NORMANDY NFM Limited

RELINQUISHMENT REPORT

1ST RELINQUISHMENT REPORT FOR THE HIGHLAND ROCKS PROJECT

for the period
29/04/1999 to 26/03/2002

Exploration Licenses covered by this report:

EL8970	**McLeod**
EL8971	**Rameriz**
EL9559	**Highlander**
EL9563	**Lowlander**

NORTHERN TERRITORY

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

1:250,000 SHEET:	The Granites	SF52-03
	Highland Rocks	SF52-07
1:100,000 SHEET:	Wickham	4855
	Highland	4955

AUTHOR: A. Zdziarski

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

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- ❑ Newmont Australia

SUMMARY

The 1999 exploration program over the relinquished portions of the Project involved initial reconnaissance traverses of opportunistic surficial sampling (lag and rockchip). 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.

In 2000 the majority of the work program was focussed on the regional 500m × 500m lag and CRC coverage of areas of negligible. A 1-2km × 500m vacuum drilling program was also conducted over areas in interpreted shallow cover. These programs were designed to provide a coherent geochemical and geological picture over regions of subcrop and shallow cover. Small programs of RAB drilling and ground magnetics were also carried out.

Results from these programs were disappointing, with only rare low level isolated anomalous assays returned.

In summary, exploration of the relinquished areas of EL's 8970, 8971, 9559 & 9563 comprised:

	EL8970	EL8971	EL9559	EL9563	TOTAL:
CRC Sampling	8	51	30	10	**99 samples**
Lag Sampling	135	383	202	-	**720 samples**
Vacuum Drilling	24 holes, 207m, 70 samples	-	14 holes, 123m, 40 samples	-	**38 holes 330m, 110 samples**
RAB Drilling	2 holes, 48m, 16 samples	-	-	-	**2 holes 48m, 16 samples**
Aircore Drilling	-	5 holes, 207m, 69 samples	4 holes, 165m, 55 samples	-	**9 holes for 372m, 124 samples**
Petrology	-	1		-	**1 sample**

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1 INTRODUCTION

This report summarises the work carried out by Newmont Exploration over the portions of EL's 8970, 8971, 9559 & 9563 that were relinquished on 26 March 2002. These tenements comprise the active licences within the Highland Rocks Project Area as located in Figure 1. A fifth lease (Icebox EL9562) also formed part of the Project area; however this lease was surrendered on 26 March 2002, and is the subject of a separate report.

2 TENEMENT DETAILS

A 12 month waiver of relinquishment was granted over EL's 8970, 8971, 9559 & 9563 on 17 April 2001. Details of the current relinquishment are provided in Table 1; this comprised a 50% relinquishment over EL's 8971 & 9563, and a 25% partial relinquishment over EL's 8970 & 9559 (granted on 19 April 2002). Figure 2 shows the relinquished areas which are the subject of this report.

Table 1: Highland Rocks Project tenement history

TENEMENT		DATE OF		NUMBER OF BLOCKS		
Number	Name	Grant	Expiry	Prior to Relinquishment	Relinquished 26/03/02	Current
EL8970	McLEOD	29/04/99	28/04/05	102	26	76
EL8971	RAMERIZ	29/04/99	28/04/05	74	40	34
EL9559	HIGHLANDER	29/04/99	28/04/05	304	77	227
EL9563	LOWLANDER	29/04/99	28/04/05	8	4	4

3 LOCATION, INFRASTRUCTURE, ACCESS, SURVEY CONTROL & ENVIRONMENTAL PRACTICE

3.1 Location

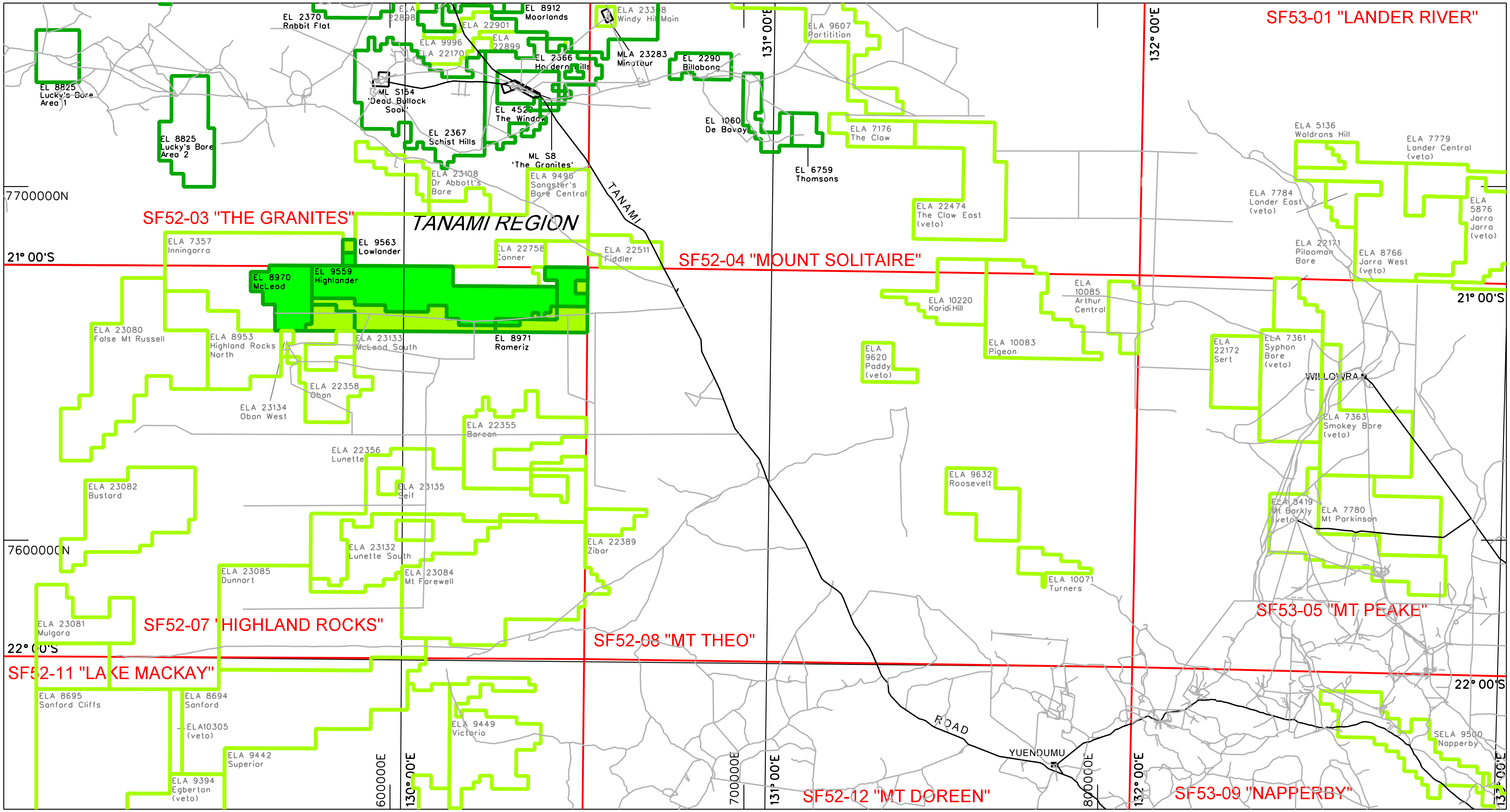
The tenements that comprise The Highland Rocks Project are situated approximately 500km northwest of Alice Springs in the Granites-Tanami region of the Northern Territory. These licences are located within the 1:250,000 map sheets SF52-3 (The Granites), SF52-7 (Highland Rocks) and SF52-8 (Mount Theo) as shown on Figure 1.

Geographically, the area lies in the western part of the Tanami Desert, a generally flat and featureless sand-covered landscape of spinifex and low scrub. All tenements within the Project Area are within Aboriginal freehold land.

The annual average rainfall is of the order of 200mm, which is mostly derived from summer monsoonal and storm activity. Daily temperatures vary from minima of near freezing in winter to summer maxima of approximately 48°C. The area is devoid of surface water except in small soaks after heavy rain.

3.2 Infrastructure

Prior to the presence of Newmont Exploration 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 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 town is Yuendumu some 250km southeast of The Granites on the Tanami Road.



N
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0 75km

SCALE 1:1,500,000

UTM Zone 52 (AGD66)

Normandy NFM Limited

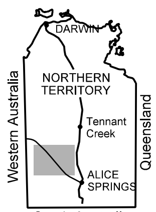
NORTH FLINDERS EXPLORATION

HIGHLAND ROCKS PROJECT TENEMENTS

TENEMENT LOCATION MAP

FIGURE 1
25/06/2002

Tanami Location



South Australia

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25/06/2002

INNINGARRA 55/5 | GRANITES 55/6 | 130° 00'E

GRANITES 55/6 | 130° 30'E | GIBBES-MURRAY 56/4

20° 56'S

INNINGARRA 55/5

21° 00'S

WICKHAM 61/2

21° 10'S

67 68 69 70 41 42 43 44 45 46 47 48 49 50

GIBBES-MURRAY 56/4

20° 56'S

67 68 69 70

21° 00'S

41 42 43 44 45 46 47 48 49 50

MCDIARMID 62/1

16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40

129° 35'E

WICKHAM 61/2 | 130° 00'E | HIGHLAND 61/3

11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40

HIGHLAND 61/3 | 130° 30'E | MCDIARMID 62/1

BLOCKS TO BE RELINQUISHED

BLOCKS TO BE RETAINED

N

W E

S

0 5000m

SCALE 1:250,000

UTM Zone 52 (AGD66)

Normandy NFM Limited

NORMANDY EXPLORATION PTY LTD

HIGHLAND ROCKS PROJECT

BLOCKS TO BE RELINQUISHED

26 March 2002

Figure 2

t:\MSDATA\diagram\highland\hilat020.dgn

3.3 Access

Access to the area is via the Tanami Highway, which passes through Icebox, the eastern-most license. The main track that gives access to the central licenses is the east-west running Escondida track off the Tanami Road (Figure 1).

3.4 Survey Control

Survey control has been established only at the Mankeeper prospect in the Highlander lease. This grid was initially installed via a GPS-located origin and theodolite-surveying of crosslines. It was subsequently surveyed in from a differential GPS mark emplaced by the 1999 gravity survey (Daish). 18.5km of gridlines were installed incorporating eleven 200m spaced lines. Wooden grid pegs were installed at 50m intervals, with metal survey pegs every 200m along the baseline. RAB drilling at this prospect was located using this grid (however soil sampling was conducted using GPS units prior to grid installation).

3.5 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, and

all grid lines and tracks were rehabilitated when no longer needed.

4 PREVIOUS EXPLORATION

Gold mineralisation was discovered by Davidson in 1900 at a number of sites within the Tanami region. Gold was reported as having been found by Wickham in the 1920's in an area about 75km south west of gold occurrences at the Granites. However, there are no reliable records to substantiate this report. Hossfield, on his journey to Lake Mackay in 1940, collected a single sample consisting of surface stones from low ironstone gravel hills on the eastern margin of the Highland Rocks sheet. The sample returned an assay of 0.15g/t gold and 3.7g/t silver.

The area was mapped by the Bureau of Mineral Resources in the 1960's and 1970's, the results of which constitute the 1:250000 Mt. Theo, Mt. Solitaire, The Granites and Highland Rocks map sheets and explanatory notes. In 1994, the Australian Geological Survey Organisation conducted regolith mapping of the Highland Rocks using airborne gamma-ray and Landsat MSS data.

No records exist of exploration within this license prior to granting of the ground to Newmont Exploration.

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., 1975) 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).

6 EL8970 - MCLEOD

The 1999 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.

The 2000 work program was dominated by extensive systematic regional vacuum drilling and lag and CRC sampling. This was conducted to provide a coherent geochemical and geological picture over regions of subcrop and shallow cover.

No work was conducted over the relinquished portion of the lease in 2001.

Work over the relinquished area included:

Lag Sampling	135 samples
Rock chip Sampling	8 samples
RAB Drilling	2 holes for 48m, 16 samples
Vacuum Drilling	24 holes for 207m, 70 samples

6.1 Rock chip sampling

Rock chip samples were collected opportunistically in tandem with the lag sampling programs from outcropping localities within the relinquished area as shown on Figure 4. Sample analysis details are summarised below. No samples returned either anomalous gold or arsenic results.

Table 2: EL8970 Rock chip details

Sample Number	Total	Laboratory	Method	Elements Analysed
757337-338 787740-741 787841-844	8	Genalysis	B*ETA	Au
			A/MS	Fe, Co, Ni, Cu, Zn, As, Mo, Ag, Sn, Sb, W, Pb, Bi, Th, U
				Total: 8 samples

6.2 Lag sampling

Lag samples were collected on a 500m × 500m spacing as displayed in Figure 4. Sample and analysis details are provided in Table 3. No anomalous gold results were returned from these samples, and the highest arsenic assay was 51ppm.

Table 3: EL8970 Lag sample details

Sample Number	Total	Laboratory	Method	Elements Analysed
3197587-588 3205147-154,167-201,204-232,558-563,740-776,778-783 3240322-326 5006920-926	135	Genalysis	B*ETA	Au
			A/MS	Fe, Co, Ni, Cu, Zn, As, Mo, Ag, Sn, Sb, W, Pb, Bi, Th, U
				Total: 135 samples

6.3 Vacuum drilling

The vacuum drilling conducted in 2000 was designed to extend the geochemical coverage of the licence in areas of interpreted shallow cover peripheral to subcrop/outcrop and in regions of poor lag development. Ideally three samples were collected from each hole: a VBCL in the soil horizon, a DSL at the cover/bedrock interface and a BOH sample. However in most cases at least one of the sampling media was not present.

Drilling was conducted on a 1-2km × 500m spacing. Table 4 provides sampling and analysis details, with hole locations displayed in Figure 4.

The highest DSL result was 2.8ppb Au, with no anomalous As. The best BOH result was 1.8ppb Au, and no anomalous VBCL results were received.

Table 4: EL8970 Vacuum drilling details

Hole ID	Sample Type	Sample Total	Sample ID	Genalysis Method	Elements
MCLV0194-196 211-215 231-233 235-240 353-359	**BOH**	24	3237715-719,733-735,737-742,826-831,930-932	B * ETA	Au
				A/MS	As, Cu, Zn & Ag
	VBCL	24	3196926-932 3204117-121,137-139,141-146,259-261	MINBLEG	Au, Ag & Cu
				B * ETA	Au
	DSL	22	3201814-820 3207717-721,737-739,741-746,915	A / MS	Th, Mo, Sb, W, Bi, Sn, U, As, Pb, Ni, Fe, Cu, Zn, Co, Ag
Total: 24 holes for 207m, 70 samples					

6.4 RAB drilling

MCLRB0020 & MCLRB0021 were drilled as a part of a water search in 2001 to provide water for the McLeod camp (Hole locations on Figure 4). Both holes intercepted granite under negligible cover, with no waterflow. Sample and analysis details are presented in Table 5.

No significant gold or arsenic assays were returned from this work.

Table 5: EL8970 RAB drilling details

Drillhole ID	Sample Type	Sample ID	No. of Samples	Genalysis Method	Elements
MCLRB0020 - 21	3m comp	5314049-64	16	B*ETA	Au
				B/MS	Fe, Co, Ni, Cu, Zn, As, Mo, Ag, Sn, Sb, W, Pb, Bi, Th, U
Total: 2 holes for 48m, 16 samples					

580000E 585000E 590000E

7665000N

7660000N

EL 8970
McLeod
(retained area)

EL 9559
Highlander

EL 8970
McLeod
(relinquished area)

3205232 3205231 3205230 3205225 3205224 3205563 3205562 3205561 3205560 3205559 3205558
MCLV0354 3205223 787841 3205226 3205229 3205227 3205222
3205201 3205200 3205199 MCLV0353 3205221 MCLRB0020 MCLRB0021 3205228 3205740 3205220
3205180 MCLV0196 3205741
3205179 3205181 3205198 MCLV0195 3205219 3205204 3205742 3205775 787844 MCLV0355
3205178 3205182 3205197 MCLV0194 3205205 3205218 3205743 3205774
3205177 3205183 3205196 MCLV0211 3205744 MCLV0356
3205176 3205184 3205195 MCLV0212 3205206 3205217 3205763 3205773
757338 MCLV0213 3205776
3205175 MCLV0215 3205207 3205745 3205762 MCLV0357
3205185 MCLV0214 3205758 3205764
3205746 3205778
3205174 3205186 MCLV0235 3205216 3205757 3205759 3205761 3205765 3205772 5006926 5006923 5006922
3205187 757337 5006925 3205779
787741 3205147 3205154 MCLV0233 3205173 3205188 MCLV0236 3205208 3205215 3205747 3205756 3205760 787843 5006924 5006921 5006920
3205167 3240323 3205755 MCLV0358
3240322 MCLV0232 3205172 3205189 3205194 MCLV0237 3205748 3205766 3205771 3205780
3197588 787740 3205148 3205153 3205168 3205209 3205214 3205781
3205749 3240326
3205149 3205152 MCLV0231 3205171 3205190 3205193 MCLV0238 3240324 3240325 MCLV0359
3205169 3205210 3205213 3205754 787842 3205782
3205192 3205767
3197587 3205150 3205151 MCLV0240 3205191 MCLV0239 3205750 3205770
3205170 3205211 3205212 3205751 3205752 3205753 3205768 3205769 3205783

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UTM Zone 52 (AGD66)

LEGEND
Rock Chip △
Lag Sample □
Vacuum Drillhole ○
RAB Drillhole +

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NEWMONT NFM

HIGHLAND ROCKS RELINQUISHMENT REPORT 2002

EL 8970 - McLEOD
SAMPLE & DRILLHOLE LOCALITY PLAN

25/06/2002

FIGURE 4

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7 EL8971 - RAMERIZ

The 1999 work program over the relinquished areas of this lease 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 EL. A sample from both the surface sampling was also sent for petrological analysis.

The 2000 work program was dominated by extensive regional lag and CRC sampling. These programs were conducted to provide a coherent geochemical and geological picture over regions of subcrop and shallow cover.

No significant work was conducted over the relinquished areas in 2001.

Work over the relinquished areas included:

Lag Sampling	383 samples
Rock chip Sampling	51 samples
Aircore Drilling	5 holes for 207m, 69 samples
Petrology	1 sample

7.1 Rock chip sampling

Rock chip samples were collected opportunistically in tandem with the lag sampling, as displayed in Figures 5a & b. Sample and analysis details are presented in Table 6.

No anomalous results were returned from this work.

Table 6: EL8971 Rock chip sample details

Sample Number	Total	Genalysis Method	Elements Analysed
426884-896 787983,987-990,993-994,996 3078491 32242047-211,213,230-232,234-239,241-242,250,254-261 & 263-267	51	B*ETA	Au
		A/MS	Fe, Co, Ni, Cu, Zn, As, Mo, Ag, Sn, Sb, W, Pb, Bi, Th, U
			Total: 51 samples

7.2 Lag sampling

Lag samples were collected on a 500m × 500m spacing across areas of subcrop and shallow cover, as displayed in Figures 5a & 5b. Sample and analysis details are presented in Table 7.

The best result was a solitary 23.5ppb Au result (sample 3205823) towards the eastern tenement boundary. Unfortunately follow-up sampling failed to replicate this result. No other anomalous results were apparent.

Table 7: EL8971 Lag sample details

Sample Number	Total	Genalysis Method	Elements Analysed
3197658-661, 677-682,686, 692, 707-713,849,901-906 3205791-792,800-801,810-811,822-824, 829-831,836-846,852,860,870-874, 876-880,883-888,893,929-935, 3205987-3206000 3208001-53,55-120,171-177,179-190, 193-244,246-271 3240189-248,254-258,302,982	383	B*ETA	Au
		A/MS	Fe, Co, Ni, Cu, Zn, As, Mo, Ag, Sn, Sb, W, Pb, Bi, Th, U
			Total: 383 samples

7.3 Aircore drilling

Five aircore drillholes were drilled over the relinquished area as part of a regional regolith program in 1999. Holes are located on Figures 5a & 5b. Sample and analysis details are presented in Table 8.

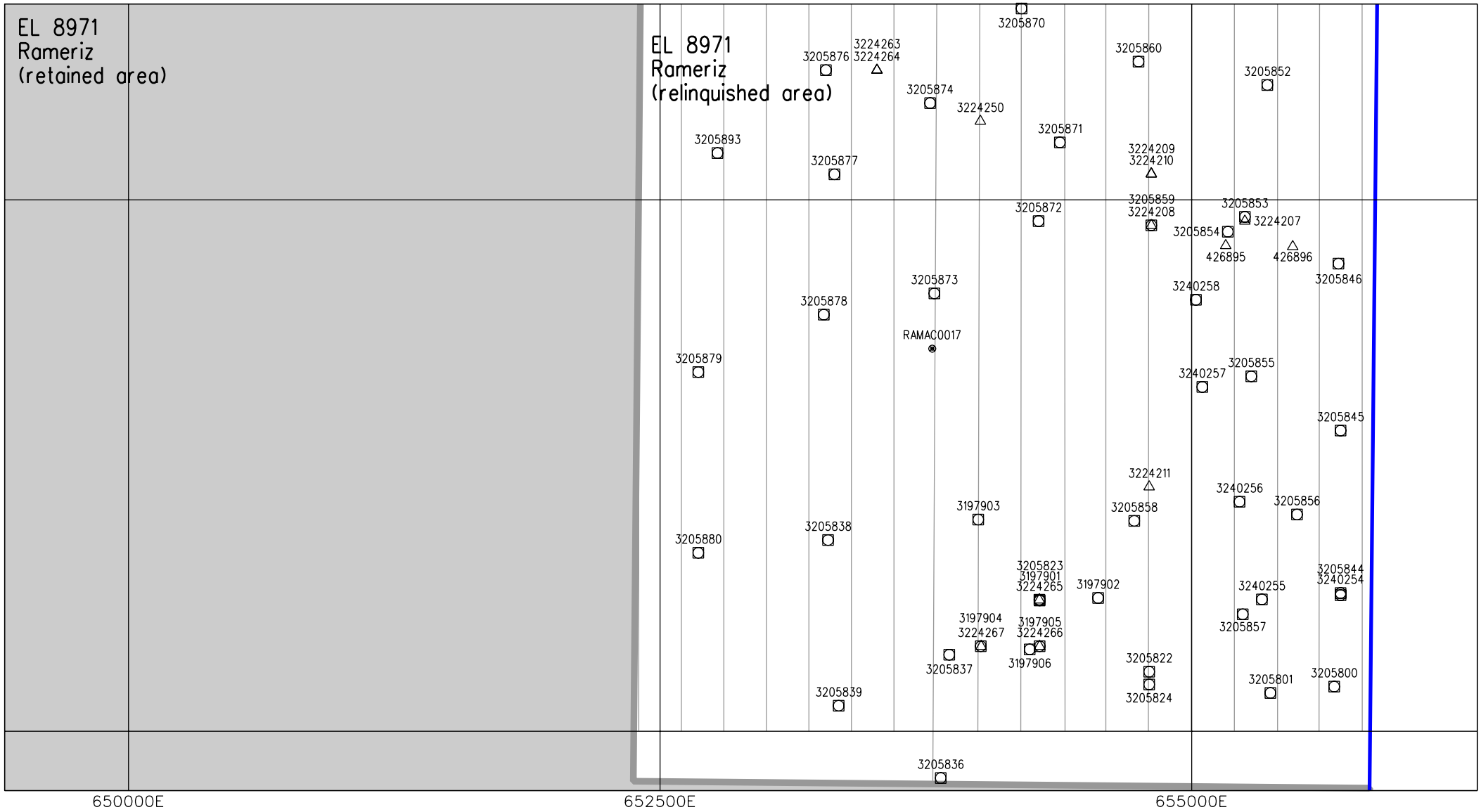
No significant gold or arsenic assays were returned from this work. All 5 holes intersected granitic basement under up to 18m of cover.

Table 8: EL8971 Aircore drilling details

Drillhole ID	Sample Type	Sample ID	No. of Samples	Genalysis Method	Elements
RAMAC0003 RAMAC0017 RAMAC0020 RAMAC0021 RAMAC0022	3m comp	3223159-3170 3223378-3384 3223404-3453	69	B*ETA	Au
				B/MS	Fe, Co, Ni, Cu, Zn, As, Mo, Ag, Sn, Sb, W, Pb, Bi, Th, U
					Total: 5 holes for 207m, 69 samples

7.4 Petrology

One rockchip sample was submitted from the relinquished area to Pontifex and Associates for petological analysis (as sample P06531 in report P7993).



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UTM Zone 52 (AGD66)

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HIGHLAND ROCKS PROJECT RELINQUISHMENT REPORT 2002

EL 8971 - RAMERIZ

SAMPLE & DRILLHOLE LOCALITY PLAN

26/06/2002

LEGEND

Rock Chip Sample △

Lag Sample □

Vacuum Drillhole ○

Aircore Drillhole ⊗

FIGURE 5a

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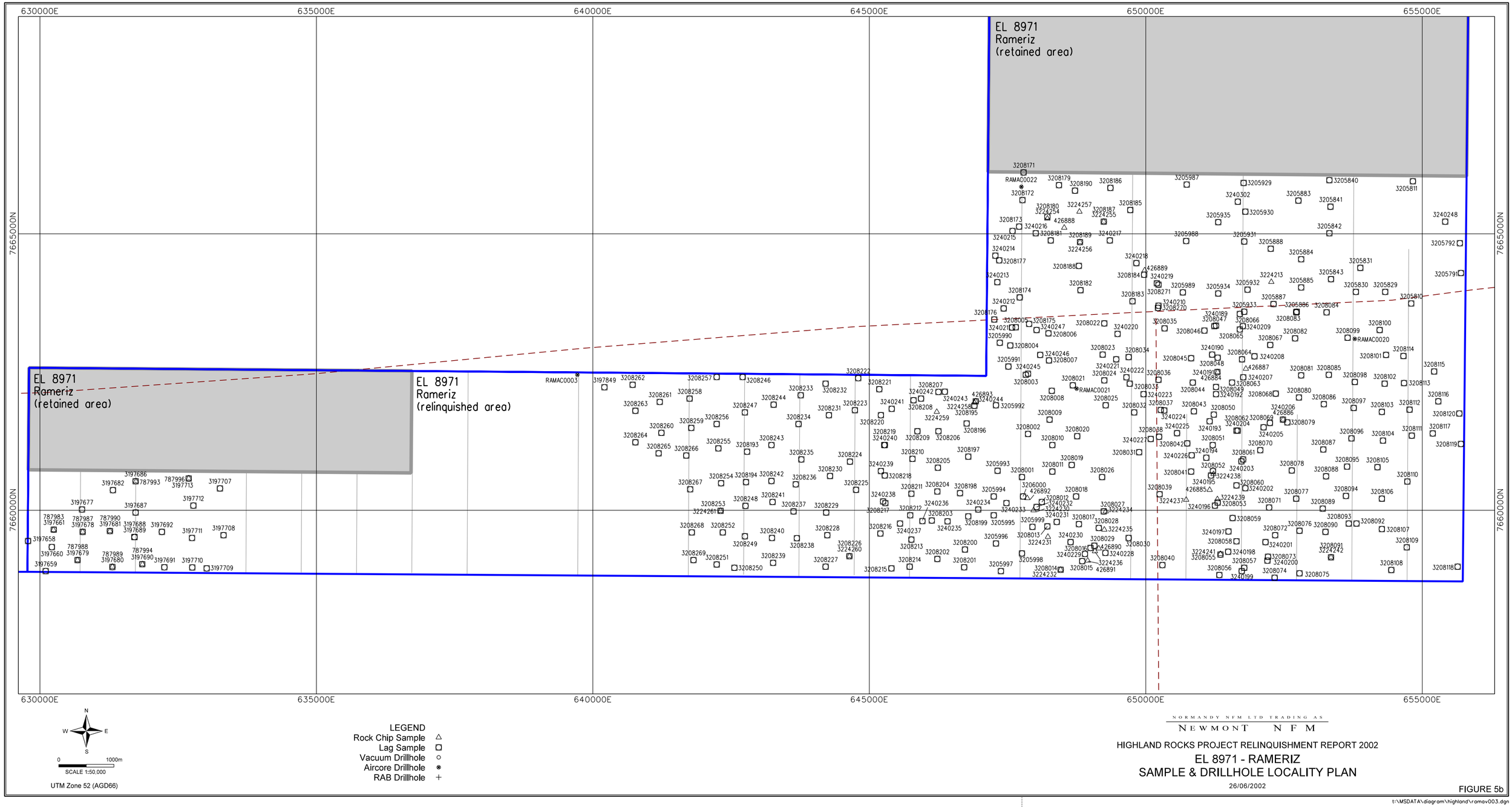
630000E
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EL 8971
Rameriz
(retained area)
EL 8971
Rameriz
(relinquished area)
EL 8971
Rameriz
(retained area)
RAMAC0003
RAMAC0022
RAMAC0020
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SCALE 1:50,000
UTM Zone 52 (AGD66)
LEGEND
Rock Chip Sample
Lag Sample
Vacuum Drillhole
Aircore Drillhole
RAB Drillhole
NORMANDY NFM LTD TRADING AS
NEWMONT NFM
HIGHLAND ROCKS PROJECT RELINQUISHMENT REPORT 2002
EL 8971 - RAMERIZ
SAMPLE & DRILLHOLE LOCALITY PLAN
26/06/2002
FIGURE 5b
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8 EL9559 - HIGHLANDER

The 1999 work program over the relinquished portions of this lease 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 EL.

The 2000 work program was dominated by extensive systematic regional lag and CRC sampling, with more limited vacuum drilling. This was conducted to provide a coherent geochemical and geological picture over regions of subcrop and shallow cover.

No work was conducted over these areas in 2001.

Work over the relinquished areas included:

Lag Sampling	202 samples
Rock Chip Sampling	30 samples
Vacuum Drilling	14 holes for 123m, 40 samples
Aircore Drilling	4 holes for 165m, 55 samples

8.1 Rock chip sampling

Rock chip samples were collected opportunistically in tandem with the regional lag sampling program. Sample locations are presented in Figures 6a, 6b & 6c, with sample details in Table 9.

There were no anomalous rockchip samples.

Table 9: EL9559 Rock chip sample details

Sample Number	Total	Laboratory	Method	Elements Analysed
787566-568,801,803-816,845-849,940-944,947,949 3078492	30	Genalysis	B*ETA	Au
			A/MS	Fe, Co, Ni, Cu, Zn, As, Mo, Ag, Sn, Sb, W, Pb, Bi, Th, U
				Total: 30 samples

8.2 Lag sampling

Lag samples were collected at 500m × 500m spacings over areas of subcrop and interpreted negligible cover. Samples are located on Figures 6a, 6b & 6c, with sample details and analyses provided in Table 10.

The highest gold assay received from these samples was 2.1ppb, with no anomalous arsenic.

Table 10: EL9559 Lag sample details

Sample Number	Total	Genalysis Method	Elements Analysed
3197656-657,716-720,817-819,830-831,839-842 3201701-707,710-761,763-773,785-788 3205531-557,564-620,777,784-790 3208272-277,281-298,302-304 3240174-176,327,334-337 5006927-930, 5033541	202	B*ETA	Au
		A/MS	Fe, Co, Ni, Cu, Zn, As, Mo, Ag, Sn, Sb, W, Pb, Bi, Th, U
	Total: 202 samples		

8.3 Vacuum drilling

14 vacuum drillholes were drilled over areas of shallow cover proximal to the lag coverage. Ideally three samples were collected from each hole: a VBCL in the soil horizon, a DSL at the cover/bedrock interface and a BOH sample. However in most cases at least one of the sampling media was not present.

Drilling was conducted at 500m spacings. Table 11 provides sampling and analysis details, with hole locations displayed in Figures 6a, 6b & 6c.

There were no anomalous VBCL, BOH or DSL samples.

Table 11: EL9559 Vacuum drilling details

Hole ID	Sample Type	Sample Total	Sample / Drillhole ID	Genalysis Method	Elements
HIV0005-9, 12-14,16-21	**BOH**	14	3235592-597 3237933-936,938-942	B * ETA	Au
				A/MS	As, Cu, Zn & Ag
	VBCL	14	3204005-009,262-271	MINBLEG	Au, Ag & Cu
				B * ETA	Au
	DSL	12	3207605-609,916-918,920-923	A / MS	Th, Mo, Sb, W, Bi, Sn, U, As, Pb, Ni, Fe, Cu, Zn, Co, Ag
				Total: 14 holes for 123m, 40 samples	

8.4 Aircore drilling

Four aircore drillholes were drilled over the relinquished area as part of the regional regolith program in 1999. Holes are located on Figures 6a, 6b & 6c. Sample and analysis details are presented in Table 12.

No significant gold or arsenic assays were returned from this work. All 4 holes intersected granitic basement under up to 24m of cover.

Table 12: EL9559 Aircore drilling details

Drillhole ID	Sample Type	Sample ID	No. of Samples	Genalysis Method	Elements
HIAC0013-16	3m comp	3223023-3077	55	B*ETA	Au
				B/MS	Fe, Co, Ni, Cu, Zn, As, Mo, Ag, Sn, Sb, W, Pb, Bi, Th, U
			Total: 4 holes for 165m, 55 samples		

580000E 585000E 590000E 595000E

7670000N

7665000N

7660000N

EL 8970
McLeod

EL 9559
Highlander
(Relinquished area)

EL 9559
Highlander
(Retained area)

3205603 3205604 3205605 3205606 787809 3205607 3205608 3205609 3205610 3205611 787810 3205612 3205613 3205614 3205615 3205616 787811 787812 3205618 787813 787814 3205619 787815 3205620 3240334 787816 3240335
3205602 3205601 3205600 3205599 3205598 3205597 3205596 3205595 3205594 3205593 3205592 3205591 3205590 3205589 3205588 3205587 3205586 3205584
3205568 787804 3205566 3205567 3205569 787805 3205565 3205570 3205571 3205572 3205564 787803 3205573 3205574 3205575 3205576 3205577 3205578 787806 3205579 3205580 3205581 3205582 3205583 3205617 3205585 787808 787807 3205552
3205557 787801 3205556 3205555 3205554 3205553 3240337 3240336 3205551
HIV0017
HIV0014
HIV0016
HIV0013
3205790
HIV0012
HIAC0013
3205789
HIV0021
3205777
3205788
HIV0020
5006930 5006929 3205787
5006928 5006927 3240327
3205786
HIV0019
3205785
HIV0018
3205784

N
W E
S
0 1200m
SCALE 1:60,000

UTM Zone 52 (AGD66)

LEGEND
Rock Chip △
Lag Sample □
Vacuum Drillhole ○
Aircore Drillhole ⊗

NORMANDY NFM LTD TRADING AS
NEWMONT NFM

HIGHLAND ROCKS PROJECT RELINQUISHMENT REPORT 2002

EL 9559 - HIGHLANDER
SAMPLE & DRILLHOLE LOCALITY PLAN

25/06/2002

FIGURE 6a

t:\MSDATA\diagram\highland\higav005.dgn

605000E 610000E 615000E 620000E 625000E

7670000N

7665000N

7660000N

EL 9559
Highlander
(Retained area)

EL 9559
Highlander
(Relinquished area)

HIAC0014
HIAC0015
787566
787567
787568
HIAC0016
3197720
3197719
3197718
3197717
3197716
3201701
3201702
3201703
3201704
3201705
3201706
3201707
3201769
3201770
3201768
3201767
3201766
3201765
3201764
3201763
3201754
3201755
3201756
3201757
3201758
3201759
3201760
3201761
3201737
3201750
3201751
3201752
3201753
787942
787943
787944
3201748
3201749
3201747
3201746
3201745
3201744
3201743
3201742
3201738
787941
3201736
3201735
3201734
3240176
3201718
3201719
3201720
3201721
3201722
3201723
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3201725
3201726
3201727
3201728
3201729
3201730
3201731
3201732
3240175
3240174
5033541
3201733
3201710
3201711
3201712
3201713
787940
3201714
3201715
3201716
3201717
3201741
3201740
3201739

N
W E
S

0 1200m
SCALE 1:60,000

UTM Zone 52 (AGD66)

LEGEND
Rock Chip △
Lag Sample ⊡
Vacuum Drillhole ○
Aircore Drillhole ⊗

NORMANDY NFM LTD TRADING AS
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HIGHLAND ROCKS PROJECT RELINQUISHMENT REPORT 2002

EL 9559 - HIGHLANDER
SAMPLE & DRILLHOLE LOCALITY PLAN

25/06/2002

FIGURE 6b

t:\MSDATA\diagram\highland\higav005.dgn

630000E 635000E 640000E 645000E

7665000N

7660000N

EL 9559
Highlander
(Retained area)

EL 8971
Ramirez

EL 9559
Highlander
(Relinquished area)

HIV0009
3208298
3208290
HIV0008
3208289
3208297
3208291
HIV0007
3208288
3208296
HIV0006
3208292
3208302
787849
3208287
3201785
3201772
HIV0005
3201788
3201773
3208303
3208295
3201786
3201771
3208293
3201787
3208294
787846
787848
3208272
3208304
3208284
3208276
3208275
787847
3208273
3208285
3208274
787845
3208277

EL 9559
Highlander
(Relinquished area)

3197819
3197842
3197818
3197839
3197830
787947
787949
3197840
3197817
3197841
3197831
3208281
3208286
3208283
3208282

3197656
3197657

EL 9559
Highlander
(Relinquished area)

630000E 635000E 640000E 645000E

N
W E
S
0 1000m
SCALE 1:50,000

UTM Zone 52 (AGD66)

LEGEND
Rock Chip △
Lag Sample □
Vacuum Drillhole ○
Aircore Drillhole ⊗

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HIGHLAND ROCKS PROJECT RELINQUISHMENT REPORT 2002

EL 9559 - HIGHLANDER
SAMPLE & DRILLHOLE LOCALITY PLAN

25/06/2002

FIGURE 6c

t:\MSDATA\diagram\highland\higav005.dgn

9 EL9563 - LOWLANDER

EL 9563 is located on the northern boundary of the Highlander EL (9559). Access to this ground was granted at the same time as the other Highland Rocks Project licenses. Unfortunately access to the lease is significantly hindered by the large E-W trending dunes along this boundary. In particular the asymmetrical nature of these dunes, with steeper northern slopes than southern, presented a formidable obstacle on the return journey, even in a Toyota Landcruiser.

Nevertheless, a minor amount of surficial reconnaissance work was carried out as listed below. A small amount of geophysical and airphoto interpretation was also conducted over the lease.

Work over the relinquished area included:

Rock Chip Sampling 13 samples

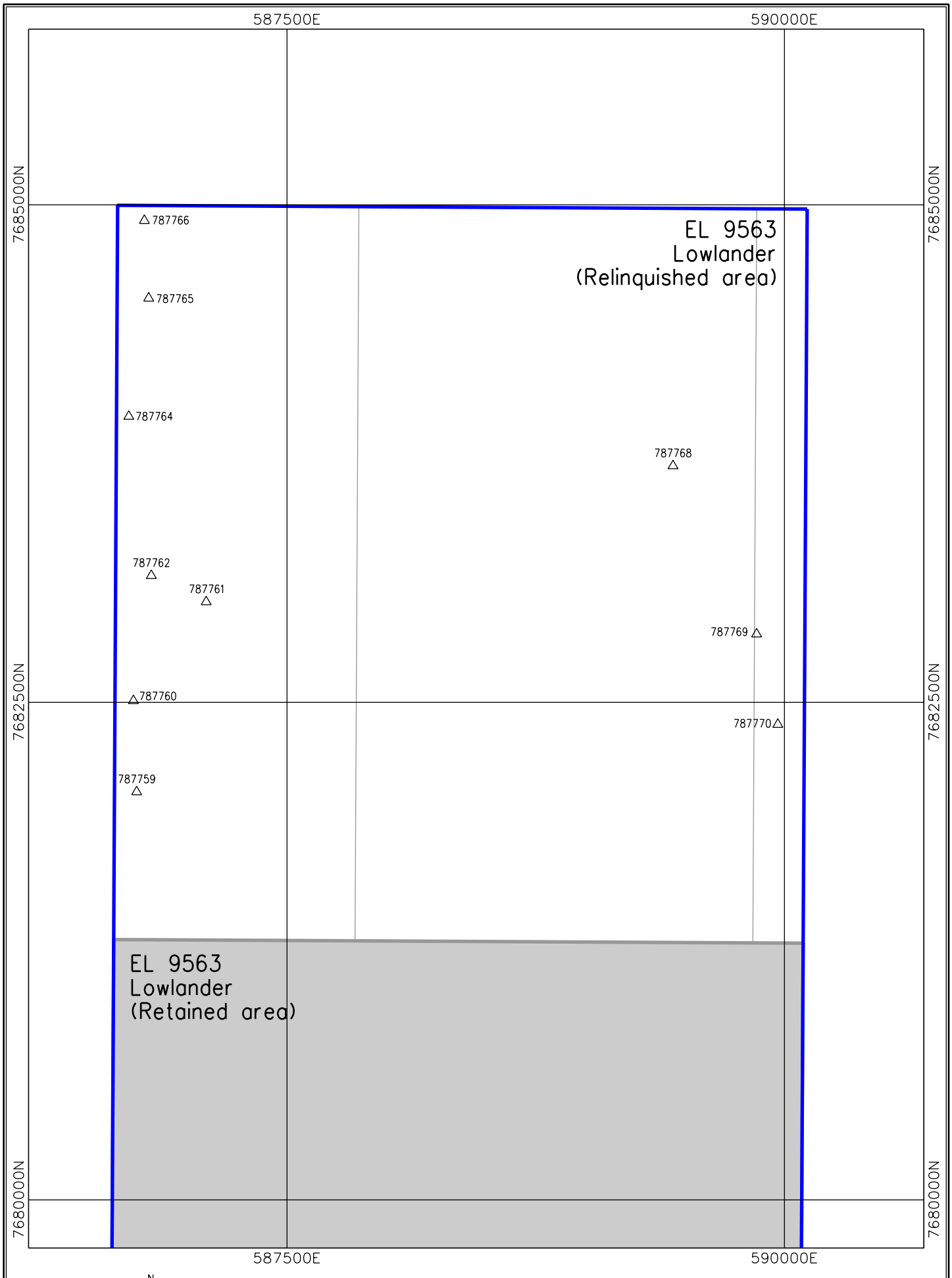
9.1 Rock chip sampling

Ten rock chip samples were collected during a reconnaissance traverse in 2000, with all samples composed of calcrete. Samples are located in Figure 3, with sample details and analyses supplied in Table 13.

Table 13: EL9563 Rock chip sampling details

Sample Number	Total	Laboratory	Method	Elements Analysed
787759 – 763 787764 - 766 787768 - 770	10	Genalysis	B*ETA	Au
			A/MS	Fe, Co, Ni, Cu, Zn, As, Mo, Ag, Sn, Sb, W, Pb, Bi, Th, U
				Total: 13 samples

No anomalous results were returned.



N
W E
S

0 500m

SCALE 1:25,000

UTM Zone 52 (AGD66)

NORMANDY NFM LTD TRADING AS

NEWMONT NFM

HIGHLAND ROCKS RELINQUISHMENT REPORT 2002

EL 9563 - LOWLANDER
ROCK CHIP LOCALITY PLAN

25/06/2002

FIGURE 3

t:\MSDATA\diagram\highland\lowav002.dgn

10 REFERENCE LIST / ANNUAL REPORT BIBLIOGRAPHY

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Zdziarski, A., 2002. Final Report for EL9562 (Icebox) for the period 29/04/1999 to 26/04/2002. Normandy NFM Ltd. RN29890

APPENDIX 1
Digital Data

APPENDIX 2

Petrological Descriptions

Report #	Author	Date	Work	Geo	Prospect			Notes
Petrology #	Count	ID	Type	NFM	Sample #	From To	Easting	Northing	Description

Highland Rocks
EL8971 Ramirez

P7993	**PO**	**1/07/2000**	**TS**		**EJW**	**Ramirez (EL)**			***Ramirez and McLeod prospects***
P06531	1		OC		3224263		653518	7673107	Silcrete with abundant grains of quartz, and minor fragments of quartzite, incorporated within a cement of hematite and extremely fine clouded possible quartz-anatase-zircon.

APPENDIX 3

Sample & Survey Methodology

Geophysical Surveys

Ground Magnetics

All ground magnetic surveys were effected by Normandy NFM personnel.

Total Magnetic Intensity (TMI) readings were taken at 10m intervals (unless otherwise stated) using a G856 proton precession magnetometer and a pole height of 1.8m. Diurnal measurements were taken using a second magnetometer as a base station, with readings taken every 30 seconds. On completion of the survey, diurnal variations were removed from the data using the MAGPAC program.

Data was collected over the surveyed lines which were pegged every 100m and clearly annotated with the line number and location coordinates. The placement of these traverses was achieved by using a Garmin GPS II+.

Geochemical Sampling Techniques/Sample Descriptions

SURFACE SAMPLES

CRC (Composite Rock Chip)

A composite technique is adopted whereby approximately 4-5kg of material comprising 10 to 15 grab samples is collected from within a 2m radius of the designated sample site.

GPS equipment is used to determine reconnaissance sample locations in the absence of a local grid.

LAG/DSL (Drill-derived Stone Line)

Lag is any hard residual surficial material varying from a coarse sand to rock fragments.

The sample is obtained via a shallow surface scrape, sieved to obtain approximately 250g of +2mm material and collected into a plastic zip seal bag.

Sample sites are not marked. Sample type, quality, description and size is noted at the time of collection and recorded via codes outlined in Section 6.2.6.

The samples are submitted for multielement analysis to provide a screen for other mineralisation styles.

A **DSL** sample is a drill derived “buried” lag sample. Other than using a drill rig to bring the sample to surface, collection methods are identical to lag.

The lag sample logging scheme is described in Appendix 1.

SOIL

Soil material is sieved to obtain approximately 200g, with the sieve size varying according to the program, but generally a -180µm fraction is collected. The sample is collected into a plastic zip-seal bag which is enclosed into another to prevent contamination during transport.

BCL/BLEG (Bulk Cyanide Leach/Bulk Leach Extractable Gold)

Many of the low relief areas have variable amounts of drainage sediments (typically arenitic alluvium +/- clay horizons) which are sampled via a bulk cyanide leach. Sufficient soil is sieved to obtain 5kg of -80# sample which was double bagged within a plastic liner to prevent cross contamination.

Standard BLEG analysis (Au, Ag and Cu) is performed by Genalysis.

The samples may be subcategories in the NFM database to distinguish sample derivation:

Code	Derivation	Description
VBCL	drill derived	usually vacuum, however some are sourced from RAB drillholes (parent drillhole listed next to sample number in datasheets)
DBCL	drainage	stream sediment from a defined drainage channel
SBCL	soil	surface BCL sample
	Note: Some drill derived samples have been coded SBCL where the sample represented a buried residual soil.	

VACUUM DRILLING & SAMPLING

Vacuum drilling is undertaken by Normandy NFM using EDSON 200 series vacuum drill rigs. All holes are plugged and back filled upon completion and are only marked if positioned on an established grid.

DSL Samples

As described above. The sample is sieved to a +2mm fraction and approximately 250g of which is collected into a plastic zip seal bag.

Vac/BOH Samples

A perspex tube collects the sample that retains relative downhole depth proportions. The geologist may choose to sample a particular horizon of interest as a selected sample or collect a composite sample. For this reason, sample intervals are variable. Specific sample intervals are listed in the drill hole logs.

RAB AND AIRCORE DRILLING & SAMPLING

RAB and aircore drilling was undertaken by Century Drilling Pty Ltd. All holes are rehabilitated on completion of drilling by using available drill spoil to back fill the hole.

Composite Samples

RAB and aircore drillholes are typically composite sampled at 3m intervals where the geology is considered to be prospective. Depending on the program budget, the drillhole may be comprehensively sampled from surface, sampled only at particular lithologies or have been restricted to a bottom of hole sample. Drill spoil is riffle split to obtain 2kg composite samples. While this sample is customarily a 3m composite sample, the sample interval is ultimately left to the geologist's discretion. The sample intervals are clearly documented in the drillhole logs accompanying this report.

BIBLIOGRAPHIC DATA SHEET

REPORT NUMBER	29900
REPORT TITLE	First Relinquishment Report for EL'S 8970, 8971, 9559 & 9562 for the period 29 April1999 to 28 March 2002
PROSPECT NAME	McLeod, Rameriz, Highlander and Lowlander
TENEMENT NUMBERS	8970, 8971, 9559 & 9563
OWNER/JV PARTNERS	Normandy NFM 100%
COMMODITIES	Gold
TECTONIC UNITS	Tanami Inlier
STRATIGRAPHIC UNITS	Unspecified
1:250,000 MAPSHEET(S)	The Granites SF52-03 Mt Theo SF52-08
1:100,000 MAPSHEET(S)	Wickham 4855 Highland 4955
KEYWORDS	Reconnaissance, rock chip sampling, lag sampling, soil sampling, vacuum drilling, RAB drilling, aircore drilling, geophysics, ground magnetics

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)	8970, 8971, 9559 & 9563	Company Report Number	29900
Report Date	July 2002	Anniversary Date	29 April
Group Project Name	Highland Rocks Project		
Report Title	First Relinquishment Report for EL'S 8970, 8971, 9559 & 9562 for the period 29 April1999 to 28 March 2002		
Author(s)	Alex Zdziarski		
Corporate Author(s)	Newmont Exploration		
Maps 1 : 250 000	SF52-03	SF52-07	
Maps 1 : 100 000	4855	4955	

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			

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 ...	❑ Aircore drilling		

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

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