

```
=====
Scientific Name: LOXODONTA AFRICANA (no subsp)           Accession #: 1670
Common Name: African elephant                             Female
Name: LOIS                                               Birth: 17.Sep.1978 (Estimated)
                                                         Age: 27Y Est.
=====
```

Clinical Note: 1.Oct.2005
This am-eye open and doing better-not as much "puffiness" to left eye.
Ate all food and meds-put on exhibit. (WKS)

```

=====
Scientific Name: LOXODONTA AFRICANA (no subsp)           Accession #: 1670
Common Name: African elephant                           Female
Name: LOIS                                             Birth: 17.Sep.1978 (Estimated)
                                                         Age: 27Y Est.
=====

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```

Clinical Note:                                           3.Oct.2005
UMC Results- Access.#:0520188-..204, ..206-..207, and ..340

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Date rcv'd: 10/3/05
Date reported: 10/13/05

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Bacteriology
Sample: Swab/culturette

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Aerobic Culture
Accession #: 0520188                               Accessio
Specimen ID: Drain swab                           Specimen ID: Whe

Accession #: 0520190                               Accessio
Specimen ID: Truck                                Specimen

Accession #: 0520192                               Accessio
Specimen ID: Door 5 swab                          Specimen ID: Fo

Accession #: 0520194                               Accessio
Specimen ID: Big yard swab                         Specimen ID: Dr

Accession #: 0520196                               Accessio
Specimen ID: Stall 1                              Specimen

Accession #: 0520198                               Accessio
Specimen ID: Stall 5                              Specimen

Accession #: 0520200                               Accessio
Specimen ID: Refrigerator                          Specimen ID: St

Accession #: 0520202                               Accessio
Specimen ID: Stall 2                              Specimen

Accession #: 0520204                               Accessio
Specimen ID: Big yard- feces                       Specimen ID: St

Accession #: 0520207                               Accessio
Specimen ID: Stall 3                              Specimen

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Organism ID on all of the above specimens:
  No Significant Growth

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The samples were negative, by culture, for Salmonella using primary

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

Accession #: 1670
Female
Birth: 17.Sep.1978 (Estimated)
Age: 27Y Est.
=====

Clinical Note: 3.Oct.2005
and secondary enrichment in conjunction with the use of selective media.

WNL. WKS (TLH)

Clinical Note: 3.Oct.2005
Rx'd 500mg 500 cap amoxicillin po sid for + salmonella culture. (WKS)

Clinical Note: 4.Oct.2005
Keepers radioed to report animal is on exhibit bloated and laying down. Keepers were able to move animal from exhibit into barn and eventually (using Lady) into restraint. Animal did not respond to food rewards. Suspect colic, possibly from oats she got with meds this am, Salmonella, or meds themselves. Animal did lay down and have flatulence. Animal also passed watery stools. Injected with pole syringe in restraint with 3000mg Flunixin meglumine (Banamine) IM. Animal did very well in restraint for injections. Advised staff to watch and note any changes in behavior. Offer hay this afternoon with mineral oil. Do not give produce, oats, grain, or alfalfa this pm and no meds (amoxicillin) tomorrow am. Collected fecal sample for culture. Will continue to monitor. Also noted, edema around the eye was decreased. DSP 1 gallon mineral oil to be given over hay. (SJV)

Clinical Pathology Records - Specimen Report
KANSAS CITY ZOOLOGICAL PARK

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=====
Scientific Name: LOXODONTA AFRICANA (no subsp)           Accession #: 1670
Common Name: African elephant                           Female
Name: LOIS                                             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: 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 >>

WHITE BLOOD CELL COUNT	8.6		*10 ³ /UL
RED BLOOD CELL COUNT	3.2		*10 ⁶ /UL
HEMOGLOBIN	12.1		GM/DL
HEMATOCRIT	39		%
MCV	122		fL
MCH	< 37.8		uug
MCHC	< 31.0		gm/dL
SEGMENTED NEUTROPHILS	27	(2.322)	% (*10 ³ /UL)
LYMPHOCYTES	71	(6.106)	% (*10 ³ /UL)
MONOCYTES	1	(0.086)	% (*10 ³ /UL)
EOSINOPHILS	1	(0.086)	% (*10 ³ /UL)
BASOPHILS	0		% (*10 ³ /UL)
ESTIMATED PLATELET COUNT	ADEQ		
PLATELET COUNT	268		*10 ³ /UL
ABSOLUTE BASOPHILS	0		/UL
ABSOLUTE EOSINOPHILS	86		\UL
ABSOLUTE LYMPHOCYTES	6106		/UL
ABSOLUTE MONOCYTES	86		/UL
ABSOLUTE SEGS	2322		/UL
MEAN CORPUSCULAR HEMOGLOBIN	37.8		UUG
MEAN CORPUSCULAR HEMOGLOBIN CONCENTRATION	31		%
MEAN CORPUSCULAR VOLUME	122		U(3)

Comments >>

RBC Morph: Normal

Clinical Pathology Records - Specimen Report
KANSAS CITY ZOOLOGICAL PARK

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=====
Scientific Name: LOXODONTA AFRICANA (no subsp)           Accession #: 1670
Common Name: African elephant                             Female
Name: LOIS                                               Birth: 17.Sep.1978 (Estimated)
                                                         Age: 27Y Est.
=====

```

```

Collection Information >>                               Date of Collection: 4.Oct.2005
Health Status: Abnormal                                 Time of Collection:
Fasting Time: < 8 hours                                Collected by:
Activity: Active                                        Sample Collection Site: EAR VEIN
Weight: 2948 Kg on 28.May.1997
Manual restraint used.

```

```

Chemistry >>
Analysis Information >>                                Laboratory: ANTECH
Chemistry Sample: Serum                                Date of Analysis: 5.Oct.2005
Storage: Refrigerated (<48 hours)                    Time of Analysis:
Sample Quality: No quality problems.                   Analysis by:
                                                         Automated analysis.

```

Tests and Results >>

GLUCOSE	<<	52	MG/DL
BLOOD UREA NITROGEN		10	MG/DL
CREATININE		1.3	MG/DL
BUN/creatinine ratio		7.69	
CALCIUM	<	10.1	MG/DL
PHOSPHORUS		4.9	MG/DL
calcium/phosphorus ratio		2.06	
SODIUM		133	MEQ/L
POTASSIUM		4.7	MEQ/L
sodium/potassium ratio		28.3	
CHLORIDE		89	MEQ/L
CHOLESTEROL		61	MG/DL
TOTAL PROTEIN (COLORIMETRY)		7.6	GM/DL
ALBUMIN (COLORIMETRY)	<	3.0	GM/DL
GLOBULIN (COLORIMETRY)		4.6	GM/DL
albumin/globulin ratio		0.652	
ASPARTATE AMINOTRANSFERASE	<	12	IU/L
TOTAL BILIRUBIN		0.1	MG/DL
ALKALINE PHOSPHATASE		82	IU/L
LACTATE DEHYDROGENASE	<	297	IU/L
CREATINE PHOSPHOKINASE		188	IU/L
ALBUMIN GLOBULIN RATIO		0.7	GM/DL
BUN/CREATININE RATIO		8	MG/DL
GAMMA GLUTAMYLTRANSFERASE		9	IU/L
SODIUM/POTASSIUM RATIO		28	RATIO

```

Comments >>
Significant increase in lymphs.   WKS

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=====
Scientific Name: *LOXODONTA AFRICANA (no subsp)* Accession #: 1670
Common Name: African elephant Female
Name: LOIS Birth: 17.Sep.1978 (Estimated)
Age: 27Y Est.
=====

Clinical Note: 5.Oct.2005
Keepers report animal's attitude is 80% of normal. Went down to demo fine today. Eating what she is given and trying to steal other elephants' food. Given grass hay, small amt of alfalfa, and produce tonight. No grain. No stools from overnight. Cultured standing water from yard for Salmonella. (SJV)

Clinical Note: 6.Oct.2005
Keepers report animal's attitude is back to normal. Stools normal. Animal will receive all hay, all alfalfa if not bloated, 1/2 normal grain. D/C antibiotics. (SJV)

=====
Scientific Name: *LOXODONTA AFRICANA (no subsp)* Accession #: 1670
Common Name: African elephant Female
Name: LOIS Birth: 17.Sep.1978 (Estimated)
Age: 27Y Est.
=====

Clinical Note: 6.Oct.2005
UMC Results Accession #:0520205, 0519717, 0519726 and 0520520

Date rcv'd: 10/3/05
Date reported: 10/6/05

PCR Results
WNV PCR OD swab Positive
OS swab Negative

Pursuing blood PCR. WKS

UMC Results Accession #:0519717

Date rcv'd: 9/27/05
Date reported: 10/6/05

Bacteriology

Aerobic Culture
Specimen ID: Fecal
Organism ID:
No Significant Growth

Comments: The fecal sample was negative, by culture, for Salmonella using primary and secondary enrichment in conjunction with the use of selective media. 10/6/05.

WNL. WKS

UMC Results Accession #:0519726

Date rcv'd: 9/27/05
Date reported: 10/6/05

Bacteriology

Aerobic Culture
Specimen ID: Produce from Elephants
Organism ID:
No Significant Growth

Clinical Pathology Records - Specimen Report
KANSAS CITY ZOOLOGICAL PARK

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=====
Scientific Name: LOXODONTA AFRICANA (no subsp)           Accession #: 1670
Common Name: African elephant                             Female
Name: LOIS                                               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 >>

WHITE BLOOD CELL COUNT	>	13.2		*10 ³ /UL
RED BLOOD CELL COUNT		3.2		*10 ⁶ /UL
HEMOGLOBIN		13.3		GM/DL
HEMATOCRIT		38		%
MCV		119		fL
MCH		41.6		ug
MCHC		35.0		gm/dL
SEGMENTED NEUTROPHILS	>	49	(6.468)	% (*10 ³ /UL)
LYMPHOCYTES		45	(5.940)	% (*10 ³ /UL)
MONOCYTES		5	(0.660)	% (*10 ³ /UL)
EOSINOPHILS		1	(0.132)	% (*10 ³ /UL)
BASOPHILS		0		% (*10 ³ /UL)
ESTIMATED PLATELET COUNT		ADEQ		
PLATELET COUNT		279		*10 ³ /UL
ABSOLUTE BASOPHILS		0		/UL
ABSOLUTE EOSINOPHILS		132		\UL
ABSOLUTE LYMPHOCYTES		5940		/UL
ABSOLUTE MONOCYTES		660		/UL
ABSOLUTE SEGS		6468		/UL
FIBRINOGEN		300		MG/DL
MEAN CORPUSCULAR HEMOGLOBIN		42.4		UUG
MEAN CORPUSCULAR HEMOGLOBIN CONCENTRATION		35		%
MEAN CORPUSCULAR VOLUME		119		U(3)

Comments >>

RBC Morph: Normal

Clinical Pathology Records - Specimen Report
KANSAS CITY ZOOLOGICAL PARK

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=====
Scientific Name: LOXODONTA AFRICANA (no subsp)           Accession #: 1670
Common Name: African elephant                             Female
Name: LOIS                                               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 >>

```

          GLUCOSE > 108          MG/DL
        BLOOD UREA NITROGEN          7          MG/DL
          CREATININE          1.2          MG/DL
        BUN/creatinine ratio          5.83
          CALCIUM          11.2          MG/DL
          PHOSPHORUS          4.7          MG/DL
        calcium/phosphorus ratio          2.38
          SODIUM          133          MEQ/L
          POTASSIUM          4.5          MEQ/L
        sodium/potassium ratio          29.6
          CHLORIDE          90          MEQ/L
          CHOLESTEROL          66          MG/DL
TOTAL PROTEIN (COLORIMETRY)          8.0          GM/DL
  ALBUMIN (COLORIMETRY) < 3.0          GM/DL
  GLOBULIN (COLORIMETRY) > 5.0          GM/DL
  albumin/globulin ratio          0.600
  ASPARTATE AMINOTRANSFERASE < 9          IU/L
          TOTAL BILIRUBIN          0.2          MG/DL
          ALKALINE PHOSPHATASE          103          IU/L
  LACTATE DEHYDROGENASE < 270          IU/L
  CREATINE PHOSPHOKINASE          170          IU/L
  ALBUMIN GLOBULIN RATIO          0.6          GM/DL
  BUN/CREATININE RATIO          6          MG/DL
  GAMMA GLUTAMYLTRANSFERASE          9          IU/L
  SODIUM/POTASSIUM RATIO          30          RATIO

```

=====
Scientific Name: *LOXODONTA AFRICANA (no subsp)* Accession #: 1670
Common Name: African elephant Female
Name: LOIS Birth: 17.Sep.1978 (Estimated)
Age: 27Y Est.
=====

Clinical Note: 12.Oct.2005

UMC Results Accession #:0520955

Date rcv'd: 10/12/05
Date reported: 10/12/05

PCR Results
WNV PCR Negative

WNL. WKS (TLH)

Clinical Note: 13.Oct.2005

To discontinue alfalfa for all elephants for now. (WKS)

Clinical Note: 14.Oct.2005

Texas Vet Med Lab Results Accession#: C052850163
Date specimens rcv'd: 10/14/05
Specimen ID: Feces

Test: Salmonella PCR
Result: Negative

WNL. WKS (TLH)

```

=====
Scientific Name: LOXODONTA AFRICANA (no subsp)           Accession #: 1670
Common Name: African elephant                           Female
Name: LOIS                                             Birth: 17.Sep.1978 (Estimated)
                                                         Age: 27Y Est.
=====

```

```

Clinical Note:                                           16.Oct.2005
UMC Results Accession #:0520505, .07, .09-.13, .15-.18, and .20-.21
&.399

```

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Date rcv'd: 10/6/05
Date reported: 10/16/05

```

```

Bacteriology
Sample: Swab/culturette

```

```

Aerobic Culture
Specimen ID: Sm.pool next to pool                       Specimen ID: Lg exhibit

```

```

Aerobic Culture
Specimen ID: Demo wall. by fence                       Specimen ID: Sm puddle b

```

```

Aerobic Culture
Specimen ID: Lg exhibit wallow                         Specimen ID: Pai

```

```

Aerobic Culture
Specimen ID: Big wallow                               Specimen

```

```

Aerobic Culture
Specimen ID: Mini mud wallow                          Specimen ID: Rock pool

```

```

Aerobic Culture
Specimen ID: Lg exhibit/wall. 2                       Specimen ID: Poo

```

```

Aerobic Culture
Specimen ID: Elephant pool

```

```

Organism ID:
No Significant Growth

```

```

Comments: The sample was negative, by culture, for Salmonella using
primary and secondary enrichment in conjunction with the use of
selective media.

```

```

WNL. WKS

```

```

UMC Results Accession #:0520399

```

```

Date rcv'd: 10/5/05

```

=====
Scientific Name: *LOXODONTA AFRICANA (no subsp)* Accession #: 1670
Common Name: African elephant Female
Name: LOIS Birth: 17.Sep.1978 (Estimated)
Age: 27Y Est.
=====

Clinical Note: 16.Oct.2005
Date reported: 10/16/05

Bacteriology

Aerobic Culture

Specimen ID: Fecal

Organism ID:

No Significant Growth

Comments: The fecal sample was negative, by culture, for Salmonella using primary and secondary enrichment in conjunction with the use of selective media.

WNL. WKS (TLH)

Clinical Note: 18.Oct.2005
Fecal sample sent to MU for culture. (TLH)

Clinical Pathology Records - Specimen Report
KANSAS CITY ZOOLOGICAL PARK

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

Accession #: 1670
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: 18.Oct.2005
Time of Collection:
Collected by:
Sample Collection Site: EAR VEIN

Hematology >>

Analysis Information >>

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

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

Tests and Results >>

WHITE BLOOD CELL COUNT	<	6.2	*10 ³ /UL
RED BLOOD CELL COUNT		3.0	*10 ⁶ /UL
HEMOGLOBIN		12.6	GM/DL
HEMATOCRIT		37	%
MCV		123	fL
MCH		42.0	uug
MCHC		34.1	gm/dL
SEGMENTED NEUTROPHILS		25 (1.550)	% (*10 ³ /UL)
LYMPHOCYTES		68 (4.216)	% (*10 ³ /UL)
MONOCYTES		6 (0.372)	% (*10 ³ /UL)
EOSINOPHILS		1 (0.062)	% (*10 ³ /UL)
BASOPHILS		0	% (*10 ³ /UL)
ESTIMATED PLATELET COUNT		INCRS	
ABSOLUTE BASOPHILS		0	/UL
ABSOLUTE EOSINOPHILS		62	\UL
ABSOLUTE LYMPHOCYTES		4216	/UL
ABSOLUTE MONOCYTES		372	/UL
ABSOLUTE SEGS		1550	/UL
FIBRINOGEN		100	MG/DL
MEAN CORPUSCULAR HEMOGLOBIN		42.1	UUG
MEAN CORPUSCULAR HEMOGLOBIN CONCENTRATION		34	%
MEAN CORPUSCULAR VOLUME		123	U(3)

Morphology Results >>

HYPOCHROMIA +1

=====
Scientific Name: *LOXODONTA AFRICANA (no subsp)* Accession #: 1670
Common Name: African elephant Female
Name: LOIS Birth: 17.Sep.1978 (Estimated)
Age: 27Y Est.
=====

Clinical Note: 19.Oct.2005
UMC Results Accession #:0521487

Date rcv'd: 10/19/05
Date reported: 10/28/05

Bacteriology

Aerobic Culture
Specimen ID: Fecal
Organism ID:
No significant growth

Comments: The sample was negative, by culture, for Salmonella using primary and secondary enrichment in conjunction with the use of selective media.

WNL. WKS (TLH)

```
=====
Scientific Name: LOXODONTA AFRICANA (no subsp)           Accession #: 1670
Common Name: African elephant                             Female
Name: LOIS                                               Birth: 17.Sep.1978 (Estimated)
                                                           Age: 27Y Est.
=====
```

```
Clinical Note:                                           20.Oct.2005
UMC Results           Accession #:0520829 and 0520833
```

Date rcv'd: 10/11/05
Date reported: 10/20/05

Bacteriology

Aerobic Culture
Specimen ID: Fecal
Organism ID:
No Significant Growth

Comments: The fecal sample was negative, by culture, for Salmonella using primary and secondary enrichment in conjunction with the use of selective media.

WNL. WKS

```
UMC Results           Accession #:0520833
```

Date rcv'd: 10/11/05
Date reported: 10/20/05

Bacteriology

Aerobic Culture
Specimen ID: Produce
Organism ID:
No Significant Growth

Comments: The sample was negative, by culture, for Salmonella using primary and secondary enrichment in conjunction with the use of selective media.

WNL. WKS (TLH)

=====
Scientific Name: *LOXODONTIA AFRICANA* (no subsp) Accession #: 1670
Common Name: African elephant Female
Name: LOIS Birth: 17.Sep.1978 (Estimated)
 Age: 27Y Est.
=====

Clinical Note: 24.Oct.2005
UMC Results Accession #:0520832

Date rcv'd: 10/11/05
Date reported: 10/24/05

Bacteriology

Aerobic Culture
Specimen ID: Fecal
Organism ID:
 No Significant Growth

Comments: The fecal sample was negative, by culture, for Salmonella using primary and secondary enrichment in conjunction with the use of selective media.

WNL. WKS (TLH)

Clinical Note: 25.Oct.2005
Fecal sample sent to Texas A&M for Salmonella PCR. (TLH)

Clinical Pathology Records - Specimen Report
KANSAS CITY ZOOLOGICAL PARK

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=====
Scientific Name: LOXODONTA AFRICANA (no subsp)           Accession #: 1670
Common Name: African elephant                             Female
Name: LOIS                                               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 >>

WHITE BLOOD CELL COUNT	8.6		*10 ³ /UL
RED BLOOD CELL COUNT	3.0		*10 ⁶ /UL
HEMOGLOBIN	12.4		GM/DL
HEMATOCRIT	36		%
MCV	120		fL
MCH	41.3		uug
MCHC	34.4		gm/dL
SEGMENTED NEUTROPHILS	29	(2.494)	% (*10 ³ /UL)
LYMPHOCYTES	65	(5.590)	% (*10 ³ /UL)
MONOCYTES	1	(0.086)	% (*10 ³ /UL)
EOSINOPHILS	5	(0.430)	% (*10 ³ /UL)
BASOPHILS	0		% (*10 ³ /UL)
ESTIMATED PLATELET COUNT	ADEQ		
PLATELET COUNT	323		*10 ³ /UL
ABSOLUTE BASOPHILS	0		/UL
ABSOLUTE EOSINOPHILS	430		\UL
ABSOLUTE LYMPHOCYTES	5590		/UL
ABSOLUTE MONOCYTES	86		/UL
ABSOLUTE SEGS	2494		/UL
FIBRINOGEN	300		MG/DL
MEAN CORPUSCULAR HEMOGLOBIN	41.7		UUG
MEAN CORPUSCULAR HEMOGLOBIN CONCENTRATION	35		%
MEAN CORPUSCULAR VOLUME	120		U(3)

Comments >>

RBC Morph: Normal

Clinical Pathology Records - Specimen Report
KANSAS CITY ZOOLOGICAL PARK

```

=====
Scientific Name: LOXODONTA AFRICANA (no subsp)           Accession #: 1670
Common Name: African elephant                             Female
Name: LOIS                                               Birth: 17.Sep.1978 (Estimated)
                                                         Age: 27Y Est.
=====

```

```

Collection Information >>                               Date of Collection: 25.Oct.2005
Health Status: Normal                                  Time of Collection: 9:00.0
Fasting Time: < 8 hours                               Collected by:
Activity: Active                                       Sample Collection Site: EAR VEIN
Weight: 2948 Kg on 28.May.1997
Manual restraint used.

```

```

Chemistry >>
Analysis Information >>                               Laboratory: ANTECH
Chemistry Sample: Serum                               Date of Analysis: 26.Oct.2005
Storage: Refrigerated (<48 hours)                   Time of Analysis:
Sample Quality: No quality problems.                  Analysis by:
                                                         Automated analysis.

```

Tests and Results >>

GLUCOSE	69	MG/DL
BLOOD UREA NITROGEN	7	MG/DL
CREATININE	1.3	MG/DL
BUN/creatinine ratio	5.38	
CALCIUM	< 9.7	MG/DL
PHOSPHORUS	4.4	MG/DL
calcium/phosphorus ratio	2.20	
SODIUM	< 122	MEQ/L
POTASSIUM	4.4	MEQ/L
sodium/potassium ratio	27.7	
CHLORIDE	85	MEQ/L
CHOLESTEROL	55	MG/DL
TOTAL PROTEIN (COLORIMETRY)	< 6.9	GM/DL
ALBUMIN (COLORIMETRY)	< 2.8	GM/DL
GLOBULIN (COLORIMETRY)	4.1	GM/DL
albumin/globulin ratio	0.683	
ASPARTATE AMINOTRANSFERASE	< 12	IU/L
TOTAL BILIRUBIN	0.1	MG/DL
ALKALINE PHOSPHATASE	81	IU/L
LACTATE DEHYDROGENASE	< 274	IU/L
CREATINE PHOSPHOKINASE	141	IU/L
ALBUMIN GLOBULIN RATIO	0.7	GM/DL
BUN/CREATININE RATIO	5	MG/DL
GAMMA GLUTAMYLTRANSFERASE	10	IU/L
SODIUM/POTASSIUM RATIO	28	RATIO

Comments >>

WNL, though moderate increase in fibrinogen. WKS

=====
Scientific Name: *LOXODONTA AFRICANA (no subsp)* Accession #: 1670
Common Name: African elephant Female
Name: LOIS Birth: 17.Sep.1978 (Estimated)
Age: 27Y Est.
=====

Clinical Note: 26.Oct.2005
UMC Results Accession #:0521986

Date rcv'd: 10/26/05
Date reported: 11/01/05

PCR Results
WNV PCR Negative

WNL. WKS (TLH)

Clinical Note: 27.Oct.2005
UMC Results Accession #:0522031

Date rcv'd: 10/27/05
Date reported: 11/05/05

Bacteriology

Aerobic Culture
Specimen ID: Produce salmonella screen
Organism ID:
No significant growth

Comments: The sample was negative, by culture, for Salmonella using primary and secondary enrichment in conjunction with the use of selective media.

WNL. WKS (TLH)

=====
Scientific Name: *LOXODONTA AFRICANA (no subsp)* Accession #: 1670
Common Name: African elephant Female
Name: LOIS Birth: 17.Sep.1978 (Estimated)
Age: 27Y Est.
=====

Clinical Note: 28.Oct.2005
Texas Vet Med Lab Results Accession#: C052990324
Date specimens rcv'd: 10/26/05
Specimen ID: Feces

Test: Salmonella PCR
Result: Negative

WNL. WKS (TLH)

Clinical Note: 4.Nov.2005
UMC Results Accession #:0521843

Date rcv'd: 10/25/05
Date reported: 11/4/05

Bacteriology

Aerobic Culture
Specimen ID: Fecal
Organism ID:
No Significant Growth

Comments: The fecal sample was negative, by culture, for Salmonella using primary and secondary enrichment in conjunction with the use of selective media.

WNL. WKS (TLH)

Clinical Note: 15.Nov.2005

stationary conditioning for lateral radiograph of rt rear
stifle-swelling is smaller in circumference and walking is near
normal, though does favor it on occasion. Radiographs demonstrated
normal appearance to patella, but view does not include caudal aspect
of tibial crest/plateau. To repeat radiographs and continue
hydrotherapy until rescheduled. Doing well otherwise (WKS)

=====
Scientific Name: *LOXODONTIA AFRICANA (no subsp)* Accession #: 1670
Common Name: African elephant Female
Name: LOIS Birth: 17.Sep.1978 (Estimated)
Age: 27Y Est.
=====

Clinical Note: 9.Dec.2005
UMC Results Accession #:0524721 and 0524720

Date rcv'd: 12/9/05
Date reported: 12/20/05

Bacteriology

Aerobic Culture
Specimen ID: Fecal
Specimen ID 2: Produce
Organism ID:
No significant growth

Comments: The samples were negative, by culture, for Salmonella using primary and secondary enrichment in conjunction with the use of selective media.

WNL. WKS

UMC Results Accession #:0524720

Bacteriology
Date rcv'd: 12/9/05
Date finalized: 12/15/05

Aerobic Culture
Sample: Swab/culturette
Specimen ID: Abscess swab #1
Organism ID:
Corynebacterium spp

Comments: The growth of the isolate was heavy on direct culture.

Specimen 2 ID: Abscess swab #2
Organism ID:
Staphylococcus epidermidis

The isolate was recovered from enrichment broth only.

Anaerobic Culture
Specimen ID: Abscess swab #1
Organism ID:

```

=====
Scientific Name: LOXODONTA AFRICANA (no subsp)           Accession #: 1670
Common Name: African elephant                           Female
Name: LOIS                                             Birth: 17.Sep.1978 (Estimated)
                                                         Age: 27Y Est.
=====

```

Clinical Note: 9.Dec.2005
 No growth

Specimen 2 ID: Abscess swab #2
 Organism ID:
 No growth

Small Animal Suscept
 Specimen ID: Abscess swab #1 and #2
 Organism ID: #1= Corynebacterium spp (1)
 #2= Staphylococcus epidermidis (2)
 #3=

Note resistance of the S. epidermidis to oxacillin. This indicates the presence of a potent beta lactamase enzyme that will inactivate the beta lactam drugs including those with inhibitors eventhough the MIC value may be low.

	s=susceptible		r=resistant	i=intermediate
Organism ID-	#1	#2	#3	
Amikacin:		s	s	
Amoxi/Clav:		s	r	
Ampicillin:		s	r	
Cefazolin:		s	r	
Cefotaxime:				
Cefoxitin:		s	r	
Cefpodoxime:	s	r		
Ceftiofur:		s	r	
Cephalexin:				
Cephalothin:	s	r		
Chloramphenicol:	s	s		
Ciprofloxacin:				
Clindamycin:	s	s		
Doxycycline:				
Enrofloxacin:	s	s		
Erythromycin:	i	s		
Gentamicin:		i	r	
Imipenem:		s	r	
Marbofloxacin:	i	s		
Neomycin:				
Novobiocin:				
Orbifloxacin/Orbax:	s	s		
Oxacil 2% NaCl:	s	r		
Oxytetracycline:				
Penicillin:		s	r	
Piperacillin:				


```

=====
Scientific Name: LOXODONTA AFRICANA (no subsp)           Accession #: 1670
Common Name: African elephant                             Female
Name: LOIS                                               Birth: 17.Sep.1978 (Estimated)
                                                         Age: 27Y Est.
=====

```

```

Clinical Note:                                           28.Dec.2005
UMC Results           Accession #:0525597

```

```

Bacteriology
Date rcv'd: 12/28/05
Date finalized: 12/31/05

```

```

Aerobic Culture
Sample: Swab/culturette
Specimen ID: Abscess swab

```

```

Organism ID:
  Streptococcus spp, Alpha hemolytic
  Streptococcus equisimilis

```

Comments: The growth of the isolates was heavy on direct culture.

```

Anaerobic Culture
Specimen ID: Abscess swab
Organism ID:
  No significant growth

```

```

Antimicrob Suscept/Equine
Specimen ID: Abscess swab
Organism ID: #1= Streptococcus equisimilis
              #2= Streptococcus spp, Alpha hemolytic
              #3=

```

	s=susceptible		r=resistant	i=intermediate
Organism ID-	#1	#2	#3	
Amikacin:		i		s
Amoxi/Clav:		s		s
Ampicillin:		s		s
Cefazolin:		s		s
Cefotaxime:				
Cefoxitin:				
Cefpodoxime:				
Ceftiofur:		s		s
Cephalexin:				
Cephalothin:				
Chloramphenicol:	r	s		
Ciprofloxacin:				
Clindamycin:				
Doxycycline:				

Scientific Name: *LOXODONTA AFRICANA (no subsp)*

Accession #: 1670

Common Name: African elephant

Female

Name: LOIS

Birth: 17.Sep.1978 (Estimated)

Age: 27Y Est.

Clinical Note:

28.Dec.2005

Enrofloxacin:			
Erythromycin:	r	i	
Gentamicin:		r	s
Imipenem:		s	s
Marbofloxacin:			
Neomycin:			
Novobiocin:			
Orbifloxacin/Orbax:			
Oxacil 2% NaCl:	s	s	
Oxytetracycline:			
Penicillin:		i	s
Piperacillin:			
Rifampin:		s	s
Sarafloxacin:			
Spectinomycin:			
Streptomycin:			
Sulfadimethox:			
Sulfathiazole:			
Tetracycline:	r	s	
Ticar/Clav Acid:	s	s	
Ticarcillin:	s	s	
Trimeth/Sulfa:	s	s	
Tylosin:			

Abscess likely from traumatically involved wound. WKS (TLH)

Clinical Note:

28.Dec.2005

Flushed area via 60cc diluted chlorhexidine solution, then applied Ssulfadiazine cream topically. To reapeate daily. (WKS)

Clinical Note:

29.Dec.2005

Flushed area as before and removed necrotic eschar. Bed of granulation tissue present. To continue hydrotherapy and apply ointment daily. Overall , lesions has decreased in size and is flattening out. (WKS)

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

Accession #: 1670
Female
Birth: 17.Sep.1978 (Estimated)
Age: 27Y Est.

Clinical Note:

30.Dec.2005

UMC Results Accession #:0525734

Bacteriology

Date rcv'd: 12/30/05
Date finalized: 1/10/06

Aerobic Culture

Sample: Swab/culturette
Specimen ID: Abscess swab

Organism ID:

Streptococcus equisimilis
Actinomyces spp

Comments: The growth of the Streptococcus equisimilis isolate was heavy on direct culture. The Actinomyces first developed under anaerobic conditions but sub-cultured aerobically. It was present in less numbers.

Anaerobic Culture

Specimen ID: Abscess swab
Organism ID:

Streptococcus equisimilis
Streptococcus spp, Alpha hemolytic
Actinomyces spp

The Actinomyces failed to grow in a susceptibility test initially. However, with prolonged incubation a susceptibility test was obtained. WHF. Final report. 1/10/06

Antimicrob Suscept/Equine

Specimen ID: Abscess

Organism ID: #1= Actinomyces spp

#2= Streptococcus equisimilis

#3= Streptococcus spp, Alpha hem

s=susceptible r=resistant i=intermediate

Organism ID-	#1	#2	#3	
Amikacin:		s	i	i
Amoxi/Clav:		s	s	s
Ampicillin:		s	s	s
Cefazolin:		s	s	s
Cefotaxime:				
Cefoxitin:				

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

Accession #: 1670
Female
Birth: 17.Sep.1978 (Estimated)
Age: 27Y Est.

Clinical Note:

30.Dec.2005

Cefpodoxime:				
Ceftiofur:		S	S	S
Cephalexin:				
Cephalothin:				
Chloramphenicol:	S	S	S	
Ciprofloxacin:				
Clindamycin:				
Doxycycline:				
Enrofloxacin:				
Erythromycin:	S	i	i	
Gentamicin:		S	S	S
Imipenem:		S	S	S
Marbofloxacin:				
Neomycin:				
Novobiocin:				
Orbifloxacin/Orbax:				
Oxacil 2% NaCl:	S	S	S	
Oxytetracycline:				
Penicillin:		S	S	S
Piperacillin:				
Rifampin:		S	S	S
Sarafloxacin:				
Spectinomycin:				
Streptomycin:				
Sulfadimethox:				
Sulfathiazole:				
Tetracycline:	S	S	S	
Ticar/Clav Acid:	S	S	S	
Ticarcillin:	S	S	S	
Trimeth/Sulfa:	r	S	S	
Tylosin:				

Sensitive to all drugs tested- abscess is healing well. To consider placing on systemic abs. WKS

Has been placed on TMZ. WKS (TLH)

```

=====
Scientific Name: LOXODONTA AFRICANA (no subsp)           Accession #: 1670
Common Name: African elephant                             Female
Name: LOIS                                               Birth: 17.Sep.1978 (Estimated)
                                                         Age: 27Y Est.
=====

```

Clinical Note: 30.Dec.2005
 Dispensed 2 60cc syringes of diluted nolvasan and demonstrated how to flush area, then blot and apply ointment. Doing well. (WKS)

Clinical Note: 2.Jan.2006
 Called keeper-asked about dailies that indicated Lois had apparent edema on ventrum (no call/contact). Keeper stated they noted it on Sunday and called curator. Left side swollen-to examined tomorrow am. (WKS)

Clinical Note: 3.Jan.2006
 Visual exam-abscess area healing well, slight serous discharge present-to flush one more day-dispensed 60cc nolvasan syringe. to discontinue hydrotherapy. Ventral edema of left abdominal wall and to a lesser extent rt ventral abdominal wall. To monitor-unlikely connected to abscess, but to consider pupura hemorrhagica-type of reaction. To request blood for CBC/profile. (WKS)

Clinical Note: 4.Jan.2006
 NVSL Results Accession #: 417020
 Date rcv'd: 1/4/06
 Date reported: 3/1/06

Trunk Wash results- Tuberculosis test

NVSL ID	Case ID	Sample Date	Results (Mycobac)
1395161	0602601	12/27/05	No isolation mad
1395162	0602602	12/29/05	No isolation mad
1395163	0602603	12/30/05	No isolation mad

WNL. WKS (TLH)

```

=====
Scientific Name: LOXODONTA AFRICANA (no subsp)           Accession #: 1670
Common Name: African elephant                             Female
Name: LOIS                                               Birth: 17.Sep.1978 (Estimated)
                                                         Age: 27Y Est.
=====

```

Clinical Note: 6.Jan.2006

UMC Results Accession #:0600330 and 0600324

Date rcv'd: 1/6/06
Date reported: 1/16/06

Bacteriology

Aerobic Culture
Specimen ID: Fecal
Organism ID:
 No significant growth

Comments: The fecal sample was negative, by culture, for Salmonella using primary and secondary enrichment in conjunction with the use of selective media.

WNL. WKS

UMC Results Accession #:0600324

Date rcv'd: 1/6/06
Date reported: 1/16/06

Bacteriology

Aerobic Culture
Specimen ID: Produce- Elephant barn
Organism ID:
 No significant growth

Comments: The produce sample was negative, by culture, for Salmonella using primary and secondary enrichment in conjunction with the use of selective media.

WNL. WKS (TLH)

=====
Scientific Name: *LOXODONTA AFRICANA* (no subsp)

Accession #: 1670

Common Name: African elephant

Female

Name: LOIS

Birth: 17.Sep.1978 (Estimated)

Age: 27Y Est.

=====

Clinical Note:

6.Jan.2006

Behavioral restraint for indirect oscillometric blood pressure measurement. Placed cuff ~1/3 the way down tail and obtained 3 readings each. All did very well. To repeat at least two more times while "calm", then three times after coming off exhibit/exercised. Recheck of abscessation-granulating in well. Small amount of serous discharge to area but area has flattened out well. To discontinue treatment with hydrotherapy, but continue application of Ssulfadiazine topically. Edema unchanged. (WKS)

Clinical Note:

7.Jan.2006

Results of abscess culture revealed streptococcus equisimilis and an @ hemolytic streptococcus, sensitive to all drugs-disp TMZ 960, 80 tabs po sid x 5 days as a follow-up. (WKS)

Clinical Note:

10.Jan.2006

Behavioral restraint for indirect blood pressure determination via oscillometric unit. Placed cuff in same position as before, obtained 3 readings each. All did very well. Results of 102529 are preliminarily compatible with hypertension (have observed scleral injection and has retained calf) caused by retained calf, or as a result or previous suspected nephritis, which is also secondary to ascending infection from retained calf. To complete one more set on "calm" group, then immediately after coming off exhibit, or when animals are in restraint for other procedures. (WKS)

Clinical Note:

17.Jan.2006

Recorded blood pressures on each elephant via tail. (ANL)

=====
Scientific Name: *LOXODONTA AFRICANA (no subsp)* Accession #: 1670
Common Name: African elephant Female
Name: LOIS Birth: 17.Sep.1978 (Estimated)
Age: 27Y Est.
=====

Clinical Note: 2.Feb.2006

UMC Results Accession #:0602450 and 0602452

Date rcv'd: 2/2/06
Date finalized: 2/11/06

Bacteriology Results

Aerobic Culture
Specimen ID: Produce
Organism ID:
No significant growth

Comments: The produce sample was negative, by culture, for Salmonella using primary and secondary enrichment in conjunction with the use of selective media.

WNL. WKS

UMC Results Accession #:0602452

Date rcv'd: 2/2/06
Date finalized: 2/13/06

Bacteriology Results

Aerobic Culture
Specimen ID: Fecal
Organism ID:
No significant growth

Comments: The fecal sample was negative, by culture, for Salmonella using primary and secondary enrichment in conjunction with the use of selective media.

WNL. WKS (TLH)

```

=====
Scientific Name: LOXODONTA AFRICANA (no subsp)           Accession #: 1670
Common Name: African elephant                             Female
Name: LOIS                                               Birth: 17.Sep.1978 (Estimated)
                                                         Age: 27Y Est.
=====

```

```

Clinical Note:                                           8.Feb.2006
Performed PLR in both eyes and utilized 6.35mm (known measurement) tag
as comparison. Time from rest to maximal miotic response averaged
>15sec and return to full mydriasis averaged >2 minutes at a fc of
~10-20 ambient light and >600 fc with transillumination. (WKS)

```

```

Submission Data >>                                     Sample id.: 2006-0062
Type: Fecal sample                                     Date collected: 1.Mar.2006
Purpose: ROUTINE EXAM                                Collected by: SS

```

```

Collected from:                                       Enclosure: EBC
  Group of specimens housed together.

```

```

Examination Data >>                                   Date examined: 1.Mar.2006
Storage: refrigerated
Consistency: Not specified                             by: ANL
Gross appearance: Not specified

```

```

Comments >>
  Sent to MU for culture for salmonella

```


=====
Scientific Name: *LOXODONTA AFRICANA* (no subsp) Accession #: 1670
Common Name: African elephant Female
Name: LOIS Birth: 17.Sep.1978 (Estimated)
=====

Parasitology Examination:

Submission Data >>

Type: Fecal sample
Purpose: ROUTINE EXAM

Sample id.: 2006-0124
Date collected: 5.Mar.2006

Collected from:

Group of specimens housed together.

Enclosure: EBC

Examination Data >>

Storage: other storage
Consistency: Not specified
Gross appearance: Not specified

Date examined: 5.Mar.2006

by: WKS

Comments >>

Sent to MU for salmonella culture

Clinical Note:

21.Mar.2006

UMC Results Accession #: 0606711

Date rcv'd: 3/21/06

Date finalized: 3/30/06

Bacteriology Results

Aerobic Culture

Specimen ID: Fecal

Organism ID:

No significant growth

The fecal sample was negative, by culture, for Salmonella using primary and secondary enrichment in conjunction with the use of selective media.

WNL. WKS (TLH)

=====
Scientific Name: *LOXODONTA AFRICANA (no subsp)* Accession #: 1670
Common Name: African elephant Female
Name: LOIS Birth: 17.Sep.1978 (Estimated)
=====

Parasitology Examination:

Submission Data >>

Type: Fecal sample
Purpose: NOT SPECIFIED

Sample id.: 2006-0077
Date collected: 4.Apr.2006
Collected by: SS

Collected from:

Group of specimens housed together.

Enclosure: EBC

Examination Data >>

Storage: refrigerated
Consistency: Not specified
Gross appearance: Not specified

Date examined: 4.Apr.2006

by: ANL

Sample description:

Sent to MU for salmonella culture.

```

=====
Scientific Name: LOXODONTA AFRICANA (no subsp)           Accession #: 1670
Common Name: African elephant                             Female
Name: LOIS                                               Birth: 17.Sep.1978 (Estimated)
                                                         Age: 27Y Est.
=====

```

```

Clinical Note:                                           6.Apr.2006
UMC Results           Accession #: 0608519 and 0608511

```

```

Date rcv'd: 4/6/06
Date finalized: 4/18/06

```

```

Bacteriology
Aerobic Culture
Specimen ID: Fecal
Organism ID:
    No significant growth

```

The fecal sample was negative, by culture, for Salmonella using primary and secondary enrichment in conjunction with the use of selective media.

WNL. WKS

```

UMC Results           Accession #: 0608511

```

```

Date rcv'd: 4/6/06
Date finalized: 4/15/06

```

```

Bacteriology
Aerobic Culture
Specimen ID: Produce
Organism ID:
    No significant growth

```

The fecal sample was negative, by culture, for Salmonella using primary and secondary enrichment in conjunction with the use of selective media.

WNL. WKS (TLH)

=====
Scientific Name: *LOXODONTA AFRICANA (no subsp)* Accession #: 1670
Common Name: African elephant Female
Name: LOIS Birth: 17.Sep.1978 (Estimated)
Age: 27Y Est.
=====

Clinical Note: 14.Apr.2006
UMC Results Accession #: 0608124 and 0608127

Date rcv'd: 4/4/06
Date finalized: 4/13/06

Bacteriology

Aerobic Culture
Specimen ID: Fecal (no name/id given)
Organism ID:
No significant growth

The fecal sample was negative, by culture, for Salmonella using primary and secondary enrichment in conjunction with the use of selective media.

WNL. WKS

UMC Results Accession #: 0608124 and 0608127

Date rcv'd: 4/4/06
Date finalized: 4/13/06

Bacteriology

Aerobic Culture
Specimen ID: Fecal (no name/id given)
Organism ID:
No significant growth

The fecal sample was negative, by culture, for Salmonella using primary and secondary enrichment in conjunction with the use of selective media.

WNL. WKS (TLH)

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

Accession #: 1670
Female
Birth: 17.Sep.1978 (Estimated)
Age: 27Y Est.
=====

Clinical Note:

15.Apr.2006

Physical exam for apparent increase in size of right rear stifle-not limping, but didn't want to bend limb as per usual when doing commands. Has been in wallow on exhibit and supervisor stated she may have tweaked limb. PE-very firm swelling in area of patella, with softer aspect ventrally-not erythematous to touch. Not sensitive to palpation. Otherwise normal, except for slightly looser stools as has been historically. To perform hydrotherapy bid x 10-15 minutes. Will try to radiograph opposite stifle to compare with previous rt stifle film. (WKS)

Clinical Note:

18.Apr.2006

Visual exam-stifle still swollen but putting good weight on leg-no limping seen. To initiate phenylbutazone paste, 2mg/kg po (9g) sid #3 tubes. To radiograph this week. (WKS)

Clinical Note:

27.Apr.2006

Palpated swelling. Still present on right stifle. Hard mass the size of an orange. Lateral radiographs of both stifles with Lois in ERD. Patella visible on right stifle rad but not on left. Major ddx is still laterally luxated patella of right stifle. To re-radiograph next week and possibly radiograph another elephant of equal size to compare. (HRL)

=====
Scientific Name: *LOXODONTA AFRICANA (no subsp)* Accession #: 1670
Common Name: African elephant Female
Name: LOIS Birth: 17.Sep.1978 (Estimated)
Age: 27Y Est.
=====

Clinical Note: 4.May.2006
UMC Results Accession #: 0611088 and 0611082

Date rcv'd: 5/4/06
Date finalized: 5/15/06

Bacteriology

Aerobic Culture
Specimen ID: Produce
Organism ID:
No significant growth

The produce sample was negative, by culture, for Salmonella using primary and secondary enrichment in conjunction with the use of selective media.

WNL. WKS

UMC Results Accession #: 0611082

Date rcv'd: 5/4/06
Date finalized: 5/13/06

Bacteriology

Aerobic Culture
Specimen ID: Fecal
Organism ID:
No significant growth

The fecal sample was negative, by culture, for Salmonella using primary and secondary enrichment in conjunction with the use of selective media.

WNL. WKS (TLH)

=====
Scientific Name: *LOXODONTA AFRICANA (no subsp)*

Accession #: 1670

Common Name: African elephant

Female

Name: LOIS

Birth: 17.Sep.1978 (Estimated)

Age: 27Y Est.

=====
Clinical Note:

5.May.2006

Lateral radiographs of left stifle attempted in restraint. Difficult to get adequate exposure with portable unit. Right rear patella appears more prominent when compared to left, with similar angle of exposure, but difficult to interpret. Associated swelling has dissipated somewhat-can discontinue hydrotherapy and monitor for now. (WKS)

Clinical Note:

13.May.2006

Results of most recent salmonella culture from feces of each elephant are NEG (WKS)

Clinical Note:

19.May.2006

Radiographed rt rear leg from a P/A aspect-Bone density consistent with patella but cannot be certain. To attempt left rear leg in next couple weeks. Unit may not be adequate to penetrate tissues for proper evaluation. (WKS)

Clinical Note:

27.May.2006

Radiographed left rear leg (couldn't perform as schedule yesterday-supervisor had Dr. appointment) in a similar plane/angle as rt rear leg. Could not visualize patella or appreciate any swelling. Cannot definitively state whether patella on rt rear limb is luxated -unit not powerful enough to penetrate limb. May pursue palpation/evaluation in recumbency of restraint. (WKS)

Clinical Note:

28.Jun.2006

Intraspecific fighting in am-could not visualize as she was on exhibit and wouldn't be brought off till pm and may not tolerate conspecific. Staff stated wounds did not appear to be significant-some blood next to sulcus but only a small laceration noted. (WKS)

Clinical Note:

29.Jun.2006

PE-small number of contusions around face/sulcus and did not visualize laceration but keeper stated no blood noted-to monitor for now. Has been back with conspecific and no significant aggression noted. (WKS)

=====
Scientific Name: *LOXODONTA AFRICANA* (no subsp)

Accession #: 1670

Common Name: African elephant

Female

Name: LOIS

Birth: 17.Sep.1978 (Estimated)

Age: 27Y Est.

=====

Clinical Note:

19.Jul.2006

PE - ophthalmic exam; OD-lenticular sclerosis noted centrally, OS-
Lenticular sclerosis ventrolaterally and pigmentd area on sclera at
7-8 o'clock position. Tusk/Oral exam; NSF. Confirmation was assessed
and considered WNL. Foot Pad exam revealed; RF-separation of foot pad
on caudolateral aspect, cracks b/w nails 2-3, 3-4, and mild crack b/w
4-5. LF-separation of foot pad on medial aspect, identical cracks to
RF. Mild heat noted on lateral aspect over 5th nail. RH-1cm x 1cm x
1cm lesion slightly lateral to midline on plantar aspect of foot pad.
Swollen right stifle noted. LH-circumfrential separation on lateral
aspect with some minor loss of foot pad. Vulvular exam; WNL. Mammary
exam; WNL. AU Otic culture obtained. Right pinna noted to have two
1cm x 1cm holes in most ventral aspect. (ANL)

Clinical Pathology Records - Specimen Report
KANSAS CITY ZOOLOGICAL PARK

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=====
Scientific Name: LOXODONTA AFRICANA (no subsp)           Accession #: 1670
Common Name: African elephant                             Female
Name: LOIS                                               Birth: 17.Sep.1978 (Estimated)
                                                         Age: 28Y Est.
=====

```

Collection Information >>

```

Health Status: Normal
Fasting Time: < 8 hours
Activity: Active
Weight: 3843 Kg on 16.Nov.2005
Manual restraint used.

```

```

Date of Collection: 19.Jul.2006
Time of Collection: 10:30.0
Collected by: SM
Sample Collection Site: EAR VEIN

```

Hematology >>

Analysis Information >>

```

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

```

```

Laboratory: ANTECH
Date of Analysis: 20.Jul.2006
Time of Analysis: 4:23
Analysis by:
Automated analysis.

```

Tests and Results >>

WHITE BLOOD CELL COUNT	<	6.7		*10 ³ /UL
RED BLOOD CELL COUNT		3.2		*10 ⁶ /UL
HEMOGLOBIN		13.3		GM/DL
HEMATOCRIT		39		%
MCV		122		fL
MCH		41.6		uug
MCHC		34.1		gm/dL
SEGMENTED NEUTROPHILS	>	77	(5.159)	% (*10 ³ /UL)
LYMPHOCYTES	<	15	(1.005)	% (*10 ³ /UL)
MONOCYTES		1	(0.067)	% (*10 ³ /UL)
EOSINOPHILS		7	(0.469)	% (*10 ³ /UL)
BASOPHILS		0		% (*10 ³ /UL)
ESTIMATED PLATELET COUNT		ADEQU		
PLATELET COUNT		214		*10 ³ /UL
ABSOLUTE BASOPHILS		0		/UL
ABSOLUTE EOSINOPHILS		469		\UL
ABSOLUTE LYMPHOCYTES		1005		/UL
ABSOLUTE MONOCYTES		67		/UL
FIBRINOGEN	>	444		MG/DL
MEAN CORPUSCULAR HEMOGLOBIN		41.6		UUG
MEAN CORPUSCULAR HEMOGLOBIN CONCENTRATION		35		%
MEAN CORPUSCULAR VOLUME		122		U(3)

Comments >>

```

RBC morphology normal
absolute neutrophils: 5159
platelet estimate adequate

```

Clinical Pathology Records - Specimen Report
KANSAS CITY ZOOLOGICAL PARK

```

=====
Scientific Name: LOXODONTA AFRICANA (no subsp)           Accession #: 1670
Common Name: African elephant                             Female
Name: LOIS                                               Birth: 17.Sep.1978 (Estimated)
                                                         Age: 28Y Est.
=====

```

```

Collection Information >>                               Date of Collection: 19.Jul.2006
Health Status: Normal                                  Time of Collection: 10:30.0
Fasting Time: < 8 hours                               Collected by: SM
Activity: Active                                       Sample Collection Site: EAR VEIN
Weight: 3843 Kg on 16.Nov.2005
Manual restraint used.

```

```

Chemistry >>
Analysis Information >>                               Laboratory: ANTECH
Chemistry Sample: Serum                               Date of Analysis: 20.Jul.2006
Storage: Refrigerated (<48 hours)                   Time of Analysis: 4:23
Sample Quality: No quality problems.                  Analysis by:
                                                         Automated analysis.

```

```

Tests and Results >>

```

GLUCOSE	87	MG/DL
BLOOD UREA NITROGEN	7	MG/DL
CREATININE	2.0	MG/DL
BUN/creatinine ratio	3.50	
CALCIUM	10.7	MG/DL
PHOSPHORUS	4.8	MG/DL
calcium/phosphorus ratio	2.23	
SODIUM	> 137	MEQ/L
POTASSIUM	4.7	MEQ/L
sodium/potassium ratio	29.1	
CHLORIDE	> 95	MEQ/L
CHOLESTEROL	70	MG/DL
TOTAL PROTEIN (COLORIMETRY)	8.2	GM/DL
ALBUMIN (COLORIMETRY)	3.5	GM/DL
GLOBULIN (COLORIMETRY)	> 4.7	GM/DL
albumin/globulin ratio	0.745	
ASPARTATE AMINOTRANSFERASE	15	IU/L
TOTAL BILIRUBIN	0.2	MG/DL
ALKALINE PHOSPHATASE	< 62	IU/L
LACTATE DEHYDROGENASE	< 352	IU/L
CREATINE PHOSPHOKINASE	155	IU/L
ALBUMIN GLOBULIN RATIO	0.7	GM/DL
BUN/CREATININE RATIO	4	MG/DL
GAMMA GLUTAMYLTRANSFERASE	7	IU/L
SODIUM/POTASSIUM RATIO	29	RATIO

```

Comments >>
Mild increase in NaCl may indicate slight dehydration. Creatinine
just above normal but BUN WNL. Mild increase in cholesterol. Mild
leukopenia without increased globulin unknown etiology. WKS.

```

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

Accession #: 1670
Female
Birth: 17.Sep.1978 (Estimated)
Age: 28Y Est.

Clinical Note:

21.Jul.2006

UMC Microbiology Results
Accession # 0617049
Received: 7/21/2006
Finalized: 7/25/2006
Reported: 7/25/2006

Bacteriology Results

Specimen ID: Left Ear swab
Organism ID: Staphylococcus epidermidis
Organism ID: Streptococcus spp., alpha hemolytic
Organism ID: Klebsiella pneumoniae
Comments: The growth of the isolates was heavy on direct culture. The ear swab impression stain did not show yeast.

Anaerobic Culture

Specimen ID: Left Ear swab
Organism ID: No significant growth

Small Animal Suscept

Specimen ID: Left Ear swab
Organism ID: #1 Staphylococcus epidermidis
Organism ID: #2 Streptococcus spp., alpha hemolytic
Organism ID: #3 Klebsiella pneumoniae

	#1	#2	#3
Amikacin	s	i	s
Amoxi/Clav	s	s	s
Ampicillin	s	s	r
Cefazolin	s	s	s
Cefoxitin	s	s	s
Cefpodoxime	s	s	s
Ceftiofur	s	s	s
Cephalothin	s	s	s
Chloramphenicol	s	s	s
Clindamcin	r	s	r
Enrofloxacin	s	s	s
Erythromycin	r	i	r
Gentamicin	s	s	s
Imipenem	s	s	s
Marbofloxacin	s	s	s
Orbifloxacin	s	i	s
Oxacil + 2% NaCl	s	s	r
Penicillin	s	s	r

```

=====
Scientific Name: LOXODONTA AFRICANA (no subsp)           Accession #: 1670
Common Name: African elephant                             Female
Name: LOIS                                               Birth: 17.Sep.1978 (Estimated)
                                                         Age: 28Y Est.
=====

```

Clinical Note: 21.Jul.2006

```

Rifampin          s      s      r
Tetracycline      i      s      s
Ticar/Clav Acid   s      s      s
Ticarcillin       s      s      r
Trimeth/Sulfa     s      s      s

```

Attempting to define normal flora. WKS.

UMC Results

```

Accession #0617048
Received: 7/21/2006
Reported: 7/26/2006

```

Bacteriology results

Aerobic culture

```

Specimen ID: Right ear swab
Organism ID: Pasteurella multocida
Organism ID: Streptococcus spp., alpha hemolytic
Organism ID: Aeromonas hydrophila
Organism ID: Escherichia hermanii
Organism ID: Klebsiella pneumoniae

```

Comments: The ear swab impression stain showed a few yeast cells. The growth of the isolates was heavy on direct culture.

Anaerobic culture

```

Specimen ID: Right ear swab
Organism ID: No significant growth

```

Small animal suscept

```

Specimen ID: right ear swab
Organism ID: #1 Streptococcus spp., alpha hemolytic
              #2 Pasteurella multocida
              #3 Aeromonas hydrophila
              #4 Escherichia hermanii
              #5 Klebsiella pneumoniae

```

	#1	#2	#3	#4	#5
Amikacin	i	s	s	s	s
Amoxi/Clav	s	s	r	s	s
Ampicillin	s	s	r	r	r
Cefazolin	s	s	r	s	s
Cefoxitin	s	s	r	s	s
Cefpodoxime	s	s	s	s	s

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

Accession #: 1670
Female
Birth: 17.Sep.1978 (Estimated)
Age: 28Y Est.

Clinical Note:

21.Jul.2006

Ceftiofur	s	s	s	s	s
Cephalothin	s	s	r	s	s
Chloramphenicol	s	s	s	s	s
Clindamycin	s	s	r	r	r
Enrofloxacin	s	s	s	s	s
Erythromycin	i	s	r	r	r
Gentamicin	s	s	s	s	s
Imipenem	s	s	s	s	s
Marbofloxacin	s	s	s	s	s
Orbifloxacin	i	s	s	s	s
Oxacil + 2% NaCl	s	r	r	r	r
Penicillin	s	s	r	r	r
Rifampin	s	s	i	r	r
Tetracycline	s	s	s	s	s
Ticar/Clav Acid	s	s	i	s	s
Ticarcillin	s	s	r	r	r
Trimeth/sulfa	s	s	s	s	s

Attempting to define normal flora. WKS. (ERB)

Clinical Pathology Records - Specimen Report
KANSAS CITY ZOOLOGICAL PARK

```

=====
Scientific Name: LOXODONTA AFRICANA (no subsp)           Accession #: 1670
Common Name: African elephant                           Female
Name: LOIS                                             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: 3843 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 >>

APPEARANCE	OPAQUE	
COLOR	PLYEWH	
PH	8.5	
SPECIFIC GRAVITY	1.005	
URINE BACTERIA	COCCI	
URINE BILIRUBIN	NEG	
URINE BLOOD	NEG	
URINE CASTS	-	
URINE CRYSTALS	-	
URINE EPITHELIAL CELLS	-	
URINE GLUCOSE	NEG	MG/DL
URINE KETONE	NEG	
URINE NITRITE	NEG	
URINE PROTEIN	NEG	
URINE RBC/HPF	-	
URINE UROBILINOGEN	NORMAL	
URINE WBC/HPF	-	

Comments >>

Color: pale yellow-white

```

=====
Scientific Name: LOXODONTA AFRICANA (no subsp)           Accession #: 1670
Common Name: African elephant                             Female
Name: LOIS                                               Birth: 17.Sep.1978 (Estimated)
                                                         Age: 28Y Est.
=====

```

Clinical Note: 27.Jul.2006

Mich. State Univ. Results Case #:00203362

Date Received: 7/27/06
Date Reported: 7/28/06

Sample: Serum
Test: Serum/Plasma Panel (values in ppm)

B: <1.00
Fe: 0.71
P: 47
Ca: 104
K: 174
Zn: 0.84
Cr: <0.100
Mg: 22.9
Cu: 1.00
Na: 2920

Comments: WNL per WKS.

Mich State Univ Results Case#: 00203362

Date rcv'd: 7/27/06
Date reported: 7/29/06

Specimen: Serum (Plastic top)

Vitamin E serum analysis: 0.91
Selenium serum analysis: 292

Comments: WNL per WKS. (ERB)

=====
ear swab impression stain did not show yeast. rect culture. The

Anaerobic Culture

Specimen ID: Left Ear swab
Organism ID: No significant growth

Small Animal Suscept

Specimen ID: Left Ear swab
Organism ID: #1 Staphylococcus epidermidis
Organism ID: #2 Streptococcus spp., alpha hemolytic
Organism ID: #3 Klebsiella pneumoniae

	#1	#2	#3
Amikacin	s	i	s
Amoxi/Clav	s	s	s
Ampicillin	s	s	r
Cefazolin	s	s	s
Cefoxitin	s	s	s
Cefpodoxime	s	s	s
Ceftiofur	s	s	s
Cephalothin	s	s	s
Chloramphenicol	s	s	s
Clindamcin	r	s	r
Enrofloxacin	s	s	s
Erythromycin	r	i	r
Gentamicin	s	s	s
Imipenem	s	s	s
Marbofloxacin	s	s	s
Orbifloxacin	s	i	s
Oxacil + 2% NaCl	s	s	r
Penicillin	s	s	r

```

=====
Scientific Name: LOXODONTA AFRICANA (no subsp)           Accession #: 1670
Common Name: African elephant                             Female
Name: LOIS                                               Birth: 17.Sep.1978 (Estimated)
                                                         Age: 28Y Est.
=====

```

Clinical Note:

21.Jul.2006

```

Rifampin           s     s     r
Tetracycline       i     s     s
Ticar/Clav Acid   s     s     s
Ticarcillin        s     s     r
Trimeth/Sulfa     s     s     s

```

Attempting to define normal flora. WKS.

UMC Results

Accession #0617048
Received: 7/21/2006
Reported: 7/26/2006

Bacteriology results

Aerobic culture

Specimen ID: Right ear swab

Organism ID: Pasteurella multocida

Organism ID: Streptococcus spp., alpha hemolytic

Organism ID: Aeromonas hydrophila

Organism ID: Escherichia hermanii

Organism ID: Klebsiella pneumoniae

Comments: The ear swab impression stain showed a few yeast cells. The growth of the isolates was heavy on direct culture.

Anaerobic culture

Specimen ID: Right ear swab

Organism ID: No significant growth

Small animal suscept

Specimen ID: right ear swab

Organism ID: #1 Streptococcus spp., alpha hemolytic

#2 Pasteurella multocida

#3 Aeromonas hydrophila

#4 Escherichia hermanii

#5 Klebsiella pneumoniae

	#1	#2	#3	#4	#5
Amikacin	i	s	s	s	s
Amoxi/Clav	s	s	r	s	s
Ampicillin	s	s	r	r	r
Cefazolin	s	s	r	s	s
Cefoxitin	s	s	r	s	s
Cefpodoxime	s	s	s	s	s

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

Accession #: 1670
Female
Birth: 17.Sep.1978 (Estimated)
Age: 28Y Est.
=====

Clinical Note:

21.Jul.2006

Ceftiofur	s	s	s	s	s	
Cephalothin	s	s	s	r	s	s
Chloramphenicol	s	s	s	s	s	s
Clindamycin	s	s	r	r	r	
Enrofloxacin	s	s	s	s	s	
Erythromycin	i	s	r	r	r	
Gentamicin	s	s	s	s	s	s
Imipenem	s	s	s	s	s	s
Marbofloxacin	s	s	s	s	s	
Orbifloxacin	i	s	s	s	s	
Oxacil + 2% NaCl	s	r	r	r	r	
Penicillin	s	s	r	r	r	r
Rifampin	s	s	i	r	r	r
Tetracycline	s	s	s	s	s	s
Ticar/Clav Acid	s	s	i	s	s	
Ticarcillin	s	s	r	r	r	r
Trimeth/sulfa	s	s	s	s	s	

Attempting to define normal flora. WKS. (ERB)

Clinical Pathology Records - Specimen Report
KANSAS CITY ZOOLOGICAL PARK

```

=====
Scientific Name: LOXODONTA AFRICANA (no subsp)           Accession #: 1670
Common Name: African elephant                           Female
Name: LOIS                                             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: 3843 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 >>

APPEARANCE	OPAQUE	
COLOR	PLYEWH	
PH	8.5	
SPECIFIC GRAVITY	1.005	
URINE BACTERIA	COCCI	
URINE BILIRUBIN	NEG	
URINE BLOOD	NEG	
URINE CASTS	-	
URINE CRYSTALS	-	
URINE EPITHELIAL CELLS	-	
URINE GLUCOSE	NEG	MG/DL
URINE KETONE	NEG	
URINE NITRITE	NEG	
URINE PROTEIN	NEG	
URINE RBC/HPF	-	
URINE UROBILINOGEN	NORMAL	
URINE WBC/HPF	-	

Comments >>

Color: pale yellow-white

=====
Scientific Name: *LOXODONTA AFRICANA (no subsp)* Accession #: 1670
Common Name: African elephant Female
Name: LOIS Birth: 17.Sep.1978 (Estimated)
=====

Parasitology Examination:

Submission Data >>

Type: Fecal sample
Purpose: ROUTINE EXAM

Sample id.: 2006-0159
Date collected: 2.Aug.2006
Collected by: SM

Collected from:

Group of specimens housed together.

Enclosure: EBC

Examination Data >>

Storage: other storage
Consistency: Not specified
Gross appearance: Typical

Date examined: 2.Aug.2006

Comments >>

samples sent out for salmonella

Clinical Note:

7.Aug.2006

UMC results
Accession #0618273
Received: 8/7/06
Reported: 8/16/06

Bacteriology results

Aerobic culture

Specimen ID: fecal

Organism ID: No significant growth

Comments: The fecal sample was negative, by culture, for Salmonella using primary and secondary enrichment in conjunction with the use of selective media.

PCR results

Salmonella sp. PCR

Result: Negative

WNL per WKS. (ERB)

=====
Scientific Name: *LOXODONTA AFRICANA* (no subsp) Accession #: 1670
Common Name: African elephant Female
Name: LOIS Birth: 17.Sep.1978 (Estimated)
Age: 28Y Est.
=====

Clinical Note: 21.Aug.2006

Visual exam: Right tusk. Keepers reported that yesterday there was a small amount of dried blood on the craniodorsal aspect of her right tusk at the area of the distal sulcus. No additional bleeding was observed during the remainder of the day. Keeper was able to touch the tusk and no movement of the tusk was felt. Lois did not react to tusk manipulation according to keeper. Visual exam- no blood (fresh or dried) was seen. Lois was acting normal with a normal appetite. No further recheck needed unless additional bleeding is seen or a change in Lois's behaviour or appetite is noted. (GLT)

Clinical Note: 7.Sep.2006

Michigan State University Toxicology results
Encounter: 00227177
Received: 9/7/06
Reported: 9/28/06

General Toxicology

GCMS Specimen: Lettuce

GCMS: Positive

GCMS Interpretation: Compounds in lettuce: Permethrin. Permethrin is a synthetic pyrethroid compound which is used as an insecticide.

Wilson K. Rumbleha BVM, PhD, Clinical Toxicologist.

Comments: Expected result. WKS. (ERB)


```

=====
Scientific Name: LOXODONTA AFRICANA (no subsp)           Accession #: 1670
Common Name: African elephant                             Female
Name: LOIS                                               Birth: 17.Sep.1978 (Estimated)
                                                         Age: 28Y Est.
=====

```

Clinical Note: 12.Sep.2006

Texas Veterinary Medical Diagnostic Laboratory System results
Accession #C062550302
Received: 9/12/06
Final report mailed: 9/18/06

Samonellosis (genus) PCR
Specimen: Feces
Results: negative

WNL per WKS.Texas Veterinary Medical Diagnostic Laboratory System
results
Accession #: C062550306
Received: 9/12/06
Report Mailed: 9/15/06

Specimen: Produce sample
Test requested: Salmonella PCR

Results: PCR cancelled ver vet - no valid protocol for Salmonella PCR
from fruit sample.

WKS. (ERB)

Clinical Note: 27.Sep.2006

Keeper reports a small rock was removed from the front right foot pad
the previous Thursday (9/21), and had been flushing once daily with
H2O2. There is no purulent discharge or evidence of necrosis. Continue
to flush daily. (AP)

Clinical Note: 29.Sep.2006

Dispensed 7 curved tip syringes: Use syringe to flush footpad wound
once daily with hydrogen peroxide x 7 days. Keeper reports that wound
is healing nicely, pared out the wound again yesterday. No discharge,
no lameness as per keeper. (GLT)

=====
Scientific Name: *LOXODONTA AFRICANA (no subsp)* Accession #: 1670
Common Name: African elephant Female
Name: LOIS Birth: 17.Sep.1978 (Estimated)
Age: 28Y Est.
=====

Clinical Note: 4.Oct.2006
Visual exam of footpad wound. No discharge or heat. Continues to heal
appropriately. Flush with hydrogen peroxide every other day. (102)

Clinical Note: 19.Oct.2006
Performed blood pressure readings via oscilimetric unit at base of
tail. (GLT)

Clinical Note: 2.Nov.2006
Performed 5 serial blood pressure measurements for scientific study
via tail cuff. Patient did very well during testing. (GLT)

Clinical Note: 9.Nov.2006
Performed 5 serial blood pressure measurements using tail cuff and
oscillimetric unit. (GLT)

Clinical Note: 24.Nov.2006
Records from yesterday indicated some ventral edema on abdomen but
otherwise doing well. (WKS)

=====

Scientific Name: <i>LOXODONTA AFRICANA (no subsp)</i>	Accession #: 1670
Common Name: African elephant	Female
Name: LOIS	Birth: 17.Sep.1978 (Estimated)
	Age: 28Y Est.

=====

Clinical Note: 1.Dec.2006

At ~4:30pm supervisor radioed and stated elephants had been out for about 30minutes, came back in and Lois was bloated, not eating and just standing. Visual exam-significant dorsal distension of abdomen bilaterally, rt worse than left side. Somnolent. Only change had been hay from camel barn yesterday, since elephant barn was out (other supervisor stated that "extra" hay from camels was same load placed at elephant barn-advised since hay was stored in different location, temp and humidity could play a role in quality-as a potential cause of bloating).Disp 2 gallons mineral oil on hay (alfalfa ok but minimal amount just so she would take it) and 2500mg flunixin po. To walk between stalls for the next hour or so. Would not take any meds after ~2 hours. Had not tried to lie down, but ~5:30 did lie down once-advised would give another hour or so, then consider injectables (staff hesitant to try to get her in restraint as it was dark and elephants would have to be shifted outdoors to move her to restraint). ~7:30-had not taken any meds and was lying down frequently but not rolling. Had passed small amount of stool-some gravel in boluses, but minimal. Was lying on left side upon presentation but stood easily and was alert, though mentation was depressed. Dated with ~1900mg flunixin meglumine im in triceps/shoulders bilaterally. Started to eat mineral-oil soaked hay, gatorade/mineral oil mix. Advised no grain, no alfalfa and minimal hay this evening-To walk for an additional hour (~until about 9:45-10:00), then recheck between 1:00-2:00 am. If doing very well (alert, walking, responding to commands, then can have another flake or two of hay). To receive ~3 gallons mineral oil if possible. Prognosis fair to guarded. (WKS)

Clinical Note: 3.Dec.2006

This am-no bloating observed at all. Passed stool while observing this afternoon-loose but not diarrhea. Urinated normally. Advised giving ~1/2 bale of hay today-not necessary to give mineral oil or other meds as she appears to be at least 90% of normal behaviorally also. To monitor. (WKS)

Clinical Pathology Records - Specimen Report
KANSAS CITY ZOOLOGICAL PARK

```

=====
Scientific Name: LOXODONTA AFRICANA (no subsp)           Accession #: 1670
Common Name: African elephant                           Female
Name: LOIS                                             Birth: 17.Sep.1978 (Estimated)
                                                         Age: 28Y Est.
=====

```

```

Collection Information >>                               Date of Collection: 6.Dec.2006
Health Status: Abnormal                                Time of Collection: 8:00.0
Fasting Time: < 8 hours                               Collected by: SM
Activity: Active                                       Sample Collection Site: EAR VEIN
Weight: 3843 Kg on 16.Nov.2005
Manual restraint used.

```

```

Hematology >>
Analysis Information >>                               Laboratory: ANTECH
Anticoagulant: EDTA                                  Date of Analysis: 7.Dec.2006
Storage: Refrigerated (<48 hours)                  Time of Analysis: 5:42
Sample Quality: No quality problems.                 Analysis by:
                                                         Automated analysis.

```

```

Tests and Results >>

```

WHITE BLOOD CELL COUNT	9.1		*10 ³ /UL
RED BLOOD CELL COUNT	< 2.5		*10 ⁶ /UL
HEMOGLOBIN	< 10.8		GM/DL
HEMATOCRIT	< 32		%
MCV	128		fL
MCH	43.2		uug
MCHC	33.8		gm/dL
SEGMENTED NEUTROPHILS	44	(4.004)	% (*10 ³ /UL)
LYMPHOCYTES	47	(4.277)	% (*10 ³ /UL)
MONOCYTES	8	(0.728)	% (*10 ³ /UL)
EOSINOPHILS	1	(0.091)	% (*10 ³ /UL)
BASOPHILS	0		% (*10 ³ /UL)
ESTIMATED PLATELET COUNT	ADEQU		
PLATELET COUNT	287		*10 ³ /UL
ABSOLUTE BASOPHILS	0		/UL
ABSOLUTE EOSINOPHILS	91		\UL
ABSOLUTE LYMPHOCYTES	4277		/UL
ABSOLUTE MONOCYTES	728		/UL
FIBRINOGEN	182		MG/DL
MEAN CORPUSCULAR HEMOGLOBIN	42.9		UUG
MEAN CORPUSCULAR HEMOGLOBIN CONCENTRATION	34		%
MEAN CORPUSCULAR VOLUME	128		U(3)

```

Comments >>
RBC morphology normal
Neutrophils absolute: 4004

Essentially normal. WKS.

```

Clinical Pathology Records - Specimen Report
KANSAS CITY ZOOLOGICAL PARK

```

=====
Scientific Name: LOXODONTA AFRICANA (no subsp)           Accession #: 1670
Common Name: African elephant                             Female
Name: LOIS                                               Birth: 17.Sep.1978 (Estimated)
                                                         Age: 28Y Est.
=====

```

Collection Information >>

```

Health Status: Abnormal
Fasting Time: < 8 hours
Activity: Active
Weight: 3843 Kg on 16.Nov.2005
Manual restraint used.

```

```

Date of Collection: 6.Dec.2006
Time of Collection: 8:00.0
Collected by: SM
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: 7.Dec.2006
Time of Analysis: 5:42
Analysis by:
Automated analysis.

```

Tests and Results >>

GLUCOSE	73	MG/DL
BLOOD UREA NITROGEN	< 6	MG/DL
CREATININE	1.3	MG/DL
BUN/creatinine ratio	4.62	
CALCIUM	10.4	MG/DL
PHOSPHORUS	5.1	MG/DL
calcium/phosphorus ratio	2.04	
SODIUM	132	MEQ/L
POTASSIUM	4.6	MEQ/L
sodium/potassium ratio	28.7	
CHLORIDE	89	MEQ/L
CHOLESTEROL	51	MG/DL
TOTAL PROTEIN (COLORIMETRY)	7.5	GM/DL
ALBUMIN (COLORIMETRY)	3.2	GM/DL
GLOBULIN (COLORIMETRY)	4.3	GM/DL
albumin/globulin ratio	0.744	
ASPARTATE AMINOTRANSFERASE	< 11	IU/L
TOTAL BILIRUBIN	0.2	MG/DL
ALKALINE PHOSPHATASE	< 56	IU/L
LACTATE DEHYDROGENASE	< 265	IU/L
CREATINE PHOSPHOKINASE	213	IU/L
ALBUMIN GLOBULIN RATIO	0.7	GM/DL
BUN/CREATININE RATIO	5	MG/DL
GAMMA GLUTAMYLTRANSFERASE	7	IU/L
SODIUM/POTASSIUM RATIO	29	RATIO

=====
Scientific Name: *LOXODONTA AFRICANA (no subsp)* Accession #: 1670
Common Name: African elephant Female
Name: LOIS Birth: 17.Sep.1978 (Estimated)
Age: 28Y Est.
=====

Clinical Note: 8.Dec.2006
Vaccination- Tetanus toxoid Fort Dodge 1630100A exp 10jan07 IM right
triceps. Watch lethargy, lameness, anorexia. (AWB)

Clinical Note: 19.Dec.2006
Performed trunk wash #1 using 60ml of sterile saline infused into 1 or
both nostrils, trunk is gently agitated and the contents were blown
into a plastic bag. Contents were then transferred into a sterile
tube. At least 20ml of fluid was obtained from each elephant.
Samples will be frozen, batched and sent off for culture. (GLT)

Clinical Note: 26.Dec.2006
Obtained trunk culture via 60cc saline intranasally and retrieved 20cc
of fluid for Mycobacterial culture (2nd of 3 samples). (WKS)

Submission Data >> Sample id.: 2006-0549
Type: Fecal sample Date collected: 27.Dec.2006
Purpose: ROUTINE EXAM Collected by: PYT

Collected from: Enclosure: STALL#1
From an individual specimen.

Examination Data >> Date examined: 28.Dec.2006
Storage: refrigerated
Consistency: formed
Gross appearance: Typical by: MS

Tests & Results >>
DIRECT MICROSCOPIC EXAMINATION NO PARASITES SEEN
FLOATATION - ZINC SULFATE NO PARASITES SEEN

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Scientific Name: *LOXODONTA AFRICANA (no subsp)* Accession #: 1670
Common Name: African elephant Female
Name: LOIS Birth: 17.Sep.1978 (Estimated)
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=====

Clinical Note: 3.Jan.2007
Trunk wash #3: 60ml of sterile saline was instilled into the trunk and then blown into a bag. The contents were transferred into marked vials. The samples were frozen, and will be sent in with the first 2 trunk washes for culture. (GLT)

Clinical Note: 4.Jan.2007
UMC microbiology results
Accession #0700177
Received: 1/4/07
Reported: 1/16/07

Bacteriology results
Aerobic culture
Specimen ID: Fecal
Organism ID: No significant growth
Comments: The fecal sample was negative, by culture, for Salmonella using primary and secondary enrichment in conjunction with the use of selective media.

Comments: WNL per WKS. (ERB)

Clinical Note: 5.Jan.2007
NVSL trunk wash results
Accession #476574
Received: 1/5/07
Submitted: 3/14/07

Sample ID: 12/19/06, 12/26/06, 1/3/07
Mycobacteria isolation diagnosis: no isolation made
Specimen submitted: trunk wash

Comments: WNL per WKS. (ERB)

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Scientific Name: LOXODONTA AFRICANA (no subsp)           Accession #: 1670
Common Name: African elephant                           Female
Name: LOIS                                             Birth: 17.Sep.1978 (Estimated)
                                                         Age: 28Y Est.
=====
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Clinical Note: 18.Jan.2007
Performed PLRs on all six elephants All did well. Noted small (3mm) pink, nonulcerated raised lesion at dorsal limbus (12:00) OD in Tattoo. Not present at annual exam. To monitor. Noted brown, 3-4mm slightly raised mass at lateral canthus of Lois's eye OD and note pink, nonulcerated 2-3mm mass at lateral canthus OS in Penny. To monitor all. Will repeat PLRs from temporal aspect next week. (WKS)

Clinical Note: 22.Jan.2007
Keepers report that there still appears to be ventral edema. Unable to visualize edema due to patient being in corner stall. Patient still eating and acting normal. Will assess tomorrow. (GLT)

Clinical Note: 23.Jan.2007
Performed 5 serial blood pressure readings using tail cuff and behavioral restraint. Patient did very well. (GLT)

Clinical Note: 23.Jan.2007
Performed 2nd of 3 final BPs on each. 5 readings obtained with cuff at level of heart. (WKS)

Clinical Note: 25.Jan.2007
Performed PLR in a nasal to temporal angle with Finoff transilluminator-all did very well-recorded all times from resting pupillary size to maximal mydriasis, then to maximal mydriasis. Some apparent differences noted. Study is completed (WKS)

Clinical Note: 1.Feb.2007
Performed 5 serial blood pressure measurements via a tail oscillometric cuff. Elephant did very well for measurements. (GLT)

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Scientific Name: *LOXODONTA AFRICANA (no subsp)* Accession #: 1670
Common Name: African elephant Female
Name: LOIS Birth: 17.Sep.1978 (Estimated)
Age: 28Y Est.
=====

Clinical Note: 10.Feb.2007
Disp .05cc ophthalmic solution in individual TB syringes w/o needle.
To apply as a practice/conditioning in preparation for atropine study
(mydriasis effect). #12 (WKS)

Clinical Note: 13.Mar.2007
Ventral edema resolving, doing well. (WKS)

Clinical Pathology Records Report - ISIS/In-House Reference Values
KANSAS CITY ZOOLOGICAL PARK

Scientific name: *LOXODONTA AFRICANA*
Common Name: African elephant

		ISIS Values				
		Mean	S.D.	Min.	Max.	(N)
WBC	*10 ³ /UL	10.50 ± 2.648		4.500	22.10	(1544)
RBC	*10 ⁶ /UL	3.15 ± 0.40		2.05	4.80	(1480)
HGB	GM/DL	13.7 ± 1.6		7.0	26.1	(1522)
HCT	%	39.5 ± 4.6		27.0	56.0	(1984)
MCH	MG/DL	43.6 ± 3.0		34.8	66.8	(1454)
MCHC	uug	34.7 ± 2.0		18.4	57.9	(1501)
MCV	fL	125.8 ± 8.1		91.1	190.0	(1466)
SEGS	*10 ³ /UL	3.146 ± 1.695		0.000	11.80	(1224)
BANDS	*10 ³ /UL	0.843 ± 0.799		0.000	6.530	(605)
LYMPHOCYTES	*10 ³ /UL	4.913 ± 2.532		0.022	17.40	(1236)
MONOCYTES	*10 ³ /UL	1.513 ± 1.651		0.000	9.480	(1175)
EOSINOPHILS	*10 ³ /UL	0.225 ± 0.273		0.000	2.898	(885)
BASOPHILS	*10 ³ /UL	0.049 ± 0.081		0.000	0.525	(464)
NRBC	/100 WBC	0 ± 1		0	3	(92)
PLATE. CNT.	*10 ³ /UL	417 ± 245		74	1380	(215)
RETICS	%	0.0 ± 0.0		0.0	0.0	(7)
GLUCOSE	MG/DL	84 ± 15		38	174	(1437)
BUN	MG/DL	10 ± 3		0	22	(1458)
CREAT.	MG/DL	1.5 ± 0.5		0.0	11.0	(1405)
URIC ACID	MG/DL	0.2 ± 0.4		0.0	5.1	(466)
CA	MG/DL	10.9 ± 0.6		8.1	15.3	(1434)
PHOS	MG/DL	4.9 ± 0.8		2.8	8.2	(1291)
NA	MEQ/L	129 ± 4		107	182	(1353)
K	MEQ/L	4.8 ± 0.5		3.3	7.6	(1368)
CL	MEQ/L	88 ± 4		67	129	(1323)
IRON	MCG/DL	79 ± 42		8	174	(54)
MG	MG/DL	1.97 ± 0.75		0.65	4.20	(98)
HCO3	MMOL/L	25.1 ± 3.6		13.0	31.0	(44)
CHOL	MG/DL	68 ± 17		0	234	(1290)
TRIG	MG/DL	64 ± 31		0	179	(1124)
T.PROT. (C)	GM/DL	7.7 ± 0.6		5.8	10.5	(1261)
T.PROT. (R)	GM/DL	8.0 ± 0.4		7.4	8.6	(8)
ALBUMIN (C)	GM/DL	3.6 ± 0.4		2.4	5.2	(1145)
GLOBULIN (C)	GM/DL	4.1 ± 0.5		2.6	6.4	(1135)
AST (SGOT)	IU/L	24 ± 10		6	93	(1398)
ALT (SGPT)	IU/L	7 ± 6		0	40	(547)
T. BILI.	MG/DL	0.2 ± 0.1		0.0	1.0	(1187)
D. BILI	MG/DL	0.1 ± 0.1		0.0	0.3	(154)
I. BILI.	MG/DL	0.1 ± 0.1		0.0	0.9	(152)
AMYLASE	U/L	3075 ± 1552		0	7918	(241)
ALK.PHOS.	IU/L	128 ± 61		32	441	(1404)
LDH	IU/L	988 ± 568		157	4306	(1099)

Clinical Pathology Records Report - ISIS/In-House Reference Values
KANSAS CITY ZOOLOGICAL PARK

Scientific name: *LOXODONTA AFRICANA*

Common Name: African elephant

		ISIS Values				
		Mean	S.D.	Min.	Max.	(N)
CPK	IU/L	256 ±	196	18	1884	(247)
OSMOLARITY	MOSMOL/L	259 ±	4	246	272	(689)
ALPHA GLOB.	MG/DL	0.7 ±	0.0	0.7	0.7	(1)
ALPHA-1 GLOB	MG/DL	0.7 ±	0.2	0.2	0.8	(8)
ALPHA-2 GLOB	MG/DL	1.0 ±	0.3	0.8	1.6	(8)
BETA GLOB.	MG/DL	1.2 ±	0.8	0.6	1.7	(2)
Body Temperature:		39.0 ±	0.0	39.0	39.0	(1)
CO2	MMOL/L	27.0 ±	3.1	12.0	61.4	(840)
ESR	MM/HR	27 ±	0	27	27	(1)
FIBRINOGEN	MG/DL	238 ±	139	0	600	(70)
GGT	IU/L	12 ±	5	0	37	(389)
LIPASE	U/L	7 ±	7	0	45	(66)
PROGESTERONE	NG/DL	144.8 ±	216.4	0.060	1005	(266)
TESTOSTERONE	NG/ML	1.010 ±	1.117	0.220	1.800	(2)
TOTAL T4	MCG/DL	8.2 ±	1.3	6.9	9.5	(3)
T3 (RIA)	NG/ML	209.0 ±	0.0	209.0	209.0	(1)
ALBUMIN (E)	GM/DL	4.4 ±	0.3	4.1	4.9	(7)
GAMMA GLOB	GM/DL	1.6 ±	0.4	0.7	1.9	(7)