



TRANSMISSION CORPORATION OF ANDHRA PRADESH LIMITED
(An ISO 9001:2008 Certified Company)

OIL TESTING LABORATORY :: VIJAYAWADA
TRANSFORMER OIL TEST REPORT

SS Name : RENTACHINTALA-220/132KV-SUBSTATION

OTR No: VJA10002112

Ref: OTLVJA2303241

Equipment: 132/33KV, 10/15MVA PTR-III (MAIN TANK BOTTOM)

Equipment Details

SAMPLE Details

Make : HHE	Capacity : 10/15 MVA	Sample Dt : 17.03.2023	Oil Temp : 52.0 ^o C
Sl.no : 28677	Equipment : 10034995	Recpt Dt : 18.03.2023	Load@Sample : 3.0
YOM : 1970	HV level : 132KV	Test Dt : 18.03.2023	
Total Quantity of Oil in(Litres)		Equipment : 0.00	Container : 2.00

Remarks : previous test result: Std deviation of BDV random test values is high
may be due to sampling
errors. Send a fresh sample for correct assessment.

TEST RESULTS

Reference standard as per IS: 1866-2017

Sl.no	Parameter	Measured Value	UoM	Violation limit	Test method
01	Appearance & Colour	P.YELLOW			
02	Hydrogen (H ₂)	ND	ppm		
03	Methane(CH ₄)	ND	ppm		
04	Ethane(C ₂ H ₆)	ND	ppm		
05	Ethylene(C ₂ H ₄)	ND	ppm		
06	Acetylene(C ₂ H ₂)	ND	ppm		
07	Nitrogen (N ₂)	855.838	ppm		
08	Carbon Monoxide (CO)	57.851	ppm		
09	Oxygen (O ₂)	442.112	ppm		
10	B.D.V@ 61.8Hz, with stirrer)	34	kV	>40.00	
11	Resistivity @ 90 °C	240.05	GOM	>0.20	
12	Water content	15.8	mg/kg	<30.00	
13	Carbon Dioxide(CO ₂)	1463.020	ppm		
14	Tan Delta @ 90 °C, 55Hz	0.001602		<0.500	

Environmental Conditions

Room temp

25.0^o C

Rel Humidity

40

NT NOT TESTED

ND

NOT DETECTED

Test conditions for BDV:

Oil Temp: 28.0^o C

freq: 61.8 Hz,

Electrode type: Hemispherical brass,

6 test values: 43.3, 37.8, 32.3, 32.2, 29.6, 28.8

Test conditions for DDF:

elec.stress: 1kv/mm,

freq: 55 HZ.

Test conditions for Resistivity:

elec.stress: 250kv/mm,

electrification time: 60 sec.