

Report Start Date
1/1/1900

Specimen Report for ASHEBORO / 1770

Report End Date
8/21/2008

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

Family: Elephantidae
Order: Proboscidea

Current information

Sex:	Male	Sire ID:	WILD at ZIMBABWE
Birth type:	Wild Born	Dam ID:	WILD at ZIMBABWE
Birth Location:	ZIMBABWE	Rearing:	Unknown
Birthdate-Age:	~ 1983 - 25Y,7M,19D +/- 1 Yr.	Hybrid:	Not a hybrid
Time since last Acq:	0Y,9M,26D 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>
26 Oct 2007	Purchase from RIDDLES / ARTIE	ASHEBORO / 1770		

<u>Date</u>	<u>Identifier type</u>	<u>Identifier</u>	<u>Location</u>
26 Oct 2007	Regional Studbook #	403	AZA
26 Oct 2007	House Name	ARTIE	

<u>Date</u>	<u>Type</u>	<u>Value</u>	<u>Units</u>	
14 Jul 2008	live animal weight	12044	pound	First time using the scale.

<u>Date</u>	<u>Note type</u>	
26 Oct 2007	Acquisition note	Purchased from Riddles Elephant Sanctuary, P.O. Box 715, Greenbrier, AR 21058. Picked up from Riddles and driven by truck to zoo by Eddie Novak. Arrived safely.
26 Oct 2007	Fecal check/worming	Results of 1st quarantine fecal sample submitted were negative.
27 Oct 2007	Medical note	Artie [1770] Washed plug out of site on Rt. Temporal, sent sample to VMC.
2 Nov 2007	Fecal check/worming	Results of 2nd quarantine fecal sample submitted were negative.
3 Nov 2007	Rut/Musth	MUSTH INDICATORS: intermitten urine dribble; temps stained
4 Nov 2007	Medical note	Flushed abcess site at Left temp with water for a good 5 mins. Site packed with debris and was difficult to dislodge.
4 Nov 2007	Rut/Musth	MUSTH: intermitten steady urine dibble, left temp wet and stained to the cheek - right side does not appear to be draining.
7 Nov 2007	Rut/Musth	MUSTH ID - Temporals stained w/ intermittent urine dribble.
9 Nov 2007	Rut/Musth	MUSTH: indicators include stained to cheeks, slight intermittent urine dribble.
10 Nov 2007	Rut/Musth	MUSTH INDICATORS: temps stained to cheek; intermitten urine dribble.
11 Nov 2007	Rut/Musth	MUSTH INDICATORS: stained temps to cheek; intermitten urine dribble.
12 Nov 2007	Rut/Musth	MUSTH INDICATORS: include temps stained and intermitten steady stream urine dribble; green penis.
13 Nov 2007	Rut/Musth	MUSTH INDICATORS: temps wet and stained to cheek; intermitten steady stream urine dribble; green penis.
15 Nov 2007	Rut/Musth	MUSTH INDICATORS: urine dribble; one temp was wet; a little attitude with head high.
16 Nov 2007	Medical note	MUSTH INDICATORS: intermitten urine dribble; some drainage from temp.
17 Nov 2007	Rut/Musth	MUSTH ID: periodic gushing of urine, temporals actively draining, staining cheeks to jaw line.
18 Nov 2007	Rut/Musth	MUSTH INDICATORS: temps wet/stained; intermitten urine dribble with gushing; G.P.
20 Nov 2007	Rut/Musth	MUSTH: both temps wet, starting to stain, urine dribble, erection observed a couple of times during the day.
21 Nov 2007	Rut/Musth	MUSTH INDICATORS: temp drainage; dribbling urine.
22 Nov 2007	Rut/Musth	MUSTH INDICATORS: temps stained; intermitten steady stream urine dribble.
23 Nov 2007	Medical note	MUSTH INDICATORS: Temps wet and stained to cheek; intermitten urine dribble with some steady stream; G.P.

Report Start Date
1/1/1900

Specimen Report for ASHEBORO / 1770

Report End Date
8/21/2008

24 Nov 2007	Medical note	MUSTH INDICATORS: temps stained and wet to cheeks; intermitten urine dribble; G.P.
25 Nov 2007	Rut/Musth	MUSTH INDICATORS: both temps draining and stained; light moderate urine dribble w/ some continuous stream; G.P.: very excited at bath time.
26 Nov 2007	Rut/Musth	MUSTH INDICATORS: temps draining and stained; intermitten urine dribble; G.P.
27 Nov 2007	Rut/Musth	MUSTH INDICATORS: temps wet and stained; light intermittent urine dribble; green penis.
28 Nov 2007	Fecal check/worming	Results of 3rd quarantine fecal sample submitted were negative.
28 Nov 2007	Rut/Musth	MUSTH INDICATORS: both temporals draining; constant urine dribble with occassional streams; G.P.
29 Nov 2007	Rut/Musth	MUSTH: indicators include: both temps draining, stained, moderate, constant urine dribble, green penis.
1 Dec 2007	Rut/Musth	MUSTH: temps wet/draining/stained, slight urine dribble.
2 Dec 2007	Medical note	Flushed abscess in a.m.. Some tissue/pus flushed out with hose.
2 Dec 2007	Rut/Musth	Showing signs of musth. Urine dribble, temps. draining, g.p.
3 Dec 2007	Medical note	MUSTH ID: Both temporals draining, gushing urine and green discoloration of sheath.
3 Dec 2007	Rut/Musth	MUSTH ID: Temporals wet and stained, intermittent urine dribble w/ periodic gushing.
5 Dec 2007	Rut/Musth	MUSTH: indicators include: temps stained, intermittent urine dribble with some gushing.
6 Dec 2007	Rut/Musth	MUSTH: indicators include: temps wet/stained, steady intermittent urine dribble w/some gushing.
7 Dec 2007	Medical note	MUSTH INDICATORS: temps wet/stained; intermitten urine dribble.
8 Dec 2007	Medical note	MUSTH: indicators include: both temps slightly draining, light-moderate urine dribble, green penis.
9 Dec 2007	Medical note	Lame on rear Left leg when keepers arrived in am, would not put weight on it, also had ~5 in cut on outside of leg (near 'ankle' area). Vet prescribed antibiotics and banamine and stall rest. Only ate ~10% of am meds, rec'd 100% banamine and 0% antibiotics pm (o.k.'d per hospital Shaub). Leg hosed and sprayed with nolvasan solution am.
9 Dec 2007	Rut/Musth	MUSTH: temps only, no urine dribble observed,
10 Dec 2007	Medical note	Only got 25% of antibiotics, condition much improved is putting weight on left rear leg, walking with pronounced limp but even that improved a little during the day; Dr. Loomis/Devoe/Wolf observed; Dr. Loomis advises to get as much of antibiotics as possible but concentrate on analgesic which is due for Tuesday; dr. Loomis said 1770 could have access to paddock when scraped and evened out.
10 Dec 2007	Rut/Musth	MUSTH INDICATORS: temporal drainage observed but no dribble.
11 Dec 2007	Medical note	Consumed 100% banamine, but no antibiotic. Leg is improving. Still has a slight limp.
13 Dec 2007	Rut/Musth	Temps wet, intermittent urine dribble.
14 Dec 2007	Medical note	Given banamine in oranges and bananas overnight, ate ~50%. Darted with teatnus in right rear rump. Bearing full weight, slight limp still.
15 Dec 2007	Medical note	Left rear leg much improved, observed no limp today.
15 Dec 2007	Rut/Musth	MUSTH: Temps wet, intermittant urine dribble.
16 Dec 2007	Rut/Musth	MUSTH: indicators include: both temporals slightly draining, moderate urine dribble, green penis.
17 Dec 2007	Rut/Musth	MUSTH INDICATORS: both temporals slightly draining, stained; light-moderate urine dribble; G.P.
18 Dec 2007	Rut/Musth	Musth signs: slight urine dribble, light temp. drainage, G.P..
19 Dec 2007	Rut/Musth	MUSTH INDICATORS - Both temporals stained but no drainage observed. Light urine dribble and green penis.
30 Dec 2007	Medical note	Flushed temporal abscess w/ water and treated w/ Bag Balm. Copious amt. of puss expelled.
7 Jan 2008	Medical note	Temporal abscess flushed w/ water/betadine and treated w/ Bag Balm. Process repeated for new abscess site on R leg where he recently received a tetanus shot. Both were inspected by Hospital4.

Report Start Date
1/1/1900

Specimen Report for ASHEBORO / 1770

Report End Date
8/21/2008

11 Jan 2008	Rut/Musth	Seen with erection throughout day.
12 Jan 2008	Medical note	Temporal and leg abscess treated (am) flushed w/ water and sprayed w/ betadine. Got a lot of puss and debris out of both. Plug came out of leg site.
31 Jan 2008	Medical note	Treated temp by flushing with water and spraying with betadine. Dr Devoe also looked at temp and advises to not make any changes in treatment.
4 Feb 2008	Medical note	MUSTH: indicators include: urine streams observed thru the day.
5 Feb 2008	Rut/Musth	MUSTH INDICATORS: Intermitten urine dribble w/ some gushing G.P
6 Feb 2008	Rut/Musth	MUSTH INDICATORS: intermitten urine dribble constant; no gushing; G.P. Temps appear dry.
7 Feb 2008	Medical note	Temp treat SID Dr Devoe came to look at temp wants to discontinue honey and use panafil.
7 Feb 2008	Rut/Musth	MUSTH INDICATORS: intermitten urine dribble;
8 Feb 2008	Rut/Musth	MUSTH: small amount temp drainage, urine dribble, a bit of gushing during transfer.
9 Feb 2008	Rut/Musth	MUSTH ID: Slight temporal drainage, intermittent urine dribble and projecting attitude.
10 Feb 2008	Rut/Musth	MUSTH: indicators include: temps wet, stained, urine dribble with some gushing observed, projecting attitude.
11 Feb 2008	Rut/Musth	MUSTH: indicators include: temps wet, stained, urine dribble.
12 Feb 2008	Rut/Musth	MUSTH: indicators include: etmps wet, stained, urine dribble with steady streams.
13 Feb 2008	Rut/Musth	MUSTH ID - Temporals swollen and draining, cheek slightly stained. Dribbling urine.
14 Feb 2008	Rut/Musth	MUSTH ID - Temporals draining and cheeks slightly stained, Dribbling urine.
15 Feb 2008	Rut/Musth	MUSTH: indicators include: temps wet/draining, urine dribble.
16 Feb 2008	Medical note	Temporal abscess treated SID. Appears to be some pus under large skin cap above opening.
16 Feb 2008	Rut/Musth	MUSTH ID - Temporals swollen and draining. Dribbling urine.
17 Feb 2008	Medical note	Temporal abscess treated SID. Keepers able to get cotton swab up into Lg cavity but little to no pus present today, area felt solid when pressed.
17 Feb 2008	Rut/Musth	Temporals swollen and draining. Musty odor present, dribbling urine and green discoloration of sheath.
18 Feb 2008	Medical note	MUSTH: indicators include: temps draining, intermittant urine dribble with gushing observed during transfer.
19 Feb 2008	Rut/Musth	Musth: Stained and draining temps., G.P., urine dribble/gushing, attitude.
20 Feb 2008	Rut/Musth	MUSTH: indicators include: temps wet, stained, urien dribble.
21 Feb 2008	Rut/Musth	MUSTH ID - Temporals draining, dribbling urine and green discoloration of sheath.
22 Feb 2008	Rut/Musth	MUSTH INDICATORS: both temps wet; intermitten urine dribble w/ gushing; G.P.
23 Feb 2008	Rut/Musth	Musth: Temperol drainage, G.P., urine drainage, attitude.
24 Feb 2008	Shed/moult	MUSTH ID - Temporals slightly stained, periodic gushing of urine w/ green discoloration of sheath and legs.
25 Feb 2008	Rut/Musth	MUSTH: indicators include: slight temp drainage, urine dribble.
26 Feb 2008	Rut/Musth	MUSTH:indicators include:Temps wet, urine dribble.
27 Feb 2008	Rut/Musth	MUSTH: indicators include: temps wet, stained, urine dribble.
28 Feb 2008	Rut/Musth	MUSTH ID - Slight temporal drainage, dribbling urine and green discoloration of sheath, projecting attitude.
29 Feb 2008	Rut/Musth	MUSTH: indicators include: temps wet, stained, urine dribble.
2 Mar 2008	Rut/Musth	MUSTH ID - slight temporal drainage and urine dribble w/ periodic gushing and green discoloration of sheath.
2 Mar 2008	Rut/Musth	MUSTH INDICATORS: temps wet/stained; intermitten urine dibble; G.P.
3 Mar 2008	Rut/Musth	Temporals slightly stained, dribbling urine with green discoloration of sheath. Projecting attitude.
4 Mar 2008	Rut/Musth	MUSTH INDICATOR: temps wet and stained; constant intermitten urine dribble
5 Mar 2008	Rut/Musth	MUSTH INDICATORS: both temporals draining, left temporal stained to bottom of cheek; moderate - heavy urine dribble; G.P.

Report Start Date
1/1/1900

Specimen Report for ASHEBORO / 1770

Report End Date
8/21/2008

7 Mar 2008	Rut/Musth	MUSTH: indicators include: temps draining, stained, urine dribble with stream, green penis.
8 Mar 2008	Rut/Musth	MUSTH: indicators include: temps wet, stained, draining, urine dribble with streams, green penis.
9 Mar 2008	Rut/Musth	MUSTH INDICATORS: both temporals draining, stained 1/2 way down cheeks; heavy urine dribble with frequent thin streams of urine; G.P., strong odor.
10 Mar 2008	Rut/Musth	MUSTH INDICATORS: both temporals drainingstained cheeks; heavy urine dribble with frequent streams and gushes of urine; strong odor; very "energetic"
11 Mar 2008	Rut/Musth	MUSTH INDICATORS: temps stained and draining; intermitten urine dribble.
12 Mar 2008	Rut/Musth	MUSTH ID - Temporals slightly stained, dribbling urine and projecting attitude.
13 Mar 2008	Medical note	Temporal abcess site treated SID as usual - per Dr.Devoe, large q-tips do not need to be autoclaved prior to use.
14 Mar 2008	Rut/Musth	MUSTH INDICATORS: temps wet and stained; intermitten urine dribble w/ gushing
15 Mar 2008	Rut/Musth	MUSTH: indicators include: temps wet/stained, urine dribble.
16 Mar 2008	Rut/Musth	MUSTH: indicators include: temps wet/stained, urien dribble with gushing.
17 Mar 2008	Rut/Musth	Musth: urine dribble, attitude, G.P., stained temps. This comment was added to the following specimens: 27, 1770.
18 Mar 2008	Rut/Musth	MUSTH INDICATORS: temps wet/stained; intermitten urine dribble;
19 Mar 2008	Rut/Musth	MUSTH ID - Temporals slightly stained, dribbling/gushing urine and green discoloration of sheath.
20 Mar 2008	Rut/Musth	MUSTH: indicators include: temps wet, stained, urine dribble.
21 Mar 2008	Rut/Musth	MUSTH INDICATORS; temps wet and stained; intermitten urine dribble some gushing.
22 Mar 2008	Rut/Musth	MUSTH: indicators include: temps wet/stained, urine dribble.
23 Mar 2008	Rut/Musth	MUSTH: indicators include: temps wet, urine dribble.
24 Mar 2008	Medical note	Temporal flushed and treated SID per protocol . Dr. Devoe advised may now begin using unpasteurized honey on site.
24 Mar 2008	Rut/Musth	Musth indicators: Heavy urine dribble - gushing observed during transfer. Temporals wet/stained. Projecting attitude.
25 Mar 2008	Rut/Musth	Musth: Urine dribble, stained temps., G.P., attitude.
26 Mar 2008	Rut/Musth	MUSTH INDICATORS: temps stained; dribbling urine with some gushes of urine; G.P.; projecting attitude.
27 Mar 2008	Rut/Musth	Temporals heavily stained, gushing urine and green discoloration of sheath. Projecting attitude.
28 Mar 2008	Rut/Musth	Musth: G.P., urine dribble, stained temps., posture, attitude.
30 Mar 2008	Rut/Musth	MUSTH: indicators include: temps wet, stained, urine dribble, some steady stream.
31 Mar 2008	Rut/Musth	MUSTH: indicators include: temps wet, stained, urine dribble with some streaming.
1 Apr 2008	Rut/Musth	MUSTH: indicators include: temps wet, stained, urine dribble with some streaming/gushing.
2 Apr 2008	Medical note	Treated temporal site SID per protocol, treated with unpasteurized honey, area looks clean.
2 Apr 2008	Rut/Musth	MUSTH INDICATORS: both temporals draining, stained; copious urine dribble, frequent gushes; G.P.
3 Apr 2008	Rut/Musth	MUSTH INDICATORS: Temps wet/stained; intermitten urine dribble
4 Apr 2008	Rut/Musth	MUSTH ID - Temporals stained, dribbling urine and green discoloration of sheath, projecting attitude.
5 Apr 2008	Rut/Musth	MUSTH: indicators include: temps wet, stained, urine dribble with gushing.
6 Apr 2008	Rut/Musth	MUSTH: indicators include: temps wet, stained, urine dribble with gushing.
7 Apr 2008	Rut/Musth	MUSTH: indicators include: temps wet, stained, urine dribble with gushing.
8 Apr 2008	Rut/Musth	MUSTH: indicators include: temps wet, stained, urine dribble with gushing.
9 Apr 2008	Rut/Musth	Musth indicators included: temporals actively draining,intermittent urine dribble with gushing observed during transfer.

Report Start Date
1/1/1900

Specimen Report for ASHEBORO / 1770

Report End Date
8/21/2008

10 Apr 2008	Rut/Musth	Musth: Stained temps., urine dribble, G.P., posture.
11 Apr 2008	Rut/Musth	MUSTH INDICATORS: temps wet/stained; intermitten urine dribble; G.P. Posture. This comment was added to the following specimens: 27, 1770.
12 Apr 2008	Rut/Musth	Musth: stained temps., urine dribble, G.P..
13 Apr 2008	Rut/Musth	Musth: Stained temps., urine dribble, posture.
14 Apr 2008	Rut/Musth	MUSTH INDICATORS: stained temps; intermitten urine dribble; G.P.; Projecting attitude.
15 Apr 2008	Rut/Musth	MUSTH INDICATORS: temps wet/stained; intermitten urine dribble with some gushing.
16 Apr 2008	Rut/Musth	MUSTH: indicators include: temps wet, stained, urine dribble with gushing.
17 Apr 2008	Rut/Musth	MUSTH: indicators include: temps wet/stained, urine dribble with gushing.
18 Apr 2008	Rut/Musth	MUSTH: indicators include: temps wet/stained, urine dribble with gushing.
19 Apr 2008	Rut/Musth	Temporals stained, dribbling urine and projecting attitude, also had green discoloration of sheath.
20 Apr 2008	Rut/Musth	Temporals stained, gushing urine and projecting attitude. This comment was added to the following specimens: 1770.
21 Apr 2008	Rut/Musth	MUSTH ID Stained temporals, dribbling urine and green discoloration of sheath.
22 Apr 2008	Fecal check/worming	Results of diagnostic fecal sample submitted tested positive for flagellates but no giardia observed.
22 Apr 2008	Medical note	Temp treated SID as usual. Held off exhibit due to two very loose fecals in a.m. along with behavior and appetite off. Appetite and behavior fine later in day. Dr.Loomis and Dr. Devoe came to observe Artie, need two more days of fecal samples, but don't worry about biosponge or sand clear, probably just ate too much grass.
22 Apr 2008	Rut/Musth	MUSTH: indicators include: temps wet/stained, urine dribble with gushing.
23 Apr 2008	Fecal check/worming	Results of follow-up fecal sample submitted were positive for rotifers and flagellates.
23 Apr 2008	Rut/Musth	MUSTH: indicators include temps wet/stained, urine dribble with gushing.
24 Apr 2008	Rut/Musth	MUSTH: indicators include: temps stained/wet, urine dribble with gushing.
25 Apr 2008	Medical note	Routine blood collection.
25 Apr 2008	Rut/Musth	Musth indicators only observed light urine dribble and stained temporal cheeks.
26 Apr 2008	Rut/Musth	MUSTH: temps have appeared to be dry, no urine dribble seen.
27 Apr 2008	Rut/Musth	MUSTH INDICATORS: only observed light urine dribble when letting out into paddock in a.m.
28 Apr 2008	Rut/Musth	Musth: We are noticing less signs of musth. Stained temps.
29 Apr 2008	Rut/Musth	MUSTH INDICATORS: Stained temps; no urine dribble; G.P.
30 Apr 2008	Rut/Musth	MUSTH INDICATORS: temps stained.
30 May 2008	Medical note	Temp treated SID as usual, ~2cc pus extracted.
31 May 2008	Medical note	Temp treated SID as usual, ~2cc pus extracted.
8 Jun 2008	Rut/Musth	MUSTH: indicators include: sm amt drainage on right temp, no urine dribble observed.
8 Jun 2008	Rut/Musth	MUSTH: indicators include: sm amt drainage on right temp, no urine dribble observed.
19 Jun 2008	Medical note	Temp treated SID as usual - per Killi, starting tomorrow treatment will include 'yellow dog' powder, to be mixed with the honey before application.
19 Jun 2008	Medical note	Received 6 bananas and 3 potatoes per vets as potassium supplement UFN.
20 Jun 2008	Medical note	Temp treated SID as usual, had yellow dog added to honey application. Rec'd 6 bananas and three potatoes for K+.
22 Jun 2008	Medical note	Treated temp. abscess S.I.D.. There was a small amount of pus extracted.
26 Jul 2008	Rut/Musth	Musth indicators: Urine dribble.
27 Jul 2008	Rut/Musth	Intermittently dribbling urine.
29 Jul 2008	Rut/Musth	MUSTH: indicators include: temps swollen, urine dribble.

Report Start Date
1/1/1900

Specimen Report for ASHEBORO / 1770

Report End Date
8/21/2008

31 Jul 2008	Rut/Musth	MUSTH: indicators include: temps stained, no urine dribble observed today.
8 Aug 2008	Fecal check/worming	Results of routine fecal sample submitted were negative.

This comment was added to the following specimens: 1770.

<u>Date</u>	<u>Enclosure</u>	
26 Oct 2007	EBST4	Into quarantine in new elephant barn.

<u>Date</u>	<u>Sex</u>
26 Oct 2007	Male

<u>Date</u>	<u>Rearing</u>
26 Oct 2007	Unknown

<u>Date</u>	<u>Parent(s)</u>	<u>local id</u>	<u>Location</u>
26 Oct 2007	Sire	WILD	ZIMBABWE
26 Oct 2007	Dam	WILD	ZIMBABWE

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

Scientific Name: LOXODONTA AFRICANA AFRICANA	Accession #: 1770
Common Name: South African bush elephant	Male
Name: ARTIE	Birth: 1.Jan.1983 (Estimated)

.....2007....

23.Aug Blood sample: (EDTA) Hematology/Chemistry/Serology results.
HCT: 45.0%; BUN:6 MG/DL;

26.Oct Obtained from another institution.
Parasitology examination: (QUARANTINE EXAMINATION) Fecal sample.
NO PARASITES SEEN

27.Oct Clinical note recorded. (RSD)

30.Oct Clinical note recorded. (CUL)

2.Nov Parasitology examination: (QUARANTINE EXAMINATION) Fecal sample.
NO PARASITES SEEN

7.Nov Clinical note recorded. (RSD)

28.Nov Parasitology examination: (QUARANTINE EXAMINATION) Fecal sample.
NO PARASITES SEEN

3.Dec Clinical note recorded. (CUL)

9.Dec Purpose/Problem: wound on left rear leg
Rx: SULFADIAZINE/TRIMETHOPRIM (5:1) 110400mg PO BID for 7 days.
FLUNIXIN MEGLUMINE 3500mg PO q48h for 3 doses.

Clinical note recorded. (RX)

10.Dec Clinical note recorded. (KNW)

12.Dec Clinical note recorded. (KNW)

.....2008....

2.Jan Clinical note recorded. (SKC)

7.Jan Clinical note recorded. (SKC)

24.Jan Clinical note recorded. (CUL)

31.Jan Clinical note recorded. (ML)

7.Feb Clinical note recorded. (MML)

29.Feb Clinical note recorded. (RSD)

17.Apr Clinical note recorded. (RSD)

22.Apr Parasitology examination: (DIAGNOSTIC EXAMINATION) Fecal sample.

ROTIFERS/FLAGELLATES/OCCULT BLOOD - NO PARASITES SEEN/NEG

23.Apr Parasitology examination: (FOLLOW-UP/RECHECK EXAMINATION) Fecal sample

ROTIFERS/FLAGELLATES/NO PARASITES SEEN

26.Apr Clinical note recorded. (CUL)

28.Apr Clinical note recorded. (CUL)

29.Apr Clinical note recorded. (CUL)

23.May Clinical note recorded. (ETA)

5.Jun Clinical note recorded. (JH)

E 1770.TXT

Printed on: 19.Aug.2008

/ISIS/MedARKS/5.32a

- page 2 -

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

Scientific Name: LOXODONTA AFRICANA AFRICANA	Accession #: 1770
Common Name: South African bush elephant	Male
Name: ARTIE	Birth: 1.Jan.1983 (Estimated)

.....2008...

- 12.Aug Clinical note recorded. (BMS)
- 13.Aug Parasitology examination: (ROUTINE EXAMINATION) Fecal sample.
NO PARASITES SEEN
- 17.Aug Blood sample: (EDTA) (10:00.0) Hematology/Chemistry/Serology results.
WBC:10.37 *10³/UL; HCT: 37.0%; BUN:7 MG/DL;

Printed on: 19.Aug.2008

/ISIS/MedARKS/5.32a

- page 1 -

Clinical Pathology Records - Specimen Report
NORTH CAROLINA ZOOLOGICAL PARK

Scientific Name: LOXODONTA AFRICANA AFRICANA	Accession #: 1770
Common Name: South African bush elephant	Male
Name: ARTIE	Birth: 1.Jan.1983 (Estimated)
	Age: 25Y Est.

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

Date of Collection: 23.Aug.2007
Time of Collection:
Collected by:

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

Laboratory: NC ZOO
Date of Analysis: 24.Aug.2007
Time of Analysis:
Analysis by: HSS
Automated analysis.

Tests and Results >>

HEMATOCRIT	>	45	%
SEGMENTED NEUTROPHILS	>>	43.44	% (*10 ³ /UL)
NEUTROPHILIC BANDS	<	0.00	% (*10 ³ /UL)
LYMPHOCYTES	>>	30.30	% (*10 ³ /UL)
MONOCYTES	>>	26.26	% (*10 ³ /UL)
EOSINOPHILS		0.00	% (*10 ³ /UL)
BASOPHILS		0.00	% (*10 ³ /UL)
AZUROPHILS		0.00	% (*10 ³ /UL)
PLATELET COUNT	ADEQ		*10 ³ /UL

Morphology Results >>
ANISOCYTOSIS MILD

Comments >>
anisocytosis - mild

Hemavet:
WBC 10.90, Ne 2.62, Ly 47.55, Mo 19.62, Eo 29.70, Ba 0.52.
RBC 3.65, HB 12.9, HCT 41.8, PLT 189, MCV 114.4, MCH 35.3, MCHC 30.9,
RDW 19.1, MPV 4.9, PDW 19.5.

E 1770.TXT

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

/ISIS/MedARKS/5.32a

- page 3 -

Scientific Name: LOXODONTA AFRICANA AFRICANA	Accession #: 1770
Common Name: South African bush elephant	Male
Name: ARTIE	Birth: 1.Jan.1983 (Estimated)

Parasitology Examination:

Submission Data >>

Type: Fecal sample

Purpose: QUARANTINE EXAMINATION

Sample id.: 2007-0569
Date collected: 26.Oct.2007
Time collected: 12:00

Collected from:

From an individual specimen.

Examination Data >>

Storage: room temperature

Consistency: Not specified

Gross appearance: Typical

Date examined: 26.Oct.2007

by: DGH

Tests & Results >>

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

Clinical Note:

27.Oct.2007

Comment/observation: This bull elephant was received from Riddle's elephant facility yesterday. He appears to be in good condition and is behaviorally normal. He is eating, drinking, defecating and urinating normally. He appears to have some lesions bilaterally on his temples, though he will not allow close examination of them at this point in time. We will continue to monitor and evaluate this elephant throughout the quarantine period and perform a more thorough examination and blood collection when his training allows it. (RSD)

Clinical Note:

30.Oct.2007

Fecal culture, received 10/27, reported 10/30 (Antech):
No Campylobacter, Yersinia, Salmonella, or Shigella isolated. (CUL)

Printed on: 19.Aug.2008

/ISIS/MedARKS/5.32a

- page 4 -

Scientific Name: LOXODONTA AFRICANA AFRICANA	Accession #: 1770
Common Name: South African bush elephant	Male
Name: ARTIE	Birth: 1.Jan.1983 (Estimated)

Parasitology Examination:

Submission Data >>

Type: Fecal sample
Purpose: QUARANTINE EXAMINATION

Sample id.: 2007-0574
Date collected: 2.Nov.2007
Time collected: 11:00
Collected by: DC

Collected from:

From an individual specimen.

Examination Data >>

Storage: refrigerated
Consistency: formed
Gross appearance: Typical

Date examined: 2.Nov.2007
at: 14:28
by: CAP

Tests & Results >>

FLOATATION - NA NITRATE

NO PARASITES SEEN

Clinical Note:

7.Nov.2007

Observation: Artie has bilateral areas of temporal necrosis/abscessation. Keepers report that there was some thick purulent material draining from the right temporal lesion the day before yesterday. The lesion on the right temple is approximately 12-15 cm in diameter. It appears there is a layer of necrotic skin which ventrally has broken away to reveal pockets of purulent material and necrotic subcutis. There appears to be a similar lesion on the left temple, however it is smaller (6-7 cm) and the epidermis is still intact. Both lesions are caudal to the temporal glands and do not appear to involve the glands.

Artie is not to the point where he will allow manipulation of the lesions via training. We will keep on eye on the lesions' progression and intervene aggressively if required. I do not feel that the lesions' severity warrants aggressive therapy at this point. (RSD)

Printed on: 19.Aug.2008

/ISIS/MedARKS/5.32a

- page 5 -

Scientific Name: LOXODONTA AFRICANA AFRICANA	Accession #: 1770
Common Name: South African bush elephant	Male
Name: ARTIE	Birth: 1.Jan.1983 (Estimated)

Parasitology Examination:

Submission Data >>

Type: Fecal sample
Purpose: QUARANTINE EXAMINATION

Sample id.: 2007-0633
Date collected: 28.Nov.2007

Collected from:
From an individual specimen.

Enclosure: EBST4

Examination Data >>

Storage: room temperature
Consistency: formed
Gross appearance: Typical

Date examined: 28.Nov.2007
at: 14:10
by: HSS

Tests & Results >>

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

Comments >>

FF - NEG (observed 2 unknown ciliates)

Clinical Note:

No Campylobacter, Yersinia, Salmonella, or Shigella isolated.
Heavy growth Enterococcus Sp. (non-pathogenic)
Scant growth Coliforms
(received 11/29, reported 12/3, Antech) (CUL)

3.Dec.2007

Clinical Note:

RX: SULFADIAZINE/TRIMETHOPRIM (5:1) 110400 mg PO BID for 7 days.
RX: FLUNIXIN MEGLUMINE 3500 mg PO q48h for 3 doses. (RX)

9.Dec.2007

Purpose: wound on left rear leg

Prescription Data >>

Drug: SULFADIAZINE/TRIMETHOPRIM (5:1) 110400 mg PO BID for 7

Starting date: 9.Dec.2007

E 1770.TXT

days
Formulation: 960 mg tablet
Prescribed by: RX (9.Dec.2007)

Filled by: RX (9.Dec.2007)

Comments >>

Printed on: 19.Aug.2008

/ISIS/MedARKS/5.32a

- page 6 -

Medical History Report - Individual Specimen
NORTH CAROLINA ZOOLOGICAL PARK

Scientific Name: LOXODONTA AFRICANA AFRICANA	Accession #: 1770
Common Name: South African bush elephant	Male
Name: ARTIE	Birth: 1.Jan.1983 (Estimated)

Prescription Record (continued):

Dispensing Note: Dispense 14 doses. Each dose: 115 tablets. Total to dispense: 1610 tablets. Use 960 mg tablets.

Daily Treatment Notes >>

Date	Time	Success	By	Comments
9.Dec.2007	10:30	10 %	JWS	
9.Dec.2007	15:30	90 %	JWS	ate overnight
10.Dec.2007	09:00	0 %		
10.Dec.2007	14:00	50 %	JWS	put in front but got wise (sp?)

Purpose: wound on left rear leg

Prescription Data >>

Starting date: 9.Dec.2007
Drug: FLUNIXIN MEGLUMINE 3500 mg PO q48h for 3 doses
Formulation: 50.00 mg/ml injectable
Prescribed by: RX (9.Dec.2007) Filled by: RX (9.Dec.2007)

Comments >>

Tradename of drug used is BANAMINE PASTE.

Dispensing Note: Dispense 3 doses. Each dose: 70 gm. Total to dispense: 210 gm of paste. Use 50.00 mg/gm paste.

Daily Treatment Notes >>

Date	Time	Success	By	Comments
9.Dec.2007	15:00	100%	JWS	plugged it in fruit
10.Dec.2007	14:00	90 %	JWS	plugged it in fruit
11.Dec.2007	15:00	50 %	BL	plugged it in fruit

Printed on: 19.Aug.2008

/ISIS/MedARKS/5.32a

- page 7 -

Scientific Name: LOXODONTA AFRICANA AFRICANA	Accession #: 1770
Common Name: South African bush elephant	Male
Name: ARTIE	Birth: 1.Jan.1983 (Estimated)

Clinical Note: 10.Dec.2007
update: Animal was non-weight bearing on the left rear yesterday; Dr. Loomis called in to evaluate him. There was a full thickness skin laceration on the left lateral aspect of the left rear leg just above the ankle. He was started on a course of Banamine and TMS. He ingested the Banamine in the evening but did not accept the antibiotic.

Proc: visual evaluation

This morning Artie is weight bearing although lameness is still evident in the left rear. The swelling is much improved per Dr.Loomis. The wound had feces impacted in it which was rinsed off with the hose. Keepers to continue to try and get Artie to accept the antibiotics and to attempt multiple oral vehicles that may be palatable (peanut butter, etc.). Will need to monitor regularly. (KNW)

Clinical Note: 12.Dec.2007
Update: Artie is weight bearing and walking well on all legs. Very slight swelling remains on the left rear. He is not accepting antibiotics but is taking the banamine. will d/c attempts to give antibiotics and finish the prescription of banamine. (KNW)

Clinical Note: 2.Jan.2008
Draining pressure sore on right temporal area.

Hx: Artie has had a pressure sore on the right side of his face since arrival. Keepers noticed that the swelling had increased and that there is ventral drainage from the wound.

SO: The swelling is approx 8x8cm with exposed white ulcerated tissue. There is a small fissure on the craniodorsal aspect which communicated with a fissure non the ventral aspect. when washing with a hose fluid is able to flush between the two holes.

A: The pocket appears to be superficial, possibly just under the dermis

P: Keepers will wash with betadine and continue to flush with the hose. Will investigate another fludhing device. (SKC)

Printed on: 19.Aug.2008

/ISIS/MedARKS/5.32a

- page 8 -

Scientific Name: LOXODONTA AFRICANA AFRICANA	Accession #: 1770
Common Name: South African bush elephant	Male
Name: ARTIE	Birth: 1.Jan.1983 (Estimated)

Clinical Note: 7.Jan.2008
Recheck of temporal abscess and new abscess on right shoulder

Abscess on right shoulder ruptured yesterday and is red and inflamed today, but not draining actively.

Abscess on right temporal region has opened up ventrally and there is a 4-5 cm deep 7-9cm wide irregular crevice with active pus drainage and pink granulation tissue present.

P: keepers will continue flushing out the wound on a daily basis to keep sand out of it. Continue training to get him to allow cleaning and debridment. (SKC)

Clinical Note: 24.Jan.2008
Facial abscess culture (rec 1/10, reported 1/25/08):
Organism #1: CORRECTION: Heavy growth Alpha Hemolytic Streptococci
Organism #2: Moderate growth Staphylococcus aureus
No anaerobic bacteria isolated.
Fungal: Cladosporium sp. (CUL)

Clinical Note: 31.Jan.2008
Comment: Temporal abscess appears to be healing appropriately. Moderate amounts of granulation tissue centrally. wound on right shoulder continues to heal nicely. (ML)

Clinical Note: 7.Feb.2008
Comment: Temporal abscess continues to heal with moderate amount of granulation tissue and localized edema. Shoulder lesion continues to heal and appears dry.

The keepers were advised to continue with hydrotherapy and cleaning of temporal lesion. They were applying unpasteurized to the lesion as directed by veterinary staff. I asked them to temporarily discontinue the honey and apply panafil ointment liberally to the lesion following cleaning until further notice, or the medication runs out. This

E 1770.TXT

medication will be applied in an effort to soften the necrotic tissue and hasten the debridement that occurs with hydrotherapy. (MML)

Printed on: 19.Aug.2008

/ISIS/MedARKS/5.32a

- page 9 -

Scientific Name: LOXODONTA AFRICANA AFRICANA	Accession #: 1770
Common Name: South African bush elephant	Male
Name: ARTIE	Birth: 1.Jan.1983 (Estimated)

Clinical Note: 29.Feb.2008
 Comment: I observed this elephant's right temporal lesion today and it appears to be healing very well. The keepers are continuing to keep it clean and apply panafil. The progress of this lesion is very encouraging. (RSD)

Clinical Note: 17.Apr.2008
 Comment: I examined this elephant's right temporal lesion today. It continues to heal well, but is slowing down a bit. The keepers are treating the lesion with unpasteurized honey or panafil on alternating days (following thorough cleaning). We may need to consider trimming some of the dead skin away to open up the lesion and allow it to heal faster. (RSD)

Submission Data >>	Sample id.: 2008-0221
Type: Fecal sample	Date collected: 22.Apr.2008
Purpose: DIAGNOSTIC EXAMINATION	Time collected: 9:50
	Collected by: RSD

Collected from:
 From an individual specimen.

Examination Data >>	Date examined: 22.Apr.2008
Storage: room temperature	at: 10:15
Consistency: liquid to watery	by: CAP
Gross appearance: Atypical	
Sample description:	
liquid/watery, soft	
<<< Sample resubmission requested >>>	

Tests & Results >>		
DIRECT MICROSCOPIC EXAMINATION	ROTIFERS	2+
	FLAGELLATES	2+
OCCULT BLOOD	NO PARASITES SEEN	
STAINED - IODINE	NEG FOR GIARDIA	

E 1770.TXT

Comments >>

Resubmit sample daily for 3 days.

Sent for culture.

Printed on: 19.Aug.2008

/ISIS/MedARKS/5.32a

- page 10 -

Scientific Name: LOXODONTA AFRICANA AFRICANA	Accession #: 1770
Common Name: South African bush elephant	Male
Name: ARTIE	Birth: 1.Jan.1983 (Estimated)

Parasitology Examination:

Submission Data >>

Type: Fecal sample

Purpose: FOLLOW-UP/RECHECK EXAMINATION

Sample id.: 2008-0224

Date collected: 23.Apr.2008

Time collected: 9:00

Collected by: RM

Collected from:

From an individual specimen.

Enclosure: PADDOCK

Examination Data >>

Storage: refrigerated

Consistency: soft

Gross appearance: Atypical

Sample description:

slightly loose

Date examined: 23.Apr.2008

at: 15:00

by: GAW

Tests & Results >>

DIRECT MICROSCOPIC EXAMINATION	ROTIFERS	2+
	FLAGELLATES	2+
FLOATATION - NA NITRATE	NO PARASITES SEEN	

Comments >>

rotifers & flagellates +2

Clinical Note:

Fecal culture, received 4/23, reported 4/25/08 (Antech):

Campylobacter not isolated.

Yersinia not isolated.

Bacillus sp. (non-pathogenic), light growth

Diphtheroids (non-pathogenic), non-pathogenic flora, light growth

No Salmonella or Shigella isolated. (CUL)

26.Apr.2008

Printed on: 19.Aug.2008

/ISIS/MedARKS/5.32a

- page 11 -

Scientific Name: LOXODONTA AFRICANA AFRICANA	Accession #: 1770
Common Name: South African bush elephant	Male
Name: ARTIE	Birth: 1.Jan.1983 (Estimated)

Clinical Note: 28.Apr.2008
Fecal culture, received 4/24, reported 4/28 (Antech):
No Campylobacter, Yersinia, Salmonella, or Shigella isolated.
Coliforms, heavy growth. (CUL)

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)

Clinical Note: 23.May.2008
Evaluation today of the right temple lesion showed no improvement since last examination. There was a moderate amount of purulent material, and several deep pocket remain. We will try to use a curret next week to try and remove some of the necrotic debris from the wound. Discussed with the keepers about devising a tool to aid in irrigation deep within the wound. We are also planning to evaluate the wound with Dr. Eckerman-Ross early next week to discuss benefits of accupuncture and possibly initiate treatment. (ETA)

Clinical Note: 5.Jun.2008
ACCUPUNCTURE 5/26 (Dr. E-Ross):
The wound has a large amount of gaseous purulent discharge and is surrounded with necrotic skin edges. Deep pockets are present, particularly dorsally and caudally.

As this patient is not particularly cooperative, TCVM assessment was not attempted. Shen appears to be good to excellent, and a rapid surrogate pulse assessment was interpreted as normal.

Plan:
After wound cleaning and debridement, pack the wound with a paste made

E 1770.TXT
of Golden Yellow Powder combined with honey. (JH)

Printed on: 19.Aug.2008

/ISIS/MedARKS/5.32a

- page 12 -

Scientific Name: LOXODONTA AFRICANA AFRICANA	Accession #: 1770
Common Name: South African bush elephant	Male
Name: ARTIE	Birth: 1.Jan.1983 (Estimated)

Clinical Note: 12.Aug.2008
Recheck temple wound: Trainers report that wound is slightly smaller in size but that purulent discharge is routinely expressed from the site.

Exam: The right temple wound remains open with necrotic skin margins. A moderate amount of purulent discharge was removed during routine cleaning. A 2 cm pocket is present along a cranial skin crack. Wound is overall slightly smaller in size.

Plan: Will stop treatment with gold powder, as keepers and Dr DeVoe feel this is no longer effective. Will continue treatment with topical honey SID. Recheck status in two weeks. (BMS)

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

Sample id.: 2008-0431
Date collected: 13.Aug.2008
Time collected: 7:30

Collected from:
From an individual specimen.

Enclosure: EBST4

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

Date examined: 13.Aug.2008
at: 13:30
by: DGH

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

Printed on: 19.Aug.2008

/ISIS/MedARKS/5.32a

- page 13 -

Clinical Pathology Records - Specimen Report
NORTH CAROLINA ZOOLOGICAL PARK

Scientific Name: LOXODONTA AFRICANA AFRICANA	Accession #: 1770
Common Name: South African bush elephant	Male
Name: ARTIE	Birth: 1.Jan.1983 (Estimated)
	Age: 26Y Est.

Collection Information >>
 Health Status: Normal
 Fasting Time: < 8 hours
 Activity: Active
 Weight: 5463 Kg on 14.Jul.2008
 Manual restraint used.

Date of Collection: 17.Aug.2008
 Time of Collection: 10:00.0
 Collected by: D C
 Sample Collection Site: EAR VEIN

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

Laboratory: NC ZOO
 Date of Analysis: 17.Aug.2008
 Time of Analysis: 11:00
 Analysis by: HSS
 Automated analysis.

Tests and Results >>

WHITE BLOOD CELL COUNT	10.37		*10 ³ /UL
RED BLOOD CELL COUNT	3.17		*10 ⁶ /UL
HEMOGLOBIN <	11.9		GM/DL
HEMATOCRIT	37.0		%
MCV <	117		fL
MCH <<	37.5		uug
MCHC <	32.2		gm/dL
SEGMENTED NEUTROPHILS >	51	(5.289)	% (*10 ³ /UL)
NEUTROPHILIC BANDS <	-		% (*10 ³ /UL)
LYMPHOCYTES	40	(4.148)	% (*10 ³ /UL)
MONOCYTES	7	(0.726)	% (*10 ³ /UL)
EOSINOPHILS	2	(0.207)	% (*10 ³ /UL)
BASOPHILS	-		% (*10 ³ /UL)
PLATELET COUNT	ADEQ		*10 ³ /UL
FIBRINOGEN <<	1.2		MG/DL

Comments >>

E 1770.TXT

RBC's okay. WBC - clumping around feathered edge.

Hemavet:

WBC 11.80, Ne 8.01, Ly 29.76, Mo 22.79, Eo 39.35, Ba 0.09.
RBC 3.17, HB 11.9, HCT 40.2, PLT 172, MCV 126.9, MCH 37.5, MCHC 29.6,
RDW 18.4, MPV 4.9, PDW 17.0.

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

/ISIS/MedARKS/5.32a

- page 14 -

Clinical Pathology Records - Specimen Report
NORTH CAROLINA ZOOLOGICAL PARK

Scientific Name: LOXODONTA AFRICANA AFRICANA	Accession #: 1770
Common Name: South African bush elephant	Male
Name: ARTIE	Birth: 1.Jan.1983 (Estimated)
	Age: 26Y Est.

Collection Information >>

Health Status: Normal
Fasting Time: < 8 hours
Activity: Active
Weight: 5463 Kg on 14.Jul.2008
Manual restraint used.

Date of Collection: 17.Aug.2008
Time of Collection: 10:00.0
Collected by: D C
Sample Collection Site: EAR VEIN

Chemistry >>

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

Laboratory: NC ZOO
Date of Analysis: 17.Aug.2008
Time of Analysis: 10:55
Analysis by: HSS
Automated analysis.

Tests and Results >>

	GLUCOSE	91	MG/DL
	BLOOD UREA NITROGEN	< 7	MG/DL
	CREATININE	>> 2.9	MG/DL
	BUN/creatinine ratio	2.41	
	CALCIUM	11.3	MG/DL
	SODIUM	>> 136	MEQ/L
	POTASSIUM	4.7	MEQ/L
	sodium/potassium ratio	28.9	
	TOTAL PROTEIN (COLORIMETRY)	8.2	GM/DL
	TOTAL PROTEIN (REFRACTOMETER)	< 7.2	GM/DL
	ALBUMIN (COLORIMETRY)	3.3	GM/DL
	GLOBULIN (COLORIMETRY)	> 4.9	GM/DL
	albumin/globulin ratio	0.673	
	ASPARTATE AMINOTRANSFERASE	22	IU/L
	TOTAL BILIRUBIN	0.3	MG/DL
	CREATINE PHOSPHOKINASE	181	IU/L

E 1770.TXT

GAMMA GLUTAMYLTRANSFERASE	15	IU/L
TOTAL CONTENT CO2	31	MEQ/L

ISIS reference values are for LOXODONTA AFRICANA
 Printed on: 19.Aug.2008 /ISIS/MedARKS/5.32a

- page 15 -

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

Scientific name: LOXODONTA AFRICANA
 Common Name: African elephant

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

E 1770.TXT

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)

Printed on: 19.Aug.2008

/ISIS/MedARKS/5.32a

- page 16 -

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

Scientific name: LOXODONTA AFRICANA
Common Name: African elephant

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

E 1770.TXT

Printed on: 19.Aug.2008

/ISIS/MedARKS/5.32a