



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

OIL TESTING LABORATORY :: VIJAYAWADA
TRANSFORMER OIL TEST REPORT

SS Name : BAPATLA-132/33KV-SUBSTATION

OTR No: VJA10002395

Ref: OTLVJA2306515

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

Equipment Details

SAMPLE Details

Make : INDOTECH

Capacity : 31.5 MVA

Sample Dt : 15.06.2023

Oil Temp : 57.0°C

Sl.no : IT-43120

Equipment : 10034983

Recpt Dt : 16.06.2023

Load@Sample : 9.56

YOM : 2008

HV level : 132KV

Test Dt : 16.06.2023

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	P.YELLOW			
02	Methane(CH ₄)	ND	ppm		
03	Ethane(C ₂ H ₆)	ND	ppm		
04	Acetylene(C ₂ H ₂)	ND	ppm		
05	Resistivity @ 90 °C	80.55	GOM	>0.20	
06	B.D.V@ 61.8Hz,with stirrer)	70.3	kV	>40.00	
07	Hydrogen (H ₂)	5.83	ppm		
08	Ethylene(C ₂ H ₄)	5.66	ppm		
09	Carbon Dioxide(CO ₂)	3404.21	ppm		
10	Nitrogen (N ₂)	3162.55	ppm		
11	Carbon Monoxide (CO)	256.42	ppm		
12	Oxygen (O ₂)	1457.74	ppm		
13	Water content	13.0	mg/kg	<30.00	
14	Tan Delta @ 90 °C, 55Hz	0.007135		<0.500	

Environmental Conditions

Room temp

25.0° C

Rel Humidity

40

NT NOT TESTED

ND

NOT DETECTED

Test conditions for BDV:

Oil Temp: 28.0° C

freq:61.8 Hz,

Electrode type:Hemispherical brass,

6 test values: 83.6,78.2,77.7,69.0,57.3,55.8

Test conditions for DDF:

elec.stress: 1kv/mm,

freq: 55 HZ.

Test conditions for Resistivity:

elec.stress: 250kv/mm,

electrification time: 60 sec.