

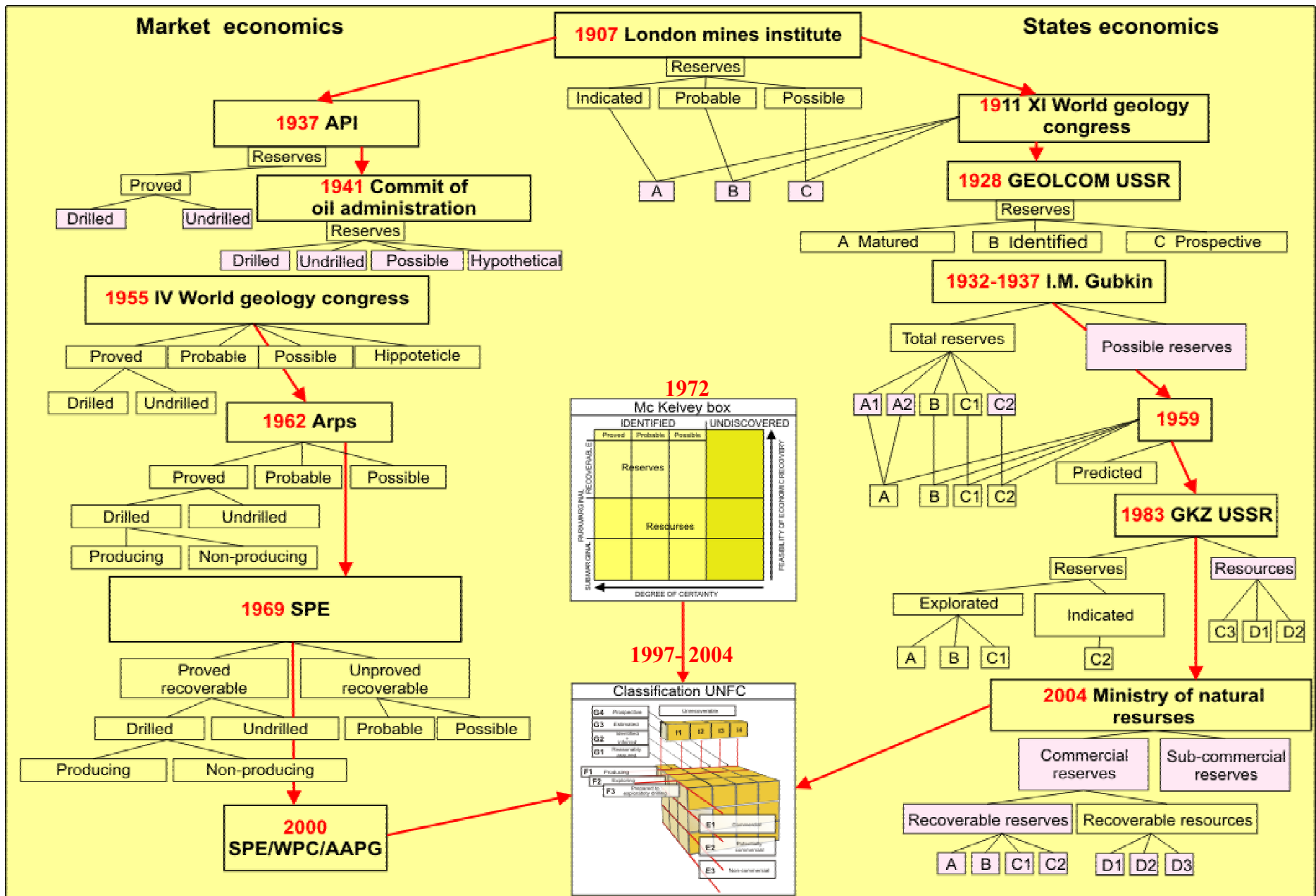


# ***Comparison of the Russian Classification and UNFC of Reserves and Resources***

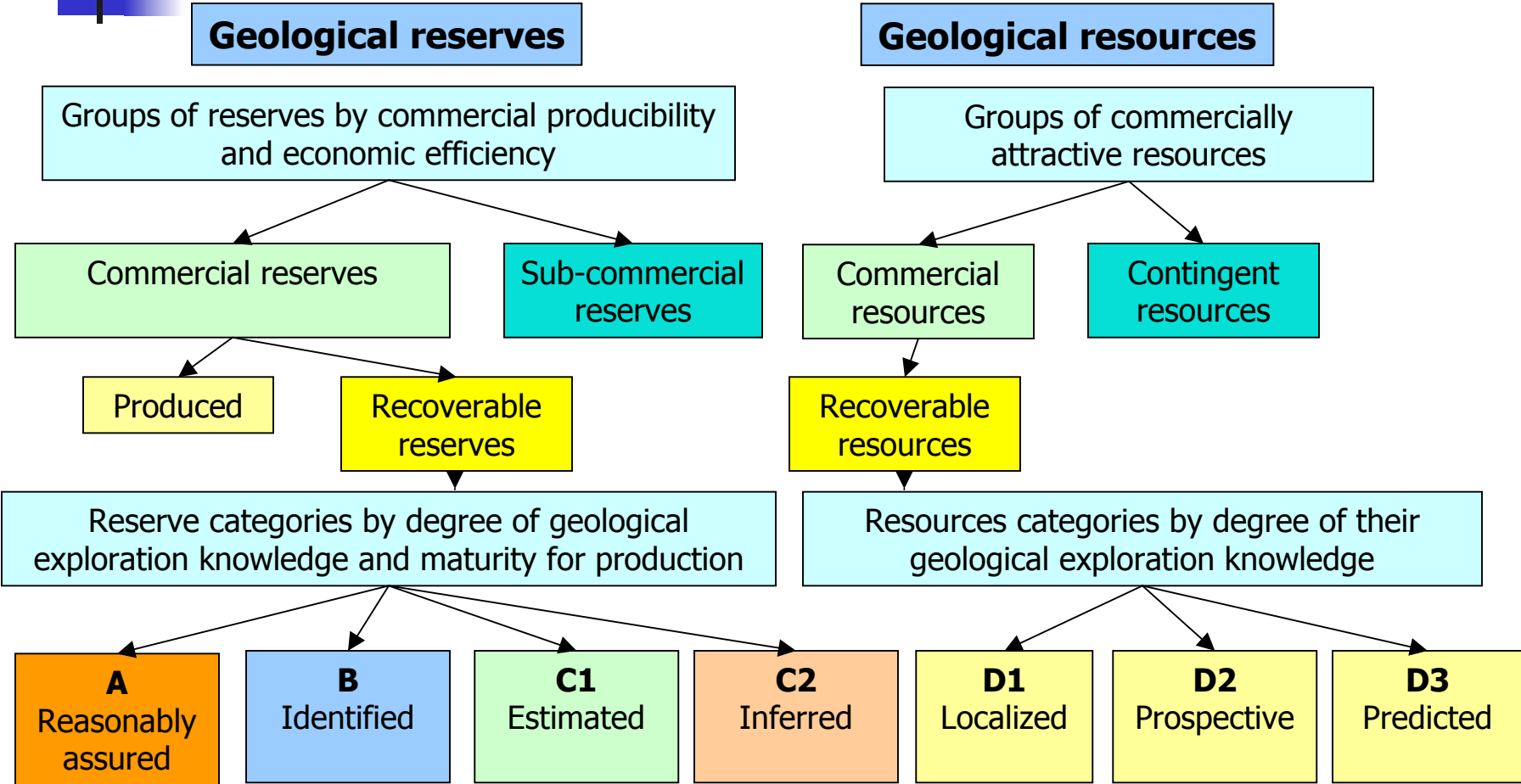
***by***

***Gabrielyants G.A., Poroskun V.I., Krasilnikova T.B.***

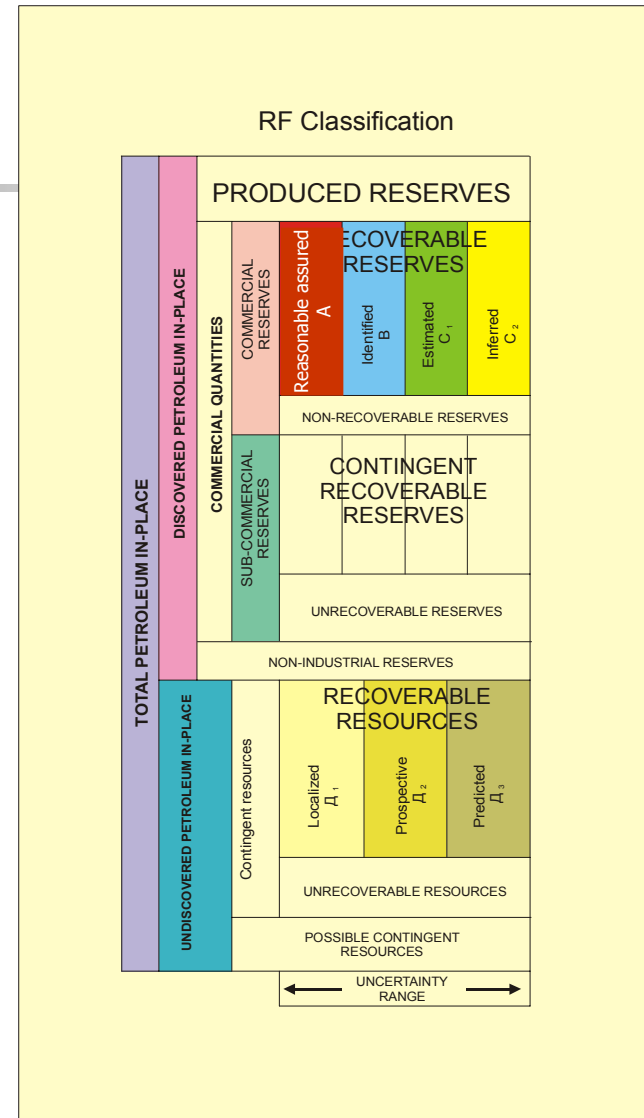
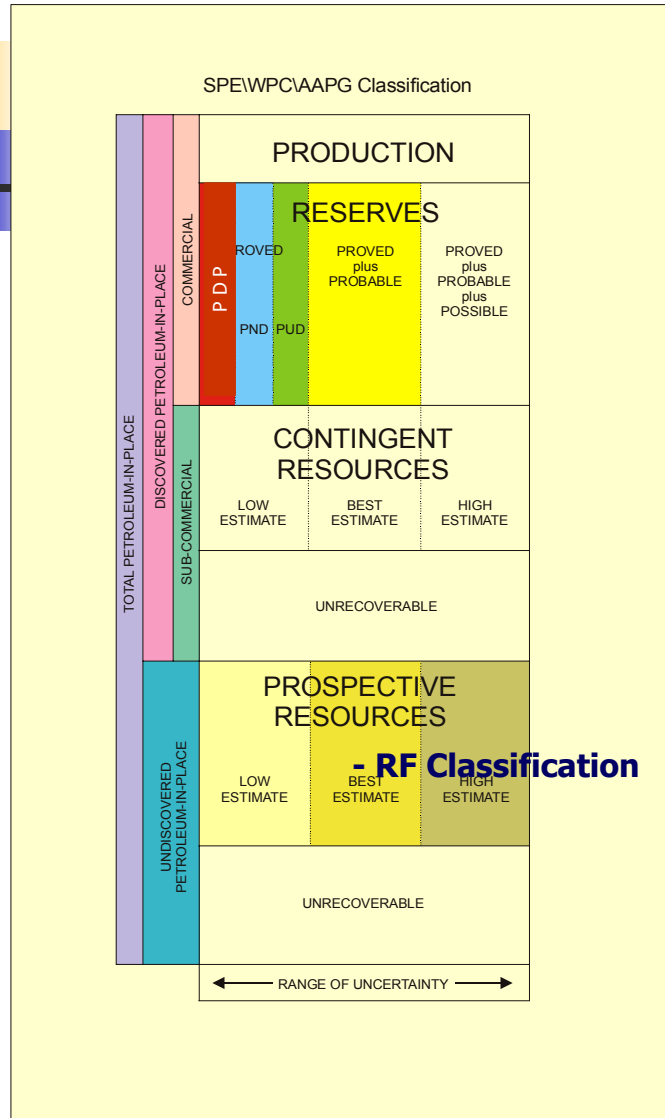
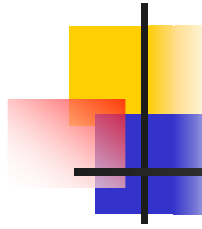
Presentation to First Session of UNECE  
Ad Hoc Group of Experts on Supply of Fossil Fuels  
Geneva - 10-11 November 2004



# Classification of Reserves and Resources



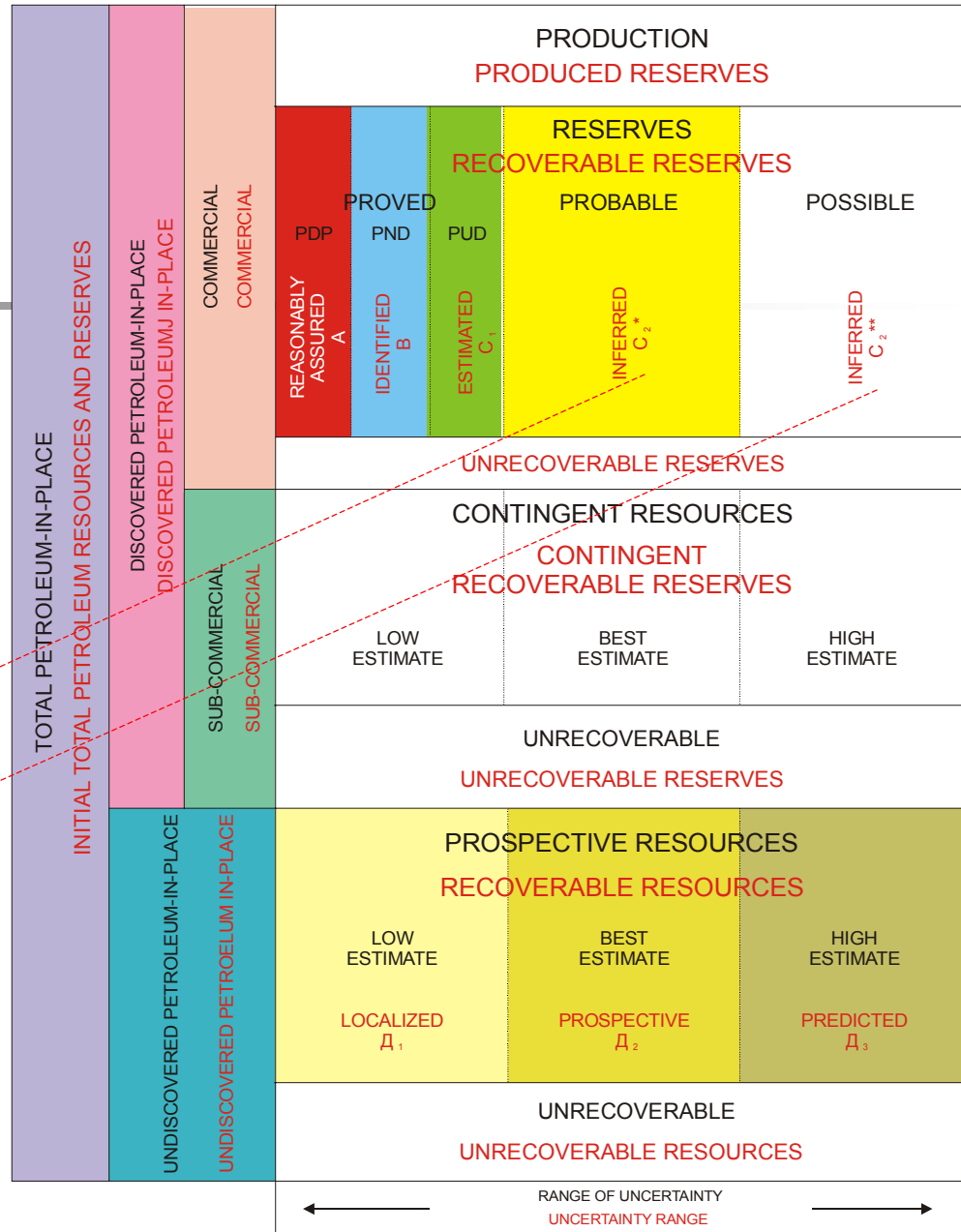
# SPE/WPC/AAPG Classification      RF Classification



*Gabrielyants G.A., Poroskun V.I., Krasilnikova T.B.*

# Comparison of SPE and RF Classifications

Black text – SPE  
Red text - RF



\* - Under similar economic requirements quantities identified by category C<sub>2</sub> are comparable with *probable* quantities

\*\* - Under similar economic requirements quantities identified by category C<sub>2</sub> are comparable with *possible* quantities

# *Comparison of the Russian and SPE Classification*

## *RF classification*

*Recoverable reserves* of accumulations which according to technical/economic calculations have been assessed, on a given date, to be commercially recoverable if brought to production under competitive market conditions, with the use of equipment and technology of recovery and treatment ensuring that the requirements for rational use of the subsoil and environmental protection are observed.

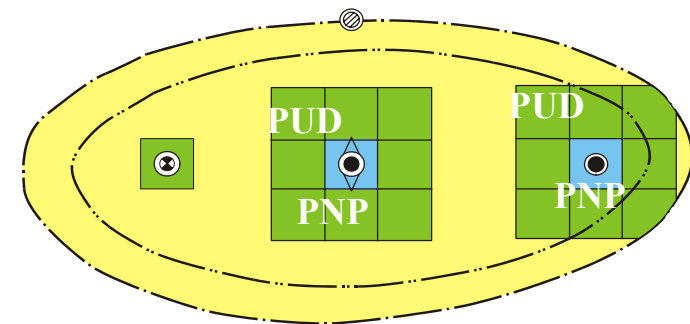
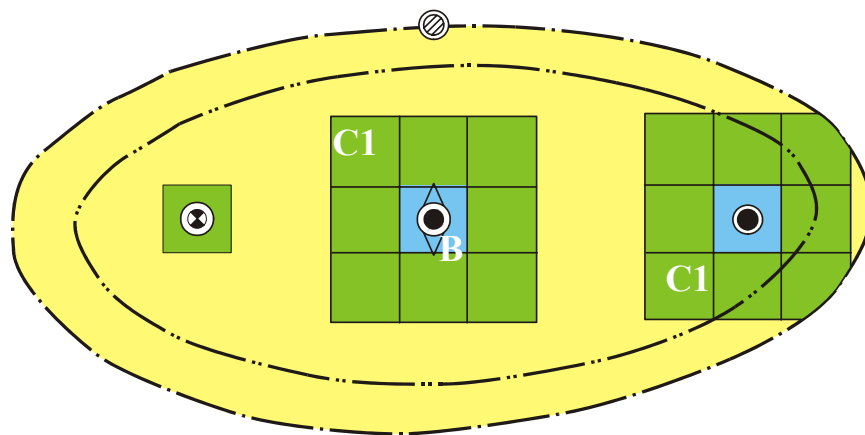
## *SPE classification*

*Proved reserves* are those quantities of petroleum which, by analysis of geological and engineering data, can be estimated with reasonable certainty to be commercially recoverable, from a given date forward, from known reservoirs and under current economic conditions, operating methods, and government regulations.

# Comparison of the Russian and SPE Classification

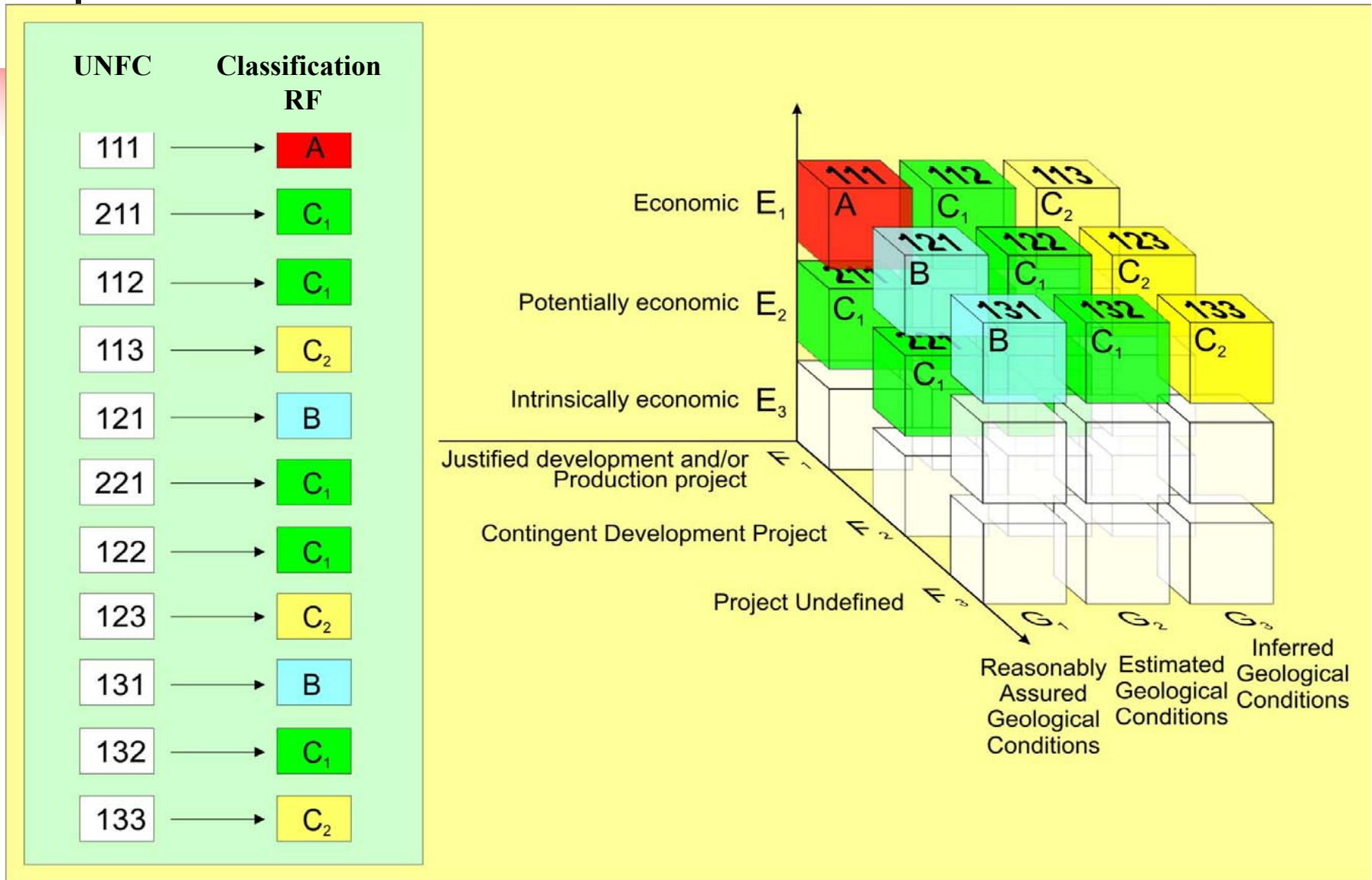
**Category C1 (estimated)** reserves of a portion of a petroleum accumulation an undrilled portion of the reservoir immediately adjoining the reserves of A+B categories at the distance equal to possible drainage zone

**Undeveloped Reserves (PUD)**  
Undeveloped reserves are expected to be recovered from new wells on undrilled acreage.

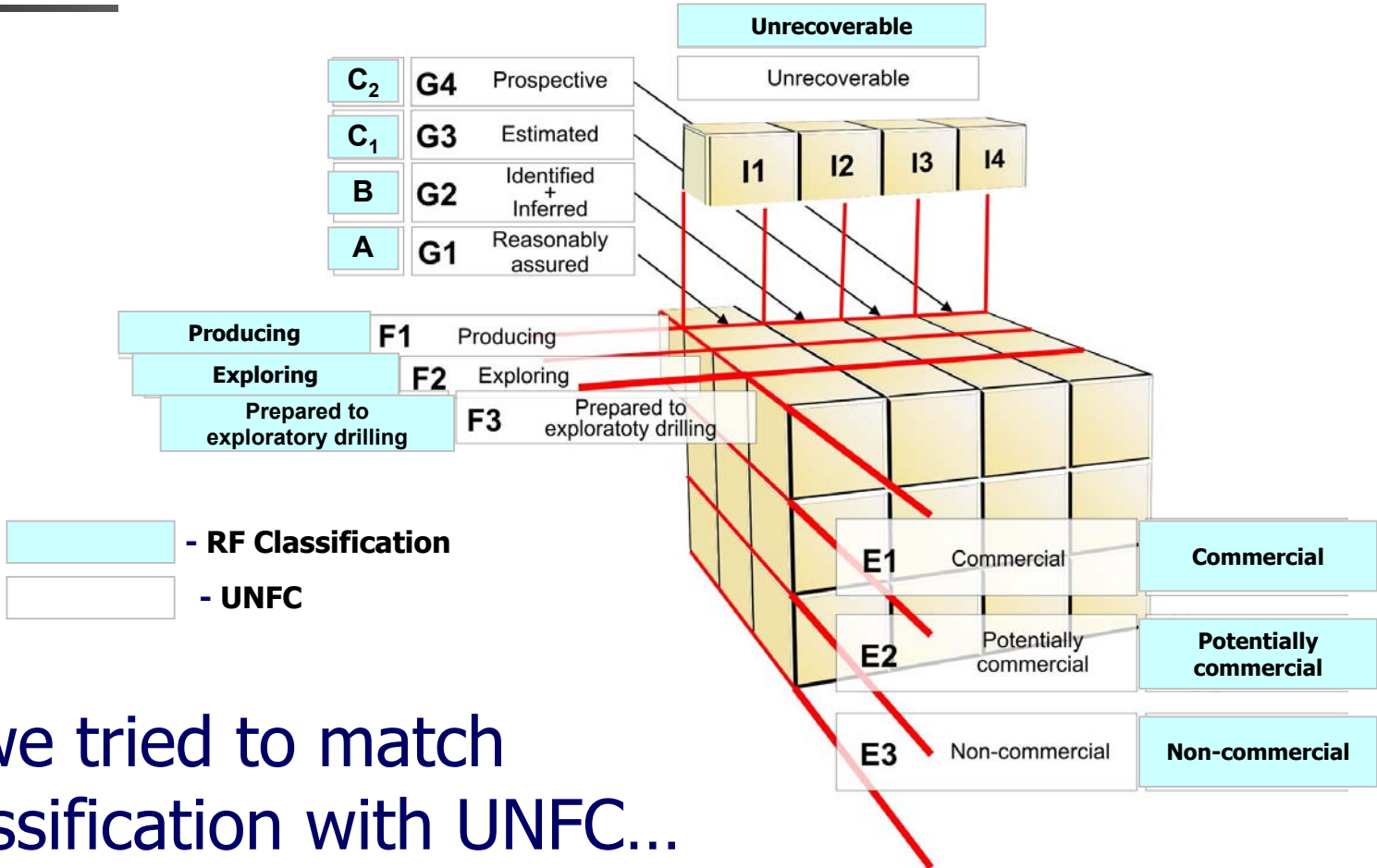


# Harmonization of UNFC and RF Classification

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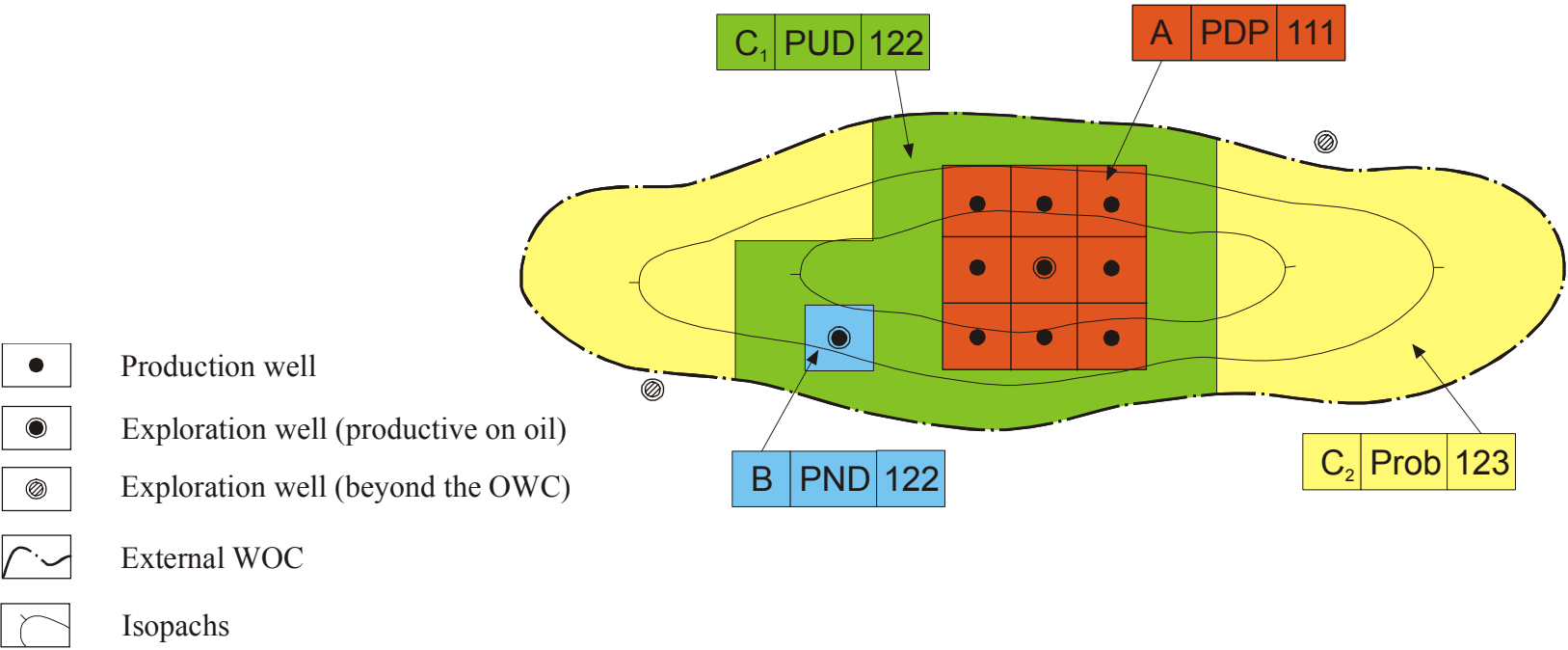


# Harmonization of UNFC and RF Classification



Here we tried to match RF classification with UNFC...

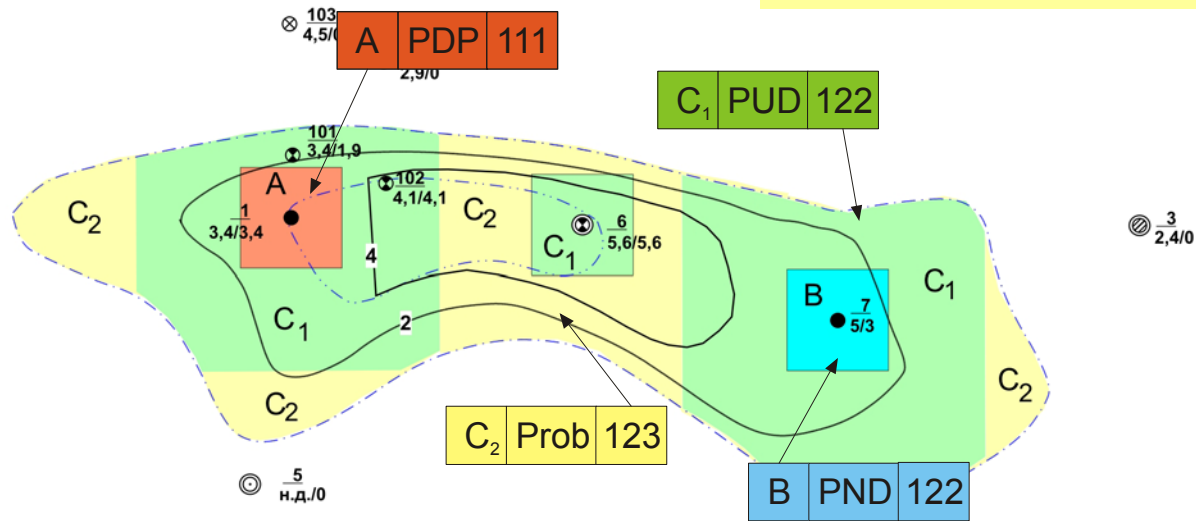
# Example of reserves classification: UNFC, SPE and RF Classification



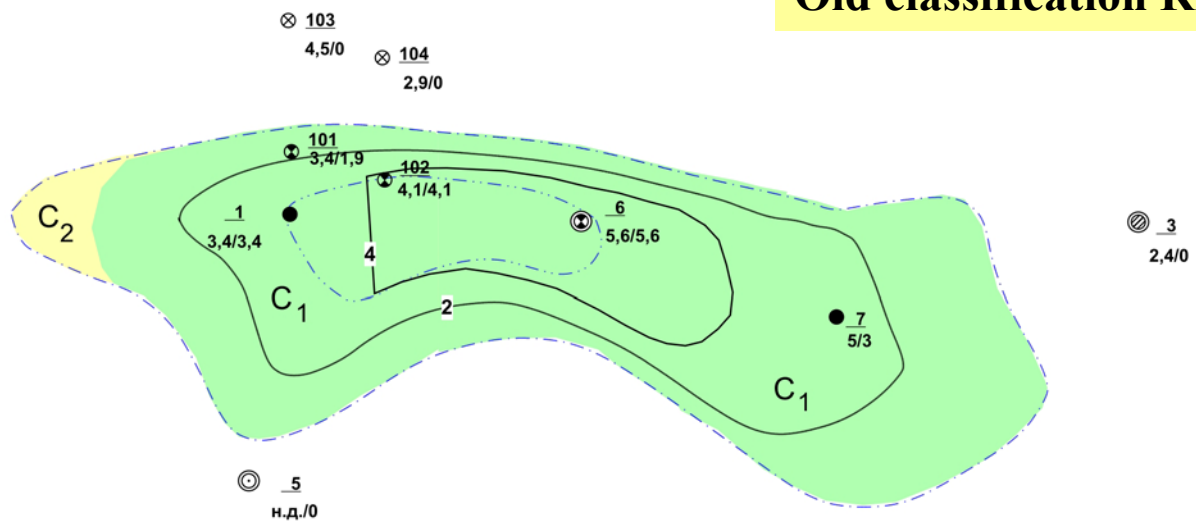
Classes of reserves: 1- RF classification  
 2- classification SPE\WPC\AAPG  
 3- UNFC

|   |   |   |
|---|---|---|
| 1 | 2 | 3 |
|---|---|---|

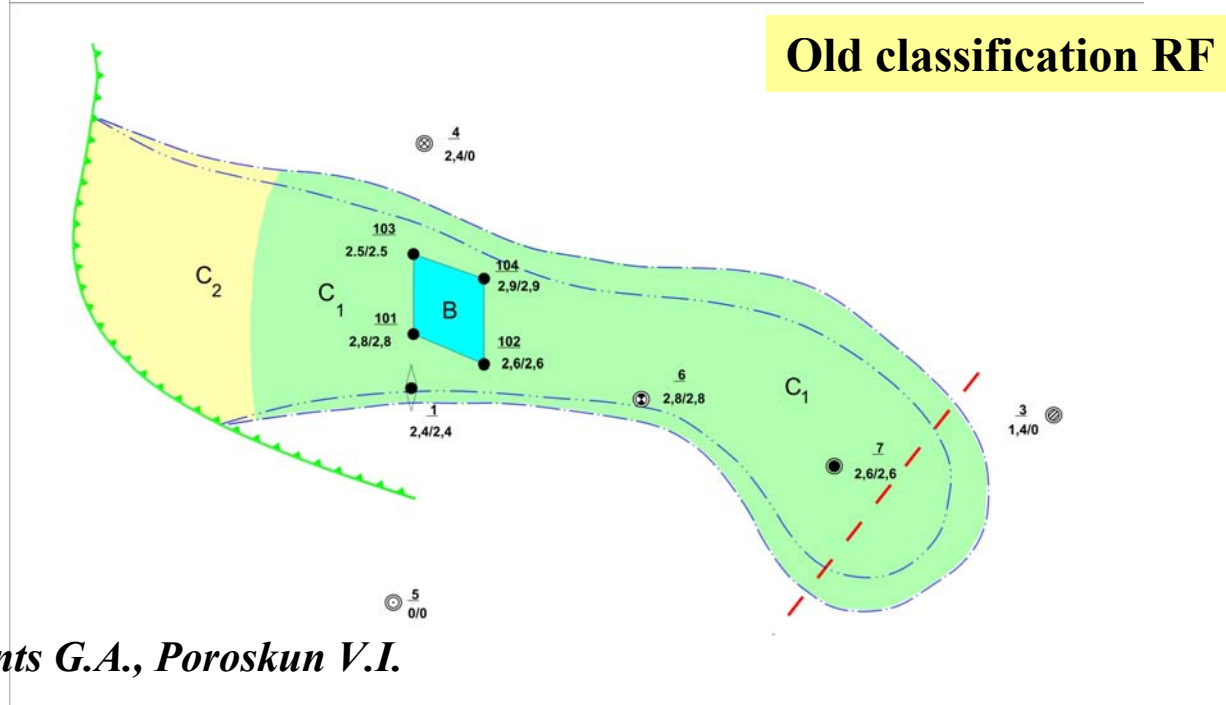
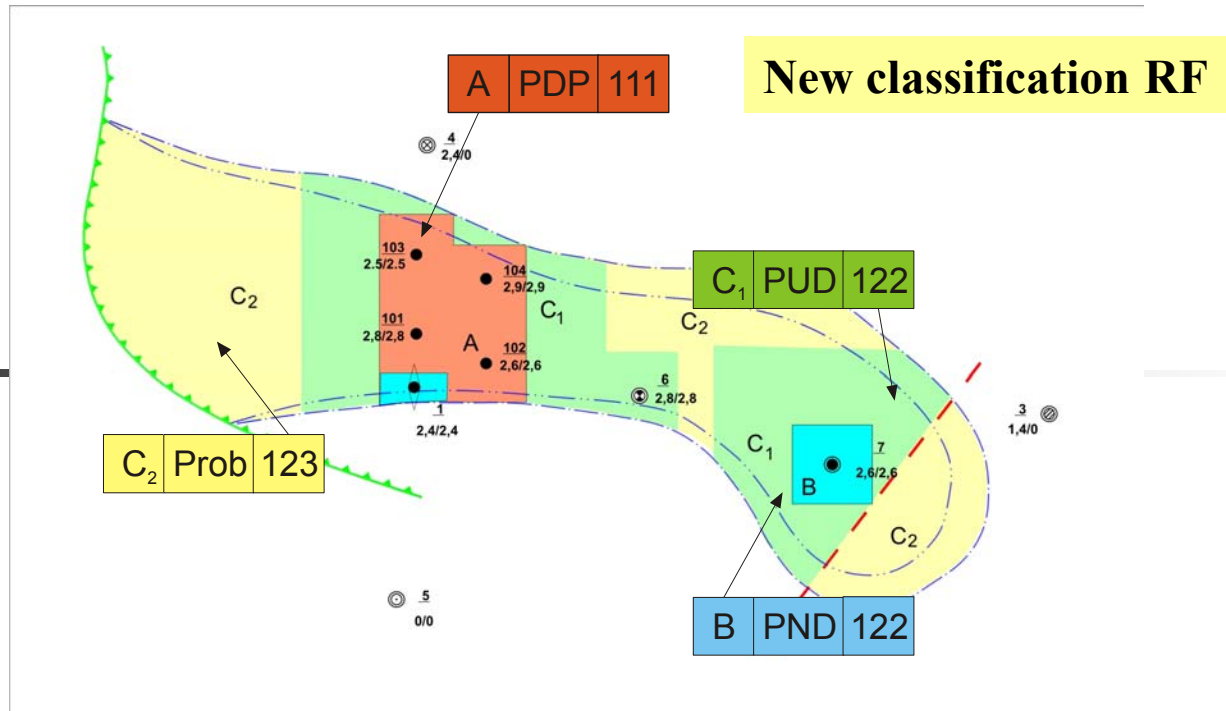
## New classification RF



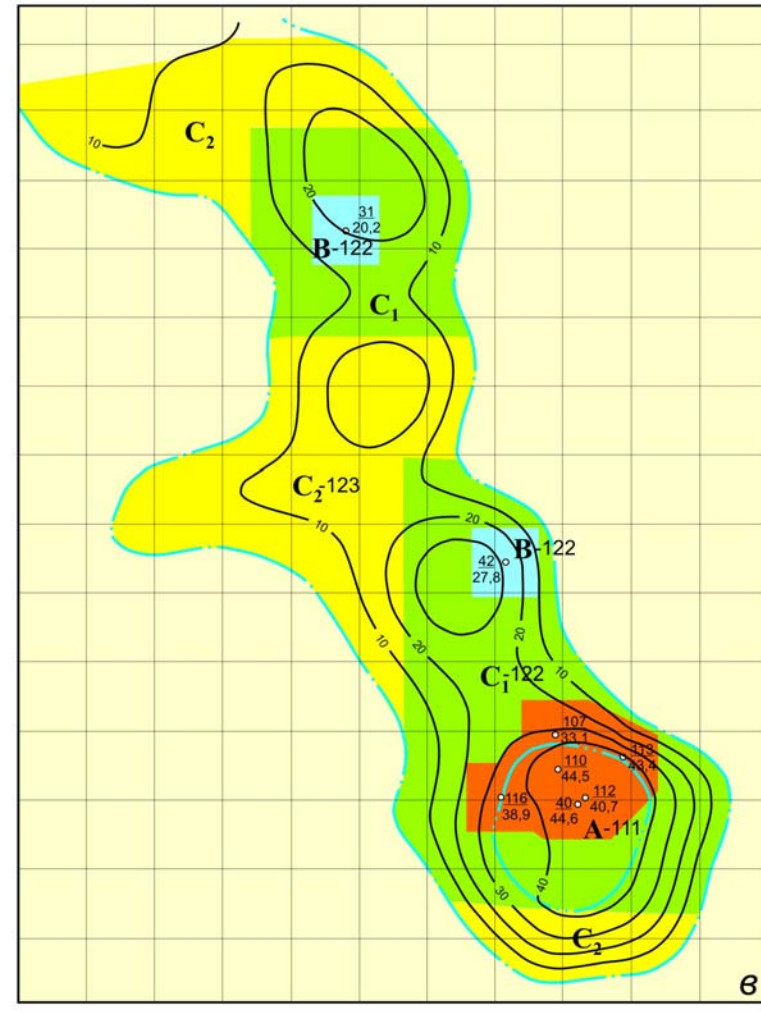
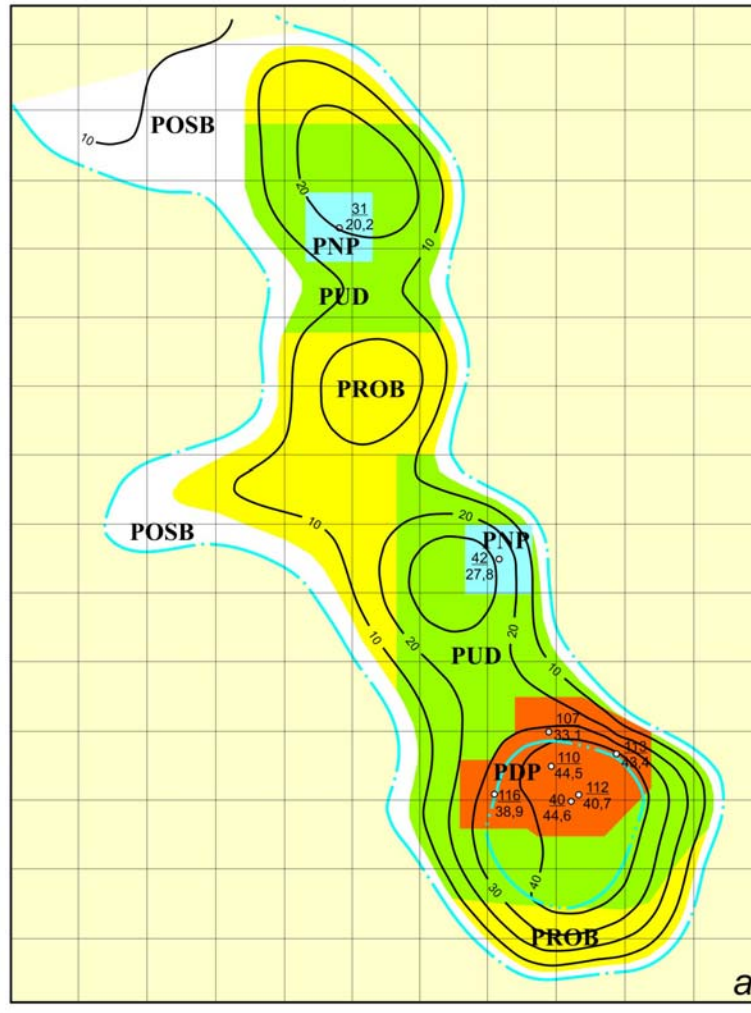
## Old classification RF



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# Example of reserves classification: SPE , UNFC and RF Classifications



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## ***WHAT ELSE NEEDS TO BE DONE?***

- **To continue work on basic UNFC definitions**
- **To harmonize the terminological basis of classifications now employed**
- **To elaborate guidelines facilitating to establish:**
  - ✓ *appropriate technique to be used when calculating reserves;*
  - ✓ *reference date on which estimates of economic parameters are to be assumed;*
  - ✓ *rules of determination of justified discount rates;*
  - ✓ *the need of geological/engineering audit of reserves;*
  - ✓ *transfer ratios for resources/reserves of different categories.*