

When a parameter of the steroid profile indicates a need to further study, its $^{13}\text{C}/^{12}\text{C}$ value expressed in delta units per mil ($\delta\text{‰}$) or that of its metabolites will be measured and compared to that of urinary reference steroids within the sample not affected by administration. Depending upon the nature of the endogenous steroid suspected to have been administered, the metabolites analysed could be ... androsterone, etiocholanolone, the androstane diols ... while the urinary reference steroid usually analysed by the Laboratories is one of, pregnanediol ... or 11-ketoetiocholanolone.”

Here, the French Lab (LNDD) that analyzed the Landis “A” and “B” samples tested for and calculated the $\delta\text{‰}$ values for the following testosterone metabolites that are affected by exogenous testosterone administration: androsterone, etiocholanolone, and the androstane diols (5α -Androstane diol³ and 5β -Androstane diol⁴). LNDD also tested for and calculated the $\delta\text{‰}$ values for the following testosterone metabolites that are not affected by exogenous testosterone administration: pregnanediol (specifically, 5β -pregnanediol⁵) and 11-ketoetiocholanolone⁶. Without conceding the accuracy of the data, LNDD calculated the following values, expressed as corrected and uncorrected values:

For the “A” sample [see Document package, p. USADA 0185]:

	True Value	Corrected Value
Androsterone	-27.71	-25.05
Etiocholanolone	-26.43	-23.63
5α Adiol	-32.12	-27.72
5β Adiol	-28.82	-23.73

³ Also referred to as 5α Adiol.

⁴ Also referred to as 5β Adiol.

⁵ Also referred to as 5β Pdiol.

⁶ Also referred to as 11-Ketoetio.