abstract We obtained spectra of 60 red, starlike objects ($E < 18.8$) identified with FIRST radio sources, $S_{1.4 \text{GHz}} > 1 \text{mJy}$. Eight are QSOs with redshift $z > 3.6$. Combined with our pilot search (Benn et al 2002), our sample of 121 candidates yields a total of 18 $z > 3.6$ QSOs (10 of these with $z > 4.0$). 8% of candidates with $S_{1.4 \text{GHz}} < 10 \text{mJy}$, and 37% of candidates with $S_{1.4 \text{GHz}} > 10 \text{mJy}$ are QSOs with $z > 3.6$. The surface density of $E < 18.8$, $S_{1.4 \text{GHz}} > 1 \text{mJy}$, $z > 4$ QSOs is $0.003 \text{deg}^{-2}$. This is currently the only well-defined sample of radio-loud QSOs at $z \approx 4$ selected independently of radio spectral index. The QSOs are highly luminous in the optical (8 have $M_B < -28$, $q_0 = 0.5$, $H_0 = 50 \text{km} \text{s}^{-1} \text{Mpc}^{-1}$). The SEDs are as varied as those seen in optical searches for high-redshift QSOs, but the fraction of objects with weak (strongly self-absorbed) Lyα emission is marginally higher (3 out of 18) than for high-redshift QSOs from SDSS (5 out of 96).