Ellingham Diagrams

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Standard Gibb's Energies of Formation for

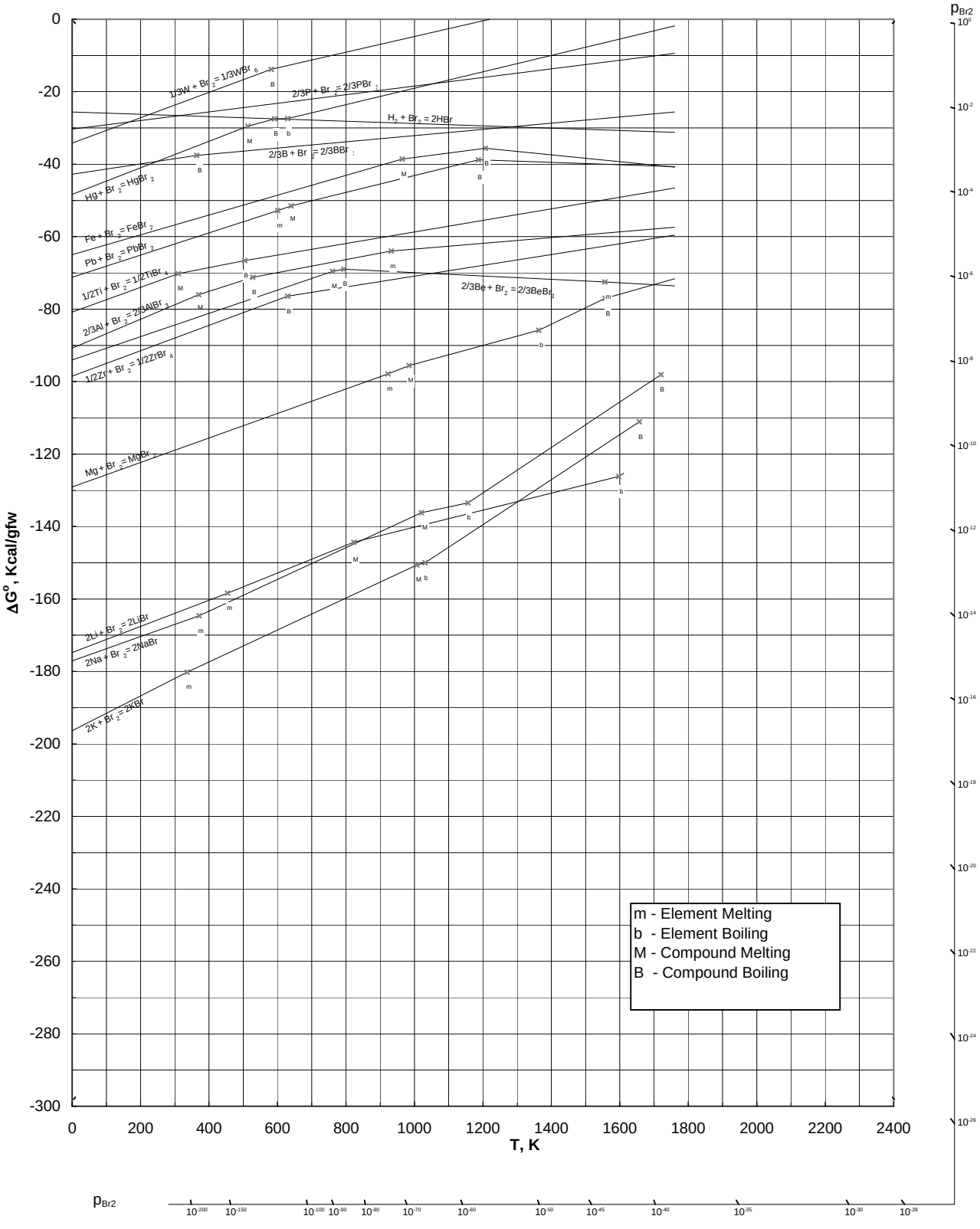
Bromides
Chlorides
Fluorides
Hydrides
Iodides
Nitrides
Oxides
Sulfides
Selenides
Tellurides

The figures include nomographs for equilibrium partial pressures.

Data sources:

1) **Thomas B. Reed, Free Energy of Formation of Binary Compounds, MIT Press, Cambridge, MA, 1971.**
2) **D. R. Stull and H. Prophet, JANAF Thermochemical Tables, NSRDS-NBS 37, U.S. Dept of Commerce, National Bureau of Standards, 1971**

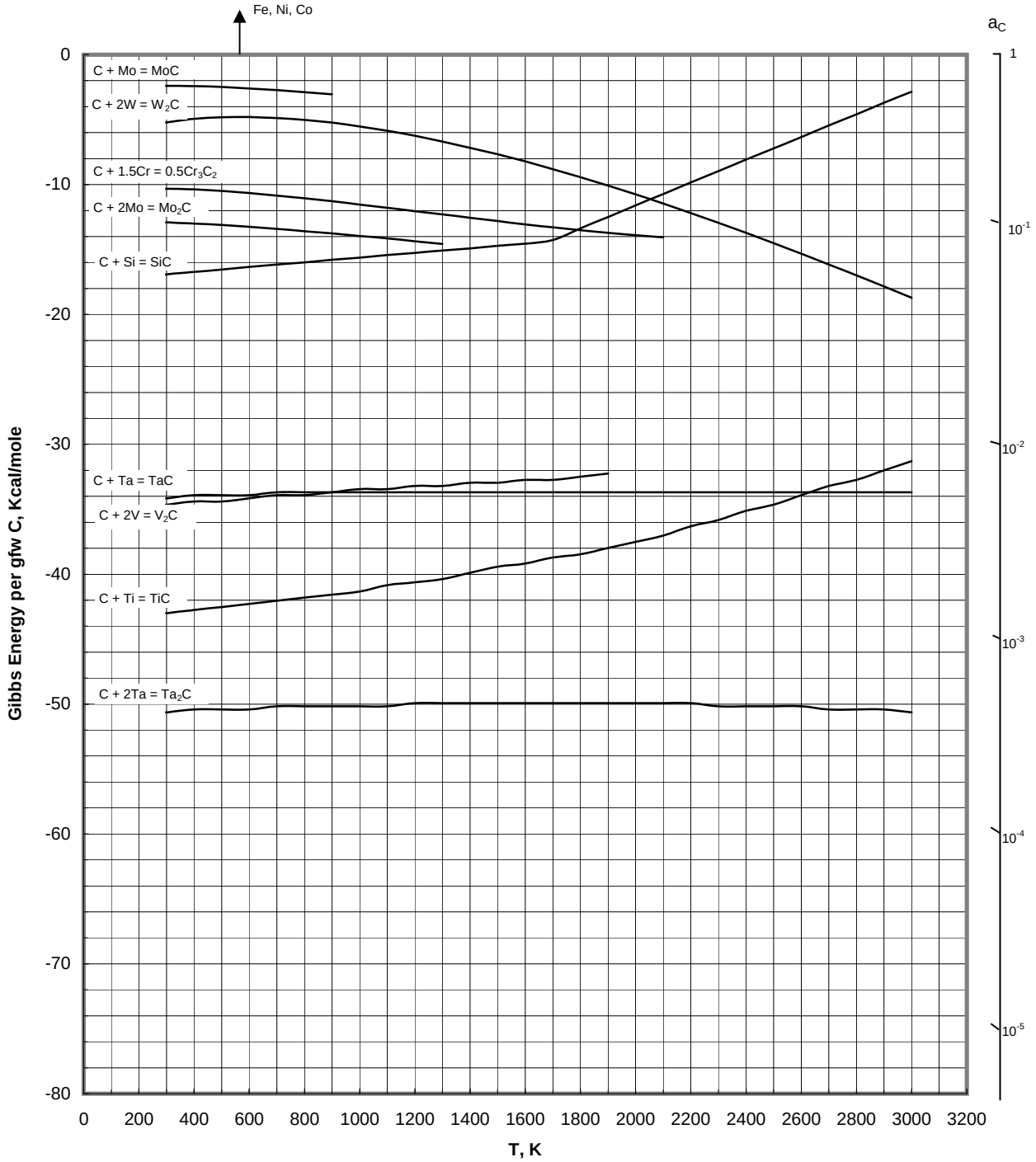
This is an Internet Resource for MET 320 - Metallurgical Thermodynamics.



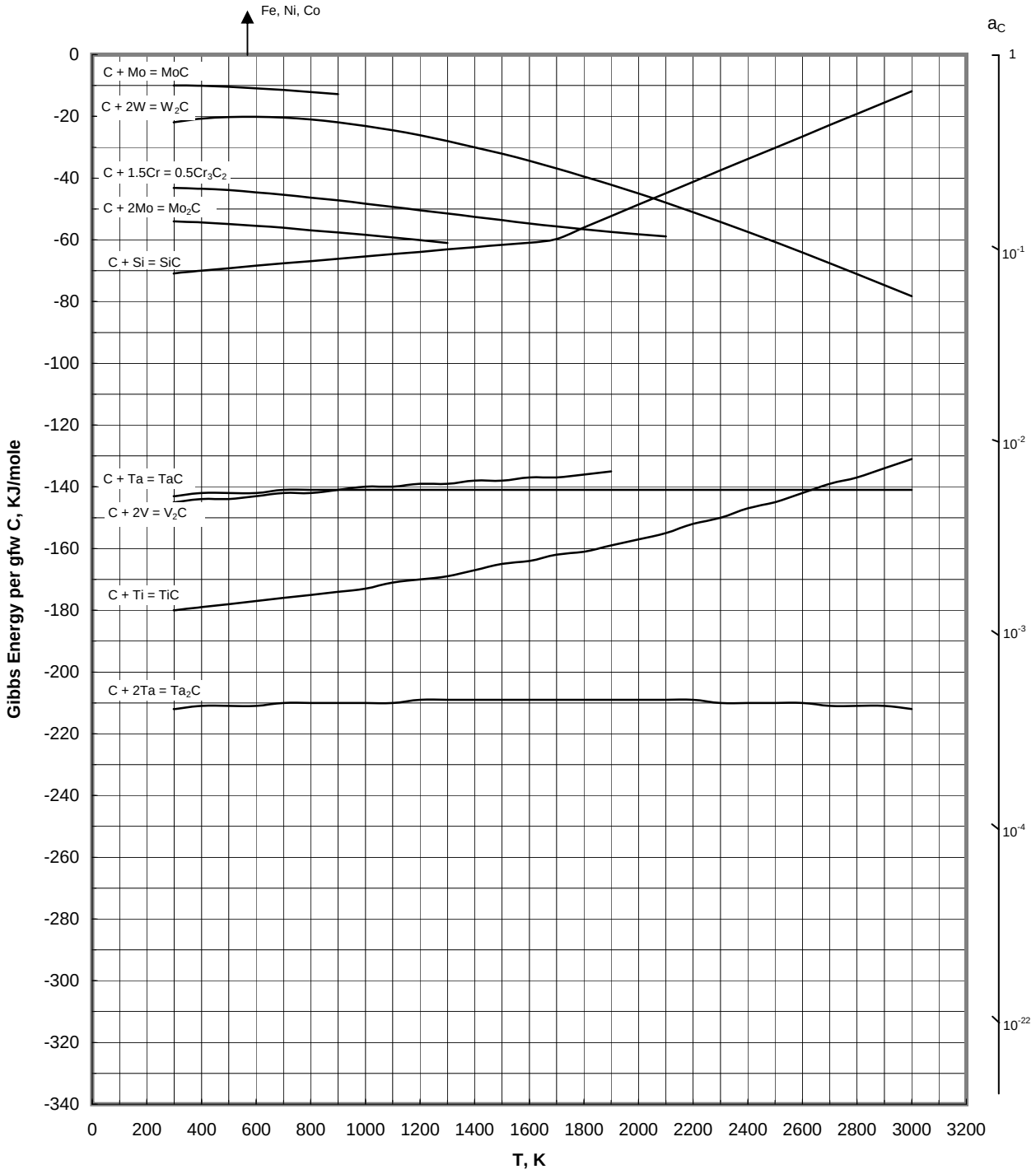
Ellingham Diagram for Selected Bromides: Part-1

Data from Thomas B. Reed, Free Energy of Formation of Binary Compounds, MIT Press, Cambridge, MA, 1971.

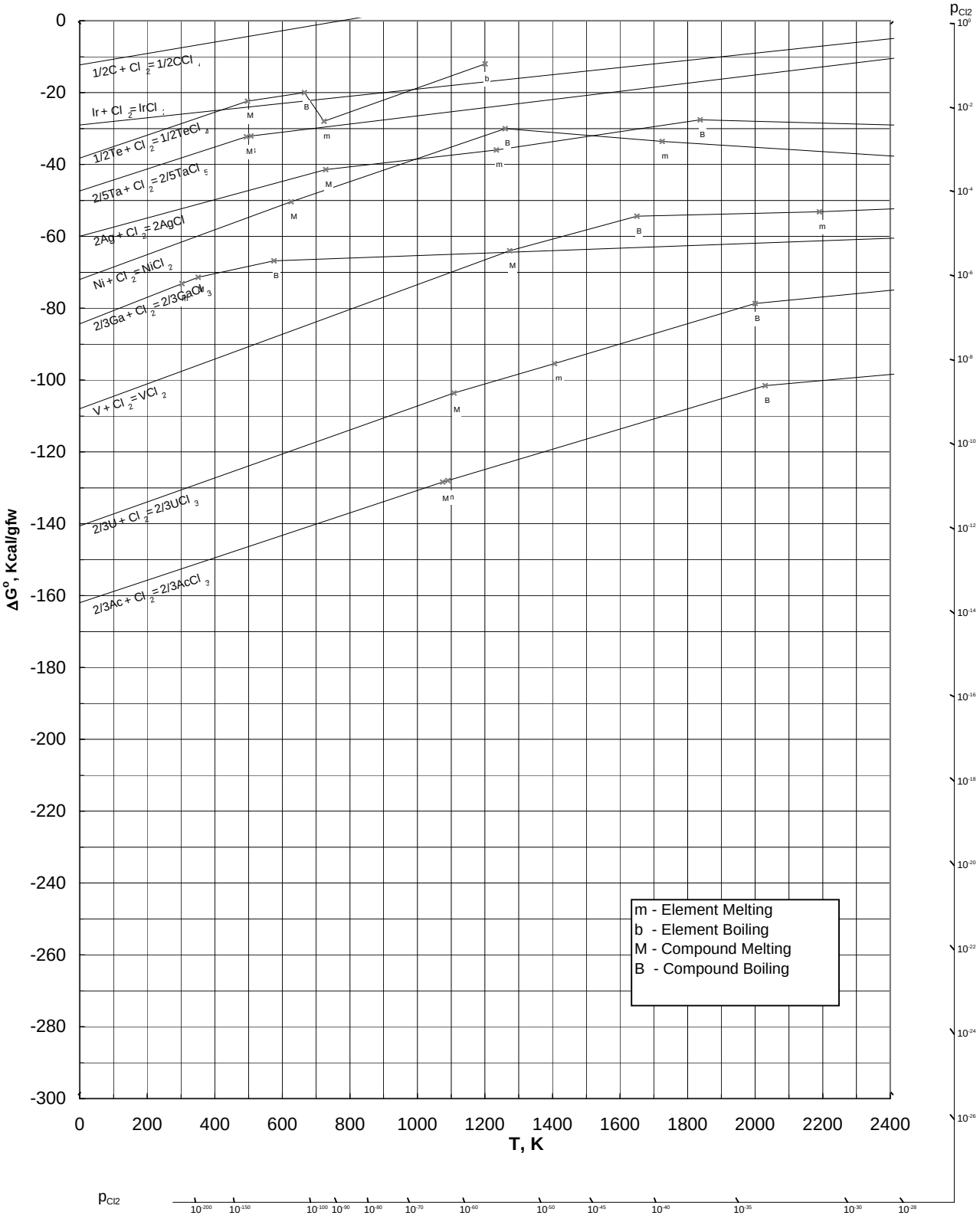
ΔG_f^o of Carbides (per gmole of C)



Gibb Energies of Formation for Selected Carbides per gmole of C

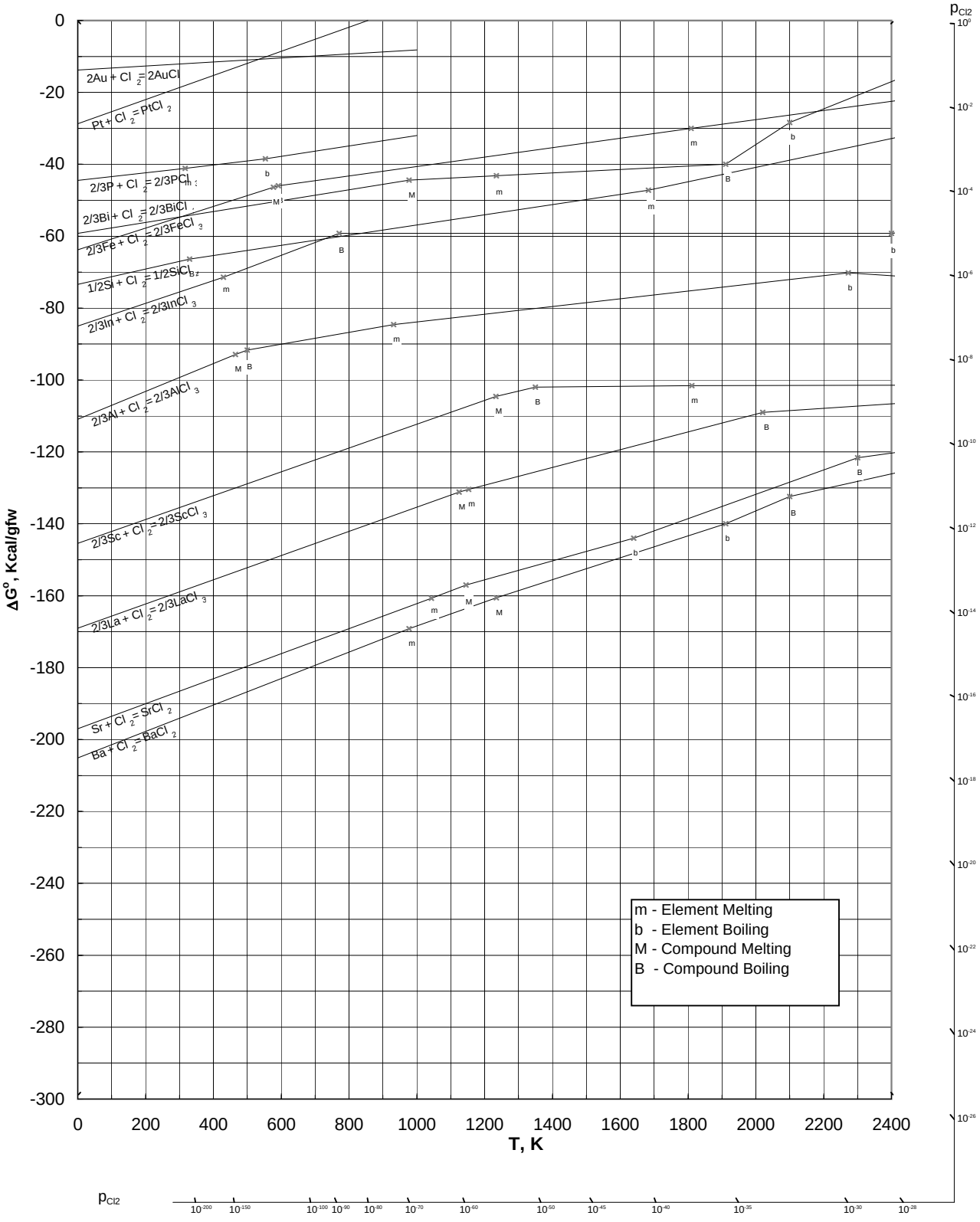


Gibb Energies of Formation for Selected Carbides per gmole of C



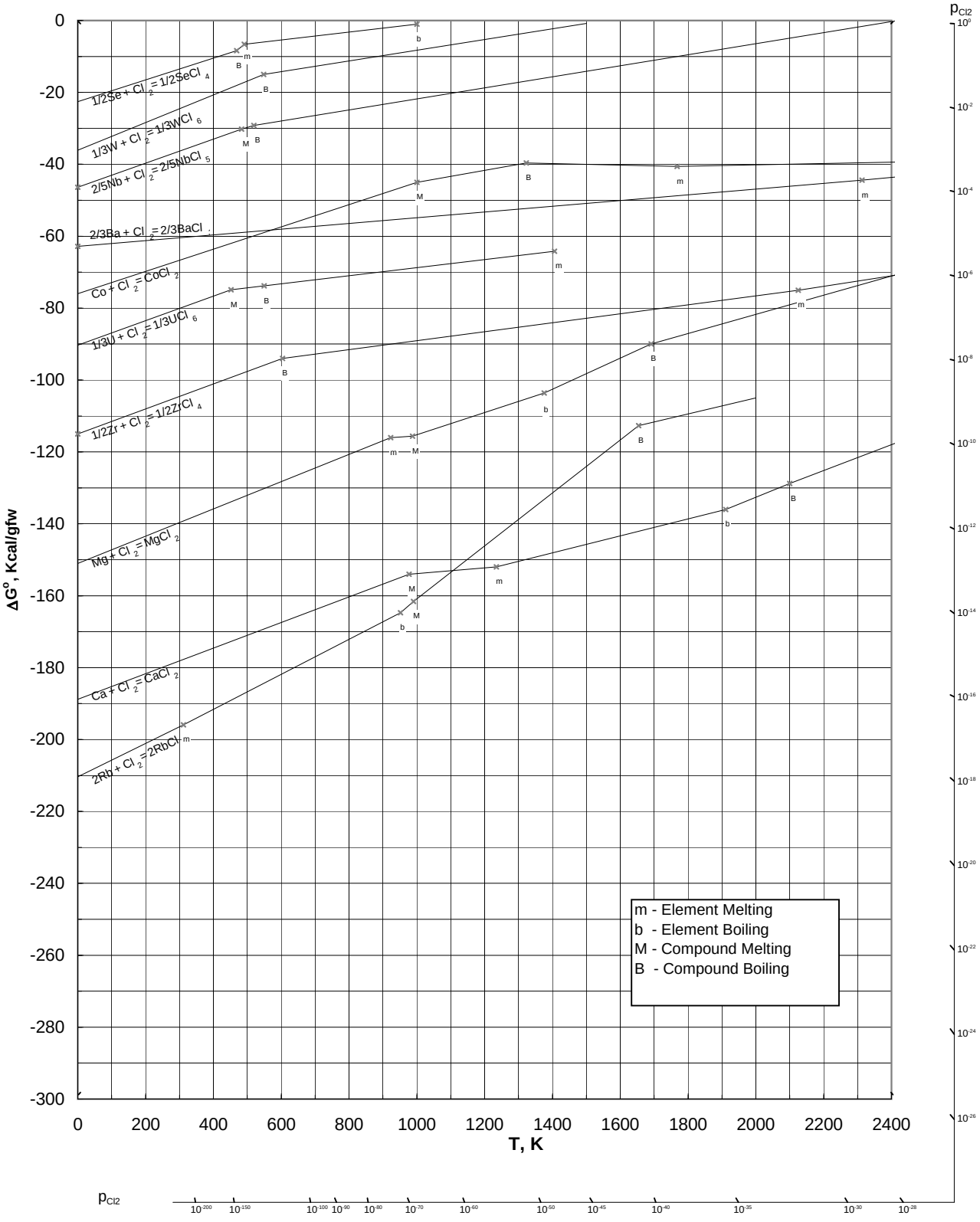
Ellingham Diagram for Selected Chlorides: Part-1

Data from Thomas B. Reed, Free Energy of Formation of Binary Compounds, MIT Press, Cambridge, MA, 1971.



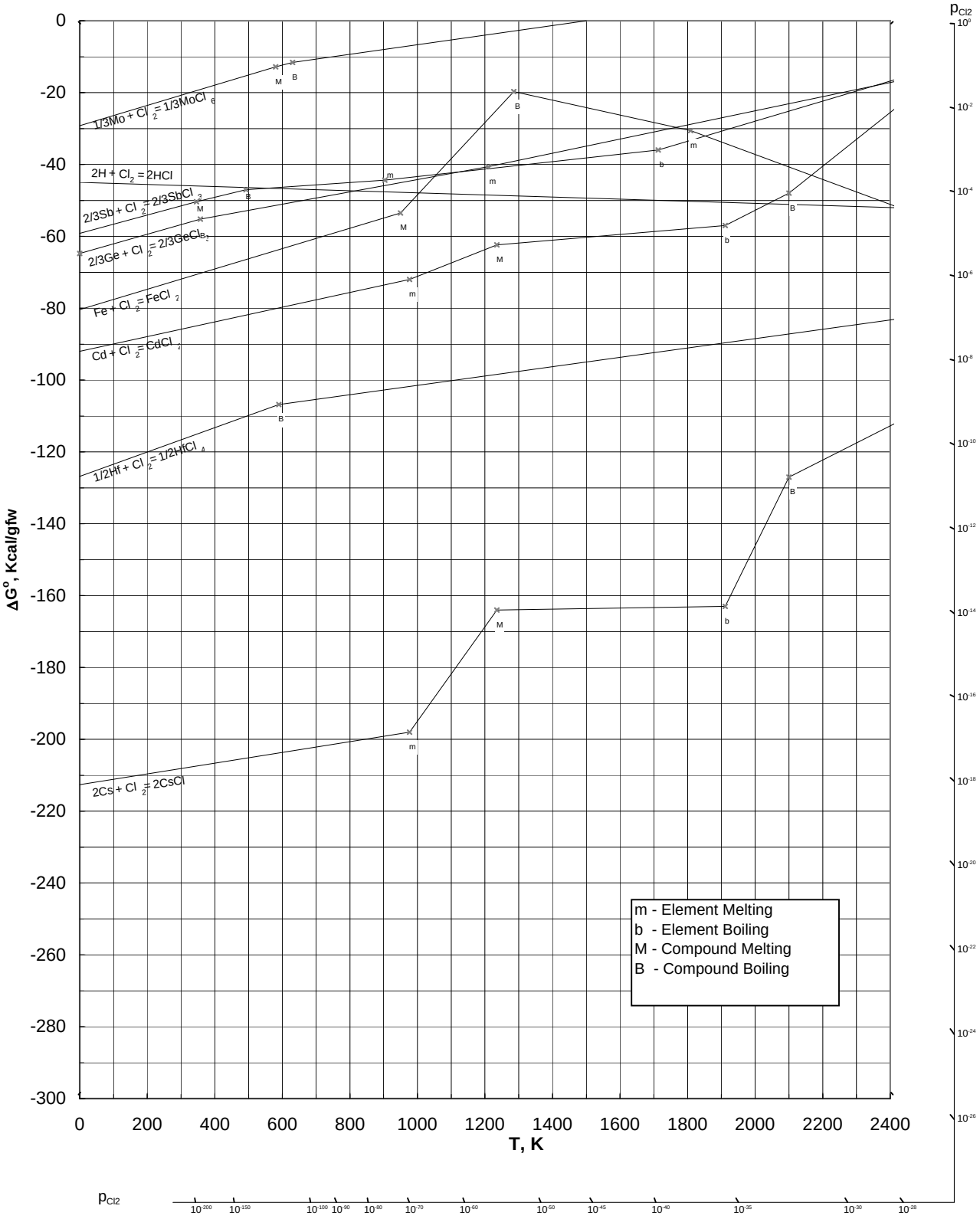
Ellingham Diagram for Selected Chlorides: Part-2

Data from Thomas B. Reed, Free Energy of Formation of Binary Compounds, MIT Press, Cambridge, MA, 1971.



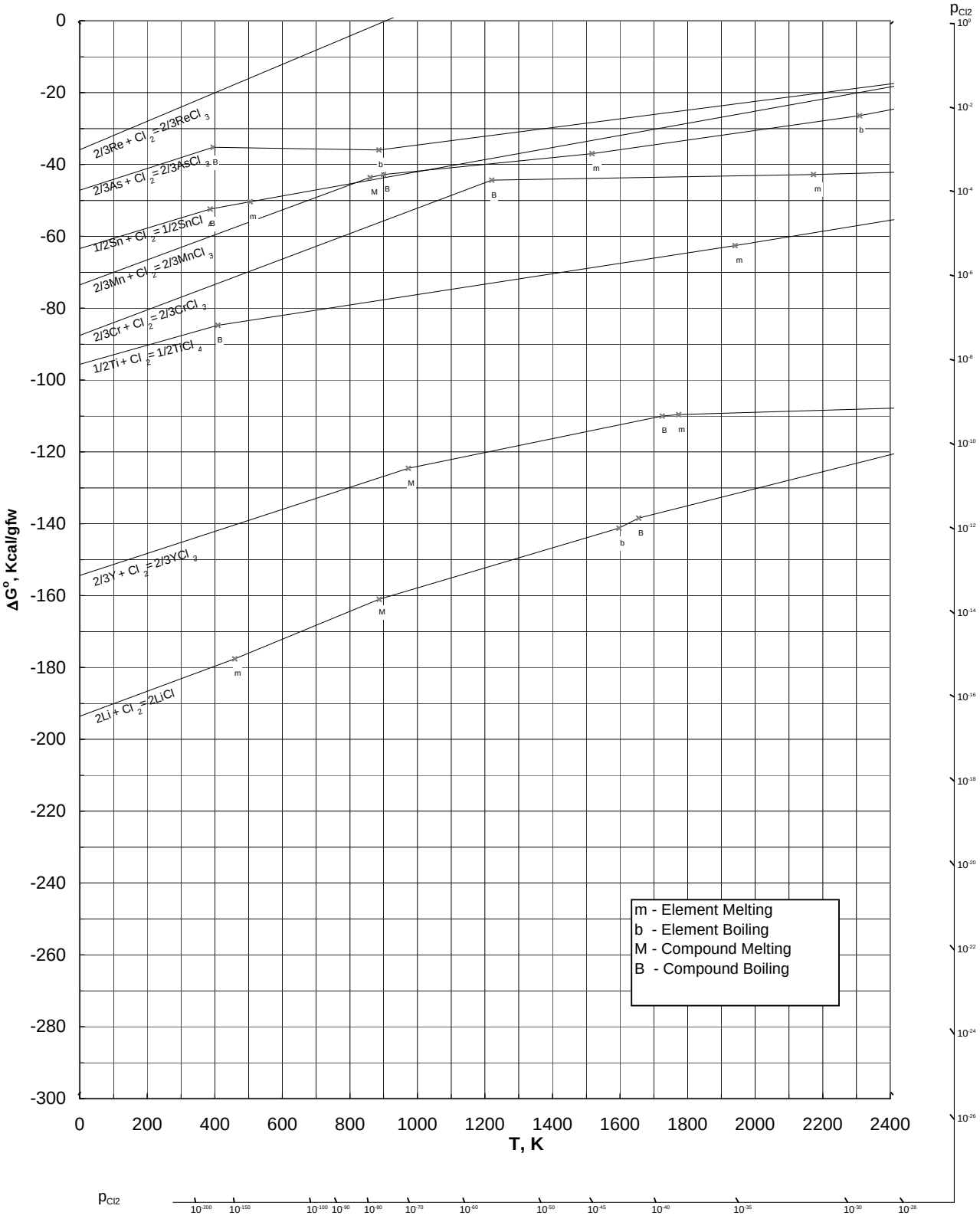
Ellingham Diagram for Selected Chlorides: Part-3

Data from Thomas B. Reed, Free Energy of Formation of Binary Compounds, MIT Press, Cambridge, MA, 1971.



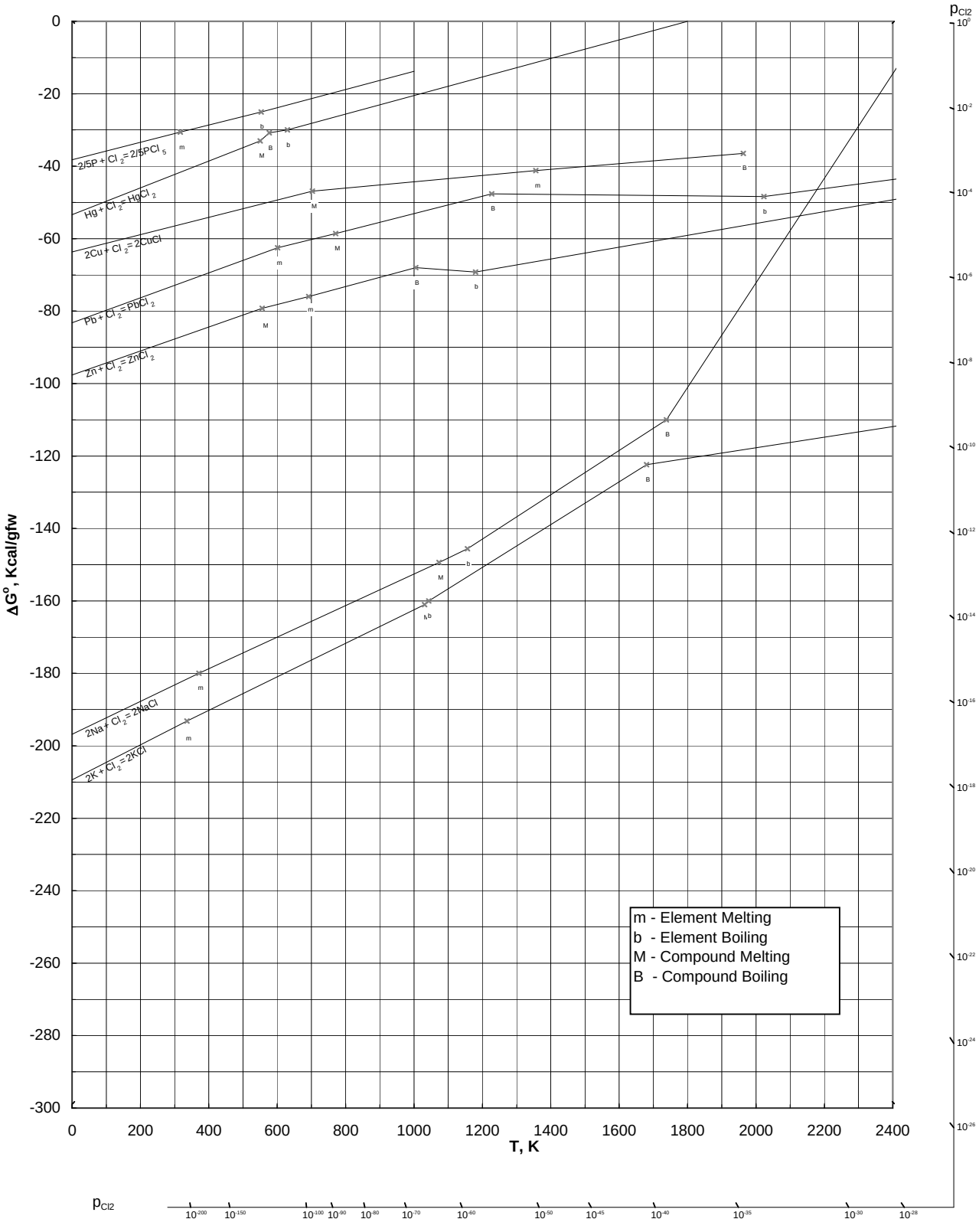
Ellingham Diagram for Selected Chlorides: Part-4

Data from Thomas B. Reed, Free Energy of Formation of Binary Compounds, MIT Press, Cambridge, MA, 1971.



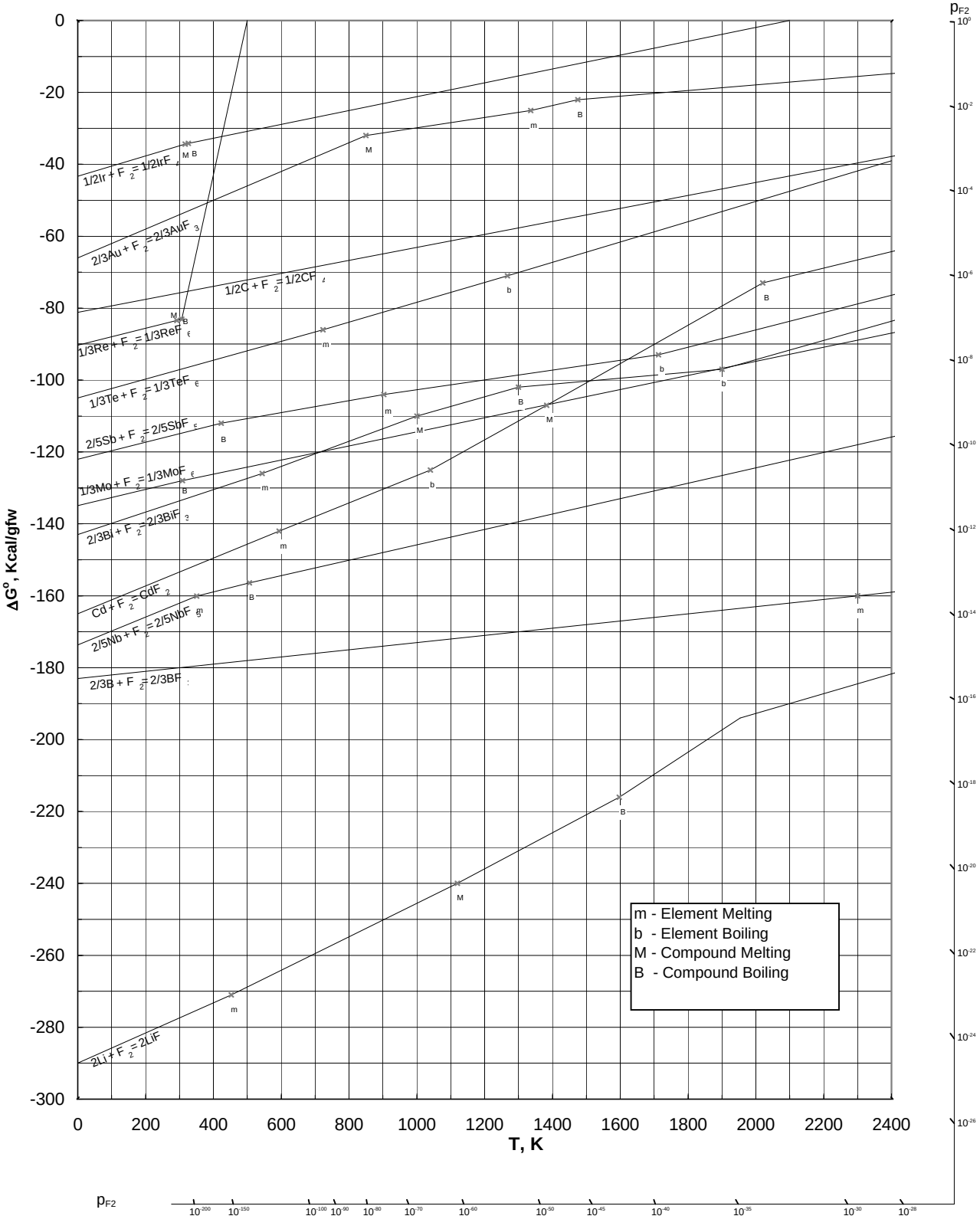
Ellingham Diagram for Selected Chlorides: Part-5

Data from Thomas B. Reed, Free Energy of Formation of Binary Compounds, MIT Press, Cambridge, MA, 1971.



Ellingham Diagram for Selected Chlorides: Part-6

Data from Thomas B. Reed, Free Energy of Formation of Binary Compounds, MIT Press, Cambridge, MA, 1971.



Ellingham Diagram for Selected Fluorides: Part-1

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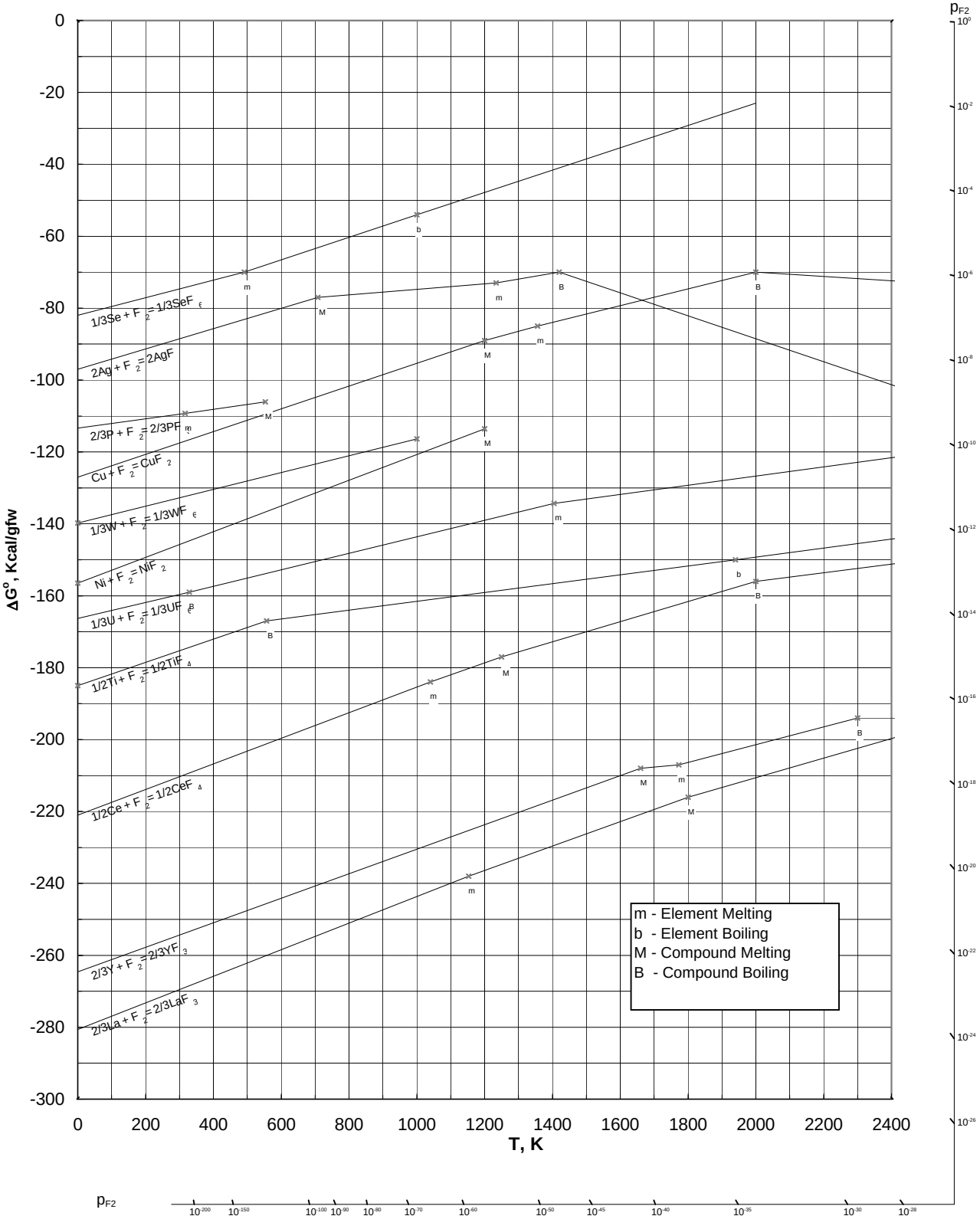
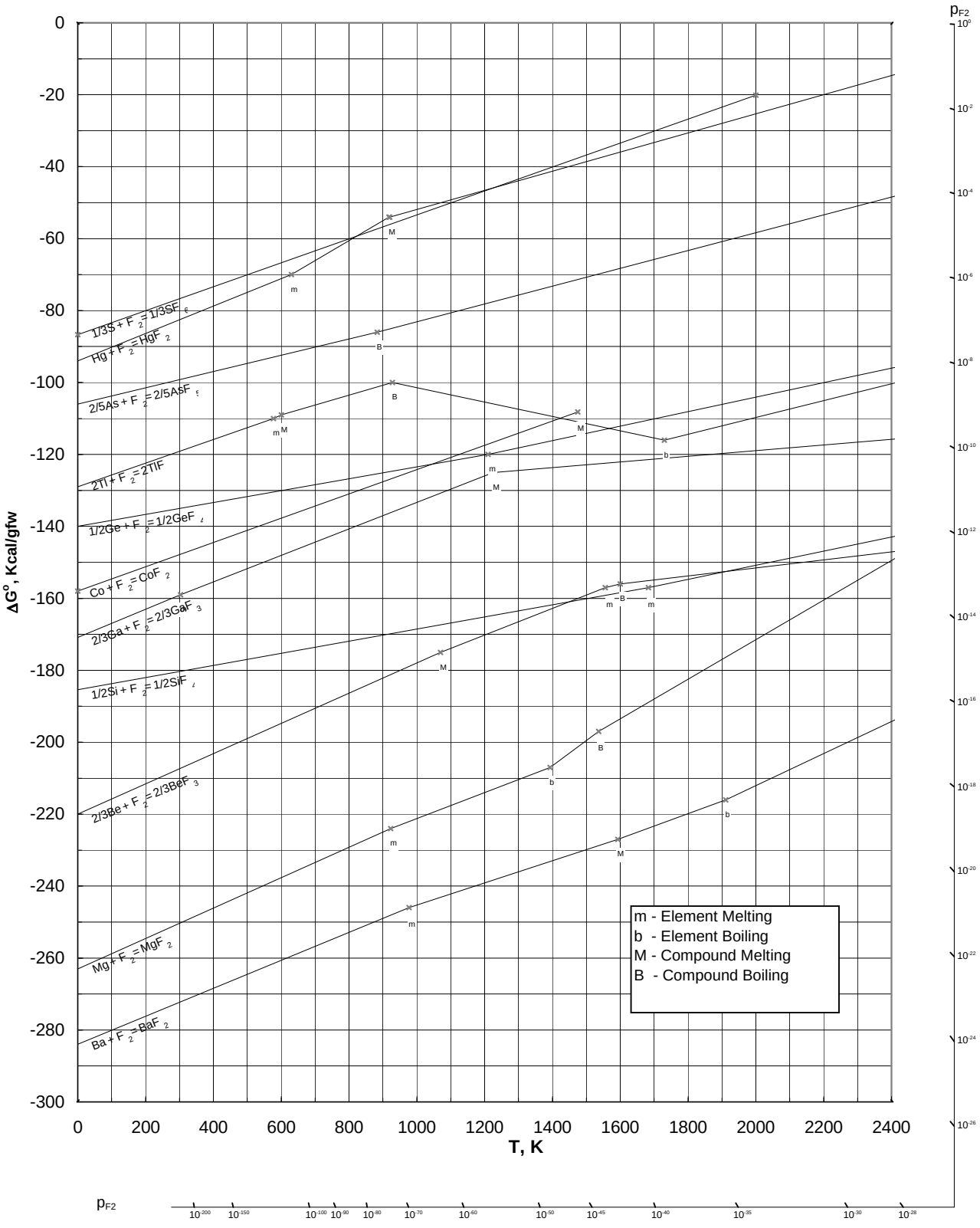


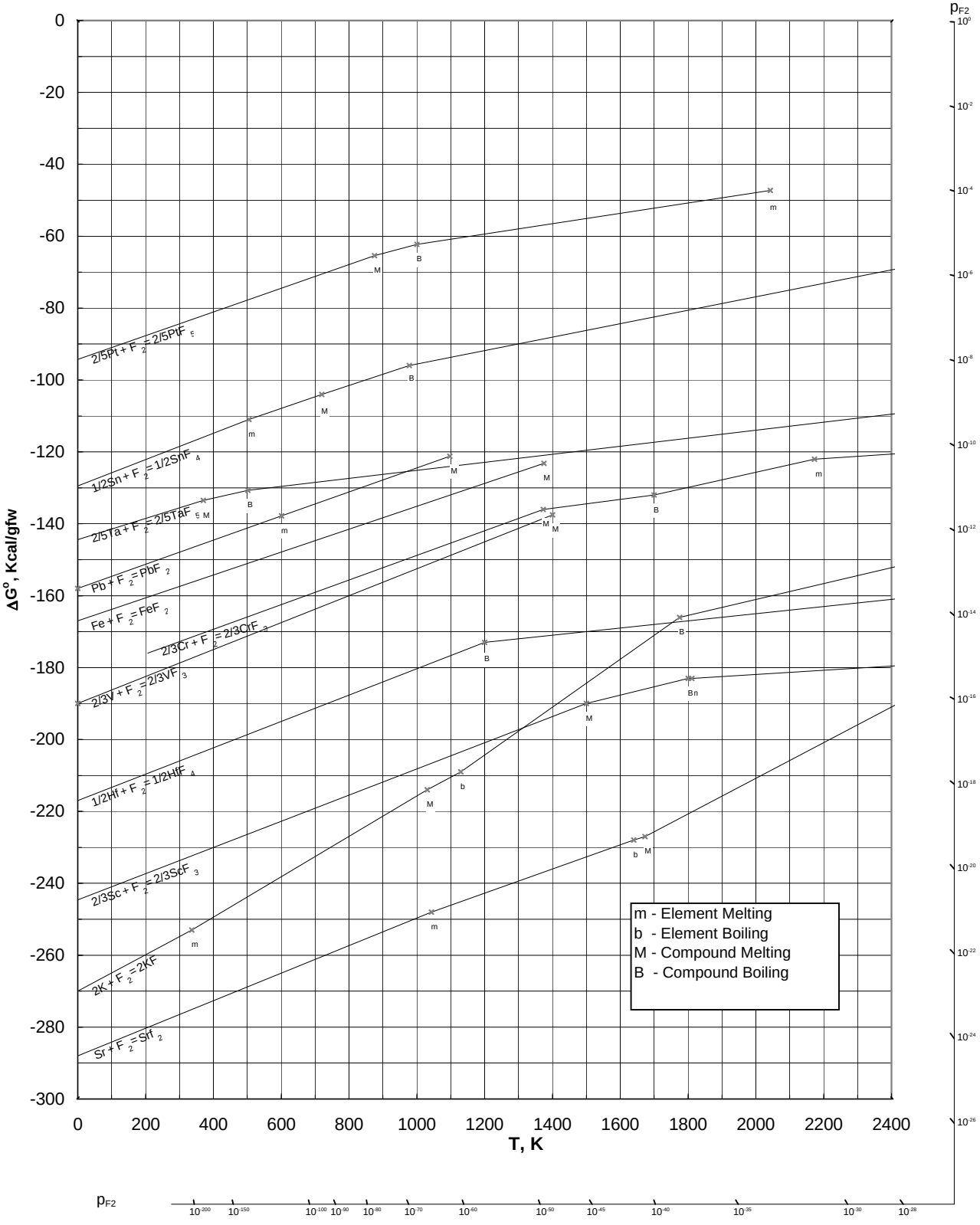
Ellingham Diagram for Selected Fluorides: Part-2

Data from Thomas B. Reed, Free Energy of Formation of Binary Compounds, MIT Press, Cambridge, MA, 1971.



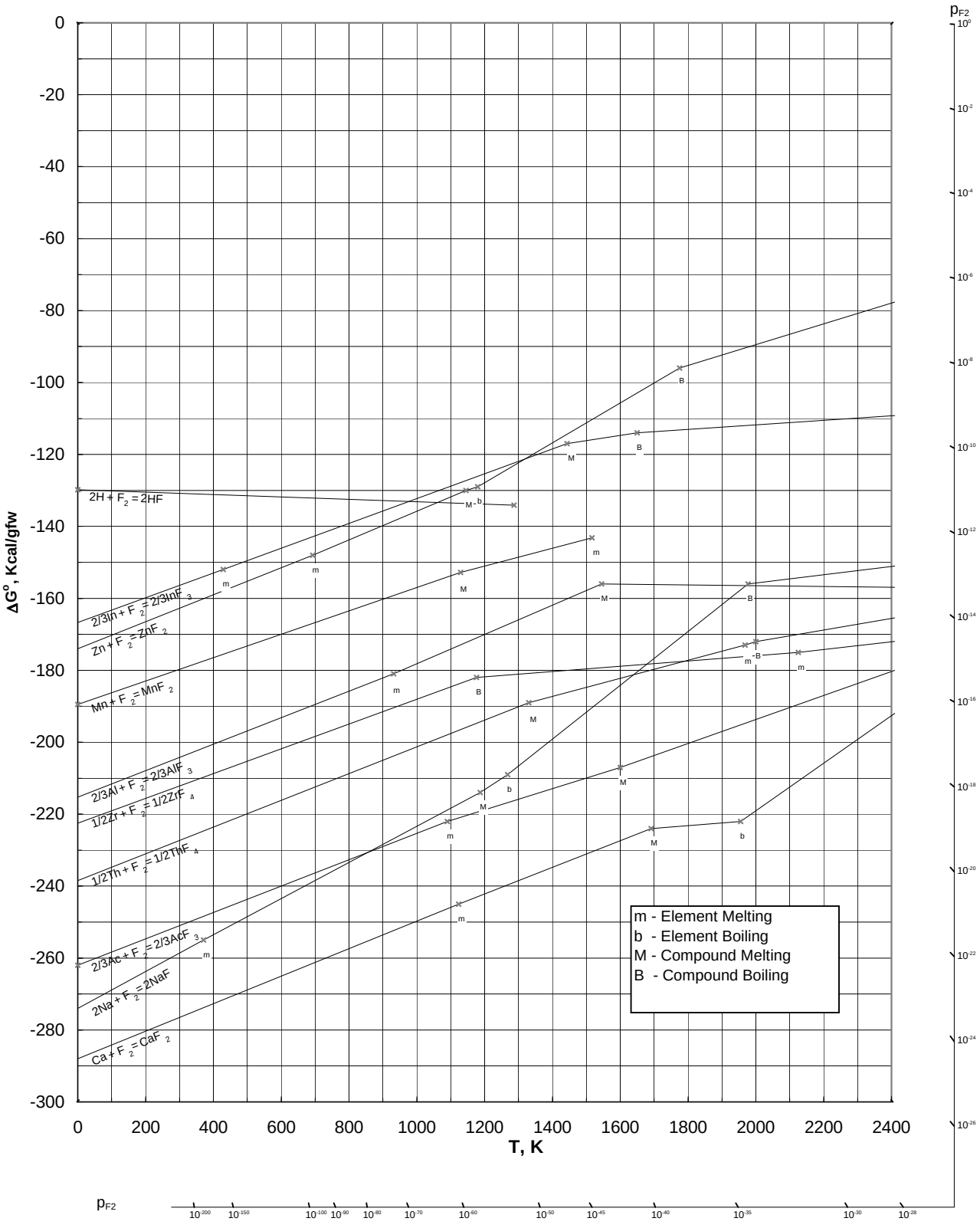
Ellingham Diagram for Selected Fluorides: Part-3

Data from Thomas B. Reed, Free Energy of Formation of Binary Compounds, MIT Press, Cambridge, MA, 1971.



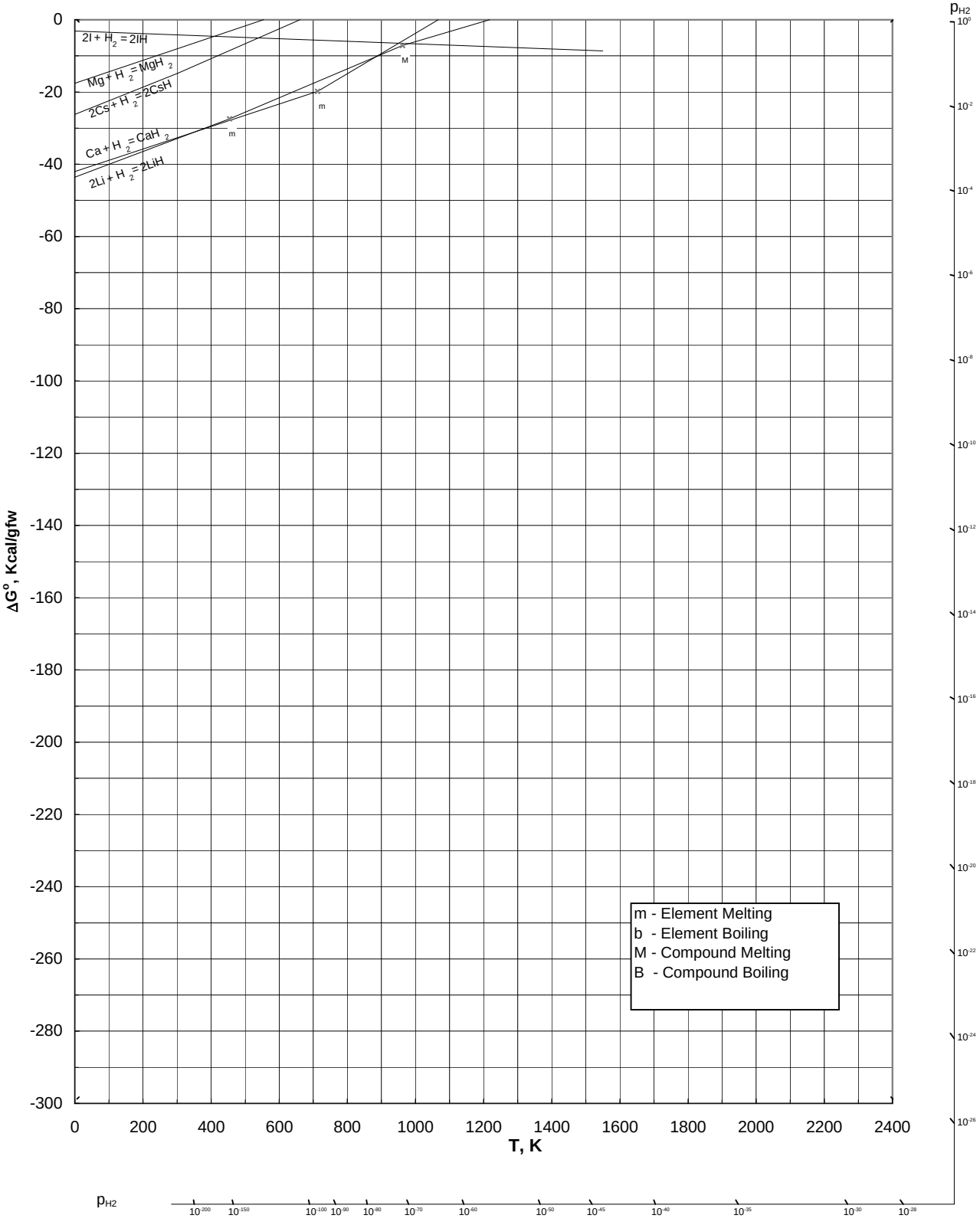
Ellingham Diagram for Selected Fluorides: Part-4

Data from Thomas B. Reed, Free Energy of Formation of Binary Compounds, MIT Press, Cambridge, MA, 1971.



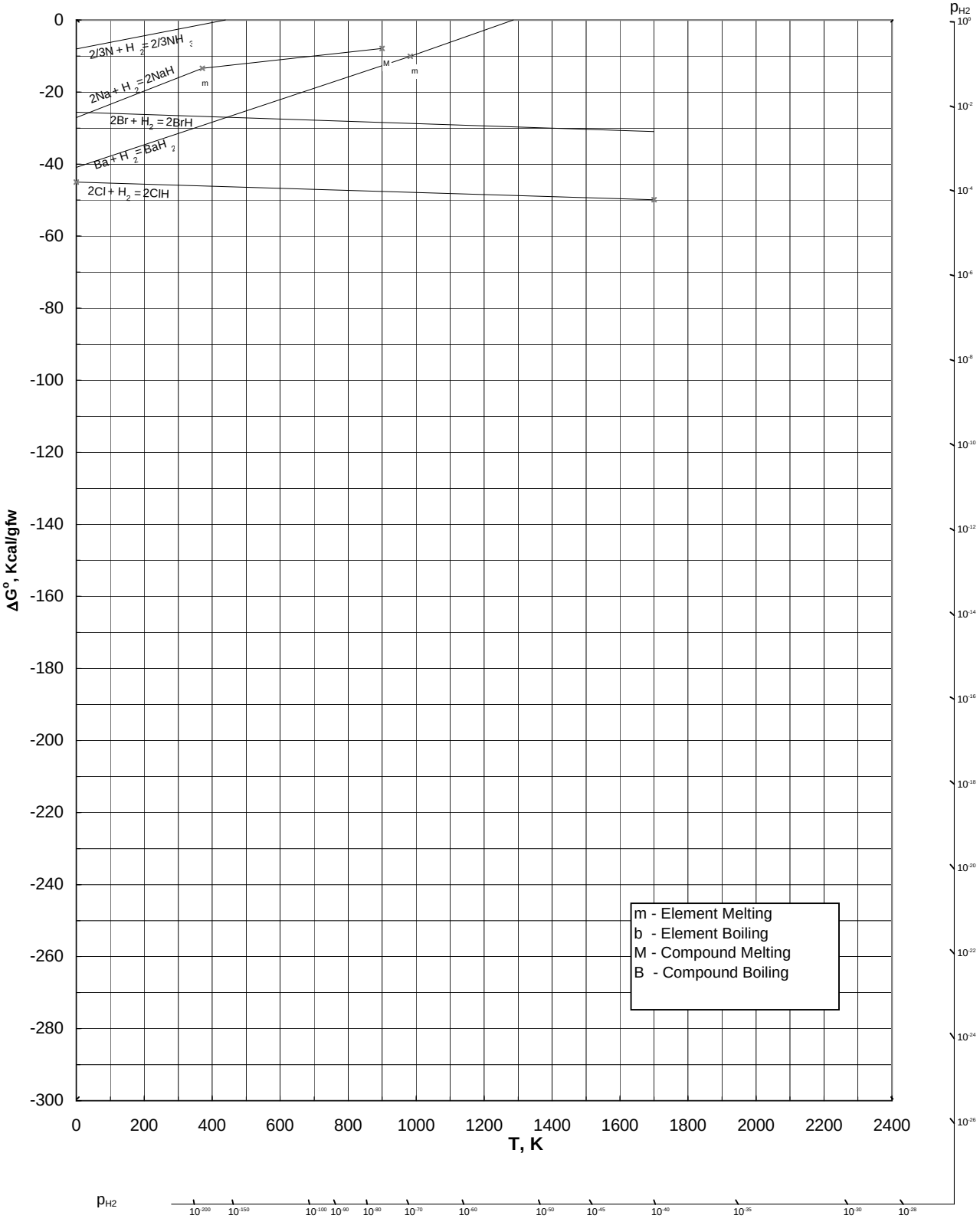
Ellingham Diagram for Selected Fluorides: Part-5

Data from Thomas B. Reed, Free Energy of Formation of Binary Compounds, MIT Press, Cambridge, MA, 1971.



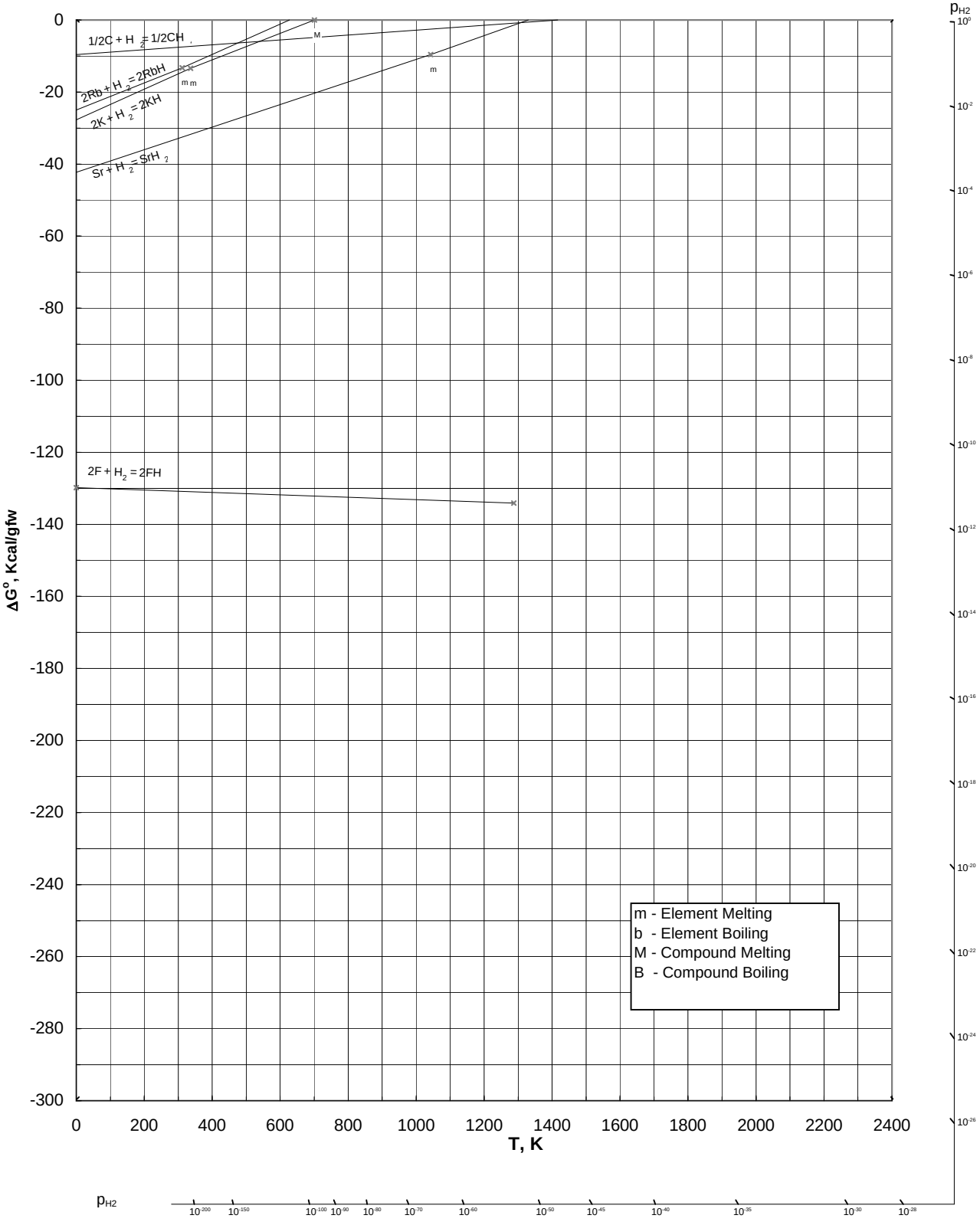
Ellingham Diagram for Selected Hydrides: Part-1

Data from Thomas B. Reed, Free Energy of Formation of Binary Compounds, MIT Press, Cambridge, MA, 1971.



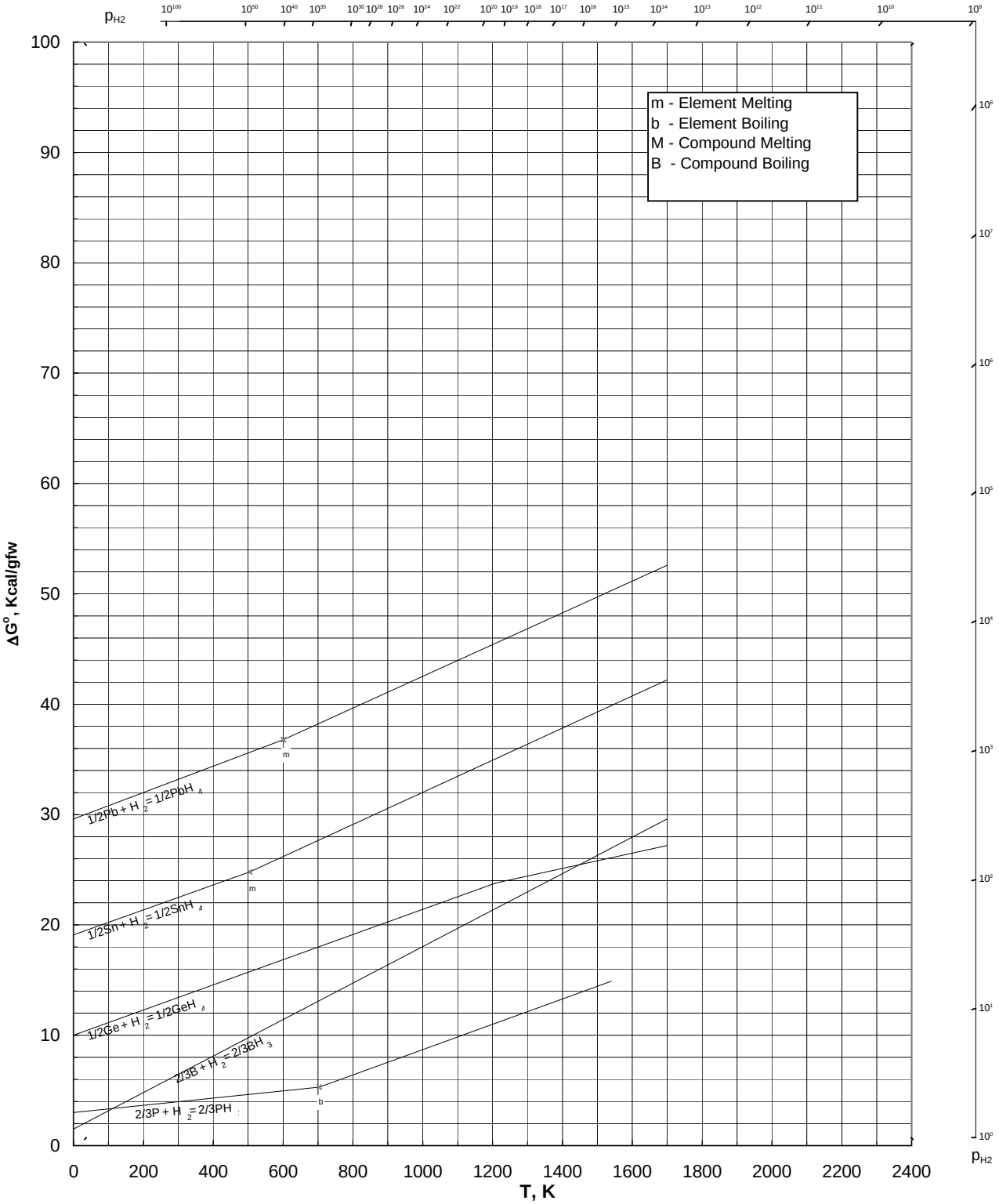
Ellingham Diagram for Selected Hydrides: Part-2

Data from Thomas B. Reed, Free Energy of Formation of Binary Compounds, MIT Press, Cambridge, MA, 1971.



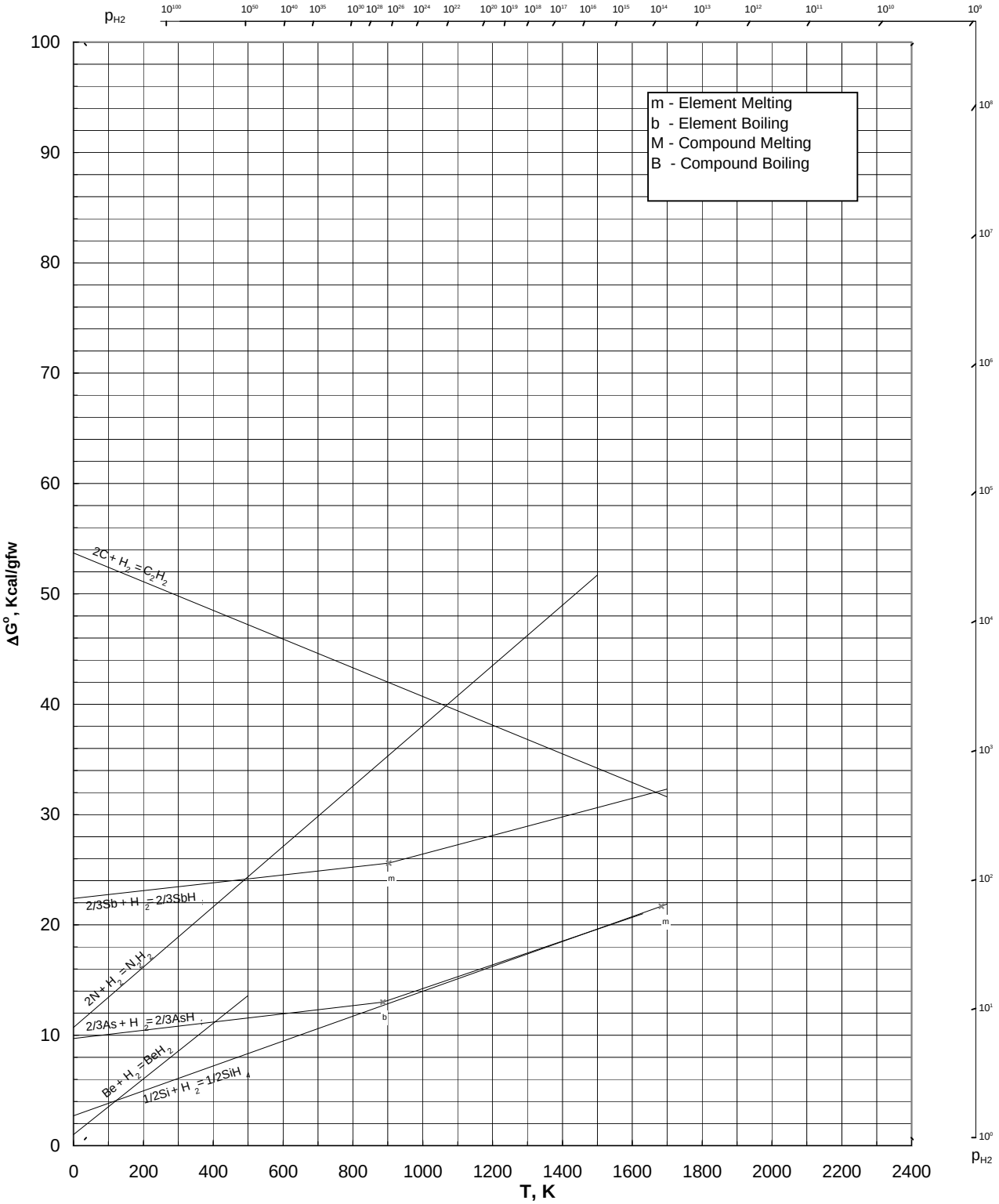
Ellingham Diagram for Selected Hydrides: Part-3

Data from Thomas B. Reed, Free Energy of Formation of Binary Compounds, MIT Press, Cambridge, MA, 1971.



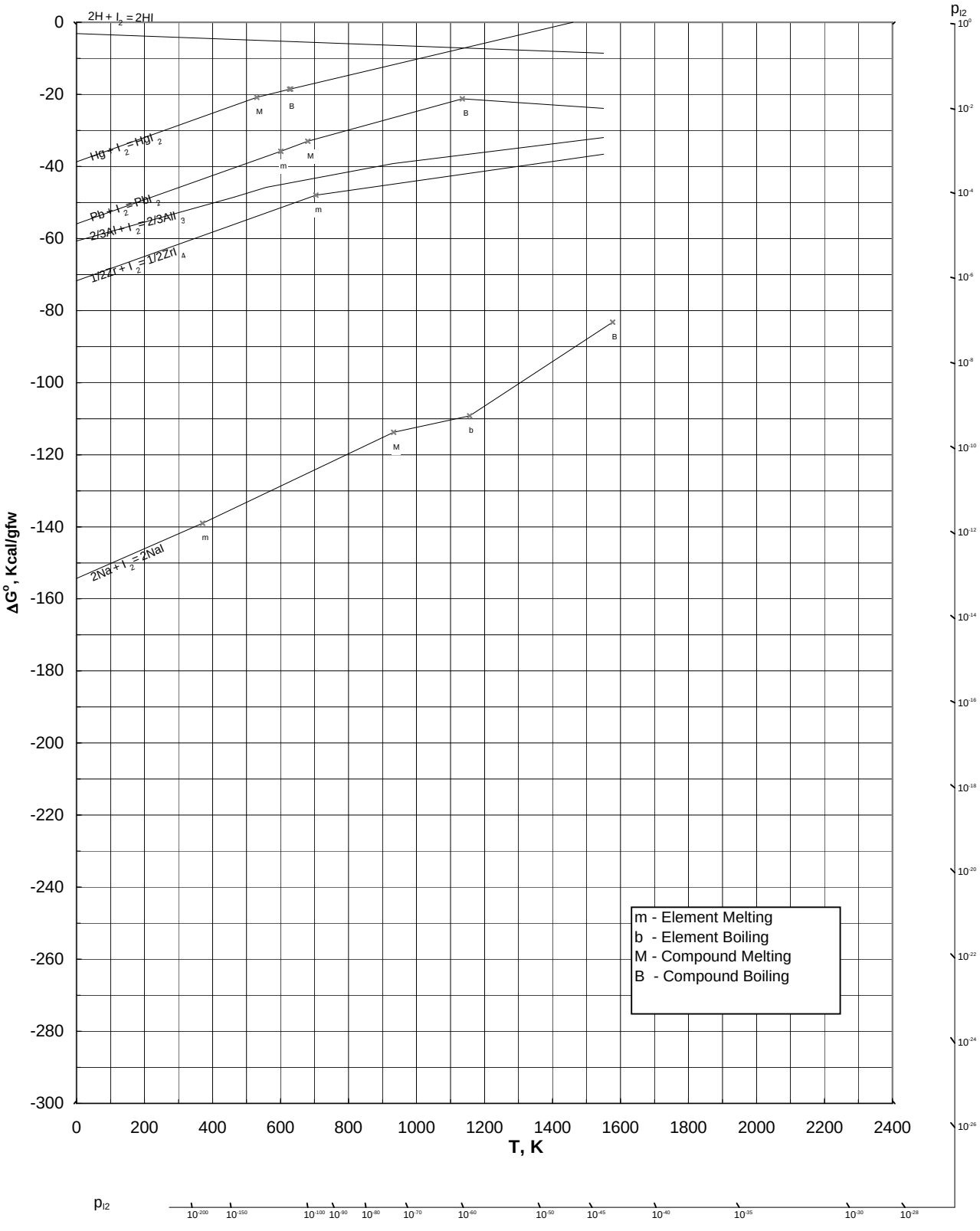
Ellingham Diagram for Selected Hydrides: Part-4

Data from Thomas B. Reed, Free Energy of Formation of Binary Compounds, MIT Press, Cambridge, MA, 1971.



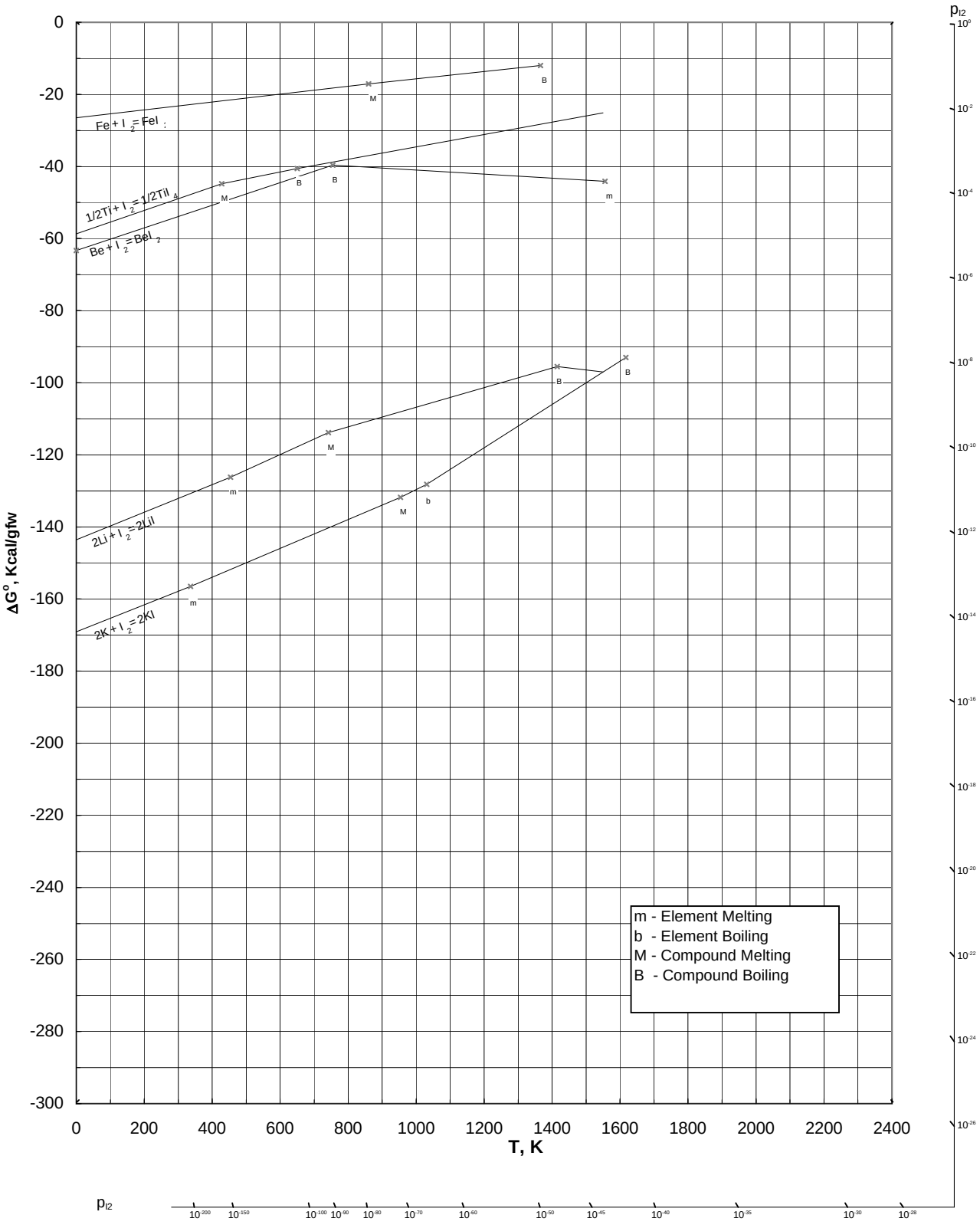
Ellingham Diagram for Selected Hydrides: Part-5

Data from Thomas B. Reed, Free Energy of Formation of Binary Compounds, MIT Press, Cambridge, MA, 1971.



Ellingham Diagram for Selected Iodides: Part-1

Data from Thomas B. Reed, Free Energy of Formation of Binary Compounds, MIT Press, Cambridge, MA, 1971.



Ellingham Diagram for Selected Iodides: Part-2

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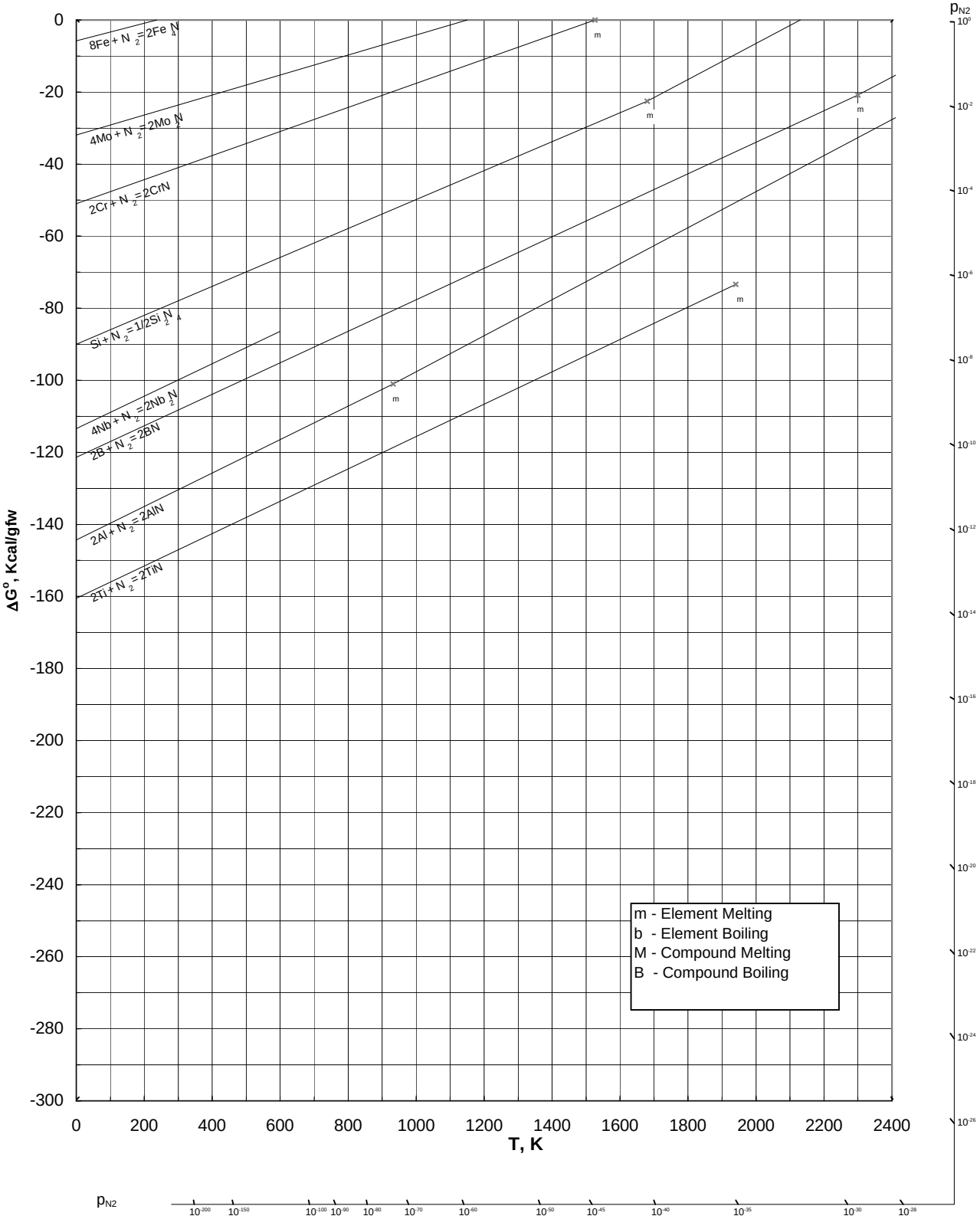
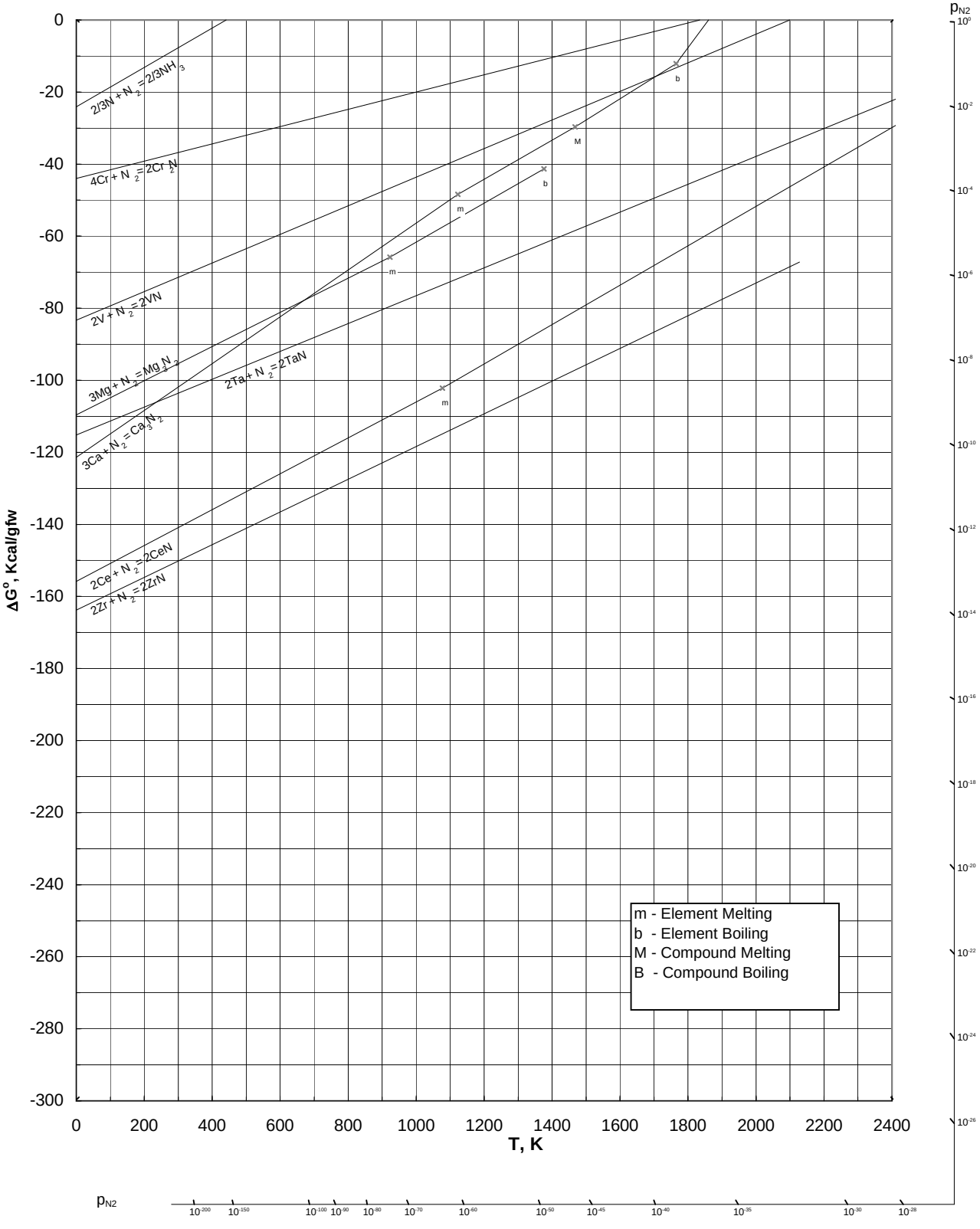


Ellingham Diagram for Selected Nitrides: Part-1

Data from Thomas B. Reed, Free Energy of Formation of Binary Compounds, MIT Press, Cambridge, MA, 1971.



Ellingham Diagram for Selected Nitrides: Part-2

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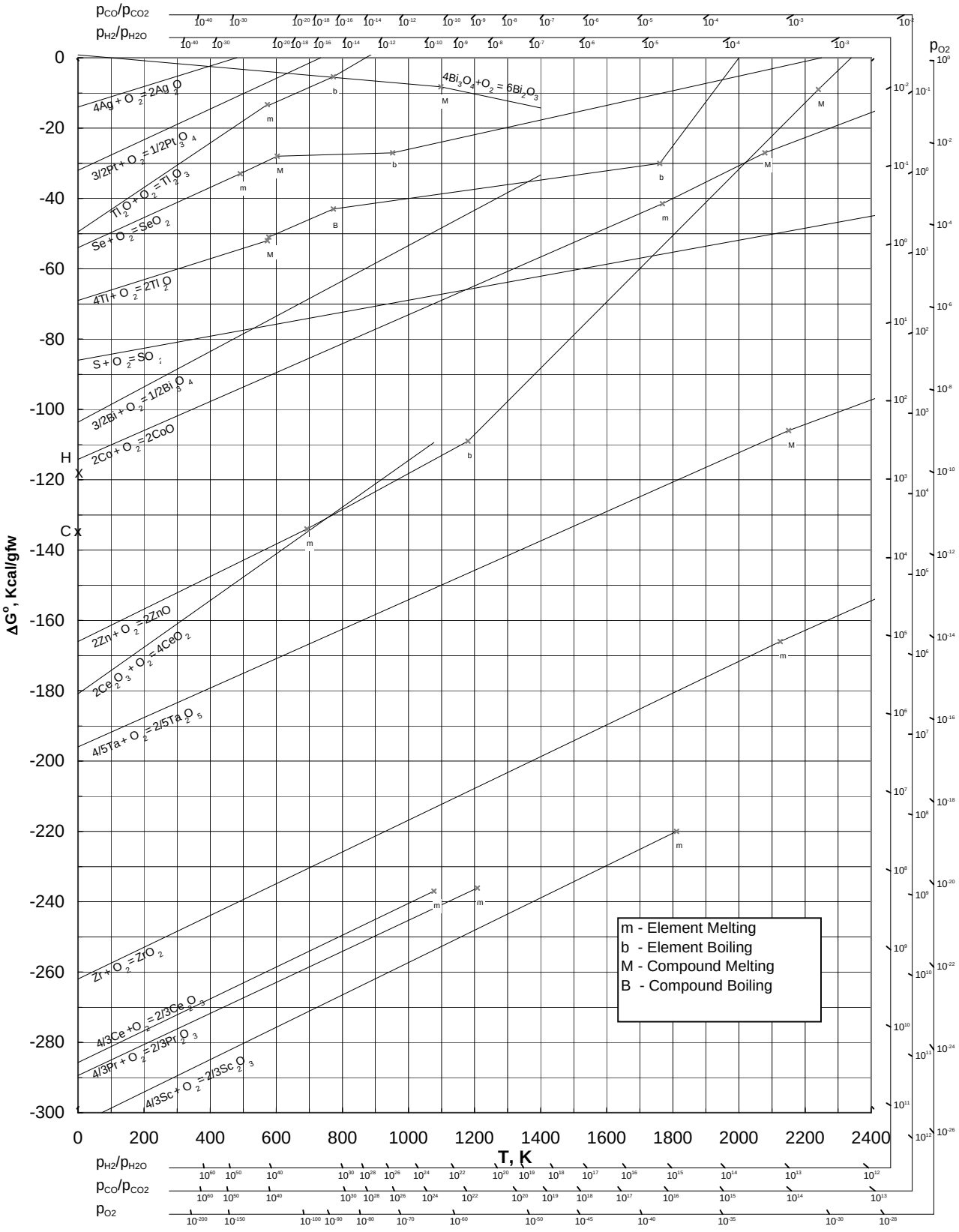

Ellingham Diagram for Selected Oxides: Part-1

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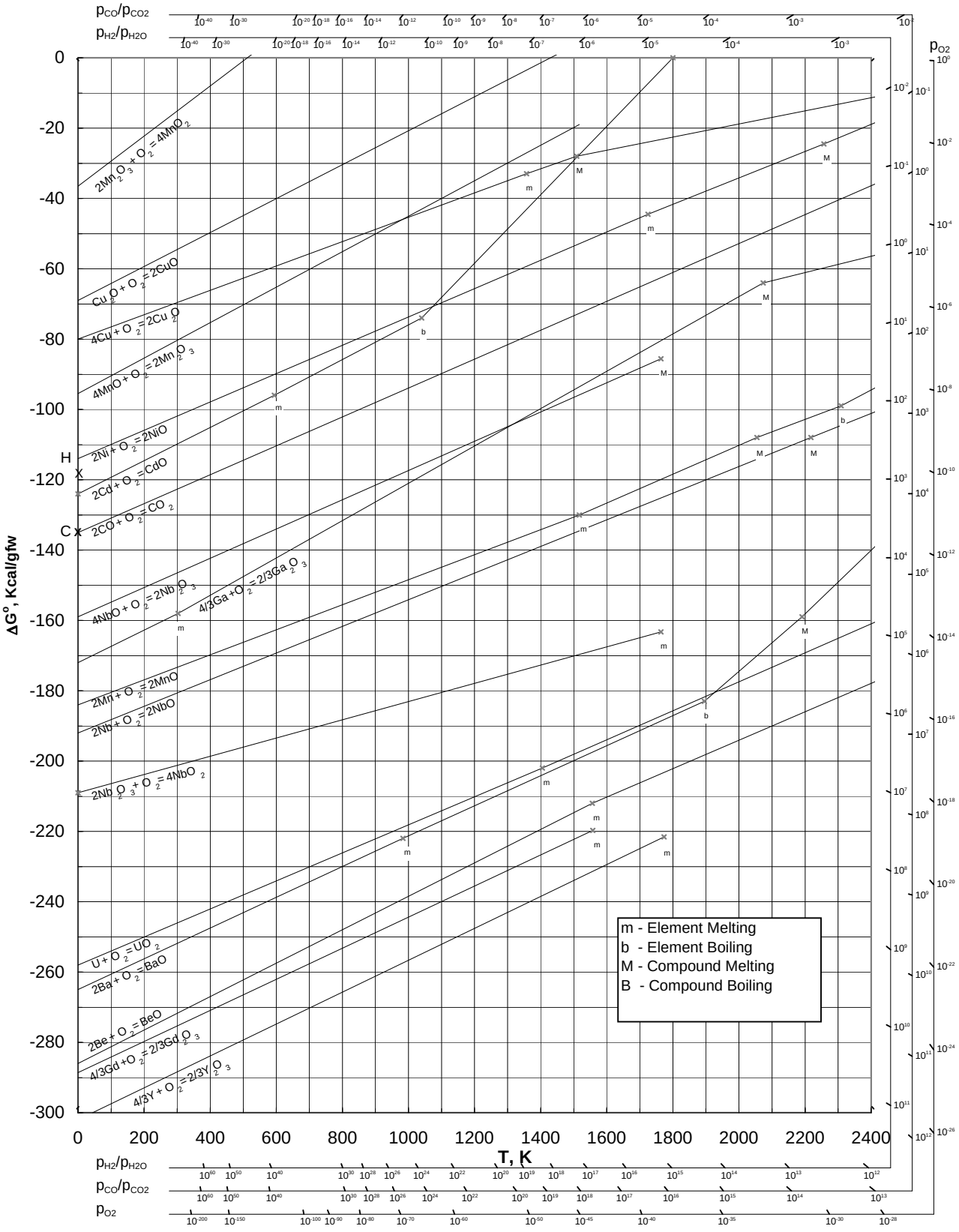

Ellingham Diagram for Selected Oxides: Part-2

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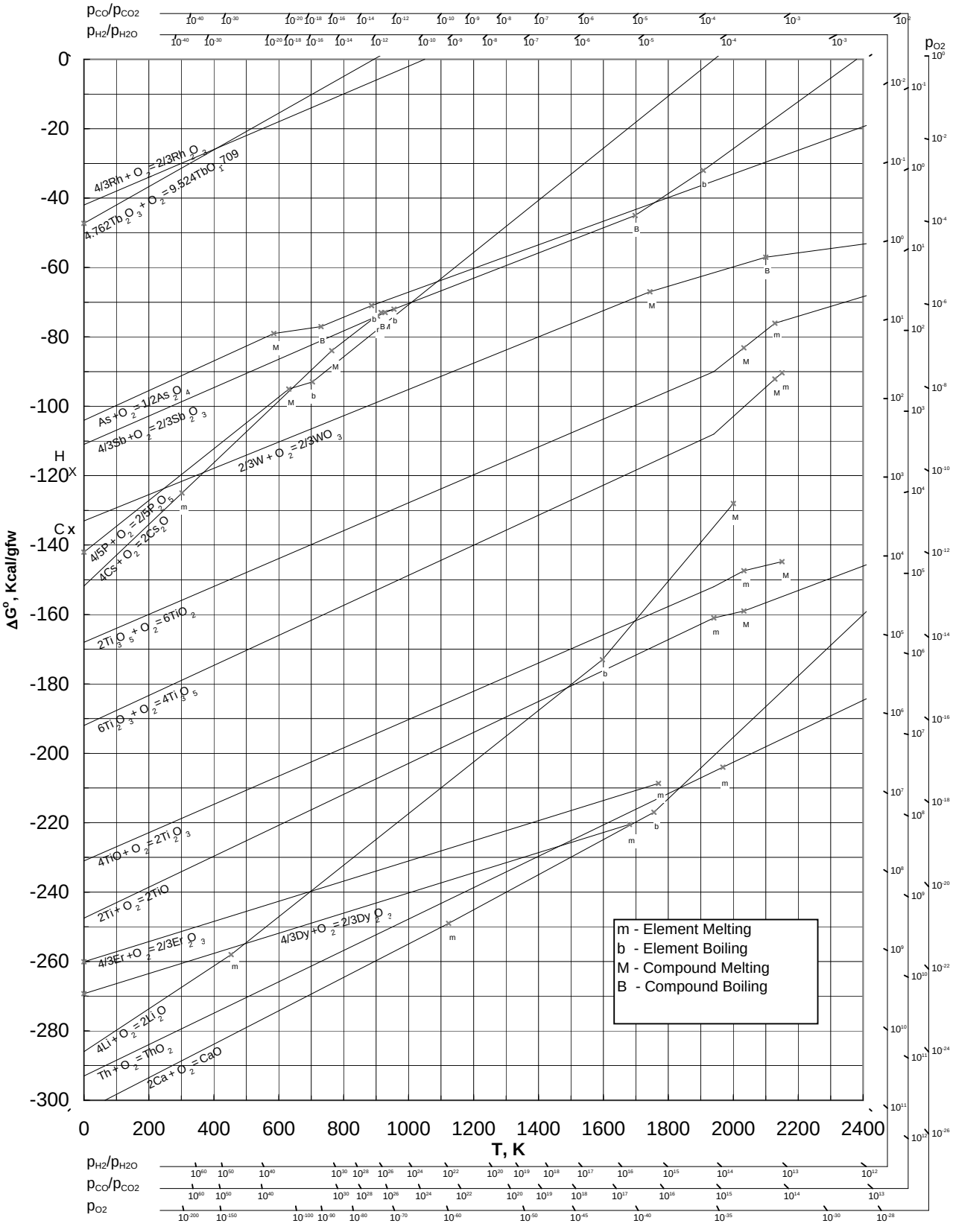

Ellingham Diagram for Selected Oxides: Part-3

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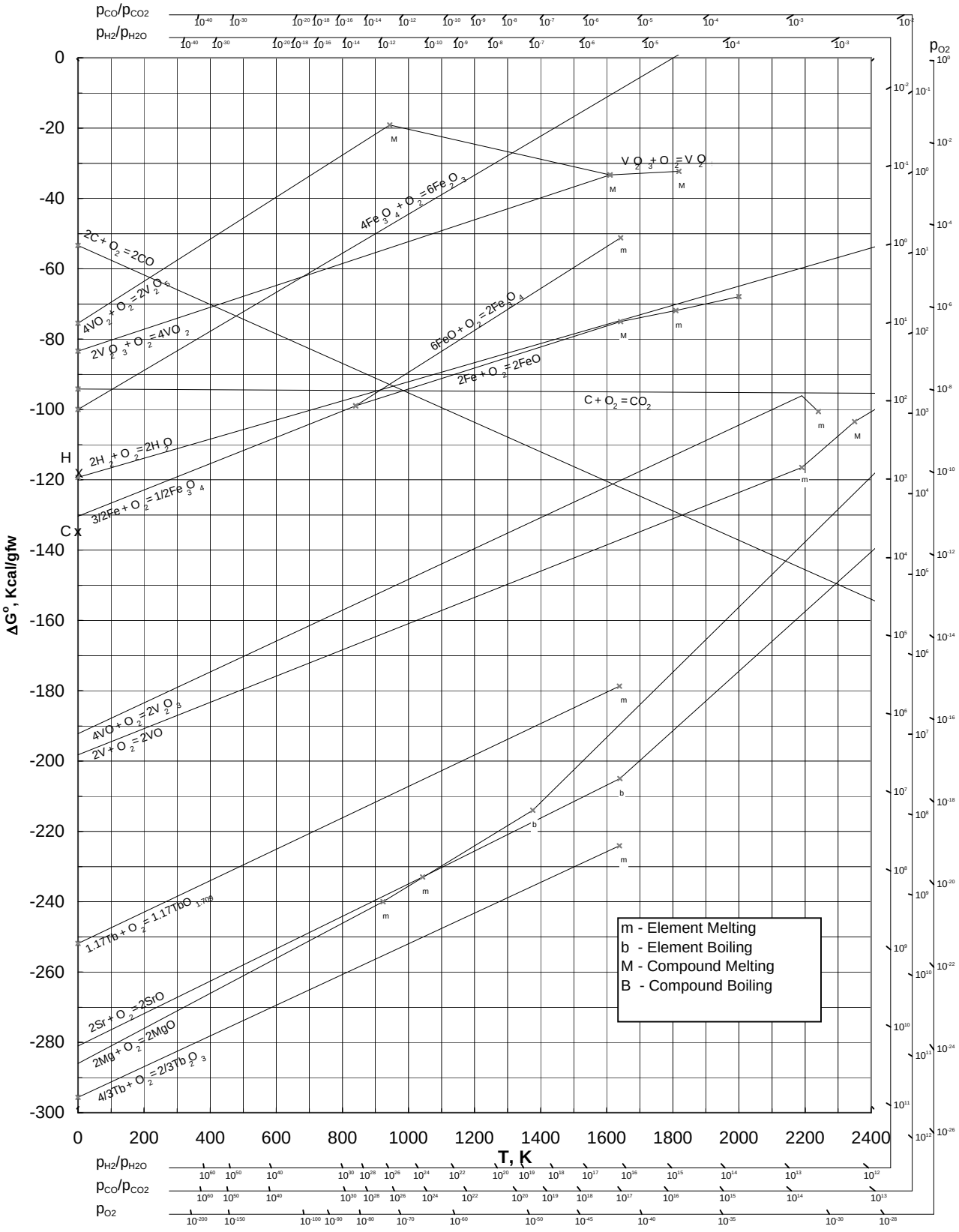
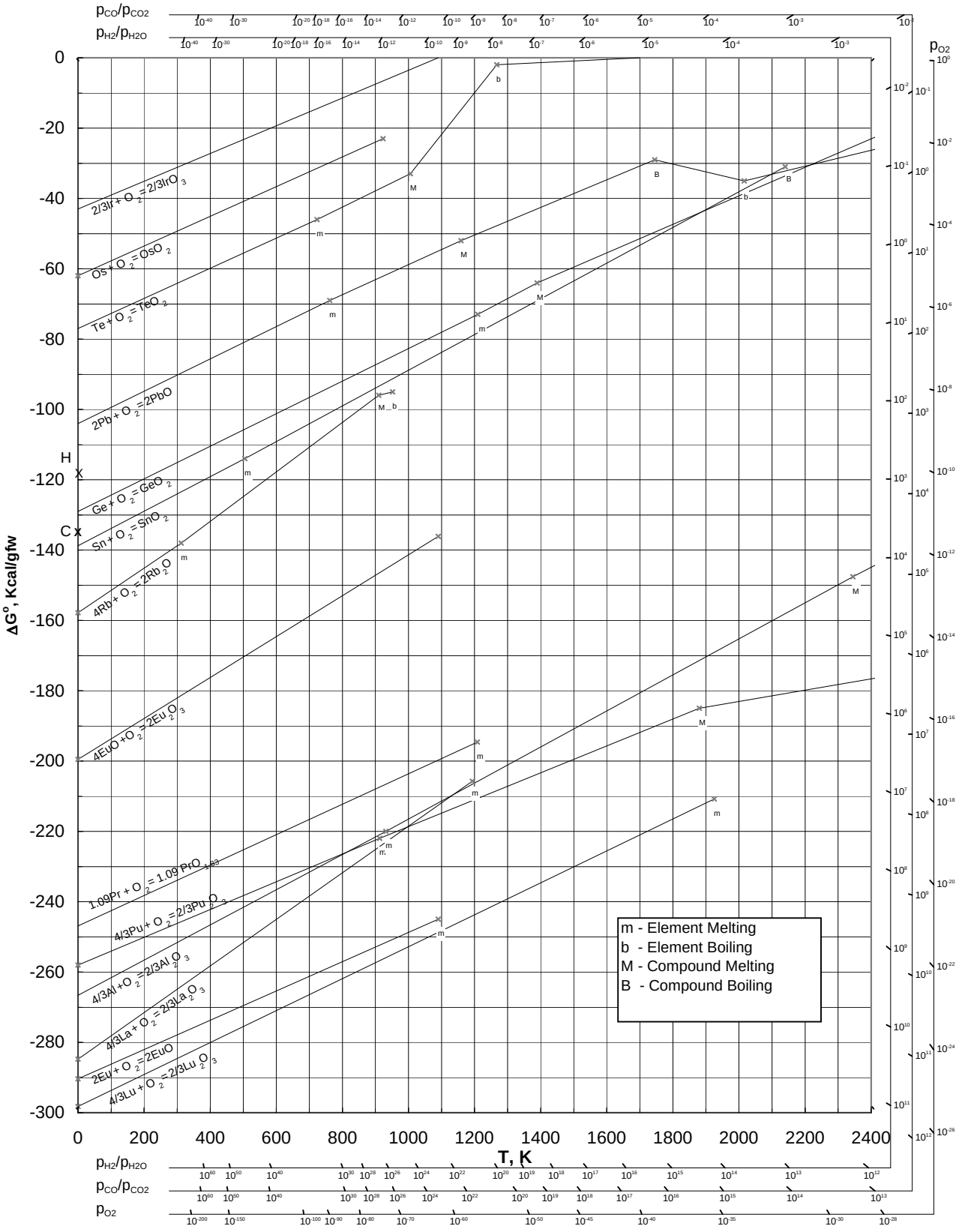


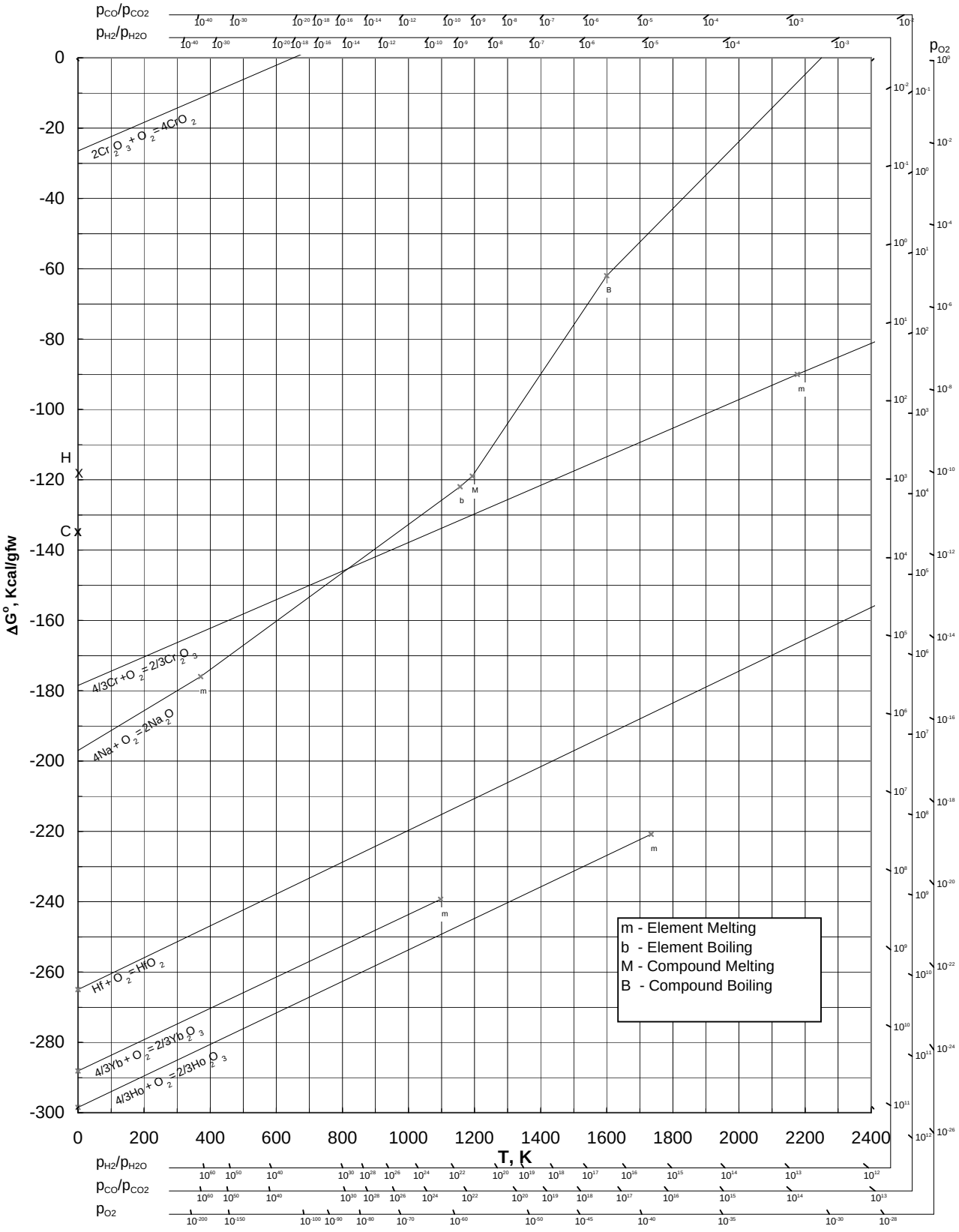
Ellingham Diagram for Selected Oxides: Part-4

Data from Thomas B. Reed, Free Energy of Formation of Binary Compounds, MIT Press, Cambridge, MA, 1971.



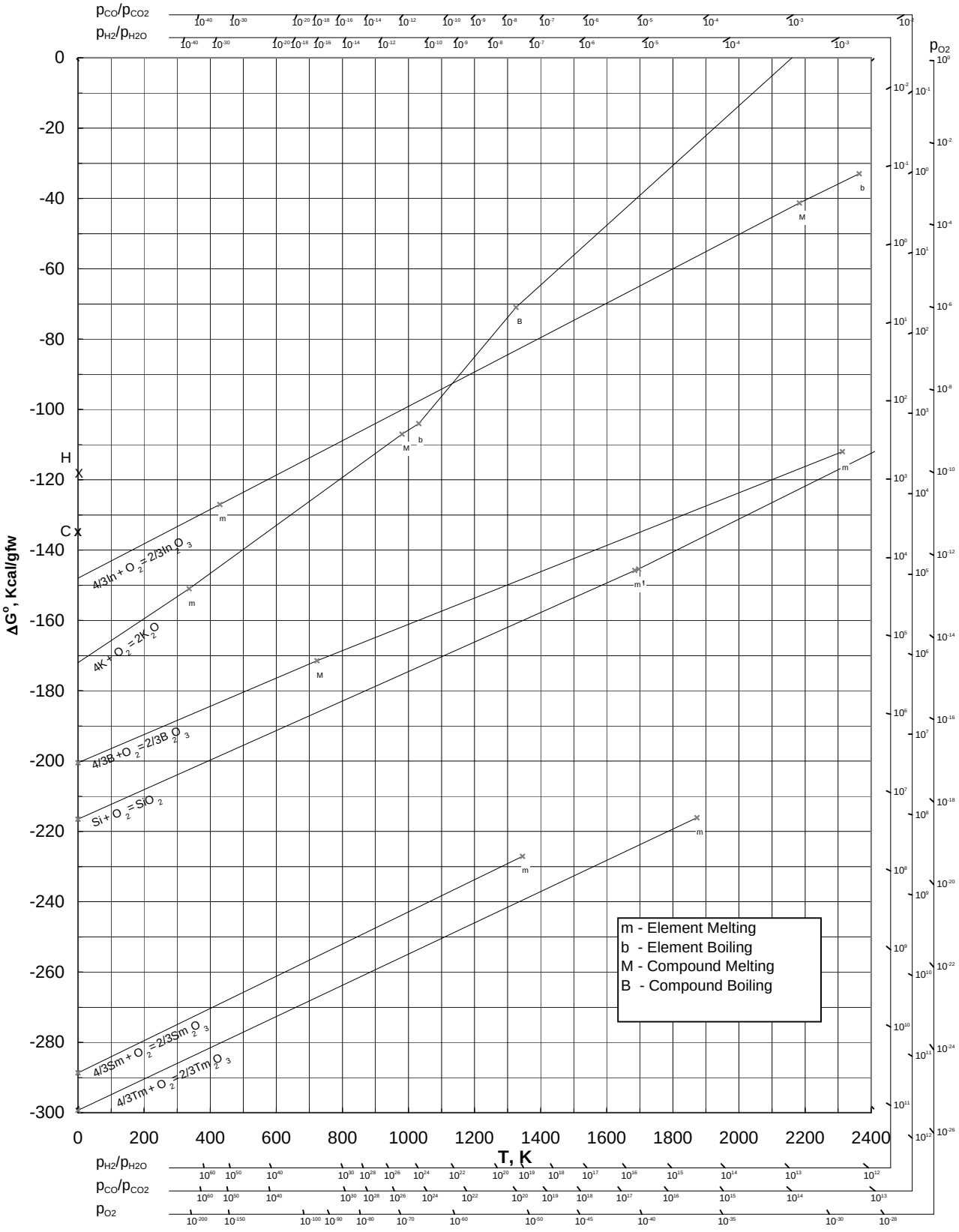
Ellingham Diagram for Selected Oxides: Part-5

Data from Thomas B. Reed, Free Energy of Formation of Binary Compounds, MIT Press, Cambridge, MA, 1971.



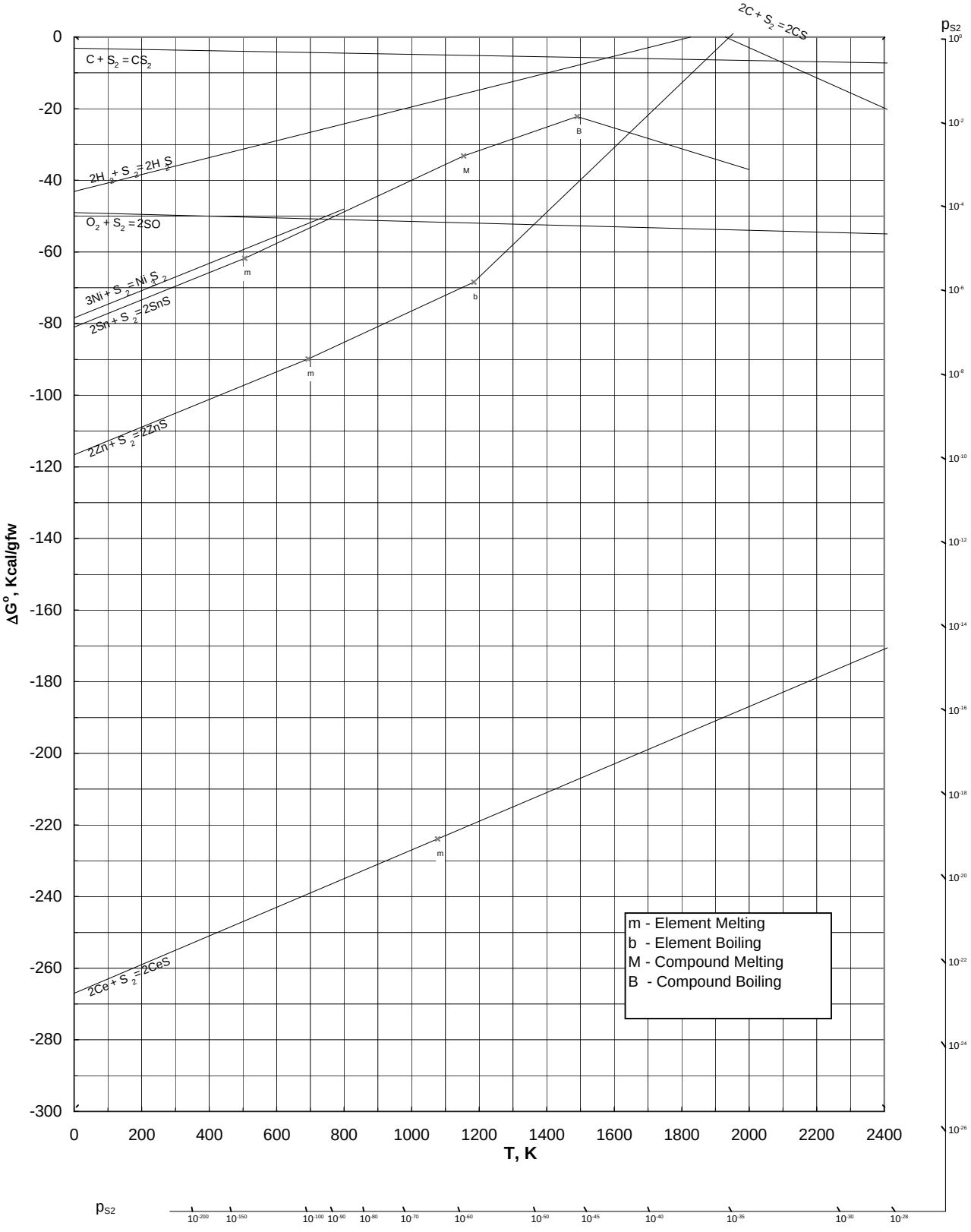
Ellingham Diagram for Selected Oxides: Part-6

Data from Thomas B. Reed, Free Energy of Formation of Binary Compounds, MIT Press, Cambridge, MA, 1971.



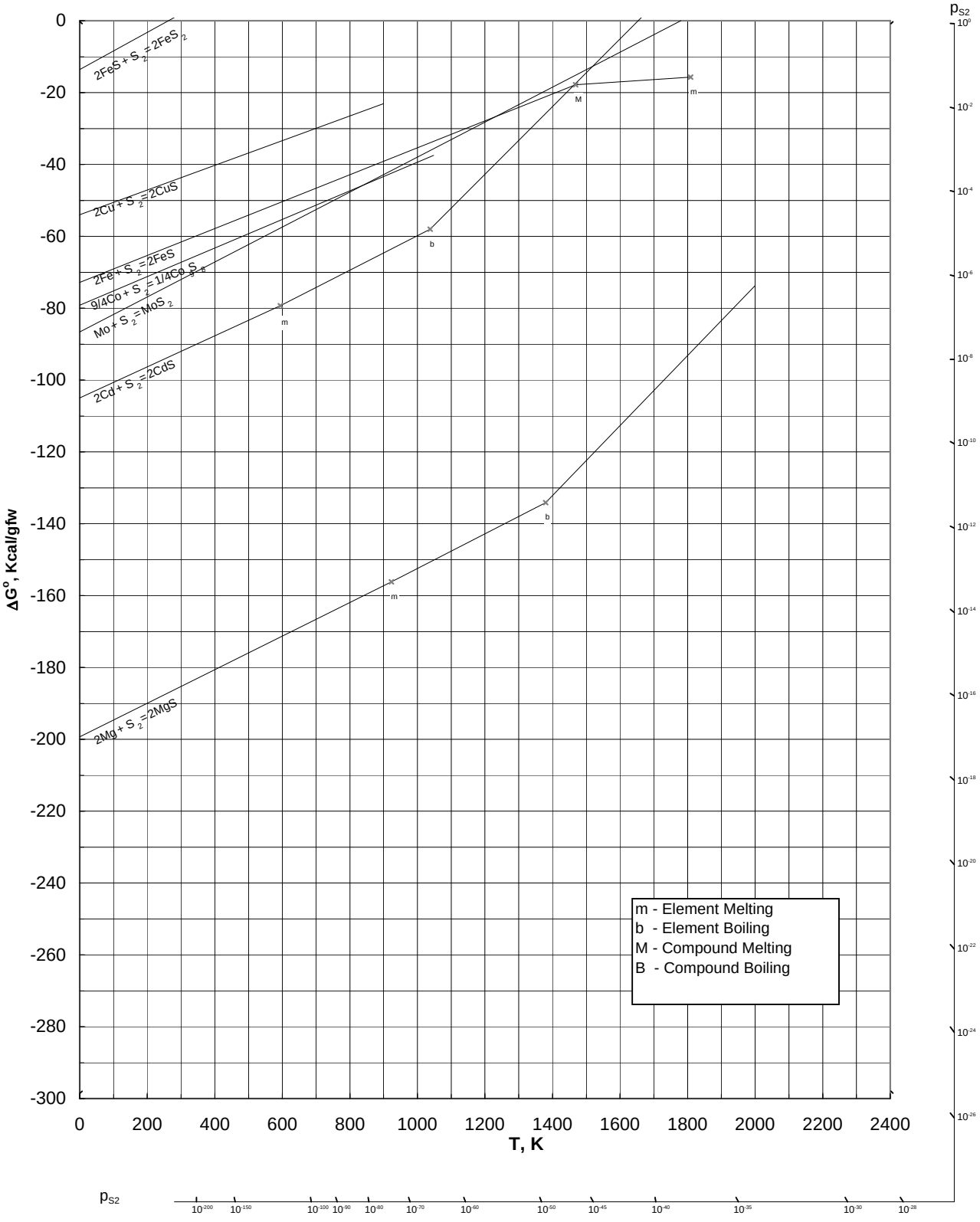
Ellingham Diagram for Selected Oxides: Part-7

Data from Thomas B. Reed, Free Energy of Formation of Binary Compounds, MIT Press, Cambridge, MA, 1971.



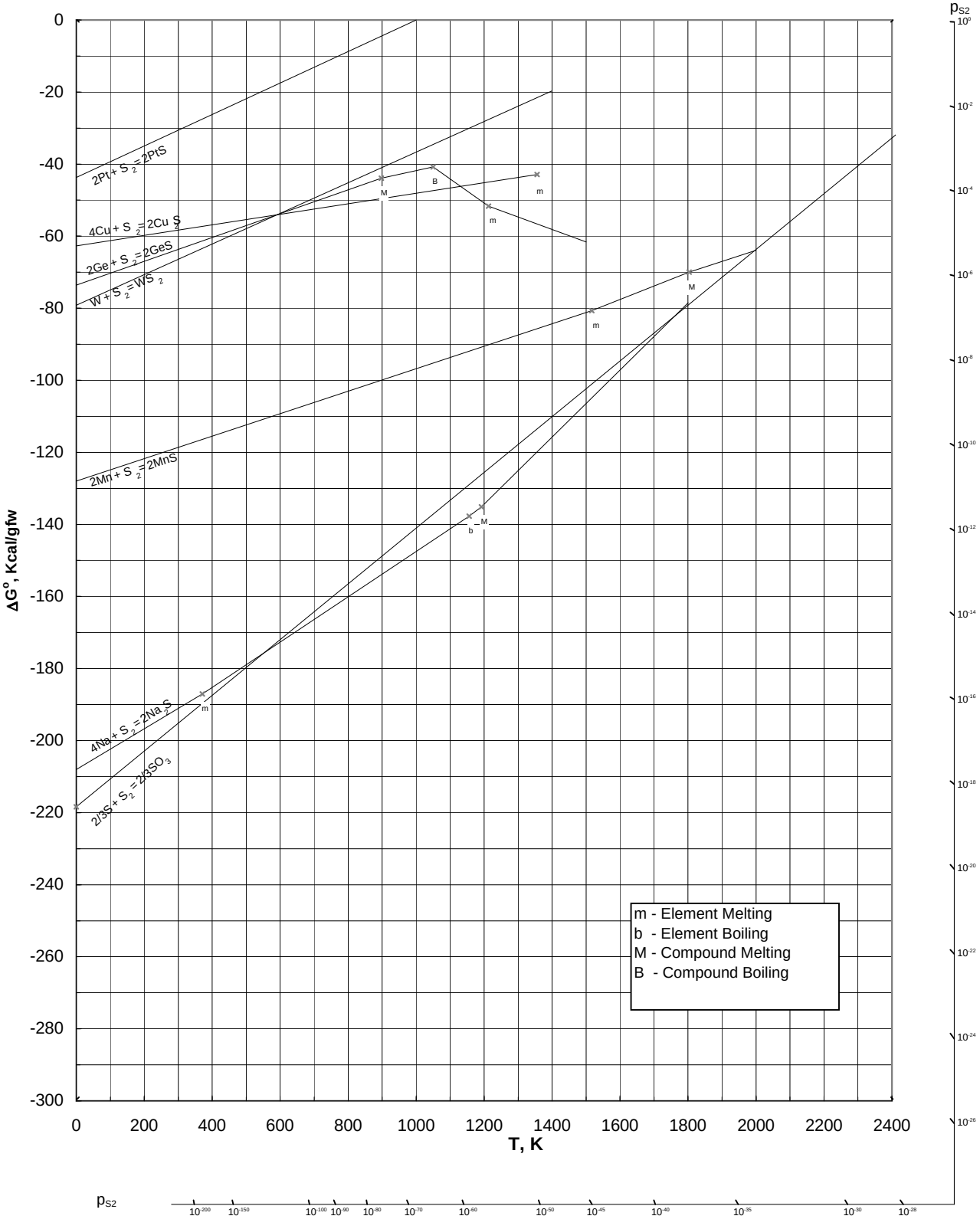
Ellingham Diagram for Selected Sulfides: Part-1

Data from Thomas B. Reed, Free Energy of Formation of Binary Compounds, MIT Press, Cambridge, MA, 1971.



Ellingham Diagram for Selected Sulfides: Part-2

Data from Thomas B. Reed, Free Energy of Formation of Binary Compounds, MIT Press, Cambridge, MA, 1971.



Ellingham Diagram for Selected Sulfides: Part-3

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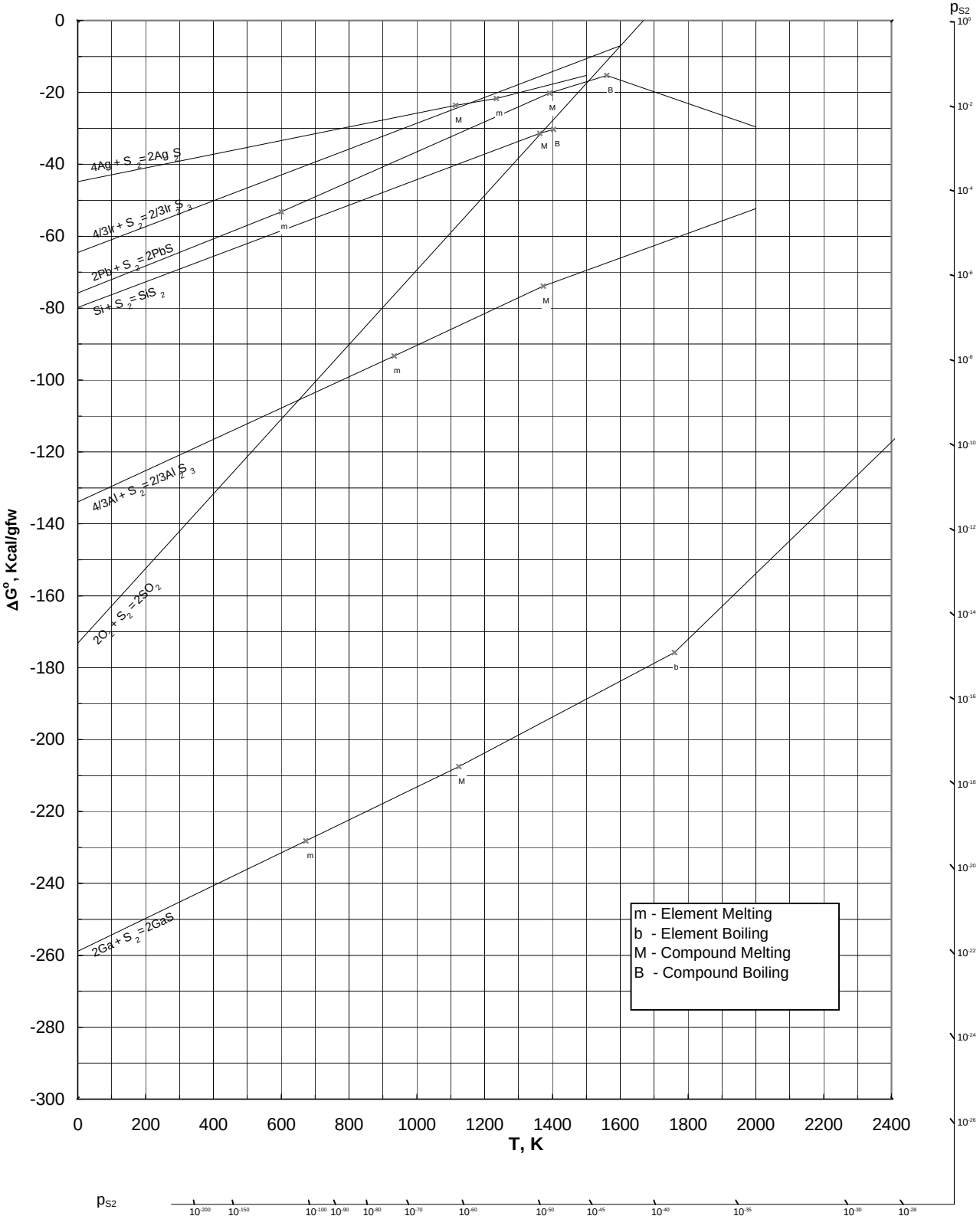
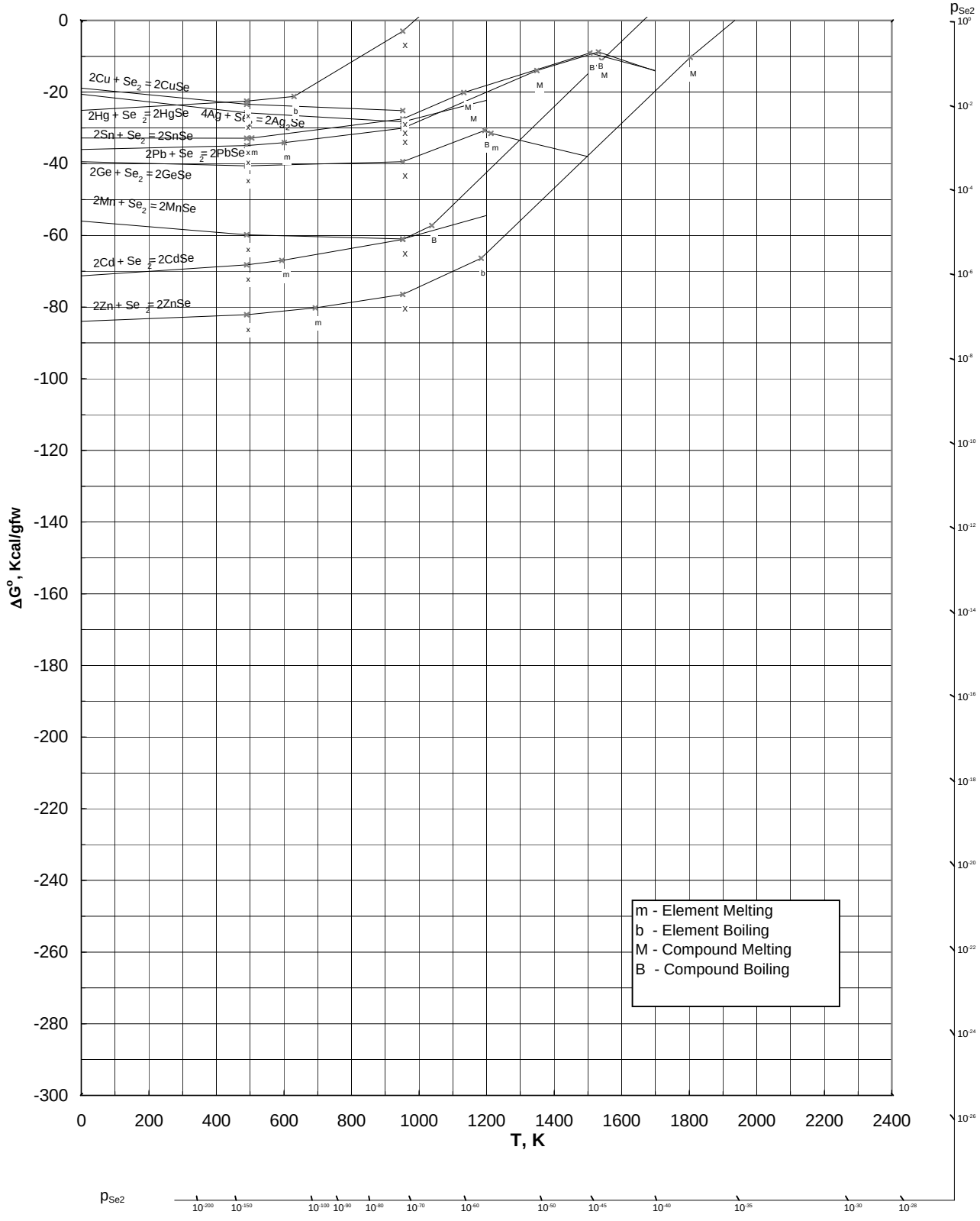


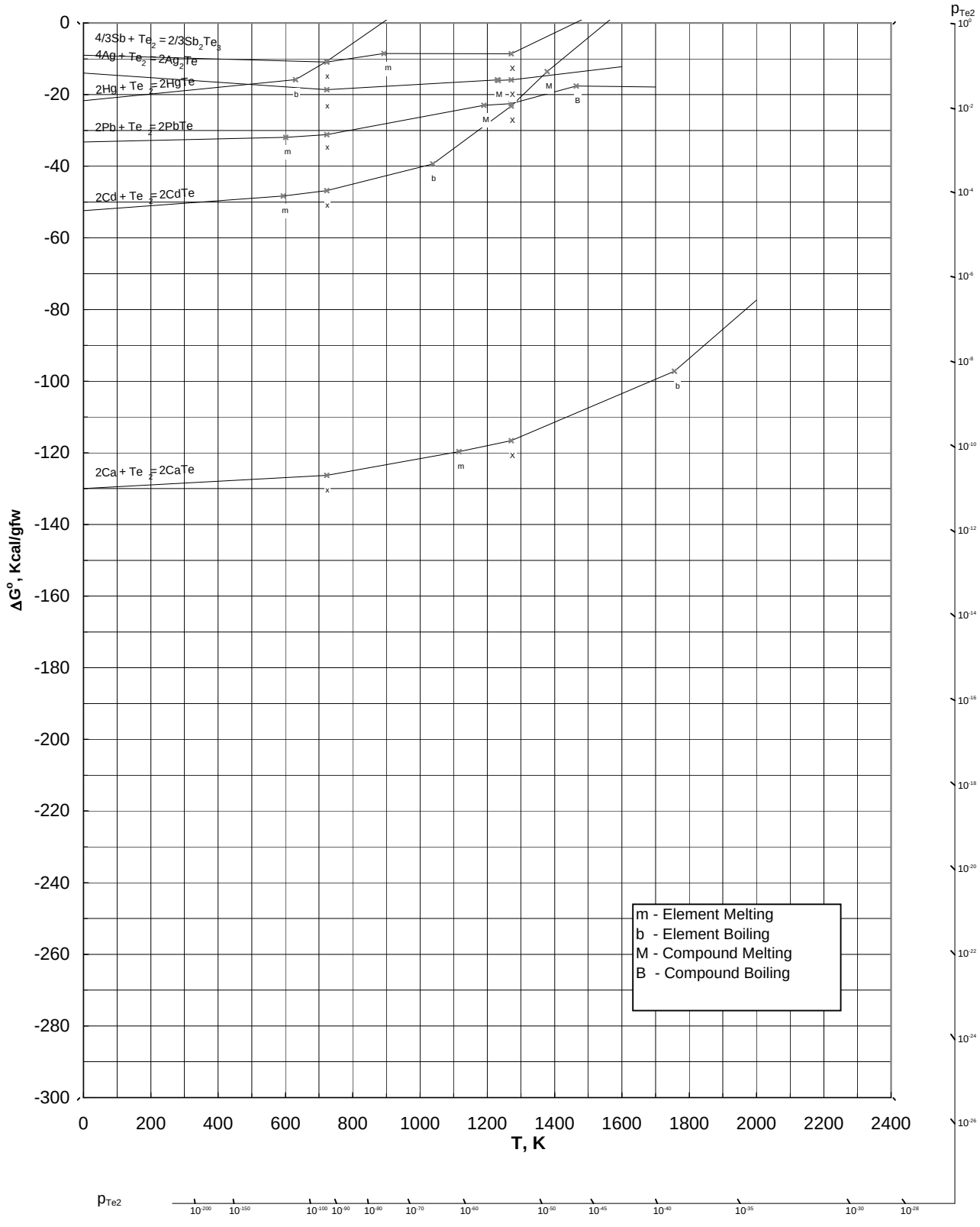
Ellingham Diagram for Selected Sulfides: Part-4

Data from Thomas B. Reed, Free Energy of Formation of Binary Compounds, MIT Press, Cambridge, MA, 1971.



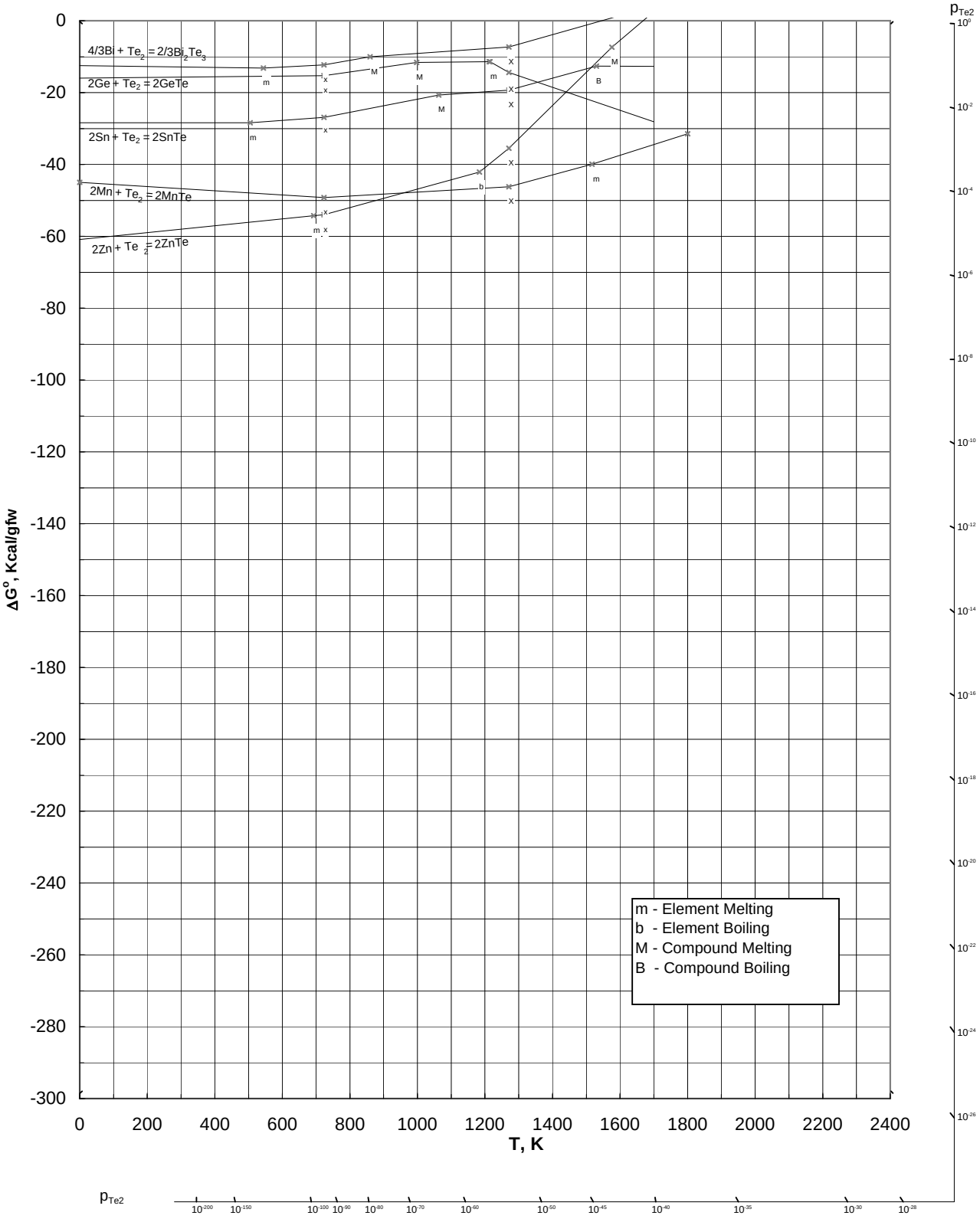
Ellingham Diagram for Selected Selenides: Part-1

Data from Thomas B. Reed, Free Energy of Formation of Binary Compounds, MIT Press, Cambridge, MA, 1971.



Ellingham Diagram for Selected Tellurides: Part-1

Data from Thomas B. Reed, Free Energy of Formation of Binary Compounds, MIT Press, Cambridge, MA, 1971.



Ellingham Diagram for Selected Tellurides: Part-2

Data from Thomas B. Reed, Free Energy of Formation of Binary Compounds, MIT Press, Cambridge, MA, 1971.