Release notes for ENDF/B Development dec-039_Y_098m1 evaluation

October 13, 2016

- `checkr` Errors:

  1. Generic error message
     MAT=1012, MF= 1, MT=451 (0): Error

     ```
     ERROR(S) FOUND IN MAT=1012, MF= 1, MT=451
        ELIS SHOULD BE SET TO  0.000000E+00              RECORD NUMBER       3
     ```

  2. Generic error message
     MAT=1012, MF= 1, MT=451 (1): Error

     ```
     ERROR(S) FOUND IN MAT=1012, MF= 1, MT=451
        LISO SHOULD BE SET TO    0                       RECORD NUMBER       3
     ```

  3. A variable is outside the allowed ENDF range
     MAT=1012, MF= 1, MT=451 (2): Variable range

     ```
     ERROR(S) FOUND IN MAT=1012, MF= 1, MT=451
        NFOR =     8 OUT OF RANGE     6 -     6          RECORD NUMBER       3
     ```

  4. Generic error message
     MAT=1012, MF= 8, MT=457 (0): Error

     ```
     ERROR(S) FOUND IN MAT=1012, MF= 8, MT=457
        LIS SHOULD BE SET TO    0                        RECORD NUMBER      45
     ```

- `fizcon` Errors:

  1. Isomer flag not set properly
     MAT=1012, MF= 1, MT=451 (1): Isomer flag (b)

     ```
     ERROR(S) FOUND IN MAT=1012, MF= 1, MT=451
        ELIS NOT IN RANGE  0.00000E+00 TO  0.00000E+00
     ```

  2. Energies released in decay not adding up!
     MAT=1012, MF= 8, MT=457 (1): Bad energy sum

     ```
     ERROR(S) FOUND IN MAT=1012, MF= 8, MT=457
        NEUTRON MULTIPLICITY SUMUP FAILURE
            WHOLE= 3.40000E-02  SUM= 3.31000E-03
     ```

  3. Energies released in decay not adding up!
     MAT=1012, MF= 8, MT=457 (2): Bad energy sum

     ```
     ERROR(S) FOUND IN MAT=1012, MF= 8, MT=457
        NEUTRON AVERAGE ENERGY SUMUP FAILURE
            WHOLE= 7.10276E+02  SUM= 7.34390E+02
     ```