



PRECIOUS METAL RESOURCES LIMITED

QUARTERLY ACTIVITIES REPORT

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Latest News

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Chief Geologist

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Non-Executive Director

Peter Meers
Non-Executive Director

ASX Symbol: PMR

JORC STATEMENT

The information in this announcement that relates to mineral exploration is based on information compiled by Peter John Kennewell, who is a member of the Australasian Institute of Mining and Metallurgy.

Peter John Kennewell is a director of Precious Metal Resources Limited, and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a competent person as defined in the 2004 Edition of the "Australasian Code for Reporting of Exploration Results, Identified Mineral Resources, and Ore Reserves".

Peter John Kennewell consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

Quarterly Activities Statement period ending 31st March 2013.

This quarterly operations report is dated 30th April 2013 and is for the three months ending 31st March 2013.

Exploration

14.29 km² potential SEDEX deposit identified

During the March quarter, PMR received final processing and interpretation of the helicopter VTEM survey conducted over the Halls Peak tenements (EL 5339, EL 4474 and EL 7679) in 2012.

Four target types were identified:

- Large flat laying conductors which may represent flat lying sulphide bearing beds
- Vertical vent zones from depth located on faults and possibly copper bearing
- Point magnetic anomalies which are very conductive
- Surficial anomalies

Significant of these are the flat laying conductors, which may represent a major stratiform Zn-Pb-Ag deposit, generally classified as sedimentary exhalative (SEDEX) deposits¹ (Figure 1).

Global SEDEX deposits include:

- Red Sea base metals (20 km²)
- Greenland Zinc deposits (6 km²)

Australian SEDEX deposits include:

- McArthur River (227 Mt)
- Mt Isa (150 Mt)
- Hilton (120 Mt)
- George Fisher (108 Mt)

The deep VTEM conductors at Halls Peak may be produced by highly mineralised zinc-lead-silver-copper lenses similar to those occurring in typical northern Australian SEDEX mineralised systems. These systems include world-class base metal mines including Mt Isa, McArthur River and Cannington.

The setting of the former mines at Halls Peak is shown in brown on Figure 1, where they clearly occur in the uppermost part of the mineralising SEDEX system. The high grade zinc-lead-silver lenses common in the lower parts of such systems would be expected to occur at much greater depth than these former mines and past drill holes, and are shown in red. The mineralisation model shown was produced in 2005 by an in-depth study of the SEDEX systems of northern Australia.

Past drilling and mining at Halls Peak has been too shallow to reach these high-grade lenses if they are present, instead intersecting either less mineralised beds within the overlying

¹ SEDEX deposits form when fluids containing base metals rise through fractures in the sea floor and deposit beds of base metals on the surrounding sea floor.



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black shales, or high grade near surface mineralised fractures extending upwards from the deeper lenses. Such fractures may be produced by later mobilisation of earlier deposited and deeper mineralisation.

The copper-lead-zinc-silver mineralisation previously mined at Gibsons Mine, Faints Mine and bulk sampled by BHP at Khans Creek may represent such younger mineralisation.

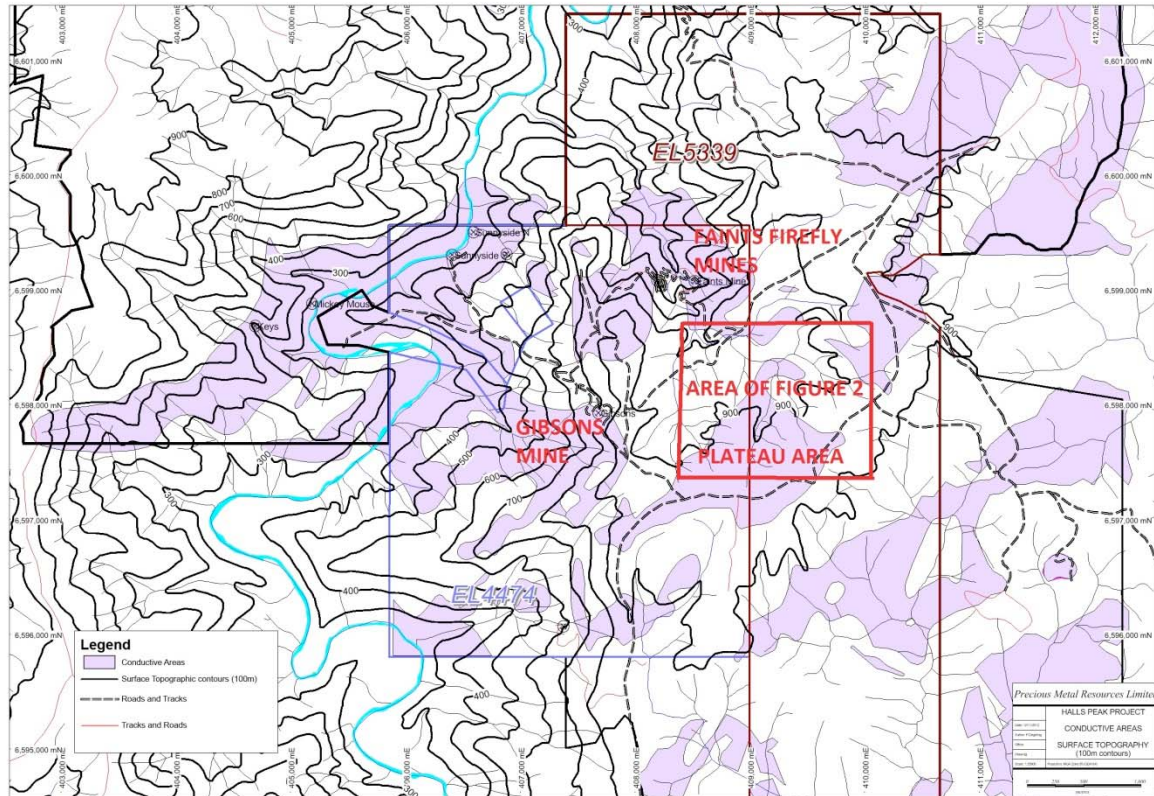


Figure 1. Location map, showing extent of conductive horizon measuring 14.29 km² in purple

Lower grade base metals lenses drilled and recently re-assayed by the company in the upper part of the Halls Peak SEDEX system are consistent with earlier and perhaps richer base metal lenses being present at depth.

PMR's VTEM survey at Halls Peak has shown a deep conductive zone in the deepest part of the Halls Peak SEDEX system where high-grade lenses are expected to occur (see Figure 2). This is consistent with this deep conductor being produced by base metal mineralisation.

SEDEX base metal deposits are formed when fluids carrying high concentrations of lead-zinc-silver-copper flow up large fractures (faults) in the earth and deposit their metals on the sides of these fractures and as fine crystals within the sea water. These crystals then settle on the sea floor as metal rich beds (bedded sulphides). They commonly conduct electricity, and are detected as conductive zones by a VTEM survey.

The conductive zones recorded at depths of around 400 metres by the VTEM helicopter survey extend beneath at least 14 square kilometres of the base metal field. The extent of the McArthur River SEDEX system, (Figure 2) confirms that this is the scale on which these systems develop. Although Halls Peak is geologically younger than the northern Australian systems, it appears to be comparable in extent, and the presence of base metals in its upper parts confirms the potential for similar deposits at depth.



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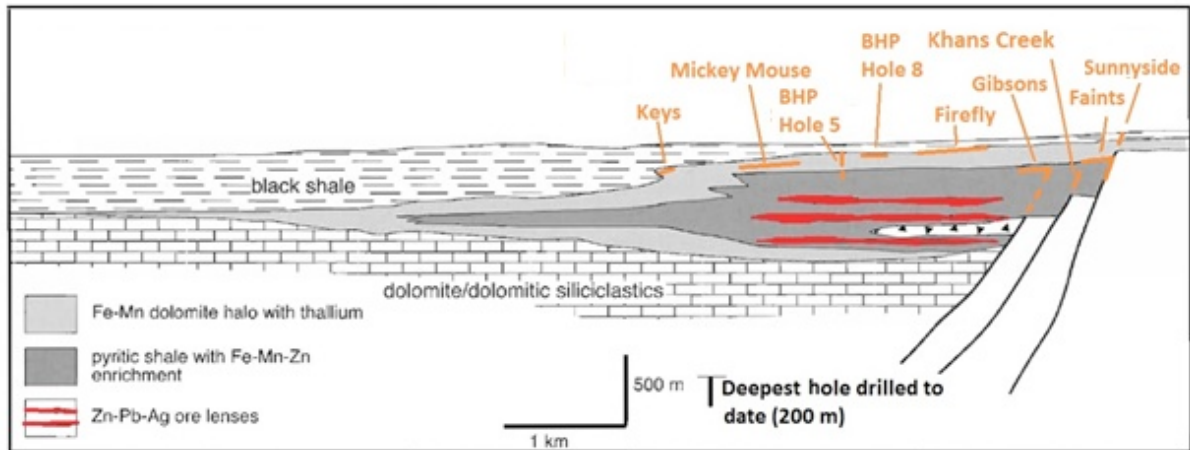


Figure 2. Setting of Halls Peak Mineralisation in a Typical Northern Australian SEDEX System – Schematic geologic cross section of a typical Proterozoic northern Australian stratiform Zn-Pb-Ag deposit, showing stacked mineral lenses and the related carbonate alteration halo adjacent to a synsedimentary fault system that focused metalliferous brine upflow.

It is clear that only shallower and less conductive base metal beds and veins were drilled at Halls Peak by past explorers. The deepest hole to date went to 200 metres and its inadequacy to evaluate the deeply buried parts of these SEDEX mineralised system is shown on Figure 1. It was obviously inadequate to test the conductive beds identified during the VTEM survey. Holes of at least 400 metres will be necessary.

A comparison of the typical SEDEX system above with the results obtained at Halls Peak by the VTEM survey below, demonstrates close similarities:

- Conductive red zones at the base of the VTEM (figure 3) may represent vent zones with mineralisation on rock fractures (faults) within the vent.
- The horizontal red zone on the VTEM possibly represents the zinc-lead-silver lenses shown on the model above.
- The non-conductive overlying blue zones on the VTEM include black shales with low grade mineralisation in parts, and are similar to “pyritic shale with Fe-Mn-Zn enrichment” on figure 2 above.

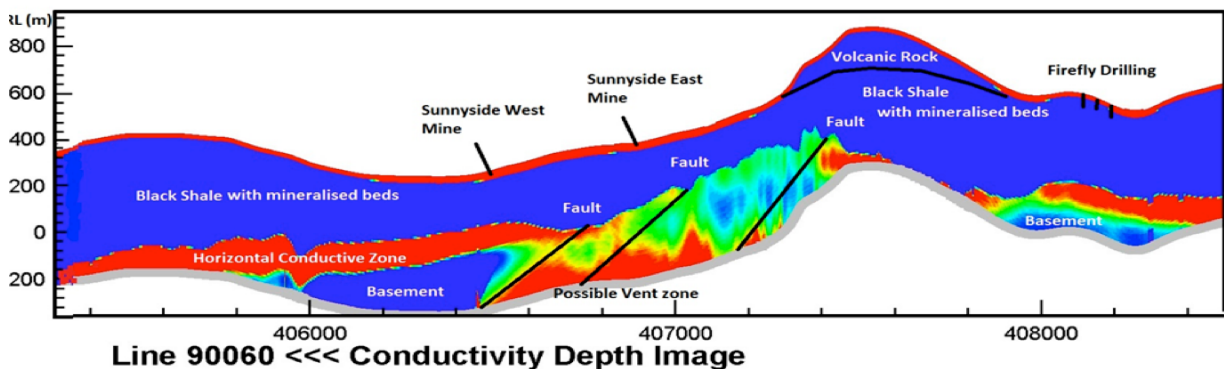


Figure 3. VTEM Section at Halls Peak, showing comparison with a Typical Northern Australian SEDEX System.

The occurrence of the Halls Peak SEDEX system is also similar to those in northern Australia. A comparison of mapped anomalies at Halls Peak with the SEDEX system containing the world class McArthur River deposit in the Northern Territory is shown below:



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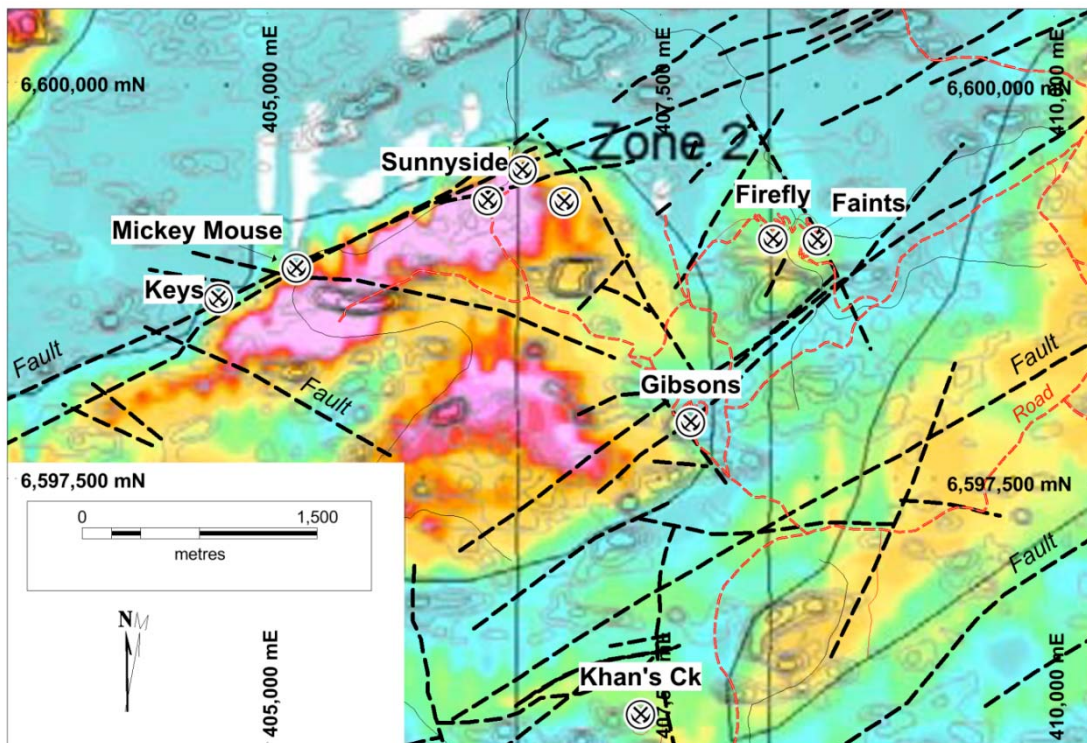
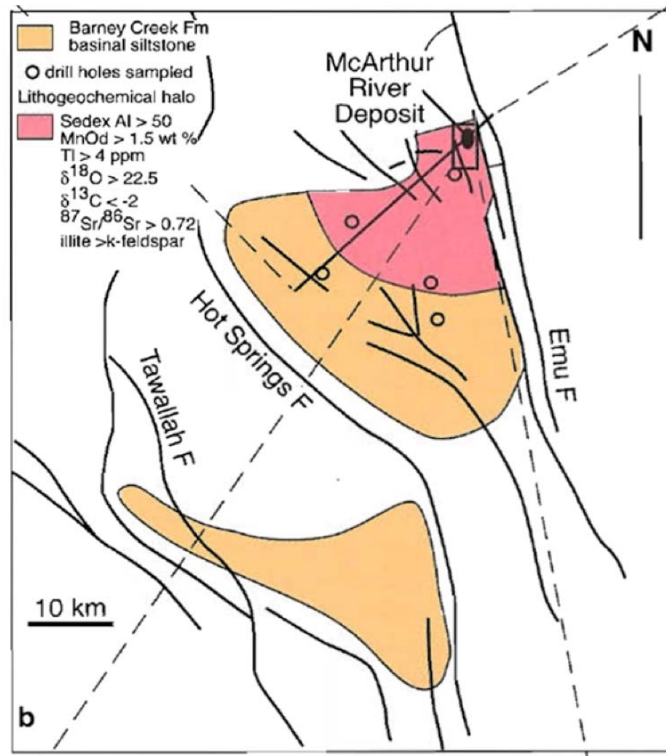


Figure 4. Comparison of McArthur River SEDEX System (upper figure in pink), and Halls Peak Interpreted SEDEX System (lower figure in red and yellow).

- The McArthur River SEDEX system in the Northern Territory is world class (pre-JORC geologic resource of 227 million tonnes at 9.2% zinc, 3.1% lead, 0.2% copper and 41 g/t silver). Mineralisation in the deeper parts of the Halls Peak SEDEX system is untested.
- Both are confined to a depressed area between major faults.
- The location of the former mines at Halls Peak on or near major faults suggests the mineralising fluids were vented from the faults.



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- At McArthur River the base metals originate from a main vent zone located on the intersection of two major faults. At Halls Peak the conductors deepen towards the Sunnyside area, consistent with a similar vent on the intersection of mineralising faults.

Halls Peak was recognised as a SEDEX province in 2006 by Greg McKelvey, retired Vice President Exploration South America, Phelps Dodge Mining Co., USA. He concluded, “Halls Peak, known since 1896, is a classic Sed Ex massive sulphide system with potential to discover a large, Mt Isa sized deposit”. “Mineralisation is in a large Sedimentary Exhalative System over 30 sq. km”.

The VTEM survey was proposed by PMR to confirm the nature, extent and economic potential of this system and has located conductors which are consistent with the SEDEX model, supporting McKelvey's conclusions.

Exploration Licences 4474, and 5339 are each subject to cooperation and investment agreements with Jiangsu Geology and Engineering Co. Ltd. (**SUGEC**) of Nanjing China to contribute \$4 million toward exploration on both EL 4474 and EL 5339. This is in addition to \$2 million exploration funding which is well underway on the adjacent EL 7679, and under which the VTEM survey on this EL was carried out.

BHP data supports SEDEX hypothesis on PMR tenements (ASX 22 February 2013)

Fractures up which base metal bearing fluids have vented were shown by BHP drilling in 1969 to carry anomalous values of base metal mineralisation. This suggests that the conductive horizon, shown on the recent VTEM survey is present at a depth of 500 metres beneath the drill hole (figure 5), is a source of these base metals.

One such fracture was penetrated by hole BHP PDH 5, and cuttings from between 48 and 49 metres carried 0.2% zinc, 0.1% Copper and 0.1% lead within a 4 metre zone of anomalous mineralisation.

The spread of the base metals onto the surrounding sea floor is evidenced by two other drill holes, one also drilled by BHP in 1974, and the other by CRA in 1979. Both were located less than a kilometre from the fracture which vented the mineralisation and both terminated in pyrite-bearing black shales carrying anomalous base metals.

CRA's comments on these results were: “This drill hole shows a typical mineral zoning which might be expected above a base metal massive sulphide lens.” (GS1979/142).

The nearby cored hole, CRA 78 HPC 1, penetrated pyritic mudstone (pyrite content estimated between 0.5 and 7%) over 36.4 metres, continuing from 83.5 metres to the base of the hole.

This zone, and the mineralisation intersected at the base of BHP PDH 8, may be represented on the Resistivity Depth Image (Figure 5) by the broad zone of yellow colour at shallow depth. This is apparently lying above the red conductor (possibly produced by base metal mineralisation) on the Conductivity Depth Image.

Mapping in the field by CRA confirmed the relatively flat lying nature of the rock beds throughout this area, and identified several areas in which gossans (weathered mineralised rocks), cropped out. These were classified into two types:

“Type ‘A’ gossans occur in the black shales and contained up to 0.5% lead, 0.2% zinc and 0.15% copper. These were considered derived from the oxidation of massive sulphide.



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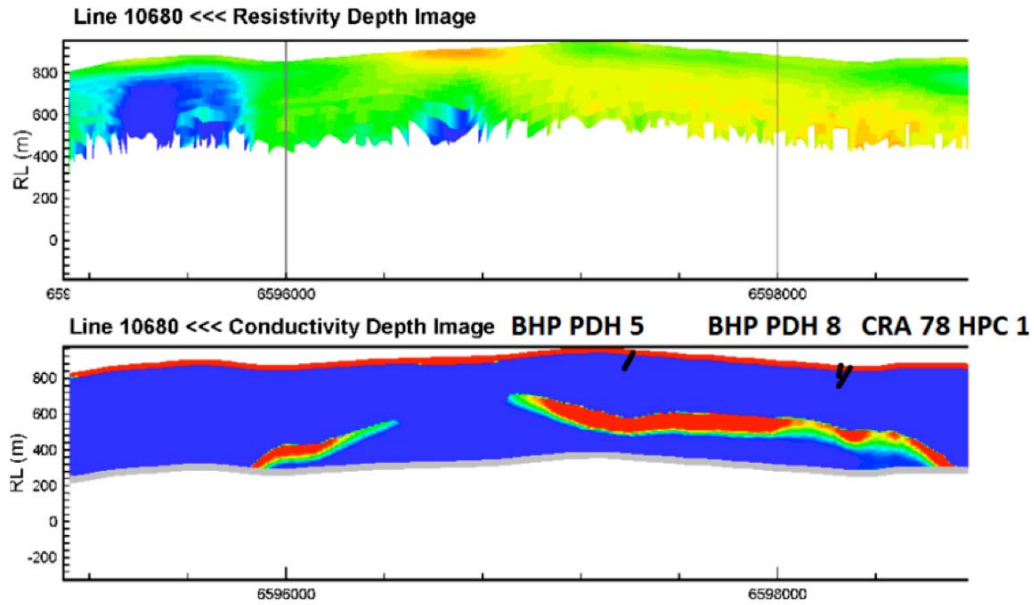


Figure 5. Resistivity and Conductivity Depth Images relative to the BHP and CRA drill holes

Type 'B' gossans also contain high lead, zinc and copper values, but they are believed to occur in fault zones and probably represent 'leakage' mineralisation which has migrated out of the black shale horizon. At one occurrence of the type 'B' gossan several 5mm galena [lead sulphide] crystals occur in milky quartz, giving support to this view.

The relationship of these gossans to the drill holes, and the base metal assay values reported from them are shown in Figure 6.

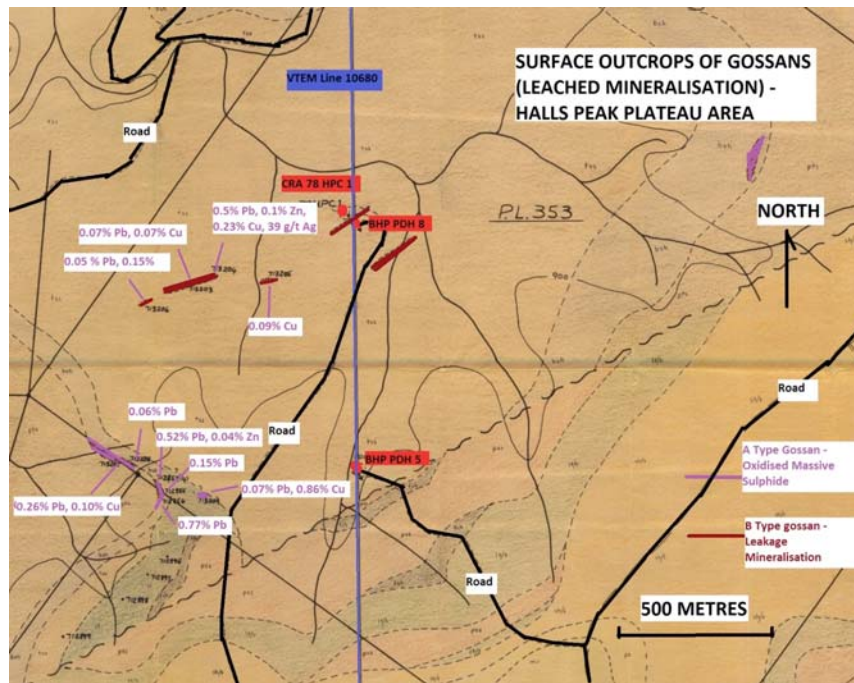


Figure 6. Gossan Grades, Plateau Area

The pyritic black shale beds in which holes BHP PDH 8 and CRA 78 HPC 1 were terminated are typical of the upper parts of SEDEX base mineral systems. In some provinces throughout the world large lenses of high grade mineralisation are present within such beds at depth. An interpretation of the conductive horizon (shown in red on the Conductivity Depth Image) as a base metal bearing bed is consistent with the expected place of base metal lenses within a SEDEX mineralising system.

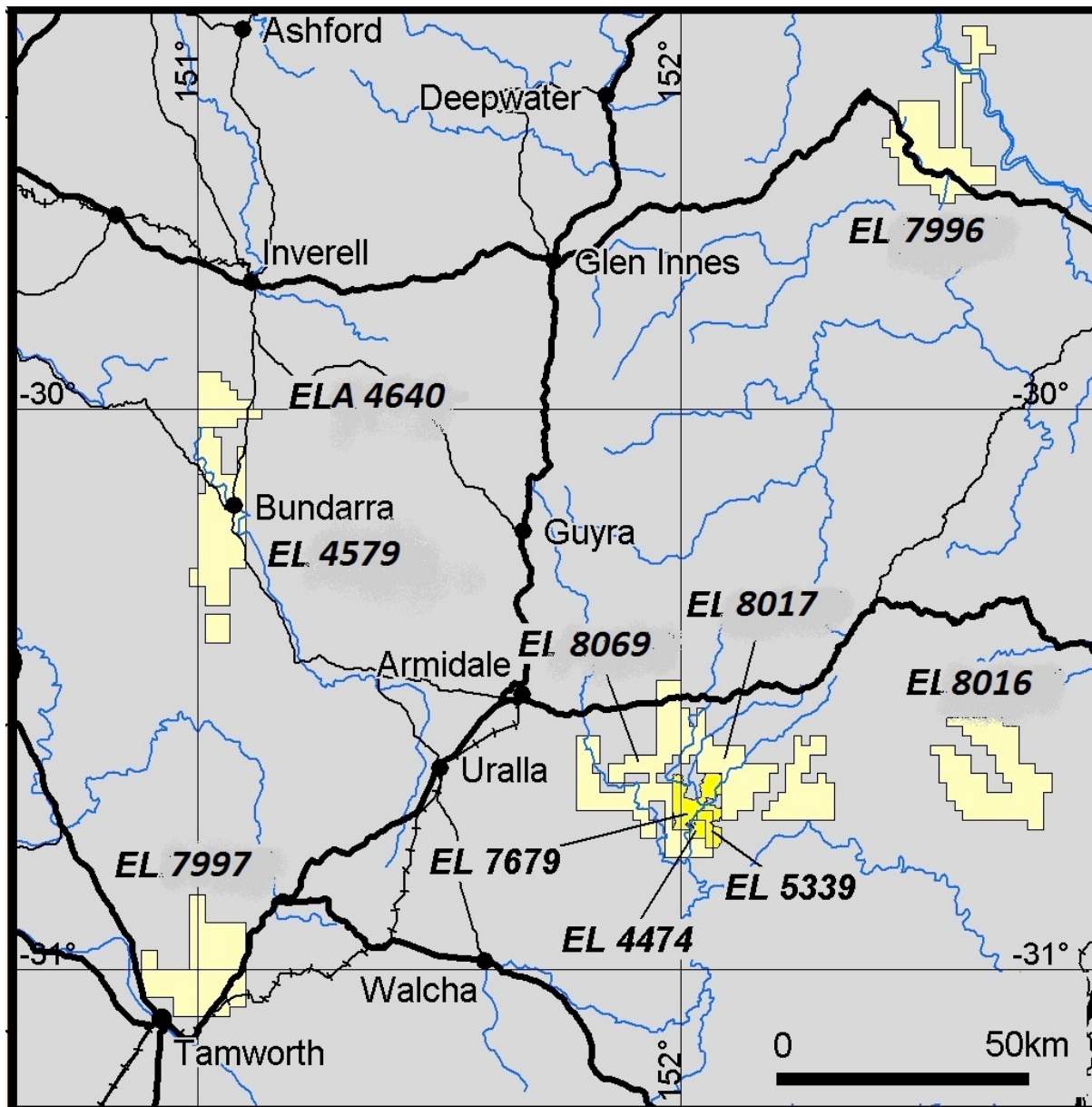


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JORC Code Compliant Public Reports

The Company advises that this Quarterly Operations Report contains summaries of Exploration Results and Mineral Resources as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' ("JORC Code").

The source of these summaries is identified in the body of this Quarterly Operations Report (under the relevant heading). The Code-compliant Public Reports or Public Reporting on which the summaries are based can be viewed on the ASX and the Company's website (www.pml.com.au) and the Company will provide these reports, free of charge, to any person who requests it.



Location map of PMR (Armidale) licences and applications