

Medical History Report - Summary for Individual Specimen
BUTTONWOOD PARK ZOO

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ELEPHAS MAXIMUS (no subsp)
Asiatic elephant
Name: RUTH

Sex: Female
Age: 55Y 4M 18D

Acc. #: 5
Birth: 29.Oct.1958

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.....2014....

24.Feb Clinical note recorded. (MAS)
28.Feb

Weight: 3175 Kg (7000 Lb)

4.Mar Purpose/Problem: arthritis
Rx: GLUCOSAMINE 64gm PO BID until further notice.
Clinical note recorded. (MS)
8.Mar Clinical note recorded. (LAS)

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ELEPHAS MAXIMUS (no subsp)
Asiatic elephant
Name: RUTH

Sex: Female Acc. #: 5
Age: 55Y 4M 18D Birth: 29.Oct.1958

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Clinical Note:

24.Feb.2014

2/24/14: Staff reports that appetite is normal. Recheck: Ruth appears to have lost some weight. Muscles mass appears atrophied on rear legs. Some muscle tremor/weakness in rear legs noted when ambulating, standing and lying down. Large area of old skin has sloughed around vulva. Tracts do not appear to be progressing deeper subcutaneously. Ventral edema near umbilicus is no longer pitting. Progression of dead tissue on distal tail appears to have ceased at this time. Measurements taken by staff support this. Dr.'s [REDACTED], [REDACTED], and Wojick to assess later this week.

Plan:

- 1.) Mineral oil bath.
- 2.) CWCT as prescribed pending medical reassessment.
- 3.) Repeat CBC/Chem 3/6/14. (MAS)

Clinical Note:

4.Mar.2014

Rx: GLUCOSAMINE 64 gm PO BID until further notice. (MS)

Purpose: arthritis

Prescription Data >>

Starting date: **4.Mar.2014**

Drug: GLUCOSAMINE 64 gm PO BID until further notice

Formulation: 1000.0 mg granules

Prescribed by: MS (21.Aug.2013)

Filled by: LAS (4.Mar.2014)

Treatment weight: 3175 kg

Clinical response to treatment: Good

Comments >>

Tradename of drug used is GLYCO FLEX.

Clinical Note:

8.Mar.2014

Examined by Dr. Kaiser. Recommends continuing treatment as prescribed.

Re-check 3/22. (LAS)

Clinical Pathology Records Report - ISIS/In-House Reference Values
 BUTTONWOOD PARK ZOO

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

		ISIS Values				
		Mean	S.D.	Min.	Max.	(N)
WBC	*10 ³ /UL	14.43	4.409	5.800	33.30	(1779)
RBC	*10 ⁶ /UL	3.06	0.51	1.78	5.15	(1501)
HGB	GM/DL	13.2	2.2	6.6	24.9	(1568)
HCT	%	37.1	6.0	20.3	68.0	(1890)
MCH	MG/DL	43.3	4.8	16.6	63.2	(1464)
MCHC	uug	35.4	3.6	16.9	68.6	(1536)
MCV	fL	122.3	13.4	47.1	213.2	(1491)
SEGS	*10 ³ /UL	4.822	2.925	0.291	23.90	(1502)
BANDS	*10 ³ /UL	1.402	2.124	0.000	11.40	(307)
LYMPHOCYTES	*10 ³ /UL	5.243	3.223	0.196	20.60	(1513)
MONOCYTES	*10 ³ /UL	3.677	2.909	0.000	9.983	(1273)
EOSINOPHILS	*10 ³ /UL	0.465	0.551	0.000	4.520	(1093)
BASOPHILS	*10 ³ /UL	0.173	0.105	0.000	0.508	(119)
NRBC	/100 WBC	1	1	0	3	(85)
PLATE. CNT.	*10 ³ /UL	469	215	121	1394	(428)
RETICS	%	0.8	1.6	0.0	4.4	(10)
GLUCOSE	MG/DL	91	21	33	223	(1257)
BUN	MG/DL	13	4	4	30	(1260)
CREAT.	MG/DL	1.6	0.4	0.7	3.3	(1230)
URIC ACID	MG/DL	0.2	0.3	0.0	3.4	(286)
CA	MG/DL	10.6	0.8	7.8	14.8	(1184)
PHOS	MG/DL	5.0	1.2	1.9	11.1	(724)
NA	MEQ/L	130	6	99	181	(859)
K	MEQ/L	4.6	0.5	3.2	6.6	(861)
CL	MEQ/L	89	4	77	103	(731)
IRON	MCG/DL	65	23	29	158	(82)
MG	MG/DL	2.10	0.53	0.00	2.90	(68)
HCO3	MMOL/L	26.3	3.0	19.0	32.3	(55)
CHOL	MG/DL	48	19	0	189	(599)
TRIG	MG/DL	61	42	10	329	(745)
T.PROT. (C)	GM/DL	8.1	0.8	5.8	11.3	(1227)
T.PROT. (R)	GM/DL	8.4	0.4	7.8	9.2	(23)
ALBUMIN (C)	GM/DL	3.2	0.5	1.9	4.7	(648)
GLOBULIN (C)	GM/DL	5.0	1.0	2.7	8.6	(639)
AST (SGOT)	IU/L	22	11	4	97	(1227)
ALT (SGPT)	IU/L	7	8	0	72	(781)
T. BILI.	MG/DL	0.2	0.2	0.0	1.2	(765)
D. BILI	MG/DL	0.1	0.1	0.0	1.3	(233)
I. BILI.	MG/DL	0.1	0.1	0.0	0.6	(224)
AMYLASE	U/L	3017	2492	0	9866	(170)
ALK.PHOS.	IU/L	143	66	28	641	(1157)
LDH	IU/L	655	703	46	4769	(495)

Clinical Pathology Records Report - ISIS/In-House Reference Values
 BUTTONWOOD PARK ZOO

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

		ISIS Values		Min.	Max.	(N)
		Mean	S.D.			
CPK	IU/L	225 +	170	23	1260	(486)
OSMOLARITY	MOSMOL/L	264 +	29	0	325	(98)
ALPHA GLOB.	MG/DL	250.4 +	353.1	0.7	500.0	(2)
ALPHA-1 GLOB	MG/DL	0.8 +	0.1	0.7	1.0	(6)
ALPHA-2 GLOB	MG/DL	0.9 +	0.2	0.7	1.1	(6)
BETA GLOB.	MG/DL	1.0 +	0.6	0.6	1.4	(2)
Body Temperature:		36.3 +	0.5	36.0	37.0	(4)
CO2	MMOL/L	24.8 +	4.0	15.8	37.0	(230)
CORTISOL	UG/DL	2.0 +	1.0	0.5	5.4	(35)
ESR	MM/HR	98 +	32	53	130	(7)
FIBRINOGEN	MG/DL	371 +	181	0	810	(238)
GGT	IU/L	7 +	5	0	33	(314)
LIPASE	U/L	19 +	30	0	127	(53)
PROGESTERONE	NG/DL	18.82 +	62.45	0.020	346.0	(379)
TESTOSTERONE	NG/ML	20.34 +	27.95	0.570	40.10	(2)
A-TOCOPHEROL	UG/DL	19 +	15	0	42	(8)
TOTAL T4	MCG/DL	10.0 +	2.7	4.2	12.6	(10)
T3 UPTAKE	%	28 +	2	26	29	(2)
ALBUMIN (E)	GM/DL	4.1 +	0.6	3.5	4.9	(4)
GAMMA GLOB	GM/DL	2.9 +	2.9	0.0	9.0	(11)

Weight Records Report - Individual Specimen
BUTTONWOOD PARK ZOO

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ELEPHAS MAXIMUS (no subsp)

Sex: Female

Acc. #: 5

Asiatic elephant

Birth: 29.Oct.1958

Name: RUTH

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Date	Weight	Age	Change	Overall
28.Feb.2014	3175 Kg (7000 Lb)	55.3 Y		

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Average: 3175 Kg (7000 Lb)

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240 Farrier Road, Cornell University, Ithaca, NY 14853
Ph: 607-253-3900 Fax: 607-253-3943
http://diagcenter.vet.cornell.edu

Finalized Report

Owner: See Reference-Incomplete Info

Accession Number: **26978-14**

Buttonwood Park Zoo - (12054)
Dr Emma Kaiser
Animal Care Facility - Attn Leslie
425 Hawthorne St
New Bedford, MA 02740
(508) 991-6178

Sampled: 03/08/2014
Received: 03/11/2014
Finalized: 03/14/2014

CLINICAL PATHOLOGY

607-253-3255

HEMATOLOGY

1 RUTH 5 - Proboscidea Asian Elephant Female

Test Name	Result	Reference Interval	Units
Blood, Whole, Edta			
Hematocrit	37	Not established	%
Hemoglobin	12.2	Not established	g/dL
RBC	2.7	Not established	mill/uL
MCV	136	Not established	fL
MCH	45	Not established	pg
MCHC	33	Not established	g/dL
RDW	14.9	Not established	%
WBC	13.4	Not established	thou/uL
Segmented Neutrophils	5.1	Not established	thou/uL
Band Neutrophils	0.0	Not established	thou/uL
Lymphocytes	5.4	Not established	thou/uL
Monocytes	2.7	Not established	thou/uL
Eosinophils	0.3	Not established	thou/uL
Basophils	0.0	Not established	thou/uL
Platelet Count	505	Not established	thou/uL
MPV	7.0	Not established	fL
Platelet Smear Estimation	ADEQUATE		

Comment: Platelet clumps noted on smear. Platelet clumping falsely decreases the platelet count and prevents accurate enumeration. Therefore, any provided count is a minimum count.

Total Protein - Ref	9.8	Not established	g/dL
Plasma Appearance	NORMAL		
WBC Exam	NO SIGNIFICANT ABNORMALITIES		
RBC Morphology	NO SIGNIFICANT ABNORMALITIES		
Parasites	NONE SEEN		

HEMATOLOGY

1 **RUTH 5** - Proboscidea Asian Elephant Female

Test Name	Result	Reference Interval	Units
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Clinical Pathologist: Deanna Schaefer, DVM DACVP

URINALYSIS

1 **RUTH 5** - Proboscidea Asian Elephant Female

Test Name	Result	Reference Interval	Units
Urine			
Volume	20.0		mL
Color	LIGHT YELLOW		
Turbidity	OPAQUE		
Specific Gravity	1.009		
pH	9		
Protein	NEGATIVE		mg/dL
Glucose	NEGATIVE		mg/dL
Ketones	NEGATIVE		mg/dL
Bilirubin	NEGATIVE		mg/dL
Heme	NEGATIVE		
WBC	NONE SEEN		/HPF
RBC	NONE SEEN		/HPF
Bacteria	MODERATE		
Epithelial Cells	FEW		
Sperm	NONE SEEN		
Fat Drops	NONE SEEN		
Debris	NONE SEEN		
Casts	NONE SEEN		/LPF
Crystals	MANY AMORPHOUS		

CHEMISTRY

1 **RUTH 5** - Proboscidea Asian Elephant Female

Test Name	Result	Reference Interval	Units
Serum			
Sodium	130	Not established	mEq/L
Potassium	4.5	Not established	mEq/L
Chloride	87	Not established	mEq/L
Bicarbonate	26	Not established	mEq/L
Anion Gap	22	Not established	mEq/L
Urea Nitrogen	15	Not established	mg/dL
Creatinine	1.2	Not established	mg/dL
Calcium	11.3	Not established	mg/dL
Phosphate	5.0	Not established	mg/dL
Magnesium	1.8	Not established	mEq/L
Total Protein	9.9	Not established	g/dL
Albumin	3.4	Not established	g/dL
Globulin	6.5	Not established	g/dL
A/G Ratio	0.5	Not established	

CHEMISTRY

1 RUTH 5 - Proboscidea Asian Elephant Female

Test Name	Result	Reference Interval	Units
Glucose	68	Not established	mg/dL
AST	13	Not established	U/L
SDH	<2	Not established	U/L
Glutamate Dehydrogenase	1	Not established	u/L
GGT	5	Not established	U/L
Total Bilirubin	0.1	Not established	mg/dL
Direct Bilirubin	0.0	Not established	mg/dL
Indirect Bilirubin	0.1	Not established	mg/dL
Creatine Kinase	233	Not established	U/L
Iron	46	Not established	ug/dL
Total Iron Binding Capacity	284	Not established	ug/dL
Saturation	16	Not established	%
Lipemia	6	Not established	

Comment: Lipemia is an approximate measure of the degree of turbidity in the sample as follows: <30 = no turbidity, 30-60 = slight turbidity, 61-120 = moderate turbidity, >120 = marked turbidity. This value correlates weakly to triglyceride (lipid) concentrations.

Hemolysis	7	Not established
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Comment: Hemolysis is an approximate measure of the hemoglobin concentration in mg/dL. This value correlates to visual estimates of hemolysis as follows: <20 = no hemolysis, 20-100 = mild hemolysis, 101-300 = moderate hemolysis, >300 = marked hemolysis.

Icterus	0	Not established
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TOXICOLOGY

607-253-3900

1 RUTH 5 - Proboscidea Asian Elephant Female

Test	Result
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Serum

Vitamin E Alcohol, in serum	Vitamin E: 47 ug/dL
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Comments: The range given for serum vitamin E concentrations in Asian elephants in Nepal was 23 to 150 ug/dL with a mean of 77 ug/dL (Shrestha et al, 1998).

Vitamin E is not stable and some sample characteristics and handling procedures may decrease the concentration of vitamin E present in serum samples. Factors that may affect vitamin E levels in a serum sample include hemolysis, contact with rubber stoppers, repeated freezing and thawing and exposure to light.

Vitamin E is very safe to supplement. Vitamin E toxicosis has rarely been reported in livestock, and only experimentally.

Blood, Whole, Edta

Selenium, whole blood	Quantity: 46.83 ug/dL
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Comments: Reference values given for blood selenium in captive Asian elephants range from 22.7 to 60.4 ppm (Wiedner et al, 2011).

Vitamin E Alcohol, in serum

This analysis was developed to determine the vitamin E (as alpha-tocopherol) concentration in serum samples. Analysis of an inappropriate sample, such as serum collected or stored in gel clot tubes, or plasma instead of serum, could affect the accuracy of the test result.

Medical History Report - Summary for Individual Specimen
BUTTONWOOD PARK ZOO

ELEPHAS MAXIMUS (no subsp)
Asiatic elephant
Name: RUTH

Sex: Female
Age: 55Y 6M 28D

Acc. #: 5
Birth: 29.Oct.1958

.....2014....

- 19.Apr Clinical note recorded. (EK)
- 22.Apr Purpose/Problem: antibiotic plus
Rx: SSD CREAM % topically SID until further notice.
Clinical note recorded. (MS)
- 30.Apr Clinical note recorded. (EK)

- 1.May Blood sample: (EDTA) Hematology/Chemistry/Serology results.
WBC:12.40 *10³/UL; HCT: 33.0%; BUN:12 MG/DL;
Hemolysis
- 8.May Blood sample: (EDTA) (9:30.0) Hematology/Chemistry/Serology results.
HCT: 37.0%;
Blood sample: (EDTA) (9:30.1) Hematology/Chemistry/Serology results.
WBC:11.50 *10³/UL; HCT: 38.0%; BUN:13 MG/DL;
Clinical note recorded. (LAS)

Weight: 3175 Kg (7000 Lb)

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ELEPHAS MAXIMUS (no subsp)

Sex: Female

Acc. #: 5

Asiatic elephant

Age: 55Y 6M 28D

Birth: 29.Oct.1958

Name: RUTH

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Clinical Note:

19.Apr.2014

O: Tail appears very similar to previous exam. There is moderate swelling visible at the caudal aspects of both tarsal joints. It is more evident on the right hind leg. Upon palpation, the swelling feels very firm, as though it is composed of tissue rather than fluid.

A: Swelling at caudal tarsal joints- rule out cellulitis vs. joint capsule swelling vs. abscess, other

Plan: Keepers to monitor closely for change in size or consistency (EK)

Clinical Note:

22.Apr.2014

Rx: SSD CREAM % topically SID until further notice. (MS)

Purpose: antibiotic plus

Prescription Data >>

Starting date: **22.Apr.2014**

Drug: SSD CREAM % topically SID until further notice

Formulation: 10 mg/gm cream

Prescribed by: MS (14.Feb.2014)

Filled by: LAS (14.Feb.2014)

Treatment weight: 3175 kg

Clinical response to treatment: Good

Comments >>

Topical treatment: Apply to to vulva & tail.

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ELEPHAS MAXIMUS (no subsp)

Sex: Female

Acc. #: 5

Asiatic elephant

Age: 55Y 6M 28D

Birth: 29.Oct.1958

=====

Name: RUTH

Clinical Note:

30 Apr. 2014

S: History of severe frostbite injuries-still recovering; continually healing per keepers; Still on antibiotic therapy; Also has history of partial trunk paralysis

O: BAR; BCS 3.5/5; Papillomatous growths and callouses as previously noted; Discolored (hypopigmentation) around margins of pinnae AE from frostbite injury; Eyes- OD corneal scar, OS has star-shaped mineralizations beginning on lens; Oral cavity- Molars are quite discolored and appear irregular; Heart and lungs auscult WNL; GI sounds auscult WNL; G/U- contracting draining tracts and regions of necrosis from frostbite injury around vulva; MSN: distal tail has defined region of necrotic tissue- static (as previously noted). Left caudal hamstring/gluteal region appears swollen and keeper reports that elephant was sensitive in the region yesterday.

A: Healing is progressing from frostbite injuries; Partial tail amputation is likely necessary; Otherwise apparently healthy geriatric elephant; Due to left hamstring/gluteal swelling, no vaccine was given in this area; Rabies vaccine given IM right gluteal (SN: 18210B, exp: 3/19/15)

Plan: Continue current treatment. Monitor left thigh swelling. Will vaccinate in 1-2 weeks when swelling disappears. (EK)

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Clinical Pathology Records - Specimen Report
BUTTONWOOD PARK ZOO

ELEPHAS MAXIMUS (no subsp)
Asiatic elephant
Name: RUTH

Sex: Female
Age: 55Y 6M 2D

Acc. #: 5
Birth: 29.Oct.1958

Collection Information >>

Health Status: Normal
Fasting Time: < 8 hours
Activity: Calm
Weight: 3175 Kg on 28.Feb.2014
Manual restraint used.

Date of Collection: 1.May.2014
Time of Collection:
Collected by: SAM
Sample Collection Site: EAR VEIN

Hematology >>

Analysis Information >>

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

Laboratory: CORNELL
Date of Analysis: 1.May.2014
Time of Analysis:
Analysis by:
Automated analysis.

Tests and Results >>

WHITE BLOOD CELL COUNT	12.4		*10 ³ /UL
RED BLOOD CELL COUNT	< 2.5		*10 ⁶ /UL
HEMOGLOBIN	11.2		GM/DL
HEMATOCRIT	33		%
MCV	132		fL
MCH	44.8		uug
MCHC	33.9		gm/dL
SEGMENTED NEUTROPHILS	50.81	(6.300)	% (*10 ³ /UL) ↑
NEUTROPHILIC BANDS	0.0		% (*10 ³ /UL)
LYMPHOCYTES	< 8.871	(1.100)	% (*10 ³ /UL) ↓
MONOCYTES	37.10	(4.600)	% (*10 ³ /UL) ↓
EOSINOPHILS	3.226	(0.400)	% (*10 ³ /UL)
BASOPHILS	< 0.0		% (*10 ³ /UL)
ESTIMATED PLATELET COUNT	ADEQU		
PLATELET COUNT	535		*10 ³ /UL

Comments >>

MCV = 130
MCH = 45
MCHC = 34
RDW = 15.7%
MPV = 7.3fL
Plasma appearance = slight hemolysis
WBC Exam = NSF
RBC Exam = moderate rouleaux
Parasites = NPS

ISIS reference values are for ELEPHAS MAXIMUS
Printed on: 27.May.2014

/ISIS/MedARKS/5.54.c

Clinical Pathology Records - Specimen Report
 BUTTONWOOD PARK ZOO

ELEPHAS MAXIMUS (no subsp)
Asiatic elephant
 Name: RUTH

Sex: Female
 Age: 55Y 6M 2D

Acc. #: 5
 Birth: 29.Oct.1958

Collection Information >>

Health Status: Normal
 Fasting Time: < 8 hours
 Activity: Calm
 Weight: 3175 Kg on 28.Feb.2014
 Manual restraint used.

Date of Collection: **1.May.2014**
 Time of Collection:
 Collected by: SAM
 Sample Collection Site: EAR VEIN

Chemistry >>

Analysis Information >>

Chemistry Sample: Serum
 Storage: Refrigerated (<48 hours)
 Sample Quality: hemolysis

Laboratory: **CORNELL**
 Date of Analysis: **1.May.2014**
 Time of Analysis:
 Analysis by:
 Automated analysis.

Tests and Results >>

GLUCOSE	97	MG/DL
BLOOD UREA NITROGEN	12	MG/DL
CREATININE	1.3	MG/DL
BUN/creatinine ratio	9.23	
CALCIUM	10.8	MG/DL
SODIUM	128	MEQ/L
POTASSIUM	< 3.8	MEQ/L
sodium/potassium ratio	33.7	
CHLORIDE	89	MEQ/L
IRON	45	MCG/DL
MAGNESIUM	1.9	MG/DL
BICARBONATE	25	MMOL/L
TOTAL PROTEIN (COLORIMETRY)	> 9	GM/DL
TOTAL PROTEIN (REFRACTOMETER)	>> 9.6	GM/DL
ALBUMIN (COLORIMETRY)	3.4	GM/DL
GLOBULIN (COLORIMETRY)	5.6	GM/DL
albumin/globulin ratio	0.607	
ASPARTATE AMINOTRANSFERASE	14	IU/L
TOTAL BILIRUBIN	0.1	MG/DL
DIRECT BILIRUBIN	0.0	MG/DL
INDIRECT BILIRUBIN	0.1	MG/DL
CREATINE PHOSPHOKINASE	148	IU/L
GAMMA GLUTAMYLTRANSFERASE	3	IU/L
SORBITOL DEHYDROGENASE	<2	SFU

Comments >>

Anion Gap = 18
 Phosphate = 3.8
 A/G Ratio = 0.6
 Glutamate Dehydrogenase = 1
 Total binding capacity = 264

ISIS reference values are for ELEPHAS MAXIMUS
 Printed on: 27.May.2014

/ISIS/MedARKS/5.54.c

Clinical Pathology Records - Specimen Report
BUTTONWOOD PARK ZOO

=====

ELEPHAS MAXIMUS (no subsp)

Sex: Female

Acc. #: 5

Asiatic elephant

Age: 55Y 6M 2D

Birth: 29.Oct.1958

Name: RUTH

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Chemistry >>

Comments >>

Saturation = 17

Vitamin E = 39

Selenium = 27.45

ELEPHAS MAXIMUS (no subsp)
Asiatic elephant
Name: RUTH

Sex: Female
Age: 55Y 6M 2D

Acc. #: 5
Birth: 29.Oct.1958

Clinical Note:

8 May 2014

<<< Urinalysis >>>

Sample Accession #:64916-14

Laboratory: [] Antech
[] Idexx n
[X] Cornell
[] In-house

Date collected: 05082014
Date received: 05092014

Analysis by:

Sample collection:
[] floor
[X] mid-stream
[] catheter
[] cystocentesis

Sample storage:
[] room temperature
[X] refrigerated
[] frozen

Color:Lt. yellow
USG:1.016

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

Leukocytes: -
Nitrite: -
Urobilinogen: -
Protein: NEG
pH: 8
Blood: None Seen
Ketones: Trace
Bilirubin: NEG
Glucose: NEG
Heme: NEG

RBC/hpf:None Seen
WBC/hpf:None Seen
Bacteria/hpf:None Seen
Casts/lpf:None Seen
Crystals:many calcium carbonate

Debris: None Seen
Epithelial cells: None Seen
Mucus: None Seen
Fat Drops: None Seen

Comments:

A weak positive reaction for ketones on the dipstick (5mg/dL) is likely a false positive due to color interference with the pad. (LAS)

Clinical Pathology Records - Specimen Report
BUTTONWOOD PARK ZOO

ELEPHAS MAXIMUS (no subsp)
Asiatic elephant
Name: RUTH

Sex: Female Acc. #: 5
Age: 55Y 6M 9D Birth: 29.Oct.1958

Collection Information >>

Health Status: Normal
Fasting Time: < 8 hours
Activity: Calm
Weight: 3175 Kg on 8.May.2014
Manual restraint used.

Date of Collection: **8.May.2014**
Time of Collection: 9:30.0
Collected by: SAM
Sample Collection Site: EAR VEIN

Hematology >>

Analysis Information >>

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

Laboratory: **IN_HOUSE**
Date of Analysis: **8.May.2014**
Time of Analysis: 10:30
Analysis by: LAS
Manual analysis.

Tests and Results >>

HEMATOCRIT 37 %

Chemistry >>

Analysis Information >>

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

Laboratory: **IN_HOUSE**
Date of Analysis: **8.May.2014**
Time of Analysis:
Analysis by: LAS
Automated analysis.

Tests and Results >>

TOTAL PROTEIN (REFRACTOMETER) > 9 GM/DL

Clinical Pathology Records - Specimen Report
BUTTONWOOD PARK ZOO

ELEPHAS MAXIMUS (no subsp)
Asiatic elephant
Name: RUTH

Sex: Female
Age: 55Y 6M 9D

Acc. #: 5
Birth: 29.Oct.1958

Collection Information >>

Health Status: Normal
Fasting Time: < 8 hours
Activity: Calm
Weight: 3175 Kg on 8.May.2014
Manual restraint used.

Date of Collection: 8.May.2014
Time of Collection: 9:30.1
Collected by: SAM
Sample Collection Site: EAR VEIN

Hematology >>

Analysis Information >>

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

Laboratory: CORNELL
Date of Analysis: 8.May.2014
Time of Analysis:
Analysis by:
Automated analysis.

Tests and Results >>

WHITE BLOOD CELL COUNT	11.5		*10 ³ /UL
RED BLOOD CELL COUNT	2.9		*10 ⁶ /UL
HEMOGLOBIN	13.3		GM/DL
HEMATOCRIT	38		%
MCV	131		fL
MCH	45.9		uug
MCHC	35.0		gm/dL
SEGMENTED NEUTROPHILS	28.70	(3.301)	% (*10 ³ /UL)
NEUTROPHILIC BANDS	0.0		% (*10 ³ /UL)
LYMPHOCYTES	33.04	(3.800)	% (*10 ³ /UL)
MONOCYTES	37.39	(4.300)	% (*10 ³ /UL)
EOSINOPHILS	.8696	(0.100)	% (*10 ³ /UL)
BASOPHILS	< 0.0		% (*10 ³ /UL)
ESTIMATED PLATELET COUNT	ADEQU		
PLATELET COUNT	642		*10 ³ /UL

Comments >>

MCV = 131
MCH = 45
MCHC = 35
RDW = 15.4
MPV = 6.6
Plasma protien = WNL
WBC exam = nsf
RBC Morphology = NSF
Parasites = NPS

Clinical Pathology Records - Specimen Report
 BUTTONWOOD PARK ZOO

ELEPHAS MAXIMUS (no subsp)
Asiatic elephant
 Name: RUTH

Sex: Female
 Age: 55Y 6M 9D

Acc. #: 5
 Birth: 29.Oct.1958

Collection Information >>

Health Status: Normal
 Fasting Time: < 8 hours
 Activity: Calm
 Weight: 3175 Kg on 8.May.2014
 Manual restraint used.

Date of Collection: **8.May.2014**
 Time of Collection: 9:30.1
 Collected by: SAM
 Sample Collection Site: EAR VEIN

Chemistry >>

Analysis Information >>

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

Laboratory: **CORNELL**
 Date of Analysis: **8.May.2014**
 Time of Analysis:
 Analysis by:
 Automated analysis.

Tests and Results >>

GLUCOSE	86	MG/DL
BLOOD UREA NITROGEN	13	MG/DL
CREATININE	1.3	MG/DL
BUN/creatinine ratio	10.0	
CALCIUM	11.2	MG/DL
SODIUM	128	MEQ/L
POTASSIUM	4.1	MEQ/L
sodium/potassium ratio	31.2	
CHLORIDE	89	MEQ/L
IRON	42	MCG/DL
MAGNESIUM	2.0	MG/DL
BICARBONATE	25	MMOL/L
TOTAL PROTEIN (COLORIMETRY)	> 9.2	GM/DL
TOTAL PROTEIN (REFRACTOMETER)	>> 9.3	GM/DL
ALBUMIN (COLORIMETRY)	3.3	GM/DL
GLOBULIN (COLORIMETRY)	5.9	GM/DL
albumin/globulin ratio	0.559	
ASPARTATE AMINOTRANSFERASE	15	IU/L
TOTAL BILIRUBIN	0.1	MG/DL
DIRECT BILIRUBIN	0.1	MG/DL
INDIRECT BILIRUBIN	0.0	MG/DL
CREATINE PHOSPHOKINASE	200	IU/L
GAMMA GLUTAMYLTRANSFERASE	3	IU/L
SORBITOL DEHYDROGENASE	3	SFU

Comments >>

Anion gap = 18
 Phosphate = 4.7
 A/G ratio = 0.6
 Glutamate dehydrogenase = 1
 Total iron binding capacity = 249

ISIS reference values are for ELEPHAS MAXIMUS
 Printed on: 27.May.2014

/ISIS/MedARKS/5.54.c

Clinical Pathology Records - Specimen Report
BUTTONWOOD PARK ZOO

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ELEPHAS MAXIMUS (no subsp)

Sex: Female

Acc. #: 5

Asiatic elephant

Age: 55Y 6M 9D

Birth: 29.Oct.1958

Name: RUTH

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Chemistry >>

Comments >>

Saturation = 17

ISIS reference values are for ELEPHAS MAXIMUS
Printed on: 27.May.2014

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