$$\lim_{x\to 1-0}\frac{x+2}{2x^2-3x+1}=\lim_{x\to 1-0}\frac{x+2}{(2x-1)(x-1)}=\left(\lim_{x\to 1-0}\frac{x+2}{2x-1}\right)\left(\lim_{x\to 1-0}\frac{1}{x-1}\right)=$$

$$=\left(\frac{1+2}{2-1}\right)\left(\lim_{x\to 1-0}\frac{1}{x-1}\right)=3\left(\lim_{x\to 1-0}\frac{1}{x-1}\right)=3(-\infty)=-\infty$$