

## APPLICANT: Trans Atlantic Diamonds (Pty) Ltd

### APPLICATION FOR PROSPECTING RIGHTS AND ENVIRONMENTAL AUTHORISATION TO PROSPECT IN THE OFFSHORE SEA CONCESSION AREA 14C

FEBRUARY 2022

#### PROJECT BACKGROUND

Trans-Atlantic Diamonds (Pty) Ltd (TAD) has applied for a right to prospect for diamondiferous and gemstone deposits in addition to other heavy minerals, industrial minerals, precious metals and ferrous and base metals that may exist within the application area, in terms of the Mineral and Petroleum Resources Development Act (Act 28 of 2002), as amended, within Sea Concession Area 14C. As prospecting is a Listed Activity under the Environmental Impact Assessment Regulations, 2014 (amended and promulgated in terms of the National Environmental Management Act (Act No. 107 of 1998)), TAD is also required to apply for Environmental Authorisation (EA) from the competent authority, i.e., the Department of Mineral Resources and Energy (DMRE). To apply for EA, a Basic Assessment of the proposed activity and its potential impacts, along with a Public Participation Process, must be conducted and the findings submitted as a report to the DMRE. The Applicant has appointed Anchor Environmental Consultants (Pty) Ltd (Anchor) as the independent Environmental Assessment Practitioner to assist with applying for prospecting rights and Environmental Authorisation.

#### PROJECT LOCATION

Sea Concession area 14C is located offshore on the West Coast and is 106 001 ha in extent. It is located off the Western Cape Coast approximately 5 km offshore of Doringbaai and Groothoekbaai (Figure 1). The inshore boundary is situated about 5 km from the coast, and the outer boundary extends to the 200m isobath.

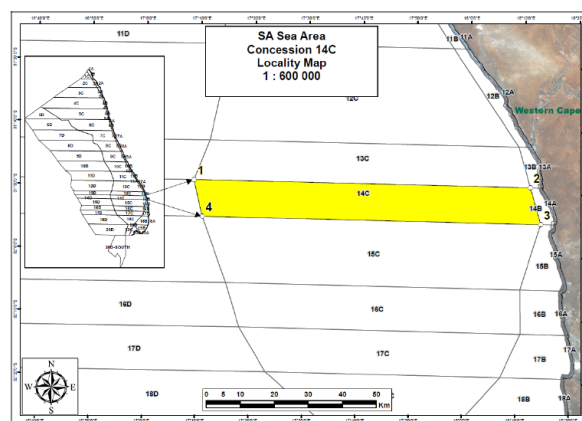


Figure 1: Sea concession 14C off the Western Cape Coast.

## PROSPECTING METHOD

**Geophysical Survey:** A high frequency Multibeam Echo Sounder and mid-frequency sub-bottom profiler will be used to create a model of the seafloor and layers of sediment and identify specific rock types (geological units) of interest. This equipment works by sending out sound towards the seabed. The sound energy is reflected from the seabed and travels back through the water to the receiver. The received signals are processed and used to create an image of the seafloor. Results from this survey will be used to inform the appropriate drilling method, drill sites and the design of the mining vessel (Figure 2 and 3).

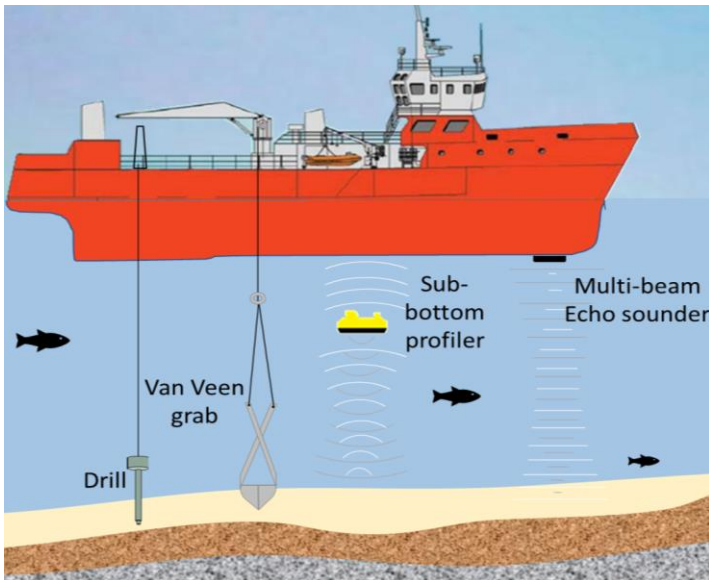


Figure 2: The various sampling methods that will be used.



Figure 3. An example of a sub-bottom profiler. Source: Seatronics.

**Coring:** Seabed samples will be collected using a Vibracore, Gravity Core or Sonic Core. A core penetrates the seafloor and collects sediment samples (Figure 4). It will provide information on the structure of the seafloor, sediment layers

and geological units. Results from this survey will be used to inform the engineering of the drilling tool (see below) and mining vessel.

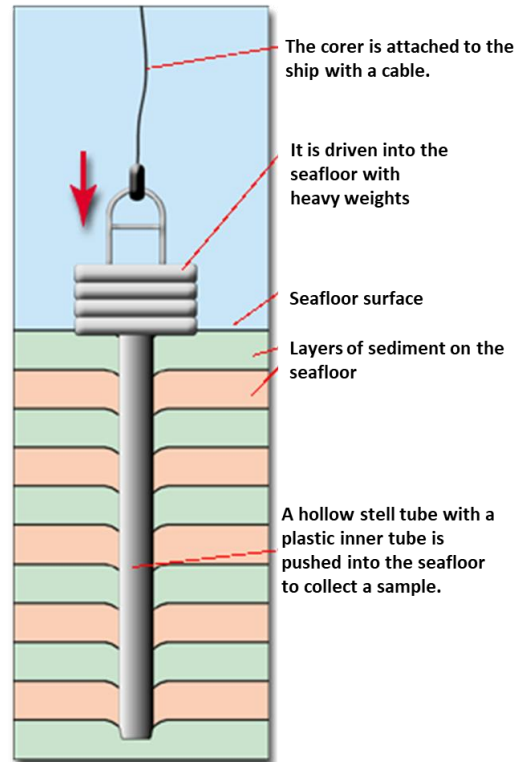


Figure 4. Example of a corer. Source: British Ocean Sediment Core Research Facility.

**Drilling:** Prospective targets need to be analysed by a uniquely designed drill tool that will dredge gravel from the seabed. Material will be processed onboard by a DMS processing plant and tailings discarded overboard. Results from this survey will be used to inform the engineering of the mining vessel.

**Van Veen Grab sampling:** The grab collects surficial sediment samples that are analysed to identify benthic macrofauna (small animals such as worms, mussels, and crustaceans) to determine geological units of the seafloor (Figure 5). Results from this survey will be used to describe and monitor the baseline macrofaunal communities in the area during and after prospecting and mining.



Figure 5. A Van Veen grab works like a claw to grab sediment containing macrofauna from the seafloor.

- Impacts of core and grab sampling on Maritime Archaeological Resources

**No-go Option, i.e., to not commence with the activity:**

**Positive impacts of this option**

- No effects to the bio- and geophysical environment

**Negative impact of this option**

- Loss of opportunity to establish whether viable offshore resources exist in the concession area
- Lost economic opportunities

## POTENTIAL IMPACTS

### Socio-economic:

- Socio-economic impacts on fishing industry
- Regional benefits
- Local benefits

### Marine Ecology and fisheries:

- Seismic disturbance to marine fauna
- Marine megafauna collisions with survey vessels
- Seabed sampling and tailings disposal
- Fine sediment plumes
- Physical disturbance due to anchors and chains
- Waste discharges during vessel operations
- Impact on fisheries

### Heritage:

- Impacts of core and grab sampling on submerged prehistoric resources
- Impacts of core and grab sampling on submerged palaeontological resources

---

## APPLICATION PROCESS AND TIMELINE

### Phase 1: Lodge Application

A prospecting rights and environmental authorisation application has been lodged with the DMRE and was accepted 21 February 2022.

### Phase 2: Initial commenting period

Interested and Affected Parties (I&APs) were invited to register and provide initial comment on the activity.

### Phase 3: Circulate Draft BAR & Official Public Participation Period

A Draft Basic Assessment Report (BAR) will be available on our website and at the Doringbaai e-centre, Dorinbaai Library, Strandfontein West Coast Information Centre, and Ebenhaeser Library, for 30 days. It will include a detailed description of the proposed project, potential impacts, and specialist findings.

### Phase 4: Public Participation Meeting

A Public meeting is scheduled in Doringbaai during which members of Anchor (the EAP) and Trans-Atlantic Diamonds (the applicant) will provide more detail on the proposed prospecting activity and consult with I&APs who can ask questions and provide comment on the activity.

### Phase 5: Submit Final BAR to the DMRE

Stakeholder comments will be addressed and included in the stakeholder consultation report which forms part of the final BAR. The final BAR will then be submitted to the DMRE for review.

### Phase 6: Decision by the DMRE

The DMRE has 107 days to review all the documents and decide whether to grant Environmental Authorisation for prospecting in Concession area 14C.

## HOW TO PARTICIPATE

**I&APs are invited to register and provide comments on the application for prospecting rights and environmental authorisation (details of which are in the BAR) during the Public Participation Period (dates to be confirmed).**

### Methods to register and participate:

- 1) Complete the questionnaire or compile your comment on a document of your choice and submit it to the contact person below via email, post, telephonically or submit it during the Public Participation Meeting.
- 2) Attend and provide comment during the Public Participation Meeting.

**Ensure that your name, contact details, interest in this activity (e.g., fisherman, resident, etc.) and way you wish to be contacted (e.g., email) are provided.**

***Cheruscha Swart***

*Ecologist and Environmental Consultant*

**Anchor Environmental Consultants (Pty) Ltd**

Tel: +27 21 701 3420

Postal Address: Suite 8 Steenberg House, Steenberg Office  
Park, Silverwood Close, Tokai, 7945

Email: [info@anchorenvironmental.co.za](mailto:info@anchorenvironmental.co.za)

Website: [anchorenvironmental.co.za](http://anchorenvironmental.co.za)