

**TECHNICAL REPORT  
AND RESOURCE ESTIMATE  
ON THE  
UPPER HALLNOR, C-ZONE, AND BROULAN REEF DEPOSITS,  
WHITNEY GOLD PROPERTY  
TIMMINS AREA, ONTARIO, CANADA**

**LATITUDE 48° 30' 50" N, LONGITUDE 81° 10' 21" W  
UTM NAD83 17U 487,269 mE; 5,373,428 mN**

**For**

**TEMEX RESOURCES CORP.**

**By**

**P & E Mining Consultants Inc.**

**NI-43-101 & 43-101F1  
TECHNICAL REPORT No. 281**

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## TABLE OF CONTENTS

1.0	SUMMARY .....	1
2.0	INTRODUCTION .....	7
2.1	TERMS OF REFERENCE .....	7
2.2	SITE VISIT .....	7
2.3	UNITS AND CURRENCY .....	7
2.4	SOURCES OF INFORMATION .....	8
2.5	GLOSSARY OF TERMS .....	8
3.0	RELIANCE ON OTHER EXPERTS .....	10
4.0	PROPERTY DESCRIPTION AND LOCATION .....	11
4.1	PROPERTY LOCATION .....	11
4.2	PROPERTY DESCRIPTION .....	11
4.3	PERMITS .....	15
4.4	ENVIRONMENTAL LIABILITY .....	15
5.0	ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY .....	16
5.1	ACCESSIBILITY .....	16
5.2	CLIMATE .....	16
5.3	LOCAL RESOURCES AND INFRASTRUCTURE .....	16
5.4	PHYSIOGRAPHY .....	16
6.0	HISTORY .....	18
6.1	HISTORIC DRILLING .....	19
6.1.1	2005-2006 Drilling .....	19
6.1.2	2007 Drilling .....	20
6.1.3	2008 Drilling .....	20
6.1.4	2008-2009 Drilling .....	20
6.1.5	2010 Drilling .....	21
6.1.6	2011-2012 Drilling .....	21
6.2	HISTORIC PRODUCTION .....	22
7.0	GEOLOGICAL SETTING AND MINERALIZATION .....	23
7.1	REGIONAL GEOLOGY .....	24
7.2	PROPERTY AND DEPOSIT GEOLOGY .....	25
7.3	ALTERATION AND STRUCTURE .....	27
7.4	MINERALIZATION .....	29
8.0	DEPOSIT TYPES .....	30
9.0	EXPLORATION .....	31
10.0	DRILLING .....	32
10.1	NOVEMBER – DECEMBER 2012 DRILLING PROGRAM .....	32
10.1.1	Northwest Volcanic Horizon .....	32
10.1.2	Bonetal Mine Area .....	32
10.2	2013 DRILLING PROGRAM .....	37
10.2.1	110 Zone .....	39
10.2.2	Hallnor Main Vein Area .....	40
10.2.3	155 South Vein .....	41
10.2.4	155 Vein .....	41
10.3	238 VEIN DISCOVERY .....	44
10.4	WESTERN EXTENSION OF HALLNOR/BONETAL 155 VEIN AND STOCKWORK ZONES .....	46
10.5	BROULAN REEF RESOURCE DRILLING .....	46

10.6	BONETAL MINE AREA AND GEOTECHNICAL DRILLING .....	47
11.0	SAMPLE PREPARATION, ANALYSES AND SECURITY .....	51
11.1	2012-2013 DRILLING AND LABORATORY PROCEDURES .....	51
11.2	LABS USED PRIOR TO 2012-2013 .....	52
12.0	DATA VERIFICATION .....	53
12.1	SITE VISIT AND INDEPENDENT SAMPLING UPPER HALLNOR AND C-ZONE.....	53
12.2	SITE VISIT AND INDEPENDENT SAMPLING BROULAN REEF .....	54
12.3	QUALITY ASSURANCE/QUALITY CONTROL PROGRAM .....	54
	12.3.1 Performance of Certified Reference Materials .....	54
	12.3.2 Performance of Blank Material.....	61
	12.3.3 Performance of Duplicates.....	62
13.0	MINERAL PROCESSING AND METALLURGICAL TESTING .....	64
13.1	INTRODUCTION AND SUMMARY .....	64
13.2	SAMPLES.....	64
13.3	GRINDABILITY .....	65
13.4	GRAVITY CONCENTRATION.....	65
13.5	FLOTATION .....	66
	13.5.1 Whole Ore Flotation – MC .....	66
	13.5.2 Gravity Tails Flotation – MC.....	66
	13.5.3 Sub-composite Flotation .....	66
13.6	CYANIDATION.....	68
	13.6.1 Direct Cyanidation (MC) .....	68
	13.6.2 Cyanidation of Gravity Tails (MC).....	68
	13.6.3 Direct Cyanidation of Sub-Composites .....	68
	13.6.4 Cyanidation of Sub-composite Gravity Tails .....	69
14.0	MINERAL RESOURCE ESTIMATE.....	70
14.1	INTRODUCTION .....	70
14.2	DATABASE .....	70
14.3	DATA VERIFICATION .....	70
14.4	DOMAIN INTERPRETATION .....	71
14.5	ROCK CODE DETERMINATION .....	72
14.6	COMPOSITING .....	74
14.7	GRADE CAPPING.....	75
14.8	SEMI-VARIOGRAPHY.....	77
14.9	BULK DENSITY.....	77
14.10	BLOCK MODELING.....	77
14.11	RESOURCE CLASSIFICATION .....	78
14.12	RESOURCE ESTIMATE.....	79
	14.12.1 Underground Au Cut-Off Grade Calculation CDN\$ .....	79
14.13	RESOURCE ESTIMATE STATEMENT .....	79
14.14	MINERAL RESOURCE SENSITIVITY .....	81
14.15	CONFIRMATION OF ESTIMATE .....	83
15.0	MINERAL RESERVE ESTIMATES.....	86
16.0	MINING METHODS .....	87
17.0	RECOVERY METHODS.....	88
18.0	PROJECT INFRASTRUCTURE .....	89
19.0	MARKET STUDIES AND CONTRACTS.....	90
20.0	ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT .....	91

21.0	CAPITAL AND OPERATING COSTS .....	92
22.0	ECONOMIC ANALYSIS .....	93
23.0	ADJACENT PROPERTIES .....	94
24.0	OTHER RELEVANT DATA AND INFORMATION .....	96
25.0	INTERPRETATION AND CONCLUSIONS .....	97
25.1	OPPORTUNITIES TO EXPAND RESOURCES .....	97
25.2	PRODUCTION OPPORTUNITIES .....	98
25.3	EXPLORATION POTENTIAL.....	99
26.0	RECOMMENDATIONS .....	100
27.0	REFERENCES .....	101
28.0	CERTIFICATES.....	103
APPENDIX I.	DRILL HOLE PLANS .....	110
APPENDIX II.	3D DOMAINS .....	117
APPENDIX III.	LOG NORMAL HISTOGRAMS .....	121
APPENDIX IV.	VARIOGRAMS.....	131
APPENDIX V.	AU BLOCK MODEL CROSS SECTIONS AND PLANS.....	142
APPENDIX VI.	CLASSIFICATION BLOCK MODEL CROSS SECTIONS AND PLANS .....	163



## LIST OF TABLES

Table 1.1	Mineral Resource Estimate Statement at 3.0 g/t Gold Cut-off .....	6
Table 4.1	Unpatented and Patented Claims of the Temex Property .....	13
Table 6.1	Historical Exploration on the Whitney Gold Property .....	18
Table 6.2	Historic Production .....	22
Table 10.1	2012 Upper Hallnor Drill Program Borehole Location Data .....	33
Table 10.2	2012 Drill Program Significant Intersections.....	34
Table 10.3	2013 110 Zone Drill Program Borehole Location Data .....	39
Table 10.4	2013 Drill Program Borehole Location Data – Main Vein Area .....	41
Table 10.5	2013 155 Vein & 155 South Vein Drill Program Borehole Location Data .....	42
Table 10.6	2013 Drill Program Borehole Location Data – Hallnor 238 Vein .....	44
Table 10.7	2013 Drill Program Significant Intersections – Upper Hallnor .....	44
Table 10.8	2013 Drill Program Borehole Location Data – Western Extension of Hallnor/Bonetal 155 Vein and Stockwork Zones .....	46
Table 10.9	2013 Drill Program Borehole Location Data – Broulan Reef.....	47
Table 10.10	2012 Drill Program Borehole Location Data – Bonetal Mine Area .....	48
Table 10.11	2013 Drill Program Significant Intersections – Bonetal Mine Area .....	49
Table 13.1	Gold Assays, Head Samples.....	65
Table 13.2	ICP Analyses .....	65
Table 13.3	Gravity Concentration .....	65
Table 14.1	Drill Hole Database Summary .....	70
Table 14.2	Assay Data Verification Summary.....	71
Table 14.3	Constrained Assay and Drill Hole Length .....	72
Table 14.4	Rock Code Description and Volume.....	73
Table 14.5	Basic Statistics of all Constrained Au Assays and Sample Length.....	74
Table 14.6	Au Grade Capping Summary .....	76
Table 14.7	Block Model Definitions .....	77
Table 14.8	Au Block Model Interpolation Parameters.....	78
Table 14.9	Mineral Resource Estimate Statement at 3.0 g/t Gold Cut-off .....	80
Table 14.10	Upper Hallnor Resource Sensitivity to Au Cut-off.....	81
Table 14.11	Broulan Reef Resource Sensitivity .....	82
Table 14.12	C-Zone Resource Sensitivity.....	83
Table 14.13	Statistics Comparison of Composites with Block Model.....	83
Table 14.14	Volume Comparison of Block Model with Geometric Solids .....	84
Table 26.1	Recommended Program and Budget.....	100

## LIST OF FIGURES

Figure 4.1	Location of the Whitney Property .....	11
Figure 4.2	Location of the Claims of the Temex Property .....	13
Figure 5.1	Climate Chart of the Timmins Area .....	17
Figure 7.1	Regional Geology Map .....	23
Figure 7.2	Property Geology Map .....	25
Figure 7.3	Schematic Section in the Hallnor Shaft Area .....	27
Figure 10.1	Whitney Gold Project .....	35
Figure 10.2	Drill Hole Locations – Hallnor Main Vein, 155 Vein, Resource Expansion and 238 Vein .....	36
Figure 10.3	Drill Hole Locations – Bonetal Mine Area .....	37
Figure 10.4	2013 Drill Hole Locations and 2012 NI 43-101 Resource Pit Shell .....	38
Figure 10.5	2013 Drill Hole Locations - 110 Zone .....	40
Figure 10.6	2013 Drill Hole Locations and 2012 NI43-101 Resource Pit Shell .....	43
Figure 10.7	Drill Hole Locations – Broulan Reef Mine .....	47
Figure 10.8	Drill hole Locations – Bonetal Mine Area .....	50
Figure 12.1	P&E Site Visit Results for Gold – Upper Hallnor and C-Zone .....	53
Figure 12.2	P&E Site Visit Results for Gold – Broulan Reef .....	54
Figure 12.3	Performance of SL20 for Gold .....	55
Figure 12.4	Performance of SJ10 for Gold .....	56
Figure 12.5	Performance of OXH37 for Gold .....	56
Figure 12.6	Performance of OREAS 17Pb for Gold .....	57
Figure 12.7	Performance of OREAS 10Pb for Gold .....	57
Figure 12.8	Performance of Accurassay Labs In-House AuQ1 for Gold .....	58
Figure 12.9	Performance of Accurassay Labs In-House Au47 for Gold .....	58
Figure 12.10	Performance of OREAS 16b for Gold .....	59
Figure 12.11	Performance of OREAS 10c for Gold .....	60
Figure 12.12	Performance of GS-14a for Gold .....	60
Figure 12.13	Performance of GS-1k for Gold .....	61
Figure 12.14	Performance of GS-5k for Gold .....	61
Figure 12.15	Performance of Blank Material .....	62
Figure 12.16	2011-2012 Pulp Duplicate Pairs Fire Assay-AA method .....	62
Figure 12.17	2012-2013 Pulp Duplicate Pairs Fire Assay-AA method .....	63
Figure 13.1	Whole Ore Flotation, MC .....	66
Figure 13.2	Rougher Flotation, Comparison of Composites (Whole Ore) .....	67
Figure 13.3	Flotation, Comparison of Composites (Gravity + Flotation) .....	67
Figure 13.4	Direct Cyanidation, MC .....	68
Figure 13.5	Direct Cyanidation, SC-H .....	69
Figure 13.6	Direct Cyanidation, SC-L .....	69
Figure 14.1	Constrained Sample Length Distribution .....	74
Figure 14.2	Upper Hallnor Grade Tonnage Comparisons for NN and ID <sup>3</sup> Interpolation .....	84
Figure 14.3	Broulan Reef Grade Tonnage Comparisons for NN and ID <sup>3</sup> Interpolation .....	85
Figure 14.4	C-Zone Grade Tonnage Comparisons for NN and ID <sup>3</sup> Interpolation .....	85

## 1.0 SUMMARY

This report was prepared by P & E Mining Consultants Inc. (“P&E”) at the request of Ms. Karen Rees, P.Geo. Vice President, Exploration, and Mr. Kim Tyler, P.Geo, Project Manager, both of Temex Resources Corp. (“Temex”). Temex is an Ontario based, publicly held company trading on the TSX Venture Exchange (“TSX.V”) under the symbol of TME. The purpose of this report is to provide an independent, National Instrument (“NI”) 43-101, Technical Report and Mineral Resource Estimate (the “Report”) on the Upper Hallnor, C-Zone, and Broulan Reef Deposits on the Whitney Property in the Timmins area of Ontario, Canada (the “Property”).

The Whitney Gold Property is located in the Township of Whitney, approximately 3 km north of the town of Porcupine and lies within the city limits of Timmins, Ontario. The center of the Whitney Property, is located at latitude 48° 30’ 50” N, longitude 81° 10’ 21” W (UTM NAD83 17U 487,269 mE; 5,373,428 mN).

The Property comprises two unpatented mining claims and 45 patented claims totalling 872 ha held in joint venture by Temex (60%) and Goldcorp (40%). Pursuant to the joint venture agreement, Temex was appointed as the operator with overall responsibility to manage and carry out operations under the joint venture agreement. The initial participating interests of Temex and Goldcorp of 60% and 40%, respectively, are subject to dilution in accordance with the terms of the joint venture agreement and conversion to a net smelter return royalty in the event that any such participating interest is reduced to 10% or less.

As a condition of the joint venture agreement, Temex may be required to contribute, to a maximum of \$5 million, towards the reclamation, remediation and other costs under a closure plan for all previous activities on the Hallnor Mine Property. Upon the Company having incurred the aggregate of \$5 million in exploration expenditures the Company was deemed to have contributed \$2 million towards such costs thereby reducing the maximum contribution to \$3 million.

As of the effective date of the Report, all of the Whitney claims are in good standing.

The Whitney Property benefits from excellent access and close proximity to the city of Timmins. Access to the Property is via gravel roads that extend from Highway 101. Regional power lines extend northeast of Timmins and two power lines cross the Property. A natural gas line crosses the north-western portion and a spur of the Ontario Northland Railway crosses the south-eastern boundary of the Property. The property benefits significantly from proximity to Timmins and the abundance of material and human resources which are available in the region to support exploration and mining operations. The Whitney Property assets include five former producing mines with extensive mine development along a 3.6 km strike length, five main shafts plus an underground winze at the Hallnor Mine that accesses over 1,540 m vertical.

The Whitney Property is situated in the Porcupine Gold Camp in the southern portion of the Abitibi Greenstone Belt of the Archean Superior Province. The Abitibi Sub-province is a regionally east-west trending greenstone belt, approximately 400 km long and 200 km wide, consisting of assemblages of dominantly mafic to felsic metavolcanic, metasedimentary rocks, lesser ultramafic metavolcanic rocks, and a variety of intrusive rocks. The Destor Porcupine Fault Zone is a regional structure that is associated with gold mineralization in the Porcupine Gold camp.

The Whitney Gold Property is in the central part of the Porcupine gold camp and consequently there is an extensive history of geological mapping, mineral exploration, and mining in the area of the Property. The Porcupine gold camp has produced in excess of 70 million ounces of gold with four mines currently in production , (Hoyle Pond, Dome, Timmins West and Bell Creek) and one in development (Hollinger Pit). The Whitney Property straddles the unconformable contact between Timiskaming metasedimentary rocks and Tisdale metavolcanic rocks. On the Whitney Property, the Destor-Porcupine Fault Zone is south of, and parallel to the Timiskaming unconformity. Gold mineralization is associated with several styles of vein structures at or near the contacts of Timiskaming sediments with mafic and ultramafic volcanic rocks in the Abitibi Greenstone Belt.

In addition to the Upper Hallnor above 650 metres vertical depth, Bonetal, C-Zone and Broulan Reef above 350 metres vertical (collectively the “Upper Whitney”) Deposits that are located on the Property and form the basis of this Report, the “Lower Whitney” composed of the Lower Hallnor to the 1,550 metre depth, Lower Broulan Reef to the 760 metre depth, Hugh Pam, and Q Zone are four additional zones of gold mineralization that have been identified within the Whitney Gold Property that remain to be evaluated. The historic Hallnor Mine, located on the east side of the Whitney Property, was the highest grade past-producing mine in the Timmins gold camp which yielded 1.7 million ounces of gold at an average grade of 0.40 opt (13.7 g/t) before closing in 1972. Other past-producing gold mines on the Property include the Broulan Reef, Bonetal, Bonwhit and Hugh Pam and together, these historic mines produced an aggregate of 2.43 million ounces of gold.

The gold mineralization on the Whitney Gold Property can be broadly classified as a mesothermal lode gold deposit in an Archean greenstone belt setting. In the Superior Province, mesothermal gold deposits are spatially associated with large scale regional deformation zones such as the Destor Porcupine zone. These large scale structures and the associated Timiskaming-type sediments are interpreted as zones of transpressive terrain accretion (Kerrick and Wyman 1990). Dube and Gosselin (2007) have summarized the general consensus that greenstone-hosted quartz-carbonate vein deposits are related to metamorphic fluids liberated during accretionary processes and generated by prograde metamorphism and thermal re-equilibration of subducted volcano-sedimentary terranes.

To the end of December 2012, eight drill programs were conducted on the Whitney Property by Temex. Between 2005 and September 2012, Temex drilled 247 surface diamond drill holes totalling 70,094 m.

The Upper Whitney resource in this Report includes an update of the initial September 5, 2012 estimate (Technical Report No. 249, Sutcliffe et al, 2012) and incorporates initial estimates on the former producing Bonetal, Broulan Reef Mines, and the C Zone located between them. This study is updated through 93 holes totalling 9,898 m of new drilling by Temex and 32 new holes totalling 1,470 m of drilling performed by the Goldcorp performed during late 2012-2013. It also incorporates a compilation and validation of historical data on the Upper Hallnor, Bonetal and Broulan Reef Mines.

Although a larger, low grade envelope amenable to large scale open pit extraction was highlighted in the initial September 5, 2012 estimate, this Report defines the higher grade components within with the objective of defining gold resources which would be amenable to stand-alone underground mining operations and more selective open pit mining methods. This

study demonstrates the Whitney Property Resource also remains robust and continuous at higher grades and grade cut-offs consistent with that achieved through historical production.

Following the September 2012 Resource Estimate, a 10 drill hole program, totalling 2,029 m was completed between November 2012 and December 2012. Five holes were advanced into the metavolcanics east of the Porcupine River to increase the in-pit resource and five holes were drilled west of the river, in the Bonetal Mine area, to expand the resource outside the in-pit area on the western portion of the resource.

The 2013 diamond drilling program took place between March 11 and June 26, 2013 and followed the recommendations from the 2012 NI 43-101 report. 83 holes totalling 7,869 m were drilled in three areas. 69 holes, totalling 6,829 m were drilled on the Upper Hallnor to evaluate the viability of a combined open pit/underground operation. Four holes totalling 324 m were drilled to follow up on the 238 Vein discovery made in 2012. 10 holes, totalling 716 m, were drilled in the Broulan Reef Mine area to increase the drill density in order to calculate a new resource and refine the geological model. The program focused on further defining near surface, high grade targets suitable for early start-up production opportunities and upgrading Inferred resources to the Measured and Indicated category.

The core was logged and any intervals containing mineralized quartz veins or sulfides were sampled. Samples that contained visible gold or were thought to be possibly gold-bearing were sampled in core lengths of 0.3 meters to 1.0 metre. The marked core was sawn in half with a diamond saw by a core technician, and one-half of the core for each sample was placed in a sample bag with the accompanying sample tags.

For the late 2012 and 2013 drill programs, a standard and a blank were inserted in the sample sequence at regular intervals in every batch of 20 samples as part of the Temex QA/QC program. Three standards were used representing three different gold grades. Any batches of samples containing blanks or standards, which were outside of the control limits were re-analysed. Core samples were analyzed for gold using fire assay on a 30 gram split with an ICP finish at SGS laboratories. Where initial results exceeded 3 g/t gold, a second assay was completed on another 30 gram split using fire assay with a gravimetric finish. Samples with visible gold were noted during logging, and these samples were analysed using a screened metallic fire assay.

The Upper Hallnor and C-Zone deposits were visited by Mr. Antoine Yassa, P.Geo. on September 25, 2013 and the Broulan Reef on September 5, 2013 for the purposes of completing a site visit and due diligence sampling. It is P&E's opinion that the sample preparation, security and analytical procedures used by Temex were satisfactory.

For the late 2012 and 2013 diamond drilling, Temex used five different certified reference materials prepared by either Canadian Resource Labs of Langley, BC or Ore Research and Pty of Australia. With very few exceptions, performance for the standards was very good. Blank material inserted by Temex to monitor contamination in the years 2012-2013 consisted of marble landscaping material and the blank material performed perfectly, with all values falling below the upper threshold of three times detection limit. In 2012-2013, there were 324 pulp duplicates analyzed by SGS using the fire assay-AA method. Precision was not entirely satisfactory for this level of homogeneity and P&E recommends that Temex work with the laboratory to improve precision at the pulp level. Overall, it is P&E's opinion that the data are of good quality and appropriate for use in the current resource estimate.

A metallurgical testwork program on mineralization from the Property was conducted by SGS Lakefield Research in late 2012. Direct cyanidation yielded very good results and was equivalent or superior to tests with prior gravity recovery, returning 95.3% extraction at a grind of 83 $\mu$ . Extractions are a function of grind and optimization may allow a higher extraction. Required leach time is short at 24 hours, and reagent consumptions are modest.

The Gemcom database for this resource estimate was constructed by P&E from 11,173 drill holes consisting of 340 surface diamond drill holes (79,992 metres) drilled by Temex between 2005 and 2013, and 10,833 historic drill holes (501,146 metres) drilled by previous operators. Of these holes, 6,051 drill holes in the database intercepted the mineralized domains and were utilized for the resource estimates. The database was verified in Gemcom with minor corrections made to bring it to an error free status. The assay table of the database contained 175,766 Au assays (3,492 analyzed in 2013, 26,127 from 2005 to 2012 and 146,147 previous to 2005). Verification of assay database records was performed with original laboratory and electronically issued certificates from laboratories for all 2013 assays, and visually checking for historical assays.

The geological interpretation and wireframes of Upper Hallnor, Broulan Reef and C-Zone were initially generated by Temex. P&E undertook to review and audit the wireframes and modified them where necessary. The mineralized constraining domain boundaries were determined from lithology, structure, underground workings and grade boundary interpretation from visual inspection of drill hole sections. These domains were created with computer screen digitizing on drill hole sections in Gemcom. The domain outlines interpreted and designed by Temex were influenced by the selection of mineralized material that demonstrated a lithological and structural zonal continuity along strike and down dip. Topography and overburden surfaces were created by P&E based on the drill hole collar locations and lithology. Wireframes of the mined out voids were provided by Temex. The mean of constrained sample length was 1.03m. Un-assayed intervals and below the detection limit assays were set to 0.001 g/t Au. Any composites that were less than 0.25 metres in length were discarded. Grade capping was investigated on the 1.0m composite values in the database within the constraining domains to ensure that the possible influence of erratic high values did not bias the database. A variography study was performed as a guide to determining grade interpolation search strategy.

The Upper Hallnor, Broulan Reef and C-Zone resource block model were constructed separately using Gemcom modelling software. Block sizes were 2.5 x 1.25 x 2.5 m. A uniform bulk density of 2.84 t/m<sup>3</sup> was applied to all mineralized blocks. Inverse distance cubed (1/d<sup>3</sup>) grade interpolation was utilized with the Au capped composites. Multiple passes were executed for the grade interpolation to progressively capture the sample points so to avoid over smoothing and preserve local grade variability.

In P&E's opinion, the drilling, assaying and exploration work of the Upper Hallnor, Broulan Reef and C-Zone supporting this resource estimate are sufficient to indicate reasonable potential for economic extraction and thus qualify it as a Mineral Resource under CIM definition standards. The mineral resources were classified as Measured, Indicated and Inferred based on the geological interpretation, semi-variogram performance and drill hole spacing. The Measured resources were defined for the blocks interpolated by the grade interpolation Pass I, which used at least 5 composites from a minimum of three holes; Indicated resources were justified for the blocks interpolated by Pass II, which were estimated with at least three composites from a minimum of two drill holes; and Inferred resources were categorized for all remaining grade populated blocks within the mineralized domains.

An underground Au cut-off grade of 3.0 g/t was calculated based on a gold price of US\$1,200/oz, \$US/\$CDN exchange rate of \$0.95, Au recovery of 95%, mining dilution of 20%, mining cost of \$60/tonne mined, process cost of \$30.00/tonne milled, haulage cost of \$2.25/tonne milled, and G&A of \$4.50/tonne milled.

The mineral resources estimate is presented in Table 1.1.

Mineral resources are sensitive to the selection of a reporting Au cut-off grade and were reported for a variety of cut-off grades from 0.001, 1.0 to 10 g/t Au for the Upper Hallnor, Broulan Reef and C-Zone deposits. The block model was validated using a number of industry standard methods including visual and statistical methods.

P&E considers that the Whitney Property contains a significant gold resource that merits further evaluation and has excellent potential to define significant additional resources. While the initial September 5, 2012 study successfully defined a low grade, bulk tonnage, potentially open-pit mineable resource at cut-off grade of 0.30 g/t gold, this study demonstrates a high grade gold resource amenable to underground mining and more selective open pit mining methods at a 3.00 g/t gold cut-off is defined within. P&E recommends that Temex continue to prepare for an Advanced Exploration/bulk sample comprised of a combined open pit/underground project. It is recommended this work continue with the approach of incorporating it into a Preliminary Economic Assessment (“PEA”) of the entire Upper Whitney.

P&E also recommends that additional resource work be undertaken to evaluate the Lower Whitney and that a minimum 25,000 metres of diamond drilling be conducted to explore along strike and to depth of favourable mineralized structures and lithologies.

A proposed \$7.0 million budget is recommended.

<b>TABLE 1.1</b> <b>MINERAL RESOURCE ESTIMATE STATEMENT AT 3.0 G/T GOLD CUT-OFF<sup>(1-5)</sup></b>												
Deposit	Measured			Indicated			Measured + Indicated			Inferred		
	Tonnes	Au g/t	Contained Au oz	Tonnes	Au g/t	Contained Au oz	Tonnes	Au g/t	Contained Au oz	Tonnes	Au g/t	Contained Au oz
Upper Hallnor	776,000	6.88	171,500	1,735,000	6.73	375,600	2,511,000	6.78	547,100	801,000	5.26	135,600
Broulan Reef	169,000	7.92	43,000	417,000	7.15	95,800	586,000	7.37	138,800	88,000	5.82	16,500
C-Zone	21,000	5.26	3,600	101,000	5.89	19,100	122,000	5.79	22,700	106,000	5.50	18,600
<b>Total</b>	<b>966,000</b>	<b>7.02</b>	<b>218,100</b>	<b>2,253,000</b>	<b>6.77</b>	<b>490, 500</b>	<b>3,219,000</b>	<b>6.85</b>	<b>708,600</b>	<b>995,000</b>	<b>5.34</b>	<b>170, 700</b>

- (1) Mineral resources which are not mineral reserves do not have demonstrated economic viability. The estimate of mineral resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.
- (2) The quantity and grade of reported Inferred resources in this estimation are uncertain in nature and there has been insufficient exploration to define these Inferred resources as an Indicated or Measured mineral resource and it is uncertain if further exploration will result in upgrading them to an Indicated or Measured mineral resource category.
- (3) The mineral resources in this news release were estimated using the Canadian Institute of Mining, Metallurgy and Petroleum (CIM), CIM Standards on Mineral Resources and Reserves, Definitions and Guidelines prepared by the CIM Standing Committee on Reserve Definitions and adopted by the CIM Council.
- (4) The volume of the historical mined areas was removed from the resource estimates.
- (5) Mineral resources outside of the Temex property boundary were not included in this estimate.



## **2.0 INTRODUCTION**

### **2.1 TERMS OF REFERENCE**

The following is a Technical Report and Resource Estimate (the “Report”) prepared by P&E Mining Consultants Inc. (“P&E”) regarding the Upper Hallnor, Bonetal, C-Zone and Broulan Reef Deposits on the Whitney Gold Property in the Timmins area of Ontario, Canada (the “Property”). This Report has been prepared in compliance with the requirements of Canadian National Instrument (“NI”) 43-101 and in accordance with the guidelines of the Canadian Institute of Mining, Metallurgy and Petroleum (“CIM”), Standards on Mineral Resources and Reserves, Definitions and Guidelines prepared by the CIM Standing Committee on Reserve Definitions and adopted by CIM Council December 11, 2005 (CIM 2005).

This report was prepared at the request of Ms. Karen Rees P.Geo., Vice President, Exploration and Mr. Kim Tyler P.Geo, Project Manager, both of Temex Resources Corp. (“Temex”). Temex is a Toronto, Ontario based publicly held company trading on the TSX Venture Exchange under the symbol of “TME”, with its corporate offices at:

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Toronto, Ontario M5H 3L5  
Canada

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This report is considered current as of January 14, 2014.

The Whitney Gold Property is located in northern half of Whitney Township, approximately 3 km north of the town of Porcupine and lies within the city limits of Timmins, in the Porcupine Mining Division of Ontario. The Whitney Property comprises 2 unpatented mining claims and 45 patented claims totalling 872 ha held 60% by Temex and 40% by Goldcorp Canada Ltd. (Goldcorp). All claims and leases are in good standing as of the effective date of this Report.

### **2.2 SITE VISIT**

A site visit to the Property on September 5 and 25, 2013 was carried out by Mr. Antoine Yassa, P. Geo. GPS readings were taken of drill collars and core sampling was conducted at that time.

### **2.3 UNITS AND CURRENCY**

Metric units of measure have been used throughout this Report, unless noted otherwise. Costs are reported in Canadian dollars (“CDN\$”) unless otherwise stated. Metal values are reported in grams per metric tonne (“g/t”), ounces (“oz”) and percentage (“%”).

The coordinate system used by Temex for locating and reporting drill hole information is UTM/NAD 27, zone 17. Maps in this Report use either the UTM coordinate system or latitude and longitude.

## 2.4 SOURCES OF INFORMATION

This Report is based, in part, on internal company technical reports, and maps, published government reports, company letters, memoranda, public disclosure and public information as listed in the References at the conclusion of this Report. Sections from reports authored by other consultants have been directly quoted or summarized in this Report, and are so indicated where appropriate.

Sections 4 and 5 of this report were prepared by Ms. Jarita Barry B.Sc., under the supervision of Richard Sutcliffe, P.Geo., who acting as a QP as defined by NI 43-101, takes responsibility for those sections of the report prepared by Ms. Barry, as outlined in the “Certificate of Author” attached to this report.

## 2.5 GLOSSARY OF TERMS

<b>Abbreviation</b>	<b>Description</b>
°C	Degrees Celsius
<	Less than
%	Percentage
\$	Dollar
3-D	Three dimensions
Actlabs	Activation Laboratories Ltd.
AGAT	AGAT Laboratories Ltd.
ALS	ALS Minerals
asl	Above sea level
Au	Gold
CIM	Canadian Institute of Mining, Metallurgy and Petroleum
cm	Centimetre
CDN\$	Canadian dollar
DDH	Diamond drill hole
E	East
EM	Electromagnetic
Fe	Iron
ft	Foot/feet
g	Gram
Ga	Billion years
G&A	General and administration
g/t Au	Grams of gold per tonne
ha	Hectare
IP	Induced Polarization
km	Kilometre
lb	Pound
m	Metre

<b>Abbreviation</b>	<b>Description</b>
m <sup>2</sup>	Squared metres
m <sup>3</sup>	Cubic metres
M	Million
Ma	Millions of years
Mlb	Million pounds
mm	Millimetre
N	North
NE	Northeast
NI	National Instrument (43-101)
NSR	Net smelter return
NW	Northwest
OGS	Ontario Geological Survey
oz	Troy ounces
oz/t	Ounces per tonne
P&E	P&E Mining Consultants Inc.
PGM	Porcupine Gold Mines Joint Venture
ppm	Parts per million
QA/QC	Quality assurance / quality control
QC	Quality control
QP	Qualified person
RC	Reverse Circulation
RQD	Rock quality designation
S	South
SE	Southeast
SEDAR	System for Electronic Document Analysis and Retrieval
SW	Southwest
Swastika Labs	Swastika Laboratories
VLF-EM	Very Low Frequency – Electro Magnetic Survey
t	Tonnes (metric measurement)
t/m <sup>3</sup>	Tonnes per cubic metre
tons	Short tons
TSX	Toronto Stock Exchange
US\$	United States dollar
UTM	Universal Transverse Mercator
W	West

### **3.0 RELIANCE ON OTHER EXPERTS**

P&E has assumed, and relied on the fact, that all the information and existing technical documents listed in the References section of this Report are accurate and complete in all material aspects. While P&E carefully reviewed the available information presented to us, we cannot guarantee its accuracy and completeness. We reserve the right, but will not be obligated to revise our Report and conclusions if additional information becomes known to us subsequent to the date of this Report.

Although selected copies of the tenure documents were reviewed, an independent verification of land title and tenure was not performed. P&E has not verified the legality of any underlying agreement(s) that may exist concerning the licenses or other agreement(s) between third parties but has relied on the clients solicitor's to have conducted the proper legal due diligence. Information on tenure was obtained from Temex and the Ontario government website.

A draft copy of the Report has been reviewed for factual errors by the client and P&E has relied on Temex's historical and current knowledge of the Property in this regard. Any statements 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.

## 4.0 PROPERTY DESCRIPTION AND LOCATION

### 4.1 PROPERTY LOCATION

The Whitney Property is located in the northern half of the Township of Whitney, approximately 3 km north of the town of Porcupine and lies within the city limits of Timmins, Ontario (Figure 4.1). The centre of the Property is located at approximately latitude 48° 30' 50" N, longitude 81° 10' 21" W (UTM NAD83 17U 487,269 mE, 5,373,428 mN. (Figure 4.2).

**Figure 4.1 Location of the Whitney Property**



(Source: [www.temexcorp.com](http://www.temexcorp.com))

### 4.2 PROPERTY DESCRIPTION

The Whitney Property comprises two unpatented mining claims and 45 patented claims totalling 872 ha held 60% by Temex and 40% by Goldcorp Canada Inc. (Goldcorp). (Figure 4.2 and Table 4.1). Boundaries of individual claims can be identified in the field by locating the survey pins.

All 2013 land taxes on patented claims have been paid in full to the Ontario Ministry of Northern Development and Mines, with Temex's 60% share totalling \$1,975.85, out of the full amount of \$3,293.08. Municipal taxes for the Whitney Property have been paid in the amount of \$20,704.64 for 2013 to the city of Timmins. Temex's 60% portion of the tax bill was \$12,422.78. Copies of the tax payments were reviewed by P&E.

The unpatented claims were also verified through the Ministry of Ontario CLAIMaps web application. As of the effective date of the report, all Property claims are in good standing.

Temex's acquisition of the Whitney property is described in Temex's quarterly Management Discussion and Analysis for the three months ended August 31, 2013 that was filed on SEDAR ([www.sedar.com](http://www.sedar.com)) on October 24, 2013. In May 2005, Temex entered into an option agreement with Porcupine Gold Mines ("PGM"), a joint venture (the "Joint Venture") between Goldcorp Inc. and Goldcorp Canada Ltd. ("Goldcorp"), which granted Temex the option to earn a 60% undivided interest in the Whitney Property. The property was originally defined by certain patented and unpatented claims on which the former Broulan Reef Mine is located and beginning at 1000 feet below surface on the Hallnor Mine block which includes the former Hallnor and Bonetal Mines.

In June 2009, the Company delivered notice to PGM that it was exercising the option to earn a 60% interest in the property and its intention to form the joint venture by certifying that Temex had met all the requirements to exercise including: i) incurring \$4.0 million in eligible exploration expenditures by May 26, 2009; ii) delivering a final statement of expenditures; and iii) delivering notice that all obligations had been fulfilled.

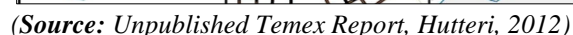
On June 29, 2010, Temex entered into the joint venture agreement with Goldcorp (as manager, and on behalf, of PGM) for the exploration and evaluation, and if feasible, the development and mining of mineral resources on certain properties, including those properties which the Company had acquired an undivided 60% interest in pursuant to its option agreement with PGM, as well as the upper portion of the Hallnor Mine Property (the "Upper Hallnor Mine Property"), which the Company acquired an interest in pursuant to the joint venture agreement.

Under the terms of the joint venture agreement, Temex subsequently acquired an undivided 60% interest in the mining rights (from the surface to a depth of 1,000 feet below the surface) to those parts of certain patented properties known as the Upper Hallnor Mine Property, other than for mining rights in and to certain parts of the Upper Hallnor Mine Property. The purchase price of \$1.25 million for the acquired interest in the Upper Hallnor Mine Property was satisfied in two instalments. The first payment of \$625,000 was required to be made upon execution of the joint venture agreement. Temex elected to satisfy the initial payment by issuing 2 million common shares. The second payment was completed in June 2011 with the issuance of 2 million common shares thereby acquiring an undivided 60% interest in the upper portion of the Hallnor Mine Property.

Pursuant to the joint venture agreement, Temex was appointed as the operator with overall responsibility to manage and carry out operations under the joint venture agreement. A minimum joint work program totalling \$8.33 million will be undertaken over a 5 year period. Temex has agreed to fund a minimum total of \$5 million in exploration expenditures prior to the end of the fifth anniversary of the joint venture agreement. The Company met the \$5 million expenditure level as of October 31, 2012.

The initial participating interests of Temex and Goldcorp of 60% and 40%, respectively, are subject to dilution in accordance with the terms of the joint venture agreement and conversion to an NSR royalty interest in the event that any such participating interest is reduced to 10% or less.

**Figure 4.2**      **Location of the Claims of the Temex Property**



Claim / Lease No.	Type	Parcel No.	Lot	Conc.	Area (ha)	Rights <sup>(1)</sup>	Property Tax (2013)
P1193792	Unpatented		11	5	32		N/A
P1193793	Unpatented		12	5	16		N/A
4736WT	Patent	4736W+T	N1/2, Lot 7	5	64.750	S	\$259.00
P13170	Patent	13790W+T	NW 1/4, N1/2, Lot 9	4	16.187	S	\$64.75
P13171	Patent	13790W+T	SW 1/4, N1/2, Lot 9	4	16.187	S	\$64.75
P14843	Patent	13790W+T	NE 1/4, N1/2, Lot 9	4	16.187	S	\$64.75
P13095	Patent	13790W+T	NW 1/4, N1/2, Lot 10	4	16.187	S	\$65.07
P13086	Patent	13790W+T	SE 1/4, N1/2, Lot 10	4	16.026	S	\$64.10

**TABLE 4.1**  
**UNPATENTED AND PATENTED CLAIMS OF THE TEMEX PROPERTY**

Claim / Lease No.	Type	Parcel No.	Lot	Conc.	Area (ha)	Rights <sup>(1)</sup>	Property Tax (2013)
P12743	Patent	13790W+T	NE 1/4, N1/2, Lot 10	4	16.187	S	\$64.75
P13090	Patent	13790W+T	SE 1/4, N1/2, Lot 10	4	16.026	S	\$64.75
P12694	Patent	13790W+T	NE1/4, N1/2, Lot 12	4	15.783	S	\$63.13
P12693	Patent	13790W+T	NW1/4, N1/2, Lot 12	4	15.783	S	\$63.13
P1193	Patent	13790W+T	SE 1/4, S1/2, Lot 9	5	16.440	S	\$65.76
P13087	Patent	13790W+T	NE 1/4, S1/2, Lot 9	5	16.440	S	\$65.76
P14566	Patent	13790W+T	SE 1/4, N1/2, Lot 9	5	16.440	S	\$65.76
P7640	Patent	13790W+T	SW 1/4, N1/2, Lot 9	5	16.440	S	\$65.76
P1309	Patent	13790W+T	NW 1/4, S1/2, Lot 9	5	16.440	S	\$65.76
P13096	Patent	13790W+T	SE 1/4, S1/2, Lot 10	5	15.985	S	\$63.94
P12708	Patent	13790W+T	SW1/4,S1/2, Lot 10	5	15.985	S	\$63.94
P12709	Patent	13790W+T	NW 1/4, S1/2, Lot 10	5	15.580	S	\$62.32
13790WT-44	Patent	13790W+T	N 1/2, Lot 10	5	64.750	S	\$259.00
P13091	Patent	13790W+T	NE 1/4, S1/2, Lot 10	5	15.580	S	\$62.32
P12727	Patent	13790W+T	SE 1/4, S1/2, Lot 12	5	16.137	S	\$64.55
P6578	Patent	13790W+T	SW 1/4, S1/2, Lot 12	5	16.137	S	\$64.55
P12892	Patent	13790W+T	NE 1/4, S1/2, Lot 12	5	16.137	S	\$64.55
P13728	Patent	13790W+T	SE 1/4, N1/2, Lot 12	5	16.137	S	\$64.55
P7643	Patent	13790W+T	SW 1/4, N1/2, Lot 12	5	16.137	S	\$64.55
P7644	Patent	13790W+T	NW1/4, N1/2, Lot 12	5	16.137	S	\$64.55
P7645	Patent	13790W+T	NW 1/4, S1/2, Lot 12	5	16.137	S	\$64.55
P12691	Patent	13790W+T	NE1/4, N1/2, Lot 11	4	16.238	S	\$64.95
P12692	Patent	13790W+T	NW1/4, N1/2, Lot 11	4	16.238	S	\$64.95
P12804	Patent	13790W+T	SW 1/4, N1/2, Lot 11	4	16.238	S	\$64.95
P12805	Patent	13790W+T	SE 1/4, N1/2, Lot 11	4	16.238	S	\$64.95
P12576	Patent	13790W+T	SW 1/4, S1/2, Lot 11	5	16.592	S	\$66.37
P12575	Patent	13790W+T	SE 1/4, S1/2, Lot 11	5	16.592	S	\$66.37
P18996	Patent	13790W+T	SW 1/4, S1/2, Lot 7	5	16.491	S	\$65.96
P14908	Patent	13790W+T	SE 1/4, S1/2, Lot 7	5	16.491	S	\$65.96
P14932.5	Patent	13790W+T	NW 1/4, S1/2, Lot 7	5	16.491	S	\$65.96
P14933.5	Patent	13790W+T	NE 1/4, S1/2, Lot 7	5	16.491	S	\$65.96
P18522	Patent	13790W+T	NE 1/4, N1/2, Lot 8	5	15.541	S	\$61.80
P18523	Patent	13790W+T	SE 1/4, N1/2, Lot 8	5	14.892	S	\$59.57
P18524	Patent	13790W+T	NE 1/4, S1/2, Lot 8	5	15.054	S	\$60.22
P18995	Patent	13790W+T	SW 1/4, S1/2, Lot 8	5	16.187	S	\$64.75
P1780	Patent	13790W+T	SE 1/4, S1/2, Lot 8	5	16.187	S	\$64.75
P14601	Patent	13790W+T	SW 1/4, N1/2, Lot 8	5	16.187	S	\$64.75



<b>TABLE 4.1</b> <b>UNPATENTED AND PATENTED CLAIMS OF THE TEMEX PROPERTY</b>							
<b>Claim / Lease No.</b>	<b>Type</b>	<b>Parcel No.</b>	<b>Lot</b>	<b>Conc.</b>	<b>Area (ha)</b>	<b>Rights<sup>(1)</sup></b>	<b>Property Tax (2013)</b>
P14597	Patent	13790W+T	NW 1/4, S1/2, Lot 8	5	16.187	S	\$64.75
P13097	Patent	13790W+T	SW 1/4, S1/2, Lot 9	5	16.440	S	\$65.76
						<b>Total</b>	<b>\$3,293.08</b>
<b>Total</b>	<b>2 Unpatented and 45 Patents</b>				<b>871.117</b>	<b>60% Billed to Temex</b>	<b>\$1,975.85</b>

### 4.3 PERMITS

No permits are required to conduct exploration on the patented claims.

### 4.4 ENVIRONMENTAL LIABILITY

The past producing mines including the Hallnor, Broulan, Bonetal, Bonwhit, Reef, Hugh-Pam and Banner that were originally owned by separate companies and operated mainly in the 1950's and 1960's are subject to a closure plan submitted by the Porcupine Joint Venture dated December 22, 2003 and approved by the Ontario Ministry of Northern Development and Mines.

Three distinct tailings deposits remain on the property that are associated with the former mining operations at the Hallnor and Broulan mines. The closure plan is managed by Goldcorp. Since late 2011, Goldcorp has been doing work to rehabilitate the tailings dam.

A mine closure plan, prepared by the Porcupine Joint Venture, was filed with the Ministry of Northern Development and Mines in 2003 and outlines rehabilitation measures and site monitoring programs for the Property.

As a condition of the joint venture agreement, Temex may be required to contribute, to a maximum of \$5 million, towards the reclamation, remediation and other costs under a closure plan for all previous activities on the Hallnor Mine Property. Upon the Company having incurred the aggregate of \$5 million in exploration expenditures the Company was deemed to have contributed \$2 million towards such costs thereby reducing the maximum contribution to \$3 million.

## **5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY**

### **5.1 ACCESSIBILITY**

Road access to the central portion of the Property is easily achieved by travelling north on Florence Street, a few kilometres from Highway 101 in Porcupine. Florence Street turns into a gravel road just beyond the residential area. This road passes through the centre of the claim block and leads to the Bell Creek Mine and mill located several kilometres to the north. Secondary gravel side roads provide access to other portions of the Property. Access to the eastern portion of the Property containing the Bonetal and Hallnor Mines on the east side of the Porcupine River is via Highway 101 by travelling north on Hallnor Road, a main access road that leads to the Pamour and Hoyle Mine sites currently operated by Goldcorp (Figure 4.1 and Figure 4.2).

### **5.2 CLIMATE**

The Timmins area has a typical continental climate characterized by cold, dry winters and warm, dry summers. Average daily temperatures in the Timmins area vary from a low of -24°C in the winter to 24°C in the summer. Average annual precipitation is 581 mm of rain and 352 cm of snow. Most of the precipitation occurs between June and November. Climate trends are shown in Figure 5.1.

### **5.3 LOCAL RESOURCES AND INFRASTRUCTURE**

The full range of equipment, supplies and services required for any mining development is available in Timmins that has a population of approximately 43,000. The general Timmins area also possesses a skilled mining work force from which personnel could be sourced for any new mine development.

Regional power lines extend northeast of Timmins and two power lines cross the Property. A spur of the Ontario Northland Railway crosses the south-eastern boundary of the Property (Figure 4.2). A natural gas line also crosses the property from west to east via the former Broulan Reef shaft to the Kidd Creek Smelter.

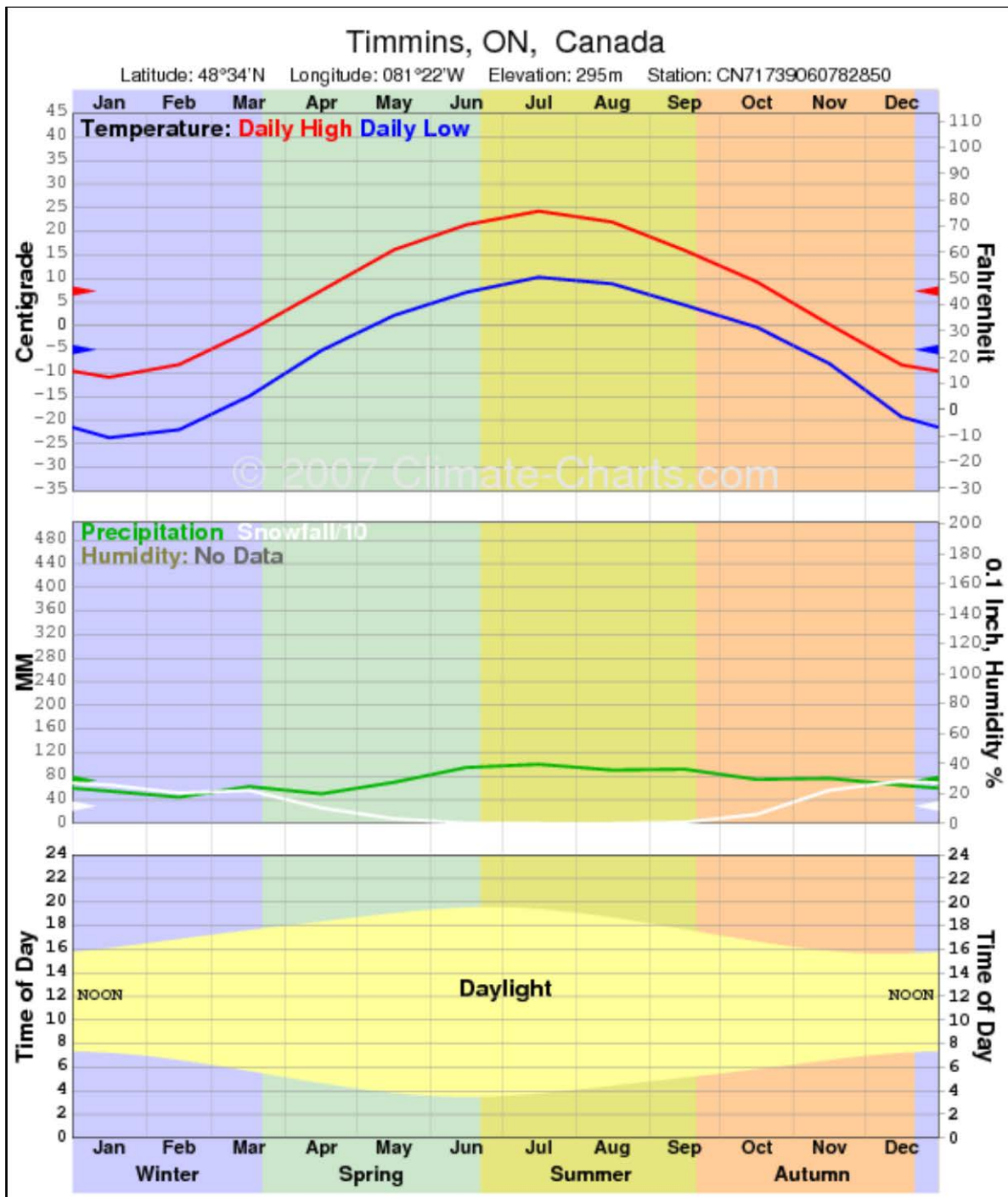
Abundant water resources are present in the lakes, rivers, creeks, and beaver ponds throughout the area. There is sufficient space on the Properties to build a mine and mill. Likewise, there are several suitable locations to construct environmentally sound tailings disposal area(s).

### **5.4 PHYSIOGRAPHY**

As a general statement, the Timmins area is within the Great Clay Belt of the Canadian Shield and consists of local islands of higher ground, either bedrock-cored or as glacial deposits such as eskers, within large areas of spruce, alder and cedar swamp. Eskers typically trend north-south. The areas of higher ground are variably covered by jack pine, balsam and poplar forests with locally thick underbrush of species such as moose maple. Relief is generally low with some local higher relief bedrock ridges. The area in general is poorly drained, a reflection of the low relief. Mean elevation in the area is on the order of 300 m asl. Outcrop exposure overall averages less than 5 % and is 0 % over large areas, particularly north of Timmins.

The topography of the Whitney Property is an undulating, low relief, lacustrine plain with few bedrock outcrops. The area is characterized by slow runoff into the centrally located, north flowing Porcupine River system leading into Nighthawk Lake.

**Figure 5.1 Climate Chart of the Timmins Area**



(Source: [www.climate-charts.com](http://www.climate-charts.com))

## 6.0 HISTORY

George Bannerman discovered what became the Banner Shaft in 1909. Since then there has been a long history of exploration and mining on the Property in different campaigns between 1927 and 1981 (Table 6.1). Table 6.1 is sourced and summarized from the technical report by Hutteri (2012).

<b>TABLE 6.1</b> <b>HISTORICAL EXPLORATION ON THE WHITNEY GOLD PROPERTY</b>		
<b>Year</b>	<b>Company</b>	<b>Exploration</b>
1909 - 1911	George Bannerman	Prospector discovered gold bearing quartz vein near current Banner Shaft. Scottish Ontario Gold Mining Company sank a 90 ft shaft with 260 ft of drift.
1915 - 1917	Porcupine Reef Mining Co.	Broulan Reef shaft sank to 100 ft. 104 oz of Au produced
1927	Scottish Ontario Syndicate	Leased Banner Shaft property, briefly mined high grade shoot.
1928 – 1929	Canusa Mining and Exploration Ltd.	Enlarged Banner Shaft to 3 compartment shaft and deepened it to 320 ft with 135 ft of drifting. Minor Au production.
1930 - 1937	Canusa Gold Mines Ltd.	Diamond drilling, small shaft sunk, two small mills constructed, 2,300 ft of lateral development on the Banner Shaft property. Minor Au production.
1934 – 1935	Noranda	Claims staked west of the Pamour area. 5,553.5 ft of diamond drilling.
1936 – 1971	Noranda	Formed Hallnor Mines to exploit deposit. Diamond drilling, mill constructed, 3 compartment shaft sank to 3,475 ft and a winze from the 21 <sup>st</sup> level down to a depth exceeding 5,000 ft.
1937	McIntyre Porcupine Mines Ltd.	Surface diamond drilling and exploration on Broulan Reef Mine area.
1938 – 1951	Bonetal Gold Mines Inc.	Agreement in place with Noranda to drift over from the Hallnor Mine to the Bonetal Mine. Surface drilling conducted, 3 compartment sank to 571 ft, later connected to the Bonwhit workings on the 512 level. Mine produced 51, 510 oz.
1944 – 1951	Porcupine Reef Gold Mines	Magnetic surveying and 16,000 ft of surface drilling completed on Broulan Reef. Shaft deepened to 1058 ft with 13,246 ft of lateral development. 68,354 oz Au produced.
1945- 1946	Banner Porcupine Mines Ltd.	22 drill holes totalling 13,065 ft advanced on Banner Shaft area.
1952 – 1965	Broulan Reef Mines Ltd.	Shaft deepened to 2,556 ft, winze sunk from 2,500 to 2,673 ft levels. 430,470 oz Au produced. Mine closed in 1965, mine buildings subsequently taken down.
1960 – 1963	Rollex Mines Ltd.	Four drill holes advanced totalling 2,003 ft approximately 1 km NW of Broulan Reef Shaft. No assays recorded in logs.
1966	Broulan Reef Mines Ltd.	Dewatered underground workings and sampled the Bonetal Mine.

<b>TABLE 6.1</b> <b>HISTORICAL EXPLORATION ON THE WHITNEY GOLD PROPERTY</b>		
<b>Year</b>	<b>Company</b>	<b>Exploration</b>
1975 – 1989	Pamourex	Sporadic exploration on the Hallnor Mine. Mine kept on care and maintenance. Mine was allowed to flood after attempts to acquire adjacent Broulan Reef failed.
1983	Kidd Creek Mines Ltd.	Horizontal Loop EM and magnetic surveying on the Broulan Reef area. 2 drill holes totalling 1,946 ft, no assay results reported.
1983 – 1985	Newmont Mines	Optioned Broulan Reef and Hugh Pam properties. Conducted magnetic and IP surveys, compilation work and 4,014 ft of surface drilling.
1986 – 1987	Mill City Gold Inc.	VLF-EM and IP surveys and RC drilling. 13 of 44 RC holes drilled were on Whitney Gold Property.
1986 – 1989	Belmoral Mines	Geological surveying and 40,400 ft of diamond drilling from surface and 18,277 ft from underground on C Zone. Built head frame and rehabilitated Broulan Reef shaft after dewatering underground workings. A further 2434 ft of drifting, 9 ft of raising and 62 ft of shaft sinking was carried out before mine closure in 1989.
1990 – 1999	Royal Oak Mines	Acquired the Pamour and Broulan Property. Compilation work, resource calculation on the Reef pit area and Hugh Pam conglomerate zone. 15,294 ft of diamond drilling on shallow Hallnor vein structures. Shaft rehabilitation to reach 22 <sup>nd</sup> level. 20,383 ft of underground diamond drilling carried out on the 14th level of the Hallnor Mine. Mine allowed to flood in 1998. Sporadic surface drilling carried out around Hallnor mine to the end of 1999.
1999	Kinross Gold Corporation	Kinross took ownership of all Timmins and area Royal Oak properties following the dissolution of Royal Oak Mines
2000 – 2002	Kinross Gold Corporation	Drilled west of Bonetal shaft in search of additional TN vein mineralization around the Hallnor Mine. Completed 40 km of line cutting, magnetic and IP surveying along volcanic/sediment contact between the Broulan Reef and Hallnor mine sites. 34 holes and 5,285 m of stratigraphic drilling were carried out along contact area and 6 holes totalling 968 m was carried out over IP anomalies in the volcanics. Compilation work also conducted.
2002 – 2003	Porcupine Joint Venture	Compilation of previous work. 25 hole drill program totalling 12,971 ft. Geochemical sampling of drill core. Property wide structural study completed by David Rhys.

## 6.1 HISTORIC DRILLING

This section reports on drilling by Temex from 2005 to 2012.

### 6.1.1 2005-2006 Drilling

Temex began drilling on the Whitney Property in the fall of 2005. Phase 1 consisted of 16 holes (TW05-01 to TW05-16) totalling 2,622.4 m. The program focused on near surface mineralization on the C-Zone and Hugh Pam Zone. The Phase 2 drill program commenced in the winter of 2006 and consisted of 23 drill holes (TW06-17 to TW06-39) totalling 3,423 m. The Phase 2 drill program focused on near surface targets such as the Hugh Pam Zone, the Reef Pit

Zone and the C-Zone. The first two phases of drilling confirmed that historical drill results reported in the C-Zone were consistent in width, grade and morphology to those in the 2005-2006 drilling.

Significant intersections include 7.91 g/t Au over 29.3 m including 26.94 g/t Au over 7.0 in hole TW05-11 advanced in the Hugh-Pam Zone. Hole TW06-30, advanced in the Reef Offset Zone, yielded 4.56 g/t Au over 3.5 m including 15.64 g/t over 1.0 m.

#### **6.1.2 2007 Drilling**

Phase 3 of the drilling on The Property was completed during July and August of 2007. The Phase 3 program comprised 13 diamond drill holes (TW07-41 to TW07-54) totalling 2,107.5 m. The aim of the program was to find additional, relatively shallow gold mineralization within the Broulan Reef portion of the Whitney Property. The main target areas were the Hugh Pam Conglomerate, Reef Offset, Reef Pit, Banner Shaft and Variolitic Hyaloclastite “Chicken Feed” Zones. The best assay interval observed in the Hugh Pam Conglomerate was 2.47 g/t Au over 14.1 m, including 5.18 g/t Au over 4.7 m from hole TW07-45. The Mulholland shear zone was intersected in several holes adjacent to the Hugh Pam conglomerate with the best assay of 2.36 g/t Au over 2.3 m obtained from borehole TW07-43.

#### **6.1.3 2008 Drilling**

Phase 4 of the drilling on the Property was completed during February and May of 2008. The Phase 4 program comprised 19 diamond drill holes (TW08-55 to TW08-73) totalling 3,324.5 m. The aim of the program was to test for additional near surface mineralization within the north-western Variolitic Hyaloclastite (the “Chicken Feed”) zone, Bonetal 2-891 stope area, C Zone West area and the Broulan Reef Mine area.

The seven holes advanced on the Variolitic Hyaloclastite zone did not yield significant gold values. Three holes drilled east of the Bonetal 2-891 stope yielded intersections of 4.86g/t Au over 0.8 m, 2.35 g/t Au over 7.3 m and 5.60 g/t Au over 1.8 m. One hole drilled west of the C Zone yielded 2.23 g/t Au gold over 4.4 m. Eight holes were drilled in the Broulan Reef mine crown pillar, hanging wall and footwall areas. The best assay results obtained included 33.46 g/t Au over 5.4 m from hole TW08-67, 30.14 g/t Au over 0.9 m from hole TW08-71 and 49.37 g/t Au over 0.8 m

#### **6.1.4 2008-2009 Drilling**

Phase 5 of the drilling on the property was conducted between May 2008 and May 2009. The Phase 5 program comprised 15 diamond drill holes (TW-08-74 to TW09-79) totalling 8,858.9 m. The aim of the program was to test new areas for mineralization and to locate down dip and down plunge extensions to known gold bearing structures. The program targeted the deep Vipond area, the deep Hallnor west boundary area and a new target within the Timiskaming quartzite.

Two holes advanced to intersect the Broulan Reef Shear within the Vipond Formation did not return significant gold values. Eleven holes targeted the Lower Hallnor 11, 19, and 20 Vein systems, within 125 metres of the former Hallnor west boundary. Gold values obtained from the 19 Vein system include 21.10 g/t Au over 6.55 m, 3.15 g/t Au over 3.10 m and 21.02 g/t Au over 2.3 m. No significant gold values were obtained from the deeper intercepts on the 20 Vein.

Narrow high grade intervals were encountered within the broad 19 Vein alteration envelop and the 13 Vein zone.

### **6.1.5 2010 Drilling**

Phase 6 of the drilling on the property was conducted between July 2010 and December 2010. The Phase 6 program comprised 46 diamond drill holes totalling 14,204 m. The program targeted the Bonetal Mine area, 1-55 North and South Veins, Hallnor Q Zone, Hallnor South Veins and Hallnor 6 Vein/footwall areas within the Bonetal-Upper Hallnor Mine portion of the property.

Eight holes were advanced in the Bonetal Mine area and the grades obtained were comparable to the historical mining grades. The best value obtained from the drilling was 5.61 g/t Au over 8.7 m.

Twelve holes were advanced on the 1-55 North and South veins and confirmed the continuity of the gold mineralization and potential stoping blocks within these vein structures. Gold values obtained on the 1-55 North and South Veins from this program include 24.75 g/t Au over 0.7 m and 18.74 g/t Au over 2.1 m respectively.

Four deep holes, ranging from 639.7 to 803.0 m were advanced to intersect the Hallnor Q Zone target. Gold values up to 180.0 g/t over 0.5 m were encountered within the quartzite unit well above the projected intersection of the Q Zone veining.

The four holes advanced into the remnants and extensions of the main Hallnor vein yielded results up to 7.59 g/t Au over 1.4 m.

Four drill holes, totalling 1,082.0 m, were carried out in the Hallnor South vein area targeting down-dip and strike extensions of mined veins and a moderate north-dipping high grade vein system. Gold bearing intersections included 21.16 g/t Au over 4.1 m and 3.24 g/t Au over 8.9 m.

Nine holes, totalling 4,021.9 m were drilled within the Hallnor footwall area in close proximity to the mined out hook shaped 6 Vein. A variety of narrow and wide, and both north and south-dipping quartz veins and stockworks yielded gold values of 6.47 g/t over 5.7 m, 9.94 g/t over 6.7 m, 5.81 g/t over 11.4 m and 3.04 g/t over 10.0 m.

### **6.1.6 2011-2012 Drilling**

Phase 7 of the drilling on the property was conducted between March 2011 and January 2012. The Phase 7 program comprised 78 diamond drill holes totalling 20,909.25 m. The program targeted the Bonetal Reef Mine hanging wall and footwall, the Broulan quartzite horizon, the Bonwhit area, the C Zone, the east extension of the 1-55 Vein and the Hallnor 6 Vein of the Upper Hallnor Mine portion of the property.

Thirty-one holes, totalling 6,100.5 m (TW11-126 to TW11-157), were advanced on the Broulan Reef Mine area to test potentially open pitable gold mineralization within the Broulan Reef flat veins. The westernmost two holes drilled during this program yielded 1.3 g/t Au over 6.1 m in TW11-126 and 1.35 g/t Au over 15.8 m in TW11-127. The eastern half of the Broulan mine produced the highest grades with hole TW11-145 yielding 7.78 g/t Au over 55.4 m between 230.9 and 286.3 m.

Two holes were drilled south of the Broulan Reef to test the Timiskaming quartzite horizon. Hole TW11-154 yielded 122.85 g/t Au over 0.5 m and 5.42 g/t over 0.7 m..

Five infill holes were drilled on the C Zone. The best results were obtained from hole TW11-174 which yielded 1.21 g/t Au over 7.0 m and 12.92 g/t Au over 7.0 m.

Thirteen holes were advanced on the Upper Hallnor 1-55 Vein system. Approximately nine of the drill holes yielded significant gold values, including 2.20 g/t Au over 17.80 m and 5.67 g/t Au over 7.0 m in hole TW11-163 and 9.37 g/t Au over 5.0 m in TW12-195.

Twenty seven holes, totalling 9,776.90 m were drilled into the Hallnor Footwall/6 Vein area. A variety of narrow and wide, north and south-dipping quartz-carbonate veined zones featured gold mineralization. Drill hole TW11-164 intersected 2.83 g/t Au over 11.5 m, hole TW11-167 intersected 2.06 g.t Au over 21.0 m, hole TW11-169 intersected 14.67 g/t Au over 3.8 m, TW11-180 intersected 3.68 g/t Au over 6.73 m, hole TW11-187 intersected 1.07 g/t Au over 31.3 m and hole TW12-198 intersected 2.31 g/t Au over 20.0 m.

## 6.2 HISTORIC PRODUCTION

The Whitney Property includes several past producing gold mines that have had production dating back to the early 1900s. The former producing gold mines include the Hallnor, Bonetal, Bonwhit, Broulan Reef and Hugh Pam mines. These mines have been owned and largely operated separately until 1990. Their production statistics are shown in Table 6.2.

<b>TABLE 6.2</b>				
<b>HISTORIC PRODUCTION</b>				
<b>Mine</b>	<b>Years in Production</b>	<b>Tons Milled</b>	<b>Ounces Produced</b>	<b>Grade (oz/t)</b>
Bonetal	1941-1951	352,254	51,510	0.15
Bonwhit	1951-1954	200,555	67,940	0.34
Broulan Reef	1915-1917, 1947-1965	2,144,507	498,932	0.23
Hallnor	1938-1968, 1981	4,226,419	1,690,560	0.40
Hugh Pam	1926, 1948-1965	636,751	119,604	0.19

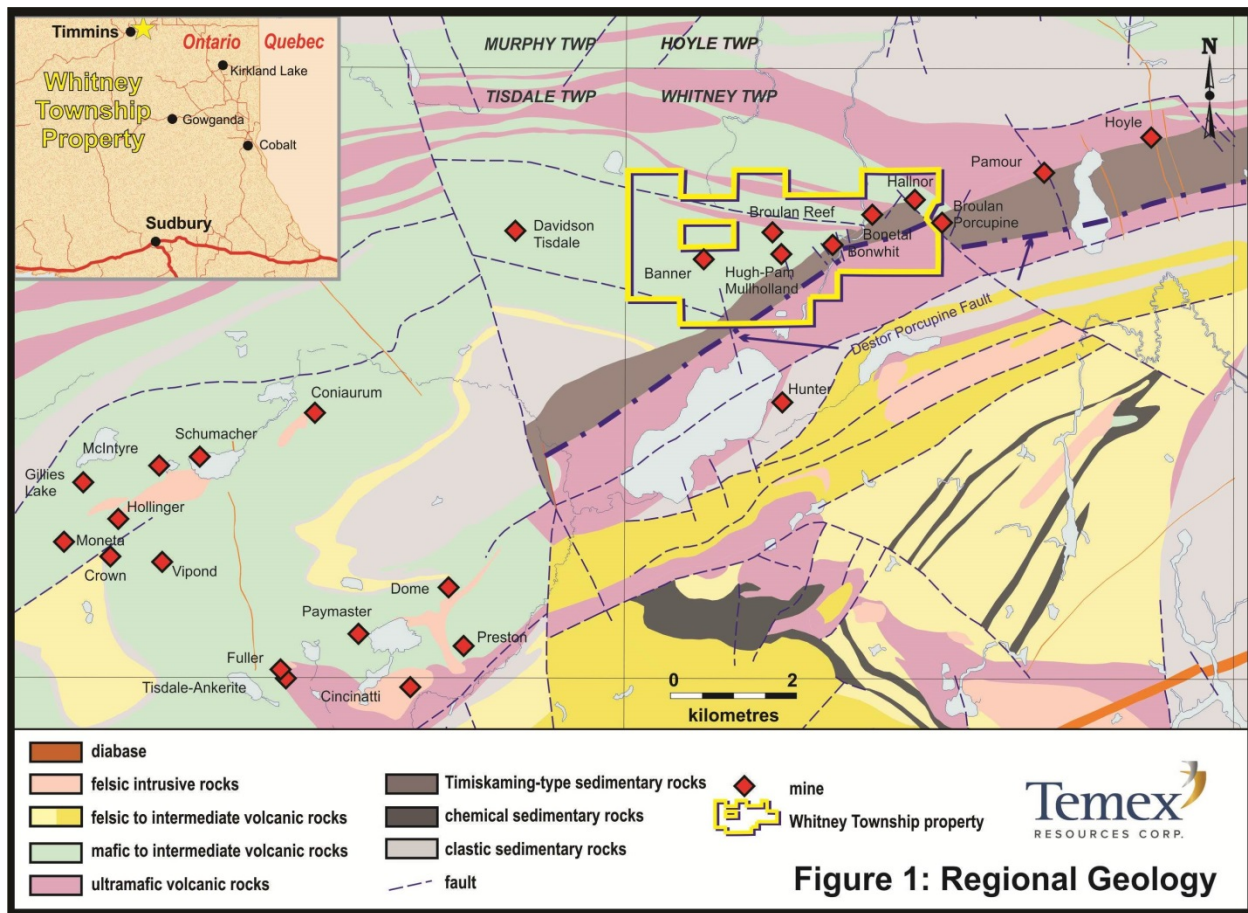
(Source: Gliddon, 2004)



## 7.0 GEOLOGICAL SETTING AND MINERALIZATION

Temex's Whitney Gold Property (Figure 7.1 - Regional Geology) is situated within the southern portion of the Archean (ca. 2.7 Ga) Abitibi Greenstone Belt of the Superior Province of the Canadian Shield. The Abitibi Greenstone Belt consists of a regionally east-west striking suite of dominantly mafic to felsic metavolcanic, metasedimentary rocks, lesser ultramafic metavolcanic rocks, and a variety of intrusive rocks.

**Figure 7.1 Regional Geology Map**



**Figure 1: Regional Geology**

Temex Resources' Whitney Property is located on a mine trend over 4 km long that has produced over 7 million ounces of gold. This trend includes the Pamour (4,078,525 ounces), Pamour Pit (670,000 to 700,000 ounces to 2011 when production ended), Hoyle (71,843 ounces), Broulan Porcupine (243,757 ounces) mines, located immediately east of the Whitney Property and owned by Goldcorp Inc. Temex reports that historical production at the Hallnor Mine was the highest grade gold mine of those mines that have produced more than 1 million ounces in the Timmins camp. The Hallnor mine produced 1,645,892 ounces of gold at an average grade of 0.40 opt (13.71 g/t) (Temex Resources Corp. Annual Report 2012). Other past producing mines on the Whitney property include Bonetal (51,500 ounces), Bonwhit (67,940 ounces), Broulan Reef (498,932 ounces), and Hugh Pam (119,604 ounces).

Whitney Township occupies a central position in the Porcupine gold camp and consequently there is an extensive history of mineral exploration and mining in the area of the Whitney Property. Descriptions of the Whitney Property geology presented in this report are primarily

based on an unpublished Temex reports written on programs conducted between 2005 and 2012 and mapping by the Ontario Geological Survey in Whitney Township (Pyke 1982; Piroshco and Kettles 1991). Descriptions of the regional geology and adjacent properties are also based on the 1991 IAGOD Field Trip Guidebook edited by Fyon and Green (1991). This report uses the lithostratigraphic “assemblage” subdivisions, used by the Ontario Geological Survey. In this framework, the southern Abitibi Greenstone belt is subdivided into several lithostratigraphic assemblages using lithological, chemical, structural and geo-chronological criteria. Some of the assemblages correspond in whole or part to “groups” used in the historic mapping.

## **7.1 REGIONAL GEOLOGY**

Within the Porcupine gold camp of the Abitibi Greenstone belt, the metavolcanic rocks are part of the Deloro and Tisdale assemblages (Fyon and Green 1991) (previously referred to as Deloro and Tisdale Groups, Pyke, 1982) and the metasedimentary rocks are part of the Porcupine and Timiskaming assemblages.

The Deloro assemblage is the oldest metavolcanic sequence in the Porcupine gold camp and consists of calc-alkaline basalt, andesite, dacite, and rhyolitic pyroclastic rocks capped by chert and iron formation (Fyon and Green 1991). The Deloro assemblage is confined to the Shaw Dome, a domal feature to the south of the Whitney property. Based on U/Pb geochronology, the felsic metavolcanic rocks of the Deloro Group are thought to be as old as 2,727 Ma (Corfu et al 1989). The younger, overlying Tisdale assemblage consists of basal ultramafic volcanics and basaltic komatiites, overlain by a thick sequence of tholeiitic basalts and capped by minor dacitic volcanoclastics (Pyke, 1982). The Tisdale assemblage volcanoclastics have been dated at 2,698 +/-4 Ma (Corfu et al. 1989). The Tisdale assemblage underlies the northern part of the Whitney Property and is an important host rock for gold mineralization.

In Whitney Township, a major northeast to east striking belt of clastic metasediments separate the Tisdale assemblage to the north and Deloro assemblage to the south. This sedimentary sequence consisting of wackes, siltstones, sandstones and lesser conglomerate includes the Porcupine and Timiskaming groups (Piroshco and Kettles, 1991), and subsequently is referred to as the Porcupine assemblage and Timiskaming assemblage (Fyon and Green 1991).

The Porcupine assemblage is the older of the two metasedimentary groups and consists of metawacke and argillite that conformably overlies the Tisdale assemblage. The younger Timiskaming assemblage consists of metawacke, slate, and metaconglomerate and forms an angular unconformity with both the Tisdale assemblage metavolcanics and Porcupine assemblage metasediments within the Timmins area (Piroshco and Kettles, 1991). Piroshco and Kettles (1991) report that the Timiskaming rocks strike east, north east, dip subvertically and in most places are overturned with south facing directions. The angular unconformity also truncates the older fold structures in the Tisdale and Porcupine assemblages. The Timiskaming assemblage is a significant host rock for gold mineralization.

Several prominent deformation zones including the ENE striking Hollinger Main fault, the east striking Dome fault and the east striking Destor Porcupine deformation zone cut rocks of the Tisdale and Timiskaming assemblages. The Destor Porcupine deformation zone also defines the southern boundary of the Timiskaming assemblage in Whitney Township.

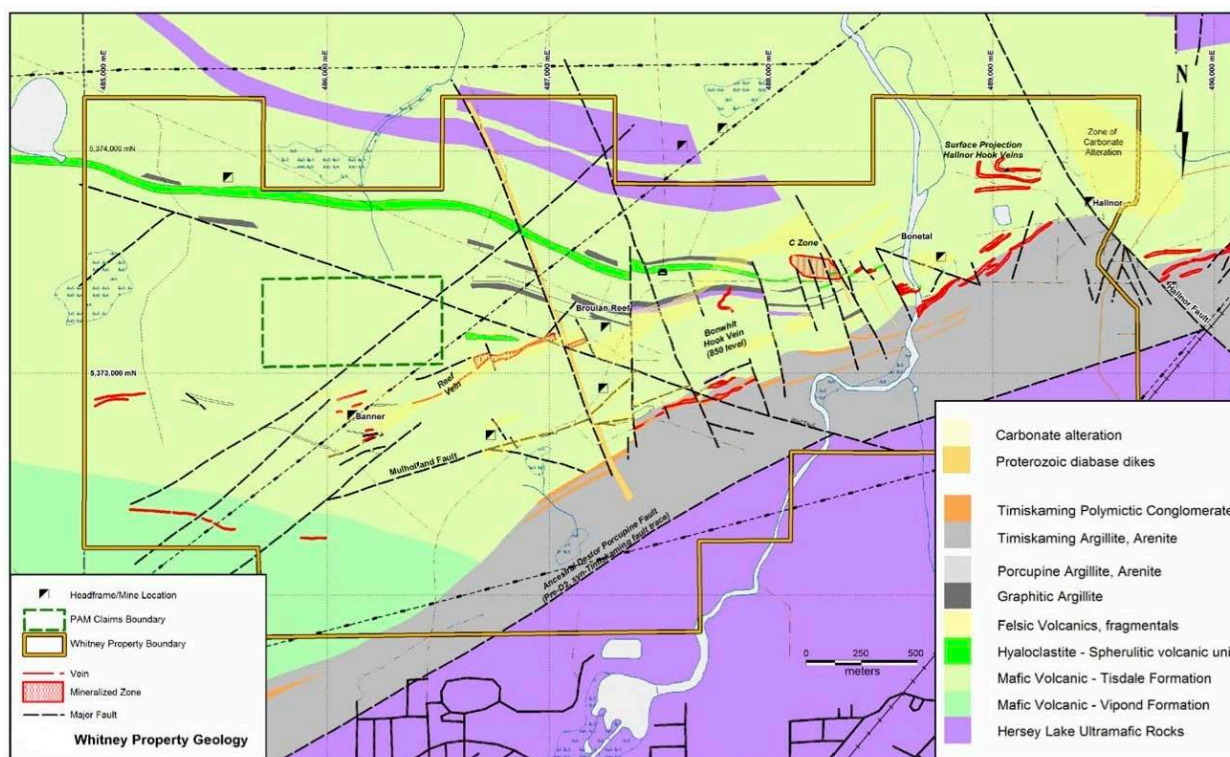
The majority of gold deposits within the Timmins area occur proximal to fault structures or within fault-bounded blocks, and the mineralized vein zones commonly occupy brittle fracture

zones in these areas. The more productive faults recognized to date within the Timmins area are the Destor-Porcupine, Dome, and Hollinger faults. In Whitney Township there is a close spatial relationship of gold deposits to the Timiskaming unconformity. Mines located at or near the unconformity include the Broulan Reef, Bonetal, Hallnor, and Pamour Mines. Most mineralized vein structures in the area are associated with carbonate-quartz-sericite-pyrite-albite alteration envelopes that are superimposed on existing, more extensive carbonate and chlorite alteration zones (Piroshco and Kettles, 1991).

## 7.2 PROPERTY AND DEPOSIT GEOLOGY

The Hallnor and Broulan Reef deposits on Temex's Whitney property (Figure 7.2 - Property Geology) straddle the east-northeast striking unconformity between the younger Timiskaming assemblage metasediments to the south and older Tisdale assemblage metavolcanic rocks to the north.

**Figure 7.2 Property Geology Map**



In the area of the property, the Timiskaming assemblage sediments are subdivided into two formations referred to as the Dome and Three Nations Lake formations. The Dome formation is the oldest of the two and occurs on the south side of the Timiskaming unconformity. The Dome formation consists of a basal conglomerate known as the Pamour conglomerate which is overlain by turbiditic sandstones, greywackes and mudstones (Born, 1996). The Pamour conglomerate is an important host rock for gold mineralization on the Whitney and adjacent properties. The younger and overlying Three Nations Lake formation is more mature, well-sorted sandstones, arkose, conglomerate and pebbly sandstone, and pebble conglomerate beds (Born, 1996). Both formations are overturned, dip steeply to the north and have a fining upwards sequence to the south. The Broulan conglomerate forms the basal contact unit of the Three Nations Lake

Formation and is a marker horizon. It lies approximately 200 metres south of the Pamour conglomerate within the Hallnor Mine area.

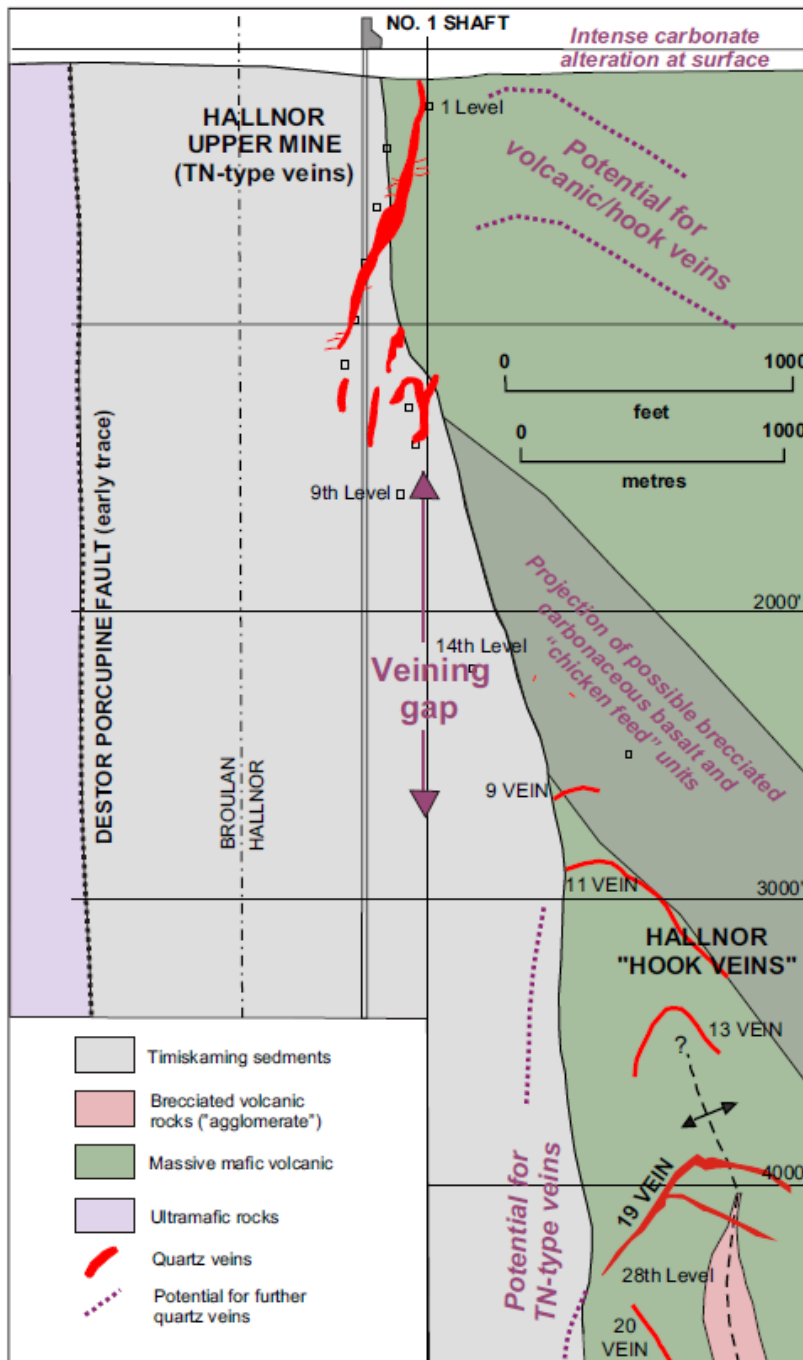
The older Tisdale assemblage volcanics are located in the northern part of the property and as described by Hutteri (2012) consist of an overturned, moderate to steep-north dipping, southeast to east-striking sequence of komatiitic volcanics, massive, pillowed and spherulitic iron tholeiites, and minor interflow sediments. The Tisdale volcanics on the Whitney Property have been further divided into three formations referred to as the Hershey Lake Formation in the north, Central, and Vipond Formations further to the south. Several prominent marker horizons occur within the Tisdale assemblage. These are the variolitic hyaloclastite (“chicken feed”) “95 flow” within the lower Central formation located within the northern part of the property, and the “99 flow” which occurs as thick, massive, and coarser grained mafic flows in the lower Vipond formation, found in the south-west part of the property. These important marker horizons indicate that the gold-bearing quartz vein systems within the Whitney Township Property are hosted within the same stratigraphy as the Hollinger mine (Hutteri 2012).

Labine (1994) describes the past producing Hallnor Mine as consisting of Upper and Lower Deposits separated by a barren zone between 1,400’ and approximately 2,600’. Native gold occurs in quartz veins with minor disseminated pyrite, pyrrhotite and sphalerite. The Upper Mine exploited a system of steep south dipping, east plunging zones mainly hosted in metasedimentary rocks. Sub-horizontal quartz stringers connecting the steep structures are common. The Lower Mine consisted of a variety of structural styles with quartz veins mainly occurring in the metavolcanics.

Whereas the past producing Hallnor Mine straddles the unconformity between the Tisdale and overlying Timiskaming assemblages, both the C-Zone and Broulan Reef Deposits are hosted entirely by overturned steeply north dipping and south facing metavolcanics of the Tisdale assemblage.

At the Broulan Reef, past production was from a single ENE trending and steep southeast dipping quartz-carbonate+/-albite vein in a host shear zone that obliquely transects the metavolcanic sequence. First order ore shoots are shallow northeast plunging and controlled by the intersection of the vein and its host shear zone with the lithologic units (Rhys, 2003). The C-Zone deposit is a west plunging shoot of quartz-carbonate veins with sulphides that occurs in a 20 to 50 m wide zone of foliation striking at 070° and dipping moderately north that cuts the Tisdale assemblage metavolcanic rocks at a 15-20° angle (Wetherup and Smethurst 2006).

**Figure 7.3 Schematic Section in the Hallnor Shaft Area**



**Note:** The Hallnor vein systems comprise the TN type reverse shear veins near surface that are separated from northeast dipping to hook veins at depth. (Rhys, 2003)

### 7.3 ALTERATION AND STRUCTURE

On the Whitney Property, several carbonate (ankerite, Fe-dolomite) +/- sericite alteration zones occur within the metavolcanic and sedimentary units primarily along east-northeast striking weak shear and brittle fracture zones, such as the Broulan Reef, Lower Hallnor and Mulholland shear/fault structures, which are sub-parallel to the Timiskaming unconformity and Destor-Porcupine fault zone. The vein systems within the Broulan Reef-Hallnor area are typically quartz-carbonate+/-albite veins which commonly have an associated carbonate+/-sericite+/-



pyrite wall rock alteration. Hutteri (2012) considers that the carbonate alteration zones and brittle lithologies such as the Hallnor trachyte, polymictic Pamour conglomerate and sandstone horizons have been a more favourable host to mineralized quartz vein systems.

Within the Broulan Reef - Hallnor corridor, Hutteri (2012) reports several distinct structural styles of veining. These include:

- Moderate to steep, south dipping and east-northeast striking shear veins developed within the volcanic rocks such as those at the Broulan Reef and Mulholland shear.
- Sub-vertical to steep south dipping, northeast striking shear veins commonly referred to as TN veins which straddle the volcanic-sediment unconformity contact but which occur largely within the sediments. These occur within the Upper Hallnor, Hugh Pam Conglomerate zone, Bonetal, Porcupine Reef, and Pamour mines;
- Moderate to shallow north dipping, east-northeast striking veins hosted within the volcanics, some of which have folded hook-like or horse-tailed structures. Examples of these veins are the Bonwhit, C Zone, Lower Hallnor veins, Upper Hallnor 12 Vein, and the Pamour 51, 62 and 44 Veins.
- Shallow dipping extension veins commonly occur and are associated with all three vein types.

On a local scale, Hutteri (2012) considers that a number of the vein systems on the Whitney Property show a spatial relationship to low angle cross/thrust faults such as the Broulan Reef, Hallnor, and No.17 faults. These faults may have been active pre-ore structures which may have acted as local barriers to mineralizing fluids. Numerous late, high-angle cross-faults have also disrupted the stratigraphy with local offsets.

Hutteri (2012) reports references to a possible fold structure occurring within the volcanic rocks at depth at the Hallnor Mine which may have had some influence on formation of the hook-veins, but further work is required to confirm this. The presence of steeply-dipping, sub-parallel breccia zones crossing through the fold nose area of the 19 Vein system may also have played a role in the formation of the hook structures. The regionally extensive Destor-Porcupine fault underlies the extreme southeast portions of the claim group.

The Three Nations (“TN”)-type veins at the Upper Hallnor, as well as the deep Hallnor volcanic veins, have been the most productive veins on the Whitney property to date, yielding mined gold grades in the 0.3 to 0.4 oz/ton range. Spectacular coarse gold mineralization has also been reported within the Pamour mine metavolcanic-hosted vein systems to the east. There was a strong nugget effect within the various vein systems, and studies carried out by Royal Oak Mines Inc. on the 19, 15 and 11 Veins within the Lower Hallnor have shown that as low as 30% of drill intersections on some of these mined out veins yielded economic intersections. In addition, within these three vein systems, there was an “improvement factor” of 1.6 times the drill indicated grades when mined (Jarvi, 1984).

Vein systems generally have a moderate to shallow southeast plunge, however, the fold noses of the hook veins appear to plunge moderately to the west. The north dipping metavolcanic-hosted veins and south dipping TN veins may be part of a conjugate vein set and the veins occur as a stacked set of inverted “V” structures related to a system of conjugate fractures (Labine, 1994). The repetition of plunging vein zones at depth at Hallnor shows a periodicity which increases the

probability of finding similar vein systems above and below the 11 and 19 Veins previously identified. The size, shape and whether mineralized zones even formed along these repeating structures was most likely dictated by a combination of the hardness and the geochemistry of the host rocks.

#### **7.4 MINERALIZATION**

Gold occurs in native form associated with quartz veins and as minute gold inclusions in sulphide minerals. Veins vary from millimeters to several centimeters in thickness and are associated with sulphides including pyrite, pyrrhotite, and arsenopyrite. Sulphides occur in both the veins and altered wall rocks.

High grade quartz-tourmaline TN-type veins occur in the wacke units and contain carbonate, tourmaline and sulphides. The presence of arsenopyrite is indicative of higher gold grades and chalcopyrite and sphalerite are indicative of very good grades.

Ribbon veins occur in the metavolcanic rocks and are well-developed veins consisting of quartz carbonate, with minor tourmaline, calcite, chlorite, sphalerite, pyrite and chalcopyrite. Gold in these veins is erratically distributed with high-grade coarse gold.

## 8.0 DEPOSIT TYPES

The Upper Hallnor, Bonetal, C-Zone and Broulan Reef Deposits on the Whitney Gold Property can be broadly classified as mesothermal lode gold deposits in an Archean greenstone belt setting. The Whitney Gold Property is located in the central part of the prolific Porcupine Gold Camp in the Timmins area. Ayer et al. (2005) interpret the main structural and gold mineralization events leading to gold mineralization in the Timmins area as follows:

- D1 uplift and excision of upper Tisdale stratigraphy with formation of an angular unconformity predating deposition of Porcupine assemblage at 2,690 Ma.
- An early, lower grade gold mineralizing event predates the Timiskaming unconformity and may be synchronous with D2, which produced thrusting and folding and early south-over-north dip-slip movement on the Porcupine–Destor deformation zone (PDDZ) between 2,685 and 2,676 Ma.
- The later main stage of gold mineralization is associated with D3, a protracted event which coincided with the opening of the Timiskaming basin but also overprints the Timiskaming sediments. The D3 folding and faulting are coeval with up to 13 km of left-lateral strike-slip movement on the PDDZ. The main stage of gold mineralization provided most of the ore at the Hollinger-McIntyre, Dome and Hoyle Pond mines. Corfu et al. (1989) have documented auriferous quartz veins cutting 2,691 to 2,688 Ma quartz-feldspar porphyry intrusions and a 2,673  $\pm$  6/-2 Ma albitite dike. Rhenium-osmium analyses of molybdenite associated with gold mineralization at the McIntyre Mine provided an age of 2,672 $\pm$ 7 Ma and, at the Dome Mine, 2,670 $\pm$ 10 Ma.
- D4, produced by transpressional strain, included folding and faulting that preserved Timiskaming assemblages in synclines along the PDDZ and is associated with a late stage gold mineralization event along the Pamour Mine trend.

In the Superior Province, mesothermal gold deposits are spatially associated with regional deformation zones such as the Destor Porcupine deformation zone. These large scale structures and the associated Timiskaming-type sediments are interpreted as zones of transpressive terrain accretion (Kerrick and Wyman 1990). Dube and Gosselin (2007) have summarized the general consensus that greenstone-hosted quartz-carbonate vein deposits are related to metamorphic fluids liberated during the accretionary processes and generated by prograde metamorphism and thermal re-equilibration of subducted volcano-sedimentary terranes. The deep-seated, Au-transporting metamorphic fluid has been channelled to higher crustal levels through major crustal faults or deformation zones. Along its pathway, the fluid has dissolved gold and other components from the volcano-sedimentary assemblages, including a potential gold-rich precursor. The fluid then precipitated as vein material or wall-rock replacement in second and third order structures at higher crustal levels through fluid-pressure cycling processes and temperature, pH and other physico-chemical variations.

The Porcupine camp gold mineralization is interpreted to have formed from deposition of gold with hydrothermal quartz veins at crustal depths of 1.5 to 4.5 km (Fyon and Green, 1991). This is consistent with Colvine et al.'s (1988) conclusion that Archean lode gold deposits are formed at deeper crustal levels (2 to 10 km) than younger epithermal deposits.



## **9.0 EXPLORATION**

Temex has not conducted any exploration on the property, besides drilling, since 2010. The drilling is summarized in Section 10.

## **10.0 DRILLING**

The following section references the “Report on the 2012-2013 Exploration Program, Whitney Gold Project, Timmins, Ontario by Temex Resources Corp.” (Harvey, 2013)

To the end of December 2012, eight drill programs have been conducted on the Whitney Property by Temex. Between 2005 and September 2012, Temex drilled 247 surface diamond drill holes totalling 70,094 m. For details on drill programs prior to September 2012, refer to Section 6. The 2012-2013 exploration drill program followed the recommendations from the Sutcliffe, et al. (2012) NI 43-101 report. An outline of the proposed September 2012 open pit is presented in Figure 10.1. Holes were surveyed using either a Lieca TS06 Total Station or a Magellan Pro Mark 3 GPS.

### **10.1 NOVEMBER – DECEMBER 2012 DRILLING PROGRAM**

Following the September 2012 Resource Estimate, a 10 drill hole program, totalling 2,029 m was completed between November 2012 and December 2012. Five holes were advanced into the volcanics east of the Porcupine River to increase the Sept. 2012 in-pit resource estimate and five holes were drilled west of the river, in the Bonetal Mine area, to expand the resource outside the in-pit area on the western portion of the resource.

The drilling focused on the Bonetal Mine Area and the Northwest Volcanic Horizon of the Upper Hallnor area (Table 10.1). Select intervals are presented below. Select significant intersections over 2.0 g/t Au and longer than 1.5 m, and higher grade sub-intervals, are presented in Table 10.2.

#### **10.1.1 Northwest Volcanic Horizon**

The Hallnor hanging wall volcanics were identified as having the best potential to expand the resource within the 2012 in-pit resource. These volcanic rocks are located in the north-west part of the resource and are characterized by multi-ounce, narrow, sheared veins that expand in places into extension vein stockworks.

Five holes were advanced in the north hanging wall volcanics and intersected gold mineralization similar to that found at the former producing Hallnor Mine (Figure 10.2). Holes TW12-234, TW12-236 and TW12-237 targeted inferred resources in the north volcanic hanging wall at the northern extremity of the 2012 resource pit shell. A new, high grade gold zone was found within 50 m of the surface in hole TW12-238 grading 7.33 g/t Au over 5.75 m. Drill hole TW12-238 lies within the 2012 resource pit shell in an area previously designated as waste.

- Drill hole TW12-234 intersected 1.15 g/t Au over 20.00 m, and 1.83 g/t over 4.00 m including 26.10 g/t over 0.50 m.
- Drill hole TW12-237 intersected 2.38 g/t Au over 5.70 m.
- Hole TW12-238 intersected 7.33 g/t Au over 5.75 m including 60.40 g/t Au over 0.50 m and 27.50 g/t Au over 0.35 m.

#### **10.1.2 Bonetal Mine Area**

The Bonetal Deposit area is continuous with the Hallnor Deposit and for all intents is geologically and spatially the western extension of the Hallnor. The distinction only arises from

the deposits being separated by a past ownership boundary now consolidated under the Joint Venture. The unmined boundary pillar between the former producing mines has been the object for exploitation for subsequent owners since consolidation of both properties. The Bonetal workings are located near surface and contain numerous historic high-grade drill intersections. The area was identified as having the best potential to expand the resource outside the in-pit area in the preceding Sept 2012 Technical Report. Five drill holes were advanced in the Bonetal Mine area but outside of the 2012 resource pit shell.

Holes TW12-239 to TW12-243 were drilled in this area near the Bonetal BON2-880 Stope (Figure 10.3).

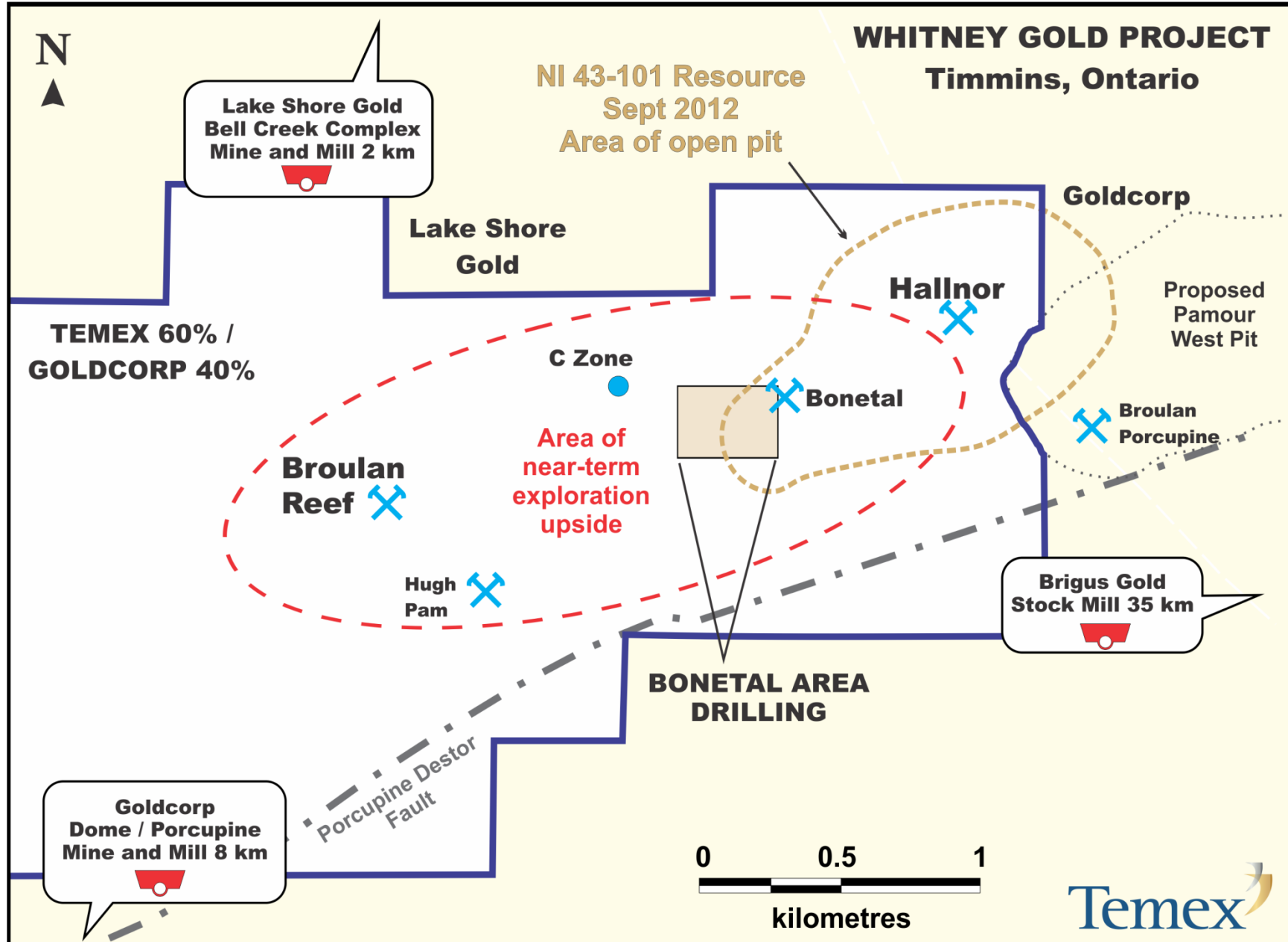
- Drill hole TW12-239 yielded 1.10 g/t Au over 8.00 m including 11.30 g/t gold over 0.50 m.
- Hole TW12-240 intersected 23.20 m grading 1.89 g/t Au including 6.50 g/t Au over 2.70 m and including 28.80 g/t Au over 0.40 m.
- Drill hole TW12-241 yielded 4.15 g/t Au over 3.50 m and 1.68 g/t Au over 5.20 m.
- Hole TW12-242 yielded 4.30 g/t Au over 3.00 m including 16.18 g/t Au over 0.70 m.
- Drill hole TW12-243 intersected 8.00 m grading 1.67 g/t Au, including 0.50 m grading 10.05 g/t Au.

<b>TABLE 10.1</b>							
<b>2012 UPPER HALLNOR DRILL PROGRAM BOREHOLE LOCATION DATA</b>							
<b>DDH No.</b>	<b>Exploration Target</b>	<b>Easting</b>	<b>Northing</b>	<b>Elevation (m)</b>	<b>Dip (°)</b>	<b>Azimuth (°)</b>	<b>Length (m)</b>
TW12-234	Northwest Hanging Wall Volcanics	488848	5373612	287	-45	155	168
TW12-235	Northwest Hanging Wall Volcanics	488801	5373707	282	-50	155	302
TW12-236	Northwest Hanging Wall Volcanics	488831	5373602	287	-45	155	159
TW12-237	Northwest Hanging Wall Volcanics	488864	5373713	284	-48	155	329
TW12-238	Northwest Hanging Wall Volcanics	488753	5373674	280	-50	152	342
TW12-239	Bonetal	488486	5373514	283	-60	155	222
TW12-240	Bonetal	488505	5373473	282	-57	155	171
TW12-241	Bonetal	488528	5373426	282	-55	155	77
TW12-242	Bonetal	488561	5373424	281	-58	145	61
TW12-243	Bonetal	488528	5373494	281	-58	155	198
<b>Total</b>							<b>2,029</b>

<b>TABLE 10.2</b> <b>2012 DRILL PROGRAM SIGNIFICANT INTERSECTIONS</b>					
<b>Hole-ID</b>	<b>From (m)</b>	<b>To (m)</b>	<b>Length (m)*</b>	<b>Au (g/t)</b>	<b>Target</b>
TW12-234	67.50	69.70	2.20	3.48	NW Hanging Wall Volcanics
TW12-237	202.00	207.70	5.70	2.38	NW Hanging Wall Volcanics
Including	202.80	206.40	3.60	3.51	NW Hanging Wall Volcanics
TW12-238	41.00	46.75	5.75	7.33	NW Hanging Wall Volcanics
TW12-240	76.30	90.30	14.00	2.41	Bonetal Mine Area
Including	76.30	79.00	2.70	6.50	Bonetal Mine Area
TW12-240	87.80	90.30	2.50	3.67	Bonetal Mine Area
TW12-241	57.00	60.50	3.50	4.15	Bonetal Mine Area
TW12-241	65.50	70.70	5.20	1.68	Bonetal Mine Area
TW12-242	28.50	31.50	3.00	4.30	Bonetal Mine Area
TW12-243	62.80	70.80	8.00	1.67	Bonetal Mine Area
Including	64.80	68.80	4.00	3.03	Bonetal Mine Area

*\*True widths are not known due to complex folding of the vein systems.*

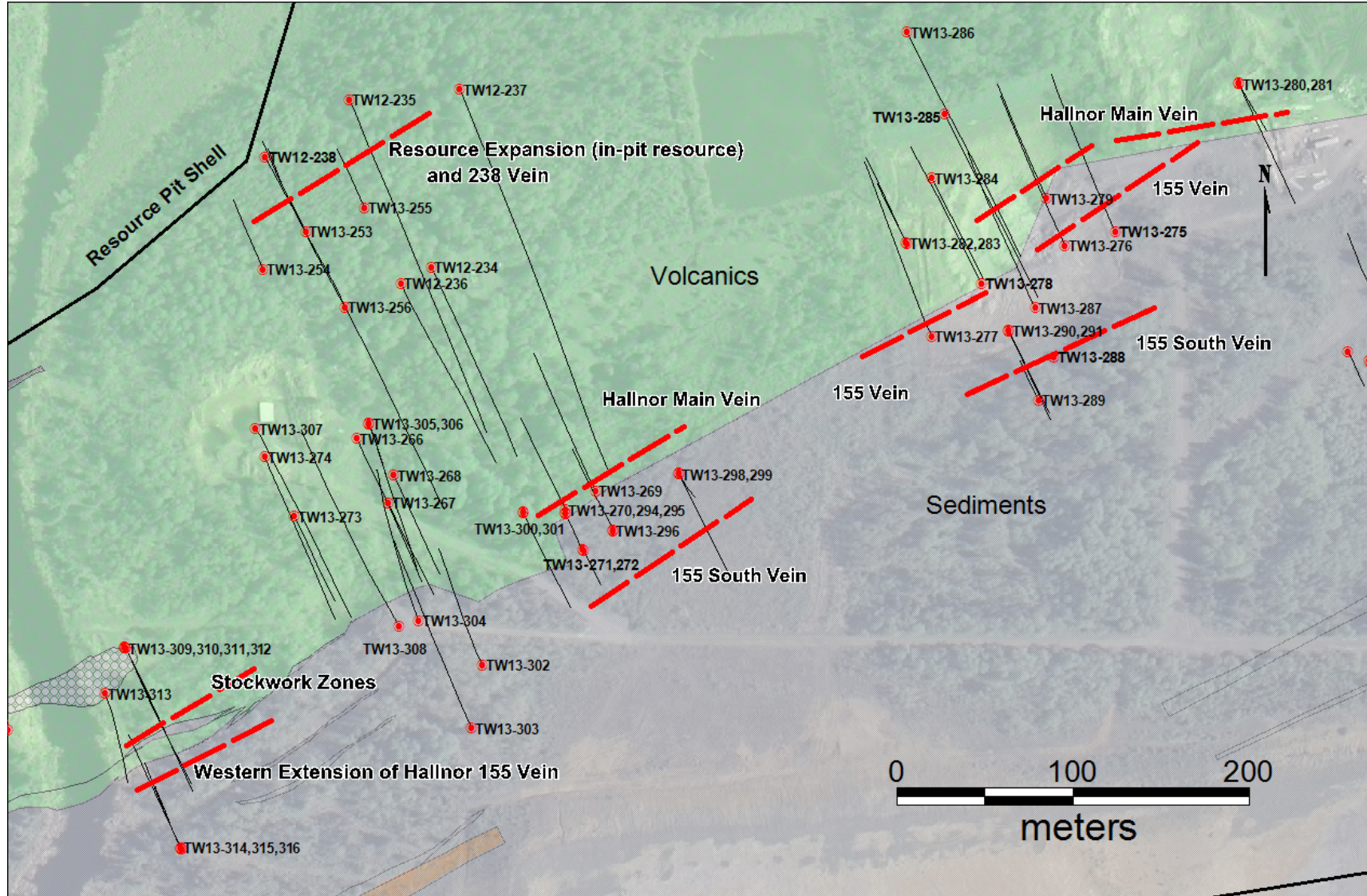
Figure 10.1 Whitney Gold Project



(Source: [www.temexcorp.com](http://www.temexcorp.com))



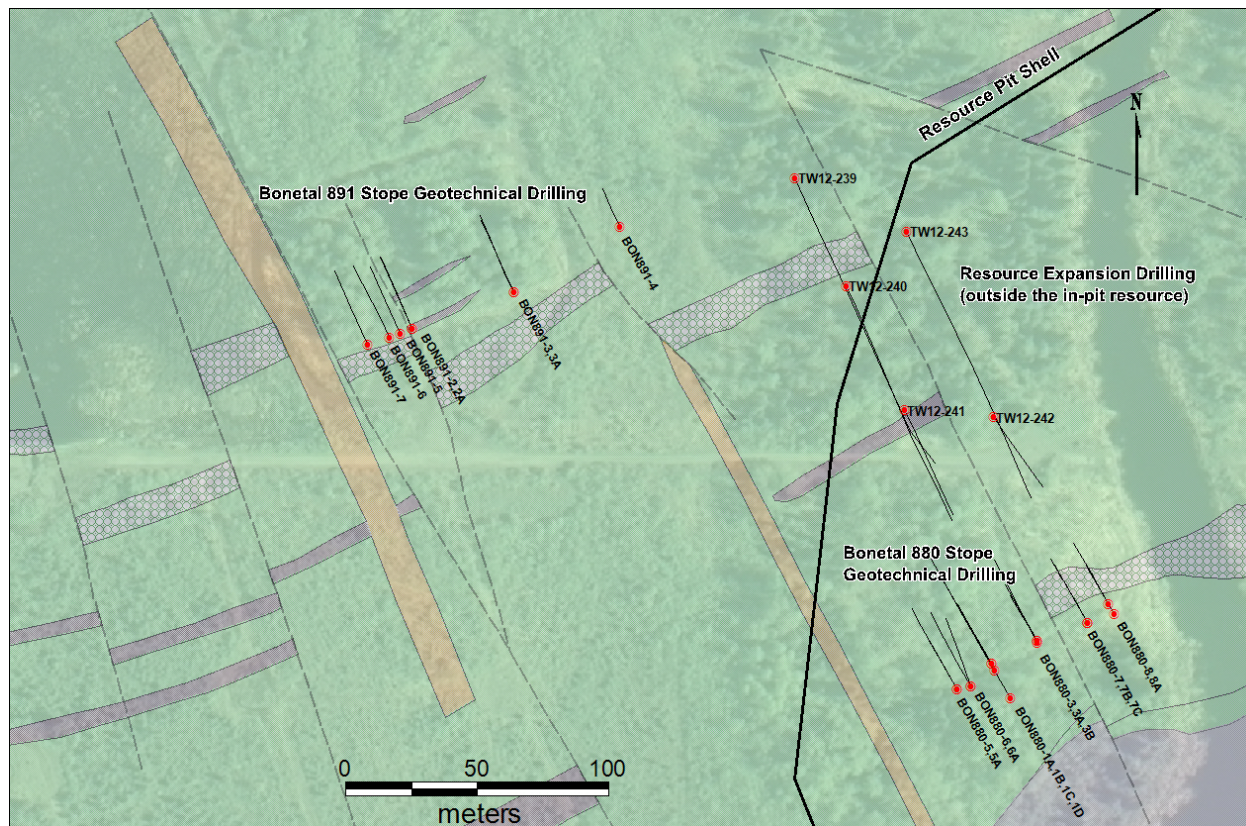
**Figure 10.2 Drill Hole Locations – Hallnor Main Vein, 155 Vein, Resource Expansion and 238 Vein**



(Source: Temex, Harvey (2013 report))



**Figure 10.3 Drill Hole Locations – Bonetal Mine Area**



(Source: Temex, Harvey (2013 report))

## 10.2 2013 DRILLING PROGRAM

The 2013 diamond drilling program took place between March 11 and June 26, 2013 and followed the recommendations from the 2012 NI 43-101 report. 83 holes totalling 7,869 m were drilled in three areas. 69 holes, totalling 6,829 m were drilled on the Upper Hallnor to evaluate the viability of a combined open pit/underground operation. Four holes totalling 324 m were drilled to follow up on the 238 Vein discovery made in 2012. 10 holes, totalling 716 m, were drilled in the Broulan Reef Mine area to increase the drill density in order to calculate a new resource and refine the geological model (Figure 10.4).

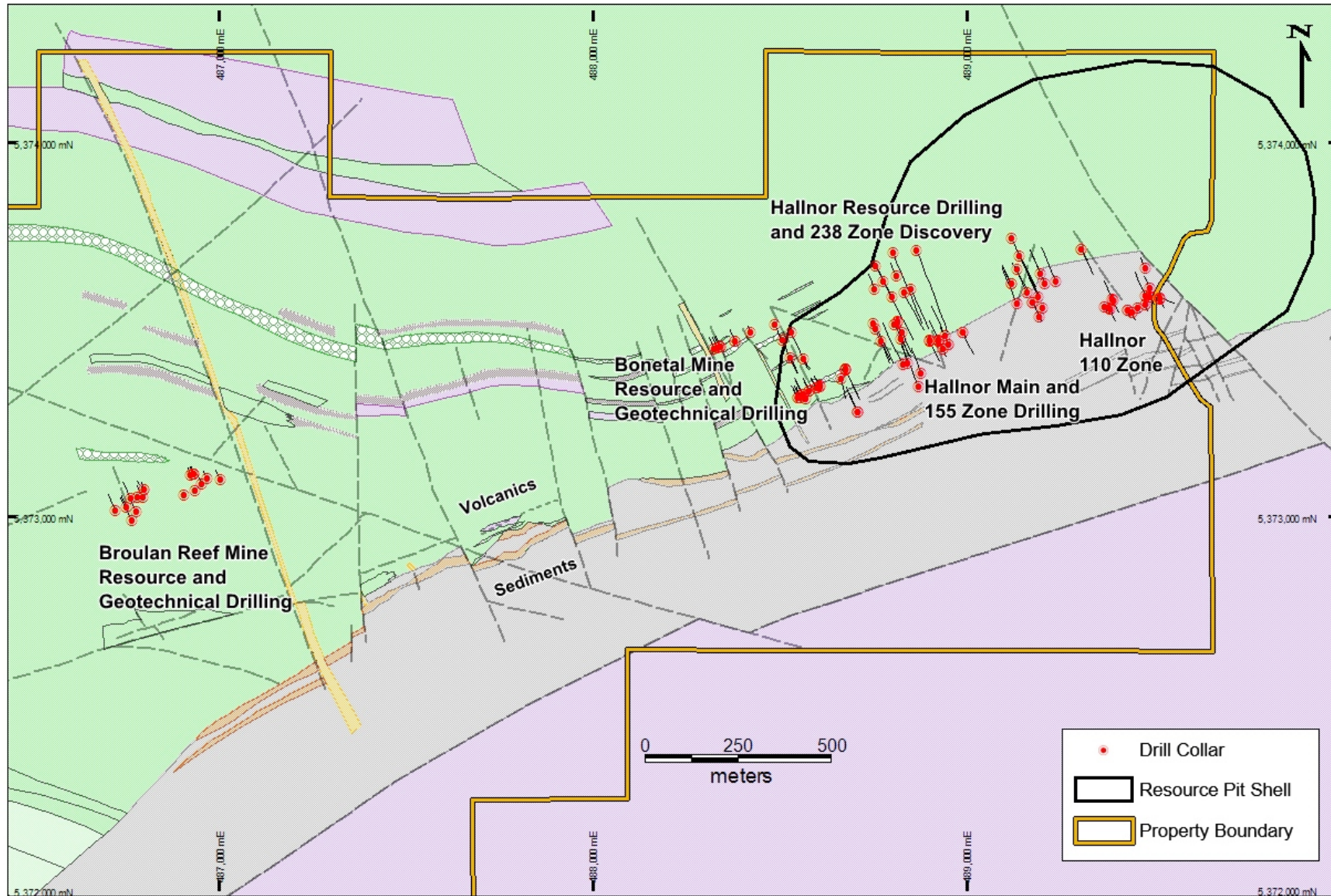
The program focused on further defining near surface, high grade targets suitable for early start-up production opportunities and upgrading Inferred resources to the Indicated category.

Drilling began on the 110 Zone as it was identified as having the greatest potential as a starter pit. Drill results from the Phase 8 program, conducted by Temex in early 2012, included TW12-205 which encountered four significant zones of mineralization in the Hallnor South Vein area, including 4.83 g/t Au over 6.5 m from a near surface, moderate north-dipping vein zone. The area is now known as the 110 Zone.

The drilling also established lateral and vertical continuity of four closely spaced, parallel gold-bearing structures including the VM, 155, 155 North and 155 South veins that are approximately 10 to 50 m north and south of the Hallnor Main Vein and have been identified over a combined strike length of 600 m.



**Figure 10.4 2013 Drill Hole Locations and 2012 NI 43-101 Resource Pit Shell**



(Source: Temex, Harvey (2013 report))



### 10.2.1 110 Zone

The 110 Zone was one of several targets located within the Upper Hallnor tested for early production opportunity as it has historical high grade gold drill intercepts and projects to surface. Sixteen holes, totalling 743 m, were advanced on the 110 Zone (Figure 10.5), TW13-244 to TW13-252 and TW13-257, TW13-258, TW13-262, TW13-264, TW13-265, TW13-292 and TW13-293 (Table 10.3).

Ten holes advanced on the 110 Zone intersected the vein structure at target locations aimed to expand the Hallnor 110 Zone. TW13-244 to TW13-252 and TW13-257 to TW13-260 were drilled to confirm the extent and geometry of the 110 structure and aid preliminary engineering evaluation. The zone extends over a 180 m strike length and an average 65 m down an average -45 degree dip. Select significant intersections over 2.0 g/t Au and longer than 1.5 m, and higher grade sub-intervals, are presented in Table 10.7.

Drill Hole TW13-250 intersected 8.84 g/t Au over 6.20 m, including 19.83 g/t Au over 2.70 m and 37.43 g/t Au over 1.20 m.

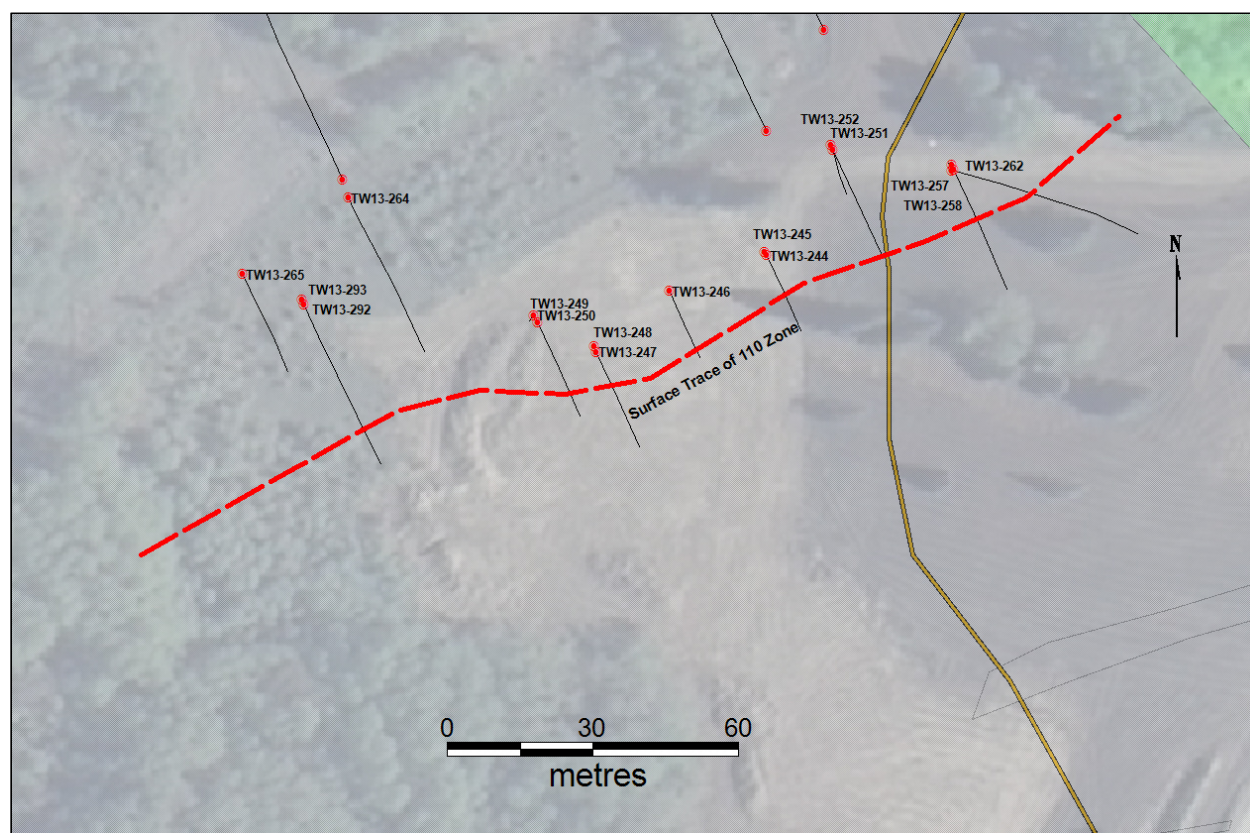
Drill Hole TW13-252 intersected 1.80 g/t Au over 11.30 m including 2.86 g/t Au over 6.10 m.

Drill hole TW13-257 intersected 21.50 m grading 9.78 g/t Au, including 7.70 m grading 23.82 g/t Au. Two high grade samples include 83.30 g/t Au over 0.65 m and 87.90 g/t Au over 1.20 m. The 21.50 m intercept of gold mineralization occurs near surface, from 13.00 to 34.50 m downhole.

Hole TW13-258 intersected 1.91 g/t Au over 28.80 m including 5.49 g/t Au over 6.00 m with individual samples yielding 16.22 g/t Au over 1.00 m and 11.17 g/t Au over 0.80 m.

<b>TABLE 10.3</b> <b>2013 110 ZONE DRILL PROGRAM BOREHOLE LOCATION DATA</b>							
DDH No.	Exploration Target	Easting	Northing	Elevation (m)	Dip (o)	Azimuth (o)	Length (m)
TW13-244	Hallnor 110 Zone	489476	5373568	293	-55	155	30
TW13-245	Hallnor 110 Zone	489476	5373569	293	-90	166	36
TW13-246	Hallnor 110 Zone	489456	5373560	293	-60	155	30
TW13-247	Hallnor 110 Zone	489441	5373548	292	-45	155	30
TW13-248	Hallnor 110 Zone	489441	5373549	292	-90	155	30
TW13-249	Hallnor 110 Zone	489429	5373544	293	-45	155	30
TW13-250	Hallnor 110 Zone	489428	5373555	292	-90	155	51
TW13-251	Hallnor 110 Zone	489490	5373590	294	-50	155	36
TW13-252	Hallnor 110 Zone	489489	5373590	294	-85	155	101
TW13-257	Hallnor 110 Zone	489515	5373585	295	-50	155	42
TW13-258	Hallnor 110 Zone	489514	5373586	294	-90	155	57
TW13-262	Hallnor 110 Zone	489514	5373585	295	-45	105	57
TW13-264	Hallnor 110 Zone SS3 Zone	489390	5373580	291	-55	155	60
TW13-265	Hallnor 110 Zone	489368	5373564	290	-60	155	42
TW13-292	Hallnor 110 zone	489381	5373558	291	-45	155	51
TW13-293	Hallnor 110 zone	489381	5373559	291	-90	155	60
<b>Total</b>							<b>743</b>

**Figure 10.5 2013 Drill Hole Locations - 110 Zone**



(Source: Temex, Harvey (2013 report))

### 10.2.2 Hallnor Main Vein Area

The Hallnor Main Vein was historically mined over a 230 m strike length to a depth of 240 m across widths ranging between 2 to 16 m. Borehole location data is presented on Table 10.4 and Figure 10.6. Select significant intersections over 2.0 g/t Au and longer than 1.5 m, and higher grade sub-intervals, are presented in Table 10.7.

- Hole TW13-269 intersected 6.38 g/t Au over 4.10 m
- Hole TW13-270 intersected 53.91 g/t Au over 0.30 m

Hole TW13-285 extended the continuity of the Main Vein 50 m east of the high-grade workings and intersected 13.80 m grading 19.77 g/t Au including 8.30 m grading 31.64 g/t Au. This intersection occurs approximately 17 m below surface at the bedrock/overburden interface and remains open to the east. No mining has been conducted to the east between surface and 90 m below this intersection. Additional drilling is required to determine if this area can be incorporated into the bulk sample program.

<b>TABLE 10.4</b> <b>2013 DRILL PROGRAM BOREHOLE LOCATION DATA – MAIN VEIN AREA</b>							
<b>DDH No.</b>	<b>Exploration Target</b>	<b>Easting</b>	<b>Northing</b>	<b>Elevation (m)</b>	<b>Dip</b>	<b>Azimuth</b>	<b>Length (m)</b>
TW13-269	Main Vein	488941	5373485	285	-45	335	120
TW13-273	Main Vein	488770	5373470	287	-45	155	75
TW13-274	Main Vein	488753	5373504	287	-48	155	141
TW13-276	Main Vein	489208	5373624	286	-55	335	150
TW13-280	Main Vein	489306	5373716	292	-45	155	102
TW13-281	Main Vein	489306	5373716	292	-70	155	90
TW13-282	Main Vein	489118	5373625	287	-45	335	75
TW13-283	Main Vein	489118	5373625	287	-71	335	120
TW13-302	Main Vein	488877	5373386	285	-65	335	159
TW13-303	Main Vein	488871	5373350	285	-50	335	171
TW13-304	Main Vein	488841	5373411	286	-50	340	141
TW13-305	Main Vein	488813	5373523	288	-48	160	132
TW13-306	Main Vein	488812	5373523	288	-60	160	60
TW13-308	Main Vein	488830	5373408	286	-45	330	180
<b>Total</b>							<b>1,716</b>

### 10.2.3 155 South Vein

The 155 South Vein dips near vertical across widths between 0.5 and 4.0 m wide and extends over a minimum 350 m strike length to a depth of 60 m from surface and has never been mined. Borehole location data is presented on Table 10.4 and in Figure 10.6. Select significant intersections over 2.0 g/t Au and longer than 1.5 m, and higher grade sub-intervals, are presented in Table 10.7.

- Hole TW13-288 intersected 23.41 g/t Au over 8.90 m including 43.67 Au over 4.40 m. Hole TW13-271 intersected 1.66 g/t Au over 14.50 m including 11.21 g/t Au over 1.50 m.
- Hole TW13-272 intersected 8.26 g/t Au over 2.60 m including 19.97 g/t Au over 1.00 m.

### 10.2.4 155 Vein

The 155 Vein extends over a 270 m strike length, dips near-vertical to an average 90 m depth. It has never been mined. Borehole location data is presented on Table 10.4 and in Figure 10.6. Significant intersections over 2.0 g/t Au and longer than 1.5 m, and higher grade sub-intervals, are presented in Table 10.7.

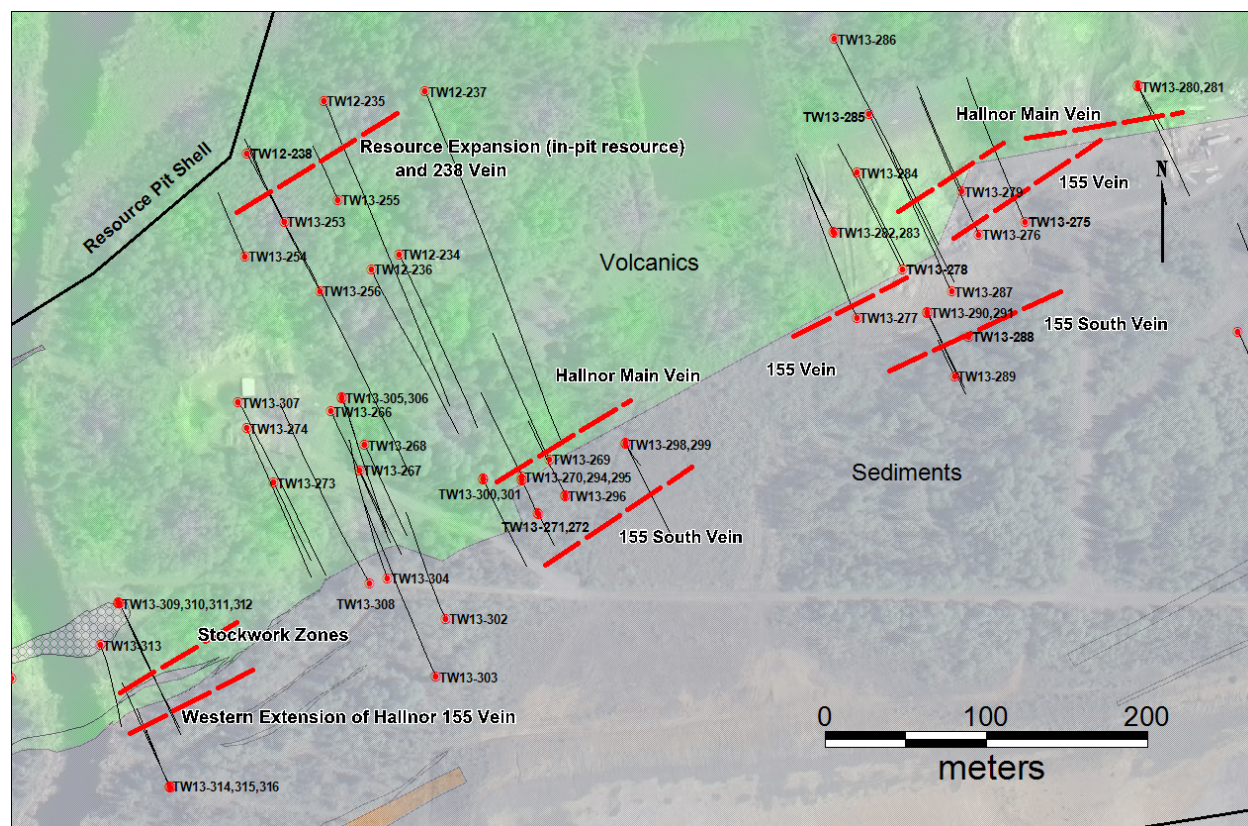
- Hole TW13-275 intersected 8.43 g/t Au over 6.00 m including 35.00 g/t Au over 0.90 m.
- Hole TW13-278 intersected 7.13 g/t Au over 9.50 m including 25.30 g/t Au over 0.80 m.

<b>TABLE 10.5</b> <b>2013 155 VEIN &amp; 155 SOUTH VEIN DRILL PROGRAM BOREHOLE LOCATION DATA</b>							
<b>DDH No.</b>	<b>Exploration Target</b>	<b>Easting</b>	<b>Northing</b>	<b>Elevation (m)</b>	<b>Dip (°)</b>	<b>Azimuth (°)</b>	<b>Length (m)</b>
TW13-260	Hallnor 104 stope	489476	5373665	297	-50	335	45
TW13-261	Hallnor 104105 stopes	489476	5373593	294	-45	335	90
TW13-263	SS5 Zone Hallnor 104 stope	489389	5373583	291	-45	335	66
TW13-266	Bonetal Hallnor	488805	5373515	288	-45	155	120
TW13-267	Bonetal Hallnor	488824	5373478	288	-50	155	90
TW13-268	Bonetal Hallnor	488827	5373494	287	-47	155	90
TW13-270	Hallnor 207 stope	488924	5373474	285	-45	335	81
TW13-271	Hallnor 155 Veins south	488934	5373451	285	-65	155	51
TW13-272	Hallnor 155 Veins south	488934	5373451	285	-90	155	51
TW13-275	Hallnor 155 Veins	489236	5373632	290	-52	335	150
TW13-277	Hallnor 155 Veins	489132	5373572	287	-49	335	150
TW13-278	Hallnor 155 Veins	489160	5373602	285	-58	335	150
TW13-279	Hallnor 155 Veins	489197	5373651	286	-48	335	102
TW13-284	Hallnor 155 Veins	489132	5373662	287	-50	155	96
TW13-285	Hallnor 155 Veins	489139	5373699	288	-45	155	162
TW13-286	Hallnor 155 Veins	489118	5373745	288	-48	155	201
TW13-287	Hallnor 155 Veins north	489191	5373589	287	-52	335	150
TW13-288	Hallnor 155 Veins south	489201	5373561	290	-90	0	81
TW13-289	Hallnor 155 Veins south	489192	5373536	288	-75	335	90
TW13-290	Hallnor 155 Veins	489176	5373576	288	-45	155	72
TW13-291	Hallnor 155 Veins	489176	5373576	288	-67	155	135
TW13-294	Hallnor 155 Veins south	488924	5373472	285	-67	155	60
TW13-295	Hallnor 155 Veins north	488924	5373472	285	-90	0	129
TW13-296	Hallnor 155 Veins	488951	5373462	284	-70	335	145
TW13-297	Hallnor 115 Zone	488951	5373462	284	-90	335	66
TW13-298	Hallnor 155	488988	5373494	285	-45	155	90



TABLE 10.5 2013 155 VEIN & 155 SOUTH VEIN DRILL PROGRAM BOREHOLE LOCATION DATA							
DDH No.	Exploration Target	Easting	Northing	Elevation (m)	Dip (°)	Azimuth (°)	Length (m)
	Veins south						
TW13-299	Hallnor 155 Veins south	488988	5373495	285	-80	155	90
TW13-300	Hallnor 155 Veins south	488900	5373472	285	-45	155	84
TW13-301	Hallnor 155 Veins north	488900	5373473	285	-90	155	150
TW13-309	Main Vein 155 Veins	488674	5373395	282	-54	155	141
TW13-310	Main Vein, Hallnor 155 Veins north	488674	5373396	282	-60	155	180
TW13-313	Hallnor 155 Veins south	488663	5373370	281	-45	160	72
TW13-314	Hallnor 155 Veins south	488706	5373282	281	-47	335	102
<b>Total</b>							<b>4,248</b>

**Figure 10.6 2013 Drill Hole Locations and 2012 NI43-101 Resource Pit Shell**



(Source: Temex, Harvey (2013 report))

### 10.3 238 VEIN DISCOVERY

Holes TW13-253 to TW13-256 (Table 10.6) all intersected the new gold-bearing quartz vein discovery made with hole TW12-238. Six holes advanced on the 238 Vein to date have intercepted a strong shear vein structure with associated strong ankerite, pyrite, and pyrrhotite with occasional sphalerite alteration along 80 m of strike length to a depth of 60 m below surface at a near vertical orientation. The vein structure remains open along strike and at depth. Select significant intersections over 2.0 g/t Au and longer than 1.5 m, and higher grade sub-intervals, are presented in Table 10.7.

<b>TABLE 10.6</b>							
<b>2013 DRILL PROGRAM BOREHOLE LOCATION DATA – HALLNOR 238 VEIN</b>							
<b>DDH No.</b>	<b>Exploration Target</b>	<b>Easting</b>	<b>Northing</b>	<b>Elevation (m)</b>	<b>Dip (°)</b>	<b>Azimuth (°)</b>	<b>Length (m)</b>
TW13-253	Hallnor 238 vein	488777	5373632	284	-45	335	78
TW13-254	Hallnor 238 vein	488753	5373610	283	-45	335	60
TW13-255	Hallnor 238 vein	488810	5373645	285	-45	335	51
TW13-256	Hallnor 238 vein	488799	5373589	287	-45	335	135
<b>Total</b>							<b>324</b>

<b>TABLE 10.7</b>				
<b>2013 DRILL PROGRAM SIGNIFICANT INTERSECTIONS – UPPER HALLNOR</b>				
<b>Hole-ID</b>	<b>From (m)</b>	<b>To (m)</b>	<b>Length (m)*</b>	<b>Au (g/t)</b>
TW13-245	24.80	26.80	2.00	4.02
TW13-250	23.00	29.20	6.20	8.84
Including	25.00	27.70	2.70	19.83
TW13-252	31.70	37.80	6.10	2.86
TW13-256	37.50	39.00	1.50	2.09
TW13-257	13.00	34.50	21.50	9.78
Including	26.80	34.50	7.70	23.82
And	27.25	32.10	4.85	36.20
And	29.20	32.10	2.90	57.53
TW13-258	14.00	20.00	6.00	5.49
TW13-258	37.30	41.80	4.50	3.12
TW13-259	36.00	38.30	2.30	3.15
TW13-264	42.00	47.00	5.10	3.89
TW13-265	18.00	25.30	7.30	6.57
Including	22.20	25.30	3.10	12.70
And	22.20	23.70	1.50	21.51
TW13-267	55.50	63.00	7.50	5.21
TW13-269	70.50	74.60	4.10	6.38
TW13-269	102.80	110.60	7.80	2.69
TW13-272	33.00	35.60	2.60	8.26
TW13-274	111.00	119.00	8.00	5.74
TW13-275	22.00	28.00	6.00	8.43

<b>TABLE 10.7</b> <b>2013 DRILL PROGRAM SIGNIFICANT INTERSECTIONS –</b> <b>UPPER HALLNOR</b>				
<b>Hole-ID</b>	<b>From (m)</b>	<b>To (m)</b>	<b>Length (m)*</b>	<b>Au (g/t)</b>
TW13-276	30.60	33.00	2.40	4.26
TW13-276	60.50	65.50	5.00	3.05
TW13-278	26.50	36.00	9.50	7.13
TW13-285	27.20	41.00	13.80	19.77
Including	27.20	35.50	8.30	31.64
And	29.80	34.80	5.00	49.38
TW13-287	59.80	62.20	2.40	5.94
TW13-287	100.00	105.20	5.20	10.01
Including	100.00	104.00	4.00	13.02
And	101.00	103.00	2.00	21.57
TW13-288	47.40	56.30	8.90	23.41
Including	47.40	51.80	4.40	43.67
TW13-289	24.00	31.50	7.50	2.47
Including	24.00	27.20	3.20	5.22
TW13-291	70.50	76.00	5.50	6.42
TW13-291	81.80	85.70	3.90	3.96
TW13-291	90.00	94.50	4.50	8.33
TW13-296	37.10	40.60	3.50	2.34
TW13-296	93.90	96.00	2.10	2.56
TW13-298	48.00	55.30	7.30	5.40
TW13-299	43.50	50.00	6.50	1.67
TW13-299	72.00	75.00	3.00	72.07
Including	73.00	75.00	2.00	107.72
TW13-301	114.90	116.90	2.00	2.15
TW13-302	132.00	134.40	2.40	7.09
Including	132.00	133.50	1.50	11.07
TW13-303	140.30	143.20	2.90	3.34
TW13-303	151.00	153.40	2.40	3.73
TW13-303	159.50	163.00	2.50	21.98
TW13-304	65.80	68.00	2.20	16.78
TW13-304	103.00	104.50	1.50	5.94
TW13-305	95.50	111.00	15.50	4.90
Including	96.70	100.20	3.50	6.99
TW13-305	104.10	111.00	6.90	6.40
Including	104.50	108.00	3.50	10.27
TW13-309	103.30	105.70	2.40	5.90

*\*True widths are not known due to complex folding of the vein systems.*

## 10.4 WESTERN EXTENSION OF HALLNOR/BONETAL 155 VEIN AND STOCKWORK ZONES

Several holes tested for the western extension of the Hallnor 155 Vein onto the Bonetal property as well as testing stockwork zones in the volcanics. Drill collar data is presented in Table 10.8. Highlights of this drilling are presented below.

- Hole TW13-312 intersected 10.97 g/t Au over 6.00 m, including 94.20 g/t Au over 0.30 m.
- Hole TW13-315 intersected 6.34 g/t Au over 2.5 m, including 13.00 g/t Au over 1.00 m was

The intersection in TW13-312 occurs in a stockwork/hook vein zone in the volcanics located 30 m north of the unconformity and 25 m east of the nearest Bonetal stope on the 155 Vein. The intersection from TW13-315 was from the western extension of the Hallnor 155 Vein on the Bonetal Property. This intercept leaves mineralization and further exploration potential significantly open along strike to the west.

<b>TABLE 10.8</b> <b>2013 DRILL PROGRAM BOREHOLE LOCATION DATA – WESTERN EXTENSION OF</b> <b>HALLNOR/BONETAL 155 VEIN AND STOCKWORK ZONES</b>							
DDH No.	Exploration Target	Easting	Northing	Elevation (m)	Dip (°)	Azimuth (°)	Length (m)
TW13-307	Bonetal Main Vein	488748	5373520	286	-51	150	182
TW13-311	Bonetal SW	488674	5373396	282	-75	155	120
TW13-312	Bonetal SW	488674	5373396	281	-85	155	201
TW13-315	Main Vein West Bonetal West	488706	5373282	282	-65	335	120
TW13-316	Main Vein West Bonetal West	488706	5373281	282	-76	335	171
<b>Total</b>							<b>794</b>

## 10.5 BROULAN REEF RESOURCE DRILLING

Previous Temex drill programs encountered mineralized zones in the Broulan Reef Mine area associated with flat lying quartz vein systems in the hanging wall and footwall areas above the 800 ft level. Drilling in 2013 was completed in an effort to increase the drill density in the upper portion of the Broulan Reef Mine in order to incorporate this area into a new resource as well as to refine the geological model (Figure 10.7).

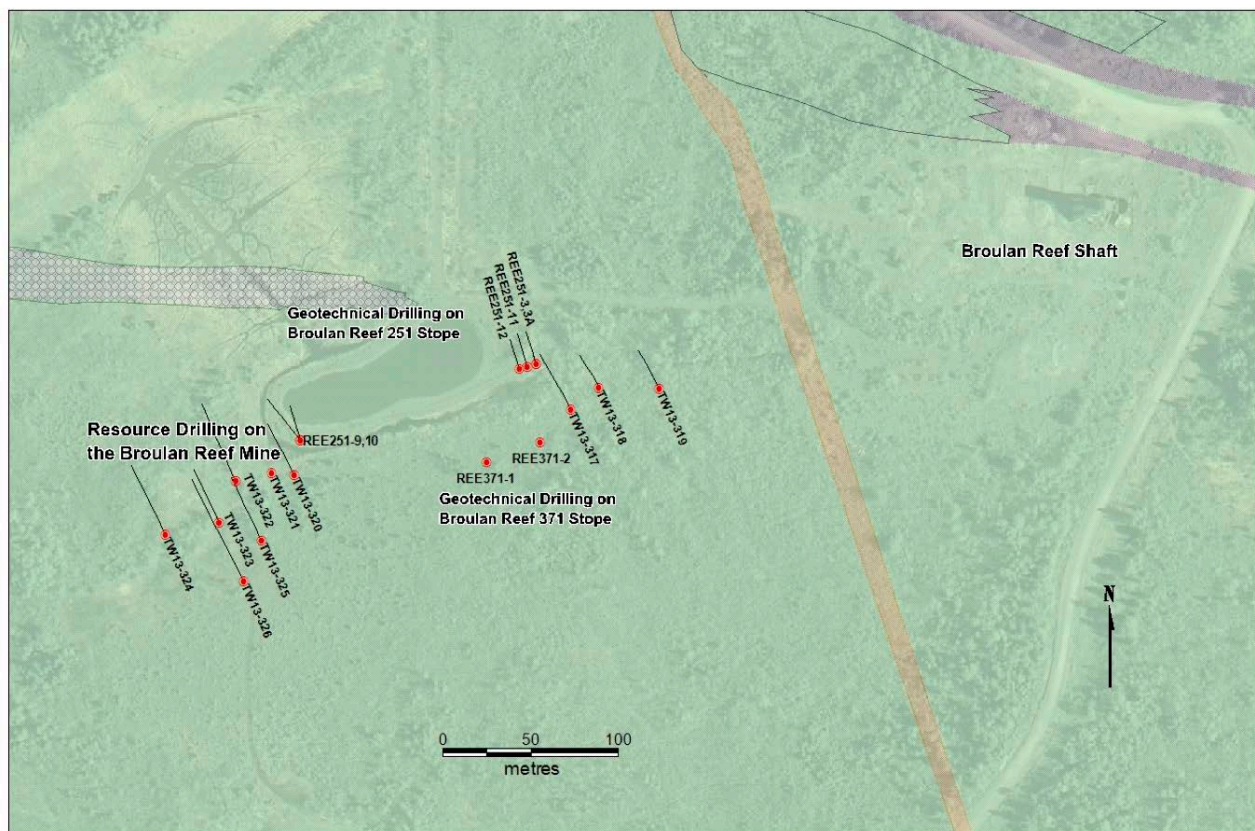
Ten holes (TW13-317 to TW13-326, Table 10.9), totalling 716 m were advanced in this area. Highlights of this drilling are listed below:

- Hole TW13-324 intersected 4.12 g/t Au over 1.20 m including 14.06 g/t Au over 0.30 m.
- Hole TW13-324 intersected 11.88 g/t Au over 2.70 m including 101.00 g/t Au over 0.30 m
- Hole TW13-326 intersected 1.18 g/t Au over 19.50 m including 2.29 g/t Au over 7.50 m and 37.50 g/t Au over 0.30 m.



TABLE 10.9							
2013 DRILL PROGRAM BOREHOLE LOCATION DATA – BROULAN REEF							
DDH No.	Exploration Target	Easting	Northing	Elevation (m)	Dip (°)	Azimuth (°)	Length (m)
TW13-317	Broulan West	486951	5373091	293	-55	335	61
TW13-318	Broulan West	486967	5373103	293	-60	335	42
TW13-319	Broulan West	487001	5373103	293	-70	335	70
TW13-320	Broulan West	486794	5373054	293	-60	335	60
TW13-321	Broulan West	486781	5373055	293	-90	335	87
TW13-322	Broulan West	486761	5373050	293	-50	335	72
TW13-323	Broulan West	486751	5373027	293	-60	335	66
TW13-324	Broulan West	486721	5373019	293	-50	335	66
TW13-325	Broulan West	486775	5373017	293	-65	335	90
TW13-326	Broulan West	486765	5372993	293	-50	335	102
<b>Total</b>							<b>716</b>

**Figure 10.7 Drill Hole Locations – Broulan Reef Mine**



(Source: Temex, Harvey (2013 report))

## 10.6 BONETAL MINE AREA AND GEOTECHNICAL DRILLING

In late 2012, Goldcorp drilled a series of holes for geotechnical investigations of selected crown pillar areas on the Bonetal and Broulan Reef properties as part of ongoing closure plan activities on the Whitney Gold Project. Crown pillar areas tested were the Bonetal 880 Stope, the Bonetal 891 Stope (Figure 10.3, Table 10.10), and the Broulan Reef 251 and 371 Stopes. Select

significant intersections over 2.0 g/t Au and longer than 1.5 m, and higher grade sub-intervals, are presented in Table 10.7.

In March of 2013, this core was made available to Temex and it was brought to Temex's core yard and logged and sampled according to Temex's protocols. 32 holes, totalling 1,470 m were added to the drill hole database for inclusion in the 2013 resource calculation.

- Drill hole BON880-7 intersected 6.09 g/t Au over 6.30 m including 12.05 g/t Au over 0.60 m.
- Drill hole BON891-2 intersected 3.19 g/t Au over 14.40 m including 16.21 g/t Au over 0.60 m.
- Drill hole BON891-6 intersected 3.92 g/t Au over 8.10 m including 13.25 g/t Au over 0.80 m.

Gold mineralization is hosted within variolitic hyaloclastite volcanic breccia known as 'chicken feed,' in vein zones and stockworks similar to the Lower Hallnor Mine.

These holes were drilled within a few metres of near-surface historic mining and often broke through into mine openings. The significant assays returned from the geotechnical drill holes demonstrates that previous mining was selective and the remaining wall rock often contains wide zones of mineralization that could potentially be recovered by modern mining methods.

<b>TABLE 10.10</b> <b>2012 DRILL PROGRAM BOREHOLE LOCATION DATA – BONETAL MINE AREA</b>							
<b>DDH No.</b>	<b>Exploration Target</b>	<b>Easting</b>	<b>Northing</b>	<b>Elevation (m)</b>	<b>Dip (°)</b>	<b>Azimuth (°)</b>	<b>Length (m)</b>
BON880-1A	Bonetal 880 Stope	488560	53735330	281	-45	330	36
BON880-1B	Bonetal 880 Stope	488560	53733330	281	-49	330	69
BON880-1C	Bonetal 880 Stope	488561	53733327	281	-49	330	63
BON880-1D	Bonetal 880 Stope	488567	53733317	281	-49	330	63
BON880-3	Bonetal 880 Stope	488578	53733338	281	-58	330	46
BON880-3A	Bonetal 880 Stope	488578	53733338	280	-69	330	57
BON880-3B	Bonetal 880 Stope	488578	53733339	281	-49	330	53
BON880-5	Bonetal 880 Stope	488547	53733320	281	-55	330	60
BON880-5A	Bonetal 880 Stope	488547	53733320	281	-60	330	45
BON880-6	Bonetal 880 Stope	488553	53733321	281	-54	330	54
BON880-6A	Bonetal 880 Stope	488553	53733321	281	-59	330	53
BON880-7	Bonetal 880	488597	53733346	280	-60	330	42

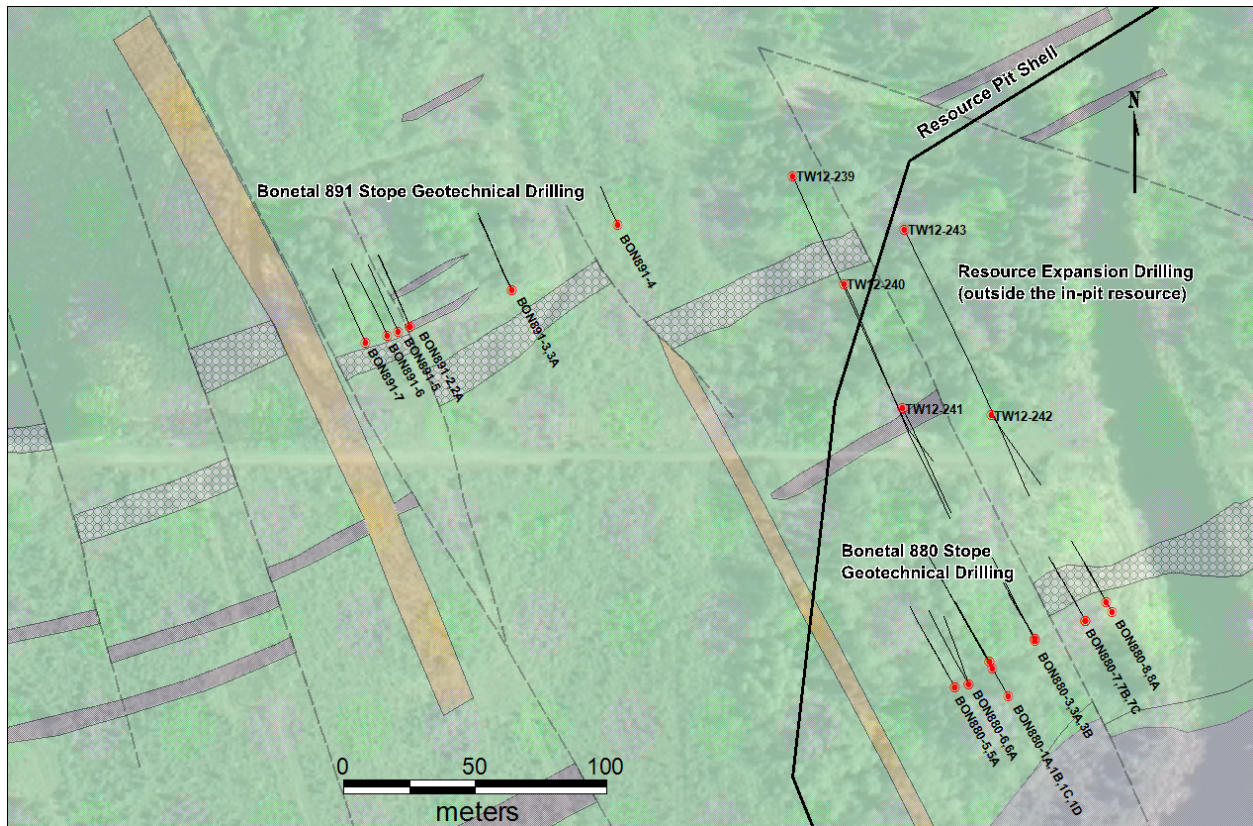
<b>TABLE 10.10</b> <b>2012 DRILL PROGRAM BOREHOLE LOCATION DATA – BONETAL MINE AREA</b>							
DDH No.	Exploration Target	Easting	Northing	Elevation (m)	Dip (°)	Azimuth (°)	Length (m)
	Stope						
BON880-7B	Bonetel 880 Stope	488597	5373346	280	-55	330	42
BON880-7C	Bonetel 880 Stope	488597	5373346	280	-45	330	42
BON880-8	Bonetel 880 Stope	488605	5373353	280	-51	330	42
BON880-8A	Bonetel 880 Stope	488607	5373348	280	-54	330	36
BON891-2	Bonetel 2-891 Stope	488341	5373457	285	-45	336	42
BON891-2A	Bonetel 2-891 Stope	488341	5373457	285	-49	336	45
BON891-3	Bonetel 2-891 Stope	488379	5373471	284	-45	336	45
BON891-3A	Bonetel 2-891 Stope	488379	5373471	284	-49	336	45
BON891-4	Bonetel 2-891 Stope	488419	5373496	284	-45	336	22
BON891-5	Bonetel 2-891 Stope	488336	5373455	285	-45	336	39
BON891-6	Bonetel 2-891 Stope	488332	5373454	285	-45	336	42
BON891-7	Bonetel 2-891 Stope	488323	5373451	284	-45	336	43
<b>Total</b>							<b>1,126</b>

<b>TABLE 10.11</b> <b>2013 DRILL PROGRAM SIGNIFICANT INTERSECTIONS – BONETAL MINE AREA</b>				
Hole-ID	From (m)	To (m)	Length (m)*	Au (g/t)
TW13-312	81.00	87.00	6.00	10.97
TW13-315	104.00	106.50	2.50	6.34
BON880-3B	25.50	45.60	20.10	2.42
Including	28.50	36.00	7.50	3.55
BON880-7	21.00	33.00	12.00	3.57
Including	23.40	29.70	6.30	6.09
BON880-8	24.70	27.00	2.30	3.86
BON891-2	24.30	38.70	14.40	3.19
BON891-6	22.70	30.80	8.10	3.92

\*True widths are not known due to complex folding of the vein systems.



**Figure 10.8 Drill hole Locations – Bonetal Mine Area**



(Source: Temex, Harvey (2013 report))

There are no drilling, sampling or recovery factors that could materially impact the accuracy and reliability of the results.

## **11.0 SAMPLE PREPARATION, ANALYSES AND SECURITY**

The data reviewed for this Report and used for geological modeling and resource estimation combined various phases of historical exploration by different companies, beginning in 2005, along with the most recent drill results from 2012-2013. The following section is taken from the current drilling report written by Peter Harvey, P.Geo. and is pertinent for this latest phase of drilling.

### **11.1 2012-2013 DRILLING AND LABORATORY PROCEDURES**

For both phases of the 2012-2013 drilling, the holes were spotted in the field by surveyor Larry Labelle using either a Lieca TS06 Total Station Instrument or a Magellan Pro Mark 3 GPS. Casings were left in the holes, and at regular intervals the surveyor would pick-up the final drill hole locations from the casings. Any holes that broke through into underground workings were plugged and cemented. Final locations for the series of holes drilled for geotechnical investigations of crown pillar areas by Goldcorp were also picked-up by the surveyor.

Diamond drilling services were provided by Norex Drilling of Porcupine, Ontario. Drill supervision was provided by Peter Harvey of Temex. The drill core was logged by Henry Hutteri, Ashley Durham, and Peter Harvey, all Temex employees.

Drill core was regularly picked up at the drill site or delivered directly to the company core yard in Porcupine by either Temex or Norex personnel. The core was logged and samples were marked up to cover any intervals containing mineralized quartz vein zones, and included areas where quartz or sulfides occurred intermittently or in areas where the mineralization was widespread. All quartz veins and stringers within these zones were sampled. Samples that contained visible gold or were thought to be possibly gold-bearing were sampled in core lengths of 0.3 meters to 1.0 metre. Bracket or infill samples that appeared to have little potential for mineralization had a maximum sample length of 1.5 metres. Mineralization models used in the initial NI 43-101 Technical Report were referred to during core logging and holes passing through or near these models were sampled thoroughly.

The marked core was sawn in half with a diamond saw by a core technician, and one-half of the core for each sample was placed in a sample bag with the accompanying sample tags. The remaining portion of the sample tag was stapled into the core box at the end of the sample interval.

A standard and a blank were inserted in the sample sequence at regular intervals in every batch of 20 samples as part of the Temex QA/QC program. Three standards were used representing three different gold grades. Any batches of samples containing blanks or standards, which were outside of the control limits were re-analysed.

The core samples were then placed into rice bags, sealed, and either picked up by SGS Canada personnel and driven directly to the SGS facility in Cochrane, Ontario, or transported by Temex personnel to a bonded freighting company and from there directly to facilities operated by SGS in Sudbury, Mississauga or Lakefield, Ontario for preparation and analysis. Core samples were analyzed for gold using fire assay on a 30 gram split with an ICP finish. Where initial results exceeded 3 g/t gold, a second assay was completed on another 30 gram split using fire assay with a gravimetric finish. Samples with visible gold were noted during logging, and these samples were analysed using a screened metallic fire assay.

SGS operates 1,350 offices and labs throughout the world. Sample processing services at SGS are ISO 17025 accredited by the Standards Council of Canada. Quality Assurance procedures include standard operating procedures for all aspects of the processing and also include protocols for training and monitoring of staff. ONLINE LIMS is used for detailed worksheets, batch and sample tracking including weights and labeling for all the products from each sample.

As part of in-house QA/QC program, SGS inserted certified gold standards, blanks and pulp duplicate samples.

The remaining core boxes were then tagged and either racked or cross-piled within the secure Temex core yard or stored on the Hallnor property where access is controlled by a locked gate.

## **11.2 LABS USED PRIOR TO 2012-2013**

Swastika Laboratories in Swastika, Ontario was used for the 2005-2010 and 2011 drill programs, Actlabs was used for the 2010 drill program, and ALS Minerals (“ALS”) was used for the 2011 and 2011-2012 drill programs.

Core samples throughout the years were analyzed for gold using a 30 g fire assay with AA or ICP finish, and by gravimetric determination when the upper limit of the AA or ICP method had been reached. The upper limit for AA varied according to the laboratory. Samples containing visible gold were generally assayed by the metallic screen method.

Swastika Labs has been in continuous business since 1928 and participates in the bi-annual round robin Proficiency Testing Program for Mineral Analysis Laboratories (PTP-MAL) through the Standards Council of Canada. P&E verified the 2004 through 2009 certificates, which state that lab met the testing requirements.

The Actlabs’ Quality System is accredited to international quality standards through the International Organization for Standardization /International Electrotechnical Commission (ISO/IEC) 17025 (ISO/IEC 17025 includes ISO 9001 and ISO 9002 specifications) with CAN-P-1758 (Forensics), CAN-P-1579 (Mineral Analysis) and CAN-P-1585 (Environmental) for specific registered tests by the SCC. The accreditation program includes ongoing audits, which verify the QA system and all applicable registered test methods. Actlabs is also accredited by the National Environmental Laboratory Accreditation Conference (NELAC) program and Health Canada.

ALS maintains ISO registrations and accreditations. ISO registration and accreditation provides independent verification that a QMS is in operation at the location in question. Most ALS Minerals laboratories are registered or are pending registration to ISO 9001:2008, and a number of analytical facilities have received ISO 17025 accreditations for specific laboratory procedures.

It is P&E’s opinion that the sample preparation, security and analytical procedures used by Temex were satisfactory.

## 12.0 DATA VERIFICATION

### 12.1 SITE VISIT AND INDEPENDENT SAMPLING UPPER HALLNOR AND C-ZONE

The Upper Hallnor and C-Zone deposits were visited by Mr. Antoine Yassa, P.Geo. on September 25, 2013 for the purposes of completing a site visit and due diligence sampling. Additional visits were made to the project on April 4, May 15 and June 12, 2012 to discuss general data acquisition procedures, core logging procedures and quality assurance/quality control (QA/QC).

Mr. Yassa collected 18 samples from five diamond drill holes. Nine samples were chosen from C-Zone and nine samples were chosen from Upper Hallnor. Samples were collected by taking a ¼ split of the half core remaining in the core box. Once the samples were ¼ sawn they were placed in a large bag and taken by Mr. Yassa to Dicom Express courier in Rouyn-Noranda, QC. From there they were sent to AGAT Labs, (“AGAT”) in Mississauga, ON for analysis.

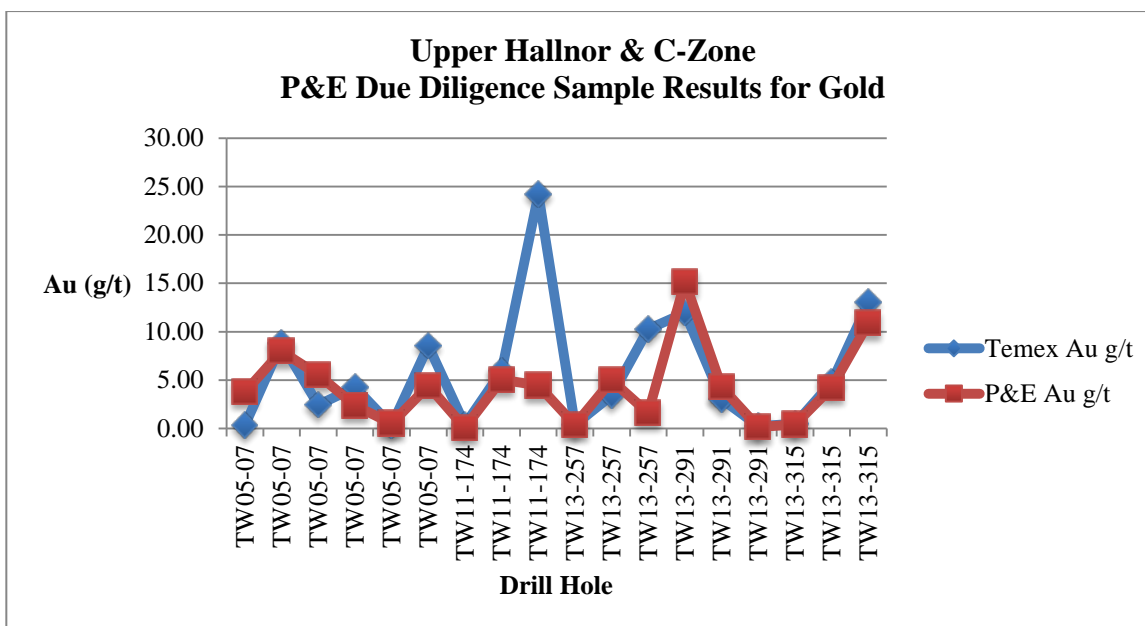
Samples at AGAT were analyzed for gold by fire assay with atomic absorption (“AA”) finish up to a tenor of 10 g/t Au. Any values exceeding 10 g/t Au were rerun and finished using a gravimetric read.

AGAT has developed and implemented at each of its locations a Quality Management System (QMS) designed to ensure the production of consistently reliable data. The system covers all laboratory activities and takes into consideration the requirements of ISO standards.

AGAT maintains ISO registrations and accreditations. ISO registration and accreditation provide independent verification that a QMS is in operation at the location in question. Most AGAT laboratories are registered or are pending registration to ISO 9001:2000.

Results of the Upper Hallnor site visit samples are presented in Figure 12.1.

**Figure 12.1 P&E Site Visit Results for Gold – Upper Hallnor and C-Zone**



## 12.2 SITE VISIT AND INDEPENDENT SAMPLING BROULAN REEF

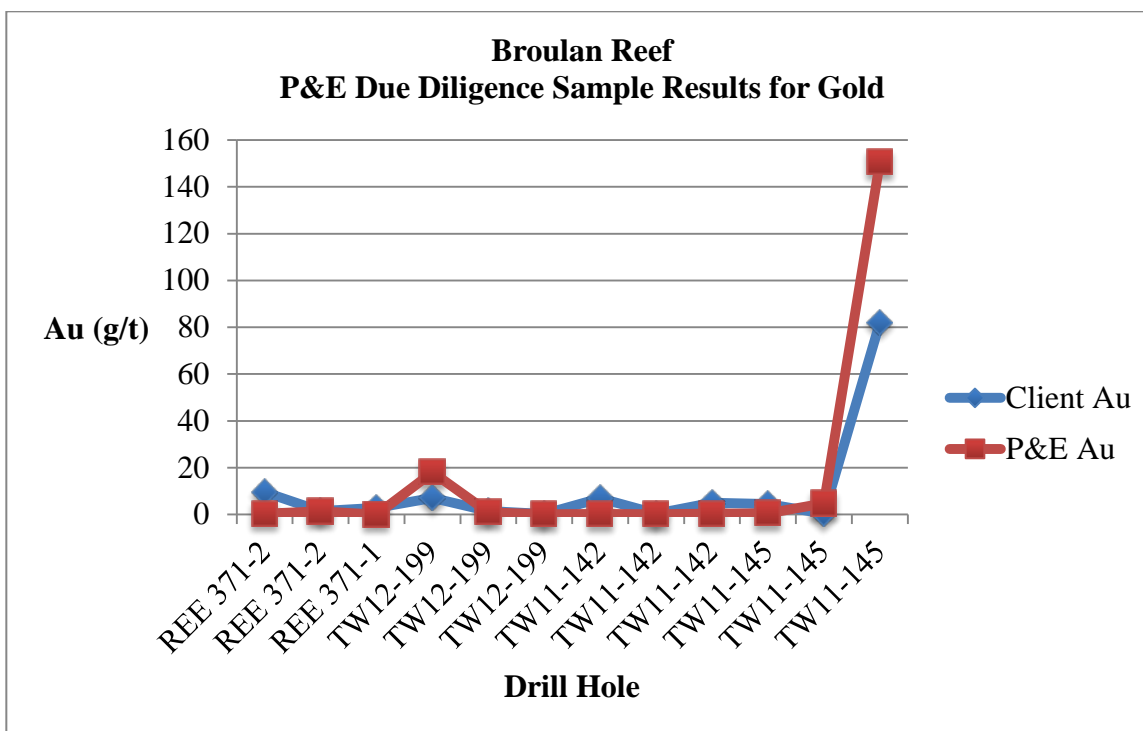
The Broulan Reef deposit was visited by Mr. Antoine Yassa, P.Geo. on September 5, 2013 for the purposes of completing a site visit and due diligence sampling. The Whitney Project as a whole has been visited several times, on April 4, May 15 and June 12, 2012 to discuss general data acquisition procedures, core logging procedures and quality assurance/quality control (QA/QC).

Mr. Yassa collected 12 samples from five diamond drill holes. Samples were collected by taking a ¼ split of the half core remaining in the core box. Once the samples were ¼ sawn they were placed in a large bag and taken by Mr. Yassa to Dicom Express courier in Rouyn-Noranda, QC. From there they were sent to AGAT Labs, (“AGAT”) in Mississauga, ON for analysis.

Samples at AGAT were analyzed for gold by fire assay with atomic absorption (“AA”) finish up to a tenor of 10 g/t Au. Any values exceeding 10 g/t Au were rerun and finished using a gravimetric read.

Results of the Broulan Reef site visit samples are presented in Figure 12.2.

**Figure 12.2 P&E Site Visit Results for Gold – Broulan Reef**



## 12.3 QUALITY ASSURANCE/QUALITY CONTROL PROGRAM

### 12.3.1 Performance of Certified Reference Materials

New drilling since the last resource estimate on Upper Hallnor includes drill holes TW12-234 to TW13-326, all the BON series of holes, and all the REE series of holes.



These drill holes are on various parts of the property, including a) Upper Hallnor, b) Broulan Reef and c) Bonetal, which as noted in Section 10.1.2 is the western extension of the Upper Hallnor..

Some of the 2005-2009 drill holes that Temex completed are either part of the C Zone or part of the Broulan Reef area, and were not verified prior to this report.

#### Performance for 2005-2009 Drilling at Swastika Labs

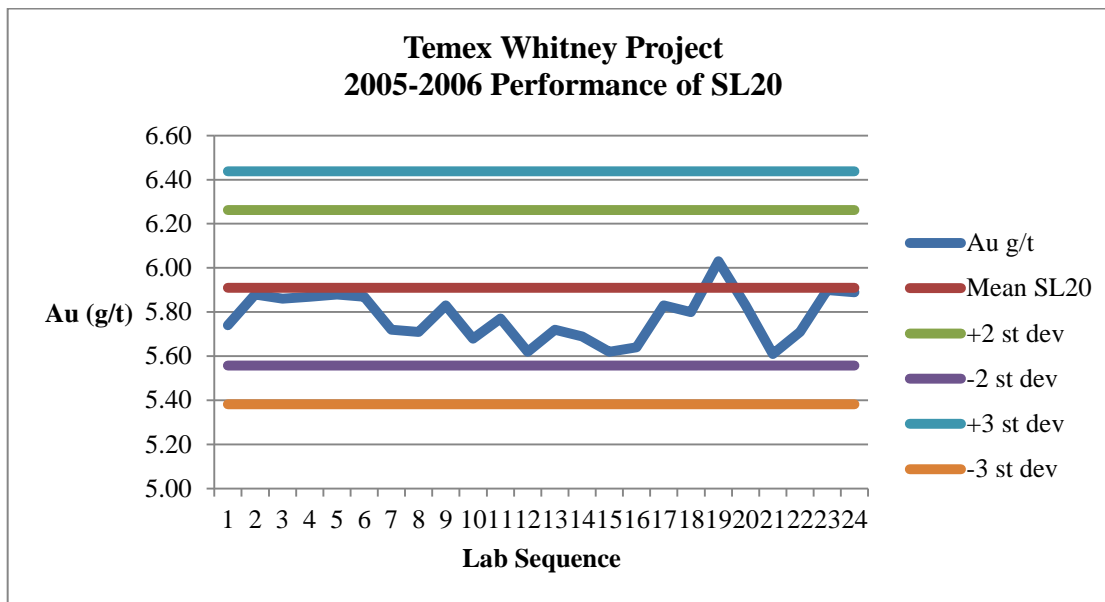
The drilling included in these resource estimates, that was completed from 2005 to 2009 was monitored by seven different reference materials. All samples, (with very few exceptions) were analyzed at Swastika Labs in Swastika, ON.

Three of the reference materials used in these years were purchased from Rocklabs in New Zealand, two of them were purchased from Ore Research and Pty in Australia, and two of the reference materials were purchased from Accurassay Labs of Thunder Bay, Ontario.

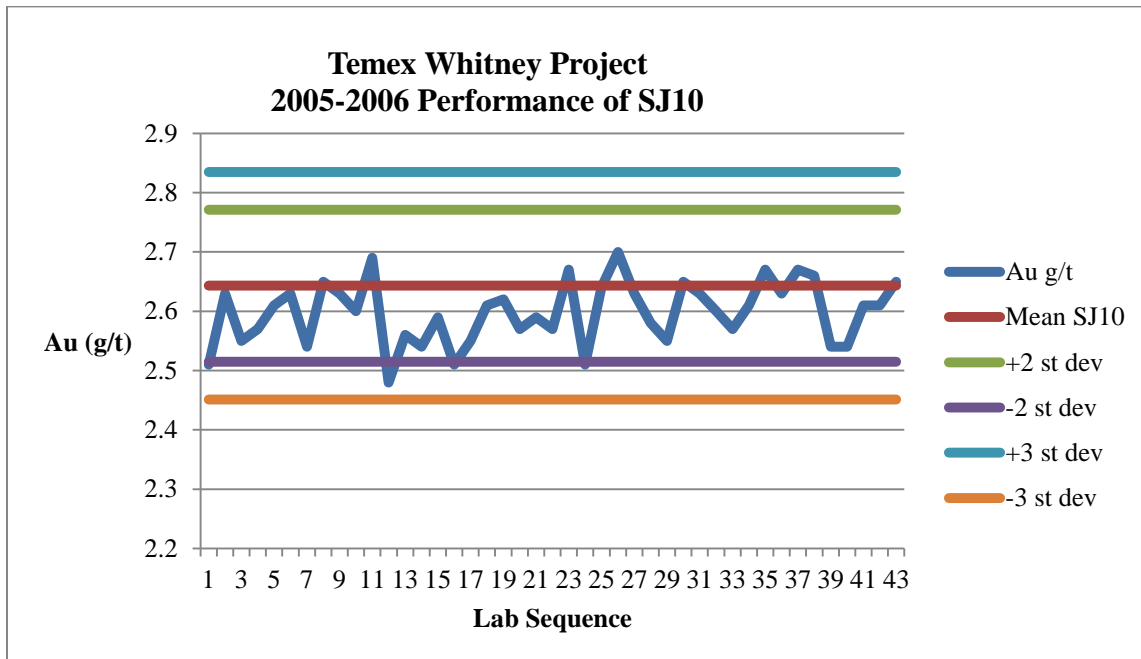
Grades ranged from a low of 1.23 g/t Au to a high value of 7.15 g/t Au. All data for the seven standards were graphed and compared to the warning limits of +/- two standard deviations from the mean and the tolerance limits of +/- three standard deviations from the mean.

With very few exceptions, performance for the standards was very good. Graphs of the standards are pictured in the Figure 12.3 to Figure 12.9.

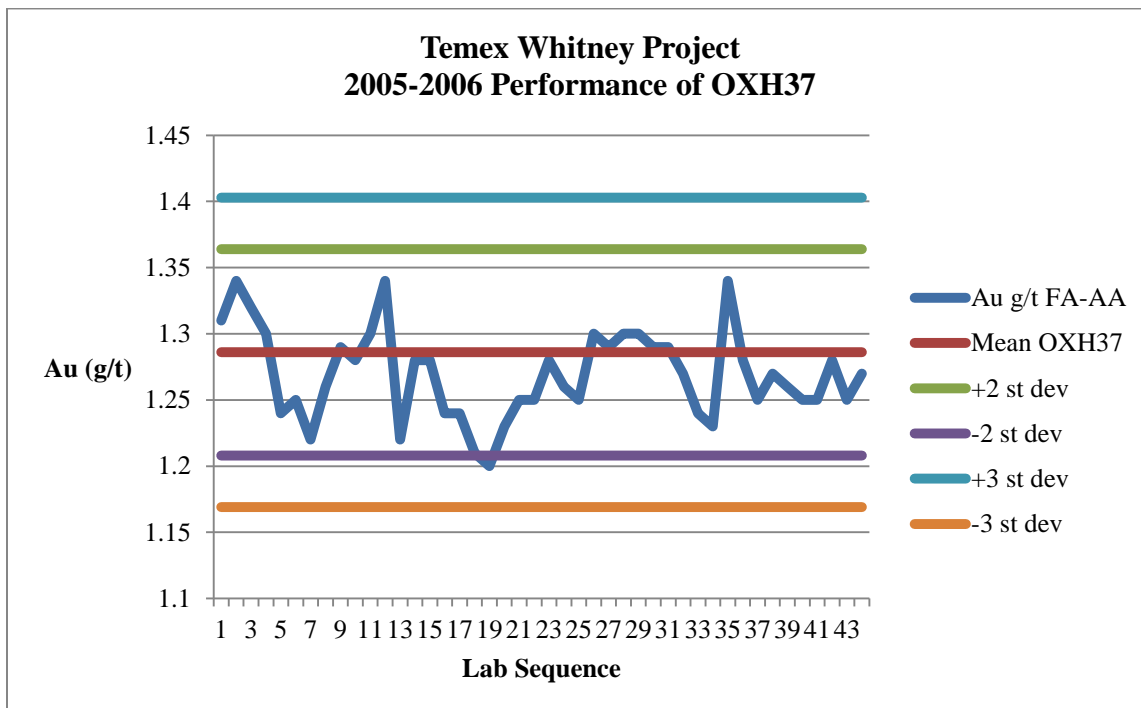
**Figure 12.3 Performance of SL20 for Gold**



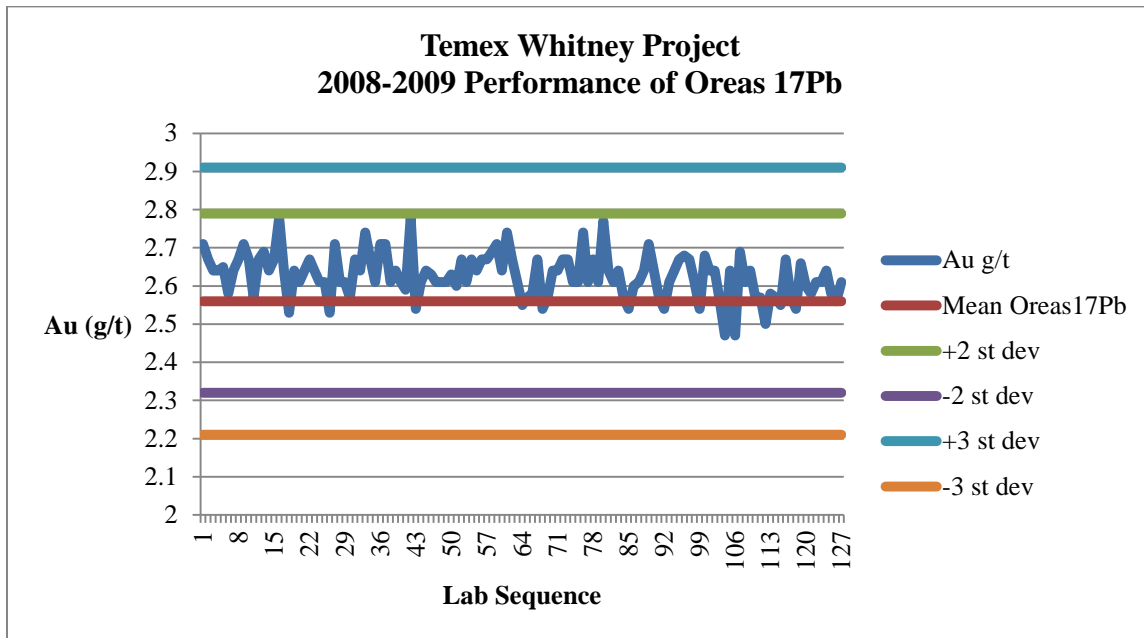
**Figure 12.4 Performance of SJ10 for Gold**



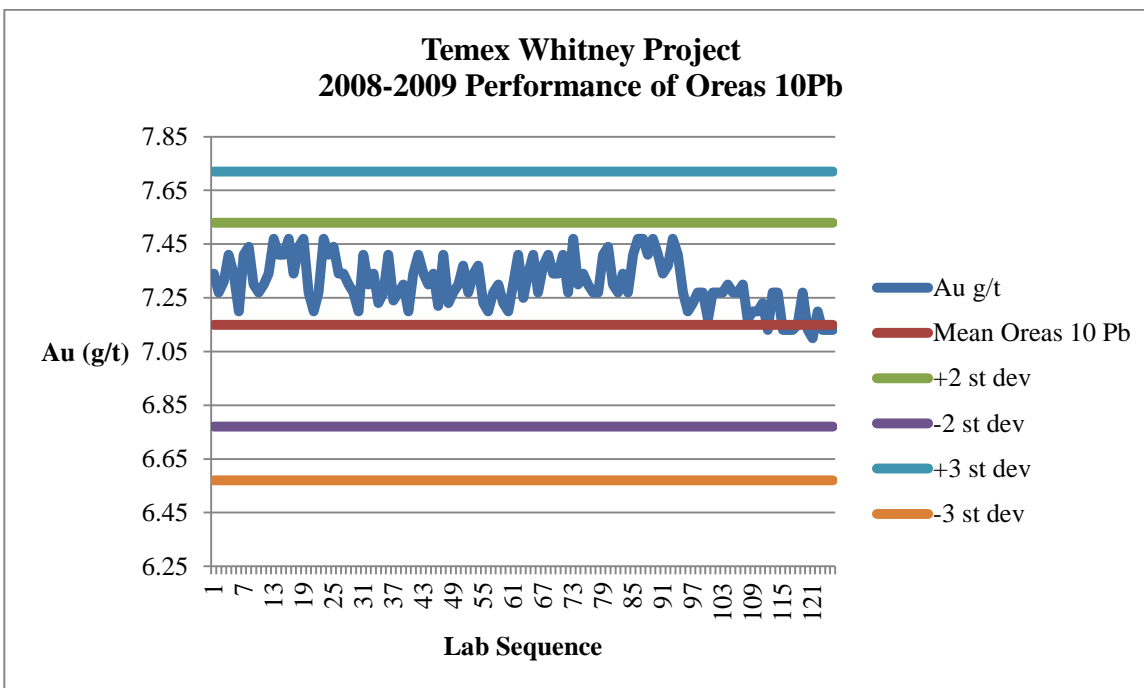
**Figure 12.5 Performance of OXH37 for Gold**



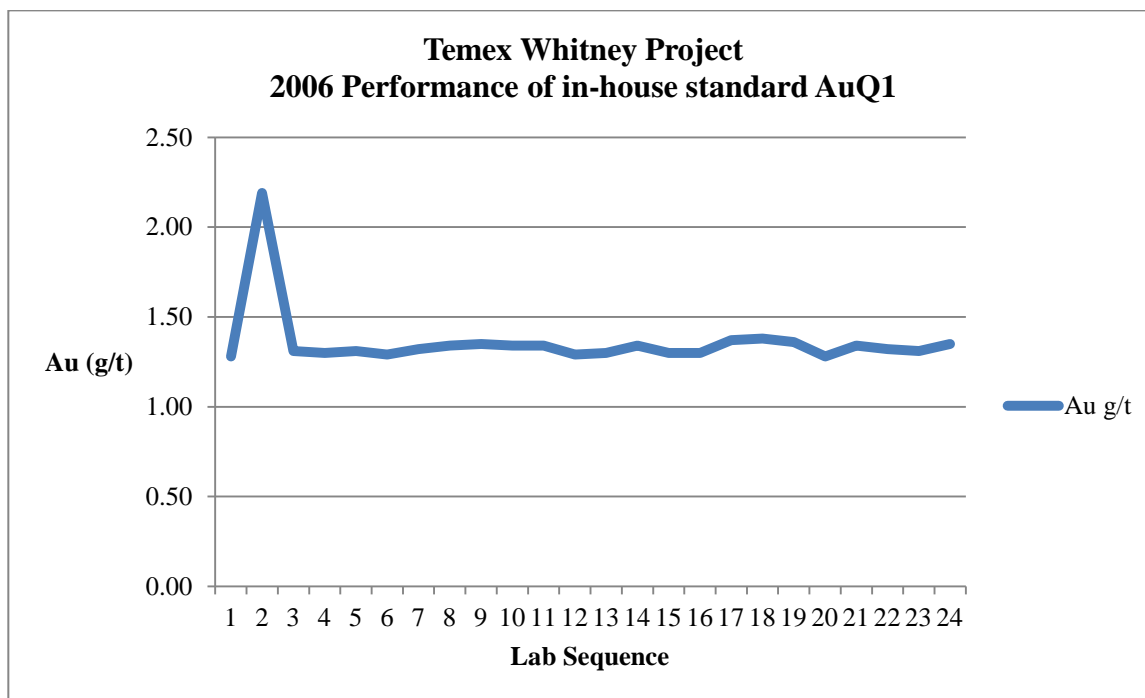
**Figure 12.6 Performance of OREAS 17Pb for Gold**



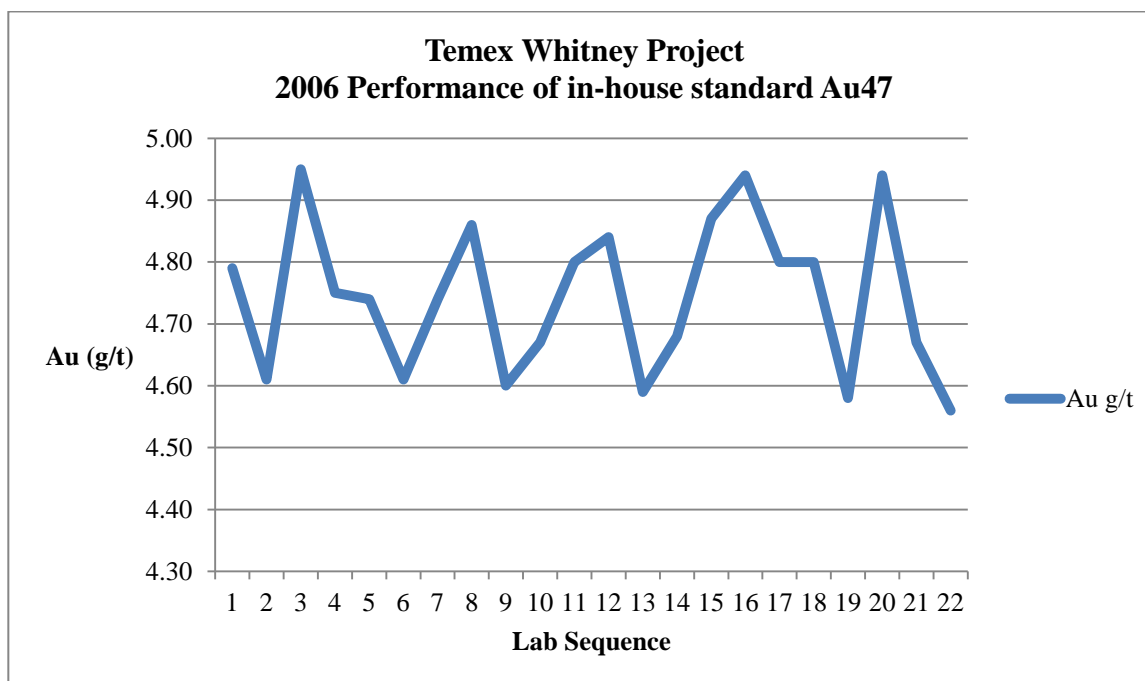
**Figure 12.7 Performance of OREAS 10Pb for Gold**



**Figure 12.8 Performance of Accurassay Labs In-House AuQ1 for Gold**



**Figure 12.9 Performance of Accurassay Labs In-House Au47 for Gold**



Performance for 2012 and 2013 at SGS and ALS Labs

For the 2012 and 2013 diamond drilling, Temex used five different certified reference materials prepared by either Canadian Resource Labs of Langley, BC or Ore Research and Pty of Australia. The reference materials were certified for gold, and grades ranged from a low of 0.867 g/t Au to a high of 14.9 g/t Au.

The labs used were either SGS Minerals Services, (“SGS”), (principal lab) or ALS Minerals, (“ALS”).

SGS operates 1,350 offices and labs throughout the world. Sample processing services at SGS are ISO 17025 accredited by the Standards Council of Canada. Quality Assurance procedures include standard operating procedures for all aspects of the processing and also include protocols for training and monitoring of staff. ONLINE LIMS is used for detailed worksheets, batch and sample tracking including weights and labeling for all the products from each sample.

Gold was analyzed at SGS using lead-collection fire assay with ICP finish. Gold values exceeding 3000 ppb were reanalyzed using fire assay with a gravimetric determination.

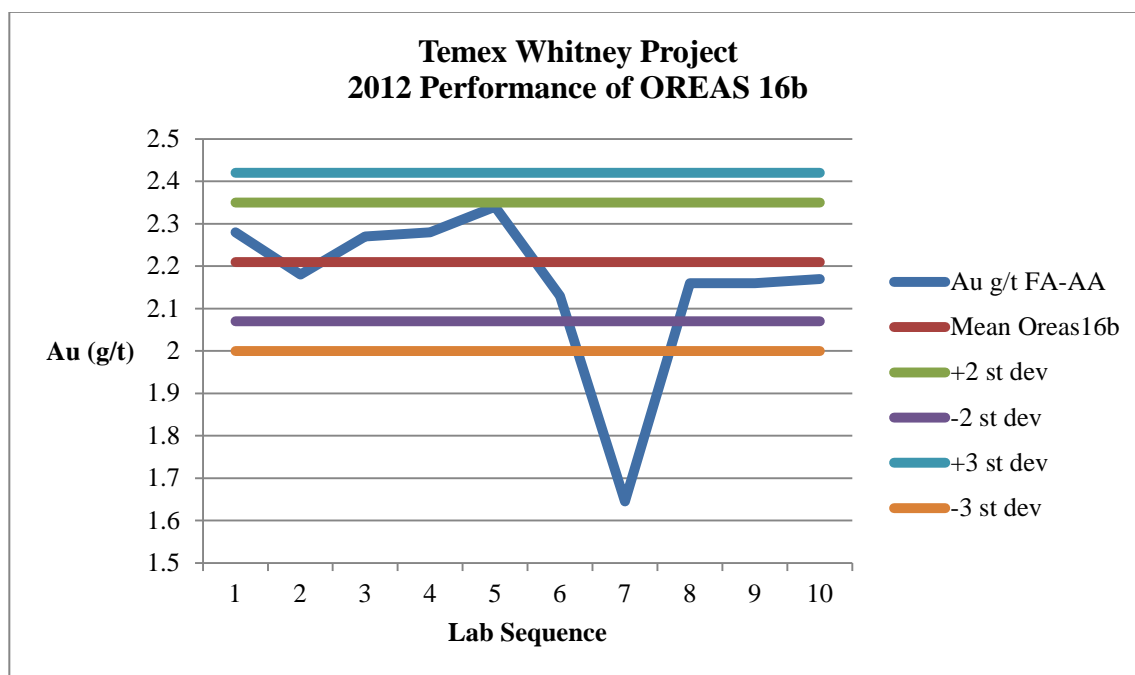
ALS maintains ISO registrations and accreditations, which provide independent verification that a QMS is in operation at the location in question. Most ALS Minerals laboratories are registered or are pending registration to ISO 9001:2008, and a number of analytical facilities have received ISO 17025 accreditations for specific laboratory procedures.

Gold was analyzed at ALS using lead-collection fire assay with an AA finish. Values exceeding 10,000 ppb were reanalyzed using fire assay with a gravimetric determination.

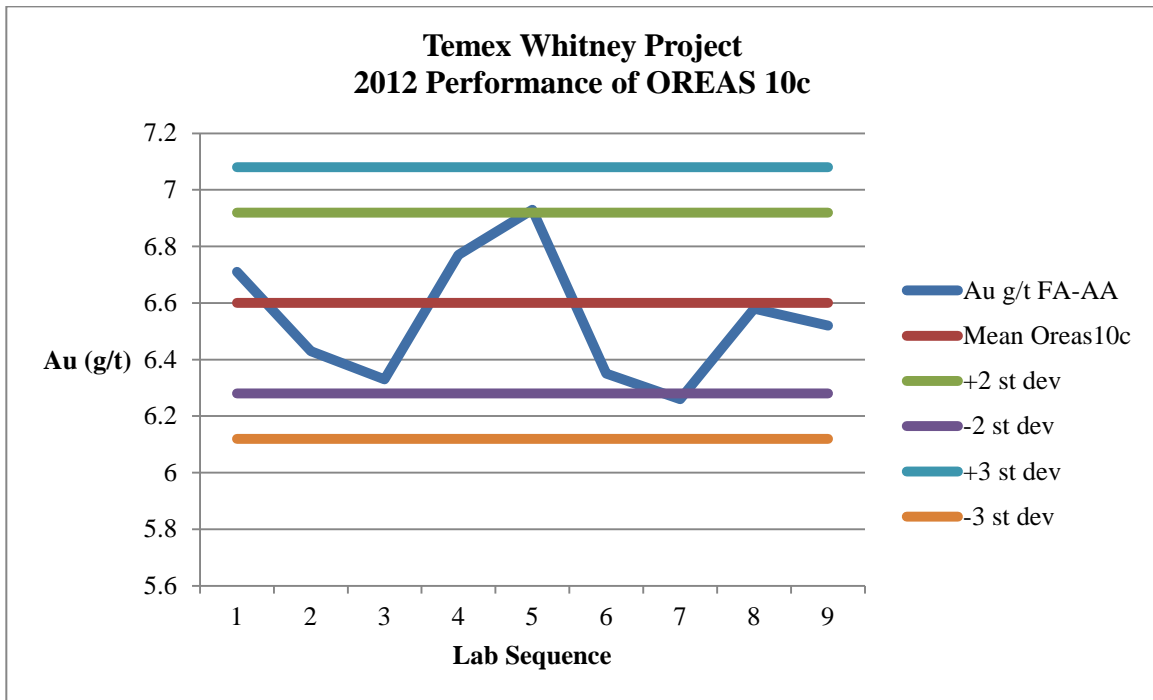
All data for the five standards were graphed and compared to the warning limits of +/- two standard deviations from the mean and the tolerance limits of +/- three standard deviations from the mean.

With very few exceptions, performance for the standards was very good. Graphs of the standards are pictured in Figure 12.10 to Figure 12.15.

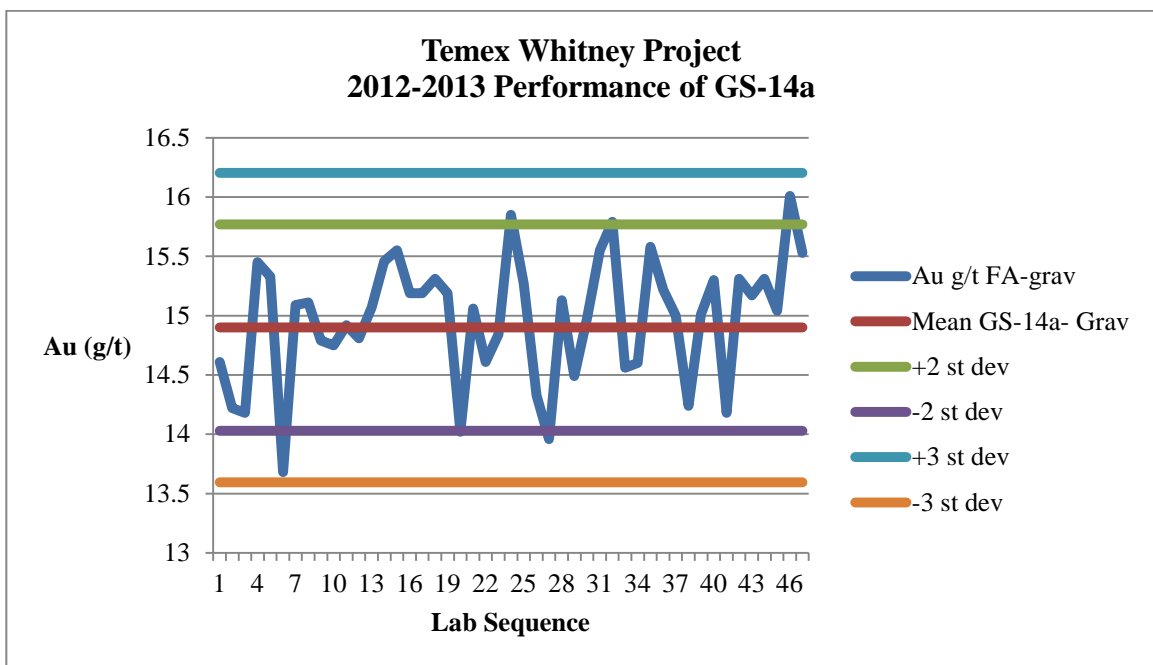
**Figure 12.10 Performance of OREAS 16b for Gold**



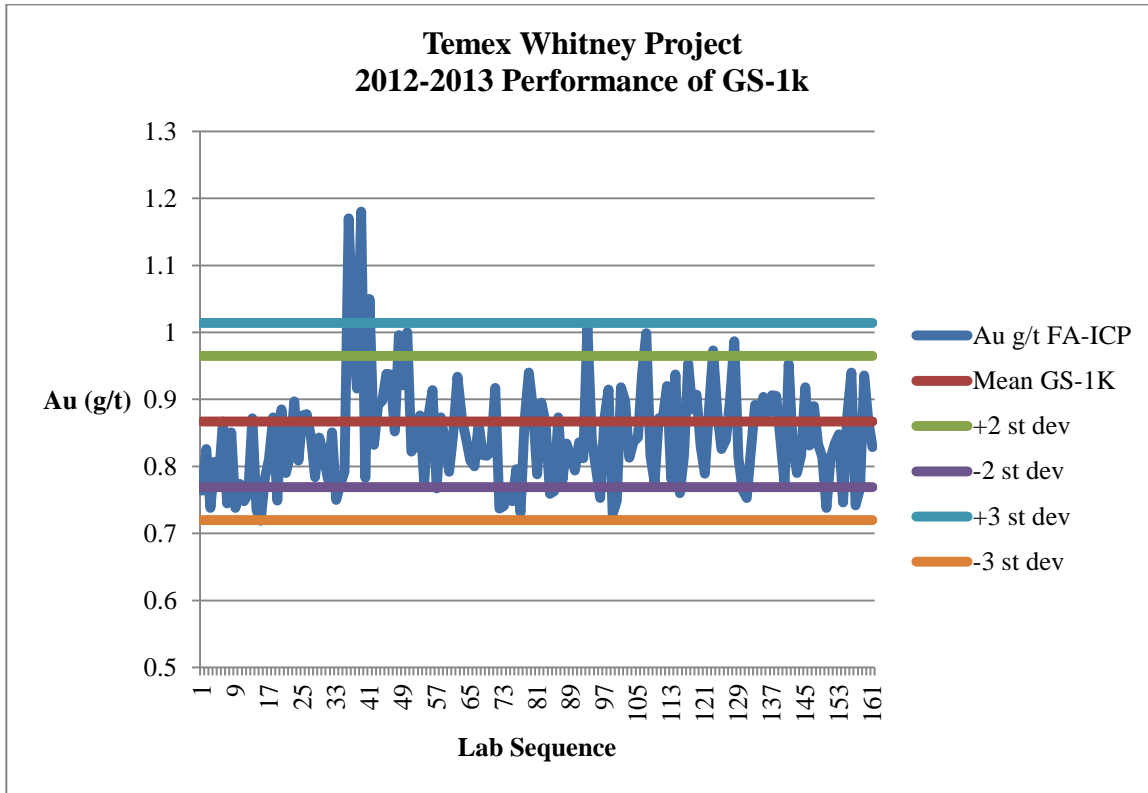
**Figure 12.11 Performance of OREAS 10c for Gold**



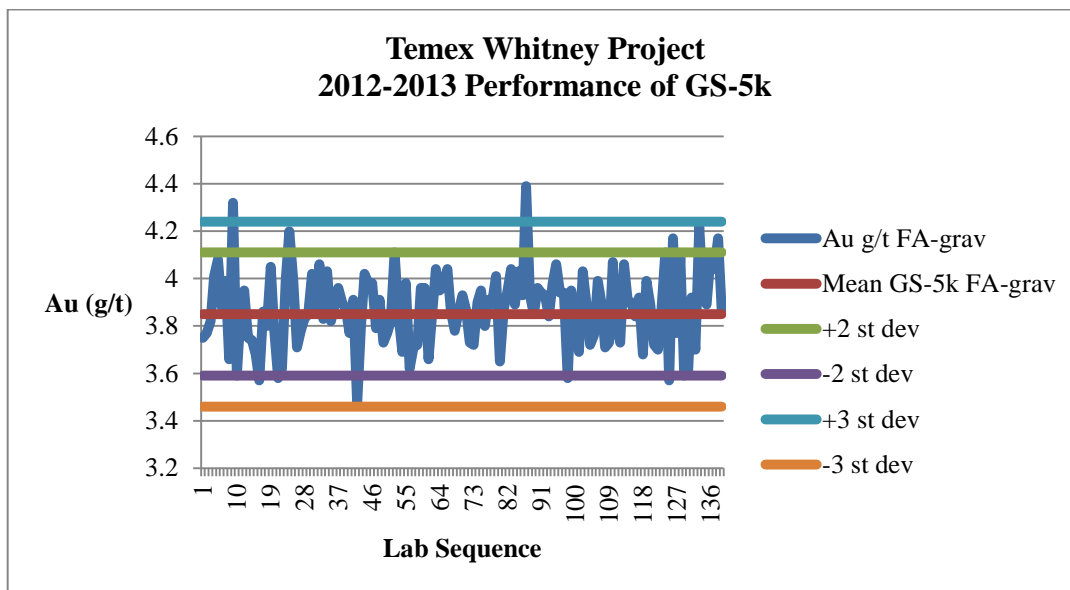
**Figure 12.12 Performance of GS-14a for Gold**



**Figure 12.13 Performance of GS-1k for Gold**



**Figure 12.14 Performance of GS-5k for Gold**

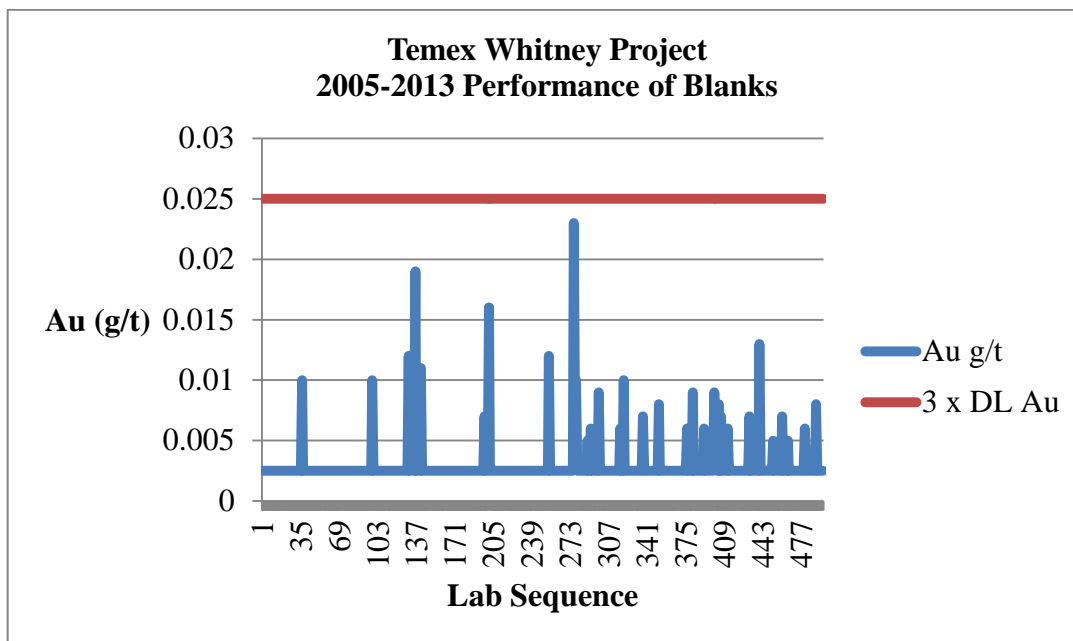


### 12.3.2 Performance of Blank Material

[no blanks were used in 2005, but blanks were purchased from RockLabs for 2006]The blank material inserted by Temex to monitor contamination in the years 2007-2013 consisted of chunks of marble landscaping material. The blank material performed perfectly, with all values falling

below the upper threshold of three times the detection limit. Figure 12.15 shows the performance.

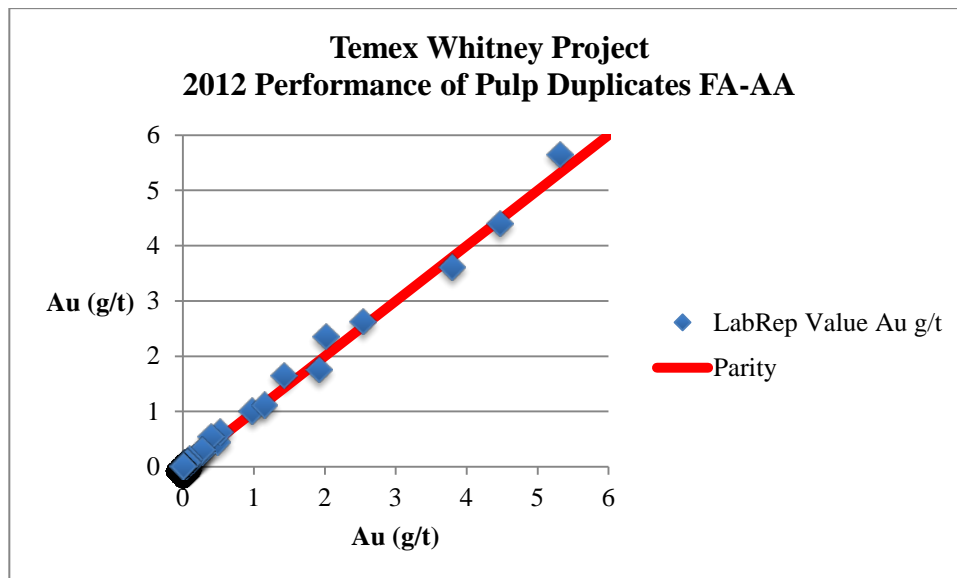
**Figure 12.15 Performance of Blank Material**



### 12.3.3 Performance of Duplicates

In 2011-2012 there were 293 pulp duplicates analyzed by ALS using the fire assay-AA method. Precision was excellent at this level of homogeneity. Results are shown in Figure 12.16.

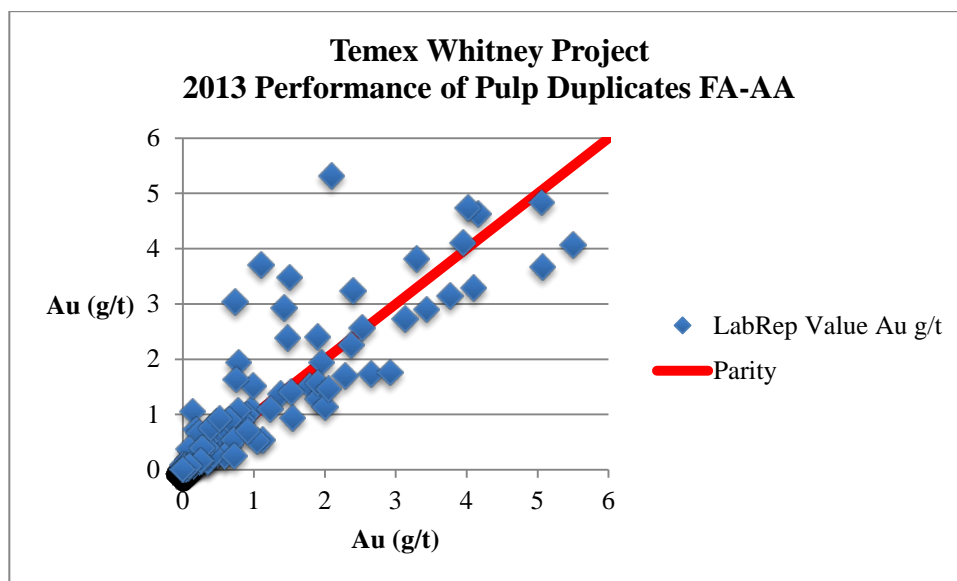
**Figure 12.16 2011-2012 Pulp Duplicate Pairs Fire Assay-AA method**



In 2012-2013, there were 324 pulp duplicates analyzed by SGS using the fire assay-AA method. Precision was not satisfactory for this level of homogeneity. Temex will need to work with the lab in order to improve precision at the pulp level. Results are presented in Figure 12.17.



**Figure 12.17 2012-2013 Pulp Duplicate Pairs Fire Assay-AA method**



It is P&E's opinion that the data are of good quality and appropriate for use in the current resource estimate.

## **13.0 MINERAL PROCESSING AND METALLURGICAL TESTING**

### **13.1 INTRODUCTION AND SUMMARY**

A metallurgical testwork program was conducted by SGS Lakefield Research in late 2012 and summarized in a report “Metallurgical Testing of Whitney Gold Deposit”, Project report 50287-001 dated April 11, 2013.

Data sheets are not included in the draft report reviewed; consequently, tables and most of the charts illustrating performance are extracted or developed directly from the body of the SGS report. For results incorporating prior gravity concentration, it has been assumed that the reported gravity tests provided the feed material for the subsequent flotation or cyanidation tests on gravity tails.

A single Bond ball mill test indicated material of moderate hardness, at 14.0 kWh/t (metric).

Gravity recovery tests returned 34 – 45% of the gold to a concentrate comprising 0.04 – 0.05% of the mass indicating that a significant portion of the gold can be recovered by such means. However, gravity recovery did not enhance overall gold recovery when followed by either flotation or cyanidation; this combined with fast flotation and cyanidation kinetics strongly suggests that the available free gold is very fine.

Flotation tests on the master composite yielded up to 95 % gold recovery while tests on both high and low grade sub-composites yielded inferior results. The reasons for the unexpected behaviour require further investigation. However, it is considered unlikely that flotation would be the economic route of choice even at 95% recovery.

Direct cyanidation yielded very good results and was equivalent or superior to tests with prior gravity recovery, returning 95.3% extraction at a grind of 83 $\mu$ . Extractions are a function of grind and optimization may allow a higher extraction. Required leach time is short at 24 hours, and reagent consumptions are modest.

### **13.2 SAMPLES**

A total of 224 individual samples taken from 55 drill holes and totalling 180 kg from the Whitney gold deposit in Ontario, Canada and supplied by Temex Resources Corp. (Temex) were used to prepare one master composite (MC) and two high (SC-H) and low grade (SC-L) sub-composites for metallurgical testing. The reported gold and ICP analyses are summarized in the following tables:

**TABLE 13.1**  
**GOLD ASSAYS, HEAD SAMPLES**

Sample	Products	Mass	Grade - g/t	Distribution - %
		%	Au	Au
Master Composite	Screen Oversize	4.00	8.07	16.9
	Screen Undersize	96.0	1.65	83.1
	Calc. Feed		1.91	
Sub-Composite 1	Screen Oversize	3.27	15.6	15.8
	Screen Undersize	96.7	2.81	84.2
	Calc. Feed		3.23	
Sub-Composite 2	Screen Oversize	3.90	6.55	21.0
	Screen Undersize	96.1	1.00	79.0
	Calc. Feed		1.22	

**TABLE 13.2**  
**ICP ANALYSES**

Sample	S	SO4	C(t)	CO2	TIC	Fe	As	Ag
	%	%	%	%	%	%	%	g/t
Master Composite	0.78	<0.01	1.69	5.96	1.63	4.62	0.018	0.7
Sub-Composite 1	0.93	<0.01	1.76	6.12	1.67	4.50	0.030	0.6
Sub-Composite 2	0.65	<0.01	1.44	5.09	1.39	4.88	0.009	0.3

### 13.3 GRINDABILITY

A Bond ball mill work index measurement was performed on the master composite and returned a value of 14.0 kWh/t (metric) at a P80 of 114 microns, indicating a material of moderate hardness.

### 13.4 GRAVITY CONCENTRATION

Standard Knelson – Mozley gravity concentration tests were conducted on the composites.

**TABLE 13.3**  
**GRAVITY CONCENTRATION**

Test	Composite	Product	Mass Rec.	Assays, g/t	% Distribution	Gravity Tail K80
			%	Au	Au	µm
GR-1	Master composite (MC)	Mozley Conc	0.04	2007	34.0	143
		Knelson & Mozley Tail	99.96	1.55	66.0	
		Head (calc.)		2.35		
		(direct)		1.91		
GR-2	Sub-composite 1 (SC-H)	Mozley Conc	0.04	3046	42.8	143
		Knelson & Mozley Tail	99.96	1.62	57.2	
		Head (calc.)		2.82		
		(direct)		3.23		
GR-3	Sub-composite 2 (SC-L)	Mozley Conc	0.05	1136	45.0	133
		Knelson & Mozley Tail	99.95	0.65	55.0	
		Head (calc.)		1.17		
		(direct)		1.22		

The results indicate that a significant fraction of the gold is free and can be recovered by gravity concentration. These results are promising enough that gravity testwork should be explored further in any future testwork program.

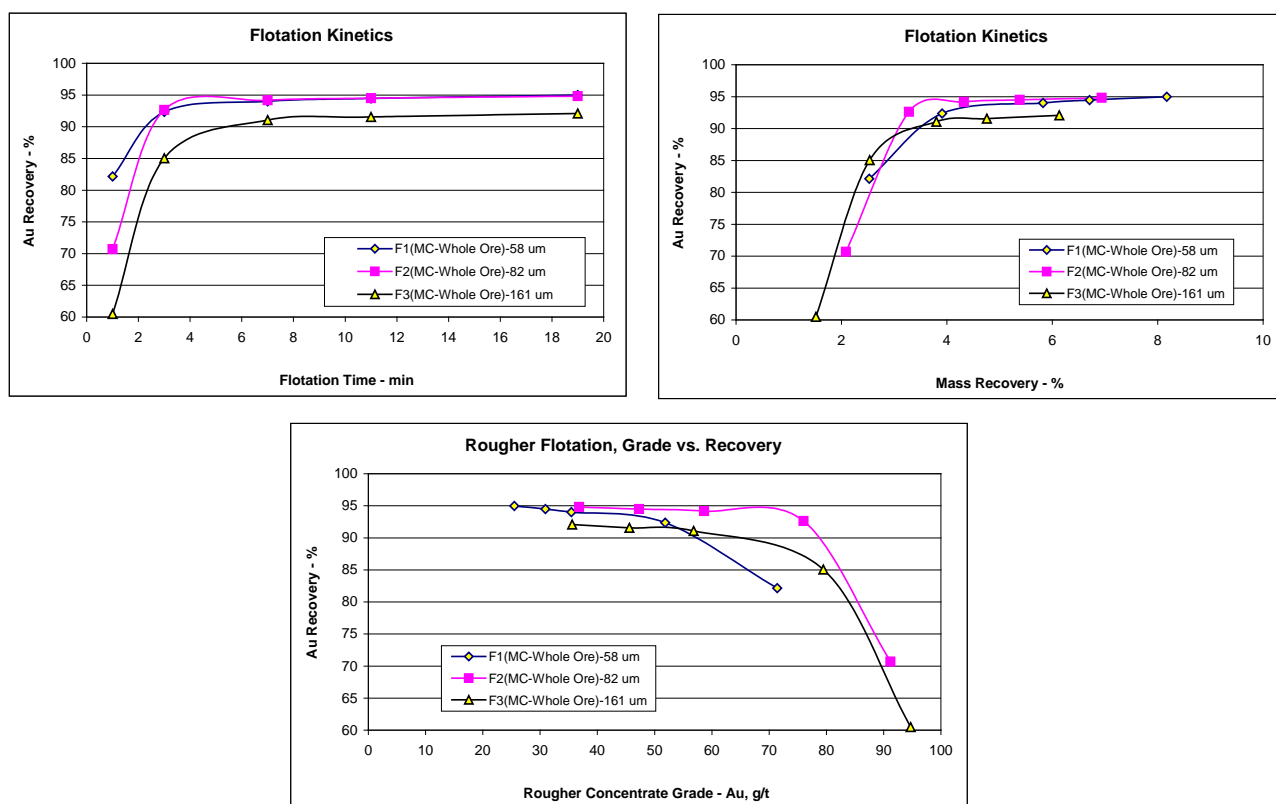
## 13.5 FLOTATION

### 13.5.1 Whole Ore Flotation – MC

Flotation of whole ore at three grinds as summarized in the following charts indicate the following:

- Flotation is fast and essentially complete in 6 minutes
- There is little difference in recovery between grinds of 82 and 58 microns but a grind of 161 microns incurs a significant recovery penalty. A grind of 82 microns and an expected rougher flotation recovery of 95% is appropriate based on these results.

**Figure 13.1 Whole Ore Flotation, MC**



### 13.5.2 Gravity Tails Flotation – MC

Gravity tails flotation at a grind of 70µ gave a recovery of 86.4% in 9.4% of the mass which appears to correspond to an overall (gravity + flotation) recovery of 91% which is inferior to the whole ore flotation results of about 95%. This is unexpected but suggests that gravity pre-concentration would not be advantageous if flotation is employed.

### 13.5.3 Sub-composite Flotation

The following graph presents a comparison of the three composites based on grinds as indicated. The expected relationship between grade and recovery is not present which suggests that the

variability is not associated with grade. Additional work and perhaps mineralogy will be required.

**Figure 13.2 Rougher Flotation, Comparison of Composites (Whole Ore)**

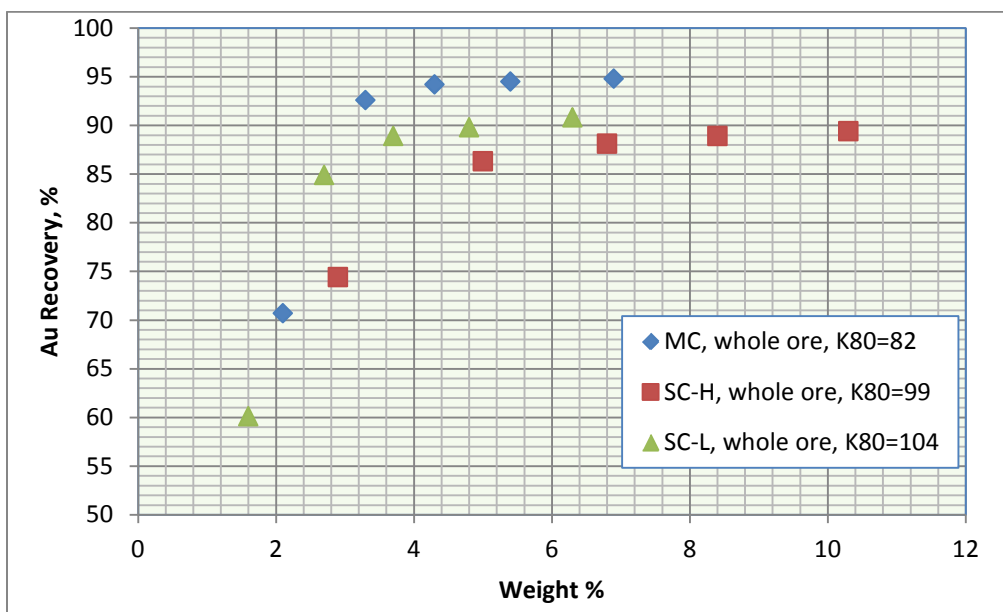
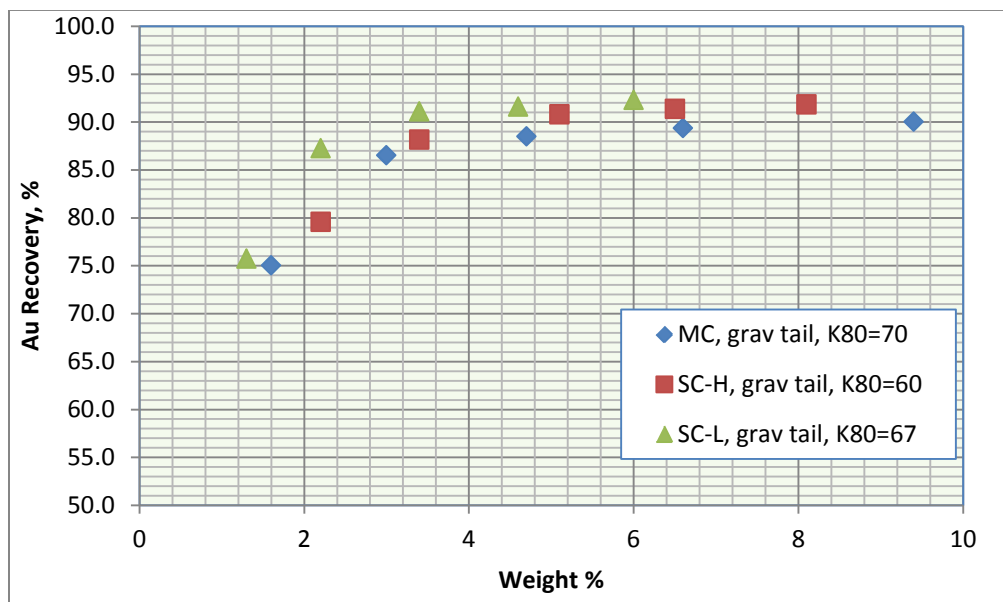


Figure 13.3 compares combined gravity plus flotation recoveries for the three composites. The curves are fairly similar and suggest little to no effect of grade on recovery. The results for the MC do not compare well with Figure 13.2 and additional work will be required to resolve the issue. However, a tentative conclusion can be drawn that a gravity stage prior to flotation does not enhance overall gold recovery.

**Figure 13.3 Flotation, Comparison of Composites (Gravity + Flotation)**

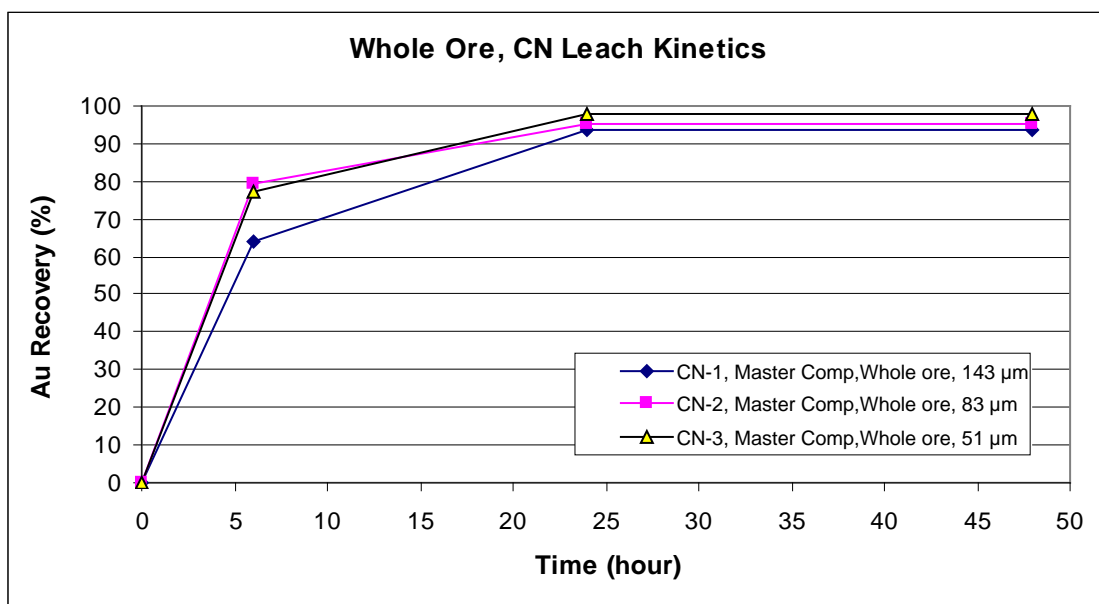


## 13.6 CYANIDATION

### 13.6.1 Direct Cyanidation (MC)

Figure 13.4 summarizes cyanidation results on whole ore for the MC (Master Composite) sample. There is a positive effect of grind which yields up to 98% extraction at the finest grind of 51 $\mu$  and 95.3% at 83 $\mu$ . Leaching is relatively fast and complete at 24 hours. Reported reagent consumptions range from 0.27 – 0.42 kg/t for cyanide, depending on fineness of grind, and 0.42 – 0.74 kg/t for lime; both consumptions are moderate.

**Figure 13.4 Direct Cyanidation, MC**



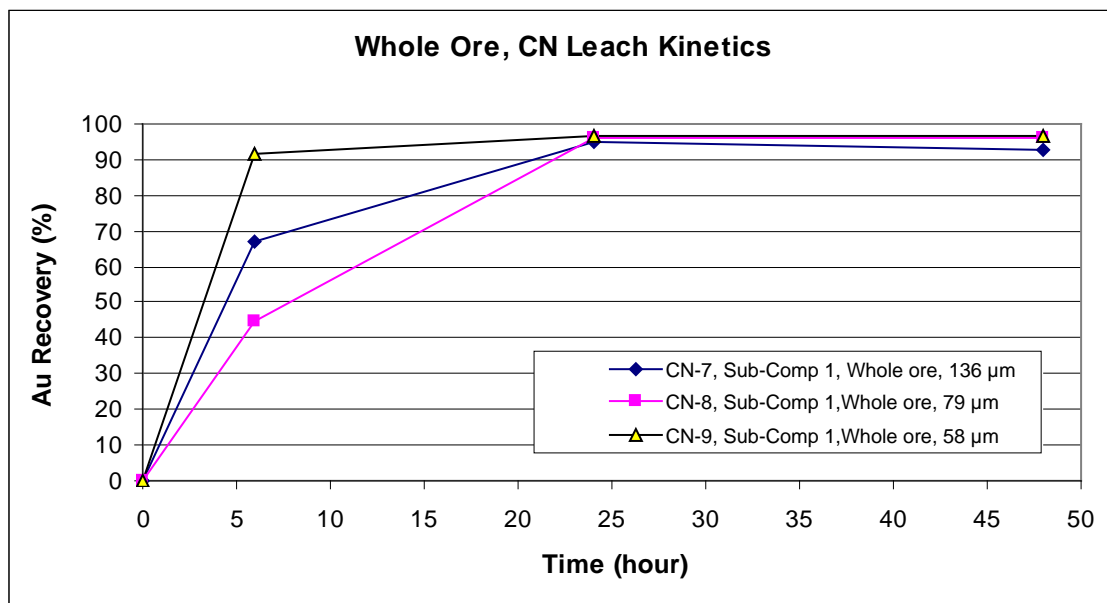
### 13.6.2 Cyanidation of Gravity Tails (MC)

Leaching of gravity tails at the finest grind tested (49  $\mu$ ) returned 94.3% extraction or 95.2% including gravity recovery, which is less than the 97.8% reported for direct cyanidation. This behaviour is unusual and similar to that observed in flotation tests; it indicates that gravity recovery is not warranted and also suggests that the free gold in the deposit is not coarse.

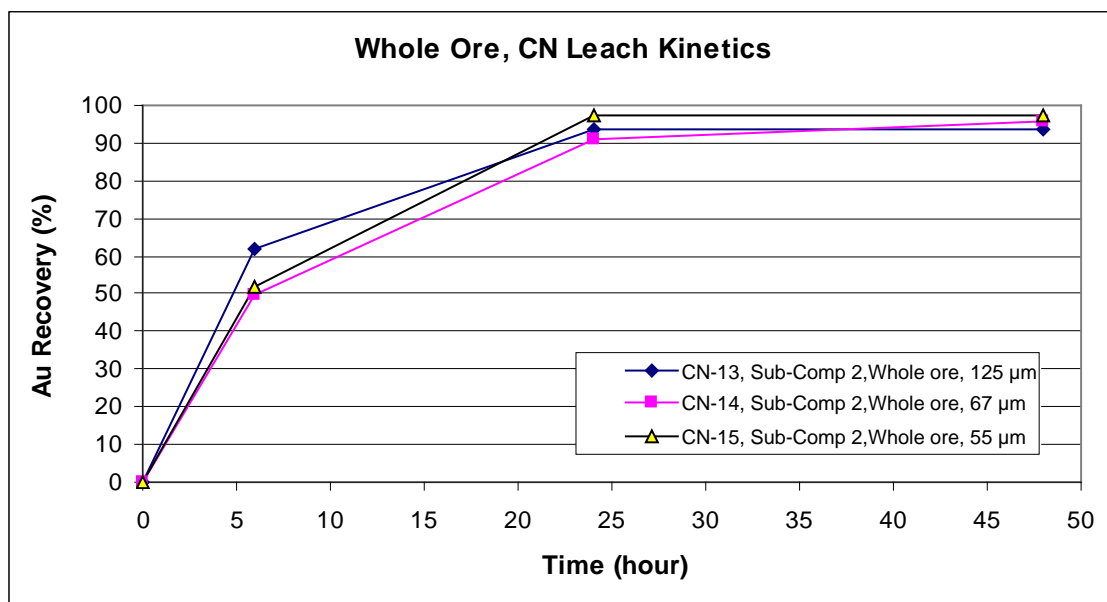
### 13.6.3 Direct Cyanidation of Sub-Composites

Cyanidation tests on SC-H and SC-L showed similar behaviour to the MC sample. Leaching is complete after 24 hours, extractions improved with fineness of grind, and reagent consumptions were modest. Within test variations, extractions from the sub-composites were indistinguishable from the MC sample.

**Figure 13.5 Direct Cyanidation, SC-H**



**Figure 13.6 Direct Cyanidation, SC-L**



#### 13.6.4 Cyanidation of Sub-composite Gravity Tails

Cyanidation of gravity tails for the sub-composites were somewhat erratic, but overall behaved similarly to the MC sample; there was no apparent positive effect of prior gravity concentration. Extractions ranged from 91% to 94% (95.0% to 96.6% including gravity recovery) with a tendency to higher extraction with finer grind. The sodium cyanide consumptions in the leach tests were 0.23-0.81 kg/t and lime consumptions were in the range of 0.53-0.57 kg/t.



## 14.0 MINERAL RESOURCE ESTIMATE

### 14.1 INTRODUCTION

The Upper Whitney covers an area of 3,000 metres long by 250 metres wide by 650 metres deep. This resources estimate of the Upper Whitney include an update of the Upper Hallnor portion (top 650 metres), as well as initial estimates on the former producing Broulan Reef Mine (top 350 metres), and the intervening un-mined C Zone. This resource estimate is in compliance with NI 43-101 and CIM standards, and was undertaken by Yungang Wu, P.Geo., Eugene Puritch, P.Eng. and Antoine Yassa, P.Geo. of P&E Mining Consultants Inc. of Brampton, Ontario. All drilling and assay data for the resource estimates were received from Temex by October 31, 2013. The effective date of this resource estimate is January 1, 2014.

### 14.2 DATABASE

All drilling data up to October 31, 2013 were provided by Temex in the form of Excel data files. The Gemcom database for this resource estimate was constructed by P&E from 11,173 drill holes. Table 14.1 summarizes the number of the drill holes in the database which consisted of 340 surface diamond drill holes (79,992 metres) drilled by Temex between 2005 and 2013, and 10,833 historic drill holes (501,146 metres) drilled by previous operators. Of these holes, 6,051 drill holes in the database intercepted the mineralized domains and were utilized for the resource estimates. Surface and underground drill hole plans are shown in Appendix I.

<b>TABLE 14.1</b>				
<b>DRILL HOLE DATABASE SUMMARY</b>				
<b>Drilling Period</b>	<b># of Surface Drill Holes</b>	<b>Metres of Surface Drilling</b>	<b># of Underground Drill Holes</b>	<b>Metres of Underground Drilling</b>
Historical	696	102,238	10,137	398,908
2005-2012	257	72,123		
2013	83	7,869		
<b>Total</b>	<b>1,036</b>	<b>182,230</b>	<b>10,137</b>	<b>398,908</b>

The database was verified in Gemcom with minor corrections made to bring it to an error free status. The assay table of the database contained 175,766 Au assays (3,492 analyzed in 2013, 26,127 from 2005 to 2012 and 146,147 previous to 2005). All drillhole survey and assay values are expressed in metric units, while grid coordinates are in the NAD 27, Zone 17 UTM system.

### 14.3 DATA VERIFICATION

Verification of assay database records was performed with original laboratory and electronically issued certificates from laboratories for all 2012-2013 assays, and visually checking for historical assays (see Table 14.2). Some minor errors were detected and corrected in the Gemcom database. All assay data collected in 2013 were verified and the checked assays represent approximately 10% of the total database. There were 12,442 assays checked from laboratory certificates during the last resource estimate of the Upper Hallnor in 2012.

TABLE 14.2 ASSAY DATA VERIFICATION SUMMARY		
# of Assays Checked	Data Source	Verification Method
10,821	Historic Data	Visually checked against scanned logs
6,190	New results	Checked against original lab certificates
<b>Total</b>	<b>17,011</b>	<b>10% of the total assays checked</b>

#### 14.4 DOMAIN INTERPRETATION

The geological interpretation and wireframes of Upper Hallnor, Broulan Reef and C-Zone were initially generated by Temex. P&E undertook to review and audit the wireframes and modified them where necessary.

The mineralized constraining domain boundaries were determined from lithology, structure, underground workings and grade boundary interpretation from visual inspection of drill hole sections. These domains were created with computer screen digitizing on drill hole sections in Gemcom. The domain outlines were influenced by the selection of mineralized material above cut-off (2.0 g/t Au for Upper Hallnor, 2.0 g/t for Broulan Reef and 0.3 g/t for C-Zone) that demonstrated a lithological and structural zonal continuity along strike and down dip. In some cases mineralization below the Au cut-off was included for the purpose of maintaining zonal continuity.

On each section, polyline interpretations were digitized from drill hole to drill hole but not typically extended more than 50 metres into untested territory. Minimum constrained width for interpretation was approximately 2 metres. Interpreted polylines from each section were “wireframed” in Gemcom into 3-D domains. Thirty one (31) domains for Upper Hallnor, eight (8) domains for Broulan Reef and two (2) domains for C-Zone were created and are shown in Appendix II. The resulting solids (domains) were used for statistical analysis, grade interpolation, rock coding and resource reporting purposes.

As shown in Table 14.3, wireframe constrained assays totalled 41,282 and the sampled length was accumulated at 38,615 m. A total of 15,517 m (approximately 29%) of drill core within the constrained solids were not sampled. For this mineral estimate process, P&E assigned a Au value of 0.001 g/t to all un-sampled intervals during drill hole compositing, although it is most likely that the un-sampled intervals, especially from the historical underground drill holes, contain some gold mineralization.

**TABLE 14.3**  
**CONSTRAINED ASSAY AND DRILL HOLE LENGTH**

Upper Hallnor Solids	Intersect	Assays	Missing Assays	Assays Length	Missing Length	Interval Length Used	Volume	Au g/t
110	154	907	138	776.1	404.7	776.1	162043.4	6.4711
156	11	58	0	35.2	0.0	35.2	7668.3	3.8652
158	3	28	0	19.2	0.0	19.2	7571.5	3.0195
HM4	380	1988	280	1729.4	525.4	1729.4	194534.2	5.5865
HM7	193	1112	101	1069.7	215.9	1069.7	386311.1	3.4181
238	3	27	0	18.8	0.0	18.8	9234.3	2.9275
HM3	455	1912	375	1695.9	802.1	1695.9	321485.6	4.0991
HM	181	1732	239	1492.1	472.0	1492.1	85519.8	4.2891
104N	4	9	1	5.7	0.8	5.7	706.8	6.3820
110Upper	4	31	1	28.2	1.2	28.2	6264.4	4.2731
104	124	390	75	355.8	180.6	355.8	105665.6	3.6265
105	50	125	33	94.4	64.2	94.4	22972.0	17.2844
107	87	276	62	230.2	101.1	230.2	64975.6	4.2295
155	183	644	124	538.3	221.6	538.3	183016.9	3.7802
155N	177	583	70	391.6	82.4	391.6	140682.4	5.9834
155S	34	164	3	108.5	5.2	108.5	25279.3	3.5523
155S_B	17	70	1	42.5	1.4	42.5	12341.7	10.6253
157	21	119	1	85.7	1.0	85.7	23440.0	7.4898
H17	256	954	162	746.2	230.1	746.2	203206.4	4.8063
BON_HOOK	569	1087	283	1527.0	127.2	1527.0	73755.8	4.9871
HM9	66	275	42	246.1	69.3	246.1	61987.7	3.6668
HM8	160	998	86	897.4	161.1	897.4	180450.4	3.1074
HM6B	259	1288	139	1200.0	250.8	1200.0	505466.0	2.1373
HM6	433	1845	289	1625.4	574.8	1625.4	433122.1	3.2809
HM5	632	2583	504	2285.1	1002.0	2285.1	501761.9	7.0565
HM2	1403	5060	737	4537.9	1324.6	4537.9	1236802.9	5.9948
HM1	245	942	217	861.2	355.1	861.2	161384.5	4.4783
BON_HOOK2	47	146	52	116.3	96.7	116.3	63764.2	3.3999
B960	464	1128	282	1459.6	356.2	1459.6	216957.2	3.0032
HM10	12	63	6	52.0	18.1	52.0	55300.3	1.6599
BON891	49	259	78	288.0	398.5	288.0	181997.9	2.1953
Totals	6676	26803	4381	24559.6	8043.9	24559.6	5635670.2	4.5971

Broulan Reef Solid	Intersect	Assays	Missing Assays	Assays Length	Missing Length	Interval Length Used	Volume	Au g/t
Bonwit	303	2035	571	2106.7	1393.5	2106.7	878360.1	4.0551
BR_revis	963	4539	886	4476.8	1540.0	4476.8	1091370.3	2.7239
BRN	746	3581	976	3504.2	2470.3	3504.2	852406.1	3.4222
BRN1	63	379	108	360.1	320.3	360.1	135392.9	2.5019
BRS	277	920	314	827.0	787.4	827.0	228700.8	3.6472
BRS1	157	318	136	279.0	387.9	279.0	51498.2	3.9096
HP	66	375	64	375.3	244.9	375.3	130328.0	2.2760
HP_V	11	56	4	52.2	11.1	52.2	16833.5	3.5194
Totals	2586	12203	3059	11981.3	7155.3	11981.3	3384889.9	3.3034

C-Zone Solid	Intersect	Assays	Missing Assays	Assays Length	Missing Length	Interval Length Used	Volume	Au g/t
C Zone	110	2251	71	2050.6	317.7	2050.6	847803.5	2.2965
C-Upper	2	25	0	23.0	0.0	23.0	18942.4	1.3460
C-Zone Totals	112	2276	71	2073.6	317.7	2073.6	866745.9	2.2757

**Note:** the missing assay intervals were not used for averaging the Au grades.

Topography and overburden surfaces were created by P&E based on the drill hole collar locations and lithology. Wireframes of the mined out voids were provided by Temex and P&E didn't perform a validation of the voids for this resource estimate.

## 14.5 ROCK CODE DETERMINATION

A unique rock code was assigned for each the mineralized domain solid in the resource models. The domain volumes and rock codes applied for the modeling are tabulated in Table 14.4.

TABLE 14.4 ROCK CODE DESCRIPTION AND VOLUME			
Deposit	Domain	Rock Type	Volume (m3)
Upper Hallnor	104	100	105,666
	104N	110	707
	105	120	22,972
	107	130	64,976
	110	140	162,043
	110upper	150	6,264
	155	160	183,017
	155N	170	140,682
	155S	180	25,279
	155S_B	190	12,342
	156	200	7,668
	157	210	23,440
	HM	220	85,520
	HM1	230	161,384
	HM2	240	1,236,803
	HM3	250	321,486
	HM4	260	194,534
	HM5	270	501,762
	HM6	280	433,122
	HM7	290	386,311
	HM8	300	180,450
	HM9	310	61,988
	HM10	320	55,300
	HM6B	330	505,466
	158	340	7,571
	238	350	9,234
	BON_HOOK	360	73,756
	H17	370	203,206
	BON_HOOK2	380	63,764
	B960	390	216,957
	BON891	480	181,998
Broulan Reef	HP	400	128,921
	HP_V	410	16,400
	Bonwit	420	878,360
	BRN1	430	135,393
	BRS	440	228,536
	BRS1	450	51,498
	BRN	460	851,104
	BR	470	1,090,290
C-Zone	C Zone	500	847,718
	C-Upper	510	18,942
All	Air	0	
	OVB	1	
	Waste	99	
	Voids	999	

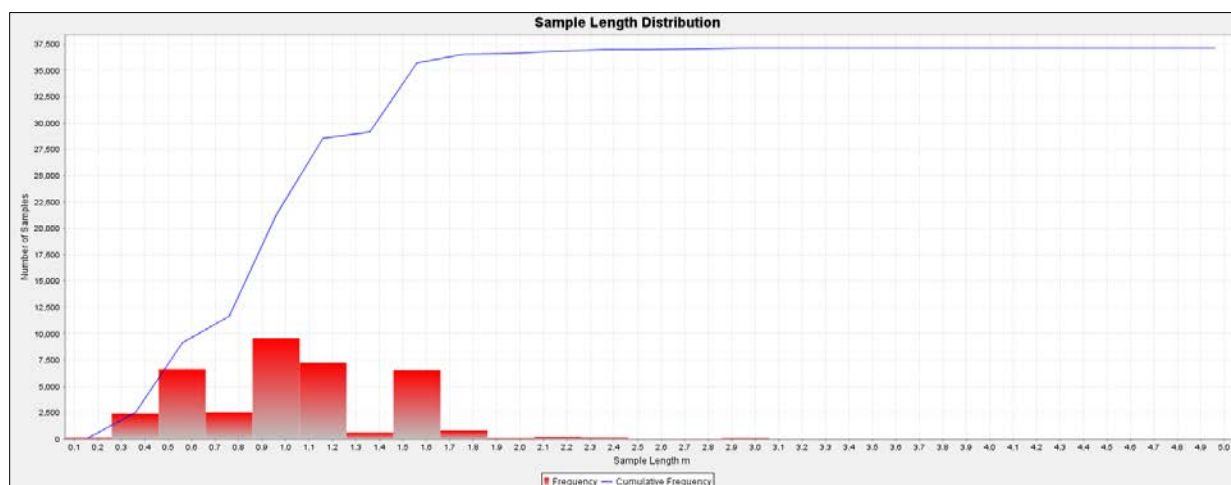
## 14.6 COMPOSITING

The basic statistics of all constrained Au assays and sample length are presented in Table 14.5.

<b>TABLE 14.5</b>		
<b>BASIC STATISTICS OF ALL CONSTRAINED AU ASSAYS AND SAMPLE LENGTH</b>		
<b>Statistics</b>	<b>Au Assay g/t</b>	<b>Sample Length m</b>
Number of samples	37,125	3,7125
Minimum value	0.003	0.06
Maximum value	2,998.97	4.88
Mean	5.23	1.03
Median	1.02	0.92
Geometric Mean	0.68	0.93
Variance	1,719.02	0.18
Standard Deviation	41.46	0.42
Raw Coefficient of variation	7.92	0.41

The mean of constrained sample length was 1.03m and the sample length distribution is exhibited in Figure 14.1.

**Figure 14.1 Constrained Sample Length Distribution**



A one metre compositing length was selected for the drill hole intervals that fell within the constraints of the above-mentioned domains. The composites were calculated for Au over 1.0 metre lengths starting at the first point of intersection between assay data hole and hanging wall of the 3-D zonal constraint. The compositing process was halted upon exit from the footwall of the aforementioned constraint. Un-assayed intervals and below the detection limit assays were set to 0.001 g/t Au. Any composites that were less than 0.25 metres in length were discarded so as not to introduce any short sample bias in the interpolation process. The constrained composite data were extracted to Gemcom point files for the capping study.

Some of the historical underground drill holes which intersected the mineralization domains contained no assays. They were considered as explicit missing samples and assigned a 0.001g/t Au value for the un-sampled intervals within the constrained domains during the course of this study. As a result, it is likely that the resource grades were locally underestimated.

## **14.7 GRADE CAPPING**

Grade capping was investigated on the 1.0 m composite values in the database within the constraining domains to ensure that the possible influence of erratic high values did not bias the database. Au composite Log-normal histograms were generated for each mineralized domain and the resulting graphs are exhibited in Appendix III. Table 14.6 details the grade capping values. The capped Au composites were utilized to develop variograms and for block model grade interpolation.

**TABLE 14.6**  
**AU GRADE CAPPING SUMMARY**

Deposit	Domains	Total # of Composites	Capping Value Au (g/t)	# of Capped Composites	Mean of Raw Composites	Mean of Capped Composites	CoV of Raw Composites	CoV of Capped Composites	Capping Percentile
Upper Hallnor	104	475	25	2	1.95	1.74	2.97	1.94	99.6
	104N	6	NA	0	5.41	5.41	0.81	0.81	100.0
	105	153	25	4	4.00	2.34	4.08	2.33	97.4
	107	250	NA	0	1.41	1.41	1.91	1.91	100.0
	110	1,211	55	13	4.31	3.43	5.23	2.31	98.9
	110upper	31	10	2	4.40	3.08	1.80	0.80	93.6
	155	804	30	7	2.74	2.44	2.67	1.88	99.1
	155N	512	40	6	3.95	3.46	2.61	1.85	98.8
	155S	121	NA	0	3.41	3.41	1.28	1.28	100.0
	155S_B	49	10	3	9.55	3.16	2.97	0.96	93.9
	156	38	10	2	3.89	3.14	1.46	0.96	94.7
	157	92	27	6	7.18	5.69	1.87	1.31	93.5
	HM	2,013	40	16	3.30	3.10	2.37	1.97	99.2
	HM1	1,266	50	5	3.15	3.10	2.13	2.04	99.6
	HM2	6,203	70	46	4.58	3.97	3.89	2.23	99.3
	HM3	2,621	70	6	2.81	2.64	3.19	2.46	99.8
	HM4	2,347	80	17	4.20	3.80	3.42	2.60	99.3
	HM5	3,445	70	33	4.95	3.02	7.33	2.92	99.0
	HM6	2,300	55	5	2.44	2.27	3.30	2.40	99.8
	HM7	1,337	55	6	2.83	2.61	2.93	2.24	99.6
	HM8	1,098	NA	0	2.63	2.63	2.07	2.07	100.0
	HM9	333	36	1	2.81	2.39	3.86	2.31	99.7
	HM10	60	NA	0	1.58	1.58	1.34	1.34	100.0
	HM6B	1,511	30	3	1.79	1.75	1.97	1.68	99.8
	158	19	NA	0	3.00	3.00	0.74	0.74	100.0
	238	19	5	2	3.07	1.28	2.30	1.20	89.5
	BON_HOOK	1,792	50	12	4.69	4.59	1.76	1.62	99.3
	H17	1,043	40	11	3.69	3.20	3.08	1.89	99.0
	BON_HOOK2	225	20	3	1.92	1.44	3.74	2.18	98.7
	B960	1,957	30	11	2.53	2.43	1.97	1.69	99.5
	Bon891	677	20	3	0.83	0.77	3.75	3.19	99.6
Broulan Reef	HP	634	20	4	1.47	1.16	4.78	2.28	99.4
	HP_V	66	15	2	2.82	2.91	2.70	1.50	97.0
	BONWIT	3,581	60	17	2.41	1.15	14.52	4.66	99.5
	BRN1	692	20	7	1.54	0.84	8.34	3.12	99.0
	BRS	1,665	30	14	2.38	1.19	15.92	3.06	99.2
	BRS1	710	30	8	1.78	1.37	4.64	2.99	98.9
	BRN	6,171	50	45	2.05	1.46	7.27	3.61	99.3
	BR	6,254	60	27	2.07	1.46	9.53	3.76	99.6
C-Zone	C-Zone	2,397	20	22	2.00	1.33	9.43	2.15	99.1
	C-Upper	23	NA	0	1.36	1.36	0.95	0.95	100.0



## 14.8 SEMI-VARIOGRAPHY

A variography study was performed as a guide to determining grade interpolation search strategy. Omni, along strike, down dip and across dip semi-variograms were attempted individually for all domains using capped composites. The variogram ranges were used as the spherical search ellipse parameters for grade interpolation. Selected variograms are attached in Appendix IV.

## 14.9 BULK DENSITY

The bulk density used for the creation of the density block models was derived from site visit samples taken by Antoine Yassa, P.Geo. and analyzed at Agat Laboratories in Mississauga, Ontario. The average bulk density for the resource estimates was 2.84 tonnes per cubic metre. It is recommended that a systematic density sampling and measuring program should be carried out in future drilling programs.

## 14.10 BLOCK MODELING

The Upper Hallnor, Broulan Reef and C-Zone resource block models were constructed separately using Gemcom modelling software and their block origin and block size are tabulated in Table 14.7. The block models were rotated in order to orient the X axis parallel to the trend of the domains. Block models were created for rock type, density, percent, Au, and class.

<b>TABLE 14.7</b>				
<b>BLOCK MODEL DEFINITIONS</b>				
<b>Deposit</b>	<b>Direction</b>	<b>Origin</b>	<b># of Blocks</b>	<b>Block Size</b>
Upper Hallnor	X	488,597.118	536	2.5
	Y	5,372,929.051	560	1.25
	Z	300	278	2.5
	Rotation	30° Counter Clockwise		
Broulan Reef	X	486,738	752	2.5
	Y	5,372,290	760	1.25
	Z	300	160	2.5
	Rotation	25° Counter Clockwise		
C-Zone	X	487,881.294	300	2.5
	Y	5,373,098.894	428	1.25
	Z	300	80	2.5
	Rotation	30° Counter Clockwise		

All blocks in the rock type block model were initially assigned a waste rock code of 99, corresponding to the country rocks. All mineralized domains were used to code all blocks within the rock type block model that contain by volume at least 1% or greater volume within the domains. These blocks were assigned their appropriate individual rock codes as indicated in Table 14.4. The Void solid was utilized to code all historical mined blocks with a rock code 999 that were at least 1% or greater inside the Void. The bedrock topographic surface was subsequently utilized to assign rock code 1, corresponding to overburden, to all blocks at least 50% or greater above the bedrock surface. Blocks 50% or greater above the topographic surface were coded with 0 for Air.

A percent block model was set up to accurately represent the volume and subsequent tonnage that was occupied by each block inside the constraining domains. As a result, the domain boundary was properly represented by the percent model ability to measure individual infinitely variable block inclusion percentages within that domain. The minimum percentage of the mineralized block was set to 1%. The Void solids were utilized to deplete the resource model volume with the historical mined areas by selecting 1% as the minimum percent of block inside the Void solids. The percentage used for this resource estimation was derived from the subtraction of the domain percent and the void percent. If the volume percent value of any block contained by volume less than 1%, it was coded to 0%.

A uniform bulk density of 2.84 t/m<sup>3</sup> was applied to all mineralized blocks.

Inverse distance cubed (1/d<sup>3</sup>) grade interpolation was utilized with the Au capped composites. Multiple passes were executed for the grade interpolation to progressively capture the sample points so as to avoid over smoothing and preserve local grade variability. Search ranges were based on the variograms and search directions which were aligned with the strike and dip directions of each domain respectively. In order to properly align the search ellipsoid with the trend of the domains, sub-domains with individual variogram directions were created for some domains. Grade blocks were interpolated using the following parameters in Table 14.8.

<b>TABLE 14.8</b> <b>AU BLOCK MODEL INTERPOLATION PARAMETERS</b>							
<b>Deposit</b>	<b>Pass</b>	<b>Dip Range (m)</b>	<b>Strike Range (m)</b>	<b>Across Dip Range (m)</b>	<b>Max # of Sample per Hole</b>	<b>Min # Sample</b>	<b>Max # Sample</b>
Upper Hallnor	I - Measured	12.5	10	5	2	5	12
	II - Indicated	25	20	10	2	3	12
	III-Inferred-1	50	40	20	2	1	12
	IV- Inferred-2	100	80	40	2	1	12
Broulan Reef	I - Measured	12.5	10	5	2	5	12
	II - Indicated	25	20	10	2	3	12
	III-Inferred-1	50	40	20	2	1	12
	IV- Inferred-2	100	80	40	2	1	12
C-Zone	I - Measured	10	10	5	2	5	12
	II - Indicated	20	20	10	2	3	12
	III-Inferred-1	50	50	25	2	1	12
	IV- Inferred-2	200	200	100	2	1	12

Selected cross-sections and plans of the Au grade blocks are presented in Appendix V.

## 14.11 RESOURCE CLASSIFICATION

In P&E's opinion, the drilling, assaying and exploration work on the Upper Hallnor, Broulan Reef and C-Zone supporting this resource estimate are sufficient to indicate reasonable potential for economic extraction and thus qualify it as a Mineral Resource under CIM definition standards. The mineral resources were classified as Measured, Indicated and Inferred based on the geological interpretation, semi-variogram performance and drill hole spacing. The Measured resources were defined for the blocks interpolated by the grade interpolation Pass I in Table 14.8, which used at least 5 composites from a minimum of three holes; Indicated resources were justified for the blocks interpolated by Pass II, which were estimated with at least three

composites from a minimum of two drill holes; and Inferred resources were categorized for all remaining grade populated blocks within the mineralized domains. The classifications of some blocks have been adjusted to represent the resource classification more reasonably. Selected classification block cross-sections and plans are attached in Appendix VI.

## 14.12 RESOURCE ESTIMATE

The resource estimate was derived from applying a Au cut-off grade to the block model and reporting the resulting tonnes and grade for potentially mineable areas. The following calculation demonstrates the rationale supporting the Au cut-off grade that determines the underground potentially economic portions of the constrained mineralization.

### 14.12.1 Underground Au Cut-Off Grade Calculation CDN\$

Au Price	US\$1,200/oz
\$US/\$CDN Exchange Rate	\$0.95
Au Recovery	95%
Mining Dilution	20%
Mining Cost	\$60/tonne mined
Process Cost	\$30.00/tonne milled
Haulage Cost	\$2.25/tonne milled
General & Administration	\$4.50/tonne milled

Therefore, the Au cut-off grade for the underground resource estimate is calculated as follows:

$$\text{Operating costs per ore tonne} = (\$60 + \$30 + \$2.25 + \$4.50) = \$96.75/\text{tonne}$$

$$[(\$96.75)/[(\$1,200/\text{oz}/31.1035/0.95 \text{ FX} \times 95\% \text{ Recovery}/20\% \text{ Dilution})] = 3.01 \text{ g/t Use } 3.0 \text{ g/t}$$

The above data were derived from similar gold projects to the Whitney Deposit.

## 14.13 RESOURCE ESTIMATE STATEMENT

The resulting resource estimate is tabulated in the Table 14.9. P&E considers that the gold mineralization of Upper Hallnor, Broulan Reef and C-Zone are potentially amenable to underground extraction.

**TABLE 14.9**  
**MINERAL RESOURCE ESTIMATE STATEMENT AT 3.0 G/T GOLD CUT-OFF<sup>(1-5)</sup>**

Deposit	Measured			Indicated			Measured + Indicated			Inferred		
	Tonnes	Au g/t	Contained Au oz	Tonnes	Au g/t	Contained Au oz	Tonnes	Au g/t	Contained Au oz	Tonnes	Au g/t	Contained Au oz
Upper Hallnor	776,000	6.88	171,500	1,735,000	6.73	375,600	2,511,000	6.78	547,100	801,000	5.26	135,600
Broulan Reef	169,000	7.92	43,000	417,000	7.15	95,800	586,000	7.37	138,800	88,000	5.82	16,500
C-Zone	21,000	5.26	3,600	101,000	5.89	19,100	122,000	5.79	22,700	106,000	5.50	18,600
Total	966,000	7.02	218,100	2,253,000	6.77	490, 500	3,219,000	6.85	708,600	995,000	5.34	170, 700

- (1) Mineral resources which are not mineral reserves do not have demonstrated economic viability. The estimate of mineral resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.
- (2) The quantity and grade of reported Inferred resources in this estimation are uncertain in nature and there has been insufficient exploration to define these Inferred resources as an Indicated or Measured mineral resource and it is uncertain if further exploration will result in upgrading them to an Indicated or Measured mineral resource category.
- (3) The mineral resources in this news release were estimated using the Canadian Institute of Mining, Metallurgy and Petroleum (CIM), CIM Standards on Mineral Resources and Reserves, Definitions and Guidelines prepared by the CIM Standing Committee on Reserve Definitions and adopted by the CIM Council.
- (4) The volume of the historical mined areas was removed from the resource estimates.
- (5) Mineral resources outside of the Temex property boundary were not include in this estimate.

## 14.14 MINERAL RESOURCE SENSITIVITY

Mineral resources are sensitive to the selection of a reporting Au cut-off grade. The sensitivities of the Au cut-off are demonstrated in Table 14.10, Table 14.11, and Table 14.12 for Upper Hallnor, Broulan Reef and C-Zone respectively.

<b>TABLE 14.10</b> <b>UPPER HALLNOR RESOURCE SENSITIVITY TO AU CUT-OFF</b>									
Cut-off Au g/t	Measured			Indicated			Inferred		
	Tonnes	Au g/t	Contained Au oz	Tonnes	Au g/t	Contained Au oz	Tonnes	Au g/t	Contained Au oz
10.0	112,555	17.70	64,036	242,700	17.68	137,931	58,809	14.68	27,763
9.0	136,270	16.27	71,265	295,005	16.22	153,871	72,360	13.71	31,888
8.0	170,029	14.72	80,462	361,586	14.80	172,001	94,560	12.47	37,912
7.0	216,420	13.17	91,620	460,115	13.23	195,646	129,375	11.12	46,262
6.0	281,516	11.62	105,153	598,943	11.66	224,552	172,628	9.96	55,271
5.0	379,846	10.02	122,422	812,353	10.03	261,951	240,677	8.69	67,207
4.0	534,654	8.41	144,618	1,156,257	8.37	311,276	427,018	6.82	93,664
3.0	775,543	6.88	171,462	1,735,060	6.73	375,544	801,152	5.26	135,589
2.0	1,162,209	5.41	201,997	2,748,915	5.15	455,551	1,388,170	4.06	181,297
1.0	1,796,900	4.01	231,878	4,431,300	3.75	534,547	2,316,787	3.02	225,142
0.001	2,947,803	2.60	246,625	7,186,838	2.47	569,881	3,429,792	2.18	240,696

**TABLE 14.11**  
**BROULAN REEF RESOURCE SENSITIVITY**

<b>Cut-off Au g/t</b>	<b>Measured</b>			<b>Indicated</b>			<b>Inferred</b>		
	<b>Tonnes</b>	<b>Au g/t</b>	<b>Contained Au oz</b>	<b>Tonnes</b>	<b>Au g/t</b>	<b>Contained Au oz</b>	<b>Tonnes</b>	<b>Au g/t</b>	<b>Contained Au oz</b>
10.0	35,856	18.20	20,979	70,050	17.69	39,831	9,229	14.94	4,434
9.0	41,331	17.04	22,649	83,366	16.38	43,891	11,503	13.86	5,127
8.0	49,346	15.65	24,832	101,670	14.95	48,872	13,983	12.91	5,804
7.0	60,481	14.15	27,508	126,320	13.49	54,799	17,027	11.94	6,536
6.0	74,192	12.73	30,369	160,756	11.99	61,972	22,441	10.60	7,650
5.0	92,656	11.29	33,624	207,317	10.52	70,143	35,179	8.74	9,891
4.0	121,378	9.67	37,754	281,284	8.93	80,743	57,335	7.08	13,057
3.0	169,041	7.92	43,052	416,482	7.15	95,776	88,013	5.82	16,460
2.0	264,488	5.94	50,528	693,912	5.27	117,578	169,553	4.16	22,698
1.0	535,007	3.64	62,668	1,414,551	3.30	149,914	421,788	2.52	34,199
0.001	1,858,581	1.29	77,159	4,754,374	1.22	185,863	1,360,663	1.03	45,180

<b>TABLE 14.12</b> <b>C-ZONE RESOURCE SENSITIVITY</b>									
Cut-off Au g/t	Measured			Indicated			Inferred		
	Tonnes	Au g/t	Contained Au oz	Tonnes	Au g/t	Contained Au oz	Tonnes	Au g/t	Contained Au oz
10.0	1,162	12.55	469	10,717	14.09	4,853	8,961	10.63	3,063
9.0	1,738	11.57	646	14,155	12.96	5,898	11,494	10.38	3,834
8.0	2,443	10.66	838	18,958	11.83	7,213	15,182	9.91	4,838
7.0	3,620	9.62	1,120	24,130	10.90	8,455	21,726	9.15	6,393
6.0	5,486	8.53	1,505	31,395	9.87	9,962	34,851	8.15	9,136
5.0	8,396	7.48	2,018	43,057	8.67	12,003	48,771	7.39	11,591
4.0	13,151	6.37	2,695	64,218	7.29	15,048	71,200	6.47	14,800
3.0	21,232	5.26	3,588	100,983	5.89	19,130	105,492	5.50	18,648
2.0	35,674	4.12	4,721	172,730	4.46	24,753	183,790	4.21	24,862
1.0	62,440	2.96	5,952	330,876	3.00	31,949	418,600	2.62	35,197
0.001	123,208	1.70	6,724	995,441	1.24	39,593	1,339,156	1.09	46,750

## 14.15 CONFIRMATION OF ESTIMATE

The block model was validated using a number of industry standard methods including visual and statistical methods.

Visual examination of composite and block grades on plans and sections on-screen and review of estimation parameters including:

- Number of composites used for estimation;
- Number of holes used for estimation;
- Distance to the nearest composite;
- Number of passes used to estimate grade;
- Mean of the composites used.

Comparison of mean grades of capped composites and model blocks (Table 14.13).

<b>TABLE 14.13</b> <b>STATISTICS COMPARISON OF COMPOSITES WITH BLOCK MODEL</b>					
Deposit	Data Type	Au g/t	Variance	Standard Deviation	Coefficient of Variation
Upper Hallnor	Composites	3.55	262.37	16.20	4.56
	Capped Composites	3.06	50.71	7.12	2.32
	Block Model	2.56	14.62	3.82	1.49
Broulan Reef	Composites	2.10	544.76	23.34	11.10
	Capped Composites	1.34	25.51	5.05	3.76
	Block Model	1.25	7.02	2.65	2.13
C-Zone	Composites	1.99	350.84	18.73	9.41
	Capped Composites	1.33	8.15	2.85	2.14
	Block Model	1.22	3.41	1.85	1.52



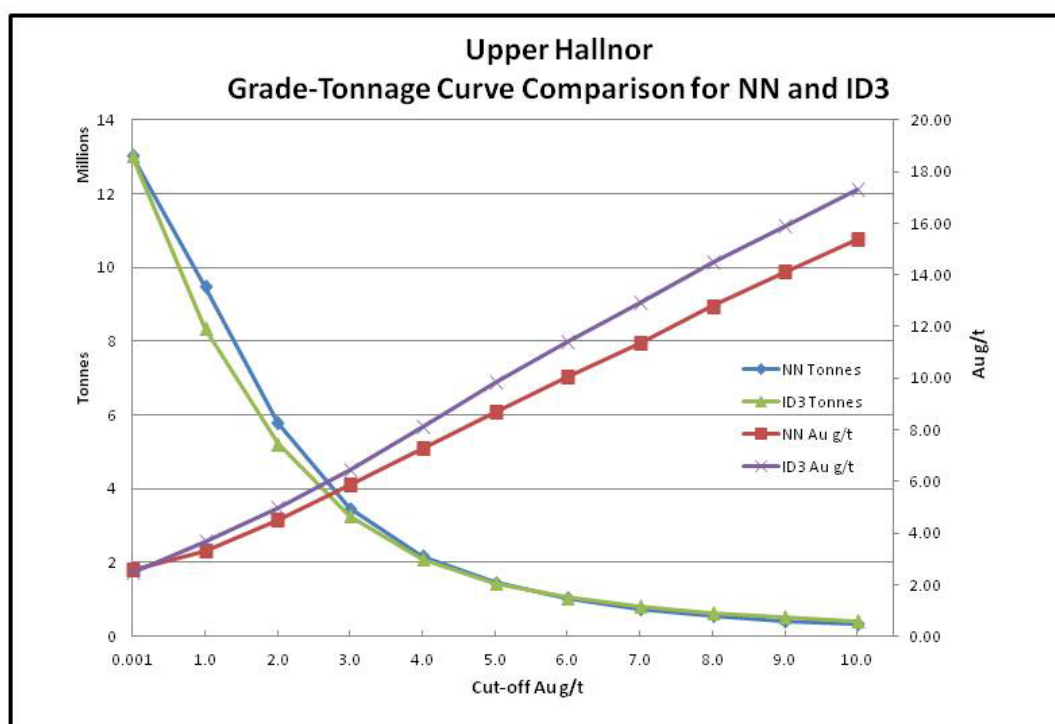
The comparison above shows the average grades of all the Au blocks in the block models to be somewhat lower than the average grades of capped composites used for grade estimation. This is probably due to the localized clustering of some higher grade assays which were smoothed by the block modeling grade interpolation process. It is also possible that the higher grade areas were depleted with the voids. The block model Au values will be more representative than the capped composites due to the block model's 3D spatial distribution characteristics.

A volumetric comparison was performed with the block model volume versus the geometric calculated volume of the domain solids and the differences are detailed in Table 14.14.

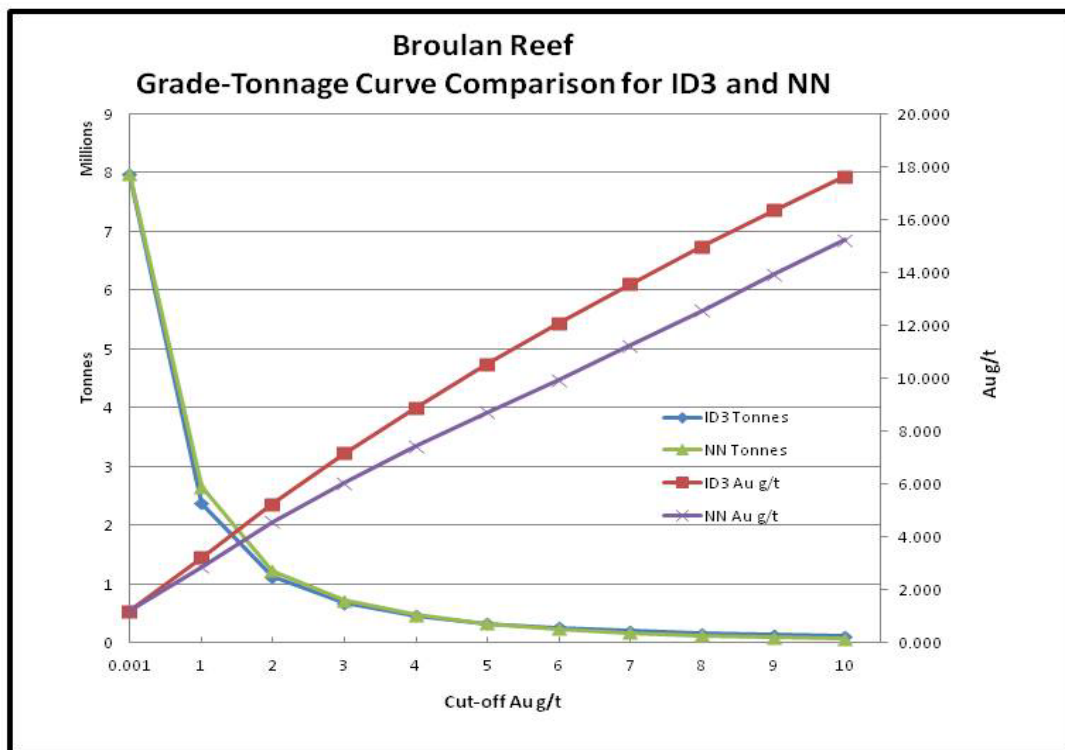
<b>TABLE 14.14</b>			
<b>VOLUME COMPARISON OF BLOCK MODEL WITH GEOMETRIC SOLIDS</b>			
<b>Deposit</b>	<b>Upper Hallnor</b>	<b>Broulan Reef</b>	<b>C-Zone</b>
Geometric Domain Volume (m <sup>3</sup> )	5,635,668	3,384,791	866,660
Block Model Volume (m <sup>3</sup> )	5,585,764	3,381,297	865,703
Difference %	0.89%	0.10%	0.11%

Comparison of grade models interpolated with Inverse Distance cubed ( $1/d^3$ ) and Nearest Neighbour (NN) on global resource basis. Figure 14.2, Figure 14.3 and Figure 14.4 present the grade-tonnage curve for comparison.

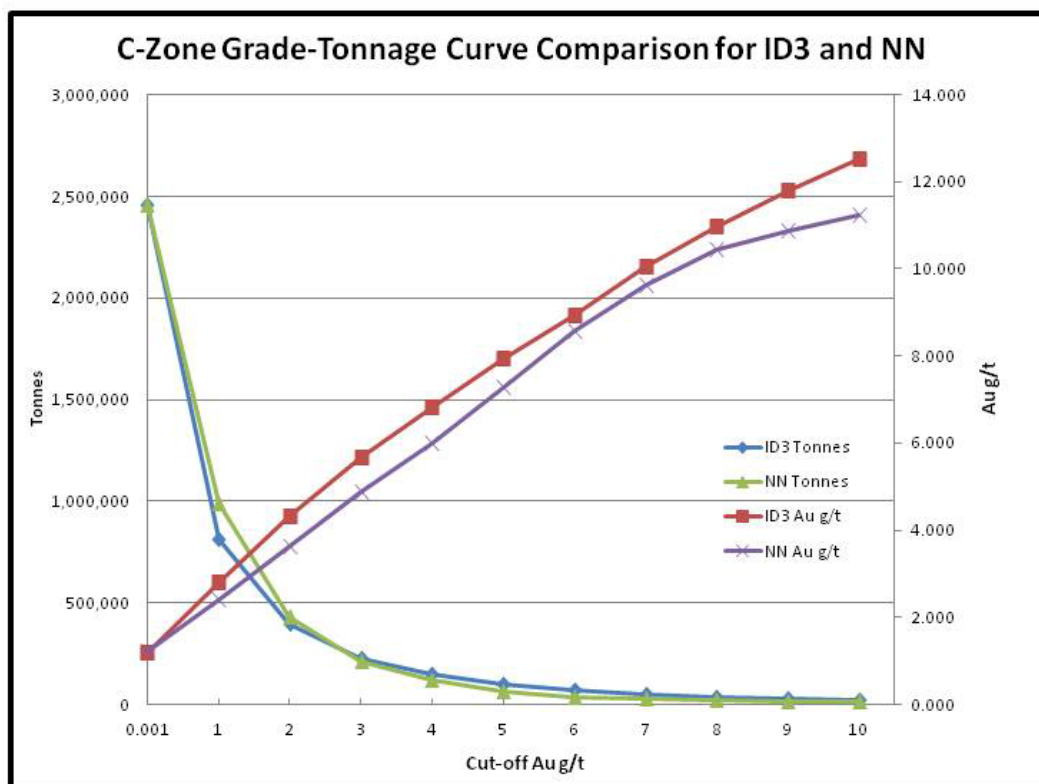
**Figure 14.2 Upper Hallnor Grade Tonnage Comparisons for NN and ID<sup>3</sup> Interpolation**



**Figure 14.3 Broulan Reef Grade Tonnage Comparisons for NN and ID<sup>3</sup> Interpolation**



**Figure 14.4 C-Zone Grade Tonnage Comparisons for NN and ID<sup>3</sup> Interpolation**



## **15.0 MINERAL RESERVE ESTIMATES**

This section is not applicable to this report.

## **16.0 MINING METHODS**

This section is not applicable to this report.

## **17.0 RECOVERY METHODS**

This section is not applicable to this report.

## **18.0 PROJECT INFRASTRUCTURE**

This section is not applicable to this report.

## **19.0 MARKET STUDIES AND CONTRACTS**

This section is not applicable to this report.



## **20.0 ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT**

This section is not applicable to this report.

## **21.0 CAPITAL AND OPERATING COSTS**

This section is not applicable to this report.

## **22.0 ECONOMIC ANALYSIS**

This section is not applicable to this report.

## 23.0 ADJACENT PROPERTIES

Immediately east of Temex's Whitney property, the mineralized trend following the Timiskaming unconformity hosts the past producing Broulan Porcupine, Pamour Mine and Hoyle Mine sites owned by Goldcorp Inc. The geology of these mines is reviewed in some detail here as the stratigraphy and structure associated with these past producing mines is contiguous with Temex's Whitney property.

The Pamour mine has produced over 4.0 million ounces of gold since 1936 and is located 2 km east of the Whitney property. Mineralization at Pamour straddles the unconformable contact of the Tisdale metavolcanic rocks with the Timiskaming metasediments. The mine was initiated as an underground mine in 1936 and complemented with open pit mining between 1975 to 1999 whereupon all operations ceased. The operation was reactivated in 2004 as an open pit mine. Mining ended in the second half of 2009 due to depletion of resources with residual operations continuing into 2011.

The following description of the Pamour mine is summarized from the report by West et al. (1991) that was part of the IAGOD field trip guidebook. In the Pamour mine area, the metavolcanic and metasedimentary rocks are overturned with steep north dips and south facing directions and display a similar stratigraphic sequence as the Whitney property. The mineralized zone is five kilometers in length on the property and straddles the Timiskaming unconformity. The Pamour conglomerate is the key lithological unit hosting gold mineralization. The conglomerate is a poorly sorted heterolithic conglomerate that attains a maximum thickness of 21 m and is deposited on top of a discontinuous "agglomerate" unit and the north greywacke that is approximately 18 m thick. The south greywacke is a turbiditic wacke siltstone that is 80 to 300 m thick and overlies the Pamour conglomerate. The Hallnor Broulan conglomerate is a second conglomerate unit overlying the south greywacke.

The east striking Tisdale and Timiskaming assemblage rocks are overturned, with dips ranging from 40° to 75° north and have south facing pillow tops and bedding structures. The Destor Porcupine fault zone occurs south of the mineralized zone. The Pamour main fault and the Hallnor main fault are two major north striking faults that cross the Pamour property. The Hallnor main fault has a northwest strike and dextral offset of 300 meters, occurs near the east boundary of the Whitney property.

West et al. (1991) describe the mineralization at Pamour as varying according to host rock competency with zones of brittle fracture being the principal host to gold. All of the rocks contain ore except for the Hallnor Broulan conglomerate. West et al. (1991) describe three main types of mineralization. The first are flat vein zones consisting of quartz-carbonate-sulphide stringer veins and veinlets dipping 35° to 65° south and average 3.5 g/t Au. The fracture zones containing the veins form lenticular ore bodies up to 250 m long and 25 meters thick. Veins vary from millimeters to several centimeters in thickness and associated sulphides including pyrite, pyrrhotite, and arsenopyrite impregnate both the matrix and clasts of the conglomerate. Sulphides occur in both the veins and altered wall rocks. Gold occurs associated with quartz veins or as minute inclusions in sulphide minerals.

Single veins are another type of mineralization described by West et al. (1991) and occur in the wacke units, have an east strike and dip sub-vertically from 80° north to 80° south. These veins contain quartz, carbonate, minor tourmaline and sulphides. The presence of arsenopyrite is indicative of higher gold grades and chalcopyrite and sphalerite are indicative of very good

grades. These veins have an average grade of 3.77 g/t Au. This type of vein includes the high grade quartz tourmaline TN-type veins.

Ribbon veins of the third type occur in the metavolcanic rocks and are well-developed veins consisting of quartz carbonate, with minor tourmaline, calcite, chlorite, sphalerite, pyrite and chalcopyrite. They strike east, dip 30 to 50° degrees north and have the highest grade mined averaging 6.38 g/t Au. They exhibit well developed ribbon textures suggestive of crack and seal. Major veins such as the 51 vein are up to 600 meters in strike length. Gold in these veins is erratically distributed with high-grade coarse gold.

The past-producing Hoyle mine is located 4 km east of the Whitney property. The description here is summarized from Kusic and Olsen (1991). The Hoyle mine was operated as an underground mine from 1941 to 1948 producing 70,000 ounces of gold from 659,539 tonnes of ore. From 1978 to 1980 ore was mined from 400 level development and the #2 pit (Kusic and Olsen 1991). Gold is associated with quartz-ankerite-pyrrhotite veins and stockworks with minor pyrrhotite +/- pyrite. The favourable stratigraphy is approximately 900 meters in width and is an extension of the sequence at the Pamour mine. These rocks are overturned and dip 60° to 80° north. Most production was from the Pamour conglomerate that is 6 to 30 meters thick and is close to the unconformity between the Tisdale and Timiskaming assemblages, however, veins in the metavolcanic rocks are higher grade than those in the metasediments. The Destor Porcupine fault traverses the southern part of the mine property and is approximately 1,000 meters south of the unconformity.

Kusic and Olsen (1991) describe gold values at the Hoyle mine as being present in all rock types and are correlated with pyrite and pyrrhotite and strongly correlated with arsenopyrite, galena and sphalerite. Early production on the property was from the conglomerate horizon and ranged in grade from 2.26 to 3.67 g/t Au. Subsequently considerable tonnages have been mined from veins in greywacke (2.8 g/t) and veins in metavolcanics (up to 14 g/t) and disseminated zones or stockworks in metavolcanics.

Types of mineralization defined by Kusic and Olsen (1991) include: 1) wide disseminated zones developed in the conglomerate and greywackes. These are characterized by closely spaced quartz veins ranging in width from 2.5 cm to several meters. The ore includes both veins and altered wall rock. Gold occurs as free grains or as minute particles in sulphide; 2) Tabular high grade veins occur in metavolcanic rocks and include thin veins with abundant sulphides and thick veins with rare sulphides. Both types strike east and dip 30° to 55° north. Wall rock alteration is minimal; 3) tabular high grade veins occur in the greywacke and strike east with dips of 70° to 80° north. They have strike lengths for up to 300 m and widths of 15 cm to 3.7 m. The veins cut the wacke bedding at an acute angle and are associated with wall rock bleaching attributed to sericite alteration accompanied by pyrite. Gold occurs in the veins and in the altered wall rock.

## **24.0 OTHER RELEVANT DATA AND INFORMATION**

There are no other data considered relevant to this Report that have not previously been included.

## **25.0 INTERPRETATION AND CONCLUSIONS**

The Upper Whitney resource in this Report includes an update of the initial September 5, 2012 estimate (Technical Report No. 249, Sutcliffe et al, 2012) and incorporates initial estimates on the former producing Bonetal, Broulan Reef Mines, and the C Zone located between them. This study is updated through 93 holes totalling 9,898 m of new drilling by Temex and 32 new holes totalling 1,470 m of drilling performed by the Goldcorp performed during late 2012-2013. It also incorporates a compilation and validation of historical data on the Upper Hallnor, Bonetal and Broulan Reef Mines.

Although a larger, low grade envelope amenable to large scale open pit extraction was highlighted in the initial September 5, 2012 estimate, this Report defines the higher grade components within with the objective of defining gold resources which would be amenable to stand-alone underground mining operations and more selective open pit mining methods. This study demonstrates the Whitney Property Resource also remains robust and continuous at higher grades and grade cut-offs consistent with that achieved through historical production.

P&E has evaluated drilling procedures, sample preparation, analyses and security and is of the opinion that the core logging procedures employed, and the sampling methods used were thorough and have provided sufficient geotechnical and geological information. The authors consider the data to be of good quality and satisfactory for use in a resource estimate. P&E compared independent sample verification results versus the original assay results for gold and the P&E results demonstrate that the results obtained and reported by Temex were reproducible.

The resource estimate is based on a database consisting of a total of 1,036 surface drill holes and 10,137 underground drill holes. Based on estimated operating costs and 95% gold recovery, a gold price of US\$1,200/oz and an exchange rate of CDN\$/US\$ of 0.95/1.00, underground cut-offs were calculated as 3.0 g/t Au. Mineralization is estimated to have a density of 2.84 tonnes/m<sup>3</sup>.

In P&E's opinion, the drilling, assaying and exploration work of the Upper Hallnor, Broulan Reef and C-Zone supporting this resource estimate are sufficient to indicate reasonable potential for economic extraction and thus qualify it as a Mineral Resource under CIM definition standards. The resulting resource estimate for the Whitney Project at a 3.0 g/t Au cut-off includes: Measured and Indicated Resources of 3,219,000 tonnes at a grade of 6.85 g/t Au for 708,600 contained oz gold; and Inferred Resources of 995,000 tonnes at a grade of 5.34 g/t Au for 170,700 contained oz gold.

### **25.1 OPPORTUNITIES TO EXPAND RESOURCES**

#### Lower Whitney Compilation

The Upper Hallnor resource stated in this Report only covers the area between surface to the 650 m depth. The Lower Hallnor however extends beyond the 1,540 m depth historically producing 1.29 million tonnes at an average grade of 14.4 g/t Au and remains available for compilation and resource estimation. The Lower Hallnor has unmined high grade vein systems including the 9 and 13 Veins, the western extension of the 11 Vein, 19 Vein and other targets which are accessible from existing development. Past exploration by Temex and former owners have had success at identifying extensions of known as well as new mineralized structures. As well, the



Lower Broulan Reef Mine historically produced beyond the current resource depth at 370 m to 786 m below surface which also remains for resource estimation. It is recommended that the Lower Hallnor and Lower Broulan Reef be evaluated for inclusion in a property-wide resource compilation and resource estimation.

### Upper Hallnor Drilling

Significant targets for potential expansion include the following:

- Upper Hallnor Main Vein East Extension; TW13-285 yielded 19.77 g/t gold over 13.80 metres including 31.64 g/t gold over 8.30 metres at the bedrock/overburden interface and within 17 metres from that surface. Open to the east and at depth
- 155 Zones: Drilling demonstrated lateral and vertical continuity of four closely spaced, parallel gold-bearing structures including the VM, 155, 155 North, and 155 South veins that are approximately 10 to 50 metres north and south of the Hallnor Main Vein. The results occur along a strike length of 400 metres length, and from vertical depths ranging from 15 to 125 metres below surface. The most significant result included 23.41 g/t Au over 8.90 m including 43.67 Au over 4.40 m from hole TW13-288
- 238 Zone: Discovered in January 2013 intersected 7.33 g/t gold over 5.75 metres including 60.40 g/t gold over 0.50 metres within 35 metres from surface in hole TW13-238. Open both directions along strike and at depth.
- Hallnor/Bonetal West: Hole TW13-312 intersected 10.97 g/t Au over 6.00 m, including 94.20 g/t Au over 0.30 m was in a stockwork/hook vein located 30 m north of the unconformity in the volcanics and 25 m east of the nearest Bonetal stope on the 155 Vein. This intercept leaves mineralization and further exploration potential open along strike to the west.
- Q Zone previously drilled by Temex with results including 68.70 g/t gold over 0.50 metres, 17.71 g/t gold over 2.90 metres including 90.35 g/t gold over 0.50 metres, and 29.21 g/t gold over 1.40 metres in hole TW09-78 and 122.85 g/t over 0.50 metres in hole TW11-154 800 metres further along strike with minimal drilling in between.

Further step out drilling in the Upper Whitney is recommended along strike and from near-surface to depth. The programs should also consider upgrading such targets from Inferred to Measured and Indicated where required with a view to nearest access for potential mining.

## **25.2 PRODUCTION OPPORTUNITIES**

The initial September 5, 2012 estimate concluded that the Upper Hallnor portion of the Upper Whitney defined a bulk tonnage, potentially open-pit mineable resource. This Report and updated resource estimate demonstrates that the Upper Whitney Property Resource also remains robust and continuous at higher grades and grade cut-offs consistent with that achieved through historical production. The resource is therefore amenable to selectively mine high grade mineralization commencing from numerous near surface structures at the bedrock interface while providing flexibility to expand to less selective/bulk mining techniques. Production options should consider a selective high grade/low capital start-up with the flexibility to expand to less selective/lower grade bulk mining option. There are numerous opportunities for custom milling in the Timmins area that may make attractive alternatives to building a mill on site. The

opportunity for a high grade project such as Whitney to make an attractive supplement to existing low grade operations in the area is excellent.

### **25.3 EXPLORATION POTENTIAL**

There remains high potential for expanding known mineralized areas on the Upper Whitney including the Lower Hallnor, and undrilled areas west beneath the Bonetal, C Zone and Broulan Reef. The new 238 vein discovery demonstrates the potential for discovering gold mineralized quartz veins in relatively open ground to the north of known mineralization.

The Lower Hallnor described in Section 25.1 above is noteworthy not only for being the deepest high grade gold deposit but also for being the only blind deposit discovered in the Timmins camp until the Hoyle Pond 1060 zone discovery in the early 1990's. The opportunity to discover more blind deposits on the Lower Whitney Property remains excellent as there is a 4 km gap between Temex's 2008-2009 drilling and the west property boundary that remains untested.

Gold mineralization intersected in the Hugh Pam target requires follow-up drill testing 50 m below and 100 m east of the gold bearing interval encountered in hole TW11-154.

The mineral resources in this report were estimated using the Canadian Institute of Mining, Metallurgy and Petroleum (CIM), CIM Standards on Mineral Resources and Reserves, Definitions and Guidelines prepared by the CIM Standing Committee on Reserve Definitions and adopted by the CIM Council. Mineral resources which are not mineral reserves do not have demonstrated economic viability. The estimate of mineral resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues. The quantity and grade of reported Inferred resources in this estimation are uncertain in nature and there has been insufficient exploration to define these Inferred resources as an Indicated or Measured mineral resource and it is uncertain if further exploration will result in upgrading them to an Indicated or Measured mineral resource category.

## 26.0 RECOMMENDATIONS

P&E considers that the Whitney Property contains a significant gold resource that merits further evaluation and has excellent potential to define additional resources. While the initial September 5, 2012 study successfully defined a low grade, bulk tonnage, potentially open-pit mineable resource at a cut-off grade of 0.30 g/t gold, this study demonstrates a high grade gold resource amenable to underground mining and more selective open pit mining methods at a 3.00 g/t gold cut-off. P&E recommends that Temex continue to evaluate a combined open pit/underground operational scenario. An Advanced Exploration/bulk sample designed to test the high grade potential of the deposit between surface and the Hallnor 1st level (~70m from surface) is recommended. It is further recommended this work continue with the approach of incorporating the results into a Preliminary Economic Assessment (“PEA”) of the entire Upper Whitney.

- P&E’s recommendations to support the PEA include additional diamond drilling, metallurgical, permitting and geotechnical testwork.
- P&E recommends that additional resource work be undertaken to evaluate the Lower Hallnor and Lower Broulan Reef Mines.
- P&E recommends that a minimum 25,000 metres of diamond drilling be conducted to explore along strike and to depth of favourable mineralized structures and lithologies.

It is recommended that additional metallurgical work be done at higher grades to achieve projected grade/recovery curves and customized to meet potential toll-milling partners specifications.

A proposed \$7.0 million program is recommended in Table 26.1.

<b>TABLE 26.1</b> <b>RECOMMENDED PROGRAM AND BUDGET</b>			
<b>Program</b>	<b>Units</b>	<b>Unit Cost (\$)</b>	<b>Budget</b>
In fill Diamond Drilling	7,000 m	\$107	\$750,000
Geotechnical Studies and Drilling			\$250,000
Metallurgical Testwork			\$200,000
Permitting, FN Consultation, Legal			\$420,000
Engineering - Pit Design			\$100,000
Lower Hallnor Resource			\$215,000
Upper Hallnor PEA			\$300,000
Personnel, office, support, taxes			\$715,000
Exploration Drill Program	25,000 m	\$107	\$2,675,000
Analytical (samples)	20,000	\$30	\$600,000
Program Planning and Supervision	6 months	\$10,000	\$60,000
Geologists	6 months	\$20,000	\$120,00
Core Technicians	6 months	\$9,000	\$54,000
Survey, supplies			\$25,000
Contingency			\$636,000
<b>Total</b>			<b>\$7,000,000</b>

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## 28.0 CERTIFICATES

### CERTIFICATE OF QUALIFIED PERSON

#### EUGENE J. PURITCH, P. ENG.

I, Eugene J. Puritch, P. Eng., residing at 44 Turtlecreek Blvd., Brampton, Ontario, L6W 3X7, do hereby certify that:

1. I am an independent mining consultant and President of P & E Mining Consultants Inc.
2. This certificate applies to the technical report titled “Technical Report and Resource Estimate on the Upper Hallnor, C-Zone, and Broulan Reef Deposits, Whitney Gold Property Timmins Area, Ontario, Canada” (the “Technical Report”), with an effective date of January 14, 2014.
3. I am a graduate of The Haileybury School of Mines, with a Technologist Diploma in Mining, as well as obtaining an additional year of undergraduate education in Mine Engineering at Queen’s University. In addition I have also met the Professional Engineers of Ontario Academic Requirement Committee’s Examination requirement for Bachelor’s Degree in Engineering Equivalency. I am a mining consultant currently licensed by the Professional Engineers of Ontario (License No. 100014010) and registered with the Ontario Association of Certified Engineering Technicians and Technologists as a Senior Engineering Technologist. I am also a member of the National and Toronto Canadian Institute of Mining and Metallurgy.

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.

I have practiced my profession continuously since 1978. My summarized career experience is as follows:

- Mining Technologist - H.B.M. & S. and Inco Ltd., ..... 1978-1980
- Open Pit Mine Engineer – Cassiar Asbestos/Brinco Ltd., ..... 1981-1983
- Pit Engineer/Drill & Blast Supervisor – Detour Lake Mine, ..... 1984-1986
- Self-Employed Mining Consultant – Timmins Area, ..... 1987-1988
- Mine Designer/Resource Estimator – Dynatec/CMD/Bharti, ..... 1989-1995
- Self-Employed Mining Consultant/Resource-Reserve Estimator, ..... 1995-2004
- President – P & E Mining Consultants Inc., ..... 2004-Present

4. I have not visited the Property that is the subject of this report.
5. I am responsible for co-authoring Section 14 of the Technical Report.
6. I am independent of the Issuer applying the test in Section 1.5 of NI 43-101.
7. I have had prior involvement with the project that is the subject of this Technical Report. The nature of my involvement was as co-author of a Technical Report titled “Technical Report and Resource Estimate on the Upper Hallnor Deposit, Whitney Property, Timmins Area, Ontario, Canada” (the “Technical Report”), with an effective date of September 5, 2012.
8. I have read NI 43-101 and Form 43-101F1. This Technical Report has been prepared in compliance therewith.
9. 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 Technical Report not misleading.

Effective Date: January 14, 2014

Signed Date: February 26, 2014

**{SIGNED AND SEALED}**

[Eugene Puritch]

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Eugene J. Puritch, P.Eng.

## CERTIFICATE OF QUALIFIED PERSON

**RICHARD SUTCLIFFE, Ph.D., P. GEO.**

I, Richard Sutcliffe, Ph.D., P. Geo., residing at 100 Broadleaf Crescent, Ancaster, Ontario, do hereby certify that:

1. I am an independent geological consultant and Vice President Geology, P&E Mining Consultants Inc.
2. This certificate applies to the technical report titled "Technical Report and Resource Estimate on the Upper Hallnor, C-Zone, and Broulan Reef Deposits, Whitney Gold Property Timmins Area, Ontario, Canada" (the "Technical Report"), with an effective date of January 14, 2014.
3. I am a graduate of the University of Toronto with a Bachelor of Science degree in Geology (1977). In addition, I have a Master of Science in Geology (1980) from University of Toronto and a Ph.D. in Geology (1986) from the University of Western Ontario. I have worked as a geologist for a total of 32 years since obtaining my M.Sc. degree. I am a geological consultant currently licensed by the Association of Professional Geoscientists of Ontario (License No 852).

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.

My relevant experience for the purpose of the Technical Report is:

- Precambrian Geologist, Ontario Geological Survey ..... 1980-1989
- Senior Research Geologist, Ontario Geological Survey ..... 1989-1991
- Associate Professor of Geology, University of Western Ontario ..... 1990-1992
- President and CEO, URSA Major Minerals Inc. .... 1992-2012
- President and CEO, Patricia Mining Corp. .... 1998-2008
- President and CEO, Auriga Gold Corp. .... 2010-2012
- Consulting Geologist ..... 1992-Present

4. I have not visited the Property that is the subject of this report.
5. I am responsible for authoring Sections 2, 3, 7, 8 and 15-27 of the Technical Report.
6. I am independent of the Issuer applying the test in Section 1.5 of NI 43-101.
7. I have had prior involvement with the project that is the subject of this Technical Report. The nature of my involvement was as co-author of a Technical Report titled "Technical Report and Resource Estimate on the Upper Hallnor Deposit, Whitney Property, Timmins Area, Ontario, Canada" (the "Technical Report"), with an effective date of September 5, 2012.
8. I have read NI 43-101 and Form 43-101F1 and this Technical Report has been prepared in compliance therewith.
9. 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 Technical Report not misleading.

Effective Date: January 14, 2014

Signing Date: February 26, 2014

**{SIGNED AND SEALED}**

[Richard Sutcliffe]

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Dr. Richard H. Sutcliffe, P. Geo.

## CERTIFICATE OF QUALIFIED PERSON

**DAVID BURGA, P. GEO.**

I, David Burga, P. Geo., residing at 3884 Freeman Terrace, Mississauga, Ontario, do hereby certify that:

1. I am an independent geological consultant contracted by P&E Mining Consultants Inc.
2. This certificate applies to the technical report titled “Technical Report and Resource Estimate on the Upper Hallnor, C-Zone, and Broulan Reef Deposits, Whitney Gold Property Timmins Area, Ontario, Canada” (the “Technical Report”), with an effective date of January 14, 2014.
3. I am a graduate of the University of Toronto with a Bachelor of Science degree in Geological Sciences (1997). I have worked as a geologist for a total of 12 years since obtaining my B.Sc. degree. I am a geological consultant currently licensed by the Association of Professional Geoscientists of Ontario (License No 1836).

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.

My relevant experience for the purpose of the Technical Report is:

- Exploration Geologist, Cameco Gold..... 1997-1998
- Field Geophysicist, Quantec Geoscience ..... 1998-1999
- Geological Consultant, Andeburg Consulting Ltd. .... 1999-2003
- Geologist, Aeon Egmond Ltd. .... 2003-2005
- Project Manager, Jacques Whitford ..... 2005-2008
- Exploration Manager – Chile, Red Metal Resources ..... 2008-2009
- Consulting Geologist..... 2009-Present

4. I have not visited the Property that is the subject of this report.
5. I am responsible for authoring Sections 6, 9 and 10 of the Technical Report.
6. I am independent of the Issuer applying the test in Section 1.5 of NI 43-101.
7. I have had prior involvement with the project that is the subject of this Technical Report. The nature of my involvement was as co-author of a Technical Report titled “Technical Report and Resource Estimate on the Upper Hallnor Deposit, Whitney Property, Timmins Area, Ontario, Canada” (the “Technical Report”), with an effective date of September 5, 2012.
8. I have read NI 43-101 and Form 43-101F1 and this Technical Report has been prepared in compliance therewith.
9. 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 Technical Report not misleading.

Effective Date: January 14, 2014

Signed Date: February 26, 2014

**{SIGNED AND SEALED}**

*[David Burga]*

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David Burga, P. Geo.



## CERTIFICATE OF AUTHOR

**YUNGANG WU, P.GEO.**

I, Yungang Wu, P. Geo., residing at 4334 Trail Blazer Way, Mississauga, Ontario, L5R 0C3, do hereby certify that:

1. I am an independent consulting geologist contracted by P&E Mining Consultants Inc.
2. This certificate applies to the technical report titled “Technical Report and Resource Estimate on the Upper Hallnor, C-Zone, and Broulan Reef Deposits, Whitney Gold Property Timmins Area, Ontario, Canada” (the “Technical Report”) with an effective date of January 14, 2014.
3. I am a graduate of Jilin University, China with a Master Degree in Mineral Deposits (1992). I am a geological consultant and a registered practising member of the Association of Professional Geoscientist of Ontario (Registration No. 1681). I am also a member of the Ontario Prospectors Association.

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.

My relevant experience for the purpose of the Technical Report is as follows:

- Geologist –Geology and Mineral Bureau, Liaoning Province, China..... 1992-1993
- Senior Geologist – Committee of Mineral Resources and Reserves of Liaoning, China... 1993-1998
- VP – Institute of Mineral Resources and Land Planning, Liaoning, China..... 1998-2001
- Project Geologist–Exploration Division, De Beers Canada..... 2003-2009
- Mine Geologist – Victor Diamond Mine, De Beers Canada..... 2009-2011
- Resource Geologist– Coffey Mining Canada..... 2011-2012
- Consulting Geologist..... Present

4. I have not visited the property that is the subject of this Technical Report
5. I am responsible for co-authoring Section 14 of the Technical Report.
6. I am independent of the Issuer applying the test in Section 1.5 of NI 43-101.
7. I have had prior involvement with the project that is the subject of this Technical Report. The nature of my involvement was as co-author of a Technical Report titled “Technical Report and Resource Estimate on the Upper Hallnor Deposit, Whitney Property, Timmins Area, Ontario, Canada” (the “Technical Report”), with an effective date of September 5, 2012.
8. I have read NI 43-101 and Form 43-101F1 and the Technical Report has been prepared in compliance therewith.
9. 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 Technical Report not misleading;

Effective date: January 14, 2014

Signing Date: February 26, 2014

**{SIGNED AND SEALED}**

[Yungang Wu]

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Yungang Wu, P. Geo.

## CERTIFICATE of AUTHOR

**TRACY J. ARMSTRONG, P.GEO.**

I, Tracy J. Armstrong, residing at 2007 Chemin Georgeville, res. 22, Magog, QC J1X 0M8, do hereby certify that:

1. I am an independent geological consultant contracted by P&E Mining Consultants Inc. and have worked as a geologist continuously since my graduation from university in 1982.
2. This certificate applies to the technical report titled "Technical Report and Resource Estimate on the Upper Hallnor, C-Zone, and Broulan Reef Deposits, Whitney Gold Property Timmins Area, Ontario, Canada" (the "Technical Report") dated January 14, 2014.
3. I am a graduate of Queen's University at Kingston, Ontario with a B.Sc. (HONS) in Geological Sciences (1982). I am a geological consultant currently licensed by the Order of Geologists of Québec (License 566), the Association of Professional Geoscientists of Ontario (License 1204) and the Association of Professional Engineers and Geoscientists of British Columbia, (Licence No. 34720).

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 and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101. This report is based on my personal review of information provided by the Issuer and on discussions with the Issuer's representatives. My relevant experience for the purpose of the Technical Report is:

- Underground production geologist, Agnico-Eagle Laronde Mine..... 1988-1993
- Exploration geologist, Laronde Mine ..... 1993-1995
- Exploration coordinator, Placer Dome ..... 1995-1997
- Senior Exploration Geologist, Barrick Exploration ..... 1997-1998
- Exploration Manager, McWatters Mining ..... 1998-2003
- Chief Geologist Sigma Mine ..... 2003
- Consulting Geologist ..... 2003-to present

4. I have not visited the Property that is the subject of this Technical Report.
5. I am responsible for the preparation and authoring of Sections 4, 5, and 11 and co-authoring of Section 12 of this Technical Report.
6. I am independent of issuer applying the test in Section 1.5 of NI 43-101.
7. I have had prior involvement with the project that is the subject of this Technical Report. The nature of my involvement was as co-author of a Technical Report titled "Technical Report and Resource Estimate on the Upper Hallnor Deposit, Whitney Property, Timmins Area, Ontario, Canada" (the "Technical Report"), with an effective date of September 5, 2012.
8. I have read NI 43-101 and Form 43-101F1 and the Technical Report has been prepared in compliance therewith.
9. 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 Technical Report not misleading.

Effective Date: January 14, 2014

Signing Date: February 26 2014

**{SIGNED AND SEALED}**

[Tracy J. Armstrong]

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Tracy J. Armstrong, P. Geo.

## CERTIFICATE OF QUALIFIED PERSON

**ANTOINE R. YASSA, P. GEO.**

I, Antoine R. Yassa, P. Geo., residing at 3602 Rang des Cavaliers, Rouyn-Noranda, Quebec, J0Z 1Y2, do hereby certify that:

1. I am an independent geological consultant contracted by P&E Mining Consultants Inc.
2. This certificate applies to the technical report titled “Technical Report and Resource Estimate on the Upper Hallnor, C-Zone, and Broulan Reef Deposits, Whitney Gold Property Timmins Area, Ontario, Canada” (the “Technical Report”) dated January 14, 2014.
3. I am a graduate of Ottawa University at Ottawa, Ontario with a B.Sc (HONS) in Geological Sciences (1977). I have worked as a geologist for 30 years since obtaining my B.Sc. degree. I am a geological consultant currently licensed by the Order of Geologists of Québec (License No 224) and a practising member of the APGO (Registration Number 1890).

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.

My relevant experience for the purpose of the Technical Report is:

- Minex Geologist (Val d’Or), 3D Modeling (Timmins), Placer Dome ..... 1993-1995
  - Database Manager, Senior Geologist, West Africa, PDX ..... 1996-1998
  - SeniorGeologist, Database Manager, McWatters Mine ..... 1998-2000
  - Database Manager, Gemcom modeling and Resources Evaluation (Kiena Mine) QAQC Manager (Sigma Open pit), McWatters Mines..... 2001-2003
  - Database Manager and Resources Evaluation at Julietta Mine, Far-East Russia, Bema Gold Corporation ..... 2003-2006
  - Consulting Geologist ..... since 2006
4. I have visited the Property that is the subject of this Technical Report on September 5 and 25, 2013.
  5. I am responsible for co-authoring Section 12 of the Technical Report.
  6. I am independent of the Issuer applying the test in Section 1.5 of NI 43-101.
  7. I have had prior involvement with the project that is the subject of this Technical Report. The nature of my involvement was as co-author of a Technical Report titled “Technical Report and Resource Estimate on the Upper Hallnor Deposit, Whitney Property, Timmins Area, Ontario, Canada” (the “Technical Report”), with an effective date of September 5, 2012.
  8. I have read NI 43-101 and Form 43-101F1 and this Technical Report has been prepared in compliance therewith.
  9. 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 Technical Report not misleading.

Effective Date: January 14, 2014

Signed Date: February 26, 2014

**{SIGNED AND SEALED}**

*[Antoine Yassa]*

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Antoine R. Yassa, P. Geo.

## CERTIFICATE OF QUALIFIED PERSON

**ALFRED S. HAYDEN, P. ENG**

I, Alfred S. Hayden, P. Eng., residing at 284 Rushbrook Drive, Ontario, L3X 2C9, do hereby certify that:

1. I am currently President of:  
EHA Engineering Ltd.,  
Consulting Metallurgical Engineers  
Box 2711, Postal Stn. B.  
Richmond Hill, Ontario, L4E 1A7
2. This certificate applies to the technical report titled "Technical Report and Resource Estimate on the Upper Hallnor, C-Zone, and Broulan Reef Deposits, Whitney Gold Property Timmins Area, Ontario, Canada" (the "Technical Report") dated January 14, 2014.
3. I graduated from the University of British Columbia, Vancouver, B.C. in 1967 with a Bachelor of Applied Science in Metallurgical Engineering. I am a member of the Canadian Institute of Mining, Metallurgy and Petroleum and a Professional Engineer and Designated Consulting Engineer registered with Professional Engineers Ontario. I have worked as a metallurgical engineer for a total of 42 years since my graduation from university.

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.

4. I have not visited the Property that is the subject of this report.
5. I am responsible for authoring of Section 13 of the Technical Report
6. I am independent of the issuer applying the test in Section 1.5 of NI 43-101.
7. I have had no prior involvement with the Property that is the subject of this Technical Report.
8. I have read NI 43-101 and Form 43-101F1 and the Technical Report has been prepared in compliance therewith.
9. 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 Technical Report not misleading.

Effective Date: January 14, 2014

Signing Date: February 26, 2014

***{SIGNED AND SEALED}***

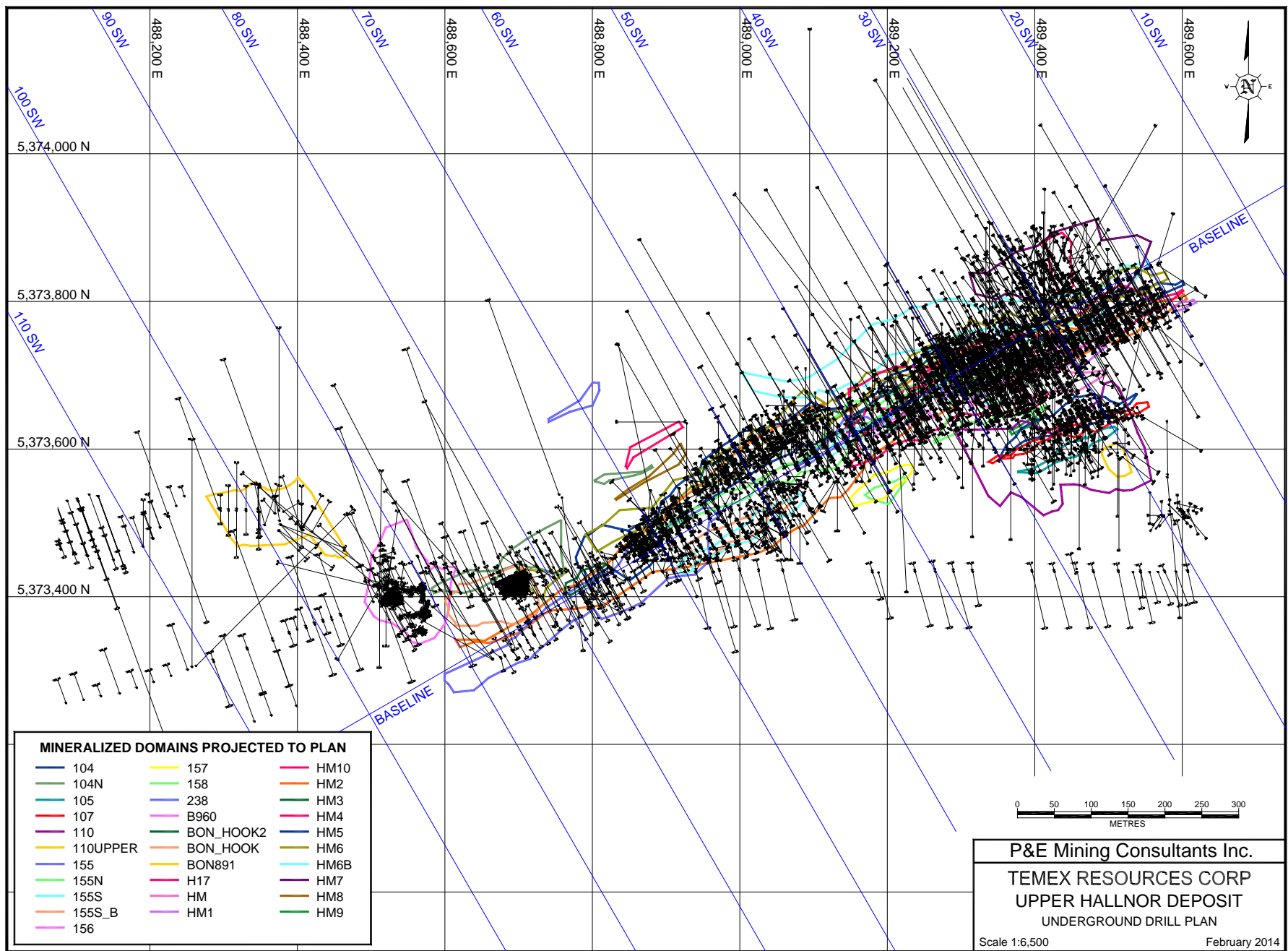
*[Alfred Hayden]*

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Alfred S. Hayden, P.Eng.

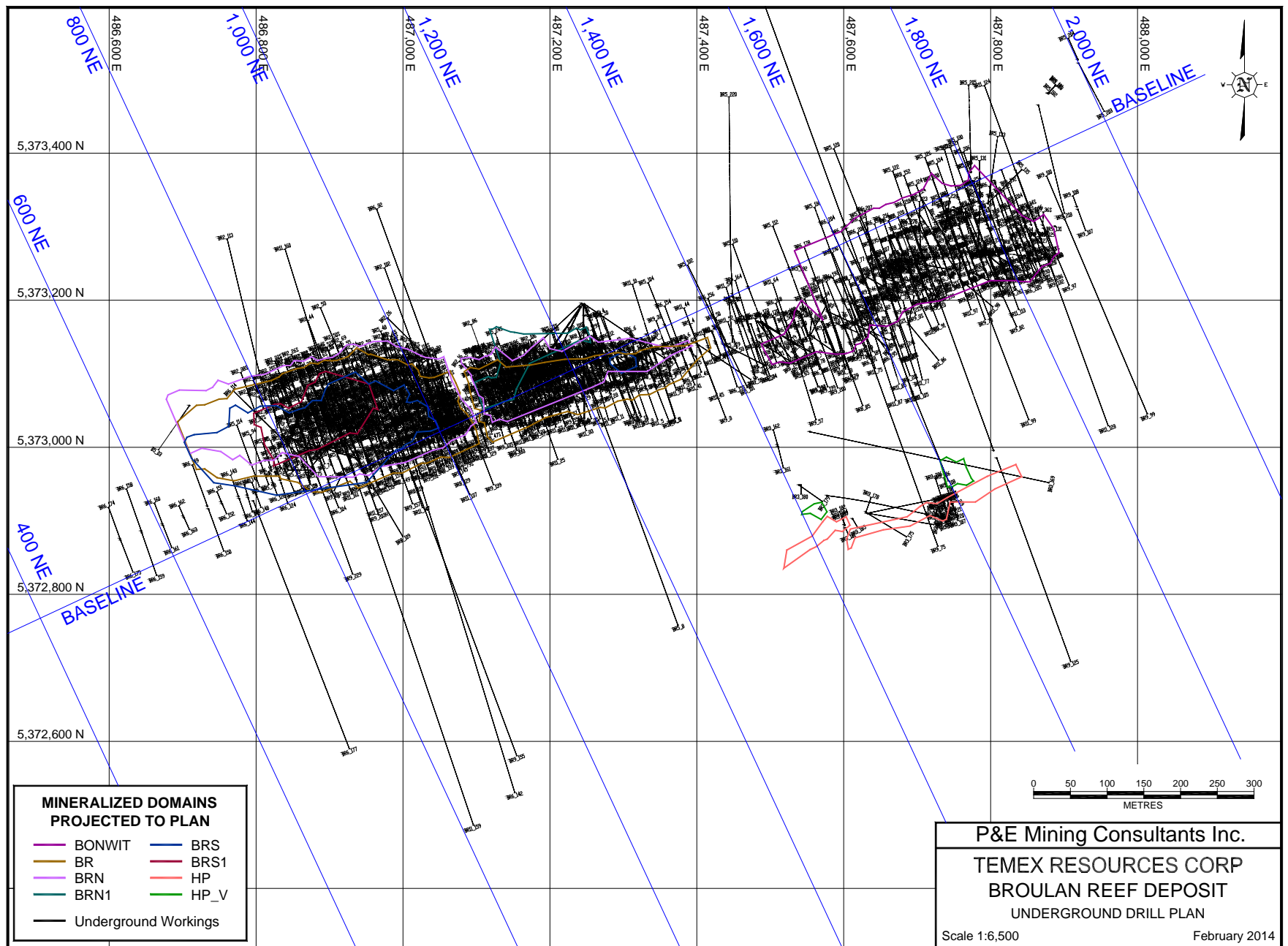
## **APPENDIX I. DRILL HOLE PLANS**



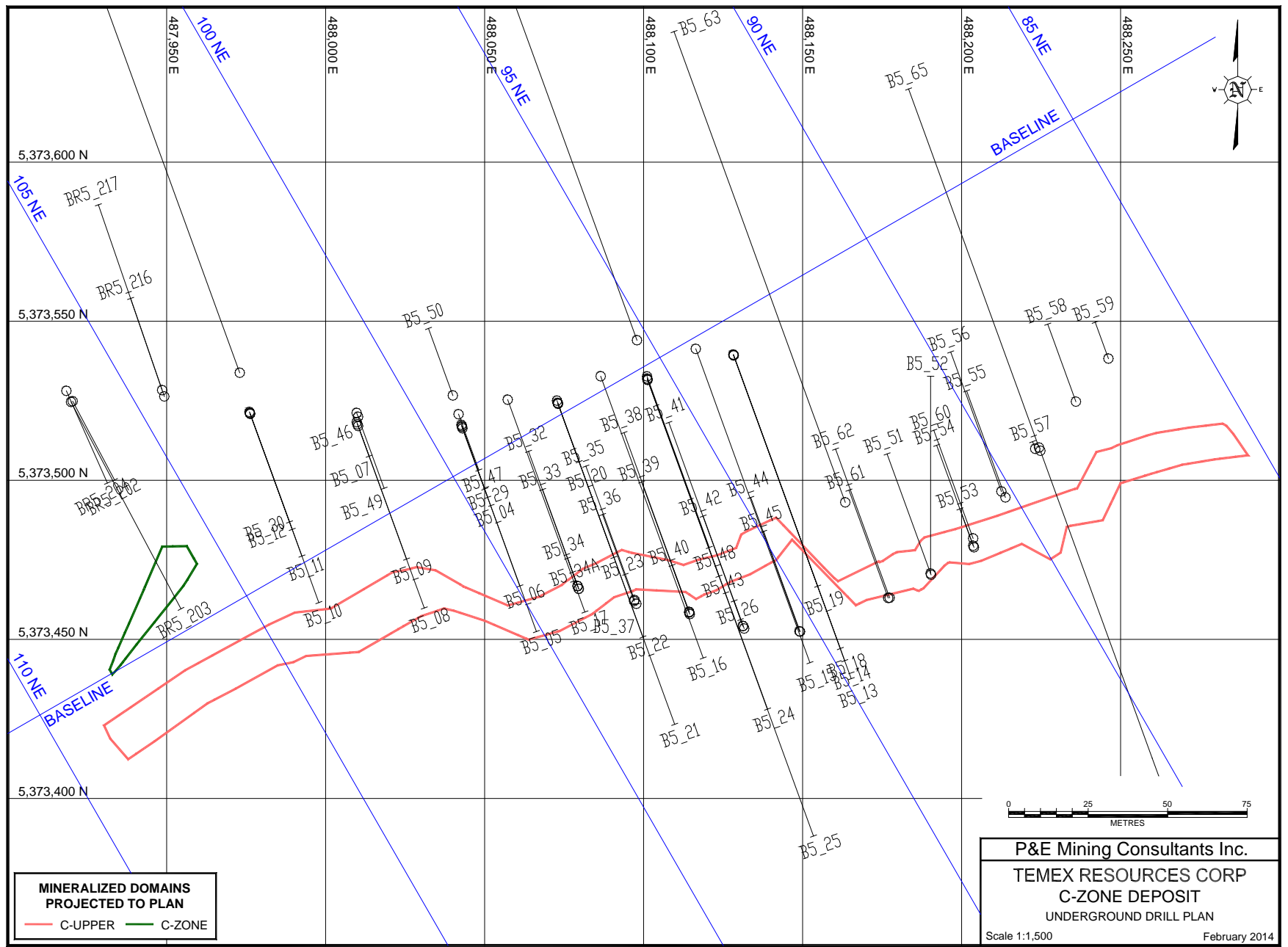






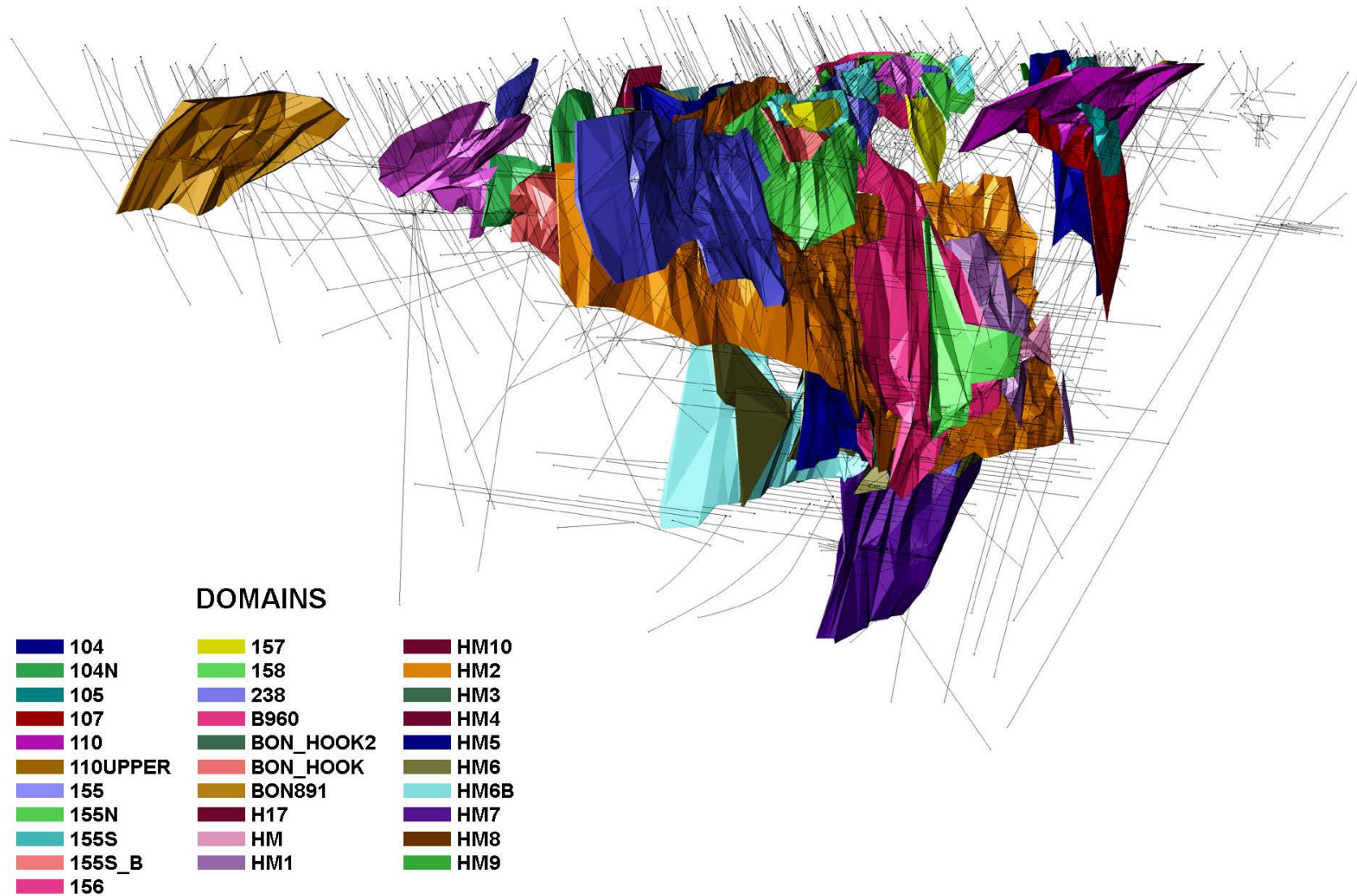






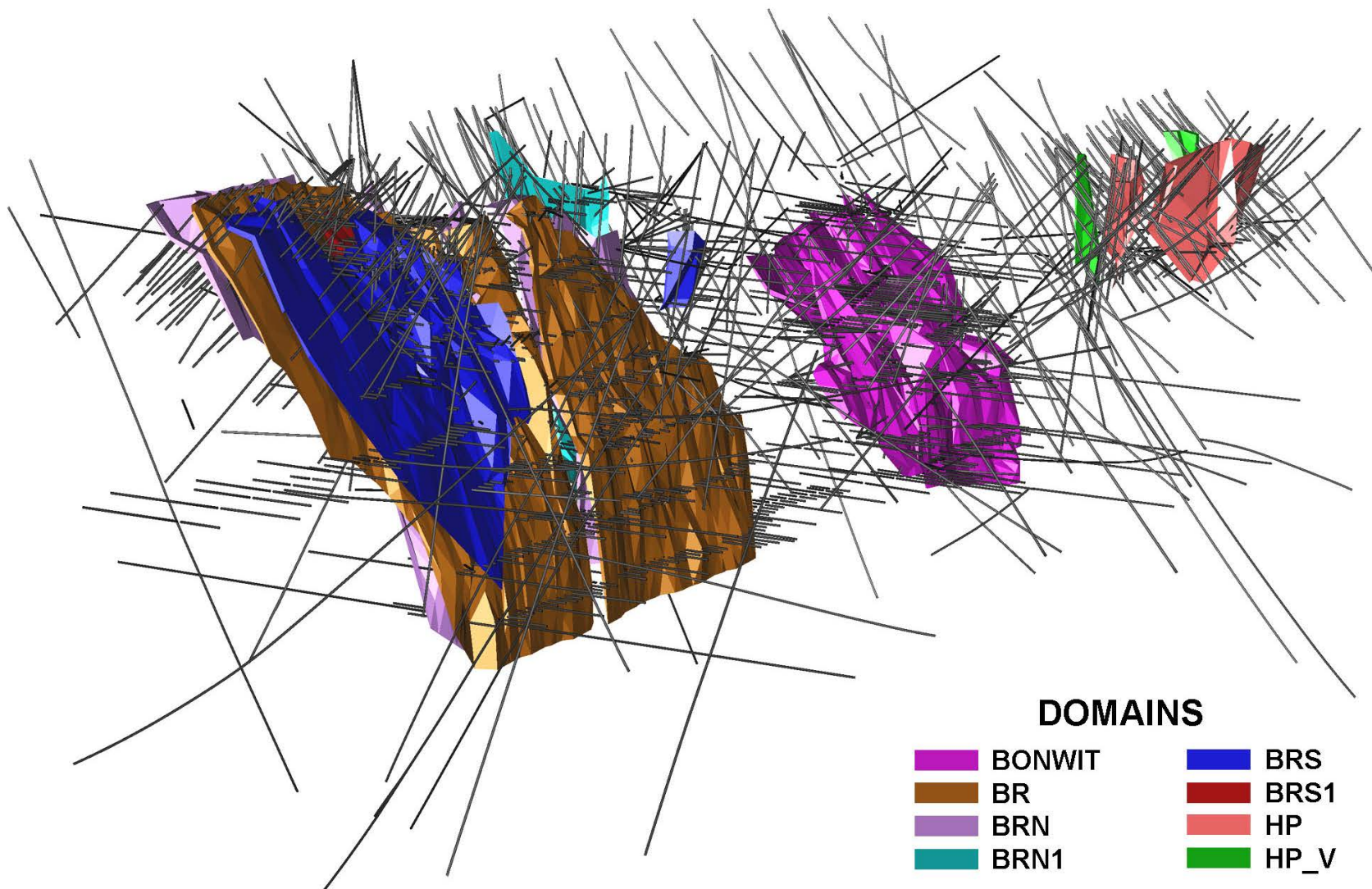
## **APPENDIX II. 3D DOMAINS**

# UPPER HALLNOR DEPOSIT - 3D DOMAINS

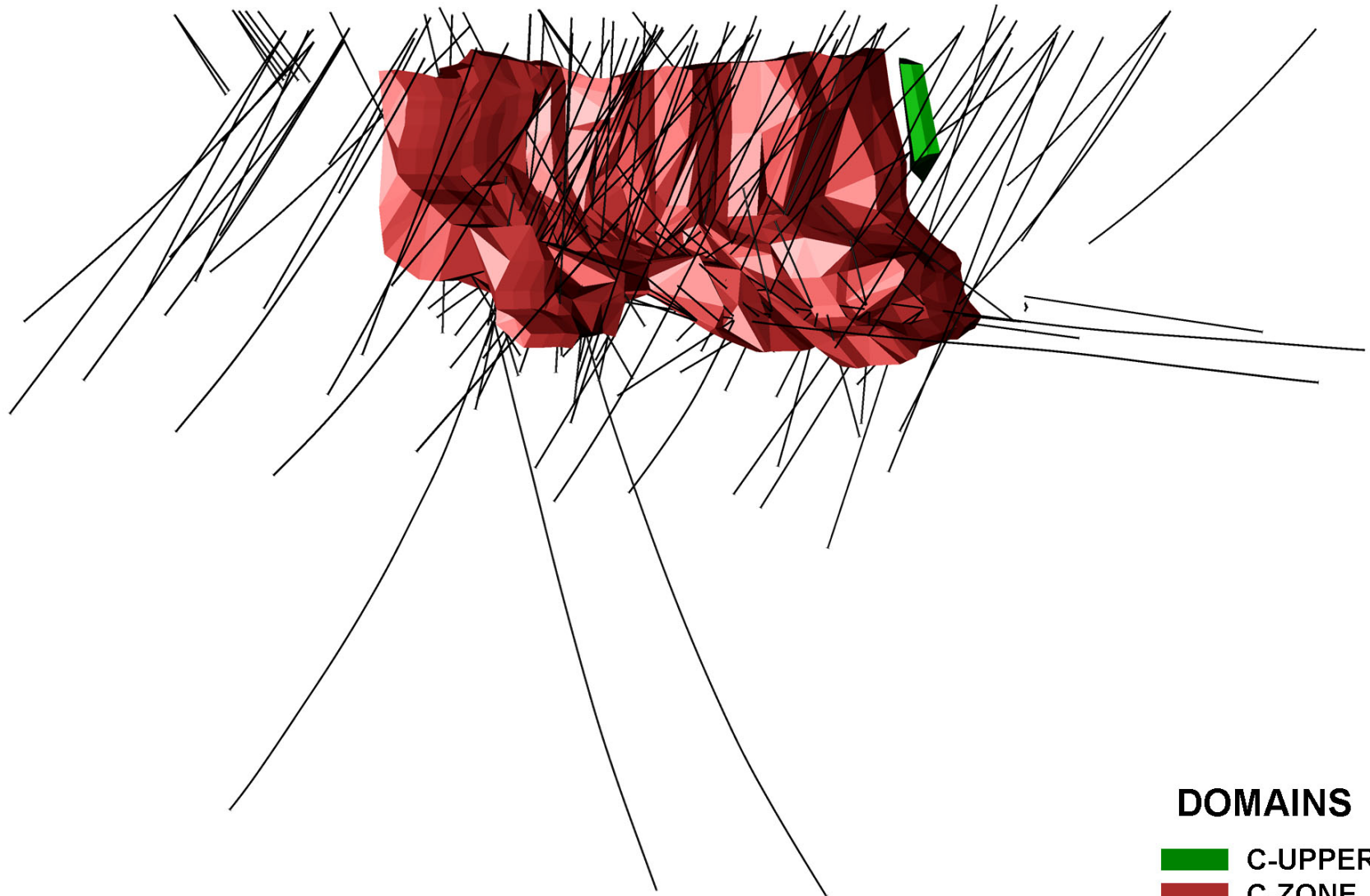




## BROULAN REEF DEPOSIT - 3D DOMAINS

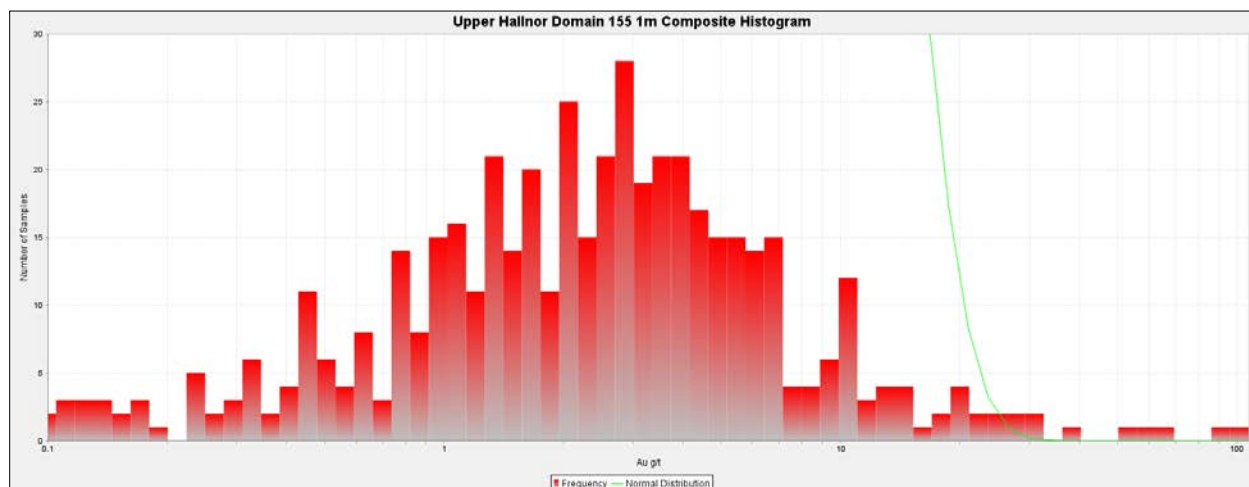
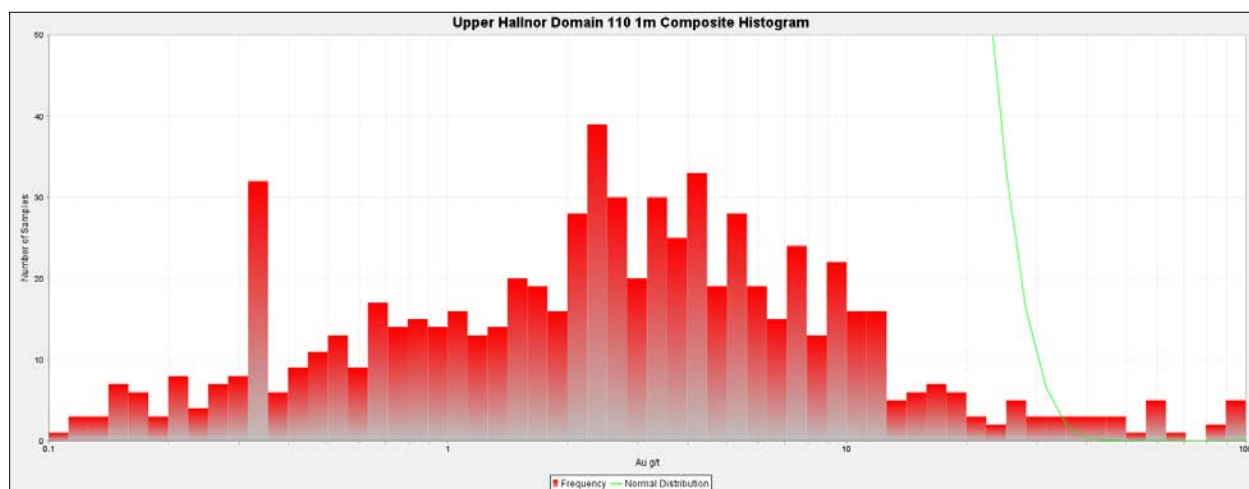
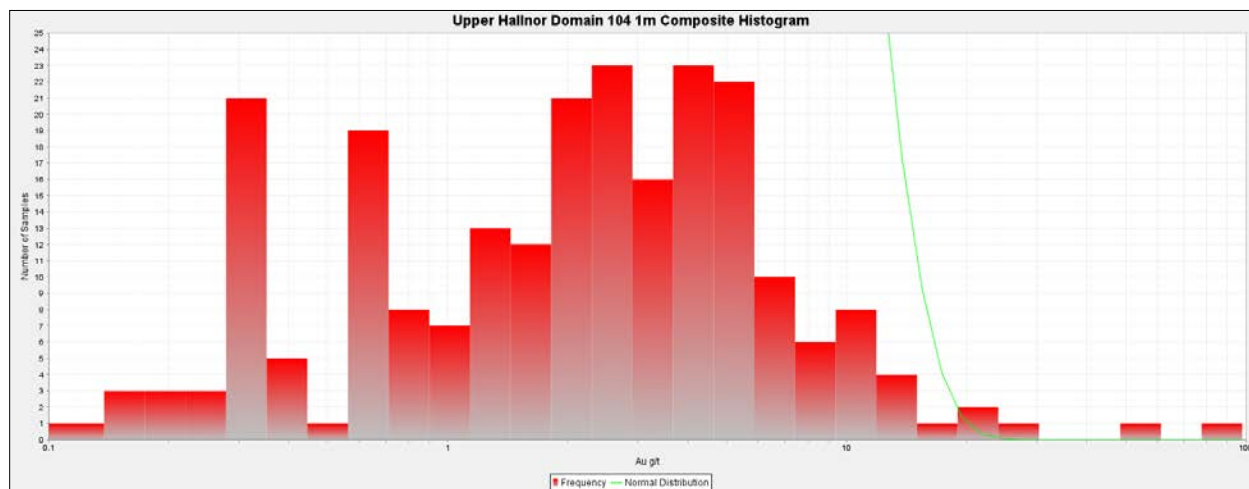


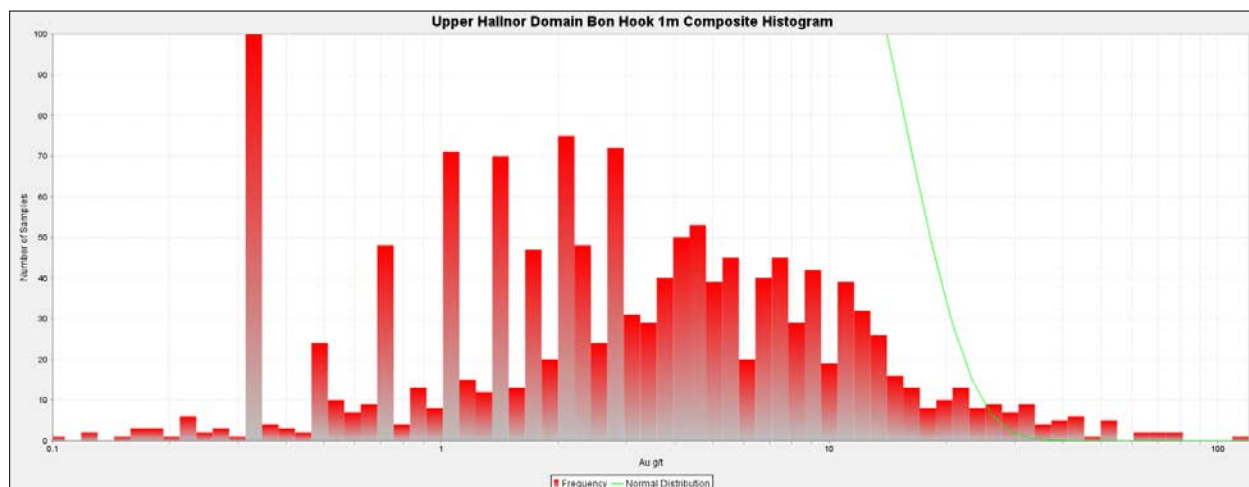
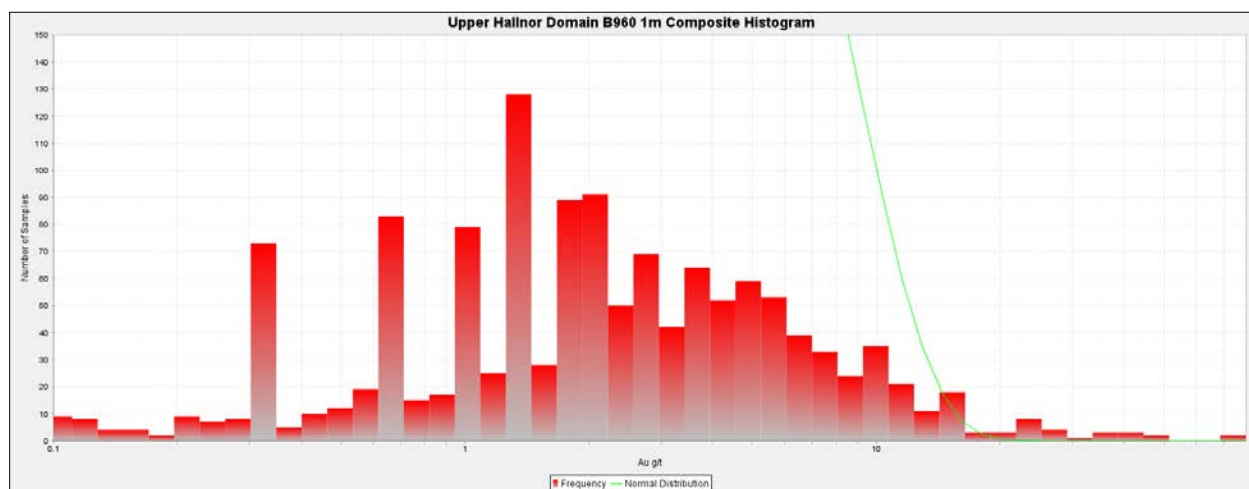
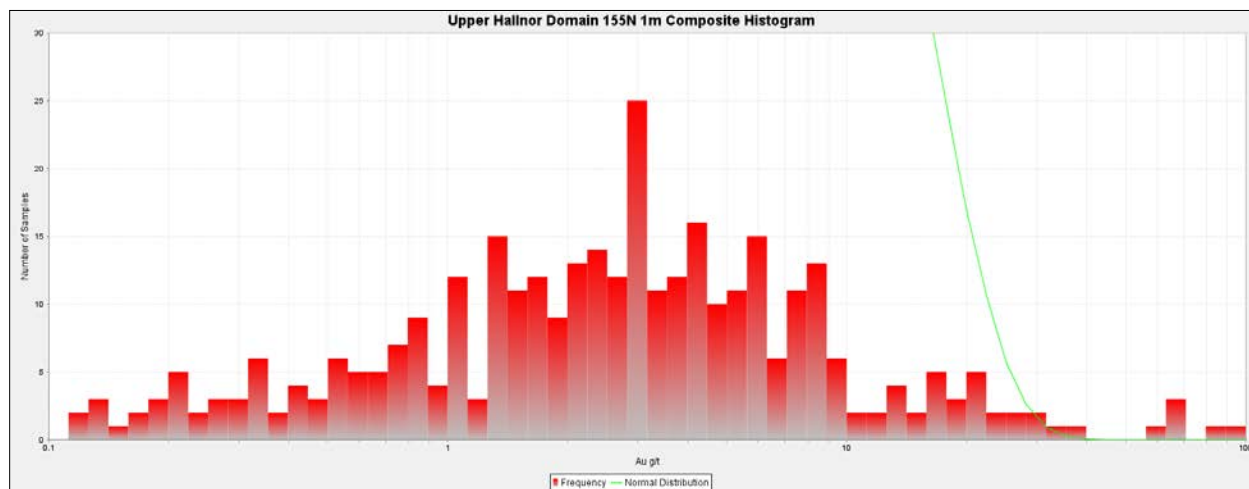
## C-ZONE DEPOSIT - 3D DOMAINS

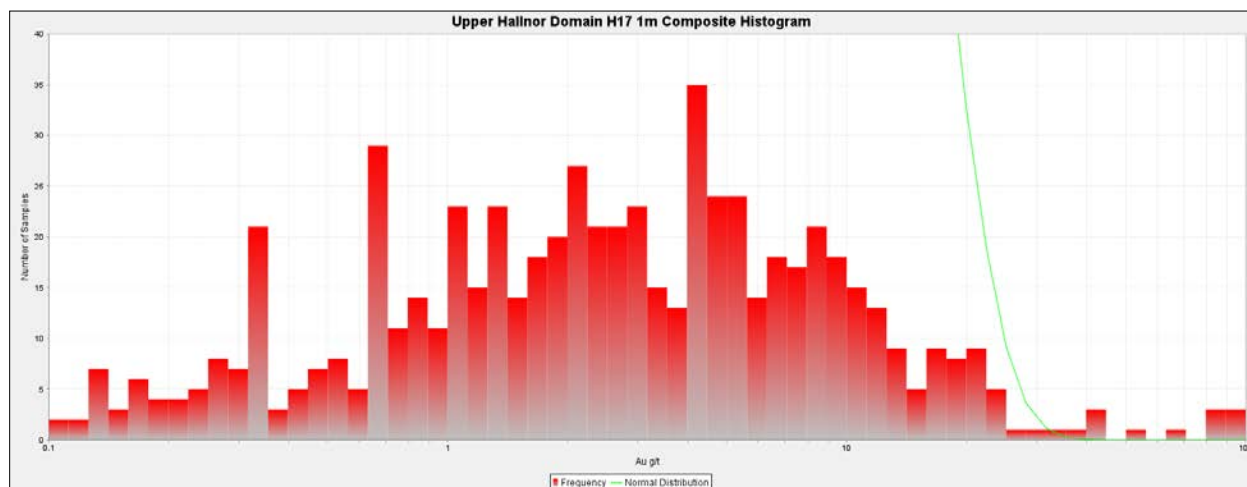
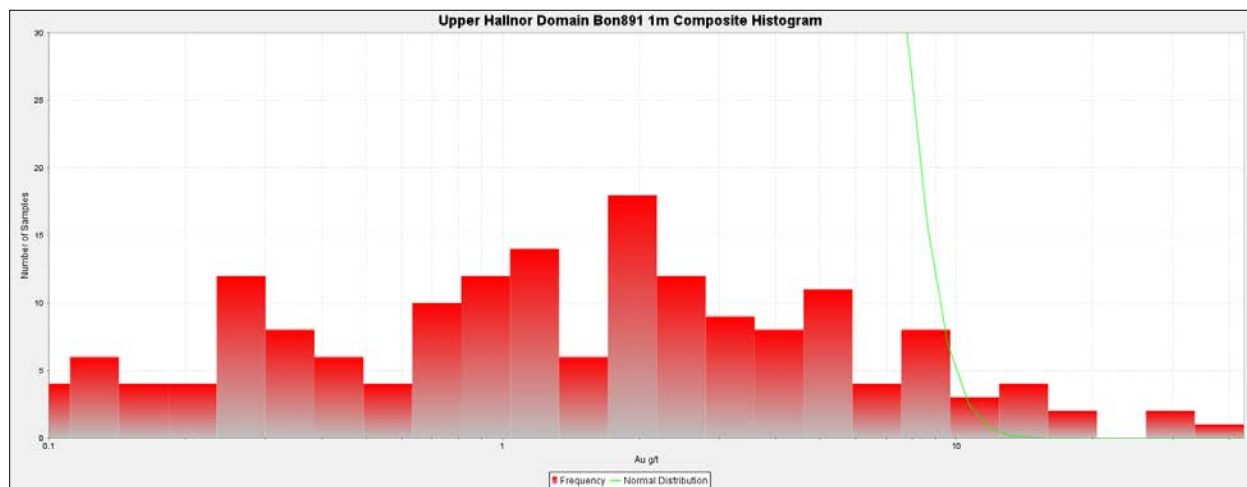
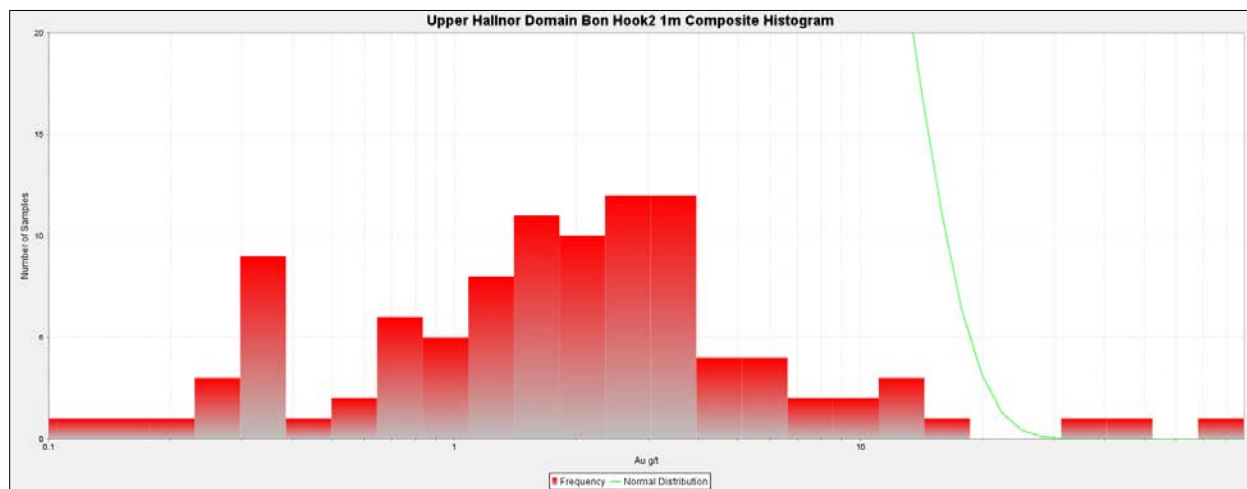


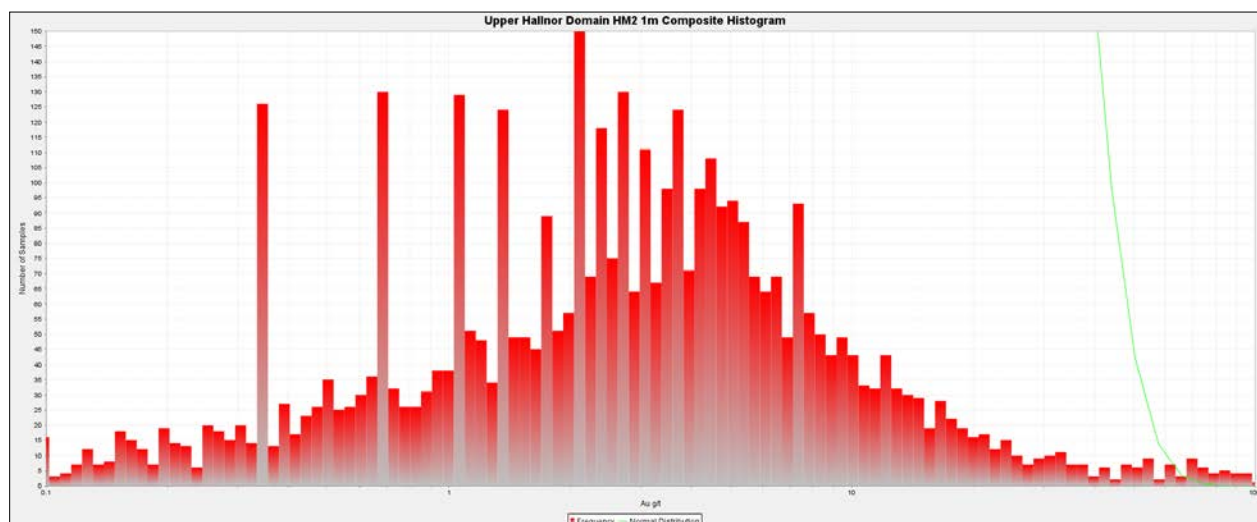
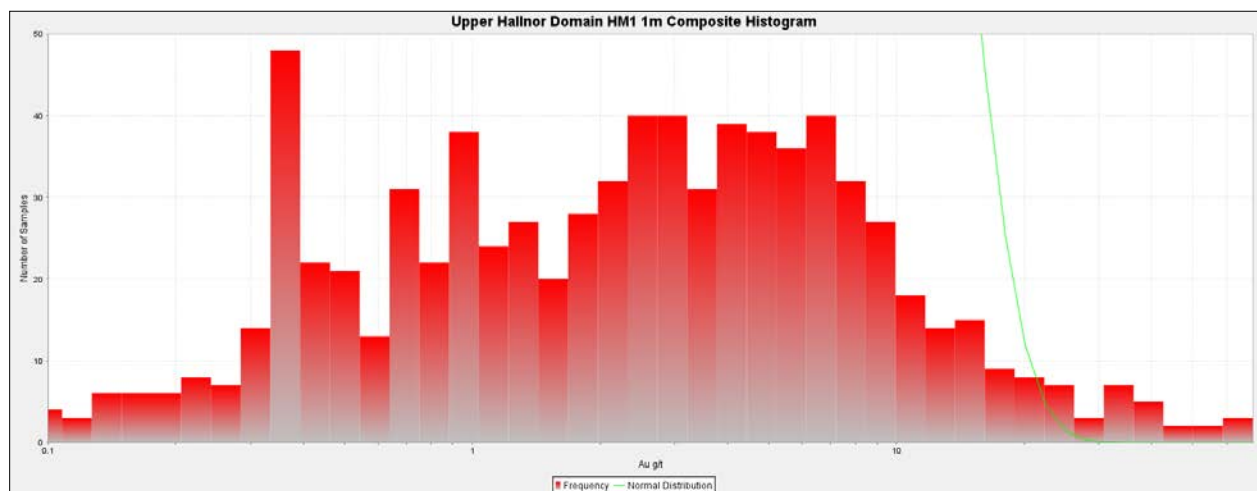
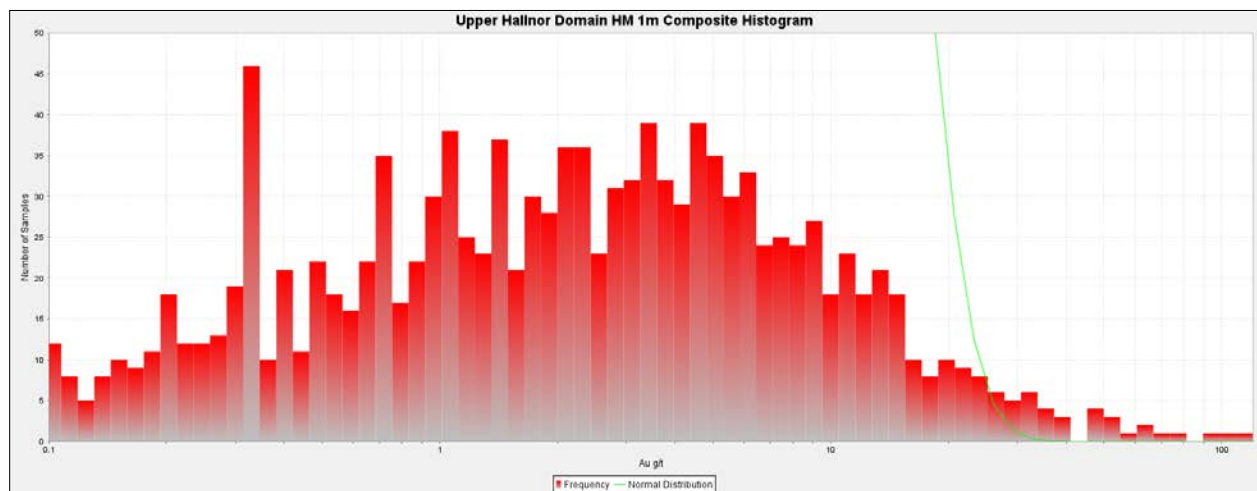
### **APPENDIX III. LOG NORMAL HISTOGRAMS**

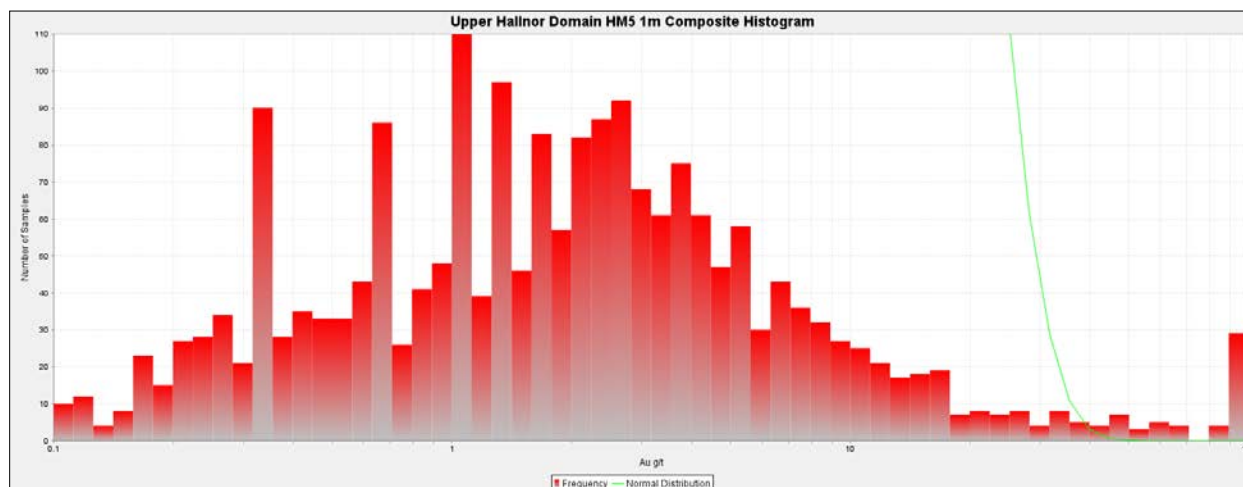
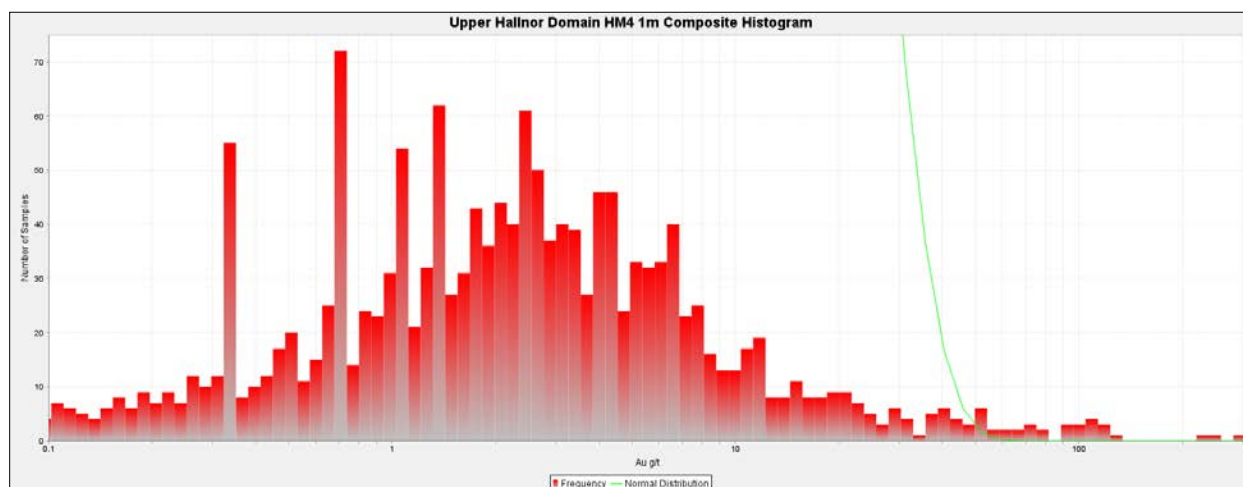
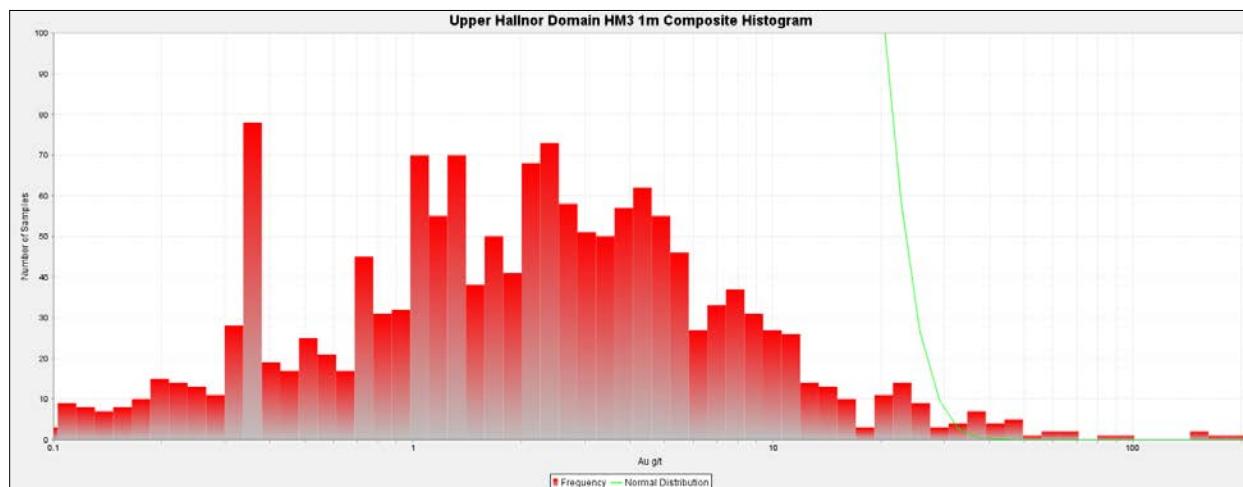




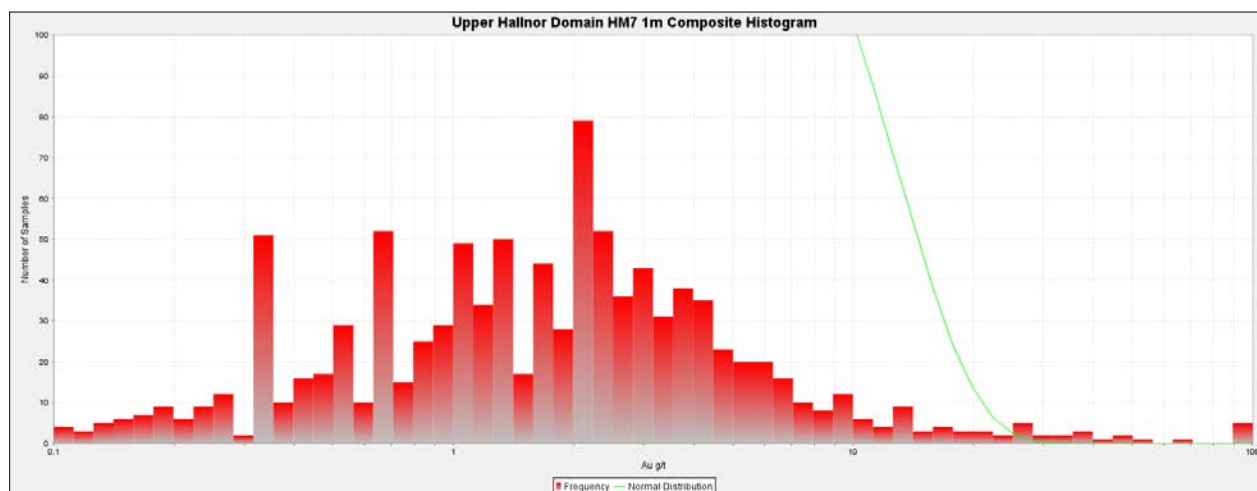
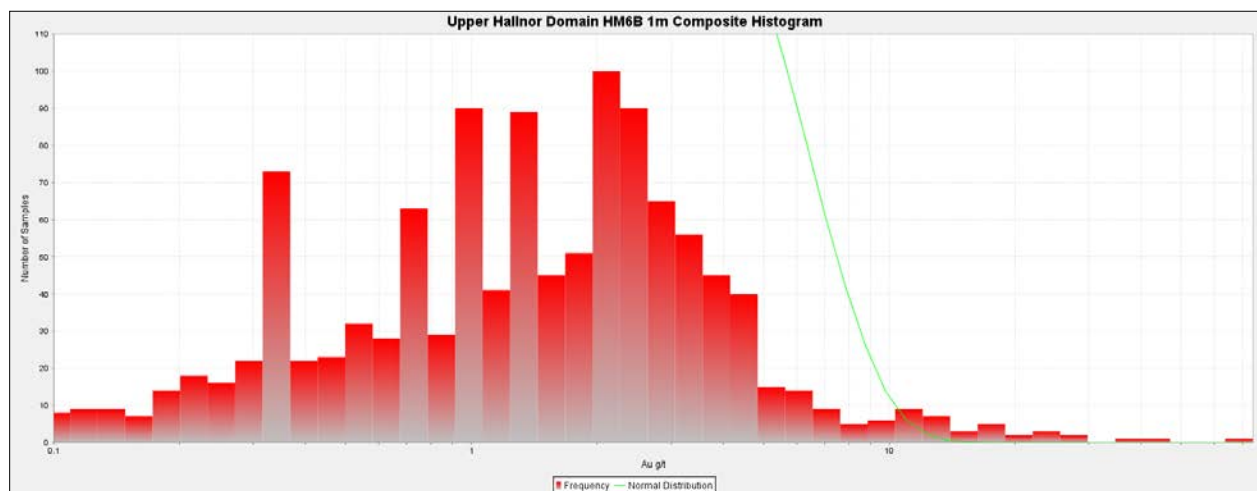
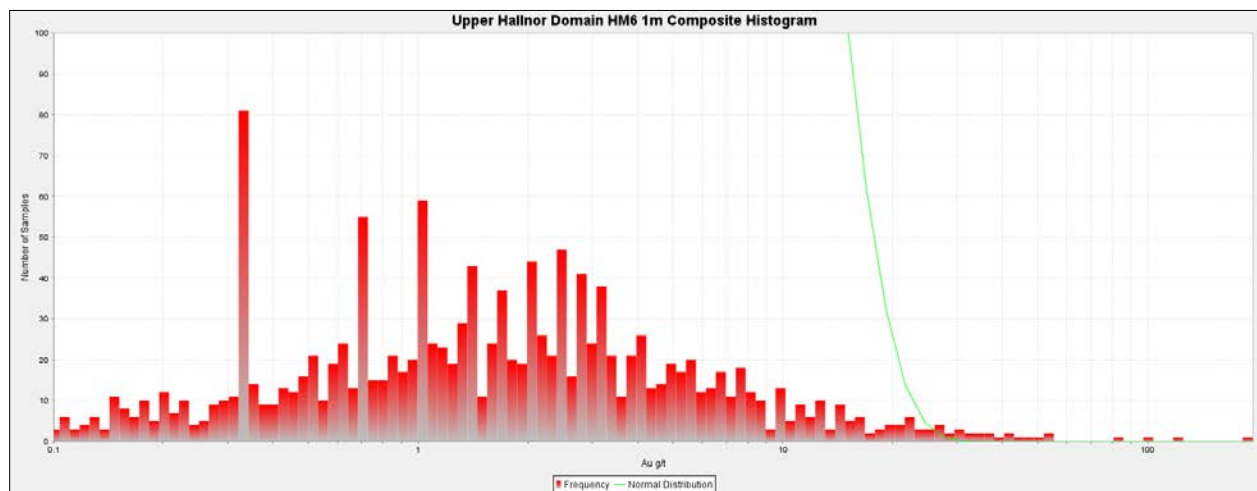


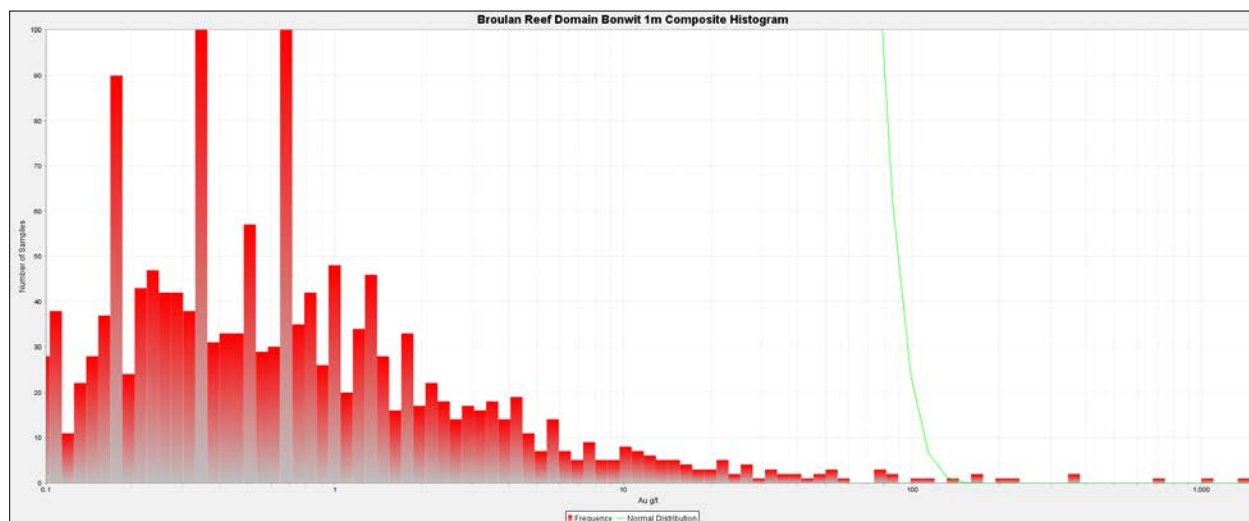
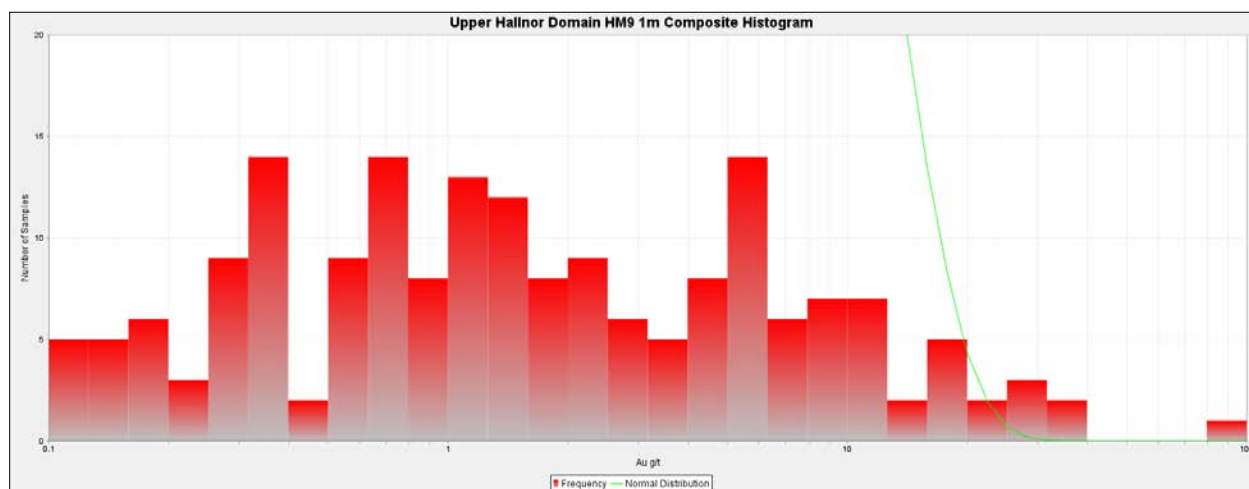
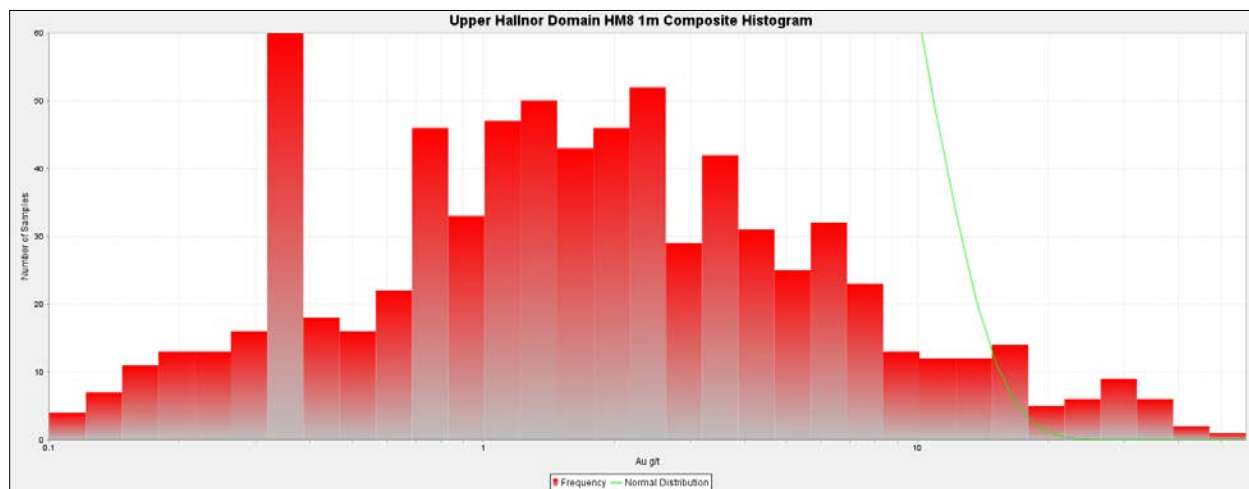


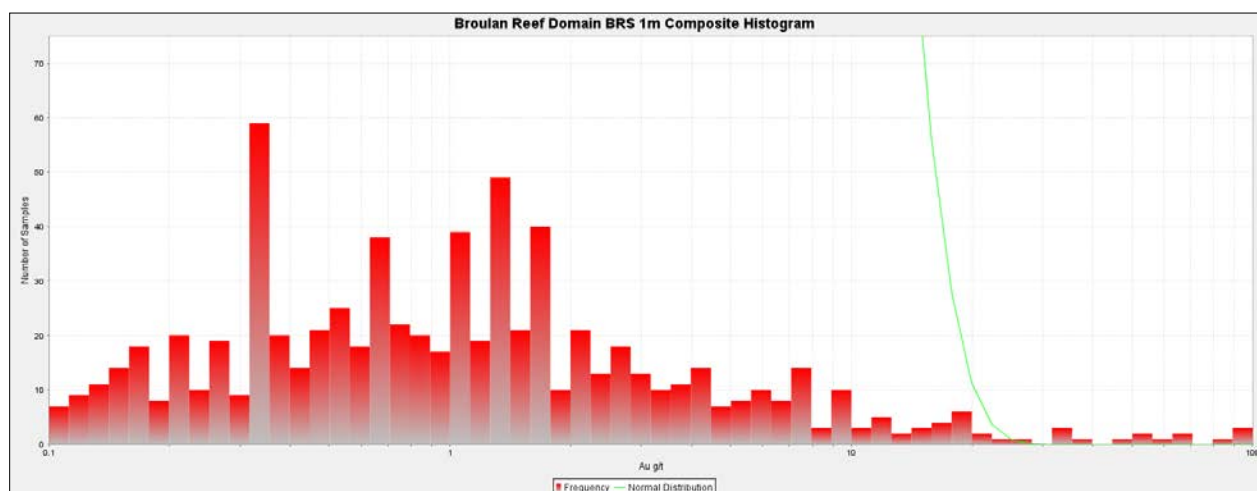
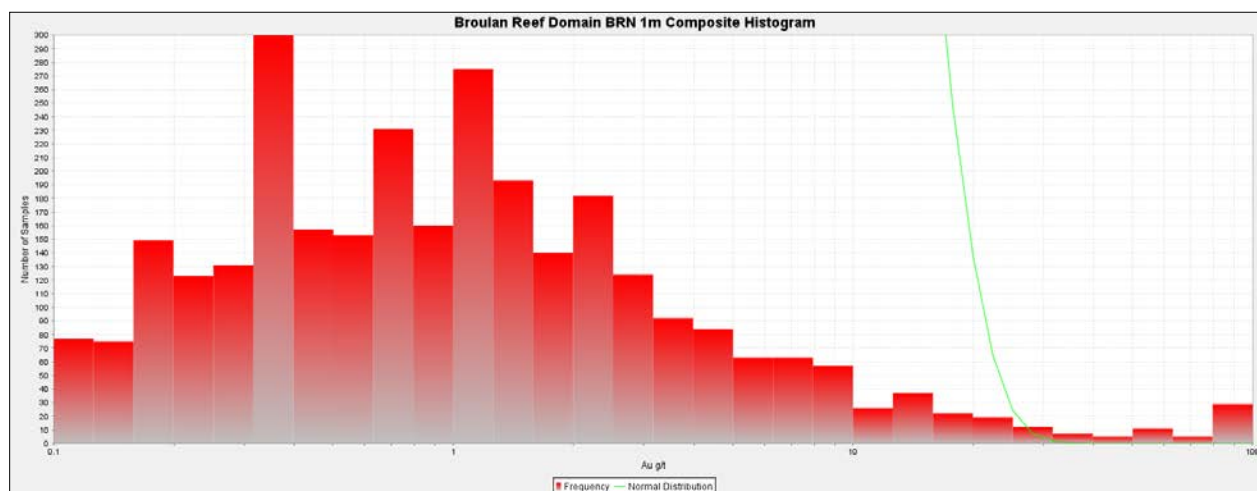
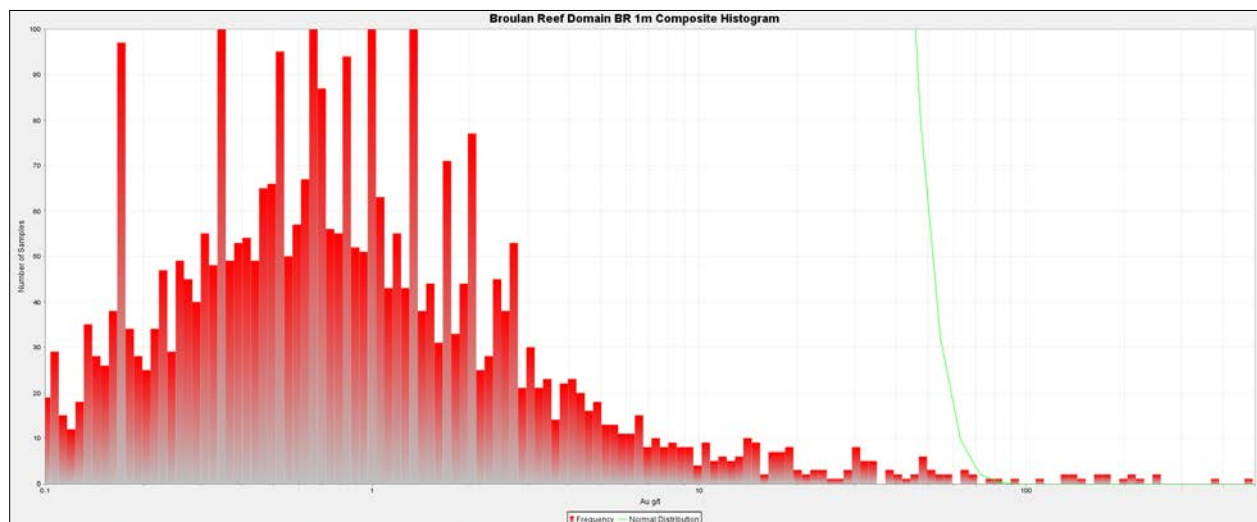




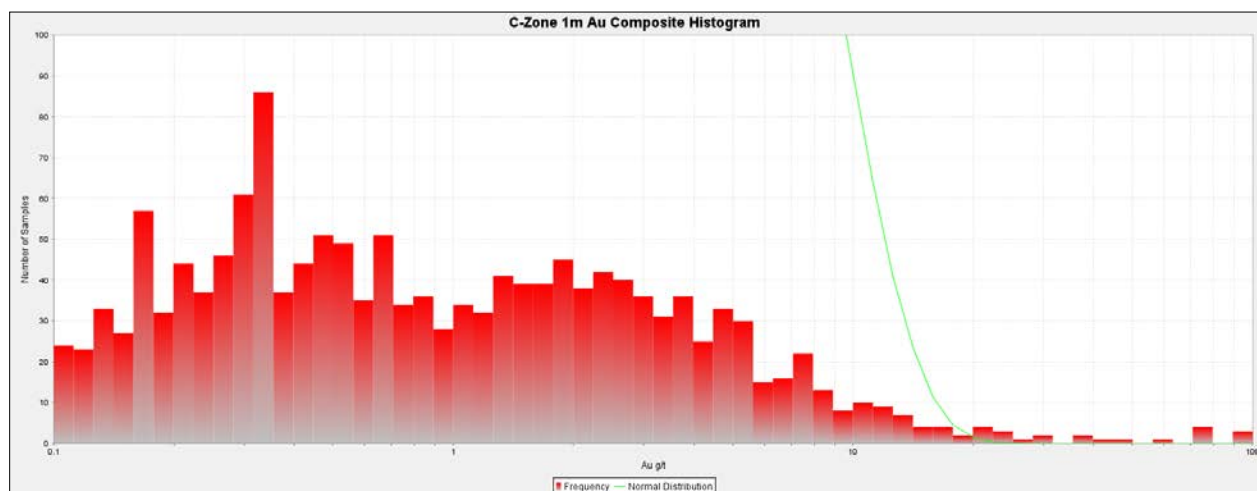
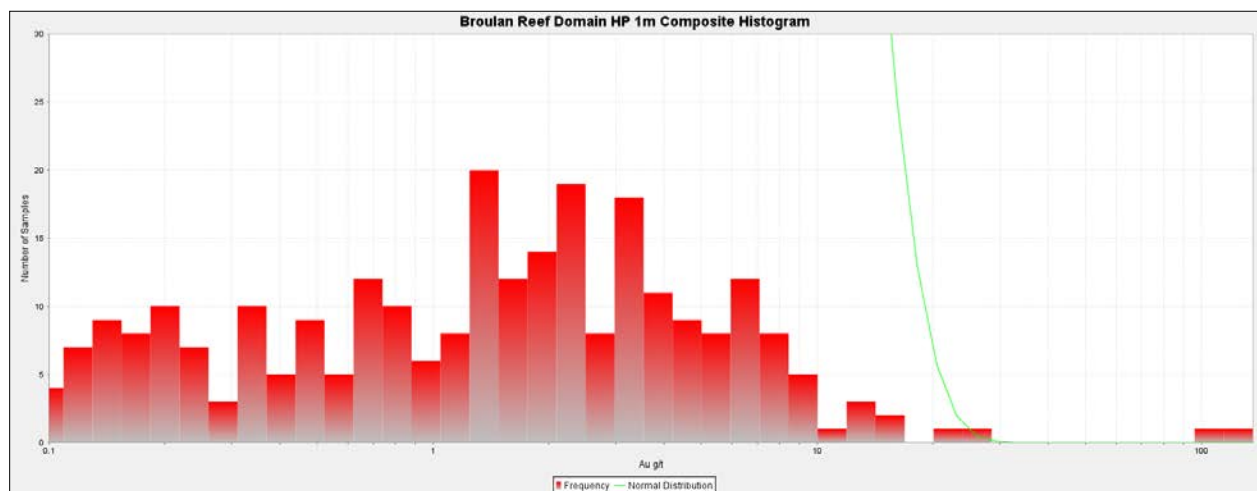
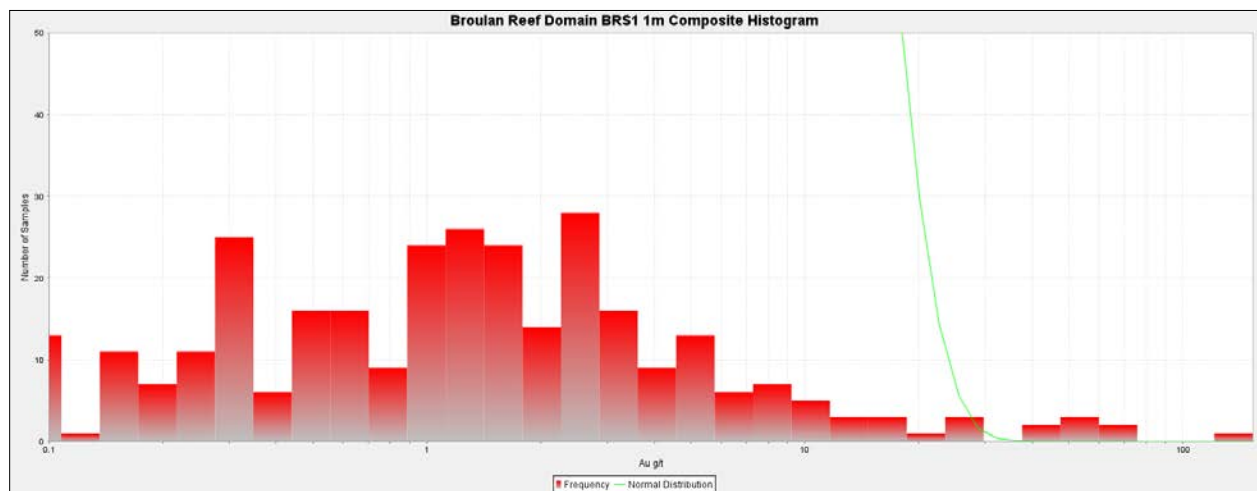




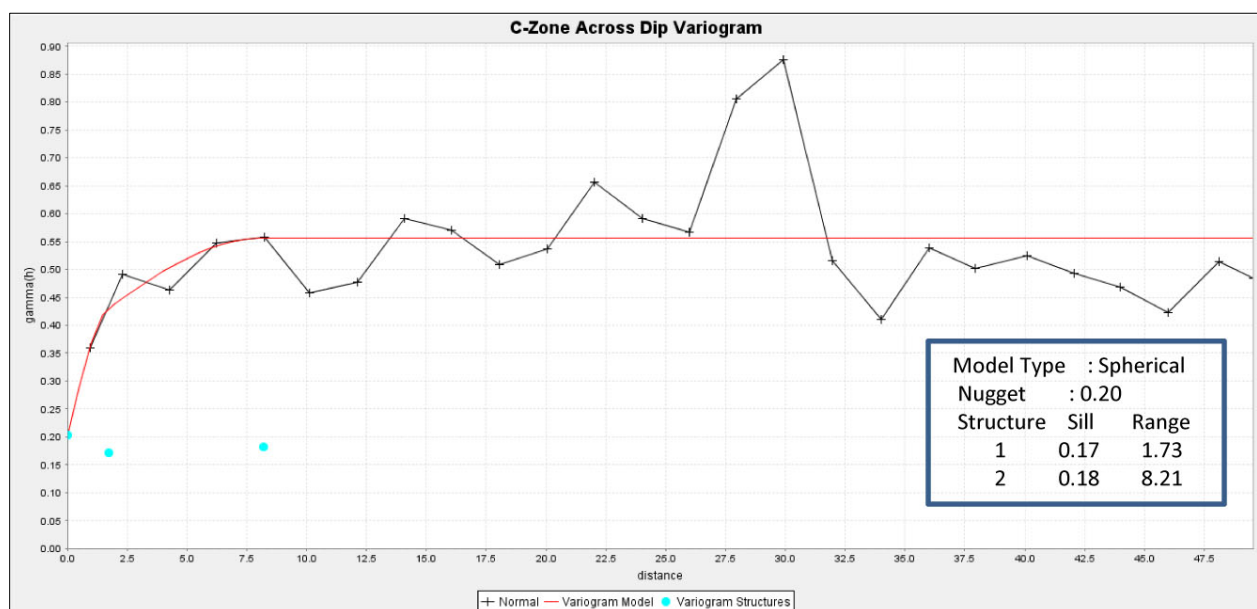
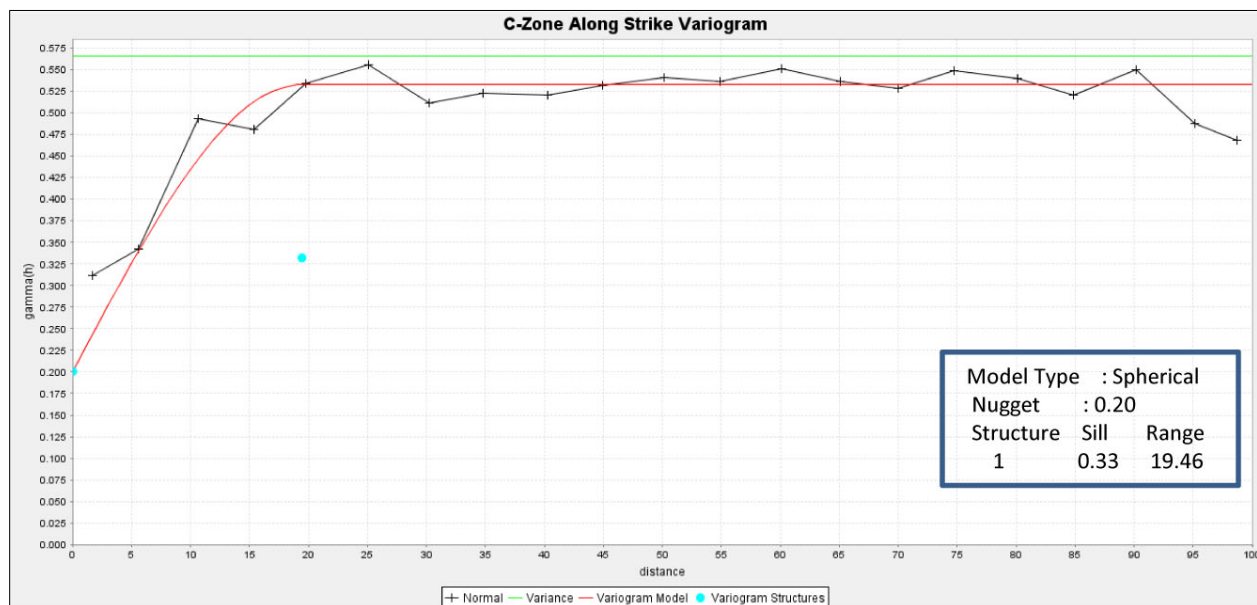


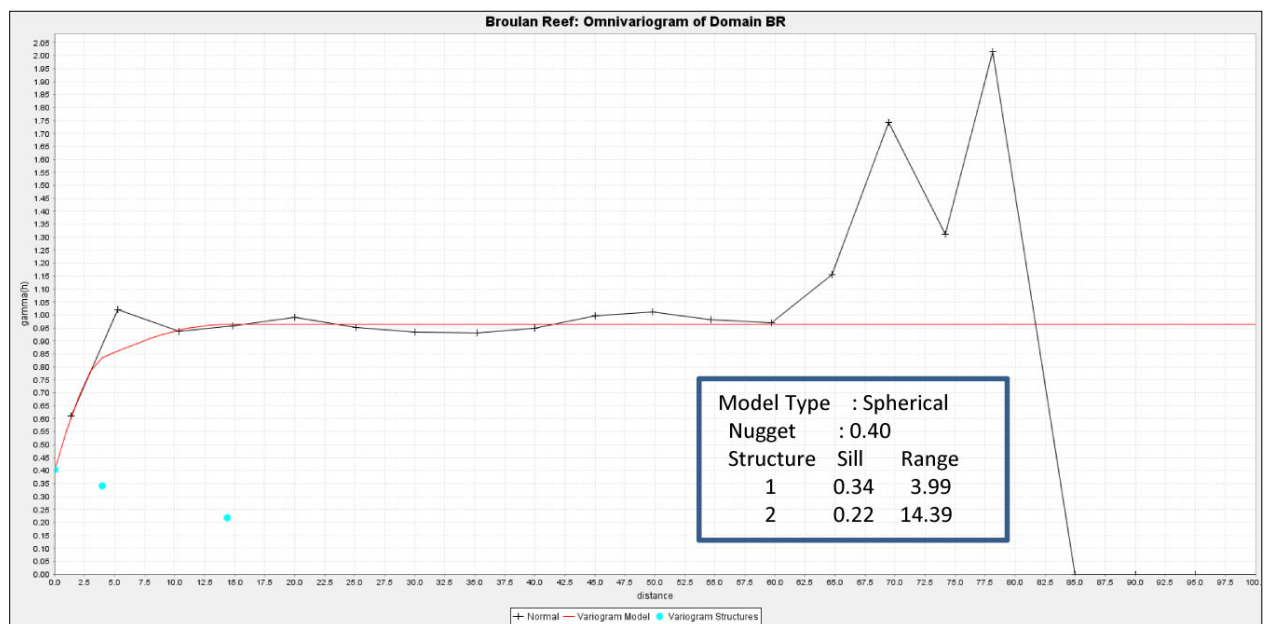
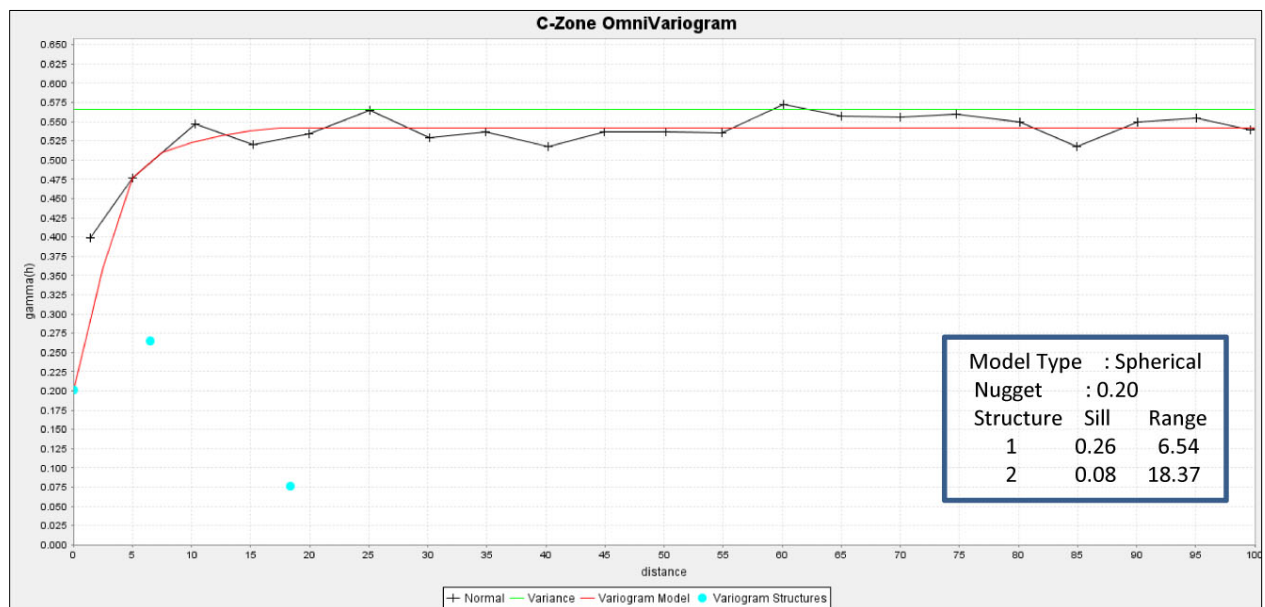


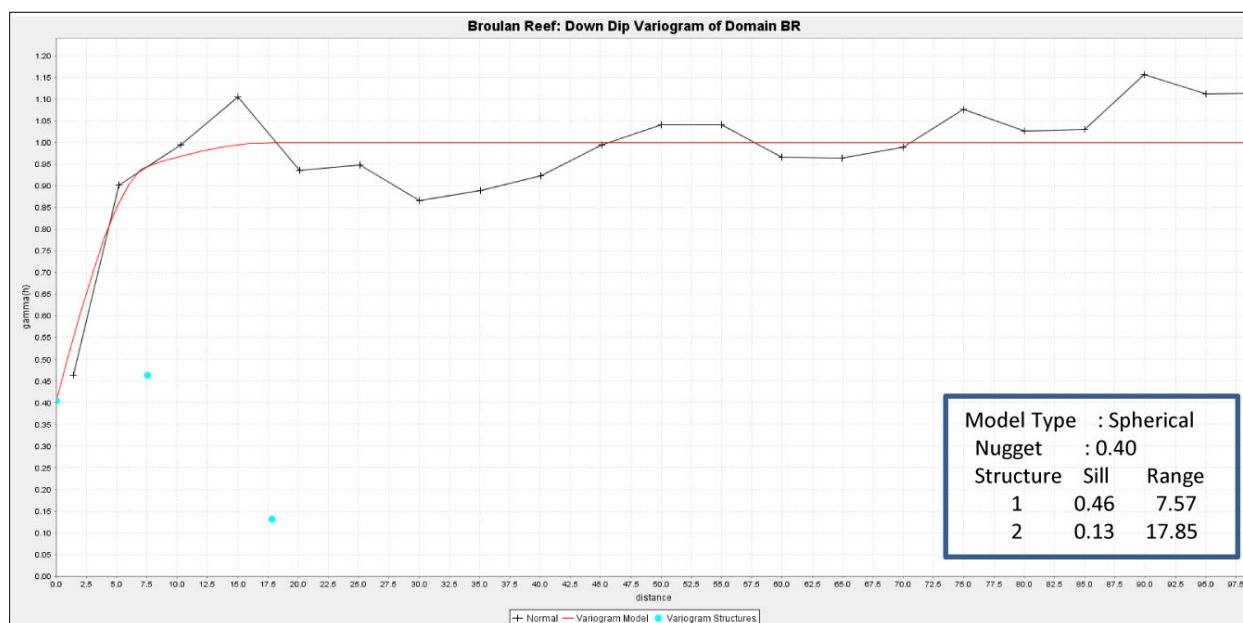
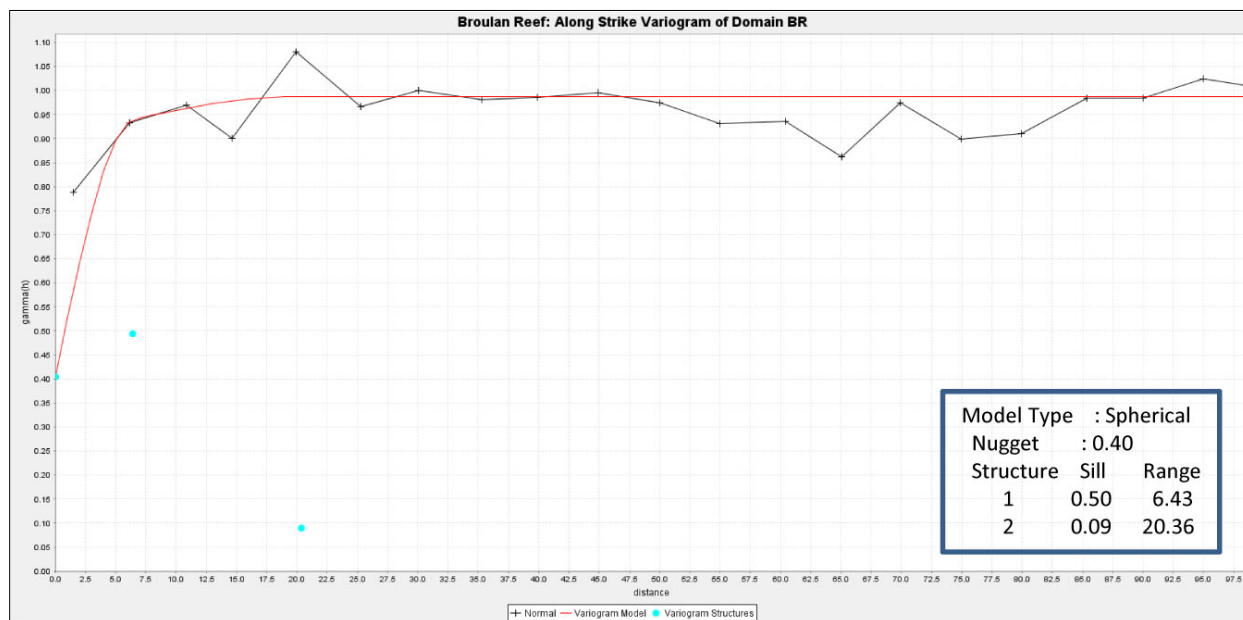


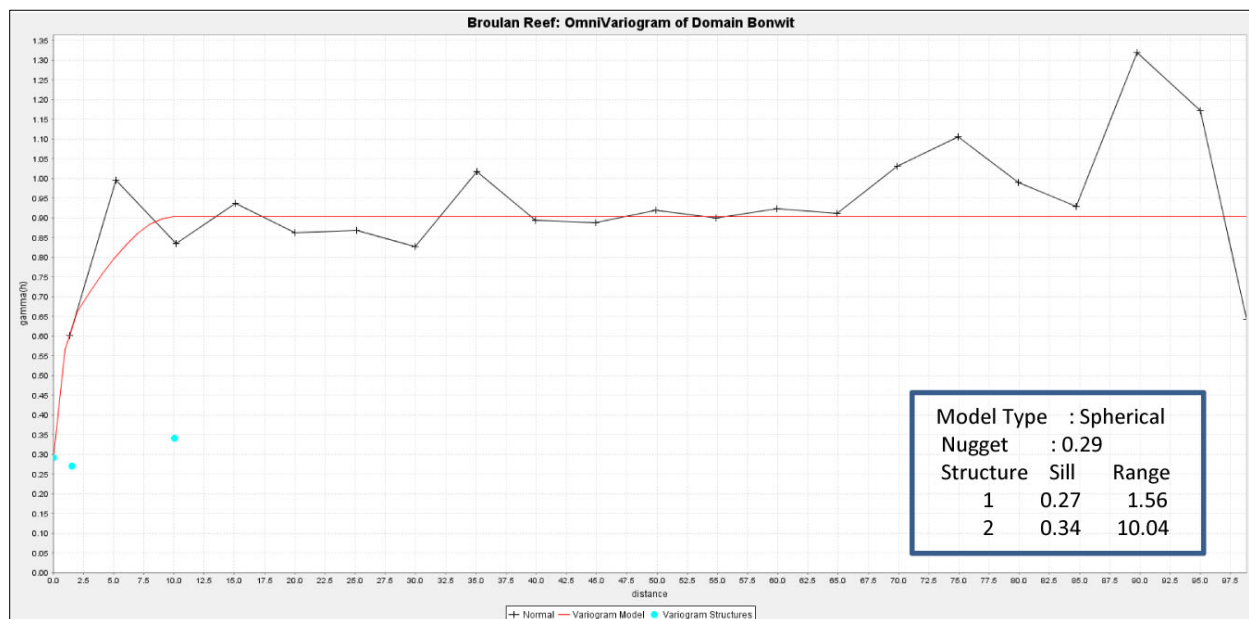
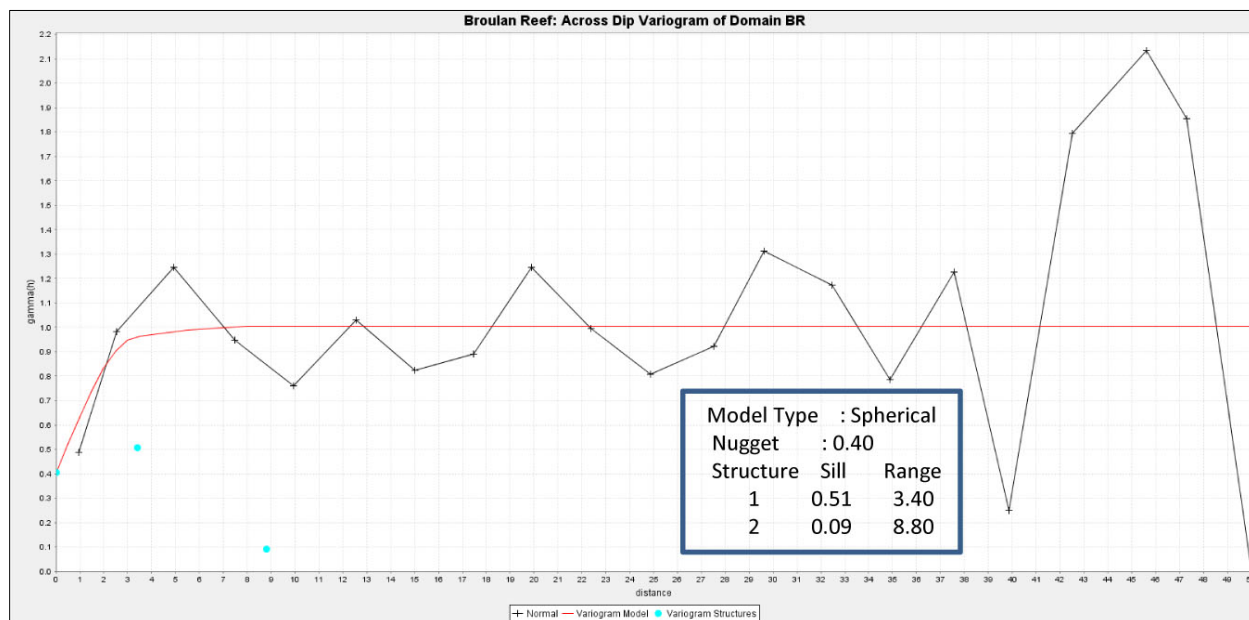


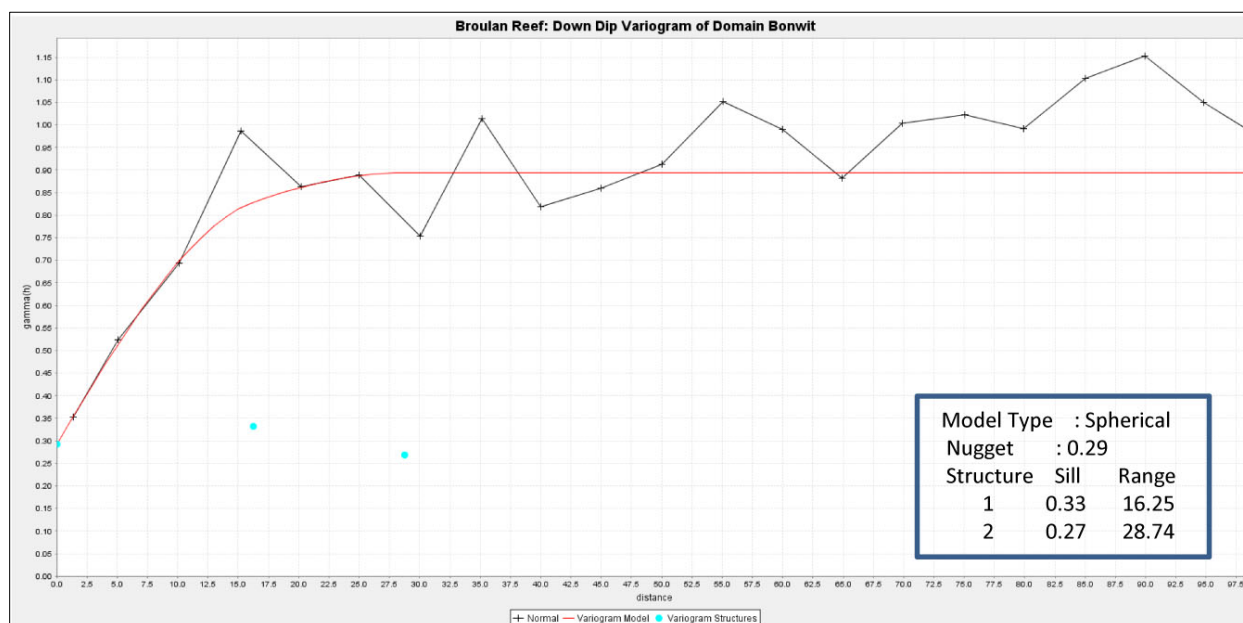
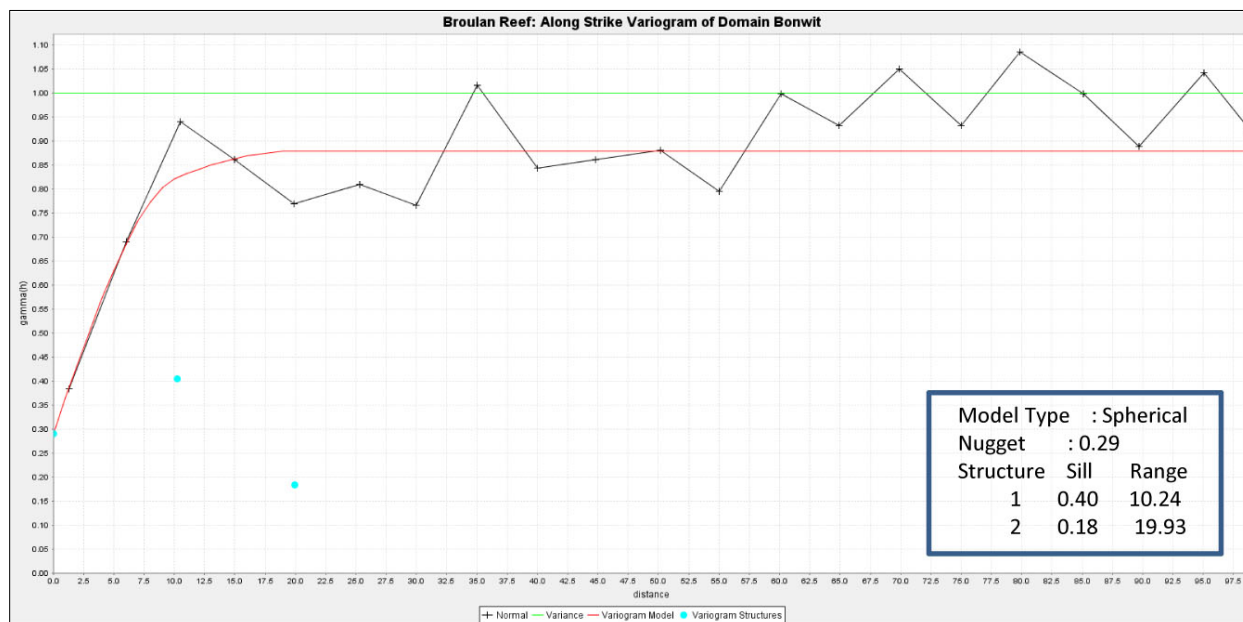
## **APPENDIX IV. VARIOGRAMS**



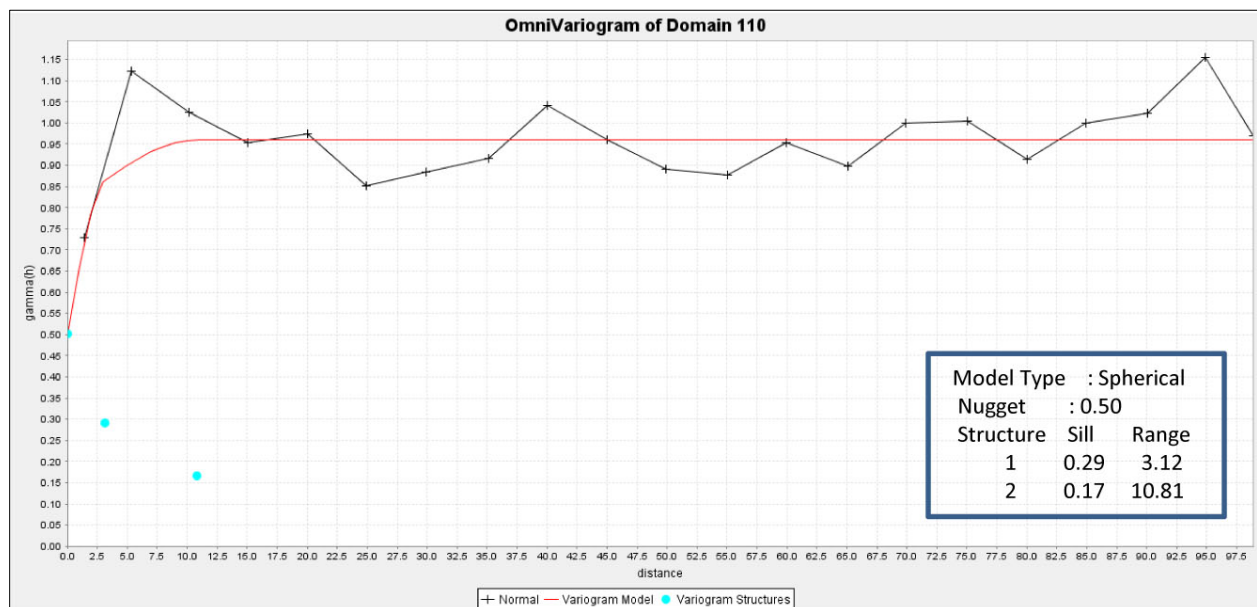
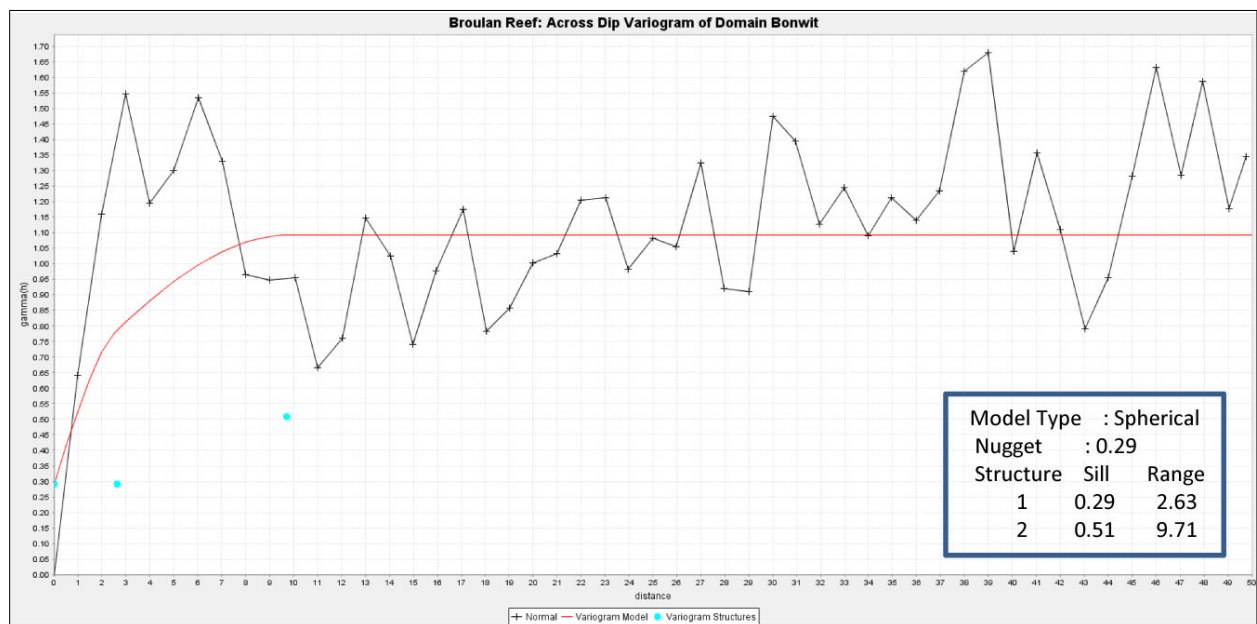




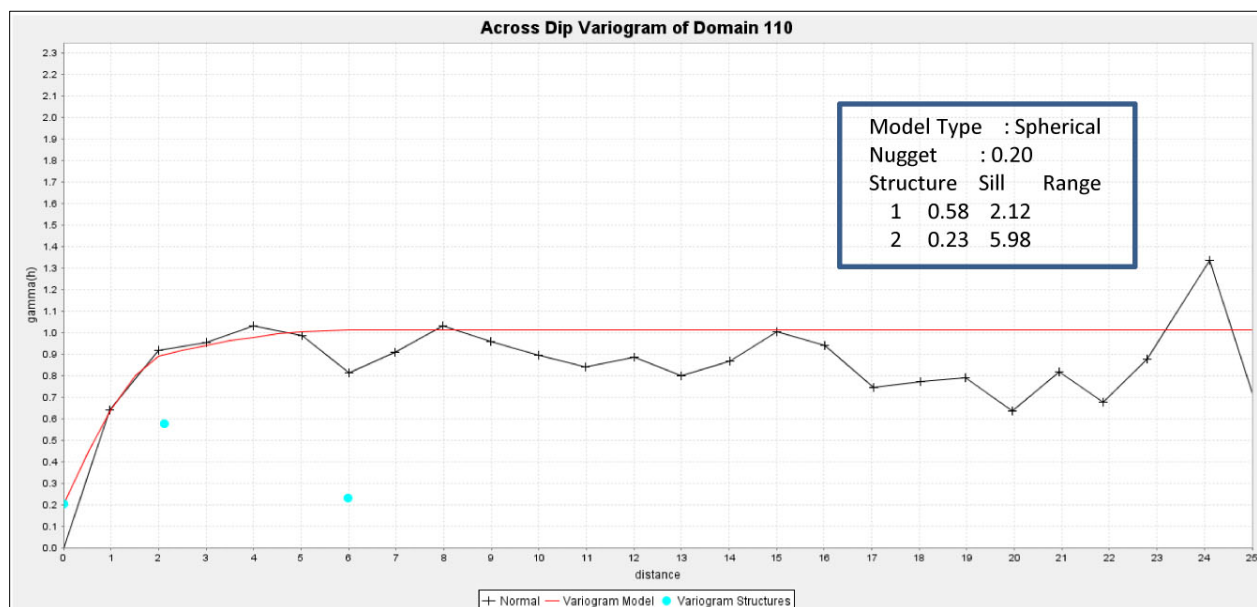
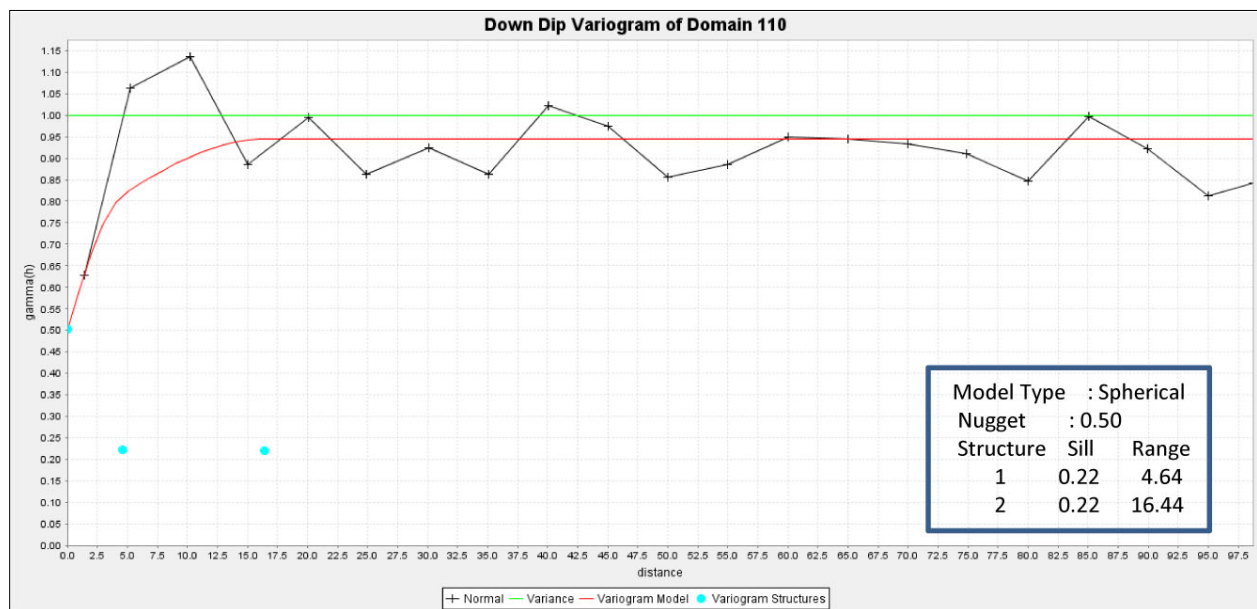


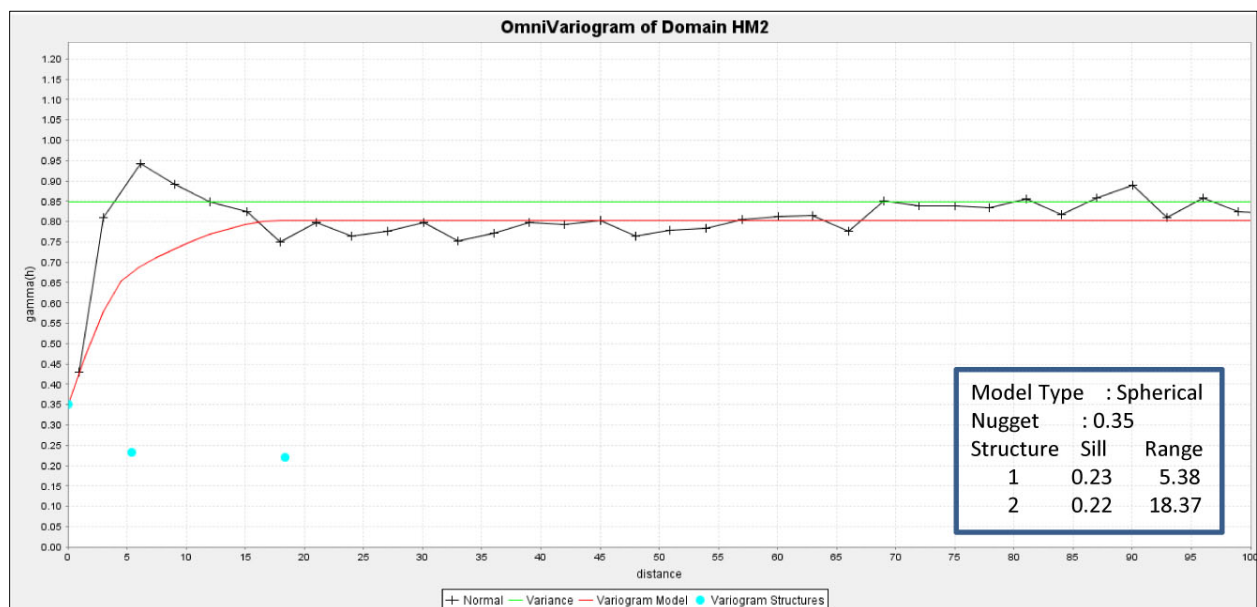
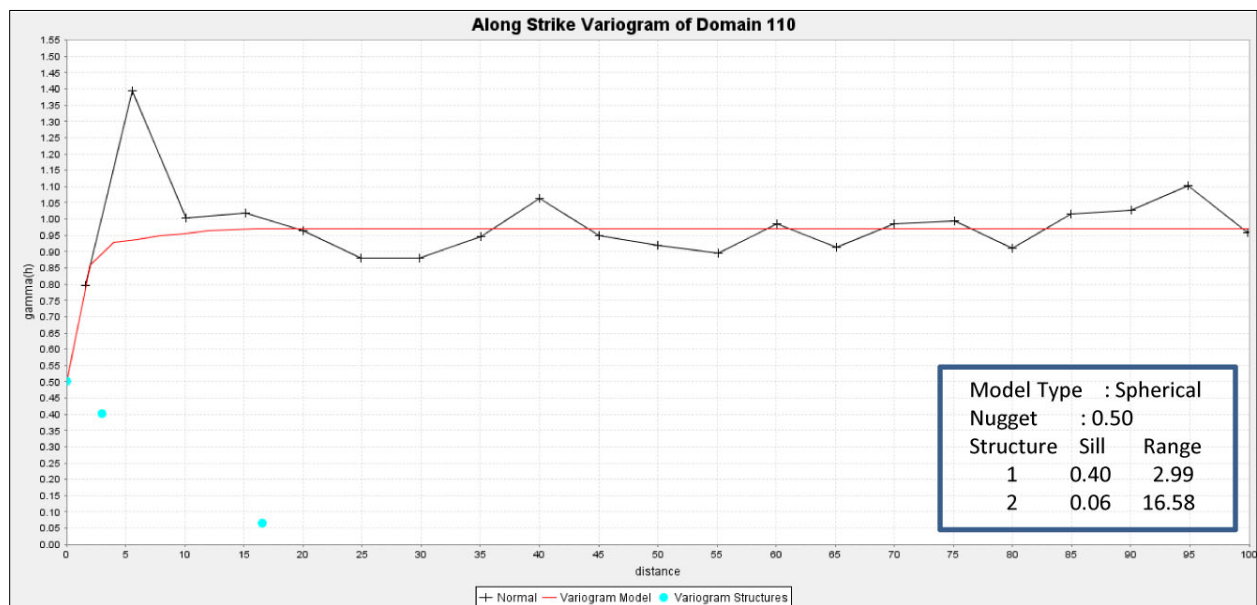


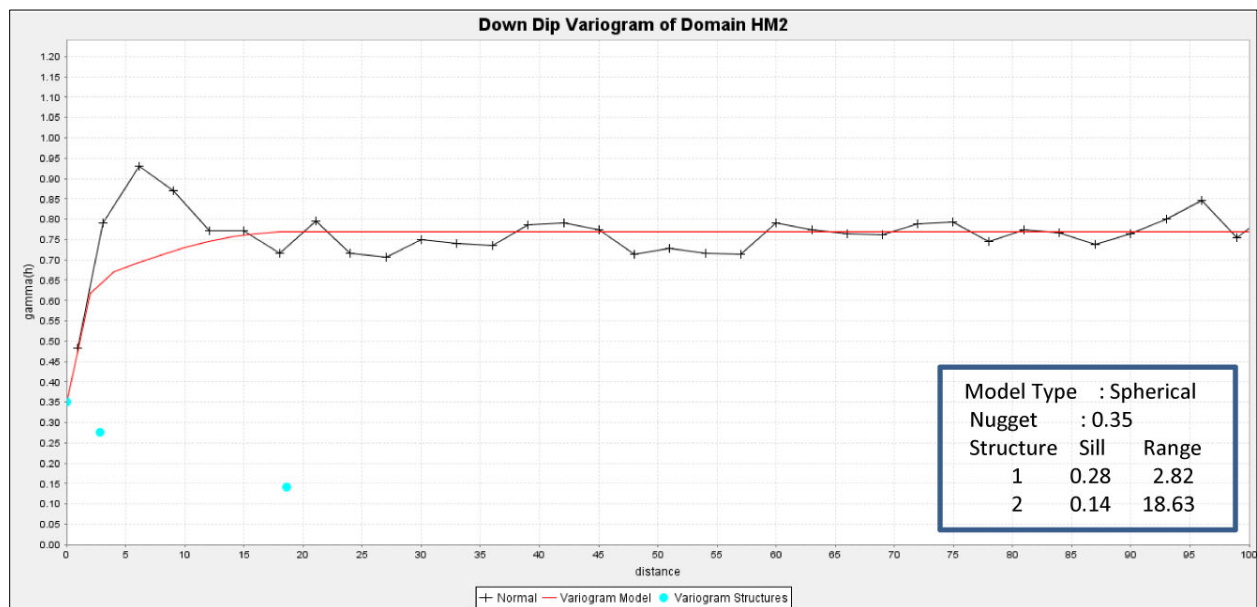
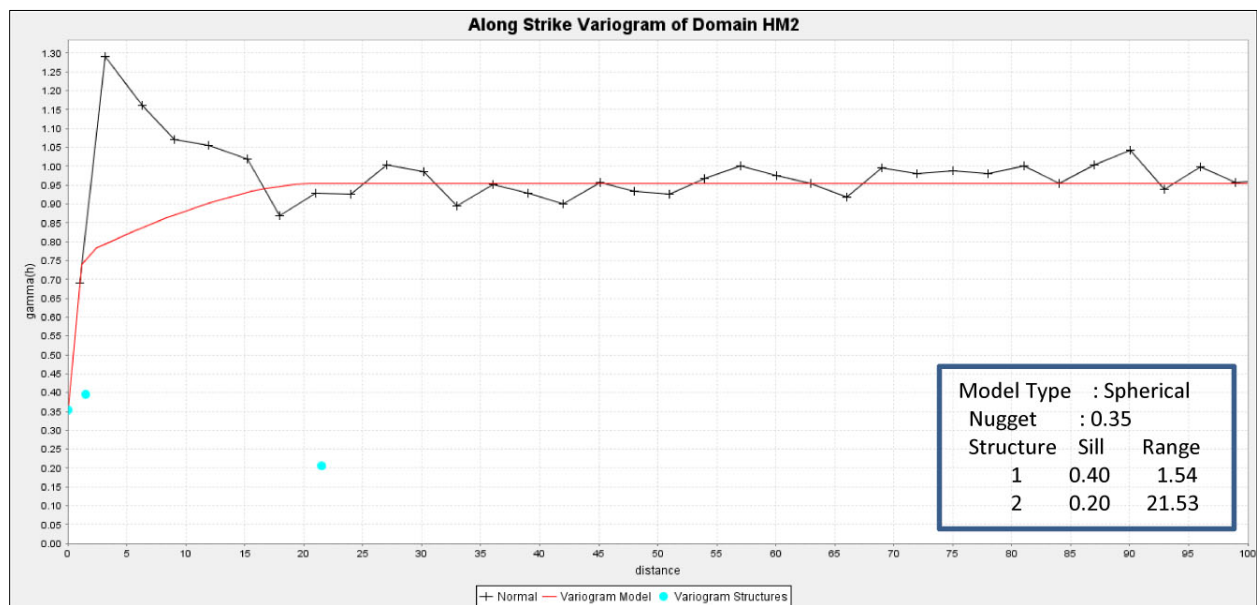


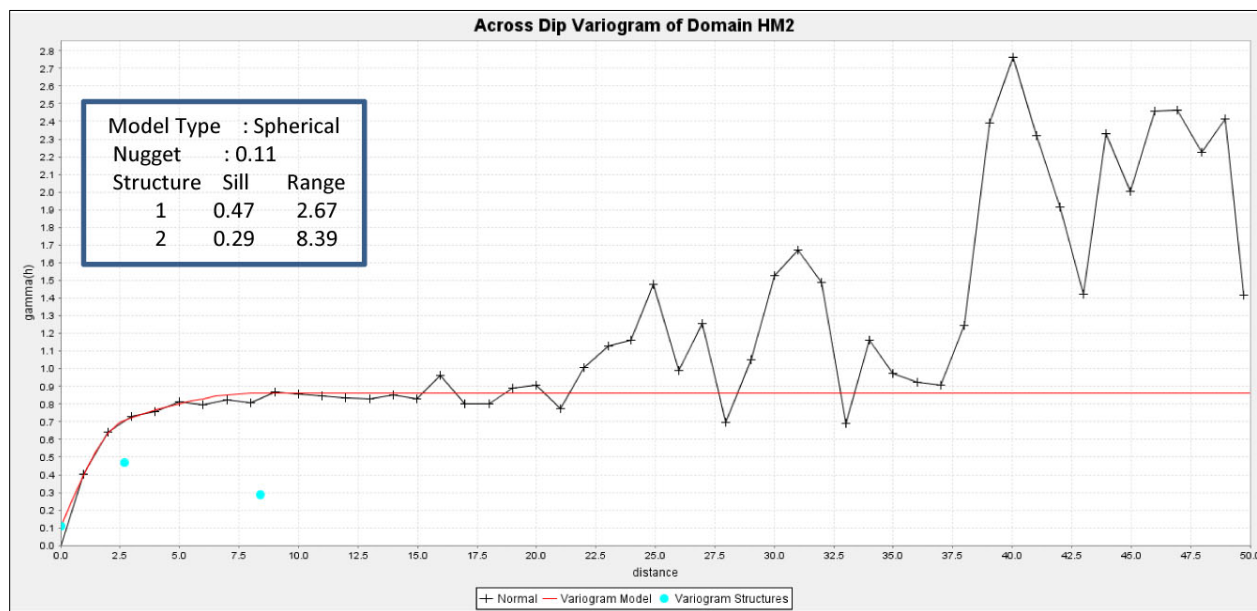




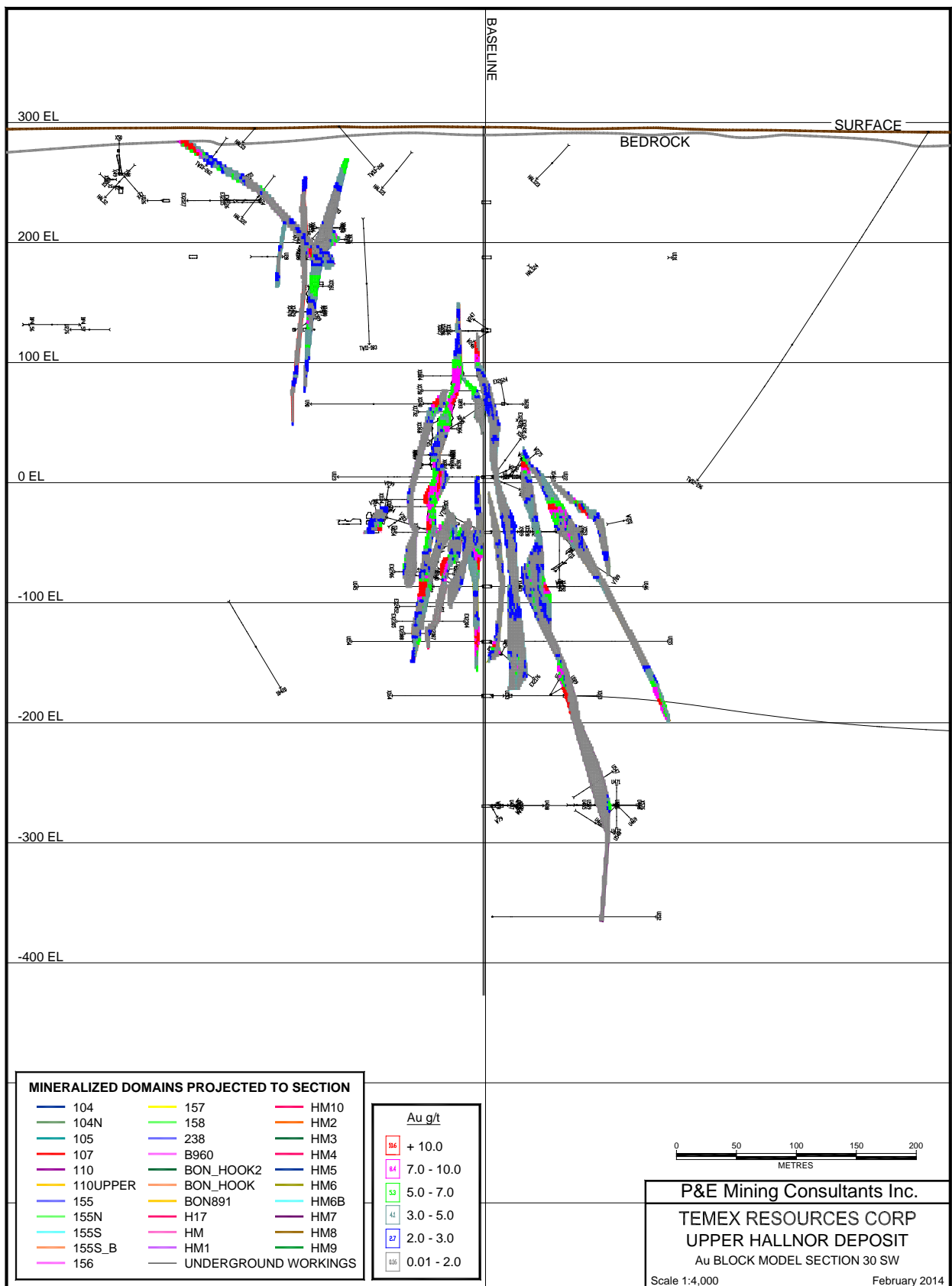




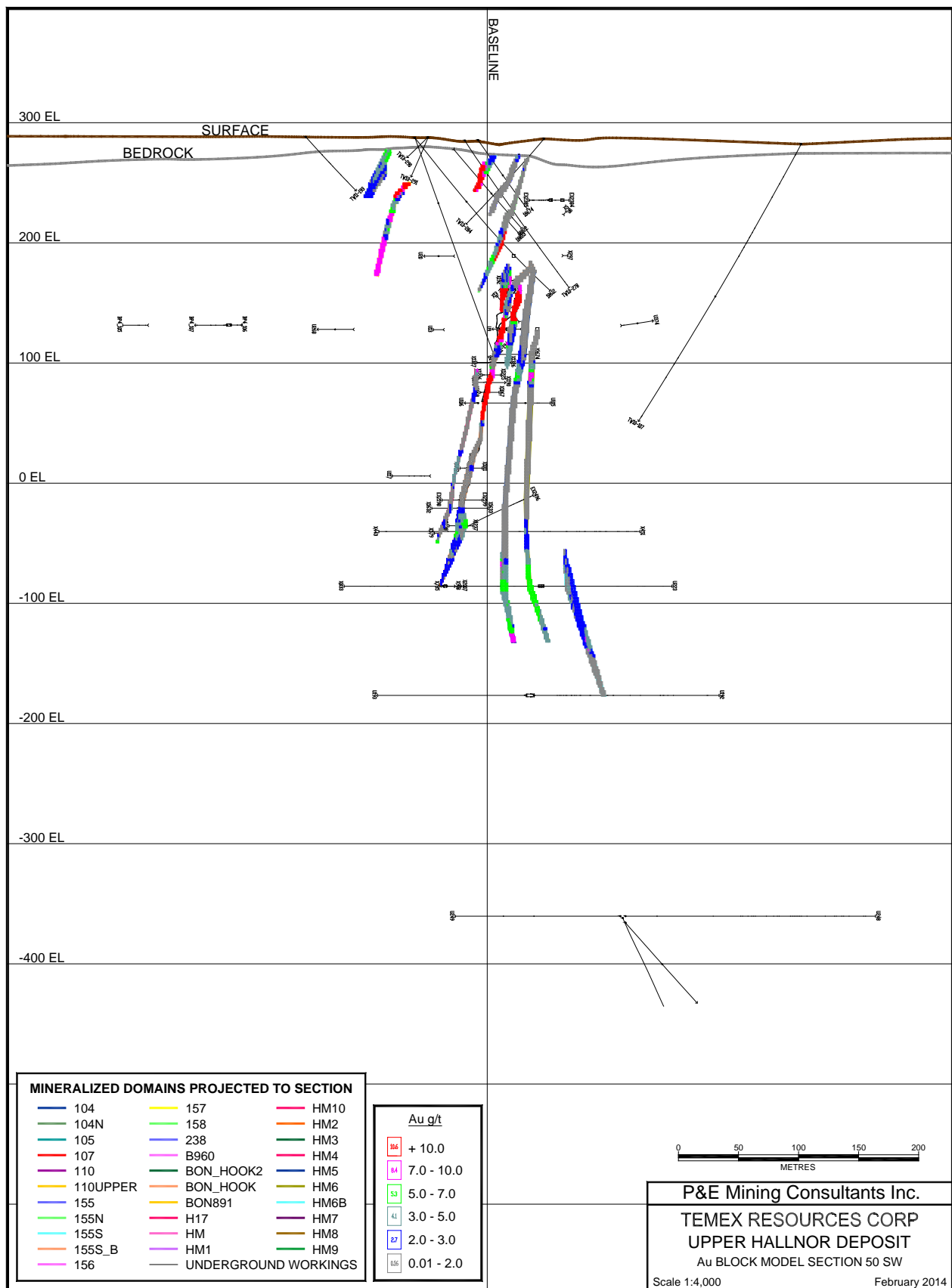




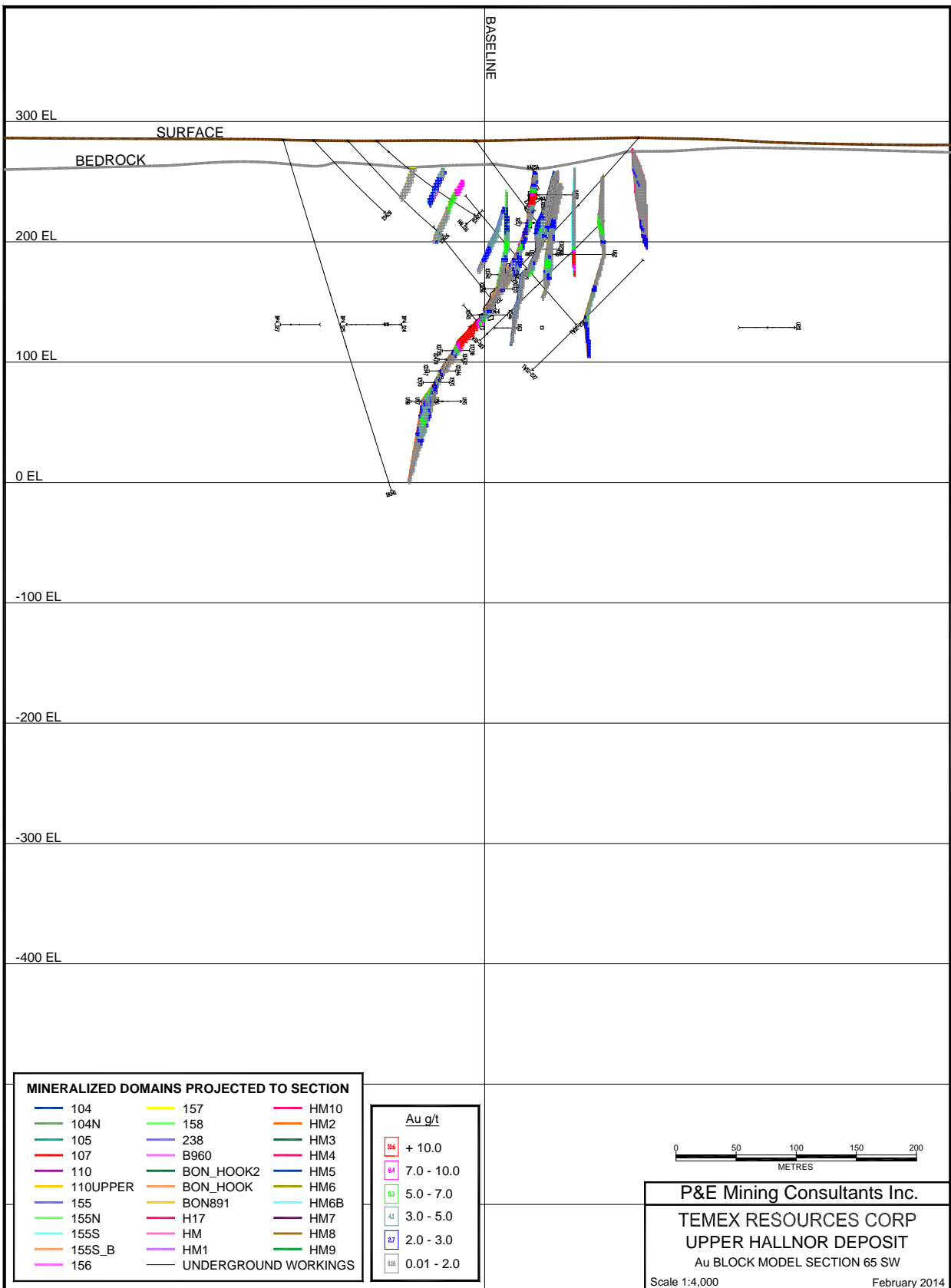
## **APPENDIX V. AU BLOCK MODEL CROSS SECTIONS AND PLANS**

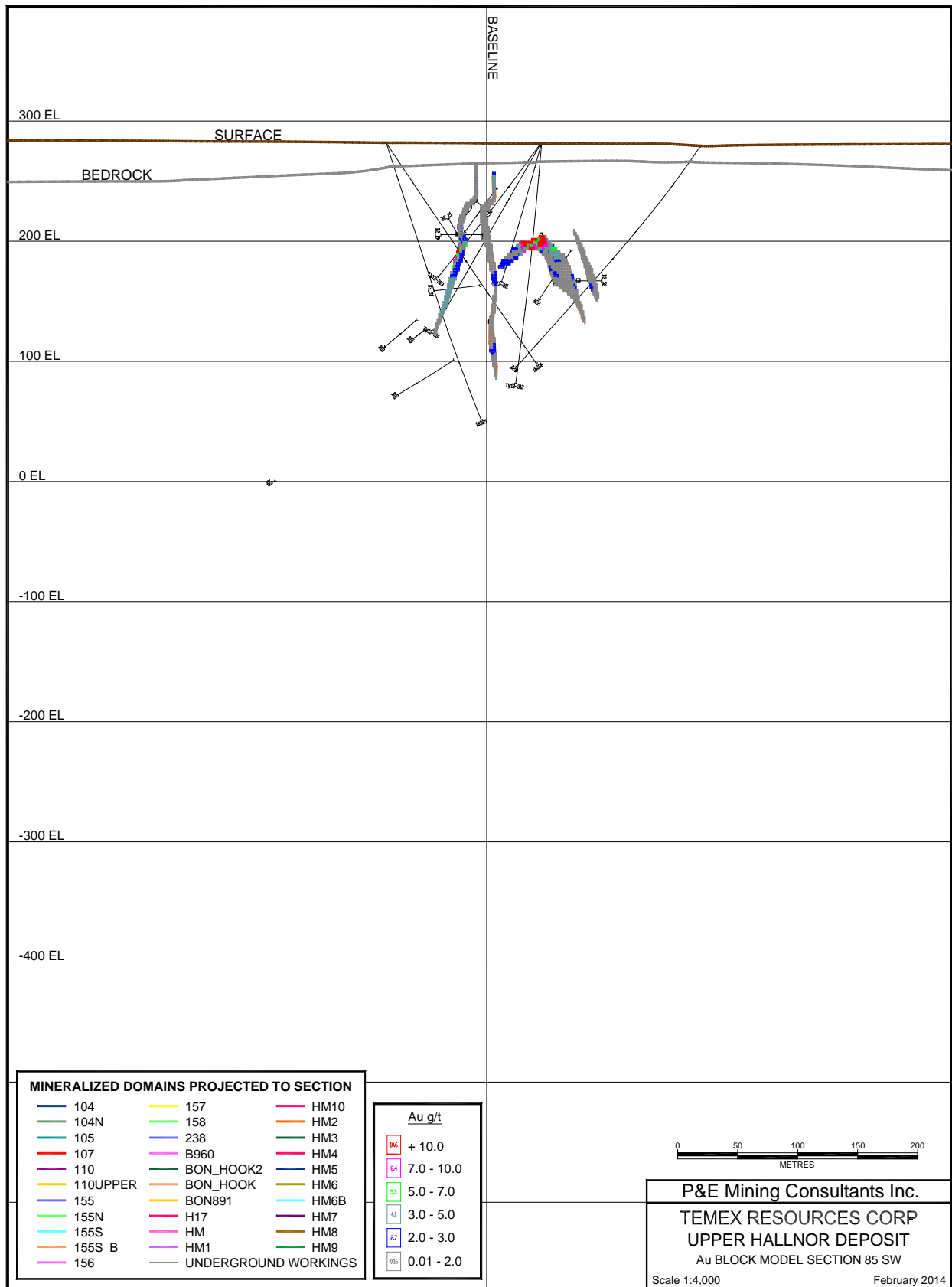


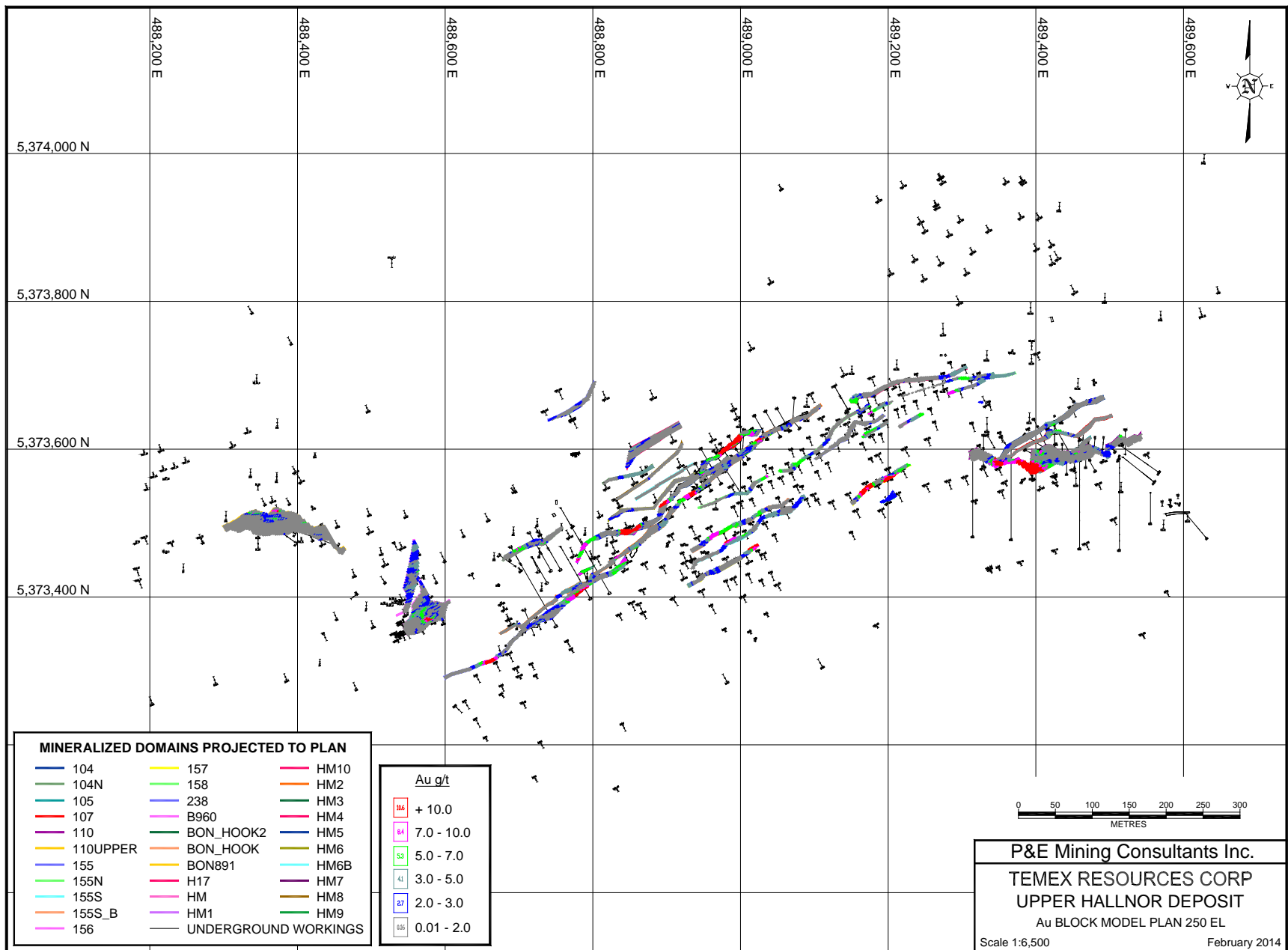


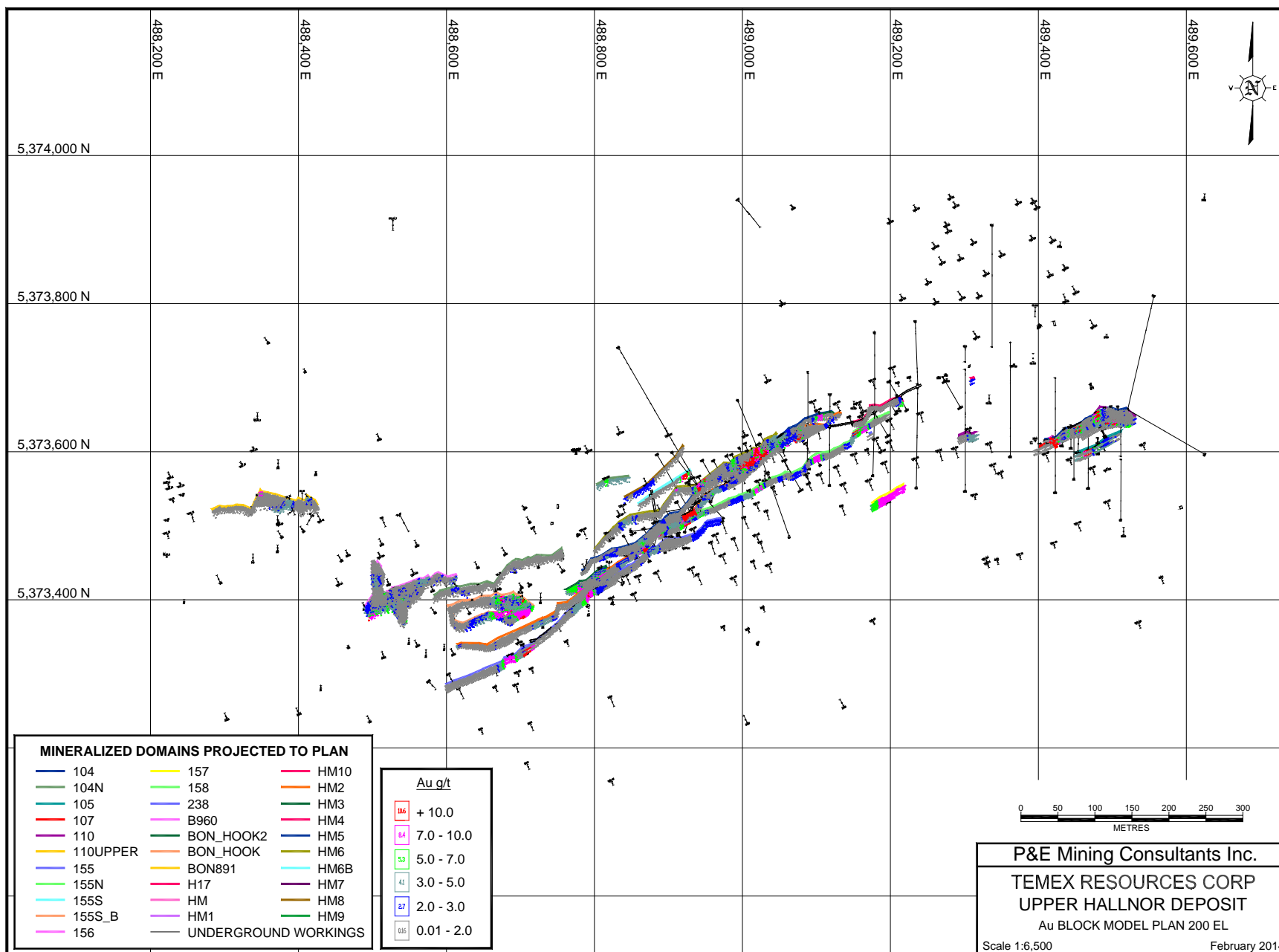


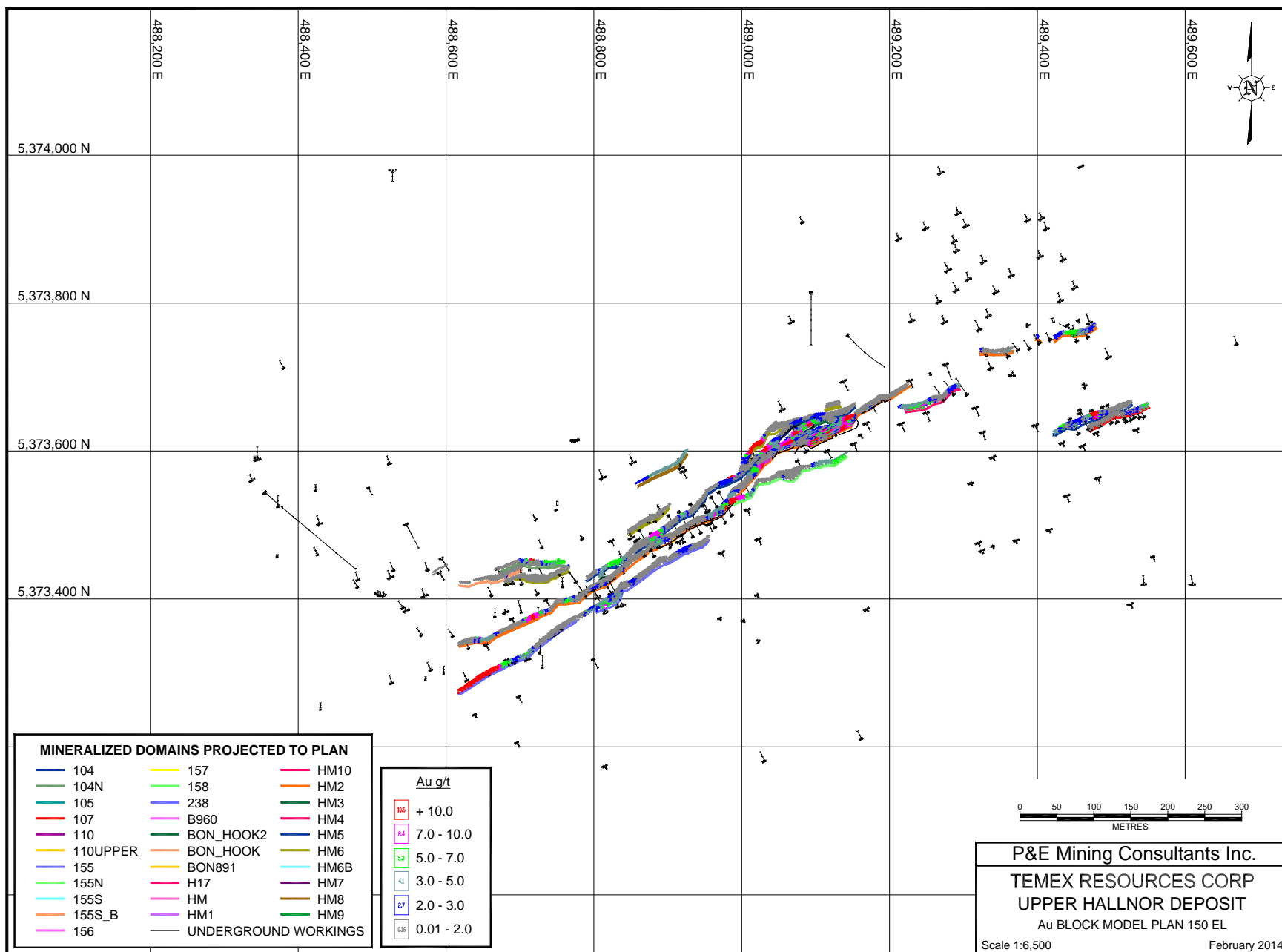


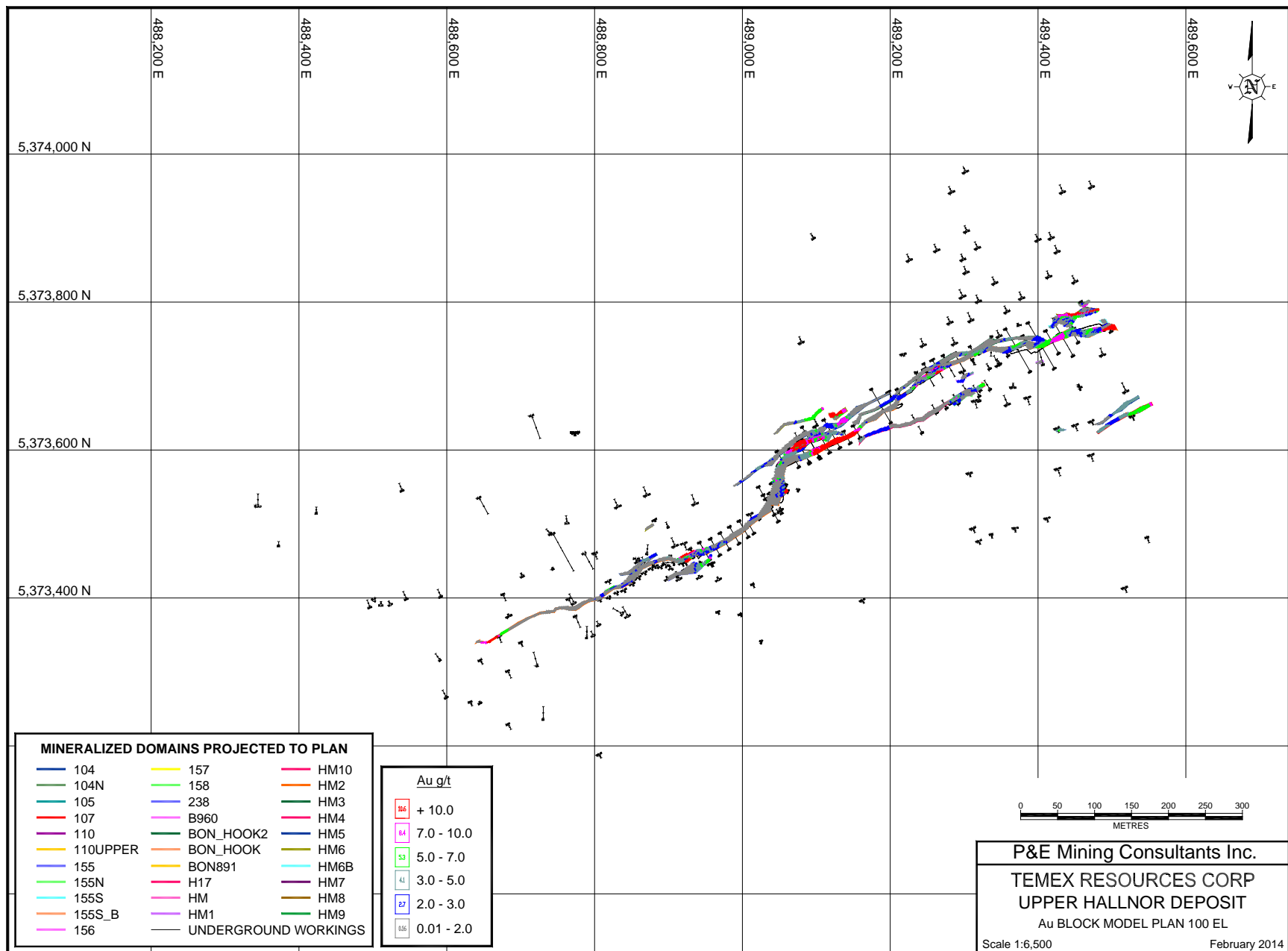


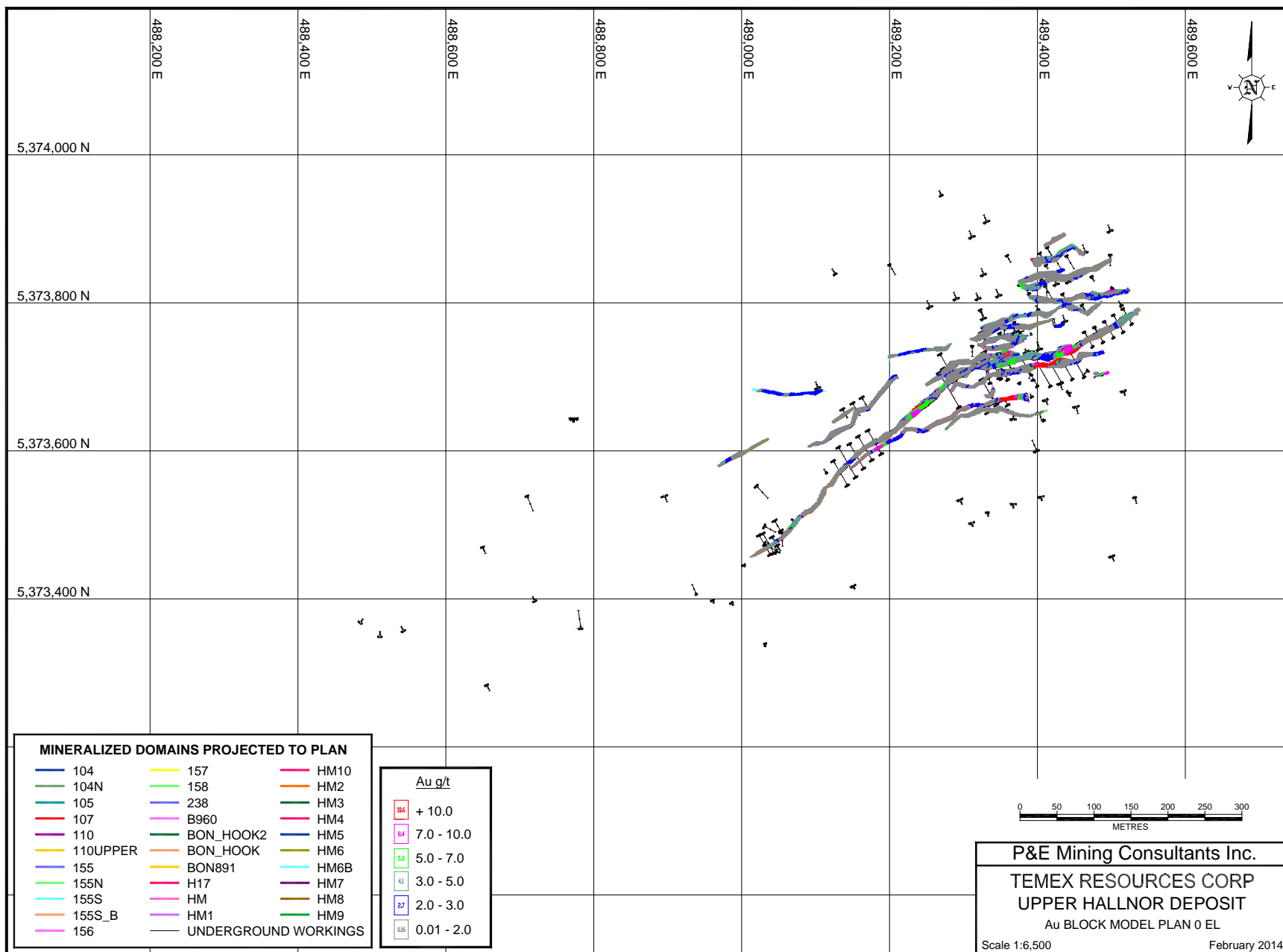


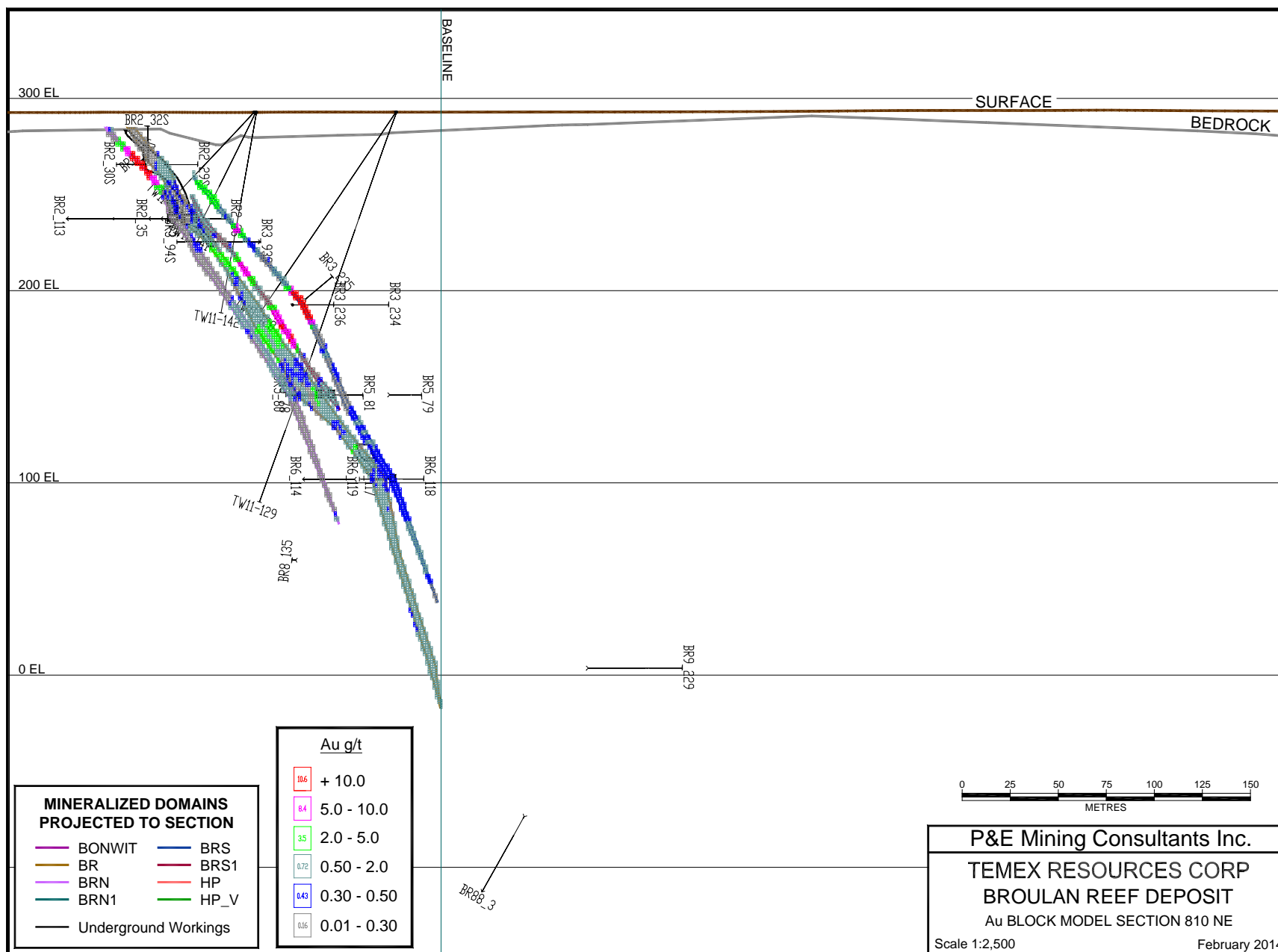




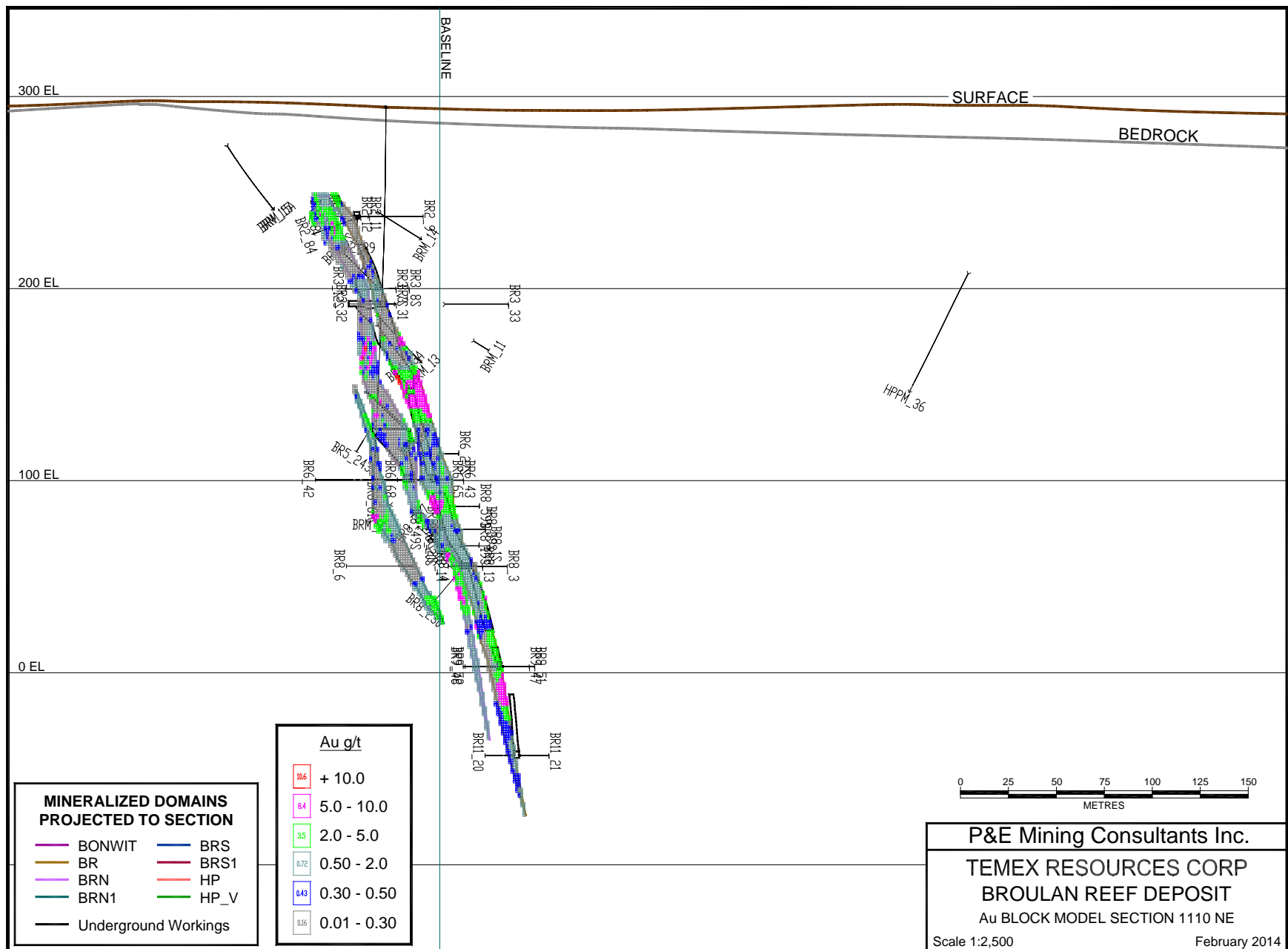


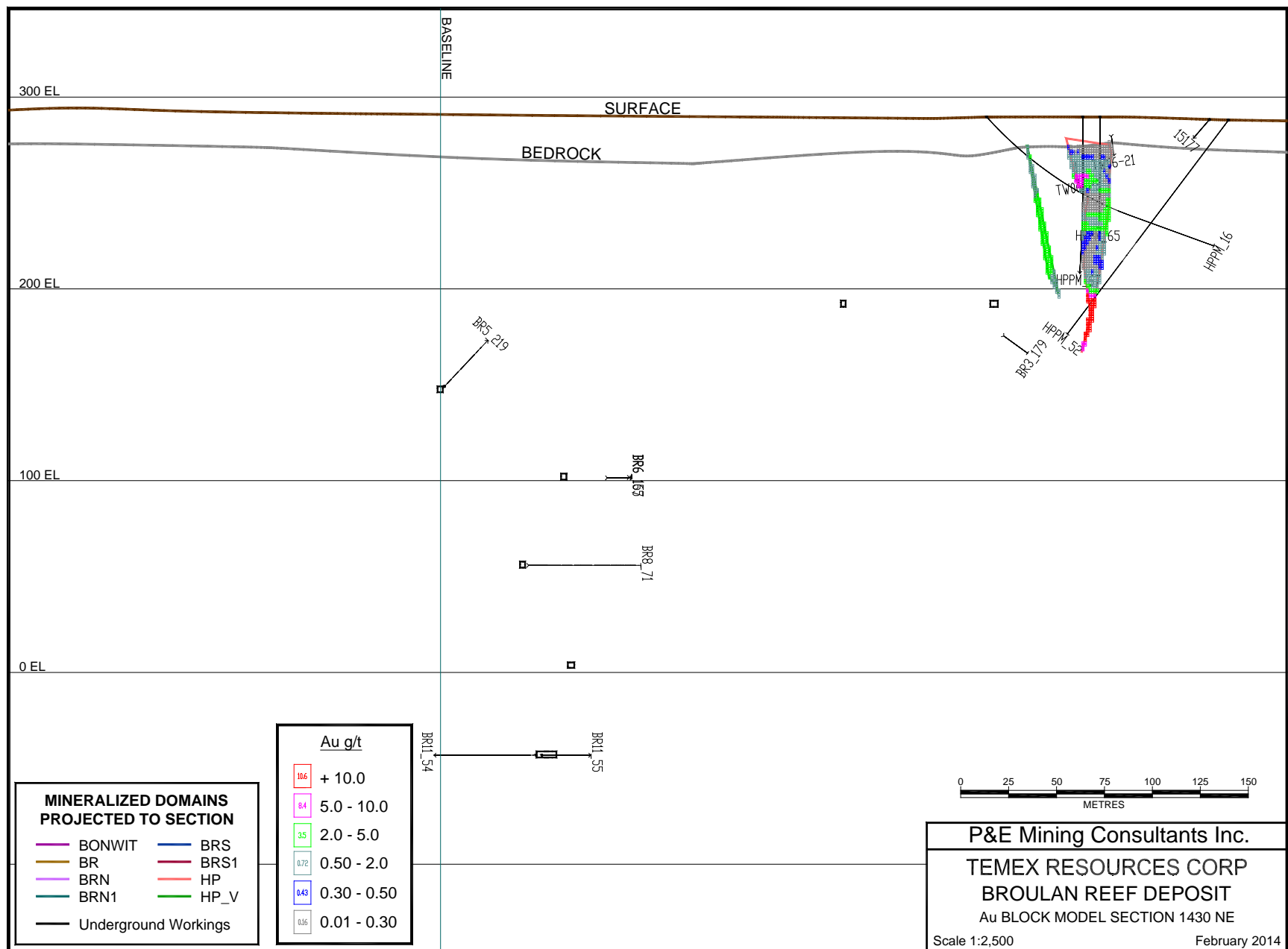


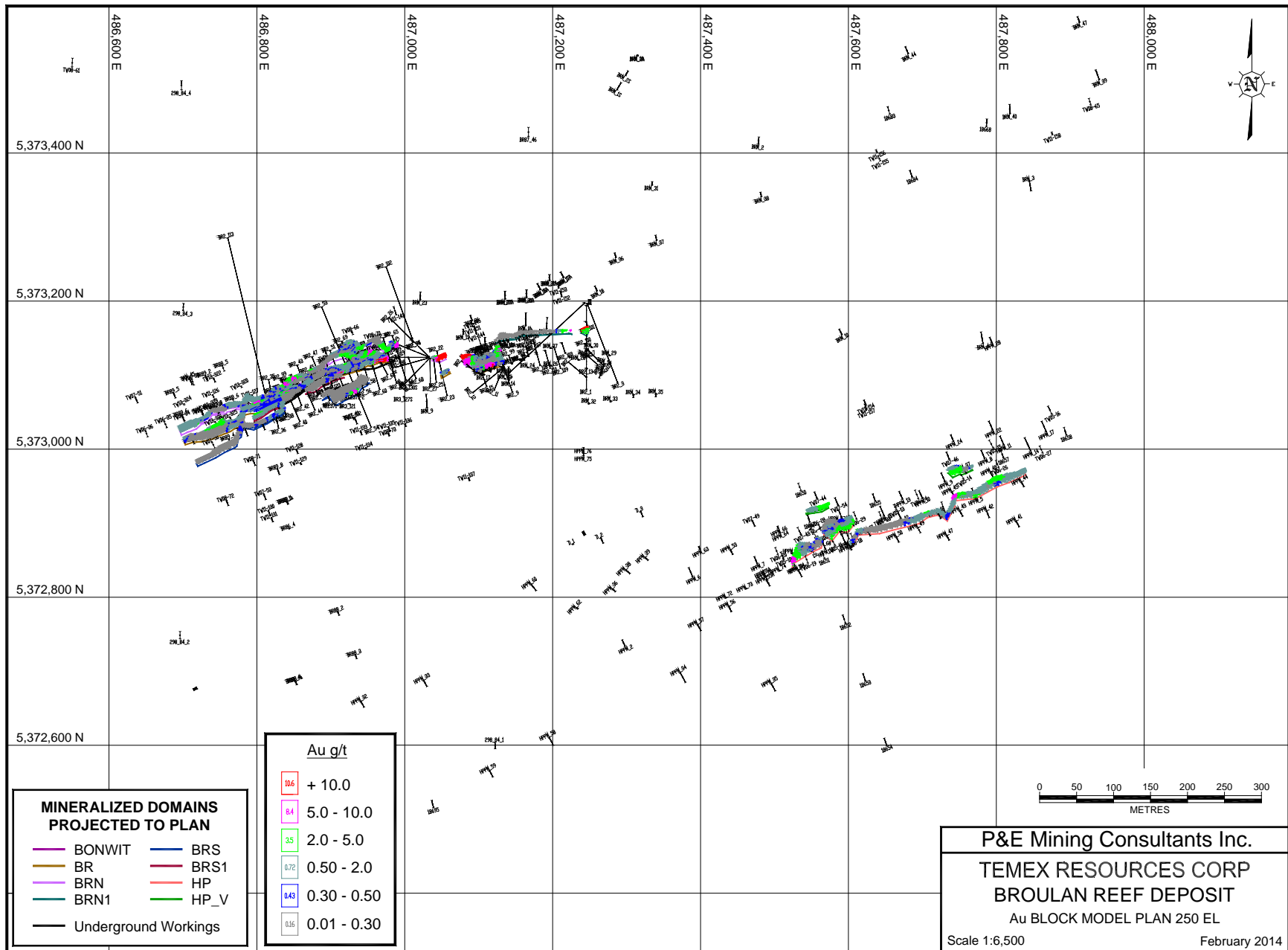


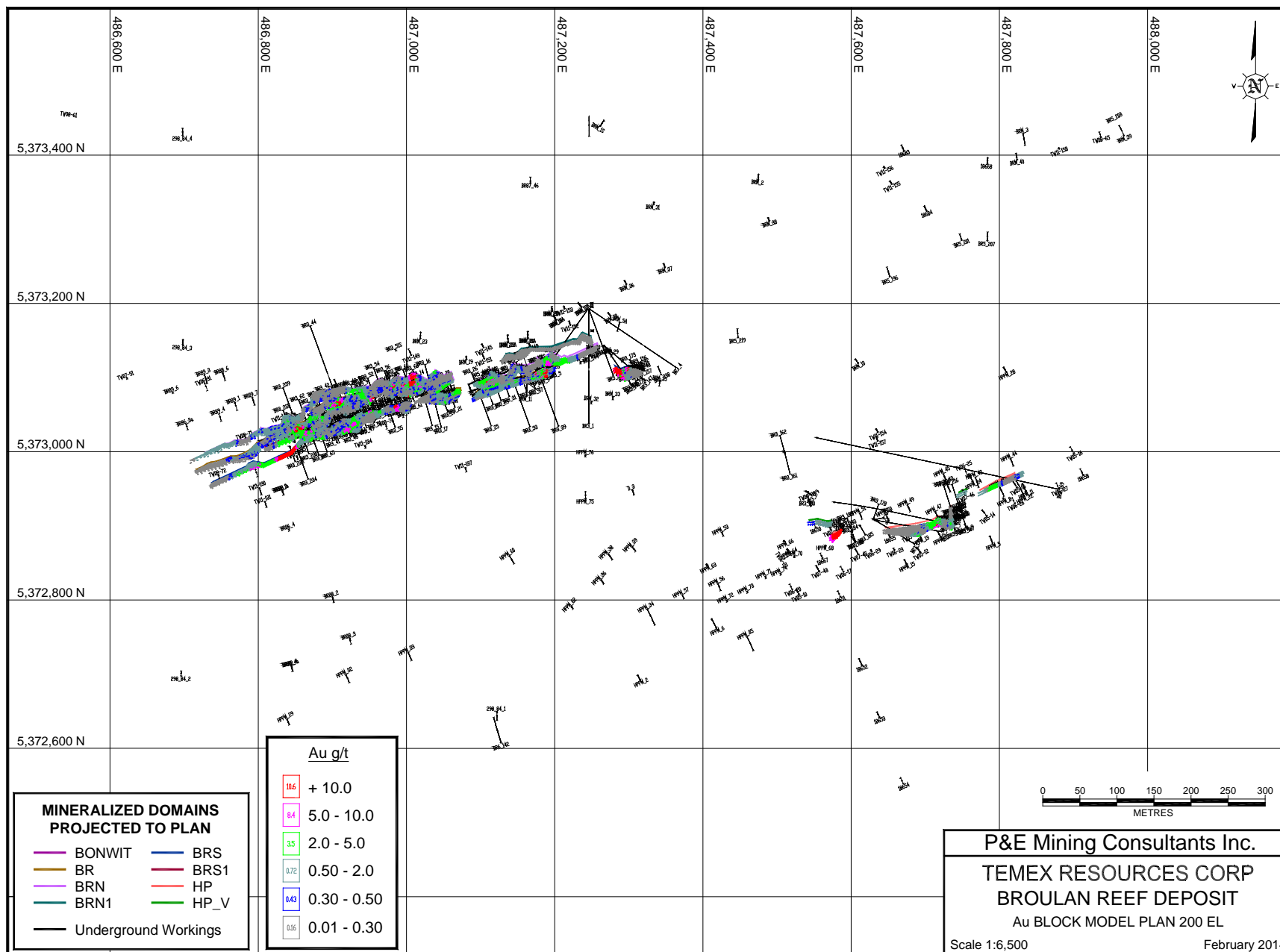


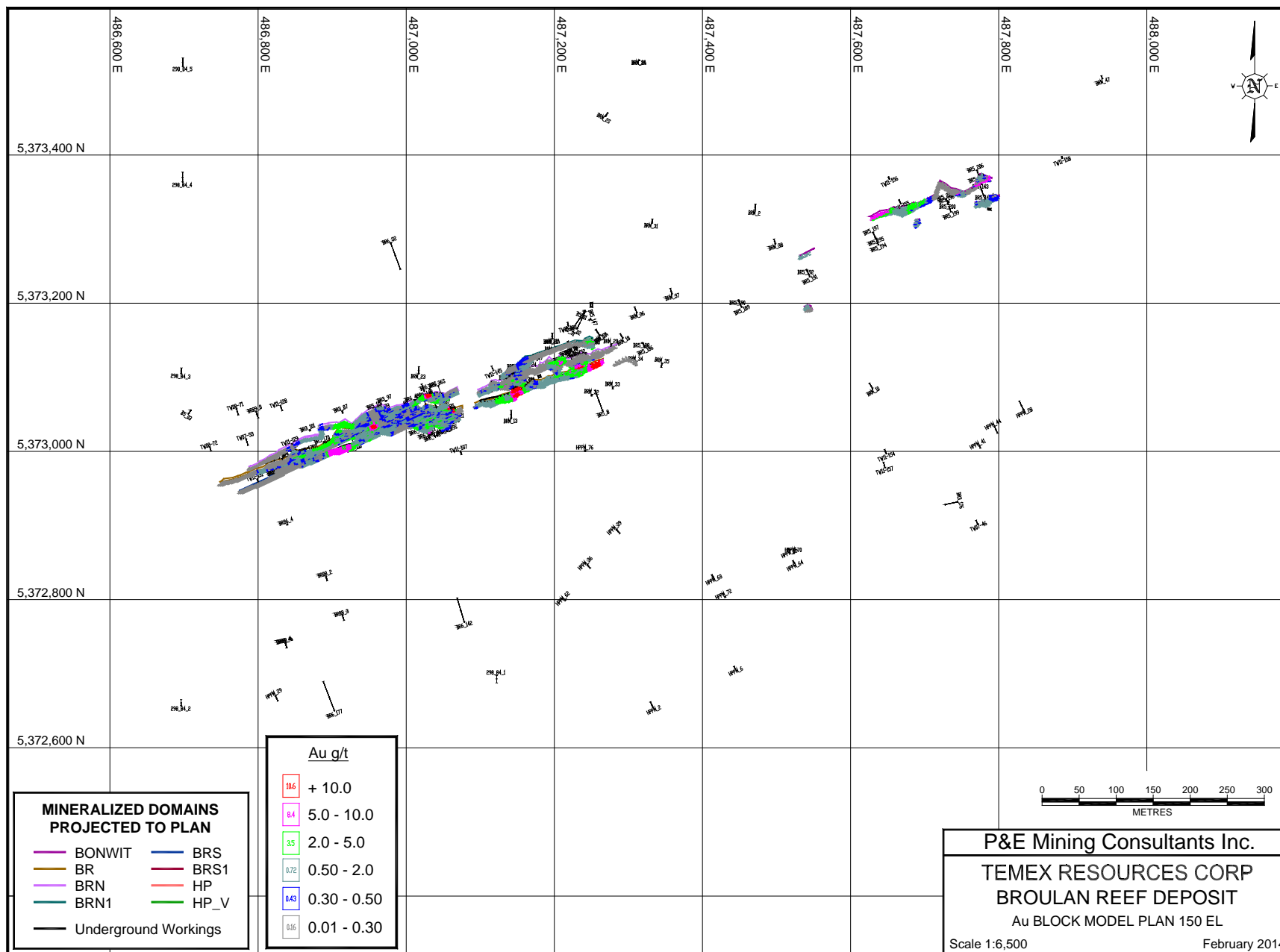


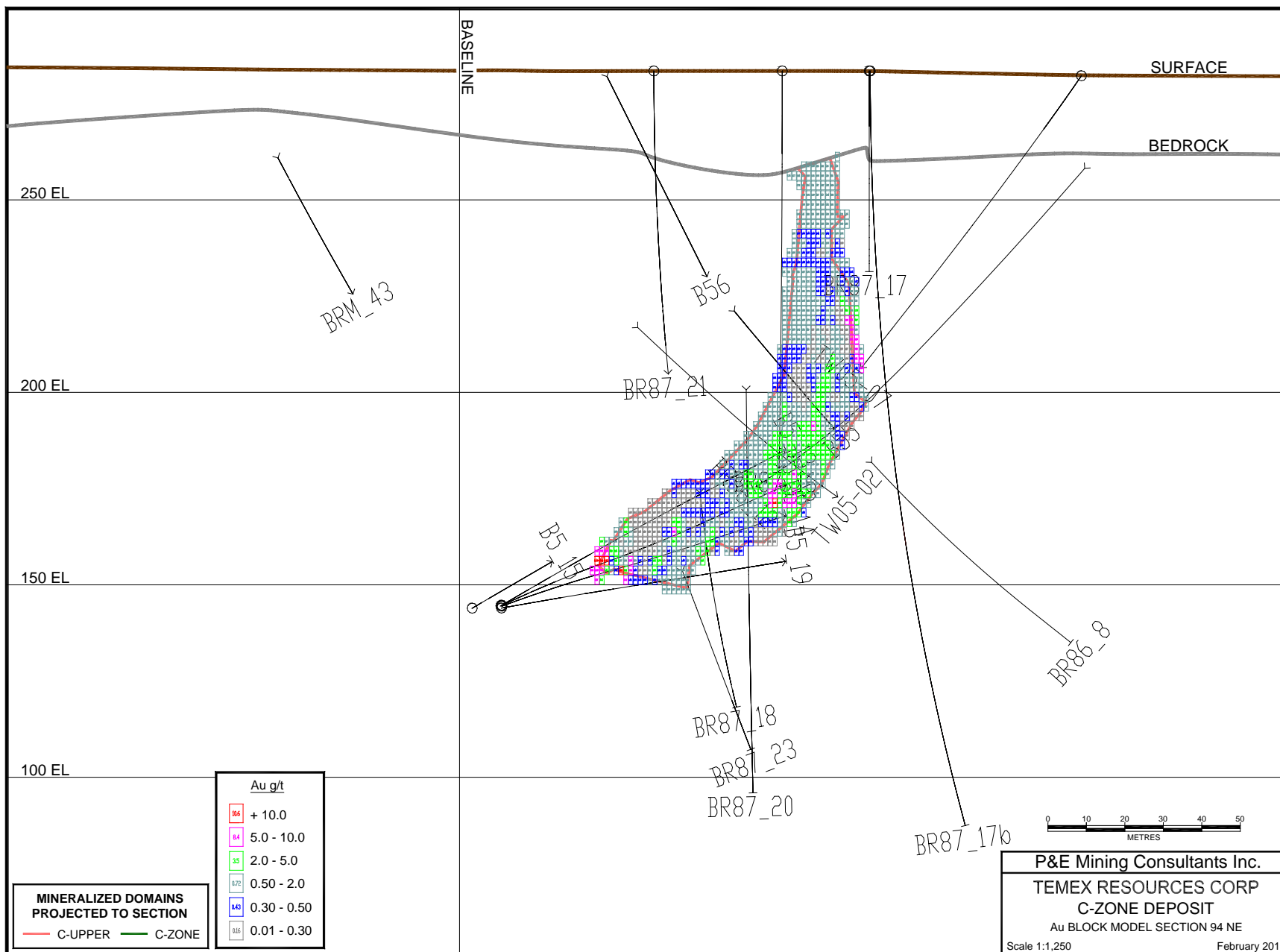


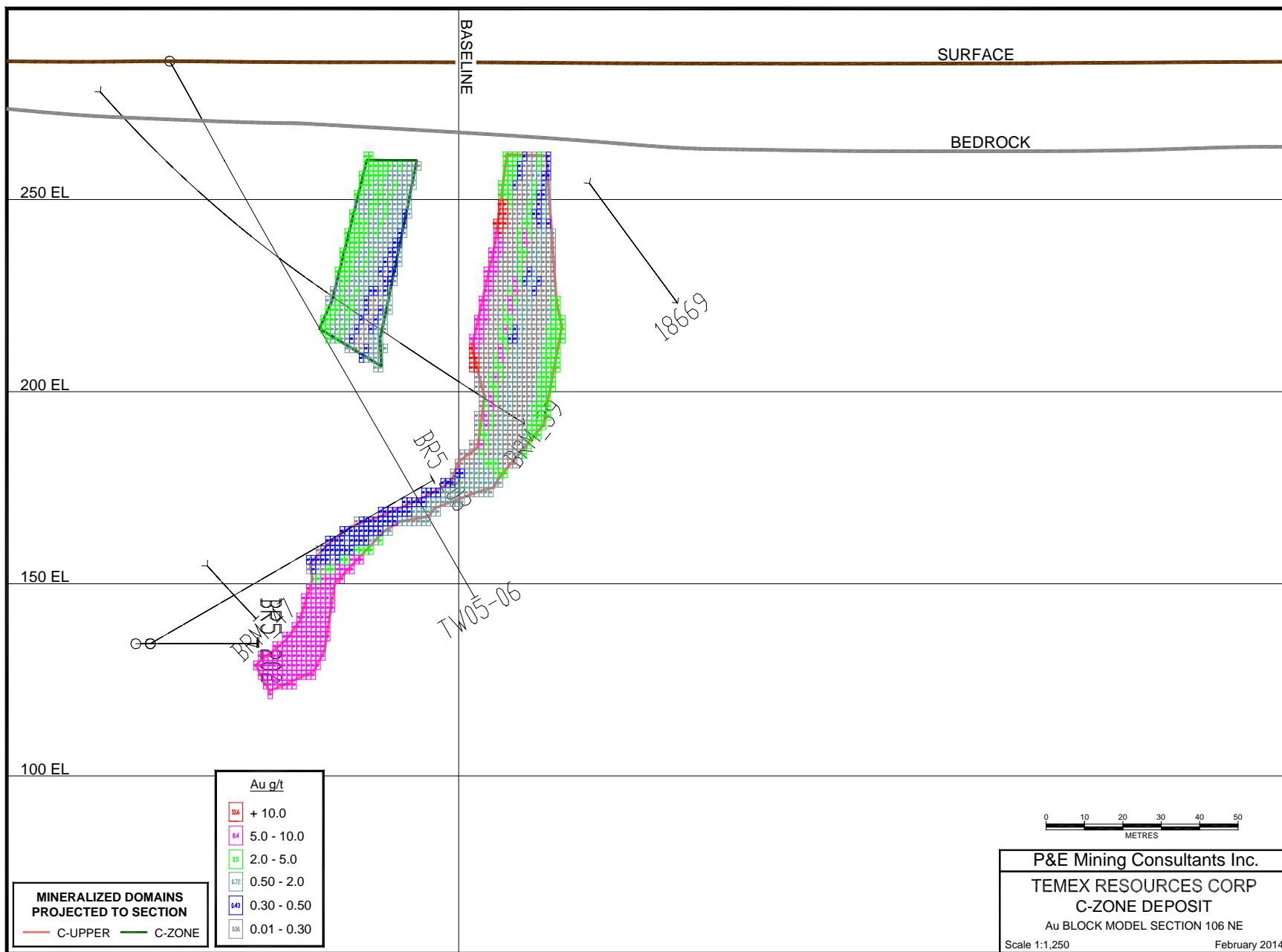


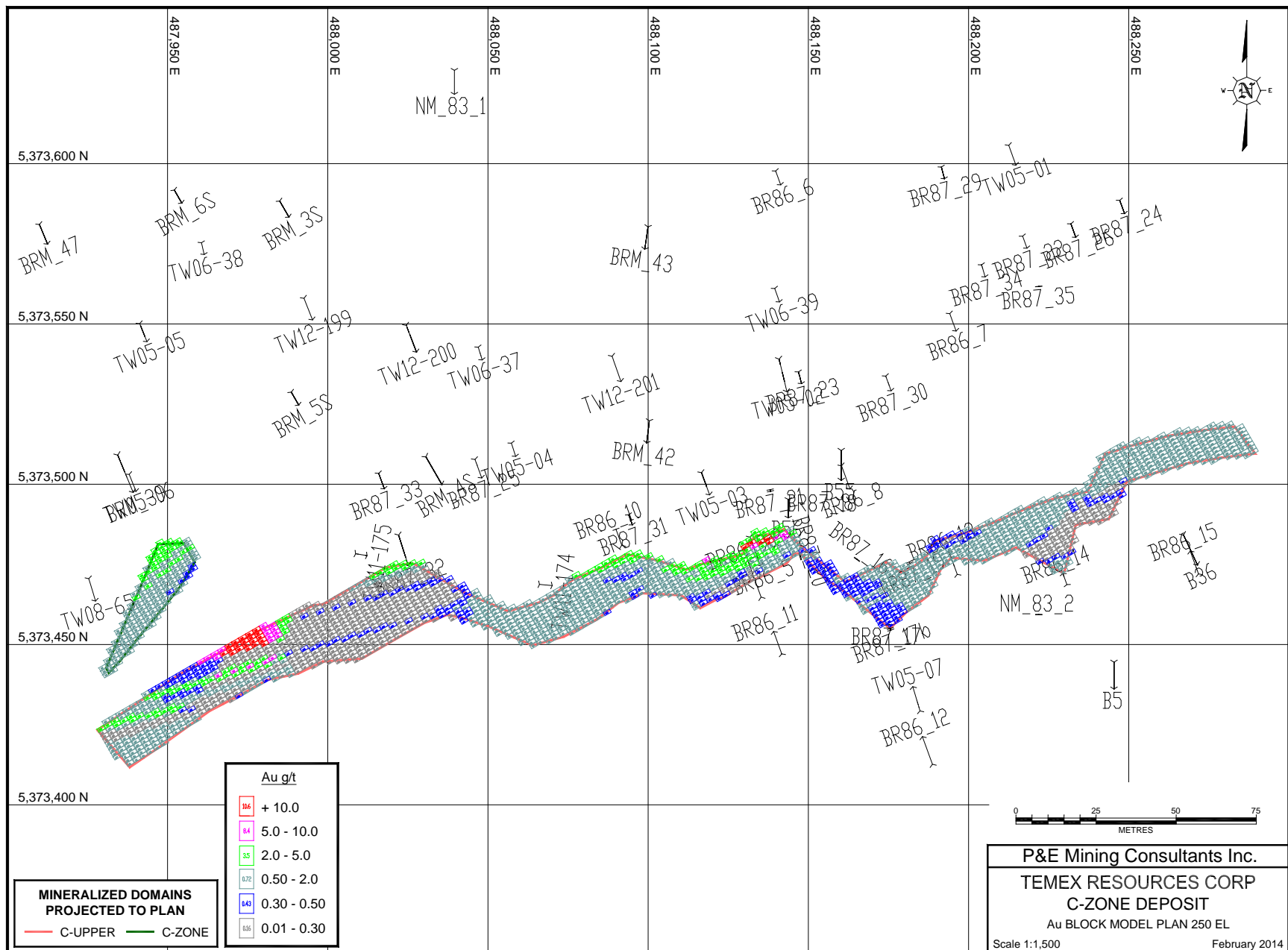




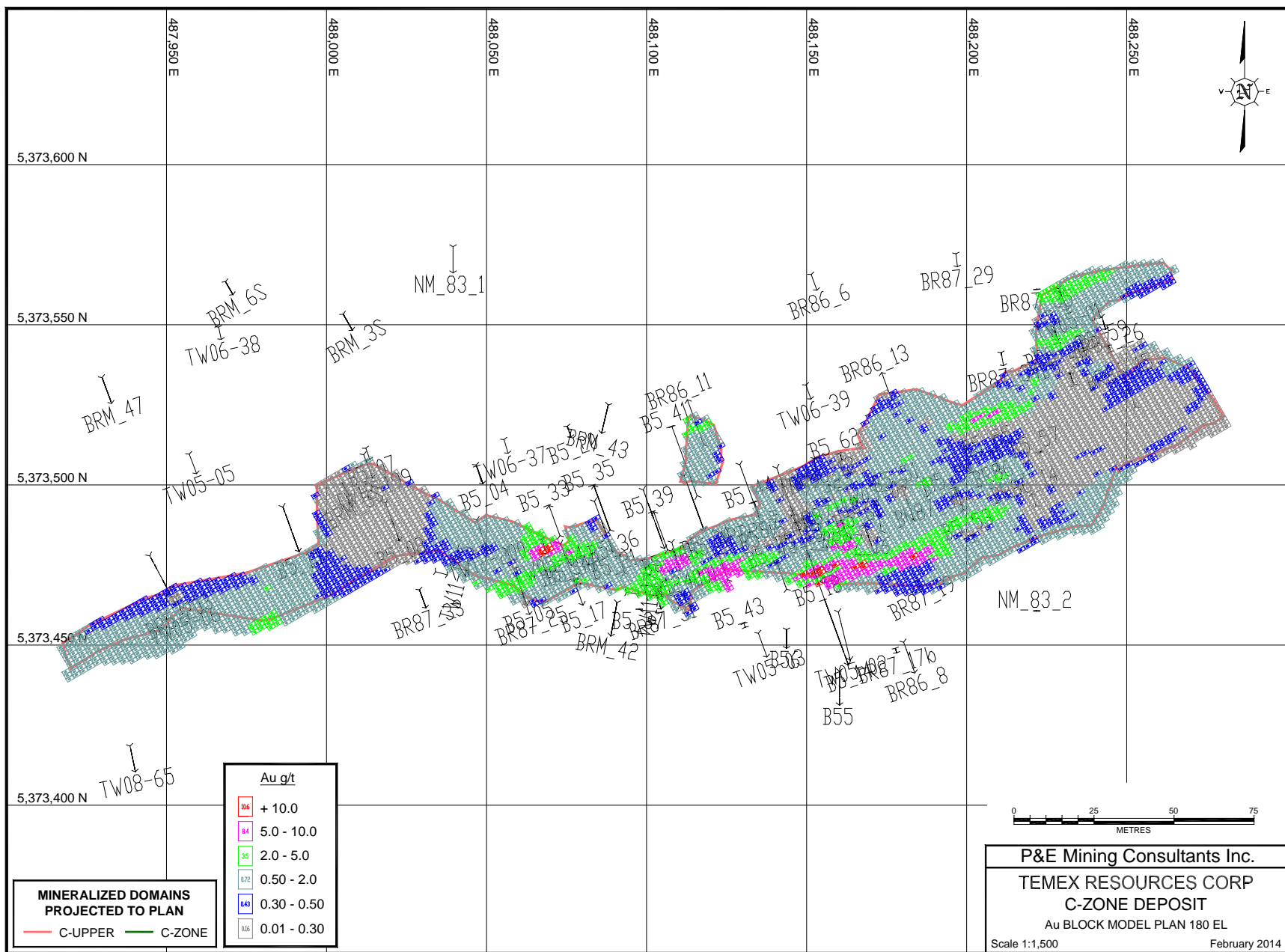












**APPENDIX VI. CLASSIFICATION BLOCK MODEL CROSS SECTIONS AND  
PLANS**

