WHOI Underwater Cable Electrical Test Record # _____

Test date: 1/26/2019 Conducted by: E. Shimada Customer: _____

Location and identification of cable tested (including armor, shield & conductor count:

R/V Atlantis forward hydro winch
0.322 A301592 cable
NSF-3-C165

Recorded length and condition of cable:

6603 meters (taken from 12/14/18 wire status report)

Preparation and visual condition of wire ends (bare, terminated, sliprings, etc):

terminated on wet end and inboard end with individual, female mecca connectors

Max voltage specified by cable manufacturer: 1000 Avg armor dia: 0.322 mm (in) Wire temp, °C 10.17 (taken with 566 IR thermometer)

Megger ID: AEMC 1060 S/N 154856DCDV (cal date 8/6/2018) used on battery mode (full charge at start)

TDR ID: _____

Test Sequence	Insulation res, GΩ	DAR ratio	PI ratio	cap µF	appl. volts	minutes duration	Continuity (ohm) comments
Blk/armor	11.79	1.12	1.22	0.794	250	5.0	187.8
Wht/armor	34.256	1.25	1.31	0.742			188.1
Red/armor	7.84	1.09	1.24	0.740			189.8
Blk/Wht	26.776	1.17	1.24	0.522			373.0
Blk/Red	27.636	1.23	1.32	0.490			372.8
Wht/Red	14.659	1.15	1.16	0.488			372.9
Slip Ring							
Blk/armor	49.30	1.10	1.18	0.004			
Wht/armor	36.21	1.07	1.11	0.005			
Red/armor	38.76	1.08	1.14	0.004			
Blk/Wht	38.54	1.14	1.09	0.005			
Blk/Red	49.40	1.11	1.38	0.005			
Wht/Red	37.91	1.10	1.16	0.004			

End-to-End: Black: _____ Ω, White: _____ Ω, Red: _____ Ω, Armor: _____ Ω,
Termination end: armor to ship's structure: 1.48 k Ω. AC volts, armor to ship's structure: ___ V.

TDR setup: Velocity Factor (VF) used: 0.____. Confirm VF from actual recorded length? Y/N

TDR Results Summary:

NOTE: Megger battery fully charged prior to running test. Starting voltage 11.6 V and ending voltage 10.9 V.

NOTE: Fluke 87 III True RMS multimeter used for continuity testing.

NOTE: temperature of wire taken using a 566 IR thermometer gun aimed at outer wraps and several points on the drum. Drum temperature used above. Outer wraps were 10.89C.