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INTERPRETATION OF SELENIUM ANALYSES

Simple and exact guidelines, applicable to all animals and situations, cannot be devised. The following is offered as suggestive only. It should be used with caution after consideration of any clinical signs or other evidence.

For cattle and horses, the following may be useful in diagnosing chronic selenosis (alkali disease).

<u>Selenium content (ppm)</u>		<u>Comments</u>
<u>Hair*</u>	<u>Blood</u>	
Under 5.0	Under 1.0	No likelihood of toxicity
5.0 - 10.0	1.0 - 2.0	Borderline toxicity problem.
Over 10.0	Over 2.0	Selenium intake excessive. Potential toxicity.

*Hair from side or flank, not from mane or tail.

For other animals, including man, or for other specimens, values within the ranges shown below suggest no problem with either a deficiency or an excess of selenium, but the greater the deviation from the range the greater the likelihood of a selenium related problem.

<u>Sample or Specimen</u>	<u>ppm Selenium</u> (Undried basis except silage)
Feeds	0.1 – 5.0
Foods	0.1 – 2.0
Blood	0.1 – 0.6
Plasma or serum	0.05 – 0.4
Liver	0.1 – 3.0
Kidney	0.2 – 3.0
Hair	0.01 – 0.20*

*Or 10 – 300 micrograms per 24 hours
ppm – parts per million or micrograms per gram or ml.