## June 22, 2022

## Health and Welfare Assessment of Tokitae (also known as Lolita), killer whale housed at Miami Seaquarium, Miami-Dade County, Florida.

Report of James McBain, DVM retired, and Stephanie Norman, DVM, PhD

As we noted on our May 20th assessment, beginning in late December 2021 and continuing into March 2022, just prior to the change of management of the Miami Seaquarium (MSQ) from Palace Entertainment to MS Leisure (The Dolphin Company), Toki suffered from an acute illness evidenced through her blood examinations and behavior monitoring. This was a very serious health event. Bloodwork results and responses to treatment confirmed this illness and the ongoing recovery. She was responding well to treatment. In spite of this positive response to therapy, we did not know the specific source of the infection nor the specific organism she was fighting. It was agreed that Lolita needed to remain on her medical treatments until her bloodwork had stabilized, after which cessation of antibiotic therapy could then be tested.

When therapy was discontinued, the blood parameters associated with inflammation began to worsen along with a declining appetite and deteriorating behavior. This overall trend persisted, so it was decided to return her to the previous treatment plan. Lolita's appetite and behavior returned to normal as before. Due to size, killer whales present diagnostic challenges that are not an issue with smaller species. What we now know is that her infection was well established and will likely require prolonged therapy. Our next steps will be to explore therapies better suited to long term treatment. It appears that there will not be a rapid resolution of her medical issues. In spite of her deep-seated illness, she is active, eating well and would appear to be perfectly normal to a poolside observer. We will continue to monitor her blood test parameters and observe her behavior, while evaluating alternative therapies, and we will issue another assessment in 30 days. We will do everything in our power to provide appropriate medical support for Lolita and to aid in her recovery from her health challenges.

Respectfully submitted:

James McBain, DVM retired

Stephanie Norman, DVM, PhD

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**Dr. James McBain**, DVM, Retired Vice President of Corporate Veterinary Services for SeaWorld and Busch Garden Parks. is considered a pioneering expert in marine mammal veterinary medicine. His career at Sea World included serving as senior staff veterinarian corporate director of veterinarian medicine and Vice President of Corporate Veterinary Services. He has authored and coauthored more than 83 scientific papers, books and presentations on marine mammals and is recognized worldwide for his experience and expertise. Dr. McBain is seen by his peers as having fundamentally altered the way in which marine mammal medicine is practiced. Dr. McBain has served as a mentor and trained countless veterinarians seeking his specialized knowledge. In 2009 he received the Distinguished Veterinary Alumni Award for Outstanding Service from Washington State University.

**Dr. Stephanie Norman,** DVM, PhD, veterinary epidemiologist and wildlife veterinarian, received her DVM from Texas A&M University; her Master of Science in epidemiology from the University of Washington, Seattle; and her PhD in wildlife epidemiology from the University of California, Davis. She has been involved in the field of animal health, disease, and conservation for more than 20 years. Dr. Norman has extensive clinical and teaching experience, and has authored or co-authored more than 40 peer-reviewed scientific papers and reports. In addition, she has served as a wildlife epidemiologist for NOAA, National Marine Fisheries Service.