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## MINERAL LEASES C65 and C186-C196

*RED TERROR*

### FINAL REPORT

*4 May 1967 to 31 December 2002*

*LICENSEE:*

**SANTEXCO PTY LTD**

A.B.N. 002 910 296

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*March, 2003*

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## SUMMARY

This report records exploration work carried out on Mineral Lease C65 during its 35-year tenure from 4<sup>th</sup> May 1967 to 31<sup>st</sup> December 2002, and Mineral Leases C186 – C196 during their 28-year tenure from 12<sup>th</sup> December 1974 to 31<sup>st</sup> December 2002.

On 13<sup>th</sup> June 2001, Giants Reef Exploration Pty Ltd (Giants Reef), a wholly owned subsidiary of Giants Reef Mining Limited, purchased all of the shares in Normandy Tennant Creek Pty Ltd (NTC) from Normandy Consolidated Gold Holdings Pty Ltd, a wholly-owned subsidiary of Normandy Mining Limited. As a result, NTC is now a wholly owned subsidiary of Giants Reef and its name has been changed to Santexco Pty Ltd (Santexco).

This is the final report for Mineral Leases C65 and C186-C196, *Red Terror*.

Work over Mineral Leases C65 and C186-C196 during their tenure has included ground magnetic surveying with RC and diamond drilling follow-up of the Explorer 29 magnetic anomaly. Shallow vacuum, PMF and bedrock geochemical drilling of flat sheet wash areas north and south of the Red Terror hills, and RC drill testing for at-depth extensions to surface mineralisation at Red Terror and Black Boy mines. Geophysical methods used included gravity, IP, downhole magnetic surveys and an aeromagnetic survey, and geochemical methods included underground mapping and rock chip geochemistry.

Exploratory drilling and magnetic reinterpretation of the Explorer 29 magnetic anomaly suggested a magnetic sediment source is causative of the anomaly. Although ADL drilled 10 diamond drill holes at Explorer 29 the majority of these holes were not assayed for Au. The depth potential of the prospect remains unexplored for Au.

Drilling at Black Boy has adequately closed any further mineralisation at depth to surface ironstone and mineralisation.

Drilling at the Red Terror mineralised structure identified a lack of structural control at depth and due to this complexity, the mineralising system has not been closed off at depth. No shallow extension to the Red Terror mineralising system was identified.

Reviews of the Red Terror Lease area by Giants Reef concluded that the prospects in Mineral Leases C65 and C186-C196 are of low exploration priority. This combined with Giants Reefs initiative to reduce the amount of Mineral Leases and Claims held by the company, led to the decision to allow the *Red Terror* Leases to expire at the end of their third period of tenure on the 31<sup>st</sup> December 2002.

Giants Reef intends to continue the exploration of this target area under Sanexco's SEL 8665, *Shark*.

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## 1. INTRODUCTION

This report records exploration work carried out on Mineral Lease C65 during its 35-year tenure from 4<sup>th</sup> May 1967 to 31<sup>st</sup> December 2002, and Mineral Leases C186 – C196 during their 28-year tenure from 12<sup>th</sup> December 1974 to 31<sup>st</sup> December 2002.

On 13<sup>th</sup> June 2001, Giants Reef Exploration Pty Ltd (Giants Reef), a wholly owned subsidiary of Giants Reef Mining Limited, purchased all of the shares in Normandy Tennant Creek Pty Ltd (NTC) from Normandy Consolidated Gold Holdings Pty Ltd, a wholly-owned subsidiary of Normandy Mining Limited. As a result, NTC is now a wholly owned subsidiary of Giants Reef and its name has been changed to Santexco Pty Ltd (Santexco).

This is the final report for Mineral Leases C65 and C186-C196, *Red Terror*.

In producing this report, Giants Reef has endeavoured to find as much information as possible to record all the work done on the Leases over the 35-year period. However, the changes of ownership over that time, together with Giants Reef's unfamiliarity with the large database acquired as a result of the purchase of NTC, means that there may be some unintentional omissions.

## 2. LOCATION

Mineral Leases C65 and C186-C196 are located approximately 18km east-southeast of the Tennant Creek Township on the Tennant Creek 1:100 000 map sheet (5758).

Access is via the sealed Peko and Nobles Nob Roads and the Gosse River Road that runs along the south edge of the Leases. A well-developed network of gravel tracks extends from these roads to provide good vehicular access.

The climate of the Tennant Creek district is mild and dry through most of the autumn to spring months. The summer period is hot with seasonal heavy rainfall between January and March making access very difficult during these periods.

Figure 1 shows the Mineral Leases and surrounding tenements.

## 3 TENURE

The *Red Terror Leases* comprise of 12 granted Mineral Leases covering approximately 192 hectares. A tenure summary for Mineral Leases C65 and C186 – C196 is presented in the table below:

Tenement	Name	Granted	Expiry	Size (ha)	Comment
ML C65	Red Terror	4/5/67	31/12/02	16	<i>Red Terror Mine</i>
ML C186	Red Terror	12/12/74	31/12/02	16	
ML C187	Red Terror	12/12/74	31/12/02	16	
ML C188	Red Terror	12/12/74	31/12/02	16	
ML C189	Red Terror	12/12/74	31/12/02	16	
ML C190	Red Terror	12/12/74	31/12/02	16	<i>Black Boy/Explorer 29</i>
ML C191	Red Terror	12/12/74	31/12/02	16	
ML C192	Red Terror	12/12/74	31/12/02	16	
ML C193	Red Terror	12/12/74	31/12/02	16	
ML C194	Red Terror	12/12/74	31/12/02	16	
ML C195	Red Terror	12/12/74	31/12/02	16	
ML C196	Red Terror	12/12/74	31/12/02	16	

Mineral Lease C65 was granted on 4<sup>th</sup> May 1967 to Australian Development Limited (ADL) for a period of 20 years. A renewal for 10 years was granted to expire on the 31<sup>st</sup> December 1997, and a further 5-year renewal was granted on the 31<sup>st</sup> December 1997 to expire 31<sup>st</sup> December 2002.

Mineral Leases C186-C196 was granted on 12<sup>th</sup> December 1974 to Australian Development Limited for a period of 20 years to expire 12<sup>th</sup> December 1994. A renewal for 3 years was granted on the 6<sup>th</sup> April 1995 to expire 31<sup>st</sup> December 1997. A further renewal for 5 years was granted to expire on the 31<sup>st</sup> December 2002.

In 1984 Poseidon Limited became a 57% shareholder in ADL. In 1990 ADL registered a change of name to Poseidon Gold Limited (PosGold). PosGold was then purchased by Normandy Gold Limited (Normandy) in 1996.

In June 2001, Giants Reef Mining Limited purchased Normandy Tennant Creek Limited (a subsidiary of Normandy) and all its assets. After the purchase Normandy Tennant Creek was re-named Santexco Pty Ltd, and is now a wholly-owned subsidiary of Giants Reef Mining Limited.

The Red Terror Leases were on Inalienable Aboriginal Freehold land held by the Warumungu Land Trust. An agreement referred to as the Area of Interest Agreement was signed by the Central Land Council, Traditional Landowners and NTC on 9<sup>th</sup> December 1998. This agreement established land access for mineral exploration upon Warumungu Land Trust areas.

Mineral Leases C65 and C186-C196 expired on 31<sup>st</sup> December 2002.

## 4. GEOLOGY

### 4.1 Regional Geology

The reader is referred to AusIMM Monograph 14 (Geology of the Mineral Deposits of Australia and Papua New Guinea), Volume 1, pp. 829-861, to gain a good introduction to the regional geology and the styles of gold-copper mineralisation of the area.

### 4.2 Local Geology

Crohn, Oldershaw and Ryan (1959); Crohn and Oldershaw (1964), Granger (1973), Skirrow (1990) and Elliot and Jones (1993) have previously reported the geology of the Red Terror Leases.

The rocks of the Red Terror Leases are comprised of Warramunga Group siltstone, shale and sandstone with intruding porphyries. This stratigraphy hosts the hydrothermal ironstones that contain most of the gold mineralisation in the area. Granger (1974) mapped pebbly sandstone (pellet sandstone), carbonaceous siltstone, pyritic shale (with cubic limonite pseudomorphs) and haematite shale units; and a sequence of interbedded siltstone, shale and sandstone and used each as marker horizons. The latter is persistent for approximately 1.2km of strike.

Other rocks include quartz dolerite dykes that outcrop 200m east of Black Boy and around the Red Terror workings. The dolerite is less than 1m thick and trends north north-west to north south with subvertical dips.

Several quartz veins (< 0.5m thick) outcrop in the hills with north-south trends, probably related to late north-south faulting. Quartz porphyry outcrops in the north west portions of the Leases and occur in flat sheet wash areas north and south of the Red Terror hills.

The Nobles Nob anticline hosts the Red Terror Leases. It is an open upright shallow east plunging fold. The Red Terror Leases occupy the southern limb of the anticline. Bedding broadly strikes east west and dips –70° south.

#### 4.2.1 Red Terror Mine

The Red Terror Mine (on ML C65) is located in the south eastern hills and has a recorded production of 605 tonnes @ 68g/t Au.

Mine workings comprise of several shallow prospector pits, a glory hole, three shafts and two adits. Five underground levels were used to access the three stope systems. The main shaft (north shaft) was used to loft ore to surface, while the southern shafts were sunk into the top of the southern stopes.

Gold is hosted in deep-red sheared, haematite-rich sediment and brecciated quartz-haematite ironstone.

The historic mined gold shoots are structurally located at the convergence of bedding parallel shears and at least two east north-east (70°) striking shears, and have attitude broadly similar in orientation to the shears' intersection lineation (steep) east south-east plunge. Slicken lineations pitch steeply south east or west in shear zones, but apparent displacement is less than 10m.

North south striking, vertically dipping faults have offset the Red Terror ironstone and mineralisation. The faults have apparent left lateral movement less than 5m. At surface the faults outcrop as thin quartz veins. Underground, the faults form kaolin – quartz crush zones up to 1m wide. Within the north-south trending 2 level adit a quartz-brecciated sediment fault is exposed varying in thickness from 1cm to 50cm.

Gold mineralisation is supergene enriched. In the glory hole talc-kaolin-limonite alteration, leached zones, and solution cavities are typical.

Several shallow (<2m depth) pits form an east-west trending line of workings located 70m north of the Red Terror mine. The geology is similar to Red Terror, with workings in sheared haematite altered siltstone bounding small quartz haematite ironstone.

Figure 2 shows the Red Terror Mine located within Mineral Lease C65.

#### 4.2.2 Black Boy Mine

The Black Boy Mine (on ML C190) is located 700m north west of the Red Terror mine on the northern slopes of the Red Terror hills, and has a recorded production of 45 tonnes @ 36.7g/t Au.

Mine workings comprise of two shafts sunk on the northern side of ironstone. There are no records regarding underground drives and cross cuts.

From surface, ore is hosted by sheared kaolin and haematite altered sediment bounding the northern side of ironstone. Drilling conducted during the late 1980's failed to intersect ironstone at depth. Elevated Cu-Bi was returned in the ironstones' down dip position, suggesting the mineralised structure continues at depth.

Figure 2 shows the Black Boy Mine located within Mineral Lease C190

## 5. WORK DONE DURING THE TERM

### 5.1 Previous Work

Mining at Black Boy was conducted by prospectors during the 1938-39 period (Balfour, 1978). Prospectors initially mined at Red Terror, however during the 1946-1952 period the mine was owned and operated by Red Terror Gold Mines NL (RTG). This company also owned the Edna Beryl and Blue Moon mines. Red Terror closed in 1952 owing to declining gold grades.

Previous exploration has been conducted in the Red Terror and Black Boy area by the Bureau of Mineral Resources (BMR) and by a number of other companies including RTG.

Work completed by the BMR is detailed in Crohn et al (1959) and Finney (1967).

Hone undertook a study of a ground magnetic surveys and drill core from the Red Terror Prospect in 1970. This study showed that the principal magnetic rocks are fractured and veined chloritic siltstones and shales containing haematite shale bands. Magnetic remanence at Red Terror has only a small effect. An attempt was made to correlate drill holes using the susceptibility measurements (Hone, 1970).

The Red Terror mine area was investigated by ADL in the late 1960s under Authority to Prospect 2386. Work included auger drilling, diamond drilling, geophysical surveying and is described in Wolff (1970a, b & c).

The area surrounding the Red Terror Mine was covered by ADL's Exploration Licence 96 between 1972-75. There is no recorded production from these leases and no workings are evident. The area has been explored by ADL since the 1960s. During the period 1966 to 1975 ADL conducted a ground magnetic survey that defined the anomaly referred to as R20. The anomaly was then targeted with three diamond holes with limited drilling success. A Jacro Auger rig was used for bedrock geochemical testing on the leases. All the results are presented in ADL (1973, 1974, 1975a, 1975b, 1976) and Haigh (1974a, b & c).

PosGold explored the area covered by the leases under EL 7274 in the early 1990s. Work completed by PosGold included a review of the historical data, rock chip and soil sampling, regional regolith, structural and photogeological mapping, a regional gravity survey, several ground magnetic surveys, prospect scale mapping, vacuum drilling, RAB drilling, RC drilling and downhole magnetic surveying. All results are presented in Lowe (1992, 1993), Evans (1994a, 1994b, 1995) and Ward (1996).

### 5.2 Aeromagnetic Survey

In 1973 ADL completed a low level airborne magnetic survey over ML's C65 & C186-C196 and the surrounding area. The survey covered 695km<sup>2</sup> and was conducted and processed by Geometrics International Corporation.

Flight height averaged 91m with line spacing of 200m. The data was collected using a proton magnetometer, recorded digitally, results were processed, and a computer generated contour plan was processed.

### 5.3 Ground Magnetic Survey by ADL

A ground magnetic survey was completed over the Black Boy – Red Terror area in 1974 by ADL. Survey specifications and results for this survey are contained in the Annual Exploration Report for EL 96 for the periods 28/3/72 to 29/3/73 and 28/3/73 to 29/3/74, ADL report to NTDME.

In summary, ADL conducted a ground magnetic survey utilising a 200' x 100' grid closing to 50' x 50' over areas of interest. Geophysical interpretation was contracted to McPhar Geophysics Pty Ltd of Kalgoorlie, WA.

Noteworthy results include a magnetic anomaly centred 150m east of the Black Boy ironstone, with a source modelled at 70m vertical depth below surface.

Several ADL diamond holes were drilled to test the anomaly without success.

#### 5.4 Surface Rock Chip Sampling

A total of three rock chip samples were collected on ML's C186-C196. Two of the samples were taken from a dolerite dyke located approximately 250m east of the Black Boy Mine area. The other sample was taken from a small haematite-jasper-quartz outcrop located 50m east of the Black Boy Mine. Anomalous results were identified in the sericitic haematite-magnetite and chloritic sediments at 0.6g/t Au, 1 200ppm Cu, 900ppm Bi.

#### 5.5 Gravity Survey

In 1988 PosGold conducted a close spaced gravity survey over the Red Terror Leases. Survey specifications include:

Gravimeter:	Lacoste & Romberg G215
Elevation:	Barometric (+/- 0.4m)
BMR Base:	Tennant Creek Airport 978528.94
Station Spacing:	20m
Orientation:	North south (AMG)
Operator:	K Franckcombe

The Red Terror hills corresponded with a Bougar gravity ridge. The ridge strikes east west and forms part of a disconnected line of gravity ridges at Nobles Nob, Eldorado and New Hope.

A plan of the Bougar gravity contours for the Red Terror Leases can be found in the report by PosGold entitled "Red Terror Leases Exploration History and status Report, Tennant Creek District, Northern Territory: Red Terror/Black Boy Prospect, Tennant Creek 1:250 000 sheet SE 53-14". Author R. Evans, (1996). PosGold Report to NTDME.

#### 5.6 PosGold RC Drilling

In 1989, PosGold drilled two RC drill holes (BBRC-001 and BBRC-002) for a total of 210m targeting the down-dip/plunge extension of the Black Boy ironstone. No ironstone was intersected, however a weakly defined chloritic-alteration zone in sediments, with anomalous Cu was intersected. No downhole magnetic anomalies were defined.

In 1991, a further RC drill hole (BBRC-003) was drilled to 201m to test the magnetic anomaly to the east of the Black Boy ironstone at Explorer 29. The hole intersected a sequence of sandstone, siltstone and greywacke with stringer magnetite (up to 60%). No true ironstone was logged, although strongly anomalous Cu and Bi values compare to anomalous ADL diamond drill holes at Explorer 29.

Downhole magnetic probing of BBRC-003 was attempted, but was only successful to 153m due to hole caving. An erratic signature characteristic of magnetic sediments was produced, but this did not cover the anomalous Cu-Bi zone.

Sampling was at 1m intervals, assaying for Au, Cu, and Bi and were submitted to AMDEL Laboratories Ltd (Darwin).

Hole details are as follows:



Hole	Easting	Northing	Azimuth	Dip	Depth (m)
BBRC-001	432034	7819627	60° True	0°	99m
BBRC-002	432087	7819636	62° True	0°	111m
BBRC-003	432206	7819731	60° True	180°	201m

BBRC-001 and BBRC-002 were targeted to intersect the down-dip plunge extensions of the Black Boy ironstone. BBRC-001 intersected a weak chlorite alteration system with 3m @ 210ppm Cu. BBRC-002 intersected a weak chlorite alteration system with 45m @ 640ppm Cu from 34m.

BBRC-003 intersected anomalous alteration with 15m @ 860ppm Cu from 150m and 12m @ 50ppm Bi from 140m.

#### 5.7 ADL Drill Hole Re-Assaying

In 1992, the core from ADL diamond drill holes DDH-343, 349 and 360 was inspected for the purposes of re-assay by PosGold.

A total of 69m of core was re-split and submitted for analysis of Au, Cu and Bi. Encouragement was returned from all three holes, with significant geochemically anomalous intersections, in the haematite altered siltstone.

Hole No.	From	To	Intercept
DDH-343	75.5	81.7	6.2m @ 0.44 % Cu
	76.8	78.0	1.2m @ 1.3 ppm Au
	84.7	86.0	1.3m @ 250 ppm Cu
	84.7	87.2	2.5m @ 268 ppm Bi
DDH-349	28.0	63.4	35.4m @ 564 ppm Cu
	26.8	60.4	33.6m @ 392 ppm Cu
	28.90	31.7	3.7m @ 0.18 ppm Au
	29.14	31.7	2.5m @ 52 ppm Bi
DDH-360 inc	25.6	65.8	40.2m @ 623 ppm Cu
	52.4	58.5	6.1m @ 0.15 % Cu
	25.0	41.1	20.1m @ 352 ppm Cu
	27.4	30.5	3.1m @ 0.40 ppm Au
	28.7	31.7	3.0m @ 342 ppm Bi

#### 5.8 Magnetic Survey

The Red Terror Leases have been subject to several aero and ground magnetic surveys. PosGold conducted a ground magnetic survey in 1992. Survey specifications include:

Magnetometer: PosMag 1 (Rapid Sampling Triaxial Fluxgate)  
 Line Spacing: 50m  
 Orientation: North-South (AMG)  
 Survey: Compass and Topofil  
 Operator: P. Walton

The ground magnetic survey redefined the explorer 29 magnetic dipolar anomaly. A broad north-east trending low occurs to the south of Red Terror, probably related to quartz porphyry, and east north-east to north-east striking regional faults. An east-west trending magnetic high occurs to the north near the hinge of the Nobles Nob anticline. Magnetic sediment is interpreted to be the source of this high. No obvious structures related to mineralisation at Red Terror and Black Boy were resolved.

## 5.9 Soil Sampling

To assess the geochemical potential of the Red Terror – Black Boy hills, a soil program utilising a 125 x 50m grid was undertaken in 1993 by PosGold. A total of 45, -1.00mm soil samples were taken and submitted to Australian Laboratory Services (Alice Springs) for Au, Cu, Bi, Fe and Mn analysis.

Au and Bi results were generally low, peaking at 1ppb Au. Cu was elevated in haematite rich sediments, and correlated to mapped shear systems. Fe and Mn were weakly elevated in areas surrounding the Black Boy and Red Terror ironstones.

## 5.10 Vacuum Drilling

In Mineral Leases C65 and C186-C196, a detailed vacuum drillhole program was conducted by Poseidon in 1992 to 1994 to test the potential for shallow ironstone/shear hosted Au mineralised systems.

A total of 1,571m in 363 vertical vacuum holes was completed using a 250m x 50m grid, closing to 125m x 25m over areas of interest. All holes were drilled an average of 5m into bedrock, and a sample of bedrock and overburden were collected, the latter on alternate drillhole traverse lines (250m x 50m grid only). Overburden samples were submitted to Analabs Pty Ltd (Perth) for low level Au, Cu, Bi, Fe, Mn, Cd, Ag, Pb, Zn and Mo analysis. Bedrock samples were submitted to AMDEL Laboratories Ltd (Darwin) for Au, Cu, Bi, Fe and Mn analysis. Bedrock Au and Bi were below detection.

Most drillholes intersected typical Warramunga Group sandstone, siltstone and greywack, with porphyry to the south and northwest.

The geochemical results were generally low although several areas with elevated results are noteworthy.

Peak geochemical results include 380ppb Au, 599ppm Cu, 181ppm Bi, 41.3% Fe, 54.5ppm Pb, 36.5ppm Ag, 218.5ppm Zn, 9ppm Mo and 879ppm Mn.

Co-existant heavy mineral concentrate (HMC) overburden bedrock Au-Cu zones with anomalous HMC Pb, Zn, Ag and Bi were defined immediately north and 500m to the west of Black Boy. A good correlation between bedrock Au and Cu was also present.

To the south, west and north-west low lying areas, a broad PMF Cu-Mn was defined. A north flowing creek, located near the vacuum traverse explains the Au-Bi-Cd-Ag anomaly north of Black Boy. Likewise peak Au anomalism was located near a south-east flowing creek from Red Terror. To the central east of the Red Terror Leases was a robust PMF Cu-Ag-Mo-Pb-Cd-Zn. This anomaly was also in the vicinity of a east flowing creek from Red Terror, however the lack of anomalism from another vacuum traverse between the anomaly and the Red Terror mine suggests a possible alternate source.

Elevated bedrock samples were subdued and failed to coexist with PMF anomalies. Peak Au anomalism was adjacent to the Red Terror mine and within an Au halo (1-2ppb Au) in the immediate Red Terror Vicinity. Elevated Cu corresponds to elevated Mn.

A full account of all exploration work conducted over Mineral Leases C65 and C186-C196 including drill hole locations, assay results and aeromagnetic data generated from 1974 to 1994 can be found in the report by Poseidon entitled "Report in Support of Renewal of Mineral Lease Numbers C186 to C196 Inclusive. Red Terror/Black Boy Area, Tennant Creek District 1:250 000 sheet SE 53-14". Author R. Evans, (1994). Poseidon Report to NTDME.

### 5.11 Diamond Drilling

The Explorer 29 (also called the Red Terror NW) magnetic anomaly was initially defined by the 1958 BMR aeromagnetic survey. Peko located the anomaly via ground magnetics and interpreted a disseminated magnetite sediment to be causative of the anomaly.

Between 1969 and 1975 a total of 10 percussion precollar-diamond tail drill holes for 2233m were completed by ADL targeting the interpreted Explorer 29 magnetic source.

No massive ironstone was intersected however several intervals of disseminated magnetite sediment was intersected which potentially explains the anomaly.

### 5.12 RC Drilling at Red Terror by Normandy

A total of six RC drill holes (RTRC-001 to 006) for 722m were completed targeting any at-depth extension to shallow mineralisation at Red Terror in 1996 to 1997. All drill holes were collared on the southern edge of the Red Terror hills and drilled north from approximately 370 RL.

All drill holes intersected sheared and haematite altered siltstone with anomalous Cu-Bi-(Au) geochemistry. Sheared sediment was interpreted to represent the at depth extension to shallow and surface shearing and mineralisation. These intercepts occurred at approximately 300 RL (50m below workings and 100m below surface) and were below the base of oxidation. No down hole anomalies were defined.

The Red Terror anomalous RC drill results are as follows:

Hole No.	From	To	Intercept
RTRC-004	78	93	16m @ 175 ppm Cu
RTRC-002	67	102	36m @30ppb Au
RTRC-006	70	71	1m @0.2 g/t Au 12.0m @ 50 ppm Bi 12.0m @ 66 ppm Cu 12.0m @ 20ppm Bi
	105	106	1m @ 0.26 g/t Au

A full account of all exploration work conducted over Mineral Leases C65 and C186-C196 including exploration history prior to 1994, can be found in the report by PosGold entitled, "Red Terror Leases: Exploration History and Status Report, Red Terror/Black Boy Prospect, Tennant Creek District 1:250 000 sheet SE 53-14". Author R. Evans, (1996). PosGold Report to NTDME.

A full account of all exploration work conducted over Mineral Leases C65 and C186-C196, between 1994 to 1997, can be found in the report by Normandy entitled, "Report in Support of Renewal of Mineral Lease Central Numbers 65, 186-198, Tennant Creek District 1:250 000 sheet SE 53-14." Volume 1 of 1. Author B. Ward, (1997). Normandy Report to NTDME.

### 5.13 Nob Line Aeromagnetic Survey

The Nob Line airborne geophysical survey was completed in October 1998 by Kevron Geophysics Pty Limited for a total of 8,200 line km. Mineral Leases C65 and C186-C196 were covered by this survey, although they only represented a tiny fraction of the area covered.

Lines were flown north-south, 50m apart, at an average height of 40m above the terrain. Aeromagnetic readings were collected every 7m and radiometric and altitude readings were collected every 49m. Tie lines were flown east-west every 500m. Information gained from the survey included aeromagnetic, radiometric and digital elevation data.

Modelling of the 1998 aeromagnetic data onto a contour plot identified a number of prospect areas warranting drill testing in Mineral Leases C65 and C186-C196. These include possible mineralised ironstones in the Red Terror-Black Boy deeps. A work proposal and request for site clearance was submitted to the Central Land Council (CLC) for one diamond drillhole at Red Terror. Due to Normandy's withdrawal from the Tennant Creek goldfield this hole was never drilled and the project has not been followed up.

#### 5.14 Area of Interest Agreement

The Area of Interest Agreement was signed on 9 December 1998. This agreement, between CLC, Traditional Landowners and Normandy, established land access for mineral exploration upon Warrungu Land Trust. The agreement included the land covered by Mineral Leases C65 and C186-C196.

#### 5.15 Review by Giants Reef

An internal review of the Giants Reefs tenement portfolio and a classification of exploration opportunities in September 2002 assessed the future exploration potential of the Red Terror Leases. The report identified the Leases to have shallow (<100m) resource potential but concluded the Red Terror Leases are a low priority exploration target. Recommendations from the review suggested that the Leases be allowed to expire at the end of their third tenure period on the 31<sup>st</sup> December 2002.

On their expiry, the Mineral Leases C65 and C186-C196 will fall into Santexco's Substitute Exploration Licence 8665 *Shark* (Figure 3). Giants Reef intend to continue further exploration over the Red Terror Lease area under the Exploration Licence 8665.

### 6. REHABILITATION

PosGold completed an Environmental Management Plan for their Tennant Creek operations in 1993. The plan details the environmental management of various areas following completion of exploration programs and mining operations.

A detailed account of the plan is given in the report by Poseidon Gold Limited entitled, "*Environmental Management Plan 1993*". PosGold Limited, by Fowler, B (1993), Report to the NTDME 93181.

In 1999 an environmental audit by Normandy was completed, covering all historical disturbances in the Tennant Creek mineral field. The audit located and detailed all forms of unnatural substantial disturbance including mine workings and structures, tracks, mullock and tailings dumps, drillholes, excavations, construction work, flora and fauna not native to the local area, unnatural drainage diversions, pipelines and cables, and refuse. This report addressed the Red Terror Leases.

A detailed account of the audit over the Red Terror Leases is given in the report by Normandy entitled, "A Safety and Environmental Audit of Historical Mine and Prospect Workings in the Tennant Creek Field". Report 3. PosGold Limited, by J.S. Hankinson, (1999). Normandy Internal Report.

## 7. CONCLUSIONS

Work over Mineral Leases C65 and C186-C196 during their tenure has included ground magnetic surveying with RC and diamond drilling follow-up of the Explorer 29 magnetic anomaly. Shallow vacuum, PMF and bedrock geochemical drilling of flat sheet wash areas north and south of the Red Terror hills, and RC drill testing for at-depth extensions to surface mineralisation at Red Terror and Black Boy mines. Other geophysical methods used included gravity, IP, downhole magnetic surveys and an aeromagnetic survey, and other geochemical methods included underground mapping and rock chip geochemistry.

Exploratory drilling and magnetic reinterpretation of the Explorer 29 magnetic anomaly interpreted a magnetic sediment source is causative of the anomaly. Although ADL drilled 10 diamond drill holes at Explorer 29 the majority of these holes were not assayed for Au. The depth potential of the prospect remains unexplored for Au.

Drilling at Black Boy has adequately closed any further mineralisation at depth to surface ironstone and mineralisation.

Drilling at the Red Terror mineralised structure identified a lack of structural control at depth and due to this complexity, the mineralising system has not been closed off at depth. No shallow extension to the Red Terror mineralising system was identified.

Reviews of the Red Terror Lease area by Giants Reef concluded that the prospects in Mineral Leases C65 and C186-C196 are of low exploration priority. This combined with Giants Reefs initiative to reduce the amount of Mineral Leases and Claims held by the company, led to the decision to allow the *Red Terror Leases* to expire at the end of their third period of tenure on the 31<sup>st</sup> December 2002.

J.L. CAHILL  
EXPLORATION GEOLOGIST

S. C. RUSSELL  
SENIOR EXPLORATION GEOLOGIST

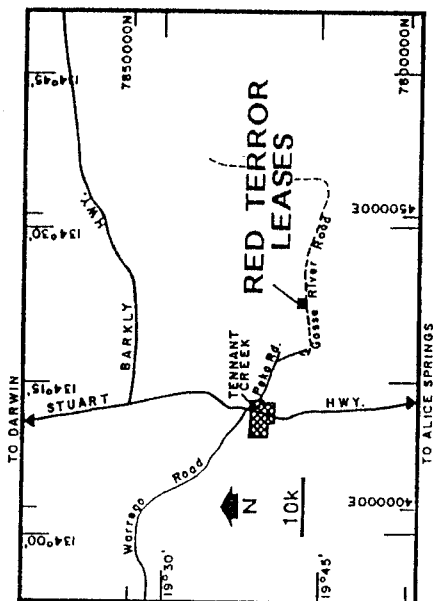
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ML C65, MC C186 - C196 Red Terror  
FINAL REPORT 4 May 1967 - 31 December 2002

7825000N



MLC's

186	189	192	194
187	190	65	195
188	191	193	196

Red Terror

Gosse River Road

# GIANTS REEF EXPLORATION PTY LTD

TENNANT CREEK NORTHERN TERRITORY

AREA	ML's C65 and C186-C196 Red Terror
MAP REF.	5758 TENNANT CREEK 1:100 000
SUBJECT	RED TERROR LEASES
DATE	OCT 1997
AUTHOR	SCALE
1:50,000	FIGURE 1

N

1k

430000E

425000E

To Tennant Creek  
134°16'

Peko Road

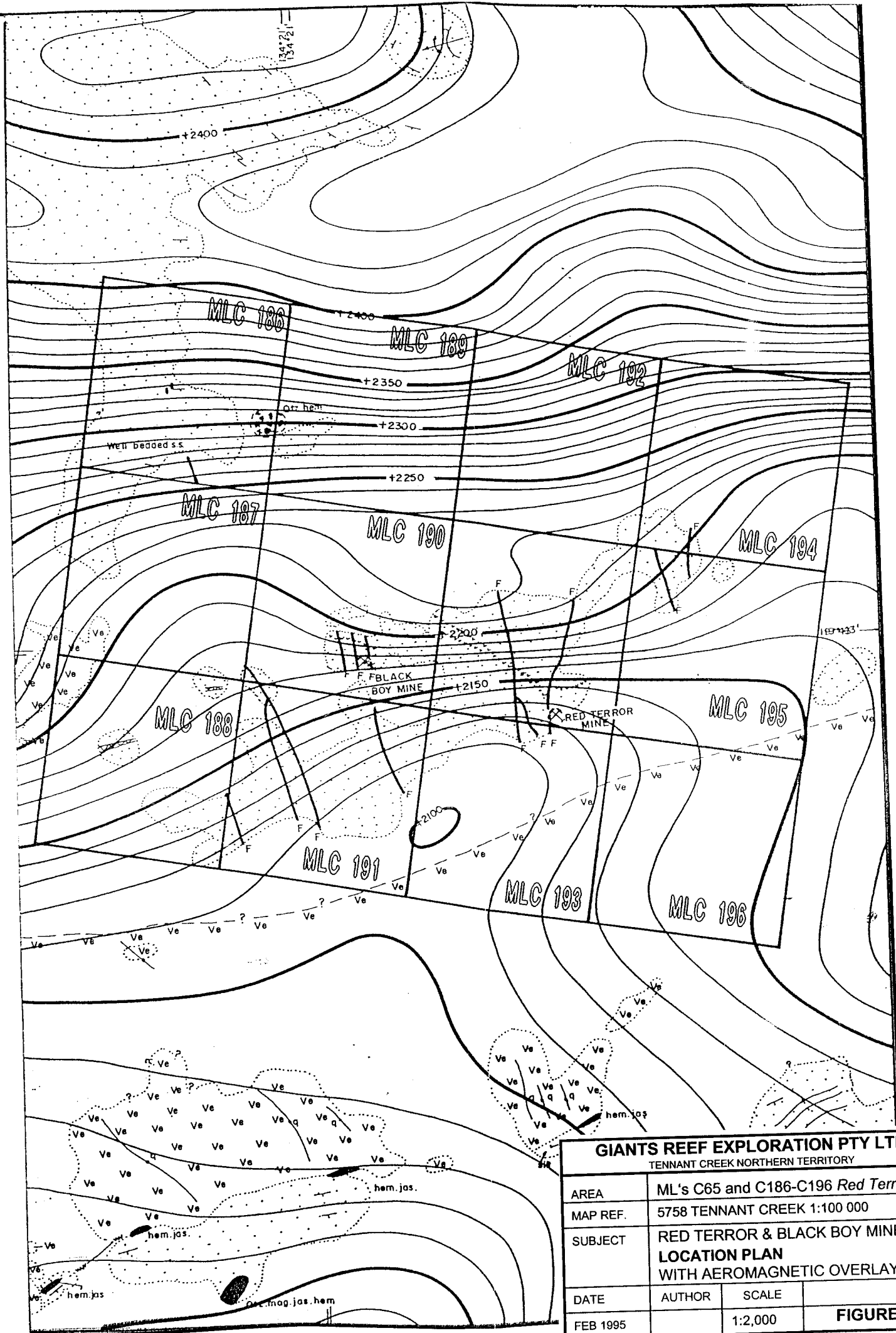
Peko

Nobles Nob

To Juno  
19°42'

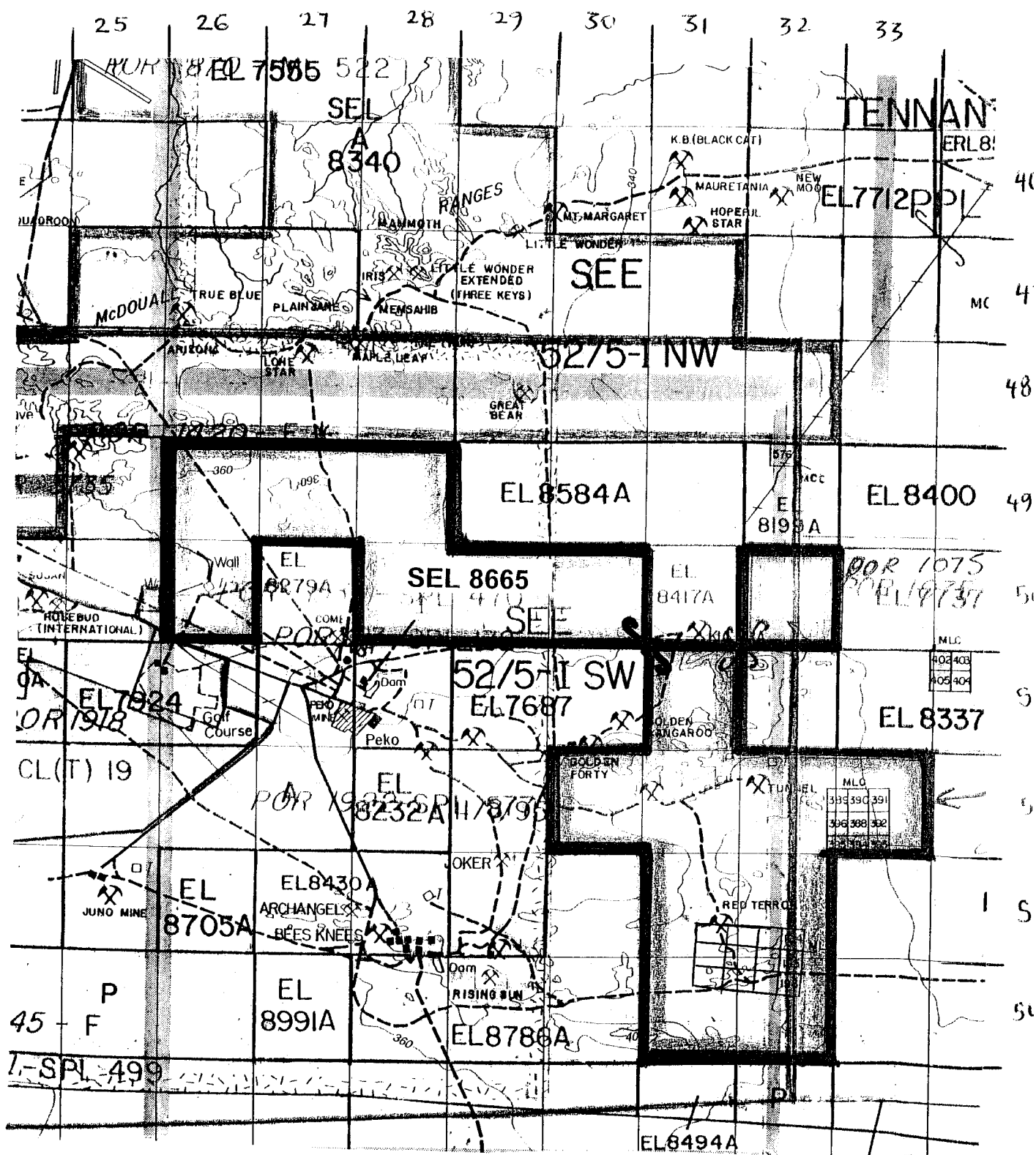
19°44'





**GIANTS REEF EXPLORATION PTY LTD**  
 TENNANT CREEK NORTHERN TERRITORY

AREA	ML's C65 and C186-C196 Red Terror		
MAP REF.	5758 TENNANT CREEK 1:100 000		
SUBJECT	RED TERROR & BLACK BOY MINE: LOCATION PLAN WITH AEROMAGNETIC OVERLAY		
DATE	AUTHOR	SCALE	FIGURE :
FEB 1995		1:2,000	



GIANTS REEF EXPLORATION PTY LTD			
TENNANT CREEK NORTHERN TERRITORY			
AREA	SEL 8665 Shark		
MAP REF.	5758 TENNANT CREEK 1:100 000		
SUBJECT	ML's C65 and C186-C196 Red Terror LOCATION PLAN		
DATE	AUTHOR	SCALE	
FEB 2002		1:100 000	FIGURE 3