

Elephant Profile - Rani

House Name: Rani

STB #: 386

Sex: female

Birthplace: Jacksonville, Florida

Common Name: Asian Elephant

Scientific Name: *Elephas maximus*

DOB: 7/5/96

Sire/Dam: (name and location) Indy, STB #27,
Burnet Park Zoo; Ellie, STB #130, St. Louis Zoo.

Currently Managed: In accordance with the Saint Louis Zoo Elephant Management Policy

Transaction History:

Date	Type	To	From
July 2001	Donation	St. Louis Zoo	Jacksonville Zoo

Physical Characteristics: Large head in proportion to overall body size; one tush; kink in "j" shape near tail tip.

Medical History: See medical records

Reproductive Status: Calf due in early 2007. See medical records for further details.

Temperament/Behavior History: During intros, approaches new-comers with little to no caution. **Blood behavior: Blood can be collected n the ERD, open panels and at the howdy.**

Rani's Behavior/Command List:

- Come
- Over
- Foot
- Stool
- Pad
- Lift
- Rear
- Back
- Steady
- Alright
- No
- Beak
- Blow
- Drink
- Stay
- Tail
- Ear
- Ahh
- Line
- Shift
- Chute
- Come Around
- Move Up

- Salute
- Stretch
- Lay Down
- Trunk
- Rise
- Switch or Other
- Head down
- Brace
- Tub it up
- Pivot
- Step up

Preferred Reinforcers: Grain ration; most produce.

Reviewed/Revised January 2007

Medical History Report - Summary for Individual Specimen
ST. LOUIS ZOOLOGICAL PARK

- page 1 -

ELEPHAS MAXIMUS INDICUS
INDIAN ELEPHANT
Name: Rani

Sex: Female
Age: 10Y 9M 7D

Acc. #: 101145
Birth: 5.Jul.1996

.....2006....

- 12.May Clinical note recorded. (MW)
24.May Parasitology examination: (ROUTINE EXAMINATION) Fecal sample.
NO PARASITES SEEN
Clinical note recorded. (PM)
5.Jun Blood sample: (EDTA) Hematology/Chemistry/Serology results.
WBC:13.70 *10³/UL; HCT: 34.3%; BUN:17 MG/DL;
Clinical note recorded. (JM)
6.Jun Clinical note recorded. (EKT)
12.Jul Clinical note recorded. (MW)
25.Jul Clinical note recorded. (MJA)
26.Jul Clinical note recorded. (REJ)
27.Jul Clinical note recorded. (REJ)
6.Sep Clinical note recorded. (REJ)
25.Oct Clinical note recorded. (MW)
1.Nov Clinical note recorded. (MW)
2.Nov Clinical note recorded. (REJ)
7.Nov Parasitology examination: (ROUTINE EXAMINATION) Fecal sample.
NO PARASITES SEEN
Clinical note recorded. (PM)
9.Nov Clinical note recorded. (REJ)
22.Nov Clinical note recorded. (REJ)
6.Dec Clinical note recorded. (REJ)
20.Dec Clinical note recorded. (MW)

.....2007....

- 3.Jan Clinical note recorded. (REJ)
6.Jan Clinical note recorded. (MW)
7.Jan Clinical note recorded. (MJA)
8.Jan Blood sample: (EDTA) Hematology/Chemistry/Serology results.
WBC:13.10 *10³/UL; HCT: 29.0%; BUN:11 MG/DL;
9.Jan Clinical note recorded. (REJ)
10.Jan Clinical note recorded. (REJ)
11.Jan Clinical note recorded. (REJ)
20.Jan Clinical note recorded. (MW)
25.Jan Clinical note recorded. (REJ)
1.Feb Clinical note recorded. (REJ)

Weight: 2902 Kg (6396 Lb)

Medical History Report - Summary for Individual Specimen
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ELEPHAS MAXIMUS INDICUS

INDIAN ELEPHANT

Name: Rani

Sex: Female

Age: 10Y 9M 7D

Acc. #: 101145

Birth: 5.Jul.1996

.....2007....

- 8.Feb Clinical note recorded. (REJ)
22.Feb Clinical note recorded. (REJ)
23.Feb Clinical note recorded. (REJ)
24.Feb Clinical note recorded. (MW)
25.Feb Clinical note recorded. (REJ)
26.Feb Clinical note recorded. (REJ)
28.Feb Clinical note recorded. (REJ)
- 1.Mar Blood sample: Hematology/Chemistry/Serology results.
WBC:13.10 *10³/UL; HCT: 21.6%; BUN:10 MG/DL;
Rx: PHENYLBUTAZONE 6000mg PO SID for 5 days.
Clinical note recorded. (REJ)
Biopsy report: 2005-0144
- 2.Mar Clinical note recorded. (REJ)
- 5.Mar Blood sample: (EDTA) Hematology/Chemistry/Serology results.
WBC:20.60 *10³/UL; HCT: 25.1%; BUN:10 MG/DL;
Clinical note recorded. (REJ)
- 6.Mar Purpose/Problem: Elevated white blood cell count, fibrinogen
Rx: CIPROFLOXACIN HYDROCHLORIDE 30gm PO SID for 10 days. (10.34 mg/kg)
Clinical note recorded. (MW)
Clinical note recorded. (REJ)
- 7.Mar Rx: IRON SUPPLEMENT mg PO SID for 10 days.
Clinical note recorded. (REJ)
- 8.Mar Rx: DOMPERIDONE 3000mg PO BID for 10 days. (1.03 mg/kg)
Clinical note recorded. (REJ)
- 9.Mar Blood sample: (EDTA) Hematology/Chemistry/Serology results.
WBC:19.10 *10³/UL; HCT: 29.7%; BUN:10 MG/DL;
Clinical note recorded. (JM)
- 10.Mar Clinical note recorded. (MW)
- 12.Mar Blood sample: (EDTA) Hematology/Chemistry/Serology results.
WBC:17.10 *10³/UL; HCT: 30.5%; BUN:11 MG/DL;
- 13.Mar Clinical note recorded. (REJ)
- 19.Mar Blood sample: (EDTA) Hematology/Chemistry/Serology results.
WBC:16.50 *10³/UL; HCT: 30.5%; BUN:8 MG/DL;
- 20.Mar Clinical note recorded. (MLK)
- 21.Mar Clinical note recorded. (REJ)
- 23.Mar Blood sample: (EDTA) Hematology/Chemistry/Serology results.
WBC:17.00 *10³/UL; HCT: 24.8%; BUN:11 MG/DL;
Purpose/Problem: Relief for leg swelling
Rx: PHENYLBUTAZONE 13gm PO SID for 5 days. (4.48 mg/kg)
Clinical note recorded. (MW)
- 24.Mar Clinical note recorded. (MW)
- 25.Mar PROBLEM: parturition
Purpose/Problem: leukocytosis

Medical History Report - Summary for Individual Specimen
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.....2007....

- 25.Mar Rx: CIPROFLOXACIN HYDROCHLORIDE 15gm PO BID for 10 days. (5.17 mg/kg)
IRON SUPPLEMENT 100ml PO SID for 5 days.
Clinical note recorded. (MJA)
- 26.Mar Rx: LORAZEPAM 10mg PO SID for 5 days. (3.45 mcg/kg)
FLUFENICOL 58.04gm IM SID (20.00 mg/kg)
Clinical note recorded. (REJ)
- 28.Mar Blood sample: (EDTA) Hematology/Chemistry/Serology results.
WBC:9.70 *10³/UL; HCT: 33.9%; BUN:10 MG/DL;
Clinical note recorded. (REJ)
- 29.Mar Clinical note recorded. (MW)
- 2.Apr Purpose/Problem: Give 15000mg (20 tablets) orally, twice a day, for 11
Rx: CIPROFLOXACIN 15000mg PO BID for 11 days.
Clinical note recorded. (MKA)
Clinical note recorded. (REJ)
- 4.Apr Clinical note recorded. (REJ)
- 5.Apr Clinical note recorded. (REJ)
- 10.Apr Blood sample: (EDTA) Hematology/Chemistry/Serology results.
WBC:14.60 *10³/UL; HCT: 30.0%; BUN:6 MG/DL;
Clinical note recorded. (MW)

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ELEPHAS MAXIMUS INDICUS
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Name: Rani

Sex: Female
Age: 10Y 9M 7D

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Birth: 5.Jul.1996

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Clinical Note:

O: Trunk wash samples collected 3/1 - 3/3/2006 negative for Mycobacteria
(NVSL). (MW) 12.May.2006

Clinical Note:

Fecal flotation-negative (PM) 24.May.2006

Submission Data >>

Type: Fecal sample
Purpose: ROUTINE EXAMINATION

Sample id.: 2006-0389
Date collected: 24.May.2006
Time collected: 9:00
Collected by: SW

Collected from:

From an individual specimen.

Enclosure: RIVERS E

Examination Data >>

Storage: room temperature
Consistency: formed
Gross appearance: Typical

Date examined: 24.May.2006
at: 15:30
by: PM

Tests & Results >>

FLOATATION - NA NITRATE

NO PARASITES SEEN

Clinical Note:

Biannual urine sample pH 8, protein, glucose, ketones, urobilinogen,
blood and bilirubin negative, Sp Gr. 1.020, transp clear, color medium
yellow. (JM) 5.Jun.2006

Clinical Pathology Records - Specimen Report
ST. LOUIS ZOOLOGICAL PARK

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ELEPHAS MAXIMUS INDICUS
INDIAN ELEPHANT
Name: Rani

Sex: Female
Age: 10Y 9M 7D

Acc. #: 101145
Birth: 5.Jul.1996

Collection Information >>

Health Status: Normal
Fasting Time: < 8 hours
Activity: Calm
Weight: 2647 Kg on 10.Jan.2006
Manual restraint used.

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

Hematology >>

Analysis Information >>

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

Laboratory: ADV. VET LG MAM
Date of Analysis: 5.Jun.2006
Time of Analysis:
Analysis by:
Automated analysis.

Tests and Results >>

WHITE BLOOD CELL COUNT	13.7		*10 ³ /UL
RED BLOOD CELL COUNT	2.86		*10 ⁶ /UL
HEMOGLOBIN	12.5		GM/DL
HEMATOCRIT	34.3		%
MCV	120		fL
MCH	43.7		uug
MCHC	36.4		gm/dL
SEGMENTED NEUTROPHILS	20	(2.740)	% (*10 ³ /UL)
NEUTROPHILIC BANDS	1	(0.137)	% (*10 ³ /UL)
LYMPHOCYTES	31	(4.247)	% (*10 ³ /UL)
MONOCYTES	> 48	(6.576)	% (*10 ³ /UL)
PLATELET COUNT	< 340		*10 ³ /UL

Clinical Pathology Records - Specimen Report
ST. LOUIS ZOOLOGICAL PARK

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Name: Rani

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Age: 10Y 9M 7D

Acc. #: 101145
Birth: 5.Jul.1996

Collection Information >>

Health Status: Normal
Fasting Time: < 8 hours
Activity: Calm
Weight: 2647 Kg on 10.Jan.2006
Manual restraint used.

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

Chemistry >>

Analysis Information >>

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

Laboratory: ADV. VET LG MAM
Date of Analysis: 5.Jun.2006
Time of Analysis:
Analysis by:
Automated analysis.

Tests and Results >>

GLUCOSE	93	MG/DL
BLOOD UREA NITROGEN >	17	MG/DL
CREATININE	1.4	MG/DL
BUN/creatinine ratio	12.1	
CALCIUM	10.6	MG/DL
PHOSPHORUS >	6.9	MG/DL
calcium/phosphorus ratio	1.54	
SODIUM	135	MEQ/L
POTASSIUM	4.7	MEQ/L
sodium/potassium ratio	28.7	
CHLORIDE >>	101	MEQ/L
MAGNESIUM	2.3	MG/DL
TOTAL PROTEIN (COLORIMETRY)	8.5	GM/DL
ALBUMIN (COLORIMETRY) <	2.8	GM/DL
ASPARTATE AMINOTRANSFERASE <	7	IU/L
ALANINE AMINOTRANSFERASE	10	IU/L
TOTAL BILIRUBIN	0.2	MG/DL
ALKALINE PHOSPHATASE	117	IU/L
CREATINE PHOSPHOKINASE	67	IU/L
GAMMA GLUTAMYLTRANSFERASE	6	IU/L

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Clinical Note:

Bloodwork: No significant findings except mild low hematocrit Hct
34.3%. (EKT)

6.Jun.2006

Clinical Note:

Proc: Transrectal ultrasound. Able to identify urethra, bladder,
vagina, and cervix. (MW)

12.Jul.2006

Clinical Note:

PROCEDURE: Trunk wash
Collected first of three samples for mycobacteriosis screening. (MJA)

25.Jul.2006

Clinical Note:

Trunk wash for mycobacteriosis screening, sample 2 of 3. (REJ)

26.Jul.2006

Clinical Note:

Trunk wash collected for mycobacterial screening, samples 3 of 3. (REJ)

27.Jul.2006

Clinical Note:

Transrectal ultrasonography, normal caudal reproductive structures
noted. (REJ)

6.Sep.2006

Clinical Note:

Proc: Transrectal ultrasound. Able to identify urethra, bladder, and
cervix. (MW)

25.Oct.2006

Clinical Note:

Proc: Trunk wash for routine TB screening. Day 1 of 3. (MW)

1.Nov.2006

Clinical Note:

Trunk wash procedure for routine TB screening, day 2 of 3. (REJ)

2.Nov.2006

ELEPHAS MAXIMUS INDICUS
INDIAN ELEPHANT
Name: Rani

Sex: Female
Age: 10Y 9M 7D

Acc. #: 101145
Birth: 5.Jul.1996

Clinical Note:

Fecal floatation-negative (PM)

7.Nov.2006

Submission Data >>

Type: Fecal sample
Purpose: ROUTINE EXAMINATION

Sample id.: 2006-0790
Date collected: 7.Nov.2006
Time collected: 8:30
Collected by: CB

Collected from:

Group of specimens housed together.

Enclosure: RE

Examination Data >>

Storage: room temperature
Consistency: formed
Gross appearance: Typical

Date examined: 7.Nov.2006
at: 16:30
by: PM

Tests & Results >>

FLOATATION - NA NITRATE

NO PARASITES SEEN

Clinical Note:

Trunk wash culture negative for Mycobacterium (collected 25, 26, 27 July), submitted to NVSL. (REJ)

9.Nov.2006

Clinical Note:

Rectal ultrasonography - normal caudal repro tract structures visualized. Transabdominal US (left) revealed fluid in the uterus, but no fetal or placental structures noted. (REJ)

22.Nov.2006

Clinical Note:

Rectal ultrasonography - normal caudal repor tract structures visualized. (REJ)

6.Dec.2006

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ELEPHAS MAXIMUS INDICUS
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Name: Rani

Sex: Female
Age: 10Y 9M 7D

Acc. #: 101145
Birth: 5.Jul.1996

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Clinical Note:

20.Dec.2006

Proc: Transrectal ultrasound. Normal caudal urinary and reproductive structures visualized. Small amount of fluid present within vagina, possible edema of vaginal wall, cervix tightly closed. (MW)

Clinical Note:

3.Jan.2007

Ultrasound examination. Caudal reproductive tract well visualized. Some fluid in vagina and wall appears thick as before, presumably normal for this female. Cervix visualized, no dilation noted. Transabominal ultrasonography (left paralumbar fossa) revealed uterine fluid and fetal membranes, but no identifiable fetal structures noted. Statistical due date 15 Feb 2007, birth range began 29 December 2006. (REJ)

Clinical Note:

6.Jan.2007

Proc: Transrectal ultrasound. Fluid present in vagina and possibly in cervix although cervix does not appear dilated and folds are clearly visible. (MW)

Clinical Note:

7.Jan.2007

PROCEDURE: Transrectal U/S
Fluid present in vagina. Cervical folds visible. Cervix contains small amount of fluid (1cm diameter) and does not appear dilated. (MJA)

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ST. LOUIS ZOOLOGICAL PARK

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ELEPHAS MAXIMUS INDICUS
INDIAN ELEPHANT
Name: Rani

Sex: Female
Age: 10Y 9M 7D

Acc. #: 101145
Birth: 5.Jul.1996

Collection Information >>

Health Status: Normal
Fasting Time: < 8 hours
Activity: Calm
Weight: 2647 Kg on 10.Jan.2006
Manual restraint used.

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

Hematology >>

Analysis Information >>

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

Laboratory: ADV. VET LG MAM
Date of Analysis: 8.Jan.2007
Time of Analysis:
Analysis by:
Automated analysis.

Tests and Results >>

WHITE BLOOD CELL COUNT	13.1		*10 ³ /UL
RED BLOOD CELL COUNT	< 2.35		*10 ⁶ /UL
HEMOGLOBIN	< 11.1		GM/DL
HEMATOCRIT	< 29.0		%
MCV	123		fL
MCH	47.2		uug
MCHC	38.3		gm/dL
SEGMENTED NEUTROPHILS	22	(2.882)	% (*10 ³ /UL)
NEUTROPHILIC BANDS	1	(0.131)	% (*10 ³ /UL)
LYMPHOCYTES	29	(3.799)	% (*10 ³ /UL)
MONOCYTES	48	(6.288)	% (*10 ³ /UL)
PLATELET COUNT	< 379		*10 ³ /UL

Morphology Results >>

TARGET CELLS 1

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ELEPHAS MAXIMUS INDICUS
INDIAN ELEPHANT
Name: Rani

Sex: Female
Age: 10Y 9M 7D

Acc. #: 101145
Birth: 5.Jul.1996

Collection Information >>

Health Status: Normal
Fasting Time: < 8 hours
Activity: Calm
Weight: 2647 Kg on 10.Jan.2006
Manual restraint used.

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

Chemistry >>

Analysis Information >>

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

Laboratory: ADV. VET LG MAM
Date of Analysis: 8.Jan.2007
Time of Analysis:
Analysis by:
Automated analysis.

Tests and Results >>

GLUCOSE	<	51	MG/DL
BLOOD UREA NITROGEN		11	MG/DL
CREATININE		1.3	MG/DL
BUN/creatinine ratio		8.46	
CALCIUM		10	MG/DL
PHOSPHORUS	>	6.1	MG/DL
calcium/phosphorus ratio		1.64	
SODIUM		129	MEQ/L
POTASSIUM		5.1	MEQ/L
sodium/potassium ratio		25.3	
CHLORIDE	>	94	MEQ/L
MAGNESIUM		2.3	MG/DL
TOTAL PROTEIN (COLORIMETRY)		7.8	GM/DL
ALBUMIN (COLORIMETRY)	<	2.6	GM/DL
GLOBULIN (COLORIMETRY)		5.2	GM/DL
albumin/globulin ratio		0.500	
ASPARTATE AMINOTRANSFERASE		11	IU/L
ALANINE AMINOTRANSFERASE		10	IU/L
TOTAL BILIRUBIN		0.3	MG/DL
ALKALINE PHOSPHATASE		116	IU/L
CREATINE PHOSPHOKINASE		135	IU/L
FIBRINOGEN		600	MG/DL
GAMMA GLUTAMYLTRANSFERASE		8	IU/L

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ELEPHAS MAXIMUS INDICUS
INDIAN ELEPHANT
Name: Rani

Sex: Female
Age: 10Y 9M 7D

Acc. #: 101145
Birth: 5.Jul.1996

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Clinical Note:

Results of bloodwork - within expected ranges. UA pH 8, protein, glucose, ketones, bilirubin and blood negative, urobili- normal, color-golden yellow, trans clear Sp. Gr. 1.025 (REJ)

9.Jan.2007

Clinical Note:

Transrectal ultrasonography - caudal repro tract structures visualized. Cervix clearly visualized, no evidence of dilation. Results of Mycobacterium culture (NVSL) from samples collected Nov 1,2,3 - no isolation. (REJ)

10.Jan.2007

Clinical Note:

Annual examination performed with conditioned behaviors. All feet in excellent condition. Eyes, oral cavity, and teeth normal. (REJ)

11.Jan.2007

Clinical Note:

Proc: Transrectal ultrasound exam. Caudal urinary and reproductive structures visualized. No evidence of imminent parturition. (MW)

20.Jan.2007

Clinical Note:

Transrectal ultrasound, normal structures noted, no evidence of progression of parturition. (REJ)

25.Jan.2007

Clinical Note:

Transrectal ultrasound, normal structures noted. Cervix closed, adjacent vessels appear large. (REJ)

1.Feb.2007

Clinical Note:

Transrectal ultrasound, normal structures noted. Cervix closed, no fetal membranes or fluids detected. (REJ)

8.Feb.2007

Clinical Note:

Transrectal ultrasound, normal structures noted. Distal end of cervix shows slight dilation (2 cm) but proximal cervix still tightly closed. (REJ)

22.Feb.2007

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ELEPHAS MAXIMUS INDICUS
INDIAN ELEPHANT
Name: Rani

Sex: Female
Age: 10Y 9M 7D

Acc. #: 101145
Birth: 5.Jul.1996

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Clinical Note:

23.Feb.2007

Serum progesterone value has dropped to 0.2 mg/dl. Transrectal ultrasound, normal structures noted. Distal end of cervix shows slight dilation (2 cm) but proximal cervix still tightly closed. (REJ)

Clinical Note:

24.Feb.2007

Proc: Transrectal ultrasound. Difficult to maintain adequate contact with rectal mucosa today. Cervix appears edematous and folds are spread apart but no evidence of notable dilation. (MW)

Clinical Note:

25.Feb.2007

Elephant restless overnight. Showing behaviors interpreted as labor (squatting, frequent urination, abdominal contractions). Transrectal ultrasonography (5 AM) revealed cervix is still closed, and fetal vesicle is pressed against the proximal end of the cervix, with one foot visible when contractions occur.
4:30 PM transrectal ultrasonography revealed dilated cervix with feet in the birth canal.
Parturition - significant labor activity started about 6:30 PM and progressed intermittently until 8:00 PM. At that point a bulge was apparent in the urogenital canal, and the baby was delivered at 8:21 PM. Female calf, weight 236#. Blood collected for CBC, chem. Umbilicus ligated. Placenta retrieved, and umbilical cord collected for possible cell culture (sent to Georgia State University, Atlanta). (REJ)

Clinical Note:

26.Feb.2007

Cow and calf introduced to the other cow/calf pair today (Ellie and Maliha). Introductions went well all day. Approx 4 PM Rani became agitated and directed behaviors at calf, necessitating keeper intervention. Rani sedated with 300 mg xylazine via dart to facilitate calf nursing. (REJ)

Clinical Note:

28.Feb.2007

Sedated with 350 mg xylazine AM, 250 mg xylazine PM to allow calf to nurse. Significant vulvar edema, urine flow in dribbles rather than flow, probably due to swelling. Administered 2000 mg ketoprofen IM. (REJ)

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Sex: Female
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INDIAN ELEPHANT

Name: Rani

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Clinical Note:

1.Mar.2007

Treated with 200 mg ketoprofen IM, dispensed oral phenylbutazone 6000 mg PO SID for 5 days. Blood collected for CBC, chem profile. Vulvar swelling less, seems less uncomfortable. (REJ)

Clinical Pathology Records - Specimen Report
ST. LOUIS ZOOLOGICAL PARK

ELEPHAS MAXIMUS INDICUS
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Name: Rani

Sex: Female
Age: 10Y 9M 7D

Acc. #: 101145
Birth: 5.Jul.1996

Collection Information >>

Health Status: Abnormal
Fasting Time: < 8 hours
Activity: Calm
Weight: 2902 Kg on 11.Jan.2007
Manual restraint used.

Date of Collection: 1.Mar.2007
Time of Collection:
Collected by:
Sample Collection Site: EAR VEIN

Hematology >>

Analysis Information >>

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

Laboratory: ADV. VET LG MAM
Date of Analysis: 1.Mar.2007
Time of Analysis:
Analysis by:
Automated analysis.

Tests and Results >>

WHITE BLOOD CELL COUNT	13.1		*10 ³ /UL
RED BLOOD CELL COUNT <<	1.76		*10 ⁶ /UL
HEMOGLOBIN <<	8.3		GM/DL
HEMATOCRIT <<	21.6		%
MCV	123		fL
MCH	47.2		uug
MCHC	38.4		gm/dL
SEGMENTED NEUTROPHILS	34	(4.454)	% (*10 ³ /UL)
LYMPHOCYTES	24	(3.144)	% (*10 ³ /UL)
MONOCYTES	41	(5.371)	% (*10 ³ /UL)
EOSINOPHILS	1	(0.131)	% (*10 ³ /UL)
PLATELET COUNT <<	38.6		*10 ³ /UL

Clinical Pathology Records - Specimen Report
ST. LOUIS ZOOLOGICAL PARK

ELEPHAS MAXIMUS INDICUS
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Acc. #: 101145
Birth: 5.Jul.1996

Collection Information >>

Health Status: Abnormal
Fasting Time: < 8 hours
Activity: Calm
Weight: 2902 Kg on 11.Jan.2007
Manual restraint used.

Date of Collection: 1.Mar.2007
Time of Collection:
Collected by:
Sample Collection Site: EAR VEIN

Chemistry >>

Analysis Information >>

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

Laboratory: ADV. VET LG MAM
Date of Analysis: 1.Mar.2007
Time of Analysis:
Analysis by:
Automated analysis.

Tests and Results >>

GLUCOSE >>	144	MG/DL
BLOOD UREA NITROGEN	10	MG/DL
CREATININE	1.4	MG/DL
BUN/creatinine ratio	7.14	
CALCIUM <	9.6	MG/DL
PHOSPHORUS <<	2.8	MG/DL
calcium/phosphorus ratio	3.43	
SODIUM	132	MEQ/L
POTASSIUM	4.9	MEQ/L
sodium/potassium ratio	26.9	
CHLORIDE >>	101	MEQ/L
MAGNESIUM	1.7	MG/DL
TOTAL PROTEIN (COLORIMETRY)	8.1	GM/DL
ALBUMIN (COLORIMETRY) <	2.6	GM/DL
ASPARTATE AMINOTRANSFERASE	10	IU/L
ALANINE AMINOTRANSFERASE	10	IU/L
TOTAL BILIRUBIN >>	0.5	MG/DL
ALKALINE PHOSPHATASE	92	IU/L
CREATINE PHOSPHOKINASE	244	IU/L
FIBRINOGEN >>	900	MG/DL
GAMMA GLUTAMYLTRANSFERASE	7	IU/L

Medical History Report - Individual Specimen
ST. LOUIS ZOOLOGICAL PARK

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ELEPHAS MAXIMUS INDICUS
INDIAN ELEPHANT
Name: Rani

Sex: Female Acc. #: 101145
Age: 10Y 9M 7D Birth: 5.Jul.1996

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Prescription Data >>

Drug: PHENYLBUTAZONE 6000 mg PO SID for 5 days
Formulation: 1000.0 mg tablet
Prescribed by: (1.Mar.2007)

Starting date: 1.Mar.2007
Filled by: (1.Mar.2007)
Treatment weight: 2902 kg

2005-0144 - page 15 -
Medical History Report - Summary for Individual Specimen
ST. LOUIS ZOOLOGICAL PARK

=====

ELEPHAS MAXIMUS INDICUS
INDIAN ELEPHANT

Sex: Female
Age: 10Y 9M 7D

Acc. #: 101145
Birth: 5.Jul.1996

Name: Rani

Time in this collection: > 30 days (2055 days)

=====

Baseline Data >>>

Biopsy Obtained: 1.Mar.2007
Enclosure: E.BARN

Pathology Case Number: 2005-0144
(Biopsy Record)

Recent History and Observations >>

Rani calved 25 Feb 07. Placenta submitted for examination 01 Mar 07.

Gross Examination Data >>>

Gross Description by: DUNCAN on 1.Mar.2007

Gross Examination Report >>

B18-07

The sample consists of a thick band (zonary hematophagous) of red spongy tissue 3cm thick with green/brown margins, where peripheral red materanl tissue has peeled away. The opposite surface is smooth and white. with locally extensive white fluid-filled cystic structures up to 1.5cm in diameter. In addition a white sheet of tissue is presented, amnion suspect. Cord is not examined, collected for research project.

Gross Diagnoses >>>

PLACENTA, NORMAL

Histopathology Report >>

Slide 1:

Placenta: The fetal allantoic aspect is lined by cuboidal epithelium with rare villi and there are areas of subendothelial hemorrhages and rounded pale edematous rounded proliferations, verrucae (pseudocysts). The chorionic surface forms complex villi and loss of differentiation at one end of the section is attributed to autolysis. At the allantois, vessels adjacent to the interface are surrounded by granulocytes. Amnion is hypocellular with extensive stroma between mesenchymal cells. Cuboidal to squamous epithelial cells are present at one surface.

Slide 2:

Placenta: In the labyrinthine region there is hyalinization of the maternal tissue with a rim of dystrophic mineralization. The fetal tissue has foamy yellow epithelial cells.

Slide 3:

Placenta: As slides 1 and 2.

Histopathology Diagnoses >>>

PLACENTA, NORMAL

Clinical Note:

2.Mar.2007

Results of bloodwork -- WBC 13,100, PCV 21.6%, TP = 8.1 g/dl, T bili 0.5, fibrinogen 900. Interpretation - anemia secondary to inflammation / infection, suspected to be secondary to parturition. Continuing on oral phenylbutazone. Given 5000 mg ceftiofur (2 mg/kg) CFA IM, 40 ml iron dextran IM.

Serum Fe requested from both dam and calf (from blood collected yesterday). (REJ)

Clinical Note:

5.Mar.2007

Blood collected for CBC, chem profile. Significant swelling present on medial aspect of left rear leg at the site of the iron injection. Given 8000 mg ceftiofur CFA IM (right rear leg). Attitude is BAR, oral mucus membranes are pinker than last week. (REJ)

Clinical Pathology Records - Specimen Report
ST. LOUIS ZOOLOGICAL PARK

ELEPHAS MAXIMUS INDICUS
INDIAN ELEPHANT
Name: Rani

Sex: Female
Age: 10Y 9M 7D

Acc. #: 101145
Birth: 5.Jul.1996

Collection Information >>

Health Status: Abnormal
Fasting Time: < 8 hours
Activity: Calm
Weight: 2902 Kg on 11.Jan.2007
Manual restraint used.

Date of Collection: 5.Mar.2007
Time of Collection:
Collected by:
Sample Collection Site: EAR VEIN

Hematology >>

Analysis Information >>

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

Laboratory: ADV. VET LG MAM
Date of Analysis: 5.Mar.2007
Time of Analysis:
Analysis by:
Automated analysis.

Tests and Results >>

WHITE BLOOD CELL COUNT	>	20.6		*10 ³ /UL
RED BLOOD CELL COUNT	<<	1.92		*10 ⁶ /UL
HEMOGLOBIN	<	9.3		GM/DL
HEMATOCRIT	<<	25.1		%
MCV		131		fL
MCH	>	48.4		uug
MCHC		37.1		gm/dL
SEGMENTED NEUTROPHILS		22	(4.532)	% (*10 ³ /UL)
NEUTROPHILIC BANDS		2	(0.412)	% (*10 ³ /UL)
LYMPHOCYTES		14	(2.884)	% (*10 ³ /UL)
MONOCYTES	>>	62	(12.77)	% (*10 ³ /UL)
PLATELET COUNT		591		*10 ³ /UL

Morphology Results >>

ANISOCYTOSIS 1, TARGET CELLS 2

Clinical Pathology Records - Specimen Report
ST. LOUIS ZOOLOGICAL PARK

ELEPHAS MAXIMUS INDICUS
INDIAN ELEPHANT
Name: Rani

Sex: Female
Age: 10Y 9M 7D

Acc. #: 101145
Birth: 5.Jul.1996

Collection Information >>

Health Status: Abnormal
Fasting Time: < 8 hours
Activity: Calm
Weight: 2902 Kg on 11.Jan.2007
Manual restraint used.

Date of Collection: 5.Mar.2007
Time of Collection:
Collected by:
Sample Collection Site: EAR VEIN

Chemistry >>

Analysis Information >>

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

Laboratory: ADV. VET LG MAM
Date of Analysis: 5.Mar.2007
Time of Analysis:
Analysis by:
Automated analysis.

Tests and Results >>

GLUCOSE	90	MG/DL
BLOOD UREA NITROGEN	10	MG/DL
CREATININE	1.2	MG/DL
BUN/creatinine ratio	8.33	
CALCIUM	10.1	MG/DL
PHOSPHORUS	4.1	MG/DL
calcium/phosphorus ratio	2.46	
SODIUM	131	MEQ/L
POTASSIUM	4.9	MEQ/L
sodium/potassium ratio	26.7	
CHLORIDE >>	101	MEQ/L
MAGNESIUM	2.2	MG/DL
TOTAL PROTEIN (COLORIMETRY)	8.3	GM/DL
ALBUMIN (COLORIMETRY) <	2.6	GM/DL
ASPARTATE AMINOTRANSFERASE <	6	IU/L
ALANINE AMINOTRANSFERASE	10	IU/L
TOTAL BILIRUBIN	0.2	MG/DL
ALKALINE PHOSPHATASE	96	IU/L
CREATINE PHOSPHOKINASE	188	IU/L
FIBRINOGEN >>	1400	MG/DL
GAMMA GLUTAMYLTRANSFERASE	10	IU/L

ELEPHAS MAXIMUS INDICUS
INDIAN ELEPHANT
Name: Rani

Sex: Female
Age: 10Y 9M 7D

Acc. #: 101145
Birth: 5.Jul.1996

Clinical Note:

Rx: CIPROFLOXACIN HYDROCHLORIDE 30 gm PO SID for 10 days. (MW)

6.Mar.2007

Clinical Note:

Results of bloodwork - WBC 20,600, PCV 25.1%, TP = 8.3 g/dl, t. bili
0.2 mg/dl, fibrinogen 1400 mg/dl. Serum iron (pre-iron injection) 36
mcg/dl (normal 60 - 150). (REJ)

6.Mar.2007

Purpose: Elevated white blood cell count, fibrinogen

Prescription Data >>

Drug: CIPROFLOXACIN HYDROCHLORIDE 30 gm PO SID for 10 days

Starting date: 6.Mar.2007

Formulation: 750.0 mg tablet

Prescribed by: MW (6.Mar.2007)

Filled by: MW (6.Mar.2007)

Drug dosage: 10.34 mg/kg

Treatment weight: 2902 kg

Clinical Note:

Rx: IRON SUPPLEMENT mg PO SID for 10 days. (REJ)

7.Mar.2007

Prescription Data >>

Drug: IRON SUPPLEMENT mg PO SID for 10 days

Starting date: 7.Mar.2007

Formulation: suspension

Prescribed by: REJ (7.Mar.2007)

Filled by: MLK (7.Mar.2007)

Treatment weight: 2902 kg

Clinical Note:

Domperidone 3000 mg PO BID x 10 days. (REJ)

8.Mar.2007

Prescription Data >>

Drug: DOMPERIDONE 3000 mg PO BID for 10 days

Starting date: 8.Mar.2007

Formulation: 3000 mg powder

Prescribed by: (8.Mar.2007)

Filled by: (8.Mar.2007)

Drug dosage: 1.03 mg/kg

Treatment weight: 2902 kg

=====

ELEPHAS MAXIMUS INDICUS

INDIAN ELEPHANT

Name: Rani

Sex: Female

Age: 10Y 9M 7D

Acc. #: 101145

Birth: 5.Jul.1996

=====

Clinical Note:

Placenta PCR negative for EEHV (epitheliotropic elephant herpes virus, Smithsonian, Erin Lattimer). (JM)

9.Mar.2007

Clinical Pathology Records - Specimen Report
ST. LOUIS ZOOLOGICAL PARK

ELEPHAS MAXIMUS INDICUS
INDIAN ELEPHANT
Name: Rani

Sex: Female
Age: 10Y 9M 7D

Acc. #: 101145
Birth: 5.Jul.1996

Collection Information >>

Health Status: Abnormal
Fasting Time: < 8 hours
Activity: Calm
Weight: 2902 Kg on 11.Jan.2007
Manual restraint used.

Date of Collection: 9.Mar.2007
Time of Collection:
Collected by:
Sample Collection Site: EAR VEIN

Hematology >>

Analysis Information >>

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

Laboratory: ADV. VET LG MAM
Date of Analysis: 9.Mar.2007
Time of Analysis: 20:39
Analysis by:
Automated analysis.

Tests and Results >>

WHITE BLOOD CELL COUNT	>	19.1		*10 ³ /UL
RED BLOOD CELL COUNT	<	2.31		*10 ⁶ /UL
HEMOGLOBIN	<	10.6		GM/DL
HEMATOCRIT	<	29.7		%
MCV		129		fL
MCH		45.9		uug
MCHC		35.7		gm/dL
SEGMENTED NEUTROPHILS		35	(6.685)	% (*10 ³ /UL)
NEUTROPHILIC BANDS	>	7	(1.337)	% (*10 ³ /UL)
LYMPHOCYTES	<	8	(1.528)	% (*10 ³ /UL)
MONOCYTES	>	49	(9.359)	% (*10 ³ /UL)
EOSINOPHILS		1	(0.191)	% (*10 ³ /UL)
PLATELET COUNT	>>	1026		*10 ³ /UL

Clinical Pathology Records - Specimen Report
ST. LOUIS ZOOLOGICAL PARK

ELEPHAS MAXIMUS INDICUS
INDIAN ELEPHANT
Name: Rani

Sex: Female
Age: 10Y 9M 7D

Acc. #: 101145
Birth: 5.Jul.1996

Collection Information >>

Health Status: Abnormal
Fasting Time: < 8 hours
Activity: Calm
Weight: 2902 Kg on 11.Jan.2007
Manual restraint used.

Date of Collection: 9.Mar.2007
Time of Collection:
Collected by:
Sample Collection Site: EAR VEIN

Chemistry >>

Analysis Information >>

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

Laboratory: ADV. VET LG MAM
Date of Analysis: 9.Mar.2007
Time of Analysis: 20:34
Analysis by:
Automated analysis.

Tests and Results >>

GLUCOSE	>	110	MG/DL
BLOOD UREA NITROGEN		10	MG/DL
CREATININE	<	1.1	MG/DL
BUN/creatinine ratio		9.09	
CALCIUM		10.6	MG/DL
PHOSPHORUS		5.5	MG/DL
calcium/phosphorus ratio		1.93	
SODIUM		128	MEQ/L
POTASSIUM		5.0	MEQ/L
sodium/potassium ratio		25.6	
CHLORIDE	>>	102	MEQ/L
MAGNESIUM		1.9	MG/DL
TOTAL PROTEIN (COLORIMETRY)	>	9.2	GM/DL
ALBUMIN (COLORIMETRY)		2.9	GM/DL
ASPARTATE AMINOTRANSFERASE		9	IU/L
ALANINE AMINOTRANSFERASE		10	IU/L
TOTAL BILIRUBIN		0.3	MG/DL
ALKALINE PHOSPHATASE		96	IU/L
CREATINE PHOSPHOKINASE		110	IU/L
FIBRINOGEN	>>	1100	MG/DL
GAMMA GLUTAMYLTRANSFERASE		9	IU/L

=====

ELEPHAS MAXIMUS INDICUS

Sex: Female

Acc. #: 101145

INDIAN ELEPHANT

Age: 10Y 9M 7D

Birth: 5.Jul.1996

=====

Name: Rani

Clinical Note:

10.Mar.2007

O: CBC results - hct 29.7%, WBC 19,100 35% neuts, 7% bands, 8%
lymphs, 49% monos, 1% eos.

Chem panel results - TP 9.2 g/dl, albumin 2.9 g/dl, globulin 6.3
g/dl, fibrinogen 1100 mg/dl.

A: Hematocrit and all red blood cell parameters continue to improve
(previous hcts 21%, 25%). Animal has increased numbers of immature
cells, but monocytosis is resolving. Globulins have increased,
probably in response to inflammatory process but fibrinogen is
beginning to decrease suggesting that acute inflammation is resolving.
(MW)

Clinical Pathology Records - Specimen Report
ST. LOUIS ZOOLOGICAL PARK

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ELEPHAS MAXIMUS INDICUS
INDIAN ELEPHANT
Name: Rani

Sex: Female
Age: 10Y 9M 7D

Acc. #: 101145
Birth: 5.Jul.1996

Collection Information >>

Health Status: Abnormal
Fasting Time: < 8 hours
Activity: Calm
Weight: 2902 Kg on 11.Jan.2007
Manual restraint used.

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

Hematology >>

Analysis Information >>

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

Laboratory: ADV. VET LG MAM
Date of Analysis: 12.Mar.2007
Time of Analysis:
Analysis by:
Automated analysis.

Tests and Results >>

WHITE BLOOD CELL COUNT	17.1		*10 ³ /UL
RED BLOOD CELL COUNT	< 2.29		*10 ⁶ /UL
HEMOGLOBIN	< 10.1		GM/DL
HEMATOCRIT	< 30.5		%
MCV	133		fL
MCH	44.1		uug
MCHC	33.1		gm/dL
SEGMENTED NEUTROPHILS	36	(6.156)	% (*10 ³ /UL)
LYMPHOCYTES	17	(2.907)	% (*10 ³ /UL)
MONOCYTES	> 47	(8.037)	% (*10 ³ /UL)
PLATELET COUNT >>	900		*10 ³ /UL

Clinical Pathology Records - Specimen Report
ST. LOUIS ZOOLOGICAL PARK

ELEPHAS MAXIMUS INDICUS
INDIAN ELEPHANT
Name: Rani

Sex: Female
Age: 10Y 9M 7D

Acc. #: 101145
Birth: 5.Jul.1996

Collection Information >>

Health Status: Abnormal
Fasting Time: < 8 hours
Activity: Calm
Weight: 2902 Kg on 11.Jan.2007
Manual restraint used.

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

Chemistry >>

Analysis Information >>

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

Laboratory: ADV. VET LG MAM
Date of Analysis: 12.Mar.2007
Time of Analysis:
Analysis by:
Automated analysis.

Tests and Results >>

GLUCOSE	100	MG/DL
BLOOD UREA NITROGEN	11	MG/DL
CREATININE	1.3	MG/DL
BUN/creatinine ratio	8.46	
CALCIUM	10.6	MG/DL
PHOSPHORUS >	6.3	MG/DL
calcium/phosphorus ratio	1.68	
SODIUM	135	MEQ/L
POTASSIUM >	5.2	MEQ/L
sodium/potassium ratio	26.0	
CHLORIDE >	97	MEQ/L
MAGNESIUM	1.6	MG/DL
TOTAL PROTEIN (COLORIMETRY)	8.9	GM/DL
ALBUMIN (COLORIMETRY) <	2.8	GM/DL
ASPARTATE AMINOTRANSFERASE	10	IU/L
ALANINE AMINOTRANSFERASE	10	IU/L
TOTAL BILIRUBIN	0.2	MG/DL
ALKALINE PHOSPHATASE	99	IU/L
CREATINE PHOSPHOKINASE	120	IU/L
FIBRINOGEN >>	1200	MG/DL
GAMMA GLUTAMYLTRANSFERASE	9	IU/L

=====

ELEPHAS MAXIMUS INDICUS

INDIAN ELEPHANT

Name: Rani

Sex: Female

Age: 10Y 9M 7D

Acc. #: 101145

Birth: 5.Jul.1996

=====

Clinical Note:

Results of bloodwork - PCV = 30.5%, WBC 17,100 (36% segs, 17% lymphs,
47% monos, no bands), fibrinogen 1200 mg/dl. (REJ)

13.Mar.2007

Clinical Pathology Records - Specimen Report
ST. LOUIS ZOOLOGICAL PARK

ELEPHAS MAXIMUS INDICUS
INDIAN ELEPHANT
Name: Rani

Sex: Female
Age: 10Y 9M 7D

Acc. #: 101145
Birth: 5.Jul.1996

Collection Information >>

Health Status: Normal
Fasting Time: < 8 hours
Activity: Calm
Weight: 2902 Kg on 11.Jan.2007
Manual restraint used.

Date of Collection: 19.Mar.2007
Time of Collection:
Collected by:
Sample Collection Site: EAR VEIN

Hematology >>

Analysis Information >>

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

Laboratory: ADV. VET LG MAM
Date of Analysis: 19.Mar.2007
Time of Analysis:
Analysis by:
Automated analysis.

Tests and Results >>

WHITE BLOOD CELL COUNT	16.5		*10 ³ /UL
RED BLOOD CELL COUNT	< 2.31		*10 ⁶ /UL
HEMOGLOBIN	< 10.3		GM/DL
HEMATOCRIT	< 30.5		%
MCV	132		fL
MCH	44.6		uug
MCHC	33.8		gm/dL
SEGMENTED NEUTROPHILS	33	(5.445)	% (*10 ³ /UL)
LYMPHOCYTES	19	(3.135)	% (*10 ³ /UL)
MONOCYTES	> 44	(7.260)	% (*10 ³ /UL)
EOSINOPHILS	3	(0.495)	% (*10 ³ /UL)
BASOPHILS	1	(0.165)	% (*10 ³ /UL)
PLATELET COUNT	>> 837		*10 ³ /UL

Morphology Results >>

TARGET CELLS 3

Comments >>

W

Clinical Pathology Records - Specimen Report
ST. LOUIS ZOOLOGICAL PARK

- page 28 -

ELEPHAS MAXIMUS INDICUS
INDIAN ELEPHANT
Name: Rani

Sex: Female
Age: 10Y 9M 7D

Acc. #: 101145
Birth: 5.Jul.1996

Collection Information >>

Health Status: Normal
Fasting Time: < 8 hours
Activity: Calm
Weight: 2902 Kg on 11.Jan.2007
Manual restraint used.

Date of Collection: 19.Mar.2007
Time of Collection:
Collected by:
Sample Collection Site: EAR VEIN

Chemistry >>

Analysis Information >>

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

Laboratory: ADV. VET LG MAM
Date of Analysis: 19.Mar.2007
Time of Analysis:
Analysis by:
Automated analysis.

Tests and Results >>

GLUCOSE	87	MG/DL
BLOOD UREA NITROGEN	8	MG/DL
CREATININE	1.2	MG/DL
BUN/creatinine ratio	6.67	
CALCIUM	10.9	MG/DL
PHOSPHORUS <<	0.0	MG/DL
SODIUM	134	MEQ/L
POTASSIUM >	5.5	MEQ/L
sodium/potassium ratio	24.4	
CHLORIDE >	94	MEQ/L
MAGNESIUM	2.2	MG/DL
TOTAL PROTEIN (COLORIMETRY)	8.9	GM/DL
ALBUMIN (COLORIMETRY) <	2.8	GM/DL
ASPARTATE AMINOTRANSFERASE	11	IU/L
ALANINE AMINOTRANSFERASE	10	IU/L
TOTAL BILIRUBIN >	0.4	MG/DL
ALKALINE PHOSPHATASE	101	IU/L
CREATINE PHOSPHOKINASE	115	IU/L
FIBRINOGEN >>	1000	MG/DL
GAMMA GLUTAMYLTRANSFERASE	10	IU/L

=====

ELEPHAS MAXIMUS INDICUS
INDIAN ELEPHANT
Name: Rani

Sex: Female
Age: 10Y 9M 7D

Acc. #: 101145
Birth: 5.Jul.1996

=====

Clinical Note:

20.Mar.2007

In house U/A
pH: 9
Blood: Neg
Protein: 30+
Bilirubin: Neg
Ketones: Neg
Glucose: Neg
Urobiligen: Normal
Sp. grav: 1.344
Color: dk Yellow
Turbid
Crystals: Ca oxalate 3-4
Bacteria: coccia +3 (MLK)

Clinical Note:

21.Mar.2007

Results of CBC within normal limits (PCV = 30.5%); chem profile -
fibrinogen 1000 mg/dl. (REJ)

Clinical Note:

23.Mar.2007

CC: Curator reports that animal has rear leg swelling that appears to
be causing discomfort.
Obs: Keepers have been doing warm water hydrotherapy but this does not
appear to have helped to resolve swelling. Will try NSAID treatment
to see if this will reduce swelling.
Rx: PHENYLBUTAZONE 13 gm PO SID for 5 days. (MW)

Clinical Pathology Records - Specimen Report
ST. LOUIS ZOOLOGICAL PARK

ELEPHAS MAXIMUS INDICUS
INDIAN ELEPHANT
Name: Rani

Sex: Female
Age: 10Y 9M 7D

Acc. #: 101145
Birth: 5.Jul.1996

Collection Information >>

Health Status: Abnormal
Fasting Time: < 8 hours
Activity: Calm
Weight: 2902 Kg on 11.Jan.2007
Manual restraint used.

Date of Collection: 23.Mar.2007
Time of Collection:
Collected by:
Sample Collection Site: EAR VEIN

Hematology >>

Analysis Information >>

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

Laboratory: ADV. VET LG MAM
Date of Analysis: 23.Mar.2007
Time of Analysis: 20:22
Analysis by:
Automated analysis.

Tests and Results >>

WHITE BLOOD CELL COUNT	17		*10 ³ /UL
RED BLOOD CELL COUNT <<	1.9		*10 ⁶ /UL
HEMOGLOBIN <<	8.9		GM/DL
HEMATOCRIT <<	24.8		%
MCV	131		fL
MCH	46.8		uug
MCHC	35.9		gm/dL
SEGMENTED NEUTROPHILS	46	(7.820)	% (*10 ³ /UL)
NEUTROPHILIC BANDS	3	(0.510)	% (*10 ³ /UL)
LYMPHOCYTES	24	(4.080)	% (*10 ³ /UL)
MONOCYTES	26	(4.420)	% (*10 ³ /UL)
EOSINOPHILS	1	(0.170)	% (*10 ³ /UL)
PLATELET COUNT >>	907		*10 ³ /UL

Clinical Pathology Records - Specimen Report
ST. LOUIS ZOOLOGICAL PARK

ELEPHAS MAXIMUS INDICUS
INDIAN ELEPHANT
Name: Rani

Sex: Female
Age: 10Y 9M 7D

Acc. #: 101145
Birth: 5.Jul.1996

Collection Information >>

Health Status: Abnormal
Fasting Time: < 8 hours
Activity: Calm
Weight: 2902 Kg on 11.Jan.2007
Manual restraint used.

Date of Collection: 23.Mar.2007
Time of Collection:
Collected by:
Sample Collection Site: EAR VEIN

Chemistry >>

Analysis Information >>

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

Laboratory: ADV. VET LG MAM
Date of Analysis: 23.Mar.2007
Time of Analysis: 20:14
Analysis by:
Automated analysis.

Tests and Results >>

GLUCOSE	70	MG/DL
BLOOD UREA NITROGEN	11	MG/DL
CREATININE	1.2	MG/DL
BUN/creatinine ratio	9.17	
CALCIUM	10.4	MG/DL
PHOSPHORUS	4.6	MG/DL
calcium/phosphorus ratio	2.26	
SODIUM	133	MEQ/L
POTASSIUM	4.7	MEQ/L
sodium/potassium ratio	28.3	
CHLORIDE	> 94	MEQ/L
MAGNESIUM	1.9	MG/DL
TOTAL PROTEIN (COLORIMETRY)	8.4	GM/DL
ALBUMIN (COLORIMETRY)	< 2.8	GM/DL
ASPARTATE AMINOTRANSFERASE	< 6	IU/L
ALANINE AMINOTRANSFERASE	10	IU/L
TOTAL BILIRUBIN	0.2	MG/DL
ALKALINE PHOSPHATASE	104	IU/L
CREATINE PHOSPHOKINASE	72	IU/L
FIBRINOGEN	>> 1000	MG/DL
GAMMA GLUTAMYLTRANSFERASE	7	IU/L

Medical History Report - Individual Specimen
ST. LOUIS ZOOLOGICAL PARK

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ELEPHAS MAXIMUS INDICUS
INDIAN ELEPHANT
Name: Rani

Sex: Female
Age: 10Y 9M 7D

Acc. #: 101145
Birth: 5.Jul.1996

Purpose: Relief for leg swelling

Prescription Data >>

Starting date: 23.Mar.2007

Drug: PHENYLBUTAZONE 13 gm PO SID for 5 days

Formulation: 1000.0 mg tablet

Prescribed by: MW (23.Mar.2007)

Filled by: MW (23.Mar.2007)

Drug dosage: 4.48 mg/kg

Treatment weight: 2902 kg

Clinical Note:

24.Mar.2007

O: CBC results - hct 24.8%, WBC 17,000 46% neuts, 3% bands, 24%
lymphs, 26% monos, 1% eos.

Chem panel results - fibrinogen 1000 mg/dl, TP 8.4 g/dl, albumin
2.8 g/dl, globulin 5.6 g/dl

A: Anemia has returned with low hematocrit and decreased red blood
cell numbers. White count and neutrophilia are consistent with
previous values but monocytosis has decreased. Hyperfibrinogenemia
and elevated globulins are still present, albumin seems to be
dropping somewhat.

P: Recommend repeat physical examination of animal to re-assess
overall condition and leg swelling. Animal is not currently on iron
supplement, may want to start that again. (MW)

=====

ELEPHAS MAXIMUS INDICUS
INDIAN ELEPHANT
Name: Rani

Sex: Female
Age: 10Y 9M 7D

Acc. #: 101145
Birth: 5.Jul.1996

=====

Clinical Note:

25.Mar.2007

Problem: parturition (Confirmed)

EXAMINATION:

S: Excited/anxious this AM. Spraying water on back. Allowing calf to nurse today only with coaxing from keeper staff. Patient uncooperative for vet to perform thorough physical examination. No vaginal/vulvar discharge is present. Moderate swelling on caudal aspect of left hip, appears edematous.

A/P: Unclear cause of agitation. Spraying with water raises concerns animal may be mildly febrile and trying to cool off. Low grade fever would be consistent with leukocytosis. R/O cellulitis vs abscess on leg. Will place animal back on ciprofloxacin today. Consider addition of florfenicol tomorrow to increase anaerobic spectrum of action. Unable to obtain vaginal cytology/culture today; retry to tomorrow. Consider anxiolytic drug if animal still appears excited tomorrow. Will resume oral iron supplement for 5 more days to decline in Hct.

Rx: CIPROFLOXACIN HYDROCHLORIDE 15 gm PO BID for 10 days.PROBLEM:

Rx: IRON SUPPLEMENT 100 ml PO SID for 5 days. (MJA)

Purpose: leukocytosis

Prescription Data >>

Starting date: 25.Mar.2007

Drug: CIPROFLOXACIN HYDROCHLORIDE 15 gm PO BID for 10 days

Formulation: 750.00 mg tablet

Prescribed by: MJA (25.Mar.2007)

Filled by: MJA (25.Mar.2007)

Drug dosage: 5.17 mg/kg

Treatment weight: 2902 kg

Purpose: anemia

Prescription Data >>

Starting date: 25.Mar.2007

Drug: IRON SUPPLEMENT 100 ml PO SID for 5 days

Formulation: suspension

Prescribed by: MJA (25.Mar.2007)

Filled by: MJA (25.Mar.2007)

Treatment weight: 2902 kg

ELEPHAS MAXIMUS INDICUS
INDIAN ELEPHANT
Name: Rani

Sex: Female
Age: 10Y 9M 7D

Acc. #: 101145
Birth: 5.Jul.1996

Clinical Note:

26.Mar.2007

Animal is less excited today; however still not calm. Will begin anti-anxiety meds to assess effect.

Rx: LORAZEPAM 10 mg PO SID for 5 days.

Rx: FLUFENICOL 30 gm IM SID for 1 dose. (REJ)

Prescription Data >>

Starting date: 26.Mar.2007

Drug: LORAZEPAM 10 mg PO SID for 5 days

Formulation: 2.00 mg tablet

Prescribed by: REJ (26.Mar.2007)

Drug dosage: 3.45 mcg/kg

Filled by: REJ (26.Mar.2007)

Treatment weight: 2902 kg

Prescription Data >>

Starting date: 26.Mar.2007

Drug: FLUFENICOL 58.04 gm IM SID

Formulation: 300.00 mg/ml injectable

Prescribed by: REJ (26.Mar.2007)

Drug dosage: 20.00 mg/kg

Filled by: REJ (26.Mar.2007)

Treatment weight: 2902 kg

Clinical Note:

28.Mar.2007

Lorazepam dose increased to 10 mg BID. (REJ)

Clinical Pathology Records - Specimen Report
ST. LOUIS ZOOLOGICAL PARK

ELEPHAS MAXIMUS INDICUS
INDIAN ELEPHANT
Name: Rani

Sex: Female
Age: 10Y 9M 7D

Acc. #: 101145
Birth: 5.Jul.1996

Collection Information >>

Health Status: Abnormal
Fasting Time: < 8 hours
Activity: Calm
Weight: 2902 Kg on 11.Jan.2007
Manual restraint used.

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

Hematology >>

Analysis Information >>

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

Laboratory: ADV. VET LG MAM
Date of Analysis: 28.Mar.2007
Time of Analysis: 19:05
Analysis by:
Automated analysis.

Tests and Results >>

WHITE BLOOD CELL COUNT	<	9.7		*10 ³ /UL
RED BLOOD CELL COUNT		2.57		*10 ⁶ /UL
HEMOGLOBIN		11.6		GM/DL
HEMATOCRIT		33.9		%
MCV		132		fL
MCH		45.1		uug
MCHC		34.2		gm/dL
SEGMENTED NEUTROPHILS		32	(3.104)	% (*10 ³ /UL)
LYMPHOCYTES	<	23	(2.231)	% (*10 ³ /UL)
MONOCYTES		43	(4.171)	% (*10 ³ /UL)
EOSINOPHILS		2	(0.194)	% (*10 ³ /UL)
PLATELET COUNT		596		*10 ³ /UL

Clinical Pathology Records - Specimen Report
ST. LOUIS ZOOLOGICAL PARK

ELEPHAS MAXIMUS INDICUS
INDIAN ELEPHANT
Name: Rani

Sex: Female
Age: 10Y 9M 7D

Acc. #: 101145
Birth: 5.Jul.1996

Collection Information >>

Health Status: Abnormal
Fasting Time: < 8 hours
Activity: Calm
Weight: 2902 Kg on 11.Jan.2007
Manual restraint used.

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

Chemistry >>

Analysis Information >>

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

Laboratory: ADV. VET LG MAM
Date of Analysis: 28.Mar.2007
Time of Analysis: 19:16
Analysis by:
Automated analysis.

Tests and Results >>

GLUCOSE	102	MG/DL
BLOOD UREA NITROGEN	10	MG/DL
CREATININE	1.9	MG/DL
BUN/creatinine ratio	5.26	
CALCIUM	< 9.9	MG/DL
PHOSPHORUS	< 3.2	MG/DL
calcium/phosphorus ratio	3.09	
SODIUM	132	MEQ/L
POTASSIUM	< 4.0	MEQ/L
sodium/potassium ratio	33.0	
CHLORIDE	> 96	MEQ/L
MAGNESIUM	1.8	MG/DL
TOTAL PROTEIN (COLORIMETRY)	> 9.4	GM/DL
ALBUMIN (COLORIMETRY)	2.9	GM/DL
ASPARTATE AMINOTRANSFERASE	>> 123	IU/L
ALANINE AMINOTRANSFERASE	11	IU/L
TOTAL BILIRUBIN	>> 2.4	MG/DL
ALKALINE PHOSPHATASE	166	IU/L
CREATINE PHOSPHOKINASE	>> 1549	IU/L
FIBRINOGEN	>> 1200	MG/DL
GAMMA GLUTAMYLTRANSFERASE	> 15	IU/L

ELEPHAS MAXIMUS INDICUS
INDIAN ELEPHANT
Name: Rani

Sex: Female
Age: 10Y 9M 7D

Acc. #: 101145
Birth: 5.Jul.1996

Clinical Note:

29.Mar.2007

O: CBC results - hct 33.9%, WBC 9,700 32% neuts, 23% lymphs, 43% monos, 2% eos.

Chem panel results - Ca 9.9 mg/dl, phos 3.2 mg/dl, TP 9.4 g/dl, albumin 2.9 g/dl, globulin 6.5 g/dl, t. bili 2.4 mg/dl, CPK 1549 IU/L, AST 123 IU/L, fibrinogen 1200 mg/dl

A: White blood cell count has returned to normal range. Differential appears appropriate. Hematocrit has also improved notably. Elevated total protein due to increased globulins and elevated fibrinogen suggest that there is still some ongoing inflammation. Marked elevation of total bilirubin, new finding, suspect hemolysis of blood sample - check at next sampling. (MW)

Clinical Note:

2.Apr.2007

Rx: CIPROFLOXACIN 15000 mg PO BID for 11 days. (MKA)

Clinical Note:

2.Apr.2007

Lorazepam 20 mg BID. (REJ)

Purpose: Give 15000mg (20 tablets) orally, twice a day, for 11 days.

Prescription Data >>

Starting date: 2.Apr.2007

Drug: CIPROFLOXACIN 15000 mg PO BID for 11 days

Formulation: 750.00 mg tablet

Prescribed by: MKA (1.Apr.2007)

Filled by: PM (1.Apr.2007)

Treatment weight: 2902 kg

Comments >>

Give 15000mg (20 tablets) orally, twice a day, for 11 days.

Clinical Note:

4.Apr.2007

Results of bloodwork - fibrinogen 1300 mg/dl, other chem profile parameters within normal ranges. CBC = WBC = 17,100, PCV = 32%. (REJ)

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ELEPHAS MAXIMUS INDICUS
INDIAN ELEPHANT
Name: Rani

Sex: Female
Age: 10Y 9M 7D

Acc. #: 101145
Birth: 5.Jul.1996

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Clinical Note:

5.Apr.2007

Calf removed for handrearing. Given 200 mg xylazine IM via hand syringe to provide analgesia while lactation discontinues. (REJ)

Clinical Note:

10.Apr.2007

O: CBC results - hct 30%, WBC 14,600 20% neuts, 4% bands, 41% lymphs, 24% monos, 1% eos.

Chem panel results - globulin 5.9 g/dl, fibrinogen 1100 mg/dl.

A: No significant changes in blood parameters. (MW)

Clinical Pathology Records - Specimen Report
ST. LOUIS ZOOLOGICAL PARK

ELEPHAS MAXIMUS INDICUS
INDIAN ELEPHANT
Name: Rani

Sex: Female
Age: 10Y 9M 7D

Acc. #: 101145
Birth: 5.Jul.1996

Collection Information >>

Health Status: Abnormal
Fasting Time: < 8 hours
Activity: Calm
Weight: 2902 Kg on 11.Jan.2007
Manual restraint used.

Date of Collection: 10.Apr.2007
Time of Collection:
Collected by:
Sample Collection Site: EAR VEIN

Hematology >>

Analysis Information >>

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

Laboratory: ADV. VET LG MAM
Date of Analysis: 10.Apr.2007
Time of Analysis: 11:33
Analysis by:
Automated analysis.

Tests and Results >>

WHITE BLOOD CELL COUNT	14.6		*10 ³ /UL
RED BLOOD CELL COUNT	< 2.26		*10 ⁶ /UL
HEMOGLOBIN	< 10.1		GM/DL
HEMATOCRIT	< 30.0		%
MCV	133		fL
MCH	44.7		uug
MCHC	33.7		gm/dL
SEGMENTED NEUTROPHILS	20	(2.920)	% (*10 ³ /UL)
NEUTROPHILIC BANDS	4	(0.584)	% (*10 ³ /UL)
LYMPHOCYTES	41	(5.986)	% (*10 ³ /UL)
MONOCYTES	34	(4.964)	% (*10 ³ /UL)
EOSINOPHILS	1	(0.146)	% (*10 ³ /UL)
PLATELET COUNT	561		*10 ³ /UL

Clinical Pathology Records - Specimen Report
ST. LOUIS ZOOLOGICAL PARK

ELEPHAS MAXIMUS INDICUS
INDIAN ELEPHANT
Name: Rani

Sex: Female
Age: 10Y 9M 7D

Acc. #: 101145
Birth: 5.Jul.1996

Collection Information >>

Health Status: Abnormal
Fasting Time: < 8 hours
Activity: Calm
Weight: 2902 Kg on 11.Jan.2007
Manual restraint used.

Date of Collection: 10.Apr.2007
Time of Collection:
Collected by:
Sample Collection Site: EAR VEIN

Chemistry >>

Analysis Information >>

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

Laboratory: ADV. VET LG MAM
Date of Analysis: 10.Apr.2007
Time of Analysis: 12:51
Analysis by:
Automated analysis.

Tests and Results >>

	GLUCOSE	87	MG/DL
	BLOOD UREA NITROGEN	< 6	MG/DL
	CREATININE	1.3	MG/DL
	BUN/creatinine ratio	4.62	
	CALCIUM	10.5	MG/DL
	PHOSPHORUS	6.0	MG/DL
	calcium/phosphorus ratio	1.75	
	SODIUM	131	MEQ/L
	POTASSIUM	> 5.2	MEQ/L
	sodium/potassium ratio	25.2	
	CHLORIDE	92	MEQ/L
	MAGNESIUM	2.0	MG/DL
	TOTAL PROTEIN (COLORIMETRY)	8.5	GM/DL
	ALBUMIN (COLORIMETRY)	< 2.6	GM/DL
	ASPARTATE AMINOTRANSFERASE	>> 56	IU/L
	ALANINE AMINOTRANSFERASE	10	IU/L
	TOTAL BILIRUBIN	>> 0.6	MG/DL
	ALKALINE PHOSPHATASE	163	IU/L
	CREATINE PHOSPHOKINASE	220	IU/L
	FIBRINOGEN	>> 1100	MG/DL
	GAMMA GLUTAMYLTRANSFERASE	>> 57	IU/L

Clinical Pathology Records Report - ISIS/In-House Reference Values
ST. LOUIS ZOOLOGICAL PARK

Scientific name: *ELEPHAS MAXIMUS*
Common Name: INDIAN ELEPHANT (E,I)

		ISIS Values			In-House Values				
		Mean	S.D.	(N)	Mean	S.D.	Min.	Max.	(N)
WBC	*10 ³ /UL	14.41 ±	4.418	(920)	12.04 ±	4.20	5.800	24.00	(100)
RBC	*10 ⁶ /UL	3.11 ±	0.55	(778)	2.765 ±	0.339	2.140	3.990	(98)
HGB	GM/DL	13.3 ±	2.1	(814)	12.27 ±	1.30	9.600	15.70	(100)
HCT	%	37.7 ±	5.8	(987)	34.46 ±	3.55	26.90	43.20	(98)
MCH	MG/DL	43.4 ±	4.9	(752)	45.60 ±	11.13	30.91	153.0	(100)
MCHC	uug	35.4 ±	3.7	(808)	35.60 ±	1.47	28.07	39.02	(100)
MCV	fL	122.4 ±	15.6	(773)	128.6 ±	31.1	110.3	430.1	(99)
SEGS	*10 ³ /UL	4.927 ±	2.953	(704)	4.208 ±	1.890	0.000	12.38	(95)
BANDS	*10 ³ /UL	0.431 ±	0.660	(124)	0.127 ±	0.501	0.000	2.940	(42)
LYMPHOCYTES	*10 ³ /UL	5.635 ±	3.373	(705)	5.335 ±	2.944	1.680	15.43	(97)
MONOCYTES	*10 ³ /UL	3.517 ±	2.925	(567)	1.594 ±	1.524	0.000	5.880	(90)
EOSINOPHILS	*10 ³ /UL	0.483 ±	0.540	(529)	0.281 ±	0.277	0.000	1.533	(85)
BASOPHILS	*10 ³ /UL	0.124 ±	0.088	(66)	0.045 ±	0.077	0.000	0.292	(63)
NRBC	/100 WBC	0 ±	1	(47)	0.333 ±	0.577	0.000	1.000	(3)
PLATE. CNT.	*10 ³ /UL	549 ±	132	(161)	386.0 ±	144.7	75.00	713.0	(56)
RETICS	%	0.0 ±	0.1	(6)	0.000 ±	0.000	0.000	0.000	(2)
GLUCOSE	MG/DL	88 ±	20	(630)	83.97 ±	19.16	29.00	141.0	(86)
BUN	MG/DL	12 ±	4	(635)	13.78 ±	3.03	6.000	20.00	(88)
CREAT.	MG/DL	1.6 ±	0.4	(599)	1.407 ±	0.216	0.900	1.900	(85)
URIC ACID	MG/DL	0.2 ±	0.2	(249)	0.079 ±	0.142	0.000	0.400	(14)
CA	MG/DL	10.7 ±	0.7	(579)	10.70 ±	0.53	9.500	12.10	(87)
PHOS	MG/DL	5.0 ±	1.0	(461)	5.332 ±	0.773	4.000	7.600	(34)
NA	MEQ/L	130 ±	5	(481)	131.3 ±	3.4	124.0	140.0	(86)
K	MEQ/L	4.6 ±	0.5	(491)	4.628 ±	0.389	3.700	6.100	(83)
CL	MEQ/L	89 ±	4	(460)	87.98 ±	2.92	82.00	95.00	(85)
IRON	MCG/DL	69 ±	23	(60)					
MG	MG/DL	2.00 ±	0.51	(33)	1.818 ±	0.140	1.600	2.000	(11)
HCO3	MMOL/L	25.2 ±	2.8	(25)					
CHOL	MG/DL	45 ±	11	(400)	42.29 ±	8.07	20.00	59.00	(31)
TRIG	MG/DL	50 ±	29	(346)	57.79 ±	32.12	15.00	145.0	(29)
T.PROT. (C)	GM/DL	8.1 ±	0.8	(598)	8.016 ±	0.605	6.600	9.600	(83)
T.PROT. (R)	GM/DL	8.4 ±	0.4	(23)					
ALBUMIN (C)	GM/DL	3.3 ±	0.4	(316)	3.054 ±	0.746	1.800	4.400	(82)
GLOBULIN (C)	GM/DL	5.0 ±	0.9	(312)	5.440 ±	0.865	3.500	8.000	(48)
AST (SGOT)	IU/L	21 ±	13	(607)	16.70 ±	5.05	5.000	40.00	(84)
ALT (SGPT)	IU/L	7 ±	8	(457)	5.511 ±	3.833	0.000	20.00	(47)
T. BILI.	MG/DL	0.2 ±	0.1	(447)	0.244 ±	0.111	0.000	0.500	(84)
D. BILI	MG/DL	0.1 ±	0.1	(164)	0.050 ±	0.071	0.000	0.100	(2)
I. BILI.	MG/DL	0.1 ±	0.1	(157)	0.050 ±	0.071	0.000	0.100	(2)
AMYLASE	U/L	3600 ±	2366	(70)	5221 ±	391	4633	5855	(13)
ALK.PHOS.	IU/L	139 ±	73	(576)	116.7 ±	53.8	57.00	265.0	(84)
LDH	IU/L	471 ±	357	(352)	499.2 ±	208.0	230.0	1092	(17)

Clinical Pathology Records Report - ISIS/In-House Reference Values
ST. LOUIS ZOOLOGICAL PARK

Scientific name: *ELEPHAS MAXIMUS*
Common Name: INDIAN ELEPHANT (E,I)

		ISIS Values			In-House Values				
		Mean	S.D.	(N)	Mean	S.D.	Min.	Max.	(N)
CPK	IU/L	223 ±	165	(287)	222.5 ±	126.7	61.00	518.0	(19)
OSMOLARITY	MOSMOL/L	234 ±	96	(8)	263.1 ±	6.3	251.0	274.0	(44)
ALPHA GLOB.	MG/DL	250.4 ±	353.1	(2)	500.0 ±	0.0	500.0	500.0	(1)
ALPHA-1 GLOB	GM/DL	1.0 ±	0.0	(1)					
ALPHA-2 GLOB	GM/DL	0.7 ±	0.0	(1)					
BETA GLOB.	GM/DL	1.0 ±	0.6	(2)	0.600 ±	0.000	0.600	0.600	(1)
Body Temperature:		36.3 ±	0.5	(4)					
CO2	MMOL/L	24.7 ±	3.6	(99)	26.27 ±	1.48	22.00	28.00	(26)
CORTISOL	UG/DL	1.8 ±	0.5	(3)					
ESR	MM/HR	98 ±	32	(7)	108.5 ±	11.1	81.00	135.0	(26)
FIBRINOGEN	MG/DL	387 ±	223	(56)	315.9 ±	58.1	210.0	403.0	(25)
GGT	IU/L	7 ±	5	(139)	5.615 ±	3.097	1.000	12.00	(13)
CA++					4.267 ±	0.116	4.200	4.400	(3)
LEPTO. CANI.					400.0 ±	0.0	400.0	400.0	(1)
LEPTO. ICT.					1600 ±	0	1600	1600	(1)
LEPTO. POM.					200.0 ±	0.0	200.0	200.0	(1)
LIPASE	U/L	17 ±	28	(22)	25.00 ±	0.00	25.00	25.00	(13)
MEAN PLATELET VOLUME					4.367 ±	0.392	3.500	5.100	(15)
OSMOLALITY	MOSMOL/KG				268.6 ±	6.4	259.0	279.0	(14)
PROGESTERONE	NG/DL	8.785 ±	38.20	(299)	0.800 ±	0.000	0.800	0.800	(1)
RED CELL DISTRIBUTION WI					15.63 ±	0.91	13.70	17.70	(25)
TESTOSTERONE	NG/ML	40.10 ±	0.000	(1)					
VITAMIN E	UG/ML	0 ±	0	(2)					
TOTAL T4	MCG/DL	10.5 ±	2.0	(6)					
T3 UPTAKE	%	28 ±	2	(2)					
ALBUMIN (E)	GM/DL	3.7 ±	0.2	(2)	3.800 ±	0.000	3.800	3.800	(1)
GAMMA GLOB	GM/DL	3.1 ±	3.2	(9)	1.800 ±	0.000	1.800	1.800	(1)