Hole cleaning is ~~one of~~a major consideration~~s~~ for~~on~~ both the design~~,~~ and ~~a~~ execution of drilling operation's. In particular, ~~Especially~~ in well's ~~that~~ having a high~~-~~ inclination, ~~if~~ the fluid velocity is ~~lowest~~lower tha~~e~~n a critical value; a stationary bed is developed ~~makes~~, which may cause~~s~~ several problems, such as a high~~er~~ probability of ~~stuck~~ a pipe getting stuck, high ~~-~~drag, and high~~er~~ hydraulic requirements~~, etc.~~, if not removed properly ~~not~~ [1~~–~~5]. ~~In order t~~To ~~clear~~ avoid such problems, ~~generated~~ any cuttings generated will have t~~o~~ be ~~taken out~~removed from the wellbore ~~through help of~~using a drilling fluid. Factors that influence~~ing~~ cutting transport include~~s~~ ~~drilling fluid~~the flow rate, ~~drilling fluid~~ visco~~s~~ity, ~~drilling fluid~~ weight, and ~~; drilling fluid~~ type of drilling fluid, as well as the~~;~~ hole size, rotational speed, eccentricity, penetration-rate, and cutting size. Efficient cutting transport ~~are~~ is presume~~d~~ to be achieved when the pump~~-~~ flow ~~–~~rate ~~above~~ exceeds a critical ~~flow rate~~value. An inadequate pump~~-~~flow rate may ~~bring~~ cause cuttings to fall back to the bottom of the hole. In inclined ~~highly~~ vertical and horizontal wells, cutting beds occur frequently, i.e., ~~fall back~~ back-fallen cuttings that pile ~~up~~ on~~in~~ the surface of the ~~a~~ wellbore.

~~A lot of~~ Several cutting~~-~~transportation model's have been~~ing~~ developed. ~~Nowadays, it was common to recognize a t~~Two ~~main~~ common approaches~~:~~ include an empirical approach~~,~~ and a~~n~~ mechanistic approach [6]. However, ~~these~~ this study employs~~ed~~ three models~~,~~ developed through an empirical approach, i.e., Rudi~~–~~Shindu's model [7], Hopkins' model [8], and Tobenna's model [9]. In 1995, Hopkins listed all variables ~~that is~~ required to~~o~~ determine the minimum flowing rate. ~~After several year,~~Several years later, Rudi–Shindu introduced the slip velocity~~,~~ and correction factors for the ~~to~~ drilling~~-~~fluid weight~~,~~ and ~~the~~ for the angular~~le~~ inclination. Tobe~~e~~nna developed a model in 2010 to~~for~~ calculate the critical flow rate~~ing~~ for deviated wells based ~~to~~ on Bern~~–~~Lou's method. The models ~~was~~ are compared to case-study wells. ~~2 examples~~Two exemplary wells that mimicked~~ing~~ operational conditions are considered.

Comment [A1]: At this instance, drilling operations in a general sense are being referred to, rather than to a specific operation, and so an article is not needed. Please also note that the indefinite article "an" should be used when followed by a vowel.

Comment [A2]: In a list starting with "such as" or "including," the use of "etc" and "and so on" is redundant.

Comment [A3]: Note that hyphenation is used when words form compound adjectives.

Comment [A4]: This word has been edited to maintain consistency.