

11. TWIN BONANZA (EL 6859)

11.1 Introduction

The Twin Bonanza prospect is located approximately 130km west-north-west of The Granites within EL 6859. Access to the area is via the Dead Bullock Soak camp, the Tanami Downs homestead, then station tracks north-west to the prospect. Alternatively there are tracks leading south to the exploration licence from the Tanami Highway. Twin Bonanza lies approximately 3km north of the Old Pirate prospect.

Previous work in the area has included:-

- Reconnaissance mapping at 1:25,000
- Aeromagnetic interpretation presented at 1:25,000
- Surface lag sampling on a 1.8 x 0.5km grid

The Twin Bonanza prospect occurs within a large arsenic anomaly with a 20km strike length outlined by the surface lag sampling program.

11.2 Work Undertaken

A summary of work undertaken is given below:-

- Local Grid Surveying - 53.3 line km
- Ground Magnetic Survey - 46.5 line km
- RAB Drilling - 161 holes (TBR001-161) for a total of 3445m and 240 samples collected
- Petrology - 10 samples

Survey - Twin Bonanza Local Grid

A total of 53.5 line kilometres of grid was established with traverses spaced 400m apart. A 6.8 kilometre baseline and orientated with the local grid north bearing 033 degrees magnetic.

Grid origins were sited using a differential GPS method with an accuracy of plus/minus 10mm. The grid lines were completed with a hip chain and optical square.

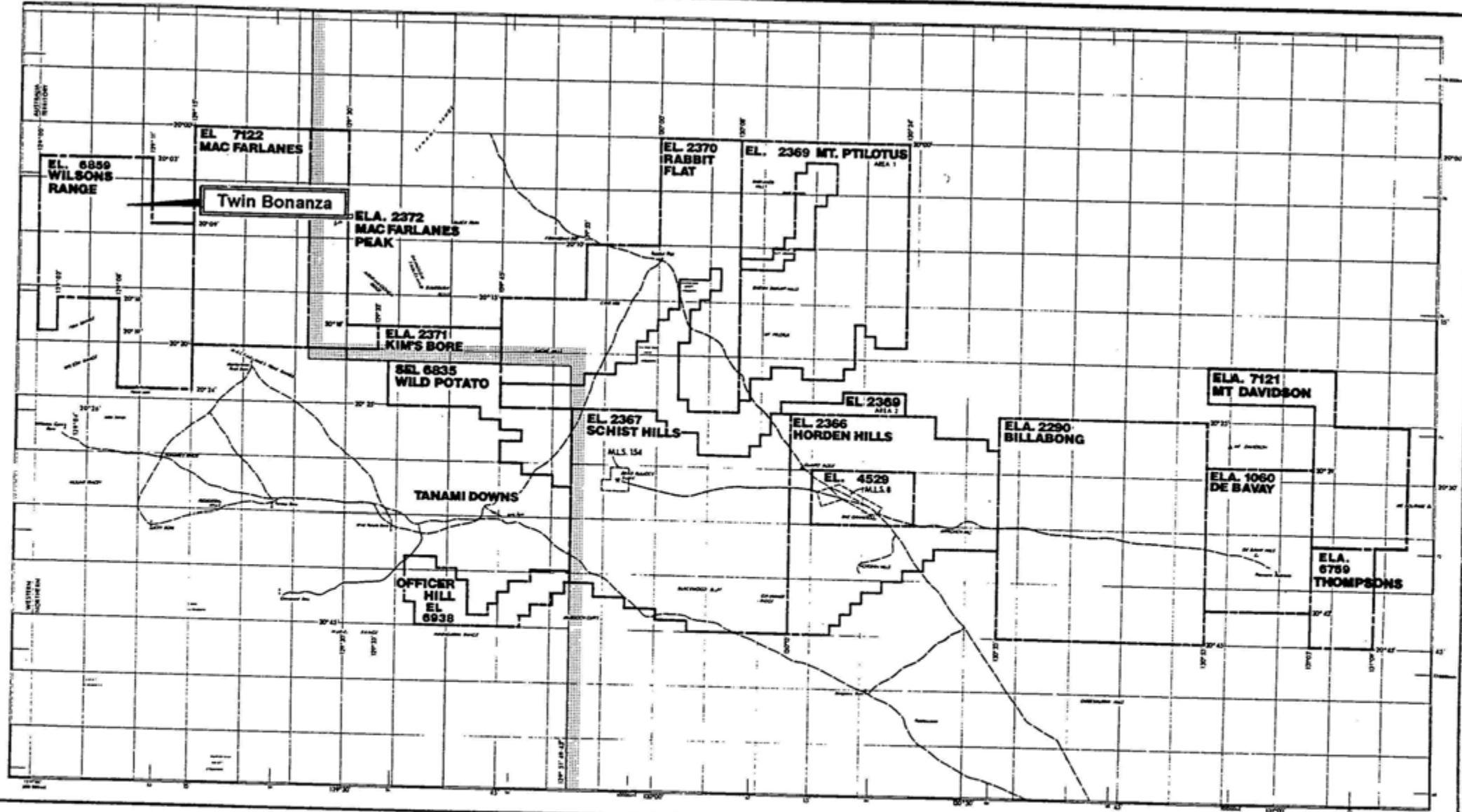
Ground Magnetics

The complete Twin Bonanza grid was covered with readings taken at stations 10m apart on traverses spaced at intervals of 400m. The program allowed further resolution of the magnetic features, despite many profiles being too "noisy" to be useful. All profiles were smoothed using a thirteen point moving average filter.

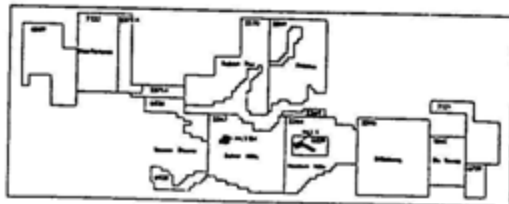
RAB Drilling

The two orientation drill traverses which covered the prospect area, demonstrated an extensive and thick alluvial cover. RAB rather than vacuum drilling was selected to further test the area as it allowed deeper penetration through surficial material. Drill hole density was 800m x 100m over the Twin Bonanza grid. Drilling confirmed that at Twin Bonanza the mineralised targets are blanketed by up to 35 metres of alluvium and an undetermined thickness of Proterozoic cover arenites.

Usually one 3 metre bedrock sample was collected from the saprolite zone of each drill hole. If vein quartz was intersected then several additional 3 metre samples were collected from the drill hole. This less exhaustive method of sample analysis is balanced by the intensity of the across strike coverage.



LOCATION MAP



LEGEND

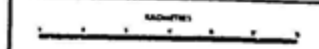
- EL
- ELA
- Area 1
- Area 2
- Road
- Boundary
- Water
- Shaded Area
- Grid

NFM NORTH FLINDERS MINES LIMITED
 Tanami Reconnaissance : Northern Territory

EL LAYOUT

1:250 000

SCALE



DATE	BY	CHECKED	DATE
DRAWN			DATE

Fig. (1)

A total of 161 drill holes (TBRB001-161) were completed for 3445 metres and 240 samples.

Samples were analysed by Analabs for gold, arsenic, antimony, copper, zinc, molybdenum, platinum, palladium and uranium.

Analysis Of RAB Samples Twin Bonanza - Elements And Analytical Methods

Element	Au	As	Sb	Cu	Zn	Mo	U	Pt Pd
Detection	0.001	5	0.05	1	1	0.05	0.05	0.005
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method	GG334	GA215	GS201	GS140	GS140	GS140	GS140	GS333

GG334 - 30g Aqua regia with carbon rod finish

GA115 - 30g Aqua regia, AAS

GS201 - 0.2g Aqua regia/prechloric acid/hydrofluoric acids, ICP-MS

GS140 - 0.3g Aqua regia/perchloric acid, ICP-MS

GS333 - 50g Fire assay, lead collection ICP-MS

Petrology

Ten RAB drill chip samples were petrographically described by Pontifex and Associates.

11.3 Results

Ground Magnetic Survey

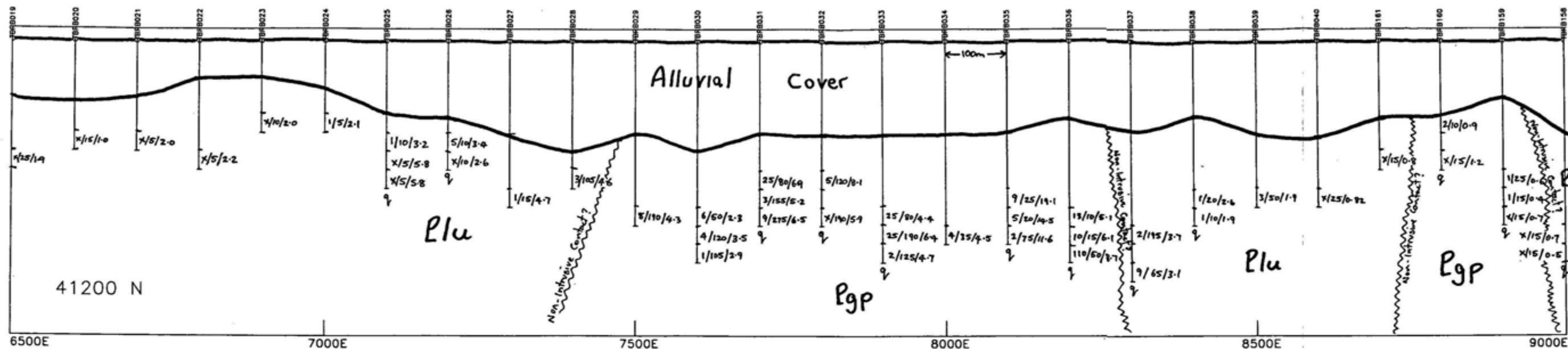
Many of the ground magnetic profiles over the northern part of the Twin Bonanza grid were very noisy due to laterite and alluvium cover. Modelling was completed for the profiles over the southern half of the grid, where noise was not excessive.

The source of the magnetic bodies is interpreted as magnetic schists, which may have been magnetised through contact metamorphism. The closest the magnetic bodies approach the surface is on line 40400N where the depth is interpreted as 90 metres.

A report which includes ground magnetic survey results for Twin Bonanza and Old Pirate is included in the appendices. A plan showing an interpretation of the ground magnetic survey superimposed on the contoured airborne magnetic map is also presented for both prospects.

TWIN BONANZA PROSPECT

INTERPRETED GEOLOGICAL CROSS-SECTION 41200N (also showing Au/As/Sb assays)



SCALE
Horizontal Scale 1:5000

50m

50m

Vertical Scale 1:500

Plu - Undifferentiated sediments, interpreted as equivalent to Fargoe sandstone or Tarami Mine sequences
Egp - porphyritic microgranite (>50% phenocrysts)

Assays shown gold (ppb)/Arsenic (ppm)/Antimony (ppm)

Fig. 11.2

RAB Drilling

Initial interpretation of the RAB data from the Twin Bonanza prospect suggests a close spatial association between anomalous gold (with a threshold 5ppb) and a feldspar quartz porphyry. The coincident intrusive and gold anomaly extends over 6 kilometres with a maximum width of 800 metres.

From the broad spaced sampling it is inferred that the gold mineralisation is mostly associated with iron-stained quartz veins. Stratigraphic relationships are interpretative, as bedrock is obscured by the alluvial cover. Interpretation is reliant upon the ground magnetic data which identifies a north east trending horizon parallel to the gold anomaly.

The table below lists anomalous gold values from this bedrock sampling. A plan showing bedrock geochemical anomalies and bottom of hole lithologies is also presented for Twin Bonanza and Old Pirate prospects.

Summary of Anomalous Gold (>20ppb) from RAB Drilled Bedrock Geochemical Sampling Program Over Twin Bonanza Prospect

RAB HOLE NO.	GOLD (ppb)	ARSENIC (ppm)
Twin Bonanza		
TBRB003	33	20
031	25	80
033	25	80
	25	190
036	110 *	50
041	23	230
043	54 *	130
047	260 *	<5
059	20	15
064	28	85
107	24	15
108	47	20
	44	20
126	34	150
138	58 *	240
	220 *	715

* Significant Result

11.4 Plans

Drawing No.	Title	Scale	Date
F001	Locality Plan Sht 1, Work Completed 1993	1:100,000	Feb 94
-	Wilson Range Gold Bedrock Geochemistry/Geology	1:100,000	Dec 93