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*ELEPHAS MAXIMUS (no subsp)*  
Asiatic elephant  
Name: MARI

Sex: Female                      Acc. #: 821294  
Age: 32Y Est.                    Birth: 24.Jul.1975

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**Parasitology Examination:**

**Submission Data >>**

Type: Fecal sample  
Purpose: ROUTINE EXAMINATION

Sample id.: 2005-0440  
Date collected: 14.Oct.2005  
Time collected: 11:00  
Collected by: MD

**Collected from:**

From an individual specimen.

Enclosure: ME1

**Examination Data >>**

Storage: room temperature  
Consistency: formed  
Gross appearance: Typical

Date examined: 14.Oct.2005  
at: 11:30  
by: BJ

**Tests & Results >>**

FLOATATION - NA NITRATE                      NEGATIVE

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**Clinical Note:**

26.Jun.2006

Microbiology: Swab submitted for aerobic bacterial culture.  
Req: 1036818                      Lab#: L0150250  
Lab: Idexx

**Results:**

Bacillus Species - 3+  
Enterobacter Species - 3+  
Delftia Acidovorans - 3+ (BJ)

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Medical History Report - Summary for Individual Specimen  
HONOLULU ZOO

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<i>ELEPHAS MAXIMUS (no subsp)</i>	Sex: Female	Acc. #: 821294
<b>Asiatic elephant</b>	Age: 32Y Est.	Birth: 24.Jul.1975
Name: MARI		
Tag/Band: YELLOW 13 R- LOST BA		

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.....2005....

14.Oct Parasitology examination: (ROUTINE EXAMINATION) Fecal sample.  
NEGATIVE

.....2006....

26.Jun Clinical note recorded. (BJ)

8.Oct Blood sample: (EDTA) Hematology/Chemistry/Serology results.  
WBC:9.60 \*10<sup>3</sup>/UL; HCT: 35.3%; BUN:10 MG/DL;

11.Oct Parasitology examination: (ROUTINE EXAMINATION) Fecal sample.  
NEGATIVE

20.Oct Parasitology examination: (FOLLOW-UP/RECHECK EXAMINATION) Fecal sample  
NEGATIVE

1.Nov Clinical note recorded. (BJ)

Clinical Pathology Records - Specimen Report  
HONOLULU ZOO

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ELEPHAS MAXIMUS (no subsp)           Sex: Female           Acc. #: 821294
Asiatic elephant                     Age: 32Y Est.        Birth: 24.Jul.1975
Name: MARI
Tag/Band: YELLOW 13 R- LOST BA
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Collection Information >>

Health Status: Normal  
Fasting Time: < 8 hours  
Activity: Active  
Weight: 4378 Kg on 21.Sep.2004  
Manual restraint used.

Date of Collection: 8.Oct.2006  
Time of Collection:  
Collected by:  
Sample Collection Site: EAR VEIN

Hematology >>

Analysis Information >>

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

Laboratory: IDEXX  
Date of Analysis: 8.Oct.2006  
Time of Analysis:  
Analysis by:  
Automated analysis.

Tests and Results >>

WHITE BLOOD CELL COUNT	<	9.6		*10 <sup>3</sup> /UL
RED BLOOD CELL COUNT		3.14		*10 <sup>6</sup> /UL
HEMOGLOBIN		12.8		GM/DL
HEMATOCRIT		35.3		%
MCV		112		fL
MCH		40.8		uug
MCHC		36.3		gm/dL
SEGMENTED NEUTROPHILS		70	(6.720)	% (*10 <sup>3</sup> /UL)
NEUTROPHILIC BANDS		0		% (*10 <sup>3</sup> /UL)
LYMPHOCYTES		22	(2.112)	% (*10 <sup>3</sup> /UL)
MONOCYTES	<	6	(0.576)	% (*10 <sup>3</sup> /UL)
EOSINOPHILS		2	(0.192)	% (*10 <sup>3</sup> /UL)
BASOPHILS	<	0		% (*10 <sup>3</sup> /UL)
PLATELET COUNT		349		*10 <sup>3</sup> /UL

Morphology Results >>

ANISOCYTOSIS SLGHT

Comments >>

Platelets - Clumped  
Platelet count reflects minimum value.  
Slide reviewed microscopically.

Clinical Pathology Records - Specimen Report  
HONOLULU ZOO

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Asiatic elephant                     Age: 32Y Est.        Birth: 24.Jul.1975
Name: MARI
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Collection Information >>

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Health Status: Normal
Fasting Time: < 8 hours
Activity: Active
Weight: 4378 Kg on 21.Sep.2004
Manual restraint used.

```

```

Date of Collection: 8.Oct.2006
Time of Collection:
Collected by:
Sample Collection Site: EAR VEIN

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Chemistry >>

Analysis Information >>

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

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Laboratory: IDEXX
Date of Analysis: 8.Oct.2006
Time of Analysis:
Analysis by:
Automated analysis.

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Tests and Results >>

GLUCOSE	85	MG/DL
BLOOD UREA NITROGEN	10	MG/DL
CREATININE	1.7	MG/DL
BUN/creatinine ratio	5.88	
CALCIUM	10.6	MG/DL
PHOSPHORUS	5.5	MG/DL
calcium/phosphorus ratio	1.93	
SODIUM	129	MEQ/L
POTASSIUM	4.8	MEQ/L
sodium/potassium ratio	26.9	
CHLORIDE	89	MEQ/L
BICARBONATE	27	MMOL/L
CHOLESTEROL	47	MG/DL
TOTAL PROTEIN (COLORIMETRY)	8.1	GM/DL
ALBUMIN (COLORIMETRY)	3.0	GM/DL
GLOBULIN (COLORIMETRY)	5.1	GM/DL
albumin/globulin ratio	0.588	
ASPARTATE AMINOTRANSFERASE	< 10	IU/L
TOTAL BILIRUBIN	0.2	MG/DL
DIRECT BILIRUBIN	0.2	MG/DL
INDIRECT BILIRUBIN	0.0	MG/DL
ALKALINE PHOSPHATASE	142	IU/L
CREATINE PHOSPHOKINASE	227	IU/L
ALBUMIN GLOBULIN RATIO	0.6	GM/DL
ANION GAP	18	MEQ/L
BUN/CREATININE RATIO	5.9	MG/DL
FIBRINOGEN	300	MG/DL
GAMMA GLUTAMYLTRANSFERASE	> 16	IU/L
SODIUM POTASSIUM RATIO	27	

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Asiatic elephant	Age: 32Y Est.	Birth: 24.Jul.1975
Name: MARI		

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**Parasitology Examination:**

<b>Submission Data &gt;&gt;</b>	Sample id.: 2006-0456
Type: Fecal sample	Date collected: 11.Oct.2006
Purpose: ROUTINE EXAMINATION	Time collected: 14:20
	Collected by: EB

<b>Collected from:</b>	Enclosure: ME1
From an individual specimen.	

<b>Examination Data &gt;&gt;</b>	Date examined: 11.Oct.2006
Storage: refrigerated	at: 14:30
Consistency: soft	by: BJ
Gross appearance: Typical	

<b>Tests &amp; Results &gt;&gt;</b>	
FLOATATION - NA NITRATE	NEGATIVE

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<b>Submission Data &gt;&gt;</b>	Sample id.: 2006-0464
Type: Fecal sample	Date collected: 20.Oct.2006
Purpose: FOLLOW-UP/RECHECK EXAMINATION	Time collected: 10:30
	Collected by: MD

<b>Collected from:</b>	Enclosure: ME1
From an individual specimen.	

<b>Examination Data &gt;&gt;</b>	Date examined: 20.Oct.2006
Storage: refrigerated	at: 14:00
Consistency: formed	by: BJ
Gross appearance: Typical	

<b>Tests &amp; Results &gt;&gt;</b>	
FLOATATION - NA NITRATE	NEGATIVE

=====

<i>ELEPHAS MAXIMUS</i> (no subsp)	Sex: Female	Acc. #: 821294
Asiatic elephant	Age: 32Y Est.	Birth: 24.Jul.1975
Name: MARI		
Tag/Band: YELLOW 13 R- LOST BA		

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**Clinical Note:** 1.Nov.2006

TEST: TB Trunk Wash to test for Mycobacteria Isolation  
Lab: National Veterinary Services Laboratories

NVSL #	Case#	Sample ID	Animal Acc#
1530813	0610126	8/20/06	821294
1530814	0610127	8/21/06	821294
1530815	0610128	8/22/06	821294

RESULTS:  
NO MYCOBACTERIA ISOLATED (BJ)

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

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

		ISIS Values		Min.	Max.	(N)
		Mean	S.D.			
WBC	*10 <sup>3</sup> /UL	14.43 ±	4.409	5.800	33.30	(1779)
RBC	*10 <sup>6</sup> /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 <sup>3</sup> /UL	4.822 ±	2.925	0.291	23.90	(1502)
BANDS	*10 <sup>3</sup> /UL	1.402 ±	2.124	0.000	11.40	(307)
LYMPHOCYTES	*10 <sup>3</sup> /UL	5.243 ±	3.223	0.196	20.60	(1513)
MONOCYTES	*10 <sup>3</sup> /UL	3.677 ±	2.909	0.000	9.983	(1273)
EOSINOPHILS	*10 <sup>3</sup> /UL	0.465 ±	0.551	0.000	4.520	(1093)
BASOPHILS	*10 <sup>3</sup> /UL	0.173 ±	0.105	0.000	0.508	(119)
NRBC	/100 WBC	1 ±	1	0	3	(85)
PLATE. CNT.	*10 <sup>3</sup> /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  
HONOLULU ZOO

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

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

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