NEWMONT AUSTRALIA

NORMANDY NFM Limited

FINAL REPORT

FINAL REPORT FOR EL 8803 (SYRENE)

for the period
29/04/1999 to **03/04/2003**

Western Tanami Project
NORTHERN TERRITORY

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

1:250,000 SHEET:	The Granites	SF52-03
1:100,000 SHEET:	MacFarlane	4757

AUTHOR: M. Walter

TENEMENT HOLDERS: Newmont NFM (trading as Normandy NFM Ltd)

Newmont Gold Exploration Pty Ltd

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JUNE 2003 NEWMONT CR 31110

SUMMARY

EL8803 was formerly a part of the Western Non-TGEA Project, and was located in the Tanami desert region approximately 130km west-north-west of the Granites Gold Mine. The licence was 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 for a report covering the exploration for the previous year. Originally this project group was comprised of 4 licences (EL's 8803 & 8999 (Syrene & Medussa), EL 8825 (Lucky's Bore) and EL 8593 (Nora)). During 2002 EL's 8999 and 8593 were relinquished in full and final reports were completed and sent to NTDBIRD.

This is the final annual report for EL8803 (Syrene) covering all work completed on the licence from 29th April 1999 until the 3rd April 2003. The licence was incorporated with EL 6859 and EL 7122 into SEL23661, which was granted on April 3, 2003.

The following is a summary of all work completed over the licence during the period of tenure:

- Gridding: 14.6 line km
- Ground Magnetics Survey: 13.6 line km
- Rock chip sampling: 28 samples
- Lag sampling: 230 samples
- Soil sampling: 40 BCL samples, 383 Soil samples
- Vacuum Drilling: 115 holes, 894.7m, 206 BOH samples, 82 DSL samples
- RAB Drilling: 76 holes, 2435m, 813 samples

TABLE OF CONTENTS

Page Number

LIST OF FIGURES

LIST OF APPENDICES

1. INTRODUCTION

This report comprises all work completed over EL8803 (Syrene) for the period 29/04/1999 to 03/04/2003.

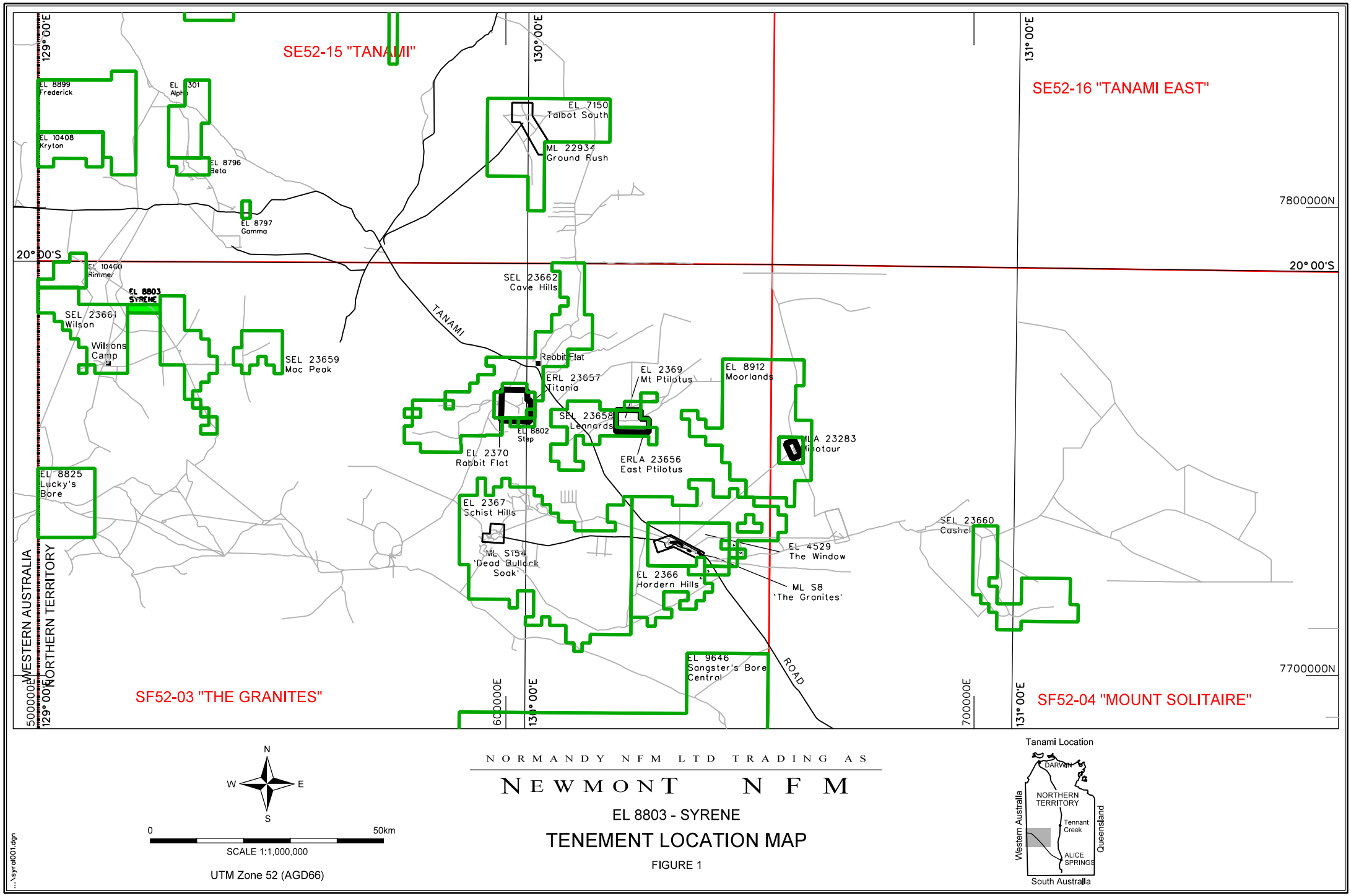
The licence is located to the south of the Tanami Road, within Aboriginal Freehold land approximately 130km west north west of the Granites Gold Mining Operations (Figure 1). Access to the Project area is via the Wilsons Camp Road, a well-formed road extending south for 40 km from its junction with the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

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.

The first relinquishment reduced the licence by 9 blocks in 2001. During 2002 a second relinquishment of the 50% of the licence took place. EL 8803 was relinquished in full on the 3rd April 2003.

Table 1: EL8803 Syrene Tenement Summary

	Date	Blocks Relinquished	Holding (Blocks)	Km²
Grant Date	29/04/1999		17	54.6
First Relinquishment	28/03/2001	9	8	25.7
Second Relinquishment	25/04/2002	4	4	12.9
Final Relinquishment	03/04/2003	4	0	0
Expiry Date/Cessation	28/04/05			



NORMANDY NFM LTD TRADING AS

NEWMONT NFM

EL 8803 - SYRENE

TENEMENT LOCATION MAP

FIGURE 1

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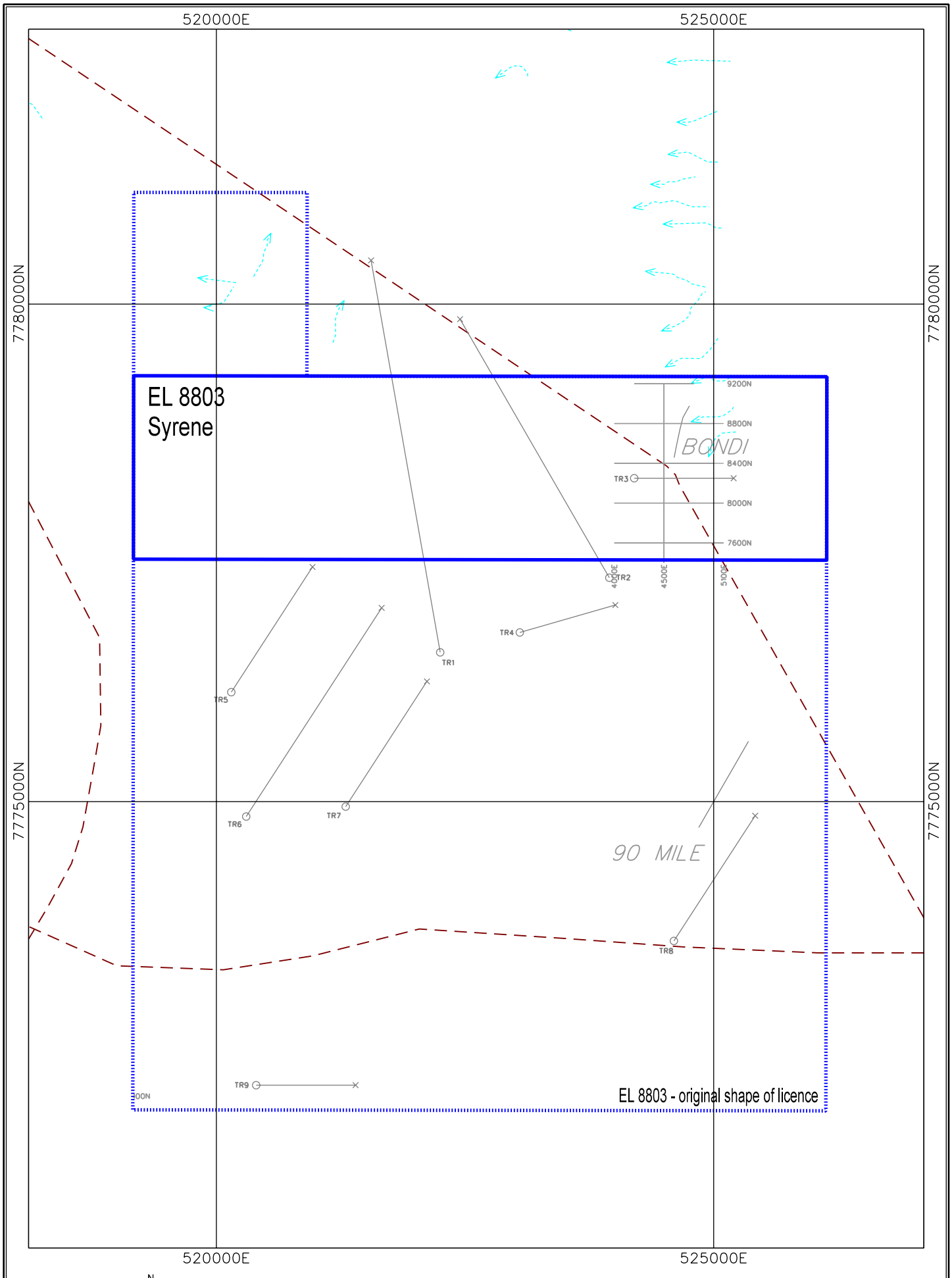

NORMANDY NFM LTD TRADING AS

NEWMONT NFM

EL 8803 - SYRENE

PROSPECT LOCALITY PLAN

UTM Zone 52 (AGD66)

04/06/2003

FIGURE 2

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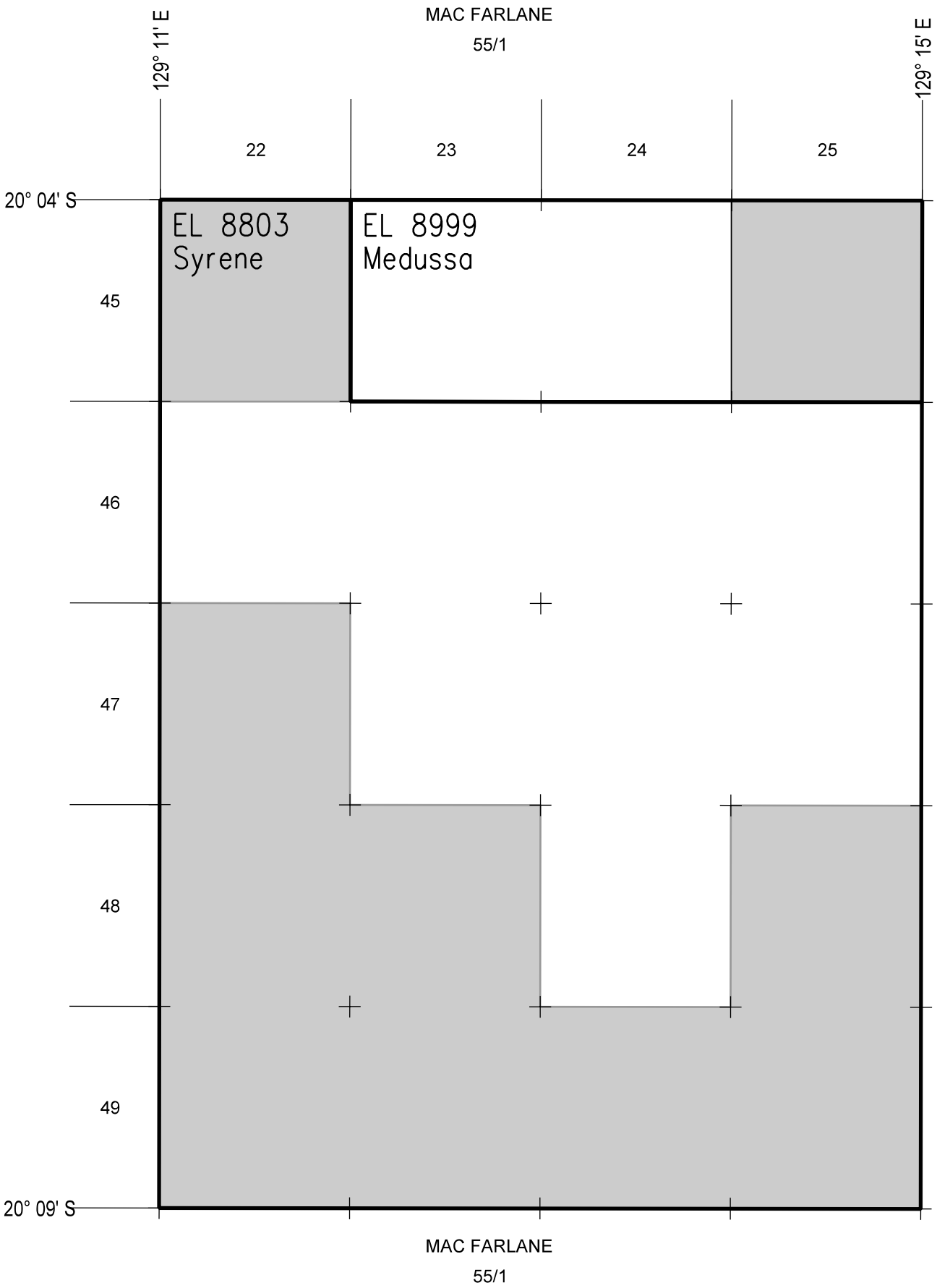

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UTM Zone 52 (AGD66)

Normandy NFM Limited

NORMANDY EXPLORATION PTY LTD

EL 8803 SYRENE, EL 8999 MEDUSA
- MAC FARLANE 55/1

BLOCKS TO BE RELINQUISHED MARCH 2001

02/06/2003

Blocks to be relinquished (partial compliance)

Blocks to be retained

Figure 3

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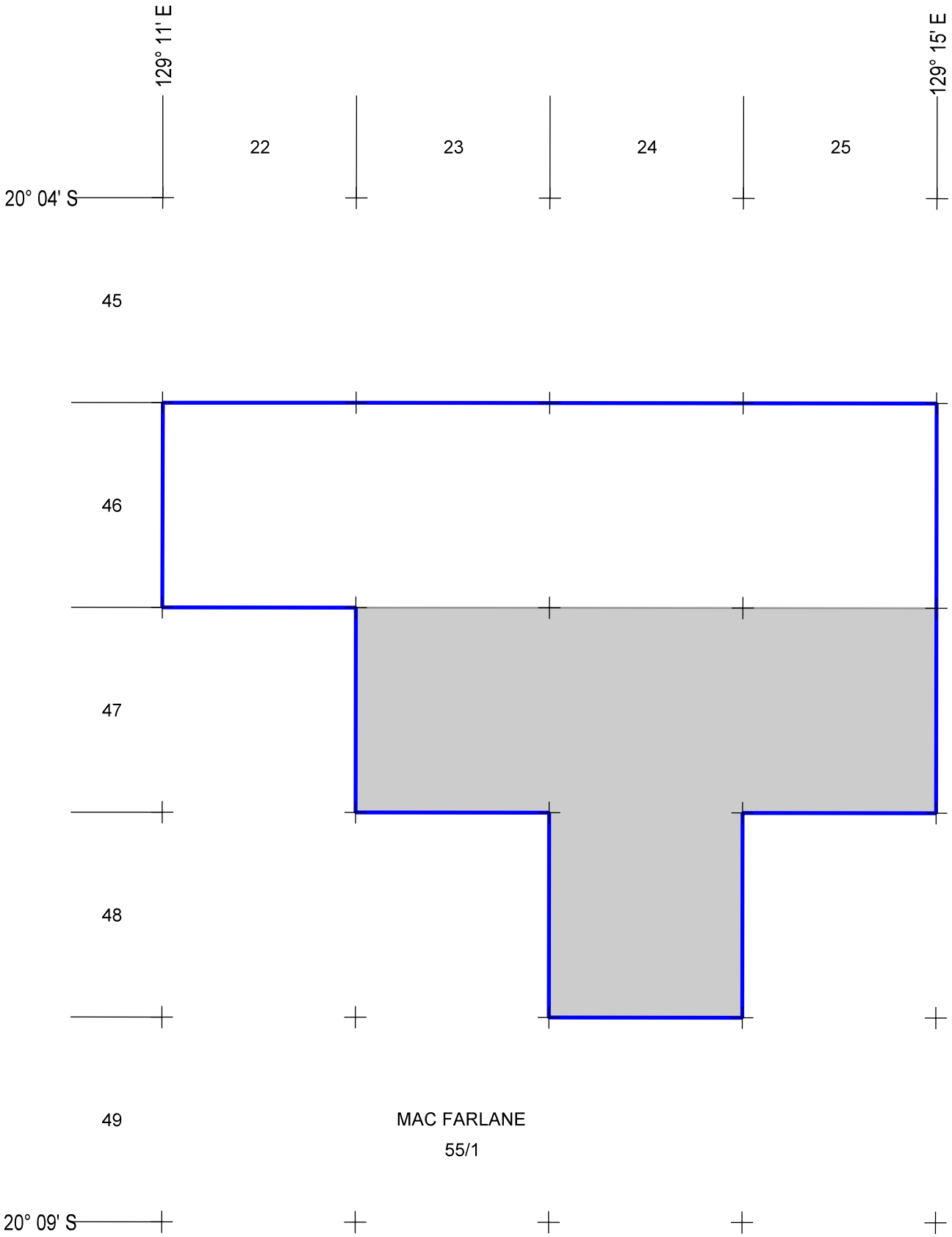

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UTM Zone 52 (AGD66)

Normandy NFM Limited

NEWMONT NFM

NEWMONT EXPLORATION

EL 8803 SYRENE

4 BLOCKS TO BE RELINQUISHED

02/06/2003

Blocks to be relinquished

Blocks to be retained

Figure 4

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

2.1 Location, Access & Physiography

EL 8803 (Syrene) 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 permanent camps at The Granites (within EL4529) from Alice Springs. All camps are serviced by telephone and fax using microwave links. 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. A single bore supplies the Wilsons camp. 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 town is Yuendumu some 250km southeast of The Granites on the Tanami Road.

2.3 Access

Access to the area is by air or via the Tanami Road. A basic network of pre-existing and newly formed tracks link individual prospect areas to the three major NFM camps at The Granites, Dead Bullock Soak and Wilsons (Figure 1). A bitumen ore haulage road connects the Dead Bullock Soak mining/exploration camp with The Granites camp facilities.

2.4 Survey Control

Initial survey control has been established over the current exploration licences by Company and contract surveyors.

All survey marks have been tied to the Australian Map Grid with trigonometrical survey station control. Extensive use is made of Global Positioning System equipment by staff engaged in regional exploration.

2.5 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 licence 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. WORK COMPLETED 1st Year of Tenure

The 1999 work program consisted of initial reconnaissance lag sampling incorporating opportunistic rock chip sampling. A program of broad spaced RAB drilling and ground magnetics survey traverses were also completed to develop an understanding of the regolith, depth of cover and nature of the bedrock across the license. A number of samples from both the surface sampling and drilling programs were also sent for petrological analysis. Prospect based work included infill soil sampling over the Bondi Syenite and 90 Mile Prospects and ground magnetic surveys.

Work for the period included:

- Gridding 14.6 line km
- Ground Magnetics Survey 13.6 line km
- Lag Sampling 228 samples
- Rock Sampling 24 samples
- Soil Sampling 383 samples
- RAB Drilling 24 holes, 854m, 283 samples
- Petrology 5 samples

6.1 Reconnaissance Exploration

6.1.1 Surficial Sampling

Reconnaissance scale lag and CRC samples were collected throughout the Syrene licence (EL 8803) in areas with regolith and landform amenable to surficial sampling. Lag sample coverage is on a reducing scale of: a) 1000m x 500m reconnaissance to; b) 500m x 500m in areas of interest to; c) 250m x 250m / 500m infill in areas of geochemical encouragement. Rock chip samples were collected opportunistically from various rock types and any quartz veins and potential mineralisation.

The objectives of the program were to locate and define any mineralisation in outcropping or subcropping domains. Sample distributions are shown on Figure 5. A summary of sample statistics is given in Tables 2 & 3 and data is displayed in Appendix 1.

Table 2: Lag Sample Details

Sample ID	Genalysis Method	Elements	Total Samples
3127472-481; 3127483-500; 3127508-537; 3127539- 578, 3127580- 592, 3127608- 610, 3127642- 686, 3127723-791	B*ETA	Au	228
	A/MS	Ag, As, Bi, Co, Cu, Fe, Mo, Ni, Pb, Sb, Th, U, W, Zn	
		TOTAL	**228**

Table 3: CRC Sample Details

Sample ID	Genalysis Method	Elements	Total Samples
755479-483; 756177-193; 755927-928;	B*ETA	Au	24
	A/MS	Ag, As, Bi, Co, Cu, Fe, Mo, Ni, Pb, Sb, Th, U, W, Zn	
		TOTAL	**24**

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522000E
525000E
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129° 12'E
129° 15'E
20° 04'S
20° 05'S
20° 06'S
20° 09'S
7779000N
7776000N
7773000N

EL 8803
Syrene

EL 8999
Medussa

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UTM Zone 52 (AGD66)

NORMANDY NFM LTD TRADING AS
NEWMONT NFM

EL 8803 - SYRENE

RECONNAISSANCE WORK COMPLETED - 1999 FIELD SEASON

MARCH 2000

LEGEND
Lag Sample
CRC Sample
RAB Drillhole
Ground Magnetics Traverse

FIGURE 5

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The initial surficial sampling programs highlighted two areas of anomalism. These were followed up with sample verification and reducing scale infill and definition lag sampling. They are as follows:

An area within EL 8803 returned 0.88ppm Au from a lag sample. A verification sample from the same site returned below detection Au. Several infill lag samples returned weakly anomalous gold up to 3.3ppm Au within 600m of the original sample site.

A number of weak to moderately anomalous gold results were received from an area of north-north-west striking shears and quartz veins in EL 8803 which was subsequently designated as the 90 Mile Prospect. The results received from initial and infill surficial samples were up to 5.6ppb Au in lag and up to 14.5ppb Au in CRC over an area of 800m x 400m.

6.1.2 Gridding

A total of 14.6 line kilometres of gridding were completed to allow for ground magnetics to be carried out at various locations throughout the licence, and to accommodate soil sampling. Refer to Figures 2 & 5 for grid and traverse locations. Eight traverses totalling 17 line km were constructed for a regional ground magnetic survey. A further 6.6 line kilometres of were completed to construct a grid at the Bondi Syenite Prospect for ground magnetic surveying and soil sample control. Another single line kilometre of traverse was constructed at the 90 Mile Prospect for soil sample control. Grids are constructed with wooden pegs using a Garmin GPS to determine a point of origin. The grids are removed once work has been finalised in a given area.

6.1.3 Ground Magnetics Survey

Ground magnetic surveying was conducted on 17 line kilometres of traverses within the licence to accommodate conceptual targeting of magnetic features using RAB drilling. A further 6.6 line kilometres of surveying was completed over the Bondi Syenite Prospect to aid definition of a highly magnetic syenite intrusive.

Details of the ground magnetic surveys are catalogued in Appendix 2. Figure 5 shows the location of the ground magnetic traverses.

6.1.4 RAB Drilling

RAB drilling was conducted at irregular spacings within EL 8803. Refer to Figure 5 for drillhole locations.

The objective of the drilling was to test the depth of regolith and distribution of transported cover sediments and to test a variety of conceptual geological and magnetic targets. A summary of drilling statistics is given in Table 4 and data is collated in Appendix 1.

Table 4: Reconnaissance RAB Drillhole and Sample Details

Drill Hole ID	Total Metres	Sample ID	Amdel Method	Elements	Total Samples
SYRB0001- SYRB0024	854	3225692-3225868 3226301-3226406	ARM1	Ag, As, Au, Bi, Cd, Co, Cu, Mo, Ni, Pb, Sb, Se, Te, Zn	283
TOTAL: 24 holes, 854m, 283 samples					

The drilling phase facilitated a broad assessment of the licence area regolith and bedrock geology.

Drilling encountered a shallow drainage in the centre of EL 8803, partially filled by Cambrian Antrim Plateau Volcanics and an undifferentiated Meso-Proterozoic Birrindudu Group cover sandstone (possibly a local derivative of the Gardiner Sandstone). Tertiary cover over the tenements is limited to 30% of the combined area with <10m of cover.

One RAB hole drilled into the Bondi Syenite returned a significant intersection of continuous downhole gold anomalism (Table 5) in an area of approximately 6 metres of loose sand cover. This information, combined with historical exploration details, generated further interest in the Syenite, prompting a detailed soil survey over the area.

Table 5 lists the best intersections from this program. Refer to Appendix 1 for comprehensive drillhole logs and assays.

Table 5: Best RAB Assay Intersections

Drillhole ID	Intersection	Depth From:	Comments
SYRB0017	24m @ >5ppb Au including 3m @ 0.527g/t Au	12m	Weathered syenite to Monzonite

6.1.5 Petrology

5 representative samples from EL 8803 were sent to Pontifex & Associates for thin section preparation and petrological examination. Full descriptions are submitted as Appendix 3.

6.2 Bondi Syenite Prospect

Following a favourable result from regolith drilling at the Bondi Syenite (3m @ 0.5 g/t Au; SYRB0017), and considering historical exploration in the area, a program of follow-up soil and ground magnetic surveying was undertaken over the Bondi area. A grid was established and surveyed with ground magnetics (Appendix 2). The same grid was utilised for soil sample location control. A total of 332 samples were collected at 400m x 20m spacings. All sampling and gridding was conducted entirely within EL 8803 (Syrene). Soil sample details are displayed in Table 6 and geochemical data is contained in Appendix 1. Sample distributions are shown in Figure 6.

Soil sampling of the Bondi Syenite grid revealed weak intensity gold anomalism in the northern half of the grid area up to 3.1ppb Au over an area of 500m x 200m. A coincident arsenic anomaly (3 to 15ppm As) was defined over an area of 900m x up to 500m. The effectiveness of the program in the southern half of the grid is limited by sand cover of at least 6m depth. Vacuum drilling will be used to complete the survey.

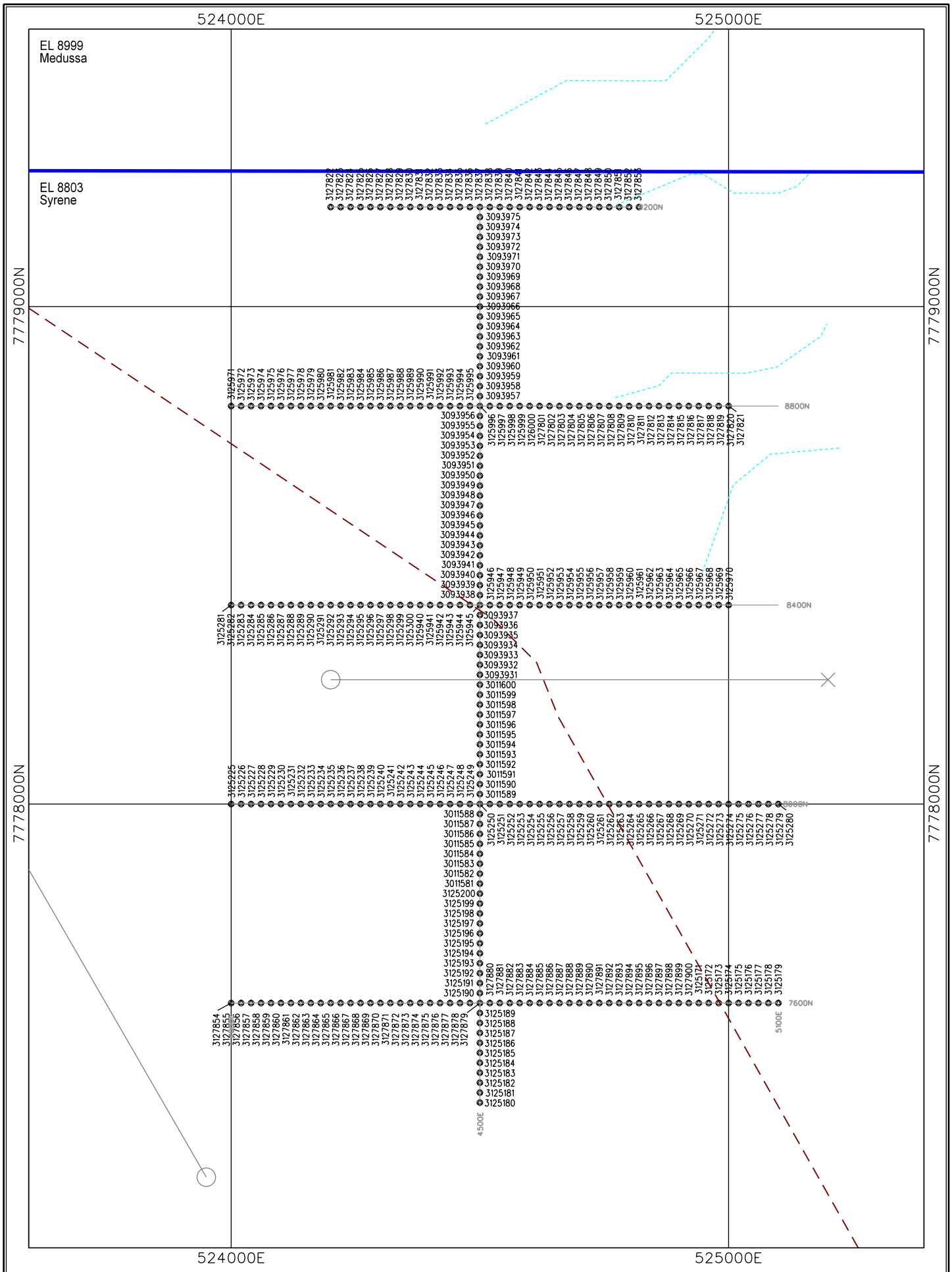
6.3 90 Mile Prospect

Following favourable surficial geochemical results from lag and CRC programs, a one line kilometre soil traverse was constructed over the 90 Mile Prospect. The traverse is perpendicular to quartz veining and covers the contact of Killi Killi Beds and Pargee Sandstone. Soil sampling was conducted on 20m intervals. Soil sample details are displayed in Table 6 and assay results are contained in Appendix 1. Sample distributions are shown in Figure 7.

Table 6: Prospect Scale Soil Sample Details

Area	Sample ID	Amdel Method	Elements	Total Samples
Bondi Syenite	3011581-1600; 3093931-3975; 3125171-5200; 3125225-5300; 3125940-6000; 3127801-7900.	ARM1	Ag, As, Au, Bi, Cd, Co, Cu, Mo, Ni, Pb, Sb, Se, Te, Zn	332
90 Mile Prospect	3202401 – 2451			51
			TOTAL	**383**

Soil sampling of a traverse at the 90 Mile Prospect indicated very weak gold anomalism up to 1.5 ppb Au coincident with defined lag and rock chip anomalism. Further rock chip sampling will be conducted along strike of the sampled area, however the results of the soil program indicate limited potential for the Prospect.



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NORMANDY NFM LTD TRADING AS

NEWMONT N F M

BONDI PROSPECT

WORK COMPLETED - 1999 FIELD SEASON

UTM Zone 52 (AGD66)

03/06/2003

FIGURE 6

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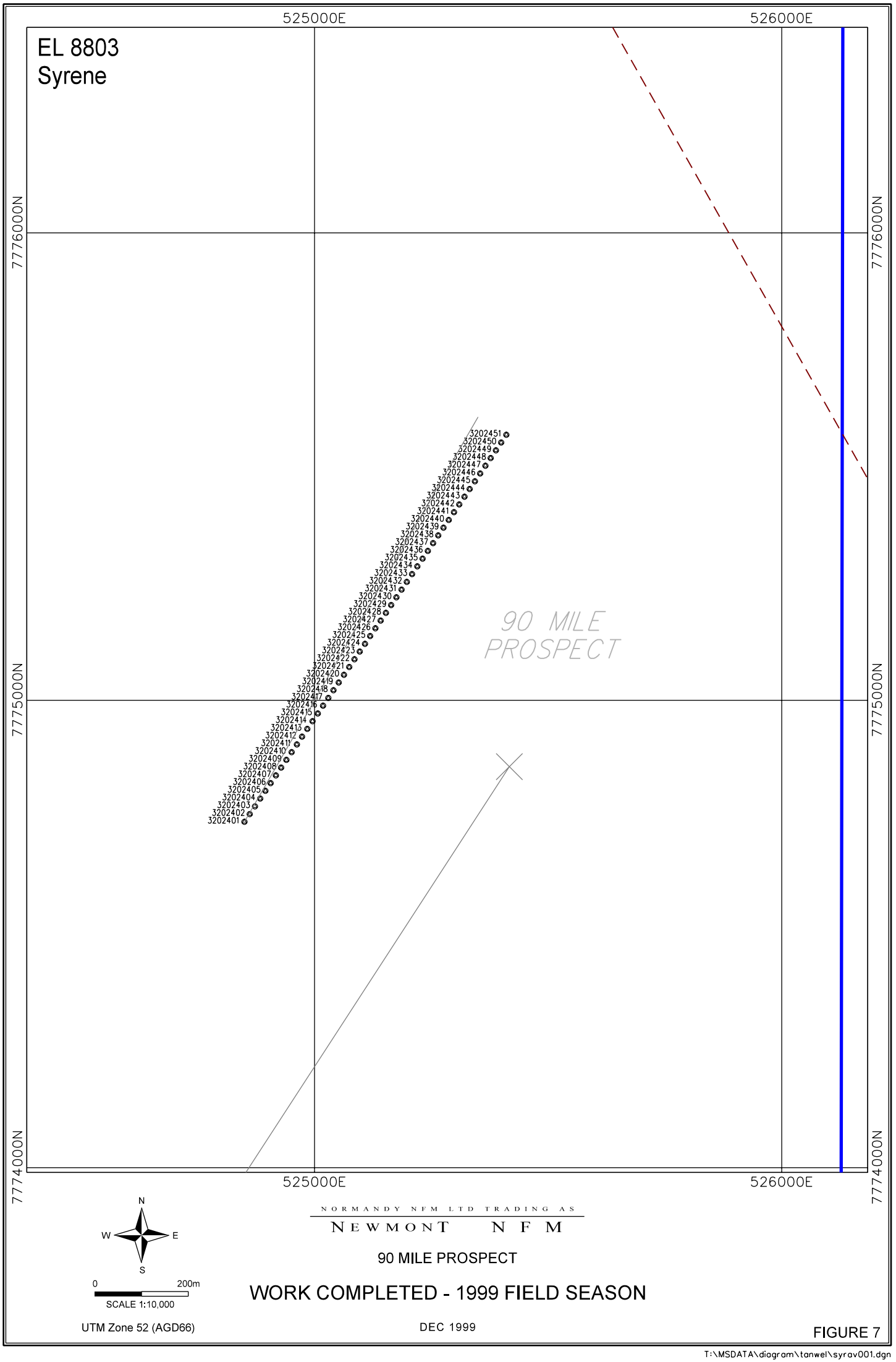

NORMANDY NFM LTD TRADING AS

NEWMONT NFM

90 MILE PROSPECT

WORK COMPLETED - 1999 FIELD SEASON

UTM Zone 52 (AGD66)

DEC 1999

FIGURE 7

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7. WORK COMPLETED 2nd Year of Tenure

The 2000 work program consisted of initial reconnaissance traverses incorporating opportunistic surficial sampling. A program of broad spaced aircore drilling was also completed to develop an understanding of the regolith, depth of cover and nature of the bedrock across the license. A number of samples from both the surface sampling and drilling programs were also sent for petrological analysis.

Work for the report period included:

- Lag Sampling 2 samples
- Rock Chip Sampling 4 samples
- Orientation Soil Sampling 40 samples
- Vacuum Drilling 115 holes for 894.7m, 288 samples
- RAB Drilling 52 holes for 1581m, 530 samples
- Petrology 8 samples

7.1 Reconnaissance Exploration

7.1.1 Surficial Sampling

In the course of drilling several lag and rockchip samples were collected. Rock chip samples consisted of outcropping basement as well as patches of quartz float. Lag samples were collected in lieu of drilling vacuum holes at some locations. A total of 2 lag samples and 4 rockchip samples were collected from the Syrene licence. All samples were dispatched to Genalysis for analysis by B/*ETA and A/MS. Sample locations are presented in Figure 8.

A summary of sample statistics is given in Tables 7 & 8 and data is displayed in Appendix 1.

Table 7 –Reconnaissance Lag Sample Details

Sample Numbers	Total	Genalysis Method	Elements Analysed
3242235 - 236	2	B*ETA A/MS	Au Ag, As, Bi, Co, Cu, Fe, Pb, Sb, Mo, Ni, Sn, Th, U, W,
			2 samples

Table 8 - Reconnaissance Rock chip Sample Details

Sample Numbers	Total	Genalysis Method	Elements Analysed
755080 - 082, 085	4	B*ETA	Au
			4 samples

None of the surface samples collected returned any gold mineralisation above 1ppb. None of the samples returned anomalous multi-elements either.

Three rock chip samples were submitted for petrological analysis and the results are submitted in Appendix 3.

520500E 522000E 523500E 525000E

7780500N

7779000N

7777500N

CACTUS

BONDI

EL 8999
MEDUSSA

EL 8803
SYRENE

9200N

8800N

8400N

8000N

7600N

755082 755080 755081

755085

3242235 3242236

4000E 4500E 5100E

N
W E
S

0 300m
SCALE 1:15,000

UTM Zone 52 (AGD66)

LEGEND
CRC Sample △
SBCL Sample ⌖
Soil Sample ⊙

NORMANDY NFM LTD TRADING AS
NEWMONT NFM

EL 8803 - SYRENE

WORK COMPLETED (SAMPLING) - 2000 FIELD SEASON

04/06/2003

FIGURE 8

T:\MSDATA\diagram\tanwel\syrav005.dgn

7.1.2 Orientation Soil Sampling

Orientation soil sampling using in-house Normandy BLEG techniques was tried to evaluate its effectiveness in an area of known weak Au-mineralisation beneath thin and variable cover. The region chosen was the southern part of the Bondi grid where gold mineralisation up to 0.5g/t has been intersected. Previous soil sampling at the Bondi prospect using the Amdel ARM1 method failed to produce many results above the assay detection limit. Aeolian sand cover dominates the Bondi area, whilst a thin alluvial veneer exists at the Cactus prospect. A total of 40 BLEG samples were collected and prepared in the Newmont laboratory in Perth. Sample locations are presented in Figure 8, sample data presented in Table 9, and results in Appendix 1.

Table 9: Orientation Soil Sample Details

Tenement	Area	Sample ID	Normandy BLEG Technique	Total Samples
Syrene (8803)	Bondi	3139434 - 473		40
			TOTAL	**40**

The BLEG orientation soil sampling produced inconclusive results over the southern end of the Bondi grid. Whilst there was no distinct response over the known weak bedrock mineralisation (up to 0.5g/t Au), the background results certainly demonstrated that there is sufficient variation that the technique should work given substantial bedrock mineralisation. Background mineralisation is at least two orders of magnitude greater than the detection limit of the BLEG technique. This compares more favourably than the ARM1 technique where background results are the same order of magnitude as the detection limit (0.1ppb Au).

7.1.3 Vacuum Drilling

A program of vacuum drilling was completed to test the geochemical response of the cover/bedrock interface and upper bedrock in areas beneath a variable and aeolian/alluvial dominated transported profile. Holes were drilled at 50m centres along E-W traverses spaced 400m apart. A total of 115 holes for 894.7m were drilled (SYV001-115).

Holes were drilled until recognisable bedrock was intersected (where possible), with the complete profile being sampled. Composite samples (defined by geological intervals) were collected from both the transported and residual parts of the hole, with an unsieved interface sample also being collected where a derived stone line (DSL) existed.

Composite samples were dispatched to Amdel for analysis by ARM1, with interface (DSL) samples being dispatched to Genalysis for analysis by B/*ETA and A/MS. A total of 208 composite samples and 82 DSL samples were collected.

Drill hole locations are presented in Figure 9, sampling data presented in Table 10 and drilling logs presented in Appendix 1.

Table 10 - Reconnaissance Vacuum Drillhole & Sample Details.

Drillhole ID	Total	Metres	Sample Type	Sample ID	Total Samples	Sample Method / Laboratory
SYV0001 - 0115	115	894.7	Composite	3140794 – 0819 3140901 – 1000 3139001 - 0080	206	Amdel ARM1 Ag, As, Au, Bi, Cd, Co, Cu, Mo, Ni, Pb, Sb, Se, Te, Zn
			DSL	3202966 – 3000 3242301 – 2346 3242356	82	Genalysis B/*ETA (Au) and A/MS (Ag, As, Bi, Co, Cu, Fe, Pb, Sb, Mo, Ni, Sn, Th, U, W,)
						115 holes for 894.7m, 288 samples

520500E 522000E 523500E 525000E

7780500N

7779000N

7777500N

CACTUS

BONDI

EL 8999
MEDUSSA

EL 8803
SYRENE

9200N

8800N

8400N

8000N

7600N

4000E 4500E 5100E

SYV0072 SYV0073 SYV0074 SYV0075 SYV0076 SYV0077 SYV0078 SYV0079 SYV0080 SYV0081 SYV0082 SYV0083 SYV0084 SYV0085 SYV0086 SYV0087 SYV0088 SYV0089 SYV0090 SYV0091 SYV0092 SYV0093 SYV0094 SYV0095 SYV0096 SYV0097 SYV0098 SYV0099 SYV0100 SYV0101 SYV0102 SYV0103 SYV0104 SYV0105 SYV0106 SYV0107 SYV0108 SYV0109 SYV0110 SYV0111 SYV0112 SYV0113 SYV0114 SYV0115

SYRB0067 SYRB0068 SYRB0069 SYRB0070 SYRB0071 SYRB0072 SYRB0073 SYRB0074 SYRB0075 SYRB0076

SYV0054 SYV0055 SYV0056 SYV0057 SYV0071 SYV0070 SYV0069 SYV0068 SYV0067 SYV0066 SYV0065 SYV0064 SYV0063 SYV0062 SYV0061 SYV0060 SYV0059 SYV0058

SYV0024 SYV0025 SYV0026 SYV0027 SYV0028 SYV0029 SYV0030 SYV0031 SYV0032 SYV0033 SYV0034 SYV0035 SYV0036 SYV0037 SYV0038 SYV0039 SYV0040 SYV0041 SYV0042 SYV0043 SYV0044 SYV0045 SYV0046 SYV0047 SYV0048 SYV0049 SYV0050 SYV0051 SYV0052 SYV0053 SYV0014 SYV0023 SYV0015 SYV0016 SYV0017 SYV0018 SYV0019 SYV0020 SYV0021 SYV0022 SYV0013 SYV0012 SYV0008 SYV0009 SYV0010 SYV0011 SYV0001 SYV0002 SYV0003 SYV0004 SYV0005 SYV0006 SYV0007

SYRB0066 SYRB0065 SYRB0064 SYRB0063 SYRB0062 SYRB0061 SYRB0060 SYRB0059 SYRB0058 SYRB0057 SYRB0055 SYRB0056 SYRB0054 SYRB0053 SYRB0052 SYRB0051 SYRB0050 SYRB0043 SYRB0025 SYRB0026 SYRB0027 SYRB0028 SYRB0029 SYRB0030 SYRB0031 SYRB0032 SYRB0033 SYRB0034 SYRB0035 SYRB0036 SYRB0037 SYRB0038 SYRB0039 SYRB0040 SYRB0041 SYRB0042 SYRB0043 SYRB0044 SYRB0045 SYRB0046 SYRB0047

520500E 522000E 523500E 525000E

N
W E
S

0 300m
SCALE 1:15,000

UTM Zone 52 (AGD66)

LEGEND

Vacuum Drillhole ○

RAB Drillhole +

NORMANDY NFM LTD TRADING AS
NEWMONT NFM

EL 8803 - SYRENE

WORK COMPLETED (DRILLING) - 2000 FIELD SEASON

04/06/2003

FIGURE 9

T:\MSDATA\diagram\tanwel\syrav004.dgn

The vacuum drilling at Syrene assisted in defining new zones of anomalous mineralisation beneath transported cover, although coverage in the southern part of the Bondi grid was hampered by excessive moisture in the ground. The vacuum drilling has indicated that the transported cover in the "Syrene valley" is only very thin and may in fact be amenable to surface sampling. The vacuum drilling aided in mapping bedrock stratigraphy, although due to the strongly weathered nature of bedrock in the upper part of the residual profile, rocktypes could only generally be differentiated into intrusives, coarse grained sediments and siltstones. Many zones of intense quartz veins were also intersected, although only a small percentage of these appear to be related to mineralisation. Several geochemical anomalies were generated and were followed up with RAB drilling.

7.1.4 RAB Drilling

A RAB drilling was conducted to test geochemical anomalies generated by the earlier vacuum drilling program. Drill holes were angled at -60° towards either AMG-east or west. Holes were drilled at varying centres along E-W traverses no closer than 200m apart. Some overlapping traverses were drilled, whilst shallow RAB holes were drilled along some traverses where earlier vacuum drilling failed due to excessive moisture in the weathered profile. A total of 52 holes for 1581m were drilled (SYRB025-076).

Drill cuttings were laid out in three metre piles with one sample being collected from each pile by spearing from four different directions. The complete hole was sampled with all samples dispatched to Amdel for analysis by ARM1. A total of 530 samples were collected.

Drill hole locations are presented in Figure 9, sampling data presented in Table 11 and drilling logs presented in Appendix 1.

Table 11: Reconnaissance RAB Drillhole and Sample Details

Drillhole ID	Total	Metres	Samples	Total	Amdel Method	Elements Analysed
SYRB025 - 076	52	1581	3673874 - 403	530	ARM 1	Ag, As, Au, Bi, Cd, Co, Cu, Mo, Ni, Pb, Sb, Se, Te, Zn
						TOTAL: 52 holes for 1581m, 530 samples

A total of eight samples from Syrene RAB holes were submitted to Pontifex and Associates for petrological examination and interpretation. The petrology report is contained in Appendix 3.

The RAB drilling undertaken at Syrene extended the known mineralisation at Bondi and improved greatly the geological understanding of the area. Drilling intersected a variety of intrusives ranging in composition from felsic (porphyries) to intermediate (syenite, monzonite and diorite) to mafic (diorite-gabbro), as well as a variety of sedimentary lithologies. Some possible volcanic/volcaniclastic rocks were also intersected.

Drilling encountered anomalous mineralisation similar in style and magnitude to the previously encountered mineralisation at Bondi (ie 3m @ 0.527ppm Au from SYRB017). The new mineralisation is also hosted in syenitic to dioritic rocks and may or may not be associated with quartz veins. The results from this drilling have confirmed the presence of low grade Au-mineralisation in the southern end of the Bondi grid, but has not yielded any higher (ore-grade) mineralisation.

8. WORK COMPLETED 3rd Year to Final Year of Tenure

No on-ground work was completed during the period 01/01/2001 to 03/04/2003.

9. FINAL EXPENDITURE STATEMENT

Expenditure for the final period of tenure, 29/04/2002 to 03/04/2003:

Expense Element	EL 8803 (SYRENE)
Employee Costs	$2,803.01
Overheads & Allocations	$1,376.11
TOTAL	**$4,179.12**
COVENANT	$6,000.00

10. REFERENCE LIST / ANNUAL REPORT BIBLIOGRAPHY

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APPENDIX 1: DIGITAL SAMPLE & DRILLHOLE DATA

SYR_WADG1_DOW2003S.TXT	Downhole assays data file
SYR_WADL1_DOW2003S.TXT	Downhole lithology data file
SYR_WADS1_DOW2003S.TXT	Downhole Downhole surveys data file
SYR_WASG1_SUR2003S.TXT	Surface sample data file
SYR_WASG2_SUR2003S.TXT	Suface sample geology data file
SYR_WASL1_DRI2003S.TXT	Drillhole collar data file

APPENDIX 2: GEOPHYSICAL SURVEY DATA

EL8803_GMag_1999.xls	Ground Magnetic Survey data file (Excel)

APPENDIX 3: PETROLOGICAL SAMPLE DESCRIPTIONS

EL8803 Syrene

Report #	Author	Date	Work	Geo	Prospect					Notes
Petrology #	Count	ID	Type	NFM	Sample #	From	To	Easting	Northing	Description
P7913	PU	9/10/1999	TS	PJD	Syrene (EL)					*5 Drillchip samples, photos*
05180	1	SYRB017	DC		3225865-868	27	39	524600	7777890	Chips classified variously as mucrosyenite and monzonite with saussuritised plagioclase, clouded orthoclase, partly amphibole-clay-altered clinopyroxene, fresh to clay-altered biotite, minor hornblende, accessory opaque oxide, quartz and apatite. Cut by veinlets of quartz and carbonate.
05181	2	SYRB019	DC		3226329-333	46	60	521180	7776450	Two lithologies represented by different chips:- 1. Greywacke, quartz rich but with plagioclase and rare K-spar as well as muscovite, altered possible biotite and lithic grains as well as muscovite and tourmaline. Possibly Titania lithic wackes rather than Madigan Beds. 2. Albite-chorite-clay-K-spar-leucoxene -altered basalt or quartz dolerite with quartz veinlets and some quartz in vesicles.
05182	3	SYRB024	DC		3226403-04	49	55	523220	7778550	Chips of plagioclase-biotite-magnetite-sphene porphyritic andesite or andesite porphyry. Altered to albite-sericite, limonite, clay and leucoxene. Possible lave or small high level intrusion.
05183	4	SYRB024	DC		3226401	43	46	523220	7778550	All chips composed of poorly sorted and matrix supported sandstones with volcanic fragments as well as quartz and plagioclase. May represent Titania Lithic Wacke with the volcanic detritus derived from the Mount Winnecke Formation.
05184	5	SYRB024	DC		3226406	58	61	523220	7778550	Chips of massive siltstone and claystones with minor extremely fine disseminated opaguw oxide. Locally cut by veinlets of smectite/vermiculite and/or clay quartz. May be from the Titania Lithic Wacke or Pargee Sandstone formations.
P06059	1	SYRB011	DC		3225806	42	45	520974	7776002	Altered plagioclase porphyritic vesicular basalt possibly from a flow-top: Antrim Plateau Volcanics or older.
P06702	2	SYRB0032	DC		3673959	45	47	525560	7778000	Sericite-smectite-vermiculite-leucoxne altered, possible biotite-pyroxene diorite or gabbro, rich in apatite and possibly calc-alkaline.
P06703	3	SYRB043	DC		3674110 - 111	36	42	524560	7778200	Altered mafic biotite-pyroxene syenite with abundant apatite indicating alkaline affinities.
P06704	4	SYRB041	DC		3674084	33	36	524600	7778200	Clay-sericite biotite-pyroxene diorite with late magmatic quartz and irregularly disseminated orthoclase.
P06705	5	SYRB0056	DC		3674246-247	30	36	524620	7777860	Foliated, clay-sericite-leucoxene-limonite altered possible quartz dirite or gabbro with leucoxene after opaque oxide and minor apatite. May be related to the diorites described above. One chip has limonite possibly after pyrite.
P06706	6	SYRB0056	DC		3674246-247	30	36	524620	7777800	Clay-sericite-leucoxene-altered, orthoclase-quartz bearing biotite-pyroxene diorite or gabbro?
P06707	7	SYRB067	DC		367301-302	27	33	523458	7779100	Albite-sericite-clay-K-spar altered plagioclase porphyritic andesite with accessory opaque oxide, apatite and zircon.
P06708	8	SYRB0068	DC		3674312	27	30	523750	7779000	Albite-sericite-limonite-leucoxene altered probable quartz micromonxzonite porphyry with phenocrysts of K-spar and altered plagioclase.
P06709	9	SYRB073	DC		3674362-364	51	60	524250	7779000	Quartz-plagioclase-lithic, poorly sorted coarse to very coarse grained sandstone with a sparxe quartz-chlorite matrix. Probably derived from acid volcanics.
P06710	1		OC					523145	7779411	Altered orthoclase-plagioclase porphyritic rock (latite lava or porphyry?) incorporating a large fragment (andesite or latite?) porphyritic in plagioclase and ferromagnesian mineral(s). Possibly represents Mount Winnecke Group or Nanny Goat Volcanics.

Report #	Author	Date	Work	Geo	Prospect				Notes	
Petrology #	Count	ID	Type	NFM	Sample #	From To	Easting	Northing	Description	EL8803
P06711			OC				523100	7779320	Sericite-clau-chlorite-limonite-luecoxene altered possible ignimbrite or pyroclastic. Possibly represents Nanny Goat Volcanics or Mount Winnecke Group.	
P06712	3		OC				523100	7779320	Contact between pumice-hosted ignimbrite and siltstone. May represent Nanny Goat Volcanics or Mount Winnecke Group.	

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)	EL 8803	Company Report Number	31110
Report Date	June 2003	Anniversary Date	29/04/1999
Group Project Name	Western Tanami		
Report Title	Final Report for EL 8803 (Syrene) for the period 29/04/1999 to 03/04/2003		
Author(s)	M.Walter		
Corporate Author(s)	Newmont Australia		
Maps 1 : 250 000	SF52-03		
Maps 1 : 100 000	4757		

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 ...	Lag Sampling		

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	115	SYRB0001-0115
RAB	76	SYRB0001-0076
Auger		
Air		
RC		
Rotary		
Other ...		

Mine / Deposit / Prospects		Location - AMG	Location - Datum
Mines			
Deposits			
Prospects	Bondi		
	90 Mile Prospect		
Other …			