



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

OIL TESTING LABORATORY :: VIJAYAWADA
TRANSFORMER OIL TEST REPORT

SS Name : NALLAPADU-132/33KV-SUBSTATION

OTR No: VJA10002090

Ref: OTLVJA2303224

Equipment: 31.5 MVA 132/33KV PTR-II(BOTTOM)

Equipment Details		SAMPLE Details	
Make : TR	Capacity : 31.5 MVA	Sample Dt : 13.03.2023	Oil Temp : 52.0°C
Sl.no : 20000/08	Equipment : 10041242	Recpt Dt : 14.03.2023	Load@Sample : 4.7
YOM : 2006	HV level : 132KV	Test Dt : 14.03.2023	
Total Quantity of Oil in(Litres)		Equipment :	0.00 Container : 2.00

TEST RESULTS

Reference standard as per IS: 1866-2017

Sl.no	Parameter	Measured Value	UoM	Violation limit	Test method
01	Appearance & Colour	YELLOW			
02	Acetylene(C2H2)	ND	ppm		
03	Ethane(C2H6)	82.215	ppm		
04	Methane(CH4)	70.247	ppm		
05	B.D.V@ 61.8Hz,with stirrer)	54.8	kV	>40.00	
06	Oxygen (O2)	535.272	ppm		
07	Carbon Dioxide(CO2)	5237.002	ppm		
08	Ethylene(C2H4)	410.972	ppm		
09	Resistivity @ 90 °C	314.26	GOM	>0.20	
10	Carbon Monoxide (CO)	241.903	ppm		
11	Hydrogen (H2)	14.257	ppm		
12	Nitrogen (N2)	1201.213	ppm		
13	Water content	12.1	mg/kg	<30.00	
14	Tan Delta @ 90 °C, 55Hz	0.001222		<0.500	

Environmental Conditions		Room temp	25.0°C	Rel Humidity	40
NT	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: 71.0, 65.6, 60.2, 54.4, 48.6, 28.9			Test conditions for DDF: elec.stress: 1kv/mm, freq: 55 Hz. Test conditions for Resistivity: elec.stress: 250kv/mm, electrification time: 60 sec.		

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Remarks : BDV,water content test results are with in the specified limits.But DGA reveals the thermal fault (T3) ,severe over heating of solid core insulation.Explore the reason.

Approver ID : 1029317
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Designation : EE/MRT&TRANSFORMERS/VIJAYAWADA
Appr. Dt : 15.03.2023