COMPLETE BLOOD COUNT AND BLOOD CHEMISTRY TESTS:

The following is a brief summary of blood tests offered. The descriptions are not meant to be all inclusive. Each parameter is evaluated in light of the other blood values to produce an overall picture of your pet's health. Profiles may be tailored to fit your pet's needs.

<u>CBC w/diff</u>: is a complete blood count of red and white cells and a differentiation of the major population of white cells. This provides detailed information about possible anemia and hemoglobin content and can point to an underlying bacterial or viral infection that may compromise your pet's health.

PLATELET COUNT: tells the veterinarian if specific blood clotting elements are present in sufficient numbers,

TOTAL PROTEIN: measures the blood fluid protein content. Low levels may indicate failure of protein production (usually a liver problem) or a protein loss (usually a digestive or kidney problem). High levels may indicate dehydration or, in rare cases a protein-producing tumor.

<u>BUN</u>: (blood urea nitrogen) reflects failure of adequate protein intake or assimilation if lowered and reflects dehydration and in some cases kidney problems if elevated.

<u>CREATININE</u>: is generally a good specific indicator of kidney function. All anesthetics depress blood supply to all vital organs to various degrees and some are directly cleared from the blood through the kidneys. Adequate kidney function is vital to your pet's health and recovery.

<u>GLUCOSE</u>: is the primary circulating sugar in the blood stream. The brain requires adequate circulating levels to function properly. Small animals are especially at risk of developing hypoglycemia (low blood sugar) when fasting and diabetics will have significantly elevated blood sugar levels.

<u>ALT</u>: (Alanine transferase) is a liver enzyme. An elevated level may indicate an ongoing liver problem or problem in other organs affecting the liver.

<u>ALKP</u>: (Alkaline phosphatase) is produced by the cells in the bile ducts and gall bladder. It also originates from bone and muscle. It is elevated in growing puppies and kittens, and may indicate liver disease, steroid anti-inflammatory use or Cushings's syndrome.

<u>ALB</u>: (Albumin) is the primary blood protein. Low levels indicate failure of production (liver) or loss (kidney or GI). High levels indicate dehydration.

<u>AMYL</u>: (Amylase) and <u>LIP</u> (Lipase) are produced primarily by the pancreas, the gland responsible for most of the digestive enzymes that break down food in the intestines. Elevations can indicate pancreatic or kidney disease.

<u>CA</u>: (Calcium) along with phosphorous is what makes up the main structure of bones. Elevation of blood calcium can indicate disease of the parathyroid glands or kidneys and is an indicator of certain types of tumors. Low calcium can lead to titanic muscle spasms.

PHOS: (Phosphorous) elevation frequently indicates kidney disease. The level of this compound is an important prognostic indicator of the state of the disease.

TBIL: (Total Bilirubin) is a normal breakdown product of blood hemoglobin and is found in bile. Bilirubin levels change with anemia or bile duct disease.

CHOL and TG: (Cholesterol and Triglycerides) levels can be elevated in a variety of disorders including genetic disease, liver and kidney disease and hypothyroidism (dogs).

ELECTROLYTES (Na, K, Cl): Sodium, Potassium, and Chloride are vital components for all tissue functions. Significant abnormalities in these levels can indicate life-threatening processes. Changes in their values in relation to each other and with regard to the other blood chemistry values is very important in vomiting, diarrhea, dehydration and heart symptoms