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Autore	Abzalov Marat
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Nota di contenuto	1. Introduction -- PART I. MINE MAPPING AND SAMPLING -- 2. Mining Methods -- 3. Mine Mapping -- 4. Drilling Techniques and Drill Holes Logging -- 5. Sampling of the Mine Workings -- 6. Geotechnical Study -- 7. Dry Bulk Density (DBD) of Rocks -- 8. Data Points Location (surveying) -- PART II. SAMPLING ERRORS -- 9. Introduction to the Theory of Sampling -- 10. Quality Control and Assurance (QAQC) -- 11. Twin Holes -- 12. Database -- PART III. MINERAL RESOURCES -- 13. Data Preparation -- 14. Geological Constrains of Mineralisation -- 15. Exploratory Data Analysis -- 16. Resource Estimation Methods -- PART IV. APPLIED MINING GEOSTATISTICS -- 17. Introduction to Geostatistics -- 18. Variography -- 19. Methods of the Linear Geostatistics (Kriging) -- 20. Multivariate Geostatistics -- 21. Multiple Indicator Kriging -- 22. Estimation of the Recoverable Resources -- 23. Model Review and Validation -- 24. Reconciliation with New Data -- PART V. ESTIMATING UNCERTAINTY -- 25. Grade Uncertainty -- 26. Quantitative Geological Models -- PART VI. CLASSIFICATION -- 27. Principles of Classification -- 28. Methodology of the Mineral Resource Classification -- 29. Conversion Resources to Reserves -- 30. Balance

Between Quantity and Quality of Samples -- PART VII. MINERAL DEPOSIT TYPES -- 31. Lode Gold Deposits -- 32. Uranium Deposits (In-Situ Leach Projects) -- 33. Iron-Oxide Deposits -- 34. Bauxite Deposits -- 35. Mineral Sands.

Sommario/riassunto

This book provides a detailed overview of the operational principles of modern mining geology, which are presented as a good mix of theory and practice, allowing use by a broad range of specialists, from students to lecturers and experienced geologists. The book includes comprehensive descriptions of mining geology techniques, including conventional methods and new approaches. The attributes presented in the book can be used as a reference and as a guide by mining industry specialists developing mining projects and for optimizing mining geology procedures. Applications of the methods are explained using case studies and are facilitated by the computer scripts added to the book as Electronic Supplementary Material.