EIT spectra in coated cells MASON KLEIN, MICHAEL HOHENSEE, DAVID PHILLIPS, IRINA NOVIKOVA, RONALD WALSWORTH, Harvard-Smithsonian — We use rubidium vapor cells with paraffin-coated walls, which greatly reduce the ground state decoherence rate due to wall collisions, to measure electromagnetically-induced transparency (EIT) spectra. Characteristic line shapes have a dual structure, with a wide feature corresponding to the transit time-scale and an ultra-narrow feature corresponding to the coherence lifetime allowed by the coating. Such narrow features can exhibit large contrast, and so are of interest to slow light studies. Using a model based on Ramsey pulse sequences, we can explain qualitative behavior for both Zeeman and hyperfine EIT, with good line width agreement in the Zeeman case in the small beam limit.