

Shara Crook-Martin

From: Keith Lovett [keithmlovett@gmail.com]
Sent: Friday, January 03, 2014 10:58 PM
To: Shara Crook-Martin
Subject: Fwd: Elephant Incident Report
Attachments: Elephant Incident Report Timeline.docx; ATT00001.htm; Elephant Incident Report.docx; ATT00002.htm

Sent from my iPhone

Begin forwarded message:

From: Keith Lovett <KLovett@newbedford-ma.gov>
Date: January 3, 2014, 5:33:33 PM EST
To: Keith Lovett <keithmlovett@gmail.com>, Keith Lovett <KLovett@newbedford-ma.gov>
Subject: FW: Elephant Incident Report

Keith Lovett
Director
Buttonwood Park Zoo
New Bedford, MA

From: Keith Lovett
Sent: Friday, January 03, 2014 5:33 PM
To: Neil Mello; Christina R. Connelly; Angela Natho
Subject: Elephant Incident Report

Attached is my preliminary elephant incident report and incident timeline. Let me know if you require additional information or for it to be formatted in a different manner.

Keith Lovett
Director
Buttonwood Park Zoo
New Bedford, MA

Shara Crook-Martin

From: Keith Lovett
Sent: Saturday, January 04, 2014 12:53 PM
To: Neil Mello; Christina R. Connelly; Angela Natho; Shara Crook-Martin
Subject: Update on Ruth

Ruth is doing better than expected today (knock on wood). Staff stayed with her all night and provide supportive care. She is eating pretty well, has good mobility, is showing limited pain response, and is in good spirits. There is significant edema (swelling w fluid) on her ears which is draining a "plasma" like substance out her pores. We just finished lancing small sections of the ears to allow for better drainage. We will likely have staff stay with her throughout tonight as well.

I will be flying my kids home tomorrow to Florida. I had originally had planned on coming back on Tuesday night, but I searched high and low and was able to find a flight that brings me into Hartford on Monday night. While I am away on Sunday and Monday I will be in constant contact with the staff. Shara will be covering in my absence and we obviously have vet coverage as well. I am available by email and cell.

Thanks,

Keith Lovett
Director
Buttonwood Park Zoo
New Bedford, MA

Elephant Incident Report

January 3, 2014

Background: An incident occurred overnight where Ruth, the zoo's Asian elephant, was able to open the access door from the heated elephant barn to the outdoor exhibit as result of zoo animal caretakers failing to padlock the access door as dictated by policy. Once the access door was opened, Ruth proceeded to go outside into the exhibit yard. It is estimated that Ruth was outside in blizzard-like conditions for 90 minutes. Ruth had the ability to re-enter the heated barn while outside, but for undetermined reason Ruth chose to stay outside in the cold. Animal caretakers discovered Ruth outside in the yard during morning rounds at approximately 7:30 am. Upon this discovery, animal caretakers called zoo Unit C management who had not yet arrived for the day and immediately started emergency procedures to warm up Ruth.

Elephant procedures: The zoo has elaborate procedures in place involving the care of its elephants. Detailed procedures also exists regarding elephant safety and security practices (See Elephant Care Manual). Key safety procedures in place related to this incident include:

- "All gates and doors leading into the elephant barn must be kept locked when elephant keepers are not in the building/exhibit..."
- No elephant keeper is allowed to enter the elephant enclosure without a guide and an EMC approved backup." (Two-person rule)

Animal caretakers are thoroughly trained on the requirement to close and padlock all staff and animal access doors in the elephant facilities. As an additional backup to prevent employee error and for safety reasons, the zoo has a two-person rule in place requiring two qualified elephant caretakers to be present while working the elephants and securing their facilities for the night.

Night Watch Procedures (overnight security): The zoo employs security staff, referred to as "night watch", during all non-operational hours when Unit C and animal caretakers are not on site. Elaborate procedures are in place governing the responsibilities of night watch. Included in these procedures is the requirement to perform rounds of the zoo's perimeter every two hours. The night watch employee on duty during the elephant incident indicated in the log book that he performed security rounds as required by policy.

Unit C Notification: Upon discovering Ruth outdoors, two elephant caretakers called the zoo's curator as required by policy to inform her of the emergency situation. The curator immediately directed the caretakers to guide Ruth into the barn and start procedures to warm the elephant. The curator immediately contacted the zoo director and both the curator and director arrived at the zoo within a few minutes of receiving the emergency call.

Emergency Treatment: Once staff was able to coax Ruth into the heated barn, efforts were put forth to treat Ruth for hypothermia and potential frost bite of some of her extremities. Zoo staff used many efforts to warm Ruth including the use of hot water soaked towels on her ears and tail, the placement of emergency foil blankets over her body, placement of blankets and quilts over her back, the positioning of Ruth directly under radiant heat panel warmed sections of the barn, and the continual walking of Ruth around the barn to keep her circulation flowing and to prevent her from laying down which could have proven fatal based on her condition. After several hours of treatment, Ruth's body temperature returned to a more normal temperature.

Incident Review: Zoo management, led by the zoo's director of zoological services, is actively reviewing all staff actions before and during the incident, reviewing all elephant management procedures, reviewing all night watch procedures, has interviewed all applicable staff, will be working with the City's Personnel Director regarding any staff disciplinary action that is required, and has or will be reporting the incident to New Bedford Animal Care and Control and the USDA.

Report written and submitted by Keith Lovett to Neil Mello, Christina Connolly, and Angela Natho.

Elephant Incident Report Timeline

January 2-3, 2014

January 2, 2014:

9:30 am: Elephant caretakers allow the zoo's elephants access to their outdoor yard from the elephant barn.

10:15 am: Due to cold weather conditions, the elephants are brought back into the heated barn and the animal access door to the outdoor exhibit is closed, but caretakers failed to padlock the door.

10:15 am – 2:30 pm: Elephant caretakers check on the elephants in the barn every hour as dictated by zoo policy.

2:30 pm: Two assigned elephant caretakers "close" elephant exhibit for the day. This closing occurred an hour earlier than normal due to the zoo closing early due to inclement weather. As part of closing procedures, the elephants are fed and watered, but the assigned caretakers fail to lock the access door from the barn to the exhibit and also fail to perform a two-person lock check as required by policy.

4:00 pm – 11:45 pm: Night watch performed security rounds, including around the elephant barn, every two hours as required by policy.

January 3, 2014:

12:00 am – 6:00 am: Night watch performed security rounds, including around the elephant barn, every two hours as required by policy.

7:30 am: Zoo caretakers discover Ruth the elephant outdoors in her exhibit. Staff immediately notifies Unit C by phone and is directed by Unit C to coax Ruth into the barn.

7:30am – 1:30 pm: Unit C staff and animal caretakers treat Ruth for hypothermia and possible frost bite.

1:30 pm – 5:30 pm: Animal care and veterinary staff monitor Ruth and provide supportive care.

5:30 pm to present: Staff puts in place a schedule to have two qualified staff persons in the elephant barn to monitor Ruth overnight and provide supportive care.

Shara Crook-Martin

From: Michele A. Sims
Sent: Wednesday, January 08, 2014 4:58 PM
To: Shara Crook-Martin
Subject: Ruth notes...

ELEPHANTS

Asian Elephant - Ruth -- 5

1/3/13: Elephant barn door was left unlocked overnight and Ruth opened the door and let herself out sometime during the storm and did not come back in. Keepers found her at ~7:30 this morning. QAR, slow to move, ears, body and tail covered in ice. Ears were more iced than body. Keepers immediately coaxed her inside to stand under the radiant heat and applied warm towels gently to ears and body. Keepers were also instructed to keep her walking to increase warmth metabolically. Ruth refused water at this time. Keepers were instructed to offer any form of room temperature liquid that she would accept, such as Gatorade, fruit juice, pedialyte, etc.

At ~10:30, distal tail was dark purple/pink in color and was still very cool to touch. Ears and distal aspect of trunk were also cool. At this time, she had started normal shivering as well. Initiated warm compresses to ears and tail for 10 minutes every 30 minutes by way of microwaved fluid bags. Ruth began drinking small amounts of juice and Gatorade. Instructed staff to offer small food items to encourage mobility and fine motor movements of trunk throughout the day.

At~noon, ears were stiffening up due to fluid accumulation/cellulitis.

At ~2:30pm, skin pores in ears were oozing serous fluid, however, ears were less stiff. Warm compresses were continued throughout the evening every two hours until she was no longer amenable to it. Total fluid consumption was still fairly low, ~2gallons. Keepers instructed to dilute the juice with water 50/50. She began consuming larger amounts of fluid by the end of the day. Appetite has been good since ~10am this morning.

A single dose of aspirin at 9mg/kg was administered in PM for pain and inflammation.

As Ruth is quite BAR by the end of the day, bloodwork is held off to preserve vascular supply to ears. An attempt may be made from a leg vein, however, she is not amenable at this time.

A: Hypothermia and frostbite: Expect some tissue loss on ears, and possibly on tail. Full extent of tissue/organ trauma is unknown at this time and may take several days to elucidate.

Plan:

- 1.) RX Aspirin 9mg/kg SID PO X 7 days.
- 2.) Monitor tissue trauma.
- 3.) Monitor appetite, drinking, urination and defecation.

1/4/13: Ruth became more amenable to warm compresses this morning and so they were re-initiated today every hr. Some ventral edema is now noted. Keepers were instructed to allow her to rest, but if not sleeping, to keep her moving to stimulate lymphatics to help with edema. Fluid in ears appeared to be pocketed and several

attempts were made to lance to allow more drainage, however, this yielded very little drainage so attempts were aborted. She started drinking water regularly today and dilute juice and other options will continue to be offered to maintain hydration.

1/5/13: A patch of skin on the ventral aspect of the left ear sloughed. Tissue underneath appears pink and healthy. Ears remain markedly swollen.

Plan: RX sulfamethazine 32g/bolus: 3 boluses BID X 7 days.

1/6/13: Recheck: Ears remain swollen but warm to touch and continue to drain small amounts of serous fluid. BAR, appetite good. Some swelling noted on rear legs and joints are stiff.

Plan: RX: DMSO on rear legs to assist with swelling.

1/7/13: Joints mobility is improving. Swelling is nearly resolved on rear legs. Ventral edema is migrating to the most dependent aspect of ventrum, around vulva. Cellulitis in ears remains static. Caudal aspect of right ear is cooler than the rest of the ear in one small area, but remains pink and appears to still have good circulation.

Plan: DC DMSO and monitor for return of swelling.

1/8/13: Keepers report that Ruth did lie down for a brief period of time last night and was able to get up with no problems. Otherwise she has been sleeping in a standing position. Ears remain swollen, however swelling at tops of ears has gone down significantly and previously normal contour is beginning to come back at the dorsal edge of both ears. Serous fluid continues to drain from both ears slowly at the ventral aspect. This evening, warm compresses will be suspended for several hours to allow normal physiological processes to take place and ears will be reassessed in AM.

Michele A. Sims, D.V.M.
Staff Veterinarian
Buttonwood Park Zoo
425 Hawthorn Street
New Bedford, MA 02740

Phone: 508-991-6178, X23



Inspection Report

BUTTONWOOD PARK ZOO

Customer ID: 11495

Certificate: 14-C-0131

Site: 001

BUTTONWOOD PARK ZOO

425 HAWTHORN ST

Type: ROUTINE INSPECTION

NEW BEDFORD, MA 02740

Date: 07 January 2014

2.131 (b)(1) DIRECT NCI

HANDLING OF ANIMALS.

1. On 1/2/14 two zookeepers failed to padlock the access door in the heated elephant barn that leads to the outdoor exhibit space when the exhibit was closed at the end of the day. As a result, one of the facility's Asian elephants managed to open the access door sometime in the early morning hours of 1/3/14 during a snow storm when the outside temperatures were below freezing. The elephant went outside into the outdoor exhibit space and was discovered outside when zookeepers arrived for work on the morning of 1/3/14. Based on the time of the last check made by security and the time the zookeepers arrived, it is estimated that the elephant was outside for at most 90 minutes.

The elephant was immediately brought back into the heated barn and appropriate supportive measures and treatments were implemented under the direction of the Attending Veterinarian to address the potential effects of hypothermia and possible frostbite. At the time of the inspection, the margins of both of the elephant's ears show some sloughing of the superficial layer of the skin associated with some mild drainage of clear fluid, portions of both ears exhibit some swelling of the tissues, and there is also some mild edema of the caudal part of the ventral abdominal skin. The underlying tissues of both ears appear look healthy in appearance, the elephant's appetite continues to be good, and her vital signs are stable. The elephant is being monitored around the clock by facility personnel and the animal is receiving appropriate veterinary care as prescribed by and under the supervision of the Attending Veterinarian.

Per this Section of the Regulations, animals should be handled as expeditiously as possible in a manner that does not cause trauma, excessive cooling, behavioral stress, physical harm, or unnecessary discomfort to ensure the health and well-being of the animal. In this instance, the failure of zookeepers to lock the outside access door of the heated elephant barn resulted in the elephant being able to leave its heated barn and get outdoors and be exposed to sub-freezing temperatures that can cause adverse effects on the health of the animal.

In response to this incident and to prevent any future incidents, the facility took immediate corrective actions including but not limited to the implementation of additional checks made by management to ensure facility standard lockdown procedures are being followed, the addition of new security processes, re-training of

Prepared By:


PAULA S GLADUE, VMD

USDA, APHIS, Animal Care

Date:

Title:

VETERINARY MEDICAL OFFICER Inspector 1054

07 January 2014

Received By:


SHARA CROOK

Date:

Title:

CURATOR -BUTTONWOOD PARK ZOO

07 January 2014



Inspection Report

zookeepers on standard procedures, and the installation of a second locking mechanism on the outside access door of the elephant barn.

The facility is taking appropriate corrective measures to address this item.

NOTE - This was a focused inspection of the elephants and elephant barn. The incident documented in this inspection report was reported by the facility to the USDA. Exit interview held on-site with facility representatives.

END OF REPORT

Prepared By:

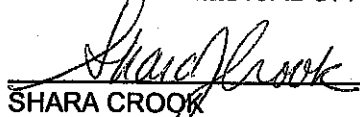

PAULA S GLADUE, VMD USDA, APHIS, Animal Care

Title: VETERINARY MEDICAL OFFICER Inspector 1054

Date:

07 January 2014

Received By:


SHARA CROOK

Title: CURATOR -BUTTONWOOD PARK ZOO

Date:

07 January 2014

Medical History Report - Summary for Individual Specimen
BUTTONWOOD PARK ZOO

- page 1 -

ELEPHAS MAXIMUS (no subsp)
Asiatic elephant
Name: RUTH

Sex: Female
Age: 55Y 2M 12D

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

.....2014....

- 3.Jan Purpose/Problem: inflammation secondary to hypothermia
Rx: ACETYLSALICYLIC ACID 30213gm PO SID for 2 doses. (9 gm/kg)
Clinical note recorded. (MS)
- 4.Jan Clinical note recorded. (LAS)
- 5.Jan Purpose/Problem: post hypothermia
Rx: SMZ-TMP 92.71gm PO BID for 7 days. (28 mg/kg)
Clinical note recorded. (LAS)
Clinical note recorded. (MS)
- 6.Jan Purpose/Problem: post hypothermia inflammation
Rx: ACETYLSALICYLIC ACID 29.80gm PO SID for 4 days. (9 mg/kg)
SMZ-TMP 96gm PO BID for 5 days. (28.99 mg/kg)
DIMETHYL SULFOXIDE ml topically SID until further notice.
Clinical note recorded. (MS)

ELEPHAS MAXIMUS (no subsp)
Asiatic elephant
Name: RUTH

Sex: Female
Age: 55Y 2M 12D

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

Clinical Note:

Rx: ACETYLSALICYLIC ACID 23496 gm PO SID for 2 doses. (MS)

3.Jan.2014

Purpose: inflammation secondary to hypothermia

Prescription Data >>

Drug: ACETYLSALICYLIC ACID 30213 gm PO SID for 2 doses

Starting date: 3.Jan.2014

Formulation: 325.00 mg tablet

Prescribed by: MS (3.Jan.2014)

Filled by: LAS (3.Jan.2014)

Drug dosage: 9 gm/kg

Treatment weight: 3357 kg

Clinical response to treatment: Good

Comments >>

Tradename of drug used is ASPIRIN.

Clinical Note:

Due to increased edema in both ears a small incision was made distally to allow gravity to help with drainage. The right ear had an additional cut near a pocket with increased pressure to decrease the chances of it splitting. Hot compresses will continue to help with drainage. Before leaving for the day Ruth seemed relaxed enough to lance the proximal pockets of both ears as well. All seem to be draining slowly and she is tolerating the hot compresses well. (LAS)

4.Jan.2014

Clinical Note:

Edema has increased in both ears but still actively draining. Hot compresses were stopped last night to let her rest and started up again this morning. She tried to lay down and then stopped herself and remained standing. They will increase hot compresses in frequency to every 45 minutes instead of every hour as tolerated. She is eating, drinking, participating in training commands, and exercising. She trumpeted last night, twice. As of now she has not laid down. (LAS)

5.Jan.2014

Clinical Note:

Rx: SMZ-TMP 92.71 gm PO BID for 7 days. (MS)

5.Jan.2014

Medical History Report - Individual Specimen
BUTTONWOOD PARK ZOO

- page 2 -

ELEPHAS MAXIMUS (no subsp)
Asiatic elephant
Name: RUTH

Sex: Female
Age: 55Y 2M 12D

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

Purpose: post hypothermia

Prescription Data >>

Drug: SMZ-TMP 92.71 gm PO BID for 7 days
Formulation: 240.00 mg/ml tablet
Prescribed by: MS (5.Jan.2014)
Drug dosage: 28 mg/kg

Starting date: **5.Jan.2014**

Filled by: LAS (5.Jan.2014)
Treatment weight: 3311 kg

Comments >>

Sustain III
SMZ-TMP = SULFAMETHOXAZOLE + TRIMETHOPRIM

Clinical Note:

6.Jan.2014

Rx: ACETYLSALICYLIC ACID 29.80 gm PO SID for 5 days.
Rx: SMZ-TMP 96 gm PO BID for 5 days.
Rx: DIMETHYL SULFOXIDE ml topically SID until further notice. (MS)

Purpose: post hypothermia inflammation

Prescription Data >>

Drug: ACETYLSALICYLIC ACID 29.80 gm PO SID for 4 days
Formulation: 325.00 mg tablet
Prescribed by: MS (6.Jan.2014)
Drug dosage: 9 mg/kg
Clinical response to treatment: Good

Starting date: **6.Jan.2014**

Filled by: LAS (6.Jan.2014)
Treatment weight: 3311 kg

Comments >>

Tradename of drug used is ASPIRIN TABLET.

Purpose: post hypothermia inflammation

Prescription Data >>

Drug: SMZ-TMP 96 gm PO BID for 5 days
Formulation: 240.00 mg/ml bolus
Prescribed by: MS (6.Jan.2014)
Drug dosage: 28.99 mg/kg
Clinical response to treatment: Good

Starting date: **6.Jan.2014**

Filled by: LAS (6.Jan.2014)
Treatment weight: 3311 kg

Comments >>

Printed on: 9.Jan.2014

/ISIS/MedARKS/5.54.c

Medical History Report - Individual Specimen
BUTTONWOOD PARK ZOO

- page 3 -

ELEPHAS MAXIMUS (no subsp)
Asiatic elephant
Name: RUTH

Sex: Female
Age: 55Y 2M 12D

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

Prescription Record (continued):

Sustain III
SMZ-TMP = SULFAMETHOXAZOLE + TRIMETHOPRIM

Purpose: post hypothermia inflammation

Prescription Data >>

Drug: DIMETHYL SULFOXIDE ml topically SID until further notice

Formulation: 900.0 mg/ml liquid

Prescribed by: MS (6.Jan.2014)

Starting date: **6.Jan.2014**

Filled by: LAS (6.Jan.2014)

Treatment weight: 3311 kg

Comments >>

Topical treatment: Apply to to legs

- page 4 -

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

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

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

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

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

Asian Elephant #5 Ruth

Date	Time	Water	Juice	Urine	Fecal	Compress	Sleep	Exercised	Behavioral Notes
1/3/2014	3:00pm					ears/tail	30min		
	3:30pm					ears/tail			
	5:00pm					ears/tail	15min		
	5:30pm						15min		
	6:20pm								
	6:40pm	9 trunkfuls							
	7:00pm					ears/tail			
	8:20pm	8 trunkfuls							
	8:45pm	3 trunkfuls							
9:00pm			50/50 64oz G			ears/tail			
			50/50 96oz AJ						
	10:40pm	hose in mouth							
	11:00pm					ears/tail			
1/4/2014									
	1:00am		50/50 45ozG			tail			
	1:00am		50/50 45ozAJ						
	1:30am							30 min	
	3:00am					tail			
	3:15am			normal	normal				
	3:30am							30 min	
	4:30am							45min	
	6:00am			50/50 85oz G		tail			
	6:10am							20min	
	6:30am							10min	
6:40am			50/50 32oz AJ				20min		
7:30am							20min		
8:40am					ears				
9:00am							15min		

	9:30am		50/50 16oz AJ								slow eating am diet
	9:40am	3 trunkfuls									playing with hanging b
	10:25am	5 trunkfuls									
	10:30am		50/5016oz AJ							20min	
	10:45am		normal		normal						
	11:25am						ears				
	11:50am		50/50 50oz G				ears				
	12:15pm	15 trunkfuls					ears				
	1:00pm										
	1:51pm		normal		normal						
	2:00pm										
	2:10pm	hose in mouth	7 min				ears				
	3:00pm		50/50 48oz G								
	3:30pm						ears				
	4:55pm	hose in mouth	3 min								
	5:00pm						ears				
	6:00pm	5 trunkfuls									
	6:45pm		50/50 16oz normal		normal		ears				
	7:04pm	hose in mouth	2 min								Allowed RC to hose leg
	8:20pm		50/50 32oz G				ears				
	9:25pm	8 trunkfuls									
	10:30pm		normal		normal						
	11:15pm	8 trunkfuls									
	1/5/2014										
	12:50am		normal		normal						
	12:55am	5 trunkfuls									
	3:00am		normal		normal						
	7:30am									15 min	
	7:35am						ears				
	8:30am						ears				
	9:30am						ears				
	10:00am	6 trunkfuls									
	11:00am		50/50 112oz G								

	11:00am		50/50 48oz AJ					
	11:15am				ears		15min	
	12:00pm			normal	normal		20 min	
	1:45pm	9 trunkfuls						
	3:00pm			normal	normal		20 min	
	4:30pm						20 min	
	4:45pm	9 trunkfuls						
	5:20pm				ears			
	6:30pm			normal	normal			
	6:45pm	hose in mouth					20min	
	7:30pm				ears			
	7:40pm			normal	normal			
	9:41pm						5min	
	9:45pm		50/50 384oz AJ					
	9:45pm		50/50 128 oz G					
	10:45pm						4min	
	11:10pm						5min	
	1/6/2014							
	12:30am			normal	normal		20 min	
	1:15am						30 min	
	3:00am						45 min	
	4:15am						45 min	
	5:15am						30 min	
	6:00am			normal	normal			
	8:00am			normal	normal			
	9:30am				ears			
	11:00am		50/50 600oz AJ				20 min	
	11:15am			normal	normal			
	3:00pm						20 min	
	3:30pm	hose in mouth					10 min	
	4:08pm						15-20min	
	4:15pm			normal	normal			

