TECHNICAL REPORT AND MINERAL RESOURCE ESTIMATE ON THE

GARRCON DEPOSIT- GARRISON GOLD PROPERTY LARDER LAKE MINING DIVISION GARRISON TOWNSHIP, ONTARIO, CANADA

for

NORTHERN GOLD MINING LIMITED

Report No. 940

A.C.A. Howe International Limited Toronto, Ontario, Canada

Doug Roy, M.A.Sc., P.Eng. Ian D. Trinder, M.Sc., P.Geo.

Effective Date: September 23, 2010



A.C.A. HOWE INTERNATIONAL LIMITED Mining and Geological Consultants

Effective Date: September 23, 2010

Report Number: 940

Client Reference:

NORTHERN GOLD MINING LIMITED

TECHNICAL REPORT AND MINERAL RESOURCE ESTIMATE ON THE GARRCON DEPOSIT- GARRISON GOLD PROPERTY LARDER LAKE MINING DIVISION GARRISON TOWNSHIP, ONTARIO, CANADA



Doug Roy, M.A.Sc., P.Eng. Associate Consulting Engineer

Ian D. Trinder, M.Sc., P.Geo. Senior Geologist



PROFESSIO

W. D. ROY

0

DATE 23

365 Bay Street, Suite 501, Toronto, ON, Canada, M5H2V1 (t) +1.416.368.7041, (f) +1.416.368.2579 254 High Street, Berkhamsted, Hertfordshire, HP41AQ, U.K. (t) +44.1442.873.398, (f) +44.1442.865.710 website: www.acahowe.ca; www.acahowe.co.uk

Office Locations: Toronto - London - Halifax



TABLE OF CONTENTS

1 2		MMARY ΓRODUCTION	
4	2.1	GENERAL	
	2.2	SCOPE AND CONDUCT	8
	2.3	SOURCES OF INFORMATION	9
	2.4	UNITS AND CURRENCY	9
3	RE	LIANCE ON OTHER EXPERTS	11
4	PR 4.1	OPERTY DESCRIPTION AND LOCATION PROPERTY LOCATION	
	4.2	PROPERTY DESCRIPTION	
	4.3	PROPERTY, OTHER OBLIGATIONS	
5	AC	CESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND	
P	HYSIC	OGRAPY	17
	5.1	ACCESSIBILITY	
	5.2	CLIMATE AND PHYSIOGRAPHY	
	5.3	LOCAL RESOURCES AND INFRASTRUCTURE	
6		OPERTY HISTORY	
	6.1	GARRCON DEPOSIT EXPLORATION HISTORY	
	6.2	GARRCON HISTORIC RESERVES AND RESOURCES	
7	GE 7.1	OLOGICAL SETTING REGIONAL GEOLOGICAL SETTING	24 24
	7.2	LOCAL GEOLOGICAL SETTING	
8		POSIT TYPES	
U	8.1	EXPLORATION TARGETS	
	8.2	DEPOSIT MODELS	30
9		NERALISATION	
	9.1	GARRCON MINERALISED ZONE	
	9.1	.1 Host Rocks, Structures and Alteration	33
	9.1	.2 Length, Width, Depth and Continuity of Mineralisation	33
	9.1	.3 Significant Assay Results	34
	9.2	JONPOL DEPOSIT	36
1		PLORATION	
	10.1	SATELLITE IMAGERY	
	10.2	SURFACE GRIDDING and GEOPHYSICS	37

Page | i of iv



10.3	DATABASE REVISIONS	
10.4	REHABILITATION	
10.5	SURFACE STRIPPING / SAMPLING	
10.6	2009 and 2010 DIAMOND DRILL PROGRAMS	41
10.7	ENVIRONMENTAL BASELINE STUDY / PERMITTING	41
	LING	
11.1	HISTORICAL DRILLING ON THE PROPERTY	
11.2	NORTHERN GOLD DRILL PROGRAMS 2009-2010	
11.2.	1 2009 Diamond Drill Program	
11.3	2010 DIAMOND DRILLING	46
	PLING METHOD AND APPROACH	
12.1	SAMPLING METHODS	
12.2	SAMPLING OR RECOVERY FACTORS	
12.3	SAMPLE QUALITY, REPRESENTATIVENESS, AND SAMPLE BIAS	
13 SAM 13.1	PLE PREPARATION, ANALYSES AND SECURITY SAMPLE PREPARATION	50 51
13.1	ANALYTICAL PROCEDURES	
	A VERIFICATION	
14.1	HISTORIC QUALITY ASSURANCE/ QUALITY CONTROL (QA/QC)	····· J4
PROGE	AMS	
14.2	2009 NORTHERN GOLD QA/QC PROGRAMS	
14.2.	1 Accuracy	
14.2.	2 Contamination	55
14.2.	3 Precision	
14.2.	4 Check Analyses	61
14.3	ACA HOWE 2010 VERIFICATION	64
14.3.	1 ACA Howe 2010 Site Visit	64
14.3.	2 ACA Howe 2010 Verification Sampling	65
14.3.	3 Database Verification	
15 ADJA	ACENT PROPERTIES	67
	ERAL PROCESSING AND METALLURGICAL TESTING	
17 MIN 17.1	ERAL RESOURCE ESTIMATE INTRODUCTION	
17.2	DATA SOURCES	
17.3	MINERALISED ZONE INTERPRETATION	
17.4	SAMPLE REGULARISING	
1/.7		••••••

Page | ii of iv



17.5 SAMPLE STATISTICS	77
17.6 SPECIFIC GRAVITY	77
17.7 VARIOGRAPHY	77
17.8 BLOCK MODELLING	79
17.9 CUT-OFF GRADES	79
17.9.1 Zone Interpretation	79
17.9.2 Mineral Resources	79
17.10 TOP-CUT GRADE	79
17.11 GRADE ESTIMATION	80
17.12 RESOURCE CLASSIFICATION PARAMETERS	81
17.13 RESULTS	81
17.13.1 Indicated Mineral Resources	
17.13.2 Inferred Mineral Resources	
17.14 CROSS-VALIDATION OF RESULTS	85
18 OTHER RELEVANT INFORMATION	
19 INTERPRETATION AND CONCLUSIONS	
20 RECOMMENDATIONS 21 REFERENCES	
22 DATE AND SIGNATURE PAGE	
23 CERTIFICATES OF QUALIFICATIONS	

LIST OF FIGURES

Figure 4-1: Garrison Gold Property Location	13
Figure 4-2: Property Claim Map	
Figure 4-3: Property Claim Map with Historic Claim Group Outlines	15
Figure 7-1: Property Geology	29
Figure 10-1: 2009 Exploration Grid Layout	38
Figure 10-2: 2010 Garrcon Surface Stripping Locations	40
Figure 11-1: Northern Gold 2009 Diamond Drill Hole Plan	45
Figure 14-1: Standard OREAS 61Pa results plotted against time	54
Figure 14-2: Standard AU45 results plotted against time	54
Figure 14-3: Standard SL46 results plotted against time	55
Figure 14-4: Standard SJ39 results plotted against time	55
Figure 14-5: Blank sample analytical results plotted against time	57
Figure 14-6: Plots of Swastika primary analyses vs. Swastika pulp duplicate analyses	58
Figure 14-7: Plot of primary assays versus quarter core duplicate assays	60
Figure 14-8: Plot of primary assays versus preparation duplicates	61
Figure 14-9: Check Assay Scatterplot Comparison	63
Figure 14-10: Check Assay Absolute Relative Percent Difference (RPD) Plot	64
Figure 17-1: Plan view of drilling and mineralised zone.	72

Page | iii of iv



Figure 17-2: 3-D view of outlined zones, facing local grid west.	73
Figure 17-3: Drill Hole Cross-Sections.	
Figure 17-4: Sample statistics for the main mineralised zone (regularised samples).	77
Figure 17-5: Omni-directional semi-variogram model (1.0 metre regularised samples)	

LIST OF TABLES

Table 4-1: List of patented mining claims comprising the Garrison Gold Property	12
Table 6-1: Historical diamond drill defined reserves, Jonpol Explorations Ltd. (1988)	23
Table 7-1: Regional Table of Formations (Berger 2002)	26
Table 9-1: Significant 2009 Drill Program Composite Assay Intervals	34
Table 11-1: Historic Drilling included in Northern Gold's Drill Hole and Resource Database	42
Table 11-2: 2009 Garrcon Diamond Drill Program	43
Table 11-3: 2010 Garrcon Diamond Drill Program	47
Table 13-1: Summary List of 2009 Drill Core Samples and Performed Analyses	50
Table 14-1: QA/QC certified reference materials, for 2009 drilling program	
Table 14-2: ACA Howe Verification Samples - SGS Analytical Method	65
Table 14-3: ACA Howe Duplicates vs. Original Samples	66
Table 17-1: Cross-section definitions.	
Table 17-2: Semi-variogram spherical model parameters.	78
Table 17-3: Block model parameters.	79
Table 17-4: Grade estimation parameters.	80
Table 17-5: Block model fields	81
Table 17-6: Summary of mineral resources.	83
Table 17-7: Details of mineral resources.	84
Table 17-8: Cross-validation of results.	85

LIST OF PLATES

Plate 5-1: Core logging/geology office and core saw facility at time of Howe site visit	18
Plate 5-2: Core saw and sample preparation facility at time of Howe site visit	19
Plate 5-3: Core storage racks with remodeled field office/logging and sample preparation	
facilities in background (September 2010).	19

LIST OF APPENDICES

APPENDIX A:	Diamond Drill Holes used in Mineral Resource Estimate
APPENDIX B:	ACA Howe Duplicate Samples - Analytical Certificates
APPENDIX C:	Mineral Resource Estimate Cross Sections



1 SUMMARY

This technical report ("the Report") has been prepared by A. C. A. Howe International Limited ("Howe") at the request of Mr. Martin Shefksy, President, Northern Gold Mining Inc. ("Northern Gold" or "the Company"). This report is specific to the standards dictated by National Instrument 43-101 and Form 43-101F1 (Standards of Disclosure for Mineral Projects) in respect to the Garrison Gold Property ("Property") and focuses on Howe's independent first-time NI 43-101 compliant mineral resource estimate on the Garrcon Deposit.

The Property is located in the Timmins-Kirkland Lake area of northeastern Ontario along the Highway 101 corridor east of the town of Matheson. Specifically it is located in Garrison Township, Larder Lake Mining Division, approximately 40 kilometres north of Kirkland Lake, 40 kilometres east of Matheson, and 100 kilometres east of Timmins, Ontario.

The Property is comprised of 35 patented mining claims covering an area of approximately 374.5 hectares (925 acres). The claims that make up the Property have been historically grouped into three contiguous claim blocks known as the Newfield, Garrcon, and Brydges Groups.

The Property is located within the Archean Abitibi Subprovince of the Superior Province of the Canadian Shield. The Property overlies about 4 kilometres of the regionally significant Destor-Porcupine Fault Zone and a major splay, the Munro Fault Zone. The Property is underlain by Kidd-Munro Assemblage metavolcanic rocks which, in the absence of faults, are unconformably overlain by Timiskaming Assemblage clastic metasedimentary rocks, composed of conglomerate, wacke-sandstone, siltstone, argillite and schist. The Timiskaming Assemblage rocks are closely associated with the Destor-Porcupine Fault Zone from the Quebec border to Hislop Township a distance of approximately 65 kilometres (Berger, 2002). Banded magnetite-hematite iron formation is complexly interbedded and structurally interleaved with clastic metasedimentary rocks. On the Property the Timiskaming Assemblage is fault bounded, on the north side by the Munro fault and on the south side by the Destor-Porcupine Fault Zone.

The Destor-Porcupine Fault Zone comprises a variably altered and deformed sequence of metavolcanic rocks that include komatiites and tholeiitic basalts. Significant gold deposits generally occur in clusters proximal to and along the Destor-Porcupine Fault Zone. Where clustering occurs, the gold deposits are associated with disseminated pyrite zones in sub-parallel auriferous structures over limited strike distances. An example of this clustering is the Holloway Mine and Holt-McDermott gold mines in Holloway Township, approximately 15 kilometres east of the Property. These two deposits occur along two separate gold-bearing structures which, like the Garrison Property, are largely covered by overburden.

Gold mineralisation on the Property is similar to many of the deposits in the Timmins Gold Camp, where high-grade gold mineralized quartz veins and gold-bearing disseminated sulphide zones occur within and adjacent to shear zones, as steeply dipping ore shoots. On the Property gold mineralisation occurs in sulphide-rich bodies (pyrite-arsenopyrite) within the Destor-Porcupine Fault Zone (903 Zone) and Munro Fault Zone (Jonpol Deposit comprising the JD, JP, RP and East Zones), and also within the intervening Timiskaming sedimentary rocks (Garroon



Deposit comprising the Garron North, Shaft and South Zones) where it is associated with quartz-pyrite vein stockworks on the northern edge of the Destor-Porcupine Fault Zone.

The quality control and quality assurance (QA/QC) protocols of the Company are industry standard. While there is no available QA/QC data for the historic exploration on the Property, it was conducted under the supervision of experienced local geologists and the Author is of the opinion that the data is of sufficient quality to be used in a current NI 43-101 compliant resource estimate.

During August and September, 2010 ACA Howe International Limited ("Howe") carried out a resource estimate for Northern Gold's Garrison Gold Property, Garrcon Deposit. The mineral resource estimate incorporates previous third-party drill holes and Northern Gold's drill holes completed in 2009.

This resource estimate was prepared by Doug Roy, M.A.Sc., P.Eng., Associate Mining Engineer with Howe. Geological interpretation was provided by Ian Trinder, M.Sc., P.Geo., Senior Geologist with Howe. Micromine software (Version 12) was used to facilitate the resource estimation process. The resource estimate was prepared in accordance with CIM Standards on Mineral Resources and Reserves¹.

For resource estimation, Northern Gold provided several forms of digital data. Input files were created from the supplied data for import to Micromine resource modeling software.

The drilling data was imported to Micromine and the database files were validated. Apart from a few concerns regarding downhole survey data for two pre-2009 drill holes, and minor discrepancies in the assay database, no significant errors were detected. All errors were corrected and documented. Unassayed drill hole intervals were assigned a grade of zero g/tonne Au.

Much of the historic and current drilling has been conducted at True azimuths approximating 340/160. Therefore to generate interpretive sections in the approximate plane of the most of the diamond drill holes, UTM grid coordinates were translated to a local grid such that Local Grid north equals 340 True. The UTM grid was rotated 20 degrees counterclockwise about Northern Gold's drill hole GAR-09-01 (UTM 578625.69E, 5373998.41N) which was assigned an arbitrary Local Grid coordinate of 5,000E and 5,000N.

Mineralised zones were outlined to enforce geological control during block modeling. Because of the larger scale and lower grade nature of the mineralisation, it was assumed that if developed the deposit would be mined using larger scale, surface mining methods.

Cross-sections were interpreted and digitised onscreen and zone intercepts were determined. The main zone is constrained to the south by Porcupine-Destor Fault Zone which is delineated by ultramafic and chlorite talc schists. Similarly there appears to be a smaller more limited ultramafic body bounding (at least locally) the mineralisation to the north.

¹ CIM Standards in Mineral Resources and Reserves, Definitions and Guidelines, adopted August 20, 2000



Samples were regularised over 1.0 metre intervals - the most common sample interval for samples within the mineralised zones. Statistics were calculated for regularised samples within the main mineralised zone. The mean value for all samples was 0.43 g/tonne.

Experimental variograms were constructed. The omni-directional variogram produced excellent data to which a spherical model could readily be fit. The range was approximately fifty metres.

A block model was constructed with a block size of 10x10x10 metres. There were two subblocks in each direction for a geological resolution of 5x5x5 metres.

The chosen cut-off grade for mineralised zone interpretation was 0.1 g/tonne of gold. The chosen "block cut-off" 2 grade for defining mineral resources was 0.5 g/tonne. No top-cut grade was applied because, in the author's opinion, a top-cut would not affect the global estimate.

Because of the exceptional global semi-variogram model (refer to Figure 17-5), ordinary block kriging was considered to be an acceptable, and appropriate method for estimating block grades in this deposit.

Resource classification parameters were chosen based on a combination of variography results and the author's judgment. Indicated Resources were outlined graphically on cross-sections within areas where the intercept spacing was approximately less than the variogram range of 52 metres.

Howe has reviewed the Garrcon deposit data provided by Northern Gold, including the drill hole database, has visited the site and has reviewed sampling procedures and security. Howe believes that the data presented by the Company are generally an accurate and reasonable representation of the Garrcon deposit mineralisation. The Authors conclude that the database for the Garrcon deposit is of sufficient quality to provide the basis for the conclusions and recommendations reached in this Report.

Work by the Company at the Garron deposit has confirmed the grade of mineralisation outlined by previous operators, provided further detail on the nature of the mineralised zones and permitted the completion a NI 43-101 compliant Mineral Resource Estimate.

Northern Gold's QA/QC results to date indicate that there are no major problems with the accuracy of the analyses. Howe does note however that a comparison of the Swastika and Polymet check samples show a significant scatter and generally poor gold analytical precision for pulps, Howe has attributed this to the analytical detection limit and methods utilised at the Polymet laboratory. The current sampling and analytical protocols are considered by Howe to be appropriate.

Northern Gold's exploration program to December 2009 has confirmed and delineated a significant gold resource. Using a cut-off grade of 0.1 g/tonne gold for mineralised zone

² The grade at which it is possible to mine and process and exposed block (*i.e.*: stripping not included).



interpretation, Howe outlined a mineralised zone that is nearly vertical, 760 metres long and 300 metres wide (on average).

The volume of shaft, drifts and crosscuts historically excavated by Cominco have not been deleted from the mineral resource volume. Utilizing approximate cross-sectional dimensions typical of underground workings for the era, Howe estimates that the total volume and tonnage of the material extracted by Cominco from the resource area was approximately 7,000 cubic metres and 20,000 tonnes respectively. This is less that 0.1% of Howe's combined inferred and indicated resource tonnage and therefore is insignificant.

Howe is unaware of any known environmental, permitting, legal, title, taxation, socio-economic, marketing, political or other relevant issues that may materially affect the mineral resource estimate.

Indicated mineral resources total 3.8 million tonnes with an average gold grade of 1.2 g/tonne, for 144,000 ounces gold using a 0.5 g/tonne block cut-off grade.

Inferred mineral resources total 18.5 million tonnes with an average gold grade of 0.9 g/tonne, for 530,000 ounces gold using a 0.5 g/tonne block cut-off grade.

Mineral Resource Category	Tonnes Above Cut- off	Average Gold Grade (g/tonne)	Ounces
Indicated			
Less Than 150 m Deep	3,300,000	1.2	130,000
More than 150 m Deep	480,000	0.9	14,000
Total Indicated	3,780,000	1.2	144,000
Inferred			
Less Than 150 m Deep	9,400,000	1.0	300,000
More than 150 m Deep	9,100,000	0.8	230,000
Total Inferred	18,500,000	0.9	530,000

Notes:

- 1. Cut-off grade for mineralised zone interpretation was 0.1 g/tonne.
- 2. Block cut-off grade for defining Mineral Resources was 0.5 g/tonne.
- 3. No top-cut grade was used. In the author's opinion, the use of a top cut would not have significantly affected the results.
- 4. Gold price was \$US 900 per troy ounce.
- 5. Zones extended up to 100 metres down-dip from last intercept. Along strike, zones extended halfway to the next cross-section.
- 6. Minimum width was 5 metres, though in no place was the zone that narrow.
- 7. Non-diluted.
- 8. Mineral resources that are not mineral reserves do not have demonstrated economic viability.



- 9. Resource estimate prepared by Doug Roy, M.A.Sc., P.Eng.
- 10. A specific gravity (bulk density) value of 2.6 was applied to all blocks (a representative value based on a limited number of measurements).
- 11. Ordinary block kriging ("OBK") was used for estimating block grades.
- 12. Indicated resources identified where sample intercept spacing was
 50 metres or less (based on variography).
- 13. No Measured Mineral Resources or Mineral Reserves of any category were identified.
- 14. The volume/tonnage of historic Cominco shaft, drifts and crosscuts have not been deleted from the Howe mineral resource volume/ tonnage. Howe estimates the tonnage extracted from the resource area was less than 0.1% of the total inferred and indicated resource tonnage.

Howe concludes that the Garrcon deposit and the Garrison Gold Property is a property of merit as defined in NI 43-101 and warrants additional expenditures.

Howe recommends that:

- 1. Check samples should continue to be submitted with inserted standards to a second laboratory as part of the Company's sampling QA/QC program. Pulps should be rehomogenised and riffle split at the check lab prior to analysis and that the same analytical methods be used at both primary and check laboratories. The Company should re-run some of the check pulps from the 2009 drill program at a third laboratory to confirm the source of the discrepancies between the Swastika and Polymet check samples.
- 2. Given the lack of QA/QC information and documentation of sampling and assaying methodologies for the historic Cominco/Jonpol drill core, Northern Gold should conduct a check sampling program of select archived Cominco/Jonpol drill core. Pulps and rejects are not available therefore the archived half core should be utilized after thorough relogging and photographing of the core. The rejects from the duplicate check samples will be archived and securely stored
- 3. Northern Gold should sample and assay currently non-sampled intervals of historic Cominco/Jonpol and ValGold drill holes that lie within the mineral resource volume.
- 4. A sufficient quantity of certified reference materials (low, medium and high grades) representative of the Garroon mineralisation be acquired and used throughout the sampling QA/QC program.
- 5. Additional diamond drilling should be completed on the Garron deposit to (a) expand Inferred mineral resources along strike and at depth and (b) upgrade Inferred resources to Indicated resources.



- 6. Specific gravity measurements be conducted on representative Garron samples. The number of samples would depend on the statistical variance of the measurements, but 100-200 representative measurements would be a good starting point.
- 7. Laboratory scale mineral processing work be carried out on Garroon mineralisation to support a preliminary economic assessment ("PEA"). Gravity/flotation, gravity/cyanide leach (CIL or CIP) and heap leach options should be evaluated using a representative sample. At least 200-300 kilograms of representative material would be required for that work.
- 8. Update of the Garron resource estimate to include the results of the ongoing 2010 drill program.
- 9. A scoping study or *preliminary economic assessment* ("PEA") on the Garrcon deposit is warranted and should be carried out. This work should evaluate, at a minimum, conventional surface mining combined with the three mineral processing options described in recommendation item 7.

The estimated cost of the recommended work is as follows:

Step-out and in-fill diamond drilling (30,000 m)	\$4,500,000
Specific gravity measurements	\$ 5,000
Ground Geophysics (including IP)	\$ 100,000
Mineral processing testwork	\$ 150,000
Environmental Permitting	\$ 200,000
Garrcon resource update	\$ 50,000
Preliminary Economic assessment	\$ 150,000
Total	\$5,155,000



2 INTRODUCTION

2.1 GENERAL

This technical report ("the Report") has been prepared by A. C. A. Howe International Limited ("Howe") at the request of Mr. Martin Shefksy, President, Northern Gold Mining Inc. ("Northern Gold" or "the Company"). This report is specific to the standards dictated by National Instrument 43-101 and Form 43-101F1 (Standards of Disclosure for Mineral Projects) in respect to the Garrison Gold Property ("Property") and focuses on Howe's independent mineral resource estimate on the Garrcon Deposit within the Property. The Property is situated in Garrison Township, Larder Lake Mining Division, Ontario, approximately 100 kilometres east of the city of Timmins.

Northern Gold is a junior resource company listed on the TSX Venture Exchange under the symbol "NGM". The corporate head office is located at Suite 800 20 Victoria St., Toronto, Ontario, M5C 2N8. The company's field office is located in the town of Kirkland Lake, Ontario, approximately 40 km south of the Property area.

The Company's current focus is the Garrison Gold Property on which it has an option to earn an undivided 80% interest from the Property owner ValGold Resources Inc.

Howe is an international mining and geological consulting firm that has been serving the international mining community for over 30 years. Howe is well recognized by the major Canadian Stock Exchanges and provincial regulatory bodies and its personnel have worked on projects involving a wide variety of commodities and deposit types throughout the world. The firm's services are provided through offices in Toronto and Halifax, Canada; and London, England.

Neither Howe nor any of the authors of the opinions expressed in this Report (nor family members nor associates) have business relationships with the Company or any associated company, nor with any other company mentioned in this Report which is likely to materially influence their impartiality or create the perception that the credibility of this Report could be compromised or biased in any way. The views expressed herein are genuinely held and deemed independent of the Companies.

Moreover, neither the authors of this Report nor Howe (nor their family members nor associates) have any financial interest in the outcome of any transaction involving the property considered in this Report, other than the payment of normal professional fees for the work undertaken in its preparation (which are based upon hourly charge-out rates and reimbursement of expenses). The payment of such fees is not dependent upon the content or conclusions of either this Report, nor any consequences of any proposed transaction.



2.2 SCOPE AND CONDUCT

The purpose of the report is to complete a first-time NI 43-101 compliant resource estimate for the Company's Garron Deposit at its Garrison Township Gold Property (formerly known as the Jonpol Property) with the aim of establishing a bulk tonnage resource encompassing the known Shaft, South and North zones.

This resource estimate was prepared by Doug Roy, M.A.Sc., P.Eng., Associate Mining Engineer with Howe. Geological interpretation was provided by Ian Trinder, M.Sc., P.Geo., Senior Geologist with Howe. Mr. Roy is a mining engineer with over ten years experience in the mining industry. He has participated in numerous projects and resource estimates for precious metals and base metals projects and has authored or co-authored numerous OSC-2A and NI 43-101 resource reports. Mr. Trinder has over 20 years experience in the mining industry with a background in international precious and base metals mineral exploration including project evaluation and management. The estimate was prepared in accordance with CIM Standards on Mineral Resources and Reserves. Only mineral Resources were estimated – no Reserves were defined.

Mr. Trinder visited the Property site and Northern Gold's Kirkland Lake field office on July 12th and 13th, 2010 as part of Howe's due diligence in the preparation of this technical report. During the property visit, Mr. Trinder met with Mr. Michael Gross, Northern Gold's Vice President Exploration and Mr. Greg Matheson, the Company's Project Geologist to examine the Property area and discuss the Company's exploration activities, methodologies, findings and interpretations. Mr. Trinder completed a thorough review of all recent drilling on the Property, acquired a complete digital database of all historic and current drilling on the Property, and reviewed and made copies of historic reports available for the Property. In addition, Mr. Trinder reviewed drilling and sampling methodology, quality assurance and quality control procedures, security, etc.

The Report is based on information known to Howe as of September 23, 2010 and includes assay data for the Company's 2009 diamond drill holes up through GAR-09-10. Results from the Company's 2010 drill program are not considered in the resource estimate. Only the Garron Deposit within the Property area is discussed in any detail in this report. Howe reserves the right, but will not be obligated to revise this Report and conclusions if additional information becomes known to Howe subsequent to the date of this Report.

Northern Gold reviewed draft copies of this Report for factual errors. Any changes made as a result of these reviews did not include alterations to the conclusions made. Therefore the statement and opinions expressed in this document are given in good faith and in the belief that such statements and opinions are not false and misleading at the date of this Report.

Northern Gold has accepted that the qualifications, expertise, experience, competence and professional reputation of Howe's Principals and Associate Geologists and Engineers are appropriate and relevant for the preparation of this Report. The Company has also accepted that Howe's Principals and Associates are members of professional bodies that are appropriate and relevant for the preparation of this Report.



Northern Gold has warranted that full disclosure of all material information in its possession or control at the time of writing has been made to Howe, and that it is complete, accurate, true and not misleading. The Company has also provided Howe with an indemnity in relation to the information provided by it, since Howe has relied on Northern Gold's information while preparing this Report. The Company has agreed that neither it nor its associates or affiliates will make any claim against Howe to recover any loss or damage suffered as a result of Howe's reliance upon that information in the preparation of this Report. Northern Gold has also indemnified Howe against any claim arising out of the assignment to prepare this Report, except where the claim arises out of any proven willful misconduct or negligence on the part of Howe. This indemnity is also applied to any consequential extension of work through queries, questions, public hearings or additional work required arising out of the engagement.

2.3 SOURCES OF INFORMATION

In preparing this updated resource estimate, Howe has relied on a digital database received from Northern Gold in Microsoft Excel spreadsheet format. Howe has also reviewed geological reports, maps, miscellaneous technical papers, company letters and memoranda, and other public and private information as listed in Section 21 of this Report, "Sources of Information / References". Howe has assumed that all of the information and technical documents reviewed and listed in the "Sources of Information" are accurate and complete in all material aspects. While Howe carefully reviewed all of this information, Howe has not conducted an independent investigation to verify its accuracy and completeness. Howe has only reviewed the land tenure in a preliminary fashion, and has not independently verified the legal status or ownership of the property or the underlying agreements. Howe has not investigated any environmental or social issues that could conceivably affect the Garrcon Deposit. Historical mineral resource figures contained in the Report, including any underlying assumptions, parameters and classifications, are quoted "as is" from the source. Howe confirms the estimated resource is in compliance with National Instrument 43-101 and Form 43-101F1 (Standards of Disclosure for Mineral Projects) and the definitions and guidelines of the CIM Standards on Mineral Resources and Reserves.

In addition, Howe carried out discussions with Mr. Michael Gross, Northern Gold's Vice President Exploration and Mr. Greg Matheson, the Company's Project Geologist. Howe's extensive experience in mesothermal vein deposits was also drawn upon.

The authors believe that the data presented by Northern Gold are a reasonable and accurate representation of the Garrison Gold Property's Garron Deposit.

2.4 UNITS AND CURRENCY

All units of measurement used in this report are metric unless otherwise stated. Historical tonnage figures are reported as originally published in "tons" (short tons). Base metal values are reported in percent (%) or parts per million (ppm). Historical gold and silver grades are reported in their original unit of oz Au/ton or oz Ag/ton (ounces per short ton), although metric



equivalents are also given for clarity. Recent analyses are reported in g/t (grams per metric tonne), ppm or parts per billion (ppb). Distances are expressed as kilometres (km) and metres (m). The Canadian dollar is used throughout this Report unless otherwise stated. At the time of writing this report exchange rate for conversion of U.S. dollars to Canadian dollars was US\$1.00: C\$1.03.

Location coordinates are expressed in Universal Transverse Mercator (UTM) grid coordinates, Zone 17, using the 1983 North American Datum, (NAD83).



3 RELIANCE ON OTHER EXPERTS

Howe has relied upon the Ontario Ministry of Northern Development and Mines ("MNDM") for information on mining claim location and mining claim status. The MNDM disclaims any guarantee or warranty that their information is accurate, complete or reliable. Howe has relied upon the Company, its management and legal counsel for information related to underlying contracts and agreements pertaining to the historic acquisition of the mining claims and their status. The Property description presented in this report is not intended to represent a legal, or any other opinion as to title.

Information on the Property presented in this Report is based on data derived from current and historic reports written by geologists and/or engineers, whose professional status may or may not be known in relation to the NI 43-101 definition of a Qualified Person. Howe has made every attempt to accurately convey the content of reports and files, but cannot guarantee either the accuracy or validity of the work contained. However, Howe believes that these reports were written with the objective of presenting the results of the work performed without any promotional or misleading intent. In this sense, the information presented should be considered reliable, unless otherwise stated, and may be used without any prejudice by Northern Gold.



4 PROPERTY DESCRIPTION AND LOCATION

4.1 **PROPERTY LOCATION**

The Property is located in the Timmins-Kirkland Lake area of northeastern Ontario along the Highway 101 corridor east of the town of Matheson (Figure 4-2). Specifically it is located in Garrison Township, Larder Lake Mining Division, approximately 40 kilometres north of Kirkland Lake, 40 kilometres east of Matheson, and 100 kilometres east of Timmins, Ontario. The Property is situated within National Topographic System (NTS) map sheet 32/D12 at approximately latitude 48°30'58" North and longitude 79°57'11" West (UTM Zone 17N coordinates 578,115E and 5,374,030N, NAD83 Datum).

4.2 **PROPERTY DESCRIPTION**

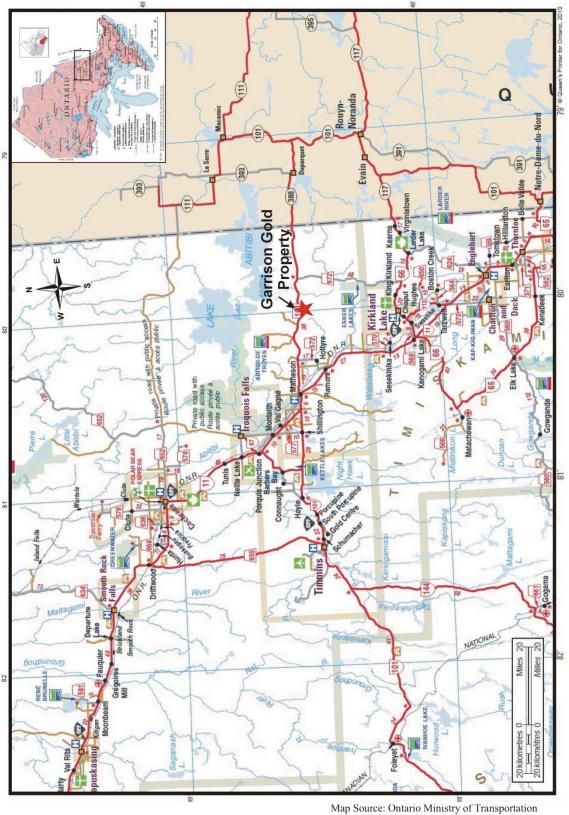
The Property is comprised of 35 patented mining claims covering an area of approximately 374.5 hectares (925 acres) (Table 4-1; Figure 4-2). The claims that make up the Property have been historically grouped into three contiguous claim blocks known as the Newfield, Garrcon, and Brydges Groups (Table 4-1; Figure 4-3).

Land surveyors established claim boundaries at the time the claims were patented. The cost of maintaining tenure of the patented claims is comprised of nominal fees (Provincial Land Tax and Provincial Mining Tax).

Claim Group	Claim Numbers (L)	No. Claims	Status	Holder	Percentage
Newfield	26432 to 26437	6	Patented	ValGold Resources Ltd.	100
	29734 to 29735	2	Patented	ValGold Resources Ltd.	100
	39428 to 39429	2	Patented	ValGold Resources Ltd.	100
	43702 to 43703	2	Patented	ValGold Resources Ltd.	100
	44331 to 44332	2	Patented	ValGold Resources Ltd.	100
Garrcon	26120 to 26122	3	Patented	ValGold Resources Ltd.	100
	26341 to 26346	6	Patented	ValGold Resources Ltd.	100
	38949 to 38951	3	Patented	ValGold Resources Ltd.	100
Brydges	25803 to 25805	3	Patented	ValGold Resources Ltd.	100
	25937 to 25942	6	Patented	ValGold Resources Ltd.	100
	TOTAL:	35			



A.C.A. HOWE INTERNATIONAL LIMITED Mining and Geological Consultants





Page | 13 of 94



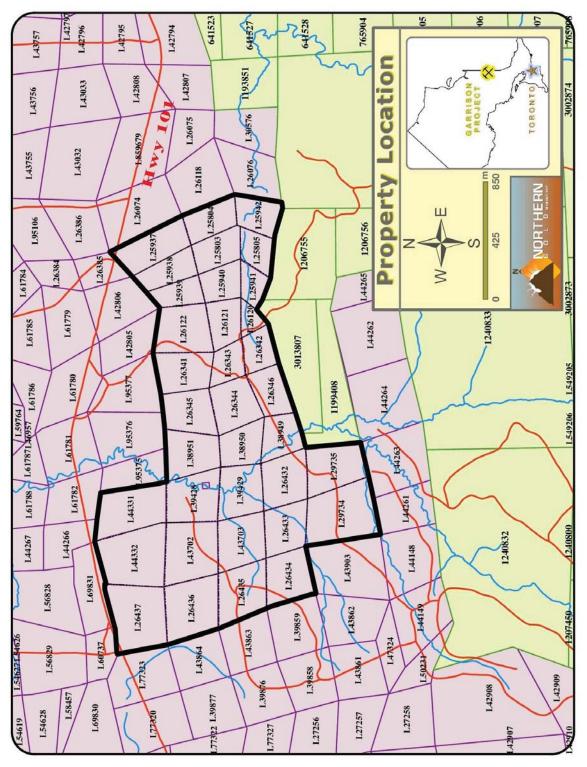


Figure 4-2: Property Claim Map



A.C.A. HOWE INTERNATIONAL LIMITED Mining and Geological Consultants

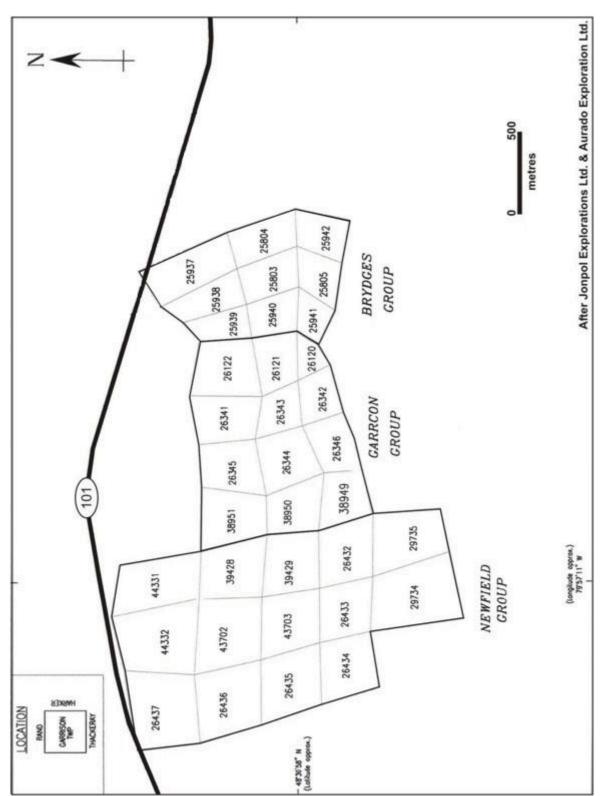


Figure 4-3: Property Claim Map with Historic Claim Group Outlines



4.3 **PROPERTY, OTHER OBLIGATIONS**

The claims are 100% owned by ValGold Resources Inc. On September 9, 2009 Northern Gold Mining Inc. entered into an Option Agreement with ValGold Resources Ltd. covering the Garrison Gold Property. Under the terms of the agreement, Northern Gold may earn up to an undivided 80% interest in the Property in two phases. Northern Gold may acquire a 50% undivided interest in the property by making exploration expenditures totaling \$4,000,000 plus cash payments to ValGold totaling \$1,000,000 over four years for a total expenditure of \$5,000,000. The cash payments to ValGold totaling \$1,000,000 over four years can be made either in cash or in Northern Gold stock at Northern Gold's option, using a 20 day value weighted average price, upon regulatory approval. Northern Gold must also complete work on the property in the amount of \$4,000,000 over four years, with \$500,000 being spent on the property in the first year of the agreement and not less than \$750,000 to be expended in each of the subsequent years. After earning the 50% interest, Northern Gold may increase its interest to 80% percent by making additional cash payments totaling \$1,000,000 over four years (again with all or part of the payments being made in Northern Gold stock equivalent, using a 20 day value weighted average price) and completing additional work on the property in the amount of \$4,000,000 over four years.

Under the Option Agreement, Northern is the operator of the property and since signing the Option Agreement has accrued total expenditures of greater than \$1,000,000 from September 9, 2009 to June 30, 2010 which exceed the minimum expenditures of \$500,000 required for the first year of the Option Agreement. The primary focus of Northern Gold's work and expenditures has been the Garron Deposit located in the south central portion of the Garrison Gold Property.

Cominco (now Teck Resources Limited) holds a Net Smelter Return royalty (1.5% on ore above the 400-foot level and 2.0% on ore below the 400-foot level) on the Garrcon claim group (12 claims, L26120 to 22, L26341 to 46, and L38949 to 51), which cover both the Jonpol East Zone and the Garrcon Zone. The NSR agreement was made between previous property holder Jonpol Explorations Ltd. and Cominco, and has not been reviewed by Howe.

Howe is unaware of any obligations, underlying agreements, royalties or encumbrances on the Property other than the above Option Agreement and the Cominco Royalty and is not aware of any environmental liabilities or public hazards associated with the Property. The exploration shaft and ramp that were established at the Jonpol Deposit during the 1980's and 1990's have been capped and meet current regulatory standards for closure. The portal to the Jonpol ramp has been blocked with coarse mine waste. In Ontario, work permits are not required to perform the work recommended in this Report.



5 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPY

5.1 ACCESSIBILITY

The Garrison Gold Property is located approximately 40 kilometres north of Kirkland Lake, 40 kilometres east of Matheson, and 100 kilometres east of Timmins, Ontario. Air access to the area is available via scheduled commercial flights to Timmins. Direct highway access to the area from Toronto is via Highways 400 and 11 north through North Bay to Matheson (approximately 560 km) then east from Matheson along Highway 101. Highway 101 traverses the north side of the Property and an 800 metre long gravel road, constructed in 1988, allows for 2-wheel drive access to the Property from the highway. Additional bush roads provide further access into the Property.

5.2 CLIMATE AND PHYSIOGRAPHY

There is low topographic relief in the immediate area of the Property. Property elevations range from 289 to 305 metres above sea level (ASL) with swamp and overburden covered areas between hummocks of clay rimmed outcrop. Jack pine and balsam grow on esker and sandy soil areas; wet areas are vegetated with spruce, cedar and tag alder. Bedrock exposure is generally poor (\sim 10-20% exposure) and overburden is typically >5 metres thick.

The Property area experiences four distinct seasons. Daily average winter temperature in January is -17 degrees Celsius with an extreme daily minimum of -47 Celsius. Daily average summer temperature in July is +18 degrees Celsius with an extreme daily maximum of +39 degrees Celsius. The region has average annual precipitation of approximately 89 centimetres including approximately 59 centimetres of rain, largely during the months of April to October and up to 3 metres of winter snow accumulation, occurring largely between the months of November and April.

Mineral exploration can be conducted year-round. In lake covered or swampy areas, exploration activities such as geophysical surveys and diamond drilling are more easily conducted in the winter due to better accessibility after freeze-up.

5.3 LOCAL RESOURCES AND INFRASTRUCTURE

There are numerous operating gold and base metal mines in the area and the necessary infrastructure for mining and mineral exploration, including skilled labour, is available locally. The Property is located about 100 kilometres east of the City of Timmins, Ontario (2006 population: 42,997), a major mining centre with a skilled and educated work force, a commercial airport and rail service. Other population centres in the area include Matheson (2006 population: 2,619) and Kirkland Lake (2006 population: 8,248), an active mineral exploration and mining town with rail service.



Existing surface site infrastructure at the time of Howe's site visit consisted of the following:

- A graveled site access road from Highway 101 allowing 2 wheel-drive vehicle access;
- A security gatehouse;
- A combined core logging shack and geology field office (Plate 5-1);
- A core sampling shack with electric core saws and water storage tanks (Plate 5-2);
- One diesel powered electric generator for core logging and core sampling shacks;
- Two decommissioned railway boxcars for storage of sample rejects and pulps;
- Core storage racks on gravel pad (Plate 5-3);
- Weather station.

Following Howe's site visit Northern Gold extended the field office roof placing the field office/logging room and sample preparation room under one roof with additional storage areas for core and ATV's (Plate 5-3). The core saw setup in the sample preparation room was also remodeled.

Power and water are readily available in the vicinity of the Property. The Property is of sufficient area for the establishment of potential mine infrastructure such as tailings and waste storage areas, heap leach pads and processing plant site.



Plate 5-1: Core logging/geology office and core saw facility at time of Howe site visit.





Plate 5-2: Core saw and sample preparation facility at time of Howe site visit



Plate 5-3: Core storage racks with remodeled field office/logging and sample preparation facilities in background (September 2010).



6 PROPERTY HISTORY

Exploration conducted on the Property dates back to 1935 (Satterly, 1949). The majority of work has concentrated on the Jonpol Deposit area within the Property and this exploration history has been documented in Howe's 2008 technical report on the Garrison Gold Property for ValGold (George, 2008). Bath (1990) summarized the exploration and development from 1935 to 1989, for the area within and surrounding the present Property. Squair (2000) further summarized exploration conducted up to 1997.

As this Report focuses on the Garron Deposit, the Property history presented in this section shall concentrate on the immediate area of this zone within the Property. For the exploration history of the rest of the Property area, the reader is directed to the reports noted above.

The mining claims that make up the Property are patented and as a result very little of the exploration work carried out on the Property has been filed with the government and hence the data is not in the government assessment work files. Initial drilling on the Property occurred in the period 1935-1946 with additional drilling completed during 1983. None of this data has been included in the Northern Gold's current exploration database. The most important historic data relating to the Property is the exploration work completed since 1985 by Cominco / Jonpol Explorations Ltd. and by ValGold Resources Inc. Northern Gold's current drill hole database includes only holes drilled between 1986 and present.

6.1 GARRCON DEPOSIT EXPLORATION HISTORY

Exploration and development history from 1935 to 1989 has been extracted from Bath (1990) with metric equivalents inserted by Howe:

- "1935: The Consolidated Mining and Smelting Company of Canada Ltd. optioned 9 claims from a Mr. McKenzie, sank a 256 foot (78 metre) deep inclined (to the south at 62 degrees) shaft, performed about 1,033 feet (315 metres) of lateral exploration work on the 120 and 240 foot (36.5 and 73 metre) levels, and hoisted about 7,612 tons (6,920 tonnes) of waste material. By year end, about 10,550 feet (3,216 metres) of underground and surface diamond drilling had been completed (Young 1937, Sinclair et al. 1937, Sinclair et al. 1938).
- 1936: Garroon Mines Ltd. was incorporated in May with Consolidated Mining and Smelting controlling the company and acting as operator on the Garroon Mines property. 1,745 feet (532 metres) of lateral underground exploration work and additional underground diamond drilling were completed (Sinclair et al. 1938).
- 1937: 4 feet (1.2 metres) of shaft sinking, 1,542 feet (470 metres) of lateral underground exploration work, 21 surface holes totaling 5,070 feet (1,545 metres), and 33 underground holes totaling about 5, 905 feet (1,800 metres) were diamond drilled. Before operations were suspended at year end, aggregate lateral underground exploration work amounted to



636 feet (194 metres) on the 120 foot (36.5 metre) and 3,655 feet (1,114 metres) on the 240 foot (73 metre) levels (Sinclair et al. 1939), aggregate diamond drilling totaled 16,099 feet (4,907 metres) (of which 11,029 feet (3,362 metres) were drilled underground) and about 520 feet (158 metres) of trenching had been completed (Satterly 1949).

- 1941: Consolidated Mining and Smelting diamond drilled one 293 foot (89 metre) hole near the northeast corner of claim 38950.
- 1946: Consolidated Mining and Smelting completed a magnetic survey.
- 1949: By this time, Consolidated Mining and Smelting controlled in addition to the Garroon property, 3 contiguous patented claims to the west (claim Nos. 39949-51). Before 1949, trenching and 4 holes totaling 2,110 feet (643 metres) were diamond drilled on these claims (Satterly 1949).
- 1983: Kerr Addison Mines Ltd. diamond drilled 10 holes on the 12 Consolidated Mining and Smelting/Garrcon Mines (by this time, optioned by Cominco Ltd.) claims (Jonpol Explorations Ltd. 1987 Annual Report).
- 1985: Jonpol Explorations Ltd. acquired the right to earn a 49% interest in the 12 Cominco/Garrcon Mines claims.
- 1986: Diamond drilling by Cominco was financed by Jonpol Explorations and delineated 2 additional auriferous zones (the North and South Zones). These were described (The Northern Miner, February 10, 1986) to be stratabound and not vein type. By July, Jonpol had earned a 49% interest in the property (The Northern Miner, July 21, 1986). By September, the South Zone was reported (The Northern Miner, September 29, 1986) to be hosted by altered sediment, to average 6 feet (1.8 metres) in width, and to have been traced by diamond drilling to the (vertical) 500 foot (152 metre) level along about 1,300 feet (396 metres) of strike. The North Zone had by this time been traced along strike for about 200 feet (61 metres), to the (vertical) 500 foot (152 metre) level, averaged 10.7 feet (3.3 metres) in width, and was reported to be hosted by a wide shear.
- 1987: By midyear, drilling funded by Jonpol Explorations and supervised by Cominco had established reserves of 1.5 million tons (1.36 million tonnes) of material averaging 0.04 ounce of gold per ton (1.37 grams gold per tonne) above the 200 foot (61 metre) level near the shaft. The South Zone was indicated to average 0.15 ounce of gold per ton (5.14 grams gold per tonne) across 3.8 feet (1.2 metres) along 1,400 feet (427 metres) of strike. The North Zone was reported to have been drill defined along 300 feet (91 metres) of strike. A new auriferous zone within the "Munro Shear" was reported to average 10 feet (3 metres) in width, to be drill defined along 250 feet (76 metres) of strike, with a mineralized drill core length of 36.9 feet (11.3 metres) averaging 0.30 (cut) ounce of gold per ton (10.28 grams gold per tonne - cut) intersected within it (Jonpol Explorations Ltd. 1987 Annual Report). By July, Jonpol Explorations/Cominco were reported (The Northern Miner, July



27, 1987) to have spent \$500,000 and that an additional \$2 million was budgeted for additional exploration during the next 2 years.

- 1988: Jonpol Explorations announced in a news release dated February 2, 1988 that aggregate drill defined reserves were estimated to be 350,900 tons (319,000 tonnes) of material averaging 0.191 ounce of gold per ton (6.55 grams gold per tonne) above the (vertical) 500 foot (152 metre) level in three distinct zones. Later, Jonpol Explorations acquired a 100% interest in the property following Cominco's having diamond drilled 79 holes totaling about 70,168 feet (21,387 metres) since 1983 (A. D. Drummond, project engineer, Jonpol Explorations Ltd., pers. comm. 1988). In July, Lac Minerals Ltd. obtained the right to acquire a 50% interest in the (Jonpol Explorations) properties (The Kirkland Lake Northern Daily News, July 7, 1988; The Northern Miner, July 11, 1988), and in November, Lac Minerals optioned the property (The Northern Miner, November 21, 1988)."
- 2005: ValGold Resources Inc. secured 100% ownership of the Property in June 2005 (subject to the Cominco NSR on the Garroon claim group). Initial work consisted of data review and preliminary data compilation as part of the planning process for a diamond drilling program.
- 2006: ValGold completed 9 NQ diamond drill holes on the Garrcon zone totaling 3,348 metres.
- 2007: ValGold completed 3 BQ and 2 NQ diamond drill holes on the Garrcon zone totaling 2,361 metres.
- 2009: In September 2009 the Company entered into an Option Agreement with ValGold covering the Garrison Gold property (historic Newfield, Garrcon and Brydges claim blocks).

6.2 GARRCON HISTORIC RESERVES AND RESOURCES

Various historical resource estimates on gold mineralisation in the Jonpol Mine and Garrcon Mine have been provided by various authors since the mid 1980's. *These historical resources, which are summarized and reported by Bath (1990), and by Squair (2000) who referred to historical reports by DDH Geomanagement Ltd. (1989) and R.J. Bradshaw (1989), have not been reviewed by Howe, and are not in compliance with NI 43-101 "Standards of Disclosures for Mineral Deposits". Data and the basis for the calculation of these resources are not known to Howe and as such these resources should not be relied upon.*

By mid 1987, Jonpol Explorations Ltd. had established reserves of 1.5 million tons (1.36 million tonnes) of material averaging 0.04 ounce of gold per ton (1.37 grams gold per tonne) above the 200 foot (61 metre) level and within the area of the Garron shaft.

In a news release dated February 2nd, 1988, Jonpol Explorations Ltd. announced aggregate drill defined reserves of *350,900 tons (319,000 tonnes) of material averaging 0.191 ounce of gold per*



ton (6.55 grams gold per tonne) above the (vertical) 500 foot level and contained in three distinct zones (Table 6-1).

Mineralized Zone	Tonnage (tons)	Average Grade (opt)
Munro Zone	81,300	0.267
North Zone	166,800	0.161
Shaft Area (South Zone)	102,800	0.180
Weighted Average:	350,900	0.191

 Table 6-1: Historical diamond drill defined reserves, Jonpol Explorations Ltd. (1988).

7 GEOLOGICAL SETTING

7.1 REGIONAL GEOLOGICAL SETTING

Garrison Township, situated in the Abitibi Greenstone Belt ("AGB"), is underlain by Neoarchean supracrustal rocks of the Abitibi Subprovince of the Canadian Shield. Supracrustal rocks are divided into tectonostratigraphic units called assemblages for descriptive purposes. The reader is referred to Jackson and Fyon (1991) for a full discussion of the Archean geology of the Superior Province and to Ayer et al. (2001) for a more recent interpretation of the AGB geology. Gold deposits are structurally controlled and are widely distributed within the AGB, but all of the large deposits occur within 2 km of the Porcupine-Destor Fault Zone, the Pipestone Fault Zone and the Cadillac-Larder Lake Shear Zone.

The most recent description of the regional geology of the area is by Berger (2002) in his geological synthesis of the Highway 101 area, east of Matheson. Berger (op cit p.xvii) has summarized the regional geological setting as follows (Table 7-1):

"The study area is underlain by Neoarchean supracrustal and intrusive rocks that are subdivided into 5 lithotectonic assemblages. The Kidd-Munro assemblage underlies the north part of the study area and is composed of a tholeiitic metavolcanic member and a calc-alkalic metavolcanic member. Ultramafic to mafic layered sills intrude the metavolcanic rocks. The Tisdale assemblage is composed of tholeiitic metavolcanic rocks and subordinate amounts of calc-alkalic metavolcanic rocks. The distribution of the assemblage is poorly constrained because of the Porcupine-Destor deformation zone and related splay faults transect the assemblage in several places. The Kinojevis assemblage underlies the south part of the study area and is composed of predominantly mafic tholeiitic metavolcanic rocks that are intercalated with thin units of tholeiitic rhyolite and calcalkalic metavolcanic rocks. The Porcupine assemblage underlies the northwest part of the study area and is composed of greywacke, argillite, and rare conglomerate that are intruded by small alkalic intrusions. The Timiskaming assemblage is composed of clastic and chemical metasedimentary rocks and rare alkalic metavolcanic rocks that are distributed within and near to the Porcupine-Destor deformation zone. Ultramafic to felsic alkalic intrusive rocks are also correlated with the Timiskaming assemblage and occur as dikes, small single-phase intrusions and large multi-phase intrusions throughout the area. Paleoproterozoic quartz-diabase dikes, Keweenawan-age olivine diabase dikes and Jurassic kimberlite dikes and diatremes intrude the Neoarchean rocks.

The Porcupine-Destor deformation zone is a crustal-scale structure that transects the study area and is characterized by south-side-up vertical movement. The fault zone and related northeaststriking splay faults such as the Ghostmount fault and McKenna fault, are the loci for gold mineralisation. Northeast-striking faults with dominant vertical displacement transect the Porcupine-Destor deformation zone. Two of these faults, the Hislop fault and Garrison fault, are major structural features that act as the boundaries to different metallogenic segments. Gold mineralisation occurs in different structural settings, different styles, and different types of alteration patterns in each segment."



Gold is extracted from the St Andrew Goldfield Ltd.'s Holloway mine in Holloway Township and Brigus Gold's Black Fox mine in Hislop Township (approximately 15 kilometres east and 32 kilometres west of the Property respectively). In addition, St Andrew Goldfield Ltd.'s Holt mine in Holloway Township and Hislop mine in Hislop Township are in development (approximately 15 kilometres east and 27 kilometres west of the Property respectively). Several past-producing gold mines are located in Hislop and Garrison townships. Many gold prospects and occurrences are located throughout the study area and there is excellent potential for future discoveries. There is potential for platinum group elements mineralisation in the ultramafic to mafic layered, intrusions and the ultramafic phases of the alkalic intrusions (Berger, 2002). Diamonds occur in some of the kimberlite intrusions (Berger, 2002).



Table 7-1: Regional Table of Formations	s (Berger 2002)
---	-----------------

PHANEROZOIC
CENOZOIC
QUATERNARY
HOLOCENE
Lake, stream and wetland deposits
PLEISTOCENE
Glacial, glaciofluvial and glaciolacustrine deposits, sand, gravel, and clay.
UNCONFORMITY
MESOZOIC
JURASSIC
Kimberlite dikes and diatremes
INTRUSIVE CONTACT
PRECAMBRIAN
PROTEROZOIC
Mafic intrusive rocks, Diabase dikes
INTRUSIVE CONTACT
ARCHEAN
NEOARCHEAN
Metamorphosed Alkalic Felsic and Intermediate Intrusive Rocks
Syenite, monzonite, quartz monzonite, granite, feldspar and quartz feldspar porphyry, intrusion
breccia, pegmatitic syenite, schist, mylonite, albitite
INTRUSIVE CONTACT
Metamorphosed Alkalic Ultramafic and Mafic Intrusive Rocks
Hornblendite, pyroxenite, melasyenite, pegmatitic melasyenite, lamprophyre, gabbro and/or diorite
INTRUSIVE CONTACT
Metamorphosed Tholeiitic Ultramafic and Mafic Intrusive Rocks
Peridotite, pyroxenite, gabbro, gabbronorite, schist, diorite, pegmatitic gabbro
INTRUSIVE CONTACT
Mafic and Intermediate Alkalic Metavolcanic Rocks
Massive and porphyritic amphibole-biotite-bearing flows, flow breccias
Clastic and Chemical Metasedimentary Rocks: Timiskaming Assemblage
Greywacke, sandstone, arkose, siltstone, argillite, polymictic conglomerate, schist, chert, laminated
magnetite-hematite iron formation.
UNCONFORMITY
Clastic and Chemical Metasedimentary Rocks: Turbidites: Porcupine Assemblage
Greywacke, siltstone, argillite, graphitic and pyritic mudstone, conglomerate, schist, chert
Felsic Metavolcanic Rocks: Kidd-Munro Assemblage and Kamiskotia Assemblage
Flows, tuffs, lapilli tuff, tuff breccia, schist
Mafic to Intermediate Metavolcanic Rocks: Kidd-Munro, Tisdale and Kinojevis Assemblages
Massive, flow-laminated and pillowed flows with flow top and pillow breccia, as well as
amygdaloidal and variolitic varieties; tuff, lapilli tuff, schist, breccia, and feldspar porphyry
Mafic Metavolcanic Rocks: Kidd-Munro, Tisdale and Kinojevis Assemblages
Massive and pillowed flows with pillow and flow top breccia, as well as variolitic and amygdaloidal
varieties; tuff and lapilli tuff, schist, leucoxene-bearing units, graphite breccia, dikes, hornfelsic
greenstone
Ultramafic, Komatiitic, and Mafic Metavolcanic Rocks: Kidd-Munro, Lower Tisdale and Stoughton-
Roquemaure Assemblages
Massive, spinifex and polysuture textured flows, schist and basaltic komatiite
Hussive, spiniez and polysuure extered nows, senist and basance kollatine



7.2 LOCAL GEOLOGICAL SETTING

Satterly (1949) mapped Garrison Township for the Ontario Department of Mines and his mapping provides the best geological work relating to the geology of the Property. Berger (2002) made minor amendments to the geology and brought the nomenclature for the various volcanic-sedimentary units up-to-date in terms of the current understanding of the stratigraphy of the Abitibi Greenstone Belt.

Figure 7-1 presents a summary of the geology in the immediate area of the Property. The Property is underlain by rocks of the Kidd-Munro and Timiskaming Assemblages and about 4 kilometres of the regionally significant Destor-Porcupine Fault Zone and a major splay, the Munro Fault Zone. Both fault zones comprise a variably altered and deformed sequence of metavolcanic rocks that include komatilites and tholeiitic basalts. The map also shows the location of Highway 101, the Jonpol and Garrcon shafts, the Jonpol adit and ramp and the Property boundary.

The Kidd-Munro Assemblage is comprised of massive to pillowed, mafic (high magnesium and iron tholeiites) and ultramafic (komatiite) metavolcanic rocks. The metavolcanic flows strike in a general east-west direction and dip steeply to the south, however, outcrop is limited and there is probably significant local folding, particularly in the vicinity of the major fault zones that cross the property. No surface exposures of ultramafic (komatiite) metavolcanics have been identified, however, in drill core there are abundant occurrences of talc schists, talc-carbonate schists, and carbonate-mariposite schists that are indicative of the presence of ultramafic or high magnesium tholeiites in the metavolcanic sequence. It is a clear possibility that the Munro and Porcupine-Destor faults are focused within the ultramafic rock units because of their high ductility compared to the more brittle mafic volcanic, felsic volcanic and sedimentary assemblages. The Munro fault hosts the Jonpol Deposit.

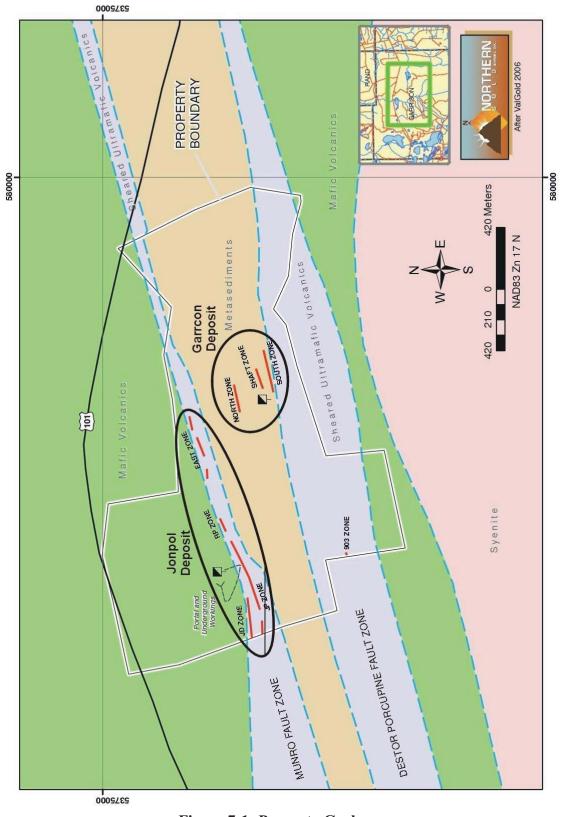
Timiskaming Assemblage clastic metasedimentary rocks, composed of conglomerate, wackesandstone, siltstone, argillite and schist, are closely associated with the Porcupine-Destor deformation zone from the Quebec border to Hislop Township a distance of approximately 65 kilometres (Berger, 2002). Banded magnetite-hematite iron formation is complexly interbedded and structurally interleaved with clastic metasedimentary rocks. The Timiskaming Assemblage is younger than the Kidd-Munro Assemblage and in the absence of faults; the contact between the assemblages is an angular unconformity. On the Property the Timiskaming Assemblage is fault bounded, on the north side by the Munro fault and on the south side by the Porcupine-Destor fault. The sedimentary beds strike in a general east-west direction and dip steeply to the south. In general along the Munro fault zone the bedding tops are facing to the north, whereas to the south along the Porcupine-Destor fault zone the bedding tops are facing to the south. The Timiskaming sediments host the Garrcon Deposit immediately north of the Porcupine-Destor fault.



Immediately to the south of the Property is a large, metamorphosed, alkalic intrusive stock with a plan view diameter of 4 to 4.5 kilometres. The intrusive varies in composition from granite to monzonite.

Mineralisation on the Property is described in Section 9.









8 **DEPOSIT TYPES**

8.1 EXPLORATION TARGETS

The Garrcon Zone exploration target on the Property includes the historic Shaft, South and North Zones. It occurs within the Timiskaming Assemblage adjacent to the Porcupine-Destor fault and is described as a zone of brecciated, silicified, sandstone with disseminated sulphides (pyrite and arsenopyrite) and irregular quartz veinlets. The mineralisation is not thought to be refractory, but requires metallurgical test work to confirm whether or not it is free milling.

The Jonpol Deposit (JD, JP, RP and East Zones) was the primary exploration target on the Property in the 1980s and 1990s and is detailed in Howe's 2009 technical report (George, 2009). The Jonpol Deposit is a zone of gold mineralisation hosted in structurally controlled alteration zones within mafic to ultramafic (tholeiitic to komatiitic) rocks along the north contact of the Munro Fault which crosses the central part of the Property. The Jonpol gold mineralisation is generally associated with pervasive carbonate alteration with late stage silicification, sulphidisation (pyrite and arsenopyrite) and sericitisation, giving the altered rock a pale buff to pale purple-grey hue. The Jonpol mineralisation is refractory in nature.

8.2 **DEPOSIT MODELS**

Robert (1998) has provided an updated statement of the geological characteristics of Archean gold deposits (update of Robert 1996).

Robert has concluded that a close examination of the geological characteristics of Archean worldclass gold deposits reveals a significant diversity in the nature and chemistry of the ore, hydrothermal alteration, and lithological or structural associations. Several geological styles of deposits can be distinguished:

- Quartz-carbonate veins in shear zones, faults and folds, and related extensional structures;
- Zones of stockwork veinlets and disseminated sulphides associated with small porphyry intrusions;
- Sulphide-rich veins and vein arrays;
- Gold-rich volcanogenic massive sulphide ("VMS") lenses in felsic volcanic rocks; and
- Rare carbonate-rich veins and siliceous replacements.

Geological relationships suggest that the porphyry-style, gold-rich VMS and possibly epithermalstyle deposits have formed during the stages of construction (volcanic-plutonic activity) of the greenstone belts at depths of less than 5 kilometres, whereas orogenic deposits have formed during deformation at depths in excess of 5 kilometres.

These different styles of gold deposits commonly occur within the same districts or along the same fault zones, indicating that gold deposits within a given district formed at different crustal



levels, at different times, and by different processes, and have been juxtaposed by successive episodes of burial, uplift, and deformation that have been focused in certain areas.

With specific reference to the southern Abitibi Greenstone Belt, where the Property is located, Robert notes that development begins with the accumulation of volcanic rocks in one or more cycles and the emplacement of coeval igneous intrusions. This represents the main phase of construction of volcanic plutonic edifices, which is partly accompanied by, but mostly followed by, turbidite (greywacke, shale and siltstone) sedimentation. This main phase of construction was followed by a first episode of deformation (D1) tilting, folding and overthrusting of supracrustal units, accompanied by diorite-tonalite intrusions. Subsequent uplift and erosion led to the deposition of alluvial-fluvial Timiskaming-type sedimentary rocks above an angular unconformity. This Timiskaming stage can be regarded as a renewed stage of volcano-plutonic construction as it was accompanied by the emplacement of high-level intrusives and volcanic rocks of alkalic composition. The Timiskaming stage was followed by the main period of deformation of the volcanic-plutonic edifices, beginning with regional D2 shortening across the belt and evolving into D3 transcurrent deformation.

Quartz-carbonate vein deposits consist of networks of quartz-carbonate veins in moderately to steeply dipping brittle-ductile shear zones and related extensional veins and vein arrays and breccia veins in relatively competent lithologic units. The deposits are spatially associated with major shear zones but have a tendency to be hosted by second and third order structures and splays. In the larger deposits, the vein networks have a surface footprint exceeding 1 kilometre of strike length and generally extend vertically to depths of 1 kilometre or more (McIntyre deepest levels were at approximately 2.5 kilometres below surface.

Robert (op cit) further noted that there is a strong association of world-class deposits with districts that contain a large proportion of mafic and ultramafic volcanic rocks.

In the Timmins gold camp, all of the above-mentioned styles of mineralisation can be found, and multiple styles can be found within a single mine, for example the Dome and Hollinger-McIntyre mines.

In quartz-carbonate vein deposits gold mineralisation occurs in both the veins and in adjacent altered wall rocks, with the bulk of the gold found in the veins. The mineralized veins consist of quartz and carbonate minerals, with subordinate amounts of pyrite, arsenopyrite, pyrrhotite, native gold, base metal sulphides, tournaline, scheelite, talc, sericite and chlorite. Alteration envelopes, a few metres to tens of metres thick surround the veins, and may consist of reduced carbon, carbonatisation, potassium metasomatism, sodium metasomatism, sulphidisation and silicification (Card et al, 1988).

Carbonatisation is the most common and most extensive type of alteration in quartz vein deposits. This type of alteration involves the progressive replacement of Ca, Fe and Mg silicate minerals by carbonate species through the addition of carbon dioxide and is inwardly zoned from calcite to ankerite and dolomite. Potassium metasomatism is found in close proximity to the veins as sericitisation of chlorite and plagioclase, the development of K-feldspar and biotite and



the presence of fuchsite in ultramafic rocks. Sulphidation is restricted to the immediate wall rocks of the veins. Pyrite is the dominant sulphide with lesser amounts of pyrrhotite and arsenopyrite, but the volume of total sulphide minerals is generally less than 10%. Sodium metasomatism results in the formation of albite and paragonite. Silicification results in quartz flooding of the host rocks and an abundance of quartz veinlets and stockworks.

At the district and property scale, exploration for quartz-carbonate vein gold deposits focuses on broad transpressional shear zones located along lithologic boundaries. The gold mineralisation tends to occur within structures measuring hundreds to thousands of metres long that are subsidiary to major fault zones. At a more local scale mapping of alteration mineral assemblages can delineate favourable portions of shear zones. Even though the sulphide content of the quartz veins and the associated wall rock alteration is low, induced polarisation and resisitivity geophysical methods result in a recognizable chargeability response, while the increased quartz content is recognized as an increase in resistivity. Carbonatisation causes destruction of magnetic minerals in mafic rocks, creating a negative magnetic feature coincident with alteration surrounding the lode deposits. In glaciated areas, geochemical surveys using heavy mineral concentrates derived from sampling till can be used to define areas of potential lode gold mineralisation. In addition, Mobile Metal Ion-type soil geochemical surveys have proven to be applicable in overburden covered areas.



9 MINERALISATION

9.1 GARRCON MINERALISED ZONE

The Garron Zone exploration target located at UTM 5,373,700 metres north and 578,450 metres east on the Property includes the historic Shaft, South and North Zones. It occurs within the Timiskaming Assemblage adjacent to the Porcupine-Destor fault and is described as a zone of brecciated, silicified, sandstone with disseminated sulphides (pyrite and arsenopyrite) and irregular quartz veinlets. The mineralisation is not thought to be refractory, but requires metallurgical test work to confirm whether or not it is free milling.

9.1.1 Host Rocks, Structures and Alteration

Sulphide-bearing gold mineralisation in the Garrcon North and Garrcon Shaft/South zones is hosted by Timiskaming-age sedimentary rock sequences that include greywacke, arkose and iron formation, occurring adjacent to the Destor-Porcupine Fault Zone (Figure 9-1). These sedimentary sequences have been hydrothermally altered and mineralized in distinct zones persisting to depth. Native gold grains and sulphide-bearing gold mineralisation occurs in quartz-carbonate vein stockworks. In this environment, gold may be encapsulated in sulphides or occur as native grains within crosscutting quartz veins. Principal minerals are native gold, pyrite, arsenopyrite, magnetite, specularite and pyrrhotite with subordinate chalcopyrite, sphalerite and galena. Gangue minerals are vein quartz and carbonate (calcite, dolomite, and ankerite). Pervasive wall rock alteration is common adjacent to the veins, usually consisting of carbonatisation (ankerite or ferroan dolomite) and sulphides (pyrite, arsenopyrite, and pyrrhotite).

9.1.2 Length, Width, Depth and Continuity of Mineralisation

Development and mining at the Garrcon Shaft zone began in 1935 with the sinking of a 256 foot (78 metre) deep shaft by Consolidated Mining and Smelting Company of Canada Ltd. In 1986, diamond drilling by Cominco Ltd. delineated 2 new auriferous ore zones (the North and South zones) which were described as "stratabound". The South Zone was reported to be hosted by altered sedimentary rocks, with mineralisation averaging 6 feet (1.8 metres) in width, and traced by diamond drilling to 500 feet (152 metres) vertical along 1,300 feet (396 metres) of strike. The South Zone is described by Bath (1990) as striking 75°, dipping south at 50° and within about 70 feet (21 metres) of and/or within a regional scale, east-striking and steeply shear developed between clastic sedimentary rocks to the north and komatilitic rocks to the south. The North Zone was reported to be hosted in a shear zone, had been traced along strike for about 200 feet (61 metres) down to 500 feet (152 metres) in the vertical, and averaged 10.7 feet (3.3 metres) in width.

Howe's deposit model was developed with the aim of establishing a bulk tonnage resource estimate for the Company's Garrcon Deposit encompassing the known Shaft, South and North Zones and as such identifies a broad zone of mineralisation that extends over an east-west distance of 760 metres and remains open to the east. The mineralisation averages approximately



300 metres wide, with the narrowest width of 175 metres located on the more sparsely drilled eastern end of the zone, reaching a maximum width of 375 metres in the more densely drilled western portion of the zone. About half of the 760 metres east-west length of the zone is bounded by the Destor-Porcupine fault system on the south and the contact with mafic and ultramafic rocks on the north. Widths are still open on the remainder of the 760 metre strike length. Mineralisation included in the resource extends from surface across the entire zone to a depth of 125 metres on the more sparsely drilled eastern end and reaches a depth of 350 to 400 metres on the western half of the zone and remains open at depth.

9.1.3 Significant Assay Results

Significant composite assay intervals intersected in the 2009 drill program are presented in Table 9-1.

Hole ID	From (m)	To (m)	Length (m)	Au (g/tonne)	Comment	Zone
GAR-09-01	118.7	120.0	1.3	1.11		North B
	127.1	149.1	22.0	4.31	* VG	North DZ + A
including	127.1	128.8	1.7	3.88	* VG	North A
and	137.9	149.1	11.2	7.03	_	North DZ
GAR-09-02	12.3	15.0	2.7	2.05		Shaft C2
	21.3	77.4	56.1	2.15		Shaft C1-A1
including	21.3	22.3	1.0	11.00	* VG	Shaft C1
and	30.4	32.4	2.0	9.44	* VG	Shaft B2
and	52.3	56.7	4.4	2.19	* VG	Shaft B1
and	72.8	76.2	3.4	16.90	* VG	Shaft A2
including	75.0	76.2	1.2	36.60	* VG	
and	76.6	77.4	0.8	3.38		Shaft A1
	83.0	83.9	0.9	2.54		
	94.7	95.7	1.0	1.83		
	158.1	160.0	1.9	1.87		
	185.8	189.4	3.6	1.42	* VG	North Deep B
	199.8	229.2	29.4	1.05	* VG	North Deep A
including	217.0	218.0	1.0	4.84		
and	228.8	229.2	0.4	6.54	* VG	
	234.0	235.5	1.5	1.33		
	319.5	322.0	2.5	1.09		
	329.5	330.0	0.5	2.08		
	338.6	339.1	0.5	2.52		
	00.0	00.0	04.0	4.05	* \/O	01.01.7
GAR-09-03	26.0	60.0	34.0	1.05	* VG	Shaft Zones
including	41.5	42.0	0.5	6.39	* \/O	Shaft B Zone
and	54.0	60.0	6.0	2.01	* VG	Shaft B Zone
	76.5	78.8	2.3	1.33	* VG	Shaft C Zone

Table 9-1: Significant 2009 Drill Program Composite Assay Intervals

A.C.A. HOWE INTERNATIONAL LIMITED Report No. 940 September 23, 2010

Page | 34 of 94



	-	Ŧ	1			
	From	To	Length	Au (altenne)	Commont	Zono
Hole ID GAR-09-	(m)	(m)	(m)	(g/tonne) 1.01	Comment	Zone
03A	36.0	64.0	28.0	1.01		Shaft B
including	46.0	58.0	12.0	1.60		Shart D
including	40.0 56.0	56.5	0.5	8.50	*VG	
including	93.0	94.0	1.0	1.13	VG	
	129.0	130.0	1.0	1.60		Shaft C
	129.0	143.0	1.0	1.05		Shaft C
	142.0	143.0	2.0	3.03	*VG	South Zone
	159.5	101.5	2.0	0.00	VG	
GAR-09-04	9.0	10.0	1.0	2.60		
0/ 11 00 01	29.0	37.5	8.5	1.19	* VG	Shaft A Zone
	44.0	50.0	6.0	1.10	* VG	Shaft A Zone
	76.5	179.0	102.5	1.38	* VG	Shaft B+C Zones
including	113.0	115.0	2.0	12.33	v0	Shaft B Zone
and	147.0	179.0	32.0	2.25	* VG	Shaft C Zone
including	147.0	148.2	1.2	19.59	* VG	Shaft C Zone
and	151.0	151.7	0.7	17.99	* VG	Shaft C Zone
and	151.0	151.7	0.7	9.20	* VG	Shaft C Zone
and	177.5	178.5	1.0	10.76	* VG	Shaft C Zone
anu	186.0	187.0	1.0	1.86	vG	
	196.8	197.3	0.5	3.84		
	208.5	211.2	2.7	3.84 1.34	* VG	
	208.5	237.0	1.0	1.34	vG	
	230.0	237.0	1.0	1.10		
GAR-09-05	20.0	103.0	83.0	1.00	* VG	Shaft A+B Zones
including	20.0	36.0	16.0	1.41	* VG	Shaft A Zone
and	57.0	63.0	6.0	3.38		Shaft A Zone
and	101.0	102.0	1.0	10.22		Shaft B Zone
and	127.0	128.5	1.5	7.25		Shaft C Zone
	170.0	171.0	1.0	12.04	* VG	Shaft C Zone
	207.0	213.0	6.0	1.50	* VG	onalit o Zono
	235.0	236.0	1.0	2.36		
	200.0	200.0	1.0	2.00		
GAR-09-06	68.0	152.2	84.2	1.49		Shaft B+C Zones
including	68.0	85.5	17.5	2.44		Shaft B
including	68.0	69.0	1.0	11.56	* VG	
and	76.5	77.5	1.0	8.08	* VG	
and	115.0	152.2	37.2	2.03	_	Shaft C
including	115.0	116.0	1.0	16.29		
and	151.2	152.2	1.0	15.61	* VG	South Zone
					_	
GAR-09-07	4.4	14.0	9.6	2.22		Shaft A
including	6.0	8.0	2.0	5.53	* VG	
Ŭ	17.0	18.0	1.0	1.60		
	68.0	76.5	8.5	3.24		Shaft B
including	76.0	76.5	0.5	27.02	* VG	
,					•	·]



	From	То	Length	Au		
Hole ID	(m)	(m)	(m)	(g/tonne)	Comment	Zone
GAR-09-08	54.0	57.5	3.5	0.70		
	125.0	138.0	13.0	0.60		North B
including	137.0	138.0	1.0	2.14		
	153.0	154.0	1.0	1.14		
	176.0	193.0	17.0	0.75	*VG	North A
including	192.0	193.0	1.0	1.72		
GAR-09-09	35.0	36.0	1.0	2.36		
	82.0	83.0	1.0	1.04		North B
	103.0	132.0	29.0	4.90		North A + DZ
including	112.0	132.0	20.0	6.74		North DZ
including	112.0	117.0	5.0	14.67		North DZ
including	115.5	116.5	1.0	33.22	* VG	North DZ
and	131.0	132.0	1.0	14.33		North DZ
GAR-09-10	18.0	19.0	1.0	0.90		
	62.0	63.0	1.0	0.98		
	70.0	71.0	1.0	2.29		

Composite lengths are downhole core lengths not true widths. VG = Visible gold observed

9.2 JONPOL DEPOSIT

The Jonpol Deposit (JD, JP, RP and East Zones) located at UTM 5,373,875 metres north and 577,325 metres east, was the primary exploration target on the Property in the 1980s and 1990s and is detailed in Howe's 2009 technical report (George, 2009). The Jonpol Deposit is a zone of gold mineralisation hosted in structurally controlled alteration zones within mafic to ultramafic (tholeiitic to komatiitic) rocks along the north contact of the Munro Fault which crosses the north-central part of the Property. The Jonpol gold mineralisation is generally associated with pervasive carbonate alteration with late stage silicification, sulphidisation (pyrite and arsenopyrite) and sericitisation, giving the altered rock a pale buff to pale purple-grey hue. The Jonpol mineralisation is refractory in nature.



10 EXPLORATION

Under the Option Agreement, Northern Gold is the operator of the Property and since signing the Option Agreement on September 9, 2009 the primary focus of Northern Gold's work and expenditures has been the Garron Deposit located in the south central portion of the Garrison Gold Property. Work programs implemented by Northern Gold include geophysics, data revision/interpretation, surface stripping/sampling, diamond drilling, asset and infrastructure rehabilitation, and environmental permitting.

This section outlines work completed by Northern Gold on the Property through July 31, 2010 however the drill hole database includes drilling to the end of 2009 only. Logging, sampling and assaying of the 2010 drill holes is ongoing at the time of this report and therefore are not included in the drill hole database and mineral resource estimate. Mineral exploration activities including diamond drilling are ongoing at the Garron Deposit.

10.1 SATELLITE IMAGERY

To facilitate geophysics and other exploration work, the Company acquired Worldview 1 satellite imagery encompassing a 5 kilometre x 5 kilometre area totaling 25 square kilometres over the entire Garrison Gold Property area. The grayscale satellite image was collected June 2009 and has a 50 centimetre resolution.

10.2 SURFACE GRIDDING and GEOPHYSICS

Northern Gold contracted Kirkland Gems and Minerals, PO Box 834, Kirkland Lake, Ontario P2N 3K4, to chainsaw cut 40 line kilometres of grid on the Garrison Gold Property between February 9th and March 18th 2010. The grid covers the entire property and includes a baseline with an azimuth of 070°/250° True North. Twenty nine grid lines were cut perpendicular to the grid at 340°/160° True North and one tie line was cut parallel to the baseline (Figure 10-1). Northern Gold's Civil Technician, Dave Eves is conducting a GPS survey of the grid lines and is approximately 60% complete at the time of this Report.

The Company contracted Larder Geophysics, 14579 Government Rd., Larder Lake, Ontario P0K 1L0, to complete a walking ground magnetometer - VLF/EM survey over the entire 40 kilometres of grid.



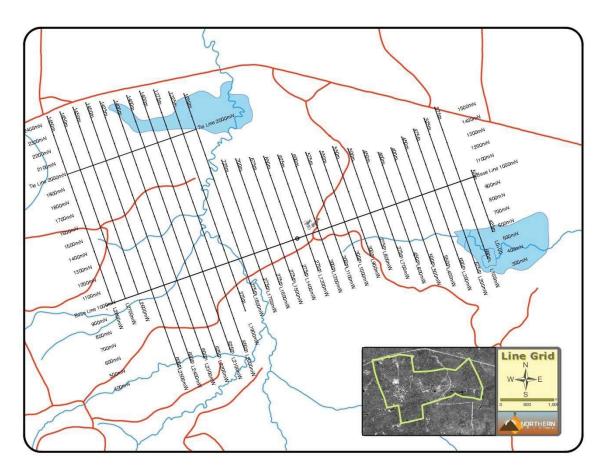


Figure 10-1: 2009 Exploration Grid Layout

10.3 DATABASE REVISIONS

Northern Gold undertook a thorough due diligence review of the Garrison Gold Property data which identified errors and omissions within the databases supplied by ValGold. Most of the errors were deemed to be minor in nature and to not materially affect the property resource and valuation. The errors were primarily related to the historical assay database and collar location data for drill holes on the historic "Cominco Grid".

After a full review of the historical assay databases provided by ValGold, the Company determined that it would be best to re-assemble all of the assay data into a clean dataset from original diamond drill logs. This task was near completion at the time of Howe's site visit.

On attempting to ground truth collar locations of historical Garron diamond drilling it was evident that there were inconsistencies in the data supplied by ValGold. Northern Gold identified location inaccuracies related to diamond drill holes drilled from the "Cominco Grid". Ground truthing of collar locations for holes drilled from the historical "Newfield Grid" were deemed to be accurate. Between January 26th and May 30th 2010, Northern Gold's Civil



Technician, Dave Eves utilized a differential global positioning system (DGPS) to identify multiple drill holes and historical grid lines on the "Cominco Grid" and reposition these holes and grid lines to fit the ground-truthed model. The overall repositioning resulted in a roughly 10 m shift to the West for all "Cominco Grid" drill holes.

10.4 REHABILITATION

Various work programs have been undertaken to improve the Garrison Gold Property site and core facility. In addition, a significant amount of effort has been made to rehabilitate historical core, pulps and rejects.

Physical work undertaken at the Property site includes rehabilitation of the main access road, the removal of the main gate from its location on the main road and reinstallation on the Garrcon access road, allowing loggers access to their areas without the need to provide them with keys to the gate and tacit access to the core shack facility. Excavation and construction of a settling pond to collect core saw cuttings, unplugging culverts located on Garrison creek and rehabilitation of the road linking the Garrcon site to the Jonpol site. Portable storage containers were purchased and located on site to establish safe, dry and secure long term storage facilities for assay pulps and rejects, in accordance with applicable QA/QC requirements. New core storage pads were constructed and new core storage racks were purchased and set up at the core shack facility. A large expansion of the core shack building is underway to provide additional short term drill core storage until logging and splitting are completed, improve the core splitting work area and covered cold storage for ATV's and snow machines.

A very important part of the rehabilitation program is the reboxing and relabeling of historical diamond drill core which is ongoing. This includes most of the historical Jonpol and Cominco diamond drill core but also includes GE-88 series holes drilled by Orcana Resources at the 903 prospect in the southwest corner of the Property. The Orcana diamond drill core was located at the collar site and has been moved to the Garrison core shack. Additional Jonpol core drilled in the eastern part of the Property has been located in storage at Moneta Porcupine Mine's core facility in Timmins and is in the process of being moved to the Property for storage.

Assay pulps and rejects from historical ValGold drilling which were located at Barabrae Farms and Perry Lake Lodge were moved to the Garrison Gold Property sample storage containers for secure storage.

10.5 SURFACE STRIPPING / SAMPLING

Following receipt of high grade assays from grab samples collected on an outcropping quartz vein identified as the 1070 vein, prospecting found other quartz veins and evidence of earlier Cominco (?) work nearby. Consequently, a surface stripping program was initiated at the Garrison site on May 13th and conducted intermittently until July 3rd 2010. A total of four areas were stripped of overburden with an excavator and washed using a Wajax fire pump. The total surface area exposed in all four areas is roughly 5000 m². The areas stripped and washed are identified on the following modified satellite image as the light beige stippled areas:



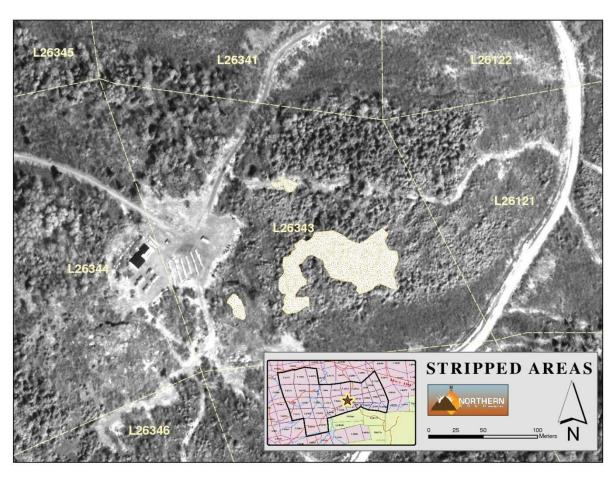


Figure 10-2: 2010 Garrcon Surface Stripping Locations

The largest of the three stripped areas focused on multiple high-grade veins found east of the core shack along the Garroon Shaft Zone with visible gold frequently observed in the newly exposed quartz veins. The other two stripped areas were significantly smaller, focusing on small surface showings around drill hole collars from previous drilling by Northern or other operators.

Approximately 150 metres of channel samples were cut on the newly exposed outcrops with a self-propelled circular saw using a diamond cutting blade in July and August 2010. Samples were collected from the channels at a maximum of one metre intervals. Channels were cut with an approximate 4 centimetre width and 4 centimetre depth. Channels were cut in both north-south and east-west directions and tested both overall mineralized zones and specific veins/stringers. Samples have been submitted for assay and results are pending at the time of this report.



10.6 2009 and 2010 DIAMOND DRILL PROGRAMS

Northern Gold's 2009 and ongoing 2010 diamond drill programs focused on verifying results and in-filling historic drilling of the Shaft, South and North zones at the Garron Deposit. The drill programs are described in Section 11 of this Report.

10.7 ENVIRONMENTAL BASELINE STUDY / PERMITTING

Northern Gold has retained N.A.R. Environmental Consultants Inc. (NAR) of Sudbury to initiate environmental baseline studies on the Garrison property in anticipation of advanced exploration permitting and potential resource development. Water sampling stations were installed at three sites on and around the Garrison Gold Property on April 28, 2010. Two of the sampling sites are located on Garrison Creek and one is located on Tobacco creek. One additional sample point was added on Thackeray Creek following a NAR site visit in July because it is uncertain if Garrison creek will be large enough to accept the effluent discharge from a large mining operation. Water sample analysis is completed monthly and is will be conducted over a 12 to 18 month period to establish baseline water quality data. An automated flow monitoring station and staff gauge has been installed on the culverts at the Garrison creek crossing in the central portion of the Garrison property; these instruments are collecting continuous data on water volumes and sample collection will also be conducted over a 12 to 18 month period. The locations for two water monitoring wells have been selected and these in conjunction with water levels in the Jonpol shaft will establish a three point ground water monitoring system to be used by NAR in determining regional ground water movements. As of this Report, one of the water monitoring wells has been completed.

A weather station has been installed at the Garrison core shack facility and is collecting real time weather data such as temperature, wind speed, barometric pressure and precipitation amounts. Centimetre accurate horizontal and vertical survey stations have been established on the Property.

NAR has completed fish, flora and fauna inventories on the Property. Laboratory and data analysis is in progress.



11 DRILLING

11.1 HISTORICAL DRILLING ON THE PROPERTY

Initial drilling on the Property occurred in the period 1935-1946 with additional drilling completed during 1983. None of this data is available in sufficient detail to be included in Northern Gold's current drill hole database. The most important historic data relating to Garrcon Deposit is the exploration work completed since 1985 by Cominco / Jonpol Explorations Ltd. and by ValGold Resources Inc.

The following surface diamond drilling was completed by Cominco/Jonpol during the period 1985 to 1988 and by ValGold during 2006 and 2007. Northern Gold's current drill hole and resource database includes only holes drilled between 1985 and present (Appendix A).

Table 11-1: Historic Drilling included in Northern Gold's Drill Hole and ResourceDatabase

Company	Year	# Drill Holes	Length (m)
Cominco/Jonpol	1985	5	619.2
Cominco/Jonpol	1986	14	2,696.5
Cominco/Jonpol	1986-1987	6	1,417.3
Cominco/Jonpol	1987	11	3,481.4
Cominco/Jonpol	1988	3	592.3
ValGold	2006	10	3,393.0
ValGold	2007	5	2,361.0
	Total	54	14,560.7

11.2 NORTHERN GOLD DRILL PROGRAMS 2009-2010

Northern Gold's 2009 and 2010 diamond drill programs focused on verifying results by in-filling historic drilling of the Shaft, South and North zones at the Garron Deposit. Northern Gold personnel supervised both drill programs.

The 2010 drill holes were not included in the current resource estimate because the 2010 program is ongoing and assays for only three holes (GAR-10-11 to GAR-10-13) had been received when Howe's resource estimate was initiated. Results from an additional two holes (GAR-10-14 and GAR-10-15) had been released as of the date of this Report. Sampling and assaying of the remaining drill holes continues or is pending. The 2010 drill holes are noted in this report for completeness but will not be described in detail. The 2010 diamond drill program will be reported in future technical reports when assay results are obtained and incorporated into future resource updates.



11.2.1 2009 Diamond Drill Program

Northern Gold's 2009 diamond drilling program on the Garrcon Deposit commenced October 26, 2009 and was completed on December 11, 2009. The program consisted of 2,330 m of NQ core (47.6 millimetres diameter) in 11 drill holes (Table 11-2, Appendix A). All holes were completed to their planned depths except holes GAR-09-03 and GAR-09-07 which were lost when they encountered the historic Cominco underground workings. GAR-09-03 required an offset and restart as GAR-09-03A. Hole GAR-10-12 was offset 3 metres from GAR-09-07 and completed to planned depth. Overall core recovery was excellent, averaging nearly 100%.

HOLE ID	*Easting (UTM m)	*Northing (UTM m)	Elev (m-asl)	Azimuth	Dip	Length (m)	Start	Finish	Target Zone
GAR-09-01	578625.69	5373998.41	303.08	343.5	-40.5	177	10/27/2009	10/29/2009	Garrcon North Zone
GAR-09-02	578663.81	5373881.84	288.96	339.2	-44.6	350	10/29/2009	11/3/2009	Garrcon Shaft Zone / Garrcon North Zone
GAR-09-03	578592.92	5373945.58	298.62	159.8	-43.7	80	11/3/2009	11/4/2009	Garrcon Shaft Zone
GAR-09-03A	578597.71	5373937.13	297.34	154.3	-43.7	198	11/24/2009	11/27/2009	Garrcon Shaft Zone
GAR-09-04	578503.28	5373963.24	304.50	156.0	-42.6	291	11/4/2009	11/12/2009	Garrcon Shaft Zone
GAR-09-05	578530.59	5373968.35	304.07	162.5	-45.6	288	11/12/2009	11/17/2009	Garrcon Shaft Zone
GAR-09-06	578660.36	5373954.00	299.24	170.4	-45.3	189	11/17/2009	11/19/2009	Garrcon Shaft Zone
GAR-09-07	578652.64	5373974.63	302.21	165.9	-45.2	83	11/24/2009	11/25/2009	Garrcon Shaft Zone
GAR-09-08	578623.16	5373950.27	297.99	340.8	-45.3	237	11/28/2009	11/31/2009	Garrcon North Zone
GAR-09-09	578614.22	5374027.55	303.48	343.4	-45.4	150	11/31/2009	12/3/2009	Garrcon North Zone
GAR-09-10	578955.18	5374116.90	289.52	162.5	-45.0	290	12/8/2009	12/11/2009	Garrcon Shaft Zone

Table 11-2: 2009 Garrcon Diamond Drill Program

* North American Datum 1983

Major Drilling International Group (Major) was the diamond drill contractor. Major used a Longyear 50 skid-mounted rig for all holes that was operated on two 12-hour shifts per day, five days per week. The drill contractor constructed drill access trails and drill pads. Drill water was supplied by pump and hose from a local surface water sources.

Upon completion of drill holes, drill hole collar coordinates and elevations were surveyed in UTM coordinates (NAD83) utilizing a Magellan Mobile Mapper CX DPGS with a horizontal accuracy of 0.3m. GPS coordinates of all collar locations were recorded and tied into the exploration grid. The drill contractors completed down-hole directional surveys on all diamond drill holes at approximately 100 metre intervals using a Reflex EZ Shot single shot digital survey tool.

The drill casing was left in each hole and capped to permit future downhole geophysical testing and/or deepening of the holes.

Core was retrieved from the drill string using conventional wireline techniques. Core was removed from the core tube by drilling personnel and carefully placed in core boxes. Filled core boxes were removed from the drill site at shift change by drilling personnel and brought to Northern Gold's secure core logging and sampling facility at the Property. At the facility, the core was laid out on workbenches and cleaned prior to logging and sample interval marking.



The drill core was logged by a Northern Gold geologist who recorded a geotechnical log of core recovery and RQD measurements and a descriptive log including rock type (maintaining consistency with previous work), structure, alteration, and mineralisation (including presence of VG, quartz veining and its angle with the axis of the core). Drill core and sample information were input into a digital database using portable computer workstations at the workbenches. The geologist selected the sample intervals and input the intervals into the drill hole database. The core was digitally photographed before sampling. The core sampling technician marked the sample cut line on the core prior to cutting.

Following core logging, the core was sampled as detailed in Section 12. At the completion of hole GAR-09-10, a total of approximately 2,571 core samples excluding standards, blanks and duplicates had been collected and sent to Swastika Labs in Kirkland Lake, Ontario.

Digital assay files provided by Swastika Laboratory were merged with a "from" and "to" interval file created by Northern, with the sample number linking the two files. This methodology limits data entry errors to sample numbering, as well as the "from" and "to" specifications; assay data re-entry errors are therefore avoided. Sample numbering errors are identified during the merging process.









11.3 2010 DIAMOND DRILLING

In 2010, Northern Gold contracted with Major Drilling International Group for a 10,000 metre diamond drilling program on the Garrcon Deposit. Major began drilling May 10, 2010 and as of September 24, 2010, 5,519 metres of NQ diamond drilling had been completed in 23 drill holes (GAR10-11 to GAR-10-33, Table 11-3). The 2010 drill holes were not included in the current resource estimate because the program is ongoing and assays for only three holes (GAR-10-11 to GAR-10-13) had been received when Howe's resource estimate was initiated. Results from an additional two holes (GAR-10-14 and GAR-10-15) had been released as of the date of this Report. Sampling and assaying of the remaining drill holes continues or is pending.

The company had completed up to hole GAR-10-22 at the time of Howe's property visit on July 12, 2010. The drill rig was onsite but the drilling program was on a three week break.



HOLE ID	*Easting	*Northing	Elev (m-asl)	Azimuth	Dip	Length (m)	Start	Finish	Target Zone
GAR-10-11	578670.02	5373930.74	297.54	161.6	-44.0	129	5/10/2010	5/12/2010	Garrcon Shaft Zone
GAR-10-12	578650.38	5373977.54	304.38	155.3	-45.4	237	5/12/2010	5/14/2010	Garrcon Shaft Zone
GAR-10-13	578580.84	5373988.97	304.26	346.6	-44.0	231	5/17/2010	5/20/2010	Garrcon North Zone
GAR-10-14	578479.94	5373957.38	304.35	162.6	-45.9	324	5/20/2010	5/28/2010	Garrcon Shaft Zone
GAR-10-15	578590.20	5374022.40	302.87	339.9	-42.8	138	5/28/2010	6/1/2010	Garrcon North Zone
GAR-10-16	578639.92	5374015.63	302.92	162.2	-44.3	297	6/1/2010	6/7/2010	Garrcon Shaft Zone
GAR-10-17	578534.79	5373934.31	306.00	166.2	-45.0	260	6/8/2010	6/11/2010	Garrcon Shaft Zone
GAR-10-18	578571.82	5373992.43	307.69	162.0	-46.5	330	6/14/2010	6/17/2010	Garrcon Shaft Zone
GAR-10-19	578708.67	5373994.75	302.73	179.2	-45.8	231	6/18/2010	6/22/2010	Garrcon Shaft Zone
GAR-10-20	578793.92	5374014.85	319.23	241.9	-44.9	75	6/22/2010	6/24/2010	Garrcon Shaft Zone
GAR-10-21	578775.56	5374016.26	312.24	245.9	-44.7	51	6/24/2010	6/25/2010	Garrcon Shaft Zone
GAR-10-22	578760.48	5373948.39	289.52	160.0	-45.0	96	6/28/2010	6/29/2010	Garrcon Shaft Zone
GAR-10-23	578552.48	5373979.51	310.62	158.8	-44.8	336	7/19/2010	7/23/2010	Garrcon Shaft Zone
GAR-10-24	578528.31	5374016.90	316.95	349.1	-44.5	120	7/23/2010	7/26/2010	Garrcon North Zone
GAR-10-25	578496.96	5373986.77	311.70	161.5	-44.0	354	7/27/2010	8/3/2010	Garrcon Shaft Zone
GAR-10-26	578504.61	5373934.01	311.16	156.6	-43.9	291	8/3/2010	8/10/2010	Garrcon Shaft Zone
GAR-10-27	578505.40	5373823.62	297.09	337.3	-48.5	177	8/10/2010	8/12/2010	Garrcon Shaft Zone
GAR-10-28	578551.74	5373882.78	299.55	164.9	-58.2	150	8/12/2010	8/16/2010	Garrcon Shaft Zone
GAR-10-29	578654.07	5373863.42	297.21	343.5	-44.8	351	8/17/2010	8/24/2010	Garrcon North Zone
GAR-10-20X	578793.92	5374014.85	319.23	241.9	-44.9	**276 (351)	8/24/2010	8/31/2010	Garrcon Shaft Zone
GAR-10-30	578689.16	5373971.99	308.49	342.2	-45.8	249	9/1/2010	9/7/2010	Garrcon North Zone
GAR-10-31	578673.64	5374014.49	311.28	340.3	-45.6	177	9/8/2010	9/10/2010	Garrcon North Zone
GAR-10-32	578718.79	5373891.97	293.52	341.3	-45.6	339	9/13/2010	9/20/2010	Garrcon North Zone
GAR-10-33	578706.02	5373929.14	294.11	339.1	-43.4	300	9/20/2010	9/24/2010	Garrcon North Zone

Table 11-3: 2010 Garrcon Diamond Drill Program

* North American Datum 1983

**GAR-10-20X is the 276m extension of GAR-10-20 (75m) for a total hole depth of 351m,



12 SAMPLING METHOD AND APPROACH

Historical (1985-1995) work on the Property was not reported in the manner currently required under NI 43-101, however, Howe is of the opinion that the geologists of the 1985-1995 era followed procedures related to the logging and sampling of drill core that would meet current NI 43-101 standards with exception of the insertion of QA/QC standards and blanks. However, written descriptions of the procedures were rarely recorded in technical reports at that time.

Sampling conducted by ValGold in its 2006-2007 drill programs have been described by Howe in its 2009 technical report (George, 2009). It is presumed by Howe that all historic sampling by Cominco / Jonpol in the 1985-1988 drill programs was completed in a manner consistent with accepted industry standard sampling and assaying techniques current at that time.

Based on a detailed review of the drilling and assay database of the Company's drilling and the historic drilling, Howe concludes that the sampling methods, core logging and assaying for the Property have met or were basically equivalent to standards currently required under NI 43-101.

The remainder of this section reviews the sampling methods used by the Company.

12.1 SAMPLING METHODS

Diamond drill core is placed in labeled wooden trays and localized by depth blocks inserted by the drill contractor's personnel prior to removal of the core from the drill site. The drillers deliver the core boxes to the on-site facility at the end of each shift.

The core logging facility is located on the Property near the Garron Shaft (see Figure 2) and is located at the end of a gated road off of Highway 101. The facility has an office and core logging building with secure storage for core prior to logging. There is an adjacent, secure building used for sawing core and packing samples for shipment to the assay laboratory in Kirkland Lake.

Upon arrival at the core logging facility the core boxes are sequentially placed in a core rack. Spatial information related to each box of core is checked for accuracy and consistency at this point. Remedial actions are undertaken, if necessary, to correct deficiencies in the spatial information prior to entry into a database.

An experienced geologist logs the core and observations are entered into a drill log database prior to selecting samples for analyses. Selected portions of the core are marked and measured for sampling and are identified with one part of a three part assay tag, placed at the end of the sample interval.

The core is sawn with a Husqvarna water-cooled masonry saw with 14-inch diamond blade and 230-volt 5hp motor. The core saw is located in a ventilated room separate from the core logging facility. Fresh water is used as a cooling/lubricating fluid; recycled water is not used.



The core is cut in half longitudinally, perpendicular to the foliation (50% split) with one half placed into plastic sample bags along with part two of the three part assay tag and sealed. The other half core is returned to the core box for archive and future verification and testing (if required). Each sample bag has the sample number written on the outside of the bag with black permanent marker corresponding to the sample tag placed inside. Information on the third part of the assay tag is entered into the database and the drill log, at which time accuracy and consistency are again reviewed and remedied, if necessary.

Core logging, sawing, sample bagging and sample shipment preparation is completed either by or under the onsite supervision of a Northern Gold geologist. Certified reference materials (standards), sample blanks and ¹/₄ core duplicate samples are inserted by Northern Gold into each sample batch submitted to the lab for the purpose of quality control.

After sampling is completed, the archived core boxes are labeled and placed on core racks assembled in the yard of Northern Gold's field office on the Property.

Sample intervals vary from 0.3 metres to a maximum of 1.0 metre in length. The majority of samples are 1.0 metre in length but some are shortened for geological reasons. More than 99% of the drill core is submitted to a certified analysis laboratory for assaying. The core not submitted for analysis is collected (retained) for hand samples, petrographic samples and ARD analysis or for such other technical needs as they arise from time to time.

Sealed sample bags are placed in rice sacks and sealed. Northern Gold personnel maintain possession of the samples in the secure core shack until delivery to the laboratory. Sample batches are transported to the analytical laboratory in a timely fashion by Company personnel and transferred to the laboratory's chain of custody procedures and protocols. Samples are shipped direct from the site to the laboratory or via the Company's Kirkland Lake office. Northern Gold has a secure chain of custody to ensure the security and integrity of all samples submitted to the assay laboratory and appropriate Chain of Custody paperwork is maintained regardless of the shipping/transportation method. Laboratory pulps and rejects are backhauled to the Property and stored in a locked boxcar container.

12.2 SAMPLING OR RECOVERY FACTORS

Core recovery is generally good in the Property area and Howe is confident that there are no sampling or recovery factors that would negatively impact the sampling procedures.

12.3 SAMPLE QUALITY, REPRESENTATIVENESS, AND SAMPLE BIAS

The sampling methods are to industry standards for mineralisation of this type. Howe is of the opinion that the sampling methods meet NI 43-101 standards.



13 SAMPLE PREPARATION, ANALYSES AND SECURITY

Northern Gold's sample preparation and analyses for the 2009 drill program were conducted by Swastika Laboratories Limited, Swastika, Ontario, POK 1T0. Swastika Laboratories Limited participates in the Proficiency Testing Program for Mineral Analysis Laboratories, a testing program conducted bi-annually by the Standards Council of Canada. Swastika is the holder of a Certificate of Laboratory Proficiency.

It is the opinion of Howe that all potential gold mineralized zones in the Company's drill core have been sampled and that the sample preparation, security and analytical procedures implemented have been adequate for the exploration conducted to date by Northern Gold. Northern Gold has implemented a quality assurance and quality control (QA/QC) protocol as detailed in Section 14.2.

No aspect of the sample preparation subsequent to delivery to the laboratory was conducted by an employee, officer, director or associate of the issuer.

Sampling and assaying methods conducted by ValGold in its 2006-2007 drill programs have been described by Howe in its 2009 technical report (George, 2009). It is presumed by Howe that all historic sampling by Cominco / Jonpol in the 1985-1988 drill programs was completed in a manner consistent with accepted industry standard sampling and assaying techniques current at that time.

Drill Hole	DDH Length (m)	Sampled Length (m)	No. Samples (excludes QC samples)	Average Sample Interval (m)	Analyses
GAR-09-01	177.0	170.4	205	0.8	Fire Assay AA and Gravimetric
GAR-09-02	350.0	339.3	438	0.8	Fire Assay AA and Gravimetric
GAR-09-03	80.0	75.5	98	0.8	Fire Assay AA and Gravimetric
GAR-09-03A	198.0	194.0	200	1.0	Fire Assay AA and Gravimetric
GAR-09-04	291.0	284.0	361	0.8	Fire Assay AA and Gravimetric
GAR-09-05	288.0	283.0	311	0.9	Fire Assay AA and Gravimetric
GAR-09-06	189.0	184.9	201	0.9	Fire Assay AA and Gravimetric
GAR-09-07	83.0	78.0	80	1.0	Fire Assay AA and Gravimetric
GAR-09-08	237.0	233.0	241	1.0	Fire Assay AA and Gravimetric
GAR-09-09	150.0	146.3	153	1.0	Fire Assay AA and Gravimetric
GAR-09-10	290.0	280.0	283	1.0	Fire Assay AA and Gravimetric

Table 13-1: Summary List of 2009 Drill Core Samples and Performed Analyses.



13.1 SAMPLE PREPARATION

Sample preparation consisted of conventional drying in ovens if required; crushing; splitting and; pulverizing. After drying, the sample was passed through a jaw crusher producing material of approximately -1/2 inch, with further size reduction to -10 mesh by a roller mill. A 300 gm sample was riffle split from the -10 mesh sample and pulverised to >90% -200 mesh using a ring and puck pulveriser. Silica sand was used to clean the equipment between each sample to prevent cross contamination. Prepared sample pulps were matted to ensure homogeneity prior to analysis. The homogeneous sample was then sent to the fire assay laboratory.

13.2 ANALYTICAL PROCEDURES

All samples were analysed for gold by fire assay. A homogenized 30 gram charge of the sample is mixed with a lead based flux fused for one hour and fifteen minutes. Each sample has a silver solution added to it prior to fusion that allows each sample to produce a precious metal bead after cupellation. The fusing process results in lead buttons that contain all of the precious metals from the sample as well as the silver that was added. The button is then placed in a cupelling furnace where all of the lead is absorbed by the cupel and a silver bead, which contains any gold from the sample, is left in the cupel. The cupel is removed from the furnace and allowed to cool. Once the cupel has cooled sufficiently, the silver bead is placed in an appropriately labeled test tube and digested using aqua regia. The samples are bulked up with 1.0 ml of distilled de-ionized water and 1.0 ml of 1% digested lanthanum solution. The samples are allowed to cool and are mixed to ensure proper homogeneity of the solution. Once the samples have settled they are analysed for gold using atomic absorption spectroscopy. The atomic absorption spectroscopy unit is calibrated using appropriate certified standards in an air-acetylene flame. All gold assays that are greater than 1 g/t are automatically re-assayed by fire assay with a gravimetric finish for better accuracy & reproducibility.

Swastika voluntarily re-assays every 10th pulp (on average) as a check on laboratory precision, and at their discretion frequently assays a second pulp.



14 DATA VERIFICATION

14.1 HISTORIC QUALITY ASSURANCE/ QUALITY CONTROL (QA/QC) PROGRAMS

Documentation is not available on any assay QA/QC program that may have been used by Cominco / Jonpol during their 1985-1988 drill programs however standards and blanks were not typically inserted by the exploration companies during this time period.

ValGold submitted blanks and standards representing approximately 1 blank or standard per 10 core samples during the period of its 2006-2007 drill program in 2005 to 2007. Howe (George, 2009) tabulated all of the blank and standard analyses and found no material deviations that would indicate any problems with the laboratory's accuracy and reproducibility.

14.2 2009 NORTHERN GOLD QA/QC PROGRAMS

Northern Gold implemented QA/QC procedures for the 2009 drill program that included insertion of certified reference materials (standards), pulp and reject duplicates and sample blanks.

14.2.1 Accuracy

To monitor accuracy, certified reference materials (CRM) were inserted sequentially into the sample stream before shipment from the field at a rate of at least 1 in every 20 samples submitted.

Both high grade and lower-grade gold standards were used in each sample shipment. The CRMs were obtained from Ore Research and Exploration Pty. Ltd. of Bayswater, Victoria, Australia (distributed by Analytical Solutions Inc. of Toronto, Ontario, Canada); Rocklabs, Auckland, New Zealand; and Accurassay Laboratory, Thunder Bay, Ontario (Table 14-1). The standards were received prepared (pulverized to –200 mesh and blended) and pre-packaged in 50 to 60 gram packets.

Standard	Au (ppm)	SD (ppm)	Supplier
Au45	9.83	0.71	Accurassay
OREAS 61Pa	4.46	0.13	Ore Research and Exploration
SL46	5.867	0.170	Rocklabs
SJ39	2.641	0.083	Rocklabs

Table 14-1: QA/QC certified reference materials, for 2009 drilling program.

14.2.1.1 Acceptance Criteria for Routine Analyses

To check the accuracy of the laboratory, control limits (CL) are established at accepted mean $\pm 3\sigma$ (standard deviation) and warning limits (WL) at accepted mean $\pm 2\sigma$. Any single standard



analysis beyond the upper (UCL) and lower (LCL) control limits is considered a "failure". In addition, three successive standard analyses outside of the upper (UWL) and lower (LWL) warning limits on the same side of the mean could also constitute a failure. Successive warning results may indicate laboratory bias and possibly incorrect calibration of the laboratory equipment.

14.2.1.2 Results of Routine Analyses

The results from the QA/QC standards were plotted versus time for each standard (Figure 14-1 to Figure 14-4). The upper and lower warning and control limits and mean Au value (Au-ppm) for the QC sample are shown on each chart.

Most of the Certified Reference Materials (CRM) returned values within the accepted mean ± 2 SD (standard deviations). Howe recommends that the Company review any results falling outside the control limits. In some cases the "failures" may be due to mislabeling. For example the 0.01 g/t value for a OREAS 61Pa sample has been determined to be a blank (Figure 14-1). Also the two SL46 samples with values of approximately 4.5 g/t Au may actually be mislabeled OREAS 61Pa standard samples (Figure 14-3). Howe notes that while generally within acceptable levels, the number of failures and overall spread of analytical results for OREAS 61Pa increased after mid-January 2010 (Figure 14-1). This increase may reflect an inhomogeneity (gravitational settling) of the standard material or it may indicate an incorrect calibration of the laboratory equipment.

The OREAS 61Pa standard was utilized throughout the 2009 drill program. Standards Au45, SL46 and SJ 39 were inserted sequentially during the early, mid and late stages of the program respectively. Howe recommends that the Company utilize two to three standards consistently throughout its sampling programs. Sufficient material should be acquired to ensure enough standard is available to complete the program. Given the low grade nature of the Garroon Deposit, the Company should include a low grade (1 to 2 g/t Au) and medium grade (4 to 5 g/t Au) standard in its QA/QC program.



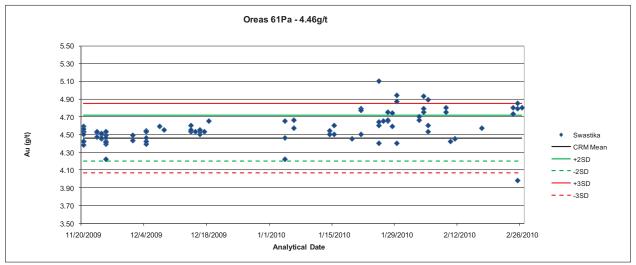


Figure 14-1: Standard OREAS 61Pa results plotted against time

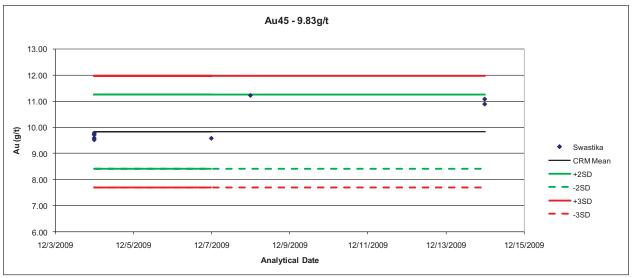


Figure 14-2: Standard AU45 results plotted against time



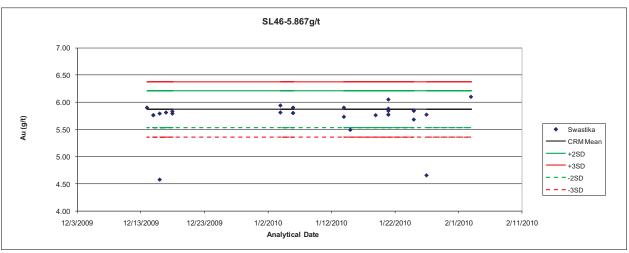


Figure 14-3: Standard SL46 results plotted against time

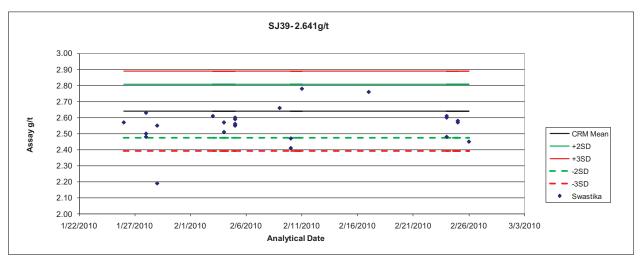


Figure 14-4: Standard SJ39 results plotted against time

14.2.2 Contamination

Two laboratory sample preparation processes that have significant potential for crosscontamination between samples are the jaw crushing and ring pulverizing stages. Contamination could also occur in the analytical side of the laboratory or from sample mislabeling.

Contamination is normally monitored through the routine insertion of coarse field blank material into the sample stream. The blank material is often a local un-mineralised rock. As a rough guide, Howe suggests that blank samples should have analyses of less than 5x the detection limit. This, of course depends on how low the analytical detection limit is and the natural background concentration of the blank material.



Northern inserted blanks approximately every 20th sample into the drill core sample batches before shipment. The company has utilized several materials for the blanks. Initially coarse abrasive sand was utilized but after several spurious results it was discovered that the material was sourced from a copper slag and the use of the material was discontinued. Broken commercial cinder block was then used but was discontinued in favour of commercial coarse marble aggregate.

14.2.2.1 Acceptance Criteria for Routine Analyses

In the case of Swastika's analysis, Howe suggests that the maximum acceptable value for the blanks be 50 ppb or 0.05 g/t gold. A blank sample that assayed greater than the maximum acceptable value should be considered a failure.

14.2.2.2 Results of Routine Analyses

The results from the Blanks were plotted against time with the maximum acceptable value on the chart illustrated in Figure 14-5.

Most of the blanks inserted into the sample batches returned gold concentrations below the maximum acceptable value. As noted, the initial use of coarse abrasive sand was discontinued after it was determined that the material was sourced from a copper slag and resulted in several spurious high grade results. Only one cinder block blank and one marble aggregate blank failed and Howe recommends that the Company review the results of associated batches.

The chart indicates there may be a slight bias to higher grades in the marble blank towards the end of the program. Howe noted that the bags of aggregate were stored in the core cutting area, and recommends that the blanks and certified reference materials be stored in sealed containers in the field office/core shack to avoid possible dust contamination from the core saw.



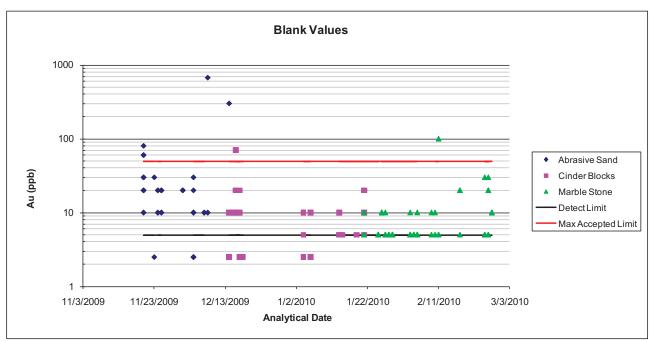


Figure 14-5: Blank sample analytical results plotted against time

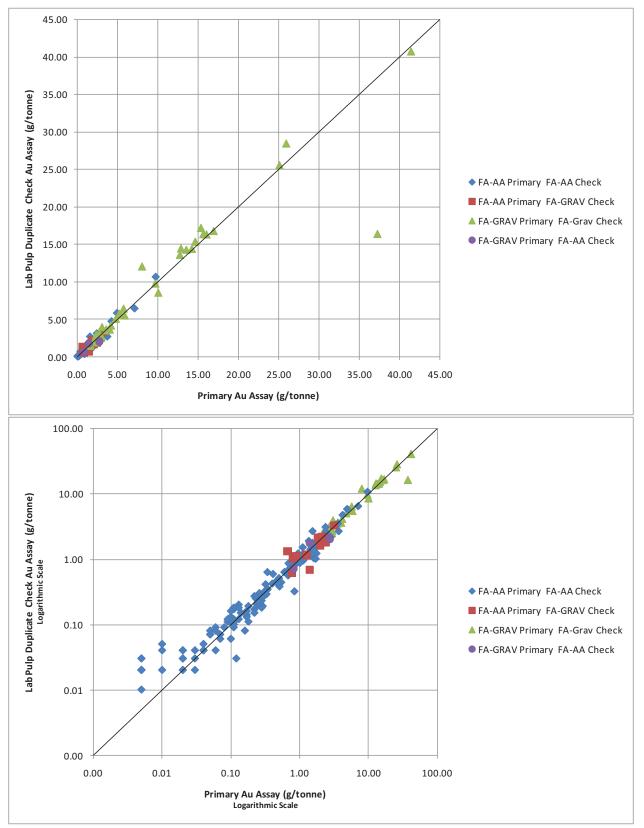
14.2.3 Precision

Precision is often monitored by the insertion of duplicate samples at a rate of 1 in 20 samples submitted. The duplicates may be quarter core duplicates and/or preparation duplicates, split after the initial jaw-crushing phase to make two pulps. Northern Gold inserted both quarter core duplicates and preparation duplicates into the sample stream each at a rate of 1 in 40 samples such that there was a duplicate sample every 20 samples. In addition laboratories routinely analyse pulp duplicates, split after the pulverizing phase, as part of their internal quality control programs.

14.2.3.1 Swastika Laboratory Pulp Duplicates

Laboratories run pulp duplicate analyses as a check on analytical errors, sample preparation errors and nugget effect. Swastika Laboratory was the principal assay laboratory during the Company's 2009 drill program and as a standard practice re-assayed approximately every 10th sample as an internal check on their own analyses. 376 pulp duplicates were re-assayed (check assayed) by Swastika. Primary (original) analysis data vs. the duplicate analysis is plotted at normal and logarithmic scales in Figure 14-6. Any values that plot significantly away from the correlation line may indicate sample mislabeling, sample preparation errors, analytical errors or a potential nugget effect. With exception to one higher grade sample, the graph shows good correlation between the original samples and duplicates. The poor correlation in one sample with an original assay of 37.24g/t Au and check assay of 16.42 g/t Au is likely due to nugget effect.









14.2.3.2 Quarter Core Duplicates

Generally, in a duplicate sampling program, quarter core duplicates are a compromise, as the best measure of precision would be to analyse the other half of the core, leaving no remaining core. Precision indicated by quarter core duplicate is generally poorer than indicated by half core duplicates. In a duplicate sampling program, the core duplicate analyses account for the largest portion of total error in the entire process, and as such provide the best indication of the precision of any individual analyses.

The Company submitted a total of 59 quarter core duplicate samples in the 2009 program. Original analysis data vs. the quarter core duplicate analysis is plotted in Figure 14-7. Any values that plot significantly away from the correlation line may indicate a potential nugget effect or, less likely sample preparation errors or analytical errors. Overall, the graph shows good correlation between the original samples and quarter core duplicates, however note that only 9 of the 59 samples have primary gold values of greater than 0.5 g/t. It is difficult to make any meaningful analysis of potential nugget effect from so few higher grade samples. Howe recommends additional quarter core duplicates be taken from the mineralized zone.

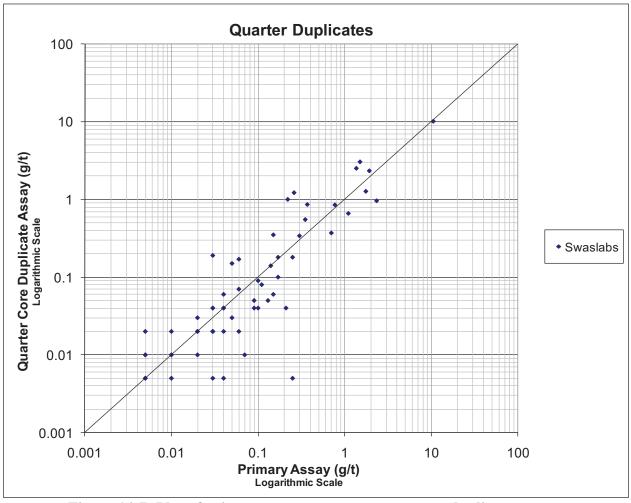


Figure 14-7: Plot of primary assays versus quarter core duplicate assays

14.2.3.3 Preparation Duplicates

Preparation duplicates are split after crushing; so much of the initial geological variability should be eliminated, resulting in better precision overall.

The Company submitted a total of 90 preparation duplicate samples in the 2009 program. Original analysis data vs. the quarter core duplicate analysis is plotted in Figure 14-8. Any values that plot significantly away from the correlation line may indicate a potential nugget effect or, less likely sample preparation errors or analytical errors. Overall, the graph shows good correlation between the original samples and preparation duplicates, however note that only 24 of the 90 samples have primary gold values of greater than 0.5 g/t. Howe recommends additional preparation duplicates be taken from the mineralized zone in order to adequately assess the potential nugget effect.

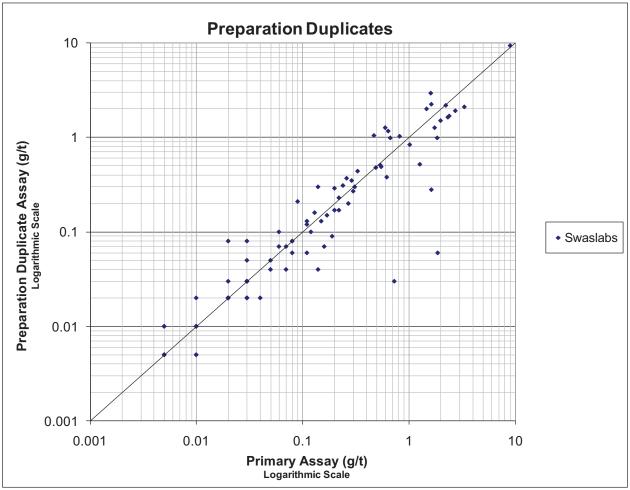


Figure 14-8: Plot of primary assays versus preparation duplicates

14.2.4 Check Analyses

In many QA/QC programs, pulp duplicates are also submitted for external check analyses at another laboratory to provide an independent check of relative bias and accuracy. In a routine quality control program approximately 5% of pulps may be submitted along with standard reference material to a second lab. Pulps are the preferred sample type as it eliminates much of the sampling error and provides a better comparison of the analyses.

Northern Gold submitted a total of 121 check samples from the 2009 drill program to Polymet Labs in Cobalt, Ontario. The pulps submitted were from quarter core and preparation duplicates; primary sample pulps were not submitted.

Check (pulp duplicate) results are presented as a scatterplot and absolute relative percent difference (RPD) plot (Figures 14-9 and 14-10). The scatterplot is presented with log scales that provide detail at lower concentrations.



Absolute RPD is a measure of precision, calculated by:

$$RPD(\%) = \left[\frac{|(X_1 - X_2)|}{X_{ave}}\right] \times 100 \text{ where:}$$

 X_1 = concentration observed in first analysis (Swastika); X_2 = concentration observed duplicate analysis (Polymet); and X_{ave} = average concentration = (($X_1 + X_2$) / 2)

A RPD of 0% is an optimum result where both the first and duplicate analyses have identical results and therefore perfect precision. The larger the RPD value, the greater the difference between the two analytical results and the poorer the precision.

Pulp duplicates are split after pulverising; so the initial geological variability in the sample should be eliminated, resulting in the best overall precision in comparison to $\frac{1}{4}$ or $\frac{1}{2}$ core duplicates and preparation duplicates. Significant differences in pulp duplicate pairs may be an indication of errors in the sample preparation or analysis or a mix-up laboratory sample labeling.

The scatterplot generally shows significant scatter at grades less than approximately 1.0 g/tonne with better clustering about the 1:1 correlation line at higher grades (Figure 14-9). The check samples generally show poor gold analytical precision, particularly at grades of less than 1.0g/tonne, but also at higher grades (Figure 14-10). Howe attributes this to the Polymet laboratory. The Polymet Lab conducts only gravimetric fire assays with a lower detection limit of 0.03g/tonne whereas Swastika conducted fire assays with AA finish with a lower detection limit of 0.005g/tonne on samples with grades of less than 1.0 g/tonne. This could result in the large absolute RPD values observed at very low grades nearing the lower detection limit. The high RPD values at higher grades are more problematic however Howe suggests they may, at least in part, be due to Polymet's preparation methods of the check pulps. Northern Gold reports that Polymet simply scooped out a 30 gram aliquot of pulp from the check sample envelope as received. Gravitational settling of pulp may have occurred during storage and transport to the lab which may have resulted in some of the larger RPD values (>20%). Howe recommends that pulps should be re-homogenised and riffle split at the check lab prior to analysis and that the same analytical methods be used at both primary and check laboratories. Alternatively the relatively high RPD values may reflect insufficient initial pulverisation and homogenisation of the pulp at the Swastika lab however internal duplicate checks of the pulps did not indicate a significant problem (Section 14.2.3.1). Northern Gold submitted one standard and one blank per sample batch of approximately 20 samples. All blanks returned gold values below detection limit and the standards returned values within acceptable limits. Howe recommends that the Company re-run some of the check pulps at a third laboratory to confirm the source of the discrepancies between the Swastika and Polymet check samples. Northern Gold has notified Howe that it is now submitting check assays to SGS Canada Inc. Geochemistry laboratory in Toronto Ontario for its 2010 drill program.



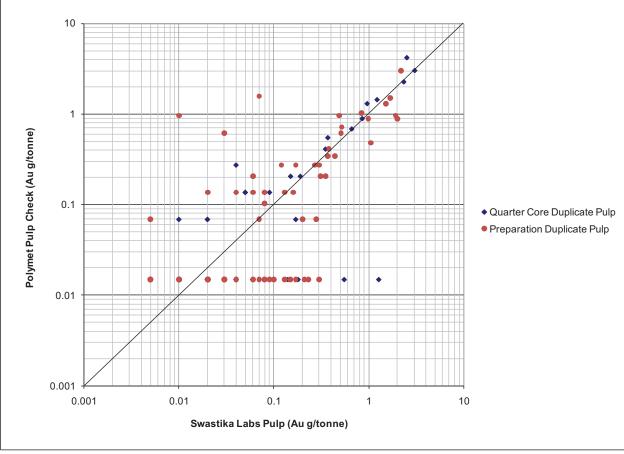


Figure 14-9: Check Assay Scatterplot Comparison



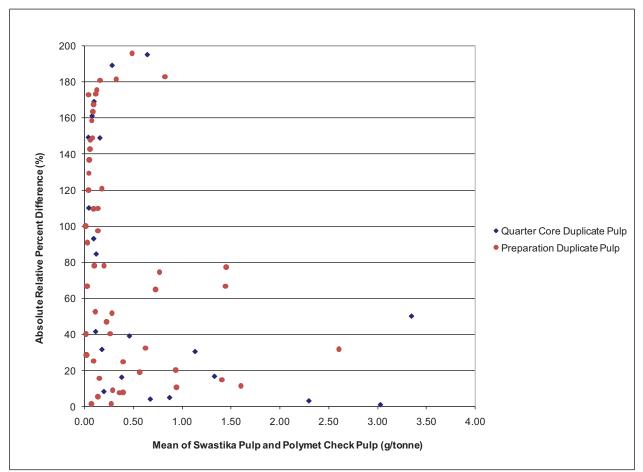


Figure 14-10: Check Assay Absolute Relative Percent Difference (RPD) Plot

14.3 ACA HOWE 2010 VERIFICATION

14.3.1 ACA Howe 2010 Site Visit

Confirmation of the existence of reported work sites was conducted by Howe representative and author Mr. I. Trinder during his visit to the Property on July 12th, 2010 as part of Howe's due diligence in the preparation of this technical report. Mr. Trinder completed an inspection of isolated surface outcrops, historic trenches, 2010 stripped areas and selected drill hole collars. The core logging / field office and sample preparation facilities were inspected. The condition of Company's onsite core storage racks and sample storage containers was checked and core from several holes was examined. All of the work sites and technical observations were as reported by the Company.

As part of the property visit, Mr. Trinder met with Mr. Michael Gross, Northern Gold's Vice President Exploration and Mr. Greg Matheson, Northern Gold's Project Geologist on July 12th at the Property site and on July 13th at the Company's Kirkland Lake office to discuss and review the Company's exploration activities, methodologies, data, results and interpretations.



14.3.2 ACA Howe 2010 Verification Sampling

Howe conducted limited verification sampling during its 2010 site visit which included two rock samples from outcrop and six samples of quarter core from holes GAR-09-01 and GAR-09-06.

Mr. Trinder collected and sealed the sample bags with ladder lock ties and maintained possession of all samples until delivery by courier to SGS Canada's geochemistry lab at 1885 Leslie Street, Toronto, Ontario. SGS-Toronto is a reputable, ISO/IEC17025 accredited laboratory qualified for the material analysed. SGS quality control procedures are method specific and include duplicate samples, blanks, replicates, reagent / instrument blanks for the individual methods.

The samples were prepared using SGS sample preparation package PRP89, which consists of conventional drying if required, in 105°C ovens; crushing; splitting and; pulverizing. After drying, the sample was passed through a primary oscillating jaw crusher producing material of 75% passing a 2mm screen. A 250-gram sub-sample was split from the crushed material using a stainless steel riffle splitter. This split was then ground to 85% passing 75 microns or better using a ring pulveriser.

The verification samples were analysed for gold using SGS analytical code FAI313 (Table 14-2).

Method code	Description	Lower Detection
	1	Limit
FAI313	Au fire assay; ICP finish, 30 g nominal sample weight.	>5 ppb Au

Table 14-2: ACA Howe Verification Samples - SGS Analytical Method

The outcrop and duplicate core samples provide an independent confirmation of the presence of significant gold mineralisation at the Garron Deposit (Table 14-3, Appendix B). Data are too limited however, to make a meaningful comparison of Howe's duplicate sample analytical results with Northern Gold's original analytical results. Howe notes however, that the variation between the original and duplicate assay results are reasonable given the difference in sample size (1/2 core vs. ¹/₄ core) and are typical for gold exploration projects with coarse visible gold (nugget effect). The results do however confirm the requirement for check assays at a second laboratory to ensure there is not a bias in results from the primary laboratory.



ACA Howe Sample #	ID	From	То	Zone	Sample Type	ACA Howe Au (ppb)	Northern Gold Sample #	Northern Gold Au (ppb)
32189-ACA	GAR-09-01	137.9	138.8	North Zone	1/4 core	1250	32189	5435
32191-ACA	GAR-09-01	138.9	139.9	North Zone	1/4 core	84	32191	870
32192-ACA	GAR-09-01	139.9	140.9	North Zone	1/4 core	950	32192	400
33894-ACA	GAR-09-06	138.0	139.0	South Zone	1/4 core	77	33894	307
33896-ACA	GAR-09-06	139.0	140.0	South Zone	1/4 core	90	33896	4180
33897-ACA	GAR-09-06	140.0	141.0	South Zone	1/4 core	1430	33897	2625

Table 14-3: ACA Howe Duplicates vs. Original Samples

Sample #	ID	UTM E	UTM N	Zone	Sample Type		
1001-ACA	outcrop - Wpt 32	578499	5373905	Shaft Zone	Grab	4690	
1002-ACA	outcrop - Wpt 42	578711	5373977	South Zone	Grab	6420	
1003-ACA	CDN-GS-5D				Standard	5030	
	Rec. Value:						
	5060 ppb Au						

14.3.3 Database Verification

Howe compiled all of the drill hole information into digital spreadsheet files. The drilling data was imported to Micromine and the database files were validated. Apart from a few concerns regarding downhole survey data for two pre-2009 drill holes, and minor discrepancies in the assay database, no significant errors were detected. All errors were corrected and documented. Unassayed drill hole intervals were assigned a grade of zero g/tonne Au.

Much of the historic and current drilling has been conducted at True azimuths approximating 340/160. Therefore to generate interpretive sections in the approximate plane of most of the diamond drill holes, UTM grid coordinates were translated to a local grid such that Local Grid north equals 340 True. The UTM grid was rotated 20 degrees counterclockwise about Northern Gold's drill hole GAR-09-01 (UTM 578,625.69E, 5,373,998.41N) which was assigned an arbitrary Local Grid coordinate of 5,000E and 5,000N.

Howe is of the opinion that the assay database for the Garron Deposit is of sufficient quality to provide the basis for the conclusions and recommendations reached in this Report.



15 ADJACENT PROPERTIES

Howe is unaware of any significant exploration results on immediately adjacent mineral properties.

Gold is extracted from the St Andrew Goldfield Ltd.'s Holloway mine in Holloway Township and Brigus Gold's Black Fox mine in Hislop Township (approximately 15 kilometres east and 32 kilometres west of the Property respectively). In addition, St Andrew Goldfield Ltd.'s Holt mine in Holloway Township and Hislop mine in Hislop Township are in development (approximately 15 kilometres east and 27 kilometres west of the Property respectively).

16 MINERAL PROCESSING AND METALLURGICAL TESTING

Squair (2000) states that early surface and underground work at the Garrcon Shaft and South zones have shown that the auriferous pyrite zones are non-refractory. Howe author, Ian Trinder, observed visible gold in core and outcrop at the Garrcon Deposit however, Howe has no knowledge of any mineral processing or metallurgical testing analyses that have been conducted on mineralisation from the Garrcon Deposit.



17 MINERAL RESOURCE ESTIMATE

17.1 INTRODUCTION

During August and September, 2010 ACA Howe International Limited ("Howe") carried out a resource estimate for Northern Gold's Garrison Property's Garrcon Deposit with the aim of establishing a bulk tonnage resource encompassing the known Shaft, South and North zones. The current resource estimate includes 65 drill holes including historic third party and Northern Gold's 2009 drill holes.

This resource estimate was prepared by Doug Roy, M.A.Sc., P.Eng., Associate Mining Engineer with Howe. Geological interpretation was provided by Ian Trinder, M.Sc., P.Geo., Senior Geologist with Howe. Micromine software (Version 12) was used to facilitate the resource estimation process.

The resource estimate was prepared in accordance with CIM Standards on Mineral Resources and Reserves³ where:

- A *Measured Mineral Resource*, as defined by the CIM Standing Committee is "that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics are so well established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters, to support production planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough to confirm both geological and grade continuity."
- An *Indicated Mineral Resource* as defined by the CIM Standing Committee is "that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics, can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters, to support mine planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough for geological and grade continuity to be reasonable assumed." And,
- An *Inferred Mineral Resource* as defined by the CIM Standing Committee is "that part of a Mineral Resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes."

A *Mineral Reserve* is "the economically mineable part of a Measured or Indicated Mineral Resource demonstrated by at least a Preliminary Feasibility Study." This Study must include adequate information on mining, processing, metallurgical, economic and other relevant factors

³ CIM Standards in Mineral Resources and Reserves, Definitions and Guidelines, adopted August 20, 2000



that demonstrate, at the time of reporting, that economic extraction can be justified. A Mineral Reserve includes diluting materials and allowances for losses that may occur when the material is mined.

- A *Probable Mineral Reserve* is "the economically mineable part of an Indicated, and in some circumstances a Measured Mineral Resource demonstrated by at least a Preliminary Feasibility Study. This Study must include adequate information on mining, processing, metallurgical, economic, and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified."
- A *Proven Mineral Reserve* is "the economically mineable part of a Measured Mineral Resource demonstrated by at least a Preliminary Feasibility Study. This Study must include adequate information on mining, processing, metallurgical, economic, and other relevant factors."

Classification, or assigning a level of confidence to Mineral Resources, has been undertaken with strict adherence to the CIM Standards on Mineral Resources and Reserves.

Only mineral resources are identified in this report. No economic work that would enable the identification of mineral reserves has been carried out - no mineral reserves are defined. Mineral resources that are not mineral reserves do not account for mineability, selectivity, mining loss and dilution and do not have demonstrated economic viability. These mineral resource estimates include inferred mineral resources that are normally considered too speculative geologically to have economic considerations applied to them that would enable them to be categorized as mineral reserves. There is also no certainty that these inferred mineral resources will be converted to the measured and indicated categories through further drilling, or into mineral reserves, once economic considerations are applied.

17.2 DATA SOURCES

For the resource estimation, Northern Gold provided several forms of digital data:

- A digital drill hole database comprising separate Microsoft Excel format spreadsheets that contained, collar surveys, down-hole surveys, geological logs and assays for 54 previous third-party holes up to and including Hole C07-05.
- A digital drill hole database comprising separate Microsoft Excel format spreadsheets that contained, collar surveys, down-hole surveys, geological logs and assays for 11 Northern Gold diamond drill holes completed in 2009 (up to and including Hole GAR-09-10; Hole GAR-09-03 was redrilled as GAR-09-03A).
- A digital spreadsheet containing results of six specific gravity ("SG") measurements from four holes.
- Digital laboratory assay files received for 2009 drill hole samples
- PDF files of laboratory assay certificates received for 2009 drill hole samples



Input files were created from the supplied data for import to Micromine resource modeling software:

Table	Micromine File
Collar Survey	Collars.dat
Downhole Survey	dhSurvey.dat
Assays	Assays.dat
Lithology	Lithology.dat

The drilling data was imported to Micromine and the database files were validated. Apart from a few concerns regarding downhole survey data for two pre-2009 drill holes, and minor discrepancies in the assay database, no significant errors were detected. All errors were corrected and documented. Unassayed drill hole intervals were assigned a grade of zero g/tonne Au.

Much of the historic and current drilling has been conducted at True azimuths approximating 340/160. Therefore to generate interpretive sections in the approximate plane of most of the diamond drill holes, UTM grid coordinates were translated to a local grid such that Local Grid north equals 340 True. The UTM grid was rotated 20 degrees counterclockwise about Northern Gold's drill hole GAR-09-01 (UTM 578,625.69E, 5,373,998.41N) which was assigned an arbitrary Local Grid coordinate of 5,000E and 5,000N.

17.3 MINERALISED ZONE INTERPRETATION

Mineralised zones were outlined to enforce geological control during block modeling.

Because of the larger scale and lower grade nature of the mineralisation, it was assumed that the deposit would be mined using larger scale, surface mining methods.

The following guidelines were used during the interpretation process:

- 1. A cut-off grade of 0.1 g/tonne gold was generally used to constrain the mineralized zone. Cut-off grades are further discussed in Section 17.9.
- 2. Along strike, zones were extended halfway to the next, under-mineralised cross-section.
- 3. Zones were extended down-dip by a maximum of 100 metres beyond the last intercept approximately double the omni-directional semi-variogram range (refer to
- 4. Figure 17-5).
- 5. Zones were allowed to extend through "below cut-off" intercepts so long as there was a "geological reason" to do so.

The mineralised zone is constrained to the south by assay cut-off and/or the Porcupine-Destor Fault which is delineated by ultramafic and chlorite talc schists. Similarly there appears to be smaller ultramafic body and/or assay cut-off constraining the mineralised zone to the north.



Cross- sections were interpreted and digitised onscreen and zone intercepts were tagged (refer to Table 17-1 for cross-section definitions; refer to Figure 17-3 for selected cross-sections; refer to Appendix C for all interpreted cross-sections).

Figure 17-1 and Figure 17-2 show a plan view and three-dimensional view of the interpreted mineralised zone, respectively.

Number	Section	Name	Away	Towards	Width
1	4750	4750E	25	25	50
2	4800	4800E	25	25	50
3	4850	4850E	25	12.5	37.5
4	4875	4875E	12.5	12.5	25
5	4900	4900E	12.5	12.5	25
6	4925	4925E	12.5	12.5	25
7	4950	4950E	12.5	12.5	25
8	4975	4975E	12.5	12.5	25
9	5000	5000E	12.5	12.5	25
10	5025	5025E	12.5	12.5	25
11	5050	5050E	12.5	25	37.5
12	5100	5100E	25	50	75
13	5200	5200E	50	50	100
14	5300	5300E	50	50	100
15	5400	5400E	50	50	100



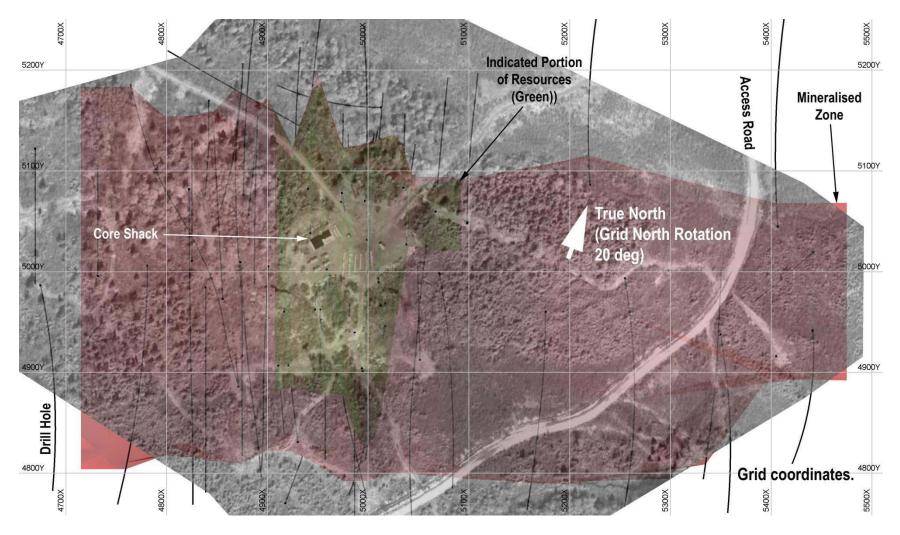
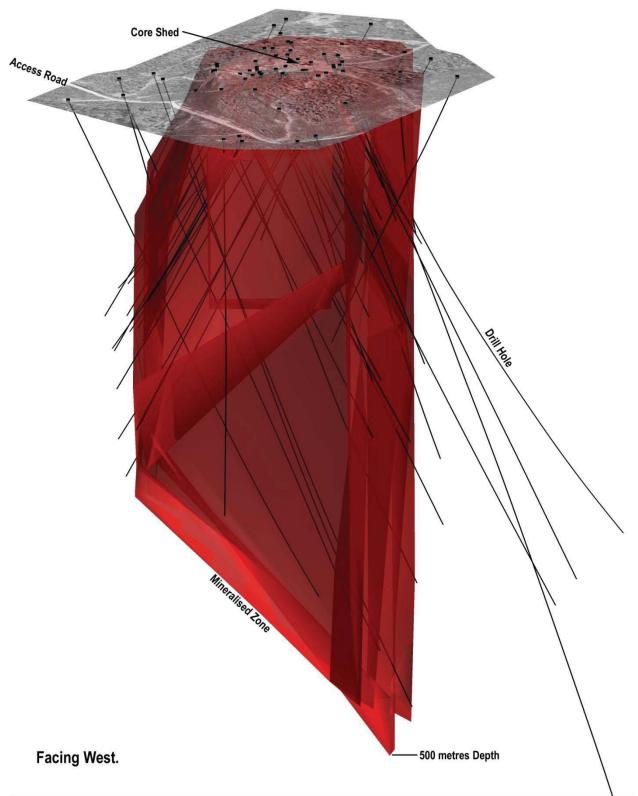
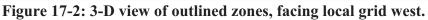


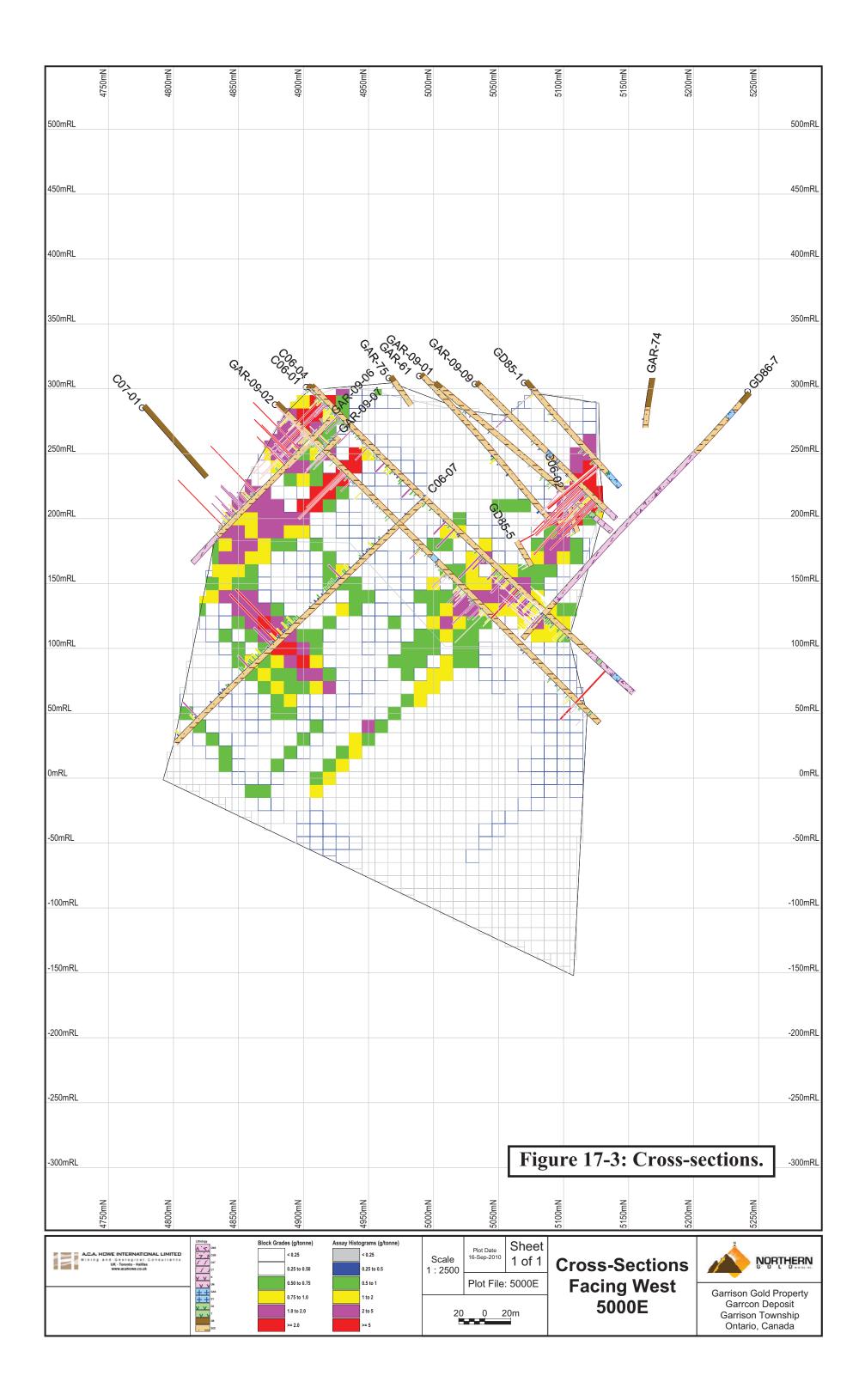
Figure 17-1: Plan view of drilling and mineralised zone.

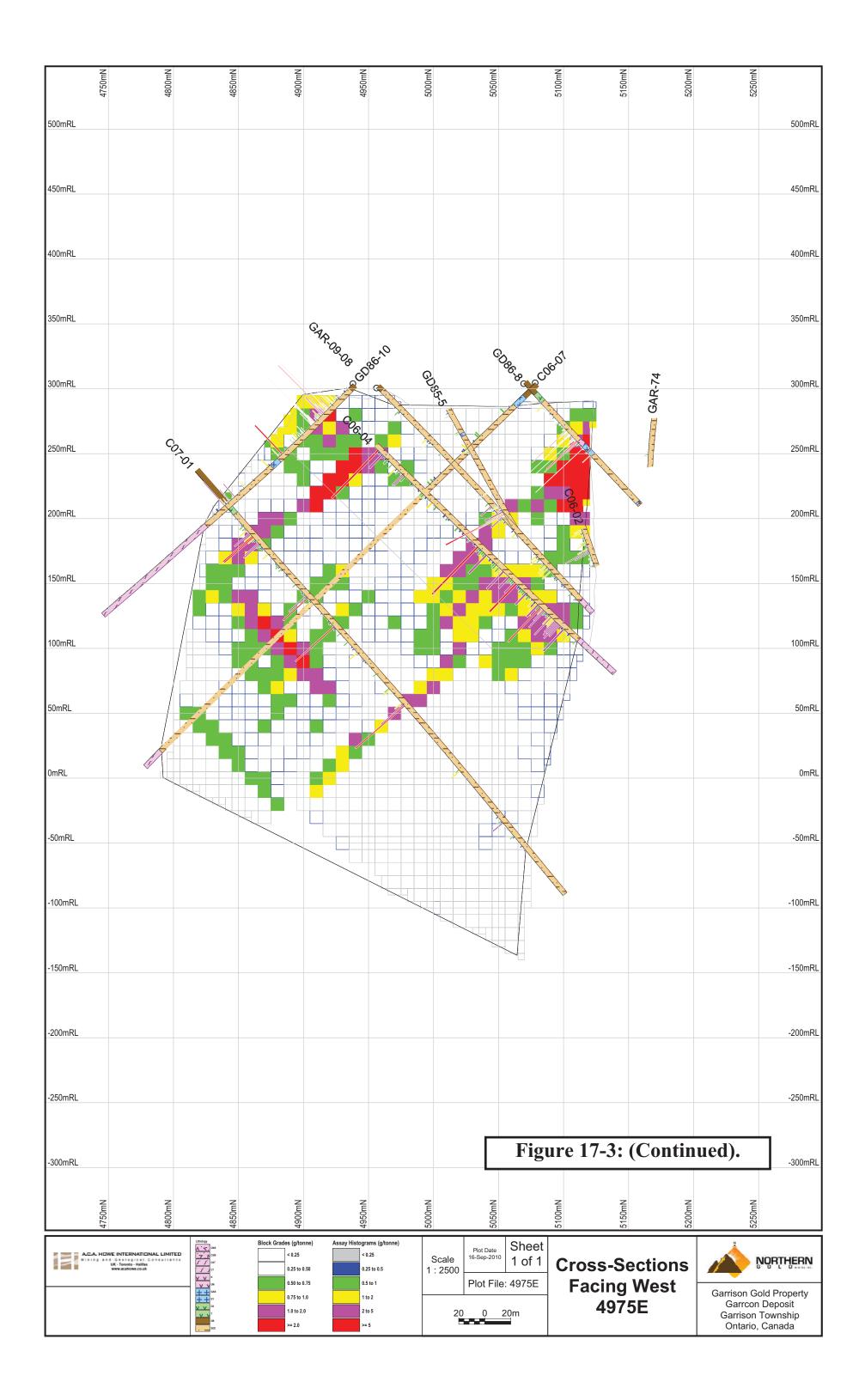
A.C.A. HOWE INTERNATIONAL LIMITED Report No. 940 September 23, 2010

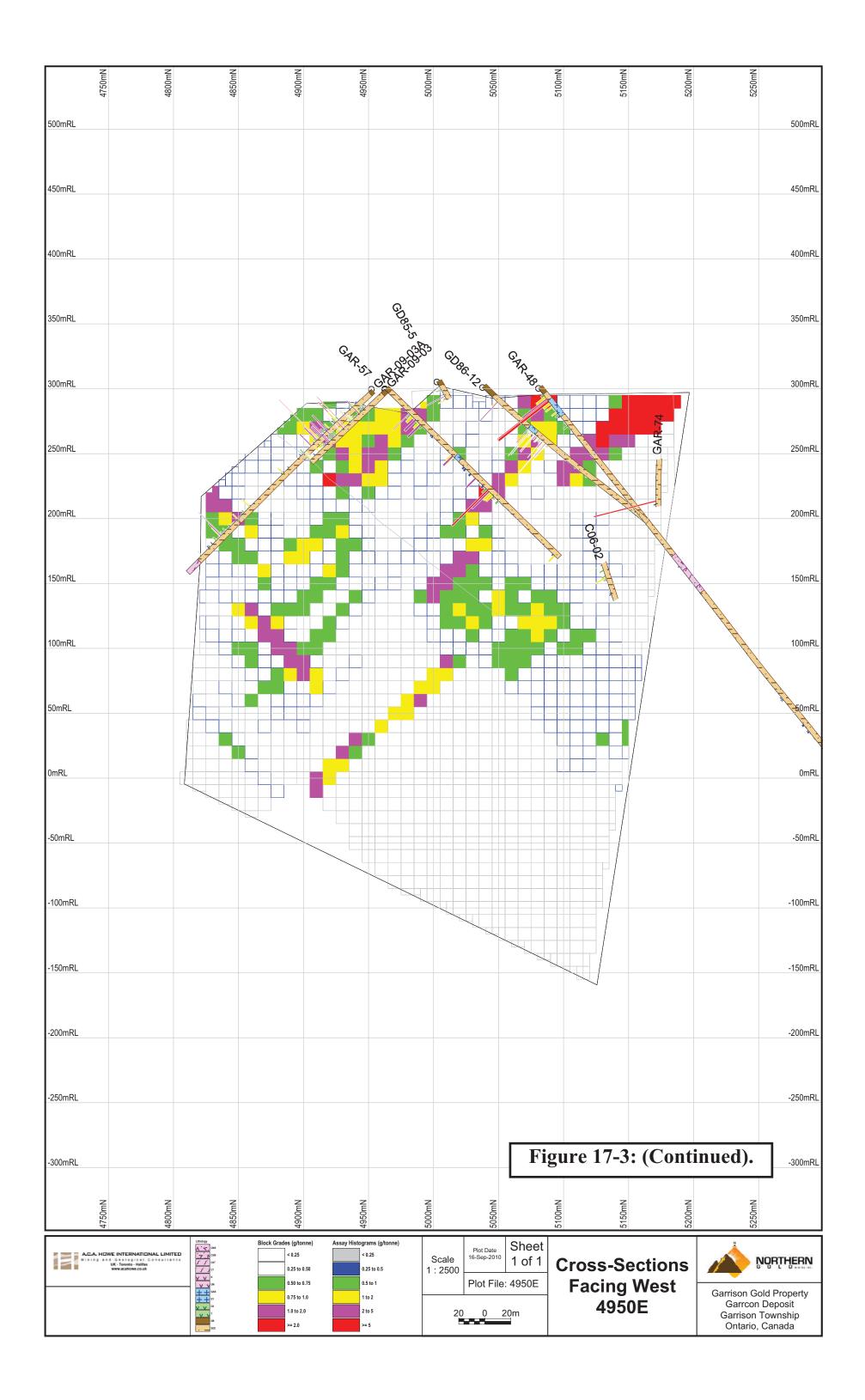














17.4 SAMPLE REGULARISING

Samples were regularised over 1.0 metre intervals - the most common sample interval for samples within the mineralised zones. .

17.5 SAMPLE STATISTICS

Statistics were calculated for regularised (over 1.0 metre intervals) samples within the main mineralised zone (refer to Figure 17-4). The mean value for all samples is 0.43 g/tonne gold.

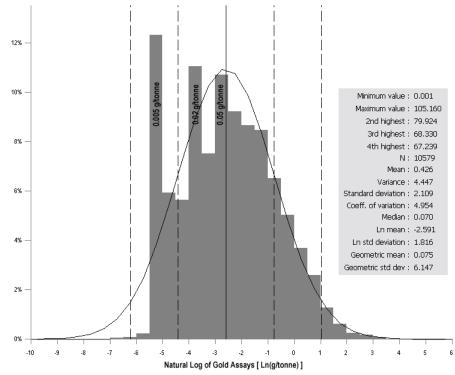


Figure 17-4: Sample statistics for the main mineralised zone (regularised samples).

17.6 SPECIFIC GRAVITY

Based on a limited number of measurements, a representative specific gravity ("SG") value was determined to be 2.6.

17.7 VARIOGRAPHY

Experimental variograms were constructed using assays that were regularised over 1.0 metre intervals. The lag was ten metres.



There appear to be trends along certain search directions. However, orthogonal to those directions (i.e. along secondary and tertiary search directions), the range is not significantly different. More detailed directional variography could be successful in exposing grade trends. However, such detailed work is beyond the scope of this report.

The omni-directional variogram produces excellent data to which a spherical model can readily be fit (refer to Figure 17-5).

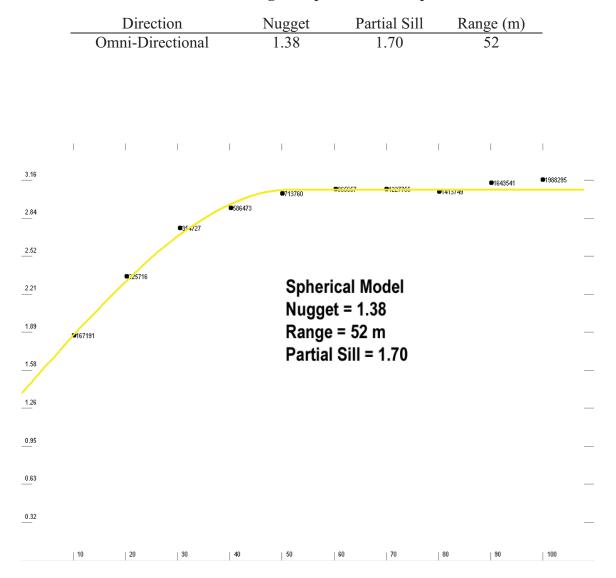


Table 17-2: Semi-variogram spherical model parameters.

Figure 17-5: Omni-directional semi-variogram model (1.0 metre regularised samples).



17.8 BLOCK MODELLING

A blank block model with the file name "Blocks Blank.dat" was created with the parameters reported in Table 17-3. The blocks are constrained by the mineralised zone wireframe.

The "parent" block size is 10x10x10 metres (Easting x Northing x Elevation).

There are two sub-blocks in each direction for a geological resolution of 5x5x5 metres (Easting x Northing x Elevation).

Direction	Model Origin (Grid, m)	Model Limit (Grid, m)	Model Extent (m)	Block Size (m)	Number of Blocks	Number of Sub-blocks
East	4300	5800	1500	10	151	2
North	4500	5500	1000	10	101	2
Elevation (RL)	-200	400	600	10	61	2

Table 17-3: Block model parameters.

17.9 CUT-OFF GRADES

17.9.1 Zone Interpretation

The chosen cut-off grade for mineralised zone interpretation is 0.1 g/tonne of gold. Through iteration, this value was chosen as the cut-off that, in the author's opinion, when used for outlining the lower grade mineralisation, provided the closest approximation of the continuity of that mineralisation.

17.9.2 Mineral Resources

The chosen "block cut-off"⁴ grade for defining mineral resources is 0.5 g/tonne gold. Considering a typical mining recovery of 95%, a typical overall processing recovery of 95%, a typical smelter return of 98% and a gold price of \$US 900 per troy ounce gold, rock with this grade would have a revenue of \$US 12-13. This is considered to be a reasonable value for conventional surface mining – the most likely mining method that would be applied to this deposit.

17.10 TOP-CUT GRADE

A top-cut value is normally chosen to prevent the overestimation of block grades by a small number of very high assays or *outliers*.

There is no indication that there is more than one sample population present. Only six samples (1.0 metre regularised) out of a population of 11,004 samples, or 0.05 % have a grade that is more than 34.3 g/tonne (1 troy oz/ton) gold, with the highest value being 105 g/tonne gold. Because there are

⁴ The grade at which it is possible to mine and process an exposed block (*i.e.*: stripping not included).

A.C.A. HOWE INTERNATIONAL LIMITED Report No. 940 September 23, 2010



so few higher grade samples and no "bonanza grade" samples, it is felt that no arbitrary top-cut is necessary.

No top-cut has been applied because, in the author's opinion, a top-cut will not affect the global estimate.

17.11 GRADE ESTIMATION

Because of the exceptional fit of the global semi-variogram model (refer to Figure 17-5), ordinary block kriging is considered to be an acceptable, and appropriate method for estimating block grades in this deposit.

Blocks were discretised twice in each dimension. The grade estimation process was carried out using the parameters reported in Table 17-4. A description of the block model file fields is reported in Table 17-5.

Grade estimation was carried out in three phases or "runs." The first run had a maximum search radius of 50 metres and required samples from at least three holes. In subsequent runs, the parameters were relaxed.

Parameter	Run 1	Run 2	Run 3
Model	Spherical, Omni-	Spherical, Omni-	Spherical, Omni-
	directional	directional	directional
Range	52 m	52 m	52 m
Nugget	1.38	1.38	1.38
Partial Sill	1.70	1.70	1.70
Min. Number of Holes	3	2	1
Min. Number of Samples Per Hole	3	3	3
Max. Number of Samples Per Hole	12	12	12
Search Sphere Radius (m)	50	100	100
Resulting File	Blocks – Kriged –	Blocks – Kriged	Blocks – Kriged –
	Run 1.dat	– Run 2.dat	Run 3.dat

Table 17-4: Grade estimation parameters.

Field	Description
East	Easting (Grid)
_East	Block Dimension, East Direction
North	Northing (Grid)
_North	Block Dimension, North Direction
RL	Reduced Level (Grid)
_RL	Block Dimension, North Direction
Zone	Outlined Zone
Resource Category	Resource category.
Assay G/T	Estimated Gold Grade (g/tonne)
Points	Number of Samples Used for Estimate
KR_VAR	Kriging variance.
KR_STDERR	Kriging standard error.
Number of Holes	Number of Holes Used for Estimate

Table 17-5: Block model fields.

17.12 RESOURCE CLASSIFICATION PARAMETERS

Resource classification parameters were chosen based on a combination of variography results and the author's judgement. The degree of confidence in the reported resources was classified based on the validity and robustness of input data and the proximity of resource blocks to sample locations. Resources are reported according to the CIM Standards on Minerals Resources and Reserves as required by NI 43-101.

Rather than classifying resources using the search ellipse parameters (Table 17-4), Inferred resources were outlined graphically, on cross-sections using the process that was described in Section 17.3.

Indicated Resources were outlined graphically on cross-sections within areas where the intercept spacing was approximately less than the variogram range of 52 metres (refer to Table 17-2). Generally, Indicated Resources were outlined in the area with the highest concentration of drilling, between 4900 and 5100 metres East and within approximately100-150 metres of surface.

17.13 RESULTS

Mineral resources were defined using a block cut-off grade of 0.5 g/tonne gold (refer to Table 17-6 and Table 17-7). The volume of shaft, drifts and crosscuts historically excavated by Cominco have not been deleted from the mineral resource volume. Utilizing approximate cross-sectional dimensions typical of underground workings for the era, Howe estimates that the total volume and tonnage of the material extracted by Cominco from the resource area was approximately 7,000 cubic metres and 20,000 tonnes respectively. This is less that 0.1% of Howe's combined inferred and indicated resource tonnage and therefore is insignificant.

Howe is unaware of any known environmental, permitting, legal, title, taxation, socio-economic, marketing, political or other relevant issues that may materially affect the mineral resource estimate.



17.13.1Indicated Mineral Resources

Non-diluted <u>Indicated</u> Mineral Resources, less than 150 metres deep total 3.3 million tonnes with an average gold grade of 1.2 g/tonne for 130,000 ounces gold. Non-diluted <u>Indicated</u> Mineral Resources, more than 150 metres deep total 480,000 tonnes with an average gold grade of 0.9 g/tonne for 14,000 ounces gold.

The grand total for <u>Indicated</u> mineral resources is 3.8 million tonnes with an average gold grade of 1.2 g/tonne, for 144,000 ounces gold.

17.13.2Inferred Mineral Resources

Non-diluted <u>Inferred</u> Mineral Resources, less than 150 metres deep total 9.4 million tonnes with an average gold grade of 1.0 g/tonne for 300,000 ounces gold. Non-diluted <u>Inferred</u> Mineral Resources, more than 150 metres deep total 9.1 million tonnes with an average gold grade of 0.8 g/tonne for 230,000 ounces gold.

The grand total for <u>Inferred</u> mineral resources is 18.5 million tonnes with an average gold grade of 0.9 g/tonne, for 530,000 ounces gold.

	Tonnes Above Cut-	Average Gold Grade	
Mineral Resource Category	off	(g/tonne)	Ounces
Indicated			
Less Than 150 m Deep	3,300,000	1.2	130,000
More than 150 m Deep	480,000	0.9	14,000
Total Indicated	3,780,000	1.2	144,000
Inferred			
Less Than 150 m Deep	9,400,000	1.0	300,000
More than 150 m Deep	9,100,000	0.8	230,000
Total Inferred	18,500,000	0.9	530,000

Table 17-6: Summary of mineral resources.

Notes:

- 1. Cut-off grade for mineralised zone interpretation was 0.1 g/tonne.
- 2. Block cut-off grade for defining Mineral Resources was 0.5 g/tonne.
- No top-cut grade was used. In the author's opinion, the use of a top cut would not have significantly affected the results.
- 4. Gold price was \$US 900 per troy ounce.
- 5. Zones extended up to 100 metres down-dip from last intercept. Along strike, zones extended halfway to the next cross-section.
- 6. Minimum width was 5 metres, though in no place was the zone that narrow.
- 7. Non-diluted.
- 8. Mineral resources that are not mineral reserves do not have demonstrated economic viability.
- 9. Resource estimate prepared by Doug Roy, M.A.Sc., P.Eng.
- A specific gravity (bulk density) value of 2.6 was applied to all blocks (a representative value based on a limited number of measurements).
- 11. Ordinary block kriging ("OBK") was used for estimating block grades.
- 12. Indicated resources identified where sample intercept spacing was
 50 metres or less (based on variography).
- 13. No Measured Mineral Resources or Mineral Reserves of any category were identified.
- 14. The volume/tonnage of historic Cominco shaft, drifts and crosscuts have not been deleted from the Howe mineral resource volume/ tonnage. Howe estimates the tonnage extracted from the resource area was less than 0.1% of the total inferred and indicated resource tonnage.



Table 17-7: Details of mineral resources.

Indicated Category, Less than 150 m Deep:			Indicated C	Category, More	than 150 m	Deep:	
		Average					
		Gold		Cut-off		Average	
Cut-off Grade	Tonnes Above	Grade		Grade	Tonnes Above	Gold Grade	
(g/tonne)	Cut-off	(g/tonne)	Ounces	(g/tonne)	Cut-off	(g/tonne)	Ounces
2.00	490,000	3.2	50,000	2.00	<u></u>		.
1.50	660,000	2.8	59,000	1.50	18,000	1.7	980
1.00	1,300,000	2.0	84,000	1.00	150,000	1.3	6,300
0.75	2,000,000	1.6	100,000	0.75	310,000	1.1	11,000
0.50	3,300,000	1.2	130,000	0.50	480,000	0.9	14,000
0.25	6,000,000	0.8	150,000	0.25	650,000	0.8	17,000

Inferred Category, Less than 150 m Deep:

Inferred Category, More than 150 m Deep:

		Average					
		Gold		Cut-off		Average	
Cut-off Grade	Tonnes Above	Grade		Grade	Tonnes Above	Gold Grade	
(g/tonne)	Cut-off	(g/tonne)	Ounces	(g/tonne)	Cut-off	(g/tonne)	Ounces
2.00	670,000	3.5	75,000	2.00	92,000	2.4	7,100
1.50	1,100,000	2.8	99,000	1.50	460,000	1.8	27,000
1.00	2,700,000	1.9	160,000	1.00	1,400,000	1.4	63,000
0.75	4,500,000	1.4	200,000	0.75	3,700,000	1.1	130,000
0.50	9,400,000	1.0	300,000	0.50	9,100,000	0.8	230,000
0.25	20,000,000	0.7	450,000	0.25	21,000,000	0.6	410,000

Note: Figures in *italics* were not considered to be mineral resources and were included for information puposes only.

Notes:

- 1. Cut-off grade for mineralised zone interpretation was 0.1 g/tonne.
- 2. Block cut-off grade for defining Mineral Resources was 0.5 g/tonne.
- 3. No top-cut grade was used. In the author's opinion, the use of a top cut would not have significantly affected the results.
- 4. Gold price was \$US 900 per troy ounce.
- 5. Zones extended up to 100 metres down-dip from last intercept. Along strike, zones extended halfway to the next cross-section.
- 6. Minimum width was 5 metres, though in no place was the zone that narrow.
- 7. Non-diluted.
- 8. Mineral resources that are not mineral reserves do not have demonstrated economic viability.
- 9. Resource estimate prepared by Doug Roy, M.A.Sc., P.Eng.
- 10. A specific gravity (bulk density) value of 2.6 was applied to all blocks (a representative value based on a limited number of measurements).
- 11. Ordinary block kriging ("OBK") was used for estimating block grades.
- Indicated resources identified where sample intercept spacing was
 metres or less (based on variography).
- 13. No Measured Mineral Resources or Mineral Reserves of any category were identified.
- 14. The volume/tonnage of historic Cominco shaft, drifts and crosscuts have not been deleted from the Howe mineral resource volume/ tonnage. Howe estimates the tonnage extracted from the resource area was less than 0.1% of the total inferred and indicated resource tonnage.



17.14 CROSS-VALIDATION OF RESULTS

Block grades were recalculated using inverse distance weighting with a power of two ("ID2") and compared against the results obtained using ordinary block kriging ("OBK"). Both methods compared very well (refer to Table 17-8). The difference in Inferred ounces could probably be attributed to rounding.

Table 17-8: Cross-validation of results.

Mineral Resource Category	Tonnes Above Cut- off	Average Gold Grade (g/tonne)	Ounces
Indicated			
Less Than 150 m Deep	3,300,000	1.2	130,000
More than 150 m Deep	480,000	0.9	14,000
Total Indicated	3,780,000	1.2	144,000
Inferred			
Less Than 150 m Deep	9,400,000	1.0	300,000
More than 150 m Deep	9,100,000	0.8	230,000
Total Inferred	18,500,000	0.9	530,000

Ordinary Block Kriging:

	Inverse Distance	<u>:</u>	
Mineral Resource Category	Tonnes Above Cut- off	Average Gold Grade (g/tonne)	Ounces
Indicated			
Less Than 150 m Deep	3,300,000	1.2	130,000
More than 150 m Deep	470,000	0.9	14,000
Total Indicated	3,770,000	1.2	144,000
Inferred			
Less Than 150 m Deep	10,000,000	1.0	320,000
More than 150 m Deep	8,400,000	0.8	220,000
Total Inferred	18,400,000	0.9	540,000



18 OTHER RELEVANT INFORMATION

There is no other relevant information known to Howe that if undisclosed would make this Report misleading or would make this Report more understandable.

19 INTERPRETATION AND CONCLUSIONS

Howe has reviewed the Garron Deposit data provided by Northern Gold, including the drilling database, has visited the site and has reviewed sampling procedures and security. Howe believes that the data presented by the Company are generally an accurate and reasonable representation of the Garron Deposit mineralisation. Howe concludes that the database for the Garron Deposit is of sufficient quality to provide the basis for the conclusions and recommendations reached in this Report.

Work by the Company at the Garron Deposit has confirmed the grade of mineralisation outlined by previous operators, provided further detail on the nature of the mineralised zones and permitted the completion a NI 43-101 compliant Mineral Resource Estimate.

Northern Gold's QA/QC results to date indicate that there are no major problems with the accuracy of the analyses. Howe does note however that a comparison of the Swastika and Polymet check samples show a significant scatter and generally poor gold analytical precision for pulps, Howe has attributed this to the analytical detection limit and methods utilised at the Polymet laboratory. The current sampling and analytical protocols are considered by Howe to be appropriate.

Northern Gold's exploration program to December 2009 has confirmed and delineated a significant gold resource. Using a cut-off grade of 0.1 g/tonne gold for mineralised zone interpretation, Howe outlined a mineralised zone that is nearly vertical, 760 metres long and 300 metres wide (on average).

Indicated mineral resources total 3.8 million tonnes with an average gold grade of 1.2 g/tonne, for 144,000 ounces gold using a 0.5 g/tonne block cut-off grade.

Inferred mineral resources total 18.5 million tonnes with an average gold grade of 0.9 g/tonne, for 530,000 ounces gold using a 0.5 g/tonne block cut-off grade.

Howe concludes that the Garroon Deposit and the Garrison Gold Property is a property of merit as defined in NI 43-101 and warrants additional expenditures.



20 RECOMMENDATIONS

Howe recommends that:

- 1. Check samples should continue to be submitted with inserted standards to a second laboratory as part of the Company's sampling QA/QC program. Standards should be inserted into the check assay batches submitted to the check laboratory. Pulps should be rehomogenised and riffle split at the check lab prior to analysis and that the same analytical methods be used at both primary and check laboratories. The Company should re-run some of the check pulps from the 2009 drill program at a third laboratory to confirm the source of the discrepancies between the Swastika and Polymet check samples.
- 2. Given the lack of QA/QC information and documentation of sampling and assaying methodologies for the historic Cominco/Jonpol drill core, Northern Gold should conduct a check sampling program of select archived Cominco/Jonpol drill core. Pulps and rejects are not available therefore the archived half core should be utilized after thorough relogging and photographing of the core. The rejects from the duplicate check samples will be archived and securely stored.
- 3. Northern Gold sample and assay currently non-sampled intervals of historic Cominco/Jonpol and ValGold drill holes that lie within the mineral resource volume.
- 4. A sufficient quantity of two to three certified reference materials (low, medium and high grades) representative of the Garroon mineralisation be acquired and used throughout the sampling QA/QC program.
- 5. Additional diamond drilling should be completed on the Garroon Deposit to (a) expand Inferred mineral resources along strike and at depth and (b) upgrade Inferred resources to Indicated resources.
- 6. Specific gravity measurements be conducted on representative Garron samples. The number of samples would depend on the statistical variance of the measurements, but 100-200 representative measurements would be a good starting point.
- 7. Laboratory scale mineral processing work be carried out on Garrcon mineralisation to support a preliminary economic assessment ("PEA"). Gravity/flotation, gravity/cyanide leach (CIL or CIP) and heap leach options should be evaluated using a representative sample. At least 200-300 kilograms of representative material would be required for that work.
- 8. Update of the Garron resource estimate to include the results of the ongoing 2010 drill program.



9. A scoping study or *preliminary economic assessment* ("PEA") on the Garron Deposit is warranted and should be carried out. This work should evaluate, at a minimum, conventional surface mining combined with the three mineral processing options described in recommendation item 7.

The estimated cost of the recommended work is as follows:

Step-out and in-fill diamond drilling (30,000m)	\$ 4,500,000
Ground Geophysics (including IP)	\$ 100,000
Specific gravity measurements	\$ 5,000
Mineral processing testwork	\$ 150,000
Environmental Permitting	\$ 200,000
Garrcon resource update	\$ 50,000
Preliminary Economic assessment	\$ 150,000
Total	\$5,155,000



21 REFERENCES

Ayer, J. A. and Trowell, N. F., 2001, Project Unit 95-24, The Abitibi Greenstone Belt: A Program Update. In Summary of Field Work and Other Activities 2001, Ontario Geological Survey, OFR 6070, p. 4-1 to 4-9.

Bath, A.C., 1990, Mineral Occurrences, Deposits, and Mines of the Black River – Matheson Area, Ontario Geological Survey Open File Report 5735, 1883 p.

Berger, B. R., 2002, Geological Synthesis of the Highway 101 Area, East of Matheson, Ontario; Ontario Geological Survey Open File Report 6091, 124 p.

Bradshaw, R.J., 1989, A Report on the Newfield Property Gold Deposits, Garrison Township, Ontario, August 17, 1989, pp. 14.

Card, K. D., Poulsen, K. H., and Robert, F., 1988, The Archean Superior Province of the Canadian Shield and Its Lode Gold Deposits, p. 19-36; in Economic Geology Monograph 6: The Geology of Gold Deposits; the Perspective in 1988, edited by R. R. Keays, W. R. H. Ramsey, and D. I. Groves, Economic Geology Publishing Company, 667p.

DDH Geomanagement, 1989, unpublished exploration report

George, P.T., 2008, Technical Report, Mineral Resource Estimate and Preliminary Assessment of Garrison Gold Property, Abitibi Greenstone Belt, Garrison Township, Ontario, Canada for ValGold Resources Inc.; A.C.A. Howe International Limited Technical Report.

George, P.T., 2009, Technical Report, Mineral Resource Estimate and Preliminary Assessment of Garrison Gold Property, Abitibi Greenstone Belt, Garrison Township, Ontario, Canada for Northern Gold Mining Inc.; A.C.A. Howe International Limited Technical Report.

Jackson, S. L., and Fyon, J. A., 1991, The Western Abitibi Subprovince in Ontario; in Geology of Ontario, Special Volume 4, Part 1, Chapter 11, p.405-482.

Northern Miner, various

Robert, F., 1996, Quartz-carbonate vein gold; in Geology of Canadian Mineral Deposit Types, edited by O. R. Ekstrand, W. D. Sinclair, and R. I. Thorpe, Geological Survey of Canada, Geology of Canada, No 8, p 350-366.

Robert, F., 1998, An Overview of World Class Archean Gold Deposits; in The First Age of Giant Ore Formation; Stratigraphy, Tectonics, and Mineralisation in the Late Archean and Early Proterozoic; papers presented in a technical session at the Annual Convention and Trade Show of the Prospectors and Developers Association of Canada, Sunday March 8, 1998, p.137-162.

A.C.A. HOWE INTERNATIONAL LIMITED Report No. 940 September 23, 2010



Rogers, D. S., 1982, Drilling as an aid in ore definition at the Dome Mine, Canadian Institute of Mining and Metallurgy, vol. 75, no. 842, June 1982, p. 98-104.

Sinclair, D.G., Keely, E.C., Cooper, D.F., Weir, E.B. and Webster, A.R., 1937, Mines of Ontario in 1935; Ontario Department of Mines, Annual Report of 1936, Volume 45, Part 1, p. 77-188.

Sinclair, D.G., Tower, W.O., Bayne, A.S., Cooper, D.F., Weir, E.B. and Webster, A.R., 1938, Mines of Ontario in 1936; Ontario Department of Mines, Annual Report of 1937, Volume 46, Part 1, p. 90-238.

Sinclair, D.G., Tower, W.O., Taylor, J.B., Douglas, D.P., Bayne, A.S., Cave, A.E., Cooper, D.F., Weir, E.B. and Webster, A.R., 1939, Mines of Ontario in 1937; Ontario Department of Mines, Annual Report of 1938, Volume 47, Part 1, p. 80-249.

Satterly, J., 1949, Geology of Garrison Township; Ontario Department of Mines Annual Report, v.58, pt.4, including Map M1949-01, Scale 1:12,000.

Squair, H., 2000, A Report on the Garrison Gold Project, Garrison Township, District of Cochrane, Ontario, for Aurado Exploration Ltd., April 2000, 34 p.

Young, A.C., 1937, Statistical Review of the Mineral Industry of Ontario for 1935, Ontario Department of Mines, Annual Report of 1936, Volume 45, Part 1, p. 1-60.



22 DATE AND SIGNATURE PAGE

This report titled "Technical Report and Mineral Resource Estimate on the Garron Deposit-Garrison Gold Property Larder Lake Mining Division, Garrison Township, Ontario, Canada" for Northern Gold Mining Limited dated September 23, 2010, was prepared and signed by the following authors:



William D. Roy, M.A.Sc., P.Eng. Associate Consulting Engineer A.C.A. Howe International Limited

4 1240 PACTISING MEMPER 0452 ONTARI

Ian D. Trinder, M.Sc., P.Geo. Senior Geologist A.C.A. Howe International Limited

Dated at Halifax, Nova Scotia September 23, 2010

Dated at Toronto, Ontario September 23, 2010

A.C.A. HOWE INTERNATIONAL LIMITED Report No. 940 September 23, 2010 Page | 91 of 94



23 CERTIFICATES OF QUALIFICATIONS



CERTIFICATE of CO-AUTHOR

I, William Douglas Roy, M.A.Sc., P.Eng., do hereby certify that:

- 1) I am an Associate Mining Engineer of ACA Howe International Limited, whose office is located at 365 Bay St, Toronto, Ontario, Canada.
- I graduated with a B.Eng. degree in Mining Engineering from the Technical University of Nova Scotia (now Dalhousie University) in 1997 and with a M.A.Sc. degree in Mining Engineering from Dalhousie University in 2000.
- 3) I am a Professional Engineer (Mining), registered with the Association of Professional Engineers of Nova Scotia (Registered Professional Engineer, No. 7472). I am a member of the Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") and of the Prospectors and Developers Association of Canada ("PDAC").
- 4) I have worked as a mining engineer for more than ten years since graduating from university. This work has included the estimation of resources and reserves for precious metals, base metals and industrial minerals, as well as participation in pre-feasibility and feasibility studies.
- 5) I have read the definition of "qualified person" set out in National Instrument 43-101 ("NI 43- 101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.
- 6) I am co-author of the technical report titled: "Technical Report and Mineral Resource Estimate on the Garron Deposit Garrison Gold Property, Larder Lake Mining Division, Garrison Township, Ontario, Canada" for Northern Gold Mining Limited dated September 23, 2010, (the "Technical Report"). I am responsible for Section 17: Mineral Resources.
- 7) I have read NI 43-101 and Form 43-101 F1. This Technical Report has been prepared in accordance with that Instrument and form.
- 8) I have not visited the Garrison Gold Property.
- 9) I have had no prior involvement with the issuer, nor the property that is the subject of the Technical Report.
- 10) I am not aware of any material fact or material change with respect to the subject matter of this Report that is not reflected in the Report, the omission to disclose which makes the Report misleading.
- 11) I am independent of the issuer applying all of the tests in Section 1.4 of NI 43-101.
- 12) As of the date of this certificate, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the report not misleading.
- 13) I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them for regulatory purposes.

Dated this 23rd Day of September 2010.

William Douglas Roy, M.A.Sc., P. Eng. Associate Mining Engineer ACA Howe International Limited



A.C.A. HOWE INTERNATIONAL LIMITED Report No. 940 September 23, 2010 Page | 93 of 94

CERTIFICATE of CO-AUTHOR

I, Ian D. Trinder, M.Sc., P.Geo. (ON, MAN), do hereby certify that:

- 1. I reside at 4185 Taffey Crescent, Mississauga, Ontario, L5L 2A6.
- 2. I am a self-employed geologist and have been retained since 2007 as an associate consulting geologist with the firm of A.C.A. Howe International Limited, Mining and Geological Consultants located at 365 Bay St., Suite 501, Toronto, Ontario, Canada. M5H 2V1.
- 3. I graduated with a degree in Bachelor of Science Honours, Geology, from the University of Manitoba in 1983 and a Master of Science, Geology, from the University of Western Ontario in 1989.
- 4. I am a Professional Geoscientist (P.Geo.) registered with the Association of Professional Engineers and Geoscientists of Manitoba (APEGM, No. 22924) and with the Association of Professional Geoscientists of Ontario (APGO, No. 452). I am a member of the Society of Economic Geologists and of the Prospectors and Developers Association of Canada.
- 5. I have over 20 years of direct experience with precious and base metals mineral exploration in Canada, USA and the Philippines including project evaluation and management. Additional experience includes the completion of various National Policy 2A and NI 43-101 technical reports for gold and base metal projects.
- 6. I have read the definition of "qualified person" set out in National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.
- 7. I am co-author of the technical report titled: "Technical Report and Mineral Resource Estimate on the Garroon Deposit Garrison Gold Property, Larder Lake Mining Division, Garrison Township, Ontario, Canada" for Northern Gold Mining Limited dated September 23, 2010, (the "Technical Report"). I am responsible for Sections 1 to 16 and 18 to 21 of the report. I visited the Garrison Gold Property from July 12th to 13th, 2010.
- 8. I have no prior involvement with the issuer, nor involvement with the property that is the subject of the Technical Report.
- I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission to disclose which makes the Technical Report misleading.
- 10. I am independent of the issuer applying all of the tests in section 1.4 of National Instrument 43-101.

NTAR

- 11. I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.
- 12. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

Dated this 23rd Day of September 2010.

A.C.A. HOWE INTERNATIONAL LIMITED Report No. 940 September 23, 2010 Page | 94 of 94



APPENDIX A Diamond Drill Holes used in Resource Estimate



Hole ID	UTM E NAD 83	UTM N NAD 83	Elev m	Azimuth	Length m	Dip	Local E	Local N	Local Az	Company	Core Size	Start Date	Finish Date
C06-01	578654.3	5373903.7	303.02	342.2	383.00	-44.5	4994.4	4901.2	2.2	ValGold	NQ	26/06/2006	??/07/2006
C06-02	578702.0	5374078.3	311.00	277.5	461.00	-44.0	5099.0	5049.0	297.5	ValGold	NO	??/07/2006	18/07/2006
C06-03	578701.6	5374077.2	311.00	340.4	254.00	-54.4	5098.3	5048.0	0.4	ValGold	NQ	18/07/2006	21/07/2006
C06-04	578652.7	5373906.1	303.29	331.3	323.00	-45.1	4993.7	4904.0	351.3	ValGold	NQ	21/07/2006	26/07/2006
C06-05	578543.8	5373847.5	290.00	334.7	45.00	-43.4	4871.4	4886.1	354.7	ValGold	NQ	26/07/2006	11/08/2006
C06-05B	578543.8	5373847.5	290.00	324.3	497.00	-50.2	4871.4	4886.1	344.3	ValGold	NO	26/07/2006	11/08/2006
C06-06	578583.0	5373884.0	298.00	338.1	455.00	-44.9	4920.7	4907.0	358.1	ValGold	NQ	13/08/2006	16/08/2006
C06-07	578574.6	5374063.1	305.00	151.4	422.00	-44.7	4974.1	5078.2	171.4	ValGold	NQ	16/08/2006	?? /08/2006
C06-08	578430.8	5374014.5	303.25	159.7	422.00	-43.0	4822.3	5081.7	179.7	ValGold	NQ	31/08/2006	12/09/2006
C06-09	578703.8	5373934.2	296.00	338.6	131.00	-45.1	5051.4	4912.9	358.6	ValGold	NO	13/09/2006	??/09/2006
C07-01	578701.1	5373786.9	286.00	326.5	499.00	-48.6	4998.4	4775.4	346.5	ValGold	BQ	25/02/2007	12/03/2007
C07-02	578771.9	5373730.9	288.00	337.4	500.00	-46.6	5045.9	4698.5	357.4	ValGold	BQ	12/03/2007	26/03/2007
C07-03	578617.9	5373815.8	290.00	333.0	512.00	-56.1	4930.2	4831.0	353.0	ValGold	BQ	26/03/2007	11/04/2007
C07-04	578570.7	5373784.9	288.00	340.0	581.00	-57.0	4875.2	4818.1	360.0	ValGold	NQ	11/04/2007	26/04/2007
C07-05	579035.0	5374058.1	299.00	340.0	269.00	-88.0	5405.0	4916.0	360.0	ValGold	NQ	29/06/2007	05/07/2007
GAR-20	578324.9	5373874.6	300.39	148.0	275.84	-45.0	4674.9	4986.5	168.0	Cominco	BQ	25/11/1986	10/12/1986
GAR-21	578235.7	5373860.2	295.17	152.0	142.34	-45.0	4586.2	5003.5	172.0	Cominco	BQ	13/12/1987	15/12/1987
GAR-22	578692.6	5374021.2	309.50	150.0	282.55	-45.0	5070.6	4998.5	170.0	Cominco	BQ	16/12/1986	08/01/1987
GAR-23	578867.2	5374079.4	304.39	150.0	303.89	-45.0	5254.6	4993.5	170.0	Cominco	BQ	09/01/1987	13/01/1987
GAR-24	578975.7	5374059.4	295.25	150.0	233.78	-45.0	5349.7	4937.6	170.0	Cominco	BQ	14/01/1987	18/01/1987
GAR-25B	579060.3	5374094.5	301.70	155.0	178.92	-45.0	5441.2	4941.6	175.0	Cominco	BQ	20/01/1987	25/01/1987
GAR-47	578483.6	5374027.7	301.16	340.0	529.74	-52.0	4876.4	5076.0	360.0	Cominco	BQ	11/08/1987	22/08/1987
GAR-48	578541.7	5374055.0	303.50	340.0	674.43	-52.0	4940.4	5081.9	360.0	Cominco	BQ	22/08/1987	10/09/1987
GAR-49	578803.1	5374154.9	304.78	336.0	470.06	-50.0	5220.2	5086.4	356.0	Cominco	BQ	10/09/1987	21/09/1987
GAR-50	578992.3	5374179.7	301.71	336.0	474.88	-50.0	5406.5	5044.9	356.0	Cominco	BQ	26/09/1987	01/10/1987
GAR-52	578499.3	5373923.7	304.02	337.0	213.94	-45.0	4855.6	4973.0	357.0	Cominco	BQ	05/10/1987	17/10/1987
GAR-55	578523.3	5373949.6	302.00	340.0	228.94	-45.0	4887.1	4989.1	360.0	Cominco	BQ	17/10/1987	23/10/1987
GAR-56	578560.7	5373932.6	301.39	337.0	197.57	-45.0	4916.4	4960.4	357.0	Cominco	BQ	24/10/1987	30/10/1987
GAR-57	578588.8	5373945.0	300.28	345.0	186.96	-45.0	4947.0	4962.4	5.0	Cominco	BQ	31/10/1987	06/11/1987
GAR-59	578375.2	5373902.7	301.00	340.0	152.95	-45.0	4731.8	4995.7	360.0	Cominco	BQ	31/10/1987	06/11/1987
GAR-61	578639.2	5373991.9	306.17	337.0	183.95	-45.0	5010.4	4989.3	357.0	Cominco	BQ	12/11/1987	17/11/1987
GAR-63	578457.7	5373948.7	304.62	340.0	167.98	-45.0	4825.1	5010.7	360.0	Cominco	BQ	17/11/1987	23/11/1987
GAR-74	578581.9	5374155.9	304.31	250.0	165.96	-50.0	5012.7	5162.9	270.0	Cominco	BQ	26/02/1988	29/02/1988
GAR-75	578648.9	5373971.0	303.87	340.0	271.42	-55.0	5012.4	4966.3	360.0	Cominco	BQ	29/02/1988	10/03/1988
GAR-76	578652.4	5374037.0	308.20	340.0	154.96	-50.0	5038.2	5027.1	360.0	Cominco	BQ	11/03/1988	13/03/1988
GD85-1	578598.9	5374063.3	305.70	350.0	110.05	-50.0	4997.0	5070.1	10.0	Cominco	BQ	21/11/1985	24/11/1985
GD85-2	578627.2	5373754.3	289.00	360.0	93.88	-58.0	4917.9	4770.0	20.0	Cominco	BQ	?? /11/1985	?? /11/1985
GD85-3	579034.3	5374167.6	301.61	210.0	111.00	-45.0	5441.8	5019.2	230.0	Cominco	BQ	28/11/1985	30/11/1985
GD85-4	578573.8	5373880.4	298.48	155.0	144.30	-60.0	4910.8	4906.9	175.0	Cominco	BQ	01/12/1985	04/12/1985
GD85-5	578586.3	5373986.8	302.28	5.0	160.00	-61.0	4959.0	5002.5	25.0	Cominco	BQ	05/12/1985	10/12/1985
GD86-6	578630.2	5374088.5	307.31	340.0	129.95	-56.0	5035.0	5083.1	360.0	Cominco	BQ	22/02/1986	24/02/1986
GD86-7	578539.2	5374225.5	299.31	160.0	259.08	-49.0	4996.3	5243.0	180.0	Cominco	BQ	25/02/1986	02/03/1986
GD86-8	578577.0	5374054.7	304.50	340.0	129.54	-50.0	4973.4	5069.5	360.0	Cominco	BQ	03/03/1986	06/03/1986
GD86-9	578479.5	5373928.9	302.00	160.0	279.98	-45.0	4838.8	4984.6	180.0	Cominco	BQ	07/03/1986	14/03/1986
GD86-10	578634.0	5373936.8	299.98	160.0	256.85	-45.5	4986.7	4939.2	180.0	Cominco	BQ	15/03/1986	24/03/1986
GD86-11	578273.5	5374000.1	300.81	160.0	180.31	-45.5	4669.6	5122.0	180.0	Cominco	BQ	24/03/1986	01/04/1986

A.C.A. HOWE INTERNATIONAL LIMITED Report No. 940 September 23, 2010



A.C.A. HOWE INTERNATIONAL LIMITED Mining and Geological Consultants

Hole ID	UTM E NAD 83	UTM N NAD 83	Elev m	Azimuth	Length m	Dip	Local E	Local N	Local Az	Company	Core Size	Start Date	Finish Date
GD86-12	578558.8	5374014.7	303.39	340.0	165.56	-45.0	4942.7	5038.1	360.0	Cominco	BQ	01/04/1986	02/04/1986
GD86-13	578668.4	5374077.1	309.50	340.0	180.82	-45.0	5067.0	5059.3	360.0	Cominco	BQ	08/04/1986	11/04/1986
GD86-14	578417.7	5373929.4	300.44	160.0	300.41	-45.0	4780.9	5006.3	180.0	Cominco	BQ	12/04/1986	18/04/1986
GD86-15	578804.8	5374021.2	309.59	160.0	273.92	-45.0	5176.1	4960.1	180.0	Cominco	BQ	19/04/1986	26/04/1986
GD86-16	578538.4	5373987.6	302.39	340.0	115.49	-45.0	4914.2	5019.6	360.0	Cominco	BQ	27/04/1986	30/04/1986
GD86-17	578438.2	5374149.5	298.63	160.0	198.12	-45.0	4875.5	5206.0	180.0	Cominco	BQ	01/05/1986	05/05/1986
GD86-18	578419.2	5374103.7	299.50	160.0	131.12	-45.0	4841.9	5169.5	180.0	Cominco	BQ	05/05/1986	08/05/1986
GD86-19	578495.0	5374011.0	302.50	345.0	95.31	-45.0	4881.4	5056.5	5.0	Cominco	BQ	09/05/1986	11/05/1986
GAR-09-01	578625.7	5373998.4	303.08	343.5	177.00	-40.5	5000.0	5000.0	3.5	Northern Gold	NQ	27/10/2009	29/10/2009
GAR-09-02	578663.8	5373881.8	288.96	339.2	350.00	-44.6	4995.9	4877.4	359.2	Northern Gold	NQ	29/10/2009	03/11/2009
GAR-09-03	578593.7	5373947.1	299.11	159.8	79.60	-43.7	4952.3	4962.7	179.8	Northern Gold	NQ	03/11/2009	04/11/2009
GAR-09-03A	578597.9	5373937.8	298.48	154.3	198.00	-43.7	4953.1	4952.5	174.3	Northern Gold	NQ	24/11/2009	27/11/2009
GAR-09-04	578503.2	5373964.0	304.30	156.0	291.00	-42.6	4873.1	5009.5	176.0	Northern Gold	NQ	04/11/2009	12/11/2009
GAR-09-05	578530.9	5373969.5	304.31	162.5	288.00	-45.6	4900.9	5005.2	182.5	Northern Gold	NQ	12/11/2009	17/11/2009
GAR-09-06	578659.9	5373953.7	299.64	170.4	189.00	-45.3	5016.8	4946.2	190.4	Northern Gold	NQ	17/11/2009	19/11/2009
GAR-09-07	578652.2	5373975.1	303.13	165.9	83.00	-45.2	5016.8	4969.0	185.9	Northern Gold	NQ	24/11/2009	25/11/2009
GAR-09-08	578623.1	5373951.4	298.36	340.8	237.00	-45.3	4981.4	4956.6	0.8	Northern Gold	NQ	28/11/2009	30/11/2009
GAR-09-09	578614.0	5374028.0	303.87	343.4	150.00	-45.4	4999.1	5031.8	3.4	Northern Gold	NQ	30/11/2009	03/12/2009
GAR-09-10	578955.0	5374118.4	290.20	162.5	293.00	-45.0	5350.4	5000.0	182.5	Northern Gold	NQ	08/12/2009	11/12/2009



APPENDIX B

ACA Howe Duplicate Samples Analytical Certificates



Certificate of Analysis

Work Order: TO111045

To: lan Trinder

A.C.A. Howe International Ltd. 365 Bay Street Suite 501 TORONTO ONTARIO M5H 2V1

P.O. No. : NGM-101 Project No. ÷ No. Of Samples 9 : Date Submitted : Jul 27, 2010 Report Comprises : Pages 1 to 2 (Inclusive of Cover Sheet)

Distribution of unused material:

Discard after 90 days:

Certified By Gavin McGill **Operations Manager**

Date:

Aug 19, 2010

SGS Minerals Services (Toronto) is accredited by Standards Council of Canada (SCC) and conforms to the requirements of ISO/IEC 17025 for specific tests as indicated on the scope of accreditation to be found at http://www.scc.ca/en/programs/lab/mineral.shtml

Report Footer

L.N.R. = Listed not received n.a.

= Not applicable

1.S. = Insufficient Sample = No result

*INF = Composition of this sample makes detection impossible by this method

M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion

Methods marked with an asterisk (e.g. *NAA08V) were subcontracted

Methods marked with the @ symbol (e.g. @AAS21E) denote accredited tests

This document is issued by the Company under its General Conditions of Service accessible at http://www.sgs.com/terms_and_conditions.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

WARNING: The sample(s) to which the findings recorded herein (the "Findings") relate was (were) drawn and / or provided by the Client or by a third party acting at the Client's direction. The Findings constitute no warranty of the sample's representativity of the goods and strictly relate to the sample(s). The Company accepts no liability with regard to the origin or source from which the sample(s) is/are said to be extracted. The findings report on the samples provided by the client and are not intended for commercial or contractual settlement purposes. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Canada Inc. Mineral Services 1885 Leslie Street Toronto t(416) 445-5755 f(416) 445-4152 www.ca.sgs.com



Final : TO111045 Order: NGM-101

Element Method Det.Lim. Units	WtKg WGH79 0.001 kg	Au @FAl313 1 ppb
1001-ACA	1.252	4690
1002-ACA	0.732	6420
32189-ACA	0.792	1250
32191-ACA	0.912	84
32192-ACA	0.696	950
33894-ACA	0.804	77
33896-ACA	0.888	90
33897-ACA	0.866	1430
1003-ACA	0.056	5030
*Rep 32191-ACA		89

Page 2 of 2

This document is issued by the Company under its General Conditions of Service accessible at <u>http://www.sgs.com/terms_and_conditions.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

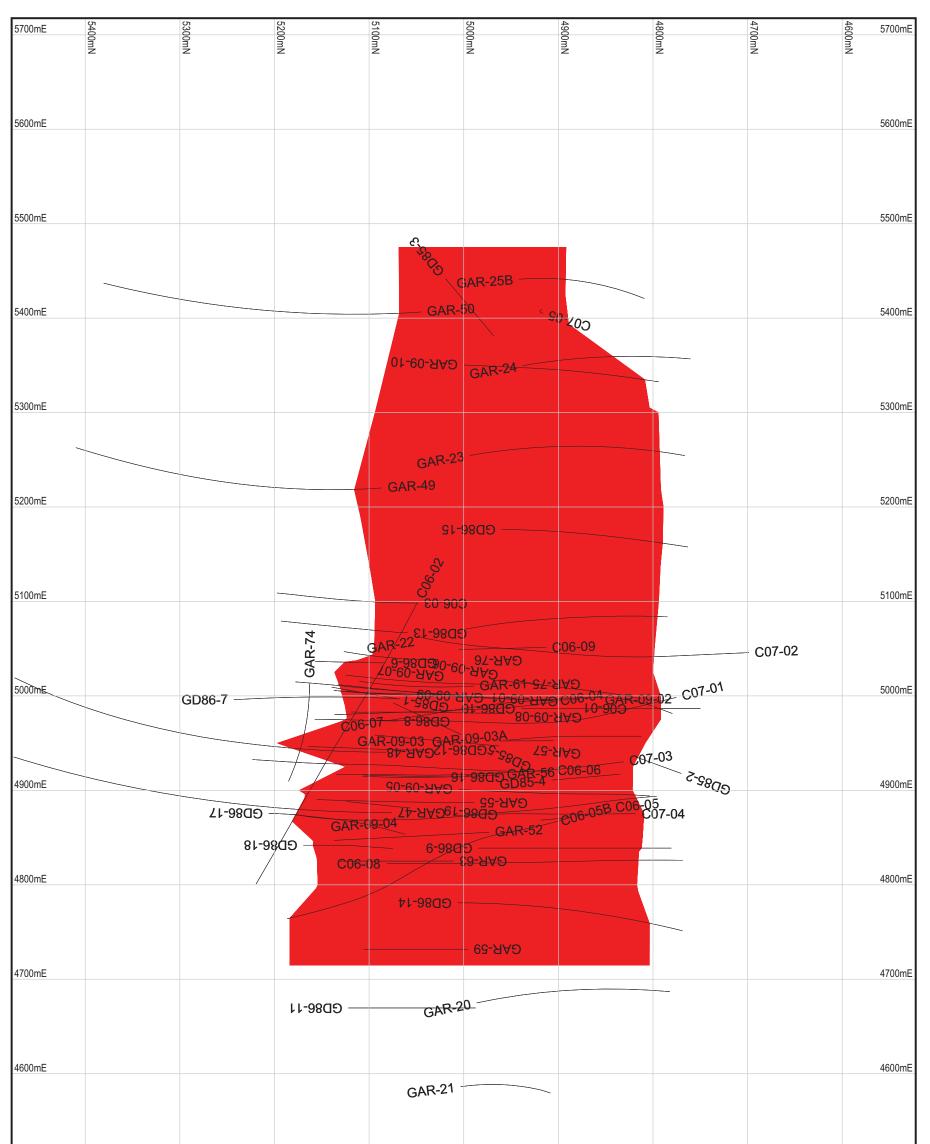
WARNING: The sample(s) to which the findings recorded herein (the "Findings") relate was (were) drawn and / or provided by the Client or by a third party acting at the Client's direction. The Findings constitute no warranty of the sample's representativity of the goods and strictly relate to the sample(s). The Company accepts no liability with regard to the origin or source from which the sample(s) is/are said to be extracted. The findings report on the samples provided by the client and are not intended for commercial or contractual settlement purposes. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Canada Inc. Mineral Services 1885 Leslie Street Toronto t(416) 445-5755 f(416) 445-4152 www.ca.sgs.com

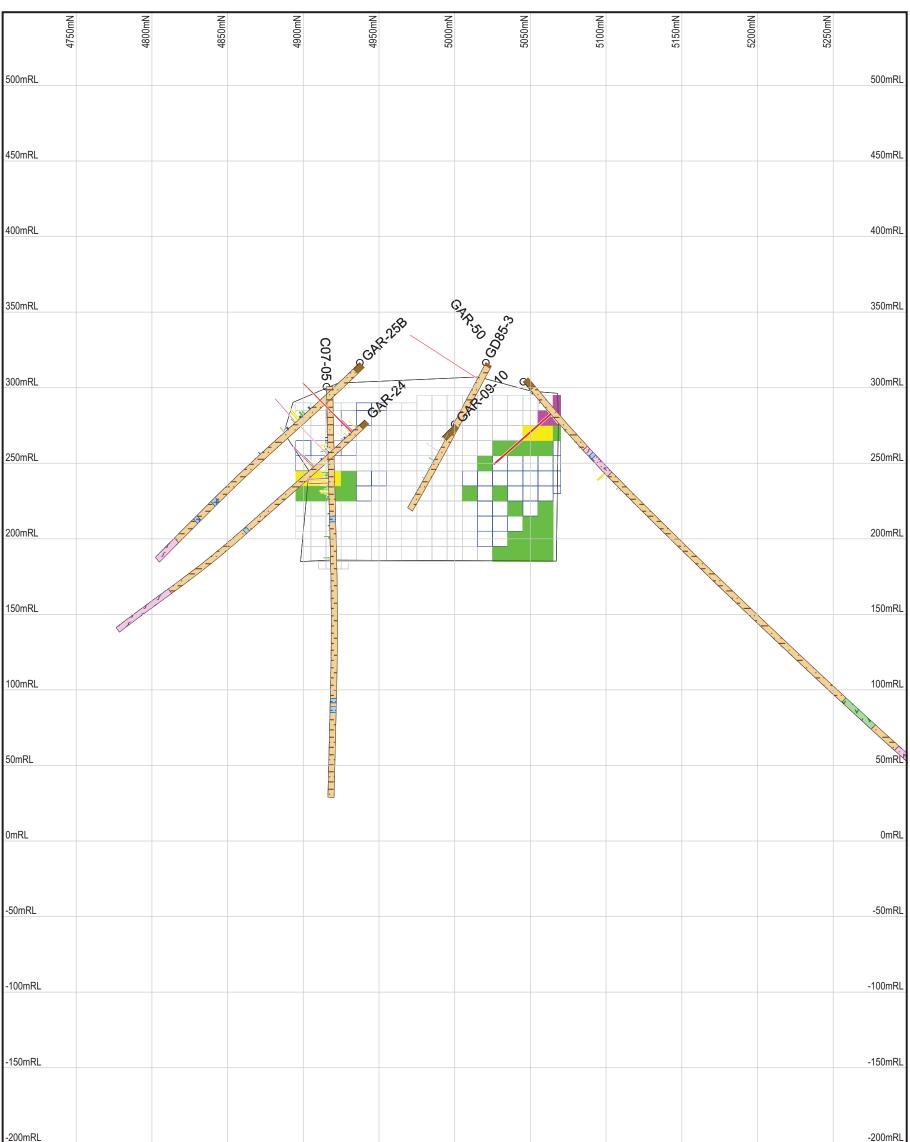


APPENDIX C

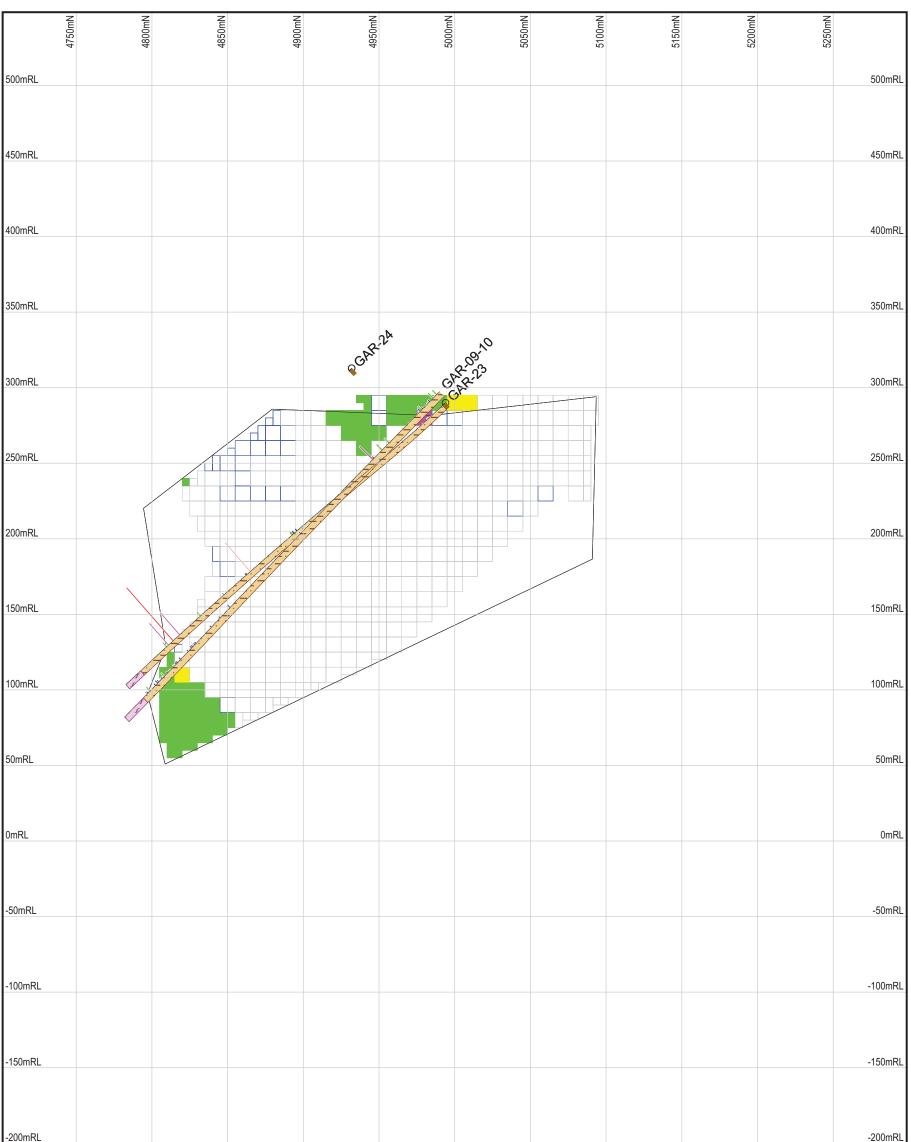
Resource Estimate Cross Sections



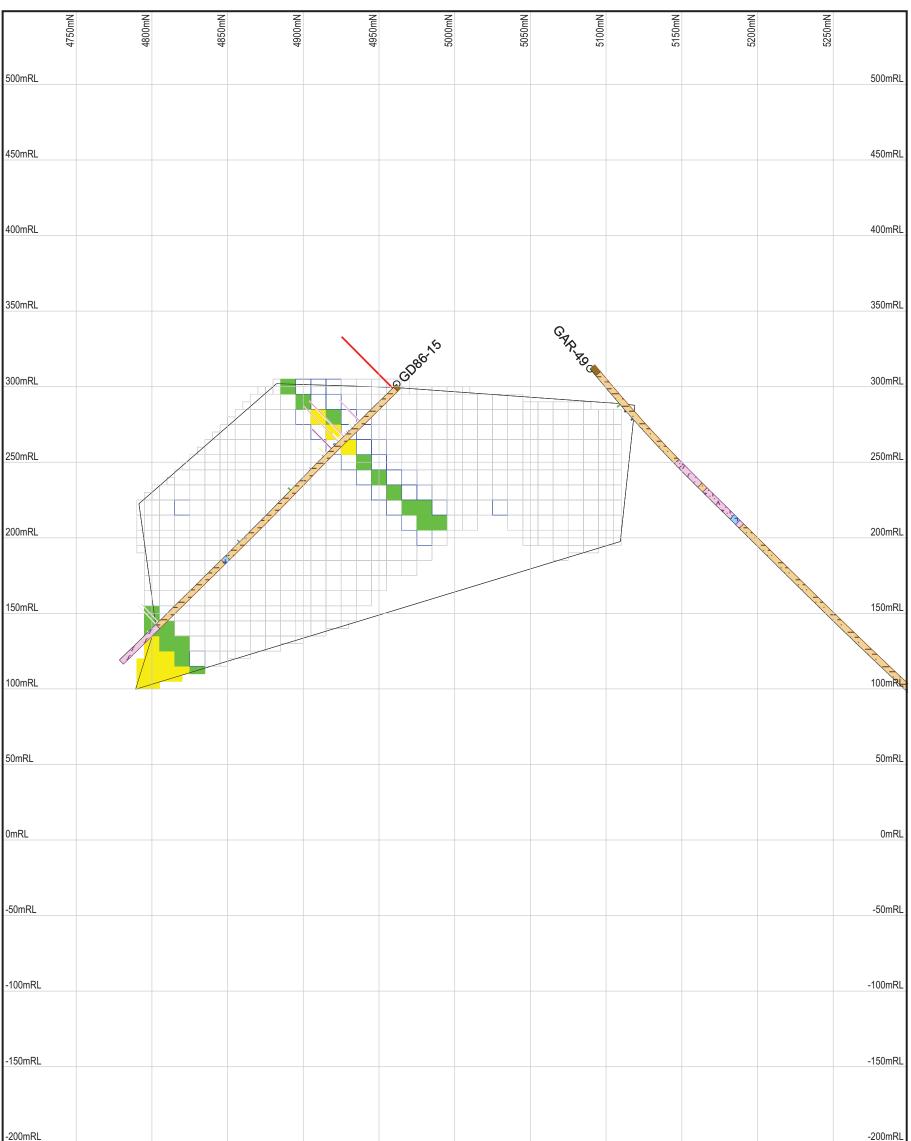
4500mE											4500mE
4400mE											4400mE
4300mE	54000 mN	5300 mN	5200 mN	5100mN	5000mN		4900mN	4800 mN	4700mN		4300mE
	mN	MN	DmN	0mN	NmO		NmO	MMN	Nm(DmN
A.C.A. HOWE INTERNATIONAL LIMITED					Scale 1 : 4000		Sheet 1 of 1	Plan View of Drilling			
		-				Plot File: Plan View of Drilling R2		Showing Outline of		Garrison Gold Property	
					50	0	50m	Main Zone		Garrison Township Ontario, Canada	



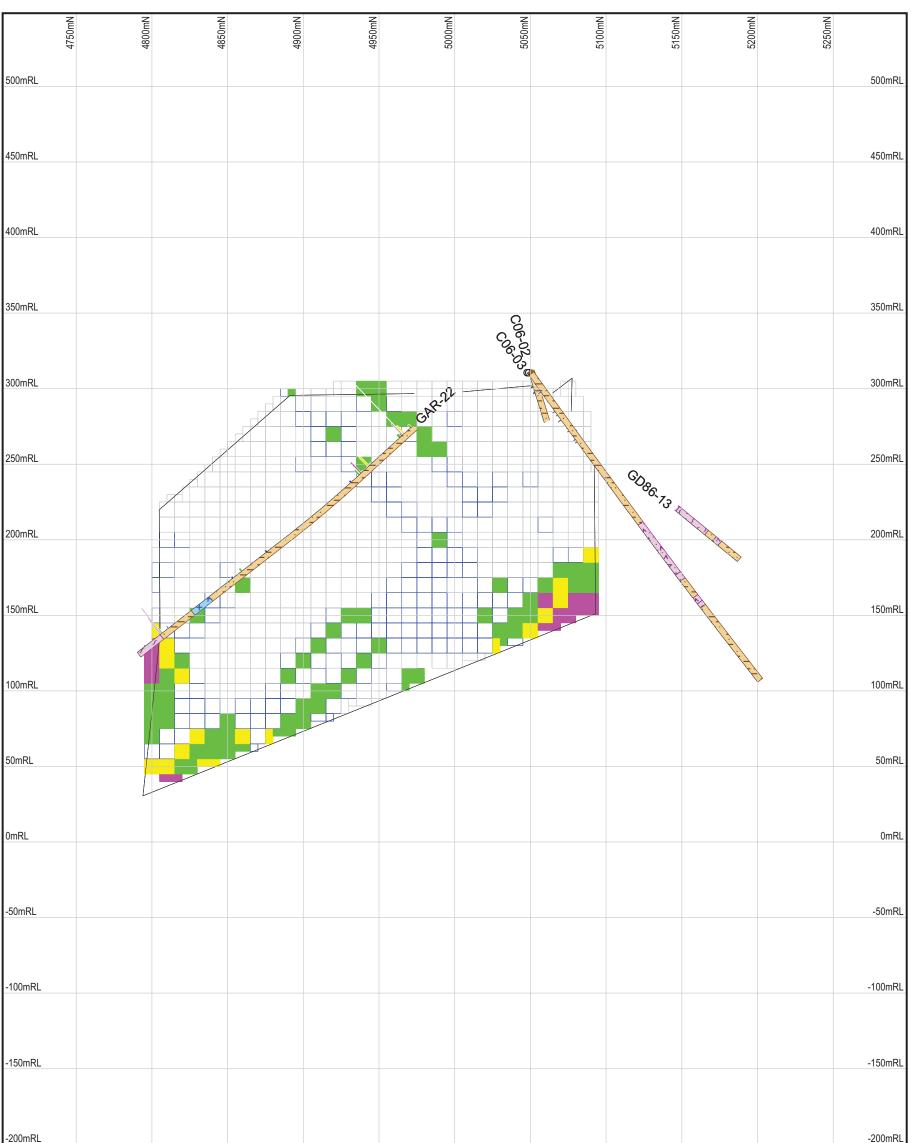
		045 57 CX V V CX 7 66 580	0.75 to 1.0 1.0 to 2.0 >= 2.0	1 to 2 2 to 5 >= 5	20		20m	Facing 540		Garrison Go Garrcon Garrison Ontario,	Deposit Township
	WE INTERNATIONAL LIMITED © Geological Consultants UK-Teronto-Halifax www.acahowe.co.uk	Lifteday 	Block Grades (g/tonne) < 0.25 0.25 to 0.50 0.50 to 0.75	Assay Histograms (g/tonne) < 0.25 0.25 to 0.5 0.5 to 1	Scale 1 : 2500	Plot Date 16-Sep-2010 Plot File	Sheet 1 of 1	Cross-Se			NORTHERN
4750mN	4800mN	4850mN	4900mN	4950mN	5000mN	5050mN		5100mN 5150mN	5200mN	5250mN	
-300mRL											-300mRL
-250mRL											-250mRL
-200mRL											-200mRL



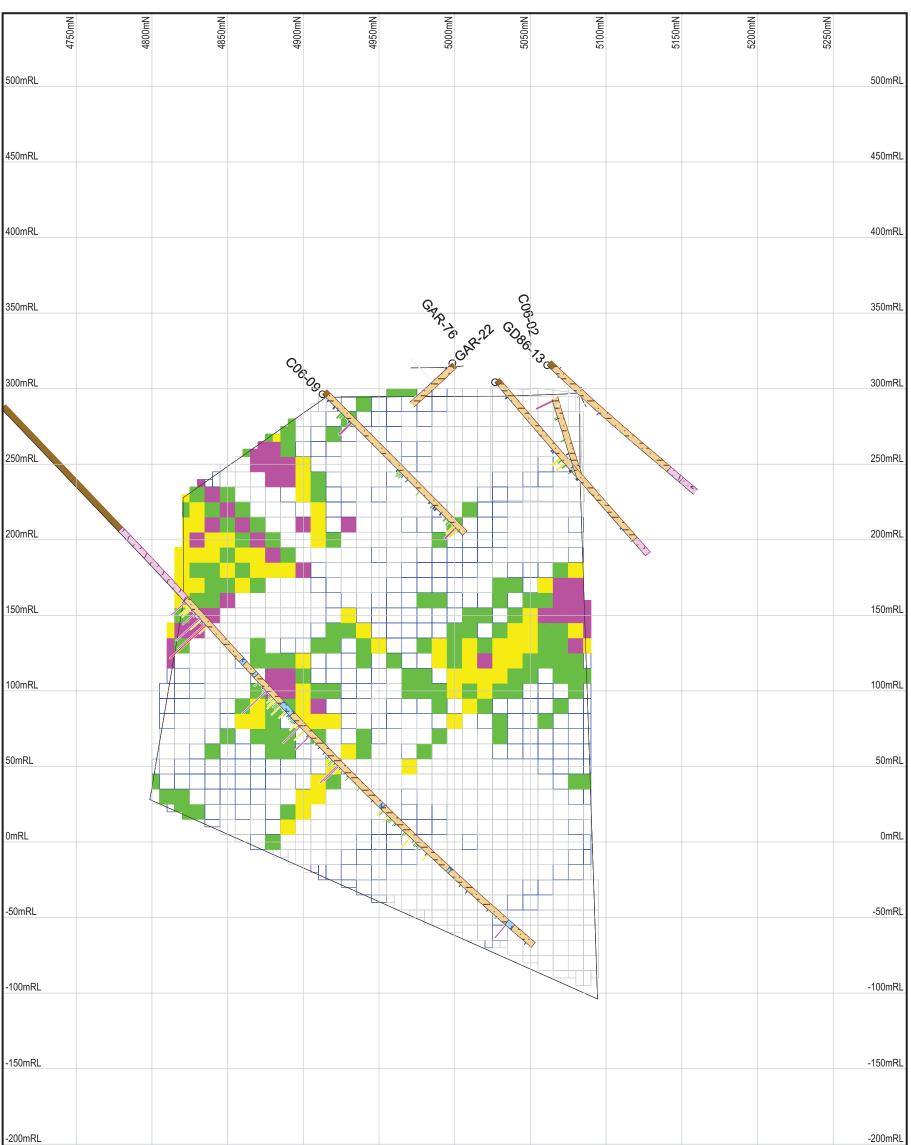
		••••• •••• ••••• ••• •••• ••• •••• ••• •••• ••• ••• ••• ••• ••• ••• ••• ••• ••• ••• ••• ••• ••• ••• ••• ••• ••• ••• ••• ••• ••• ••• ••• ••• •••	0.75 to 1.0 1.0 to 2.0 >= 2.0	1 to 2 2 to 5 >= 5	20		20m	Facing 530		Garrison Go Garrcon Garrison Ontario,	Deposit Township
	VE INTERNATIONAL LIMITED e Geological Consultents UK-Teronto-Halfax www.acahowe.co.uk	Linkey 	Block Grades (g/tonne) < 0.25 0.25 to 0.50 0.50 to 0.75	Assay Histograms (g/tonne) < 0.25 0.25 to 0.5 0.5 to 1	Scale 1 : 2500	Plot Date 16-Sep-2010	Sheet 1 of 1	Cross-Se			NORTHERN
4750mN	4800mN	4850mN	4900mN	4950mN	5000mN	5050mN		5100mN 5150mN	5200mN	5250mN	
-300mRL											-300mRL
-250mRL											-250mRL
-200mRL											-200mRL



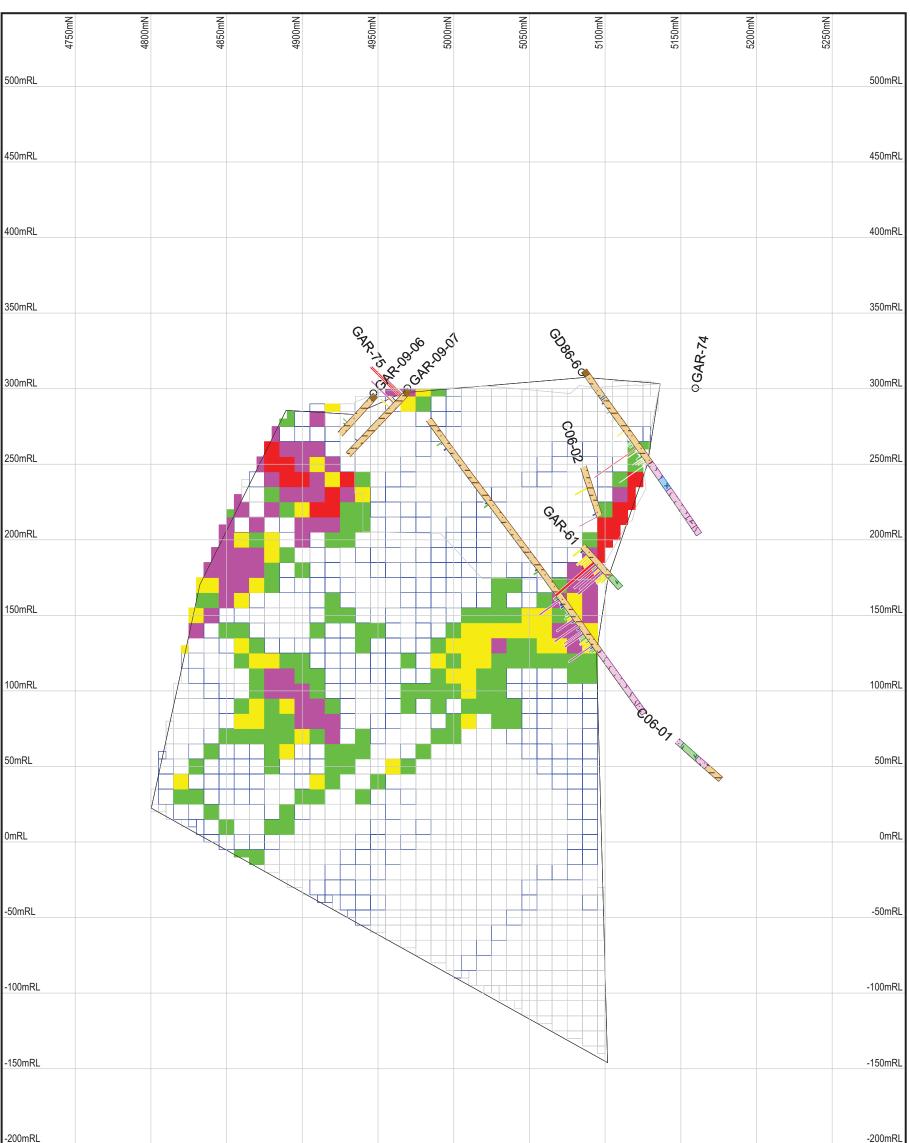
-300mN -3250mN 5270mN 5270m			608 57 V V CX 7 7 56 580	0.75 to 1.0 1.0 to 2.0 >= 2.0	1 to 2 2 to 5 >= 5	20		20m	520		Garrison Go Garrcon Garrison Ontario,	Township
-300mRL		d Geological Consultants UK - Toronto - Halifax	Libuday 	< 0.25 0.25 to 0.50	< 0.25 0.25 to 0.5		16-Sep-2010	1 of 1				
	4750mN	4800mN	4850mN	4900mN	4950mN	5000mN	5050mN		5150mN	5200mN	5250mN	
-250mRL -250mF	-300mRL											-300mRL
-200mRL -200mR												-200mRL



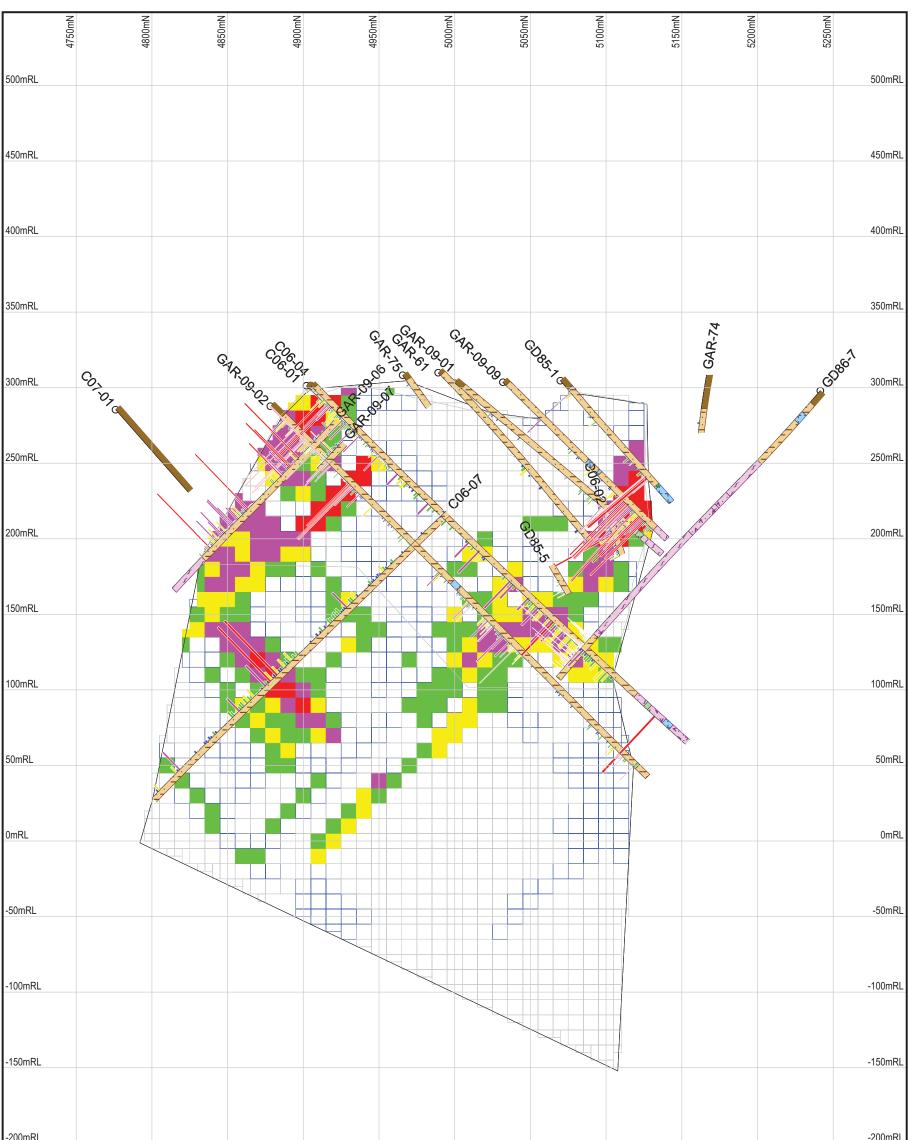
			0.75 to 1.0 1.0 to 2.0 >= 2.0	1 to 2 2 to 5 >= 5	20		20m	Facing 510		Garrison Go Garrcon Garrison Ontario,	Deposit Township
	WE INTERNATIONAL LIMITED o Geological Consultants UK-Toronto-Halfax www.acahows.co.ux	Lithology 	Block Grades (g/tonne) < 0.25 0.25 to 0.50 0.50 to 0.75	Assay Histograms (g/tonne) < 0.25 0.25 to 0.5 0.5 to 1	Scale 1 : 2500	Plot Date 16-Sep-2010	Sheet 1 of 1	Cross-Se			NORTHERN
4750mN	4800mN	4850mN	4900mN	4950mN	5000mN	5050mN		5100mN 5150mN	5200mN	5250mN	
-300mRL											-300mRL
-250mRL											-250mRL
-200mRL											-200mRL



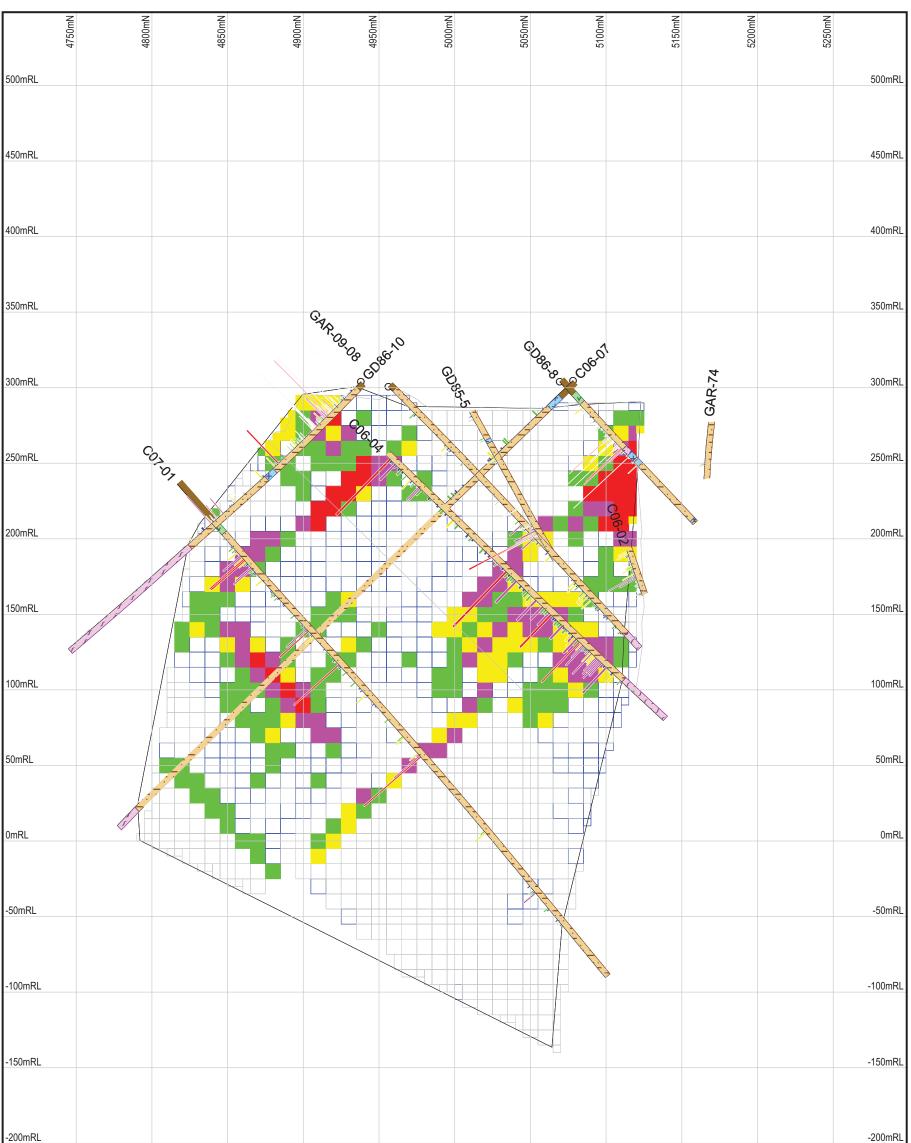
			0.75 to 1.0 1.0 to 2.0	1 to 2 2 to 5 >= 5	20		20m	Facing 505		Garrison Go Garrcon Garrison Ontario,	Deposit Township
	WE INTERNATIONAL LIMITED © Geological Consultants UK Toronto Halifax www.acahowe.co.uk	Librology CBB CBB CCB CCB CCB CCB CCB CC	Block Grades (g/tonne) < 0.25 0.25 to 0.50 0.50 to 0.75 	Assay Histograms (g/tonne) < 0.25 0.25 to 0.5 0.5 to 1	Scale 1 : 2500	Plot Date 16-Sep-2010 Plot File	Sheet 1 of 1	Cross-Se			IORTHERN
4750mN	4800mN	4850mN	4900mN	4950mN	5000mN	5050mN		5100mN 5150mN	5200mN	5250mN	
-300mRL											-300mRL
-250mRL											-250mRL
-200mRL											-200mRL



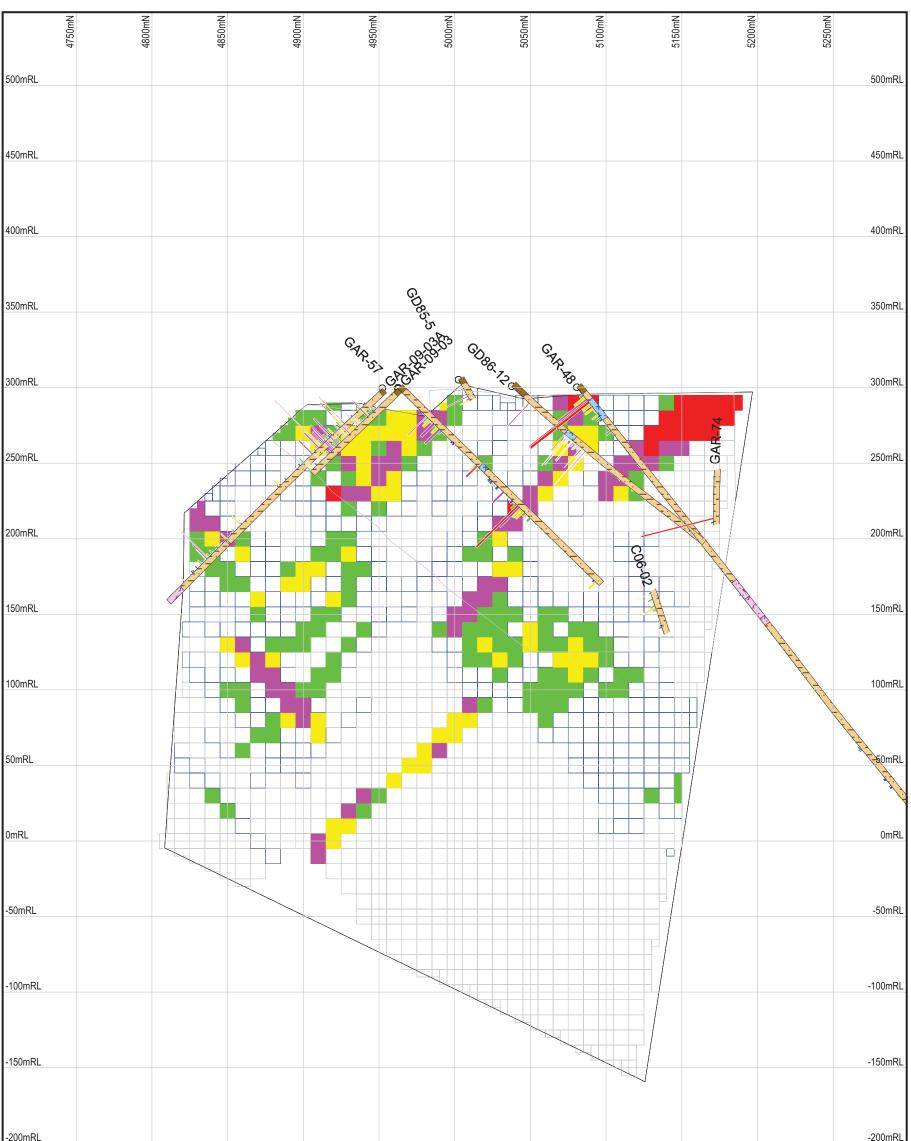
-250mRL NWU0088 NU NWU0099 NU NWU NU NWU0099 NU NWU	Image: state of the state o	old Property Deposit Township Canada
-250mRL	4750mN 4850mN 5000mN 5000mN 5250mN	-300mRL
	Image: Second se Image: Exact second seco	-250mRL



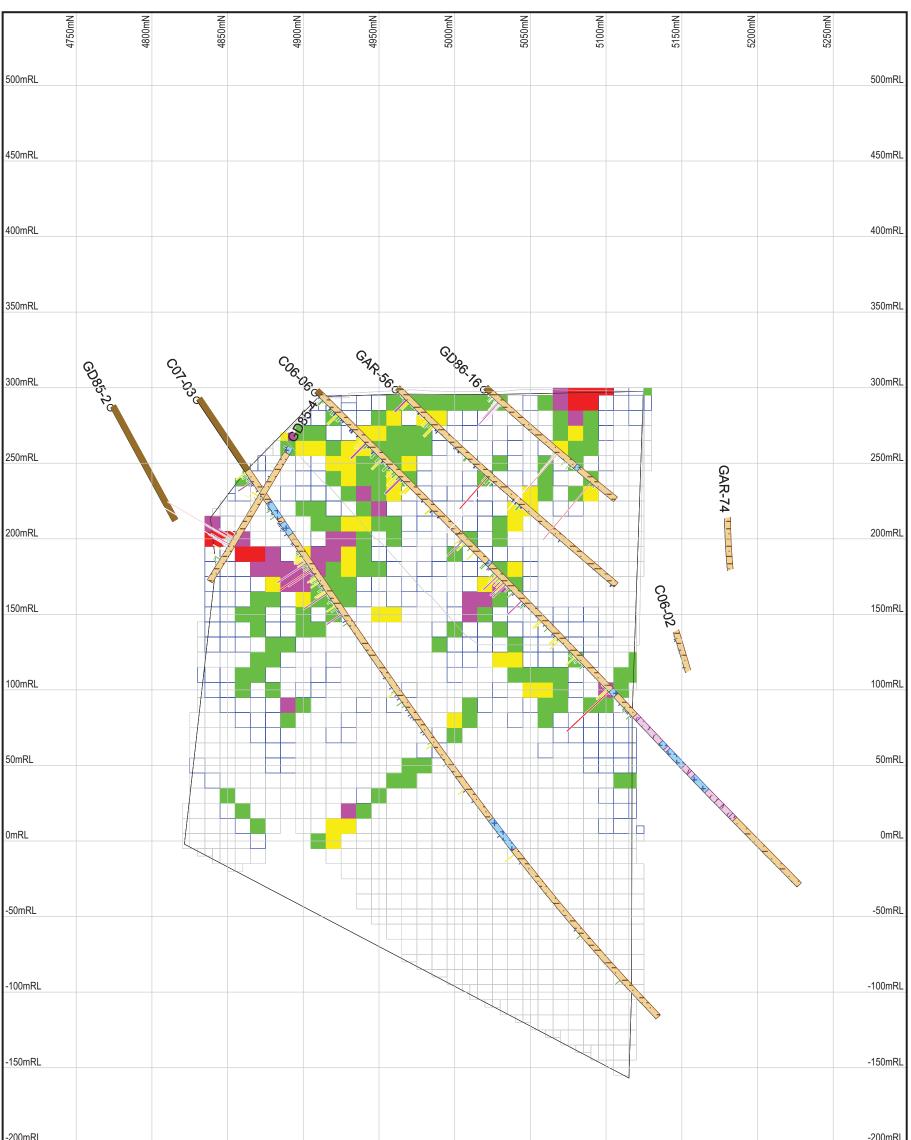
	WE INTERNATIONAL LIMITED © Geological Consultants WWW.acahows.co.uk	Lithology 	Block Grades (g/tonne) < 0.25 0.25 to 0.50 0.50 to 0.75 0.75 to 1.0 1.0 to 2.0 >= 2.0	Assay Histograms (g/tonne) < 0.25 0.25 to 0.5 0.5 to 1 1 to 2 2 to 5 >= 5	Scale 1 : 2500 20	Plot Date 16-Sep-2010 Plot File	Sheet 1 of 1 :: 5000E	Cross-Se Facing 500	West	Garrison Go Garrcon Garrison	DId Property Deposit Township Canada
-300mRL	4800mN	4850mN	4900mN	4950mN	5000mN	5050mN		5150mN 5150mN	5200mN	5250mN	-300mRL
-250mRL											-250mRL
-200mRL											-200mRL



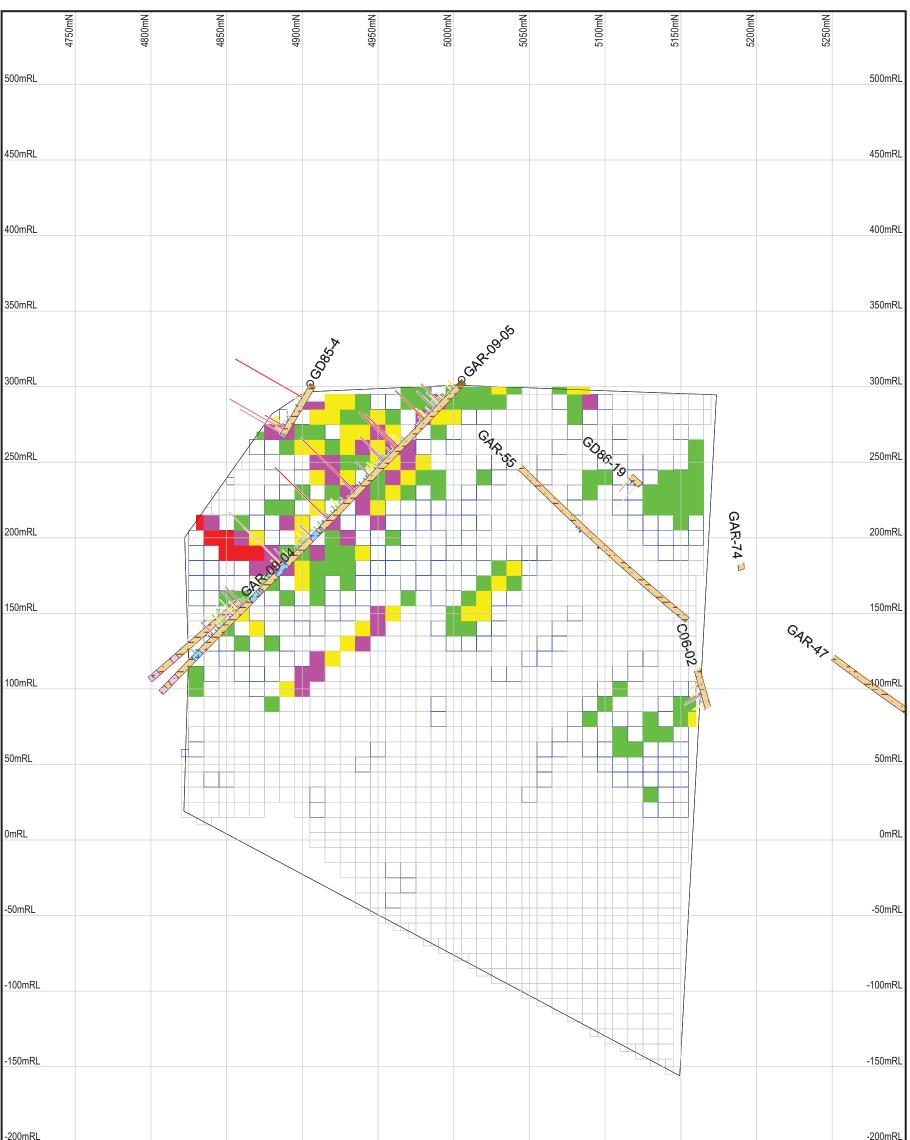
	WE INTERNATIONAL LIMITED © Geological Consultants WWW.acatiows.co.uk WWW.acatiows.co.uk	Libelay 	Block Grades (g/tonne) < 0.25 0.25 to 0.50 0.50 to 0.75 0.75 to 1.0 1.0 to 2.0 >= 2.0 	Assay Histograms (g/tonne) < 0.25 0.25 to 0.5 0.5 to 1 1 to 2 2 to 5 >= 5	Scale 1 : 2500 20	Plot Date 16-Sep-2010 Plot File 0 2	Sheet 1 of 1 : 4975E	Cross-Se Facing 497	West	Garrison Go Garrcon	Deposit Township
-300mRL	4800mN	4850mN	4900mN	4950mN	5000mN	5050mN		5150mN 5150mN	5200mN	5250mN	-300mRL
-250mRL											-250mRL
-200mRL											-200mRL



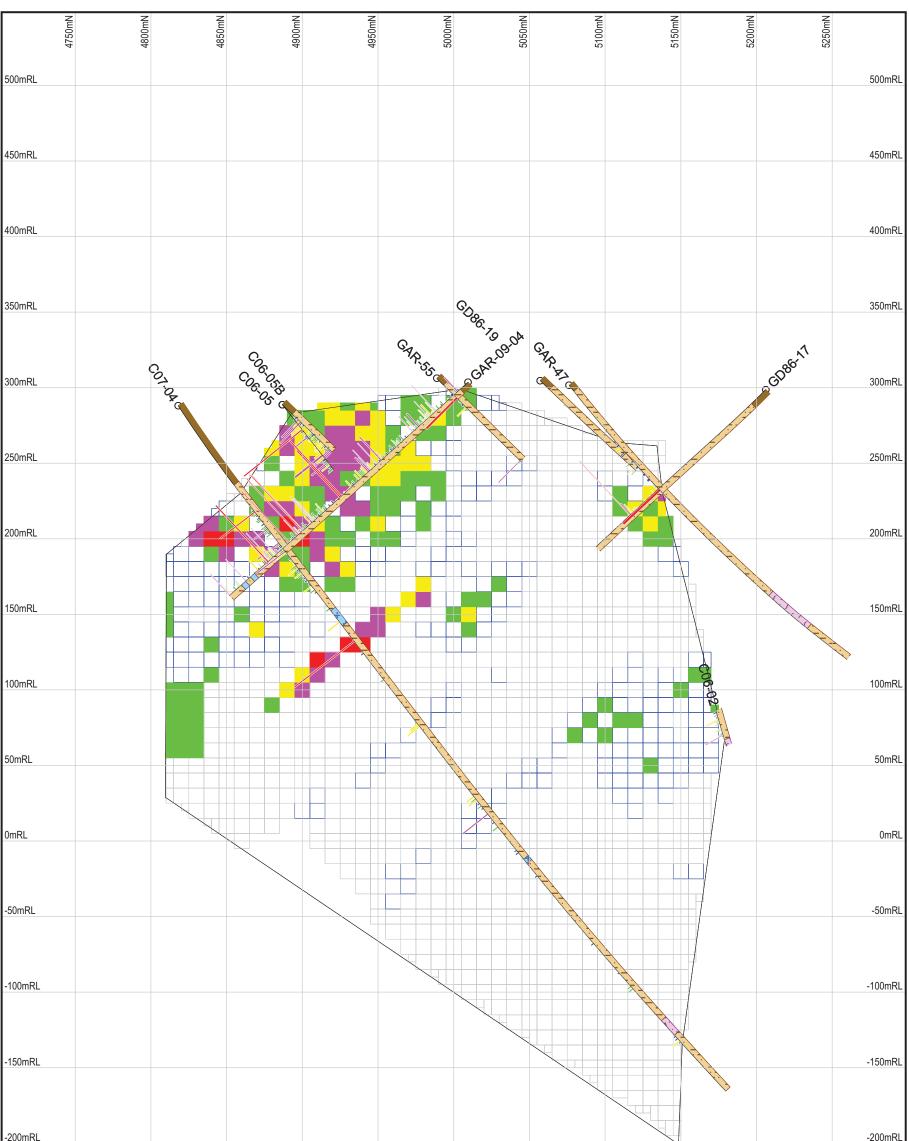
		V V V +++ ++ Gas V V Cas V V Cas V V Cas Str Str Str	0.50 to 0.75 0.75 to 1.0 1.0 to 2.0 >= 2.0	0.5 to 1 1 to 2 2 to 5 >= 5	20	Plot File	20m	Facing 495		Garrison Go Garrcon Garrison Ontario,	Deposit Township
	WE INTERNATIONAL LIMITED © Geological Consultants UK-Terento-Halfax www.acahowe.coux	Libology 	Block Grades (g/tonne) < 0.25 0.25 to 0.50	Assay Histograms (g/tonne) < 0.25 0.25 to 0.5	Scale 1 : 2500	Plot Date 16-Sep-2010	Sheet 1 of 1	Cross-Se			NORTHERN
4750mN	4800mN	4850mN	4900mN	4950mN	5000mN	5050mN		5100mN 5150mN	5200mN	5250mN	
-300mRL											-300mRL
-250mRL											-250mRL
-200mRL											-200mRL



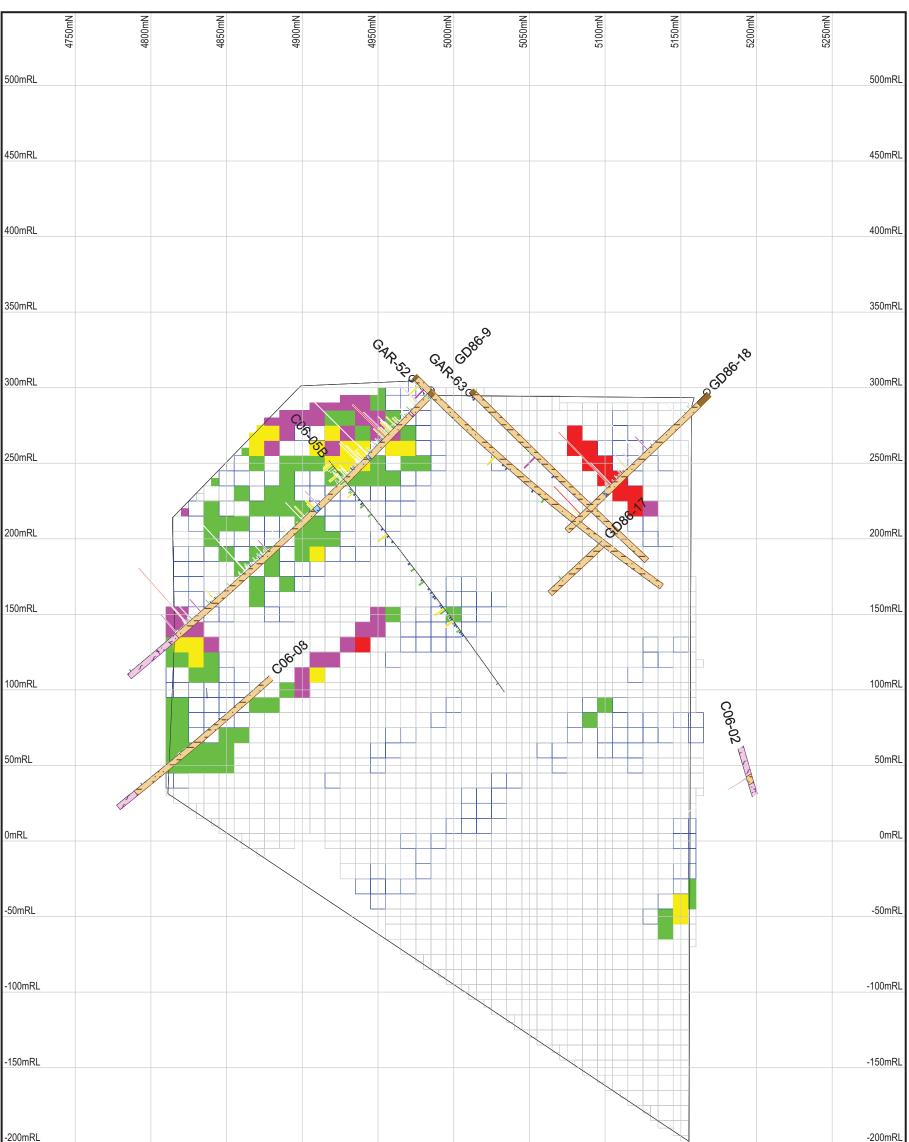
	VE INTERNATIONAL LIMITED © de of ogical Consultants UK-Terroto-Haffak www.acahows.co.uk	Lithology 	Block Grades (g/tonne) < 0.25 0.25 to 0.50 0.50 to 0.75 0.75 to 1.0 1.0 to 2.0 >= 2.0	Assay Histograms (g/tonne) < 0.25 0.25 to 0.5 0.5 to 1 1 to 2 2 to 5 >= 5	Scale 1 : 2500 20	Plot Date 16-Sep-2010 Plot File	Sheet 1 of 1 : 4925E	Cross-Se Facing 492	West	Garrison Go Garrcon Garrison	Deposit Canada
-300mRL	4800mN	4850mN	4900mN	4950mN	5000mN	5050mN		5150mN 5150mN	5200mN	5250mN	-300mRL
-250mRL											-250mRL
-200mRL											-200mRL



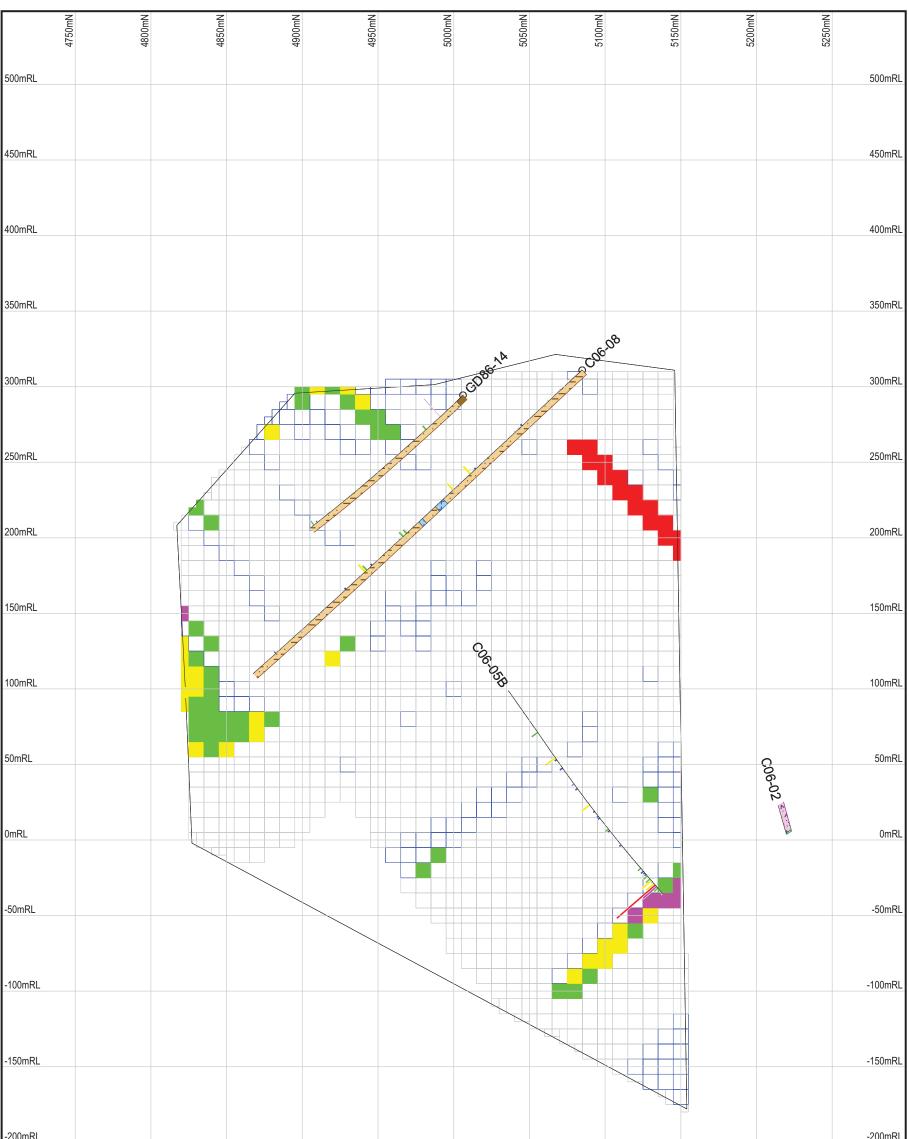
		V V I I I I V V V V V V CS I I	0.75 to 1.0 1.0 to 2.0	1 to 2 2 to 5 >= 5	20		20m	Facing 490		Garrison Go Garrcon Garrison Ontario,	Township
	WE INTERNATIONAL LIMITED © Geological Consultants UK Teronto-Halifax www.acahows.co.uk	Libuday 	Block Grades (g/tonne) < 0.25 0.25 to 0.50 0.50 to 0.75	Assay Histograms (g/tonne) < 0.25 0.25 to 0.5 0.5 to 1	Scale 1 : 2500	Plot Date 16-Sep-2010 Plot File	Sheet 1 of 1	Cross-S			NORTHERN
4750mN	4800mN	4850mN	4900mN	4950mN	5000mN	5050mN		5100mN 5150mN	5200mN	5250mN	
-300mRL											-300mRL
-250mRL											-250mRL
-200mRL											-200mRL



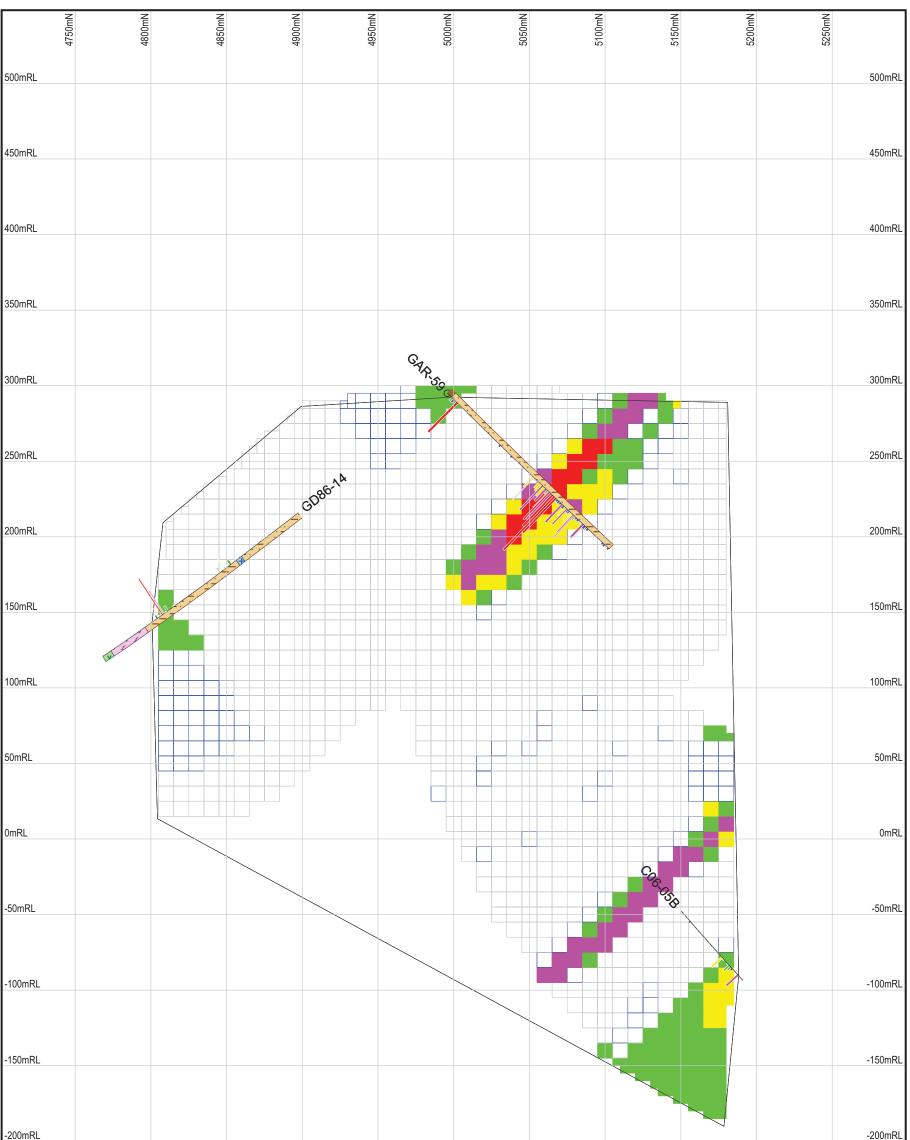
		ALS ALS A A A A A A A A A A A A A	0.75 to 1.0 1.0 to 2.0 >= 2.0	1 to 2 2 to 5 >= 5	5	20 0	20m	487		Garrcon Garrison	old Property Deposit Township , Canada
ACA HOWE INTERNA Mining and Geologic UK, Toronio, H. Www.acahows.c	al Consultants alifax	Libology Cus Cus Cus Cus Cus Cus Cus Cus	Block Grades (g/tonne) < 0.25 0.25 to 0.50 0.50 to 0.75 	< 0.2	to 0.5 1	Scale : 2500 Plot Date 16-Sep-201 Plot Fi	^o Sheet 1 of 1 e: 4875E	Cross-Se Facing			NORTHERN
4750mN	4800mN	4850mN	4900mN	4950mN	5000mN	5050mN		5100mN 5150mN	5200mN	5250mN	
-300mRL											-300mRL
-250mRL											-250mRL
-200mRL											-200mRL



		sv ck ce seb	0.75 to 1.0 1.0 to 2.0 >= 2.0	1 to 2 2 to 5 >= 5	20) 0 2	20m	485		Garrcon Garrison	old Property Deposit Township , Canada
	WE INTERNATIONAL LIMITED e Grategical Consultants UK-Terento-Halfax www.acallowe.co.ak		Block Grades (g/tonne) < 0.25 0.25 to 0.50 0.50 to 0.75 	Assay Histograms (g/tonne) < 0.25 0.25 to 0.5 0.5 to 1	Scale 1 : 2500	Plot Date 16-Sep-2010 Plot File	Sheet 1 of 1 : 4850E	Cross-Se Facing			
4750mN	4800mN	4850mN	4900mN	4950mN	5000mN	5050mN		5100mN 5150mN	5200mN	5250mN	
-300mRL											-300mRL
-250mRL											-250mRL
-200mRL											-200mRL



		V V + - - - - - - - - - - -	0.75 to 1.0 1.0 to 2.0	1 to 2 2 to 5 >= 5	20		20m	Facing 480		Garrison Go Garrcon Garrison Ontario,	Deposit Township
	WE INTERNATIONAL LIMITED © Gaological Consultants UK Terronto Halfax www.acahows.co.uk	Lithology Case C	Block Grades (g/tonne) < 0.25 0.25 to 0.50 0.50 to 0.75 	Assay Histograms (g/tonne) < 0.25 0.25 to 0.5 0.5 to 1	Scale 1 : 2500	Plot Date 16-Sep-2010 Plot File	Sheet 1 of 1	Cross-Se			IORTHERN
4750mN	4800mN	4850mN	4900mN	4950mN	5000mN	5050mN		5100mN 5150mN	5200mN	5250mN	
-300mRL											-300mRL
-250mRL											-250mRL
-200mRL											-200mRL



-250mRL -300mR -300m	IQRTHERN
-300mRL	
-250mRL	-300mRL
-200mRL	-200mRL -250mRL