Release notes for ENDF/B Development dec-039_Y_102m1 evaluation

October 14, 2016

- `fizcon` Warnings:

  1. We don't know the energy of the isomer in question, FIZCON should just lighten up and let science progress
     MAT=1018, MF= 1, MT=451 (1): Unknown ELIS

     ```
     ERROR(S) FOUND IN MAT=1018, MF= 1, MT=451
        ELIS SHOULD NOT BE ZERO FOR A METASTABLE STATE
     ```

- `fizcon` Errors:

  1. Generic error message
     MAT=1018, MF= 8, MT=457 (1): Error

     ```
     ERROR(S) FOUND IN MAT=1018, MF= 8, MT=457
        E(MAXIMUM) > Q  E= 3.89000E+06  Q= 3.88600E+06
     ```

  2. Energies released in decay not adding up!
     MAT=1018, MF= 8, MT=457 (2): Bad energy sum

     ```
     ERROR(S) FOUND IN MAT=1018, MF= 8, MT=457
        TOTAL ENERGY RELEASE SUMUP FAILURE
            WHOLE= 1.00608E+07  SUM= 6.23174E+06
     ```

  3. Energies released in decay not adding up!
     MAT=1018, MF= 8, MT=457 (3): Bad energy sum

     ```
     ERROR(S) FOUND IN MAT=1018, MF= 8, MT=457
        GAMMA AVERAGE ENERGY SUMUP FAILURE
            WHOLE= 2.92887E+06  SUM= 2.94502E+06
     ```

  4. Energies released in decay not adding up!
     MAT=1018, MF= 8, MT=457 (4): Bad energy sum

     ```
     ERROR(S) FOUND IN MAT=1018, MF= 8, MT=457
        BETA AVERAGE ENERGY SUMUP FAILURE
            WHOLE= 3.26909E+06  SUM= 3.27409E+06
     ```

  5. Energies released in decay not adding up!
     MAT=1018, MF= 8, MT=457 (5): Bad energy sum

     ```
     ERROR(S) FOUND IN MAT=1018, MF= 8, MT=457
        NEUTRON AVERAGE ENERGY SUMUP FAILURE
            WHOLE= 1.22537E+04  SUM= 1.26236E+04
     ```