

Abilene Zoological Gardens

2070 Zoo Lane
Abilene, Texas 79602

325-676-6085

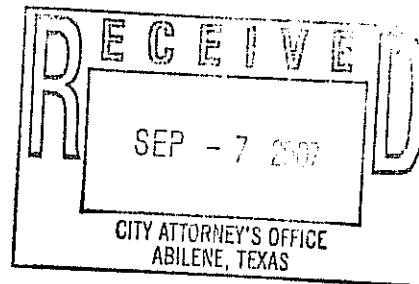
207

From: Clayton D. Hilton, MS, DVM *CHA*
Contract Veterinarian

To: Bill Baker, Director

Date: August 30, 2007

RE: African elephant results



Gross Necropsy

African elephant, 0.1, (SB #29, ISIS #1237), House Name "Tanzy". Postmortem examination of the carcass showed a body condition consistent with an elephant of geriatric status. There were no visible signs of wounds, trauma, or cancer. Gross examination revealed no abnormalities of the eyes, ears, trunk, mouth, heart, or lungs. Approximately 50% of the final set of teeth was present. Abdomen contained abundant fluid, food material, and fibrin. There was an approximate 4 x 3 inch rupture of the GI tract (medial wall of the cecum). There were no other lesions of the GI tract observed during visual examination. Examination of the right knee joint revealed incidental amounts of arthritis.

Histopathology

The lining of the cecum was ulcerated and there were several types of inflammatory cells found in the walls of the cecum. The muscular layer of the cecal wall contained hemorrhage and necrosis. The capsule of the spleen contained hemorrhage and fibrin. Ovaries contained small cysts consistent with advanced age; however, histologic evidence of recent ovulation was present. No histologic abnormalities were identified in the kidney, heart, stomach, eye, peripheral nerve, pancreas, uterus, salivary gland, and trunk.

Histopathologic Diagnoses

Ulcerative and hemorrhagic typhilitis, cecum presumed.
Moderate diffuse subacute fibrinohemorrhagic capsulitis, spleen.

Comments

In light of the above findings, I propose the following as an explanation of Tanzy's demise: The reduced amount of chewing surface of Tanzy's teeth prevented adequate grinding of feedstuffs, which led to an impaction of the cecum. The resulting pressure necrosis of the medial wall of the cecum led to the eventual rupture. The resulting contamination of the abdominal cavity with intestinal contents led to toxic shock and a rapid death.

Please contact me at 325.437.4687 if you have any questions or would like further clarification.



Texas Veterinary Medical Diagnostic Laboratory System



Final Report

P.O. Drawer 3040, College Station, TX 77841-3040
Phone: (979)845-3414 Fax: (979)845-1794 <http://tvmidlweb.tamu.edu/>

(325)676-6085

Owner's Name:
Abilene Zoo

Veterinarian/Submitter: Account ID#: 13826
Abilene Zoological Gardens
2070 ZOO LANE
Abilene, TX 79602

Date specimens received: 8/14/07

Preliminary reports: Fax 8/17/07

Phone reports:

Final report: Fax 8/23/07

Species: Exotic **Age:** 49.00 Years **Animal ID:** Tanzy/ #1237
Breed: Elephant **Weight:** **Sex:** Female

Tests Requested: Bacteriology(Peritoneal swab), stone analysis (gallstone), Histopathology

Specimens Submitted: fixed tissue, gall stone, peritoneal swab

Clinical History: 8/14/07 Animal ill (anorexic) 8/9/07. Treated and responded well. Eating 8/18/07
Returned to normal 8/12/07 Found dead 8/13/07. /ac

Clinical Diagnosis:

Previous Cases:

Treatment:

Conclusion/Interpretation of Lab Findings:

Peritonitis. See Histopath. comments.

LABORATORY TEST STATUS:

Ordered Current Status

Histopath: Necropsy tissues (H)	8/16/07	Completed 8/23/07
Routine culture (B)	8/14/07	Completed 8/17/07
Toxicology Comments (T)	8/14/07	Completed 8/14/07

Histopathology**Histopath: Necropsy tissues****Pathologist: Lewis, Barbara****Date completed:** 08/23/07**Sections/Slides:** 47/25**Date report entered:** 08/23/07**# Tissues:** 23

Tanzy/ #1237, Exotic

DESCRIPTION:

LYMPH NODE - The parenchyma is acutely diffusely congested. There is moderate subacute nodular lymphoid hyperplasia.

TUBULAR VISCUS - (cecum?) - The mucosa is diffusely ulcerated. The submucosa contains low numbers of lymphocytes, plasma cells, and neutrophils. There is extensive hemorrhage and necrosis in the muscular tunics.

SPLEEN - The parenchyma is acutely diffusely congested with moderate hemosiderosis. The capsule is expanded with hemorrhage and organizing fibrin. **LARGE INTESTINE** - There is surface mucosal autolysis. No microscopic lesions are observed.

TUBULAR VISCUS (large intestine?) - There are multifocal hemorrhages in the serosa.

LUNG - The parenchyma is acutely diffusely congested. There is mild thickening of the lobular interstitium with accumulation of macrophages with phagocytized refractile brown black pigment (pneumoconiosis, incidental finding).

OVARY - There are multifocal cysts lined by cuboidal epithelium. Another section contains a corpus luteum.

TUBULAR VISCUS (Urinary bladder?) - The mucosa is missing. The lamina propria is congested and hemorrhagic.

TRACHEA (respiratory epithelium) - The submucosa is edematous.

SMALL INTESTINE - There is mucosal autolysis. No lesions are observed.

SKELETAL MUSCLE - There are some angular fibers with variation in fiber diameter.

LIVER - The hepatocytes often contain brown granular pigment interpreted as bile.

KIDNEY, HEART, STOMACH, EYE, PERIPHERAL NERVE, PANCREAS, UTERUS?,

GLANDULAR TISSUE (Salivary gland?), AND LINEAR TISSUE STRUCTURE LINED BY KERATINIZING STRATIFIED SQUAMOUS EPITHELIUM - No lesions are observed.

HISTOPATHOLOGIC DIAGNOSIS:

Ulcerative and hemorrhagic typhlitis, cecum presumed.

Moderate diffuse subacute fibrinohemorrhagic capsulitis, spleen.

COMMENT:

Histologic identification of some of the tissues was difficult due to loss of the mucosa or lack of architectural relevance. The tissue with the most hemorrhage and necrosis is presumed to be the cecum.

and is consistent with your clinical diagnosis of cecal rupture. Peritonitis is evident on the surface of the spleen. The significance of the NSAID treatment is uncertain. These drugs have been associated with ulcerations in the anterior intestinal tract of many animal species and in the right dorsal colon of horses administered high dosages of phenylbutazone. The clinical significance of the cholelith is undetermined.

Barbara Lewis, DVM, MS, DACVP
/ath

⊕Bacteriology

Date completed: 8/17/07

Test: Routine culture

Animal ID: Tanzy/ #1237

Specimen	Isolate	Growth
Peritoneal fluid swab	Mixed anaerobes	
Peritoneal fluid swab	Escherichia coli	
Peritoneal fluid swab	Klebsiella pneumoniae	
Peritoneal fluid swab	Enterobacter sp.	
Peritoneal fluid swab	Mixed bacterial growth	

Comment:

08/16/07

Additional work is in progress.

---A. K. Swinford, DVM, MS, DACVM /lak

08/17/07

Laboratory results as listed. See above for final culture results.

---A. K. Swinford, DVM, MS, DACVM /lak

⊕Toxicology

Date Completed: 8/14/07

Toxicology Comments:

Service not offered. Our tests are designed for urinary stones not gall stones. -- Dr. Reagor

Veterinary Bulletin:

Sheep and Goat parasite Antihelminthic Resistance:

Rainfall in Texas has been exceptional for much of the state this year and grass is above normal in most pastures. Unfortunately good rains and good pastures can quickly lead to heavy populations of gastrointestinal parasites. Recently, TVMDL has received several small ruminants (both sheep and goats) for postmortem examination. During the same time period, fecal samples submitted to TVMDL from small ruminants have had high trichostrongyle egg counts. The cause of these recent deaths and rising egg counts can

be attributed solely to *Haemonchus contortus*. Pasture populations of *H. contortus* are markedly elevated now because weather conditions have been perfect for this species.

Unfortunately *H. contortus* has become highly resistant to all classes of anthelmintics. Ivermectin, Moxidectin as well as all of the benzimidazoles appear to have little or no effect at this time. To further compound this problem there are no new drugs in the pipeline which will provide any relief for the *Haemonchus* problem in the near future.

In the mean time sheep and goats, particularly those in small groups should be maintained on the highest and driest areas available and when possible animals should be fed quality feed in bunkers off the ground.

Additional Note: We have had some evidence that Llamas are also a species experiencing severe intestinal parasite problems with apparent resistance to currently used anthelmintics.

TVMDL Fee Increase:

The last increase in fees TVMDL charges for testing occurred in September of 2002. Since that time there have been significant increases in the costs associated with providing testing. Therefore, TVMDL is currently conducting a review of fees charged for testing and we expect an increase to be implemented within the next 30 days. When they are activated, the new fees will be posted on our web site at <http://tvmdlweb.tamu.edu> under the "TESTING" link. Please rest assured that TVMDL is committed to providing you with accurate testing results at an affordable price with as short a "turn around time" as possible.



Taxonomic name: *Loxodonta africana*

Family: Elephantidae

Common name: African elephant

Order: Proboscidea

Current information

Sex: Female Sire ID:
 Birth type: Wild Born Dam ID:
 Birth Location: TANGANYIKA (unknown location) Rearing: Unknown
 Birthdate-Age: ~ 1958 - ~48Y at death Hybrid: Not a hybrid
 Time since last Acq: 8Y,9M,15D as of death

<u>Date in</u>	<u>Acquisition - Vendor/local Id</u>	<u>Holder</u>	<u>Disposition - Recipient/local Id</u>	<u>Date out</u>
30 Oct 1998	Loan In from OKLAHOMA / 022101	ABILENE / 1237	Death	13 Aug 2007

<u>Date</u>	<u>Identifier type</u>	<u>Identifier</u>	<u>Location</u>	<u>Comments</u>
9 Nov 1958	House Name	TANZY		
9 Nov 1958	Regional Studbook #	29	AZA	29 "International Studbook Number" from ARKS 2 records

<u>Date</u>	<u>Note type</u>	<u>Comments</u>
8 Oct 2002	Animal management note	Worked on getting her to lift rear feet to target during lean in, went great.
13 Oct 2002	Medical note	Worked on foot trimming; still having trouble getting her to present hind feet.
14 Oct 2002	Behavior note	She acted very aggressive to #356 Tanya and keeper this a.m.
18 Oct 2002	Behavior note	Did not want to go outside today. Was aggressive toward keepers and female #356, even knocking her down once outside.
23 Oct 2002	Behavior note	Very uncooperative and nervous, would never face keeper during commands. Probable cause arrival of new tigers last night.
23 Oct 2002	Medical note	Had green mucous in corner of left eye.
24 Oct 2002	Behavior note	Very non responsive to commands again this a.m.
24 Oct 2002	Medical note	Left eye is red, same eye that had mucous in it yesterday.
26 Oct 2002	Medical note	Worked on foot trimming.
28 Oct 2002	Animal management note	She turned today. Reintroduced laser pointer to her and she did great.
2 Nov 2002	Medical note	Has green mucus around right eye.
17 Nov 2002	Behavior note	Worked well with laser pointer today. Turned and presented back feet.
18 Nov 2002	Behavior note	Would not present back feet today.
25 Nov 2002	Behavior note	She was very aggressive today.
25 Nov 2002	Medical note	Applied bag balm to two superficial wounds on right flank area.
15 Dec 2002	Animal management note	Trimmed feet. Let keepers trim hind right foot and also turned for them.
22 Dec 2002	Animal management note	Presented hind left foot and keepers trimmed some of the pad. She would put it all the way on foot bar but could not hold it up there very long. She turned great.
13 Feb 2003	Medical note	Left rear foot appears to have broken off a part of the nail on the inside toe. Treated w/Koppertox.
12 May 2003	Behavior note	Has not been drinking water in the barn past 2 days. Not interested in grain and appears moody.
13 May 2003	Behavior note	Concerned about small amount of fecal matter. Cut grain and increased hay. Seems to help. She is eating all hay. Also she is drinking from pool outside, but not much in barn still.
18 May 2003	Note	COLLECTED URINE OFF FLOOR AM FOR TESTINGS.
19 May 2003	Behavior note	Seems to be back to normal
14 Nov 2003	Medical treatment	During foot training session deep hole found to pad adjacent to nail bed (approx. 1 to 2 inch from anterior border) on central-lateral portion of pad. Wound was cleaned out, but animal seemed tender before could completely clean lesion. Had director (JB) examine lesion; recommendation to clean lesion daily with Novasan solution, then apply Betadine solution. Flushed lesion with 10% Nolvasan solution using 60 ml syringe (5 to 6 syringes) and then coated lesion with betadine solution. Will continue treatment daily until healed.



20 Nov 2003	Medical note	Keepers report lesion to foot pad doing well. Seems to be healing in; no longer painful or tender to treatment. Continue treatment as previously.
2 Dec 2003	Foot management	Nolvasan and Betadine treatment to foot. RDH
8 Dec 2003	Behavior note	Elephants wouldn't go on exhibit initially due to commotion with tigers leaving. RDH
10 Dec 2003	Animal management note	Elephant has been working well for foot trim sessions. Feet are improving and animal is allowing longer and longer sessions for trims. Animal has been on Glyco-flex Equine II nutraceutical for past several months (May 2003, 8 months or so), and significant improvement has been noted. Today, keepers noticed overgrowth of tissue at junction of sole of foot and skin edge. Keepers are concerned that animal maybe developing thrush type lesion, but examination reveals animal maybe developing hyperkeratosis to skin secondary to chronic irritation from water and urine pooling in floor of elephant floor. Maintenance has cut opening to den leading to outside which should allow liquid to drain better. Will begin symptomatic treatment, including rasping done extra tissue and using betadine solution to help keep lesion dry. RDH
12 Dec 2003	Medical observation	Keepers report noticing large amount of ocular discharge bilaterally. In afternoon, no discharge seen, but elephant was noticed to be rubbing at eyes with trunk.
15 Dec 2003	Medical observation	Keepers report eyes seem normal. No discharge seen, elephant is not rubbing at eyes with trunk, and no discomfort was observed.
1 Jan 2004	Medical treatment	Keepers report elephant has continued to develop hyperkeratotic lesion to left rear foot. Will start scrubbing foot with Oxy Gel, then cover foot with betadine following scrubbing. Will attempt to obtain corona cream to help moisturize and softer skin around foot.
1 Jan 2004	Behavior note	Keepers report elephant appears to be in a "sour" mood today. Keepers will monitor and maintain vigilance in protecting themselves as well as public during "tantrums".
1 Jan 2004	Behavior note	Keepers report elephant was very "grouchy" today. Wouldn't respond to commands.
11 Jan 2004	Foot management	Scrubbed LR foot w/ Nolvasan and poured Betadine over hyperkeratotic lesion after cleaning. Will continue daily treatment due to hyperkeratotic lesion.
12 Jan 2004	Medical note	Keeper noticed elephant was rubbing right side of jaw/mouth on post for several minutes today. Concerned there might be a problem since eleph is missing tusk from right side. Elephant did respond to commands and opened mouth for visual examination. No problems were seen, although small abrasion was present to skin over L tusk (no treatment needed).
15 Jan 2004	Foot management	Scrubbed back feet with Dermapet Gel due to hyperkeratotic lesion on feet, then covered lesions with corona cream. Will continue daily foot treatments until can get hyperkeratotic lesion to respond. Elephant is responding better overall. Temperment seems to be better. Presents feet for cleaning when directed by keepers. Overall behaviour is fastly improved.
17 Jan 2004	Foot management	Scrubbed and cleaned both back feet. Applied corona ointment to each foot.
22 Jan 2004	Foot management	Scrubbed foot with Dermapet shampoo, then applied corona cream to hyperkeratotic lesions around sole of each rear foot. Will continue daily treatment, as possible, until lesions are clear.
22 Jan 2004	Foot management	Continuing treatment to hind foot due to hyperkeratotic lesions, using Dermapet to scrup foot, then applying corona cream after cleaning.
28 Jan 2004	Animal management note	Keepers report could not perform foot treatment session as animal was very uncooperative.
30 Jan 2004	Medical note	In afternoon animal was found to be very restless and uncomfortable. Would not respond to any of usual commands. Seemed bloated to left flank, but was passing feces. Animal had not eaten all of morning hay, refused produce treats. Animal would stretch rear legs behind her, or lean against barn pole supports and kept trunk down with drops of liquid seen dripping off of trunk. During urination, she voided only a small amount of foamy urine, she also seemed to strain after voiding without passing anymore urine. Talked w/ Dr. Flanagan @ Houston, Dr. Gary West @ Oklahoma City, and Dr. Dennis Schmidt in Southwest Missouri State. Suggested possible cystitis or uteran tumor, as well as possible gastrointestinal/bloat involvement but all agreed bloat was unlikely since she is passing feces. Recommended prophylactic treatment w/ Banamine until more diagnostics are available. Urinalysis was performed and revealed; Blood-Neg; Bili-Neg; Urobilinogen-Neg; Ketones-Neg; Glu-Neg; Protein-Neg; Nitrite-Pos (was contaminated sample from barn floor); Leukocytes-Neg; pH-8; sp. gr. 1.020. Sedimentation revealed too much debris to be diagnostic; did not recognize any RBC, WBC, or any smooth muscle cells, indicative of uteran tumor. Dr. Schmidt reported most uteran tumors seen on Asian, not African Elephants and is usually accompanied by blood in urine as well.



		Animal was let on exhibit, she would stretch rear legs, and acted uncomfortable. Left flank remained distended. Keeper came back and checked in late evening and reported no improvement. Water consumption had been normal, only change had been 2 grapefruits given as enrichment.
31 Jan 2004	Medical note	Keepers report animal seems back to normal. Responded well to commands. Allowed foot session for rear foot treatment. Ate all of hay given-withheld pelleted foods and gave few handfuls of produce. Normal feces and urination.
1 Feb 2004	Medical observation	Keepers report animal is back to normal. No evidence of gastrointestinal upset, no straining. Normal fecal output; normal appetite; normal water consumption.
5 Feb 2004	Behavior note	Keepers report elephant has been fairly aggressive all week. Is responding to commands, but will charge at keepers, or swing trunk at keepers through stall bars.
10 Feb 2004	Foot management	Foot session performed today. Keepers are trying to work on feet by scrubbing with Dermapet medicated shampoo, then covering with Corona cream. Today were able to remove portion of overgrown cuticle.
18 Feb 2004	Foot management	Keepers continue to perform daily (as possible) foot treatments to manage foot problems
18 Feb 2004	Behavior note	Keepers report de-sensitizing animal to ERC by getting animal to eat hay next to open chute doors.
24 Feb 2004	Behavior note	Keepers report would not go on exhibit today due to weather (cold, rain-1.13", north wind)
2 Mar 2004	Fecal check/worming	Fecal flotation: Negative
9 Mar 2004	Behavior note	Didn't respond to commands well today. Seemed agitated. Was aggressive towards other elephant and keepers during weekly blood draw on elephant #356.
10 Mar 2004	Medical note	Keepers reported elephant was very listless and uncomfortable in morning. Wouldn't eat morning grains. Did eat hay overnight and had normal amount of stool present in stall. Did go outside, but didn't eat any hay or produce. Stood and would rock back and forth and rear legs. Would cock leg up and stand on other 3, then shift to other rear leg. Would hold trunk motionless on ground. Didn't interact w/ other elephant. Didn't appear bloated. Hard to tell if she was having intestinal pain or arthritic problems. Discussed problem with elephant manager and director. Decided to go ahead and give Banamine as anti-inflammatory to treat either/or intestinal discomfort or arthritic problems. Gave 0.2mg/kg orally of 50mg/ml Banamine injectable by hiding in peanut butter, then giving w/ Cola. Received 20 ml or 1 gm of Banamine. Seemed more comfortable in afternoon. More responsive, did eat some ry crisps offered by public. Gave only hay in evening. Ate hay. Did respond better for commands.
11 Mar 2004	Medical note	Animal seems less uncomfortable this am. Did eat all of hay during night; fed only hay this am and ate normally. Had only one fecal pile in barn, but didn't eat much yesterday. Repeated 20ml injectable Banamine by giving orally in a banana (1gm). Fed 8 cups wheat bran mixed with 4 cups whole oats, 2 cups rolled oats, and mixed with small amount of Karo syrup and Molasses. More responsive this morning. Responded to commands, went outside, seemed much more alert.
11 Mar 2004	Fecal check/worming	Repeated fecal flotation this morning. Fecal-Negative.
11 Mar 2004	Medical note	Elephant seems to be feeling better today. More responsive to commands, more active, appetite is improving. Still not having normal amount of bowel movements but stool being passed does appear normal. Repeated Banamine medication; gave 15 ml in an orange and additional 5 ml in a banana. Gave 8 cups wheat bran in small amount (approx. 6 cups) whole and processed oats along with some molasses and karo syrup. Gave glyco-flex w/ 2 cups ADF 16 in pm. Ate 2 bales coastal hay.
12 Mar 2004	Medical note	Elephant continues to appear in improving. Is much more alert and visually seems to feel better. Appetite continues to be good, still not passing normal amount of feces, but stool being passed does appear normal. Repeat fecal flotation is negative. Discontinued Banamine, gave 8 cups wheat bran in 6 cups ADF 16 and gave pm glyco-flex in 2 cups ADF 16. Continued increased coastal hay.
12 Mar 2004	Medical note	Elephant continues to improve and return to normal. Much more alert and responsive to commands. Has good appetite, fed small amount of ADF 16 w/ 8 cups of bran this am and another small amount in evening w/ Glyco-flex. Gave 1&1/2 bales of hay in pm.
23 Mar 2004	Behavior note	Elephant charged ERC this afternoon during blood draw on elephant #356. Also much disruption due to old exhibit destruction and wind blowing.
28 Mar 2004	Medical treatment	Added 8 cups of bran to diet after added new dirt to exhibit in case elephants ingested dirt due to new enrichment.
28 Mar 2004	Medical note	Added 8 cups of bran to diet due to dirt work/new dirt added to exhibit in case elephants ingested any dirt.



1 Apr 2004	Medical observation	In evening elephant was very reluctant to come in off exhibit. On observation she was seen to be stiff to LR leg and would not bend leg and was favoring leg. Leg at ankle seemed swollen medially. Took 45 min. to get in off exhibit. Keepers came back at 9:30 pm to check on elephant. She had not had a bowel movement but did finally have a loose stool while observing. Elephant seemed agitated and would sway back and forth and swish tail constantly.
2 Apr 2004	Medical treatment	Animal was still very stiff and favoring left rear leg. Begin to double Glyco-flex by giving with grains am and pm (1 cup each) instead of just pm. Will also give 20 cc Banamine orally for the next 3 days.
3 Apr 2004	Medical treatment	Animal seems better today. Still stiff to left rear leg, but did respond to commands, eating well, normal bowel movements. Will give last dose banamine tomorrow and continue Glyco-flex bid to assess response.
4 Apr 2004	Medical treatment	Last day of 20 ml Banamine orally. Keepers are hiding 10 ml/orange and elephant is taking well. Keepers report elephant is using leg better; is still a little stiff to LR leg, but doesn't seem as swollen and animal is definitely using leg better, and bearing more weight on leg. Responding better to commands. Keepers are planning to perform foot session tomorrow in attempt to examine leg more closely.
5 Apr 2004	Medical treatment	Keepers are maintaining elephant on 1 cup glyco-flex in grains bid as nutraceutical support due to arthritis. Keepers do report that elephant seems to continue to improve and return to normal. Swelling is down in leg, and elephant is responding well to commands, however elephant is still favoring leg a little.
7 Apr 2004	Medical observation	Keepers report elephant has small superficial laceration to top of trunk. Visitor reported seeing blood present. Scrape is not serious and should not require medication. Will continue to monitor.
7 Apr 2004	Foot management	Keepers began treating feet once again. Elephant still has hyperkeratosis type lesion around back foot pads. Keepers are using Corona cream for treatment.
20 Apr 2004	Behavior note	Wouldn't respond to commands given by back-up keeper.
28 Apr 2004	Medical observation	Elephant is again lame to left rear leg-had rain over past several days and exhibit is muddy; may have injured leg while sliding in mud.
2 May 2004	Medical treatment	Keepers report elephant is again lame to left rear leg. Not willing to bend at knee; cocks leg up to take weight off of leg while standing. Will start on oral Banamine again, due to presumed arthritis at 20 ml (1 gram) injectable Banamine (Flunixin meglumine) orally hidden in 3 oranges for administration.
3 May 2004	Medical treatment	Keepers report elephant is improved, but still lame to left rear leg. Will repeat Banamine administration (1 gm injectable Banamine hidden in 3 oranges for oral administration).
5 May 2004	Medical treatment	Keepers report elephant is no longer lame to left rear leg. Will discontinue oral Banamine at this time and maintain on oral Glyco-flex twice daily to help control arthritis.
7 May 2004	Medical observation	Keeper reports elephant is still favoring LR leg slightly, has slight limp noted.
12 May 2004	Foot management	Keepers worked on both rear feet today. No problems reported.
16 May 2004	Behavior note	Elephant wouldn't leave barn and go on exhibit w/o other 0.1 elephant (#356) with her.
18 May 2004	Aggression	Elephant acted aggressive during blood draw on elephant #356; this animal has been off of glyco-flex supplementation for 3 days (out-has been re-ordered) and may have arthritis pain.
25 May 2004	Behavior note	Did not want to go out w/o 356 (Tanya)
2 Jun 2004	Individual behavior	Keeper reports became upset, possibly due to large zoo teen volunteer group coming through on tour. Threw branches into Secretary bird exhibit.
15 Jun 2004	Animal management note	Keepers report did training session w/ 0.2 elephants. Report training session went well, with both 0.2 elephants responding well to commands.
18 Jun 2004	Behavior note	Keepers report elephants worked well for training session.
23 Jun 2004	Behavior note	Training session with both elephants done today.
27 Jun 2004	Medical observation	Animal noted to be stiff to left rear leg today. Unsure of reason-maybe related to increased rain, causing mud in exhibit and resulting in animal slipping or sliding more.
1 Jul 2004	Foot management	Foot session went well today; able to trim all 4 feet.
2 Jul 2004	Medical treatment	Consulted with Dr. Michele Miller @ Disney (elephant tag veterinary advisor) over use of NDAID's in elephants for the treatment of arthritis. Dr. Miller recommended using (1) Flunixin meglumine: 0.7-1.0 mg/kg PO q 24-48 hr; (2) Ibuprofen: 0.5-4 mg/kg PO q 24 hr; (3) Phenylbutazone: 1-2 mg/kg PO q 24 hr up to 2.5 mg/kg q 48 hr. Also stated there was a report of using Adequan (polysulfated glycosaminoglycan) in performing elephants at a dosage of 0.5-1.0 mg/kg im weekly for 4 to 8 weeks. Due to this animal's aggression, unable to give injections, will start on 1 mg/kg Phenylbutazone orally q



		24 hrs due to lameness seen to left rear leg along with some swelling to lower leg. RX: 5 grams Phenylbutazone orally po q 24 hrs. mixed in ADF 16 powder and molasses or honey until no longer lame.
5 Jul 2004	Medical observation	Keepers report animal is no longer limping. Seems to be back to normal. NSAID medication discontinued for now. Will continue to give Glyco-flex to help keep symptoms of arthritis under control.
6 Jul 2004	Foot management	Foot session reveals return of hyperkeratosis or "feathering" signs to LR foot. Applied corona cream to LR foot to help reduce signs of hyperkeratosis.
8 Jul 2004	Individual behavior	Keepers report elephant did not want to leave barn in am.
14 Jul 2004	Individual behavior	Elephant aggressive towards other female elephant (#356) during blood draw on #356.
29 Jul 2004	Foot management	Keepers performed foot trim. Reported this elephant has deep ridge along outside edge of RR foot.
30 Jul 2004	Medical observation	Elephant seen slightly favoring LR leg during day.
1 Aug 2004	Medical treatment	8 cups bran added to diet daily for next week as laxative.
1 Aug 2004	Medical note	Lots of fecal matter found in stall today (2.5 barrels compared to 1 barrel w/ other elephant) that had a very pungent odor. Keepers report seemed normal yesterday; may have been stressed from zoo serenade.
9 Aug 2004	Medical treatment	Gave 10,000 mg (10 gm) Phenylbutazone orally mixed with ADF 16 dust and honey because keepers noticed elephant was somewhat lame to left rear leg.
10 Aug 2004	Medical treatment	Keepers report elephant is not lame to rear leg, is moving well and seems to be feeling good. Discontinue Phenylbutazone.
15 Aug 2004	Medical note	Limping some on LR leg
19 Aug 2004	Medical treatment	Given 10,000mg Phenylbutazone PO
20 Aug 2004	Medical treatment	Given 10,000mg Phenylbutazone PO in PM
21 Aug 2004	Medical treatment	Given 10,000mg Phenylbutazone PO
24 Aug 2004	Behavior note	Tanzy charged the ERD and broke the weld at the top of the north east door where it is attached to the hydraulic cylinder. Door repaired by maintenance staff and Park Staff. Tanzy sustained no injury.
29 Aug 2004	Behavior note	Tanzy seemed distant and listless today. Standing with left rear leg propped on toes.
29 Aug 2004	Medical treatment	Given 10,000 mg Bute
1 Sep 2004	Medical note	Limping on left rear leg and in a bad mood. Seemed very aggitated today. Aggressive to Tanya. Took a swing at keeper (James O'Brien).
2 Sep 2004	Behavior note	Very aggressive toward Tanya today. Hitting her and knocking her down.
3 Sep 2004	Medical treatment	Given 10,000mg Bute
7 Sep 2004	Behavior note	Still aggressive to Tanya.
22 Sep 2004	Behavior note	Due to problems with ERD, both elephants left out on exhibit overnight. Keepers on hand and observed throughout the night. No problems recorded.
20 Oct 2004	Behavior note	On Wednesday, October 20, Tanzy, our 48-year old female African elephant was locked in the elephant restraint device (ERD) for the first time since she was unloaded into it upon her arrival. Since that time, she had been weary of it and would pass through it quickly. The elephant staff has been working to succeed in getting her more accustom to and comfortable in this space. This is what made Wednesday's accomplishment such a big deal. She was held and rewarded for this over the duration of about 10 minutes that she was kept in the ERD. She showed some stress in her behavior, but no severe stress.
21 Oct 2004	Behavior note	On Thursday, October 21, staff attempted again to stop her in the ERD. Their first attempt was rebuffed by Tanzy and she was given a time out for about 30 minutes. The second time they tried, she did come out and was again secures in the ERD.
22 Oct 2004	Behavior note	On Friday, October 22, she totally refused to leave the barn and enter the ERD. She would step out with her front feet, but her back feet never left the barn. Keepers tried treats and browse to coax her out to no avail. Due to severe weather on that day, staff did not push it. Later in the day, they tried again without success.
23 Oct 2004	Behavior note	On Saturday, October 23, Tanzy's attitude was pretty much the same. She shows no sign of stress nor discomfort but Jeff Bullock, Director approved giving her some Bute in case we were dealing with some arthritic pain as we had in the past. She was again given several opportunities to leave the stall but continued to refuse.
24 Oct 2004	Behavior note	On Sunday, October 24, she again refused. This time however, when the gate between the two stalls



		was open, Tonya, the other elephant that had been trapped in the barn due to Tanzy's refusal to leave passed by Tanzy and exited the barn through the ERD. She was left out approx. 2 hours during which she was somewhat agitated and kept returning to the ERD as if trying to coax Tanzy out. At the end of the day, Tonya was brought back through Tanzy's stall and locked in her own.
25 Oct 2004	Behavior note	On Monday, October 25, there was no change. This time Tonya would not pass through Tanzy's stall so both elephants stayed in again.
26 Oct 2004	Behavior note	On Tuesday, October 26, Tanzy again refused to exit the barn. Jeff went down to the barn and worked with her to no avail. That afternoon, a meeting was held with Jeff, Stephanie, James, and Kate (Elephant Management Team) to discuss the problem to see if we missed something that might give some insight to this new behavior. Due to the extraordinary amount of feces build-up in Tanzy's stall as well as in Tonya's stall, we contacted the fire department to borrow a fire hose that would allow us to spray the feces and urine from the barn and into the yard. This was completed by staff and at least the elephants had clean, though wet, stalls.
27 Oct 2004	Behavior note	On Wednesday October 27, Tanzy continued her resistance to leaving the barn. Special treats were offered from her past, but made no difference. Jeff met with Stephanie and James that afternoon to discuss the current situation and the future plans. Jeff laid out the following plan for Tanzy. She will receive ¼ bale of grass hay each night along with ½ barrel of water. She will be given opportunities to leave the barn every couple of hours spending no more than 30 minutes on each attempt. In order to meet Tonya's psychological and physical needs, it was decided that the west gate into the barn that had been sealed shut would be modified to be open and allow Tonya to go on exhibit without having to go through Tanzy's stall.
31 Oct 2004	Behavior note	Appears to be getting more aggressive with female Tanya (356) fighting through the bars.
2 Nov 2004	Medical observation	Noticeable amount of white mucus around both eyes AM. Shivering and skin appears very dry.
3 Nov 2004	Medical observation	Shivering at 1:30 PM. Not eating much. Mucus in both eyes and temporals draining.
14 Nov 2004	Note	Leg stiffness and irritable. Took a swing at keepers two times.
15 Nov 2004	Note	Mucus in both eyes. Aggressive to keepers and other elephant. Treated w/10g Bute
16 Nov 2004	Medical treatment	10g Bute Calmer today
29 Nov 2004	Medical treatment	10g Bute PO
30 Nov 2004	Medical observation	Shakey AM on front legs.
12 Dec 2004	Medical observation	Lots of mucus in eyes
23 Dec 2004	Medical observation	Shaking badly, especially on front legs. Very cold today, but barn appears warm.
2 Jan 2005	Medical observation	Noticeable stiffness in legs when she went out. She finally left barn on her own at 10:15 AM through ERD. Minimal temporal drainage. She went out after Tanya made a sudden noise in the exhibit. Nothing else out of the ordinary. She came in well. Followed normal let in procedures. Given 10g Bute tabs.
3 Jan 2005	Note	Refused to leave stall again.
4 Jan 2005	Medical treatment	1st day of TB trunk wash. Still in barn.
5 Jan 2005	Medical treatment	2nd day of TB trunk wash. Still in barn
6 Jan 2005	Medical treatment	3rd day of TB trunk wash.
7 Jan 2005	Note	Went out at about 4 PM through ERD. No staff around at the time. She was allowed to stay outside later than normal. When given opportunity to enter barn through north door, she refused. She was shifted inside through ERD before dark. While outside, she was somewhat stiff, but active in the yard. She looked noticeably thinner across her back.
8 Jan 2005	Note	Refused to leave her stall again.
17 Jan 2005	Note	She was somewhat aggressive today but also seemed stiff, drawn, & lethargic. Keepers noted hearing cracking in joints when she walked.
18 Jan 2005	Medical observation	Seemed bloated on her left side. Tried to give her Therablast (4oz) mixed with KoolAid but she wouldn't drink it. Still no major improvement. Ate less than 1/2 bale of hay.
19 Jan 2005	Medical treatment	Attempted to give 90cc Banamine. Got approx. 45cc in her. She seems uncomfortable.
20 Jan 2005	Medical treatment	10g Bute for pain
21 Jan 2005	Medical treatment	Seems to be feeling better but still sluggish. Given 10g Bute tabs



22 Jan 2005	Medical treatment	10g bute tabs to make her comfortable. Ate better; Good stools.
25 Jan 2005	Medical observation	After visual exam with Dr. Hilton, noticed definite lack of teeth on upper left jaw. Started chopping hay with brush chipper from Parks Department. She seems to eat the hay much better.
27 Jan 2005	Medical treatment	Called in Dr. Dennis Schmitt to assist with her treatment. Drew blood from right rear leg for CBC/Chem. Blood draw went well.
28 Jan 2005	Medical treatment	Dr. Hilton tried to draw blood, but she pulled her leg. Increased Glyco-Flex to 1 cup AM and 2 PM
31 Jan 2005	Medical treatment	Started treating with 30,000mg (7mg/kg) Ibuprofen daily for long-term pain treatment. (150 200mg tablets) Collected urine for urinalysis - Normal Defecating more than normal and stool getting softer throughout the day. Will stop beet pulp in diet. She is acting strangely submissive when James O enters Tanya's stall. Took temperature - 96.5
1 Feb 2005	Medical observation	Took temperature in fresh stool - 95.5 Still showing submissive behavior. Not targeting for KAte, but does everything else. Targets for James.
2 Feb 2005	Medical treatment	Tanzy will be treated with 30,000 mg Ibuprofen daily UFN.
7 Feb 2005	Medical observation	She looked bloated on her left side.
8 Feb 2005	Medical observation	Still looks a little bloated. Blood draw. WBC is back up????
10 Feb 2005	Medical observation	Somewhat bloated after 2 barrels of AM hay
21 Feb 2005	Behavior note	GIVEN ACCESS TO EXHIBIT OVERNIGHT TONIGHT AND LAST NIGHT. SHE DID NOT LEAVE BARN LAST NIGHT.
1 Mar 2005	Medical treatment	Blood draw successful.
4 Mar 2005	Medical treatment	Started on 100mg Xanax daily. UFN
7 Mar 2005	Behavior note	Still aggressive, but almost leaving the barn.
8 Mar 2005	Medical treatment	Blood Draw
9 Mar 2005	Note	Attached chain anklet to left front foot. Did not affect her at all.
10 Mar 2005	Medical treatment	Increased Xanax to 150 mg per day UFN
11 Mar 2005	Behavior note	Tanzy left the barn on her own this AM. Will continue w/Xanax for now. Seemed kind of out of it in AM
12 Mar 2005	Behavior note	Out on exhibit again. Given access to yard overnight
13 Mar 2005	Behavior note	Going out nearly normal.
14 Mar 2005	Medical treatment	Reduced Xanax to 100mg/day UFN. Went out great today
15 Mar 2005	Medical treatment	Blood Draw. Went out great for staff.
19 Mar 2005	Medical treatment	Xanax reduced to 90mg. Supposed to be 75mg.
20 Mar 2005	Medical treatment	Given 75mg Xanax. Slowly decreasing dosage as long as she keeps going outside.
21 Mar 2005	Medical treatment	75mg Xanax
22 Mar 2005	Medical treatment	Blood Draw
23 Mar 2005	Behavior note	Slow to go out this AM.
24 Mar 2005	Medical treatment	Dropped to 50mg Xanax. Tanzy refused to go outside. Given another 25mg and went out 15 minutes later.
25 Mar 2005	Medical treatment	75mg Xanax
29 Mar 2005	Medical treatment	Blood draw
30 Mar 2005	Medical treatment	74mg Xanax
31 Mar 2005	Medical treatment	Dropped Xanax dose to 72 mg. Will continue dropping by 4mg every three days to assess dosage level.
1 Apr 2005	Medical treatment	Given 74mg Xanax
2 Apr 2005	Medical treatment	70 Mg. Xanax
7 Apr 2005	Medical treatment	Dose dropped to 66mg Xanax
11 Apr 2005	Medical treatment	Dose dropped to 62mg Xanax
13 Apr 2005	Medical observation	Unusual mucous substance found in stall and on wall. Taken to Dr. Hilton and sent off for testing.
15 Apr 2005	Medical treatment	Dose dropped to 58mg Xanax
19 Apr 2005	Medical treatment	Dose dropped to 54mg Xanax
22 Apr 2005	Medical treatment	Either given 58mg or 54mg Xanax. Keeper reports differ????
25 Apr 2005	Medical observation	More mucus found in stall and collected.



29 Apr 2005	Medical treatment	Dose dropped to 46mg Xanax. Also day 1 of trunk washes.
30 Apr 2005	Medical treatment	Day 2 trunk wash
1 May 2005	Medical treatment	Day 3 trunk wash
1 May 2005	Medical observation	More mucus in stall. Day 3 of trunk washes.
2 May 2005	Medical treatment	Reduced Xanax to 42 mg. Went out fine.
6 May 2005	Medical treatment	Reduced Xanax to 38mg. Went out fine.
10 May 2005	Medical treatment	Xanax Dosage at 34mg.
14 May 2005	Medical treatment	Reduced Xanax to 30mg per day
18 May 2005	Medical treatment	Dropped to 26mg Xanax
19 May 2005	Medical observation	Very lethargic today. Refused to stand for blood draw and slow to respond to commands.
23 May 2005	Medical treatment	Dropped to 22mg Xanax
26 May 2005	Medical treatment	Dropped to 18mg Xanax
29 May 2005	Medical treatment	Xanax dose dropped to 18mg
30 May 2005	Medical treatment	Xanax dose dropped to 14mg. Keeper noted that she was pretty aggressive toward toward Tanya in the barn. Also, Stephanie noted a quarter sized hole about 1/2-inch deep of feathered tissue on left rear foot @ first nail.
31 May 2005	Behavior note	She was once again aggressive towards Tanya.
3 Jun 2005	Medical treatment	Xanax dose dropped to 10mg
6 Jun 2005	Behavior note	Very aggressive to Tanya.
7 Jun 2005	Medical treatment	Xanax dose dropped to 6mg
11 Jun 2005	Medical treatment	Xanax 2mg dose
14 Jun 2005	Behavior note	Still aggressive towards Tanya.
15 Jun 2005	Medical treatment	No Xanax AM-she refused to leave barn. Given 40mg. Then given 30mg. Keepers then gave 30 mg more and then another 30mg. She left the barn at 3PM.
16 Jun 2005	Medical treatment	Given 40mg Xanax then another 60mg.
17 Jun 2005	Medical treatment	Given 100mg Xanax AM. Hesitated, but came out.
18 Jun 2005	Medical treatment	Given 100mg Xanax daily UFN
24 Jun 2005	Medical treatment	Increased daily dose of Ibuprofen to 37,500mg (188- 500mg tablets)
25 Jun 2005	Behavior note	She was calmer today and much less aggressive to Tanya.
20 Jul 2005	Medical observation	Chipped off big chunk of tusk this evening.
25 Jul 2005	Medical treatment	96 mg Xanax
29 Jul 2005	Medical treatment	Xanax dropped to 92mg
2 Aug 2005	Medical treatment	Dropped Xanax to 88mg
5 Aug 2005	Medical treatment	Xanax dropped to 84mg
10 Aug 2005	Medical treatment	Xanax dropped to 80mg
12 Aug 2005	Medical treatment	Left 4mg of 80mg treatment of Xanax
18 Aug 2005	Medical treatment	Xanax decreased to 76mg
21 Aug 2005	Medical treatment	Ate 68 of 76mg Xanax
25 Aug 2005	Medical treatment	Xanax dropped to 72mg
31 Aug 2005	Note	Given access to exhibit overnight for exercise.
3 Sep 2005	Medical treatment	Xanax dropped to 68mg
4 Sep 2005	Medical treatment	Left 8mg of 68mg treatment of Xanax
11 Sep 2005	Medical observation	Mucus like substance from vagina.
12 Sep 2005	Medical treatment	Xanax dose dropped to 64mg
15 Sep 2005	Medical observation	Vaginal discharge. Clear with mucus-like texture
16 Sep 2005	Medical note	Only received 56mg Xanax because keepers ran short. No problem noted. More vaginal discharge.
17 Sep 2005	Medical treatment	Back on track with 64mg Xanax



18 Sep 2005	Behavior note	Hesitant to go outside.
26 Sep 2005	Medical treatment	Xanax dose dropped to 60mg.
27 Sep 2005	Medical observation	Right side of jaw appears to be sinking in.
11 Oct 2005	Medical treatment	Dropped xanax to 56mg
24 Oct 2005	Medical treatment	REDUCED XANAX DOSE TO 52MG
26 Oct 2005	Behavior note	Slow to leave the barn today.
8 Nov 2005	Medical treatment	Xanax reduced to 48mg
29 Nov 2005	Medical treatment	Blood taken from right rear leg for CBC Chem. On 52mg. Xanax
6 Dec 2005	Medical treatment	Ibuprofen dose will be increased by 50% for seven days and then reduced to 25% of current dose UFN. Current dose is 37,500mg daily. Also will begin monthly CBC tests and quarterly Chem panels.
8 May 2006	Medical treatment	3 days of trunk washes sent off.
29 May 2006	Medical observation	Looks like both of her bottom teeth are about ready to fall out
4 Jul 2006	Behavior note	Keeper reported "Tanzy has been acting more aggressive lately."
26 Jul 2006	Medical treatment	Tanzy took new ibuprofen treats fine.
8 Aug 2006	Medical observation	Slower kneeling and switching back foot on salute command. Seems to be favoring left rear leg.
9 Aug 2006	Behavior note	Very uncooperative. Possibly due to problem with hydraulics. They were making a racket due to hose problem.
10 Aug 2006	Behavior note	Much better today. Hydraulics were repaired.
16 Aug 2006	Medical observation	Seems stressed when no one is around, but fine when staff is present. Moving and eating fine.
23 Aug 2006	Medical observation	Shifting on her feet. Mainly her left rear leg..
24 Aug 2006	Medical observation	Seemed to have p[roblems when we got to left rear leg in footwork session.
25 Aug 2006	Medical observation	Continues to show problems with her left rear leg. Seemed to walk OK but favors it when standing for long periods of time. She is eating great.
4 Sep 2006	Medical observation	Slow to eat grains and drinking a lot of water. Face appeared sunken in. Ate hay fine and went outside with no difficulty.
21 Sep 2006	Medical treatment	Not feeling well today. Bloating, possibly Colic. Laying down on exhibit in AM. Not responsive at first, but then got up. Leaning against building and stretching legs. Brought into barn. Treated with 5cc Butorphanol IV in ear & 9cc Banamine injectable IV in ear. Beginning tomorrow, will give 9cc Banamine Paste orally twice a day for three days and 1gal. mineral oil orally, twice a day for two days. Her condition improved throughout the day.
22 Nov 2006	Medical note	Keepers note more drainage from the temporal glands, reluctance to follow commands and perhaps more "trunk sucking". Medication evaluation may be needed.
30 Nov 2006	Medical note	May have lost a portion of a molar. Keepers found a portion of a molar in her stall, although cannot pinpoint the actual source.
11 Dec 2006	Behavior note	Tanzy acting up again today. Trumpeting a lot today, chasing Tanya around exhibit. Bluff charging at curator as he walked by. Generally seemed wound up.
16 Dec 2006	Medical treatment	Xanax increased to 75 mg SID and will monitor her behavior. Per Dr. Hilton and Doug's direction.
1 Jan 2007	Environment	Added new scratchin post to exhibit along with new tire swing for enrichment. Elephants seemed to really enjoy the new addition.
5 Mar 2007	Medical note	Broke off her left tusk in the exhibit. Has sharp sharp left. Notified vet. Curator, Director examined and will re-evaluate with the vet tomorrow when he arrives. As of now, it does not appear to be causing distress or appear to have fractured into the pulp. Purely cosmetic.
6 Mar 2007	Medical note	Broke off shard overnight. Her demeanor seems much better this morning. Vet looked at her. Does not seem to have fractured in to the pulp. For now the plan is to do nothing except keep the area clean and monitor for distress or discomfort.
17 Mar 2007	Behavior note	Seems to be having some problems kneeling and presenting L rear foot through foot door.
28 Mar 2007	Medical note	Urine seemed very cloudy and "pungent" today.
29 Mar 2007	Medical note	Urine cloudy and "pungent" again today. Elephant seems fine otherwise, no "off" behaviors noted my staff.
22 May 2007	Medical note	Broke off a piece of tooth this morning, with a small fleck of tissue. Does not seem to be effecting her at



		all. Will continue to monitor.
9 Jul 2007	Behavior note	Refused to leave the barn today. May be because Tanya got a hold of keepers tools on exhibit first thing in morning and had to be rushed back in and this may have been enough to spook Tanzy. Will attempt again tomorrow.
10 Jul 2007	Behavior note	Came out of barn okay today
24 Jul 2007	Animal management note	Day #1 of trunk washes for TB testing. Animal did fine.
25 Jul 2007	Animal management note	Day #2 of trunk wash. Did okay.
26 Jul 2007	Animal management note	Last day for trunk wash. She did splendid.
4 Aug 2007	Medical observation	Tanzy has "coudy" urine today. Will monitor. Seemed normal at pm check.
6 Aug 2007	Medical observation	Tanzy seemed "off" in the morning. She did not eat her grain from last night. Was slow with commands going out. She is doing a lot of stretching and seems to be in some dicomfort in a.m. Curator looked at her and approsed staff to keep close eye on her. Vet notified. Keepers watching her through the day. At 4:00 she appears to have worsened. She seems unresponsive and is doing quite a bit of leaning against things. Vet called again and given new information. Director looked at her also. Vet came in and vet, curator, director, supervisor loked at her and think maybe she is colic-ing. Pull grains for evening and gave her beet pulp with mineral oil to aid in her sitation. Will monitor through night.
7 Aug 2007	Medical observation	Still no real response. Did not eat beet pulp through night. Curator and supervisor took turns checking on her through night. Let her out as usual, she was not overly active. No real drinking or eating was observed. Gave her poweraid drinks to see if she would drink. She took a couple. 32 oz total. Was not overly interested in watermelon or ice placed on exhibit for her. Curator and vet are calling around country to consult other experts on condition.
8 Aug 2007	Medical observation	Still no progress on condition. Keeprs have tried multiple foods and variety of ideas to get water to her. She is unresponsive to commands as well. She did spend some time at the pool today with Tanya tossing water on herself although did not note her drinking. Consesus from amangement is that we will need to do a standing sedation on her to get her hydrated and obtain blood sample. May look at tomorrow for this.
9 Aug 2007	Medical note	Still no change in condition. Seems to be declining. Animal was darted for standing sedation so vet could draw blood and hydrate through enema. Tanzy would not go into full sedation enough for staff to work on her. She became quite calm, yet never full seadate to point of workability. Had to abort procedure as it was felt risk was not worth it. ***Tanzy began to eat some hay and produce and drink from barrel in evening!
10 Aug 2007	Medical observation	Tanzy ate 3/4 bale of hay, quite a bit of produce and drank a full barrel of water (50 gal) overnight! Today's sedation was aborted as it was felt that she got plenty of water on her own. Tanzy followed commands and keepers were able to get a blood sample for lab testing. Animal was let out into the yard and seems to be doing better. Vet feels as though the drugs she was darted gave her some pain relief. Curator and vet are working to pinpoint what is causing the pain.
11 Aug 2007	Medical observation	Seems to be doing better. Took her medications fine. Did all her commands and she is eating and drinking. Small amounts, but still taking some. She was actually at the fence today taking rye-crisp crackers from the visitors. Keepers continuing to keep watch on her through day. Staying cautiously guarded.
12 Aug 2007	Medical observation	Tanzy sooms okay today. Following her commands well. Still picking at her food. She is still at the fence mingling with the crowd. Drank about 8 gal. out of the barrel of the gatoraid. Keeprs did not see her drink from the pool.
13 Aug 2007	Death note	Tanzy found down in her stall by keepers at 9:30. Curator was called and verified she was deceased. She had been on her feet and seemingly okay at 6:30 a.m. visit by curator. Time of death between 6:30 and 9:30.



<u>Date</u>	<u>Sex</u>	<u>Comments</u>
30 Oct 1998	Female	

<u>Date</u>	<u>Rearing</u>	<u>Comments</u>
30 Oct 1998	Unknown	

Death Information

According to ABILENE

Circumstances:	Infection Associated
Carcass Disposition	Bury
Carcass recipient:	
Necropsy (Topological):	Generalized
Necropsy (Etiological):	Unknown



Texas Veterinary Medical Diagnostic Laboratory System



Final Report

P.O. Drawer 3040, College Station, TX 77841-3040
Phone: (979)845-3414 Fax: (979)845-1794 <http://tvmdlweb.tamu.edu/>

(325)676-6085

Owner's Name:
Abilene Zoo

Veterinarian/Submitter: Account ID#: 13826
Abilene Zoological Gardens
2070 ZOO LANE
Abilene, TX 79602

Date specimens received: 8/14/07

Preliminary reports: Fax 8/17/07

Phone reports:

Final report: Fax 8/23/07

Species: Exotic Age: 49.00 Years Animal ID: Tanzy/ #1237
Breed: Elephant Weight: Sex: Female

Tests Requested: Bacteriology(Peritoneal swab), stone analysis (gallstone), Histopathology

Specimens Submitted: fixed tissue, gall stone, peritoneal swab

Clinical History: 8/14/07 Animal ill (anorexic) 8/9/07. Treated and responded well. Eating 8/18/07
Returned to normal 8/12/07. Found dead 8/13/07. /ac

Clinical Diagnosis:

Previous Cases:

Treatment:

Conclusion/Interpretation of Lab Findings:

Peritonitis. See Histopath. comments.

LABORATORY TEST STATUS:

	Ordered	Current Status
Histopath: Necropsy tissues (H)	8/16/07	Completed 8/23/07
Routine culture (B)	8/14/07	Completed 8/17/07
Toxicology Comments (T)	8/14/07	Completed 8/14/07

Histopathology

Histopath: Necropsy tissues
Date completed: 08/23/07
Date report entered: 08/23/07
 Tanzy/ #1237, Exotic

Pathologist: Lewis, Barbara

Sections/Slides: 47/25
Tissues: 23

DESCRIPTION:

LYMPH NODE - The parenchyma is acutely diffusely congested. There is moderate subacute nodular lymphoid hyperplasia.

TUBULAR VISCUS - (cecum?) - The mucosa is diffusely ulcerated. The submucosa contains low numbers of lymphocytes, plasma cells, and neutrophils. There is extensive hemorrhage and necrosis in the muscular tunics.

SPLEEN - The parenchyma is acutely diffusely congested with moderate hemosiderosis. The capsule is expanded with hemorrhage and organizing fibrin. **LARGE INTESTINE** - There is surface mucosal autolysis. No microscopic lesions are observed.

TUBULAR VISCUS (large intestine?) - There are multifocal hemorrhages in the serosa.

LUNG - The parenchyma is acutely diffusely congested. There is mild thickening of the lobular interstitium with accumulation of macrophages with phagocytized refractile brown black pigment (pneumoconiosis, incidental finding).

OVARY - There are multifocal cysts lined by cuboidal epithelium. Another section contains a corpus luteum.

TUBULAR VISCUS (Urinary bladder?) - The mucosa is missing. The lamina propria is congested and hemorrhagic.

TRACHEA (respiratory epithelium) - The submucosa is edematous.

SMALL INTESTINE - There is mucosal autolysis. No lesions are observed.

SKELETAL MUSCLE - There are some angular fibers with variation in fiber diameter.

LIVER - The hepatocytes often contain brown granular pigment interpreted as bile.

KIDNEY, HEART, STOMACH, EYE, PERIPHERAL NERVE, PANCREAS, UTERUS?, GLANDULAR TISSUE (Salivary gland?), AND LINEAR TISSUE STRUCTURE LINED BY KERATINIZING STRATIFIED SQUAMOUS EPITHELIUM - No lesions are observed.

HISTOPATHOLOGIC DIAGNOSIS:

Ulcerative and hemorrhagic typhilitis, cecum presumed.
 Moderate diffuse subacute fibrinohemorrhagic capsulitis, spleen.

COMMENT:

Histologic identification of some of the tissues was difficult due to loss of the mucosa or lack of architectural relevance. The tissue with the most hemorrhage and necrosis is presumed to be the cecum

and is consistent with your clinical diagnosis of cecal rupture. Peritonitis is evident on the surface of the spleen. The significance of the NSAID treatment is uncertain. These drugs have been associated with ulcerations in the anterior intestinal tract of many animal species and in the right dorsal colon of horses administered high dosages of phenylbutazone. The clinical significance of the cholelith is undetermined.

Barbara Lewis, DVM, MS, DACVP
/ath

Bacteriology

Date completed: 8/17/07

Test: Routine culture

Animal ID: Tanzy/ #1237

Specimen	Isolate	Growth
Peritoneal fluid swab	Mixed anaerobes	
Peritoneal fluid swab	Escherichia coli	
Peritoneal fluid swab	Klebsiella pneumoniae	
Peritoneal fluid swab	Enterobacter sp.	
Peritoneal fluid swab	Mixed bacterial growth	

Comment:

08/16/07

Additional work is in progress.

---A. K. Swinford, DVM, MS, DACVM /lak

08/17/07

Laboratory results as listed. See above for final culture results.

---A. K. Swinford, DVM, MS, DACVM /lak

Toxicology

Date Completed: 8/14/07

Toxicology Comments:

Service not offered. Our tests are designed for urinary stones not gall stones. -- Dr. Reagor

Veterinary Bulletin:

Sheep and Goat parasite Anthelmintic Resistance:

Rainfall in Texas has been exceptional for much of the state this year and grass is above normal in most pastures. Unfortunately good rains and good pastures can quickly lead to heavy populations of gastrointestinal parasites. Recently, TVMDL has received several small ruminants (both sheep and goats) for postmortem examination. During the same time period, fecal samples submitted to TVMDL from small ruminants have had high trichostrongyle egg counts. The cause of these recent deaths and rising egg counts can

be attributed solely to *Haemonchus contortus*. Pasture populations of *H. contortus* are markedly elevated now because weather conditions have been perfect for this species.

Unfortunately *H. contortus* has become highly resistant to all classes of anthelmintics. Ivermectin, Moxidectin as well as all of the benzimidazoles appear to have little or no effect at this time. To further compound this problem there are no new drugs in the pipeline which will provide any relief for the *Haemonchus* problem in the near future.

In the mean time sheep and goats, particularly those in small groups should be maintained on the highest and driest areas available and when possible animals should be fed quality feed in bunkers off the ground.

Additional Note: We have had some evidence that Llamas are also a species experiencing severe intestinal parasite problems with apparent resistance to currently used anthelmintics.

TVMDL Fee Increase:

The last increase in fees TVMDL charges for testing occurred in September of 2002. Since that time there have been significant increases in the costs associated with providing testing. Therefore, TVMDL is currently conducting a review of fees charged for testing and we expect an increase to be implemented within the next 30 days. When they are activated, the new fees will be posted on our web site at <http://tvmdlweb.tamu.edu> under the "TESTING" link. Please rest assured that TVMDL is committed to providing you with accurate testing results at an affordable price with as short a "turn around time" as possible.



Texas Veterinary Medical Diagnostic Laboratory System



Final Report

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Phone: (979)845-3414 Fax: (979)845-1794 <http://tvmdiweb.tamu.edu/>

(325)676-6085

Owner's Name:
1237 Tanzy

Veterinarian/Submitter: Account ID#: 13826
Abilene Zoological Gardens
2070 ZOO LANE
Abilene, TX 79602

Date specimens received: 3/29/07

Preliminary reports: Fax 3/29/07

Phone reports: Fax 3/29/07 3/29/07 C *Final*

Final report: Fax 3/30/07

Species: Exotic	Age: 49.00 Years	Animal ID: Tanzy
Breed:	Weight:	Sex: Female

Tests Requested: CBC, Chemistries with Fibrinogen

Specimens Submitted: Serum, Whole Blood, Slide

Clinical History: Sample from 4th week after breaking tusk off. Fax results. /wg

Clinical Diagnosis:

Previous Cases:

Treatment:

Conclusion/Interpretation of Lab Findings:

Laboratory results as listed. S. L. Lovering, DVM/vs

LABORATORY TEST STATUS:**Ordered Current Status**

Chem panel (Equine) (C)	3/29/07	Completed 3/30/07
Complete Blood Count (Mammalian) (C)	3/29/07	Completed 3/30/07

🔍 Clinical Pathology**Completed:** 3/30/07**Test:** Chem panel (Equine)**Animal ID:** Tanzy

Test	Results	Reference Range	Relative Result Indication		
			Low	Normal	High
Total Serum Protein	8.3	g/dl			
Albumin	3.3	0 g/dl			
Calcium, serum	10.9	0 mg/dl			
Phosphorus, serum	4.15	0 mg/dl			
Glucose	73	0 mg/dl			
BUN	7.9	0 mg/dl			
Creatinine	1.51	0 mg/dl			
Total bilirubin	0.10	mg/dl			
Direct bilirubin	0.05	mg/dl			
ALP	43	0 U/l			
CK	258	0 U/l			
AST (SGOT)	13	0 U/l			
Globulins	5.0	0 g/dl			
A/G Ratio	0.66				
GGT	9	0 U/l			

Comment

NOTE

Species was not given on submittal form; called clinic to obtain that information; per submitter, species is exotic (elephant) named "Tanzy".

/bw

S. L. Lovering, DVM

sl/vs

Completed: 3/30/07**Animal ID:** Tanzy**Complete Blood Count (Mammalian)**

Total WBC's 7,200

/ul

Differential/%		
Neutrophils	31	%
Lymphocytes	37	%
Monocytes	29	%
Eosinophils	3	%
Absolute/ul		
Neutrophils	2232	/ul
Lymphocytes	2664	/ul
Monocytes	2088	/ul
Eosinophils	216	/ul
Red blood cells	2.79	X10 ⁶ /ul
Hemoglobin, blood	12.0	g/dl
PCV	35.4	0%
MCV	126.9	f
MCH	43.0	pg
MCHC	33.9	g/dl
Platelet estimate	1890	X10 ³ /ul
Platelet comment	Estimate	
Plasma protein	8.5	5.6-6.7 g/dl
Fibrinogen	400	0 mg/dl

RBC Morphology

Normal

WBC Morphology

Normal

Hemoparasites

None seen

Comments:

/bw

S. L. Lovering, DVM

sl/vs

Veterinary Bulletin:**FEED TESTING:**

TVMDL will no longer offer feed nutrient analysis testing (routine feed analysis testing). If you need assistance in finding a laboratory for feed nutrient analysis, please contact the Amarillo laboratory (Dr. Haliburton) at 888-646-5624 or the College Station laboratory (Dr. Reagor) at 888-646-5623.

Bovine Viral Diarrhea Testing

Ear notch specimens sent for BVD testing must have the type of test requested listed in the "Test Requested" section of the TVMDL submission form. Currently TVMDL runs an Immunohistochemistry (IHC) test on formalin fixed tissue which is still considered the "gold standard" and we also offer an ELISA based test which is run on fresh tissue submitted as an ear notch. Please make sure you list the specific test request as either BVD-IHC or BVD-ELISA. If that information is not provided we will attempt to call you. However, in the event we are unable to clarify your test request, we will provide the IHC test.

Error Free Submission Data on Export Cases and Blood Draw Date Requirements:

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conflicting data in documents submitted with animals for export. This requirement also applies to providing **"blood draw dates"** on all testing required for export. Please make sure you review for accuracy all submission forms and supporting documents submitted for testing on export cases. A single error, conflicting information, or data omission can cause your client to literally "miss the boat".



Texas Veterinary Medical Diagnostic Laboratory System

Accession#: C070800601

CD#



Final Report

P.O. Drawer 3040, College Station, TX 77841-3040
Phone: (979)845-3414 Fax: (979)845-1794 <http://tvmdlweb.tamu.edu/>

Owner's Name:
'Tanzy' Elephant

Veterinarian/Submitter: (325)676-6085
Account ID#: 13826
Abilene Zoological Gardens
2070 ZOO LANE
Abilene, TX 79602

Date specimens received: 3/21/07

Preliminary reports: Fax 3/21/07

Phone reports:

Final report: Fax 3/22/07

Final

Species: Exotic

Age: 49.00 Years

Animal ID: Tanzy

Breed: Elephant

Weight:

Sex: Female

Tests Requested: CBC, Chemistries

Specimens Submitted: Whole blood, serum, slides

Clinical History: Third week since she broke tusk off. Fax results. /wg

Clinical Diagnosis:

Previous Cases:

Treatment:

Conclusion/Interpretation of Lab Findings:

Laboratory results as listed.

J. A. Akins, DVM/vs

LABORATORY TEST STATUS:

Ordered Current Status

Chem panel (Equine) (C)	3/21/07	Completed 3/22/07
Complete Blood Count (Mammalian) (C)	3/21/07	Completed 3/22/07

Clinical Pathology

Completed: 3/22/07

Test: Chem panel (Equine)

Animal ID: Tanzy

Test	Results	Reference Range	Relative Result Indication		
			Low	Normal	High
Total Serum Protein	7.9	g/dl			
Albumin	3.2	g/dl			
Calcium, serum	10.7	mg/dl			
Phosphorus, serum	5.18	mg/dl			
Glucose	73	mg/dl			
BUN	7.4	mg/dl			
Creatinine	1.43	mg/dl			
Total bilirubin	<0.1	mg/dl			
Direct bilirubin	0.03	mg/dl			
ALP	44	U/l			
CK	240	U/l			
AST (SGOT)	14	U/l			
Globulins	4.7	g/dl			
A/G Ratio	0.68				
GGT	6	U/l			

Comment

/bw

J. A. Akins, DVM

ja/vs

Completed: 3/22/07

Animal ID: Tanzy

Complete Blood Count (Mammalian)

Total WBC's	7,900	/ul
Differential/%		
Neutrophils	29	%
Lymphocytes	23	%
Monocytes	46	%

Eosinophils	2	%
Absolute/ul		
Neutrophils	2291	/ul
Lymphocytes	1817	/ul
Monocytes	3634	/ul
Eosinophils	158	/ul
Red blood cells	2.71	X10e6/ul
Hemoglobin, blood	11.5	g/dl
PCV	34.7	0%
MCV	128.0	f
MCH	42.4	pg
MCHC	33.1	g/dl
Platelet estimate	290	X10e3/ul
Platelet comment	Estimate	
Plasma protein	8.3	0 g/dl
Fibrinogen	400	0 mg/dl

RBC Morphology

Normal

WBC Morphology

Normal

Hemoparasites

None seen

Comments:

/bw

J. A. Akins, DVM

ja/vs

Veterinary Bulletin:

FEED TESTING:

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Bovine Viral Diarrhea Testing

Ear notch specimens sent for BVD testing must have the type of test requested listed in the "Test Requested" section of the TVMDL submission form. Currently TVMDL runs an Immunohistochemistry (IHC) test on formalin fixed tissue which is still considered the "gold standard" and we also offer an ELISA based test which is run on fresh tissue submitted as an ear notch. Please make sure you list the specific test request as either BVD-IHC or BVD-ELISA. If that information is not provided we will attempt to call you. However, in the event we are unable to clarify your test request, we will provide the IHC test.

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Texas Veterinary Medical Diagnostic Laboratory System



Final Report

P.O. Drawer 3040, College Station, TX 77841-3040
Phone: (979)845-3414 Fax: (979)845-1794 <http://tvmdlweb.tamu.edu/>

Owner's Name:
Afr. Eleph. #1237

(325)676-6085

Veterinarian/Submitter: Account ID#: 13826
Abilene Zoological Gardens
2070 ZOO LANE
Abilene, TX 79602

Date specimens received: 3/14/07

Preliminary reports: Fax 3/14/07

Phone reports:

Final report: Fax 3/14/07

Final

Species: Exotic

Age: 49.00 Years

Animal ID: Tanzy

Breed: Elephant

Weight:

Sex: Female

Tests Requested: CBC, chemistries

Specimens Submitted: serum, whole blood, slide

Clinical History: Follow up blood work (week #2 after breaking tusk off). /sp

Clinical Diagnosis:

Previous Cases:

Treatment:

Conclusion/Interpretation of Lab Findings:

Laboratory results as listed. J. A. Akins, DVM/bw

LABORATORY TEST STATUS:**Ordered Current Status**

Chem panel (Equine) (C)	3/14/07	Completed 3/14/07
Complete Blood Count (Mammalian) (C)	3/14/07	Completed 3/14/07

🔍 Clinical Pathology**Completed:** 3/14/07**Test:** Chem panel (Equine)**Animal ID:** Tanzy

Test	Results	Reference Range	Relative Result Indication		
			Low	Normal	High
Total Serum Protein	8.1	g/dl			
Albumin	3.3	0 g/dl			
Calcium, serum	7.5	0 mg/dl			
Phosphorus, serum	4.54	0 mg/dl			
Glucose	73	0 mg/dl			
BUN	7.5	0 mg/dl			
Creatinine	1.37	0 mg/dl			
Total bilirubin	<0.1	mg/dl			
Direct bilirubin	0.02	mg/dl			
ALP	37	0 U/l			
CK	300	0 U/l			
AST (SGOT)	15	0 U/l			
Globulins	4.8	0 g/dl			
A/G Ratio	0.69				
GGT	8	0 U/l			

Comment

/bw

--- J. Akins, DVM,MS

/ja/bw

Completed: 3/14/07**Animal ID:** Tanzy**Complete Blood Count (Mammalian)**

Total WBC's	5,500	/ul
Differential/%		
Neutrophils	33	%
Lymphocytes	25	%

Monocytes	42	%
Absolute/ul		
Neutrophils	1815	/ul
Lymphocytes	1375	/ul
Monocytes	2310	/ul
Platelet estimate	2460	X10c3/ul
Platelet comment	Estimate	

RBC Morphology

Normal

WBC Morphology

Normal

Hemoparasites

None seen

Comments:

---Blood sample clotted, unable to perform CBC.

/bw

--- J. Akins, DVM,MS

/ja/bw

Veterinary Bulletin:**FEED TESTING:**

TVMDL will no longer offer feed nutrient analysis testing (routine feed analysis testing). If you need assistance in finding a laboratory for feed nutrient analysis, please contact the Amarillo laboratory (Dr. Haliburton) at 888-646-5624 or the College Station laboratory (Dr. Reagor) at 888-646-5623.

Bovine Viral Diarrhea Testing

Ear notch specimens sent for BVD testing must have the type of test requested listed in the "Test Requested" section of the TVMDL submission form. Currently TVMDL runs an Immunohistochemistry (IHC) test on formalin fixed tissue which is still considered the "gold standard" and we also offer an ELISA based test which is run on fresh tissue submitted as an ear notch. Please make sure you list the specific test request as either BVD-IHC or BVD-ELISA. If that information is not provided we will attempt to call you. However, in the event we are unable to clarify your test request, we will provide the IHC test.

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Texas Veterinary Medical Diagnostic Laboratory System



Final Report

P.O. Drawer 3040, College Station, TX 77841-3040
Phone: (979)845-3414 Fax: (979)845-1794 <http://tvmidiweb.tamu.edu/>

(325)676-6085

Owner's Name:
Tanzy #1237

Veterinarian/Submitter: Account ID#: 13826
Abilene Zoological Gardens
2070 ZOO LANE
Abilene, TX 79602

Date specimens received: 3/7/07

Preliminary reports:

Phone reports:

Final report: Fax 3/7/07

Species: Exotic	Age: 49.00 Years	Animal ID: Tanzy
Breed: Elephant	Weight:	Sex: Female

Tests Requested: CBC, chemistries

Specimens Submitted: serum, whole blood, slide /mb

Clinical History: Her tusk was broken yesterday afternoon. Wanting to update her blood work values.

Clinical Diagnosis:

Previous Cases:

Treatment:

Conclusion/Interpretation of Lab Findings:

Laboratory results as listed. J. A. Akins, DVM/bw

LABORATORY TEST STATUS:

Ordered Current Status

Chem panel (Equine) (C)	3/7/07	Completed 3/7/07
Complete Blood Count (Mammalian) (C)	3/7/07	Completed 3/7/07

Clinical Pathology

Completed: 3/7/07

Test: Chem panel (Equine)

Animal ID: Tanzy

Test	Results	Reference Range	Relative Result Indication		
			Low	Normal	High
Total Serum Protein	7.8	g/dl			
Albumin	3.0	0 g/dl			
Calcium, serum	10.8	0 mg/dl			
Phosphorus, serum	4.31	0 mg/dl			
Glucose	79	0 mg/dl			
BUN	8.2	0 mg/dl			
Creatinine	1.40	0 mg/dl			
Total bilirubin	<0.1	mg/dl			
Direct bilirubin	0.04	mg/dl			
ALP	44	0 U/l			
CK	330	0 U/l			
AST (SGOT)	12	0 U/l			
Globulins	4.8	0 g/dl			
A/G Ratio	0.63				
GGT	9	0 U/l			

Comment

/bw

--- J. Akins, DVM,MS

/ja/bw

Completed: 3/7/07

Animal ID: Tanzy

Complete Blood Count (Mammalian)

Total WBC's	8,420	/ul
Differential/%		
Neutrophils	28	%
Lymphocytes	34	%

Monocytes	37	%
Eosinophils	1	%
Absolute/ul		
Neutrophils	2358	/ul
Lymphocytes	2863	/ul
Monocytes	3115	/ul
Eosinophils	84	/ul
Red blood cells	2.49	X10 ⁶ /ul
Hemoglobin, blood	10.7	g/dl
PCV	31.6	0%
MCV	126.9	fl
MCH	43.0	pg
MCHC	33.9	g/dl
Platelet estimate	560	X10 ³ /ul
Platelet comment	Estimate	
Plasma protein	7.9	g/dl
Fibrinogen	200	mg/dl

RBC Morphology
Normal

WBC Morphology
Normal

Hemoparasites
None seen

Comments:
/bw

--- J. Akins, DVM, MS
/ja/bw

Veterinary Bulletin:

FEED TESTING:

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Texas Veterinary Medical Diagnostic Laboratory System



Preliminary Report

P.O. Drawer 3040, College Station, TX 77841-3040

Phone: (979)845-3414 Fax: (979)845-1794 <http://tvmdlweb.tamu.edu/>

(325)676-6085

Owner's Name:
Afr. Eleph. #1237

Veterinarian/Submitter: Account ID#: 13826
Abilene Zoological Gardens
2070 ZOO LANE
Abilene, TX 79602

Date specimens received: 3/14/07

Preliminary reports: Fax 3/14/07

Phone reports:

Final report:

3/14/07

Species: Exotic Age: 49.00 Years Animal ID: Tanzy
Breed: Elephant Weight: Sex: Female

Tests Requested: CBC, chemistries

Specimens Submitted: serum, whole blood, slide

Clinical History: Follow up blood work (week #2 after breaking tusk off). /sp

Clinical Diagnosis:

Previous Cases:

Treatment:

Conclusion/Interpretation of Lab Findings:

Jeff
Doug
Dr. Hilton
Jascha

LABORATORY TEST STATUS:

Ordered Current Status

Chem panel (Equine) (C)	3/14/07	Partial
Complete Blood Count (Mammalian) (C)	3/14/07	Partial

Clinical Pathology**Completed:****Test:** Chem panel (Equine)**Animal ID:** Tanzy

Test	Results	Reference Range	Relative Result Indication		
			Low	Normal	High
Total Serum Protein	8.1	g/dl			
Albumin	3.3	0 g/dl			
Calcium, serum	7.5	0 mg/dl			
Phosphorus, serum	4.54	0 mg/dl			
Glucose	73	0 mg/dl			
BUN	7.5	0 mg/dl			
Creatinine	1.37	0 mg/dl			
Total bilirubin	<0.1	mg/dl			
Direct bilirubin	0.02	mg/dl			
ALP	37	0 U/l			
CK	300	0 U/l			
AST (SGOT)	15	0 U/l			
Globulins	4.8	0 g/dl			
A/G Ratio	0.69				
GGT	8	0 U/l			

Comment

/bw

Completed:**Animal ID:** Tanzy**Complete Blood Count (Mammalian)**

Total WBC's	5,500	/ul
Differential/%		
Neutrophils	8	%
Lymphocytes	60	%
Monocytes	1	%
Eosinophils	31	%
Absolute/ul		
Neutrophils	440	/ul

Lymphocytes	3300	/ul
Monocytes	55	/ul
Eosinophils	1705	/ul
Platelet estimate	2460	X10e3/ul
Platelet comment	Estimate	

RBC Morphology
Normal

WBC Morphology
Normal

Hemoparasites
None seen

Comments:

---Blood sample clotted, unable to perform CBC.
/bw

Veterinary Bulletin:

FEED TESTING:

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Bovine Viral Diarrhea Testing

Ear notch specimens sent for BVD testing must have the type of test requested listed in the "Test Requested" section of the TVMDL submission form. Currently TVMDL runs an Immunohistochemistry (IHC) test on formalin fixed tissue which is still considered the "gold standard" and we also offer an ELISA based test which is run on fresh tissue submitted as an ear notch. Please make sure you list the specific test request as either BVD-IHC or BVD-ELISA. If that information is not provided we will attempt to call you. However, in the event we are unable to clarify your test request, we will provide the IHC test.

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Texas Veterinary Medical Diagnostic Laboratory System



Final Report

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Phone: (979)845-3414 Fax: (979)845-1794 <http://tvmidlweb.tamu.edu/>

(325)676-6085

Owner's Name:
African Elephant 'Tanzy' 1237

Veterinarian/Submitter: Account ID#: 13826
Abilene Zoological Gardens
2070 ZOO LANE
Abilene, TX 79602

Date specimens received: 7/26/06

Preliminary reports: Fax 7/26/06

Phone reports:

Final report: Fax 7/26/06

Species: Exotic	Age: 47.00 Years	Animal ID: Tanzy
Breed: Elephant	Weight: 10,000 Pounds	Sex: Female

Tests Requested: CBC and chemistry panel

Specimens Submitted: Whole blood in PTT, serum in RTT

Clinical History: Dr. Hilton. /sw

Clinical Diagnosis:

Previous Cases:

Treatment:

Conclusion/Interpretation of Lab Findings:

Laboratory results as listed. S. L. Lovering, DVM/jf

LABORATORY TEST STATUS:**Ordered Current Status**

Chem panel (Equine) (C)	7/26/06	Completed 7/26/06
Complete Blood Count (Mammalian) (C)	7/26/06	Completed 7/26/06

🔍 Clinical Pathology**Completed:** 7/26/06**Test:** Chem panel (Equine)**Animal ID:** Tanzy

Test	Results	Reference Range	Relative Result Indication		
			Low	Normal	High
Total Serum Protein	8.0	g/dl			
Albumin	3.1	0 g/dl			
Calcium, serum	10.6	0 mg/dl			
Phosphorus, serum	4.10	0 mg/dl			
Glucose	85	0 mg/dl			
BUN	7.3	0 mg/dl			
Creatinine	1.62	0 mg/dl			
Total bilirubin	0.07	mg/dl			
Direct bilirubin	0.03	mg/dl			
ALP	40	0 U/l			
CK	142	0 U/l			
AST (SGOT)	11	0 U/l			
Globulins	4.9	0 g/dl			
A/G Ratio	0.63				
GGT	8	0 U/l			

Comment

tc/jf

--- Sandra L. Lovering, DVM/jf

Completed: 7/26/06**Animal ID:** Tanzy**Complete Blood Count (Mammalian)**

Total WBC's	8,800	/ul
Differential/%		
Neutrophils	40	%
Lymphocytes	35	%
Monocytes	22	%

Eosinophils	3	%
Absolute/ul		
Neutrophils	3520	/ul
Lymphocytes	3080	/ul
Monocytes	1936	/ul
Eosinophils	264	/ul
Red blood cells	2.58	X10e6/ul
Hemoglobin, blood	11.5	g/dl
MCH	44.6	pg
Platelet comment	Clumped	
Plasma protein	8.6	0 g/dl
Fibrinogen	400	0 mg/dl

RBC Morphology
Normal

WBC Morphology
Normal

Hemoparasites
None seen

Comments:
HCT: 34.2%

-- No slides received. For best results, please submit 2-3 blood smears made within 1 to 2 hours of collection.
-- Due to WBC degeneration, the differential is only an estimate.
tc/jf

--- Sandra L. Lovering, DVM/jf

Veterinary Bulletin:

Notice: Increase in Specimen Shipping Cost using the State of Texas/DHL Contract Price.

Account holders with TVMDL can take advantage of reduced shipping fees provided through the State of Texas/DHL shipping contract. The contract allows for the overnight delivery of packages at a significantly reduced fee. The package is shipped using a preprinted AirBill with TVMDL in the ship to address line and "Bill Receiver" box checked. The charges for shipping are then applied to the TVMDL invoice associated with the case. The process is relatively simple but, the submitter must contact TVMDL - College Station at 888-646-5623 or TVMDL - Amarillo at 888-646-5624 to arrange this service.

DHL has recently raised their fees due to increased fuel prices. Therefore, TVMDL must increase the price charge for overnight shipping for a 3 pound package from \$7.00 to \$10.00. Prices will increase incrementally depending on package weight over 3 pounds and/or size of the package.

Additionally, please be aware the following additional charges may be incurred:

1. If you do not use the preprinted AirBill with the TVMDL account number and you do not provide the TVMDL account number, there will be an additional \$10.00 fee for the "DHL Client Search" service.
2. DHL delivers packages available for delivery on Saturday but, if you check the "Saturday Deliver" box on the AirBill to insure delivery, there will be an additional \$15.00 charge.

Notice: LE Prep Test:

The LE Prep test provided by TVMDL, which was performed at the TAMU College of Veterinary Medicine (CVM), is no longer available. Currently, we do not have another source for this test and until further notice we have removed it from our fee schedule. Other tests available at TVMDL for immune testing are 1. Rheumatoid factor and 2. the Antinuclear antibody test.

Clinical Pathology Records - Specimen Report
ABILENE ZOOLOGICAL GARDENS

LOXODONTA AFRICANA (no subsp)
African elephant
Name: TANZY

Sex: Female
Age: 48Y Est.

Acc. #: 1237
Birth: 9.Nov.1958

Collection Information >>
Health Status: Abnormal
Fasting Time: < 8 hours
Activity: Active
Manual restraint used.

Date of Collection: 28.Mar.2007
Time of Collection:
Collected by: KPR
Sample Collection Site: SAPHENOUS VEIN

Hematology >>

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

Laboratory: TVMDL
Date of Analysis: 29.Mar.2007
Time of Analysis:
Analysis by:
Automated analysis.

Tests and Results >>

ISIS Reference Values >>

				Mean	S.D.	Min.	Max.	(N)
WBC	*10 ³ /UL	<	7.2	10.50±	2.648	4.500	22.10	(1544)
RBC	*10 ⁶ /UL		2.79	3.15±	0.40	2.05	4.80	(1480)
HGB	GM/DL	<	12.0	13.7±	1.6	7.0	26.1	(1522)
HCT	%		35.4	39.5±	4.6	27.0	56.0	(1984)
MCV	fL		127	125.8±	8.1	91.1	190.0	(1466)
MCH	uug		43.0	43.6±	3.0	34.8	66.8	(1454)
MCHC	gm/dL		33.9	34.7±	2.0	18.4	57.9	(1501)
SEGS	% (*10 ³ /UL)		31 (2.232)	3.146±	1.695	0.000	11.80	(1224)
LYMPHOCYTES	% (*10 ³ /UL)		37 (2.664)	4.913±	2.532	0.022	17.40	(1236)
MONOCYTES	% (*10 ³ /UL)		29 (2.088)	1.513±	1.651	0.000	9.480	(1175)
EOSINOPHILS	% (*10 ³ /UL)		3 (0.216)	0.225±	0.273	0.000	2.898	(885)
BASOPHILS	% (*10 ³ /UL)		0	0.049±	0.081	0.000	0.525	(464)
PLATE. EST.			1890					

Comments >>

Plasma protein 8.5 (normal is 5.6-6.7 g/dl in horses).
Fibrinogen 400 (normal is 292 +/-185, range of 1-600).

Clinical Pathology Records - Specimen Report
ABILENE ZOOLOGICAL GARDENS

LOXODONTA AFRICANA (no subsp)
African elephant
Name: TANZY

Sex: Female
Age: 48Y Est.

Acc. #: 1237
Birth: 9.Nov.1958

Collection Information >>
Health Status: Abnormal
Fasting Time: < 8 hours
Activity: Active
Manual restraint used.

Date of Collection: 28.Mar.2007
Time of Collection:
Collected by: KPR
Sample Collection Site: SAPHENOUS VEIN

Chemistry >>

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

Laboratory: TVMDL
Date of Analysis: 29.Mar.2007
Time of Analysis:
Analysis by:
Automated analysis.

Tests and Results >>

ISIS Reference Values >>

			Mean	S.D.	Min.	Max.	(N)
GLUCOSE	MG/DL	73	84±	15	38	174	(1437)
BUN	MG/DL	7.9	10±	3	0	22	(1458)
CREAT.	MG/DL	1.51	1.5±	0.5	0.0	11.0	(1405)
BUN/Cr ratio		5.23					
CA	MG/DL	10.9	10.9±	0.6	8.1	15.3	(1434)
PHOS	MG/DL	4.15	4.9±	0.8	2.8	8.2	(1291)
Ca/P ratio		2.63					
T.PROT. (C)	GM/DL	8.3	7.7±	0.6	5.8	10.5	(1261)
ALBUMIN (C)	GM/DL	3.3	3.6±	0.4	2.4	5.2	(1145)
GLOBULIN (C)	GM/DL	> 5.0	4.1±	0.5	2.6	6.4	(1135)
Alb/Glob rat		0.660					
AST (SGOT)	IU/L	< 13	24±	10	6	93	(1398)
T. BILI.	MG/DL	0.1	0.2±	0.1	0.0	1.0	(1187)
ALK.PHOS.	IU/L	< 43	128±	61	32	441	(1404)
CPK	IU/L	258	256±	196	18	1884	(247)
A/G RATIO	GM/DL	0.66					
FIBRINOGEN	MG/DL	> 400	238±	139	0	600	(70)
GGT	IU/L	9	12±	5	0	37	(389)

Clinical Pathology Records - Specimen Report
ABILENE ZOOLOGICAL GARDENS

LOXODONTA AFRICANA (no subsp)
African elephant
Name: TANZY

Sex: Female
Age: 48Y Est.

Acc. #: 1237
Birth: 9.Nov.1958

Collection Information >>

Health Status: Abnormal
Fasting Time: < 8 hours
Activity: Active
Manual restraint used.

Date of Collection: 20.Mar.2007
Time of Collection:
Collected by: KPR
Sample Collection Site: SAPHEOUS VEIN

Hematology >>

Analysis Information >>

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

Laboratory: TVMDL
Date of Analysis: 21.Mar.2007
Time of Analysis:
Analysis by:
Automated analysis.

Tests and Results >>

ISIS Reference Values >>

				Mean	S.D.	Min.	Max.	(N)
WBC	*10 ³ /UL		7.9	10.50±	2.648	4.500	22.10	(1544)
RBC	*10 ⁶ /UL	<	2.71	3.15±	0.40	2.05	4.80	(1480)
HGB	GM/DL	<	11.5	13.7±	1.6	7.0	26.1	(1522)
HCT	%	<	34.7	39.5±	4.6	27.0	56.0	(1984)
MCV	fL		128	125.8±	8.1	91.1	190.0	(1466)
MCH	uug		42.4	43.6±	3.0	34.8	66.8	(1454)
MCHC	gm/dL		33.1	34.7±	2.0	18.4	57.9	(1501)
SEGS	% (*10 ³ /UL)		29 (2.291)	3.146±	1.695	0.000	11.80	(1224)
LYMPHOCYTES	% (*10 ³ /UL)	<	23 (1.817)	4.913±	2.532	0.022	17.40	(1236)
MONOCYTES	% (*10 ³ /UL)	>	46 (3.634)	1.513±	1.651	0.000	9.480	(1175)
EOSINOPHILS	% (*10 ³ /UL)		2 (0.158)	0.225±	0.273	0.000	2.898	(885)
PLATE. EST.			290					
FIBRINOGEN	MG/DL	>	400	238±	139	0	600	(70)

Comments >>

Plasma protein 8.3 g/dl
RBC morphology WNL
WBC morphology WNL
Hemoparasites: none seen

Clinical Pathology Records - Specimen Report
ABILENE ZOOLOGICAL GARDENS

LOXODONTA AFRICANA (no subsp)
African elephant
Name: TANZY

Sex: Female
Age: 48Y Est.
Acc. #: 1237
Birth: 9.Nov.1958

Collection Information >>

Health Status: Abnormal
Fasting Time: < 8 hours
Activity: Active
Manual restraint used.

Date of Collection: 20.Mar.2007
Time of Collection:
Collected by: KPR
Sample Collection Site: SAPHEOUS VEIN

Chemistry >>

Analysis Information >>

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

Laboratory: TVMDL
Date of Analysis: 21.Mar.2007
Time of Analysis:
Analysis by:
Automated analysis.

Tests and Results >>

ISIS Reference Values >>

			Mean	S.D.	Min.	Max.	(N)
GLUCOSE	MG/DL	73	84±	15	38	174	(1437)
BUN	MG/DL	7.4	10±	3	0	22	(1458)
CREAT.	MG/DL	1.43	1.5±	0.5	0.0	11.0	(1405)
BUN/Cr ratio		5.17					
CA	MG/DL	10.7	10.9±	0.6	8.1	15.3	(1434)
PHOS	MG/DL	5.18	4.9±	0.8	2.8	8.2	(1291)
Ca/P ratio		2.07					
T.PROT. (C)	GM/DL	7.9	7.7±	0.6	5.8	10.5	(1261)
ALBUMIN (C)	GM/DL	3.2	3.6±	0.4	2.4	5.2	(1145)
GLOBULIN (C)	GM/DL	> 4.7	4.1±	0.5	2.6	6.4	(1135)
Alb/Glob rat		0.681					
AST (SGOT)	IU/L	14	24±	10	6	93	(1398)
T. BILI.	MG/DL	<0.1	0.2±	0.1	0.0	1.0	(1187)
ALK.PHOS.	IU/L	< 44	128±	61	32	441	(1404)
CPK	IU/L	240	256±	196	18	1884	(247)
A/G RATIO	GM/DL	0.68					
GGT	IU/L	< 6	12±	5	0	37	(389)

Clinical Pathology Records - Specimen Report
ABILENE ZOOLOGICAL GARDENS

LOXODONTA AFRICANA (no subsp)
African elephant
Name: TANZY

Sex: Female
Age: 48Y Est.

Acc. #: 1237
Birth: 9.Nov.1958

Collection Information >>

Health Status: Abnormal
Fasting Time: < 8 hours
Activity: Active
Manual restraint used.

Date of Collection: 12.Mar.2007
Time of Collection:
Collected by: KPR
Sample Collection Site: SAPHEOUS VEIN

Hematology >>

Analysis Information >>

Anticoagulant: EDTA
Storage: Refrigerated (<48 hours)
Sample Quality: clotted

Laboratory: TVMDL
Date of Analysis: 13.Mar.2007
Time of Analysis:
Analysis by:
Automated analysis.

Tests and Results >>

ISIS Reference Values >>

				Mean	S.D.	Min.	Max.	(N)
WBC	*10 ³ /UL	<	5.5	10.50±	2.648	4.500	22.10	(1544)
SEGS	% (*10 ³ /UL)		33	3.146±	1.695	0.000	11.80	(1224)
LYMPHOCYTES	% (*10 ³ /UL)	<	25	4.913±	2.532	0.022	17.40	(1236)
MONOCYTES	% (*10 ³ /UL)		42	1.513±	1.651	0.000	9.480	(1175)
PLATE. EST.			2460					

Comments >>

Comments as per TVMDL: "blood sample clotted, unable to perform CBC".
WBC count, RBC morphology and WBC morphology probably were made from the blood smear that was prepared at AZG.
RBC morph WNL.
WBC morph WNL.
Hemoparasites: none seen.

Clinical Pathology Records - Specimen Report
 ABILENE ZOOLOGICAL GARDENS

LOXODONTA AFRICANA (no subsp)
 African elephant
 Name: TANZY

Sex: Female
 Age: 48Y Est.
 Acc. #: 1237
 Birth: 9.Nov.1958

Collection Information >>
 Health Status: Abnormal
 Fasting Time: < 8 hours
 Activity: Active
 Manual restraint used.

Date of Collection: 12.Mar.2007
 Time of Collection:
 Collected by: KPR
 Sample Collection Site: SAPHEOUS VEIN

Chemistry >>

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

Laboratory: TVMDL
 Date of Analysis: 13.Mar.2007
 Time of Analysis:
 Analysis by:
 Automated analysis.

Tests and Results >>

ISIS Reference Values >>

			Mean	S.D.	Min.	Max.	(N)
GLUCOSE	MG/DL	73	84±	15	38	174	(1437)
BUN	MG/DL	7.5	10±	3	0	22	(1458)
CREAT.	MG/DL	1.37	1.5±	0.5	0.0	11.0	(1405)
BUN/Cr ratio		5.47					
CA	MG/DL	<< 7.5	10.9±	0.6	8.1	15.3	(1434)
PHOS	MG/DL	4.54	4.9±	0.8	2.8	8.2	(1291)
Ca/P ratio		1.65					
T.PROT. (C)	GM/DL	8.1	7.7±	0.6	5.8	10.5	(1261)
ALBUMIN (C)	GM/DL	3.3	3.6±	0.4	2.4	5.2	(1145)
GLOBULIN (C)	GM/DL	> 4.8	4.1±	0.5	2.6	6.4	(1135)
Alb/Glob rat		0.688					
AST (SGOT)	IU/L	15	24±	10	6	93	(1398)
T. BILI.	MG/DL	<0.1	0.2±	0.1	0.0	1.0	(1187)
ALK.PHOS.	IU/L	< 37	128±	61	32	441	(1404)
CPK	IU/L	300	256±	196	18	1884	(247)
A/G RATIO	GM/DL	0.69					
GGT	IU/L	8	12±	5	0	37	(389)

Clinical Pathology Records - Specimen Report
ABILENE ZOOLOGICAL GARDENS

LOXODONTA AFRICANA (no subsp)
African elephant
Name: TANZY

Sex: Female
Age: 48Y Est.

Acc. #: 1237
Birth: 9.Nov.1958

Collection Information >>
Health Status: Abnormal
Fasting Time: < 8 hours
Activity: Active
Manual restraint used.

Date of Collection: 26.Jul.2006
Time of Collection:
Collected by: KPR
Sample Collection Site: SAPHENOUS VEIN

Hematology >>

Analysis Information >>

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

Laboratory: TVMDL
Date of Analysis: 26.Jul.2006
Time of Analysis:
Analysis by:
Automated analysis.

Tests and Results >>

ISIS Reference Values >>

				Mean	S.D.	Min.	Max.	(N)
WBC	*10 ³ /UL		8.8	10.50±	2.648	4.500	22.10	(1544)
RBC	*10 ⁶ /UL	<	2.58	3.15±	0.40	2.05	4.80	(1480)
HGB	GM/DL	<	11.5	13.7±	1.6	7.0	26.1	(1522)
HCT	%	<	34.2	39.5±	4.6	27.0	56.0	(1984)
MCV	fL		133	125.8±	8.1	91.1	190.0	(1466)
MCH	uug		44.6	43.6±	3.0	34.8	66.8	(1454)
MCHC	gm/dL		33.6	34.7±	2.0	18.4	57.9	(1501)
SEGS	% (*10 ³ /UL)		40 (3.520)	3.146±	1.695	0.000	11.80	(1224)
LYMPHOCYTES	% (*10 ³ /UL)		35 (3.080)	4.913±	2.532	0.022	17.40	(1236)
MONOCYTES	% (*10 ³ /UL)		22 (1.936)	1.513±	1.651	0.000	9.480	(1175)
EOSINOPHILS	% (*10 ³ /UL)		3 (0.264)	0.225±	0.273	0.000	2.898	(885)
PLATE. EST.			CLMPD					
FIBRINOGEN	MG/DL	>	400	238±	139	0	600	(70)

Comments >>

Plasma protein 8.6
RBC Morph: Normal
WBC Morph: Normal
Hemoparasites: None seen

Clinical Pathology Records - Specimen Report
ABILENE ZOOLOGICAL GARDENS

LOXODONTA AFRICANA (no subsp)
African elephant
Name: TANZY

Sex: Female
Age: 48Y Est.

Acc. #: 1237
Birth: 9.Nov.1958

Collection Information >>

Health Status: Abnormal
Fasting Time: < 8 hours
Activity: Active
Manual restraint used.

Date of Collection: 26.Jul.2006
Time of Collection:
Collected by: KPR
Sample Collection Site: SAPHEOUS VEIN

Chemistry >>

Analysis Information >>

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

Laboratory: TVMDL
Date of Analysis: 26.Jul.2006
Time of Analysis:
Analysis by:
Automated analysis.

Tests and Results >>

ISIS Reference Values >>

			Mean	S.D.	Min.	Max.	(N)
GLUCOSE	MG/DL	85	84±	15	38	174	(1437)
BUN	MG/DL	7.3	10±	3	0	22	(1458)
CREAT.	MG/DL	1.62	1.5±	0.5	0.0	11.0	(1405)
BUN/Cr ratio		4.51					
CA	MG/DL	10.6	10.9±	0.6	8.1	15.3	(1434)
PHOS	MG/DL	4.1	4.9±	0.8	2.8	8.2	(1291)
Ca/P ratio		2.59					
T.PROT. (C)	GM/DL	8.0	7.7±	0.6	5.8	10.5	(1261)
ALBUMIN (C)	GM/DL	< 3.1	3.6±	0.4	2.4	5.2	(1145)
GLOBULIN (C)	GM/DL	> 4.9	4.1±	0.5	2.6	6.4	(1135)
Alb/Glob rat		0.633					
AST (SGOT)	IU/L	< 11	24±	10	6	93	(1398)
T. BILI.	MG/DL	< 0.07	0.2±	0.1	0.0	1.0	(1187)
ALK.PHOS.	IU/L	< 40	128±	61	32	441	(1404)
CPK	IU/L	142	256±	196	18	1884	(247)
A/G RATIO	GM/DL	0.63					
GGT	IU/L	8	12±	5	0	37	(389)

SUBMISSION DATA:

Genus/species: Loxodonta africana
Or
Common name: African Elephant

Accession number(s): #1237

- Type of sample:
- A. Fecal sample
 - B. Rectal swab
 - C. Skin scraping
 - D. Ear swab or wash
 - E. Oral swab or wash
 - F. Nasal swab or wash
 - G. Tracheal wash/sample
 - H. Gastric wash/sample
 - I. Intestinal wash/sample
 - J. Blood sample
 - K. Urine sample
 - L. Tissue or organ
 - M. Whole or partial parasite
 - N. Not specified
 - O. Other _____
 - P. Unknown
 - Q. Feather

Date collected: 02103104
 d d m m y y

Time collected: 2:00 pm

Collected by: AC

Enclosure: Stall

- Purpose of examination:
- 1. Routine or scheduled
 - 2. Quarantine
 - 3. Follow-up or recheck
 - 4. Shipping or preshipment
 - 5. Diagnostic (problem or illness)
 - 6. Post-mortem
 - 7. Not specified
 - 8. Other _____

- Gross appearance: 1. Typical
 2. Atypical

EXAMINATION DATA:

Date examined: 02103104
 d d m m y y

Time examined: 5:07 pm

Examination by: SMD

- Storage conditions:
- 1. Room/ambient temperature
 - 2. Refrigerated
 - 3. Frozen
 - 4. Formalin
 - 5. Alcohol
 - 6. Merthiolate-Iodine-Formalin
 - 7. Polyvinyl alcohol
 - 8. Other _____

- Consistency of stool:
- 1. Liquid or watery
 - 2. Soft
 - 3. Formed
 - 4. Hard or dry

- Unusual Characteristics
- 1. Fresh Blood
 - 2. Excessive mucus
 - 3. melana or tarry
 - 4. Foamy
 - 5. visible adult/larval parasites

Description: _____

Resubmit sample: Yes No

> > > For Laboratory Use only < < < (below this line)

TESTS AND RESULTS:

- Test performed codes:
- 1. Direct microscopic exam.
 - 2. Flotation - Na nitrate
 - 3. Formalin concentration
 - 4. Baermann Sedimentation
 - 5. Centrifugation
 - 6. Flotation - Zinc sulfate
 - 7. Flotation - sugar
 - 8. Gross microscopic exam
 - 9. McMaster
 - A. Knotts
- Quantity codes:
- 1. 1+
 - 2. 2+
 - 3. 3+
 - 4. 4+

TEST PERFORMED	RESULTS	QUANTITY
<u>2</u>	<u>no parasites seen</u>	
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Comments: _____

CLIENT NAME: Abilene Zoo PATIENT NAME: Tangy ~~Don~~
DATE: 5-21-03

VOIDed sample on 5-18-03

HEMOGLOBIN;

BLOOD: neg

BILIRUBIN: Pos gold

UROBILINOGEN: neg

KETONES: neg

GLUCOSE: neg

PROTEIN: neg

NITRITE: Pos dark pink

LEUKOCYTES: neg

pH: 9

SPECIFIC GRAVITY: 1032 on Refractometer

SEDIMENTATION: WBC, few rbc, bacteria

COLOR: dark amber

TURBIDITY: clear

let said Bili & Nitr. Pos caused by cleaner mixed w/urine

SAMPLE SUBMISSION INFORMATION: "Janzy"

Genus/species: Loxostoma oryctolae or Common name: African Ekip

Accession number(s): _____

Enclosure: _____

- Type of sample:
- Fecal sample
 - Rectal swab
 - Skin scraping
 - Ear swab or wash
 - Oral swab or wash
 - Nasal swab or wash
 - Tracheal wash/sample
 - Gastric wash/sample
 - Intestinal wash/sample
 - Blood sample
 - Urine sample
 - Tissue or organ
 - Whole or partial parasite
 - Other _____
 - Unknown

Date collected: 10,08,02
 d d m m y y
 Time collected: 9:30
 Collected by: TF

- Purpose of examination:
- 1. Routine or scheduled
 - 2. Quarantine
 - 3. Diagnostic (problem or illness)
 - 4. Follow-up or recheck
 - 5. Shipping or preshipment
 - 6. Quarantine #1
 - 7. Quarantine #2
 - 8. Quarantine #3
 - 9. Post-mortem
 - Other _____
- Gross Appearance
- 1. Typical
 - 2. Atypical

>>> For Laboratory Use Only <<< (below this line)

EXAMINATION DATA:

Date examined: 10,08,02
 d d m m y y
 Time examined: 2:45
 Examination by: TF

TESTS AND RESULTS:

Codes for Test Performed:

1) Direct microscopic exam.	6) Floatation- zinc sulfate	1) +
2) Floatation - Na nitrate	7) Floatation- sugar	2) ++
3) Formalin concentration	8) Gross examination	3) +++
4) Baermann sedimentation	9) McMasters quantitative	4) ++++
5) Centrifugation		5) Other

- Storage condition:
- 1. Room/ambient temperature
 - 2. Refrigerated
 - 3. Frozen
 - 4. Formalin
 - 5. Alcohol
 - 6. Merthiolate-Iodine-Formalin
 - 7. Polyvinyl alcohol
 - 8. Other

TEST	RESULTS	QUANTITY
<u>2</u>	<u>negative</u>	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

- Consistency of stool:
- 1. Liquid or watery
 - 2. Soft
 - 3. Formed
 - 4. Hard or dry

- Unusual Characteristics:
- 1. Fresh blood
 - 2. Excessive mucus
 - 3. Melena or tarry stool
 - 4. Foamy - excess gas
 - 5. Adult/larval parasites grossly visible

Description: _____

Comments: _____

Repeat Submission: [] Yes [] No

ABILENE ZOOLOGICAL GARDENS
ANIMAL PHYSICAL EXAMINATION REPORT

Date May 7, 2002
Species Loxotoma africana ISIS# 1237
Sex F House Name TANZY
Enclosure concrete I-beam Comp # gravel (roof) steel railing
Individual _____ within species group _____ mixed species group _____

Weight _____

Vaccinations _____

Individual special treatment _____

Diet review _____

Dental exam _____

External characteristics _____

EENT _____

Thorax _____

Abdomen _____

Extramities _____

Fecal analysis negative - performed by Ashley Vandiver 5/7/02

Additional comments Looks good. No abnormal findings on physical exam.

Veterinarian R. Dale Kinley, DVM

PARASITOLOGY EXAMINATION WORKSHEET

SUBMISSION DATA:

Genus/species: Loxodonta africana

Or
Common name: Elephant
Tauzy

Accession number(s):
1237

- Type of sample:
- A. Fecal sample
 - B. Rectal swab
 - C. Skin scraping
 - D. Ear swab or wash
 - E. Oral swab or wash
 - F. Nasal swab or wash
 - G. Tracheal wash/sample
 - H. Gastric wash/sample
 - I. Intestinal wash/sample
 - J. Blood sample
 - K. Urine sample
 - L. Tissue or organ
 - M. Whole or partial parasite
 - N. Not specified
 - O. Other _____
 - P. Unknown
 - Q. Feather

Date collected: 07/05/02
 d d m m y y

Time collected: _____

Collected by: SBTA

Enclosure: _____

- Purpose of examination:
- 1. Routine or scheduled
 - 2. Quarantine
 - 3. Follow-up or recheck
 - 4. Shipping or preshipment
 - 5. Diagnostic (problem or illness)
 - 6. Post-mortem
 - 7. Not specified
 - 8. Other _____

- Gross appearance: 1. Typical
 2. Atypical

EXAMINATION DATA:

Date examined: 07/05/02
 d d m m y y

Time examined: 01:15

Examination by: aw

- Storage conditions:
- 1. Room/ambient temperature
 - 2. Refrigerated
 - 3. Frozen
 - 4. Formalin
 - 5. Alcohol
 - 6. Merthiolate-Iodine-Formalin
 - 7. Polyvinyl alcohol
 - 8. Other _____

- Consistency of stool:
- 1. Liquid or watery
 - 2. Soft
 - 3. Formed
 - 4. Hard or dry

- Unusual Characteristics
- 1. Fresh Blood
 - 2. Excessive mucus
 - 3. melana or tarry
 - 4. Foamy
 - 5. visible adult/larval parasites

Description: _____

Resubmit sample: Yes No

> > > For Laboratory Use only < < < (below this line)

TESTS AND RESULTS:

- Test performed codes:
- 1. Direct microscopic exam.
 - 2. Flotation - Na nitrate
 - 3. Formalin concentration
 - 4. Baermann Sedimentation
 - 5. Centrifugation
 - 6. Flotation - Zinc sulfate
 - 7. Flotation - sugar
 - 8. Gross microscopic exam
 - 9. McMaster
 - A. Knotts

- Quantity codes:
- 1. 1+
 - 2. 2+
 - 3. 3+
 - 4. 4+

TEST PERFORMED	RESULTS	QUANTITY
<u>2</u>	<u>negative</u>	
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Comments: _____

SAMPLE SUBMISSION INFORMATION:

Genus/species: Loxodonta africana or Common name: African elephant

Accession number(s): 1237 "Taming"

Enclosure: _____

- Type of sample:
- Fecal sample
 - Rectal swab
 - Skin scraping
 - Ear swab or wash
 - Oral swab or wash
 - Nasal swab or wash
 - Tracheal wash/sample
 - Gastric wash/sample
 - Intestinal wash/sample
 - Blood sample
 - Urine sample
 - Tissue or organ
 - Whole or partial parasite
 - Other _____
 - Unknown

Date collected: 19 10 21 02

d d m m y y

Time collected: 9:05

Collected by: SMD

Purpose of examination:

- 1. Routine or scheduled
- 2. Quarantine
- 3. Diagnostic (problem or illness)
- 4. Follow-up or recheck
- 5. Shipping or preshipment
- 6. Quarantine #1
- 7. Quarantine #2
- 8. Quarantine #3
- 9. Post-mortem
- Other _____

Gross Appearance

- 1. Typical
- 2. Atypical

>>> For Laboratory Use Only <<< (below this line)

EXAMINATION DATA:

Date examined: 19 10 21 02

d d m m y y

Time examined: 11:40

Examination by: SMD

TESTS AND RESULTS:

Codes for Test Performed:

- 1) Direct microscopic exam.
- 2) Floatation - Na nitrate
- 3) Formalin concentration
- 4) Baermann sedimentation
- 5) Centrifugation
- 6) Floatation- zinc sulfate
- 7) Floatation- sugar
- 8) Gross examination
- 9) McMasters quantitative

Quantity Codes:

- 1) +
- 2) ++
- 3) +++
- 4) ++++
- 5) Other

Storage condition:

- 1. Room/ambient temperature
- 2. Refrigerated
- 3. Frozen
- 4. Formalin
- 5. Alcohol
- 6. Merthiolate-Iodine-Formalin
- 7. Polyvinyl alcohol
- 8. Other

TEST

RESULTS

QUANTITY

2

No parasites seen

Consistency of stool:

- 1. Liquid or watery
- 2. Soft
- 3. Formed
- 4. Hard or dry

Unusual Characteristics:

- 1. Fresh blood
- 2. Excessive mucus
- 3. Melena or tarry stool
- 4. Foamy - excess gas
- 5. Adult/larval parasites grossly visible

Description: _____

Comments: recheck 3 months

Repeat Submission: Yes No

ABILENE ZOOLOGICAL GARDENS

SPECIMEN MEDICAL RECORD

NAME African Elephant

GENUS SPECIES Loxodonta africana

GIVEN NAME Tandy I.D. 1237

BORN/HATCHED/REC'D. _____

HISTORY: (Hereditry, Condition, behavior problems, patterns, etc..) _____

FECAL EXAM:

DATE	RESULTS	TREATMENT	DOSAGE	DATE	PROCEDURE/COMMENTS/RESULTS
June 10 '99	Positive for Strongyles & Ascarids				
June 15 '99		Strongid T	490ml	15 June 99	Recheck on 22 June 99
June 22 '99					float. Recheck on 20 July 99
July 13 '99	negative				float. Recheck on 24 Aug. 99
Aug 31 '99	negative				float. Recheck on 26 Oct. 99
Oct 26 '99	negative				float. Recheck 27 April 2000.
2000					
May 2 '00	negative				float. Recheck 17 Nov. 2000.
June 27 '00	negative	strongid T	500ml		did not treat. ran out of strongid float. Recheck 25 July 00
Aug 15 '00	negative				float. Recheck 17 Nov. 00.
Nov 7 '01	negative				float. Recheck in May 01
May 8 '01	negative				float. Recheck 11 Sept. 01
Sept 11 '01	Positive Strongyles	Strongid T	500ml		float. Recheck 2 Oct. 01
Oct 9 '01	Positive Strongyles & Ascarids	strongid T	500ml	11 Oct 01	Common sample
23 Oct 2001	positive ascarids				common sample
6 Nov 2001	negative	strongid T	500ml	6 Nov 01	Common sample
5 Dec 2001	negative				float.

Anesthesia Record

Accession #: 356

Physical Status:

- 1. Class I
- 2. Class II
- 3. Class III
- 4. Class IV
- 5. Class V

Species: _____

Date: 24/10/07
d d m m y y

Common name: African Elephant

Health Status:

- 1. Normal
- 2. Abnormal

Immobilizing Conditions:

- 1. Free ranging
- 2. Large enclosure
- 3. Small enclosure
- 4. Squeeze cage
- 5. Manual restraint for drug administration

Sex: D.1 Birth date/Age: _____

House name: Tanya

ID: _____

Fasting Time:

- 1. <8 hours
- 2. 8-24 hours
- 3. 24-48 hours
- 4. >48 hours

Comments: po slip/leaking sedation

Activity

- 1. calm
- 2. active
- 3. excited

- 1. isolated
- 2. in group

Demeanor:

- 1. depressed
- 2. alert
- 3. aggressive
- 4. apprehensive

Body Condition:

- 1. obese/fat
- 2. good
- 3. fair/thin
- 4. poor/emaciated

Environmental Temp: _____ 1. °C 2. °F %Humidity: _____

Dose:	Drug Given:	Amount mg/%	Route:	Time Given:	Delivery Success:	Effect:	Time of Effect:	Bottle #:	# ml	Concentration mg/ml
P	Xylazine	200	IV	6:59	C	1	7:07		20	100

Time of Initial Effect: 7:02

Anesthesia Rating:
Excellent Good Fair Poor
Induction 1. 2. 3. 4.

Physical Status:
1= normal health
2= mild disease
3= severe disease
4= chronic severe disease
5= may not survive anesthesia

Dose: Pre-anesthetic
Immobilizing
Supplemental
Maintenance
Antagonist
Other

Time of Recumbency: N/A

Estimated Weight: 1000 1. kg
2. lb
3. gm

Relaxation 1. 2. 3. 4.
Overall: 1. 2. 3. 4.

Route: Polesyringe
Blowdart
Metal Dart
Non-metal Dart
Oral
Facemask
Chamber
Endotracheal tube
Venous catheter

M= intramuscular
V= intravenous
P= intraperitoneal
S= subcutaneous
Effect: 0 = no effect/ full recovery
1 = mild sedation
2 = heavy sedation
3 = light anesthesia
4 = surgical anesthesia
5 = excessively deep

Revised Est. Weight: _____ 1. kg
2. lb
3. gm

Endotracheal Tube: N/A mm

Actual Weight: _____ 1. kg
2. lb
3. gm

Recovery Data:
Time: _____ Effect _____
Time: _____ Effect _____

Complications:
1. None
2. Minor
3. Major
4. Fatal

Veterinarian: C D H
Recorded by: C D H

Success: Complete
Partial
None

Recovery: 1. Normal 2. Abnormal _____ 3. Prolonged 4. Stormy 5. Renarcotized