1086-03-1033Paola D'Aquino, Salma Kuhlmann and Karen Lange* (karen.lange@wellesley.edu),
Department of Mathematics, Wellesley College, 106 Central St, Wellesley, MA 02481. An algebraic
characterization of recursively saturated real closed fields.

We give a valuation theoretic characterization for a real closed field to be recursively saturated. This builds on work in in (KKMZ), where the authors gave such a characterization for κ -saturation, for a cardinal $\kappa \geq \aleph_0$. Our result extends the characterization of Harnik and Ressayre (HR) for a divisible ordered abelian group to be recursively saturated.

(HR) V. Harnik and J.P. Ressayre, Draft of a paper, 1992.

(KKMZ) F.-V. Kuhlmann, S. Kuhlmann, M. Marshall, M. Zekavat, Embedding ordered fields in formal power series fields, J. Pure Appl. Algebra 169 2002 71–90.

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