To:	Keabetswe Sehularo	**Date:**	April 2021
From:	Ecology Division	**Proj #:**	HAR6981
RE:	**Kalgold Prospecting rights Expansion: Ecological walkdown Memorandum**		

Dear Keabetswe,

Digby Wells Environmental (hereafter Digby Wells) has recently published a Draft Basic Assessment Report (DBAR), on behalf of Kalahari Goldridge Mining Company Ltd. (hereafter Kalgold), for the proposed incorporation of Prospecting Rights into the existing Mining Right near Mahikeng, North-West Province. The proposed activities trigger Activity 20 and Activity 27 of Listing Notice 1 of the EIA Regulations, 2014 (GN R983 of 04 December 2014, as amended) (EIA Regulations, 2014).

Based on the correspondence received from the Department of Mineral Resources and Energy (DMRE), dated the 19th of March 2021, providing comment on the Basic Assessment Report (Ref: NW 30/5/1/2/3/2/1/ (10177 MR Section 102 of 77) EM) submitted to the DMRE, there was a need to undertake an ecological site walkdown of the proposed prospecting site in order to determine if any ecological features of significance were present, and if these features would therefore require a full ecological impact assessment.

1. Walkdown Rationale

To determine the potential ecological impact requirements of the project, a rapid site walkdown was undertaken. Specific focus was placed on the identification of sensitive environmental parameters, and potential wetland habitat that may fall within the prospecting area, or within 500m of the prospecting area. Floral and faunal parameters were assessed to determine if any species of conservation concern occur on the site.

1.1. Proposed Prospecting Site

The proposed prospecting site is located to the south eats of the existing Kalgold operations, as indicated in Figure 1-1 below. The general area is a ridgeline with exposed rocky outcrops along much of the higher lying areas. The prospecting will include the drilling of a number of boreholes into the rocky outcrop, and these have been chosen to maximise the exploration of

the rocky areas. The test boreholes have been placed on transects that run perpendicular to the rocky ridge, and the positions of these are highlighted in Figure 1-2 below.

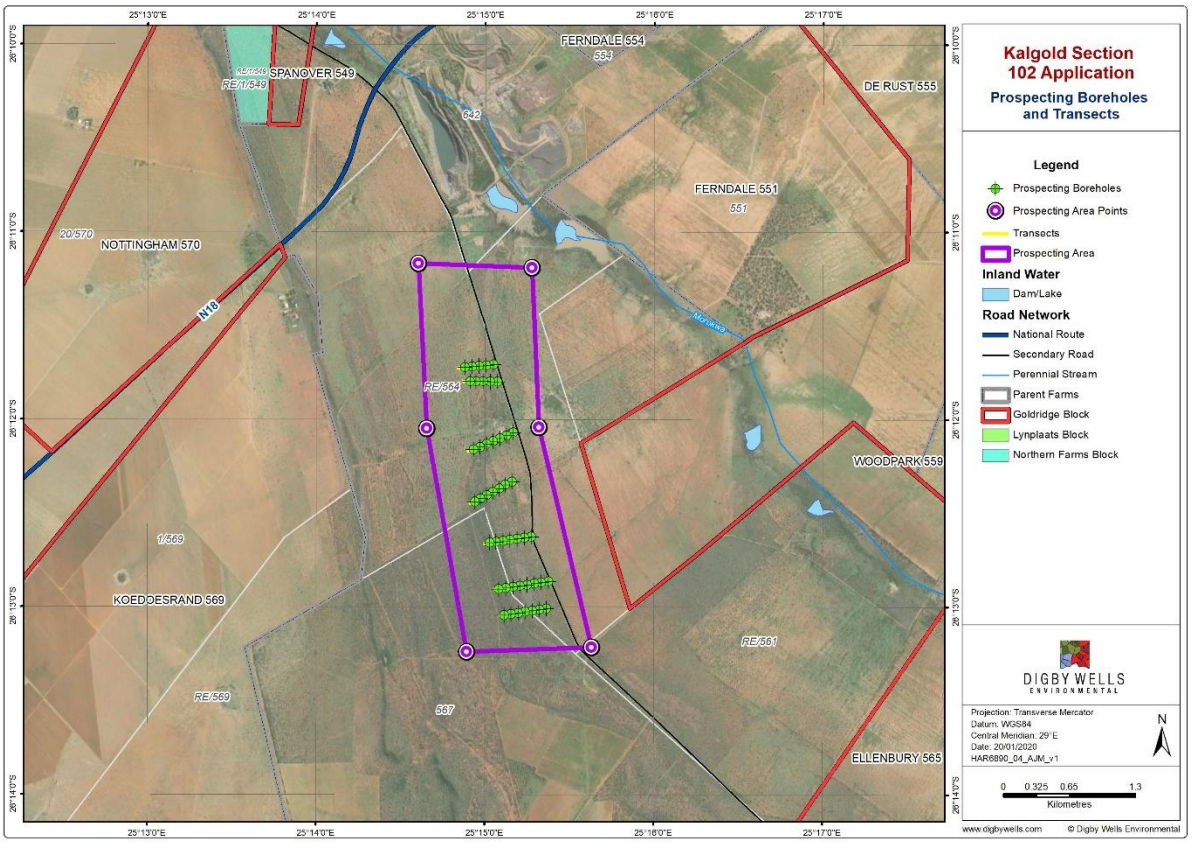

Figure 1-1: Proposed Prospecting Area Site Locality Map

The ecological walkdown included active assessment of the entire prospecting area for potential low lying wetland areas, as well as the surrounding 500m from the prospecting boreholes. In addition, the entire prospecting area was walked in a zigzag fashion to cover the area as comprehensively as possible. Specific focus was placed on assessing the rocky ridges in close proximity to the proposed borehole transects, and thus each prospecting borehole transect was walked to determine the immediate area that will be affected by the drilling rig required for the drilling of the boreholes.

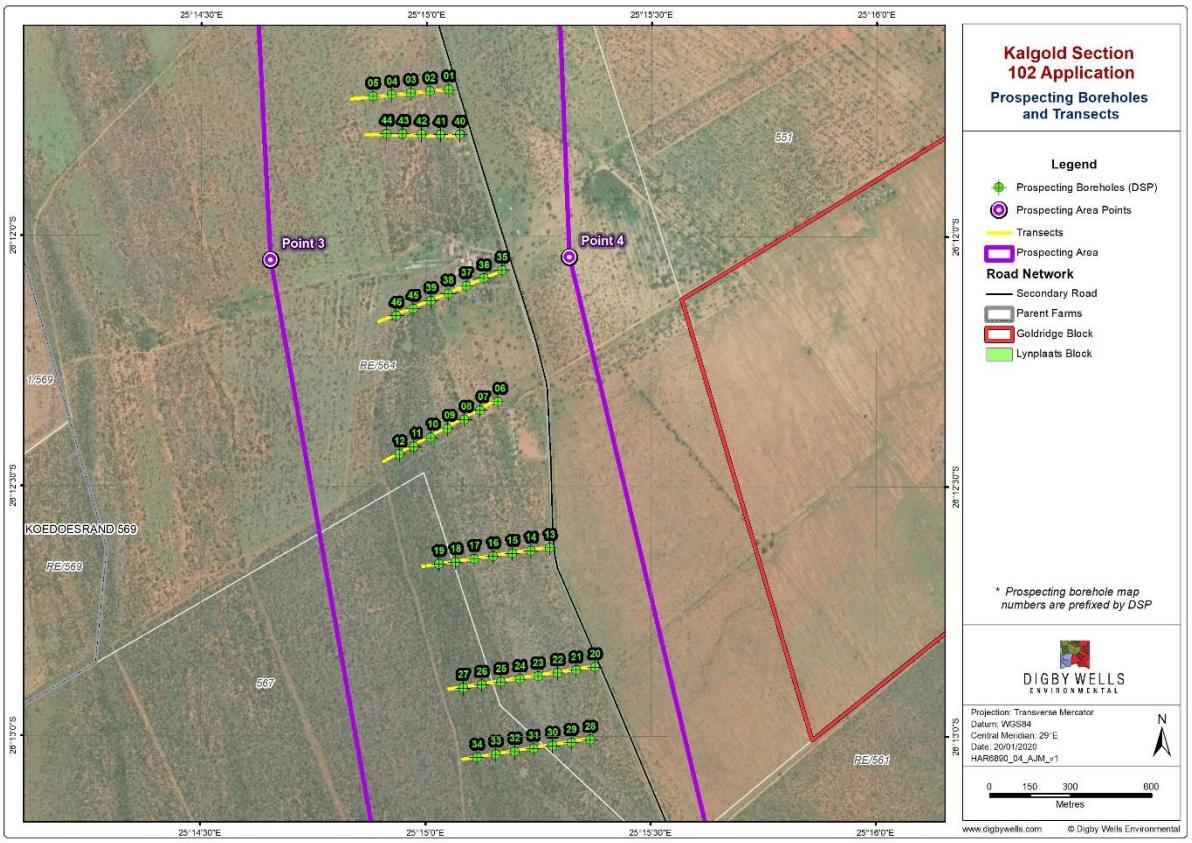

Figure 1-2: Proposed Prospecting Borehole Positions, with Associated Transects

2. Ecological Field Observations and Results

The prospecting area has been used as cattle grazing for an extended period, and thus the species diversity across the site was found to be quite low. It was noted that no wetlands are to be found within the site boundary, and further investigation noted that no wetlands are within 500m of any of the proposed prospecting boreholes.

2.1. Plant Species Recorded

It was noted during the site visit that there were limited tree and grass species, and a number of alien invasive plant species present. The plant species identified on site are listed in Table 2-1 below.

Table 2-1: Plant Species Recorded on Site

Scientific Name	Common Name	Ecological status	Form
Vachellia erioloba	Camel thorn	Declining/Protected	Tree
Vachellia karroo	Sweet thorn		Tree
Vachellia tortilis	Umbrella thorn		Tree
Acacia mearnsii	Black Wattle	Invader 2	Tree

Scientific Name	Common Name	Ecological status	Form
Agave sisalana	Sisal	Invader 2	Succulent
Aloe transvaalensis	Spotted Aloe		Succulent
Alternanthera pungens	Khakhiweed		Herb
Aristida congesta	Buffalo Grass		Grass
Aristida junciformis	Ngongoni three-awn		Grass
Aristida meridionalis	Gembokgras		Grass
Bidens pilosa	Common Black-Jack	Weed	Herb
Cenchrus ciliaris	Foxtail buffalo grass		Grass
Cirsium vulgare	Scotch Thistle	Category 1b	Herb
Cymbopogon excavatus	Broad-Leaved Turpentine Grass		Grass
Cynodon dactylon	Couch Grass		Grass
Datura ferox	Long Spined Thorn Apple	Category 1b	Herb
Dichrostachys cinerea	Sicklebush		Shrub
Digitaria eriantha	Common Finger Grass		Grass
Eragrostis superba	Saw-tooth love grass		Grass
Eragrostis trichophora	Atherstone's Grass		Grass
Gomphocarpus physocarpus	Balloon milkweed		Shrub
Hyparrhenia hirta	Common Thatching Grass		Grass
Melia azedarach	Syringa	Category 1b	Tree
Melinis repens	Natal Red Top		Grass
Ricinus communis	Caster-oil plant	Category 1b	Shrub
Salvia disermas	Wild Giant sage		Shrub
Sporobolus africanus	Ratstail Dropseed		Grass
Themeda triandra	Red Grass		Grass
Verbena brasiliensis	The Brazilian verbena	Category 1b	Herb

2.2. Protected Trees

Vachellia (Acacia) erioloba (Camel Thorn) (**Figure 2-1**), which is a protected tree in terms of the National Forests Act (Act No. 84 of 1998), were recorded in abundance across the site. In terms of a part of section 51(1) of the National Forests Act (Act No. 84 of 1998), no person may cut, disturb, damage or destroy any protected tree or possess, collect, remove, transport, export, purchase, sell, donate or in any other manner acquire or dispose of any protected tree, except under a license granted by the Minister of Department of Agriculture, Forestry and Fisheries (DAFF).

Figure 2-1: *Vachellia erioloba* recorded during the site visit.

2.3. Faunal Diversity

A number of bird species were noted during the site visit, but the use of the proposed prospecting area by any species of conservation concern was not noted during the brief survey. A number of observations are worth noting though. A dead Spotted Eagle Owl (*Bubo africanus*) was found dead on the road that bisects the site, this is noted as a probable car strike death (**Figure 2-2** below). In addition, a Barn Owl (*Tyto alba*) was noted on the site during the day. A lone Kudu bull (*Tragelaphus strepsiceros*) was noted on the site during the visit, but the majority of animal sign was from domestic cattle that graze the farm area normally. The burrows of Gerbil were noted in numerous places across site, as well as porcupine burrows. The scat of numerous mongooses were noted across the site, and a number of invertebrates were noted. Two spider species were particularly prevalent across the site, the Common Garden Orb Web Spider (*Argiope australis*) and the Banded-legged Golden Orb-Weaver (*Trichonephila senegalensis*) (Figure 2-3 below)

Figure 2-2: Dead Spotted Eagle Owl noted on the road that bisects site.

Figure 2-3: Banded-legged Golden Orb-Weaver Spiders Seen Across the Site

3. Recommendations

Following the site ecological walkdown the following recommendations are noted:

- No faunal species of conservation concern were noted during the site visit, but that does not preclude the possibility that species of conservation concern may use the site during different times of the da, or year, and thus any siting of a species of conservation concern should immediately be reported to the mine environmental officer for further investigation.
- No wetlands were found on site, and no wetlands occur within 500m of the proposed drilling sites. However, should additional drilling be required, or should the prospecting area be deemed appropriate for expansion of the mine, then a wetland assessment of all areas within 500m of the proposed expansion pit will need to be undertaken.
- The presence of the protected tree *Vichellia erioloba* on the site, does not preclude the proposed drilling, but will require that an appropriate tree removal permit must be applied for before the trees can be destroyed through the drilling process. To this end, the exact clearance area for each drilling transect will need to be demarcated, and each *Vichellia erioloba* that falls within this clearance area will need to be counted, measured and noted for inclusion in the permit application. Alternatively, it may be possible to apply for a blanket destruction of these trees within the transect footprints without measuring and marking each one, and in this regard it is recommended that the appropriate official at the forestry department be approached for clarity on the process to be followed.
- All disturbance on site should be minimised, and as far as possible, the corridor for drilling should be only as wide as necessary, with no clearance of vegetation outside of the required footprint.

It must be noted that the above survey is not a full ecological assessment of the site, but it is the opinion of the specialist that the above is sufficient to allow the prospecting activities to proceed without a full ecological impact assessment being required.

Regards,

Stephen Burton

Divisional Manager: Ecology and Atmospheric Sciences