



**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: VJA10002101

Ref: OTLVJA2303235

Equipment: 100MVA, 220/132KV, AUTO TRANSFORMER-II (MAIN TANK BOTTOM)

<b>Equipment Details</b>		<b>SAMPLE Details</b>	
Make : T&R	Capacity : 100 MVA	Sample Dt : 14.03.2023	Oil Temp : 55.0°C
Sl.no : POM100078	Equipment : 10033725	Recpt Dt : 15.03.2023	Load@Sample : 46
YOM : 2012	HV level : 220KV	Test Dt : 15.03.2023	
Total Quantity of Oil in(Litres)		Equipment : 0.00	Container : 2.00

**Remarks :** as per remarks of previous test sample: BDV value is below the specified limits and not correlating with other properties. A fresh sample may be sent for confirmation

**TEST RESULTS**

Reference standard as per IS: 1866-2017

<b>Sl.no</b>	<b>Parameter</b>	<b>Measured Value</b>	<b>UoM</b>	<b>Violation limit</b>	<b>Test method</b>
01	Ethane(C2H6)	ND	ppm		
02	Ethylene(C2H4)	ND	ppm		
03	Acetylene(C2H2)	ND	ppm		
04	Appearance & Colour	CLEAR			
05	Carbon Monoxide (CO)	687.135	ppm		
06	B.D.V@ 61.8Hz,with stirrer)	64.9	kV	>50.00	
07	Methane(CH4)	6.317	ppm		
08	Water content	6.0	mg/kg	<20.00	
09	Carbon Dioxide(CO2)	4973.54	ppm		
10	Oxygen (O2)	465.304	ppm		
11	Resistivity @ 90 °C	434.37	GOM	>3.00	
12	Nitrogen (N2)	1987.909	ppm		
13	Hydrogen (H2)	10.226	ppm		
14	Tan Delta @ 90 °C, 55Hz	0.001426		<0.200	

<b>Environmental Conditions</b>	Room temp	25.0°C	Rel Humidity	40
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<b>NT</b>	NOT TESTED	ND	NOT DETECTED
Test conditions for BDV: Oil Temp: 26.0°C freq: 61.8 Hz, Electrode type: Hemispherical brass, 6 test values: 81.4, 70.1, 69.2, 67.2, 51.2, 50.1		Test conditions for DDF: elec.stress: 1kv/mm, freq: 55 Hz. Test conditions for Resistivity: elec.stress: 250kv/mm, electrification time: 60 sec.	