



NORTH-WEST UNIVERSITY[®]
YUNIBESITI YA BOKONE-BOPHIRIMA
NOORDWES-UNIVERSITEIT
POTCHEFSTROOM CAMPUS

THRIP Project Report 1

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Title on report: Bio-diesel Project

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Faculty of Engineering

1. Table of Contents

1. Table of Contents.....	2
1. Introduction	3
1.1 Project Background	3
2. Student Activities	3
2.1 Research Activities	3
3. Conclusion.....	4

1. Introduction

1.1 PROJECT BACKGROUND

We were tasked by the Tshwane University of Technology (eMalahleni campus) Engineering Department to work with Ilive Sustainable Development to help build the Bio-diesel project. The purpose was to expose us (Trainee Technicians) to the corporate world of Electrical Engineering.

2. Student Activities

During the period as from **2016-04-28** to **2016-09-02** the following activities were completed:

- Civil work – Creating stands for pumps and other equipment so that they cannot be placed in a dangerous area.
- Mechanical work – Fixing the tools that were broken and reusing them to reduce the costs.
- Plumbing working – Creating a pipe line from settling tanks to all the corners of the plant so as to create a path way for the Bio-diesel.
- Electrical Work – Powering all the Electrical equipment in the plant in order to process the oil through different stages.

2.1 RESEARCH ACTIVITIES

- We had to research how the liquid-seal work and how can we create it without spending a fortune.
- The other research was why some pumps were not able to suck at a required rate.

3. Conclusion

- . The Practical 2 has made a great contribution in my training and has also offered me an opportunity to learn new things and expose myself in to the cooperate world. During my training I have gained trust, self-confidence and ability to take any challenge and make it possible, no matter how hard it may be.
- The other thing that I have learnt was that hard work and dedication really pay. The other thing that I have discovered is that when you working with a team you need to put extra effort to achieve your goals.
- During the Bio-diesel project I have realised my specials skills that I did not know that I have, for example civil, construction and Plumbing. My problem solving skills have improved to a level that I believe I am ready to work as a qualified Electrical technician.