

Nicole/Nichole Female Asian Elephant: Date of Birth 1976 Age: 32 yrs

Acquisition/Origin: 1980 H. Ruhe, West Germany, Burma

01/94 on Blue Unit

11/02/94: transferred from Blue Unit to Williston

02/21/96: transferred from Williston to CEC

06/04/97: transferred CEC to Blue Unit

Currently on Blue Unit FEI 1281

Medical Record Entries:

11/4/94: Polk Unit: 150 ml ps for 3 weeks-lymphatic infection causing edema of forelimbs. FELD 0026414

3/20/98: Polk Unit: Slight bleeding LF nail, Betadine & Triple purple spray x 2 months. FELD 0026414

8/5/98: Blue Unit: Daily Animal Records: Nicole scraped nose in stock car. FEI 36250

Date Unknown: Blue Show: Daily Animal Records: Blood in Nicole's stool probably from straining. FEI 36255

6/16/99: Blue Unit: Daily Animal Records: Nicole: Front foot soaked. FEI 22855

6/17/99: Blue Unit: Daily Animal Records: Nicole front foot soaked. Dr. Lindsay was here to check up on Nicole, Mysore, Lecheme, and Minas' feet. He took blood sample from Nicole. FEI 22856

6/17/99: Both front legs swollen, no apparent distress or systemic signs.

Polyflex IM x 5 days. WBC 14,000, high end of normal. All else ok, Chemistry. FELD 0026415

6/18/99: Blue Unit: Daily Animal Records: Front foot soaked. Dr. Lindsay took Nicole out of the show until further notice. FEI 22857

6/19/99: Blue Unit: Daily Animal Records: Front foot soaked. "Nicole is receiving injections of..." FEI 22858

6/23/99: Memo: Subject: RE: Blue Unit Report: From: Kenneth Feld: "What's wrong with Nicole? Has the vet been notified?" Memo: From William Lindsay, 6/23/99: Mr. Feld: "I saw Nicole last week at College Station. Both front feet have accumulation of fluid extending up to her elbows. Although her blood work is all within normal limits, the total white blood count is at the high end of normal, and I put her on injectable antibiotics, and, thus I suggested no performances. I will see her Monday night in Buffalo." FEI 20812

6/23/99: Start on Naxcel IM SID x 4 days, Banamine x 2 days. FELD 0026415

6/24/99: Blue Unit: Daily Animal Records: Nicole received an injection of Naxcel. She is still out of show. Her legs are still swollen. FEI 22864

6/25/99: Blue Unit: Daily Animal Records: Nicole received a injection of Naxcel. She is still out of show. Her legs are still swollen. FEI 22865

6/25-26/99: Lasix IM SID. FELD 0026415

6/26/99: Blue Unit: Daily Animal Records: Nicole received her medication. Her legs are still swollen. FEI 22866

6/27/99: Blue Unit: Daily Animal Records: Nicole received her medication. Load out- 4.5 mile walk. FEI 22867

7/8/99: Front legs remain swollen. Naquazone BID x 3 days no improvement. FELD 0026415

7/12/99: Transferred from Blue Unit to CEC. FELD 0026415 Load out 2.3 mile walk FEI 22821

7/14/99: Nicole has joined CEC because of edema in both front legs. FEI 32599

7/15/99: CEC: Daily Animal Records: Nichole- legs swollen, but ED-BAR FEI 22981

7/16/99: CEC: Daily Animal Records: Nichole- legs swollen, but ED-BAR FEI 22982

7/17/99: CEC: Daily Animal Records: Nichole- legs swollen but ED-BAR FEI 22983

7/18/99: CEC: Daily Animal Records: Nichole- legs more swollen, some swelling under belly. FEI 22984

7/19/99: CEC: Daily Animal Records: Nichole- legs more swollen, some swelling under belly. FEI 22985

7/20/99: CEC: Daily Animal Records: Nichole- legs more swollen, some swelling under belly. ED-BAR FEI 22986

7/20/99: TB Treatment Nichole FELD 0030198

7/20/99: Started Isoniazid, Last day of treatment 7/31/00

7/26/99: Started PZA, Last day of treatment 7/31/00

7/30/99: Started Rifampin, Last day of treatment 7/31/00

7/21/99: CEC: Daily Animal Records: Nichole- legs swollen, swelling under belly. ED-BAR FEI 22987

7/21/99: Both front legs are swollen with pitting edema extending from the chest to the feet. Moderate amount of edema is also located on the underside of the chest. The RF #3 has a severe NBA that involves the whole nail bed. The LF #4/5 has an inter-digital swelling. Rx Nuflor IM EOD x 5 doses. Suspect recurrence of lymphangitis, possible bacterial origin. Start aggressive foot/nail care. Start mild exercise (walking). Monitor. FELD 0026415

7/22/99: CEC: Daily Animal Records: Nichole- legs swollen, swelling under belly. ED-BAR FEI 22988

7/23/99: CEC: Animal Records: Nichole- legs swollen, swelling under belly, ED-BAR FEI 22989

7/23/99: Nichole: CEC TB Status-S, Scott's ELISA Results-P, Ramiro's ELISA RESULTS-P FELD 0008094

7/24/99: CEC: Daily Animal Records: Nichole- legs swollen, swelling under belly, ED-BAR FEI 22990

7/25/99: CEC: Daily Animal Records: Nichole- legs swollen, swelling under belly, ED-BAR FEI 22991

7/26/99: CEC: Daily Animal Record: Nichole- legs swollen, swelling under belly, ED-BAR FEI 22992

7/27/99: CEC: Daily Animal Records: Nichole-legs swollen, swelling under belly. FEI 22993

7/28/99: CEC: Daily Animal Records: Nichole- legs swollen, swelling under belly. FEI 22994

7/29/99: Examine on site, legs still swollen. FELD 0026415

7/29/99: CEC: Daily Animal Records: Memo From: William Lindsay To: Ramiro Isaza, Subject: CEC med records: Nichole- No change from last week- fore limb swelling and ventral edema and digit lesions, both front, persist. Bright, alert and eating. 5 doses of Nuflor have been completed; now on 3 drug therapy for treatment of possible Tb. Blood levels to National Jewish soon. FEI 31085

7/31/99: CEC: Daily Animal Records: Nichole- legs swollen, swelling under belly, FEI 22997

8/01/99: CEC: Daily Animal Record: Nichole- legs swollen, swelling under belly, FEI 22928

8/02/99: CEC: Daily Animal Records: Nichole- legs swollen, swelling under belly, FEI 22929

8/03/99: CEC: Daily Animal Records: Nichole- legs swollen, swelling under belly, FEI
22930

8/04/99: CEC: Daily Animal Report: Nichole- legs swollen, swelling under belly, FEI
22931

8/05/99: CEC: Daily Animal Records: Nichole- legs swollen, swelling under belly, FEI
22932

8/06/99: CEC: Daily Animal Records: Nichole- legs swollen, swelling under belly, FEI
22933

8/07/99: CEC: Daily Animal Records: Nichole- legs swollen, swelling under belly, FEI
22934

8/08/99: CEC: Daily Animal Records: Nichole- legs swollen, swelling under belly, FEI
22935

8/09/99: CEC: Daily Animal Records: Nichole- legs swollen, swelling under belly, FEI
22936

8/10/99: CEC: Daily Animal Records: Nichole- legs swollen, swelling under belly, FEI
22937

8/11/99: CEC: Daily Animal Records: Nichole- legs swollen, swelling under belly, FEI
22938

8/12/99: CEC: Daily Animal Records: Nichole- legs swollen, swelling under belly, FEI
22939

8/13/99: CEC: Daily Animal records: Nichole- legs swollen, swelling under belly, FEI 22940

9/08/99: Memo From: William Lindsay, To: Richard Froemming, Subject Tuberculosis Treatment Update- "Alana, Romeo, Juliette, Kelly and Nichole are also being treated, with 2 drugs, either because of past clinical suspicions, positive DNA tests, or positive ELISA tests (blood results)." FEI 21511

10/18/99: CEC: Daily Animal Records: Nichole- swelling on belly gone. FEI 23801

10/27/99: Examine on site. Some improvement in limb edema. FELD 0026415

2/1/00: Nichole: CEC TB Status-S, Scott's ELISA Results-P, Ramiro's ELISA RESULTS-P FELD 0008094

7/31/00: CEC: Daily Animal Records: Nichole, last day of treatment. FEI 36128

8/6/00: CEC: Daily Animal Records: Nicole, Right front foot trimmed and filed loose skin trimmed off right front pad stiff in the afternoon. FEI 36122

8/7/00: CEC: Daily Animal Records: Nichole, Showing no signs of stiffness. FEI 36121

6/2/01: CEC: Daily Animal Records: Nichole, abscess on toe; start daily trimming and treatment. FEI 25326

12/02/01: CEC: Daily Animal Records: Nichole transferred to Tampa W/Q FEI 25261

2/28/02: Hampton, VA Blue Unit: History recheck LF lameness. Trainers report no

change. Stiffness still noted in the LF carpus. Healing NBA FELD 0021812

3/27/02: NYC, NY Blue Unit: Recheck old NBA RF #4. RF #4 has a healing NBA. Currently being treated. FELD 0021827

8/10/02: San Diego, CA Blue Unit: LF #4/5 mild inter-digital swelling. RF#2 healed NBA. RF #5 deep hole under nail. Small healing abrasion on left axillary area. Normal exam. FELD 0021898

11/26/02: Chicago, IL Blue Unit: Mild, chronic, bed sore lesions on both sides of face and left hip. Small raised lesion on the lateral aspect of the LF carpus. FELD 0021836

11/5/03: Pittsburgh, PA Blue Unit: Mild. Small, raised lesion on the lateral aspect of LF carpus. All feet/nails normal. Normal examination. FEI 42625

6/16 to 6/19/04: Wichita falls, TX Blue Unit: History: Significantly lame over one week LF. Has been on Ibuprofen BID for a week. Feet look good. Elephant was extremely stiff legged. Suspect a problem is in carpus primarily and in elbow secondarily. Seems to advance shoulder satisfactorily. No muscle atrophy noted. Diagnosis: Open. Follow up: Conversation with Dr. Lindsay: He recommended initiating Banamine IM at 30cc SID, and Adequan IM, at 35cc every four days. Discussed this with Sonny. Troy not available. FELD 0008344

6/26/05: Winter Quarters: Stiff right front. No treatment. FEI 8377

8/4/05: Winter Quarters: Stiff right front. Treatment Ibuprofen. BID FEI 8381

8/5/05: Winter Quarters: Same treatment. Ibuprofen BID. FEI 8381

8/6/05: Winter Quarters: Same treatment. Ibuprofen BID. FEI 8381

8/7/05: Winter Quarters: Same treatment. Ibuprofen BID. FEI 8381

1/1/06: Winter Quarters: Tampa. Leave Winter Quarters, Tampa. FEI 8399

2/3/06: Nicole elephant small abscess left front. Flush water and Gentamicin - 2 x. FEI 8402

2/4/06: Nicole elephant flush abscess water and Gentamicin -1 x. FEI 8402

2/5/06: Greensboro, NC: Nicole elephant flush abscess 2 x- FEI 8403

2/7/06: Letter to Dr. Ellen Wiedner from Dr. William Lindsay: Nichole-There is an area of skin loss and superficial infection on her lower left forearm. I suggested keeping the area clean and flushing with gentocin solution daily using an infusion tip. FEI 11093

2/8/06: Nicole elephant flush abscess water and Gentamicin. FEI 8403

2/11/06: Nicole elephant flush abscess water and Gentamicin 2x. FEI 8403

2/12/06: Richmond, VA: Nicole elephant flush abscess with water and Gentamicin 1x. FEI 8404

2/16/06: Nicole elephant flush open abscess water and Gentamicin 1x. FEI 8404

2/17/06: Memo From: Knudsen, Jessica, To: Fahrenbruck, Deborah; Weidner, Ellen.
Subject: Med Info. On Tuesday Feb.14th the scar on Nichole's leg finally opened. It is

being thoroughly cleansed with water every day. Dr. Lindsay checked her when he visited the unit in Greenville. FEI 11179

2/20/06: Nicole elephant flush open abscess water- 2x. FEI 8405

2/23/06: Nicole elephant flush open abscess water 2x. Ultrasound leg O.K. FEI 8405

2/24/06: Nicole elephant flush open abscess water and Gentamicin- 2x. FEI 8405

2/25/06: Nicole elephant flush open abscess water and Gentamicin 1x FEI 8406

2/26/06: Nicole elephant flush open abscess water FEI 8406

2/28/06: Nicole elephant flush open abscess water + Gentamicin FEI 8406

3/2/06: Nicole elephant flush open abscess water + Gentamicin FEI 8406

3/3/06: Nicole elephant flush open abscess water + Gentamicin FEI 8406

3/4/06: Nicole elephant flush open abscess with water and Gentamicin 1 x FEI 8407

3/5/06: Nicole elephant flush open abscess water - 1x FEI 8407

3/10/06: Nicole elephant flush open abscess with water - 1x FEI 8407

3/11/06: Nicole elephant flush open abscess with water and Gentamicin- 1x FEI 8408

3/12/06: Nicole elephant flush open abscess with water and Gentamicin- 1x FEI 8408

3/16/06: Nicole elephant flush open abscess water and Gentamicin- 1x FEI 8408

3/17/06: Nicole elephant flush open abscess water and Gentamicin 1x FEI 8408

3/19/06: New York City, NY: Nicole elephant flush open abscess water and Gentamicin 1x FEI 8409

3/20-23/06: NYC, NY Blue Unit: Nichole elephant: Bump on lateral surface of LF. Slowly healing, still some drainage. Elephant BAR, not lame. Plan: Observe and keep clean. FEI 11094

3/23/06: Nicole elephant flush open abscess water -2x FEI 8409

3/24/06: Nicole elephant flush out open abscess water -2x FEI 8409

3/25/06: Nicole elephant flush out open abscess water 1x FEI 8409

3/27/06: Nicole elephant flush open abscess water 2x and Gentamicin 1x FEI 8409
3/28/06: Nicole elephant flush open abscess water - 2x FEI 8410
3/29/06: Nicole elephant flush open abscess water -1x FEI 8410
3/30/06: Nicole elephant flush open abscess water- 1x FEI 8410
3/31/06: Nicole elephant flush open abscess water - 1x FEI 8410
4/1/06: Nicole elephant flush open abscess water + Gentamicin -1x- FEI 8410
4/2/06: Nicole elephant flush open abscess water - 1x FEI 8401
4/3/06: Nicole elephant flush open abscess water- 1x FEI 8410
4/4/06: Nicole elephant flush open abscess water -1x FEI 8411
4/6/06: Nicole elephant flush open abscess water- 1x + Gentamicin 1x FEI 8411
4/7/06: Nicole elephant flush open abscess water- 1x FEI 8411
4/8/06: Nicole elephant flush open abscess water Gentamicin 1x FEI 8411
4/9/06: Nicole elephant flush open abscess water- Gentamicin 1x FEI 8411
4/10/06: Nicole elephant flush open abscess water- FEI 8412
4/11/06: Nicole elephant flush open abscess water- FEI 8412
4/13/06: Nicole elephant flush open abscess water- Gentamicin FEI 8412
4/14/06: Nicole elephant flush open abscess water- FEI 8412
4/15/06: Nicole elephant flush open abscess water- Gentamicin FEI 8412
4/16/06: Nicole elephant flush open abscess water- Gentamicin FEI 8413
4/21/06: Nicole elephant flush open abscess water- FEI 8413
4/22/06: Nicole elephant flush open abscess water- FEI 8413
4/23/06: Nicole elephant flush open abscess water- FEI 8414
4/25/06: Nicole elephant flush open abscess water- FEI 8414
4/26/06: Nicole elephant flush open abscess water- FEI 8414
4/27/06- Nicole elephant flush open abscess water- FEI 8414
4/27/06: Nicole elephant flush open abscess water- FEI 8414
4/27/06: Nicole elephant flush open abscess water- FEI 8414
4/28/06: Nicole elephant flush open abscess water- FEI 8414

4/29/06: Nicole elephant flush open abscess water FEI 8414

5/13-5/14/06: Hartford, CT Blue Unit: Nichole elephant. BAR, 3cm raised bumps laterally on RF and LF, ongoing. Elephant not lame. Not hot or painful. Keepers note intermittent draining, none during this visit. Plan: Continue to keep clean. FEI 16891

6/9/06: Blue Unit: Lameness RH. "Troy called me to tell me that Nichole was stiff on her right hind leg. I authorized him to administer 20cc banamine IM tonight and asked him to call me again in the morning. Troy says she is BAR, that her feet/nails appear solid, and that she has not experienced any sort of trauma." FEI 21810

6/10/06: Blue Unit: Lameness RH. "Troy called this morning to report that Nichole was still stiff on her RH but seems to improve somewhat with movement. I authorized him to administer 30cc banamine IM this morning and to call me later today with updates. He told me there are no obvious lesions to explain the lameness. I told Troy I will be in Las Vegas to examine the elephant personally. Phone conversations with Gary Jacobson; Bill Lindsay - informed Troy called back and said that Nichole is very stiff, and the banamine wasn't doing much. I asked him to ask Anita Santiago to call in the on call vet. The vet told me that this looks like an upward patellar fixation in a horse. He didn't think it was particularly painful. He described it as a 'mechanical not a supporting limb lameness.' "

FEI 21808

6/11/06: Blue Unit: Lameness RH. Nichole is out of the show. FEI 21808

6/12/06: Blue Unit: Elephant traveling well. Still stiff but seems comfortable. Lameness RH. FEI 21807

6/13/06: Blue Unit: Lameness RH. Still not bending knee, RH. No heat, redness, or

swelling. Can bear weight; not fracture lame. Assess: Trauma of unknown origin. Cold hose leg hourly for 5-10 minutes. Rest elephant from walking for 24 hours. Adequan SID IM. FEI 21807

6/14/06: Blue Unit: History of lameness RH. Slight ability to bend knee. Still no heat, redness, or swelling. Swings leg in arc when walks, but very interested in moving around to obtain food, interact with peers. Slight improvement. Today, walk slowly 5 to 10 min. Adequan SID IM. FEI 21806

6/15/06: Blue Unit: Lameness RH. History of lameness RH. Unchanged from yesterday. Continue as yesterday, plus add Ibuprofen BIB PO for the first day, than SID. Updated on Nicole. Discussed ability to slightly bend leg which I take as evidence of healing. FEI 21805

6/20/06: Blue Unit: Daily Animal Records: Front foot soaked. "Nicole received her injection." 1 show day - load out. FEI 22859

6/21/06: Blue Unit Daily Animal Records: "Nicole received injection." Travel day. FEI 22860

6/22/06: Blue Show: Daily Animal Records: "Nicole received her injection." Travel day. FEI 22861

6/27/06: Muscle pain. Stiff leg-abduction right front leg: limited flexibility of knee, slight swelling. FEI 41390

7/11/06: Nichole elephant has been approved by me to return to performing. Ellen Wiedner, VMD FEI 41391

8/24/06: Memo From: Wiedner, Ellen, To: Thomas, Albert; Aria, Janice; Coleman, Carrie; Andacht, Jim; Ramos, Jennifer; Fahrenbruck, Deborah; Griggs, Jon; Isaza, Ramiro; Jacobson, Gary; Jones, Kayleen; Lindsay, William; Locker, Harry; Polke, David; Quevedo, Angelina; Read, Bruce; Santiago, Anita; Schmitt, Dennis; Strauss, Julie; Stuart, Mike; Williams, Trudy; Frizzell, Mickie. Subject: Murray Fowler's Visits to the Blue Show, Veterinary Report from Dr. Murray Fowler: 11 July 2006 "2. Jewel (elephant) has an ongoing stiffness on the right fore limb. When walked off the train she was slightly stiff, but didn't change any during the walk in, USDA officials were present with instruction to videotape Jewel's movement. 3. Nicole (elephant) had traumatized her stifle previously, but she was walking okay when I saw her.

16 July 2006 1. Jewel (elephant) no change. REDACTED FEI 42373

10/18/06: Letter from Dr. Lindsay to Dr. Wiedner, dated 10/26/06- "I traveled to Cleveland, Ohio on October 18, 2006. "I observed the animal walk and noted that Nichole had a stiff front leg that improved with exercise." REDACTED FEI 44334

12/14/06: Orlando, FL Blue Unit: "Chronic raised dermal mass on left lateral carpus, the center is draining a small amount of fluid." FEI 4334

1/11/07: Miami, FL Blue Unit: Vertical crack LF/D3, vertical crack LH/D2, vertical crack RH/D3, approx 9cm bump on lateral carpus LF. Normal for this elephant. FEI 44482

COPIES OF UNDATED PHOTOGRAPHS: Foot toe cracks and toe nail abscess:
FEI 7934, FEI 7969, FEI 8001, FEI 8027, FEI 8043, FEI 8044, FEI 8052, FEI 8053, FEI 8063, FEI 8064, FEI 8065, FEI 8077, FEI 8078, FEI 8079, FEI 8083, FEI 8084, FEI 8091, FEI 8092, FEI 8095, FEI 8112, FEI 8013, FEI 8126, FEI 8127, FEI 8128, FEI 8129, FEI 8130, FEI 8131, FEI 8157, FEI 8158, FEI 8159, FEI 8160, FEI 8196, FEI 8196, FEI 8197, FEI 8246, FEI 8271, FEI 8272, FEI 8290, FEI 8297

Nicole/Nichole-Summary of medical and/or behavioral events:

(Little or no medical records available prior to 1989)

1994-3 weeks-lymphatic infection causing edema of forelimbs.

1998-Slight bleeding LF nail.

-Scraped nose in stock car.

-Per Tom Rider response to an interrogatory: "Randy Peterson... come out and started beating the elephant Nicole. It happened another time in Winter Quarters, he beat Nicole..."

-Per Tom Rider deposition: "Again the elephants were hooked as they came off the train, and as they walked down and put in tents; Randy Peterson hit the elephant Nicole on the head with a bull hook."

-Per Tom Rider deposition: "Handlers beat elephants named Sophie and Karen; and Nicole was also severely beaten."

1999-Both front legs swollen; out of show until further notice; transferred to CEC.

-Tb treatment; on 3 drug therapy for treatment of possible Tb.

-RF #3 has a severe NBA that involves the whole nail bed.

-LF #4/5 has an inter-digital swelling.

-Alana, Romeo, Juliette, Kelly and Nichole are also being treated with 2 drugs (For Tb), either because of past clinical suspicions, positive DNA tests, or positive ELSIA test.

2000-Right front foot trimmed and filed loose skin trimmed off right front pad stiff in the afternoon.

2001 Abscess on toe; start daily trimming and treatment.

2002-History: Recheck left front lameness; stiffness still noted in LF carpus; healing NBA.

-Recheck old NBA RF #4; RF #4 has healing NBA.

-LF #4/5 mild inter-digital swelling; RF #2 healed NBA; RF #5 deep hole under nail; small healing abrasion on left axillary area.

-Mild chronic bed sore lesions on both sides of face and left hip; small raised lesion on lateral aspect of the LF carpus.

2004-Significantly lame over one week LF; elephant was extremely stiff legged.

2005-Stiff right front.

2006-Small abscess left front.

-Area of skin loss and superficial infection on her lower left forearm.

-Bump on lateral surface of LF; slowly healing, still some drainage.

-3 cm raised bumps laterally on RF and LF, ongoing, intermittent draining.

-Stiff on her right hind leg; lameness right hind, out of show.

-Still not bending knee, RH; trauma of unknown origin.

-Swings leg in arc when walks.

-Muscle pain; stiff leg-abduction right front leg: limited flexibility of knee, slight swelling.

-Stiff front leg that improved with exercise.

2007-Vertical crack LF/D3; vertical crack LH/D2; vertical crack RH/D3; approx 9 cm bump on lateral carpus LF.

Lutzi Female Asian Elephant: Date of Birth 1950 Age: 58 yrs

***Acquisition/Origin: 1954, India**

01/94 @ Williston

04/15/94 transferred from Williston to Blue Unit

01/96 to 1/16/05 on Blue Unit

1/16/05: transferred from Blue Unit to CEC

Currently at CEC FEI 1268

***Per Donna Gautier affidavit 1/16/95- FEI 1378**

& Tim J. Holst affidavit 11/14/ 96- FEI 1360 Lutzi joined Ringling in 1954

Medical Record Entries:

9/2/98: RF overgrown cuticles, RR crack in sole, deep & wet, LR soft sole & crack, trimmed LR & RR. FELD 0007259

1/4/99: Blue Unit: Travel Day: Comments: Load at 3:30 AM. Taken by semi to Sunrise, FL. Lutzi and Susan have scratches from the semi and fighting (in the semi). Dr. Lindsay was called. Otherwise the trip went well. Susan & Lutzi treated. FELD 0022077

1/6/99: Several facial abrasions, granulating well, subcutaneous abscess right mandible, has broken & is draining. FELD 0007259

1/31/99: History: Reported NBA RF #4. Trimmed and explored a crack that lead to a NBA. New NBA. Will need topical treatment and periodic trimming. FELD 0007260

9/12/99: Kansas City, MO Blue Unit: "She has a bilateral pigeon toed conformation in her front feet. LF #5 abraded or scuffed. RF #5 has small crack and scuffed. "Abnormal conformation. No treatment needed." FELD 0021893

10/20/99: Boston Blue Unit: "She has bilateral pigeon-toed conformation in her front feet. LF #5 abraded or scuffed. Abnormal conformation. No treatment needed." FELD 0021842

3/31/00: NYC, NY. Blue Unit. Normal examination. LR #2 vertical crack and mild swelling under the nail. FELD 0021832

12/22/00: Foot Exam: Forefeet fine. Overgrown soles hind feet. Feet trimmed. Note: Part of callus over left elbow has come off, resulting in superficially ulcerated area. FELD 0007256

1/18/01: Unannounced inspection by Fish and Game Inspector. At conclusion of inspection said he overall had no problems today. History: Acutely lame during rehearsal. Trainer removed a 1.5 cm screw from lateral aspect of right hind foot, which elephant had just stepped on. Mild bleeding. Elephant rubbed foot on ground a bit immediately following, but seemed fine a few hours later. FELD 0002926

7/17/01: Houston, TX Blue Unit: BAR. Eating. Slightly thin BC. FELD 0020179

Undated: Lutzi (elephant) History: on & off weight loss. Diagnosis open. Drew CBC/Chem/UA FELD 0008336

8/23/01: Colorado Springs Blue Unit: Losing weight. Not producing feces in past 24 hours. BAR. Eating. Moderately thin BC. Early trunk paralysis. Normal general examination. Concerned about the weight loss. May be related to loss of her companion Susan, heat of summer. Need to record a weight. Consider blood work in Kansas City. FELD 0021901

9/1/01: Moline, ILL Blue Unit: Daily Animal Record: Lutzi not eating very well/ Her teeth look good/ Maybe due to Sue leaving unit. FELD 0024557

9/4/01: Kansas City Blue Unit: Daily Animal Record: Lutzi not eating her grain at night very well / have started giving her steamed rolled oats wet in morning and night. She seems to like them. FELD 0024521

9/6/01: Kansas City Blue Unit: .Daily Animal Record: After weighing elephant Lutzi has shown a significant weight loss. FELD 0024525

9/8/01: Kansas City, MO: Still losing weight. BAR. Eating poorly. Moderately thin BC. Early trunk paralysis. Normal general examination. FELD 0021845

9/16/01: Memo From: John Kirkland, To: William Lindsay, Cathy Shilton. Subject: Lutzi, "Bill, Cathy: Richard called me this afternoon expressing concern over Lutzi's weight loss and wanting to know what the vet plan was for her. In his examination on 08/23, Ramiro had expressed concern over her weight and had recommended regularly recording her weight and doing blood work while the unit was in Kansas City. Has this happened? If not, why not? I am being told that the unit has been expressing concern over Lutzi's weight loss, as well, so I want to know what the veterinary plan is for this animal and I also want one of you (or Ramiro) to personally look at her this week. I need to have a response for Richard tomorrow, so please get back to me tonight or first thing tomorrow morning at the latest." John Kirkland, Executive Director of Animal Stewardship FEI 20732

9/17/01: Memo From: John Kirkland, To: William Lindsay. Subject: Lutzi, "Bill: Once you have discussed Lutzi's condition with Cathy & Ramiro, please give me a call so that we can discuss before I speak with Richard again. If you all feel that her weight loss is

not a result of a medical condition but rather the loss of companionship or something else, then perhaps we need to come up with some sort of a program for her to address her social needs.” John Kirkland, Executive Director of Animal Stewardship FEI 21731

9/18/01: Memo From: John Kirkland, To: William Lindsay, Cathy Shilton, Ramiro Isaza. Subject: Lutzi: “I am glad to hear that you are recommending leaving Lutzi on the unit for the time being. However, we still need to address her weight loss. I would like a written plan-- both medical and behavioral--that can be implemented by the unit to try to improve her situation. Assuming that my flights go as planned tomorrow, I will be at the CEC most of the day on Wednesday. I would like to see a draft plan of your recommendations at that time. I appreciate your help.” John Kirkland, Executive Director of Animal Stewardship FEI 20730

10/10/01: Memo From: Deborah Fahrenbruck To: William Lindsay Cc: John Kirkland Subject: Behavioral Evaluation for Asian elephant Lutzi, Bill please go over and add anything you feel is needed, Thanks Debbie FEI 31076

Behavioral Evaluation for Asian Elephant Lutzi, Medical Management: “Dr Lindsay has concluded there is no underlying medical issues at this time.” Behavioral Enrichment Recommendations: “1. Companionship- The first line of action would be to couple Lutzi with a compatible companion. There isn’t a suitable companion on the unit at this time. There are several candidates at the CEC that would need to be evaluated? None are suitable candidates at the CEC that would need to be evaluated? None are suitable to rejoin the traveling unit? Debbie- OK?” “Conclusion: Lutzi seems to be slowly responding at this time. Continual monitoring of weight, exercise and food intake on a regular basis is recommended.” FEI 31077

11/1/01: History: Thinner than other elephants, but has excellent appetite, and has gained approx. 300 lbs in last few months. Elephant is bright, behaves normally, body condition

appears improved. FELD 0021895

2/28/02: Hampton, VA Blue Unit: Previous weight loss. Subjectively she seems improved. FELD 0021812

4/7/02: History: Stumbled during walk-out because of Minyak. Not lame. No apparent injuries. FELD 0002928

6/7/02: Wilkes-Barre, PA Recheck BC. Fair BC, seem to have improved over the past few months. FELD 0021825

7/6/02: Phoenix, AZ Blue Unit: History: Sore left front leg. Mild swelling of foot and ankle. Not visible lame. Swelling over #4 nail with mild exudates. Treatment- Start nail trimming and soaks as needed. Early NBA LF #4. FELD 0021820

7/8/02: Written Note: sent by William Lindsay, DVM. "Current Guidelines: 'Lutzi' was culture positive, Group D- page 4." FELD 0028949

8/10/02: San Diego, CA Blue Unit: Routine exam. Fair BC. LF #4 NBA. FELD 0021897

11/26/02: Chicago. ILL Blue Unit: Fair BC (seems to be gaining weight). Possibly early nuclear sclerosis. FELD 0021835

4/17/03: Blue Unit: Exam-elephant physical. Presenting Complaint: Routine exam. Skin: Bed sore, left head, healing with topical cleaning. Musculoskeletal: SQ fluid filled mass on the left hip. LH #4 small crack. FELD 0002923

11/5/03: Pittsburgh, PA Blue Unit: Flap wound of the sole under RF #5 nail, occurred during walk-in. No lameness nor bleeding. RF#4 has a small flap growing down from the coronary band. All other feet/nails normal. FELD 0021839

2/15/04: CEC: Exam-recheck: follow-up on left cheek pressure sore. Moderate irritation associated with pressure sore on left cheek, no unexpected complications. RX: continue triple antibiotic ointment application. FELD 0020407

4/21/04: Memo From: Ellen Wiedner To: William Lindsay Subject: Blue Unit Report. Lutz (elephant) History: Two year history of 200 lb weight loss, followed by slow recovery. Blood work from, 3 months ago WNL. Eats well. Has been on Ibuprofen for a while. Animal not underweight, but "lanky." BAR and active. Diagnosis: open. Discussed blood work, dental exam, fecal exam with owner. Stop Ibuprofen see how animal does. Tests above to be performed on next visit to Blue Unit. FEI 31832

9/9-9/13/04: Sacramento, CA Blue Unit: History: Had tail bitten by Minyak last week. Tail healing nicely, dry not painful. Normal healing wound. FELD 0008339

10/5/?: Train Run. Blue Unit: Lutz scratched Susan's head with her ivory. Treated with Biozide. FEI 36275

11/8/05: Preparation H Left side of head. FEI 5153

11/9/04: CEC: Exam-recheck: follow-up on left cheek pressure point. FELD 0020407

12/1/05: Meta Fill II Left side of head. FEI 4564

12/2/05: Kollagen gel Lf Head FEI 4539

12/3/05: CEC: Decubital lesions on cheeks. Apply topical collagen once or twice as desired. Can spray prior to applying collagen with a light spray of gentocin if desired. FELD 0028072

12/15/05: CEC: Gentocin & Kollogen gel Lf head. FEI 4215

1/8/05: Memo From: Deborah Fahrenbruck To: Mike Stuart Subject: mrfeld. doc
Attachments: mrfeld. Doc "I had forgotten I had written this. I never sent this to Mr. Feld but I send it along for your information. FEI 15025

"Dear Mr. Feld," "I've witnessed some things done by Troy and his crew that were troubling but I cannot say were truly abusive. When I brought these issues to his attention strictly for his knowledge and for him to deal with as the barn head I was always met with resistance and always felt he considered me as an outsider and a threat." "Things did settle down after leaving the coast but unfortunately have taken a turn again. I believe Alex's transfer triggered some of this but Troy is Troy and even when he is confronted with his attitude acknowledges it and even sometimes apologizes but also says he not only has no plans to change but vows to increase it. I have some first hand knowledge on how he berates his crew and a lot of second hand. I think we will probably lose at least several good people and possibly one key one. I will tell you of my own recent incident. As everyone is aware Isham is practicing to take over ring one in manage. Last night in the show I observed him hook Lutzi under the trunk three times and behind the leg once in an attempt to line her up for the T-mount. After the act I stopped backstage and observed blood in small pools and dripped along the length of the rubber and all the way inside the barn. Troy was readying two elephants for Spec. Not knowing if he was aware I asked very quietly if the had seen the blood. Ignoring me and thinking he didn't hear me I asked again. He was very abrupt in his acknowledgement. Understanding this I said nothing more and went up to the barn to check on the elephant. I asked Mike which elephant was bleeding and was told Lutzi. I told him I was not surprised as I had seen Isham hook her in the show fairly severely. Mike said he thought it might have been Suny during the act either way we had an elephant dripping blood all over the arena floor during the show from being hooked. I observed Suny cleaning Lutzi's trunk and decided to let the elephant department handle it." Deborah Fahrenbruck, Animal Behavioralist,

Feld Entertainment, Inc. FEI 15026 FEI 15027

1/16/06: CEC: Gentocin & Kollogen gel L cheek. FEI 5288

2/17/06: CEC: Triple antibiotic L cheek. FEI 6070

3/13/06: CEC: Triple antibiotic L cheek FEI 6685

4/3/06: CEC: Called Dr. Wiedner not eating. Gave shot of Banamine. Started eating ~
30 minutes later. FEI 10336

7/5/06: CEC: Mildly stiff LF. Stiffness is long standing and is probably mechanical. FEI
40006

10/03/06: Memo From: Schmitt, Dennis To: Locker, Harry; Jacobson, Gary; Wiedner,
Ellen; Isaza, Ramiro Attachments: TB Treatment Notes Williston. doc: "Harry, Attached
are the dates of Tb treatment for the elephants at Williston as Dr. Lindsay provided them
to me last week (Sept 25th). They include Zerbini's elephant, Tilly as well. Please add to
the elephants medical records as appropriate to complete their documentation." FEI
41147 "Tb Treatment Notes Williston Elephants Per Dr. Bill Lindsay." "Notes"
indicate: "Lutze" start Tb treatment: 10/13/00 and stop Tb treatment: 5/18/02." FEI
41148

12/19/07: CEC- Quarantined elephant reclassified as Group C by USDA/Animal Care on
9/18/06, as outlined in the Guidelines for Control of Tuberculosis in Elephants (2003),
which remain on travel restrictions.

COPY OF UNDATED PHOTOGRAPH: Foot toe crack:

FEI 7988

Lutzi-Summary of medical and/or behavioral events:

(Little or no medical records available prior to 1989)

1998-RF overgrown cuticles, RR crack in sole, deep & wet, LR soft sole & crack.

1999-Lutzi and Susan have scratches from the semi and fighting (in the semi).

- Several facial abrasions, granulating well; subcutaneous abscess right mandible has broken and is draining.

- Reported NBA RF #4.

- Has bilateral pigeon toed conformation in her front feet; LF #5 abraded or scuffed.

*2000-LR #2 vertical crack and mild swelling under the nail.

- Overgrown soles hind feet; part of callus over left elbow has come off, resulting in superficially ulcerated area.

2001-Acutely lame during rehearsal; removed 1.5 cm screw from lateral aspect of right hind foot.

- Slightly thin BC.

- losing weight; early trunk paralysis

- not eating well.

2002-Stubbed during walk-out because of Minyak.

- Sore left front leg; mild swelling of foot and ankle; swelling over #4 nail with mild exudates; early NBA LF #4.

- *-Lutzi was culture positive, Group D.

- Possible early nuclear sclerosis.

2003-Bed sore, left head; LH #4 small crack.

- Flap wound of the sole under RF #5 nail, occurred during walk-in.

2004-Left cheek pressure sore.

- Weight loss history; diagnosis open.

-Had tail bitten off by Minyak last week.

-Lutzi scratched Susan's head with her ivory (date of event uncertain).

2005-Decubital lesions on cheeks.

2005-Per Deborah Fahrenbruck Memo, "...hook Lutzi under the trunk three times and behind the leg once in an attempt to line her up for the T-mount."

-Mildly stiff LF; stiffness is long standing and probably mechanical.

12/19/07: CEC- Quarantined elephant reclassified as Group C by USDA/Animal Care on 9/18/06, as outlined in the Guidelines for Control of Tuberculosis in Elephants (2003), which remain on travel restrictions.

*2000-2002-Per Dr. Dennis Schmitt Memo: "Lutze" start Tb treatment: 10/13/00 and stop Tb treatment 5/18/02." However there are no entries in Lutzi's medical records to indicate treatment.

Jewel/Jewell Female Asian Elephant: Date of Birth 1951 Age: 57 yrs

***Acquisition/Origin: 1954 India**

01/94 on Blue Unit

01/15/03 transferred from Blue Unit to CEC

02/21/96 transferred from Williston to CEC

12/15/05 transferred CEC to Blue Unit

Currently on Blue Unit FEI 1239

9/6/06 Jewell arrived at CEC from Blue Unit FEI 41293

***Per Donna Gautier affidavit 1/16/95- FEI 1378**

& Tim J. Holst affidavit 11/14/ 96- FEI 1360 Jewel joined Ringling in 1954

Medical Record Entries:

2/-/91: Blue Unit: Arthritis Ibuprofen BID 3 days FELD 0006980

5/10/91: Blue Unit: Treat feet FELD 0006980

7/4/96: Blue Unit: Nail abscess FELD 0006980

5/29/98: Blue Unit: RF leg swollen Banamine, Polyflex SID x 4 days FELD 0006980

5/29/98: Jewel elephant with Sonny on the Blue, front leg swollen? Infected wound?

Sonny gives Banamine once and 4 daily doses Polyflex each day. REDACTED

“I’ve never been involved in a USDA inspection before, but I’d be concerned about several items- lack of help, and thus not enough time spent handling animals, could be tidier, cleaner, ie. Meat cooler.” “Exposed wire connection in ground. Two elephants outside all day in electric fence- OK- but no shade available. Prince and Sabu spend a lot if not all time on concrete. More help might allow time for foot care, enhancement activity.” REDACTED FEI 38332

8/23/98: Blue Unit: History- Older animal in the RB herd since about 1954. No current or chronic problems reported by Sonny. FELD 0006980

9/2/98: Blue Unit: RF trim between toes, LF small NBA, RR & LR overgrown cuticles, LR crack nail, trim and Tri-dye soak SID FELD 0006982

1/31/99: Blue Unit: History: Reported NBA between RF #3 & #4. Cuticle between the two toes is inflamed, trimmed edges. New NBA found in central right #4 nail. Trimmed and cleaned. Both lesions are active. Continue periodic trimmings and topical treatment.

2/11/99: Blue Unit: LF toe 3, abscess in nail center, to soak in Nolvasan solution, careful beveling around abscess. RF interdigital cellulitis toes 2, 3. FELD 0006982

2/18/99: Blue Unit: LF toe 3, continue to soak in Nolvasan bath, trimmed to take off pressure when walks, looking better. FELD 0006981

3/3/99: Blue Unit: LF toe abscess, trimmed out some more. FELD 0006981

3/25/99: Blue Unit: Much improvement in nail bed abscess. FELD 0006968

4/8/99: Blue Unit: Feet improved, will soak foot with soft spot and lesions, hot Nolvasan SID. FELD 0006968

4/13/99: Blue Unit: History: Sonny pointed out a "soft spot" (necrotic area) on the sole pad of the right front foot near digit #5. Tender to deep palpation. Routine soaks and dressing. Needs some debridement. FELD 0006968

9/12/99: Kansas City Blue Unit: Observed during walk out. LF #3 old NBA. RF #5 old

NBA abscess, small hole. RF interdigital tissue swollen 4-5. FELD 0006968

9/12/99: Kansas City Blue Unit: A large, approximately 1 foot, linear, superficial scratch on the left upper flank near the top of the back. LF #3 old NBA. RF #5 has on old NBA with a 2 cm hole. RF between #4-5 the interdigital tissue is swollen. Unknown cause for the wound on the back, but healing well. Active NBAs. No treatment needed. FELD 0021894

10/13-16/99: Boston, MA Blue Unit: RF #5 has an old healed NBA. LR #2 has small vertical cracks on the nails. Old healed NBAs. No treatment needed. FELD 0006968

3/31/00: NYC Blue Unit: Normal general examination except healing wound on the right trunk base. FELD 0021832

7/19/00: Long Beach, CA Blue Unit: Normal general examination. Nails of the front feet tend to grow laterally. FELD 0021823

8/9-13/00: San Diego: LF leg stiffness noted. FELD 26878

8/10/00: San Diego, CA Blue Unit: History: Lameness noted. Mild lameness (stiffness in the carpus) noted in the RF leg. The problem is worse after rest and improves with exercise. Note: Zina hit Jewel with her head this afternoon while they were in their exercise pen. Jewel has a stiffness and lameness of the left front leg. She is weight bearing and no swelling is noted. Banamine paste PO SID. Arthritis of the RF carpus. Acute traumatic injury of the LF leg. FELD 0021791

8/15/00: Oakland, CA Blue Unit: Daily Animal Record: Jewell's Ankle Stiff. FEI 31063

8/16/00: Oakland, CA Blue Unit: Daily Animal Record: Jewell's FL Ankle Stiff. FEI 31061

8/17/00: Oakland, CA Blue Unit: Daily Animal record: Jewell's FL Ankle Stiff. FEI 31059

8/18/00: Oakland, CA Blue Unit: Daily Animal Record: Jewell's Ankle Stiff. FEI 31057

8/19/00: Oakland, CA Blue Unit: Daily Animal Record. Jewell's Ankle Stiff. FEI 31055

8/20/00: Oakland, CA Blue Unit: LF leg still stiff, no evidence of discomfort. FELD 0006968

8/20/00: Oakland, CA Blue Unit: Daily Animal Record: Jewell's Ankle Stiff. FEI 31053

8/22-25/00: San Jose, CA Blue Unit: No change in LF leg. Some carpal stiffness, however Jewell places foot on stool and does not resist palpation or flexion. Also walks with upper forearm fixed- no pain on palpation; unable to perform upper limb manipulations. No obvious pain, participates in turn out, animal walks, practices and performances without resistance. FELD 0006969-FELD 0006969

12/13/00: Orlando, FL Blue Unit: Lameness noted. Mild lameness in the LF leg. The problem is worse after rest and improves with exercise. RF #4/#5 interdigital soft tissue swelling. Zina hit Jewel with her head in San Diego while they were in their exercise pen. Chronic traumatic injury of the LF leg. FELD 0021806

12/22/00: Blue Unit: Foot Exam: In the forefeet, on the left, there are erosions or "pockets" at the nail/sole junction of the 3rd and 4th digits. There is also a circular, 2 cm

soft spot in the nail/sole junction on the medial aspect of the 3rd digit of the left forefoot. On the right, there is a 2 cm deep ulcer at the nail/sole junction of the 3rd digit. In the hind feet, there are cracks in the nails of both 3rd digits. Elephant is chronically moderately lame left fore. Possibly related to foot abscess with osteomyelitis.

12/22/00: Radiographic Interpretation by Dr. Biller, Kansas State University:

Jewell: Asian Elephant. Female, 50 years old.

Radiographs shot 22nd of December 2000. Four radiographs of the left front foot and two of the right.

Right: "There is a linear lucent line to the lateral aspect of the 3rd phalanx of the 4th digit. There is also irregularity involving especially the medial wing of the third phalanx of the 4th digit. There is a focal area of bony lysis that is circular in appearance of the distal aspect of the 2nd phalanx 3rd digit. The medial half of the 3rd phalanx 3rd digit is also missing. Circular lucency in the plane of the 3rd phalanx 3rd digit in the soft tissues. There is slight irregularity to the medial aspect of the distal 1st phalanx in the 3rd digit. Similar change distal medial 2nd phalanx in 2nd digit."

Left Front: "There is a similar circular lucency of the distal 2nd phalanx 3rd digit. The margin is slightly more sclerotic than in the right front foot. There is also missing the medial half of the 3rd phalanx 3rd digit (small remnant left). There is however just distal and medial to the distal portion of the 2nd phalanx 3rd digit a rounded osseous/osteochondral fragment. Irregular new bone is noted at the medial aspect of the distal 1st phalanx on the 3rd digit as well. A linear lucency in a proximal distal direction involving the lateral aspect of the 3rd phalanx and the 4th digit."

"These are radiographs shot on the 12th of April 2001. This is a four-month progression from first set of radiographs). A single radiograph of the right front and a single of the left were taken. There is lysis noted at the junction between the body and the wing laterally (LF) of the 3rd phalanx and fourth digit. There is also irregularity involving the solar margin of the lateral and medial wings of the 3rd phalanx 4th digit. The lysis

involving the 2nd phalanx in the 3rd digit left front appears slightly smoother than on earlier study. There is periarticular osteophyte formation involving the proximal medial aspect of the 2nd phalanx 3rd digit. There is also periarticular osteophyte formation lateral aspects of the proximal 2nd phalanx 4th digit. New bone lateral distal 2nd phalanx 2nd digit. Periarticular osteophytes noted at the abaxial proximal aspect of the 2nd phalanx 4th digit right side and medial aspect of the 2nd phalanx 3rd digit. No significant change involving the 2nd or 3rd phalanx and lysis of the 3rd digit right front foot. Slight irregularity to the solar margin of the 3rd phalanx 4th digit. The previously noted lucency has changed little. Focal area increased opacity medial mid 1st phalanx 4th digit. Suspect rock. FEI 15326- FEI 15327

12/28/00: Blue Unit: Foot Exam: Soft spot on sole beneath medial aspect of left third digit may not be significant (possibly just a bruise?) Decided not to attempt fine needle aspirate for culture. The medial aspect of the cuticle of the 4th digit on the left forefoot is swollen, and trimming of the cuticle revealed fetid, infected granulation tissue.

Instructions given to trainer for gradual trimming to open up this area. On the right forefoot, the cuticle of the 5th digit is overgrown, and there is associated swelling at the interdigital space of the 4th and 5th digits, with possibly a necrotic pocket. Instructions for trimming given to trainer. FELD 0006969

1/7-10/01: Sunrise, FL Blue Unit: Load-out from Sunrise onto trucks then onto trains uneventful. Animal walk in Miami next day uneventful. History: Bilateral problems in forefeet. Exam: In the left forefoot, the soft sot in the sole adjacent to the third nail is still present, and does not appear as if it's going to open up. The adjacent irregular black spot appears to be healing over. However, there is a severe infectious process in the medial aspect of the base of the nail of the 4th digit. This area is swollen and there is protruding granulation tissue. The associated nail approx 1 cm below the cuticle is

splitting horizontally and oozes fetid serosanguinous fluid. In the right forefoot, the 1.5 cm ulcer in the sole adjacent to the nail of the 3rd digit is closing over, however light trimming and exploration with a cotton-tipped swab revealed an opening through the sole of the foot to an area containing caseous material. Swabs of both areas taken for anaerobic and aerobic culture. Treatment: trainers to work at gradually trimming left sole and right cuticle so that these areas can drain. Also, since there is radiographic evidence of osteomyelitis associated with sole ulcer in left foot, pack area after trimming with metronidazole. Treat rectally with metronidazole tablets SID for 10 days, then continue long-term treatment with another antibiotic when culture and sensitivity results in. FELD 0006969-FELD 0006970

1/16-18/01: Blue Unit: Unannounced inspection by Fish & Game Inspector. Did inspection on his own at first, and noted problem with Jewell's left forefoot and generally overgrown condition of all her cuticles. I accompanied him at his request to have a closer look. He seemed satisfied that foot problems are being addressed. At conclusion of inspection said he overall had no problems today. FELD 0006970

1/18/01: Blue Unit: History: Recheck forefeet: Still has granulation tissue protruding above 4th nail and adjacent nail is open and draining serosanguinous fluid. Mild swelling of toe above nail. Still has 1.5 cm soft sole beneath 3rd nail. Right forefoot: Draining tract in sole beneath 3rd nail is closing over (may not be a good thing depending on if underlying bone is infected). No swelling between and above 4th and 5th nails of left forefoot. Elephant is consistently stiff on left foreleg, and intermittently stiff on right foreleg. Test: Culture results from last week: Right foot sole ulcer swab grew a mixed aerobic and anaerobic gram positive and gram negatives. Left foot cuticle draining tract grew mixture of Actinomyces, anaerobic Streptococcus and Corynebacterium. No sensitivities done since such a mixed culture. Once course of metronidazole is finished (in a few days) start on longer term antibiotic. Elephant won't take oral medication at all,

so will have to use injectable. Considering ceftiofur or trimethoprim-sulfa. Feet still need a lot of trimming. Condition of feet noted by Fish and Wildlife Inspector today.
FELD 0006970

1/25/01: Blue Unit: Recheck foot abscesses. Exam: Left forefoot infection at base of 4th nail had improved in that there is less swelling of the toe above the nail, and trainers have been working on opening up the infected tract through the nail, so that there is now purulent material draining through a fistula in the nail. With continued trimming, the infected area will soon be opened up completely. The 3rd toe of the right forefoot appears normal except for the small, gradually disappearing hole in the sole adjacent to the nail. There is still moderate swelling and granulation tissue protruding from between the nails of the 4th and 5th toes of the right forefoot. FELD 0006970

2/8/01: Blue Unit: Focus on infection at base of left fore 4th nail is growing out (approx. midway down nail now), and there is no longer any swelling at the base of the nail. The swelling and ulceration that was previously present between the bases of the 4th and 5th nails of the right forefoot is progressing caudally towards the sole, and is being gradually trimmed away by trainers. The 3rd digits of the forefeet (in which there were radiographic changes in the distal phalanges) appear normal. There is a crack in the nail of the 3rd digit of the right hind which is being worked by corrective trimming. Cuticles have been trimmed. Fourteen day course of ceftiofur finished today. Elephant has 10 cm SQ swelling in hip where injection given yesterday. FELD 0006970-0006971

3/21/01: Washington, DC Blue Unit: History: Routine exam. Lameness noted LF leg. Eating. Lameness in the LF leg (will not flex carpus while walking). The problem is worse after rest and improves with exercise. RF #4/5 inter-digital swelling continues to be active. RH #3 has vertical crack. Assess: Chronic traumatic injury of LF leg. Note: Consider adequan and/or NSAIDS for the leg. I talked to Brian French, asked him to

consider changing this animal's "act" to limit the number of lay downs and situp tricks. Both require the usage of the sore leg. FELD 0021828

3/31/01: Memo from: Ramiro Isaza. To William Lindsay, Subject: Notes from the Blue Unit. Dated: March 31, 2001. Jewel is notably lame. I asked Brian to see if he could limit her routine to tricks that don't require placing full weight on the hurt leg. Adequan and/or nsaid? FEI 33051

4/12/01: Blue Unit: Exam: No swelling in leg or obvious foot problems that identify source of lameness. Elephant has reduced flexion of carpus, which it doesn't warm out of as well as she used to. Radiographs taken of 3rd digits of both forefeet as follow-up to previous rads which showed changes in P2. Elephant still has a protrusion of granulation tissue between the 4th and 5th digits of the right forefoot. Assess: Likely osteoarthritis causing stiffness of left foreleg. Granulation tissue protrusion between toes is minor problem. Scheduled for trimming in a few weeks when elephant can be sedated and rested following trim. Treatment: For arthritis, try Adequan IM every four days, for 4 treatments, then once weekly for a month. FELD 0006971

7/17/01: Houston, TX Blue Unit: Lameness noted LF leg. Eating. Lameness in the LF leg (will not flex carpus while walking). Lameness chronic, but this episode is acute onset. RF #4/5 inter-digital soft tissue swelling continues to be active. RH #3 has a vertical crack. LF #4 old healing NBA. Hind sole pads are overgrown. Treatment: Ketoprofen Injection IV. Trail dosage to help acute lameness. Assess: Chronic traumatic injury of LF elbow or carpus. RF #4/5 inter-digital NBA. FELD 0006971

8/23/01: Colorado Springs, CO Blue Unit: RF #4/5 inter-digital soft tissue swelling continues to be active. RH #3 and LH #3 have vertical cracks. Assess: NBA chronic active, but healing. FELD 0021901

9/8/01: Kansas City, MO Blue Unit: RF #4/5 inter-digital soft tissue swelling continues to be active. RH #3 and LH #3 have vertical cracks. NBA chronic active, but healing. FELD 0021845

9/27-28/01: Buffalo Blue Unit: Stiff L front, no discomfort noted. FELD 0006972

10/4-5/01: Detroit Blue Unit: No change in stiffness still comfortable. FELD 0006972

10/25-26/01: Bridgeport Blue Unit: Still stiff, no discomfort. FELD 0006972

11/1/01: Blue Unit: Chronic, 1-2 cm sole ulcer beneath focus of granulation tissue medial aspect of 5th nail, RF. Not associated with lameness. FELD 0006972

1/22-23/02: Birmingham, AL Blue Unit: History: Chronic stiffness LF carpus. FELD 0006972

2/28/02: Hampton, VA Blue Unit: Stiffness still noted in LF carpus. FELD 0021812

3/21/02: Blue Unit: RF nail #4 separation at nail- cuticle junction, probable trauma. FELD 0006972

3/27/02: New York City, NY Blue Unit: Recheck old NBA RF #4 Exam- RF nail #4, separation at nail - cuticle junction. Chronic LF lameness. FELD 0021827

4/7/02: New York City, NY Blue Unit: History: Active NBA of #4 FELD 0021896

6/7/02: Wilkes-Barre, PA Blue Unit: Recheck NBA of RF #4. Healing well. Trainers trimming. Assess: healing. FELD0021825

6/20/02: Blue Unit: Skin wound L flank granulating and epithelializing well. FELD 0002834

6/22/02: Memo From: Deborah Fahrenbruck, To: William Lindsay, Lisa Wallenda, and Brian French. Subject: The two factors to be considered before taking an animal off the show for retirement is first medical reasons but secondly behavioral. Attachments: retirement for elephants doc. "alright guys, please look this over and add subtract, etc. I figure it's at least a start. Debbie."

"The two factors to be considered before taking an animal off the show for retirement is first medical reason and secondly behavioral. Our elephants live in social groups. They are members of an intricate herd structure and interact with the other members of the group. They form bonds, and just like humans have likes and dislikes within the herd but work together well as a group. We have found in the past that retirement, just like people, is not always the best answer. For this reason we look at each individual elephant and decide accordingly. Our veterinary staff considers medical issues and these, of course, are our first consideration. Many times our veterinary staff determines that the medical aspect can be cured while traveling without undo stress or restricted work in the show are most comfortable. That is what you see with Jewell. She has had stiffness in her leg for several years. Our veterinary staff has determined there is no pain involved and in fact she can bend it and has full motion of the limb. We have restricted her behaviors to ones she can do comfortably and loves to do. Behaviorally staying with her barn mates and maintaining her daily routine is very important it may not be correct in saying she is 'happier' but I truly feel she is happier with her 'family' which includes her fellow pachyderms and humans." FEI 19528

6/26/02: Blue Unit: Medical Report: "Jewel" Laceration on her left rib cage was cleaned and treated with betadine ointment. Wound healing well. FEI 16787

7/15/02: Blue Unit: L flank skin wound improving. FELD 0006973

8/10/02: San Diego, CA Blue Unit: Healed skin abrasion on right flank. Pigeon toed with associated abnormal growth of RF #3 towards RF #4. FELD 0021897

11/26/02: Chicago, IL Blue Unit: Chronic stiffness of the left leg. Resolving scratch on left flank. LH #2 vertical crack. RF between 4 and 5 has an old resolving NBA. FELD 0021836

1/15/03: CEC Daily Animal Records: Ozzie and Jewel transferred to CEC from Blue Unit. FEI 27238

1/29/03: CEC: Exam: History: Reported to be stiff. Chronic problem. Moderate lameness. Treatment Ketoprofen tablets BID as needed. Monitor side effects of NSAIDS. FELD 0002828

2/5/03: CEC: Daily Animal Records: Jewel Ibuprofen tablets in AM. FEI 27227

2/6/03: CEC: Daily Animal Records: Jewel Ibuprofen tablets in AM. FEI 25943

2/7/03: CEC: Daily Anima Records: Jewel Banamine, not eating much. FEI 27229

2/8/03: CEC: Daily Animal Records: Jewel Banamine FEI 25945

2/9/03: CEC: Daily Animal Records: Jewel Banamine FEI 25946

12/13/05: CEC: Jewell left in truck P.M. to go to Blue Show. FEI 4261

12/15/05: Record of Acquisition, Disposition or Transport. APHIS Form 7020. Jewell, Asian elephant, Remarks (condition, etc.): "Good," signed by Director of Vet. Care FEI 1240

5/24/06: Memo From: Ellen Wiedner To: Anita Santiago, Deborah Fahrenbruck,
Subject: Notes for the blue unit: Jewell Elephant: "I examined this elephant during my
visit to Hartford, CT last week and determined that she is normal. No lameness was
observed. Any stiffness on the LF disappeared within a few minutes of walking around.
This mild stiffness is normal for an older elephant and requires no treatment. Exercise is
to her benefit and should be encouraged. She has good muscle tone and is bright, alert,
and responsive." (REDACTED) FEI 16590

5/24/06: Hershey, PA Giant Center, Blue Unit: USDA APHIS Inspection Report:
Prepared by Dr. Mary Geib: Routine Inspection

2.40

ATTENDING VETERINARIAN AND VETERINARY CARE (DEALERS AND
EXHIBITORS)

Section 2.40 (b)(2) Veterinary care: Each exhibitor shall establish and maintain programs
of adequate veterinary care that include the use of appropriate methods to prevent,
control, diagnose, and treat diseases and injuries, and the availability of emergency,
weekend, and holiday care.

"The elephant named Jewell has an abnormal gait and walks with a stiff left front leg.
There were no records available initially during this inspection regarding this condition
including an assessment by the attending veterinarian. During the inspection the
attending veterinarian sent documentation that she examined Jewell last week and
determined that she was normal, no lameness was observed. Additionally the
veterinarian stated that any stiffness on the left front leg disappeared within a few minutes
of walking around and requires no treatment. During this inspection Jewell was observed
walking in a line with the other seven elephants for about seven minutes. The stiffness in
the left front leg did not disappear as she walked."

"Jewell's current condition needs to be addressed by the attending veterinarian to ensure
the animal's health and well-being. Correct by May 31, 2006." FEI 39550

5/29/06: Letter From: Dr. William Lindsay To: Dr. Ellen Wiedner. "I visited the Blue Unit in Hershey, Pennsylvania today. I examined the Asian elephant Jewell and found her to be in good general health. Her left leg is stiff. This stiffness remains unchanged with rest or with exercise. It is my opinion that there is no lameness or discomfort associated with this problem; thus no medication is recommended. I would suggest the physical activity to which she is accustomed, and also that she remain in this group of elephants that she is well socialized with." FEI 16587

8/8/06 to 8/9/06 Blue Unit visit by Dr. Schmitt REDATED FEI 42448

8/8/06: Blue Unit: Muscle pain. Escorted animal walk about 2 miles to arena area. Stiff left front leg at carpus area. Observed during walk to arena (7 AM) and following for short time to the elephant area. During walk Jewell held left front carpus straight and affected her walk. However, she maintained position during walk and did not head bob or give other indications of pain during the walk in. No swelling or heat noted after walk. FEI 41479

8/15-18/06: Oakland, CA Visit to Blue Unit: Dr. Ellen Wiedner. Jewell Elephant: Stiffness unchanged in front. On walk from train car, Jewell was off on LH. This appeared to change depending on the substrate. Possible stones from area around train car impeded walk. Elephant looked better back next morning. Plan: Ordered etogesic to start next week. FEI 42363-FEI 42364

8/20/06: Blue Unit: Muscle pain. Stiffness unchanged in front. On walk from train car, Jewell was off on LH. This appeared to change depending on the substrate. Possible stones from area around train car impeded walk. Elephant looked better in back next morning. FEI 41480

8/21/06: Osteoarthritis. Stiff left front leg at carpus area. Radiographs obtained of the left front foot and carpus of diagnostic quality. Unable to obtain diagnostic quality images of left elbow due to scatter, etc. Dr. Schmitt will interpret radiographs. However, immediate impression on-site is that while some mild osteoarthritis is evident in some of the phalanges, there are normal joint spaces, and little indication of joint fusion in the carpus. Assess: Mild osteoarthritis of left front foot and carpus. FELD 41481

8/24/06: Memo From: Wiedner, Ellen, To: Thomas, Albert; Aria, Janice; Coleman, Carrie; Andacht, Jim; Ramos, Jennifer; Fahrenbruck, Deborah; Griggs, Jon; Isaza, Ramiro; Jacobson, Gary; Jones, Kayleen; Lindsay, William; Locker, Harry; Polke, David; Quevedo, Angelina; Read, Bruce; Santiago, Anita; Schmitt, Dennis; Strauss, Julie; Stuart, Mike; Williams Trudy; Frizzell, Mickie, Subject: Murray Fowler's Visits to the Blue Show, Veterinary Report from Dr. Murray Fowler: 11 July 2006 "2. Jewel (elephant) has an ongoing stiffness on the right fore limb. When walked off the train she was slightly stiff, but didn't change any during the walk in, USDA officials were present with instruction to videotape Jewel's movement. 3. Nicole (elephant) had traumatized her stifle previously, but she was walking okay when I saw her.

16 July 2006 1. Jewel (elephant) no change. REDACTED FEI 42373

8/24/06: Memo From: Wiedner, Ellen, To: Thomas, Albert; Aria, Janice; Coleman, Carrie; Andacht, Jim; Ramos, Jennifer; Fahrenbruck, Deborah; Griggs, Jon; Isaza, Ramiro; Jacobson, Gary; Jones, Kayleen; Lindsay, William; Locker, Harry; Polke, David; Quevedo, Angelina; Read, Bruce; Santiago, Anita; Schmitt, Dennis; Strauss, Julie; Stuart, Mike; Williams Trudy; Frizzell, Mickie, Subject: Visit to Blue Show, San Jose. Visit to Blue San Jose, CA Aug 20-Aug 24, 2006 Dr. Wiedner, Note: Dr. Murray Fowler on site on Aug 23. "-escorted animal walk on short trip to arena on Aug 20. -Reviewed Jewell's medical records and radiographs with Dr. Tyson, DVM of the San Jose animal shelter."

“Jewell Elephant S: Stiff LF, BAR, eating well. O: Dr. Wiedner reviewed films with Dr. Fowler who concurred with Dr. Schmitt that the foot and carpus show mild osteoarthritic changes. P: Have ordered etogesic. Will start when it arrives on unit.” REDACTED FEI 42366

8/27/06: San Jose, CA Blue Unit: Veterinary Report Murray E. Fowler, DVM, “I participated in the walk out and loading on the train.” “Jewel (elephant) shows gait abnormality. I had reviewed radiographs that Dr. Wiedner had taken earlier. Minimal lesions in the carpus. These changes are consistent with an older elephant.” REDACTED Stockton, California, August 28, 2006 “I participated in the unloading from the train and in the walk in.” REDACTED FEI 42391

8/30-31/06: Stockton, CA Blue Unit: Jewell Elephant: Soft areas on sole of RF (d3) and LF d2. Possible developing NBA. REDACTED FEI 42383

9/20/06: Abscess. Large warm swelling on right mandible. Ultrasound shows 8 cm area with flocculent material. Still about 1.5 cm below skin surface. Developing abscess. Treat: Topical ichthammol, and banamine for pain. FEI 41482

9/21/06: CEC: Jewell: Swollen right mandible. Depressed not eating.

9/24/06: Abscess. Spoke to Gary Jacobson on 9/24 and 9/25. Jaw abscess had broken open and she continued to be comfortable and to eat and drink. Assess: Healing abscess. Plan: Flush abscess daily. FEI 41482

12/19/07: CEC- Quarantined elephant reclassified as Group C by USDA/Animal Care on 9/18/06, as outlined in the Guidelines for Control of Tuberculosis in Elephants (2003), which remain on travel restrictions.

COPIES OF UNDATED PHOTOGRAPHS: Foot toe crack and toe nail abscess:
FEI 8308, FEI 18290

Jewel/Jewell-Summary of medical and/or behavioral events:

(Little or no medical records available prior to 1989)

1991-Arthritis.

-Treat feet.

1996-Nail abscess.

1998-RF leg swollen.

-LF small NBA; RR & LR overgrown cuticles; LR crack nail.

1999-Reported NBA between RF #3 & #4; cuticle between two toes is inflamed; new
NBA found in central right #4 nail.

-LF toe 3, abscess in nail center; RF interdigital cellulitis toes 2, 3.

-“Soft spot” (necrotic area) on the sole pad of the right front foot near digit #5.

-LF #3 old NBA; RF #5 old NBA abscess, small hole; RF interdigital
tissue swollen 4-5.

-Wound on back, unknown cause.

-RF #5 has an old healed NBA; LR #2 has small vertical cracks on the nails.

2000-Healing wound on the right trunk base.

-Nails of the front feet tend to grow laterally.

-LF leg stiffness.

-Lameness noted; mild lameness (stiffness in the carpus) noted in the RF leg.

-Zina hit Jewell on the head this afternoon while in the exercise pen; Jewell has a
stiffness and lameness in the left front leg; arthritis of the RF carpus; acute
traumatic injury of the LF leg.

-Ankle stiff.

-LF leg still stiff.

-Some carpal stiffness; walks with upper forearm fixed.

- Mild lameness in the LF leg; RF interdigital soft tissue swelling.

- LF forefoot erosions or "pockets" at the nail/sole junction of the 3rd and 4th digits; on the RF there is a 2cm deep ulcer at the nail/sole junction of the 3rd digit. In the hind feet, there are cracks in the nails of both 3rd digits. Chronically moderately lame left fore; possibly related to foot abscess with osteomyelitis. Radiographs reveal bony lysis.

- 5th digit on left forefoot is swollen, trimming the cuticle reveals fetid, infected granulation tissue.

2001-Severe infectious process in the medial aspect of the base of the nail of the 4th digit; radiographic evidence of osteomyelitis associated with the sole ulcer in the left foot.

- Consistently stiff on left foreleg and intermittently stiff on right foreleg.

- Crack in the nail of the 3rd digit of the right hind.

- Lameness noted LF leg (will not flex carpus while walking); RF #4/5 inter-digital swelling; assess: chronic traumatic injury of LF leg.

- Jewel is notable lame, treatment for arthritis.

- Reduced flexion of carpus (RF); assess: Likely osteoarthritis causing stiffness of left foreleg.

- Hind sole pads are overgrown; assess: chronic traumatic injury of LF elbow or carpus; RF #4//5 inter-digital NBA

- RH #3 and LH #3 have vertical cracks; NBA chronic active, but healing.

2002-Chronic stiffness LF carpus.

- RF nail.#4 separation at nail- cuticle junction, probable trauma.

- Chronic LF lameness.

- Active NBA of #4.

- Skin wound L flank.

- Deborah Fahrenbruck Memo: "She has had stiffness in her leg for several years."

- Laceration on her left rib cage.

- Pigeon toed with associated abnormal growth of RF #3 towards RF #4.

2003-Transferred to CEC from Blue.

-Reported to be stiff; chronic problem.

2005-Jewell left CEC to go to Blue Show.

-Jewell has an abnormal gait and walks with a stiff front leg.

2006-Her left leg is stiff. This stiffness remains unchanged with rest or exercise.

-Muscle pain; stiff left front leg at carpus.

-Jewell was off on LH.

-Muscle pain; stiffness unchanged in front.

-Osteoarthritis; stiff left front leg at carpus area.

-Ongoing stiffness on the right fore limb.

-Radiographs show mild osteoarthritis changes in foot and carpus.

-Soft areas on sole of RF (d3) and LF d2; possible developing NBA.

-Abscess; large warm swelling on right mandible.

-Jaw abscess broken open.

-Returned to the CEC

12/19/07: CEC- Quarantined elephant reclassified as Group C by USDA/Animal Care on 9/18/06, as outlined in the Guidelines for Control of Tuberculosis in Elephants (2003), which remain on travel restrictions.

Zina Female Asian Elephant: Date of Birth 1961 Age: 47 yrs

***Acquisition/Origin: 1972 Smart Circus, England; Unknown**

01/94 on Blue Unit

12/02/03 transferred from Blue Unit to CEC

Currently at CEC FELD 1376

***Per Donna Gautier affidavit 1/16/95- FEI 1378**

& Tim J. Holst affidavit 11/14/ 96- FEI 1360 Zina joined Ringling in 1972

Medical Record Entries:

2/12/99: Kansas City: Observed during walk out. Foot care: LR #4 small split; LF #5 small crack; LF #4 hang nail; RF #1 small misshapen nail; RF 4-5 interdigital tissue swollen, RF #5 lateral abrasion. Trunk paralysis noted. FELD 0026888

2/22/99: Elephant Zina still having trouble plugging up (she does not plug up on the train however). No bloody urine seen. FEI 29633

3/1/99: REDACTED: Next AM walked to show, worked on feet, especially Jewell and Zina. FEI 29634 REDACTED

3/25/99: RF foot is dry and pocket above nail is healing. FELD 0026888

4/13/99: History: Slipped while unloading off a train about 2 months ago. Small laceration on the edge of right front #5 nail. Observed during the walk in, no problems. Possible trunk paralysis. FELD 0026888

8/31/99: Wichita Blue Unit: Small nail split on left rear #4. Trunk paralysis. FELD 0021891

9/12/99: Kansas City Blue Unit: Exam: LR #4 has a small nail split. LF #5 lateral aspect of the nail is cracked. LF #4 nail overgrown on the lateral aspect (hangnail). RF #1 small misshapen nail. RF between #4-5 interdigital tissue mildly swollen. RF #5 lateral abrasion (this nail had been avulsed a few months ago). Trunk paralysis noted. FEI 33029

10/20/99: Boston, MA Exam: LR #4 has a small, old nail split. RF between #4-5, interdigital tissue mildly swollen. Mild foot lesions. FELD 0026888

02/21/00: Blue Unit: Daily Animal Record: ACO here- Zina and Minyak fighting. Minyak stiff in Rt Ft leg. Walks right out of it. FEI 23203

3/31/00: NYC Blue Unit: Normal examination except trunk paralysis. FELD 0021832

7/19/00: Long Beach Blue Unit: Trunk paralysis. Impacted left lower molar. It has turned sideways and elevated. Soft tissue over the mandible swollen. Abnormal left upper molar is abnormal also. It has dropped causing a medial spike. She is currently having trouble chewing and produces feces with long hay stems. FELD 0021823

8/10/00: San Diego, CA Blue Unit: Eating. Trunk paralysis. Impacted lower left molar. Active tooth problems. FELD 0021792

12/13/00: Orlando, FL Blue Unit: Abnormal lower left molar. Eating. Fair BC. Trunk paralysis. Impacted lower left molar. Superficial corneal defect, centrally in the left eye. Cuticles need trimming. Mild standing sedation. Manually removed the impacted tooth. Resolved tooth problem. FELD 0021807

3/21/01: Washington, DC Blue Unit: trunk paralysis. Old, RF #4/5 interdigital swelling.

Upper left molar is long and too far rostral. Bilateral corneal degeneration. Mild RF #4/5 interdigital swelling. The upper left molar is abnormal due to the previous lower left molar problem. No clinical problems noted from this tooth problem. FELD 0021828

7/17/01: Houston, TX Blue Unit: Eating. Trunk paralysis. Upper left molar is still too long. Bilateral corneal focal degeneration. FELD 0020197

8/23/01: Colorado Springs Blue Unit: Trunk paralysis. Bilateral focal degeneration. Chronic, mild tearing from the left eye. Noted early vaginal polyps. Mild conjunctivitis left eye. FELD 0021901

9/8/01: Kansas City, MO Blue Unit: Eating. Trunk paralysis. Bilateral corneal focal degeneration. Chronic, mild, tearing from the left eye. Noted early vaginal polyps. Mild conjunctivitis left eye. FELD 0021845

11/1/01: Exam: Intermittent slightly choppy hind leg gait with shortened strides. Trainer notes is worse after laying down or stretching out. Continue Adequan IM every 5 days. FELD 0021895

2/20/02: Per Memo: From Doris Hackworth, DVM, To: Dr. Magid, Subject: Complaint#02-86, & 02-089, "Reference complaint 02-089, one elephant named Zina (dob 1961), has had a cranial neuropathy for at least 30 years which causes some weakness of the trunk and jaw."

2/28/02: Hampton, VA Blue Unit: Mild stiffness note by trainers. Very mild gait abnormality noted LH. Adequan every 14 days. Possible hip or stifle arthritis. FELD 0021812

4/7/02: New York City, NY Blue Unit: Mild lameness in hind legs (LH>RH). Banamine. Currently on Ibuprofen. Suspect mild arthritis of spine, hips, or stifle. FELD 0021896

8/10/02: San Diego, CA Blue Unit: LF #5 horizontal crack. Pressure sore over left knee area with a focal lesion. Healed wound on left upper forehead. Small healing abrasion on left axillary area. Normal exam except for skin lesions. Currently being treated. FELD 0021897

8/28/02: San Francisco, CA Blue Unit: LF #5 horizontal crack. Sole flap LF caudal aspect of the foot. No evidence of infection. Trimmed flap back about 30%. Mild stiffness noted in hind limbs. Sole flap caused by shear forces on foot. FELD 0021899

8/29/02: Memo From: Michael Smith, To: V.W. Koch, VMO, SACS, Subject: Ringling Bros. Complaint. "The elephant Zina was housed in the same area as the other elephants during this inspection and did not exhibit any stereotypical behavior during our visit. I was told that she had an injury to her front foot and was not able to perform. She was transported by truck because of the lesion on her foot. She was chained while in San Jose when the other elephants were being moved to the show area. According to the staff, at least 3 other elephants were not performing and were in the area with Zina. Medical records on Zina indicated that she did have a left foot injury that was being treated by the veterinary staff." FEI 39511

11/26/02: Chicago, IL Blue Unit: Currently on Rymadil for arthritis. Significant trunk paralysis. Possible early nuclear sclerosis. Bed sore on left side of face and hip. Mild papilloma type changes to the vulva. Over grown cuticle between RF #4/5. Mild chronic findings FELD 0021835

5/20/03: Memo From: William Lindsay To: Richard Froemming, Subject: Shock Wave

Therapy Unit: "Richard: Several weeks ago I forwarded to Tracy a quotation for purchase vs. lease of the EMS Dolcast Shockwave Unit REDACTED. It is too early to tell if the elephants (Zina, Lutzi, Mysore have benefited. I recommend that we either lease or purchase the unit, so we can continue a long term evaluation on its use in our elephants. Bill" FEI 33271

7/13/03: Memo From: Deborah Fahrenbruck, To: William Lindsay Subject: Zina. "Bill, I want to make sure you are aware that Zina is still not performing. Troy laid her down a few nights ago and she stayed down for a few hours and now she has been lying down on her own for short periods of time. I feel she is still uncomfortable and I don't think Troy is really ready to put her back in work. Which is to his credit. Any thoughts besides the obvious? Debbie" FEI 16559

11/5/03: Pittsburgh, PA Blue Unit: Routine Exam. Currently on medications for arthritis in left hip. Significant trunk paralysis. Mild papilloma type changes to the vulva. Normal exam with some chronic problems noted again. FELD 0021839

3/27-28/06: CEC: Daily Report Form: Zina- NBA RH. Apply topical oxytetracycline and purple spray. FEI 38202

4/20/06: CEC: Daily Report Form: NBA right hind. Soak daily in Epsom salts, then in oxytetracycline powder. Goal is to eliminate as much purulent material as possible. Cetacaine spray on NBA if caretakers feel it is necessary/helpful. After soaking, dry foot, spray thoroughly, repeat in 10 minutes. Can give 20-25 cc banamine IM, once daily at caretakers discretion. FEI 16971

4/20/06: CEC: Daily Report Form: Epsom salt soak 30 min right hind foot. Benzocaine spray right hind foot. FEI 9872

4/21/06: CEC: Daily Report Form: 40 min epsom salt soak right hind foot. Benzocaine spray right hind foot. FEI 9845

4/22/06: CEC: Daily Report Form: Epsom salt soak 40 min right hind foot. Benzocaine spray right hind foot. FEI 9818

5/3/06: CEC: Daily Report Form: USDA APHIS Inspection Report, Prepared by Robert Brandes, DVM:

2.40 ATTENDING VETERINARIAN AND ADEQUATE VETERINARY CARE & DEALERS AND EXHIBITORS). "Zena has a large swelling on her right rear leg just above the nails. The veterinarian has prescribed on course of treatment on 4/20/2006 consisting of a daily soak in oxytetracycline powder together with other treatments. The facility has no oxytetracycline powder, the staff was unaware that this medication should be administered, and does not know if any has been ordered. Medical records show only treatments on 4-20-06 through 4-22-06 but treatments continue to this date. It is not possible to determine compliance and ensure the correct care without the documentation of those treatments. Consult with your veterinarian as to whether the oxytetracycline powder is required for treatment. Correct by May 10, 2006." FEI 39957

5/4/06: CEC: Daily Report Form: 1 x AM & PM triple dye R Hind foot. FEI 9494

5/5/06: CEC: Daily Report Form: 2:00 PM Betadine soak 30 min right hind foot, 3:30 PM triple dye spray on right hind foot. FEI 9467

5/6/06: CEC: Daily Report Form: AM & PM triple dye R hind foot. FEI 9440

5/6-9/06: CEC: Daily Report Form: NBA right hind, d3, BAR and not lame.
Radiographed digit. No signs of osteomyelitis or foreign body. Plan: Soak with
tetracycline powder for three days. Trim at discretion of caretakers. FEI 17100

5/7/06: CEC: Daily Report Form: AM & PM triple dye RH. 1:30 PM- 30 min betadine
soak right hind foot. FEI 9413

5/8/06: CEC: Daily Report Form: AM triple dye right hind foot. 2:00 PM -30 min soak
tetramycline antibiotic dissolved in water, right hind foot. 2:30 PM - triple dye on right
hind foot. FEI 9359

5/9/06: CEC: Daily Report Form: AM triple dye R hind. 4:00 PM- soak right hind foot in
tetramed for 30 min. PM triple dye R hind. FEI 9359

5/10/06: CEC Daily Report Form: AM triple dye hind foot. 2:30 PM - soak right hind
foot in tetramed for 30 min. PM triple dye R hind foot. FEI 9332

5/11/06: CEC: Daily Report Form: 2:00 PM Soak right foot in tetramed for 30 min. 1x
AM & 1x PM triple dye R hind. FEI 9305

5/11/06: Conversation with Gary Johnson: "Gary told me that Zina's foot has responded
and would like to continue this. I said that that would be fine, and it was his preference
as to whether to use Epsom salts or oxytetracycline." signature FEI 17101

5/12/06: CEC: Daily Report Form: 2:15 PM soak right hind foot in Batadine. 1x AM &
1x PM triple dye R hind. FEI 9278

5/13/06: CEC: Daily Report Form: AM triple dye R hind. PM triple dye R hind. FEI 9215 FEI 9251

5/14/06: CEC: Daily Report Form: AM Triple dye R hind. PM triple dye R hind. FEI 9224

5/15-16/06: CEC: Zina- Not lame, BAR. Swollen RH foot, some purulent material. NBA with deeper inflammation. Plan: Start rectal Baytril SID per rectum. Addendum to medical record: On May 25, 2006 dose of baytril was increased. FEI 39566

5/15/06: CEC: Daily Report Form: 3:15 PM soak right hind foot in Batadine for 30 min. 1x AM & 1x PM triple dye R hind. FEI 9197

5/16/06: CEC: Daily Report Form: AM triple dye R hind. PM triple dye R hind. FEI 9170

5/17/06: CEC: Daily Report Form: 2:05 PM soak right hind foot in Batadine for 30 min. 1x AM & 1x PM triple dye R hind. PM Baytril - rectal. FEI 9143

5/18/06: CEC: Daily Report Form: 2:20 PM soak right hind foot in Batadine for 30 min. 1x AM & 1x PM triple dye R hind. PM Baytril - Rectal. FEI 9116

5/19/06: CEC: Daily Report Form: 2:35 PM soak right hind foot in Batadine for 30 min. 1x AM & 1x PM triple dye R hind. PM Baytril - rectal. FEI 9089

5/20/06: CEC: Daily Report Form: AM triple dye R hind. 3PM - Batadine soak 40 min right hind foot. PM triple dye R hind. PM Baytril - rectal. FEI 9063

5/21/06: CEC: Daily Report Form: AM triple dye R hind. 2:30 PM - 30 min betadine soak right hind foot. PM - triple dye R hind. PM baytril - rectal. FEI 9036

5/22/06: CEC: Daily Report Form: 2:30 soak right rear foot in Batadine for 30 min. 7:00 AM & 3:00 PM Triple dye right rear foot. Baytril FEI 39871

5/23/06: CEC: Daily Report Form: 2:38 soak right rear foot in Batadine for 30 min. 7:00 AM 3:00 PM Triple dye right rear foot. Baytril. FEI 39845

5/23/06: Letter From: William Lindsay To: Dr. Ellen Wiedner: "Zina has a lesion between toes of her right hind foot that may be an aberrant nail bed abscess. I agree with your recommendation of topical and systemic treatment." FEI 16625

5/24/06: CEC: Daily Report Form: 2:38 PM soak right rear foot in batadine for 30 min. 7 AM 3 PM Triple dye Rt rear foot. Baytril FEI 39818

5/31/06: CEC: Daily Report Form: 2:40 PM soak right rear foot in batadine for 30 min. Triple dye R hind. Baytril. FEI 39629

6/7/06: CEC: Zina- History of swollen RH, Elephant BAR. Swelling considerably reduced. Soft area at D3-D4 not purulent currently. Healing. Continue rectal admin of enrofloxacin one more week. Continue topical solutions PRN. FEI 39569

6/23/06: Letter From: William Lindsay to Dr. Ellen Wiedner. "On June 22, 2006 trunk washes were repeated and tetanus toxoid given to Alana, Icki and Mala. Zina's RH foot is improving, with a small amount of abnormal granulation tissue still present." FEI 41156

7/5-6/06: CEC: Zina: -BAR NBA on RH. Swelling down from earlier. Healing.
Continue to apply topicals meds and trim as needed. FEI 40007

12/19/07: CEC- Quarantined elephant reclassified as Group C by USDA/Animal Care on
9/18/06, as outlined in the Guidelines for Control of Tuberculosis in Elephants
(2003), which remain on travel restrictions.

Zina-Summary of medical and/or behavioral events:

(Little or no medical records available prior to 1994)

1998-Per Tom Rider's response to an interrogatory: "This is where Zina and Rebecca
were being laid down by Andy Weller and Jeff Pettigrew, who beat them severely. When
they were done I had to get the wonder dust and had to cover up about 30 hook wounds
on Zina and 20 on Rebecca."

1999-LR #4 small split; LF #5 small crack; LF #4 hang nail; RF #1 small misshapen nail;

RF 4-5 interdigital tissue swollen RF #5 lateral abrasion; trunk paralysis noted.

-Slipped while unloading off a train about 2 months ago; small laceration on the
edge of right front #5 nail; possible trunk paralysis.

-LR #4 has a small nail split, LF #5 lateral aspect of the nail is cracked; LF #4
hangnail; RF between #4-5 interdigital tissue mildly swollen; RF #5 lateral
abrasion (this nail had been avulsed a few months ago); trunk paralysis noted.

2000-Zina and Minyak fighting; Minyak stiff in Rt Ft leg.

-Trunk paralysis; impacted left lower molar.

-Active tooth problem.

-Superficial corneal defect; cuticles need trimming; sedation/manually remove
impacted tooth.

2001-RF #4/5 interdigital swelling; bilateral corneal degeneration.

-Mild conjunctivitis left eye.

- Chronic, mild tearing from the left eye.
- Intermittent slightly choppy hind leg gait with shortened strides.
- Cranial neuropathy for at least 30 years which causes some weakness of the trunk and jaw.

2002-Mild stiffness noted by trainers; possible hip or stifle arthritis.

- Mild lameness in hind legs; possible hip or stifle arthritis.
- Suspect mild arthritis of spine, hips, or stifle.
- LF #5 horizontal crack; pressure sore over left knee; healed wound on left upper forehead; small healing abrasion on left axillary area.
- Sole flap LF caudal aspect of the foot; mild stiffness noted in hind limbs.
- Injury to her front foot and was unable to perform.
- On Rymadil for arthritis; significant trunk paralysis; possible early nuclear sclerosis; bed sore on left side of face and hip; overgrown cuticle between RF #4/5.

2003-Shock wave therapy.

- Deborah Fahrenbruck Memo: "...Zina is still not performing." "I feel she is still uncomfortable..."
- Currently on medications for arthritis; significant trunk paralysis.

2004-Missing or no records.

2005-Missing or no records.

2006-NBA right hind; soak daily.

- Zina has a large swelling on her right rear leg just above the nails.
- Swollen RH foot, some purulent material, NBA with deeper inflammation.
- Aberrant nail bed abscess right hind foot.

12/19/07: CEC- Quarantined elephant reclassified as Group C by USDA/Animal Care on 9/18/06, as outlined in the Guidelines for Control of Tuberculosis in Elephants (2003), which remain on travel restrictions.

Susan Female Asian Elephant: Date of Birth 1951 Age: 57 yrs

***Acquisition/Origin: 1954 India (wild born FELD 0018744)**

01/94 on Blue Unit

7/21/01 transferred from Blue Unit to CEC

11/28/03 transferred from CEC to Blue Unit

12/18/05 transferred from Blue Unit to CEC

Currently at CEC FELD 1358

***Per Donna Gautier affidavit 1/16/95- FEI 1378**

& Tim J. Holst affidavit 11/14/ 96- FEI 1360 Susan joined Ringling in 1954

Medical Record Entries:

3/10-13/91: Treat feet. FELD 0026659

7/2/91: Abscess LF flush with hydrogen peroxide. FELD 0026659

8/14/91: Treat feet. FELD 0026659

10/4/91: Feet. FELD 0026659

12/1-30/91: Feet. FELD 0026659

4/24/92: Treat feet. FELD 0026659

6/6/96: Treat feet. FELD 0026659

7/4/96: Nail abscess. FELD 0026659

10/7/96: Treat feet: FELD 0026659

8/19/98: Blue Unit: Daily Animal Record: Susan's eye is watering. FEI 36259

9/27/98: Blue Unit: Sophie/Susan have a spat.. Minor scrapes on each. FEI 36262

10/5/?: Blue Unit: Train Run- Lutzie scratched Susan's forehead with her ivory. Treated with Biozide FEI 36275

10/8/98: Denver, CO Blue Unit: USDA APHIS Inspection Report, prepared by Diane R. Forbes, VMO USDA APHIS, Animal Care Site: Denver Coliseum

Inspected 15 elephants: Note 1: Three of the elephants displayed lameness when moved about during inspection. These include Lechamee (32 yrs old), Sophie (29 yrs old) and Minnie (43 yrs old). Both Lechamee and Sophie were observed with lameness in the right foreleg, and Minnie moved with an abnormal gait. The animals had been standing in their enclosures when observed, but facility representatives stated the elephants will warm out of the lameness with exercise. Satisfactory foot care was noted. The elephant Susan, had two small lacerations on her forehead. Officials stated this injury was caused by another elephant a few days ago. Medication is being applied and the injury appears to be resolving well. Note 2: The attending veterinarian is aware of the lameness noted the animals above, as documented in the 9/11/98 inspection report. Upon review, the veterinary medical records annotate a chronic lameness of the right foreleg in Lechamee and Sophie dated 8/23/98, and an abnormal gait in Minnie dated 9/2/98. The animals have not been placed on medication at this time. FEI 37628

1/6/99: FELD ENT LEGAL DEPT, USDA APHIS INSPECTION REPORT (DATE APPROX 1998-OBSCURED ON COPY (FELD 0023401) Comment: "I talked to Dr. William Lindsay, their veterinarian, about the elephants that are limping. Several animals have had arthritis for many years (at least 12), Lechamee (32 yrs), Sophie (28 yrs), Mini (42 yrs). The animals have warmed out so medication has not been given. If the condition was more pronounced, medication and retirement would happen if necessary."

1/14/99: Letter From: William Lindsay To: To Whom It May Concern: "We then examined 'Benjamin,' who had several superficial abrasions, in the head and flank area, which were a result of his playing with his companion 'Shirley.' " "Susan had several linear abrasions along her right flank, which I had examined previously on the night of

1-6-99. These occurred during a trailer ride from Miami to Sunrise Arena (these elephants usually travel on a specially designed railway car) and were caused by a protruding hinge or latch in the trailer.” No Bates #, Government Exhibit 14

1/16/99: Memo: To: USDA-APHIS-Animal Care, Kristina Cox, DVM, VMO, USDA-APHIS-AC RE: Complaint #99-075 Narrative:

“The elephants (all Asian females except Benjamin, an Asian male) were identified as: Meena, Lechamee, Camala, Zeena, Lutzi, Susan, Rebecca, Jewel, Sophie, Karen, Mysore, Minnie, Nicole and the youngsters Benjamin and Shirley.”

“Meena was the first elephant I examined (1-7-99). _____ her. She urinated when the command began. On the right side of her head, about midway between the attachment of the ear, and the bony ridge above the eye, was a round, symmetrical hole of about 1/8 inch in diameter, penetrating the skin. The lesion was compatible in appearance with a fresh puncture wound. I touched the lesion and got a small amount of blood on my finger. There were smears beside the lesion that appeared to be dried blood. I asked _____ what he thought this was from. He told me a bullhook, another elephant, or anything. He didn’t know. The next day I tried to show it to Lindsay. I was unable to locate it again, despite searching the same area.”

“Dr. Lindsay and I examined Nicole. I saw nothing except an approximately pecan sized lump of what appeared to be healed scar tissue at the upper attachment of her right ear.”

“I examined Susan, with Dr. Lindsay. She had a variety of apparently recent, healing, scratches and scrapes on her head and right side (see photos). Dr. Lindsay said he saw Susan on December 29 and 30, 1998 and they were not there. He thought they might be from the transport vehicle.”

“Benjamin, approximately 3 years old (and Shirley, the younger of the two) were loose in a ‘large’ pen when Mr. Santiago and I arrived. The pen was bedded with wood shavings, and there were traffic cones in the pen as toys. I saw the two youngsters playing together and with their toys. The scratches seen on Benjamin seemed old, and were explained as probably being from Shirley, before her tusks were removed. Otherwise, I did not see anything unusual about Benjamin. At night, these elephants were chained, in their pen.”
No Bates #, Government Exhibit 13, page 1-2 of 2.

4/13/99: Observed during walk in. Old nail bed abscess RF. Vaginal warts. Superficial wounds on front trunk. FELD 0026886

5/12/99: Blue Unit: RF toe 5 abscess, trimmed out, continue trimming and application of Gentian Violet. FELD 0003145

6/29/99: Travel Day: Blue Unit: Daily Animal Record: Susan- scratches on her forehead from train car. FEI 22869

8/10/99: Memo From: Randy Peterson To: William Lindsay Subject: Susan, “doc, I was working on Susan’s foot today and found a hole that went from the bottom of her nail half way up. It was pretty nasty, and I cleaned it up best I could with out going too far. I wanted you to look at it, before the purple mister got a hold of it. I am soaking it in nolvasan solution and hot water, let me know what else you think. The blood is from a cuticle I trimmed too short it has nothing to do with the nail. Randy.” FEI15430 (copy of photo attached to memo FEI 15131)

9/12/99: Kansas City Blue Unit: Observed during walk out. Sway back conformation, vaginal polyps. Foot care: RF #3 active nail bed abscess, has been curetted out. LF #2, 3, 4, old NBAs. FELD 0003145

10/20/99: Boston, MA Blue Unit: Sway back conformation. Vaginal polyps. RF #3 has old NBA with two associated nail cracks. Older animal. Old NBA. FELD 0003145

11/28-30/99: Tampa, FL Blue Unit: Examine on site in winter quarters. Lamé for 7 days. Slipped off tub during practice. RF carpus and elbow stiff. Exercise improves stiffness markedly, especially carpal component. banamine DID x 3 days. Adequan IM every 48 hours x 4 doses, thereafter once each week for 3 weeks. FELD 0003145

3/6/00: Long Island Nassau Blue Unit: Load In: Minnie ft lf, Susan Ft Rt, and Rebecca Ft rt, soaked for 15 minutes 1 x daily I warm water Epson salt and Nolvosan. FEI 23216

3/7-13/00: Blue Unit: Daily Animal Record: Minnie ft lf, Susan Ft Rt, and Rebecca Ft rt soaked for 15 minutes 1x daily in warm water, Epson salt and Nolvosan solution. FEI 23217-23223

3/14/00: New York, NY Travel Day Blue Unit: Daily Animal Record: Minyak bit Susan's tail. FEI 23224

3/17-21/00: Blue Unit: Daily Animal Record: Minnie's ft rt and Susan's ft lt foot soaked 2x for 15 min. Minnie- Ibuprofen 2x daily x 5 days for stiffness. FEI 23277-23231

3/22/00: Blue Unit: Daily Animal Record: Minnie's ft rt and Susan's ft lt foot soaked 2x for 15 min. FEI 23232

3/24/00: Memo From: Randy Peterson To: William Lindsay, "here it is, it is much better, but looks much worse than it really is.....she is still moving around great. Call me and we can talk, because I cant type worth a shit....." FEI 1534 (attached copies of photographs of toe abscesses: FEI 15135, FEI 15136, FEI 15137)

3/31/00: NYC Blue Unit: Normal examination except "bed sore" on left side. RF #4 has an active and severe NBA. The necrotic area extends under the whole toe nail and the soft tissues above the nail. Trimmed back some of the affected nail and established ventral drainage. Active NBA. FELD 0021833

5/15/00: Daily Animal Record: Susan / front toe nail on each foot needed cleaning and cutting out. FEI 36500

7/19/00: Long Beach, CA Blue Unit: "Bad Feet." Urinates often according to grooms. RF #4 has an old, chronic but still active NBA. RF #2 has a chronic NBA open only to the top. LF #4 has an old, healing NBA. LF #2 has a old NBA. Susan chronically urinates on her feet, causing a dermatitis. This may be due to vaginal polyps causing abnormal urine flow. Grossly the urine appears normal. FELD 0021823

8/10/00: San Diego, CA Blue Unit: Strains to defecate and urinate often according to grooms. Chronic problem. RF #4 has an old, chronic but still active NBA. RF #2 has a chronic NBA. LF #4 has an old healing NBA. LF #2 has an old NBA. Susan chronically urinates on her feet, causing dermatitis. Observed defecating, she does seem to push abnormally hard to get fecal material to pass. Assess: Active NBA RF #2. Constipation may be due to rectal diverticula. Need a rectal and vaginal exam. FELD 0021792

12/13/00: Orlando, FL Blue Unit: Normal examination except for feet. RF #4 has an old, but chronic still active NBA. RF #3/4 has inter-digital swelling. LF has a recurrent and active NBA. Cuticles need trimming. Active NBA #4, LF #2. Needs a rectal and vaginal exam for a problem noted in San Diego. FELD 0003146 FELD 0021807

12/22/00: Foot Exam: In the right forefoot, 2nd digit, there is a crack and a 2 cm ulcer filled with granulation tissue at the nail/sole junction. In hind feet, nail/sole junction of

3rd digits soft, overgrown. Feet are also generally overgrown. Trimmed. FELD 0003146

12/22/00: (Radiograph Interpretation by Dr. Biller, Kansas State University)

“Susan Asian Elephant, Female 51 years of age. Radiographs taken 12/22/00. There are three of the right hind one of the left hind two of the right front and three of the left front.” “Left Front: There is widened area of lysis to the medial aspect of the 3rd phalanx. There is also irregular new bone both proximally and distally of the 3rd phalanx. There is irregular new bone along the lateral and medial aspect of the 2nd phalanx. There is irregular new bone along the proximal and distal aspects of the 3rd phalanx of the 2nd digit and a linear lucency to the lateral aspect of the wing of the 3rd phalanx. There are periarticular changes associated with medial aspect of the metacarpophalangeal joint of the 4th digit. There is an irregular linear lucency noted to the lateral aspect of the 3rd phalanx in the 4th digit. There is also a concave lucency with a well circumscribed smooth margin in the distal aspect of the 2nd phalanx of the 4th digit. May represent obliquity. There is also lysis involving the medial wing of the 3rd phalanx 4th digit. Right Front: There is lysis of the body of the 3rd phalanx in the 2nd digit. There is new bone noted associated with the proximal interphalangeal joint especially at the distal aspect of the 1st phalanx of the 3rd digit. There is lysis involving the medial wing of the 3rd phalanx. There is an irregular distal aspect of the 2nd phalanx 3rd digit. Right Hind: There is periarticular osteophytes (lipping) noted at the lateral aspect of the metatarsophalangeal joint of the 3rd digit in the right rear foot. Enthesophyte formation may also be noted medial and lateral of that 1st phalanx 3rd digit. Left Rear Foot: There is periarticular changes (lipping) noted at the metatarsophalangeal joint of the 3rd digit in the left rear leg. There is also enthesophyte formation noted lateral and medial aspects of the mid body of the 1st phalanx 3rd digit. Note: Artifact linear lucency over P3. FEI 15346

1/7-10/01: Sunrise Blue Unit: Load-out onto trucks, then onto trains uneventful. History:

Epidermis of medial aspects of both hind feet is abnormal (chronic problem). The skin of the medial hind feet appears constantly wet. The epidermis is rubbery, friable and hyperkeratosis. Maybe due to skin being wet from urine? Unknown though why this may be the case in this elephant, when others don't appear to have same problem. Plan to treat with Betadine cleansing followed by application of ointment that will be therapeutic and also protect from any urine scald (eg. Zinc oxide ointment for its mild astringent properties and lanolin base). FELD 0003147

1/18/01: Blue Unit: History: Strains to defecate, and eventually succeeds, however trainer periodically (every few days) manually cleans her out. Fecal consistency appears normal. No straining to urinate, but passes small amounts of urine frequently. Assess: Maybe age related. FELD 0003147

2/4/01: Charlotte Blue Unit: Daily Animal Record: Sue is getting three cups of Cyllium for constipation. FEI 36901

2/7/01: Raleigh Blue Unit: Daily Animal Record: Sue is getting the cilium to make her stool to see if it will be easier to go. FEI 36898

2/8/01: Blue Unit: Foot Exam: Foot work in progress. Cuticles need trimming. NOTE: Psyllium treatment (5 scoops PO BID) not changing fecal consistency, and elephant still requires manual clean-out of rectum every few days to prevent straining. Trainer who cleans out rectum notes that distal part of rectum immediately in front of anus is enlarged and flaccid compared to other elephants. Ability of rectum to contract around examiner's arm is decreased in this area also. FELD 0003147

3/21/01: Washington, DC Blue Unit: Chronic constipation reported. Eating. LF #5 and LF #2 both have old., healed NBA's LF #1 small active NBA. RF #5 has old NBA. The

distal rectum was abnormally full of dried feces. Assess: Several old NBA's. Chronic constipation possibly due to the equivalent of a megacolon or poor neural control of the rectum. RX: Mineral oil 4 cups on food BID. Add bran or psyllium to diet. Consider adding prunes. Front right and left feet trimmed. FELD 0003147 FELD 0021829

3/25/01: Washington, DC (MCI) Blue Unit: Daily Animal Record: Susan stool is a little on the dry side / on some mineral oil in her feed. Loaded all animals onto trucks to go to Fairfax, VA FEI 36852

4/12/01: Blue Unit: History Hyperkeratosis, with moist and occasionally necrotic skin, medial aspects of hind feet, likely from urine scald. Handlers had been cleaning the affected areas with betadine soap and applying vasaline/zinc oxider once daily for past few months. Elephant is developing a dip in her mid-back, and is perhaps not as lively as she used to be. Continue treatment of medial hind feet as routine preventative. Elephant may be slowing down a bit with older age, but is not showing any evidence of a serious health problem. FELD 0003148

5/2/01: Blue Unit: Had cellulitis of her L forearm, extending from carpus to elbow. RX: 4 days of Polyflex SID, IM and Banamine IM SID and Adequan - each 5 days. I believe she has underlying stiffness in the leg and a more recent cellulitis. FELD 0003148

5/21/01: Blue Unit: Colicky, received Banamine IM- upper teeth are very slow in erupting, so she does not chew roughage completely and becomes impacted. Hay must be shredded mechanically. FELD 0003148

5/22/01: Madison, WI Blue Unit: No feces present on rectal palpation, Banamine IM BID. FELD 0003148

6/26/01: Blue Unit: Lame and stiff in front left leg- high. FELD 0003148

6/26/01: Train Blue Unit: Daily Animal Record: Sue was lame and stiff when unloaded from the train for the animal walk (front left leg high). Juliette was a little stiff in back legs both sides (maybe a bad train run) FEI 13135

6/27/01: Pensacola, FL Blue Unit: Still stiff in FL leg, having a hard time laying down. FEI 3355

6/28/01: Stiffness seems to get better with walking, but stiffens up when standing. FEI 3355

6/28/01: Pensacola, FL Blue Unit: Daily Animal Report: Sue still stiff gets better with walking then stiff when standing. Juliette better. FEI 13137

6/29/01: Pensacola, FL Blue Unit: Daily Animal Report: Sue still a little stiff. FEI 13138

6/29/01: Still stiff. FEI 3355

6/30/01: Pensacola, FL Blue Unit: Sue still a little stiff. FEI 13139

7/1/01: Train: Blue Unit: Still a little stiff. FELD 0003148 FEI 13116

7/1/01: Still a little stiff. FEI 3355

7/2/01: San Antonio Blue Unit: A little stiff, but much better on the walk. FELD 0003148 FEI 13117

7/3/01: San Antonio Blue Unit: Not laying down at night. FELD 0003148 FEI 13118

7/3/01: Still not laying down at night. FEI 3355

7/10/01: Houston, TX Blue Unit: Not eating or drinking very well and not showing much activity. FELD 0003148 FEI 13103

7/10-13/01: Not eating or drinking very well and not showing much activity. FEI 3356

7/11/01: Houston, TX Blue Unit: Not eating or drinking very well and not showing much activity. FELD 0003148 FEI 13104

7/12/01: Houston TX Blue Unit: Not eating or drinking very well and not showing much activity. FELD 0003148 FEI 13105

7/13/01: Houston, TX Blue Unit: Not eating or drinking very well and not showing much activity. FELD 0003149 FEI 13106

7/14/01: Memo: From: Gary Jacobson To: Brian French Subject: Susan, "Brian, I received your phone message. Please email me all of the weights that you have for Susan." FEI 18452

7/17/01: Houston, TX Blue Unit: Weight loss. Elevated WBC. Still lame LF leg. Chronic constipation. Handlers report decreasing activity and interest in exploring the environment. Observed to not lay down to sleep. Thin. Has lost significant weight in the past several months. Significant weight loss combined with elevated WBC are concerning. Recommend pulling her out of the shows and sending her to the CEC. RX Naxcel IM SID x 14 days (more if needed) FELD 0003149

7/22/01: Houston, TX Blue Unit: -Loaded in to truck at 7:30 AM to take her to the CEC in Florida. FEI 13115

7/23/01: Arrived from the Blue Unit in Houston, TX to the CEC. FELD 0003149

8/2/01: Daily Animal Records: Susan, stiff RR. FEI 25230

8/3/01: Daily Animal Records: Susan, defecating 2x's a day on her own. FEI 25231

8/23/01*: Colorado Springs, CO Blue Unit: History: Weight loss. Elevated WBC. Acute lameness LF leg. Chronic constipation. Trainers report decreasing activity and interest in exploring the environment. Observed not to lay down to sleep. Thin. Has lost significant weight in the past several months. FELD 0021818 (*Likely incorrect date on record entry)

9/15/01: Daily Animal Records: Susan, pus found in urine. FEI 25464

11/11/01: CEC: History chronic weight loss. Eating well. No problems noted. Noted to have laid down several times to sleep. Normal. Assess: weight loss of unknown cause. FELD 0020622

2/9/02: CEC: Start INH tabs Rectally. FELD 0003150

2/14/02: Stiff left front. FELD 0003150

2/15/02: Stiff right front. FELD 0003150

2/17/02: Start INH tabs orally. FELD 0003150

3/25/02: Start PZA, Rectally. FELD 0003150

2/28/02: Started Rifampin. FELD 0018753

3/22/02: Discontinue Rifampin treatment, spits out medication. FELD 001853

3/25/02: Start PZA. FELD 001853

4/17/02: Susan -Off treatment. FEI 25498

4/20/02: Susan -Decreased INH medication. FEI 25501

4/28/02: Memo From ; Ramiro Isaza To: William Lindsay Subject: New ELISA Results:
"Attached is a file of the results from last year's samples. I'm working on getting a
complete list of all tests from Scott. FEI 21310 (Susan's Result's: ELISA from 12/13/00
Positive FEI 21311)

5/19/02: Slight tearing and inflammation, both eyes. RX: Topical PNB ointment. FELD
0003151

6/1/02: RX: Topical PNB - HC ointment. FELD 0003151

7/23/02: AM large puddle of white goo behind her. PM last Amoxi shot. FELD 0003151

7/28/02: Letter From: Dr. Dennis Schmitt To: Dr. William Lindsay: "While at the CEC I
also examined the caudal urogenital tract of Susan. She has been observed in recent days
passing large amounts of purulent material when she urinates. The uterus was found to
contain large amounts of homogenous material which would be the source of the material
she is passing. The bladder, urethra and common urogenital canal appeared normal."
FELD 0022553

10/2/02: Abscess on left front foot. FEI 27063

10/3/02: Abscess on left front foot. Gary worked on abscess. FELD 0003151

10/4/02: Abscess on left foot. FEI 25810

10/7/02: Memo From: William Lindsay To: Susan Mikota Subject TB “1.) Yes, there are 10 cases at RBBB. 2.) Teetchie was trunk wash positive prior to Euthanasia, she was INH resistant only. 3.) Dolly was trunk wash negative pre-mortem and immediately post-euthanasia. 4.) *Susan had polyarthritis, regular M. tb; all premortem tests were negative. (*This must be incorrect as Susan is still alive.) 5.) Vance, Mala, and Prince are off treatment, as is ‘Luke’ Zerbini - all OK so far. Cal II, Siam, India, Peggy, and Tilly still getting meds (oral). FEI 21212

1/20/04: Abrasion noted on right elbow. No treatment needed. FEI 3352

4/11/04/: No lameness. RF #3, #4 have linear, nearly horizontal cracks on the proximal aspect of the nails. A similar lesion is noted LF #4. Small swelling and draining tract on the lateral aspect of the right carpus. Linear nail lesions may be associated with previous, routine foot care to remove overgrown cuticles. FEI 3352

6/16-19/04 Wichita Falls, TX Blue Unit: History: Bad abscess, lost nail LF, 3rd and 4th nails about three months ago. Healing nicely. Mike is carefully and slowly trimming things back into shape. Susan is not lame. Healing abscess, regrowing nail. FELD 0008344

Undated: Raggedy cuticle D3 LF Foot. Not hot, painful or swollen. Animal is not lame. Possible start of of a nail bed abscess. Trim cuticle. Observe. FELD 0008358

Summer 2005: Skinny and possibly constipated; pollakiuric. Possible leiomyoma in uterus pressing on rectum and bladder. FELD 0008356

8/28/05: Memo From: William Lindsay To: Ellen Wiedner Subject: Blue Show Elephants: “Susan looked the same to me as always; Mike says she is losing weight and

Troy says she is stable - I would like to see their recorded weights, please!" FEI 39991

10/2/05: Indianapolis, ID Blue Unit: Thin BC Healing nail crack RF #3. Chronic constipation managed with twice daily rake out. Normal exam. FEI 10872

10/12-14/05: Boston, MA Blue Unit: Thin. Has maintained weight, eating well, needs to be evacuated because of weak sphincter. Healthy older elephant. No treatment. FELD 0022776

12/15/05: Blue Unit: Early this morning, head keeper reported that elephant appeared painful and that a large bulge appeared under her anus. Keeper reported frequent defecations and straining. Keeper as authorized by phone to administer flunixin melamine IM and to walk elephant. Elephant became more comfortable within the hour, and the bulge subsided. Today, Dr. Schmitt performed rectal ultrasound on Susan both standing and lying down. Bulge was revealed to be probably bladder hernia caused by weakness in the vaginal wall. Animal was BAR, comfortable, and no external bulge was apparent at time of examination.

VET LOG Winter Quarters 2005-2006 FEI 8377- FEI 8415

Entries for Susan: Approx. 164 "constipation/rake out/twice a day" procedures documented in the VET LOG.

12/15/05: Memo From: Ellen Wiedner To: Gary Jacobson, Trudy Williams Subject: Phone Conversation: "Discussed Susan (on Blue) probable perineal hernia. Dr. Dennis Schmitt will ultrasound her this afternoon.." "Dr. Schmitt ultrasounded Susan. Everything normal now, but weakness visible on vaginal wall. Confirmed diagnosis of perineal hernia with bladder involvement." FEI 38185

12/15/05: Letter From: Dr. Dennis Schmitt To: Dr. Ellen Wiedner: "The examination of Susan on the Blue Unit in winter quarters is summarized below. She was reported early today to have a bulge similar to an elephant giving birth." In summary, I believe the bulge was the result of a herniation of the bladder which caused straining and the hernia to appear in the area under the anus, much like an elephant trying to give birth. After continued straining and emptying of the bladder the hernia regressed. This event did not result in a chronic protrusion of the hernia (which I have seen in one elephant). However, the potential for a future event is unpredictable and could result a chronic herniation with inclusion of the bladder or uterus. Due to the unpredictability of its recurrence, I recommend that Susan be retired from the traveling unit." FEI 38186

12/18/05: Tampa WQ Blue Show: Susan departed the Blue show by truck and arrived without incident at the CEC. FEI 38184

12/26/05: CEC: Susan: 3PM - Topical antibiotic on cheek & hip. FEI 3952

12/29/05: CEC: Susan: 3PM -Topical triple antibiotic on cheek & hip. FEI 3880

2/24/06: CEC: Susan: 3PM - Triple antibiotic ointment to cheeks and hips.(This continues almost daily.) Canola oil on front feet cuticles FEI 6256

2/26/06: CEC: Susan 3PM- Triple antibiotic ointment on cheeks & hips. Betadine scrub on back legs, inside, low. FEI 6306

3/7-8/06: CEC: Susan: NBA developing on LF/D3. FEI 16936

3/9/06: CEC Susan: 11:00 AM Triple antibiotic ointment on cheeks & hips. Betadine scrub on inside lower, hind legs. Epsom salt water soak 40 minutes front left foot.

Topical salve 20% Ichthamol on front left foot. (LF foot care continues almost daily.)
FEI 6589

3/27-28/06: CEC: Susan: NBA on LF on D3. Continue to trim as needed. Can apply
ZnSO4 solution (10%) topically to medial surface of hocks. FEI 16955

4/3/06: CEC: Susan: 3 PM triple antibiotic on cheeks & hips. Zinc sulfate spray on
inside lower hind legs. Triple dye on front left foot. Very itchy, lots of rubbing legs,
head, etc. during & after washing. FEI 10347

4/20/06: CEC: Susan: Purulent NBA LF/D3. Elephant not lame, trim and soak as
necessary. FEI 16971

4/28-29/06: CEC: Susan: BAR. Not lame. Recurrence of former NBA. Spray with purple
spray and trim as needed to improve draining. FEI 16983

5/6-9/06: CEC: Susan: History of NBA. BAR. Healing. No treatment. FEI 17098

5/29/06: CEC: Susan: Triple antibiotic cheeks & lips. Zinc sulfate on hind legs. Canola
oil on cuticles. Triple dye on left front foot. FEI 39686

7/5-7/06: CEC: Susan: BAR. Sound. Mild NBA, LF/D3. Continue to trim and treat
topically as needed. FEI 40013

12/19/07: CEC- Quarantined elephant reclassified as Group C by USDA/Animal Care on
9/18/06, as outlined in the Guidelines for Control of Tuberculosis in Elephants
(2003), which remain on travel restrictions.

COPIES OF UNDATED PHOTOGRAPHS:

Rear legs: skin lesions from urine scalding FEI 17325

Urine on enclosure floor containing white appearing matter. FEI 17326

Foot toe crack and toe nail abscesses, over grown foot pad:

FEI 12202, FEI 12201, FEI 8284, FEI 8283, FEI 8268, FEI 8267, FEI 8266, FEI 8265, FEI 8264, FEI 8263, FEI 8262, FEI 8261, FEI 8260, FEI 8259, FEI 8258, FEI 8257, FEI 8251, FEI 8250, FEI 8249, FEI 8248, FEI 8243, FEI 8242, FEI 8241, FEI 8240, FEI 8239, FEI 8238, FEI 8236, FEI 8225, FEI 8183, FEI 8223, FEI 8182, FEI 8175, FEI 8174, FEI 8173, FEI 8172, FEI 8169, FEI 8154, FEI 8152, FEI 8151, FEI 8150, FEI 8124, FEI 8120, FEI 8109, FEI 8108, FEI 8107, FEI 7942, FEI 7971, FEI 7991, FEI 8017, FEI 8049, FEI 8059, FEI 8070, FEI 8071, FEI 8072, FEI 8073, FEI 8074, FEI 8075, FEI 8080, FEI 8081, FEI 8087, FEI 8088, FEI 8089, FEI 8090

Susan-Summary of medical and/or behavioral events:

(Little or no medical records available prior to 1991)

1991-Treat feet.

-Flush LF abscess.

1996-Nail abscess.

-treat feet.

1998-Susan's eye is watering.

-Sophie/Susan had a spat; minor scrapes on each.

-Susan, had two small lacerations on her forehead.

-Linear abrasions along her right flank and head, caused by a protruding hinge or latch in the trailer/transport vehicle.

-Lutzie scratched Susan's forehead with her ivory (date of event uncertain).

1999-Old nail bed abscess RF; superficial wounds on front trunk.

-RF toe 5 abscess.

-Scratches on her forehead from train car.

- Hole found from bottom of her nail; cuticle trimmed too short.
- Sway back conformation; vaginal polyps, RF #3 active nail bed abscess; LF #2, 3, 4, old NBAs.
- Old NBA with two associated nail cracks; older animal.
- Lame for 7 days; slipped off tub during practice; RF carpus and elbow stiff.

2000-Minyak bit Susan's tail.

- FR foot soaked.
- FL foot soaked.
- Toe abscess- photographs.
- Bed sore on left side; RF has an active and severe NBA.
- RF #4 has a chronic and active NBA; RF #2 has a chronic NBA.
- Chronic urination on her feet, causing dermatitis; may be due to vaginal polyps.
- Strains to defecate, chronic problem.
- RF 3/4 has interdigital swelling; the LF has a recurrent and active NBA, active NBA #4 and LF #2.
- Right forefoot 2nd digit the is a crack and a 2 cm ulcer filled with granulation tissue; the hind feet nail sole junction of 3rd digits soft, overgrown.
- Radiographs reveal lysis and periarticular changes.

2001-The skin of the medial hind feet appears constantly wet.

- Strains to defecate, trainer periodically manually cleans her out.
- Requires manual clean-out of rectum every few days.
- Chronic constipation reported; LF #1 small active NBA; RF #5 has old NBA.
- Hyperkeratosis, with moist and occasionally necrotic skin, medial aspects of hind feet likely from urine scalding.
- Elephant developing a dip in her mid-back; not as lively as she used to be.
- Cellulitis of her L forearm, extending from carpus to elbow, underlying stiffness in the leg and a more recent cellulitis.
- Colicky.

- Lame and stiff in front leg- high.
- Still stiff in FL leg, having a hard time laying down.
- Still stiff gets better with walking, but stiffens up when standing.
- Not eating or drinking very well and not showing much activity.
- Weight loss in last several months; thin; still lame left front leg; decreasing activity and interest; observed to not lay down to sleep.
- Loaded into truck to CEC.

2002-Start INH tabs rectally.

- Stiff right front.
- Start INH tabs orally.
- Start PZA rectally.
- Started Rifampin.
- ELISA from 12/13/00 Positive.
- Slight tearing and inflammation, both eyes.
- Pus in urine.
- Abscess on left front.

2004-Abrasion on right elbow.

- RF #3, #4 have linear, nearly horizontal cracks on proximal aspect of nails; small swelling and draining tract on the lateral aspect of the right carpus.
- Bad abscess, lost nail LF 3rd and 4th nails 3 months ago.

2005-Skinny and possible constipated.

- Losing weight.
- Thin, chronic constipation, managed twice a day rake out.
- Appeared painful.

2005-2006-Winter Quarters: Approx 164 “constipation/rake out/twice a day” procedures performed.

- Confirmed diagnosis of perinea hernia with bladder involvement.
- Susan departed the Blue Show by truck and arrived at the CEC.

-Sores on cheeks and hips treated.

2006-Inside back legs treated.

-NBA developing on LF/D3.

-Purulent NBA LF/D3.

12/19/07: CEC- Quarantined elephant reclassified as Group C by USDA/Animal Care on 9/18/06, as outlined in the Guidelines for Control of Tuberculosis in Elephants (2003), which remain on travel restrictions.

Mysore Female Asian Elephant: Date of Birth ~ 1946 Age: ~ 62 yrs

**Acquisition/Origin: 1986 Tony Diano, Diamond "O" Ranch,
Canton, OH; Unknown**

01/94 on Blue Unit

3/9/06 transferred from Blue Unit to CEC

3/16/06 transferred from CEC to Gold Unit

Currently on Gold Unit FEI 1279

9/18/06 Noted on CEC Animal Daily Report FEI 41271

Medical Record Entries:

Date Unknown: Current Problems: Mysore - lame. REDACTED FEI 29480

Date Unknown: Mysore Elephant: Lameness LH. Some swelling around foot. No puncture marks, no abscess or obvious cause of lameness. Elephant already on ibuprofen. Sonny feels that this is no worse than usual. I offered to start her on Naxcel, but unit is out of Naxcel currently. Reevaluate next visit. FELD 0008361

Date Unknown: Atlanta Animal Rounds: Zina: Please talk to Troy about cold/shakes (Mysore too). FEI 22433

Date Unknown: Mysore Elephant: History of severe hind leg lameness. Not lame at all. Has been off medication for two weeks, but had intense course of NSAIDS and adequate beforehand. Suspect that elephant was not just showing signs of osteoarthritis, but of some sort injury, which is why improvement was so dramatic. Plan: Observe. No treatment. REDACTED FELD 008353

5/5/? Blue Unit: Daily Animal Record: Mysore's foot soaked. Susan's eye treated. FEI 36269

Date Unknown: Mysore: Pressure sores bilaterally on cheeks. Sore on left side of face deep, puffy, and oozing. Needs gentle cleaning and debridement, then drying.

Recommend wet-to-dry dressing, then alternating Nystatin powder and Bactroban topically to dry out and remove organisms. This is current treatment in human patients.

Will discuss with Gary Jacobson and Dr. Bill Lindsay. FEI 0008358

4/13/99: History: Presented for acute lameness in the left hind leg. May have occurred during last night's performance. Walks with the left leg stiffer than normal and slightly rotated laterally. Treatment: Pulled off show for 3-4 days. Banamine PO BID x 3 days. FELD 0002956

4/13/99: Blue Unit: Load Out: Mysore was taken out of the show and was transferred by semi to the train. FEI 23292

4/14/99: Blue Unit: Travel Day- load in: Mysore was transferred to the building, by semi. FEI 22723

4/16/99: Blue Unit: Mysore still out of show. Lamé FEI 22725, FELD 0002956

4/16/99: Go out to Unit, Mysore lame LH??- Ramiro has on Bute AM & PM, still out of show. REDACTED FEI 29635

4/17/99: Blue Unit: Mysore was kept out of all shows. FEI 23296

4/22/99: Memo From: Richard Froemming To: Gary West; Ramiro Isaza; Cc. William Lindsay, Subject: Veterinary Care Dept. Project Reviews. Doc FEI 32587 Elephants that should come off- After Smart Elephants arrive Mysore- limps on back leg- slow- plus a

rupture, Minnie- bad feet- plus a rupture, Sophie- lame right front leg- REDACTED FEI 32591

5/25/99: Observed during animal walk in, lameness resolved. Old, resolved nail bed abscess LH. FELD 0002956

6/2/99: Blue Unit: Mysore- soak foot 2 daily. FEI 22842

6/13/02: Memo From: Ramiro Isaza To: W. Lindsay Subject: Mysore Pics "The answer to your phone question is that Sonny is still packing the wound SID at night. Attached are two pictures I took last week. One has packing and the other does not. FEI 19437 FEI 19438, 19439 FEI

6/16/99: Blue Unit: Travel day: Load in: Mysore- Front foot soaked. FEI 22855

8/31/99: Wichita, KS Blue Unit: Small nail crack on right front #3. Nail crack. Currently being treated with trimming. FELD 0021891

9/12/99: Kansas City, KS Blue Unit: tested the use of a digital thermography unit for detecting early foot problems in elephants. Recorded images from all the elephants. REDACTED, Non-Responsive FEI 33029

9/12/99: Kansas City, KS Blue Unit: LF #3-5 cuticles are overgrown. LF #1 missing the nail. LF #5 small NBA under nail. LF between #4-5 interdigital tissue very swollen. RF #3 small nail crack. RF between #4-5 interdigital tissue swollen. RF #4 large active NBA. RF #5 small NBA. Assess: Active NBAs. Currently being treated with trimming. FEI 33029

10/20/99: Boston, MA Blue Unit: LF #1 missing the nail. LF#5, trimmed an old NBA from under the nail. RF #4, trimmed an active NBA. RF #3 small nail crack. RF between #4-5, interdigital tissue swollen. RF #5, trimmed a small, old NBA. Assess: Active NBAs. Currently being treated with trimming. FELD 0021841

3/31/00: NYC, NY Blue Unit: BAR. Eating. Normal examination except feet. LF #5 has an old, mostly healed NBA. RF #4 has an active NBA that has had part of the nail trimmed off. LR #2 old non-active NBA. Normal exam. FELD 0021832

7/19/00: Long Beach, CA Blue Unit: BAR. Eating. Normal examination except feet. LF #5 and RF #4 have old, mostly healed NBAs. Normal exam except for healing NBAs. FELD 0021822

8/10/00: San Diego, CA Blue Unit: Routine exam. BAR. Eating. Normal examination except for feet. LF #5 and RF #4 have old mostly healed NBAs. Normal exam except healing NBAs. FELD 0021791

11/16/00: Chicago Blue Unit: Mysore left eye much better, applied triple antibiotic again. FEI 36634

12/13/00: Orlando, FL Blue Unit: Normal examination except feet. LF #5 and RF #4 have recurrent and active NBAs. Normal exam except NBAs FELD 0021806

12/22/00: Foot Exam: Left forefoot digit 5 has ulcer at nail/sole junction that is in process of growing in (healing). Moderately overgrown soles and cuticles. Trimmed. Both corneas have central 3-4 mm foci of hazy to punctate light brown opacities. FELD 0002957

1/7-10/01: Load out from Sunrise onto trucks, then onto trains uneventful. Animal walk in Miami next day uneventful. FELD 0002957

1/9/01: History: Has chronically hyperkeratosis skin and mild "swelling" lateral aspect of left foot, posterior to 5th digit. FELD 0002958

2/8/01: Foot Exam: Cuticles require trimming. There is a focus of swelling and ulceration in the left forefoot caudal to the nail of the 5th digit. Minor lesion being gradually trimmed by trainer. FELD 0002958

3/21/01: Washington, DC Blue Unit: Normal examination except LF #5 has an interdigital swelling. FELD 0021828

5/23/01: There are bilateral, 5mm diameter, lacy, irregular brownish corneal opacities (similar to Zina). No evidence of ocular irritation. Currently incidental corneal lesions. FELD 0002958

4/12/01: Exam: Chronic swelling/hyperkeratosis protruding caudal to 5th digit, left forefoot persists. Minor problem; elephant not lame. Scheduled for trimming in a few weeks when elephant can be sedated and rested post-trimming. FELD 0002958

7/1/01: Houston, TX Blue Unit: LF #3 cuticles are overgrown. LF #1 has a small vertical crack in the nail. Normal exam except interdigital swelling. FELD 00201778

1/25-28/02: Given Ibuprofen FELD 0002959

2/7/02: Greensboro, NC Blue Unit: History - Swelling on lateral aspect of the metacarpus. Noted about a week ago, acute, focal, warm mass, however the site is

located where an old inactive mass was located. Placed on antibiotics (by CS) and the swelling decreased. Epidermal necrosis over the mass caused a partial thickness loss of skin. Assess: BAR. Eating. Swelling is firm with no apparent fluid. Slightly warm to the touch. X-rays: Lateral and DV of the carpus taken. Assess: focal, inflammation from trauma, or reoccurrence of chronic infection. Plan: Assess radiographs and monitor.

FELD 0021815-U

2/7/02: Acute onset swelling associated with left carpus last week. Exam: Approx. 15 cm diameter poorly defined firm swelling lateral aspect LF carpus is still present but gradually getting smaller. Area is warmer than surrounding tissue. Region where 10 cm diameter patch of superficial epidermis sloughed appears same as immediately post-slough. No evidence of impending rupture of potential abscess. Elephant is not lame, although is a bit touchy about palpation of area. Radiographs taken of both carpi to ensure no bony involvement. Other than some osteophytes associated with various surfaces of carpal joints, no obvious bony problems associated with soft tissue lesion.

TX: Continue antibiotic treatment for another 3 days. History: Swelling on lateral aspect of the left carpus. Noted about a week ago, acute, focal, warm, mass, however the site is located where an old inactive mass was located. Placed on antibiotics by (CS) an the swelling decreased. Epidermal necrosis over the mass caused a partial thickness loss of skin. Assess: Focal, inflammation from trauma, or reoccurrence of a chronic infection.

FELD 0002959

2/14/02: Norfolk, VA Blue Unit: Recheck swelling on LF carpus. BAR. No change in the swelling on the lateral aspect of the left carpus. No lameness or soreness when palpated. Assess: Chronic swelling possibly due to mild trauma over the bony prominence. Plan: Monitor suspect it will resolve with time. FELD 0021810

2/28/02: Hampton, VA Blue Unit: Recheck swelling on LF carpus. BAR. Decreased size of the carpal mass. RX- Decrease Ibuprofen from 20 pills SID to 10 pills SID for 15

days, then stop treatment. Assess: Resolving FELD 0021812

5/14/02: Swelling noted over R eye - warm to touch. Temporal gland OK. Naxcel IM SID, hydrotherapy and topical DMSO. FELD 0002959

5/24/02: Some enlargement. Central softening noted, continue therapy. FELD 0002959

5/29/02: Abscess has ruptured overnight; 40 mls lidocaine, trim and debride, flush and pack with betadine soaked gauze. Continue Naxcel IM. Will be out of show until further notice. FELD 0002959

6/7/02: Wilkes-Barre, PA Blue Unit: History- Draining abscess over RT forehead and must gland area. The swelling started high on the forehead and traveled ventrally prior to rupturing spontaneously. Treatment has been BID flushing and debridement. Currently the lesion is about 2 cm in diameter and about 3 cm deep. Draining small amounts of pus. Examined inside the RT ear canal and top of the head - NSF. TX- Continue treatment as before BID flushing, SID iodine gauze pack, SID betadine ointment. Assess: SC abscess ruptured and resolving. FELD 0021825

6/15/02: Oklahoma City, OK Blue Unit: recheck abscess RT forehead. BAR. Eating. Good BC. Ruptured abscess over the RT forehead and must gland area. Currently the lesion is about 2 cm in diameter and about 3 cm deep. Draining small amounts of pus. Examined inside the RT ear canal and top of head - NSF Continue treatment as before. Resolving REDACTED FELD 0021821

6/20/02: Abscess cavity over R eye still draining but is resolving. Flushing to be continued daily. Some swelling noted higher on head over frontal crest, not painful. FELD 0002959

6/26/02: Blue Unit: Medical Report: Murray Fowler, DVM: "Assisted 'Sonny' in irrigating the abscess on the right side of her zygomatic arch. A tract leads medially & slightly upward over 60 ml of betadine solution was instilled deep into the abscess space before any fluid drained out. I suggested a larger catheter such as a small mare urinary catheter be used to keep the tract open. Irrigate with hydrogen peroxide & finish with a betadine (1:4) flush." "Jewel" - laceration on her left rib cage was cleaned and treated with a betadine ointment. Wound healing well." "Checked 'Whitey' alligator. Emaciated & lethargic. Hasn't eaten in 3 weeks. Injected vitamin B Complex & ADE. Tried to force feed without success." FEI 16787

7/6/02: Phoenix, AZ Blue Unit: Recheck abscess RT forehead. Continue treatment as before. Still resolving well. FELD 0021820

7/11/02: Minimal drainage, flush and probe tract, resolving well. FELD 0002959

7/12/02: USDA APHIS INSPECTION REPORT-Routine Inspection, Fresno CA No non-compliant items identified in this inspection. Two elephants, Mysore and Jewel currently under treatment for surface abrasions. Records of treatment reviewed. FEI 2707

7/17/02: Tract continues to resolve. FELD 0002959

8/10/02: San Diego, CA Blue Unit: Check abscess RT forehead. BAR. Eating. Good BC. Abscess site still open but draining less. RF #5 has several dark spots near cuticle. Assess: Still resolving well. Monitor RF #5 for developing NBA. FELD 0021897

8/12-18/02: Abscess on side of head resolving. Treatment: Deep irrigation discontinued/drainage coming dorsally/ only light cleaning daily. FELD 0002960

8/28/02: San Francisco Blue Unit: Recheck abscess RT forehead. BAR. Eating. Good

BC. Abscess site still open but draining less. Upper right molar has a large lateral point. Stop flushing and packing of abscess site. Abscess resolving well. FELD 0021899

9/5/02: History: Continually draining fistulous tract. No evidence temporal gland involved. Continue treatment. Healing appropriately FELD 0002960

11/26/02: Chicago, IL Blue Unit: Possible early trunk paralysis. Possible early nuclear sclerosis. Bilateral corneal degenerative changes. Mild, chronic, bed sore lesions on left cheek. Resolving abscess on right cheek. Mild papilloma type changes to the vulva. Raised area on left lateral carpus. RH #4 has a vertical crack. RF #5 has a crack. RF #1 nail is missing. Assess: Mild chronic findings. FELD 0021835

7/24/03, 7/26/03, 6/19/03: Blue Unit: Shockwave Therapy (6/19/03: L. stifle, total 5000 pulses medial and lateral) FEI 3305

10/3/03: Blue Unit: Abrasion on left jaw line - treated with topical AB. FEI 3305

11/5/03: Pittsburgh, PA Blue Unit: Recheck abscess RT forehead. Raised area on left lateral carpus. Slightly overgrown cuticles. FEI 3305, FELD 0021839

2/15/04: Blue Unit: Visual of left carpal lateral swelling. There is no change in this joint callus in over 20 years; no complications nor associated arthritis nor lameness. No treatment necessary. FEI 3305

12/16/04: Mysore Elephant: Rub sore on left hip greatly improved. Continue treatment. REDACTED FEI 21932

2/8-9/05: Raleigh, NC Blue Unit: REDACTED FEI 40054 Mysore Elephant: Lane LH. Some swelling around foot. No puncture marks, no abscess or obvious cause of lameness. Elephant already on ibuprofen. Sonny feels that this is no worse than usual. I offered to start her on Naxcel, but unit is out of Naxcel currently. Evaluate on next visit. FEI 40055

3/27/05: Memo From: Ellen Wiedner To: William Lindsay, Ramiro Isaza, Subject: visit to blue. Sara: Was chewing on chain, and cut the inside of her mouth with the hook on the end. Small scab visible inside mouth. Animal BAR, eating and drinking normally. Minor abrasion. No treatment, Mysore Elephant: History of severe hind leg lameness. Not lame at all. Assess: Has been off medication for two weeks, but had intense course of NSAIDS and adequan beforehand. Suspect that was not just showing signs of osteoarthritis, but some sort of injury, which is why improvement was so dramatic. REDACTED FEI 31835

10/2/05: Indianapolis, ID Blue Unit: Small firm mass on RT flank, no change over past few years. FEI 10872

10/12-14/05: Boston, MA Mysore Elephant: BAR, bump on outside left front carpus. Bump unchanged in many years, animal not lame. Healthy older elephant. No treatment. FELD 0022777

2/7/06: Letter From: Dr. William Lindsay To: Dr. Ellen Wiedner "Mysore: concern was raised over her general condition. I suggest that consideration be given to bringing her home for several months. The swelling on the lateral aspect of her lower forearm is non painful and appears of no clinical significance." FEI 11093

3/9/06: Mysore arrived at CEC from Blue Unit FEI 1280

3/15/06: CEC: Mysore Elephant: BAR and healthy. Fibrous mass on left front leg is unchanged for many years and has not caused this animal any lameness or other problems. Will depart for Gold show today. FEI 41165

3/16/06: Angelica & Mysore left for Gold Unit FEI 1280

3/31/06-4/1/06: Bowling Green, KY Gold Unit: Mysore Elephant: Small healing NBA LH. Plan: Trim as needed. Elephant BAR, not lame. FEI 17003

4/19/06: Cape Girardeau Gold Unit: BAR, not lame. Old dried up NBA of LH. Assess: Doing well. No treatment. FEI 17005

7/11/06: Dothin, AL Gold Unit: Measured bump on lateral left carpus; approximately 7" high x 5" wide. Keepers report some change in bump in consistency. Bump feels as though it contains some fluid which was confirmed on ultrasound. Not hot, not painful. Probable hygroma. Plan: Observe FEI 41461

7/15/06: Letter From: Dr. William Lindsay To: Dr. Ellen Wiedner, "I traveled to Augusta, Georgia and performed trunk washes on Angelica and Mysore. Angelica was LH lame, slightly, during the performance, especially when circling to the left. We discussed Adequan dosage regimes and ibuprofen therapy. Trunk washes were done the next morning. I purchased a cooler for shipping the next week." FEI 41158

9/18/06: CEC: Mysore: Granulating pressure sores on cheeks bilaterally. Not painful to palpation. Not hot, red, swollen or purulent. Assess: Healing sores. Chronic condition in this older elephant. Plan: treat topically with triple cream antifungal, antibiotic, hydrocortisone). Can mix with collagen as desired or treat with collagen alone to keep skin soft. FEI 41271

9/26/06: Granulating pressure sores on cheeks bilaterally. Not painful to palpation. Not hot, red, swollen or purulent. Healing sores. Chronic condition in this older elephant. Plan: Treat topically with triple cream (antifungal, antibiotic, hydrocortisone). Can mix with collagen as desired or treat with collagen alone to keep skin soft. FEI 41461

Vet Log Winter Quarters: 2005-2006: Mysore Elephant: Treatment, Ibuprofen tabs every weekend, Fri, Sat, Sun. 2 x day-- 57 days of treatment during Winter Quarters

12/19/07: CEC- Quarantined elephant reclassified as Group C by USDA/Animal Care on 9/18/06, as outlined in the Guidelines for Control of Tuberculosis in Elephants (2003), which remain on travel restrictions.

COPIES OF UNDATED PHOTOGRAPHS: foot toe cracks, abscess: FEI 8192, FEI 8193, FEI 8195, FEI 8132, FEI 8123, FEI 8114, FEI 8003

COPIES OF DATED PHOTOGRAPHS: facial abscess: FEI 17933, FEI 17932, FEI 17931, FEI 17930, FEI 17929, FEI 17928, FEI 17927, FEI 17926, FEI 17922, FEI 17921, FEI 17920, FEI 17919, FEI 18356, FEI 18355, FEI 18055, FEI 18054, FEI 18053, FEI 17949, FEI 17948, FEI 17947, FEI 17946, FEI 17944, FEI 17943, FEI 17942, FEI 17941, FEI 17940, FEI 17939, FEI 17938, FEI 17937, FEI 17936

COPY OF DATED PHOTOGRAPH: lower leg lesions FEI 18345

Mysore-Summary of medical and/or behavioral events:

(Little or no medical records available prior to 1998)

Date Unknown-Lame LH; some swelling around foot, elephant already on Ibuprofen.

Date Unknown-Cold shakes.

Date Unknown-Foot soaked.

Date Unknown-Pressure sores bilaterally on cheeks.

1999-Acute lameness in the left hind leg.

-Taken out of the show and transferred by semi to the train.

-Lame, still out of show.

-Old resolved nail bed abscess.

-Soak front foot.

-Small nail crack right front #3.

-LF #3-5 cuticles overgrown; LF #1 missing the nail; LF #5 small NBA under nail;

LF between #4-5 interdigital tissue very swollen; RF large active NBA; RF between #4-5 interdigital tissue swollen; RF large active NBA. Assess: Active NBAs.

Currently being treated with trimming.

2000-LF #5 and RF #4 have recurrent and active NBAs.

-Both corneas have central 3-4 mm foci of hazy to punctate light brown opacities.

2001-Chronically active hyperkeratosis skin and swelling lateral aspect of left foot, posterior to 5th digit.

-LF #5 has an interdigital swelling.

-#3 cuticles are overgrown; LF #1 has a small vertical crack in the nail.

2002-Swelling on lateral aspect of the metacarpus, focal inflammation from trauma.

-Abscess has ruptured overnight.

-Draining abscess over right forehead.

-Treatment for surface abrasions.

-Monitor RF #5 for developing NBA.

-Possible early trunk paralysis; possible early nuclear sclerosis; bilateral corneal degenerative changes; RH #4 has a vertical crack; #5 has a crack; RF #1 has a nail missing.

-Shock wave therapy L stifle.

2003-Abrasion on left jaw line.

-Slightly overgrown cuticles.

2005-Lame LH; some swelling around foot; suspect some sort of injury.

2006-Concern over general condition; Mysore arrived at CEC.

- Departed for Gold show.

- Small healing NBA.

- CEC, granulating pressure sores on cheeks bilaterally.

2006-Winter Quarters-Treatment with course of Ibuprofen.

12/19/07: CEC- Quarantined elephant reclassified as Group C by USDA/Animal Care on 9/18/06, as outlined in the Guidelines for Control of Tuberculosis in Elephants (2003), which remain on travel restrictions.

Site Inspection-Blue Unit, Auburn Hills, Michigan
November 13, 2007

On November 13, 2007 three expert witnesses, including myself, conducted an inspection of the two Asian elephants, Nicole and Karen, belonging to Ringling Brothers And Barnum & Bailey Circus in Auburn Hills, Michigan. The inspection process consisted of three parts: 1. Train site visual inspection, 2. Sports arena/complex site visual inspection, and 3. Evening visual observation. According to a record from Ringling Brothers' Circus, the elephants Nicole and Karen had been traveling or were on board the train from St. Louis, MO to Auburn Hills, MI for approximately thirty-five consecutive hours prior to the train inspection (FEI 48708). During each of the three parts of the inspection process still photographs and video were recorded by outside contractors. (See video footage and photographs from the inspection in the case of Karen and Nicole on the Blue Unit in Auburn Hills, Michigan on November 13, 2007)

1. Train Site Visual Inspection:

Myself and two additional expert witnesses (Dr. Hart and Ms. Carol Buckley) individually observed Asian elephants Karen and Nicole shortly after 9:30 AM thru the doorways of Ringling Brothers And Barnum & Bailey Circus train cars #1 and #2 prior to the unloading process. I was able to observe each elephant from a distance of approximately eight to ten feet looking up thru the open train car doorways for an estimated time of one minute per elephant (Fig. 1- PL 15071). I then observed Karen and Nicole being unloaded from the train cars shortly after 10:00 AM, from an estimated distance of between 75 and 100 feet. They were then assembled with five additional Asian elephants from the train. All seven were subsequently walked from the train to the Auburn Hills sports arena/complex (Fig. 2- PL 14986). Myself and the two other expert witnesses then inspected the interiors of railway cars #1 and #2.

Findings of Train Site Visual Inspection:

I was unable to visualize all four legs of Karen and Nicole looking thru the train car doorways. Of the legs that were visible only three quarters of the length of the chain circling the legs was covered with protective fire hose-like, heavy canvas material (Fig. 3- PL 15121). Thus there was incomplete protection from chain contact with leg surfaces.

The heads of Karen and Nicole appeared to be touching or near touching the ceiling of the train cars (Fig. 4- PL 15118). Upon unloading from the train cars, Karen and Nicole, as well as some of the five other elephants had to lower their heads and backs to clear the door exits (Fig. 5- PL 14982, Fig. 6- PL 14978). As the elephants were being walked from the train I was too far away (75 to 100 feet) to characterize their gait other than being slow and easy (Fig. 2- PL 14986). The flooring of the train cars was previously cleaned of fecal matter and urine soiled saw dust and hay which had been placed in plastic bags prior to opening the train car doors for visual inspection by the expert witnesses (Fig. 7- PKE 066). The flooring was dry except for a three to four foot circumscribed area of urine moistened freshly placed saw dust. The space in car #1 that contained Karen was measured and found that given the length of the leg chains, Karen's enclosure space length was 33 feet 6 inches (Fig. 8- PL 14996). The car width was measured (Fig. 9- PL 14999) to be 10 feet 2 inches, thus giving Karen approximately 340 square feet in which to stand. The height of the car measured vertically along the car wall from the floor to the ceiling, where it continued in an upward curvature to the center of the car roof, was 7 feet 7 inches. The space in car #2 that contained Nicole was measured and found that given the length of the leg chains, Nicole's enclosure space length was 22 feet. The car width was 9 feet 7 inches, giving Nicole approximately 230 square feet in which to stand. I did not see water containers or water troughs for the elephants.

2. Sports/Arena Complex Site Visual Inspection:

Shortly after 1:00 PM, myself and the two other expert witnesses individually inspected Asian elephants Karen and Nicole from an estimated distance of between 5 to 10 feet at the edge of their holding enclosure in an asphalt surface parking lot at the Auburn Hills sports arena/complex. Karen and Nicole were viewed from their front and rear and from their left and right sides. An elephant handler had each elephant hold up her front and rear legs and feet for inspection. The ears were pulled forward so that the caudal, or rear aspect, of each ear could be visually examined. Each elephant had been bathed and

cleaned at the sports arena/complex prior to inspection. Each expert witness had an estimated eight to ten minutes of inspection time per elephant. After inspecting Karen and Nicole, and prior to departing, the expert witnesses were able to physically examine eight bull hooks (guides or ankuses).

Findings of Sports Arena/Complex Site Visual Inspection:

Nicole- Both of the soles of Asian elephant Nicole's rear feet were unevenly worn. Each of the rear heels revealed an increased wear pattern compared to the rest of the sole tissue of the rear feet (Fig. 10- PKE 093). There was a vertical toe nail crack of between $\frac{1}{2}$ to $\frac{3}{4}$ inch on the 3rd digit of the left front foot (Fig. 11- PKE 096). On Nicole's right hip was an area of scar tissue from previous bed sores (Fig. 12- PKE 108). Caudal, or behind, the right and left elbows and anterior to each knee (Fig. 13- PKE 114) were callouses from historic contact cueing with an ankus or guide, and or contact with hard or unyielding surfaces.

Karen- Like Nicole, Karen (Fig. 14- PKE 121) had an uneven wear pattern on the soles of the rear feet (Left Rear Fig. 15- PKE 118, Right Rear Fig. 16- PKE 120,). The heels demonstrated increased wear in comparison to the rest of the sole tissue. On the left rear foot was a vertical toe nail crack on the second digit extending $\frac{3}{4}$ the way up the toe nail. The crack could be seen extending thru the nail as seen from the plantar aspect or view from the bottom of the foot, (Fig. 17- PL 15024, Fig. 18- PL 15037). With Karen's weight resting on her left rear (Fig. 19- PKE 126) the toe nail crack spreads apart predisposing the tissue beneath to infection. With Karen's weight shifted to her right rear foot, the crack closes (Fig. 20- PKE 125). On the angle of Karen's left jaw was calloused skin and scar formation from a previous injury or localized infection (Fig. 21- PL 14949, Fig. 22- PL 14947). On the left and right elbows and in front of each knee were callosities similar to those observed on Nicole (Fig. 23- PKE 133, Fig. 24- PKE 122).

I observed Karen and Nicole's behavior during the inspection process. The elephants were indifferent to the procedure. The elephants did not display curiosity or interest in smelling, investigating or exploring their examiners. The elephants moved in a controlled manner in response to the handler's voice commands (Fig. 25- PKE 112, Fig. 26- PKE 116). In my experience I would characterize Karen and Nicole as having a dispirited attitude.

The wear pattern noted on the soles of Karen and Nicole's rear feet are likely the result of locomotion with abnormal limb conformation on unnatural surfaces, stereotypic movement of these limbs on unnatural surfaces, or limb movement compensating for past or ongoing musculoskeletal disorders, or combination of all three.

Eight bull hooks (guides or ankuses) were physically examined (Fig. 27- PL 15027). The size or diameter of the handles were smaller or more slender than any I have examined previously and were wrapped with smooth black electrician's tape extending the length of the handle to the edge of the hooks in some cases (Fig. 28- PL 15053). The purpose of this tape was undetermined. The hook component of the ankuses were smaller in size than I have previously seen in my experience (Fig 29- PL 15052). These ankuses would have the ability to puncture or tear the skin of an elephant if used as demonstrated in the videos in evidence.

3. Evening Visual Observation:

At approximately 6:15 PM the expert witnesses observed Karen and Nicole as they were brought from the asphalt parking lot area into an adjacent overnight tented enclosure. Karen and Nicole were then chained or tethered, along with five additional elephants, on wooden pallet platforms. The elephants were provided with hay and food provisions in rubber feeding tubs. By 6:45 PM all seven elephants were chained for the night. Karen and Nicole were observed from a distance of approximately thirty to forty feet from

outside the tent entrance. An additional five elephants were chained or tethered similarly inside the tented enclosure. The expert witnesses observed the elephants until the inspection procedure concluded at approximately 8:45 PM.

Findings of Evening Visual Observation:

Karen and Nicole were chained side by side such that if each were to stretch they could touch one another with their trunks (Fig. 30- PL 15150). A third elephant (Minyak) was adjacent to Nicole. It did not appear that Nicole would be able to reach and touch this third elephant (Fig 31- PL 15151). Opposite and diagonal to these three elephants were three others, and there was a 7th elephant, judged to be a juvenile chained opposite the second group of three. All seven elephants were tethered by chains attached to their right front and left rear legs. The elephants did not seem interested in or distracted by the expert witnesses during the period of observation. As the elephants were secured in place a circus employee used a leaf blower to clean any debris from under and around the elephants. The noise of the leaf blower was unusually loud in the tented enclosure. I did not learn if this employee was wearing ear hearing protective equipment, nor did I learn the decibel rating of the leaf blower. All seven elephants seemed indifferent or immune to the noise caused by the leaf blower. The expert witnesses were able to easily observe Karen and Nicole from a position nearly opposite, while standing immediately outside the tented enclosure doorway. I was able to clearly observe their activity for nearly 2 ½ hours. The elephants were under a continual watch by circus personnel. When an elephant eliminated solid waste, a circus employee cleaned it up. The wooden pallet platforms that Nicole and Karen were tethered upon seemed to permit them approximately the same amount of space for movement as was noted in the train cars. Except for short feeding bouts when initially tethered, Karen displayed near continuous stereotypic swaying behavior throughout the entire period of observation (See video). Three of the other five elephants laid down one by one in lateral recumbency during the period of observation. Karen and Nicole remained standing. The elephants were unable

to mingle while they were chained. Within the group of seven elephants I was unable to determine any hierarchy or social structure. When one elephant began to urinate, a circus employee quickly placed a receptacle beneath the elephant to collect the urine during elimination.

Of note concerning the surfaces available to the elephants during the three inspection procedures: The Elephants were standing on solid, unyielding or unnatural surfaces on the train for approximately thirty-five hours chained within a limited space, followed by a walk along a rail bed and then on to street and sod or dirt surfaces until reaching the sports arena/complex asphalt parking lot where they spent the afternoon (Fig. 32- PL 15030). They were then chained in a tented enclosure on wooden plank surfaced pallets where they would remain throughout the night.

Site Inspection-CEC, Polke City, Florida
November 29, 2007

On November 29, 2007 four expert witnesses including myself, Ms. Carol Buckley, Ms. Colleen Kinzley, and Dr. Joyce Poole, conducted an inspection of the five Asian elephants, Susan, Mysore, Zina, Lutzi, and Jewell belonging to Ringling Brothers And Barnum & Bailey Circus at the Center for Elephant Conservation outside Polke City, Florida. The inspection process consisted of two parts: 1. Visual inspection procedure, and 2. Afternoon/evening visual observation. During each of the two parts of the inspection process still photographs and video were recorded by outside contractors. (See video footage and photographs from the inspection in the case of Karen and Nicole on the Blue Unit in Auburn Hills, Michigan on November 13, 2007)

1. Visual Inspection Procedure:

The visual inspection procedure started at approximately 2:00 PM. There were six elephants in the group that were assembled for the expert witnesses which included the five scheduled for inspection. The inspection procedure took place in a partially shaded corner of a fenced grassy field enclosure. Following inspection of the first elephant, each expert witness was unable to evaluate the following four elephants individually. Instead, these four elephants were inspected by all four expert witnesses at the same time, one elephant at time. It would be appropriate to state that the elephant handler was unwilling or unable to satisfy the requests of each expert witness during the inspection. It was also challenging for the elephant handler to satisfy fully the requests of each expert witness, as all four witnesses were forced to inspect the same elephant at the same time. This procedure did not permit as complete a visual inspection as was performed in Auburn Hills, MI, but yielded sufficient information upon which to gain a fair impression of the five elephants specific to this case. Each elephant was observed from a distance of approximately five to ten feet. As each of the five elephants was brought forward for inspection, the four expert witnesses viewed the right and left sides, and front and back of each elephant. Each elephant raised its front and rear feet for viewing. The area behind each ear was observed. The visual inspection procedure was accomplished in less than one hour. Following the inspection process the six elephants were observed to walk

across the field to a barn facility where they were tethered with chains for the second part of the inspection process.

Findings of Visual Inspection Procedure:

Immediately proceeding the inspection process the elephants were observed being hosed down, cleaned and watered in an area adjacent to the inspection site. The elephants were then walked to the inspection site. The five elephants examined appeared somewhat more alert (Fig. 33- PL 17094) and active in comparison to Nicole and Karen seen two weeks previously in Auburn Hills, MI. Prior to the inspection procedure Susan demonstrated curiosity and even turned from her position in line to approach and explore with her trunk the vicinity where the inspectors stood. However in general all six elephants remained quietly in line until the start of the inspection procedure. Because all six elephants were walked toward the barn at the same time I was unable to appreciate the gait of each elephant (Fig. 34- PL 15502). The expert witnesses were unable to observe the elephants being chained in the barn.

Mysore- Both right and left elbows (Fig. 35- PL 15179), and right and left stifle regions have callouses from historic contact cueing with an ankus or guide, and or from contact with hard, unyielding, and unnatural surfaces. There is a lump or raised area on the lateral aspect of the left carpus approximately 15 X 10 cm in size (Fig. 35- PL 15179). Further characterization of the lump could not be determined from this procedure. The first toe of the left front foot has a relatively small vertical cracks (Fig. 36- PL 15162).

Zina- The left elbow and left stifle regions have callouses similar to Mysore. The skin on the lateral aspect of the right rear ankle (Fig. 37- PL 15269) contains multiple small areas of elevated scar tissue compatible with chain trauma. The sole of the left front foot (Fig. 38- PL 15298) reveals an abnormal increase in wear, as does to a lesser degree the sole of the right front foot (Fig. 39- PL 15301). This is an abnormal amount of wear compared to

the soles of the rear feet (Fig. 40- PL 15312). There is a toe crack on the 2nd toe of the left front foot.

Susan- This elephant has a “swayback” conformation (Fig. 41- PL 15357). The cause for this is undetermined but most likely associated with either a birth defect or nutritional deficiency early in life.

There are elbow and stifle callouses noted similar to Mysore. and Zina. On the skin of the inner aspect of Susan’s rear legs is scar tissue associated with previous episodes of urine scalding. The scar tissue is more apparent on the inner and rear aspect of the left rear leg (Fig. 42- PL 15359, Fig. 43- PL 15367).

Susan was observed prior to the inspection process to demonstrate itching behavior. She was observed rubbing one lower rear leg against the other, and against a tree trunk, likely caused by contact urine irritation. There are chronic toe nail abscesses on the 2nd toe of left front foot (Fig. 44- PL 15328) and 3rd toe of the right front foot (Fig. 45- PL 15320).

Jewell- This elephant has left and right elbow and stifle callouses similar to Mysore, Zina and Susan. Both the right (Fig. 46- PL 15386) and left (Fig. 47- PL 15381) front foot sole tissue demonstrated an abnormal increase in wear compared to the rear feet similar to the finding on the soles of Zina’s front feet.

Lutzi- This elephant demonstrated stiffness in the left front leg as she moved up for inspection. There was a healing bed sore on the left side of Lutzi’s face. There were right and left elbow and stifle callouses noted similar to Mysore, Zina, Susan, and Jewell. The soles of the left (Fig. 48- PL 15447) and right (Fig. 49- PL 15451) front feet were abnormally worn similar to what was noted with Zina and Jewell

2. Afternoon/evening Visual Observation:

Beginning at approximately 3:15 PM the four expert witnesses were able to observe the

five elephants specific to this case in an elephant barn facility. Each of the five elephants were chained in a line, side by side, by chains on concrete flooring, in addition there was the sixth elephant seen previously. Two expert witnesses at a time plus a photographer or a videographer were permitted to observe the elephants at a time from inside the barn. However, the line of chained elephants was visible from the elephant barn doorway throughout the observation period (Fig. 50- PL 15713). From the doorway, the elephants were lined up from the doorway entrance towards the back of the barn: Jewell, Zina, Lutzi, Tova (6th elephant), Susan, and Mysore. When inside the elephant barn, the elephants could be observed individually behind enclosure bars from a distance of between ten to fifteen feet. The elephants did not seem interested in or distracted by the expert witnesses during the period of observation. The period of observation concluded at approximately 6:30 PM.

Findings of Afternoon/evening Visual Observation:

The barn enclosure concrete floor surface revealed areas of wear patterns consistent with the spatial limitations of where chained elephants could place their feet (Fig. 51- PL 15568). These areas had over the years developed roughened surfaces and cavitations where urine, and fecal matter would accumulate (Fig. 52- PL 15592). Sandy particulate matter that the elephants track into the barn would accumulate at these locations and add to the abrasive effect on the elephants' feet. This likely was the source of or cause of increased wear on the soles of the front feet of Zina, Lutzi and Jewell.

It was observed that several of the tethered or chained elephants' legs were not protected from direct contact with the chains. While the chained elephants seemed to know the limits of how far they could move, I would still on occasion see several of the elephants pull against a chained leg (Fig. 53- PL 15602). Susan would periodically raise her right front foot and then place it down (Fig. 54- PL 15600). This behavior was repeated over and over to take weight off that foot for brief moments. Jewell and Zina demonstrated

stereotypic swaying behavior similar to that displayed by Karen at the Auburn Hills, MI inspection. This behavior continued throughout the observation period (See video). During the period of observation the expert witnesses had the opportunity to examine eighteen bull hooks (guides or ankuses) (Fig. 55- PL 15649-one ankus not shown), three hot shots and one whip at the CEC (Fig. 56- PL 15648). The majority of the bull hooks were like ones I have seen historically in contrast to those examined at the Auburn Hills inspection. The shafts were heavier, and the hooks were larger and heavier (Fig. 57- PL 15652, Fig. 58- PL 15688). These ankuses would have the ability to puncture or tear the skin of an elephant if used as demonstrated in the videos in evidence. Some of the ankuses were similar to those found at Auburn Hills having the smooth electrician's tape applied to the shafts. The hot shots were of the standard variety. One of the three was short and capable of being carried in a back or hip pocket. The whip appeared to be of a "coach" variety.

Areas of Investigation Still Open

Many of the medical records provided for review by the plaintiffs' are redacted, and this expert witness was limited in fully reviewing this area of evidence.

Opinion/And Basis of Opinion/Conclusions

EXECUTIVE SUMMARY

I have reviewed evidence provided to me by plaintiffs. I have also reviewed the photographs and video from the two site inspections at Auburn Hills, Michigan and at Ringling Brothers And Barnum & Bailey Circus' Center For Elephant Conservation outside Polke City, Florida where I personally inspected along with other expert witnesses the seven Asian elephants being focused on in this case. Based upon my review, expertise and experience with elephants, and site inspections, it is my opinion that:

1. The defendant's use of bull hooks and other instruments is causing wounds, injury, harm, discomfort, pain, and harassment of the elephants under review in this case. The defendant cannot force the elephants to perform in the circus without subjecting them to this treatment.
2. The defendant's practice of chaining is causing wounds, injury, harm, discomfort, pain, and harassment of the elephants under review in this case. The defendants cannot force the elephants to perform in the circus without subjecting them to this treatment.

It is further my opinion that with regard to the remainder of the defendant's Asian elephants, whose medical records I have personally reviewed:

1. The defendant's use of bull hooks and other instruments is causing wounds, injury, harm, discomfort, pain, and harassment of the elephants.
2. The defendant's practice of chaining is causing wounds, injury, harm, discomfort, pain, and harassment of the elephants.

In addition it is my opinion:

1. There has been a failure of the Circus' management to recognize their use of bull hooks, prolonged chaining, and housing on hard, unyielding and

unnatural surfaces are causing injury, harm, discomfort, pain, and harassment of the seven Asian elephants specific to this case well as the other elephants under their care.

2. Based upon studies of elephant behavior in the wild and on the behavior of the elephants in the Circus as documented in the evidence reviewed, the Circus' management has failed to become enlightened as to the behavioral needs of the elephants.
3. The Circus' management has failed to give their veterinarians sufficient guidance and authority to insure the good health of the elephants.
4. Finally there has been a failure of the defendant's veterinary staff to recognize, acknowledge and remedy harmful health trends, recognize behavioral problems in these elephants, and exercise leadership in calling for appropriate corrective measures by the Circus' management.

The consequences of these collective failures is causing injury, harm, discomfort, pain, and harassment of the defendant's elephants.

BASIS OF OPINION/CONCLUSIONS

Defendant's Use Of The Bull Hook And Other Instruments:

Regarding the defendant's use of the bull hook, the evidence shows the use of this training tool and others in a manner that is causing wounds, injury, harm, discomfort and pain and otherwise harassing Asian elephants with Ringling Brothers' circus. The video evidence of Ringling Brothers' and Barnum & Bailey Circus employees' conduct indicates these practices are longstanding. The video reveals employees of the Circus placing the ankus in elephants' mouths, jabbing, poking, and slapping elephants with the ankus, and threatening and intimidating elephants to perform unnatural behaviors. The conduct depicted in videofootage of Ringling Brothers' employees and elephants corresponds with the descriptions provided by former Ringling Brothers' employees Tom Rider, Archelle Hundley, Robert Tom Jr., Jerry Ramos, and Frank Hagan. Mr. Rider

describes how the ankus is used in a manner that is harmful, that would injure, cause pain, and discomfort, to elephants. Mr. Rider, Ms. Hundley, Mr. Tom, Mr. Ramos, and Mr. Hagan all describe how they routinely witnessed such use of the ankus while working at the circus, and how one Ringling Brothers' employee stuck a bull hook in an elephant's mouth and twisted it, and another employee used a bull hook in the mouth of another elephant.

In the 1999 affidavit of Robert Lee Ridley, a Ringling Brothers' elephant handler and "veterinary technician" on the Blue Unit, he states, "I have seen hook boils on some of the elephants. I have seen them on the side of trunks and on the underside of the legs." In another statement he indicates, "I see hook boils twice a week on average." He states, "Hook boils are common in elephants."

The names of Asian elephants, Lutzi, Karen, Nicole, and Zina, four of the seven elephants specific to this case, have appeared frequently in the evidence. For example, Mr. Rider describes how Karen was beaten, poked and stabbed by Circus employees; how Zina, was hit with a bull hook and how he had to cover up 30 hook wounds on this elephant in addition to 20 wounds on Rebecca, another Asian elephant; how another Circus employee hit Nicole on the head with a bull hook, and again how other Circus employees beat Sophie, Karen, and Nicole. He describes how a Circus employee used a leatherman/knife to clip a baby elephant.

In a January 8, 2005 electronic mail message to Mike Stuart, Deborah Fahrenbruck describes how she observed a Circus employee, "...hook Lutzi (an elephant specific to this case) under the trunk three times and behind the leg once in an attempt to line her up for the T-mount." And, that we had, "...an elephant dripping blood all over the arena floor during the show from being hooked." FEI 15025-27-.

On April 13, 1999, the elephant Susan was observed during the walk in with “Superficial wounds on front of trunk.” FELD 3145, FEI 3353.

The names of other Asian elephants have appeared frequently as well in medical and other records from Ringling Brothers’ Circus including: Sophie, Baby, Rebecca, Banco, Toby, Banana, Tonka, Assan, Mary, and Siam.

The Santa Clara Humane Society’s inspector Franco’s report reveals seven elephants with injuries behind their left ears. The elephants noted in the report include: Banco, Toby, Banana, Tonka, and Siam. Almost all of the injuries appeared to be fresh, “...with bright red blood present at the two wound sites. One of the elephants had a larger laceration with what appeared to be dried blood. None of the elephants appeared to have any injuries or scarring behind their right ears. One of the elephants, named Mary, had two lacerations on her lower left flank. Another elephant named Assan had lacerations and scars on both her trunk and forehead. An elephant named Baby had abrasions on the back of the left ear. She also had a laceration on her left foreleg and on the back of her left ear.” Her report indicated that, “Lindsay (Circus veterinarian) stated that he could not deny that they were caused by ankuses.” The report describes how a Circus employee used an ankus to intimidate an Asian elephant named Baby. San Jose police officer Reeve reported, “...several different elephant handlers using their ankus to poke and prod the elephants.” Handlers would “...smack it (elephant) with the side of the ankus to hurry it up.” “On the last day when they were tearing down the tent I saw _____ use his ankus to make one of the elephants move. Using his body weight _____ forcefully yanked on the elephant’s ear.”

In a San Jose Police Department report of August 25, 2001, Sgt. Lanette Williams, reports, “I heard yelling and saw _____ lunge at the first elephant (“Asia”) with his ankus. He was yelling at her to move forward in a jabbing motion toward the area behind

Asia's left elbow. Asia immediately bolted forward then took 3-4 very rapid steps. _____ then turned and yelled at the next elephant in line to quicken her pace. He then continued to walk back toward the tent, yelling at the elephants as he walked by them. I immediately informed Investigator Franco what I had seen and indicated that because of Asia's reaction to the ankus strike, she had probably received an injury. Franco stated that she had also seen _____ lunge toward the elephant. I attempted to catch up to Asia as she walked down the street but by the time all 13 elephants had passed me, I was too far behind to get to Asia before she went into the performance. Immediately after the elephants came out of the Arena into the loading dock area, I saw Asia had a bloody spot behind her left elbow. I informed Franco. Franco obtained photographs of the injury."

In a January 16, 1999 memo from USDA-APHIS veterinarian, Dr. Kristina Cox reports regarding Asian elephant, Meena, "On the right side of her head, about midway between the attachment of the ear, and the bony ridge above the eye, was a round, symmetrical hole of about 1/8 inch in diameter, penetrating the skin. The lesion was compatible in appearance of a fresh puncture wound."

The affidavit of Archele Faye Hundley (API 6241-6248) on September 29, 2006 describes the conduct of a Circus employee, "I observed Sacha Houche as he tried to make the elephants lie on their bellies and put up their trunks. Baby was distressed and kept getting up and refused to lie down. Sachs smacked her with the bullhook repeatedly behind the ear and on the leg. He then hooked Baby behind the ear, holding the bullhook's handle with both hands, and pulled with all of his weight. Baby refused to go down. Sacha then inserted the bullhook into Baby's ear canal and holding the bullhook's handle with both hands, again pulled down with all of his weight. This incident lasted for approximately 30-40 minutes. Baby bled profusely from inside the ear and behind the earflap. She squealed in pain 3 or 4 times and let out a loud, shrill shriek."

The affidavit of Robert Tom, Jr. (API 6235-6240) on October 10, 2006 describes the conduct of a Circus employee, "I have observed Antonio and Sacha aggressively and regularly hooking elephants for no apparent reason. This aggressive hooking takes place on a daily basis. I have observed handlers rub dirt into bloody bullhook wounds to conceal the wounds when people are around. During Ringling's 2006 performance in Baltimore, Maryland, Antonio was trying to draw blood from behind the ear of an elephant. Even though the elephant was standing still, Antonio hit the elephant repeatedly on the forehead with a bullhook. The elephant is believed to be Luna or Tonka. The elephant screamed, trumpeting and squealing." Also in the affidavit is the statement, "I have seen members of the elephant crew hooking elephants behind the ear, on the legs and on the trunk and leaving bloody wounds. Some elephants have torn ear flaps caused by bullhooks."

Records regarding these additional elephants help demonstrate the prevalence of the use of the bullhook at Ringling Brothers. Additional records demonstrate that other instruments are used with the elephants in a similar manner. Mr. Rider describes how a Circus employee used a leatherman/pliers to clip a baby elephant, which is also reflected on video footage of the circus. A Ringling Brothers employee discusses observing another employee "using [a] hand electric prod within public view after unloading." FEI 15024. During their depositions, Mr. Rider, Mr. Hagan, and Ms. Hundley all described instances in which they saw Ringling Brothers' employees use whips on the elephants, as described in (Fowler, 1995).

These records also demonstrate, as my literature review revealed, that circus elephants are handled and trained in a consistent manner that creates wounds, and harms and harasses the elephants by injuring them (Lewis, 1955, 1978; Roberts, 1979; Crocker, 1980; Adams, 1981; Wallach and Boever, 1983; Mikota in Fowler, 1994; Roocroft and Zoll, 1994; Schmidt in Fowler, 1978, Mikota, S., Sargent, E.L. and Ranglack, G.S. eds. 1994).

The conduct at issue in this case appears to be applied consistently to all of the elephants at Ringling Brothers. Based upon this evidence and a review of the medical records of the remaining Asian elephants belonging to the defendant, further annotated examples of injury (or injuries that can reasonably be assumed to be) from bull hooks, or caused by bull hooks, are documented:

In 1994, for example the elephant Juno was noted as having “22 puncture wounds” from bull hooks, FEI 3827-80 (March 7, 1994, Richmond, Blue Unit), and the elephant Siam had bull hooks on her “to get her to move faster” and a handler was prepared to use a hot shot. FEI 38277 (March 11, 1994, Nassau, Blue Unit).

In 1995, the elephant named King tusk had an infection in the lateral aspect of his left ear. FEI 15353

In 1998, “hook marks” on four elephants (Tommy, India, Calcutta, Siam) at Williston were noted and it was “questioned whether Lynn should be doing this training stuff.” FEI 29627. At that same facility, it was noted that one elephant had a hook boil.” (FELD 12092 Calcutta II, 1998)

In 1999, the USDA discussed possible “puncture wounds on the caudal lateral aspect of the abdomen” of an elephant named Toby (Sept 9, 1999 USDA Inspection Report) and an elephant on the Blue Unit named Sophie had “two wounds on the inside of the left ear canal.” (September 12, 1999).

In 2001, medical records for the elephants show infections, wounds, and lacerations on the elephants’ left ears; (FELD 29642; Banko Feb 1, 2001); (FELD 21691; Banana, Greensboro, NC Feb 10, 2001); (FELD 21754 Re: Unit vet rounds April 11, 2001).

On October 31, 2001, Ringling Brothers received a citation from the San Jose Humane Society for elephant abuse due to the misuse of an ankus on Asian elephant Asia.

In 2003, a "Hook or bad scratch" was observed on an elephant named Sarah (FELD 3090 Feb 16, 2003).

In 2004, a new veterinary technician on the Red Unit observed lacerations on five elephants, FEI 16615-17.

January 8, 2005: Per Deborah Fahrenbruck memo to Mike Stuart regarding the walk in Phoenix, "Troy was observed hitting Angelica (Asian elephant) 3-5 times in the stocks before unloading her, then using hand electric prod within public view after unloading." FEI 15024.

These examples, cited by several former employees and inspectors, document the type of injuries that are caused by the use of a bull hook and other instruments. Based on my review of relevant literature and my experience working with elephants, it is my opinion that the use of the bull hook and other instruments as is traditionally done in maintaining circus elephants creates wounds and injuries on elephants and harm and harasses them by modifying and halting essential behaviors.

As described by one elephant keeper, "The elephant must fear punishment and discomfort, and I repeat this, for if you don't chastise when necessary, then some day, she will get you. The reason would be that she did not respect you. More handlers have been maimed or killed by elephants than any animal in the zoo (or in circuses without the

attendant publicity) and the reason was, the elephant had no fear--fear of punishment--from her handler and trainer.” (Roberts, 1979) This point is elaborated in the literature I have reviewed (Lewis, 1955), “What is true of training for performance is even more true of the basic discipline that must be established before an elephant can work or act. It isn’t kept in a cage, and, while it is chained much of the time, there are many occasions when it walks at liberty, with only the respect it pays its handler to keep in check. It is absolutely essential, therefore, that the animal must have this respect for its handler; and, to get down to blunt facts, this quality begins with fear: fear of punishment and discomfort.” The punishment used can cause wounds and injuries and the need to keep constant control results in behavioral modifications. But, as noted by (Adams (1981), “In using the bull-hook, the sharp points should not be deeply embedded into the elephant’s skin, as it can readily produce wounds that may become infected and difficult to heal. The sharp point of the bull-hook should be repeatedly jabbed into various places of the skin in a given area and not in the same place continually. The skin of the elephant is relatively sensitive, so it does not require deep penetration to obtain a response. After a period of effective training, simply placing the bull-hook on the skin will bring about the desired behavior of the elephant.”

With regard to the sensitiveness of elephants’ skin I agree with Adams’ observations, as it has been my experience with elephants in captivity, the Asian elephant’s skin, feet, mouth and ears are very sensitive. In general there does not appear to be any less sensitivity in these areas compared to other domestic or non domestic animals because of the elephants’ skin thickness.

With regard to Asian elephants, areas of increased sensitivity include the backs of the ears, legs, and feet. Used with force the bullhook is painful. A blow from a bullhook can penetrate the skin one-half inch or more. Elephants who have undergone repetitive injury from the bullhook do remember the pain, and therefore respond by moving quickly in

response to gentle touching with the bullhook or guidance with gentle tactile pressure. I have never personally witnessed the use of a bullhook that has caused bleeding. I have seen Asian elephants respond very quickly while simply being touched with the bullhook. The threat of use of the bullhook sometimes appears to be enough to bring an experienced Asian elephant into compliance.

In a USDA, APHIS, Animal Care Complaint/Search No. 02-81 (PL 09133) it is noted; “Not using Doc & Angelica in shows as much because activists videotaping so can’t use ‘bull hook as normally do’ so having difficult time forcing babies to perform.”

The defendant’s use of bull hooks and other instruments on Asian elephants is causing wounds, injury, harm, discomfort, pain, and harassment of the elephants under review in this case.

Defendant’s Confinement And Chaining Of Elephants For Long Periods Of Time:

The practice of chaining and maintaining elephants in captivity in limited space on hard, unyielding, or unnatural surfaces, as documented earlier in this report, causes foot and musculoskeletal disease in elephants (Mikota in Fowler, 1994; Houck in Fowler, 1993; Gage in Fowler, 1999; Adams, 1981; Roocroft and Oosterhuis in Cusuti, 2001; Fowler in Fowler & Mikota eds., 2006; Schmid, 1995; Brockett, 1999).

A review of the video footage of Ringling Brothers’ circus demonstrates the defendant’s elephants frequently stand on concrete or asphalt and are chained by one front and one rear leg with little room to move. There is video of three elephants in an asphalt surface enclosure. There is video of a handler using pliers to prod an elephant in an asphalt surface enclosure. There is video of elephants on an asphalt surface exhibiting stereotypic swaying behavior, chained front and rear, pulling on their chains. There is

video of elephants chained on pallets, one being released into an asphalt surface enclosure. There is video of elephants chained on a picket line standing on an asphalt surface. One elephant urinates, and then stands in its own waste. There is video of elephants on a picket line standing on a concrete surface inside a building, with their only movement being from side to side.

On one compilation of video footage of Ringling elephants ("Pat CuvIELlo Compilation"), PL 07069, elephants were videoed on a picket line standing on concrete, and elephants in a training session were videoed, being encouraged with an ankus to mount one another while one elephant stood on a stool.

On the video, excerpts from a public relations shoot ("Hershey Animal Care Shoot") FEI 45224, there is an elephant husbandry demonstration showing an elephant standing on an asphalt surface following commands with narration by the trainer. One segment of the video shows a stock car with the narrator explaining that elephants stand in these cars for up to three days while in transit.

In a memo to San Jose USDA/APHIS Inspector in August 2002 from [Redacted] (PL 011552), "Zina is kept in isolation from other elephants and is not provided any exercise opportunities (as she is not used in shows and is not allowed to walk from the train unloading to the parking lot - they truck her in). In addition, Zina is kept chained most of the time and exhibits (whether in chains or not) stereotypical behavior of head-bobbing and swaying (available on videotape). To this complaint, a USDA, APHIS, Animal Care Complaint/Search No. 02-81 indicated, "Elephant Zina is isolated and not allowed any exercise. Chained a lot, swaying 'nonstop;' no exercise, 'dead trunk' so not out w/others ..." "Zina - sore foot - not used & chained when other eleph. are in show."

As noted earlier in this expert report a USDA Memorandum (PL 51129) on the "Red

Unit” of Ringling Brothers’ Circus indicates, “The chains on some were so short and taut, that they could not have turned 180, or take a single step forward or backward, much less a few steps, as would be more appropriate.” “I don’t think any two adjacent animals could have lied down at all, if they had wanted.”

In Tom Rider’s response to interrogatory No. 10, he states that Ringling handlers, “...keep them chained for most of the day, and forcibly separate baby elephants from their mothers.” In his response to interrogatory No. 11, he indicates elephants were chained up “24/7,” and that, “We didn’t unload them when we got there, instead we waited until next morning and we had 8 inches of snow.” Further, regards Winter Quarters in Tampa, Florida, “They may have got 15 hours chained and maybe 9 hours out of the chain. But this is the only time when they are not on the road performing.” At the Cow Palace in Daley City, California, “...elephants were chained most of the time.” Further, in Oakland, California, “A baby elephant named Doc was chained exhibiting stereotypic behavior.”

These records illustrate that the common practice of keeping elephants on chains or confined in small spaces that was revealed in the literature review is practiced at the circus (Houck in Fowler, 1993; Schmid, 1995; Brockett, 1999). As further, evidenced below by the medical records for the seven elephants, this conduct wounds, harms, and harasses the elephants by causing and contributing to their feet and musculoskeletal problems and their stereotypic and other atypical behaviors.

The site inspection at Auburn Hills, Michigan on November 13, 2007 (Pages 236-241) revealed that on the train Asian elephants Karen and Nicole were standing in a space smaller than the minimum indoor space guidelines recommended by both the AZA and Elephant Husbandry Resource Guide.^{2, 22} As previously described, Karen had approximately 340 square feet in which to stand on the train and Nicole had

approximately 230 square feet in which to stand on the train. Thus, for the entire time the elephants are transported on the train (as discussed below), they are in what I would consider to be severe confinement.

Even the AZA guidelines also recommend elephants must be kept outside on natural substrates as much as possible, and that institutions should consider designing exhibits that allow elephants outdoor access twenty-four hours a day -- weather, health, and safety permitting. Also that indoor space must provide room for animals to move about and lie down without restriction. At the Auburn Hills site inspection, Asian elephants Karen and Nicole, except for the walk to the sports arena/complex, were maintained on asphalt until evening when they were chained on wooden pallets until the next day.

During the CEC site inspection (Pages 242-246) at Polke City, Florida, on November 29, 2007, Asian elephants Mysore, Zina, Susan, Lutzi, and Jewell were chained on a concrete surface from approximately 3:00 PM until the next day. According to Mr. Jacobson's testimony from October, 2007, these elephants are chained each day between 3:00 and 4:00 PM until 7:00 AM the next day.

For those elephants on the road, a number of hours or days each week they are performing are dedicated to traveling from venue to venue chained on the train. On average the Blue Unit elephants spent the following number of hours on the train: in 2007, an average of 31 hours; in 2006, an average of 26 hours; in 2005, an average of 28 hours; in 2004, an average of 27 hours; in 2003, an average of 27 hours; in 2002, an average of 25 hours; in 2001, an average of 26 hours; and in 2000, an average of 27 hours (Declaration of Michelle Sinnott, page 8). However, the same Transportation Orders from which these averages were computed also show that the elephants can spend many more consecutive hours on the train. For example, in 2007 when the Blue Unit left Auburn Hills (where

our inspection had been conducted) for Tampa, Florida, the elephants spent 76 consecutive hours chained on the train.

The September 29, 2006 affidavit (API 6248) of Archele Faye Hundley stated, "It was a 3-day train ride when we traveled by train from Worcester, Mass to Tulsa, Okla. The elephants and horses were only let out once for exercise during the trip. There was such an accumulation of elephant feces that it took two dump trucks to remove all the waste from their boxcars." "The boxcars are poorly ventilated. The stench from urine and feces is overwhelming and makes your eyes water and your nose burn."

The October 10, 2006 affidavit (API 6238) of Bob Tom states, "The circus train typically only stops twice per day to water and feed the animals. On some 2-day runs, they don't even stop to water the animals. On a 3 or 4 day train run, they only stop once to let the elephants and horses off of the train for about 2 hours to clean the boxcars. During these infrequent stops, we fill up a dumpster and-a-half with waste that accumulates in the four animal cars." "The stench from waste accumulation in the boxcars is horrible and has a strong ammonia smell."

A brief review of the disorders of the seven elephants specific to this case shows the types of conditions that result from maintaining these elephants on solid, unyielding, and unnatural surfaces.

Karen- Age 39 yrs This Asian elephant has been with the circus since 1969. There are little or no medical records available for review prior to the mid 1990s. Karen has had severe lameness in her right rear limb and in 1997 was restricted from hind leg stands. She has had toe nail cracks and chronic nail bed abscesses. In 1999 the heels of her rear feet were worn down to pink tissue, and was noted to drag her feet when walking. Once she slipped during rehearsal causing lameness and discomfort and was taken out of the

show. She has been reluctant to perform some tricks that require hind limb strength, demonstrating residual pain from previous injury. She has had intermittent lameness in the right rear leg, assumed to be a pulled muscle. She has had intermittent lameness of the right hind leg, assumed to be arthritis. She has had eye and dental problems, and as recent as 2006 has had toe nail cracks, and appears sore in her right hip, and noted to be uncomfortable. During the Auburn Hills, MI site inspection the soles of her rear feet demonstrated uneven wear. On her left rear foot she had a vertical toe nail crack. She has elbow and knee callosities. Throughout the evening observation period Karen demonstrated stereotypic weaving behavior while chained on a wooden pallet. Tom Rider's response to interrogatories indicated that Karen was beaten in 1998 and again in 1999.

Nicole- Age 32 yrs This Asian elephant has been with the Circus since 1980. There are little or no medical records available for review prior to 1994. In 1999 Nicole was treated for possible tuberculosis. She has had toe nail cracks, chronic severe nail bed abscesses, and episodes of interdigital swelling, and a history of left front leg lameness, and noted to be extremely stiff legged. She has had stiffness in her right hind leg causing her to go out of the show, thought to be caused from trauma of unknown origin, resulting in swinging her leg in an arc when she walks. Her right front leg has been stiff. She has had chronic bed sore lesions on both sides of her face and left hip. Tom Rider's response to an interrogatory indicates that Nicole was beaten severely in 1998 and hit with a bull hook in the same year. More recently she has had vertical toe nail cracks. During the Auburn Hills, Michigan site inspection, the rear soles of Nicole's feet revealed uneven wear. She had elbow and knee callosities similar to Karen. Nicole had a vertical toe nail crack on the left front foot. During the evening period of observation Nicole was viewed standing while chained on a wooden pallet.

Mysore- Age 62 yrs This Asian elephant has been with the Circus since 1986. There are

little or no medical records available prior to 1999. Mysore has had several episodes of interdigital swelling, toe nail cracks and toe nail abscesses, and bilateral corneal degenerative changes. She has a chronic longstanding swelling or lump on the lateral aspect of the left carpus. She has had acute lameness in the left hind leg and was taken out of the show. An injury was suspected. Mysore has had a draining abscess over the right forehead. During Winter Quarters in 2006 she was on an extended course of ibuprofen. During the site inspection at the CEC Mysore was noted to have callosities on her elbows and knees. At 3:00 PM she was chained for the balance of the day and the night on a concrete floored barn.

Susan- Age 57 yrs Susan has been with the Circus since 1954. There are little or no medical records available for review prior to 1991. Her record indicates she has a swayback conformation and vaginal polyps. She has had multiple episodes of nail bed abscesses and toe nail cracks. She has lost toe nails on her left front foot. She was lame for seven days after slipping off a tub during practice. The right front carpus and elbow were stiff. Her tail was bitten by Minyak, another Asian elephant. She chronically urinates on her rear legs causing dermatitis. She has had episodes of interdigital swelling. Foot radiographs reveal bone lysis and periarticular changes. She has had chronic constipation which has required manual removal of fecal excreta. She has had cellulitis of the left forelimb extending from the carpus to the elbow. She has had colic. She is still stiff in the left front leg and has a hard time laying down. Susan underwent weight loss and became thin and was returned to the CEC. She was started on medication for tuberculosis. Susan was diagnosed with a perineal hernia with bladder involvement and was again returned to the CEC. She has had bed sores on her cheeks and hips. During the CEC site inspection Susan's swayback conformation was notable. She has elbow and stifle callosities. The skin on the inner aspect of her rear legs has scar tissue from previous episodes of urine scalding, where she continues to itch. There were chronic toe nail abscesses on the left and right front feet. At 3:00 PM she was chained for the balance

of the day and the night on a concrete floored barn.

Lutzi- Age 58 yrs This Asian elephant has been with the Circus since 1954. There are little or no medical records available for review prior to 1989. A memo in Lutzi's medical record indicates she was treated for tuberculosis in 2000-2002; however, no entries for treatment were located in her medical file. Lutzi was noted to have a pigeon toed conformation in her front feet, with an abraded or scuffed left front toe. She has had toe nail cracks, overgrown soles, bed sores, and nail bed abscesses.. She was acutely lame during a rehearsal when she stepped on a screw. She stumbled during a walk-out due to Minyak, another Asian elephant, who later bit her tail off. She has a history of weight loss. She has had long standing stiffness of the left front leg. Lutzi was noted to have been hooked under the trunk and behind the leg in an attempt to line her up for the T-mount, resulting in bleeding wounds caused by a bull hook. During the site inspection at the CEC, this elephant demonstrated stiffness in the left front leg. There was a healing bedsore on the left side of her face. There were left and right elbow and stifle callouses. The soles of the left and right front feet demonstrated an abnormal increase in wear similar to two additional elephants at this inspection. At 3:00 PM she was chained for the balance of the day and the night on a concrete floored barn.

Jewell- Age 57 yrs This Asian elephant has been with the Circus since 1954. There are little or no medical records available for review prior to 1991. The medical record for Jewell indicates arthritis in 1991. Jewell's medical records indicate she has had nail bed abscesses, toe nail cracks, and interdigital cellulitis. The nails on her front feet tend to grow laterally. She has had left front leg stiffness, and right front leg stiffness. She has been noted as being chronically moderately lame in the left front leg, possibly related to osteomyelitis. Radiographs reveal bony lysis. There is radiographic evidence of osteomyelitis associated with a sole ulcer. She is consistently stiff on the left foreleg and intermittently stiff on the right foreleg. She will not flex the carpus while walking. She

was placed under treatment for arthritis. The hind sole pads were noted overgrown. She was assessed as having a chronic traumatic injury of the left elbow or carpus. She has had stiffness in her left front leg for several years. She was transferred from the Blue Unit to the CEC, and later transferred back to the Blue Unit. She was noted to have an abnormal gait and walks with a stiff left front leg. She was noted to have muscle pain. She was noted to have osteoarthritis, and stiff in the left front, and ongoing stiffness on the right forelimb. Radiographs show mild osteoarthritis in the foot and carpus. Jewell was returned to the CEC. Jewell developed a jaw abscess that broke open. During the CEC site inspection Jewell was noted to have an abnormal increase in wear of the soles of her right and left front feet as did two additional elephants. She had right and left elbow and stifle callouses. At 3:00 PM she was chained for the balance of the day and the night on a concrete floored barn.

Zina- Age 47 yrs This Asian elephant has been with the Circus since 1972. There are little or no medical records available for review prior to 1999. Zina slipped once while unloading off a train receiving a laceration on the edge of the right front 5th toe nail. While on the Blue Unit she was on medication for arthritis. Tom Rider's response to an interrogatory indicates that Zina had been beaten severely and that he had to cover up about 30 hook wounds with wonder dust. Zina has had toe nail cracks, episodes of interdigital swelling, toe nail abscesses, active tooth problems, and conjunctivitis. She was noted to have an intermittent slightly choppy hind leg gait with shortened strides, mild lameness in hind legs, and suspected mild arthritis of the spine, hips or stifle. She has injured a front foot and was unable to perform. She was noted with significant trunk paralysis. She was noted still not performing and thought to be uncomfortable. At the CEC site inspection Zina was noted to have left elbow and stifle callouses. The sole of the left front foot demonstrated an abnormal increase in wear compared the soles of the rear feet, similar to two additional elephants during the inspection. There was a toe nail crack on a toe of the left front foot. At 3:00 PM she was chained for the balance of the

day and the night on a concrete floored barn.

As noted in the introduction to the veterinary text, *The Elephant's Foot*, "There is a general consensus that lack of exercise, long hours standing on hard substrates, and contamination resulting from standing in their own excreta are major contributors to elephant foot problems."⁸ This has been the experience of veterinarians working with elephants in captivity. Elephants suffer from the cumulative effects of standing on unnatural surfaces provided in captive environments. The average age of the five elephants inspected at the CEC is 56 years. They spend the majority of their day on solid, unyielding and unnatural surfaces. The average age of the two elephants inspected at Auburn Hills is 35 years. They spend nearly all of their time on solid, unyielding and unnatural surfaces. Continuing to keep these elephants under these conditions will exacerbate past and ongoing musculoskeletal disorders, as well as other maladies brought on by the longstanding practice of forcing these elephants to stand on surfaces causing injury, harm, discomfort, pain and harassment.

In the text, *The Elephant's Foot*, the introduction begins with the statement, "Foot problems are seen in 50 percent of captive Asian and African elephants at some time in their lives."⁸ I have personally reviewed the elephants' medical records provided by plaintiffs and found that nearly 100 percent of the defendant's elephants have foot problems and or musculoskeletal disorders. In January, 2007 six of seven Asian elephants on the Blue Unit in Miami, Florida, Bonnie, Sara, Kelly Ann, Juliette, Karen, and Nicole, had toe nail cracks (FEI 44481-44482). The same month in Tampa, Florida on the Red Unit nine of ten Asian elephants, Siam, Toby, Banko, Sarah, Bananna, Baby, Tonka, Luna, and Asia, had toe nail cracks, with the tenth elephant, Assan having a healing nail bed abscess (FEI 44500-44502). The compilation of video footage received from the defendant reviewed (as discussed) on pages 114-131 of this report reveals a longstanding husbandry culture of maintaining, training and performing Asian elephants

throughout their lives on hard, unyielding and unnatural surfaces.

Further review of the elephants' medical records reveals that musculoskeletal disorders are not limited necessarily to older elephants such as the seven elephants specific to this case. The medical records of nineteen of the defendant's Asian elephants that were born in captivity indicate that of the sixteen still living, all but four have had foot or limb maladies. This represents a failure of the Circus' management to recognize that in addition to the seven older elephants specific to this case, prolonged chaining, training, and housing on hard, unyielding and unnatural surfaces is causing injury, harm, discomfort, pain, and harassment, and aberrant behavior in younger elephants under their care as well. Entries noted in the medical records of fourteen of the sixteen Asian elephants include:

Asha- Age 6 -Lame left front.

- Stumbled on rocks in arena.
- Recurrent nail bed abscess.
- Nail bed abscesses

Gunther- Age 6 -Nail bed abscess.

- Lameness.
- Sole lesion.
- Stiffness, peg legged.

Bonnie- Age 14 -Slipped on curb, sole lesion.

- Interdigital inflammation, sole separation.
- Nail cracks.
- Lameness.

Doc- Age 11 -Stiffness.

- Short strided gait on right front at end of performance.
- Toe abscess.
- Lameness.
- Chronic toe nail cracks.
- Stereotypic swaying behavior.

Juliette- Age 16 -Lameness, chronic left stifle.

- Interdigital dermatitis.
- Limb stiffness.
- Uncomfortable during hind leg stands.
- Sprained carpi, stiff front legs.

Kelly Ann- Age 12 -Toe nail cracks.

- Lameness.
- Stiff legged.
- Foreign body in left front foot.

PT- Age 6 -Acute lameness.

- Sloughing toe nails.
- Nail bed abscesses.

Romeo- Age 15 -Chronic lameness for three years.

- Left rear stifle stiff.
- Muscle spasms.
- Limp.

Rudy- Age 6 -Toe nail cracks.

- Multiple lacerations and trauma running through support beams.

Sabu- Age 26 -Stereotypic behavior.

- Right front foot, stepped on stake.
- Eyelid laceration.
- Left front lameness.
- Pressure sore.
- Stiffness.

Sara- Age 7 -Cut inside mouth chewing on chain.

- Forehead abrasion.
- Toe nail cracks.
- Lame.
- Nail bed abscesses.

Shirley- Age 13 -Cut on forehead from trailer.

Smokey- Age 24 -Left front swollen.

- Chronic left hind stifle problem (ruptured cruciate?).

A review of the compilation of training and rehearsal footage, the compilation of RBBB performance footage, and compilation of video footage received from the defendant (Pages 114-131 of this report) reveals that the defendants Asian elephants begin their training at a young age. The training sessions demonstrate rapid repetitive physical movements that are performed by young growing Asian elephants at the CEC and then carried into the performances while the young elephants are in the show units and then into adult life. The training videos show young growing elephants moving quickly always in a counterclockwise direction, climbing on tubs, climbing off tubs, sitting on tubs, standing on rear legs, doing head stands, walking on their rear legs, turning in place, walking on wooden spools, pivoting on stationary stools, kicking balls with the left front

leg, going into sternal recumbancy, laying on their left side, being walked across and sat upon by another elephant, sitting up, and mounting other elephants. These maneuvers are performed rapidly, over and over, as young elephants, then as juveniles, then as adults almost always on unyielding or unnatural surfaces. In his deposition testimony, Mr. Jacobson confirms that the young elephants that are trained at the CEC and taken on the road with the circus are trained in this manner. In his book, Mr. Lewis writes that, "Actually, to perform ring acts an elephant must develop muscles that the ordinary work elephant never uses, just as acrobats develop muscles that laborers and office workers don't know they have." He also states, "Many people have the impression that the elephants enjoy performing but they don't."¹⁶

In my opinion it is reasonable to assume that the repetitious training required to condition young growing Asian elephants for performance, as demonstrated in the defendant's videos and deposition testimony is strenuous and predisposes them to musculoskeletal injury, as documented in their medical records. The injuries appearing in twelve of the defendant's young elephants just noted are a warning sign or precursor to the injuries appearing in the older elephants belonging to the defendant to include the seven elephants specific to this case. Thus, this opinion has direct application to the seven elephants specific to this case.

The long standing practice of confinement and chaining elephants for prolonged periods of time on unyielding and unnatural surfaces is also recognized to cause musculoskeletal and foot disease (Cusuti, B., Sargent, E.L., and Bechert, Fowler, M.E. and Mikota, S.K., West, G.). The defendant's confinement and chaining of elephants for prolonged periods of time on unyielding and unnatural surfaces is not consistent with the standard of care as documented in the American Zoo and Aquarium Association, Standards for Elephant Management And Care, Adopted 21 March 2001, Updated 5 May 2003² and is causing wounds, injury, harm, discomfort, pain, and harassment of the elephants.

While this case focuses upon the use of bullhooks and other instruments on Asian elephants, and the confinement and chaining of the elephants for long periods of time, it is relevant to recognize that the medical records of the seven Asian elephants specific to this case, reveal that Nicole and Susan were treated with medication that has been prescribed for the treatment of tuberculosis in defendant's elephants. A third elephant, Lutzi, according to a memo in the medical records was treated for tuberculosis; however, evidence of treatment for this elephant is unclear. It is also unclear if these three elephants were quarantined while undergoing treatment, or if they were reported to the USDA as undergoing treatment for suspected tuberculosis.

According to the elephant's medical records tuberculosis has been diagnosed in as many as thirteen of the defendant's Asian elephants based upon positive culture results, and six additional elephants by other diagnostic tests in the past ten years. As many as eleven more have been treated due to contact with elephants testing positive for tuberculosis. In at least three more of the defendant's elephants that have died, evidence of tuberculosis was found on necropsy examination, and a fourth with lung lesions compatible with tuberculosis. Of the sixteen Asian elephants belonging to the defendant, referred to previously as born in captivity, and now living, six have tested positive for tuberculosis, and two have been treated for tuberculosis due to contact with a tuberculosis positive elephant.

A partially redacted USDA-APHIS-AC memorandum from Miava Brinkley (PL01405-PL01406) indicates, "_____ also stated that he personally knew that the circus hired a private physician to test employees without reporting any positive results to the health authorities. He said some employees did test positive." In December 2007 a quarantine was placed on the CEC by the Florida Department of Agriculture and Consumer Services Division of Animal Industry Bureau of Animal Disease Control (FEI 45520-45521). This quarantine applied to twenty-two elephants, including the five Asian elephants (Jewell,

Lutzi, Mysore, Susan, and Zina) specific to this case observed during the November 29, 2007 CEC Site Inspection. Mr. Jacobson during his deposition in October 2007 admitted that the CEC (or some portions of it were under a "TB quarantine" by the State of Florida and had been for approximately a year and a half. It is unclear at this time that, were it not for this quarantine, whether the five aged Asian elephants might be touring and performing. Further is noted that on February 27, 2007 the State of Florida Department of Agriculture and Consumer Services Division of Animal Industry placed a quarantine on five Asian elephants at the defendant's Williston, FL Elephant Retirement Facility. At this facility one Asian elephant had a positive tuberculosis culture on postmortem and another Asian elephant tested positive (FEI 48113). This information is relevant as it is an overall indication of the health the defendant's Asian elephant population and is a reflection of the management practices under review in this case.

In evaluating the behavioral well being of the seven Asian elephants specific to this case, it is noted that all seven were taken from the wild at a young age. For whatever circumstance they were removed at an early age from their natural herd families. In the wild, adult females nurture their offspring for years. The offspring nurse for three to five years of age. Calves play with one another and do not reach maturity until fourteen to sixteen years of age (Moss 2000; Owens & Owens 1992, 2006; Poole 2000). Elephants are tactile animals having complex, long term social relationships centered around a matriarchal society. There is a specific group hierarchy that helps to maintain group security and a sense of tranquility. Elephants have social bonds with genetic reinforcement.

A review of the compilation of training and rehearsal footage, the compilation of RBBB performance footage and compilation of video footage received from the defendant (Pages 114-131) reveals that the defendant's young Asian elephants begin their training at a young age. Mr. Jacobson commented that Ringling Brothers starts teaching commands

right away - "You kind of start when they are born."

In the video the trainer indicates the elephant is imprinted to people, and that the young elephants are touched by humans before their moms. Another employee talks about the Center For Elephant Conservation. He indicates at the CEC there are four new babies, and that emphasis is placed on an early bond with humans until they are separated from their mothers. Ringling Brothers employees admitted during their depositions that the young elephants do not generally travel with their mothers on the road with the circus. Of the sixteen Asian elephants belonging to the defendant, born in captivity, and now living, the records I reviewed reveal separation times from the dam of eleven. Of these eleven, six were separated from their mothers at approximately three years of age or less. Five were separated from their mothers at approximately two years of age or less. More information on elephant behavior has become available since the seven elephants in this case were taken into captivity. Because of field research by Cynthia Moss, Dr. Poole, the Owens' and others, normal behavior of elephants is better understood. This research shows that the Ringling Brothers' elephants are separated from their mothers much earlier than elephants are weaned naturally in the wild.

According to Mr. Jacobson's deposition testimony, young elephants are trained from an earlier age. For example, Mr. Jacobson explained in his November, 2007 deposition that an eight-month-old male elephant Riccardo at the CEC was led around by his trunk and would be put "up on the tub" and they would "pick his feet up a little bit." Mr. Jacobson further described Riccardo slipped getting up onto a tub and broke his hind legs and was euthanized, and that during this time he had a rope tied around his trunk which a trainer used to lead him up onto the tub.

Mr. Rider described what life was like for these young elephants once they started

traveling with the circus. In Mr. Rider's response to interrogatory No. 9 he states:

"I first became aware of Ringling's mistreatment of Benjamin right after Winter Quarters, 1997 - end of December, 1997, beginning of January, 1998. I had started noticing that just about every day when Benjamin (Born February 3, 1995) would play around Shirley like a male and female elephant would play, Pat Harned would come out and start yelling at Benjamin to stop and sometimes Benjamin would stop and sometimes he would not and the next thing you know, Pat Harned would start hitting Benjamin with a bull hook, yelling and screaming at him, basically every single day."

In response to interrogatory No. 11, Mr. Rider indicates:

"Harned beat Benjamin the whole time he was with him."

The USDA found (PL 10051) that on the date that Benjamin died, Mr. Harned's handling "of the juvenile elephant 'Benjamin' was not done as expeditiously and carefully as possible in a manner that does not cause trauma, behavioral stress and physical harm."

Further, Mr. Rider states:

"There were five baby elephants there, and I saw Gary Jacobson and Dave Whaley hitting and hooking the baby elephants."

And again, Mr. Rider indicates:

"Troy Metzler used a bull hook in the mouth of an elephant, and hooked a baby elephant named Doc."

Regarding the forceful removal of baby elephants Doc and Angelica from their mothers,

a USDA inspection determined, in a letter to Julie Strauss, Ringling's Vice President and Corporate Counsel, stating that, "...we find that the handling of these two elephants was not in compliance with the Animal Welfare Act regulations," and that, "there is sufficient evidence to confirm the handling of these animals caused unnecessary trauma, behavioral stress, physical harm and discomfort to these two elephants."

Early separation, beating, and prolonged chaining of baby elephants destroys, and/or modifies elephants' natural behaviors which constitutes "take" because it disrupts normal behavioral patterns, wounds, causes physical harm, discomfort and harasses elephants. In my opinion Asian elephants Karen and Nicole displayed dispirited behavior and psychological deterioration during the Auburn Hills inspection. Based upon studies of elephant behavior in the wild compared to the defendant's elephants (Site inspection Auburn Hills, MI and site inspection Polke City, FL) and review of the defendant's compilation videos, it is my opinion that the Circus' management has failed to become enlightened as to the behavioral needs of the elephants.

A three and one-half year old Asian elephant male named Kenny died on January 25, 1998. The calf had diarrhea, appeared moderately dehydrated and passed fresh blood in his stool. A decision was made to, "...take Kenny with the other elephants to the arena as leaving him behind might be more disruptive to his routine." According to the veterinarian on duty, "I advised he should remain in the barn." "He then arrived back from the arena, passed some blood. Drank a little. 1½ gallons, of electrolytes and water and appeared improved. About 1½ hours later he died acutely. Rectal hemorrhage was present at death." (Feld 0028224-0028229)

Following a challenge to some of Ringling's redactions in the medical records, this expert received a copy of an electronic mail message sent by Ringling Brothers' veterinarian Dr. Lindsay with additional information regarding the death of Asian elephant Kenny:

-“Then comes the USDA investigation, the first one ever I think. There was the usual corporate casting of blame in many directions, but Gary W. lost. No one really stood behind him, he eventually quit. We lost the investigation -- oops, I mean we ‘settled’ with the USDA. So I think legal did not do a good job. The terms of the settlement were that we gave about \$10,000 to an elephant orphanage in Asia. This may not have been the best place or best way to help the Asian elephant, but it looked good.”

-“We also agreed to what is called Animal Welfare training. Twice a year for 4 years I think, we had a retired USDA veterinarian come in and read the rules to us - often in Winter Quarters. He was a nice man, with some good info, but a very dry speaker. Dry means boring, Dr. Weidner. There never was an interpreter, so imagine how long he held the attention of the Russian Cossacks, or the Red Show horse crew.”

Directory of Veterinary Care, Ringling Bros. and Barnum & Bailey Circus
(FEI 33503 - Revised)

After reviewing the further released information, it appears Dr. West’s medical judgment was overruled. The further released information indicates a lack of thoroughness in the USDA investigation, and that the Circus’ management did not take seriously their animal welfare training. It is my opinion therefore that the Circus’ management failed to give their veterinarians sufficient guidance, and authority to insure the good health of the elephants.

The impact of the Circus on the health of the defendant’s Asian elephants is revealed in reviewing their medical records. There are numerous examples of annotated entries in the elephants’ medical records which reveal injuries associated with training, travel, and performing, including documentation of veterinary care:

-3/29/90: Siam (1978) Blue Unit- Carpitis, 6 bottles of Adequan IM.

-10/1/90: Dunja- Fought with Said- broke tusk, flush.

-10/2/90: Desy- Tail bitten off by Madras on train trip, necrotic tissue trimmed & tip cauterized.

-5/2/90: Siam (1978) "Same" carpalis, but 10 bottles of Adequan IM.

-4/13/91: Said- Treat burns on skin from diesel fuel.

-7/2/91: Siam (1978) On Adequan IM for three weeks (1/week) Lamé on L elbow.

-6/28/91: Peggy - Knocked down by Mary, aches and bruises, rec'd Banamine, on Red Unit.

-9/23/93: Banana- Fight wounds- Rx antibiotics.

-5/6/94: Red Unit Knoxville: "Congo a little frisky- breaks handlers ribs."

-9/30/95: Mary- Red Unit. Metal object removed from R front, on abts 7 days.

-1997: Teechie knocked down by Susie.

-8/?/98: Blue Unit- location? "Karen bit Sophie's ear during the night." Cleaned and treated.

-9/27/98: "Sophie/Susan have spat. Minor scrapes on each.

-9/?/98: Blue Unit: "Fighting between Sophie/Lechamee."

-10/30/98: Jenny (1952) History- oldest elephant on Unit- chronic hips, "Knocked down" 9/3/97 by another elephant & injured L shoulder & hip lameness predated that incident.

-11/9/98: Angelica at the CEC hurt her leg on pipes in the barn, very lame on the right hind leg. There was swelling around the hock the next day.

-4/13/99: Zina- (With arthritis) History- slipped while unloading off a train about 2 months ago. Small laceration on the edge of right front #5 nail. Possible partial trunk paralysis.

-6/4/99: Blue Unit, Lechamee, "While in the pens with Mina & Camela she received a cut on the top right side of her trunk from Sophie."

-6/9/99: USDA Inspection Report Denver, CO "Susan had two small lacerations on her forehead. Officials stated this injury was caused by another elephant a few days ago."

-7/19/99: Judy- mild stiffness noted in right hind leg while walking. Suspect mild, chronic hip or stifle problem in Los Angeles.

-6/4/99: Camella- One show day/Blue Unit- Lechamee while out in pens with Mina and Camella, she received a cut on the top right of her trunk from Sophie.

-6/13/99: Blue Unit Shirley received a cut on her forehead from the edge of the trailer. It was treated with biozide gel.

-9/30/99: "Prince & Calcutta fighting pretty good today! Had to chain Calcutta up. Still fighting!"

-10/1/99: "Prince outside, Calcutta II inside to avoid fighting."

-10/9/99: "Assan, Banko, Siam started fighting in the ring during the second show.

-10/15/99: "Calcutta II- On PZA, tail tip, oral & anus trauma from young male, pen mate.

-2/21/00: Zina & Minyak fighting. Minyak stiff in RF leg and walks out of it.

-3/1 & 6 & 14/00: Suzi charged/charging Tilly this morning as Tilly walked by causing me to change his position in barn and daytime pen.

-3/5/00: "Suzie was charging Tommy, causing me to change his position in barn and daytime pen.

-3/14/00: Minyak bit Susan's tail.

-3/31/00: Minyak bit Minnie's tail.

-3/31/00: Minyak bit Minnie's tail, cleaned, wrapped, & ibuprofen given.

-4/1/00: Minyak bit Minnie's tail this morning. Sonny stopped the bleeding and bandaged the tail. Distal 5 cm has been crushed and skinned. Tx amputation- removal of 5 cm under local anesthesia.

-5/14/00: All elephants walk to train after 5:00 PM shows (1.2 mile walk) loaded on train, Minyak's RH leg a little stiff.

-5/24/00: Minyak's RH leg still a little stiff, Springfield, Blue Unit.

-7/5/00: Blue Unit Las Vegas- Walk from train to buildings: "Birka was out of breath on walks, had to stop half way for about five minutes."

-8/10/00: Blue Unit, San Diego- Mild lameness (stiffness in the carpus) noted in the RF leg. The problem is worse after rest and improves with exercise. Note: Zina hit Jewell with her head this afternoon while they were in their exercise pen. PE Jewell has a stiffness and lameness of the left front leg. She is weight bearing and no swelling is noted. Assess: Jewell- arthritis of RF carpus. Acute traumatic injury of the LF leg. Tx Banamine.

-2/20/00: Travel day- Blue Unit- Richmond, VA (Load) in, On trip Birka scratched top of head on stocks.

-5/31/00: Blue Unit Wilkesberry , PA, walks to train. Comment: "Birka had a hard time on the walk, there was a very steep grade about ¾ mile, at the end she had to stop two times to catch her breath."

-6/18/00: Austin, TX Blue Unit- walk to train after show, "Walk after 1:30 show (HOT) Birka was a little out of breath on walk but didn't have to stop."

-3/21/01: Jewell- Lameness L front in Washington, DC. RI spoke to Brian French & asked to consider changing animal's "act" to limit the numbers lay downs & sit up tricks when both require the use of the sore leg. Assess: likely osteoarthritis cause.

-4/?/01: Judy- Chronic arthritis in NYC, lameness notable to public with Red Unit.

-4/1/01: Judy- History- noted to be mildly lame (not flexing carpus) in right foreleg during performance. This elephant was noted lame a few weeks ago also. Trainer feels

problem is behavioral and is not concerned.

-4/11/01: Judy- History lameness. RF leg lameness noted during performance and walks. The carpus can be flexed and extended with no apparent pain. Carpus is not flexed while walking. After a long walk the lameness is less noticeable. Assess: Chronic arthritis.

This lameness is noticeable to the public, New York City.

-5/2/01: Cellulitis & stiffness L front leg. Susan has a laceration on forehead caused by another elephant a few days ago.

-6/26/01: "Juliette was a little stiff in back legs, both sides. ("Maybe a bad train run.") "Sue was lame and stiff when unloaded from the train for the animal walk (front left leg high)."

-6/27/01: Juliette better, Sue still stiff hard time laying down.

-6/28/01: Juliette better, Sue still stiff gets better with walking than stiff when standing.

-7/24/01: Doc- "Still stiff in right front leg." Blue Unit.

-8/9/01: Bonnie- A few weeks previous (on Blue Unit) slipped on curb, sole swelling- sole lesion flushed (sole fissure).

-8/16/01: Prince Tusk- Bit Calcutta II 's tail off & traumatized her anus with tusk. Placed in pen with Siam instead.

-10/4/01: "Elephant fight (several elephants involved). There are apparently no medical issues stemming from the fight which occurred over the hot wire in the outside pens. The

major concern is the potential for elephants to get loose during a fight, or injury to elephant handlers or public. Solution to the problem suggested during the meeting was to limit access to outside pens to times when multiple handlers that can get around the elephants can be present to observe elephants. Another suggestion was to place buffer zone of several feet of space between adjacent pens of elephants known to fight. I consulted with Gary Jacobson at the CEC regarding this problem, and he felt that separation of contrary elephants would be useful since elephants would no longer be within striking distance of one another. He also suggested that increasing the number of strands of hot wire in the fence from one to 2-4 would also help.”

-11/1/01: Zina- choppy leg gait, on Adequan. Blue Unit. Exam: intermittent choppy leg gait, with shortened strides. Trainer notes worse while laying down or stretching out. Tx: continue Adequan, IM every 5 days.

-11/22/01: Sarah- Examine back. Questionable soreness and swelling on back muscles. Dr. Houck examined elephant. Concurs that she has sore, mildly swollen back muscles.

-1/4/02: Vicky- Red Unit- Mildly lame RF, Re'cd Banamine.

-2/1/02: Luna- Charlotte, NC. History of matting slipping beneath elephant during performance and now favored L hind leg after falling. Topical treatment & Banamine administered & instructions to repeat banamine this evening prior to transport.

-2/11/02: Regards Banko- Slipped getting up- mild lameness.

-2/14/02: Baby (Baby II?) Bite wound trunk tip. Acute crush wound on lateral left tip of trunk.

-3/9/02: Regards: Banko- Lameness L rear, "Long mount during finale."

-4/7/02: Angelica slips on sand during walkout in New York City and initially holding leg off ground but within a few minutes no lameness is seen or reported by trainers.

-3/15/03: Baby (Baby II?) Tripped going down ramp, scrape knee.

-2003: Sabu- "Mindless walking- a path in yard- 2 hours, 1½- 3 hours." Dr. Isaza visit. Rx glucosamine & etogesic, "Charged Harry at gate."

-5/12/03: Juliette- Past several weeks- episodes of shifting or diffuse stiffness in back, ribs, hips or upper hind legs. Seems uncomfortable during hind leg stands. Treatment with short course of Banamine. Suspect injury to back, ribs, or hips that gets aggravated with exercise. Recommended rest.

-6/15/03: Sarah- "Fell down hard on her knee on the boards. Cut up her knee." Red Unit.

-6/14/03: Sarah- "History- wound that occurred from an elephant fight last night." PE skin wound, 2-3 cm on cranial aspect of the right knee. Mild lameness noted while walking.

-7/15/03: Sarah- Red Unit Los Angeles. History skin wound right knee, mild firm swelling, no exudates. Treatment continued flushing wound with hose once daily until healed. Flush recto-vaginal fistula daily to keep it clean.

-2/15/04: Angelica aberrant behavior/resolving facial/frontal scratches from tusks on conspecific.

-3/27/04: Juliette- Surface abrasions on outside of right front foot caused by rubbing leg on cement post. Blue Unit.

-6/9/04: Ashville, NC Report by Brenda Sears, Animal Services Supervisor, Ashville police Department. Comment on report, Regards Doc: "The older elephant Doc displays stereotypy of weaving. Ms. Keeley explained that elephants get breaks from the road in increments of a few weeks at a time and went on to explain after a couple more years on the road Doc would be 'retired' for use in the breeding program."

-6/12/04: "The animal (Doc) was also displaying the characteristic weaving behavior described by officer Sears."

-9/9-13/04: Lutzi- Tail bit by Minyak the previous week.

-6/16/04: "Baby (elephant) skin irritation on L face and L caudal flank. I am concerned about the head piece rubbing on the area on her cheek, Bill feels that it will respond better without treatment." Handler noted continued weight loss based upon loosening of head piece. She seems very lethargic, and Bill notes ADR.

-6/21/04: Red Unit Little Rock, ARK- Baby (Baby II?) History of intermittently lame. Healing decubital ulcers on right side. Elephant handlers report she seems "confused." Ulcers healing nicely. Currently using silvadene cream. Lameness is hard to detect sometimes, and severe at others. "From a conversation with Dr. Lindsay, we will initiate ibuprofen. Currently none on the unit, and will order new supply."

-7/?/04: Doc- Stiff. Started on Adequan, "short strided" R front at end of performance.

-8/4/04: Doc appeared lame/stiff in FR after exiting transport trailer (Gold Unit).

-8/17/04: Doc- "SI lameness RF by end of second show."

-9/14/04: Angelica- Lameness exacerbated by performing the "ferris wheel" which requires hind leg strength. Currently not in show. Angelica is active but displays moderate swinging leg lameness in the right hind leg, can put full weight on the right hind leg without difficulty. Diagnosis: suspect hip, lower back, soft tissue injury?

-11/5/04: Minyak- Dr. Houck thought Minyak looked a bit melancholy. Today she was not shaking, stiff or lame. The ventral edema is much improved. Dr. Houck felt that the combination of long train travel, onset of cold weather, and the recent weight changes (up to 11,500 in California, 8 weeks later, back down to 10,500) may have been hard on her. He told me that elephants grieve and asked if there had been any changes in Minyak's life style. The only thing I could think of was that Angelica left, but Troy said that there was no love lost between them.

-2005 to present: - Banana: chronic minor stiff, Banamine authorized by Dr. Weidner.

-1/14/05: Asha- Lame L front, "Stumbled on rocks in arena." Treated with Bute paste, ibuprofen & Adequan.

-7/4/05: Phoenix, AZ Banana- Bitten by Zara on L ear. Obs: cool, purple and painful area about 4" in diameter at base of ear, plus inch long laceration: assess- probably will lose section of ear.

-8/31/05: Gilda/Gildah- Deceased- no necropsy report found in this elephant's record.

-9/2/05: Letter to Chester A. Gibson, DVM, at USDA regards Gildah living in solitary at the Mirage & "...sick for weeks and no necropsy was performed."

-12/5/05: Angelica stiff because of arrangement of the arena. The elephants have not been able to exercise. Dr. Weidner authorized the use of Banamine.

-12/15/05: Dr. Jiminez examined the elephants after ran into bleachers backstage. Per Dr. Jimanez- Elephants examined due to trauma of running thru a metal support beam. Angelica had a right hind laceration on the dorsal aspect of the ankle, and multiple lacerations on bilateral sides of the body. Rudy followed Angelica and also sustained similar cuts and scrapes on the left sides of body at shoulder and abdominal areas. Angelica was startled by a barking dog in a sky kennel in Puerto Rico on December 12, 2005.

-2/18/06: Banana- Vaginal polyps unchanged-non treatment. Red Unit-lameness L front (history of) Sound today. Assess: Probable arthritis. Plan treat as needed with ibuprofen.

-3/4/06: "Peg legged again." (on Gold Unit) Per Dr. Weidner, "...NBA is uncomfortable and that's why Gunther is stiff." "...if Gunther is peg legged he should not perform..." "Gary said he will take Gunther out of the show and put Doc back in."

-5/20/06: Angelica is favoring back left leg and will not be performing the "walking leg mount."

-7/13/06: In Augusta, GA Angelica was lame in the left hind slightly during the performance, especially when circling to the left.

-9/6/06: Sarah- Kansas City, MO Red Unit- Obs: abnormal stringhalt-like gait on RH. Also vertical nail crack of RH/D4, LF D3 and circular lesion on sole. Assess: gait suggests stifle issue. Gait appeared smoother after morning. Plan: discuss NSAIDS with trainer.

These last annotated entries in the elephants' medical records describe patterns of injuries associated with historic, longstanding and ongoing stress of travel and performance on unyielding and unnatural surfaces. A USDA Inspection Report in 1998 from an inspection at the Arco Arena in Sacramento indicated, "Several animals have had arthritis for many years (at least 12). PL 10975 Circus veterinarian William Lindsay in a 1998 letter indicated, "Several elephants, Leechame, Minnie and Sophie exhibit varying degrees of limb stiffness. According to the veterinarians previously caring for these elephants, this stiffness has been present for the last 14 years, and has remained consistent. I have personally been providing veterinary care to these elephants since April of 1998, and also have noted this stiffness. My opinion is that these animals have been comfortable for many years, are not receiving medication, do not demonstrate pain on palpation, nor exhibit the classic 'head or hip drop' associated with actual lameness." FELD 0000872

According to a review paper by Church, "Chronic pain typically lasts beyond the normal time required for healing following tissue trauma and is often associated with a pathological condition that does not heal. Examples of chronic pain include low back pain, phantom limb pain, fibromyalgia syndrome, and arthritis." (Church, J.S. 2000 in Understanding Pain And Its Relevance To Animals)

As noted earlier in this report according to Roocroft and Oosterhuis, "Another condition that can lead to foot problems is arthritis. The soreness in an elephant's joints will result in decreased joint flexibility. This will lead to an altering of the elephant's gait and, as mentioned before, abnormal pressure on the nails and pads." (Cusuti, B., Sargent, E.L., and Bechert, U.S. eds. 2001. The Elephant's Foot).

Further, regards stiffness in elephants' limbs, Roocroft and Oosterhuis indicate, "When an elephant injures a leg, it will refuse to flex the joints and walk with a stiff leg. The end

result in many cases is a permanently stiff leg, regardless of the original problem. When the elephant walks on this stiff leg, it will cause abnormal wear on the medial edge of the pad of that foot.”

In the annotated entries from the medical records there are examples of aberrant behavior, acute and chronic musculoskeletal maladies, injury from travel, performance and being maintained on unyielding and unnatural surfaces. There is documentation of elephants traveling and performing with arthritis and conformation abnormalities. There are examples of elephants being prescribed non-steroidal anti-inflammatory medications (Banamine, Rimadyl, EtoGesic, and ibuprofen), NSAIDS, which relieve pain, both acute and chronic, and provide analgesia. Treatment for relief of pain is appropriate. What is inappropriate in my opinion is that the elephants placed on this medication were still maintained on the unyielding and unnatural surfaces that directly or indirectly caused or exacerbate their maladies. Under these circumstances these medications provide temporary relief. There does not appear in the medical records recognition as to the cause of musculoskeletal injury or the attempt to curtail these injuries and associated maladies. In a USDA, APHIS, AC Animal Welfare Complaint report in May 2006, it was noted concerning circus veterinarian, Dr. Wiedner, “She is also aware [of] the toe cracks and said vertical cracks are rarely a problem and that Billy is taking good care of the feet.” _ (As noted previously in January 2007, between the Blue Unit and the Red Unit, fifteen of seventeen elephants had vertical toe nail cracks.) In the veterinary text, *The Elephant’s Foot*, Roocroft and Oosterhuis indicate, “Cracks are normal in the pads of an elephant’s foot, but not in their nails. When cracks occur in the nails, they demand attention to prevent the development of serious problems. (Cusuti, B., Sargent, E.L., and Bechert, U.S. eds. 2001)

Additionally, “Nail cracks are usually the result of a repetitive movement that puts abnormal pressure on the nail. The environment of the elephant’s enclosure can

exacerbate this pressure. An example is the stereotypical 'rocking' elephant, where an elephant stands in one place on a hard surface and rocks back and forth. This puts abnormal pressure on the lateral toes of the front feet, eventually leading to nail cracks." (Cusuti, B., Sargent, E.L., and Bechert, U.S. eds. 2001)

A routine USDA Inspection Report in May 2006 indicated, "The elephant Jewell has an abnormal gait and walks with a stiff left front leg. There were no records available initially during this inspection regarding this condition including an assessment by the attending veterinarian. During the inspection the attending veterinarian sent documentation that she examined Jewell last week and determined that she was normal, no lameness was observed. Additionally the veterinarian stated that any stiffness on the left front leg disappeared within a few minutes of walking around and requires no treatment. During this inspection Jewell was walking in a line with the other seven elephants for about seven minutes. The stiffness in the left front leg did not disappear as she walked." FEI 49027 Arthritis is documented in Jewell's medical record in 1991. FELD 0006980

Jewell is one of the Asian Elephants specific to this case and currently at the CEC. Another Asian elephant, age 50 years, Banana was noted on the Red Unit in in Anaheim, CA on July 23, 2007 with lameness in the left front carpus. (FEI 46209) This elephant was noted having toe cracks and lameness the previous month and was treated with Banamine on three occasions. The Lexington Humane Society Visit Patrol Report on July 12, 2006 notes, " 'Banana' left front leg limp from arthritis at 50, years of age, 'Vet tech Coleman says 'Banana' is 50 years of age and suffers from a mild arthritis.' " FEI 44458-44461

There is no recognition in the elephants' medical records by the Circus' veterinary staff of treatment and prevention of injuries, where it is reasonable to assume, caused by

use of the bullhook. For example, a memo from veterinary technician, Heather Riggs: July 25, 2004: Memo from Heather Riggs to Drs. Lindsay, Wiedner and Case, List of injuries I was able to see without approaching and without help of handlers:

Siam- #2- 1-2 cm lacerations on front of trunk.

Baby- #1- 1 cm laceration on front of trunk.

#1- 3-5 cm laceration and #1- 2-3 cm laceration behind the left ear

(Bleeding enough to drip.)

Asia- #1- 1 cm laceration on front of trunk.

Assan- 6-8 cm laceration behind left ear, bleeding (This is pointed out by 2 members of the public.)

2-3 cm laceration left tusk sulcus.

Banko- 1 cm laceration on front of trunk.

“Please let me (Heather Riggs) know what I should do.” FEI 16615-17.

In another example, when the elephant Lutzi was reported to have “dripped [blood] along the length of the rubber and all the way inside the barn” after being hooked a few times during a performance on or about January 7, 2005 (FEI 15025), there was nothing in her medical records to document these wounds. Similarly, during the summer of 2006 when two elephants on the Red Unit fought and were punished by elephant trainer Sacha Houcke, several former employees reported that at least one of the elephants dripped blood from her bullhook wounds (API 6241-48; API 6235-40). However, again there is no record of these wounds in the medical records of elephants on the Red Unit at that time.

There is no recognition in the elephants’ medical records by the Circus’ veterinary staff of musculoskeletal injuries and other maladies from prolonged chaining on unyielding and unnatural surfaces. As noted previously, more recent information regarding the length of time the elephants spend on the train appears in a number of “Transportation

Orders” spanning from 1997 through 2008. This information indicates Blue Unit elephants spent the following number of total hours on the train:

in 2007--1182 hours/about 49 days
in 2006--1103 hours/about 45 days
in 2005-- 965 hours/about 40 days
in 2004--1295 hours/about 53 days
in 2003--1003 hours/about 41 days
in 2002--1050 hours/about 43 days
in 2001-- 1023 hours/about 42 days
in 2000-- 1292 hours/about 53 days

Wounds from the use of bullhooks on the elephants, as well as the impacts of their chaining and confinement are not routinely documented in the medical records of Ringling Brothers’ elephants. It is my opinion there has been a failure of the defendant’s veterinary staff to recognize, acknowledge and remedy an unacceptable standard of care for these elephants, and exercise leadership in advocating appropriate corrective measures as documented by the American Veterinary Medical Association’s AVMA Animal Welfare Principles,³ and others (Church, J.S., McMillan, F.D., Miller, L. F.D., Radostits, O.M.).

A review of references, and personal experience applied to the evidence in this case reveals the defendant is practicing a standard of care which wounds, injures, harms, and harasses the Asian elephants in its care.