

MIAMI METROZOO MEDICAL RECORD

SPECIES ELEPHANT, ASIAN "NELLIE" ACQUISITION 12/5/00
 OR BIRTH est 1969

ACCES.# YOM072 stbk#84 SEX 0.1 DAM/SIRE wildborn

total digits) - got some good views and some that need to be re-done [kvp=44, mas=1.6]. COMT/Nellie getting anxious and had been cooperating for quite a while for these procedures - stopped with these for now, will plan to continue at another date. - CLM

01/30/04 XRAY/completed the series of digit views for both hindfeet; took several front foot xrays but having troubles with positioning and with xray processor [kvp48, mas=1.6]. Will continue again at a later date. - CLM

02/13/04 XRAY/completed views of each front foot digit (10 digits total in front). This completes the baselines views of each of Nellie's feet. - CLM

06/08/04 ANNUAL TB TESTING: PROC/collected 40-50ml of "trunk wash" sample (after overnight water withholding on 6/6 and 6/7 and two hour withholding on 6/8; 60ml sterile saline were placed in each trunk) for mycobacterial culture on each of three consecutive mornings (6/6, 6/7 & today 6/8); all samples were immediately frozen, and shipped overnight on ice to NVSL, as per USDA-mandated-protocol. All elephants were well-behaved for collection routine. BLOOD/CBC, chem. screen, save serum; blood taken for annual check. SMM

06/09/04 Dr. Dennis Schmitt at Metrozoo today to perform ultrasonographic assessments of each elephant's reproductive tract. Nellie has numerous leiomyomas/fibroid cysts within the uterine walls, and although she cycles regularly, is unlikely to be able to carry a pregnancy. Written report will be added to her record when received. - CLM

07/09/04 Updating vaccinations on elephants this year. VAX/tetanus toxoid 2.0ml IM (left caudal thigh). - CLM

07/13/04 WT=9630 lbs.

08/12/04 WT=9715 lbs.

09/10/04 WT=9506 lbs.

10/12/04 WT=9674 lbs.

11/16/04 WT=9620 lbs.

11/30/04 Just a little "off" the past few days: off-feed on 11/28, but ate normally last night; sluggish to respond to commands and not moving around much on paddock; "squeaking" and behaving OK in barn, doesn't seem to be reluctant to eat and allows keepers to manipulate her teeth without apparent discomfort; posture normal; feces normal in appearance but a little less volume, presumably due to decreased intake; normal urine on floor in barn; nothing specific to indicate what the problem is. BLOOD/CBC (in-house); chem screen, protein electrophoresis; save serum. Keepers will try to get clean urine sample. Watch closely. - CLM

12/02/04 Seems to be doing OK, more or less returning to normal for her. - CLM

12/16/04 WT=9400 lbs.

01/26/05 WT=9340 lbs. COMT/her "diet" is working.

02/01/05 BLOOD/~5ml whole blood in EDTA collected and sent to USDI Forensics Lab (Ashland, OR) per their request for DNA samples of Asian elephants. - CLM

02/11/05 Keepers found a large-finger-like piece of tooth - looks like a small tusk - out on Nellie's paddock in the dirt - appears to be a

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crown-part that is polished and was "in wear" and a longer root portion that is very irregular and may be fractured off at the base; smells foul, but more like feces than like exudate; not sure how long it's been out there. Keepers checked Nellie's mouth and report that she has a left tusk of similar size/diameter to the lost & found one, and that her right tusk sulcus is "empty" and she has packed dirt in it but is not sensitive about letting them probe in it. Spoke to USDI Forensics Lab personnel and plan to send this tooth piece to them to see if they can retrieve DNA from it and match it to Nellie's blood for individual ID & confirmation (test their "science" and confirm our suspicions). - CLM

02/16/05 Inspected empty right tusk sulcus today while keepers had Nellie in restraint chute - fairly tight opening but smooth and no obvious exudate (but has been packing it with dirt); couldn't reach with finger back to the full recess of "hole", and it does have a foul odor, but Nellie is not sensitive about it at all. Probably should granulate and heal OK (may have been doing this for sometime already anyway), but dispensed some chlorhexidene solution for keepers to dilute 5ml in 60ml water and use as a last rinse once daily or every other day when they hose the dirt out of the sulcus, until they think healing has progressed much further along or she stops packing it with dirt. Perhaps, this incident relates to the episode of being "off" that Nellie showed last November (?). - CLM

05/11/05 Nellie reportedly had soft stool 4-5 days ago. Today she is "off" - less feces than normal from overnight, and did not eat well yesterday. Also observed her head pressing and leaning her body against the bars. Did not eat on exhibit. OBS/figety but quiet, somewhat depressed; laying trunk on ground; teeth look ok; mucous membranes pink; eyes clear; abdomen does not appear noticeably bloated; Temp= 98.5 (in fecal bolus). BLOOD/CBC, chem screen, SPEP. URINALYSIS/mid-stream catch; USG 1.010, otherwise unremarkable. RX/flunixin meglumine 2.5g IM right thigh (late afternoon) - did not seem to mind injection. COMT/colicky; may be sand impaction, other abnormal product consumed, toxicity, etc. Recommend entice water consumption; offer bran with mineral oil; high-water content browse (e.g. banana). Monitor input and output.
 SMM

05/12/05 Did not eat overnight or drink much; did not pass much feces. Acting a little better, not pressing against bars, but did posture a few times on paddock. Keepers were able to get her to drink mineral oil mixed with water; also offered Gatorade this morning - drank 12 gallons. Ate some banana browse but still no hay or produce. URINALYSIS/USG 1.009, rest is normal. COMT/surprised that urine is still isosthenuric - Nellie may be drinking on the paddock when no one is watching, unless there is a problem with her kidneys as well. Bloodwork results showed relative monocytosis (46%); chemistry unremarkable (slightly elevated globulins, which she tends to have had in the past as well; may be normal for her). Will continue flunixin meglumine and enticing her to drink water. RX/flunixin meglumine 2.25g (lost 10% of 2.5g dose) IM/SQ left flank - seemed to resent injection today.

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- 05/13/05 Acting still a little better today; still did not eat any hay/grain/bran from overnight, and little feces, though did pass sand and rocks in a few boluses. Did not drink much overnight from drinker. Did eat apples and carrots this morning, and more browse on the paddock. More active and responding better. RX/flunixin meglumine 2.5g IM. ENEMA/water from hose, administered by keeper; no abnormalities during palpation; hope that enema will loosen up any feces upstream that may be impacted, and perhaps help with overall hydration of the elephant, if she retains any fluid. SMM
- 05/14/05 Apparently acting still better today; consumed most of hay offered (reduced quantity) and some bran, a few watermelons, and Gatorade. More fecal matter in pen in the morning. No posturing/leaning/head pressing observed. Ate produce and browse, and some hay on exhibit. Will discontinue injections unless becomes uncomfortable again. SMM
- 05/15/05 Still feeling better today; ate most of hay and bran/sweet feed offered last night, and some grain. Appears brighter, even vocalizing some. Recommend keep giving bran (can mix with mineral oil; no sweet feed tonight); entice to drink, etc. SMM
- 05/16/05 Ate grain last night but not much hay. Some dense fecal boluses in pen. Behavior normal this morning. Received Gatorade, bran, and mineral oil. Dispensed additional mineral oil; equine psyllium pellets ~1 lb SID x 3 days (had obtained previously for a rhino); rec. offer one flake of alfalfa hay; continue bran/mineral oil. SMM
- 05/17/05 Ate better overnight - most of hay, bran and grain, produce. Drank more water from drinker overnight as well (~1/2 the volume). WT=8760 lbs. SMM
- 05/21/05 Appears to have finally returned to normal - eating 100% of normal diet (plus bran SID), and defecated normal amounts/normal consistency; behavior normal. Consider case resolved; discontinue bran. SMM
- 06/07/05 Annual TB testing routine starts today. BLOOD/CBC, chem screen; serum saved for routine hormonal monitoring. COMT/Nellie appears to be in good health and condition right now and seems to be fully recovered from her previous "illness"; however she has developed two large firm swellings (one on each thigh) from the previous Banamine injections - not hot, or particularly tender to touch, probable muscle necrosis/hemorrhage from injections, with resulting fibrosis or granuloma formation (watch only). - CLM
- 06/09/05 ANNUAL TB TESTING: PROC/collected 40-50ml (60ml saline total placed down into trunk) of "trunk wash" sample (after overnight water withholding) for mycobacterial culture on each of three consecutive mornings (6/7, 6/8, & today) - frozen samples from 6/7 & 8, and partially frozen sample from 6/9 sent overnight to NVSL as per USDA-mandated-protocol (well-behaved for collection routine). - CLM
- 06/12/05 WT=9212 lbs. SMM
- 06/21/05 WT=9064 lbs.
- 06/27/05 WT=9030 lbs. SMM
- 07/05/05 WT=8978 lbs. SMM

MIAMI METROZOO MEDICAL RECORD

5

SPECIES ELEPHANT, ASIAN "NELLIE" ACQUISITION 12/5/00
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ACCES.# Y0M072 stbk#84 SEX 0.1 DAM/SIRE wildborn

- 09/01/05 Has developed a "hole" in the center of her nail on her 2nd digit on the LF foot; this hole appears to connect by fistula to a deeper crevice under the foot at the junction of the nail and sole; there is mild, warm swelling just above the cuticle on this digit as well, but Nellie is not obviously lame. PROC/finished paring out and connecting the two holes between the nail-center and the sole - smells "thrushy" but no purulent exudate or other malodor noted. RX/keepers to soak Nellie's foot for 10 min's twice daily in dilute chlorhexidine, and then apply Kopertox to the site. - CLM
- 09/08/05 Serum samples sent from each elephant to Disney for TB-testing by new research methods: MAPIA and RT - all negative on all elephants, per Michelle Miller. - CLM
- 09/09/05 Toenail is improved - drier and looking OK; still slightly "puffy" around coronary band/cuticle but not hot and not obviously tender. Discontinue the twice daily chlorhexidene soaks, but continue Koppertox on nail lesion several times a week, and watch carefully for any signs of re-emerging problem at cuticle edge. - CLM
- 01/10/06 WT=9215 lbs.
- 06/05/06 WT=8738 lbs.
- 06/14/06 PROC/collected 40-50ml (60ml saline total placed down into trunk) of "trunk wash" sample (after a few hours of water withholding) for mycobacterial culture on each of three consecutive mornings (6/12, 6/13, & today) - frozen samples from 6/12 & 13, and partially frozen sample from 6/14 sent overnight to NVSL as per USDA-mandated-protocol (very well-behaved with conditioned trunk-wash procedures). BLOOD/CBC, chem screen sent to lab on 6/13, along with routine blood collection for hormone assays; serum saved for possible MAPIA testing again, in the future. COMT/Nellie has had some chronic problems with the inflamed cuticle and "gravel" under the nail on her 2nd digit, LF foot, but at this time, the cuticle appears normal and healthy and the toenail has grown out very well and is nearly fully back to normal (small defect at ground surface still remains to finish growing out). Bloodwork results from yesterday reveal a mild chronic anemia (has been borderline for a while) with a PCV=26-29%; not sure as to cause of this - will look into an iron-vitamin supplement (equine) to add to diet for a few months and see if this improves the situation. - CLM
- 06/21/06 Vet out-of-town, vet tech.(J.Shaw)relaying messages about case by phone - apparently Nellie had her distal tail bitten by Dahlip during some aggressive advances for breeding out on paddock (yesterday?). Nellie's tail is reportedly swollen and firm about 6-8" from tip; reportedly not painful to touch; no open wound noted. Vet suggested that nothing special need be done, but watch only. - CLM
- 06/28/06 Keepers concerned about Nellie's tail, and consulting vet (Dr.Franklin) on-site checking another animal; now reportedly *does* have an open ("yellowish", 3" long) wound. Dr. Franklin prescribed daily to twice daily scrub of wound with Nolvasan and then application of Alu-spray. - CLM
- 07/03/06 Vet tech reports that wound on tail is "resolving". - CLM
- 07/05/06 Nellie reportedly "off feed" for last 2 days, with some diarrhea;

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seems better today, but has not defecated yet. BLOOD/CBC, chem screen (blood collected per routine draw today anyway); still anemic with PCV=27%. - CLM

07/07/06 Vet back on duty at zoo: OBS/irregular, chronic, open wound with epithelializing edges and granulation bed (typical yellowish, thick dschg for elephant); distal tail - left-lateral and ventral aspects - slightly spiral and ~8-10cm long and ~3-4cm wide; some circumferential swelling of tail at this site and obvious sensitivity but allows handling. COMT/asked keepers to continue BID scrubs with chlorhexidene to clean and debride, then apply Alu-spray provided by Dr. Franklin as previously prescribed; suggested that if keepers have time to hot-soak tail tip in bucket of water once daily, this may offer some pain relief and improve circulation/healing time slightly; meanwhile problems with soft stool, then lack of feces and off-feed over last few days are now reportedly resolved and Nellie is behaving normally other than regards her tail. Acquired iron supplement to try to address Nellie's anemia. RX/begin "Horse Health Red Cell" liquid supplement - 4oz (1200mg iron) daily on grain for next several months to see if this will improve PCV. - CLM

07/15/06 Having another round of loose stools and lethargy - not eating much hay, but consuming grain & produce and is responsive and active in barn during routine. FECAL CULTURE. Keepers will offer wheat bran in diet for a few days, and otherwise watch only. - CLM

07/17/06 Improving gradually - returning to more normal appetite and fecal consistency. - CLM

07/18/06 Fecal culture came back positive for Campylobacter jejuni - not sure if this is truly causing her problems, but will go ahead and treat her and Dahlip with a short course of a'biotics to see if this will resolve her recurrent issues. RX/trimethoprim-sulfa 134.4 Gms PO BID, begin tomorrow, for 10 days. - CLM

07/31/06 Has finished off her course of TMPs without problems; Dahlip was more difficult to medicate and was hit-and-miss with his drug consumption. Meanwhile, recheck of Nellie's healing tail wound reveals some generalized swelling left (probably semi-permanent lump in tail now), but wound is reduced by 3/4 in size and is nearly completely sealed - small linear area of granulation tissue still left raw. Keepers to continue to clean with chlorhexidene once daily 'til fully healed over. - CLM

08/19/06 **WT=8872 lbs.**

10/10/06 BLOOD/CBC, chem screen (recheck); serum & EDTA-whole blood for elephant herpes-virus study; and serum banked (weekly) per SSP. - CLM

10/11/06 Nellie's hematocrit is in the low to mid-30's again, so iron supplementation may be helping - will plan to continue this indefinitely; her globulin values are still a bit out of sorts with an elevated beta globulin compared with Dahlip's; not sure whether to interpret this as very important at this point. Will just watch for now. - CLM

10/18/06 **WT=8490 lbs.**

10/21/06 Keepers reported that Nellie has had at least two occasions in the

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last 10 days or so on which they noted her dribbling urine; they had been asked to watch her closely to be sure she can void a full stream normally, and to try to catch a sample to check for cystitis or other problems, but up until today they had not directly observed her urinating. Today they noted a full-stream urination and were able to collect a sample from the puddle on the paddock. URINALYSIS/sp grav=1.010, no abN's present. COMT/keepers have not observed any urine dribbling since they've been watching for it. - CLM

11/14/06 BLOOD/EDTA-whole blood collected for herpesvirus study - took small sample to recheck anemia status: PCV=34%, T.S.=8.7gm/dl. COMT/seems to be doing OK now, will keep on iron supplement indefinitely. - CLM

12/08/06 Apparently went in moat overnight, also managed to climb back out, but from the looks of the paddock, she tried several places before succeeding in climbing out. This morning, Nellie has a few minor abrasions on her forehead and left stifle region, but is walking normally; keepers checked her feet and found no wounds of foreign bodies; Nellie's worst injuries are to her trunk - she has significant abrasions and minor lacerations on the ventral surface of the distal trunk with some mild bloody exudate and swelling, and she has a laceration/abrasion on the septum just inside her nares on her trunk - no active bleeding, but looks like "road rash"-type injuries and trunk is very obviously sore: Nellie is reluctant to allow trunk to be examined or cleaned (but did relent with some patience) and is also reluctant (but capable) to pick up food with her trunk (has to hold items against the abraded areas on the inside of her "curled" trunk. PROC/gently washed distal trunk lesions with betadine and running water and picked off some plant debris and dirt; applied light coating of generic Panalog ointment (Animax) to try to relieve swelling and "sting". RX/flunixin meglumine paste 3000mg PO BID today. Keepers will hand-feed as necessary today, and try to clean and topically medicate trunk again this afternoon; will re-evaluate swelling and wound status tomorrow before deciding to continue flunixin or some other NSAID, or go with topical salves only, plus-minus antibiotics. - CLM

12/09/06 Reportedly doing OK - some swelling of wounds on trunk, but no lameness, and is managing to drink and eat OK. Will not continue NSAID's then, and only treat wounds with topicals. RX/discontinue Animax ointment on wounds now, and switch to silver sulfadiazine cream applied to trunk lesions after cleaning BID. - CLM

12/11/06 Trunk and nasal septal lesions more defined as lacerations now, with some dirt-coated rough surfaces and a small amount of exudate from the largest, deepest wound in the curve of the trunk tip; septum in tact inside tip of trunk but has long laceration on either side (at slightly different angles); some swelling of each, but all else looks OK. Will most likely take some time to heal, but doesn't look like it's holding her back from eating or drinking much now. RX/continue silvadene cream on deepest external trunk laceration after cleaning with chlorhexidene BID; watch septal wounds but leave alone to heal for now (rather than try cleaning

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and applying anything to nasal mucosa up nares). - CLM

- 12/13/06 Trunk wound a bit exudative but healing as expected so far. - CLM
- 12/19/06 In-house serum BUN=17.8mg/dl and creatinine=1.60mg/dl today; PCV=28% and T.S.=8.1gm/dl. (there seems to be a lot of fluctuations here, and I'm no longer sure whether to interpret this anemia as responding or not). Will recheck from time to time to see if there are any discernible trends, and continue to supplement with iron for now. Meanwhile, Nellie's trunk wounds appear to be healing as expected without complications. - CLM
- 01/09/07 BLOOD/in-house PCV=30%, T.S.=9.0gm/dl, BUN=17.0mg/dl, and creatinine=1.63mg/dl - on today's routine collection.
- 01/10/07 Trunk has continued to heal well, with only a small residual area to be epithelialized and a minimal scar on the outside surface and some scarring and hyperplastic edges of mucosa along the trunk septal wounds. Meanwhile, keepers discovered a firm "knot" under the skin on the craniolateral aspect of her left carpus; ~5-6cm single firm nodular swelling under the skin with no obvious heat or pain, somewhat mobile but not readily undermined due to skin thickness; cannot tell if it is associated with joint or just in that area. Does not seem to be bothering Nellie right now, keepers think it may be associated with trauma while playing with a new dead-tree-stump she was given a couple of days ago. Watch to see if lesion enlarges or becomes sensitive. - CLM
- 03/06/07 Keepers report that Nellie did not eat well overnight and seems somewhat lethargic today with some sloppy stool. FECAL CULTURE. BLOOD/CBC, chem screen; save serum. Watch only for now, still eating grain & produce and alert. - CLM
- 03/07/07 About the same, still "off" but not worse, still some sloppy feces. Bloodwork from yesterday has some very bizarre results which don't really seem to be "real" and don't match some of the in-house values on the same sample; plan to re-submit another sample tomorrow, before considering any further action. - CLM
- 03/08/07 Not eating much hay or grain today and still seems depressed to keepers; still has some soft feces, but some normal feces also. RX/begin trimethoprim-sulfa 134.4 Gms PO BID for next 5-7 days. Repeat BLOOD/CBC, chem screen. Fecal culture results grew only normal enteric flora - no pathogens found. - CLM
- 03/09/07 Seems to be feeling better today; drinking electrolyte solution and eating better in general. Bloodwork submitted today is much more in line with previous results and seems to be essentially normal (except for high protein which she has had for a long time). RX/continuing TMPS as per 3/8. - CLM
- 03/15/07 RX/finishing up course of TMPS. Nellie is behaving normally now and feces seems to be back to normal as well. - CLM

Medical History Report - Summary for Individual Specimen
MIAMI METROZOO

- page 1 -

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ELEPHAS MAXIMUS (no subsp)
Asiatic elephant
Name: Nellie

Sex: Female
Age: 38Y Est.

Acc. #: YOM072
Birth: 1.Jan.1969

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.....2005....

26.Jan
28.Jan Parasitology examination: (ROUTINE EXAMINATION) Fecal sample. Weight: 4238 Kg (9341 Lb)
NO PARASITES SEEN

22.Mar Parasitology examination: (ROUTINE EXAMINATION) Fecal sample.
NO PARASITES SEEN

11.May Blood sample: (EDTA) Hematology/Chemistry/Serology results.
WBC:11.10 *10³/UL; HCT: 44.0%; BUN:9 MG/DL;
Parasitology examination: (DIAGNOSTIC EXAMINATION) Fecal sample.
NO PARASITES SEEN/OCCULT BLOOD - NEGATIVE

13.May Clinical note recorded. (SMM)

17.May

24.May Parasitology examination: (ROUTINE EXAMINATION) Fecal sample. Weight: 3975 Kg (8761 Lb)
NO PARASITES SEEN

7.Jun Blood sample: (EDTA) Hematology/Chemistry/Serology results.
WBC:15.90 *10³/UL; HCT: 31.0%; BUN:14 MG/DL;

12.Jun
14.Jun Parasitology examination: (DIAGNOSTIC EXAMINATION) Fecal sample. Weight: 4180 Kg (9213 Lb)
NO PARASITES SEEN/OCCULT BLOOD - NEGATIVE

21.Jun

27.Jun

Weight: 4113 Kg (9065 Lb)
Weight: 4097 Kg (9030 Lb)

5.Jul

26.Jul Parasitology examination: (ROUTINE EXAMINATION) Fecal sample. Weight: 4074 Kg (8979 Lb)
NO PARASITES SEEN

28.Sep Parasitology examination: (ROUTINE EXAMINATION) Fecal sample.
NO PARASITES SEEN

31.Oct
Weight: 4065 Kg (8959 Lb)

21.Nov Parasitology examination: (ROUTINE EXAMINATION) Fecal sample.
NO PARASITES SEEN

.....2006....

10.Jan
23.Jan Parasitology examination: (ROUTINE EXAMINATION) Fecal sample. Weight: 4181 Kg (9215 Lb)
NO PARASITES SEEN

3.Apr Parasitology examination: (ROUTINE EXAMINATION) Fecal sample.

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MIAMI METROZOO

- page 2 -

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ELEPHAS MAXIMUS (no subsp)
Asiatic elephant
Name: Nellie

Sex: Female
Age: 38Y Est.

Acc. #: Y0M072
Birth: 1.Jan.1969

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.....2006....

- 3.Apr NO PARASITES SEEN
- 22.May Parasitology examination: (ROUTINE EXAMINATION) Fecal sample.
NO PARASITES SEEN
- 5.Jun Weight: 3965 Kg (8739 Lb)
- 13.Jun Blood sample: (EDTA) Hematology/Chemistry/Serology results.
WBC:11.98 *10³/UL; HCT: 29.0%; BUN:10 MG/DL;
- 5.Jul Blood sample: (EDTA) Hematology/Chemistry/Serology results.
WBC:10.26 *10³/UL; HCT: 27.0%; BUN:9 MG/DL;
Parasitology examination: (DIAGNOSTIC EXAMINATION) Fecal sample.
NO PARASITES SEEN
- 25.Jul Parasitology examination: (ROUTINE EXAMINATION) Fecal sample.
NO PARASITES SEEN
- 19.Aug Weight: 4025 Kg (8871 Lb)
- 26.Sep Parasitology examination: (ROUTINE EXAMINATION) Fecal sample.
NO PARASITES SEEN
- 10.Oct Blood sample: (EDTA) Hematology/Chemistry/Serology results.
WBC:14.10 *10³/UL; HCT: 36.0%; BUN:10 MG/DL;
- 18.Oct Weight: 3852 Kg (8490 Lb)
- 21.Oct Clinical note recorded. (CLM)
- 24.Oct Clinical note recorded. (CLM)
- 14.Nov Blood sample: (EDTA) Hematology/Chemistry/Serology results.
HCT: 34.0%;
Parasitology examination: (ROUTINE EXAMINATION) Fecal sample.
NO PARASITES SEEN
- 19.Dec Blood sample: (EDTA) Hematology/Chemistry/Serology results.
HCT: 28.0%; BUN:18 MG/DL;
Hemolysis

.....2007....

- 9.Jan Blood sample: (EDTA) (15:45.0) Hematology/Chemistry/Serology results.
HCT: 30.0%; BUN:17 MG/DL;
- 23.Jan Parasitology examination: (ROUTINE EXAMINATION) Fecal sample.
NO PARASITES SEEN
- 6.Feb Blood sample: (EDTA) Hematology/Chemistry/Serology results.

Medical History Report - Summary for Individual Specimen
MIAMI METROZOO

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<i>ELEPHAS MAXIMUS</i> (no subsp)	Sex: Female	Acc. #: Y0M072
Asiatic elephant	Age: 38Y Est.	Birth: 1.Jan.1969
Name: Nellie		

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.....2007...

- 6.Feb HCT: 30.0%; BUN:21 MG/DL;
- 6.Mar Parasitology examination: (DIAGNOSTIC EXAMINATION) Fecal sample.
NO PARASITES SEEN
- 8.Mar Blood sample: (EDTA) Hematology/Chemistry/Serology results.
WBC:9.84 *10³/UL; HCT: 32.0%; BUN:10 MG/DL;
- 19.Mar Parasitology examination: (ROUTINE EXAMINATION) Fecal sample.
NO PARASITES SEEN

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ELEPHAS MAXIMUS (no subsp)
Asiatic elephant
Name: Nellie

Sex: Female
Age: 38Y Est.

Acc. #: YOM072
Birth: 1.Jan.1969

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Parasitology Examination:

Submission Data >>

Type: Fecal sample
Purpose: ROUTINE EXAMINATION

Sample id.: 2005-0094
Date collected: 28.Jan.2005

Collected from:

From an individual specimen.

Enclosure: 18 - Asi

Examination Data >>

Storage: room temperature
Consistency: formed
Gross appearance: Typical

Date examined: 28.Jan.2005

by: JS

Tests & Results >>

DIRECT MICROSCOPIC EXAMINATION NO PARASITES SEEN
FLOATATION - NA NITRATE NO PARASITES SEEN

Submission Data >>

Type: Fecal sample
Purpose: ROUTINE EXAMINATION

Sample id.: 2005-0396
Date collected: 22.Mar.2005

Collected from:

From an individual specimen.

Enclosure: 18 - Asi

Examination Data >>

Storage: room temperature
Consistency: formed
Gross appearance: Typical

Date examined: 22.Mar.2005

by: JS

Tests & Results >>

DIRECT MICROSCOPIC EXAMINATION NO PARASITES SEEN
FLOATATION - NA NITRATE NO PARASITES SEEN

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ELEPHAS MAXIMUS (no subsp)
Asiatic elephant
Name: Nellie
=====

Sex: Female
Age: 38Y Est.

Acc. #: YOM072
Birth: 1.Jan.1969
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Clinical Note:

<<< Urinalysis >>>

11.May.2005

Laboratory: [X] Miami Metrozoo
[] other

Date collected:05/11/05
Date analysed: 05/11/05

Analysis by:JS

Sample collection:

- [] floor
[X] mid-stream
[] catheter
[] cystocentesis

Sample storage:

- [X] room temperature
[] refrigerated
[] frozen

Color:pale yellow
Specific Gravity:1.010
cloudy

Appearance: [X] clear
[] hazy / slightly
[] cloudy / turbid

Leukocytes:
Nitrite:
Urobilinogen:normal
Protein:trace
pH:8.5
Blood:neg
Ketones:neg
Bilirubin:neg
Glucose:neg

RBC/hpf:
WBC/hpf:
Bacteria/hpf:some
Casts/lpf:
Crystals:

Epithelial cells:few
Mucus:

Comments: off feed, colicky
(SMM)

Clinical Pathology Records - Specimen Report
MIAMI METROZOO

- page 3 -

=====

ELEPHAS MAXIMUS (no subsp)
Asiatic elephant
Name: Nellie

Sex: Female
Age: 38Y Est.

Acc. #: YOM072
Birth: 1.Jan.1969

=====

Collection Information >>

Health Status: Abnormal
Fasting Time: < 8 hours
Activity: Calm
Weight: 4238 Kg on 26.Jan.2005
Manual restraint used.

Date of Collection: 11.May.2005
Time of Collection:
Collected by: RT
Sample Collection Site: EAR VEIN

Hematology >>

Analysis Information >>

Anticoagulant: EDTA
Storage: Refrigerated (<48 hours)
Sample Quality: No quality problems.

Laboratory: U OF MIAMI
Date of Analysis: 12.May.2005
Time of Analysis:
Analysis by:
Automated analysis.

Tests and Results >>

WHITE BLOOD CELL COUNT	11.1		*10 ³ /UL
RED BLOOD CELL COUNT	3.29		*10 ⁶ /UL
HEMOGLOBIN	13.5		GM/DL
HEMATOCRIT	> 44		%
MCV	134		fL
MCH	41.0		uug
MCHC	< 30.7		gm/dL
SEGMENTED NEUTROPHILS	33	(3.663)	% (*10 ³ /UL)
LYMPHOCYTES	21	(2.331)	% (*10 ³ /UL)
MONOCYTES	46	(5.106)	% (*10 ³ /UL)
ESTIMATED PLATELET COUNT	ADEQ		

Comments >>

colicky; off feed

in-house PCV=35

Clinical Pathology Records - Specimen Report
MIAMI METROZOO

ELEPHAS MAXIMUS (no subsp)
Asiatic elephant
Name: Nellie

Sex: Female
Age: 38Y Est.

Acc. #: YOM072
Birth: 1.Jan.1969

Collection Information >>

Health Status: Abnormal
Fasting Time: < 8 hours
Activity: Calm
Weight: 4238 Kg on 26.Jan.2005
Manual restraint used.

Date of Collection: 11.May.2005
Time of Collection:
Collected by: RT
Sample Collection Site: EAR VEIN

Chemistry >>

Analysis Information >>

Chemistry Sample: Serum
Storage: Refrigerated (<48 hours)
Sample Quality: No quality problems.

Laboratory: U OF MIAMI
Date of Analysis: 12.May.2005
Time of Analysis:
Analysis by:
Automated analysis.

Tests and Results >>

GLUCOSE	>	116	MG/DL
BLOOD UREA NITROGEN		9	MG/DL
CREATININE		2.0	MG/DL
BUN/creatinine ratio		4.50	
URIC ACID		<0.2	MG/DL
CALCIUM		10.0	MG/DL
PHOSPHORUS		4.2	MG/DL
calcium/phosphorus ratio		2.38	
SODIUM	>>	147	MEQ/L
POTASSIUM	<<	3.1	MEQ/L
sodium/potassium ratio		47.4	
CHLORIDE	>	96	MEQ/L
anion gap		26.1	
CHOLESTEROL		<45	MG/DL
TRIGLYCERIDE		36	MG/DL
TOTAL PROTEIN (COLORIMETRY)	>	9.2	GM/DL
ALBUMIN (COLORIMETRY)		3.3	GM/DL
GLOBULIN (COLORIMETRY)		5.9	GM/DL
albumin/globulin ratio		0.559	
ASPARTATE AMINOTRANSFERASE		20	IU/L
ALANINE AMINOTRANSFERASE	>	21	IU/L
TOTAL BILIRUBIN		0.3	MG/DL
DIRECT BILIRUBIN		0.0	MG/DL
AMYLASE		772	U/L
ALKALINE PHOSPHATASE	<	76	IU/L
LACTATE DEHYDROGENASE		963	IU/L
CREATINE PHOSPHOKINASE	<	54	IU/L
ALBUMIN (ELECTROPHORESIS)	<<	2.11	GM/DL
ALPHA-1 GLOBULIN (ELECTROPHORESIS)		0.89	GM/DL
ALPHA-2 GLOBULIN (ELECTROPHORESIS)	>>	2.24	GM/DL
BETA GLOBULIN (ELECTROPHORESIS)	>>	3.50	GM/DL

Clinical Pathology Records - Specimen Report
MIAMI METROZOO

=====

<i>ELEPHAS MAXIMUS</i> (no subsp)	Sex: Female	Acc. #: Y0M072
Asiatic elephant	Age: 38Y Est.	Birth: 1.Jan.1969
Name: Nellie		

=====

Collection Information >>

Health Status: Abnormal
Fasting Time: < 8 hours
Activity: Calm
Weight: 4238 Kg on 26.Jan.2005
Manual restraint used.

Date of Collection: 11.May.2005
Time of Collection:
Collected by: RT
Sample Collection Site: EAR VEIN

Chemistry >>

Tests and Results >>

	CARBON DIOXIDE	28	MMOL/L
	GAMMA GLOBULIN (ELECTROPHORESIS)	0.46	GM/DL
	GAMMA GLUTAMYLTRANSFERASE	6	IU/L

Comments >>

colicky

=====

ELEPHAS MAXIMUS (no subsp)
Asiatic elephant
Name: Nellie

Sex: Female
Age: 38Y Est.

Acc. #: YOM072
Birth: 1.Jan.1969

=====

Parasitology Examination:

Submission Data >>

Type: Fecal sample
Purpose: DIAGNOSTIC EXAMINATION

Sample id.: 2005-0750
Date collected: 11.May.2005

Collected from:

From an individual specimen.

Enclosure: 18 - Asi

Examination Data >>

Storage: room temperature
Consistency: formed
Gross appearance: Typical

Date examined: 11.May.2005

by: JS

Tests & Results >>

DIRECT MICROSCOPIC EXAMINATION NO PARASITES SEEN
FLOATATION - NA NITRATE NO PARASITES SEEN
OCCULT BLOOD NEGATIVE

=====
ELEPHAS MAXIMUS (no subsp)
Asiatic elephant
Name: Nellie
=====

Sex: Female Acc. #: YOM072
Age: 38Y Est. Birth: 1.Jan.1969
=====

Clinical Note:

13.May.2005

<<< Urinalysis >>>

Laboratory: [X] Miami Metrozoo
[] other

Date collected:05/13/05
Date analysed: 05/13/05
Analysis by:JS

Sample collection:

- [] floor
[X] mid-stream
[] catheter
[] cystocentesis

Sample storage:

- [X] room temperature
[] refrigerated
[] frozen

Color:yellow
Specific Gravity:1.009
cloudy

Appearance: [] clear
[X] hazy / slightly
[] cloudy / turbid

Leukocytes:
Nitrite:
Urobilinogen:normal
Protein:trace
pH:6.0
Blood:neg
Ketones:neg
Bilirubin:neg
Glucose:neg

RBC/hpf:
WBC/hpf:occ
Bacteria/hpf:few
Casts/lpf:
Crystals:

Epithelial cells:few
Mucus:

Comments: recheck; colicky
(SMM)

=====

ELEPHAS MAXIMUS (no subsp)
Asiatic elephant
Name: Nellie

Sex: Female
Age: 38Y Est.

Acc. #: YOM072
Birth: 1.Jan.1969

=====

Parasitology Examination:

Submission Data >>

Type: Fecal sample
Purpose: ROUTINE EXAMINATION

Sample id.: 2005-0859
Date collected: 24.May.2005

Collected from:

From an individual specimen.

Enclosure: 18 - Asi

Examination Data >>

Storage: room temperature
Consistency: formed
Gross appearance: Typical

Date examined: 24.May.2005

by: JS

Tests & Results >>

DIRECT MICROSCOPIC EXAMINATION NO PARASITES SEEN
FLOATATION - NA NITRATE NO PARASITES SEEN

Clinical Pathology Records - Specimen Report
MIAMI METROZOO

ELEPHAS MAXIMUS (no subsp)
Asiatic elephant
Name: Nellie

Sex: Female
Age: 38Y Est.

Acc. #: YOM072
Birth: 1.Jan.1969

Collection Information >>

Health Status: Normal
Fasting Time: < 8 hours
Activity: Active
Weight: 3975 Kg on 17.May.2005
Manual restraint used.

Date of Collection: 7.Jun.2005
Time of Collection:
Collected by:
Sample Collection Site: EAR VEIN

Hematology >>

Analysis Information >>

Anticoagulant: EDTA
Storage: Refrigerated (<48 hours)
Sample Quality: No quality problems.

Laboratory: U OF MIAMI
Date of Analysis: 8.Jun.2005
Time of Analysis:
Analysis by:
Automated analysis.

Tests and Results >>

WHITE BLOOD CELL COUNT	15.9		*10 ³ /UL
RED BLOOD CELL COUNT	< 2.34		*10 ⁶ /UL
HEMOGLOBIN	< 9.9		GM/DL
HEMATOCRIT	< 31		%
MCV	132		fL
MCH	42.3		ug
MCHC	31.9		gm/dL
SEGMENTED NEUTROPHILS	> 52	(8.268)	% (*10 ³ /UL)
LYMPHOCYTES	26	(4.134)	% (*10 ³ /UL)
MONOCYTES	20	(3.180)	% (*10 ³ /UL)
EOSINOPHILS	2	(0.318)	% (*10 ³ /UL)
BASOPHILS	< 0		% (*10 ³ /UL)

Comments >>

in-house PCV=27%

Clinical Pathology Records - Specimen Report
MIAMI METROZOO

ELEPHAS MAXIMUS (no subsp)
Asiatic elephant
Name: Nellie

Sex: Female
Age: 38Y Est.

Acc. #: YOM072
Birth: 1.Jan.1969

Collection Information >>

Health Status: Normal
Fasting Time: < 8 hours
Activity: Active
Weight: 3975 Kg on 17.May.2005
Manual restraint used.

Date of Collection: 7.Jun.2005
Time of Collection:
Collected by:
Sample Collection Site: EAR VEIN

Chemistry >>

Analysis Information >>

Chemistry Sample: Serum
Storage: Refrigerated (<48 hours)
Sample Quality: No quality problems.

Laboratory: U OF MIAMI
Date of Analysis: 8.Jun.2005
Time of Analysis:
Analysis by:
Automated analysis.

Tests and Results >>

GLUCOSE	85	MG/DL
BLOOD UREA NITROGEN	14	MG/DL
CREATININE	1.9	MG/DL
BUN/creatinine ratio	7.37	
URIC ACID	<0.2	MG/DL
CALCIUM	10.3	MG/DL
PHOSPHORUS	3.8	MG/DL
calcium/phosphorus ratio	2.71	
SODIUM	> 138	MEQ/L
POTASSIUM	< 3.9	MEQ/L
sodium/potassium ratio	35.4	
CHLORIDE	>> 103	MEQ/L
anion gap	10.9	
CHOLESTEROL	54	MG/DL
TRIGLYCERIDE	96	MG/DL
TOTAL PROTEIN (COLORIMETRY)	8.7	GM/DL
ALBUMIN (COLORIMETRY)	3.2	GM/DL
GLOBULIN (COLORIMETRY)	5.5	GM/DL
albumin/globulin ratio	0.582	
ASPARTATE AMINOTRANSFERASE	14	IU/L
ALANINE AMINOTRANSFERASE	> 18	IU/L
TOTAL BILIRUBIN	0.3	MG/DL
DIRECT BILIRUBIN	0.1	MG/DL
AMYLASE	692	U/L
ALKALINE PHOSPHATASE	78	IU/L
LACTATE DEHYDROGENASE	761	IU/L
CREATINE PHOSPHOKINASE	60	IU/L
CARBON DIOXIDE	28	MMOL/L
GAMMA GLUTAMYLTRANSFERASE	6	IU/L

Comments >>

ISIS reference values are for ELEPHAS MAXIMUS
Printed on: 2.Apr.2007

Clinical Pathology Records - Specimen Report
MIAMI METROZOO

=====

<i>ELEPHAS MAXIMUS</i> (no subsp)	Sex: Female	Acc. #: Y0M072
Asiatic elephant	Age: 38Y Est.	Birth: 1.Jan.1969
Name: Nellie		

=====

Chemistry >>
Comments >>
 annual PE

=====

<i>ELEPHAS MAXIMUS</i> (no subsp)	Sex: Female	Acc. #: Y0M072
Asiatic elephant	Age: 38Y Est.	Birth: 1.Jan.1969
Name: Nellie		

=====

Parasitology Examination:

Submission Data >>

Type: Fecal sample
Purpose: DIAGNOSTIC EXAMINATION

Sample id.: 2005-0977
Date collected: 14.Jun.2005

Collected from:

From an individual specimen.

Enclosure: 18 - Asi

Examination Data >>

Storage: room temperature
Consistency: soft
Gross appearance: Atypical

Date examined: 14.Jun.2005
by: JS

Tests & Results >>

DIRECT MICROSCOPIC EXAMINATION NO PARASITES SEEN
FLOATATION - NA NITRATE NO PARASITES SEEN
OCCULT BLOOD NEGATIVE

Submission Data >>

Type: Fecal sample
Purpose: ROUTINE EXAMINATION

Sample id.: 2005-1250
Date collected: 26.Jul.2005

Collected from:

From an individual specimen.

Enclosure: 18 - Asi

Examination Data >>

Storage: room temperature
Consistency: formed
Gross appearance: Typical

Date examined: 26.Jul.2005
by: JS

Tests & Results >>

DIRECT MICROSCOPIC EXAMINATION NO PARASITES SEEN
FLOATATION - NA NITRATE NO PARASITES SEEN

=====

ELEPHAS MAXIMUS (no subsp)
Asiatic elephant
Name: Nellie

Sex: Female
Age: 38Y Est.

Acc. #: YOM072
Birth: 1.Jan.1969

=====

Parasitology Examination:

Submission Data >>

Type: Fecal sample
Purpose: ROUTINE EXAMINATION

Sample id.: 2005-1679
Date collected: 28.Sep.2005

Collected from:

From an individual specimen.

Enclosure: 18 - Asi

Examination Data >>

Storage: room temperature
Consistency: formed
Gross appearance: Typical

Date examined: 28.Sep.2005

by: JS

Tests & Results >>

DIRECT MICROSCOPIC EXAMINATION NO PARASITES SEEN
FLOATATION - NA NITRATE NO PARASITES SEEN

Submission Data >>

Type: Fecal sample
Purpose: ROUTINE EXAMINATION

Sample id.: 2005-1938
Date collected: 21.Nov.2005

Collected from:

From an individual specimen.

Enclosure: 18 - Asi

Examination Data >>

Storage: room temperature
Consistency: formed
Gross appearance: Typical

Date examined: 21.Nov.2005

by: JS

Tests & Results >>

DIRECT MICROSCOPIC EXAMINATION NO PARASITES SEEN
FLOATATION - NA NITRATE NO PARASITES SEEN

=====
ELEPHAS MAXIMUS (no subsp)
Asiatic elephant
Name: Nellie
=====

Sex: Female
Age: 38Y Est.

Acc. #: YOM072
Birth: 1.Jan.1969
=====

Parasitology Examination:

Submission Data >>

Type: Fecal sample
Purpose: ROUTINE EXAMINATION

Sample id.: 2006-0106
Date collected: 23.Jan.2006

Collected from:

From an individual specimen.

Enclosure: 18 - Asi

Examination Data >>

Storage: room temperature
Consistency: formed
Gross appearance: Typical

Date examined: 23.Jan.2006

by: JS

Tests & Results >>

DIRECT MICROSCOPIC EXAMINATION NO PARASITES SEEN
FLOATATION - NA NITRATE NO PARASITES SEEN

Submission Data >>

Type: Fecal sample
Purpose: ROUTINE EXAMINATION

Sample id.: 2006-0419
Date collected: 3.Apr.2006

Collected from:

From an individual specimen.

Enclosure: 18 - Asi

Examination Data >>

Storage: room temperature
Consistency: formed
Gross appearance: Typical

Date examined: 3.Apr.2006

by: JS

Tests & Results >>

DIRECT MICROSCOPIC EXAMINATION NO PARASITES SEEN
FLOATATION - NA NITRATE NO PARASITES SEEN

=====

ELEPHAS MAXIMUS (no subsp)
Asiatic elephant
Name: Nellie

Sex: Female
Age: 38Y Est.

Acc. #: YOM072
Birth: 1.Jan.1969

=====

Parasitology Examination:

Submission Data >>

Type: Fecal sample
Purpose: ROUTINE EXAMINATION

Sample id.: 2006-0629
Date collected: 22.May.2006

Collected from:

From an individual specimen.

Enclosure: 18 - Asi

Examination Data >>

Storage: room temperature
Consistency: formed
Gross appearance: Typical

Date examined: 22.May.2006

by: JS

Tests & Results >>

DIRECT MICROSCOPIC EXAMINATION NO PARASITES SEEN
FLOATATION - NA NITRATE NO PARASITES SEEN

Clinical Pathology Records - Specimen Report
MIAMI METROZOO

ELEPHAS MAXIMUS (no subsp)
Asiatic elephant
Name: Nellie

Sex: Female
Age: 38Y Est.

Acc. #: Y0M072
Birth: 1.Jan.1969

Collection Information >>

Health Status: Normal
Fasting Time: < 8 hours
Activity: Active
Weight: 3965 Kg on 5.Jun.2006
Manual restraint used.

Date of Collection: 13.Jun.2006
Time of Collection:
Collected by:
Sample Collection Site: EAR VEIN

Hematology >>

Analysis Information >>

Anticoagulant: EDTA
Storage: Refrigerated (<48 hours)
Sample Quality: No quality problems.

Laboratory: U OF MIAMI
Date of Analysis: 14.Jun.2006
Time of Analysis:
Analysis by:
Automated analysis.

Tests and Results >>

WHITE BLOOD CELL COUNT	11.98		*10 ³ /UL
RED BLOOD CELL COUNT	< 2.32		*10 ⁶ /UL
HEMOGLOBIN	< 8.9		GM/DL
HEMATOCRIT	< 29		%
MCV	125		fL
MCH	< 38.4		ug
MCHC	< 30.7		gm/dL
SEGMENTED NEUTROPHILS	37	(4.433)	% (*10 ³ /UL)
LYMPHOCYTES	57	(6.829)	% (*10 ³ /UL)
MONOCYTES	< 0		% (*10 ³ /UL)
EOSINOPHILS	6	(0.719)	% (*10 ³ /UL)
BASOPHILS	< 0		% (*10 ³ /UL)

Comments >>

in-house PCV=26%

Clinical Pathology Records - Specimen Report
MIAMI METROZOO

```

=====
ELEPHAS MAXIMUS (no subsp)           Sex: Female           Acc. #: YOM072
Asiatic elephant                     Age: 38Y Est.        Birth: 1.Jan.1969
Name: Nellie
=====

```

Collection Information >>

```

Health Status: Normal
Fasting Time: < 8 hours
Activity: Active
Weight: 3965 Kg on 5.Jun.2006
Manual restraint used.

```

```

Date of Collection: 13.Jun.2006
Time of Collection:
Collected by:
Sample Collection Site: EAR VEIN

```

Chemistry >>

Analysis Information >>

```

Chemistry Sample: Serum
Storage: Refrigerated (<48 hours)
Sample Quality: No quality problems.

```

```

Laboratory: U OF MIAMI
Date of Analysis: 14.Jun.2006
Time of Analysis:
Analysis by:
Automated analysis.

```

Tests and Results >>

GLUCOSE	86	MG/DL
BLOOD UREA NITROGEN	10	MG/DL
CREATININE	1.5	MG/DL
BUN/creatinine ratio	6.67	
URIC ACID	<0.2	MG/DL
CALCIUM	10.0	MG/DL
PHOSPHORUS	4.8	MG/DL
calcium/phosphorus ratio	2.08	
SODIUM	134	MEQ/L
POTASSIUM	4.2	MEQ/L
sodium/potassium ratio	31.9	
CHLORIDE	89	MEQ/L
anion gap	24.2	
CHOLESTEROL	51	MG/DL
TRIGLYCERIDE	> 127	MG/DL
TOTAL PROTEIN (COLORIMETRY)	> 9.0	GM/DL
ALBUMIN (COLORIMETRY)	2.9	GM/DL
GLOBULIN (COLORIMETRY)	> 6.1	GM/DL
albumin/globulin ratio	0.475	
ASPARTATE AMINOTRANSFERASE	14	IU/L
ALANINE AMINOTRANSFERASE	14	IU/L
TOTAL BILIRUBIN	0.2	MG/DL
DIRECT BILIRUBIN	0.0	MG/DL
AMYLASE	723	U/L
ALKALINE PHOSPHATASE	< 64	IU/L
LACTATE DEHYDROGENASE	656	IU/L
CREATINE PHOSPHOKINASE	55	IU/L
CARBON DIOXIDE	25	MMOL/L
GAMMA GLUTAMYLTRANSFERASE	6	IU/L

Comments >>

```

ISIS reference values are for ELEPHAS MAXIMUS
Printed on: 2.Apr.2007

```

Clinical Pathology Records - Specimen Report
MIAMI METROZOO

=====

ELEPHAS MAXIMUS (no subsp)
Asiatic elephant
Name: Nellie

Sex: Female
Age: 38Y Est.

Acc. #: Y0M072
Birth: 1.Jan.1969

=====

Chemistry >>

Comments >>

annual PE & TB testing

Clinical Pathology Records - Specimen Report
MIAMI METROZOO

=====

ELEPHAS MAXIMUS (no subsp)
Asiatic elephant
Name: Nellie

Sex: Female
Age: 38Y Est.

Acc. #: Y0M072
Birth: 1.Jan.1969

=====

Collection Information >>

Health Status: Abnormal
Fasting Time: < 8 hours
Activity: Calm
Weight: 3965 Kg on 5.Jun.2006
Manual restraint used.

Date of Collection: 5.Jul.2006
Time of Collection:
Collected by:
Sample Collection Site: EAR VEIN

Hematology >>

Analysis Information >>

Anticoagulant: EDTA
Storage: Refrigerated (<48 hours)
Sample Quality: No quality problems.

Laboratory: U OF MIAMI
Date of Analysis: 6.Jul.2006
Time of Analysis:
Analysis by:
Automated analysis.

Tests and Results >>

WHITE BLOOD CELL COUNT	10.26		*10 ³ /UL
RED BLOOD CELL COUNT	2.80		*10 ⁶ /UL
HEMOGLOBIN	< 9.2		GM/DL
HEMATOCRIT	< 27		%
MCV	< 96.4		fL
MCH	<< 32.9		uug
MCHC	34.1		gm/dL
SEGMENTED NEUTROPHILS	35	(3.591)	% (*10 ³ /UL)
LYMPHOCYTES	64	(6.566)	% (*10 ³ /UL)
MONOCYTES	< 1	(0.103)	% (*10 ³ /UL)
EOSINOPHILS	0		% (*10 ³ /UL)
BASOPHILS	< 0		% (*10 ³ /UL)

Comments >>

in-house PCV=27%

Clinical Pathology Records - Specimen Report
MIAMI METROZOO

=====
ELEPHAS MAXIMUS (no subsp)
Asiatic elephant
Name: Nellie
=====

Sex: Female
Age: 38Y Est.

Acc. #: Y0M072
Birth: 1.Jan.1969
=====

Collection Information >>

Health Status: Abnormal
Fasting Time: < 8 hours
Activity: Calm
Weight: 3965 Kg on 5.Jun.2006
Manual restraint used.

Date of Collection: 5.Jul.2006
Time of Collection:
Collected by:
Sample Collection Site: EAR VEIN

Chemistry >>

Analysis Information >>

Chemistry Sample: Serum
Storage: Refrigerated (<48 hours)
Sample Quality: No quality problems.

Laboratory: U OF MIAMI
Date of Analysis: 6.Jul.2006
Time of Analysis:
Analysis by:
Automated analysis.

Tests and Results >>

Table with 4 columns: Test Name, Value, Comparison, and Units. Rows include GLUCOSE (111 MG/DL), BLOOD UREA NITROGEN (9.0 MG/DL), CREATININE (> 2.2 MG/DL), BUN/creatinine ratio (4.09), URIC ACID (<0.2 MG/DL), CALCIUM (< 9.5 MG/DL), PHOSPHORUS (4.1 MG/DL), calcium/phosphorus ratio (2.32), SODIUM (130 MEQ/L), POTASSIUM (4.6 MEQ/L), sodium/potassium ratio (28.3), CHLORIDE (> 96 MEQ/L), anion gap (13.6), CHOLESTEROL (47 MG/DL), TRIGLYCERIDE (>> 200 MG/DL), TOTAL PROTEIN (8.1 GM/DL), ALBUMIN (< 2.6 GM/DL), GLOBULIN (> 6.5 GM/DL), albumin/globulin ratio (0.400), ASPARTATE AMINOTRANSFERASE (14 IU/L), ALANINE AMINOTRANSFERASE (> 16 IU/L), TOTAL BILIRUBIN (> 0.4 MG/DL), DIRECT BILIRUBIN (> 0.3 MG/DL), AMYLASE (795 U/L), ALKALINE PHOSPHATASE (< 55 IU/L), LACTATE DEHYDROGENASE (780 IU/L), CREATINE PHOSPHOKINASE (68 IU/L), CARBON DIOXIDE (25 MMOL/L), GAMMA GLUTAMYLTRANSFERASE (5 IU/L).

Comments >>

Clinical Pathology Records - Specimen Report
MIAMI METROZOO

=====
ELEPHAS MAXIMUS (no subsp) Sex: Female Acc. #: YOM072
Asiatic elephant Age: 38Y Est. Birth: 1.Jan.1969
Name: Nellie
=====

Chemistry >>
Comments >>
 lethargy, diarrhea

=====

ELEPHAS MAXIMUS (no subsp)
Asiatic elephant
Name: Nellie

Sex: Female
Age: 38Y Est.

Acc. #: YOM072
Birth: 1.Jan.1969

=====

Parasitology Examination:

Submission Data >>

Type: Fecal sample
Purpose: DIAGNOSTIC EXAMINATION

Sample id.: 2006-0821
Date collected: 5.Jul.2006

Collected from:

From an individual specimen.

Enclosure: 18 - Asi

Examination Data >>

Storage: room temperature
Consistency: soft
Gross appearance: Atypical

Date examined: 5.Jul.2006

by: JS

Tests & Results >>

DIRECT MICROSCOPIC EXAMINATION NO PARASITES SEEN
FLOATATION - NA NITRATE NO PARASITES SEEN

Submission Data >>

Type: Fecal sample
Purpose: ROUTINE EXAMINATION

Sample id.: 2006-0957
Date collected: 25.Jul.2006

Collected from:

From an individual specimen.

Enclosure: 18 - Asi

Examination Data >>

Storage: room temperature
Consistency: formed
Gross appearance: Typical

Date examined: 25.Jul.2006

by: JS

Tests & Results >>

DIRECT MICROSCOPIC EXAMINATION NO PARASITES SEEN
FLOATATION - NA NITRATE NO PARASITES SEEN

=====

ELEPHAS MAXIMUS (no subsp)
Asiatic elephant
Name: Nellie

Sex: Female Acc. #: Y0M072
Age: 38Y Est. Birth: 1.Jan.1969

=====

Parasitology Examination:

Submission Data >>

Type: Fecal sample
Purpose: ROUTINE EXAMINATION

Sample id.: 2006-1240
Date collected: 26.Sep.2006

Collected from:

From an individual specimen.

Enclosure: 18 - Asi

Examination Data >>

Storage: room temperature
Consistency: formed
Gross appearance: Typical

Date examined: 26.Sep.2006

by: JS

Tests & Results >>

DIRECT MICROSCOPIC EXAMINATION NO PARASITES SEEN
FLOATATION - NA NITRATE NO PARASITES SEEN

Clinical Pathology Records - Specimen Report
MIAMI METROZOO

```

=====
ELEPHAS MAXIMUS (no subsp)           Sex: Female           Acc. #: Y0M072
Asiatic elephant                     Age: 38Y Est.        Birth: 1.Jan.1969
Name: Nellie
=====

```

Collection Information >>

Health Status: Normal
Fasting Time: < 8 hours
Activity: Active
Weight: 4025 Kg on 19.Aug.2006
Manual restraint used.

Date of Collection: 10.Oct.2006
Time of Collection:
Collected by:
Sample Collection Site: EAR VEIN

Hematology >>

Analysis Information >>

Anticoagulant: EDTA
Storage: Refrigerated (<48 hours)
Sample Quality: No quality problems.

Laboratory: U OF MIAMI
Date of Analysis: 11.Oct.2006
Time of Analysis:
Analysis by:
Automated analysis.

Tests and Results >>

WHITE BLOOD CELL COUNT	14.1		*10 ³ /UL
RED BLOOD CELL COUNT	2.67		*10 ⁶ /UL
HEMOGLOBIN	< 10.4		GM/DL
HEMATOCRIT	36		%
MCV	135		fL
MCH	39.0		uug
MCHC	< 28.9		gm/dL
SEGMENTED NEUTROPHILS	44	(6.204)	% (*10 ³ /UL)
LYMPHOCYTES	53	(7.473)	% (*10 ³ /UL)
MONOCYTES	< 2	(0.282)	% (*10 ³ /UL)
EOSINOPHILS	1	(0.141)	% (*10 ³ /UL)
BASOPHILS	< 0		% (*10 ³ /UL)

Comments >>

in-house PCV=31%; automated lab results claim 2 nRBC's/100 WBC's, but none seen on in-house smear

Clinical Pathology Records - Specimen Report
MIAMI METROZOO

ELEPHAS MAXIMUS (no subsp)
Asiatic elephant
Name: Nellie

Sex: Female
Age: 38Y Est.

Acc. #: YOM072
Birth: 1.Jan.1969

Collection Information >>

Health Status: Normal
Fasting Time: < 8 hours
Activity: Active
Weight: 4025 Kg on 19.Aug.2006
Manual restraint used.

Date of Collection: 10.Oct.2006
Time of Collection:
Collected by:
Sample Collection Site: EAR VEIN

Chemistry >>

Analysis Information >>

Chemistry Sample: Serum
Storage: Refrigerated (<48 hours)
Sample Quality: No quality problems.

Laboratory: U OF MIAMI
Date of Analysis: 11.Oct.2006
Time of Analysis:
Analysis by:
Automated analysis.

Tests and Results >>

GLUCOSE	88	MG/DL
BLOOD UREA NITROGEN	10	MG/DL
CREATININE	1.6	MG/DL
BUN/creatinine ratio	6.25	
URIC ACID	<0.2	MG/DL
CALCIUM	10.8	MG/DL
PHOSPHORUS	4.5	MG/DL
calcium/phosphorus ratio	2.40	
SODIUM	124	MEQ/L
POTASSIUM	4.6	MEQ/L
sodium/potassium ratio	27.0	
CHLORIDE	86	MEQ/L
anion gap	23.6	
CHOLESTEROL	50	MG/DL
TRIGLYCERIDE	> 115	MG/DL
TOTAL PROTEIN (COLORIMETRY)	8.3	GM/DL
ALBUMIN (COLORIMETRY)	3.0	GM/DL
GLOBULIN (COLORIMETRY)	5.3	GM/DL
albumin/globulin ratio	0.566	
ASPARTATE AMINOTRANSFERASE	16	IU/L
ALANINE AMINOTRANSFERASE	> 16	IU/L
TOTAL BILIRUBIN	> 0.5	MG/DL
DIRECT BILIRUBIN	0.1	MG/DL
AMYLASE	687	U/L
ALKALINE PHOSPHATASE	< 56	IU/L
LACTATE DEHYDROGENASE	640	IU/L
CREATINE PHOSPHOKINASE	60	IU/L
ALBUMIN (ELECTROPHORESIS)	<< 1.71	GM/DL
ALPHA-1 GLOBULIN (ELECTROPHORESIS)	0.79	GM/DL
ALPHA-2 GLOBULIN (ELECTROPHORESIS)	0.90	GM/DL
BETA GLOBULIN (ELECTROPHORESIS)	>> 3.67	GM/DL

Clinical Pathology Records - Specimen Report
MIAMI METROZOO

=====

<i>ELEPHAS MAXIMUS</i> (no subsp)	Sex: Female	Acc. #: Y0M072
Asiatic elephant	Age: 38Y Est.	Birth: 1.Jan.1969
Name: Nellie		

=====

Collection Information >>

Health Status: Normal	Date of Collection: 10.Oct.2006
Fasting Time: < 8 hours	Time of Collection:
Activity: Active	Collected by:
Weight: 4025 Kg on 19.Aug.2006	Sample Collection Site: EAR VEIN
Manual restraint used.	

Chemistry >>

Tests and Results >>

CARBON DIOXIDE	< 19	MMOL/L
GAMMA GLOBULIN (ELECTROPHORESIS)	1.51	GM/DL
GAMMA GLUTAMYLTRANSFERASE	<0.5	IU/L
TOTAL PROTEIN (ELECTROPHORESIS)	8.6	

Comments >>

recheck anemia

=====
ELEPHAS MAXIMUS (no subsp)
Asiatic elephant
Name: Nellie
=====

Sex: Female
Age: 38Y Est.
Acc. #: Y0M072
Birth: 1.Jan.1969
=====

Clinical Note:

21.Oct.2006

<<< Urinalysis >>>

Laboratory: [X] Miami Metrozoo
[] other

Date collected: 10/21/06
Date analysed: 10/21/06

Analysis by: CLM

Sample collection:

- [X] floor
[] mid-stream
[] catheter
[] cystocentesis

Sample storage:

- [X] room temperature
[] refrigerated
[] frozen

Color: yellow
Specific Gravity: 1.010
cloudy

Appearance: [] clear
[X] hazy / slightly
[] cloudy / turbid

Leukocytes:

Nitrite:

Urobilinogen: 0.2mg/dl

Protein: neg

pH: 8.0

Blood: neg

Ketones: neg

Bilirubin: neg

Glucose: neg

RBC/hpf:

WBC/hpf:

Bacteria/hpf:

Casts/lpf:

Crystals: Ca++-types

Epithelial cells:

Mucus:

Comments: sediment - lots of variable crystals, amorphous debris & dirt
(CLM)

=====
ELEPHAS MAXIMUS (no subsp)
Asiatic elephant
Name: Nellie

Sex: Female
Age: 38Y Est.

Acc. #: Y0M072
Birth: 1.Jan.1969
=====

Clinical Note:

24.Oct.2006

<<< Urinalysis >>>

Laboratory: [X] Miami Metrozoo
[] other

Date collected: 10/24/06
Date analysed: 10/24/06

Analysis by: JS

Sample collection:

- [X] floor
[] mid-stream
[] catheter
[] cystocentesis

Sample storage:

- [X] room temperature
[] refrigerated
[] frozen

Color: yellow
Specific Gravity: 1.017
cloudy

Appearance: [] clear
[X] hazy / slightly

[] cloudy / turbid

Leukocytes:

Nitrite:

Urobilinogen: 0.2mg/dl

Protein: trace

pH: 8.0

Blood: neg

Ketones: neg

Bilirubin: neg

Glucose: neg

RBC/hpf:

WBC/hpf:

Bacteria/hpf:

Casts/lpf:

Crystals: Ca-oxalates

Epithelial cells:

Mucus:

Comments: too much debris in sediment for significant exam
(CLM)

Clinical Pathology Records - Specimen Report
MIAMI METROZOO

ELEPHAS MAXIMUS (no subsp)
Asiatic elephant
Name: Nellie

Sex: Female
Age: 38Y Est.

Acc. #: YOM072
Birth: 1.Jan.1969

Collection Information >>

Health Status: Normal
Fasting Time: < 8 hours
Activity: Active
Weight: 3852 Kg on 18.Oct.2006
Manual restraint used.

Date of Collection: 14.Nov.2006
Time of Collection:
Collected by:
Sample Collection Site: EAR VEIN

Hematology >>

Analysis Information >>

Anticoagulant: EDTA
Storage: Fresh
Sample Quality: No quality problems.

Laboratory: IN-HOUSE
Date of Analysis: 14.Nov.2006
Time of Analysis:
Analysis by: JS
Manual analysis.

Tests and Results >>

HEMATOCRIT 34 %

Chemistry >>

Analysis Information >>

Chemistry Sample: Plasma (EDTA)
Storage: Fresh
Sample Quality: No quality problems.

Laboratory: IN-HOUSE
Date of Analysis: 14.Nov.2006
Time of Analysis:
Analysis by: JS
Manual analysis.

Tests and Results >>

TOTAL PROTEIN (REFRACTOMETER) 8.7 GM/DL

Comments >>

recheck anemia

=====

ELEPHAS MAXIMUS (no subsp)
Asiatic elephant
Name: Nellie

Sex: Female
Age: 38Y Est.

Acc. #: Y0M072
Birth: 1.Jan.1969

=====

Parasitology Examination:

Submission Data >>

Type: Fecal sample
Purpose: ROUTINE EXAMINATION

Sample id.: 2006-1484
Date collected: 14.Nov.2006

Collected from:

From an individual specimen.

Enclosure: 18 - Asi

Examination Data >>

Storage: room temperature
Consistency: formed
Gross appearance: Typical

Date examined: 14.Nov.2006

by: JS

Tests & Results >>

DIRECT MICROSCOPIC EXAMINATION NO PARASITES SEEN
FLOATATION - NA NITRATE NO PARASITES SEEN

Clinical Pathology Records - Specimen Report
MIAMI METROZOO

```

=====
ELEPHAS MAXIMUS (no subsp)           Sex: Female           Acc. #: YOM072
Asiatic elephant                     Age: 38Y Est.        Birth: 1.Jan.1969
Name: Nellie
=====

```

```

Collection Information >>           Date of Collection: 19.Dec.2006
Health Status: Normal              Time of Collection:
Fasting Time: < 8 hours           Collected by:
Activity: Active                   Sample Collection Site: EAR VEIN
Weight: 3969 Kg on 20.Nov.2006
Manual restraint used.

```

```

Hematology >>
Analysis Information >>           Laboratory: IN-HOUSE
Anticoagulant: EDTA              Date of Analysis: 19.Dec.2006
Storage: Fresh                   Time of Analysis:
Sample Quality: No quality problems. Analysis by: JS
Manual analysis.

```

```

Tests and Results >>
                                HEMATOCRIT < 28 %

```

```

Chemistry >>
Analysis Information >>           Laboratory: IN-HOUSE
Chemistry Sample: Serum          Date of Analysis: 19.Dec.2006
Storage: Fresh                   Time of Analysis:
Sample Quality: hemolysis        Analysis by: JS
Automated analysis.

```

```

Tests and Results >>
                                BLOOD UREA NITROGEN > 17.8 MG/DL
                                CREATININE 1.60 MG/DL
                                BUN/creatinine ratio 11.1
                                TOTAL PROTEIN (REFRACTOMETER) 8.1 GM/DL

```

```

Comments >>
  recheck anemia

```

Clinical Pathology Records - Specimen Report
MIAMI METROZOO

- page 32 -

=====

ELEPHAS MAXIMUS (no subsp)
Asiatic elephant
Name: Nellie

Sex: Female
Age: 38Y Est.

Acc. #: YOM072
Birth: 1.Jan.1969

=====

Collection Information >>

Health Status: Normal
Fasting Time: < 8 hours
Activity: Active
Weight: 3969 Kg on 20.Nov.2006
Manual restraint used.

Date of Collection: 9.Jan.2007
Time of Collection: 15:45.0
Collected by:
Sample Collection Site: EAR VEIN

Hematology >>

Analysis Information >>

Anticoagulant: EDTA
Storage: Fresh
Sample Quality: No quality problems.

Laboratory: IN-HOUSE
Date of Analysis: 9.Jan.2007
Time of Analysis: 16:20
Analysis by: CLM
Manual analysis.

Tests and Results >>

HEMATOCRIT < 30 %

Chemistry >>

Analysis Information >>

Chemistry Sample: Serum
Storage: Fresh
Sample Quality: No quality problems.

Laboratory: IN-HOUSE
Date of Analysis: 9.Jan.2007
Time of Analysis:
Analysis by: CLM
Automated analysis.

Tests and Results >>

BLOOD UREA NITROGEN	17.0	MG/DL
CREATININE	1.63	MG/DL
BUN/creatinine ratio	10.4	
TOTAL PROTEIN (REFRACTOMETER)	> 9.0	GM/DL

Comments >>

rechecking anemia

Clinical Pathology Records - Specimen Report
MIAMI METROZOO

```

=====
ELEPHAS MAXIMUS (no subsp)           Sex: Female           Acc. #: YOM072
Asiatic elephant                     Age: 38Y Est.        Birth: 1.Jan.1969
Name: Nellie
=====

```

```

Collection Information >>
Health Status: Normal                Date of Collection: 6.Feb.2007
Fasting Time: < 8 hours              Time of Collection:
Activity: Active                      Collected by:
Weight: 3969 Kg on 20.Nov.2006       Sample Collection Site: EAR VEIN
Manual restraint used.

```

```

Hematology >>
Analysis Information >>
Anticoagulant: EDTA                  Laboratory: IN-HOUSE
Storage: Refrigerated (<48 hours)   Date of Analysis: 7.Feb.2007
Sample Quality: No quality problems.  Time of Analysis:
                                        Analysis by: JS
                                        Manual analysis.

```

```

Tests and Results >>
                                HEMATOCRIT < 30 %

```

```

Chemistry >>
Analysis Information >>
Chemistry Sample: Serum              Laboratory: IN-HOUSE
Storage: Refrigerated (<48 hours)   Date of Analysis: 7.Feb.2007
Sample Quality: No quality problems.  Time of Analysis:
                                        Analysis by: JS
                                        Automated analysis.

```

```

Tests and Results >>
                                BLOOD UREA NITROGEN > 20.9 MG/DL
                                CREATININE 1.52 MG/DL
                                BUN/creatinine ratio 13.8
                                TOTAL PROTEIN (REFRACTOMETER) > 9.2 GM/DL

```

```

Comments >>
recheck chronic anemia

```

=====

ELEPHAS MAXIMUS (no subsp)
Asiatic elephant
Name: Nellie

Sex: Female
Age: 38Y Est.

Acc. #: Y0M072
Birth: 1.Jan.1969

=====

Parasitology Examination:

Submission Data >>

Type: Fecal sample
Purpose: DIAGNOSTIC EXAMINATION

Sample id.: 2007-0302
Date collected: 6.Mar.2007

Collected from:

From an individual specimen.

Enclosure: 18 - Asi

Examination Data >>

Storage: room temperature
Consistency: formed
Gross appearance: Typical

Date examined: 6.Mar.2007

by: JS

Tests & Results >>

DIRECT MICROSCOPIC EXAMINATION NO PARASITES SEEN

Clinical Pathology Records - Specimen Report
MIAMI METROZOO

ELEPHAS MAXIMUS (no subsp)
Asiatic elephant
Name: Nellie

Sex: Female
Age: 38Y Est.

Acc. #: YOM072
Birth: 1.Jan.1969

Collection Information >>

Health Status: Abnormal
Fasting Time: < 8 hours
Activity: Active
Weight: 3895 Kg on 20.Feb.2007
Manual restraint used.

Date of Collection: 8.Mar.2007
Time of Collection:
Collected by:
Sample Collection Site: EAR VEIN

Hematology >>

Analysis Information >>

Anticoagulant: EDTA
Storage: Refrigerated (<48 hours)
Sample Quality: No quality problems.

Laboratory: U OF MIAMI
Date of Analysis: 9.Mar.2007
Time of Analysis:
Analysis by:
Automated analysis.

Tests and Results >>

WHITE BLOOD CELL COUNT	<	9.84		*10 ³ /UL
RED BLOOD CELL COUNT		2.77		*10 ⁶ /UL
HEMOGLOBIN		11.3		GM/DL
HEMATOCRIT		32		%
MCV		116		fL
MCH		40.8		uug
MCHC		35.3		gm/dL
SEGMENTED NEUTROPHILS		41	(4.034)	% (*10 ³ /UL)
LYMPHOCYTES		57	(5.609)	% (*10 ³ /UL)
MONOCYTES	<	2	(0.197)	% (*10 ³ /UL)
EOSINOPHILS		0		% (*10 ³ /UL)
BASOPHILS	<	0		% (*10 ³ /UL)

Comments >>

in-house PCV=33%

Clinical Pathology Records - Specimen Report
MIAMI METROZOO

```

=====
ELEPHAS MAXIMUS (no subsp)           Sex: Female           Acc. #: YOM072
Asiatic elephant                     Age: 38Y Est.        Birth: 1.Jan.1969
Name: Nellie
=====

```

Collection Information >>

Health Status: Abnormal
Fasting Time: < 8 hours
Activity: Active
Weight: 3895 Kg on 20.Feb.2007
Manual restraint used.

Date of Collection: 8.Mar.2007
Time of Collection:
Collected by:
Sample Collection Site: EAR VEIN

Chemistry >>

Analysis Information >>

Chemistry Sample: Serum
Storage: Refrigerated (<48 hours)
Sample Quality: No quality problems.

Laboratory: U OF MIAMI
Date of Analysis: 9.Mar.2007
Time of Analysis:
Analysis by:
Automated analysis.

Tests and Results >>

	GLUCOSE	73	MG/DL
	BLOOD UREA NITROGEN	10	MG/DL
	CREATININE	> 2.1	MG/DL
	BUN/creatinine ratio	4.76	
	URIC ACID	<0.2	MG/DL
	CALCIUM	> 11.6	MG/DL
	PHOSPHORUS	< 3.7	MG/DL
	calcium/phosphorus ratio	3.14	
	SODIUM	> 142	MEQ/L
	POTASSIUM	> 5.3	MEQ/L
	sodium/potassium ratio	26.8	
	CHLORIDE	>> 98	MEQ/L
	anion gap	24.3	
	CHOLESTEROL	49	MG/DL
	TRIGLYCERIDE	> 138	MG/DL
	TOTAL PROTEIN (COLORIMETRY)	8.8	GM/DL
	ALBUMIN (COLORIMETRY)	3.3	GM/DL
	GLOBULIN (COLORIMETRY)	5.5	GM/DL
	albumin/globulin ratio	0.600	
	ASPARTATE AMINOTRANSFERASE	16	IU/L
	ALANINE AMINOTRANSFERASE	> 16	IU/L
	TOTAL BILIRUBIN	0.1	MG/DL
	DIRECT BILIRUBIN	0.0	MG/DL
	AMYLASE	747	U/L
	ALKALINE PHOSPHATASE	< 63	IU/L
	LACTATE DEHYDROGENASE	936	IU/L
	CREATINE PHOSPHOKINASE	79	IU/L
	ALBUMIN (ELECTROPHORESIS)	<< 2.08	GM/DL
	ALPHA-1 GLOBULIN (ELECTROPHORESIS)	0.71	GM/DL
	ALPHA-2 GLOBULIN (ELECTROPHORESIS)	0.94	GM/DL
	BETA GLOBULIN (ELECTROPHORESIS)	>> 4.66	GM/DL

Clinical Pathology Records - Specimen Report
MIAMI METROZOO

- page 38 -

=====

ELEPHAS MAXIMUS (no subsp)
Asiatic elephant
Name: Nellie

Sex: Female
Age: 38Y Est.

Acc. #: Y0M072
Birth: 1.Jan.1969

=====

Collection Information >>

Health Status: Abnormal
Fasting Time: < 8 hours
Activity: Active
Weight: 3895 Kg on 20.Feb.2007
Manual restraint used.

Date of Collection: 8.Mar.2007
Time of Collection:
Collected by:
Sample Collection Site: EAR VEIN

Chemistry >>

Tests and Results >>

	CARBON DIOXIDE	25	MMOL/L
GAMMA GLOBULIN (ELECTROPHORESIS)		0.61	GM/DL
GAMMA GLUTAMYLTRANSFERASE		<5	IU/L
TOTAL PROTEIN (ELECTROPHORESIS)		9.0	

Comments >>

lethargy, soft stool

Clinical Pathology Records Report - ISIS/In-House Reference Values
MIAMI METROZOO

Scientific name: **ELEPHAS MAXIMUS**

Common Name: **Asiatic elephant**

		ISIS Values			In-House Values				
		Mean	S.D.	(N)	Mean	S.D.	Min.	Max.	(N)
WBC	*10 ³ /UL	14.43 ±	4.409	(1779)	16.44 ±	4.93	8.400	28.80	(35)
RBC	*10 ⁶ /UL	3.06 ±	0.51	(1501)	3.109 ±	0.414	2.340	4.080	(35)
HGB	GM/DL	13.2 ±	2.2	(1568)	13.14 ±	1.64	9.500	16.50	(35)
HCT	%	37.1 ±	6.0	(1890)	38.78 ±	5.86	26.50	51.00	(34)
MCH	MG/DL	43.3 ±	4.8	(1464)	42.35 ±	2.26	38.12	47.23	(35)
MCHC	uug	35.4 ±	3.6	(1536)	34.01 ±	2.21	27.80	36.27	(35)
MCV	fL	122.3 ±	13.4	(1491)	125.0 ±	9.4	108.3	146.1	(35)
SEGS	*10 ³ /UL	4.822 ±	2.925	(1502)	7.122 ±	3.598	2.226	17.56	(34)
BANDS	*10 ³ /UL	1.402 ±	2.124	(307)	0.279 ±	0.442	0.000	1.536	(20)
LYMPHOCYTES	*10 ³ /UL	5.243 ±	3.223	(1513)	7.244 ±	3.749	1.098	16.43	(34)
MONOCYTES	*10 ³ /UL	3.677 ±	2.909	(1273)	1.039 ±	1.380	0.000	6.888	(32)
EOSINOPHILS	*10 ³ /UL	0.465 ±	0.551	(1093)	0.530 ±	0.588	0.000	2.080	(31)
BASOPHILS	*10 ³ /UL	0.173 ±	0.105	(119)	0.038 ±	0.094	0.000	0.312	(27)
NRBC	/100 WBC	1 ±	1	(85)					
PLATE. CNT.	*10 ³ /UL	469 ±	215	(428)	433.7 ±	109.6	310.0	519.0	(3)
RETICS	%	0.8 ±	1.6	(10)					
GLUCOSE	MG/DL	91 ±	21	(1257)	81.80 ±	15.81	47.00	116.0	(25)
BUN	MG/DL	13 ±	4	(1260)	13.93 ±	3.48	7.700	19.00	(29)
CREAT.	MG/DL	1.6 ±	0.4	(1230)	1.775 ±	0.373	1.200	2.700	(28)
URIC ACID	MG/DL	0.2 ±	0.3	(286)	0.185 ±	0.038	0.100	0.200	(13)
CA	MG/DL	10.6 ±	0.8	(1184)	11.06 ±	0.88	8.900	13.10	(28)
PHOS	MG/DL	5.0 ±	1.2	(724)	4.786 ±	1.057	1.800	6.800	(29)
NA	MEQ/L	130 ±	6	(859)	133.8 ±	5.8	125.0	145.0	(24)
K	MEQ/L	4.6 ±	0.5	(861)	5.021 ±	0.726	4.100	7.100	(29)
CL	MEQ/L	89 ±	4	(731)	89.97 ±	4.04	84.00	100.0	(29)
IRON	MCG/DL	65 ±	23	(82)	50.20 ±	8.56	44.00	64.00	(5)
MG	MG/DL	2.10 ±	0.53	(68)					
HCO3	MMOL/L	26.3 ±	3.0	(55)					
CHOL	MG/DL	48 ±	19	(599)	53.86 ±	16.33	28.00	99.00	(29)
TRIG	MG/DL	61 ±	42	(745)	44.00 ±	31.71	16.00	130.0	(15)
T.PROT. (C)	GM/DL	8.1 ±	0.8	(1227)	8.689 ±	0.504	8.000	9.600	(18)
T.PROT. (R)	GM/DL	8.4 ±	0.4	(23)					
ALBUMIN (C)	GM/DL	3.2 ±	0.5	(648)	3.644 ±	0.355	3.200	4.500	(18)
GLOBULIN (C)	GM/DL	5.0 ±	1.0	(639)	5.044 ±	0.534	3.700	5.900	(18)
AST (SGOT)	IU/L	22 ±	11	(1227)	28.34 ±	12.33	11.00	59.90	(29)
ALT (SGPT)	IU/L	7 ±	8	(781)	9.935 ±	5.741	0.000	23.00	(29)
T. BILI.	MG/DL	0.2 ±	0.2	(765)	0.321 ±	0.150	0.100	0.700	(28)
D. BILI	MG/DL	0.1 ±	0.1	(233)	0.190 ±	0.120	0.000	0.300	(10)
I. BILI.	MG/DL	0.1 ±	0.1	(224)					
AMYLASE	U/L	3017 ±	2492	(170)	1087 ±	177	749.0	1300	(10)
ALK.PHOS.	IU/L	143 ±	66	(1157)	105.3 ±	44.6	48.70	233.0	(29)
LDH	IU/L	655 ±	703	(495)	825.6 ±	411.2	206.0	1780	(29)

Clinical Pathology Records Report - ISIS/In-House Reference Values
MIAMI METROZOO

Scientific name: *ELEPHAS MAXIMUS*

Common Name: Asiatic elephant

		ISIS Values			In-House Values				
		Mean	S.D.	(N)	Mean	S.D.	Min.	Max.	(N)
CPK	IU/L	225 ±	170	(486)	262.2 ±	179.5	70.00	788.0	(18)
OSMOLARITY	MOSMOL/L	264 ±	29	(98)					
ALPHA GLOB.	MG/DL	250.4 ±	353.1	(2)					
ALPHA-1 GLOB	GM/DL	0.8 ±	0.1	(6)	0.620 ±	0.000	0.620	0.620	(1)
ALPHA-2 GLOB	GM/DL	0.9 ±	0.2	(6)	0.610 ±	0.000	0.610	0.610	(1)
BETA GLOB.	GM/DL	1.0 ±	0.6	(2)	0.900 ±	0.000	0.900	0.900	(1)
Body Temperature:		36.3 ±	0.5	(4)					
CO2	MMOL/L	24.8 ±	4.0	(230)	24.07 ±	2.87	19.00	28.00	(15)
CORTISOL	UG/DL	2.0 ±	1.0	(35)					
ESR	MM/HR	98 ±	32	(7)					
FIBRINOGEN	MG/DL	371 ±	181	(238)					
GGT	IU/L	7 ±	5	(314)	15.87 ±	13.48	0.000	47.00	(15)
FE SATURATN.	%				21.35 ±	10.25	14.10	28.60	(2)
LIPASE	U/L	19 ±	30	(53)					
OSMOLALITY	MOSMOL/KG				273.0 ±	5.0	268.0	278.0	(3)
PROGESTERONE	NG/DL	18.82 ±	62.45	(379)					
TESTOSTERONE	NG/ML	20.34 ±	27.95	(2)	40.10 ±	0.00	40.10	40.10	(1)
A-TOCOPHEROL	UG/DL	19 ±	15	(8)					
TOTAL T4	MCG/DL	10.0 ±	2.7	(10)					
T3 UPTAKE	%	28 ±	2	(2)					
ALBUMIN (E)	GM/DL	4.1 ±	0.6	(4)	3.780 ±	0.000	3.780	3.780	(1)
GAMMA GLOB	GM/DL	2.9 ±	2.9	(11)	2.980 ±	0.000	2.980	2.980	(1)