BASE MAP PRODUCTION

on the

MARG PROPERTY

Mayo Mining District
Marg 117 – 144 (YB02501 – YB02528)
Marg 159 – Marg 178 (YB02594 – YB02613)

YUKON TERRITORY
NTS 105M/15 & 16, 106D/1 & 2
63°59'N 134°37'W

Claims owned by
ATNA RESOURCES LTD.
1550-409 Granville Street
Vancouver, B.C., Canada
V6C 1T2

Work completed March 1 – 13, 2000

Rob G. Wilson, P.Geo
David A. Copeland, M.Sc., G.I.T.

September 6, 2000

This report has been examined by the Geological Evaluation Unit under Section 53 (4) Yukon Quartz Mining Act and is allowed as representation work in the amount of $ ~~4800.00~~ 4800.00.

M. Bak

for Regional Manager, Exploration and Geological Services for Commissioner of Yukon Territory.

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EXECUTIVE SUMMARY

The Marg project is a joint venture between operator Atna Resources Ltd. (66 2/3%) and Cameco Corporation (33 1/3%) exploring the Marg property in central Yukon. The Marg property hosts the Marg deposit, a Mississippian age, precious metal-rich, polymetallic, volcanogenic massive sulphide deposit. The area has been explored by a number of companies in several phases since 1965. The year 2000 program included detailed structural mapping of the Marg Deposit, plus prospecting, mapping and sampling on the Jane Zone. An orthophoto base map prepared by Integrated Mapping Technologies Inc. (IMT) of Vancouver was used as control for the work. This base map is being submitted for assessment purposes and is the subject of this report. Additional assessment utilizing the base map will be applied after the field program.

1. INTRODUCTION

This report describes the preparation of an orthophoto base map for the Marg claims. The orthophoto was used as control for additional field programs on the property. This report is being submitted separately since field program reports are in progress and will not be completed before the due date of this assessment report.

1.1 LOCATION AND ACCESS

The Marg claims are located in central Yukon on NTS map sheets, 105M/15 & 16, 106D/1 & 2, centered at approximately 64°00'N and 134°30'W (Fig. 1.1). Access to the claim group may be gained by helicopter based in Mayo, located approximately 80 km to the southwest (Fig. 1.2). A 380 m airstrip suitable for light aircraft is located near the Marg zone.

The claims cover sub-alpine to alpine terrain within the Patterson Range with elevations on the claim group varying from 600 to 1900 metres. The majority of the claim block is covered with a thin veneer of talus or colluvium. Overall, outcrop exposure averages less than 10% although some slopes within cirque headwalls approach 70% exposure.

1.2 CLAIMS

The Marg property consists of 322 contiguous mineral claims covering approximately 6730 hectares (Fig. 1.3). The property is owned by a joint venture between Atna Resources Ltd. (66 2/3%) and Cameco Corporation (33 1/3%). The claims are recorded in the Mayo Mining District as follows:

Table 1: Claim Data

Name	Grant number	Expiry date
Tudl 1-32	YA76768-YA76799	September 14, 2006
Marg 1-86	YB02385-YB02470	September 14, 2005
Marg 87-116	YB02471-YB02500	March 14, 2002
Marg 117-144	YB02501-YB02528	March 14, 2001*
Marg 144-158	YB02529-YB02593	September 14, 2005
Marg 159-178	YB02594-YB02613	March 14, 2001*
Marg 179-190	YB02944-YB02955	September 14, 2002
Marg 191-290	YB03107-YB03206	January 14, 2007
Marg 291-370	YB03606-YB03685	January 14, 2005

*with acceptance of this report.

1.3 HISTORY

Below is listed an ownership and work summary for the Marg property area. Much of the property history is taken from property reports by Archer Cathro & Associates (1981) Ltd. (Archer Cathro) who completed the bulk of fieldwork for the various owners.

1965-1967: The Jack claims were staked by a joint venture between United Keno Hill Mines Ltd. (United Keno) and Canadian Superior Exploration Ltd. (Canadian Superior) following release of Geological Survey of Canada (GSC) reconnaissance stream sediment survey results. The project entailed silt and soil sampling plus prospecting. The program's objective of finding Keno Hill style silver veins was not achieved and the claims were allowed to lapse.

1982-1984: The area was re-staked by the ZX Joint Venture between SMD Mining Co. Ltd. (now Cameco), Chevron Minerals Ltd. (Chevron), and Enterprise Exploration Ltd. (Enterprise; an Australian exploration subsidiary of Rio Tinto). The project included hand trenching in the search for sedex lead-zinc mineralization.

Approx.1985: Enterprise abandoned their interest in the property.

1986: The ZX JV optioned the property to All-North Resources Ltd. (All-North) who earned a 50% interest. Field exploration included geochemical and geophysical surveys (VLF and MaxMin EM, Magnetometer, and IP) plus hand trenching.

1987-1988: NDU Resources Ltd. (NDU) purchased All-North's interest and Chevron converted its 25% working interest to a 5% net profits interest. This resulted in NDU controlling 66 2/3% of the JV and Cameco controlling 33 1/3% of the property.

1988: The NDU/Cameco JV explored the property in two phases. NDU's portion of the second phase was financed through an option with Noranda Inc. and Brenda Mines Ltd. Noranda et. al. dropped its option at the end of 1988 due to mixed results and significantly escalating property payments. The 1988 work program included claim staking, geological, geochemical, and geophysical surveys (VLF and Pulse EM) plus 6037.5 m of diamond drilling in 33 holes. Preliminary geological and geochemical surveys began on the Jane zone, and a baseline environmental program was initiated. Survey control was established, and an airphoto survey flown in mid-September. A 380 m airstrip was also constructed. J.P. Franzen prepared an independent mineral reserve.

1989: The NDU/Cameco JV continued to explore the property, and purchased Chevron's 5% NPI; the buyout was split 3.33% by NDU and 1.67% by Cameco. In 1989, work was split between the Marg and Jane zones. On the Marg zone, 1818.7 m of diamond drilling in five holes was completed. Work on the Jane zone included grid geological, geochemical and geophysical (VLF-EM, Pulse EM and Magnetometer) surveys. Reconnaissance geochemical sampling was also

completed over much of the property and further water samples were collected for environmental monitoring. J.P. Franzen (P.Eng.) updated his mineral reserve calculation.

1990: An additional nine holes for 4119.6 m of diamond drilling was completed on the Marg Zone, and a 100,000N baseline and several cross lines were cut as control for spotting drill holes. Hand (blast) trenching and sampling was carried out on the Jane Zone. Baseline environmental monitoring surveys initiated in 1988 were continued. A third update on mineral reserves was calculated by J.P. Franzen (P.Eng.).

1996: NDU began to purchase Cameco's interest via a series of staged cash payments and continued to explore the property. The cash payments were never completed and Cameco retained its interest in the property. Exploration in 1996 consisted of 8518 m of diamond drilling in 29 holes using two Longyear 38 drills. A new 100,000N baseline was cut along with additional cross lines. A Caterpillar D3 bulldozer was moved to the property. Work on the Jane zone consisted of deepening one trench and collecting additional samples. Environmental monitoring water sample sites were re-established and sampled.

1997: United Keno acquired NDU in 1997 and became the Marg property majority interest holder. In January, J.P. Franzen (P.Eng.) calculated a drill indicated resource for the Marg deposit as 5,527,002 tonnes at 1.76% Cu, 2.46% Pb, 4.06% Zn, 62.7 g/t Ag, and 1.00 g/t Au using a minimum 3 m width. Additional diamond drilling in 1997 totaled seven holes for 2539.6 metres.

1998: United Keno issued convertible debentures to Norvista Development Ltd. (Norvista) and withdrew cash through a promissory note using their interest in the Marg property as collateral. United Keno subsequently went into default on the promissory note.

1999-2000: Norvista obtained a judgement against United Keno resulting in the court ordered sale of United Keno's interest in the Marg claims. Atna Resources Ltd. (Atna) successfully bid on the property and after appeals by United Keno failed, Atna became the majority interest owner. Atna and Cameco completed a Novation agreement and formed a JV to further explore the property.

1.4 WORK COMPLETED

An orthophoto base map was completed over the entire property and four "E-size" working copies of individual bases were produced at 1:5,000 scale with 10 m contours. The field maps cover over 90% of the property. The orthophoto base maps are NAD 83 Zone 8 projection, and the topographic base maps without orthophoto are NAD 27 Zone 8 projection and contain an overlay NAD 83, UTM grid. Integrated Mapping Technologies, Inc. (IMT) of Vancouver was selected to complete the base mapping. IMT previously created a number of the TRIM-II base maps for the Province of British Columbia.

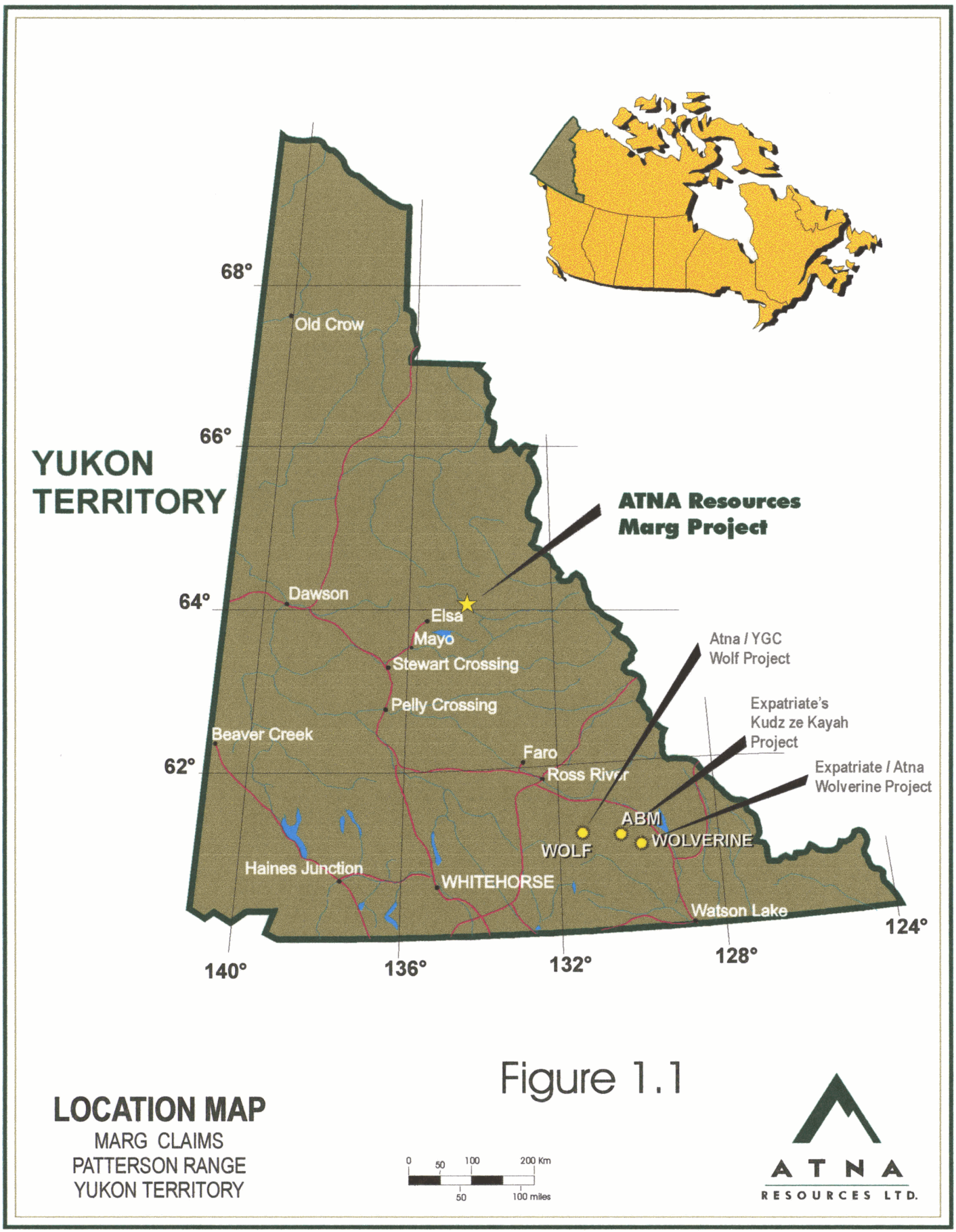


Figure 1.1

LOCATION MAP

MARG CLAIMS
PATTERSON RANGE
YUKON TERRITORY

ATNA
RESOURCES LTD.

134°30'

64°00'

MARG

TUDL

MARG DEPOSIT

MARG

MARG

MARG

JANE ZONE

MARG

MARG

SCALE 1:50,000

0 1000 2000 3000m

ATNA RESOURCES LTD.

MARG PROPERTY CLAIM LOCATION

NTS: 105M/15&16 106D/ 1& 2			Date: Sept. 2000
Scale: As Shown	DWG by: DC/RGW		Figure: 1.2

2 GEOLOGY

2.1 REGIONAL GEOLOGY

The Marg property lies south of a shelf / off-shelf regional boundary and within Selwyn Basin, a predominantly off-shelf metasedimentary and metavolcanic sequence that forms part of the Foreland Belt of the northern Canadian Cordillera (Fig. 2.1). The regional geology has been described by Green (1971; 1972) and Abbott (1990a, b) and consists of three major tectonostratigraphic elements. They are, generally from north to south: Middle-Proterozoic shelf sequence carbonate rocks of the Wernecke Supergroup that are unconformably overlain by Lower to Middle Paleozoic carbonate shelf sedimentary rocks ; Neoproterozoic to Lower Cambrian off-shelf rocks of the Hyland Group; and, Devonian to Mississippian age rocks of the Earn Group and the Keno Hill Quartzite (Fig. 2.2). Deformation, metamorphism and imbrication of the varying stratigraphic units occurred during the Jurassic to Lower Cretaceous (190 to 120 million years ago).

Three major fault structures control the geometry of the belt and separate the major stratigraphic units. These are the Dawson, Tombstone, and Robert Service thrust faults. The northern-most fault, the Dawson Thrust, separates off-shelf rocks of the Selwyn Basin (Keno Hill Quartzite, Earn Group, and Hyland Group) from shelf rocks of the Wernecke Supergroup and younger shelf metasedimentary rocks. The central Tombstone Thrust regionally imbricates rocks of the Keno Hill Quartzite and Marg deposit host Earn Group rocks. On the Marg property, these two lithologies are commonly seen to have gradational contacts and may in fact be lateral stratigraphic equivalents (Abbott, 1990a). The southern-most fault, the Robert Service Thrust, carries rocks of the Hyland Group onto Earn Group and Keno Hill Quartzite. The Wernecke Supergroup and other associated shelf rocks are not seen near the Marg property and will not be discussed further.

2.1.1 HYLAND GROUP

The oldest rocks surrounding the Marg property are Neoproterozoic to Lower Cambrian Hyland Group siliciclastic metasedimentary rocks (Fig. 2.2). Included rock types are quartz sandstone, quartzite, quartz-feldspar grit, buff weathering grey phyllite, buff to grey weathering limestone, and silty to sandy limestone that locally grades to calcareous grit. The unit is also characterized by abundant green and maroon shale.

2.1.2 EARN GROUP

Devonian to Mississippian metasedimentary and metavolcanic rocks form the majority of the Earn Group that surrounds and hosts the Marg Deposit (Turner and Abbott, 1990). Metasedimentary rocks are largely graphitic argillites with locally more siliceous intercalations. Thick sequences of metavolcanic and metatuffaceous rocks with blue quartz eyes are intimately stratified with the argillaceous metasedimentary rocks. Deformed, Triassic (?) metapyroxenite to metadiorite dykes or sills have pervaded the metavolcanic and metasedimentary stratigraphy but tend to be locally concentrated.

Rocks initially mapped as Hyland Group (Abbott, 1990a) just north of the Marg deposit (1.5 km), were considered by Abbott (1990b) to belong to a younger (Mississippian?) suite of volcanic and volcaniclastic metasediments. These rocks, identified by the presence of blue quartz eyes, may in fact be correlative with, or equivalent to, volcaniclastic and volcanic rocks of the Earn Group.

2.1.3 KENO HILL QUARTZITE

The Mississippian Keno Hill quartzite consists of dark-grey, homogeneous, deformed quartzite with 10 to 100 metre intercalations of graphitic argillite. These rocks have rare interbeds of metatuffaceous rocks. The Keno Hill quartzite is commonly intruded by deformed Triassic (?) metadiorite to metapyroxenite sills and/or dykes.

2.1.4 INTRUSIVE ROCKS

Metasedimentary and metavolcanic rocks of the Keno Hill Quartzite and Earn Group in the Marg map area are intruded by deformed, Triassic(?) aged metadiorite to metapyroxenite dykes and/or sills and undeformed Cretaceous(?) granite to granodiorite plutonic rocks. The Cretaceous intrusions have pervaded the stratigraphy within the Mt. Westman map area (106D/1) and Abbott (1990a) interprets this to indicate the area is underlain by Cretaceous granitic stocks.

2.1.5 STRUCTURAL GEOLOGY AND METAMORPHISM

Abbott (1990a, b) and Turner & Abbott (1990) characterize the deformation within the area with two generation of structures. The structures are generally composed of varying degrees of ductile and brittle deformation that is compatible with the lower- to middle-greenschist-facies metamorphic grade of the region.

The first generation of deformation is distinguished by north to northeast-vergent, overturned, isoclinal folds whose axial surface parallels the south-dipping, regional-scale thrust faults. These folds and related thrust faults define the major south dipping aspect of the orogen; with the majority of fold axes and associated linear features plunging to the southeast.

Lithologies within the region are also deformed by second generation, younger, upright, tight- to open-, southwest-vergent folds. These structures are northeasterly dipping with fold axes that plunge to the south-southeast. This generation of deformation is observed to overprint first generation structures, and may be related to re-activation along older faults. The two episodes of deformation are related to shortening, imbrication, and thickening through related overthrusting of the off-shelf and shelf sequences during Jurassic orogenesis.

2.2 PROPERTY GEOLOGY

Property geology descriptions are in preparation and will be included in future reports.

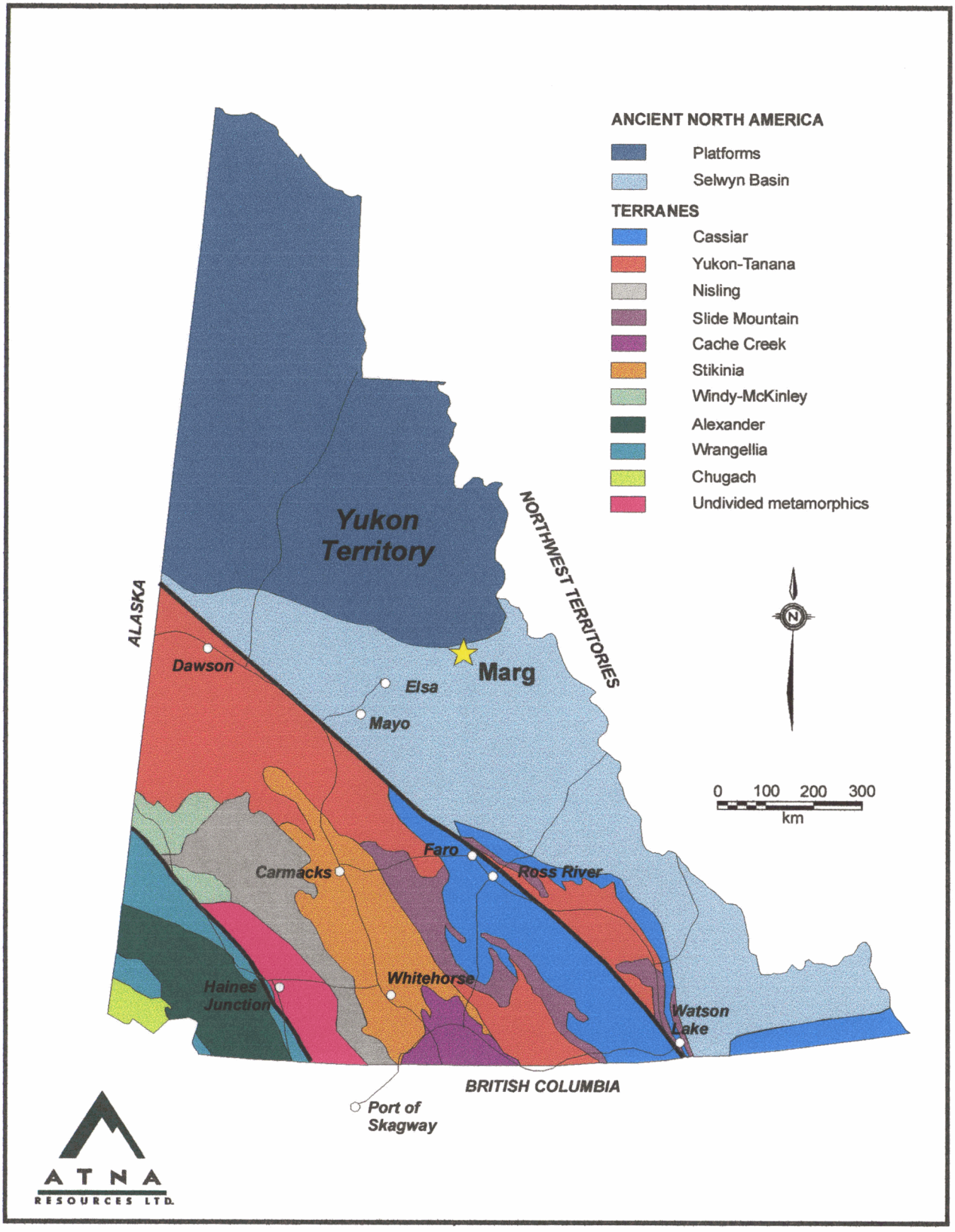
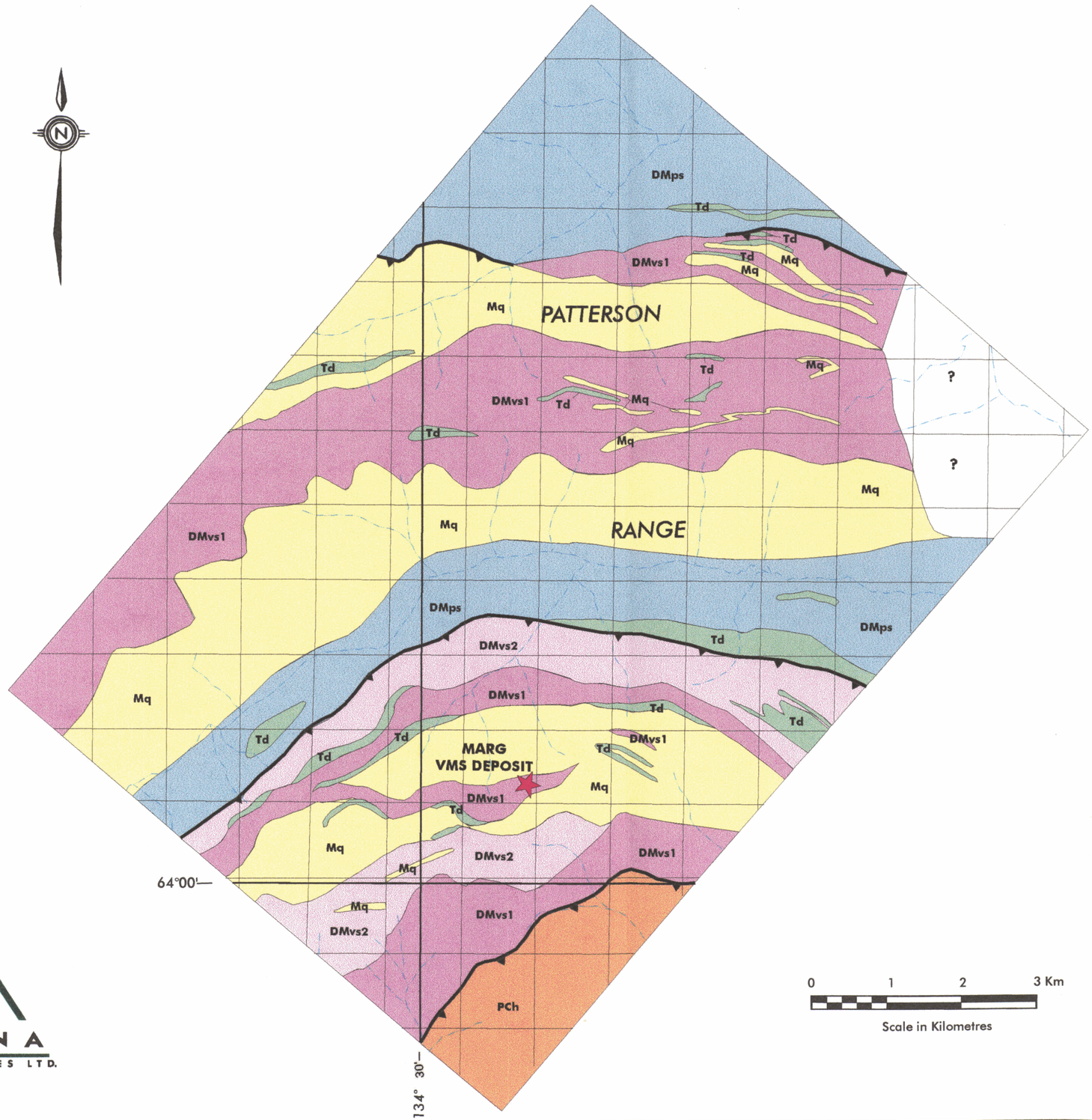


Figure 2.1: TERRANE LOCATIONS: Location of the Marg massive sulphide deposit and tectonic assemblages of the northern Canadian Cordillera.



*LEGEND**

TRIASSIC (?)

- **Td** — Diorite to gabbro dykes and/or sills

DEVONIAN (?), MISSISSIPPIAN, OR YOUNGER (?)

- **Mq** — Keno Hill quartzite
- **DMps** — Earn Group argillaceous metasedimentary rocks
- **DMvs1** — Earn Group metavolcanic rocks
- **DMvs2** — Metavolcanic rocks possibly equivalent to Earn Group

LATE PRECAMBRIAN AND LOWER CAMBRIAN

- **PCh** — Hyland Group metasedimentary rocks
- Geological Contact
- Thrust Fault
- Stream, river

* geology after Abbott (1990a) and Turner & Abbott (1990).

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MARG PROPERTY
REGIONAL GEOLOGY

NTS: 105M/15&16 106D/ 1& 2			Date: Sept. 2000
Scale: As Shown	DWG by: DC/RGW		Figure: 2.2

3. BASE MAP PRODUCTION

3.1 DIGITAL PHOTOGRAMMETRY

Integrated Mapping Technologies Inc. was contracted to produce orthophoto base maps for the Marg property. IMT differs from conventional map production companies in that they use a new form of photogrammetry based on digital (softcopy) images, as distinct from conventional photogrammetry, based on film (hardcopy) images.

Digital photogrammetry is not just digital mapping, which is a generic term encompassing computer-assisted photogrammetric restitution and data compilation/recording processes. In digital photogrammetry, high resolution scanned images of the analog photographic images are collected into digital image files. Stereo views of the digital files are produced by alternately projecting left and right images (at 60 fields/sec each) to the computer screen. The images are viewed with active LCD shuttering eyewear originally developed for Virtual Reality applications. The eyewear synchronizes with the screen display, presenting to the left and right eye sequentially the corresponding aerial camera view. This produces a flickerless image and the human brain perceives a 3D image similar to that achieved using a conventional stereoscope.

Once a digital stereo image is created, map and orthophoto production using digital photogrammetry are achieved through aerial triangulation and digital elevation models based on well-published and proven analytical photogrammetric algorithms. Digital systems do not use optical or mechanical sub-systems like conventional analytical plotters except in the initial scanning stage. Instead, the solution is achieved entirely by computer (mathematical) manipulation of digital imagery. Error analysis between digital and analytical methodologies slightly favours the digital environment. The benefit of using digital photogrammetry is in the reduced cost since the digital orthophoto image is, in fact, simply a result of setting up the digital airphotos for map production. The drawback in digital photogrammetry is that even a high-resolution scanned image is not as clear as a photographic image, hence the resulting orthophoto has an increased degree of graininess.

3.2 MARG BASE MAPS

The Marg property base maps were created from 15 airphotos on three flight lines. The airphotos were of 1995 vintage and were flown at a scale 1:50,000. The photography was completed in late summer and deep shadows are prevalent, especially in the Jane Zone.

The resulting topographic-orthophoto maps at 1:20,000 scale were subdivided and reproduced as four "E-size" maps at 1:5,000 scale (Fig. 3.1 to 3.8). Approximately 90% of the property was captured in these four maps. AutoCAD (.dxf) vector versions of the topographic maps along with geo-referenced raster image files (TIFF format) containing the orthophoto images are included on a CD-ROM, in both NAD 27 and NAD 83 datum.

The base maps were produced to provide control for geological and geochemical surveys carried out during the 2000 field season. Reports documenting these surveys and which use the topographic maps as bases will be submitted as future assessment reports once completed.

3.3 ORTHOPHOTO PRODUCTION SPECIFICATIONS

Marg Property: IMT Job #000205

The Marg property photo was triangulated by Integrated Mapping Technologies for the generation of a 50cm Orthophoto and 10m Contours. Below is listed the source materials, hardware, software and procedures used. Statistical results and accuracy's are also included and summarized for the 15 photos triangulated.

1. Photographic Materials

Source, scale and date:	National Air Photo Library, -1:50,000, 1995
Overlaps:	~65% forward, ~40% lateral
Roll Number:	A28225

2. Control

The control was derived from the 1:50,000 NTS map sheets 105M/15 & 16 and 106D/1 & 2.

3. Equipment and Software

Scanner	I.S.M. XL-10 Precision Scanner
Mensuration & Mapping	I.S.M. Digital Image Analytical Plotter Workstation With the Aerial Triangulation Module: ISM DiAP- ATM
Orthophoto	I.S.M. Sysimage Producer
Block Adjustment	K2-photogrammetry PAT -B

4. Aerial Triangulation Methodology / Procedure

After receiving the imagery from the National Air Photo Library, the diapositives were scanned on the XL-10 Precision Scanner at 10 microns. The mensuration of the scanned images was performed on an I.S.M. DiAP stereo workstation using I.S.M. ATM software. Since a camera calibration report was not available, nominal camera lens calibration corrections were applied at the time of measurement. Earth curvature/atmospheric refraction corrections were applied at the time of adjustment.

5. Quality of Adjustment

The measured data was adjusted using K^2-Photogrammetry's PAT-B adjustment software with results showing an overall $sigma_0$ value of 9.3 microns.

The RMS values of the photogrammetric observations are X-.310 & Y -.310 of a meter in the terrain system, making this block of photo very strong relative to itself. The RMS values of the control points are X-39.370, Y-26.676, Y-16.115 meters in the terrain system. These are suitable tolerances based on control derived from a 1:50,000 NTS map sheet.

6. Mapping & Orthophoto

Upon the completion of the Aerial triangulation, mapping was produced in order to support a 10 metre contour map for the Marg Property, approximately 143 sq. Km. The original data was captured in NAD27 and then transformed into NAD83 using NTv2 Software from Geodetic Survey of Canada.

The Surface created from this mapping was used to orthorectify the imagery and output 50cm pixel Orthophoto for the property. The Orthophoto and Contours were then clipped to produce the four maps at a plot scale of 1:5,000.

4. CONCLUSIONS

The production of base maps for the Marg Property, following the guidelines and procedures mentioned above, was completed to provide a proper navigational and presentation base map for geological mapping, geological interpretation, rock grab sampling, and soil sampling. The results of the base map presentation were both positive and negative, as outlined below.

The poor quality of the orthophoto was a negative aspect of the procedure. This was due to the time of year (late summer) that the aerial photograph was taken. The resultant image showed long shadows within north to northeast facing headwalls and cirques, which made recognition of position and geological features difficult to impossible. These areas covered approximately 30% (?) of the orthophoto maps. This negative character to the maps was not the result of low-resolution reproduction of the airphotos, as the resolution was excellent and allowed for reliable positioning where shadows were absent.

The creation of reliable digital and hard copy (paper) 1:5,000 topographic maps with 10 m elevation contours was considered a positive aspect of the map production. The maps provided accurate and precise positioning, and were in accordance and consistent, with coordinates obtained via the Global Positioning System (hand-held unit), and elevation measured with a pocket altimeter.

Overall, the maps were extremely useful in completing the follow-up exploration and geological work. Without these maps, such work would have required the more costly completion of an extensive, surveyed, ground grid to allow for proper positioning. Thus the map production was a cost-efficient means of providing a proper base map, for current and future, exploration work.

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APPENDIX I

DIGITAL MAPS ON COMPACT DISK

APPENDIX II

STATEMENT OF EXPENDITURES

Statement of Expenditures

Marg Project 2000

Base map production	
Consulting map production services	$6323.70
Geological supervision: 1 days @ $300.00/day	$ 300.00
Reporting:	
	$ 800.00
	$7423.70

APPENDIX III

GEOLOGIST'S CERTIFICATES

OF QUALIFICATIONS

CERTIFICATE OF QUALIFICATIONS

I, David A. Copeland, of 6708 110th Street, Edmonton, in the Province of Alberta, DO HEREBY CERTIFY:

1. THAT I am employed by Atna Resources Ltd. of 1550 - 409 Granville St., Vancouver B.C.

2. THAT I am a graduate of the University of New Brunswick with a Bachelor of Science degree in Geology and a Masters of Science degree in Geology.

3. THAT I am a Geologist In Training registered in good standing with the Association of Professional Engineers, Geologists and Geophysicists of Alberta.

4. THAT I presently hold a contract position with Atna Resources Ltd. of 1550 - 409 Granville St., Vancouver B.C.

DATED at Vancouver, British Columbia, this 7th day of September, 2000.

David A. Copeland, M.Sc., G.I.T.

CERTIFICATE OF QUALIFICATIONS

I, Robert G. Wilson, of 3328 West 15th Ave. Vancouver, in the Province of British Columbia, DO HEREBY CERTIFY:

1. THAT I am employed by Atna Resources Ltd. of 1550 - 409 Granville St., Vancouver B.C.

2. THAT I am a graduate of the University of British Columbia with a Bachelor of Science degree in Geology.

3. THAT I am a Professional Geoscientist registered in good standing with the Association of Professional Engineers and Geoscientists of the Province of British Columbia.

4. THAT this report is based in part on property work I directly supervised between March 1 and March 13, 2000

DATED at Vancouver, British Columbia, this 7th day of September, 2000.

Robert G. Wilson, P.Geo.

094171

29°39'
TRUE NORTH
GRID NORTH

IMT
Integrated Mapping Technologies Inc.

ATNA RESOURCES LTD.

MARG PROPERTY

REVISION DATE:

NTS:

DRAWN BY:

PROJECTION : UTM ZONE 8 (NAD 83)

-100 0 100 200 300

SCALE : 1 : 5000

FIGURE

Fig. 3.1

DIAND - YUKON REGION, LIBRARY

094171

29° 39°

TRUE NORTH
GRID NORTH

N

IMT
Integrated Mapping Technologies Inc.

ATNA RESOURCES LTD.

MARG PROPERTY

REVISION DATE:

NTS:

DRAWN BY:

PROJECTION : UTM ZONE 8 (NAD 83)

-100 0 100 200 300

SCALE : 1 : 5000

FIGURE

Fig. 3.2

DIAND - YUKON REGION, LIBRARY

518000
519000
520000
521000
7098000
7097000
7096000
7095000
7094000
7093000
134° 38' 00"
134° 37' 00"
134° 36' 00"
63° 59' 30"
63° 59' 00"
63° 58' 30"
63° 58' 00"
1119.9
1575
1755.8
1746.4
1716.6
1641.4
1656.2
1545.8
1713.6
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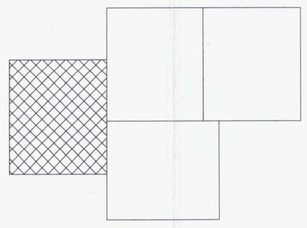
1797.3
1868.1
1720.2
094171



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REVISION DATE:

MARG PROPERTY

NTS:

DRAWN BY:

PROJECTION : UTM ZONE 8 (NAD 83)

-100 0 100 200 300

SCALE : 1 : 5000

FIGURE
Fig. 3.3

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522000 523000 524000 525000 526000

7095000 7094000 7093000 7092000

63°58'30" 63°58'00" 63°57'30" 63°57'00"

134°33'00" 134°32'00" 134°31'00" 134°30'00" 134°29'00" 134°28'00"

1692.6 1471.9 1465.1 1345.0 1292.2 736.2 777.3 629.2 625.2

29°30'

TRUE NORTH
GRID NORTH

N

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-100 0 100 200 300

SCALE : 1 : 5000

FIGURE
Fig. 3.4

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FIGURE
Fig. 3.5

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FIGURE
Fig. 3.6

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29°39' TRUE NORTH GRID NORTH

N

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100 0 100 200 300

SCALE 1 : 5000

FIGURE

Fig. 3.7

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-100 0 100 200 300

SCALE 1 : 5000

FIGURE
Fig. 3.8

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