Bruce Olberding* (olberdin@nmsu.edu), Department of Mathematical Sciences, Las Cruces, NM 88003-8001. Integrally closed overrings of two-dimensional Noetherian domains. Preliminary report.

Let D be a Noetherian domain of Krull dimension 2. A 1969 theorem of W. Heinzer states that every finite character intersection of rank one discrete valuation overrings of D (i.e. every Krull overring of D) is a Noetherian domain. We discuss the integrally closed overrings of D that arise as finite character intersections of arbitrary valuation overrings of D. (Received August 28, 2005)