

ANALISIS GAS TERLARUT PADA TRANSFORMATOR DENGAN METODE KROMATOGRAFI GAS											
Klien/Proyek	PT. HONDA Indonesia					Tegangan	20000/380 V				
Pabrikasi/Tahun	Trafindo / 1998					Kapasitas Minyak	1219 L				
Umur Trafo	25 Tahun					Catatan	2: After Purif				
Nomor Seri	9830012										
Rated Power	1600 kVA										
HASIL UJI						STANDARD IEEE C57.104.2019					
(Nilai konsentrasi dalam parts per million (ppm))											
Tanggal	1	2									
Tanggal Sampling	11/06/23	15/07/23				Delta [Δ] (ppm)	Rates (ppm/year)	Tabel 1 (ppm)	Tabel 2 (ppm)		
Tanggal Terima	12/06/23	17/07/23								Tabel 3 (ppm)	Tabel 4 (ppm/year)
Tanggal Pengujian	15/06/23	19/07/23									
GAS PARAMETER											
Hidrogen (H ₂)	3	8				5	53.7	40	90		
Etana (C ₂ H ₆)	0	41				41	440.1	15	40		
Etilena (C ₂ H ₄)	0	338				338	3628.5	60	125		
Asetilena (C ₂ H ₂)	0	0				0	0.0	2	7		
Karbon Dioksida (CO ₂)	8.9	2398				2389.1	25647.7	5500	8000		
Metana (CH ₄)	0.12	42				41.88	449.6	20	60		
Karbon Monoksida (CO)	0.19	147				146.81	1576.0	500	600		
CO ₂ /CO ratio	-	-				Note: The ratio for normal cellulosic decomposition (healthy) = 3 to 10					
DGA Status	DGA Status 1	Rates < Tabel 4	Delta < Tabel 3	IG < Tabel 1	Status 3						
	DGA Status 2	Rates < Tabel 4	Delta > Tabel 3	Tabel 1 < IG < Tabel 2							
	DGA Status 3	Rates > Tabel 4	Delta > Tabel 3	IG > Tabel 2							
Key Gas Analysis						Keterangan :					
N/A						° Thermal-Oil Decomposition: Gas Utama Etilena (C ₂ H ₄) ° Thermal-Cellulose: Gas Utama Karbon Monoksida (CO) ° Electrical-Partial Discharge: Gas Utama-Hidrogen (H ₂) ° Electrical- Arcing: Gas utama-Asetilena (C ₂ H ₂)					
Duval Pentagon Analysis						Keterangan :					
						° PD: Corona partial discharge ° D1: Low Energy Discharge ° D2: High Energy Discharge ° T3: Thermal Faults > 700°C ° T2: Thermal Faults of 300 to 700 °C ° T1: Thermal Faults < 300°C ° S: Stray Gassing S of Mineral Oil at 120 and 200°C					

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GAS PARAMETER												
Hidrogen (H_2)	3	8				5	53.7	40	90			
Etana (C_2H_6)	0	41				41	440.1	15	40			
Etilena (C_2H_4)	0	338				338	3628.5	60	125			
Asetilena (C_2H_2)	0	0				0	0.0	2	7			
Karbon Dioksida (CO_2)	8.9	2398				2389.1	25647.7	5500	8000			
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