$$
2 \log _{3} 6-\log _{3} 4=\frac{2(\log (2)+\log (3))}{\log (3)}-\frac{2 \log (2)}{\log (3)}=-\frac{\log (4)-2 \log (6)}{\log (3)}=\frac{\log (9)}{\log (3)}=2
$$

