QUESTION (HD0402): Is there an example of a prime t-ideal P of R that R_P is not a valuation domain?

Answer: There are many answers to this question. (i). Take a one dimentional Noetherian local domain that is not a valuation domain. The maximal ideal of this ring is a t-ideal, because it is the minimal prime of a principal ideal. (If R is a one dimensional local ring with maximal ideal P then $R = R_P$.) (ii). Look up the answer to the question (HD 0312) on this web page. Or see Proposition 2.5 of [Zafrullah, Well behaved prime t-ideals that appeared in Journal of Pure and Applied Algebra 65(1990), 199-207)].

(This question was asked by Mohammad Sakhdari of the University of Kashan, Kashan, Iran.)