



# Thermal Imaging Report Doc



*Thermal Imaging completed by  
a Certified Thermographer  
Authorized with the EquineIR™  
Network.*



*Interpretative results  
completed by Licensed  
Veterinarians in contract with  
Integrated Equine Infrared.*



**SoCal Infrared Thermal Imaging Services**  
P.O. Box 1413 Bonsall, CA 92003

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**PATIENT:** Doc

**THERMOGRAPHY DATE:** November 13, 2014

**IMAGING TIME:** 10 am

November 18, 2014

Dawn Rockwell  
7241 Voorhes Lane  
Ramona, CA 92065

Dear Dawn Rockwell:

EquineIR was recently requested to perform a full body thermal imaging scan of: **Doc**

The following photo report was completed by your EquineIR™ Certified Thermographer and all interpretative results were channeled through interpretir.com and subsequently formulated and input by a licensed veterinary team member with Integrated Equine Infrared.

The interpretation is intended to aid your state-licensed veterinarian in providing a diagnostic or treatment protocol. All follow-up testing and treatments should be conducted and administered by your primary veterinarian. The interpretation provided is based solely on the conditions at the time of survey and the thermal images included in this report. Thermography is a diagnostic tool that measures heat emitted from the surface of the patient. The thermal imaging camera converts infrared energy into a visible image. Emitted heat is related to circulation; as such, the thermal camera can help detect areas of inflammation as well as decreased circulation. Thermal symmetry is key, so you compare one anatomic area with the same area on the other side. The EquineIR™ report is prepared in this manner. It should be understood that correct patient preparation and environment are vital to a successful survey. Your EquineIR™ technician is also a Certified Infrared Thermographer and has been trained in the proper use and the proven techniques of thermal imaging as it is used with horses. There are however certain situations which may reduce the quality of the survey including the improper preparation of the horse prior to technician's arrival. The interpreting veterinarians who review the imagery base their findings and recommendations on information provided, so it is critical that proper care be taken in the preparation process to ensure success.

Thermal imaging is a physiologic modality and should not be relied upon as the sole diagnostic tool. A complete clinical examination by your state-licensed veterinarian is always recommended for the best diagnosis and follow-up treatment. This Report is not a definitive diagnosis of any illness or disease. It is intended for use only by licensed veterinary professionals to evaluate patient health, diagnose medical conditions, and provide treatment. It is not to be used by individuals for self-diagnosis or self-evaluation, nor for the diagnosis or evaluation of other non-qualified personnel. This report does not replace, nor is intended to replace a complete clinical evaluation by your state-licensed veterinarian. Under no circumstances will EquineIR™, Integrated Equine Infrared or its affiliates be held responsible for illness, injury, or death to the patient as a result of the information contained herein. This report does not replace, nor is intended to replace a complete clinical evaluation.

Your EquineIR™ Technician looks forward to working with you in the future. If you would like to set up an ongoing maintenance imaging program for your horse(s), we can arrange this at discounted rates along with multiple horse discounts. Please call our office with any questions as we would love to assist you in your success.

Sincerely,

Peter Hopkins, SoCal Infrared  
Level III *Certified Infrared Thermographer #4424*

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## EQUINE/CLIENT INFORMATION *(provided by client)*

**CLIENT NAME:** Dawn Rockwell **MAILING ADDRESS:** 7241 Voorhes Lane, Ramona, CA 92065

**CLIENT EMAIL:** rockydawn24@gmail.com **CLIENT PHONE:** 760-390-3025

**HORSE NAME:** Doc **HORSE AGE:** 10 **HORSE BREED:** AQHA **HORSE PRIMARY USE:** Trail

**VETERINARIAN:** Miska Padgent "Giddee Up" **LAST VISIT:** 3 Months,

**REASON FOR VISIT:** Lamé

**CURRENT MEDICATIONS:** None

**FARRIER:** Juan Aquhian **LAST VISIT:** 9-25-14

**LAST TRIMMED/SHOD:** Straight Shodd **TRIM/SHOEING CYCLE:** na

**IF LAME, HOW LONG:** 6 Months

**TREATMENTS:** na

**REASON FOR SCAN or HISTORY RECEIVED:** Right Shoulder suspect

## SURVEY INFORMATION

**THERMOGRAPHER:** Peter Hopkins **INFRARED CERTIFICATION #:** 4424 **INFRARED CAMERA MODEL:** Flir T420

**NUMBER OF THERMAL IMAGES SUBMITTED:** 30

**WEATHER:** partly cloudy/overcast **APPROXIMATE TEMPERATURE:** 63 degrees °F **HUMIDITY:** na % **IMAGING LOCATION:** Stall

**CLIENT SURVEY QUESTIONNAIRE:**

**EXERCISED PRIOR:** Yes **HOW LONG:** 30 minutes **WHEN:** 8:30 am **TYPE OF EXERCISE:** Jog

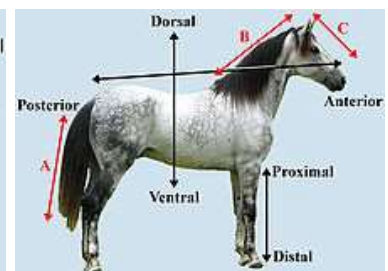
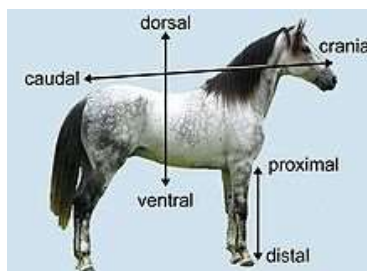
**BOOTS OR WRAPS ON HORSE?** No **HOURS SINCE:** Na **FLYSPRAY OR LINIMENTS APPLIED WITHIN 24 HOURS:** Yes 18 hours prior

## INTERPRETATION INFORMATION *(Completed by Veterinarian)*

**INTERPRETATION TYPE:** Full Enhanced Survey

**DATE OF INTERPRETATION:** 11/18/2014

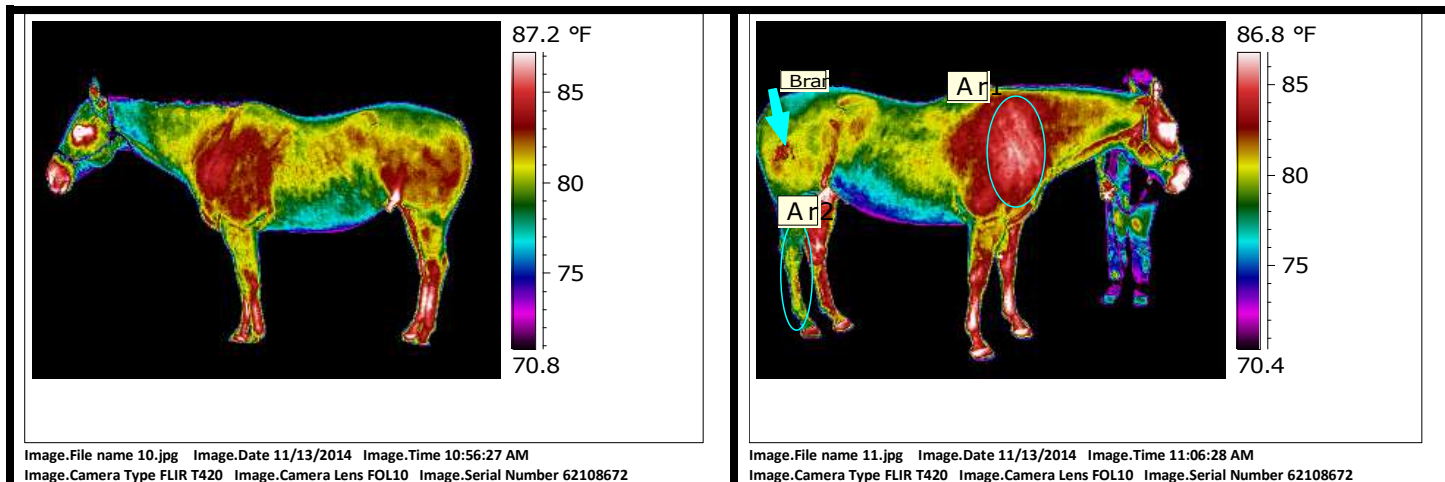
**REVIEWING VETERINARIAN:** Dr. Debra K Tibbitts



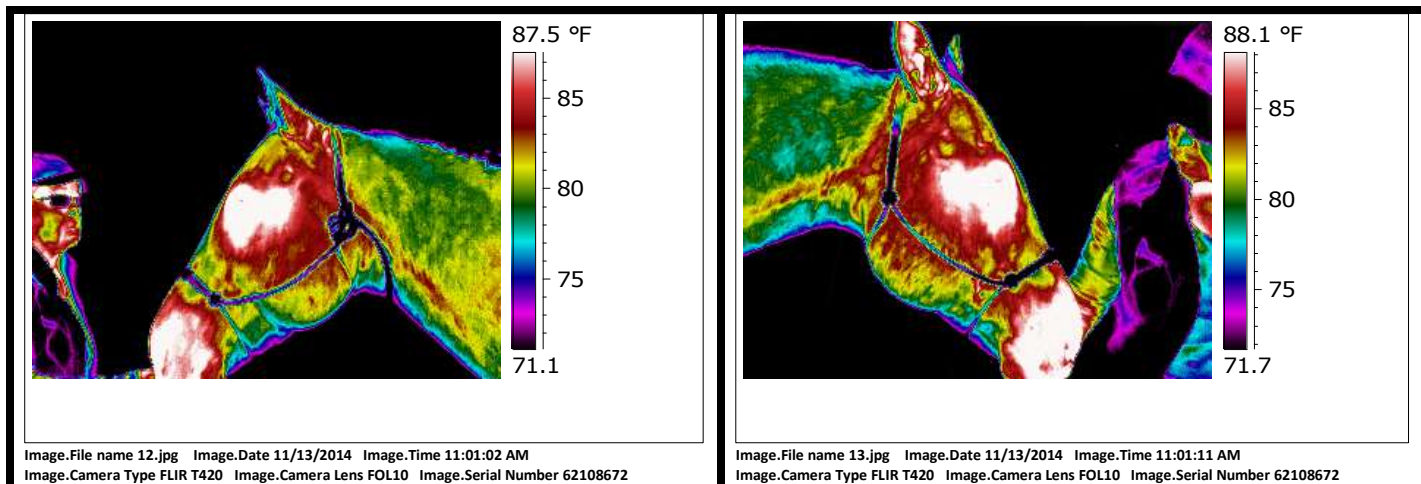
PATIENT: Doc

THERMOGRAPHY DATE: November 13, 2014

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Focal view is limited; comments are based on images provided. There appears to be asymmetry in the shoulders with heat greater on the right. Direct palpation of the cranial aspect of the shoulder and motion palpation of the scapula, C7 and first rib recommended. Chiropractic lesions may be present or bicipital bursa inflammation. Asymmetry seen in the hind limbs with decreased heat right hind – off-loading of the right hind may be present.



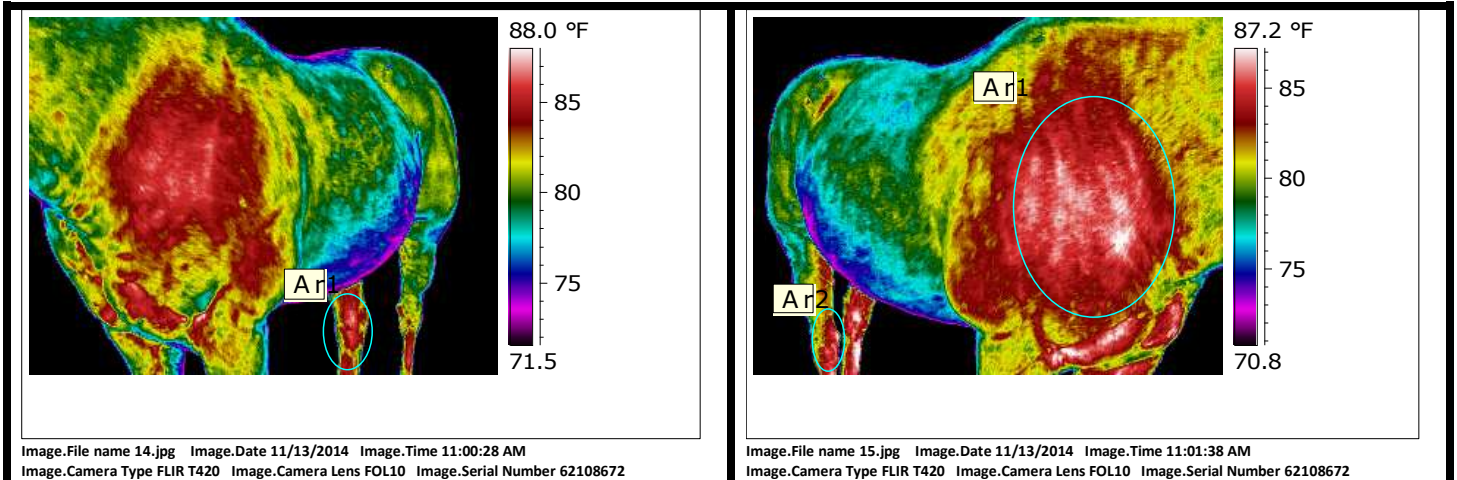
NSF: No Significant Findings



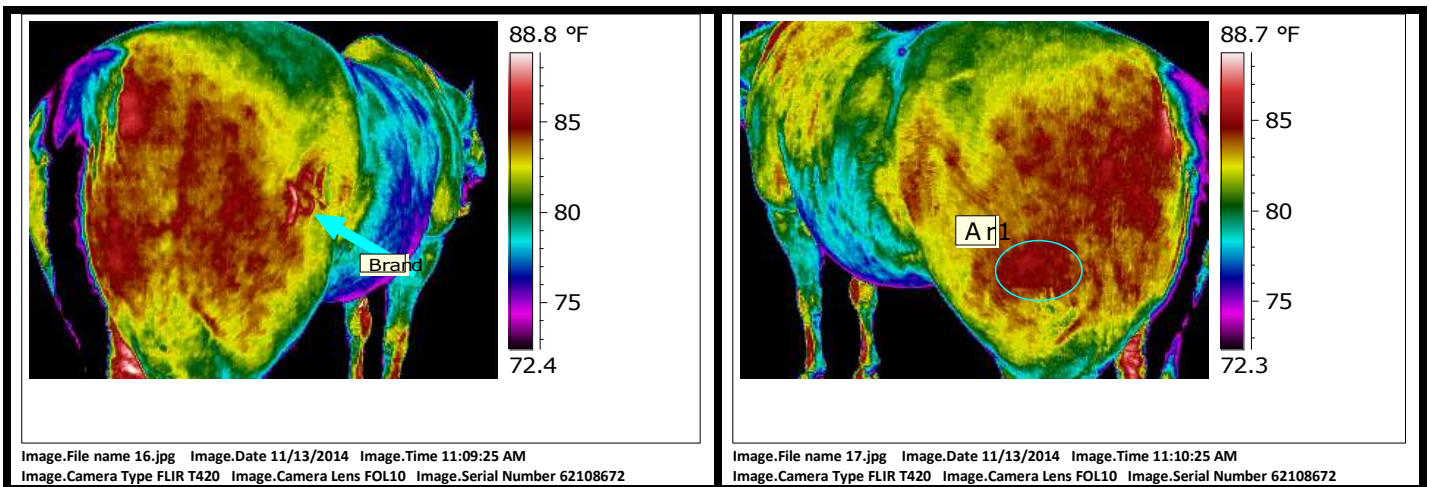
**PATIENT:** Doc

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Asymmetry in the shoulders with heat greater on the right. See previous comments page 4, images 10/11. Increased heat right hock, possible tarsitis present. Gait analysis, direct palpation, motion palpation and flexion tests recommended for evaluation. Radiographs may also be warranted based on examination findings.

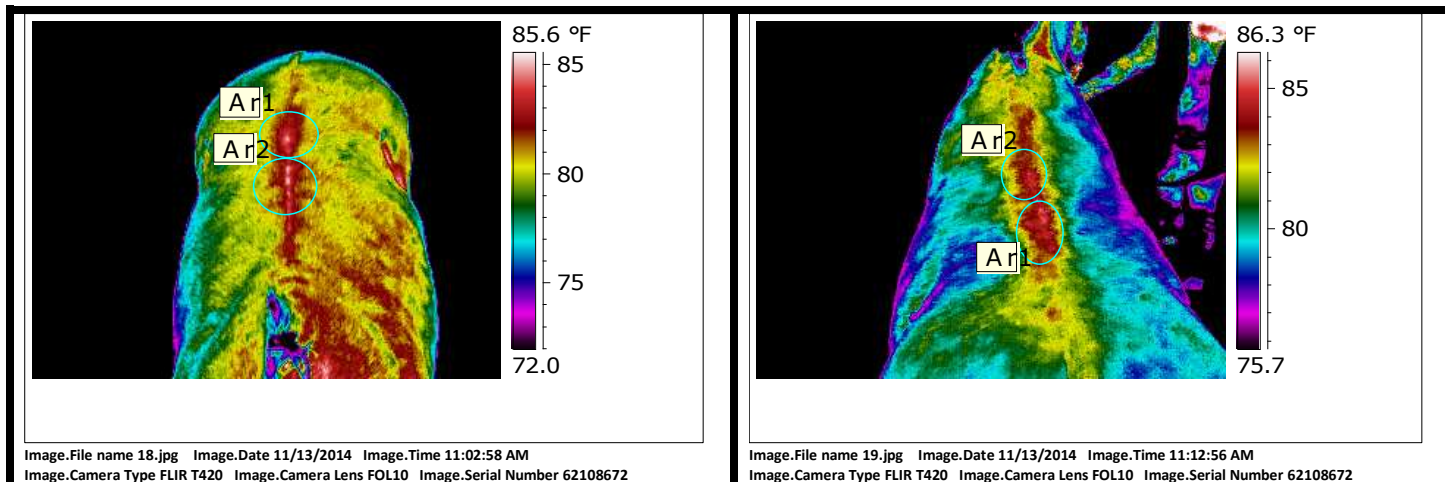


Areas of increased heat in image 17 possible skin irritation? Palpation recommended.

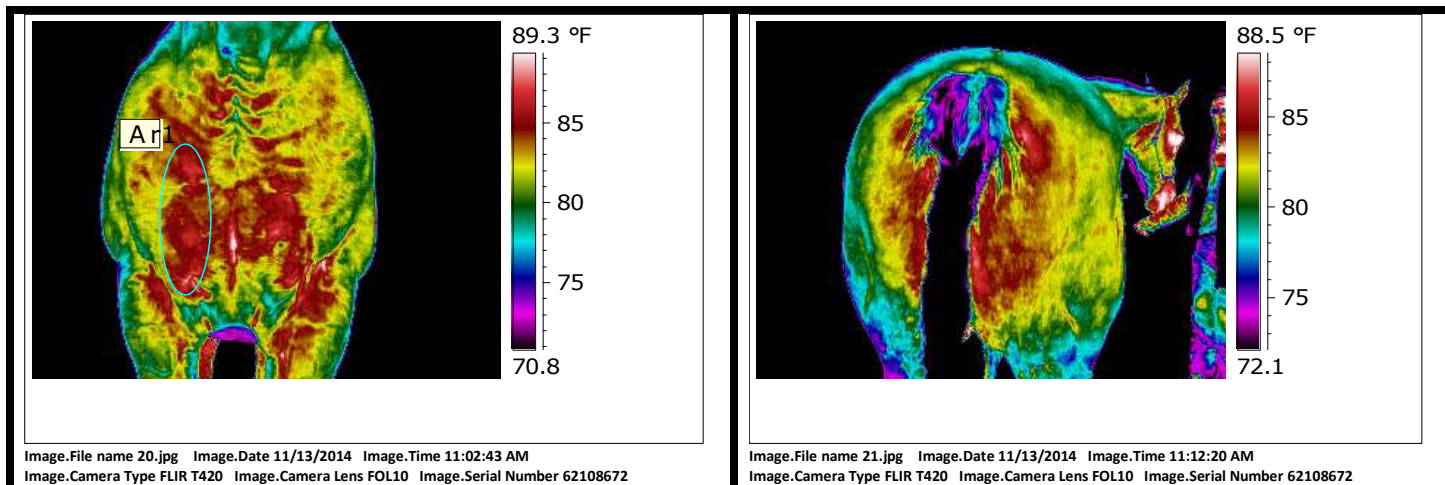
PATIENT: Doc

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Areas of increased heat in the thoracic and lumbar spine indicating possible chiropractic rotations/fixations. Direct and motion palpation of the vertebrae recommended for further evaluation.

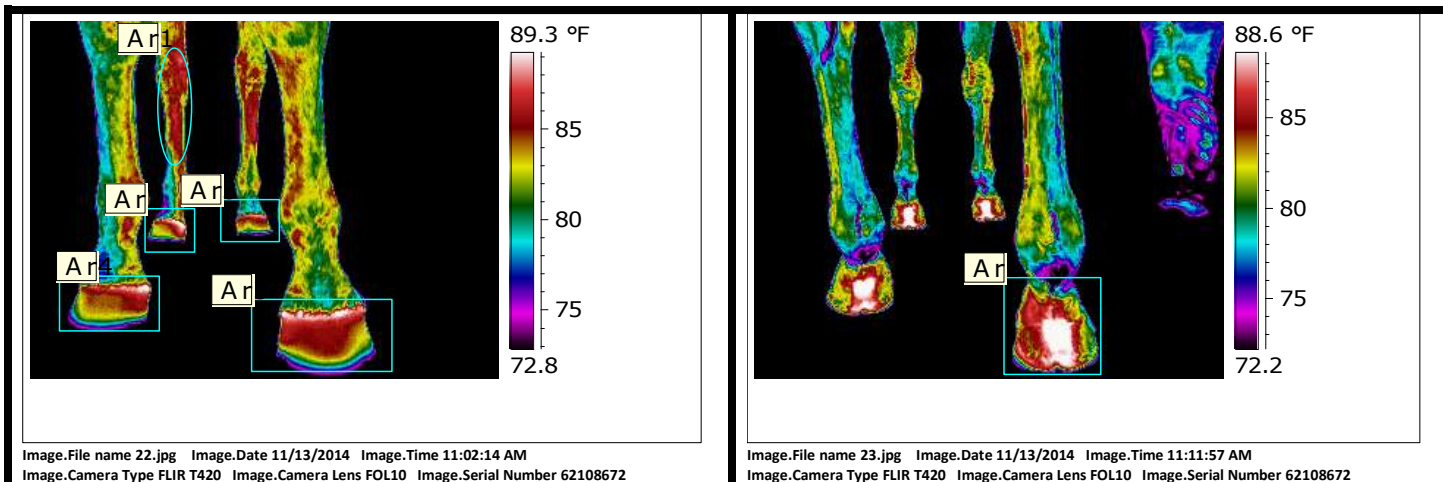


Asymmetry seen in the chest with heat greater on the right. Direct palpation recommended checking for inflammation, also motion palpation of the first rib area checking for restrictions/pain response.

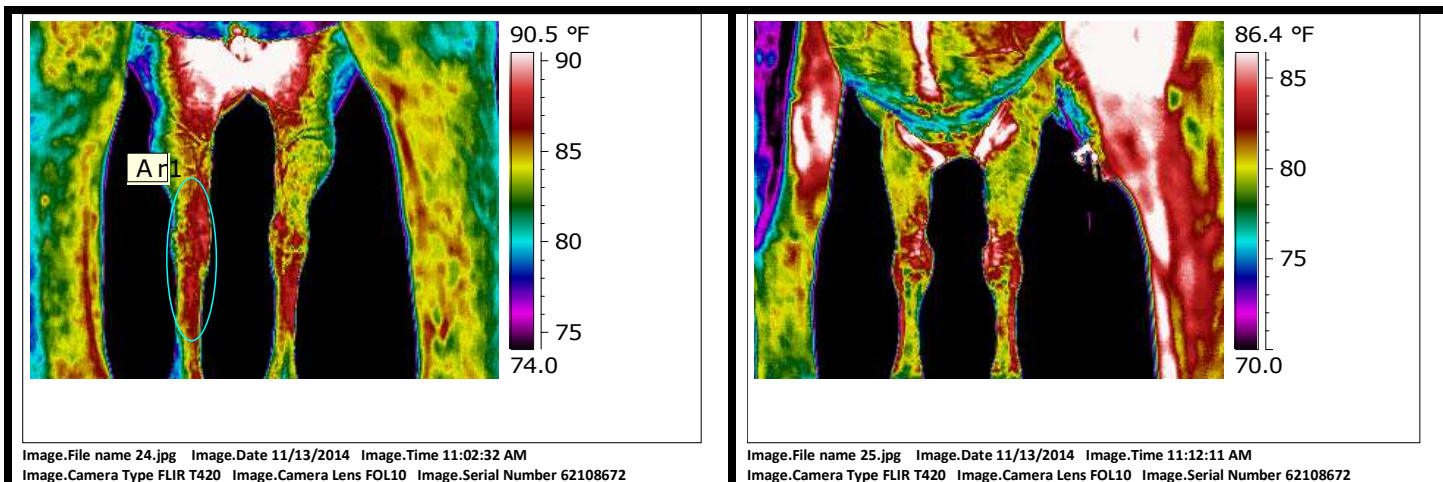
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Increased heat left front foot with uneven heat patten and pressure, there also appears to be some off-loading of the right front onto the left front. There is uneven pressure at the coronary bands of both hind feet. Heels appear to have increased heat with uneven pressure seen in the right hind foot at the heel. There is increased heat in the right hock with extension down lower limb. See previous comments page 5, images 14/15.



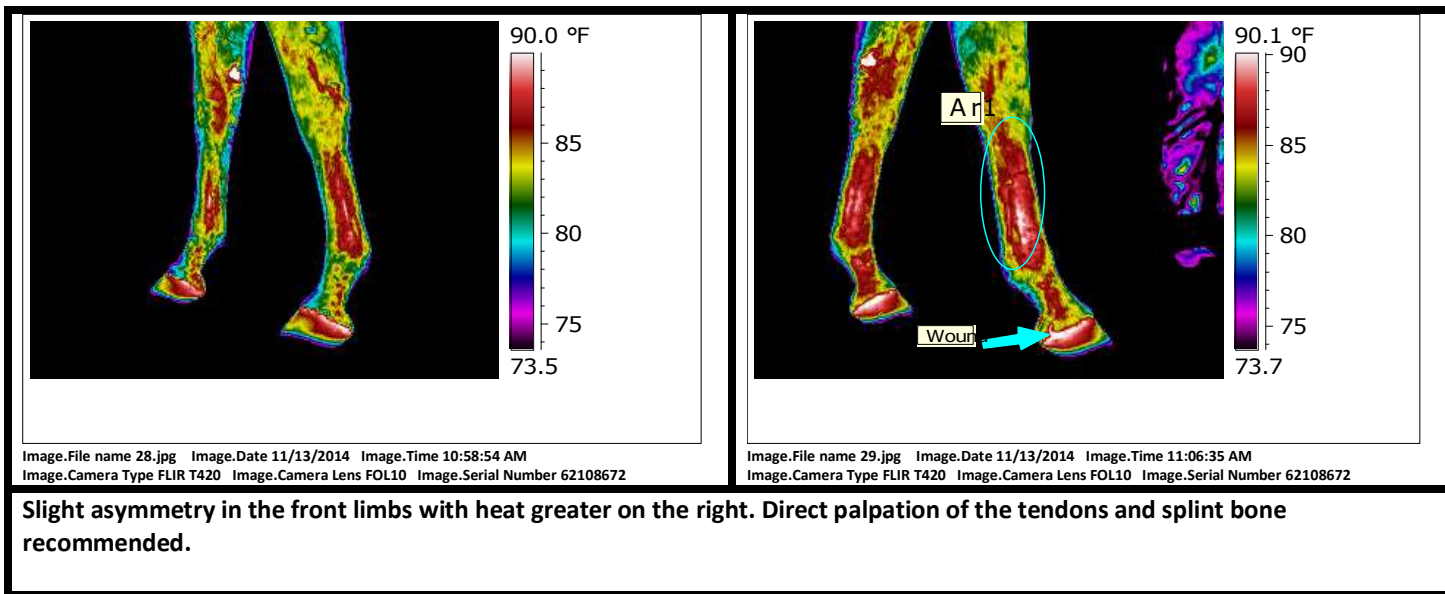
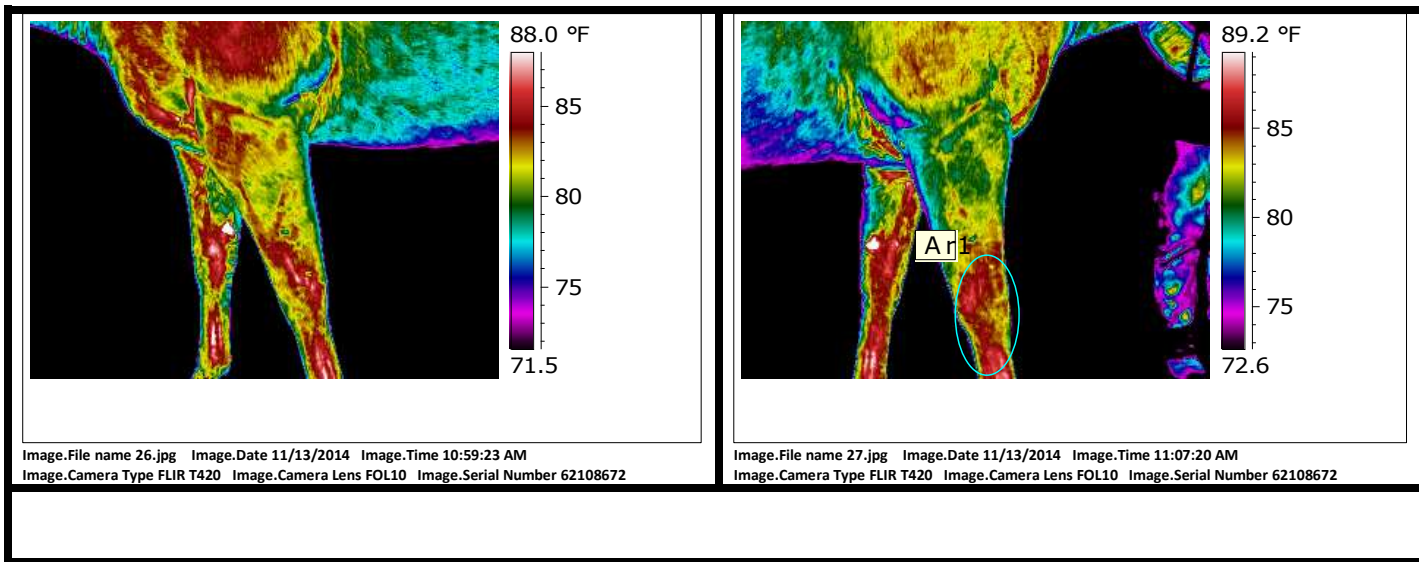
Increased right hind hock with extension distally and proximally. Tarsitis likely present. See previous comments page 5, images 14/15.



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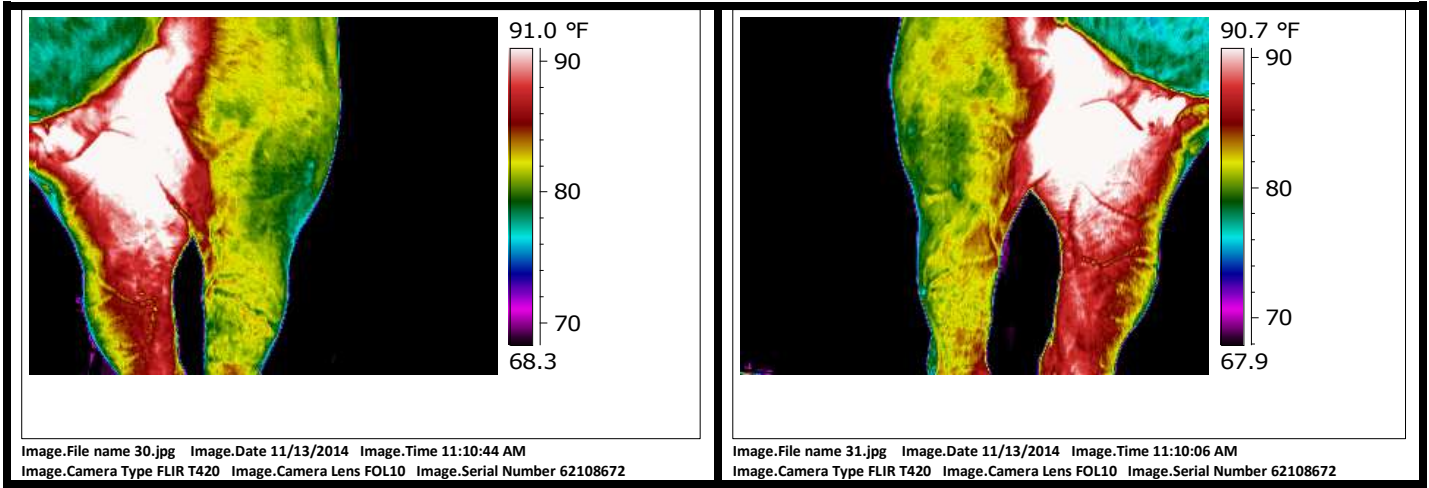




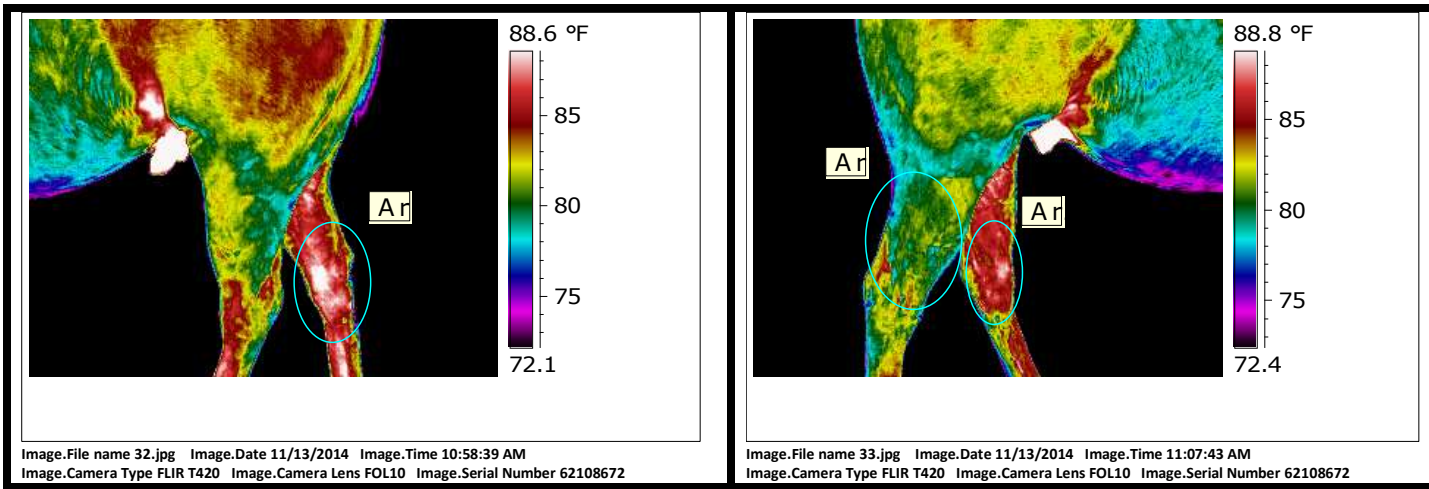
**PATIENT:** Doc

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**NSF: No Significant Findings**

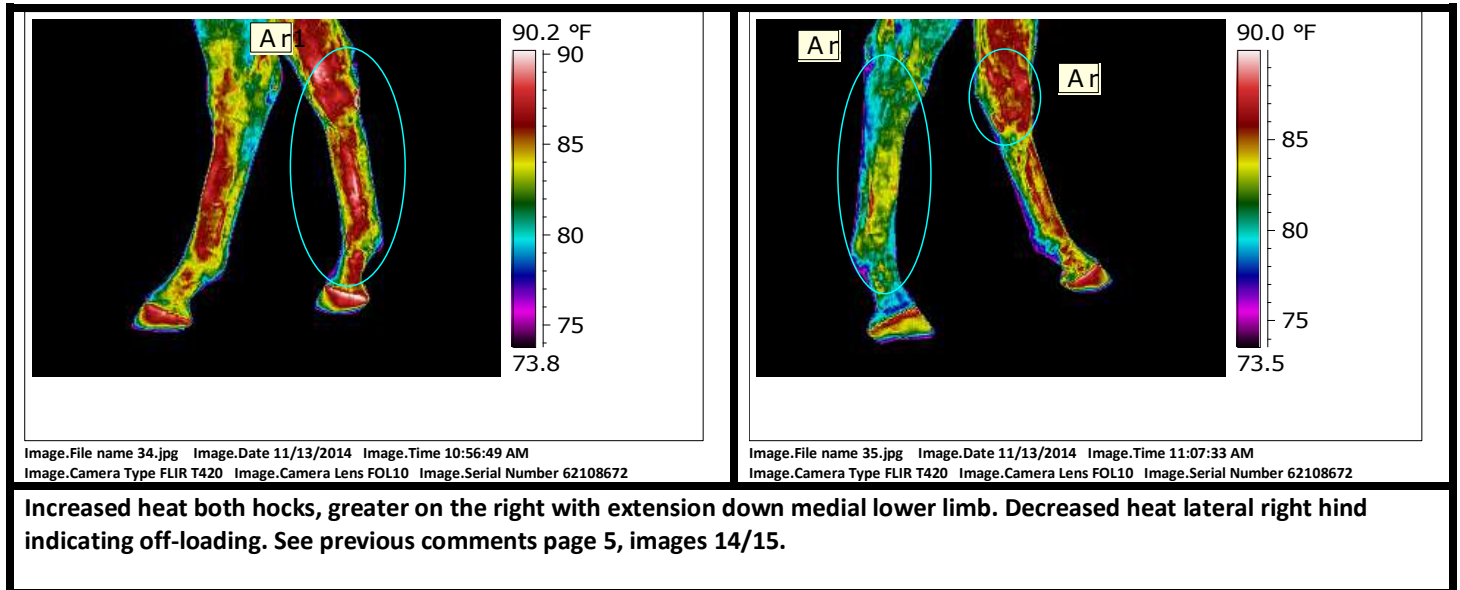


**Increased heat medial hocks, greater on the right. There also appears to be some off-loading of the right hind limb onto the left hind limb. See previous comments page 4, images 10/11 and page 5, images 14/15.**

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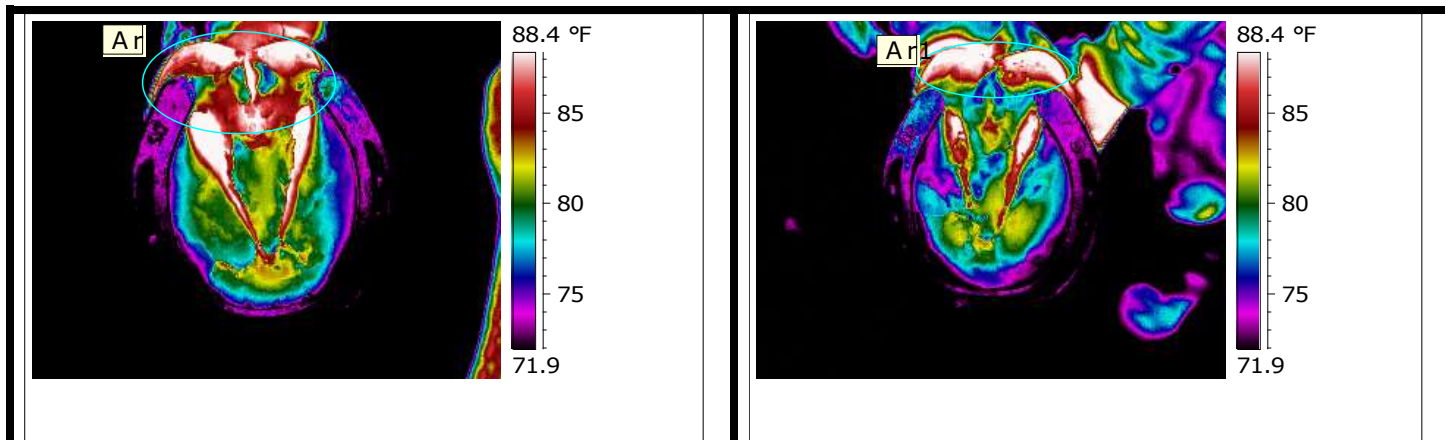


Image.File name 36.jpg Image.Date 11/13/2014 Image.Time 11:18:13 AM  
Image.Camera Type FLIR T420 Image.Camera Lens FOL10 Image.Serial Number 62108672

Image.File name 37.jpg Image.Date 11/13/2014 Image.Time 11:13:56 AM  
Image.Camera Type FLIR T420 Image.Camera Lens FOL10 Image.Serial Number 62108672

Increased heat at the heels both front feet. Hoof imbalances may be present. There is increased heat in the left of the right front frog and the frog sulci indicating possible infection. The cleft area should be probed with cotton swab checking for infection. Right front foot appears smaller than left.

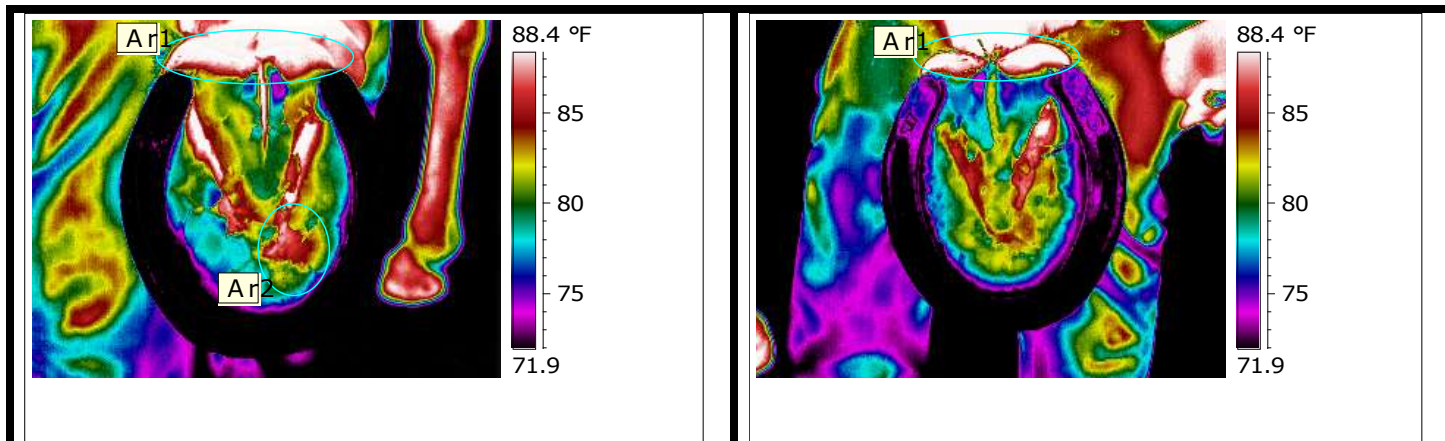


Image.File name 38.jpg Image.Date 11/13/2014 Image.Time 11:17:07 AM  
Image.Camera Type No camera Image.Camera Lens No lens Image.Serial Number -

Image.File name 39.jpg Image.Date 11/13/2014 Image.Time 11:16:16 AM  
Image.Camera Type No camera Image.Camera Lens No lens Image.Serial Number -

Increased heat heels both hind feet indicating possible hoof imbalances. There is asymmetry in the left hind foot with heat greater medially indicating uneven load bearing. There is also some increased heat in the frog cleft which may indicate infection. Probing of the cleft recommended. Overall there is increased heat in the left hind versus the right which would go along with off-loading of the right hind.

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**SUMMARY AND RECOMMENDATIONS:** Doc is a nice looking horse but there are some areas of concern on his scan that warrant further investigation.

Sunlight and ambient light artifacts affected several of the images, affecting interpretation. There is still much information to be gleaned from the images presented. Comments are based on the images submitted.

There are some consistent issues seen in the images. The right hind limb has increased heat at the hock with extension proximally toward the stifle and distally to the pastern area. There also appears to be off-loading of the right hind limb based on lateral images and hoof images. Direct palpation, motion palpation, gait analysis and flexion tests recommended checking for tarsitis. There is also some increased heat in the left hock. Radiographs likely will also be warranted based on examination results and thermal images.

There is asymmetry in the front limbs with heat greater in the right shoulder and chest. Direct palpation of the cranial shoulder and bicipital bursa recommended. Motion palpation of the shoulder, scapulothoracic joint and first rib recommended for ruling out musculoskeletal inflammation and chiropractic issues.

There is increased heat in the thoracic and lumbar spine. Veterinary chiropractic evaluation recommended for possible chiropractic rotations/fixations.

There is uneven pressure and loading in all four feet indicating possible uneven weight bearing along with hoof imbalances. Thorough postural evaluation and hoof balance evaluation recommended. A change in the balance likely needed to aid in present return to soundness and continued soundness. There is increased heat at the heels of all four feet indicating hoof imbalances. There is also increased heat in the frog cleft of the left front and left rear feet indication possible infection – probing of the area recommended. The increased overall heat in the left front foot suggests some off-loading of the right front foot.

**Thank You!**

Reviewing Veterinarian: Debra K Tibbitts, DVM, CVCP, EDO, CVA, CIT

