

CONFIRMATION OF PRELIM. MAXIMUM DIVING DEPTH

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G155103
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Particulars of Submersible

Name of Submersible:	LIMITING FACTOR
Builder:	Triton Submarines LLC
Yard No/Hull No:	Triton 36000/2-001
Owner:	Caladan Oceanic LLC

This is to confirm:

That the preliminary maximum diving depth attained by the above mentioned Manned Submersible has been verified by measurements and computation methods, as further outlined below and according to referenced documents listed below. The preliminary maximum diving depth attained by the Manned Submersible "LIMITING FACTOR" at the Challenger Deep in the Mariana Trench (bottom location Lat 11.3693, Lon 142.5889) during the dives on 2019-04-28 and 2019-05-01 has been determined to be:

10925 ± 6.5 m

Verification method:

The verification of the preliminary maximum diving depth has been performed based on the recognized UNESCO Technical Papers in Marine Science No. 44, which are considered as the most up to date conversion method from Pressure (dbar) to depth (m).

In total four (4) pressure (dbar) measurements have been taken during two dives, piloted solo by Victor Vescovo, at two (2) different occasions and with a total of two (2) different CTD sensors of the type Seabird SBE49 10500 m as summarized below:

Date of measurement	CTD installation location	CTD Serial Number	Pressure [dbar]	Depth [m]
2019-04-28	"LIMITING FACTOR" FWD	49-0454	11269.2	10929
2019-04-28	"LIMITING FACTOR" AFT	49-0456	11260.8	10921
2019-05-01	"LIMITING FACTOR" FWD	49-0454	11267.9	10928
2019-05-01	"LIMITING FACTOR" AFT	49-0456	11259.4	10920
		AVRG	11264.3	10925

Standard deviation: 4.1 m
Confidence interval for 95% probability: ± 6.5 m

Reference documents:

Calibration Certificates for CTD sensors (appended)
UNESCO Technical Papers in Marine Science No. 44, Unesco 1983

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