SE Report No. 870147-3

TEST REPORT
ENVIRONMENTAL QUALIFICATION OF CONTINENTAL WIRE AND CABLE CORPORATION INSTRUMENTATION CABLE INSTALLED IN BEAVER VALLEY POWER STATION UNIT 1

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Prepared for:

Duquesne Light Company
Nuclear Engineering Division
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Shippingport, PA 15077

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Table II-1

Description of Test Cables

A. Type: Twisted Pair, AWG #16 stranded, instrumentation, 300-V

B. Manufacturer: Continental Wire and Cable Corporation

C. Specification No.: BVS-395

D. Purchase Order No.: BV-314

E. Stone & Webster Mark No.: NFC-01

F. Conductor Insulation: 25 mils, white silicone rubber type CC-2115

G. Conductor Jacket: 6 mils, color-coded (gray, black) glass braid

H. Shield Material: 100% coverage of copper-backed Mylar (0.0017-0.0007 copper and 0.001 minimum Mylar)

I. Drain Wire: Copper, AWG #18

J. Overall Jacket: 40 mils, black asbestos braid type CC1120

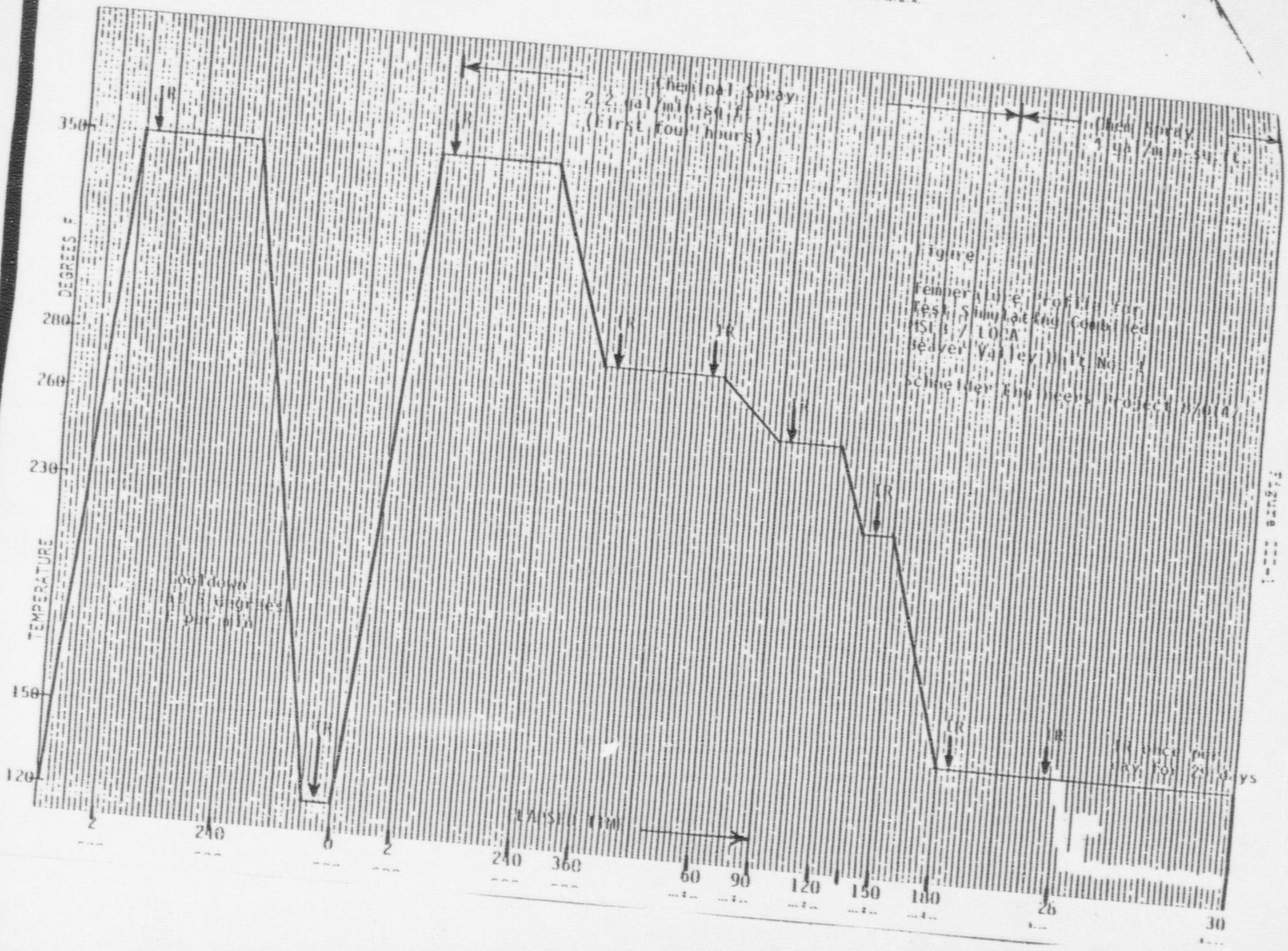
K. Test Specimen Length: 25 feet (approximately)

L. Other Identification: Identifier strip between conductors marked "Continental W&C, 1971, #16 AWG silicone insulated (Type SRGA) cable"

	LOCA Energization		Accelerated Thermal
Cable Sample I.D. No.	Voltage	Current	Aging Equivalency
1	45 Vdc	4mA	40 years at 105°F
2	45 Vdc	20mA	40 years at 105°F
3	50 Vdc	4mA	40 years at 105°F
4	50 Vdc	20mA	40 years at 105°F

NRE 340-20 DIETZGEN GRAPH PAPER
20 X 20 PER INCH

DIETZGEN CORPORATION
MADE IN U.S.A.



Continental Cable (SE870147-3)

(Data compiled for clarity)

DATE	ELAPSED TIME (Days)	TEMP. (F)	IR (Ohms)
11/20/87	0.003	352.000	4.00e+7
11/20/87	0.003	357.000	7.00e+7
11/20/87	0.006	280.000	1.10e+8
11/20/87	0.040	280.000	1.10e+8
11/20/87	0.070	260.000	2.10e+8
11/20/87	0.100	233.000	5.60e+8
11/20/87	0.120	151.000	4.00e+9
11/20/87	0.240	120.000	7.40e+8
11/21/87	1.000	150.000	1.10e+10
11/23/87	3.000	153.000	2.20e+10
11/25/87	5.000	153.000	1.80e+10
11/27/87	7.000	158.000	1.60e+10
11/30/87	10.000	156.000	1.60e+10
12/01/87	11.000	158.000	1.00e+10
12/02/87	12.000	156.000	1.10e+10
12/03/87	13.000	155.000	6.40e+9
12/04/87	14.000	155.000	7.00e+9
12/07/87	17.000	155.000	6.80e+9
12/08/87	18.000	155.000	1.50e+10
12/09/87	19.000	155.000	1.10e+10
12/10/87	20.000	155.000	1.30e+10
12/11/87	21.000	155.000	2.00e+10
12/14/87	24.000	155.000	1.70e+10
12/15/87	25.000	155.000	7.20e+9
12/16/87	26.000	155.000	2.20e+10
12/17/87	27.000	155.000	2.00e+10
12/18/87	28.000	155.000	1.60e+10
12/19/87	29.000	151.000	1.70e+10