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Comparison between material balance and numerical simulation modelling; 3.6. The opening move in applying material balance; 3.7. Volumetric depletion fields; 3.8. Water influx calculations; 3.9. Gascap drive; 3.10. Compaction drive; 3.11. Conclusion; References; Chapter 4. OILWELL TESTING; 4.1. Introduction; 4.2. Essential observations in well testing; 4.3. Well testing literature; 4.4. The purpose of well testing; 4.5. Basic, radial flow equation; 4.6. Constant terminal rate solution of the radial diffusivity equation  
4.7. The transient constant terminal rate solution of the radial diffusivity equation  
4.8. Difficulties in application of the constant terminal rate solution of the radial diffusivity equation; 4.9. Superposition of CTR solutions; 4.10. Single-rate drawdown test; 4.11. Pressure buildup testing (general description); 4.12. Miller, Dyes, Hutchinson (MDH) pressure buildup analysis; 4.13. Horner pressure buildup analysis; 4.14. Some practical aspects of appraisal well testing; 4.15. Practical difficulties associated with Horner analysis  
4.16. The influence of fault geometries on pressure buildups in appraisal well testing  
4.17. Application of the exponential integral; 4.18. Pressure support during appraisal well testing; 4.19. Well testing in developed fields; 4.20. Multi-rate flow testing; 4.21. Log-log type curves; 4.22. Conclusions; References; Chapter 5. WATERDRIVE; 5.1. Introduction; 5.2. Planning a waterflood; 5.3. Engineering design of waterdrive projects; 5.4. The basic theory of waterdrive in one dimension; 5.5. The description of waterdrive in heterogeneous reservoir sections  
5.6. Waterdrive under segregated flow conditions (vertical equilibrium)

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## Sommario/riassunto

This revised edition of the bestselling Practice of Reservoir Engineering has been written for those in the oil industry requiring a working knowledge of how the complex subject of hydrocarbon reservoir engineering can be applied in the field in a practical manner. Containing additions and corrections to the first edition, the book is a simple statement of how to do the job and is particularly suitable for reservoir/production engineers as well as those associated with hydrocarbon recovery. This practical book approaches the basic limitations of reservoir engineering with the

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