NORMANDY NFM Limited

ANNUAL REPORT

THIRD ANNUAL REPORT FOR THE WESTERN TANAMI PROJECT

for the

2001 FIELD SEASON

EXPLORATION LICENCES COVERED BY THIS REPORT:

EL8593	**Nora**
EL8803	**Syrene**
EL8825	**Lucky's Bore**
EL8999	**Medussa**

NORTHERN TERRITORY

Volume **1** of **1**

1:250,000 SHEET:	The Granites	SF52-3
	Mount Solitaire	SF52-4
1:100,000 SHEET:	MacFarlane	4757
	Pedestal Hills	4758

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TENEMENT HOLDERS: Normandy NFM Limited

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SUMMARY

The Western Non-TGEA Project, located in the Tanami desert region approximately 130km west-north-west of the Granites Gold Mine, currently comprises 4 exploration licences. EL's 8803, 8999, 8593 & 8825 were granted on the 29th April 1999. During 1999, Normandy NFM negotiated an agreement with the NT DME to provide technical reports on the Project Area for an entire field season rather than the anniversary year. A submission date of the 30th April each year was established. This is the third annual report for the Western Tanami Project covering the period to 31/12/2001.

Exploration activities have commenced on the EL's 8803 & 8999 (Syrene & Medussa) and EL 8593 (Nora). Reconnaissance has not been started on the EL 8825 (Lucky's Bore) due initially to CLC restrictions and subsequently to weather restrictions.

Exploration at Syrene / Medussa and Nora during the reporting period comprised surface work over prospective areas. This has incorporated:

- Rock Chip Sampling: 2 samples
- Soil Sampling: 237samples

This work has downgraded the prospectivity of the area.

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1. INTRODUCTION

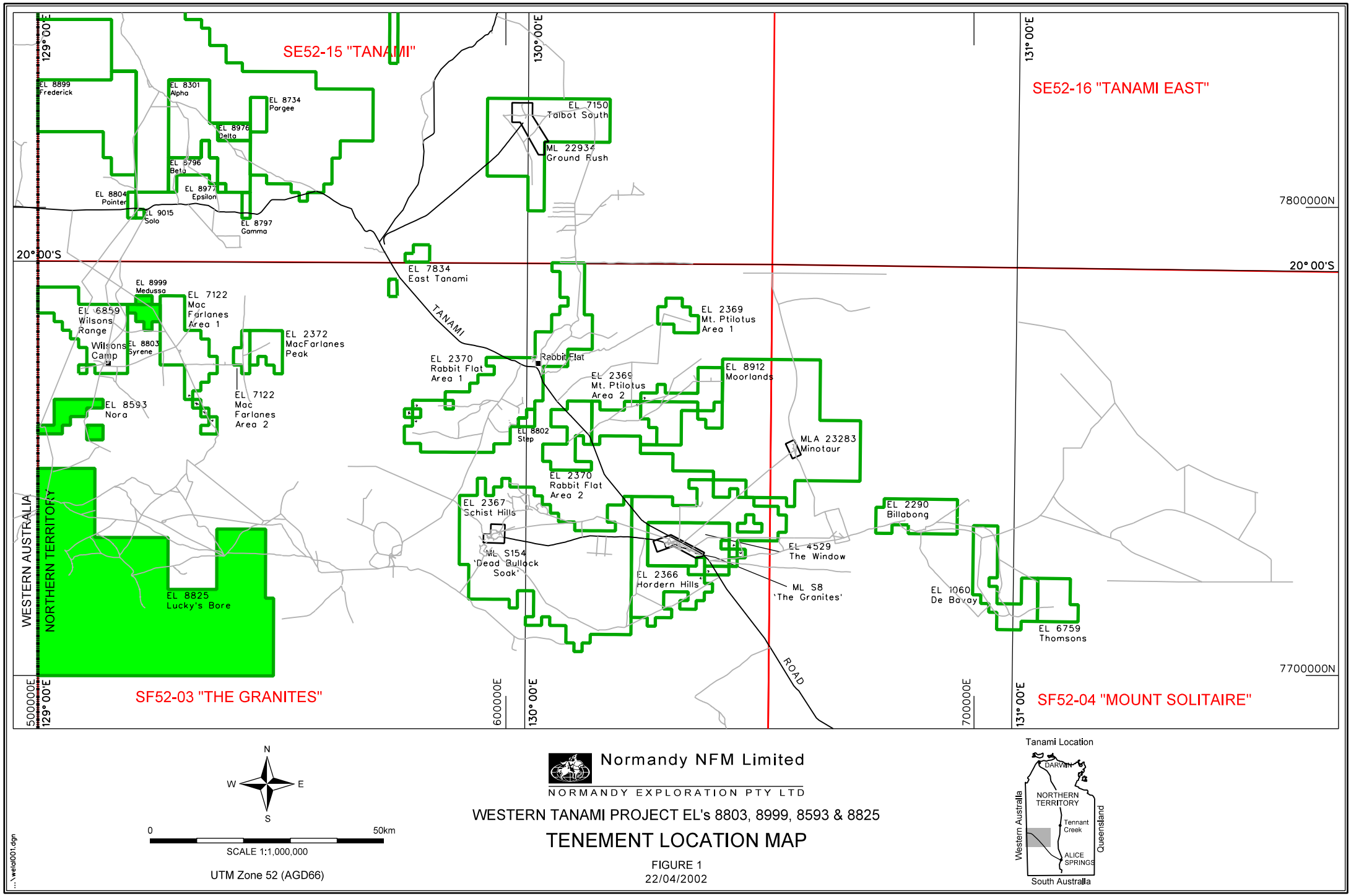
This report covers the Western Tanami Project for the period ending 31/12/2001.

The Western Tanami Project is located south of the Tanami Road, within Aboriginal Freehold land approximately 130km west north west of the Granites Gold Mining Operations (Figure 1). Access to the Project area is via the Wilsons Camp Road, a well-formed road extending south for 40 km from its junction with the Tanami Highway, 20km east of the Western Australian border. Access within the EL's is then via graded tracks. The licences are dispersed but semi-contiguous with the Normandy NFM TGEA Project (Western zone).

Exploration Licences 8803, 8999, 8593 & 8825 were granted to Normandy NFM on 29th April 1999 for a period of six years. Access to EL's 8803 & 8999 and approval of proposed Work Programs was granted by the CLC on 7th July, 1999 allowing work to commence in the second half of the field season. Access to EL 8593 and approval of proposed Work Programs was granted by the CLC on 11th September, 1999. A supplementary work program for this lease was not granted until late in the 2000 field season, therefore allowing only partial exploration to be undertaken within available time during 2000. Table 1 outlines tenement details.

Table 1: Western Tanami Project Tenement Summary

EL Number	Name	Blocks	Km^2	Grant Date	Expiry Date	Covenant ($)
EL 8803	Syrene	17	55	29/04/1999	28/04/05	64,000
EL 8999	Medussa	3	9	29/04/1999	28/04/05	10,000
EL 8593	Nora	34	109	29/04/1999	28/04/05	22,500
EL 8825	Lucky's Bore	483	1555	29/04/1999	28/04/05	50,000
		537	**1728**			**146,500**


SE52-15 "TANAMI"
SE52-16 "TANAMI EAST"
SF52-03 "THE GRANITES"
SF52-04 "MOUNT SOLITAIRE"
129° 00'E
130° 00'E
131° 00'E
20° 00'S
7800000N
7700000N
500000E
600000E
700000E
WESTERN AUSTRALIA
NORTHERN TERRITORY
EL 8899 Frederick
EL 8301 Alpha
EL 8734 Pargee
EL 8976 Delta
EL 8796 Beta
EL 8977 Epsilon
EL 8804 Pointer
EL 9015 Solo
EL 8797 Gamma
EL 7150 Talbot South
ML 22934 Ground Rush
EL 7834 East Tanami
TANAMI
EL 8999 Medusa
EL 7122 Mac Farlanes Area 1
EL 6859 Wilsons Range
Wilsons Camp
EL 8803 Syrene
EL 2372 MacFarlanes Peak
EL 7122 Mac Farlanes Area 2
EL 8593 Nora
EL 2370 Rabbit Flat Area 1
Rabbit Flat
EL 2369 Mt. Ptilotus Area 1
EL 2369 Mt. Ptilotus Area 2
EL 8912 Moorlands
EL 8802 Step
MLA 23283 Minotaur
EL 2370 Rabbit Flat Area 2
EL 2367 Schist Hills
ML S154 'Dead Bullock Soak'
EL 2366 Hordern Hills
EL 4529 The Window
ML S8 'The Granites'
EL 2290 Billabong
EL 1060 De Bavay
EL 6759 Thomsons
EL 8825 Lucky's Bore
ROAD
N
W
E
S
0
50km
SCALE 1:1,000,000
UTM Zone 52 (AGD66)
Normandy NFM Limited
NORMANDY EXPLORATION PTY LTD
WESTERN TANAMI PROJECT EL's 8803, 8999, 8593 & 8825
TENEMENT LOCATION MAP
FIGURE 1
22/04/2002
Tanami Location
DARWIN
NORTHERN TERRITORY
Tennant Creek
ALICE SPRINGS
Western Australia
Queensland
South Australia
...\weld001.dgn

2. LOCATION, INFRASTRUCTURE, ACCESS, SURVEY CONTROL & ENVIRONMENTAL PRACTICE

2.1 Location, Access & Physiography

The Western Tanami Project is located in the Tanami Desert region, approximately 130km WNW of the Granites Gold Mine. The area is covered by the Granites (SF52-3), 1:250 000 series map sheet, as shown on Figure 1.

The Project area is dominated by variable thicknesses of alluvial cover, the depth of which is greatest within palaeodrainage channels. Areas of subcropping to outcropping Palaeo-Proterozoic lithologies generally form low to moderate sized hills.

Sparse spinifex plains with isolated eucalypts are the typical vegetation found in the project area. Dense stands of mulga punctuate the landscape, but are usually no more than a few square kilometres in areal extent. Other vegetation includes shrubs (cassia) and low trees (mallee, tea tree and hakea). There are no permanent or perennial watercourses in the area.

2.2 Infrastructure

Prior to the presence of NFM in this part of the Tanami region, infrastructural support was almost completely lacking. Currently supplies are trucked or flown to the permanent camp at The Granites (within EL4529) from Alice Springs. Telephone and fax using microwave links service this camp. Water is provided by two remote borefields. One borefield lies 35km east of The Granites (Billabong) and the other 10km north-east of Dead Bullock Soak. Power is locally generated at exploration bases and mine sites. The nearest settlements are the Rabbit Flat roadhouse 50km to the northwest of The Granites on the Tanami Road and Tanami Downs homestead 60km to the west. The nearest settlement is Yuendumu some 250km southeast of The Granites on the Tanami Road.

2.3 Environmental Practice

Rehabilitation of exploration sites was carried out pursuant to Section 24(e) of the NT Mining Act and in accordance with the Departments “Guidelines for Rehabilitation of Exploration Sites”,

- all drillholes were capped on completion,
- all grid lines and tracks were rehabilitated when no longer needed.

3. PREVIOUS EXPLORATION

The Syrene / Medussa portion of the Western Tanami Project was first held by the Power and Nuclear Corporation Pty Ltd (PNC) from 1988 to 1991 as EL 4829. In the subsequent period 1991 to 1994 Western Mining Corporation (WMC) held the ground under agreement with PNC as SEL 7423. No field work was conducted by WMC.

PNC was exploring throughout the region for uranium mineralisation by targeting anomalies generated from airborne magnetic and radiometric surveys. A high intensity magnetic feature (now the Bondi Prospect in EL 8803) was targeted as part of this project. Field reconnaissance and mapping were completed revealing the source of the magnetic anomaly to be multiple intrusives of syenitic to monzonitic composition.

A limited program of rotary air blasting (RAB) drilling and geochemical testing was conducted to test the intrusives for uranium mineralisation. Bulk samples also were collected to test for the potential for diamonds. Two micro-diamonds were identified leading to a program of diamond drilling and a 10 tonne bulk alluvial sample. When no further diamonds were found, the petrological analysis of the diamonds was interpreted to indicate 'offset' contamination. Of the geochemical sampling program, only three samples were analysed for Au. One of these returned 0.1g/t Au.

4. EXPLORATION OBJECTIVES

Exploration and mine studies have indicated that gold mineralisation in the region has an association with a range of geological environments. Models of gold occurrence for which the Tanami is believed to be most prospective include:

- Disseminated, stratabound deposits hosted by banded iron formations;
- Discordant stockwork deposits of gold in relatively late stage quartz veins;
- Gold mineralisation in veins hosted by shear zones with strong alteration characteristics;
- Deposits in regolith containing gold concentrated by alluvial, eluvial or alteritic processes.

With these models in mind, the Company's geologists have selected prospective target exploration areas based on regional geological, structural, geophysical and geochemical data.

The detailed assessment of these targets has been undertaken by a range of exploration techniques, designed to reveal the geology of the target area, and the presence of indicator elements, particularly gold itself, in anomalous quantities.

The task has been made difficult by the very extensive cover of windblown sand and other transported material, which conceals the rock and associated soil, typically to a thickness of several metres. This blanket covers as much as 98% of the region. Consequently the exploration process has relied heavily on point samples obtained by drilling to expose bedrock.

5. GEOLOGY

The Project Area lies astride the Granites - Tanami and Arunta provinces. The relationship between the Granites - Tanami and Arunta provinces is not well understood. Basement metasedimentary sequences in both regions are thought to be lateral equivalents (Blake et al., 1979) and the sequences merge with one another (Stewart et al., 1984).

The Granites - Tanami and the Northern Arunta provinces contain similar rock sequences and share similar Palaeoproterozoic magmatic, metamorphic and deformational histories. Both comprise of a deformed Palaeoproterozoic basement turbiditic sequence of greywacke, quartz sandstone, siltstone, shale, and minor mafic rocks and their moderate to high grade metamorphic equivalents (schist, gneiss, quartzite, amphibolite). The Tanami Block also contains chert, pyritic carbonaceous sediments and ironstone, whereas the Arunta Block has minor calc-silicates and meta-felsic volcanics (felsic orthogneiss).

During the Barramundi Orogeny (1890-1850 Ma, Page and Williams, 1988), the sedimentary sequences in the Arunta were intruded by mafic rocks, deformed and metamorphosed up to amphibolite facies. Granite plutons were emplaced in the closing stages of the Barramundi Orogeny, at about 1820 - 1800 Ma.

In the Arunta province, platform quartzite-shale-carbonate sediments (Reynolds Range Group) unconformably overlie the Barramundi metamorphic rocks and probably represent correlatives of the Hatches Creek Group of the Davenport Province to the north (Blake et al. 1987). Deformation of the Hatches Creek Group preceded granite intrusion at about 1660 Ma (Page and Williams 1988) and involved an early phase of upright northwest-trending folds and a second episode of northeast-trending folds. Faulting, thrusting and metamorphism accompanied both episodes of folding.

The Arunta province remained tectonically active after the Barramundi Orogeny with several metamorphic and deformational events, including the ~1800 Ma Strangways granulite event (Shaw et al, 1984), the 1760-1650 Ma Aileron retrogressive event (Windrim and McCulloch, 1986) and the most recent Carboniferous Alice Springs Orogeny. In the northern Arunta region, significant granitic magmatism occurred at 1780-1770, 1713, 1635 and 1570 Ma.

The basement provinces described above are unconformably overlain by younger, Neoproterozoic and Palaeozoic sediments of the Birrindudu, Wiso, Georgina and Ngalia basins (Wells and Moss, 1983).

The geology of the northern half of the project is dominated by Palaeo-Proterozoic sediments intruded by felsic to intermediate igneous bodies, with minor Antrim Plateau Volcanics. The southern half of the project, including the Luckys Bore Tenement, is dominated by Palaeozoic sequences overlying granitoid and possible Tanami Complex lithologies at depth.

6. METHODOLOGY

6.1 Geochemical Sampling Techniques/Sample Descriptions

6.1.1 SURFACE SAMPLES

RC (Rock Chip)

Composite Rock Chip samples are representative samples of outcrop composited over an area of 10 to 20 metres diameter. Total sample weights are generally 2 to 3 kg and comprise all outcropping lithologies in the sample area without bias towards lithology, quartz vein or apparently mineralised materials. Selective samples are composites of specific lithologies or apparently mineralised materials from within a similar diameter area. They are noted as selective samples in sample logs.

GPS (Global Positioning System) equipment is used to determine reconnaissance sample locations in the absence of a local grid. Sampled sites have been marked with numbered aluminium permatags affixed to the sampled outcrop or nearby tree.

Soil

Samples are collected at 20 metre intervals from a pseudo B-horizon soil (darkening of soil colour) at the bottom of a hole approximately 20 to 25cm deep. Material is sieved with a 0.18mm nylon sieve to derive a 100 gram sample and the oversize discarded. Digging is conducted using a pelican pick from which the paint has been removed, and collected in plastic buckets to minimise contamination. Samples are stored in plastic bags for analysis.

7. WORK COMPLETED

7.1 EL8999 - MEDUSSA

Work during the 2001 year comprised surface soil sampling and rock chip sampling. Soil samples were collected within EL 8999 at spacings of either 200m x 40m or 400m x 40m. A total of 237 samples were collected and submitted to Amdel Laboratories for analysis by ARM 1. No significant results were returned.

Work for the report period included:

- CRC Sampling 2 samples
- Soil Sampling 227 samples (plus 10 quality control samples)

7.1.1 Rock Chip Sampling

Two rock chip samples were collected from of outcropping basement as well as patches of quartz float..

Samples were sent to Genalysis Laboratories for analysis. A maximum result of 10ppb Gold and 121ppb Arsenic was returned. All data is included in Appendix 1, sample locations are presented in Figure 3.

Table 2 - RC Sample Details

Sample Numbers	Total	Genalysis Method	Elements Analysed
755094-755095	2	B*ETA	Au
		A/MS	Ag, As, Bi, Co, Cu, Fe, Pb, Sb, Mo, Ni, Sn, Th, U, W,
			2 samples

None of the surface samples collected from Medussa returned any gold results above 1ppb. None of the samples returned anomalous multi-elements.

7.1.2 Soil Sampling

Soil samples were collected within EL 8999 at spacings of either 200m x 40m or 400m x 40m. A total of 237 samples were collected and submitted to Amdel Laboratories for analysis by ARM 1.

Sample locations are presented in Figure 3, sample data presented in Table 3, and results in Appendix 1.

Table 3: Soil Sample Details

Sample Number	Total	Amdel Analytical Technique	Elements Analysed
3633001-3633237	227	ARM1	Ag, As, Au, Bi, Cd, Co, Cu, Mo, Ni, Pb, Sb, Se, Te, Zn
			227 samples (+ 10 QC samples)

No significant results were returned.

521000E 522000E 523000E 524000E

7781000N

7780000N

EL 8999
Medussa

EL 8803
Syrene

CACTUS

755094 △

N
W E
S

0 200m
SCALE 1:10,000

UTM Zone 52 (AGD66)

Normandy NFM Limited
NORMANDY EXPLORATION PTY LTD

Annual Report for the Western Tanami, 2001 Field Season

EL 8999 - Medussa
SAMPLE LOCALITY PLAN

22/04/2002

FIGURE 2

t:\MSDATA\diagram\tanwel\medav003.dgn

8. REFERENCE LIST / ANNUAL REPORT BIBLIOGRAPHY

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Twinning, M., 2001. Second Annual Report for the Western Tanami Project for the 2000 Field Season Normandy RN: 28004.

APPENDIX 1: DIGITAL DATA

el8999_soils.DAT

Northern Territory Department of Mines and Energy

REPORT METADATA FORM
(MINERAL EXPLORATION)

PART A (DME USE ONLY)					
Report Number	Date Received				
Collation	___ pp.	___ figs	___ logs	___ maps	___ apps.
Media	___ CDs	___ 1.5"	___ Exab.	___ DLT	___ vols.

PART B			
Tenure Number(s)	8803, 8999, 8593, 8825	Company Report Number	CR29571
Report Date	April 2002	Anniversary Date	29/04/2002
Group Project Name	Western Tanami		
Report Title	Third Annual Report for the Western Tanami Project for the 2000 Field Season.		
Author(s)	D. Power		
Corporate Author(s)			
Maps 1 : 250 000			
Maps 1 : 100 000			

Tectonic Units			
❑ Amadeus Basin	❑ Carpentaria Basin	❑ McArthur Basin	❑ Pine Creek Inlier
❑ Arafura Basin	❑ Daly Basin	❑ Money Shoal Basin	❑ Simpson Basin
❑ Arnhem Inlier	❑ Dunmarra Basin	❑ Murphy Inlier	❑ South Nicholson Basin
❑ Arunta Inlier	❑ Eromanga Basin	❑ Musgrave Block	❑ Tennant Creek Inlier
❑ Birrindudu Basin	❑ Fitzmaurice Mobile Zone	❑ Ngalia Basin	❑ Victoria Basin
❑ Bonaparte Basin	❑ Georgina Basin	❑ Ord Basin	❑ Warburton Basin
❑ Browse Basin	▪ Granites-Tanami Inlier	❑ Pedirka Basin	❑ Wiso Basin
Other structural units			

Stratigraphic Names			
Killi Killi Beds			

AMF Thesaurus Terms - General			
❑ Geological mapping	❑ Regional Geology	❑ Stratigraphy	❑ Structural Geology
❑ Metallogenesis	❑ Remote sensing	❑ Imagery	❑ Landsat
❑ Petrology	❑ Lithology	❑ Literature reviews	❑ Metamorphism
❑ Lineaments	❑ Photogeology	❑ Reconnaissance	❑ Indicator minerals
Other terms ...			

AMF Thesaurus Terms - Target Minerals			
♦ Gold	❑ Silver	❑ Tin	❑ Diamonds
❑ Lead	❑ Copper	❑ Platinum Group Minerals	❑ Industrial Minerals
❑ Zinc	❑ Uranium	❑ Bauxite	

Others…			

AMF Thesaurus Terms - Mining			
❑ Environmental impact surveys	❑ Feasibility studies	❑ Geostatistics	❑ Metallurgy
❑ Ore reserves	❑ Resource assessment	❑ Mineral resources	❑ Mining geology
❑ Mine design	❑ Mine drainage	❑ Mine evaluation	❑ Pits
Other terms ...			

AMF Thesaurus Terms - Geophysical Surveys			
❑ Aerial magnetic surveys	❑ Aerial radioactivity surveys	❑ Aerial EM surveys	❑ Ground EM surveys
❑ Gravity surveys	❑ Geophysical anomalies	❑ Gravity anomalies	❑ Bouger anomaly maps
❑ Sirotem surveys	❑ Ground magnetic surveys	❑ IP surveys	❑ Resistivity surveys
❑ Seismic surveys	❑ Magnetic anomalies	❑ Geophysical interpretation	❑ Geophysical logs
Other terms ...			

AMF Thesaurus Terms - Geochemical Exploration – Surface sampling			
❑ Geochemical sampling	❑ Stream sediment sampling	❑ Rock chip sampling	❑ Bulk sampling
▪ Soil sampling	❑ Heavy mineral sampling	❑ Geochemical anomalies	❑ Assaying
❑ Isotope geochemistry	❑ Whole rock analysis	❑ X ray diffraction	❑ Sample location maps
Other terms ...			

AMF Thesaurus Terms - Geochemical Exploration - Drill sampling			
❑ Diamond drilling	❑ RAB drilling	❑ Percussion drilling	❑ Air drilling
❑ RC drilling	❑ Rotary drilling	❑ Vacuum drilling	❑ Auger drilling
❑ Drill core	❑ Drill cuttings	❑ Drill hole logs	❑ Drill core analysis
Other terms ...			

Drilling Type	**No. of holes**	**Hole name(s)**
Diamond		
Percussion		
Vacuum		
RAB		
Auger		
Air		
RC		
Rotary		
Other ...		

Mine / Deposit / Prospects		**Location - AMG**	**Location - Datum**
Mines			
Deposits			
Prospects			
Other …			
