

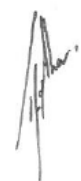


MONTHLY AIR QUALITY REPORT



MOKOLO CROCODILE WATER AUGMENTATION PROJECT PHASE 2 (MCWAP-2)
ENVIRONMENTAL BASELINE AIR QUALITY - MONTHLY MONITORING REPORT.



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EXECUTIVE SUMMARY

Environmental Assurance (Pty) Ltd. (ENVASS) has been appointed by GIBB Bigen Nyeleti Joint Venture (GBN-JV) to design, implement and maintain a monthly Air quality compliance monitoring programme related to the Phase 2 Mokolo Crocodile Water Augmentation Project (MCWAP-2). The monitoring is implemented as baseline monitoring along the proposed pipeline construction route (hereafter referred to as **“the proposed development”**), which is planned to stretch from the Vlieepoort Mountains, west of Thabazimbi, to Medupi and Matimba Power Stations situated between Steenbokpan and Lephalale, Limpopo Province. The monthly passive sampling comprises of gravimetric dust fallout monitoring, as well as future planned Particulate Matter (PM) monitoring at three (3) predetermined localities. The identified localities are monitored on a monthly basis for data collection and interpretation in order to determine possible impacts related to the proposed construction activities, as well as to serve as a baseline condition for monitoring programme refinement as the project progresses.

This report communicates the monthly air quality monitoring and results conducted within February to March 2022. All monitoring was conducted according to recognised standards and sent to a SANAS accredited laboratory for analysis as further described in this report.

The following findings pertain to the February to March 2022 air quality monitoring:

- Ninety-six (96) of the one-hundred (100) samples were obtained and analysed during the monitoring period;
- Dust stand DB17 recorded as being stolen during the monitoring period;
- Dust Bucket DB75 was recorded as being stolen during the monitoring period;
- DB84 and DB85 could not be sampled during the monitoring period due to access restrictions to the property (Farm Paarl);
- All three (3) E-Sampler data was captured during the February to March 2022 monitoring period;
- All E-sampler localities (ES01 (School), ES02 (Eskom - Medupi Power Station) and ES03 (Mooivalei) recorded general low and relatively constant daily PM₁₀ readings with some influences (peaks) noted;
- One (1) sample locality (DB87) exceeded the SANS 1929 Industrial limit of 1200 mg/m²/day during the monitoring period with a reading of 1659 mg/m²/day;
- One (1) sample locality (DB86) recorded exceedances related to the SANS 1929 Residential limit of 600 mg/m²/day with a value of 948 mg/m²/day;
- The remaining monitoring locality results were compliant with the set SANS 1929 limits;
- Monitoring locality DB87 presented the highest reading during the February to March 2022 monitoring period at an elevated 1659 mg/m²/day, while monitoring locality DB76 presented the lowest with a calculated 13.9 mg/m²/day; and
- The dominant wind direction recorded during the monitoring period originated from the west-southwest and to a lesser extent from the northern direction. Wind speeds recorded an average between 0.5 m/s and 2.4 m/s.

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GLOSSARY

A list of commonly used acronyms, measurement units and definitions are included below for the purpose of ensuring uniformity in the interpretation of this report:

| ACRONYMS | |
|------------------|---|
| GBN-JV | GIBB Bigen Nyeleti Joint Venture |
| ASTM | American Society for Testing and Materials |
| DFFE | Department of Forestry, Fisheries and the Environment (Previously known as DEFF) |
| ENVASS | Environmental Assurance (Pty) Ltd |
| NEMA | National Environmental Management Act: Act 109 of 1998. |
| NEM:AQA | National Environmental Management: Air Quality Act 39 of 2004 |
| PM ₁₀ | Particulate Matter of less than 10 microns in diameter |
| SANS | South African National Standards |

| MEASUREMENT UNITS | |
|------------------------|------------------------------------|
| mg/m ² /day | Milligram per square meter per day |
| PPM | Parts per million |
| µg/m ³ | Microgram per cubic meter |

| DEFINITIONS | |
|-----------------------------------|---|
| Ambient air | Outdoor air in the troposphere, excluding air regulated by the relevant national legislation, where air quality is determined in accordance with this standard. |
| ASTM D1739 | Standard test method for the collection measurement of dust fall (settleable particulate matter). |
| Average period | Period of time over which the average value is determined. |
| Dust fallout monitoring programme | Means monitoring of gravimetric dust fallout on a continuous basis. |
| Monthly basis | Period of 30 days (±2 day) as specified by ASTM D1739. |
| National Dust Control Regulations | Means the National Dust Control regulations, 2013, as published in the Government Gazette (No. 36974) of 1 November 2013 in terms of the National Environmental Management: Air Quality Act 39 of 2004. |
| Non-residential area | Means any area not classified for residential use as per local town planning scheme. |
| Residential area | Means any area classified for residential use in terms of the local town planning scheme. |
| SANS1929: 2011 | South African National Standards, Ambient Air Quality – limits for common pollution. |

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1. INTRODUCTION

Environmental Assurance (Pty) Ltd. (ENVASS) was appointed by GIBB Bigen Nyeleti Joint Venture (GBN-JV) to undertake the environmental air quality baseline monitoring programme of the Mokolo Crocodile Water Augmentation Project Phase 2 (MCWAP-2) project. The monitoring is implemented based on the proposed construction pipeline associated with the increased water demand required within Lephalale to coal-fired power stations, where water will be transferred from the Crocodile River (West) to the Steenbokpan and Lephalale area. The project infrastructure includes:

- Water Transfer Infrastructure:
 - Vlieepoort abstraction weir and pump station;
 - Low lift rising main;
 - Balancing dams and desilting works;
 - High-lift pump station;
 - High-lift rising main;
 - Break pressure reservoir;
 - Gravity pipeline;
 - Operation reservoir;
 - Electrical infrastructure; and
- Borrow pits for sourcing of construction material.

The monthly air quality monitoring consists of one hundred (100) gravimetric dust fall-out monitoring localities and three (3) remote particulate matter E-Samplers sites. The scope of work (SoW) performed is aligned to the Tender Document Requirements (Reference: MCWAP2: CONTRACT 2A-C-122-8.9), which are included within the report.

2. BACKGROUND

The project area is located within the Limpopo Province (Waterberg District Municipality) and stretches from the Thabazimbi to Lephalale Local Municipalities. The climate is classified as semi-arid with precipitation generally present during the summer season at a maximum from November to March. The current ambient air quality profile is affected through residential traffic on the associated dirt roads, farming and agriculture activities. Planned sources of air pollution from the pipeline construction included as a minimum, infrastructure and equipment use:

- Tracked machinery and equipment;
- Heavy mobile vehicles;
- Dump trucks;
- Haul trucks;
- Light motor vehicles;
- Access roads.

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3. LEGISLATIVE CONTEXT AND REFERENCES

Section 28 of the National Environmental Management Act (NEMA, Act 107 of 1998) places a duty of care on any person causing, has caused or may cause significant pollution or degradation of the environment to take reasonable measures to prevent such pollution or degradation from occurring, continuing, or, insofar as such harm to the environment is authorised by law or cannot be reasonably avoided or stopped and rectify such pollution of the environment.

The measures required in terms of subsection (1) may include measures to:

- Investigate, assesses and evaluate the impact on the environment,
- Inform and educate employees on the environmental risk of their work and the manner in which tasks must be performed in order to avoid causing significant pollution or degradation of the environment;
- Cease, modify or control any activity or processes causing pollution or degradation;
- Contain or prevent the movement of pollutants or the cause of degradation;
- Eliminate any source of pollution or degradation; or
- Remedy the effects of pollution or degradation.

The National Environmental Management: Air Quality Act (Act no. 39 of 2004) (AQA) was developed to give effect to NEMA in order to update air quality legislation to comply with general environmental policies and to ensure that the legislation is in line with local and international standards on air quality and air quality management practices. The main objectives of the act are to:

- Enhance and protect air quality;
- Provide reasonable measures and steps to prevent pollution or environmental degradation; and
- To secure sustainable environmental development in conjunction with economic and social development.

In terms of the AQA certain activities and industries, including mining, have the responsibility to:

- Comply with any relevant standards or bylaws;
- Comply with relevant emission standards;
- **Comply with the Minister's requirement for the implementation of a pollution prevention plan in respect of a substance declared as a priority air pollutant;**
- Comply with an **Air Quality Official's legal request for impact reports;**
- Taking reasonable steps to prevent the emission of any offensive odour caused by any activity on their premises.

Guidelines provide a basis for protecting public health from the adverse effects of air pollution and for eliminating or reducing to a minimum, those contaminants of air that are known or likely to be hazardous to human health and well-being (WHO, 2000). The South African Bureau of Standards (SABS), in collaboration with DEA, established ambient air quality standards for criteria

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pollutants. The National Ambient Air Quality Standards (Republic of South Africa, 2009a and 2012) provide standards for ambient air quality in terms of criteria pollutants and permitted frequency of exceedances.

4. PURPOSE

The purpose of this assessment is to determine the baseline ambient air quality of the proposed development area. The baseline air quality assessment will measure the current ambient air quality before commencement of construction. The compliance monitoring is based on a pro-active approach to assess air quality on a continuous basis, by measuring the air quality levels.

Generated dust can become a nuisance (or health risk) when it is not properly managed and mitigated. Dust can be a concern to the surrounding land users and receiving environment and it is therefore important to determine the potential of dust generated by the activities.

This report is structured to include the following:

- Purpose / Objective of the study;
- Scope of Work / terms of reference;
- Description of methodologies utilised;
- Limitations and assumptions;
- Results from the baseline results; and
- Summary of findings and recommendations.

This report also aims to give effect to the requirements and legislation as promulgated in South Africa. Please refer to Section 2 for detailed legislative requirements for the study. Key aspects for the purpose of this document is to:

- Describe baseline air quality conditions and how they could be affected;
- Raise relevant air quality concerns of the proposed project; and
 - To recommend, based on the conditions, preventative measures for implementation once the activity commences.

5. METHODOLOGY

5.1 SITE ESTABLISHMENT AND SCOPE OF WORK

An initial desktop site assessment was conducted to determine suitable locations regarding the air quality baseline assessment in conjunction with GBN-JV representatives. The result of the desktop study was the identification of areas to provide a holistic baseline condition of the overall pipeline and associated extent.

Site establishment was implemented in February 2021 followed by monthly passive dust monitoring, while active indicative was initiated during July 2021.

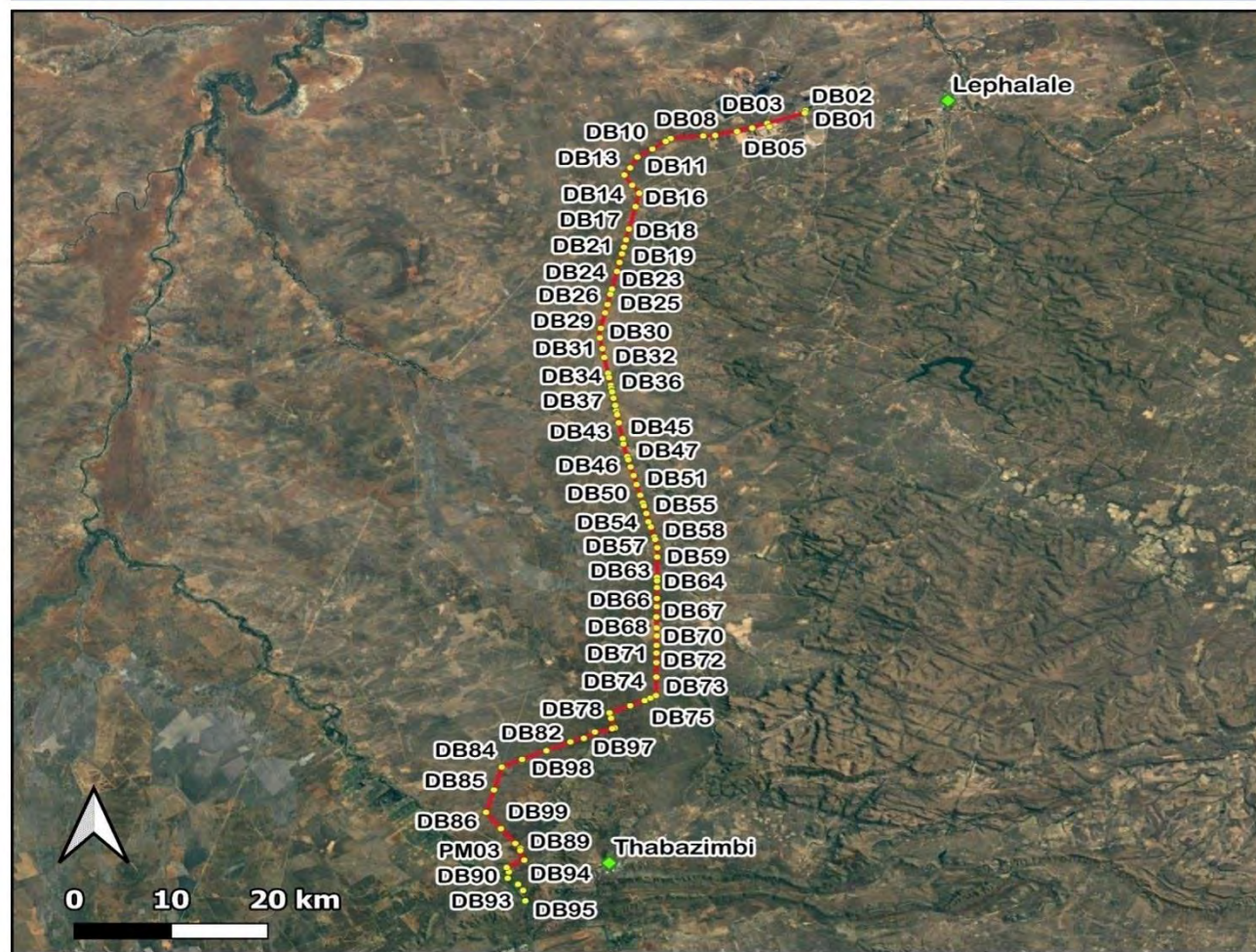
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Sampling occurred as per the scope of work at the identified sampling localities (100 in total) presented in Table 1 and Figure 1 to Figure 3.

Table 1: Monitoring Resources and Sampling Frequencies

| Description | Locality Count | Monitoring Frequency |
|--|----------------|----------------------|
| Dust Stand Monitoring Points: <ul style="list-style-type: none"> • Along Pipeline Alignment; • Selected positions at the Weir, Balancing dams, Break Pressure Reservoir and Points of Supply; • Monitoring Weirs; • Along Gravel Access Roads; • Borrow Pits and Spoil Areas; and • Sensitive Receptors. | 100 | Monthly |
| PM10 E-Sampler <ul style="list-style-type: none"> • Kesarona Primary School, Eskom - Medupi Power Station & Balancing Reservoir | 3 | Monthly |

GIBB Bigen Nyeleti Joint Venture (GBN-JV) - Air Quality Monitoring Programme



Legend

- ◆ Towns
- Pipeline
- Air Quality Monitoring Points



Project: 244-20_21
 Map by: Richard Viljoen
 Date: 11/02/2021
 Coordinate System: EPSG 3857

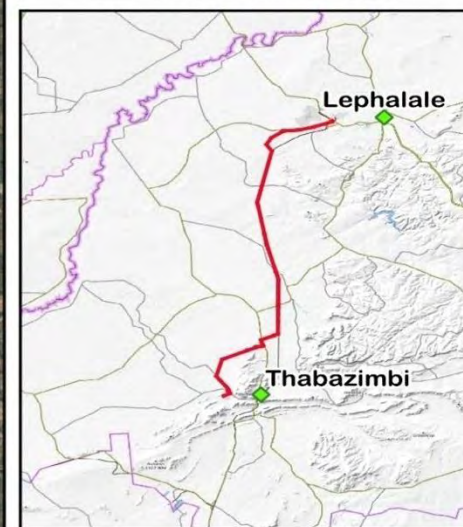
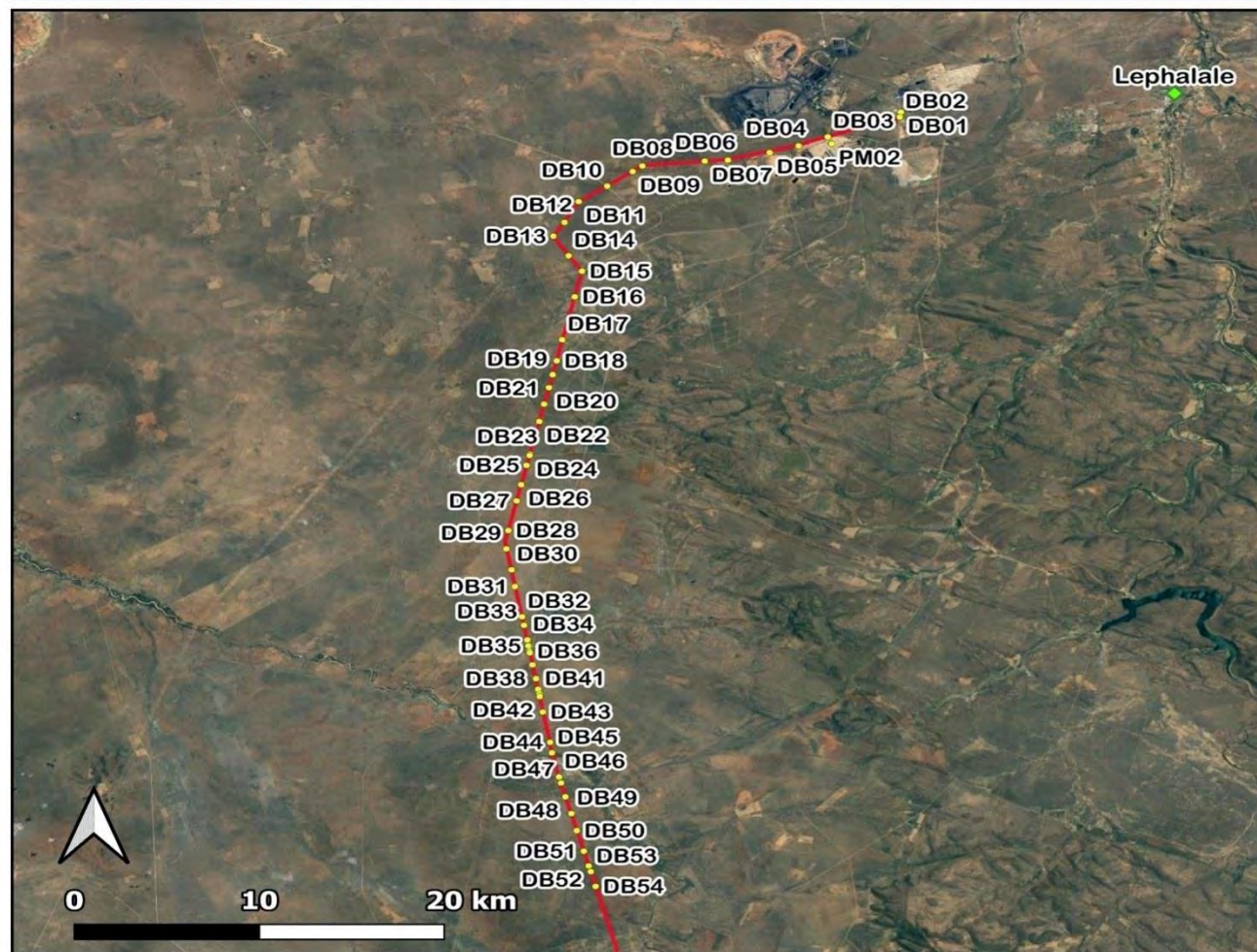


Figure 1: GBN-JV Air Quality Monitoring Localities

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GIBB Bigen Nyeleti Joint Venture (GBN-JV) - Air Quality Monitoring Programme



Legend

- ◆ Towns
- Pipeline
- Air Quality Monitoring Points

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Map by: Richard Viljoen
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Coordinate System: EPSG 3857

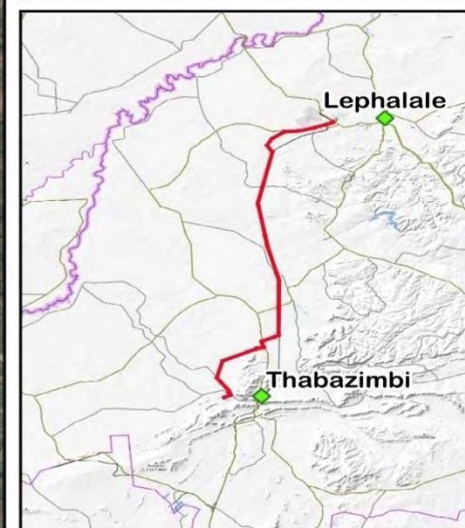
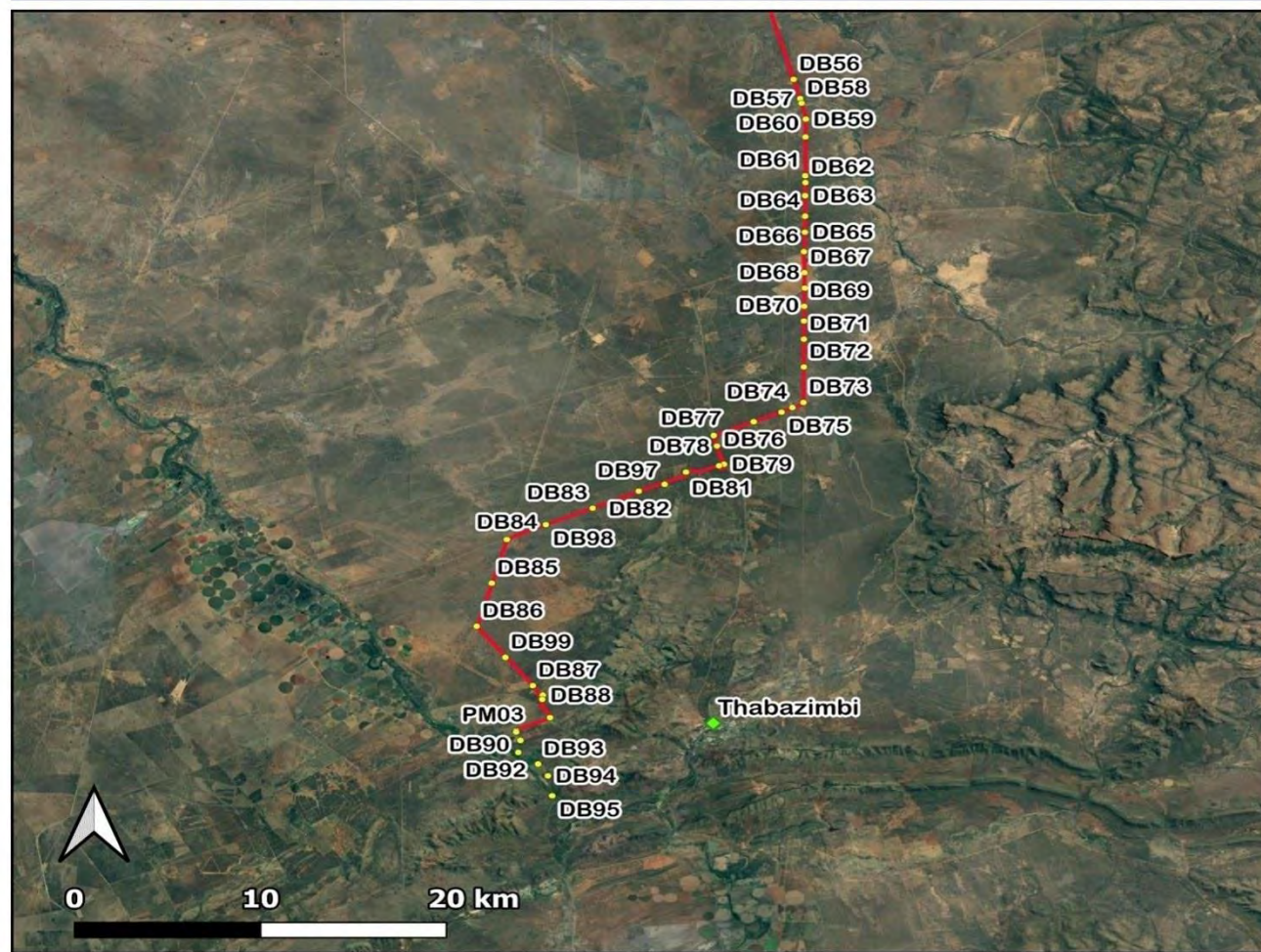


Figure 2: GBN-JV Air Quality Monitoring Localities (Northern Region)

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GIBB Bigen Nyeleti Joint Venture (GBN-JV) - Air Quality Monitoring Programme



Legend

- ◆ Towns
- Pipeline
- Air Quality Monitoring Points

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Project: 244-20_21

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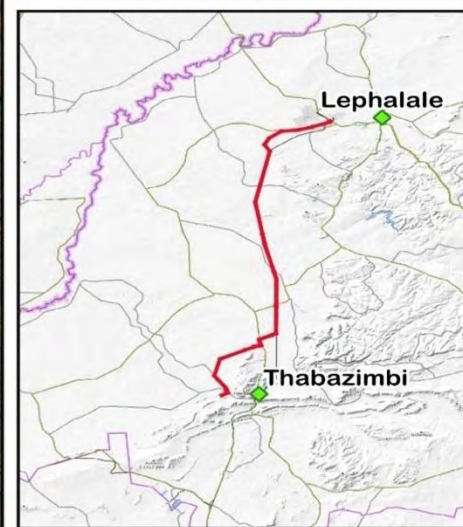


Figure 3: GBN-JV Air Quality Monitoring Localities (Southern Region)

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5.2 ACTIVE INDICATIVE MONITORING

The Met One Instruments, Inc. model E-Sampler is a type of nephelometer that automatically measures and records real-time airborne PM₁₀, PM_{2.5}, or TSP particulate concentration levels using the principle of forward laser light scatter. In addition, the E-Sampler has a built-in 47 mm filter sampler which can optionally be used to collect the particulate for subsequent gravimetric mass or laboratory evaluation.

Laser Light Scatter System

Sample air is drawn into the E-Sampler and through the laser optical module, where the particulate in the sample air stream scatters the laser light through reflective and refractive properties. This scattered light is collected onto a photodiode detector at a near-forward angle, and the resulting electronic signal is processed to determine a continuous, real-time measurement of airborne particulate mass concentrations.

Gravimetric Filter Sampler System

After the sample air stream has been measured by the E-Sampler and exits the optical engine, it passes through the built-in 47 mm filter sampler system. This system allows the particulate to optionally be collected on a filter disc as a second method to obtain airborne particulate mass data, or for laboratory analysis of the particulate. The 47 mm filter system can also be used to determine a gravimetric K-factor (slope multiplier) to correct the E-Sampler real-time signal to match the local particulate type. In this case, a filter disc is weighed on a microbalance before and after being run in the E-Sampler for a period of time. The resulting mass of the dust on the filter is correlated with the concentrations that the E-Sampler recorded over the same time period, and a correction factor is calculated. The E-Sampler can be used with no correction factor in applications where relative particulate trending is appropriate.



Figure 4: Met One Instruments E-Sampler-9800

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Additional details of the apparatus:

- Model: E-Sampler-9800
- Key Features: Real Time Particulate Monitor
- Description: Particulate and air quality monitoring combined in one instrument.

Results obtained from active indicative sampling is evaluated against ambient air quality limits for any common pollutants (SANS 1929:2011) as represented in Table 1 below:

Table 2: Ambient air quality limits for common pollutants (SANS 1929:2011) (Limit Values in $\mu\text{g}/\text{m}^3$)

| Pollutant | Averaging Period | Limit Value | Frequency of Exceedance | Compliance Date |
|-------------------------------------|-------------------|-------------|-------------------------|------------------------------|
| Particulate Matter PM_{10} | 24 – hour average | 120 | 4 | Immediate – 31 December 2014 |
| | 24 – hour average | 75 | 4 | 1 January 2015 |
| | Annual average | 50 | 0 | Immediate – 31 December 2014 |
| | Annual average | 40 | 0 | 1 January 2015 |

5.3 PASSIVE DUST MONITORING

Dust buckets of a standard size and shape are prepared and set up at locations within the servitude of the pipeline and ancillary infrastructure, in order for dust to settle for periods of 30 (± 2) days. The dust buckets are collected and sealed on-site and sent to a SANAS accredited laboratory for analysis. The masses of the water-soluble and insoluble components of the material collected are then determined and results are reported as $\text{mg}/\text{m}^2/\text{day}$. This methodology is described according to South African National Standards 1929:2011 and the American Society for Testing and Materials (ASTM) Designation: D 1739-98 (2017) standards. The results for this method of testing are obtained by gravimetric weighing. The apparatus required for this type of monitoring include open-top buckets/containers no less than 150mm in diameter with a height of no less than twice its diameter. The buckets must be placed on a stand at a height of 2 (± 0.2) m above the ground.

Results obtained are evaluated against the four-band scale for dust deposition (SANS 1929:2011) and the National Dust Control Regulation limits (GN827).

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Table 3: Four-band scale evaluation criteria for dust deposition (SANS 1929: 2011)

| Band Number | Band Description level | Classification | Dust fallout rate (D) (mg/m ² /day, 30-day average) | Comment |
|-------------|------------------------|----------------|--|--|
| 1 | Residential | Ideal | $D > 600$ | Permissible for residential and light commercial |
| 2 | Industrial | Acceptable | $600 < D < 1200$ | Permissible for heavy commercial and industrial |
| 3 | Action | Tolerable | $1200 < D < 2400$ | Requires investigation and remediation if two sequential months lie in this band, or more than three occur in a year. |
| 4 | Alert | Unacceptable | $2440 < D$ | Immediate action and remediation required followed the first incidence of dust fallout rate being exceeded. Incidents report is submitted to the relevant authority. |

The National Dust Control Regulations identify the permissible amount of gravimetric dust fallout, as indicated below:

Table 4: Acceptable dust fallout results (GNR 827)

| Restriction Areas | Dust fall rate (D) (mg / m ² / day, 30-day average) | Permitted frequency of exceeding dust fall rate |
|----------------------|--|---|
| Residential Area | $D < 600$ | Two within a year, not sequential months. |
| Non-residential Area | $600 < D < 1200$ | Two within a year, not sequential months. |

6. EMISSION GENERATION AND POLLUTANT OVERVIEW

The current dust generating activities at the site include movement of vehicles along the proposed pipeline route.

It is important to predict and determine possible areas of emission generation as early identification can help develop mitigation or prevention plans for the specific emission generating activities. A prediction is made possible by using existing examples of emission generating activities on other sites and their effect and measures in place to mitigate. From the activities proposed for this project, the following can be expected to be activities that can cause or lead to the generation of emissions:

Construction Phase:

- Site establishment including fencing and security;
- Site and vegetation clearing;
- Soil stripping, stockpiling, earthworks and diggings;
- Storage of waste and construction materials;
- Materials transport;
- Foundations and constructions;
- Surfacing;
- Tracked machinery and equipment;
- Heavy mobile vehicles;
- Articulated dump trucks;
- Haul trucks;
- Light motor vehicles;
- Access roads; and
- Materials stockpiles.

From the abovementioned activities, exhaust emissions from construction vehicles and equipment will typically include particulates, such as PM₁₀, carbon monoxide (CO), sulphur dioxide (SO₂) and volatile organic compounds (VOCs). Additionally, disturbance of groundcover caused by groundworks and activities will further impact on particulate matter generation.

6.1 PARTICULATE MATTER

Particles can be classified by its aerodynamic properties into coarse particles (gravimetric), PM₁₀ (particulate matter with a diameter of less than or equal to 10 microns), PM₄ (particulate matter with a diameter of less than or equal to 4 microns), very fine particles such as PM_{2.5} (particulate matter with a diameter of less than or equal to 2.5 microns) and PM₁ (particulate matter with a diameter of less than or equal to 1 microns) (Harrison and van Grieken, 1998). The fine particles may contain **aerosols such as sulphates and nitrates (they “cling” to particulate matter), combustion particles and/or recondensed organic**

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and metal vapours. The coarse particles contain earth crust materials and fugitive dust from roads and industries (Fenger, 2002).

In terms of health impacts, particulate air pollution effects are broad, but are predominately associated with effects of the respiratory and cardiovascular systems (WHO, 2000). Particle size is important for health because it controls where in the respiratory system a given particle deposits. Fine particles have been found to be more damaging to human health than coarse particles as larger particles are less respirable in that they do not penetrate deep into the lungs compared to smaller particles (Manahan, 1991).

Larger particles are deposited into the extrathoracic part of the respiratory tract while smaller particles are deposited into the smaller airways leading to the respiratory bronchioles (WHO, 2000). A study by Pope and Burnett (2002) indicated that PM_{2.5} leads to high plaque deposits in arteries, causing vascular inflammation and atherosclerosis (Kaonga and Kgabi, 2009). As yet, no evidence of a threshold in the relationship between particulate concentrations and adverse human health effects have been determined (Burger and Scorgie, 2001; WHO 2005).

- *Short-term (acute) exposure*

Recent studies suggest that short-term exposure to particulate matter leads to adverse health effects, even at low **concentrations of exposure (below 100 µg/m³)**. Morbidity effects associated with short-term exposure to particulates include increases in lower respiratory symptoms, medication use and small reductions in lung function.

- *Long-term (or chronic) exposure*

Long-term exposure to low concentrations (~10 µg/m³) of particulates is associated with mortality and other chronic effects such as increased rates of bronchitis and reduced lung function (WHO, 2000). Those most at risk include the elderly, individuals with pre-existing heart or lung disease, asthmatics and children; with an increased risk associated with an increase in exposure (WHO 2005).

6.2 ENVIRONMENTAL IMPACT

Trace gases and aerosols impact the climate through the effect on the radiative balance of the earth. Trace gases such as **greenhouse gases absorb and emit infrared radiation which raises the temperature of the earth's surface causing the** enhanced greenhouse effect. Aerosol particles have a direct effect by scattering and absorbing solar radiation and an indirect effect by acting as cloud condensation nuclei. Atmospheric aerosol particles range from dust and smoke to mists, smog and haze (IPCC, 2001). Smog and haze are common in regions where certain geographic features, such as mountains, and weather conditions, such as temperature inversions, contribute to the trapping of air pollutants (Kumar and Mohan, 2002). Smog and haze also contribute to visibility degradation through the absorption and scattering of radiation by gases and particulates (Elsom, 1996).

Other environmental impacts associated with air pollution include loss of biodiversity and damage to sensitive environments.

| | | | |
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7. RESULTS AND DISCUSSION

7.1. MONTHLY SAMPLING REGISTER

Table 5 below illustrates the February to March 2022 sampling register as recorded by ENVASS during the monthly monitoring.

Table 5: February to March 2022 Monthly Sampling Register

| GBN-JV Air Quality Monitoring | | | | | | | |
|-------------------------------|--|---------------|---------------|------------------------------|-----------------------------|---------------|----------|
| Locality ID | Description | Co-ordinates | | Sampler Name | Sampling Date | Sampling Time | Comments |
| | | Latitude | Longitude | | | | |
| Passive Dust Fallout | | | | | | | |
| DB01 | Grootestryd 465 LQ Portion 5 | 23°40'41.16"S | 27°36'4.24"E | Damon Nell/ Enock Machete | 16 th March 2022 | 09:16 | Sampled |
| DB02 | Grootestryd 465 LQ Portion 5 | 23°40'52.25"S | 27°36'2.03"E | | 16 th March 2022 | 09:22 | Sampled |
| DB03 | Along D1675 outside of Turfvlakte 463 LQ farm | 23°41'37.30"S | 27°33'44.10"E | | 16 th March 2022 | 08:33 | Sampled |
| DB04 | Along D1675 outside of Hierontrent 460 LQ farm | 23°41'57.80"S | 27°32'48.26"E | | 16 th March 2022 | 08:30 | Sampled |
| DB05 | Along D1675 outside of Eenzaamheid 687 LQ farm | 23°42'13.03"S | 27°31'52.68"E | | 16 th March 2022 | 08:27 | Sampled |
| DB06 | Along D1675 outside of Eenzaamheid 687 LQ farm | 23°42'29.97"S | 27°30'32.64"E | | 16 th March 2022 | 08:24 | Sampled |
| DB07 | Along D1675 outside of Eenzaamheid 687 LQ farm | 23°42'32.26"S | 27°29'48.38"E | | 16 th March 2022 | 08:21 | Sampled |
| DB08 | Along D1675 outside of Pontes Estate 744 LQ farm | 23°42'43.21"S | 27°27'48.78"E | | 16 th March 2022 | 08:01 | Sampled |
| DB09 | Pontes Estate 744 LQ (Buffels Jag) | 23°42'55.98"S | 27°27'30.40"E | | 16 th March 2022 | 08:05 | Sampled |
| DB10 | Pontes Estate 744 LQ (Buffels Jag) | 23°43'28.90"S | 27°26'41.33"E | | 16 th March 2022 | 08:12 | Sampled |
| DB11 | Pontes Estates 712 LQ | 23°44'4.06"S | 27°25'46.60"E | | 16 th March 2022 | 07:44 | Sampled |
| DB12 | Along unnamed dirt road bordering Exxaro mine | 23°41'23.55"S | 27°34'20.99"E | | 16 th March 2022 | 08:37 | Sampled |
| DB13 | D729 dirt road | 24°38'30.48"S | 27°18'53.46"E | | 15 th March 2022 | 10:24 | Sampled |
| DB14 | Along unnamed dirt road bordering Exxaro mine | 23°41'8.24"S | 27°35'18.63"E | | 16 th March 2022 | 08:43 | Sampled |

| | | | |
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| GBN-JV Air Quality Monitoring | | | | | | | |
|-------------------------------|----------------|---------------|---------------|--------------|-----------------------------|---------------|---------------------------------|
| Locality ID | Description | Co-ordinates | | Sampler Name | Sampling Date | Sampling Time | Comments |
| | | Latitude | Longitude | | | | |
| DB15 | Servitude Road | 23°46'41.92"S | 27°25'52.99"E | | 16 th March 2022 | 09:48 | Sampled |
| DB16 | Servitude Road | 23°47'39.91"S | 27°25'39.16"E | | 16 th March 2022 | 09:53 | Sampled |
| DB17 | Servitude Road | 23°49'17.37"S | 27°25'15.13"E | | 16 th March 2022 | NA | Not Sampled – Dust Stand Stolen |
| DB18 | Servitude Road | 23°50'5.11"S | 27°25'4.54"E | | 16 th March 2022 | 10:34 | Sampled |
| DB19 | Servitude Road | 23°50'36.53"S | 27°24'56.77"E | | 16 th March 2022 | 10:43 | Sampled |
| DB20 | Servitude Road | 23°51'5.81"S | 27°24'49.59"E | | 16 th March 2022 | 10:47 | Sampled |
| DB21 | Servitude Road | 23°51'43.25"S | 27°24'40.22"E | | 16 th March 2022 | 10:49 | Sampled |
| DB22 | Servitude Road | 23°52'22.70"S | 27°24'31.05"E | | 16 th March 2022 | 10:51 | Sampled |
| DB23 | Servitude Road | 23°53'36.73"S | 27°24'13.40"E | | 16 th March 2022 | 10:54 | Sampled |
| DB24 | Servitude Road | 23°53'39.51"S | 27°24'12.55"E | | 16 th March 2022 | 10:56 | Sampled |
| DB25 | Servitude Road | 23°54'1.90"S | 27°24'6.76"E | | 16 th March 2022 | 10:59 | Sampled |
| DB26 | Servitude Road | 23°54'46.08"S | 27°23'56.64"E | | 16 th March 2022 | 11:02 | Sampled |
| DB27 | Servitude Road | 23°55'22.69"S | 27°23'47.77"E | | 16 th March 2022 | 11:05 | Sampled |
| DB28 | Servitude Road | 23°56'29.84"S | 27°23'31.71"E | | 16 th March 2022 | 11:09 | Sampled |
| DB29 | Servitude Road | 23°57'11.41"S | 27°23'28.14"E | | 16 th March 2022 | 11:12 | Sampled |
| DB30 | Servitude Road | 23°57'58.79"S | 27°23'37.97"E | | 16 th March 2022 | 11:17 | Sampled |
| DB31 | Servitude Road | 23°58'36.77"S | 27°23'44.50"E | | 16 th March 2022 | 11:19 | Sampled |
| DB32 | Servitude Road | 23°59'45.59"S | 27°23'58.25"E | | 16 th March 2022 | 11:24 | Sampled |
| DB33 | Servitude Road | 24° 0'4.67"S | 27°24'1.95"E | | 16 th March 2022 | 11:25 | Sampled |
| DB34 | Servitude Road | 24° 0'37.82"S | 27°24'8.36"E | | 16 th March 2022 | 11:29 | Sampled |
| DB35 | Servitude Road | 24° 0'51.33"S | 27°24'10.07"E | | 16 th March 2022 | 11:34 | Sampled |
| DB36 | Servitude Road | 24° 1'3.54"S | 27°24'12.35"E | | 16 th March 2022 | 11:35 | Sampled |
| DB37 | Servitude Road | 24° 1'7.07"S | 27°24'13.15"E | | 16 th March 2022 | 11:37 | Sampled |
| DB38 | Servitude Road | 24° 1'34.37"S | 27°24'18.32"E | | 16 th March 2022 | 11:39 | Sampled |
| DB39 | Servitude Road | 23°41'35.31"S | 27°38'51.43"E | | 16 th March 2022 | 11:41 | Sampled |

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| GBN-JV Air Quality Monitoring | | | | | | | |
|-------------------------------|----------------|---------------|---------------|------------------------------|-----------------------------|---------------|----------|
| Locality ID | Description | Co-ordinates | | Sampler Name | Sampling Date | Sampling Time | Comments |
| | | Latitude | Longitude | | | | |
| DB40 | Servitude Road | 24° 2'29.74"S | 27°24'28.91"E | Damon Nell/ Enock Machete | 16 th March 2022 | 11:43 | Sampled |
| DB41 | Servitude Road | 24° 2'40.69"S | 27°24'31.20"E | | 16 th March 2022 | 11:44 | Sampled |
| DB42 | Servitude Road | 24° 2'46.02"S | 27°24'32.19"E | | 16 th March 2022 | 11:45 | Sampled |
| DB43 | Servitude Road | 24° 3'21.38"S | 27°24'37.93"E | | 16 th March 2022 | 11:48 | Sampled |
| DB44 | Servitude Road | 24° 4'29.95"S | 27°24'51.86"E | | 16 th March 2022 | 11:52 | Sampled |
| DB45 | Servitude Road | 24° 4'53.87"S | 27°24'55.26"E | | 16 th March 2022 | 11:55 | Sampled |
| DB46 | Servitude Road | 24° 5'48.56"S | 27°25'8.99"E | | 16 th March 2022 | 11:58 | Sampled |
| DB47 | Servitude Road | 24° 6'2.39"S | 27°25'12.90"E | | 16 th March 2022 | 12:02 | Sampled |
| DB48 | Servitude Road | 24° 6'33.52"S | 27°25'21.12"E | | 16 th March 2022 | 12:05 | Sampled |
| DB49 | Servitude Road | 24° 7'11.42"S | 27°25'32.63"E | | 16 th March 2022 | 12:08 | Sampled |
| DB50 | Servitude Road | 24° 7'50.30"S | 27°25'43.01"E | | 16 th March 2022 | 12:10 | Sampled |
| DB51 | Servitude Road | 24° 8'36.82"S | 27°25'56.47"E | | 16 th March 2022 | 12:14 | Sampled |
| DB52 | Servitude Road | 24° 9'10.22"S | 27°26'5.85"E | | 16 th March 2022 | 12:16 | Sampled |
| DB53 | Servitude Road | 24° 9'23.38"S | 27°26'10.00"E | | 16 th March 2022 | 12:19 | Sampled |
| DB54 | Servitude Road | 24° 9'56.57"S | 27°26'19.10"E | | 16 th March 2022 | 12:21 | Sampled |
| DB55 | Servitude Road | 24°10'32.51"S | 27°26'26.49"E | | 16 th March 2022 | 12:23 | Sampled |
| DB56 | Servitude Road | 24°10'55.15"S | 27°26'36.17"E | | 16 th March 2022 | 12:25 | Sampled |
| DB57 | Servitude Road | 24°11'38.61"S | 27°26'48.79"E | | 16 th March 2022 | 12:30 | Sampled |
| DB58 | Servitude Road | 24°11'49.30"S | 27°26'51.53"E | | 15 th March 2022 | 16:28 | Sampled |
| DB59 | Servitude Road | 24°12'25.42"S | 27°26'59.45"E | | 15 th March 2022 | 16:32 | Sampled |
| DB60 | Servitude Road | 24°13'6.00"S | 27°26'59.07"E | | 15 th March 2022 | 16:35 | Sampled |
| DB61 | Servitude Road | 24°14'34.19"S | 27°26'58.48"E | | 15 th March 2022 | 16:40 | Sampled |
| DB62 | Servitude Road | 24°14'49.64"S | 27°26'58.86"E | | 15 th March 2022 | 16:43 | Sampled |
| DB63 | Servitude Road | 24°15'19.44"S | 27°26'58.33"E | | 15 th March 2022 | 16:47 | Sampled |
| DB64 | Servitude Road | 24°16'6.23"S | 27°26'58.26"E | | 15 th March 2022 | 16:51 | Sampled |

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| GBN-JV Air Quality Monitoring | | | | | | | |
|-------------------------------|--|---------------|---------------|------------------------------|-----------------------------|---------------|-----------------------------|
| Locality ID | Description | Co-ordinates | | Sampler Name | Sampling Date | Sampling Time | Comments |
| | | Latitude | Longitude | | | | |
| DB65 | Servitude Road | 24°16'42.57"S | 27°26'57.57"E | Damon Nell/ Enock Machete | 15 th March 2022 | 16:54 | Sampled |
| DB66 | Servitude Road | 24°17'26.82"S | 27°26'56.01"E | | 15 th March 2022 | 16:58 | Sampled |
| DB67 | Servitude Road | 24°18'14.46"S | 27°26'56.97"E | | 15 th March 2022 | 17:01 | Sampled |
| DB68 | Servitude Road | 24°18'49.52"S | 27°26'57.63"E | | 15 th March 2022 | 17:04 | Sampled |
| DB69 | Servitude Road | 24°19'31.03"S | 27°26'56.52"E | | 15 th March 2022 | 17:08 | Sampled |
| DB70 | Servitude Road | 24°20'4.26"S | 27°26'56.14"E | | 15 th March 2022 | 17:11 | Sampled |
| DB71 | Servitude Road | 24°20'45.70"S | 27°26'55.87"E | | 15 th March 2022 | 17:15 | Sampled |
| DB72 | Servitude Road | 24°21'48.85"S | 27°26'55.81"E | | 15 th March 2022 | 17:20 | Sampled |
| DB73 | Servitude Road | 24°23'9.52"S | 27°26'54.85"E | | 15 th March 2022 | 17:24 | Sampled |
| DB74 | Between Tarentaalpan 132 KQ portion 2 and Diepkuil 135 Portion 5 | 24°23'21.10"S | 27°26'33.71"E | | 15 th March 2022 | 17:26 | Sampled |
| DB75 | Between Tarentaalpan 132 KQ portion 2 and Diepkuil 135 Portion 5 | 24°23'31.60"S | 27°26'13.03"E | | 15 th March 2022 | NA | Not Sampled – Bucket Stolen |
| DB76 | Between Tarentaalpan 132 KQ portion 2 and Diepkuil 135 Portion 5 | 24°23'53.46"S | 27°25'19.77"E | | 15 th March 2022 | 17:31 | Sampled |
| DB77 | Along the R510 | 24°24'24.61"S | 27°24'3.45"E | | 15 th March 2022 | 16:05 | Sampled |
| DB78 | Along the R510 | 23°41'35.31"S | 27°38'51.43"E | | 15 th March 2022 | 16:02 | Sampled |
| DB79 | Along the R510 | 24°25'29.93"S | 27°24'23.06"E | | 15 th March 2022 | 15:59 | Sampled |
| DB80 | Between Zondagsuil 137 KQ and Diepkuil 135 KQ portion 1 | 24°25'33.45"S | 27°24'13.50"E | | 15 th March 2022 | 15:54 | Sampled |
| DB81 | Between Zondagsuil 137 KQ and Diepkuil 135 KQ portion 1 | 24°25'47.88"S | 27°23'10.20"E | | 15 th March 2022 | 15:51 | Sampled |
| DB82 | Between Buffelsvley 127 KQ and Karoobult 126 KQ | 24°26'31.14"S | 27°21'39.92"E | | 15 th March 2022 | 15:42 | Sampled |
| DB83 | Between Buffelsvley 127 KQ and Karoobult 126 KQ | 24°27'9.88"S | 27°20'11.67"E | | 15 th March 2022 | 15:36 | Sampled |
| DB84 | Paarl 124 KQ Portion 6 | 24°28'20.86"S | 27°17'27.36"E | | 15 th March 2022 | NA | Not Sampled – No Access |
| DB85 | Paarl 124 KQ Portion 3 | 24°30'0.19"S | 27°16'58.48"E | | 15 th March 2022 | NA | Not Sampled – No Access |

| | | | |
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| GBN-JV Air Quality Monitoring | | | | | | | |
|-------------------------------|---|---------------|---------------|------------------------------|-----------------------------|---------------|----------|
| Locality ID | Description | Co-ordinates | | Sampler Name | Sampling Date | Sampling Time | Comments |
| | | Latitude | Longitude | | | | |
| DB86 | D769 dirt road | 24°31'38.11"S | 27°16'29.83"E | Damon Nell/ Enock Machete | 15 th March 2022 | 12:20 | Sampled |
| DB87 | D769 dirt road | 24°33'53.16"S | 27°18'16.95"E | | 15 th March 2022 | 12:11 | Sampled |
| DB88 | Within small community near Stratford 462 KQ | 24°34'14.79"S | 27°18'36.10"E | | 15 th March 2022 | 12:06 | Sampled |
| DB89 | Near Primary School | 24°34'24.25"S | 27°18'35.18"E | | 15 th March 2022 | 14:30 | Sampled |
| DB90 | Mooivalei 342 KQ – Portion 1 | 24°35'35.70"S | 27°17'45.31"E | | 15 th March 2022 | 11:29 | Sampled |
| DB91 | Mooivalei 342 KQ – Portion 2 | 24°35'59.20"S | 27°17'38.40"E | | 15 th March 2022 | 11:26 | Sampled |
| DB92 | Mooivalei 342 KQ – Portion 4 | 24°36'25.02"S | 27°17'49.23"E | | 15 th March 2022 | 11:06 | Sampled |
| DB93 | Mooivalei 342 KQ – Portion 7 | 24°36'51.37"S | 27°18'27.13"E | | 15 th March 2022 | 10:58 | Sampled |
| DB94 | Mooivalei 342 KQ – Portion 9 | 24°37'18.10"S | 27°18'45.97"E | | 15 th March 2022 | 10:50 | Sampled |
| DB95 | D729 dirt road | 24°38'3.48"S | 27°18'54.13"E | | 15 th March 2022 | 10:19 | Sampled |
| DB96 | Along unnamed dirt road bordering Exxaro mine | 23°41'25.22"S | 27°34'18.42"E | | 16 th March 2022 | 08:40 | Sampled |
| DB97 | Between Zondagsuil 137 KQ and Diepkuil 135 KQ portion 1 | 24°26'15.46"S | 27°22'29.41"E | | 15 th March 2022 | 15:46 | Sampled |
| DB98 | Buffelsvley 127 KQ | 24°26'48.84"S | 27°18'57.38"E | | 15 th March 2022 | 15:28 | Sampled |
| DB99 | D769 dirt road | 24°32'48.86"S | 27°17'24.55"E | | 15 th March 2022 | 12:15 | Sampled |
| DB100 | Mooivalei 342 KQ – Portion 1 | 24°35'5.76"S | 27°18'49.94"E | | 15 th March 2022 | 11:20 | Sampled |
| E-Sampler PM Monitoring | | | | | | | |
| PM01 | Thaba Tholo Primary School | 24°34'22.26"S | 27°18'33.97"E | Damon Nell/ Enock Machete | 16 th March 2022 | 11:34 | Sampled |
| PM02 | Eskom - Medupi Power Station | 23°41'50.52"S | 27°34'7.72"E | | 15 th March 2022 | 14:30 | Sampled |
| PM03 | Mooivalei 342 KQ – Portion 1 | 24°35'36.99"S | 27°17'43.54"E | | 15 th March 2022 | 09:08 | Sampled |

| | | | |
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7.2. PARTICULATE MATTER RESULTS

Particulate matter is measured using two (2) techniques. The first method involves the use of a hand-held PM meter (section 7.2.1) which is sampled at every dust fallout sampling locality. The second method involves the use of three (3) Stations Met One E-Samplers and compared to the SANS 1929:2011 24-hour limit of 75 mg/m³ for both PM₁₀ to determine compliance. Two (2) E-samplers were installed during the June 2021 monitoring period with the final E-sampler being installed during the August 2021 monitoring period.

7.2.1. Active Handheld PM Monitoring

Table 6: PM meter results

| GBN-JV PM Data | | | | | | |
|----------------|------------------|------|--------|--------|--------|--------|
| Locality Name | Month | PM 1 | PM 2.5 | PM 4 | PM 10 | TSP |
| SANS Limits | | | | | 75 | |
| DB - 1 | Jun-21 to Jul-21 | 1,20 | 13,30 | 20,70 | 72,40 | 154,40 |
| | Jul-21 to Aug-21 | 3,20 | 17,20 | 36,70 | 106,70 | 131,30 |
| | Aug-21 to Sep-21 | 7,20 | 28,40 | 47,50 | 88,00 | 104,60 |
| | Sep-21 to Oct-21 | 1,30 | 6,20 | 9,80 | 20,50 | 28,50 |
| | Oct-21 to Nov-21 | 0,90 | 6,00 | 14,80 | 47,80 | 67,50 |
| | Nov-21 to Dec-21 | 2,00 | 11,90 | 21,00 | 42,70 | 59,40 |
| | Dec-21 to Jan-22 | 1,60 | 14,70 | 40,10 | 88,80 | 102,90 |
| | Jan-22 to Feb-22 | 1,10 | 9,20 | 19,70 | 41,20 | 59,00 |
| | Feb-22 to Mar-22 | 0,00 | 0,10 | 1,40 | 5,70 | 6,30 |
| DB - 2 | Jun-21 to Jul-21 | 1,90 | 26,40 | 37,70 | 96,60 | 138,50 |
| | Jul-21 to Aug-21 | 4,20 | 11,30 | 39,70 | 214,40 | 422,80 |
| | Aug-21 to Sep-21 | 7,10 | 29,70 | 51,10 | 87,60 | 99,30 |
| | Sep-21 to Oct-21 | 8,30 | 89,80 | 127,90 | 229,00 | 255,50 |
| | Oct-21 to Nov-21 | 0,90 | 5,40 | 18,50 | 64,50 | 81,10 |
| | Nov-21 to Dec-21 | 1,50 | 7,60 | 14,30 | 27,30 | 36,60 |
| | Dec-21 to Jan-22 | 1,90 | 11,00 | 62,70 | 201,40 | 233,50 |
| | Jan-22 to Feb-22 | 1,10 | 8,90 | 18,50 | 39,80 | 56,40 |
| | Feb-22 to Mar-22 | 0,10 | 0,70 | 2,00 | 13,10 | 15,00 |
| DB - 3 | Jun-21 to Jul-21 | 1,00 | 11,10 | 23,40 | 146,50 | 332,00 |
| | Jul-21 to Aug-21 | 3,10 | 13,60 | 41,40 | 124,80 | 151,30 |
| | Aug-21 to Sep-21 | 2,10 | 5,10 | 15,30 | 111,50 | 201,50 |
| | Sep-21 to Oct-21 | 1,60 | 7,10 | 13,10 | 33,20 | 40,00 |
| | Oct-21 to Nov-21 | 2,30 | 7,10 | 10,40 | 18,50 | 13,40 |
| | Nov-21 to Dec-21 | 1,30 | 8,20 | 14,40 | 23,50 | 24,10 |
| | Dec-21 to Jan-22 | 0,80 | 5,40 | 11,60 | 30,30 | 39,60 |
| | Jan-22 to Feb-22 | 1,20 | 10,40 | 20,00 | 29,70 | 40,20 |
| | Feb-22 to Mar-22 | 0,10 | 0,10 | 0,90 | 3,30 | 3,40 |
| DB - 4 | Jun-21 to Jul-21 | 1,10 | 3,90 | 28,40 | 255,50 | 710,40 |
| | Jul-21 to Aug-21 | 3,20 | 21,60 | 54,10 | 206,10 | 273,90 |
| | Aug-21 to Sep-21 | 2,40 | 9,70 | 15,30 | 33,30 | 40,70 |

| | | | |
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| GBN-JV PM Data | | | | | | |
|----------------|---------------------------|--|--------|---|--------|---------|
| Locality Name | Month | PM 1 | PM 2.5 | PM 4 | PM 10 | TSP |
| SANS Limits | | | | | 75 | |
| | Sep-21 to Oct-21 | 1,60 | 7,90 | 13,70 | 25,70 | 29,40 |
| | Oct-21 to Nov-21 | 2,60 | 9,20 | 14,60 | 23,60 | 24,20 |
| | Nov-21 to Dec-21 | 1,30 | 6,30 | 12,30 | 24,70 | 26,60 |
| | Dec-21 to Jan-22 | 3,20 | 45,00 | 74,50 | 165,50 | 190,10 |
| | Jan-22 to Feb-22 | 1,30 | 11,20 | 23,30 | 45,60 | 52,40 |
| | Feb-22 to Mar-22 | 0,10 | 0,40 | 2,00 | 6,10 | 7,90 |
| DB - 5 | Jun-21 to Jul-21 | 4,20 | 71,20 | 92,80 | 203,30 | 300,70 |
| | Jul-21 to Aug-21 | 1,90 | 10,80 | 18,10 | 51,90 | 74,70 |
| | Aug-21 to Sep-21 | 3,10 | 19,00 | 42,00 | 108,80 | 129,80 |
| | Sep-21 to Oct-21 | 2,00 | 13,60 | 27,80 | 77,80 | 108,00 |
| | Oct-21 to Nov-21 | 2,50 | 8,40 | 13,90 | 26,50 | 32,00 |
| | Nov-21 to Dec-21 | 1,30 | 6,80 | 14,00 | 28,90 | 32,00 |
| | Dec-21 to Jan-22 | 1,40 | 1,40 | 8,90 | 807,40 | 1039,80 |
| | Jan-22 to Feb-22 | 3,00 | 38,10 | 70,50 | 168,10 | 219,10 |
| | Feb-22 to Mar-22 | 0,20 | 1,20 | 3,00 | 8,90 | 12,60 |
| DB - 6 | Jun-21 to Jul-21 | 0,60 | 2,80 | 8,70 | 41,20 | 54,20 |
| | Jul-21 to Aug-21 | 3,00 | 24,80 | 31,10 | 51,00 | 60,80 |
| | Aug-21 to Sep-21 | 2,20 | 7,40 | 13,30 | 41,90 | 67,20 |
| | Sep-21 to Oct-21 | 2,30 | 15,60 | 32,70 | 91,20 | 117,70 |
| | Oct-21 to Nov-21 | 2,40 | 7,90 | 12,20 | 23,10 | 27,40 |
| | Nov-21 to Dec-21 | 1,40 | 7,40 | 14,20 | 26,60 | 29,10 |
| | Dec-21 to Jan-22 | 2,60 | 70,80 | 84,00 | 136,50 | 176,60 |
| | Jan-22 to Feb-22 | 1,10 | 7,90 | 16,70 | 32,80 | 38,90 |
| | Feb-22 to Mar-22 | 0,20 | 1,80 | 2,90 | 8,70 | 11,70 |
| DB - 7 | Jun-21 to Jul-21 | 0,60 | 2,90 | 5,50 | 12,10 | 14,60 |
| | Jul-21 to Aug-21 | 1,60 | 4,90 | 11,20 | 35,10 | 46,80 |
| | Aug-21 to Sep-21 | 2,30 | 14,60 | 18,70 | 34,50 | 43,80 |
| | Sep-21 to Oct-21 | 2,30 | 18,50 | 36,50 | 91,60 | 120,60 |
| | Oct-21 to Nov-21 | 2,40 | 7,60 | 11,80 | 17,90 | 19,80 |
| | Nov-21 to Dec-21 | 1,30 | 7,30 | 14,30 | 24,90 | 26,10 |
| | Dec-21 to Jan-22 | 1,10 | 9,70 | 27,10 | 85,40 | 114,40 |
| | Jan-22 to Feb-22 | 1,10 | 9,10 | 16,50 | 29,80 | 36,00 |
| | Feb-22 to Mar-22 | 0,20 | 0,60 | 2,00 | 9,30 | 9,30 |
| DB - 8 | Jun-21 to Jul-21 | 0,70 | 5,50 | 13,50 | 62,90 | 107,80 |
| | Jul-21 to Aug-21 | 1,80 | 5,30 | 11,80 | 36,50 | 49,40 |
| | Aug-21 to Sep-21 | 2,30 | 11,70 | 19,50 | 68,30 | 96,60 |
| | Sep-21 to Oct-21 | 1,60 | 7,70 | 15,60 | 47,20 | 84,20 |
| | Oct-21 to Nov-21 | 2,10 | 7,30 | 10,80 | 19,50 | 26,30 |
| | Nov-21 to Dec-21 | 1,40 | 6,80 | 14,00 | 25,00 | 26,80 |
| | Dec-21 to Jan-22 | 0,80 | 7,10 | 17,00 | 40,30 | 49,00 |
| | Jan-22 to Feb-22 | 1,10 | 7,90 | 15,60 | 27,40 | 31,70 |
| Document No: | MON-AQR-244-20_21 (22-02) | GIBB Bigen Nyeleti Joint Venture (GBN-JV) | | Client Restricted Author: D Nell 19 | | |
| Revision: | 0.0 | | | | | |
| Date: | February to March 2022 | | | | | |

| GBN-JV PM Data | | | | | | |
|----------------|---------------------------|--|---------|---|----------|----------|
| Locality Name | Month | PM 1 | PM 2.5 | PM 4 | PM 10 | TSP |
| SANS Limits | | | | | 75 | |
| | Feb-22 to Mar-22 | 0,10 | 0,20 | 3,00 | 19,20 | 22,30 |
| DB - 9 | Jun-21 to Jul-21 | 0,60 | 2,10 | 4,60 | 12,00 | 14,40 |
| | Jul-21 to Aug-21 | 2,00 | 14,20 | 19,60 | 57,70 | 107,00 |
| | Aug-21 to Sep-21 | 7,90 | 34,30 | 82,40 | 210,70 | 261,90 |
| | Sep-21 to Oct-21 | 1,40 | 8,90 | 24,50 | 72,60 | 88,60 |
| | Oct-21 to Nov-21 | 2,60 | 9,30 | 15,10 | 28,90 | 34,50 |
| | Nov-21 to Dec-21 | 1,20 | 6,50 | 14,20 | 33,70 | 43,50 |
| | Dec-21 to Jan-22 | 0,90 | 5,30 | 15,40 | 44,20 | 55,90 |
| | Jan-22 to Feb-22 | 1,10 | 8,00 | 14,90 | 24,80 | 27,80 |
| | Feb-22 to Mar-22 | 0,10 | 0,40 | 1,60 | 8,50 | 10,30 |
| DB - 10 | Jun-21 to Jul-21 | 0,70 | 5,40 | 11,00 | 49,10 | 79,30 |
| | Jul-21 to Aug-21 | 1,70 | 7,30 | 13,40 | 35,80 | 48,70 |
| | Aug-21 to Sep-21 | 8,20 | 42,20 | 91,50 | 246,40 | 288,50 |
| | Sep-21 to Oct-21 | 1,00 | 4,80 | 17,10 | 52,90 | 65,90 |
| | Oct-21 to Nov-21 | 3,10 | 12,10 | 19,40 | 35,20 | 43,90 |
| | Nov-21 to Dec-21 | 1,20 | 5,40 | 15,40 | 46,50 | 71,80 |
| | Dec-21 to Jan-22 | 1,40 | 8,70 | 30,30 | 58,00 | 72,00 |
| | Jan-22 to Feb-22 | 1,20 | 9,30 | 17,10 | 32,00 | 36,30 |
| | Feb-22 to Mar-22 | 0,20 | 0,80 | 2,10 | 5,30 | 7,80 |
| DB - 11 | Jun-21 to Jul-21 | 2,20 | 23,00 | 35,50 | 79,40 | 98,50 |
| | Jul-21 to Aug-21 | 2,10 | 13,00 | 36,30 | 121,90 | 165,60 |
| | Aug-21 to Sep-21 | 7,60 | 29,50 | 58,90 | 149,80 | 200,90 |
| | Sep-21 to Oct-21 | 0,70 | 4,60 | 7,30 | 13,00 | 16,10 |
| | Oct-21 to Nov-21 | 2,80 | 14,70 | 21,80 | 43,20 | 55,50 |
| | Nov-21 to Dec-21 | 1,20 | 6,60 | 13,80 | 24,40 | 24,40 |
| | Dec-21 to Jan-22 | 1,50 | 6,40 | 21,20 | 92,00 | 175,80 |
| | Jan-22 to Feb-22 | 1,10 | 8,00 | 15,90 | 31,10 | 35,00 |
| | Feb-22 to Mar-22 | 0,10 | 0,60 | 2,00 | 7,10 | 9,60 |
| DB - 12 | Jun-21 to Jul-21 | - | - | - | - | - |
| | Jul-21 to Aug-21 | 3,50 | 10,80 | 73,70 | 298,80 | 394,40 |
| | Aug-21 to Sep-21 | 7,30 | 31,40 | 51,70 | 87,80 | 109,90 |
| | Sep-21 to Oct-21 | 1,40 | 7,20 | 15,30 | 38,80 | 43,80 |
| | Oct-21 to Nov-21 | 1,30 | 14,90 | 35,80 | 117,60 | 144,70 |
| | Nov-21 to Dec-21 | 0,70 | 5,20 | 7,00 | 12,10 | 14,00 |
| | Dec-21 to Jan-22 | 0,80 | 5,70 | 16,70 | 67,70 | 122,60 |
| | Jan-22 to Feb-22 | 1,40 | 14,70 | 30,10 | 50,60 | 70,10 |
| | Feb-22 to Mar-22 | 0,10 | 0,70 | 2,10 | 8,20 | 9,80 |
| DB - 13 | Jun-21 to Jul-21 | 59,10 | 1260,10 | 3339,30 | 11149,60 | 15194,70 |
| | Jul-21 to Aug-21 | 2,50 | 30,80 | 46,10 | 98,10 | 133,30 |
| | Aug-21 to Sep-21 | 5,00 | 98,00 | 174,70 | 438,30 | 516,00 |
| | Sep-21 to Oct-21 | 2,20 | 14,00 | 38,10 | 111,90 | 138,40 |
| Document No: | MON-AQR-244-20_21 (22-02) | GIBB Bigen Nyeleti Joint Venture (GBN-JV) | | Client Restricted Author: D Nell 20 | | |
| Revision: | 0.0 | | | | | |
| Date: | February to March 2022 | | | | | |

| GBN-JV PM Data | | | | | | |
|----------------|---------------------------|--|--------|---|--------|--------|
| Locality Name | Month | PM 1 | PM 2.5 | PM 4 | PM 10 | TSP |
| SANS Limits | | | | | 75 | |
| | Oct-21 to Nov-21 | 2,00 | 13,90 | 33,40 | 79,50 | 90,00 |
| | Nov-21 to Dec-21 | 1,10 | 5,80 | 15,90 | 65,80 | 99,70 |
| | Dec-21 to Jan-22 | 2,00 | 7,50 | 15,30 | 22,80 | 28,30 |
| | Jan-22 to Feb-22 | 1,20 | 13,60 | 25,60 | 81,40 | 135,00 |
| | Feb-22 to Mar-22 | 1,70 | 7,40 | 15,40 | 52,90 | 72,70 |
| DB - 14 | Jun-21 to Jul-21 | 1,10 | 5,90 | 33,90 | 227,70 | 359,00 |
| | Jul-21 to Aug-21 | 3,40 | 20,50 | 54,00 | 190,30 | 237,20 |
| | Aug-21 to Sep-21 | 7,30 | 28,60 | 47,50 | 79,20 | 95,90 |
| | Sep-21 to Oct-21 | 1,30 | 8,20 | 12,70 | 26,60 | 35,80 |
| | Oct-21 to Nov-21 | 0,90 | 7,30 | 19,70 | 68,90 | 94,20 |
| | Nov-21 to Dec-21 | 0,70 | 3,20 | 4,60 | 9,40 | 11,80 |
| | Dec-21 to Jan-22 | 0,90 | 6,00 | 13,70 | 52,10 | 92,10 |
| | Jan-22 to Feb-22 | 1,20 | 9,80 | 18,60 | 30,50 | 37,90 |
| | Feb-22 to Mar-22 | 0,10 | 0,20 | 0,70 | 4,00 | 4,50 |
| DB - 15 | Jun-21 to Jul-21 | 1,80 | 21,00 | 47,60 | 160,90 | 220,70 |
| | Jul-21 to Aug-21 | 1,60 | 5,50 | 8,80 | 17,80 | 22,10 |
| | Aug-21 to Sep-21 | 2,20 | 7,30 | 12,00 | 27,60 | 31,30 |
| | Sep-21 to Oct-21 | 2,10 | 13,00 | 29,20 | 73,90 | 85,70 |
| | Oct-21 to Nov-21 | - | - | - | - | - |
| | Nov-21 to Dec-21 | 1,10 | 5,50 | 10,30 | 23,20 | 31,90 |
| | Dec-21 to Jan-22 | 1,20 | 9,70 | 22,60 | 46,40 | 52,50 |
| | Jan-22 to Feb-22 | 0,90 | 10,00 | 11,30 | 38,10 | 50,10 |
| | Feb-22 to Mar-22 | 0,20 | 3,00 | 4,80 | 14,00 | 17,00 |
| DB - 16 | Jun-21 to Jul-21 | 0,90 | 7,30 | 21,40 | 120,40 | 233,80 |
| | Jul-21 to Aug-21 | 1,60 | 6,80 | 12,50 | 41,00 | 60,80 |
| | Aug-21 to Sep-21 | 2,20 | 7,80 | 13,70 | 32,00 | 42,50 |
| | Sep-21 to Oct-21 | 2,30 | 13,80 | 29,60 | 70,70 | 77,40 |
| | Oct-21 to Nov-21 | - | - | - | - | - |
| | Nov-21 to Dec-21 | 1,30 | 6,90 | 11,40 | 17,10 | 17,70 |
| | Dec-21 to Jan-22 | 1,40 | 10,30 | 21,40 | 39,20 | 47,80 |
| | Jan-22 to Feb-22 | 0,90 | 7,10 | 12,80 | 43,80 | 97,20 |
| | Feb-22 to Mar-22 | 0,00 | 0,10 | 1,10 | 10,00 | 12,40 |
| DB - 17 | Jun-21 to Jul-21 | 102,30 | 0,70 | 1,20 | 6,70 | 46,20 |
| | Jul-21 to Aug-21 | 1,40 | 3,20 | 11,50 | 43,70 | 60,40 |
| | Aug-21 to Sep-21 | 2,30 | 7,30 | 12,20 | 24,70 | 30,20 |
| | Sep-21 to Oct-21 | 2,50 | 15,40 | 31,60 | 88,50 | 103,90 |
| | Oct-21 to Nov-21 | - | - | - | - | - |
| | Nov-21 to Dec-21 | - | - | - | - | - |
| | Dec-21 to Jan-22 | 1,20 | 9,10 | 18,70 | 43,20 | 52,40 |
| | Jan-22 to Feb-22 | 0,80 | 7,20 | 13,70 | 41,20 | 59,70 |
| | Feb-22 to Mar-22 | 0,10 | 0,10 | 0,10 | 27,90 | 46,40 |
| Document No: | MON-AQR-244-20_21 (22-02) | GIBB Bigen Nyeleti Joint Venture (GBN-JV) | | Client Restricted Author: D Nell 21 | | |
| Revision: | 0.0 | | | | | |
| Date: | February to March 2022 | | | | | |

| GBN-JV PM Data | | | | | | |
|----------------|---------------------------|--|--------|---|--------|--------|
| Locality Name | Month | PM 1 | PM 2.5 | PM 4 | PM 10 | TSP |
| SANS Limits | | | | | 75 | |
| | Nov-21 to Dec-21 | 12,30 | 17,70 | 20,40 | 26,50 | 27,70 |
| | Dec-21 to Jan-22 | 2,40 | 7,80 | 11,80 | 26,50 | 39,50 |
| | Jan-22 to Feb-22 | 0,70 | 4,50 | 9,60 | 21,90 | 25,00 |
| | Feb-22 to Mar-22 | 0,20 | 0,70 | 1,50 | 11,10 | 20,00 |
| DB - 23 | Jun-21 to Jul-21 | 0,60 | 0,70 | 7,60 | 82,40 | 206,90 |
| | Jul-21 to Aug-21 | 1,40 | 4,30 | 7,40 | 20,10 | 28,10 |
| | Aug-21 to Sep-21 | 3,00 | 10,70 | 22,70 | 92,80 | 148,90 |
| | Sep-21 to Oct-21 | 1,50 | 6,50 | 11,90 | 21,80 | 26,80 |
| | Oct-21 to Nov-21 | 2,20 | 5,70 | 11,00 | 27,10 | 41,30 |
| | Nov-21 to Dec-21 | 6,80 | 11,20 | 13,80 | 19,70 | 23,40 |
| | Jan-22 to Feb-22 | 1,10 | 8,00 | 13,20 | 24,00 | 31,70 |
| | Feb-22 to Mar-22 | 0,20 | 0,80 | 3,10 | 8,80 | 12,20 |
| DB - 24 | Jun-21 to Jul-21 | 4,50 | 85,70 | 126,60 | 321,70 | 410,40 |
| | Jul-21 to Aug-21 | 2,80 | 28,60 | 59,00 | 162,00 | 202,10 |
| | Aug-21 to Sep-21 | 2,90 | 5,80 | 35,70 | 125,60 | 137,90 |
| | Sep-21 to Oct-21 | 1,70 | 8,60 | 16,80 | 42,30 | 53,30 |
| | Oct-21 to Nov-21 | 2,30 | 6,80 | 10,20 | 14,40 | 16,30 |
| | Nov-21 to Dec-21 | 5,90 | 10,40 | 13,90 | 22,80 | 28,30 |
| | Dec-21 to Jan-22 | 2,80 | 29,40 | 34,00 | 48,20 | 55,60 |
| | Jan-22 to Feb-22 | 0,80 | 6,20 | 9,50 | 28,80 | 33,10 |
| DB - 25 | Feb-22 to Mar-22 | 0,20 | 2,90 | 6,20 | 13,30 | 26,40 |
| | Jun-21 to Jul-21 | 0,80 | 2,40 | 10,60 | 93,20 | 219,00 |
| | Jul-21 to Aug-21 | 1,60 | 7,50 | 13,90 | 33,50 | 43,40 |
| | Aug-21 to Sep-21 | 3,00 | 9,90 | 33,60 | 115,60 | 143,30 |
| | Sep-21 to Oct-21 | 1,50 | 9,20 | 13,20 | 21,90 | 25,60 |
| | Oct-21 to Nov-21 | 2,20 | 7,10 | 9,80 | 15,30 | 16,60 |
| | Nov-21 to Dec-21 | 4,50 | 7,80 | 9,90 | 14,70 | 18,40 |
| | Dec-21 to Jan-22 | 1,80 | 7,10 | 11,50 | 24,30 | 32,90 |
| | Jan-22 to Feb-22 | 1,10 | 7,00 | 12,20 | 33,70 | 58,80 |
| DB - 26 | Feb-22 to Mar-22 | 0,10 | 2,60 | 4,00 | 13,20 | 18,10 |
| | Jun-21 to Jul-21 | 0,80 | 3,30 | 7,10 | 18,30 | 24,40 |
| | Jul-21 to Aug-21 | 1,60 | 19,50 | 24,30 | 48,80 | 69,80 |
| | Aug-21 to Sep-21 | 3,20 | 9,50 | 43,60 | 152,50 | 175,30 |
| | Sep-21 to Oct-21 | 1,50 | 7,10 | 10,70 | 20,30 | 23,40 |
| | Oct-21 to Nov-21 | 2,30 | 7,20 | 11,50 | 20,10 | 31,20 |
| | Nov-21 to Dec-21 | 5,40 | 11,10 | 14,80 | 26,00 | 36,50 |
| | Dec-21 to Jan-22 | 1,80 | 6,00 | 9,30 | 16,70 | 17,90 |
| | Jan-22 to Feb-22 | 0,70 | 4,30 | 9,00 | 20,10 | 25,10 |
| DB - 27 | Feb-22 to Mar-22 | 0,20 | 1,80 | 2,60 | 5,90 | 7,10 |
| | Jun-21 to Jul-21 | 0,80 | 5,10 | 8,60 | 20,30 | 25,90 |
| | Jul-21 to Aug-21 | 1,50 | 6,30 | 10,30 | 20,20 | 23,30 |
| Document No: | MON-AQR-244-20_21 (22-02) | GIBB Bigen Nyeleti Joint Venture (GBN-JV) | | Client Restricted Author: D Nell 23 | | |
| Revision: | 0.0 | | | | | |
| Date: | February to March 2022 | | | | | |

| GBN-JV PM Data | | | | | | |
|----------------|---------------------------|--|--------|---|-------|--------|
| Locality Name | Month | PM 1 | PM 2.5 | PM 4 | PM 10 | TSP |
| SANS Limits | | | | | 75 | |
| | Aug-21 to Sep-21 | 3,00 | 10,40 | 25,30 | 76,20 | 88,60 |
| | Sep-21 to Oct-21 | 1,50 | 7,00 | 10,60 | 17,80 | 21,50 |
| | Oct-21 to Nov-21 | 2,30 | 8,10 | 10,90 | 14,80 | 16,70 |
| | Nov-21 to Dec-21 | 6,80 | 11,60 | 13,90 | 17,30 | 20,40 |
| | Dec-21 to Jan-22 | 1,70 | 5,20 | 8,00 | 12,30 | 13,50 |
| | Jan-22 to Feb-22 | 1,40 | 15,10 | 32,10 | 51,40 | 71,10 |
| | Feb-22 to Mar-22 | 0,20 | 1,10 | 4,10 | 40,90 | 63,10 |
| DB - 28 | Jun-21 to Jul-21 | 0,80 | 5,70 | 9,40 | 28,10 | 49,10 |
| | Jul-21 to Aug-21 | 5,00 | 29,90 | 38,70 | 66,10 | 75,90 |
| | Aug-21 to Sep-21 | 2,90 | 9,00 | 21,60 | 61,90 | 77,40 |
| | Sep-21 to Oct-21 | 1,70 | 11,90 | 17,80 | 38,40 | 52,60 |
| | Oct-21 to Nov-21 | 2,20 | 7,10 | 9,40 | 15,30 | 20,80 |
| | Nov-21 to Dec-21 | 7,90 | 13,00 | 15,10 | 20,20 | 26,40 |
| | Dec-21 to Jan-22 | 2,00 | 7,50 | 11,70 | 18,70 | 23,10 |
| | Jan-22 to Feb-22 | 0,80 | 5,40 | 10,10 | 38,11 | 50,00 |
| | Feb-22 to Mar-22 | 0,50 | 12,50 | 18,10 | 57,70 | 72,40 |
| DB - 29 | Jun-21 to Jul-21 | 0,70 | 2,00 | 9,30 | 44,30 | 78,20 |
| | Jul-21 to Aug-21 | 1,40 | 6,90 | 9,70 | 16,30 | 17,60 |
| | Aug-21 to Sep-21 | 3,20 | 9,90 | 23,80 | 75,70 | 94,80 |
| | Sep-21 to Oct-21 | 1,50 | 6,70 | 10,50 | 19,60 | 27,00 |
| | Oct-21 to Nov-21 | 2,20 | 7,10 | 11,10 | 22,10 | 28,30 |
| | Nov-21 to Dec-21 | 7,10 | 11,20 | 12,70 | 22,80 | 40,00 |
| | Dec-21 to Jan-22 | 1,80 | 4,40 | 10,30 | 30,60 | 44,80 |
| | Jan-22 to Feb-22 | 0,80 | 5,90 | 11,00 | 30,60 | 42,00 |
| | Feb-22 to Mar-22 | 0,20 | 0,80 | 1,80 | 10,40 | 15,30 |
| DB - 30 | Jun-21 to Jul-21 | 1,80 | 31,40 | 37,00 | 63,20 | 79,80 |
| | Jul-21 to Aug-21 | 1,50 | 4,40 | 7,80 | 16,00 | 19,10 |
| | Aug-21 to Sep-21 | 3,20 | 13,20 | 28,30 | 79,80 | 102,60 |
| | Sep-21 to Oct-21 | 1,60 | 8,20 | 13,70 | 26,60 | 34,60 |
| | Oct-21 to Nov-21 | 2,30 | 8,40 | 12,60 | 24,20 | 28,50 |
| | Nov-21 to Dec-21 | 9,00 | 15,90 | 18,40 | 25,90 | 28,90 |
| | Dec-21 to Jan-22 | 1,80 | 5,20 | 10,80 | 32,30 | 50,80 |
| | Jan-22 to Feb-22 | 0,80 | 5,70 | 10,80 | 37,40 | 40,00 |
| | Feb-22 to Mar-22 | 0,50 | 14,10 | 19,40 | 48,00 | 65,00 |
| DB - 31 | Jun-21 to Jul-21 | 0,70 | 4,50 | 8,70 | 25,10 | 32,50 |
| | Jul-21 to Aug-21 | 1,40 | 5,10 | 9,30 | 21,60 | 30,30 |
| | Aug-21 to Sep-21 | 3,30 | 11,80 | 15,70 | 75,30 | 91,90 |
| | Sep-21 to Oct-21 | 1,70 | 12,69 | 17,30 | 27,30 | 34,00 |
| | Oct-21 to Nov-21 | 2,20 | 6,80 | 9,40 | 17,60 | 23,80 |
| | Nov-21 to Dec-21 | 13,00 | 19,50 | 22,30 | 27,90 | 31,60 |
| | Dec-21 to Jan-22 | 1,90 | 7,00 | 11,70 | 23,10 | 27,40 |
| Document No: | MON-AQR-244-20_21 (22-02) | GIBB Bigen Nyeleti Joint Venture (GBN-JV) | | Client Restricted Author: D Nell 24 | | |
| Revision: | 0.0 | | | | | |
| Date: | February to March 2022 | | | | | |

| GBN-JV PM Data | | | | | | |
|----------------|---------------------------|--|--------|---|-------|--------|
| Locality Name | Month | PM 1 | PM 2.5 | PM 4 | PM 10 | TSP |
| SANS Limits | | | | | 75 | |
| | Jan-22 to Feb-22 | 1,10 | 9,00 | 19,80 | 39,90 | 54,90 |
| | Feb-22 to Mar-22 | 0,20 | 2,00 | 15,10 | 24,60 | 30,60 |
| DB - 32 | Jun-21 to Jul-21 | 0,70 | 1,80 | 7,50 | 34,60 | 67,30 |
| | Jul-21 to Aug-21 | 1,40 | 4,00 | 7,70 | 16,50 | 21,40 |
| | Aug-21 to Sep-21 | 3,10 | 11,20 | 22,50 | 61,90 | 78,50 |
| | Sep-21 to Oct-21 | 1,60 | 8,10 | 12,20 | 21,30 | 26,20 |
| | Oct-21 to Nov-21 | 2,20 | 6,90 | 10,10 | 17,60 | 24,40 |
| | Nov-21 to Dec-21 | 9,80 | 15,20 | 18,50 | 25,00 | 26,20 |
| | Dec-21 to Jan-22 | 1,90 | 6,00 | 10,10 | 19,10 | 24,70 |
| | Jan-22 to Feb-22 | 1,00 | 8,90 | 24,00 | 35,80 | 37,30 |
| | Feb-22 to Mar-22 | 0,90 | 6,90 | 11,90 | 35,40 | 45,20 |
| | | | | | | |
| DB - 33 | Jun-21 to Jul-21 | 0,70 | 2,20 | 8,60 | 89,00 | 225,80 |
| | Jul-21 to Aug-21 | 1,50 | 5,00 | 9,50 | 45,10 | 88,20 |
| | Aug-21 to Sep-21 | 3,10 | 10,60 | 22,80 | 60,20 | 74,40 |
| | Sep-21 to Oct-21 | 1,50 | 8,10 | 11,70 | 17,10 | 19,00 |
| | Oct-21 to Nov-21 | 2,10 | 7,10 | 9,60 | 14,70 | 19,00 |
| | Nov-21 to Dec-21 | 9,00 | 15,60 | 18,30 | 22,90 | 24,20 |
| | Dec-21 to Jan-22 | 1,90 | 7,80 | 10,70 | 16,70 | 18,00 |
| | Jan-22 to Feb-22 | 0,90 | 10,30 | 25,80 | 30,30 | 38,80 |
| | Feb-22 to Mar-22 | 0,10 | 0,70 | 2,00 | 6,50 | 10,20 |
| DB - 34 | Jun-21 to Jul-21 | 0,70 | 2,20 | 7,20 | 39,50 | 90,70 |
| | Jul-21 to Aug-21 | 1,40 | 2,80 | 9,00 | 33,20 | 52,30 |
| | Aug-21 to Sep-21 | 3,30 | 11,10 | 22,60 | 58,40 | 83,10 |
| | Sep-21 to Oct-21 | 1,70 | 9,60 | 13,90 | 21,80 | 24,30 |
| | Oct-21 to Nov-21 | 2,20 | 6,10 | 9,20 | 15,10 | 17,00 |
| | Nov-21 to Dec-21 | 8,90 | 15,80 | 18,50 | 23,70 | 37,20 |
| | Dec-21 to Jan-22 | 1,90 | 5,90 | 9,70 | 17,30 | 20,40 |
| | Jan-22 to Feb-22 | 1,30 | 15,00 | 33,40 | 75,60 | 92,80 |
| | Feb-22 to Mar-22 | 0,70 | 2,80 | 6,40 | 30,80 | 40,70 |
| DB - 35 | Jun-21 to Jul-21 | 0,70 | 2,70 | 8,40 | 64,50 | 163,70 |
| | Jul-21 to Aug-21 | 1,50 | 4,60 | 9,70 | 30,00 | 42,40 |
| | Aug-21 to Sep-21 | 3,80 | 16,30 | 27,78 | 71,90 | 92,20 |
| | Sep-21 to Oct-21 | 1,50 | 7,40 | 14,10 | 32,50 | 44,90 |
| | Oct-21 to Nov-21 | 2,40 | 8,50 | 13,60 | 32,30 | 57,50 |
| | Nov-21 to Dec-21 | 10,30 | 17,10 | 21,00 | 25,70 | 27,50 |
| | Dec-21 to Jan-22 | 2,00 | 8,80 | 15,50 | 36,60 | 51,40 |
| | Jan-22 to Feb-22 | 0,80 | 4,50 | 8,70 | 20,50 | 27,20 |
| | Feb-22 to Mar-22 | 0,20 | 0,80 | 3,00 | 5,70 | 9,80 |
| DB - 36 | Jun-21 to Jul-21 | 0,80 | 5,80 | 10,80 | 35,70 | 53,50 |
| | Jul-21 to Aug-21 | 1,40 | 3,30 | 7,80 | 30,50 | 52,00 |
| | Aug-21 to Sep-21 | 3,40 | 12,20 | 24,50 | 69,00 | 97,30 |
| | | | | | | |
| Document No: | MON-AQR-244-20_21 (22-02) | GIBB Bigen Nyeleti Joint Venture (GBN-JV) | | Client Restricted Author: D Nell 25 | | |
| Revision: | 0.0 | | | | | |
| Date: | February to March 2022 | | | | | |

| GBN-JV PM Data | | | | | | |
|----------------|---------------------------|--|--------|---|--------|--------|
| Locality Name | Month | PM 1 | PM 2.5 | PM 4 | PM 10 | TSP |
| SANS Limits | | | | | 75 | |
| | Sep-21 to Oct-21 | 1,60 | 8,00 | 12,40 | 21,20 | 24,20 |
| | Oct-21 to Nov-21 | 2,40 | 8,50 | 13,60 | 32,20 | 57,50 |
| | Nov-21 to Dec-21 | 10,50 | 19,50 | 23,10 | 30,70 | 32,00 |
| | Dec-21 to Jan-22 | 2,00 | 6,60 | 10,40 | 19,10 | 24,60 |
| | Jan-22 to Feb-22 | 0,80 | 7,70 | 11,50 | 30,80 | 38,70 |
| | Feb-22 to Mar-22 | 0,50 | 13,40 | 22,00 | 40,10 | 64,10 |
| DB - 37 | Jun-21 to Jul-21 | 0,70 | 6,30 | 16,30 | 66,30 | 107,60 |
| | Jul-21 to Aug-21 | 1,50 | 6,50 | 13,70 | 56,30 | 85,20 |
| | Aug-21 to Sep-21 | 3,40 | 9,90 | 19,50 | 49,50 | 67,40 |
| | Sep-21 to Oct-21 | 1,70 | 8,60 | 13,20 | 20,40 | 22,30 |
| | Oct-21 to Nov-21 | 2,10 | 7,30 | 9,70 | 14,70 | 22,10 |
| | Nov-21 to Dec-21 | 8,30 | 13,50 | 16,30 | 20,70 | 21,30 |
| | Dec-21 to Jan-22 | 2,30 | 8,70 | 15,70 | 52,20 | 86,10 |
| | Jan-22 to Feb-22 | 0,90 | 7,80 | 15,60 | 31,20 | 41,10 |
| | Feb-22 to Mar-22 | 0,10 | 0,60 | 3,10 | 13,30 | 20,10 |
| DB - 38 | Jun-21 to Jul-21 | 0,70 | 3,60 | 8,30 | 31,70 | 64,40 |
| | Jul-21 to Aug-21 | 1,40 | 1,40 | 1,40 | 169,20 | 558,10 |
| | Aug-21 to Sep-21 | 3,40 | 10,60 | 20,40 | 53,20 | 69,20 |
| | Sep-21 to Oct-21 | 1,50 | 7,30 | 14,50 | 38,80 | 62,20 |
| | Oct-21 to Nov-21 | 2,30 | 8,20 | 11,60 | 16,90 | 20,00 |
| | Nov-21 to Dec-21 | 9,30 | 15,00 | 18,00 | 26,60 | 34,00 |
| | Dec-21 to Jan-22 | 2,20 | 6,80 | 12,40 | 31,50 | 49,30 |
| | Jan-22 to Feb-22 | 0,80 | 4,70 | 11,70 | 28,80 | 36,60 |
| | Feb-22 to Mar-22 | 0,20 | 0,90 | 2,20 | 8,90 | 24,00 |
| DB - 39 | Jun-21 to Jul-21 | 1,30 | 11,50 | 19,60 | 69,90 | 130,90 |
| | Jul-21 to Aug-21 | 1,70 | 8,10 | 15,90 | 56,80 | 80,80 |
| | Aug-21 to Sep-21 | 3,30 | 10,90 | 23,10 | 68,20 | 89,70 |
| | Sep-21 to Oct-21 | 1,60 | 7,20 | 17,60 | 41,40 | 51,90 |
| | Oct-21 to Nov-21 | 2,20 | 7,90 | 10,70 | 14,40 | 18,80 |
| | Nov-21 to Dec-21 | 7,60 | 12,70 | 15,50 | 22,90 | 29,60 |
| | Dec-21 to Jan-22 | 2,50 | 5,60 | 15,40 | 62,00 | 121,30 |
| | Jan-22 to Feb-22 | 0,80 | 5,00 | 12,10 | 30,60 | 41,10 |
| | Feb-22 to Mar-22 | 0,10 | 2,80 | 5,90 | 12,90 | 17,40 |
| DB - 40 | Jun-21 to Jul-21 | 1,40 | 18,00 | 27,40 | 95,20 | 170,40 |
| | Jul-21 to Aug-21 | 1,70 | 9,20 | 21,10 | 69,60 | 93,60 |
| | Aug-21 to Sep-21 | 3,80 | 13,60 | 24,70 | 69,90 | 95,80 |
| | Sep-21 to Oct-21 | 1,60 | 2,50 | 14,50 | 29,70 | 34,60 |
| | Oct-21 to Nov-21 | 2,40 | 7,00 | 9,80 | 13,90 | 13,90 |
| | Nov-21 to Dec-21 | 9,70 | 22,60 | 25,80 | 34,10 | 39,00 |
| | Dec-21 to Jan-22 | 2,50 | 8,50 | 13,00 | 31,40 | 41,30 |
| | Jan-22 to Feb-22 | 0,80 | 6,00 | 11,10 | 24,30 | 30,50 |
| Document No: | MON-AQR-244-20_21 (22-02) | GIBB Bigen Nyeleti Joint Venture (GBN-JV) | | Client Restricted Author: D Nell 26 | | |
| Revision: | 0.0 | | | | | |
| Date: | February to March 2022 | | | | | |

| GBN-JV PM Data | | | | | | |
|----------------|---------------------------|--|--------|---|--------|--------|
| Locality Name | Month | PM 1 | PM 2.5 | PM 4 | PM 10 | TSP |
| SANS Limits | | | | | 75 | |
| | Feb-22 to Mar-22 | 0,10 | 1,20 | 2,70 | 8,50 | 11,70 |
| DB - 41 | Jun-21 to Jul-21 | 0,80 | 3,10 | 7,60 | 27,80 | 53,10 |
| | Jul-21 to Aug-21 | 1,70 | 9,50 | 16,50 | 46,10 | 59,00 |
| | Aug-21 to Sep-21 | 4,10 | 17,50 | 28,80 | 79,30 | 110,80 |
| | Sep-21 to Oct-21 | 1,70 | 9,00 | 14,00 | 19,90 | 31,00 |
| | Oct-21 to Nov-21 | 2,20 | 7,60 | 10,30 | 15,30 | 19,00 |
| | Nov-21 to Dec-21 | 8,80 | 16,30 | 19,60 | 31,20 | 49,70 |
| | Dec-21 to Jan-22 | 3,10 | 11,00 | 19,90 | 52,60 | 72,30 |
| | Jan-22 to Feb-22 | 1,50 | 15,30 | 24,90 | 41,40 | 44,50 |
| | Feb-22 to Mar-22 | 0,20 | 3,10 | 5,90 | 23,70 | 18,00 |
| DB - 42 | Jun-21 to Jul-21 | 1,00 | 9,40 | 15,00 | 46,80 | 83,10 |
| | Jul-21 to Aug-21 | 1,50 | 4,00 | 9,70 | 38,40 | 60,60 |
| | Aug-21 to Sep-21 | 3,60 | 11,80 | 20,80 | 46,00 | 60,80 |
| | Sep-21 to Oct-21 | 1,60 | 8,00 | 13,00 | 24,40 | 31,20 |
| | Oct-21 to Nov-21 | 2,20 | 8,30 | 11,90 | 21,50 | 28,90 |
| | Nov-21 to Dec-21 | 6,90 | 10,80 | 14,20 | 26,50 | 35,70 |
| | Dec-21 to Jan-22 | 2,20 | 7,50 | 14,60 | 41,10 | 50,90 |
| | Jan-22 to Feb-22 | 0,70 | 4,40 | 9,00 | 23,30 | 33,10 |
| | Feb-22 to Mar-22 | 0,10 | 2,30 | 4,00 | 5,80 | 10,00 |
| DB - 43 | Jun-21 to Jul-21 | 0,80 | 4,40 | 12,80 | 69,90 | 149,50 |
| | Jul-21 to Aug-21 | 1,60 | 6,90 | 14,00 | 43,80 | 61,10 |
| | Aug-21 to Sep-21 | 4,40 | 22,10 | 33,00 | 60,70 | 68,10 |
| | Sep-21 to Oct-21 | 16,00 | 9,70 | 15,60 | 25,60 | 34,80 |
| | Oct-21 to Nov-21 | 2,20 | 7,10 | 10,90 | 20,80 | 25,10 |
| | Nov-21 to Dec-21 | 6,10 | 10,80 | 13,30 | 15,80 | 17,00 |
| | Dec-21 to Jan-22 | 2,40 | 6,50 | 13,10 | 34,90 | 47,30 |
| | Jan-22 to Feb-22 | 0,80 | 4,80 | 11,40 | 51,30 | 111,20 |
| | Feb-22 to Mar-22 | 0,20 | 0,80 | 2,10 | 5,70 | 12,10 |
| DB - 44 | Jun-21 to Jul-21 | 0,80 | 4,30 | 12,60 | 47,70 | 71,70 |
| | Jul-21 to Aug-21 | 2,20 | 9,90 | 34,90 | 177,90 | 343,70 |
| | Aug-21 to Sep-21 | 3,50 | 9,90 | 17,70 | 41,90 | 53,60 |
| | Sep-21 to Oct-21 | 1,60 | 9,00 | 15,40 | 30,5 | 36,10 |
| | Oct-21 to Nov-21 | 2,20 | 6,40 | 8,80 | 13,80 | 19,40 |
| | Nov-21 to Dec-21 | 10,80 | 18,10 | 21,20 | 27,80 | 27,80 |
| | Dec-21 to Jan-22 | 3,20 | 16,90 | 22,40 | 49,00 | 106,20 |
| | Jan-22 to Feb-22 | 1,00 | 9,80 | 13,90 | 26,90 | 30,60 |
| | Feb-22 to Mar-22 | 0,40 | 6,30 | 8,80 | 27,40 | 37,30 |
| DB - 45 | Jun-21 to Jul-21 | 0,70 | 4,00 | 11,60 | 37,70 | 56,20 |
| | Jul-21 to Aug-21 | 2,30 | 21,90 | 30,20 | 69,80 | 100,60 |
| | Aug-21 to Sep-21 | 3,50 | 12,10 | 19,90 | 43,90 | 50,00 |
| | Sep-21 to Oct-21 | 1,80 | 11,70 | 18,00 | 29,30 | 37,30 |
| Document No: | MON-AQR-244-20_21 (22-02) | GIBB Bigen Nyeleti Joint Venture (GBN-JV) | | Client Restricted Author: D Nell 27 | | |
| Revision: | 0.0 | | | | | |
| Date: | February to March 2022 | | | | | |

| GBN-JV PM Data | | | | | | |
|----------------|---------------------------|--|--------|---|--------|--------|
| Locality Name | Month | PM 1 | PM 2.5 | PM 4 | PM 10 | TSP |
| SANS Limits | | | | | 75 | |
| | Oct-21 to Nov-21 | 2,30 | 7,20 | 11,10 | 23,90 | 39,30 |
| | Nov-21 to Dec-21 | 8,30 | 15,70 | 18,70 | 23,50 | 26,60 |
| | Dec-21 to Jan-22 | 3,00 | 6,90 | 14,00 | 59,20 | 110,50 |
| | Jan-22 to Feb-22 | 1,00 | 4,30 | 9,00 | 29,00 | 51,20 |
| | Feb-22 to Mar-22 | 0,10 | 1,10 | 2,50 | 8,80 | 11,90 |
| DB - 46 | Jun-21 to Jul-21 | 2,20 | 48,10 | 64,80 | 145,50 | 212,60 |
| | Jul-21 to Aug-21 | 1,70 | 1,70 | 23,00 | 156,30 | 197,60 |
| | Aug-21 to Sep-21 | 3,50 | 12,50 | 20,00 | 45,90 | 54,00 |
| | Sep-21 to Oct-21 | 1,90 | 10,40 | 16,90 | 34,30 | 46,60 |
| | Oct-21 to Nov-21 | 2,30 | 7,00 | 9,90 | 16,80 | 19,30 |
| | Nov-21 to Dec-21 | 6,30 | 12,30 | 15,40 | 21,00 | 21,60 |
| | Dec-21 to Jan-22 | 3,00 | 7,60 | 10,60 | 17,60 | 18,90 |
| | Jan-22 to Feb-22 | 0,90 | 3,30 | 10,00 | 42,60 | 74,60 |
| | Feb-22 to Mar-22 | 0,10 | 0,10 | 1,00 | 15,10 | 19,40 |
| DB - 47 | Jun-21 to Jul-21 | 0,80 | 6,60 | 11,90 | 33,20 | 44,90 |
| | Jul-21 to Aug-21 | 1,80 | 1,80 | 35,00 | 169,40 | 200,20 |
| | Aug-21 to Sep-21 | 3,50 | 10,90 | 19,30 | 48,40 | 60,70 |
| | Sep-21 to Oct-21 | 1,80 | 10,10 | 14,40 | 22,70 | 24,50 |
| | Oct-21 to Nov-21 | 2,20 | 7,30 | 11,50 | 24,90 | 5,80 |
| | Nov-21 to Dec-21 | 7,80 | 13,00 | 15,90 | 21,50 | 24,00 |
| | Dec-21 to Jan-22 | 2,50 | 6,10 | 12,40 | 15,10 | 42,00 |
| | Jan-22 to Feb-22 | 1,10 | 4,80 | 11,30 | 34,60 | 46,00 |
| | Feb-22 to Mar-22 | 0,20 | 1,30 | 2,80 | 9,00 | 12,00 |
| DB - 48 | Jun-21 to Jul-21 | 1,00 | 21,00 | 30,40 | 71,90 | 107,00 |
| | Jul-21 to Aug-21 | 1,80 | 5,90 | 18,00 | 61,00 | 77,00 |
| | Aug-21 to Sep-21 | 3,50 | 10,30 | 17,80 | 42,20 | 52,10 |
| | Sep-21 to Oct-21 | 2,00 | 15,00 | 23,20 | 59,00 | 78,70 |
| | Oct-21 to Nov-21 | 2,20 | 6,50 | 9,30 | 23,10 | 38,50 |
| | Nov-21 to Dec-21 | 5,20 | 12,00 | 15,60 | 22,30 | 24,20 |
| | Dec-21 to Jan-22 | 2,90 | 9,70 | 16,00 | 46,50 | 74,30 |
| | Jan-22 to Feb-22 | 1,00 | 4,60 | 10,20 | 32,00 | 50,50 |
| | Feb-22 to Mar-22 | 0,10 | 0,20 | 0,20 | 21,80 | 60,10 |
| DB - 49 | Jun-21 to Jul-21 | 0,80 | 9,60 | 14,40 | 31,20 | 39,80 |
| | Jul-21 to Aug-21 | 1,80 | 6,90 | 15,60 | 48,40 | 66,20 |
| | Aug-21 to Sep-21 | 3,50 | 11,70 | 19,80 | 46,10 | 56,60 |
| | Sep-21 to Oct-21 | 1,90 | 8,10 | 15,00 | 34,30 | 52,80 |
| | Oct-21 to Nov-21 | 2,30 | 7,10 | 10,00 | 14,50 | 17,00 |
| | Nov-21 to Dec-21 | 8,60 | 14,50 | 19,80 | 42,60 | 67,90 |
| | Dec-21 to Jan-22 | 3,00 | 8,90 | 15,20 | 39,50 | 41,40 |
| | Jan-22 to Feb-22 | 0,90 | 5,30 | 10,20 | 24,10 | 30,60 |
| | Feb-22 to Mar-22 | 0,10 | 1,20 | 2,40 | 7,90 | 11,50 |
| Document No: | MON-AQR-244-20_21 (22-02) | GIBB Bigen Nyeleti Joint Venture (GBN-JV) | | Client Restricted Author: D Nell 28 | | |
| Revision: | 0.0 | | | | | |
| Date: | February to March 2022 | | | | | |

| GBN-JV PM Data | | | | | | |
|----------------|---------------------------|--|--------|---|--------|--------|
| Locality Name | Month | PM 1 | PM 2.5 | PM 4 | PM 10 | TSP |
| SANS Limits | | | | | 75 | |
| DB - 50 | Jun-21 to Jul-21 | 2,20 | 46,30 | 63,70 | 141,30 | 223,90 |
| | Jul-21 to Aug-21 | 2,00 | 9,20 | 24,40 | 76,30 | 96,60 |
| | Aug-21 to Sep-21 | 3,40 | 12,00 | 19,50 | 44,10 | 52,70 |
| | Sep-21 to Oct-21 | 2,00 | 12,20 | 19,20 | 31,60 | 35,30 |
| | Oct-21 to Nov-21 | 2,30 | 7,00 | 10,50 | 17,80 | 13,40 |
| | Nov-21 to Dec-21 | 5,90 | 15,40 | 18,20 | 30,40 | 43,30 |
| | Dec-21 to Jan-22 | 3,00 | 9,50 | 14,20 | 24,90 | 26,80 |
| | Jan-22 to Feb-22 | 1,30 | 6,80 | 12,40 | 40,30 | 38,90 |
| | Feb-22 to Mar-22 | 0,20 | 0,40 | 1,30 | 8,10 | 10,50 |
| DB - 51 | Jun-21 to Jul-21 | 0,80 | 6,70 | 17,00 | 62,90 | 93,70 |
| | Jul-21 to Aug-21 | 1,70 | 4,40 | 13,80 | 46,00 | 66,90 |
| | Aug-21 to Sep-21 | 1,90 | 11,30 | 18,30 | 30,50 | 34,20 |
| | Sep-21 to Oct-21 | 2,20 | 7,30 | 10,20 | 13,10 | 16,80 |
| | Oct-21 to Nov-21 | 2,20 | 7,30 | 10,20 | 13,10 | 16,80 |
| | Nov-21 to Dec-21 | 3,90 | 9,00 | 11,70 | 16,30 | 18,70 |
| | Dec-21 to Jan-22 | 2,80 | 12,90 | 17,10 | 32,90 | 47,10 |
| | Jan-22 to Feb-22 | 0,90 | 3,80 | 8,50 | 22,00 | 31,90 |
| | Feb-22 to Mar-22 | 0,20 | 2,40 | 4,40 | 15,70 | 30,10 |
| DB - 52 | Jun-21 to Jul-21 | 0,80 | 8,10 | 12,90 | 49,10 | 102,10 |
| | Jul-21 to Aug-21 | 1,60 | 4,10 | 17,70 | 53,30 | 614,00 |
| | Aug-21 to Sep-21 | 3,50 | 10,50 | 19,60 | 46,60 | 73,80 |
| | Sep-21 to Oct-21 | 2,00 | 10,30 | 17,60 | 27,90 | 31,60 |
| | Oct-21 to Nov-21 | 2,30 | 7,40 | 10,90 | 20,80 | 26,40 |
| | Nov-21 to Dec-21 | 3,70 | 14,50 | 18,40 | 27,60 | 35,00 |
| | Dec-21 to Jan-22 | 2,70 | 7,30 | 15,00 | 49,50 | 84,60 |
| | Jan-22 to Feb-22 | 1,00 | 3,90 | 9,80 | 25,00 | 26,30 |
| | Feb-22 to Mar-22 | 0,10 | 0,20 | 5,00 | 12,30 | 30,40 |
| DB - 53 | Jun-21 to Jul-21 | 0,60 | 3,30 | 7,40 | 20,20 | 30,10 |
| | Jul-21 to Aug-21 | 2,60 | 19,90 | 28,40 | 58,70 | 69,80 |
| | Aug-21 to Sep-21 | 3,50 | 10,60 | 17,90 | 44,00 | 57,50 |
| | Sep-21 to Oct-21 | 1,80 | 11,00 | 19,00 | 37,10 | 50,70 |
| | Oct-21 to Nov-21 | 2,10 | 5,30 | 12,60 | 38,70 | 59,60 |
| | Nov-21 to Dec-21 | 3,10 | 7,30 | 10,80 | 17,90 | 22,20 |
| | Dec-21 to Jan-22 | 2,60 | 7,80 | 12,30 | 25,80 | 40,60 |
| | Jan-22 to Feb-22 | 0,90 | 4,90 | 9,90 | 23,80 | 28,70 |
| | Feb-22 to Mar-22 | 0,10 | 0,60 | 2,00 | 5,20 | 8,70 |
| DB - 54 | Jun-21 to Jul-21 | 0,60 | 0,60 | 8,90 | 100,00 | 190,60 |
| | Jul-21 to Aug-21 | 1,50 | 1,50 | 9,10 | 145,40 | 177,40 |
| | Aug-21 to Sep-21 | 3,40 | 10,40 | 17,70 | 45,90 | 50,80 |
| | Sep-21 to Oct-21 | 1,80 | 12,70 | 19,50 | 32,00 | 36,30 |
| | Oct-21 to Nov-21 | 2,30 | 10,10 | 13,80 | 24,40 | 27,50 |
| Document No: | MON-AQR-244-20_21 (22-02) | GIBB Bigen Nyeleti Joint Venture (GBN-JV) | | Client Restricted Author: D Nell 29 | | |
| Revision: | 0.0 | | | | | |
| Date: | February to March 2022 | | | | | |

| GBN-JV PM Data | | | | | | |
|----------------|------------------|------|--------|--------|--------|--------|
| Locality Name | Month | PM 1 | PM 2.5 | PM 4 | PM 10 | TSP |
| SANS Limits | | | | | 75 | |
| | Nov-21 to Dec-21 | 5,10 | 10,20 | 13,00 | 19,30 | 22,40 |
| | Dec-21 to Jan-22 | 3,50 | 29,90 | 35,40 | 56,50 | 68,20 |
| | Jan-22 to Feb-22 | 0,90 | 3,90 | 9,20 | 21,30 | 25,70 |
| | Feb-22 to Mar-22 | 0,20 | 1,90 | 6,70 | 14,50 | 28,10 |
| DB - 55 | Jun-21 to Jul-21 | 0,90 | 8,90 | 19,50 | 70,50 | 101,30 |
| | Jul-21 to Aug-21 | 2,70 | 26,30 | 57,40 | 162,30 | 206,60 |
| | Aug-21 to Sep-21 | 3,40 | 12,00 | 19,60 | 44,90 | 57,30 |
| | Sep-21 to Oct-21 | 2,00 | 15,50 | 26,10 | 59,80 | 82,60 |
| | Oct-21 to Nov-21 | 2,20 | 7,00 | 10,10 | 14,60 | 15,80 |
| | Nov-21 to Dec-21 | 5,40 | 10,40 | 14,30 | 21,40 | 25,10 |
| | Dec-21 to Jan-22 | 3,20 | 10,50 | 17,90 | 41,30 | 54,20 |
| | Jan-22 to Feb-22 | 0,90 | 4,60 | 9,50 | 23,10 | 30,00 |
| | Feb-22 to Mar-22 | 0,20 | 1,10 | 4,10 | 10,40 | 22,80 |
| DB - 56 | Jun-21 to Jul-21 | 6,50 | 181,40 | 207,40 | 306,70 | 349,20 |
| | Jul-21 to Aug-21 | 1,50 | 6,70 | 11,80 | 30,60 | 34,90 |
| | Aug-21 to Sep-21 | 3,50 | 11,70 | 18,40 | 35,30 | 41,50 |
| | Sep-21 to Oct-21 | 1,80 | 10,20 | 19,50 | 38,30 | 49,40 |
| | Oct-21 to Nov-21 | 2,20 | 6,80 | 9,80 | 14,00 | 16,50 |
| | Nov-21 to Dec-21 | 3,50 | 8,60 | 11,70 | 25,50 | 53,90 |
| | Dec-21 to Jan-22 | 3,20 | 6,00 | 9,80 | 20,30 | 25,90 |
| | Jan-22 to Feb-22 | 0,90 | 4,80 | 9,10 | 20,50 | 28,60 |
| | Feb-22 to Mar-22 | 0,10 | 0,20 | 2,50 | 6,50 | 22,20 |
| DB - 57 | Jun-21 to Jul-21 | 0,70 | 4,00 | 12,30 | 42,00 | 64,20 |
| | Jul-21 to Aug-21 | 1,40 | 4,30 | 9,30 | 21,10 | 29,70 |
| | Aug-21 to Sep-21 | 3,50 | 10,80 | 17,50 | 35,50 | 46,60 |
| | Sep-21 to Oct-21 | 1,80 | 11,40 | 18,90 | 26,70 | 27,30 |
| | Oct-21 to Nov-21 | 2,30 | 10,80 | 14,20 | 20,80 | 23,90 |
| | Nov-21 to Dec-21 | 4,80 | 10,40 | 13,00 | 17,70 | 25,10 |
| | Dec-21 to Jan-22 | 3,20 | 5,90 | 10,10 | 31,70 | 58,80 |
| | Jan-22 to Feb-22 | 0,90 | 4,80 | 9,70 | 21,20 | 23,00 |
| | Feb-22 to Mar-22 | 0,20 | 3,10 | 5,50 | 21,40 | 23,00 |
| DB - 58 | Jun-21 to Jul-21 | 3,10 | 67,50 | 133,10 | 311,60 | 388,70 |
| | Jul-21 to Aug-21 | 4,60 | 43,70 | 144,50 | 393,40 | 467,40 |
| | Aug-21 to Sep-21 | 3,20 | 40,10 | 78,50 | 241,60 | 327,90 |
| | Sep-21 to Oct-21 | 2,00 | 12,80 | 20,90 | 39,50 | 48,20 |
| | Oct-21 to Nov-21 | 2,20 | 6,80 | 10,10 | 15,90 | 19,60 |
| | Nov-21 to Dec-21 | 4,90 | 8,40 | 10,40 | 12,70 | 17,70 |
| | Dec-21 to Jan-22 | 2,30 | 7,10 | 10,90 | 19,70 | 20,40 |
| | Jan-22 to Feb-22 | 0,90 | 6,30 | 11,50 | 28,10 | 37,30 |
| | Feb-22 to Mar-22 | 0,20 | 1,00 | 2,90 | 7,40 | 7,80 |
| DB - 59 | Jun-21 to Jul-21 | 0,90 | 10,90 | 28,30 | 103,00 | 157,30 |

| GBN-JV PM Data | | | | | | |
|----------------|------------------|------|--------|--------|--------|---------|
| Locality Name | Month | PM 1 | PM 2.5 | PM 4 | PM 10 | TSP |
| SANS Limits | | | | | 75 | |
| | Jul-21 to Aug-21 | 2,30 | 11,40 | 19,80 | 46,00 | 57,70 |
| | Aug-21 to Sep-21 | 3,80 | 52,90 | 87,70 | 302,00 | 474,30 |
| | Sep-21 to Oct-21 | 1,90 | 11,00 | 17,30 | 25,30 | 31,40 |
| | Oct-21 to Nov-21 | 2,20 | 6,90 | 16,90 | 42,80 | 53,90 |
| | Nov-21 to Dec-21 | 3,80 | 7,40 | 9,30 | 17,90 | 24,70 |
| | Dec-21 to Jan-22 | 2,20 | 7,80 | 14,80 | 39,10 | 56,90 |
| | Jan-22 to Feb-22 | 0,80 | 4,50 | 8,90 | 25,60 | 36,70 |
| | Feb-22 to Mar-22 | 0,20 | 0,70 | 1,70 | 5,90 | 6,50 |
| DB - 60 | Jun-21 to Jul-21 | 0,50 | 2,20 | 9,60 | 35,00 | 48,60 |
| | Jul-21 to Aug-21 | 2,30 | 10,00 | 17,40 | 36,10 | 42,20 |
| | Aug-21 to Sep-21 | 2,40 | 12,70 | 37,60 | 361,00 | 704,60 |
| | Sep-21 to Oct-21 | 1,90 | 11,90 | 18,50 | 25,60 | 28,00 |
| | Oct-21 to Nov-21 | 1,10 | 6,30 | 14,30 | 34,50 | 41,90 |
| | Nov-21 to Dec-21 | 4,10 | 9,90 | 11,60 | 23,10 | 39,70 |
| | Dec-21 to Jan-22 | 2,00 | 4,70 | 10,10 | 26,90 | 42,90 |
| | Jan-22 to Feb-22 | 0,90 | 5,80 | 11,00 | 23,70 | 26,80 |
| | Feb-22 to Mar-22 | 0,10 | 0,80 | 1,60 | 5,70 | 6,30 |
| DB - 61 | Jun-21 to Jul-21 | 1,90 | 41,20 | 66,70 | 214,70 | 360,80 |
| | Jul-21 to Aug-21 | 2,20 | 7,80 | 15,30 | 32,90 | 36,00 |
| | Aug-21 to Sep-21 | 2,30 | 10,80 | 29,00 | 90,80 | 124,10 |
| | Sep-21 to Oct-21 | 1,90 | 11,20 | 18,90 | 29,50 | 33,80 |
| | Oct-21 to Nov-21 | 1,00 | 4,80 | 15,20 | 48,60 | 66,40 |
| | Nov-21 to Dec-21 | 2,00 | 4,80 | 7,30 | 16,70 | 23,50 |
| | Dec-21 to Jan-22 | 2,80 | 7,10 | 10,30 | 20,40 | 30,00 |
| | Jan-22 to Feb-22 | 0,80 | 5,10 | 9,50 | 20,30 | 26,50 |
| | Feb-22 to Mar-22 | 0,10 | 0,60 | 1,80 | 5,20 | 6,40 |
| DB - 62 | Jun-21 to Jul-21 | 4,90 | 135,00 | 170,20 | 270,70 | 324,90 |
| | Jul-21 to Aug-21 | 2,20 | 7,20 | 18,60 | 54,40 | 78,30 |
| | Aug-21 to Sep-21 | 2,50 | 13,70 | 23,00 | 93,70 | 154,70 |
| | Sep-21 to Oct-21 | 1,90 | 12,00 | 19,80 | 29,90 | 34,30 |
| | Oct-21 to Nov-21 | 2,30 | 7,30 | 9,40 | 21,00 | 57,00 |
| | Nov-21 to Dec-21 | 2,20 | 9,40 | 13,40 | 33,50 | 64,90 |
| | Dec-21 to Jan-22 | 3,50 | 8,00 | 11,40 | 19,20 | 25,90 |
| | Jan-22 to Feb-22 | 0,90 | 5,60 | 9,90 | 22,10 | 32,00 |
| | Feb-22 to Mar-22 | 0,40 | 3,50 | 5,50 | 23,00 | 26,70 |
| DB - 63 | Jun-21 to Jul-21 | 1,30 | 28,20 | 48,10 | 120,50 | 166,80 |
| | Jul-21 to Aug-21 | 2,50 | 2,50 | 39,90 | 739,30 | 1291,60 |
| | Aug-21 to Sep-21 | 2,40 | 14,50 | 23,60 | 92,40 | 163,30 |
| | Sep-21 to Oct-21 | 1,80 | 12,90 | 19,90 | 28,10 | 30,00 |
| | Oct-21 to Nov-21 | 2,20 | 6,00 | 11,80 | 28,00 | 40,40 |
| | Nov-21 to Dec-21 | 2,30 | 6,00 | 8,40 | 28,00 | 50,20 |

| | | | |
|--------------|---------------------------|--|---|
| Document No: | MON-AQR-244-20_21 (22-02) | GIBB Bigen Nyeleti Joint Venture (GBN-JV) | Client Restricted Author: D Nell 31 |
| Revision: | 0.0 | | |
| Date: | February to March 2022 | | |

| GBN-JV PM Data | | | | | | |
|----------------|------------------|------|--------|--------|--------|--------|
| Locality Name | Month | PM 1 | PM 2.5 | PM 4 | PM 10 | TSP |
| SANS Limits | | | | | 75 | |
| | Dec-21 to Jan-22 | 3,50 | 6,90 | 12,20 | 38,30 | 73,40 |
| | Jan-22 to Feb-22 | 0,90 | 4,50 | 9,00 | 18,60 | 21,00 |
| | Feb-22 to Mar-22 | 0,20 | 0,80 | 2,00 | 6,90 | 8,70 |
| DB - 64 | Jun-21 to Jul-21 | 0,60 | 2,10 | 7,90 | 29,70 | 45,70 |
| | Jul-21 to Aug-21 | 2,60 | 15,60 | 37,70 | 152,40 | 227,00 |
| | Aug-21 to Sep-21 | 2,10 | 10,60 | 18,10 | 59,10 | 86,20 |
| | Sep-21 to Oct-21 | 1,80 | 12,30 | 21,80 | 35,90 | 42,00 |
| | Oct-21 to Nov-21 | 2,30 | 15,10 | 27,20 | 64,00 | 89,30 |
| | Nov-21 to Dec-21 | 2,50 | 6,80 | 10,40 | 30,20 | 56,10 |
| | Dec-21 to Jan-22 | 3,70 | 8,00 | 11,20 | 19,90 | 22,30 |
| | Jan-22 to Feb-22 | 0,90 | 4,60 | 9,00 | 24,40 | 32,50 |
| | Feb-22 to Mar-22 | 0,30 | 2,30 | 4,80 | 14,80 | 22,20 |
| | | | | | | |
| DB - 65 | Jun-21 to Jul-21 | 1,30 | 22,10 | 42,50 | 124,90 | 155,70 |
| | Jul-21 to Aug-21 | 2,70 | 18,50 | 44,50 | 110,20 | 126,80 |
| | Aug-21 to Sep-21 | 2,20 | 10,50 | 18,60 | 44,30 | 62,10 |
| | Sep-21 to Oct-21 | 1,90 | 12,30 | 21,10 | 30,40 | 32,80 |
| | Oct-21 to Nov-21 | 2,10 | 4,40 | 10,10 | 27,50 | 36,80 |
| | Nov-21 to Dec-21 | 2,10 | 5,00 | 6,50 | 9,80 | 11,00 |
| | Dec-21 to Jan-22 | 3,50 | 7,80 | 11,00 | 18,20 | 20,00 |
| | Jan-22 to Feb-22 | 0,80 | 4,10 | 9,20 | 24,30 | 32,90 |
| | Feb-22 to Mar-22 | 0,20 | 0,50 | 3,00 | 17,80 | 21,50 |
| DB - 66 | Jun-21 to Jul-21 | 2,60 | 66,40 | 150,80 | 520,20 | 746,40 |
| | Jul-21 to Aug-21 | 4,00 | 41,50 | 84,00 | 191,30 | 218,40 |
| | Aug-21 to Sep-21 | 2,50 | 17,40 | 30,40 | 68,80 | 87,30 |
| | Sep-21 to Oct-21 | 1,80 | 13,40 | 21,80 | 31,40 | 33,30 |
| | Oct-21 to Nov-21 | 2,40 | 4,60 | 10,70 | 29,20 | 38,50 |
| | Nov-21 to Dec-21 | 2,80 | 6,70 | 10,20 | 43,10 | 66,50 |
| | Dec-21 to Jan-22 | 4,10 | 9,60 | 20,10 | 47,30 | 69,10 |
| | Jan-22 to Feb-22 | 0,90 | 5,20 | 10,30 | 27,30 | 34,70 |
| | Feb-22 to Mar-22 | 0,50 | 11,40 | 15,50 | 43,90 | 56,80 |
| DB - 67 | Jun-21 to Jul-21 | 0,60 | 3,20 | 13,80 | 57,50 | 82,20 |
| | Jul-21 to Aug-21 | 1,80 | 5,10 | 13,60 | 58,70 | 102,50 |
| | Aug-21 to Sep-21 | 2,40 | 12,60 | 24,80 | 66,90 | 89,70 |
| | Sep-21 to Oct-21 | 1,80 | 13,00 | 21,10 | 34,50 | 38,80 |
| | Oct-21 to Nov-21 | 2,20 | 5,40 | 11,30 | 25,00 | 32,40 |
| | Nov-21 to Dec-21 | 2,20 | 5,00 | 8,20 | 33,30 | 61,10 |
| | Dec-21 to Jan-22 | 3,50 | 7,70 | 10,40 | 17,30 | 18,50 |
| | Jan-22 to Feb-22 | 0,80 | 3,30 | 9,20 | 36,90 | 77,00 |
| | Feb-22 to Mar-22 | 0,40 | 1,70 | 8,50 | 56,80 | 78,40 |
| DB - 68 | Jun-21 to Jul-21 | 1,70 | 27,60 | 137,10 | 731,40 | 936,60 |
| | Jul-21 to Aug-21 | 1,87 | 8,20 | 21,80 | 63,70 | 82,20 |

| GBN-JV PM Data | | | | | | |
|----------------|---------------------------|--|--------|---|--------|--------|
| Locality Name | Month | PM 1 | PM 2.5 | PM 4 | PM 10 | TSP |
| SANS Limits | | | | | 75 | |
| | Aug-21 to Sep-21 | 2,50 | 12,00 | 29,80 | 105,10 | 153,80 |
| | Sep-21 to Oct-21 | 1,70 | 12,30 | 21,60 | 33,60 | 37,90 |
| | Oct-21 to Nov-21 | 2,20 | 4,60 | 9,80 | 26,40 | 38,80 |
| | Nov-21 to Dec-21 | 2,60 | 5,90 | 7,50 | 9,50 | 12,60 |
| | Dec-21 to Jan-22 | 3,50 | 8,20 | 11,70 | 20,80 | 26,40 |
| | Jan-22 to Feb-22 | 0,90 | 3,00 | 11,20 | 57,90 | 120,20 |
| | Feb-22 to Mar-22 | 0,30 | 1,30 | 3,80 | 14,90 | 22,90 |
| DB - 69 | Jun-21 to Jul-21 | 0,40 | 2,50 | 6,70 | 25,00 | 32,30 |
| | Jul-21 to Aug-21 | 1,70 | 9,10 | 14,90 | 33,80 | 46,80 |
| | Aug-21 to Sep-21 | 2,70 | 16,30 | 31,60 | 89,80 | 128,00 |
| | Sep-21 to Oct-21 | 1,90 | 17,90 | 28,30 | 50,50 | 60,90 |
| | Oct-21 to Nov-21 | 2,30 | 4,30 | 10,40 | 27,70 | 32,70 |
| | Nov-21 to Dec-21 | 3,20 | 8,90 | 12,50 | 29,80 | 49,50 |
| | Dec-21 to Jan-22 | 3,80 | 6,10 | 11,10 | 15,50 | 18,60 |
| | Jan-22 to Feb-22 | 1,00 | 7,40 | 15,60 | 51,50 | 82,30 |
| | Feb-22 to Mar-22 | 0,60 | 1,80 | 7,70 | 43,50 | 58,90 |
| DB - 70 | Jun-21 to Jul-21 | 0,70 | 4,70 | 28,90 | 151,90 | 212,90 |
| | Jul-21 to Aug-21 | 1,90 | 2,50 | 25,10 | 56,40 | 77,30 |
| | Aug-21 to Sep-21 | 2,70 | 13,50 | 30,00 | 97,00 | 137,70 |
| | Sep-21 to Oct-21 | 1,70 | 12,30 | 20,60 | 26,20 | 28,10 |
| | Oct-21 to Nov-21 | 2,10 | 5,20 | 11,40 | 29,00 | 34,50 |
| | Nov-21 to Dec-21 | 2,70 | 9,30 | 13,60 | 40,10 | 69,10 |
| | Dec-21 to Jan-22 | 4,00 | 5,70 | 12,20 | 15,70 | 17,30 |
| | Jan-22 to Feb-22 | 0,90 | 5,60 | 12,30 | 31,50 | 43,20 |
| | Feb-22 to Mar-22 | 0,30 | 3,90 | 6,20 | 20,50 | 22,90 |
| DB - 71 | Jun-21 to Jul-21 | 1,60 | 31,10 | 73,50 | 356,30 | 641,10 |
| | Jul-21 to Aug-21 | 3,40 | 40,00 | 63,10 | 138,70 | 173,20 |
| | Aug-21 to Sep-21 | 2,90 | 15,10 | 30,00 | 82,10 | 128,00 |
| | Sep-21 to Oct-21 | 1,70 | 10,30 | 19,00 | 35,30 | 40,00 |
| | Oct-21 to Nov-21 | 2,30 | 5,90 | 11,40 | 26,70 | 36,60 |
| | Nov-21 to Dec-21 | 2,80 | 5,90 | 7,90 | 13,50 | 14,10 |
| | Dec-21 to Jan-22 | 4,20 | 9,80 | 25,60 | 49,60 | 73,20 |
| | Jan-22 to Feb-22 | 1,00 | 4,70 | 10,10 | 25,20 | 29,20 |
| | Feb-22 to Mar-22 | 0,70 | 1,38 | 8,40 | 38,00 | 52,20 |
| DB - 72 | Jun-21 to Jul-21 | 5,60 | 184,00 | 262,80 | 688,40 | 966,40 |
| | Jul-21 to Aug-21 | 3,40 | 47,40 | 64,60 | 160,40 | 220,80 |
| | Aug-21 to Sep-21 | 3,60 | 11,00 | 18,10 | 38,60 | 52,10 |
| | Sep-21 to Oct-21 | 1,70 | 10,60 | 16,70 | 22,30 | 26,00 |
| | Oct-21 to Nov-21 | 2,30 | 4,00 | 9,80 | 28,50 | 32,80 |
| | Nov-21 to Dec-21 | 2,50 | 6,10 | 8,70 | 22,20 | 38,80 |
| | Dec-21 to Jan-22 | 3,70 | 7,90 | 11,20 | 18,70 | 21,80 |
| Document No: | MON-AQR-244-20_21 (22-02) | GIBB Bigen Nyeleti Joint Venture (GBN-JV) | | Client Restricted Author: D Nell 33 | | |
| Revision: | 0.0 | | | | | |
| Date: | February to March 2022 | | | | | |

| GBN-JV PM Data | | | | | | |
|----------------|------------------|------|--------|--------|---------|---------|
| Locality Name | Month | PM 1 | PM 2.5 | PM 4 | PM 10 | TSP |
| SANS Limits | | | | | 75 | |
| | Jan-22 to Feb-22 | 0,90 | 4,30 | 9,10 | 25,50 | 34,70 |
| | Feb-22 to Mar-22 | 0,30 | 1,20 | 4,90 | 25,00 | 29,90 |
| DB - 73 | Jun-21 to Jul-21 | 4,10 | 46,70 | 228,60 | 1007,20 | 1384,40 |
| | Jul-21 to Aug-21 | 2,10 | 9,50 | 43,30 | 250,20 | 447,40 |
| | Aug-21 to Sep-21 | 3,40 | 11,50 | 18,20 | 32,10 | 38,90 |
| | Sep-21 to Oct-21 | 1,50 | 9,50 | 17,40 | 26,60 | 30,30 |
| | Oct-21 to Nov-21 | 2,10 | 4,70 | 10,50 | 27,90 | 35,30 |
| | Nov-21 to Dec-21 | 2,70 | 6,50 | 8,70 | 22,20 | 29,60 |
| | Dec-21 to Jan-22 | 3,60 | 8,20 | 12,30 | 27,80 | 42,60 |
| | Jan-22 to Feb-22 | 0,90 | 4,60 | 9,70 | 25,60 | 30,60 |
| | Feb-22 to Mar-22 | 0,90 | 20,50 | 22,20 | 33,30 | 35,80 |
| | | | | | | |
| DB - 74 | Jun-21 to Jul-21 | 0,50 | 2,50 | 12,30 | 111,90 | 188,30 |
| | Jul-21 to Aug-21 | 4,00 | 184,80 | 190,10 | 222,80 | 247,50 |
| | Aug-21 to Sep-21 | 3,50 | 10,90 | 17,40 | 36,00 | 42,70 |
| | Sep-21 to Oct-21 | 1,80 | 15,10 | 28,40 | 64,80 | 74,60 |
| | Oct-21 to Nov-21 | 2,20 | 4,80 | 11,60 | 31,10 | 41,00 |
| | Nov-21 to Dec-21 | 3,20 | 6,10 | 8,70 | 21,00 | 31,50 |
| | Dec-21 to Jan-22 | 3,50 | 7,30 | 9,90 | 17,80 | 18,40 |
| | Jan-22 to Feb-22 | 0,90 | 4,50 | 10,00 | 29,50 | 38,70 |
| | Feb-22 to Mar-22 | 0,60 | 2,00 | 9,30 | 47,70 | 60,10 |
| DB - 75 | Jun-21 to Jul-21 | 0,50 | 1,50 | 11,40 | 46,30 | 70,30 |
| | Jul-21 to Aug-21 | 1,50 | 4,00 | 11,70 | 32,80 | 43,90 |
| | Aug-21 to Sep-21 | 3,70 | 16,70 | 28,00 | 66,60 | 103..6 |
| | Sep-21 to Oct-21 | 1,70 | 14,20 | 21,50 | 34,20 | 39,10 |
| | Oct-21 to Nov-21 | 2,20 | 4,40 | 11,50 | 31,10 | 40,40 |
| | Nov-21 to Dec-21 | 3,60 | 6,80 | 9,60 | 26,70 | 45,20 |
| | Dec-21 to Jan-22 | 2,50 | 4,90 | 11,50 | 22,70 | 30,40 |
| | Jan-22 to Feb-22 | 1,00 | 4,70 | 9,90 | 28,60 | 34,80 |
| | Feb-22 to Mar-22 | 0,40 | 1,80 | 8,70 | 53,40 | 75,30 |
| DB - 76 | Jun-21 to Jul-21 | 5,40 | 83,90 | 95,00 | 122,70 | 136,80 |
| | Jul-21 to Aug-21 | 1,50 | 2,20 | 21,30 | 74,90 | 103,90 |
| | Aug-21 to Sep-21 | 4,00 | 15,50 | 32,50 | 76,50 | 86,90 |
| | Sep-21 to Oct-21 | 1,60 | 11,60 | 21,50 | 33,70 | 34,90 |
| | Oct-21 to Nov-21 | 2,10 | 4,70 | 11,30 | 30,90 | 40,70 |
| | Nov-21 to Dec-21 | 3,40 | 7,70 | 13,30 | 17,90 | 27,40 |
| | Dec-21 to Jan-22 | 3,90 | 10,10 | 22,70 | 50,40 | 56,90 |
| | Jan-22 to Feb-22 | 0,80 | 4,10 | 9,40 | 36,30 | 49,30 |
| | Feb-22 to Mar-22 | 0,20 | 1,10 | 2,20 | 6,30 | 7,80 |
| DB - 77 | Jun-21 to Jul-21 | 4,40 | 94,00 | 165,90 | 421,40 | 544,10 |
| | Jul-21 to Aug-21 | 2,30 | 6,40 | 10,70 | 26,20 | 36,70 |
| | Aug-21 to Sep-21 | 1,70 | 9,30 | 15,30 | 35,80 | 46,20 |

| GBN-JV PM Data | | | | | | |
|----------------|---------------------------|--|--------|---|--------|--------|
| Locality Name | Month | PM 1 | PM 2.5 | PM 4 | PM 10 | TSP |
| SANS Limits | | | | | 75 | |
| | Sep-21 to Oct-21 | 0,50 | 2,50 | 4,50 | 14,50 | 22,50 |
| | Oct-21 to Nov-21 | 1,10 | 6,40 | 16,00 | 37,00 | 48,70 |
| | Nov-21 to Dec-21 | 0,90 | 3,10 | 5,30 | 14,90 | 19,30 |
| | Dec-21 to Jan-22 | 3,00 | 12,80 | 16,00 | 24,90 | 41,70 |
| | Jan-22 to Feb-22 | 1,00 | 6,20 | 12,10 | 38,90 | 57,40 |
| | Feb-22 to Mar-22 | 0,40 | 1,70 | 5,50 | 22,80 | 28,90 |
| DB - 78 | Jun-21 to Jul-21 | 3,60 | 89,80 | 124,10 | 280,10 | 412,00 |
| | Jul-21 to Aug-21 | 2,40 | 6,90 | 13,90 | 58,10 | 135,70 |
| | Aug-21 to Sep-21 | 1,80 | 6,90 | 12,50 | 35,00 | 44,80 |
| | Sep-21 to Oct-21 | 0,60 | 1,80 | 3,60 | 9,80 | 11,00 |
| | Oct-21 to Nov-21 | 1,10 | 6,10 | 14,40 | 32,90 | 37,30 |
| | Nov-21 to Dec-21 | 0,90 | 4,10 | 6,30 | 16,60 | 23,40 |
| | Dec-21 to Jan-22 | 3,50 | 7,90 | 10,80 | 18,20 | 22,50 |
| | Jan-22 to Feb-22 | 0,90 | 4,90 | 10,00 | 27,30 | 40,20 |
| | Feb-22 to Mar-22 | 0,30 | 0,90 | 3,00 | 8,70 | 13,00 |
| DB - 79 | Jun-21 to Jul-21 | 2,50 | 27,80 | 34,30 | 54,90 | 65,40 |
| | Jul-21 to Aug-21 | 2,20 | 11,90 | 26,70 | 216,70 | 474,90 |
| | Aug-21 to Sep-21 | 3,00 | 97,10 | 103,60 | 144,30 | 195,50 |
| | Sep-21 to Oct-21 | 0,60 | 2,00 | 3,40 | 7,50 | 11,20 |
| | Oct-21 to Nov-21 | 1,30 | 6,50 | 14,90 | 39,40 | 49,90 |
| | Nov-21 to Dec-21 | 1,10 | 8,40 | 10,10 | 16,00 | 20,30 |
| | Dec-21 to Jan-22 | 3,40 | 7,20 | 10,00 | 15,60 | 17,40 |
| | Jan-22 to Feb-22 | 1,00 | 4,00 | 12,00 | 61,90 | 120,50 |
| | Feb-22 to Mar-22 | 0,30 | 0,90 | 2,70 | 9,30 | 11,70 |
| DB - 80 | Jun-21 to Jul-21 | 1,90 | 10,80 | 17,00 | 33,20 | 40,00 |
| | Jul-21 to Aug-21 | 2,30 | 12,10 | 21,50 | 64,40 | 117,40 |
| | Aug-21 to Sep-21 | 2,70 | 17,70 | 26,10 | 52,40 | 64,10 |
| | Sep-21 to Oct-21 | 0,50 | 0,50 | 6,20 | 49,70 | 77,40 |
| | Oct-21 to Nov-21 | 1,80 | 16,10 | 27,20 | 63,20 | 76,70 |
| | Nov-21 to Dec-21 | 1,10 | 5,80 | 7,70 | 13,20 | 14,40 |
| | Dec-21 to Jan-22 | 0,90 | 4,80 | 15,70 | 42,50 | 56,70 |
| | Jan-22 to Feb-22 | 0,90 | 4,90 | 10,50 | 26,30 | 32,40 |
| | Feb-22 to Mar-22 | 0,20 | 0,80 | 3,10 | 10,60 | 11,80 |
| DB - 81 | Jun-21 to Jul-21 | 1,40 | 5,10 | 18,10 | 54,00 | 64,50 |
| | Jul-21 to Aug-21 | 2,30 | 9,40 | 17,60 | 50,00 | 78,40 |
| | Aug-21 to Sep-21 | 2,30 | 14,20 | 21,60 | 48,40 | 60,10 |
| | Sep-21 to Oct-21 | 0,50 | 0,90 | 5,60 | 18,60 | 23,50 |
| | Oct-21 to Nov-21 | 1,20 | 5,30 | 15,40 | 43,40 | 57,00 |
| | Nov-21 to Dec-21 | 0,80 | 3,80 | 5,80 | 13,30 | 17,70 |
| | Dec-21 to Jan-22 | 0,80 | 5,70 | 12,20 | 24,20 | 30,40 |
| | Jan-22 to Feb-22 | 1,10 | 8,60 | 25,10 | 74,40 | 85,50 |
| Document No: | MON-AQR-244-20_21 (22-02) | GIBB Bigen Nyeleti Joint Venture (GBN-JV) | | Client Restricted Author: D Nell 35 | | |
| Revision: | 0.0 | | | | | |
| Date: | February to March 2022 | | | | | |

| GBN-JV PM Data | | | | | | |
|----------------|------------------|-------|--------|-------|--------|--------|
| Locality Name | Month | PM 1 | PM 2.5 | PM 4 | PM 10 | TSP |
| SANS Limits | | | | | 75 | |
| | Feb-22 to Mar-22 | 0,30 | 0,90 | 4,10 | 13,10 | 18,90 |
| DB - 82 | Jun-21 to Jul-21 | 2,00 | 16,70 | 26,50 | 56,20 | 66,70 |
| | Jul-21 to Aug-21 | 2,40 | 6,90 | 14,90 | 35,30 | 39,60 |
| | Aug-21 to Sep-21 | 1,80 | 7,30 | 17,40 | 45,50 | 49,20 |
| | Sep-21 to Oct-21 | 0,60 | 2,50 | 10,90 | 42,40 | 50,40 |
| | Oct-21 to Nov-21 | 1,20 | 7,70 | 17,10 | 39,50 | 45,60 |
| | Nov-21 to Dec-21 | 0,80 | 3,00 | 5,80 | 16,60 | 25,90 |
| | Dec-21 to Jan-22 | 0,80 | 5,60 | 11,70 | 16,80 | 20,50 |
| | Jan-22 to Feb-22 | 1,10 | 4,20 | 24,50 | 27,90 | 40,30 |
| | Feb-22 to Mar-22 | 0,20 | 1,00 | 2,70 | 10,40 | 11,60 |
| DB - 83 | Jun-21 to Jul-21 | 1,70 | 8,00 | 13,20 | 29,70 | 39,00 |
| | Jul-21 to Aug-21 | 2,20 | 7,10 | 11,40 | 23,30 | 27,60 |
| | Aug-21 to Sep-21 | 31,20 | 1,90 | 7,20 | 13,50 | 28,10 |
| | Sep-21 to Oct-21 | 0,60 | 1,60 | 5,20 | 18,00 | 22,90 |
| | Oct-21 to Nov-21 | 1,10 | 6,50 | 15,70 | 36,90 | 46,10 |
| | Nov-21 to Dec-21 | 0,80 | 3,70 | 6,40 | 14,90 | 24,70 |
| | Dec-21 to Jan-22 | 0,90 | 6,30 | 11,50 | 17,50 | 19,90 |
| | Jan-22 to Feb-22 | 1,10 | 6,70 | 12,50 | 26,60 | 33,40 |
| | Feb-22 to Mar-22 | 0,30 | 1,10 | 5,90 | 41,50 | 80,30 |
| DB - 84 | Jun-21 to Jul-21 | 1,70 | 8,10 | 21,90 | 78,20 | 98,50 |
| | Jul-21 to Aug-21 | 1,60 | 2,70 | 11,80 | 99,20 | 188,00 |
| | Aug-21 to Sep-21 | 2,30 | 8,70 | 17,10 | 79,40 | 140,40 |
| | Sep-21 to Oct-21 | 0,80 | 2,80 | 5,70 | 17,30 | 23,40 |
| | Oct-21 to Nov-21 | - | - | - | - | - |
| | Nov-21 to Dec-21 | 0,70 | 2,40 | 4,10 | 11,60 | 12,90 |
| | Dec-21 to Jan-22 | 0,70 | 6,10 | 10,20 | 16,20 | 16,80 |
| | Jan-22 to Feb-22 | - | - | - | - | - |
| | Feb-22 to Mar-22 | - | - | - | - | - |
| DB - 85 | Jun-21 to Jul-21 | 1,50 | 5,30 | 15,80 | 55,50 | 84,40 |
| | Jul-21 to Aug-21 | 2,20 | 19,80 | 30,80 | 101,80 | 194,80 |
| | Aug-21 to Sep-21 | 2,30 | 14,40 | 21,90 | 51,60 | 79,90 |
| | Sep-21 to Oct-21 | 0,70 | 3,30 | 5,50 | 11,00 | 19,00 |
| | Oct-21 to Nov-21 | - | - | - | - | - |
| | Nov-21 to Dec-21 | 0,80 | 3,00 | 4,70 | 8,30 | 10,80 |
| | Dec-21 to Jan-22 | 0,70 | 4,90 | 9,70 | 15,50 | 17,30 |
| | Jan-22 to Feb-22 | - | - | - | - | - |
| | Feb-22 to Mar-22 | - | - | - | - | - |
| DB - 86 | Jun-21 to Jul-21 | 5,80 | 52,30 | 82,00 | 156,20 | 175,30 |
| | Jul-21 to Aug-21 | 1,60 | 6,40 | 15,70 | 93,00 | 176,20 |
| | Aug-21 to Sep-21 | 2,60 | 16,20 | 25,60 | 53,40 | 79,30 |
| | Sep-21 to Oct-21 | 0,70 | 3,00 | 4,80 | 8,40 | 9,70 |

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| GBN-JV PM Data | | | | | | |
|----------------|------------------|-------|--------|-------|--------|---------|
| Locality Name | Month | PM 1 | PM 2.5 | PM 4 | PM 10 | TSP |
| SANS Limits | | | | | 75 | |
| | Oct-21 to Nov-21 | 4,60 | 52,80 | 66,90 | 105,30 | 125,60 |
| | Nov-21 to Dec-21 | 0,70 | 2,10 | 3,10 | 5,70 | 7,50 |
| | Dec-21 to Jan-22 | 0,80 | 5,40 | 10,80 | 15,70 | 17,60 |
| | Jan-22 to Feb-22 | 0,90 | 5,30 | 13,40 | 57,10 | 57,10 |
| | Feb-22 to Mar-22 | 0,40 | 1,40 | 4,10 | 12,90 | 17,80 |
| DB - 87 | Jun-21 to Jul-21 | 2,30 | 2,30 | 2,30 | 785,00 | 1254,00 |
| | Jul-21 to Aug-21 | 3,60 | 33,40 | 66,90 | 393,30 | 851,30 |
| | Sep-21 to Oct-21 | 1,30 | 7,20 | 28,20 | 85,50 | 107,10 |
| | Oct-21 to Nov-21 | 2,70 | 39,10 | 64,30 | 146,60 | 188,50 |
| | Nov-21 to Dec-21 | 0,50 | 2,10 | 3,30 | 4,40 | 4,40 |
| | Dec-21 to Jan-22 | 1,20 | 10,40 | 17,10 | 33,70 | 41,70 |
| | Jan-22 to Feb-22 | 1,30 | 13,10 | 30,30 | 87,60 | 105,50 |
| | Feb-22 to Mar-22 | 0,40 | 2,30 | 7,80 | 25,20 | 30,00 |
| DB - 88 | Jun-21 to Jul-21 | 1,50 | 1,50 | 24,50 | 160,60 | 201,90 |
| | Jul-21 to Aug-21 | 1,60 | 1,60 | 16,20 | 216,30 | 458,50 |
| | Aug-21 to Sep-21 | 2,40 | 9,70 | 17,00 | 37,60 | 45,00 |
| | Sep-21 to Oct-21 | 1,40 | 17,50 | 25,90 | 53,70 | 68,50 |
| | Oct-21 to Nov-21 | 1,20 | 11,00 | 25,30 | 75,10 | 94,80 |
| | Nov-21 to Dec-21 | 0,60 | 3,30 | 4,90 | 8,20 | 11,30 |
| | Dec-21 to Jan-22 | 1,20 | 5,40 | 11,80 | 20,60 | 23,70 |
| | Jan-22 to Feb-22 | 1,00 | 6,90 | 15,40 | 45,20 | 52,00 |
| | Feb-22 to Mar-22 | 0,40 | 2,10 | 8,20 | 24,30 | 28,70 |
| DB - 89 | Jun-21 to Jul-21 | 1,60 | 3,90 | 15,20 | 92,40 | 146,70 |
| | Jul-21 to Aug-21 | 1,20 | 5,30 | 9,80 | 27,60 | 41,80 |
| | Aug-21 to Sep-21 | 2,90 | 19,50 | 40,00 | 162,20 | 283,60 |
| | Sep-21 to Oct-21 | 0,90 | 6,70 | 8,80 | 13,50 | 20,90 |
| | Oct-21 to Nov-21 | 1,20 | 7,60 | 19,30 | 51,60 | 66,40 |
| | Nov-21 to Dec-21 | 0,70 | 4,40 | 9,60 | 47,60 | 66,70 |
| | Dec-21 to Jan-22 | 1,20 | 7,70 | 14,60 | 25,40 | 31,00 |
| | Jan-22 to Feb-22 | 1,10 | 7,90 | 22,20 | 77,30 | 111,30 |
| | Feb-22 to Mar-22 | 0,20 | 2,10 | 9,00 | 12,10 | 14,50 |
| DB - 90 | Jun-21 to Jul-21 | 80,80 | 2,30 | 14,70 | 24,20 | 59,80 |
| | Jul-21 to Aug-21 | 1,40 | 5,60 | 11,50 | 25,30 | 30,20 |
| | Aug-21 to Sep-21 | 1,60 | 10,50 | 20,80 | 50,10 | 57,50 |
| | Sep-21 to Oct-21 | 1,50 | 16,80 | 23,00 | 43,80 | 54,90 |
| | Oct-21 to Nov-21 | 1,40 | 10,10 | 22,10 | 48,70 | 57,90 |
| | Nov-21 to Dec-21 | 0,60 | 2,30 | 4,10 | 9,90 | 16,70 |
| | Dec-21 to Jan-22 | 0,70 | 6,50 | 10,30 | 16,70 | 21,10 |
| | Jan-22 to Feb-22 | 1,00 | 4,90 | 13,40 | 41,30 | 47,50 |
| | Feb-22 to Mar-22 | 0,60 | 2,00 | 9,40 | 64,20 | 84,20 |
| DB - 91 | Jun-21 to Jul-21 | 1,40 | 2,50 | 13,80 | 48,00 | 100,00 |

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| GBN-JV PM Data | | | | | | |
|------------------|------------------|-------|--------|--------|---------|---------|
| Locality Name | Month | PM 1 | PM 2.5 | PM 4 | PM 10 | TSP |
| SANS Limits | | | | | 75 | |
| | Jul-21 to Aug-21 | 1,80 | 14,10 | 31,10 | 121,90 | 190,90 |
| | Aug-21 to Sep-21 | 1,80 | 13,20 | 25,60 | 100,50 | 168,30 |
| | Sep-21 to Oct-21 | 1,30 | 6,50 | 9,40 | 18,30 | 31,80 |
| | Oct-21 to Nov-21 | 1,30 | 9,90 | 25,90 | 83,60 | 112,50 |
| | Nov-21 to Dec-21 | 0,70 | 2,20 | 4,80 | 14,70 | 20,90 |
| | Dec-21 to Jan-22 | 0,70 | 4,20 | 8,90 | 14,10 | 14,70 |
| | Jan-22 to Feb-22 | 0,90 | 4,90 | 10,50 | 25,60 | 28,10 |
| | Feb-22 to Mar-22 | 0,90 | 3,80 | 11,50 | 58,00 | 86,00 |
| DB - 92 | Jun-21 to Jul-21 | 2,60 | 37,20 | 60,00 | 137,00 | 167,20 |
| | Jul-21 to Aug-21 | 1,90 | 9,00 | 27,20 | 82,70 | 112,90 |
| | Aug-21 to Sep-21 | 2,00 | 15,10 | 41,50 | 136,00 | 180,50 |
| | Sep-21 to Oct-21 | 2,00 | 13,80 | 22,10 | 39,90 | 44,80 |
| | Oct-21 to Nov-21 | 1,40 | 10,40 | 26,60 | 71,90 | 86,70 |
| | Nov-21 to Dec-21 | 0,50 | 2,40 | 4,50 | 10,10 | 17,30 |
| | Dec-21 to Jan-22 | 1,40 | 7,30 | 14,10 | 23,70 | 25,50 |
| | Jan-22 to Feb-22 | 1,10 | 10,20 | 17,20 | 34,80 | 41,60 |
| Feb-22 to Mar-22 | 1,10 | 6,30 | 10,70 | 29,70 | 34,70 | |
| DB - 93 | Jun-21 to Jul-21 | 12,90 | 187,70 | 215,00 | 292,40 | 334,30 |
| | Jul-21 to Aug-21 | 2,50 | 15,40 | 34,70 | 95,80 | 112,30 |
| | Aug-21 to Sep-21 | 2,00 | 21,30 | 57,80 | 219,10 | 301,70 |
| | Sep-21 to Oct-21 | 1,60 | 9,10 | 17,30 | 35,30 | 41,70 |
| | Oct-21 to Nov-21 | 1,30 | 9,50 | 24,20 | 54,30 | 72,80 |
| | Nov-21 to Dec-21 | 0,90 | 4,60 | 10,50 | 37,10 | 55,60 |
| | Dec-21 to Jan-22 | 2,50 | 9,20 | 18,80 | 47,70 | 92,10 |
| | Jan-22 to Feb-22 | 1,00 | 8,00 | 13,30 | 29,40 | 44,80 |
| | Feb-22 to Mar-22 | 1,40 | 2,80 | 10,40 | 45,10 | 55,00 |
| DB - 94 | Jun-21 to Jul-21 | 2,10 | 15,30 | 36,10 | 169,70 | 322,50 |
| | Jul-21 to Aug-21 | 10,00 | 62,80 | 103,00 | 168,50 | 185,10 |
| | Aug-21 to Sep-21 | 3,00 | 34,20 | 81,10 | 225,40 | 277,80 |
| | Sep-21 to Oct-21 | 1,70 | 10,10 | 21,10 | 41,30 | 46,80 |
| | Oct-21 to Nov-21 | 1,30 | 9,70 | 24,70 | 64,50 | 76,20 |
| | Nov-21 to Dec-21 | 0,70 | 2,80 | 5,50 | 13,00 | 13,00 |
| | Dec-21 to Jan-22 | 3,70 | 11,80 | 19,70 | 32,30 | 34,10 |
| | Jan-22 to Feb-22 | 1,00 | 6,10 | 12,20 | 30,70 | 34,40 |
| | Feb-22 to Mar-22 | 1,30 | 3,50 | 7,70 | 19,90 | 21,70 |
| DB - 95 | Jun-21 to Jul-21 | 20,20 | 238,60 | 788,70 | 2424,00 | 2965,80 |
| | Jul-21 to Aug-21 | 2,90 | 29,00 | 70,10 | 180,10 | 207,30 |
| | Aug-21 to Sep-21 | 7,60 | 108,60 | 306,20 | 943,90 | 885,20 |
| | Sep-21 to Oct-21 | 2,00 | 11,40 | 25,80 | 65,30 | 83,20 |
| | Oct-21 to Nov-21 | 1,30 | 9,50 | 23,50 | 63,20 | 102,00 |
| | Nov-21 to Dec-21 | 1,20 | 3,80 | 15,90 | 67,60 | 100,90 |

| GBN-JV PM Data | | | | | | |
|----------------|------------------|------|--------|--------|--------|--------|
| Locality Name | Month | PM 1 | PM 2.5 | PM 4 | PM 10 | TSP |
| SANS Limits | | | | | 75 | |
| | Dec-21 to Jan-22 | 1,90 | 8,50 | 16,90 | 28,00 | 31,70 |
| | Jan-22 to Feb-22 | 1,10 | 8,00 | 18,20 | 54,70 | 98,40 |
| | Feb-22 to Mar-22 | 1,60 | 4,10 | 10,10 | 22,30 | 24,80 |
| DB - 96 | Jun-21 to Jul-21 | 5,60 | 74,60 | 90,00 | 145,20 | 180,30 |
| | Jul-21 to Aug-21 | 4,70 | 23,00 | 59,10 | 166,00 | 191,90 |
| | Aug-21 to Sep-21 | 7,40 | 36,10 | 58,90 | 99,90 | 111,60 |
| | Sep-21 to Oct-21 | 1,60 | 8,60 | 13,10 | 24,00 | 26,50 |
| | Oct-21 to Nov-21 | 0,80 | 4,90 | 11,60 | 35,00 | 41,80 |
| | Nov-21 to Dec-21 | 0,80 | 2,50 | 5,70 | 20,00 | 31,10 |
| | Dec-21 to Jan-22 | 0,80 | 9,20 | 14,00 | 26,90 | 31,20 |
| | Jan-22 to Feb-22 | 1,00 | 9,60 | 34,50 | 58,20 | 99,00 |
| | Feb-22 to Mar-22 | 0,10 | 0,40 | 1,10 | 3,20 | 3,40 |
| | | | | | | |
| DB - 97 | Jun-21 to Jul-21 | 1,80 | 10,90 | 22,50 | 68,70 | 102,60 |
| | Jul-21 to Aug-21 | 2,50 | 8,30 | 14,50 | 37,50 | 58,40 |
| | Aug-21 to Sep-21 | 2,20 | 10,60 | 21,40 | 51,60 | 69,50 |
| | Sep-21 to Oct-21 | 0,50 | 1,80 | 3,30 | 8,90 | 15,70 |
| | Oct-21 to Nov-21 | 1,30 | 7,40 | 16,10 | 33,20 | 38,10 |
| | Nov-21 to Dec-21 | 0,80 | 3,20 | 4,70 | 9,60 | 12,70 |
| | Dec-21 to Jan-22 | 0,90 | 4,70 | 10,40 | 18,40 | 20,90 |
| | Jan-22 to Feb-22 | 1,10 | 6,80 | 12,60 | 26,50 | 33,90 |
| | Feb-22 to Mar-22 | 0,20 | 0,60 | 3,40 | 10,30 | 10,30 |
| DB - 98 | Jun-21 to Jul-21 | 1,50 | 7,20 | 17,20 | 48,20 | 63,60 |
| | Jul-21 to Aug-21 | 2,30 | 9,80 | 15,10 | 36,60 | 49,60 |
| | Aug-21 to Sep-21 | 2,20 | 14,70 | 22,90 | 50,60 | 69,10 |
| | Sep-21 to Oct-21 | 0,60 | 2,10 | 4,50 | 15,50 | 22,20 |
| | Oct-21 to Nov-21 | 1,20 | 6,40 | 16,10 | 45,00 | 63,50 |
| | Nov-21 to Dec-21 | - | - | - | - | - |
| | Dec-21 to Jan-22 | - | - | - | - | - |
| | Jan-22 to Feb-22 | 0,90 | 5,00 | 10,50 | 22,30 | 27,90 |
| | Feb-22 to Mar-22 | 0,20 | 0,80 | 3,10 | 8,80 | 10,70 |
| DB - 99 | Jun-21 to Jul-21 | 7,00 | 18,50 | 145,00 | 258,90 | 324,90 |
| | Jul-21 to Aug-21 | 1,30 | 2,20 | 19,30 | 76,40 | 107,20 |
| | Aug-21 to Sep-21 | 2,70 | 16,60 | 27,50 | 60,20 | 70,60 |
| | Sep-21 to Oct-21 | 0,90 | 3,60 | 8,80 | 22,30 | 26,60 |
| | Oct-21 to Nov-21 | 5,10 | 84,10 | 105,00 | 172,10 | 194,20 |
| | Nov-21 to Dec-21 | 0,60 | 1,60 | 5,50 | 16,50 | 13,60 |
| | Dec-21 to Jan-22 | 1,20 | 4,50 | 9,90 | 15,40 | 16,60 |
| | Jan-22 to Feb-22 | 1,60 | 8,00 | 33,10 | 101,80 | 124,00 |
| | Feb-22 to Mar-22 | 0,60 | 2,90 | 9,30 | 40,70 | 47,50 |
| DB - 100 | Jun-21 to Jul-21 | 2,20 | 10,10 | 18,60 | 46,70 | 57,80 |
| | Jul-21 to Aug-21 | 1,70 | 14,10 | 25,50 | 76,70 | 121,70 |

| GBN-JV PM Data | | | | | | |
|----------------|------------------|------|--------|-------|-------|--------|
| Locality Name | Month | PM 1 | PM 2.5 | PM 4 | PM 10 | TSP |
| SANS Limits | | | | | 75 | |
| | Aug-21 to Sep-21 | 1,50 | 9,20 | 19,00 | 41,10 | 55,30 |
| | Sep-21 to Oct-21 | 1,30 | 6,20 | 9,10 | 18,20 | 21,90 |
| | Oct-21 to Nov-21 | 1,60 | 10,90 | 26,10 | 56,00 | 60,90 |
| | Nov-21 to Dec-21 | 0,80 | 2,90 | 5,60 | 12,50 | 14,30 |
| | Dec-21 to Jan-22 | 0,60 | 4,20 | 8,60 | 13,80 | 15,60 |
| | Jan-22 to Feb-22 | 1,00 | 6,10 | 12,90 | 28,80 | 50,40 |
| | Feb-22 to Mar-22 | 0,80 | 2,40 | 6,20 | 14,10 | 17,10 |
| Average | | 2,39 | 12,82 | 25,26 | 72,77 | 101,97 |

7.2.2. E-Sampler PM Monitoring

The following results are present for the February to March 2022 period related to stations:

- ES01 (Thaba Tholo School);
- ES02 (Eskom – Medupi Power Station); and
- ES03 (Mooivalei).

All three (3) E-sampler localities recorded general low daily PM₁₀ readings with some influences (peaks) noted:

- ES01 (School): Spikes recorded are likely as a result of traffic on the nearby dirt road, however, a noticeable higher spikes were present on the 17th of February (Value of 0.149 mg/m³), 3rd of March (0.157 mg/m³) and the 4th of March (Value of 0.210 mg/m³);
- ES02 (Eskom – Medupi Power Station): Particular matter levels remained extremely low throughout the monthly monitoring period. A spike was however recorded on the 22nd of February with a recorded value of 0.481 mg/m³; and
- ES03 (Mooivalei): Recorded concentrations measured during the month remained very low with a significant spike being recorded on the 22th of February with a value of 0.562 mg/m³ and the 15th of March (0.196 mg/m³);

The low concentrations are expected due to the study being a baseline assessment and with no construction works being near either monitoring localities. Results are however expected to fluctuate during the year cycle due to the seasonality of precipitation and wind fluctuations.

The results from the handheld PM reader are on average higher than the average PM readings obtained from the E-Samplers (as seen in Table 7 below). The reason for the elevated readings can be attributed to multiple factors which include the active indicative monitoring (time and day dependant) of the handheld PM readings recorded at each the dust stands where the majority is located along dirt roads and elevated PM readings expected, whereas the E-Samplers are located in fenced areas further away from roads. Additionally, the handheld PM reading takes the average PM reading over one (1) minute whereas the E-Sampler is calculated over 30 days, therefore the handheld PM meter readings are easily heightened due to disturbances such as vehicles or wind in the area and represents an indicative time dependant snapshot.

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It should be noted that the March 2022 handheld PM readings revealed lowered concentration compared to the historical annual data.

Table 7: Daily Average PM₁₀

| Locality Name: | PM10 Daily Average |
|------------------------------------|--------------------------|
| ES01: School | 0.0223 mg/m ³ |
| ES02: Eskom – Medupi Power Station | 0.0167 mg/m ³ |
| ES03: Mooivalei | 0.0172 mg/m ³ |

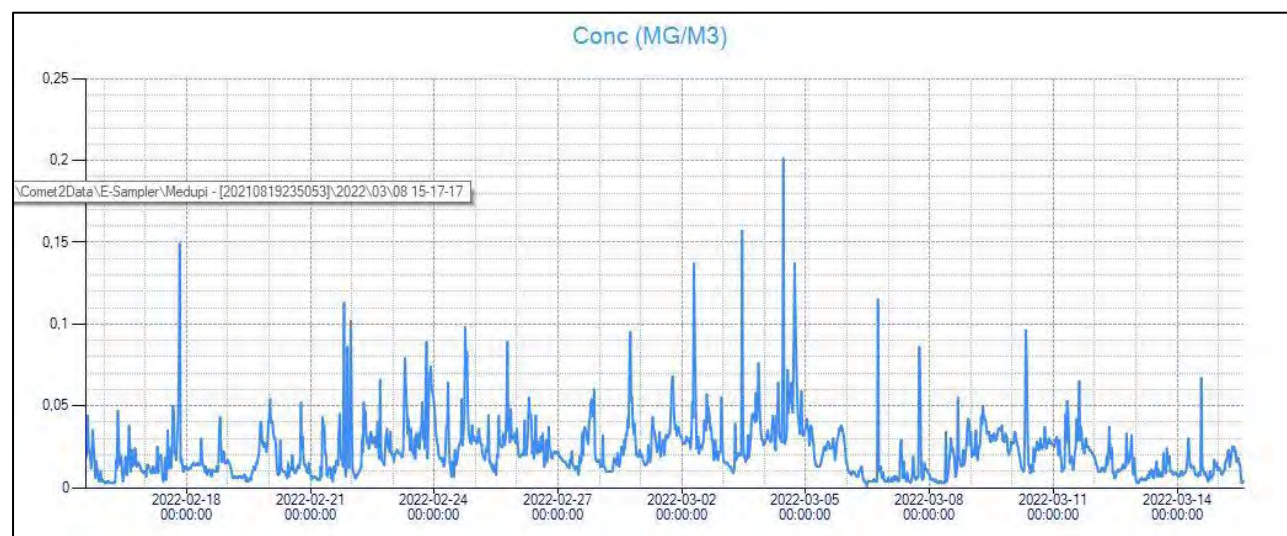


Figure 5: ES01 (School) E-Sampler PM₁₀ Data

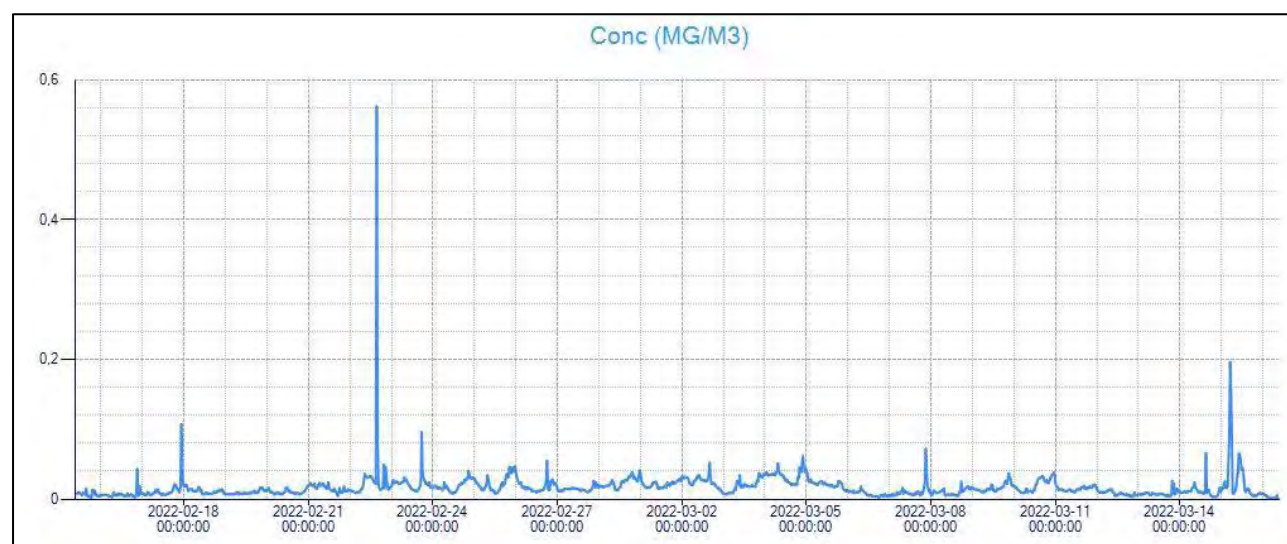


Figure 6: ES02 (Eskom – Medupi Power Station) E-Sampler PM₁₀ Data

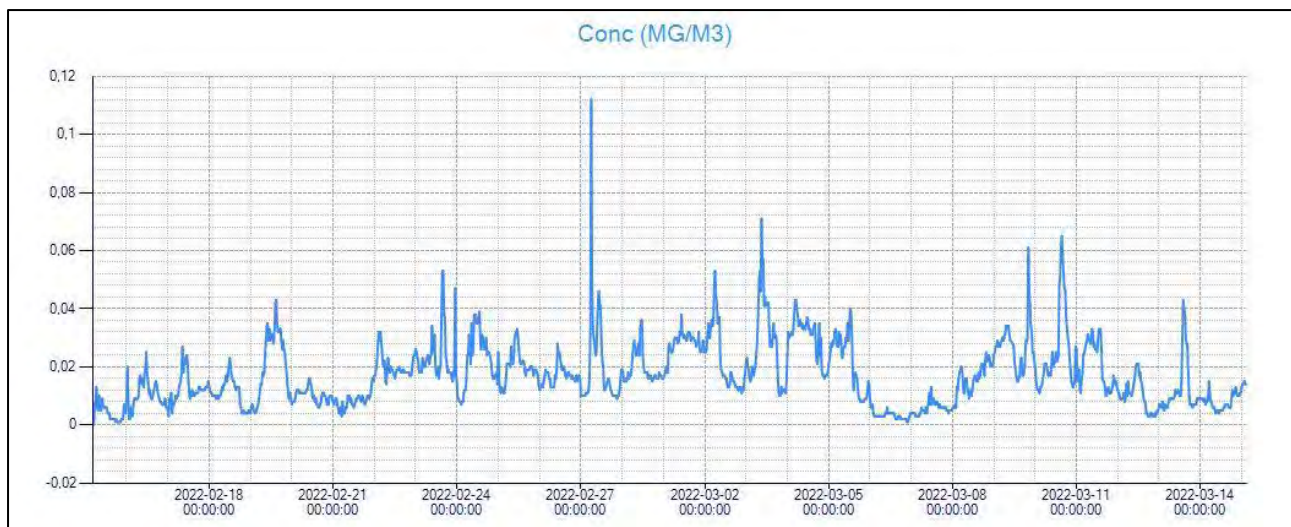


Figure 7: ES03 (Mooivalei) E-Sampler PM₁₀ Data

7.3. GRAVIMETRIC DUST FALLOUT RESULTS

Field monitoring was conducted between the 15th and 16th of March 2022. During the February to March 2022 monthly monitoring period, ninety-six (96) of the one-hundred (100) samples were obtained and analysed from the dust monitoring programme. Two (2) dust buckets (DB84 and DB85) were not obtained due to access restrictions during the monitoring period, while two (2) additional buckets (DB17 and DB75) were recorded as being stolen during the monitoring period. Based on the gravimetric dust fallout results, one (1) exceedance of the Residential Limit of 600 mg/m²/day was recorded at sample locality DB86, while an exceedance of the Industrial Limit of 1200 mg/m²/day was only recorded at one (1) sampling locality (DB87). The highest value was recorded at the DB87 point during the February and March 2022 monitoring period, calculated at 1659 mg/m²/day. The running annual average was determined at 183 mg/m²/day, well below the residential limit. Both DB86 and DB87 which recorded exceedances during the monitoring period are situated near dirt roads, indicating that road traffic is the primary cause of elevated dust fallout readings. No major activities were recorded at the proposed pipeline area.

Gravimetrical dust fallout can be classified according to SANS 1929: 2011 standard into four categories or levels. The first category consists of monitoring stand values that are below 600 mg/m²/day and thus can be classified as Ideal namely:

- Ninety four (94) of the sampled monitoring points fell into this category during the monitoring period.

The second category consists of monitoring points with gravimetric dust fallout between 600 mg/m²/day and 1200 mg/m²/day. This category can be classified as Acceptable to Tolerable.

- One (1) of the monitoring points (DB86) fell into this category during the monitoring period.

The third category consists of monitoring points with gravimetric dust fallout between 1200 mg/m²/day and 2400 mg/m²/day. This category can be classified as unacceptable and must be reported if it continues for more than two consecutive months or three months in total per year.

- One (1) of the monitoring points fell into this category (DB87) during the monitoring period.

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The fourth category consists of monitoring points exceeding dust fallout of 2400 mg/m²/day. This category is classified as alert, immediate action and remediation required followed the first incident of dust fallout exceedance.

- None of the monitoring points fell into this category during the monitoring period.

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Table 8: Gravimetric Dust Fallout Results

| GBN-JV Air Quality Results | | | | | | | | | | | | |
|---|------------------|------------------|------------------|-------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|---------|
| Gravimetric Dust Fallout (mg/m ² /day) | | | | | | | | | | | | |
| Location | Apr-21 to May-21 | May-21 to Jun-21 | Jun-21 to Jul-21 | July-21 to Aug-21 | Aug-21 to Sep-21 | Sep-21 to Oct-21 | Oct-21 to Nov-21 | Nov-21 to Dec-21 | Dec-21 to Jan-21 | Jan-22 to Feb-22 | Feb-22 to Mar-22 | Average |
| DB - 1 | 21 | 5 | 86 | 147 | 187 | Stolen | 292 | 198 | Stolen | 240 | 104 | 123 |
| DB - 2 | 170 | 297 | 543 | 404 | 503 | 423 | 730 | 507 | 221 | 783 | 377 | 439 |
| DB - 3 | 27 | 126 | 190 | 212 | 427 | 372 | 377 | 233 | 123 | 223 | 209 | 247 |
| DB - 4 | 75 | 137 | Stolen | 277 | 1360 | 381 | 1103 | 237 | 141 | 238 | 290 | 555 |
| DB - 5 | 127 | 107 | 365 | 165 | 195 | 321 | 339 | 270 | 120 | 1052 | 296 | 231 |
| DB - 6 | 41 | 137 | 200 | 231 | 288 | 281 | 272 | 331 | 145 | 234 | 420 | 207 |
| DB - 7 | 134 | 98 | 198 | 218 | 279 | 379 | 168 | 269 | 151 | 246 | 199 | 211 |
| DB - 8 | 61 | 10 | 135 | 113 | 189 | 419 | 155 | 223 | 68 | 172 | 244 | 155 |
| DB - 9 | 91 | 9 | 140 | 216 | 184 | 413 | 232 | 259 | 66 | 195 | 335 | 184 |
| DB - 10 | 46 | 126 | 128 | 219 | 193 | 388 | 190 | 211 | 104 | 207 | 152 | 184 |
| DB - 11 | Installed | 161 | 55 | 295 | 215 | 340 | 187 | 129 | 120 | 204 | 209 | 209 |
| DB - 12 | Not Installed | Not Installed | Installed | 90 | 242 | 348 | 187 | 235 | 188 | 132 | 241 | 217 |
| DB - 13 | Not Installed | Not Installed | Installed | 487 | 376 | 429 | 397 | 210 | 61 | 279 | 235 | 422 |
| DB - 14 | Not Installed | Not Installed | Not Installed | Installed | 143 | 311 | 161 | 399 | 112 | 930 | 207 | 205 |
| DB - 15 | 6 | 277 | 47 | 171 | 138 | 255 | No Access | 320 | 162 | 120 | 102 | 149 |
| DB - 16 | 10 | 281 | 27 | 168 | 123 | 379 | No Access | 740 | 154 | 104 | 124 | 165 |
| DB - 17 | 11 | 88 | 15 | 150 | 153 | 268 | No Access | No Access | Stolen | Stolen | Stolen | 114 |
| DB - 18 | 39 | 331 | 61 | 96 | 106 | 334 | 117 | 135 | 134 | 99 | 128 | 155 |
| DB - 19 | 5 | 273 | 22 | 59 | 52 | 216 | 126 | 188 | 50 | 118 | 112 | 108 |
| DB - 20 | 14 | 290 | 99 | 119 | 65 | 213 | 289 | 703 | 185 | 74 | 96 | 156 |
| DB - 21 | 12 | 305 | 103 | 121 | 108 | 235 | 374 | 241 | 293 | 108 | 131 | 180 |
| DB - 22 | 14 | 155 | 104 | 113 | 94 | 319 | 80 | 152 | 53 | 129 | 95 | 126 |

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| GBN-JV Air Quality Results | | | | | | | | | | | | |
|---|------------------|------------------|------------------|-------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|---------|
| Gravimetric Dust Fallout (mg/m ² /day) | | | | | | | | | | | | |
| Location | Apr-21 to May-21 | May-21 to Jun-21 | Jun-21 to Jul-21 | July-21 to Aug-21 | Aug-21 to Sep-21 | Sep-21 to Oct-21 | Oct-21 to Nov-21 | Nov-21 to Dec-21 | Dec-21 to Jan-21 | Jan-22 to Feb-22 | Feb-22 to Mar-22 | Average |
| DB - 23 | 2 | 300 | 106 | 109 | 106 | 292 | 193 | 106 | 212 | 122 | 103 | 158 |
| DB - 24 | 11 | 392 | 149 | 172 | 175 | 342 | 32 | 182 | 133 | 141 | 138 | 182 |
| DB - 25 | 7 | 476 | 95 | 124 | 125 | 336 | 236 | 165 | 68 | 88 | 163 | 200 |
| DB - 26 | 4 | 324 | 33 | 183 | 113 | 261 | 173 | 105 | 44 | 116 | 136 | 156 |
| DB - 27 | 14 | 457 | 107 | 128 | 75 | 269 | 27 | 137 | 107 | 128 | 161 | 154 |
| DB - 28 | 18 | 301 | 29 | 113 | 119 | 230 | 105 | 144 | 177 | 123 | 139 | 131 |
| DB - 29 | 4 | 337 | 6 | 95 | 95 | 180 | 86 | 107 | 63 | 91 | 102 | 115 |
| DB - 30 | 92 | 338 | 36 | 105 | 127 | 221 | 170 | 118 | 44 | 117 | 101 | 156 |
| DB - 31 | 13 | 488 | 88 | 82 | 76 | 280 | 5 | 149 | 7 | 123 | 98 | 147 |
| DB - 32 | 244 | 335 | 165 | 206 | 243 | 729 | 567 | 389 | 207 | 252 | 350 | 355 |
| DB - 33 | 10 | 479 | 103 | 96 | 125 | 592 | 254 | 210 | 219 | 150 | 162 | 237 |
| DB - 34 | 13 | 18 | 3 | 79 | 169 | 184 | 176 | 119 | 129 | 73 | 102 | 92 |
| DB - 35 | 11 | 7 | 39 | 49 | 82 | 196 | 14 | 114 | 29 | 33 | 117 | 57 |
| DB - 36 | 2 | 18 | 28 | 61 | 98 | 212 | 91 | 295 | 128 | 106 | 151 | 73 |
| DB - 37 | 8 | 8 | 12 | 52 | 74 | 216 | 237 | 106 | Stolen | Stolen | 61 | 87 |
| DB - 38 | 8 | 104 | 26 | 54 | 83 | 246 | 57 | 106 | 130 | 91 | 100 | 83 |
| DB - 39 | 5 | 92 | 19 | 96 | 75 | 281 | 96 | 110 | 83 | 87 | 67 | 95 |
| DB - 40 | 3 | 18 | 17 | 43 | 18 | Stolen | 58 | 108 | 198 | 62 | 84 | 26 |
| DB - 41 | 3 | 101 | 11 | 34 | 100 | 211 | 46 | 75 | 126 | 119 | 89 | 72 |
| DB - 42 | 10 | 248 | 13 | 65 | 53 | 241 | 48 | 57 | 41 | 45 | 92 | 97 |
| DB - 43 | 9 | 91 | 13 | 58 | 66 | 249 | 109 | 165 | 166 | 33 | 75 | 85 |
| DB - 44 | 7 | 98 | 13 | 39 | 63 | 396 | 126 | 179 | 34 | 83 | 87 | 106 |
| DB - 45 | 14 | 86 | 4 | 59 | 78 | 215 | 89 | 122 | 66 | 96 | 94 | 78 |
| DB - 46 | 7 | 238 | 18 | 60 | 48 | 230 | 63 | 140 | 48 | 63 | 102 | 95 |
| DB - 47 | 6 | 245 | 21 | 62 | 48 | 203 | 84 | 83 | 32 | 51 | 85 | 96 |

Document No:
Revision:
Date:

MON-AQR-244-20_21 (22-02)
0.0
February to March 2022

GIBB Bigen Nyeleti Joint Venture
(GBN-JV)

Client Restricted
Author: D Nell
45

| GBN-JV Air Quality Results | | | | | | | | | | | | |
|---|------------------|------------------|------------------|-------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|---------|
| Gravimetric Dust Fallout (mg/m ² /day) | | | | | | | | | | | | |
| Location | Apr-21 to May-21 | May-21 to Jun-21 | Jun-21 to Jul-21 | July-21 to Aug-21 | Aug-21 to Sep-21 | Sep-21 to Oct-21 | Oct-21 to Nov-21 | Nov-21 to Dec-21 | Dec-21 to Jan-21 | Jan-22 to Feb-22 | Feb-22 to Mar-22 | Average |
| DB - 48 | 15 | 240 | 4 | 55 | 63 | 224 | 304 | 113 | 149 | 74 | 59 | 129 |
| DB - 49 | 3 | 277 | 10 | 75 | 69 | 203 | 13 | 100 | 172 | 115 | 139 | 93 |
| DB - 50 | 1 | 80 | 20 | 96 | 112 | 209 | 45 | 132 | 36 | Stolen | 83 | 80 |
| DB - 51 | 1 | 268 | 16 | 98 | 74 | 223 | 93 | 124 | 67 | 127 | 77 | 110 |
| DB - 52 | 42 | 111 | 23 | 94 | 11 | 216 | 40 | 97 | Stolen | 332 | 88 | 77 |
| DB - 53 | 11 | 289 | 24 | 108 | 88 | 312 | 145 | 134 | 69 | 260 | 196 | 139 |
| DB - 54 | 13 | 78 | 52 | 74 | 61 | 216 | 60 | 107 | 10 | 103 | 97 | 79 |
| DB - 55 | 8 | 247 | 6 | 98 | 23 | 209 | 72 | 135 | 116 | 17 | 256 | 95 |
| DB - 56 | 8 | 282 | 30 | 141 | 83 | 194 | 80 | 79 | 176 | 45 | 196 | 117 |
| DB - 57 | 6 | 258 | 95 | 84 | 30 | 199 | 139 | 126 | 123 | 41 | 144 | 116 |
| DB - 58 | 3 | 309 | 70 | 161 | 79 | 227 | 161 | 289 | 122 | 93 | 164 | 144 |
| DB - 59 | 1 | 15 | 114 | 89 | 148 | 228 | 99 | 95 | 149 | 61 | 105 | 99 |
| DB - 60 | 6 | 19 | 113 | 122 | 46 | 269 | 108 | 80 | 152 | 40 | 138 | 98 |
| DB - 61 | 5 | 244 | 185 | 82 | 53 | 202 | 90 | 154 | 389 | 79 | 101 | 123 |
| DB - 62 | 10 | 73 | 2 | 33 | 48 | 185 | 83 | 81 | 50 | 53 | 74 | 62 |
| DB - 63 | 4 | 269 | 9 | 31 | 70 | 254 | 77 | 41 | 191 | 55 | 97 | 102 |
| DB - 64 | 11 | 158 | 4 | 50 | 78 | 209 | 76 | 152 | 419 | 44 | 127 | 84 |
| DB - 65 | 13 | 98 | 13 | 147 | 102 | 215 | 48 | 171 | 156 | 52 | 100 | 91 |
| DB - 66 | 168 | 237 | 9 | 179 | 84 | 200 | 21 | 140 | 99 | 62 | 91 | 128 |
| DB - 67 | 14 | 267 | 14 | 167 | 62 | 196 | 72 | 112 | 178 | 73 | 137 | 113 |
| DB - 68 | 10 | 267 | 23 | 128 | 55 | 281 | 48 | 43 | 27 | 79 | 99 | 116 |
| DB - 69 | 6 | 295 | 33 | 170 | 73 | Stolen | 36 | 114 | 99 | 61 | 56 | 102 |
| DB - 70 | 85 | 159 | 76 | 230 | 76 | 475 | 47 | 81 | 151 | 52 | 65 | 164 |
| DB - 71 | 13 | 294 | 13 | 166 | 51 | 170 | 47 | 41 | 217 | 35 | 108 | 108 |
| DB - 72 | 13 | 195 | 39 | 155 | 27 | 263 | 61 | 68 | 1187 | 60 | 39 | 107 |

| GBN-JV Air Quality Results | | | | | | | | | | | | |
|---|------------------|------------------|------------------|-------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|---------|
| Gravimetric Dust Fallout (mg/m ² /day) | | | | | | | | | | | | |
| Location | Apr-21 to May-21 | May-21 to Jun-21 | Jun-21 to Jul-21 | July-21 to Aug-21 | Aug-21 to Sep-21 | Sep-21 to Oct-21 | Oct-21 to Nov-21 | Nov-21 to Dec-21 | Dec-21 to Jan-21 | Jan-22 to Feb-22 | Feb-22 to Mar-22 | Average |
| DB - 73 | 48 | 261 | 17 | 135 | 36 | 165 | 59 | 90 | 94 | 27 | 38 | 103 |
| DB - 74 | 3 | 285 | 56 | 132 | 33 | 171 | 67 | 81 | 356 | 90 | 97 | 107 |
| DB - 75 | 39 | 16 | 104 | 172 | 72 | Stolen | 100 | 92 | 192 | 10 | Stolen | 84 |
| DB - 76 | 16 | 216 | 87 | 163 | 37 | 154 | 104 | 98 | 93 | 91 | 14 | 111 |
| DB - 77 | 39 | 192 | 123 | 197 | 109 | 184 | 99 | 109 | 651 | 87 | 59 | 135 |
| DB - 78 | 13 | 191 | 26 | 155 | 71 | 221 | 77 | 169 | 181 | 75 | 45 | 108 |
| DB - 79 | 133 | 141 | 11 | 138 | 70 | 216 | 90 | 214 | 40 | 134 | 48 | 114 |
| DB - 80 | 279 | 186 | 250 | 426 | 204 | 323 | 182 | 368 | 178 | 295 | 440 | 264 |
| DB - 81 | 42 | 279 | 100 | 199 | 143 | 320 | 124 | 207 | 526 | 222 | 73 | 172 |
| DB - 82 | 12 | 184 | 43 | 210 | 172 | 269 | 172 | 192 | 223 | 75 | 156 | 152 |
| DB - 83 | 46 | 344 | 48 | 113 | 89 | 262 | 82 | 151 | 345 | 154 | 55 | 141 |
| DB - 84 | 2 | 148 | 73 | 120 | 63 | 218 | No Access | 351 | 185 | No Access | No Access | 104 |
| DB - 85 | 15 | 417 | 78 | 86 | 57 | 246 | No Access | 226 | 157 | No Access | No Access | 150 |
| DB - 86 | 886 | 704 | 883 | 1141 | 747 | 1146 | 478 | 627 | 193 | 566 | 948 | 855 |
| DB - 87 | 2167 | 1921 | 1472 | 1783 | 1797 | 1629 | 1063 | 2437 | 212 | 1292 | 1659 | 1690 |
| DB - 88 | 969 | 262 | 71 | 241 | 379 | 308 | 207 | 153 | 2214 | 248 | 96 | 348 |
| DB - 89 | 119 | 183 | 102 | 296 | 255 | 515 | 273 | 355 | 345 | 175 | 100 | 249 |
| DB - 90 | 40 | 81 | 5 | 37 | 51 | 235 | 248 | 177 | 174 | 142 | 53 | 100 |
| DB - 91 | 78 | 265 | 85 | 99 | 233 | 329 | 123 | 210 | 96 | 146 | 524 | 173 |
| DB - 92 | 315 | 272 | 438 | 107 | 131 | 181 | 46 | 651 | 198 | 76 | 17 | 213 |
| DB - 93 | 45 | 322 | 6 | 90 | 106 | 27 | 99 | 165 | 126 | 63 | 53 | 99 |
| DB - 94 | 48 | 158 | 23 | 79 | 97 | 245 | 62 | 202 | 149 | 74 | 81 | 102 |
| DB - 95 | 142 | 1057 | 370 | 681 | 531 | 504 | 338 | 333 | 284 | 402 | 162 | 518 |
| DB - 96 | Installed | 114 | 54 | 192 | 158 | 301 | 150 | 286 | 141 | 210 | 184 | 161 |
| DB - 97 | 47 | 166 | 155 | 313 | 246 | 430 | 194 | 655 | 366 | 186 | 88 | 222 |

| GBN-JV Air Quality Results | | | | | | | | | | | | |
|---|------------------|------------------|------------------|-------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-------------------------------|
| Gravimetric Dust Fallout (mg/m ² /day) | | | | | | | | | | | | |
| Location | Apr-21 to May-21 | May-21 to Jun-21 | Jun-21 to Jul-21 | July-21 to Aug-21 | Aug-21 to Sep-21 | Sep-21 to Oct-21 | Oct-21 to Nov-21 | Nov-21 to Dec-21 | Dec-21 to Jan-21 | Jan-22 to Feb-22 | Feb-22 to Mar-22 | Average |
| DB - 98 | 34 | 7 | 15 | 101 | 74 | 272 | 107 | No Access | No Access | 416 | 21 | 87 |
| DB - 99 | 1085 | 1336 | 1059 | 1341 | 832 | 942 | 448 | 477 | 649 | 740 | 494 | 1006 |
| DB - 100 | 138 | 257 | 49 | 101 | 64 | 216 | 73 | 76 | 73 | 100 | 15 | 128 |
| 3 Month Average | 92 | 169 | 149 | 179 | 153 | 174 | 166 | 233 | 194 | 195 | 175 | Total Running Average |
| Residential Limit | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | |
| Industrial Limit | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 183 |
| 1 Month Median | 13 | 238 | 48 | 120 | 94 | 307 | 169 | 222 | 190 | 173 | 163 | Industrial Limit Exceedances: |
| Maximum | 2167 | 1921 | 1472 | 1783 | 1797 | 1629 | 1103 | 2437 | 2214 | 1292 | 1659 | |
| Minimum | 1 | 5 | 2 | 31 | 11 | 27 | 5 | 41 | 7 | 10 | 14 | 13 |

| Legend | |
|------------------------------|--|
| No Sample | |
| Residentially acceptable | |
| Residential Limit Exceedance | |
| Industrial Limit Exceedance | |
| Alert Level | |

| | | | |
|--------------|---------------------------|--|---|
| Document No: | MON-AQR-244-20_21 (22-02) | GIBB Bigen Nyeleti Joint Venture (GBN-JV) | Client Restricted Author: D Nell 48 |
| Revision: | 0.0 | | |
| Date: | February to March 2022 | | |

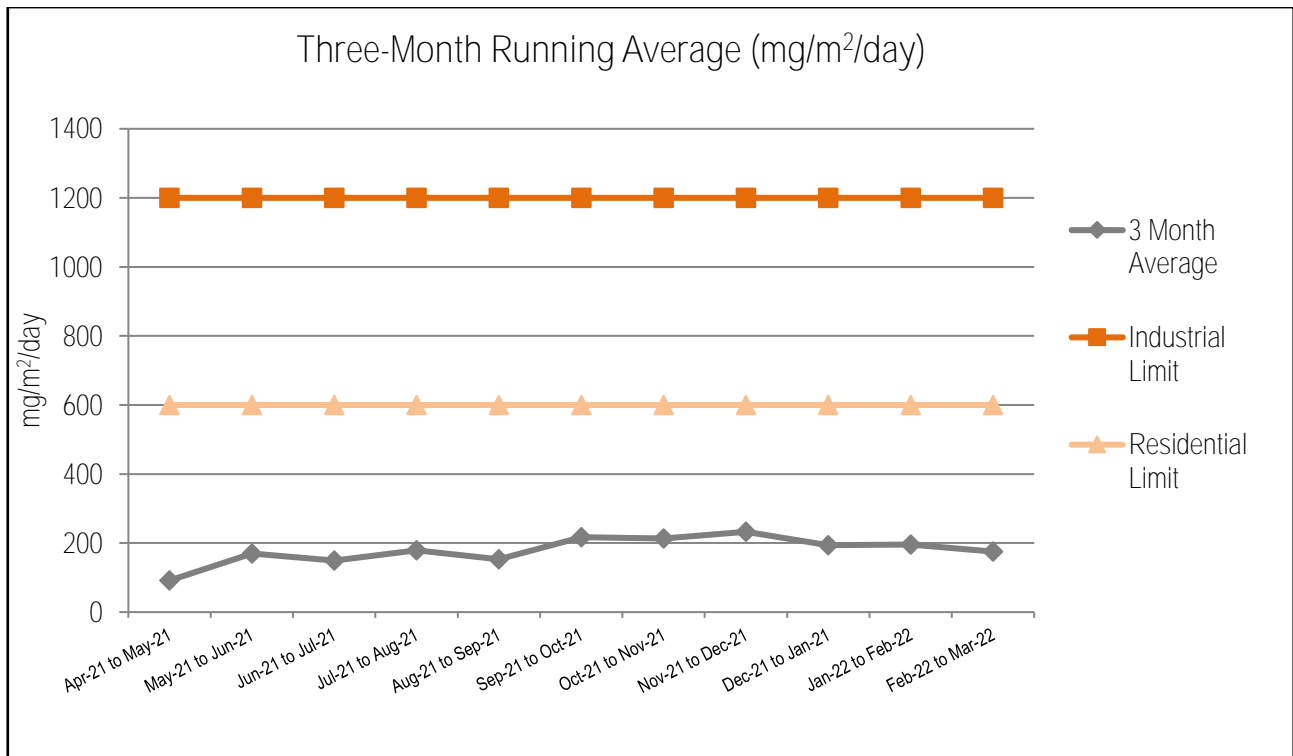


Figure 8: Dust Fallout Three-Month Running Average across all monitoring localities

7.4. WEATHER DATA

The possibility of emissions becoming a nuisance is determined by various factors. Specifically, PM_{10} (dust) is mostly transported by air movement and as such wind and wind intensity can help determine the effective range of travel of pollutants. To determine possible areas that could be affected the wind rose data must be studied and interpreted. The following section provides an interpretation of the areas that could possibly be affected, by assessing the direction the wind is coming from and the areas the wind would deposit transported dust as reasonably expected. The following graphs provide an insight into the wind conditions versus the areas which would be affected during the current monitoring period. From Table 9 & 10 and Figure 9 & 10, the dominant wind direction was from the west-southwest and to a lesser extent from the north. Moreover, average wind speeds presented a calm to light breeze (0.5 m/s – 2.4 m/s) during the monitoring period. A total of 110.4 mm rain was recorded from February to March 2022.

Table 9: Wind Direction

| Wind Direction: February to March 2022 | |
|--|---------------------|
| Direction | Direction Frequency |
| North | 20 |
| NNE | 19 |
| NE | 12 |
| ENE | 7 |
| East | 17 |
| ESE | 6 |
| SE | 1 |
| SSE | 2 |
| South | 4 |
| SSW | 10 |
| SW | 15 |
| WSW | 21 |
| West | 9 |
| WNW | 5 |
| NW | 13 |
| NNW | 12 |

Table 10: Average Wind Speeds

| Average Wind Speeds: February to March 2022 | |
|---|------------------|
| Day of Month | Wind Speed (m/s) |
| 15-Feb | 0,9 |
| 16-Feb | 1,1 |
| 17-Feb | 1,2 |
| 18-Feb | 1,6 |
| 19-Feb | 1,3 |
| 20-Feb | 0,9 |
| 21-Feb | 0,9 |
| 22-Feb | 1,4 |
| 23-Feb | 0,5 |
| 24-Feb | 1,4 |
| 25-Feb | 1,0 |
| 26-Feb | 1,4 |
| 27-Feb | 0,9 |
| 28-Feb | 1,4 |
| 01-Mar | 1,5 |
| 02-Mar | 1,5 |
| 03-Mar | 1,0 |
| 04-Mar | 1,4 |
| 05-Mar | 1,3 |
| 06-Mar | 0,9 |
| 07-Mar | 1,3 |
| 08-Mar | 1,8 |
| 09-Mar | 2,4 |
| 10-Mar | 1,3 |
| 11-Mar | 0,8 |
| 12-Mar | 1,4 |
| 13-Mar | 0,8 |
| 14-Mar | 1,4 |
| 15-Mar | 1,1 |
| 16-Mar | 1,3 |
| Max | 2,4 |
| Min | 0,5 |

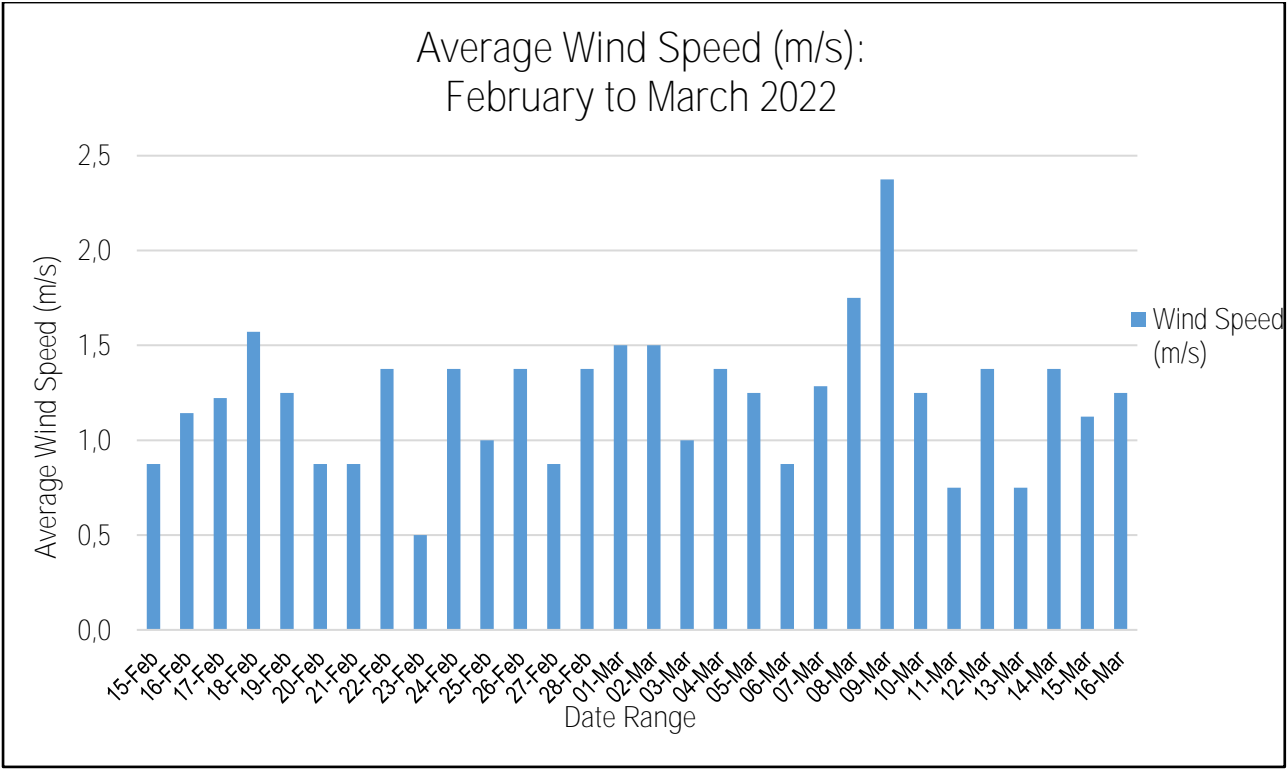


Figure 9: Wind Direction Frequency Average

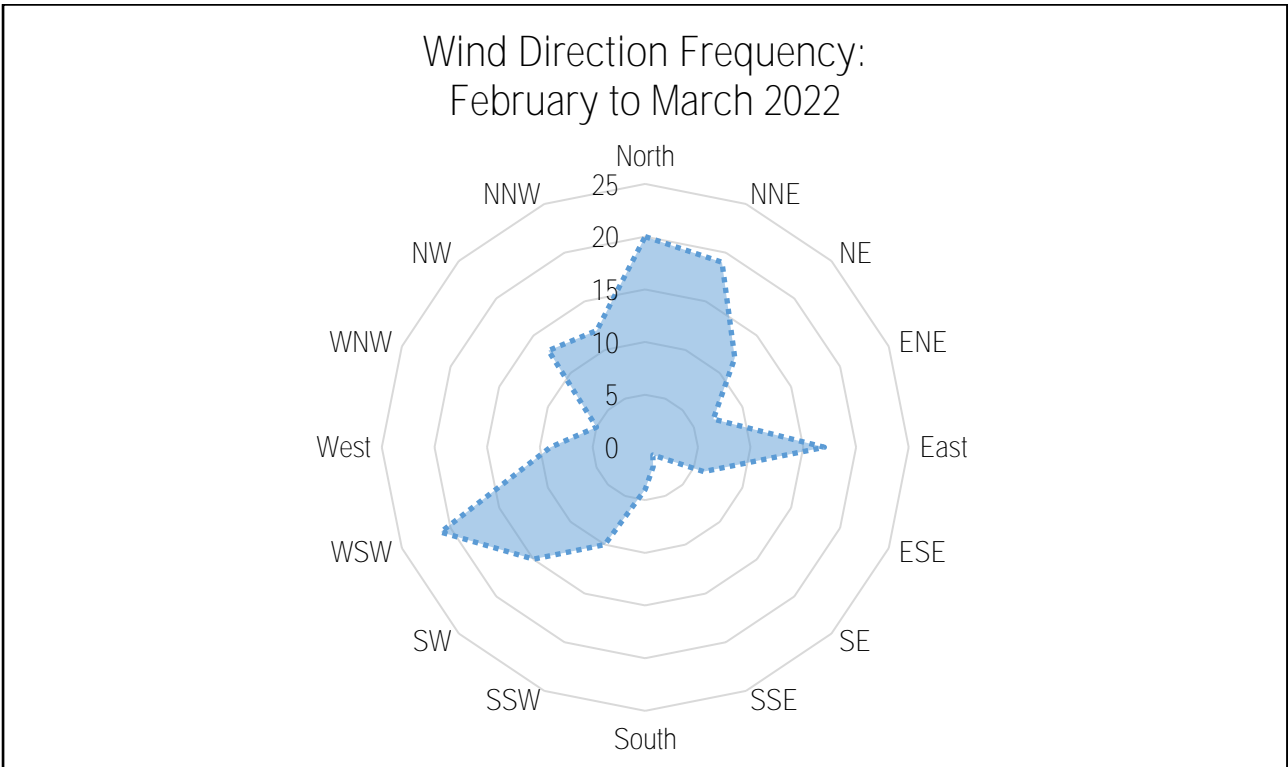


Figure 10: Windrose Diagram

Table 11: Beaufort Wind Force Scale

| Beaufort Wind Force Scale | | | |
|---------------------------|------------------|-------------------------------------|---|
| Number | Wind speed (m/s) | Description | Land Conditions |
| 0 | <0.3 m/s | Calm | Calm. Smoke rises vertically |
| 1 | 0.3–1.5 m/s | Light air | Wind motion visible in smoke. |
| 2 | 1.6–3.3 m/s | Light breeze | Wind felt on exposed skin. Leaves rustle. |
| 3 | 3.4–5.5 m/s | Gentle breeze | Leaves and smaller twigs in constant motion. |
| 4 | 5.5–7.9 m/s | Moderate breeze | Dust and loose paper raised. Small branches begin to move. |
| 5 | 8.0–10.7 m/s | Fresh breeze | Branches of a moderate size move. Small trees begin to sway. |
| 6 | 10.8–13.8 m/s | Strong breeze | Large branches in motion. Whistling heard in overhead wires. Umbrella use becomes difficult. Empty plastic garbage cans tip over. |
| 7 | 13.9–17.1 m/s | High wind, moderate gale, near gale | Whole trees in motion. Effort needed to walk against the wind. Swaying of skyscrapers may be felt, especially by people on upper floors. |
| 8 | 17.2–20.7 m/s | Fresh gale | Twigs broken from trees. Cars veer on road. |
| 9 | 20.8–24.4 m/s | Strong gale | Larger branches break off trees, and some small trees blow over. Construction/temporary signs and barricades blow over. Damage to circus tents and canopies. |
| 10 | 24.5–28.4 m/s | Whole gale, storm | Trees are broken off or uprooted, saplings bent and deformed, poorly attached asphalt shingles and shingles in poor condition peel off roofs. |
| 11 | 28.5–32.6 m/s | Violent storm | Widespread vegetation damage. More damage to most roofing surfaces, asphalt tiles that have curled up and/or fractured due to age may break away completely. |
| 12 | ≥32.7 m/s | Hurricane force | Considerable and widespread damage to vegetation, a few windows broken, structural damage to mobile homes and poorly constructed sheds and barns. Debris may be hurled about. |

Table 12: Rainfall

| Rainfall Summary: February to March 2022 | |
|--|---------------|
| Day of Month | Rainfall (mm) |
| 15-Feb | 0,0 |
| 16-Feb | 2,0 |
| 17-Feb | 7,0 |
| 18-Feb | 5,4 |
| 19-Feb | 0,4 |
| 20-Feb | 0,0 |
| 21-Feb | 0,0 |
| 22-Feb | 0,0 |
| 23-Feb | 0,2 |
| 24-Feb | 2,8 |
| 25-Feb | 2,0 |
| 26-Feb | 0,0 |
| 27-Feb | 0,0 |
| 28-Feb | 0,0 |
| 01-Mar | 0,8 |
| 02-Mar | 2,8 |
| 03-Mar | 2,0 |
| 04-Mar | 0,0 |
| 05-Mar | 30,4 |
| 06-Mar | 0,4 |
| 07-Mar | 0,0 |
| 08-Mar | 0,4 |
| 09-Mar | 40,0 |
| 10-Mar | 0,4 |
| 11-Mar | 0,4 |
| 12-Mar | 0,0 |
| 13-Mar | 0,0 |
| 14-Mar | 4,0 |
| 15-Mar | 9,0 |
| 16-Mar | 0,0 |
| Total | 110,4 |

*Rainfall was not recorded on the omitted days

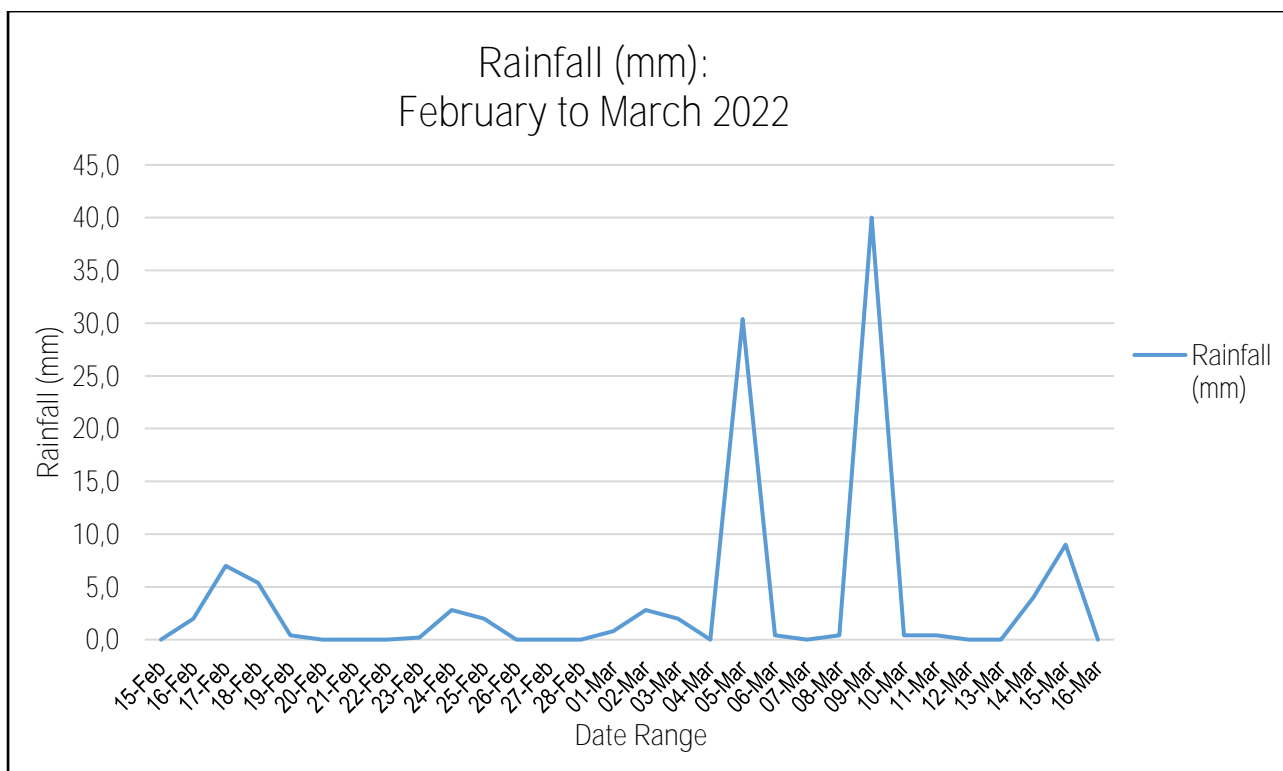


Figure 11: Rainfall for monitoring period

8. CONCLUSION AND ASPECTS TO CONSIDER

The air quality measured in the proposed area is considered in generally fair condition as per the results obtained, while it should be noted that currently operations are not present and the levels representative of the non-disturbed ambient air quality conditions.

It is assumed that the construction phase of the planned pipeline will contribute to the total suspended load in the atmosphere, although off-site impacts are not expected, and the impact is anticipated to be largely localised and centralised within the construction area. From the current sampling data obtained, exceedances are expected during the construction phase. In order to ensure and prevent this possible outcome, mitigation measures are provided in this report to enable the proposed developer to minimise the impact as stated in the CEMPr.

9. PROPOSED MITIGATION AND POLLUTION PREVENTION MEASURES DURING FUTURE CONSTRUCTION

| Aspect: Stakeholder Communication | |
|--|--|
| 1 | Implement a programme of stakeholder communication that includes community engagement before and during work undertaken on site. |
| 2 | Provide complaints register on site where complaints can be made. This register should enable effective communication of complaints where these are reasonably addressed. |
| 3 | Clearly display the contact details of the environmental site office and manager at the construction camps. |
| Aspect: Dust Management | |
| 4 | In instances where exceedances are recorded, the implementation and maintenance of a Dust and Emission Management Plan which provides clear details on preventing, maintaining and improving the air quality in terms of site-specific activities is recommended. |
| Aspect: Site Management | |
| 5 | All complaints should be logged in the complaints register and should be available on the site at all times. All complaints regarding air quality should be adequately investigated and actions taken to reduce the impact in a timely manner should it be required. |
| 6 | Note must be taken of incidents that cause air emissions and this must be recorded to ensure that these are resolved and prevented from reoccurring. |
| Aspect: Monitoring | |
| 7 | Weekly site inspections should be undertaken in the vicinity of sensitive receptors. Records should be kept of these routine inspections. |
| 8 | Should activities be undertaken during dry and windy conditions, special focus must be taken on the impact and results of the conditions to ensure that minimal impact is occurring. |
| Aspect: Preparing and maintaining the site | |

| | | | |
|--|---|----------------------------------|-------------------|
| 9 | Plan the site layout in such a manner as to ensure that emission generating activities occur as far as possible from sensitive receptors. | | |
| 10 | Should the conditions require it, erect screens and barriers around the sensitive receptors. | | |
| 11 | Ensure that all areas, fencing, barriers and scaffolding is kept clear of debris and dust. | | |
| 12 | Remove any accumulating matter that could serve as emission generator from the site as soon as possible. | | |
| Aspect: Operating vehicle/machinery and sustainable travel | | | |
| 13 | Ensure that all vehicles are maintained in good working condition and that they are serviced on regular intervals. | | |
| 14 | Ensure that all vehicles are switched off when stationary – no vehicles should be idling for extended period. | | |
| 15 | Avoid the use of diesel- or petrol-powered generators and use mains electricity or battery powered equipment as reasonably possible. | | |
| 16 | Impose and regulate a speed limit. | | |
| Aspect: Operations | | | |
| 17 | Only use cutting, grinding or sawing equipment fitted or in conjunction with suitable dust suppression techniques such as water sprays or local extraction, e.g. suitable local exhaust ventilation systems. | | |
| 18 | Ensure an adequate water supply on the site for effective dust/particulate matter suppression/mitigation, using non-potable water where possible. | | |
| 19 | Ensure equipment is readily available on site to clean any dry spillages, and clean up spillages as soon as reasonably practicable after the event using wet cleaning methods. | | |
| Waste management | | | |
| 20 | Only use registered waste carriers to take waste off-site. | | |
| Measures specific to earthworks | | | |
| 21 | Re-vegetate earthworks and exposed areas/soil stockpiles to stabilise surfaces as soon as practicable. Use Hessian, mulches or tackifiers where it is not possible to re-vegetate or cover with topsoil, as soon as practicable. Only remove the cover in a small area during work and not all at once. | | |
| Aspect: Measures specific to construction | | | |
| 22 | Ensure sand and other aggregates are stored in bunded areas and are not allowed to dry out, unless this is required for a particular process, in which case ensure that appropriate additional control measures are in place. | | |
| 23 | Ensure cement and other fine powder materials are delivered in enclosed tankers and stored in appropriate storage with suitable emission control systems to prevent escape of material and overfilling during delivery. | | |
| 24 | For smaller supplies of fine powder materials ensure bags are sealed after use and stored appropriately to prevent dust. | | |
| Aspect: Measures specific to track-out | | | |
| 25 | Use water-assisted dust sweeper(s) on the access roads (where practical) to remove, as soon as practicable any material tracked out of the site. | | |
| 26 | Avoid dry sweeping of large areas. | | |
| 27 | Ensure vehicles entering and leaving sites are covered to prevent escape of materials during transport. | | |
| Document No: | MON-AQR-244-20_21 (22-02) | GIBB Bigen Nyeleti Joint Venture | Client Restricted |
| Revision: | 0.0 | (GBN-JV) | Author: D Nell |
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| | |
|----|---|
| 28 | Record all inspections of haul routes and any subsequent action in a site log book. |
| 29 | Install hard surfaced routes (compaction), which are regularly damped down with fixed or mobile sprinkler systems, or mobile water bowsers and regularly cleaned. |
| 30 | Inspect surfaced routes for integrity and instigate necessary repairs to the surface as soon as practicable. |


| Aspects | Management action or objective | Responsible Person(s) | Timeframe |
|-----------------------|--|--|------------------------------------|
| Removal of Vegetation | <ul style="list-style-type: none"> Spray areas to be cleared with water. Ensure minimum travel distance between working areas and stockpiles. Ensure that topsoil for stockpiles is sprayed with water before tipping to prevent dust generation. | Environmental Site Officer Contractors & Sub-Contractor Safety and Environmental Officers | Duration of the construction phase |
| Land clearing | | | |
| Excavation | | | |
| Material Transport | | | |
| Material Handling | | | |
| Construction | <ul style="list-style-type: none"> Ensure graded areas are sprayed with water. Minimise the amount of graded areas. Ensure that shortest routes are used for material transport. Load and offload material, as far as possible, downwind of stockpiles. Actively monitor dust fallout generated on the borders of the site. Implement monthly site inspection to check for possible areas of dust generation not addressed or not effectively managed. | | |

10. REFERENCES

- ASTM Standard (1739-98). 2004 (Reapproved 2017). Standard Test Method for Collection and Measurement of Dustfall (Settleable Particulate Matter). United States.
- GNR 827. 2013. National Environmental Management: Air Quality Act, Act No. 39 of 2004. Government Gazette 36974.
- South African National Standards (SANS) 1929. 2011. Ambient Air Quality- Limits for Common Pollutants. Ed. 2. ISBN 978-0-626-26919-7. South Africa.

| | | | |
|--------------|---------------------------|----------------------------------|-------------------|
| Document No: | MON-AQR-244-20_21 (22-02) | GIBB Bigen Nyeleti Joint Venture | Client Restricted |
| Revision: | 0.0 | (GBN-JV) | Author: D Nell |
| Date: | February to March 2022 | | 58 |

APPENDIX A – EQUIPMENT CHECKLIST

| Description | Serial No. | Quantity | Date Checked | Checked By |
|--|------------|--------------------|--------------|------------|
| COVID-19 | | | | |
| Gloves | | 1 x Box | 15-Mar-22 | DN |
| Disinfectant | | 1 x 2 Liter Bottle | 15-Mar-22 | DN |
| Covid-19 Mask | | 1 x Person | 15-Mar-22 | DN |
| DOCUMENTS | | | | |
| Project specific sampling field form | | 1 | 15-Mar-22 | DN |
| Project specific Laboratory Analysis Request Form and Chain of Custody Form | | 1 | 15-Mar-22 | DN |
| Project Specific monitoring localities and co-ordinates | | 1 | 15-Mar-22 | DN |
| SAMPLING EQUIPMENT | | | | |
| Handheld PM Meter | | | | |
| Aerocet 831 PM meter | | 1 | 15-Mar-22 | DN |
| Sampling Containers | | | | |
| 5 Litre Dust Bucket | | 100 | 15-Mar-22 | DN |
| Signatures: | | | | |
|  | | | | |

APPENDIX B – ENVASS CHAIN OF CUSTODY (COC) FORM

YANKA LABORATORIES

YANKA LABORATORIES (Pty) Ltd. 1001 TOLL FREE 0844 744 0000 (Toll Free)

SAMPLE CONDITION REPORT

CLIENT: Envass GBN-JV MONTHLY DUST EO: JOBNO: W16/

ATTENTION: Damon, Anton and Carl Adv. Note DATE RECEIVED: 17/3/22

| LABORATORY NUMBER | SAMPLE DESCRIPTION | SAMPLED | IL CHEMISTRY SAMPLE | 500mL MICROBIOLOGY SAMPLE | DOE | BOG & COB | COMMENTS |
|-------------------|--------------------|---------------|---------------------|---------------------------|-----|-----------|----------|
| SpEnvass 1 | DB 1 | | | | | | |
| SpEnvass 2 | DB 2 | | | | | | |
| SpEnvass 3 | DB 3 | | | | | | |
| SpEnvass 4 | DB 4 | | | | | | |
| SpEnvass 5 | DB 5 | | | | | | |
| SpEnvass 6 | DB 6 | | | | | | |
| SpEnvass 7 | DB 7 | 16-3-22 | | | | | |
| SpEnvass 8 | DB 8 | | | | | | |
| SpEnvass 9 | DB 9 | | | | | | |
| SpEnvass 10 | DB 10 | | | | | | |
| SpEnvass 11 | DB 11 | | | | | | |
| SpEnvass 12 | DB 12 | | | | | | |
| SpEnvass 13 | DB 13 | 15-3-2022 | | | | | |
| SpEnvass 14 | DB 14 | 16-3-2022 | | | | | |
| SpEnvass 15 | DB 15 | 16-3-22 | | | | | |
| SpEnvass 16 | DB 16 | 16-3-22 | | | | | |
| SpEnvass 17 | DB 17 | STOLEN | | | | | |
| SpEnvass 18 | DB 18 | | | | | | |
| SpEnvass 19 | DB 19 | | | | | | |
| SpEnvass 20 | DB 20 | | | | | | |
| SpEnvass 21 | DB 21 | 16-3-22 | | | | | |
| SpEnvass 22 | DB 22 | | | | | | |
| SpEnvass 23 | DB 23 | | | | | | |
| SpEnvass 24 | DB 24 | | | | | | |
| SpEnvass 25 | DB 25 | | | | | | |
| SpEnvass 26 | DB 26 | | | | | | |
| SpEnvass 27 | DB 27 | | | | | | |
| SpEnvass 28 | DB 28 | | | | | | |
| SpEnvass 29 | DB 29 | | | | | | |
| SpEnvass 30 | DB 30 | | | | | | |
| | | TOTAL SAMPLES | | | | | |

Analysis Required : Domestic (General) Sewage: MB

Selected:

RECEIVED BY: *[Signature]*

DELIVERED BY: *[Signature]*

YANKA LABORATORIES (Pty) Ltd. 1001 TOLL FREE 0844 744 0000 (Toll Free)

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JOURNAL OF THE ATMOSPHERIC SCIENCES SOCIETY OF AMERICA

Active Movie

DATE RECEIVED: _____

17/3/22

30
DAYS

Sewage :

MB

Selected:

RECEIVED BY:

DELIVERED BY:

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Figure 1. (continued)

YANKA LABORATORIES

PO BOX 100000 DAVENPORT, IOWA 52810 TEL: 319 662 8441 FAX: 319 662 8441

SAMPLE CONDITION REPORT

CLIENT: Enviro GBN-JV MONTHLY DUST
ATTENTION: Damon, Anlon and Carl

EO:

JOBNO: W18/

Adv Note

DATE RECEIVED: 17/3/22

| LABORATORY NUMBER | SAMPLE DESCRIPTION | SAMPLED | IL CHEMISTRY SAMPLE | 9037L MICROBIOLOGY SAMPLE | SEE | BOO & COO | COMMENTS |
|-------------------|--------------------|---------------|---------------------|---------------------------|-----|-----------|----------|
| SpEnviro 1 | DB 61 | | | | | | |
| SpEnviro 2 | DB 62 | | | | | | |
| SpEnviro 3 | DB 63 | | | | | | |
| SpEnviro 4 | DB 64 | | | | | | |
| SpEnviro 5 | DB 65 | | | | | | |
| SpEnviro 6 | DB 66 | | | | | | |
| SpEnviro 7 | DB 67 | | | | | | |
| SpEnviro 8 | DB 68 | | | | | | |
| SpEnviro 9 | DB 69 | | | | | | |
| SpEnviro 10 | DB 70 | | | | | | |
| SpEnviro 11 | DB 71 | 15-3-2022 | | | | | |
| SpEnviro 12 | DB 72 | | | | | | |
| SpEnviro 13 | DB 73 | | | | | | |
| SpEnviro 14 | DB 74 | | | | | | |
| SpEnviro 15 | DB 75 | *STOLEN | | | | | |
| SpEnviro 16 | DB 76 | | | | | | |
| SpEnviro 17 | DB 77 | | | | | | 30 DAYS |
| SpEnviro 18 | DB 78 | | | | | | |
| SpEnviro 19 | DB 79 | | | | | | |
| SpEnviro 20 | DB 80 | | | | | | |
| SpEnviro 21 | DB 81 | | | | | | |
| SpEnviro 22 | DB 82 | | | | | | |
| SpEnviro 23 | DB 83 | | | | | | |
| SpEnviro 24 | DB 84 | | | | | | |
| SpEnviro 25 | DB 85 | * NO ACCESS | | | | | |
| SpEnviro 26 | DB 86 | * NO ACCESS | | | | | |
| SpEnviro 27 | DB 87 | | | | | | |
| SpEnviro 28 | DB 88 | | | | | | |
| SpEnviro 29 | DB 89 | | | | | | |
| SpEnviro 30 | DB 90 | | | | | | |
| | | TOTAL SAMPLES | | | | | |

Analysis Required : Domestic : General :

Sewage :

MB

Selected:

RECEIVED BY:

DELIVERED BY:

SA/Technical Support/Environ. & Waste 1

PAGE 1 OF 1

Document No:
Revision:
Date:

MON-AQR-244-20_21 (22-02)
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February to March 2022

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Author: D Nell

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Foto: G. Vignati/Infocultura/AGF, B. B. 1990. TEL: 070 792 0440 FAX: 0600011 070

17/3/22

8. yourChapple@ednet.ca

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MARCH - 2022

| GBN-JV 2A-C-8.9 Air Monitoring | | | | | | | | |
|--------------------------------|-----------|------------|------------------|---------|--------------------|------|-------|------|
| No | Sample ID | Date | Time | Comment | | | | |
| | | | | PM 1 | PM 2.5 | PM 4 | PM 10 | TSP |
| 1 | DB01 | 16/3/22 | 09h16 | 0.0 | 0.1 | 1.4 | 5.7 | 6.3 |
| 2 | DB02 | " | 09h22 | 0.1 | 0.7 | 2.0 | 13.1 | 15.0 |
| 3 | DB03 | " | 08h33 | 0.1 | 0.1 | 0.9 | 3.3 | 3.4 |
| 4 | DB04 | " | 08h30 | 0.1 | 0.4 | 2.0 | 6.1 | 7.9 |
| 5 | DB05 | " | 08h27 | 0.2 | 1.2 | 3.0 | 8.9 | 12.6 |
| 6 | DB06 | " | 08h28 | 0.2 | 1.8 | 2.9 | 8.7 | 11.7 |
| 7 | DB07 | " | 08h21 | 0.2 | 0.6 | 2.0 | 9.3 | 9.3 |
| 8 | DB08 | 16/03/2022 | 08h01 | 0.1 | 0.2 | 3.0 | 19.2 | 22.3 |
| 9 | DB09 | " | 08h05 | 0.1 | 0.4 | 1.6 | 8.5 | 10.3 |
| 10 | DB10 | " | 08h12 | 0.2 | 0.8 | 2.1 | 5.3 | 7.8 |
| 11 | DB11 | 16/3/2022 | 07h44 | 0.1 | 0.6 | 2.0 | 7.1 | 9.6 |
| 12 | DB12 | 16/3/22 | 08h37 | 0.1 | 0.7 | 2.1 | 8.2 | 9.8 |
| 13 | DB13 | 15/3/22 | 10h24 | 1.7 | 7.4 | 15.4 | 52.9 | 72.7 |
| 14 | DB14 | 16/3/22 | 08h43 | 0.1 | 0.2 | 0.7 | 4.0 | 6.5 |
| 15 | DB15 | " | 09h48 | 0.2 | 0.8 3.0 | 4.8 | 16.0 | 17.0 |
| 16 | DB16 | " | 09h53 | 0.0 | 0.1 | 1.1 | 10.0 | 12.4 |
| 17 | DB17 | " | STOLEN | 0.1 | 0.1 | 0.1 | 27.9 | 46.4 |
| 18 | DB18 | " | 10h34 | 0.2 | 2.0 | 4.2 | 16.7 | 19.1 |
| 19 | DB19 | " | 10h43 | 0.2 | 0.6 | 1.9 | 9.2 | 10.1 |
| 20 | DB20 | " | 10h47 | 0.1 | 0.5 | 1.9 | 6.4 | 7.1 |
| 21 | DB21 | " | 09h49 | 0.1 | 0.8 | 2.8 | 9.2 | 9.8 |
| 22 | DB22 | " | 10h51 | 0.2 | 0.7 | 1.5 | 11.1 | 20.0 |
| 23 | DB23 | " | 10h54 | 0.2 | 0.8 | 3.1 | 8.8 | 12.2 |
| 24 | DB24 | " | 10h56 | 0.2 | 2.9 | 6.2 | 23.3 | 26.4 |
| 25 | DB25 | " | 10h59 | 0.1 | 2.6 | 4.0 | 13.2 | 18.1 |
| 26 | DB26 | " | 11h02 | 0.2 | 1.8 | 2.6 | 5.9 | 7.1 |
| 27 | DB27 | " | 11h05 | 0.2 | 1.1 | 4.1 | 60.9 | 63.1 |
| 28 | DB28 | " | 11h09 | 0.5 | 12.5 | 18.1 | 57.7 | 72.4 |
| 29 | DB29 | " | 11h12 | 0.2 | 0.8 | 1.8 | 10.4 | 15.3 |
| 30 | DB30 | " | 11h17 | 0.5 | 16.1 | 19.4 | 48.0 | 65.0 |
| 31 | DB31 | " | 11h19 | 0.2 | 2.0 | 15.1 | 24.6 | 30.6 |
| 32 | DB32 | " | 11h24 | 0.9 | 6.9 | 11.9 | 35.4 | 45.2 |
| 33 | DB33 | " | 11h25 | 0.1 | 0.7 | 2.0 | 6.5 | 10.2 |
| 34 | DB34 | " | 11h29 | 0.7 | 2.8 | 6.4 | 30.8 | 40.7 |
| 35 | DB35 | " | 11h36 | 0.2 | 0.8 | 3.0 | 5.7 | 9.8 |
| 36 | DB36 | " | 11h35 | 0.5 | 13.4 | 22.0 | 40.1 | 64.1 |
| 37 | DB37 | " | 11h37 | 0.1 | 0.6 | 3.1 | 13.3 | 20.1 |
| 38 | DB38 | " | 11h39 | 0.2 | 0.9 | 2.2 | 8.9 | 24.0 |
| 39 | DB39 | " | 11h41 | 0.1 | 2.8 | 5.9 | 12.9 | 17.4 |
| 40 | DB40 | " | 11h43 | 0.1 | 1.2 | 2.7 | 8.5 | 11.7 |
| 41 | DB41 | " | 11h44 | 0.2 | 3.1 | 5.9 | 23.7 | 18.0 |
| 42 | DB42 | " | 11h45 | 0.1 | 2.3 | 4.0 | 5.8 | 10.0 |
| 43 | DB43 | " | 11h48 | 0.2 | 0.8 | 2.1 | 5.7 | 12.1 |

March - 2022

| GBN-JV 2A-C-8.9 Air Monitoring | | | | | | | | |
|--------------------------------|-----------|-----------|------------------------|---------|--------------------|----------------|----------------|----------------|
| No | Sample ID | Date | Time | Comment | | | | |
| | | | | PM 1 | PM 2.5 | PM 4 | PM 10 | TSP |
| 44 | DB44 | 16/3/2022 | 11h52 | 0.4 | 6.3 | 8.8 | 27.4 | 37.3 |
| 45 | DB45 | 16/3/22 | 11h55 | 0.1 | 1.1 | 2.5 | 8.8 | 11.9 |
| 46 | DB46 | " | 11h58 | 0.1 | 0.1 | 1.0 | 15.1 | 19.4 |
| 47 | DB47 | " | 12h02 | 0.2 | 1.3 | 2.8 | 9.0 | 12.0 |
| 48 | DB48 | " | 12h05 | 0.1 | 0.2 | 0.2 | 21.8 | 60.1 |
| 49 | DB49 | " | 12h08 | 0.1 | 1.2 | 2.4 | 7.9 | 11.5 |
| 50 | DB50 | " | 12h10 | 0.2 | 0.4 | 1.3 | 8.1 | 10.5 |
| 51 | DB51 | " | 12h14 | 0.2 | 2.4 | 4.4 | 15.7 | 30.1 |
| 52 | DB52 | " | 12h16 | 0.1 | 0.2 | 5.0 | 12.3 | 30.4 |
| 53 | DB53 | " | 12h19 | 0.1 | 0.6 | 2.0 | 5.2 | 8.7 |
| 54 | DB54 | " | 12h21 | 0.2 | 1.9 | 6.7 | 14.5 | 28.1 |
| 55 | DB55 | " | 12h23 | 0.2 | 1.1 | 4.1 | 10.4 | 22.8 |
| 56 | DB56 | " | 12h25 | 0.1 | 0.2 | 2.5 | 6.5 | 22.2 |
| 57 | DB57 | 16/3/22 | 12h30 | 0.2 | 3.1 | 5.5 | 21.4 | 23.0 |
| 58 | DB58 | 15/3/22 | 16h32 16h32 | 0.2 | 1.8 | 2.9 | 7.4 | 7.8 |
| 59 | DB59 | 15/3/22 | 16h32 | 0.2 | 0.7 | 1.7 | 5.9 | 6.5 |
| 60 | DB60 | 15/3/22 | 16h35 | 0.1 | 0.8 | 1.6 | 5.7 | 6.3 |
| 61 | DB61 | 15/3/22 | 16h40 | 0.1 | 0.6 | 1.8 | 5.2 | 6.4 |
| 62 | DB62 | 15/3/22 | 16h43 | 0.4 | 3.5 | 5.5 | 23.0 | 26.7 |
| 63 | DB63 | 15/3/22 | 16h47 | 0.2 | 0.8 | 2.0 | 6.9 | 8.7 |
| 64 | DB64 | 15/3/22 | 16h51 | 0.3 | 2.3 2.3 | 4.8 | 14.8 | 22.2 |
| 65 | DB65 | 15/3/22 | 16h54 | 0.2 | 0.5 | 3.0 | 17.8 | 21.5 |
| 66 | DB66 | 15/3/22 | 16h58 | 0.3 | 11.4 | 15.5 | 43.9 | 56.8 |
| 67 | DB67 | 15/3/22 | 17h01 | 0.4 | 1.7 | 8.5 | 56.8 | 78.4 |
| 68 | DB68 | 15/3/22 | 17h04 | 0.3 | 1.3 | 3.8 | 14.9 | 22.9 |
| 69 | DB69 | 15/3/22 | 17h08 | 0.6 | 1.8 | 7.7 | 43.5 | 58.9 |
| 70 | DB70 | 15/3/22 | 17h11 | 0.3 | 3.9 | 6.2 | 20.5 | 22.9 |
| 71 | DB71 | 15/3/22 | 17h15 | 0.7 | 1.8 | 8.4 | 38.0 | 52.2 |
| 72 | DB72 | 15/3/22 | 17h20 | 0.3 | 4.2 | 4.9 | 26.0 | 29.9 |
| 73 | DB73 | 15/3/22 | 17h24 | 0.9 | 20.5 | 22.2 | 33.3 | 35.8 |
| 74 | DB74 | 15/3/22 | 17h26 | 0.6 | 2.0 | 9.3 | 47.7 | 60.1 |
| 75 | DB75 | 15/3/22 | STOLEN | 0.4 | 1.8 | 8.4 | 53.4 | 75.3 |
| 76 | DB76 | 15/3/22 | 17h31 | 0.2 | 1.1 | 2.2 | 6.3 | 7.8 |
| 77 | DB77 | 15/3/22 | 16h05 | 0.4 | 1.7 | 5.3 | 22.8 | 28.9 |
| 78 | DB78 | 15/3/22 | 16h02 | 0.3 | 0.9 | 3.0 | 8.7 | 13.0 |
| 79 | DB79 | 15/3/22 | 15h59 | 0.3 | 0.9 | 2.7 | 9.3 | 11.7 |
| 80 | DB80 | 15/3/22 | 15h54 | 0.2 | 0.8 | 3.1 | 10.6 | 11.8 |
| 81 | DB81 | 15/3/22 | 15h51 | 0.3 | 0.9 | 4.1 | 13.1 | 18.9 |
| 82 | DB82 | 15/3/22 | 15h42 | 0.2 | 1.0 | 2.7 | 10.4 | 11.6 |
| 83 | DB83 | 15/3/22 | 15h36 | 0.3 | 1.1 | 5.9 | 41.5 | 80.3 |
| 84 | DB84 | 15/3/22 | NO ACCESS | | | 2.8 | 4.5 | 7.8 |
| 85 | DB85 | 15/3/22 | | | | 2.8 | 4.5 | 7.8 |
| 86 | DB86 | 15/3/22 | 12h26 | 0.4 | 1.4 | 4.1 | 12.9 | 17.8 |

| GBN-JV 2A-C-8.9 Air Monitoring | | | | | | | | |
|--------------------------------|-----------|----------|-------|---------|--------------------|---------------------|-----------------|------|
| No | Sample ID | Date | Time | Comment | | | | |
| | | | | PM 1 | PM 2.5 | PM 4 | PM 10 | TSP |
| 87 | DB87 | 15/3/22 | 12h11 | 0.4 | 2.3 | 7.8 | 25.2 | 30.3 |
| 88 | DB88 | 15/3/22 | 12h06 | 0.4 | 2.1 | 8.2 | 24.3 | 28.7 |
| 89 | DB89 | 15/3/22 | 14h30 | 0.2 | 2.1 | 9.0 | 12.1 | 14.5 |
| 90 | DB90 | 15/3/22 | 11h29 | 0.6 | 2.0 | 9.4 | 64.2 | 84.2 |
| 91 | DB91 | 15/3/22 | 11h26 | 0.9 | 3.8 | 11.5 | 58.0 | 86.0 |
| 92 | DB92 | 15/3/22 | 11h06 | 1.1 | 6.3 | 10.7 | 29.7 | 34.7 |
| 93 | DB93 | 15/3/22 | 10h58 | 1.4 | 2.8 | 10.4 | 45.1 | 55.0 |
| 94 | DB94 | 15/3/22 | 10h50 | 1.3 | 7.3 3.5 | 19.7 7.7 | 19.9 | 21.7 |
| 95 | DB95 | 15/03/22 | 10h19 | 1.6 | 4.1 | 10.1 | 22.3 | 24.8 |
| 96 | DB96 | 16/3/22 | 08h40 | 0.1 | 0.4 | 1.1 | 3.2 | 3.4 |
| 97 | DB97 | 15/3/22 | 15h46 | 0.2 | 0.6 | 3.4 | 10.3 | 10.3 |
| 98 | DB98 | 15/3/22 | 15h28 | 0.2 | 0.8 | 3.1 | 8.8 | 10.7 |
| 99 | DB99 | 15/3/22 | 12h15 | 0.6 | 2.9 | 9.3 | 40.7 | 47.5 |
| 100 | DB100 | 15/3/22 | 11h20 | 0.8 | 2.4 | 6.2 | 14.1 | 17.1 |


Mooivalei E-Sampler - 15-03-2022 → 11h34

Thaba Tholo Primary School E-Sampler - 15-03-2022 → 14h30

Eskom Medupi Power Station → 16-03-2022 → 09h08

APPENDIX C – MONITORING LOCALITY SUMMARY TABLE

Air Quality Monitoring Localities:

| DB 01 | |
|---|--|
| <p>Location: 23°40'41.16"S; 27°36'4.24"E</p> <p>Farm: Grootestryd 465 LO Portion 5</p> <p>Description: Near Matimba Power Station</p> |  |
| March 2021 | Date Installed: 31 st March 2021 |
| April 2021 | <p>Date Sampled: 5th May 2021</p> <p>Sample Status: Sampled</p> <p>Air Quality Class: Ideal</p> |
| May 2021 | <p>Date Sampled: 2nd June 2021</p> <p>Sample Status: Sampled</p> <p>Air Quality Class: Ideal</p> |
| June 2021 | <p>Date Sampled: 20th July 2021</p> <p>Sample Status: Sampled</p> <p>Air Quality Class: Ideal</p> |
| July 2021 | <p>Date Sampled: 19th August 2021</p> <p>Sample Status: Sampled</p> <p>Air Quality Class: Ideal</p> |

| | | | |
|--------------|---------------------------|--|-------------------------------------|
| Document No: | MON-AQR-244-20_21 (22-02) | GIBB Bigen Nyeleti Joint Venture (GBN-JV) | Client Restricted Author: D Nell |
| Revision: | 0.0 | | |
| Date: | February to March 2022 | | 67 |

| DB 01 | |
|----------------|--|
| August 2021 | Date Sampled: 16 th September 2021 Sample Status: Sampled Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Not Sampled – Tampered Air Quality Class: NA |
| October 2021 | Date Sampled: 9 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 19 th January 2022 Sample Status: Not Sampled – Stolen Air Quality Class: NA |
| January 2022 | Date Sampled: 15 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 16 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

DB 02

Location: 23°40'52.25"S; 27°36'2.03"E

Farm: Grootestryd 465 LQ Portion 5

Description: Near Matimba Power Station



March 2021

Date Installed: 31st March 2021

April 2021

Date Sampled: 5th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 2nd June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 20th July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 19th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 16th September 2021

Sample Status: Sampled

Document No:

MON-AQR-244-20_21 (22-02)

Revision:

0.0

Date:

February to March 2022

GIBB Bigen Nyeleti Joint Venture
(GBN-JV)

Client Restricted

Author: D Nell

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| DB 02 | |
|----------------|---|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 9 th November 2021 Sample Status: Sampled Air Quality Class: Exceeded Residential Limit |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 19 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 15 th February 2022 Sample Status: Sampled Air Quality Class: Exceeded Residential Limit |
| February 2022 | Date Sampled: 16 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

DB 03

Location: 23°41'37.30"S; 27°33'44.10"E

Farm: Turfvlakte 463 LQ

Description: Next to D1675



March 2021

Date Installed: 31st March 2021

April 2021

Date Sampled: 5th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 2nd June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 20th July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 19th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 15th September 2021

Sample Status: Sampled

Document No:

MON-AQR-244-20_21 (22-02)

Revision:

0.0

Date:

February to March 2022

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(GBN-JV)

Client Restricted

Author: D Nell

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| DB 03 | |
|----------------|---|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Exceeded Residential Limit |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 19 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 15 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 16 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

DB 04

Location: 23°41'57.80"S; 27°32'48.26"E

Farm: Hierontrent 460 LQ

Description: Next to D1675



March 2021

Date Installed: 31st March 2021

April 2021

Date Sampled: 5th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 2nd June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 20th July 2021

Sample Status: **Not Sampled – Bucket Stolen**

July 2021

Date Sampled: 19th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 15th September 2021

Sample Status: Sampled

Air Quality Class: Exceeded both the Residential limit and the Industrial Limit

Document No:

MON-AQR-244-20_21 (22-02)

Revision:

0.0

Date:

February to March 2022

GIBB Bigen Nyeleti Joint Venture
(GBN-JV)

Client Restricted

Author: D Nell

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| DB 04 | |
|----------------|---|
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Exceeded Residential Limit |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 19 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 15 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 16 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 23°42'13.03"S, 27°31'52.68"E

Farm: Eenzaamheid 687 LQ

Description: Next D1675



March 2021

Date Installed: 31st March 2021

April 2021

Date Sampled: 5th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 2nd June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 20th July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 19th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 15th September 2021

Sample Status: Sampled

| DB 05 | |
|----------------|---|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 19 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 15 th February 2022 Sample Status: Sampled Air Quality Class: Exceeded the Residential Limit |
| February 2022 | Date Sampled: 16 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 23°42'29.97"S, 27°30'32.64"E

Farm: Eenzaamheid 687 LQ

Description: Next to D1675



March 2021

Date Installed: 31st March 2021

April 2021

Date Sampled: 5th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 2nd June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 20th July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 19th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 15th September 2021

Sample Status: Sampled

| DB 06 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 19 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 15 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 16 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 23°42'32.26"S, 27°29'48.38"E

Farm: Eenzaamheid 687 LQ

Description: Next to D1675



March 2021

Date Installed: 31st March 2021

April 2021

Date Sampled: 5th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 2nd June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 20th July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 19th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 15th September 2021

Sample Status: Sampled

| DB 07 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 19 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 15 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 16 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 23°42'43.21"S, 27°27'48.78"E

Farm: Pontes Estate 744 LQ

Description: Outside farm gate next D1675



March 2021

Date Installed: 31st March 2021

April 2021

Date Sampled: 6th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 2nd June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 20th July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 19th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 15th September 2021

Sample Status: Sampled

| DB 08 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 19 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 15 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 16 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 23°42'55.98"S, 27°27'30.40"E

Farm: Pontes Estate 744 LQ (Buffels Jag)



March 2021

Date Installed: 31st March 2021

April 2021

Date Sampled: 6th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 3rd June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 20th July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 19th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 16th September 2021

Sample Status: Sampled

| DB 09 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 13 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 19 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 15 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 16 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

DB 10

Location: 23°43'28.90"S, 27°26'41.33"E

Farm: Pontes Estate 744 LQ (Buffels Jag)



March 2021

Date Installed: 31st March 2021

April 2021

Date Sampled: 6th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 3rd June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 20th July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 19th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 16th September 2021

Sample Status: Sampled

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Client Restricted

Author: D Nell

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| DB 10 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 13 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 19 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 15 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 16 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

DB 11

| | |
|---|--|
| <p>Location: 23°44'4.06"S, 27°25'46.60"E</p> <p>Farm: Pontes Estates 712 LQ</p> <p>Description: Border fence of Enkeldraai 718 LQ</p> |  |
| March 2021 | Date Installed: 31 st March 2021 |
| April 2021 | <p>Date Sampled: 6th May 2021</p> <p>Sample Status: Tampered (Attempted theft)</p> <p>Air Quality Class: Ideal</p> |
| May 2021 | <p>Date Sampled: 3rd June 2021</p> <p>Sample Status: Sampled</p> <p>Air Quality Class: Ideal</p> |
| June 2021 | <p>Date Sampled: 21st July 2021</p> <p>Sample Status: Sampled</p> <p>Air Quality Class: Ideal</p> |
| July 2021 | <p>Date Sampled: 19th August 2021</p> <p>Sample Status: Sampled</p> <p>Air Quality Class: Ideal</p> |
| August 2021 | <p>Date Sampled: 16th September 2021</p> <p>Sample Status: Sampled</p> |

| DB 11 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 13 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 19 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 15 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 16 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

DB 12

| | |
|--|---|
| <p>Location: 23°41'23.55"S, 27°34'20.99"E</p> <p>Farm: N/A</p> <p>Description: N/A</p> |  |
| July 2021 | <p>Date Sampled: 19th August 2021</p> <p>Sample Status: Sampled</p> <p>Air Quality Class: Ideal</p> |
| August 2021 | <p>Date Sampled: 16th September 2021</p> <p>Sample Status: Sampled</p> <p>Air Quality Class: Ideal</p> |
| September 2021 | <p>Date Sampled: 12th October 2021</p> <p>Sample Status: Sampled</p> <p>Air Quality Class: Ideal</p> |
| October 2021 | <p>Date Sampled: 9th November 2021</p> <p>Sample Status: Sampled</p> <p>Air Quality Class: Ideal</p> |
| November 2021 | <p>Date Sampled: 8th December 2021</p> <p>Sample Status: Sampled</p> <p>Air Quality Class: Ideal</p> |

| DB 12 | |
|---------------|--|
| December 2021 | Date Sampled: 19 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 15 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 16 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

| DB 13 | |
|---|--|
| Location: 24°38'30.48"S, 27°18'53.46"E Farm: N/A Description: N/A |  |
| June 2021 | Date Installed: 19 th July 2021 |
| July 2021 | Date Sampled: 13 th August 2021 Sample Status: Sampled Air Quality Class: Ideal |
| August 2021 | Date Sampled: 13 th September 2021 |

| | | | |
|--------------|---------------------------|--|-------------------|
| Document No: | MON-AQR-244-20_21 (22-02) | GIBB Bigen Nyeleti Joint Venture (GBN-JV) | Client Restricted |
| Revision: | 0.0 | | Author: D Nell |
| Date: | February to March 2022 | | 90 |

| DB 13 | |
|----------------|--|
| | <p>Sample Status: Sampled</p> <p>Air Quality Class: Ideal</p> |
| September 2021 | <p>Date Sampled: 11th October 2021</p> <p>Sample Status: Sampled</p> <p>Air Quality Class: Ideal</p> |
| October 2021 | <p>Date Sampled: 9th November 2021</p> <p>Sample Status: Sampled</p> <p>Air Quality Class: Ideal</p> |
| November 2021 | <p>Date Sampled: 8th December 2021</p> <p>Sample Status: Sampled</p> <p>Air Quality Class: Ideal</p> |
| December 2021 | <p>Date Sampled: 17th January 2022</p> <p>Sample Status: Sampled</p> <p>Air Quality Class: Ideal</p> |
| January 2022 | <p>Date Sampled: 14th February 2022</p> <p>Sample Status: Sampled</p> <p>Air Quality Class: Ideal</p> |
| February 2022 | <p>Date Sampled: 15th March 2022</p> <p>Sample Status: Sampled</p> <p>Air Quality Class: Ideal</p> |

DB 14

Location: 23°41'8.24"S, 27°35'18.63"E

Farm: N/A

Description: N/A



July 2021

Date Sampled: 19th August 2021

Sample Status: Installed

Air Quality Class: NA

August 2021

Date Sampled: 16th September 2021

Sample Status: Sampled

Air Quality Class: Ideal

September 2021

Date Sampled: 12th October 2021

Sample Status: Sampled

Air Quality Class: Ideal

October 2021

Date Sampled: 9th November 2021

Sample Status: Sampled

Air Quality Class: Ideal

November 2021

Date Sampled: 8th December 2021

Sample Status: Sampled

Air Quality Class: Ideal

Document No:

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Author: D Nell

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| DB 14 | |
|---------------|---|
| December 2021 | Date Sampled: 19 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 15 th February 2022 Sample Status: Sampled Air Quality Class: Exceeded the Residential Limit |
| February 2022 | Date Sampled: 16 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

| DB 15 | |
|---|--|
| Location: 23°46'41.92"S, 27°25'52.99"E Farm: Zandnek 358 LQ Portion 1 Description: Servitude Road |  |
| March 2021 | Date Installed: 31 st March 2021 |
| April 2021 | Date Sampled: 5 th May 2021 Sample Status: Sampled Air Quality Class: Ideal |
| May 2021 | Date Sampled: 2 nd June 2021 |

| | | | |
|--------------|---------------------------|--|-------------------|
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| Revision: | 0.0 | | Author: D Nell |
| Date: | February to March 2022 | | 93 |

| DB 15 | |
|----------------|---|
| | <p>Sample Status: Sampled</p> <p>Air Quality Class: Ideal</p> |
| June 2021 | <p>Date Sampled: 20th July 2021</p> <p>Sample Status: Sampled</p> <p>Air Quality Class: Ideal</p> |
| July 2021 | <p>Date Sampled: 18th August 2021</p> <p>Sample Status: Sampled</p> <p>Air Quality Class: Ideal</p> |
| August 2021 | <p>Date Sampled: 15th September 2021</p> <p>Sample Status: Sampled</p> <p>Air Quality Class: Ideal</p> |
| September 2021 | <p>Date Sampled: 12th October 2021</p> <p>Sample Status: Sampled</p> <p>Air Quality Class: Ideal</p> |
| October 2021 | <p>Date Sampled: NA</p> <p>Sample Status: Not Sampled – No Access</p> <p>Air Quality Class: NA</p> |
| November 2021 | <p>Date Sampled: 9th December 2021</p> <p>Sample Status: Sampled</p> <p>Air Quality Class: Ideal</p> |
| December 2021 | <p>Date Sampled: 17th January 2022</p> <p>Sample Status: Sampled</p> |

| DB 15 | |
|---------------|--|
| | Air Quality Class: Ideal |
| January 2022 | Date Sampled: 15 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 16 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

| DB 16 | |
|--|---|
| Location: 23°47'39.91"S, 27°25'39.16"E Farm: Renosterpan 361 Portion 6 Description: Servitude Road |  |
| March 2021 | Date Installed: 31 st March 2021 |
| April 2021 | Date Sampled: 5 th May 2021 Sample Status: Sampled Air Quality Class: Ideal |
| May 2021 | Date Sampled: 2 nd June 2021 Sample Status: Sampled Air Quality Class: Ideal |

| | | | |
|--------------|---------------------------|--|-------------------|
| Document No: | MON-AQR-244-20_21 (22-02) | GIBB Bigen Nyeleti Joint Venture (GBN-JV) | Client Restricted |
| Revision: | 0.0 | | Author: D Nell |
| Date: | February to March 2022 | | 95 |

| DB 16 | |
|----------------|--|
| June 2021 | Date Sampled: 20 th July 2021 Sample Status: Sampled Air Quality Class: Ideal |
| July 2021 | Date Sampled: 18 th August 2021 Sample Status: Sampled Air Quality Class: Ideal |
| August 2021 | Date Sampled: 15 th September 2021 Sample Status: Sampled Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: NA Sample Status: Not Sampled – No Access Air Quality Class: NA |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Exceeded Residential Limit |
| December 2021 | Date Sampled: 17 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 15 th February 2022 |

| DB 16 | |
|---------------|---|
| | Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 16 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

| DB 17 | |
|--|---|
| Location: 23°49'17.37"S, 27°25'15.13"E Farm: Renosterpan 361 Portion 3 Description: Servitude Road |  |
| March 2021 | Date Installed: 31 st March 2021 |
| April 2021 | Date Sampled: 5 th May 2021 Sample Status: Sampled Air Quality Class: Ideal |
| May 2021 | Date Sampled: 2 nd June 2021 Sample Status: Sampled Air Quality Class: Ideal |
| June 2021 | Date Sampled: 20 th July 2021 Sample Status: Sampled |

| | | | |
|--------------|---------------------------|--|-------------------|
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| Revision: | 0.0 | | Author: D Nell |
| Date: | February to March 2022 | | 97 |

| DB 17 | |
|----------------|--|
| | Air Quality Class: Ideal |
| July 2021 | Date Sampled: 18 th August 2021 Sample Status: Sampled Air Quality Class: Ideal |
| August 2021 | Date Sampled: 15 th September 2021 Sample Status: Sampled Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: NA Sample Status: Not Sampled – No Access Air Quality Class: NA |
| November 2021 | Date Sampled: NA Sample Status: Not Sampled – No Access Air Quality Class: NA |
| December 2021 | Date Sampled: 17 th January 2022 Sample Status: Not Sampled – Bucket Stolen Air Quality Class: NA |
| January 2022 | Date Sampled: 15 th February 2022 Sample Status: Not Sampled – Dust Bucket Stand Stolen Air Quality Class: NA |

| DB 17 | |
|---------------|--|
| February 2022 | Date Sampled: 16 th March 2022 Sample Status: Not Sampled – Dust Bucket Stand Stolen Air Quality Class: NA |

| DB 18 | |
|--|--|
| Location: 23°50'5.11"S, 27°25'4.54"E Farm: Renosterpan 361 Portion 4 Description: Servitude Road |  |
| March 2021 | Date Installed: 30 th March 2021 |
| April 2021 | Date Sampled: 5 th May 2021 Sample Status: Sampled Air Quality Class: Ideal |
| May 2021 | Date Sampled: 2 nd June 2021 Sample Status: Sampled Air Quality Class: Ideal |
| June 2021 | Date Sampled: 21 st July 2021 Sample Status: Sampled Air Quality Class: Ideal |

| | | | |
|--------------|---------------------------|--|-------------------|
| Document No: | MON-AQR-244-20_21 (22-02) | GIBB Bigen Nyeleti Joint Venture (GBN-JV) | Client Restricted |
| Revision: | 0.0 | | Author: D Nell |
| Date: | February to March 2022 | | 99 |

| DB 18 | |
|----------------|---|
| July 2021 | Date Sampled: 18 th August 2021 Sample Status: Sampled Air Quality Class: Ideal |
| August 2021 | Date Sampled: 15 th September 2021 Sample Status: Sampled Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 19 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 15 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 16 th March 2022 |

| | | | |
|--------------|---------------------------|----------------------------------|-------------------|
| Document No: | MON-AQR-244-20_21 (22-02) | GIBB Bigen Nyeleti Joint Venture | Client Restricted |
| Revision: | 0.0 | (GBN-JV) | Author: D Nell |
| Date: | February to March 2022 | | 100 |

| DB 18 | |
|-------|---|
| | <p>Sample Status: Sampled</p> <p>Air Quality Class: Ideal</p> |

| DB 19 | |
|---|--|
| <p>Location: 23°50'36.53"S, 27°24'56.77"E</p> <p>Farm: Renosterpan 361 Portion 4</p> <p>Description: Servitude Road</p> |  |
| March 2021 | Date Installed: 30 th March 2021 |
| April 2021 | <p>Date Sampled: 5th May 2021</p> <p>Sample Status: Sampled</p> <p>Air Quality Class: Ideal</p> |
| May 2021 | <p>Date Sampled: 2nd June 2021</p> <p>Sample Status: Sampled</p> <p>Air Quality Class: Ideal</p> |
| June 2021 | <p>Date Sampled: 21st July 2021</p> <p>Sample Status: Sampled</p> <p>Air Quality Class: Ideal</p> |
| July 2021 | <p>Date Sampled: 18th August 2021</p> <p>Sample Status: Sampled</p> |

| | | | |
|--------------|---------------------------|--|-------------------|
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| Revision: | 0.0 | | Author: D Nell |
| Date: | February to March 2022 | | 101 |

| DB 19 | |
|----------------|---|
| | Air Quality Class: Ideal |
| August 2021 | Date Sampled: 15 th September 2021 Sample Status: Sampled Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 19 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 15 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 16 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 23°51'5.81"S, 27°24'49.59"E

Farm: Renosterpan 361 Portion 5

Description: Servitude Road



March 2021

Date Installed: 30th March 2021

April 2021

Date Sampled: 5th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 2nd June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 21st July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 18th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 15th September 2021

Sample Status: Sampled

| DB 20 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Exceeded Residential Limit |
| December 2021 | Date Sampled: 19 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 15 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 16 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 23°51'43.25"S, 27°24'40.22"E

Farm: Naauwpoort 365 LQ

Description: Servitude Road



March 2021

Date Installed: 30th March 2021

April 2021

Date Sampled: 5th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 2nd June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 21st July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 18th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 15th September 2021

Sample Status: Sampled

| DB 21 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 19 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 15 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 16 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 23°52'22.70"S, 27°24'31.05"E

Farm: Naauwpoort 365 LQ

Description: Servitude Road



March 2021

Date Installed: 30th March 2021

April 2021

Date Sampled: 5th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 2nd June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 21st July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 18th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 15th September 2021

Sample Status: Sampled

| DB 22 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 19 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 15 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 16 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 23°53'36.73"S, 27°24'13.40"E

Farm: Rooipan 357 LQ Portion 2

Description: Servitude Road



March 2021

Date Installed: 30th March 2021

April 2021

Date Sampled: 5th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 2nd June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 21st July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 18th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 15th September 2021

Sample Status: Sampled

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| DB 23 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 19 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 15 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 16 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 23°53'39.51"S, 27°24'12.55"E

Farm: Rooipan 357 LQ Portion 4

Description: Servitude Road



March 2021

Date Installed: 29th March 2021

April 2021

Date Sampled: 5th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 2nd June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 21st July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 18th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 15th September 2021

Sample Status: Sampled

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| DB 24 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 19 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 15 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 16 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 23°54'1.90"S, 27°24'6.76"E

Farm: Rooipan 357 LQ Portion 4

Description: Servitude Road



March 2021

Date Installed: 29th March 2021

April 2021

Date Sampled: 5th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 2nd June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 21st July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 18th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 15th September 2021

Sample Status: Sampled

| DB 25 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 19 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 15 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 16 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 23°54'46.08"S, 27°23'56.64"E

Farm: Rooipan 357 LQ Portion 4

Description: Servitude Dam



March 2021

Date Installed: 29th March 2021

April 2021

Date Sampled: 5th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 2nd June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 21st July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 18th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 15th September 2021

Sample Status: Sampled

| DB 26 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 19 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 15 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 16 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 23°55'22.69"S, 27°23'47.77"E

Farm: Zandfontein Portion 2

Description: Servitude Road



March 2021

Date Installed: 29th March 2021

April 2021

Date Sampled: 5th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 2nd June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 21st July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 18th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 15th September 2021

Sample Status: Sampled

| DB 27 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 19 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 15 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 16 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 23°56'29.84"S, 27°23'31.71"E

Farm: Zandfontein Portion 2

Description: Servitude Road



March 2021

Date Installed: 29th March 2021

April 2021

Date Sampled: 5th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 2nd June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 21st July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 18th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 15th September 2021

Sample Status: Sampled

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Date:

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GIBB Bigen Nyeleti Joint Venture
(GBN-JV)

Client Restricted

Author: D Nell

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| DB 28 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 19 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 15 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 16 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 23°57'11.41"S, 27°23'28.14"E

Farm: Diepspruit 386 LQ

Description: Servitude Road



March 2021

Date Installed: 29th March 2021

April 2021

Date Sampled: 5th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 2nd June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 21st July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 18th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 15th September 2021

Sample Status: Sampled

Document No:

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Date:

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GIBB Bigen Nyeleti Joint Venture
(GBN-JV)

Client Restricted

Author: D Nell

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| DB 29 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 19 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 15 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 16 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 23°57'58.79"S, 27°23'37.97"E

Farm: Diepspruit 386 LQ

Description: Servitude Road



March 2021

Date Installed: 29th March 2021

April 2021

Date Sampled: 5th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 2nd June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 21st July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 18th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 15th September 2021

Sample Status: Sampled

| DB 30 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 19 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 15 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 16 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 23°58'36.77"S, 27°23'44.50"E

Farm: Mabulskop 406 LQ

Description: Servitude Road



March 2021

Date Installed: 29th March 2021

April 2021

Date Sampled: 5th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 2nd June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 21st July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 18th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 15th September 2021

Sample Status: Sampled

| DB 31 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 19 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 15 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 16 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 23°59'45.59"S, 27°23'58.25"E

Farm: Mabulskop 406 LQ

Description: Servitude Road



March 2021

Date Installed: 29th March 2021

April 2021

Date Sampled: 5th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 2nd June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 21st July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 18th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 15th September 2021

Sample Status: Sampled

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(GBN-JV)

Client Restricted

Author: D Nell

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| DB 32 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Sampled Air Quality Class: Exceeded Residential Limit |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 19 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 15 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 16 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 24° 0'4.67"S, 27°24'1.95"E

Farm: Groenland 397 LQ Portion 2

Description: Servitude Road



March 2021

Date Installed: 29th March 2021

April 2021

Date Sampled: 5th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 2nd June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 21st July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 18th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 15th September 2021

Sample Status: Sampled

| DB 33 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 19 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 15 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 16 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 24° 0'37.82"S, 27°24'8.36"E

Farm: Groenland 397 LQ Portion 2

Description: Servitude Road



March 2021

Date Installed: 29th March 2021

April 2021

Date Sampled: 5th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 2nd June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 21st July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 18th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 15th September 2021

Sample Status: Sampled

Document No:

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0.0

Date:

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(GBN-JV)

Client Restricted

Author: D Nell

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| DB 34 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 19 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 15 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 16 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 24° 0'51.33"S, 27°24'10.07"E

Farm: Inkerman 10 KQ Portion 2

Description: Servitude Road



March 2021

Date Installed: 29th March 2021

April 2021

Date Sampled: 5th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 2nd June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 21st July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 18th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 15th September 2021

Sample Status: Sampled

| DB 35 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 19 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 15 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 16 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 24° 1'3.54"S, 27°24'12.35"E

Farm: Inkerman 10 KQ portion 3

Description: Servitude Road



March 2021

Date Installed: 29th March 2021

April 2021

Date Sampled: 5th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 2nd June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 21st July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 18th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 15th September 2021

Sample Status: Sampled

Document No:

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Revision:

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Date:

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GIBB Bigen Nyeleti Joint Venture
(GBN-JV)

Client Restricted

Author: D Nell

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| DB 36 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 19 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 15 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 16 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 24° 1'7.07"S, 27°24'13.15"E

Farm: Inkerman 10 KQ portion 3

Description: Servitude Road



March 2021

Date Installed: 29th March 2021

April 2021

Date Sampled: 5th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 2nd June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 21st July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 18th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 15th September 2021

Sample Status: Sampled

Document No:

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Revision:

0.0

Date:

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GIBB Bigen Nyeleti Joint Venture
(GBN-JV)

Client Restricted

Author: D Nell

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| DB 37 | |
|----------------|---|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 19 th January 2022 Sample Status: Not Sampled – Bucket Stolen Air Quality Class: NA |
| January 2022 | Date Sampled: 15 th February 2022 Sample Status: Not Sampled – Bucket Stolen Air Quality Class: NA |
| February 2022 | Date Sampled: 16 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

| | |
|--|--|
| <p>Location: 24° 1'34.37"S, 27°24'18.32"E</p> <p>Farm: Inkerman 10 KQ Portion 3</p> <p>Description: Servitude Road</p> |  |
| March 2021 | Date Installed: 29 th March 2021 |
| April 2021 | <p>Date Sampled: 5th May 2021</p> <p>Sample Status: Sampled</p> <p>Air Quality Class: Ideal</p> |
| May 2021 | <p>Date Sampled: 2nd June 2021</p> <p>Sample Status: Sampled</p> <p>Air Quality Class: Ideal</p> |
| June 2021 | <p>Date Sampled: 21st July 2021</p> <p>Sample Status: Sampled</p> <p>Air Quality Class: Ideal</p> |
| July 2021 | <p>Date Sampled: 18th August 2021</p> <p>Sample Status: Sampled</p> <p>Air Quality Class: Ideal</p> |

| DB 38 | |
|----------------|---|
| August 2021 | Date Sampled: 15 th September 2021 Sample Status: Sampled Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 19 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 15 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 16 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 23°41'35.31"S; 27°38'51.43"E

Farm: Rietfontein 820 KQ

Description: Servitude Road



March 2021

Date Installed: 29th March 2021

April 2021

Date Sampled: 5th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 2nd June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 21st July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 18th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 15th September 2021

Sample Status: Sampled

Document No:

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GIBB Bigen Nyeleti Joint Venture
(GBN-JV)

Client Restricted

Author: D Nell

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| DB 39 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 19 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 15 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 16 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 24° 2'29.74"S, 27°24'28.91"E

Farm: Rietfontein 820 KQ

Description: Servitude Road



March 2021

Date Installed: 29th March 2021

April 2021

Date Sampled: 5th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 2nd June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 21st July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 18th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 15th September 2021

Sample Status: Sampled

| DB 40 | |
|----------------|---|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Not Sampled – Tampered Air Quality Class: Ideal |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 19 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 15 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 16 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 24° 2'40.69"S, 27°24'31.20"E

Farm: Rietfontein 820 KQ

Description: Servitude Road



March 2021

Date Installed: 29th March 2021

April 2021

Date Sampled: 5th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 2nd June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 21st July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 18th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 15th September 2021

Sample Status: Sampled

| DB 41 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 19 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 15 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 16 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 24° 2'46.02"S, 27°24'32.19"E

Farm: Rietfontein 15 KQ Portion 4

Description: Servitude Road



March 2021

Date Installed: 29th March 2021

April 2021

Date Sampled: 5th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 2nd June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 21st July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 18th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 15th September 2021

Sample Status: Sampled

| DB 42 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 19 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 15 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 16 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 24° 3'21.38"S, 27°24'37.93"E

Farm: Rietfontein 15 KQ Portion 4

Description: Servitude Road



March 2021

Date Installed: 29th March 2021

April 2021

Date Sampled: 5th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 2nd June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 21st July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 18th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 15th September 2021

Sample Status: Sampled

| DB 43 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 19 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 15 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 16 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 24° 4'29.95"S, 27°24'51.86"E

Farm: Schoonwater 14 KQ Portion 1

Description: Servitude Road



March 2021

Date Installed: 29th March 2021

April 2021

Date Sampled: 5th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 2nd June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 21st July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 18th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 15th September 2021

Sample Status: Sampled

| DB 44 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 19 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 14 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 16 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 24° 4'53.87"S, 27°24'55.26"E

Farm: Schoonwater 14 KQ Portion 1

Description: Servitude Road



March 2021

Date Installed: 29th March 2021

April 2021

Date Sampled: 5th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 2nd June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 21st July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 18th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 15th September 2021

Sample Status: Sampled

| DB 45 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 19 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 14 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 16 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 24° 5'48.56"S, 27°25'8.99"E

Farm: Welgewonden 16 KQ portion 6

Description: Servitude Road



March 2021

Date Installed: 29th March 2021

April 2021

Date Sampled: 5th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 2nd June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 21st July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 18th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 15th September 2021

Sample Status: Sampled

| DB 46 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 19 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 14 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 16 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 24° 6'2.39"S, 27°25'12.90"E

Farm: Welgewonden 16 KQ portion 9

Description: Servitude Road



March 2021

Date Installed: 29th March 2021

April 2021

Date Sampled: 5th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 2nd June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 21st July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 18th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 15th September 2021

Sample Status: Sampled

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Date:

February to March 2022

GIBB Bigen Nyeleti Joint Venture
(GBN-JV)

Client Restricted

Author: D Nell

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| DB 47 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 19 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 14 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 16 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 24° 6'33.52"S, 27°25'21.12"E

Farm: Welgewonden 949 KQ

Description: Servitude Road



March 2021

Date Installed: 29th March 2021

April 2021

Date Sampled: 5th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 2nd June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 21st July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 18th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 15th September 2021

Sample Status: Sampled

| DB 48 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 19 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 14 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 16 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 24° 7'11.42"S, 27°25'32.63"E

Farm: Welgewonden 949 KQ

Description: Servitude Road



March 2021

Date Installed: 29th March 2021

April 2021

Date Sampled: 5th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 2nd June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 21st July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 18th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 15th September 2021

Sample Status: Sampled

| DB 49 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 19 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 14 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 16 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 24° 7'50.30"S, 27°25'43.01"E

Farm: Welgewonden 949 KQ

Description: Servitude Road



March 2021

Date Installed: 29th March 2021

April 2021

Date Sampled: 5th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 2nd June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 21st July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 18th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 15th September 2021

Sample Status: Sampled

| DB 50 | |
|----------------|---|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 19 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 14 th February 2022 Sample Status: Not Sampled – Bucket Stolen Air Quality Class: NA |
| February 2022 | Date Sampled: 16 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 24° 8'36.82"S, 27°25'56.47"E

Farm: Welgewonden 949 KQ

Description: Servitude Road



| | |
|-------------|--|
| March 2021 | Date Installed: 29 th March 2021 |
| April 2021 | Date Sampled: 5 th May 2021 Sample Status: Sampled Air Quality Class: Ideal |
| May 2021 | Date Sampled: 2 nd June 2021 Sample Status: Sampled Air Quality Class: Ideal |
| June 2021 | Date Sampled: 21 st July 2021 Sample Status: Sampled Air Quality Class: Ideal |
| July 2021 | Date Sampled: 18 th August 2021 Sample Status: Sampled Air Quality Class: Ideal |
| August 2021 | Date Sampled: 15 th September 2021 Sample Status: Sampled |

| DB 51 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 19 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 14 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 16 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 24° 9'10.22"S, 27°26'5.85"E

Farm: Welgewonden 949 KQ

Description: Servitude Road



March 2021

Date Installed: 29th March 2021

April 2021

Date Sampled: 5th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 2nd June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 21st July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 18th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 15th September 2021

Sample Status: Sampled

| DB 52 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 19 th January 2022 Sample Status: Not Sampled – Bucket Stolen Air Quality Class: NA |
| January 2022 | Date Sampled: 14 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 16 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 24° 9'23.38"S, 27°26'10.00"E

Farm: Harlemoost 51 KQ portion 13

Description: Servitude Road



March 2021

Date Installed: 29th March 2021

April 2021

Date Sampled: 5th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 2nd June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 21st July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 18th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 15th September 2021

Sample Status: Sampled

| DB 53 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 19 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 14 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 16 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 24° 9'56.57"S, 27°26'19.10"E

Farm: Harlemoost 51 KQ portion 13

Description: Servitude Road



March 2021

Date Installed: 29th March 2021

April 2021

Date Sampled: 5th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 2nd June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 21st July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 18th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 15th September 2021

Sample Status: Sampled

| DB 54 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 19 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 14 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 16 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 24°10'32.51"S, 27°26'26.49"E

Farm: Harlemoost 51 KQ portion 16

Description: Servitude Road



March 2021

Date Installed: 29th March 2021

April 2021

Date Sampled: 5th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 2nd June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 21st July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 18th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 15th September 2021

Sample Status: Sampled

| DB 55 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 19 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 14 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 16 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 24°10'55.15"S, 27°26'36.17"E

Farm: Harlemoost 51 KQ portion 15

Description: Servitude Road



March 2021

Date Installed: 29th March 2021

April 2021

Date Sampled: 5th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 2nd June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 21st July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 18th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 15th September 2021

Sample Status: Sampled

| DB 56 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 19 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 14 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 16 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 24°11'38.61"S, 27°26'48.79"E

Farm: Harlemoost 51 KQ portion 15

Description: Servitude Road



March 2021

Date Installed: 29th March 2021

April 2021

Date Sampled: 5th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 2nd June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 21st July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 18th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 15th September 2021

Sample Status: Sampled

| DB 57 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 19 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 14 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 16 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 24°11'49.30"S, 27°26'51.53"E

Farm: Matlabas 94 KQ Portion 2

Description: Servitude Road



March 2021

Date Installed: 29th March 2021

April 2021

Date Sampled: 5th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 1st June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 21st July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 18th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 15th September 2021

Sample Status: Sampled

| DB 58 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 17 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 14 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 15 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 24°12'25.42"S, 27°26'59.45"E

Farm: Matlabas 94 KQ Portion 2

Description: Servitude Road



March 2021

Date Installed: 29th March 2021

April 2021

Date Sampled: 5th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 1st June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 21st July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 18th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 15th September 2021

Sample Status: Sampled

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GIBB Bigen Nyeleti Joint Venture
(GBN-JV)

Client Restricted

Author: D Nell

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| DB 59 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 17 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 14 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 15 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 24°13'6.00"S, 27°26'59.07"E

Farm: Matlabas 94 KQ Portion 2

Description: Servitude Road



March 2021

Date Installed: 29th March 2021

April 2021

Date Sampled: 5th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 1st June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 21st July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 18th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 15th September 2021

Sample Status: Sampled

| DB 60 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 17 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 14 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 15 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 24°14'34.19"S, 27°26'58.48"E

Farm: Matsulan 98 KQ Portion 37

Description: Servitude Road



March 2021

Date Installed: 29th March 2021

April 2021

Date Sampled: 5th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 1st June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 21st July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 18th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 15th September 2021

Sample Status: Sampled

| DB 61 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 17 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 14 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 15 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 24°14'49.64"S, 27°26'58.86"E

Farm: Matsulan 98 KQ Portion 37

Description: Servitude Road



March 2021

Date Installed: 29th March 2021

April 2021

Date Sampled: 5th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 1st June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 21st July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 18th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 15th September 2021

Sample Status: Sampled

| DB 62 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 17 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 14 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 15 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 24°15'19.44"S, 27°26'58.33"E

Farm: Witklip 665 KQ Portion 4

Description: Servitude Road



March 2021

Date Installed: 29th March 2021

April 2021

Date Sampled: 5th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 1st June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 21st July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 18th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 15th September 2021

Sample Status: Sampled

| DB 63 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 17 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 14 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 15 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 24°16'6.23"S, 27°26'58.26"E

Farm: Witklip 665 KQ Portion 4

Description: Servitude Road



March 2021

Date Installed: 29th March 2021

April 2021

Date Sampled: 5th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 1st June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 21st July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 18th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 15th September 2021

Sample Status: Sampled

| DB 64 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 17 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 14 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 15 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 24°16'42.57"S, 27°26'57.57"E

Farm: Witklip 665 KQ Portion 4

Description: Servitude Road



March 2021

Date Installed: 29th March 2021

April 2021

Date Sampled: 5th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 1st June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 21st July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 18th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 15th September 2021

Sample Status: Sampled

Document No:

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Date:

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GIBB Bigen Nyeleti Joint Venture
(GBN-JV)

Client Restricted

Author: D Nell

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| DB 65 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 17 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 14 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 15 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 24°17'26.82"S, 27°26'56.01"E

Farm: Witklip 665 KQ Portion 4

Description: Servitude Road



March 2021

Date Installed: 29th March 2021

April 2021

Date Sampled: 5th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 1st June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 21st July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 18th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 15th September 2021

Sample Status: Sampled

| DB 66 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 17 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 14 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 15 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 24°18'14.46"S, 27°26'56.97"E

Farm: Rugtevley 97 KQ Portion 5

Description: Servitude Road



March 2021

Date Installed: 29th March 2021

April 2021

Date Sampled: 5th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 1st June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 21st July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 18th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 15th September 2021

Sample Status: Sampled

| DB 67 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 17 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 14 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 15 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 24°18'49.52"S, 27°26'57.63"E

Farm: Rugtevely 97 KQ Portion 5

Description: Servitude Road



March 2021

Date Installed: 29th March 2021

April 2021

Date Sampled: 5th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 1st June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 21st July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 18th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 15th September 2021

Sample Status: Sampled

| DB 68 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 17 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 14 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 15 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 24°19'31.03"S, 27°26'56.52"E

Farm: Rugtevley 97 KQ Portion 6

Description: Servitude Road



March 2021

Date Installed: 29th March 2021

April 2021

Date Sampled: 5th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 1st June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 21st July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 18th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 15th September 2021

Sample Status: Sampled

Document No:

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GIBB Bigen Nyeleti Joint Venture
(GBN-JV)

Client Restricted

Author: D Nell

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| DB 69 | |
|----------------|---|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Not Sampled – Bucket was Stolen Air Quality Class: NA |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 17 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 14 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 15 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 24°20'4.26"S, 27°26'56.14"E

Farm: Rugtevley 97 KQ Portion 6

Description: Servitude Road



March 2021

Date Installed: 29th March 2021

April 2021

Date Sampled: 5th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 1st June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 21st July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 18th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 15th September 2021

Sample Status: Sampled

Document No:

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Date:

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GIBB Bigen Nyeleti Joint Venture
(GBN-JV)

Client Restricted

Author: D Nell

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| DB 70 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 17 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 14 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 15 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

DB 71

Location: 24°20'45.70"S, 27°26'55.87"E

Farm: Blaauwpan 133 KQ


Description: Servitude Road



| | |
|-------------|--|
| March 2021 | Date Installed: 29 th March 2021 |
| April 2021 | Date Sampled: 5 th May 2021 Sample Status: Sampled Air Quality Class: Ideal |
| May 2021 | Date Sampled: 1 st June 2021 Sample Status: Sampled Air Quality Class: Ideal |
| June 2021 | Date Sampled: 21 st July 2021 Sample Status: Sampled Air Quality Class: Ideal |
| July 2021 | Date Sampled: 18 th August 2021 Sample Status: Sampled Air Quality Class: Ideal |
| August 2021 | Date Sampled: 15 th September 2021 Sample Status: Sampled |

| | | | |
|--------------|---------------------------|--|-------------------|
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| Revision: | 0.0 | | Author: D Nell |
| Date: | February to March 2022 | | 205 |

| DB 71 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 17 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 14 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 15 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

| | |
|--|--|
| <p>Location: 24°21'48.85"S, 27°26'55.81"E</p> <p>Farm: Blaauwpan 133 KQ</p> <p>Description: Servitude Road</p> |  |
| March 2021 | Date Installed: 29 th March 2021 |
| April 2021 | <p>Date Sampled: 5th May 2021</p> <p>Sample Status: Sampled</p> <p>Air Quality Class: Ideal</p> |
| May 2021 | <p>Date Sampled: 1st June 2021</p> <p>Sample Status: Sampled</p> <p>Air Quality Class: Ideal</p> |
| June 2021 | <p>Date Sampled: 21st July 2021</p> <p>Sample Status: Sampled</p> <p>Air Quality Class: Ideal</p> |
| July 2021 | <p>Date Sampled: 18th August 2021</p> <p>Sample Status: Sampled</p> <p>Air Quality Class: Ideal</p> |
| August 2021 | <p>Date Sampled: 15th September 2021</p> <p>Sample Status: Sampled</p> |

| DB 72 | |
|----------------|---|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 17 th January 2022 Sample Status: Sampled Air Quality Class: Exceeded the Residential limit. |
| January 2022 | Date Sampled: 14 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 15 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

DB 73

Location: 24°23'9.52"S, 27°26'54.85"E

Farm: Blaauwpan 133 KQ

Description: Servitude Road



March 2021

Date Installed: 29th March 2021

April 2021

Date Sampled: 5th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 1st June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 21st July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 18th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 15th September 2021

Sample Status: Sampled

Document No:

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Date:

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GIBB Bigen Nyeleti Joint Venture
(GBN-JV)

Client Restricted

Author: D Nell

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| DB 73 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 17 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 14 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 15 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 24°23'21.10"S, 27°26'33.71"E

Description: Dirt road between Tarentaalpan 132 KQ portion 2 and
Diepkuil 135 Portion 5



March 2021

Date Installed: 29th March 2021

April 2021

Date Sampled: 5th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 1st June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 21st July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 18th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 15th September 2021

Sample Status: Sampled

| DB 74 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 17 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 14 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 15 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 24°23'31.60"S, 27°26'13.03"E

Description: Dirt road between Tarentaalpan 132 KQ portion 2 and
Diepkuil 135 Portion 5



March 2021

Date Installed: 30th March 2021

April 2021

Date Sampled: 5th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 1st June 2021

Sample Status: **Stolen (Dust Bucket stolen from the
dust stand)**

Air Quality Class: NA

June 2021

Date Sampled: 21st July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 18th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 15th September 2021

Sample Status: Sampled

Document No:

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Date:

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GIBB Bigen Nyeleti Joint Venture
(GBN-JV)

Client Restricted

Author: D Nell

213

| DB 75 | |
|----------------|---|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Not Sampled – Bucket Was Stolen Air Quality Class: NA |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 17 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 14 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 15 th March 2022 Sample Status: Not Sampled – Dust Bucket Stolen Air Quality Class: NA |

Location: 24°23'53.46"S, 27°25'19.77"E

Description: Dirt road between Tarentaalpan 132 KQ portion 2 and
Diepkuil 135 Portion 3



March 2021

Date Installed: 30th March 2021

April 2021

Date Sampled: 5th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 1st June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 21st July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 18th August 2021

Sample Status: Sampled


Air Quality Class: Ideal

August 2021

Date Sampled: 15th September 2021

Sample Status: Sampled

| DB 76 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 12 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 10 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 17 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 14 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 15 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

| | |
|--|--|
| <p>Location: 24°24'24.61"S, 27°24'3.45"E</p> <p>Farm: Diepkuil 135 KQ Portion 3</p> <p>Description: Along the R510</p> |  |
| March 2021 | Date Installed: 30th March 2021 |
| April 2021 | <p>Date Sampled: 5th May 2021</p> <p>Sample Status: Sampled</p> <p>Air Quality Class: Ideal</p> |
| May 2021 | <p>Date Sampled: 1st June 2021</p> <p>Sample Status: Sampled</p> <p>Air Quality Class: Ideal</p> |
| June 2021 | <p>Date Sampled: 21st July 2021</p> <p>Sample Status: Sampled</p> <p>Air Quality Class: Ideal</p> |
| July 2021 | <p>Date Sampled: 17th August 2021</p> <p>Sample Status: Sampled</p> <p>Air Quality Class: Ideal</p> |
| August 2021 | <p>Date Sampled: 14th September 2021</p> <p>Sample Status: Sampled</p> |

| DB 77 | |
|----------------|---|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 11 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 9 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 17 th January 2022 Sample Status: Sampled Air Quality Class: Exceeded the Residential limit. |
| January 2022 | Date Sampled: 14 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 15 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 23°41'35.31"S; 27°38'51.43"E

Farm: Diepkuil Portion 3

Description: Along the R510



March 2021

Date Installed: 30th March 2021

April 2021

Date Sampled: 5th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 1st June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 21st July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 17th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 14th September 2021

Sample Status: Sampled

| DB 78 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 11 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 9 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 17 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 14 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 15 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 24°25'29.93"S, 27°24'23.06"E

Farm: Diepkuil 135 KQ Portion 1

Description: Along the R510



March 2021

Date Installed: 30th March 2021

April 2021

Date Sampled: 4th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 1st June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 19th July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 17th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 14th September 2021

Sample Status: Sampled

| DB 79 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 11 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 9 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 17 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 14 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 15 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 24°25'33.45"S, 27°24'13.50"E

Description: Along Dirt road between Zondagsuil 137 KQ and Diepkuil 135 KQ portion 1



March 2021

Date Installed: 30th March 2021

April 2021

Date Sampled: 4th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 1st June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 19th July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 17th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 14th September 2021

Sample Status: Sampled

| DB 80 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 11 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 9 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 18 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 14 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 15 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 24°25'47.88"S, 27°23'10.20"E

Description: Along Dirt road between Zondagsuil 137 KQ and Diepkuil 135 KQ portion 1



March 2021

Date Installed: 30th March 2021

April 2021

Date Sampled: 4th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 1st June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 19th July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 17th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 14th September 2021

Sample Status: Sampled

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GIBB Bigen Nyeleti Joint Venture
(GBN-JV)

Client Restricted

Author: D Nell

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| DB 81 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 11 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 9 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 18 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 14 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 15 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 24°26'31.14"S, 27°21'39.92"E

Description: Along Dirt road between Buffelsvley 127 KQ and Karoobult 126 KQ



March 2021

Date Installed: 30th March 2021

April 2021

Date Sampled: 4th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 1st June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 19th July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 17th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 14th September 2021

Sample Status: Sampled

| DB 82 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 11 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 9 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 18 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 14 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 15 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 24°27'9.88"S, 27°20'11.67"E

Description: Along Dirt road between Buffelsvley 127 KQ and Karoobult 126 KQ



March 2021

Date Installed: 30th March 2021

April 2021

Date Sampled: 4th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 1st June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 19th July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 17th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 14th September 2021

Sample Status: Sampled

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GIBB Bigen Nyeleti Joint Venture
(GBN-JV)

Client Restricted

Author: D Nell

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| DB 83 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 11 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 9 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 18 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 14 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 15 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 24°28'20.86"S, 27°17'27.36"E

Farm: Paarl 124 KQ Portion 6

Description: Beneath power line



March 2021

Date Installed: 30th March 2021

April 2021

Date Sampled: 4th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 1st June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 19th July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 17th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 14th September 2021

Sample Status: Sampled

| DB 84 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 11 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: NA Sample Status: Not Sampled – No Access Air Quality Class: NA |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 18 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 14 th February 2022 Sample Status: Not Sampled – No Access Air Quality Class: NA |
| February 2022 | Date Sampled: 15 th March 2022 Sample Status: Not Sampled – No Access Air Quality Class: NA |

Location: 24°30'0.19"S, 27°16'58.48"E

Farm: Paarl 124 KQ Portion 3

Description: Beneath powerlines near eastern boundary line



March 2021

Date Installed: 29th March 2021

April 2021

Date Sampled: 4th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 1st June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 19th July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 17th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 14th September 2021

Sample Status: Sampled

Document No:

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Date:

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GIBB Bigen Nyeleti Joint Venture
(GBN-JV)

Client Restricted

Author: D Nell

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| DB 85 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 11 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: NA Sample Status: Not Sampled – No Access Air Quality Class: NA |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 18 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 14 th February 2022 Sample Status: Not Sampled – No Access Air Quality Class: NA |
| February 2022 | Date Sampled: 15 th March 2022 Sample Status: Not Sampled – No Access Air Quality Class: NA |

Location: 24°31'38.11"S, 27°16'29.83"E

Farm: Stratford 462 KO

Description: Along D769 dirt road



March 2021

Date Installed: 29th March 2021

April 2021

Date Sampled: 4th May 2021

Sample Status: Sampled

Air Quality Class: Exceeded Residential Limit

May 2021

Date Sampled: 1st June 2021

Sample Status: Sampled

Air Quality Class: Exceeded Residential Limit

June 2021

Date Sampled: 19th July 2021

Sample Status: Sampled

Air Quality Class: Exceeded Residential Limit

July 2021

Date Sampled: 17th August 2021

Sample Status: Sampled

Air Quality Class: Exceeded Residential Limit

August 2021

Date Sampled: 14th September 2021

Sample Status: Sampled

| DB 86 | |
|----------------|--|
| | Air Quality Class: Exceeded Residential Limit |
| September 2021 | Date Sampled: 11 th October 2021 Sample Status: Sampled Air Quality Class: Exceeded Residential Limit |
| October 2021 | Date Sampled: 9 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Exceeded Residential Limit |
| December 2021 | Date Sampled: 18 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 14 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 15 th March 2022 Sample Status: Sampled Air Quality Class: Exceeded Residential Limit |

Location: 24°33'53.16"S, 27°18'16.95"E

Farm: Stratford 462 KQ

Description: Along D769 dirt road



March 2021

Date Installed: 29th March 2021

April 2021

Date Sampled: 4th May 2021

Sample Status: Sampled

Air Quality Class: Exceeded both Residential and Industrial limits

May 2021

Date Sampled: 1st June 2021

Sample Status: Sampled

Air Quality Class: Exceeded both Residential and Industrial limits

June 2021

Date Sampled: 19th July 2021

Sample Status: Sampled

Air Quality Class: Exceeded both Residential and Industrial limits

July 2021

Date Sampled: 17th August 2021

Sample Status: Sampled

Air Quality Class: Exceeded both Residential and Industrial limits

Document No:

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Revision:

0.0

Date:

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GIBB Bigen Nyeleti Joint Venture
(GBN-JV)

Client Restricted

Author: D Nell

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| DB 87 | |
|----------------|---|
| August 2021 | <p>Date Sampled: 14th September 2021</p> <p>Sample Status: Sampled</p> <p>Air Quality Class: Exceeded both the Residential limit and the Industrial</p> |
| September 2021 | <p>Date Sampled: 11th October 2021</p> <p>Sample Status: Sampled</p> <p>Air Quality Class: Exceeded both the Residential limit and the Industrial</p> |
| October 2021 | <p>Date Sampled: 9th November 2021</p> <p>Sample Status: Sampled</p> <p>Air Quality Class: Exceeded Residential Limit</p> |
| November 2021 | <p>Date Sampled: 9th December 2021</p> <p>Sample Status: Sampled</p> <p>Air Quality Class: Exceeded the Residential, Industrial and Unacceptable limit</p> |
| December 2021 | <p>Date Sampled: 18th January 2022</p> <p>Sample Status: Sampled</p> <p>Air Quality Class: Ideal</p> |
| January 2022 | <p>Date Sampled: 14th February 2022</p> <p>Sample Status: Sampled</p> <p>Air Quality Class: Exceeded the Residential and Industrial Limit.</p> |
| February 2022 | <p>Date Sampled: 15th March 2022</p> <p>Sample Status: Sampled</p> |

| | | | |
|--------------|---------------------------|----------------------------------|-------------------|
| Document No: | MON-AQR-244-20_21 (22-02) | GIBB Bigen Nyeleti Joint Venture | Client Restricted |
| Revision: | 0.0 | (GBN-JV) | Author: D Nell |
| Date: | February to March 2022 | | 238 |

| DB 87 | |
|-------|--|
| | Air Quality Class: Exceeded the Residential and Industrial Limits. |

| DB 88 | |
|--|---|
| <p>Location: 24°34'14.79"S, 27°18'36.10"E</p> <p>Farm: Stratford 462 KQ</p> <p>Description: Situated between the houses of the small community</p> |  |
| March 2021 | Date Installed: 29 th March 2021 |
| April 2021 | <p>Date Sampled: 4th May 2021</p> <p>Sample Status: Sampled</p> <p>Air Quality Class: Exceeded Residential Limit</p> |
| May 2021 | <p>Date Sampled: 1st June 2021</p> <p>Sample Status: Sampled</p> <p>Air Quality Class: Ideal</p> |
| June 2021 | <p>Date Sampled: 19th July 2021</p> <p>Sample Status: Sampled</p> <p>Air Quality Class: Ideal</p> |
| July 2021 | <p>Date Sampled: 17th August 2021</p> <p>Sample Status: Sampled</p> |

| | | | |
|--------------|---------------------------|--|-------------------|
| Document No: | MON-AQR-244-20_21 (22-02) | GIBB Bigen Nyeleti Joint Venture (GBN-JV) | Client Restricted |
| Revision: | 0.0 | | Author: D Nell |
| Date: | February to March 2022 | | 239 |

| DB 88 | | | |
|----------------|---------------------------|--|-------------------|
| | | Air Quality Class: Ideal | |
| August 2021 | | Date Sampled: 14 th September 2021 Sample Status: Sampled Air Quality Class: Ideal | |
| September 2021 | | Date Sampled: 11 th October 2021 Sample Status: Sampled Air Quality Class: Ideal | |
| October 2021 | | Date Sampled: 9 th November 2021 Sample Status: Sampled Air Quality Class: Ideal | |
| November 2021 | | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal | |
| December 2021 | | Date Sampled: 18 th January 2022 Sample Status: Sampled Air Quality Class: Exceeded both the residential and industrial limits. | |
| January 2022 | | Date Sampled: 14 th February 2022 Sample Status: Sampled Air Quality Class: Ideal | |
| February 2022 | | Date Sampled: 15 th March 2022 Sample Status: Sampled Air Quality Class: Ideal | |
| Document No: | MON-AQR-244-20_21 (22-02) | GIBB Bigen Nyeleti Joint Venture (GBN-JV) | Client Restricted |
| Revision: | 0.0 | | Author: D Nell |
| Date: | February to March 2022 | | 240 |

Location: 24°34'24.25"S, 27°18'35.18"E

Farm: Stratford 462 KO

Description: Situated within Primary School Property



March 2021

Date Installed: 29th March 2021

April 2021

Date Sampled: 4th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 1st June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 19th July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 17th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 14th September 2021

Sample Status: Sampled

Document No:

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Revision:

0.0

Date:

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GIBB Bigen Nyeleti Joint Venture
(GBN-JV)

Client Restricted

Author: D Nell

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| DB 89 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 11 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 9 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 18 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 14 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 15 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 24°35'35.70"S, 27°17'45.31"E

Farm: Mooivalei 342 KQ – Portion 1

Description: Situated next to the farmhouse property fence



March 2021

Date Installed: 29th March 2021

April 2021

Date Sampled: 4th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 1st June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 19th July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 17th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 14th September 2021

Sample Status: Sampled

| DB 90 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 11 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 9 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 18 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 14 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 15 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 24°35'59.20"S, 27°17'38.40"E

Farm: Mooivalei 342 KQ – Portion 2

Description: Situated Within the farmhouse boundary fence



March 2021

Date Installed: 29th March 2021

April 2021

Date Sampled: 4th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 3rd June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 22nd July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 17th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 14th September 2021

Sample Status: Sampled

| DB 91 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 11 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 9 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 18 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 14 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 15 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 24°36'25.02"S, 27°17'49.23"E

Farm: Mooivalei 342 KQ – Portion 4

Description: Situated near the farmhouse



March 2021

Date Installed: 29th March 2021

April 2021

Date Sampled: 4th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 1st June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 19th July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 17th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 14th September 2021

Sample Status: Sampled

| DB 92 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 11 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 9 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Exceeded Residential Limit |
| December 2021 | Date Sampled: 18 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 14 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 15 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 24°36'51.37"S, 27°18'27.13"E

Farm: Mooivalei 342 KQ – Portion 7

Description: Situated next to the farm work shed



March 2021

Date Installed: 29th March 2021

April 2021

Date Sampled: 4th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 1st June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 19th July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 17th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 14th September 2021

Sample Status: Sampled

| DB 93 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 11 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 9 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 18 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 14 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 15 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 24°37'18.10"S, 27°18'45.97"E

Farm: Mooivalei 342 KQ – Portion 9

Description: Situated within horse paddock



March 2021

Date Installed: 29th March 2021

April 2021

Date Sampled: 4th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 1st June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 19th July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 17th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 14th September 2021

Sample Status: Sampled

| DB 94 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 11 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 9 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 18 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 14 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 15 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 24°38'3.48"S, 27°18'54.13"E

Farm: NA

Description: Along D727 dirt road



March 2021

Date Installed: 29th March 2021

April 2021

Date Sampled: 4th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 1st June 2021

Sample Status: Sampled

Air Quality Class: Exceeded Residential Limit

June 2021

Date Sampled: 19th July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 17th August 2021

Sample Status: Sampled

Air Quality Class: Exceeded Residential Limit

August 2021

Date Sampled: 14th September 2021

Sample Status: Sampled

| DB 95 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 11 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 9 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 17 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 14 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 15 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 23°41'25.22"S, 27°34'18.42"E

Farm: NA

Description: Along unnamed dirt road on the fence line of Exxaro coal mine



| | |
|----------------|---|
| March 2021 | Access Restrictions |
| April 2021 | Date Installed: 6 th May 2021 |
| May 2021 | Date Sampled: 3 rd June 2021 Sample Status: Sampled Air Quality Class: Ideal |
| June 2021 | Date Sampled: 20 th July 2021 Sample Status: Sampled Air Quality Class: Ideal |
| July 2021 | Date Sampled: 19 th August 2021 Sample Status: Sampled Air Quality Class: Ideal |
| August 2021 | Date Sampled: 16 th September 2021 Sample Status: Sampled Air Quality Class: Ideal |
| September 2021 | Date Sampled: 11 th October 2021 |

| DB 96 | |
|---------------|--|
| | <p>Sample Status: Sampled</p> <p>Air Quality Class: Ideal</p> |
| October 2021 | <p>Date Sampled: 9th November 2021</p> <p>Sample Status: Sampled</p> <p>Air Quality Class: Ideal</p> |
| November 2021 | <p>Date Sampled: 9th December 2021</p> <p>Sample Status: Sampled</p> <p>Air Quality Class: Ideal</p> |
| December 2021 | <p>Date Sampled: 19th January 2022</p> <p>Sample Status: Sampled</p> <p>Air Quality Class: Ideal</p> |
| January 2022 | <p>Date Sampled: 15th February 2022</p> <p>Sample Status: Sampled</p> <p>Air Quality Class: Ideal</p> |
| February 2022 | <p>Date Sampled: 16th March 2022</p> <p>Sample Status: Sampled</p> <p>Air Quality Class: Ideal</p> |

Location: 24°26'15.46"S, 27°22'29.41"E

Description: Along Dirt road between Zondagsuil 137 KQ and Diepkuil 135 KQ portion 1



March 2021

Date Installed: 29th March 2021

April 2021

Date Sampled: 4th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 1st June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 19th July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 17th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 14th September 2021

Sample Status: Sampled

| DB 97 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 11 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 9 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Exceeded Residential Limit |
| December 2021 | Date Sampled: 18 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 14 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 15 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 24°26'48.84"S, 27°18'57.38"E

Farm: Buffelsvley 127 KQ

Description: Next to workshop/ homestead



March 2021

Date Installed: 29th March 2021

April 2021

Date Sampled: 4th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 1st June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 19th July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 17th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 14th September 2021

Sample Status: Sampled

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GIBB Bigen Nyeleti Joint Venture
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Client Restricted

Author: D Nell

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| DB 98 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 11 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 9 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: NA Sample Status: Not Sampled – No Access Air Quality Class: NA |
| December 2021 | Date Sampled: NA Sample Status: Not Sampled – No Access Air Quality Class: NA |
| January 2022 | Date Sampled: 14 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 15 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

Location: 24°32'48.86"S, 27°17'24.55"E

Farm: Stratford 462 KO

Description: Along D769 dirt road



March 2021

Date Installed: 29th March 2021

April 2021

Date Sampled: 4th May 2021

Sample Status: Sampled

Air Quality Class: Exceeded residential limits

May 2021

Date Sampled: 1st June 2021

Sample Status: Sampled

Air Quality Class: Exceeded both the Residential and Industrial limits

June 2021

Date Sampled: 19th July 2021

Sample Status: Sampled

Air Quality Class: Exceeded residential limits

July 2021

Date Sampled: 17th August 2021

Sample Status: Sampled

Air Quality Class: Exceeded both the Residential and Industrial limits

August 2021

Date Sampled: 14th September 2021

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Client Restricted

Author: D Nell

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| DB 99 | |
|----------------|--|
| | <p>Sample Status: Sampled</p> <p>Air Quality Class: Exceeded the Residential limit</p> |
| September 2021 | <p>Date Sampled: 11th October 2021</p> <p>Sample Status: Sampled</p> <p>Air Quality Class: Exceeded the Residential limit</p> |
| October 2021 | <p>Date Sampled: 9th November 2021</p> <p>Sample Status: Sampled</p> <p>Air Quality Class: Ideal</p> |
| November 2021 | <p>Date Sampled: 9th December 2021</p> <p>Sample Status: Sampled</p> <p>Air Quality Class: Ideal</p> |
| December 2021 | <p>Date Sampled: 18th January 2022</p> <p>Sample Status: Sampled</p> <p>Air Quality Class: Exceeded the Residential limit.</p> |
| January 2022 | <p>Date Sampled: 14th February 2022</p> <p>Sample Status: Sampled</p> <p>Air Quality Class: Exceeded the Residential Limit.</p> |
| February 2022 | <p>Date Sampled: 15th March 2022</p> <p>Sample Status: Sampled</p> <p>Air Quality Class: Ideal</p> |

DB 100

Location: 24°35'5.76"S, 27°18'49.94"E

Farm: Mooivalei 342 KQ – Portion 1

Description: Near the D1649 Road



March 2021

Date Installed: 29th March 2021

April 2021

Date Sampled: 4th May 2021

Sample Status: Sampled

Air Quality Class: Ideal

May 2021

Date Sampled: 1st June 2021

Sample Status: Sampled

Air Quality Class: Ideal

June 2021

Date Sampled: 19th July 2021

Sample Status: Sampled

Air Quality Class: Ideal

July 2021

Date Sampled: 17th August 2021

Sample Status: Sampled

Air Quality Class: Ideal

August 2021

Date Sampled: 14th September 2021

Sample Status: Sampled

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Author: D Nell

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| DB 100 | |
|----------------|--|
| | Air Quality Class: Ideal |
| September 2021 | Date Sampled: 11 th October 2021 Sample Status: Sampled Air Quality Class: Ideal |
| October 2021 | Date Sampled: 9 th November 2021 Sample Status: Sampled Air Quality Class: Ideal |
| November 2021 | Date Sampled: 9 th December 2021 Sample Status: Sampled Air Quality Class: Ideal |
| December 2021 | Date Sampled: 18 th January 2022 Sample Status: Sampled Air Quality Class: Ideal |
| January 2022 | Date Sampled: 14 th February 2022 Sample Status: Sampled Air Quality Class: Ideal |
| February 2022 | Date Sampled: 15 th March 2022 Sample Status: Sampled Air Quality Class: Ideal |

ES01

Location: 24°34'22.26"S, 27°18'33.97"E

Description: Primary School



June 2021

Not installed due to insurance delays and time constraints

July 2021

Installed: 19th August 2021

August 2021

Date Sampled: 16th September 2021

Sample Status: Sampled

September 2021

Date Sampled: 11th October 2021

Sample Status: Sampled

October 2021

Date Sampled: 9th November 2021

Sample Status: Sampled

November 2021

Date Sampled: 8th December 2021

Sample Status: Sampled

December 2021

Date Sampled: 18th January 2022

Sample Status: Sampled

January 2022

Date Sampled: 14th February 2022

Sample Status: Sampled

February 2022

Date Sampled: 15th March 2022

Sample Status: Sampled

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Author: D Nell

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ES02

Location: 23°41'51.31"S, 27°34'6.52"E

Description: – Eskom - Medupi Power Station



June 2021

Date Installed: 19th July 2021

July 2021

Date Sampled: 20th August 2021

Sample Status: Sampled

August 2021

Date Sampled: 14th September 2021

Sample Status: Sampled

September 2021

Date Sampled: 13th October 2021

Sample Status: Sampled

October 2021

Date Sampled: 10th November 2021

Sample Status: Sampled

November 2021

Date Sampled: 9th December 2021

Sample Status: Sampled

December 2021

Date Sampled: 19th January 2022

Sample Status: Sampled

January 2022

Date Sampled: 15th February 2022

Sample Status: Sampled

February 2022

Date Sampled: 16th March 2022

Document No:

MON-AQR-244-20_21 (22-02)

Revision:

0.0

Date:

February to March 2022


GIBB Bigen Nyeleti Joint Venture
(GBN-JV)

Client Restricted

Author: D Nell

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| ES02 | |
|------|------------------------|
| | Sample Status: Sampled |

| ES03 | |
|--|--|
| <p>Location: 24°35'37.25"S, 27°17'43.45"E</p> <p>Farm: Mooivalei 342 KQ – Portion 1</p> <p>Description: Situated within the farmhouse property fence</p> |  |
| June 2021 | Date Installed: 19 th July 2021 |
| July 2021 | <p>Date Sampled: 20th August 2021</p> <p>Sample Status: Sampled</p> |
| August 2021 | <p>Date Sampled: 14th September 2021</p> <p>Sample Status: Sampled</p> |
| September 2021 | <p>Date Sampled: 11th October 2021</p> <p>Sample Status: Sampled</p> |
| October 2021 | <p>Date Sampled: 9th November 2021</p> <p>Sample Status: Sampled</p> |
| November 2021 | <p>Date Sampled: 8th December 2021</p> <p>Sample Status: Sampled</p> |
| December 2021 | <p>Date Sampled: 18th January 2022</p> <p>Sample Status: Sampled</p> |
| January 2022 | Date Sampled: 14 th February 2022 |

| | | | |
|--------------|---------------------------|--|-------------------|
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| ES03 | |
|---------------|---|
| | Sample Status: Sampled |
| February 2022 | Date Sampled: 15 th March 2022 Sample Status: Sampled |


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| Revision: | 0.0 | | Author: D Nell |
| Date: | February to March 2022 | | 268 |

APPENDIX D – INDEPENDENT FORM AND CV

STATEMENT OF OBJECTIVENESS AND COMPETENCE

The author(s) of this document hereby declare that he/she/they:

- Act as an independent and objective consultant/s;
- Does not have any financial interest in the undertaking of this project or projects, other than remuneration for the work performed in terms of relevant legislation;
- Has and will not have a vested interest in the current and/or proposed activity, nor will engage in any directly conflicting interest associated with this project;
- Undertakes to function transparently and provide any information to a competent authority if compelled to do so by law or by consent of the involved parties;
- Based on the information provided by the client, due diligence studies or any other source or sources, have presented the results, discussion and conclusion, as applicable to the project concerned, to the best of his/her/their professional ability;
- Reserves the right to modify aspects pertaining to this study should additional information become available through ongoing research and further work on the relevant field/s;
- Undertakes to have the work peer reviewed on a regular basis by a competent specialist in the field/s of study;
- Is duly qualified and experienced to undertake the work at hand; and
- Adheres to the code of conduct as stipulated under Section 28 (3) of the Natural Scientific Professions Act 27 of 2003 as observed by the South African Council for Natural Scientific Professions (SACNASP).
- Signed by Anton Botha:



Date: 03-05-2022

| Environmental Auditor | Relevant expertise |
|---|--|
| Anton Botha Pr. Sci.Nat Registration No 122440 | Has completed a B.Sc. in Environmental Sciences, followed by a B.Sc. (Hons) and M.Sc. specialising in Hydrogeology and Hydrology. Anton has comprehensive experience and knowledge on compliance monitoring, project management and specialist reporting. As an environmental consultant, Anton has provided numerous environmental monitoring assessments, specialist input services, mine closure quantum's and environmental audits. monitoring assessments, specialist input services and environmental audits. |

| | | | |
|--------------|---------------------------|--|--|
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| Revision: | 0.0 | | |
| Date: | February to March 2022 | | |



ENVIRONMENTAL ASSURANCE (PTY) LTD

Anton Botha

ENVIRONMENTAL CONSULTANT & DIVISIONAL MANAGER

394 Tram Street, New Muckleneuk, Pretoria, 0181

T : 012 460 9768 ; M : 083 555 4354 ; F : 012 460 3071 ; E mail : anton@envass.co.za

Date of Birth : 25 July 1991 ; Place of Birth : South Africa

Ethnic Group and Gender : White Male ; Disabilities : None

AREAS OF EXPERTISE

- Compliance Monitoring
- Data Analysis & Interpretation
- Potable, Ground and Surface Water Quality
- Compliance Monitoring
- Data Analysis & Interpretation
- Hydrogeology
- Ambient Air and Particulate Matter Quality
- Water and Salt Balance Development and Assessment
- Hydrogeology
- Ambient Air and Particulate Matter Quality
- Customer Relationships
- Site Audits and Inspections
- Field Sampling of dust, soil, ambient air and water
- Customer Relationships
- Site Audits and Inspections

CAREER HISTORY

Employer
Period
Position
Responsibilities

ENVIRONMENTAL ASSURANCE (PTY) LTD

Anton holds a B.Sc. in Environmental Sciences, followed by a B.Sc. (Hons) and M.Sc. specializing in Hydrogeology and Hydrology. He has comprehensive experience and knowledge on compliance monitoring, project management and specialist reporting. As an environmental consultant, Anton has provided several environmental monitoring assessments, audits, mine closure assessments and specialist input services.

BUSINESS UNIT HEAD: COMPLIANCE MONITORING, SPECIALIST AND MINE CLOSURE

Environmental Consultant and Auditor

October 2018 – Current

- Develop and maintain environmental compliance monitoring programmes in conjunction with site audits and assessments. Monitoring co-ordination and planning of all relevant projects. Maintaining data and results from monitoring programmes and databases. Conduct compliance audits, determine compliance ratings and report on conditions. Determining financial provision of mine closures. Compile and overseeing reports on water-, soil-, air-quality and site findings, with interpretation of results and possible recommendations. Maintain and build customer relationships with guidance on environmental matters and updates on environmental legislation. Market to potential clients with site specific marketing material

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EDUCATION AND QUALIFICATIONS

North-West University; Masters (MSc.) Hydrogeology - 2018
 North-West University; Honours BSc. Hydrogeology and Hydrology - 2013
 North-West University; Degree BSc. Environmental Science Geology and Geography – 2012

PROFESSIONAL STATUS

Registration
 Membership

Registered as a Professional Natural Scientist (122440) with the South African Council of Natural Scientific Professions (SACNASP)

PROJECT EXPERIENCE

| PROJECT DESCRIPTION | CLIENT |
|--|--------------------------------------|
| Water and Air Quality Monitoring programme co-ordination, management and reporting | Afrimat Lyttleton |
| | Afrimat Delfsand |
| | Assmang Black Rock |
| | Assmang Dwarsrivier |
| | Barloworld Slurry |
| | Blue Diamond Mine |
| | Exxaro Base Metals Zincor |
| | Lonmin Marikana |
| | Kimberly Ekapa Mining |
| | Kimberley Ekapa Mining Joint Venture |
| | Kudumane Manganese Resources |
| | Mooikloof Heights |
| | Polokwane Smelter |
| | PPC Dwaalboom |
| | PPC Slurry |
| | Rolfes Silica |
| | TC Smelter |
| | Makoya Binkpan |
| | Makoya Highveld |
| | SACMH Umlabu |
| | SACMH Voorslag |
| | Ocon Brick |
| | Group 5 Everite |
| | Locksand |
| | Samancor WCM |
| | Samancor ECM |
| | Rosema Olifantsfontein |
| | Rosema Delmas |
| | Sublime |
| | SABrix Boekenhoutkloof |
| | SABrix Zandfontein |
| | Tubatse Chrome |
| | Infrabuild |
| | Federale Stene |
| | Tronox |
| | Canyon Coal |
| | Lynca Meats |
| | Ankerlig |
| | Lafarge |
| | SACMH Voorslag |
| Water and Salt Balances | PPC Dwaalboom |
| | Kimberly Ekapa Mining (De Beers) |

| | | | |
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REFERENCES

| | |
|--|------------------------------|
| | SABrix Zandfontein |
| | SABrix Boekenhoutkloof |
| | Lynca Meats |
| | Ilangabi Brikor Plant 1 |
| | Kudumane Manganese |
| | Tronox Namakwa Sands Smelter |
| Specialist Noise, Air, Odour Assessments | Numerous |
| Odour Assessment | Lafarge Geocycle |
| Regulation 34 EMPr Audits | Several |
| Technical AEL, WML and WUL Audits | Numerous |

| CONTACT NAME | COMPANY | RELATIONSHIP | CONTACT |
|------------------|---------|--------------|--------------|
| Emile van Druten | ENVASS | Director | 012 460 9768 |
| Carl Schoeman | ENVASS | Consultant | 012 460 9768 |



herewith certifies that

Anton Botha

Registration Number: 122440

is a registered scientist

in terms of section 20(3) of the Natural Scientific Professions Act, 2003
(Act 27 of 2003)

in the following field(s) of practice (Schedule 1 of the Act)

Environmental Science (Professional Natural Scientist)

Effective 11 September 2019

Expires 31 March 2023



A handwritten signature in black ink, appearing to read 'Botha'.

Chairperson

A handwritten signature in black ink, appearing to read 'R. J. J. J.'.

Chief Executive Officer



To verify this certificate scan this code

| | | | |
|--------------|---------------------------|--|-------------------|
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| Revision: | 0.0 | | Author: D Nell |
| Date: | February to March 2022 | | 273 |

STATEMENT OF OBJECTIVENESS AND COMPETENCE

The author(s) of this document hereby declare that he/she/they:

- Act as an independent and objective consultant/s;
- Does not have any financial interest in the undertaking of this project or projects, other than remuneration for the work performed in terms of relevant legislation;
- Has and will not have a vested interest in the current and/or proposed activity, nor will engage in any directly conflicting interest associated with this project;
- Undertakes to function transparently and provide any information to a competent authority if compelled to do so by law or by consent of the involved parties;
- Based on the information provided by the client, due diligence studies or any other source or sources, have presented the results, discussion and conclusion, as applicable to the project concerned, to the best of his/her/their professional ability;
- Reserves the right to modify aspects pertaining to this study should additional information become available through ongoing research and further work on the relevant field/s;
- Undertakes to have the work peer reviewed on a regular basis by a competent specialist in the field/s of study;
- Is duly qualified and experienced to undertake the work at hand; and
- Adheres to the code of conduct as stipulated under Section 28 (3) of the Natural Scientific Professions Act 27 of 2003 as observed by the South African Council for Natural Scientific Professions (SACNASP).
- Signed by Damon Nell:



Date: 21-04-2022

| Environmental Auditor | Relevant expertise |
|---|--|
| Damon Nell Cand.Sci.Nat Registration No 124378 | Has completed a B.Sc. in Environmental Sciences, followed by a B.Sc. (Hons) in Plant Science. Damon has comprehensive experience and knowledge on compliance monitoring, project management and specialist reporting. As an environmental consultant, Damon has provided numerous environmental monitoring assessments, and specialist input services. |

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| Date: | February to March 2022 | | 274 |



ENVIRONMENTAL ASSURANCE (PTY) LTD

Damon Nell

ENVIRONMENTAL CONSULTANT & FIELD TECHNICIAN

394 Tram Street, New Muckleneuk, Pretoria, 0181

T : 012 460 9768 ; M : 072 506 9692; F : 012 460 3071 ; E mail :
damon@envass.co.za

Date of Birth : 01 June 1997; Place of Birth : South Africa

Ethnic Group and Gender : White Male ; Disabilities : None

AREAS OF EXPERTISE

- Compliance Monitoring
- Ambient Air and Particulate Matter Quality
- Customer Relationships
- Data Analysis & Interpretation
- Potable, Ground and Surface Water Quality
- Field Sampling of dust, soil, ambient air and water
- Water and Salt Balance Development and Assessment

CAREER HISTORY

Employer
Period
Position
Responsibilities

ENVIRONMENTAL ASSURANCE (PTY) LTD

Damon holds a B.Sc. in Environmental Sciences, followed by a B.Sc. (Hons) in Plant Science from the University of Pretoria. He has comprehensive experience and knowledge on compliance monitoring, project management and specialist reporting. As an environmental consultant, Damon has provided several environmental monitoring assessments, and specialist input services.

Environmental Consultant and Field Technician.

February 2021 – Current

- Conduct specialist studies and reports in the field of Visual Impacts, and Terrestrial Vegetation, and conduct compliance monitoring with regards to surface water, ground water, air quality and site findings, with interpretation of results and possible recommendations. Maintain and build customer relationships with guidance on environmental matters and updates on environmental legislation. Market to potential clients with site specific marketing material.

EDUCATION AND QUALIFICATIONS

University of Pretoria: Honours (Hons) BSc. Plant Science and Plant Diversity – 2019

University of Pretoria: Degree BSc. Environmental Science - 2018

PROFESSIONAL STATUS

Registration
Membership

Registered as a Candidate Natural Scientist (124378) with the South African Council of Natural Scientific Professions (SACNASP)

| | | | |
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PROJECT EXPERIENCE

| PROJECT DESCRIPTION | CLIENT |
|---|-------------------------------|
| Water and Air Quality Monitoring program reporting | Tronox Fairbreeze |
| | Tronox Hillendale |
| | Hercules Bricks |
| | Sublime |
| | Silica Quartz |
| | SA Brix |
| | Rosema |
| Specialist Visual Impact and Vegetation Assessments | Victoria Bricks |
| | Samancor Ferrometals |
| | Goldfields – Deep South |
| | Samancor Eastern Chrome Mines |
| | Kephri Innovations |

REFERENCES

| CONTACT NAME | COMPANY | RELATIONSHIP | CONTACT |
|------------------|---------|--------------|--------------|
| Emile van Druten | ENVASS | Director | 012 460 9768 |
| Carl Schoeman | ENVASS | Consultant | 012 460 9768 |

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| Date: | February to March 2022 | | 276 |



herewith certifies that

Damon Travis Nell

Registration Number: 124378

is a registered scientist

in terms of section 20(3) of the Natural Scientific Professions Act, 2003
(Act 27 of 2003)

in the following field(s) of practice (Schedule 1 of the Act)

Ecological Science (Candidate Natural Scientist)
Environmental Science (Candidate Natural Scientist)
Botanical Science (Candidate Natural Scientist)

Effective **9 September 2020**

Expires **31 March 2023**



Chairperson

Chief Executive Officer

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|--------------|---------------------------|----------------------------------|-------------------|
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| Revision: | 0.0 | (GBN-JV) | Author: D Nell |
| Date: | February to March 2022 | | 277 |