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Thermal Equilibrium in Permafrost Areas; CHAPTER 5. CEMENTING OF CASING; 5.1 Strength and Thickening Time of Cement; 5.2 Cement Heat Generation; 5.3 Temperature Increase Due to Cement Hydration; 5.4 Bottomhole Fluid Circulating Temperatures; 5.5 Designing Cementing Programs for Deep Wells; 5.6 Cementing of Casing in Permafrost Regions; CHAPTER 6. PRODUCTION AND INJECTION WELLS; 6.1 Heat Transfer; 6.2 Temperature Profiles in Wells; 6.3 Water Formation Volume Factor; 6.4 Temperature Around the Wellbore  
6.5 Permafrost Thawing and Estimation of Well Thermal Insulation Efficiency6.6 Thermal Stresses; CHAPTER 7. INTERPRETATION AND UTILIZATION OF TEMPERATURE DATA; 7.1 Effect of Free Thermal Convection and Casing; 7.2 Determination of Formation Temperature; 7.3 Estimation of the Geothermal Gradient; 7.4 Mud Density Program; 7.5 Location of the Cement Column Top; 7.6 The Injectivity Profile; 7.7 The Use of Thermistors in Temperature Probes; 7.8 Interpretation of Temperature Surveys in Shallow Wells; CHAPTER 8. APPENDICES; 8.1 APPENDIX A. CONVERSION FACTORS  
8.2 APPENDIX B. THERMAL PROPERTIES OF FORMATIONS8.3 APPENDIX C. COMPUTER PROGRAMS (FORTRAN); REFERENCES; INDEX

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#### Sommario/riassunto

The purpose of Applied Geothermics for Petroleum Engineers is to present in a clear and concise form methods of utilizing the data of temperature surveys in deep boreholes as well as the results of field, laboratory and analytical investigations in geothermics to a wide audience. Although some aspects of the subject of this book have been discussed in several previous books and numerous papers, Applied Geothermics for Petroleum Engineers is the first book on this topic available to the petroleum engineering community. The objective of the book is to present the state of knowl

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