Tri-Star Minerals Pty Ltd
EL 6783
Annual Technical Report

24 May 2022 to 23 May 2023

Year 1

Table 1. Titleholder contact summary

Titleholder	Tri-Star Minerals Pty Ltd ABN 55 631 733 161
Operator	Tri-Star Minerals Pty Ltd ABN 55 631 733 161
Titles / Tenements	EL 6783
Report Title	Annual Technical Report for Period Ending 23 May 2023
Date of Report	23 June 2023
Target Commodity	Gold, Silver, Copper, Lead, Zinc, Cobalt, Nickel, Uranium, REEs, Platinum Group Elements (PGE) and Lithium
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1. Summary

Tri-Star Minerals Pty Ltd (Tri-Star) Annual Technical Report for Exploration Licence (EL) 6783, provides a summary of the activities undertaken on the tenement for the reporting period ending 23 May 2023, including any results produced by these activities. Tri-Star is the sole titleholder and operator for EL 6783.

This report complies with the statutory reporting requirements prescribed in s 15AJ of the *Mining Act 1971* (SA) and s.78 of the Mining Regulation 2020 (SA).

EL 6783 was granted to Tri-Star Minerals Pty Ltd (Tri-Star) on 24 May 2022. A summary of the completed Program of Works for Year 1 is provided in Table 2 below.

During the Year 1 term, Tri-Star undertook a collation of geological and geophysical data which built on the initial assessment from public data. Tri-Star also undertook desktop studies and formed an exploration program for year two (2). Engagement with Native Title to progress Native Title Agreements and consultation with Landowners commenced around the exploration program planned for year 2.

Table 2. Completed vs. proposed activities for the Year 1 work program term

Tenure term	Proposed Program of Works	Completed Program of Works
Year 1	▪ Collation of geological and geophysical data (building on the initial assessment) ▪ Desktop mapping and development of an exploration program to test the exploration model and associated targets. ▪ Field inspections (if suitable) and commence engagement of Native Title and Land Access Matters	▪ Completed desktop studies of existing information. ▪ Commenced Native Title engagement and negotiation of Native Title Agreements. ▪ Commenced Engagement with Landowners. ▪ Completed data review based on geological and economic factors.

2. Tenure history

2.1 Term and area

EL 6783 was granted to Tri-Star Minerals Pty Ltd on 24 May 2022 and covers an area of approximately 991km^2. Tri-Star is currently in Year 1 of the tenure term for the tenement.

2.2 Location and general description

EL 6783 is located near the Tieyon area, approximately 270km north-northwest of Coober Pedy, as shown in Figure 1. This tenement is geologically located over the Eromanga and Hamilton Basins and the Musgrave Province (Figure 2). EL 6783 is located on the Abminga 1:250,000 map sheet.

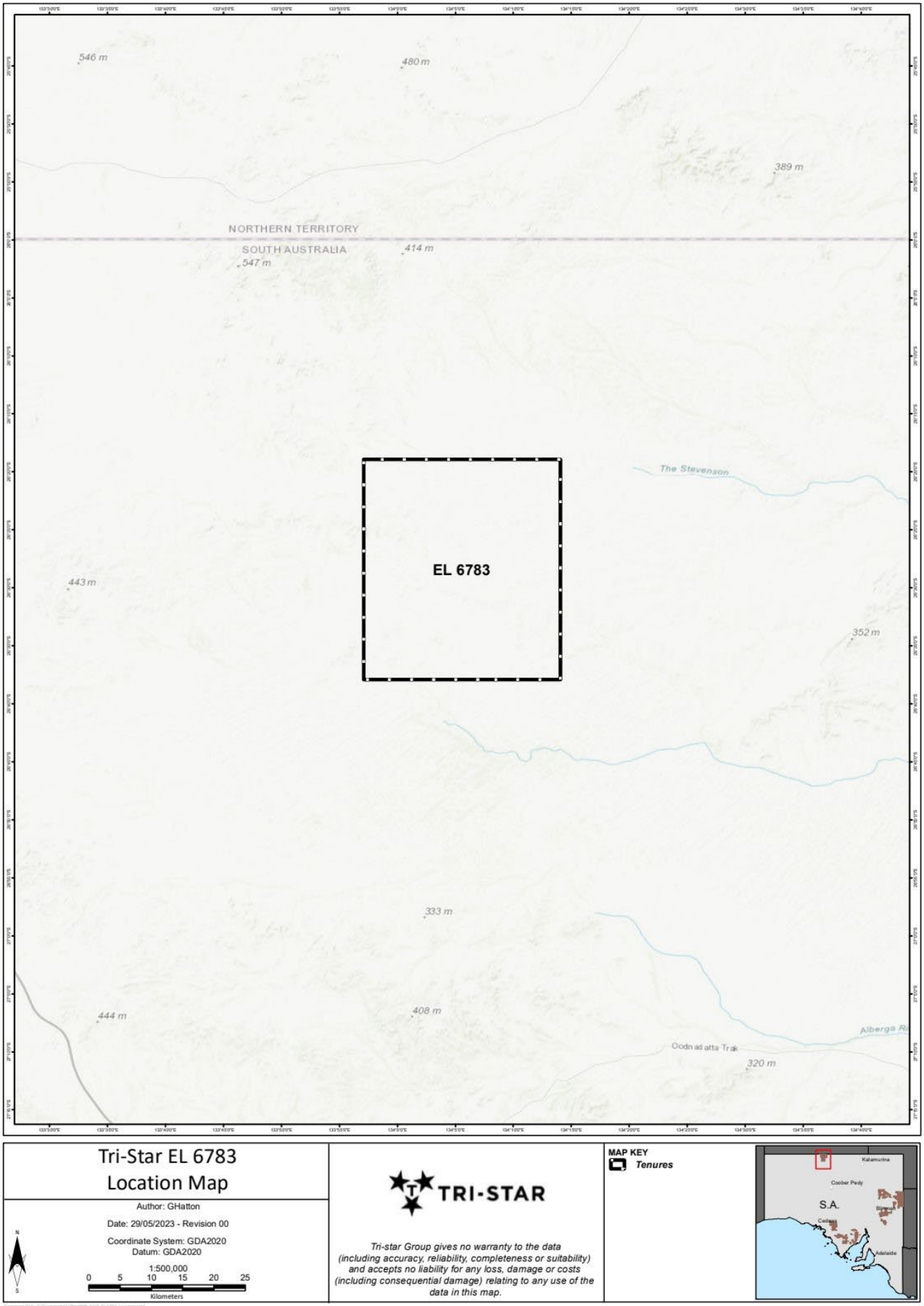

Figure 1. EL 6783 Location Map

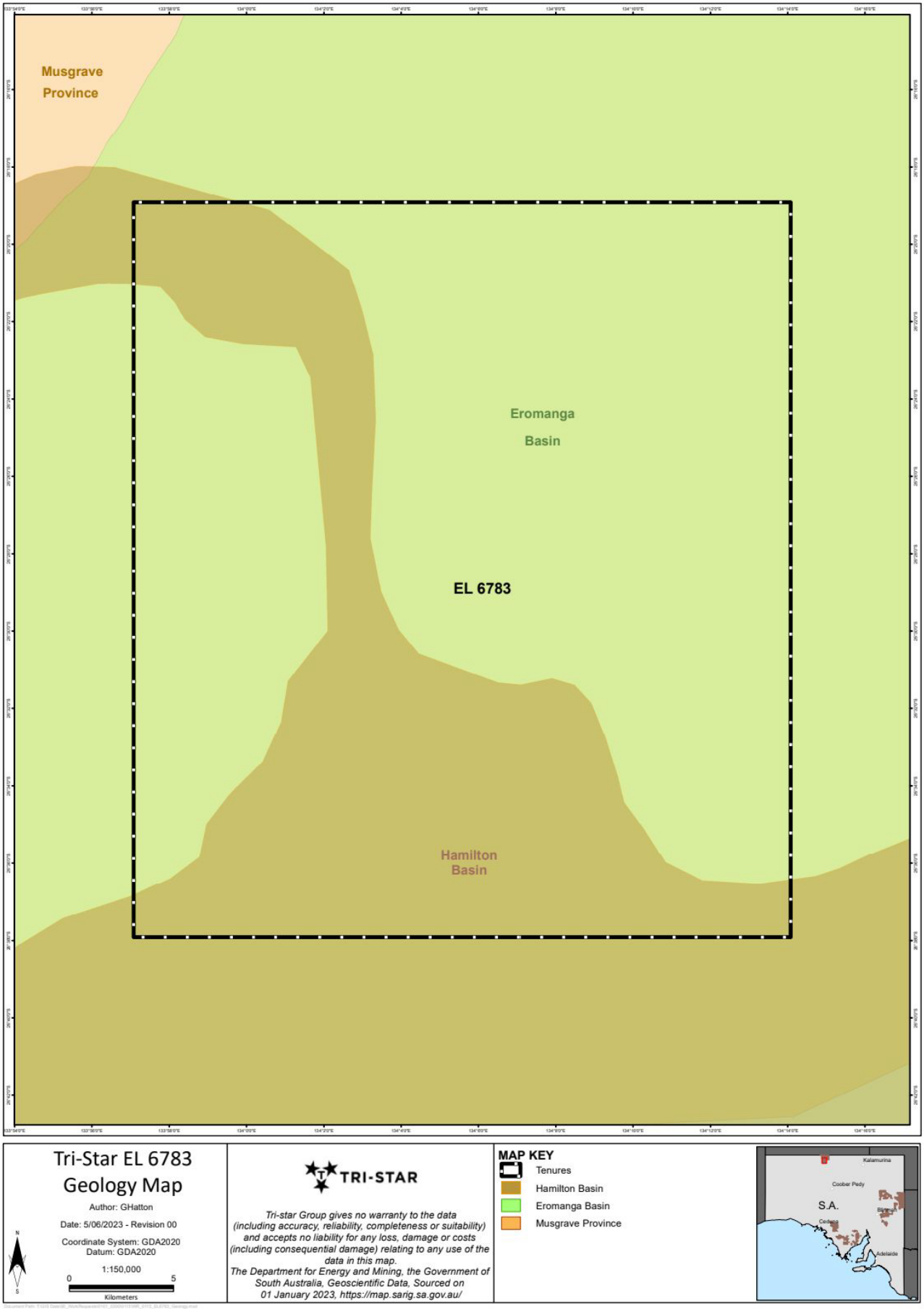

Figure 2. EL 6783 Geology Map

2.3 Exploration rationale

Tri-Star's exploration rationale and objectives for EL 6783 is to explore for Gold, Silver, Copper, Lead, Zinc, Cobalt, Nickel Uranium, REEs, Platinum Group Elements (PGE) and Lithium in the Musgrave Province, and will focus on the following deposit models:

1. Iron-Oxide Copper-Gold (IOCG) e.g., Olympic Dam, Prominent Hill
2. Sediment hosted silver-base metal e.g., Paris, Nankivel Hill, Beltana
3. Orogenic gold (lode gold) e.g., Tunkillia, Tarcoola
4. Paleochannel Uranium e.g., Beverley, Four Mile
5. Magmatic Ni-Cu-Co-PGE e.g., Nebo-Babel

The Musgrave Province is host to the Nebo-Babel Ni-Cu-PGE and has the potential to host significant orogenic gold mineralisation arising from orogenesis in the Mesoproterozoic and Ordovician. There are several Ag mineral occurrences surrounding EL 6783 with potential for these minerals to continue into the tenement. Ag could potentially indicate sediment-hosted silver-base metal mineralisation. There is also potential for Musgrave Province-hosted deposits to be located under the Pedirka Basin. Geophysics may elucidate the prospectivity of the Musgrave Province, as well as the thickness of cover sequences above (Eromanga Basin sediments).

The earliest recorded uranium exploration in the Abminga region was carried out by Dampier Mining Company Ltd (BHP) starting in 1973. The company's tenements encompassed a large area over the Moorilyanna Graben, which includes EL 4094 Lambina. A total of 56 rotary holes were drilled, outlining two northeast trending paleo-valleys filled with Upper Jurassic fluviatile sediments and Lower Cretaceous mudstone, separated by a basement ridge. Interbedded carbonaceous, pyritic sandstone, and clay were found in the Jurassic sediments, which rested unconformably on Proterozoic siltstone basement. Gamma ray logging revealed multiple anomalies in the Algebuckina Sandstone, with the largest anomaly found in hole AL50, corresponding to an estimated value of 195 ppm U3O8 over an interval of 0.75 metres. However, BHP was dissatisfied with the results and did not renew their tenements.

Between 1979 and 1980, Afmeco Pty Ltd (Afmeco) explored for uranium deposits in the Algebuckina Sandstone within and to the east of the Abminga East project tenements. A total of five diamond holes and 15 aircore holes were drilled, mainly near Enungarenna Bore on the present EL 3964 Enungarenna Hill. Gamma logs were obtained from selected holes and five water bores, and radiometric anomalies were recorded in six drillholes. The largest anomaly was found in hole CUR13 near Enungarenna Hill, where chemical analysis of drill samples revealed several anomalous uranium values, the highest being 190 ppm. A water sample from the same hole returned a uranium analysis of 180 milligrams per litre. Afmeco suggested that hole CUR13 may have intersected a palaeochannel near a regional redox interface. Despite these findings, no further work was carried out.

3. Geology

In the Neoarchean to Mesoproterozoic (2.8-1.2 Ga) the formation of the Musgrave Province began with the basement rocks that comprised primarily granitic and gneissic formations. In the Mesoproterozoic (1.6-1.0 Ga) the Musgrave Orogeny occurred, leading to intense deformation and

metamorphism of the basement rocks. This event also resulted in the formation of the Musgravian granulite facies metamorphic rocks. The Neoproterozoic to Cambrian (1 Ga – 540 Ma) comprised a prolonged period of erosion and weathering occurred, followed by the Ordovician Period (480 Ma) during which the region underwent a significant tectonic event known as the Petermann Orogeny. This event led to additional deformation and metamorphism, and it's believed that this is when the major structures visible in the Province today were primarily formed.

The Eromanga is a large intra-cratonic sedimentary basin in central Australia that formed during the Mesozoic. In the early Jurassic Period (200-174 Ma) the Eromanga Basin's formation began with fluvial and lacustrine sediment deposition, represented by formations such as the Hooray Sandstone and Westborne Formation. In the Middle to Late Jurassic (174-145 Ma) the basin was a marine environment, depositing sandstones, siltstone and mudstones (e.g. Birkhead Formation). Further marine sedimentation occurred through the Cretaceous Period (145-66 Ma). The Cretaceous Period also saw the beginning of the basin's uplift, erosion and reworking of older sediments.

The Musgrave Province is known for its potential for significant mineral deposits, including nickel, copper, and gold. The province is highly prospective for mafic-ultramafic intrusions, which are often associated with nickel-copper-PGE (Platinum Group Elements) deposits. The Nebo-Babel deposits are located in the Western Australian portion of the Musgrave Province and are an example of a significant nickel-copper deposit within a mafic intrusion. Although technically not in South Australia, they indicate the mineral potential of the broader Musgrave Province. Large structures and their secondary off-shoots formed during orogeny will provide targets for potential orogenic gold mineralisation.

4. Geophysics

4.1 Airborne Surveys (excluding remote sensing)

No Airborne Surveys were undertaken during this reporting period.

4.2 Gravity Surveys

No Gravity Surveys were undertaken during this reporting period.

4.3 Airborne Surveys (excluding remote sensing)

No Airborne Surveys were undertaken during this reporting period.

4.4 Other Geophysical Surveys (including those conducted using a drone platform)

No Other Geophysical Surveys were undertaken during this reporting period.

5. Remote Sensing Data

No Remote Sensing Activities were conducted during the reporting period.

6. Surface Geochemistry

No Surface Geochemistry Activities were conducted during the reporting period.

7. Drilling

7.1 Drilling

No Drilling Activities were conducted during the reporting period.

7.2 Drilling Log Data

No Drilling Activities were conducted during the reporting period.

7.3 Analytical results

No Drilling Activities were conducted during the reporting period.

7.4 Downhole geophysical survey results

No Drilling Activities were conducted during the reporting period.

7.5 Core photographs/images

No Drilling Activities were conducted during the reporting period.

7.6 Other tests

No Drilling Activities were conducted during the reporting period.

7.7 Maps

No Drilling Activities were conducted during the reporting period.

8. Other Studies

As part of our comprehensive assessment of tenement EL 6783, a detailed review of both government and open-file data was conducted. This review incorporated an extensive range of data types, including geophysical data, surface geochemistry, geological mapping and structural data, as well as historic drill data. The objective of this examination was to discern any potential indicators suggestive of mineral deposits, such as Iron Oxide Copper Gold (IOCG) deposits, sediment-hosted silver-base metal deposits, paleochannel uranium and orogenic gold deposits within the tenement area. By identifying these indicators, we have been able to highlight areas with elevated prospectivity within the tenement. This process allows for efficient prioritisation of these areas for follow-up exploration activities in the next phase of our work, with the aim of fully understanding the mineral potential within tenement EL 6783.

9. Environment

Tri-Star has not undertaken any ground disturbance activities during the reporting period and submits that it is in full compliance with Mining Regulation 77(3)(b)). Tri-Star acknowledges that in accordance with Mining Regulation 77(8), a compliance report is not required if no on-ground exploration operations have been conducted or the operations are limited to those outlined in the generic PEPR.

10. Reporting on ore reserves and resources

EL 6783 is currently in the early exploration phase and activities undertaken to date and the associated results are not of a nature that would allow a resource to be estimated.

11. Conclusion

Desktop geological and historical exploration indicates the potential for rich deposits of gold, silver, base metals, and uranium within the Musgrave Province. Therefore, we maintain a confident outlook towards the prospectivity of EL 6783. As we move forward into the next reporting year, we will concentrate our resources and efforts on initiating and advancing comprehensive exploration programs. Additionally, a project areas application has been submitted to allow for an optimisation of exploration activity. Our goal is to unlock the full potential of EL 6783 and thereby contribute to the overall growth and success of our operations.

12. References

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