

Clinical Pathology Records - Specimen Report  
KANSAS CITY ZOOLOGICAL PARK

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=====
Scientific Name: LOXODONTA AFRICANA (no subsp)           Accession #: 1669
Common Name: African elephant                             Female
Name: LEA                                                Birth: 17.Sep.1978 (Estimated)
                                                         Age: 28Y Est.
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Collection Information >>
Health Status: Normal
Fasting Time: < 8 hours
Activity: Active
Weight: 4088 Kg on 16.Nov.2005
Manual restraint used.

Date of Collection: 3.Jul.2006
Time of Collection: 8:00.0
Collected by: ANL
Sample Collection Site: EAR VEIN

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

Laboratory: ANTECH
Date of Analysis: 5.Jul.2006
Time of Analysis: 14:27
Analysis by:
Automated analysis.

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Tests and Results >>			ISIS Reference Values >>				
			Mean	S.D.	Min.	Max.	(N)
WBC	*10 <sup>3</sup> /UL	11.0	10.50±	2.648	4.500	22.10	(1544)
RBC	*10 <sup>6</sup> /UL	2.9	3.15±	0.40	2.05	4.80	(1480)
HGB	GM/DL	13.1	13.7±	1.6	7.0	26.1	(1522)
HCT	%	37	39.5±	4.6	27.0	56.0	(1984)
MCV	fL	128	125.8±	8.1	91.1	190.0	(1466)
MCH	uug	45.2	43.6±	3.0	34.8	66.8	(1454)
MCHC	gm/dL	35.4	34.7±	2.0	18.4	57.9	(1501)
SEGS	% (*10 <sup>3</sup> /UL)	37 (4.070)	3.146±	1.695	0.000	11.80	(1224)
LYMPHOCYTES	% (*10 <sup>3</sup> /UL)	41 (4.510)	4.913±	2.532	0.022	17.40	(1236)
MONOCYTES	% (*10 <sup>3</sup> /UL)	22 (2.420)	1.513±	1.651	0.000	9.480	(1175)
PLATE. EST.		ADEQU					
PLATE. CNT.	*10 <sup>3</sup> /UL	358	417±	245	74	1380	(215)
ABSLYMP	/UL	4510					
ABSMONO	/UL	2420					
FIBRINOGEN	MG/DL	>> 757	238±	139	0	600	(70)
MCH	UUG	45.4					
MCHC	%	35					
MCV	U(3)	129					

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Morphology Results >>
ANISOCYTOSIS +2

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Comments >>
Frequent platelet clumps are present on the blood smear.
slight degeneration of SBC.

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Scientific Name: *LOXODONTA AFRICANA* (no subsp) Accession #: 1669  
Common Name: African elephant Female  
Name: LEA Birth: 17.Sep.1978 (Estimated)  
Age: 28Y Est.

Collection Information >>

Health Status: Normal  
Fasting Time: < 8 hours  
Activity: Active  
Weight: 4088 Kg on 16.Nov.2005  
Manual restraint used.

Date of Collection: 3.Jul.2006  
Time of Collection: 8:00.0  
Collected by: ANL  
Sample Collection Site: EAR VEIN

Chemistry >>

Analysis Information >>

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

Laboratory: ANTECH  
Date of Analysis: 5.Jul.2006  
Time of Analysis: 14:27  
Analysis by:  
Automated analysis.

Tests and Results >>

				ISIS Reference Values >>				
				Mean	S.D.	Min.	Max.	(N)
GLUCOSE	MG/DL	>>	119	84±	15	38	174	(1437)
BUN	MG/DL	<	5	10±	3	0	22	(1458)
CREAT.	MG/DL		1.2	1.5±	0.5	0.0	11.0	(1405)
BUN/Cr ratio			4.17					
CA	MG/DL		10.7	10.9±	0.6	8.1	15.3	(1434)
PHOS	MG/DL	<	4.0	4.9±	0.8	2.8	8.2	(1291)
Ca/P ratio			2.68					
NA	MEQ/L		129	129±	4	107	182	(1353)
K	MEQ/L		4.3	4.8±	0.5	3.3	7.6	(1368)
Na/K ratio			30.0					
CHOL	MG/DL	>>	114	68±	17	0	234	(1290)
T.PROT. (C)	GM/DL		8.2	7.7±	0.6	5.8	10.5	(1261)
ALBUMIN (C)	GM/DL	<	3.1	3.6±	0.4	2.4	5.2	(1145)
GLOBULIN (C)	GM/DL	>	5.1	4.1±	0.5	2.6	6.4	(1135)
Alb/Glob rat			0.608					
AST (SGOT)	IU/L		21	24±	10	6	93	(1398)
T. BILI.	MG/DL		0.2	0.2±	0.1	0.0	1.0	(1187)
ALK.PHOS.	IU/L		92	128±	61	32	441	(1404)
CPK	IU/L	>>	1370	256±	196	18	1884	(247)
A/G RATIO	GM/DL		0.6					
BUN/CREAT	MG/DL		4					
GGT	IU/L		11	12±	5	0	37	(389)
NA/K RATIO	RATIO		30					

Comments >>

Significant elevation of fibrinogen compatible with trauma from tusk damage and damaged root. Slight elevation of globulins. Significant elevation of CPK also. Compatible with trauma from interspecific aggression. per WKS.

ISIS reference values are for *LOXODONTA AFRICANA*  
Printed on: 21.Oct.2006

/ISIS/MedARKS/5.32a

Clinical Pathology Records - Specimen Report  
KANSAS CITY ZOOLOGICAL PARK

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=====
Scientific Name: LOXODONTA AFRICANA (no subsp)           Accession #: 1669
Common Name: African elephant                             Female
Name: LEA                                                Birth: 17.Sep.1978 (Estimated)
                                                         Age: 28Y Est.
=====

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Collection Information >>

Health Status: Abnormal

Date of Collection: 24.Jul.2006

Time of Collection:

Collected by:

Sample Collection Site: from Floor

Weight: 4088 Kg on 16.Nov.2005

Analysis Information >>

Sample type: Urine

Storage: Refrigerated (<48 hours)

Sample Quality: No quality problems.

Laboratory: IN HOUSE

Date of Analysis: 25.Jul.2006

Time of Analysis:

Analysis by:

Manual analysis.

Tests and Results >>

ISIS Reference Values >>

Mean	S.D.	Min.	Max.	(N)
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appearance	CLEAR
color	PLYELL
PH URINE	8.0
SG	1.005
urine bacter	COCCI+
urine biliru	NEG
urine blood	NEG
urine casts	-
urine crysta	OXALAT
urine epithe	SQUAMO
urine glucos MG/DL	NEG
urine ketone	NEG
urine nitrit	NEG
urine protei	NEG
urine rbc/hp	-
urine urobil	NORMAL
urine wbc/hp	-

Comments >>

Epithelial cells: squamous (occ)

Clinical Pathology Records - Specimen Report  
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Scientific Name: *LOXODONTA AFRICANA* (no subsp)  
Common Name: African elephant  
Name: LEA

Accession #: 1669  
Female  
Birth: 17.Sep.1978 (Estimated)  
Age: 27Y Est.

Collection Information >>

Health Status: Normal  
Fasting Time: < 8 hours  
Activity: Active  
Weight: 2948 Kg on 28.May.1997  
Manual restraint used.

Date of Collection: 25.Oct.2005  
Time of Collection: 9:00.0  
Collected by:  
Sample Collection Site: EAR VEIN

Hematology >>

Analysis Information >>

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

Laboratory: ANTECH  
Date of Analysis: 26.Oct.2005  
Time of Analysis:  
Analysis by:  
Automated analysis.

Tests and Results >>

ISIS Reference Values >>

				Mean	S.D.	Min.	Max.	(N)
WBC	*10 <sup>3</sup> /UL	9.0		10.50±	2.648	4.500	22.10	(1544)
RBC	*10 <sup>6</sup> /UL	3.1		3.15±	0.40	2.05	4.80	(1480)
HGB	GM/DL	14.5		13.7±	1.6	7.0	26.1	(1522)
HCT	%	41		39.5±	4.6	27.0	56.0	(1984)
MCV	fL	132		125.8±	8.1	91.1	190.0	(1466)
MCH	uug	> 46.8		43.6±	3.0	34.8	66.8	(1454)
MCHC	gm/dL	35.4		34.7±	2.0	18.4	57.9	(1501)
SEGS	% (*10 <sup>3</sup> /UL)	38	(3.420)	3.146±	1.695	0.000	11.80	(1224)
LYMPHOCYTES	% (*10 <sup>3</sup> /UL)	60	(5.400)	4.913±	2.532	0.022	17.40	(1236)
MONOCYTES	% (*10 <sup>3</sup> /UL)	1	(0.090)	1.513±	1.651	0.000	9.480	(1175)
EOSINOPHILS	% (*10 <sup>3</sup> /UL)	1	(0.090)	0.225±	0.273	0.000	2.898	(885)
BASOPHILS	% (*10 <sup>3</sup> /UL)	0		0.049±	0.081	0.000	0.525	(464)
PLATE. EST.		ADEQ						
PLATE. CNT.	*10 <sup>3</sup> /UL	314		417±	245	74	1380	(215)
ABSBASO	/UL	0						
ABSEOS	\UL	90						
ABSLYMP	/UL	5400						
ABSMONO	/UL	90						
ABSSEGS	/UL	3420						
FIBRINOGEN	MG/DL	200		238±	139	0	600	(70)
MCH	UUG	46.2						
MCHC	%	36						
MCV	U(3)	132						

Comments >>

RBC Morph: Normal

Clinical Pathology Records - Specimen Report  
KANSAS CITY ZOOLOGICAL PARK

Scientific Name: *LOXODONTA AFRICANA* (no subsp)  
Common Name: African elephant  
Name: LEA

Accession #: 1669  
Female  
Birth: 17.Sep.1978 (Estimated)  
Age: 27Y Est.

Collection Information >>

Health Status: Normal  
Fasting Time: < 8 hours  
Activity: Active  
Weight: 2948 Kg on 28.May.1997  
Manual restraint used.

Date of Collection: 25.Oct.2005  
Time of Collection: 9:00.0  
Collected by:  
Sample Collection Site: EAR VEIN

Chemistry >>

Analysis Information >>

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

Laboratory: ANTECH  
Date of Analysis: 26.Oct.2005  
Time of Analysis:  
Analysis by:  
Automated analysis.

Tests and Results >>

ISIS Reference Values >>

			Mean	S.D.	Min.	Max.	(N)
GLUCOSE	MG/DL	86	84±	15	38	174	(1437)
BUN	MG/DL	< 5	10±	3	0	22	(1458)
CREAT.	MG/DL	1.4	1.5±	0.5	0.0	11.0	(1405)
BUN/Cr ratio		3.57					
CA	MG/DL	< 10.1	10.9±	0.6	8.1	15.3	(1434)
PHOS	MG/DL	4.9	4.9±	0.8	2.8	8.2	(1291)
Ca/P ratio		2.06					
NA	MEQ/L	< 122	129±	4	107	182	(1353)
K	MEQ/L	4.9	4.8±	0.5	3.3	7.6	(1368)
Na/K ratio		24.9					
CL	MEQ/L	84	88±	4	67	129	(1323)
CHOL	MG/DL	> 93	68±	17	0	234	(1290)
T.PROT. (C)	GM/DL	7.6	7.7±	0.6	5.8	10.5	(1261)
ALBUMIN (C)	GM/DL	< 3.1	3.6±	0.4	2.4	5.2	(1145)
GLOBULIN (C)	GM/DL	4.5	4.1±	0.5	2.6	6.4	(1135)
Alb/Glob rat		0.689					
AST (SGOT)	IU/L	16	24±	10	6	93	(1398)
T. BILI.	MG/DL	0.1	0.2±	0.1	0.0	1.0	(1187)
ALK.PHOS.	IU/L	89	128±	61	32	441	(1404)
LDH	IU/L	< 370	988±	568	157	4306	(1099)
CPK	IU/L	153	256±	196	18	1884	(247)
A/G RATIO	GM/DL	0.7					
BUN/CREAT	MG/DL	4					
GGT	IU/L	9	12±	5	0	37	(389)
NA/K RATIO	RATIO	25					

Comments >>

WNL. WKS

Clinical Pathology Records - Specimen Report  
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Scientific Name: *LOXODONTA AFRICANA* (no subsp)  
Common Name: African elephant  
Name: LEA

Accession #: 1669  
Female  
Birth: 17.Sep.1978 (Estimated)  
Age: 27Y Est.

Collection Information >>

Health Status: Abnormal  
Fasting Time: < 8 hours  
Activity: Active  
Weight: 2948 Kg on 28.May.1997  
Manual restraint used.

Date of Collection: 11.Oct.2005  
Time of Collection: 9:00.0  
Collected by:  
Sample Collection Site: EAR VEIN

Hematology >>

Analysis Information >>

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

Laboratory: ANTECH  
Date of Analysis: 12.Oct.2005  
Time of Analysis:  
Analysis by:  
Automated analysis.

Tests and Results >>

ISIS Reference Values >>

			Mean	S.D.	Min.	Max.	(N)
WBC	*10 <sup>3</sup> /UL	8.9	10.50±	2.648	4.500	22.10	(1544)
RBC	*10 <sup>6</sup> /UL	3.2	3.15±	0.40	2.05	4.80	(1480)
HGB	GM/DL	14.7	13.7±	1.6	7.0	26.1	(1522)
HCT	%	41	39.5±	4.6	27.0	56.0	(1984)
MCV	fL	128	125.8±	8.1	91.1	190.0	(1466)
MCH	uug	45.9	43.6±	3.0	34.8	66.8	(1454)
MCHC	gm/dL	35.9	34.7±	2.0	18.4	57.9	(1501)
SEGS	% (*10 <sup>3</sup> /UL)	31 (2.759)	3.146±	1.695	0.000	11.80	(1224)
LYMPHOCYTES	% (*10 <sup>3</sup> /UL)	48 (4.272)	4.913±	2.532	0.022	17.40	(1236)
MONOCYTES	% (*10 <sup>3</sup> /UL)	20 (1.780)	1.513±	1.651	0.000	9.480	(1175)
EOSINOPHILS	% (*10 <sup>3</sup> /UL)	1 (0.089)	0.225±	0.273	0.000	2.898	(885)
BASOPHILS	% (*10 <sup>3</sup> /UL)	0	0.049±	0.081	0.000	0.525	(464)
PLATE. EST.	ADEQ						
PLATE. CNT.	*10 <sup>3</sup> /UL	300	417±	245	74	1380	(215)
ABSBASO	/UL	0					
ABSEOS	\UL	89					
ABSLYMP	/UL	4272					
ABSMONO	/UL	1780					
ABSSEGS	/UL	2759					
FIBRINOGEN	MG/DL	200	238±	139	0	600	(70)
MCH	UUG	46.5					
MCHC	%	36					
MCV	U(3)	128					

Comments >>

RBC Morph: Normal

Clinical Pathology Records - Specimen Report  
KANSAS CITY ZOOLOGICAL PARK

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=====
Scientific Name: LOXODONTA AFRICANA (no subsp)      Accession #: 1669
Common Name: African elephant                      Female
Name: LEA                                           Birth: 17.Sep.1978 (Estimated)
                                                    Age: 27Y Est.
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Collection Information >>
Health Status: Abnormal
Fasting Time: < 8 hours
Activity: Active
Weight: 2948 Kg on 28.May.1997
Manual restraint used.

Date of Collection: 11.Oct.2005
Time of Collection: 9:00.0
Collected by:
Sample Collection Site: EAR VEIN

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

Laboratory: ANTECH
Date of Analysis: 12.Oct.2005
Time of Analysis:
Analysis by:
Automated analysis.

```

Tests and Results >>		ISIS Reference Values >>					
			Mean	S.D.	Min.	Max.	(N)
GLUCOSE	MG/DL	90	84±	15	38	174	(1437)
BUN	MG/DL	7	10±	3	0	22	(1458)
CREAT.	MG/DL	1.0	1.5±	0.5	0.0	11.0	(1405)
BUN/Cr ratio		7.00					
CA	MG/DL	> 11.8	10.9±	0.6	8.1	15.3	(1434)
PHOS	MG/DL	5.0	4.9±	0.8	2.8	8.2	(1291)
Ca/P ratio		2.36					
NA	MEQ/L	133	129±	4	107	182	(1353)
K	MEQ/L	4.7	4.8±	0.5	3.3	7.6	(1368)
Na/K ratio		28.3					
CL	MEQ/L	89	88±	4	67	129	(1323)
CHOL	MG/DL	>> 106	68±	17	0	234	(1290)
T.PROT. (C)	GM/DL	7.8	7.7±	0.6	5.8	10.5	(1261)
ALBUMIN (C)	GM/DL	< 3.0	3.6±	0.4	2.4	5.2	(1145)
GLOBULIN (C)	GM/DL	> 4.8	4.1±	0.5	2.6	6.4	(1135)
Alb/Glob rat		0.625					
AST (SGOT)	IU/L	22	24±	10	6	93	(1398)
T. BILI.	MG/DL	0.1	0.2±	0.1	0.0	1.0	(1187)
ALK.PHOS.	IU/L	86	128±	61	32	441	(1404)
LDH	IU/L	< 376	988±	568	157	4306	(1099)
CPK	IU/L	>> 767	256±	196	18	1884	(247)
A/G RATIO	GM/DL	0.6					
BUN/CREAT	MG/DL	7					
GGT	IU/L	10	12±	5	0	37	(389)
NA/K RATIO	RATIO	28					

Clinical Pathology Records - Specimen Report  
KANSAS CITY ZOOLOGICAL PARK

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=====
Scientific Name: LOXODONTA AFRICANA (no subsp)      Accession #: 1669
Common Name: African elephant                      Female
Name: LEA                                          Birth: 17.Sep.1978 (Estimated)
                                                    Age: 27Y Est.
=====

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Collection Information >>

```

Health Status: Normal
Fasting Time: < 8 hours
Activity: Active
Weight: 2948 Kg on 28.May.1997
Manual restraint used.

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Date of Collection: 4.Oct.2005
Time of Collection:
Collected by:
Sample Collection Site: EAR VEIN

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Hematology >>

Analysis Information >>

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

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Laboratory: ANTECH
Date of Analysis: 5.Oct.2005
Time of Analysis:
Analysis by:
Automated analysis.

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Tests and Results >>

ISIS Reference Values >>

			Mean	S.D.	Min.	Max.	(N)
WBC	*10 <sup>3</sup> /UL	8.6	10.50±	2.648	4.500	22.10	(1544)
RBC	*10 <sup>6</sup> /UL	2.9	3.15±	0.40	2.05	4.80	(1480)
HGB	GM/DL	13.4	13.7±	1.6	7.0	26.1	(1522)
HCT	%	38	39.5±	4.6	27.0	56.0	(1984)
MCV	fL	131	125.8±	8.1	91.1	190.0	(1466)
MCH	uug	46.2	43.6±	3.0	34.8	66.8	(1454)
MCHC	gm/dL	35.3	34.7±	2.0	18.4	57.9	(1501)
SEGS	% (*10 <sup>3</sup> /UL)	34 (2.924)	3.146±	1.695	0.000	11.80	(1224)
LYMPHOCYTES	% (*10 <sup>3</sup> /UL)	64 (5.504)	4.913±	2.532	0.022	17.40	(1236)
MONOCYTES	% (*10 <sup>3</sup> /UL)	1 (0.086)	1.513±	1.651	0.000	9.480	(1175)
EOSINOPHILS	% (*10 <sup>3</sup> /UL)	1 (0.086)	0.225±	0.273	0.000	2.898	(885)
BASOPHILS	% (*10 <sup>3</sup> /UL)	0	0.049±	0.081	0.000	0.525	(464)
PLATE. EST.		ADEQ					
PLATE. CNT.	*10 <sup>3</sup> /UL	319	417±	245	74	1380	(215)
ABSBASO	/UL	0					
ABSEOS	\UL	86					
ABSLYMP	/UL	5504					
ABSMONO	/UL	86					
ABSSEGS	/UL	2924					
FIBRINOGEN	MG/DL	300	238±	139	0	600	(70)
MCH	UUG	46.6					
MCHC	%	36					
MCV	U(3)	131					

Comments >>

RBC Morph: Normal

Clinical Pathology Records - Specimen Report  
KANSAS CITY ZOOLOGICAL PARK

```

=====
Scientific Name: LOXODONTA AFRICANA (no subsp)           Accession #: 1669
Common Name: African elephant                             Female
Name: LEA                                                Birth: 17.Sep.1978 (Estimated)
                                                         Age: 27Y Est.
=====

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Collection Information >>

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Health Status: Normal
Fasting Time: < 8 hours
Activity: Active
Weight: 2948 Kg on 28.May.1997
Manual restraint used.

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Date of Collection: 4.Oct.2005
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: Refrigerated (<48 hours)
Sample Quality: No quality problems.

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Laboratory: ANTECH
Date of Analysis: 5.Oct.2005
Time of Analysis:
Analysis by:
Automated analysis.

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Tests and Results >>

ISIS Reference Values >>

				Mean	S.D.	Min.	Max.	(N)
GLUCOSE	MG/DL	<	59	84±	15	38	174	(1437)
BUN	MG/DL		7	10±	3	0	22	(1458)
CREAT.	MG/DL		1.1	1.5±	0.5	0.0	11.0	(1405)
BUN/Cr ratio			6.36					
CA	MG/DL		10.6	10.9±	0.6	8.1	15.3	(1434)
PHOS	MG/DL		4.4	4.9±	0.8	2.8	8.2	(1291)
Ca/P ratio			2.41					
NA	MEQ/L	>	134	129±	4	107	182	(1353)
K	MEQ/L		4.8	4.8±	0.5	3.3	7.6	(1368)
Na/K ratio			27.9					
CL	MEQ/L		88	88±	4	67	129	(1323)
CHOL	MG/DL	>>	104	68±	17	0	234	(1290)
T.PROT. (C)	GM/DL		7.8	7.7±	0.6	5.8	10.5	(1261)
ALBUMIN (C)	GM/DL	<	3.0	3.6±	0.4	2.4	5.2	(1145)
GLOBULIN (C)	GM/DL	>	4.8	4.1±	0.5	2.6	6.4	(1135)
Alb/Glob rat			0.625					
AST (SGOT)	IU/L		16	24±	10	6	93	(1398)
T. BILI.	MG/DL		0.1	0.2±	0.1	0.0	1.0	(1187)
ALK.PHOS.	IU/L		80	128±	61	32	441	(1404)
LDH	IU/L	<	414	988±	568	157	4306	(1099)
CPK	IU/L		232	256±	196	18	1884	(247)
A/G RATIO	GM/DL		0.6					
BUN/CREAT	MG/DL		6					
GGT	IU/L		9	12±	5	0	37	(389)
NA/K RATIO	RATIO		28					

Comments >>

Mild increase in lymphs. WKS

Clinical Pathology Records - Specimen Report  
KANSAS CITY ZOOLOGICAL PARK

```

=====
Scientific Name: LOXODONTA AFRICANA (no subsp)      Accession #: 1669
Common Name: African elephant                      Female
Name: LEA                                          Birth: 17.Sep.1978 (Estimated)
                                                    Age: 27Y Est.
=====

```

Collection Information >>

```

Health Status: Normal
Fasting Time: < 8 hours
Activity: Active
Weight: 2948 Kg on 28.May.1997
Manual restraint used.

```

```

Date of Collection: 30.Sep.2005
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: ANTECH
Date of Analysis: 3.Oct.2005
Time of Analysis:
Analysis by:
Automated analysis.

```

Tests and Results >>

ISIS Reference Values >>

			Mean	S.D.	Min.	Max.	(N)
T.PROT. (C)	GM/DL	8.0	7.7±	0.6	5.8	10.5	(1261)
ALBUMIN (C)	GM/DL	3.89	3.6±	0.4	2.4	5.2	(1145)
GLOBULIN (C)	GM/DL	4.11	4.1±	0.5	2.6	6.4	(1135)
Alb/Glob rat		0.946					
ALPHA-1 GLOB	MG/DL	<< 0.12	0.7±	0.2	0.2	0.8	(8)
ALPHA-2 GLOB	MG/DL	0.80	1.0±	0.3	0.8	1.6	(8)
BETA-1 GLOB.	MG/DL	0.77					
GAMMA GLOB	GM/DL	>> 2.42	1.6±	0.4	0.7	1.9	(7)

Comments >>

```

Suspect increase in Gamma fraction is related to re-exposure/infection
with WNV. WKS

```

Clinical Pathology Records - Specimen Report  
KANSAS CITY ZOOLOGICAL PARK

```

=====
Scientific Name: LOXODONTA AFRICANA (no subsp)           Accession #: 1669
Common Name: African elephant                             Female
Name: LEA                                                Birth: 17.Sep.1978 (Estimated)
                                                         Age: 27Y Est.
=====

```

Collection Information >>

```

Health Status: Normal
Fasting Time: < 8 hours
Activity: Active
Weight: 2948 Kg on 28.May.1997
Manual restraint used.

```

```

Date of Collection: 18.Oct.2005
Time of Collection:
Collected by:
Sample Collection Site: EAR VEIN

```

Hematology >>

Analysis Information >>

```

Anticoagulant:
Storage: Not recorded
Sample Quality: No quality problems.

```

```

Laboratory: ANTECH
Date of Analysis: 19.Oct.2005
Time of Analysis:
Analysis by:
Automated analysis.

```

Tests and Results >>

ISIS Reference Values >>

				Mean	S.D.	Min.	Max.	(N)
WBC	*10 <sup>3</sup> /UL	9.6		10.50±	2.648	4.500	22.10	(1544)
RBC	*10 <sup>6</sup> /UL	2.9		3.15±	0.40	2.05	4.80	(1480)
HGB	GM/DL	13.8		13.7±	1.6	7.0	26.1	(1522)
HCT	%	37		39.5±	4.6	27.0	56.0	(1984)
MCV	fL	128		125.8±	8.1	91.1	190.0	(1466)
MCH	uug	> 47.6		43.6±	3.0	34.8	66.8	(1454)
MCHC	gm/dL	> 37.3		34.7±	2.0	18.4	57.9	(1501)
SEGS	% (*10 <sup>3</sup> /UL)	24	(2.304)	3.146±	1.695	0.000	11.80	(1224)
LYMPHOCYTES	% (*10 <sup>3</sup> /UL)	66	(6.336)	4.913±	2.532	0.022	17.40	(1236)
MONOCYTES	% (*10 <sup>3</sup> /UL)	9	(0.864)	1.513±	1.651	0.000	9.480	(1175)
EOSINOPHILS	% (*10 <sup>3</sup> /UL)	1	(0.096)	0.225±	0.273	0.000	2.898	(885)
BASOPHILS	% (*10 <sup>3</sup> /UL)	0		0.049±	0.081	0.000	0.525	(464)
PLATE. EST.		INCRS						
ABSBASO	/UL	0						
ABSEOS	\UL	96						
ABSLYMP	/UL	6336						
ABSMONO	/UL	864						
ABSSEGS	/UL	2304						
FIBRINOGEN	MG/DL	200		238±	139	0	600	(70)
MCH	UUG	48.1						
MCHC	%	37						
MCV	U(3)	128						

Comments >>

RBC Morph: Normal

Clinical Pathology Records - Specimen Report  
KANSAS CITY ZOOLOGICAL PARK

```

=====
Scientific Name: LOXODONTA AFRICANA (no subsp)           Accession #: 1669
Common Name: African elephant                           Female
Name: LEA                                               Birth: 17.Sep.1978 (Estimated)
                                                         Age: 27Y Est.
=====

```

Collection Information >>

```

Health Status: Normal
Fasting Time: < 8 hours
Activity: Active
Weight: 2948 Kg on 28.May.1997
Manual restraint used.

```

```

Date of Collection: 27.Sep.2005
Time of Collection:
Collected by: KPR
Sample Collection Site: EAR VEIN

```

Hematology >>

Analysis Information >>

```

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

```

```

Laboratory: ANTECH
Date of Analysis: 27.Sep.2005
Time of Analysis:
Analysis by:
Automated analysis.

```

Tests and Results >>

ISIS Reference Values >>

			Mean	S.D.	Min.	Max.	(N)
WBC	*10 <sup>3</sup> /UL	9.0	10.50±	2.648	4.500	22.10	(1544)
RBC	*10 <sup>6</sup> /UL	3.0	3.15±	0.40	2.05	4.80	(1480)
HGB	GM/DL	13.9	13.7±	1.6	7.0	26.1	(1522)
HCT	%	39	39.5±	4.6	27.0	56.0	(1984)
MCV	fL	130	125.8±	8.1	91.1	190.0	(1466)
MCH	uug	46.3	43.6±	3.0	34.8	66.8	(1454)
MCHC	gm/dL	35.6	34.7±	2.0	18.4	57.9	(1501)
SEGS	% (*10 <sup>3</sup> /UL)	25 (2.250)	3.146±	1.695	0.000	11.80	(1224)
LYMPHOCYTES	% (*10 <sup>3</sup> /UL)	72 (6.480)	4.913±	2.532	0.022	17.40	(1236)
MONOCYTES	% (*10 <sup>3</sup> /UL)	1 (0.090)	1.513±	1.651	0.000	9.480	(1175)
EOSINOPHILS	% (*10 <sup>3</sup> /UL)	2 (0.180)	0.225±	0.273	0.000	2.898	(885)
BASOPHILS	% (*10 <sup>3</sup> /UL)	0	0.049±	0.081	0.000	0.525	(464)
PLATE. EST.		INCRS					
ABSBASO	/UL	0					
ABSEOS	\UL	180					
ABSLYMP	/UL	6480					
ABSMONO	/UL	90					
ABSSEGS	/UL	2250					
FIBRINOGEN	MG/DL	200	238±	139	0	600	(70)
MCH	UUG	46.8					
MCHC	%	36					
MCV	U(3)	130					

Comments >>

RBC Morph: Normal

Clinical Pathology Records - Specimen Report  
KANSAS CITY ZOOLOGICAL PARK

```

=====
Scientific Name: LOXODONTA AFRICANA (no subsp)           Accession #: 1669
Common Name: African elephant                             Female
Name: LEA                                                Birth: 17.Sep.1978 (Estimated)
                                                         Age: 27Y Est.
=====

```

Collection Information >>

```

Health Status: Normal
Fasting Time: < 8 hours
Activity: Active
Weight: 2948 Kg on 28.May.1997
Manual restraint used.

```

```

Date of Collection: 27.Sep.2005
Time of Collection:
Collected by: KPR
Sample Collection Site: EAR VEIN

```

Chemistry >>

Analysis Information >>

```

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

```

```

Laboratory: ANTECH
Date of Analysis: 27.Sep.2005
Time of Analysis:
Analysis by:
Automated analysis.

```

Tests and Results >>

ISIS Reference Values >>

				Mean	S.D.	Min.	Max.	(N)
GLUCOSE	MG/DL		72	84±	15	38	174	(1437)
BUN	MG/DL		7	10±	3	0	22	(1458)
CREAT.	MG/DL		1.0	1.5±	0.5	0.0	11.0	(1405)
BUN/Cr ratio			7.00					
CA	MG/DL		10.6	10.9±	0.6	8.1	15.3	(1434)
PHOS	MG/DL		4.3	4.9±	0.8	2.8	8.2	(1291)
Ca/P ratio			2.47					
NA	MEQ/L	>	134	129±	4	107	182	(1353)
K	MEQ/L		5.0	4.8±	0.5	3.3	7.6	(1368)
Na/K ratio			26.8					
CL	MEQ/L		88	88±	4	67	129	(1323)
CHOL	MG/DL	>>	123	68±	17	0	234	(1290)
T.PROT. (C)	GM/DL		8.2	7.7±	0.6	5.8	10.5	(1261)
ALBUMIN (C)	GM/DL	<	3.0	3.6±	0.4	2.4	5.2	(1145)
GLOBULIN (C)	GM/DL	>>	5.2	4.1±	0.5	2.6	6.4	(1135)
Alb/Glob rat			0.577					
AST (SGOT)	IU/L		14	24±	10	6	93	(1398)
T. BILI.	MG/DL		0.1	0.2±	0.1	0.0	1.0	(1187)
ALK.PHOS.	IU/L		72	128±	61	32	441	(1404)
LDH	IU/L	<	368	988±	568	157	4306	(1099)
CPK	IU/L		178	256±	196	18	1884	(247)
A/G RATIO	GM/DL		0.6					
BUN/CREAT	MG/DL		7					
GGT	IU/L		9	12±	5	0	37	(389)
NA/K RATIO	RATIO		27					

Comments >>

Mild hyperglobulinemia. WKS

Clinical Pathology Records - Specimen Report  
KANSAS CITY ZOOLOGICAL PARK

```

=====
Scientific Name: LOXODONTA AFRICANA (no subsp)           Accession #: 1669
Common Name: African elephant                             Female
Name: LEA                                                Birth: 17.Sep.1978 (Estimated)
                                                         Age: 28Y Est.
=====

```

Collection Information >>

```

Health Status: Normal
Fasting Time: < 8 hours
Activity: Active
Weight: 4088 Kg on 16.Nov.2005
Manual restraint used.

```

```

Date of Collection: 3.Jul.2006
Time of Collection: 8:00.0
Collected by: ANL
Sample Collection Site: EAR VEIN

```

Hematology >>

Analysis Information >>

```

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

```

```

Laboratory: ANTECH
Date of Analysis: 5.Jul.2006
Time of Analysis: 14:27
Analysis by:
Automated analysis.

```

Tests and Results >>

ISIS Reference Values >>

			Mean	S.D.	Min.	Max.	(N)
WBC	*10 <sup>3</sup> /UL	11.0	10.50±	2.648	4.500	22.10	(1544)
RBC	*10 <sup>6</sup> /UL	2.9	3.15±	0.40	2.05	4.80	(1480)
HGB	GM/DL	13.1	13.7±	1.6	7.0	26.1	(1522)
HCT	%	37	39.5±	4.6	27.0	56.0	(1984)
MCV	fL	128	125.8±	8.1	91.1	190.0	(1466)
MCH	uug	45.2	43.6±	3.0	34.8	66.8	(1454)
MCHC	gm/dL	35.4	34.7±	2.0	18.4	57.9	(1501)
SEGS	% (*10 <sup>3</sup> /UL)	37 (4.070)	3.146±	1.695	0.000	11.80	(1224)
LYMPHOCYTES	% (*10 <sup>3</sup> /UL)	41 (4.510)	4.913±	2.532	0.022	17.40	(1236)
MONOCYTES	% (*10 <sup>3</sup> /UL)	22 (2.420)	1.513±	1.651	0.000	9.480	(1175)
PLATE. EST.		ADEQU					
PLATE. CNT.	*10 <sup>3</sup> /UL	358	417±	245	74	1380	(215)
ABSLYMP	/UL	4510					
ABSMONO	/UL	2420					
FIBRINOGEN	MG/DL >>	757	238±	139	0	600	(70)
MCH	UUG	45.4					
MCHC	%	35					
MCV	U(3)	129					

Morphology Results >>

ANISOCYTOSIS +2

Comments >>

Frequent platelet clumps are present on the blood smear.  
slight degeneration of SBC.

Clinical Pathology Records - Specimen Report  
KANSAS CITY ZOOLOGICAL PARK

Scientific Name: *LOXODONTA AFRICANA* (no subsp)  
Common Name: African elephant  
Name: LEA

Accession #: 1669  
Female  
Birth: 17.Sep.1978 (Estimated)  
Age: 28Y Est.

Collection Information >>

Health Status: Normal  
Fasting Time: < 8 hours  
Activity: Active  
Weight: 4088 Kg on 16.Nov.2005  
Manual restraint used.

Date of Collection: 3.Jul.2006  
Time of Collection: 8:00.0  
Collected by: ANL  
Sample Collection Site: EAR VEIN

Chemistry >>

Analysis Information >>

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

Laboratory: ANTECH  
Date of Analysis: 5.Jul.2006  
Time of Analysis: 14:27  
Analysis by:  
Automated analysis.

Tests and Results >>

ISIS Reference Values >>

				Mean	S.D.	Min.	Max.	(N)
GLUCOSE	MG/DL	>>	119	84±	15	38	174	(1437)
BUN	MG/DL	<	5	10±	3	0	22	(1458)
CREAT.	MG/DL		1.2	1.5±	0.5	0.0	11.0	(1405)
BUN/Cr ratio			4.17					
CA	MG/DL		10.7	10.9±	0.6	8.1	15.3	(1434)
PHOS	MG/DL	<	4.0	4.9±	0.8	2.8	8.2	(1291)
Ca/P ratio			2.68					
NA	MEQ/L		129	129±	4	107	182	(1353)
K	MEQ/L		4.3	4.8±	0.5	3.3	7.6	(1368)
Na/K ratio			30.0					
CHOL	MG/DL	>>	114	68±	17	0	234	(1290)
T.PROT. (C)	GM/DL		8.2	7.7±	0.6	5.8	10.5	(1261)
ALBUMIN (C)	GM/DL	<	3.1	3.6±	0.4	2.4	5.2	(1145)
GLOBULIN (C)	GM/DL	>	5.1	4.1±	0.5	2.6	6.4	(1135)
Alb/Glob rat			0.608					
AST (SGOT)	IU/L		21	24±	10	6	93	(1398)
T. BILI.	MG/DL		0.2	0.2±	0.1	0.0	1.0	(1187)
ALK.PHOS.	IU/L		92	128±	61	32	441	(1404)
CPK	IU/L	>>	1370	256±	196	18	1884	(247)
A/G RATIO	GM/DL		0.6					
BUN/CREAT	MG/DL		4					
GGT	IU/L		11	12±	5	0	37	(389)
NA/K RATIO	RATIO		30					

Comments >>

Significant elevation of fibrinogen compatible with trauma from tusk damage and damaged root. Slight elevation of globulins. Significant elevation of CPK also. Compatible with trauma from interspecific aggression. per WKS.

ISIS reference values are for LOXODONTA AFRICANA

Printed on: 21.Oct.2006

Chemistry Sample: Serum

/ISIS/MedARK

Lab

Date of Analysis: 22.Sep.2005

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

Time of Analysis:  
Analysis by:  
Automated analysis.

Tests and Results >>

ISIS Reference Values >>

				Mean	S.D.	Min.	Max.	(N)
GLUCOSE	MG/DL		75	84±	15	38	174	(1437)
BUN	MG/DL	<	6	10±	3	0	22	(1458)
CREAT.	MG/DL		1.2	1.5±	0.5	0.0	11.0	(1405)
BUN/Cr ratio			5.00					
CA	MG/DL		11.0	10.9±	0.6	8.1	15.3	(1434)
PHOS	MG/DL	<	3.9	4.9±	0.8	2.8	8.2	(1291)
Ca/P ratio			2.82					
NA	MEQ/L		133	129±	4	107	182	(1353)
K	MEQ/L		4.8	4.8±	0.5	3.3	7.6	(1368)
Na/K ratio			27.7					
CL	MEQ/L		87	88±	4	67	129	(1323)
CHOL	MG/DL	>>	103	68±	17	0	234	(1290)
T.PROT. (C)	GM/DL		7.7	7.7±	0.6	5.8	10.5	(1261)
ALBUMIN (C)	GM/DL	<	3.0	3.6±	0.4	2.4	5.2	(1145)
GLOBULIN (C)	GM/DL	>	4.7	4.1±	0.5	2.6	6.4	(1135)
Alb/Glob rat			0.638					
AST (SGOT)	IU/L	<	13	24±	10	6	93	(1398)
T. BILI.	MG/DL		0.1	0.2±	0.1	0.0	1.0	(1187)
ALK.PHOS.	IU/L		72	128±	61	32	441	(1404)
LDH	IU/L	<	404	988±	568	157	4306	(1099)
CPK	IU/L		200	256±	196	18	1884	(247)
A/G RATIO	GM/DL		0.6					
BUN/CREAT	MG/DL		5					
GGT	IU/L		10	12±	5	0	37	(389)
NA/K RATIO	RATIO		28					

Comments >>

Mild elevation of fibrinogen with slight increase in phos and Na.  
WKS

ISIS reference values are for LOXODONTA AFRICANA  
Printed on: 21.Oct.2006

/ISIS/MedARKS/5.32a

Clinical Pathology Records - Specimen Report  
KANSAS CITY ZOOLOGICAL PARK

```

=====
Scientific Name: LOXODONTA AFRICANA (no subsp)           Accession #: 1669
Common Name: African elephant                             Female
Name: LEA                                                Birth: 17.Sep.1978 (Estimated)
                                                         Age: 28Y Est.
=====

```

Collection Information >>

Health Status: Abnormal

Date of Collection: 24.Jul.2006

Time of Collection:

Collected by:

Sample Collection Site: from Floor

Weight: 4088 Kg on 16.Nov.2005

Analysis Information >>

Sample type: Urine

Storage: Refrigerated (<48 hours)

Sample Quality: No quality problems.

Laboratory: IN HOUSE

Date of Analysis: 25.Jul.2006

Time of Analysis:

Analysis by:

Manual analysis.

Tests and Results >>

ISIS Reference Values >>

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

appearance	CLEAR
color	PLYELL
PH URINE	8.0
SG	1.005
urine bacter	COCCI+
urine biliru	NEG
urine blood	NEG
urine casts	-
urine crysta	OXALAT
urine epithe	SQUAMO
urine glucos MG/DL	NEG
urine ketone	NEG
urine nitrit	NEG
urine protei	NEG
urine rbc/hp	-
urine uobil	NORMAL
urine wbc/hp	-

Comments >>

Epithelial cells: squamous (occ)

Clinical Pathology Records - Specimen Report  
KANSAS CITY ZOOLOGICAL PARK

```

=====
Scientific Name: LOXODONTA AFRICANA (no subsp)           Accession #: 1669
Common Name: African elephant                             Female
Name: LEA                                                Birth: 17.Sep.1978 (Estimated)
                                                         Age: 27Y Est.
=====

```

Collection Information >>

```

Health Status: Normal
Fasting Time: < 8 hours
Activity: Active
Weight: 2948 Kg on 28.May.1997
Manual restraint used.

```

```

Date of Collection: 25.Oct.2005
Time of Collection: 9:00.0
Collected by:
Sample Collection Site: EAR VEIN

```

Hematology >>

Analysis Information >>

```

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

```

```

Laboratory: ANTECH
Date of Analysis: 26.Oct.2005
Time of Analysis:
Analysis by:
Automated analysis.

```

Tests and Results >>

ISIS Reference Values >>

				Mean	S.D.	Min.	Max.	(N)
WBC	*10 <sup>3</sup> /UL	9.0		10.50±	2.648	4.500	22.10	(1544)
RBC	*10 <sup>6</sup> /UL	3.1		3.15±	0.40	2.05	4.80	(1480)
HGB	GM/DL	14.5		13.7±	1.6	7.0	26.1	(1522)
HCT	%	41		39.5±	4.6	27.0	56.0	(1984)
MCV	fL	132		125.8±	8.1	91.1	190.0	(1466)
MCH	uug	> 46.8		43.6±	3.0	34.8	66.8	(1454)
MCHC	gm/dL	35.4		34.7±	2.0	18.4	57.9	(1501)
SEGS	% (*10 <sup>3</sup> /UL)	38	(3.420)	3.146±	1.695	0.000	11.80	(1224)
LYMPHOCYTES	% (*10 <sup>3</sup> /UL)	60	(5.400)	4.913±	2.532	0.022	17.40	(1236)
MONOCYTES	% (*10 <sup>3</sup> /UL)	1	(0.090)	1.513±	1.651	0.000	9.480	(1175)
EOSINOPHILS	% (*10 <sup>3</sup> /UL)	1	(0.090)	0.225±	0.273	0.000	2.898	(885)
BASOPHILS	% (*10 <sup>3</sup> /UL)	0		0.049±	0.081	0.000	0.525	(464)
PLATE. EST.		ADEQ						
PLATE. CNT.	*10 <sup>3</sup> /UL	314		417±	245	74	1380	(215)
ABSBASO	/UL	0						
ABSEOS	\UL	90						
ABSLYMP	/UL	5400						
ABSMONO	/UL	90						
ABSSEGS	/UL	3420						
FIBRINOGEN	MG/DL	200		238±	139	0	600	(70)
MCH	UUG	46.2						
MCHC	%	36						
MCV	U(3)	132						

Comments >>

RBC Morph: Normal

Clinical Pathology Records - Specimen Report  
KANSAS CITY ZOOLOGICAL PARK

```

=====
Scientific Name: LOXODONTA AFRICANA (no subsp)           Accession #: 1669
Common Name: African elephant                             Female
Name: LEA                                                Birth: 17.Sep.1978 (Estimated)
                                                         Age: 27Y Est.
=====

```

Collection Information >>

```

Health Status: Normal
Fasting Time: < 8 hours
Activity: Active
Weight: 2948 Kg on 28.May.1997
Manual restraint used.

```

```

Date of Collection: 25.Oct.2005
Time of Collection: 9:00.0
Collected by:
Sample Collection Site: EAR VEIN

```

Chemistry >>

Analysis Information >>

```

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

```

```

Laboratory: ANTECH
Date of Analysis: 26.Oct.2005
Time of Analysis:
Analysis by:
Automated analysis.

```

Tests and Results >>

ISIS Reference Values >>

				Mean	S.D.	Min.	Max.	(N)
GLUCOSE	MG/DL		86	84±	15	38	174	(1437)
BUN	MG/DL	<	5	10±	3	0	22	(1458)
CREAT.	MG/DL		1.4	1.5±	0.5	0.0	11.0	(1405)
BUN/Cr ratio			3.57					
CA	MG/DL	<	10.1	10.9±	0.6	8.1	15.3	(1434)
PHOS	MG/DL		4.9	4.9±	0.8	2.8	8.2	(1291)
Ca/P ratio			2.06					
NA	MEQ/L	<	122	129±	4	107	182	(1353)
K	MEQ/L		4.9	4.8±	0.5	3.3	7.6	(1368)
Na/K ratio			24.9					
CL	MEQ/L		84	88±	4	67	129	(1323)
CHOL	MG/DL	>	93	68±	17	0	234	(1290)
T.PROT. (C)	GM/DL		7.6	7.7±	0.6	5.8	10.5	(1261)
ALBUMIN (C)	GM/DL	<	3.1	3.6±	0.4	2.4	5.2	(1145)
GLOBULIN (C)	GM/DL		4.5	4.1±	0.5	2.6	6.4	(1135)
Alb/Glob rat			0.689					
AST (SGOT)	IU/L		16	24±	10	6	93	(1398)
T. BILI.	MG/DL		0.1	0.2±	0.1	0.0	1.0	(1187)
ALK.PHOS.	IU/L		89	128±	61	32	441	(1404)
LDH	IU/L	<	370	988±	568	157	4306	(1099)
CPK	IU/L		153	256±	196	18	1884	(247)
A/G RATIO	GM/DL		0.7					
BUN/CREAT	MG/DL		4					
GGT	IU/L		9	12±	5	0	37	(389)
NA/K RATIO	RATIO		25					

Comments >>

WNL. WKS

Clinical Pathology Records - Specimen Report  
KANSAS CITY ZOOLOGICAL PARK

```

=====
Scientific Name: LOXODONTA AFRICANA (no subsp)           Accession #: 1669
Common Name: African elephant                             Female
Name: LEA                                                Birth: 17.Sep.1978 (Estimated)
                                                         Age: 27Y Est.
=====

```

Collection Information >>

```

Health Status: Abnormal
Fasting Time: < 8 hours
Activity: Active
Weight: 2948 Kg on 28.May.1997
Manual restraint used.

```

```

Date of Collection: 11.Oct.2005
Time of Collection: 9:00.0
Collected by:
Sample Collection Site: EAR VEIN

```

Hematology >>

Analysis Information >>

```

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

```

```

Laboratory: ANTECH
Date of Analysis: 12.Oct.2005
Time of Analysis:
Analysis by:
Automated analysis.

```

Tests and Results >>

ISIS Reference Values >>

			Mean	S.D.	Min.	Max.	(N)
WBC	*10 <sup>3</sup> /UL	8.9	10.50±	2.648	4.500	22.10	(1544)
RBC	*10 <sup>6</sup> /UL	3.2	3.15±	0.40	2.05	4.80	(1480)
HGB	GM/DL	14.7	13.7±	1.6	7.0	26.1	(1522)
HCT	%	41	39.5±	4.6	27.0	56.0	(1984)
MCV	fL	128	125.8±	8.1	91.1	190.0	(1466)
MCH	uug	45.9	43.6±	3.0	34.8	66.8	(1454)
MCHC	gm/dL	35.9	34.7±	2.0	18.4	57.9	(1501)
SEGS	% (*10 <sup>3</sup> /UL)	31	3.146±	1.695	0.000	11.80	(1224)
LYMPHOCYTES	% (*10 <sup>3</sup> /UL)	48	4.913±	2.532	0.022	17.40	(1236)
MONOCYTES	% (*10 <sup>3</sup> /UL)	20	1.513±	1.651	0.000	9.480	(1175)
EOSINOPHILS	% (*10 <sup>3</sup> /UL)	1	0.225±	0.273	0.000	2.898	(885)
BASOPHILS	% (*10 <sup>3</sup> /UL)	0	0.049±	0.081	0.000	0.525	(464)
PLATE. EST.	ADEQ						
PLATE. CNT.	*10 <sup>3</sup> /UL	300	417±	245	74	1380	(215)
ABSBASO	/UL	0					
ABSEOS	\UL	89					
ABSLYMP	/UL	4272					
ABSMONO	/UL	1780					
ABSSEGS	/UL	2759					
FIBRINOGEN	MG/DL	200	238±	139	0	600	(70)
MCH	UUG	46.5					
MCHC	%	36					
MCV	U(3)	128					

Comments >>

RBC Morph: Normal

Clinical Pathology Records - Specimen Report  
KANSAS CITY ZOOLOGICAL PARK

```

=====
Scientific Name: LOXODONTA AFRICANA (no subsp)      Accession #: 1669
Common Name: African elephant                      Female
Name: LEA                                          Birth: 17.Sep.1978 (Estimated)
                                                    Age: 27Y Est.
=====
  
```

Collection Information >>

Health Status: Abnormal  
Fasting Time: < 8 hours  
Activity: Active  
Weight: 2948 Kg on 28.May.1997  
Manual restraint used.

Date of Collection: 11.Oct.2005  
Time of Collection: 9:00.0  
Collected by:  
Sample Collection Site: EAR VEIN

Chemistry >>

Analysis Information >>

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

Laboratory: ANTECH  
Date of Analysis: 12.Oct.2005  
Time of Analysis:  
Analysis by:  
Automated analysis.

Tests and Results >>

ISIS Reference Values >>

				Mean	S.D.	Min.	Max.	(N)
GLUCOSE	MG/DL		90	84±	15	38	174	(1437)
BUN	MG/DL		7	10±	3	0	22	(1458)
CREAT.	MG/DL		1.0	1.5±	0.5	0.0	11.0	(1405)
BUN/Cr ratio			7.00					
CA	MG/DL	>	11.8	10.9±	0.6	8.1	15.3	(1434)
PHOS	MG/DL		5.0	4.9±	0.8	2.8	8.2	(1291)
Ca/P ratio			2.36					
NA	MEQ/L		133	129±	4	107	182	(1353)
K	MEQ/L		4.7	4.8±	0.5	3.3	7.6	(1368)
Na/K ratio			28.3					
CL	MEQ/L		89	88±	4	67	129	(1323)
CHOL	MG/DL	>>	106	68±	17	0	234	(1290)
T.PROT. (C)	GM/DL		7.8	7.7±	0.6	5.8	10.5	(1261)
ALBUMIN (C)	GM/DL	<	3.0	3.6±	0.4	2.4	5.2	(1145)
GLOBULIN (C)	GM/DL	>	4.8	4.1±	0.5	2.6	6.4	(1135)
Alb/Glob rat			0.625					
AST (SGOT)	IU/L		22	24±	10	6	93	(1398)
T. BILI.	MG/DL		0.1	0.2±	0.1	0.0	1.0	(1187)
ALK.PHOS.	IU/L		86	128±	61	32	441	(1404)
LDH	IU/L	<	376	988±	568	157	4306	(1099)
CPK	IU/L	>>	767	256±	196	18	1884	(247)
A/G RATIO	GM/DL		0.6					
BUN/CREAT	MG/DL		7					
GGT	IU/L		10	12±	5	0	37	(389)
NA/K RATIO	RATIO		28					

Clinical Pathology Records - Specimen Report  
KANSAS CITY ZOOLOGICAL PARK

```

=====
Scientific Name: LOXODONTA AFRICANA (no subsp)      Accession #: 1669
Common Name: African elephant                      Female
Name: LEA                                          Birth: 17.Sep.1978 (Estimated)
                                                    Age: 27Y Est.
=====

```

```

Collection Information >>
Health Status: Normal
Fasting Time: < 8 hours
Activity: Active
Weight: 2948 Kg on 28.May.1997
Manual restraint used.

Date of Collection: 4.Oct.2005
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: ANTECH
Date of Analysis: 5.Oct.2005
Time of Analysis:
Analysis by:
Automated analysis.

```

Tests and Results >>			ISIS Reference Values >>				
			Mean	S.D.	Min.	Max.	(N)
WBC	*10 <sup>3</sup> /UL	8.6	10.50±	2.648	4.500	22.10	(1544)
RBC	*10 <sup>6</sup> /UL	2.9	3.15±	0.40	2.05	4.80	(1480)
HGB	GM/DL	13.4	13.7±	1.6	7.0	26.1	(1522)
HCT	%	38	39.5±	4.6	27.0	56.0	(1984)
MCV	fL	131	125.8±	8.1	91.1	190.0	(1466)
MCH	uug	46.2	43.6±	3.0	34.8	66.8	(1454)
MCHC	gm/dL	35.3	34.7±	2.0	18.4	57.9	(1501)
SEGS	% (*10 <sup>3</sup> /UL)	34	3.146±	1.695	0.000	11.80	(1224)
LYMPHOCYTES	% (*10 <sup>3</sup> /UL)	64	4.913±	2.532	0.022	17.40	(1236)
MONOCYTES	% (*10 <sup>3</sup> /UL)	1	1.513±	1.651	0.000	9.480	(1175)
EOSINOPHILS	% (*10 <sup>3</sup> /UL)	1	0.225±	0.273	0.000	2.898	(885)
BASOPHILS	% (*10 <sup>3</sup> /UL)	0	0.049±	0.081	0.000	0.525	(464)
PLATE. EST.		ADEQ					
PLATE. CNT.	*10 <sup>3</sup> /UL	319	417±	245	74	1380	(215)
ABSBASO	/UL	0					
ABSEOS	\UL	86					
ABSLYMP	/UL	5504					
ABSMONO	/UL	86					
ABSSEGS	/UL	2924					
FIBRINOGEN	MG/DL	300	238±	139	0	600	(70)
MCH	UUG	46.6					
MCHC	%	36					
MCV	U(3)	131					

```

Comments >>
RBC Morph: Normal

```

Clinical Pathology Records - Specimen Report  
KANSAS CITY ZOOLOGICAL PARK

```

=====
Scientific Name: LOXODONTA AFRICANA (no subsp)      Accession #: 1669
Common Name: African elephant                      Female
Name: LEA                                          Birth: 17.Sep.1978 (Estimated)
                                                    Age: 27Y Est.
=====

```

Collection Information >>

```

Health Status: Normal
Fasting Time: < 8 hours
Activity: Active
Weight: 2948 Kg on 28.May.1997
Manual restraint used.

```

```

Date of Collection: 4.Oct.2005
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: ANTECH
Date of Analysis: 5.Oct.2005
Time of Analysis:
Analysis by:
Automated analysis.

```

Tests and Results >>

ISIS Reference Values >>

				Mean	S.D.	Min.	Max.	(N)
GLUCOSE	MG/DL	<	59	84±	15	38	174	(1437)
BUN	MG/DL		7	10±	3	0	22	(1458)
CREAT.	MG/DL		1.1	1.5±	0.5	0.0	11.0	(1405)
BUN/Cr ratio			6.36					
CA	MG/DL		10.6	10.9±	0.6	8.1	15.3	(1434)
PHOS	MG/DL		4.4	4.9±	0.8	2.8	8.2	(1291)
Ca/P ratio			2.41					
NA	MEQ/L	>	134	129±	4	107	182	(1353)
K	MEQ/L		4.8	4.8±	0.5	3.3	7.6	(1368)
Na/K ratio			27.9					
CL	MEQ/L		88	88±	4	67	129	(1323)
CHOL	MG/DL	>>	104	68±	17	0	234	(1290)
T.PROT. (C)	GM/DL		7.8	7.7±	0.6	5.8	10.5	(1261)
ALBUMIN (C)	GM/DL	<	3.0	3.6±	0.4	2.4	5.2	(1145)
GLOBULIN (C)	GM/DL	>	4.8	4.1±	0.5	2.6	6.4	(1135)
Alb/Glob rat			0.625					
AST (SGOT)	IU/L		16	24±	10	6	93	(1398)
T. BILI.	MG/DL		0.1	0.2±	0.1	0.0	1.0	(1187)
ALK.PHOS.	IU/L		80	128±	61	32	441	(1404)
LDH	IU/L	<	414	988±	568	157	4306	(1099)
CPK	IU/L		232	256±	196	18	1884	(247)
A/G RATIO	GM/DL		0.6					
BUN/CREAT	MG/DL		6					
GGT	IU/L		9	12±	5	0	37	(389)
NA/K RATIO	RATIO		28					

Comments >>

Mild increase in lymphs. WKS

Clinical Pathology Records - Specimen Report  
KANSAS CITY ZOOLOGICAL PARK

```

=====
Scientific Name: LOXODONTA AFRICANA (no subsp)           Accession #: 1669
Common Name: African elephant                             Female
Name: LEA                                                Birth: 17.Sep.1978 (Estimated)
                                                         Age: 27Y Est.
=====

```

Collection Information >>

```

Health Status: Normal
Fasting Time: < 8 hours
Activity: Active
Weight: 2948 Kg on 28.May.1997
Manual restraint used.

```

```

Date of Collection: 30.Sep.2005
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: ANTECH
Date of Analysis: 3.Oct.2005
Time of Analysis:
Analysis by:
Automated analysis.

```

Tests and Results >>

ISIS Reference Values >>

				Mean	S.D.	Min.	Max.	(N)
T.PROT. (C)	GM/DL		8.0	7.7±	0.6	5.8	10.5	(1261)
ALBUMIN (C)	GM/DL		3.89	3.6±	0.4	2.4	5.2	(1145)
GLOBULIN (C)	GM/DL		4.11	4.1±	0.5	2.6	6.4	(1135)
Alb/Glob rat			0.946					
ALPHA-1 GLOB	MG/DL	<<	0.12	0.7±	0.2	0.2	0.8	(8)
ALPHA-2 GLOB	MG/DL		0.80	1.0±	0.3	0.8	1.6	(8)
BETA-1 GLOB.	MG/DL		0.77					
GAMMA GLOB	GM/DL	>>	2.42	1.6±	0.4	0.7	1.9	(7)

Comments >>

Suspect increase in Gamma fraction is related to re-exposure/infection with WNV. WKS

Clinical Pathology Records - Specimen Report  
KANSAS CITY ZOOLOGICAL PARK

```

=====
Scientific Name: LOXODONTA AFRICANA (no subsp)           Accession #: 1669
Common Name: African elephant                             Female
Name: LEA                                                Birth: 17.Sep.1978 (Estimated)
                                                         Age: 27Y Est.
=====

```

Collection Information >>

```

Health Status: Normal
Fasting Time: < 8 hours
Activity: Active
Weight: 2948 Kg on 28.May.1997
Manual restraint used.

```

```

Date of Collection: 18.Oct.2005
Time of Collection:
Collected by:
Sample Collection Site: EAR VEIN

```

Hematology >>

Analysis Information >>

```

Anticoagulant:
Storage: Not recorded
Sample Quality: No quality problems.

```

```

Laboratory: ANTECH
Date of Analysis: 19.Oct.2005
Time of Analysis:
Analysis by:
Automated analysis.

```

Tests and Results >>

ISIS Reference Values >>

				Mean	S.D.	Min.	Max.	(N)
WBC	*10 <sup>3</sup> /UL	9.6		10.50±	2.648	4.500	22.10	(1544)
RBC	*10 <sup>6</sup> /UL	2.9		3.15±	0.40	2.05	4.80	(1480)
HGB	GM/DL	13.8		13.7±	1.6	7.0	26.1	(1522)
HCT	%	37		39.5±	4.6	27.0	56.0	(1984)
MCV	fL	128		125.8±	8.1	91.1	190.0	(1466)
MCH	uug	> 47.6		43.6±	3.0	34.8	66.8	(1454)
MCHC	gm/dL	> 37.3		34.7±	2.0	18.4	57.9	(1501)
SEGS	% (*10 <sup>3</sup> /UL)	24	(2.304)	3.146±	1.695	0.000	11.80	(1224)
LYMPHOCYTES	% (*10 <sup>3</sup> /UL)	66	(6.336)	4.913±	2.532	0.022	17.40	(1236)
MONOCYTES	% (*10 <sup>3</sup> /UL)	9	(0.864)	1.513±	1.651	0.000	9.480	(1175)
EOSINOPHILS	% (*10 <sup>3</sup> /UL)	1	(0.096)	0.225±	0.273	0.000	2.898	(885)
BASOPHILS	% (*10 <sup>3</sup> /UL)	0		0.049±	0.081	0.000	0.525	(464)
PLATE. EST.		INCRS						
ABSBASO	/UL	0						
ABSEOS	\UL	96						
ABSLYMP	/UL	6336						
ABSMONO	/UL	864						
ABSSEGS	/UL	2304						
FIBRINOGEN	MG/DL	200		238±	139	0	600	(70)
MCH	UUG	48.1						
MCHC	%	37						
MCV	U(3)	128						

Comments >>

RBC Morph: Normal

Clinical Pathology Records - Specimen Report  
KANSAS CITY ZOOLOGICAL PARK

```

=====
Scientific Name: LOXODONTA AFRICANA (no subsp)           Accession #: 1669
Common Name: African elephant                             Female
Name: LEA                                                Birth: 17.Sep.1978 (Estimated)
                                                         Age: 27Y Est.
=====

```

Collection Information >>

```

Health Status: Normal
Fasting Time: < 8 hours
Activity: Active
Weight: 2948 Kg on 28.May.1997
Manual restraint used.

```

```

Date of Collection: 27.Sep.2005
Time of Collection:
Collected by: KPR
Sample Collection Site: EAR VEIN

```

Hematology >>

Analysis Information >>

```

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

```

```

Laboratory: ANTECH
Date of Analysis: 27.Sep.2005
Time of Analysis:
Analysis by:
Automated analysis.

```

Tests and Results >>

ISIS Reference Values >>

			Mean	S.D.	Min.	Max.	(N)
WBC	*10 <sup>3</sup> /UL	9.0	10.50±	2.648	4.500	22.10	(1544)
RBC	*10 <sup>6</sup> /UL	3.0	3.15±	0.40	2.05	4.80	(1480)
HGB	GM/DL	13.9	13.7±	1.6	7.0	26.1	(1522)
HCT	%	39	39.5±	4.6	27.0	56.0	(1984)
MCV	fL	130	125.8±	8.1	91.1	190.0	(1466)
MCH	uug	46.3	43.6±	3.0	34.8	66.8	(1454)
MCHC	gm/dL	35.6	34.7±	2.0	18.4	57.9	(1501)
SEGS	% (*10 <sup>3</sup> /UL)	25 (2.250)	3.146±	1.695	0.000	11.80	(1224)
LYMPHOCYTES	% (*10 <sup>3</sup> /UL)	72 (6.480)	4.913±	2.532	0.022	17.40	(1236)
MONOCYTES	% (*10 <sup>3</sup> /UL)	1 (0.090)	1.513±	1.651	0.000	9.480	(1175)
EOSINOPHILS	% (*10 <sup>3</sup> /UL)	2 (0.180)	0.225±	0.273	0.000	2.898	(885)
BASOPHILS	% (*10 <sup>3</sup> /UL)	0	0.049±	0.081	0.000	0.525	(464)
PLATE. EST.		INCRS					
ABSBASO	/UL	0					
ABSEOS	\UL	180					
ABSLYMP	/UL	6480					
ABSMONO	/UL	90					
ABSSEGS	/UL	2250					
FIBRINOGEN	MG/DL	200	238±	139	0	600	(70)
MCH	UUG	46.8					
MCHC	%	36					
MCV	U(3)	130					

Comments >>

RBC Morph: Normal

Clinical Pathology Records - Specimen Report  
KANSAS CITY ZOOLOGICAL PARK

```

=====
Scientific Name: LOXODONTA AFRICANA (no subsp)      Accession #: 1669
Common Name: African elephant                      Female
Name: LEA                                           Birth: 17.Sep.1978 (Estimated)
                                                    Age: 27Y Est.
=====

```

Collection Information >>

```

Health Status: Normal
Fasting Time: < 8 hours
Activity: Active
Weight: 2948 Kg on 28.May.1997
Manual restraint used.

```

```

Date of Collection: 27.Sep.2005
Time of Collection:
Collected by: KPR
Sample Collection Site: EAR VEIN

```

Chemistry >>

Analysis Information >>

```

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

```

```

Laboratory: ANTECH
Date of Analysis: 27.Sep.2005
Time of Analysis:
Analysis by:
Automated analysis.

```

Tests and Results >>

ISIS Reference Values >>

			Mean	S.D.	Min.	Max.	(N)
GLUCOSE	MG/DL	72	84±	15	38	174	(1437)
BUN	MG/DL	7	10±	3	0	22	(1458)
CREAT.	MG/DL	1.0	1.5±	0.5	0.0	11.0	(1405)
BUN/Cr ratio		7.00					
CA	MG/DL	10.6	10.9±	0.6	8.1	15.3	(1434)
PHOS	MG/DL	4.3	4.9±	0.8	2.8	8.2	(1291)
Ca/P ratio		2.47					
NA	MEQ/L	> 134	129±	4	107	182	(1353)
K	MEQ/L	5.0	4.8±	0.5	3.3	7.6	(1368)
Na/K ratio		26.8					
CL	MEQ/L	88	88±	4	67	129	(1323)
CHOL	MG/DL	>> 123	68±	17	0	234	(1290)
T.PROT. (C)	GM/DL	8.2	7.7±	0.6	5.8	10.5	(1261)
ALBUMIN (C)	GM/DL	< 3.0	3.6±	0.4	2.4	5.2	(1145)
GLOBULIN (C)	GM/DL	>> 5.2	4.1±	0.5	2.6	6.4	(1135)
Alb/Glob rat		0.577					
AST (SGOT)	IU/L	14	24±	10	6	93	(1398)
T. BILI.	MG/DL	0.1	0.2±	0.1	0.0	1.0	(1187)
ALK.PHOS.	IU/L	72	128±	61	32	441	(1404)
LDH	IU/L	< 368	988±	568	157	4306	(1099)
CPK	IU/L	178	256±	196	18	1884	(247)
A/G RATIO	GM/DL	0.6					
BUN/CREAT	MG/DL	7					
GGT	IU/L	9	12±	5	0	37	(389)
NA/K RATIO	RATIO	27					

Comments >>

Mild hyperglobulinemia. WKS

Clinical Pathology Records - Specimen Report  
KANSAS CITY ZOOLOGICAL PARK

```

=====
Scientific Name: LOXODONTA AFRICANA (no subsp)           Accession #: 1669
Common Name: African elephant                             Female
Name: LEA                                                Birth: 17.Sep.1978 (Estimated)
                                                         Age: 27Y Est.
=====

```

Collection Information >>

```

Health Status: Normal
Fasting Time: < 8 hours
Activity: Active
Weight: 2948 Kg on 28.May.1997
Manual restraint used.

```

```

Date of Collection: 21.Sep.2005
Time of Collection:
Collected by: KPR
Sample Collection Site: EAR VEIN

```

Hematology >>

Analysis Information >>

```

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

```

```

Laboratory: ANTECH
Date of Analysis: 22.Sep.2005
Time of Analysis:
Analysis by:
Automated analysis.

```

Tests and Results >>

ISIS Reference Values >>

			Mean	S.D.	Min.	Max.	(N)
WBC	*10 <sup>3</sup> /UL	10.6	10.50±	2.648	4.500	22.10	(1544)
RBC	*10 <sup>6</sup> /UL	3.1	3.15±	0.40	2.05	4.80	(1480)
HGB	GM/DL	14.4	13.7±	1.6	7.0	26.1	(1522)
HCT	%	40	39.5±	4.6	27.0	56.0	(1984)
MCV	fL	129	125.8±	8.1	91.1	190.0	(1466)
MCH	uug	46.5	43.6±	3.0	34.8	66.8	(1454)
MCHC	gm/dL	36.0	34.7±	2.0	18.4	57.9	(1501)
SEGS	% (*10 <sup>3</sup> /UL)	29 (3.074)	3.146±	1.695	0.000	11.80	(1224)
LYMPHOCYTES	% (*10 <sup>3</sup> /UL)	68 (7.208)	4.913±	2.532	0.022	17.40	(1236)
MONOCYTES	% (*10 <sup>3</sup> /UL)	1 (0.106)	1.513±	1.651	0.000	9.480	(1175)
EOSINOPHILS	% (*10 <sup>3</sup> /UL)	2 (0.212)	0.225±	0.273	0.000	2.898	(885)
BASOPHILS	% (*10 <sup>3</sup> /UL)	0	0.049±	0.081	0.000	0.525	(464)
PLATE. EST.	ADEQ						
PLATE. CNT.	*10 <sup>3</sup> /UL	338	417±	245	74	1380	(215)
ABSBASO	/UL	0					
ABSEOS	/UL	212					
ABSLYMP	/UL	7208					
ABSMONO	/UL	106					
ABSSEGS	/UL	3074					
FIBRINOGEN	MG/DL	300	238±	139	0	600	(70)
MCH	UUG	46.6					
MCHC	%	36					
MCV	U(3)	129					

Comments >>

RBC Morph: Normal

Clinical Pathology Records - Specimen Report  
KANSAS CITY ZOOLOGICAL PARK

```

=====
Scientific Name: LOXODONTA AFRICANA (no subsp)      Accession #: 1669
Common Name: African elephant                        Female
Name: LEA                                           Birth: 17.Sep.1978 (Estimated)
                                                    Age: 27Y Est.
=====

```

Collection Information >>

```

Health Status: Normal
Fasting Time: < 8 hours
Activity: Active
Weight: 2948 Kg on 28.May.1997
Manual restraint used.

```

```

Date of Collection: 21.Sep.2005
Time of Collection:
Collected by: KPR
Sample Collection Site: EAR VEIN

```

Chemistry >>

Analysis Information >>

```

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

```

```

Laboratory: ANTECH
Date of Analysis: 22.Sep.2005
Time of Analysis:
Analysis by:
Automated analysis.

```

Tests and Results >>

ISIS Reference Values >>

			Mean	S.D.	Min.	Max.	(N)
GLUCOSE	MG/DL	75	84±	15	38	174	(1437)
BUN	MG/DL	< 6	10±	3	0	22	(1458)
CREAT.	MG/DL	1.2	1.5±	0.5	0.0	11.0	(1405)
BUN/Cr ratio		5.00					
CA	MG/DL	11.0	10.9±	0.6	8.1	15.3	(1434)
PHOS	MG/DL	< 3.9	4.9±	0.8	2.8	8.2	(1291)
Ca/P ratio		2.82					
NA	MEQ/L	133	129±	4	107	182	(1353)
K	MEQ/L	4.8	4.8±	0.5	3.3	7.6	(1368)
Na/K ratio		27.7					
CL	MEQ/L	87	88±	4	67	129	(1323)
CHOL	MG/DL	>> 103	68±	17	0	234	(1290)
T.PROT. (C)	GM/DL	7.7	7.7±	0.6	5.8	10.5	(1261)
ALBUMIN (C)	GM/DL	< 3.0	3.6±	0.4	2.4	5.2	(1145)
GLOBULIN (C)	GM/DL	> 4.7	4.1±	0.5	2.6	6.4	(1135)
Alb/Glob rat		0.638					
AST (SGOT)	IU/L	< 13	24±	10	6	93	(1398)
T. BILI.	MG/DL	0.1	0.2±	0.1	0.0	1.0	(1187)
ALK.PHOS.	IU/L	72	128±	61	32	441	(1404)
LDH	IU/L	< 404	988±	568	157	4306	(1099)
CPK	IU/L	200	256±	196	18	1884	(247)
A/G RATIO	GM/DL	0.6					
BUN/CREAT	MG/DL	5					
GGT	IU/L	10	12±	5	0	37	(389)
NA/K RATIO	RATIO	28					

Comments >>

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Mild elevation of fibrinogen with slight increase in phos and Na.
WKS

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Clinical Pathology Records - Specimen Report  
KANSAS CITY ZOOLOGICAL PARK

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=====
Scientific Name: LOXODONTA AFRICANA (no subsp)           Accession #: 1669
Common Name: African elephant                             Female
Name: LEA                                                Birth: 17.Sep.1978 (Estimated)
                                                         Age: 27Y Est.
=====

```

Collection Information >>

```

Health Status: Normal
Fasting Time: < 8 hours
Activity: Active
Weight: 2948 Kg on 28.May.1997
Manual restraint used.

```

```

Date of Collection: 14.Sep.2005
Time of Collection:
Collected by: KPR
Sample Collection Site: EAR VEIN

```

Hematology >>

Analysis Information >>

```

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

```

```

Laboratory: ANTECH
Date of Analysis: 14.Sep.2005
Time of Analysis:
Analysis by:
Automated analysis.

```

Tests and Results >>

ISIS Reference Values >>

			Mean	S.D.	Min.	Max.	(N)
WBC	*10 <sup>3</sup> /UL	9.3	10.50±	2.648	4.500	22.10	(1544)
RBC	*10 <sup>6</sup> /UL	3.1	3.15±	0.40	2.05	4.80	(1480)
HGB	GM/DL	14.5	13.7±	1.6	7.0	26.1	(1522)
HCT	%	41	39.5±	4.6	27.0	56.0	(1984)
MCV	fL	132	125.8±	8.1	91.1	190.0	(1466)
MCH	uug	> 46.8	43.6±	3.0	34.8	66.8	(1454)
MCHC	gm/dL	35.4	34.7±	2.0	18.4	57.9	(1501)
SEGS	% (*10 <sup>3</sup> /UL)	21 (1.953)	3.146±	1.695	0.000	11.80	(1224)
LYMPHOCYTES	% (*10 <sup>3</sup> /UL)	70 (6.510)	4.913±	2.532	0.022	17.40	(1236)
MONOCYTES	% (*10 <sup>3</sup> /UL)	8 (0.744)	1.513±	1.651	0.000	9.480	(1175)
EOSINOPHILS	% (*10 <sup>3</sup> /UL)	1 (0.093)	0.225±	0.273	0.000	2.898	(885)
BASOPHILS	% (*10 <sup>3</sup> /UL)	0	0.049±	0.081	0.000	0.525	(464)
PLATE. EST.	ADEQ						
PLATE. CNT.	*10 <sup>3</sup> /UL	295	417±	245	74	1380	(215)
ABSBASO	/UL	0					
ABSEOS	\UL	93					
ABSLYMP	/UL	6510					
ABSMONO	/UL	744					
ABSSEGS	/UL	1953					
FIBRINOGEN	MG/DL	300	238±	139	0	600	(70)
MCH	UUG	46.3					
MCHC	%	36					
MCV	U(3)	132					

Comments >>

RBC Morph: Normal

Clinical Pathology Records - Specimen Report  
KANSAS CITY ZOOLOGICAL PARK

```

=====
Scientific Name: LOXODONTA AFRICANA (no subsp)           Accession #: 1669
Common Name: African elephant                             Female
Name: LEA                                                Birth: 17.Sep.1978 (Estimated)
                                                         Age: 27Y Est.
=====

```

Collection Information >>

```

Health Status: Normal
Fasting Time: < 8 hours
Activity: Active
Weight: 2948 Kg on 28.May.1997
Manual restraint used.

```

```

Date of Collection: 14.Sep.2005
Time of Collection:
Collected by: KPR
Sample Collection Site: EAR VEIN

```

Chemistry >>

Analysis Information >>

```

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

```

```

Laboratory: ANTECH
Date of Analysis: 14.Sep.2005
Time of Analysis:
Analysis by:
Automated analysis.

```

Tests and Results >>

ISIS Reference Values >>

			Mean	S.D.	Min.	Max.	(N)
GLUCOSE	MG/DL	82	84±	15	38	174	(1437)
BUN	MG/DL	7	10±	3	0	22	(1458)
CREAT.	MG/DL	1.4	1.5±	0.5	0.0	11.0	(1405)
BUN/Cr ratio		5.00					
CA	MG/DL	< 10.2	10.9±	0.6	8.1	15.3	(1434)
PHOS	MG/DL	4.3	4.9±	0.8	2.8	8.2	(1291)
Ca/P ratio		2.37					
NA	MEQ/L	131	129±	4	107	182	(1353)
K	MEQ/L	4.8	4.8±	0.5	3.3	7.6	(1368)
Na/K ratio		27.3					
CL	MEQ/L	88	88±	4	67	129	(1323)
CHOL	MG/DL	>> 107	68±	17	0	234	(1290)
T.PROT. (C)	GM/DL	7.2	7.7±	0.6	5.8	10.5	(1261)
ALBUMIN (C)	GM/DL	< 2.9	3.6±	0.4	2.4	5.2	(1145)
GLOBULIN (C)	GM/DL	4.3	4.1±	0.5	2.6	6.4	(1135)
Alb/Glob rat		0.674					
AST (SGOT)	IU/L	14	24±	10	6	93	(1398)
T. BILI.	MG/DL	0.1	0.2±	0.1	0.0	1.0	(1187)
ALK.PHOS.	IU/L	< 63	128±	61	32	441	(1404)
LDH	IU/L	< 402	988±	568	157	4306	(1099)
CPK	IU/L	175	256±	196	18	1884	(247)
A/G RATIO	GM/DL	0.7					
BUN/CREAT	MG/DL	5					
GGT	IU/L	10	12±	5	0	37	(389)
NA/K RATIO	RATIO	27					

Comments >>

Mild increase in fibrinogen, cholesterol with slight decrease in Alb, Ca.

