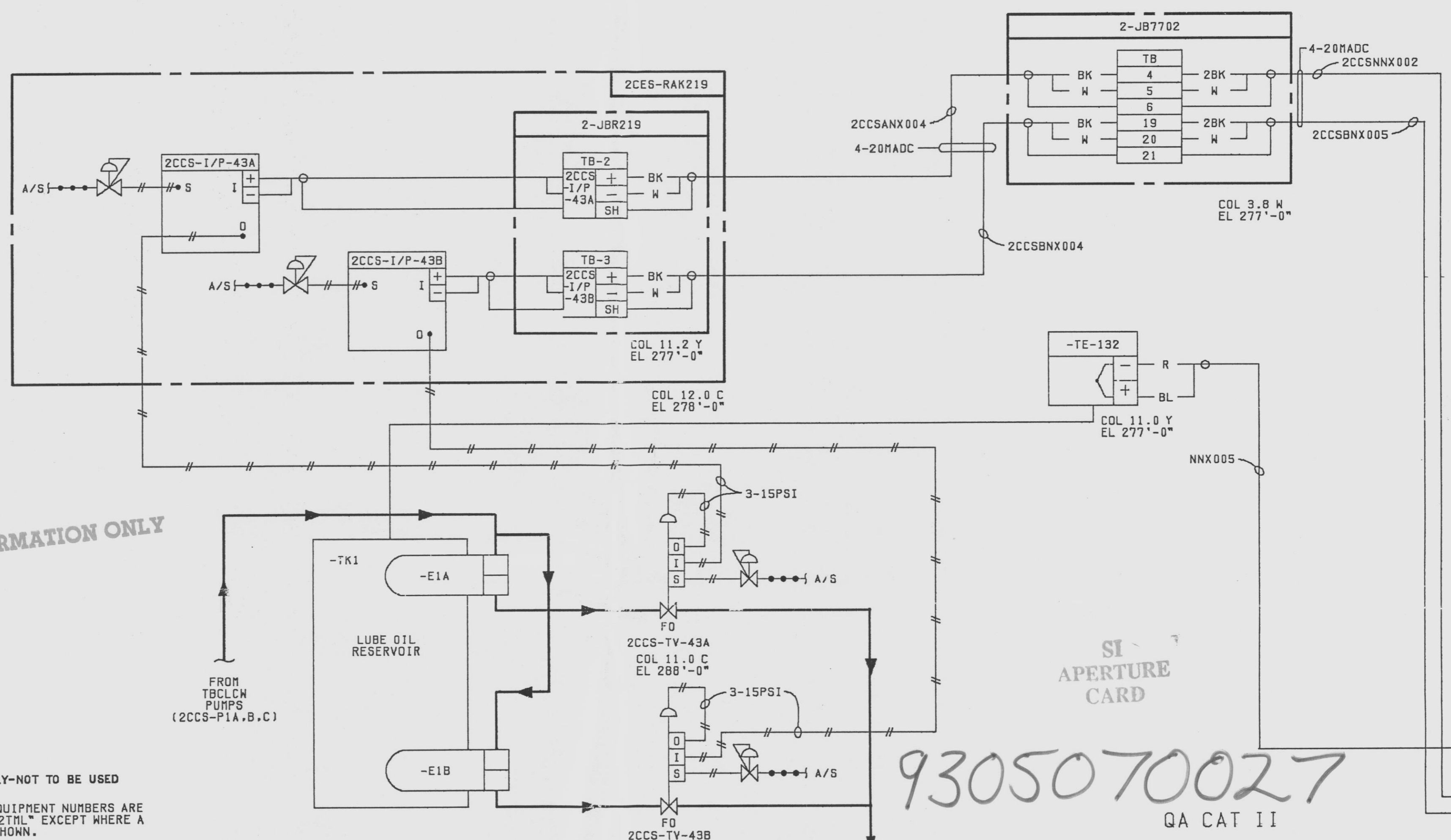


REFERENCES:

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- LSH-16-2.1 -6
- 2CCS-43 -2
- 2TML-132 -4
- 0007.159-451-294 -C
- EE-3UA -1
- EE-3L -2
- EE-3AK -4
- EE-4B -2
- EE-4BA -1
- EE-11FY -1
- 0007.510-414-510 -B
- 0007.520-001-557 -H
- 0007.520-001-546 -F
- E4DCR-C43310
- E4DCR-F40381



INFORMATION ONLY

SI APERTURE CARD

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QA CAT II

NOTES:

1. FOR TEST PURPOSES ONLY-NOT TO BE USED FOR CONSTRUCTION.
2. ALL INSTRUMENT AND EQUIPMENT NUMBERS ARE TO BE PREFIXED WITH "2TML" EXCEPT WHERE A DIFFERENT PREFIX IS SHOWN.
3. LOOP ACTION: TE-132 MONITORS TURBINE LUBE OIL COOLERS DISCHARGE OIL TEMPERATURE AND PROVIDES TEMPERATURE SIGNALS TO TC-132, TI-132 AND THE COMPUTER VIA TT-132. WITH HIC-132, 2CCS-TIK-43A, AND 2CCS-TIK-43B IN AUTO (2CCS-TIK-43A AND 43B SET THE BIAS WHEN IN AUTO), TC-132 COMPARES HIC-132 SET POINT, TE-132 TEMPERATURE SIGNAL AND THE AVERAGED TEMPERATURE BIAS SIGNALS PROVIDED BY TYX-132 AND TYY-132, AND PROVIDES A BALANCED ERROR SIGNAL TO THE MODULATE 2CCS-TV-43A VIA TYX-132, E/IX-132, AND 2CCS-I/P-43A, AND TO MODULATE 2CCS-TV-43B VIA TYY-132, E/IY-132, AND 2CCS-I/P-43B. WITH HIC-132 IN MANUAL AND 2CCS-TIK-43A AND 43B IN AUTO, TC-132 COMPARES HIC-132 INPUT AND AVERAGED TEMPERATURE BIAS SIGNALS AND PRODUCES A BALANCED ERROR SIGNAL TO MODULATE THE VALVES. WHEN 2CCS-TIK-43A OR 43B IS IN MANUAL TO POSITION ITS RESPECTIVE VALVE, THE OTHER VALVE'S POSITION WILL BE RE-ADJUSTED VIA TC-132 BALANCED ERROR SIGNAL TO MAINTAIN SUFFICIENT COOLING. WHEN 2CCS-TIK-43A AND 43B ARE IN MANUAL, TC-132 PROVIDES A BALANCED ERROR SIGNAL EQUAL TO THE AVERAGED TEMPERATURE BIAS FOR USE WHEN 2CCS-TIK-43A OR 43B IS RETURNED TO AUTO.

DATE	DATE	DATE	DATE	DATE	DATE
4	3	2	1	0	0
PREPARED	PREPARED	PREPARED	PREPARED	PREPARED	PREPARED
APPROVED	APPROVED	APPROVED	APPROVED	APPROVED	APPROVED

TEST LOOP DIAGRAM
TURBINE LUBE OIL COOLERS TEMP CONTROL
2TML-TT-132, 2CCS-TV-43A, 2CCS-TV-43B
NINE MILE POINT NUCLEAR STATION-UNIT 2
NIAGARA MOHAWK POWER CORPORATION

STONE & WEBSTER ENGINEERING CORPORATION
SHEET 1 OF 2
12177-TL2TML-003



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CONT'D ON SHEET 2