

FIRST ANNUAL REPORT

EL43/2006

GOWRIE PARK PROJECT

For Period 8 March 2007 to 7 March 2008

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Distribution:

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APPENDICIES

- Appendix 1 EL43/2006 Gowrie Park – Eastern Sector
Report on Prospect Reconnaissance for the Work Program Planning,
K. Morrison August 2007.
(See Digital File EL432006_200803_03_Appendix1.pdf).
- Appendix 2 EL43/2006 Gowrie Park – Western Sector
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K. Morrison August 2007.
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- Appendix 3 Gowrie Park Graphic Logs – previous Drilling
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(See Digital File EL432006_200803_05_Appendix3.pdf).
- Appendix 4 Petrographic Descriptions for Three Surface Cambrian Rock Samples,
Gowrie Park, NW Tasmania.
Mason Geoscience November 2007
(See Digital File EL432006_200803_06_Appendix4.pdf)
- Appendix 5 Rock Chip Sample Data
(NTR072 – NTR085)
(See Digital File EL432006_200803_07_Appendix5.txt)
- Appendix 6 Soil Sample Data
(NTS0385 – NTS0552)
(See Digital File EL432006_200803_08_Appendix6.txt).

DIGITAL FILES

- EL432006_200803_01_Report.pdf (Report Text)
- EL432006_200803_02_Plan1.pdf (Plan 1)
- EL432006_200803_03_Appendix1.pdf (Gowrie Park Eastern Sector – Prospect Reconnaissance)
- EL432006_200803_04_Appendix2.pdf (Gowrie Park Western Sector – Prospect Reconnaissance)
- EL432006_200803_05_Appendix3.pdf (Scan Graphic Logs – Previous Drilling)
- EL432006_200803_06_Appendix4.pdf (Petrology Report – 3 Surface Cambrian Rock Samples)
- EL432006_200803_07_Appendix5.pdf (Rock Chip Sample Data)
- EL432006_200803_08_Appendix6.pdf (Soil Sample Data)
- EL432006_200803_09_File Verification.txt (Report File Verification)

SUMMARY

Newcrest Mining Limited commenced exploration for gold-rich deposits on being granted EL43/2006 – Gowrie Park on the 8th March 2007. The tenement encompasses the northeastern extension of Mount Read Volcanics (MRV) and is located just 34km south of Devonport in northern Tasmania.

Previous exploration by CRAE, Plutonic Operations, RGC Exploration, Aberfoyle and Pasmenco has detailed the presence of an extensive, 8km-long, invariably sericite-chlorite-pyrite alteration zone, hosted within felsic volcanoclastics and lavas. The alteration zone, termed the ‘Cethana Alteration Zone’ (CAZ), extends from the Cethana West prospect, east through to Gowrie Park. The CAZ hosts anomalous base metal stringer mineralisation intersected in drilling, which has been interpreted by past explorers to represent sub-seafloor replacement mineralisation.

Newcrest’s exploration work, in the first year of tenure has been to re-evaluate the CAZ in terms of its prospectivity for gold-rich polymetallic mineralisation. Reconnaissance geological mapping, rock chip sampling and relogging of historic drill core have been the primary methods used in evaluating potential gold-rich prospects within the Gowrie Park EL. Future exploration will centre on systematic testing of the Cethana Alteration Zone using Short Wave Infrared Spectroscopy to vector into the higher temperature core of the system and define targets to be tested by diamond drilling.

KEY WORDS

Exploration; Gold; Copper; Mount Read Volcanics; Cethana; Cethana Alteration Zone; Cethana 4240; Gog 4440; Gowrie Park; Lake Barrington; Star of the West; Gregory’s Road; North Gog.

1. INTRODUCTION

Newcrest Mining Limited is exploring for gold rich deposits in the north east extension of the Mount Read Volcanics. This is the first annual report for EL43/2006 for the period 8th March 2007 to 7th March 2008.

1.1 TITLE

TENEMENT

EL43/2006 was granted on the 8th March 2007 to Newcrest Operations Limited for five years to 7th March 2012. The area was most recently held by Frontier Resources (EL29/2003).

LOCATION

The tenement covers an area of 141 square kilometres over the northern slopes of Round Mountain, Mount Claude, Roland, Van Dyke and the Gog Range, while to the northwest and northeast, the Dasher and Minnow Rivers form broad valley floors respectively. Refer to Figure 1 for location. Most of the exploration area of interest falls within State Forest. However, in terms of land tenure, the EL also comprises some private land, Crown land, Aurora/ Hydro / Transend land, MDC informal reserve, Staverton Forest Reserve, Promised Land Forest Reserve, Lake Barrington Nature Recreation Area, and parts of the Mt Roland Regional Reserve and Conservation Areas.

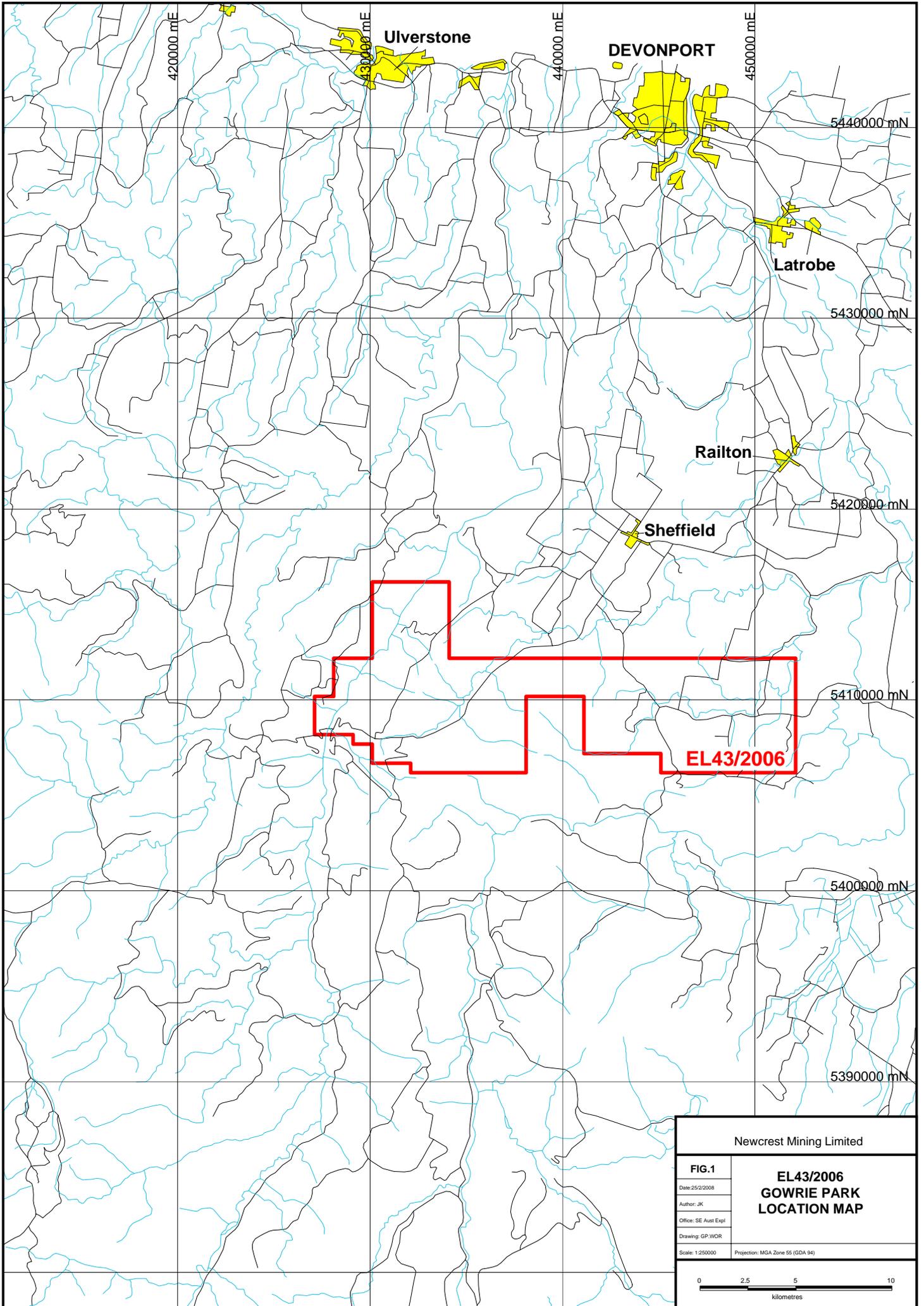
Topographic map sheets covering the area are listed below.

1:25,000 TASMANIA TOPOGRAPHIC MAPS

CETHANA	4240
WILMOT	4241
GOG	4440
SHEFFIELD	4441

DATUM

All AMG (Australian Map Grid) references are to AGD66_Zone 55.



Newcrest Mining Limited

FIG.1

Date: 25/2/2008

Author: JK

Office: SE Aust Expl

Drawing: GP.WOR

Scale: 1:250000

Projection: MGA Zone 55 (GDA 94)

**EL43/2006
GOWRIE PARK
LOCATION MAP**



2. PREVIOUS EXPLORATION

Significant phases of past exploration by other companies in the area covered by the tenement are summarised as follows.

Cethana East and Cethana West Prospects

1973 – 1976 (Anon, 1974; Barker, 1975)

Early exploration consisting of regional stream sediment sampling was conducted by Asarco in 1973 under EL7/73. Values upto 310 ppm Pb and 700 ppm Zn were obtained from Machinery Creek, while 950ppm Pb was obtained between Claude and Oliver's Road near the Cethana West prospect. The Machinery Creek anomaly was followed up by additional stream sediment sampling, returning weakly anomalous results.

In 1975 Asarco withdrew from Tasmania, and signed a letter of intent for a Joint Venture on EL7/73 with CRAE. The agreement was finalised in March 1976. EL10/76 was pegged in March 1976, and covered an area of Cambrian volcanics north of Round Mountain in the Oliver's Road and Cethana Road areas. Exploration by CRAE commenced in August 1976.

1976-1977 (Purvis, 1977; Kirton, 1977; Howland Rose, 1977)

Initial work by CRAE at the Cethana West prospect consisted of a grid being established and extensive soil and rock chip sampling performed on 100m spaced lines. A number of Pb-Zn-Mn anomalies were defined. Geological mapping identified a sequence of predominately pyroclastics and tuffs that had been altered to quartz-sericite +/- chlorite schists. The package was interpreted to have been deposited in a marine environment, and the presence of tuff and tuff-shales exhibiting a chemical sedimentation component such as chert or black shales were considered favourable for VHMS mineralisation.

An IP survey conducted at Cethana West provided a lack of IP anomalies coincident with geochemical anomalism over the area of siliceous quartz-sericite schists.

Three diamond drill holes (DD77CC1, DD77CC2 and DD77CC3) were drilled to test the best Pb-Zn in soil anomalies.

DD77CC1 was drilled to test beneath mineralised siliceous quartz-sericite schist. The schist contained sparse bands of sulfides 0.5-5cm thick, parallel to schistosity. The largest of the bands assayed 23% Zn, 0.71% Pb. Numerous gossanous fractures occurred throughout the area. Best intersections were:

0.4m @ 8.2% Zn, 0.2% Pb from 78.6m;

2.0m @ 1.1% Zn, 1.0% Pb, 12 g/t Ag from 98m.

DD77CC2 was designed to pass across the main zone of Pb-Zn soil anomalism, specifically aimed at a >1000ppm Pb soil anomaly. Best intersections were:
2m @ 0.33% Zn, 0.11% Pb from 45m.

DD77CC3 was a subsurface test beneath the strongest part of the main soil anomaly. Best intersections were:
0.8m @ 0.67% Zn, 0.07% Pb from 38.4m.
33.2m @ 0.14% Zn, 524 ppm Pb from
20.5m @ 0.13% Zn, 0.11% Pb from 132m

At Cethana East a grid was also established which was subsequently mapped, and rock chip and soil samples collected. Identified a 1300m long x 250m wide zone of anomalous geochemistry upto 2640 ppm Pb and 1720 ppm Zn. The anomaly continued east on the adjacent Gowrie Park grid.

An initial gradient array IP survey was conducted, followed-up by a more detailed IP, EM and magnetic surveys over the main chargeable zone. The zone had chargeabilities up to 60 msec coincident with highest geochemical soil values.

Two diamond drill holes (DD77CC4 and DD77CC5) totaling 314m were put down across the zone of anomalous IP, coincident with the strongest soil geochemistry, and encountered significant concentrations of sulfides up to 10% pyrite. Best intersections included:

DD77CC4 – 0.5m @ 550 ppm Zn, 0.35% Pb and 20 g/t Ag.
DD77CC5 – 1.0 m @ 1.18% Cu, 3.88% Zn, 0.8% Pb, 185 g/t Ag and 0.7 g/t Au.
0.9m @ 0.12% Cu, 0.25% Zn, 330 ppm Pb, 6 g/t Ag and 0.2 g/t Au
5.5m @ 0.10% Cu, 0.13% Zn and 550 ppm Pb.
1.8m @ 0.10% Cu, 0.34% Zn, 0.16% Pb and 2 g/t Ag.

1977-1979 (Purvis 1979a; Purvis 1979b)

Three further drill holes (DD77CC6, DD77CC7 and DD77CC8) were drilled at East Cethana. Drilling delineated a zone of highly altered, Pb-Zn rich cherty carbonaceous tuffs, but failed to intersect any economic mineralisation. Drill holes DD77CC6 and DD77CC7 were designed to test gradient array IP anomalies, while DD77CC8 was drilled to test the possible down-dip extension of mineralisation in DD77CC5. Finely disseminated sphalerite and galena mineralisation was intersected in DD77CC6, while the down-dip extension of mineralisation in DD77CC5 was not intersected in DD77CC8 due to possible faulting. Best intersections included:

DD77CC6 – 3.0m @ 1.4% Zn, 0.49% Pb and 3.5 g/t Ag
2.4m @ 0.98% Pb, 0.65% Zn and 5 g/t Ag
DD77CC7 – 1.7m @ 0.10% Zn, 0.36% Pb and 2 g/t Ag
2.5m @ 0.37% Zn, 0.11% Pb and 2 g/t Ag
DD77CC8 – 2.0m @ 0.66% Zn, 0.12% Pb and 2 g/t Ag
2.0m @ 0.46% Zn, 0.18% Pb and 2 g/t Ag

2.0m @ 0.47% Zn, 0.20% Pb and 3 g/t Ag

Dipole-Dipole IP survey was completed over the entire grid and showed that the majority of the gradient array IP 'anomalies' in the central part of the prospect were spurious. The DDIP survey detected a new anomaly on line 21800mE with a strike length of 100m and a coincident geochemical anomaly upto 1.2% Pb and 0.15% Zn in rockchips and maximum values of 1275 ppm Pb and 520 ppm Zn in soils. The anomaly appears not to have been tested.

At Cethana West only a limited amount of IP and rock chip sampling was completed in critical areas to supplement earlier surveys.

1981-1982 (Flis, 1983)

In February 1981 a regional Dighem II Multicoil airborne electromagnetic survey was flown incorporating Cethana EL10/1976. A total of 24 EM responses were recorded over the EL, however, only four of these anomalies were considered worthy of follow-up with ground magnetometry, VLF-EM, geochemistry and geology. Only one anomaly was located within the Cethana Alteration Zone (36xH) on the western end of Cethana East. Subsequent follow up of the anomaly by VLF-EM and Crone Pulse EM concluded that the anomaly was likely to be due to the response of unmineralised black shale.

1984-1985 (Temby, 1985)

One percussion drill hole (PD84CC9) was drilled on the Cethana West prospect, while one percussion hole was drilled just outside EL43/2006 boundary on Roland Conglomerate, east of Lorinna Road (PD84CC10). PD84CC9 which was sited to test a combined UTEM anomaly / resistivity low, geochemical anomaly intersected base metal poor massive sulfides over a 24m interval. No significant assays >0.1% Zn or Pb were returned. Downhole EM surveys were conducted on both holes, however, no conductors were identified.

Reassays of core from historic drill holes within the Cethana Alteration Zone were carried out to test the gold potential of the area. All samples with Pb plus Zn >1500ppm, Ag >5 ppm or pyrite > 5% were analysed. Only six samples returned gold values greater than 0.01 ppm with maximum value of 80 ppb Au over 2.5m in DD77CC6.

1985-1986 (Caithness, 1986)

Only minor work was completed across the Cethana district during the period. A regional drainage geochemistry sampling program was carried out over EL10/76 to search for fine gold both as a primary target and also as a pathfinder for volcanogenic massive sulfides. Three drill holes were planned to test the strike extent of the chlorite altered zone in PD84CC9.

1986-1987 (Caithness and von Strokirch, 1987)

Two diamond drill holes (DD86CC11 and DD86CC13) were drilled at Cethana West prospect. DD86CC11 was designed to test a UTEM response within favourable geology, along strike of PD84CC9 which reported semi-massive sulfide mineralisation. DD86CC11 was abandoned at 77m due to drilling difficulties and was redrilled 1m from the collar position (DD86CC12). DD86CC13 was designed to test a soil geochemical anomaly on a prospective geological horizon. Neither of the holes intersected significant quantities of sulfides. Best Intersections:

DD86CC13 – 1m @ 0.38% Cu, 0.46% Zn, 0.65% Pb, 10g/t Ag and 0.02 g/t Au

DD86CC12 – 1m @ 0.26% Zn and 0.17% Pb

Downhole EM surveys conducted on both holes were abandoned due to insurmountable noise encountered from high tension power lines.

Four follow-up locations were sampled to test the anomalous gold response in Machinery Creek. Sampling recorded significant gold only upstream in Machinery Creek (2.8 g/t Au -80#), while cyanide leach anomaly of 2550 ppt was noted in a tributary draining from the north.

1987-1988 (Funnell, 1988)

Only minor stream sediment sampling was conducted at Machinery Creek. Results were disappointing and did not warrant further follow-up. EL10/76 was subsequently relinquished by CRAE.

1988-1989 (Jones, 1989)

In 1988 Cethana became part of Noranda Pty Ltd and Plutonic Operations JV EL10/88. Work conducted by Noranda entailed data compilation, production of 1:10000 base maps, regional and detailed geological maps, regional rock chip sampling, gridded geochemical sampling and isotopic studies. Noranda appraised all previously conducted geophysical surveys over certain areas of the EL including the Cethana East and Cethana West prospects. A number of prospective geophysical anomalies were identified on existing lines.

Pb isotope studies were conducted on nine drill core samples and 1 rock chip sample from the Cethana Alteration Zone. Results returned a positive signature for Cambrian age mineralisation with a similar signature to Rosebery mineralisation.

1989-1991 (Hicks, 1989; Leaman, 1989)

In 1989 the geology and mineralisation of the Cethana Alteration Zone was studied by Hicks (1989). During the period Hicks completed detailed mapping, isotopic (Pb, S and O) analyses, and conducted some statistical analyses (Zn ratios) on drill core geochemical assays over the Cethana Alteration Zone.

Repeat dipole-dipole IP surveys were completed over selected lines. A review of gravity and magnetic data in the region was carried out by Leaman (1989). Infill gravity or resurvey (magnetics) was recommended.

1991-1992 (MacDonald and Tomlinson, 1992)

Plutonic Operations Limited became the sole licensee and operator of EL10/88 in June 1992. Work included review of previous work, and identified 10 potential drill targets at Cethana based on IP and geochemical surveys conducted by CRAE and Noranda.

1992-1993 (MacDonald, 1993)

No work was completed on the Cethana prospect.

1993-1994 (Rea, 1994)

Limited field work was undertaken by Plutonic Operations Limited, and included a review of previous geochemical, geological and geophysical data. Two diamond drill holes were proposed to test the horizon that hosts "semi-massive" sulfides in DD77CC5.

1994-1995 (Close and MacDonald, 1995)

Two diamond drill holes (CED1 and CED2) were drilled for a total of 395m at the Cethana East prospect. CED1 which targeted a dipole-dipole IP chargeability high. The response was adequately explained by a zone of deformed pyrite stringers and blebs. CED2 targeted both an IP chargeability anomaly and the interpreted trend of a small base metal lens intersected in DD77CC5. Mineralisation was described as epigenetic in late stage veinlets. Best intersections:

CED1 – No significant results.

CED2 – 1m @ 1.33% Zn, 0.26% Pb and 0.03 g/t Au.

1.3m @ 1.41% Zn, 0.52% Pb, 6.1 g/t Ag and 0.04 g/t Au.

1.0m @ 0.52% Zn, 1.01% Pb, 7.8 g/t Ag and 0.01 g/t Au.

DHEM was conducted on both holes, as well as three existing CRAE holes (DD77CC4, DD77CC6 and DD77CC8). Only a weak in-hole response was given by DD77CC7.

1995-1996 (Close, 1996)

A review was conducted on the Cethana prospect in order to promote more effective exploration. A total of 75 bedrock auger samples were collected from 0.3m to 2.0m. The program highlighted several target zones that warranted further evaluation by drilling, including a subcropping Fe-Mn rich gossanous felsic volcanoclastic that assayed 0.29% Pb, 0.06% Zn and 0.40% Mn.

1996-1997 (Close and Reid, 1997)

A six hole (CERC1-CERC6) reverse circulation drilling program, for a total of 393m was completed over 300m strike, targeting a peak Pb-Zn soil anomaly of 1860 ppm Pb, and 650 ppm Zn. Best mineralized intervals:

CERC4 – 10m @ 514 ppm Pb and 639 ppm Zn; including:

1.0m @ 2740 ppm Pb and 1390 ppm Zn.

CERC5 – 3.0m @ 632 ppm Pb and 1677 ppm Zn

No further work was recommended by Plutonic Operations Limited, and the tenement covering the Cethana area was subsequently dropped in August 1997.

1998 -1999 (Murphy *et al.*, 1999)

The Cethana prospect was acquired by Pasminco Exploration in April 1998 under EL3/98 – Lake Barrington, which was the result of consolidating ELA26/1998 (Gowrie Park) and EL16/1999 (Cethana). Work completed during the year included a literature review of previous exploration, digitizing of previous soil geochemistry data, reprocessing of 1990 helimagnetics, 1:5000 scale geological mapping of the Cethana prospect and geological interpretation.

1999-2000 (Denwer, 2000)

During 1999, Pasminco completed a literature review of previous exploration. An orientation partial leach soil survey was completed across the entire Cethana Alteration Zone including Gowrie Park. All historic drill holes were relogged. 1:5000 scale geological mapping was also completed in the area between Staverton Road and Gowrie Park. The aeromagnetics obtained by Plutonic and the ground magnetics obtained by RGC were stitched together.

2000-2001 (Denwar and Simpson, 2001)

1:10000 scale mapping was completed on all grid lines and access roads gridded during the 1999 partial leach soil survey. A complete partial leach soil sampling program was undertaken for the entire Cethana Alteration Zone grid. Four multi-element anomalies were identified in the Cethana prospect area.

2001-2002 (McNeil, 2002; McNeil, 2002)

No field work was completed by Pasminco, and EL3/98 was relinquished in August 2002.

2002-2006 (Reid and McDougall, 2004; Reid and McDougall, 2005; Reid and Campbell, 2005; McDougall and Allen, 2006)

EL29/2003 – Gowrie Park was relinquished by Frontier Resources (formerly TasGold) in September 2006. No work was completed over the Gowrie Park area.

Gowrie Park Prospect**1973-1975 (Barker, 1975; Williamson, 1975)**

Asarco Pty Ltd conducted regional stream sediment sampling over EL7/73 in 1973. The program sampled most of the main stream systems and tributaries within the Cethana and Gowrie Park prospects, and detected 10 anomalous areas throughout the entire EL including the Mt Roland prospect, and the Mt Claude anomaly.

Both the Mt Roland and Mt Claude anomalies were resampled in 1975 with follow-up stream sediment and rock chip sampling. Sampling returned anomalous results of 1.8% Pb and 1.73% Zn from rock chips taken near the mouth of the Mt Roland adit, while the best assay result of 2120 ppm Pb was returned from a rockchip at Mt Claude. Follow-up soil and rock-chip sampling was completed over the Mt Roland anomaly returning upto 0.67% Pb and 0.64% Zn confirming the presence of mineralisation in the vicinity of the Mt Roland adit.

1977-1978 (Purvis, 1978; Howland-Rose, 1977)

CRA Exploration Pty. Ltd began exploration on the Gowrie Park prospect under a joint venture agreement with Asarco Pty. Ltd in 1977. Geological mapping, geochemical sampling, IP and magnetic surveys were conducted over an extensive grid covering the Gowrie Park area. Sampling defined a Pb-Zn soil anomaly 1,500m x 150m defined by a Pb contour >300ppm, with a peak value of 0.34% Pb. Rock sampling of limonitic volcanics gave values up to 3.5% Pb. Coincident with the Pb soil anomaly, a broad IP chargeability high was defined with numerous peaks greater than five time background. Three diamond drill holes were drilled for a total of 314m, targeting geochemical / IP chargeability anomalies.

Drill hole DD77GPC1 targetted the best IP chargeability anomaly – a peak five times background. The anomaly was also accompanied by a resistivity (low) anomaly. The hole intersected minor pyrite-hematite-galena-sphalerite mineralisation. The best intersections were:

3.0m @ 0.64% Pb and 260 ppm Zn from 26.1m;
2.8m @ 1.08% Pb and 850 ppm Zn from 32.7m;
0.7m @ 1.35% Pb, 1% Zn and 16 ppm Ag from 82.8m; and
1.3m @ 0.66% Pb and 0.22% Zn from 89.0m.

Drill hole DD77GPC2 targetted the strongest geochemical anomaly with peak Pb in soils value of 3400 ppm Pb, and 3.5% Pb in rock chips. The IP chargeability response was subtle at two times background. The best intersections were:

15.8m @ 0.7% Pb and 0.2% Zn from 61.9m;
including: 61.9m – 65.9m: 4m @ 1.01% Pb and 0.2% Zn;
71.7m – 77.7m: 6m @ 0.9% Pb and 0.4% Zn.

Drill hole DD77GPC3 targetted a well defined IP anomaly with a chargeability high three times background, coincident with a resistivity low. Rock samples from an outcropping silicified lava with gossanous fractures returned values upto 2.15% Pb, while soils returned values to 1100 ppm Pb. The best intersections were:

9.4m @ 1.1% Pb and 0.4% Zn from 34.0m;
Including: 3.0m @ 1.8% Pb, 0.5% Zn from 36.7m; and
1.0m @ 2.8% Pb, 1% Zn and 14 ppm Ag from 41.6m.

Downhole IP was also conducted on all three drill holes.

1979-1983 (Webber, 1983a)

Mapping, soil and rock chip sampling was performed over the Mt Roland grid. The historic Mt Roland adit was reopened and channel sampled, returning results up to 3300 ppm Pb, and 1.57% Zn.

Dipole-dipole IP conducted over the Grid revealed two chargeable anomalies, however, trench samples collected over the responses, failed to identify any geochemical anomalies. Diamond drill hole 80MR1 drilled to test the southern chargeability anomaly, intersected only weakly anomalous values up to 630 ppm Pb, 200 ppm Zn, and 475 ppm Cu.

In 1981 a regional Dighem II survey was flown over EL 7/73. The survey identified a ‘bullseye’ magnetic anomaly coincident with an EM anomaly 500m north of the Mt Roland grid. The grid was extended and soil sampling, ground magnetics and Pulse EM were conducted, however a conductor was not identified. No further work was carried out by CRA on the Mt Roland prospect.

1984-1985 (Temby, 1985)

In 1984 CRAE conducted a UTEM survey over the Cethana and Gowrie Park prospects. A group of responses were shown to occur between holes DD77GPC2 and DD77GPC3. The anomalies occur predominately within tuffs and sedimentary sequences, and have a combined length of 1000m.

Three drill holes, DD77GPC1, DD77GPC2 and DD77GPC3 were all reassayed for gold. All intervals with Pb and Zn >1500ppm, Ag >5ppm and pyrite >5% were assayed. Of the 64 samples reassayed only 17 samples recorded values above 0.01ppm detection limit, with only four samples >0.1 g/t Au. The maximum value for each hole were:

DD77GPC1 - 2.0m @ 1.0 g/t Au.
 3.0m @ 0.27 g/t Au;
DD77GPC2 - 1.0m @ 0.17 g/t Au;
DD77GPC3 - 2.1m @ 0.06 g/t Au.

1985-1986 (von Strokirch, 1986)

One hole (RD85GP5) was drilled by CRA Exploration Pty. Ltd at the site of a geophysical and geochemical anomaly, but was abandoned at 96m. The hole drilled into altered sandy epiclastic sequence with minor galena mineralisation from 47.2-49.1m with 2-3% galena, and minor carbonate veining with upto 10% galena from 63-89m. Maximum assays upto 2940 ppm Cu, 1.26% Pb, 1420 ppm Zn. Downhole EM planned for RD85GP5 was never conducted.

A regional stream sediment sampling program was conducted over EL7/73 by CRAE during 1985. The program was designed to search for fine gold as both a primary target and as a pathfinder to VHMS mineralisation.

1987 (Funnell, 1988)

The Gowrie Park area was recommended for relinquishment by CRAE as part of exploration license EL7/73 Sheffield.

1988-1989 (Rand and Noonan, 1988)

Aberfoyle commenced exploration in the Gowrie Park area in 1988 under EL11/88. Limited regional sampling was undertaken in the license. Samples of altered lavas and volcaniclastics were collected from both outcrop and previous CRAE drill holes in the Gowrie Park area.

1989-1990 (Rand, 1990)

Extensive 1:2500 and 1:10000 scale geological mapping was completed by Aberfoyle in the Gowrie Park and Mt Roland areas. At Gowrie Park limited reconnaissance mapping and rock chip sampling was completed. Peak values from weak silica-sericite altered veined samples from the CAZ were 125ppm Cu, 90ppm Pb, 1100ppm Zn. A lead isotope study of the mineralisation from Gowrie Park was completed. Isotopic signatures were similar to Rosebery massive sulfide deposits and were considered to have a high probability of representing Cambrian mineralisation.

At Mt Roland the old CRAE grid was reconstructed and mapping and rock chip sampling performed. Minor sphalerite and galena veining was reported at the old Mt Roland adit, with samples assaying 210ppm Cu, 1.75% Pb, 4.82% Zn, 9 g/t Ag and 0.7 g/t Au. A UTEM survey failed to delineate any response attributable to VHMS mineralisation. A lead isotope study suggested a Cambrian isotopic signature for the Mt Roland mineralisation.

1990-1991 (Hicks and Richardson, 1991)

Further mapping, sampling and interpretation completed over 1:25000 scale in the Gowrie Park area.

At Mt Roland, reconnaissance mapping above the Mt Roland grid indicated strong silica-sericite-pyrite altered volcanics.

1991-1992

No field work undertaken.

1992-1993 (Sharpe, 1993)

A three-loop UTEM survey was completed for a total of 11.4 line kms. No significant conductors were identified and no further work was recommended. EL11/88 was subsequently relinquished.

1994-1996 (Halley and Vicary, 1996)

EL 32/94 was granted to RGC Exploration in January 1995. RGC completed relogging of 5 historic diamond holes from the Gowrie Park – Roland area. 37 line kms of track were cut and cleared and geological mapping and a ground magnetic survey completed. The magnetic survey shows a general change in magnetic character from west to east reflecting a change in rock type from rhyolitic to andesitic volcanics. A major northwest trending trough transects the central portion of the grid, and is interpreted as an extension to the fault that offsets the Roland Conglomerate between Mt Van Dyke and Mt Roland.

460 soil samples were collected at 25m spaced intervals on every second grid line at Gowrie Park. An additional 19 rock chip samples were also collected. A strong Cu, Pb, Zn anomaly was apparent on the northern slopes of Mt Claude, while a weak Zn, Cu, Pb anomaly was identified on the southern end of line 435600mE. An infill soil sampling program was also completed, but failed to detect any further anomalism.

1997-1998 (Gregory, 1997; Stockwell, 1997)

Six short RC holes (GPRC1-2 & GPRC5-8) were completed for a total of 389m across the rhyolite/andesite contact beneath scree deposits north of known base metal stringer mineralisation at Gowrie Park. Only minor base metal concentrations were detected.

A self-potential survey was completed across 200m spaced north-south grid lines over 2.4km. 100m spaced infill lines were surveyed at the western end of the grid. All anomalies were considered to be the result of conductive transported overburden, or the natural streaming potential of water flow.

Gradient array IP and VLF-EM were conducted to delineate sulfide mineralisation and assist geological mapping. IP and resistivity data was collected for 26.55 line kms over four arrays. VLF-EM was acquired over the entire grid. Evidence suggests that higher chargeabilities may be encountered south of the survey grid and that the known ESE striking mineralisation may continue beneath the Roland Conglomerate of Mt Claude. A coincident VLF-EM anomaly also disappears underneath Mt Claude. A large VLF-EM anomaly also occurs over the rhyolite-andesite contact northeast of Gowrie Park, however the absence of any chargeability anomaly significantly downgrades its potential.

Two soil sampling programs were conducted. The first was to test the soils beneath the scree covered andesite-rhyolite contact. Base metal samples were generally low, three samples were weakly anomalous. The second program was to test the scree covered soils which the mechanical auger could not sample during the initial program by using a weak acid digest to detect mobile metal ions.

One diamond drill hole was planned to test the andesite-rhyolite contact at a depth of 300m. The target was chosen for its proximity to an inferred Cambrian growth fault, its position to an apparent resistivity low, a coincident CRAE UTEM anomaly, and the presence of a large demagnetized zone. The hole was not drilled prior to relinquishment.

Further infill soil sampling was completed to test the VLF-EM/IP anomaly north east of Gowrie Park. Assay results were low (<23ppm Cu, <44ppm Pb, <128ppm Zn).

1998 (Vicary, 1998)

EL32/94 – Gowrie Park was relinquished by RGC Exploration Pty Ltd due to changes in corporate strategy.

1998-2000 (Denwar, 2000)

EL3/98– Lake Barrington was acquired by Pasminco Exploration in April 1998. ELA26/98 and EL16/99 were incorporated into EL3/98 on 15 March 1999 and 3 December 1999 respectively. All 4 previous diamond core holes from the Gowrie Park area were relogged. 1:5000 scale geological mapping was also completed in the Staverton Road to Gowrie Park areas. The aeromagnetics obtained by Plutonic and the ground magnetics obtained by RGC were stitched together.

2000-2001 (Denwer and Simpson, 2001)

1:10,000 scale mapping of the Cethana Alteration Zone was completed, including all grid lines and access roads in the Gowrie Park area. A complete partial leach soil sampling program was undertaken for the entire Cethana Alteration Zone grid with four polymetallic Pb-Zn-Ag-Cu-As anomalies defined in the Gowrie Park area.

2001-2002 (McNeil, 2002a; McNeil, 2002b)

No fieldwork completed. EL3/1998 was relinquished by Pasminco due to a lack of high priority targets, reduced exploration budget and Pasminco's near mine exploration focus at Rosebery.

2002-2006 (Reid and McDougall, 2004; Reid and McDougall, 2005; Reid and Campbell, 2005; McDougall and Allen, 2006)

EL29/2003 – Gowrie Park was relinquished by Frontier Resources (formerly TasGold) in September 2006. No work was completed over the Gowrie Park area.

Lake Barrington Prospect

1973-1976 (Anon, 1974; Barker, 1975)

The Lake Barrington prospect was identified by Asarco from stream sediment sampling in 1974. The prospect was defined by a 1300ppm Cu result. Follow-up stream sediment sampling gave strongly anomalous copper results (upto 3550 ppm Cu) in the southern creek. A small grid was cut over the area drained by the southern creek, and soil samples collected at 25m intervals. 3 anomalous areas were defined by a 400 ppm Cu contour including a 450m long anomaly in the northern portion of the grid.

1979-1981 (Purvis, 1981)

In 1980 CRAE commenced systematic exploration of the area, including gridding, mapping, rock sampling, magnetic and dipole-dipole IP surveys. Two diamond drill holes (DD80LB1 and DD80LB2) were put down by CRAE (Asarco-CRAE JV) on a 400m coincident soil geochemical / IP anomaly in Cambrian acid volcanic tuffs and lavas. Both drill holes intersected widespread dispersed copper mineralisation. DD80LB1 intersected what was reported as 0.1m band of semi-massive sulfide with fine grained altered tuff from 179.4m. The interval assayed 14% Cu, 0.75% Pb, 0.59% Zn, 84 g/t Ag and 1.35 g/t Au. Additional significant intersections included:

DD80LB1 – 0.30m @ 1.88% Cu from 18m;
0.60m @ 0.77% Cu from 21.7m;
15.2m @ 0.38% Cu from 31.5m.

DD80LB2 – 2.0m @ 0.37% Cu from 87m;
2.0m @ 0.76% Cu from 190m;
1.0m @ 0.56% Cu from 226m;
3.0m @ 0.50% Cu from 247m;
16.0m @ 0.31% Cu from 270m.

2.5 (Weber, 1983a)

Mise-a-la-masse, Crone Pulse EM and Self Potential geophysical surveys were conducted. Diamond drillhole DD82LB3 was drilled and intersected a stringer zone hosting significant copper mineralisation. Best intersections included:

DD82LB3 – 0.25m @ 2.4% Cu, 19 g/t Ag, 0.18 g/t Au from 14m;
0.18m @ 9.14% Cu, 52 g/t Ag, 0.04 g/t Au from 140.8m;
15.85m @ 1.17% Cu, 12 g/t Ag from 156.6m, including:
1.38m @ 3.43% Cu, 49 g/t Ag, 0.28 g/t Au from 156.6m;
5.15m @ 2.45% Cu, 23 g/t Ag, 0.18 g/t Au from 167.3m, including:
3.5m @ 3.2% Cu, 28 g/t Ag, 0.25 g/t Au from 167.3 m;

1982-1983 (Weber, 1983b)

Diamond drill hole DD83LB4 was sited 100m grid east of the significant intersection recorded in DD82LB3 at the eastern end of a Misse-a-la-masse anomaly. Best intersections were:

DD83LB4 – 1.0m @ 1.86% Cu, 5 g/t Ag from 48m;
0.5m @ 4.78% Cu, 36 g/t Ag, 3.16 g/t Au and 515 ppm Co from 225.8m.

1984-1986 (Temby, 1985; von Strokirch, 1986)

Downhole EM37 profiles conducted on DD80LB1 identified an off-hole conductor, worthy of further investigation. A revaluation of the geochemical dataset drew attention to anomalous results north of the previously explored prospect area. An extension to the grid was constructed in the northern area, and C-horizon soil samples collected at 25m intervals. A further copper anomaly was identified, but there was little interest in other metals.

A UTEM survey was conducted that covered the old and new portions of the grid. No anomalies of interest were identified. Revaluation of the downhole EM survey found that the off-hole conductor lay close to or above DD80LB1, therefore, the potential that it represented a significant deposit was reduced. CRAE recommended that no further work be conducted on the Lake Barrington prospect. EL7/73 was relinquished early in 1988.

1988-1989 (Jones, 1989)

EL10/88 was granted to Noranda in 1988. Regional Gravity and Magnetics were flown over the area. A revaluation of CRAE geophysical data suggested that the four holes drilled at Lake Barrington failed to test the major IP and Misse-a-la-masse target. Deeper drilling and downhole EM was planned.

1992-1997 (MacDonald, 1993; Rea, 1994; Close and MacDonald, 1995; Close, 1996; Close and Reid, 1997)

Plutonic Operations became operators of EL10/88 in March 1992. Plutonic mapped the Lake Barrington area at 1:10000 scale. DD80LB1 was also extended 100.3m to a final depth of 287.8m to test the coincident Misse-a-la-masse and IP anomaly. Best intersections were:

DD80LB1 – 1.3m @ 1.32% Cu, 0.21% Pb, 1.02% Zn from 222.0m;
1.0m @ 0.36% Cu, 0.57% Pb, 0.85% Zn from 239.0m;
3.2m @ 1.17% Cu, 1.04% Pb, 0.70% Zn from 242.9m;
2.8m @ 1.41% Cu, 0.12% Pb, 0.61% Zn from 246.1m.

A Chrono Pulse EM survey was conducted on the extended portion of DD80LB1, but failed to give any further response due to conductive sulfides.

The shores of Lake Barrington were mapped, and rock samples collected. Assays were disappointing, with best result: 342 ppm Cu, 100 ppm Zn, <5 ppm Pb. Plutonic relinquished the area covering the Lake Barrington prospect in August 1997.

Star of the West Mine

Early Days (Thureu, 1881; Nye, 1941; Jennings, 1979).

Gold was found in the Minnow district prior to 1891, where alluvial gold was discovered in a few locations within two miles of the Star of the West prospect on the southern side of the Minnow River. Shafts were sunk, and adits were driven in to determine the source of the gold on the northern slopes of Star of the West Hill. In one 17.4m shaft, gold was reported to occur in lenticular quartz veins hosted within a feldspar-hornblende porphyry, as well as within the friable matrix of the porphyry. The average yield of the shaft was reported to be 4.5 g/t Au.

1980-1981 (Clementson and Flis, 1983)

Reconnaissance rock chip sampling by CRAE in 1980 returned anomalous gold in outcrop (upto 1.18 g/t Au), with three of six samples returning >0.1 g/t Au. CRAE carried out very limited soil and rock chip sampling. Soil samples collected over a 200m interval ranged 12-56 ppb Au (average 33 ppb), whilst rock chips collected over the same line reflected higher background gold levels (16-80 ppb).

1987-1988 (Jack, 1988)

No gold values were reported in samples taken by Aberfoyle in the 88m-long Star of the East adit.

Gregory's Road Prospect

1984 (Vivian, 1984)

Gabbroic to tonolite intrusives associated with quartz tourmaline breccia veins and anomalous gold were located by Austamax at the Gregory's Road prospect in 1984, 4km south east of the Star of the West prospect. The intrusives and associated breccias were not fully assessed for their gold potential. Only 3 rock chips were collected, and only one sample was assayed, returning 0.24 g/t Au, in what was described as "brecciation + silicification + tourmaline".

North Gog Prospect

2001-2002 (Callaghan, 2001)

C-horizon soil data was collected over the West Gog Range, just south of EL43/2006 by Aurion Gold in April-May 2002. Silica-sericite altered volcanics with fine quartz-limonite-hematite veining similar to that of the Firetower prospect were mapped on many lines, particularly in the northeast of the grid. Large Au, As, Cu, Pb and Zn C-horizon soil anomalies of similar order to those over the Firetower prospect were identified on the West Gog grid. An 800 x 300m Au-Cu-As anomaly is open to the north and extends onto EL43/2006.

No previous modern exploration work has been completed over the North Gog grid apart from a small number of reconnaissance stream sediment samples.

In summary the EL43/2006 has been explored by:

- extensive phases of mapping,
- recent airborne geophysics (magnetics, radiometrics, partially by EM),
- various phases of stream, rock, soil and old workings geochemistry,
- various phases of mostly analogue-era ground geophysics (ground magnetics, IP, old EM methods),
- large grids of blanket-coverage fixed-loop TEM, and
- drilling at 11 prospects for 50 holes in all (Cethana West - 6 DDH, 1 RC; Cethana East - 7 DDH, 6 RC; Gowrie Park - 4 DDH, 6 RC; Lake Barrington - 4 DDH; Mt Roland - 2 DDH, Claude Road - 3 DDH, Hereford Prospect 1 DDH, Staverton Prospect - 1 DDH, 1 RC; Simonds Prospect 2 DDH; Beulah Barite Prospect 3 DDH, 3 RC).

3. EXPLORATION STRATEGY

Target

Newcrest is exploring for high grade gold deposits. In particular, the Henty style of gold deposit is considered an attractive target. However, exploration tools used can potentially find any one of a range of gold-rich polymetallic deposits of the style that occur in the Mt Read Volcanics.

An assumption is made that a potential target would not outcrop, and is likely to occur at considerable depth. Exploration targets are defined on the basis of geological, geochemical and geophysical anomalies, that may reflect the outer margins of a mineralised alteration system. Mineralised systems are often centralised within a much wider, though possibly structurally deformed, alteration envelope and these can be detected by geological mapping, geochemistry or geophysics. Common features of Mt Read Volcanic style gold-rich deposits that are being used to help define gold targets within the north eastern correlates of the Mt Read Volcanics include the following.

- 1) Deposits tend to be hosted near the top of the Central Volcanic Complex (CVC) stratigraphy and/or base of the Tyndall Group.
- 2) Adjacent to major Cambrian structures that form the boundaries to packages of CVC.
- 3) Alteration envelopes commonly of silica-sericite-pyrite+/-chlorite and/or chlorite-quartz-sericite+/-carbonate, strongly deformed into schists.
- 4) Pods of polymetallic massive sulphides, cherts or silica associated with and/or adjacent to mineralisation.
- 5) Anomalous gold, copper, lead zinc, barium, manganese elements and minerals such as magnetite.
- 6) Chargeable and resistive geophysical anomalies.

Strategy

The basic exploration strategy is to compile previous geological mapping, geochemical and geophysical work, combine with additional selective geochemical and geophysical surveys and interpret to define drill targets.

A review of previous exploration suggests there is still good potential for stratabound gold-rich polymetallic VHMS mineralisation to occur at depth beneath known mineralisation within the Cethana Alteration Zone. Newcrest will utilise Short Wave Infrared Spectroscopy (SWIRS) for onsite alteration mineral mapping within the Cethana Alteration Zone. Given, the strong sericite alteration throughout the footwall sequence of the CAZ, SWIRS is considered to be an effective method of geochemical vectoring, as it can relate to the most common and most widely distributed alteration mineral group in the alteration system.

In addition to this, much of the tenement being explored has dozens of historic workings and prospects, but very few have been drilled, and where drilled, the holes are generally short. Some of these are considered worthy of follow-up.

4. RECONNAISSANCE MAPPING

Reconnaissance geological mapping was conducted at the Lake Barrington prospect and within the Cethana Alteration Zone in the western portion of the exploration license. Reconnaissance field mapping was also completed over the Star of the West, Gregory's Road and North Gog prospects on the northern flanks of the Gog Range. For complete report refer to Appendix 1 and 2. For regional geological setting refer to previous exploration reports (Denwer and Simpson, 2001; Denwer and McNeil, 2001).

4.1 CETHANA ALTERATION ZONE

The NW-SE trending belt of schistose sericitic felsic volcanics is the largest outcropping Tasmanian Middle Cambrian volcanigenic alteration system outside Mt Lyell, yet its exploration history to date is plagued by a lack of demonstrated ore metals and an interpretation of the exposed alteration as the footwall only part of the system. Potential is centred on a contact mapped on the 1:25,000 Cethana sheet, between the altered felsic and rhyolitic CAZ rocks and an association of andesite lavas and volcanoclastics.

Outcrop coverage on the CAZ rocks is good but much of the contact area and the andesitic rocks mapped close to the contact are covered by Owen talus in the SE and Tertiary basalt in the NW.

Alteration intensity expressed as feldspar replaced by sericite and subsequent schistosity development appears to increase along strike to the SE within the CAZ, from about Staverton Road. In the SE part of the prospect the felsic schist is patchily exposed under Owen talus, as small escarpments with a NW-SE orientation and steep dip to the foliation. The Cethana sheet shows CAZ-andesite contacts on both Staverton Road and Days Road, about 1500 metres further along strike to the NW and projected under Tertiary basalt cover, however field checks revealed no andesitic rocks and no convincing contact on either traverse. Towards the NE margin of the CAZ in the Days Road-Staverton Road area, a schistose polymict quartz phyric volcanoclastic-lithic granule conglomerate with minor clasts of chert and hematitic silica outcrops and this could represent a thin top to the footwall volcanics and therefore be in the right stratigraphic position for a host horizon to mineralisation. The best exposure of the critical contact area seen on the excursion is down slope from Staverton Road, SE towards Dasher River. Here the schistose granule conglomerate is well exposed and appears to be interstratified with a green (?weakly chloritic) sericite schist with a remnant porphyritic feldspar texture poorly preserved. It is possible that these rocks have been mapped as andesitic volcanoclastics further to the NW where exposure is masked by the overlying basalt.

NE of these contentious rocks an unequivocal contact edge to the CAZ can be traced down slope from Staverton Road, where a feldspar hornblende quartz phyric crystal sandstone with patches of chlorite and a characteristic fresh, hard and dense outcrop preservation is patchily well exposed (Table 1) and marks the NE limit to the CAZ schists. The striking contrast in degrees of feldspar destruction and schistosity between the two units is strong evidence that the crystal sandstone is younger than the hydrothermal system and if the contact is not faulted in this area, then the stratigraphy youngs to the northeast. Texturally and by its characteristic outcrop form, the "Staverton Road crystal sandstone" is very similar to the Lynchard Tuff in the Henty-Queenstown region. The Lynchford Tuff is a near basal Tyndall Group marker horizon, particularly on the western side of the central volcanic belt where it marks the top of the recognised prospective stratigraphy. It also has an anomalous magnetic high signature due to its mafic content.

4.2 LAKE BARRINGTON

The prospect is located on the wet eucalypt native forest covered steeply sloping western side of Lake Barrington, immediately east of and down slope from the Wilmot farming district which is developed on a Tertiary basalt plateau (Photos 1 & 2). The prospect is defined by a copper in soil anomaly which extends for some 700 metres along a SW-NE trending grid but has a definite focus along a NW-SE trend at the NE and upslope end of the anomaly. Four diamond drill holes from three pads have tested the NE edge of the copper anomaly by drilling normal to the NW-SE trend, intersecting broad zones of low grade copper mineralisation including patchy very narrow (< 1 metre) ore grade intervals of copper and minor gold. The Wilmot 1:25,000 geology sheet shows that the prospect is hosted by felsic volcanics and volcanoclastics which are in contact with an untested andesite unit at the SW end of the grid

The rock type distribution comprises five broadly defined units, which from the NE upslope end are as follows.

- Polymict resedimented volcanoclastic-lithic granule conglomerate and sandstone.
- Rhyolite lava and associated felsic juvenile volcanoclastic sandstones.
- An association of marine sedimentary rocks with a shale base and grading up through fine dacitic and fine quartz sandstones.
- Dacite lava.
- Andesite lava.

One good quality outcrop within the dacite unit shows a northerly strike and westerly dip. This was the only site where reliable bedding/primary layering was observed. Subtle support for a northerly strike to the dacite can be interpreted from the eastern edge of the soil zinc data, which appear to map the distribution of the dacite. If representative of the prospect rocks, the dacite shows conformability with the NW plunging anticline mapped on the Wilmot sheet, NE of the prospect, and also suggests that the Owen Conglomerate unconformably overlies the volcanic sequence.

No evidence of volcanogenic or stratigraphically controlled alteration was seen in any unit. The dacite-andesite contact is abrupt with no intervening clastic unit seen and no evidence of either alteration or faulting at the contact. If the high soil zinc values are reflecting background levels within the dacite, then the andesite contact appears to trend NW-SE, suggesting a fault with an incised creek at the contact. The andesite is more deeply weathered than the felsic rocks and yields a more fertile red-brown ferrisol which supports a rainforest vegetation type (Photo 4). Where kernels of fresh andesite are preserved they exhibit fresh pristine unaltered lava textures, providing no incentive to extend the grid further SW.

Localised patchily pyrite altered rhyolite outcrops in the NW-SE trending creek (“Pyrite Creek”), at the NE edge of the most intense part of the copper anomaly. No sulphide or alteration was seen immediately either side of the creek, suggesting a linear trend which is probably fault controlled. The shape of the copper anomaly suggests dispersion down slope, particularly when it is recognised that both the soil profile and the creek incision are Holocene landscape development products occurring contemporaneously since the last ice age. Pre creek incision, a mineralised structure would have been several metres higher than it is today. Pyrite was also noted in a dacite sample (Table 1), further SW along the grid and close to a possible secondary zone of copper anomalism. Because there are only three grid lines extending this far to the southwest, and the upslope line is probably contaminated by Owen talus, it is not clear whether this anomaly represents another fault or a lobe of more distal soil anomalism sourced from “Pyrite Creek”.

4.3 STAR OF THE WEST

A cluster of old workings exists across the contact between a quartz feldspar porphyritic coherent volcanic (probable rhyolite lava) and a sequence of non volcanic quartz muscovite sandstones and siltstones. The contact is more complex than shown on the 1:25000 Gog sheet but there is plenty of outcrop to support fact mapping. In the vicinity of the three mapped DEPOSITS symbols, four substantial adits, nine shafts and winzes, with depths estimated by drop time to be in the range 5-25 metres, and several small trenches and aligned pits were located.



Photo 1: Star of the West Prospect – Kensies Hill looking north from Union Bridge Road

The workings are collared in both the rhyolite and the sediments, and are directly upslope from the DEPOSITS alluvial site in Minnow River. Minor sericite and possible silicification were noted in the rhyolite. The non-volcanic quartz-muscovite sandstones and siltstones have in places (especially on the northern slopes of Kensies Hill towards Minnow River) have undergone a high degree of recrystallisation and silicification, and consist of mid to dark grey, banded and strongly silicified quartzites. This response appears to be contact metamorphic, possibly due to the proximal intrusion of the quartz-feldspar porphyritic rhyolite. However, the target of the early miners appears to be quartz veining, minor amounts of which occur in and were sampled from both mullock heaps and outcrop. The main veining style appears to be sets of parallel quartz veinlets and fine ferruginous fractures hosted in brittle rhyolite with a characteristic blocky outcrop expression.



Photo 2: Star of the West Prospect – Well constructed adit within subtle se-altered, qtz-fsp porphyritic felsic lava.

4.4 GREGORY'S ROAD

No signs of hard rock mine workings or evidence of early prospecting were detected at the south and east sites and only possible small scale alluvial 'scratchings' were seen at the west site.

Outcrop is scarce in this area but there is sufficient surface float and subcrop in soil to enable useful mapping. The mafic intrusive was confirmed from float near the junction of Gregorys and Garden of Eden Roads (inside the EL), where it looks like equigranular dolerite in contact with quartz sandstone and deeply oxidised felsic volcanoclastics. Near the western edge of the intrusive float samples of quartz-Mn oxide-black tourmaline breccia were observed, and may correlate with reported gold bearing samples from previous exploration.

The east site also occurs in an area of similar (but less mafic input) soils to those at the south site. Good outcrop exists at the east site and although no sign of old diggings was detected, the site straddles a contact between quartz phyric resedimented polymict volcaniclastic conglomerate and a coherent feldspar quartz fine black ?pyroxene phyric dacite (perhaps a crystal pyroclastic or a lava). Locally the coherent volcanic is silicified and contains traces of pyrite. This rock type was sampled and is the only sulphide occurrence observed.

The west site is located on the bank of a north flowing creek draining Owen Conglomerate on Gog Range. Newly established pine and eucalypt forests are planted on both sides of the creek, which flows through a strip of preserved native forest about 100 metres wide. The creek is incised into rhyo-dacitic volcanics with porphyritic textures and the valley floor contains boulders and cobbles of water worn Owen Conglomerate, some of which look as if they may have been removed from the creek as over-size rejects from small scale alluvial prospecting.

4.5 NORTH GOG

The geology at the North Gog prospect changes abruptly northwards across the Minnow River representing a possible faulted contact. South of the Minnow River the lithology consists of felsic interbedded polymictic volcaniclastic conglomerates, wackes, sandstones and siltstones hosting fine undulose fracture controlled veining and associated iron and manganese oxides. North of the Minnow River, the geology consists predominately of ?potassic Ksp-Ch altered intermediate volcanic (andesitic lava). Outcrop exposure is poor with the valley floor of the Minnow River containing abundant Roland Conglomerate derived talus and coarse sediment, flanked by fairly steep slopes composed of the target rocks with varying thicknesses of overlying Roland talus extending down slope from the prominent talus capped east-west trending spur shown on the 1:25000 Gog sheet. The andesitic rocks, where exposed do exhibit the same iron and manganese fracture filled style veining observed south of the Minnow River (albeit to a lesser degree).

5. CETHANA ALTERATION ZONE CORE RELOGGING

Three historic diamond drill holes from the Cethana Alteration Zone were relogged at the Mineral Resources of Tasmania core library. All three holes were selected from the intensely quartz-chlorite-sericite-pyrite altered interpreted felsic volcanic and volcanoclastic “footwall sequence” of the Cethana Alteration Zone. One hole was selected from each of the three main prospects located from east to west throughout the southeast – northwest striking CAZ – DD77GPC1 (Gowrie Park), CED2 (Cethana East) and DD86CC13 (Cethana West). Copies of the scan logs are in Appendix 3.

The main features that were observed between the three prospects are as follows.

- 1) Tuffaceous rocks dominate over lavas towards the west. The eastern most prospect at Gowrie Park, is dominated by more massive qtz-fspar phyrlic ?lava or welded tuff, and minor qtz-fsp phyrlic volcanoclastic units. The central East Cethana prospect consists predominately of crystal rich tuffaceous siltstones and sandstones with minor felsic lavas, while the western most prospect, Cethana West consists almost entirely of coarse tuffaceous sandstone with a greater lithic component.
- 2) Alteration in general is zoned from east to west from Se[±]-Qtz-Py to Se-Ch-He to Ch-Ab-He-Se. Strongest intensity of Se-Qtz-Py alteration was observed at the eastern most prospect at Gowrie Park and is incidentally associated with strongest gold anomalism throughout the prospect. Alteration in drilling at the western most prospect was defined by moderate to strong pervasive Ch-Ab alteration with pervasive hematite to hematite dusting of albite at Cethana West. If the apparent zonation in alteration holds true across the prospect, it provides a vector towards the higher temperature part of the system toward the east of the CAZ.



Photo 3: DD86CC13 - Pervasive chlorite with hematite dusted albite altered volcaniclastic sandstone (Cethana West).

- 3) The intensity of foliation in the interpreted felsic “footwall sequence” decreases from west to east. This appears to reflect the lithological control of the host rocks during alteration and subsequent deformation. The tuffaceous sandstone units in the western and central portions of the CAZ at Cethana West and Cethana East had a higher internal permeability and porosity which influenced their susceptibility to a higher degree of pervasive alteration. This then completed the ground preparation for subsequent Devonian deformation. The more massive felsic lavas at Gowrie Park were weakly sericitised and feldspar phenocrysts have been replaced by pale green sericite due to lower degree of permeability. Only a weak mineral lineation has developed in the massive lava units.



Photo 3: DD86CC13 – Strongly foliated qtz-sericite lithic schist (Cethana West).

- 4) Sulfide content generally decreased towards the west, however the central portion of the CAZ contained increased levels of pyritic sulfides. Only trace pyritic sulfides were recorded at Cethana West, while at Gowrie Park, Quartz-pyrite-galena-sphalerite stringers were more common.



Photo 3: DD77GPC1 – Poorly foliated se-altered quartz-phyric porphyry or welded ignimbrite (Gowrie Park).



Photo 3: DD77GPC1 – Quartz (Dark blue/grey)-pyrite-galena-sphalerite veinlets in sericite altered qtz-fsp phyric welded sandstone or felsic lava.

Scan graphic logs were completed and are at Appendix 3. Summary logs for each of the three holes has been provided below.

DD77GPC1 (Gowrie Park Prospect)

- 0 - 5.6m:** Light green/yellow, se-altered, moderately oxidised massive qtz-fsp phyrlic **porphyritic volcanic or welded tuff**.
- 5.6 – 40.0m:** Dark brown, strongly sericitised+/-qtz-py, massive to v. weakly foliated, qtz-fspar phyrlic **volcaniclastic sandstone**. Stringer zone py-sph-gal-qtz veins 8% sulfides, 4% py, 4% sph+gal (26.5-29m). Anastomosing sph-gal-py stringer zone, partially brecciated, in qtz-se cement infill 4% py 3% gal (34.9m).
- 29.6 - 32.1m:** Intensely foliated and broken, se-altered **fault shear zone**.
- 40.0 - 61.0m:** **Mineralised Zone** – Intense se-py-qtz altered **volcaniclastic sandstone**. Multiple intense 2m zones of qtz-se-py alteration. Finely disseminated pyrite 10%, trace gal, cpy and he.
- 61.0 - 81.0m:** Dark brown, dominantly se-altered, abundantly qtz-phyric, coarse grained **qtz-porphyry**. 1-2% dispersed hematite. Trace disseminated py-gal-sph.
- 81.0 - 91.0m:** Pinkish/brown, se-altered, siliceous, weakly schistose, qtz-fsp-phyric, lithic-rich **volcaniclastic sandstone**. Patchy zones of dark grey silicification. 2-3% gal>py>cpy in stringers and patches.
- 91.0 – 107.1m:** Light, pale brown/red, se-altered, fine-grained qtz-fsp phyrlic **volcaniclastic sandstone**. 1-2% py>sp,gal in thin stringers.

CED2 (Cethana East Prospect)

- 0 – 6.0m:** Precollar – no core recovery.
- 6.0 – 17.0 m:** Light green/yellow, moderately oxidised, strong se+/-qtz altered, strongly schistose, qtz-fsp phyrlic **schist**.
- 17.0 - 40.0 m:** Light, pale pink/cream, moderate he+/-se altered, weakly siliceous, fine-grained, weakly schistose, moderately brecciated **tuffaceous sandstone**.
- 40.0 – 40.5 m:** **Fault zone**.
- 40.5 – 57.0 m:** Pale green/cream, se-altered, strongly schistose, fine-grained, felsic, **tuffaceous siltstone**.

- 57.0 – 70.4 m:** Pale green/brown, strong se-altered, qtz-fsp phyrlic **volcaniclastic sandstone**. Increasing schistosity downhole.
- 70.4 – 79.0 m:** Medium green/grey, he-ch altered, medium grained, qtz-fsp phyrlic **volcaniclastic sandstone**.
- 79.0 – 86.2 m:** Pale grey/green, intensely schistose, strong ch-si altered, fine-grained **volcaniclastic siltstone**. Local zones of dark grey silica alteration.
- 86.2 – 88.0 m:** Light pink/cream, he-altered, medium grained, felsic **volcaniclastic sandstone**. Strong he veining.
- 88.0 – 109.0 m:** Dark green, moderate ch-altered, moderately foliated, fine to medium grained, lithic-rich, **volcaniclastic sandstone** and interbedded **siltstone**.
- 109.0 – 124.6 m:** Pale brown/cream, weak se-he altered, medium to coarse grained qtz-phyric felsic **volcaniclastic sandstone**. Moderately foliated. 5% py in deformed stringer blebs.
- 124.6 – 127.0 m:** Pale yellow/orange, weak ch-altered, fsp-pyx phyrlic **intermediate to mafic dyke**.
- 127.0 – 158.8 m:** Pale brown/cream, se-altered, medium to coarse-grained, moderately foliated felsic **volcaniclastic sandstone**. Upto 5% py as veinlets, and 2% as fine disseminations and deformed blebs.
- 158.8 -166.7 m:** Dark red/purple, he-si altered, fine to medium-grained felsic **volcaniclastic sandstone**.
- 166.7 – 168.1 m:** **Semi-massive pyrite zone**. 5-10% py in veinlets associated with silicification.
- 168.1 - 195.7 m:** Medium purple/red, hematitic, diffuse he-se altered, medium grained-gritty, qtz-lithic rich, **volcaniclastic sandstone**. 1-2% py in deformed stringers. Py veinlets associated with silicification around 187.4m.
- 195.7 – 204.4 m:** Banded, sericitic-hematitic, strongly foliated, qtz-fsp rich felsic **volcaniclastic sandstone**. 1-2% pyrite.
- 204.4 – 207.2 m:** **Fault zone**.
- 207.2 – 207.7 m:** Light yellow/green, weakly vesicular, cb-ch amygdoidal **andesitic dyke**.
- 207.7 – 264.0 m:** Light yellow/green, se+/-he altered, fine grained, qtz-fsp phyrlic **felsic volcanic(lava?)**. 3-5% py, upto 10% py in deformed stringer (231.6m).
- 264.0 – 265.5 m:** **Fault zone**.

- 265.5 – 279.0 m:** Light pink/grey, weak se-altered, medium grained qtz-phyric **felsic volcanic (lava?)**. 3% py in deformed veinlets, sub parallel to cleavage.
- 279.0 – 295.0 m:** Light cream/green, qtz-fsp phyric, fine grained **felsic volcanic**. Fine grained ch-py veinlets.

DD86CC13 (Cethana West Prospect)

- 0 -9.0 m:** Precollar, no core recovery.
- 9.0 – 16.8 m:** Light cream/green, moderately oxidised, strong qtz-se-cy altered (argillic), medium grained, schistose, felsic **volcaniclastic sandstone**.
- 16.8 – 26.1 m:** Light to medium grey/green, se-ch+/-qtz altered medium grained, fsp xtal-rich and lithic-rich **volcaniclastic sandstone**. Minor diss py 2%.
- 26.1 – 26.3 m:** Dark black/brown, schistose, strongly disseminated **pyrite zone**. Limonitic/manganiferous.
- 26.3 – 29.3 m:** Light to medium grey/green, se-ch+/-qtz altered medium grained, fsp xtal-rich and lithic-rich **volcaniclastic sandstone**. Strongly pyritic, disseminated and veined pyrite 2-3%.
- 29.3 – 34.3 m:** Dark black/brown, strongly pyritic, medium to coarse grained xtal and lithic-rich **volcaniclastic sandstone**. Upto 2% pyrite.
- 34.3 – 36.8 m:** Medium green, moderate chlorite altered, qtz-phyri, lithic-rich, moderately foliated **volcaniclastic sandstone**.
- 36.8 – 108.2 m:** Medium to dark green/grey, pervasive ch-altered +/- patchy he-dusted, qtz-fsp phyric **volcaniclastic sandstone**. Cb-qtz-gal veins.
- 108.2 – 114.0 m:** Pale brown, strong qtz-ch-ksp-se+/-py altered, coarse, monomict, near monomict, clast supported **volcanic breccia**. Minor py. Trace cpy and gal.
- 114.0 – 120.0 m:** Dark green/brown, strong pervasive ch+/-se altered, coarse lithic, crystals-rich **volcaniclastic sandstone**. Trace veined and diss py <1%.
- 120.0 – 126.0 m:** Medium brown/cream, qtz-sericite altered, strongly foliated, lithic **schist**.
- 126.0 – 147.0 m:** Dark green, strong pervasive ch-altered, mixed coarse and fine grained lithic and crystal-rich **tuff**. Trace disseminated py and gal.

- 147.0 – 201.0 m:** Medium green to pink/red, mottled ch+/-he-ksp-se altered, polymict, moderately schistose, lithic, qtz crystal-rich **volcaniclastic sandstone**. Trace disseminated py.
- 201.0 – 203.5 m:** Medium grey/green, weakly siliceous/cherty **volcaniclastic siltstone**. Trace py.
- 203.5 – 206.4 m:** Medium green, moderate se-altered, polymict, lithic, vein qtz-rich **volcaniclastic sandstone**. Trace py.
- 206.4 – 229.5 m:** Intermittent light to dark grey, weak qtz+/-se altered, fine grained, thinly bedded siliceous **siltstone** interbedded with minor coarse qtz-xtal and lithic-rich **volcaniclastic sandstone**. Qtz-cb veinlets. Trace diss py.

In addition, six historic RC percussion holes GPRC1-2 and GPRC5-8 drilled at the interpreted contact between the felsic ‘footwall sequence’ and overlying ‘hangingwall andesite’ were also scan logged. Summary logs for each of the six RC holes are presented below.

GPRC1

- 22 - 37m** Medium green/yellow, limonite stained, quartz-phyric rock.
- 37 – 46m** Medium green, unoxidised, qtz-se altered, feldspar-phyric andesitic rock
- 46 – 51m** Medium green, unoxidised, qtz-se altered, feldspar-phyric andesitic rock. Limonite staining.
- 51 – 58m** Medium green, weak se-altered quartz-feldspar phyric andesite.
- 59 - 79m** Light pink/purplish, strongly siliceous rhyolitic volcaniclastic. Upto 10% vein quartz fragments.

GPRC2

- 16 – 32m** Medium green, chlorite altered, fine to medium grained, qtz-phyric volcaniclastic sandstone. Limonite staining.
- 32 – 34m** Medium purple-green volcaniclastic sandstone.
- 34 - 35m** Quartz vein.
- 35 – 61m** Moderate green, pink/reddening of feldspar, quartz-phyric andesitic lava?

GPRC5

20 – 58m Dark green/red, fine to medium grained, qtz-phyric andesite. Minor light white/pinkish chert or quartzite fragments.

GPRC6

20 – 31m Dark green fine grained, andesite. Weak he-ab altered feldspar phenocrysts.

GPRC7

24 -38m Dark green, chlorite altered, fine to medium grained andesitic volcanoclastic sandstone.

38 – 79m Red/purple hematitic, fine to medium grained rhyolitic volcanoclastic sandstone. (Jasper fragments?) Strong quartz veining.

GPRC8

32 – 45m Dark green chlorite altered, fine to medium grained andesitic volcanoclastic. Minor quartz veining.

45 -49m Light green +/- red moderately sericitic andesitic volcanoclastic.

49 – 50m Quartz veining.

50 – 57m Red/green hematitic ?chert.

57 – 60m Dark green andesitic volcanoclastic sandstone.

60 – 79m Red/purple rhyolitic volcanoclastic. Strong quartz veining.

6. SURFACE GEOCHEMISTRY

6.1 RECONNAISSANCE ROCK CHIP SAMPLING AND PETROGRAPHY

14 reconnaissance rock chip samples NTR072-NTR085 were collected from three gold and gold-copper prospects within the Gowrie Park EL. One sample was collected from the Gregory's Road prospect, and 13 samples were taken from the Star of the West prospect. Results were disappointing. Results are summarised in Table 1.

Of the 14 reconnaissance rock chip samples collected, three selected samples were submitted to Mason Geoscience Pty Ltd for petrographic analysis. A full report has been compiled at Appendix 4.

Two samples (NTR072 and NTR085) were identified as dacite to rhyolite porphyry, with a shallow intrusive mode of emplacement which was suggested based on textural and compositional characteristics. Sample NTR077 (Star of the West) was identified as a non-welded felsic ash-crystal tuff/tuffite.

Alteration of dacitic porphyry sample NTR072 (Gregory's Rd) was described as propylitic-type (Ch-Se-Ab+/-Ksp-Leu-Rut-Py) hydrothermal alteration.

Preserved pyritic sulfides were identified in Potassic-?Propylitic altered samples NTR072 (Gregory's Rd) and NTR077 (Star of the West). Low to high intensity weathering has affected most samples

6.2 SOIL SAMPLING

A total of 168 C-horizon soil samples were collected over the Gowrie Park EL during the reporting period. Samples were collected over three grid lines with a total pegged length of 2.2 line kms at North Gog prepared by Rogers Exploration Services, as well as from five 'bush lines' within open mature pine forest at Gregory's Road and the Star of the West prospects. Samples were taken from the intervals shown below at approximately 25m intervals. This soil sampling program was designed to provide better target definition for drill planning for the eastern portion of the Gowrie Park EL.

Soils tend to be thin, low fertility, acidic, skeletal duplex podsoles having developed in a post glaciation environment on Cambrian aged rhyolite-andesite volcanics. All samples taken are classed as "C-horizon" on the basis that they are basal soils and include some rock fragments from the underlying bedrock.

Assays for soil samples were completed by Australian Laboratory Group (ALS) at the Orange ALS laboratory facility. Standards were submitted at a ratio of 1:20 with every batch of samples. Analytical techniques used on the samples submitted to ALS were Au-AA26 for gold and ME-ICP41s for a suite of elements including Au, Cu, Pb, Zn, Ag, As, Ba, Mn, Fe, S, Bi, Cd, Co, Mo, Sb and Tl.

6.2.1 North Gog Soil Sampling

A total of 56 C-horizon soil samples (NTS0497-NTS0522) were collected over 2.2 line kms on three cleared grid lines at the North Gog Au-Cu prospect, in the eastern portion of the Gowrie Park EL. The soil sampling program was aimed at extending the northern extension of an historic Au-Cu-As+/-Pb-Zn soil anomaly identified by Aurion Gold in 2002. Samples were collected at approximately 25m intervals. Due to thick sequences of Quaternary glacial and periglacial cover, adequate C-horizon samples could not be obtained from the central portion of the western-most grid line. The results are summarised in Table 2. The results show a weak coincident Au, Cu +/- Zn anomaly (165 x 250m) located in the southern portion of the grid extending 165m northwards from an historic Au-Cu-As+/-Pb-Zn anomaly identified by Aurion Gold on historic EL 12/2001

Gog, which is currently held by Greatland Proprietary Limited under EL26/2004 (Figures 2 and 3). The Au-Cu anomalism is principally constrained to rhyolitic-dacitic volcanics similar to those lithologies that host the West Gog anomalism and Firetower prospects. The anomaly is open to the east, and has the potential to extend westward beneath the talus covered slopes of Mt Roland. The anomaly appears to be truncated to the north, where an abrupt change in lithology may reflect a structural discontinuity. While the Aurion Gold anomaly appears to extend northward for an additional 165m, the anomalism at North Gog is of much lower tenure (upto 40 ppm Cu, 8 ppb Au and 55 ppm Zn), and further, because of its limited extent, it is unlikely to represent a large tonnage target that would be of interest to Newcrest Mining Limited.

6.2.2 Star of the West Soil Sampling

At Star of the West, a total of 84 C-horizon soil samples (NTS0411-NTS0494) were collected on three north-south oriented 'bush lines' at 200m spacings. The bush lines were accessible through recently thinned, half-grown pine plantation. No cutting of grid lines were required, and samples were collected at 25m intervals. The sampling program aimed to follow up gold anomalism in soils (56 ppb Au) and rock chips (1.18 g/t Au) delineated by CRA Exploration over the historic Star of the West workings.

The soil sampling program, failed to replicate the anomalism identified by CRA Exploration in 1980 at the contact between quartz feldspar porphyritic volcanic and a sequence of non volcanic quartz muscovite sandstones and siltstones. The program has adequately closed off the anomaly to the east, with only one sample (NTS0435) returning anomalous gold in soils (0.257 g/t Au). A weak, but broad 400m-long copper anomaly, up to 85 ppm Cu, is apparent on the eastern most line. While the CRAE anomaly is still open to the north, south and east, the absence of any apparent hydrothermal alteration, visible veining or mineralisation in outcrop and no clear explanation for the gold anomalism, it is unlikely that the Star of the West prospect holds the potential of representing a large tonnage gold target.

6.2.3 Gregory's Road Soil Sampling

Two "bush lines" of C-horizon soils totaling 28 samples (NTS0385-NTS0410 and NTS0495-NTS0496) were completed over the Gregory's Road prospect. The southern east-west trending line aimed at testing the contact between a mafic volcanic (equigranular dolerite) and quartz sandstone / deeply oxidised felsic volcanoclastics. The northern line, trending north-northwest, straddles the contact between a quartz-phyric, resedimented volcanoclastic conglomerate, and a pyroxene-phyric dacite (crystal-rich pyroclastic or lava) in which traces of pyrite were observed. Assay results across both lines were poor, and no definitive gold anomalism was identified. The best result, 0.01 g/t Au was detected in NTS0385. A weak copper anomaly upto 304 ppm Cu is apparent at the western end of the southern line. No further work is recommended at this prospect.

TABLE 1: ROCK CHIP SAMPLES – EL43/2006
 (* AGD 1966/55 AMG)

Sample ID	Easting		Northing		Description	Assays											
	AMG*	AMG*	AMG*	AMG*		Au Au- AA26	Cu ME- ICP41s	Pb ME- ICP41s	Zn ME- ICP41s	As ME- ICP41s	Ag ME- ICP41s	Ba ME- ICP41s	Mn ME- ICP41s	Fe ME- ICP41s			
					METHOD LDETECTION	0.01	1	2	2	2	2	2	2	2	2	5	0.01
					UNITS	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
NTR072	449790	5406463	5406463	5406463	qtz fspar ?pyx phyrlic coherent volc, trace py	-0.01	5	8	9	5	-0.2	50	289	5.47			
NTR073	445370	5409288	5409288	5409288	composite vein qtz chips, shaft mullock, ss host	-0.01	2	3	25	6	-0.2	100	466	5.63			
NTR074	445369	5409279	5409279	5409279	quartz feldspar porphyritic rhyolite lava	-0.01	4	-2	2	2	-0.2	50	191	1.56			
NTR075	445320	5409298	5409298	5409298	quartz feldspar porphyritic rhyolite lava	-0.01	3	17	33	4	-0.2	100	1345	1.76			
NTR076	445343	5409224	5409224	5409224	quartz feldspar porphyritic rhyolite lava	-0.01	1	110	88	3	-0.2	170	312	1.65			
NTR077	445349	5409177	5409177	5409177	qtz fspar porph rhy lava, fine vlt, se speckling	-0.01	5	7	35	3	-0.2	80	305	1.93			
NTR078	445137	5409203	5409203	5409203	qtz fspar porph rhyolite lava, minor qtz veining	-0.01	15	4	9	-2	-0.2	50	121	1.03			
NTR079	445137	5409203	5409203	5409203	qtz fspar porph rhyolite lava, fine lmt fractures	-0.01	6	-2	5	2	-0.2	90	56	0.48			
NTR080	445151	5409211	5409211	5409211	quartz feldspar porphyritic rhyolite lava	-0.01	1	6	49	2	-0.2	90	110	1.53			
NTR081	445247	5409172	5409172	5409172	qtz fspar porphyritic rhyolite lava, fine veinlets	-0.01	5	4	15	4	-0.2	50	78	0.67			
NTR082	445529	5408987	5408987	5408987	qtz fspar porphyritic rhyolite lava, fine veinlets	-0.01	3	12	12	6	0.2	60	490	0.72			
NTR083	445498	5408977	5408977	5408977	composite vn qtz chips, shaft mullock, rhy host	-0.01	16	9	23	8	0.3	40	304	1.75			
NTR084	445498	5408977	5408977	5408977	composite vn qtz chips, shaft mullock, rhy host	-0.01	40	23	94	12	-0.2	590	4390	4.66			
NTR085	445498	5408977	5408977	5408977	qtz fspar porphyritic rhyolite lava, shaft mullock	-0.01	5	10	28	5	-0.2	60	179	1.78			

TABLE 2: SOIL SAMPLES – EL43/2006
 (* AGD 1966/55 AMG)

Sample ID	Easting		Northing		Description METHOD LDETECTION	Assays										
	AMG*	AMG*	AMG*	AMG*		Au Au- AA25 0.001 ppm	Cu ME- ICP41s 1 ppm	Pb ME- ICP41s 2 ppm	Zn ME- ICP41s 2 ppm	As ME- ICP41s 2 ppm	Ag ME- ICP41s 0.2 ppm	Ba ME- ICP41s 10 ppm	Mn ME- ICP41s 5 ppm	Fe ME- ICP41s 0.01 %		
NTS0385	449595	5406148	5406148	5406148	mafic intrusive	0.01	62	20	58	2	0.2	230	2150	8.54		
NTS0386	449616	5406151	5406151	5406151	mafic intrusive	-0.001	19	10	52	2	-0.2	360	3370	8.48		
NTS0387	449643	5406155	5406155	5406155	mafic intrusive	-0.001	14	10	54	3	-0.2	310	4300	10		
NTS0388	449665	5406158	5406158	5406158	mafic intrusive	-0.001	24	8	48	2	0.2	320	2810	6.82		
NTS0389	449687	5406160	5406160	5406160	mafic intrusive	0.001	33	13	34	6	0.2	240	2930	9.55		
NTS0390	449573	5406148	5406148	5406148	mafic intrusive	-0.001	30	11	53	4	0.5	420	4150	8.38		
NTS0391	449550	5406149	5406149	5406149	mafic intrusive	-0.001	23	6	33	5	-0.2	150	1210	8.74		
NTS0392	449525	5406150	5406150	5406150	mafic intrusive	0.006	15	9	21	3	0.2	110	524	7.19		
NTS0393	449500	5406152	5406152	5406152	mafic intrusive	0.001	66	68	151	3	0.4	200	2110	8.39		
NTS0394	449485	5406167	5406167	5406167	mafic intrusive	-0.001	67	83	175	2	0.6	100	770	8.64		
NTS0395	449455	5406160	5406160	5406160	mafic intrusive	0.002	304	127	281	3	0.4	120	2060	8.99		
NTS0396	449419	5406154	5406154	5406154	?	-0.001	150	60	122	3	0.5	90	627	8.5		
NTS0397	449396	5406146	5406146	5406146	?	-0.001	108	54	113	2	-0.2	60	394	8.27		
NTS0398	449863	5406639	5406639	5406639	dacitic volcanics	0.002	48	15	12	12	0.2	60	861	5.46		
NTS0399	449877	5406626	5406626	5406626	dacitic volcanics	-0.001	13	13	13	8	-0.2	60	1430	5.13		
NTS0400	449893	5406597	5406597	5406597	dacitic volcanics	0.002	35	17	21	4	-0.2	170	2060	7.48		
NTS0401	449901	5406580	5406580	5406580	dacitic volcanics	-0.001	22	9	9	4	-0.2	150	1900	6.32		
NTS0402	449910	5406564	5406564	5406564	dacitic volcanics	-0.001	49	9	12	6	0.2	50	3610	11.8		
NTS0403	449924	5406542	5406542	5406542	polymict volc cgl	-0.001	25	24	31	16	0.3	80	3150	12.85		
NTS0404	449937	5406521	5406521	5406521	polymict volc cgl	-0.001	19	30	22	7	-0.2	70	1700	10.45		
NTS0405	449849	5406674	5406674	5406674	dacitic volcanics	-0.001	16	9	9	8	0.2	40	234	4.72		
NTS0406	449845	5406684	5406684	5406684	dacitic volcanics	-0.001	19	13	13	4	0.3	40	219	6.75		
NTS0407	449820	5406710	5406710	5406710	dacitic volcanics	-0.001	17	10	9	5	-0.2	50	365	5.29		
NTS0408	449806	5406745	5406745	5406745	dacitic volcanics	-0.001	31	12	12	12	-0.2	40	232	6.9		
NTS0409	449795	5406752	5406752	5406752	dacitic volcanics	-0.001	77	20	16	10	0.2	80	547	8.61		

TABLE 2 - Continued
SOIL SAMPLES – EL43/2006
 (* AGD 1966/55 AMG)

Sample ID	Easting		Northing		Description	Assays										
	AMG*	AMG*	AMG*	AMG*		Au	Cu	Pb	Zn	As	Ag	Ba	Mn	Fe		
	ppm	ppm	ppm	ppm		ME-ICP41s										
NTS0410	449782	5406767	5406767	5406767	dacitic volcanics	0.001	98	79	36	18	-0.2	120	928	11.7		
NTS0411	445400	5409479	5409479	5409479	qtz porph rhyolite	-0.001	14	20	27	3	-0.2	60	613	3.12		
NTS0412	445399	5409457	5409457	5409457	qtz mica sandstone	0.001	25	18	29	3	-0.2	70	650	3.79		
NTS0413	445407	5409433	5409433	5409433	qtz mica sandstone	-0.001	36	23	40	6	-0.2	80	326	4.51		
NTS0414	445402	5409387	5409387	5409387	qtz mica sandstone	-0.001	63	26	69	2	-0.2	100	837	5.16		
NTS0415	445408	5409366	5409366	5409366	qtz mica sandstone	-0.001	38	36	39	4	-0.2	90	1140	4.9		
NTS0416	445399	5409339	5409339	5409339	qtz porph rhyolite	0.005	9	59	28	6	-0.2	150	2320	3.78		
NTS0417	445396	5409317	5409317	5409317	qtz porph rhyolite	-0.001	29	18	22	5	-0.2	60	1520	6.38		
NTS0418	445415	5409416	5409416	5409416	qtz porph rhyolite	0.001	85	34	70	5	0.2	210	1845	7.38		
NTS0419	445395	5409294	5409294	5409294	qtz porph rhyolite	-0.001	30	34	29	6	-0.2	100	2460	5.78		
NTS0420	445399	5409250	5409250	5409250	qtz mica sandstone	-0.001	36	25	31	5	-0.2	40	163	4.96		
NTS0421	445199	5409278	5409278	5409278	qtz porph rhyolite	-0.001	3	29	22	-2	0.2	70	1260	1.52		
NTS0422	445197	5409295	5409295	5409295	qtz mica sandstone	-0.001	9	25	22	-2	-0.2	40	589	2.47		
NTS0423	445203	5409333	5409333	5409333	qtz porph rhyolite	0.009	17	68	26	5	0.2	60	1085	4.1		
NTS0424	445197	5409350	5409350	5409350	qtz porph rhyolite	-0.001	3	12	14	-2	0.2	40	288	1.85		
NTS0425	445200	5409375	5409375	5409375	qtz porph rhyolite	-0.001	3	6	15	2	-0.2	50	519	2.15		
NTS0426	445196	5409403	5409403	5409403	qtz porph rhyolite	0.002	4	9	16	-2	0.2	30	353	2.19		
NTS0427	445197	5409423	5409423	5409423	qtz porph rhyolite	-0.001	25	37	20	7	0.2	60	746	5.42		
NTS0428	445204	5409449	5409449	5409449	qtz porph rhyolite	-0.001	35	30	23	9	-0.2	70	704	5.75		
NTS0429	445198	5409487	5409487	5409487	qtz porph rhyolite	-0.001	26	34	20	9	0.4	80	814	5.32		
NTS0430	445201	5409540	5409540	5409540	qtz mica sandstone	-0.001	10	14	13	3	-0.2	30	302	3.15		
NTS0431	445200	5409515	5409515	5409515	polymict gravel/fill	-0.001	14	14	18	3	0.2	40	287	2.99		
NTS0432	445206	5409557	5409557	5409557	qtz porph rhyolite	-0.001	2	11	15	-2	0.2	40	272	2.26		
NTS0433	445205	5409582	5409582	5409582	qtz porph rhyolite	0.001	3	6	15	-2	-0.2	40	470	1.98		
NTS0434	445195	5409603	5409603	5409603	qtz porph rhyolite	-0.001	7	11	36	-2	-0.2	120	1450	2.46		

TABLE 2 - Continued
SOIL SAMPLES – EL43/2006
 (* AGD 1966/55 AMG)

Sample ID	Easting		Northing		Description METHOD LDETECTION	Assays									
	AMG*	AMG*	AMG*	AMG*		Au	Cu	Pb	Zn	As	Ag	Ba	Mn	Fe	
						Au-AA25 0.001	ME- ICP41s 1	ME- ICP41s 2	ME- ICP41s 2	ME- ICP41s 2	ME- ICP41s 2	ME-ICP41s 10	ME- ICP41s 5	ME-ICP41s 0.01	
NTS0435	445400	5409484			polymict gravel/fill	0.257	18	46	39	4	0.2	170	2430	2.91	
NTS0436	445400	5409530			polymict gravel/fill	-0.001	22	24	25	6	0.2	80	1120	4.46	
NTS0437	445408	5409571			alluvial gravel	-0.001	10	31	32	3	0.2	70	646	3.04	
NTS0438	445410	5409592			alluvial gravel	-0.001	6	17	22	3	-0.2	50	215	2.22	
NTS0439	445397	5409621			alluvial gravel	-0.001	10	31	29	2	0.2	80	580	3.56	
NTS0440	445400	5409652			alluvial fine sed	0.03	15	35	35	-2	0.2	110	1620	3.04	
NTS0441	445403	5409673			alluvial fine sed	0.003	12	32	43	-2	0.2	120	1000	2.82	
NTS0442	445404	5409705			alluvial fine sed	0.001	11	23	28	-2	0.2	110	226	1.8	
NTS0443	445405	5409557			alluvial gravel	-0.001	10	28	23	-2	0.3	100	1580	2.43	
NTS0444	444999	5409408			qrtz porph rhyolite	0.002	3	13	18	-2	0.3	40	39	1.84	
NTS0445	445001	5409378			?	-0.001	4	15	17	2	-0.2	60	249	1.41	
NTS0446	445004	5409345			qrtz porph rhyolite	-0.001	8	10	21	8	-0.2	50	504	1.51	
NTS0447	445004	5409320			qrtz porph rhyolite	-0.001	8	24	29	2	-0.2	70	1185	2.06	
NTS0448	445009	5409292			qrtz porph rhyolite	-0.001	6	55	23	-2	0.2	70	967	1.61	
NTS0449	445000	5409262			qrtz porph rhyolite	-0.001	6	57	14	-2	0.2	70	841	1.41	
NTS0450	444997	5409247			qrtz porph rhyolite	-0.001	7	37	16	2	-0.2	50	940	1.49	
NTS0451	445000	5409230			qrtz porph rhyolite	-0.001	1	5	3	-2	-0.2	40	50	0.43	
NTS0452	444992	5409550			qrtz porph rhyolite	-0.001	4	11	21	2	0.2	100	613	2.05	
NTS0453	444990	5409570			qrtz porph rhyolite	-0.001	3	9	25	-2	-0.2	130	451	2.36	
NTS0454	445002	5409590			qrtz porph rhyolite	-0.001	5	14	23	-2	-0.2	80	137	2.79	
NTS0455	445003	5409525			qrtz porph rhyolite	-0.001	3	58	31	2	0.2	140	949	1.77	
NTS0456	445007	5409496			qrtz porph rhyolite	-0.001	7	99	40	2	-0.2	270	1570	2.94	
NTS0457	445008	5409474			qrtz porph rhyolite	0.001	4	33	22	-2	-0.2	130	347	1.84	
NTS0458	445393	5409181			qtz mica sandstone	0.005	36	52	26	8	-0.2	120	3060	5.47	
NTS0459	445395	5409198			qtz mica sandstone	-0.001	17	32	19	4	-0.2	90	1935	4.7	

TABLE 2 - Continued
SOIL SAMPLES – EL43/2006
 (* AGD 1966/55 AMG)

Sample ID	Easting		Description METHOD LDETECTION	Assays										
	AMG*	AMG*		Au	Cu	Pb	Zn	As	Ag	Ba	Mn	Fe		
				Au-AA25 0.001	ME- ICP41s 1	ME- ICP41s 2	ME- ICP41s 2	ME- ICP41s 2	ME- ICP41s 2	ME- ICP41s 10	ME- ICP41s 5	ME- ICP41s 0.01		
NTS0460	445405	5409168	qtz mica sandstone	0.003	49	23	31	10	0.2	80	2470	7.48		
NTS0461	445393	5409141	qtz mica sandstone	0.001	47	23	33	13	-0.2	20	463	6.86		
NTS0462	445395	5409115	qtz porph rhyolite	0.003	8	65	22	3	-0.2	40	2030	3.33		
NTS0463	445395	5409090	qtz porph rhyolite	0.002	7	20	17	4	-0.2	80	1555	3.48		
NTS0464	445395	5409065	qtz mica sandstone	0.001	17	18	24	5	-0.2	60	2410	4.42		
NTS0465	445395	5409045	qtz mica sandstone	0.003	7	9	11	-2	-0.2	70	1360	1.94		
NTS0466	445395	5409025	qtz porph rhyolite	-0.001	3	11	13	-2	-0.2	30	596	1.41		
NTS0467	445395	5409000	qtz porph rhyolite	-0.001	2	9	13	-2	-0.2	40	832	1.6		
NTS0468	445395	5408980	qtz porph rhyolite	0.001	5	15	16	-2	0.2	170	1780	1.43		
NTS0469	445395	5408960	qtz porph rhyolite	-0.001	3	19	17	-2	0.2	140	2380	1.71		
NTS0470	445395	5408940	qtz porph rhyolite	-0.001	11	14	14	-2	-0.2	80	1085	1.6		
NTS0471	445395	5408920	qtz porph rhyolite	-0.001	2	17	17	2	-0.2	60	660	1.53		
NTS0472	445201	5409248	qtz porph rhyolite	0.001	3	14	26	-2	-0.2	80	1180	1.87		
NTS0473	445196	5409220	qtz porph rhyolite	0.002	2	11	20	3	-0.2	100	666	2.17		
NTS0474	445203	5409194	qtz porph rhyolite	0.005	2	12	21	-2	-0.2	40	108	1.94		
NTS0475	445202	5409172	qtz porph rhyolite	0.001	1	9	17	2	-0.2	60	344	1.61		
NTS0476	445198	5409150	qtz porph rhyolite	0.004	2	14	19	2	-0.2	80	731	1.91		
NTS0477	445200	5409130	qtz porph rhyolite	0.002	2	6	12	-2	0.2	60	726	1.69		
NTS0478	445200	5409100	qtz porph rhyolite	0.002	2	8	8	-2	0.2	50	852	1.51		
NTS0479	445200	5409075	qtz porph rhyolite	-0.001	1	10	10	-2	-0.2	50	806	1.42		
NTS0480	445200	5409050	qtz porph rhyolite	0.006	5	23	18	2	0.2	110	1160	1.91		
NTS0481	445200	5409025	qtz porph rhyolite	0.001	2	60	21	-2	-0.2	120	1170	1.95		
NTS0482	445197	5408999	qtz porph rhyolite	0.004	4	96	57	3	0.3	50	1180	3.06		
NTS0483	445006	5409215	qtz porph rhyolite	-0.001	2	2	3	2	-0.2	30	43	0.43		
NTS0484	445000	5409190	qtz porph rhyolite	0.004	61	20	29	15	0.2	30	152	5.17		

TABLE 2 - Continued
SOIL SAMPLES – EL43/2006
 (* AGD 1966/55 AMG)

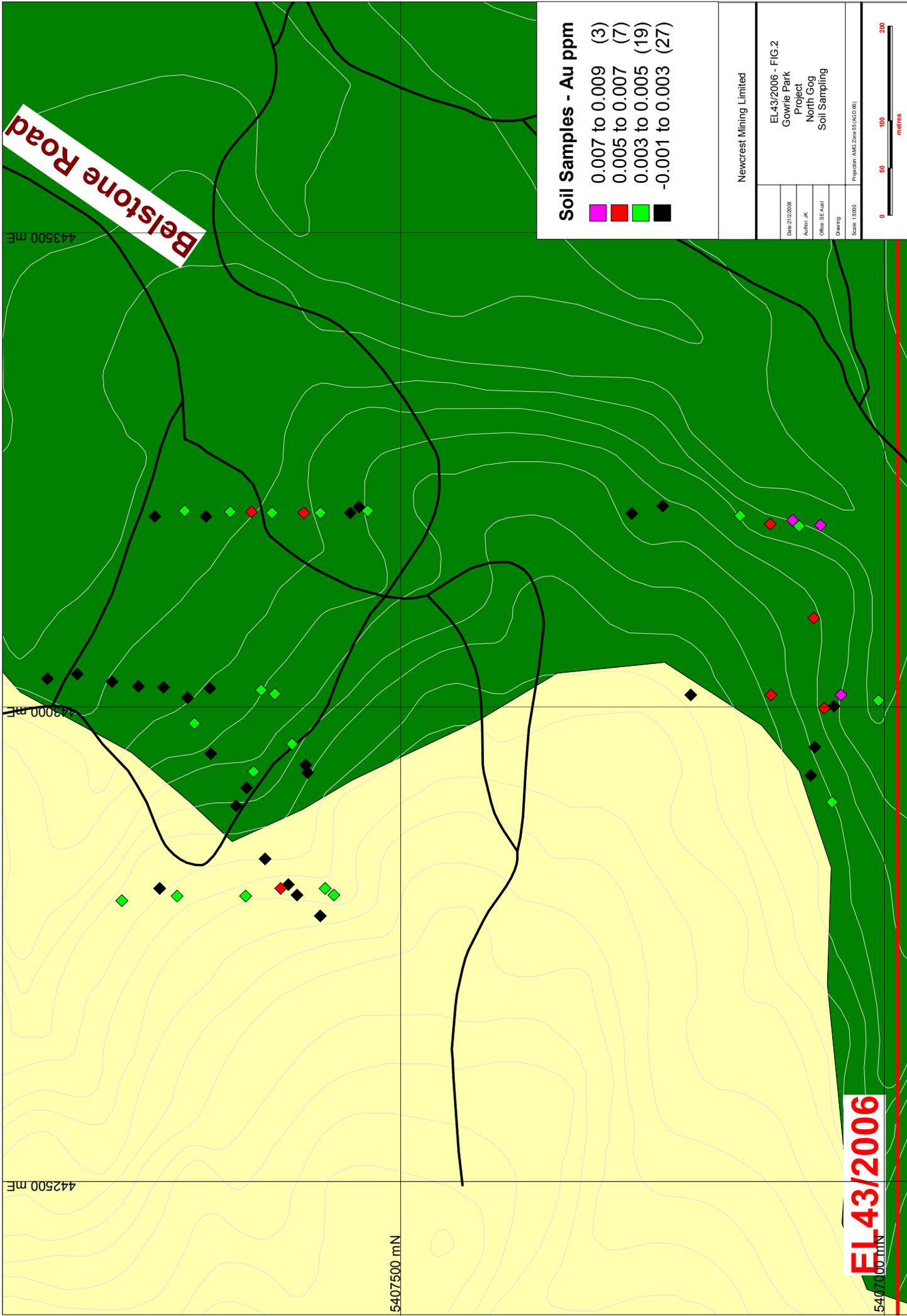
Sample ID	Easting Northing		Description METHOD LDETECTION	Assays										
	AMG*	AMG*		Au	Cu	Pb	Zn	As	Ag	Ba	Mn	Fe		
				Au-AA25 0.001	ME- ICP41s 1	ME- ICP41s 2	ME- ICP41s 2	ME- ICP41s 2	ME- ICP41s 2	ME- ICP41s 10	ME- ICP41s 5	ME- ICP41s 0.01		
NTS0485	445000	5409165	qtz porph rhyolite	0.002	2	12	11	2	-0.2	80	447	2.01		
NTS0486	445000	5409140	qtz porph rhyolite	-0.001	2	8	16	-2	0.2	70	478	1.64		
NTS0487	445000	5409115	qtz porph rhyolite	0.005	1	11	22	-2	-0.2	70	423	2.14		
NTS0488	445000	5409090	qtz porph rhyolite	-0.001	2	15	27	2	-0.2	40	101	2.42		
NTS0489	445000	5409060	qtz porph rhyolite	0.005	-1	18	19	3	-0.2	30	204	2.02		
NTS0490	445000	5409035	qtz porph rhyolite	-0.001	2	16	16	-2	-0.2	50	343	1.96		
NTS0491	445000	5409000	qtz porph rhyolite	-0.001	1	13	20	2	-0.2	30	244	1.66		
NTS0492	445000	5408975	qtz porph rhyolite	-0.001	2	48	19	2	0.2	70	2210	2.25		
NTS0493	445000	5408950	qtz porph rhyolite	-0.001	2	196	34	5	0.4	50	400	2.85		
NTS0494	445004	5408923	qtz porph rhyolite	-0.001	1	51	26	3	0.2	50	912	1.61		
NTS0495	449730	5406150	dacitic volcanics	-0.001	31	23	32	20	-0.2	150	3030	8.46		
NTS0496	449341	5406155	polymict talus	-0.001	23	19	29	3	0.2	40	233	5.31		
NTS0497	443201	5407754	andesite	-0.001	6	16	13	4	-0.2	30	190	4.8		
NTS0498	443207	5407723	andesite	0.003	9	17	13	3	-0.2	30	1060	3.55		
NTS0499	443201	5407701	andesite	-0.001	6	29	14	3	-0.2	60	1735	7.12		
NTS0500	443021	5407745	andesite	0.002	4	16	18	2	-0.2	40	114	3.26		
NTS0501	443022	5407771	andesite	-0.001	3	17	8	5	0.2	10	40	7.52		
NTS0502	443027	5407798	andesite	-0.001	14	21	30	5	0.2	20	105	6.62		
NTS0503	443035	5407834	andesite	0.002	6	15	23	3	-0.2	20	117	5.12		
NTS0504	443030	5407865	andesite	0.001	8	20	50	3	0.2	30	651	6.69		
NTS0505	443010	5407720	andesite	-0.001	8	19	15	5	0.2	10	186	7.58		
NTS0506	443020	5407697	andesite	-0.001	5	11	10	3	0.2	40	247	3.03		
NTS0507	443192	5407066	dacitic volcanics	0.008	19	16	11	6	0.2	20	59	2.53		
NTS0508	443191	5407088	dacitic volcanics	0.004	13	15	11	3	0.2	60	67	3.18		
NTS0509	443197	5407095	dacitic volcanics	0.007	18	19	19	4	0.3	70	357	5.16		

TABLE 2 - Continued
SOIL SAMPLES – EL43/2006
 (* AGD 1966/55 AMG)

Sample ID	Easting Northing		Description METHOD LDETECTION	Assays										
	AMG*	AMG*		Au	Cu	Pb	Zn	As	Ag	Ba	Mn	Fe		
				Au-AA25 0.001	ME- ICP41s 1	ME- ICP41s 2	ME- ICP41s 2	ME- ICP41s 2	ME- ICP41s 2	ME- ICP41s 10	ME- ICP41s 5	ME- ICP41s 0.01		
NTS0510	443193	5407118	dacitic volcanics	0.005	23	26	20	5	0.2	40	140	5.65		
NTS0511	443202	5407149	dacitic volcanics	0.004	13	20	9	3	0.2	50	96	2.99		
NTS0512	443212	5407229	dacitic volcanics	0.001	6	8	10	2	-0.2	50	53	3.32		
NTS0513	443204	5407261	dacitic volcanics	0.002	6	13	6	2	-0.2	30	51	3.74		
NTS0514	443207	5407534	andesite	0.004	2	5	4	-2	-0.2	10	21	0.33		
NTS0515	443211	5407543	andesite	0.001	2	-2	3	-2	-0.2	-10	24	0.85		
NTS0516	443205	5407552	andesite	-0.001	4	7	5	2	-0.2	10	45	2.88		
NTS0517	443205	5407583	andesite	0.003	17	30	18	4	-0.2	30	84	7.48		
NTS0518	443205	5407600	andesite	0.005	11	32	24	4	0.2	40	87	11.95		
NTS0519	443205	5407633	andesite	0.003	6	14	8	6	0.2	10	50	5.07		
NTS0520	443206	5407654	andesite	0.006	6	19	14	6	-0.2	30	103	6.18		
NTS0521	443206	5407676	andesite	0.003	4	31	9	7	-0.2	50	165	9.74		
NTS0522	443013	5407045	dacitic volcanics	0.007	40	36	55	6	0.4	70	1600	4.64		
NTS0523	443001	5407052	dacitic volcanics	0.002	24	22	23	5	0.2	40	208	4.73		
NTS0524	442999	5407062	dacitic volcanics	0.006	7	11	5	-2	0.2	30	45	1.1		
NTS0525	443013	5407117	dacitic volcanics	0.005	8	18	4	5	0.2	10	44	4.45		
NTS0526	443013	5407200	dacitic volcanics	0.002	3	6	2	3	-0.2	10	16	1.53		
NTS0527	443014	5407630	andesite	0.003	6	32	12	4	-0.2	30	224	8.84		
NTS0528	443018	5407644	andesite	0.004	8	20	17	2	-0.2	30	602	6.94		
NTS0529	442983	5407713	andesite	0.003	8	16	19	4	0.3	20	255	6.66		
NTS0530	442951	5407696	andesite	-0.001	8	12	12	3	-0.2	20	189	4.88		
NTS0531	442896	5407670	andesite	0.002	7	8	8	2	0.2	20	185	3.59		
NTS0532	442840	5407640	andesite	0.002	3	3	3	-2	0.2	-10	23	1.64		
NTS0533	442813	5407616	andesite	0.001	2	6	4	-2	-0.2	10	28	2.79		
NTS0534	442780	5407583	andesite	0.002	3	4	5	2	-0.2	10	21	2.51		

TABLE 2 - Continued
SOIL SAMPLES – EL43/2006
 (* AGD 1966/55 AMG)

Sample ID	Easting		Northing		Description METHOD LDETECTION	Assays										
	AMG*	AMG*	AMG*	AMG*		Au Au-AA25 0.001	Cu ME- ICP41s 1	Pb ME- ICP41s 2	Zn ME- ICP41s 2	As ME- ICP41s 2	Ag ME- ICP41s 0.2	Ba ME- ICP41s 10	Mn ME- ICP41s 5	Fe ME- ICP41s 0.01		
NTS0535	442802	5407607	5407607	5407607	andesite	0.002	7	14	10	2	-0.2	10	39	3.98		
NTS0536	442809	5407624	5407624	5407624	andesite	0.005	4	5	3	-2	0.2	10	19	2.76		
NTS0537	442801	5407660	5407660	5407660	andesite	0.004	19	19	20	3	0.2	30	216	6.64		
NTS0538	442801	5407731	5407731	5407731	andesite	0.003	5	13	9	-2	0.2	40	28	1.93		
NTS0539	442809	5407749	5407749	5407749	andesite	0.002	14	19	26	3	0.3	30	320	4.09		
NTS0540	442796	5407788	5407788	5407788	andesite	0.004	14	33	29	5	0.3	80	88	6.18		
NTS0541	443007	5407006	5407006	5407006	dacitic volcanics	0.003	27	22	17	5	0.5	50	131	3.98		
NTS0542	442900	5407054	5407054	5407054	dacitic volcanics	0.004	7	5	6	-2	0.2	10	26	1.19		
NTS0543	442802	5407569	5407569	5407569	dacitic volcanics	0.003	6	7	19	11	0.2	20	46	5.25		
NTS0544	442809	5407578	5407578	5407578	andesite	0.003	4	3	4	-2	0.2	10	20	1.73		
NTS0545	443094	5407073	5407073	5407073	andesite	0.006	25	14	14	8	0.2	30	59	4.28		
NTS0546	442915	5407659	5407659	5407659	andesite	0.002	3	7	3	-2	-0.2	-10	19	1.91		
NTS0547	442932	5407652	5407652	5407652	andesite	0.003	11	29	24	2	0.2	30	206	5.4		
NTS0548	442961	5407612	5407612	5407612	andesite	0.004	4	13	8	4	0.2	10	27	4.04		
NTS0549	442939	5407598	5407598	5407598	andesite	0.001	13	17	27	2	0.4	30	121	4.96		
NTS0550	442931	5407596	5407596	5407596	andesite	-0.001	4	5	6	-2	-0.2	10	32	0.73		
NTS0551	442928	5407076	5407076	5407076	andesite	0.002	5	3	7	-2	-0.2	30	58	1.8		
NTS0552	442958	5407072	5407072	5407072	andesite	0.002	10	11	28	-2	0.4	40	102	5.05		



Belstone Road

443500 mE

443000 mE

442500 mE

5407500 mN

EL43/2006
5407500 mN

Soil Samples - Au ppm

- ◆ 0.007 to 0.009 (3)
- ◆ 0.005 to 0.007 (7)
- ◆ 0.003 to 0.005 (19)
- ◆ -0.001 to 0.003 (27)

Newcrest Mining Limited

EL43/2006 - FIG.2
Gowrie Park
Project
North Gog
Soil Sampling

Date: 21/12/2006

Author: JK

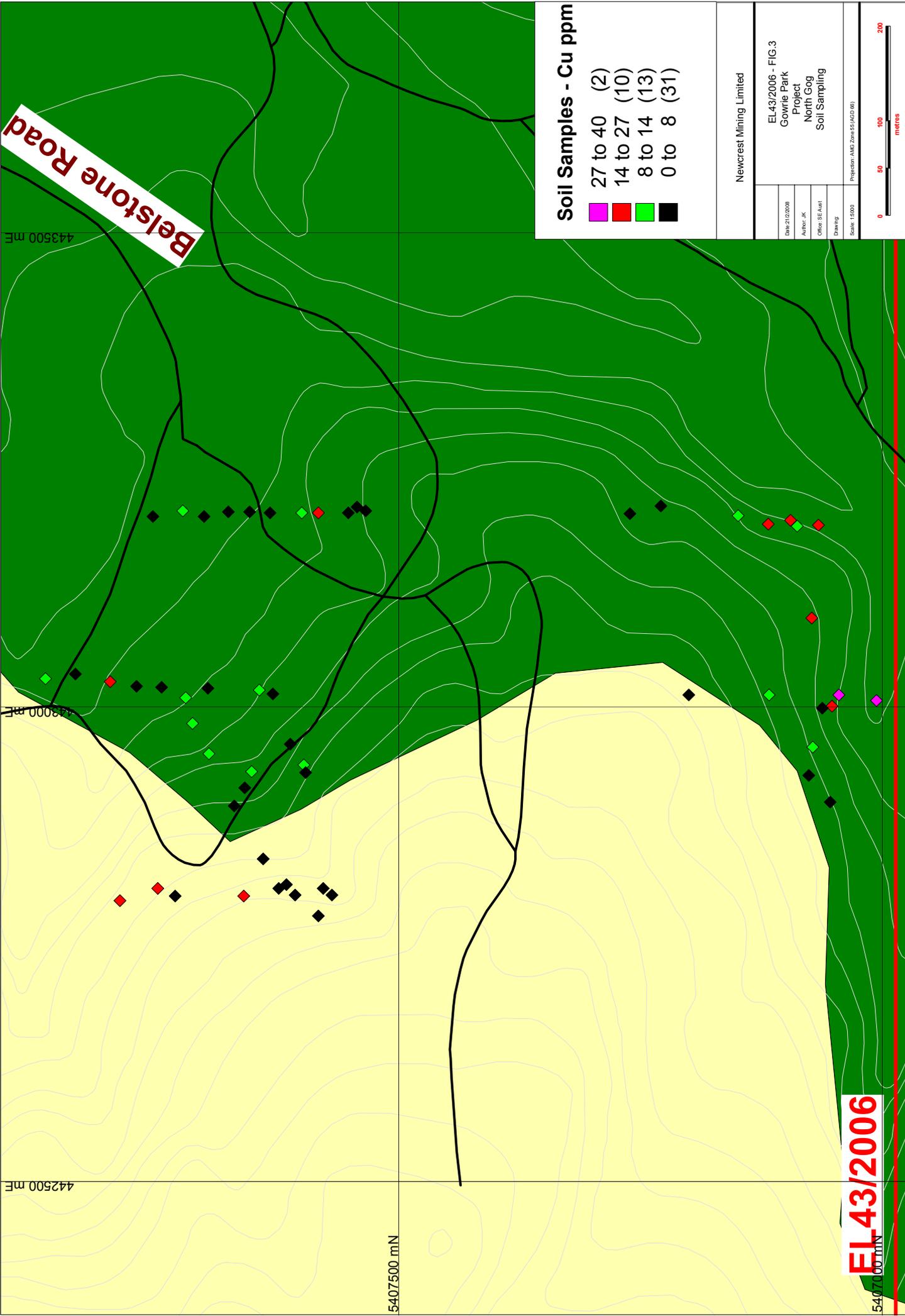
Office: SE Aust

Drawing

Scale: 1:5000

Projection: MGS Zone 55 (AGD 86)





443500 mE

443000 mE

442500 mE

5407500 mN

5407000 mN

Belstone Road

Soil Samples - Cu ppm

- ◆ 27 to 40 (2)
- ◆ 14 to 27 (10)
- ◆ 8 to 14 (13)
- ◆ 0 to 8 (31)

Newcrest Mining Limited

EL43/2006 - FIG.3
Gowrie Park
Project
North Gog
Soil Sampling

Date: 21/12/2006

Author: JK

Office: SE Aust

Drawing

Scale: 1:5000

Projection: MGS Zone 55 (AGD 86)



EL43/2006

7. ENVIRONMENT

The exploration program required the cutting and of pegging of three north-south oriented grid lines for a total of 2.2 line kms over the North Gog prospect, from which C-horizon soil samples were collected. The grid lines were completed by Rogers Exploration Services, through vegetation classified by TasVeg as predominately Eucalyptus oblique – dry forest and woodland, Eucalyptus oblique – wet forest, Eucalyptus amygdalina – Eucalyptus oblique damp sclerophyll forest, Acacia dealbata forest and Plantations for silviculture. Lines were pegged at 50m intervals with wooden pegs and flagging tape.

For *Phytophthora cinnamomi* (Pc) hygiene management, all boots and gaiters were washed before going to a new area/line and at the end of each day. In addition all soil sampling implements used had all dirt removed before moving on to the next station/site.

8. PLANNED WORK

The planned program of work for the next 12 months is as follows.

- 1) Complete PIMA orientation survey on pre-existing diamond drill holes from the Cethana Alteration Zone;
- 2) Complete more detailed and systematic PIMA and alteration mapping of outcrop throughout the Cethana Alteration Zone;
- 3) Complete a minimum of one diamond drill hole within the Cethana Alteration Zone based on spectral / alteration vectors arising from the above program.

Further reconnaissance mapping is to be conducted to the east of the Gowrie Park prospect on the north eastern slopes of the Fossey Mountains.

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10 EXPENDITURE

**EXPENDITURE
EL43/2006
GOWRIE PARK PROJECT**

For Period 1st March 2007 – 29th February 2008

ITEM	EXPENDITURE
SALARIES	\$71,336
FIELD COSTS	\$10,110
MISCELLANEOUS OFFICE COSTS	\$7,390
TRAVEL/ACCOMM	\$619
ANALYSES	\$5,758
TOTAL EXPENDITURE	\$95,213