



A Maharatna Company

Project Report as part of Vocational
Training: NTPC SIPAT On the topic: Transformers oil
analysis and its Significance

Submitted by VT-CHEM-GRP-3

| S.NO | NAME | INSTITUTE | ROLL NUMBER |
|------|---------------------|--|-------------|
| 1. | SHIVENDU BHASKAR | GURU GHASIDAS VISHWAVIDYALAYA BILASPUR | VT-CHEM-203 |

TRANSFORMERS OIL ANALYSIS

INDEX:

| SNO | | NO. |
|-----|--|-------|
| 1. | ABOUT NTPC AND NTPC SIPAT | 4-7 |
| 2. | INTRODUCTION OF TRANSFORMER | 8-12 |
| 3. | UNDERSTANDING OF TRANSFORMER | 13-18 |
| 4. | 5 Ws OF TRANSFORMER | 18-22 |
| 5. | OIL SAMPLING AND TESTING | 23-30 |
| 6. | TRANSFORMER DESIGN AND MANUFACTURING | 31-34 |
| 7. | TRANSFORMER MAINTENANCE | 35-42 |
| 8. | CONDITION MONITORING AND DIAGNOSTIC TECHNIQUES | 43-48 |
| 9. | STRATEGIES IN TRANSFORMER | 49-54 |
| 10. | CASE STUDIES | 55-60 |
| 11. | ENVIRONMENTAL IMPACT AND CONCLUSION | 61-64 |



REGIONAL LEARNING INSTITUTE, NTPC, SIPAT

क्षेत्रीय ज्ञानार्जन संस्थान, एनटीपीसी, सीपत

CERTIFICATE OF VOCATIONAL TRAINING - 2024

व्यावसायिक प्रशिक्षण प्रमाण पत्र- 2024

Ref No. RLI/SIPAT/VT/CERT/2024/VT-CHEM-203

THE CERTIFICATE IS AWARDED TO

Shivendu Bhaskar

Roll No - VT-CHEM-203

Branch - CHEM



Name of College/ Institute – Guru Ghasidas Vishvavidhyalay, Bilaspur

For satisfactorily completing **Vocational Training at NTPC, Sipat, Bilaspur** for a period of four weeks from 10/06/2024 to 13/07/2024. The participant has successfully completed the course and has also completed the project assigned to him/her as part of this course. We wish him/her a bright and successful future. This Certificate is digitally signed.

Date: 18/07/2024

Nakka Ramesh
Sr. Manager (RLI)

Anshul Rajan Singh
Sr. Manager (RLI)

AK Tripathi
GM & Head (RLI-Simulator)