

# 1. EXPLORATION RATIONALE

The target area in Exploration Licence Application (ELA) 006408 (LINTON) follows up on previous work conducted in the 1990's to the southwest of Linton. This work included soil geochemical sampling and drilling. The focus area is shown in figure 1. The target sought is gold-bearing quartz reefs beneath and adjacent to historic workings. Proposed exploration, approval pathways and project management are discussed separately below.

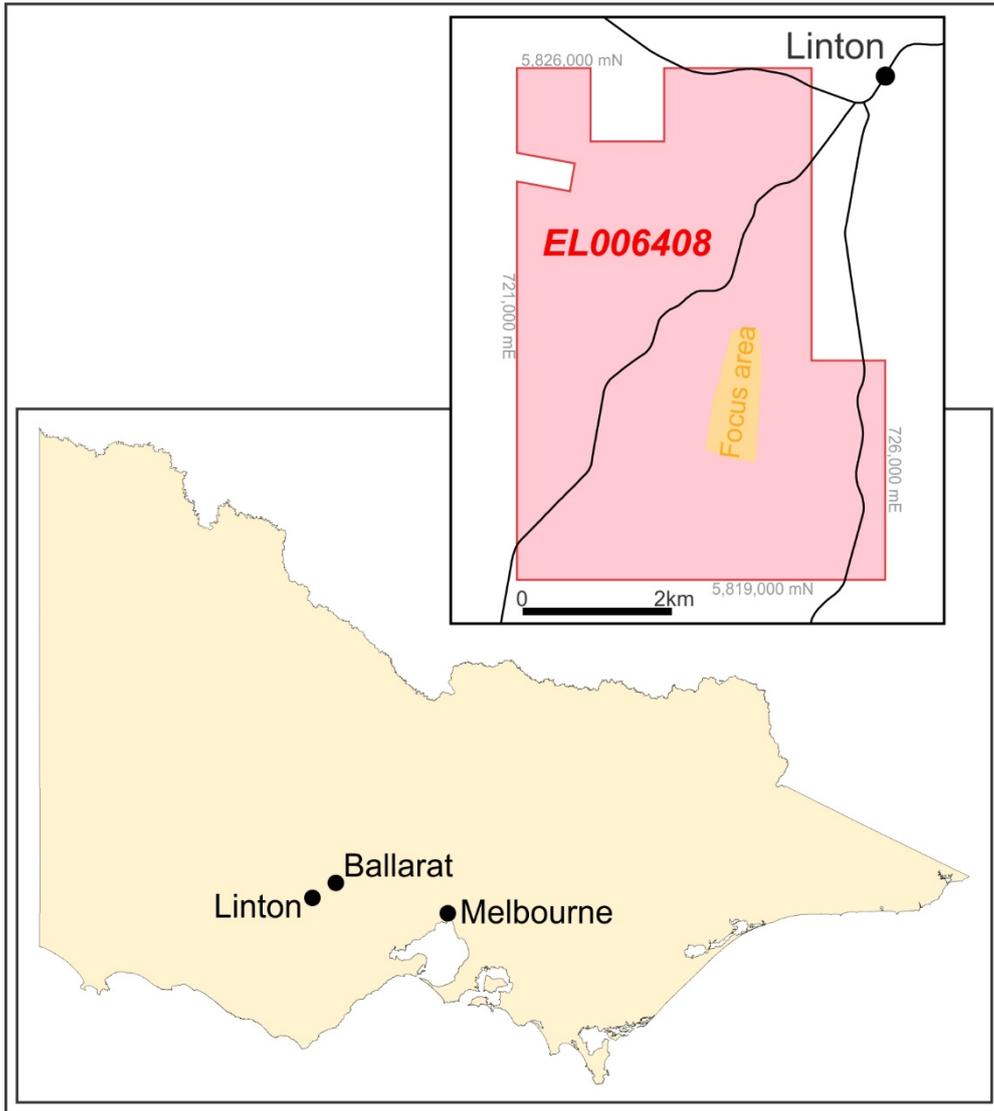


Figure 1. Map showing the location of ELA006408 near Linton.

**Mineralisation age:** ~415 Ma (million years)

**Host rock:** Deep marine sandstones and shales in the east of the tenement and granite to the west. Folded sandstones and shales are steeply dipping and intersected by faults. Faults and folds within the sandstones and shales host gold-bearing quartz veins.

**Gold occurrence:** Historic mining in the tenement has targeted two styles of gold distribution: gold-bearing quartz veins (quartz reefs) and alluvial gold eroded from the quartz reefs into the adjacent gullies and streams. The latter have been extensively mined and mostly worked out. Historic shafts sunk on quartz reefs in the focus area are mostly shallow, typically less than 30 m deep.

**Exploration rationale:** Exploration will concentrate on the gold distribution around the historic workings in the focus area and follow up on previous exploration conducted in the 1990's by Metex Resources.

## 2. WORK PROGRAM

### 2.1 Office studies:

- Collation of previous exploration results conducted in the area by 13 companies since the late 1960's, including exploration conducted by Metex Resources and CRA (now Rio Tinto).
- Collation of historic mining reports. Due to the small nature of the workings, there are very few historic records.
- Review of modern geological evaluations, for example University Research and Government Mapping.
- Satellite image interpretation.

**Timing:** 3-4 months

### 2.2 Field mapping & soil geochemical sampling:

- Metex Resources successfully delineated zones of anomalous gold in soils from a series of soil samples taken in traverses across the lines of workings. Our exploration plans to follow up and infill these results with modern methodologies. Metex took small soil samples and sent these to a laboratory for chemical analysis. Our exploration will utilise a portable X-ray analyser (pXRF) that sits directly on the ground and takes reading, providing immediate results of dozens of chemical elements. An example of use of this equipment is shown in figure 2.
- Soil sampling is planned for some roadside reserves to the west of the focus area to seek new mineral occurrences.
- Soil sampling will be accompanied by some geological check mapping of earlier work.

The geochemical and field mapping results will be integrated with the Office Studies to ascertain targets for drilling.

**Timing:** 3-4 months



*Figure 2. Example of a hand-held portable X-ray analyser (pXRF) used in the field in for a previous project worked by the exploration staff engaged for EL006408.*

### **2.3 Scout RC/Diamond drilling program**

Scout drilling will test the targets identified from the office studies, geochemistry and field mapping. Initially 10 drill holes up to 100 m deep will test the targets. If the results are positive, infill drilling of priority areas will be conducted.

**Timing:** 1-12 months, pending Government and related approvals.

### **2.4 Resource RC/Diamond drilling program**

If the drilling proves to be successful, detailed resource drilling may be conducted prior to mining studies commencing.

**Timing:** 1 – 5 years.

## **3. ENVIRONMENTAL AND COMMUNITY IMPACTS, MITIGATION AND CONTROL MEASURES**

Exploration is conducted under approved Work Plans in full consultation with the land managers, the Department of Economic Development, Jobs, Transport and Resources (DEDJTR) and will consult experts in areas of flora, fauna and cultural heritage as required. Each exploration work site is different and requires differing levels of permitting to conduct exploration work. Some of the potential environmental and community impacts and mitigation/control measures are discussed below.

### **3.1 Potential environmental impacts and mitigation measures:**

- Soil contamination
- Loss of native vegetation
- Noise
- Light
- Erosion and sediment inflow to water courses from road or drill pad construction
- Disturbance of fauna.

Proposed measures to mitigate or control environmental impacts include:

- Planning work sites to avoid clearing and to minimise the extent of disturbance.
- Identifying and avoiding sensitive areas such as threatened flora.
- Maintenance of vehicles and machinery to prevent oil spillage.
- Constructing noise barriers around drill rigs near residential areas.
- Scheduling works to coincide with most appropriate field season (for example, avoiding wet periods or breeding periods of sensitive fauna).
- Installing drainage to divert water around earth works.
- Sealing drill holes to prevent aquifer contamination.

### **3.2 Consultation and community engagement:**

Under section 39A of the MRSDA, all licensees have a duty to consult with the community throughout the period of the licence. The type and level of consultation needed depends on the complexity of the project, the potential risks and who may be affected. Exploration will use the guidelines provided in the code and publication *Community Engagement Guidelines for Mining and Exploration in Victoria (2008)* to design appropriate community consultation material. This may include the use of:

- Print media
- The company web site
- Discussions with local authorities and agencies
- Meetings with key individuals and groups
- Mail outs (print and electronic)
- Discussions with local community organisations
- Community meetings

The community consultation will commence at the design stage of an exploration program to ensure that any risks associated with an operation are identified early in the process, concerns of land owners / occupiers and local residents are appropriately considered, and exploration works will not cause unnecessary adverse effects or conflict with other land users.

All relevant regulatory agencies and stakeholders that are potentially affected by the proposed exploration will be identified and appropriately consulted about the design of the proposal, inclusive of establishing appropriate ongoing consultation after the exploration project.

A list of relevant organisations / stakeholders that may be contacted / consulted as part of the proposed exploration activities appears below:

- Department of Economic Development, Jobs, Transport and Resources (DEDJTR)
- Department of Environment, Land, Water and Planning (DELWP)
- Parks Victoria
- Private land owners / occupiers
- Indigenous communities
- Local residents
- Special interest groups
- The local water authority
- The local municipal council
- VicRoads
- Catchment Management Authority.