

## **ANNUAL REPORT TO STAKEHOLDERS ON HEALTH AND SAFETY FOR THE YEAR JUNE 2016 TO MAY 2017**

### **Summary**

- **OSHAS 18 001 re-certification audit completed during the year**
- **5 lost time accidents were reported during the year**
- **DIFR (Disabling Injury Frequency Rate) = 0.17 in 2016 to 0.89 in 2017**
- **Number of employees 503 Stable over 2016 levels**
- **Shifts worked 136233**
- **Shifts lost 92 in 2015 – 129 in 2016**
- **Man hours worked 1125686**
- **Operating machines 225**

## 1. INTRODUCTION

The year under review represents the company's fifteenth year of operations. 225 machines produced an average of metres of core at the operations below.

This is an average of 665 metres per machine.

- **Harmony Gold:** Bambanani Mine, Tshepong Mine, Masimong Mine, Unisel Mine, Phakisa, Joel Mine.
- **Anglogold Ashanti:** Gt Nologwa Mine, Moab Khotsong, Kopanang and Tau Tona,
- **ARM:** Two Rivers Mine and Marula
- **Anglo Platinum:** Townlands Mine, Turffontein (Khuseleka and Siphumelele Mines), Bathopele, Thembelani, Union Mine
- **Petra Diamonds:** Koffiefontein, Finch Mine and Kimberley Mine

### Commentary

Health and Safety is of paramount importance to us. We are, therefore, committed to providing and maintaining a safe, healthy and productive working environment for all our employees, through the continual improvement in our safety performance and safety system. At Lesedi we have a co-operative approach to safety to ensure that the necessary systems are in place; from safety systems, inspections, communication and training.

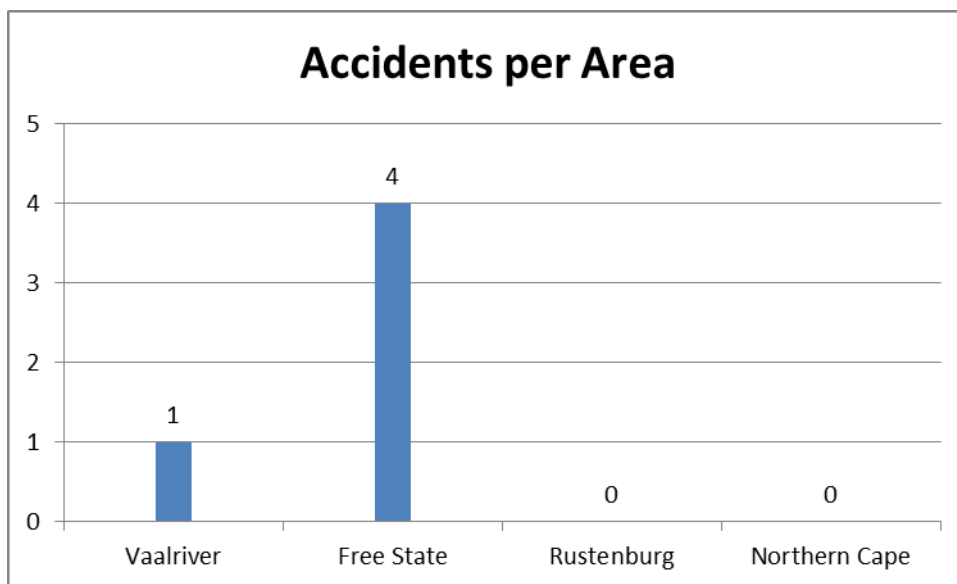
Lesedi management and employees take joint responsibility for their actions. This can only be achieved if management and employee take responsibility for their actions and to stop work when unsafe behaviour or conditions are evident.

Safe behaviour is the key to a safe work force and managers and supervisors need to reinforce safe behaviour by conducting continual over inspections and by having an open communication channel.

Monthly safety reviews conducted by senior management teams have been introduced to measure the team's safety performance; all major safety risks are highlighted and addressed. All safety issues is then elevated to the Health and Safety Committee and reported to the board on a quarterly basis.

Reporting on safety issues and near miss reporting allows us to track incidents, and measure safety performance of the sites.

### **Year June 2016 – May 2017 trends in health and safety at Lesedi**



**Accidents during operational year: 2016-2017**

The accident frequency of the previous year could not be maintained and deteriorated to five accidents.

Accident Date	Name	Mine	Lost Shifts	Circumstance
17/10/2016	P Mokhena	Moab Khotsong	84	Whilst standing on two protruding rock studs from the side wall, his feet slipped and he fell. During the fall he tried to stop his fall and fractured his wrist (Slip and Fall)
30/10/2016	T Gutu	Tshepong	2	Whilst installing rod puller his left ring finger nail was caught between the rod puller and the rod puller bracket (Rigging)
04/11/2016	M Mulelu	Tshepong	6	Whilst operating the control lever on the lubricator a piece of rock dislodged and struck him on his left hand thumb causing a small laceration (Drilling Operation)
16/11/2016	J Motaung	Tshepong	34	During the loading of a water pump on a material car his left little finger was caught between the pump and material side causing a laceration on his nail (Material Handling)
19/01/2017	E Mathavi	Tshepong	3	Whilst removing the hose from the casing used during grouting process, cement under pressure was released into his eyes (Grouting)

Table 1: Lost Shift Accidents 2015 – 2016

## REVIEW OF THE PERIOD: MAR 2016 – FEB 2017

It is important to classify the lost shift accidents. The table below documents the accidents 1st March 2016 to 28<sup>th</sup> Feb 2017

	<b>Critical Activities</b>	<b>Freq of Incidents</b>	<b>Severity (lost shifts)</b>
1	Gas Measuring	0	0
2	Start of Shift Procedure	0	0
3	Transport of equipment	1	34
4	Rigging of equipment	1	2
5	Beginning of hole operations	0	0
6	Drilling Operations	1	6
7	Pulling and Lowering rods	0	0
8	End of Shift Procedures	0	0
9	Slip and Fall	1	84
10	Grouting of hole	1	3
	<b>Total</b>	<b>5</b>	<b>129</b>

Table 2: Accidents March 2016 – Feb 2017

With the exception of the Moab Khotsong accidents (discussed in the Commentary above), and in view of the accidents that took place in the previous year, it is evident that the Free State operations, Tshepong Mine in particular, represents a significant risk to our safety performance.

It is also a concern that 20% of the accidents occurred with the Supervisor present during the activity.

Management introduced a system to measure individual employees safety performance on a continual basis where unsafe behaviour and non-adherence to procedures is recorded and flagged, this will enable management to take action before an incident occur.

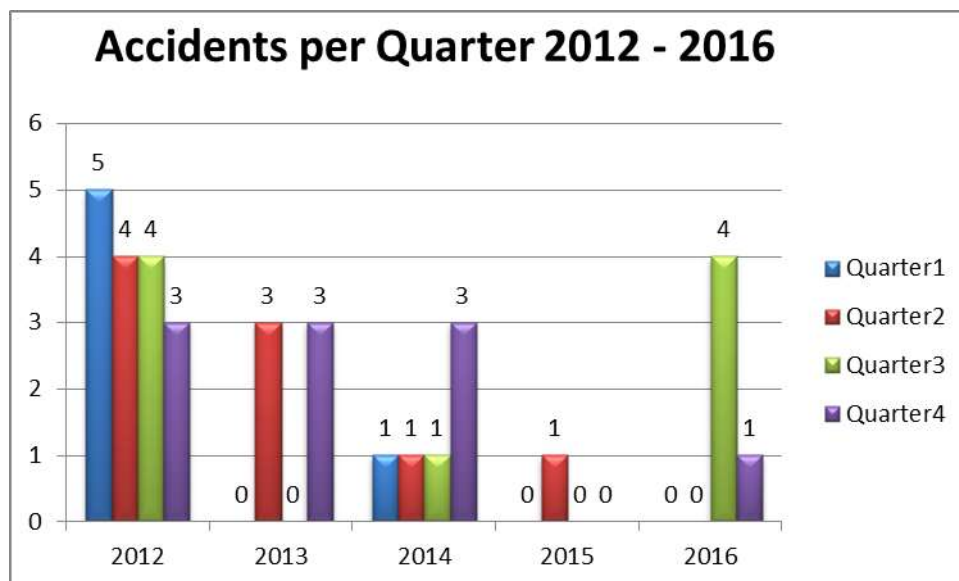
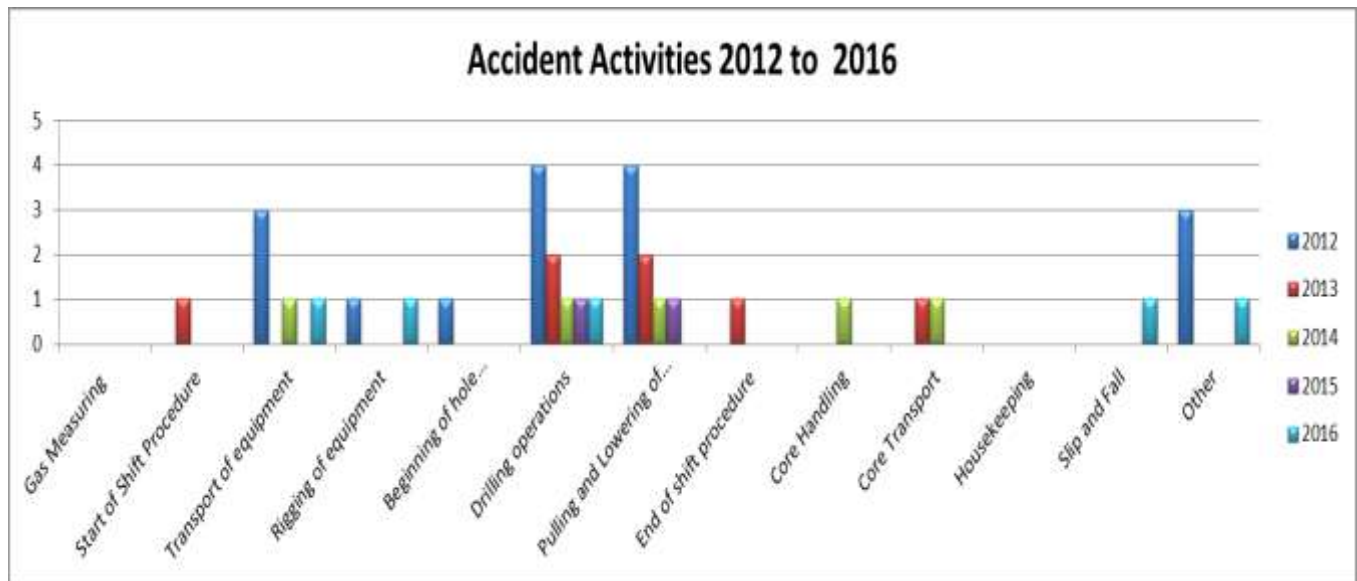
Enforcement of proper site inspections and conducting of PTO`s by line supervisors

Management to conduct over inspections on sites and actively analyse safety performance of the employees

Safety and performance meetings are conducted monthly where line management report issues at hand to senior management and action implemented according to issues identified.

### High risk activities as identified during the period

1. Transport of Equipment
2. Rod Handling
3. Drilling Operations



Reviewing the above information, we learn that:

- a) Rod Handling is responsible for 33% of the accidents in period 2012 to 2016 followed by Drilling operation 21% Others 1%(Slip and Fall, Bump against) and Transport of material with 12.5%
- b) Although only one accident was recorded on Drilling operations and transport of equipment this year, focus should not be lost on our main risk areas in the operation.
- c) The accident per quarter graphs indicates that the accidents mainly occurred during the 3rd quarter.
- d) Five accidents were recorded against one for the previous year.

## 2. YEAR LOST SHIFT TRENDS (2012 – 2016)

The table below shows the trends in our safety failures over the last 5 years.

Shifts lost during his period on average is on decline except for the current 2016 year

	2012		2013		2014		2015		2016	
	Freq	Severity (Lost shifts)	Freq	Severity (Lost shifts)	Freq	Severity (Lost Shifts)	Freq	Severity (Lost Shifts)	Freq	Severity (Lost Shifts)
Gas Measuring										
Start of Shift Procedure			1	165						
Transport of equipment	3	101			1	54			1	34
Rigging of equipment	1	31							1	2
Beginning of hole operations	1	7								
Drilling operations	4	30	1	40	1	10			1	6
Pulling and Lowering of rods	4	261	2	60	2	12	1	92		
End of shift procedure			1	64						
Core Handling					1	78				
Core Transport			1	9	1	79				
Slip and fall									1	84
Housekeeping										
Other	3	37							1	3
<b>Total</b>	<b>16</b>	<b>467</b>	<b>6</b>	<b>338</b>	<b>6</b>	<b>233</b>	<b>1</b>	<b>92</b>	<b>5</b>	<b>129</b>

Table 3: Lost Shift Trends 2012 – 2016

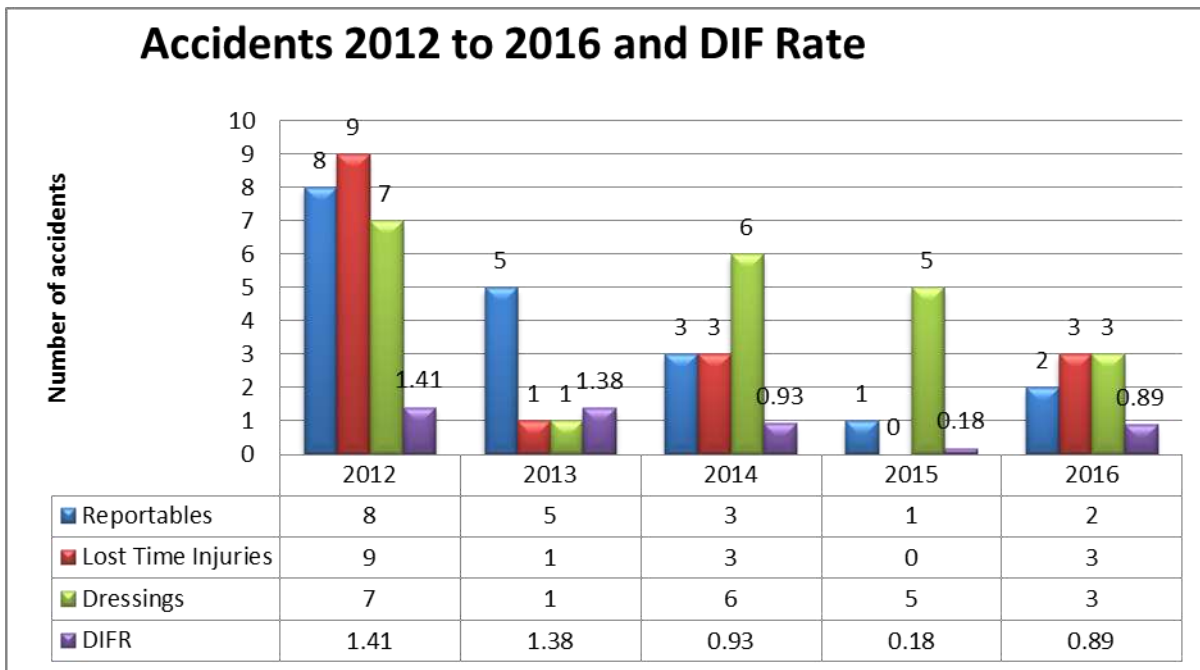


Table 3: DIFR Trends 2012 – 2016

The objective of a DIFR 0.0 was not achieved and the year ended on a DIFR 0.89. Although this was disappointing not to improve on the previous year's achievement, an attitude of taking failure and turn it into success need to be adopted.

### 3. ANALYSIS OF CRITICAL PLANNED TASK OBSERVATIONS 2016-2017

Activity Observed	Actual	Deviations	% Deviation
Lamp Room- Gas Detection Instrument (inspection & calibration)	221	5	2.2
Flammable Gas Testing	298	5	1.6
Start of Shift / Drill Site Inspection	334	25	7.4
Material Handling (Loading & Offloading)	269	32	11.8
Machine Rigging (Conventional)	227	6	2.6
Machine Rigging (Mamba - Up hole)	12	0	0.0
Machine Rigging (Mamba - Down hole)	3	0	0.0
Casing Installation	227	7	3.0
Drilling and Chucking	182	12	6.5
Rod Handling (pulling and lowering of rods and using the rod puller)	201	7	3.4
Re-chucking Procedure	140	1	0.7
Installing Wedge Bolts, Eye Bolts and Face Clamps	105	5	4.7

End of Shift Procedure	260	7	2.6
Core Handling(Underground)	247	15	6.0
Rigging Down	133	1	0.7
Total	2859	128	

In line with the Company’s Occupational Health and Safety Management System, compliance with Standard Operating Procedures is monitored through a Planned Task Observation (PTO). The results of the P.T.O`s conducted are analysed and stored in a data base in the IMS System. This give management the tool to measure the knowledge of the employee, the trend of the employees training and the training needs.

Deduced from the above table:

Material Handling PTO`s had a 11.8 % failure rate and one accident relating to loading of material was recorded when employees finger was caught whilst loading a pump

This was followed with Start of shift with a failure rate of 7.4% and one accident was recorded when a piece of rock dislodged and struck the operator (Early morning examination)

Production drilling and chucking had a 6.5% failure rate here we recorded one accident when replacing a rod puller on the machine an employee finger got caught

Core handling PTO had a failure rate of 6.0 % with no accidents recorded

This shows that there is a direct relation between the failure rates on PTO conducted and this statistic must be used to re-train employees failing the PTO.

#### 4. RISK MAP: PNEUMATIC DIAMOND DRILLING

A risk map has been included (below) so that an interested reader can gauge the severity of the risk for any given work activity.

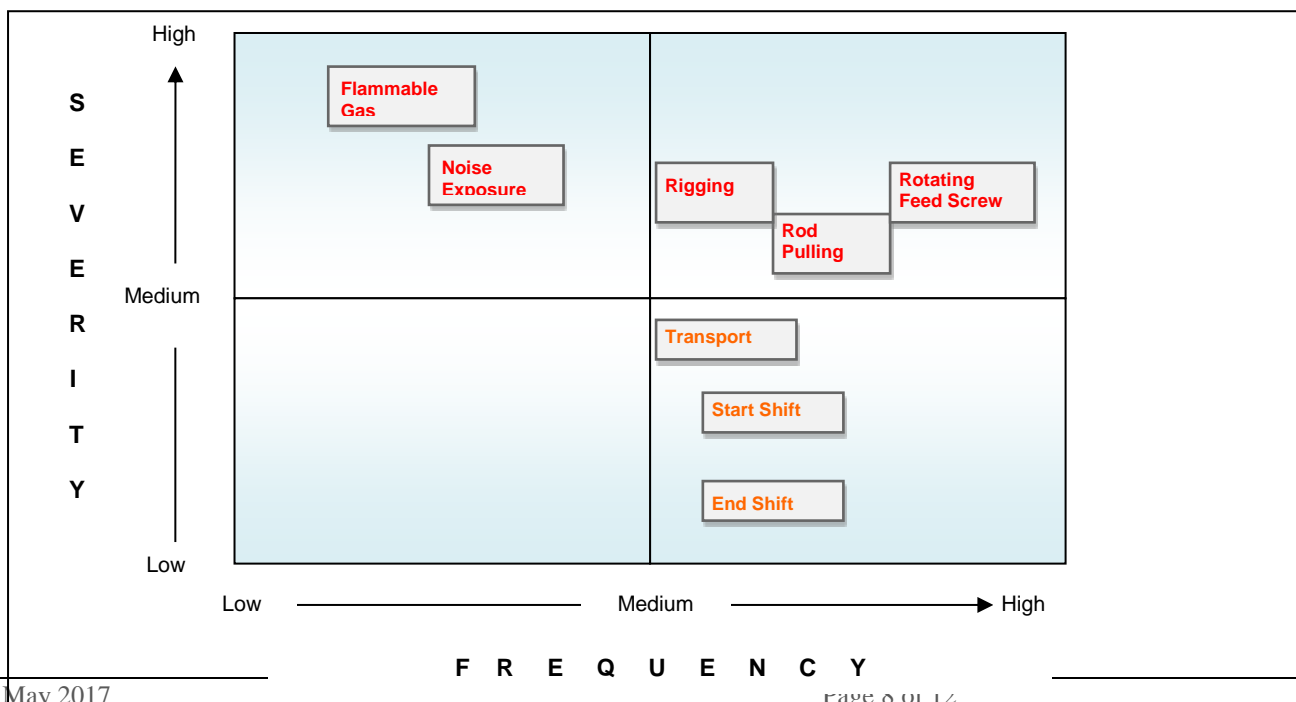




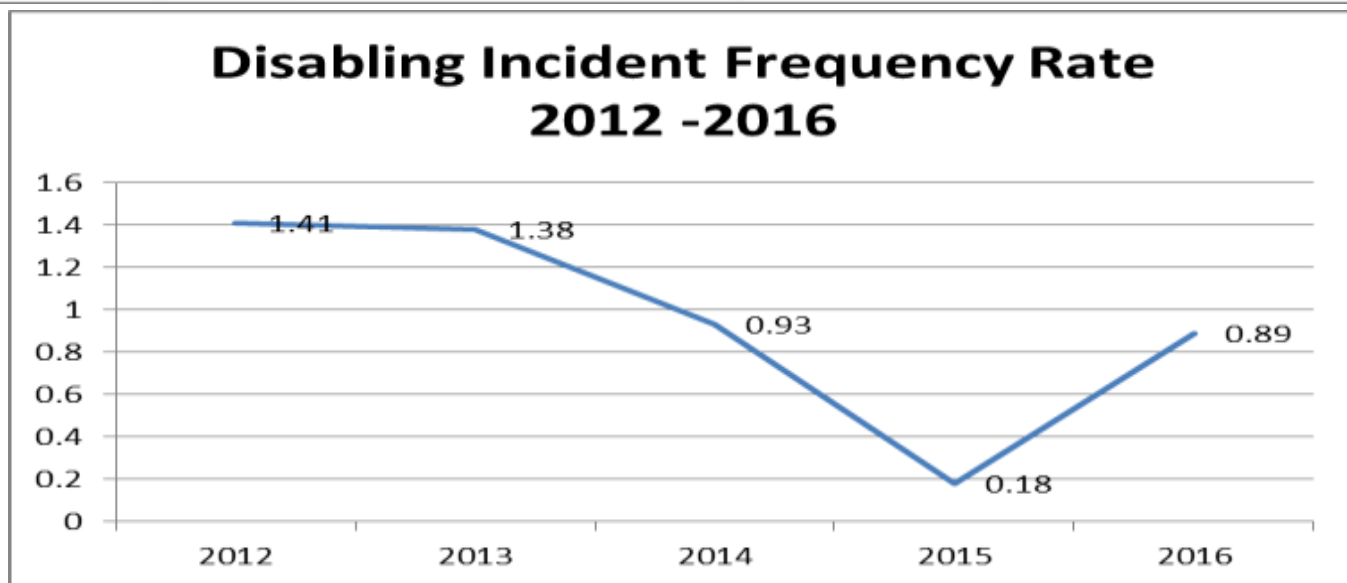
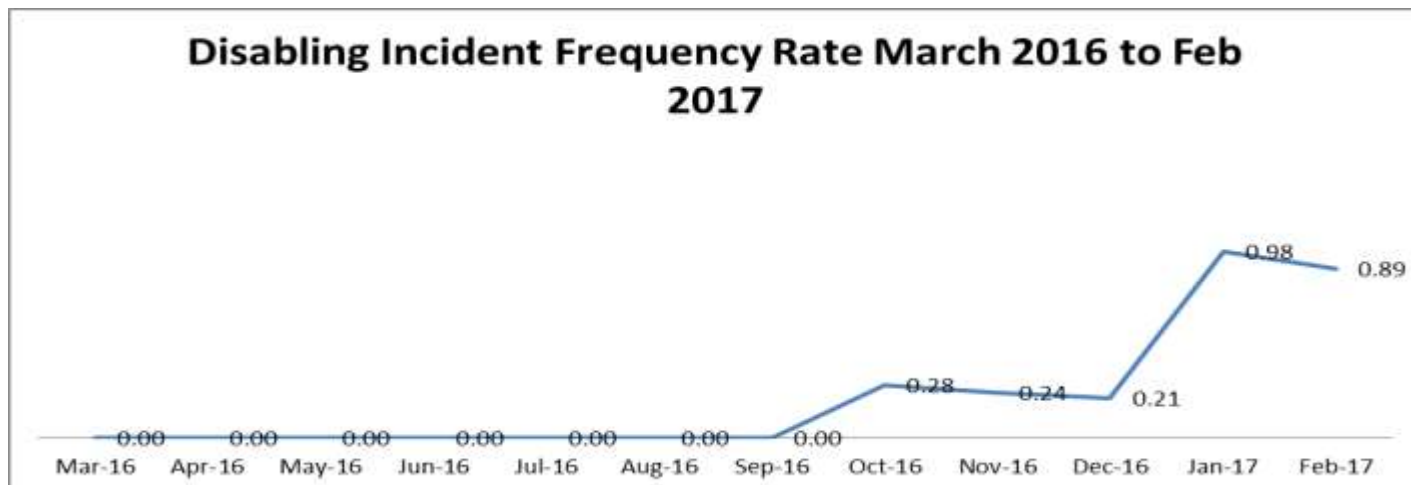
Figure 3: Risk Map

### 5. DIFR

The **DIFR** (disabling injury frequency rate) for 2016 – 2017 is: 0.89

The calculation is performed thus: Lost Time Injuries X 200 000/Total Man hours

$$5 \times 200000 / 1125686.8 = 0.89$$



## **The Company response to accidents and incidents during the year.**

1. Formal monthly safety and production meeting introduced to all areas of operation with senior management involvement. During the meeting the line supervisors present their safety and production performance and report on any issues encountered during the month. Action plan is then discussed and implemented.
2. Daily inspections by line supervisors and management with emphasis on quality inspection and determining risk on conditions and also at risk behaviour from employees.
3. All accidents is fully investigated to determine the causes of the accident, remedial actions is logged on the Lesedi information system and can only be signed off by the manager once all remedial actions was implemented.
4. Quality planned task observation and true reflections on deviations observed during the assessment are used to determine what actions to implement
5. The Performance Management System introduced pre determine at risk behaviour of employees. Employees identified are being sent for re-training and can only return to the site when management is satisfied of the employee`s competency level.
6. Key performance indicators for employees are conducted monthly and used to address any areas of concern.

## **6. HEALTH**

### **i. Exposure to Noise**

As indicated in Figure 3: Risk Map, noise exposure is a high risk in the underground drilling industry. Lesedi participate in his clients noised induced prevention programmes and compliance to procedures are measured by issuing and conducting Planned Task Observations, also yearly medical testing is conducted as per Health and Safety Act. Newly developed technology is also introduced by means of electrically operated drilling machines.

## ii. HIV

The Company Induction training programme addresses the HIV issues on a yearly basis during refresher training.

## 7. ACHIEVEMENT OF OBJECTIVES FOR THE 2016-2017 YEAR

### Objective 01: Maintaining a DIFR of Less than 0.0

The objective of 0.0 was not met during 2016 however Lesedi management and employees are committed to improve the current results and achieve the objective

### Objective 02: Improvement of Employee Skills & Competence

Lesedi employee's skill training is conducted by skilled and competent training instructors, the employees competency is measured by planned task observation conducted.

Lesedi also use out sourced training facilities to improve the employees skills and comply with legislation.

### Objective 03: Implement Effective Performance Measurement of all Employees

The system is implemented company wide and used during the weekly KPI sessions

A monthly report is also distributed to the Area Managers

Training needs is addressed by the instructors when required

### Objective 04: Develop and implement an effective, easy to use safety system that is accessible, user friendly, capturing data

The Lesedi mobile system is in operation and is capturing safety data on the go, supervisors can use either a computer or mobile device to up load data quick and easily.

### Objective 05: Obtain OHSAS 18001 re-certification by the end of March 2017

OHSAS 18001 Certification obtained



**S Malema**  
*Chief Executive Officer*  
**May 2017**