164+DRB1*131101        |                              |                     |
| DRB1*1125+DRB1*1332                  | DRB1*1145+DRB1*131101        |                              |                     |
| DRB1*1125+DRB1*140101/1454           | DRB1*115402+DRB1*1455        |                              |                     |
| DRB1*1125+DRB1*1404                  | DRB1*1167+DRB1*140101/1454   |                              |                     |
| DRB1*1125+DRB1*1417                  | DRB1*1134+DRB1*1318          |                              |                     |
| DRB1*1125+DRB1*1431                  | DRB1*1167+DRB1*143202        |                              |                     |
| DRB1*1125+DRB1*1450                  | DRB1*1167+DRB1*1438          |                              |                     |
| DRB1*1125+DRB1*1452                  | DRB1*1167+DRB1*1406          |                              |                     |
| DRB1*1125+DRB1*160202                | DRB1*1142+DRB1*1604          |                              |                     |
| DRB1*1126+DRB1*1135                  | DRB1*1133+DRB1*1134          |                              |                     |
| DRB1*1126+DRB1*1136                  | DRB1*1134+DRB1*1168          |                              |                     |
| DRB1*1126+DRB1*1143                  | DRB1*1134+DRB1*1139          |                              |                     |
| DRB1*1126+DRB1*1144                  | DRB1*1134+DRB1*1149          |                              |                     |
| DRB1*1126+DRB1*1156                  | DRB1*1134+DRB1*1137          |                              |                     |
| DRB1*1126+DRB1*131102                | DRB1*1134+DRB1*131402        |                              |                     |
| DRB1*1126+DRB1*1320                  | DRB1*1134+DRB1*1329          | DRB1*1136+DRB1*1430          | DRB1*1168+DRB1*1417 |
| DRB1*1126+DRB1*1327                  | DRB1*1134+DRB1*1341          |                              |                     |
| DRB1*1126+DRB1*1329                  | DRB1*1168+DRB1*1430          |                              |                     |
| DRB1*1126+DRB1*1332                  | DRB1*1134+DRB1*1365          |                              |                     |
| DRB1*1126+DRB1*1348                  | DRB1*1134+DRB1*1338          |                              |                     |
| DRB1*1126+DRB1*1379                  | DRB1*1134+DRB1*1339          |                              |                     |
| DRB1*1126+DRB1*140101/1454           | DRB1*1134+DRB1*140701/140702 |                              |                     |
| DRB1*1126+DRB1*140301                | DRB1*1164+DRB1*1402          |                              |                     |
| DRB1*1126+DRB1*1404                  | DRB1*1134+DRB1*1468          |                              |                     |
| DRB1*1126+DRB1*140501                | DRB1*1134+DRB1*144401        |                              |                     |
| DRB1*1126+DRB1*140503                | DRB1*1134+DRB1*144402        |                              |                     |
| DRB1*1126+DRB1*1406                  | DRB1*1134+DRB1*1402          | DRB1*1164+DRB1*1406          |                     |
| DRB1*1126+DRB1*1412                  | DRB1*1134+DRB1*140301        |                              |                     |
| DRB1*1126+DRB1*1417                  | DRB1*1134+DRB1*1430          |                              |                     |
| DRB1*1126+DRB1*142301                | DRB1*1134+DRB1*1414          |                              |                     |
| DRB1*1126+DRB1*1463                  | DRB1*1145+DRB1*1413          |                              |                     |
| DRB1*1126+DRB1*1467                  | DRB1*1145+DRB1*1402          |                              |                     |
| DRB1*1126+DRB1*1477                  | DRB1*1164+DRB1*1441          |                              |                     |
| DRB1*1126+DRB1*1478                  | DRB1*1134+DRB1*1463          |                              |                     |
| DRB1*1126+DRB1*1480                  | DRB1*1134+DRB1*1409          |                              |                     |
| DRB1*1126+DRB1*1485                  | DRB1*1164+DRB1*1413          |                              |                     |
| DRB1*1126+DRB1*15010101/15010102     | DRB1*1134+DRB1*150201        |                              |                     |
| DRB1*1126+DRB1*150103                | DRB1*1134+DRB1*150206        |                              |                     |
| DRB1*1126+DRB1*150104                | DRB1*1134+DRB1*150202/150205 |                              |                     |
| DRB1*1126+DRB1*1504                  | DRB1*1134+DRB1*1515          |                              |                     |
| DRB1*1126+DRB1*1505                  | DRB1*1134+DRB1*1531          |                              |                     |
| DRB1*1126+DRB1*1507                  | DRB1*1134+DRB1*1511          |                              |                     |
| DRB1*1126+DRB1*1515                  | DRB1*1169+DRB1*1527          |                              |                     |
| DRB1*1126+DRB1*160102                | DRB1*1137+DRB1*1527          |                              |                     |
| DRB1*112701+DRB1*1340                | DRB1*1137+DRB1*1361          |                              |                     |
| DRB1*1128+DRB1*1209                  | DRB1*1204+DRB1*135001        |                              |                     |
| DRB1*1128+DRB1*130701                | DRB1*1137+DRB1*135001        |                              |                     |
| DRB1*1128+DRB1*1344                  | DRB1*1134+DRB1*135001        |                              |                     |
| DRB1*1128+DRB1*1370                  | DRB1*1148+DRB1*135001        |                              |                     |
| DRB1*1128+DRB1*1384                  | DRB1*1129+DRB1*1340          |                              |                     |
| DRB1*1128+DRB1*1507                  | DRB1*1137+DRB1*1532          |                              |                     |
| DRB1*1128+DRB1*160101                | DRB1*1129+DRB1*1608          |                              |                     |
| DRB1*1129+DRB1*1141                  | DRB1*1137+DRB1*1163          |                              |                     |
| DRB1*1129+DRB1*1304                  | DRB1*1163+DRB1*1330          |                              |                     |
| DRB1*1129+DRB1*1320                  | DRB1*1163+DRB1*1356          |                              |                     |
| DRB1*1129+DRB1*1322                  | DRB1*1163+DRB1*1382          |                              |                     |
| DRB1*1129+DRB1*1324                  | DRB1*1163+DRB1*131401/131403 |                              |                     |
| DRB1*1129+DRB1*1348                  | DRB1*1163+DRB1*1312          |                              |                     |
| DRB1*1129+DRB1*1358                  | DRB1*1147+DRB1*1312          |                              |                     |
| DRB1*1129+DRB1*1375                  | DRB1*1163+DRB1*1321          |                              |                     |
| DRB1*1129+DRB1*1381                  | DRB1*1147+DRB1*130301/130302 |                              |                     |
| DRB1*1129+DRB1*1428                  | DRB1*1147+DRB1*1468          |                              |                     |
| DRB1*1129+DRB1*1429                  | DRB1*1147+DRB1*1402          |                              |                     |
| DRB1*1130+DRB1*1336                  | DRB1*1137+DRB1*1367          |                              |                     |
| DRB1*1130+DRB1*1340                  | DRB1*1156+DRB1*1367          |                              |                     |

|                                  |                                |                                       |
|----------------------------------|--------------------------------|---------------------------------------|
| DRB1*1131+DRB1*142301            | DRB1*1152+DRB1*1382            |                                       |
| DRB1*1132+DRB1*1148              | DRB1*1137+DRB1*1170            |                                       |
| DRB1*1132+DRB1*116501/116502     | DRB1*1133+DRB1*1170            |                                       |
| DRB1*1132+DRB1*130101            | DRB1*1170+DRB1*130501/130502   |                                       |
| DRB1*1132+DRB1*1304              | DRB1*1170+DRB1*1321            |                                       |
| DRB1*1132+DRB1*1322              | DRB1*1170+DRB1*131401/131403   |                                       |
| DRB1*1132+DRB1*1348              | DRB1*1170+DRB1*1349            |                                       |
| DRB1*1132+DRB1*1369              | DRB1*1170+DRB1*135002          |                                       |
| DRB1*1132+DRB1*1370              | DRB1*1170+DRB1*130701          |                                       |
| DRB1*1132+DRB1*1416              | DRB1*1170+DRB1*1422            |                                       |
| DRB1*1133+DRB1*1136              | DRB1*1135+DRB1*1168            |                                       |
| DRB1*1133+DRB1*1143              | DRB1*1135+DRB1*1139            |                                       |
| DRB1*1133+DRB1*1144              | DRB1*1135+DRB1*1149            |                                       |
| DRB1*1133+DRB1*1148              | DRB1*1137+DRB1*116501/116502   |                                       |
| DRB1*1133+DRB1*1156              | DRB1*1135+DRB1*1137            |                                       |
| DRB1*1133+DRB1*130101            | DRB1*1135+DRB1*130201          | DRB1*116501/116502+DRB1*130501/130502 |
| DRB1*1133+DRB1*1304              | DRB1*116501/116502+DRB1*1321   |                                       |
| DRB1*1133+DRB1*131101            | DRB1*1135+DRB1*131401/131403   |                                       |
| DRB1*1133+DRB1*131102            | DRB1*1135+DRB1*131402          |                                       |
| DRB1*1133+DRB1*1320              | DRB1*1135+DRB1*1329            |                                       |
| DRB1*1133+DRB1*1322              | DRB1*1135+DRB1*1323            | DRB1*116501/116502+DRB1*131401/131403 |
| DRB1*1133+DRB1*1327              | DRB1*1135+DRB1*1341            |                                       |
| DRB1*1133+DRB1*1332              | DRB1*1135+DRB1*1365            |                                       |
| DRB1*1133+DRB1*1340              | DRB1*1135+DRB1*1336            |                                       |
| DRB1*1133+DRB1*1342              | DRB1*1135+DRB1*130501/130502   |                                       |
| DRB1*1133+DRB1*1348              | DRB1*1135+DRB1*1338            | DRB1*116501/116502+DRB1*1349          |
| DRB1*1133+DRB1*1369              | DRB1*116501/116502+DRB1*135002 |                                       |
| DRB1*1133+DRB1*1370              | DRB1*116501/116502+DRB1*130701 |                                       |
| DRB1*1133+DRB1*1379              | DRB1*1135+DRB1*1339            |                                       |
| DRB1*1133+DRB1*140101/1454       | DRB1*1135+DRB1*140701/140702   |                                       |
| DRB1*1133+DRB1*1404              | DRB1*1135+DRB1*1468            |                                       |
| DRB1*1133+DRB1*140501            | DRB1*1135+DRB1*144401          |                                       |
| DRB1*1133+DRB1*140503            | DRB1*1135+DRB1*144402          |                                       |
| DRB1*1133+DRB1*1406              | DRB1*1135+DRB1*1402            |                                       |
| DRB1*1133+DRB1*1412              | DRB1*1135+DRB1*140301          |                                       |
| DRB1*1133+DRB1*1416              | DRB1*116501/116502+DRB1*1422   |                                       |
| DRB1*1133+DRB1*1417              | DRB1*1135+DRB1*1430            |                                       |
| DRB1*1133+DRB1*142301            | DRB1*1135+DRB1*1414            |                                       |
| DRB1*1133+DRB1*1478              | DRB1*1135+DRB1*1463            |                                       |
| DRB1*1133+DRB1*1480              | DRB1*1135+DRB1*1409            |                                       |
| DRB1*1133+DRB1*15010101/15010102 | DRB1*1135+DRB1*150201          |                                       |
| DRB1*1133+DRB1*150103            | DRB1*1135+DRB1*150206          |                                       |
| DRB1*1133+DRB1*150104            | DRB1*1135+DRB1*150202/150205   |                                       |
| DRB1*1133+DRB1*1504              | DRB1*1135+DRB1*1515            |                                       |
| DRB1*1133+DRB1*1505              | DRB1*1135+DRB1*1531            |                                       |
| DRB1*1133+DRB1*1507              | DRB1*1135+DRB1*1511            |                                       |
| DRB1*1134+DRB1*1209              | DRB1*1204+DRB1*1344            |                                       |
| DRB1*1134+DRB1*130701            | DRB1*1137+DRB1*1344            |                                       |
| DRB1*1134+DRB1*1320              | DRB1*1136+DRB1*1417            |                                       |
| DRB1*1134+DRB1*1370              | DRB1*1148+DRB1*1344            |                                       |
| DRB1*1134+DRB1*1440              | DRB1*1164+DRB1*1420            |                                       |
| DRB1*1134+DRB1*1467              | DRB1*1145+DRB1*1406            |                                       |
| DRB1*1134+DRB1*160102            | DRB1*1156+DRB1*1527            |                                       |
| DRB1*1135+DRB1*1148              | DRB1*1156+DRB1*116501/116502   |                                       |
| DRB1*1135+DRB1*130101            | DRB1*116501/116502+DRB1*1342   |                                       |
| DRB1*1135+DRB1*1322              | DRB1*116501/116502+DRB1*131101 |                                       |
| DRB1*1135+DRB1*1345              | DRB1*116501/116502+DRB1*1453   |                                       |
| DRB1*1136+DRB1*1139              | DRB1*1143+DRB1*1168            |                                       |
| DRB1*1136+DRB1*1147              | DRB1*1157+DRB1*1163            |                                       |
| DRB1*1136+DRB1*1149              | DRB1*1144+DRB1*1168            |                                       |
| DRB1*1136+DRB1*1156              | DRB1*1141+DRB1*1142            |                                       |
| DRB1*1136+DRB1*130701            | DRB1*1141+DRB1*1325            |                                       |
| DRB1*1136+DRB1*131101            | DRB1*1142+DRB1*1324            |                                       |
| DRB1*1136+DRB1*1313              | DRB1*1164+DRB1*1348            |                                       |
| DRB1*1136+DRB1*131402            | DRB1*1168+DRB1*131102          |                                       |
| DRB1*1136+DRB1*1323              | DRB1*1168+DRB1*1322            |                                       |
| DRB1*1136+DRB1*1329              | DRB1*1168+DRB1*1320            |                                       |
| DRB1*1136+DRB1*1336              | DRB1*1148+DRB1*1329            | DRB1*1168+DRB1*1340                   |
| DRB1*1136+DRB1*1338              | DRB1*1168+DRB1*1348            |                                       |
| DRB1*1136+DRB1*1340              | DRB1*1148+DRB1*1320            |                                       |
| DRB1*1136+DRB1*1358              | DRB1*1157+DRB1*1348            |                                       |
| DRB1*1136+DRB1*1365              | DRB1*1168+DRB1*1332            |                                       |
| DRB1*1136+DRB1*1402              | DRB1*1168+DRB1*1406            |                                       |
| DRB1*1136+DRB1*140301            | DRB1*1168+DRB1*1412            |                                       |
| DRB1*1136+DRB1*140701/140702     | DRB1*1168+DRB1*140101/1454     |                                       |
| DRB1*1136+DRB1*1409              | DRB1*1168+DRB1*1480            |                                       |
| DRB1*1136+DRB1*1414              | DRB1*1168+DRB1*142301          |                                       |
| DRB1*1136+DRB1*144401            | DRB1*1168+DRB1*140501          |                                       |
| DRB1*1136+DRB1*144402            | DRB1*1168+DRB1*140503          |                                       |
| DRB1*1136+DRB1*1468              | DRB1*1168+DRB1*1404            |                                       |
| DRB1*1136+DRB1*150202/150205     | DRB1*1168+DRB1*150104          |                                       |
| DRB1*1136+DRB1*150206            | DRB1*1168+DRB1*150103          |                                       |
| DRB1*1136+DRB1*1507              | DRB1*1148+DRB1*1505            |                                       |
| DRB1*1136+DRB1*1511              | DRB1*1148+DRB1*1531            | DRB1*1168+DRB1*1507                   |
| DRB1*1136+DRB1*1531              | DRB1*1168+DRB1*1505            |                                       |
| DRB1*1136+DRB1*1604              | DRB1*1155+DRB1*160202          |                                       |
| DRB1*1137+DRB1*1143              | DRB1*1139+DRB1*1156            |                                       |
| DRB1*1137+DRB1*1144              | DRB1*1149+DRB1*1156            |                                       |
| DRB1*1137+DRB1*1209              | DRB1*1204+DRB1*130701          |                                       |
| DRB1*1137+DRB1*1320              | DRB1*1141+DRB1*1356            | DRB1*1156+DRB1*1329                   |
| DRB1*1137+DRB1*1327              | DRB1*1156+DRB1*1341            |                                       |
| DRB1*1137+DRB1*1332              | DRB1*1156+DRB1*1365            |                                       |
| DRB1*1137+DRB1*1340              | DRB1*1156+DRB1*1336            |                                       |
| DRB1*1137+DRB1*1342              | DRB1*1156+DRB1*130501/130502   |                                       |
| DRB1*1137+DRB1*1343              | DRB1*1140+DRB1*1469            |                                       |
| DRB1*1137+DRB1*1348              | DRB1*1141+DRB1*1312            | DRB1*1148+DRB1*1349                   |
| DRB1*1137+DRB1*1369              | DRB1*1148+DRB1*135002          | DRB1*1156+DRB1*1338                   |
| DRB1*1137+DRB1*1370              | DRB1*1148+DRB1*130701          |                                       |
| DRB1*1137+DRB1*1379              | DRB1*1156+DRB1*1339            |                                       |
| DRB1*1137+DRB1*140501            | DRB1*1156+DRB1*144401          |                                       |
| DRB1*1137+DRB1*140503            | DRB1*1156+DRB1*144402          |                                       |
| DRB1*1137+DRB1*1406              | DRB1*1156+DRB1*1402            |                                       |
| DRB1*1137+DRB1*1412              | DRB1*1156+DRB1*140301          |                                       |
| DRB1*1137+DRB1*1416              | DRB1*1148+DRB1*1422            |                                       |
| DRB1*1137+DRB1*1433              | DRB1*115402+DRB1*1409          |                                       |
| DRB1*1137+DRB1*1472              | DRB1*1152+DRB1*131401/131403   |                                       |
| DRB1*1137+DRB1*1478              | DRB1*1156+DRB1*1463            |                                       |
| DRB1*1137+DRB1*1480              | DRB1*1156+DRB1*1409            |                                       |
| DRB1*1137+DRB1*150104            | DRB1*1156+DRB1*150202/150205   |                                       |
| DRB1*1137+DRB1*1504              | DRB1*1156+DRB1*1515            |                                       |
| DRB1*1137+DRB1*1505              | DRB1*1156+DRB1*1531            |                                       |
| DRB1*1137+DRB1*1507              | DRB1*1156+DRB1*1511            |                                       |
| DRB1*1137+DRB1*1515              | DRB1*1169+DRB1*160102          |                                       |
| DRB1*1137+DRB1*1531              | DRB1*1169+DRB1*160202          |                                       |
| DRB1*1139+DRB1*1144              | DRB1*1143+DRB1*1149            |                                       |
| DRB1*1139+DRB1*130101            | DRB1*1143+DRB1*130201          |                                       |
| DRB1*1139+DRB1*131101            | DRB1*1143+DRB1*131401/131403   |                                       |
| DRB1*1139+DRB1*131102            | DRB1*1143+DRB1*131402          |                                       |
| DRB1*1139+DRB1*1320              | DRB1*1143+DRB1*1329            |                                       |
| DRB1*1139+DRB1*1322              | DRB1*1143+DRB1*1323            |                                       |
| DRB1*1139+DRB1*1327              | DRB1*1143+DRB1*1341            |                                       |
| DRB1*1139+DRB1*1332              | DRB1*1143+DRB1*1365            |                                       |
| DRB1*1139+DRB1*1340              | DRB1*1143+DRB1*1336            |                                       |
| DRB1*1139+DRB1*1342              | DRB1*1143+DRB1*130501/130502   |                                       |

|                                               |                                      |                         |
|-----------------------------------------------|--------------------------------------|-------------------------|
| DRB1*1139+DRB1*1348                           | DRB1*1145+DRB1*1338                  |                         |
| DRB1*1139+DRB1*1379                           | DRB1*1143+DRB1*1339                  |                         |
| DRB1*1139+DRB1*140101/1454                    | DRB1*1143+DRB1*140701/140702         |                         |
| DRB1*1139+DRB1*1404                           | DRB1*1143+DRB1*1468                  |                         |
| DRB1*1139+DRB1*140501                         | DRB1*1143+DRB1*144401                |                         |
| DRB1*1139+DRB1*140503                         | DRB1*1143+DRB1*144402                |                         |
| DRB1*1139+DRB1*1406                           | DRB1*1143+DRB1*1402                  |                         |
| DRB1*1139+DRB1*1412                           | DRB1*1143+DRB1*140301                |                         |
| DRB1*1139+DRB1*1417                           | DRB1*1143+DRB1*1430                  |                         |
| DRB1*1139+DRB1*142301                         | DRB1*1143+DRB1*1414                  |                         |
| DRB1*1139+DRB1*1478                           | DRB1*1143+DRB1*1463                  |                         |
| DRB1*1139+DRB1*1480                           | DRB1*1143+DRB1*1409                  |                         |
| DRB1*1139+DRB1*15010101/15010102              | DRB1*1143+DRB1*150201                |                         |
| DRB1*1139+DRB1*150103                         | DRB1*1143+DRB1*150206                |                         |
| DRB1*1139+DRB1*150104                         | DRB1*1143+DRB1*150202/150205         |                         |
| DRB1*1139+DRB1*1504                           | DRB1*1143+DRB1*1515                  |                         |
| DRB1*1139+DRB1*1505                           | DRB1*1143+DRB1*1531                  |                         |
| DRB1*1139+DRB1*1507                           | DRB1*1143+DRB1*1511                  |                         |
| DRB1*1140+DRB1*130701                         | DRB1*1141+DRB1*130501/130502         | DRB1*1156+DRB1*1363     |
| DRB1*1140+DRB1*1327                           | DRB1*1159+DRB1*130101                |                         |
| DRB1*1140+DRB1*1341                           | DRB1*1159+DRB1*130201                |                         |
| DRB1*1140+DRB1*135002                         | DRB1*1158+DRB1*1363                  |                         |
| DRB1*1140+DRB1*1371                           | DRB1*1159+DRB1*1320                  |                         |
| DRB1*1140+DRB1*1482                           | DRB1*1159+DRB1*140101/1454           |                         |
| DRB1*1141+DRB1*120101/1206/1210/1217          | DRB1*1148+DRB1*120201                |                         |
| DRB1*1141+DRB1*1205                           | DRB1*1148+DRB1*1215                  |                         |
| DRB1*1141+DRB1*131101                         | DRB1*1156+DRB1*1324                  |                         |
| DRB1*1141+DRB1*1313                           | DRB1*1148+DRB1*1355                  |                         |
| DRB1*1141+DRB1*1327                           | DRB1*1159+DRB1*1370                  |                         |
| DRB1*1141+DRB1*1467                           | DRB1*1148+DRB1*1427                  |                         |
| DRB1*1141+DRB1*1472                           | DRB1*1152+DRB1*1324                  |                         |
| DRB1*1141+DRB1*160501                         | DRB1*1148+DRB1*160101                |                         |
| DRB1*1142+DRB1*130701                         | DRB1*1156+DRB1*1325                  |                         |
| DRB1*1142+DRB1*135002                         | DRB1*1158+DRB1*1325                  |                         |
| DRB1*1142+DRB1*1428                           | DRB1*1157+DRB1*1404                  |                         |
| DRB1*1142+DRB1*1429                           | DRB1*1157+DRB1*1406                  |                         |
| DRB1*1144+DRB1*130201                         | DRB1*1149+DRB1*130101                |                         |
| DRB1*1144+DRB1*130501/130502                  | DRB1*1149+DRB1*1342                  |                         |
| DRB1*1144+DRB1*131401/131403                  | DRB1*1149+DRB1*131101                |                         |
| DRB1*1144+DRB1*131402                         | DRB1*1149+DRB1*131102                |                         |
| DRB1*1144+DRB1*1323                           | DRB1*1149+DRB1*1322                  |                         |
| DRB1*1144+DRB1*1329                           | DRB1*1149+DRB1*1320                  |                         |
| DRB1*1144+DRB1*1336                           | DRB1*1149+DRB1*1340                  |                         |
| DRB1*1144+DRB1*1338                           | DRB1*1149+DRB1*1348                  |                         |
| DRB1*1144+DRB1*1339                           | DRB1*1149+DRB1*1379                  |                         |
| DRB1*1144+DRB1*1341                           | DRB1*1149+DRB1*1327                  |                         |
| DRB1*1144+DRB1*1365                           | DRB1*1149+DRB1*1332                  |                         |
| DRB1*1144+DRB1*1402                           | DRB1*1149+DRB1*1406                  |                         |
| DRB1*1144+DRB1*140301                         | DRB1*1149+DRB1*1412                  |                         |
| DRB1*1144+DRB1*140701/140702                  | DRB1*1149+DRB1*140101/1454           |                         |
| DRB1*1144+DRB1*1409                           | DRB1*1149+DRB1*1480                  |                         |
| DRB1*1144+DRB1*1414                           | DRB1*1149+DRB1*142301                |                         |
| DRB1*1144+DRB1*1430                           | DRB1*1149+DRB1*1417                  |                         |
| DRB1*1144+DRB1*144401                         | DRB1*1149+DRB1*140501                |                         |
| DRB1*1144+DRB1*144402                         | DRB1*1149+DRB1*140503                |                         |
| DRB1*1144+DRB1*1463                           | DRB1*1149+DRB1*1478                  |                         |
| DRB1*1144+DRB1*1468                           | DRB1*1149+DRB1*1404                  |                         |
| DRB1*1144+DRB1*150201                         | DRB1*1149+DRB1*15010101/15010102     |                         |
| DRB1*1144+DRB1*150202/150205                  | DRB1*1149+DRB1*150104                |                         |
| DRB1*1144+DRB1*150206                         | DRB1*1149+DRB1*150103                |                         |
| DRB1*1144+DRB1*1511                           | DRB1*1149+DRB1*1507                  |                         |
| DRB1*1144+DRB1*1515                           | DRB1*1149+DRB1*1504                  |                         |
| DRB1*1144+DRB1*1531                           | DRB1*1149+DRB1*1505                  |                         |
| DRB1*1145+DRB1*1212                           | DRB1*1164+DRB1*120101/1206/1210/1217 |                         |
| DRB1*1145+DRB1*1320                           | DRB1*1164+DRB1*130101                |                         |
| DRB1*1145+DRB1*1325                           | DRB1*1164+DRB1*1382                  |                         |
| DRB1*1145+DRB1*1329                           | DRB1*1164+DRB1*130201                |                         |
| DRB1*1145+DRB1*1371                           | DRB1*1164+DRB1*1327                  |                         |
| DRB1*1145+DRB1*1378                           | DRB1*1164+DRB1*1379                  |                         |
| DRB1*1145+DRB1*1388                           | DRB1*1164+DRB1*130301/130302         |                         |
| DRB1*1145+DRB1*140301                         | DRB1*1164+DRB1*1467                  |                         |
| DRB1*1145+DRB1*140501                         | DRB1*1164+DRB1*1445                  |                         |
| DRB1*1145+DRB1*1485                           | DRB1*1164+DRB1*1463                  |                         |
| DRB1*1145+DRB1*1505                           | DRB1*1164+DRB1*15010101/15010102     |                         |
| DRB1*1145+DRB1*1523                           | DRB1*1164+DRB1*15030101/15030102     |                         |
| DRB1*1145+DRB1*1531                           | DRB1*1164+DRB1*150201                |                         |
| DRB1*1145+DRB1*160201                         | DRB1*1164+DRB1*160501                |                         |
| DRB1*1146+DRB1*1370                           | DRB1*1156+DRB1*1352                  |                         |
| DRB1*1147+DRB1*1348                           | DRB1*1163+DRB1*1358                  |                         |
| DRB1*1148+DRB1*1209                           | DRB1*1204+DRB1*1370                  |                         |
| DRB1*1148+DRB1*1472                           | DRB1*1152+DRB1*1322                  |                         |
| DRB1*1152+DRB1*131101                         | DRB1*1156+DRB1*1472                  |                         |
| DRB1*115401+DRB1*120202                       | DRB1*115402+DRB1*120201              |                         |
| DRB1*115401+DRB1*130101                       | DRB1*115402+DRB1*130103              |                         |
| DRB1*115401+DRB1*140102                       | DRB1*115402+DRB1*140101/1454         |                         |
| DRB1*115401+DRB1*140503                       | DRB1*115402+DRB1*140501              |                         |
| DRB1*115401+DRB1*144402                       | DRB1*115402+DRB1*144401              |                         |
| DRB1*115401+DRB1*15010101/15010102            | DRB1*115402+DRB1*150103              |                         |
| DRB1*115401+DRB1*150201                       | DRB1*1156+DRB1*1433                  |                         |
| DRB1*115402+DRB1*1480                         | DRB1*1164+DRB1*1324                  |                         |
| DRB1*1155+DRB1*1325                           | DRB1*1158+DRB1*130701                |                         |
| DRB1*1156+DRB1*135002                         | DRB1*1158+DRB1*1370                  |                         |
| DRB1*1156+DRB1*1369                           | DRB1*1164+DRB1*1358                  |                         |
| DRB1*1157+DRB1*1313                           | DRB1*1168+DRB1*1358                  |                         |
| DRB1*1157+DRB1*1338                           | DRB1*1168+DRB1*1313                  |                         |
| DRB1*1164+DRB1*1338                           | DRB1*1168+DRB1*1521                  |                         |
| DRB1*1164+DRB1*1510                           | DRB1*120201+DRB1*1205                |                         |
| DRB1*120101/1206/1210/1217+DRB1*1215          | DRB1*120201+DRB1*1382                |                         |
| DRB1*120101/1206/1210/1217+DRB1*131401/131403 | DRB1*1212+DRB1*130101                |                         |
| DRB1*120101/1206/1210/1217+DRB1*1320          | DRB1*120201+DRB1*1330                |                         |
| DRB1*120101/1206/1210/1217+DRB1*1321          | DRB1*120201+DRB1*1322                |                         |
| DRB1*120101/1206/1210/1217+DRB1*1324          | DRB1*1212+DRB1*1382                  | DRB1*1209+DRB1*1354     |
| DRB1*120101/1206/1210/1217+DRB1*1325          | DRB1*1212+DRB1*130201                |                         |
| DRB1*120101/1206/1210/1217+DRB1*1329          | DRB1*120201+DRB1*1306                |                         |
| DRB1*120101/1206/1210/1217+DRB1*1342          | DRB1*120201+DRB1*1312                |                         |
| DRB1*120101/1206/1210/1217+DRB1*1349          | DRB1*120201+DRB1*1313                |                         |
| DRB1*120101/1206/1210/1217+DRB1*1355          | DRB1*120201+DRB1*130201              | DRB1*120204+DRB1*130202 |
| DRB1*120101/1206/1210/1217+DRB1*1363          | DRB1*1212+DRB1*1327                  |                         |
| DRB1*120101/1206/1210/1217+DRB1*1371          | DRB1*120201+DRB1*1304                |                         |
| DRB1*120101/1206/1210/1217+DRB1*1375          | DRB1*1212+DRB1*1379                  |                         |
| DRB1*120101/1206/1210/1217+DRB1*1378          | DRB1*1212+DRB1*130301/130302         |                         |
| DRB1*120101/1206/1210/1217+DRB1*1388          | DRB1*1209+DRB1*1448                  |                         |
| DRB1*120101/1206/1210/1217+DRB1*1402          | DRB1*1212+DRB1*1467                  |                         |
| DRB1*120101/1206/1210/1217+DRB1*140301        | DRB1*1212+DRB1*1445                  |                         |
| DRB1*120101/1206/1210/1217+DRB1*140501        | DRB1*120201+DRB1*1467                |                         |
| DRB1*120101/1206/1210/1217+DRB1*1427          | DRB1*1212+DRB1*1463                  |                         |
| DRB1*120101/1206/1210/1217+DRB1*1485          | DRB1*120201+DRB1*15010101/15010102   | DRB1*120202+DRB1*150103 |
| DRB1*120101/1206/1210/1217+DRB1*1504          | DRB1*1212+DRB1*15010101/15010102     |                         |
| DRB1*120101/1206/1210/1217+DRB1*1505          | DRB1*120201+DRB1*150201              | DRB1*120202+DRB1*150206 |
| DRB1*120101/1206/1210/1217+DRB1*1515          | DRB1*1212+DRB1*15030101/15030102     |                         |
| DRB1*120101/1206/1210/1217+DRB1*1523          | DRB1*1212+DRB1*150201                |                         |
| DRB1*120101/1206/1210/1217+DRB1*1531          | DRB1*120201+DRB1*160501              |                         |
| DRB1*120101/1206/1210/1217+DRB1*160101        | DRB1*120204+DRB1*160501              |                         |
| DRB1*120101/1206/1210/1217+DRB1*160102        |                                      |                         |

|                                        |                                    |                                  |                                  |
|----------------------------------------|------------------------------------|----------------------------------|----------------------------------|
| DRB1*120101/1206/1210/1217+DRB1*160201 | DRB1*1212+DRB1*160501              |                                  |                                  |
| DRB1*120102+DRB1*1219                  | DRB1*120204+DRB1*120302            |                                  |                                  |
| DRB1*120102+DRB1*1349                  | DRB1*1216+DRB1*1358                |                                  |                                  |
| DRB1*120201+DRB1*130101                | DRB1*120202+DRB1*130103            |                                  |                                  |
| DRB1*120201+DRB1*1325                  | DRB1*1212+DRB1*131401/131403       |                                  |                                  |
| DRB1*120201+DRB1*1329                  | DRB1*1212+DRB1*1363                |                                  |                                  |
| DRB1*120201+DRB1*1356                  | DRB1*1212+DRB1*130501/130502       |                                  |                                  |
| DRB1*120201+DRB1*1373                  | DRB1*1213+DRB1*130201              |                                  |                                  |
| DRB1*120201+DRB1*140102                | DRB1*120202+DRB1*140101/1454       |                                  |                                  |
| DRB1*120201+DRB1*140301                | DRB1*1212+DRB1*1427                |                                  |                                  |
| DRB1*120201+DRB1*1404                  | DRB1*1219+DRB1*1428                |                                  |                                  |
| DRB1*120201+DRB1*140503                | DRB1*120202+DRB1*140501            |                                  |                                  |
| DRB1*120201+DRB1*1406                  | DRB1*1219+DRB1*1429                |                                  |                                  |
| DRB1*120201+DRB1*143201                | DRB1*120202+DRB1*143202            |                                  |                                  |
| DRB1*120201+DRB1*144402                | DRB1*120202+DRB1*144401            |                                  |                                  |
| DRB1*120201+DRB1*1469                  | DRB1*1212+DRB1*1425                |                                  |                                  |
| DRB1*120201+DRB1*150204                | DRB1*120203+DRB1*150201            |                                  |                                  |
| DRB1*120201+DRB1*1505                  | DRB1*1212+DRB1*1504                |                                  |                                  |
| DRB1*120201+DRB1*1531                  | DRB1*1212+DRB1*1515                |                                  |                                  |
| DRB1*120201+DRB1*160102                | DRB1*120204+DRB1*160101            |                                  |                                  |
| DRB1*120201+DRB1*160201                | DRB1*1212+DRB1*160101              |                                  |                                  |
| DRB1*120201+DRB1*160202                | DRB1*120204+DRB1*160201            | DRB1*1212+DRB1*160102            |                                  |
| DRB1*120201+DRB1*1610                  | DRB1*1212+DRB1*1609                |                                  |                                  |
| DRB1*1205+DRB1*130201                  | DRB1*1214+DRB1*1334                |                                  |                                  |
| DRB1*1205+DRB1*131401/131403           | DRB1*1215+DRB1*1382                |                                  |                                  |
| DRB1*1205+DRB1*1321                    | DRB1*1215+DRB1*1330                |                                  |                                  |
| DRB1*1205+DRB1*1324                    | DRB1*1215+DRB1*1322                |                                  |                                  |
| DRB1*1205+DRB1*1342                    | DRB1*1215+DRB1*1306                |                                  |                                  |
| DRB1*1205+DRB1*1349                    | DRB1*1215+DRB1*1312                |                                  |                                  |
| DRB1*1205+DRB1*1355                    | DRB1*1215+DRB1*1313                |                                  |                                  |
| DRB1*1205+DRB1*1363                    | DRB1*1215+DRB1*130201              |                                  |                                  |
| DRB1*1205+DRB1*1375                    | DRB1*1215+DRB1*1304                |                                  |                                  |
| DRB1*1205+DRB1*1383                    | DRB1*1214+DRB1*1364                |                                  |                                  |
| DRB1*1205+DRB1*1427                    | DRB1*1215+DRB1*1467                |                                  |                                  |
| DRB1*1205+DRB1*1440                    | DRB1*1214+DRB1*1477                |                                  |                                  |
| DRB1*1205+DRB1*1504                    | DRB1*1215+DRB1*15010101/15010102   |                                  |                                  |
| DRB1*1205+DRB1*1515                    | DRB1*1215+DRB1*150201              |                                  |                                  |
| DRB1*1205+DRB1*160101                  | DRB1*1215+DRB1*160501              |                                  |                                  |
| DRB1*130101+DRB1*130301/130302         | DRB1*1310+DRB1*1338                | DRB1*1340+DRB1*1366              |                                  |
| DRB1*130101+DRB1*130501/130502         | DRB1*130201+DRB1*1342              | DRB1*1306+DRB1*1363              |                                  |
| DRB1*130101+DRB1*130701                | DRB1*130501/130502+DRB1*1370       | DRB1*131101+DRB1*1336            | DRB1*131401/131403+DRB1*1340     |
| DRB1*130101+DRB1*130702                | DRB1*131102+DRB1*1336              | DRB1*131402+DRB1*1340            |                                  |
| DRB1*130101+DRB1*1308                  | DRB1*1340+DRB1*1383                |                                  |                                  |
| DRB1*130101+DRB1*131101                | DRB1*1306+DRB1*1324                | DRB1*1322+DRB1*1342              |                                  |
| DRB1*130101+DRB1*1312                  | DRB1*1306+DRB1*1338                | DRB1*1330+DRB1*1340              | DRB1*1332+DRB1*1382              |
| DRB1*130101+DRB1*131403                | DRB1*130201+DRB1*131101            | DRB1*130501/130502+DRB1*1322     | DRB1*1323+DRB1*1342              |
|                                        | DRB1*135001+DRB1*1352              |                                  |                                  |
| DRB1*130101+DRB1*131402                | DRB1*130201+DRB1*131102            | DRB1*130203+DRB1*131101          |                                  |
| DRB1*130101+DRB1*1319                  | DRB1*1308+DRB1*1315                | DRB1*1340+DRB1*1357              | DRB1*1353+DRB1*1383              |
| DRB1*130101+DRB1*1321                  | DRB1*1304+DRB1*130501/130502       |                                  |                                  |
| DRB1*130101+DRB1*1323                  | DRB1*130201+DRB1*1322              |                                  |                                  |
| DRB1*130101+DRB1*1325                  | DRB1*1320+DRB1*1382                | DRB1*1322+DRB1*1356              |                                  |
| DRB1*130101+DRB1*1329                  | DRB1*130201+DRB1*1320              |                                  |                                  |
| DRB1*130101+DRB1*1336                  | DRB1*130201+DRB1*1340              |                                  |                                  |
| DRB1*130101+DRB1*1338                  | DRB1*130201+DRB1*1348              | DRB1*1304+DRB1*1336              | DRB1*1322+DRB1*1365              |
|                                        | DRB1*1323+DRB1*1332                |                                  |                                  |
| DRB1*130101+DRB1*1339                  | DRB1*130201+DRB1*1379              |                                  |                                  |
| DRB1*130101+DRB1*1341                  | DRB1*130201+DRB1*1327              |                                  |                                  |
| DRB1*130101+DRB1*1344                  | DRB1*1322+DRB1*1417                |                                  |                                  |
| DRB1*130101+DRB1*1346                  | DRB1*131101+DRB1*1331              |                                  |                                  |
| DRB1*130101+DRB1*1348                  | DRB1*1304+DRB1*1340                | DRB1*1322+DRB1*1332              |                                  |
| DRB1*130101+DRB1*1349                  | DRB1*130501/130502+DRB1*1348       | DRB1*131101+DRB1*1365            | DRB1*131401/131403+DRB1*1332     |
|                                        | DRB1*1321+DRB1*1340                | DRB1*1338+DRB1*1342              |                                  |
| DRB1*130101+DRB1*135002                | DRB1*130501/130502+DRB1*1369       |                                  |                                  |
| DRB1*130101+DRB1*1353                  | DRB1*1315+DRB1*1340                |                                  |                                  |
| DRB1*130101+DRB1*1355                  | DRB1*1318+DRB1*1338                |                                  |                                  |
| DRB1*130101+DRB1*1356                  | DRB1*1306+DRB1*1329                |                                  |                                  |
| DRB1*130101+DRB1*1357                  | DRB1*1315+DRB1*1383                |                                  |                                  |
| DRB1*130101+DRB1*1365                  | DRB1*130201+DRB1*1332              |                                  |                                  |
| DRB1*130101+DRB1*1370                  | DRB1*1322+DRB1*1340                |                                  |                                  |
| DRB1*130101+DRB1*1371                  | DRB1*1320+DRB1*1327                |                                  |                                  |
| DRB1*130101+DRB1*1378                  | DRB1*1320+DRB1*1379                |                                  |                                  |
| DRB1*130101+DRB1*1382                  | DRB1*1306+DRB1*1323                |                                  |                                  |
| DRB1*130101+DRB1*1383                  | DRB1*1352+DRB1*1387                |                                  |                                  |
| DRB1*130101+DRB1*1388                  | DRB1*130301/130302+DRB1*1320       |                                  |                                  |
| DRB1*130101+DRB1*140101/1454           | DRB1*130103+DRB1*140102            | DRB1*1340+DRB1*1435              |                                  |
| DRB1*130101+DRB1*1402                  | DRB1*130201+DRB1*1406              | DRB1*1315+DRB1*1409              | DRB1*1353+DRB1*1430              |
| DRB1*130101+DRB1*140301                | DRB1*130201+DRB1*1412              | DRB1*1320+DRB1*1467              |                                  |
| DRB1*130101+DRB1*140501                | DRB1*130103+DRB1*140503            | DRB1*1320+DRB1*1445              |                                  |
| DRB1*130101+DRB1*1406                  | DRB1*1315+DRB1*1480                | DRB1*1353+DRB1*1417              |                                  |
| DRB1*130101+DRB1*140701/140702         | DRB1*130201+DRB1*140101/1454       | DRB1*1336+DRB1*1435              |                                  |
| DRB1*130101+DRB1*1409                  | DRB1*130201+DRB1*1480              | DRB1*1336+DRB1*1417              | DRB1*1340+DRB1*1430              |
| DRB1*130101+DRB1*1414                  | DRB1*130201+DRB1*142301            |                                  |                                  |
| DRB1*130101+DRB1*1420                  | DRB1*1319+DRB1*1417                | DRB1*1357+DRB1*1480              | DRB1*1383+DRB1*1406              |
| DRB1*130101+DRB1*1422                  | DRB1*130501/130502+DRB1*1416       |                                  |                                  |
| DRB1*130101+DRB1*1425                  | DRB1*1340+DRB1*1453                |                                  |                                  |
| DRB1*130101+DRB1*1430                  | DRB1*130201+DRB1*1417              |                                  |                                  |
| DRB1*130101+DRB1*143202                | DRB1*130103+DRB1*143201            |                                  |                                  |
| DRB1*130101+DRB1*1437                  | DRB1*1309+DRB1*1372                |                                  |                                  |
| DRB1*130101+DRB1*1438                  | DRB1*1361+DRB1*140102              |                                  |                                  |
| DRB1*130101+DRB1*1440                  | DRB1*1383+DRB1*140301              |                                  |                                  |
| DRB1*130101+DRB1*1441                  | DRB1*1334+DRB1*1420                | DRB1*1364+DRB1*1402              |                                  |
| DRB1*130101+DRB1*144401                | DRB1*130103+DRB1*144402            | DRB1*130201+DRB1*140501          | DRB1*1329+DRB1*1445              |
| DRB1*130101+DRB1*144402                | DRB1*130201+DRB1*140503            |                                  |                                  |
| DRB1*130101+DRB1*1447                  | DRB1*1361+DRB1*1402                |                                  |                                  |
| DRB1*130101+DRB1*1453                  | DRB1*1342+DRB1*1345                |                                  |                                  |
| DRB1*130101+DRB1*1463                  | DRB1*130201+DRB1*1478              |                                  |                                  |
| DRB1*130101+DRB1*1468                  | DRB1*130201+DRB1*1404              |                                  |                                  |
| DRB1*130101+DRB1*1477                  | DRB1*1364+DRB1*140301              |                                  |                                  |
| DRB1*130101+DRB1*1480                  | DRB1*1340+DRB1*1417                |                                  |                                  |
| DRB1*130101+DRB1*1482                  | DRB1*1327+DRB1*140101/1454         |                                  |                                  |
| DRB1*130101+DRB1*1485                  | DRB1*1320+DRB1*1463                | DRB1*1329+DRB1*1478              |                                  |
| DRB1*130101+DRB1*15010101/15010102     | DRB1*1309+DRB1*1510                | DRB1*1352+DRB1*1532              |                                  |
| DRB1*130101+DRB1*150103                | DRB1*130103+DRB1*15010101/15010102 |                                  |                                  |
| DRB1*130101+DRB1*150201                | DRB1*130201+DRB1*15010101/15010102 | DRB1*130203+DRB1*150104          |                                  |
| DRB1*130101+DRB1*150202/150205         | DRB1*130201+DRB1*150104            |                                  |                                  |
| DRB1*130101+DRB1*150206                | DRB1*130103+DRB1*150201            | DRB1*130201+DRB1*150103          |                                  |
| DRB1*130101+DRB1*1505                  | DRB1*1320+DRB1*15010101/15010102   |                                  |                                  |
| DRB1*130101+DRB1*1507                  | DRB1*1340+DRB1*15010101/15010102   |                                  |                                  |
| DRB1*130101+DRB1*1511                  | DRB1*130201+DRB1*1507              | DRB1*1336+DRB1*15010101/15010102 | DRB1*1340+DRB1*150201            |
| DRB1*130101+DRB1*1515                  | DRB1*130201+DRB1*1504              | DRB1*1363+DRB1*15010101/15010102 |                                  |
| DRB1*130101+DRB1*1523                  | DRB1*1320+DRB1*15030101/15030102   |                                  |                                  |
| DRB1*130101+DRB1*1527                  | DRB1*1430+DRB1*1510                | DRB1*1320+DRB1*150201            | DRB1*1329+DRB1*15010101/15010102 |
| DRB1*130101+DRB1*1531                  | DRB1*130201+DRB1*1505              |                                  |                                  |
| DRB1*130101+DRB1*160101                | DRB1*1340+DRB1*1609                |                                  |                                  |
| DRB1*130101+DRB1*160201                | DRB1*1320+DRB1*160501              | DRB1*1340+DRB1*1610              |                                  |
| DRB1*130103+DRB1*1438                  | DRB1*1361+DRB1*140101/1454         |                                  |                                  |
| DRB1*130103+DRB1*1450                  | DRB1*1361+DRB1*1404                |                                  |                                  |
| DRB1*130103+DRB1*1505                  | DRB1*1320+DRB1*150103              |                                  |                                  |
| DRB1*130103+DRB1*1507                  | DRB1*1340+DRB1*150103              |                                  |                                  |
| DRB1*130103+DRB1*1511                  | DRB1*1336+DRB1*150103              | DRB1*1340+DRB1*150206            |                                  |
| DRB1*130103+DRB1*1515                  | DRB1*1363+DRB1*150103              |                                  |                                  |
| DRB1*130103+DRB1*1531                  | DRB1*1320+DRB1*150206              | DRB1*1329+DRB1*150103            |                                  |
| DRB1*130201+DRB1*130301/130302         | DRB1*1336+DRB1*1366                |                                  |                                  |

|                                           |                                  |                            |                              |
|-------------------------------------------|----------------------------------|----------------------------|------------------------------|
| DRB1*130201+DRB1*130701                   | DRB1*131401/131403+DRB1*1336     |                            |                              |
| DRB1*130201+DRB1*130702                   | DRB1*130203+DRB1*130701          | DRB1*131402+DRB1*1336      |                              |
| DRB1*130201+DRB1*1308                     | DRB1*1336+DRB1*1383              |                            |                              |
| DRB1*130201+DRB1*1312                     | DRB1*1330+DRB1*1336              |                            |                              |
| DRB1*130201+DRB1*131401/131403            | DRB1*130501/130502+DRB1*1323     | DRB1*1365+DRB1*1382        |                              |
| DRB1*130201+DRB1*131402                   | DRB1*130203+DRB1*131401/131403   | DRB1*1363+DRB1*1382        |                              |
| DRB1*130201+DRB1*1319                     | DRB1*1336+DRB1*1357              |                            |                              |
| DRB1*130201+DRB1*1321                     | DRB1*1330+DRB1*1363              |                            |                              |
| DRB1*130201+DRB1*1324                     | DRB1*1322+DRB1*1363              |                            |                              |
| DRB1*130201+DRB1*1325                     | DRB1*1323+DRB1*1356              | DRB1*1329+DRB1*1382        |                              |
| DRB1*130201+DRB1*1338                     | DRB1*1323+DRB1*1365              |                            |                              |
| DRB1*130201+DRB1*1344                     | DRB1*1322+DRB1*1430              | DRB1*1323+DRB1*1417        |                              |
| DRB1*130201+DRB1*1346                     | DRB1*131401/131403+DRB1*1331     |                            |                              |
| DRB1*130201+DRB1*1349                     | DRB1*130501/130502+DRB1*1338     | DRB1*1312+DRB1*1363        | DRB1*131401/131403+DRB1*1365 |
|                                           | DRB1*1321+DRB1*1336              |                            |                              |
| DRB1*130201+DRB1*1353                     | DRB1*1315+DRB1*1336              |                            |                              |
| DRB1*130201+DRB1*1355                     | DRB1*1313+DRB1*1363              |                            |                              |
| DRB1*130201+DRB1*1364                     | DRB1*1334+DRB1*1383              |                            |                              |
| DRB1*130201+DRB1*1370                     | DRB1*1322+DRB1*1336              | DRB1*1323+DRB1*1340        |                              |
| DRB1*130201+DRB1*1371                     | DRB1*1320+DRB1*1341              | DRB1*1327+DRB1*1329        |                              |
| DRB1*130201+DRB1*1375                     | DRB1*1304+DRB1*1363              |                            |                              |
| DRB1*130201+DRB1*1378                     | DRB1*1320+DRB1*1339              | DRB1*1329+DRB1*1379        |                              |
| DRB1*130201+DRB1*1388                     | DRB1*130301/130302+DRB1*1329     |                            |                              |
| DRB1*130201+DRB1*140301                   | DRB1*1329+DRB1*1467              |                            |                              |
| DRB1*130201+DRB1*1409                     | DRB1*1336+DRB1*1430              |                            |                              |
| DRB1*130201+DRB1*1420                     | DRB1*1319+DRB1*1430              | DRB1*1357+DRB1*1409        | DRB1*1383+DRB1*1402          |
| DRB1*130201+DRB1*1425                     | DRB1*1336+DRB1*1453              |                            |                              |
| DRB1*130201+DRB1*1427                     | DRB1*1363+DRB1*1467              |                            |                              |
| DRB1*130201+DRB1*1453                     | DRB1*130501/130502+DRB1*1345     |                            |                              |
| DRB1*130201+DRB1*1474                     | DRB1*1356+DRB1*1416              |                            |                              |
| DRB1*130201+DRB1*1477                     | DRB1*1334+DRB1*1440              |                            |                              |
| DRB1*130201+DRB1*1482                     | DRB1*1327+DRB1*140701/140702     | DRB1*1341+DRB1*140101/1454 |                              |
| DRB1*130201+DRB1*1485                     | DRB1*1329+DRB1*1463              |                            |                              |
| DRB1*130201+DRB1*150201                   | DRB1*130203+DRB1*150202/150205   |                            |                              |
| DRB1*130201+DRB1*1511                     | DRB1*1336+DRB1*150201            |                            |                              |
| DRB1*130201+DRB1*1515                     | DRB1*1363+DRB1*150201            |                            |                              |
| DRB1*130201+DRB1*1523                     | DRB1*1329+DRB1*15030101/15030102 |                            |                              |
| DRB1*130201+DRB1*1531                     | DRB1*1329+DRB1*150201            |                            |                              |
| DRB1*130201+DRB1*160101                   | DRB1*130202+DRB1*160102          | DRB1*1336+DRB1*1609        | DRB1*1363+DRB1*160501        |
| DRB1*130201+DRB1*160201                   | DRB1*130202+DRB1*160202          | DRB1*1329+DRB1*160501      | DRB1*1336+DRB1*1610          |
| DRB1*130203+DRB1*1346                     | DRB1*131402+DRB1*1331            |                            |                              |
| DRB1*130203+DRB1*1349                     | DRB1*131402+DRB1*1365            |                            |                              |
| DRB1*130301/130302+DRB1*1304              | DRB1*1348+DRB1*1366              |                            |                              |
| DRB1*130301/130302+DRB1*1306              | DRB1*1310+DRB1*1312              |                            |                              |
| DRB1*130301/130302+DRB1*130701            | DRB1*1337+DRB1*1349              |                            |                              |
| DRB1*130301/130302+DRB1*131401/131403     | DRB1*130701+DRB1*1366            | DRB1*1321+DRB1*1337        |                              |
| DRB1*130301/130302+DRB1*131402            | DRB1*130702+DRB1*1366            |                            |                              |
| DRB1*130301/130302+DRB1*1315              | DRB1*1304+DRB1*1385              | DRB1*1353+DRB1*1366        |                              |
| DRB1*130301/130302+DRB1*1318              | DRB1*1310+DRB1*1355              |                            |                              |
| DRB1*130301/130302+DRB1*1321              | DRB1*1349+DRB1*1366              |                            |                              |
| DRB1*130301/130302+DRB1*1322              | DRB1*1304+DRB1*1337              | DRB1*1366+DRB1*1370        |                              |
| DRB1*130301/130302+DRB1*1324              | DRB1*1337+DRB1*1375              |                            |                              |
| DRB1*130301/130302+DRB1*1325              | DRB1*1382+DRB1*1388              |                            |                              |
| DRB1*130301/130302+DRB1*1330              | DRB1*1312+DRB1*1366              |                            |                              |
| DRB1*130301/130302+DRB1*1336              | DRB1*1337+DRB1*1365              |                            |                              |
| DRB1*130301/130302+DRB1*1340              | DRB1*1332+DRB1*1337              |                            |                              |
| DRB1*130301/130302+DRB1*1342              | DRB1*1310+DRB1*1349              |                            |                              |
| DRB1*130301/130302+DRB1*1347              | DRB1*1337+DRB1*1355              |                            |                              |
| DRB1*130301/130302+DRB1*1353              | DRB1*1348+DRB1*1385              |                            |                              |
| DRB1*130301/130302+DRB1*1357              | DRB1*1319+DRB1*1366              |                            |                              |
| DRB1*130301/130302+DRB1*1358              | DRB1*1312+DRB1*1361              |                            |                              |
| DRB1*130301/130302+DRB1*1370              | DRB1*1337+DRB1*1348              |                            |                              |
| DRB1*130301/130302+DRB1*1371              | DRB1*1327+DRB1*1388              |                            |                              |
| DRB1*130301/130302+DRB1*1378              | DRB1*1379+DRB1*1388              |                            |                              |
| DRB1*130301/130302+DRB1*1382              | DRB1*1330+DRB1*1337              |                            |                              |
| DRB1*130301/130302+DRB1*1383              | DRB1*1308+DRB1*1366              |                            |                              |
| DRB1*130301/130302+DRB1*1402              | DRB1*1312+DRB1*1419              | DRB1*1337+DRB1*1413        |                              |
| DRB1*130301/130302+DRB1*140301            | DRB1*1337+DRB1*1485              | DRB1*1388+DRB1*1467        |                              |
| DRB1*130301/130302+DRB1*140501            | DRB1*1388+DRB1*1445              |                            |                              |
| DRB1*130301/130302+DRB1*1417              | DRB1*1312+DRB1*1421              | DRB1*1366+DRB1*1480        |                              |
| DRB1*130301/130302+DRB1*1427              | DRB1*1355+DRB1*1385              |                            |                              |
| DRB1*130301/130302+DRB1*1428              | DRB1*1381+DRB1*1468              |                            |                              |
| DRB1*130301/130302+DRB1*1429              | DRB1*1358+DRB1*1419              | DRB1*1381+DRB1*1402        |                              |
| DRB1*130301/130302+DRB1*1430              | DRB1*1366+DRB1*1409              |                            |                              |
| DRB1*130301/130302+DRB1*1435              | DRB1*1366+DRB1*140101/1454       |                            |                              |
| DRB1*130301/130302+DRB1*1453              | DRB1*1366+DRB1*1425              |                            |                              |
| DRB1*130301/130302+DRB1*1467              | DRB1*1313+DRB1*1385              | DRB1*1337+DRB1*1463        |                              |
| DRB1*130301/130302+DRB1*1485              | DRB1*1388+DRB1*1463              |                            |                              |
| DRB1*130301/130302+DRB1*15010101/15010102 | DRB1*1366+DRB1*1507              |                            |                              |
| DRB1*130301/130302+DRB1*150104            | DRB1*1337+DRB1*1512              |                            |                              |
| DRB1*130301/130302+DRB1*150201            | DRB1*1366+DRB1*1511              |                            |                              |
| DRB1*130301/130302+DRB1*1505              | DRB1*1388+DRB1*15010101/15010102 |                            |                              |
| DRB1*130301/130302+DRB1*1523              | DRB1*1388+DRB1*15030101/15030102 |                            |                              |
| DRB1*130301/130302+DRB1*1531              | DRB1*1388+DRB1*150201            |                            |                              |
| DRB1*130301/130302+DRB1*160201            | DRB1*1388+DRB1*160501            |                            |                              |
| DRB1*130301/130302+DRB1*1609              | DRB1*1366+DRB1*160101            |                            |                              |
| DRB1*130301/130302+DRB1*1610              | DRB1*1366+DRB1*160201            |                            |                              |
| DRB1*1304+DRB1*130701                     | DRB1*131101+DRB1*1338            | DRB1*1312+DRB1*1324        | DRB1*131401/131403+DRB1*1348 |
|                                           | DRB1*1321+DRB1*1370              | DRB1*1322+DRB1*1349        |                              |
| DRB1*1304+DRB1*130702                     | DRB1*131102+DRB1*1338            | DRB1*131402+DRB1*1348      |                              |
| DRB1*1304+DRB1*1308                       | DRB1*1348+DRB1*1363              |                            |                              |
| DRB1*1304+DRB1*1312                       | DRB1*1330+DRB1*1348              |                            |                              |
| DRB1*1304+DRB1*131401/131403              | DRB1*1321+DRB1*1322              | DRB1*1324+DRB1*1330        | DRB1*1375+DRB1*1382          |
| DRB1*1304+DRB1*1319                       | DRB1*1348+DRB1*1357              |                            |                              |
| DRB1*1304+DRB1*1321                       | DRB1*1330+DRB1*1375              |                            |                              |
| DRB1*1304+DRB1*1324                       | DRB1*1322+DRB1*1375              |                            |                              |
| DRB1*1304+DRB1*1342                       | DRB1*1306+DRB1*1375              |                            |                              |
| DRB1*1304+DRB1*1347                       | DRB1*1313+DRB1*1324              | DRB1*1322+DRB1*1355        |                              |
| DRB1*1304+DRB1*1349                       | DRB1*1312+DRB1*1375              | DRB1*1321+DRB1*1348        |                              |
| DRB1*1304+DRB1*135002                     | DRB1*1321+DRB1*1369              |                            |                              |
| DRB1*1304+DRB1*1353                       | DRB1*1315+DRB1*1348              |                            |                              |
| DRB1*1304+DRB1*1355                       | DRB1*1313+DRB1*1375              |                            |                              |
| DRB1*1304+DRB1*1356                       | DRB1*1320+DRB1*1330              |                            |                              |
| DRB1*1304+DRB1*1370                       | DRB1*1322+DRB1*1348              |                            |                              |
| DRB1*1304+DRB1*1382                       | DRB1*1322+DRB1*1330              |                            |                              |
| DRB1*1304+DRB1*140101/1454                | DRB1*1348+DRB1*1435              |                            |                              |
| DRB1*1304+DRB1*1402                       | DRB1*1322+DRB1*1413              | DRB1*1332+DRB1*1386        |                              |
| DRB1*1304+DRB1*140301                     | DRB1*1322+DRB1*1485              |                            |                              |
| DRB1*1304+DRB1*140701/140702              | DRB1*1338+DRB1*1435              |                            |                              |
| DRB1*1304+DRB1*1409                       | DRB1*1338+DRB1*1417              | DRB1*1344+DRB1*1365        | DRB1*1348+DRB1*1430          |
| DRB1*1304+DRB1*1422                       | DRB1*1321+DRB1*1416              |                            |                              |
| DRB1*1304+DRB1*1425                       | DRB1*1348+DRB1*1453              |                            |                              |
| DRB1*1304+DRB1*1427                       | DRB1*1315+DRB1*1355              | DRB1*1324+DRB1*1463        | DRB1*1375+DRB1*1467          |
| DRB1*1304+DRB1*1467                       | DRB1*1313+DRB1*1315              | DRB1*1322+DRB1*1463        | DRB1*1323+DRB1*1478          |
| DRB1*1304+DRB1*1480                       | DRB1*1332+DRB1*1344              | DRB1*1348+DRB1*1417        |                              |
| DRB1*1304+DRB1*150104                     | DRB1*1322+DRB1*1512              |                            |                              |
| DRB1*1304+DRB1*150202/150205              | DRB1*1323+DRB1*1512              |                            |                              |
| DRB1*1304+DRB1*1504                       | DRB1*1375+DRB1*15010101/15010102 |                            |                              |
| DRB1*1304+DRB1*1507                       | DRB1*1348+DRB1*15010101/15010102 |                            |                              |
| DRB1*1304+DRB1*1511                       | DRB1*1338+DRB1*15010101/15010102 | DRB1*1348+DRB1*150201      |                              |
| DRB1*1304+DRB1*1515                       | DRB1*1375+DRB1*150201            |                            |                              |
| DRB1*1304+DRB1*160101                     | DRB1*1348+DRB1*1609              | DRB1*1375+DRB1*160501      |                              |
| DRB1*1304+DRB1*160102                     | DRB1*1349+DRB1*1510              |                            |                              |
| DRB1*1304+DRB1*160201                     | DRB1*1348+DRB1*1610              |                            |                              |

|                                           |                                  |                                     |                                  |
|-------------------------------------------|----------------------------------|-------------------------------------|----------------------------------|
| DRB1*1305+DRB1*1504                       | DRB1*1355+DRB1*1510              |                                     |                                  |
| DRB1*130501/130502+DRB1*131101            | DRB1*131401/131403+DRB1*1342     |                                     |                                  |
| DRB1*130501/130502+DRB1*131102            | DRB1*131402+DRB1*1342            |                                     |                                  |
| DRB1*130501/130502+DRB1*13120             | DRB1*1329+DRB1*1342              |                                     |                                  |
| DRB1*130501/130502+DRB1*1324              | DRB1*131101+DRB1*1363            |                                     |                                  |
| DRB1*130501/130502+DRB1*1325              | DRB1*131401/131403+DRB1*1356     |                                     |                                  |
| DRB1*130501/130502+DRB1*1327              | DRB1*1341+DRB1*1342              |                                     |                                  |
| DRB1*130501/130502+DRB1*1329              | DRB1*1356+DRB1*1363              |                                     |                                  |
| DRB1*130501/130502+DRB1*1332              | DRB1*1342+DRB1*1365              |                                     |                                  |
| DRB1*130501/130502+DRB1*1340              | DRB1*1336+DRB1*1342              |                                     |                                  |
| DRB1*130501/130502+DRB1*1344              | DRB1*131101+DRB1*1430            | DRB1*131401/131403+DRB1*1417        |                                  |
| DRB1*130501/130502+DRB1*1379              | DRB1*1339+DRB1*1342              |                                     |                                  |
| DRB1*130501/130502+DRB1*140101/1454       | DRB1*1342+DRB1*140701/140702     |                                     |                                  |
| DRB1*130501/130502+DRB1*140301            | DRB1*1356+DRB1*1427              |                                     |                                  |
| DRB1*130501/130502+DRB1*1404              | DRB1*1342+DRB1*1468              |                                     |                                  |
| DRB1*130501/130502+DRB1*140501            | DRB1*1342+DRB1*144401            |                                     |                                  |
| DRB1*130501/130502+DRB1*140503            | DRB1*1342+DRB1*144402            |                                     |                                  |
| DRB1*130501/130502+DRB1*1406              | DRB1*1342+DRB1*1402              |                                     |                                  |
| DRB1*130501/130502+DRB1*1412              | DRB1*1342+DRB1*140301            |                                     |                                  |
| DRB1*130501/130502+DRB1*1417              | DRB1*1342+DRB1*1430              |                                     |                                  |
| DRB1*130501/130502+DRB1*142301            | DRB1*1342+DRB1*1414              |                                     |                                  |
| DRB1*130501/130502+DRB1*1469              | DRB1*1356+DRB1*1425              |                                     |                                  |
| DRB1*130501/130502+DRB1*1478              | DRB1*1342+DRB1*1463              |                                     |                                  |
| DRB1*130501/130502+DRB1*1480              | DRB1*1342+DRB1*1409              |                                     |                                  |
| DRB1*130501/130502+DRB1*15010101/15010102 | DRB1*1306+DRB1*1515              | DRB1*1342+DRB1*150201               |                                  |
| DRB1*130501/130502+DRB1*150103            | DRB1*1342+DRB1*150206            |                                     |                                  |
| DRB1*130501/130502+DRB1*150104            | DRB1*1342+DRB1*150202/150205     |                                     |                                  |
| DRB1*130501/130502+DRB1*1504              | DRB1*1342+DRB1*1515              |                                     |                                  |
| DRB1*130501/130502+DRB1*1505              | DRB1*1342+DRB1*1531              | DRB1*1356+DRB1*1504                 |                                  |
| DRB1*130501/130502+DRB1*1507              | DRB1*1309+DRB1*160102            | DRB1*1342+DRB1*1511                 |                                  |
| DRB1*130501/130502+DRB1*1531              | DRB1*1356+DRB1*1515              |                                     |                                  |
| DRB1*130501/130502+DRB1*160201            | DRB1*1356+DRB1*160101            |                                     |                                  |
| DRB1*130501/130502+DRB1*160202            | DRB1*1356+DRB1*160102            |                                     |                                  |
| DRB1*130501/130502+DRB1*1610              | DRB1*1356+DRB1*1609              |                                     |                                  |
| DRB1*1306+DRB1*131401/131403              | DRB1*1342+DRB1*1382              |                                     |                                  |
| DRB1*1306+DRB1*1321                       | DRB1*1330+DRB1*1342              |                                     |                                  |
| DRB1*1306+DRB1*1349                       | DRB1*1312+DRB1*1342              |                                     |                                  |
| DRB1*1306+DRB1*1355                       | DRB1*1312+DRB1*1318              | DRB1*1313+DRB1*1342                 |                                  |
| DRB1*1306+DRB1*1366                       | DRB1*1310+DRB1*1330              |                                     |                                  |
| DRB1*1306+DRB1*1381                       | DRB1*1310+DRB1*1358              |                                     |                                  |
| DRB1*1306+DRB1*1419                       | DRB1*1310+DRB1*1402              | DRB1*1385+DRB1*1417                 |                                  |
| DRB1*1306+DRB1*1421                       | DRB1*1310+DRB1*1417              |                                     |                                  |
| DRB1*1306+DRB1*1427                       | DRB1*1342+DRB1*1467              |                                     |                                  |
| DRB1*1306+DRB1*144401                     | DRB1*1356+DRB1*1445              |                                     |                                  |
| DRB1*1306+DRB1*1485                       | DRB1*1356+DRB1*1478              |                                     |                                  |
| DRB1*1306+DRB1*1504                       | DRB1*1342+DRB1*15010101/15010102 |                                     |                                  |
| DRB1*1306+DRB1*1531                       | DRB1*1356+DRB1*15010101/15010102 |                                     |                                  |
| DRB1*1306+DRB1*160101                     | DRB1*1342+DRB1*160501            |                                     |                                  |
| DRB1*130701+DRB1*1310                     | DRB1*1337+DRB1*1342              |                                     |                                  |
| DRB1*130701+DRB1*131102                   | DRB1*130702+DRB1*131101          |                                     |                                  |
| DRB1*130701+DRB1*1313                     | DRB1*1312+DRB1*1347              |                                     |                                  |
| DRB1*130701+DRB1*131402                   | DRB1*130702+DRB1*131401/131403   |                                     |                                  |
| DRB1*130701+DRB1*1315                     | DRB1*131401/131403+DRB1*1353     |                                     |                                  |
| DRB1*130701+DRB1*1321                     | DRB1*131401/131403+DRB1*1349     |                                     |                                  |
| DRB1*130701+DRB1*1322                     | DRB1*131401/131403+DRB1*1370     | DRB1*1349+DRB1*1382                 |                                  |
| DRB1*130701+DRB1*1330                     | DRB1*1312+DRB1*131401/131403     |                                     |                                  |
| DRB1*130701+DRB1*1331                     | DRB1*1336+DRB1*1346              |                                     |                                  |
| DRB1*130701+DRB1*1332                     | DRB1*1340+DRB1*1349              |                                     |                                  |
| DRB1*130701+DRB1*1343                     | DRB1*1320+DRB1*1425              |                                     |                                  |
| DRB1*130701+DRB1*1345                     | DRB1*1323+DRB1*1425              |                                     |                                  |
| DRB1*130701+DRB1*1348                     | DRB1*1349+DRB1*1370              |                                     |                                  |
| DRB1*130701+DRB1*1355                     | DRB1*1347+DRB1*1349              |                                     |                                  |
| DRB1*130701+DRB1*1357                     | DRB1*131401/131403+DRB1*1319     |                                     |                                  |
| DRB1*130701+DRB1*1357                     | DRB1*1336+DRB1*1349              |                                     |                                  |
| DRB1*130701+DRB1*1365                     | DRB1*135002+DRB1*1370            |                                     |                                  |
| DRB1*130701+DRB1*1369                     | DRB1*1324+DRB1*1349              |                                     |                                  |
| DRB1*130701+DRB1*1375                     | DRB1*1308+DRB1*131401/131403     |                                     |                                  |
| DRB1*130701+DRB1*1383                     | DRB1*1308+DRB1*135001            |                                     |                                  |
| DRB1*130701+DRB1*1387                     | DRB1*142301+DRB1*1425            |                                     |                                  |
| DRB1*130701+DRB1*140101/1454              | DRB1*1414+DRB1*1425              |                                     |                                  |
| DRB1*130701+DRB1*140701/140702            | DRB1*1349+DRB1*1402              |                                     |                                  |
| DRB1*130701+DRB1*1413                     | DRB1*1308+DRB1*1425              | DRB1*1370+DRB1*1422                 |                                  |
| DRB1*130701+DRB1*1416                     | DRB1*131101+DRB1*1409            | DRB1*131401/131403+DRB1*1480        |                                  |
| DRB1*130701+DRB1*1417                     | DRB1*131401/131403+DRB1*1409     |                                     |                                  |
| DRB1*130701+DRB1*1430                     | DRB1*131101+DRB1*140701/140702   | DRB1*131401/131403+DRB1*140101/1454 | DRB1*142301+DRB1*1453            |
| DRB1*130701+DRB1*1435                     | DRB1*131401/131403+DRB1*1425     |                                     |                                  |
| DRB1*130701+DRB1*1453                     | DRB1*1347+DRB1*143202            |                                     |                                  |
| DRB1*130701+DRB1*1455                     | DRB1*1312+DRB1*1427              | DRB1*1349+DRB1*1467                 |                                  |
| DRB1*130701+DRB1*1463                     | DRB1*1349+DRB1*140301            |                                     |                                  |
| DRB1*130701+DRB1*1485                     | DRB1*130702+DRB1*150104          | DRB1*131101+DRB1*1511               | DRB1*131401/131403+DRB1*1507     |
| DRB1*130701+DRB1*15010101/15010102        | DRB1*130702+DRB1*150202/150205   | DRB1*131401/131403+DRB1*1511        |                                  |
| DRB1*130701+DRB1*150201                   | DRB1*1322+DRB1*160102            |                                     |                                  |
| DRB1*130701+DRB1*1510                     | DRB1*1349+DRB1*150104            |                                     |                                  |
| DRB1*130701+DRB1*1512                     | DRB1*135001+DRB1*1507            |                                     |                                  |
| DRB1*130701+DRB1*1532                     | DRB1*1347+DRB1*160102            |                                     |                                  |
| DRB1*130701+DRB1*1604                     | DRB1*131401/131403+DRB1*160101   | DRB1*1325+DRB1*160101               |                                  |
| DRB1*130701+DRB1*1609                     | DRB1*131401/131403+DRB1*160201   |                                     |                                  |
| DRB1*130701+DRB1*1610                     | DRB1*131402+DRB1*1353            |                                     |                                  |
| DRB1*130702+DRB1*1315                     | DRB1*131402+DRB1*1349            |                                     |                                  |
| DRB1*130702+DRB1*1321                     | DRB1*131402+DRB1*1370            |                                     |                                  |
| DRB1*130702+DRB1*1322                     | DRB1*1312+DRB1*131402            |                                     |                                  |
| DRB1*130702+DRB1*1330                     | DRB1*131402+DRB1*1319            |                                     |                                  |
| DRB1*130702+DRB1*1357                     | DRB1*1308+DRB1*131402            |                                     |                                  |
| DRB1*130702+DRB1*1383                     | DRB1*131102+DRB1*1409            | DRB1*131402+DRB1*1480               |                                  |
| DRB1*130702+DRB1*1417                     | DRB1*131402+DRB1*1409            |                                     |                                  |
| DRB1*130702+DRB1*1430                     | DRB1*131102+DRB1*140701/140702   | DRB1*131402+DRB1*140101/1454        |                                  |
| DRB1*130702+DRB1*1435                     | DRB1*131402+DRB1*1425            |                                     |                                  |
| DRB1*130702+DRB1*1453                     | DRB1*131102+DRB1*1511            | DRB1*131402+DRB1*1507               |                                  |
| DRB1*130702+DRB1*15010101/15010102        | DRB1*131402+DRB1*1511            |                                     |                                  |
| DRB1*130702+DRB1*150201                   | DRB1*1312+DRB1*1504              | DRB1*1321+DRB1*1507                 | DRB1*1349+DRB1*15010101/15010102 |
| DRB1*130702+DRB1*1512                     | DRB1*131402+DRB1*160101          |                                     |                                  |
| DRB1*130702+DRB1*1609                     | DRB1*131402+DRB1*160201          |                                     |                                  |
| DRB1*130702+DRB1*1610                     | DRB1*1349+DRB1*1383              |                                     |                                  |
| DRB1*1308+DRB1*1321                       | DRB1*1370+DRB1*1383              |                                     |                                  |
| DRB1*1308+DRB1*1322                       | DRB1*1312+DRB1*1383              |                                     |                                  |
| DRB1*1308+DRB1*1330                       | DRB1*1336+DRB1*1364              |                                     |                                  |
| DRB1*1308+DRB1*1334                       | DRB1*1320+DRB1*1416              |                                     |                                  |
| DRB1*1308+DRB1*1343                       | DRB1*1323+DRB1*1416              |                                     |                                  |
| DRB1*1308+DRB1*1345                       | DRB1*1319+DRB1*1340              |                                     |                                  |
| DRB1*1308+DRB1*1353                       | DRB1*1319+DRB1*1383              |                                     |                                  |
| DRB1*1308+DRB1*1357                       | DRB1*1323+DRB1*1420              |                                     |                                  |
| DRB1*1308+DRB1*1386                       | DRB1*1376+DRB1*143201            | DRB1*1416+DRB1*142301               |                                  |
| DRB1*1308+DRB1*140101/1454                | DRB1*1319+DRB1*1409              | DRB1*1336+DRB1*1420                 |                                  |
| DRB1*1308+DRB1*1402                       | DRB1*1340+DRB1*1440              |                                     |                                  |
| DRB1*1308+DRB1*140301                     | DRB1*1372+DRB1*142301            |                                     |                                  |
| DRB1*1308+DRB1*140501                     | DRB1*1319+DRB1*1480              | DRB1*1340+DRB1*1420                 |                                  |
| DRB1*1308+DRB1*1406                       | DRB1*1414+DRB1*1416              |                                     |                                  |
| DRB1*1308+DRB1*140701/140702              | DRB1*1365+DRB1*1420              |                                     |                                  |
| DRB1*1308+DRB1*1413                       | DRB1*1383+DRB1*1480              |                                     |                                  |
| DRB1*1308+DRB1*1417                       | DRB1*1383+DRB1*1409              |                                     |                                  |
| DRB1*1308+DRB1*1430                       | DRB1*1383+DRB1*140101/1454       |                                     |                                  |
| DRB1*1308+DRB1*1435                       | DRB1*1322+DRB1*1414              | DRB1*1323+DRB1*142301               |                                  |
| DRB1*1308+DRB1*1442                       | DRB1*1372+DRB1*1414              |                                     |                                  |
| DRB1*1308+DRB1*144401                     | DRB1*131401/131403+DRB1*1416     | DRB1*1322+DRB1*1422                 | DRB1*1383+DRB1*1425              |
| DRB1*1308+DRB1*1453                       |                                  |                                     |                                  |

|                                       |                                    |                                           |                         |
|---------------------------------------|------------------------------------|-------------------------------------------|-------------------------|
| DRB1*1308+DRB1*1458                   | DRB1*1370+DRB1*140101/1454         |                                           |                         |
| DRB1*1308+DRB1*1464                   | DRB1*1379+DRB1*142301              |                                           |                         |
| DRB1*1308+DRB1*1485                   | DRB1*1332+DRB1*1440                |                                           |                         |
| DRB1*1308+DRB1*15010101/15010102      | DRB1*1383+DRB1*1507                |                                           |                         |
| DRB1*1308+DRB1*150201                 | DRB1*1383+DRB1*1511                |                                           |                         |
| DRB1*1308+DRB1*1532                   | DRB1*1387+DRB1*1507                |                                           |                         |
| DRB1*1308+DRB1*1609                   | DRB1*1383+DRB1*160101              |                                           |                         |
| DRB1*1308+DRB1*1610                   | DRB1*1383+DRB1*160201              |                                           |                         |
| DRB1*1309+DRB1*1385                   | DRB1*1310+DRB1*1424                |                                           |                         |
| DRB1*1309+DRB1*1402                   | DRB1*1417+DRB1*1424                |                                           |                         |
| DRB1*1309+DRB1*1419                   | DRB1*1421+DRB1*1424                |                                           |                         |
| DRB1*1309+DRB1*1427                   | DRB1*1318+DRB1*1424                |                                           |                         |
| DRB1*1309+DRB1*1451                   | DRB1*1424+DRB1*1433                |                                           |                         |
| DRB1*1309+DRB1*1527                   | DRB1*1417+DRB1*150201              | DRB1*1430+DRB1*15010101/15010102          |                         |
| DRB1*1309+DRB1*160202                 | DRB1*1356+DRB1*1507                |                                           |                         |
| DRB1*1309+DRB1*1604                   | DRB1*1318+DRB1*1511                |                                           |                         |
| DRB1*1310+DRB1*1321                   | DRB1*1342+DRB1*1366                |                                           |                         |
| DRB1*1310+DRB1*1347                   | DRB1*1318+DRB1*1337                |                                           |                         |
| DRB1*1310+DRB1*1419                   | DRB1*1385+DRB1*1421                |                                           |                         |
| DRB1*1310+DRB1*1427                   | DRB1*1318+DRB1*1385                |                                           |                         |
| DRB1*1310+DRB1*1451                   | DRB1*1385+DRB1*1433                |                                           |                         |
| DRB1*131101+DRB1*131402               | DRB1*131102+DRB1*131401/131403     |                                           |                         |
| DRB1*131101+DRB1*1323                 | DRB1*131401/131403+DRB1*1322       | DRB1*1324+DRB1*1382                       |                         |
| DRB1*131101+DRB1*1329                 | DRB1*131401/131403+DRB1*1320       | DRB1*1324+DRB1*1356                       |                         |
| DRB1*131101+DRB1*1332                 | DRB1*1342+DRB1*1348                |                                           |                         |
| DRB1*131101+DRB1*1339                 | DRB1*131401/131403+DRB1*1379       |                                           |                         |
| DRB1*131101+DRB1*1340                 | DRB1*1342+DRB1*1370                |                                           |                         |
| DRB1*131101+DRB1*1341                 | DRB1*131401/131403+DRB1*1327       |                                           |                         |
| DRB1*131101+DRB1*1345                 | DRB1*1322+DRB1*1453                |                                           |                         |
| DRB1*131101+DRB1*1356                 | DRB1*1325+DRB1*1342                |                                           |                         |
| DRB1*131101+DRB1*1402                 | DRB1*131401/131403+DRB1*1406       |                                           |                         |
| DRB1*131101+DRB1*140301               | DRB1*131401/131403+DRB1*1412       |                                           |                         |
| DRB1*131101+DRB1*1413                 | DRB1*1321+DRB1*1406                |                                           |                         |
| DRB1*131101+DRB1*1414                 | DRB1*131401/131403+DRB1*142301     |                                           |                         |
| DRB1*131101+DRB1*1417                 | DRB1*1342+DRB1*1344                |                                           |                         |
| DRB1*131101+DRB1*144401               | DRB1*131401/131403+DRB1*140501     |                                           |                         |
| DRB1*131101+DRB1*144402               | DRB1*131401/131403+DRB1*140503     |                                           |                         |
| DRB1*131101+DRB1*1449                 | DRB1*1420+DRB1*1453                |                                           |                         |
| DRB1*131101+DRB1*1463                 | DRB1*131401/131403+DRB1*1478       |                                           |                         |
| DRB1*131101+DRB1*1485                 | DRB1*1321+DRB1*1412                |                                           |                         |
| DRB1*131101+DRB1*15010101/15010102    | DRB1*131102+DRB1*150104            |                                           |                         |
| DRB1*131101+DRB1*150201               | DRB1*131102+DRB1*150202/150205     | DRB1*131401/131403+DRB1*15010101/15010102 | DRB1*131402+DRB1*150104 |
|                                       | DRB1*1382+DRB1*1504                |                                           |                         |
| DRB1*131101+DRB1*150202/150205        | DRB1*131401/131403+DRB1*150104     |                                           |                         |
| DRB1*131101+DRB1*150206               | DRB1*131401/131403+DRB1*150103     |                                           |                         |
| DRB1*131101+DRB1*1515                 | DRB1*131401/131403+DRB1*1504       |                                           |                         |
| DRB1*131101+DRB1*1531                 | DRB1*131401/131403+DRB1*1505       | DRB1*1325+DRB1*1504                       |                         |
| DRB1*131102+DRB1*1323                 | DRB1*131402+DRB1*1322              |                                           |                         |
| DRB1*131102+DRB1*1329                 | DRB1*131402+DRB1*1320              |                                           |                         |
| DRB1*131102+DRB1*1339                 | DRB1*131402+DRB1*1379              |                                           |                         |
| DRB1*131102+DRB1*1341                 | DRB1*131402+DRB1*1327              |                                           |                         |
| DRB1*131102+DRB1*1365                 | DRB1*131402+DRB1*1332              |                                           |                         |
| DRB1*131102+DRB1*1402                 | DRB1*131402+DRB1*1406              |                                           |                         |
| DRB1*131102+DRB1*140301               | DRB1*131402+DRB1*1412              |                                           |                         |
| DRB1*131102+DRB1*1414                 | DRB1*131402+DRB1*142301            |                                           |                         |
| DRB1*131102+DRB1*1430                 | DRB1*131402+DRB1*1417              |                                           |                         |
| DRB1*131102+DRB1*144401               | DRB1*131402+DRB1*140501            |                                           |                         |
| DRB1*131102+DRB1*144402               | DRB1*131402+DRB1*140503            |                                           |                         |
| DRB1*131102+DRB1*1463                 | DRB1*131402+DRB1*1478              |                                           |                         |
| DRB1*131102+DRB1*1468                 | DRB1*131402+DRB1*1404              |                                           |                         |
| DRB1*131102+DRB1*150201               | DRB1*131402+DRB1*15010101/15010102 |                                           |                         |
| DRB1*131102+DRB1*150206               | DRB1*131402+DRB1*150103            |                                           |                         |
| DRB1*131102+DRB1*1515                 | DRB1*131402+DRB1*1504              |                                           |                         |
| DRB1*131102+DRB1*1531                 | DRB1*131402+DRB1*1505              |                                           |                         |
| DRB1*1312+DRB1*1315                   | DRB1*1330+DRB1*1353                |                                           |                         |
| DRB1*1312+DRB1*1320                   | DRB1*1325+DRB1*1332                | DRB1*1348+DRB1*1356                       |                         |
| DRB1*1312+DRB1*1321                   | DRB1*1330+DRB1*1349                |                                           |                         |
| DRB1*1312+DRB1*1322                   | DRB1*1330+DRB1*1370                |                                           |                         |
| DRB1*1312+DRB1*1323                   | DRB1*1338+DRB1*1382                | DRB1*1348+DRB1*1382                       |                         |
| DRB1*1312+DRB1*1329                   | DRB1*1325+DRB1*1365                |                                           |                         |
| DRB1*1312+DRB1*1355                   | DRB1*1313+DRB1*1349                | DRB1*1338+DRB1*1356                       |                         |
| DRB1*1312+DRB1*1357                   | DRB1*1319+DRB1*1330                |                                           |                         |
| DRB1*1312+DRB1*1417                   | DRB1*1330+DRB1*1480                |                                           |                         |
| DRB1*1312+DRB1*1428                   | DRB1*1358+DRB1*1468                |                                           |                         |
| DRB1*1312+DRB1*1429                   | DRB1*1358+DRB1*1402                |                                           |                         |
| DRB1*1312+DRB1*1430                   | DRB1*1330+DRB1*1409                |                                           |                         |
| DRB1*1312+DRB1*1435                   | DRB1*1330+DRB1*140101/1454         |                                           |                         |
| DRB1*1312+DRB1*1453                   | DRB1*1330+DRB1*1425                |                                           |                         |
| DRB1*1312+DRB1*1455                   | DRB1*1313+DRB1*143202              |                                           |                         |
| DRB1*1312+DRB1*15010101/15010102      | DRB1*1330+DRB1*1507                |                                           |                         |
| DRB1*1312+DRB1*150201                 | DRB1*1330+DRB1*1511                |                                           |                         |
| DRB1*1312+DRB1*1515                   | DRB1*1321+DRB1*1511                | DRB1*1349+DRB1*150201                     |                         |
| DRB1*1312+DRB1*160101                 | DRB1*1349+DRB1*160501              |                                           |                         |
| DRB1*1312+DRB1*1604                   | DRB1*1313+DRB1*160102              |                                           |                         |
| DRB1*1312+DRB1*1609                   | DRB1*1321+DRB1*160501              | DRB1*1330+DRB1*160101                     |                         |
| DRB1*1312+DRB1*1610                   | DRB1*1330+DRB1*160201              |                                           |                         |
| DRB1*1313+DRB1*131401/131403          | DRB1*1330+DRB1*1347                | DRB1*1355+DRB1*1382                       |                         |
| DRB1*1313+DRB1*1321                   | DRB1*1330+DRB1*1355                |                                           |                         |
| DRB1*1313+DRB1*1353                   | DRB1*1348+DRB1*1467                | DRB1*1370+DRB1*1463                       |                         |
| DRB1*1313+DRB1*1427                   | DRB1*1347+DRB1*1463                | DRB1*1355+DRB1*1467                       |                         |
| DRB1*1313+DRB1*1504                   | DRB1*1355+DRB1*15010101/15010102   |                                           |                         |
| DRB1*1313+DRB1*1510                   | DRB1*1338+DRB1*1521                |                                           |                         |
| DRB1*1313+DRB1*1515                   | DRB1*1355+DRB1*150201              |                                           |                         |
| DRB1*1313+DRB1*160101                 | DRB1*1355+DRB1*160501              |                                           |                         |
| DRB1*131401/131403+DRB1*1329          | DRB1*1325+DRB1*1363                |                                           |                         |
| DRB1*131401/131403+DRB1*1330          | DRB1*1321+DRB1*1382                |                                           |                         |
| DRB1*131401/131403+DRB1*1338          | DRB1*1323+DRB1*1349                |                                           |                         |
| DRB1*131401/131403+DRB1*1343          | DRB1*1320+DRB1*1453                |                                           |                         |
| DRB1*131401/131403+DRB1*1345          | DRB1*1323+DRB1*1453                |                                           |                         |
| DRB1*131401/131403+DRB1*1355          | DRB1*1321+DRB1*1347                |                                           |                         |
| DRB1*131401/131403+DRB1*1369          | DRB1*1322+DRB1*135002              |                                           |                         |
| DRB1*131401/131403+DRB1*1375          | DRB1*1321+DRB1*1324                |                                           |                         |
| DRB1*131401/131403+DRB1*1387          | DRB1*135001+DRB1*1383              |                                           |                         |
| DRB1*131401/131403+DRB1*140301        | DRB1*1325+DRB1*1427                |                                           |                         |
| DRB1*131401/131403+DRB1*140701/140702 | DRB1*1414+DRB1*1453                | DRB1*1422+DRB1*1442                       |                         |
| DRB1*131401/131403+DRB1*1413          | DRB1*1321+DRB1*1402                |                                           |                         |
| DRB1*131401/131403+DRB1*1449          | DRB1*1386+DRB1*1422                |                                           |                         |
| DRB1*131401/131403+DRB1*1463          | DRB1*1321+DRB1*1467                | DRB1*1330+DRB1*1427                       |                         |
| DRB1*131401/131403+DRB1*1467          | DRB1*1382+DRB1*1427                |                                           |                         |
| DRB1*131401/131403+DRB1*1469          | DRB1*1325+DRB1*1425                |                                           |                         |
| DRB1*131401/131403+DRB1*1485          | DRB1*1321+DRB1*140301              |                                           |                         |
| DRB1*131401/131403+DRB1*150201        | DRB1*131402+DRB1*150202/150205     | DRB1*1382+DRB1*1515                       |                         |
| DRB1*131401/131403+DRB1*1512          | DRB1*1321+DRB1*150104              |                                           |                         |
| DRB1*131401/131403+DRB1*1531          | DRB1*1325+DRB1*1515                |                                           |                         |
| DRB1*131401/131403+DRB1*1532          | DRB1*135001+DRB1*15010101/15010102 |                                           |                         |
| DRB1*131401/131403+DRB1*160202        | DRB1*1325+DRB1*160102              |                                           |                         |
| DRB1*131401/131403+DRB1*160501        | DRB1*1382+DRB1*160101              |                                           |                         |
| DRB1*131401/131403+DRB1*1610          | DRB1*1325+DRB1*1609                | DRB1*1330+DRB1*1504                       |                         |
| DRB1*131402+DRB1*1512                 | DRB1*1321+DRB1*15010101/15010102   |                                           |                         |
| DRB1*1315+DRB1*1319                   | DRB1*1353+DRB1*1357                |                                           |                         |
| DRB1*1315+DRB1*1337                   | DRB1*1322+DRB1*1385                |                                           |                         |
| DRB1*1315+DRB1*1347                   | DRB1*1322+DRB1*1427                | DRB1*1324+DRB1*1467                       |                         |
| DRB1*1315+DRB1*1349                   | DRB1*1321+DRB1*1353                |                                           |                         |
| DRB1*1315+DRB1*1370                   | DRB1*1322+DRB1*1353                |                                           |                         |

|                                  |                                  |                       |
|----------------------------------|----------------------------------|-----------------------|
| DRB1*1315+DRB1*140101/1454       | DRB1*1353+DRB1*1435              |                       |
| DRB1*1315+DRB1*1420              | DRB1*1357+DRB1*1406              |                       |
| DRB1*1315+DRB1*1425              | DRB1*1353+DRB1*1453              |                       |
| DRB1*1315+DRB1*1440              | DRB1*1357+DRB1*140301            |                       |
| DRB1*1315+DRB1*1507              | DRB1*1353+DRB1*15010101/15010102 |                       |
| DRB1*1315+DRB1*1511              | DRB1*1353+DRB1*150201            | DRB1*1424+DRB1*1510   |
| DRB1*1315+DRB1*160101            | DRB1*1353+DRB1*1609              |                       |
| DRB1*1315+DRB1*160201            | DRB1*1353+DRB1*1610              |                       |
| DRB1*1315+DRB1*1604              | DRB1*1427+DRB1*1510              |                       |
| DRB1*1317+DRB1*140101/1454       | DRB1*1322+DRB1*1404              |                       |
| DRB1*1317+DRB1*1402              | DRB1*1323+DRB1*1452              |                       |
| DRB1*1317+DRB1*1406              | DRB1*1322+DRB1*1452              |                       |
| DRB1*1317+DRB1*140701/140702     | DRB1*1322+DRB1*1468              | DRB1*1323+DRB1*1404   |
| DRB1*1317+DRB1*143202            | DRB1*1322+DRB1*1431              |                       |
| DRB1*1317+DRB1*1438              | DRB1*1322+DRB1*1450              |                       |
| DRB1*1318+DRB1*1349              | DRB1*1342+DRB1*1355              |                       |
| DRB1*1318+DRB1*1402              | DRB1*1417+DRB1*1427              |                       |
| DRB1*1318+DRB1*1419              | DRB1*1421+DRB1*1427              |                       |
| DRB1*1318+DRB1*143202            | DRB1*1342+DRB1*1455              |                       |
| DRB1*1318+DRB1*1451              | DRB1*1427+DRB1*1433              |                       |
| DRB1*1318+DRB1*160102            | DRB1*1342+DRB1*1604              |                       |
| DRB1*1319+DRB1*1321              | DRB1*1349+DRB1*1357              |                       |
| DRB1*1319+DRB1*1322              | DRB1*1357+DRB1*1370              |                       |
| DRB1*1319+DRB1*1344              | DRB1*1322+DRB1*1420              |                       |
| DRB1*1319+DRB1*140301            | DRB1*1353+DRB1*1440              |                       |
| DRB1*1319+DRB1*1406              | DRB1*1353+DRB1*1420              |                       |
| DRB1*1319+DRB1*1435              | DRB1*1357+DRB1*140101/1454       |                       |
| DRB1*1319+DRB1*1453              | DRB1*1357+DRB1*1425              |                       |
| DRB1*1319+DRB1*15010101/15010102 | DRB1*1357+DRB1*1507              |                       |
| DRB1*1319+DRB1*150201            | DRB1*1357+DRB1*1511              |                       |
| DRB1*1319+DRB1*1609              | DRB1*1357+DRB1*160101            |                       |
| DRB1*1319+DRB1*1610              | DRB1*1357+DRB1*160201            |                       |
| DRB1*1320+DRB1*1321              | DRB1*1356+DRB1*1375              |                       |
| DRB1*1320+DRB1*1323              | DRB1*1322+DRB1*1329              |                       |
| DRB1*1320+DRB1*1336              | DRB1*1329+DRB1*1340              |                       |
| DRB1*1320+DRB1*1338              | DRB1*1329+DRB1*1348              |                       |
| DRB1*1320+DRB1*1345              | DRB1*1323+DRB1*1343              |                       |
| DRB1*1320+DRB1*1365              | DRB1*1329+DRB1*1332              |                       |
| DRB1*1320+DRB1*140101/1454       | DRB1*1343+DRB1*142301            |                       |
| DRB1*1320+DRB1*1402              | DRB1*1329+DRB1*1406              |                       |
| DRB1*1320+DRB1*140301            | DRB1*1329+DRB1*1412              |                       |
| DRB1*1320+DRB1*140701/140702     | DRB1*1329+DRB1*140101/1454       | DRB1*1343+DRB1*1414   |
| DRB1*1320+DRB1*1409              | DRB1*1329+DRB1*1480              |                       |
| DRB1*1320+DRB1*1414              | DRB1*1329+DRB1*142301            |                       |
| DRB1*1320+DRB1*1422              | DRB1*1363+DRB1*1474              |                       |
| DRB1*1320+DRB1*1427              | DRB1*1363+DRB1*1412              |                       |
| DRB1*1320+DRB1*1430              | DRB1*1329+DRB1*1417              |                       |
| DRB1*1320+DRB1*144401            | DRB1*1329+DRB1*140501            |                       |
| DRB1*1320+DRB1*144402            | DRB1*1329+DRB1*140503            |                       |
| DRB1*1320+DRB1*1468              | DRB1*1329+DRB1*1404              |                       |
| DRB1*1320+DRB1*1482              | DRB1*1371+DRB1*140101/1454       |                       |
| DRB1*1320+DRB1*150202/150205     | DRB1*1329+DRB1*150104            |                       |
| DRB1*1320+DRB1*1507              | DRB1*1340+DRB1*1505              |                       |
| DRB1*1320+DRB1*1511              | DRB1*1329+DRB1*1507              | DRB1*1336+DRB1*1505   |
| DRB1*1320+DRB1*1515              | DRB1*1329+DRB1*1504              | DRB1*1363+DRB1*1505   |
| DRB1*1320+DRB1*1531              | DRB1*1329+DRB1*1505              |                       |
| DRB1*1321+DRB1*140101/1454       | DRB1*1349+DRB1*1435              |                       |
| DRB1*1321+DRB1*1409              | DRB1*1349+DRB1*1430              |                       |
| DRB1*1321+DRB1*1425              | DRB1*1349+DRB1*1453              |                       |
| DRB1*1321+DRB1*143202            | DRB1*1425+DRB1*1465              |                       |
| DRB1*1321+DRB1*1480              | DRB1*1349+DRB1*1417              |                       |
| DRB1*1321+DRB1*150201            | DRB1*1330+DRB1*1515              |                       |
| DRB1*1321+DRB1*160101            | DRB1*1349+DRB1*1609              |                       |
| DRB1*1321+DRB1*160201            | DRB1*1349+DRB1*1610              |                       |
| DRB1*1322+DRB1*1338              | DRB1*1323+DRB1*1348              |                       |
| DRB1*1322+DRB1*1339              | DRB1*1323+DRB1*1379              |                       |
| DRB1*1322+DRB1*1341              | DRB1*1323+DRB1*1327              |                       |
| DRB1*1322+DRB1*140101/1454       | DRB1*1370+DRB1*1435              | DRB1*1383+DRB1*1458   |
| DRB1*1322+DRB1*1402              | DRB1*1323+DRB1*1406              | DRB1*1340+DRB1*1386   |
| DRB1*1322+DRB1*140301            | DRB1*1323+DRB1*1412              |                       |
| DRB1*1322+DRB1*1406              | DRB1*1344+DRB1*1353              |                       |
| DRB1*1322+DRB1*140701/140702     | DRB1*1323+DRB1*140101/1454       | DRB1*1345+DRB1*142301 |
| DRB1*1322+DRB1*1409              | DRB1*1323+DRB1*1480              | DRB1*1336+DRB1*1344   |
| DRB1*1322+DRB1*1425              | DRB1*1370+DRB1*1453              |                       |
| DRB1*1322+DRB1*144401            | DRB1*1323+DRB1*140501            | DRB1*1372+DRB1*1442   |
| DRB1*1322+DRB1*144402            | DRB1*1323+DRB1*140503            |                       |
| DRB1*1322+DRB1*1449              | DRB1*1345+DRB1*1420              | DRB1*1386+DRB1*1416   |
| DRB1*1322+DRB1*1480              | DRB1*1340+DRB1*1344              | DRB1*1370+DRB1*1417   |
| DRB1*1322+DRB1*150201            | DRB1*1323+DRB1*15010101/15010102 |                       |
| DRB1*1322+DRB1*150202/150205     | DRB1*1323+DRB1*150104            |                       |
| DRB1*1322+DRB1*150206            | DRB1*1323+DRB1*150103            |                       |
| DRB1*1322+DRB1*1504              | DRB1*1324+DRB1*15010101/15010102 |                       |
| DRB1*1322+DRB1*1507              | DRB1*1370+DRB1*15010101/15010102 |                       |
| DRB1*1322+DRB1*1511              | DRB1*1323+DRB1*1507              | DRB1*1370+DRB1*150201 |
| DRB1*1322+DRB1*1515              | DRB1*1323+DRB1*1504              | DRB1*1324+DRB1*150201 |
| DRB1*1322+DRB1*1531              | DRB1*1323+DRB1*1505              |                       |
| DRB1*1322+DRB1*160101            | DRB1*1324+DRB1*160501            | DRB1*1370+DRB1*1609   |
| DRB1*1322+DRB1*160201            | DRB1*1370+DRB1*1610              |                       |
| DRB1*1322+DRB1*1604              | DRB1*1347+DRB1*1510              |                       |
| DRB1*1323+DRB1*1402              | DRB1*1336+DRB1*1386              |                       |
| DRB1*1323+DRB1*140701/140702     | DRB1*1345+DRB1*1414              |                       |
| DRB1*1323+DRB1*1413              | DRB1*1365+DRB1*1386              |                       |
| DRB1*1323+DRB1*1464              | DRB1*1379+DRB1*1442              |                       |
| DRB1*1323+DRB1*1474              | DRB1*1325+DRB1*1416              | DRB1*1383+DRB1*1469   |
| DRB1*1324+DRB1*1332              | DRB1*1340+DRB1*1375              |                       |
| DRB1*1324+DRB1*1336              | DRB1*1363+DRB1*1370              |                       |
| DRB1*1324+DRB1*1348              | DRB1*1370+DRB1*1375              |                       |
| DRB1*1324+DRB1*1355              | DRB1*1347+DRB1*1375              |                       |
| DRB1*1324+DRB1*1365              | DRB1*1336+DRB1*1375              | DRB1*1348+DRB1*1363   |
| DRB1*1324+DRB1*1413              | DRB1*1375+DRB1*1402              |                       |
| DRB1*1324+DRB1*1430              | DRB1*1344+DRB1*1363              |                       |
| DRB1*1324+DRB1*1448              | DRB1*1354+DRB1*1402              |                       |
| DRB1*1324+DRB1*1485              | DRB1*1375+DRB1*140301            |                       |
| DRB1*1324+DRB1*1507              | DRB1*1370+DRB1*1504              |                       |
| DRB1*1324+DRB1*1511              | DRB1*1370+DRB1*1515              |                       |
| DRB1*1324+DRB1*1512              | DRB1*1375+DRB1*150104            |                       |
| DRB1*1325+DRB1*1327              | DRB1*1371+DRB1*1382              |                       |
| DRB1*1325+DRB1*1340              | DRB1*1356+DRB1*1370              |                       |
| DRB1*1325+DRB1*1379              | DRB1*1378+DRB1*1382              |                       |
| DRB1*1325+DRB1*140101/1454       | DRB1*1442+DRB1*1474              |                       |
| DRB1*1325+DRB1*1417              | DRB1*1344+DRB1*1356              |                       |
| DRB1*1325+DRB1*1445              | DRB1*1382+DRB1*140501            |                       |
| DRB1*1325+DRB1*1463              | DRB1*1330+DRB1*140301            | DRB1*1382+DRB1*1485   |
| DRB1*1325+DRB1*1467              | DRB1*1382+DRB1*140301            |                       |
| DRB1*1325+DRB1*1478              | DRB1*1330+DRB1*1412              |                       |
| DRB1*1325+DRB1*15010101/15010102 | DRB1*1382+DRB1*1505              |                       |
| DRB1*1325+DRB1*150201            | DRB1*1382+DRB1*1531              |                       |
| DRB1*1325+DRB1*15030101/15030102 | DRB1*1382+DRB1*1523              |                       |
| DRB1*1325+DRB1*160501            | DRB1*1382+DRB1*160201            |                       |
| DRB1*1326+DRB1*150202/150205     | DRB1*1424+DRB1*1609              |                       |
| DRB1*1327+DRB1*1336              | DRB1*1340+DRB1*1341              |                       |
| DRB1*1327+DRB1*1338              | DRB1*1341+DRB1*1348              |                       |
| DRB1*1327+DRB1*1339              | DRB1*1341+DRB1*1379              |                       |
| DRB1*1327+DRB1*1365              | DRB1*1332+DRB1*1341              |                       |

|                                  |                                  |                       |
|----------------------------------|----------------------------------|-----------------------|
| DRB1*1327+DRB1*1378              | DRB1*1371+DRB1*1379              |                       |
| DRB1*1327+DRB1*1402              | DRB1*1341+DRB1*1406              |                       |
| DRB1*1327+DRB1*140301            | DRB1*1341+DRB1*1412              | DRB1*1371+DRB1*1467   |
| DRB1*1327+DRB1*140501            | DRB1*1371+DRB1*1445              |                       |
| DRB1*1327+DRB1*1409              | DRB1*1341+DRB1*1480              |                       |
| DRB1*1327+DRB1*1414              | DRB1*1341+DRB1*142301            |                       |
| DRB1*1327+DRB1*1430              | DRB1*1341+DRB1*1417              |                       |
| DRB1*1327+DRB1*144401            | DRB1*1341+DRB1*140501            |                       |
| DRB1*1327+DRB1*144402            | DRB1*1341+DRB1*140503            |                       |
| DRB1*1327+DRB1*1463              | DRB1*1341+DRB1*1478              |                       |
| DRB1*1327+DRB1*1468              | DRB1*1341+DRB1*1404              |                       |
| DRB1*1327+DRB1*1485              | DRB1*1371+DRB1*1463              |                       |
| DRB1*1327+DRB1*150201            | DRB1*1341+DRB1*15010101/15010102 |                       |
| DRB1*1327+DRB1*150202/150205     | DRB1*1341+DRB1*150104            |                       |
| DRB1*1327+DRB1*150206            | DRB1*1341+DRB1*150103            |                       |
| DRB1*1327+DRB1*1505              | DRB1*1371+DRB1*15010101/15010102 |                       |
| DRB1*1327+DRB1*1511              | DRB1*1341+DRB1*1507              |                       |
| DRB1*1327+DRB1*1515              | DRB1*1341+DRB1*1504              |                       |
| DRB1*1327+DRB1*1523              | DRB1*1371+DRB1*15030101/15030102 |                       |
| DRB1*1327+DRB1*1531              | DRB1*1341+DRB1*1505              | DRB1*1371+DRB1*150201 |
| DRB1*1327+DRB1*160201            | DRB1*1371+DRB1*160501            |                       |
| DRB1*1329+DRB1*1425              | DRB1*1363+DRB1*1469              |                       |
| DRB1*1329+DRB1*1427              | DRB1*1363+DRB1*140301            |                       |
| DRB1*1329+DRB1*1482              | DRB1*1371+DRB1*140701/140702     |                       |
| DRB1*1329+DRB1*1511              | DRB1*1336+DRB1*1531              |                       |
| DRB1*1329+DRB1*1515              | DRB1*1363+DRB1*1531              |                       |
| DRB1*1329+DRB1*160101            | DRB1*1363+DRB1*160201            |                       |
| DRB1*1329+DRB1*160102            | DRB1*1363+DRB1*160202            |                       |
| DRB1*1329+DRB1*1609              | DRB1*1363+DRB1*1610              |                       |
| DRB1*1330+DRB1*1381              | DRB1*1358+DRB1*1366              |                       |
| DRB1*1330+DRB1*1402              | DRB1*1382+DRB1*1413              |                       |
| DRB1*1330+DRB1*1419              | DRB1*1366+DRB1*1402              |                       |
| DRB1*1330+DRB1*1421              | DRB1*1366+DRB1*1417              |                       |
| DRB1*1330+DRB1*1467              | DRB1*1382+DRB1*1463              |                       |
| DRB1*1330+DRB1*150104            | DRB1*1382+DRB1*1512              |                       |
| DRB1*1331+DRB1*1349              | DRB1*1346+DRB1*1365              |                       |
| DRB1*1332+DRB1*1336              | DRB1*1340+DRB1*1365              |                       |
| DRB1*1332+DRB1*1338              | DRB1*1348+DRB1*1365              |                       |
| DRB1*1332+DRB1*1339              | DRB1*1365+DRB1*1379              |                       |
| DRB1*1332+DRB1*1370              | DRB1*1340+DRB1*1348              |                       |
| DRB1*1332+DRB1*1402              | DRB1*1340+DRB1*1413              | DRB1*1365+DRB1*1406   |
| DRB1*1332+DRB1*140301            | DRB1*1340+DRB1*1485              | DRB1*1365+DRB1*1412   |
| DRB1*1332+DRB1*140701/140702     | DRB1*1365+DRB1*140101/1454       |                       |
| DRB1*1332+DRB1*1409              | DRB1*1365+DRB1*1480              |                       |
| DRB1*1332+DRB1*1414              | DRB1*1365+DRB1*142301            |                       |
| DRB1*1332+DRB1*1430              | DRB1*1365+DRB1*1417              |                       |
| DRB1*1332+DRB1*144401            | DRB1*1365+DRB1*140501            |                       |
| DRB1*1332+DRB1*144402            | DRB1*1365+DRB1*140503            |                       |
| DRB1*1332+DRB1*1449              | DRB1*1413+DRB1*1416              |                       |
| DRB1*1332+DRB1*1463              | DRB1*1365+DRB1*1478              |                       |
| DRB1*1332+DRB1*1467              | DRB1*1336+DRB1*1478              | DRB1*1340+DRB1*1463   |
| DRB1*1332+DRB1*1468              | DRB1*1365+DRB1*1404              |                       |
| DRB1*1332+DRB1*150104            | DRB1*1340+DRB1*1512              |                       |
| DRB1*1332+DRB1*150201            | DRB1*1365+DRB1*15010101/15010102 |                       |
| DRB1*1332+DRB1*150202/150205     | DRB1*1336+DRB1*1512              | DRB1*1365+DRB1*150104 |
| DRB1*1332+DRB1*150206            | DRB1*1365+DRB1*150103            |                       |
| DRB1*1332+DRB1*1511              | DRB1*1365+DRB1*1507              |                       |
| DRB1*1332+DRB1*1515              | DRB1*1365+DRB1*1504              |                       |
| DRB1*1332+DRB1*1531              | DRB1*1365+DRB1*1505              |                       |
| DRB1*1336+DRB1*1348              | DRB1*1338+DRB1*1340              | DRB1*1365+DRB1*1370   |
| DRB1*1336+DRB1*1355              | DRB1*1347+DRB1*1365              |                       |
| DRB1*1336+DRB1*1379              | DRB1*1339+DRB1*1340              |                       |
| DRB1*1336+DRB1*140101/1454       | DRB1*1340+DRB1*140701/140702     |                       |
| DRB1*1336+DRB1*1404              | DRB1*1340+DRB1*1468              |                       |
| DRB1*1336+DRB1*140501            | DRB1*1340+DRB1*144401            |                       |
| DRB1*1336+DRB1*140503            | DRB1*1340+DRB1*144402            |                       |
| DRB1*1336+DRB1*1406              | DRB1*1340+DRB1*1402              | DRB1*1353+DRB1*1409   |
| DRB1*1336+DRB1*1412              | DRB1*1340+DRB1*140301            |                       |
| DRB1*1336+DRB1*1413              | DRB1*1365+DRB1*1402              |                       |
| DRB1*1336+DRB1*142301            | DRB1*1340+DRB1*1414              |                       |
| DRB1*1336+DRB1*1463              | DRB1*1365+DRB1*1467              |                       |
| DRB1*1336+DRB1*1480              | DRB1*1340+DRB1*1409              |                       |
| DRB1*1336+DRB1*1485              | DRB1*1365+DRB1*140301            |                       |
| DRB1*1336+DRB1*150104            | DRB1*1340+DRB1*150202/150205     |                       |
| DRB1*1336+DRB1*1504              | DRB1*1340+DRB1*1515              | DRB1*1363+DRB1*1507   |
| DRB1*1336+DRB1*1507              | DRB1*1340+DRB1*1511              |                       |
| DRB1*1336+DRB1*1515              | DRB1*1363+DRB1*1511              |                       |
| DRB1*1337+DRB1*1353              | DRB1*1370+DRB1*1385              |                       |
| DRB1*1337+DRB1*1427              | DRB1*1347+DRB1*1385              |                       |
| DRB1*1338+DRB1*1379              | DRB1*1339+DRB1*1348              |                       |
| DRB1*1338+DRB1*140101/1454       | DRB1*1348+DRB1*140701/140702     |                       |
| DRB1*1338+DRB1*1404              | DRB1*1348+DRB1*1468              |                       |
| DRB1*1338+DRB1*140501            | DRB1*1348+DRB1*144401            |                       |
| DRB1*1338+DRB1*140503            | DRB1*1348+DRB1*144402            |                       |
| DRB1*1338+DRB1*1406              | DRB1*1348+DRB1*1402              | DRB1*1370+DRB1*1413   |
| DRB1*1338+DRB1*1412              | DRB1*1348+DRB1*140301            | DRB1*1370+DRB1*1485   |
| DRB1*1338+DRB1*142301            | DRB1*1348+DRB1*1414              |                       |
| DRB1*1338+DRB1*1453              | DRB1*1345+DRB1*1349              |                       |
| DRB1*1338+DRB1*1478              | DRB1*1348+DRB1*1463              |                       |
| DRB1*1338+DRB1*1490              | DRB1*1348+DRB1*1409              |                       |
| DRB1*1338+DRB1*150103            | DRB1*1348+DRB1*150206            |                       |
| DRB1*1338+DRB1*150104            | DRB1*1348+DRB1*150202/150205     |                       |
| DRB1*1338+DRB1*1504              | DRB1*1348+DRB1*1515              |                       |
| DRB1*1338+DRB1*1505              | DRB1*1348+DRB1*1531              | DRB1*1375+DRB1*1511   |
| DRB1*1338+DRB1*1507              | DRB1*1348+DRB1*1511              |                       |
| DRB1*1339+DRB1*1371              | DRB1*1341+DRB1*1378              |                       |
| DRB1*1339+DRB1*140101/1454       | DRB1*1379+DRB1*140701/140702     |                       |
| DRB1*1339+DRB1*1404              | DRB1*1379+DRB1*1468              |                       |
| DRB1*1339+DRB1*140501            | DRB1*1379+DRB1*144401            |                       |
| DRB1*1339+DRB1*140503            | DRB1*1379+DRB1*144402            |                       |
| DRB1*1339+DRB1*1406              | DRB1*1379+DRB1*1402              |                       |
| DRB1*1339+DRB1*1412              | DRB1*1378+DRB1*1467              | DRB1*1379+DRB1*140301 |
| DRB1*1339+DRB1*1417              | DRB1*1379+DRB1*1430              |                       |
| DRB1*1339+DRB1*142301            | DRB1*1379+DRB1*1414              |                       |
| DRB1*1339+DRB1*1478              | DRB1*1379+DRB1*1463              |                       |
| DRB1*1339+DRB1*1480              | DRB1*1379+DRB1*1409              |                       |
| DRB1*1339+DRB1*15010101/15010102 | DRB1*1379+DRB1*150201            |                       |
| DRB1*1339+DRB1*150103            | DRB1*1379+DRB1*150206            |                       |
| DRB1*1339+DRB1*150104            | DRB1*1379+DRB1*150202/150205     |                       |
| DRB1*1339+DRB1*1504              | DRB1*1379+DRB1*1515              |                       |
| DRB1*1339+DRB1*1505              | DRB1*1378+DRB1*150201            | DRB1*1379+DRB1*1531   |
| DRB1*1339+DRB1*1507              | DRB1*1379+DRB1*1511              |                       |
| DRB1*1340+DRB1*1406              | DRB1*1353+DRB1*1480              |                       |
| DRB1*1340+DRB1*1449              | DRB1*1402+DRB1*1416              |                       |
| DRB1*1340+DRB1*1527              | DRB1*1409+DRB1*1510              |                       |
| DRB1*1340+DRB1*160101            | DRB1*1384+DRB1*1608              |                       |
| DRB1*1344+DRB1*1402              | DRB1*1386+DRB1*1480              |                       |
| DRB1*1346+DRB1*1378              | DRB1*1354+DRB1*1356              |                       |
| DRB1*1347+DRB1*1353              | DRB1*1370+DRB1*1427              |                       |
| DRB1*1347+DRB1*1413              | DRB1*1355+DRB1*1402              |                       |
| DRB1*1347+DRB1*1485              | DRB1*1355+DRB1*140301            |                       |
| DRB1*1347+DRB1*1512              | DRB1*1355+DRB1*150104            |                       |
| DRB1*1348+DRB1*135002            | DRB1*1349+DRB1*1369              |                       |
| DRB1*1348+DRB1*1422              | DRB1*1349+DRB1*1416              |                       |

|                                         |                                  |                                           |                     |
|-----------------------------------------|----------------------------------|-------------------------------------------|---------------------|
| DRB1*1348+DRB1*1427                     | DRB1*1353+DRB1*1355              |                                           |                     |
| DRB1*1348+DRB1*150104                   | DRB1*1370+DRB1*1512              |                                           |                     |
| DRB1*1348+DRB1*1504                     | DRB1*1375+DRB1*1507              |                                           |                     |
| DRB1*1349+DRB1*1455                     | DRB1*1355+DRB1*143202            |                                           |                     |
| DRB1*1349+DRB1*1604                     | DRB1*1355+DRB1*160102            |                                           |                     |
| DRB1*135001+DRB1*1416                   | DRB1*1387+DRB1*1425              |                                           |                     |
| DRB1*135002+DRB1*1416                   | DRB1*1369+DRB1*1422              |                                           |                     |
| DRB1*1353+DRB1*142301                   | DRB1*1376+DRB1*1481              |                                           |                     |
| DRB1*1353+DRB1*143201                   | DRB1*1416+DRB1*1481              |                                           |                     |
| DRB1*1353+DRB1*1527                     | DRB1*1402+DRB1*1510              |                                           |                     |
| DRB1*1354+DRB1*1413                     | DRB1*1375+DRB1*1448              |                                           |                     |
| DRB1*1358+DRB1*1421                     | DRB1*1381+DRB1*1417              |                                           |                     |
| DRB1*1361+DRB1*1441                     | DRB1*1364+DRB1*1447              |                                           |                     |
| DRB1*1364+DRB1*1440                     | DRB1*1383+DRB1*1477              |                                           |                     |
| DRB1*1372+DRB1*140101/1454              | DRB1*140501+DRB1*1416            |                                           |                     |
| DRB1*1372+DRB1*140102                   | DRB1*140503+DRB1*1416            |                                           |                     |
| DRB1*1372+DRB1*140701/140702            | DRB1*1416+DRB1*144401            |                                           |                     |
| DRB1*1372+DRB1*1464                     | DRB1*1378+DRB1*1445              | DRB1*1379+DRB1*140501                     |                     |
| DRB1*1372+DRB1*15010101/15010102        | DRB1*1437+DRB1*1510              |                                           |                     |
| DRB1*1378+DRB1*1463                     | DRB1*1379+DRB1*1485              |                                           |                     |
| DRB1*1378+DRB1*15010101/15010102        | DRB1*1379+DRB1*1505              |                                           |                     |
| DRB1*1378+DRB1*15030101/15030102        | DRB1*1379+DRB1*1523              |                                           |                     |
| DRB1*1378+DRB1*160501                   | DRB1*1379+DRB1*160201            |                                           |                     |
| DRB1*1379+DRB1*140101/1454              | DRB1*1416+DRB1*1464              |                                           |                     |
| DRB1*1383+DRB1*1410                     | DRB1*1457+DRB1*1472              |                                           |                     |
| DRB1*1383+DRB1*1532                     | DRB1*1387+DRB1*15010101/15010102 |                                           |                     |
| DRB1*1386+DRB1*140701/140702            | DRB1*1442+DRB1*1449              |                                           |                     |
| DRB1*1386+DRB1*142301                   | DRB1*1420+DRB1*1442              |                                           |                     |
| DRB1*140101/1454+DRB1*1402              | DRB1*1406+DRB1*140701/140702     | DRB1*143202+DRB1*1451                     |                     |
| DRB1*140101/1454+DRB1*140301            | DRB1*140701/140702+DRB1*1412     |                                           |                     |
| DRB1*140101/1454+DRB1*140503            | DRB1*140102+DRB1*140501          |                                           |                     |
| DRB1*140101/1454+DRB1*1409              | DRB1*140701/140702+DRB1*1480     |                                           |                     |
| DRB1*140101/1454+DRB1*1414              | DRB1*140701/140702+DRB1*142301   |                                           |                     |
| DRB1*140101/1454+DRB1*1417              | DRB1*143202+DRB1*1433            | DRB1*1435+DRB1*1480                       |                     |
| DRB1*140101/1454+DRB1*1425              | DRB1*1422+DRB1*1458              |                                           |                     |
| DRB1*140101/1454+DRB1*1430              | DRB1*140701/140702+DRB1*1417     | DRB1*1409+DRB1*1435                       |                     |
| DRB1*140101/1454+DRB1*1431              | DRB1*1404+DRB1*143202            |                                           |                     |
| DRB1*140101/1454+DRB1*143201            | DRB1*140102+DRB1*143202          |                                           |                     |
| DRB1*140101/1454+DRB1*1434              | DRB1*1408+DRB1*143202            |                                           |                     |
| DRB1*140101/1454+DRB1*144401            | DRB1*140501+DRB1*140701/140702   |                                           |                     |
| DRB1*140101/1454+DRB1*144402            | DRB1*140102+DRB1*144401          | DRB1*140503+DRB1*140701/140702            |                     |
| DRB1*140101/1454+DRB1*1450              | DRB1*1404+DRB1*1438              |                                           |                     |
| DRB1*140101/1454+DRB1*1452              | DRB1*1404+DRB1*1406              |                                           |                     |
| DRB1*140101/1454+DRB1*1453              | DRB1*1425+DRB1*1435              |                                           |                     |
| DRB1*140101/1454+DRB1*1463              | DRB1*140701/140702+DRB1*1478     |                                           |                     |
| DRB1*140101/1454+DRB1*1468              | DRB1*1404+DRB1*140701/140702     |                                           |                     |
| DRB1*140101/1454+DRB1*15010101/15010102 | DRB1*140102+DRB1*150103          | DRB1*1435+DRB1*1507                       |                     |
| DRB1*140101/1454+DRB1*150201            | DRB1*140102+DRB1*150206          | DRB1*140701/140702+DRB1*15010101/15010102 | DRB1*1435+DRB1*1511 |
| DRB1*140101/1454+DRB1*150202/150205     | DRB1*140701/140702+DRB1*150104   |                                           |                     |
| DRB1*140101/1454+DRB1*150206            | DRB1*140701/140702+DRB1*150103   |                                           |                     |
| DRB1*140101/1454+DRB1*15030101/15030102 | DRB1*1470+DRB1*15010101/15010102 |                                           |                     |
| DRB1*140101/1454+DRB1*1511              | DRB1*140701/140702+DRB1*1507     |                                           |                     |
| DRB1*140101/1454+DRB1*1515              | DRB1*140701/140702+DRB1*1504     |                                           |                     |
| DRB1*140101/1454+DRB1*1516              | DRB1*1460+DRB1*15010101/15010102 |                                           |                     |
| DRB1*140101/1454+DRB1*1523              | DRB1*1470+DRB1*1505              |                                           |                     |
| DRB1*140101/1454+DRB1*1524              | DRB1*1426+DRB1*15010101/15010102 |                                           |                     |
| DRB1*140101/1454+DRB1*1531              | DRB1*140701/140702+DRB1*1505     |                                           |                     |
| DRB1*140101/1454+DRB1*1609              | DRB1*1435+DRB1*160101            |                                           |                     |
| DRB1*140101/1454+DRB1*1610              | DRB1*1435+DRB1*160201            |                                           |                     |
| DRB1*140102+DRB1*1402                   | DRB1*143201+DRB1*1451            |                                           |                     |
| DRB1*140102+DRB1*1417                   | DRB1*143201+DRB1*1433            |                                           |                     |
| DRB1*140102+DRB1*1431                   | DRB1*1404+DRB1*143201            |                                           |                     |
| DRB1*140102+DRB1*1434                   | DRB1*1408+DRB1*143201            |                                           |                     |
| DRB1*140102+DRB1*1447                   | DRB1*1402+DRB1*1438              |                                           |                     |
| DRB1*1402+DRB1*1404                     | DRB1*1406+DRB1*1468              | DRB1*140701/140702+DRB1*1452              | DRB1*1431+DRB1*1451 |
| DRB1*1402+DRB1*140501                   | DRB1*1406+DRB1*144401            |                                           |                     |
| DRB1*1402+DRB1*140503                   | DRB1*1406+DRB1*144402            |                                           |                     |
| DRB1*1402+DRB1*1408                     | DRB1*1434+DRB1*1451              |                                           |                     |
| DRB1*1402+DRB1*1412                     | DRB1*140301+DRB1*1406            |                                           |                     |
| DRB1*1402+DRB1*1417                     | DRB1*1406+DRB1*1430              |                                           |                     |
| DRB1*1402+DRB1*1421                     | DRB1*1417+DRB1*1419              |                                           |                     |
| DRB1*1402+DRB1*142301                   | DRB1*1406+DRB1*1414              |                                           |                     |
| DRB1*1402+DRB1*1428                     | DRB1*1429+DRB1*1468              |                                           |                     |
| DRB1*1402+DRB1*1433                     | DRB1*1417+DRB1*1451              |                                           |                     |
| DRB1*1402+DRB1*1463                     | DRB1*1413+DRB1*1467              |                                           |                     |
| DRB1*1402+DRB1*1477                     | DRB1*140301+DRB1*1441            |                                           |                     |
| DRB1*1402+DRB1*1478                     | DRB1*1406+DRB1*1463              |                                           |                     |
| DRB1*1402+DRB1*1480                     | DRB1*1406+DRB1*1409              |                                           |                     |
| DRB1*1402+DRB1*1485                     | DRB1*140301+DRB1*1413            |                                           |                     |
| DRB1*1402+DRB1*15010101/15010102        | DRB1*1406+DRB1*150201            |                                           |                     |
| DRB1*1402+DRB1*150103                   | DRB1*1406+DRB1*150206            |                                           |                     |
| DRB1*1402+DRB1*150104                   | DRB1*1406+DRB1*150202/150205     |                                           |                     |
| DRB1*1402+DRB1*150201                   | DRB1*1424+DRB1*1527              |                                           |                     |
| DRB1*1402+DRB1*1504                     | DRB1*1406+DRB1*1515              |                                           |                     |
| DRB1*1402+DRB1*1505                     | DRB1*1406+DRB1*1531              |                                           |                     |
| DRB1*1402+DRB1*1507                     | DRB1*1406+DRB1*1511              |                                           |                     |
| DRB1*1402+DRB1*1512                     | DRB1*1413+DRB1*150104            |                                           |                     |
| DRB1*140301+DRB1*1404                   | DRB1*1412+DRB1*1468              |                                           |                     |
| DRB1*140301+DRB1*140501                 | DRB1*1412+DRB1*144401            |                                           |                     |
| DRB1*140301+DRB1*140503                 | DRB1*1412+DRB1*144402            |                                           |                     |
| DRB1*140301+DRB1*1417                   | DRB1*1412+DRB1*1430              |                                           |                     |
| DRB1*140301+DRB1*1420                   | DRB1*1406+DRB1*1440              |                                           |                     |
| DRB1*140301+DRB1*142301                 | DRB1*1412+DRB1*1414              |                                           |                     |
| DRB1*140301+DRB1*1425                   | DRB1*1427+DRB1*1469              |                                           |                     |
| DRB1*140301+DRB1*1445                   | DRB1*140501+DRB1*1467            |                                           |                     |
| DRB1*140301+DRB1*1463                   | DRB1*1467+DRB1*1485              |                                           |                     |
| DRB1*140301+DRB1*1478                   | DRB1*1412+DRB1*1463              |                                           |                     |
| DRB1*140301+DRB1*1480                   | DRB1*1409+DRB1*1412              |                                           |                     |
| DRB1*140301+DRB1*15010101/15010102      | DRB1*1412+DRB1*150201            | DRB1*1467+DRB1*1505                       |                     |
| DRB1*140301+DRB1*150103                 | DRB1*1412+DRB1*150206            |                                           |                     |
| DRB1*140301+DRB1*150104                 | DRB1*1412+DRB1*150202/150205     |                                           |                     |
| DRB1*140301+DRB1*150201                 | DRB1*1467+DRB1*1531              |                                           |                     |
| DRB1*140301+DRB1*15030101/15030102      | DRB1*1467+DRB1*1523              |                                           |                     |
| DRB1*140301+DRB1*1504                   | DRB1*1412+DRB1*1515              | DRB1*1427+DRB1*1505                       |                     |
| DRB1*140301+DRB1*1505                   | DRB1*1412+DRB1*1531              |                                           |                     |
| DRB1*140301+DRB1*1507                   | DRB1*1412+DRB1*1511              |                                           |                     |
| DRB1*140301+DRB1*1512                   | DRB1*1485+DRB1*150104            |                                           |                     |
| DRB1*140301+DRB1*1515                   | DRB1*1427+DRB1*1531              |                                           |                     |
| DRB1*140301+DRB1*160101                 | DRB1*1427+DRB1*160201            |                                           |                     |
| DRB1*140301+DRB1*160102                 | DRB1*1427+DRB1*160202            |                                           |                     |
| DRB1*140301+DRB1*160501                 | DRB1*1467+DRB1*160201            |                                           |                     |
| DRB1*140301+DRB1*1609                   | DRB1*1427+DRB1*1610              |                                           |                     |
| DRB1*1404+DRB1*1409                     | DRB1*1468+DRB1*1480              |                                           |                     |
| DRB1*1404+DRB1*1414                     | DRB1*142301+DRB1*1468            |                                           |                     |
| DRB1*1404+DRB1*1417                     | DRB1*1431+DRB1*1433              |                                           |                     |
| DRB1*1404+DRB1*1429                     | DRB1*1406+DRB1*1428              |                                           |                     |
| DRB1*1404+DRB1*1430                     | DRB1*1417+DRB1*1468              |                                           |                     |
| DRB1*1404+DRB1*1434                     | DRB1*1408+DRB1*1431              |                                           |                     |
| DRB1*1404+DRB1*144401                   | DRB1*140501+DRB1*1468            |                                           |                     |
| DRB1*1404+DRB1*144402                   | DRB1*140503+DRB1*1468            |                                           |                     |
| DRB1*1404+DRB1*1463                     | DRB1*1468+DRB1*1478              |                                           |                     |
| DRB1*1404+DRB1*150201                   | DRB1*1468+DRB1*15010101/15010102 |                                           |                     |
| DRB1*1404+DRB1*150202/150205            | DRB1*1468+DRB1*150104            |                                           |                     |
| DRB1*1404+DRB1*150206                   | DRB1*1468+DRB1*150103            |                                           |                     |

|                                           |                                    |                                    |                         |
|-------------------------------------------|------------------------------------|------------------------------------|-------------------------|
| DRB1*1404+DRB1*1511                       | DRB1*1468+DRB1*1507                |                                    |                         |
| DRB1*1404+DRB1*1515                       | DRB1*1468+DRB1*1504                |                                    |                         |
| DRB1*1404+DRB1*1531                       | DRB1*1468+DRB1*1505                |                                    |                         |
| DRB1*140501+DRB1*1409                     | DRB1*144401+DRB1*1480              |                                    |                         |
| DRB1*140501+DRB1*1412                     | DRB1*1418+DRB1*1484                |                                    |                         |
| DRB1*140501+DRB1*1414                     | DRB1*142301+DRB1*144401            |                                    |                         |
| DRB1*140501+DRB1*1430                     | DRB1*1417+DRB1*144401              |                                    |                         |
| DRB1*140501+DRB1*143201                   | DRB1*140503+DRB1*143202            |                                    |                         |
| DRB1*140501+DRB1*144402                   | DRB1*140503+DRB1*144401            |                                    |                         |
| DRB1*140501+DRB1*1463                     | DRB1*144401+DRB1*1478              |                                    |                         |
| DRB1*140501+DRB1*15010101/15010102        | DRB1*140503+DRB1*150103            | DRB1*1445+DRB1*1485                |                         |
| DRB1*140501+DRB1*150201                   | DRB1*140503+DRB1*150206            | DRB1*1445+DRB1*1505                |                         |
|                                           | DRB1*1445+DRB1*1531                | DRB1*144401+DRB1*15010101/15010102 | DRB1*144402+DRB1*150103 |
|                                           | DRB1*144401+DRB1*150104            |                                    |                         |
| DRB1*140501+DRB1*150202/150205            | DRB1*144401+DRB1*150103            |                                    |                         |
| DRB1*140501+DRB1*150206                   | DRB1*1445+DRB1*1523                |                                    |                         |
| DRB1*140501+DRB1*15030101/15030102        | DRB1*144401+DRB1*1507              |                                    |                         |
| DRB1*140501+DRB1*1511                     | DRB1*144401+DRB1*1504              |                                    |                         |
| DRB1*140501+DRB1*1515                     | DRB1*144401+DRB1*1505              |                                    |                         |
| DRB1*140501+DRB1*1531                     | DRB1*1445+DRB1*160201              |                                    |                         |
| DRB1*140501+DRB1*160501                   | DRB1*144402+DRB1*1480              |                                    |                         |
| DRB1*140503+DRB1*1409                     | DRB1*142301+DRB1*144402            |                                    |                         |
| DRB1*140503+DRB1*1414                     | DRB1*1417+DRB1*144402              |                                    |                         |
| DRB1*140503+DRB1*1430                     | DRB1*144402+DRB1*1478              |                                    |                         |
| DRB1*140503+DRB1*1463                     | DRB1*144402+DRB1*15010101/15010102 |                                    |                         |
| DRB1*140503+DRB1*150201                   | DRB1*144402+DRB1*150104            |                                    |                         |
| DRB1*140503+DRB1*150202/150205            | DRB1*144402+DRB1*1507              |                                    |                         |
| DRB1*140503+DRB1*1511                     | DRB1*144402+DRB1*1504              |                                    |                         |
| DRB1*140503+DRB1*1515                     | DRB1*144402+DRB1*1505              |                                    |                         |
| DRB1*140503+DRB1*1531                     | DRB1*143202+DRB1*1452              |                                    |                         |
| DRB1*1406+DRB1*1431                       | DRB1*1438+DRB1*1452                |                                    |                         |
| DRB1*1406+DRB1*1450                       | DRB1*1412+DRB1*1441                |                                    |                         |
| DRB1*1406+DRB1*1477                       | DRB1*1412+DRB1*1413                |                                    |                         |
| DRB1*1406+DRB1*1485                       | DRB1*142301+DRB1*1449              |                                    |                         |
| DRB1*140701/140702+DRB1*1420              | DRB1*143202+DRB1*1468              |                                    |                         |
| DRB1*140701/140702+DRB1*1431              | DRB1*1438+DRB1*1468                |                                    |                         |
| DRB1*140701/140702+DRB1*1450              | DRB1*1470+DRB1*150201              |                                    |                         |
| DRB1*140701/140702+DRB1*15030101/15030102 | DRB1*1460+DRB1*150201              |                                    |                         |
| DRB1*140701/140702+DRB1*1516              | DRB1*1470+DRB1*1531                |                                    |                         |
| DRB1*140701/140702+DRB1*1523              | DRB1*1426+DRB1*150201              |                                    |                         |
| DRB1*140701/140702+DRB1*1524              | DRB1*1433+DRB1*1434                |                                    |                         |
| DRB1*1408+DRB1*1417                       | DRB1*142302+DRB1*1479              |                                    |                         |
| DRB1*1408+DRB1*1476                       | DRB1*1430+DRB1*1480                |                                    |                         |
| DRB1*1409+DRB1*1417                       | DRB1*1414+DRB1*1480                |                                    |                         |
| DRB1*1409+DRB1*142301                     | DRB1*1425+DRB1*1430                |                                    |                         |
| DRB1*1409+DRB1*1453                       | DRB1*1463+DRB1*1480                |                                    |                         |
| DRB1*1409+DRB1*1478                       | DRB1*1417+DRB1*1511                | DRB1*1430+DRB1*1507                |                         |
| DRB1*1409+DRB1*15010101/15010102          | DRB1*1480+DRB1*150206              |                                    | DRB1*1480+DRB1*150201   |
| DRB1*1409+DRB1*150103                     | DRB1*1480+DRB1*150202/150205       |                                    |                         |
| DRB1*1409+DRB1*150104                     | DRB1*1430+DRB1*1511                |                                    |                         |
| DRB1*1409+DRB1*150201                     | DRB1*1480+DRB1*1515                |                                    |                         |
| DRB1*1409+DRB1*1504                       | DRB1*1480+DRB1*1531                |                                    |                         |
| DRB1*1409+DRB1*1505                       | DRB1*1480+DRB1*1511                |                                    |                         |
| DRB1*1409+DRB1*1507                       | DRB1*1430+DRB1*160101              |                                    |                         |
| DRB1*1409+DRB1*1609                       | DRB1*1430+DRB1*160201              |                                    |                         |
| DRB1*1409+DRB1*1610                       | DRB1*1427+DRB1*1474                |                                    |                         |
| DRB1*1412+DRB1*1422                       | DRB1*1441+DRB1*1485                |                                    |                         |
| DRB1*1413+DRB1*1477                       | DRB1*1478+DRB1*1527                |                                    |                         |
| DRB1*1413+DRB1*1521                       | DRB1*142301+DRB1*1430              |                                    |                         |
| DRB1*1414+DRB1*1417                       | DRB1*142301+DRB1*1463              |                                    |                         |
| DRB1*1414+DRB1*1478                       | DRB1*142301+DRB1*150201            |                                    |                         |
| DRB1*1414+DRB1*15010101/15010102          | DRB1*142301+DRB1*150206            |                                    |                         |
| DRB1*1414+DRB1*150103                     | DRB1*142301+DRB1*150202/150205     |                                    |                         |
| DRB1*1414+DRB1*150104                     | DRB1*142301+DRB1*1515              |                                    |                         |
| DRB1*1414+DRB1*150104                     | DRB1*142301+DRB1*1531              |                                    |                         |
| DRB1*1414+DRB1*1504                       | DRB1*142301+DRB1*1511              |                                    |                         |
| DRB1*1414+DRB1*1505                       | DRB1*1453+DRB1*1480                |                                    |                         |
| DRB1*1414+DRB1*1507                       | DRB1*1430+DRB1*1478                |                                    |                         |
| DRB1*1417+DRB1*1425                       | DRB1*1430+DRB1*150104              |                                    |                         |
| DRB1*1417+DRB1*1463                       | DRB1*1430+DRB1*150103              |                                    |                         |
| DRB1*1417+DRB1*150202/150205              | DRB1*1480+DRB1*15010101/15010102   |                                    |                         |
| DRB1*1417+DRB1*150206                     | DRB1*1430+DRB1*1504                |                                    |                         |
| DRB1*1417+DRB1*1507                       | DRB1*1430+DRB1*1505                |                                    |                         |
| DRB1*1417+DRB1*1515                       | DRB1*1480+DRB1*1609                |                                    |                         |
| DRB1*1417+DRB1*1531                       | DRB1*1480+DRB1*1610                |                                    |                         |
| DRB1*1417+DRB1*160101                     | DRB1*1421+DRB1*1451                |                                    |                         |
| DRB1*1417+DRB1*160201                     | DRB1*1474+DRB1*1515                |                                    |                         |
| DRB1*1419+DRB1*1433                       | DRB1*1467+DRB1*15010101/15010102   |                                    |                         |
| DRB1*1422+DRB1*1505                       | DRB1*1427+DRB1*1511                |                                    |                         |
| DRB1*1424+DRB1*1521                       | DRB1*1453+DRB1*1507                |                                    |                         |
| DRB1*1424+DRB1*1604                       | DRB1*1453+DRB1*1511                |                                    |                         |
| DRB1*1425+DRB1*15010101/15010102          | DRB1*1469+DRB1*1504                |                                    |                         |
| DRB1*1425+DRB1*150201                     | DRB1*1469+DRB1*1515                |                                    |                         |
| DRB1*1425+DRB1*1505                       | DRB1*1469+DRB1*160101              |                                    |                         |
| DRB1*1425+DRB1*1531                       | DRB1*1469+DRB1*160102              |                                    |                         |
| DRB1*1425+DRB1*160201                     | DRB1*1453+DRB1*160101              | DRB1*1469+DRB1*1609                |                         |
| DRB1*1425+DRB1*160202                     | DRB1*1453+DRB1*160201              |                                    |                         |
| DRB1*1425+DRB1*1609                       | DRB1*1470+DRB1*1524                |                                    |                         |
| DRB1*1425+DRB1*1610                       | DRB1*1460+DRB1*1524                |                                    |                         |
| DRB1*1426+DRB1*15030101/15030102          | DRB1*1467+DRB1*1504                |                                    |                         |
| DRB1*1426+DRB1*1516                       | DRB1*1467+DRB1*1515                |                                    |                         |
| DRB1*1427+DRB1*15010101/15010102          | DRB1*1467+DRB1*160101              |                                    |                         |
| DRB1*1427+DRB1*150201                     | DRB1*143202+DRB1*1450              |                                    |                         |
| DRB1*1427+DRB1*160501                     | DRB1*143202+DRB1*144402            |                                    |                         |
| DRB1*1431+DRB1*1438                       | DRB1*143202+DRB1*15010101/15010102 |                                    |                         |
| DRB1*143201+DRB1*144401                   | DRB1*143202+DRB1*150201            |                                    |                         |
| DRB1*143201+DRB1*150103                   | DRB1*1455+DRB1*160102              |                                    |                         |
| DRB1*143201+DRB1*150206                   | DRB1*144402+DRB1*150206            |                                    |                         |
| DRB1*143202+DRB1*1604                     | DRB1*1470+DRB1*1516                |                                    |                         |
| DRB1*144401+DRB1*150201                   | DRB1*1478+DRB1*150201              |                                    |                         |
| DRB1*1460+DRB1*15030101/15030102          | DRB1*1478+DRB1*150206              | DRB1*1478+DRB1*150202/150205       |                         |
| DRB1*1463+DRB1*15010101/15010102          | DRB1*1467+DRB1*1512                |                                    |                         |
| DRB1*1463+DRB1*150103                     | DRB1*1478+DRB1*1515                |                                    |                         |
| DRB1*1463+DRB1*150104                     | DRB1*1478+DRB1*1531                | DRB1*1485+DRB1*15010101/15010102   |                         |
| DRB1*1463+DRB1*1504                       | DRB1*1478+DRB1*1511                |                                    |                         |
| DRB1*1463+DRB1*1505                       | DRB1*1485+DRB1*15030101/15030102   |                                    |                         |
| DRB1*1463+DRB1*1507                       | DRB1*1485+DRB1*150201              |                                    |                         |
| DRB1*1463+DRB1*1523                       | DRB1*1485+DRB1*160501              |                                    |                         |
| DRB1*1463+DRB1*1531                       | DRB1*150104+DRB1*150201            |                                    |                         |
| DRB1*1463+DRB1*160201                     | DRB1*150103+DRB1*150201            |                                    |                         |
| DRB1*15010101/15010102+DRB1*150202/150205 | DRB1*150201+DRB1*1507              |                                    |                         |
| DRB1*15010101/15010102+DRB1*150206        | DRB1*150201+DRB1*1504              |                                    |                         |
| DRB1*15010101/15010102+DRB1*1511          | DRB1*15030101/15030102+DRB1*1505   |                                    |                         |
| DRB1*15010101/15010102+DRB1*1515          | DRB1*150201+DRB1*1505              |                                    |                         |
| DRB1*15010101/15010102+DRB1*1523          | DRB1*1504+DRB1*160501              | DRB1*1507+DRB1*1609                |                         |
| DRB1*15010101/15010102+DRB1*1531          | DRB1*1505+DRB1*160501              | DRB1*1507+DRB1*1610                |                         |
| DRB1*15010101/15010102+DRB1*160101        | DRB1*1528+DRB1*160201              |                                    |                         |
| DRB1*15010101/15010102+DRB1*160201        | DRB1*150104+DRB1*150206            |                                    |                         |
| DRB1*15010101/15010102+DRB1*1612          | DRB1*150206+DRB1*1507              |                                    |                         |
| DRB1*150103+DRB1*150202/150205            | DRB1*150206+DRB1*1504              |                                    |                         |
| DRB1*150103+DRB1*1511                     | DRB1*150206+DRB1*1505              |                                    |                         |
| DRB1*150103+DRB1*1515                     | DRB1*150202/150205+DRB1*1507       |                                    |                         |
| DRB1*150103+DRB1*1531                     | DRB1*150202/150205+DRB1*1504       |                                    |                         |
| DRB1*150104+DRB1*1511                     | DRB1*150202/150205+DRB1*1504       |                                    |                         |
| DRB1*150104+DRB1*1515                     | DRB1*150202/150205+DRB1*1504       |                                    |                         |
| DRB1*150104+DRB1*1531                     | DRB1*150202/150205+DRB1*1505       |                                    |                         |

---

|                                    |                                  |                       |
|------------------------------------|----------------------------------|-----------------------|
| DRB1*150201+DRB1*1523              | DRB1*15030101/15030102+DRB1*1531 |                       |
| DRB1*150201+DRB1*160101            | DRB1*1511+DRB1*1609              | DRB1*1515+DRB1*160501 |
| DRB1*150201+DRB1*160201            | DRB1*1511+DRB1*1610              | DRB1*1531+DRB1*160501 |
| DRB1*15030101/15030102+DRB1*160201 | DRB1*1523+DRB1*160501            |                       |
| DRB1*1504+DRB1*1511                | DRB1*1507+DRB1*1515              |                       |
| DRB1*1504+DRB1*1531                | DRB1*1505+DRB1*1515              |                       |
| DRB1*1504+DRB1*160201              | DRB1*1505+DRB1*160101            |                       |
| DRB1*1504+DRB1*160202              | DRB1*1505+DRB1*160102            |                       |
| DRB1*1504+DRB1*1610                | DRB1*1505+DRB1*1609              |                       |
| DRB1*1505+DRB1*1511                | DRB1*1507+DRB1*1531              |                       |
| DRB1*1515+DRB1*160201              | DRB1*1531+DRB1*160101            |                       |
| DRB1*1515+DRB1*160202              | DRB1*1531+DRB1*160102            |                       |
| DRB1*1515+DRB1*1610                | DRB1*1531+DRB1*1609              |                       |
| DRB1*160101+DRB1*160202            | DRB1*160102+DRB1*160201          |                       |
| DRB1*160101+DRB1*1610              | DRB1*160201+DRB1*1609            |                       |
| DRB1*160102+DRB1*1610              | DRB1*160202+DRB1*1609            |                       |

---

## **HLA-DRB3 Ambiguities, Release 2.25.0**

### ***Sequences identical over exons 2 (nucleotides 101 to 356)***

| <i>Allele 1</i> | <i>Allele 2</i> | <i>Code in table</i>   |
|-----------------|-----------------|------------------------|
| DRB3*01010201   | DRB3*01010202   | DRB3*01010201/01010202 |
| DRB3*0201       | DRB3*0224       | DRB3*0201/0224         |
| DRB3*030101     | DRB3*030103     | DRB3*030101/030103     |

### ***Alleles extended due to unsequenced regions***

The following alleles do not contain the complete sequence in the region nucleotide 101 to 356. For these alleles, the sequence of an alternate allele has been used to extend the sequence to cover this region.

| <i>Incomplete allele</i> | <i>Sequence extended with</i> |
|--------------------------|-------------------------------|
| DRB3*010103              | DRB3*01010201                 |
| DRB3*010104              | DRB3*01010201                 |
| DRB3*0102                | DRB3*01010201                 |
| DRB3*0103                | DRB3*01010201                 |
| DRB3*0106                | DRB3*01010201                 |
| DRB3*0107                | DRB3*01010201                 |
| DRB3*0110                | DRB3*01010201                 |
| DRB3*020202              | DRB3*01010201                 |
| DRB3*0203                | DRB3*01010201                 |
| DRB3*0205                | DRB3*01010201                 |
| DRB3*0206                | DRB3*01010201                 |
| DRB3*0207                | DRB3*01010201                 |
| DRB3*0208                | DRB3*01010201                 |
| DRB3*0302                | DRB3*01010201                 |
| DRB3*0303                | DRB3*01010201                 |

### ***Alleles removed from analysis due to insertions or deletions***

| <i>Allele</i> |
|---------------|
| None          |

### ***Ambiguous typing combinations over exon 2 (nucleotides 101 to 356)***

| <i>Combination 1</i>           | <i>Combination 2</i>         | <i>Combination 3</i> | <i>Combination 4</i> |
|--------------------------------|------------------------------|----------------------|----------------------|
| DRB3*0106+DRB3*0205            | DRB3*0107+DRB3*0303          |                      |                      |
| DRB3*0201/0224+DRB3*0303       | DRB3*0222+DRB3*030101/030103 |                      |                      |
| DRB3*020201+DRB3*0209          | DRB3*0210+DRB3*0221          |                      |                      |
| DRB3*020201+DRB3*030101/030103 | DRB3*0205+DRB3*0302          |                      |                      |
| DRB3*0207+DRB3*0219            | DRB3*0221+DRB3*0222          |                      |                      |

## **HLA-DRB4 Ambiguities, Release 2.25.0**

### ***Sequences identical over exons 2 (nucleotides 101 to 356)***

| <i>Allele 1</i> | <i>Allele 2</i> | <i>Allele 3</i> | <i>Allele 4</i> | <i>Allele 5</i> | <i>Code in table</i> |
|-----------------|-----------------|-----------------|-----------------|-----------------|----------------------|
| DRB4*01010101   | DRB4*01030101   | DRB4*01030102N  | DRB4*010302     | DRB4*0106       | DRB4*01G1            |

### ***Alleles extended due to unsequenced regions***

The following alleles do not contain the complete sequence in the region nucleotide 101 to 356. For these alleles, the sequence of an alternate allele has been used to extend the sequence to cover this region.

| <i>Incomplete allele</i> | <i>Sequence extended with</i> |
|--------------------------|-------------------------------|
| DRB4*0102                | DRB4*01010101                 |
| DRB4*0105                | DRB4*01010101                 |

### ***Alleles removed from analysis due to insertions or deletions***

| <i>Allele</i> |
|---------------|
| DRB4*0201N    |
| DRB4*0301N    |

### ***Ambiguous typing combinations over exon 2 (nucleotides 101 to 356)***

| <i>Combination 1</i> | <i>Combination 2</i> |
|----------------------|----------------------|
| None                 |                      |

## **HLA-DRB5 Ambiguities, Release 2.25.0**

### ***Sequences identical over exons 2 (nucleotides 101 to 356)***

| <i>Allele 1</i> | <i>Allele 2</i> | <i>Code in table</i> |
|-----------------|-----------------|----------------------|
| DRB5*0102       | DRB5*0108N      | DRB5*0102/0108N      |

### ***Alleles extended due to unsequenced regions***

The following alleles do not contain the complete sequence in the region nucleotide 101 to 356. For these alleles, the sequence of an alternate allele has been used to extend the sequence to cover this region.

| <i>Incomplete allele</i> | <i>Sequence extended with</i> |
|--------------------------|-------------------------------|
| DRB5*0103                | DRB5*010101                   |
| DRB5*0107                | DRB5*010101                   |
| DRB5*0109                | DRB5*010101                   |
| DRB5*0203                | DRB5*0202                     |

### ***Alleles removed from analysis due to insertions or deletions***

| <i>Allele</i> |
|---------------|
| DRB5*0110N    |

### ***Ambiguous typing combinations over exon 2 (nucleotides 101 to 356)***

| <i>Combination 1</i>  | <i>Combination 2</i> | <i>Combination 3</i> | <i>Combination 4</i> |
|-----------------------|----------------------|----------------------|----------------------|
| DRB5*010101+DRB5*0202 | DRB5*0107+DRB5*0204  |                      |                      |
| DRB5*0106+DRB5*0203   | DRB5*0111+DRB5*0202  |                      |                      |