Rev. 11-21-09

PISCES IV DIVE REPORT

Pilot: MAX CREMER Dive #: P4-265 Date: OCTOBER 23, 2011

Observer 1: JUAN CARLOS BRAGA

Affiliation: UNIVERSITY OF GRANADA Dive Location: GARDNER PINNACLES

Observer 2: CHARLOTTE HUMPHREY Latitude: N 24°49.900'

Affiliation: MANCHESTER METROPOLITAN U. (UK) Longitude: W 167°51.938'

Purpose: (Research) Training Test Time of Dive: 0807

Other: Time of Surface: 1624

Special Equipment: Time Submerged: 8:17

Cameras: MINI-ZEUS HD, ROS SD Time Thru Last Dive: 1877:23

Manipulators: ORION 7-P, HYCO Total Time to Dive: 1885:40

Samplers/Sensors: CTD-DO, 2 ROCK CRATES, Dive Depth: 446 m

1 BIOBOX, 2 SEDIMENT SCOOPS Water Depth: 446 m

Support Vessel: R/V KAIMIKAI-O-KANALOA Water Temperature: REFER TO CTD LOGS

Captain: CLARY GUTZEIT Visibility: VARIABLE 5-35m, SILT CLOUDS

Dive Results/Remarks: DROWNED REEFS, PALEOCLIMATE, ROCK COLLECTING DIVE.
0834 394m land on the bottom in a flat, sandy area. 0844 moving S toward intended dive position. 0901 414m arrive at intended dive position. 0909 move SW into canyon. 0924 on canyon floor, moving WNW. 0946 394m collect samples in small gully. 0954 continue up canyon. 0959 394m collect sample about 15m from previous sample site. Continue up canyon. 1011 393m collect soft chalk sample. Continue up canyon. 1029 395m collect rock samples, silt cloud lingers. 1042 Continue up canyon. 1058 359m collect another chalk sample. 1103 Continue up canyon. 1109 330m collect chalk sample. 1121 continue upslope. 1138 261m collect samples on a small outcrop. 1210 continue toward head of canyon. 1232 211m collect carbonates and small coral. 1304 219m collect ~~small~~ Gr rock samples. 1310 Continue NW up canyon. 1320 208m collect samples on an outcrop of carbonate. 1325 Continue up canyon. 1331 174m arrive at canyon head, encounter house-sized boulders. Sampling rocks. Move up wall, then back to the base to collect more samples, 1401 154m. 1430 move upslope to W to climb the wall, then continue on a gentle slope toward an outcrop at 50m, collecting a number of rock types on the way. 1535 55m arrive at end point of mission, a small reef structure. Collect several more samples and observe abundant shallow water fauna. 1604 leave the bottom from 53m.

Pilot's Signature: Date: 10-24-11

Operations Director: Date: 10.25.11

For equipment deficiencies, refer to maintenance logs.