

Annual Technical Report
For the period ending 5th January 2018

EL 5909 Yanyarrie

Archer Energy & Resources Pty Ltd
Archer Exploration Limited

By Wade Bollenhagen
Archer Exploration Ltd
10/01/2018

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Bibliographic Data

Report Title	Annual Report for Exploration License 5909 'Yanyarrie' for the period 6 th January 2017 to 5 th January 2018
Project Name	North Burra
Tenement Number	EL 5909 'Yanyarrie'
Tenement Holder	Archer Energy & Resources Pty Ltd (wholly owned by Archer Exploration Limited)
Operator	Archer Exploration Limited
Commodities	Ba
Tectonic Unit	Adelaide Geo-syncline
Stratigraphic Units	
1:250,000 Map Sheet	SI 54-1 Orroroo
1:100,000 Map Sheets	6533 (Quorn) & 6633 (Carrieton)
Keywords	Barite

SUMMARY

Exploration Licence 5909 'Yanyarrie', held by Archer Exploration Limited (Archer) is located on the eastern Northern Adelaide Fold Belt, North surrounding the township of Carrieton.

The focus of work for the period is on the barite potential of the Yanyarrie deposit, in lieu of its location from the Sibelco barite facility located at Quorn, some 40km directly West. Historical work on the prospect had identified and determined a tenor to the Barite, which was considered worth investigating. As a first consideration, the material at Yanyarrie is considered a low value product (high silica) with limited prospectivity to increase the tonnage.

Exploration Index Map

1 Introduction

Exploration Licence 5909 'Yanyarrie' is located 12km North of the Carrieton township in South Australia, (Figure 1). Access is gained travelling North by bitumen road (RM Williams Way) through Carrieton, where the tenement can be accessed via public and private roads.

This report details exploration work completed by Archer Exploration Ltd between 5th January 2017 and 4th January 2018.

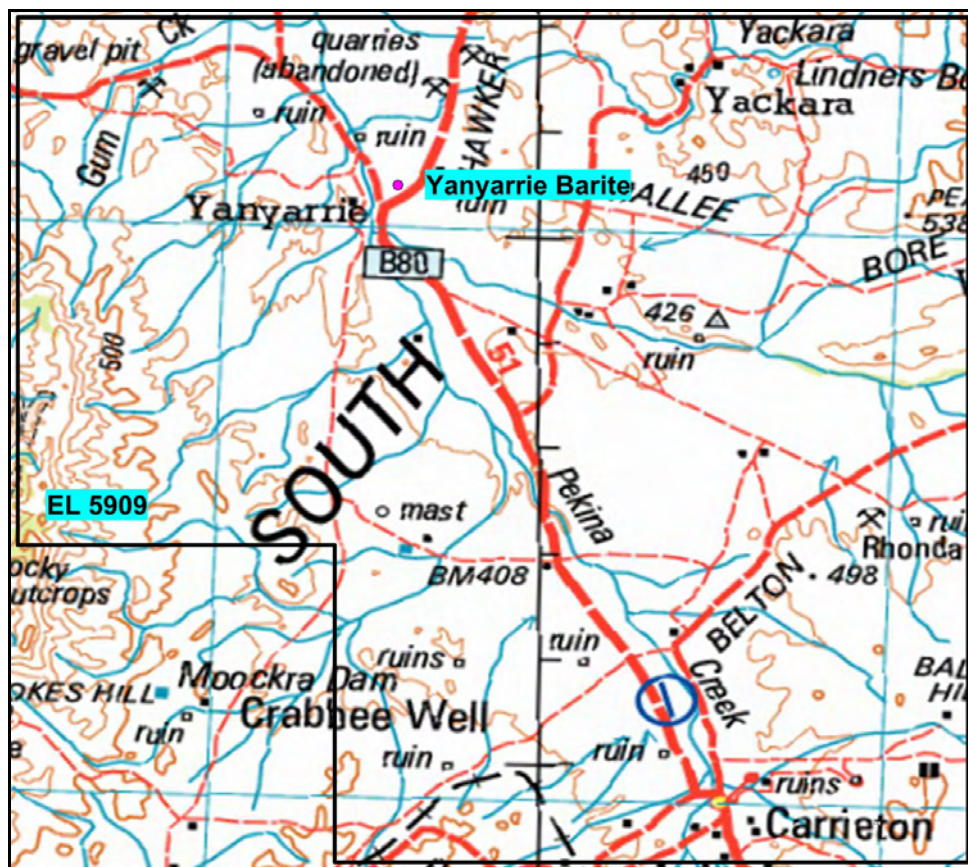


Figure 1: Location Map EL 5909, with Yanyarrie barite shown.

Little historic exploration has been conducted on the tenement, the Yanyarrie barite is the most significant mineralisation outcropping within the EL.

2 Tenure

EL 5909 'Yanyarrie' covering 183 square kilometres was granted to Archer Energy & Resources Pty Ltd (a wholly owned subsidiary of Archer Exploration Ltd) on 6th January 2017 for a term of 2 years.

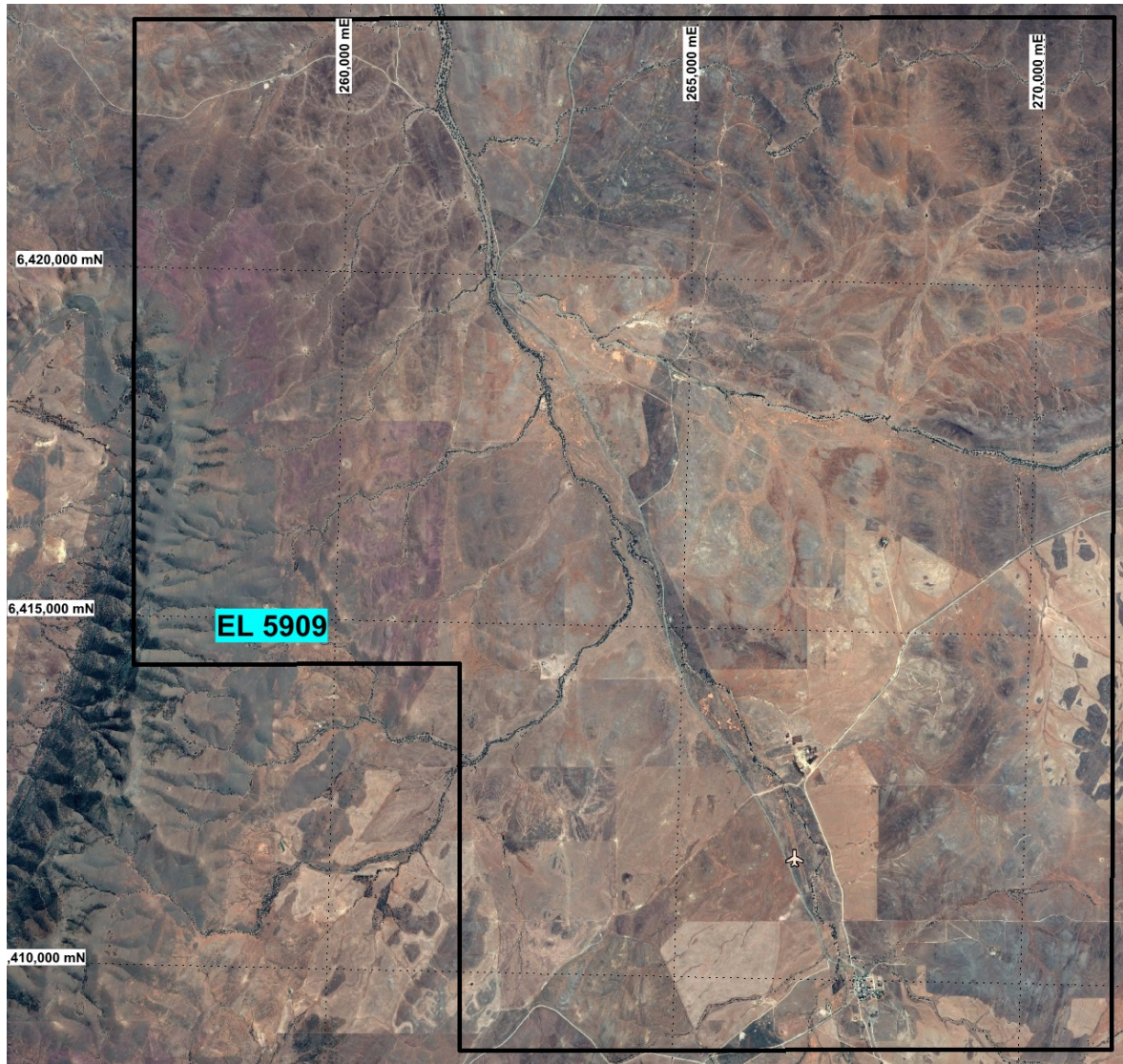


Figure 2 EL 5909

Archer Exploration listed on the Australian Stock Exchange on 14 August 2007.

3 Geology

EL 5909 resides in the Adelaide Fold Belt. The presence of the Tapley Hill Formation and the Callana Group rocks provides for a chemical contrast in host lithologies between the shales and the dolomitic interbeds. During the reporting period the only work conducted was focussed at the Yanyarrie barite prospect

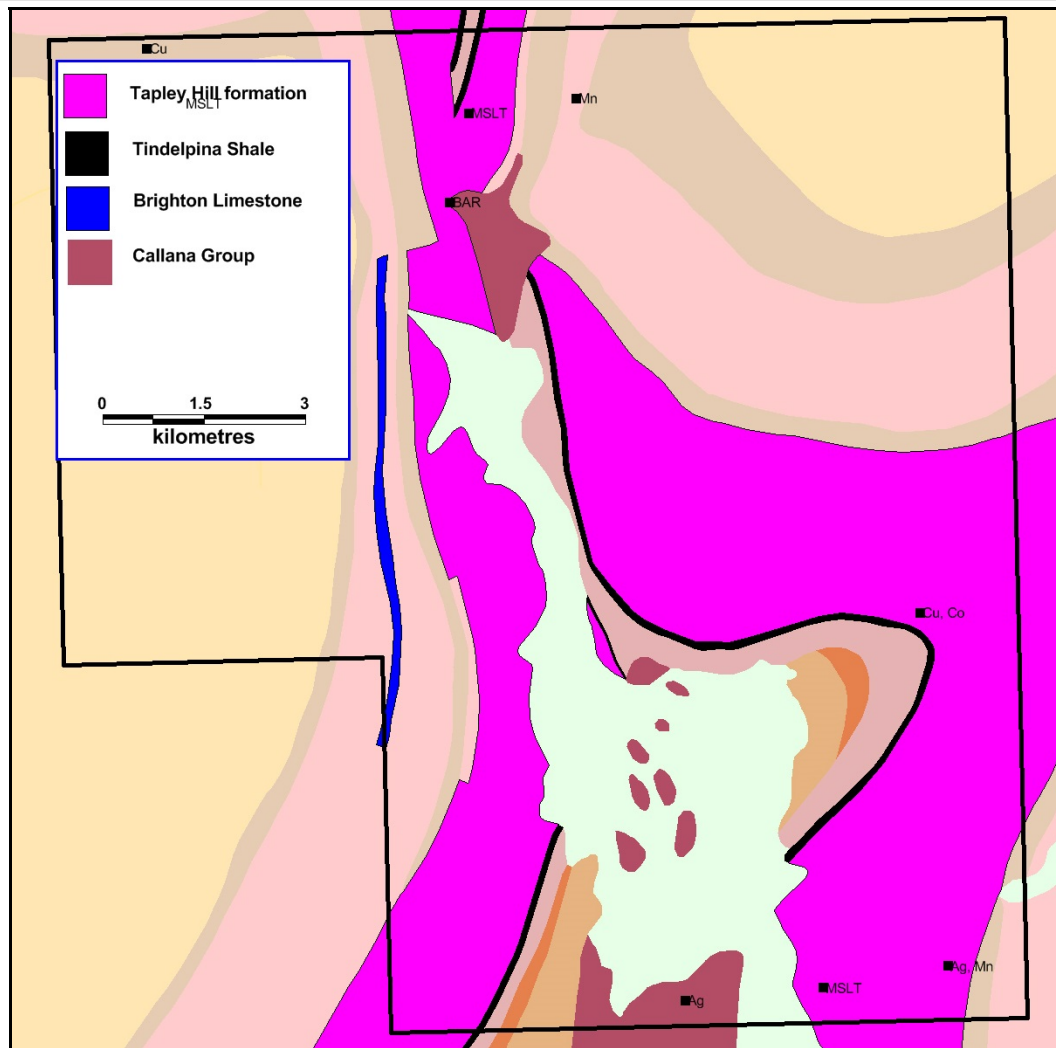


Figure 3: Geology Map for EL909 (PIRSA)

Very little work appears to have been undertaken in the area for minerals other than barite, a couple of RC holes were drilled near the Cu-Co prospect called Rhonda, this site has not been visited, though there is suspicion (based upon the strike of regional geology that they may have been collared at the wrong azimuth.

ENV01418 (1971) mentions the costeans at the barite prospect.

4 Work Completed

4.1 Drilling

No drilling undertaken

4.2 Laboratory

A total of 8 samples were submitted for analyses, these were taken from the costeans north of the RM Willaims Rd. A summary of the assays is presented in table 1, the percentage of BaSO₄ is shown.

Sample_Number	Easting	Northing	Description	BaSO4 %
YN140317_001	262835	6421106	Ba float Nth end of trench	74.41
YN140317_002	262832	6421101		73.40
YN140317_003	262817	6421094	Vn in Nth face	99.83
YN140317_004	262796	6421150		94.63
YN140317_005	262816	6421150		97.18
YN140317_006	262816	6421150	Fe Oxide	15.24
YN140317_007	262832	6421179		91.07
YN140317_008	262814	6421171		96.67

4.3 Geophysics

No work performed in the period.

4.4 Metallurgical Testwork

No work performed.

5 Environment

No ground disturbing activities were undertaken.

Surrender Report
For the period ending 7th August 2018

EL 5909 Yanyarrie

Archer Energy & Resources Pty Ltd
Archer Exploration Limited

By Wade Bollenhagen
Archer Exploration Ltd
8/08/2018

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Bibliographic Data

Report Title	Relinquishment Report for Exploration License 5909 'Yanyarrie' ending 7 th August 2018
Project Name	Yanyarrie
Tenement Number	EL 5909 'Yanyarrie'
Tenement Holder	Archer Energy & Resources Pty Ltd (wholly owned by Archer Exploration Limited)
Operator	Archer Exploration Limited
Commodities	Ba
Tectonic Unit	Adelaide Geo-syncline
Stratigraphic Units	
1:250,000 Map Sheet	SI 54-1 Orroroo
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With the decrease in the market for barite Archer has decided to relinquish all barite tenements in the state, with the only work being completed on EL 5909 a single site visit and the collection of rock chips. Assay results for these have been reported in the 2018 Annual report and the data supplied.

Exploration Index Map

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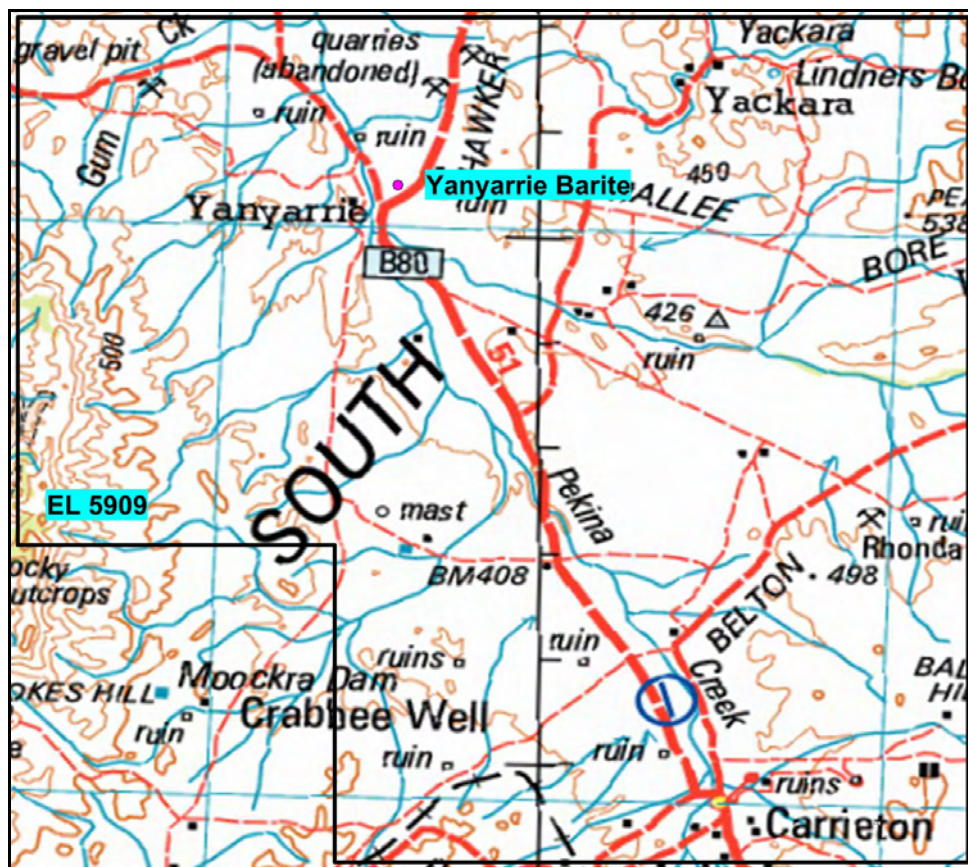


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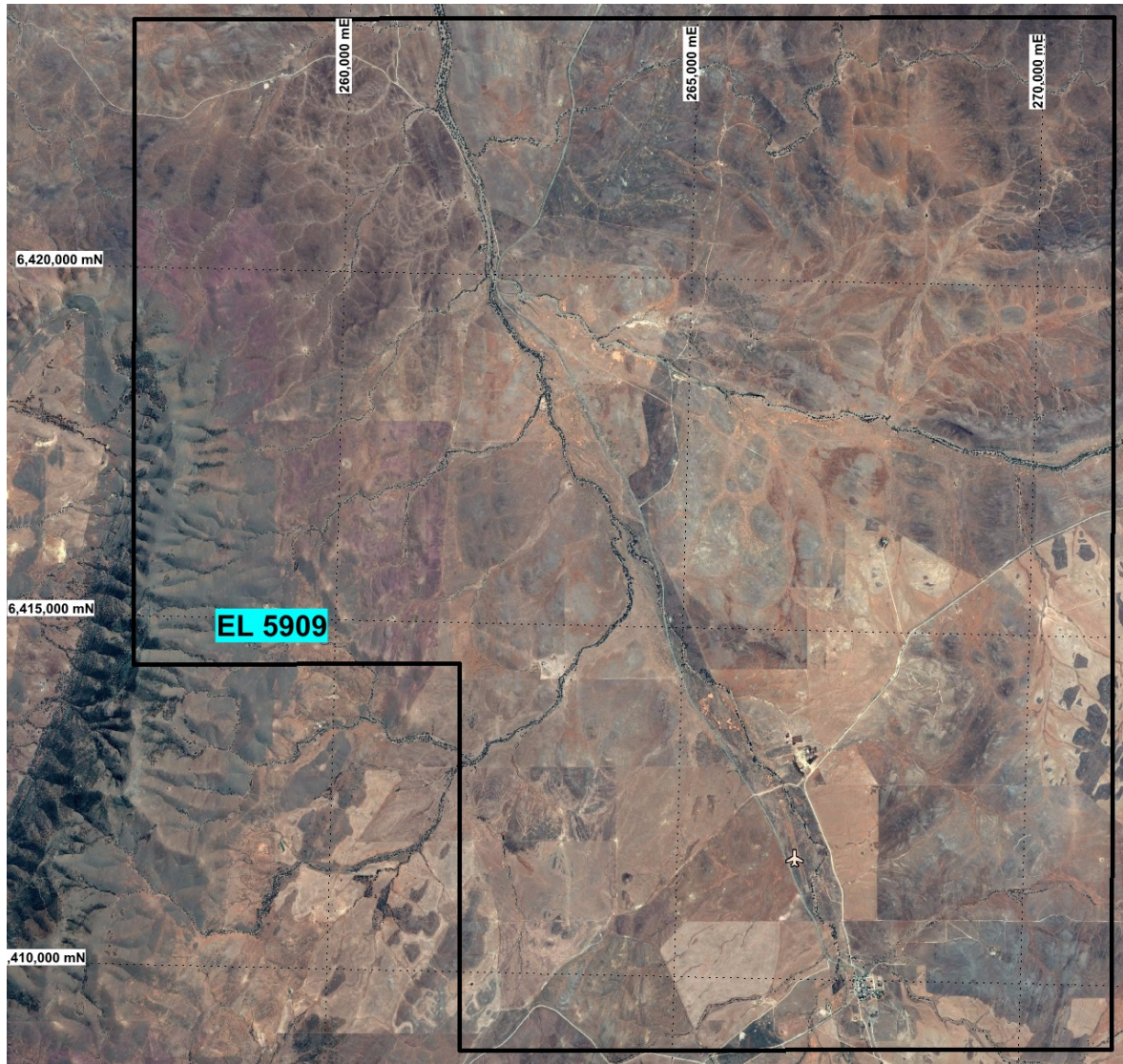


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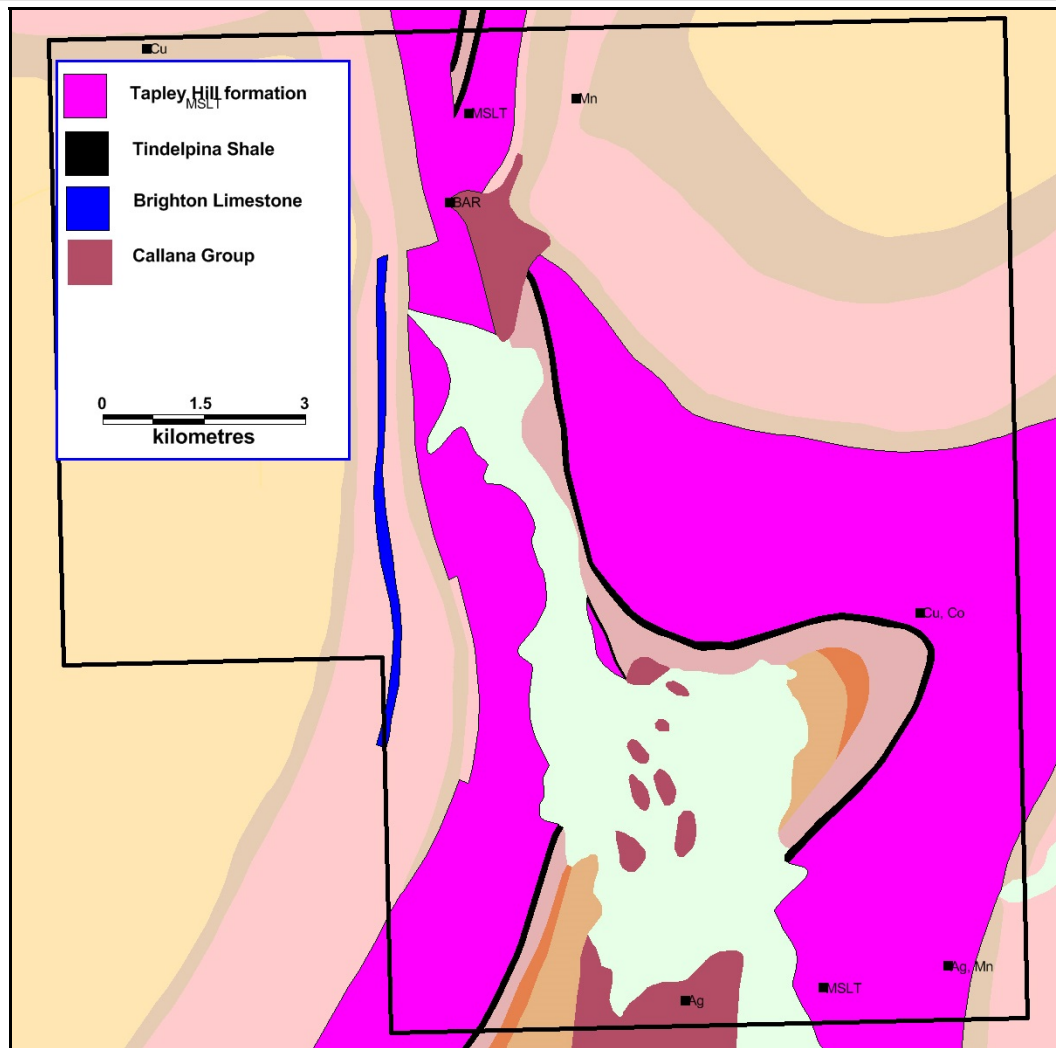


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