

PROSPECTING RIGHT OVER PORTION 2 (A PORTION OF PORTION 1), REMAINDER PORTION, REMAINDER PORTION OF PORTION 1 AND PORTION 3 OF THE FARM MAKGANYENE NO 667 KURUMAN RD MAGISTERIAL DISTRICT, NORTHERN CAPE PROVINCE

ENVIRONMENTAL PERFORMANCE ASSESSMENT



DMRE REFERENCE NUMBER:	NC 30/5/1/1/2/12774 PR & NC 00122 PR/11
AUDIT PERIOD:	July 2022 – July 2023

PREPARED FOR:

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1. PROJECT SPECIFIC DETAIL





ITEM	PROSPECTING RIGHT HOLDER
Company Name	Assmang (Pty) Ltd Makganyane Resources (Pty) Ltd
Contact Person	Mr. Lionel Koster
Tel Number	064 617 8510
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ITEM	CONSULTANT DETAIL
Company Name	Greenmined Environmental (Pty) Ltd
Contact Person	Christine Fouché
Tel Number	021 851 2673
Cell Number	082 811 8514
E-mail Address	Christine.f@greenmined.co.za
Postal Address	Postnet Suite 62 Private Bag x15 Somerset West 7129
ITEM	LOCATION AND AREA INFORMATION
Site Name	Makganyane Prospecting Right
Property Description	<ul style="list-style-type: none">  Remaining Extend of the farm Makganyene No 667  Portion 1 (Remaining Portion) of the farm Makganyene No 667  Portion 2 (a portion of Portion 1) of the farm Makganyene No 667  Portion 3 of the farm Makganyene No 667
Location	The prospecting area is located ±24 km north-west of Postmasburg on opposite sides of the R385 provincial road.
Size of Area	1 549.44 ha

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2. ENVIRONMENTAL AUDIT REPORT

PROJECT DETAIL

Right Number:	NC 30/5/1/1/2/12774 PR & NC 00122PR/11	Date of Commencement:	2019
Site Name:	Makganyane Prospecting Right	Inspection Date:	21 July 2023
Right Holder:	Assmang (Pty) Ltd	Other Authorisations:	Not Applicable
Report Number:	04		

DETAIL OF AUDITOR

(APPENDIX 7 SUB-REGULATION 3(A) & (B)):

ECO:	Christine Fouché
EXPERTISE:	Ms Fouché has a Diploma in Nature Conservation and a BSc in Botany and Zoology with eighteen years experience in doing environmental impact assessments and compliance monitoring in South Africa.
DECLARATION OF INDEPENDENCE:	<p>I, Christine Fouche, in my capacity as environmental control officer declare that–</p> <ul style="list-style-type: none"> • I act as independent environmental control officer in this compliance audit; • I will perform the work relating to the audit in an objective manner, even if the results and findings are not favourable to the holder of the authorisation; • I have expertise in conducting environmental compliance audits, including knowledge of the Act and regulations that have relevance to the activity; • I will adhere to and comply with all responsibilities as indicated in the National Environmental Management Act and Environmental Impact Assessment Regulations. • I do not have and will not have any vested interest in the activity other than remuneration for work performed in terms of the Environmental Impact Assessment Regulations, 2014 (as amended). <p></p> <p>Christine Fouché</p> <p style="text-align: right;">Date: 08 August 2023</p>

SCOPE & PURPOSE OF ENVIRONMENTAL AUDIT

(APPENDIX 7 SUB-REGULATION 3(C)):

This environmental audit report was compiled in terms of the requirements of the NEMA EIA Regulations, 2014 (as amended).

OBJECTIVE:

The objective of the environmental audit report (EAR) is to evaluate compliance of the operational activities with the Environmental Management Plan (EMP) as approved by the Department of Mineral Resources and Energy.

INSPECTED AREAS:

The inspection included an assessment of the following areas:

- Drill sites (amongst others MK0166, MK0169, MK0257, MK0323, MK0324, MK0325);
- Site entrance; and
- Site office area.


To establish the environmental compliance assessment of the operation, the prospecting site was inspected by the Environmental Control Officer, Christine Fouché, of Greenmined Environmental (Pty) Ltd accompanied by site management.

ASSUMPTIONS, UNCERTAINTIES OR GAPS IN KNOWLEDGE

(APPENDIX 7 SUB-REGULATION 3(F)):

The assumptions made in this document, stem from specific information gathered during the site audit and background information gathered from site management. It must be noted that not all the drill sites were visited but a representative number were chosen.

LOCATION

Site Location:	The prospecting area is located ±24 km north-west of Postmasburg on opposite sides of the R385 provincial road.																												
Site Map:																													
Site Coordinates:	<table border="1"> <tr> <td>1A</td> <td>28°08'42.35"S; 22°54'42.37"E</td> </tr> <tr> <td>1C</td> <td>28°09'27.69"S; 22°56'14.23"E</td> </tr> <tr> <td>1D</td> <td>28°09'46.16"S; 22°55'3.61"E</td> </tr> <tr> <td>2A</td> <td>28°08'58.80"S; 22°54'47.84"E</td> </tr> <tr> <td>2B</td> <td>28°08'50.29"S; 22°55'20.36"E</td> </tr> <tr> <td>2C</td> <td>28°09'19.11"S; 22°55'29.96"E</td> </tr> <tr> <td>2D</td> <td>28°09'27.62"S; 22°54'57.44"E</td> </tr> <tr> <td>3AT</td> <td>28°08'04.65"S; 22°56'31.94"E</td> </tr> <tr> <td>3BT</td> <td>28°07'40.21"S; 22°57'42.93"E</td> </tr> <tr> <td>3CT</td> <td>28°08'53.30"S; 22°58'25.59"E</td> </tr> <tr> <td>3DT</td> <td>28°09'17.06"S; 22°56'54.85"E</td> </tr> <tr> <td>3ET</td> <td>28°08'18.66"S; 22°55'51.24"E</td> </tr> <tr> <td>A</td> <td>28°09'00.02"S; 22°53'50.99"E</td> </tr> <tr> <td>D</td> <td>28°09'59.73"S; 22°54'11.70"E</td> </tr> </table>	1A	28°08'42.35"S; 22°54'42.37"E	1C	28°09'27.69"S; 22°56'14.23"E	1D	28°09'46.16"S; 22°55'3.61"E	2A	28°08'58.80"S; 22°54'47.84"E	2B	28°08'50.29"S; 22°55'20.36"E	2C	28°09'19.11"S; 22°55'29.96"E	2D	28°09'27.62"S; 22°54'57.44"E	3AT	28°08'04.65"S; 22°56'31.94"E	3BT	28°07'40.21"S; 22°57'42.93"E	3CT	28°08'53.30"S; 22°58'25.59"E	3DT	28°09'17.06"S; 22°56'54.85"E	3ET	28°08'18.66"S; 22°55'51.24"E	A	28°09'00.02"S; 22°53'50.99"E	D	28°09'59.73"S; 22°54'11.70"E
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PROJECT DESCRIPTION

Exploration of the approved prospecting area commenced with detailed surface mapping (non-invasive) along the outcrops present on the Remaining Extent (RE), and Portion 1 (Remaining Extent) of the farm Makganyene No 667 in 2019 (Phase 1 & 2 in the PWP). This was followed by geo-physical surveys (non-invasive) comprising of limited ground magnetic and audio-magnetotelluric surveys covering portions of the same properties (Phase 3 in the PWP). Data collected during the above surveys served as motivation for the implementation of a first phase drilling campaign in two target areas (Phase 4 in the PWP) that commenced in July 2019.

The first phase drilling campaign was complete in 2021, and the modelling of the data was subsequently done. The second phase drilling campaign (Phase 5 in the PWP) commenced in 2022 and continues into 2023. To date 297 boreholes were drilled of which 147 were already successfully reinstated/rehabilitated (refer to the most recent drill plan at the end of this document).

SITE CONDITIONS

Clear sunny day with dry soil conditions and strong wind.

REPORTABLE ENVIRONMENTAL INCIDENTS

Incident Date:	No environmental incidents were noted during the audit, and according to site management thus far none occurred during the operational phase of the project.
Incident No:	
Incident:	
How addressed:	
When addressed:	

ADOPTED METHODOLOGY *(APPENDIX 7 SUB-REGULATION 3(D)):*

COMPLIANCE SCORE	DESCRIPTION
1	Task not achieved
2	Task 20% achieved
3	Task 50% achieved
4	Task 80% achieved
5	Task 100% achieved in accordance with the EMP

NON-COMPLIANCE SCORE	DESCRIPTION
1	LOW – Mitigation not needed / mitigation measures to be maintained
2	MEDIUM – Mitigation should be considered
3	HIGH – Mitigation compulsory



**ENVIRONMENTAL PERFORMANCE ASSESSMENT
MAKGANYANE PROSPECTING**

INSPECTION ASPECTS

DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	STATUS	COMMENTS
LEGISLATION COMPLIANCE:				
National Environmental Management Act, 1998 (Act No 107 of 1998) and the Environmental Impact Assessment Regulations, 2014 (as amended 2017).	5	-	Compliant	The competent authority deems the approved EMP and PR of the operation compatible with an Environmental Authorisation in terms of the NEMA, 1998.
Copy of the EA and EMP available on site.	N/A	-	-	
Mineral and Petroleum Resources Development Act, 2002 (Act No 28 of 2002).	5	-	Compliant	-
Prospecting right available on site.	5	-	Compliant	-
Copy of the approved prospecting plan available on site (Reg 2(2)/Reg 42)	5	-	Compliant	-
National Environmental Management: Air Quality Act, 2004 (Act No 39 of 2004).	5	-	Compliant	Although the activities does not trigger an application in terms of the NEM:AQA, the air quality of the prospecting area is managed to satisfaction.
National Environmental Management: Waste Act, 2008 (Act No 59 of 2008).	5	-	Compliant	-
National Water Act, 1998 (Act 36 of 1998) (NWA).	TBC	-	-	Proof of compliance with the NWA needs to be provided by site management for the water used from the old excavation on the farm.
National Environmental Management: Biodiversity Act, 2004 (Act No 10 of 2004) (NEM:BA).	5	-	Compliant	No protected trees had to be removed because of the prospecting activities, and no weeds/invader plants were noted in the work areas.
Hazardous Substances Act, 1973 (Act 15 of 1973).	4	3	To be addressed	All chemicals must be kept in a bunded area or drip tray with impermeable surface of sufficient size.
TOPSOIL MANAGEMENT:				
Topsoil stripping.	5	-	Compliant	The topsoil is stripped from each pad (±100 m ²) before it is prospected.
Topsoil storage/stockpiling.	5	-	Compliant	The stripped topsoil is stockpiled along the boundary of the cleared pad.
Topsoil returned to rehabilitated area.	5	-	Compliant	-
VEGETATION:				
Protected plants (if any) sheltered from	5	-	Compliant	The contractor works around the large trees and bushes on

**ENVIRONMENTAL PERFORMANCE ASSESSMENT
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DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	STATUS	COMMENTS
prospecting activities.				site. The Shepherds trees (<i>Boscia albitrunca</i>) are protected on site.
Aliens & weeds controlled on site.	N/A	-	-	No listed weeds/invader plants were noted in the prospected areas at the time of the inspection.
No crisscrossing through undisturbed areas.	5	-	Compliant	-
FAUNA:				
All animals, birds and reptiles protected on site.	5	-	Compliant	When encountered, snakes are released into the veld without being harmed.
Boreholes covered to prevent trapping of animals.	5	-	Compliant	All the (finished) boreholes were either capped or closed with a collar. No open boreholes (except the ones being drilled) were noted during the inspection.
Operational areas daily inspected for signs of trapped animals.	5	-	Compliant	-
AIR QUALITY & NOISE:				
Dust suppression implemented.	5	-	Compliant	When needed.
Speed of vehicles controlled to lessen dust generation and road deterioration.	5	-	Compliant	-
Noise controlled on site.	5	-	Compliant	-
Hearing protection available to employees.	5	-	Compliant	-
ARCHAEOLOGICAL AND CULTURAL INTEREST:				
Archaeological and/or cultural remnants protected.	N/A	-	-	No archaeological or cultural remnants were discovered during the prospecting activities, nor did prospecting take place near the heritage features of the site.
SURFACE WATER:				
Erosion, caused by prospecting activities, controlled on site.	N/A	-	-	No areas of concern were noted at the time of the inspection.
No servicing of vehicle on site, and/or drip trays used during emergency break downs	5	-	Compliant	-
VISUAL EXPOSURE:				
Is the contractor implementing good visual and housekeeping standards.	5	-	Compliant	At the time of the inspection the site was neat and well managed.
MANAGEMENT OF FUEL AND HAZARDOUS PRODUCTS:				
Hazardous material stored within a bunded	4	3	To be	As mentioned earlier, site management must ensure that all

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DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	STATUS	COMMENTS
area (110% capacity).			addressed	chemicals as stored in a bunded area or placed in a drip tray.
Management of fuel and oil spills.	5	-	Compliant	-
Drip trays present when refuelling is done outside a service bay.	4	3	To be addressed	A drip tray must be used at the diesel tank during refuelling
Sealed drip trays used and managed on site.	4	3	To be addressed	The use of drip trays must be intensified when chemicals are used/stored on site.
Prospecting equipment mechanically sound without visible oil leaks.	5	-	Compliant	This appeared to be true.
Oil spill kit available on site.	5	-	Compliant	-
WASTE MANAGEMENT:				
Site free of day-to-day litter.	5	-	Compliant	-
Waste collected in sealable containers.	5	-	Compliant	-
General waste dumped at a recognised landfill site.	4	3	Records to be updated	Site management confirmed that the general waste is taken to the Postmasburg landfill site. The landfill does not provide any type of receipt or delivery note. Therefore the continued use of a general waste register is again proposed.
Hazardous waste removed by a registered waste handling contractor.	TBC	-	-	According to site management no hazardous waste was removed during the audit period.
Spillages not disposed of into the environment, ditches, drains or water courses.	5	-	Compliant	The site has hazardous waste bins as well as oil spill kits to contain the hazardous material.
Waste disposal permits on site.	4	3	To be addressed	As mentioned earlier the site must be able to proof the safe disposal of all waste types leaving the farm.
No waste stockpile allowed in- or outside the boundaries of the prospecting area.	5	-	Compliant	-
Sanitation facilities available to employees.	5	-	Compliant	Sanco was contracted to service the toilets on site.
FIRE MANAGEMENT:				
Firefighting equipment available on-site.	5	-	Compliant	-
No open fires allowed on site.	5	-	Compliant	-
Major fires or explosions reported.	N/A	-	-	No fire/explosion occurred during the audit period.
EQUIPMENT MANAGEMENT:				
Prospecting contained to the approved area.	5	-	Compliant	-
Unnecessary surface disturbance avoided.	5	-	Compliant	-

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DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	STATUS	COMMENTS
Progressive rehabilitation implemented as prospecting continues.	5	-	Compliant	-
ACCESS ROADS AND VEHICLES MANAGEMENT:				
Access road maintained.	5	-	Compliant	-
Movement of project related vehicles and machinery restricted to the approved prospecting area. No crisscrossing through undisturbed areas.	5	-	Compliant	-
Vehicle repairs only conducted in service bay area, and waste products disposed of in containers/bins.	N/A	-	-	No servicing of vehicles/equipment takes place at the prospecting area.
Speed limit enforced within the area.	5	-	Compliant	-
EMPLOYEE AND SAFETY MANAGEMENT:				
Workers inducted and informed of EMP conditions.	5	-	Compliant	-
Proof of training available.	5	-	Compliant	-
Workers provided with PPE.	5	-	Compliant	-
Effective access control to prevent unauthorised entry.	5	-	Compliant	-

**COMMENTS OR COMPLAINTS RECEIVED FROM I&AP'S
(APPENDIX 7 SUB-REGULATION 3(G) & (J)):**

No written environmental related complaints were received during the audit period.

**AUDITING OF EMP AND REPORTING THEREOF
(REGULATION 34):**

Date of previous EAR/EPA:	01 August 2022
Proof of submission of previous EAR/EPA to DMRE available:	The EPA was submitted to the DMRE on 23 August 2022.
EAR/EPA compiled by independent person with environmental auditing expertise:	Greenmined Environmental (Pty) Ltd compiled the EPA.
Potential and registered I&AP's notified within 7 days of the submission date, and report available on publicly accessible website	The EPA was available on the Greenmined public website following submission of the document to the DMRE.

GENERAL REPORT

Compliance of the prospecting area with the EMPR was reviewed during the site assessment. The site recorded a compliance score of 97% for the audit period.

As mentioned, at the time of the inspection the second phase drilling campaign was in progress.

Site Camp:

The site camp was neatly managed at the time of the inspection. An area was demarcated where the equipment is stored. Skips were placed in this area into which the waste materials are discarded. One of the skips were designated for hazardous waste. Turnstone Drilling stated that the hazardous waste skip will (once full) be transported to their main office at Kathu, where the waste will be assimilated into the site's waste management system. As discussed, the Kathu site must provide the prospecting site with receipts when waste is delivered to it as site management must ensure that the waste leaving the prospecting operation is recorded and that safe disposal certificates are available for auditing purposes.

As the Postmasburg Landfill site does not supply disposal receipts, it is again suggested that the site implement the use of waste registers, to proof the frequency, amount, and location where general waste is disposed. It is of the utmost importance that the cradle-to-grave principle is implemented, meaning that the site must be able to proof what happens to the site related waste from generation to final disposal.

It is proposed that a bund with impermeable surface be added to the storage area, where all chemicals, containers, grease pumps etc. can be kept. No chemicals (new/used containers) may be placed on the bare soil

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without secondary containment.

A steel drip tray of adequate size was added around the diesel tank. As discussed on site, drip trays must be used when vehicles/equipment are refilled to prevent diesel spillage.

Prospecting Area:

Site management confirmed that the reinstated areas (trenches and drill sites) were seeded during the previous growth season. The pads that were rehabilitated during the previous audit period 2021-2022 have recovered very well and in some areas one can no longer see where prospecting took place.

As discussed on site, all chemicals must be kept in drip trays or in the site vehicles. The operational drilling sites (that were visited), were all neatly managed. General- and hazardous waste bins were noted on site, as well as oil spill kits.

DOCUMENT CHECKLIST:

At the time of the inspection the following documents were available on site:

- Prospecting Right;
- Prospecting Works Program (both the approved and amended PWP);
- Letters of Appointments;
- Final Basic Assessment Report submitted in support of the Section 102 Application;
- Surface Use Agreement;
- Regulation 42 Plan;
- Approved EMPR;
- Incidents Register;
- Complaints Register;
- Proof of Environmental Awareness Training; and
- Material Safety Data Sheets (of all chemicals used on site).

It is proposed the following documents also be added to the site file:

- General Waste Management Register; and
- Proof of Hazardous Waste Disposal (when applicable).

MATTERS TO BE ADDRESSED:

1. Place all chemicals in a bunded area or drip trays of sufficient size;
2. File proof of general waste disposal and hazardous waste disposal (when available);
3. Proof compliance with the NWA and start a tally sheet to monitor water usage.

ABILITY OF EMP TO ADEQUATELY MANAGE OR MITIGATE ENVIRONMENTAL IMPACTS (APPENDIX 7 SUB-REGULATION 3(E):

The amended EMPR that was approved as part of the Section 102 amendment application in terms of the MPRDA, 2002 adequately manage and mitigate the environmental impacts of the activity.

NEED FOR AMENDMENT OF THE EMP:

No need was identified for the amendment of the amended EMPR.


FINANCIAL PROVISION:

This EAR/EPA is accompanied by the annual review of the financial provision amount for the rehabilitation of the prospecting area. The PR Holder has a rehabilitation amount of R 165 337.63 lodged with the DMRE. The 2023

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financial provision required to rehabilitate the prospecting area in accordance with the Guideline Document for the Evaluation of the Quantum of Closure-related Financial Provision by a Mine and as prescribed in terms of Regulation 54 (1) is R 152 237.46. The 2023 financial provision does not exceed the value of rehabilitation amount in place at the DMRE, and the PR Holder therefore does not have to provide a shortfall.

ECO SIGNATURE

NAME:	SIGNATURE:	DATE:
Christine Fouche		08 August 2023

PHOTOGRAPHS

DRILL SITES



Drill site that was capped with final rehab pending (MK 0325)



Capped drill site where rehabilitation still needs to be finalised – note vegetation returning through succession (MK 0324)



Capped drill site where final rehab must still be done (MK0323)

DRILL SITES



Signage placed at operational drill site

Waste bins and oil spill kit available on site



Chemicals stored on plastic sheeting in designated area

Sumps neatly barricaded

DRILL SITES



Brush and topsoil removed from operational site



Rehabilitated drillsite that recovered well (MK0257)



DRILL SITES



Drilling completed with rehabilitation pending (MK0169)



DRILL SITES



Operational site neatly managed



Drilling completed and sumps closed. Final rehab to be done.

SITE CAMP



All chemicals must be kept in a bunded area with impermeable surface



Cans placed on plastic lining as a temporary solution



Grease cans also placed on plastic



Salvage area

SITE CAMP



Drums that had to be removed to a bunded area



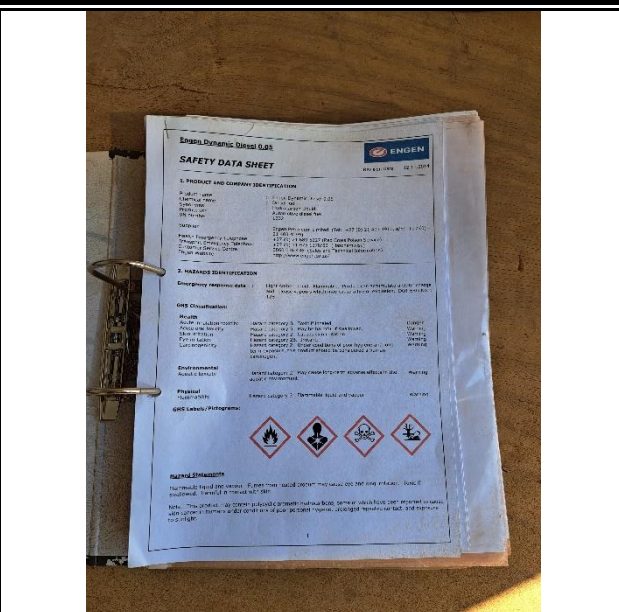
Drums removed to a storage container



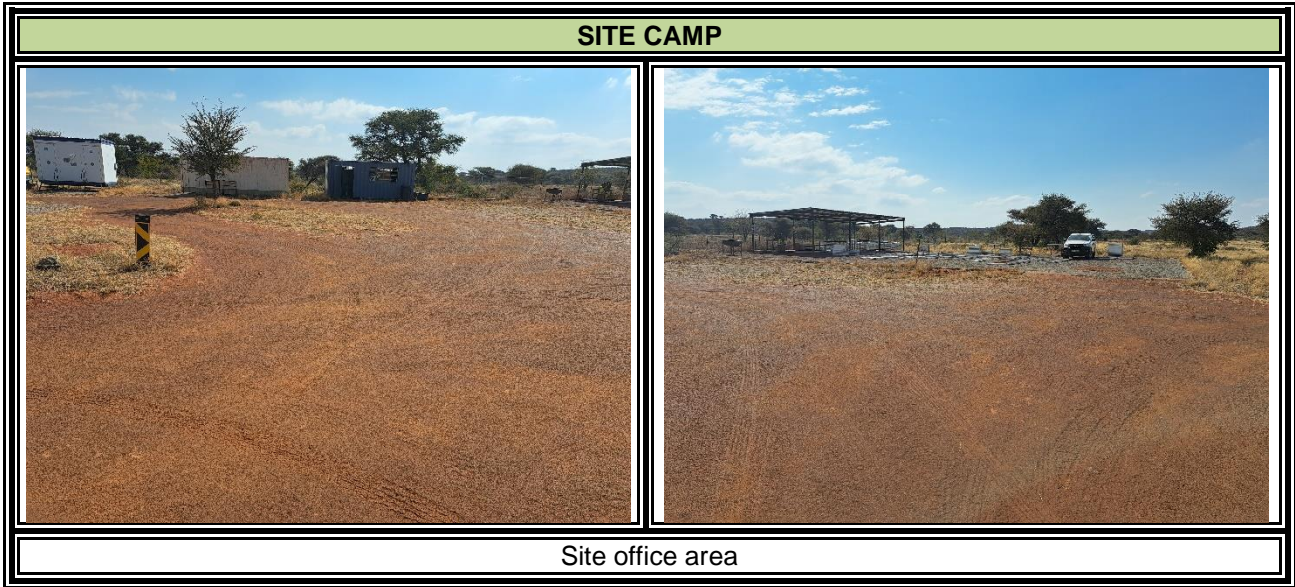
Well build drip tray installed around the diesel tank



Snake awareness poster on site



MSDS's available on site



MOST RECENT DRILL PLAN:

