

Report Start Date
1/1/1900

Specimen Report for ASHEBORO / 1768

Report End Date
8/21/2008

Taxonomic name: *Loxodonta africana*
Common name: African elephant

Family: Elephantidae
Order: Proboscidea

Current information

Sex:	Female	Sire ID:	WILD at Obtained From Wild
Birth type:	Wild Born	Dam ID:	WILD at Obtained From Wild
Birth Location:	ZIMBABWE	Rearing:	Unknown
Birthdate-Age:	~ 1988 - 20Y,7M,20D +/-1 Yr.	Hybrid:	Not a hybrid
Time since last Acq:	0Y,10M,21D as of report end date		

<u>Date in</u>	<u>Acquisition - Vendor/local Id</u>	<u>Holder</u>	<u>Disposition - Recipient/local Id</u>	<u>Date out</u>
30 Sep 2007	Loan In from VALLEYZOO / 100327	ASHEBORO / 1768		

<u>Date</u>	<u>Identifier type</u>	<u>Identifier</u>	<u>Location</u>
7 Jun 2000	Regional Studbook #	242	AZA
30 Sep 2007	House Name	NEKHANDA	

<u>Date</u>	<u>Type</u>	<u>Value</u>	<u>Units</u>	
30 Sep 2007	live animal weight	7200	pound	Weight estimated by Valley Zoo (as indicated on the Animal Data Transfer Form).

<u>Date</u>	<u>Note type</u>	
30 Sep 2007	Acquisition note	Arrived in early a.m. from Valley Zoo, Edmonton, Alberta, Canada. She was transported by Eddie Novak. Was unloaded into new elephant barn at ~7:00 a.m. Eating and drinking well. A keeper from Valley Zoo present and will spend 5 days here to help Nedhanda acclimate.
30 Sep 2007	Physical/legal arrival	Entered into U.S. with the following permits: USFWS, Designated Port Exception Permit #LE769477-0, exp. 8/29/2009. USFWS, CITES Import Permit #06US138560/9, exp. 12/19/2007. Canadian CITES Re-Export Permit, #07CA00375/CWHQ, exp. 9/27/2007. Fish & Wildlife Div., Alberta Permit to Export, #28391, exp. 9/30/2007. Customs Invoice USFWS Declaration for Importation (eDec form) - cleared prior to shipment 9/21/07. Confirmation # 2007SW460504.
30 Sep 2007	Fecal check/worming	Results of 1st quarantine fecal sample submitted were negative.
4 Oct 2007	Medical note	Routine blood collection by Kpr Cordier and Edmonton Keeper Buck
4 Oct 2007	Medical note	Vet staff observed outside nail on rt front foot treated with hydrogen peroxide and trimmed by Kpr Cordier.
9 Oct 2007	Fecal check/worming	Results of 2nd quarantine fecal sample submitted were negative.
19 Oct 2007	Fecal check/worming	Results of 3rd quarantine fecal sample submitted were negative.
22 Oct 2007	Fecal check/worming	Results of quarantine fecal sample submitted were negative.
24 Oct 2007	Medical note	Abcess has formed just above previous wound on front Right toenail
26 Oct 2007	Medical note	Treated foor abcess on Right front foot above nail, expressed pus and sprayed with peroxide.
2 Nov 2007	Fecal check/worming	Results of fecal sample submitted while in quarantine was negative.
13 Nov 2007	Fecal check/worming	Results of 3rd quarantine fecal sample submitted were negative.

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1 Dec 2007	Behavior note	<p>Introductions: 1771/1772 locked in north paddock while 1768 brought over and given access from stall beside ERD site up to maternity stall and over into her night stall and paddock; also roll up garage door was opened to allow visual contact; 1768 was calm/relaxed, when first saw 1771 thru garage door she squatted/urinated, 1768 again seemed to want to stay and be where she can see other elephants. A few rumbles out of both 1768 and 1771. 1768 left over in five stalls ~45 min, then brought back to her night stall and paddock and 1771/1772 brought inside.</p> <p>This comment was added to the following specimens: 1768, 1771, 1772.</p>
2 Dec 2007	INTRODUCTION	<p>Moved 1768 over to 1771/1772's stall while they were closed in their paddock for a visual howdy for 1 hr.. Good, calm responses.</p> <p>This comment was added to the following specimens: 1768, 1771, 1772.</p>
6 Dec 2007	INTRODUCTION	<p>Intros: 1768 given visual access with 1771/1772 for a couple hours this morning - 1768 squatted/urinated when she first saw 1771/1772, but all were calm otherwise throughout "howdy".</p>
10 Dec 2007	INTRODUCTION	<p>INTRODUCTION: 1771/1772 locked in paddock EBNPAD1 while 1768 brought over and into EBNPAD2 and given access to EBST3; 1771/1772 given access to EBST1; several interactions at mesh gate A1 also they had visuals in barn left like this for 2 1/2 hours.</p>
13 Dec 2007	INTRODUCTION	<p>Intros: 1771/1772 in EBNPAD1 and 1768 in EBNPAD2. Both had access into barn. Went well, did see trunk touches through mesh.</p>
17 Dec 2007	INTRODUCTION	<p>INTRODUCTION: as temperatures were low, 1771/1772 were brought to EBST3 and 1768 brought over to EBST1 for more visual and allow cleaning of EBST7; no noteworthy behaviors observed.</p> <p>This comment was added to the following specimens: 1768, 1771, 1772.</p>
10 Jan 2008	Medical note	<p>Rec'd meds 100% BID - start of 10 day wean off of halidol.</p>
7 Feb 2008	Medical note	<p>Scraped hide off area under right temporal gland. Small abrasion on top of trunk. Dr Devoe came to look at same.</p>
28 Feb 2008	Behavior note	<p>INTROS - 1771/1772 shifted to EBST3 before bringing 1771 back to EBST2 for howdy w/ 1768 in EBST1. No immediate response from either cow until they spotted each other. At that time 1768 turned, screamed and retreated back to EBST7. 1768 was reluctant to approach again but did not show any signs of distress like contortions or displacement towards keepers. 1771 remained calm for the most part and 1768 remained at a distance even after 1772 was added to the equation. 1771/1772 shifted back about 15min later to EBST3 w/ out incident while 1768 remained in EBST1 for remainder of day and continued to display calm demeanor.</p>
29 Feb 2008	Behavior note	<p>Intros: 1768 given stall (EBST1) adjacent to 1771 (in EBST2). (1772 in EBST3). 1768 did better today, spent a little more time in stall before going back to EBST7. Backed up a few times, urinated and defecated, was very submissive. Still did not get close enough to touch/be touched by 1771.</p>

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24 Apr 2008	INTRODUCTION	<p>INTRODUCTIONS: 1771/1772 held in EBNPAD1 while 1768 held in EBNPAD2 and doors A4, B4, B3, B2, A2 were opened; 1771/1772 allowed to go over into EBNPAD2, 1768 screamed and ran into barn; for ~30 min all elephants just kept circling in the run around. 1768 VERY subordinate to both 1771/1772, a couple times 1771/1772 got seperated and 1768 and 1772 found each other in stall inside the barn but 1768 very deferential to 1772. 1771 took a couple of jabs at 1768 once in the buttocks and once in the side as she caught 1768 against paddock bars but after about 45 minute mark all started calming down. 1772 was very interested in 1768, following her constantly; eventually 1768 allowed 1772 to approach and then 1771 approach and some very good interactions were noted at about the 1 hour mark. It was determined to close both doors from paddocks to stalls and some small browse was given. After browse was eaten by 1771/1772, 1771 really picked up aggression toward 1768, deliberately working 1768 into a corner then jabbing w/tusks in buttock in EBNPAD2, pinning 1768 against log in corner of EBNPAD2, getting 1768 cornered in EBNPAD1 and jabbing several times with tusks. (Fortunately, 1771's tusks were recently filed blunt and evened out.) After elephants were broken up they were seperated and session called off. 1768 retained some superficial scrapes but no other injury noted, elephants were seperated but all allowed access to the barn (until after lunch - 1771/1772 locked out to clean/setup) 1768 would come into barn as long as 1771 was not in barn, 1768 would exit barn when 1771 came into barn. 1768 given access to EBST2/3 plus EBNPAD2 for the night, 1771/1772 given access to EBST1 and EBNPAD1 for the night.</p>
25 Apr 2008	INTRODUCTION	<p>Introductions - Continued from 4/24 - 1768 with 1771/1772 Initiated intro same as 4/24 Did not introduce food or close off any area of "roundabout" 1772 again walked right up to 1768 and followed during most of intro period. 1768 had 3 - 4 interactions with 1771, all with good responses and no aggression observed. 1771 observed placing her trunk on 1768 rump at one point without any attached aggressive movements. Overall a much calmer intro, with no problems encountered. Intro was called after ~ 35 min. to end on a positive note - All returned to respective stalls/paddocks..</p>
28 Apr 2008	INTRODUCTION	<p>Introduction: 1771/1772 were introduced to 1768 today. They were together for 35 minutes. They were very excited to begin with lots of running and vocalizing. They quickly settled down. They spent some time near each other in the barn. 1768 showed submissive behavior. 1772 showed lots of interest in 1768. 1771 put her trunk and tusk on 1768, but did not hit hard or push much.</p>
30 Apr 2008	INTRODUCTION	<p>INTRODUCTIONS: 10:40-11:50 did same as yesterday for set up. Very little interaction between 1768 and 1771. 1768 and 1772 did spend time together in stall. 1771 was seen displacing aggression on pipeline ball and neither 1768 or 1772 were in sight. Very calm throughout entire intro.</p> <p>This comment was added to the following specimens: 1772, 1768, 1771.</p>
6 Jun 2008	INTRODUCTION	<p>Intros: 1611, 1367, 1768 allowed access to each other through stall bars inside barn. 1768 unwilling to enter barn when other cows present, but did look inside from time to time. She was somewhat nervous, but not overly so.</p> <p>This comment was added to the following specimens: 1367, 1611, 1768.</p>
8 Jun 2008	Medical note	<p>2 active lesions on bottom gumline in front of tongue.</p>
8 Jun 2008	INTRODUCTION	<p>Intros: in pm 1367 put in EBS2, 1611 in EBS3 while 1768 had access from paddock to vestibule of EBS1/2 as to give her potential for contact thru bars w/1367, for the most part 1768 stood in doorway and wouldn't come into vestibule.</p>
9 Jun 2008	Medical note	<p>Vets came to inspect mouth lesions.</p>
9 Jun 2008	INTRODUCTION	<p>INTRODUCTIONS: - Tactile intro between 1367/1768, did well.</p>
11 Jun 2008	INTRODUCTION	<p>Intros: 1768 given EBNPAD1 and EBS2 overnight, and 1367/1611 given EBNPAD2 and EBS3 overnight, for howdy.</p>
14 Jun 2008	Medical note	<p>Treated mouth spots/sores with peroxide.</p>
19 Jun 2008	Medical note	<p>Received 6 bananas and 3 potatoes per vets as potassium supplement UFN.</p>
20 Jun 2008	Medical note	<p>Rec'd 6 bananas and three potatoes for K+.</p> <p>This comment was added to the following specimens: 1367, 1611, 1768, 1771, 1772.</p>

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22 Jun 2008	INTRODUCTION	Introduction: We found evidence (feces) that 1768 spent some time in stall next to 1611 & 1367.
23 Jun 2008	INTRODUCTION	Introductions: We left door A1 open about 2 ft. between EBNPAD1 & EBNPAD2 so 1768 and 1611/1367 could interact more. We observed some trunk to mouth and other tactile behaviors.
27 Jun 2008	INTRODUCTION	<p>INTRODUCTIONS - 1367/1611, 1768 All went well and all remained calm. Some pursuit of 1768 by 1611 but no aggression observed. Cows remained together throughout day and separated at closing. Spent most of afternoon in respective corners. Keepers were able to bathe as a group and cooperative fed.</p> <p>This comment was added to the following specimens: 1367, 1611, 1768.</p>
28 Jun 2008	INTRODUCTION	<p>Training/Introduction: K.Small/Cordier held 1611/1367 while barn doors A1, A2, B2 were opened to allow all 3 females access to runaround. Not nearly the chasing, urination/defecation as yesterday. 1768 backed up to 1611 on numerous occasions throughout the day. All got startled after lunch but within 2-3 minutes all were back calm. Did not see 1367 interact much with 1768, as yesterday, all were brought in line along bars and given baths in sight and almost touching of one another - done three times throughout day. All had access to the barn/paddocks the whole time, separated for the night.</p> <p>This comment was added to the following specimens: 1611, 1367, 1768.</p>
29 Jun 2008	INTRODUCTION	<p>Training/introductions: 1367/1611/1768 were put together again today but with paddocks EBNPAD 1 and 2 only (no barn access), just opened bollard door (A1) no problems. 1768 observed backing up to 1367 more, and a couple more interactions with 1367, but 1367 still reluctant to come up to 1768 on her own. Only glitch was 1768 was in EBNPAD1 by herself and was in corner by concrete dividing wall when 1611 came over from EBNPAD2 and startled her, everyone got startled, but after a couple minutes everyone calmed down, and pretty dull for the rest of the day.</p> <p>This comment was added to the following specimens: 1611, 1367, 1768.</p>
30 Jun 2008	INTRODUCTION	<p>Training/Intros: 1367/1611/1768 in EBNPAD1 and 2 during day, everyone continues to do well. There was more lime spent with all three in same paddock. 1768 seen eating next to 1611 a few times, very relaxed. All also did well when Kivett came to pump, all three got together. Bathed a couple times, also a couple more interactions between 1768 and 1367.</p> <p>This comment was added to the following specimens: 1611, 1367, 1768.</p>
2 Jul 2008	INTRODUCTION	<p>INTRODUCTIONS (1367/1611/1768)Continued w/out incident. Worked tandem baths then lined up together. 1768 was brought within 7' alongside 1611 before she reached her threshold. No aggression at anytime from 1611. Keepers noted, 1367/1768 spending more time in each others paddocks.</p> <p>This comment was added to the following specimens: 1367, 1768, 1611.</p>
3 Jul 2008	Medical note	Routine blood sent to vet. Hospital.
3 Jul 2008	INTRODUCTION	<p>Introduction: 1768 was introduced to 1611/1367 with no problems. They were closed into 1 paddock for half the day. They were also shifted into stalls side-by-side in the barn.(Went well)</p> <p>This comment was added to the following specimens: 1611, 1367, 1768.</p>
4 Jul 2008	INTRODUCTION	<p>Intros: Continue to go well. 1367/1611/1768 given both EBNPAD1 and 2 thru lunch, did fine, one instance of 1768 being 'surprised' by 1611 as she came from EBNPAD2 to EBNPAD1 (as before) and were again fine after a couple minutes. All locked into EBNPAD1 after lunch. Sprayed off with hose throughout day.</p> <p>This comment was added to the following specimens: 1611, 1367, 1768.</p>

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5 Jul 2008	INTRODUCTION	<p>INTROS: 1367/1611/1768 Continue w/ intros. No problems all held in barn side by side. After 1 pm all held in EBNPAD1 with no problems.</p> <p>This comment was added to the following specimens: 1367, 1611, 1768.</p>
6 Jul 2008	INTRODUCTION	<p>1367/1611/1768 Introductions continue to go very well. All held in EBNPAD1 after 1pm and until closing as in previous days.]</p>
7 Jul 2008	INTRODUCTION	<p>Intros: Continue as usual, 1768/1367/1611 in EBNPAD1 and 2 in morning, closed into just EBNPAD1 in afternoon, all continue to do fine, eating side by side throughout day.</p> <p>This comment was added to the following specimens: 1768, 1367, 1611.</p>
8 Jul 2008	INTRODUCTION	<p>Introduction: Going well with 1611/1367/1768. Will only report significant changes UFN.</p>
9 Jul 2008	INTRODUCTION	<p>Introduction: 1611/1367/1768 were introduced again in the a.m. with no problems. They will stay together overnight for the first time.</p>
10 Jul 2008	Medical note	<p>Routine blood collection</p>
11 Jul 2008	INTRODUCTION	<p>INTROS: 1367/1611/17678 all being housed together. 1768 went over into EBNPAD2 with 1367/1611 but took a while to accomplish. All brought into barn and locked in stalls to rec grain. 1768 reluctant to allow herself to be locked in. took some time but eventually was able to lock her in. All brought in-line in EBNPAD1 tried to bring all 3 into EBNPAD2 but 1768 would not come. All 3 given access to both paddocks but all food was given in EBNPAD2. All observed in paddock together for most of day. 1768/1367 observed taking a bath together out of drinker and puddle. Did work all 3 in-line and moved all around the paddock. Went well!</p> <p>This comment was added to the following specimens: 1367, 1611, 1768.</p>
12 Jul 2008	INTRODUCTION	<p>INTROS: While bringing 1367/1611 into barn through door 2B 1768 acted like she wanted to follow them into barn. 1611/1367 then shifted down into EBST2 and EBST1 respectively and 1768 was closed into EBST3 w/o incident and remained calm during 1367/1611 bath and foot trim. 1768 given bath and did well. All were released to EBNPAD1 via door 2A w/o problems. All observed in same paddock most of day. 1367/1768 observed bathing from the drinker and puddle together. No problems shutting 1768/1611/1367 into EBNPAD2 for cleaning.</p>
22 Jul 2008	INTRODUCTION	<p>Intros: 1367/1611/1768 put together in ELBPAD1 in am, 1611 was very pushy with 1768, trying to assert her dominance (1768 was separated overnight last night for runway acclimation.) 1611 rumbled, 1768 screamed and 1367 trumpeted, when all were together, after a few minutes all calmed down. 1367/1611/1768 in ELBPAD1 and 2 during day. All left together overnight.</p> <p>This comment was added to the following specimens: 1367, 1611, 1768.</p>
23 Jul 2008	INTRODUCTION	<p>Intros: 1367/1611/1768 held in ELBPAD2 while gates to south exhibit opened - 1367/1611 went right out, 1768 contorted/banged in paddock briefly, then started to go into runway. After a couple attempts she made it all the way to open gate, looked out and went back to paddock. Did this for a while, finally gate was shut and she was left with runway access, fed hay/grain at gate. Went back and forth from gate paddock throughout day. Pool drained and left about halfway down for intros.</p>
24 Jul 2008	INTRODUCTION	<p>INTRODUCTIONS: Continued same as yesterday - 1367/1611 went out to exhibit quickly, 1768 hung around paddock/runway a while. Today 1611 was hanging out at exhibit gate, and it was eventually shut and she moved on. 1768 given runway access during day.</p>

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25 Jul 2008	INTRODUCTION	<p>INTRODUCTIONS: Same as yesterday thru ~2pm, 1768 traveling between paddock/exhibit gate, keepers made a few attempts to get her to go out. 1768 given runway access between attempts. At ~2pm keepers fed 1611/1367 at transfer and 1768 did go out onto exhibit. 1768 stayed on south end of exhibit ~20-3- min before 1611 noticed 1768 and went over to her. 1611 displayed, did headstand, put trunk on 1768's back and pushed a little, then calmed back down (1768 still showing all appropriate submissive behaviors). 1367 joined 1768/1611 and all were fine after that. At ~3:30 1611/1367 held at front of exhibit so 1768 could come in first - 1768 proceeded to break exhibit gate while coming in. 1768 held in ELBPAD2, 1611/1367 held in transfer while gate was fixed.</p> <p>This comment was added to the following specimens: 1768, 1611, 1367.</p>
31 Jul 2008	Medical note	Routine blood draw.
1 Aug 2008	INTRODUCTION	1611, 1367, 1768 were exhibited in the South and brought in at 3:00 p.m.; It took about an hour and two attempts to get 1768 to go on exhibit. She went off exhibit in about 10 minutes.
2 Aug 2008	Intro to New Enclosure	Elephant: 1367/1611 in South until ~3:30, 1768 also in south from ~12:30 to 3:30.
2 Aug 2008	INTRODUCTION	<p>Intros: 1367/1611/1768 in south today - all secured in EBNPAD2, brought in to station, door to runway opened and 1367/1611 started to exhibit, although slowly in hopes that 1768 would stay with them and go out. 1768 stopped while 1367/1611 kept on to exhibit. K.Shupp was at elephant transfer to distract 1367/1611 but 1611 paid no attention (1367 stayed to be fed) but 1611 did come back to gate at that time. 1768 would come up to exhibit gate but only a step or two past and come back into runway. K.Small went up on berm to try and call her out into exhibit (like yesterday) but she wouldn't come. After several attempts and about 1 hour gate 2 in runway was closed, only giving 1768 one exit (the exhibit), but still she wouldn't go past gate. Eventually 1367 came and both 1367 and 1768 stood in runway. 1367 left and 1611 came up and there was more standing in runway. Finally 1611 got past 1768 and 1768 was between 1611 and the exhibit, keepers called 1611 and she was pushing 1768 up the hill, eventually pushing 1768 into the exhibit. After a couple of minutes everyone was calm and grazing. After about 1 hour 1768 was observed standing in the edge of pool throwing water on herself, and she was seen drinking out of the nelson drinker. 1367/1611/1768 brought in ~3:30 in case of problems, 1768 a little reluctant, had to get 1367/1611 secured in EBNPAD12 but 1768 did come in, all told about 20 min.</p>
4 Aug 2008	Behavior note	<p>Shifted to S.elex only, did well all out within 15-20 min. 1768 did better, returned once. Keepers waited until she appeared comfortable before securing gate without incident</p> <p>This comment was added to the following specimens: 1367, 1611, 1768.</p>
8 Aug 2008	Fecal check/worming	<p>Results of group routine fecal sample submitted were negative.</p> <p>This comment was added to the following specimens: 1367, 1611, 1768.</p>

<u>Date</u>	<u>Enclosure</u>	
30 Sep 2007	EBST7	Into quarantine in new elephant barn.

<u>Date</u>	<u>Sex</u>
30 Sep 2007	Female

<u>Date</u>	<u>Rearing</u>
30 Sep 2007	Unknown

<u>Date</u>	<u>Parent(s)</u>	<u>local Id</u>	<u>Location</u>
30 Sep 2007	Sire	WILD	WILD
30 Sep 2007	Dam	WILD	WILD

Medical History Report - Summary for Individual Specimen
NORTH CAROLINA ZOOLOGICAL PARK

Scientific Name: LOXODONTA AFRICANA (no subsp)	Accession #: 1768
Common Name: African elephant	Female
Name: NEKHANDA	Birth: 1.Jan.1988 (Estimated)

.....2007....

- 7.Mar Clinical note recorded. (BJ)
- 21.Mar Clinical note recorded. (BJ)
- 28.Mar Purpose/Problem: Treat sore legs
Rx: PHENYLBUTAZONE 6gm PO SID for 7 days.
Clinical note recorded. (BJ)

- 4.Apr Parasitology examination: (ROUTINE EXAMINATION) Fecal sample.
NO PARASITES SEEN
Clinical note recorded. (BJ)
- 5.Apr Clinical note recorded. (BJ)
- 11.Apr Purpose/Problem: Improve attitude
Rx: ALTRENOGEST 132.0mg PO SID for 14 days.
Clinical note recorded. (BJ)
- 18.Apr Clinical note recorded. (BJ)
- 25.Apr Purpose/Problem: Treat soreness in hind legs
Rx: PHENYLBUTAZONE 6gm PO SID for 5 days.
Clinical note recorded. (BJ)

- 2.May Sedated: XYLAZINE/BUTORPHANOL/KETOPROFEN
Trunk ring block using 20 ml 2% Lidocaine and 10 ml of Marcaine.
Rx: KETOPROFEN 20ml IM
Clinical note recorded. (DBJ)
- 3.May Clinical note recorded. (BJ)
- 5.May Clinical note recorded. (BJ)
- 8.May Purpose/Problem: Treat sore right hip
Rx: PHENYLBUTAZONE 12gm PO SID
Clinical note recorded. (BJ)
- 9.May Purpose/Problem: Treat sore right hip
Rx: PHENYLBUTAZONE 9gm PO SID for 2 days.
Clinical note recorded. (BJ)
- 10.May Clinical note recorded. (BJ)
- 11.May Blood sample: (EDTA) Hematology/Chemistry/Serology results.
WBC:15.80 *10³/UL; HCT: 33.7%; BUN:3 MG/DL;
Purpose/Problem: Treat sore right hip
Rx: PHENYLBUTAZONE 6gm PO SID for 5 days.
Clinical note recorded. (BJ)
- 16.May Clinical note recorded. (DBJ)
- 17.May Clinical note recorded. (BJ)
- 23.May Clinical note recorded. (DBJ)
- 24.May Blood sample: (EDTA) Hematology/Chemistry/Serology results.
HCT: 32.3%;
Blood sample: (EDTA) Hematology results.
WBC:1.20 *10³/UL;
Clinical note recorded. (BJ)

Printed on: 19.Aug.2008

/ISIS/MedARKS/5.32a

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NORTH CAROLINA ZOOLOGICAL PARK

Scientific Name: LOXODONTA AFRICANA (no subsp)	Accession #: 1768
Common Name: African elephant	Female
Name: NEKHANDA	Birth: 1.Jan.1988 (Estimated)

.....2007...

25.May Clinical note recorded. (BJ)
 26.May Clinical note recorded. (BJ)
 27.May Clinical note recorded. (BJ)
 28.May Clinical note recorded. (BJ)
 29.May Clinical note recorded. (BJ)
 30.May Clinical note recorded. (BJ)
 31.May Clinical note recorded. (BJ)

1.Jun Clinical note recorded. (BJ)
 2.Jun Clinical note recorded. (BJ)
 3.Jun Clinical note recorded. (BJ)
 4.Jun Clinical note recorded. (BJ)
 6.Jun Clinical note recorded. (BJ)
 7.Jun Blood sample: (EDTA) Hematology/Chemistry/Serology results.
 WBC:14.40 *10³/UL; HCT: 33.9%; BUN:2 MG/DL;
 Clinical note recorded. (BJ)
 13.Jun Clinical note recorded. (BJ)
 18.Jun Clinical note recorded. (BJ)
 20.Jun Clinical note recorded. (BJ)
 26.Jun Clinical note recorded. (BJ)
 27.Jun Clinical note recorded. (BJ)

4.Jul Clinical note recorded. (BJ)
 10.Jul Clinical note recorded. (BJ)
 11.Jul Purpose/Problem: Treat pain in legs?, prevent kicking.
 Rx: PHENYLBUTAZONE 6gm PO SID for 7 days.
 Clinical note recorded. (BJ)
 13.Jul Clinical note recorded. (BJ)
 17.Jul Clinical note recorded. (BJ)

1.Aug Clinical note recorded. (BJ)
 3.Aug Clinical note recorded. (BJ)
 6.Aug Clinical note recorded. (BJ)
 8.Aug Clinical note recorded. (BJ)
 10.Aug Clinical note recorded. (BJ)

17.Sep Clinical note recorded. (DS)
 18.Sep Blood sample: (EDTA) Hematology/Chemistry/Serology results.
 WBC:9.22 *10³/UL; HCT: 30.0%; BUN:3 MG/DL;
 Clinical note recorded. (BJ)
 19.Sep Clinical note recorded. (BJ)
 20.Sep Blood sample: (EDTA) Hematology/Chemistry/Serology results.
 WBC:10.31 *10³/UL; HCT: 33.4%; BUN:4 MG/DL;
 24.Sep Clinical note recorded. (BJ)

Medical History Report - Summary for Individual Specimen
NORTH CAROLINA ZOOLOGICAL PARK

Scientific Name: LOXODONTA AFRICANA (no subsp)	Accession #: 1768
Common Name: African elephant	Female
Name: NEKHANDA	Birth: 1.Jan.1988 (Estimated)

.....2007....

- 30.Sep Obtained from another institution.
Parasitology examination: (QUARANTINE EXAMINATION) Fecal sample.
NEGATIVE

- 4.Oct Blood sample: (EDTA) (14:15.0) Hematology/Chemistry/Serology results.
WBC:8.80 *10³/UL; BUN:6 MG/DL;
Clinical note recorded. (SKC)
- 5.Oct Clinical note recorded. (CUL)
- 6.Oct Clinical note recorded. (CUL)
- 9.Oct Parasitology examination: (FOLLOW-UP/RECHECK EXAMINATION) Fecal sample
NO PARASITES SEEN
- 12.Oct Clinical note recorded. (CUL)
- 19.Oct Parasitology examination: (QUARANTINE EXAMINATION) Fecal sample.
NO PARASITES SEEN
- 22.Oct Parasitology examination: (QUARANTINE EXAMINATION) Fecal sample.
NO PARASITES SEEN
- 31.Oct Clinical note recorded. (RSD)

- 1.Nov Purpose/Problem: abnormal behavior
Rx: HALOPERIDOL 40mg PO BID for 3 days.
Clinical note recorded. (RSD)
- 2.Nov Parasitology examination: (QUARANTINE EXAMINATION) Fecal sample.
NO PARASITES SEEN
- 3.Nov Clinical note recorded. (CUL)
- 5.Nov Rx: HALOPERIDOL 80mg PO BID for 14 days.
Clinical note recorded. (RX)
- 6.Nov Clinical note recorded. (RSD)
- 7.Nov Purpose/Problem: left front leg lameness
Rx: FLUNIXIN MEGLUMINE 3000mg PO SID
Clinical note recorded. (RSD)
- 9.Nov Clinical note recorded. (RSD)
- 13.Nov Parasitology examination: (QUARANTINE EXAMINATION) Fecal sample.
NO PARASITES SEEN
- 17.Nov Clinical note recorded. (CUL)

.....2008....

- 2.Jan Clinical note recorded. (SKC)
- 4.Jan Clinical note recorded. (SKC)
- 9.Jan Purpose/Problem: weaning off haloperidol
Rx: HALOPERIDOL 80mg PO BID for 12 days.
Clinical note recorded. (RSD)

7.Feb Clinical note recorded. (RSD) E 1768.TXT

Printed on: 19.Aug.2008

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Medical History Report - Summary for Individual Specimen
NORTH CAROLINA ZOOLOGICAL PARK

Scientific Name: LOXODONTA AFRICANA (no subsp)	Accession #: 1768
Common Name: African elephant	Female
Name: NEKHANDA	Birth: 1.Jan.1988 (Estimated)

.....2008....

29.Apr Clinical note recorded. (CUL)

24.Jun Blood sample: (EDTA) (15:37.0) Hematology/Chemistry/Serology results.
WBC:13.82 *10³/UL; HCT: 34.0%; BUN:5 MG/DL;

3.Jul Blood sample: (EDTA) (11:30.0) Hematology/Chemistry/Serology results.
WBC:9.50 *10³/UL; HCT: 32.5%; BUN:2 MG/DL;

13.Aug Parasitology examination: (ROUTINE EXAMINATION) Fecal sample.
NO PARASITES SEEN

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Scientific Name: LOXODONTA AFRICANA (no subsp)	Accession #: 1768
Common Name: African elephant	Female
Name: NEKHANDA	Birth: 1.Jan.1988 (Estimated)

Clinical Note: 7.Mar.2007
Ok for training to chain in center. (BJ)

Clinical Note: 21.Mar.2007
Broke safety window in outside yard door on Monday night. Some cuts on upper trunk. Start random fasting until she can be chained and treated. Work on trunk flush. Possibly surgery after trunk flush if trunk flush required. Pounding legs. Left front seems sore. Last week punched in a keg and cut tusk flap. Continue to monitor. (BJ)

Clinical Note: 28.Mar.2007
Continue to train for trunk wash, but do not obtain actual sample. Occassionally whistling when breathing. Continue to train for chains. Right nostril slightly larger than peasize. Left nostril still very open. Cannot yet be consistently chained on both front legs. Still hitting herself on all four legs. If legs get warm, hose with cold water.
Rx: PHENYLBUTAZONE 6 gm PO SID for 7 days. (BJ)

Purpose: Treat sore legs

Prescription Data >> Starting date: 28.Mar.2007
Drug: PHENYLBUTAZONE 6 gm PO SID for 7 days
Formulation: 266.66 MG/G powder
Prescribed by: BJ (28.Mar.2007) Filled by: SH (28.Mar.2007)

Clinical Note: 4.Apr.2007
Still very moody. Buzone did seem to help her disposition a little (her back legs seemed to not bother her as much). Discontinue Buzone, report any changes in behaviour over the next week. Trunk nostril opening - no variation in size. Fecal to CVPL for Ova and Parasite. (BJ)

Submission Data >>
Type: Fecal sample
Purpose: ROUTINE EXAMINATION

Sample id.: 2007*A002
Date collected: 4.Apr.2007

Printed on: 19.Aug.2008

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Scientific Name: LOXODONTA AFRICANA (no subsp)	Accession #: 1768
Common Name: African elephant	Female
Name: NEKHANDA	Birth: 1.Jan.1988 (Estimated)

Parasitology Examination:

Collected from:
From an individual specimen.

Examination Data >>

Storage: refrigerated
Consistency: Not specified
Gross appearance: Typical

Date examined: 4.Apr.2007

by: VPL

Tests & Results >>

FLOATATION - ZINC SULFATE NO PARASITES SEEN

Clinical Note:

5.Apr.2007

Negative for Ova and Parasites (BJ)

Clinical Note:

11.Apr.2007

Start on Regumate. Can be hidden in juice or jelly powder etc.
Nostrils look ok right nostril actually looks slightly larger.
Rx: ALTRENOGEST 132.0 mg PO SID for 14 days.
Fecal negative. (BJ)

Purpose: Improve attitude

Prescription Data >>

Starting date: 11.Apr.2007

Drug: ALTRENOGEST 132.0 mg PO SID for 14 days

Formulation: 2.20 mg/ml solution

Prescribed by: BJ (11.Apr.2007)

Filled by: SH (11.Apr.2007)

Printed on: 19.Aug.2008

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Scientific Name: LOXODONTA AFRICANA (no subsp)	Accession #: 1768
Common Name: African elephant	Female
Name: NEKHANDA	Birth: 1.Jan.1988 (Estimated)

Clinical Note: 18.Apr.2007
Recheck. Took Regumate for 5 days. One keeper reports some temperament change, one feels no change. Missed one day since started, today only had 30 mls. Keepers to try to medicate via gelatin capsules. Only difficulty breathing through trunk when excited. (BJ)

Clinical Note: 25.Apr.2007
Nostrils seem to have slightly decreased in opening size. Not kicking herself quite as much, still working at the doors. Back legs seem warm to the touch. Right rear worse. Does strain to breathe when excited. Loading estimate time is 1 to 3 hours.
Rx: PHENYLBUTAZONE 6 gm PO SID for 5 days. (BJ)

Purpose: Treat soreness in hind legs

Prescription Data >> Starting date: 25.Apr.2007
Drug: PHENYLBUTAZONE 6 gm PO SID for 5 days
Formulation: 266.66 MG/G powder
Prescribed by: BJ (25.Apr.2007) Filled by: SH (25.Apr.2007)
Treatment weight: 3176 kg

Clinical Note: 2.May.2007
Surgery on end of trunk to bring skin closer together to promote better healing and decrease scar tissue build up. See anes. report.
Rx: KETOPROFEN 20 ml IM (DBJ)

Printed on: 19.Aug.2008

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Anesthesia Records Report - Individual Specimen
NORTH CAROLINA ZOOLOGICAL PARK

Scientific Name: LOXODONTA AFRICANA (no subsp)	Accession #: 1768
Common Name: African elephant	Female
Name: NEKHANDA	Birth: 1.Jan.1988 (Estimated)
	Age: 19Y Est.

Baseline Data >> Date of anesthesia: 2.May.2007

Health: Abnormal - class II
 Preanesthetic Fasting: 8-24 hours
 Activity: excited
 Immobilized in small enclosure (as an isolated animal).
 Body weight: 3200 Kg (7055 Lb) Est.
 Body condition: good / normal

Veterinarian: DBJ
 Recorded by: SH

Immobilization Data >>

Initial dose given at 8:34
 Showed initial drug effects at 16 min (8:50)
 No anesthetic complications.

Recovery Data >>

Drug Data >>

Drugs given dosage	Amount Route	Time	Effect produced	Bottle #
XYLAZINE 0.188 mg/kg	600 mg	8:34	mild sedation	
BUTORPHANOL	capture dart - i.m.			
	5 ml	8:34	mild sedation	
	capture dart - i.m.			
XYLAZINE 93.750mcg/kg	300 mg	44 min	mild sedation	
BUTORPHANOL	capture dart - i.m.		* partial dose *	
	10.5 ml	44 min	mild sedation	
	capture dart - i.m.		* partial dose *	
XYLAZINE 62.500mcg/kg	200 mg	54 min	sedation	
BUTORPHANOL	handsyringe - i.m.			
	5 ml	54 min	sedation	
	handsyringe - i.m.			
KETOPROFEN	20 ml			
	handsyringe - i.m.			

Comments >>

Trunk ring block using 20 ml 2% Lidocaine and 10 ml of Marcaine.
 Sutured ends of trunk flap with 1 PDS.
 Last injection of Rompun/Torb given by hand in left shoulder.

Printed on: 19.Aug.2008

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Medical History Report - Individual Specimen
NORTH CAROLINA ZOOLOGICAL PARK

Scientific Name: LOXODONTA AFRICANA (no subsp)	Accession #: 1768
Common Name: African elephant	Female
Name: NEKHANDA	Birth: 1.Jan.1988 (Estimated)

Prescription Data >>	Starting date: 2.May.2007
Drug: KETOPROFEN 20 ml IM	
Prescribed by: DBJ (2.May.2007)	Filled by: (2.May.2007)

Clinical Note: 3.May.2007
Routine fecal culture to CVPL (BJ)

Clinical Note: 5.May.2007
Fecal culture shows scant growth of normal flora (BJ)

Clinical Note: 8.May.2007
Rx: PHENYLBUTAZONE 12 gm PO SID for 1 dose. (BJ)

Purpose: Treat sore right hip

Prescription Data >>	Starting date: 8.May.2007
Drug: PHENYLBUTAZONE 12 gm PO SID	
Formulation: 266.66 MG/G powder	
Prescribed by: BJ (8.May.2007)	Filled by: SH (8.May.2007)
	Treatment weight: 3176 kg

Clinical Note: 9.May.2007
Recheck. Left hip swollen from dart injection. Trunk healing well.
Continue betadine spray on trunk.
Rx: PHENYLBUTAZONE 9 gm PO SID for 2 days. (BJ)

Purpose: Treat sore right hip

E 1768.TXT

Prescription Data >>

Starting date: 9.May.2007

Drug: PHENYLBUTAZONE 9 gm PO SID for 2 days

Formulation: 266.66 MG/G powder

Prescribed by: BJ (9.May.2007)

Filled by: SH (9.May.2007)

Treatment weight: 3176 kg

Printed on: 19.Aug.2008

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=====
Scientific Name: LOXODONTA AFRICANA (no subsp)

Accession #: 1768

Common Name: African elephant

Female

Name: NEKHANDA

Birth: 1.Jan.1988 (Estimated)
=====

Clinical Note:

10.May.2007

Fecal culture negative fore salmonella. (BJ)

Clinical Note:

11.May.2007

RX: PHENYLBUTAZONE 6 gm PO SID for 5 days.

Blood to CVPL for general diagnostic panel. (BJ)

Printed on: 19.Aug.2008

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Clinical Pathology Records - Specimen Report
NORTH CAROLINA ZOOLOGICAL PARK

Scientific Name: LOXODONTA AFRICANA (no subsp)	Accession #: 1768
Common Name: African elephant	Female
Name: NEKHANDA	Birth: 1.Jan.1988 (Estimated)
	Age: 19Y Est.

Collection Information >>
Health Status: Normal
Fasting Time: < 8 hours
Activity: Calm
Weight: 3176 Kg on 24.Jan.2007
Manual restraint used.

Date of Collection: 11.May.2007
Time of Collection:
Collected by: JB
Sample Collection Site: EAR VEIN

Hematology >>
Analysis Information >>
Anticoagulant: EDTA
Storage: Fresh
Sample Quality: No quality problems.

Laboratory: VPL
Date of Analysis: 11.May.2007
Time of Analysis:
Analysis by: VPL
Automated analysis.

Tests and Results >>

WHITE BLOOD CELL COUNT >>	15.8		*10 ³ /UL
RED BLOOD CELL COUNT <	2.81		*10 ⁶ /UL
HEMOGLOBIN <	12.2		GM/DL
HEMATOCRIT <	33.7		%
MCV	120		fL
MCH	43.4		uug
MCHC	36.2		gm/dL
SEGMENTED NEUTROPHILS >>	45	(7.110)	% (*10 ³ /UL)
NEUTROPHILIC BANDS <	1	(0.158)	% (*10 ³ /UL)
LYMPHOCYTES	27	(4.266)	% (*10 ³ /UL)
MONOCYTES >	26	(4.108)	% (*10 ³ /UL)
EOSINOPHILS	1	(0.158)	% (*10 ³ /UL)

ISIS reference values are for LOXODONTA AFRICANA
Printed on: 19.Aug.2008

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Medical History Report - Individual Specimen
NORTH CAROLINA ZOOLOGICAL PARK

Scientific Name: LOXODONTA AFRICANA (no subsp)	Accession #: 1768
Common Name: African elephant	Female
Name: NEKHANDA	Birth: 1.Jan.1988 (Estimated)

Purpose: Treat sore right hip

Prescription Data >> Starting date: 11.May.2007
Drug: PHENYLBUTAZONE 6 gm PO SID for 5 days
Formulation: 266.66 MG/G powder
Prescribed by: BJ (11.May.2007) Filled by: SH (11.May.2007)
Treatment weight: 3176 kg

Clinical Note: 16.May.2007
Recheck. Left hip swelling is down, swelling is now more localized,
now 1/3 the size of a large grapefruit. She took out the fence this
am and as a result has scrapes and cuts on her trunk and front legs.
Discontinue Buzone. (DBJ)

Clinical Note: 17.May.2007
Negative for Leptospirosis. (BJ)

Clinical Note: 23.May.2007
Not eating for the last 24 hours, excessive diarrhea. Fecal sample
to CVL for culture. (DBJ)

Clinical Note: 24.May.2007
Still does not want to eat produce. Did not eat much hay. Offered
water, but did not drink much throughout the day.
Blood to Uncas for diagnostic panel.
Blood to CVPL for WBC and differential. (BJ)

Printed on: 19.Aug.2008

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Clinical Pathology Records - Specimen Report
NORTH CAROLINA ZOOLOGICAL PARK

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=====
Scientific Name: LOXODONTA AFRICANA (no subsp)           Accession #: 1768
Common Name: African elephant                           Female
Name: NEKHANDA                                         Birth: 1.Jan.1988 (Estimated)
                                                         Age: 19Y Est.
=====

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Collection Information >>
Health Status: Abnormal
Fasting Time: < 8 hours
Activity: Calm
Weight: 3176 Kg on 24.Jan.2007
Manual restraint used.

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Date of Collection: 24.May.2007
Time of Collection:
Collected by: JB
Sample Collection Site: EAR VEIN

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Hematology >>
Analysis Information >>
Anticoagulant: EDTA
Storage: Fresh
Sample Quality: No quality problems.

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Laboratory: UNCAS
Date of Analysis: 24.May.2007
Time of Analysis:
Analysis by: UNC
Automated analysis.

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Tests and Results >>

HEMOGLOBIN <<	1.16	GM/DL
HEMATOCRIT <<	32.3	%
MCHC <<	3.59	gm/dL
SEGMENTED NEUTROPHILS >>	25	% (*10^3/UL)
LYMPHOCYTES	7	% (*10^3/UL)
MONOCYTES >>	68	% (*10^3/UL)
EOSINOPHILS >>	1	% (*10^3/UL)

Chemistry >>

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Analysis Information >>
Chemistry Sample: Serum
Storage: Fresh
Sample Quality: No quality problems.

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Laboratory: UNCAS
Date of Analysis: 24.May.2007
Time of Analysis:
Analysis by: UNC
Automated analysis.

```

Tests and Results >>

SODIUM	126	MEQ/L
POTASSIUM	5.0	MEQ/L

E 1768.TXT
sodium/potassium ratio 25.2
ASPARTATE AMINOTRANSFERASE 29 IU/L
CREATINE PHOSPHOKINASE >> 675 IU/L
GAMMA GLUTAMYLTRANSFERASE > 17 IU/L

ISIS reference values are for LOXODONTA AFRICANA
Printed on: 19.Aug.2008

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Clinical Pathology Records - Specimen Report
NORTH CAROLINA ZOOLOGICAL PARK

Scientific Name: LOXODONTA AFRICANA (no subsp) Accession #: 1768
Common Name: African elephant Female
Name: NEKHANDA Birth: 1.Jan.1988 (Estimated)
Age: 19Y Est.

Collection Information >>
Health Status: Normal
Fasting Time: < 8 hours
Activity: Calm
Weight: 3176 Kg on 24.Jan.2007
Manual restraint used.

Date of Collection: 24.May.2007
Time of Collection: :
Collected by: JB
Sample Collection Site: EAR VEIN

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

Laboratory: CENTRAL LAB
Date of Analysis: 25.May.2007
Time of Analysis:
Analysis by: CEN
Automated analysis.

Tests and Results >>

WHITE BLOOD CELL COUNT	<<	1.2		*10 ³ /UL
SEGMENTED NEUTROPHILS	<	57	(0.684)	% (*10 ³ /UL)
LYMPHOCYTES	<	25	(0.300)	% (*10 ³ /UL)
MONOCYTES		14	(0.168)	% (*10 ³ /UL)
EOSINOPHILS		4	(0.048)	% (*10 ³ /UL)

ISIS reference values are for LOXODONTA AFRICANA
Printed on: 19.Aug.2008

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Scientific Name: LOXODONTA AFRICANA (no subsp)	Accession #: 1768
Common Name: African elephant	Female
Name: NEKHANDA	Birth: 1.Jan.1988 (Estimated)
	Age: 19Y Est.

Clinical Note: 25.May.2007
Still not eating well, not drinking much. Stool very runny. (BJ)

Clinical Note: 26.May.2007
Stool very loose. Picked at a few flakes throughout the day. Took a few peeled bananas, had a few drinks. Did drink quite a bit of water overnight, the water in trough was down at least 6 inches. Gave only hay and 4 willow branches at night. (BJ)

Clinical Note: 27.May.2007
Given 15 capsules of L. acidophilus orally in bagels. Eating and drinking a little more today, also ate bread and watermelon. 1/2 cup salt and 1 cup baking soda in water in PC room, she drank it well. Drank twice. (BJ)

Clinical Note: 28.May.2007
Give 15 capsules L. acidophilus BID. Also given salt and Sodium Bicarb in water. Beginning to have firmer stool, very few boluses (only 5 between last night and pm today). (BJ)

Clinical Note: 29.May.2007
Given Sodium Bicarb in water in am and pm. 15 capsule L. acidophilus in am (did not take them all) and 15 in pm. Diarrhea today. Did not eat last night. Did not drink much today. Fecal positive for Salmonella. (BJ)

Clinical Note: 30.May.2007

E 1768.TXT

15 capsules L. acidophilus in am, stools have more form. Ate 5 to 7 flakes of hay last night and some produce. Try Calf Lyte II HE treat in am 3 cups per one gallon water give in am only. When done that go to Calf Lyte II use 3.5 oz to 2 L water or one pail per water trough. Use Calf Lyte in place of Sodium Bicarb. Culture sensitivity see lab reports. (BJ)

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Scientific Name: LOXODONTA AFRICANA (no subsp)	Accession #: 1768
Common Name: African elephant	Female
Name: NEKHANDA	Birth: 1.Jan.1988 (Estimated)
	Age: 19Y Est.

Clinical Note: 31.May.2007
Electrolytes in am and pm. Had actual fecal boluses overnight. (BJ)

Clinical Note: 1.Jun.2007
Ate fruit and vegetables today quite readily. Eating hay, but slowly. Ok to give her extra veggies to keep her eating. Didn't drink a lot of water but stools are still looking fairly solid. Would not take am electrolytes, did not drink much of them overnight. Had a shower and played in sand today. (BJ)

Clinical Note: 2.Jun.2007
15 L. acidophilus in am. Normal stools until bathtime then had a tantrum and stool went looser. Drank 10 gallons of electrolytes and two handfuls of Bicarb. Drank from hose multiple times. (BJ)

Clinical Note: 3.Jun.2007
15 L. acidophilus in pm. Electrolytes in water drank at will. Not too interested in working, but still did work. (BJ)

Clinical Note: 4.Jun.2007
15 capsules L. acidophilus. Drank water and 1/2 cup of Sodium Bicarb at end of the day. (BJ)

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Scientific Name: LOXODONTA AFRICANA (no subsp)	Accession #: 1768
Common Name: African elephant	Female
Name: NEKHANDA	Birth: 1.Jan.1988 (Estimated)
	Age: 19Y Est.

Clinical Note: 6.Jun.2007
Recheck. Now eating well, still not drinking well. Stopped drinking electrolytes well on Saturday and Sunday, has not had at all since Monday. Keepers report urine is a grey/green colour. Blood taken to CVLP. Fecal culture next week.
Right rear toe, second outside nail, cracked a portion out. Apply Strong Iodine BID. Cut cuticle on Friday, was bleeding, cuticle cracked on Sunday, 1/2 moon shape portion out of nail, cut off on Tuesday.
Left hip, lump larger, now grapefruit size.
Left rear foot, outside toe nail cracked.
Stools starting to be mostly bolus shaped. Continue Boot wash.
Good for training today. (BJ)

Clinical Note: 7.Jun.2007
Blood to CVPL for general diagnostic (BJ)

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Clinical Pathology Records - Specimen Report
NORTH CAROLINA ZOOLOGICAL PARK

Scientific Name: LOXODONTA AFRICANA (no subsp)	Accession #: 1768
Common Name: African elephant	Female
Name: NEKHANDA	Birth: 1.Jan.1988 (Estimated)
	Age: 19Y Est.

Collection Information >>
 Health Status: Abnormal
 Fasting Time: < 8 hours
 Activity: Calm
 Weight: 3176 Kg on 24.Jan.2007
 Manual restraint used.

Date of Collection: 7.Jun.2007
 Time of Collection:
 Collected by: JB
 Sample Collection Site: EAR VEIN

Hematology >>
 Analysis Information >>
 Anticoagulant: EDTA
 Storage: Fresh
 Sample Quality: No quality problems.

Laboratory: CENTRAL LAB
 Date of Analysis: 7.Jun.2007
 Time of Analysis:
 Analysis by: CEN
 Automated analysis.

Tests and Results >>

WHITE BLOOD CELL COUNT	>	14.4		*10 ³ /UL
RED BLOOD CELL COUNT	<	2.83		*10 ⁶ /UL
HEMOGLOBIN		12.5		GM/DL
HEMATOCRIT	<	33.9		%
MCV		120		fL
MCH		44.2		uug
MCHC	>	36.9		gm/dL
SEGMENTED NEUTROPHILS	>	33	(4.752)	% (*10 ³ /UL)
LYMPHOCYTES		26	(3.744)	% (*10 ³ /UL)
MONOCYTES	>>	41	(5.904)	% (*10 ³ /UL)

ISIS reference values are for LOXODONTA AFRICANA
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Clinical Pathology Records - Specimen Report
NORTH CAROLINA ZOOLOGICAL PARK

Scientific Name: LOXODONTA AFRICANA (no subsp)	Accession #: 1768
Common Name: African elephant	Female
Name: NEKHANDA	Birth: 1.Jan.1988 (Estimated)
	Age: 19Y Est.

Collection Information >>
Health Status: Abnormal
Fasting Time: < 8 hours
Activity: Calm
Weight: 3176 Kg on 24.Jan.2007
Manual restraint used.

Date of Collection: 7.Jun.2007
Time of Collection:
Collected by: JB
Sample Collection Site: EAR VEIN

Chemistry >>
Analysis Information >>
Chemistry Sample: Serum
Storage: Fresh
Sample Quality: No quality problems.

Laboratory: CENTRAL LAB
Date of Analysis: 7.Jun.2007
Time of Analysis:
Analysis by: CEN
Manual analysis.

Tests and Results >>

GLUCOSE	74.5	MG/DL
BLOOD UREA NITROGEN <<	1.68	MG/DL
CREATININE	1.47	MG/DL
BUN/creatinine ratio	1.14	
CALCIUM >>	1104	MG/DL
PHOSPHORUS	4.98	MG/DL
calcium/phosphorus ratio	222	
SODIUM	128	MEQ/L
POTASSIUM >	5.4	MEQ/L
sodium/potassium ratio	23.7	
CHLORIDE	91	MEQ/L
TOTAL PROTEIN (COLORIMETRY)	7.60	GM/DL

E 1768.TXT		
ALBUMIN (COLORIMETRY)	<< 2.67	GM/DL
GLOBULIN (COLORIMETRY)	> 4.90	GM/DL
albumin/globulin ratio	0.545	
ASPARTATE AMINOTRANSFERASE	22	IU/L
TOTAL BILIRUBIN	0.234	MG/DL
ALKALINE PHOSPHATASE	115	IU/L
CREATINE PHOSPHOKINASE	384	IU/L

ISIS reference values are for LOXODONTA AFRICANA
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Scientific Name: LOXODONTA AFRICANA (no subsp)	Accession #: 1768
Common Name: African elephant	Female
Name: NEKHANDA	Birth: 1.Jan.1988 (Estimated)
	Age: 19Y Est.

Clinical Note: 13.Jun.2007
 Stools now boluses. Hitting herself on her back leg. Eating and drinking well. Trunk has healed very well. Continue Iodine on right rear toe third outside nail. Fecal for culture. (BJ)

Clinical Note: 18.Jun.2007
 Fecal to CVPL for culture. (BJ)

Clinical Note: 20.Jun.2007
 Fecal culture shows light growth of normal flora (BJ)

Clinical Note: 26.Jun.2007
 Salmonella species isolated at Salmonella hada phagetype 11 from positive sample on May 23/07. See lab report for sensitivity. Fecal culture from June 18/07 negative for salmonella. (BJ)

Clinical Note: 27.Jun.2007
 Keepers report she is doing well. (BJ)

Clinical Note: 4.Jul.2007
 Back foot has dried, not as painful. Trunk very good. In a very good mood this week. (BJ)

E 1768.TXT

Clinical Note: 10.Jul.2007
Fecal sample to CVPL for culture. (BJ)

Clinical Note: 11.Jul.2007
Starting to crack nails on hind feet. Rear left, two outside toes
center cracks to cuticles. Right rear nail that had moon shape piece
taken out is doing well. Front right, second toe on inside, crack in
center 1/2 to cuticle. Ok to squeeze Iodine into cracks in nails.
Has gained weight.
RX: PHENYLBUTAZONE 6 gm PO SID for 7 days. (BJ)

Printed on: 19.Aug.2008

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Medical History Report - Individual Specimen
NORTH CAROLINA ZOOLOGICAL PARK

Scientific Name: LOXODONTA AFRICANA (no subsp)	Accession #: 1768
Common Name: African elephant	Female
Name: NEKHANDA	Birth: 1.Jan.1988 (Estimated)

Purpose: Treat pain in legs?, prevent kicking.

Prescription Data >> Starting date: 11.Jul.2007
Drug: PHENYLBUTAZONE 6 gm PO SID for 7 days
Formulation: 266.66 MG/G powder
Prescribed by: BJ (11.Jul.2007) Filled by: SH (11.Jul.2007)
Treatment weight: 3176 kg

Clinical Note: 13.Jul.2007
Fecal culture from July 10/07 shows scant growth of normal flora. (BJ)

Clinical Note: 17.Jul.2007
Fecal culture from July 17/07 negative for Salmonella. (BJ)

Clinical Note: 1.Aug.2007
Rear left, nail has cracked to cuticle. (BJ)

Clinical Note: 3.Aug.2007
Fecal to CVPL for culture. (BJ)

E 1768.TXT

Clinical Note: 6.Aug.2007
Fecal culture from August 3/07 shows scant growth of miscellaneous growth. (BJ)

Clinical Note: 8.Aug.2007
Raw spot upper and lower left eye. Two raised scrapes on upper eyelid, monitor. Keeper reports lower lid has improved. Happened 4 days ago. Keepers to report if no change or worsens. (BJ)

Clinical Note: 10.Aug.2007
Fecal culture from Aug. 3/07 is negative for Salmonella. (BJ)

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Scientific Name: LOXODONTA AFRICANA (no subsp)	Accession #: 1768
Common Name: African elephant	Female
Name: NEKHANDA	Birth: 1.Jan.1988 (Estimated)

Clinical Note: 17.Sep.2007
Cut on rear of front left foot just above pad approx. 8 to 10 in length. Spray TID with Betadine spray. (DS)

Clinical Note: 18.Sep.2007
Blood sample to CVPL for general diagnostic. Note sample not picked up by courier, sat overnight. Sample still run but they will take another sample and run again gratis. (BJ)

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Clinical Pathology Records - Specimen Report
NORTH CAROLINA ZOOLOGICAL PARK

Scientific Name: LOXODONTA AFRICANA (no subsp)	Accession #: 1768
Common Name: African elephant	Female
Name: NEKHANDA	Birth: 1.Jan.1988 (Estimated)
	Age: 20Y Est.

Collection Information >>
 Health Status: Normal
 Fasting Time: < 8 hours
 Activity: Calm
 Weight: 3176 Kg on 24.Jan.2007
 Manual restraint used.

Date of Collection: 18.Sep.2007
 Time of Collection:
 Collected by: JB
 Sample Collection Site: EAR VEIN

Hematology >>
 Analysis Information >>
 Anticoagulant: EDTA
 Storage: Fresh
 Sample Quality: No quality problems.

Laboratory: CENTRAL LAB
 Date of Analysis: 18.Sep.2007
 Time of Analysis:
 Analysis by: VPL
 Automated analysis.

Tests and Results >>

WHITE BLOOD CELL COUNT	9.22	*10 ³ /UL
RED BLOOD CELL COUNT <	2.5	*10 ⁶ /UL
HEMOGLOBIN <<	10.6	GM/DL
HEMATOCRIT <<	30	%
MCV	120	fL
MCH	42.4	uug
MCHC	35.3	gm/dL
NEUTROPHILIC BANDS >	26 (2.397)	% (*10 ³ /UL)

E 1768.TXT			
LYMPHOCYTES		34	(3.135) % (*10 ³ /UL)
MONOCYTES	>	39	(3.596) % (*10 ³ /UL)
EOSINOPHILS		1	(0.092) % (*10 ³ /UL)

ISIS reference values are for LOXODONTA AFRICANA
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Clinical Pathology Records - Specimen Report
 NORTH CAROLINA ZOOLOGICAL PARK

Scientific Name: LOXODONTA AFRICANA (no subsp)	Accession #: 1768
Common Name: African elephant	Female
Name: NEKHANDA	Birth: 1.Jan.1988 (Estimated)
	Age: 20Y Est.

Collection Information >>
 Health Status: Normal
 Fasting Time: < 8 hours
 Activity: Calm
 Weight: 3176 Kg on 24.Jan.2007
 Manual restraint used.

Date of Collection: 18.Sep.2007
 Time of Collection:
 Collected by: JB
 Sample Collection Site: EAR VEIN

Chemistry >>
 Analysis Information >>
 Chemistry Sample: Serum
 Storage: Fresh
 Sample Quality: No quality problems.

Laboratory: CENTRAL LAB
 Date of Analysis: 18.Sep.2007
 Time of Analysis:
 Analysis by: VPL
 Automated analysis.

Tests and Results >>

GLUCOSE	<	61.8	MG/DL
BLOOD UREA NITROGEN	<<	2.80	MG/DL
CREATININE		1.55	MG/DL
BUN/creatinine ratio		1.81	
CALCIUM	<<	9.96	MG/DL
PHOSPHORUS		5.67	MG/DL
calcium/phosphorus ratio		1.76	

E 1768.TXT		
SODIUM	126	MEQ/L
POTASSIUM	4.9	MEQ/L
sodium/potassium ratio	25.7	
TOTAL PROTEIN (COLORIMETRY)	7.20	GM/DL
ALBUMIN (COLORIMETRY) <<	2.64	GM/DL
GLOBULIN (COLORIMETRY)	4.60	GM/DL
albumin/globulin ratio	0.574	
ASPARTATE AMINOTRANSFERASE	24	IU/L
TOTAL BILIRUBIN	0.117	MG/DL
ALKALINE PHOSPHATASE	77	IU/L
CREATINE PHOSPHOKINASE >>	797	IU/L

ISIS reference values are for LOXODONTA AFRICANA
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Scientific Name: LOXODONTA AFRICANA (no subsp)	Accession #: 1768
Common Name: African elephant	Female
Name: NEKHANDA	Birth: 1.Jan.1988 (Estimated)
	Age: 20Y Est.

Clinical Note: 19.Sep.2007
 Cut above pad healing well. Change from Betadine spray to Iodine
 spray. (BJ)

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Clinical Pathology Records - Specimen Report
NORTH CAROLINA ZOOLOGICAL PARK

Scientific Name: LOXODONTA AFRICANA (no subsp)	Accession #: 1768
Common Name: African elephant	Female
Name: NEKHANDA	Birth: 1.Jan.1988 (Estimated)
	Age: 20Y Est.

Collection Information >>
Health Status: Normal
Fasting Time: < 8 hours
Activity: Calm
Weight: 3176 Kg on 24.Jan.2007
Manual restraint used.

Date of Collection: 20.Sep.2007
Time of Collection:
Collected by: VPL
Sample Collection Site: EAR VEIN

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

Laboratory: VPL
Date of Analysis: 21.Sep.2007
Time of Analysis:
Analysis by: VPL
Automated analysis.

Tests and Results >>

WHITE BLOOD CELL COUNT	10.31	*10 ³ /UL
RED BLOOD CELL COUNT	< 2.76	*10 ⁶ /UL
HEMOGLOBIN	< 11.6	GM/DL
HEMATOCRIT	< 33.4	%
MCV	121	fL

	E 1768.TXT			
	MCH	42.0		uug
	MCHC	34.7		gm/dL
SEGMENTED	NEUTROPHILS	37	(3.815)	% (*10^3/UL)
	LYMPHOCYTES	22	(2.268)	% (*10^3/UL)
	MONOCYTES	> 40	(4.124)	% (*10^3/UL)
	EOSINOPHILS	1	(0.103)	% (*10^3/UL)

ISIS reference values are for LOXODONTA AFRICANA
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Clinical Pathology Records - Specimen Report
 NORTH CAROLINA ZOOLOGICAL PARK

Scientific Name: LOXODONTA AFRICANA (no subsp)	Accession #: 1768
Common Name: African elephant	Female
Name: NEKHANDA	Birth: 1.Jan.1988 (Estimated)
	Age: 20Y Est.

Collection Information >>
 Health Status: Normal
 Fasting Time: < 8 hours
 Activity: Calm
 Weight: 3176 Kg on 24.Jan.2007
 Manual restraint used.

Date of Collection: 20.Sep.2007
 Time of Collection:
 Collected by: VPL
 Sample Collection Site: EAR VEIN

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

Laboratory: VPL
 Date of Analysis: 21.Sep.2007
 Time of Analysis:
 Analysis by: VPL
 Automated analysis.

Tests and Results >>

	GLUCOSE	83.6	MG/DL
	BLOOD UREA NITROGEN <<	3.64	MG/DL
	CREATININE	1.52	MG/DL
	BUN/creatinine ratio	2.39	

E 1768.TXT		
CALCIUM	< 10.1	MG/DL
PHOSPHORUS	4.12	MG/DL
calcium/phosphorus ratio	2.45	
SODIUM	126	MEQ/L
POTASSIUM	4.6	MEQ/L
sodium/potassium ratio	27.4	
TOTAL PROTEIN (COLORIMETRY)	<< 0.300	GM/DL
ALBUMIN (COLORIMETRY)	3.80	GM/DL
ASPARTATE AMINOTRANSFERASE	21	IU/L
TOTAL BILIRUBIN	0.175	MG/DL
ALKALINE PHOSPHATASE	79	IU/L
CREATINE PHOSPHOKINASE	312	IU/L

ISIS reference values are for LOXODONTA AFRICANA
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Scientific Name: LOXODONTA AFRICANA (no subsp)	Accession #: 1768
Common Name: African elephant	Female
Name: NEKHANDA	Birth: 1.Jan.1988 (Estimated)
	Age: 20Y Est.

Clinical Note: 24.Sep.2007
 Exam for export health certificate. (BJ)

Submission Data >>	Sample id.: 2007-0513
Type: Fecal sample	Date collected: 30.Sep.2007
Purpose: QUARANTINE EXAMINATION	Time collected: 8:00
	Collected by: MRL

Collected from: Enclosure: ELEPBARN
 From an individual specimen.

Examination Data >>	Date examined: 30.Sep.2007
Storage: refrigerated	at: 11:00
Consistency: formed	by: HSS
Gross appearance: Typical	

Tests & Results >>
 DIRECT MICROSCOPIC EXAMINATION NEGATIVE

FLOATATION - NA NITRATE

E 1768.TXT
NEGATIVE

Comments >>
Quar Exam #1

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Scientific Name: LOXODONTA AFRICANA (no subsp)	Accession #: 1768
Common Name: African elephant	Female
Name: NEKHANDA	Birth: 1.Jan.1988 (Estimated)
	Age: 20Y Est.

Clinical Note: 4.Oct.2007
Examination of right front foot and quarantine phlebotomy.

Hx: Animal has been here for 6 days. Keepers that a deep fissure has developed at the coronary band of the lateral digit of the right forelimb. there is some necrotic tissue underneath, though no debris or purulent material.

SO: Animal ambulates well on all four limbs. wound was flushed with hydrogen peroxide.
Quarantine bloodwork was collected. CBC showed a moderate monocytosis. Chemistry shows marked elevation in CK (1763) and LDH (>2800)

A: At this time, it appears that the nail will be lost and our goal is to prevent infection tracking to deeper tissues. CBC/Chem changes are likely due to transport stress and muscle damage. will recheck at conclusion of quarantine period.

E 1768.TXT

P: wound will be maintained by keeper staff with periodic rechecks by vet staff, as healthier underlying tissue appears, we will switch to tricide or dilute nolvasan as a more tissue friendly substitute for peroxide. (SKC)

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Clinical Pathology Records - Specimen Report
NORTH CAROLINA ZOOLOGICAL PARK

Scientific Name: LOXODONTA AFRICANA (no subsp)	Accession #: 1768
Common Name: African elephant	Female
Name: NEKHANDA	Birth: 1.Jan.1988 (Estimated)
	Age: 20Y Est.

Collection Information >>
Health Status: Normal
Fasting Time: < 8 hours
Activity: Calm
Weight: 3266 Kg on 30.Sep.2007
Manual restraint used.

Date of Collection: 4.Oct.2007
Time of Collection: 14:15.0
Collected by: J B
Sample Collection Site: EAR VEIN

Hematology >>
Analysis Information >>
Anticoagulant: EDTA
Storage: Fresh
Sample Quality: No quality problems.

Laboratory: NC ZOO
Date of Analysis: 4.Oct.2007
Time of Analysis: 16:00
Analysis by: PAW
Automated analysis.

Tests and Results >>

WHITE BLOOD CELL COUNT	8.8	*10 ³ /UL
------------------------	-----	----------------------

E 1768.TXT

SEGMENTED NEUTROPHILS	39	(3.432)	% (*10 ³ /UL)
NEUTROPHILIC BANDS	< 0		% (*10 ³ /UL)
LYMPHOCYTES	< 18	(1.584)	% (*10 ³ /UL)
MONOCYTES	> 43	(3.784)	% (*10 ³ /UL)
EOSINOPHILS	0		% (*10 ³ /UL)
BASOPHILS	0		% (*10 ³ /UL)
PLATELET COUNT	ADEQ		*10 ³ /UL

Comments >>
RBC's okay.

Hemavet:
WBC 11.58, Ne 1.03, Ly 61.41, Mo 35.93, Eo 1.59, Ba 0.03.
RCC 2.46, Hb 10.5, HCT 28.9, Plt 121, MCV 113.0, MCH 41.0, MCHC 36.3,
RDW 17.7, MPV 4.6, PDW 17.5.

ISIS reference values are for LOXODONTA AFRICANA
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Clinical Pathology Records - Specimen Report
NORTH CAROLINA ZOOLOGICAL PARK

Scientific Name: LOXODONTA AFRICANA (no subsp)	Accession #: 1768
Common Name: African elephant	Female
Name: NEKHANDA	Birth: 1.Jan.1988 (Estimated)
	Age: 20Y Est.

Collection Information >>
Health Status: Normal
Fasting Time: < 8 hours
Activity: Calm
Weight: 3266 Kg on 30.Sep.2007
Manual restraint used.

Date of Collection: 4.Oct.2007
Time of Collection: 14:15.0
Collected by: J B
Sample Collection Site: EAR VEIN

Chemistry >>
Analysis Information >>
Chemistry Sample: Serum
Storage: Fresh
Sample Quality: No quality problems.

Laboratory: NC ZOO
Date of Analysis: 4.Oct.2007
Time of Analysis: 15:14
Analysis by: PAW
Automated analysis.

Tests and Results >>

E 1768.TXT

GLUCOSE	>>	119	MG/DL
BLOOD UREA NITROGEN	<	6	MG/DL
CREATININE		1.4	MG/DL
BUN/creatinine ratio		4.29	
CALCIUM	<	10.1	MG/DL
TOTAL PROTEIN (COLORIMETRY)	<	7.1	GM/DL
ALBUMIN (COLORIMETRY)	<<	2.6	GM/DL
GLOBULIN (COLORIMETRY)		4.5	GM/DL
albumin/globulin ratio		0.578	
ASPARTATE AMINOTRANSFERASE	>>	70	IU/L
TOTAL BILIRUBIN		0.3	MG/DL
ALKALINE PHOSPHATASE		98	IU/L
LACTATE DEHYDROGENASE		>2800	IU/L
CREATINE PHOSPHOKINASE	>>	1763	IU/L
GAMMA GLUTAMYLTRANSFERASE	<	4	IU/L

ISIS reference values are for LOXODONTA AFRICANA
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Scientific Name: LOXODONTA AFRICANA (no subsp)	Accession #: 1768
Common Name: African elephant	Female
Name: NEKHANDA	Birth: 1.Jan.1988 (Estimated)
	Age: 20Y Est.

Clinical Note: 5.Oct.2007
 Fecal culture: No Campylobacter, Yersinia, Coliforms, Salmonella, or Shigella isolated.

Alpha Hemolytic Streptococci, moderate growth (no-pathogenic flora, sensitivities not performed.

per Antech, received 10/2, reported 10/5/07. (CUL)

Clinical Note: 6.Oct.2007
 Fecal culture: No Campylobacter, Yersinia, Coliforms, Salmonella, or Shigella isolated.

per Antech, received 10/3, reported 10/6/07. (CUL)

E 1768.TXT

Submission Data >>
Type: Fecal sample
Purpose: FOLLOW-UP/RECHECK EXAMINATION

Sample id.: 2007-0522
Date collected: 9.Oct.2007
Time collected: 10:30
Collected by: BAL

Collected from:
From an individual specimen.

Examination Data >>
Storage: refrigerated
Consistency: formed
Gross appearance: Typical

Date examined: 9.Oct.2007
at: 14:15
by: GAW

Tests & Results >>
DIRECT MICROSCOPIC EXAMINATION NO PARASITES SEEN
FLOATATION - NA NITRATE NO PARASITES SEEN

Comments >>
fecal culture sent to Antech

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Scientific Name: LOXODONTA AFRICANA (no subsp)	Accession #: 1768
Common Name: African elephant	Female
Name: NEKHANDA	Birth: 1.Jan.1988 (Estimated)
	Age: 20Y Est.

Clinical Note: 12.Oct.2007
Fecal culture, received 10/10, reported 10/12 (Antech):
No Campylobacter, Yersinia, Salmonella or Shigella isolated.
Coliforms - light growth. (CUL)

Submission Data >>
Type: Fecal sample
Purpose: QUARANTINE EXAMINATION

Sample id.: 2007-0540
Date collected: 19.Oct.2007
Time collected: 10:00
Collected by: GB

Collected from:
From an individual specimen.

E 1768.TXT

Examination Data >>
Storage: refrigerated
Consistency: formed
Gross appearance: Typical

Date examined: 19.Oct.2007
at: 15:30
by: PAW

Tests & Results >>
FLOATATION - NA NITRATE NO PARASITES SEEN

Submission Data >>
Type: Fecal sample
Purpose: QUARANTINE EXAMINATION

Sample id.: 2007-0542
Date collected: 22.Oct.2007
Time collected: 10:00
Collected by: JS

Collected from:
From an individual specimen.

Enclosure: EBST1

Examination Data >>
Storage: refrigerated
Consistency: hard
Gross appearance: Typical

Date examined: 22.Oct.2007
at: 14:45
by: CAP

Tests & Results >>
FLOATATION - NA NITRATE NO PARASITES SEEN

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Scientific Name: LOXODONTA AFRICANA (no subsp)
Common Name: African elephant
Name: NEKHANDA

Accession #: 1768
Female
Birth: 1.Jan.1988 (Estimated)
Age: 20Y Est.

Clinical Note:

31.Oct.2007

Comment: Nekhanda has been displaying severe behavioral problems as manifest by constant challenging of confinement, destruction of shift doors and aggressive actions towards keeper. We will attempt to curb her abnormal behaviors and help her calm down/settle in with short term administration of haloperidol.

We will begin at a low dose of haloperidol and titrate to effect. (RSD)

Clinical Note:

1.Nov.2007

Rx: HALOPERIDOL 40 mg PO BID for 3 days. (RSD)

E 1768.TXT

Purpose: abnormal behavior

Prescription Data >> Starting date: 1.Nov.2007
Drug: HALOPERIDOL 40 mg PO BID for 3 days
Formulation: 10 mg tablet
Prescribed by: RSD (31.Oct.2007) Filled by: RSD (31.Oct.2007)
Treatment weight: 3266 kg

Comments >>

Dispensing Note: Dispense 6 doses. Each dose: 2 tablets. Total to dispense: 12 tablets. Use 10 mg tablets.

Submission Data >> Sample id.: 2007-0571
Type: Fecal sample Date collected: 2.Nov.2007
Purpose: QUARANTINE EXAMINATION Time collected: 12:00
Collected by: DC

Collected from:
From an individual specimen.

Examination Data >> Date examined: 2.Nov.2007
Storage: refrigerated at: 14:30
Consistency: formed by: CAP
Gross appearance: Typical

Tests & Results >>
FLOATATION - NA NITRATE NO PARASITES SEEN

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Scientific Name: LOXODONTA AFRICANA (no subsp) Accession #: 1768
Common Name: African elephant Female
Name: NEKHANDA Birth: 1.Jan.1988 (Estimated)

Clinical Note: 3.Nov.2007
Fecal culture, received 10/31, reported 11/3/07 (Antech):
No Campylobacter, Yersinia, Salmonella, or Shigella isolated.
Heavy growth Coliforms. (CUL)

Clinical Note: 5.Nov.2007
Rx: HALOPERIDOL 80 mg PO BID for 14 days. (RX)

Prescription Data >> Starting date: 5.Nov.2007
Drug: HALOPERIDOL 80 mg PO BID for 14 days

E 1768.TXT

Formulation: 10 mg tablet
Prescribed by: RX (5.Nov.2007)

Filled by: HSS (5.Nov.2007)
Treatment weight: 3266 kg

Comments >>

Dispensing Note: Dispense 28 doses. Each dose: 8 tablets. Total to dispense: 224 tablets. Use 10 mg tablets.

Clinical Note:

6.Nov.2007

Comment: Nekhanda showed no effect from the low dose of haloperidol that was previously prescribed. We will begin today with a higher dose and evaluate. (RSD)

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=====
Scientific Name: LOXODONTA AFRICANA (no subsp)

Accession #: 1768

Common Name: African elephant

Female

Name: NEKHANDA

Birth: 1.Jan.1988 (Estimated)

=====
Clinical Note:

7.Nov.2007

Comment: Nekhanda seems to have mildly injured her left front leg while performing abnormal contortions which she is prone to. She was placing her hind legs around her front legs and balancing on her front legs when she slipped. She is mildly lame on the left front leg, but markedly improved since the morning according to the keepers. Nekhanda also appears to have an abscess that has formed on her right shoulder (likely associated with an injection she received before transport to NC). I feel the lump is enlarged since I saw it last week, but the keeper supervisor feels it is static. He has palpated it and says it is firm to touch. We will monitor it and intervene if we feel it is necessary.

E 1768.TXT

Subjectively I felt Nekhanda was somewhat more calm today than she has been in the few times I've seen her before.

Rx: FLUNIXIN MEGLUMINE 3000 mg PO SID for 1 day. (RSD)

Purpose: left front leg lameness

Prescription Data >>

Drug: FLUNIXIN MEGLUMINE 3000 mg PO SID
Formulation: 50.00 mg/gm paste
Prescribed by: RSD (7.Nov.2007)

Starting date: 7.Nov.2007

Filled by: RSD (7.Nov.2007)
Treatment weight: 3266 kg

Comments >>

Tradename of drug used is BANAMINE PASTE.

Dispensing Note: Dispense one dose. Each dose: 60 gm. Use 50.00 mg/gm paste.

Clinical Note:

9.Nov.2007

Comment: Nekhanda's lameness issue with her left front legs seems to have resolved. Keepers report that she is much calmer and doing well on the current dose of haloperidol. we will keep her on this current dose UFN. (RSD)

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=====
Scientific Name: LOXODONTA AFRICANA (no subsp)
Common Name: African elephant
Name: NEKHANDA

Accession #: 1768
Female
Birth: 1.Jan.1988 (Estimated)
=====

Parasitology Examination:

Submission Data >>

Type: Fecal sample
Purpose: QUARANTINE EXAMINATION

Sample id.: 2007-0604
Date collected: 13.Nov.2007
Time collected: 11:30
Collected by: DC

Collected from:

From an individual specimen.

Examination Data >>

Storage: refrigerated

Date examined: 13.Nov.2007

E 1768.TXT

Consistency: formed
Gross appearance: Typical

at: 15:15
by: GAW

Tests & Results >>

FLOATATION - NA NITRATE

NO PARASITES SEEN

Clinical Note:

17.Nov.2007

Fecal culture, received 11/14, reported 11/17/07 (Antech):
No Campylobacter species isolated.
No Yersinia species isolated.
Coliforms isolated (normal enteric flora), heavy growth.
No Salmonella or Shigella isolated. (CUL)

Clinical Note:

2.Jan.2008

Injury to trunk.

Keepers reported that Nekhanda charged the shift door, while it was closed and got her trunk pinched in the door.

SO: There is moderate ventral swelling and a linear crease visible from the door. She has no loss of trunk function and appears to be pain free.

P: We will continue to observe progress. (SKC)

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=====
Scientific Name: LOXODONTA AFRICANA (no subsp)
Common Name: African elephant
Name: NEKHANDA

Accession #: 1768
Female
Birth: 1.Jan.1988 (Estimated)
=====

Clinical Note:

4.Jan.2008

Recheck of trunk

The swelling on the ventral trunk is reduced and she is using it well.

Keeper were asked to measure the aperture of both nostrils to determine if scar tissue from the previous surgery has closed the right nostril much. (SKC)

E 1768.TXT

Clinical Note:

9.Jan.2008

Comment: We are going to begin weaning this elephant from the haloperidol she has been receiving. She will be weaned as follows: 80 mg in am, 40 mg in pm for 3 days, 40 mg q12h for 3 days, 20 mg q12h for 3 days, then 20 mg q24h for 3 days. (RSD)

Purpose: Weaning off haloperidol

Prescription Data >>

Starting date: 9.Jan.2008

Drug: HALOPERIDOL 80 mg PO BID for 12 days

Formulation: 20 mg tablet

Prescribed by: RSD (9.Jan.2008)

Filled by: RSD (9.Jan.2008)

Treatment weight: 3266 kg

Comments >>

Dispensing Note: Dispense 24 doses. Each dose: 4 tablets. Total to dispense: 96 tablets. Use 20 mg tablets.

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=====
Scientific Name: LOXODONTA AFRICANA (no subsp)

Accession #: 1768

Common Name: African elephant

Female

Name: NEKHANDA

Birth: 1.Jan.1988 (Estimated)

=====

Clinical Note:

7.Feb.2008

Comment/observation: Nekhanda has been reasonably calm since weaning off haloperidol, but occasionally has episodes of destructive behavior. Today she was separated visually from the other cows in the barn due to maintenance work and she injured her right temporal area, likely on the door to the barn. There is a large circular scrape approximately 7 cm in diameter over her right zygomatic arch area. The scrape is not full thickness, but all of the epidermis is removed and there is some bleeding. The area was packed with sand when I

E 1768.TXT

observed it.

The keepers were advised to keep the area clean and apply triple antibiotic ointment if possible. I do not believe this wound is serious.

The keepers are also going to try and figure out ways to keep her in contact with the other cows in an effort to avoid further destructive episodes. (RSD)

Clinical Note:

29.Apr.2008

Fecal culture, received 4/25, reported 4/29 (Antech):
No Campylobacter, Yersinia, Salmonella, or Shigella isolated.
Coliforms, heavy growth. (CUL)

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Clinical Pathology Records - Specimen Report
NORTH CAROLINA ZOOLOGICAL PARK

Scientific Name: LOXODONTA AFRICANA (no subsp)	Accession #: 1768
Common Name: African elephant	Female
Name: NEKHANDA	Birth: 1.Jan.1988 (Estimated)
	Age: 20Y Est.

Collection Information >>
Health Status: Normal
Fasting Time: < 8 hours
Activity: Calm
Weight: 3266 Kg on 30.Sep.2007
Manual restraint used.

Date of Collection: 24.Jun.2008
Time of Collection: 15:37.0
Collected by: GVB
Sample Collection Site: EAR VEIN

E 1768.TXT

Hematology >>

Analysis Information >>

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

Laboratory: NC ZOO
Date of Analysis: 24.Jun.2008
Time of Analysis: 16:00
Analysis by: HKM
Automated analysis.

Tests and Results >>

WHITE BLOOD CELL COUNT	>	13.82		*10 ³ /UL
RED BLOOD CELL COUNT		3.02		*10 ⁶ /UL
HEMOGLOBIN	<	11.5		GM/DL
HEMATOCRIT	<	34		%
MCV	<	113		fL
MCH	<	38.1		uug
MCHC		33.8		gm/dL
SEGMENTED NEUTROPHILS	>	37	(5.113)	% (*10 ³ /UL)
NEUTROPHILIC BANDS	<	0		% (*10 ³ /UL)
LYMPHOCYTES		25	(3.455)	% (*10 ³ /UL)
MONOCYTES	>>	38	(5.252)	% (*10 ³ /UL)
PLATELET COUNT	<	151		*10 ³ /UL
FIBRINOGEN	<<	0.6		MG/DL

Comments >>

RBC's normal

Hemavet:

WBC 13.82, Ne 2.58, Ly 56.49, Mo 36.64, Eo 4.27, Ba 0.01.
RBC 3.02, HB 11.5, HCT 33.3, PLT 151, MCV 110.4, MCH 38.1, MCHC 34.5,
RDW 19.6, MPV 5.1, PDW 16.1.

ISIS reference values are for LOXODONTA AFRICANA
Printed on: 19.Aug.2008

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Clinical Pathology Records - Specimen Report
NORTH CAROLINA ZOOLOGICAL PARK

Scientific Name: LOXODONTA AFRICANA (no subsp)	Accession #: 1768
Common Name: African elephant	Female
Name: NEKHANDA	Birth: 1.Jan.1988 (Estimated)
	Age: 20Y Est.

Collection Information >>

Health Status: Normal
Fasting Time: < 8 hours
Activity: Calm
Weight: 3266 Kg on 30.Sep.2007

Date of Collection: 24.Jun.2008
Time of Collection: 15:37.0
Collected by: GVB
Sample Collection Site: EAR VEIN

Manual restraint used.

Chemistry >>

Analysis Information >>

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

Laboratory: NC ZOO
Date of Analysis: 24.Jun.2008
Time of Analysis: 16:14
Analysis by: HKM
Automated analysis.

Tests and Results >>

GLUCOSE	94	MG/DL
BLOOD UREA NITROGEN	< 5	MG/DL
CREATININE	1.5	MG/DL
BUN/creatinine ratio	3.33	
CALCIUM	10.9	MG/DL
SODIUM	> 135	MEQ/L
POTASSIUM	4.7	MEQ/L
sodium/potassium ratio	28.7	
TOTAL PROTEIN (COLORIMETRY)	> 8.3	GM/DL
TOTAL PROTEIN (REFRACTOMETER)	7.8	GM/DL
ALBUMIN (COLORIMETRY)	< 3.0	GM/DL
GLOBULIN (COLORIMETRY)	>> 5.2	GM/DL
albumin/globulin ratio	0.577	
ASPARTATE AMINOTRANSFERASE	22	IU/L
TOTAL BILIRUBIN	0.2	MG/DL
CREATINE PHOSPHOKINASE	244	IU/L
GAMMA GLUTAMYLTRANSFERASE	15	IU/L
TOTAL CONTENT CO2	29	MEQ/L

ISIS reference values are for LOXODONTA AFRICANA
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Clinical Pathology Records - Specimen Report
NORTH CAROLINA ZOOLOGICAL PARK

Scientific Name: LOXODONTA AFRICANA (no subsp)	Accession #: 1768
Common Name: African elephant	Female
Name: NEKHANDA	Birth: 1.Jan.1988 (Estimated)
	Age: 21Y Est.

Collection Information >>

Health Status: Normal
Fasting Time: < 8 hours
Activity: Calm

Date of Collection: 3.Jul.2008
Time of Collection: 11:30.0
Collected by: GB
Sample Collection Site: EAR VEIN

E 1768.TXT

Weight: 3266 Kg on 30.Sep.2007
Manual restraint used.

Hematology >>

Analysis Information >>

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

Laboratory: NC Z00
Date of Analysis: 3.Jul.2008
Time of Analysis: 13:42
Analysis by: GAW
Automated analysis.

Tests and Results >>

WHITE BLOOD CELL COUNT	9.5		*10 ³ /UL
RED BLOOD CELL COUNT	> 3.65		*10 ⁶ /UL
HEMOGLOBIN	14.5		GM/DL
HEMATOCRIT	< 32.5		%
MCV	<< 89.0		fL
MCH	< 39.7		uug
MCHC	>> 44.6		gm/dL
SEGMENTED NEUTROPHILS	28	(2.660)	% (*10 ³ /UL)
NEUTROPHILIC BANDS	< 1	(0.095)	% (*10 ³ /UL)
LYMPHOCYTES	30	(2.850)	% (*10 ³ /UL)
MONOCYTES	> 41	(3.895)	% (*10 ³ /UL)
EOSINOPHILS	0		% (*10 ³ /UL)
BASOPHILS	0		% (*10 ³ /UL)
PLATELET COUNT	< 208		*10 ³ /UL
FIBRINOGEN	400		MG/DL

Morphology Results >>

ANISOCYTOSIS +1

Comments >>

anisocytosis +1

Hemavet:

WBC 9.50, Ne 3.90, Ly 33.87, Mo 29.53, Eo 32.40, Ba 0.29.
RBC 3.65, HB 14.5, HCT 41.9, PLT 208, MCV 114.9, MCH 39.7, MCHC 34.6,
RDW 20.8, MPV 52., PDW 17.3.

ISIS reference values are for LOXODONTA AFRICANA
Printed on: 19.Aug.2008

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Clinical Pathology Records - Specimen Report
NORTH CAROLINA ZOOLOGICAL PARK

Scientific Name: LOXODONTA AFRICANA (no subsp)	Accession #: 1768
Common Name: African elephant	Female
Name: NEKHANDA	Birth: 1.Jan.1988 (Estimated)
	Age: 21Y Est.

Collection Information >>

Health Status: Normal
Fasting Time: < 8 hours

Date of Collection: 3.Jul.2008
Time of Collection: 11:30.0
Collected by: GB

E 1768.TXT

Activity: Calm
Weight: 3266 kg on 30.Sep.2007
Manual restraint used.

Sample Collection Site: EAR VEIN

Chemistry >>

Analysis Information >>

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

Laboratory: NC ZOO
Date of Analysis: 3.Jul.2008
Time of Analysis: 13:48
Analysis by: GAW
Automated analysis.

Tests and Results >>

GLUCOSE	78	MG/DL
BLOOD UREA NITROGEN <<	2	MG/DL
CREATININE	1.6	MG/DL
BUN/creatinine ratio	1.25	
CALCIUM	11.5	MG/DL
PHOSPHORUS	4.9	MG/DL
calcium/phosphorus ratio	2.35	
SODIUM >>	140	MEQ/L
POTASSIUM	5.1	MEQ/L
sodium/potassium ratio	27.5	
TOTAL PROTEIN (COLORIMETRY) >	8.5	GM/DL
TOTAL PROTEIN (REFRACTOMETER) <<	7.1	GM/DL
ALBUMIN (COLORIMETRY) <	3.1	GM/DL
GLOBULIN (COLORIMETRY) >>	5.3	GM/DL
albumin/globulin ratio	0.585	
ALANINE AMINOTRANSFERASE	6	IU/L
TOTAL BILIRUBIN	0.3	MG/DL
AMYLASE <<	0	U/L
ALKALINE PHOSPHATASE <<	7.3	IU/L

ISIS reference values are for LOXODONTA AFRICANA
Printed on: 19.Aug.2008

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Scientific Name: LOXODONTA AFRICANA (no subsp)
Common Name: African elephant
Name: NEKHANDA

Accession #: 1768
Female
Birth: 1.Jan.1988 (Estimated)

Parasitology Examination:

Submission Data >>

Type: Fecal sample
Purpose: ROUTINE EXAMINATION

Sample id.: 2008-0434
Date collected: 13.Aug.2008
Time collected: 7:30

E 1768.TXT

Collected from:
Group of specimens housed together.

Enclosure: ELPB

Examination Data >>
Storage: room temperature
Consistency: Not specified
Gross appearance: Typical

Date examined: 13.Aug.2008
by: DGH

Tests & Results >>
FLOATATION - NA NITRATE NO PARASITES SEEN

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Clinical Pathology Records Report - ISIS/In-House Reference Values
NORTH CAROLINA ZOOLOGICAL PARK

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=====
Scientific name: LOXODONTA AFRICANA
Common Name: African elephant
=====

ISIS Values
Mean S.D. Min. Max. (N)

E 1768.TXT

WBC	*10 ³ /UL	10.62 + 2.491	5.000	21.00	(1081)
RBC	*10 ⁶ /UL	3.21 + 0.37	2.10	4.80	(1047)
HGB	GM/DL	13.8 + 1.3	9.0	18.6	(1071)
HCT	%	40.0 + 3.8	29.5	54.0	(1107)
MCH	MG/DL	43.2 + 2.7	36.4	65.6	(1031)
MCHC	uug	34.5 + 1.8	28.3	46.4	(1057)
MCV	fL	125.4 + 7.8	91.1	190.0	(1029)
SEGS	*10 ³ /UL	2.897 + 1.690	0.000	11.40	(778)
BANDS	*10 ³ /UL	0.908 + 0.748	0.000	3.960	(520)
LYMPHOCYTES	*10 ³ /UL	5.326 + 3.263	0.022	64.40	(787)
MONOCYTES	*10 ³ /UL	1.164 + 1.536	0.000	8.639	(742)
EOSINOPHILS	*10 ³ /UL	0.240 + 0.301	0.000	2.898	(631)
BASOPHILS	*10 ³ /UL	0.041 + 0.077	0.000	0.525	(424)
NRBC	/100 WBC	1 + 1	0	3	(25)
PLATE. CNT.	*10 ³ /UL	498 + 278	177	1380	(124)
RETICS	%	0.0 + 0.0	0.0	0.0	(6)
GLUCOSE	MG/DL	83 + 13	47	141	(1001)
BUN	MG/DL	11 + 3	0	21	(1024)
CREAT.	MG/DL	1.5 + 0.3	0.5	4.4	(962)
URIC ACID	MG/DL	0.3 + 0.4	0.0	5.1	(356)
CA	MG/DL	11.0 + 0.5	8.7	13.9	(1010)
PHOS	MG/DL	4.9 + 0.8	3.0	8.2	(981)
NA	MEQ/L	129 + 3	111	146	(995)
K	MEQ/L	4.7 + 0.4	3.9	6.9	(1005)
CL	MEQ/L	88 + 3	71	108	(984)
IRON	MCG/DL	79 + 24	24	130	(29)
MG	MG/DL	2.33 + 0.54	1.40	4.20	(44)
CHOL	MG/DL	67 + 19	0	302	(947)
TRIG	MG/DL	68 + 31	14	179	(876)
T.PROT. (C)	GM/DL	7.7 + 0.5	5.8	9.6	(906)
T.PROT. (R)	GM/DL	8.0 + 0.4	7.4	8.6	(8)
ALBUMIN (C)	GM/DL	3.6 + 0.3	2.2	4.5	(841)
GLOBULIN (C)	GM/DL	4.1 + 0.5	2.4	5.8	(832)
AST (SGOT)	IU/L	25 + 9	7	80	(982)
ALT (SGPT)	IU/L	6 + 6	0	30	(278)
T. BILI.	MG/DL	0.2 + 0.1	0.0	1.0	(829)
D. BILI.	MG/DL	0.0 + 0.0	0.0	0.2	(90)
I. BILI.	MG/DL	0.1 + 0.1	0.0	0.5	(89)
AMYLASE	U/L	3389 + 1520	0	7918	(130)
ALK.PHOS.	IU/L	123 + 55	47	364	(978)
LDH	IU/L	1043 + 575	157	4306	(949)
CPK	IU/L	256 + 198	44	1263	(105)

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Clinical Pathology Records Report - ISIS/In-House Reference Values
NORTH CAROLINA ZOOLOGICAL PARK

Scientific name: LOXODONTA AFRICANA
Common Name: African elephant

ISIS values

E 1768.TXT

		Mean	S.D.	Min.	Max.	(N)
OSMOLARITY	MOSMOL/L	258 +	4	245	272	(652)
HCO3	MEQ/L	177.7 +	398.3	23.0	1081	(7)
Body Temperature:		39.0 +	0.0	39.0	39.0	(1)
CO2	MMOL/L	27.4 +	2.5	16.7	34.6	(731)
ESR	MM/HR	27 +	0	27	27	(1)
FIBRINOGEN	MG/DL	296 +	147	100	600	(14)
GGT	IU/L	12 +	4	0	27	(148)
LIPASE	U/L	7 +	6	0	20	(29)
PROGESTERONE	NG/DL	32.81 +	47.83	0.100	257.0	(44)
TESTOSTERONE	NG/ML	0.220 +	0.000	0.220	0.220	(1)
TOTAL T4	MCG/DL	14.5 +	7.1	9.5	19.5	(2)

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