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| FLUID ANALYSIS | NORMAL | NON-INFLAMMATORY | INFLAMMATORY | INFECTIOUS | HEMORHAGIC |
| GROSS APPEARANCE | Colorless to light yellow, transparent. May be blood-tinged if blood-contaminated during collection. | Transparent/Straw yellow | Transparent/opaque  yellow | Opaque  Pus mixed | Opaque/red-brown |
| WBCs COUNT | 0-150mL | <3000mL | 3000-75000mL | 50,000-200,000mL | 50-10,000mL |
| PMNs | <25% | <30% | >50% | >90% | <50% |
| RED BLOOD CELL COUNT | This should be none unless there is blood contamination or hemorrhage (uncommon). In a freshly prepared smear of fluid, erythrophages would support recent hemorrhage into the joint (erythrophagia can be an artifact of storage, e.g. mailed-in samples). Hemosiderophages and hemtoidin crystals can be seen but are uncommon in joints. | ABSENT | ABSENT | PRESENT | PRESENT |
| TOTAL PROTEIN | This is usually <2.5 g/dL, although fluid from normal horses has a protein as low as 1.5 g/dL, so mild increases in protein may be missed with a refractometer. | 2.5-3 g/dL | 3-4 g/dL | 4-5 g/dL | 4-6 g/dL |
| VISCOSITY | A strand of 2 cm should form between two objects (High). Decreased viscosity is seen with degenerative joint disease, trauma, inflammatory joint disease, hydroarthrosis, hemarthrosis and hemodilution. | HIGH | LOW | MIXED | (VARIABLE) LOW |

SYNOVIAL FLUID ANALYSIS