

MIAMI METROZOO MEDICAL RECORD

DATE OF ACQUISITION _____
 OR BIRTH _____ WILDBORN 1966

ANIMAL ELEPHANT, ASIAN

ACCES.NO. #101 stbk#139 SEX MALE HOUSE NAME DAHLIP

01/26/05 WT=12,890 lbs.

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

02/05/05 Keepers report Dahlip has dry skin on the right temporal region with a central "depression" - where skin apparently sloughed. Keepers have been applying Vaseline to dry skin surrounding the lesion, and treating the lesion with betadine sln. OBS/appx 2cm diam area where skin sloughed on right temple area - exposed tissue is not red or raw; surrounding tissue is "stained" with Vaseline ointment. Rec. can keep putting Vaseline on surrounding dry skin. RX/triple antibiotic ointment to put on the lesion itself- however if gets too contaminated with dirt/dust then d/c the ointment. SMM

06/07/05 Annual TB testing routine starts today. BLOOD/CBC, chem screen; serum saved for routine hormonal monitoring. COMT/Dahlip appears to be in good health and condition, but is waxing & waning through musth behavior right now. - CLM

06/09/05 ANNUAL TB TESTING: PROC/collected 40-50ml (60ml saline total placed down into trunk) of "trunk wash" sample (after overnight water withholding) for mycobacterial culture on each of three consecutive mornings (6/7, 6/8, & today) - frozen samples from 6/7 & 8, and partially frozen sample from 6/9 sent overnight to NVSL as per USDA-mandated-protocol (well-behaved for collection routine). - CLM

06/12/05 WT=11,010 lbs. SMM

06/27/05 Elephant has been in musth for a while. Keepers noticed left temporal gland swollen and draining yellow-greenish discharge. OBS/moderate swelling of left temporal region; skin appears superficially eroded and cracked. No active drainage visible. Rec. watch only for now. SMM

09/08/05 Serum samples sent from each elephant to Disney for TB-testing by new research methods: MAPIA and RT - all negative on all elephants, per Michelle Miller. - CLM

10/31/05 WT=12,220 lbs.

01/10/06 WT=12,866 lbs.

06/05/06 WT=10,900 lbs. (has been in musth for past few months)

06/14/06 PROC/collected 40-50ml (60ml saline total placed down into trunk) of "trunk wash" sample (after a few hours of water withholding) for mycobacterial culture on each of three consecutive mornings (6/12, 6/13, & today) - frozen samples from 6/12 & 13, and partially frozen sample from 6/14 sent overnight to NVSL as per USDA-mandated-protocol (well-behaved with conditioned trunk-wash procedures, despite being on the end of musth). BLOOD/CBC, chem screen sent to lab on 6/13, along with routine blood collection for hormone assays; serum saved for possible MAPIA testing again, in the future. Bloodwork results from yesterday reveal an elevated creatinine (4.0mg/dl) but other parameters within normal limits - recheck of creatinine value in-house=3.58mg/dl; review of bloodwork from past few years suggests this may be very slowly

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creeping upwards and might be an indicator of renal compromise, but wish to recheck blood before getting too concerned - will plan to recheck next week. - CLM

07/06/06 Recheck of blood values on 6/20 revealed a creatinine of 3.9mg/dl, and a BUN=12mg/dl, and phosphorus=2.5mg/dl, and electrolytes within a normal range for Dahlip. Will ask keepers to collect a few urine samples to check for proteinuria and other abN's, and will consult with a few other "elephant sources" before deciding on any course of action. - CLM

07/11/06 Last week, Nellie had a few "off" days of lethargy and soft stool, which resolved on their own; overnight Dahlip had eaten normally and defecated normally, but this morning he was dull and slow-moving and not particularly interested in food (although well-behaved). This afternoon on the paddock he was also lethargic, allowing limp trunk to rest on the ground, with eyes half-closed and squinting from time-to-time as if uncomfortable. When brought into barn for closer look, he was brighter and ate some grain and bran offered to him and seemed "not so bad" but still "off"; some normal defecation (T=98.3 F) in ERC. Watch closely for now, hopefully will resolve everything on own. - CLM

07/12/06 Almost back to normal this morning already - ate most of everything overnight, and was acting pretty normal in the barn this am. - CLM

07/18/06 Fecal culture from Nellie came back positive for Campylobacter jejuni - not sure if this is truly causing her problems with recurrent bouts of lethargy and soft stools, but will go ahead and treat her and Dahlip with a short course of a'biotics to see if this will resolve her recurrent issues. RX/trimethoprim-sulfa 168 Gms PO BID, begin tomorrow, for 10 days. - CLM

07/20/06 Dahlip picked around his med's yesterday in two attempts to feed them; this morning, the keepers came up with a treat concoction to get them successfully consumed - will start his "10 day course" as of today then. - CLM

07/31/06 Given a few extra days of TMPS due to his hit-and-miss consumption of the drugs - discontinue as of today. - CLM

08/19/06 WT=12,008 lbs.

08/26/06 With regard to comments of azotemia on 7/6/06, keepers finally able to catch a urine sample. URINALYSIS/sp grav=1.010, protein - only a trace; no other abN's noted. COMT/will try to catch a few more samples to see if we can assure that he is not shedding much protein (may contact clin path labs to see if they will check for microalbuminuria), and if he can concentrate his urine. May end up having to do some sort of water deprivation to prove this point, but will hold on that for now. - CLM

09/08/06 Another urine sample from yesterday (picked up from floor of barn) was dilute and had a trace amount of protein (also lots of fecal debris in sediment). Meanwhile, keepers have pointed out that Dahlip's right tusk is growing out and worn to the end of the "filling" in the pulp canal that was done years ago (1998)-gentle probing of the canal suggests that the "hole" may end just

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an inch or so up from tip(or he's packed it tightly with sand).
 Keepers to begin conditioning Dahlip to have 4-6" trimmed off his
 tusks and will see if he needs another filling procedure or if
 the canal is dentin-filled further up at this point. - CLM

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

10/11/06 Dahlip's BUN & creatinine are within normal limits again - so for
 now his apparent chronic azotemia seems to be resolved???
 Meanwhile, his hematocrit from the lab was only 29%. Will plan
 to recheck this value on the next whole blood collection for the
 herpesvirus study (November) - may just be a one-off lab value. -
 CLM

10/17/06 Keepers ready to trim Dahlip's tusks today. COMT/both tusks were
 trimmed back less than a foot from the tips, using a hacksaw,
 with no problems (Dahlip wholly unconcerned during procedure);
 left tusk has some grooves worn in underside, but has a normal
 dental star at the center and appears fine; right tusk has an
 enlarged pulp canal through to the point of trimming with some
 soft dental material (cementum?)in the center and an open space
 beside it. Will contact dentists about trying to fill this
 cavity again, but in the meantime, to try to discourage him
 packing much dirt & debris in the hole (<1cm diameter), filled
 with plaster of Paris as far as could inject a few mls (and
 applied tape over end to hold until fully set). Trimmed tusks
 will be sent to USDI (after dentists get to inspect right
 remnant); measurements of trimmed portions as follows: right -
 length=23cm, diameter at cut-end=12.5cm, weight=1707.5 gms; left
 - length=26.5cm, diameter=11.3cm, weight=1651.3 gms. - CLM

10/18/06 WT=11,752 lbs.

11/14/06 BLOOD/EDTA-whole blood collected for herpesvirus study - took
 small sample to recheck anemia status: PCV=38%, T.S.=7.6gm/dl,
 but now serum creatinine=4.21mg/dl and BUN=17.1mg/dl again (in-
 house). COMT/so was last sample from 10/11 diluted??? no longer
 "anemic" but azotemic again; dentists scheduled to fill Dahlip's
 tusk-end next week, will recheck all serum chemistries again next
 week with UofM lab. - CLM

11/20/06 WT=11,950 lbs.

11/21/06 DENTAL/Dahlip stationed in barn for almost 90 min's while Drs
 Groh & Souviron hand-filed out the defect in Dahlip's central
 right tusk to a depth of about 2.5" and filled with calcium
 hydroxide and then a composite resin (self-curing); a horizontal
 crack that was present as a hairline when the tusk was cut last
 month has widened some and was also filled to prevent it from
 continuing to open and split the ivory. BLOOD/routine weekly
 blood collection; also submitted serum for chem screen and
 protein electrophoresis. - CLM

11/22/06 Serum BUN=15mg/dl and creatinine=1.5mg/dl (back in normal range)
 - ??? CLM

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12/19/06 In-house serum BUN=21.3mg/dl and creatinine=2.40mg/dl today; PCV=32% and T.S.=6.9gm/dl. (there seems to be a lot of fluctuations here, and I'm no longer sure whether to interpret any of these "azotemic" values as meaningful). Will recheck from time to time to see if there are any interpretable trends. - CLM

01/09/07 BLOOD/in-house PCV=35%, T.S.=7.8gm/dl, BUN=16.9mg/dl, and creatinine=2.60mg/dl - on today's routine collection. - CLM

03/07/07 Female Asian elephant is "off" a bit and has sloppy stool; today Dahlip's feces is somewhat soft and keepers think he may be "starting" something. FECAL CULTURE. - CLM

03/09/07 Dahlip is behaving normally, his feces is normal, and the female is improving. Fecal culture results reveal only normal enteric flora. - CLM

Medical History Report - Summary for Individual Specimen
MIAMI METROZOO

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ELEPHAS MAXIMUS (no subsp)           Sex: Male           Acc. #: 101
Asiatic elephant                     Age: 40Y 9M 24D    Birth: 8.Jun.1966
Name: DALIP
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.....2005....

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26.Jan Parasitology examination: (ROUTINE EXAMINATION) Fecal sample.
      NO PARASITES SEEN
                                           Weight: 5848 Kg ( 12889 Lb)

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

24.May Parasitology examination: (ROUTINE EXAMINATION) Fecal sample.
      NO PARASITES SEEN

 7.Jun Blood sample: (EDTA) Hematology/Chemistry/Serology results.
      WBC:12.60 *10^3/UL; HCT: 40.0%; BUN:13 MG/DL;
12.Jun                                           Weight: 4995 Kg ( 11009 Lb)

26.Jul Parasitology examination: (ROUTINE EXAMINATION) Fecal sample.
      NO PARASITES SEEN

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

31.Oct                                           Weight: 5544 Kg ( 12219 Lb)

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

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10.Jan                                           Weight: 5838 Kg ( 12867 Lb)
23.Jan Parasitology examination: (ROUTINE EXAMINATION) Fecal sample.
      NO PARASITES SEEN

 3.Apr Parasitology examination: (ROUTINE EXAMINATION) Fecal sample.
      NO PARASITES SEEN

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

 5.Jun                                           Weight: 4946 Kg ( 10901 Lb)
13.Jun Blood sample: (EDTA) Hematology/Chemistry/Serology results.
      WBC:11.08 *10^3/UL; HCT: 44.0%; BUN:13 MG/DL;
20.Jun Blood sample: Chemistry results.
      BUN:12 MG/DL;

25.Jul Parasitology examination: (ROUTINE EXAMINATION) Fecal sample.

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Medical History Report - Summary for Individual Specimen
MIAMI METROZOO

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ELEPHAS MAXIMUS (no subsp)           Sex: Male           Acc. #: 101
Asiatic elephant                     Age: 40Y 9M 24D    Birth: 8.Jun.1966
Name: DALIP
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25.Jul  NO PARASITES SEEN

19.Aug                                     Weight: 5448 Kg ( 12007 Lb)
26.Aug  Clinical note recorded. (CLM)

 7.Sep  Clinical note recorded. (CLM)
12.Sep  Blood sample: (EDTA) Hematology/Chemistry/Serology results.
        WBC:8.10 *10^3/UL; HCT: 32.0%; BUN:20 MG/DL;
18.Sep  Clinical note recorded. (CLM)
26.Sep  Parasitology examination: (ROUTINE EXAMINATION) Fecal sample.
        NO PARASITES SEEN

10.Oct  Blood sample: (EDTA) Hematology/Chemistry/Serology results.
        WBC:6.80 *10^3/UL; HCT: 29.0%; BUN:16 MG/DL;
18.Oct                                     Weight: 5332 Kg ( 11752 Lb)

14.Nov  Blood sample: (EDTA) Hematology/Chemistry/Serology results.
        HCT: 38.0%; BUN:17 MG/DL;
        Parasitology examination: (ROUTINE EXAMINATION) Fecal sample.
        NO PARASITES SEEN

20.Nov                                     Weight: 5422 Kg ( 11950 Lb)
21.Nov  Blood sample: Chemistry results.
        BUN:15 MG/DL;

19.Dec  Blood sample: (EDTA) Hematology/Chemistry/Serology results.
        HCT: 32.0%; BUN:21 MG/DL;

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 9.Jan  Blood sample: (EDTA) (15:45.0) Hematology/Chemistry/Serology results.
        HCT: 35.0%; BUN:17 MG/DL;
23.Jan  Parasitology examination: (ROUTINE EXAMINATION) Fecal sample.
        NO PARASITES SEEN

 6.Feb  Blood sample: (EDTA) Hematology/Chemistry/Serology results.
        HCT: 41.0%; BUN:21 MG/DL;

 7.Mar  Parasitology examination: (DIAGNOSTIC EXAMINATION) Fecal sample.
        NO PARASITES SEEN
19.Mar  Parasitology examination: (ROUTINE EXAMINATION) Fecal sample.
        NO PARASITES SEEN

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<i>ELEPHAS MAXIMUS</i> (no subsp)	Sex: Male	Acc. #: 101
Asiatic elephant	Age: 40Y 9M 24D	Birth: 8.Jun.1966
Name: DALIP		

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Parasitology Examination:

Submission Data >>

Type: Fecal sample
Purpose: ROUTINE EXAMINATION

Sample id.: 2005-0090
Date collected: 26.Jan.2005

Collected from:
From an individual specimen.

Enclosure: 19 - Asi

Examination Data >>

Storage: room temperature
Consistency: formed
Gross appearance: Typical

Date examined: 26.Jan.2005
by: JS

Tests & Results >>

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

Submission Data >>

Type: Fecal sample
Purpose: ROUTINE EXAMINATION

Sample id.: 2005-0395
Date collected: 22.Mar.2005

Collected from:
From an individual specimen.

Enclosure: 19 - Asi

Examination Data >>

Storage: room temperature
Consistency: formed
Gross appearance: Typical

Date examined: 22.Mar.2005
by: JS

Tests & Results >>

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

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ELEPHAS MAXIMUS (no subsp)
Asiatic elephant
Name: DALIP

Sex: Male
Age: 40Y 9M 24D

Acc. #: 101
Birth: 8.Jun.1966

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Parasitology Examination:

Submission Data >>

Type: Fecal sample
Purpose: ROUTINE EXAMINATION

Sample id.: 2005-0858
Date collected: 24.May.2005

Collected from:

From an individual specimen.

Enclosure: 19 - Asi

Examination Data >>

Storage: room temperature
Consistency: formed
Gross appearance: Typical

Date examined: 24.May.2005

by: JS

Tests & Results >>

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

Clinical Pathology Records - Specimen Report
MIAMI METROZOO

ELEPHAS MAXIMUS (no subsp)
Asiatic elephant
Name: DALIP

Sex: Male
Age: 40Y 9M 24D

Acc. #: 101
Birth: 8.Jun.1966

Collection Information >>

Health Status: Normal
Fasting Time: < 8 hours
Activity: Active
Weight: 5848 Kg on 26.Jan.2005
Manual restraint used.

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

Hematology >>

Analysis Information >>

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

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

Tests and Results >>

WHITE BLOOD CELL COUNT	12.6		*10 ³ /UL
RED BLOOD CELL COUNT	3.17		*10 ⁶ /UL
HEMOGLOBIN	13.5		GM/DL
HEMATOCRIT	40		%
MCV	126		fL
MCH	42.6		uug
MCHC	33.8		gm/dL
SEGMENTED NEUTROPHILS	53	(6.678)	% (*10 ³ /UL)
LYMPHOCYTES	23	(2.898)	% (*10 ³ /UL)
MONOCYTES	23	(2.898)	% (*10 ³ /UL)
EOSINOPHILS	1	(0.126)	% (*10 ³ /UL)
BASOPHILS	< 0		% (*10 ³ /UL)

Comments >>

in-house PCV=39%

Clinical Pathology Records - Specimen Report
MIAMI METROZOO

ELEPHAS MAXIMUS (no subsp)
Asiatic elephant
Name: DALIP

Sex: Male
Age: 40Y 9M 24D

Acc. #: 101
Birth: 8.Jun.1966

Collection Information >>

Health Status: Normal
Fasting Time: < 8 hours
Activity: Active
Weight: 5848 Kg on 26.Jan.2005
Manual restraint used.

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

Chemistry >>

Analysis Information >>

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

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

Tests and Results >>

GLUCOSE	96	MG/DL
BLOOD UREA NITROGEN	13	MG/DL
CREATININE >>	3.4	MG/DL
BUN/creatinine ratio	3.82	
URIC ACID	<0.2	MG/DL
CALCIUM	10.6	MG/DL
PHOSPHORUS	4.2	MG/DL
calcium/phosphorus ratio	2.52	
SODIUM >	139	MEQ/L
POTASSIUM	4.5	MEQ/L
sodium/potassium ratio	30.9	
CHLORIDE >>	100	MEQ/L
anion gap	13.5	
CHOLESTEROL	<45	MG/DL
TRIGLYCERIDE	55	MG/DL
TOTAL PROTEIN (COLORIMETRY)	8.8	GM/DL
ALBUMIN (COLORIMETRY)	3.7	GM/DL
GLOBULIN (COLORIMETRY)	5.1	GM/DL
albumin/globulin ratio	0.725	
ASPARTATE AMINOTRANSFERASE	17	IU/L
ALANINE AMINOTRANSFERASE >>	26	IU/L
TOTAL BILIRUBIN	0.4	MG/DL
DIRECT BILIRUBIN	0.2	MG/DL
AMYLASE	842	U/L
ALKALINE PHOSPHATASE	115	IU/L
LACTATE DEHYDROGENASE	822	IU/L
CREATINE PHOSPHOKINASE	66	IU/L
CARBON DIOXIDE >	30	MMOL/L
GAMMA GLUTAMYLTRANSFERASE >>	35	IU/L

Comments >>

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

Clinical Pathology Records - Specimen Report
MIAMI METROZOO

ELEPHAS MAXIMUS (no subsp)
Asiatic elephant
Name: DALIP

Sex: Male
Age: 40Y 9M 24D

Acc. #: 101
Birth: 8.Jun.1966

Collection Information >>
Health Status: Normal
Fasting Time: < 8 hours
Activity: Active
Weight: 4946 Kg on 5.Jun.2006
Manual restraint used.

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

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

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

Tests and Results >>

WHITE BLOOD CELL COUNT	11.08		*10 ³ /UL
RED BLOOD CELL COUNT	3.50		*10 ⁶ /UL
HEMOGLOBIN	12.9		GM/DL
HEMATOCRIT	> 44		%
MCV	126		fL
MCH	< 36.9		uug
MCHC	< 29.3		gm/dL
SEGMENTED NEUTROPHILS	42	(4.654)	% (*10 ³ /UL)
LYMPHOCYTES	49	(5.429)	% (*10 ³ /UL)
MONOCYTES	9	(0.997)	% (*10 ³ /UL)
EOSINOPHILS	0		% (*10 ³ /UL)
BASOPHILS	< 0		% (*10 ³ /UL)

Comments >>
in-house PCV=37%

Clinical Pathology Records - Specimen Report
MIAMI METROZOO

ELEPHAS MAXIMUS (no subsp)
Asiatic elephant
Name: DALIP

Sex: Male
Age: 40Y 9M 24D

Acc. #: 101
Birth: 8.Jun.1966

Collection Information >>

Health Status: Normal
Fasting Time: < 8 hours
Activity: Active
Weight: 4946 Kg on 5.Jun.2006
Manual restraint used.

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

Chemistry >>

Analysis Information >>

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

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

Tests and Results >>

	GLUCOSE	98	MG/DL
	BLOOD UREA NITROGEN	13	MG/DL
	CREATININE >>	4.0	MG/DL
	BUN/creatinine ratio	3.25	
	URIC ACID	<0.2	MG/DL
	CALCIUM	10.4	MG/DL
	PHOSPHORUS <	3.7	MG/DL
	calcium/phosphorus ratio	2.81	
	SODIUM	125	MEQ/L
	POTASSIUM	4.6	MEQ/L
	sodium/potassium ratio	27.2	
	CHLORIDE	89	MEQ/L
	anion gap	13.6	
	CHOLESTEROL	<45	MG/DL
	TRIGLYCERIDE	42	MG/DL
	TOTAL PROTEIN (COLORIMETRY)	8.6	GM/DL
	ALBUMIN (COLORIMETRY)	3.2	GM/DL
	GLOBULIN (COLORIMETRY)	5.4	GM/DL
	albumin/globulin ratio	0.593	
	ASPARTATE AMINOTRANSFERASE	14	IU/L
	ALANINE AMINOTRANSFERASE >>	24	IU/L
	TOTAL BILIRUBIN	0.4	MG/DL
	DIRECT BILIRUBIN	0.2	MG/DL
	AMYLASE	980	U/L
	ALKALINE PHOSPHATASE	155	IU/L
	LACTATE DEHYDROGENASE	794	IU/L
	CREATINE PHOSPHOKINASE	99	IU/L
	CARBON DIOXIDE	27	MMOL/L
	GAMMA GLUTAMYLTRANSFERASE >>	38	IU/L

Comments >>

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

/ISIS/MedARKS/5.53

Clinical Pathology Records - Specimen Report
MIAMI METROZOO

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<i>ELEPHAS MAXIMUS</i> (no subsp)	Sex: Male	Acc. #: 101
Asiatic elephant	Age: 40Y 9M 24D	Birth: 8.Jun.1966
Name: DALIP		

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Chemistry >>

Comments >>

annual PE & TB testing; in-house creatinine(frozen serum)=3.58mg/dl

Clinical Pathology Records - Specimen Report
MIAMI METROZOO

ELEPHAS MAXIMUS (no subsp)
Asiatic elephant
Name: DALIP

Sex: Male
Age: 40Y 9M 24D

Acc. #: 101
Birth: 8.Jun.1966

Collection Information >>

Health Status: Normal
Fasting Time: < 8 hours
Activity: Calm
Weight: 4946 Kg on 5.Jun.2006
Manual restraint used.

Date of Collection: 20.Jun.2006
Time of Collection:
Collected by:
Sample Collection Site: EAR VEIN

Chemistry >>

Analysis Information >>

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

Laboratory: U OF MIAMI
Date of Analysis: 21.Jun.2006
Time of Analysis:
Analysis by:
Automated analysis.

Tests and Results >>

GLUCOSE	91	MG/DL
BLOOD UREA NITROGEN	12	MG/DL
CREATININE >>	3.9	MG/DL
BUN/creatinine ratio	3.08	
URIC ACID	<0.2	MG/DL
CALCIUM	9.8	MG/DL
PHOSPHORUS <<	2.5	MG/DL
calcium/phosphorus ratio	3.92	
SODIUM	136	MEQ/L
POTASSIUM	4.7	MEQ/L
sodium/potassium ratio	28.9	
CHLORIDE >>	98	MEQ/L
anion gap	15.7	
CHOLESTEROL	<45	MG/DL
TRIGLYCERIDE	45	MG/DL
TOTAL PROTEIN (COLORIMETRY)	8.3	GM/DL
ALBUMIN (COLORIMETRY)	3.4	GM/DL
GLOBULIN (COLORIMETRY)	4.9	GM/DL
albumin/globulin ratio	0.694	
ASPARTATE AMINOTRANSFERASE	31	IU/L
ALANINE AMINOTRANSFERASE >>	30	IU/L
TOTAL BILIRUBIN	0.4	MG/DL
DIRECT BILIRUBIN >	0.3	MG/DL
AMYLASE	1118	U/L
ALKALINE PHOSPHATASE	155	IU/L
LACTATE DEHYDROGENASE	1307	IU/L
CREATINE PHOSPHOKINASE >>	1378	IU/L
ALBUMIN (ELECTROPHORESIS) <<	2.61	GM/DL
ALPHA-1 GLOBULIN (ELECTROPHORESIS)	0.78	GM/DL
ALPHA-2 GLOBULIN (ELECTROPHORESIS)	0.70	GM/DL
BETA GLOBULIN (ELECTROPHORESIS) >	1.84	GM/DL

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

Sex: Male
Age: 40Y 9M 24D
Acc. #: 101
Birth: 8.Jun.1966
=====

Clinical Note:

26.Aug.2006

<<< Urinalysis >>>

Laboratory: [X] Miami Metrozoo
[] other

Date collected: 8/26/06
Date analysed: 8/26/06
Analysis by: CLM

Sample collection:

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

Sample storage:

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

Color: bright yellow
Specific Gravity: 1.010
cloudy

Appearance: [X] clear
[] hazy / slightly

Leukocytes:

[] cloudy / turbid

Nitrite:

RBC/hpf: none

Urobilinogen: 0.2mg/dl

WBC/hpf: none

Protein: trace

Bacteria/hpf:

pH: 8.0

Casts/lpf: none

Blood: neg

Crystals: few Ca++ oxalate

Ketones: neg

Bilirubin: "small"

Glucose: neg

Epithelial cells: occasional

Mucus:

Comments: check for renal disease (azotemia) - sediment mostly
unremarkable; sample frozen
(CLM)

ELEPHAS MAXIMUS (no subsp)
Asiatic elephant
Name: DALIP

Sex: Male
Age: 40Y 9M 24D

Acc. #: 101
Birth: 8.Jun.1966

Clinical Note:

7.Sep.2006

<<< Urinalysis >>>

Laboratory: Miami Metrozoo
 other

Date collected: 9/7/06

Date analysed: 9/7/06

Analysis by: CLM

Sample collection:

- floor
- mid-stream
- catheter
- cystocentesis

Sample storage:

- room temperature
- refrigerated
- frozen

Color: pale yellow
Specific Gravity: 1.006
cloudy

Appearance: clear
 hazy / slightly

cloudy / turbid

Leukocytes:
Nitrite:
Urobilinogen: 0.2mg/dl
Protein: trace
pH: 7.0
Blood: neg
Ketones: neg
Bilirubin: neg
Glucose: neg

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

Epithelial cells:
Mucus:

Comments: check status due to "azotemia"; lots of fecal debris,
including protozoa in sediment; no intact cells noted
(CLM)

Clinical Pathology Records - Specimen Report
MIAMI METROZOO

ELEPHAS MAXIMUS (no subsp)
Asiatic elephant
Name: DALIP

Sex: Male
Age: 40Y 9M 24D

Acc. #: 101
Birth: 8.Jun.1966

Collection Information >>

Health Status: Normal
Fasting Time: < 8 hours
Activity: Active
Weight: 5448 Kg on 19.Aug.2006
Manual restraint used.

Date of Collection: 12.Sep.2006
Time of Collection:
Collected by:
Sample Collection Site: EAR VEIN

Hematology >>

Analysis Information >>

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

Laboratory: U OF MIAMI
Date of Analysis: 13.Sep.2006
Time of Analysis:
Analysis by:
Automated analysis.

Tests and Results >>

WHITE BLOOD CELL COUNT	<	8.1		*10 ³ /UL
RED BLOOD CELL COUNT	<	2.46		*10 ⁶ /UL
HEMOGLOBIN	<	9.0		GM/DL
HEMATOCRIT		32		%
MCV		130		fL
MCH	<	36.6		uug
MCHC	<<	28.1		gm/dL
SEGMENTED NEUTROPHILS		45	(3.645)	% (*10 ³ /UL)
LYMPHOCYTES		45	(3.645)	% (*10 ³ /UL)
MONOCYTES		10	(0.810)	% (*10 ³ /UL)
EOSINOPHILS		0		% (*10 ³ /UL)
BASOPHILS	<	0		% (*10 ³ /UL)

Comments >>

in-house PCV=27%??

Clinical Pathology Records - Specimen Report
MIAMI METROZOO

ELEPHAS MAXIMUS (no subsp)
Asiatic elephant
Name: DALIP

Sex: Male
Age: 40Y 9M 24D

Acc. #: 101
Birth: 8.Jun.1966

Collection Information >>

Health Status: Normal
Fasting Time: < 8 hours
Activity: Active
Weight: 5448 Kg on 19.Aug.2006
Manual restraint used.

Date of Collection: 12.Sep.2006
Time of Collection:
Collected by:
Sample Collection Site: EAR VEIN

Chemistry >>

Analysis Information >>

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

Laboratory: U OF MIAMI
Date of Analysis: 13.Sep.2006
Time of Analysis:
Analysis by:
Automated analysis.

Tests and Results >>

GLUCOSE	77	MG/DL
BLOOD UREA NITROGEN	> 20	MG/DL
CREATININE	1.7	MG/DL
BUN/creatinine ratio	11.8	
URIC ACID	<0.2	MG/DL
CALCIUM	10.0	MG/DL
PHOSPHORUS	4.6	MG/DL
calcium/phosphorus ratio	2.17	
SODIUM	132	MEQ/L
POTASSIUM	4.5	MEQ/L
sodium/potassium ratio	29.3	
CHLORIDE	> 97	MEQ/L
anion gap	11.5	
CHOLESTEROL	<45	MG/DL
TRIGLYCERIDE	< 18	MG/DL
TOTAL PROTEIN (COLORIMETRY)	7.3	GM/DL
ALBUMIN (COLORIMETRY)	3.1	GM/DL
GLOBULIN (COLORIMETRY)	4.2	GM/DL
albumin/globulin ratio	0.738	
ASPARTATE AMINOTRANSFERASE	22	IU/L
ALANINE AMINOTRANSFERASE	>> 28	IU/L
TOTAL BILIRUBIN	0.4	MG/DL
DIRECT BILIRUBIN	0.2	MG/DL
AMYLASE	720	U/L
ALKALINE PHOSPHATASE	< 59	IU/L
LACTATE DEHYDROGENASE	877	IU/L
CREATINE PHOSPHOKINASE	246	IU/L
CARBON DIOXIDE	28	MMOL/L
GAMMA GLUTAMYLTRANSFERASE	8	IU/L

Comments >>

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

Clinical Pathology Records - Specimen Report
MIAMI METROZOO

=====

<i>ELEPHAS MAXIMUS</i> (no subsp)	Sex: Male	Acc. #: 101
Asiatic elephant	Age: 40Y 9M 24D	Birth: 8.Jun.1966
Name: DALIP		

=====

Chemistry >>
Comments >>
 recheck azotemia

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

Sex: Male Acc. #: 101
Age: 40Y 9M 24D Birth: 8.Jun.1966
=====

Clinical Note:

18.Sep.2006

<<< Urinalysis >>>

Laboratory: [X] Miami Metrozoo
[] other

Date collected: 9/18/06
Date analysed: 9/18/06
Analysis by: JS

Sample collection:

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

Sample storage:

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

Color: pale yellow
Specific Gravity: 1.014
cloudy

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

Leukocytes:
Nitrite:
Urobilinogen: 0.2mg/dl
Protein: negative
pH: 8.0
Blood: neg
Ketones: neg
Bilirubin: neg
Glucose: neg

RBC/hpf:
WBC/hpf:
Bacteria/hpf:
Casts/lpf:
Crystals: TNTC - unID'd

Epithelial cells: occasional
Mucus:

Comments: recheck - previous azotemia
(CLM)

Clinical Pathology Records - Specimen Report
MIAMI METROZOO

ELEPHAS MAXIMUS (no subsp)
Asiatic elephant
Name: DALIP

Sex: Male
Age: 40Y 9M 24D

Acc. #: 101
Birth: 8.Jun.1966

Collection Information >>

Health Status: Normal
Fasting Time: < 8 hours
Activity: Active
Weight: 5448 Kg on 19.Aug.2006
Manual restraint used.

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

Hematology >>

Analysis Information >>

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

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

Tests and Results >>

WHITE BLOOD CELL COUNT	<	6.8		*10 ³ /UL
RED BLOOD CELL COUNT	<	2.11		*10 ⁶ /UL
HEMOGLOBIN	<	9.2		GM/DL
HEMATOCRIT	<	29		%
MCV	>	137		fL
MCH		43.6		uug
MCHC	<	31.7		gm/dL
SEGMENTED NEUTROPHILS	<	17	(1.156)	% (*10 ³ /UL)
LYMPHOCYTES		81	(5.508)	% (*10 ³ /UL)
MONOCYTES	<	2	(0.136)	% (*10 ³ /UL)
EOSINOPHILS		0		% (*10 ³ /UL)
BASOPHILS	<	0		% (*10 ³ /UL)

Comments >>

in-house PCV=36%

Clinical Pathology Records - Specimen Report
MIAMI METROZOO

ELEPHAS MAXIMUS (no subsp)
Asiatic elephant
Name: DALIP

Sex: Male
Age: 40Y 9M 24D

Acc. #: 101
Birth: 8.Jun.1966

Collection Information >>

Health Status: Normal
Fasting Time: < 8 hours
Activity: Active
Weight: 5448 Kg on 19.Aug.2006
Manual restraint used.

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

Chemistry >>

Analysis Information >>

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

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

Tests and Results >>

GLUCOSE	82	MG/DL
BLOOD UREA NITROGEN	16	MG/DL
CREATININE	1.9	MG/DL
BUN/creatinine ratio	8.42	
URIC ACID	<0.2	MG/DL
CALCIUM	10.9	MG/DL
PHOSPHORUS	6.1	MG/DL
calcium/phosphorus ratio	1.79	
SODIUM	128	MEQ/L
POTASSIUM	4.8	MEQ/L
sodium/potassium ratio	26.7	
CHLORIDE	86	MEQ/L
anion gap	23.8	
CHOLESTEROL	51	MG/DL
TRIGLYCERIDE	23	MG/DL
TOTAL PROTEIN (COLORIMETRY)	8.2	GM/DL
ALBUMIN (COLORIMETRY) >	3.9	GM/DL
GLOBULIN (COLORIMETRY)	4.3	GM/DL
albumin/globulin ratio	0.907	
ASPARTATE AMINOTRANSFERASE	23	IU/L
ALANINE AMINOTRANSFERASE >>	27	IU/L
TOTAL BILIRUBIN >	0.5	MG/DL
DIRECT BILIRUBIN	0.0	MG/DL
AMYLASE	770	U/L
ALKALINE PHOSPHATASE <	61	IU/L
LACTATE DEHYDROGENASE	994	IU/L
CREATINE PHOSPHOKINASE	309	IU/L
ALBUMIN (ELECTROPHORESIS) <<	2.33	GM/DL
ALPHA-1 GLOBULIN (ELECTROPHORESIS)	0.85	GM/DL
ALPHA-2 GLOBULIN (ELECTROPHORESIS)	0.77	GM/DL
BETA GLOBULIN (ELECTROPHORESIS) >>	2.24	GM/DL

Clinical Pathology Records - Specimen Report
MIAMI METROZOO

=====

ELEPHAS MAXIMUS (no subsp)
Asiatic elephant
Name: DALIP

Sex: Male
Age: 40Y 9M 24D

Acc. #: 101
Birth: 8.Jun.1966

=====

Collection Information >>

Health Status: Normal
Fasting Time: < 8 hours
Activity: Active
Weight: 5448 Kg on 19.Aug.2006
Manual restraint used.

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

Chemistry >>

Tests and Results >>

CARBON DIOXIDE	23	MMOL/L
GAMMA GLOBULIN (ELECTROPHORESIS)	2.21	GM/DL
GAMMA GLUTAMYLTRANSFERASE	8	IU/L
TOTAL PROTEIN (ELECTROPHORESIS)	8.4	

Comments >>

recheck azotemia/anemia??

Clinical Pathology Records - Specimen Report
MIAMI METROZOO

```

=====
ELEPHAS MAXIMUS (no subsp)           Sex: Male           Acc. #: 101
Asiatic elephant                     Age: 40Y 9M 24D    Birth: 8.Jun.1966
Name: DALIP
=====

```

```

Collection Information >>           Date of Collection: 14.Nov.2006
Health Status: Normal              Time of Collection:
Fasting Time: < 8 hours            Collected by:
Activity: Active                    Sample Collection Site: EAR VEIN
Weight: 5332 Kg on 18.Oct.2006
Manual restraint used.

```

```

Hematology >>
Analysis Information >>           Laboratory: IN-HOUSE
Anticoagulant: EDTA                Date of Analysis: 14.Nov.2006
Storage: Fresh                      Time of Analysis:
Sample Quality: No quality problems. Analysis by: JS
                                      Manual analysis.

```

```

Tests and Results >>
                                HEMATOCRIT           38           %

```

```

Chemistry >>
Analysis Information >>           Laboratory: IN-HOUSE
Chemistry Sample: Serum             Date of Analysis: 14.Nov.2006
Storage: Fresh                      Time of Analysis:
Sample Quality: No quality problems. Analysis by: JS
                                      Automated analysis.

```

```

Tests and Results >>
                                BLOOD UREA NITROGEN > 17.1           MG/DL
                                CREATININE >> 4.21           MG/DL
                                BUN/creatinine ratio 4.06
TOTAL PROTEIN (REFRACTOMETER) < 7.6           GM/DL

```

```

Comments >>
recheck anemia & azotemia

```


Clinical Pathology Records - Specimen Report
MIAMI METROZOO

```

=====
ELEPHAS MAXIMUS (no subsp)           Sex: Male           Acc. #: 101
Asiatic elephant                     Age: 40Y 9M 24D    Birth: 8.Jun.1966
Name: DALIP
=====

```

Collection Information >>

Health Status: Normal
Fasting Time: < 8 hours
Activity: Active
Weight: 5422 Kg on 20.Nov.2006
Manual restraint used.

Date of Collection: 21.Nov.2006
Time of Collection:
Collected by:
Sample Collection Site: EAR VEIN

Chemistry >>

Analysis Information >>

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

Laboratory: U OF MIAMI
Date of Analysis: 22.Nov.2006
Time of Analysis:
Analysis by:
Automated analysis.

Tests and Results >>

GLUCOSE	87	MG/DL
BLOOD UREA NITROGEN	15	MG/DL
CREATININE	1.5	MG/DL
BUN/creatinine ratio	10.0	
URIC ACID	<0.2	MG/DL
CALCIUM	11.2	MG/DL
PHOSPHORUS	5.1	MG/DL
calcium/phosphorus ratio	2.20	
SODIUM	135	MEQ/L
POTASSIUM	4.2	MEQ/L
sodium/potassium ratio	32.1	
CHLORIDE	89	MEQ/L
anion gap	21.2	
CHOLESTEROL	<45	MG/DL
TRIGLYCERIDE	< 18	MG/DL
TOTAL PROTEIN (COLORIMETRY)	7.8	GM/DL
ALBUMIN (COLORIMETRY)	3.6	GM/DL
GLOBULIN (COLORIMETRY)	4.2	GM/DL
albumin/globulin ratio	0.857	
ASPARTATE AMINOTRANSFERASE	23	IU/L
ALANINE AMINOTRANSFERASE >>	29	IU/L
TOTAL BILIRUBIN	0.3	MG/DL
DIRECT BILIRUBIN	0.2	MG/DL
AMYLASE	736	U/L
ALKALINE PHOSPHATASE <	63	IU/L
LACTATE DEHYDROGENASE	911	IU/L
CREATINE PHOSPHOKINASE	293	IU/L
ALBUMIN (ELECTROPHORESIS) <<	2.10	GM/DL
ALPHA-1 GLOBULIN (ELECTROPHORESIS) >>	1.01	GM/DL
ALPHA-2 GLOBULIN (ELECTROPHORESIS) <	0.68	GM/DL
BETA GLOBULIN (ELECTROPHORESIS) >>	3.35	GM/DL

Clinical Pathology Records - Specimen Report
MIAMI METROZOO

```

=====
ELEPHAS MAXIMUS (no subsp)           Sex: Male           Acc. #: 101
Asiatic elephant                     Age: 40Y 9M 24D    Birth: 8.Jun.1966
Name: DALIP
=====

```

```

Collection Information >>
Health Status: Normal                Date of Collection: 21.Nov.2006
Fasting Time: < 8 hours              Time of Collection:
Activity: Active                     Collected by:
Weight: 5422 Kg on 20.Nov.2006       Sample Collection Site: EAR VEIN
Manual restraint used.

```

Chemistry >>

Tests and Results >>

	CARBON DIOXIDE	>	29	MMOL/L
GAMMA GLOBULIN (ELECTROPHORESIS)			0.66	GM/DL
GAMMA GLUTAMYLTRANSFERASE			8	IU/L
TOTAL PROTEIN (ELECTROPHORESIS)			7.8	

Comments >>

recheck azotemia

Clinical Pathology Records - Specimen Report
MIAMI METROZOO

```

=====
ELEPHAS MAXIMUS (no subsp)           Sex: Male           Acc. #: 101
Asiatic elephant                     Age: 40Y 9M 24D    Birth: 8.Jun.1966
Name: DALIP
=====

```

```

Collection Information >>           Date of Collection: 19.Dec.2006
Health Status: Normal              Time of Collection:
Fasting Time: < 8 hours            Collected by:
Activity: Active                    Sample Collection Site: EAR VEIN
Weight: 5422 Kg on 20.Nov.2006
Manual restraint used.

```

```

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

```

```

Tests and Results >>
                                HEMATOCRIT           32           %

```

```

Chemistry >>
Analysis Information >>           Laboratory: IN-HOUSE
Chemistry Sample: Serum             Date of Analysis: 19.Dec.2006
Storage: Fresh                      Time of Analysis:
Sample Quality: No quality problems. Analysis by: JS
                                      Automated analysis.

```

```

Tests and Results >>
                                BLOOD UREA NITROGEN >> 21.3           MG/DL
                                CREATININE >           2.40           MG/DL
                                BUN/creatinine ratio    8.88
TOTAL PROTEIN (REFRACTOMETER) << 6.9           GM/DL

```

```

Comments >>
recheck chronic (recurrent?) azotemia

```

Clinical Pathology Records - Specimen Report
MIAMI METROZOO

```

=====
ELEPHAS MAXIMUS (no subsp)           Sex: Male           Acc. #: 101
Asiatic elephant                     Age: 40Y 9M 24D    Birth: 8.Jun.1966
Name: DALIP
=====

```

```

Collection Information >>
Health Status: Normal
Fasting Time: < 8 hours
Activity: Active
Weight: 5422 Kg on 20.Nov.2006
Manual restraint used.

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

```

```

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

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

```

```

Tests and Results >>
                                HEMATOCRIT           35           %

```

```

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

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

```

```

Tests and Results >>
                                BLOOD UREA NITROGEN      16.9           MG/DL
                                CREATININE >>           2.60           MG/DL
                                BUN/creatinine ratio      6.50
TOTAL PROTEIN (REFRACTOMETER) < 7.8           GM/DL

```

```

Comments >>
rechecking recurrent azotemia

```


Clinical Pathology Records - Specimen Report
MIAMI METROZOO

```

=====
ELEPHAS MAXIMUS (no subsp)           Sex: Male           Acc. #: 101
Asiatic elephant                     Age: 40Y 9M 24D    Birth: 8.Jun.1966
Name: DALIP
=====

```

Collection Information >>

```

Health Status: Normal
Fasting Time: < 8 hours
Activity: Active
Weight: 5422 Kg on 20.Nov.2006
Manual restraint used.

```

```

Date of Collection: 6.Feb.2007
Time of Collection:
Collected by:
Sample Collection Site: EAR VEIN

```

Hematology >>

Analysis Information >>

```

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

```

```

Laboratory: IN-HOUSE
Date of Analysis: 7.Feb.2007
Time of Analysis:
Analysis by: JS
Manual analysis.

```

Tests and Results >>

```

HEMATOCRIT           41           %

```

Chemistry >>

Analysis Information >>

```

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

```

```

Laboratory: IN-HOUSE
Date of Analysis: 7.Feb.2007
Time of Analysis:
Analysis by: JS
Automated analysis.

```

Tests and Results >>

```

          BLOOD UREA NITROGEN > 20.8           MG/DL
          CREATININE         >  2.13           MG/DL
          BUN/creatinine ratio 9.77
TOTAL PROTEIN (REFRACTOMETER) 8.4           GM/DL

```

Comments >>

recheck recurrent azotemia

=====

<i>ELEPHAS MAXIMUS (no subsp)</i>	Sex: Male	Acc. #: 101
Asiatic elephant	Age: 40Y 9M 24D	Birth: 8.Jun.1966
Name: DALIP		

=====

Parasitology Examination:

Submission Data >>

Type: Fecal sample
Purpose: DIAGNOSTIC EXAMINATION

Sample id.: 2007-0305
Date collected: 7.Mar.2007

Collected from:

From an individual specimen.

Enclosure: 19 - Asi

Examination Data >>

Storage: room temperature
Consistency: formed
Gross appearance: Typical

Date examined: 7.Mar.2007

by: JS

Tests & Results >>

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

Submission Data >>

Type: Fecal sample
Purpose: ROUTINE EXAMINATION

Sample id.: 2007-0370
Date collected: 19.Mar.2007

Collected from:

From an individual specimen.

Enclosure: 19 - Asi

Examination Data >>

Storage: room temperature
Consistency: formed
Gross appearance: Typical

Date examined: 19.Mar.2007

by: JS

Tests & Results >>

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

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

Scientific name: **ELEPHAS MAXIMUS**
 Common Name: Asiatic elephant

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

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

Scientific name: **ELEPHAS MAXIMUS**
Common Name: **Asiatic elephant**

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