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LOXODONTA AFRICANA (no subsp)  
African elephant  
Name: MEGAN

Sex: Female  
Age: 30Y 6M 5D

Acc. #: 102530  
Birth: 22.May.1978

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.....2008....

- 16.Jul Blood sample: (EDTA) Hematology/Chemistry/Serology results.  
WBC:5.90 \*10<sup>3</sup>/UL; HCT: 43.0%; BUN:5 MG/DL;  
22.Jul Clinical note recorded. (ERA)  
29.Jul Clinical note recorded. (CSS)  
30.Jul Clinical note recorded. (ANL)  
Clinical note recorded. (ERT)

Megan  
# Pages: 47

LOXODONTA AFRICANA (no subsp)  
African elephant  
Name: MEGAN

Sex: Female  
Age: 30Y 6M 5D

Acc. #: 102530  
Birth: 22.May.1978

Clinical Note:

16.Jul.2008

Routine exam: RR: 12 breathes/min.; Ophthalmic: left & right eyes normal, temporal gland on right side remains enlarged. Pads: Left front foot has a verticle superficial crack in nail 4 which is a historic crack and shows no pain, Right front foot Nail 3 is growing in normally from a previous crack, pad of both front feet look good and have no divets; Left hind foot has a superficial verticle crack on nail 2 and 3, more on 2 than 3, minor divets (which occur naturally in the wild), no fluid on palpation; Right hind foot Chronic but not inflammed verticle crack on nail 1, no divets. Vulva exam normal, Truck: normal, Aural exam: left ear has one area of depigmentation on margin of ear and right ear has no depigmented areas. Radiographed all 4 feet (at MA/KVP: 10/80, .80 sec); Teats bilaterally normal; Body position toes turned out with ankles turned in, ambulation was normal; Oral exam all teeth with in normal limits, upper arcade normal with wrinkles and hairs returning to area of previous fistulous tract. Blood Pressure: 1) systolic: 169 / Diastolic: 141/ MAP: 150 / HR: 31; 2) 173/132/154/30; 3) 180/136/156/30; 4) 167/132/147/30; 5) 184/129/153/30 Cuff size: 12x20. (ERA)

Clinical Pathology Records - Specimen Report  
 KANSAS CITY ZOOLOGICAL PARK

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LOXODONTA AFRICANA (no subsp)	Sex: Female	Acc. #: 102530
African elephant	Age: 30Y 6M 5D	Birth: 22.May.1978
Name: MEGAN		

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Collection Information >>

Health Status: Normal  
 Fasting Time: < 8 hours  
 Activity: Calm  
 Weight: 3384 Kg on 17.Mar.2006  
 Manual restraint used.

Date of Collection: 16.Jul.2008  
 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: 16.Jul.2008  
 Time of Analysis: 5:10  
 Analysis by:  
 Automated analysis.

Tests and Results >>

WHITE BLOOD CELL COUNT	<	5.9		*10 <sup>3</sup> /UL
RED BLOOD CELL COUNT		3.3		*10 <sup>6</sup> /UL
HEMOGLOBIN		15.0		GM/DL
HEMATOCRIT		43		%
MCV		130		fL
MCH		45.5		uug
MCHC		34.9		gm/dL
SEGMENTED NEUTROPHILS		73	(4.307)	% (*10 <sup>3</sup> /UL)
LYMPHOCYTES	<	19	(1.121)	% (*10 <sup>3</sup> /UL)
MONOCYTES		7	(0.413)	% (*10 <sup>3</sup> /UL)
EOSINOPHILS		1	(0.059)	% (*10 <sup>3</sup> /UL)
BASOPHILS		0		% (*10 <sup>3</sup> /UL)
ESTIMATED PLATELET COUNT			INCR	
PLATELET COUNT	>>	939		*10 <sup>3</sup> /UL
ABSOLUTE BASOPHILS		0		/UL
ABSOLUTE EOSINOPHILS		59		\UL
ABSOLUTE LYMPHOCYTES		1121		/UL
ABSOLUTE MONOCYTES		413		/UL
ABSOLUTE SEGS		4307		/UL
FIBRINOGEN		172		MG/DL
MEAN CORPUSCULAR HEMOGLOBIN		45.1		UUG
MEAN CORPUSCULAR HEMOGLOBIN CONCENTRATION		35		%
MEAN CORPUSCULAR VOLUME		129		U(3)

Comments >>

RBC morphology normal.  
 Platelet count results have been rechecked and verified.  
 Blood smear reviewed by technologist.

WBC just below normal but rest essentially WNL. WKS

Clinical Pathology Records - Specimen Report  
 KANSAS CITY ZOOLOGICAL PARK

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LOXODONTA AFRICANA (no subsp)	Sex: Female	Acc. #: 102530
African elephant	Age: 30Y 6M 5D	Birth: 22.May.1978
Name: MEGAN		

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Collection Information >>

Health Status: Normal  
 Fasting Time: < 8 hours  
 Activity: Calm  
 Weight: 3384 Kg on 17.Mar.2006  
 Manual restraint used.

Date of Collection: 16.Jul.2008  
 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: 16.Jul.2008  
 Time of Analysis:  
 Analysis by:  
 Automated analysis.

Tests and Results >>

GLUCOSE	>>	128	MG/DL
BLOOD UREA NITROGEN	<	5	MG/DL
CREATININE		1.4	MG/DL
BUN/creatinine ratio		3.57	MG/DL
CALCIUM		11.1	MG/DL
PHOSPHORUS	<	3.8	MG/DL
calcium/phosphorus ratio		2.92	MG/DL
SODIUM		128	MEQ/L
POTASSIUM		4.4	MEQ/L
sodium/potassium ratio		29.1	MEQ/L
CHLORIDE		89	MEQ/L
CHOLESTEROL	>	88	MG/DL
TOTAL PROTEIN (COLORIMETRY)		7.9	GM/DL
ALBUMIN (COLORIMETRY)	<	2.9	GM/DL
GLOBULIN (COLORIMETRY)	>	5.0	GM/DL
albumin/globulin ratio		0.580	GM/DL
ASPARTATE AMINOTRANSFERASE		15	IU/L
TOTAL BILIRUBIN		0.2	MG/DL
DIRECT BILIRUBIN		0.0	MG/DL
ALKALINE PHOSPHATASE	<	51	MG/DL
LACTATE DEHYDROGENASE	<	362	IU/L
CREATINE PHOSPHOKINASE		297	IU/L
ALBUMIN GLOBULIN RATIO		0.6	GM/DL
BUN/CREATININE RATIO		4	MG/DL
GAMMA GLUTAMYLTRANSFERASE		9	IU/L
SODIUM/POTASSIUM RATIO		29	RATIO

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*LOXODONTA AFRICANA (no subsp)*

African elephant

Name: MEGAN

Sex: Female

Age: 30Y 6M 5D

Acc. #: 102530

Birth: 22.May.1978

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**Clinical Note:**

Dispensed 1 box 12cc syringes, 1 flat of purple top tubes for blood  
draws. (CSS)

22.Jul.2008

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LOXODONTA AFRICANA (no subsp)  
African elephant  
Name: MEGAN

Sex: Female  
Age: 30Y 6M 5D  
Acc. #: 102530  
Birth: 22.May.1978

Clinical Note:

<<<Microbiology>>>

29.Jul.2008

Sample A

Date Received: 07/29/2008  
Date Reported: 08/02/2008

Laboratory:  
[ ] LABCORP  
[ ] NVSL  
[X] UMC  
[ ] ANTECH

Sample Source: Fecal swab

Submission type:

- aerobic bacteriology
- anaerobic bacteriology
- comprehensive stool culture
- mycology
- enteric pathogen screen
- mycobacterial

Organism:

	Growth: heavy	moderate	light
1. E. coli, nonhemolytic	[ ]	[ ]	[ ]
2. Aeromonas caviae	[ ]	[ ]	[ ]
3.	[ ]	[ ]	[ ]
4.	[ ]	[ ]	[ ]
5.	[ ]	[ ]	[ ]
6.	[ ]	[ ]	[ ]

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

\*\*\*\*\*S = SUSCEPTIBLE; I = INTERMEDIATE; R = RESISTANT

Sensitivity:

	1	2	3	4	5	6
Amikacin:	s	s				



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

ISIS Values

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

		Mean	S.D.	Min.	Max.	(N)
WBC	*10 <sup>3</sup> /UL	10.50 ±	2.648	4.500	22.10	(1544)
RBC	*10 <sup>6</sup> /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 <sup>3</sup> /UL	3.146 ±	1.695	0.000	11.80	(1224)
BANDS	*10 <sup>3</sup> /UL	0.843 ±	0.799	0.000	6.530	(605)
LYMPHOCYTES	*10 <sup>3</sup> /UL	4.913 ±	2.532	0.022	17.40	(1236)
MONOCYTES	*10 <sup>3</sup> /UL	1.513 ±	1.651	0.000	9.480	(1175)
EOSINOPHILS	*10 <sup>3</sup> /UL	0.225 ±	0.273	0.000	2.898	(885)
BASOPHILS	*10 <sup>3</sup> /UL	0.049 ±	0.081	0.000	0.525	(464)
NRBC	/100 WBC	0 ±	1	0	3	(92)
PLATE. CNT.	*10 <sup>3</sup> /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)

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)

Medical History Report - Summary for Individual Specimen - page 1 -  
KANSAS CITY ZOOLOGICAL PARK

LOXODONTA AFRICANA (no subsp)  
African elephant

Name: MEGAN

Sex: Female

Age: 30Y 2M 8D

Acc. #: 102530

Birth: 22.May.1978

.....2007....

- 28.Mar Parasitology examination: (ROUTINE EXAM) Fecal sample.  
NO PARASITES SEEN
- 9.Jul Clinical note recorded. (ERB)
- 19.Jul Blood sample: (EDTA) (10:00.0) Hematology/Chemistry/Serology results.  
WBC:6.90 \*10<sup>3</sup>/UL; HCT: 33.0%; BUN:7 MG/DL;
- 20.Jul Clinical note recorded. (PMC)
- 20.Jul Clinical note recorded. (ERB)
- 15.Aug Clinical note recorded. (ERT)
- 28.Sep Clinical note recorded. (ERT)
- 3.Oct Clinical note recorded. (DJS)
- 29.Nov Clinical note recorded. (GLT)
- 18.Dec Clinical note recorded. (ERT)
- 19.Dec Clinical note recorded. (WKS)
- 20.Dec Clinical note recorded. (WKS)
- 20.Dec Clinical note recorded. (ERT)
- 26.Dec Clinical note recorded. (KJO)
- 26.Dec Parasitology examination: (ROUTINE EXAM) Fecal sample.  
NO PARASITES SEEN

.....2008....

- 7.Jan Clinical note recorded. (KJO)
- 8.Jan Clinical note recorded. (KJO)
- 12.Jan Clinical note recorded. (WKS)
- 15.Jan Clinical note recorded. (KJO)
- 16.Jan Clinical note recorded. (WKS)
- 17.Jan Clinical note recorded. (KJO)
- 18.Jan Clinical note recorded. (WKS)
- 20.Jan Clinical note recorded. (ANL)
- 22.Jan Clinical note recorded. (WKS)
- 18.Feb Clinical note recorded. (ROV)
- 27.Mar Clinical note recorded. (WKS)
- 28.Mar Clinical note recorded. (WKS)
- 31.Mar Clinical note recorded. (GLT)
- 4.May Clinical note recorded. (CSS)

Printed on: 29.Jul.2008

/ISIS/MedARKS/5.53.a

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LOXODONTA AFRICANA (no subsp)  
African elephant

Name: MEGAN

Sex: Female

Age: 30Y 2M 8D

Acc. #: 102530

Birth: 22.May.1978

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.....2008....

- 4.May Clinical note recorded. (KS)
- 5.May Clinical note recorded. (GLT)
- 6.May Clinical note recorded. (CSS)
- Clinical note recorded. (ERT)
- Clinical note recorded. (GLT)
- 9.May Clinical note recorded. (GLT)
- 15.May Clinical note recorded. (CSS)
- Clinical note recorded. (GLT)
- 31.May Clinical note recorded. (WKS)
  
- 22.Jun Clinical note recorded. (CSS)

LOXODONTA AFRICANA (no subsp)  
African elephant  
Name: MEGAN

Sex: Female  
Age: 30Y 2M 8D

Acc. #: 102530  
Birth: 22.May.1978

Parasitology Examination:  
Submission Data >>  
Type: Fecal sample  
Purpose: ROUTINE EXAM

Sample id.: 2007-0256  
Date collected: 28.Mar.2007  
Collected by: EJD

Collected from:  
From an individual specimen.

Enclosure: EBC

Examination Data >>  
Storage: room temperature  
Consistency: formed  
Gross appearance: Not specified

Date examined: 28.Mar.2007

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

by: MS

LOXODONTA AFRICANA (no subsp)  
African elephant  
Name: MEGAN

Sex: Female  
Age: 30Y 2M 8D

Acc. #: 102530  
Birth: 22.May.1978

Clinical Note:

<<<Microbiology>>>

9.Jul.2007

Sample Accession #: 0715280

Date Received: 6/28/07  
Date Reported: 7/9/07

Laboratory:

- ANTECH
- NVSL
- UMC
- OTHER

Submission type:

- aerobic bacteriology
- anaerobic bacteriology
- comprehensive stool culture
- mycology
- enteric pathogen screen
- mycobacteria isolation
- other:

Sample source: Fecal

Organism:

- 1.
- 2.
- 3.

Comments: 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 per WKS. (ERB)

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*LOXODONTA AFRICANA* (no subsp)  
African elephant  
Name: MEGAN

Sex: Female  
Age: 30Y 2M 8D

Acc. #: 102530  
Birth: 22.May.1978

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**Clinical Note:**

19.Jul.2007

Routine yearly exam. Optho: Lenticular sclerosis OU, small darker pigmented spot in the iris OS. Swabbed both ears for culture. Noted right temporal gland half again as large as left (has been this way for long time).

Noted slight depigmentation on edge of right ear.

Oral exam: Slight divot at interface of old and new molars on right slight. Right lower molar slightly further forward than left. Lateral aspect of jaw has slight swelling at the surgery site. Line of jaw is normal, though.

Exam of trunk tip is normal.

Foot exams: Left forelimb: small vertical cracks in nails 2 and 5.

Right forepad: small vertical cracks in nails 2 and 5. Slight separation on medial side of pad. Right hind: Nail 3 has slight pad separation. Left hind: Slight separation between pad and nails on medial side. Nails 3 and 4 have 2 vertical cracks at the base.

Visual exam of vulva: symmetrical and normal.

Right rear leg seems to "pop" back when she starts to move, possibly normal for her.

Mammary glands symmetrical and normal.

Sulci normal.

Blood pressure was recorded later in the AM. Readings as follows (Systolic/Diastolic/MAP/HR): 167/128/142/36, 158/116/134/34, 149/114/132/36, 148/110/127/34, 155/110/127/33.

Collected stools for culture. Keepers drew blood for routine assays and banking. (PMC)

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Clinical Pathology Records - Specimen Report  
 KANSAS CITY ZOOLOGICAL PARK

- page 4 -

LOXODONTA AFRICANA (no subsp)  
 African elephant  
 Name: MEGAN

Sex: Female  
 Age: 30Y 2M 8D

Acc. #: 102530  
 Birth: 22.May.1978

Collection Information >>

Health Status: Normal  
 Fasting Time: < 8 hours  
 Activity: Active  
 Weight: 3384 Kg on 17.Mar.2006  
 Manual restraint used.

Date of Collection: 19.Jul.2007  
 Time of Collection: 10:00.0  
 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.2007  
 Time of Analysis: 5:02  
 Analysis by:  
 Automated analysis.

Tests and Results >>

WHITE BLOOD CELL COUNT	<	6.9		*10 <sup>3</sup> /UL
RED BLOOD CELL COUNT	<	2.7		*10 <sup>6</sup> /UL
HEMOGLOBIN	<	11.6		GM/DL
HEMATOCRIT	<	33		%
MCV		122		fL
MCH		43.0		uug
MCHC		35.2		gm/dL
SEGMENTED NEUTROPHILS		27	(1.863)	% (*10 <sup>3</sup> /UL)
LYMPHOCYTES		71	(4.899)	% (*10 <sup>3</sup> /UL)
MONOCYTES		1	(0.069)	% (*10 <sup>3</sup> /UL)
EOSINOPHILS		1	(0.069)	% (*10 <sup>3</sup> /UL)
BASOPHILS		0		% (*10 <sup>3</sup> /UL)
ESTIMATED PLATELET COUNT			ADEQU	
PLATELET COUNT		331		
ABSOLUTE BASOPHILS		0		*10 <sup>3</sup> /UL
ABSOLUTE EOSINOPHILS		69		/UL
ABSOLUTE LYMPHOCYTES		4899		\UL
ABSOLUTE MONOCYTES		69		/UL
ABSOLUTE SEGS		1863		/UL
FIBRINOGEN >>		625		/UL
MEAN CORPUSCULAR HEMOGLOBIN		43.8		MG/DL
MEAN CORPUSCULAR HEMOGLOBIN CONCENTRATION		35		UUG
MEAN CORPUSCULAR VOLUME		122		%
				U(3)

Comments >>

HCT results have been rechecked and verified.  
 RBC morph: normal  
 Blood smear reviewed by technologist.

ISIS reference values are for LOXODONTA AFRICANA  
 Printed on: 29.Jul.2008

/ISIS/MedARKS/5.53.a

Clinical Pathology Records - Specimen Report  
 KANSAS CITY ZOOLOGICAL PARK

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Sex: Female  
 Age: 30Y 2M 8D

Acc. #: 102530  
 Birth: 22.May.1978

Collection Information >>

Health Status: Normal  
 Fasting Time: < 8 hours  
 Activity: Active  
 Weight: 3384 Kg on 17.Mar.2006  
 Manual restraint used.

Date of Collection: 19.Jul.2007  
 Time of Collection: 10:00.0  
 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: 20.Jul.2007  
 Time of Analysis: 5:02  
 Analysis by:  
 Automated analysis.

Tests and Results >>

GLUCOSE >>	131	MG/DL
BLOOD UREA NITROGEN	7	MG/DL
CREATININE	1.4	MG/DL
BUN/creatinine ratio	5.00	
CALCIUM	10.7	MG/DL
PHOSPHORUS <<	2.9	MG/DL
calcium/phosphorus ratio	3.69	
SODIUM	126	MEQ/L
POTASSIUM <	4.2	MEQ/L
sodium/potassium ratio	30.0	
CHLORIDE	88	MEQ/L
CHOLESTEROL	84	MG/DL
TOTAL PROTEIN (COLORIMETRY)	7.7	GM/DL
ALBUMIN (COLORIMETRY) <	3.0	GM/DL
GLOBULIN (COLORIMETRY) >	4.7	GM/DL
albumin/globulin ratio	0.638	
ASPARTATE AMINOTRANSFERASE	14	IU/L
TOTAL BILIRUBIN	0.2	MG/DL
ALKALINE PHOSPHATASE <	50	IU/L
LACTATE DEHYDROGENASE <	366	IU/L
CREATINE PHOSPHOKINASE	310	IU/L
ALBUMIN GLOBULIN RATIO	0.6	GM/DL
BUN/CREATININE RATIO	5	MG/DL
GAMMA GLUTAMYLTRANSFERASE	7	IU/L
SODIUM/POTASSIUM RATIO	30	RATIO

Comments >>

Significant increase in fibrinogen without elevation of globulins or WBC. Mild increase in cholesterol secondary to diet. Decreased P either lab error or reflex loss due to increased Ca (relative). Significant increase in glucose secondary to routine exam/exercise

ISIS reference values are for LOXODONTA AFRICANA  
 Printed on: 29.Jul.2008

Clinical Pathology Records - Specimen Report  
KANSAS CITY ZOOLOGICAL PARK

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LOXODONTA AFRICANA (no subsp)	Sex: Female	Acc. #: 102530
African elephant	Age: 30Y 2M 8D	Birth: 22.May.1978
Name: MEGAN		

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Chemistry >>

Comments >>

performed in a.m. RBC count just below normal as is Hgb and HCT but  
RBC indices wnl so more likely hemodilution. WKS.

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LOXODONTA AFRICANA (no subsp)           Sex: Female           Acc. #: 102530
African elephant                         Age: 30Y 2M 8D       Birth: 22.May.1978
Name: MEGAN
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Clinical Note:

20.Jul.2007

<<< Microbiology >>>

Date Received: 7/20/07  
Date Reported: 7/24/07, 7/28/07

Sample Accession #:0716714  
Laboratory:  
 LABCORP  
 NVSL  
 UMC

ANTECH

Sample Source: Fecal

Submission type:

- aerobic bacteriology
- anaerobic bacteriology
- comprehensive stool culture
- mycology
- enteric pathogen screen
- mycobacterial

Organism:

Growth: heavy moderate light

1. E. coli	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comments: The sample was negative, by culture, for Salmonella via primary enrichment. Secondary enrichment results are pending. 7/24/07. The sample was negative, by culture, for Clostridium perfringens, Campylobacter, and Yersinia enterocolitica. The fecal sample was negative, by culture, for Salmonella using primary and secondary enrichment in conjunction with the use of selective media. Final report 7/28/07.

\*\*\*\*\*S = SUSCEPTIBLE; I = INTERMEDIATE; R = RESISTANT

=====

*LOXODONTA AFRICANA* (no subsp)  
African elephant  
Name: MEGAN

Sex: Female  
Age: 30Y 2M 8D

Acc. #: 102530  
Birth: 22.May.1978

=====

Clinical Note:

Sensitivity:

20.Jul.2007

	1	2	3	4	5	6
Amikacin:	s					
Amoxi/Clav:	s					
Ampicillin:	s					
Cefazolin:	s					
Cefoxitin:	s					
Cefpodoxime:	s					
Ceftiofur:	s					
Cephalothin:	s					
Chloramphenicol:	s					
Clindamycin:	r					
Enrofloxacin:	s					
Erythromycin:	r					
Gentamicin:	s					
Imipenem:	s					
Marbofloxacin:	s					
Orbifloxacin:	s					
Oxacil + 2% NaCl:	r					
Penicillin:	r					
Rifampin:	r					
Tetracycline:	s					
Ticar/Clav Acid:	s					
Ticarcillin:	s					
Trimeth/Sulfa:	s					

Comments: WNL per WKS.  
(ERB)

=====  
LOXODONTA AFRICANA (no subsp)  
African elephant  
Name: MEGAN

Sex: Female  
Age: 30Y 2M 8D

Acc. #: 102530  
Birth: 22.May.1978  
=====

Clinical Note:

20.Jul.2007

Clinical Note:

15.Aug.2007

UMC bacteriology results  
Accession #0718477  
Received: 8/15/07  
Reported: 8/25/07

Aerobic culture

Specimen: Produce

Organism ID: no significant growth

Comments: 8/25/07. The sample was negative, by culture, for Salmonella using primary and secondary enrichment in conjunction with the use of selective media.

WNL per WKS. (ERT)

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=====
LOXODONTA AFRICANA (no subsp)           Sex: Female           Acc. #: 102530
African elephant                        Age: 30Y 2M 8D       Birth: 22.May.1978
Name: MEGAN
=====

```

Clinical Note: 28.Sep.2007

<<<Microbiology>>>

Sample Accession #:0721590

Date Received: 9/28/07  
Date Reported: 10/9/07

Laboratory:  
 ANTECH  
 NVSL  
 UMC  
 OTHER

Submission type:  
 aerobic bacteriology  
 anaerobic bacteriology  
 comprehensive stool culture  
 mycology  
 enteric pathogen screen  
 mycobacteria isolation  
 other:

Sample source: Fecal

Organism:  
1.  
2.  
3.

Comments: 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 per WKS. (ERT)

Clinical Note: 3.Oct.2007  
Megan's dental plate sequestrum has healed, there has been no discharge for the past 12 months. (DJS)

=====

<i>LOXODONTA AFRICANA</i> (no subsp)	Sex: Female	Acc. #: 102530
African elephant	Age: 30Y 2M 8D	Birth: 22.May.1978
Name: MEGAN		

=====

**Clinical Note:** 29.Nov.2007  
 Tetanus Vaccination: The skin over the triceps area was hosed off, sprayed with Nolvasan and the skin was dried. Tetanus toxoid Fort Dodge #1630105A exp. Oct. 06, 2008: 1ml IM was administered by keeper staff into the triceps. Veterinarian observed injection. (GLT)

---

**Clinical Note:** 18.Dec.2007  
 NVSL trunk wash results  
 Accession: 532520  
 Sampled: 12/18/07  
 Received: 12/21/07  
 Reported: 2/21/08

Mycobacteria isolation  
 Diagnosis: no isolation made  
 Specimen submitted: trunk wash

WNL per WKS. (ERT)

---

**Clinical Note:** 18.Dec.2007  
 Obtained minimum 20cc trunk wash exudate after instilling 60cc sterile saline in trunk to evaluate TB status (annual test). Did well overall. Samples to be obtained on three different days; each elephant sampled 3 times. To freeze and send when testing complete to NVSL. (WKS)

---

**Clinical Note:** 19.Dec.2007  
 NVSL trunk wash results  
 Accession: 532520  
 Sampled: 12/19/07  
 Received: 12/21/07  
 Reported: 2/21/08

Mycobacteria isolation  
 Diagnosis: no isolation made  
 Specimen submitted; trunk wash

WNL. WKS. (ERT)

---

=====
LOXODONTA AFRICANA (no subsp)
African elephant
Name: MEGAN
=====

Sex: Female
Age: 30Y 2M 8D
Acc. #: 102530
Birth: 22.May.1978
=====

Clinical Note:

19.Dec.2007

Trunk washes for annual TB testing as performed yesterday. M07074
ingested first bag for sampling yesterday, but had not passed it
today. Did very well today though. Samples frozen. (WKS)

Clinical Note:

20.Dec.2007

NVSL trunk wash results
Accession: 532520
Sampled: 12/20/07
Received: 12/21/07
Reported: 2/21/08

Mycobacteria isolation
Diagnosis: no isolation made
Specimen submitted: trunk wash

WNL. WKS. (ERT)

Clinical Note:

20.Dec.2007

Trunk wash for annual TB testing. (KJO)

Submission Data >>

Type: Fecal sample
Purpose: ROUTINE EXAM

Sample id.: 2007-0849
Date collected: 26.Dec.2007

Collected from:

From an individual specimen.

Enclosure: EBC

Examination Data >>

Storage: refrigerated
Consistency: soft
Gross appearance: Typical

Date examined: 26.Dec.2007

by: ANL

Tests & Results >>

DIRECT MICROSCOPIC EXAMINATION NO PARASITES SEEN
FLOATATION - ZINC SULFATE NO PARASITES SEEN

=====

*LOXODONTA AFRICANA* (no subsp)  
African elephant  
Name: MEGAN

Sex: Female  
Age: 30Y 2M 8D

Acc. #: 102530  
Birth: 22.May.1978

=====

**Clinical Note:**

7.Jan.2008

Keepers reported that she had been knocked to the ground during a fight with conspecifics Zoey and Tattoo. Visual exam revealed multiple superficial circular wounds on right dorsum and a wound approximately 1 inch long on left manus. Abnormal movements, a fluttering motion, of her abdomen were seen, most likely associated with fear or pain. She was seen walking gingerly on rear limbs. Dispensed 800mg Ibuprofen, 31 tabs to be given twice daily. Keepers tried to give her first dose, recieved 9 of 31. Will try again tomorrow morning. Recheck tomorrow AM. (KJO)

---

**Clinical Note:**

8.Jan.2008

Visual exam. Keepers reported she ate well last night and that the fluttering of her abdomen was no longer present. Reported that she recieved 6 of 31 pills this AM. Atropine response test performed on right eye. Administered .03cc (1 drop) 1% (10mg/ml) Atropine solution (Lot# 097641, Exp. 2/08) at 11:17 AM. No response. (KJO)

---

**Clinical Note:**

12.Jan.2008

Physical exam for refusing to stretch into position and sensitive on right rear leg-when tibia palpated, tried to kick keeper. Advised hydrotherapy ~10min once daily and rescripted ibuprofen, 31 tabs po bid for 3 more days. Did take full amount on last day of previous script. (WKS)

---

**Clinical Note:**

15.Jan.2008

Atropine response test in right eye. Administered 0.03cc 1% Atropine sulfate solution (Lot# 097641, Exp. 2/08) in right eye at 11:28am. Dilation reported by keepers at 2:09pm. (KJO)

---

**Clinical Note:**

16.Jan.2008

Visual exam-mydriasis still present-took picture. (WKS)

---

=====

*LOXODONTA AFRICANA* (no subsp)  
African elephant  
Name: MEGAN

Sex: Female  
Age: 30Y 2M 8D

Acc. #: 102530  
Birth: 22.May.1978

=====

**Clinical Note:**

17.Jan.2008

Visual exam for wounds. Fought with conspecific Zoe this pm. Upon visual exam, superficial wound seen on caudal midline approximately 3x2 inches. Hard to fully appreciate size due to location and dried blood surrounding it. Also a small superficial abrasion seen just to the left of midline, above base of tail. Trembling, most likely due to fear. Both eyes dilated, most likely attributable to endorphin release. Continue with ibuprofen at previously dispensed dose and frequency. Instructed to monitor wounds. Stiff gait on right rear leg, but patient placing large amount of weight on limb when standing. (KJO)

---

**Clinical Note:**

18.Jan.2008

This am-pupil appears slightly dilated-did react to light though, so consider effects of atropine are gone. Took picture. Atropine study on this elephant is concluded. (WKS)

---

**Clinical Note:**

20.Jan.2008

Visual exam for scratches and swelling on back. Unable to get close look at lesions, but could visualize black lines where they were. Wrinkles around those areas appear to be stretched out, but no more obvious swelling was seen. Megan was distracted by Tattoo and refused to do behaviors that would allow a better look. (ANL)

---

**Clinical Note:**

22.Jan.2008

Moving well today. Received last does of ibuprofen. (WKS)

---

**Clinical Note:**

18.Feb.2008

Keepers noticed that a right mandibular molar was pushed up today and appears to be ready to come out. (ROV)

---

=====

LOXODONTA AFRICANA (no subsp)  
African elephant  
Name: MEGAN

Sex: Female  
Age: 30Y 2M 8D

Acc. #: 102530  
Birth: 22.May.1978

=====

Clinical Note:

27.Mar.2008

Supervisor stated animal had piece of twine at rectum hanging down-pulled on it and it wouldn't come out-animal had bent down like she wanted to defecate but didn't. Advised not pulling on twine. PE- 3 1/2-4 ft of intact twine hanging from anus to floor. Removed at ~6" below anus to prevent reingestion should it pass this evening. To monitor-may have to flush/evacuate rectum tomorrow. Otherwise acting normally. (WKS)

Clinical Note:

28.Mar.2008

No twine hanging from rectum this am. Doesn't appear as if she passed biluses according to supervisor. Advised looking for twine in stall /stools, etc. Acting normal. Found twien late am-two pieces together measure 77 inches-6.5ft in length. Advised this length to twine could be severe issue in intestines. Left message for curator suggesting pulling apart all flakes of hay for elephants. Occult blood/multistix blood test negative on twine. (WKS)

Clinical Note:

31.Mar.2008

Keeper communication: A ~12-18 inch piece of twine was found in the fecal boluses in the stall overnight. Two elephants (Megan and Tattoo) share this stall. It is unknown from which elephant the twine passed. Both animals have a normal attitude and appetite. No bloating is noted by the keeper staff. The twine was requested for evaluation, but had already been thrown away. Keepers to notify AHC if any abnormal behavior and to save any future fecal foreign bodies for AHC to analyze for occult blood. General curator was contacted about the situation. (GLT)

Clinical Note:

4.May.2008

Visual Exam: Keeper reports that the nail she was trimming came off and there was liquid coming out. On visual inspection approximately 1/4 of axial D4 nail is missing. Keeper stated that it began as a crack and then a large part of the nail was removed when she gently trimmed it. There is a small amount of serum seeping and it increases when pressure is applied to the nail. There is a malodor associated and the area under the nail is dark red. Rinsed with water and applied hydrogen peroxide to the area. GLT in to look at it pm. (CSS)

=====

LOXODONTA AFRICANA (no subsp)  
African elephant  
Name: MEGAN

Sex: Female  
Age: 30Y 2M 8D

Acc. #: 102530  
Birth: 22.May.1978

=====

**Clinical Note:**

4.May.2008

Visual Exam by GLT PM: Pocket present deep to the nail. Flushed with 12ml of hydrogen peroxide. Keeper instructed to trim nail to create a ventral draining tract. Will dispense hydrogen peroxide and ointment tomorrow. (KS)

---

**Clinical Note:**

5.May.2008

Dispensed 12ml curved tipped syringes filled w/ 3% H2O2 #20: Flush toenail wound with 1 syringe every 12 hours (2x/day). Dispensed Nitrofurazone ointment #1/2 jar: Use clean tongue depressor to apply quarter size amount of ointment into toenail wound after flushing twice a day. Do not allow ointment to come into contact with skin. Can use gloves or wash hands after use. (GLT)

---

**Clinical Note:**

6.May.2008

Dispensed 19g butterfly cath for elephant blood draws. (CSS)

---

=====
LOXODONTA AFRICANA (no subsp)
African elephant
Name: MEGAN

Sex: Female
Age: 30Y 2M 8D
Acc. #: 102530
Birth: 22.May.1978
=====

Clinical Note:

6.May.2008

<<<Microbiology>>>

Sample A

Laboratory:

Date Received: 5/6/08
Date Reported: 5/15/08

- [ ] LABCORP
[ ] NVSL
[X] UMC
[ ] ANTECH

Sample Source: Nail discharge swab

Submission type:

- [X] aerobic bacteriology
[X] anaerobic bacteriology
[ ] comprehensive stool culture
[ ] mycology
[ ] enteric pathogen screen
[ ] mycobacterial

Organism:

Growth: heavy moderate light

Table with 4 columns: Organism, Growth: heavy, moderate, light. Rows include Citrobacter freundii, Enterobacter spp., E. coli, Staphylococcus epidermidis, Enterococcus spp., and an empty row.

Comments: Aerobic: the growth of the isolates was heavy and mixed on direct culture.

Anaerobic: No significant growth.

Note the resistance of the Staphylococcus isolate to oxacillin. This indicates that the organism has a potent beta lactamase that will inactivate all beta lactam antimicrobials including those with beta lactamase inhibitors eventhough the MIC values may be low. Therefore all beta lactam antimicrobials, including those with inhibitors, have been reported as resistant.

\*\*\*\*\*S = SUSCEPTIBLE; I = INTERMEDIATE; R = RESISTANT

LOXODONTA AFRICANA (no subsp)  
African elephant  
Name: MEGAN

Sex: Female  
Age: 30Y 2M 8D

Acc. #: 102530  
Birth: 22.May.1978

Clinical Note:

6.May.2008

Sensitivity:

	1	2	3	4	5	6
Amikacin:	s	s	s	s	s	s
Amoxi/Clav:	r	r	s	r	s	
Ampicillin:	i	r	s	r	s	
Cefazolin:	r	r	s	r	i	
Ceftiofur:	s	s	s	r	r	
Chloramphenicol:	s	s	s	s		
Erythromycin:	r	r	r	s	s	
Gentamicin:	s	s	s	s	s	
Imipenem:	s	s	s	r	s	
Oxacil + 2% NaCl:	r	r	r	r		
Penicillin:	r	r	r	s		
Rifampin:	r	r	i	s		
Tetracycline:	s	s	s	r		
Ticar/Clav Acid:	s	s	r	s		
Ticarcillin:	r	s	r	s		
Trimeth/Sulfa:	s	s	s	s		

Comments: Expected results. WKS. (ERT)

Clinical Note:

6.May.2008

Visual recheck of right front P4 toenail: Keeper supervisor pared out toenail from deficit to distal aspect of nail. New nail is present underneath deficit. No discharge is present. A pocket is no longer present. Nail should heal normally. Continue previously dispensed hydrogen peroxide flushes and nitrofurazone ointment for three more days, but decrease frequency to once a day. No lameness is noted. Bruise on the pad palmar to P3 is resolving. (GLT)

Clinical Note:

9.May.2008

Visual recheck of right front P4 toenail: Nail is healing normally. Discontinue flushing and application of ointment. No lameness is noted. Attitude and appetite are normal. No further rechecks are needed. Keepers to contact AHC if new problems with nail are noted. (GLT)

=====

LOXODONTA AFRICANA (no subsp)  
African elephant  
Name: MEGAN

Sex: Female  
Age: 30Y 2M 8D

Acc. #: 102530  
Birth: 22.May.1978

=====

Clinical Note:

Dispensed 1 bottle Hooflex. Apply as needed to nails when performing  
foot work. Dispensed 1 flat tiger top tubes and 1 sleeve gauze for  
blood draws. (CSS)

15.May.2008

Clinical Note:

Communication with keeper: Twine found in feces on exhibit. Unknown  
which elephant passed the fecal bolus containing the foreign body. (GLT)

15.May.2008

Clinical Note:

PE of rt front foot-D3 nail-filling in well-numerous, very small  
laminar cracks, but part of healing process. No erythema noted-was  
hesitant at first with water from hose, but stood fine. No further  
treatment warranted-no limping noted and otherwise doing well. (WKS)

31.May.2008

Clinical Note:

Dispensed 1 jar Hooflex. Apply as needed when performing foot work.  
(CSS)

22.Jun.2008

- page 21 -

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 <sup>3</sup> /UL	10.50 ± 2.648		4.500	22.10	(1544)
RBC	*10 <sup>6</sup> /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 <sup>3</sup> /UL	3.146 ± 1.695		0.000	11.80	(1224)
BANDS	*10 <sup>3</sup> /UL	0.843 ± 0.799		0.000	6.530	(605)
LYMPHOCYTES	*10 <sup>3</sup> /UL	4.913 ± 2.532		0.022	17.40	(1236)
MONOCYTES	*10 <sup>3</sup> /UL	1.513 ± 1.651		0.000	9.480	(1175)
EOSINOPHILS	*10 <sup>3</sup> /UL	0.225 ± 0.273		0.000	2.898	(885)
BASOPHILS	*10 <sup>3</sup> /UL	0.049 ± 0.081		0.000	0.525	(464)
NRBC	/100 WBC	0 ± 1		0	3	(92)
PLATE. CNT.	*10 <sup>3</sup> /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

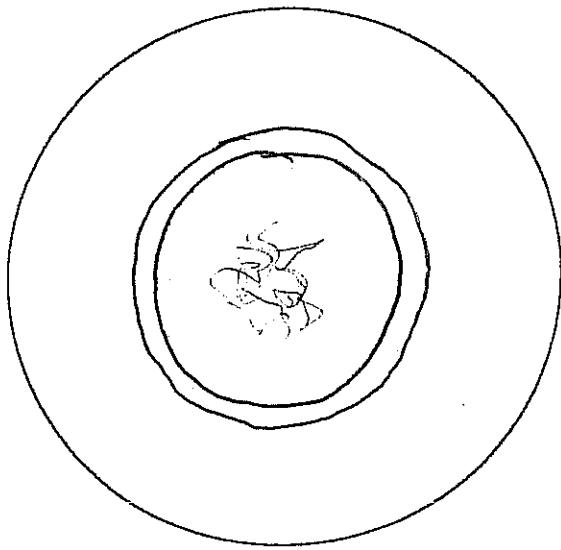
		Mean	S.D.	Min.	Max.	(N)
CPK	IU/L	256 ±	196	18	1884	(247)
OSMOLARITY	MOSMOL/L	259 ±	4	246	272	(689)
ALPHA GLOB.	MG/DL	0.7 ±	0.0	0.7	0.7	(1)
ALPHA-1 GLOB	MG/DL	0.7 ±	0.2	0.2	0.8	(8)
ALPHA-2 GLOB	MG/DL	1.0 ±	0.3	0.8	1.6	(8)
BETA GLOB.	MG/DL	1.2 ±	0.8	0.6	1.7	(2)
Body Temperature:		39.0 ±	0.0	39.0	39.0	(1)
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)

Kansas City Zoo  
Ophthalmic Exam

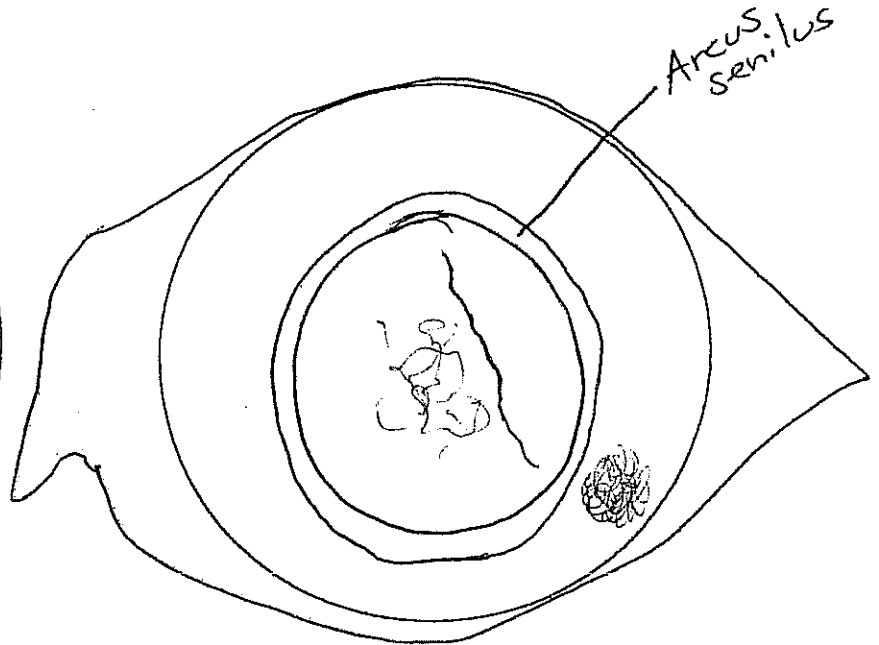
Date 7/19/2007

Species African Elephant ISIS # 102530

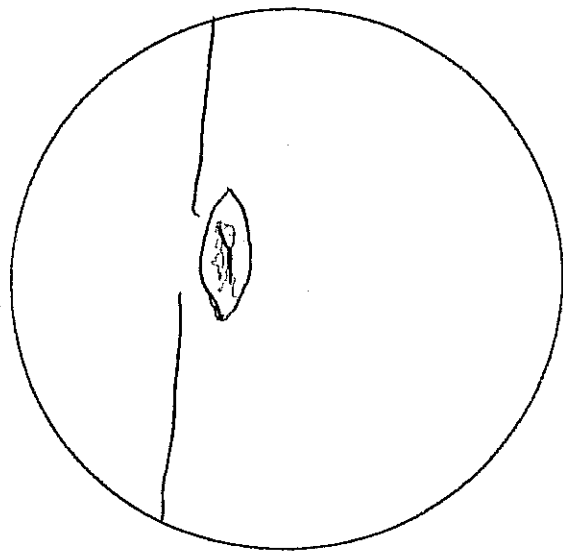
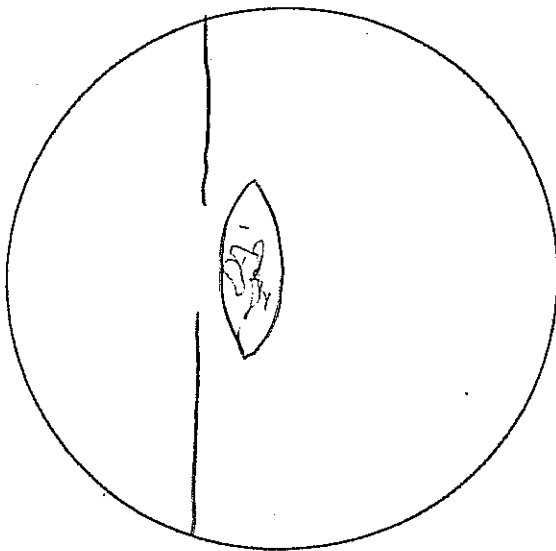
House Name Megan



OD



OS



UNIVERSITY OF MISSOURI  
VET MED DIAGNOSTIC LAB  
P.O. BOX 6023

COLUMBIA, MO 65205  
Phone #: 573-882-6811 Fax #: 573-882-1411

Owner: KANSAS CITY ZOO, ATTN: DR. SUEDEMEYER  
6800 ZOO DR  
KANSAS CITY, MO 64132

Accession Number: 0715280  
Reference Number: 102530 ELEPHANT  
Case Coordinator: William Fales MS, Ph.D  
Received: 06/28/2007 Finalized: 07/09/2007

To: KANSAS CITY ZOO, ATTN: DR. SUEDEMEYER  
6800 ZOO DR  
KANSAS CITY, MO 64132

Sampled:  
Veterinarian: DR. WM KIRK SUEDEMEYER  
Client: KANSAS CITY ZOO, ATTN: DR. SUEDEMEYER

Final Report

**BACTERIOLOGY RESULTS**

**AEROBIC CULTURE**

<b>SPECIES</b>	Misc
<b>BREED</b>	Elephant
<b>ANIMAL ID</b>	102530
<b>SPECIMEN #</b>	Fecal
<b>ORGANISM ID</b>	NO SIGNIFICANT GROWTH
<b>COMMENTS</b>	The fecal sample was negative. by culture, for Salmonella using primary and secondary enrichment in conjunction with the use of selective media.

THIS TIME DATED REPORT SUPERSEDES ALL PREVIOUS REPORTS ON THIS VMDL ACCESSION.

*WNL  
lg*

Report Date  
JUL-24-07 11:43 AM

UNIVERSITY OF MISSOURI  
VET MED DIAGNOSTIC LAB  
P.O. BOX 6023

COLUMBIA, MO 65205  
Phone #: 573-882-6811 Fax #: 573-882-1411

Owner: KANSAS CITY ZOO, ATTN: DR. SUEDEMEYER  
6800 ZOO DR  
KANSAS CITY, MO 64132

Accession Number: 0716713  
Reference Number: MEGAN 102530  
Case Coordinator: William Fales MS, Ph.D  
Received: 07/20/2007 Finalized: 07/24/2007  
Sampled:  
Veterinarian: DR. WM KIRK SUEDEMEYER  
Client: KANSAS CITY ZOO, ATTN: DR. SUEDEMEYER

To: KANSAS CITY ZOO, ATTN: DR. SUEDEMEYER  
6800 ZOO DR  
KANSAS CITY, MO 64132

Final Report

BACTERIOLOGY RESULTS

AEROBIC CULTURE

SPECIES	Misc
BREED	Elephant
ANIMAL ID	Megan 102530
SPECIMEN #	Right ear swab
ORGANISM ID	AEROMONAS SOBRIA
ORGANISM ID	E. COLI
ORGANISM ID	ACINETOBACTER CALCOACETICUS LWOFFI
ORGANISM ID	CITROBACTER FREUNDII
COMMENTS	The growth of the isolates was heavy on direct culture. The direct smear was negative for yeast.

ANAEROBIC CULTURE

SPECIES	Misc
BREED	Elephant
ANIMAL ID	Megan 102530
SPECIMEN #	Right ear swab
ORGANISM ID	NO SIGNIFICANT GROWTH

SMALL ANIMAL SUSCEPT

1	ANIMAL ID	Megan 102530
	SPECIMEN #	Right ear swab
	ORGANISM ID	AEROMONAS SOBRIA
	COMMENTS	CONCENTRATIONS IN UG/ML
	COMMENTS	Note differences in susceptibilities of the two Aeromonas sobria isolates.
2	ANIMAL ID	Megan 102530

*likely mixed flora*

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Accession Number: 0716713

BACTERIOLOGY RESULTS

- |   |             |                                    |
|---|-------------|------------------------------------|
| 2 | SPECIMEN #  | Right ear swab                     |
|   | ORGANISM ID | E. COLI                            |
|   | COMMENTS    | CONCENTRATIONS IN UG/ML            |
| 3 | ANIMAL ID   | Megan 102530                       |
|   | SPECIMEN #  | Right ear swab                     |
|   | ORGANISM ID | ACINETOBACTER CALCOACETICUS LWOFFI |
|   | COMMENTS    | CONCENTRATIONS IN UG/ML            |
| 4 | ANIMAL ID   | Megan 102530                       |
|   | SPECIMEN #  | Right ear swab                     |
|   | ORGANISM ID | AEROMONAS SOBRIA                   |
|   | COMMENTS    | CONCENTRATIONS IN UG/ML            |
| 5 | ANIMAL ID   | Megan 102530                       |
|   | SPECIMEN #  | Right ear swab                     |
|   | ORGANISM ID | CITROBACTER FREUNDII               |
|   | COMMENTS    | CONCENTRATIONS IN UG/ML            |

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Accession Number: 0716713

**BACTERIOLOGY RESULTS**

Antibiotic Susceptibility Pattern

	ACINETOBACTER CALCOACETICUS - 3	AEROMONAS SOBRIA - 1
AMIKACIN	S <=4.0000( 4 - 32 )	S <=4.0000( 4 - 32 )
AMOXI/CLAV	S <=4.0000( 4/2 - 32/16 )	I 16.0000( 4/2 - 32/16 )
AMPICILLIN	S 8.0000( 0.25 - 16 )	R >16.0000( 0.25 - 16 )
CEFAZOLIN	S 4.0000( 2 - 16 )	S 8.0000( 2 - 16 )
CEFOXITIN	S <=2.0000( 2 - 16 )	S <=2.0000( 2 - 16 )
CEFPODOXIME	S <=2.0000( 2 - 16 )	S <=2.0000( 2 - 16 )
CEFTIOFUR	S <=0.2500( 0.25 - 4 )	S 0.5000( 0.25 - 4 )
CEPHALOTHIN	S 4.0000( 2 - 16 )	S <=2.0000( 2 - 16 )
CHLORAMPHENICOL	S <=4.0000( 4 - 16 )	S <=4.0000( 4 - 16 )
CLINDAMYCIN	S 0.5000( 0.25 - 2 )	R >2.0000( 0.25 - 2 )
ENROFLOXACIN	S <=0.5000( 0.5 - 4 )	S <=0.5000( 0.5 - 4 )
ERYTHROMYCIN	S <=0.5000( 0.5 - 4 )	R >4.0000( 0.5 - 4 )
GENTAMICIN	S <=1.0000( 1 - 8 )	S <=1.0000( 1 - 8 )
IMIPENEM	S <=1.0000( 1 - 8 )	S <=1.0000( 1 - 8 )
MARBOFLOXACIN	S <=0.2500( 0.25 - 2 )	S <=0.2500( 0.25 - 2 )
ORBIFLOXACIN	S <=1.0000( 1 - 4 )	S <=1.0000( 1 - 4 )
OXACIL + 2% NACL	R 4.0000( 2 - 4 )	R >4.0000( 2 - 4 )
PENICILLIN	R >8.0000( 0.06 - 8 )	R >8.0000( 0.06 - 8 )
RIFAMPIN	S <=1.0000( 1 - 2 )	I 2.0000( 1 - 2 )
TETRACYCLINE	S <=1.0000( 1 - 8 )	S <=1.0000( 1 - 8 )
TICAR/CLAV ACID	S <=8.0000( 8 - 64 )	I 32.0000( 8 - 64 )
TICARCILLIN	I 64.0000( 8 - 64 )	R >64.0000( 8 - 64 )
TRIMETH/SULFA	S <=0.5000( 0.5/9.5 - 2/38 )	S <=0.5000( 0.5/9.5 - 2/38 )

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Accession Number: 0716713

BACTERIOLOGY RESULTS

	AEROMONAS SOBRIA - 4	CITROBACTER FREUNDII - 5
AMIKACIN	S <=4.0000( 4 - 32 )	S <=4.0000( 4 - 32 )
AMOXI/CLAV	S 8.0000( 4/2 - 32/16 )	R 16.0000( 4/2 - 32/16 )
AMPICILLIN	R >16.0000( 0.25 - 16 )	R 4.0000( 0.25 - 16 )
CEFAZOLIN	S 8.0000( 2 - 16 )	R 4.0000( 2 - 16 )
CEFOXITIN	S <=2.0000( 2 - 16 )	R >16.0000( 2 - 16 )
CEFPODOXIME	S <=2.0000( 2 - 16 )	S <=2.0000( 2 - 16 )
CEFTIOFUR	S <=0.2500( 0.25 - 4 )	S 0.5000( 0.25 - 4 )
CEPHALOTHIN	S 8.0000( 2 - 16 )	R 8.0000( 2 - 16 )
CHLORAMPHENICOL	S <=4.0000( 4 - 16 )	S 8.0000( 4 - 16 )
CLINDAMYCIN	R >2.0000( 0.25 - 2 )	R >2.0000( 0.25 - 2 )
ENROFLOXACIN	S <=0.5000( 0.5 - 4 )	S <=0.5000( 0.5 - 4 )
ERYTHROMYCIN	R 4.0000( 0.5 - 4 )	R >4.0000( 0.5 - 4 )
GENTAMICIN	S <=1.0000( 1 - 8 )	S <=1.0000( 1 - 8 )
IMIPENEM	S <=1.0000( 1 - 8 )	S <=1.0000( 1 - 8 )
MARBOFLOXACIN	S <=0.2500( 0.25 - 2 )	S <=0.2500( 0.25 - 2 )
ORBIFLOXACIN	S <=1.0000( 1 - 4 )	S 2.0000( 1 - 4 )
OXACIL + 2% NACL	R >4.0000( 2 - 4 )	R >4.0000( 2 - 4 )
PENICILLIN	R >8.0000( 0.06 - 8 )	R >8.0000( 0.06 - 8 )
RIFAMPIN	S <=1.0000( 1 - 2 )	R >2.0000( 1 - 2 )
TETRACYCLINE	S <=1.0000( 1 - 8 )	S <=1.0000( 1 - 8 )
TICAR/CLAV ACID	S 16.0000( 8 - 64 )	S <=8.0000( 8 - 64 )
TICARCILLIN	I 32.0000( 8 - 64 )	R <=8.0000( 8 - 64 )
TRIMETH/SULFA	S <=0.5000( 0.5/9.5 - 2/38 )	S <=0.5000( 0.5/9.5 - 2/38 )

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Final Report

Accession Number: 0716713

**BACTERIOLOGY RESULTS**

	E. COLI - 2
AMIKACIN	S <=4.0000( 4 - 32 )
AMOXI/CLAV	S <=4.0000( 4/2 - 32/16 )
AMPICILLIN	S 0.5000( 0.25 - 16 )
CEFAZOLIN	I 16.0000( 2 - 16 )
CEFOXITIN	S 8.0000( 2 - 16 )
CEFPODOXIME	I 4.0000( 2 - 16 )
CEFTIOFUR	S 1.0000( 0.25 - 4 )
CEPHALOTHIN	S 8.0000( 2 - 16 )
CHLORAMPHENICOL	S <=4.0000( 4 - 16 )
CLINDAMYCIN	R >2.0000( 0.25 - 2 )
ENROFLOXACIN	S <=0.5000( 0.5 - 4 )
ERYTHROMYCIN	R <=0.5000( 0.5 - 4 )
GENTAMICIN	S <=1.0000( 1 - 8 )
IMIPENEM	S <=1.0000( 1 - 8 )
MARBOFLOXACIN	S <=0.2500( 0.25 - 2 )
ORBIFLOXACIN	S <=1.0000( 1 - 4 )
OXACIL + 2% NACL	R >4.0000( 2 - 4 )
PENICILLIN	I 2.0000( 0.06 - 8 )
RIFAMPIN	S <=1.0000( 1 - 2 )
TETRACYCLINE	S <=1.0000( 1 - 8 )
TICAR/CLAV ACID	S <=8.0000( 8 - 64 )
TICARCILLIN	S <=8.0000( 8 - 64 )
TRIMETH/SULFA	S <=0.5000( 0.5/9.5 - 2/38 )

This is an "in vitro" test that may not reflect clinical outcome.

**THIS TIME DATED REPORT SUPERSEDES ALL PREVIOUS REPORTS ON THIS VMDL ACCESSION.**

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COLUMBIA, MO 65205  
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Owner: KANSAS CITY ZOO, ATTN: DR. SUEDEMEYER  
6800 ZOO DR  
KANSAS CITY, MO 64132

Accession Number: 0716714  
Reference Number: 102530 MEGAN  
Case Coordinator: William Faies MS, Ph.D  
Received: 07/20/2007 Finalized: 07/24/2007  
Sampled:  
Veterinarian: DR. WM KIRK SUEDEMEYER  
Client: KANSAS CITY ZOO, ATTN: DR. SUEDEMEYER

To: KANSAS CITY ZOO, ATTN: DR. SUEDEMEYER  
6800 ZOO DR  
KANSAS CITY, MO 64132

Final Report

BACTERIOLOGY RESULTS

ENTERIC SCREEN

SPECIES Misc  
BREED Elephant  
ANIMAL ID 102530 Megan  
SPECIMEN # Fecal  
ORGANISM ID E. COLI  
COMMENTS

The sample was negative, by culture, for Salmonella via primary enrichment. Secondary enrichment results are pending. 7/24/07. The sample was negative, by culture, for Clostridium perfringens, Campylobacter and Yersinia enterocolitica.

SMALL ANIMAL SUSCEPT

ANIMAL ID 102530 Megan  
SPECIMEN # Fecal  
ORGANISM ID E. COLI  
COMMENTS CONCENTRATIONS IN UG/ML

*WM*  
*3*

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Final Report

Accession Number: 0716714

**BACTERIOLOGY RESULTS**

Antibiotic Susceptibility Pattern

	E. COLI - 1
AMIKACIN	S <=4.0000( 4 - 32 )
AMOXI/CLAV	S <=4.0000( 4/2 - 32/16 )
AMPICILLIN	S 2.0000( 0.25 - 16 )
CEFAZOLIN	S <=2.0000( 2 - 16 )
CEFOXITIN	S <=2.0000( 2 - 16 )
CEFPodoxime	S <=2.0000( 2 - 16 )
CEFTIOFUR	S <=0.2500( 0.25 - 4 )
CEPHALOTHIN	S 8.0000( 2 - 16 )
CHLORAMPHENICOL	S <=4.0000( 4 - 16 )
CLINDAMYCIN	R >2.0000( 0.25 - 2 )
ENROFLOXACIN	S <=0.5000( 0.5 - 4 )
ERYTHROMYCIN	R >4.0000( 0.5 - 4 )
GENTAMICIN	S <=1.0000( 1 - 8 )
IMIPENEM	S <=1.0000( 1 - 8 )
MARBOFLOXACIN	S <=0.2500( 0.25 - 2 )
ORBIFLOXACIN	S <=1.0000( 1 - 4 )
OXACIL + 2% NaCl	R >4.0000( 2 - 4 )
PENICILLIN	R >8.0000( 0.05 - 8 )
RIFAMPIN	R >2.0000( 1 - 2 )
TETRACYCLINE	S <=1.0000( 1 - 8 )
TICAR/CLAV ACID	S <=8.0000( 8 - 64 )
TICARCILLIN	S <=8.0000( 8 - 64 )
TRIMETH/SULFA	S <=0.5000( 0.5/9.5 - 2/38 )

This is an "in vitro" test that may not reflect clinical outcome.

**THIS TIME DATED REPORT SUPERSEDES ALL PREVIOUS REPORTS ON THIS VMDL ACCESSION.**

Report Date  
JUL-28-07 01:31 PM

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Owner: KANSAS CITY ZOO, ATTN: DR. SUEDEMEYER  
6800 ZOO DR  
KANSAS CITY, MO 64132

Accession Number: 0716714  
Reference Number: 102530 MEGAN  
Case Coordinator: William Fales MS, Ph.D  
Received: 07/20/2007 Finalized: 07/28/2007  
Sampled:  
Veterinarian: DR. WM KIRK SUEDEMEYER  
Client: KANSAS CITY ZOO, ATTN: DR. SUEI

To: KANSAS CITY ZOO, ATTN: DR. SUEDEMEYER  
6800 ZOO DR  
KANSAS CITY, MO 64132

Addended Report

BACTERIOLOGY RESULTS

ENTERIC SCREEN

SPECIES	Misc
BREED	Elephant
ANIMAL ID	102530 Megan
SPECIMEN #	Fecal
ORGANISM ID	E. COLI
COMMENTS	

The sample was negative, by culture, for Salmonella via primary enrichment. Secondary enrichment results are pending. 7/24/07. The sample was negative, by culture, for Clostridium perfringens, Campylobacter and Yersinia enterocolitica.

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

Final report. 7/28/07

SMALL ANIMAL SUSCEPT

ANIMAL ID	102530 Megan
SPECIMEN #	Fecal
ORGANISM ID	E. COLI
COMMENTS	CONCENTRATIONS IN UG/ML

Addended Report

Accession Number: 0716714

**BACTERIOLOGY RESULTS**

Antibiotic Susceptibility Pattern

	E. COLI - 1
AMIKACIN	S <=4.0000( 4 - 32 )
AMOXI/CLAV	S <=4.0000( 4/2 - 32/16 )
AMPICILLIN	S 2.0000( 0.25 - 16 )
CEFAZOLIN	S <=2.0000( 2 - 16 )
CEFOXITIN	S <=2.0000( 2 - 16 )
CEFPODOXIME	S <=2.0000( 2 - 16 )
CEFTIOFUR	S <=0.2500( 0.25 - 4 )
CEPHALOTHIN	S 8.0000( 2 - 16 )
CHLORAMPHENICOL	S <=4.0000( 4 - 16 )
CLINDAMYCIN	R >2.0000( 0.25 - 2 )
ENROFLOXACIN	S <=0.5000( 0.5 - 4 )
ERYTHROMYCIN	R >4.0000( 0.5 - 4 )
GENTAMICIN	S <=1.0000( 1 - 8 )
IMIPENEM	S <=1.0000( 1 - 8 )
MARBOFLOXACIN	S <=0.2500( 0.25 - 2 )
ORBIFLOXACIN	S <=1.0000( 1 - 4 )
OXACIL + 2% NAACL	R >4.0000( 2 - 4 )
PENICILLIN	R >8.0000( 0.05 - 8 )
RIFAMPIN	R >2.0000( 1 - 2 )
TETRACYCLINE	S <=1.0000( 1 - 8 )
TICAR/CLAV ACID	S <=8.0000( 8 - 64 )
TICARCILLIN	S <=8.0000( 8 - 64 )
TRIMETH/SULFA	S <=0.5000( 0.5/9.5 - 2/38 )

This is an "in vitro" test that may not reflect clinical outcome.

**THIS TIME DATED REPORT SUPERSEDES ALL PREVIOUS REPORTS ON THIS VMDL ACCESSION.**

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*EKB*

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Owner: KANSAS CITY ZOO, ATTN: DR. SUEDEMEYER  
6800 ZOO DR  
KANSAS CITY, MO 64132

Accession Number: 0716709  
Reference Number: MEGAN 102530  
Case Coordinator: William Faies MS, Ph.D  
Received: 07/20/2007 Finalized: 07/26/2007

To: KANSAS CITY ZOO, ATTN: DR. SUEDEMEYER  
6800 ZOO DR  
KANSAS CITY, MO 64132

Sampled:  
Veterinarian: DR. WM KIRK SUEDEMEYER  
Client: KANSAS CITY ZOO, ATTN: DR. SUEDEMEYER

Final Report

BACTERIOLOGY RESULTS

AEROBIC CULTURE

SPECIES	Misc
BREED	Elephant
ANIMAL ID	Megan 102530
SPECIMEN #	Left ear swab
ORGANISM ID	ACINETOBACTER CALCOACETICUS LWOFFI
ORGANISM ID	LECLERCIA ADECARBOXY (CDC GR41)
ORGANISM ID	PSEUDOMONAS SPP
ORGANISM ID	STREPTOCOCCUS SPP, ALPHA HEMOLYTIC
COMMENTS	The growth of the isolates was heavy on direct culture. The direct smear was negative for yeast.

ANAEROBIC CULTURE

SPECIES	Misc
BREED	Elephant
ANIMAL ID	Megan 102530
SPECIMEN #	Left ear swab
ORGANISM ID	STREPTOCOCCUS SPP, ALPHA HEMOLYTIC

SMALL ANIMAL SUSCEPT

1	ANIMAL ID	Megan 102530
	SPECIMEN #	Left ear swab
	ORGANISM ID	ACINETOBACTER CALCOACETICUS LWOFFI
	COMMENTS	CONCENTRATIONS IN UG/ML
2	ANIMAL ID	Megan 102530
	SPECIMEN #	Left ear swab
	ORGANISM ID	LECLERCIA ADECARBOXY (CDC GR41)

*All likely need flora -  
cultures for next  
flora*

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Final Report

Accession Number: 0716709

BACTERIOLOGY RESULTS

2	COMMENTS	CONCENTRATIONS IN UG/ML
3	ANIMAL ID	Megan 102530
	SPECIMEN #	Left ear swab
	ORGANISM ID	PSEUDOMONAS SPP
	COMMENTS	CONCENTRATIONS IN UG/ML
4	ANIMAL ID	Megan 102530
	SPECIMEN #	Left ear
	ORGANISM ID	STREPTOCOCCUS SPP, ALPHA HEMOLYTIC

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Final Report

Accession Number: 0716709

**BACTERIOLOGY RESULTS**

Antibiotic Susceptibility Pattern

	ACINETOBACTER CALCOACETICUS - 1	LECLERCIA ADECARBOXY (CDC GR - 2
AMIKACIN	S <=4.0000( 4 - 32 )	S <=4.0000( 4 - 32 )
AMOXI/CLAV	S <=4.0000( 4/2 - 32/16 )	S <=4.0000( 4/2 - 32/16 )
AMPICILLIN	S <=0.2500( 0.25 - 16 )	S 0.5000( 0.25 - 16 )
CEFAZOLIN	S <=2.0000( 2 - 16 )	S <=2.0000( 2 - 16 )
CEFOXITIN	S <=2.0000( 2 - 16 )	S <=2.0000( 2 - 16 )
CEFPODOXIME	S <=2.0000( 2 - 16 )	S <=2.0000( 2 - 16 )
CEFTIOFUR	S <=0.2500( 0.25 - 4 )	S <=0.2500( 0.25 - 4 )
CEPHALOTHIN	S <=2.0000( 2 - 16 )	S <=2.0000( 2 - 16 )
CHLORAMPHENICOL	S <=4.0000( 4 - 16 )	S <=4.0000( 4 - 16 )
CLINDAMYCIN	I 2.0000( 0.25 - 2 )	R >2.0000( 0.25 - 2 )
ENROFLOXACIN	S <=0.5000( 0.5 - 4 )	S <=0.5000( 0.5 - 4 )
ERYTHROMYCIN	S <=0.5000( 0.5 - 4 )	R >4.0000( 0.5 - 4 )
GENTAMICIN	S <=1.0000( 1 - 8 )	S <=1.0000( 1 - 8 )
IMIPENEM	S <=1.0000( 1 - 8 )	S <=1.0000( 1 - 8 )
MARBOFLOXACIN	S <=0.2500( 0.25 - 2 )	S <=0.2500( 0.25 - 2 )
ORBIFLOXACIN	S <=1.0000( 1 - 4 )	S <=1.0000( 1 - 4 )
OXACIL + 2% NACL	S <=2.0000( 2 - 4 )	R >4.0000( 2 - 4 )
PENICILLIN	S <=0.0600( 0.06 - 8 )	R 4.0000( 0.06 - 8 )
RIFAMPIN	S <=1.0000( 1 - 2 )	R >2.0000( 1 - 2 )
TETRACYCLINE	S <=1.0000( 1 - 8 )	S <=1.0000( 1 - 8 )
TICAR/CLAV ACID	S <=8.0000( 8 - 64 )	S <=6.0000( 8 - 64 )
TICARCILLIN	S <=8.0000( 8 - 64 )	I 32.0000( 8 - 64 )
TRIMETH/SULFA	S <=0.5000( 0.5/9.5 - 2/38 )	R >2.0000( 0.5/9.5 - 2/38 )

Report Date  
JUL-26-07 04:07 PM

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Final Report

Accession Number: 0716709

BACTERIOLOGY RESULTS

*EES*

Kansas City Zoo  
Swope Park  
Kansas City, MO 64132  
Tel: 816-513-5700  
Fax: 816-513-4667

Client # 97779  
Chart # 102530

Accession No. CHBC17018619	Doctor NOT STATED	Owner ELEPHANT	Pet Name MEGAN	Received 07/19/2007
Species Other	Breed	Sex F	Pet Age 29Y	Reported 07/20/2007 05:02 AM

Test Requested	Results	Reference Range	Units
<b>BASIC EQUINE SCREEN</b>			
AST (SGOT)	14		IU/L
Total Bilirubin	0.2		mg/dL
Alkaline Phosphatase	50		IU/L
GGT	7		IU/L
Total Protein	7.7		g/dL
Albumin	3.0		g/dL
Globulin	4.7		g/dL
A/G Ratio	0.6		
Cholesterol	84		mg/dL
BUN	7		mg/dL
Creatinine	1.4		mg/dL
BUN/Creatinine Ratio	5		
Phosphorus	2.9		mg/dL
Calcium	10.7		mg/dL
Glucose	131		mg/dL
Sodium	126		mEq/L
Potassium	4.2		mEq/L
Na/K Ratio	30		
Chloride	88		mEq/L
CPK	310		IU/L
LDH	366		IU/L
<b>COMPLETE BLOOD COUNT</b>			
WBC	6.9		10 <sup>3</sup> /μL
RBC	2.7		10 <sup>6</sup> /μL
HGB	11.6		g/dL
HCT	33		%
Results have been rechecked and verified.			
MCV			fL
MVC = 122			
MCH	43.8		pg
MCHC	35		%
Comment			
RBC MORPHOLOGY	NORMAL		
<b>Differential</b>			
	<b>Absolute</b>	<b>%</b>	
Neutrophils	1863	27	/μL
Lymphocytes	4899	71	/μL

Test Requested	Results	Reference Range	Units
Monocytes	69	1	/ $\mu$ L
Eosinophils	69	1	/ $\mu$ L
Basophils	0	0	/ $\mu$ L
Platelet Estimate	Adequate		
Platelet Count	331		$10^3$ / $\mu$ L

Blood smear reviewed by technologist.

**FIBRINOGEN (SEMI-QUANTITATIVE)**

Fibrinogen, Semi-Quantitative 625 (HIGH)

mg/dl

reflex

Significant  $\uparrow$  in fibrinogen into level of  
 stabilins or WBC  
 mild  $\uparrow$  in cholesterol 20 to diet  
 to p enter lab error of  
 help w/ loss diff of CA (relativ)  
 sign  $\uparrow$  in  $\uparrow$  waste 20 to  
 radi exam/exercise  
 performed in a.w.  
 RBC count just below  
 norm as is Hgb  
 and Hct but  
 RBC indices will  
 so more likely  
 hemodilution  
 BS

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Owner: KANSAS CITY ZOO, ATTN: DR. SUEDEMEYER  
6800 ZOO DR  
KANSAS CITY, MO 64132

Accession Number: 0810630  
Reference Number: 102530  
Case Coordinator: William Fales MS, Ph.D  
Received: 05/06/2008 Finalized: 05/15/2008  
Sampled:

To: KANSAS CITY ZOO, ATTN: DR. SUEDEMEYER  
6800 ZOO DR  
KANSAS CITY, MO 64132

Veterinarian: DR. WM KIRK SUEDEMEYER  
Client: KANSAS CITY ZOO, ATTN: DR. SUEDEMEYER

Final Report

BACTERIOLOGY RESULTS

AEROBIC CULTURE

SPECIES	Misc
BREED	Elephant
ANIMAL ID	102530
SPECIMEN #	Nail Discharge Swab
ORGANISM ID	CITROBACTER FREUNDII
ORGANISM ID	ENTEROBACTER SPP
ORGANISM ID	E. COLI
ORGANISM ID	STAPHYLOCOCCUS EPIDERMIDIS
ORGANISM ID	ENTEROCOCCUS SPP
COMMENTS	The growth of the isolates was heavy and mixed on direct culture.

ANAEROBIC CULTURE

SPECIES	Misc
BREED	Elephant
ANIMAL ID	102530
SPECIMEN #	Nail Discharge Swab
ORGANISM ID	NO SIGNIFICANT GROWTH

ANTIMICROB SUSCEPT/EQUINE

1	ANIMAL ID	102530
	SPECIMEN #	Nail swab
	ORGANISM ID	CITROBACTER FREUNDII
	COMMENTS	CONCENTRATIONS IN UG/ML
2	ANIMAL ID	102530
	SPECIMEN #	Nail swab
	ORGANISM ID	ENTEROBACTER SPP

*Enterobacter*  
*S*

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VET MED DIAGNOSTIC LAB  
P.O. BOX 6023

COLUMBIA, MO 65205  
Phone #: 573-882-6811 Fax #: 573-882-1411

Final Report

Accession Number: 0810630

BACTERIOLOGY RESULTS

- |   |             |  |
|---|-------------|--|
| 3 | ANIMAL ID   | 102530   |
|   | SPECIMEN #  | Nail swab  |
|   | ORGANISM ID | E. COLI  |
| 4 | ANIMAL ID   | 102530   |
|   | SPECIMEN #  | Nail swab  |
|   | ORGANISM ID | STAPHYLOCOCCUS EPIDERMIDIS   |
|   | COMMENTS    | Note the resistance of the Staphylococcal isolate to oxacillin. This indicates that the organism has a potent beta lactamase that will inactivate all beta lactam antimicrobials including those with beta lactamase inhibitors even though the MIC values may be low. Therefore all beta lactam antimicrobials, including those with inhibitors, have been reported as resistant. |
| 5 | ANIMAL ID   | 102530   |
|   | SPECIMEN #  | Nail swab  |
|   | ORGANISM ID | ENTEROCOCCUS SPP   |

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**BACTERIOLOGY RESULTS**

Antibiotic Susceptibility Pattern

	CITROBACTER FREUNDII - 1	E. COLI - 3
AMIKACIN	S <=4.0000( 4 - 32 )	S <=4.0000( 4 - 32 )
AMOXI/CLAV	R 32.0000( 4/2 - 32/16 )	S <=4.0000( 4/2 - 32/16 )
AMPICILLIN	I 16.0000( 0.25 - 16 )	S 2.0000( 0.25 - 16 )
CEFAZOLIN	R 8.0000( 2 - 16 )	S <=2.0000( 2 - 16 )
CEFTIOFUR	S 1.0000( 0.25 - 4 )	S <=0.2500( 0.25 - 4 )
CHLORAMPHENICOL	S 8.0000( 4 - 16 )	S 8.0000( 4 - 16 )
ERYTHROMYCIN	R >4.0000( 0.5 - 4 )	R >4.0000( 0.5 - 4 )
GENTAMICIN	S <=1.0000( 1 - 8 )	S <=1.0000( 1 - 8 )
IMIPENEM	S <=1.0000( 1 - 8 )	S <=1.0000( 1 - 8 )
OXACIL + 2% NAACL	R >4.0000( 2 - 4 )	R >4.0000( 2 - 4 )
PENICILLIN	R >8.0000( 0.05 - 8 )	R >8.0000( 0.05 - 8 )
RIFAMPIN	R >2.0000( 1 - 2 )	R >2.0000( 1 - 2 )
TETRACYCLINE	S <=1.0000( 1 - 8 )	S <=1.0000( 1 - 8 )
TICAR/CLAV ACID	S <=8.0000( 8/2 - 64/2 )	S <=8.0000( 8/2 - 64/2 )
TICARCILLIN	R <=8.0000( 8 - 64 )	S <=8.0000( 8 - 64 )
TRIMETH/SULFA	S <=0.5000( 0.5/9.5 - 2/38 )	S <=0.5000( 0.5/9.5 - 2/38 )

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**BACTERIOLOGY RESULTS**

	ENTEROBACTER SPP - 2	ENTEROCOCCUS SPP - 5
AMIKACIN	S <=4.0000( 4 - 32 )	S 16.0000( 4 - 32 )
AMOXI/CLAV	R <=4.0000( 4/2 - 32/16 )	S <=4.0000( 4/2 - 32/16 )
AMPICILLIN	R >16.0000( 0.25 - 16 )	S 0.5000( 0.25 - 16 )
CEFAZOLIN	R <=2.0000( 2 - 16 )	I 16.0000( 2 - 16 )
CEFTIOFUR	S <=0.2500( 0.25 - 4 )	R >4.0000( 0.25 - 4 )
CHLORAMPHENICOL	S <=4.0000( 4 - 16 )	S <=4.0000( 4 - 16 )
ERYTHROMYCIN	R >4.0000( 0.5 - 4 )	S <=0.5000( 0.5 - 4 )
GENTAMICIN	S <=1.0000( 1 - 8 )	S <=1.0000( 1 - 8 )
IMIPENEM	S <=1.0000( 1 - 8 )	S <=1.0000( 1 - 8 )
OXACIL + 2% NAACL	R >4.0000( 2 - 4 )	R >4.0000( 2 - 4 )
PENICILLIN	R >8.0000( 0.06 - 8 )	S 1.0000( 0.06 - 8 )
RIFAMPIN	R >2.0000( 1 - 2 )	S <=1.0000( 1 - 2 )
TETRACYCLINE	S <=1.0000( 1 - 8 )	R >8.0000( 1 - 8 )
TICAR/CLAV ACID	S <=8.0000( 8/2 - 64/2 )	S 16.0000( 8/2 - 64/2 )
TICARCILLIN	R >64.0000( 8 - 64 )	S 16.0000( 8 - 64 )
TRIMETH/SULFA	S <=0.5000( 0.5/9.5 - 2/38 )	S <=0.5000( 0.5/9.5 - 2/38 )

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Accession Number: 0810630

**BACTERIOLOGY RESULTS**

	STAPHYLOCOCCUS EPIDERMIDIS - 4
AMIKACIN	S 16.0000( 4 - 32 )
AMOX/CLAV	R 32.0000( 4/2 - 32/16 )
AMPICILLIN	R 16.0000( 0.25 - 16 )
CEFAZOLIN	R <=8.0000( 2 - 16 )
CEFTIOFUR	R 4.0000( 0.25 - 4 )
CHLORAMPHENICOL	S <=4.0000( 4 - 16 )
ERYTHROMYCIN	S <=0.5000( 0.5 - 4 )
GENTAMICIN	S 2.0000( 1 - 8 )
IMIPENEM	R <=1.0000( 1 - 8 )
OXACIL + 2% NACL	R >4.0000( 2 - 4 )
PENICILLIN	R 0.2500( 0.06 - 8 )
RIFAMPIN	I 2.0000( 1 - 2 )
TETRACYCLINE	S <=2.0000( 1 - 8 )
TICAR/CLAV ACID	R <=8.0000( 8/2 - 64/2 )
TICARCILLIN	R 64.0000( 8 - 64 )
TRIMETH/SULF-	S 2.0000( 0.5/9.5 - 2/36 )

This is an "in vitro" test that may not reflect clinical outcome.

THIS TIME DATED REPORT SUPERSEDES ALL PREVIOUS REPORTS ON THIS VMDL ACCESSION.

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Owner: KANSAS CITY ZOO, ATTN: DR. SUEDEMEYER  
6800 ZOO DR  
KANSAS CITY, MO 64132

Accession Number: 0721590  
Reference Number: 102530  
Case Coordinator: William Fales MS, Ph.D  
Received: 09/28/2007 Finalized: 10/09/2007  
Sampled:

To: KANSAS CITY ZOO, ATTN: DR. SUEDEMEYER  
6800 ZOO DR  
KANSAS CITY, MO 64132

Veterinarian: DR. WM KIRK SUEDEMEYER  
Client: KANSAS CITY ZOO, ATTN: DR. SUEDEMEYER

Final Report

BACTERIOLOGY RESULTS

AEROBIC CULTURE

SPECIES	Misc
BREED	Elephant
ANIMAL ID	102530
SPECIMEN #	Fecal
ORGANISM ID	NO SIGNIFICANT GROWTH
COMMENTS	10 9.07 The fecal sample was negative, by culture, for Salmonella using primary and secondary enrichment in conjunction with the use of selective media.

THIS TIME DATED REPORT SUPERSEDES ALL PREVIOUS REPORTS ON THIS VMDL ACCESSION.

E103

National Veterinary Services Laboratories  
 1800 Daylor Road Ames, Iowa 50010  
 Phone (515) 663-7266 Fax (515) 663-7297  
 Tuberculosis Laboratory Test Report Page 1 of 1  
 FEDERAL RELAY SERVICE (Voice/TTY/ASCII/Spanish)  
 1-800-877-8339

\*\*\*\*\* This is a confidential report for official use only. \*\*\*\*\*  
 Accession: 532520 Date Received: 12/20/07

Establishment No.: MOSVED  
 SUEDEMEYER, DR. WM. KIRK  
 KANSAS CITY ZOO  
 6700 ZOO DRIVE  
 KANSAS CITY, MO 64132  
 Fax: 8165134667

Referral Number:  
 Owner: KC ZOO  
 City: KANSAS CITY  
 State: MO

Preservation:

Retain Tag:

Species: Elephant

NVSL ID	Case #	Sample ID	Animal ID
1807294	082043	12/18/07	102530-MEGAN-AFRICAN Mycobacteria Isolation Diagnosis: No Isolation Made  Specimen Submitted TRUNK WASH
1807295	082044	12/19/07	102530-MEGAN-AFRICAN Mycobacteria Isolation Diagnosis: No Isolation Made  Specimen Submitted TRUNK WASH
1807296	082045	12/20/07	102530-MEGAN-AFRICAN Mycobacteria Isolation Diagnosis: No Isolation Made  Specimen Submitted TRUNK WASH

DISTRIBUTION:  
 Submitter  
 1/20/2008

Approved By: Christine Quance  
 National Veterinary Services Laboratories

*WML*  
5

Kansas City Zoo  
 Swope Park  
 Kansas City, MO 64132  
 Tel: 816-513-5700  
 Fax: 816-513-4667

Client # 97779  
 Chart # 102530

Accession No. <b>CHBC26448717</b>	Doctor SSUDMEYER	Owner AFRICAN	Pet Name MEGAN	Received 07/16/2008
Species Elephant	Breed	Sex F	Pet Age 29Y	Reported 07/17/2008 05:10 AM

Test Requested	Results	Reference Range	Units
<b>BASIC LARGE ANIMAL SCREEN</b>			
AST (SGOT)	15 (LOW)	180-570	IU/L
Total Bilirubin	0.2	0.1-2.5	mg/dL
Direct Bilirubin	0.0	0.0-0.5	mg/dL
Alkaline Phosphatase	51	50-300	IU/L
GGT	9	2-30	IU/L
Total Protein	7.9	5.6-8.0	g/dl
Albumin	2.9	2.2-3.9	g/dL
Globulin	5.0	2.6-5.6	g/dL
A/G Ratio	0.6	0.5-2.4	
Cholesterol	88	70-150	mg/dL
BUN	5 (LOW)	10-25	mg/dL
Creatinine	1.4	1.2-2.0	mg/dl
BUN/Creatinine Ratio	4 (LOW)	5-21	
Phosphorus	3.8	2.0-5.6	mg/dl
Calcium	11.1	10.0-13.7	mg/dl
Glucose	128 (HIGH)	70-120	mg/dl
Sodium	128 (LOW)	130-146	mEq/L
Potassium	4.4	3-5	mEq/L
Na/K Ratio	29	24-58	
Chloride	89 (LOW)	95-110	mEq/L
CPK	297	20-500	IU/l
LDH	362	150-450	IU/L
<b>COMPLETE BLOOD COUNT</b>			
WBC	5.9	8.0-15.0	10 <sup>3</sup> /μL
RBC	3.3 (LOW)	2.0-4.0	10 <sup>6</sup> /μL
HGB	15.0	10-13	g/dL
HCT	43	34-44	%
MCV		130-170	fL
*****	MCV = 129		
MCH	45.1 (HIGH)	42.0-52.0	pg
MCHC	35	32-36	g/dL
Comment			
RBC MORPHOLOGY	NORMAL		
<b>Differential</b>			
	<b>Absolute</b>	<b>%</b>	
Neutrophils	4307	73	μL
Lymphocytes	1121	19	μL

*WBC just below normal  
 but rest essentially  
 WNL*

Accession No.  
CHBC26448717

Doctor  
SSUDMEYER

Owner  
AFRICAN

Pet Name  
MEGAN

Test Requested	Results	Reference Range	Units
Monocytes	413	7	/ $\mu$ L
Eosinophils	56	1	/ $\mu$ L
Basophils	0	0	/ $\mu$ L
Platelet Estimate	Increased		
Platelet Count	939		$10^3$ / $\mu$ L

Results have been rechecked and verified.

Blood smear reviewed by technologist

**FIBRINOGEN (SEMI-QUANTITATIVE)**

Fibrinogen, Semi-Quantitative 172 mg/dl

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Owner: KANSAS CITY ZOO, ATTN: DR. SUEDEMEYER  
6800 ZOO DR  
KANSAS CITY, MO 64132

Accession Number: 0816440  
Reference Number:  
Case Coordinator: William Fales MS, Ph.D  
Received: 07/29/2008 Finalized: 08/02/2008  
Sampled:  
Veterinarian: DR. WM KIRK SUEDEMEYER  
Client: KANSAS CITY ZOO, ATTN: DR. SUEDEMEYER

To: KANSAS CITY ZOO, ATTN: DR. SUEDEMEYER  
6800 ZOO DR  
KANSAS CITY, MO 64132

Final Report

BACTERIOLOGY RESULTS

ENTERIC SCREEN

SPECIES Misc  
BREED Elephant  
ANIMAL ID 102530 Megan  
SPECIMEN # Fecal swab  
ORGANISM ID E. COLI, NONHEMOLYTIC  
ORGANISM ID AEROMONAS CAVIAE

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

ANTIMICROB SUSCEPT/EQUINE

1 ANIMAL ID 102530 Megan  
SPECIMEN # Fecal  
ORGANISM ID E. COLI  
COMMENTS CONCENTRATIONS IN UG/ML  
2 ANIMAL ID 102530 Megan  
SPECIMEN # Fecal  
ORGANISM ID AEROMONAS CAVIAE

*Walt*  
*5*

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Final Report

Accession Number: 0816440

**BACTERIOLOGY RESULTS**

Antibiotic Susceptibility Pattern

	AEROMONAS CAVIAE - 2	E. COLI - 1
AMIKACIN	S <=4.0000( 4 - 32 )	S <=4.0000( 4 - 32 )
AMOXI/CLAV	I 16.0000( 4/2 - 32/16 )	S <=4.0000( 4/2 - 32/16 )
AMPICILLIN	R >16.0000( 0.25 - 16 )	S 2.0000( 0.25 - 16 )
CEFAZOLIN	R >16.0000( 8 - 16 )	S <=8.0000( 8 - 16 )
CEFTIOFUR	I 4.0000( 0.25 - 4 )	S 0.5000( 0.25 - 4 )
CHLORAMPHENICOL	S <=4.0000( 4 - 16 )	S 8.0000( 4 - 16 )
ERYTHROMYCIN	R >4.0000( 0.5 - 4 )	R >4.0000( 0.5 - 4 )
GENTAMICIN	S <=1.0000( 1 - 8 )	S <=1.0000( 1 - 8 )
IMIPENEM	S <=1.0000( 1 - 8 )	S <=1.0000( 1 - 8 )
OXACIL + 2% NACL	R >4.0000( 0.25 - 4 )	R >4.0000( 0.25 - ~ )
PENICILLIN	R >8.0000( 0.05 - 8 )	R >8.0000( 0.05 - 8 )
RIFAMPIN	R >2.0000( 1 - 2 )	R >2.0000( 1 - 2 )
TETRACYCLINE	S <=2.0000( 2 - 8 )	S <=2.0000( 2 - 8 )
TICAR/CLAV ACID	I 32.0000( 8/2 - 64/2 )	S <=8.0000( 8/2 - 64/2 )
TICARCILLIN	R >64.0000( 8 - 64 )	S <=8.0000( 8 - 64 )
TRIMETH/SULFA	S <=0.5000( 0.5/9.5 - 2/36 )	S <=0.5000( 0.5/9.5 - 2/36 )

This is an "in vitro" test that may not reflect clinical outcome.

THIS TIME DATED REPORT SUPERSEDES ALL PREVIOUS REPORTS ON THIS VMDL ACCESSION.