NORMANDY NFM Limited

RELINQUISHMENT REPORT

# 1st RELINQUISHMENT REPORT FOR THE Mt FREDERICK PROJECT

for the period
**09/09/1999** to **20/09/2002**

## Licences covered by this project:

| | |
|---|---|
| **EL 8301** | **Alpha** |
| **EL 8796** | **Beta** |
| **EL8797** | **Gamma** |
| **EL8899** | **Frederick** |

NORTHERN TERRITORY

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

| | | |
|---|---|---|
| **1:250,000 SHEET:** | Tanami | SE52-15 |
| **1:100,000 SHEET:** | Pargee | 4758 |

**AUTHOR:** M. Walter

**TENEMENT HOLDERS:** Normandy NFM Ltd

**DISTRIBUTION:**
- ❑ Northern Territory Department of Business, Industry & Resource Development
- ❑ Newmont Australia

# SUMMARY

The Mt Frederick Project is located in the Tanami desert region approximately 150km northwest of the Granites Gold Mine. The Project currently comprises 4 exploration licences. EL 8899 was granted on the 29th April 1999, while EL's 8301, 8796 & 8797 were granted on the 9th September 1999. During 2002, four exploration licences, EL's 8804, 9015, 8976, 8977, previously part of the Mt Frederick Project Group were relinquished in full. Final reports were submitted to the NTDBIRD.

This report covers all the work completed on the relinquished areas of EL's 8301, 8796 & 8797 from grant to 20/09/2002. A waiver was requested and granted for EL 8899 due to encouraging geochemical results and extended wet season conditions restricting access during the previous two years.

Work completed over the relinquished blocks of the Mount Frederick Project has comprised:

| | **EL8301 ALPHA** | **EL8796 BETA** | **EL8797 GAMMA** | **TOTAL:** |
|---|---|---|---|---|
| **Gridding** | 577m | 13960m | 1935m | **16.5 line km** |
| **Ground Magnetics** | 577m | 3490m | 1935m | **7.8 line km** |
| **Lag Sampling** | - | 86 samples | 33 samples | **119 samples** |
| **Rock Chip Sampling** | - | 13 samples | 2 samples | **15 samples** |
| **DSL Sampling** | 77 samples | - | - | **77 samples** |
| **Vacuum Drilling** | 85 drillholes<br>645m<br>74 samples | - | - | **85 drillholes**<br>**645m**<br>**74 samples** |
| **Aircore Drilling** | 1 drillhole<br>33m<br>11samples | 5 drillholes<br>201m<br>67 samples | 1 drillhole<br>18m<br>6 samples | **7 drillholes**<br>**252m**<br>**84 samples** |

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# 1. INTRODUCTION

The Mt Frederick Project area is located north of the Tanami Road, approximately 150km north west of the Granites Gold Mine. Exploration Licences 8804, 8899 & 9015 were granted to Normandy NFM on 29th April 1999 for a period of six years. Exploration Licences 8301, 8796, 8797, 8976 & 8977 were granted on 9th September 1999. During 2002, four exploration licences, EL's 8804, 9015, 8976, 8977, previously part of the Mt Frederick Project Group were relinquished in full. Final reports were submitted to the NTDBIRD.

**Table 1: Mt Frederick Project Tenement Summary**

| EL Number | Name | Blocks Relinquished | Blocks Remaining | Km² | Grant Date | Expiry Date |
|---|---|---|---|---|---|---|
| EL 8301 | Alpha | 35 | 35 | | 09/09/1999 | 08/09/05 |
| EL 8796 | Beta | 8 | 9 | | 09/09/1999 | 08/09/05 |
| EL 8797 | Gamma | 1 | 2 | | 09/09/1999 | 08/09/05 |
| EL 8976* | Delta | 8 | 0 | - | 09/09/1999 | 08/09/05 |
| EL 8977* | Epsilon | 1 | 0 | - | 09/09/1999 | 08/09/05 |
| EL 8804** | Pointer | | 0 | - | 29/04/1999 | 28/04/05 |
| EL 9015** | Solo | | 0 | - | 29/04/1999 | 28/04/05 |
| EL 8899 | Frederick | 0 | 93 | 299 | 29/04/1999 | 28/04/05 |
| | **Totals:** | | **196** | **630** | | |

* Licences surrendered on 20/09/2002, ** Licences surrendered on 22/04/2002

# 2. LOCATION, ACCESS AND PHYSIOGRAPHY

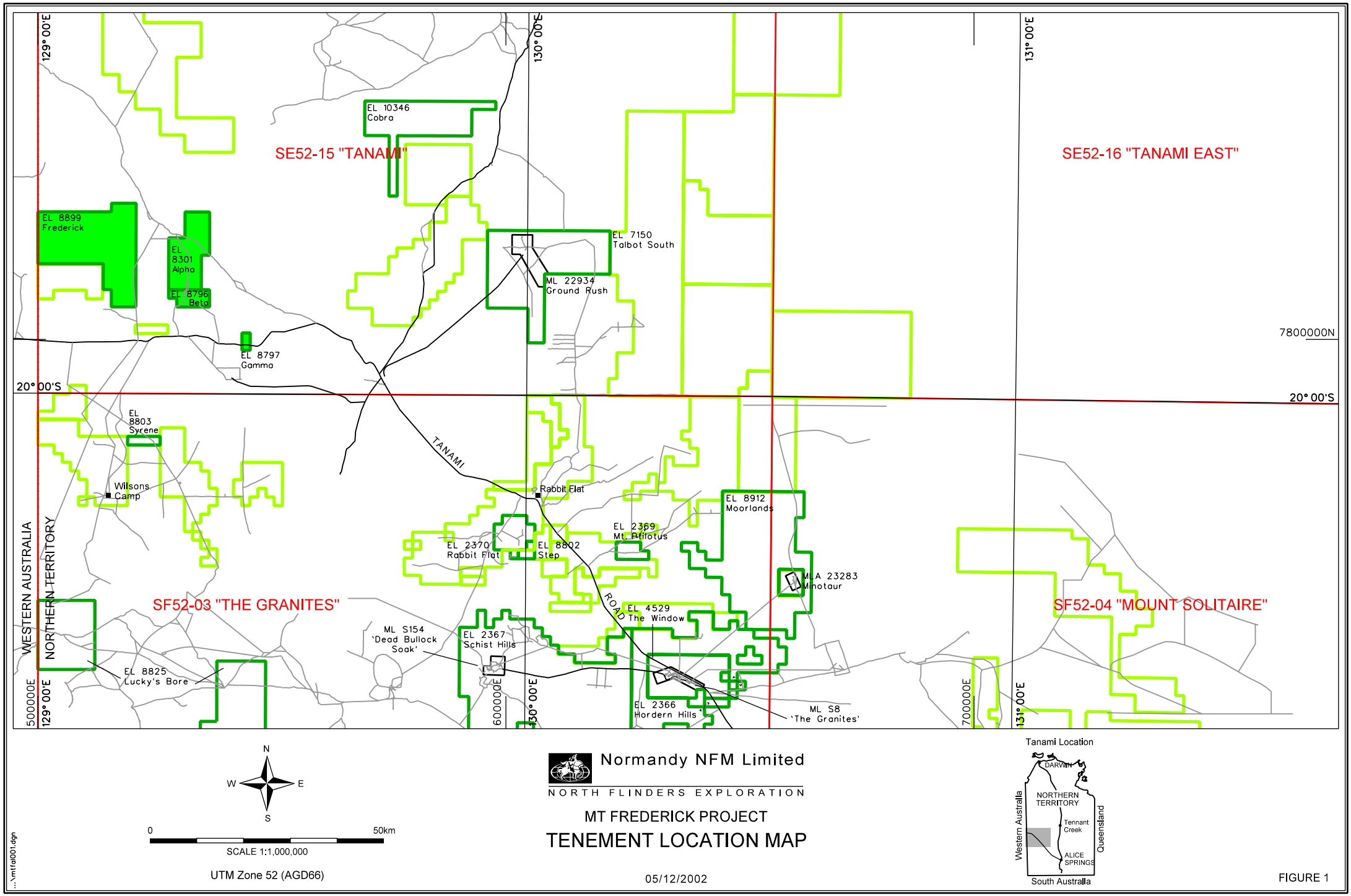
The Mt Frederick Project is located in the Tanami Desert region, approximately 150km NW of the Granites Gold Mine. The area is covered by the Tanami (SF52-15), 1:250 000 series map sheet, as shown on Figure 1.

Access to the Tenements can be gained via the Old Tanami Road or from a seismic line that runs north of the Tanami Road toward the Pargee Range.

Approximately 80% of the project area is dominated by various thicknesses of alluvial cover, the depth of which is greatest within either of two palaeodrainage channels transecting the Alpha and Frederick EL's. Limited areas of subcrop/outcrop are generally characterised by low, undulating rise. Prominent features include the NS-trending cherty ridges in the central region, the Pargee and Gardiner Ranges to the north of the Project Area and the Killi Killi Hills to the west of the Project area.

Vegetation mainly consists of spinifex with scattered low trees (mostly species of eucalyptus and acacia), shrubs and herbaceous plants, but is generally sparse due to the arid climate and predominantly sandy soils. Few trees are taller than 8m with relatively large trees present only along creeks.

There are no permanent watercourses in the region, however water apparently persists at the Pargee Rockhole and in some creeks for at least a few months following seasonal rains.




N
W E
S

0 50km

SCALE 1:1,000,000

UTM Zone 52 (AGD66)

Normandy NFM Limited

NORTH FLINDERS EXPLORATION

MT FREDERICK PROJECT

# TENEMENT LOCATION MAP

05/12/2002

Tanami Location




FIGURE 1

..\mtfal001.dgn

525000E 530000E 535000E 540000E 545000E 550000E

7825000N 7820000N 7815000N 7810000N 7805000N 7800000N 7795000N

EL 8301
Alpha

ULYSSES
(AREA 20)

EL 8796
Beta

MARS

ZEUS

EL
8797
Gamma

N
W E
S

0 2 km
SCALE 1:100,000

UTM Zone 52 (AGD66)

NORMANDY NFM LTD TRADING AS
NEWMONT N F M

GREEK ELs

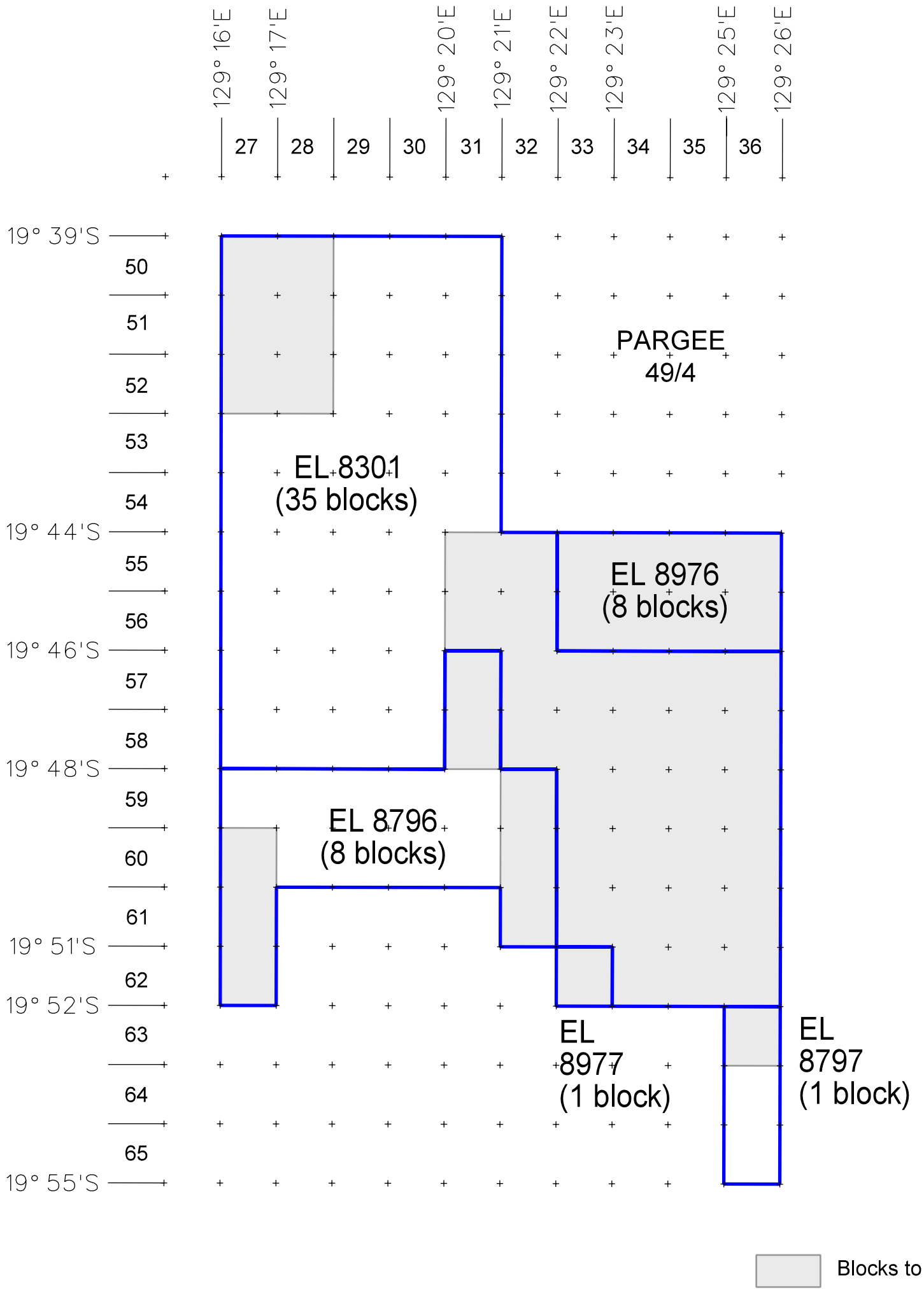
# PROSPECT LOCALITY MAP

12/12/2002

Gridding
Ground Magnetics Traverses

FIGURE 2

T:\MSDATA\diagram\frederick\gelal003.dgn




N
W E
S

0 3000m

SCALE 1:150,000

UTM Zone 52 (AGD66)

NORMANDY NFM LTD TRADING AS

NEWMONT N F M

THE GREEKS - EL'S 8301, 8796, 8797, 8976 & 8977

MT FREDERICK PROJECT - SE52-15 TANAMI

## 53 BLOCKS TO BE RELINQUISHED

JULY 2002

Figure 3

T:\MSDATA\diagram\frederick\mtfat006.dgn

## 3. HISTORICAL EXPLORATION

Limited exploration has been undertaken within the region presently occupied by the Mt Frederick Project Area. Power and Nuclear Corporation (PNC Exploration Australia) began exploring the district for uranium in 1986. They generated anomalies at outcrop sites referred to as Areas 20, 21a & 21b. Surface mapping and rock chip sampling was conducted at each site with gold anomalism up to 26 ppb reported at Areas 20 and 21b. Lag sampling at Area 21a generated a cohesive Cu-As anomaly (size and tenor unknown). RAB and DDH drilling and surface geophysical surveys were conducted at Area 20 following the discovery of a thin (0.5m to 2m) occurrence of metatorbenite and saleeite mineralisation. Very few samples were collected from these programs and even less were assayed for gold.

In April 1989 a joint venture was formed between PNC and WMC (Western Desert Joint Venture) at which time WMC began exploring primarily for gold. PNC ceased uranium exploration in the region in 1990. WMC's exploration approach involved lag sampling (-6+2mm fraction) over areas of outcrop/subcrop. Arsenic anomalism (>100ppm) was reported at Areas 21a & 21b with sample densities of 400x40m. A low order gold anomaly (max 42ppb Au) was generated at 800x100m and 200x50m lag sample spacings. This anomaly was named Coomarie Extended.

Interest was first raised in the *Killi Killi Hills* area during 1960 with the discovery of radioactive material by New Consolidated Goldfields. Two prospects were identified; Killi Killi and Watts rise, 11km to the northwest.

At Killi Killi, anomalous radioactivity extends over 1350m strike length, with samples selected using maximum radioactivity criteria returning up to 0.23% $U_3O_8$, 0.1% La and 1ppm Au. The source of the radioactivity is confirmed as Xenotime [$YPO_4$] and is restricted to the basal 6-12m conglomeratic unit of the Middle Proterozoic Gardiner Sandstone. This unit lies unconformably over Lower Proterozoic fine-grained Killi Killi Beds.

Also highlighted is Sr-REE mineralisation consisting of Florencite [$CeAl_3(PO_4)_2(OH)_6$] and Svalbergite [$SrAl_3PO_4SO_4(OH)_6$]. These minerals occur as crystals within the matrix cement, as optically continuous overgrowths on quartz grains and rarely, as reworked fragments of sandstone. Mineralisation is considered to be broadly similar to that in unconformity related U-Au deposits of the South Alligator Valley, NT (Jagodzinski *et al*, 1992).

## 4. GEOLOGY

The Geology of the Mt Frederick Project area consists of interpreted Palaeoproterozoic Mt Charles Beds of the Tanami Complex intruded by both felsic and mafic igneous bodies. The Mt Charles Beds have been further subdivided into a number of units by a number of Normandy-NFM Geologists. These subdivisions from oldest to youngest are:

The distal turbidites of the Blake Beds sequence;

Chemical and pelitic sediments of the Davidson Beds;

The proximal turbidites of the Madigan Beds sequence.

Early Proterozoic Pargee Sandstone overlies the Mt Charles Beds to the north of the Project Area. This is inturn overlain by Mesoproterozoic Gardiner Sandstone in various locations, specifically in the Gardiner Range, and along the margin of the Coomarie Dome.

# 5. WORK COMPLETED

## 1.1 Gridding and Ground Magnetics Surveys

A total of 16.5 line km of gridding was completed over the relinquished areas to aid in geochemical sampling and drilling programs. Areas gridded are as follows;

| | |
|---|---|
| EL 8301 – Alpha | 577 line metres |
| Mars Prospect (EL 8797 – Beta) | 1.74 line km |
| Zeus Prospect (EL 8796 – Beta) | 12.22 line km |
| EL 8797 – Gamma | 1.93 line km |

Ground magnetics traverses were laid over 4 traverses totalling 7.8 line kilometres.

Total magnetic intensity readings were recorded using a G856 Proton Precession magnetometer. Diurnal measurements were recorded using a second magnetometer as a base-station. Base readings were taken every 30 seconds. On completion of the survey, diurnal variations were removed from the data using the MAGPAC program. No modelling was carried out on the profiles. Figure 2 displays the location of the ground magnetic traverses. Appendix 2 catalogues magnetic profiles and traverse origins.

## 1.2 Surface Sampling

Lag and rock chip samples were collected within EL's 8301, 8796 and 8797. Refer to Figures 5, 6 & 7 for surficial (Lag/CRC) sample coverage within the relinquished blocks.

Objectives of the surficial geochemical sampling program were two-fold:

1. Verify the effectiveness of WMC lag sampling and/or analytical procedures along selected lines within appropriate regolith regimes.
2. Conduct regional lag sampling at reconnaissance spacings (250×500m - 1000×500m) within appropriate regolith domains.

All verification lag samples were collected along surveyed grid lines. Reconnaissance lag samples were collected using a Scoutmaster Global Positioning System (GPS) with an external aerial for navigation and lag sample location. In both cases, surface lag material was sieved to a +2mm size fraction and a 100-300g amount was double bagged and retained for multielement and low level gold analysis (see Table 7). Notes were made regarding the sample type, quality, description and grain size.

**Table 2: Lag Sample Details**

| Tenement | Sample ID | Total Samples |
|---|---|---|
| Alpha (EL 8301) | | |
| Beta (EL 8796) | 3127956-976<br>3202120-152, 155-181, 184-187<br>3634551 | 86 |
| Gamma (EL 8797) | 3202341-349<br>3202362-369<br>3634516-522, 524-525, 527-533 | 33 |
| | **TOTAL** | |

**Table 3: CRC Sample Details**

| Tenement | Sample ID | Total Samples |
|---|---|---|
| Alpha (EL 8301) | | |
| Beta (EL 8796) | 3634552<br>755485-492<br>787440-443 | 13 |
| Gamma (EL 8797) | 3634523, 3634526 | 2 |
| | **TOTAL** | |

## 1.3 Vacuum Drilling

Vacuum drilling was conducted at 400x100m spacings within the Alpha and Beta Tenements. Program objectives were three-fold:

1. Extend the geochemical data coverage in areas of shallow alluvial/colluvial cover (≤15m).
2. Make an assessment of the regolith & therefore, test the effectiveness of existing surface geochemical coverage (1999 program).
3. Provide an indication of bedrock geology.

Holes were drilled to bedrock with generally two-three 1-2kg samples collected from weathered saprolite, or a single Bottom of Hole sample collected in transported overburden, if saprolite was not intersected. All samples were sent to Amdel for analysis (see Table 7 for details). Drillhole locations are shown on Figure 4.

Palaeosurface samples were also collected from the bedrock/cover unconformity (DSL, combined coarse & fine fractions) double bagged and sent to Genalysis for analysis (see Tables 5 & 7 for details). Sample locations are shown on Figure 4.

**Table 4: Vacuum Drill Sample Details**

| Tenement | Drill Hole ID | Sample ID | Total Samples |
|---|---|---|---|
| Alpha (EL 8301) | ALV0138-152, 158-200, 209-223<br>228-239 | 3140639-662, 670-704, 709-717<br>709-724 | 74 |
| Beta (EL 8796) | | | |
| Gamma (EL 8797) | | | |
| | | **TOTAL** | |

**Table 5: DSL Sample Details**

| Tenement | Sample ID | Total Samples |
|---|---|---|
| Alpha (EL 8301) | 3202829-043, 3202846-881, 3202890-903, 3202907-918 | 77 |
| Beta (EL 8796) | | |
| Gamma (EL 8797) | | |
| | **TOTAL** | |

## 1.4 Aircore Drilling

Aircore drilling was completed within EL's 8301, 8796, 8797, 9015 and 8899. No drilling was conducted within EL's 8797, 8877 and 8804. Refer to Figures 5, 6 and 7 for drill hole locations.

The primary objective of the drilling program was to make a broad assessment of the regolith profile and bedrock geology. A secondary objective utilised ground magnetics to target drilling across:

1. Unresolved magnetic features ;
2. Zones of sharply decreased magnetic intensity representing possible faulting /shearing or alteration associated with mineralisation;
3. Interpreted fold closures;
4. Zones of interpreted significant structural disruption.

Holes were invariably drilled vertically in areas perceived to have greater than 20 metres of cover, however, holes were drilled $60^0$ towards AMG east in areas proximal to outcrop. Samples were collected from 3m composite from the entire hole by spearing piles four times from different directions. Samples were sent to Amdel for multielement analysis by the ARM1 analytical technique (see Tables 6 & 7 for details) and drill chips were retained for later inspection and storage.

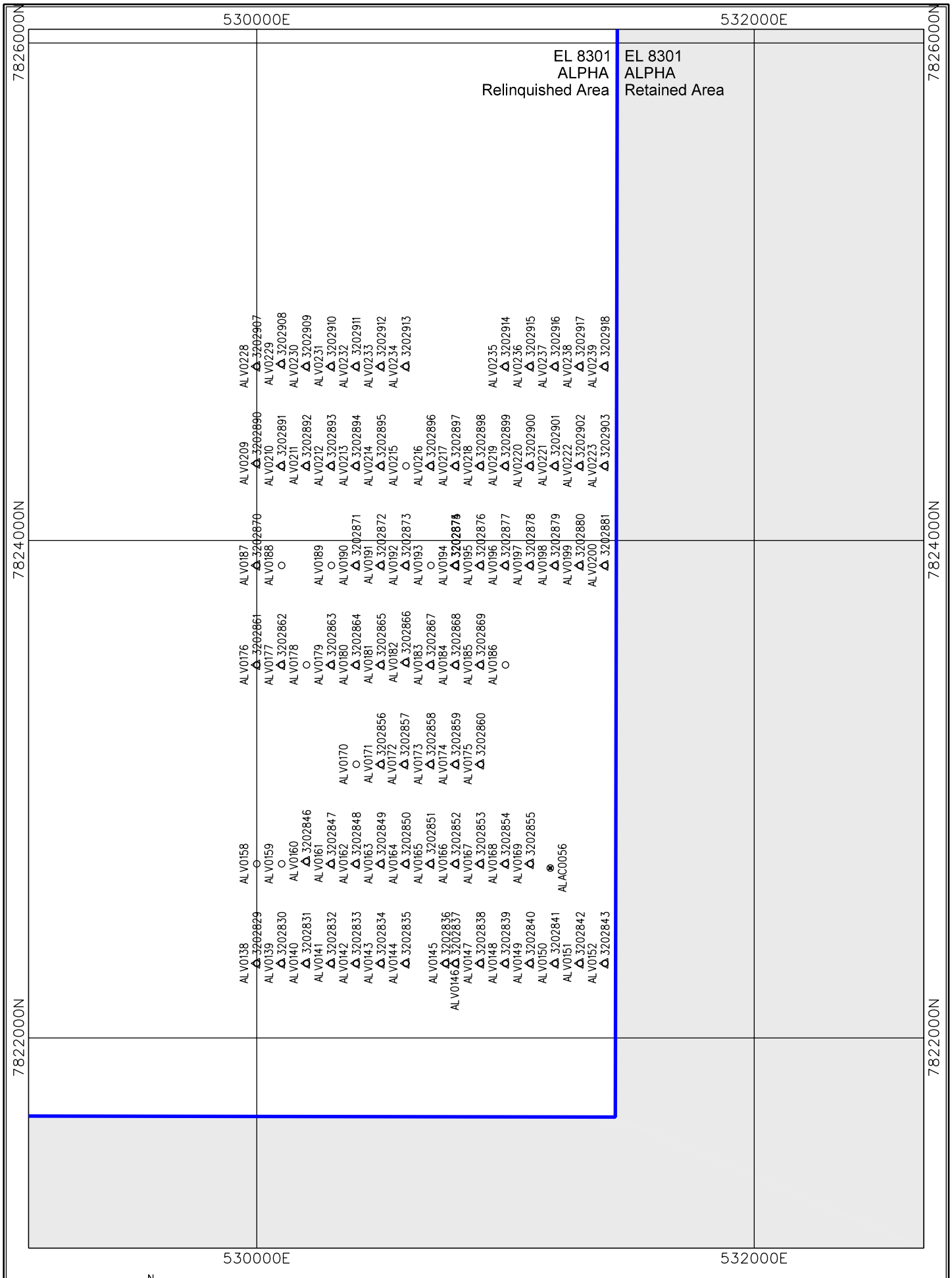
All drill holes were plugged on completion by inserting a concrete bung approximately 1m below surface. The cavity is then back filled and mounded with the original drill spoils.

**Table 6: Aircore Drill Sample Details**

| Tenement | Drill Hole ID | Sample ID | Total Samples |
|---|---|---|---|
| Alpha (EL 8301) | ALAC0056 | 3110775-785 | 11 |
| Beta (EL 8796) | BETAC0001-0004<br>BETAC0009 | 3226675-722<br>446317-335 | 48<br>19 |
| Gamma (EL8797) | GAAC0001 | 446395-400 | 6 |
| | | **TOTAL:** | |

**Table 7. Laboratory, analytical code, method of analysis, and elements assayed.**

| SAMPLE TYPE | LABORATORY | CODE | DESCRIPTION |
|---|---|---|---|
| Lag/CRC/DSL | Genalysis | B*ETA | Aqua Regia digest with Enhanced Sensitivity Graphite Furnace Atomic Absorption Spectrometry. |
| | | A/MS | Multi Acid digest with Inductively Coupled Plasma Mass Spectrometry. |
| VAC/AC/ SOIL | Amdel | ARM1 | 10-20g sample, Aqua Regia digestion, ICP-MS finish. |


530000E
532000E
7826000N
7824000N
7822000N
EL 8301
ALPHA
Relinquished Area
EL 8301
ALPHA
Retained Area
N
W
E
S
0
400m
SCALE 1:20,000
NORMANDY NFM LTD TRADING AS
NEWMONT NFM
EL 8301 - ALPHA
SAMPLE & DRILLHOLE LOCALITY PLAN
LEGEND
DSL Sample
Vacuum Drillhole
Aircore Drillhole
UTM Zone 52 (AGD66)
06/12/2002
FIGURE 4
T:\MSDATA\diagram\frederick\gelav004.dgn

526000E
528000E
530000E
7808000N
7806000N
7804000N

EL 8796
BETA
Retained Area

EL 8796
BETA
Relinquished Area

3634551
3634552

BETAC0004
BETAC0003
BETAC0002
BETAC0001

755492
755491
755490
755489
755488
755487
755485
755486

3127973
3127974
3127976
3127975
3127971
3127972
3127970
3127969
3127968
3127967
3127966
3127965
3127961
3127962
3127963
3127964
3127960
3127959
3127958
3127957
3127956

MARS

N
W
E
S
0
400m
SCALE 1:20,000

UTM Zone 52 (AGD66)

NORMANDY NFM LTD TRADING AS
NEWMONT NFM

EL 8796 - BETA (West)

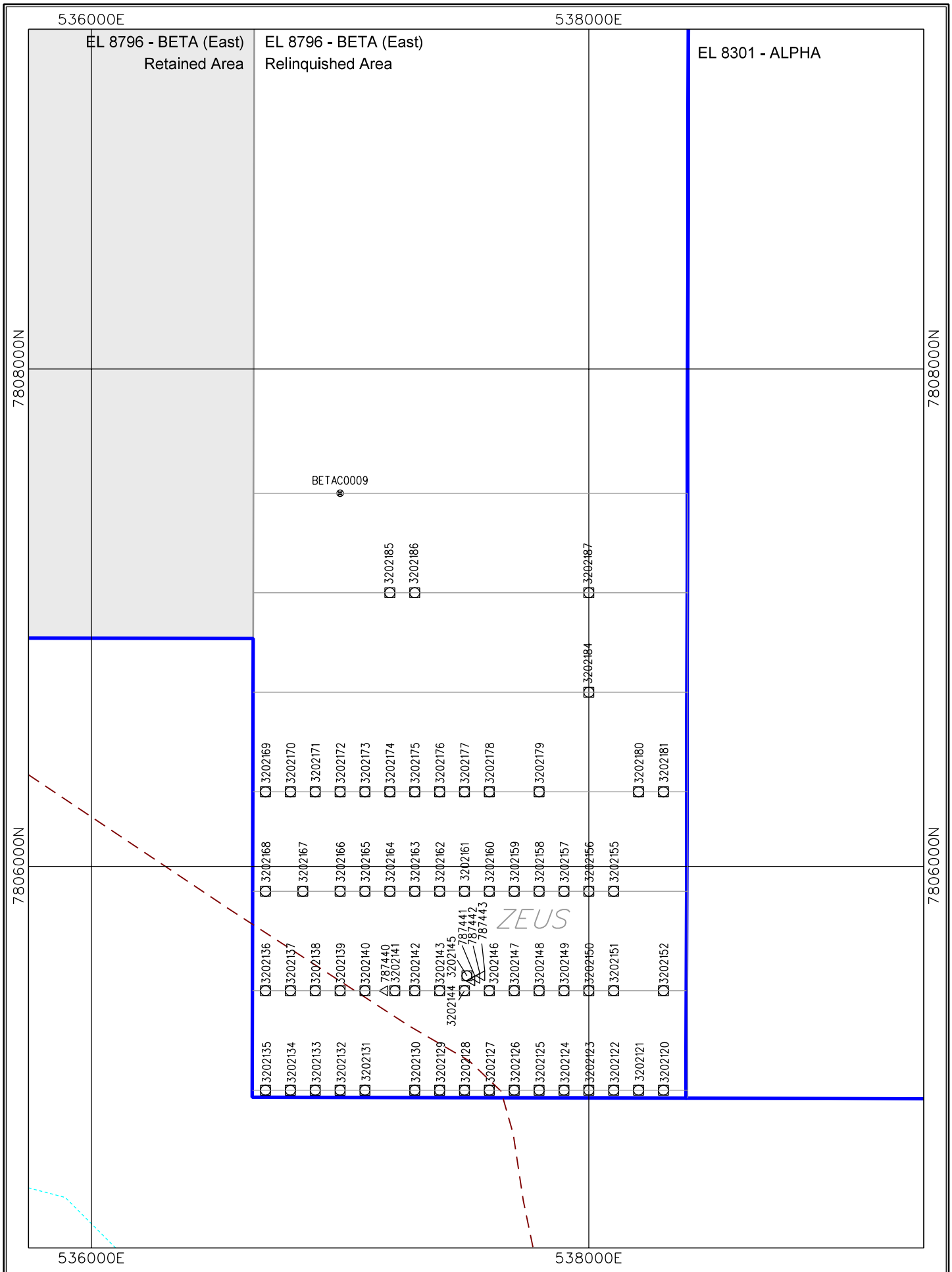
# SAMPLE & DRILLHOLE LOCALITY PLAN

06/12/2002

LEGEND
Lag Sample
Rock Chip
Aircore Drillhole

FIGURE 5

T:\MSDATA\diagram\frederick\gelav004.dgn



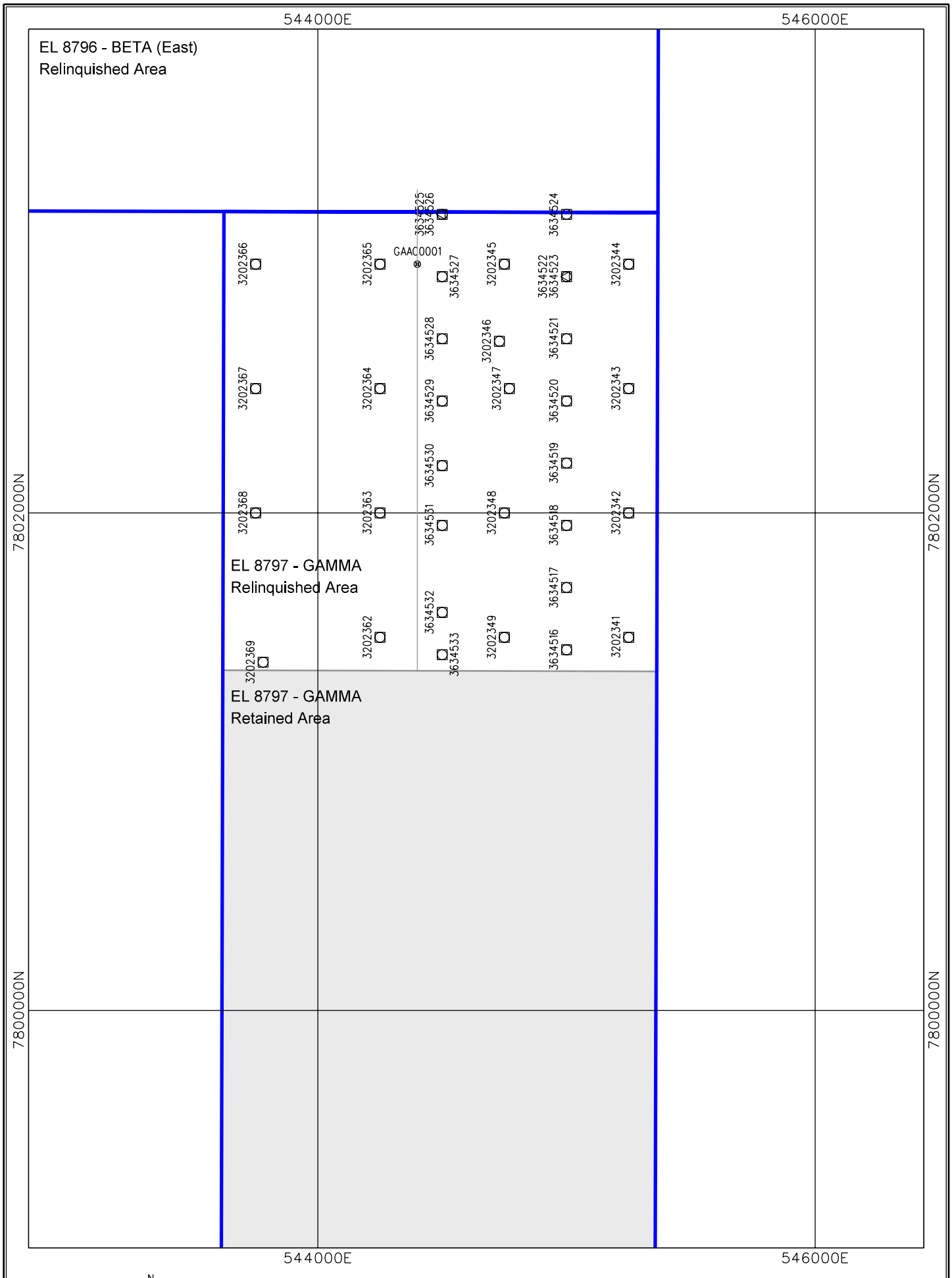

# SAMPLE & DRILLHOLE LOCALITY PLAN

UTM Zone 52 (AGD66)

09/12/2002

FIGURE 6

T:\MSDATA\diagram\frederick\gelav004.dgn


544000E
546000E
EL 8796 - BETA (East)
Relinquished Area
GAAC0001
3634525
3634526
3634524
3202366
3202365
3202345
3634527
3634522
3634523
3202344
3634528
3202346
3634521
3202367
3202364
3634529
3202347
3634520
3202343
3634530
3634519
7802000N
3202368
3202363
3634531
3202348
3634518
3202342
EL 8797 - GAMMA
Relinquished Area
3634532
3634517
3202362
3202349
3202341
3202369
3634516
3634533
EL 8797 - GAMMA
Retained Area
7800000N
544000E
546000E
N
W
E
S
0
400m
SCALE 1:20,000
NORMANDY NFM LTD TRADING AS
NEWMONT NFM
EL 8797 - GAMMA
SAMPLE & DRILLHOLE LOCALITY PLAN
LEGEND
Lag Sample
Rock Chip
Aircore Drillhole
UTM Zone 52 (AGD66)
09/12/2002
FIGURE 7
T:\MSDATA\diagram\frederick\gelav004.dgn

# 6. REFERENCES

Blake, D.H, 1978. The Proterozoic and Palaeozoic rocks of The Granites Tanami Region, Western Australia and Northern Territory, and interregional correlations. BMR Journal of Australian Geology and Geophysics, **3**, 35-42.

Blake, D.H, Hodgson, I.M, and Muhling, P.C, 1979. Geology of The Granites – Tanami Region, Northern Territory and Western Australia. Australian Government Publishing Service, BMR Bulletin 197.

Davidson, A.A. 1905. Journal of Explorations in Central Australia, by the Central Australian Exploration Syndicate, Limited, *South Australia Parliamentary Paper 27.*

Gee, L.C.E. 1911. General Report on Tanami Goldfield and District (Northwestern Central Australia). *South Australia Parliamentary Paper 31.*

Hossfeld, P.S. 1940b. The Gold Deposits of The Granites-Tanami District, Central Australia. *Aer. Geol. Geophys. Surv. N.Aust., Northern Territory Report 4*3.

Jagodzinski, E.A. Wyborn, L.A.I. and Heinrich, C.A., 1992. A Report on the Potential of the Granites Tanami Block for Unconformity style Au-Pt-Pd+/-U mineralisation, Australian Geological Survey Organisation, Minerals and Land Use Program. Unpub Report to NFM. CFN 08-614.

Plumb, K.A. 1990. Halls Creek Province and The Granites-Tanami Inlier - regional geology and mineralisation, in *Geology of the Mineral Deposits of Australia and Papua New Guinea* (Ed F.E. Hughes) pp 681-695 (The Australasian Institute of Mining and Metallurgy: Melbourne).

**REPORTS TO NT DME**

Power, D.M., 2000. First Annual Report for the Mt Frederick Project for the Calendar Year 1999. Normandy NFM Ltd. NFM RN: DME9932

Power, D.M., 2001. Second Annual Report for the Mt Frederick Project for the Calendar Year 2000. Normandy NFM Ltd. Normandy RN: 27959

Power, D.M., 2002. Third Annual Report for the Mt Frederick Project for the Calendar Year 2001. Normandy NFM Ltd. Normandy RN: 29453

Power, D.M., 2002. Final Report for EL 8804 (Pointer) & EL 9015 (Solo) for the period 29 April 1999 to 22 April 2002. Normandy NFM Ltd. Normandy CR: 29484

Walter, M., 2002. Final Report for EL 8976 (Delta) for the period 09/09/1999 to 20/09/2002. Normandy NFM Ltd. Newmont CR: 31001

Walter, M., 2002. Final Report for EL 8977 (Epsilon) for the period 09/09/1999 to 20/09/2002. Normandy NFM Ltd. Newmont CR: 31002

# APPENDIX 1

# DIGITAL DATA

**EL 8301 - Alpha**

| | | |
|---|---|---|
| ALP_WADG1_DOW2002P.TXT | ALP_WADL1_DOW2002P.TXT | ALP_WADS1_DOW2002P.TXT |
| ALP_WASG1_SUR2002P.TXT | ALP_WASL1_DRI2002P.TXT | |

**EL8796 - Beta**

| | | |
|---|---|---|
| BET_WADG1_DOW2002P.TXT | BET_WADL1_DOW2002P.TXT | BET_WADS1_DOW2002P.TXT |
| BET_WASG1_SUR2002P.TXT | BET_WASL1_DRI2002P.TXT | |

**EL 8797 - Gamma**

| | | |
|---|---|---|
| GAM_WADG1_DOW2002P.TXT | GAM_WADL1_DOW2002P.TXT | GAM_WADS1_DOW2002P.TXT |
| GAM_WASG1_SUR2002P.TXT | GAM_WASL1_DRI2002P.TXT | |

# APPENDIX 2

# GEOPHYSICAL DATA

TheGreeksGmag.XYZ

**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's 8301, 8796, 8789 | Company Report Number | 31042 |
| Report Date | December 2002 | Anniversary Date | 09/09/1999 |
| Group Project Name | Mt Frederick Project | | |
| Report Title | First Relinquishment Report for the Mount Frederick Project covering the period 09/09/1999 to 20/09/2002 | | |
| | | | |
| | | | |
| | | | |
| Author(s) | M. Walter | | |
| Corporate Author(s) | Normandy NFM Ltd | | |
| Maps 1 : 250 000 | SE52-15 | | |
| Maps 1 : 100 000 | 4758 | | |

| **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** | | | |
|---|---|---|---|
| Mount Charles Beds | Pargee Sandstone | Gardiner Sandstone | Talbot Well Formation |
| | | | |

| **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 | DSL 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 | 85 | |
| RAB | | |
| Auger | | |
| Air | 7 | |
| RC | | |
| Rotary | | |

| | | |
|---|---|---|
| **Other ...** | | |

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