

FINAL BASIC ASSESSMENT REPORT FOR THE PROPOSED PROSPECTING IN SEA CONCESSION AREA 11C BY TRANS ATLANTIC DIAMONDS (PTY) LTD

Trans Atlantic Diamonds (Pty) Ltd
Office 1603 Portside
4 Bree Street
Cape Town, Western Cape, 8001



TRANS ATLANTIC
DIAMONDS

Appendix 5: Socio-economic Specialist Study

Anchor Environmental Consultants
8 Steenberg House, Silverwood Close, Tokai, South Africa
www.anchorenvironmental.co.za



SOCIO-ECONOMIC ASSESSMENT FOR EXPLORATION AND PROSPECTING ACTIVITIES IN SOUTH AFRICAN SEA AREA 11C

OCTOBER 2021

Report prepared for:

Trans Atlantic Diamonds (Pty) Ltd
Office 1603 Portside
4 Bree Street
Cape Town, Western Cape, 8001



TRANS ATLANTIC
DIAMONDS

Report Prepared by:

Anchor Environmental (Pty) Ltd
8 Steenberg House, Silverwood Close, Tokai, South Africa
www.anchorenvironmental.co.za



Authors: Simone Louw, Safiyya Sedick, and Barry Clark

Citation: Louw S, Sedick S and Clark BM. 2021. *Socio-economic assessment for exploration and prospecting activities in South African Sea Area 11C*. Report no. 1987/6 prepared by Anchor Environmental (Pty) Ltd for Trans Atlantic Diamonds (Pty) Ltd. 18pp.

© Anchor Environmental Consultants 2021

Use of material contained in this document by prior written permission of Anchor Environmental Consultants only

EXECUTIVE SUMMARY

Anchor Environmental Consultants (Pty) Ltd were appointed to undertake a socio-economic assessment for Trans Atlantic Diamonds (Pty) Ltd who are applying for a diamond prospecting right for Concession Area 11C, inshore of the Western Cape Coast. The proposed prospecting activity is anticipated to potentially impact coastal communities in the Matzikama municipality, particularly Strandfontein, approximately 40km south of the concession Area 11C. Demographic profiles for the regional, local and project sites are provided. A brief overview of the economic performance is discussed and placed in relation to the potential impacts associated to the proposed survey area.

Five negative socioeconomic impacts were identified as potentially being associated with the proposed survey/prospecting activities. These are listed in Table 1. Potential impacts associated with the seismic survey and prospecting activities were identified as 1) Temporary disturbance of marine resources 2) Exclusion of fishing vessels from the concession area 11C; 3) Degradation of water quality in Concession Area 11C, 4) Increase in local socio-economic performance, and 5) Increase in regional socio-economic performance. The former three impacts could potentially impact the livelihoods and household income of three marine fisheries sectors (tuna pole and line, traditional line fish, and Small Pelagic Purse Seine fishers). Potential negative impacts on all three sectors were assessed as 'insignificant' after mitigation (where required).

Table 1 Potential impacts identified associated with the prospecting activities after mitigation measures are applied.

Impact	Consequence	Probability	Significance	Status	Confidence
Impact 1: Tuna pole and line No mitigation	Very Low	Possible	INSIGNIFICANT	-ve	High
Impact 2: Traditional Line fish	Very Low	Improbable	INSIGNIFICANT	-ve	High
Impact 3: Small Pelagic Purse Seine With mitigation	Very low	Probable	VERY LOW	-ve	High
	Very low	Possible	INSIGNIFICANT	-ve	High
Impact 4: Local socio-economic performance	Very Low	Possible	INSIGNIFICANT	+ve	Medium
Impact 5: Regional socio-economic performance	Low	Definite	LOW	+ve	Medium

It is strongly recommended that Trans Atlantic Diamonds should aim to incorporate codes of good practice on Broad Based Black Economic Empowerment issued under Section 9 of the Broad Based Black Economic Empowerment Act, Act 53 of 2003, as amended by Act 46 of 2013. This will include skills transfer programmes, job creation, and supporting local service industry organizations such as manufacturing, production and/or packaging services.

TABLE OF CONTENTS

EXECUTIVE SUMMARY	I
TABLE OF CONTENTS	II
LIST OF ABBREVIATIONS.....	III
1 INTRODUCTION	1
2 STUDY AREA	1
2.1 REGIONAL STUDY AREA	1
2.2 LOCAL STUDY AREA.....	3
2.3 PROJECT SITE.....	4
3 SOCIO-ECONOMIC IMPACTS ASSOCIATED WITH THE MARITIME SECTOR	5
3.1 POTENTIAL SOCIO ECONOMIC IMPACTS	5
3.1.1 <i>Tuna pole and line</i>	5
3.1.2 <i>Traditional Linefish Sector</i>	6
3.1.3 <i>Small Pelagic Purse Seine Fisheries</i>	7
4 SOCIO-ECONOMIC IMPACTS ASSOCIATED WITH LOCAL AND REGIONAL ECONOMIC PERFORMANCE.	8
5 CONCLUSIONS AND RECOMMENDATIONS.....	10
6 REFERENCES.....	11

LIST OF ABBREVIATIONS

Anchor	Anchor Environmental Consultants (Pty) Ltd.
B-BBEE	B Broad Based Black Economic Empowerment
CPUE	Catch per unit effort
FLO	Fisheries Liaison Officer
GDP	Gross domestic product
GDPR	Gross domestic product
MMO	Marine Mammal Observer
MSY	Maximum Sustainable Yield
OMP	Operational Management Plan
OMP	Operational Management Plan
PAM	Passive Acoustic Monitoring
TAC	Total allowable catch
TAD	Trans Atlantic Diamonds (Pty) Ltd
TAE	Total allowable effort
TPL	Tuna Pole and Longline
WCDM	West Coast District Municipality

1 INTRODUCTION

Trans Atlantic Diamonds (Pty) Ltd (hereafter referred to as TAD) is applying for a prospecting right for Concession Area 11C (164 023 ha in extent), located offshore on the West coast. It is located off the Western Cape Coast from just south of Hoekbaai to just north of Baai Vals and is approximately 40 km north of Strandfontein. The inshore boundary is situated about 5 km from the coast, and the outer boundary extends to the 200 m isobath. Anchor Environmental Consultants (Pty) Ltd were appointed as the Environmental Assessment Practitioner (EAP) to undertake the required Basic Assessment Process and support TAD with this application. AEC has inhouse marine specialist expertise and therefore also undertook this socio-economic impact statement. Concession area 11C falls under the local Matzikama Municipality and falls under the greater West Coast District Municipality (WCDM). The proposed prospecting activity is anticipated to directly impact coastal communities in the Matzikama municipality, particularly Strandfontein.

2 STUDY AREA

To assess the potential socio-economic impacts of the proposed project it is important to understand the socio-economic context in which the proposed project is to be developed and its potential area of impact. Depending on the scale of the potential socio-economic impacts, it may extend beyond the boundaries of the project. Here, the focus will be placed on the regional, local and project area. The proposed prospecting/survey activity falls within the regional West Coast District Municipality (WCDM) and local Matzikama Municipality. The nearest impact site, Strandfontein is approximately 40 km south of the project site. The socio-economic impact statement will thus consider these regions, focussing on the potential impact on the project site.

2.1 Regional Study Area

The West Coast District Municipality extends over an area of 31 099 km² and has a total population of 464 056 inhabitants and 122 074 households (Table 2-1). The district includes five local municipalities (Matzikama, Cederberg, Bergrivier, Saldanha Bay, and Swartland) which all have access to the Atlantic Ocean as well as the N7 national road (with the exception of Saldanha municipality) (WCDM, 2021). The population consists of 50.3% female and 49.7% male, with three predominant population groups; Coloured (66.58%), Black African (16.36%), and White (15.71%) communities. Most of the populations' first language is Afrikaans (83.67%) followed by IsiXhosa (8.58%), English (3.98%) and other indigenous languages (IsiNdebele, Sesotho, and Setswana).

The WCDM population dependency ratio is quite high (45.9%) with 68% in the working age group (15-64 years), followed by the young (25%, 0-14 years) and the elderly group (7%, 65+ years). A high dependency ratio puts greater strain on people who are part of the workforce to support their economic dependents (children and elderly people). A higher dependency ratio also means greater pressure on social systems and the delivery of basic services. The level of education in the WCDM is relatively low, with a literacy rate was 79.1% (lower than the average of the Western Cape's 87.2% and slightly lower than the rest of South Africa 80.9%) (Socio Economic Profile West Coast District Municipality). The dropout rate for high school learners (Grades 10 to 12) within the West Coast local

municipalities varied from 23.2% to 33%. These high levels of dropouts were influenced by socio-economic factors such as teenage pregnancy, availability of no-fee schools and unemployment (Socio Economic Profile West Coast District Municipality). The average income in the WCDM fall within three ranges: no income (10.5%), R1 to R9 600 per annum (5.3%) and R9 601 to R76 400 per annum for which most of the population can be categorised (57.8%). There were 183 969 people employed in the WCDM in 2018, which constitutes 7.1% of the total employment in the Western Cape. The WCDM experienced an average annual increase of 3 480 jobs over the period 2014-2018, with the Swartland municipality generating the most employment opportunities of 1 146 in the last year, conversely to Matzikama and the Bergriver municipality which only created some 546 jobs. In 2019, the WCDM experienced a loss of 389 jobs, which will have a significant impact on the WCDM economy if this trend continues.

The WCDM experienced the slowest economic growth in the Western Cape between 2005-2013, averaging 3.0% (WCDM 2021). In contrast, the province showed a growth rate of 6.8% over the same period. The West Coast experienced strong growth in its construction (6.2%) and commercial services (6.1%), which include wholesale and retail trade, catering and accommodation; transport, storage and communication; and finance, insurance, real estate and business services sectors (WCDM 2021). The sectors that experienced a reduction over the 2005-2013 period was the agriculture (0.3%), manufacturing (0.3%) and other sectors (3.0%). The general government and community, social and personal (CSP) services sector in the West Coast experienced a steady 2.8% growth. The largest sectors in the West Coast economy in 2013 were the finance, insurance, real estate and business services (27%), manufacturing (017%), agriculture, forestry and fishing (14%) and wholesale and retail trade, catering and accommodation services (13%) (WCDM 2021). The agriculture, forestry and fishing sector were the primary source of employment, with 70 060 jobs in 2018, contributing 38.1% to total employment in the WCDM. However, the agriculture, forestry and fishing sector contributed the most to the WCDM employment in 2018 (38.1%, or 70 060 jobs).

Table 2-1 Demographic profile summary of the West Coast District Municipality and Strandfontein.

Indicator	West Coast District	Strandfontein
Population Total	391 766	431
Household Total	106 781	92
Area (km²)	31 118.6	4.18
Population group		
Coloured (%)	66.58	14.8
Black African (%)	16.36	50.6
White (%)	15.71	33.2
Indian or Asian(%)	0.56	0.9
Other (%)	0.79	0.5
Gender distribution		
Male (%)	49.7	51.4
Female (%)	50.3	48.6

Indicator	West Coast District	Strandfontein
First language		
Afrikaans (%)	83.67	69.4
English (%)	3.98	3.2
IsiXhosa (%)	8.58	22.6
Setswana (%)	0.63	0
Dependency ratio	45.9	18.1
Average annual income		
No income		10.9
R1 – R9 600 (%)		3.3
R9 601 – R76 400 (%)		47.8
R76 400–R614 400 (%)		38

2.2 Local Study Area

The Matzikama municipality is situated on the north-west coast of the Western Cape and borders the Northern Cape Province (Kamiesberg municipality in the north and Hantam municipalities in the east), the Atlantic Ocean on the west, and the Western Cape (Cederberg municipality) in the south (WCDM 2021). The municipality consist of 18 towns, with three coastal settlements (Doringbaai, Papendorp, and Strandfontein) and several small inland towns which serves as agriculture service centres (Ebenhauser, Lutzville, and Koekenaap) (MM 2019; WCGPT 2018). Matzikama municipality is defined by an arid environment with a flourishing natural irrigation system sustained by the Olifants River. The Olifants River (Vanrhynsdorp Government Scheme) consist of 237 km canals and supply water for several towns, industrial and domestic waste, local agriculture, and irrigation (DWS 2019). Most of the economic activities are concentrated in the south of the municipality, with Vredendal being the largest town and primary economic node (WCGPT 2018). The agriculture sector is largely attributed by the viniculture industry and combined with the forestry and fishing sector contributed the most towards Matzikamas municipal GDP and employment in 2018 (Mayson *et al.*, 2020; MM 2019). The agriculture, forestry and fishing sector employed approximately 25 492 people in 2014 consisting of a mixed workforce of semi-skilled and unskilled workers (PGWC 2018). Matzikama's real GDP per capita in 2018 was R39 000 which is considerably lower than most surrounding municipalities, including the WCDM (at R59 000). Matzikama municipality real GDP per capita decreased between 2018 and 2019 by 2.5%, in addition to a low GDP growth rate of 2.1% over the period 2008-2017, which is 0.3% less than the WCDM average growth rate (WCDM 2021; MM 2020). It is estimated that the Matzikama municipality experienced its largest decline in its annual GDP growth rate in 2019 (4%) when compared to the GDP growth rate between 2014 and 2018 (MM 2021/22). It is anticipated that the ongoing COVID-19 pandemic will worsen Matzikama's local economy as a decline in economic performance has already been observed since 2018. A further reduction in municipal revenue, unemployment in the private sector, land grabs for informal housing and the stagnation of development programs is likely to occur in 2021. (MM 2021/22).

2.3 Project Site

Strandfontein (31.7481° S, 18.2303° E) is mostly a residential resort situated along the west coast of South Africa some 52.5km from Vredendal (Mayson *et al.*, 2020). It has limited economic activities and is characterised by a very low economic growth potential and socio-economic needs (Mayson *et al.*, 2020; SM, 2018). Major economic activities are livestock farming and employment through mining but most inhabitants are unemployed. However, Strandfontein ranked relatively highly for composite resource and development potential (2nd and 28th, respectively) out of 131 towns in the Western Cape province. Strandfontein has a population of 431 inhabitants and combined with local villages such as Kliprand, Bitterfontein, Nuwerus, Molsvlei, etc. amounts to 7 000 inhabitants) and 92 Households (Table 2-1, Census 2011). The population is 48.6% female and 51.4% male, with the predominant population group being of Black African (50.6%) followed by, White (33.2%), Coloured (14.8%), Indian/Asian (0.9%), and other (0.5 %) communities. Most of the populations' first language is Afrikaans (69,4%), followed by isiXhosa (22.6%), English (3.2%), Sesotho (2.7%) IsiZulu (1.1%), and Sepedi (0,5%). Strandfontein's population dependency ratio 18.6%, with 84.7% of the population falling in the working age group (15-64 years), followed by young (8.4%, 0-14) and then the elderly group (7%, 65+). Level of education is relatively low: 1.4% have no schooling, 38.6% completed matric, and 17.2% of the population educated to a higher degree. The average household income in Strandfontein ranges from no income (10.9%), R1 to R 9600 (3.3%), with most (47.8%) of the population earning between R9 601-R76 400 per annum (Figure 2-1).

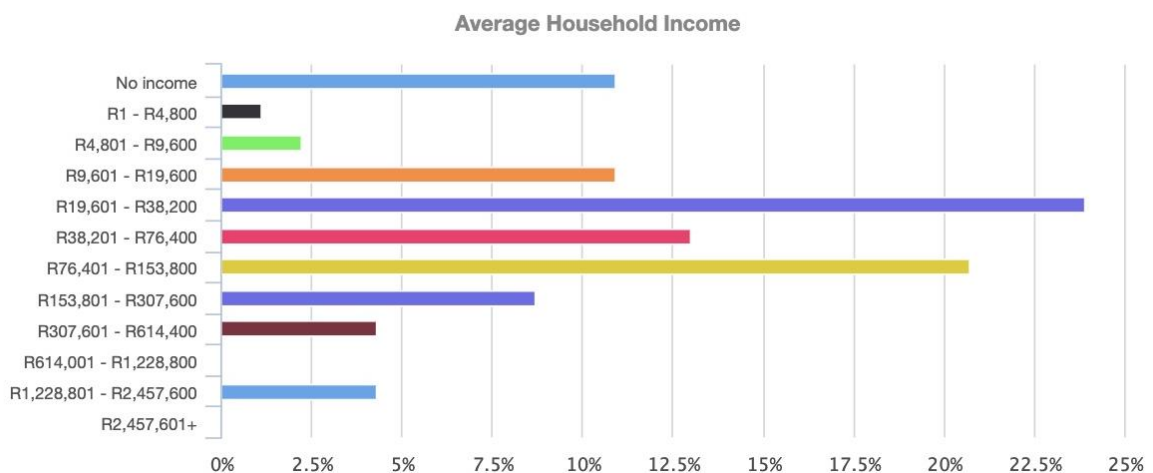


Figure 2-1 Average household income of Strandfontein.

3 SOCIO-ECONOMIC IMPACTS ASSOCIATED WITH THE MARITIME SECTOR

South Africa fisheries sector has an estimated value of R6 billion contributing to 0.1% to the national GDP (DAFF 2019). Of the 22 commercial sectors (listed in SAG 2013/14) the most economically valuable with the greatest catch volumes are the demersal-trawl (hake) and small-pelagic sectors (pilchards, anchovy and red-eye round herring) (Brick & Hasson 2016; SAG 2013/14). The Western Cape is estimated to account for most of the industry value (90%), employment, and income with the primary commercial fisheries (as well as main fisheries ports, and therefore associated industry services) concentrated along the west and south coast of South Africa (Hara *et al.*, 2008; Karaan and Rossouw. 2004). The marine specialist study identified three fishery sectors (Small Pelagic, Traditional Linefish and Tuna Pole and Line) that may overlap with the 11C concession (Hutchings et al 2021).

The concession area 11C will extend between the inshore boundary about 5 km from the coast and the outer boundary at the 200 m isobath (approximately 70 km offshore). The main users of the sea space in Concession 11C are the commercial shipping and fishing industries. Most merchant shipping would travel offshore of the concession area along the continental shelf edge, although crossing of fishing vessels and other prospecting or mining vessels is anticipated. The potential impact of the prospecting activities on the commercial fisheries and their dependence was identified and placed in relation to the potential socio-economic impacts based on the Marine Specialist Report (Hutchings et al 2021) and limited available published literature. Potential spatial overlap with the small pelagic, traditional linefish and tuna pole fisheries was identified and assessed. The significance of the potential impacts that would result from the proposed prospecting activities is determined below in order to assist with informed decision-making in the prospecting rights application. The significance of an impact is defined as a combination of the consequence of the impact occurring and the probability that the impact will occur. The significance of each identified impact was thus rated according to the methodology in Appendix 1 of the Marine Specialist Report (Hutchings et al 2021).

3.1 Potential socio economic impacts

3.1.1 Tuna pole and line

The South African tuna pole and line sector (TPL) targets longfin tuna *Thunnus alalunga*, yellowfin tuna *T. albacares*, bigeye tuna *T. obesus* and skipjack tuna *Katsuwonus pelamis* seasonally between November and May. Due to the seasonality of the TPL fishery, fishers also have access to snoek (*Thyrsites atun*) and yellowtail (*Seriola lalandi*) that are also important targets of the traditional linefishery. The tuna pole fleet consists of approximately 100 vessels ranging from small outboard powered skiboats (7-9 m length) to inboard diesel-powered deck boats (6-25 m length). The reported longfin tuna catch in 2018 was 2471 tonnes, with a wholesale value of R 124 Million, or 1.2% of the total South African commercial fisheries value (Japp & Wilkinson 2021). The commercial tuna pole fishing grounds lie between Cape Agulhas and the Orange River, but the fleet operates predominantly out of Cape Town and Hout Bay harbours and most fishing effort takes place within 100 nautical miles of these ports (particularly in the Cape Canyon area). Some effort does take place further up the west coast, although this is mostly offshore or to the south of concession area 11C. Over the period 2017-2019 there was no reported TPL fishing effort in the area west of Brand se Baai and inshore of the 200 m isobath, i.e. none within concession 11C (Japp & Wilkinson 2020).

Impacts on the TPL fleet due to the proposed prospecting activities within 11C are therefore expected to be insignificant (Table 3-1).

Table 3-1 Impact rating of the prospecting activity on the Tuna Pole and Line fishery.

	Extent	Intensity	Duration	Consequence	Probability	Significance	Status	Confidence
Without mitigation	Local 1	Low 1	Short-term 1	Very Low 4	Possible	INSIGNIFICANT	-ve	High
No mitigation required. :								

3.1.2 Traditional Linefish Sector

Most (85%) subsistence fishers employ traditional line fishing methods, which is generally considered labour intensive and associated to low revenue output (Brick & Hasson 2018). Line fishers operate in shallow water (generally <100 m depth) and would potentially be negatively impacted by coastal and nearshore seismic exploration, prospecting and mining operations (particularly recreational, small scale and subsistence shore fishing). Traditional line fishers use simple handheld lines or rod with no more than 10 baited hooks per line whereas the commercial line fishers use motorised boats and is managed by Total Applied Effort (TAE) (DAFF 2013). The traditional line fishing sector targets multiple species (up to 200 species) of which 95 species are commercially and recreationally significant (DAFF 2013). The line fisheries along the west coast (Line fish management Zone A - Orange River to Cape Infanta) mostly target the nomadic coastal migrant species, snoek (*Thyrsites atun*) and yellowtail (*Seriola lalandi*), as well as the reef dwelling Hottentot sea bream (*Pachymetopn blochii*). Snoek typically contributes the highest catch weight in the commercial line fisheries (total landings of up to 5 800 tonnes) (Kerwath *et al.*, 2017). The management framework includes a comprehensive suite of line fish regulations including minimum size limits, daily bag limits, closed seasons, closed areas, commercial fishing bans for certain species and the capping of the commercial effort with zonal based Total Allowable Effort (TAE) (Kerwath *et al.*, 2017).

Concession area 11C is however relatively far offshore in water deeper than 100 m, and far from suitable launch sites. A spatial analysis of the reported commercial linefish catch data does not show any activity in reporting blocks that overlap with Concession Area 11C and exploration activities in this concession area are expected to have negligible impacts on the traditional linefish sector. The proposed prospecting in concession area 11C is therefore expected to have a negligible socio-economic impact on the direct and indirect dependants from the traditional linefishing sector (Table 3-2).

Table 3-2 Impact rating of the prospecting activity on the Traditional Linefish Sector.

	Extent	Intensity	Duration	Consequence	Probability	Significance	Status	Confidence
Without mitigation	Local 1	Low 1	Short-term 1	Very Low 3	Improbable	INSIGNIFICANT	-ve	High

3.1.3 Small Pelagic Purse Seine Fisheries

The small pelagic fishery is described in the has the largest catch volume for any of the South African fishery sectors and has the second largest annual catch value, estimated at around R2.164 billion in 2017, which is approximately one fifth of the combined value of South African Fisheries (Japp & Wilkinson 2021). The industry supports around 4 500 full time staff, 2 500 seasonal staff and more than 700 fishers. The support industries contribute an estimated further 2 400 jobs. The management of the small pelagic fishery is described in the marine specialist report (Hutchings et al 2021). Stock status of anchovy and round herring are currently considered optimal, whilst sardine stocks are considered depleted (DEFF 2020).

The small pelagic purse-seine fishery operates between the Orange River and East London mostly in nearshore waters (within 10 km of the coast). The 11C Concession Area does overlap with identified fishing areas for anchovy and with the sardine directed fishing ground (Norman *et al.*, 2018). A quantitative spatial analysis using commercial catch return data (all small pelagic species combined) for the period 2006-2011, however, suggests that Concession Area 11C itself, does not constitute an area where a substantial proportion of the average annual purse seine catch is made. Despite overlapping with six small pelagic reporting grid blocks, concession 11C lies at the northern extreme of the small pelagic fishing grounds and the total catch reported for these blocks was only ~150 tonnes (out of a national total of around 300 000 tonnes).

The fishery is unlikely to be significantly negatively affected by small temporary closures/exclusion zones around survey vessels and geotechnical survey sites and potential negative impacts on the livelihoods and household income of participants in this fishery are considered unlikely. The socioeconomic impact is assessed as 'very low', and 'insignificant' after recommended mitigation measures (Table 3-3).

Table 3-3 Impact rating of the prospecting activity on the Small Pelagic Purse Seine Fisheries.

	Extent	Intensity	Duration	Consequence	Probability	Significance	Status	Confidence
Without mitigation	Local 1	Low 1	Short-term 1	Very Low 3	Probable	VERY LOW	-ve	High
Essential mitigation measures:								
<ul style="list-style-type: none"> Undertake surveys when fishing effort is lower (preferably out of fishing seasons). Appoint a fisheries liaison officer (FLO) to facilitate communication with the Small Pelagic Fishing Industry Association. The FLO should report daily on vessel activity and respond and advise on action to be taken in the event of encountering purse seine fishing vessels in the survey area. 								
With mitigation	Local 1	Low 1	Short term 1	Very Low 3	Possible	INSIGNIFICANT	-ve	High

4 SOCIO-ECONOMIC IMPACTS ASSOCIATED WITH LOCAL AND REGIONAL ECONOMIC PERFORMANCE.

Mining is economically important as it can create broad scale employment opportunities and boost the national and local economy. As a result, the potential impact on the socio-economic performance will be insignificant on a local scale (i.e., in Strandfontein community, Table 4-1). Conversely, investment from Trans Atlantic Diamond in South Africa will have a greater positive impact on the regional economy (Table 4-2).

Table 4-1 Impact rating of the prospecting activity on the local socio-economic performance.

	Extent	Intensity	Duration	Consequence	Probability	Significance	Status	Confidence
Without mitigation	Local 1	Medium 2	Short-term 1	Very Low 4	Possible	INSIGNIFICANT	+ve	Medium
No mitigation measures								

Table 4-2 Impact rating of the prospecting activity on the on the regional socio-economic performance.

	Extent	Intensity	Duration	Consequence	Probability	Significance	Status	Confidence
Without mitigation	Regional 2	Low 1	Medium-term 2	Low 5	Definite	LOW	+ve	Medium
No mitigation measures								

Trans Atlantic diamond should aim to incorporate codes of good practice on Broad Based Black Economic Empowerment issued under the section 9 of the Broad Based Black Economic Empowerment Act, Act 53 of 2003, as amended by Act 46 of 2013. Therefore, the following resource support aims is recommended:

- At least 25% cost of sales excluding labour cost and depreciation must be procured from local producers or local suppliers in SA.
- Job creation – 50% of jobs created are for persons of colour provided that the number of such employees since the immediate prior verified B-BBEE measurements is maintained. Employment opportunities that could be fulfilled:
 - Employment of local security companies.
 - Employment allocated to port duties
 - If feasible, employment of local small-scale fishers vessels as support vessels during survey operations.
 - Employment of local or national Geologists, a vessel manager, captain, crew members, scientists etc.
- At least 25% transformation of raw material or beneficiation which includes local manufacturing, production and/or assembly, and/or packaging, or at least 85% of labour cost paid to South African employees by service industry organizations
 - prospecting equipment can be sourced within South Africa or neighbouring communities.
 - investigate if support for operational activities can be provided by local services for; e.g. Refueling, general supplies, and possible equipment repair)
 - Skills transfer – Training opportunities:
 - Environmental officers.
 - Health and Safety Officers.
 - Marine Mammal Observers (MMO's) and Passive Acoustic Monitoring (PAM) operators.
 - general crew/ deck member.
 - Commercial divers to help with surveys.

5 CONCLUSIONS AND RECOMMENDATIONS

Anchor Environmental Consultants were requested to undertake a socio-economic assessment for Trans Atlantic Diamonds (Pty) Ltd who are applying for a diamond prospecting right for Concession Area 11C, offshore of the Western Cape Coast. The proposed prospecting activity is in a remote location and is unlikely to impact coastal communities in the Matzikama municipality, e.g. Strandfontein, approximately 40km south of Concession Area 11C. A description of Matzikama's Municipality and Strandfontein's demographic profile is, however, provided. A brief overview of the economic performance was discussed and placed in relation to the potential impacts associated to the proposed survey area. The likelihood of the proposed survey to impact the socio-economic standing of areas surrounding concession area 11C was rated, based on available resources (i.e., Marine Specialist Report 1987/1 and the wider literature), and the significance of impacts were reported on. Important user groups were identified and potential direct, indirect and cumulative impacts from the proposed exploration and prospecting activities were identified. Impacts were assessed and, where possible, mitigation measures have been identified to avoid/minimise/reduce any impacts.

Potential impacts associated to the seismic survey and sampling/prospecting activities were identified as: 1) Temporary disturbance of marine resources and the 2) Exclusion of fishing vessels from the concession Area 11C. These impacts are anticipated to potentially impact the livelihoods and household income of marine fisheries groups (i.e., Tuna pole and line, Traditional Line fish, and Small Pelagic Purse Seine fishers). Potential impacts associated with the proposed prospecting activities were as Very Low and Insignificant overall significance. After mitigation measures were applied, potential impacts associated with the proposed activities were all rated as insignificant.

Trans Atlantic Diamonds should aim to incorporate codes of good practice on Broad Based Black Economic Empowerment issued under the section 9 of the Broad Based Black Economic Empowerment Act, Act 53 of 2003, as amended by Act 46 of 2013. This will include skills transfer programmes, job creation, and supporting local service industry organizations such manufacturing, production and/or packaging services.

6 REFERENCES

- Balata D, Piazzini L, and L Beneditti-Cecchi. 2007. Sediment disturbance and loss of beta diversity on subtidal rocky reefs. *Ecol.*, 88(10), 2455-2461.
- Brick K and R Hasson. 2016. Valuing the socio-economic contribution of fisheries and other marine uses in South Africa: A socio-economic assessment in the context of marine phosphate mining. Report prepared by the Environmental Economics Policy Research Unit University of Cape Town (UCT), 53pp.
- CapMarine. 2016. Report Prepared by CapMarine (Pty) Ltd for West Coast Resources (Pty) Ltd. Available at: https://sahris.sahra.org.za/sites/default/files/additionaldocs/Volume%204_compressed_Part4.pdf [Accessed on 18 October 2021].
- CapMarine. 2021. Environmental Impact Assessment for marine prospecting activities in South African sea areas 14b, 15b and 17b west coast, South Africa Fisheries Assessment. Report prepared by CapMarine (Pty) Ltd for SLR Group on behalf of Belton Park Trading 127 (Pty) Ltd, 51pp.
- Census. 2011. National census. Prepared by the Department: Statistics South Africa.
- Clark BM, Hauck M, Harris JM, Salo K, and E Russell, E. 2002. Identification of subsistence fishers, fishing areas, resource use and activities along the South African coast. *S. Afr. J. Mar. Sci.*, 24(1), 425–437. doi:10.2989/025776102784528574
- Department of Environment, Forestry and Fisheries (DEFF). 2020. Status of the South African marine fishery resources 2020. Cape Town: DEFF.
- Department of Agriculture, Forestry And Fisheries (DAFF). 2013. Department of Agriculture, Forestry and Fisheries policy on the allocation and management of fishing rights in the traditional linefish fishery: 2013. Government Gazette, 13pp.
- Department of Agriculture, Forestry And Fisheries (DAFF). 2013. Integrated Growth. Development Plan 2012. Report, 69pp.
- Department of Agriculture, Forestry And Fisheries (DAFF). 2015. Draft policy on the location and management of fishing rights in the netfish fishery: 2015. Government Gazette, 10pp.
- Department of Agriculture, Forestry And Fisheries (DAFF). 2021. The most important products in our ocean fishing industry. Prepared by the Department of Statistics South Africa. Available at: <http://www.statssa.gov.za/?p=14327> [Accessed on the 28 October 2021].
- Griffiths MH. 2000. Long-term trends in catch and effort of commercial linefish off South Africa's Cape Province: snapshots of the 20th century. *S. Afr. J. Mar. Sci.*, 22(1), 81–110. doi:10.2989/025776100784125663
- Hara M, deWit M, Crookes D, and T Jayiya. 2008. Socio-economic contribution of South African fisheries and their current legal, policy and management frameworks. Working Paper 6, 75pp.
- Heemstra P and E Heemstra. 2004. Coastal Fishes of Southern Africa. NISC (Pty) Ltd: Makhanda, South Africa, 488pp.

- Hutchings K, Massie V, and Clark BM. 2019. Environmental & Risk Assessment for an Application for a Right to Engage in an Abalone Ranching Pilot Project. Report prepared for Doring Bay Abalone (Pty) Ltd. by Anchor Environmental Consultants (Pty) Ltd. Report no 1857/1.
- Isaacs M and Hara M. 2015. Backing small-scale fishers: Opportunities and Challenges in transforming the fish sector. PLAAS Rural Status Report 2.
- Isaacs M. 2013. Small-scale Fisheries Governance and Understanding the Snoek (*Thyrsites atun*) Supply Chain in the Ocean View Fishing Community, Western Cape, South Africa. *Ecol. Soc.*, 18(4). doi:10.5751/es-05863-180417.
- Japp D and S Wilkinson. 2021. Environmental impact assessment for marine prospecting activities in South African sea areas 14b, 15b and 17b west coast, South Africa Fisheries Assessment prepared by Capricorn Marine Environmental for SLR and Belton Park Trading, 55pp.
- Karaan M and Rossouw S. 2004. The Microeconomic Strategy Project: A Baseline Assessment of the fishing and Aquaculture industry in the Western Cape. Study commissioned by the Western Cape Provincial Government, 75pp.
- Kerwath S, Parker D, Attwood C, da Silva C, Maggs J, and Winker H. 2017. The 2017 Assessment of Snoek (*Thyrsites atun*) for the South African Linefishery. Technical Report, 26pp.
- Lamberth SJ, Sauer WHH, Mann BQ, Brouwer SL, Clark BM, and C Erasmus. B. 1997. The status of the South Africa Beach-seine and Gill-net Fisheries. *S. Afr. J. mar. Sci.*, 18, 195–202.
- Matzikama Municipality (MM). 2016/17. Matzikama Municipality Annual Report, 50pp.
- Matzikama Municipality (MM). 2019. Integrated Development Plan Revision two – 2019-2020. Matzikama Municipal Report, 309pp.
- Matzikama Municipality (MM). 2020. Socio-economic Profile: Matzikama Municipality. Matzikama Municipality Report, 20pp.
- Matzikama Municipality (MM). 2021/22. Integrated Development Plan Revision two – 2021-2022. Matzikama Municipal Report, 309pp.
- Mayson D, de Satgé R, Manuel I, Losch B, and Phuhlisani NPC. 2020. GTAC/CBPEP/ EU project on employment-intensive rural land reform in South Africa: policies, programmes and capacities. Municipal case study for the Matzikama Local Municipality, Western Cape, 68pp.
- Nthane T, Raemaekers S, and N Waldeck. 2015. New policy can bring unity to Lamberts Bay fishers. Masifundise Development trust. Available at: <http://www.masifundise.org/new-policy-can-bring-unity-to-lamberts-bay-fishers/> [Accessed on 28 October 2021].
- Nthane TT. 2015. Understanding the livelihoods of small- scale fishers in Lamberts Bay: Implications for the new Small-scale Fisheries Policy. MSc Thesis. University of Cape Town, Cape Town: South Africa.
- Pulfrich A and CL Griffiths. 1988. Growth, sexual maturity and reproduction in the hottentot *Pachymetopon blochii* (Val.). *S. Afr. J. Mar. Sci.*, 7, 25-36.

- Pulfrich A. 1987 Aspects of the biology of, and fishery for, the Hottentot, *Pachymetopon blochii* (Val.) (Sparidae), in the Western and Southwestern Cape. MSc Thesis. University of Cape Town, Cape Town: South Africa review for 2021-2022. WCDM Report, 206pp.
- SLR. 2019. Scoping report for an EIA for a prospecting right application for offshore sea concessions 14b, 15b & 17b, West Coast. Prepared by SLR Group for Belton Park Trading 127 (Pty) Ltd, 109 pp.
- South African Government (SAG). 2013. Fisheries. South African Government. Available at: <https://www.gov.za/about-sa/fisheries>. [Accessed on 28 October 2021].
- Stellenbosch University (SU). 2013. An assessment of the livelihoods and vulnerabilities of a small West Coast fishing community. Report prepared by the Department of Geography & Environmental Studies, Stellenbosch University, 50pp.
- Vijayakumar S. 2013. An Empirical Study on the Nexus of Poverty, GDP Growth, Dependency Ratio and Employment in Developing Countries. *J. Compet.*, 5(2), 67–82.
doi:10.7441/joc.2013.02.05
- West Coast District Municipality (WCDM). 2021. Integrated Development Plan 2017 – 2022.
- West Coast Info (WCI). 2021. The West Coast Travel Directory. Available at: <https://www.west-coast-info.co.za/region> [Accessed on: 28 October 2021].
- Western Cape Government Provincial Treasury (WCGPT). 2018. Municipal Economic Review and Outlook (Mero) 2018. Annual Report, 517pp.