Record Nr. UNINA9910739452403321 Autore Bahrami Nick Titolo Evaluating factors controlling damage and productivity in tight gas reservoirs / / Nick Bahrami New York:,: Springer,, 2013 Pubbl/distr/stampa **ISBN** 3-319-02481-7 Edizione [1st ed. 2013.] Descrizione fisica 1 online resource (xvi, 53 pages): illustrations (chiefly color) Collana Springer Theses, Recognizing Outstanding Ph.D. Research, , 2190-5053 622.3382 Disciplina Soggetti Gas reservoirs Natural gas - Geology Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali "ISSN: 2190-5053." Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Introduction to tight gas reservoirs -- Tight gas reservoirs characterisation for dynamic parameters -- Tight gas reservoir simulation -- Tight gas field example: effect of damage mechanims on well productivity -- Conclusions. Tight gas reservoirs have very low permeability and porosity, which Sommario/riassunto cannot be produced at economical flow rates unless the well is efficiently stimulated and completed using advanced and optimized technologies. Economical production on the basis of tight gas reservoirs is challenging in general, not only due to their very low permeability but also to several different forms of formation damage that can occur during drilling, completion, stimulation, and production operations. This study demonstrates in detail the effects of different well and reservoir static and dynamic parameters that influence damage mechanisms and well productivity in tight gas reservoirs. Geomechanics, petrophysics, production and reservoir engineering expertise for reservoir characterization is combined with a reservoir simulation approach and core analysis experiments to understand the optimum strategy for tight gas development, delivering

improved well productivity and gas recovery.