Rev. 11-21-09

PISCES IV DIVE REPORT

Pilot: MAX CREMER Dive #: P4-292 Date: AUGUST 1, 2016

Observer 1: FRAN PARRISH

Affiliation: NOAA/UHMES Dive Location: MAKAPU'U

Observer 2: TAYLOR GRIFFITH Latitude: 21° 17.509' N

Affiliation: DOER Longitude: 157° 32.707' W

Purpose: (Research) Training Test Time of Dive: 0952

Other: Time of Surface: 1644

Special Equipment: Time Submerged: 6:52

Cameras: MINI-ZEUSS HD, ROS SD, LOW LIGHT Time Thru Last Dive: 2041:14

Manipulators: HYCO, ORION 7P Total Time to Dive: 2048:06

Samplers/Sensors: COVERED CRATE Dive Depth: 413 m

Water Depth: 412 m

Support Vessel: R/V KAIMIKAI-O-KANALOA Water Temperature: not recorded

Captain: DIKE HOSHLYK Visibility: GOOD, 20+ m

Dive Results/Remarks: 2-SUB CORAL BED SURVEY. CAPTURE LOW LIGHT FOOTAGE OF BIOLUMINESCENT BAMBOO CORAL. 1026 308m land on carbonate bottom. 1054 310m PISCES V stable near PISCES IV, testing low light camera. 1115 moving to deeper water, about 375m to test limits of low light camera. 1141 371m located stand of several lepidisis specimen. Begin bioluminescence experiments with low light camera. Camera works well through viewport. 1242 371m completed camera operations in this area, taking a lepidisis's sample. 1318 at new lepidisis's tree not too far from previous location. PISCES V to agitate tree with PISCES IV filming. 1404 Current is too strong to permit close quarter operations with two subs. * Experiencing problems with thrusters cutting out as well as loss of hydraulic control. 1430 Splitting up subs, P5 to continue on to PARRISH target; P4 to continue to get low light footage. 1550 413m deploying T-recorder "flower pot" at 21:17.236 N; 157:32.044 W. 1600 leaving bottom from 413m. Normal recovery.

Pilot's Signature: Date: 8-31-16

Operations Director: Jerry Kerby Date: 10-17-16

For equipment deficiencies, refer to maintenance logs.