

41-45 Furnace Road Welshpool, WA 6106 Phone 618 9458 8877 Fax 618 9458 8857

Email:geotech@geotechnical-services.com.au **Web:** www.geotechnical-services.com.au

PETROGRAPHIC AND MINERAGRAPHIC DESCRIPTIONS

BALMAIN - 1 - BRIEF PETROGRAPHIC DESCRIPTIONS

SAMPLE NO: Balmain -1 800.8 m

TYPE: Core

LOCATION: Balmain - 1

FIELD IDENTIFICATION: Fine grained argillite - claystone.

SECTION TYPE: Unconsolidated Thin Section

DESCRIPTION:

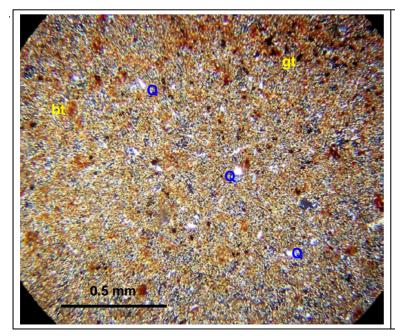
Detrital quartz 2% Jarosite 5%

Occasional, fine grained (\sim 20 μ m), subangular detrital quartz grains occur in a very fine grained clayey matrix. The clayey matrix is consistent with claystone that lacks bedding textures. Very fine grained, scaly jarosite is distributed through the matrix and has probably replaced original sulphides. Fine opaques, distributed through the matrix, represent limonite/goethite pseudomorphs after original sulphides. The lithology lacks a penetrative schistosity.

PIMA Analysis: Illite, jarosite

Petrogenesis: The argillite – claystone lithology has preserved detrital quartz. Finely dispersed scaly jarosite may represents early - diagenetic alteration of sulphides.

CLASSIFICATION: Very fine grained argillite or claystone.



Sample Balmain – 1 800.8 m Claystone locally preserving detrital quartz (Q) clasts. Fine, scaly biotite is distributed through the clay matrix. Fine limonite/goethite (gt) Pseudomorphs after orignial sulphides. Crossed polars. Field of view – 1.5 mm.
