

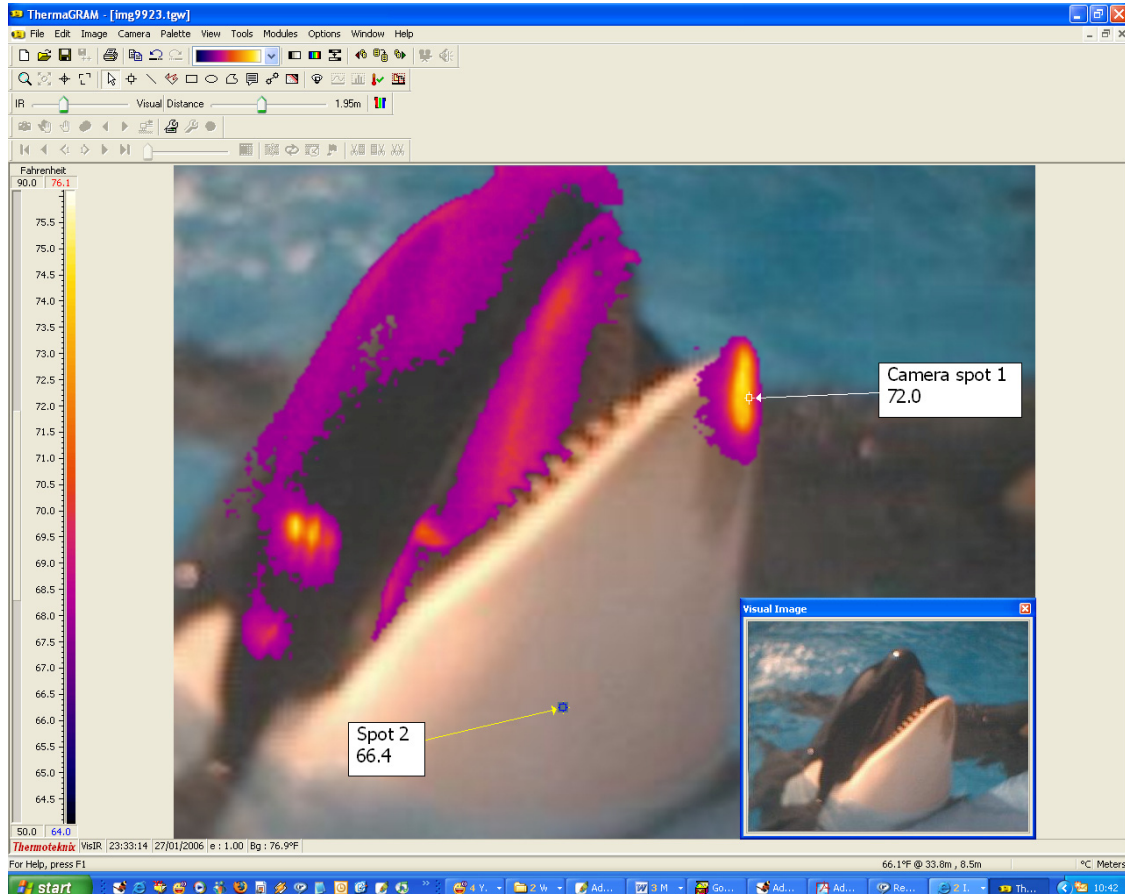
## A Whale of a Time for Thermal Imaging For Immediate Release – 23<sup>rd</sup> June 2006



Thermoteknix recently carried out quite an unusual site demonstration at the Seaworld amusement park in Orlando, Florida – to see if infrared thermography could spot the reason a killer whale was off its food and had lost its performing edge.

Thermal imaging has been used for some years to view and assess the extent of inflammation in both human and veterinary medicine. Animals create heat in order to survive and temperature levels throughout the body are dependent on blood flow. Injured areas may need higher flow levels in order to aid healing and to transport away the debris from the repair processes. In some cases a decrease in temperature may also indicate injury. Often animals may show signs of distress but are unable to convey which area of the body the pain is coming from – which is where thermography can be invaluable.

Thermoteknix Managing Director, Dr Richard Salisbury was invited to Seaworld to show veterinarians how modern infrared cameras can be used to measure body temperature and heat distribution in some of the park's most famous residents. Whilst using Thermoteknix' VisIR thermal camera to see inside the mouth of one adult killer whale that had been inexplicably off its food for some time, the camera showed an area of intense local heat in the lower jaw due to a dental abscess. Killer whales are susceptible to tooth decay just as humans are, and it can be excruciating and debilitating – particularly when you are being expected to perform acrobatics several times a day to a crowd of thousands of enthusiastic spectators. The Thermoteknix VisIR camera is able to detect temperature differences as small as 50,000<sup>th</sup> of 1 degree C and captures both visible and infrared images at the same time. By using Thermoteknix' Condition RED analysis and database software, a blend of both of these shows informative pictures like the one seen here below where the inflammation in the dental abscess stands out in the overlaid visual image.



VisIR cameras have been purchased before to detect body heat and to measure skin temperatures which are affected by blood flow and inflammation. Skin temperature measurement systems were purchased and installed at airports in Thailand at the height of the SARS outbreak. The systems used Thermoteknix ThermoGRAM real-time software to analyse air passengers' facial temperature and to trigger an alarm if an abnormally skin temperature was detected. Thermal imaging is used routinely in the horse racing industry where body temperature changes can be critical and where this non-invasive technique is ideal.

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