EL 8202
FINAL REPORT

Katherine 1:100,000 Sheet

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1.0 SUMMARY

EL 8202 is located approximately 40 kilometres south-east of Pine Creek on the Katherine 1:100,000 map sheet in the Wandie Project Area.

Exploration on EL 8202 during its tenure has targeted mainly gold mineralisation and consisted of gridding, LAG sampling, geological mapping, and data review and compilation.

Results were generally disappointing.

The licence was granted to Dominion Gold Operations Pty. Ltd. in October 1993, and was renewed for a further two years on the 22nd of October 1995. Territory Goldfields N.L., which is now managed by Northern Gold N.L., acquired the tenement in May 1995 and the Barnjarn Mining Company holds a 10% interest through a Joint Venture.

The Substitute Exploration Licence 9212 was granted over the area on the 9th of February 1996 for a period of four years.

Expenditure for the final year of tenure to the 9/2/96 was $1000.
2.0 LOCATION AND TENURE

EL 8202 is located on the Katherine 1:100,000 and Edith River 1:50,000 map sheets. The tenement lies between latitudes 14°10' south and 14°11' south and longitudes 132°07' east and 132°08' east. Access is via the Stuart Highway and then along the Edith Falls Road (Figure 1).

The licence consists of one graticular block, approximately 3 square kilometres in size, and was granted to Dominion Gold Operations Pty. Ltd. on the 22nd of October 1993 for a period of two years. Dominion signed a joint venture agreement with Barnijarn Mining Company Pty. Ltd. on the 14th of April 1994. Territory Goldfields N.L., which is now managed by Northern Gold N.L., subsequently acquired the tenement in May 1995. The tenement was renewed for a further two years on the 2nd of October 1995.

SEL 9212 was granted over the area on the 9th of February 1996 for a period of four years.

3.0 GEOLOGY

3.1 Regional Geology

EL 8202 is situated within the Pine Creek Geosyncline, a tightly to isoclinally folded sequence of mainly pelitic and psammitic Lower Proterozoic sediments with interlayered tuff units. All the lithologies in the area have been metamorphosed to low, and in places medium grade metamorphic assemblages. For the purpose of this report, the prefix meta- is implied, but omitted from the rock names and descriptions.

The sequence has been intruded by pre-orogenic dolerite sills of the Zamu Dolerite and a large number of late syn-orogenic to post-orogenic Proterozoic granitoids. Largely undeformed Middle and Late Proterozoic, Palaeozoic and Mesozoic strata, as well as Cainozoic sediments and laterites, overlie the Pine Creek Geosyncline lithologies.

3.2 Local Geology

The licence area is dominated by hornfelsed sediments of the Tollis Formation from the Lower Proterozoic El Sherana Group. Lithologies of the Burrell Creek Formation (Finniss River Group) crops out in the north-west and south-east of the licence area. Folding is complex in the area. In general, axis trend in a north-easterly direction.
4.0 PREVIOUS EXPLORATION
Little documented exploration has been conducted in the area of EL 8202 prior to it's tenure.

The area was previously held by Hunter Resources as EL 4823. In 1989, Eupene Exploration Enterprises conducted stream sediment sampling on behalf of Hunter Resources.

This work failed to produce any significant values.

5.0 EXPLORATION COMPLETED
Dominion carried out a program of gridding and LAG sampling during the first year of tenure. In the second year, a complete review of exploration data was undertaken, including the integration and assessment of the geochemical data from EL 8202 with the regional geochemical database resulting from Dominion exploration in the Wandie project area. Some mapping of the area was also carried out.

5.1 Gridding
Gridding was completed over EL 8202 to assist geochemical surveys. A GPS controlled topofil of 3.6 kilometres and compass grid lines were completed.

5.2 LAG Sampling
LAG sampling was completed on EL 8202 as a first pass exploration tool. The aim of the program was to sample suitable sites on a nominal 800 metre x 200 metre pattern. The area is dominated by rolling hills divided by areas of loamy silica silt and wash zones. Soils are generally thin and 90% of the area is amenable to LAG sampling.

LAG sampling involves the collection of approximately 2 kilograms of +2 millimetre to 6 millimetre material lying on the surface. This was achieved by using a wide, heavy duty broom to sweep up surface material which was then sieved in the field to gain the correct size fraction (Backo, 1994).

The program involved the collection of 15 samples.

All samples were dispatched to Amdel (Darwin) for low level gold analysis (1 ppb detection limit). This was achieved by fusing the pulverized sample with litharge and flux. The resultant lead button was cupelled and digested in aqua regia and then analysed by graphite furnace AAS.
Samples were also analysed for arsenic and bismuth using a perchloric acid digest followed by analysis by AAS. A detection limit of 2 ppm Bi and 20 ppm As was achieved using this method.

The results of the program were generally disappointing with no gold values >1 ppb being recorded. Peak responses of 100 ppm As and 6 ppm Bi were received.

6.0 EXPENDITURE

The following is a breakdown of costs incurred in the final year of tenure to 9/2/96 for EL 8202:-

Report Compilation
Data Review
Tenement Management

TOTAL $1000

7.0 REFERENCES