Figure 72. Post Oak Conglomerate. Originally open-framework texture of angular, lower Paleozoic blocks (*LP*) cemented by drusy sparite (*D*). Absence of fines mainly reflects solution weathering of Permian limestone land surface. View 6 × 4 cm.

Subsequent cementation of the carbonates has been by drusy sparite (forming dogtooth-spar crystals as much as 5 mm across in cavities between pebbles). This sparite records phreatic precipitation of carbonate (fig. 72); cathode-luminescence studies (Donovan and Al-Shaieb, in preparation) show a variable redox condition with respect to iron content in this cement. Minor late-stage cements are euhedral pyrite and barite. The latter mineral is also found in other Post Oak facies (Al-Shaieb, Hanson, and others, 1980).

ACKNOWLEDGMENTS

It is a pleasure to record the great hospitality of Mr. and Mrs. Charlie B. Oliver of the Kimbell Ranch; they have afforded me constant access to their land and have always expressed interest in the work.

I benefited from discussions in the field with David Sanderson, Abdolali Babaei, Richard Hanson, Richard Thomas, and Steve Culver. John Shelton and Zuhair Al-Shaieb were supportive in analysis of the Permian rocks. Wayne Pettyjohn reviewed aspects of the work.