



**Updated Mineral Resource
Report *for the*
Gays River and Getty Deposits**

MINE TECH INTERNATIONAL LIMITED
HALIFAX, CANADA





Updated Mineral Resource Report

for

**Gays River Zinc-Lead Deposit, Including the Getty
Deposit, Nova Scotia, Canada**

45°02' North, 63°21' West

October 8, 2012

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-and-

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Client: Selwyn Resources Limited

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1. Summary

Jason Dunning, Vice President of Exploration for Selwyn Resources Limited (SWN, TSX-V) based in Vancouver, Canada engaged MineTech International Limited in June, 2012 to complete a National Instrument 43-101-compliant mineral resource update for the Gays River and Getty Deposits. Mr. Douglas Roy, M.A.Sc., P.Eng., is the Principal Author of this report, is a Qualified Person under Section 1.1 of National Instrument 43-101.

The Gays River and Getty Deposits (“the Property”) are located approximately sixty kilometres northeast of Halifax in the community of Gays River in the Halifax Regional Municipality. The property’s general location is 45°02’ North, 63°21’ West. Access to the property is by paved roads and is approximately fifteen kilometres off the Trans-Canada Highway along Route #224. The Halifax International Airport is located twenty kilometres southwest of the mine site.

The Property lies in a rural-residential area of central Nova Scotia that is typified by rolling topography and abundant surface water. The Gays River Deposit lies along the south side of the Gays River main branch, immediately east of the confluence with the Gays River south branch. The Getty Deposit lies just northwest of the Gays River Deposit on the western side of Gays River. The two deposits are separated by less than one kilometre.

The climate is variable because of mixed continental and maritime weather patterns. Mean annual temperature is 5.9 °C, mean annual precipitation is 1,250 mm, and yearly evapo-transpiration is estimated to be 560 mm. The relatively mild climate (for Canada) permits year-round operations.

A Mineral Lease covers the Gays River Deposit. It consists of 615 hectares of mineral rights, including land with exploration potential for zinc/lead mineralisation, and 568.4 hectares of land ownership (real property). The Mineral Lease grants sufficient rights for mining.

There are also thirteen exploration licenses in the general vicinity of the mine held by ScoZinc. Most of the exploration licenses are located along strike from the Scotia Mine and include favourable host rocks similar to that at the mine site, including the Getty Deposit. All lands were registered to ScoZinc Limited and were either in good standing or under application for renewal as of October 5, 2012.

Mineral Lease #10-1, which covers the entire mine site (Gays River Deposit), was originally granted by the Nova Scotia Government to Westminer Canada Limited on April 2, 1990. Its anniversary date is April 2, 2013 and its expiry date is April 2, 2030. The lease was transferred to Savage Resources in 1996 and later to Pasminco Resources Canada Company in 1999. It was transferred to ScoZinc in 2002. The duration of the Mineral Lease is twenty years, at which time it may be renewed. The lease expires in 2030.

In 2008, Gallant Aggregates signed a “License, Option and Royalty Agreement” granting Gallant the right to remove, extract and process sand, gravel, fill and obtain materials from the overburden and waste material created by ScoZinc at the Scotia Mine site (Gays River Deposit) for the greater of \$25,000 per annum or \$1.00 per metric tonne. In addition, Gallant has a right of first refusal to



purchase the Scotia Mine property if ScoZinc plans to sell the property after mining operations are completed or abandoned. Gallant also purchased a 25 acre portion of ScoZinc's "real property."

ScoZinc has an agreement with an adjacent landowner (Benjamin) to lease 13 hectares of land, adjacent to the tailings impoundment, for the purpose of stockpiling stripped overburden waste material.

Cullen *et al* (2011) described a royalty agreement that covers the Getty Deposit:

"Acadian advised Mercator and Selwyn that Licence 06959 that covers the Getty Deposit, plus certain peripheral claims in the area, are subject to an agreement between Acadian and Globex Resources Ltd., dated October 10th 2006, that provides Globex with a 1% Net Smelter Return (NSR) royalty interest in the associated claims plus 25,000 common shares of Acadian. Agreement terms also allow Acadian to purchase 50% of the NSR for \$300,000 CDN.

An Environmental Registration Document is in place for Scotia Mine (Gays River Deposit), approved in August 2000, which addresses the environmental concerns of a surface and underground mining operation along with the diversion of a 500 metre section of the Gays River to accommodate the pit design. The river has not yet been diverted.

ScoZinc surface-mined the deposit during 2007 and 2008. ScoZinc mined 1.1 million tonnes of surface ore and stripped 9.4 million tonnes of overburden. Due to a drastic plunge of base metal prices nearly coinciding with the mine's re-opening, ScoZinc placed the mine on care-and-maintenance status near the end of 2008.

The Environmental Registration Document covered only part of the Gays River Deposit. This area was mined by ScoZinc Limited in 2007-2008. Resources in this area have not been exhausted. However, additional environmental assessment work would be required before the mine could expand very far outside of its current footprint, either west along strike in the Main Zone, northeast across Gays River to the Northeast Zone or to the Getty Deposit.

On October 7th, 2011, Selwyn received approval from Nova Scotia Environment, a department of the provincial government, for its proposed southwest expansion of the previously-mined Main Pit. On May 18, 2012 Selwyn received an amended Industrial Approval allowing expansion of the existing mine to include the Southwest Expansion of the previously mined Main Pit.

Prior to expansion outside the currently permitted area, updated plans would have to be approved by the Nova Scotia Department of Mines and an updated Industrial Approval (essentially an environmental operating permit) would be required.

The Scotia Mine mill, designed and built in 1978/1979, is a flotation process and has a rated capacity of 1,350 tonnes per day. However, it has operated for extended periods at a rate in excess of 2,000 tonnes per day. Other existing site infrastructure includes:

- an administration building containing offices, a dry, warehouses, workshops, a large boardroom, and several heavy equipment bays;
- two freestanding shops;
- a geology building; and,



- a core shed.

Storage and ship loading facilities for lead and zinc concentrates are available at the seaport of Sheet Harbour, a distance of eighty kilometres from the mine site over paved roads. ScoZinc does not own these facilities, but Westminer used them in 1990. Rail transport facilities have also been used for concentrate shipping. A railway siding is located in Milford, eight road-kilometres from the site.

The existing surface rights are sufficient for mining operations. Three-phase power is supplied through the regional grid at reasonable rates. Most of the mill's water requirements are satisfied by in-process recycling. Make-up water is drawn from the perennial Gays River. The existing tailings pond has sufficient capacity for the life of the project. There is also sufficient area for waste rock storage on the property.

The Property is underlain by basement rocks of the Cambro-Ordovician Meguma Group which had significant local topographic relief due to rift faulting and erosion. Locally, a veneer of Horton Group, red-brown conglomerate and sandstone mark the base of the unconformably overlying Lower Carboniferous rocks which host the Gays River and Getty Deposits.

In areas where the basement rocks formed islands in the Carboniferous Sea, coral reefs formed along the shores. These carbonate rocks are the Gays River Formation. The MacCumber Formation is time-equivalent to the Gays River Formation. The MacCumber and Gays River Formations are overlain by evaporites of the Carroll's Corner and Stewiacke Formations.

The Gays River Formation mineralisation has long been considered a Mississippi Valley-type lead-zinc deposit. This type of deposit is carbonate-hosted, classified as a typical open space filling type, and hosted in a dolomitized limestone. The limestone developed as a carbonate build-up on an irregular pre-Carboniferous basement topographic high where conditions allowed for growth of reef-building organisms.

The zinc/lead-bearing Gays River Formation trends in an east-northeast direction across the Property. Locally, the mineralisation dips up to 45 ° on average, and up to vertical in places, to the north-northwest which is the depositional slope of the front of the Gays River reef unit. But, the dip tends to be horizontal in the back reef area (south of the main trend). The mineralisation is present as sphalerite and galena and grades from massive Pb-Zn ore-grade material in the fore reef to finely disseminated, lower grade material in the back reef. In the mine area, the Gays River Formation is overlain either by the evaporites of the Carroll's Corner Formation and/or overburden.

The Gays River Deposit was discovered in 1973 by the Imperial Oil Enterprises ("Esso")/Cuvier Mines joint venture. Esso initiated mine development in 1978 and commissioned the mill in 1979. From 1979 to 1981 the mine produced 554,000 tonnes of ore containing 2.1 % Zinc and 1.4 % Lead. Esso had difficulty dealing with groundwater conditions along the hanging wall of the mineralised zone, which resulted in having to leave a hanging wall pillar that was comprised of high-grade material. The mine closed in 1982 due to groundwater inflow and operating losses caused by low metal prices.



Seabright Resources Inc. acquired the mine and mill in 1984. Despite a favourable feasibility study, they did not reactivate the mine due to depressed metal prices at the time. They converted the mill for gold processing and processed gold ore from several satellite properties.

With the takeover of Seabright by Western Mining Corporation (Westminer) in 1988, a review of the potential for mining the deposit was undertaken. Following completion of feasibility studies in 1989, the underground workings were dewatered and test mining was carried out. A total of 187,000 tonnes were mined over a fifteen month period with average grades of 7.47 % Zinc and 3.50% Lead. In 1991, production was suspended again due to groundwater inflow and economic considerations.

In 1997, Savage Resources Canada Limited acquired the Scotia Mine assets from Westminer. Savage concluded that an open pit operation was feasible and initiated environmental permitting, including provisions for a diversion of a portion of the Gays River. Savage was subsequently taken over by Pasminco Resources Canada Company (Pasminco Resources) and their environmental assessment plan was approved by the Nova Scotia Minister of the Environment in August 2000.

Regal Mines Limited (Regal Mines) purchased Pasminco Resources in February 2002. Regal was owned 50 % by OntZinc Corporation (OntZinc) and 50 % by Regal Consolidated Ventures Limited (Regal Consolidated). As part of the sale, Pasminco Canada Holdings Inc. (Pasminco Holdings) retained a 2 % net smelter return (NSR) royalty on future production. OntZinc acquired Regal Consolidated's 50 % interest in December 2002 to own 100 % of Pasminco Resources.

OntZinc later changed its name to HudBay Minerals Inc. (Hudbay) after purchasing Hudson's Bay Mining and Smelting in December 2004. In 2006, Acadian Gold Corp ("Acadian Gold") purchased 100 % of ScoZinc and all of its assets (consisting mainly of Scotia Mine and its infrastructure) from OntZinc for \$7 million. In 2007, ScoZinc purchased the remaining 2% NSR.

ScoZinc reactivated the mill and surface-mined the Gays River Deposit during 2007 and 2008. Depressed metal prices forced ScoZinc to place the mine on care-and-maintenance status. In February 2011, Selwyn Resources Limited ("Selwyn") purchased ScoZinc and all of its assets, including the Scotia Mine and ScoZinc's exploration claims, for \$10 million less a deduction relating to increased reclamation bonding requirements that were being determined at the time of the acquisition.

Regarding the Getty Deposit, Cullen *et al* (2011) stated that "in September, 2006 the provincial government tendered exploration rights to the closed Getty property and Exploration Licences 6959 and 6960 were subsequently issued to Acadian on October 20th, 2006 as successful bidder under the tendering process."

An August, 2011 Preliminary Economic Assessment (PEA) of the ScoZinc operation, prepared by Allnorth Consultants Ltd, found an average earnings before interest, taxes, depreciation and amortization (EBITA) for the first three years of operations of CAD \$26.2 million per annum, and an internal rate of return of 63.9%. The PEA was limited to the Main Zone, and did not consider the river diversion discussed in section 4.6. See the Selwyn press release dated August 30, 2011 for more information.



To summarise, Selwyn currently holds the mineral rights to the Gays River and Getty deposits, the mining rights and surface rights (real property rights) for the Scotia Mine (Gays River Deposit), and an environmental assessment (environmental registration) for the Scotia Mine.

Only Mineral Resources were identified in this resource report. No economics work, such as estimating capital and operating costs, that would be required for identifying Mineral Reserves, was carried out. In other words, no Mineral Reserves were identified.

Gays River Deposit Resource Estimate

The author reviewed the sampling results and verified that the sample types and density are adequate for establishing Mineral Resources. The sampling results are representative of the mineralisation. The available information and sample density allow a reliable estimate to be made of the size, tonnage and grade of the mineralisation in accordance with the level of confidence established by the Mineral Resource categories in the CIM Standards.

For Resource calculation, the Gays River Deposit was divided into two zones: the Main Zone, south of Highway 224 and the Northeast Zone, which lies northeast of the highway and partly under Gays River. For both zones, manual interpretation was required to properly model the geology. The Main Zone was broken down into a high-grade (HG) mineralized zone and a low-grade (LG) mineralized zone. Drill-hole data and underground openings were then plotted on hard-copy plans at ten metre intervals, and interpretations of the high-grade zone, the low-grade zone and the hanging-wall 'Trench' were produced.

The Main Zone is characterised by complex geometry and is difficult to model in terms of standard techniques. Lying along a 'paleo-shoreline', it features repetitive changes in strike of 90° or more around a general trend of 060° Azimuth, with varying dip. This geometry makes it difficult to incorporate the true spatial relationship of the samples for estimation purposes without the use of 'unfolding' techniques. Unfolding transforms the sample data into another co-ordinate space that honours the spatial relationships. Variography and estimation are conducted in the transformed space, and the results are then back-transformed into the original space.

Equal length composites were prepared from uncut assay values in a two-step process. Initial composite intervals were defined from the intercepts of the drill holes with the high-grade and low-grade 3D solids of the mineralised zone. Equal length composites of 1.5 metres were then generated within these intervals – 1.5 metres is approximately the average length of the assay intervals.

Three dimensional experimental correlograms were generated using the transformed (un-folded) Zn and Pb composite data, for both low-grade and high-grade mineralised zones below an elevation of 490 m. Separate 3D experimental correlograms were generated using un-transformed composite data for the low-grade mineralised zone above 490 m elevation, where the deposit is essentially horizontal in attitude. The resulting experimental correlograms are not considered robust enough for use in estimation by kriging, but did provide some indications with regard to suitable search distances and orientations to be used for estimation by Inverse Distance Squared (IDP2) interpolation.



Selwyn undertook SG measurements on core from the 2011 drilling program, with 559 determinations in all and 250 determinations on intervals above the mineralised threshold of 0.5% zinc-equivalent. On average the formula overestimated the SG by 0.4%, with a standard deviation of 3%. This difference is not considered to be material, and the formula-estimated values have been retained for the current estimate.

Two block models were constructed for interpolation purposes, a primary model in normal (un-transformed) space, and a secondary, smaller model in transformed space for interpolation of the unfolded data.

The Inverse distance squared (IDP2) interpolation was used to estimate Zn and Pb block values in the flat lying portions of the deposit above 490 m elevation. This estimation was restricted to the LG zone, as the HG zone does not extend above this elevation, and includes the South-West zone, which currently has no defined HG zone.

In the Northeast Zone, it was assumed that near-surface blocks could be exploited using surface mining methods, while deeper blocks could be exploited using underground mining methods. A cut-off grade of 0.5 % zinc-equivalent was generally used for outlining near-surface mineralisation that could be exploited using surface mining methods. Deeper mineralisation was outlined using a 2 % cut-off. No detailed engineering studies have been carried out with respect to mining the deposit using either surface or underground mining. At this stage, these assumptions are speculative.

Samples were regularised over 1 m intervals. Variography was carried out and spherical models were fit to the raw semi-variogram data with a fit that was acceptable for determining resource classification parameters but not, in the author's opinion, for geostatistical resource estimation. Therefore, inverse distance weighting was employed for estimating block grades.

Using a 0.75 % zinc-equivalent cut-off, the non-diluted mineral resources in the Gays River Deposit were estimated to be:

Table 1-1: Gays River Deposit Resource Estimate

ResourceCategory	ZnEq.%Cut-off	Tonnes	Zn (%)	Pb (%)	Zn Eq.%
Measured*	0.75	2,075,000	3.14	1.68	5.16
Indicated*	0.75	5,770,000	3.3	1.69	5.32
Measured+Indicated*	0.75	7,845,000	3.25	1.69	5.28
Inferred*	0.75	3,677,000	2.35	1.51	4.16

Base case for this study denoted by ""*

Refer to Table 15-1 and Table 15-5 for resource estimation notes.

The majority of the outlined mineral resources could likely be mined using surface mining methods. Some of the identified mineral resources are located underneath Gays River. Sandy soil lies underneath Gays River, so mining close to the river would be susceptible to water inundation. In other words, the mineral resources that lie close to, or underneath Gays River would be relatively



more expensive to recover due to the added cost of either (a) diverting the river or (b) recovering the resources using underground mining methods. Both scenarios are possible and therefore available to Selwyn if needed.

Getty Deposit Resource Estimate

Cullen *et al* (2011) summarized their Resource Estimate of the Getty Deposit as follows:

“The estimation of mineral resources of the Getty deposit is based on 138 drill holes completed by Acadian in 2007 and 2008 and 184 historic drill holes completed during the 1970’s by prior operators. Getty Northeast Mines Limited drilled 181 of these historic drill holes and the remaining 3 drill holes were completed by Imperial Oil Limited. It should be noted that Mercator managed the 2007 and 2008 drilling programs for Acadian and that Quality Control and Quality Assurance protocols included the systematic insertion of independent analytical standards and blanks plus duplicate sample analyses and independent check sample analyses.

“The resource estimate is based on a three dimensional block model developed using Gemcom Surpac® Version 6.0.3 software and validated results for 322 diamond drill holes. The model is coordinated to the local grid for the adjacent Scotia Mine and blocks are 2.5 meters x 2.5 meters x 2.5 meters with no sub-blocking. Inverse distance squared (ID2) interpolation methodology utilized 1 meter down-hole assay composites of lead and zinc values within a wire-framed deposit solid containing 26 orientation sub-domains. Grade interpolation was carried out using domain-specific search ellipsoid orientations. Major, semi-major and minor axis ranges for the ellipsoids were 75 meters, 75 meters and 37.5 meters respectively. Included sample range for grade interpolation was from 1 to 12, with no more than 4 samples from a single drill hole. Specific gravity (SG) values for model blocks were calculated from block metal grades using the formula $SG = 1 / (Pb\% / (86.6 * 7.6) + Zn\% / (67.0 * 4.0) + (1 - Pb\% / 86.6 - Zn\% / 67.0) / 2.82)$. Zinc Equivalent % (Zn Eq.%) equals $Zn\% + (Pb\% * 1.18)$ and is based on mill recoveries of 89.3% for zinc and 89.5% for lead, \$US1.10/lb Zn and \$US1.15/lb Pb metal pricing and smelter returns of 85% for Zn and 95% for Pb. The resource estimate is stated at a 2% Zn Eq. cutoff value that reflects the open pit development potential of this deposit.

Table 1-2: Getty Deposit Resource Statement

Getty Deposit - Resource Statement - Zn Eq. % * Cut-off					
Resource Category	Zn Eq. % Cut-off	Tonnes (Rounded)	Zinc %	Lead %	Zinc Eq %*
Measured	*2.00	1,550,000	1.97	1.45	3.68
Indicated	*2.00	2,810,000	1.82	1.44	3.51
Indicated + Measured	*2.00	4,360,000	1.87	1.44	3.57
Inferred	*2.00	960,000	1.73	1.59	3.60

Notes: (1) Zinc Equivalent % (Zn Eq.%) = $Zn\% + (Pb\% * 1.18)$ and is based on mill recoveries of 89.3% for zinc and 89.5% for lead, \$US1.10/lb Zn and \$US1.15/lb Pb metal pricing and smelter returns of 85% for Zn and 95% for Pb, (2) * denotes the 2.00% Zn Eq. resource statement cutoff value that reflects open pit development potential”



Summary – Gays River and Getty Deposits

A summary of the mineral resources for both deposits was prepared. The reader is warned that the Gays River and Getty mineral resource estimates were prepared by different authors using different parameters.

Table 1-3: Combined mineral resources, Gays River and Getty deposits.

Resource Category	Zn Eq. % Cut-off	Tonnes (Rounded)	Zinc %	Lead %	Zinc Eq %*
Measured	Varies	3,625,000	2.64	1.58	4.54
Indicated	Varies	8,580,000	2.82	1.61	4.75
Measured+ Indicated	Varies	12,205,000	2.76	1.60	4.68
Inferred	Varies	4,637,000	2.22	1.53	4.05

* 1% Lead = 1.2 % Zinc.

The Gays River and Getty Deposits have merit enough to warrant additional work.

Additional work is only recommended on the Gays River deposit at this time; however, the Authors recognize there are recommendations in Cullen et al. (2011) that will need to be considered in the future.

The total cost of the recommended proposed work is \$900,000-1,020,000.

Proposed Phase 1

The authors are proposing that Selwyn undertake an updated Preliminary Economic Assessment (“PEA”) using its internal team of Qualified Persons. This updated PEA, first published on August 30, 2011, would use the new mineral resource estimate for the Gays River and Getty deposits from the current study to update the mine plan and financial modeling that would possibly redefine project economics in the current market. The Authors approximate this work to cost between \$150,000 and \$200,000.

Proposed Phase 2

In advance of any further drilling being done on the Gays River and Getty deposits, the Authors are recommending that the Northeast zone be revisited and remodeled under a similar cut-off scheme to the work done during this study for the Main Zone and its Southwest extension. Previous work used a 0.5% zinc equivalent cut-off above 100 metres and a 2.0% zinc equivalent cut-off below. It is assumed that given the positive results of this current study, further mineralization could be identified through more detailed analysis, thereby better defining the mineralizing system that will allow for a more



accurate assessment for future drilling. The Authors approximate that this remodeling work to cost between \$35,000 and 40,000.

For the Getty deposit, Cullen et al. (2011) used a 1% (zinc plus lead) cut-off; meaning it is possible that there is additional zinc-lead mineralization outside of the currently modeled solids. This remodeling would also align the modeling of the Getty deposit with that of the Gays River deposit and will allow for a more accurate assessment for future drilling. The Authors approximate this remodeling work to cost between \$35,000 and \$40,000.

As part of Phase 2 work, the Authors are proposing that Selwyn re-examine the RQD and RMR geomechanical data collected in the 2011 drilling program and use it to better define criteria for the physical properties of the host rocks to the Gays River and Getty deposits. It is approximated that this geomechanical assessment to cost between \$30,000 and \$40,000.

Proposed Phase 3

Contingent upon the results of the updated PEA proposed in Phase 1 above, timing for any drilling activities as part of Phase 3 would need to be based upon an updated mine plan using the new mineral resource estimate of the current study. Also, any future drilling should also consider the known timelines for gaining permits for mining from the Nova Scotia Government in respect of the Northeast zone and Getty deposit, which are outside of Selwyn's current Environmental Assessment and Industrial Approval.

At this time, the Authors are only recommending a drilling program on the Northeast zone because of the immediate potential synergies with the zinc-lead mineralization of the Main Zone and its Southwest Extension. Drilling additional meters on the Northeast zone would not only further define and increase the confidence categories of the mineral resource, but would also allow for the collection of further geomechanical data and hydrogeological information. The Authors, based upon the 2011 drilling on the Main Zone, approximate that a drill program on the Northeast zone 5,000 metres to cost between \$800,000 and \$900,000.



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Selwyn Resources Limited

Updated Mineral Resource Report for the Gays River Zinc-Lead Deposit, Including the Getty Deposit

Gays River, Nova Scotia, Canada

2. Introduction

2.1 Terms of Reference

Jason Dunning, Vice President of Exploration for Selwyn Resources Limited (SWN, TSX-V) based in Vancouver, Canada engaged MineTech International Limited in June, 2012 to complete a National Instrument 43-101-compliant mineral resource update for the Gays River zinc-lead deposit and the adjacent Getty deposit.

2.2 Purpose of Report

The purpose of this report was to provide a complete and independent mineral resource update conforming to NI 43-101 standards and Form 43-101F1. The report was to update the mineral resources based on (1) a limited amount of diamond drilling on the main zone in 2011, and (2) a re-interpretation of the Main Zone model based on a Low-Grade threshold of 0.5% zinc-equivalent, as opposed to the 2% threshold used in previous modeling.

2.3 Sources of Information

This report is based, in part, on internal company technical reports and maps, published government reports, company letters and memoranda, and public information as listed in the "References" section at the conclusion of this report. Several sections from reports authored by other consultants have been directly quoted in this report, and are so indicated in the appropriate sections.

Digitised and hard copy material for all exploration activity since inception of exploration on the property was supplied by ScoZinc and Selwyn Resources Limited ("Selwyn").

Extensive reference was made to Cullen *et al*'s (2011) report titled, "Technical report on a mineral resource estimate, Getty Deposit."

2.4 Extent of Field Involvement of the Qualified Person(s)

Mr. Douglas Roy, M.A.Sc., P.Eng., who was the Principal Author of this report, is a Qualified Person under Section 1.1 of National Instrument 43-101. As an independent contractor, he supervised surface exploration work, including diamond drilling and trenching, on the Scotia Mine site (Gays



River Deposit) during 2004. Mr. Roy spotted many of the holes and logged the core for ScoZinc's twenty-five hole program that they carried out in 2004. Mr. Roy occasionally provided assistance to ScoZinc as an independent consultant up to the time of report writing. During the period while ScoZinc was mining the deposit (i.e., during 2007 and 2008), Mr. Roy visited the site many times, the last time being on January 13, 2010. Recently, Mr. Roy completed a reclamation plan and report for the mine site.

Mr. Tim Carew (M.Sc., Geology, P.Geo.), an independent contractor and Co-Author, last visited the site on September 19, 2012, spending one day on site with non-independent Qualified Person and Co-Author, Mr. Jason Dunning (M.Sc., P.Geo.). During the visit the authors reviewed plans and sections generated from the latest (2011) drilling, and from past drilling, with Selwyn geological staff. The authors also examined core from past and current drilling, with particular reference to core intervals grading 0.5 to 2.0% zinc-equivalent, as these intervals are now included in the reserve estimation dataset with the adoption of a 0.5% zinc-equivalent threshold for modeling purposes. Examination of core from available drill-holes intersecting the mineralized zones from hanging wall to footwall confirmed the general zoning from high-grade massive sulfide (dissolution zones along the gypsum contact) to low-grade disseminated halo zones in the footwall, as modeled.

Earlier, Mr. Carew visited the mine site in 1998. The visit was part of a resource estimate that was carried out by Savage Resources Canada, whereas Mr. Dunning has visited the mine site a large number of times in his capacity of managing all exploration work programs since Selwyn acquired the mine site in May 2011.

Both Mr. Carew and Mr. Dunning are Qualified Persons under Section 1.1 of National Instrument 43-101.

Field involvement on the Getty Deposit was described by Cullen *et al* (2011).

2.5 Units of Measure

Unless otherwise stated, all units used in this report are metric. Unless otherwise stated, the legal currency used is the Canadian dollar.

2.6 Site Grid Parameters

A site grid was used throughout the report. The grid is a simple translation with almost no rotational deviation from the Nova Scotia Grid, which is a 3 ° Modified Transverse Mercator projection using an ATS 77 datum. The site grid elevation datum is 500.11 metres above Mean Sea Level. For reference, the co-ordinates of two points, in both site and Nova Scotia grids, are reported in Table 2-1.

The same site grid was used for both the Gays River and Getty Deposits.



Table 2-1: Site grid parameters.

Site Control Monument	Site Grid			Nova Scotia Grid		
	North (m)	East (m)	Elev. (m)	North (m)	East (m)	Elev. (m)
No. 4	6,869.72	8,597.50	531.33	4,988,509.11	5,591,210.89	31.25
No. 7	7,019.95	8,866.55	530.69	4,988,659.37	5,591,479.94	30.58

3. Disclaimer

MineTech has assumed that all the information and technical documents listed in the References section of this report are accurate and complete in all material aspects. While all of the available information that was presented was carefully reviewed and believed to be correct, MineTech cannot guarantee its accuracy and completeness. MineTech reserves the right, but will not be obligated to revise this report and conclusions if additional information becomes known subsequent to the date of this report.

The authors have relied largely on the documents listed in the Sources of Information and the site visits for the information in this report. However, the conclusions and recommendations are exclusively the principal author's. The results and opinions outlined in this report are dependent on the aforementioned information being current, accurate and complete as of the date of this report and it has been assumed that no information has been withheld which would impact the conclusions or recommendations made herein.

4. Property Description and Location

The Gays River and Getty Deposits ("the Property") are located approximately sixty kilometres northeast of Halifax, Nova Scotia in the community of Gays River in the Halifax Regional Municipality. The property's general location is 45°02' North, 63°21' West.

The Gays River Deposit consists of 615 hectares of mineral rights, including land with exploration potential for zinc/lead mineralisation, and 568.4 hectares of land ownership (real property) (Figure 4-1 and Figure 4-2).

The Getty property consists of 62 contiguous mineral claims, approximately 992 hectares.



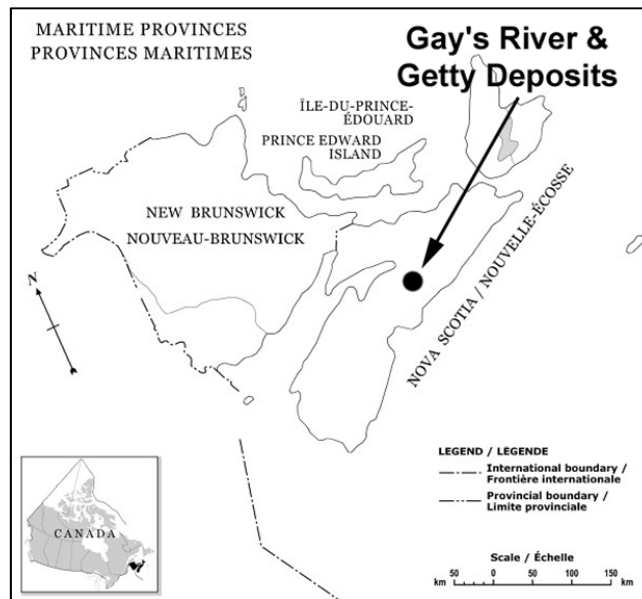


Figure 4-1: Location Map, Gays River, Nova Scotia.



Figure 4-2: Location relative to Halifax.

4.1 Exploration Licences

ScoZinc currently controls seven exploration licenses covering 277 claims in the vicinity of the mineral lease (see Figure 4-3). Each individual claim covers an area of approximately forty acres (16.2 hectares). In total, the 277 claims cover approximately 4,450 hectares (11,000 acres). These licenses are located along strike from the Gays River Deposit and include favourable host rocks similar to that at the mine site.

Exploration License no. 06959 covers the Getty Deposit.

All lands were in good standing and registered to ScoZinc Limited as of October 5, 2012. Anniversary dates range from May 2, 2012 to May 19, 2013. One license has an anniversary date before the Effective Date of this report, but it is currently under renewal application. The ScoZinc exploration licenses are summarized in Table 4-1.

Table 4-2 through Table 4-14 give details on each ScoZinc exploration license.

Table 4-1: Summary of ScoZinc Exploration Licenses

License	No. of Claims	Sheet	Anniversary Date	Year of Issue
05851	7	11E/03B	Nov. 5, 2012	16
06268	28	11E/03B	May 2, 2012*	16
06303	5	11E/03B	Oct. 25, 2012	11
06304	1	11E/03B	Oct. 13, 2012	8
06517	4	11E/03B	Feb. 1, 2013	7
06518	2	11E/03B	Feb. 1, 2013	7
06959	(Getty) 62	11E/03B	Oct. 20, 2012	6
08905	7	11E/03B	Oct. 20, 2012	3
08936	3	11E/03B	Dec. 21, 2012	3
09069	62	11E/03B	Aug. 19, 2013	8
09070	79	11E/03A 11E/03B	Apr. 26, 2013	7
09759	1	11E/03B	May 19, 2013	2
09760	16	11E/03B	May 19, 2013	2
*License 06268 is under renewal application				

Table 4-2: Exploration License 05851 (7 Claims).

Claim Reference Map	Tract	Claims	Anniversary Date
11E/03B	45	F GHL	November 5, 2012
11E/03B	46	EFG	



Table 4-3: Exploration License 06268 (28 Claims).

Claim Reference Map	Tract	Claims	Anniversary Date
11E/03B	7	D E J L K M N O P Q	02-May-12*
	18	A B C D E F G H	
	19	A B C D E F G H L M N	

* License 06268 is pending renewal

Table 4-4: Exploration License 06303 (5 Claims).

Claim Reference Map	Tract	Claims	Anniversary Date
11E/03B	29	L M N O P	October 25, 2012

Table 4-5: Exploration License 06304 (1 Claim).

Claim Reference Map	Tract	Claims	Anniversary Date
11E/03B	29	E	October 13, 2012

Table 4-6: Exploration License 06517 (4 Claims).

Claim Reference Map	Tract	Claims	Anniversary Date
11E/03B	6	N O P Q	Feb. 1, 2013

Table 4-7: Exploration License 06518 (2 Claims).

Claim Reference Map	Tract	Claims	Anniversary Date
11E/03B	7	C F	Feb. 1, 2013

Table 4-8 - Exploration License 06959 (Getty Deposit, 62 Claims).

Claim Reference Map	Tract	Claims	Anniversary Date
11E/03B	17	Q	October 20, 2012
	30	A B C D E F G H J K L M N O P Q	
	31	A B C D E F G H J K L M O P Q	
	32	A B G H J K	
	42	A B	
	43	A B C D E F G H J K	
	44	A B C D E F G H J K L M	

Table 4-9: Exploration License 08905 (7 Claims).

Claim Reference Map	Tract	Claims	Anniversary Date
11E/03B	45	A B C D E M N	October 20, 2012

Table 4-10: Exploration License 08936 (3 Claims).

Claim Reference Map	Tract	Claims	Anniversary Date
11E/03B	18	NOP	December 21, 2012

Table 4-11: Exploration License 09069 (62 Claims).

Claim Reference Map	Tract	Claims	Anniversary Date
11E/03B	20	A H J	August 19, 2013
	21	ABCD EFGH JKLM NOPQ	
	26	EFGH JKLM NOPQ	
	27	ABCD EFGH JKL OPQ	
	28	ABC FGH	
	46	ABCD	
	47	ABCD FGH	

Table 4-12: Exploration License 09070 (79 Claims).

Claim Reference Map	Tract	Claims	Anniversary Date
11E/03A	36	NOP	April 26, 2013
	37	ABCD EFGH JKLM OPQ	
	38	EFGH JKLM NOPQ	
	39	M NOPQ	
	57	EMN	
	58	ABCD EFGH JKLM NOPQ	
	59	ABCD GH	
11E/03B	25	EFG JKLM NOPQ	
	48	ABCD EFGH	

Table 4-13: Exploration License 09759 (1 Claim).

Claim Reference Map	Tract	Claims	Anniversary Date
11E/03B	32	Q	May 19, 2013

Table 4-14: Exploration License 09760 (16 Claims).

Claim Reference Map	Tract	Claims	Anniversary Date
11E/03B	42	GH JK PQ	May 19, 2013
	43	LM NOPQ	
	44	NOPQ	

4.1.1 Getty Deposit

Cullen *et al* (2011) described the exploration rights that cover the Getty Deposit:

“The deposit occurs within Exploration Licence 06959 [refer to Table 4-8] which was issued to Acadian on October 20th, 2006 as a result of tendering by Nova Scotia Department of Natural Resources (“**NSDNR**”) and is currently held by ScoZinc, a subsidiary of Acadian. The Getty property consists of 62 contiguous mineral claims, approximately 992 ha, held under Mineral Exploration Licence 06959

“In 1990 lands covering the deposit were placed under closure by NSDNR (1990, c. 18, s. 22; 1999 (2nd Sess.), c. 12, s. 6.) and these were subsequently opened for staking on September 12th, 2006. Multiple applications for exploration licences covering the deposit were received at that time by the Registrar of Mineral and Petroleum Titles, and all claims were therefore put up for tender under provisions of Section 34 of the Act (1990, c. 18, s. 34.). Acadian submitted the winning bid for this tender and was awarded the exploration licences detailed in [refer to Table 4-8] . Details of bids received and associated work requirements have been deemed confidential by the Minister of Natural Resources.

“At the effective date of this report [Cullen *et al*, 2011] exploration licences described above were in good standing as represented in records of the Nova Scotia Department of Natural Resources. This assertion does not constitute a legal search of title by Mercator with respect to ownership or status of the licences, but Mercator has no reason to question their status.”

4.2 Royalty Agreement

Cullen *et al* (2011) described a royalty agreement that covers the Getty Deposit:

“Acadian advised Mercator and Selwyn that Licence 06959 that covers the Getty Deposit, plus certain peripheral claims in the area, are subject to an agreement between Acadian and Globex Resources Ltd., dated October 10th 2006, that provides Globex with a 1% Net Smelter Return (NSR) royalty interest in the associated claims plus 25,000 common shares of Acadian. Agreement terms also allow Acadian to purchase 50% of the NSR for \$300,000 CDN. Mercator did not review or confirm terms of the Acadian-Globex agreement for purposes of this report and has relied upon Acadian and Selwyn for this information.”

4.3 Mineral Lease

A Mineral Lease entirely covers (#10-1) the Scotia Mine site (Gays River Deposit). It was originally granted by the Nova Scotia Government to Westminer Canada Limited on April 2, 1990. It was originally granted as a “Mining Lease.” However, changes to the Nova Scotia Mineral Resources Act that came into effect in November 2004 changed the terminology such that existing “Mining Leases” are now known as “Mineral Leases.”

The anniversary date (review date) of Mineral Lease #10-1 is April 2 of each year. Table 4-15 lists the claims comprising the Mineral Lease. Figure 4-4 - Property Map as of October, 2012



Figure 4-5 shows its location. The lease conveys the rights to all minerals except coal, uranium, salt and potash. The lease was transferred to Savage Resources in 1996 and later to Pasminco Resources Canada Company in 1999. It was finally transferred to ScoZinc in 2002. The duration of the lease is twenty years, at which time it may be renewed. The expiry date of the lease is April 2, 2030.

The Nova Scotia government currently holds a reclamation security (bond) for the lease in the amount of \$712,210. Selwyn has instructed its Nova Scotia counsel to pay the Nova Scotia government \$1,887,790 in additional bonding for a total bond amount of \$2.6 million.

As well, Selwyn instructed its Nova Scotia counsel to pay the Nova Scotia government \$892,876.72 in provincial royalty payments for ScoZinc's past production.

Table 4-15: Mineral Lease 10-1 (38 Claims).

Tract Map (NTS) 11E-3B		
Tract	Claims	Number of Claims
5	NOP	3
19	JKPQ	4
20	BCDE FGK LMNO PQ	13
28	DEKL MNOP	8
29	ABCD FGH JKQ	10
Total		38

4.4 Surface Rights (Real Property)

4.4.1 Gays River Deposit

ScoZinc owns outright approximately 568 hectares (1,404.6 acres) of land (real property) containing the entire surface infrastructure; the tailings area and most of the outlined mineralisation (refer to Table 4-16 and Figure 4-4). The boundaries were established through legal surveys.

On February 16, 2012, Selwyn announced the purchase on an additional 110.65 hectares (273.43 acres) of land located southwest of and adjacent to the existing real property.

Table 4-16: Property ownership, ScoZinc Limited.

Property ID #	Acres	Hectares
00369363	50.0	20.2
00522623	90.0	36.4
20080495	49.0	19.8
20080529	10.0	4.0
20158176	8.7	3.5
20158184	4.4	1.8
20223400	6.0	2.4
20223413	3.0	1.2
20313250	4.5	1.8
20416384	1.6	0.6



Property ID #	Acres	Hectares
40227936	3.0	1.2
40227951	7.5	3.0
40757577	115.4	46.7
40227963	181.3	73.4
40227985	5.6	2.3
40290256	0.72	0.3
40227963	171.8	69.5
40290264	110.0	44.5
40291452	544.6	220.4
40292553	4.5	1.8
40312092	33.0	13.4
00522201,	273.4	110.7
40746786,		
40763872,		
41094400		
Total	1,678.1	678.9

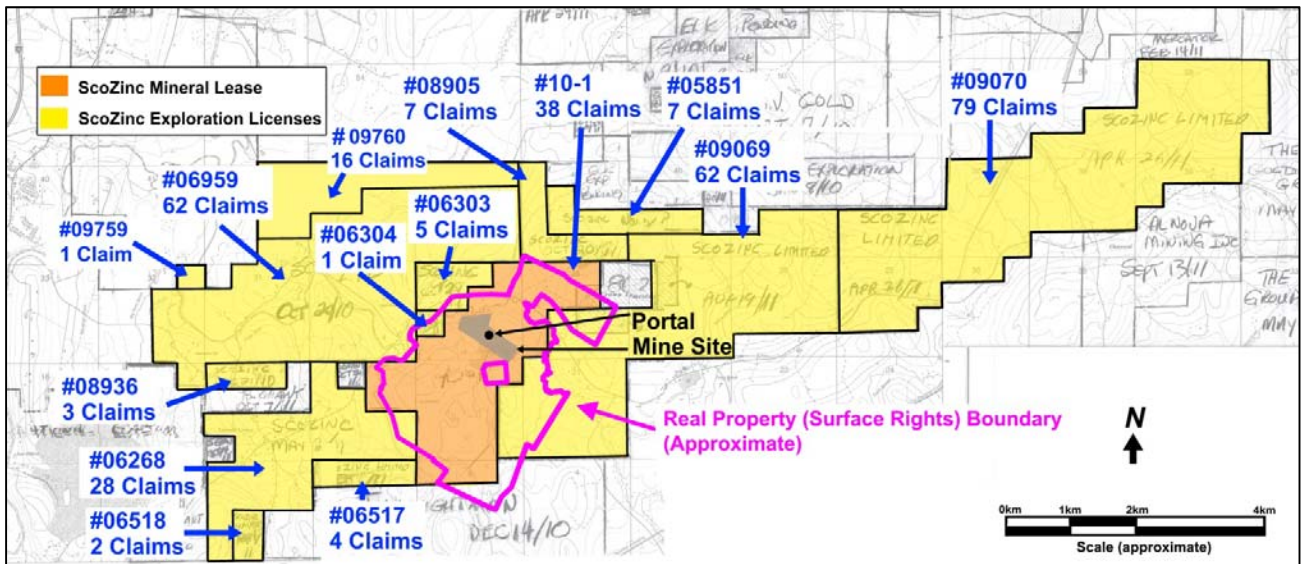
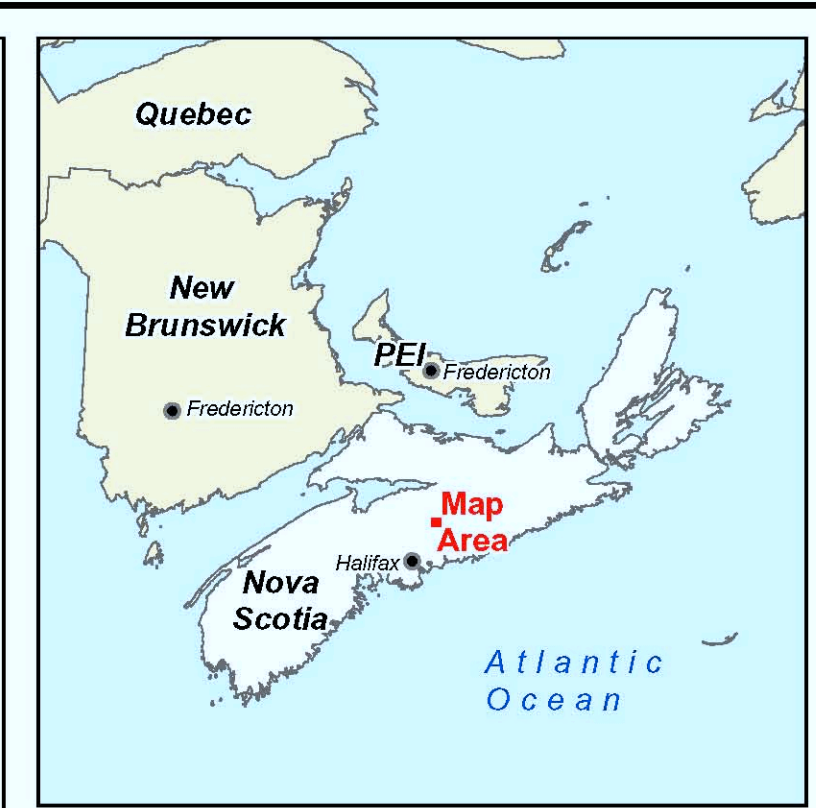
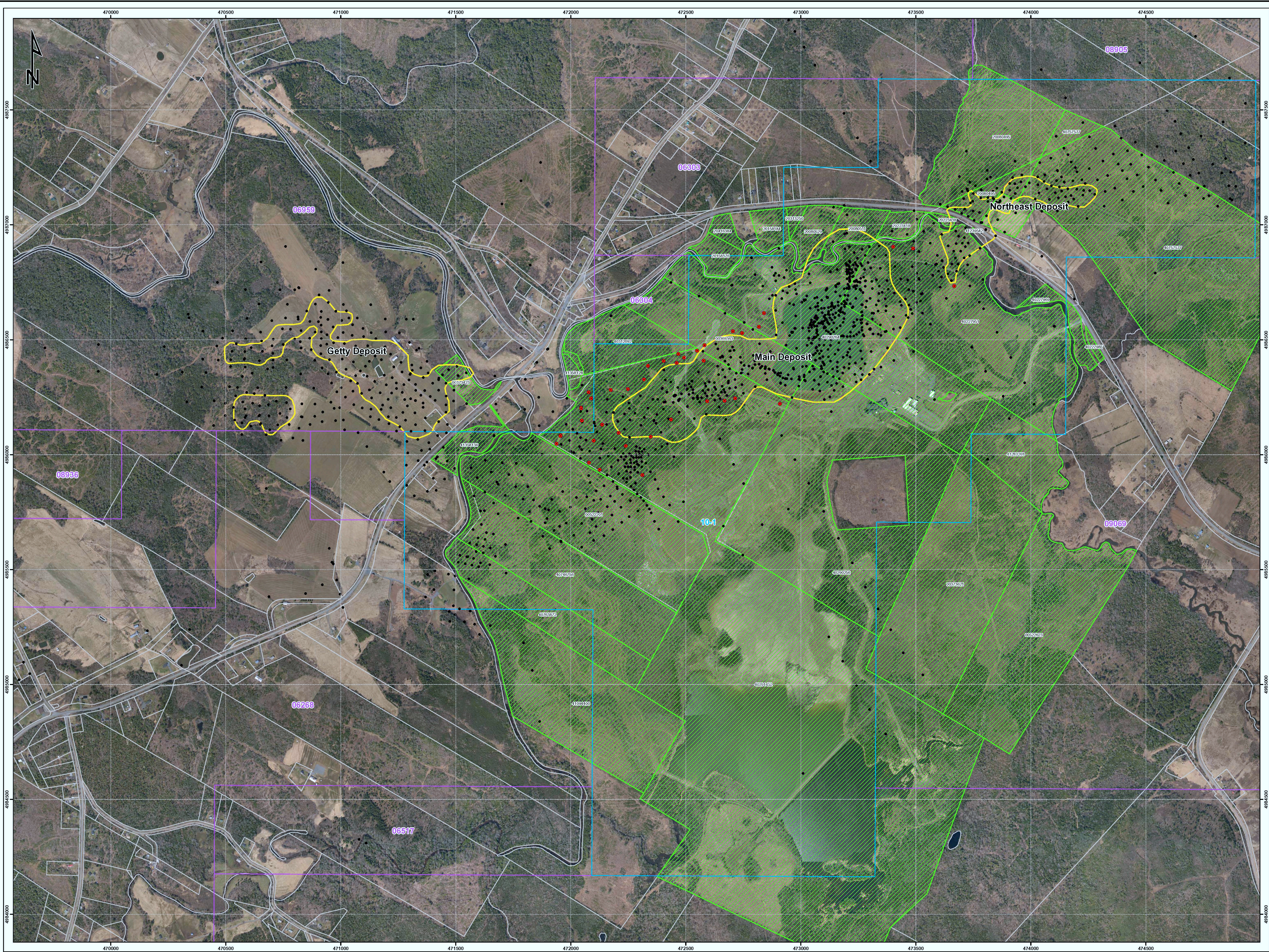


Figure 4-3: Claim Reference Map 11E03A/11E03B showing exploration licences, mineral lease and real property boundary (surface rights) for the Gays River Deposit and Getty Deposit.





Legend

ScoZinc Drilling

- 2011
- Historical

Boundaries

- 10-1 Mining Lease
- Other ScoZinc Licences
- Deposit Outline

Surface Rights (Properties)

- ScoZinc Surface Rights
- Benjamin Properties
- Company House
- Other Surface Rights

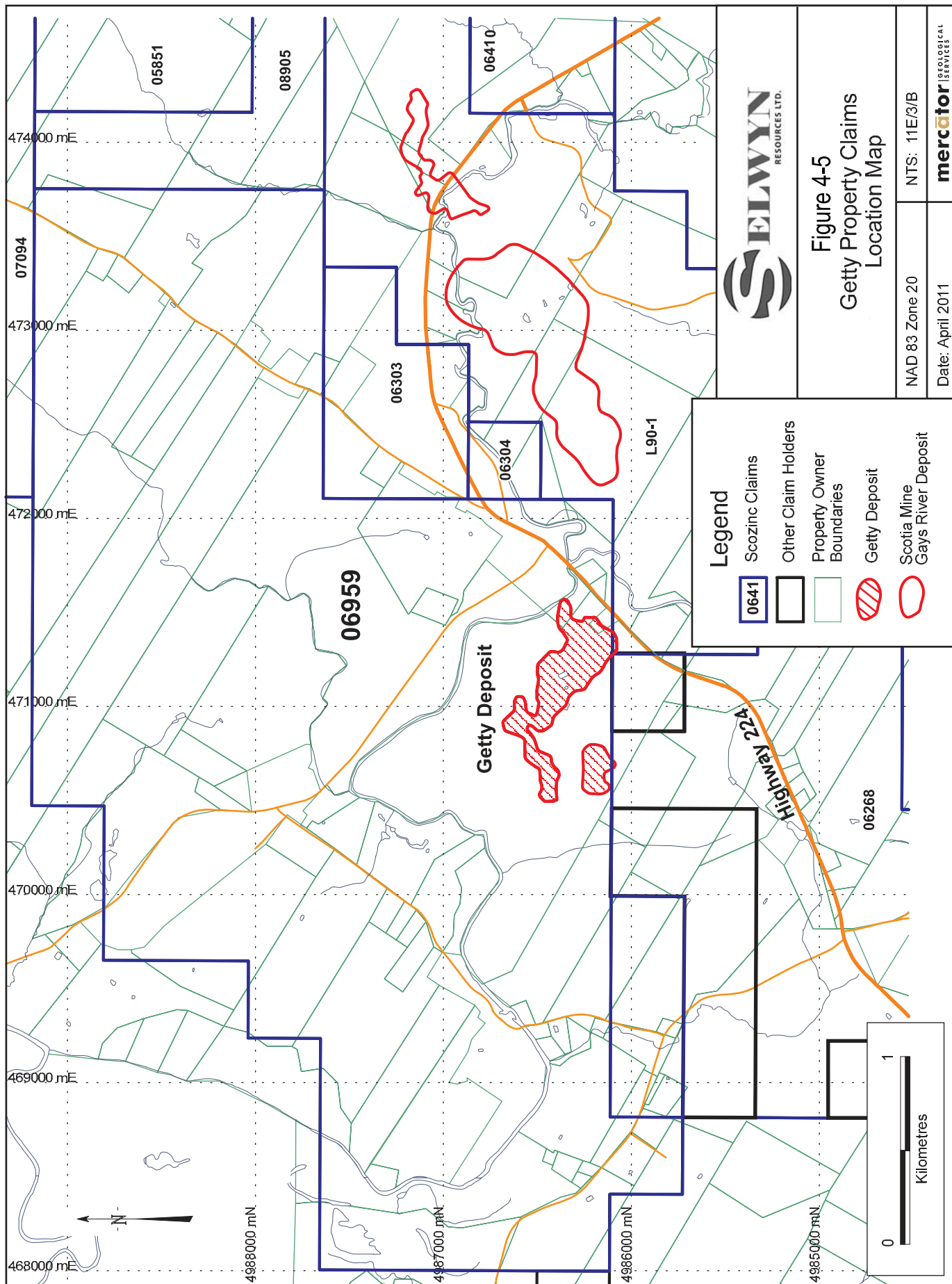
SELWYN
RESOURCES LTD.

ScoZinc Properties

Date: 2012/01/27
Author: M. Mayer
Office: Vancouver
Figure:
Scale: 1:7,000

Filename: SL1501_cims_20120127_ScoZincProperties.mxd
Project Location: Central Nova Scotia - NTS 011E
Projection: NAD83 - UTM Zone 20

0 125 250 375 500
Meters



4.4.2 Getty Deposit

Cullen *et al* (2011) described the surface or *real property* rights that cover the Getty Deposit:

“Acadian advised Mercator that surface rights to lands covering the Getty Deposit are owned under separate titles by Allan Benjamin, David Benjamin and Heather Killen. Mercator did not review the access agreements for purposes of this report but assumes that similar access permission to enter the lands for exploration purposes will be established by Selwyn. The mineral exploration claims and permits currently in place with respect to the Getty project are adequate for execution of technical programs recommended in this report. Permits necessary to do the proposed program will be applied for as required. There is adequate suitable land within the claim area for the recommend work program and future mining activities; however, Selwyn does not hold surface rights to this land. Selwyn will negotiate suitable purchase arrangements when the economic viability of the project has been demonstrated.”

4.5 Aggregate Lease

An aggregate lease covers the Scotia Mine property (Gays River Deposit). Gallant Aggregates signed a thirty-year lease agreement to mine and remove aggregate from the property for one dollar per tonne of material that is removed from the property. The lease was signed on May 15, 2003 and entitled Gallant, with certain limitations, to mine anywhere on ScoZinc’s land. The agreement contains a renewal clause and gives Gallant the right of first refusal to purchase the surface rights (real property titles). A major condition of Gallant’s lease is that metal mining takes precedence over aggregate mining. Therefore, Gallant’s lease would not interfere with zinc and lead mining operations.

In January, 2008, Gallant exercised its option under the Gallant Agreement to purchase approximately 25 acres of the Scotia Mine property. Concurrent with the transfer of the 23 acres, ScoZinc and Gallant executed a License, Option and Royalty, which terminated the Original Agreement and granted Gallant the right to access the Scotia Mine property to access existing water infrastructure and to obtain electrical power. The License, Option and Royalty Agreement grants Gallant the right to remove, extract and process sand, gravel, fill and obtain materials from the overburden and waste material created by ScoZinc at the Scotia Mine site for the greater of \$25,000 per annum or \$1.00 per metric tonne. In addition, Gallant has a right of first refusal to purchase the Scotia Mine property if ScoZinc plans to sell the property after mining operations are completed or abandoned.

4.6 Environmental Permitting

Between 1997 and 2000 work proceeded on an Environmental Registration Document. This document, which was submitted with the regulatory authorities in September 1999, addressed the environmental concerns of a surface and underground mining operation along with the diversion of a 500 metre section of the Gays River to accommodate the pit design. On August 4, 2000 the Open Pit Lead/Zinc Mine and River Diversion Project proposed by Pasminco Resources Canada Company received environmental assessment approval.

The Environmental Registration Document covered only part of the deposit. This area was mined by ScoZinc Limited in 2007-2008. Resources in this area have not been exhausted. However, additional



environmental assessment work is required before the mine can expand very far outside of its current footprint, either west along strike in the Main Zone or northeast, across Gays River to the Northeast Zone.

On October 7th, 2011, Selwyn received approval from Nova Scotia Environment, a department of the provincial government, for its proposed Southwest Expansion of the previously-mined Main Pit. On May 18, 2012 Selwyn received an amended Industrial Approval allowing expansion of the existing mine to include the Southwest Expansion of the previously mined Main Pit.

Prior to expansion outside the currently permitted area, updated plans would have to be approved by the Nova Scotia government and an updated Industrial Approval (essentially an environmental operating permit) would be required.

4.7 Environmental Liabilities

Existing environmental liabilities are typical of a surface mining operation that has temporarily suspended operations. These include:

- disturbed, as-yet non-reclaimed ground from the previous surface mining operations.
- exposed tailings in the tailings impoundment; and,
- site infrastructure such as buildings, the mill and site roads.

A reclamation bond is being held by the Nova Scotia government. Its current amount is not likely adequate to reclaim the existing site. However, a revised reclamation plan was recently approved by the Nova Scotia government.

The Nova Scotia government currently holds a reclamation security (bond) for the lease in the amount of \$712,210. Selwyn has instructed its Nova Scotia counsel to pay the Nova Scotia government \$1,887,790 in additional bonding for a total bond amount of \$2.6 million.

5. Accessibility, Climate, Local Resources, Infrastructure and Physiography

5.1 Accessibility

The Gays River and Getty Deposits ("the Property") are located approximately fifty-five kilometres northeast of Halifax, Nova Scotia along the border between Colchester and Halifax Counties (45°01'55" North Latitude and 63°21'30" West Longitude). It lies approximately one kilometre east of the community of Gays River. Access to the Property is by paved roads and is approximately fifteen kilometres off the Trans-Canada Highway, along Route #224. The Halifax International Airport is located twenty kilometres southwest of the mine site.

Portions of Highway #224 and Highway #277 are subject to spring weight restrictions. Truck weights are limited for a period that normally lasts six weeks.



5.2 Climate

The property is situated in central Nova Scotia where northern temperate zone climatic conditions are present and are moderated by relative proximity to the Atlantic Ocean. Distinct seasonal variations occur, with winter conditions of freezing and potentially substantial snowfall expected from late November through late March. Spring and fall seasons are cool, with frequent periods of rain. Summer conditions can be expected to prevail from late June through early September, with modest rainfall. (Cullen et al, 2011)

The following climate information reported for nearby Halifax International Airport during the 30 year period ending in 2000 characterizes seasonal precipitation and temperature trends in the area. The average July daily mean temperature for the reporting period was 18.6 degrees Celsius with a corresponding average maximum daily temperature of 23.6 degrees Celsius. Average daily winter temperature for January was minus 6 degrees Celsius with a corresponding average daily minimum being 10.6 degrees. Mean annual temperature is 6.3 °C, and mean annual precipitation is 1,452.2 mm. Yearly evapo-transpiration is estimated to be 560 mm. Climate conditions permit many exploration activities, such as core drilling and geophysics, to be efficiently carried out on a year-round basis. Other activities, such as geochemical surveys and geological mapping are typically limited by winter snow cover. (Cullen et al, 2011)

5.3 Local Resources & Site Infrastructure

The Scotia Mine mill, designed and built in 1978/1979 has a nominal (“nameplate”) capacity of 1,350 tonnes per day (Figure 5-1). However, during 2007-2008, ScoZinc operated the mill for extended periods at rates over 2000 tonnes per day. It was initially built to treat the zinc/lead ore from the Gays River Mine. In 1986, it was modified to treat gold ores using gravity and flotation circuits. In 1989, it was again reworked to treat zinc/lead ore from the Scotia Mine then being operated by Westminer Canada Ltd. (“WMC”). The concentrator has been properly maintained and is ready for quick start-up at minimum cost.

The mill is equipped with two stage crushing, two stage grinding, flotation cells, thickening, disk filtration and rotary kiln concentrate drying. The concentrator building contains a complete analytical laboratory, metallurgical testing laboratory, control room, maintenance area and office facilities. Its total area is approximately 32,000 square feet.

The administration building has an area of approximately 26,000 square feet. It contains offices, a dry, warehouses, workshops, a large boardroom, and several heavy equipment bays. Other, smaller surface facilities include:

- a compressor building (1,600 square feet);
- a “tire shop” (2,000 square feet);
- a welding shop;
- a geology building; and,
- a core shed.



Storage and ship loading facilities for lead and zinc concentrates are available at the seaport of Sheet Harbour, a distance of eighty kilometres from the mine site over paved roads. ScoZinc does not own these facilities, but Westminer used them in 1990. Sheet Harbour is a natural harbour on the Atlantic coast that remains ice free in the winter months and can handle vessels up to 40,000 tonnes in displacement. Rail transport facilities have also been used for concentrate shipping. A railway siding is located in Milford, eight road-kilometres from the site. The 500 tonne per hour ship loader that had been installed at the wharf in Sheet Harbour was dismantled in 2005 and brought to the Scotia Mine site.

During the last period of operations, lead concentrate was shipped through the port of Halifax, approximately 70 kilometres from the mine over excellent roads. Zinc concentrate was shipped in bulk through port facilities at Sheet Harbour, located east of Halifax and approximately 80 road-kilometres from the site.

The existing surface rights are sufficient for mining operations.

Power is supplied through the regional grid at reasonable, industrial rates. Scotia Mine owns and maintains step-down transformers adjacent to the mill.

Most of the mill's water requirements are satisfied by in-process recycling. Make-up water is drawn from the perennial Gays River.

The existing tailings pond is large enough for the life of the proposed operation. It is located just south of the mill on the footwall side of the deposit. Its design capacity was ten million tonnes. Approximately two million tonnes of tailings have been stored there, leaving a current capacity of over eight million tonnes.

There is sufficient area for waste rock and overburden storage on the property. The main area for waste rock storage lies adjacent to the tailings pond on its northwest shore, on the footwall side of the deposit.





Figure 5-1: Site infrastructure (facing southwest).

5.4 Physiography

The property is in a rural-residential area of central Nova Scotia that is typified by rolling topography and abundant surface water. The Gays River Deposit lies along the south side of the Gays River main branch, immediately east of the confluence with the Gays River south branch. The Getty Deposit lies immediately west of the Gays River Deposit, on the north side of Highway 224 (refer to Figure 4-4 - Property Map as of October, 2012



Figure 4-5).

The Gays River watershed is characterised by gently rolling topography, having a maximum elevation of 170 metres, an extensive cover of deciduous forest, a small population and local agricultural land development. Lakes, ponds and rivers are sparsely distributed throughout the watershed. Typical vegetation consists of northern black spruce, balsam fir and juniper with birch in more wet areas. Areas of open bog occur on part of the claims. Currently, parts of the forest are being harvested or thinned.

6. History

6.1 Overview

The Gays River Formation has seen exploration since the 19th century. Modern exploration on the Gays River Formation began in the early 1970s. Cullen *et al* note that

“First reports of zinc-lead mineralization in the Gays River area date to the late 1800’s and from this time until the 1950’s exploration consisted of limited amounts of mapping, pitting, trenching and sampling with up to 3% lead values being reported. Most activities focused on the area immediately around the adjacent Scotia Mine site, particularly along the South Gays River, where outcropping Gays River Formation dolomite hosting low grade zinc and lead mineralization was trenched and drilled in the 1950’s in the “Gays River Lead Mines Area” (Campbell, 1952).” (Cullen *et al*, 2011, section 5.2)

6.1.1 Gays River Deposit

The history of the project begins with its discovery in the early 1970’s by Cuvier Mines. Cuvier and Imperial Oil Limited (ESSO) carried out exploration work and delineated the mineralised zone which was then identified as being four kilometres long, 220 metres wide with depths varying from 20 to 200 metres. Initial development consisted of an exploration decline driven in 1975/76 with mine development starting in 1978 and mill commissioning in October 1979.

From 1979 until 1981, ESSO operated the mine and targeted the lower grade ore using a lower cost, bulk room and pillar mining method approach. Though Esso carried out some test mining in the higher grade mineralisation near the carbonate contact, it was not part of the mine plan at that time. During this period, 554,000 tonnes of lead/zinc ore was mined with an average grade of 2.12 % zinc and 1.36 % lead (Table 6-1). Due to low metal prices, problems caused by high rates of water influx and difficult ground conditions, mining was suspended in 1981 and the mine was allowed to flood.

Table 6-1: Historical milling records.



	Mill Feed			Concentrate Produced				Metal Recovery (%)	
	Tonnes	% Pb	% Zn	Pb Tonnes	Zn Tonnes	% Pb	% Zn	% Pb	% Zn
Esso (1979-1981)	550,000	1.40	2.10	10,000	17,000	73.6	61.5	95.6	90.5
WMC (1989-1991)	190,000	3.50	7.50	8,000	21,000	75.6	61.2	90.9	90.2
ScoZinc, 2007	337,000	0.85	2.14	3,359	8,694	64.4	55.4	75.5	66.7
ScoZinc, 2008	718,271	1.02	2.70	8,535	27,729	70.1	55.9	81.6	79.9
Total	1,795,271	1.00	2.92	29,894	74,423	72.1	58.6	87.8	83.2

In 1985, Seabright Resources purchased the property and modified the mill circuits to treat gold ore from other Nova Scotian properties.

In 1988, Westminer Canada Limited (WMC) purchased Seabright Resources. WMC began dewatering the underground mine in 1989. Their extraction method was to use narrow vein, cut and fill mining to extract the higher grade ore zones. The mine was placed back into operation and reached commercial production in March 1990 (Figure 6-1 and Figure 6-2). During the period of operations by WMC (August 1989 to May 1991) the mine produced 190,000 tonnes of ore at an average grade of 7.5 % zinc and 3.5 % lead. Mining was curtailed due to low metal prices, mining method problems and high rates of water influx. Also, for corporate reasons, WMC decided to focus on larger scale mining ventures. Following suspension of mining at Gays River Mine, WMC commissioned several studies to characterise the local hydrology of the mine and to control the ground water in the mine. These results were never tested during mining, since a cyclic low in metal prices, among other factors, prompted WMC to place the property up for sale.



Figure 6-1: Decline and portal access to the underground workings (circa 1990). The background of this photo, where the equipment is working, was surface-mined by ScoZinc during 2007/2008.





Figure 6-2: Flotation circuit (circa 1990).

In late 1996, Savage Zinc, Inc. purchased the Gays River Mine property from WMC and formed a wholly owned subsidiary named Savage Resources Canada Company (Savage). Savage started to rehabilitate the property, shops, equipment and office with the aim of starting production in 1997.

When Savage took over the operation of the former Gays River mining facility, the underground workings were flooded to the surface. After purchasing equipment and hiring employees, the mine dewatering phase started on June 7, 1997. With an installed pumping capacity of 9,000 USGPM, the average pumping rate to reach the 425 metre level was 5,200 USGPM. This level was reached during late August 1997. During this period of dewatering, men and equipment went underground to clean out the workings while management carefully examined the ground conditions. They decided to prepare a mine plan that considered an open pit design. Later, after much review during a period of depressed metal prices, it was decided to abandon the proposed underground mining activities and keep the mine dewatered to the 425 level. The electrical equipment was removed and the pumps were shut off on April 1, 1998. At present the mine is flooded above the portal.

Savage concluded that an open pit operation was feasible and initiated environmental permitting, including provisions for a diversion of a portion of the Gays River. The environmental assessment plan was approved August 2000. The operating plan was never initiated, probably due to low metal prices at the time.

ScoZinc Limited ("ScoZinc"), purchased by Acadian Mining (ADA, TSX-V) in 2006 as its wholly-owned subsidiary, continued with Savage's plan and surface-mined the deposit during 2007 and 2008. ScoZinc mined 1.1 million tonnes of surface ore and stripped 9.4 million tonnes of overburden (refer to Table 6-1). Due to a drastic plunge of base metal prices nearly coinciding with the mine's re-opening, ScoZinc placed the mine on care-and-maintenance status near the end of 2008.

In 2008, ScoZinc also drilled 17 diamond drill holes through the Northeast Zone (refer to Section 10).

In April 2011, Selwyn Resources Limited ("Selwyn") purchased ScoZinc with plans to reopen the mine amid high and rising metal prices.



An August, 2011 Preliminary Economic Assessment (PEA) of the ScoZinc operation, prepared by Allnorth Consultants Ltd with Colin Fisher, P.Eng., as Qualified Person, found an average earnings before interest, taxes, depreciation and amortization (EBITA) for the first three years of operations of CAD \$26.2 million per annum, and an internal rate of return of 63.9%. The PEA was limited to the Main Zone, and did not consider the river diversion discussed in section 4.6. See the Selwyn press release dated August 30, 2011 for more information.

A detailed account of the Mineral Lease and exploration claim history is reported in Appendix 2.

6.1.2 Getty Deposit

The following is adapted from Section 5 of Cullen *et al* (2011):

“... with the exception of regional soil geochemical surveying by Penarroya Ltd. in 1964 (Rabinovitch, 1967) that did not identify the Getty Deposit, no substantial mineral exploration efforts appear to have been carried out on the current Getty property prior to its acquisition by Getty in 1972.

Exploration in the current deposit area was initiated in 1972 by Getty and joint venture partner Skelly Mining Corporation under terms of an option - purchase agreement with Millmore-Rogers Syndicate.

“Discovery of the Getty zinc-lead deposit is attributed to drill hole GGR-12 which was completed in 1972 and intersected 4.63 meters of dolomite grading 15.48% combined zinc-lead, beginning at a down hole depth of 93.11 meters. Subsequent completion of over 200 holes by Getty and Imperial on and around the property served to delineate a nearly continuous mineralized zone measuring approximately 1300 meters in length and up to 200 meters in width (Comeau, 1973, 1974; Comeau and Everett, 1975).

“Getty retained MPH Consulting Limited (MPH) to assess three development scenarios for the deposit and Riddell (1976) reported results of this work, which showed that production of 375,000 tonnes per year would be necessary to support a viable, stand-alone open pit operation.

“In 1980 economic aspects of developing the deposit based on an in-house tonnage and grade model were assessed by Esso (MacLeod, 1980). This study concluded that mining through open-pit methods as an ore supplement to the Gays River deposit would be economically viable, provided that important operating assumptions were met. The earlier MPH work was also reviewed at this time and some economic models updated. None of the work indicated that profitable stand-alone development of the deposit could be expected under market conditions of the time. George (1985) subsequently reviewed earlier evaluations and also reached a negative conclusion regarding development potential.

“In 1992 Westminer completed a resource estimate and preliminary economic assessment of the deposit based on Getty drilling results, with potential development in conjunction with the adjacent Gays River deposit being considered (Hudgins and Lamb, 1992). Results showed that milling of about 550 tonnes per day of Getty ore could be undertaken at a low cost if excess milling capacity at Gays River was being filled by such material. Westminer also indicated that zinc oxide production from the deposit would result in a substantially better financial return to the mine in comparison with a conventional smelter contract for sulphide concentrates.



"In December, 2007 Mercator completed an inferred resource estimate for the property, on behalf of Acadian, which was reported by Cullen et al. (2007) and update by Cullen et al. (2008). Acadian completed a total of 138 new drill holes in support of these estimates." (Cullen et al, 2011, section 5.2)

6.2 Ownership History

6.2.1 Gays River Deposit

The Gays River Deposit was discovered in 1973 by the Imperial Oil Enterprises ("Esso") and Cuvier Mines Limited ("Cuvier") joint venture. Esso initiated mine development in 1978, commissioned the mill in 1979, developed the underground mine and began mining and milling.

Seabright Resources Inc. ("Seabright") acquired the Scotia Mine property and mill in 1984. Despite a favourable feasibility study, Seabright did not reactivate the Scotia Mine due to depressed metal prices at the time. Seabright converted the mill for gold processing and processed gold ore from several satellite properties.

The Scotia Mine property was acquired by Westminer Canada Limited ("Westminer"), a Canadian subsidiary of Western Mining Corp of Australia, in 1988, at which time a review of the potential for mining the deposit was undertaken. Westminer dewatered the mine and continued mining and milling.

In 1997, Savage Resources Canada Limited acquired the Scotia Mine assets from Westminer. Savage concluded that an open pit operation was feasible and initiated environmental permitting, including provisions for a diversion of a portion of the Gays River. Savage was subsequently taken over by Pasminco Resources Canada Company ("Pasminco Resources") and the environmental assessment plan was approved by the Nova Scotia Minister of the Environment in August 2000. The operating plan was never initiated.

Regal Mines Limited ("Regal Mines") purchased Pasminco Resources in February 2002. Regal was owned 50 % by OntZinc Corporation ("OntZinc") and 50 % by Regal Consolidated Ventures Limited ("Regal Consolidated"). As part of the sale, Pasminco Canada Holdings Inc. ("Pasminco Holdings") retained a 2 % net smelter return ("NSR") royalty on future production. OntZinc acquired Regal Consolidated's 50 % interest in December 2002 to own 100 % of Pasminco Resources. Savage Resources Limited was the successor of Pasminco Holdings and held the 2 % royalty.

OntZinc later changed its name to HudBay Minerals Inc. (Hudbay) after purchasing, through reverse takeover, Hudson's Bay Mining and Smelting in December 2004. Hudbay owned Scotia Mine through its wholly-owned subsidiary, ScoZinc Limited ("ScoZinc").

In 2006, Acadian Gold Corp ("Acadian Gold") purchased 100 % of ScoZinc and all of its assets (consisting mainly of Scotia Mine and its infrastructure) from OntZinc for \$7 million. Acadian Gold



subsequently changed its name to Acadian Mining Limited (“Acadian Mining”). On May 29, 2007, ScoZinc exercised its option to buy-out the 2% NSR for \$1,450,000.

ScoZinc reactivated the mill and continued surface mining the deposit during 2007 and 2008. Depressed metal prices forced ScoZinc to place the mine on care-and-maintenance status.

In February 2011, Selwyn Resources Limited (“Selwyn”) purchased ScoZinc and all of its assets, including the Scotia Mine and ScoZinc’s exploration claims, for \$10 million less a deduction relating to increased reclamation bonding requirements that were being determined at the time of the acquisition. In a May 2, 2011 letter, the Nova Scotia government informed ScoZinc that the increased bond requirement amounted to \$1,887,790 (refer to Section 4.3 and Appendix 2). On June 1, Selwyn announced the closing of the sale and therefore acquiring 100% of ScoZinc and all of its assets.

6.2.2 Getty Deposit

The following is adapted from Cullen et al (2011), section 5.1:

The Getty Property was acquired by Getty in 1972, at which time Getty and joint venture partner Skelly Mining Corporation began exploration under terms of an option - purchase agreement with Millmore-Rogers Syndicate.

Claims covering the Getty Deposit were placed under closure in 1987 by the Nova Scotia government and a tender was subsequently let for acquisition of exploration rights to the property. In 1990 Westminer Canada Limited (Westminer) was deemed the successful bidder and awarded a Special Exploration Licence for further assessment of the deposit. Attempted renewals of the Getty Special Exploration Licence by Westminer for three consecutive years were not successful.

Between 1992 and September 2006 Getty property claims were maintained under government closure and no work was carried out.

Pasminco Resources Canada Company (Pasminco) acquired the adjacent Gays River Deposit and infrastructure in 1999 through purchase of Savage Resources Inc., and in 2000 Pasminco submitted an application to NSDNR for a Special Mining Lease covering the deposit. No lease was issued and the closed status of the property was maintained.

In September, 2006 the provincial government tendered exploration rights to the closed Getty property and Exploration Licences 6959 and 6960 were subsequently issued to Acadian on October 20th, 2006 as successful bidder under the tendering process.

6.3 Historical Mineral Resource and Mineral Reserve Estimates

The following resource and reserve estimates are historical in nature, have not been extensively audited by the authors, were not prepared according to National Instrument 43-101 (except where noted) and should not be relied upon.



6.3.1 Gays River Deposit

Numerous resource estimates have been carried out over the past thirty years since the discovery of the Scotia Mine mineralisation. These resource estimates have been based on differing underlying parameters including varying minimum thickness of intercept, differing cut-off grades, utilisation of zinc equivalent or independent lead and zinc minimum grades, etc. Resource figures have ranged throughout the years from an initial 12,000,000 tons at 7 % zinc-equivalent (drill-indicated) in 1974 (Patterson, 1993) to the 1985 figure of 980,000 tonnes at 5.35 % lead and 9.42% zinc (mineable) at a 7 % zinc-equivalent cut-off (Hale and Adams, 1985).

Westminer (Nesbitt Thompson, 1991; WMC, 1995) reported resources that were outlined by over 1,300 underground and surface holes in addition to the information derived from the underground workings. The calculations were based on a minimum true thickness of two metres with a cut-off of 7 % zinc-equivalent. The total geologic reserves were quoted as 2,400,000 tonnes averaging 6.3 % Pb and 8.7 % Zn (Table 6-2). A mineable reserve was also quoted as 1,370,000 tonnes averaging 5.3 % Pb and 9.8 % Zn.

In 1992, Campbell, Thomas and Hudgins reported that there was potential for mining an additional 800,000 tonnes of lower grade mineralisation via open pit methods. The authors went on to say “there is excellent potential to expand the underground reserves, particularly in the eastern section of the mine. Underground development in the western and central zones resulted in significant expansion of the reserves as ore zone continuity has generally been better than had been originally interpreted from the drill information.”

The most recent resource and reserve estimate was carried out in 1998. In Claude Poulin’s July 1, 1998 memo titled “Scotia Mine, Mineral Resource Status,” he reported the deposit’s resources. Higher grade [greater than 7 % Zn-equivalent ($\% \text{Zn} + 0.5 \times \% \text{Pb}$)] and lower grade zones (greater than 2 % but less than 7 %) were outlined by Savage’s geologists. The higher grade zone consists of massive sulphide and lies at the contact between the dolomite and the Trench or evaporite units. The lower grade zone consists of disseminated zinc and lead within the dolomite. These outlines were transferred to a block model by Tim Carew, manager of Gemcom Services in Reno, Nevada. Inverse-distance squared weighting was used to calculate block grades. Top-cut values of 15 % Zn and 10 % Pb were used. No dilution or mining recovery factors were applied to the calculations. Undiluted resources are reported in Table 6-2.

The reader should note that the Resources were unclassified. They were not separated into Measured, Indicated and Inferred categories “due to the lack of geostatistical information” [Poulin, 1998 (1)]. Those Resources were not entirely independent and did not follow NI 43-101 guidelines, as the report predated that Standard.

Reserves were estimated through a pit optimisation process carried out on the Central portion of the deposit. These were reported in Claude Poulin’s July 1, 1998 memo titled “Scotia Mine, Mining Reserve Status.” Zinc and lead prices were \$US 0.55 and \$US 0.36 per pound, respectively. The optimised pit, which considered diverting Gays River by moving it toward the highway, was sent to



Mine Design Associates (MDA) for practical pit design. Savage supplied the economic and geotechnical parameters to MDA. Dilution and recovery factors of 20 % and 90 %, respectively, were used.

Reserves included Resources that lie northeast of the highway. These would be accessed using underground methods. For this material, dilution and recovery factors of 25 % and 90 %, respectively, were used. The estimated Reserves are reported in Table 6-2. Those Reserves were not entirely independent and did not follow NI 43-101 guidelines, as the report predated that Standard.

It was discovered during the current Resource estimation process that an error was made when calculating resource and reserve grades during the 1998 estimate. When estimating block grades in the High Grade Zone, lower grade (less than 7 % Zn-Eq) assays in the zone were filtered-out because they were thought to belong to a separate domain. Likewise in the lower grade Disseminated Zone, higher grade (greater than 7 % Zn-Eq) were filtered-out. This incorrectly increased the grade of the high grade zone, which increased the overall resource and reserve grade by approximately 1 % Zn-Eq. The error had less of an effect on the lower grade zone. The error was corrected during the current Resource and Reserve estimate.

Table 6-2: Historical resource and reserve estimates.

Estimator	Category	Tonnes	Zinc Grade	Lead Grade
Westminer (1991)	"Geologic Reserve" (Undifferentiated)	2,400,000	8.7 %	6.3 %
	Reserve (Underground)	1,370,000	9.8 %	5.3 %
Savage (1998)	Resource (Undifferentiated):			
	Higher Grade	1,700,000	11.1 % ¹	4.7 % ¹
	<u>Lower Grade</u>	<u>3,400,000</u>	<u>2.6 %¹</u>	<u>1.3 %¹</u>
	Total	5,100,000	5.5 % ¹	2.4 % ¹
	Reserve (Undifferentiated):			
	Northeast (Underground)	360,000	8.6 %	4.3 %
	<u>Central (Open Pit)</u>	<u>1,900,000¹</u>	<u>4.1 %¹</u>	<u>1.6 %¹</u>
	Total	2,260,000	4.8 %	2.0 %

¹ It was discovered during the current study that an error had been made during the grade estimation process in 1998.

It should be noted that the above referenced Resources and Reserves estimates were not carried out in accordance with the Canadian Institute of Mining and Metallurgy and Petroleum CIM standards on Mineral resources and Reserve Definitions ("CIM Standards") and therefore do not conform to Sections 1.3 and 1.4 of NI 43-101.

In 2006, MineTech International Limited ("MineTech") carried out a National Instrument 43-101-compliant resource and reserve estimate. MineTech's results were reported in Table 6-3.



Table 6-3: Previous mineral resource and reserve estimate (Roy et al, 2006).

Mineral Resources					
Category	Volume (m ³)	SG	Tonnes	Zinc Grade	Lead Grade
Measured (Surface)	680,000	2.78	1,880,000	3.8%	1.6%
Indicated					
Surface	810,000	2.77	2,250,000	3.2%	1.4%
Underground ¹	381,000	2.90	1,110,000	6.6%	3.7%
Subtotal	1,190,000	2.82	3,360,000	4.3%	2.2%
Measured + Indicated (Surface and Underground)	1,870,000	2.80	5,240,000	4.1%	2.0%
Inferred	652,000	2.76	1,800,000	3.1%	1.1%

Notes:

1. Northeast Underground Zone.
2. Undiluted Resources.

Mineral Reserves					
Category	Volume (m ³)	SG	Tonnes	Zinc Grade	Lead Grade
Proven Reserves (Surface)	630,000	2.78	1,750,000	3.2%	1.3%
Probable Reserves					
Surface	610,000	2.76	1,690,000	2.5%	1.0%
Underground	395,000	2.90	1,150,000	5.7%	3.2%
Subtotal	1,005,000	2.83	2,840,000	3.8%	1.9%
Total Proven and Probable Reserves (Surface and Underground)	1,635,000	2.81	4,590,000	3.6%	1.7%

Notes:

1. Dilution equals 15 % and mining recovery equals 90 %.

6.3.2 Getty Deposit

The following is taken from Cullen et al. (2011):

“Four previous estimates of tonnage and grade for in-situ mineralization comprising the Getty Deposit are available in the public record. The earliest of these was prepared for Getty by MPH Consulting Limited (Riddell, 1976) and was revised in 1980 as part of a Mine Valuation Study carried out for Esso (MacLeod, 1980). Subsequently, Westminer developed an in-house estimate and preliminary economic assessment of the deposit based on historic drilling (Hudgins and Lamb, 1992). The fourth estimate was completed in December, 2007 by Mercator for Acadian and reported by Cullen et al (2007).

“Results of the first three historic estimates are presented below in Table 4a and all pertain to areas currently covered by Acadian exploration licences. These pre-date National Instrument 43-101 (NI 43-101) and have not been classified under Canadian Institute of Mining, Metallurgy and Petroleum Standards for Reporting of Mineral Resources and Reserves: *Definitions and Guidelines* (the CIM standards). On this basis they should not be relied upon. Table 4b presents the Cullen et al. (2007) NI43-101 compliant resource estimate completed by Mercator, which has an effective date of December 12th, 2007.

Table 6-4: Historic Resource Estimates for Getty Deposit Not NI 43-101 Compliant (from Cullen et al, 2011)

Reference	Tonnes	Zn + Pb %	Zn %	Pb %
Riddell(1976)	4,470,400	3.71	1.87	1.84
MacLeod(1980)	3,149,600	2.97	1.60	1.37
Hudgins and Lamb(1992)	4,490,000	3.20	1.87	1.33

Notes: With regard to the historic mineral resource estimates stated above 1) a qualified person has not done sufficient work to classify the historical estimate as current mineral resources or mineral reserves; 2) the issuer is not treating the historical estimate as current mineral resources or mineral reserves as defined in sections 1.2 and 1.3 of NI43-101; and 3) the historical estimate should not be relied upon.

Table 6-5: Mercator NI 43-101 Compliant Resource Estimate for Getty Deposit (effective December 12th, 2007) (from Cullen et al, 2011)

Reference	Tonnes	Zn + Pb %	Zn %	Pb %
Cullen et al. (2007)	4,160,000	3.21	1.81	1.40

“Riddell(1976) used a 2% (zinc% + lead%) cut-off, Macleod (1980) used 1.5% zinc cut-off and Hudgins and Lamb (1992) used a 1.5% zinc-equivalent cut-off defined as zinc equivalent = zinc% +(lead % x 0.60). Figures for the previous Mercator estimate that are presented in Table 4b reflect application of a 2% zinc + lead cut-off. The Riddell (1976) and MacLeod (1980) estimates are based on drill-hole-centered polygonal methods of volume estimation along with subjectively determined specific gravity factors reflecting general experience. Both estimates include length-weighted drill hole grade assignments to polygons with subsequent tonnage-weighting to determine deposit grades. In contrast, Hudgins and Lamb (1992) used Surpac® deposit modeling software, a cross sectional method of volume estimation, a single assigned specific gravity factor of 2.75 g/cm³ and calculated average deposit zinc and lead grades as the length-weighted averages of all qualifying drill hole intercepts. Further discussion of historic resource estimates plus that by Mercator appears in report section 16.4.” (Cullen et al, 2011, section 5.3)

7. Geological Setting

7.1 Regional Geology

An excellent summary of the regional and deposit geological settings of the Gays River area is supplied by Patterson (1993). There is also a recent “special issue devoted to zinc-lead mineralisation and basinal brine movement, lower Windsor Group (Viséan), Nova Scotia Canada” released as Volume 93 by ***Economic Geology*** in 1998. The bulk of the descriptions below are taken from those publications.

The Gays River and Getty Deposits occur along the southern margin of the large (more than 250,000 km²) and deep (more than 12 kilometres) late Palaeozoic Fundy (Magdalen) Basin, bordered on the northwest by the New Brunswick platform, and on the south by the Meguma platform (Figure 7-1). During the late Palaeozoic, the Fundy Basin was divided or segregated through a complex series

of grabens into deep linear successor basins or sub-basins, which are now interpreted (Fralic and Schenk, 1981) as small pull-apart basins. Subsequent basement subsidence, fragmentation and block faulting produced the irregular pre-Carboniferous topography that was partly filled-in by early Carboniferous clastics, and later flooded by middle Carboniferous seas. Carboniferous sediments consisting of terrestrial conglomerates, and sandstones, siltstones and marine limestones and evaporites, were deposited in this Fundy Basin which probably remained active during and after the Carboniferous, and may have had a major impact in the ore-forming process. These sub-basins contained thick accumulations of terrestrial and shallow marine sediments, and therefore could provide substantial volumes of basinal fluids (Ravenhurst, 1987).

In their 2011 report, Cullen et al. give further detail about the Carboniferous strata:

"The Getty Deposit is hosted by lower Mississippian age dolostone of the Windsor Group's Gays River Formation. Well defined carbonate banks characterize this formation and in most instances are associated with well-defined paleo-basement high features. On depositional basin scale, Gays River Formation bank carbonates and laminated limestone of the laterally equivalent Macumber Formation mark the onset of marine depositional conditions after a prolonged period of predominantly terrigenous clastic sedimentation represented by Horton Group siliciclastic rocks.

"Carboniferous strata in Central Nova Scotia occur within the Shubenacadie and Musquodoboit sub-basins of the larger Maritimes basin and were described by Giles and Boehner (1982). Geometry of both sub-basins was significantly influenced by strong northeast trending structural grain in basement sequences of the Cambro-Ordovician Meguma Group. Deformation was heterogeneously distributed across the sub-basins and at present is now represented by northeast trending normal and thrust faults which are locally associated with open to moderately folded structural domains. Deformation features are essentially absent near the southern margins of the basins but become more prevalent and pervasive toward the northern limits, where effects of the regionally significant Cobequid-Chedabucto fault system are represented. Minor faults or fracture zones may be present at Getty but no structural complexity is evident in either the surface morphology or drill logs." (Cullen et al., 2011, Section 6)

The Gays River area is underlain by the Cambro-Ordovician metasediments of the Meguma Group which form the pre-Carboniferous basement upon which the Gays River carbonate host rock was deposited. The Meguma rocks were tightly folded during the Acadian Orogeny into long northeast-southwest anticlines and synclines which have been faulted and jointed. Erosion of this basement into irregular knobs and ridges was controlled by these structures prior to the deposition of overlying sediments (the Gays River carbonate). Unconformably overlying the Meguma Group are clastic sedimentary rocks of the Horton Group and marine sedimentary rocks of the Windsor Group which overstep the Horton near the basin margins and rest directly on Meguma basement. It is these Windsor Group carbonates which have been the host for the carbonate-hosted base metal sulphide and associated sulphate deposits in Nova Scotia.

Over 100 base metals occurrences, including a few deposits, are hosted by Lower Windsor Group marine carbonate rocks in Nova Scotia. About half of these occur within the Kennetcook, Shubenacadie, Musquodoboit and River Denys sub-basins. In addition to the Gays River and Getty Deposits, the most significant examples include the Walton deposit and the Jubilee deposit. Walton



has two types of mineralisation: concordant sheets of barite contain lenses of lead-rich and copper-rich mineralisation. Between 1941 and 1978, 4.5 million tonnes containing over 90% BaSO₄, and 0.4 million tonnes containing 0.52% Cu, 4.28% Pb, 1.29% Zn and 350 g/t Ag were produced (Sangster, Savard and Kontak, 1998). At the Jubilee deposit on Cape Breton sulphides cement fault-related breccias and replace adjacent limestone; there are reported, unclassified resources (e.g. Fallara and Savard, 1998) of 0.9 million tonnes containing 5.3% Zn and 1.4% Pb.



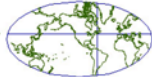
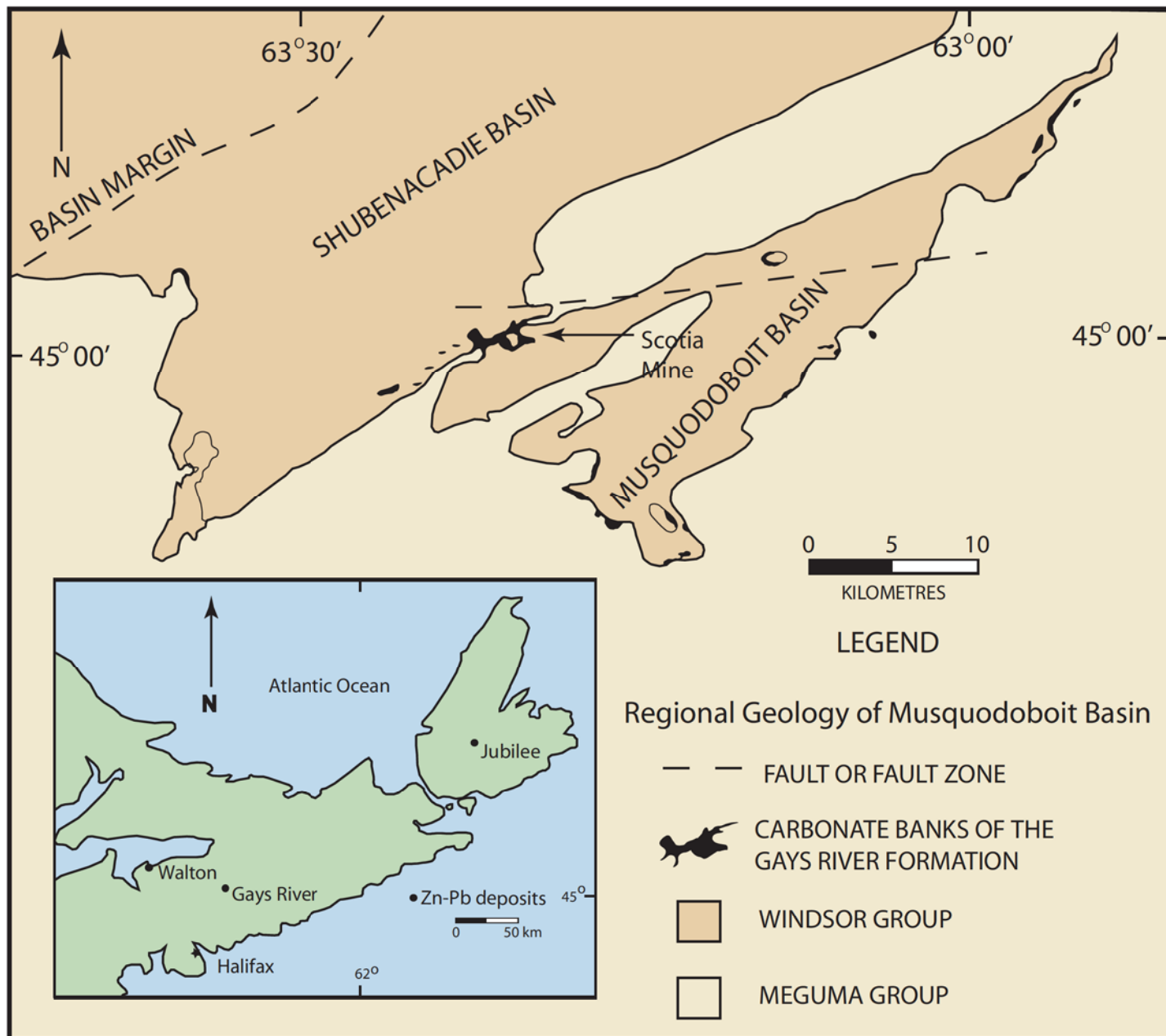


Figure 7-1: Regional geology.

7.2 Property Geology

The Gays River Formation and its lateral equivalent, the Macumber Formation, form the basal carbonate units of the Windsor Group. There is an angular unconformity between the marine sediments (Gays River Formation and Macumber Formation) and the underlying basement rocks. The underlying 380-400 million-year-old basement rocks consist of greenschist facies meta-turbidites of the Meguma Group that form a northeast-trending, paleotopographic high which separates the Shubenacadie and Musquodoboit basins, and over which the Gays River carbonate bank developed (Kontak, 1998; Savard & Chi, 1998). The property's stratigraphy is shown in Figure 7-2. The basement is overlain by a laterally extensive, but discontinuous, talus breccia composed of centimetre- to metre-size, rounded to sub-rounded fragments of Meguma Group lithologies cemented by dolostone. Overlying the basal breccia or directly in contact with the basement rocks is a carbonate build-up composed of various bank and interbank facies: algal, coral and bryozoan bafflestones, skeletal packstones and wackestones. Contours for the top of Goldenville / bottom of carbonate contact are shown in Figure 7-3. The carbonate bank can be traced basinward into a laterally extensive, thinly laminated, 3 to 18 metre thick argillaceous, bituminous dolostone or limestone unit referred to as the Macumber Formation.

Overlying the carbonate rocks are evaporites (gypsum, anhydrite, halite and minor potash) with minor interbeds of dolostone and mudstone, all of which constitute the Carroll's Corner Formation. Nearby, (5 kilometres to the southwest), the gypsum is being mined at the National Gypsum Quarry.

In the deposit area, the contact between the evaporites of the Carroll's Corner Formation and the carbonates of the Gays River Formation was deeply incised by a palaeochannel during a period of uplift and erosion during the Cretaceous period. It was filled-in by sedimentary debris (boulders, sands, silts, clay and gypsum fragments) to which a Cretaceous age has been assigned. This dense, over-compacted debris has been termed "Trench" material; it occurs adjacent to the massive sulphide mineralisation. Near the contacts, highly permeable, open channel-type structures have caused locally high rates of water flow that have been an impediment to underground mining.

Both the bedrock and "trench" sediments are overlain by 20-40 m of glacial till, which is locally cut by glacial-fluvial sands and gravels. Three geological cross sections are included as Figure 7-4, Figure 7-5, and Figure 7-6. Figure 7-6 represents the prototypical cross-sectional geology for the deposit.

Cullen et al (2011) describe the Getty Deposit in section 7.1 & 7.2 ('Stratigraphy' and 'Deposit Type', respectively) of their report:

"Stratigraphy

"Geology in the Getty Deposit area has been interpreted from compiled results of Giles and Boehner (1982) plus results of various mapping and diamond drilling campaigns carried out in the area. The actual deposit does not outcrop, but was delineated by Getty through drilling (eg. Bryant, 1975, Comeau, 1973, 1974; Palmer and Weir, 1988a, b).

"As represented in [Figure 7-7], the Getty Deposit is hosted by a northwest trending Gays River Formation carbonate bank complex that occurs as a direct extension to the larger, northeast trending carbonate bank that hosts Scotia Mine's zinc lead resources and reserves. Both banks developed along paleo-basement highs comprised of Cambro-Ordovician age Goldenville Formation quartzite and greywacke. At Getty host dolostone ranges in true thickness from less than a meter to a maximum of about 45 meters.

"The carbonate host sequence occurs above a thin sedimentary breccia or conglomerate unit comprised predominantly of Goldenville Formation debris with a small carbonate matrix component resting unconformably on Goldenville Formation basement. Carrolls Corner Formation evaporites lie stratigraphically above the Gays River Formation and are comprised locally of gypsum and anhydrite with minor amounts of interbedded dolomitic limestone and siltstone. With possible exception of local clay and sand accumulations of Cretaceous age, Carrolls Corner Formation rocks are the youngest sequences of the local bedrock section. Figure 7-8 presents a stratigraphic column for the deposit area.

"Historical and the current drilling on the Getty property has shown that evaporite cover at the Gays River Formation contact was in many instances preferentially removed by erosion and karst-related solution processes during Cretaceous time, leaving a trough or trench parallel with the carbonate contact in many areas. Stratified Cretaceous fill sedimentary material followed by Quaternary material of glacio-fluvial origin infilled this trough, and is termed "Trench" material on the adjacent Scotia Mine property. Similar material exists in some areas adjacent to the Getty Deposit but in many instances is difficult to distinguish from less consolidated overburden material that is of glacial origin.

...

"Description

"The Getty Deposit carbonate bank forms a northwest extension to the adjacent Gays River bank that hosts Scotia Mine zinc-lead resources and reserves. While broadly similar, carbonate bank slopes at Getty are generally gentler than those seen at Gays River. Figure 7-9 depicts a typical bank cross section illustrating occurrence of thickest carbonate on the bank top, with progressive thinning down dip on the paleo-topographic high. Variations existed locally in basement paleo-slope angles and appear to have directly influenced corresponding carbonate bank morphology. Areas with steep basement slopes tend to show rapid thinning of carbonate away from the thicker bank tops, with correspondingly steep contact surfaces with overlying evaporites. Gentle slope areas show greater lateral and down-dip continuation of thicker carbonate and corresponding lower average contact dips with the overlying evaporite. Based on the drilling carried out to date at Getty, the maximum carbonate thickness encountered along the basement high trend is 45.48 meters in drill hole GGR-221.

"Gays River Formation carbonate banks include intricately intercalated algal, peloidal and coralline lithofacies, with abundance of bindstone, bafflestone, packstone and micrite. These facies show transition downdip to thin (typically <5 meters), variably laminated algal/silty carbonates that are lateral equivalents to laminated carbonates of the Macumber Formation. The latter occurs basinward of the underlying Horton Group's stratigraphic pinchout and is not present in the deposit area."



STRATIGRAPHY - WINDSOR GROUP

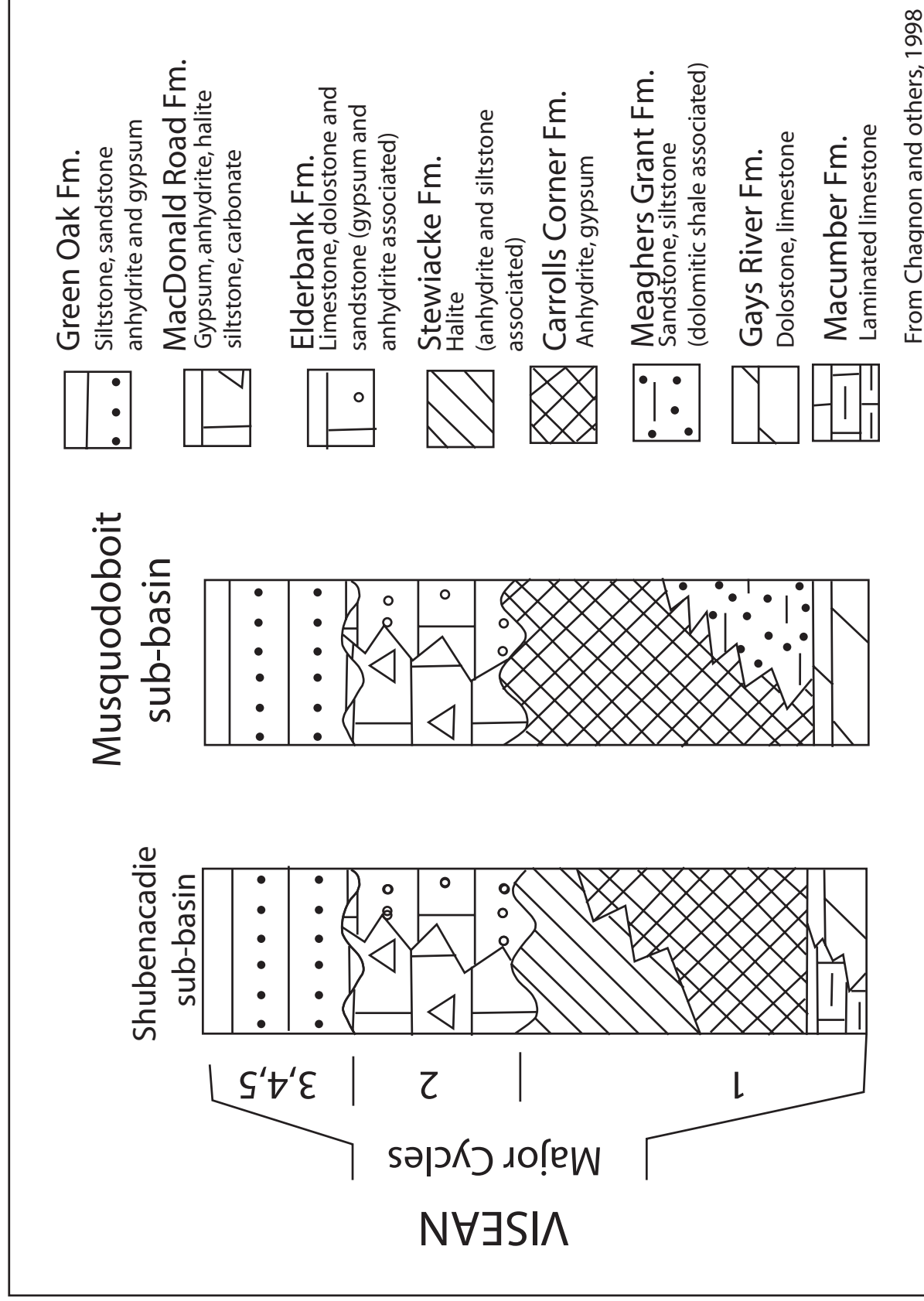
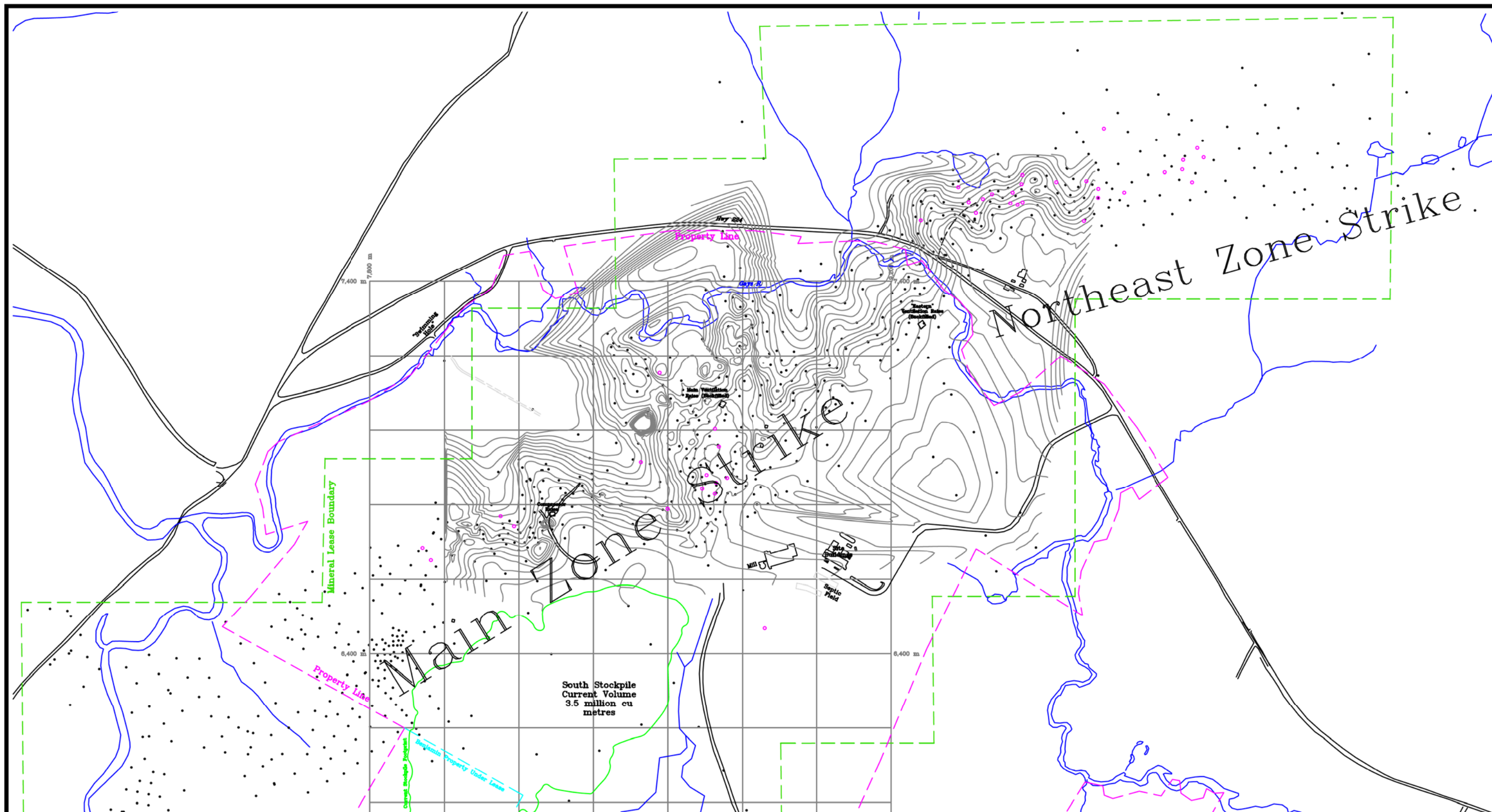
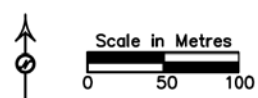



Figure 7-2: Stratigraphy.

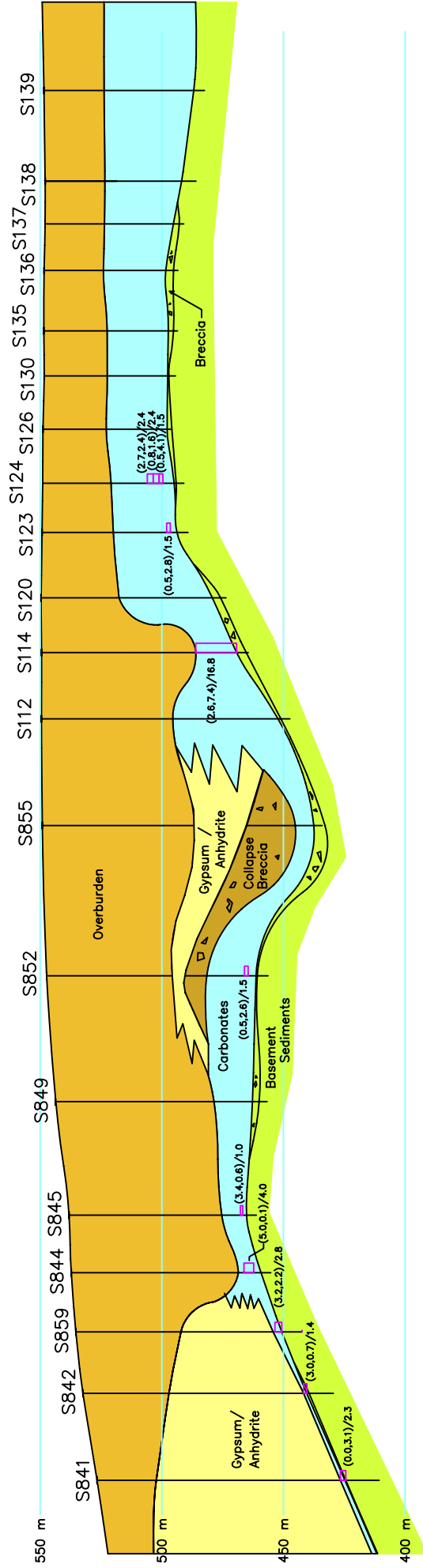


- Legend:**
- Property Line
 - Contour Line
 - Mineral Lease Outline
 - Underground Workings
 - Historical Drill Collar
 - "New" Drill Collar for Current Estimate



Date: May 6, 2011	ScoZinc Limited Scotia Mine Gays River, Nova Scotia
Scale: 1:10,000 (See Bar Scale)	
Drawn by: Douglas Roy, M.A.Sc., P.Eng.	Figure 7-3 Drill Collars and Top-of-Carbonate Contours
MINETECH INTERNATIONAL LIMITED CONSULTANT ENGINEERS & GEOLOGISTS HALIFAX, CANADA 	

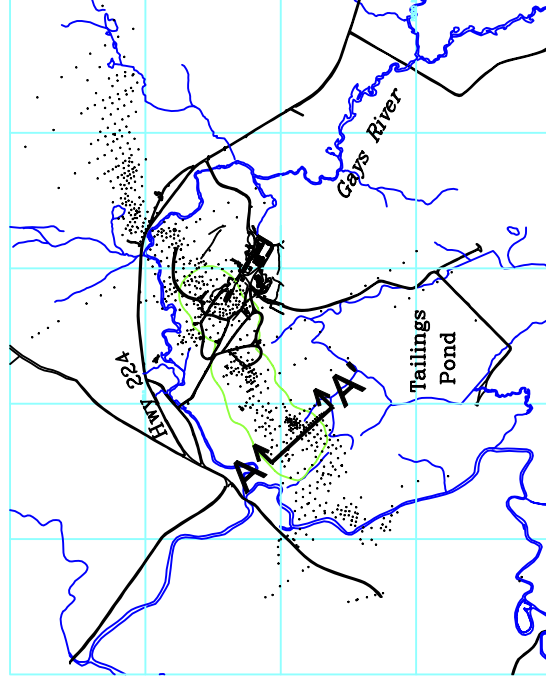
A'-----A'



Legend:

(0.0,3.1)/2.3 Sample Composite (Avg Percent Zinc, Avg Percent Lead)/Composite Length

- 7. Overburden - Till, Sand, Silt
- 6. "Trench": Collapse Breccia, Ancient Till
- 5. Carroll's Corner Formation: Evaporites - Anhydrite, Gypsum, Siltstone, Dolomite, Limestone
- 4. Gays River Formation (MacCumber): Carbonates - Dolomite, Limestone
- 3. Horton Formation: Sediments - Shale, Siltstone, Sandstone, Conglomerate
- 2. Breccia: Goldenville Clast in Dolomite Matrix
- 1. Goldenville Formation Metasediments - Greywacke, Slates



Date: June 22, 2004

Scale: Bar Scale

Scotia Mine
Gays River, Nova Scotia
Cross-Section A---A'

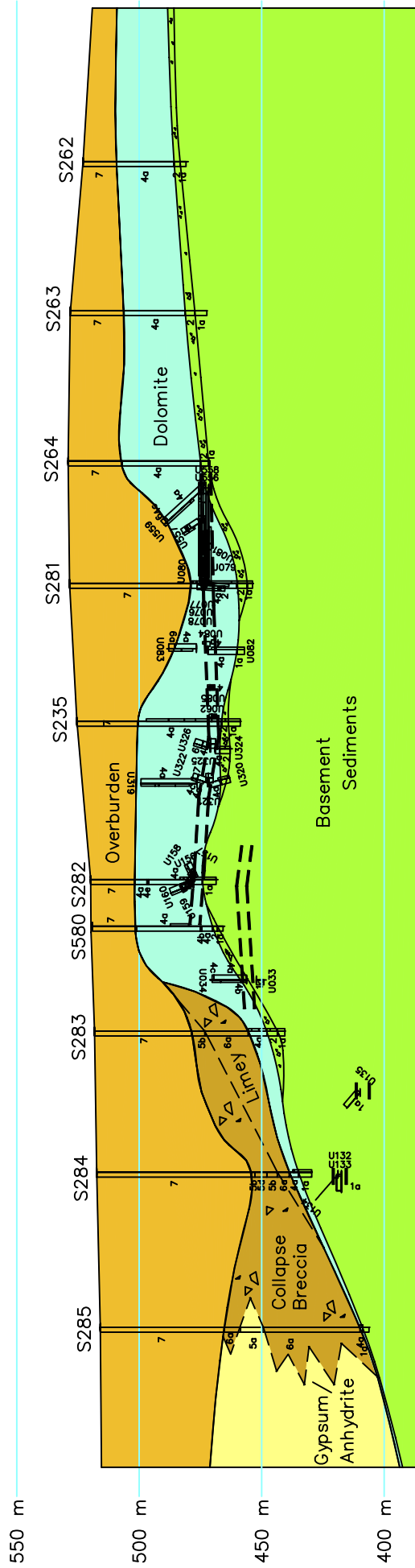
Dimensions in metres.
Looking Northeast.
See sample sheets for complete sampling data.

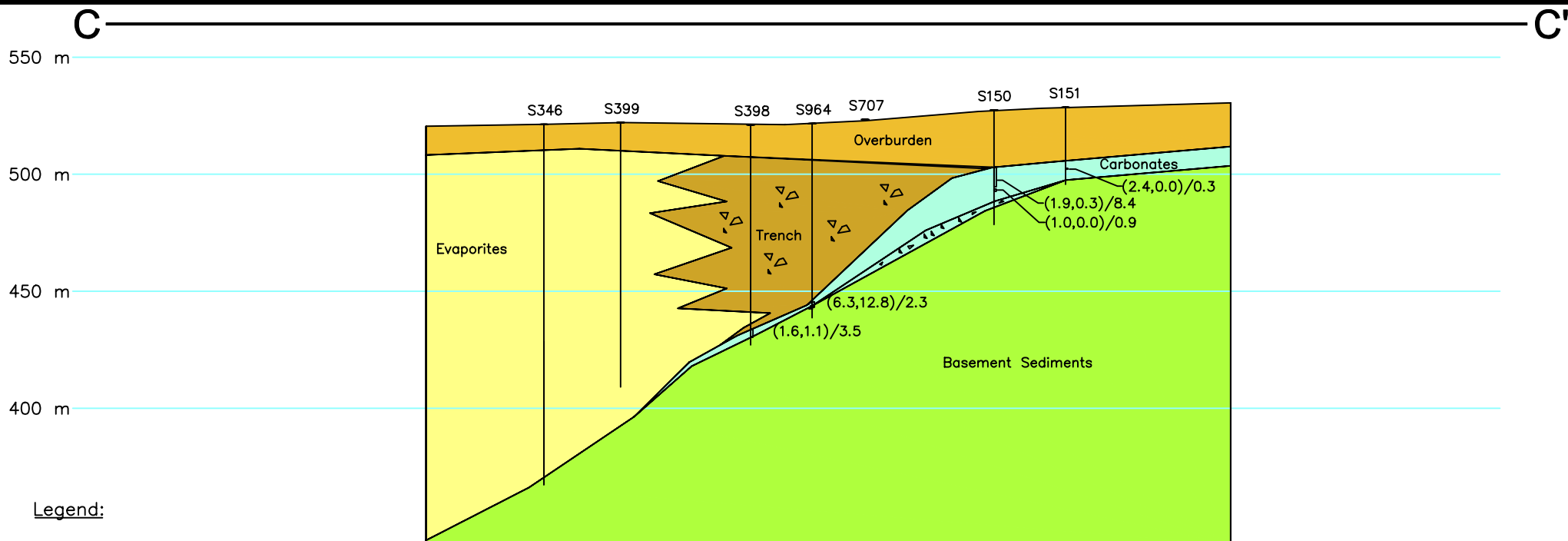
Drawn by: Douglas Roy, M.A.Sc., P.Eng.

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Figure 7-4

B-----B'

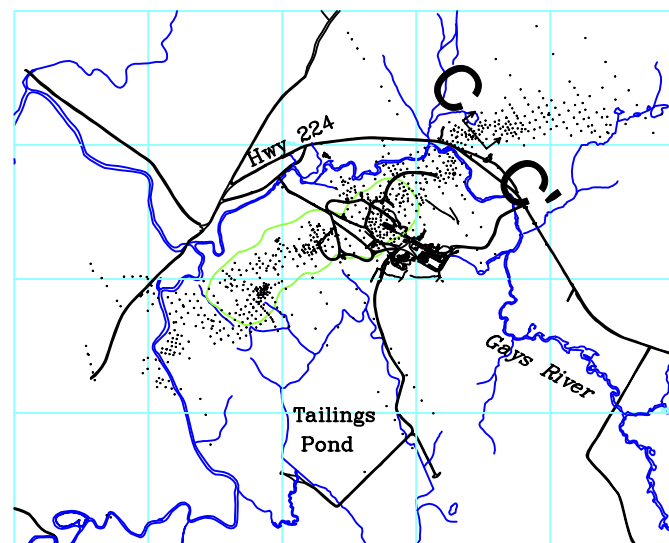




Legend:

(0.0,3.1)/2.3 Sample Composite (Avg Percent Zinc, Avg Percent Lead)/Composite Length

-  7. Overburden – Till, Sand, Silt
-  6. 'Trench': Collapse Breccia, Ancient Till
-  5. Carroll's Corner Formation:
Evaporites – Anhydrite, Gypsum, Siltstone, Dolomite, Limestone
-  4. Gays River Formation (MacCumber):
Carbonates – Dolomite, Limestone
-  3. Horton Formation:
Sediments – Shale, Siltstone, Sandstone, Conglomerate
-  2. Breccia: Goldenville Clast in Dolomite Matrix
-  1. Goldenville Formation
Metasediments – Greywacke, Slates
-  Intersected Underground Workings



Scale in Metres

0 25 50

Date: September 21, 2004

Scale: Bar Scale

Drawn by: Douglas Roy, M.A.Sc., P.Eng.

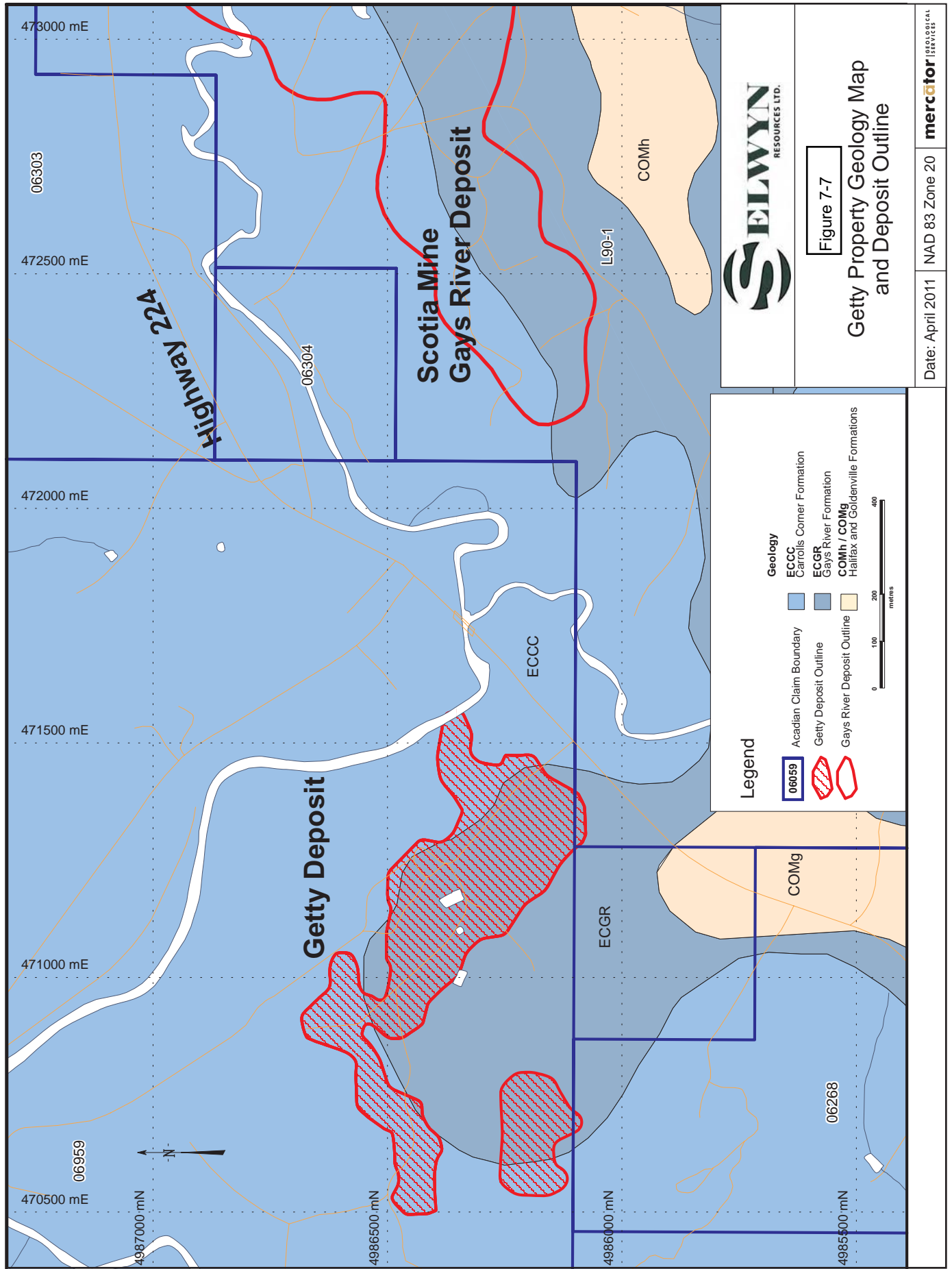
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Scotia Mine
Gays River, Nova Scotia
Cross-Section C---C'

Figure 7-6

Dimensions in metres.
Looking Northeast.
Refer to data table for sampling data.



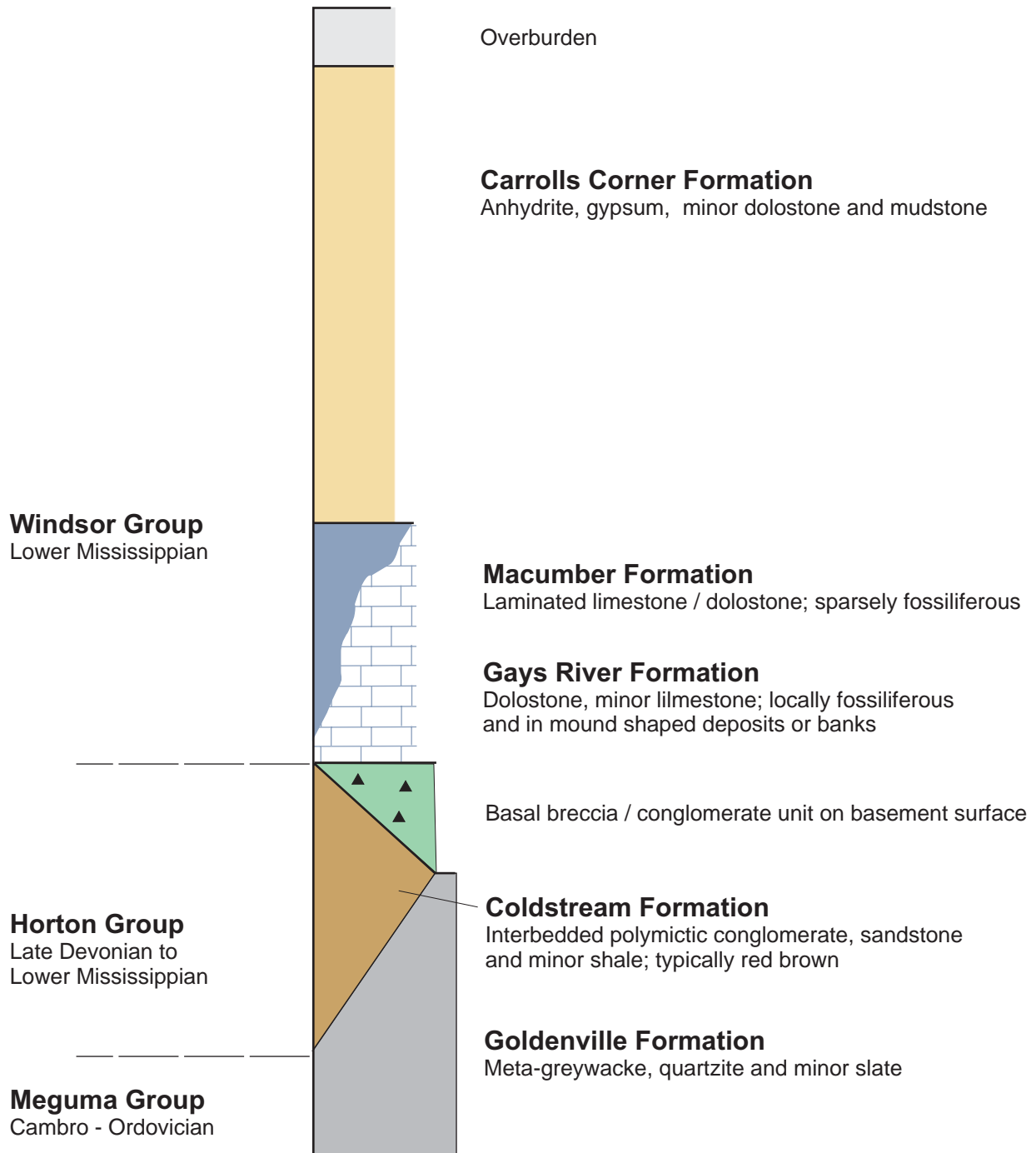
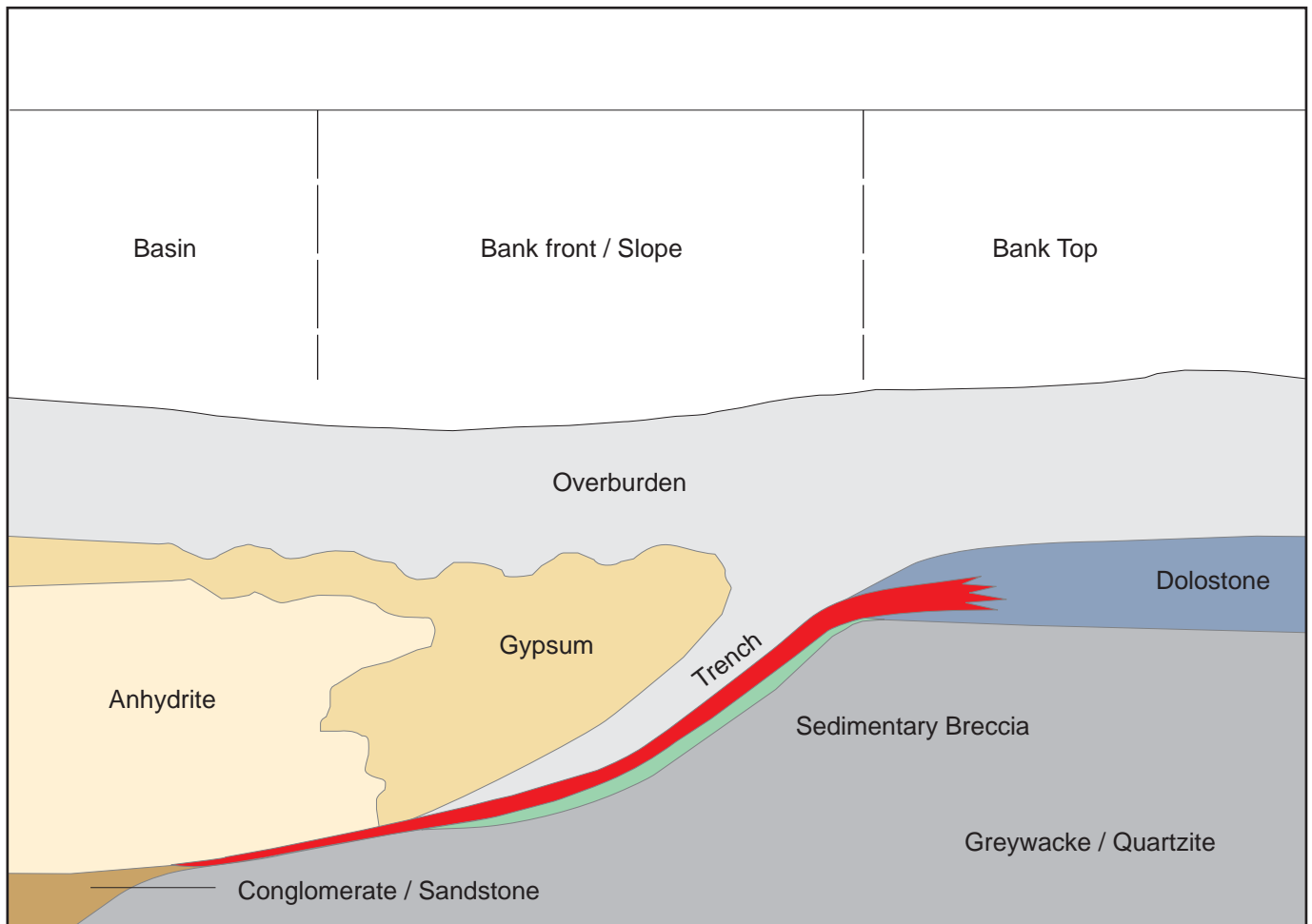


Figure 7-8

Stratigraphic Column for
Getty Deposit Area

Date: April 2011

mercator GEOLOGICAL SERVICES



Lead / Zinc mineralization in dolostone



Figure 7-9

Carbonate Bank Cross Section
Not to scale

Date: April 2011

mercator GEOLOGICAL SERVICES

7.3 Gays River Deposit Mineralization

Nesbitt Thomson Inc. (1991) describe the high-grade mineralisation as consisting of a massive sulphide zone in contact with the evaporite or Trench, ranging in thickness from 0.1 to 5.0 metres and locally containing up to 78 % Pb and 57 % Zn. On the footwall of the massive sulphide, there is a zone of disseminated material (>7% Zn equivalent¹) which, in places, is up to 12 metres in thickness. Locally disseminated mineralisation (>2% Zn equivalent) extends up to twenty metres into the footwall.

The Gays River Deposit is essentially controlled by a sinuous paleo coastline. The main part of the deposit is shallow (generally <150 m deep), has a dip length of approximately 100 m and a strike length following the paleo-coastline over a straight line distance of 2 km (Nesbitt Thomson Inc., 1991).

The mineralisation at the Gays River Deposit consists of massive and/or disseminated ore hosted predominantly by the carbonate rocks, with extensions down into the basal breccia unit. The massive mineralisation consists of fine-grained (<10-20 µm), Fe-poor, beige-coloured sphalerite and medium to coarse-grained, Ag-poor galena (<10-20 ppm Ag in galena concentrates) (Kontak, 1998; Savard and Kontak, 1998), is restricted to the carbonate-evaporite contact and is 1 to 3 metres in true thickness. Disseminated mineralisation, consisting of yellow to orange, millimetre-size euhedral sphalerite and millimetre-to-centimetre-size euhedral galena, fills in primary porosity in the dolomitized carbonates and walls of primary cavities (Kontak, 1998).

Sphalerite and galena constitute about 99.5% of metallic minerals. Other sulphide minerals are marcasite, pyrite and chalcopryite, while gangue minerals include calcite, dolomite, fluorite, barite and selenite (Patterson, 1993).

7.4 Getty Deposit Mineralization

The following is taken from section 8 (Mineralization) of Cullen et al (2011):

“Zinc and lead sulphide mineralization are found throughout the Getty carbonate bank, along with trace amounts of iron sulphide in isolated areas. Base metal sulphides are also present to a lesser extent in carbonate matrix of the underlying conglomerate/breccia unit and within calcite or micrite filled fractures and joints present in underlying Goldenville Formation greywackes. While not extensively reported to date, galena has also been documented locally at the Scotia Mine [Gays River] deposit in thin (<20cm thick) discordant, steeply dipping veins that generally trend north-south (B. Mitchell, personal communication, 2007).

“Drilling to date on the Getty Deposit has shown that massive to submassive high grade mineralization like that commonly present along steep bank front zones at Scotia Mine is not present to a significant degree at Getty (Bryant, 1975). However, a clear association of higher zinc and lead grades with dolostone intervals on the northeast and north slopes of the Getty bank is recognized and lower grades over thicker intervals occur within

¹ The parameters used to calculate “Zn equivalent” are unknown, but would have reflected the prices of zinc and lead at the time.



the carbonate sections at the top of the bank. Mineralization is more poorly developed along the southwest side of the bank.

“Sphalerite is the predominant base metal sulphide phase present and is typically honey yellow to buff or beige in colour and finely crystalline. Based on drill core observations, Bryant (1975) specified the following four modes of sphalerite occurrence within the deposit, with the first being the most common: (a) disseminated mineralization showing concentrations from trace to 10% or more, (b) semi-massive and massive mineralization as seams and replacements along bedding surfaces or laminae, (c) massive, porosity filling or surface coating mineralization in fossiliferous and vuggy carbonate, (d) mineralization associated with secondary calcite in small stringers and veinlets.

“Silver is a trace constituent of the Getty sulphide assemblage but is not present at levels of economic significance. This parallels the situation at adjacent Scotia Mine where Roy et. al. (2006) reported historic silver values in mill concentrates that were typically less than 40 parts per million.” (Cullen et al, 2011, section 8)



8. Deposit Type

The Gays River Deposit mineralization has long been considered a Mississippi Valley-type (“MVT”) lead-zinc deposit. Characteristics of sedimentary formations that host MVT lead-zinc mineralisation include shallow-water, shelf-type carbonate rocks with reefs around the peripheries of intracratonic basins, karst structures, limestone-dolomite interfaces and proximity to a major hydrocarbon-bearing basin. The archetypical MVTs occur in the United States in several famous districts surrounding the Michigan-Illinois Basin which also has significant hydrocarbon production. Each of the districts is enormous, with resource potential of 75 million to 750 million tonnes and individual deposits in the order of 1 to 100 million tonnes.

Other MVTs have been mined in the past in Canada (e.g. Pine Point in the Northwest Territories, Nanisivik mine in Nunavut, and Newfoundland Zinc) and in Ireland.

MVTs are thought to have formed when hot, basin-derived, oil field-type brines, formed at depths of more than 2 km, and migrated towards lower pressure areas around the basin periphery. Mineralisation precipitated from the brines when they encountered porous areas like reefs, karst breccias or sedimentary traps.

Sangster and others (1998) draw on their own and others’ evidence to conclude that all Windsor Group lead-zinc deposits are epigenetic relative to their enclosing strata, exhibiting both open-space filling and host-rock replacement. At the Gays River Deposit, textures (including fossils) have been preserved; representing volume-for-volume replacement of original limestones by dolomite, and the sulphides are, in turn, replacements and porosity fillings within the previously altered host rocks. Kontak (2002) feels that petroleum in fluid inclusions in the Gays River Deposit mineralisation suggest a role of hydrocarbons in the mineralising process, like many MVTs, but Sangster and others (1998) point to basement rocks underlying the Palaeozoic sedimentary rocks as the source of the mineralising fluids.

The temperatures of formation of the Gays River Deposit (and others in Nova Scotia) are higher than most North American MVTs, and compare more favourably with the clearly epigenetic MVTs of the Central Ireland Basin (Sangster and others, 1998). The Irish deposits also occur in Upper Paleozoic (Carboniferous) carbonate rocks, predominantly in shallow-water carbonates and a mudbank limestone (reef). The Irish deposits are also preferentially associated with east-northeast-trending faults which are thought to have acted as conduits for mineralising hydrothermal fluids; basement lineaments may also have controlled deposition. As with the Gays River Deposit, sphalerite and galena are the main sulphides; barite is also usually present (Exploration and Mining Division Ireland, 2004). Seven economic deposits have been mined or are currently in production in Ireland. The largest of these, the world-class Navan deposit, had total production and proven + probable reserves of 82.1 million tonnes containing about 10.6% Zn+Pb; its annual production is 2.5 million tonnes of ore. Other producers and former producers had resources between about 8 and 18 million tonnes and grades of 9-25% Zn+Pb (Exploration and Mining Division Ireland, 2004).



It is noteworthy that two major carbonate-hosted zinc-lead deposits discovered in Ireland since 1986 occur down-dip from areas where considerable exploration, including diamond drilling, had been carried out over the prior 20 years (Patterson, 1993). Similarly, the MVT deposits of the Viburnum trend in the U.S.A. were discovered at depths of 300 metres by understanding of the regional geology of the host rocks of the Old Lead Belt about 80 km away.

Cullen et al (2011) describe the Getty Deposit in section 7.2 of their report, quoted below in part:

“Genetic Model [original section: DEPOSIT TYPE (7.2)]

“The adjacent Scotia Mine deposit (Gays River Deposit) has been the subject of extensive academic and government research and reporting since its discovery in 1971. Much of this work was summarised by Roy et. al. (2006) and the deposit is considered an example of the Mississippi Valley Type (MVT) class of carbonate hosted, stratabound, base metal deposits. Prominent examples of the paleo-basement high deposit setting occur along the Viburnum Trend of Southeast Missouri, but are characterised in that area by dominance of lead mineralization over that of zinc (Sangster et. al., 1998; Akande and Zentilli, 1983; MacEachern and Hannon, 1974).

“Localization of base metals within the Getty bank complex is believed to have resulted from interaction between metal-bearing basinal fluids, potentially sourced in the Horton Group stratigraphic section or in basement sequences, and chemical reductants, possibly including hydrocarbon, that were present at sites of deposition within the bank. Kontak (1998, 2000) reported on fluid inclusion and other studies of ore from the adjacent Scotia Mine property and concluded that saline brines in the 100° C to ≤ 250° C temperature range were involved in the main mineralizing process and that these temperatures are higher than those typically seen in MVT districts. Héroux, et. al (1994) studied organic maturation and clay mineral crystallinity characteristics of Gays River Formation rocks of the Musquodoboit and Shubenacadie basins and identified a corridor of higher interpreted heat flow that occurs in part over the Gays River and Getty Deposit areas and is consistent with the higher fluid temperatures previously noted. It is clear that zinc and lead mineralization were superimposed on lithified and dolomitized host rocks (Akande and Zentilli, 1985; Kontak, 1998).” (Cullen et al, 2011)

9. Exploration History

The Gays River and Getty Deposits were explored more-or-less contemporaneously. Major drilling campaigns on both deposits first started in the mid-1970s. Esso Minerals was primarily involved with the Gays River Deposit while Getty Northeast Mines Limited was primarily involved with the Getty Deposit. During the 1980s, Seabright and Westminer carried out some drilling on the Gays River Deposit and during the late-2000's, ScoZinc chiefly drilled the Getty Deposit.

9.1 Gays River Deposit

Lead-zinc mineralisation at Gays River was first mentioned in records dating back to 1824. Knowledge of the occurrence may even go back to the early 1700's when French soldiers reportedly used the lead for making ammunition (MacEachern and Hannon, 1974). Other early references to Gays River lead were made in 1868 by J. W. Dawson in “Acadian Geology” and by H. Howe in “Mineralogy of Nova Scotia”.



The earliest recorded prospecting may have been trenching along the outcrops in 1873-1874. Additional trenching and pit sinking was carried out in 1928. Assessment records do not indicate any resumption of interest in the area until 1951. From the first reports of mineralisation in the area in the early 1800's, exploration activity up to 1950 had yielded best values of 3 % lead (Patterson, 1993).

1951

Maritime Barytes Limited acquired the property at Gays River and carried out a surface exploration program involving some trenching and sampling. Gays River Lead Mines subsequently became involved in the evaluation of the property and commenced a drill program to delineate the occurrences of lead and zinc. A total of 67 delineation drill holes were completed by mid-1952 and an additional seven holes were completed for exploration in the vicinity.

The drilling by Gays River Lead Mines Limited outlined four zones of mineralisation in an area about 400 metres by 900 metres. Over 800,000 tonnes of mineralised (galena, sphalerite, pyrite, marcasite and chalcopryrite) Windsor Group carbonate were defined overlying and flanking a northeast-trending anticlinal Meguma greywacke basement high. Grades for the four zones ranged from 1.10% to 3.50% combined lead plus zinc with an average of 2.32% combined lead plus zinc. Most, if not all, assays were from sludge samples.

1962

Gunnex Limited carried out extensive soil sampling in the Gays River area in 1962. Anomalies were encountered only over areas of previously known mineralisation where overburden was thin. An induced polarisation survey indicated only a very weak response over known mineralisation and did not add any new target areas. The lack of encouraging response on the periphery of the earlier defined mineralised area prompted Gunnex to forego any further exploration activity.

1968 – 1969

In 1968 and 1969 Penarroya Canada Limited completed extensive soil sampling and geological mapping in the Gays River and Meaghers Grant areas. Two diamond drill holes in the Meaghers Grant area intersected minor zinc mineralisation. No drilling was carried out in the Gays River area even though a number of soil anomalies had been identified. Most of the major anomalies corresponded with previously known mineralisation. Two new anomalous areas were, however, defined. They occur near Carroll's Corner and in the Black Brook area east of the Gays River and define a northeast trending geochemical high. The latter area is close to the northeast end of the presently defined Gays River Deposit itself.

1971

Texasgulf Inc. drilled four diamond drill holes in the Gays River area in 1971. One hole adjacent to a Gays River Lead Mines drill hole confirmed significant mineralisation in the carbonates. The remaining holes tested one soil anomaly southeast of Gays River and two areas northwest of Gays River. No



encouraging mineralisation or carbonate build-ups were intersected in the last three holes and work was terminated.

1972 - 1984

In 1972 personnel of Cuvier Mines Limited (“Cuvier”) prospected the Gays River area and located significant mineralised float material to the south of the old occurrence (MacEachern and Hannon, 1974) and subsequently acquired the ground. Cuvier also outlined geophysical and geochemical anomalies. In September of 1972 Cuvier optioned the property to Imperial Oil Enterprises (“Esso”) with Esso holding a 60% interest and acting as the operator. Cuvier formed a joint venture with Preussag Canada Ltd. (“Preussag”) to finance Cuvier’s 40 % interest in the property.

Both Cuvier and Esso were of the opinion that the area had the proper geological setting for a Mississippi Valley-type deposit. Esso recognised the possible existence of a reef complex trending north-easterly from the old Gays River drilling site. The source of the mineralised boulders had not been located and a combination of deep glacial till and lack of outcrop would necessitate fence-type drilling in geologically favourable areas for the purpose of obtaining geological information as well as locating any mineralised areas.

A total of 20 holes were drilled prior to drilling the discovery hole 2.5 kilometres northeast of the original showing along the postulated reef trend. The discovery hole intersected 3.35 metres averaging 7 % zinc (MacEachern and Hannon, 1974).

From October 1972 to August 1974, Esso/Cuvier drilled off the deposit and identified 12,000,000 tons averaging 7 % Zn + Pb (Patterson, 1993) over an area of approximately 4 kilometres by 220 metres at depths ranging from 20 to 200 metres (450 surface core holes)².

The initial mine development by Esso began with developing the exploration decline in 1976 across the central portion of the mineralised zone to verify mining conditions, the grade and continuity of the mineralisation and to provide bulk samples for metallurgical testing. The decline was 760 metres in length but by mid-1979 some 1,800 metres of drifting and 744 metres of underground development had been completed. The deepest workings were at a vertical depth of 100 metres. In December of 1977 Esso purchased Cuvier’s and Preussag’s interests in the property and formed Canada Wide Mines to develop and mine the deposit.

During the next two years various feasibility studies were carried out. Recoverable proven plus probable reserves were then estimated at 4.7 million tonnes at 2.8% Pb and 4.2% Zn (WMC, 1995). Esso commenced with the construction of the mill and other facilities in August of 1977. The 1,350 tonne processing plant was commissioned in October of 1979 and the mine was further developed to support a 1,350 tonne per day operation.

² A summary table of all known drilling at the Gays River Deposit by all exploration companies over the years is included as Table 10-1. A map depicting the location of the surface holes is included as Figure 7-3.



From 1978 until 1981, Esso operated the mine and targeted the lower grade mineralisation using a trackless, lower cost, bulk room and pillar mining method approach. The higher grade mineralisation near the carbonate contact was not part of the mine plan. Operations continued until August 1981 when production was suspended except for an underhand cut and fill technique test stope. Mining conditions exacerbated by bad ground conditions and excessive water inflow caused the operation to be suspended. During the operation, a total of 553,688 tonnes of mineralised material averaging 1.36% Pb and 2.12% Zn were produced and run through the mill – 272,000 tonnes of waste were also removed. Throughout this period efforts to achieve the full production rate, as well as efforts to mine areas of higher grade mineralisation were complicated by the combination of the complex geological setting and the severe hydrological problems.

The plant was shut down in 1982 as a result of operating losses due to lower than expected grades, higher than expected operating costs, the difficult water problems and low metal prices.

Seabright Resources Inc. acquired the mine and mill in 1984 but despite a favourable feasibility study did not reactivate the mine due to depressed metal prices at the time.

1985 - 1987

Seabright's primary intention was the usage of the mill facility to process gold ore from their outlying properties, and a secondary intent to later re-open the Gays River mine (WMC, 1995). At the time, Seabright was mining (bulk sampling) gold-bearing quartz veins from four small operations; Beaver Dam, Forest Hill, Caribou and Moose River, all located within the Meguma Group (Cambro-Ordovician).

The milling facility was converted for gold processing. The mine was not re-opened at that time by Seabright as a sharp drop in zinc prices rendered the underground mining operation uneconomic.

1987 - 1991

In 1988 Westminer Canada Limited ("WMC") purchased Seabright Resources. A review of the deposit, including the drilling of 89 surface core holes, led WMC to a positive production decision based on a reinterpretation of the geology and mining method. They began dewatering the underground workings in early 1989. Following the success of the mine dewatering and a test mining period to assess the suitability of the proposed narrow vein cut and fill mining method to extract the high grade ore zones, the mine was placed back into production. It reached commercial production rates in March 1990 (WMC, 1995) at a rate of 800 tonnes per day.

WMC's initial approach was to drive small 2.5x2.5 metre cut and fill stopes adjacent to the "Trench" material. Dry waste rock backfill was placed after each lift. In most areas, the method allowed the high grade ore on the carbonate-Trench contact to be extracted. In one area WMC successfully tested the room and pillar mining method (Nesbitt Thomson, 1991). A total of 187,010 tonnes of ore at an average grade of 3.5% Pb and 7.47% Zn were mined during WMC's involvement on the property.

Hydrological difficulties causing poor ground conditions continued to play a factor in the mine operation. In May 1991, rising water levels due to the spring runoff forced the cessation of mining in a



number of stopes and WMC decided to place the mine in project mode. Following the suspension of production in 1991, WMC carried out an extensive program to understand the mine hydrology and concluded that the groundwater could be successfully managed so that mining operations would no longer be adversely affected.

WMC has identified the Eastern zone of the deposit as an area for possible early development because ground conditions are substantially better due to the hanging wall being generally gypsum/anhydrite rather than Trench. The grade is also higher relative to other sections of the deposit. The Eastern area appears promising for additional resources.

WMC thoroughly assessed the property in 1991 and prepared a revised mine plan to resume mine production. The revised plan provided for more mechanisation of the mining method, institution of paste backfill, increased groundwater drainage through screened drainage wells and a revised pumping system. However, the operation was WMC's only lead and zinc producer, was not associated with any downstream smelting facilities and was a smaller operation relative to other corporate assets. For these reasons, the property did not fit within WMC's corporate strategy to focus on large scale operations and for this reason the property was sold to Savage Resources.

1996 - 1999

After acquiring the Scotia Mine in 1996, Savage conducted two exploration drilling programs to fill in the gaps from prior drilling and improve the mineral resource estimate on the mine property. In December 1996, 36 diamond drill holes, totalling 1,325 metres were drilled in the central mine area adjacent to the underground mine entrance to test the continuity of the disseminated low grade mineralisation in the back reef (known as the sand pit area –an area of commercial aggregate). In April and May 1997, an additional 30 diamond drill holes totalling 2,339 metres were drilled in the Northeast zone (as identified by WMC). Both programs were successful and confirmed the presence of low grade (in the central area) and high grade mineralisation (in the Northeast zone). According to Cullen (1997), the results of the drilling (based on a 7% Zn-equivalent cut-off grade) enhanced some areas of the Northeast zone and diminished other areas. He also states that a complete revision of some of this area (with additional drilling evaluation) be completed prior to any production decision.

Savage dewatered the underground workings from June to August 1997 and started to rehabilitate the mine before a decision was made to extract the ore in the main, central zone using open pit methods. An open pit design was prepared using appropriate technical criteria for ore mining and waste stripping (Gemcom and Whittle 3-D Optimisation). The preliminary mine plan assumed the processing of 1,350 tonnes per day with the ore coming from a combination of underground (1,000 tonnes per day) and open pit operations (350 tonnes per day).

In early 1999 ownership of Savage was transferred to the Australian mining company Pasminco Canada Limited ("Pasminco").

2001-2003



Regal Mines Limited (Regal Mines) purchased Pasminco Resources Canada Company (Pasminco Resources) and its assets in February 2002. Regal was owned 50 % by OntZinc Corporation (OntZinc) and 50 % by Regal Consolidated Ventures Limited (Regal Consolidated). As part of the sale, Pasminco Canada Holdings Inc. (Pasminco Holdings) retained a 2 % net smelter return (NSR) royalty on future production. OntZinc acquired Regal Consolidated's 50 % interest in December 2002 to own 100 % of Pasminco Resources. Savage Resources Limited is the successor of Pasminco Holdings and currently holds the 2 % royalty. Pasminco Resources was later renamed ScoZinc Limited (ScoZinc). The mining and environmental permits are still in force and are held by ScoZinc along with all the Scotia Mine assets.

2004 – 2006

Exploration activity by ScoZinc included diamond core drilling, a hydraulic mining test, prospecting of the general area, geological compilation of past relevant data and two lines (ten samples) of Mobile Metal Ion Geochemistry (MMI) across areas of known mineralisation covered by thick accumulations of glacial till. The results of the MMI survey were inconclusive.

A hydraulic mining test was performed to determine whether such a method might be useful to uncover the glacial overburden and some of the Trench material in the area of the low grade, potentially surface mineable resources. This was primarily performed near the area of the sand pit next to the original portal. Generally, the test showed that it is possible to mine the sandy overburden in the current pit bottom using dredging methods.

Six holes were drilled through the "Trench" unit using a soil drilling rig. The Trench is a geological unit that occurs between the gypsum and dolomite units. The purpose of this program was to characterize the soils that make up the Trench. Four holes were drilled in the Central Zone near the current pit. The two other holes were drilled near the highway (Hwy 224) in the East Zone.

The soil holes in the Central Zone around the current pit consisted mainly of dark brown clay with fine-to-medium grained sand. Rock fragments, rounded-to-angular, were occasionally noted. The soil holes in the East Zone near the river and highway consisted of fine-to-medium grained sand with minor clay. This observation may be an important factor during future mining. Permeability underneath the river is expected to be high to a depth of at least 20-30 metres. This will adversely affect slope stability should the walls of an open pit approach the river.

Twenty five diamond core drill holes (1,845.3 metres) were completed by ScoZinc on the Scotia Mine property. Seventeen of these holes were meant to further define the lead and zinc mineralisation contained within the reef carbonate while the remaining eight holes were meant to test the gypsum potential immediately overlying the mineralised zones.

Four holes (477 metres) were completed in the north-eastern portion of the deposit while thirteen holes (1,172 metres) were completed in the central area of possible lower grade open pit mineralisation. The program was moderately successful in the central area with zinc values consistently in the 2 to 4% range over 1 to 2 metres (Table 10-1). The drilling program in the north-eastern zone proved less successful with mineralised intervals being quite thin.



Four holes (673.3 metres) were drilled in the northeast zone and an additional four in the central area to test the overlying gypsum in the hanging wall of the base metal mineralisation. The holes were drilled to obtain core samples of the gypsum deposits that immediately overlie the mineralised zones. The purpose of the samples was to carry out early tests of gypsum consistency and quality as well as to confirm preliminary estimates of the probable size of the gypsum resource adjacent to the mineralised trend.

In most of the diamond drill holes, a gypsum “cap,” 20-30 metres thick was encountered. Grade was highest (greater than 90 % gypsum) near the bedrock surface and decreased with depth. At 20-30 metres depth, gypsum grade dropped below 80 %, transitioning to anhydrite over an interval of approximately ten metres. Because the gypsum was quite hard, it was difficult to visually determine the contact between gypsum and anhydrite.



2007-2008

ScoZinc began surface mining the deposit in 2007 and carried on into 2008. Due to a drastic fall in metal prices, ScoZinc placed the mine on care and maintenance status.

In 2008, ScoZinc drilled 17 diamond drill holes through the Northeast Zone (refer to Section 10).

2011

Selwyn drilled a further 39 drill holes totalling 4,950.50 metres between August 11th and October 11th, 2011 (see section 10.2.2).

9.2 Getty Deposit

A description of mineral exploration work that was carried out on the Getty Deposit was given in Cullen *et al* (2011):

“... with the exception of regional soil geochemical surveying by Penarroya Ltd. in 1964 (Rabinovitch, 1967) that did not identify the Getty Deposit, no substantial mineral exploration efforts appear to have been carried out on the current Getty property prior to its acquisition by Getty in 1972.

“Exploration in the current deposit area was initiated in 1972 by Getty and joint venture partner Skelly Mining Corporation under terms of an option - purchase agreement with Millmore-Rogers Syndicate.

“Discovery of the Getty zinc-lead deposit is attributed to drill hole GGR-12 which was completed in 1972 and intersected 4.63 meters of dolomite grading 15.48% combined zinc-lead, beginning at a down hole depth of 93.11 meters. Subsequent completion of over 200 holes by Getty and Imperial on and around the property served to delineate a nearly continuous mineralized zone measuring approximately 1300 meters in length and up to 200 meters in width (Comeau, 1973, 1974; Comeau and Everett, 1975).

“Mercator completed a National Instrument 43-101 compliant Inferred Mineral Resource Estimate for Acadian on the Getty Deposit with an effective date of December 12, 2007. This initial estimate was subsequently updated in a new National Instrument 43-101 compliant resource in 2008 (Cullen et al., 2008) after a total of 10,620 meters of drilling in 138 diamond drill holes had been completed by Acadian on the Getty property under the direct supervision of Mercator staff. The information used to complete these estimates was compiled from the 2007-2008 drilling by Acadian plus historical drilling undertaken prior to Acadian’s involvement in the property.

“Acadian initiated a major diamond drilling program on the Getty property in July 2007, and Mercator provided all site supervision, logging, sampling and quality control/quality assurance services to Acadian for this program, which consisted of 138 diamond drill holes. The purpose of the drilling was to upgrade geological confidence in the deposit, provide a basis for the new mineral resource estimate and to provide a higher category classification to the mineral resource estimate (Cullen et al, 2008).”



10. Drilling

10.1 Sample Length – True Width Relationship

The sample intervals do not necessarily represent true widths. The orientation of the deposit is variable, meaning the true width of any given intercept must be calculated with reference to the geological model. The orientation of the deposit is well known and is described in Section 7.2.

10.2 Gays River Deposit

To date, 1,419 diamond core drill holes have been drilled on the Gays River Deposit (refer to Figure 7-3 and Table 10-1). The majority were drilled to determine the characteristics of the zinc- and lead-mineralised dolomite.

ScoZinc drilled 17 holes totalling 1,613 metres through the Northeast Zone in 2008. These collars, as well as the collars from ScoZinc's 2004 program, are shown in magenta in Figure 7-3.

Selwyn drilled a further 39 drill holes totalling 4,950.50 metres between August 11th and October 11th, 2011 (see section 10.2.2).

Most of the 914 surface holes were drilled vertically. The azimuth and dip of the 467 holes drilled from the underground workings was variable.

Generally, holes were drilled so as to fully penetrate the dolomite reef and continue on until no more mineralisation was found. This resulted in most drill holes being drilled a few metres beyond the dolomite reef.

A compilation of core logs and sample assays from the 2008 program is given in Appendix 5. Historical logs are provided in the previous technical report for the property (MineTech, 2006).



Table 10-1: Historical Surface and Underground Diamond Drilling Activity³.

From	To	Holes with Info ⁴	Metres	Time Frame	Company
<u>Surface Holes</u>					
1	72	70	2,951.7	1951-1952	Gays River Lead Mines
73	740	646	59,123.6	1972-1982	Imperial Oil/Canada Wide Mines
741	900	89	7,596.8	1985-1995	Seabright, then Westminer (undifferentiated)
901	966	66	3,664.0	1997	Savage/Pasminco
967	991	25	1,864.3	2004	ScoZinc
1130-08	1146-08	17	1,613.5	2008	ScoZinc
MNZ-001	MNZ-039	<u>39</u>	<u>4950.5</u>	2011	Selwyn
Subtotal		952	81,764.4		
<u>Underground Holes</u>					
1	341	318	7,460.7	1979-1982	Imperial Oil/Canada Wide Mines
342	651	<u>149</u>	<u>4,434.9</u>	1985-1995	Seabright, then Westminer (undifferentiated)
Subtotal		467	11,895.6		
Total		1,419	93,660		

³ Data supplied by ScoZinc.

⁴ The electronic database does not contain information for underground holes 342-499.

10.2.1 Sample Statistics

Sample statistics were calculated for sampling within the carbonate. All samples for which at least one metal (zinc or lead) was assayed were considered. Most samples were assayed for both zinc and lead. Depending on the amount of visible mineral, some samples were assayed for only one metal. The total sample count was 8,022.

The samples from the 2011 drill program were not included in the sample statistics calculations.

The mean sample interval length was 1.44 metres with a standard deviation of 0.82 metres (Table 10-2). Skewness is a measure of symmetry, or more precisely, the lack of symmetry. The positive value for skewness indicates that the data is skewed right, meaning that the right tail is heavier than the left tail. This is also shown in the histogram in Table 10-3. The aggregate sample length was 11,522 metres.

The mean zinc grade was 3.55 %. From the histogram, we can see that zinc assays are approximately lognormal. The range in zinc content was zero to 62.10 %. Theoretically, the maximum possible zinc assay is 67.10 % - the zinc content of pure sphalerite.

The mean lead grade was 1.91 %. From the histogram, we can see that lead assays are also approximately lognormal. The range in lead content was zero to 79.50 %. Theoretically, the maximum possible lead assay is 86.6 % - the lead content of pure galena.

Sample statistics are further examined in Section 15.

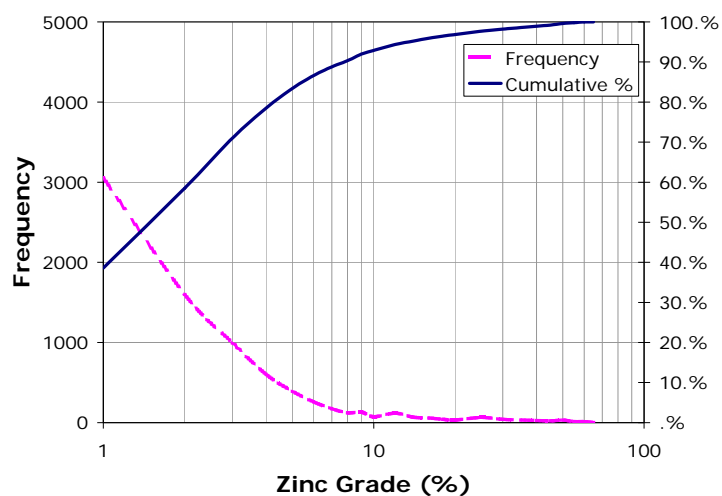
Table 10-2: Descriptive statistics.

Descriptive Statistic	Zinc Grade (%)	Lead Grade (%)
Mean	3.55	1.91
Standard Error	0.08	0.07
Median	1.52	0.12
Mode	0.02	0.01
Standard Deviation	6.79	6.24
Sample Variance	46.17	38.99
Kurtosis	25.17	52.86
Skewness	4.60	6.56
Range	62.10	79.50
Minimum	0.00	0.00
Maximum	62.10	79.50
Sum	n/a	n/a
Count	8,022	8,022

Table 10-3: Sample histograms.

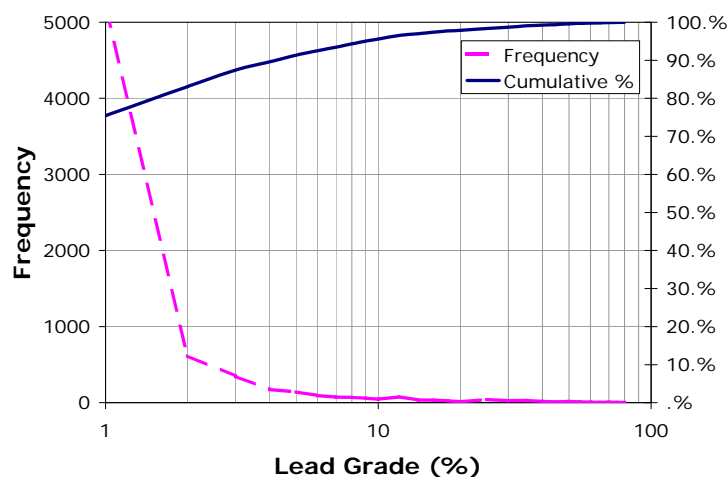
Zinc Histogram

Range	Frequency	Cumulative %
0	39	.49%
0-1	3056	38.58%
1-2	1599	58.51%
2-3	999	70.97%
3-4	603	78.48%
4-5	393	83.38%
5-6	259	86.61%
6-7	174	88.78%
7-8	123	90.31%
8-9	132	91.96%
9-10	74	92.88%
10-12	118	94.35%
12-14	68	95.20%
14-16	58	95.92%
16-18	42	96.45%
18-20	33	96.86%
20-25	65	97.67%
25-30	41	98.18%
30-35	33	98.59%
35-40	27	98.93%
40-45	23	99.21%
45-50	32	99.61%
50-55	15	99.80%
55-60	14	99.98%
60-65	2	100.00%
65+	0	100.00%



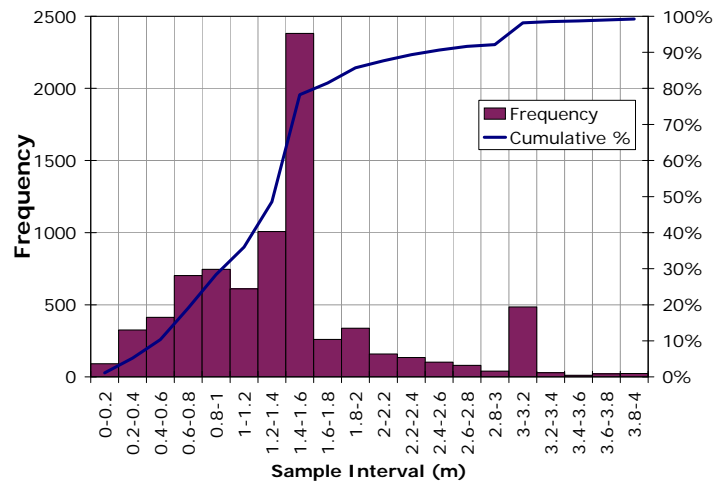
Lead Histogram

Range	Frequency	Cumulative %
0	851	10.61%
0-1	5200	75.43%
1-2	616	83.11%
2-3	347	87.43%
3-4	173	89.59%
4-5	141	91.35%
5-6	94	92.52%
6-7	73	93.43%
7-8	70	94.30%
8-9	59	95.04%
9-10	45	95.60%
10-12	77	96.56%
12-14	34	96.98%
14-16	33	97.39%
16-18	25	97.71%
18-20	12	97.86%
20-25	41	98.37%
25-30	26	98.69%
30-35	29	99.05%
35-40	17	99.26%
40-45	10	99.39%
45-50	15	99.58%
50-55	10	99.70%
55-60	7	99.79%
60-65	3	99.83%
65-70	7	99.91%
70-75	3	99.95%
75-80	4	100.00%
80+	0	100.00%



Sample Interval Histogram

Range	Frequency	Cumulative %
0	0	.00%
0-0.2	91	1.13%
0.2-0.4	326	5.20%
0.4-0.6	413	10.35%
0.6-0.8	702	19.10%
0.8-1	746	28.40%
1-1.2	611	36.01%
1.2-1.4	1007	48.57%
1.4-1.6	2381	78.25%
1.6-1.8	260	81.49%
1.8-2	338	85.70%
2-2.2	159	87.68%
2.2-2.4	134	89.35%
2.4-2.6	103	90.64%
2.6-2.8	80	91.64%
2.8-3	40	92.13%
3-3.2	485	98.18%
3.2-3.4	29	98.54%
3.4-3.6	11	98.68%
3.6-3.8	21	98.94%
3.8-4	23	99.23%
4+	62	100.00%



10.2.2 Gays River Drilling, 2011

10.2.2.1 Type and Extent of Drilling

Selwyn drilled a further 39 drill holes totalling 4,950.50 metres between August 11th and October 11th, 2011. Of the 39 holes drilled, 34 were drilled on Mineral Lease 10-1 and five were drilled on Exploration License 6959. Three of the 39 holes were drilled to the north-east of the existing pit, while the remaining 36 were drilled in a broad area to the southwest of the pit. The deepest hole was 195 metres deep, the shallowest was 43 metres, and the mean depth was 128 metres. Drilling was carried out by Logan Drilling Group of Stewiacke, Nova Scotia.

Drill holes were planned to target zinc-lead sulphide mineralization that possessed the potential to expand upon the current mineral resource or provide greater definition. Targets were primarily chosen to the southwest of the current mine pit, along the margins of, and clustered toward the southwest extent of the Main Zone of the deposit.

10.2.2.2 Drilling Procedures

Once targets were determined, drill collar locations were calculated using a projected drill hole inclination that would intersect the Gays River Formation carbonate bank front at an angle closest to perpendicular. Targets were fine-tuned based on ground factors, including terrain, proximity to watercourses, and property boundaries.

Drilling was carried out under the direction of ScoZinc and Selwyn Exploration staff. A skid-mounted Longyear-38 diamond drill was used to complete all drill holes, and was dragged onto each drill pad



with the assistance of a small John Deer bulldozer. In addition to the drill, a covered water pump and drill rod sloop were also dragged to the area by bulldozer.

All recovered core was boxed, lidded and returned to the ScoZinc core shack where it was logged and sampled by ScoZinc exploration staff.

All drill core was logged, cut and sampled by ScoZinc and Selwyn staff at the ScoZinc core shack, ScoZinc mine complex. Both geotechnical and geological data was collected from all drill core. Geotechnical data collected included Total Core Recovery, RQD, strength and weathering data, “Q System” discontinuity orientation data, and RMR system data. Geological data collected included stratigraphic contacts, as well as all lithological, mineralogical, and structural observations of note.

10.2.2.3 Sampling

Thirty eight drill holes intersected the Gays River Formation (“GRFM”). Silver and base metal analyses were conducted by a 23-element, four-acid digestion, ore-grade ICP-AES technique. Drill hole MNZ-005 was not sampled, as it did not intersect GRFM.

A total of 722 samples were submitted to Acme Analytical Laboratories in Vancouver (Acme). Of those 722 samples, 559 samples (77.4%) were actual core samples and 163 samples (22.6%) were QA/QC samples (see section 11.4).

10.2.2.4 Summary and Interpretation of Results

All but one drill hole (MNZ-005) successfully intersected the mineralized Gays River Formation, although thicknesses and grades were somewhat variable.

10.2.2.5 Drill Hole Collar Data

Hole ID	UTM Easting	UTM Northing	Elev. (m)	Az (true)	Dip	EOH (m)
MNZ-001	472840.32	4986616.85	23.80	154.0	-75.0	165.1
MNZ-002	472817.22	4986556.71	32.51	155.0	-75.0	194.9
MNZ-003	472745.12	4986528.99	37.54	152.0	-65.0	161.0
MNZ-004	472705.01	4986537.07	39.28	155.0	-60.0	152.0
MNZ-005	472909.24	4986221.07	44.15	160.0	-87.0	56.0
MNZ-006	472581.14	4986477.00	45.45	158.0	-70.0	176.0
MNZ-007	472714.91	4986245.28	46.25	158.0	-80.0	63.0
MNZ-008	472548.94	4986453.18	46.78	143.0	-70.0	194.0
MNZ-009	472577.79	4986408.98	45.01	155.0	-70.0	167.0
MNZ-010	472668.51	4986234.87	47.74	152.0	-80.0	92.3
MNZ-011	472467.67	4986438.44	42.80	157.0	-70.0	179.0
MNZ-012	472492.13	4986422.43	43.95	150.0	-50.0	165.0
MNZ-013	472593.28	4986232.83	51.07	158.0	-75.0	80.0
MNZ-014	472460.65	4986399.30	45.53	152.0	-60.0	147.5
MNZ-015	472403.74	4986408.57	45.69	154.0	-65.0	143.0
MNZ-016	472334.97	4986387.29	44.59	146.0	-65.0	161.8
MNZ-017	472317.75	4986327.62	46.19	140.0	-75.0	187.0



Hole ID	UTM Easting	UTM Northing	Elev. (m)	Az (true)	Dip	EOH (m)
MNZ-018	472435.54	4986153.22	51.11	150.0	-62.0	101.0
MNZ-019	472248.00	4986285.53	42.00	160.0	-81.0	164.0
MNZ-020	472347.33	4986078.11	52.03	151.0	-80.0	65.0
MNZ-021	472173.21	4986281.68	37.36	152.0	-66.0	155.0
MNZ-022	472077.24	4986272.60	20.88	150.0	-70.0	135.0
MNZ-023	472207.90	4986094.90	46.49	148.0	-80.0	74.0
MNZ-024	472238.97	4986038.08	47.46	134.0	-87.0	68.0
MNZ-025	472310.88	4985911.89	46.89	150.0	-87.0	43.2
MNZ-026	472087.89	4986245.72	26.58	150.0	-52.0	136.0
MNZ-027	472135.85	4986130.58	40.68	150.0	-60.0	84.0
MNZ-028	472044.77	4986205.24	20.97	338.0	-79.0	140.0
MNZ-029	472047.95	4986148.28	27.68	152.0	-51.0	95.0
MNZ-030	472099.70	4986061.13	38.52	163.0	-86.0	74.4
MNZ-031	472044.76	4986202.24	20.97	237.0	-65.0	136.0
MNZ-032	472125.32	4985935.07	53.32	323.0	-79.0	116.0
MNZ-033	472078.81	4985964.98	48.72	217.0	-76.0	143.0
MNZ-034	471955.78	4986084.56	31.66	150.0	-83.0	106.0
MNZ-035	471937.90	4986048.18	33.99	147.0	-65.0	122.7
MNZ-036	471954.85	4986081.72	31.36	276.0	-70.0	164.0
MNZ-037	473401.79	4986905.02	18.47	145.0	-86.0	191.0
MNZ-038	473488.02	4986897.65	19.42	126.0	-64.0	133.9
MNZ-039	473667.10	4986733.54	30.92	170.0	-87.0	53.0

10.3 Getty Deposit

Drilling on the Getty Deposit was described in Cullen *et al* (2011).

11. Sample Preparation, Analysis and Security

11.1 Getty Deposit (pre-2008)

Sample preparation, analysis and security measures for the Getty Deposit were described in Cullen *et al* (2011). In part, Cullen *et al* remark that:

“Reports documenting the Getty and Esso drilling programs in the Getty deposit area do not provide detailed descriptions of sample preparation methodologies, analytical procedures or security considerations. However, both Getty and Esso were major, reputable exploration companies carrying out exploration programs in various settings at that time. More specifically, Esso was also in the process of defining reserves at the adjacent Gays River mine at the time and appears to have employed the same operating protocols for Getty drilling as were applied at the adjacent development property. Mercator is of the opinion that, while not specifically detailed in historic reporting, procedures employed by both Getty and Esso for sample preparation, record keeping, chemical analysis, and security, would have met industry standards of the day. This assertion is supported by review of original drill logs and supporting data, physical review of archived core and through recognition that both companies completed resource estimate and preliminary development assessments based on the same historic drilling results.” (Cullen *et al*, 2011, section 12.1)



11.2 Gays River Deposit (pre-2008)

There is no written record regarding the sampling method employed during the early exploration years (i.e.: pre-1970's) in the Scotia Mine area.

The exploration approach and sample collection procedures employed by the more recent exploration efforts reflects thorough sampling methodology and documentation procedures. Exploration activity was carried out in a professional manner by a team of local, experienced geologists and technicians supervised by Esso's, Seabright's, Westminer's, Savage's, and ScoZinc's professional staff. The work has been well organised throughout their exploration efforts and more recently computer facilities were available to generate reports and prepare maps, etc. from the vast database.

The assay data and other parameters for all core drilling programs and underground work were entered into a computerised database using Microsoft Excel and resource estimate generating software programs. The quality control and validation of the coded data included steps to ensure that the assay intervals and the sample locations were correct. To ensure accuracy of the database, all assays were coded and the data entry system automatically checked for interval overlaps. The coded assays were also printed and a visual inspection was completed for comparison with the original (logged) data sheets. The sample locations were validated with appropriate plotting and visual checks against the original sections and plans.

Core drilling was carried out using North American service providers with the collection of BQ and NQ core. The portions of core to be analysed were either split or sawed into two sections with one half submitted for analysis, the other half remaining in the core tray. All sampling procedures were carried out on site.

Sampled core lengths were determined visually. All drill holes were logged, noting lithology, structure, alteration and mineralisation. Core recovery was generally greater than 90 %. Early in the exploration program, the samples were sent via air cargo to several analytical laboratories; however, after the construction of the mill facility, the internal laboratory was used.

Core samples from Savage's 1997 drilling program and ScoZinc's 2004 drilling program were submitted to the Minerals Engineering Centre of Dalhousie University (formerly Technical University of Nova Scotia) in Halifax. The laboratory is independent of Savage, ScoZinc and Selwyn. The laboratory is not International Standard Organisation (ISO) accredited.

According to the Minerals Engineering Centre; the core sample preparation procedure was as follows. The samples were dried, and then crushed in one or more jaw crushers, depending on the original size, to under one-quarter inch. The sample was then split in a Jones riffle to a mass of 150-200 grams. The sample was then pulverised using a ring and puck pulveriser to 80 % minus 200 mesh (75 microns). Then it was put into either a bag or a vial. Rejects were kept for six months.

The sample analysis procedure consisted of the following: one gram sample lots were digested with hydrochloric-nitric-hydrofluoric-perchloric acids. Elements were determined by Flame Atomic



Absorption with detection limit of 1 ppm. Arsenic was determined by atomic absorption/hydride generation method.

Reference standards from CANMET were routinely used as internal checks on the accuracy of the analysis.

11.3 Gays River & Getty Deposits (2008)

11.3.1 Site Procedures

Cullen (2011) provided the following description for the sampling methods that were used for the 2008 drilling program (Gays River and Getty deposits).

Sample Security and Chain of Custody

In accordance with the sample protocol established by Mercator for the 2008 drilling program, all drill core was delivered from the drill site to the secure and private core logging facility at Acadian's Scotia Mine by either Logan Drilling Limited staff or Mercator field staff. Drill core logging was carried out by a Mercator geologist who also marked core for sampling and supervised core splitting by a technician using a rock saw. Sample tag numbers from a three tag sample book system were used for the program, with one tag showing corresponding down hole sample interval information placed in the sampled core boxes at appropriate locations, one tag lacking down hole interval information placed in the core sample bag for shipment to the laboratory, and the third tag with sample interval information retained in the master sample book for future reference and database entry purposes. After sampling, core boxes were closed and placed in storage at the Scotia Mine site. Sealed sample bags were placed in an ordered sequence prior to insertion of quality control samples, preparation of sample shipment documentation, checking, and placement in plastic buckets for shipment by commercial courier to Eastern Analytical Limited ("Eastern"), a recognized commercial laboratory located in Springdale Newfoundland. A check pulp sample split was prepared at Eastern for every 25th submitted sample and these were labelled, placed in a sealed envelope and returned to Mercator. After insertion of certified standard and blank samples, all check samples were sent to ALS Chemex in Sudbury, ON for independent analysis of zinc and lead levels. All other prepared pulps and coarse reject material was stored at Eastern until the end of the program, at which time they were shipped back to Scotia Mine for secure archival storage.

11.3.2 Laboratory Procedures

Cullen (2011) provided the following description for the sampling methods that were used for the 2008 drilling program (Gays River and Getty deposits).

Core Sample Preparation

Core samples received by Eastern were organized and labelled and then placed in drying ovens until completely dry. Dried samples were crushed in a Rhino Jaw Crusher to consist of approximately 75% minus 10 Mesh material. The crushed sample was riffle split until 250 to 300 grams of material was separated and the remainder of the sample was bagged and stored as coarse reject. The 250 – 300 gram split was pulverized using a ring mill to consist of approximately 98% minus 150 Mesh material. All samples underwent ICP analysis, for which a 0.50g portion of the pulverized material was required. Those samples containing greater than 2200 ppm of zinc or lead were then processed using ore grade analysis for which 0.20g of pulverized material was required. Laboratory



sample preparation equipment was thoroughly cleaned between samples in accordance with standard laboratory practise.

Check sample splits of pulverised core were submitted to the ALS Chemex laboratory facility in Sudbury, Ontario as part of the project quality control and assurance protocol. This material was prepared in approximately 100 gram bagged splits by Eastern and returned to Mercator for subsequent submission to ALS Chemex. Since the received split material had already been pulverised, further preparation was limited to homogenization and splitting of a 0.4g portion for subsequent analysis.

Core Sample Analysis

Eastern Analytical procedures outlined below pertain to all core samples from the 2008 drill program.

ICP Analysis: A 0.50 gram sample is digested with 2ml HNO₃ in a 95 °C water bath for ½ hour, after which 1ml HCL is added and the sample is returned to the water bath for an additional ½ hour. After cooling, samples are diluted to 10ml with deionized water, stirred and let stand for 1 hour to allow precipitate to settle.

For ore grade analysis base metals (lead, zinc, copper), a 0.20g sample is digested in a beaker with 10ml of nitric acid and 5ml of hydrochloric acid for 45 minutes. Samples are then transferred to 100ml volumetric flasks and analyzed on the Atomic Absorption Spectro-Photometer (AA). The lower detection limit is 0.01% and the upper detection limit is >2200 ppm lead or zinc.

For silver, a 1000mg sample is digested in a 500ml beaker with 10ml of hydrochloric acid and 10ml of nitric acid with the cover left on for 1 hour. Covers are then removed and the liquid is allowed to evaporate leaving a moist paste. 25ml of hydrochloric acid and 25ml of deionised water are then added and the solution is gently heated and swirled to dissolve the solids. The cooled material is transferred to 100ml volumetric flask and is analyzed using AA. The lower detection limit is 0.01oz/t of silver with no upper detection limit.

A prepared sample is digested in 75% aqua regia for 120 minutes. After cooling, the resulting solution is diluted to volume (100 ml) with de-ionized water, mixed and then analyzed by inductively coupled plasma - atomic emission spectrometry or by atomic absorption spectrometry.

11.4 Gays River Deposit (2011)

11.4.1 Site Procedures

All drill core was logged, cut and sampled by ScoZinc and Selwyn staff at the ScoZinc core shack, ScoZinc mine complex. Sampling of mineralized core from the Gays River Formation and adjacent units involved breaking the mineralized range into 20-150 cm samples, inserting regular QA/QC duplicate, blank and standard samples as per company protocol, and halving each sample longitudinally with a diamond bladed rock saw. One half of the sample was placed back in the core box for storage, and the other half was bagged and sent away for assay in Vancouver.



11.4.2 Laboratory Procedures

Samples were assayed at Acme Analytical Laboratories in Vancouver (Acme) for preparation and analysis. The Acme laboratory in Vancouver is certified ISO9001:2008 compliant for the provision of assays and geochemical assays. Acme is independent of the issuer.

Samples were weighed, analyzed using four-acid digestion multi-element ICP-ES (method 7TD), and tested for specific gravity (method G8SG).

The general sample preparation method used by Acme for rock and drill core is described as follows:

Rock and Drill Core crushed to 80% passing 10 mesh (2 mm), homogenized, riffle split (250g, 500g, or 1000g subsample) and pulverized to 85% passing 200 mesh (75 microns). Crusher and pulveriser are cleaned by brush and compressed air between routine samples. Granite/Quartz wash scours equipment after high-grade samples, between changes in rock colour and at end of each file. Granite/Quartz is crushed and pulverized as first sample in sequence and carried through to analysis.

Method 7TD is described by Acme as follows:

0.5g sample split is digested to complete dryness with an acid solution of H₂O-HF-HClO₄-HNO₃. 50% HCl is added to the residue and heated using a mixing hot block. After cooling the solutions are made up to volume with dilute HCl in class A volumetric flasks. Sample split of 0.1g may be necessary for very high-grade samples to accommodate analysis up to 100% upper limit.

Method G8SG is described by Acme as follows:

G812 Specific Gravity Pulp, SG: A split of dry pulp is weighed to a class A volumetric flask. Flask and pulp are weighed precisely on a top-loading balance. Measure and record the weight then calculate for specific gravity.

G813 Specific Gravity Core, SG: Analysis can be conducted on whole samples of rock or core in irregular shape. Specific gravity is determined by measuring the displacement of water. A sample is dried at 105°C to remove all moisture then allowed to cool. The sample of the rock or drill core is first weighed in air then submerged in a container of water. Measure the mass of immersed sample and record the weight then calculate for specific gravity. Sample can also be coated with a thin layer of hot wax so that any soluble material in the core or rock is not in contact with the water.

11.4.3 Quality Control Procedures

11.4.3.1 Quality Control Samples

Of the 722 samples sent to Acme, 51 were standards, 58 were duplicates, 54 were blanks, for a total of 163 QA/QC samples. The remaining 559 were regular assays.



Of the blanks, all but one were at the lower detection limit for lead (0.01%) while a single sample was above the lower detection limit, with a value of 0.02% lead. Similarly, all but three of the blanks were at the lower detection limit for zinc (0.005 %) while three samples were above the lower detection limit, with values of 0.01%, 0.02% and 0.04%.

Of the duplicates, 38 of the 58 had a difference in lead at or below the detection limit. For the remaining samples, the average difference was 0.24% lead; 9 samples had a difference at or above 0.20% lead, with the greatest difference being 0.91% lead.

24 of the 58 duplicates had a difference in zinc at or below the detection limit. For the remaining samples, the average difference was 0.19% zinc; 9 samples had a difference at or above 0.20% zinc, with the greatest difference being 0.95% zinc.

Two types of standard were used – Standard F (28 used) and Standard G (23 used). Both were created by WCM Sales Ltd. Standard F has a mean value of 1.240% lead and 2.000% zinc, while Standard G has a mean value of 6.680% lead and 3.780% zinc, both with a tolerance of +/- 2 standard deviations. The table below summarizes the results:

Table 11-1 - 2011 Sampling Standards

Standard	Expected Value	Average Tested Value	Minimum Tested Value	Maximum Tested Value
Standard F – Lead	1.240%	1.21%	1.14%	1.28%
Standard F – Zinc	2.000%	2.13%	2.02%	2.22%
Standard G – Lead	6.680%	6.55%	6.20%	7.11%
Standard G – Zinc	3.780%	3.91%	3.76%	4.06%

Results from the check samples are within acceptable limits.

11.4.3.2 Umpire assays

Split pulps of 135 samples were re-analysed at the ALS Minerals laboratory in Vancouver (ALS). ALS Minerals is a division of ALS Ltd., and is independent of the issuer and is certified to the ISO/IEC 17025:2005 by the Standards Council of Canada (SCC).

The comparison found that the vast majority of the split pulps are within a +/-15% tolerance. After correcting for the lower detection limit, two zinc samples containing less than 0.1% zinc and one lead sample containing more than 0.1% lead had a difference of more than 15% between the Acme and ALS assay results. Overall the results are acceptable and serve to confirm the results of the wider body of Acme lab samples.

11.4.4 Author's Opinion

The author, Mr. Douglas Roy, considers the procedures used for the 2011 samples to be adequate for the purposes of this report.



12. Data Verification

12.1 Gays River Deposit

The author has reviewed the sampling results and verified that the sample types and density are adequate for establishing Resources and Reserves. The sampling results are representative of the mineralisation. The available information and sample density allow a reliable estimate to be made of the size, tonnage and grade of the mineralisation in accordance with the level of confidence established by the Mineral Resource categories in the CIM Standards.

12.1.1 Database Validation

A sample of 59 drill holes (4.3%) was selected for database validation. The collar locations, downhole survey data, geological logs and assay data in the database was compared against the original, written logs.

12.1.1.1 Methodology

ScoZinc provided scanned original drill logs in Adobe .pdf format. An up-to-date copy of the electronic database of all drill hole information was also provided. An additional data file of drill hole co-ordinates was supplied as many of the original drill logs did not have co-ordinates.

A total of 59 holes were selected (Table 12-1). Most of the holes were located within areas with the highest economic potential, but the selection process also strived to provide good coverage for the whole deposit. This amounted to 4.3% of the more than 1400 holes drilled on the property.

Print-outs were made of the relevant sections of each of the holes and also of the assay data of the corresponding assay intervals. The assays were printed on the reverse of the drill logs. Co-ordinates on the log and database were manually compared.

12.1.1.2 Results

The data in the Excel database and original drill logs were manually compared. They were found to be, for the most part, comparable. Many of the original drill logs, both underground and surface, did not have collar co-ordinates or downhole survey data. Another database was located that contained the required information. It is more than likely that the holes were surveyed and the information filed in a separate location from the original logs.

Table 12-1: Holes that were verified during the database validation.

S61	S352	S613	S882	U047	U206
S69	S390	S634	S938	U057	U217
S71	S404	S648	S939	U061	U218
S85	S423	S663	S943	U073	U246
S94	S431	S690	S956	U087	U259



S110	S466	S703	S975	U093	U290
S183	S473	S705	S976	U106	U297
S220	S555	S726	S980	U129	U321
S251	S568	S843	U003	U148	U337
S268	S574	S857	U008	U174	

The following holes were found to have discrepancies between the original data from the drill logs and the final database:

S 69

Data base 73.76-75.59 lead 0.01% Original Log 73.76-75.59 lead 0.32%

S110

Assay data for database match that on original log. However, a hand-written correction on the log shows reduced lead and zinc values.

S 663

Minor sample depth errors - not significant.

S703

Assays on original log for interval 89.0-99.83 metres not shown. These were likely assayed at a later date.

S 726

Assay section on original log 77.72- 83.82 m (6.1m) used on database. Original log interval was corrected by hand at a later date to 2 ft. (0.61m)

U 129

Sample from 115'-125' (10') misread as 115' -128' (13'). Written entry on original log looks like 128'.

U218

Azimuth on database shows 235 degrees, which is consistent with other angle holes with the same co-ordinates. However, a listing in another database shows an azimuth of 180 degrees. It is more than likely that the database listing is correct.

12.1.1.3 Conclusion

With the exception of Hole S 110 and S 726 where significant assay intervals and values were involved, the remainder of the holes do not represent any factor that would change the status of the deposit. In general, the data transfer from the original logs was of high quality and the database was considered a valid representation of the mineral deposit.

12.1.2 Verification Sampling

The Scotia Mine property was visited by Mr. Reg Comeau of ACA Howe on June 17 and June 21 and on September 22 and September 26, 2004 in order to become familiar with the area and to conduct verification sampling on the property. Split, random, core samples were inspected and sampled from

the site on the second visit from the 2004 drilling campaign in the area of the proposed low grade open pit in the central portion of the deposit as well as the higher grade zone in the Northeast zone. A second set of core samples from the 1997 drilling campaign were later collected by Mr. Doug Roy.

Samples from 1997 and 2004 drilling campaigns were collected, packaged and independently shipped by Reg Comeau. All samples were taken from the remaining half core samples in the core boxes and were sawed in half reflecting a quarter core sample. The remaining quarter core was left in the core tray. The samples were packaged and shipped to ACA Howe's office in Toronto, then shipped to and analysed by SGS Toronto. The comparison of assay results is shown in Table 12-2.

The comparison of analytical results between SGS and the original 1997 samples and the samples from the 2004 drilling program (analysed at Minerals Engineering Centre of Dalhousie University) was excellent.

The author is satisfied that the assay data base for the property is sound and sufficient for the purpose of estimating resources and reserves.

Table 12-2: Results of verification sampling.

2004 Drilling Program by ScoZinc

Pit Area

Hole #	From (m)	To (m)	Interval (m)	<u>Original Assay</u>		<u>Howe Sampling</u>	
				% Zn	% Pb	% Zn	% Pb
S968	2.70	4.70	2.00	3.38	0.29	3.62	0.14
S969	8.00	10.00	2.00	2.15	0.00	2.22	0.00
S971	2.90	4.90	2.00	4.63	0.00	3.91	0.00
S972	14.30	16.30	2.00	1.86	0.18	2.06	0.17
S973	74.00	75.00	1.00	11.90	14.98	14.18	17.25
S974	66.80	68.00	2.00	2.46	2.22	2.59	1.95
S976	98.10	98.45	0.35	7.66	0.23	7.19	0.17

Northeast Zone

S977	96.00	96.40	0.40	6.77	0.01	9.47	0.01
S982	133.30	133.60	0.30	0.84	0.32	0.84	0.18

1997 Drilling Program by Westminer

Pit Area

S926	18.40	19.90	1.50	2.82	0.01	3.16	<0.01
	19.90	21.40	1.50	3.27	0.01	2.86	<0.01
S933	12.10	13.60	1.50	1.40	0.01	1.47	0.01
	13.60	14.90	1.30	2.78	0.01	2.45	<0.01
S936	8.50	9.80	1.30	3.73	0.01	4.20	<0.01
	11.00	12.20	1.20	1.02	0.01	0.98	<0.01

Northeast Zone

S943	60.75	62.00	1.25	7.56	2.63	6.95	2.76
	62.00	63.00	1.00	3.16	5.70	2.78	3.30
S950	36.00	37.15	1.15	5.20	3.02	3.99	2.19
	37.15	38.25	1.10	17.37	1.07	15.54	0.67
S953	91.80	92.65	0.85	4.41	7.34	3.97	7.47

12.2 Getty Deposit

Data verification measures for the Getty Deposit were described in Cullen *et al* (2011):

“Review by Mercator of all government assessment reports and internal Acadian files available from the Scotia Mine site established that typed lithologic logs with complete assay records from the Getty drilling era were available. However, original sample record books, laboratory reports and other associated information were not found. The digital drill hole database used for the Westminer’s 1992 resource estimate was also obtained from Acadian and validated against the original hard copy drill log and assay record entries. Checking of digital records included manual inspection of individual database lithocode entries against source hard copy drill logs as well as use of automated validation routines that detect specific data entry logical errors associated with sample records, drill hole lithocode intervals, collar tables and down-hole survey tables. Drill hole intervals were also checked for sample interval and assay value validity against the original drill logs. Database entries were found to be of consistently acceptable quality but minor lithocode and assay entry corrections were made by Mercator. These were incorporated to create the validated and functional drilling database used in the resource estimate. As noted earlier, original assays certificates were not found for any of the historic drilling programs and no records of the laboratories to which samples were submitted for analysis, or methods of analysis, were documented in any of the historic drilling reports reviewed for the resource estimate.

“As part of the validation process, Mercator staff visited the NSDNR Core Library in Stellarton, Nova Scotia to review and sample core from the archived Getty drill holes. Nineteen holes were examined but only one hole GGR-212 was re-logged in detail and ten holes ... were re-sampled and analysed for purposes of quality control and quality assurance. These provided additional verification of historical assays and logging results. Results of this and related programs are presented below under separate headings.” (Cullen *et al*, 2011, section 13.1)

“Combined results of the Getty drill hole re-sampling and twin hole programs by Acadian generally support the earlier conclusion of Cullen *et al*. (2008), based on a smaller data set, that validated historic drilling information represented in Acadian’s Getty deposit database is of acceptable quality for resource estimation purposes.” (Cullen *et al*, 2011, section 13.2.4)

13. Adjacent Properties

There are no significant adjacent mineral properties.

14. Mineral Processing and Metallurgical Test Work

14.1 Gays River Deposit

The Scotia Mine processing plant was constructed during the late 1970’s by Canada Wide Mines (Esso) (Figure 14-1). Esso operated for less than two years during the period 1979-1981. Seabright converted the mill to process gold during the mid-to-late 1980’s. Westminer later re-converted and updated the mill to process zinc and lead, then operated it for a short time during the period 1989-1991. In all, 740,000 tonnes of zinc and lead ore have been processed in the mill (Table 6-1).



From a stockpile adjacent to the mill, a wheel loader loads ore into the primary jaw crusher (Figure 14-2). It is further crushed to $-1/2$ inch and stored in a fine ore bin. From there, it passes to the grinding mills, then to a lead flotation section. The ore, with most of the galena (lead sulphide or PbS) removed, passes to the sphalerite (zinc sulphide or ZnS) flotation section. The zinc and lead concentrates are separately thickened, filtered and dried before being stockpiled for shipment to the smelter.



Figure 14-1: Views of the outside and inside (right) of the mill.



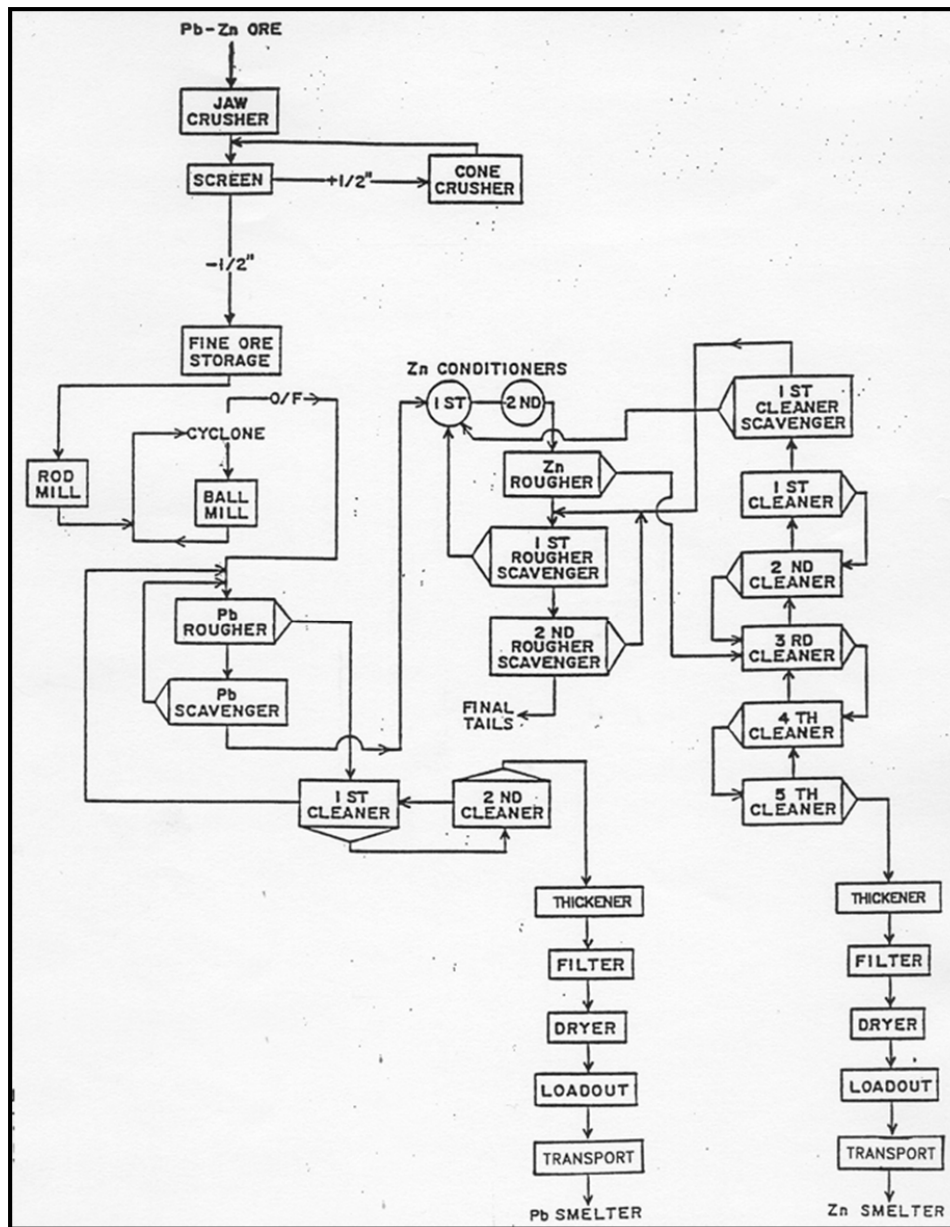


Figure 14-2: Process flowsheet.

During the recent operation, zinc concentrate was trucked in bulk to Dartmouth, Nova Scotia where it was loaded onto a bulk ocean carrier for shipment to smelters abroad. Lead concentrate was bagged in large sacks, loaded into ocean shipping containers, and trucked to the Port of Halifax for shipment to smelters abroad.

14.1.1 Recoverability

Over its operating history, whenever the feed contained a consistent grade, zinc and lead recovery values were up to 90 % and 95 %, respectively (Thornton, 2006 (1)) (see Table 14-1 for detailed processing parameters). In a monthly report for November, 1990, Westminer reported recovery



values of 90 % and 93 % for zinc and lead, respectively (Appendix 1). Thornton (2006 (1)) reported that Westminer encountered some oxidised zinc and lead that did not float well, thereby decreasing their recovery values.

Table 14-1: Mineral processing parameters.

Processing Recovery	
Zn	90 %
Pb	95 %
Smelter Return	
Zn	85 %
Pb	95 %
Concentrate Grade	
Zn	60 %
Pb	75 %
Moisture Content of Concentrate (by Mass)	
Zn	8 %
Pb	6 %

Within the mill building, in addition to the lead and zinc processing equipment, is a complete analytical and metallurgical laboratory.

The high grade of the concentrates, coupled with the absence of any appreciable amount of elements that complicate the smelting process, make the concentrates desirable material for smelter operators. In the past, WMC trucked the concentrates from the mine site to the storage and loading facility at Sheet Harbour. Rail transport facilities have also been used.

Scotia Mine's past production history is reported in Table 6-1. Thornton (2006) prepared an expected metallurgical balance based on the past performance of the mill (Table 14-2).

Table 14-2: Expected metallurgical balance (Thornton, 2006).

Product	Weight Percent	Assays		Metal Content		Metal Distribution	
		Percent Lead	Percent Zinc	Units of Lead	Units of Zinc	Percent Lead	Percent Zinc
Lead Concentrate	1.8%	75.0%	4.0%	1.33	0.071	95.0%	1.8%
Zinc Concentrate	6.1%	0.4%	60.0%	0.024	3.64	1.7%	91.0%
Tailings	92.2%	0.05%	0.31%	0.046	0.289	3.3%	7.2%
Feed	100.0%	1.4%	4.0%	1.40	4.00	100.0%	100.0%

Based on head (mill feed) grades of 1.4 % lead and 4.0 % zinc.

14.1.2 2007-2008 Operations

Ian Flint, Ph.D, P.Eng., a Metallurgical Engineer with MineTech International Limited, carried out an analysis of the mill's performance during the 2007-2008 period of operations (Flint, 2011). A summary of his results are presented in the following paragraphs.

The mill was presented with a highly variable feed rate and grade of ore. Maintenance appears to have been variable, resulting in major amounts of unscheduled maintenance. This was possibly due to instrumentation, operational and maintenance errors. There is also evidence that the grinding circuit consistently over-ground the larger lead and zinc particles in order to achieve a zinc recovery dictated by the liberation of very fine particles. This was not possible to achieve with the grinding and flotation circuits at the mill as they are currently configured. The poor performance was a result of both operation problems and fundamental problems with the circuit. Both problems should be solvable.

In the lead circuit, grades of 80% or greater should be possible at recoveries greater than 95%. However, this depends on making changes to the grinding circuit and incorporating flotation circuit changes both in configuration and the type of equipment used.

In the zinc circuit, grades and recoveries can be increased only nominally due to the locking of a sizeable percentage of the sphalerite with the carbonates. The results depend on the actual locking and cannot be accurately predicted without further mineralogical analysis. However, as an estimate at current locking percentages, perfect circuit performance will probably lie in the theoretical range bounded by an upper grade of 67% with recoveries ranging between 71% and 81%, to grades of 52-56% at almost total recovery. This could be improved by unlocking particles of sphalerite smaller than about 10 micrometers from gangue particles of approximately equal size. However, doing so would require the use of novel equipment and would carry increased risk associated with largely unproven technologies.

Many of the operational deficiencies at this mill may have, in part, be attributed to the lack of knowledge about the process operations in terms of feedback in performance and the setting of appropriate goals. In order to properly run a process plant, accurate mass balances and reporting must be achieved. An example of deficiencies in this regard are the reporting of the lead and zinc circuit recoveries. These were consistently overstated in the reports that were analyzed; probably as a result of improper analysis of error and mass balancing.

The mill was operated, especially during early operations in 2007, without sufficient laboratory work to monitor plant operations. Anecdotal verbal reports from the plant metallurgist suggest that the mill was operated, at times, without the proper laboratory facilities. It was also suggested that more streams could be tested by the on-stream analysis system to refine hour-by-hour operations and that in the past, these systems were not calibrated frequently enough. There is also evidence to suggest that a proper sampling routine was not established until late in the operations.

A detailed analysis of the circuit mass balance or an assessment of the on-stream analysis system was not carried out as part of this report. It is highly recommended that an in-depth study be carried out



with respect to the on-stream analyzer system, calibrations of such a system, and test sample points prior to re-commissioning the mill.

14.2 Getty Deposit

Cullen *et al* (2011) reported that no mineral processing work is known to have been completed for the Getty Deposit.

Because the Getty Deposit's geology and mineralogy are nearly identical to the Gays River Deposit's, the author (Doug Roy, P.Eng) would expect similar mineral processing behaviour for both deposits. The author recommends flotation test work to confirm that belief.

15. Mineral Resource Estimate

The Gays River Deposit's mineral resource estimate was prepared by Doug Roy, P.Eng. of MineTech International Limited and Mr. Tim Carew, P.Geo. of Reserva International LLC. Getty's mineral resource estimate was prepared by Cullen *et al* (2011) of Mercator Geological Services. The estimates were separately prepared using slightly different parameters, the most significant of which were different zinc-equivalent grade formulae and different block cut-off grades for resource reporting. These differences preclude reporting a total for both Deposits. In other words, mineral resources for the Gays River and Getty Deposits are reported separately.

Only Mineral Resources were identified. No economics work, such as estimating capital and operating costs, that would be required for identifying Mineral Reserves, was carried out. In other words, no Mineral Reserves were identified.

15.1 Gays River Deposit

Main Zone mineral resources, located south and west of Gays River, were estimated by Tim Carew, M.Sc., P.Geo., who was a Co-author of this report and is a Qualified Person under Section 1.1 of National Instrument 43-101. Estimation of Main Zone mineral resources is discussed in Section 15.1.3.

Northeast Zone mineral resources, located underneath and northeast of Gays River, were calculated by Douglas Roy, M.A.Sc., P.Eng., who was this report's Principal Author and is a Qualified Person under Section 1.1 of National Instrument 43-101. Estimation of Northeast Zone mineral resources is discussed in Section 15.1.5.

The Main Zone mineral resources (discussed in Section 15.1.3) were originally modelled by Tim Carew for Savage Resources during 1998. Mr. Carew updated the model using linear unfolding for a NI 43-101-compliant resource estimated in 2006 (Roy *et al*, 2006). An update of the resource estimate was completed in 2011 (Roy *et al*, 2011). As there had been no new drilling in this zone since 2006, the significant changes from 2006 were (1) a re-tabulation of Main Zone mineral resources using the revised zinc-equivalent grade (for lead – refer to Section 15.1.1) and (2) subtraction of the material that was mined during 2007 and 2008. This current update of the resource estimate incorporates new



drilling by Selwyn Resources in 2011, and a re-interpretation of the Main Zone model based on a Low-Grade threshold of 0.5% zinc-equivalent, as opposed to the 2% threshold used in previous modeling.

Mr. Roy estimated the Northeast Zone's mineral resources in 2006 using a cross-sectional end-area method (Roy *et al*, 2006). For the current estimate, Mr. Roy re-estimated those resources using block modelling and carried out grade estimation using inverse distance weighting (refer to Section 15.1.5).

Though mineral resources for the Main and Northeast Zones were estimated separately, they abut one another and represent a single, geologically continuous, mineralised body.

15.1.1 Zinc-Equivalent Grade

For cut-off grade purposes, lead's zinc-equivalent grade was calculated and added to the zinc grade.

Using reasonable metal prices derived from current (at the time of report writing) and going-forward LME contract prices, recovery values from previous mill production, and typical smelter return values, 1% lead is equivalent to 1.2% zinc. The zinc + zinc equivalent grade was added to the block model field "ZnEq".

$$\begin{aligned}
 1\% \text{ Lead} &= \frac{\text{Lead Price}}{\text{Zinc Price}} \times \frac{\text{Lead Recovery}}{\text{Zinc Recovery}} \times \frac{\text{Lead Smelter Return}}{\text{Zinc Smelter Return}} \\
 &= \frac{\$1.05}{\$1.00} \times \frac{86\%}{84\%} \times \frac{95\%}{85\%} \\
 &= 1.20\% \text{ Zinc}
 \end{aligned}$$

1. Recovery values are actual values from 2008.
2. Smelter returns were estimated.
3. Metal prices were supplied by Selwyn on Aug 7, 2012.

15.1.2 Specific Gravity/Density

Prior to 2007-2008, there was no record of any systematic whole-rock SG measurements being taken. Therefore, a formula for specific gravity based on zinc and lead grades was used for the mineralised zones. This formula, which was also used by Savage Resources for their 1998 resource estimate, was:

$$\text{SG} = 1/(\text{Pb}\%/(86.6 \times 7.6) + \text{Zn}\%/(67.0 \times 4.0) + (1 - \text{Pb}\%/86.6 - \text{Zn}\%/67.0)/2.7)$$

Selwyn undertook SG measurements on core from the 2011 drilling program, with 559 determinations in all and 250 determinations on intervals above the mineralised threshold of 0.5% zinc-equivalent. On average the formula overestimated the SG by 0.4%, with a standard deviation of 3%. This difference is not considered to be material, and the formula-estimated values have been retained for the current estimate.



15.1.3 Main Zone Resources

15.1.3.1 General

The deposit is characterised by complex geometry and is difficult to model in terms of standard techniques. Lying along a 'paleo-shoreline', it features repetitive changes in strike of 90° or more around a general trend of 060° Azimuth, with varying dip. This geometry makes it difficult to incorporate the true spatial relationship of the samples for estimation purposes without the use of 'unfolding' techniques. Unfolding transforms the sample data into another co-ordinate space that honours the spatial relationships. Variography and estimation are conducted in the transformed space, and the results are then back-transformed into the original space. The deposit has been mined by underground methods in the past and is therefore intersected by numerous openings along the hanging wall contact.

15.1.3.2 Geological Modelling Approach

Topographic contour data derived from the AutoCAD drawing files provided was utilised to create a triangulated surface (TIN) of the current topography over the project area, including open pit mining areas.

As determined in the original (1998) modeling, the geometric complexity and nature of the deposit requires manual interpretation, and that the ore zone be differentiated into a high-grade massive sulphide zone and a low-grade disseminated zone that occurs largely on the footwall side of the high-grade zone. For that modeling, a set of 3D solid models of the existing underground development and stope areas developed by Mr. Bruce Hudgins of Hudgtec Consultants was imported from AutoCAD DXF files provided. The drill-hole data and underground openings were plotted on hard-copy plans at a ten metre interval, and interpretations of the high-grade zone, the low-grade and the hanging-wall 'Trench' were produced. The cut-off grades that were used for the high-grade and low-grade zones were 7% Zn-Eq and 2% Zn-Eq respectively. These values were selected to correspond with cut-offs utilised in earlier resource evaluations. The plan-view interpretations were digitised as closed polygons, then tied together in the GEMS solids modelling system to create separate 3D solid models of the high-grade, low-grade and trench zones of the deposit. These models were adopted for use in the resource estimate of 1998 (Carew, 1998) and subsequent updates in 2006 (Roy *et al*, 2006) and 2011 (Roy *et al*, 2011).

For the current update, the 2011 drill-hole data was added to the GEMS project files, and a new interpretation of the low-grade zone was produced, using the revised low-grade cut-off of 0.5% zinc-equivalent. This threshold was selected with reference to the log-probability plot of assay zinc-equivalent values coded as Gays River Formation (carbonate), which exhibits a flexure point between low-grade mineralization and background mineralization at 0.5% zinc-equivalent (Figure 15-1).



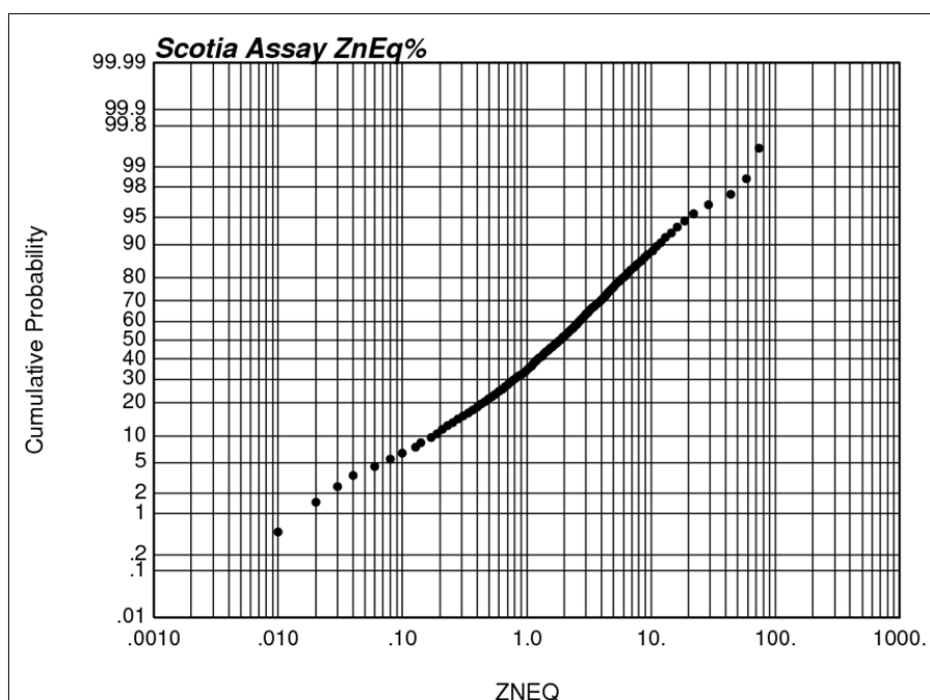


Figure 15-1: Log-probability plot – Carbonate Zn-Eq Assays

Planview contours of the existing 3D solids were used as a base for this purpose, with vertical sections cut on drill-hole fans as required to refine the interpretation. An updated low-grade 3D solid was then generated from these plan interpretation for use in block modeling and resource reporting. In addition, a mineralized zone that was not modeled in earlier estimates was included in this update. Known as the ‘South-West’ zone, it is a southerly continuation of the Main Zone mineralization that although adequately drilled in the newly modeled area, does not have sufficient drilling to define the paleo-shoreline geometry as expressed in the Main Zone.

15.1.3.3 “Unfolding” Process

As stated in Section 15.1.3.1, the deposit is characterised by complex geometry and is difficult to model in terms of standard techniques. An ‘unfolding’ technique was used that transformed the sample data into another co-ordinate space while honouring the spatial relationships.

The Gemcom GEMS unfold application was used for the transformation in this case. This approach is based on the concept of slabs – a slab being a region of space that is topologically equivalent to a cube. The edges are 3D polylines and are not necessarily straight from end to end. Each face is defined by four polylines on its perimeter and the nominally vertical edges of the slab may also have more than two points. The geological feature of interest, e.g. a folded and/or faulted vein or seam is broken down into a collection of adjacent slabs, the only proviso being that any two adjacent slabs must share an entire common face. The algorithm highlights three of the edge polylines of a representative slab that are nominally orthogonal and allows them to be associated with X, Y and Z axes of the unfolded space. All of the polylines are then categorised into three sets of lines corresponding to these unfolded axes. The unfolded slabs are displayed below the original polylines,



and the unfolded lines will be aligned approximately to the X, Y, and Z axes. The average length of each of the sets is calculated and a nominal graticule size, or spacing, is entered. The unfolding transformation includes two graticules – one for the folded region and one for the unfolded region. The points in the two graticules have an exact 1:1 correspondence, which provides for a check that the transformation will be reasonable. If any graticule cells are highly skewed, for example, the folded region can be subdivided into smaller slabs. In addition, the interior vertices can be allowed to slide on the various sets of lines in order to minimise distortion.

The graticule points are simply samples of the transformation, and are connected by straight lines to make the visualisation easier. Various combinations of the sliding axes can be experimented with, particularly in cases where the polyline lengths along the feature are different, in order to minimise the distortion in these cases. The 3D polylines were generated by contouring the 3D solid of the low-grade zone. These polylines were subdivided into a series of smaller adjacent slabs corresponding to the alternating strike direction of the deposit. A section showing the slabs and the allocation of the association with the unfolded axes is illustrated in Figure 15-2. The unfolded space is illustrated later in Figure 15-6.



Figure 15-2: 3D Polyline slabs and axes.

The basic procedure is as follows:

- Creation of the unfolding transformation;
- Forward transformation (unfold) of the sample data points;
- Spatial analysis and block modelling in the transformed space;
- Back-transformation of the estimated block data (Zn and Pb) into normal (folded) space; and,
- Allocation of the values to a block model in normal (folded) space by nearest neighbour interpolation.



15.1.3.4 Drill hole Data

A subset of the overall drill hole database was utilised for estimation purposes, comprising those drill holes that intersected the 3D solid model of the carbonate mineralisation. This subset comprises 662 holes, including the most recent 2011 drilling, and includes both surface and underground drilling.

15.1.3.5 Mineralised Envelope

The mineralised envelope for estimation purposes was restricted to the carbonate material within the 3D solid models created from plan view interpretations. These interpretations and 3D model are regarded as the most representative constraints on the mineralisation available. Separate 3D models were developed for the low grade, disseminated portion of the deposit, and for the less continuous high grade zone that lies along the footwall contact, and which was partly exploited by previous underground mining.

15.1.3.6 Statistical Analysis and Capping

The sample sets for zinc and lead mineralisation comprised those assay intervals falling within the 3D solids and were compiled separately for the low-grade (LG) and high-grade (HG) zones. The sample statistics, histograms and probability plots are shown in Figure 15-3 and Figure 15-4.

While both Zn and Pb assay grades exhibit fairly typical positively skewed distributions, the Pb values exhibit evidence of a multi-modal distribution, with a set of values falling in the 0.01 to 0.1% range - this may be related to the use of arbitrary and variable values for detection limits in the Pb data. In general, Zn and Pb values are not particularly well correlated, with a correlation coefficient of 0.32. There is also some evidence of possible misclassification of some values between low grade and high grade zones in both cases, either in terms of original typing, or in geometric boundary effects relative to the 3D solids. The Zn values are generally well behaved, with relatively low Coefficients of Variation (COV), whereas the Pb values exhibit a relatively high COV.

Whereas initial studies on the deposit by Savage Resources Canada Co. considered a capping value of 13% on both Zn and Pb, examination of the probability plots indicates that although the number of high values steadily decreases, the upper tail for the all distributions are fairly continuous and unbroken up to values considerably higher than this, suggesting that higher capping values could be utilised. In later studies, discussions with Savage personnel led to an alternative approach in which the high-grade outliers in the distributions were retained in the data set prior to any compositing, but restricted in terms of interpolation. Block centroids were required to be within 5 metres of the sample before it could be used in the estimation of the block in question. Given the indication that higher capping values could be considered, and to maintain consistency, this approach was adopted at that time and is retained for this study. No grade capping was applied prior to compositing, but the range restriction was subsequently applied in estimation for Zn and Pb composites above 20%.



Figure 15-3: Zn and Pb assay lognormal histograms.

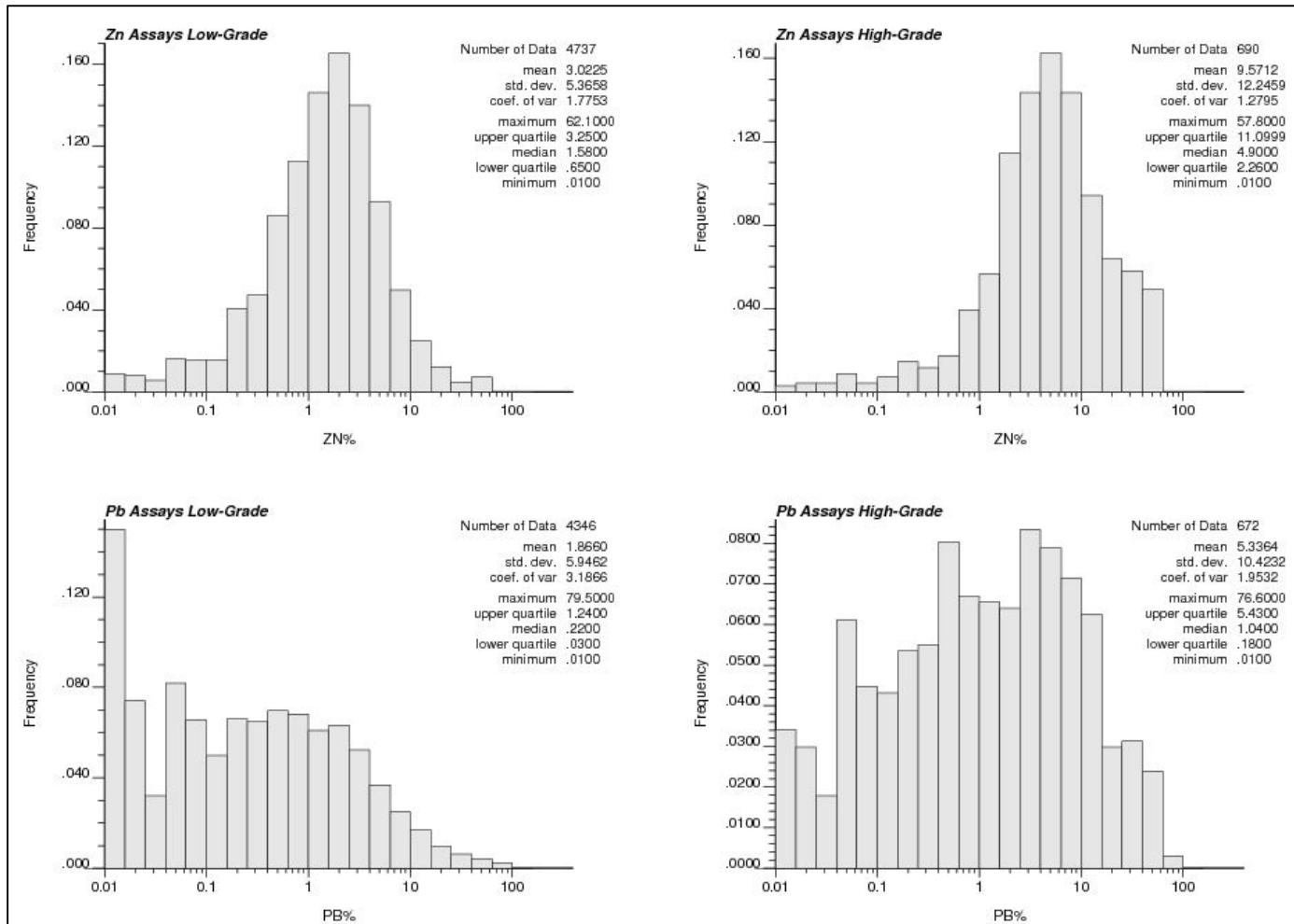
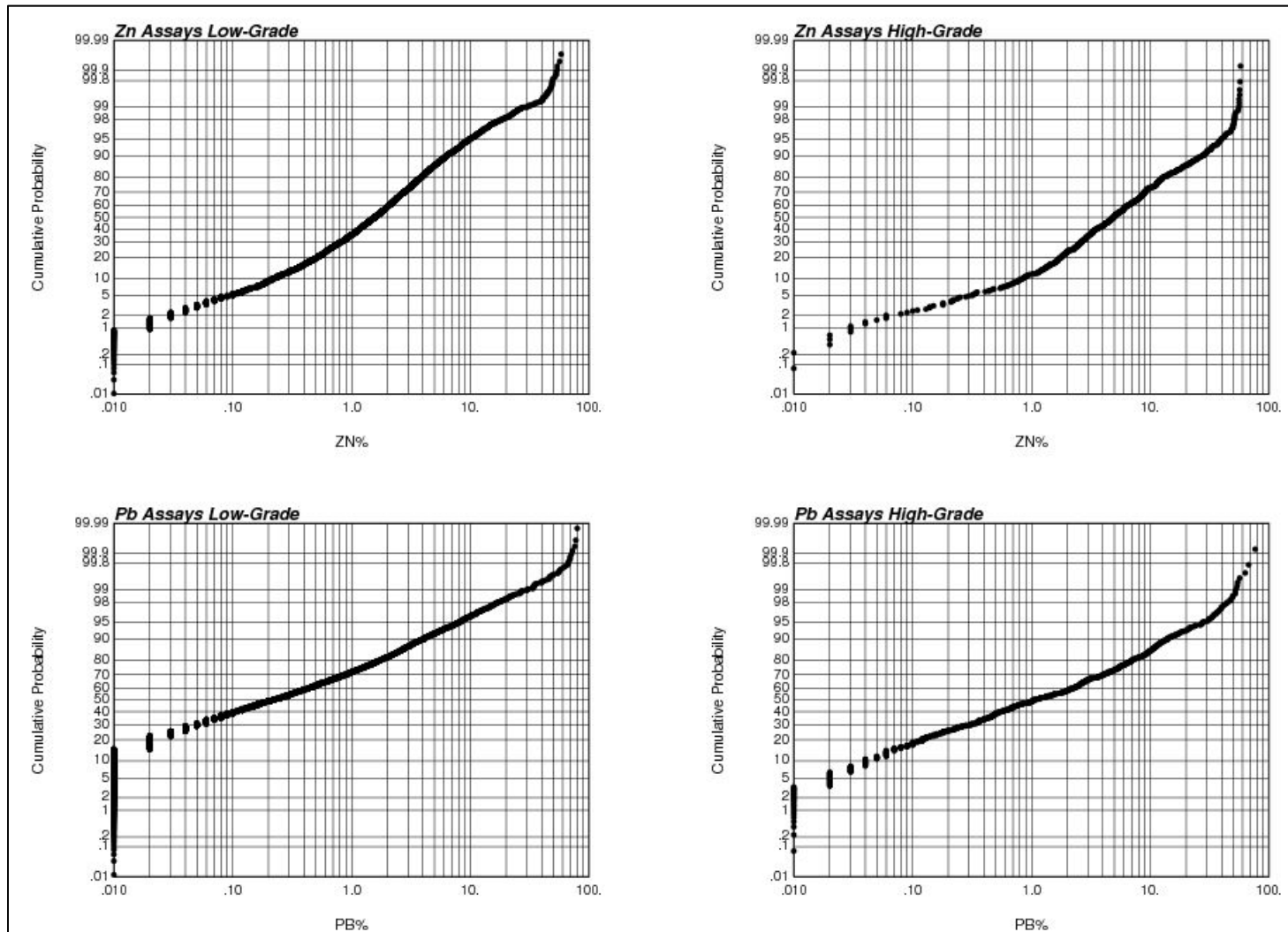


Figure 15-4: Zn and Pb assay probability plots.



15.1.3.7 Compositing

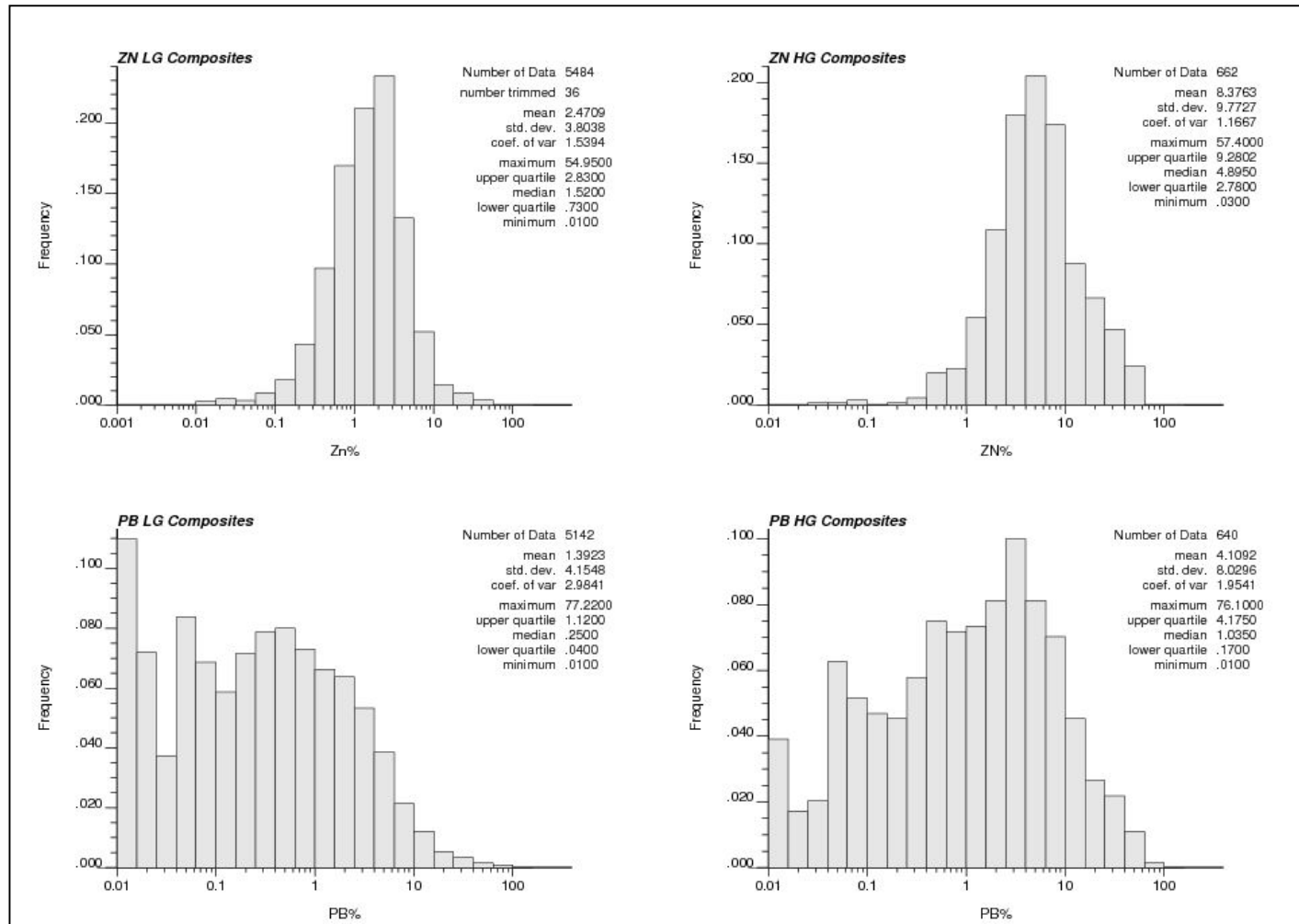
Equal length composites were prepared from uncut assay values in a two-step process. Initial composite intervals were defined from the intercepts of the drill holes with the high-grade and low-grade 3D solids of the mineralised zone. Equal length composites of 1.5 metres were then generated within these intervals – 1.5 metres is approximately the average length of the assay intervals. Residual intervals of less than 1.5 metres at the top and bottom contacts were retained if the length was at least 0.6 m (40% of composite length). Intervals less than 0.6 m in length were discarded. The low-grade composites set was further subdivided into those falling below 490 m elevation (below which the deposit dips at varying angles) and those above 490 m where the deposit is essentially flat-lying. The composite statistics and histograms for the overall high grade and low grade Zn and Pb are shown in Figure 15-5.

15.1.3.8 Spatial Analysis

Three dimensional experimental correlograms were generated using the transformed (un-folded) Zn and Pb composite data, for both low-grade and high-grade mineralised zones below an elevation of 490 m. Separate 3D experimental correlograms were generated using un-transformed composite data for the low-grade mineralised zone above 490 m elevation, where the deposit is essentially horizontal in attitude. The resulting experimental correlograms are not considered robust enough for use in estimation by kriging, but did provide some indications with regard to suitable search distances and orientations to be used for estimation by Inverse Distance Squared (IDP2) interpolation.



Figure 15-5: Composite statistics and histograms



15.1.3.9 Block Model and Grade Interpolation

Two block models were constructed for interpolation purposes, a primary model in normal (un-transformed) space, and a secondary, smaller model in transformed space for interpolation of the unfolded data. The primary block model was defined to cover the volume of interest, with the following Gemcom GEMS® parameters:

Origin:	7200.00E / 6592.82N / 375.00 AMSL (Lower Left)
Block Size:	5m x 5m x5m
Columns:	160
Rows:	400
Levels:	45
Rotation:	-60° (To align with overall strike of deposit – Azimuth 060)

The primary block model is configured as a 'partial' block model, which allows the percentage of various rock types within the block to be stored and utilised for manipulation and reporting purposes. The rock type model was initialised with the default rock code for air and all blocks below the current topographic surface were set to the Evaporites (gypsum) rock code. The model was then overprinted with rock codes for the overburden, Trench and Goldenville (quartzite) using 3D solids created from surfaces and sectional interpretations. This rock type model is referred to as the 'Standard' rock type model. The final step was overprinting with rock codes for the existing U/G mining excavations, the high-grade (HG) mineralized zone, the low-grade (LG) mineralized zone, and a solid created from the current topographic surface to represent material mined out in open pit mining in 2007-2008. The percentage of these four material types in blocks intersecting the solids was calculated and stored separately, with the 'mined-out' solid having the highest priority, followed by the U/G excavations, high-grade zone and low-grade zone, in blocks where the solids overlapped. This procedure ensures that the mined-out material in the model is correctly accounted for. The rock code for any other material in these blocks was taken from the standard rock type model, i.e. a block on the hanging wall contact might comprise 50 % U/G excavation, 20 % HG zone and 30 % Trench material.

The 3D solid of the existing U/G excavations was generated by Mr. Bruce Hudgins of Hudgtec Consulting and was originally supplied by ScoZinc. The 3D solids of the HG and LG zones were generated from plan interpretations. Zinc equivalent cut-offs of 0.5 % and 7 % were utilised for the LG and HG zones, respectively in developing the interpretations.

Inverse distance squared (IDP2) interpolation was used to estimate Zn and Pb block values in the flat lying portions of the deposit above 490 m elevation. This estimation was restricted to the LG zone, as the HG zone does not extend above this elevation, and includes the South-West zone, which currently has no defined HG zone. The estimation was done in three passes with parameters as follows:

Pass1

Minimum # of samples:	3
Maximum # samples:	8
Max. # samples/hole:	2 (ensures that samples come from at least 2 holes)
Search Radius/Direction:	

Zone	Ranges					
	Maximum		Intermediate		Minimum	
	m	Az/Dip	m	Az/Dip	m	Az/Dip
LG>490	35	46/0	20	136/0	6	0/90

Pass 2

Minimum # of samples: 3
 Maximum # samples: 8
 Max. # samples/hole: 2 (ensures that samples come from at least 2 holes)
 Search Radius/Direction: Pass 1 x 2

Pass 3

Minimum # of samples: 3
 Maximum # samples: 8
 Max. # samples/hole: 0 (no restriction)
 Search Radius/Direction: Pass 2 x 2

Mineralised blocks in the dipping portion of the deposit below 490 m elevation were populated separately following interpolation in transformed space and back-transformation of the generated values (at block centroids) into normal space, as described below. The back-transformed data was then used to interpolate the Zn, Pb and Classification values in normal space by the nearest-neighbour technique, separately for the LG and HG zones.

The secondary block model is a standard block model (every block has only one rock code), defined in 3D space to cover the volume of interest. As described earlier, the transformation process associates three of the edge polylines of a representative slab that are nominally orthogonal with the X, Y and Z axes of the unfolded space – this space is orthogonal with respect to the original co-ordinate axes, and offset by a specified amount. The transformation selected in this case results in a space in which the X axis corresponds to the unfolded strike component of the deposit (approximately 3050 m), the Y axes with cross-strike component (12 m), and the Z axis with the down-dip component (143 m), as shown in Figure 15-6 and Figure 15-7, which also show transformed and un-transformed composite data.

Figure 15-6: 3D view - transformation and block model definition.

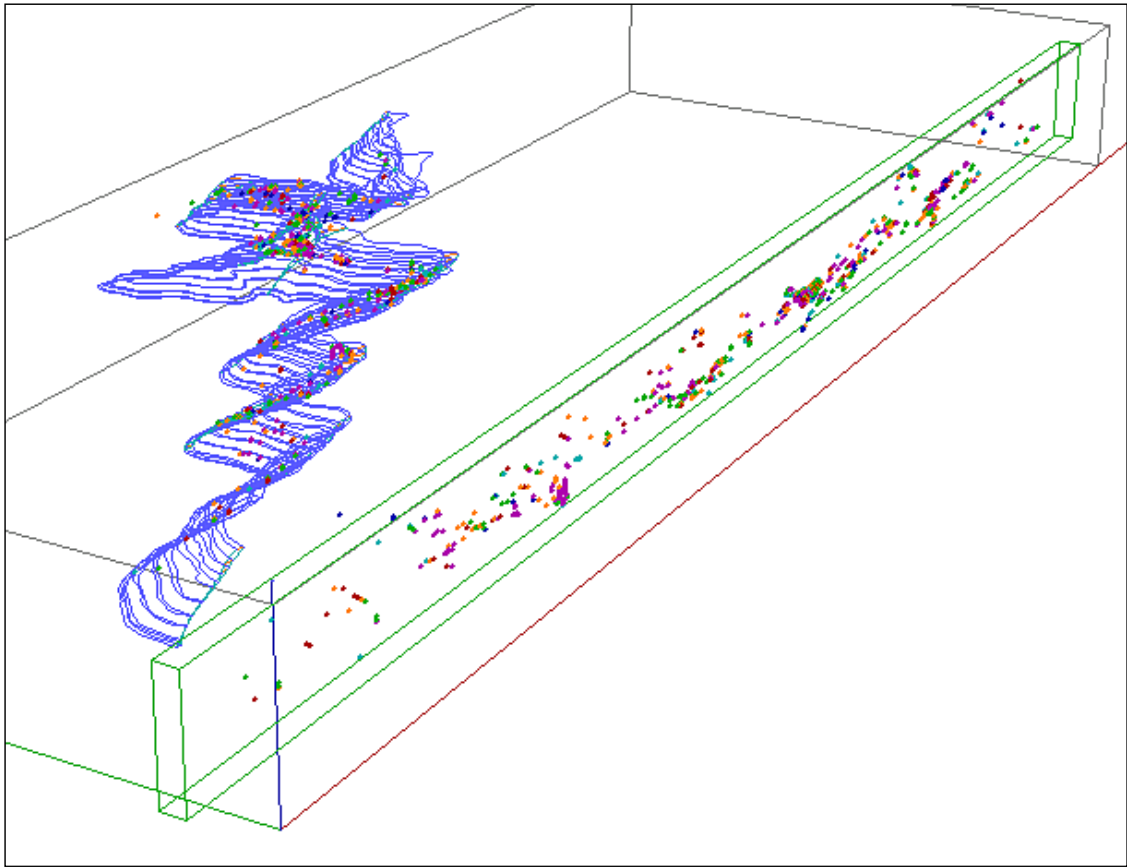
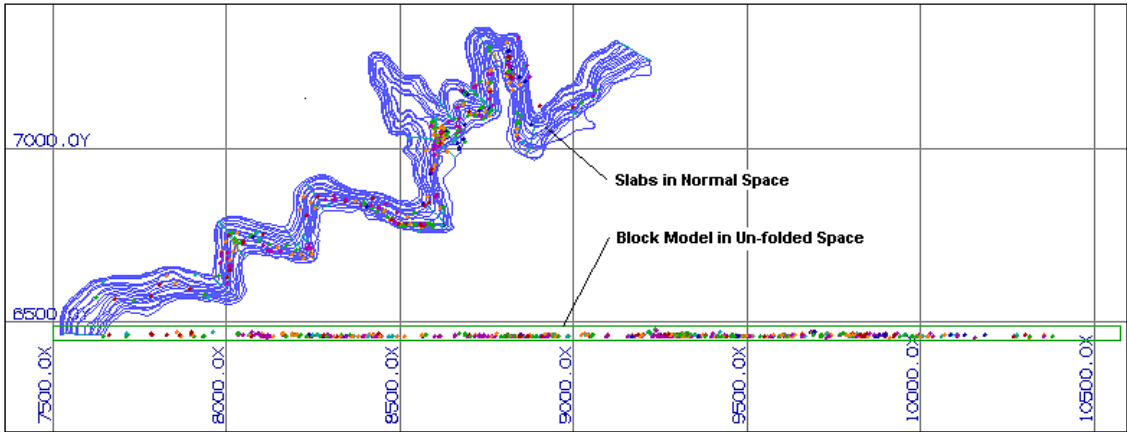


Figure 15-7: Transformation - plan view.



The secondary block model definition is as follows:

Origin: 7500.00E / 6425.00N / 200.00 AMSL (Lower Left)
 Block Size: 7.5m x 5m x5m
 Columns: 410 (7.5m)
 Rows: 15 (5m)
 Levels: 40 (5m)
 Rotation: No rotation

Separate interpolations of Zn and Pb block values for the LG and HG zones were estimated in three passes using Inverse Distance Squared (IDP2) interpolation and the transformed composites. The parameters were as follow:

Pass 1

Minimum # of samples: 3
 Maximum # samples: 8
 Max. # samples/hole: 2 (ensures that samples come from at least 2 holes)
 Search Radius/Direction:

Zone	Ranges – Transformed Model					
	Model East -X		Model North-Y		Model El.-Z	
	m	Az/Dip	m	Az/Dip	m	Az/Dip
LG – Zn <490	30	90/0	7.5	0/0	15	0/90
HG - Zn	30	90/0	7.5	0/0	15	0/90
LG – Pb <490	30	90/0	7.5	0/0	15	0/90
HG – Pb	30	90/0	7.5	0/0	15	0/90

Pass 2

Minimum # of samples: 3
 Maximum # samples: 8
 Max. # samples/hole: 2 (ensures that samples come from at least 2 holes)
 Search Radius/Direction: Pass 1 x 2

Pass 3

Minimum # of samples: 3
 Maximum # samples: 8
 Max. # samples/hole: 0 (no restriction)
 Search Radius/Direction: Pass2 x 2

An additional block model variable (Class) was updated according to the pass in which the block was interpolated; with a default value of 3. The Zn, Pb and Class block values were then back-transformed into normal space, using the block centroid as the 3D co-ordinate. These points do not correspond to block centroids in the original rotated block model and are used as input data in a nearest-neighbour interpolation to assign values to corresponding models in the primary model. The HG and LG models are interpolated into separate grade models associated with the percentage models that store the percentage of HG and LG material in a particular block.

The primary density models for the mineralised zones were then generated, utilising the estimated Zn and Pb block values and the SG estimation formula from Section 15.1.2.

Typical cross- and plan sections through the block model are illustrated in Figure 15-8 and Figure 15-9.

15.1.3.10 Mineral Resource Classification

The mineral Resources were classified according to the pass in which a block was interpolated, as recorded in the Class variable. Blocks interpolated in Pass 1 were considered to be in the Measured category. The Pass 1 ranges are based on the ranges of the first spherical component of the corresponding correlogram, and vary from 10% to 80% of the maximum ranges of the correlograms. Blocks interpolated in the second and third passes are considered to be in the Indicated and Inferred categories, respectively.

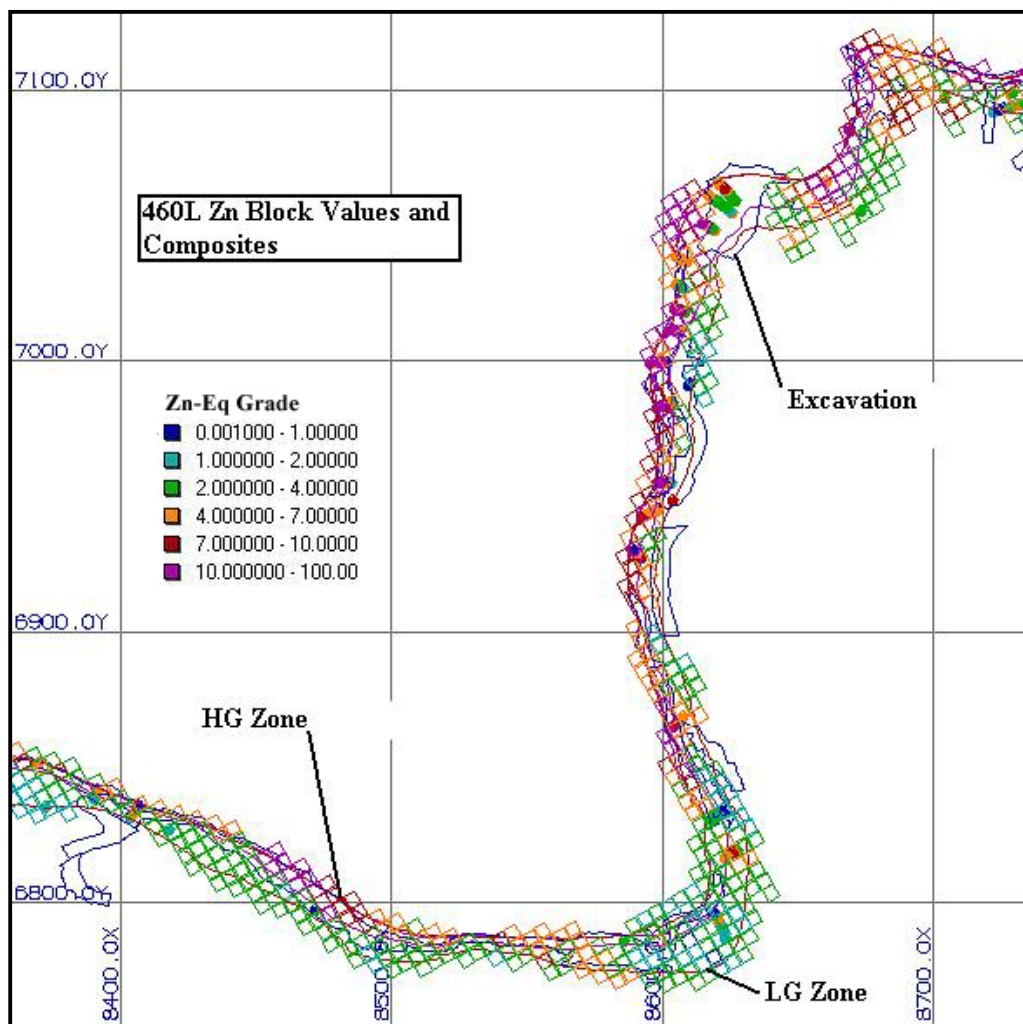


Figure 15-8: Plan section through the block model on the 460 metre level.



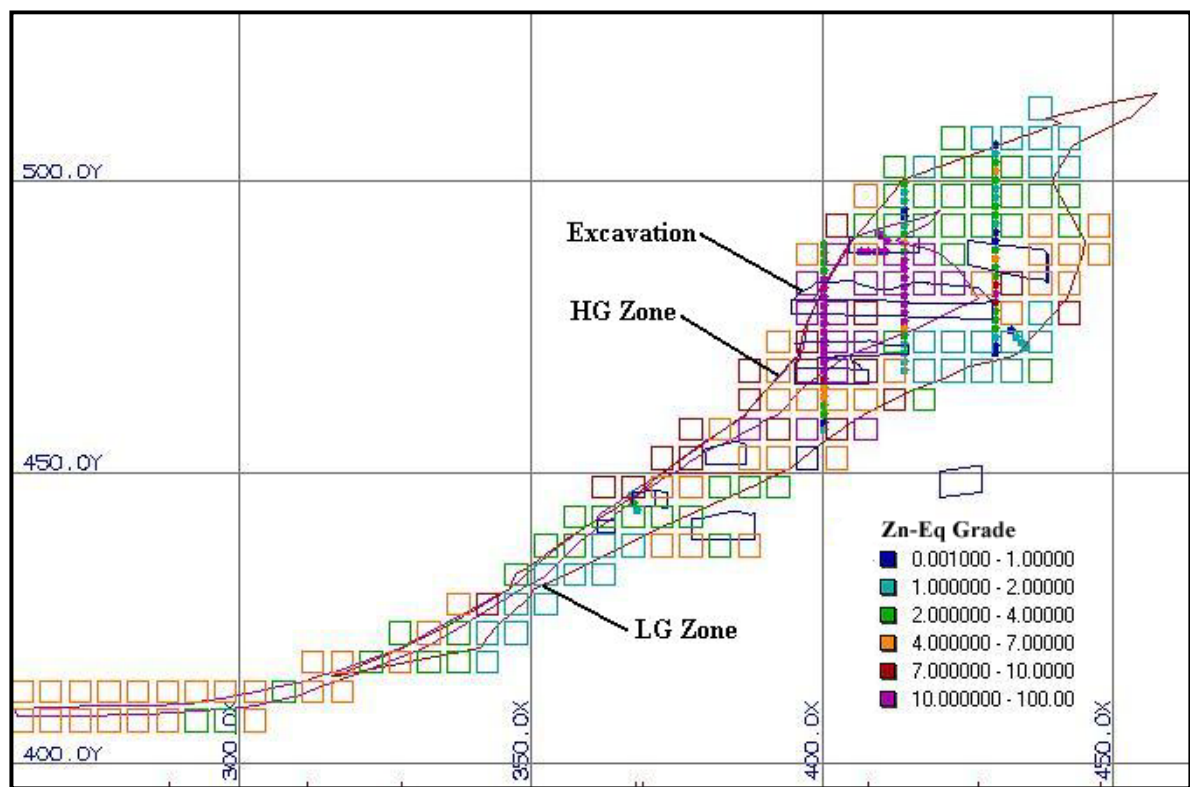


Figure 15-9: Cross-section through Row 208 of the block model, looking northeast.

15.1.4 Results

As described in previous paragraphs, Surface Resources for the High-grade and Low-grade zones were calculated separately (Table 15-1). Resources are reported using a cut-off grade of 0.75 % zinc-equivalent. For both zones, undiluted Measured Resources total 1.9 million tonnes containing 3.8 % zinc and 1.6 % lead. Indicated Resources total 2.2 million tonnes containing 3.5 % zinc and 1.5 % lead. The combined Measured + Indicated Resources total 4.1 million tonnes containing 3.5 % zinc and 1.5 % lead.

Undiluted Inferred Surface Resources total 1.8 million tonnes containing 3.1 % zinc and 1.1 % lead.



Table 15-1: 2012 Main Zone mineral resources.

Resource Category	Zn Eq. % Cut-off	Tonnes	Zn (%)	Pb (%)	Zn Eq. %
Measured	0.50	2,094,000	3.11	1.67	5.12
Indicated	0.50	4,161,000	2.89	1.45	4.62
Measured + Indicated	0.50	6,255,000	2.96	1.52	4.79
Inferred	0.50	940,000	3.03	2.04	5.46
Measured *	0.75	2,075,000	3.14	1.68	5.16
Indicated *	0.75	4,033,000	2.96	1.49	4.75
Measured + Indicated *	0.75	6,108,000	3.02	1.56	4.89
Inferred *	0.75	929,000	3.04	2.06	5.52
Measured	1.50	1,845,000	3.41	1.87	5.65
Indicated	1.50	3,335,000	3.37	1.78	5.51
Measured + Indicated	1.50	5,180,000	3.39	1.81	5.56
Inferred	1.50	765,000	3.48	2.50	6.47
Measured	2.00	1,597,000	3.73	2.11	6.26
Indicated	2.00	2,843,000	3.69	2.05	6.15
Measured + Indicated	2.00	4,440,000	3.71	2.07	6.19
Inferred	2.00	709,000	3.63	2.68	6.85

Base case for this study denoted by ""*

Notes:

1. A three dimensional block model was developed using Gemcom GEMS® Version 6.4 software
2. Cut-off grade for mineralized zone interpretation was 0.5 % zinc-equivalent for the "low-grade" domain and 7% for the "high-grade" domain.
3. Block cut-off grade for defining Mineral Resources was 0.50% zinc-equivalent. (Base case 0.75%?)
4. No top-cut grade was used. In the author's opinion, the use of top cut would not have significantly affected the results.
5. Zinc price was \$US 1.00 per lb, lead price was \$US 1.05 per lb. Prices were based on current and going-forward LME contract prices.
6. Non-diluted.
7. Mineral resources that are not mineral reserves do not have demonstrated economic viability
8. Main Zone mineral resource estimate prepared by Tim Carew, M.Sc., P.Geo.; base case denoted by "*".
9. Specific gravity was calculated based on zinc and lead content. There are no other sulphides or dense minerals that are present in significant quantities.
10. Block inverse distance interpolation using "unfolding" was used for estimating block grades.
11. No mineral reserves of any category were identified and were outside the parameters this study.
12. Zinc-equivalent for lead was calculated based on relative metal prices, demonstrated processing recoveries (86% & 84 % for lead and zinc, respectively), estimated smelter returns of 95% & 85 % respectively for lead and zinc) and demonstrated concentration factors (75% & 65% respectively for lead and zinc).

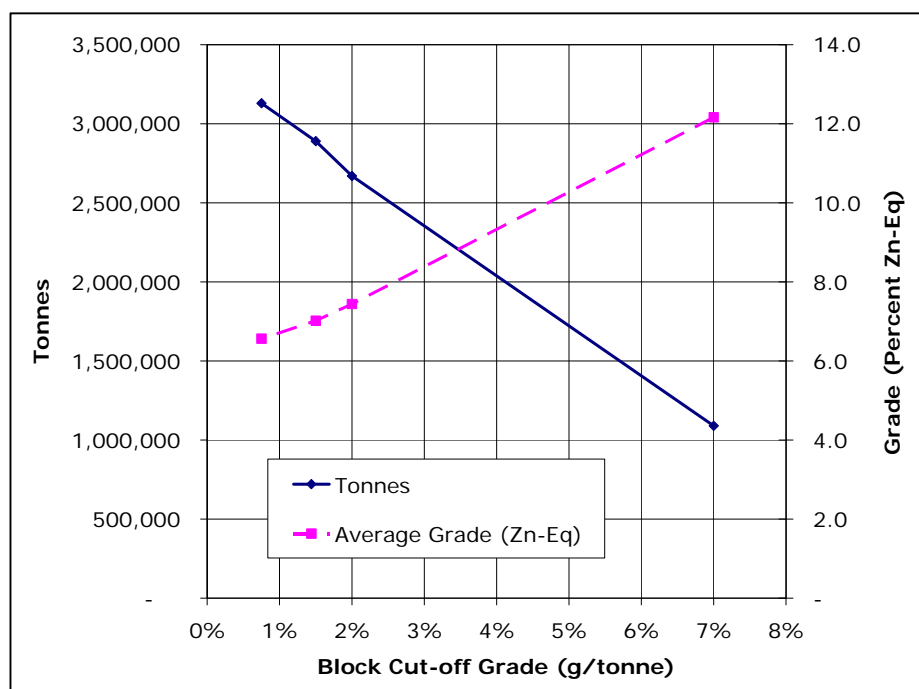


Figure 15-10: Grade-tonnage curve for Measured and Indicated surface Resources (non-diluted).

15.1.5 Northeast Zone Resources

The Northeast Zone abuts the Main Zone. Though they were modelled separately, the Main and Northeast zones represent a geologically continuous body of mineralisation.

15.1.5.1 Grid Rotation

For ease in modelling, data was rotated 30 ° clockwise about the site grid origin (0,0).

15.1.5.2 Mineralised Zone Interpretation

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

It was assumed that near-surface blocks could be exploited using surface mining methods, while deeper blocks could be exploited using underground mining methods. The division between the two was considered to be an elevation of 420 metres – approximately 100 metres depth.

The following guidelines were used during the interpretation process:

1. A cut-off grade of 0.5 % zinc-equivalent was generally used for outlining near-surface mineralisation that could be exploited using surface mining methods. Deeper mineralisation was outlined using a 2 % cut-off. Cut-off grades are further discussed in Section 15.1.5.5.
2. A minimum true width of 2 metres was used.
3. Along strike, zones were extended halfway to the next, under-mineralised cross-section.
4. Zones were extended down-dip by a maximum of 100 metres past the last intercept.
5. Zones were allowed to extend through “below cut-off” intercepts so long as there was a “geological reason” to do so.

Interpretations were accomplished by plotting and interpreting hard-copy cross-sections (refer to Figure 15-13 for cross-sections; refer to Appendix 4 for a set of selected interpreted cross-sections). Those interpretations were digitised and zone intercepts were tagged.

The mineralised outline was refined using plan views. On some sections, the interpreted outline was adjusted to form a smoother, more realistic plan view outline.

Digital terrain models (“DTM”s) for the hanging wall (upper) surface and the footwall (lower) surface were created using the contact coordinates of the interpreted intercepts. These surfaces were later used to constrain the block modeling and grade estimation process (refer to Section 15.1.5.7).

Figure 15-11 and Figure 15-12 show plan and three-dimensional views of the interpreted zones.

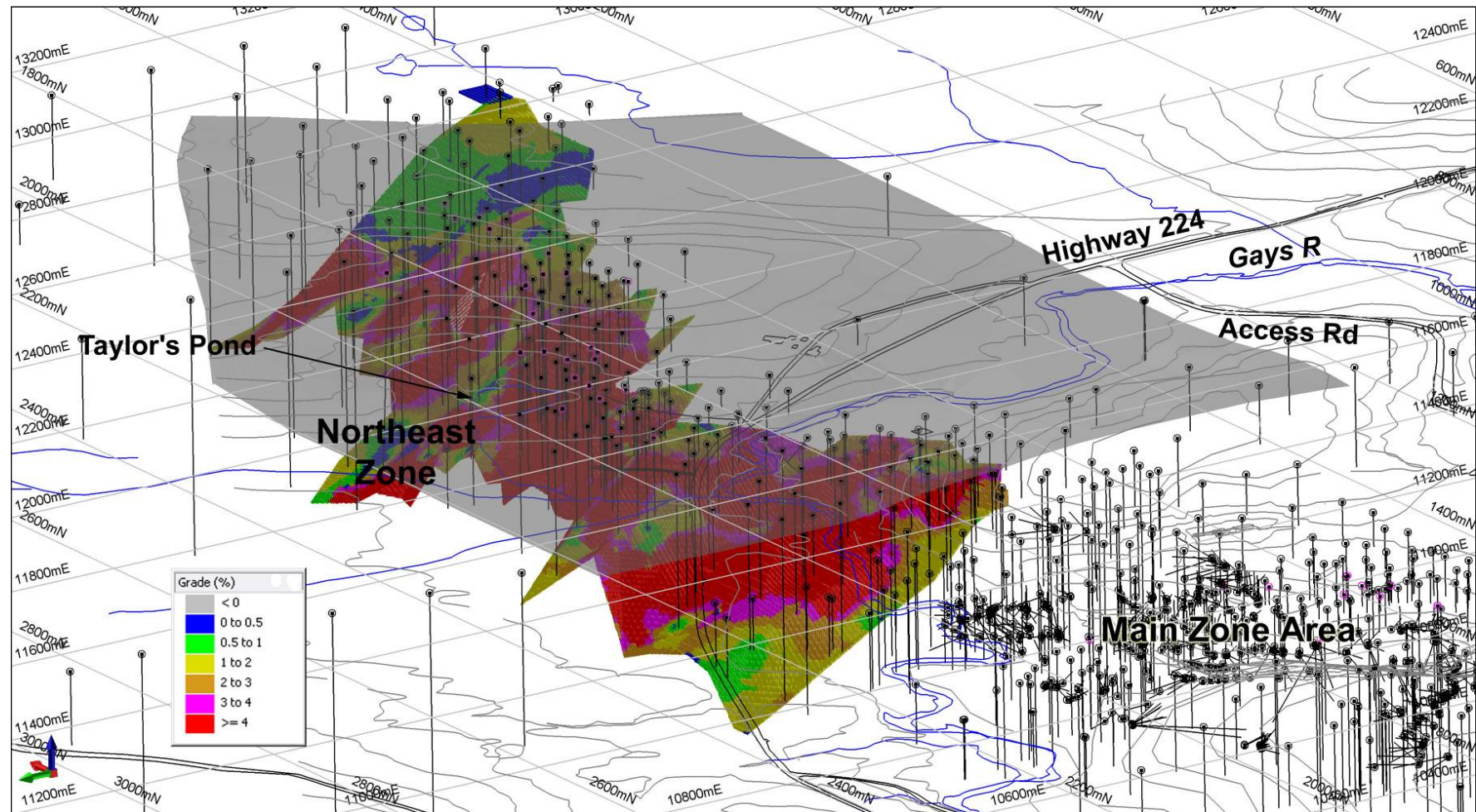
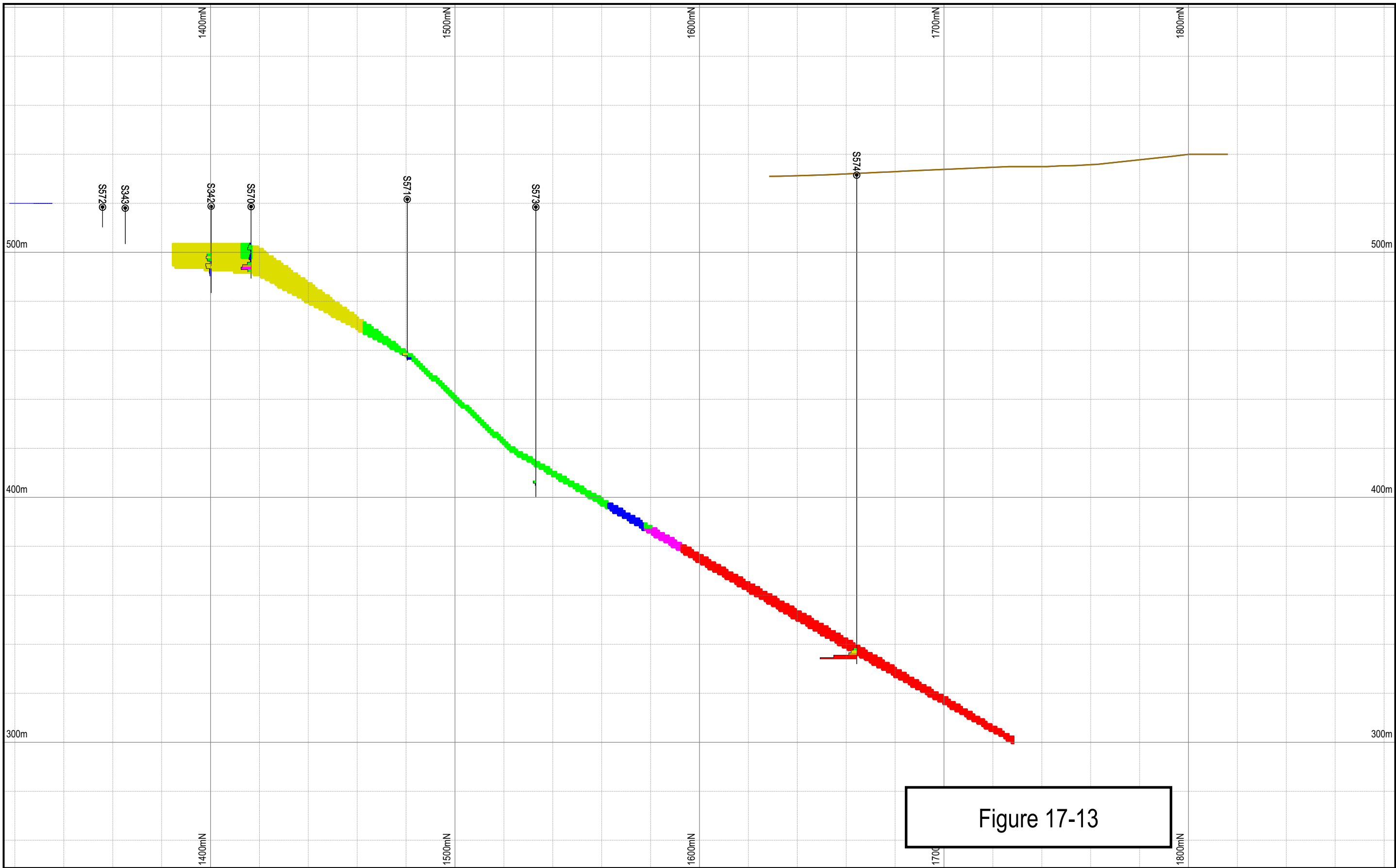


Figure 15-12: 3D view of the Northeast Zone, facing east. Block grades are expressed as percent Zn-Eq.



15.1.5.3 Sample Statistics

Samples were regularised over 1 m intervals – a common sample length (refer to Figure 15-14) - to provide a common support (sample size) for calculating statistics.

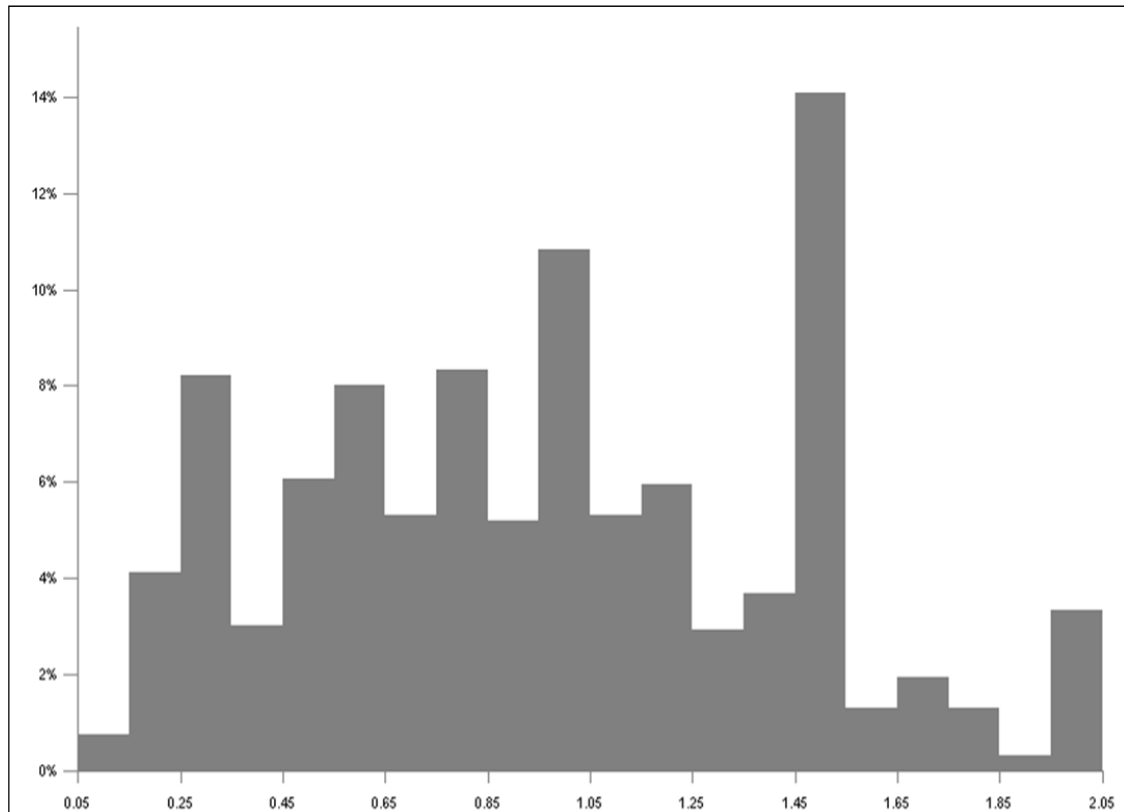


Figure 15-14: Sample lengths, Northeast Zone.



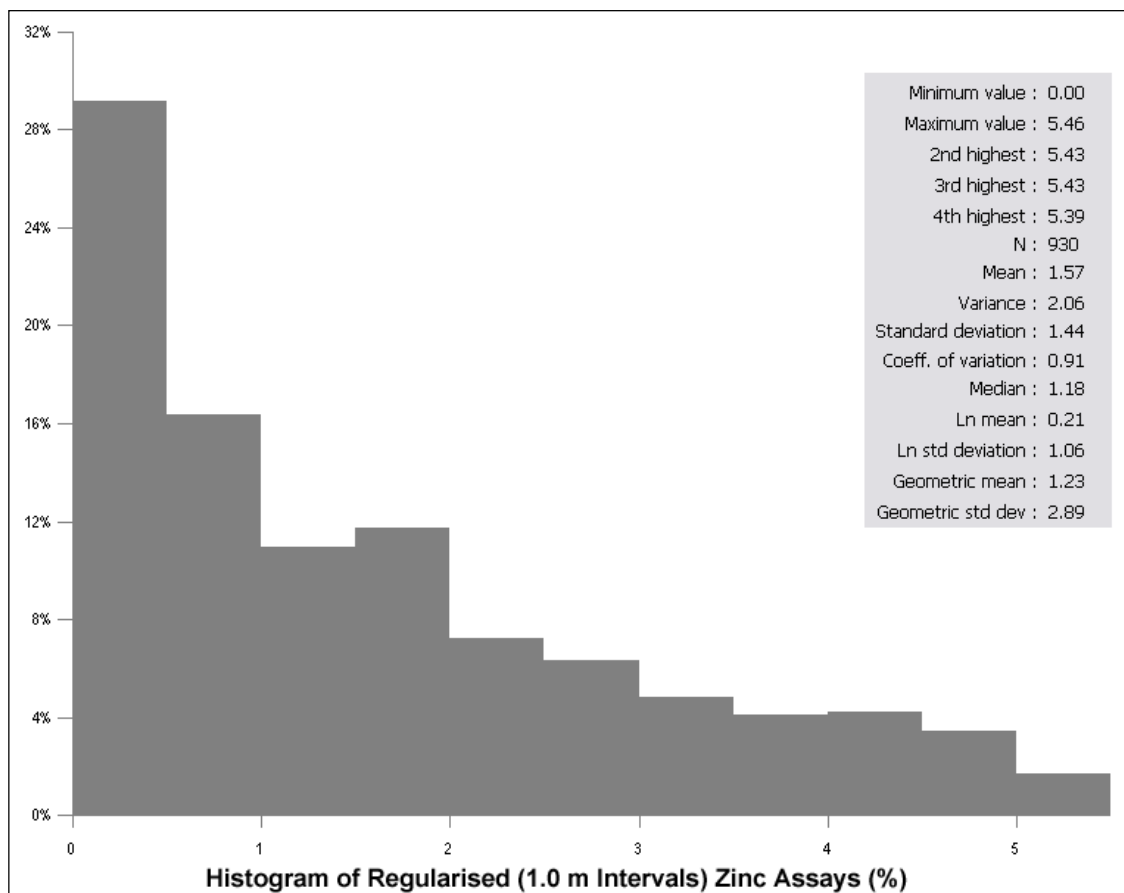


Figure 15-15: Zinc assay histogram, Northeast Zone.



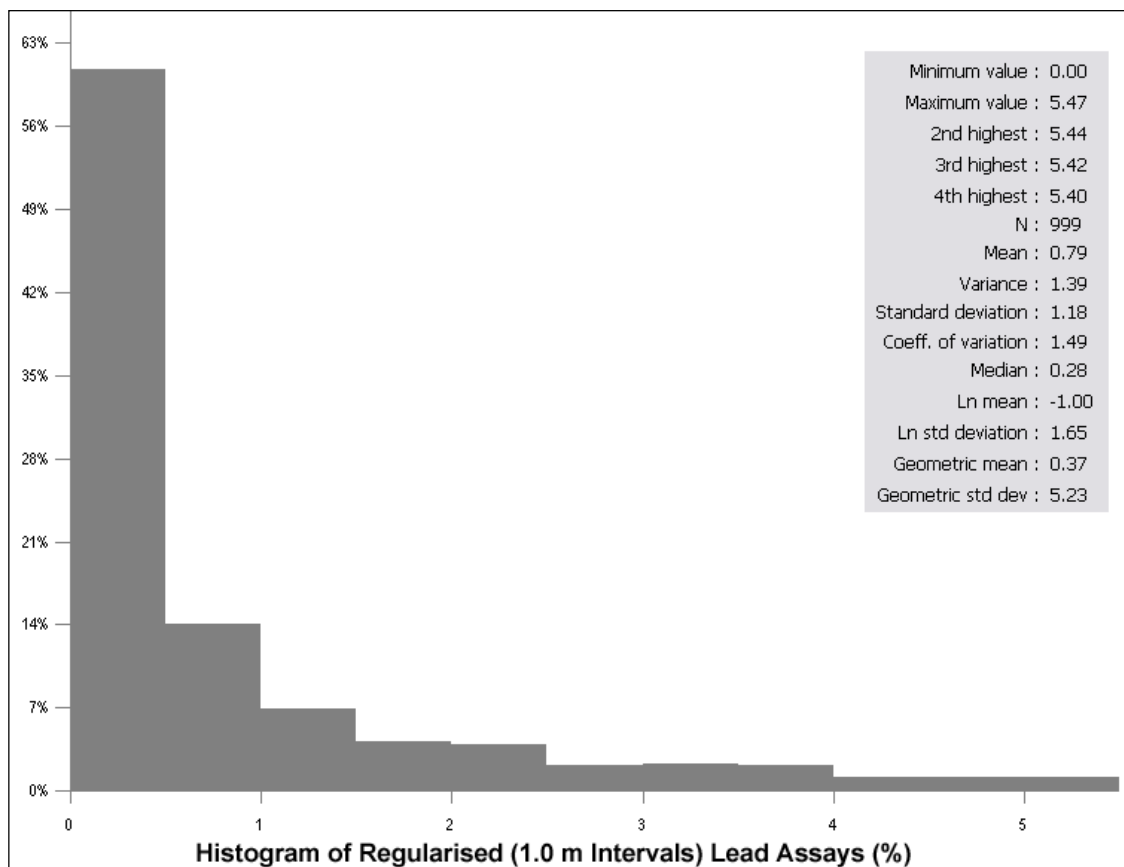


Figure 15-16: Lead assay histogram, Northeast Zone.

15.1.5.4 Variography

For the zone composites, using a 5 metre lag interval, a spherical model was fit to the raw semivariogram data for lead samples. An acceptable model was also fit to the raw semivariogram data for composited zinc samples (10 metre lag).

Directional semivariogram data was calculated for the strike and dip directions. There was no significant difference between the two directions or between the directional and omni-directional results. Therefore, it was decided to use the omni-directional models for grade estimating purposes.



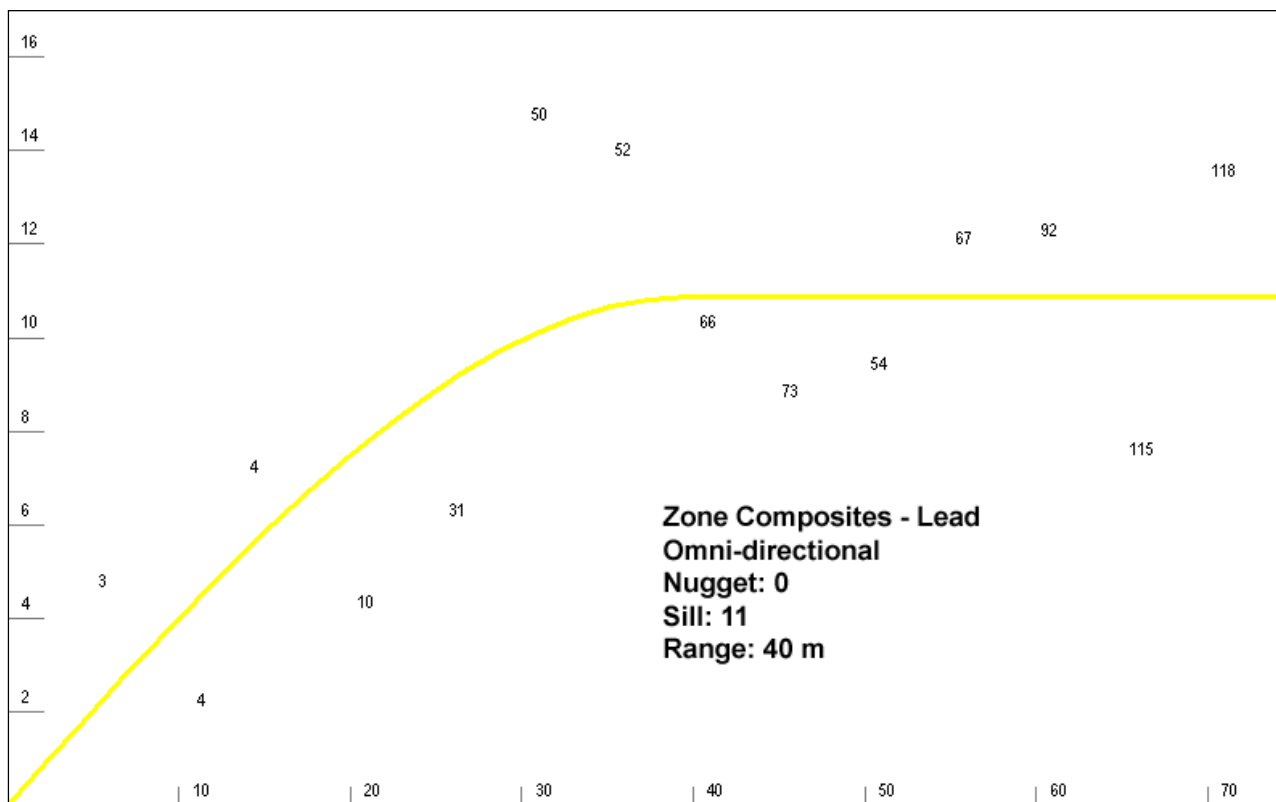


Figure 15-17: Lead semi-variogram, Northeast Zone.

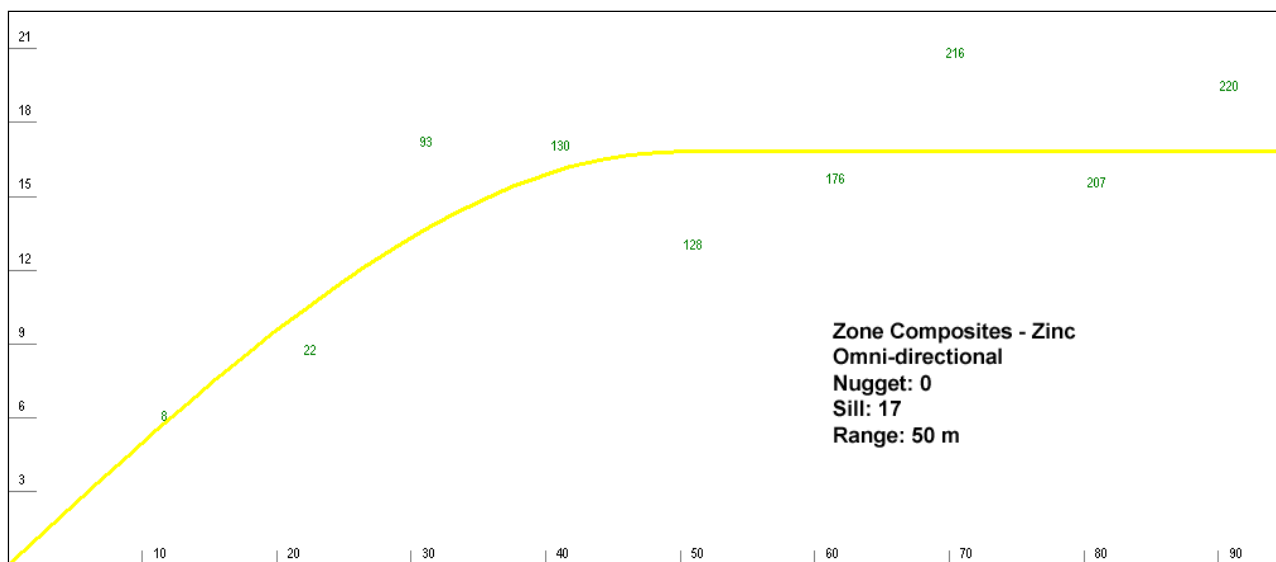


Figure 15-18: Zinc semi-variogram, Northeast Zone.

15.1.5.5 Cut-off Grades

Zone Interpretation

The chosen cut-off grade for near-surface mineralised zone interpretation was 0.5 % zinc-equivalent. This value was chosen through iteration as the cut-off that, in the author's opinion, when used for outlining the lower grade mineralisation, provided the closest approximation of the continuity of that mineralisation. Using the prices and other factors from Section 15.1.1, rock containing 0.5 % zinc would have revenue of approximately \$7. Typical mining and processing costs for this deposit would likely be \$3-4 and \$9-10 per tonne respectively, for a total operating cost of \$12-14 per tonne (not including stripping, capital, or G&A costs). In other words, the cut-off grade for mineralised zone interpretation was slightly more than half of an approximate operating cut-off grade for this deposit.

For deeper mineralisation that could be mined using underground mining methods, a 2 % zinc-equivalent cut-off grade was used for mineralised zone interpretation. Using the prices and other factors from Section 15.1.1, rock containing 2 % zinc would have a revenue of approximately \$28. Typical underground mining and processing costs for this deposit would likely be \$30-40 and \$9-10 per tonne respectively, for a total operating cost of approximately \$50 per tonne (not including stripping, capital, or G&A costs). As with the near-surface cut-off, the cut-off grade for deeper mineralised zone interpretation was slightly more than half of an approximate underground operating cut-off grade for this deposit.

Mineral Resources

The chosen "block cut-off"⁵ grades for defining near-surface (less than 100 metres deep) and deeper mineral resources 0.75% and 2%, respectively.

15.1.5.6 Top-Cut Grade

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

Through examination of the sample statistics, the author determined that no top-cut value was required. No top-cut was applied because, in the author's opinion, a top-cut would not affect the global estimate.

15.1.5.7 Block Modelling

A blank block model with the file name "Blocks – NE Zone - Blank.dat" was created with the parameters that were reported in Table 15-2. The blocks were constrained by the mineralised zone wireframe.

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

⁵ The grade at which it is possible to mine and process and exposed block (*i.e.*: stripping not included).



There were ten sub-blocks in each direction for a geological resolution of 1x1x1 metres (Easting x Northing x Elevation).

Table 15-2: Block model parameters.

Direction	Model Origin (Grid, m)	Model Limit (Grid, m)	Model Extent (m)	Block Size (m)	Number of Blocks	Number of Sub-blocks
East	11,200	13,200	2,000	10	201	10
North	1,200	2,200	1,000	10	101	10
Elevation (RL)	200	550	350	10	36	10

15.1.5.8 Grade Estimation

Regularised samples were used for estimating block grades (refer to Section 15.1.5.3).

The fit of the raw semi-variogram data to the spherical model was considered to be good enough for determining resource classification parameters (refer to Section 15.1.5.9) but, in the author's opinion, not quite good enough for kriging. Instead, inverse distance weighting ("ID") using a power of two was considered to be an appropriate method for estimating block grades.

Blocks were discretised twice in each dimension. The grade estimation process was carried out using the parameters that were reported in Table 15-3. A description of the block model file fields was reported in Table 15-4.

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

The resulting three block model files were compiled into a single block model titled "Blocks - NE Zone - Inferred - IDS Compiled.DAT". Run 2's block grades overprinted Run 3's grades and Run 1's grades overprinted Runs 2's and 3's grades.

Table 15-3: Grade estimation parameters.

Parameter	Run 1	Run 2	Run 3
Search Sphere Radius (m)	50 m	50 m	100 m
Min. Number of Holes	3	2	1
Min. Number of Samples Per Hole	7	5	3
Max. Number of Samples Per Hole	24	24	24
Resulting File	Blocks - NE Zone - Inferred - IDS Run 1.DAT	Blocks - NE Zone - Inferred - IDS Run 2.DAT	Blocks - NE Zone - Inferred - IDS Run 3.DAT

Table 15-4: Block model fields.

Field	Description
East	Easting (Grid)
_East	Block Dimension, East Direction
North	Northing (Grid)
_North	Block Dimension, North Direction
RL	Reduced Level (Grid)
_RL	Block Dimension, North Direction
Zone	Outlined Zone
Index	Unique index value for each block.
%Zn	Estimated zinc grade (percent).
%Pb	Estimated lead grade (percent).
Points	Number of Samples Used for Estimate
STD_DEV	Standard deviation of samples used.
Number of Holes	Number of Holes Used for Estimate
Run	Run number that was used to estimate the block grades.
Zn-Eq	Zinc-equivalent grade.
Resource Category	Resource category.

15.1.5.9 Resource Classification Parameters

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

Rather than classifying resources using the search ellipse parameters, Inferred resources were outlined graphically, on cross-sections using the process that was described in Section 15.1.5.2.

Indicated Resources were outlined graphically in plan-view within areas where the intercept spacing was approximately 40-50 metres – approximately the variogram ranges for zinc and lead (refer to Figure 15-17 and Figure 15-18).

No Measured Resources were identified in the Northeast Zone. In the author's opinion, the current intercept spacing was not sufficient to demonstrate grade continuity to the level that is demanded by Measured category.

15.1.5.10 Results

Using a block cut-off grade of 0.75 % zinc-equivalent, non-diluted Northeast Zone Indicated mineral resources totalled 1.7 million tonnes with average grades of 4.1 % zinc and 2.2 % lead (refer to Table 15-5).

Non-diluted Northeast Zone Inferred mineral resources totalled 2.7 million tonnes with average grades of 2.1 % zinc and 1.3 % lead.

No Measured mineral resources were identified.

Table 15-5: Non-diluted Northeast Zone resources.

Resource Category	ZnEq.% Cut-off	Tonnes	Zn (%)	Pb (%)	Zn Eq.%
Measured	0.50	-	-	-	-
Indicated	0.50	1,742,000	4.06	2.15	6.63
Measured+Indicated	0.50	1,742,000	4.06	2.15	6.63
Inferred	0.50	2,877,000	2.05	1.26	3.56
Measured*	0.75	-	-	-	-
Indicated*	0.75	1,737,000	4.07	2.15	6.65
Measured+Indicated*	0.75	1,737,000	4.07	2.15	6.65
Inferred*	0.75	2,748,000	2.12	1.32	3.70
Measured	1.50	-	-	-	-
Indicated	1.50	1,653,000	4.23	2.25	6.93
Measured+Indicated	1.50	1,653,000	4.23	2.25	6.93
Inferred	1.50	2,093,000	2.51	1.66	4.50
Measured	2.00	-	-	-	-
Indicated	2.00	1,587,000	4.35	2.32	7.14
Measured+Indicated	2.00	1,587,000	4.35	2.32	7.14
Inferred	2.00	1,741,000	2.76	1.91	5.06

*Base case for this study denoted by "**"*

Notes:

1. Cut-off grade for mineralised zone interpretation was 0.5% zinc-equivalent for surface resources (less than 100 metres deep) and 2% at depth.
2. Block cut-off grade for defining Mineral Resources was 0.75% zinc-equivalent.
3. No top-cut grade was used. In the author's opinion, the use of a top cut would not have significantly affected the results.
4. Zinc price was \$US 1.00 per lb, lead price was \$US 1.05 per lb. Prices were based on current and going-forward LME contract prices.
5. Zones extended up to 50 metres down-dip from last intercept.
6. Along strike, zones extended halfway to the next cross-section.
7. Minimum width was 2 metres.
8. Non-diluted.
9. Mineral resources that are not mineral reserves do not have demonstrated economic viability.
10. Mineral resource estimate prepared by Doug Roy, M.A.Sc., P.Eng.; base case denoted by "**".
11. Specific gravity was calculated based on zinc and lead content. There are no other sulphides or dense minerals that are present in significant quantities.
12. Inverse distance weighting, power of "2" ("ID2") was used for estimating block grades.
13. Indicated mineral resources identified where sample intercept spacing was 40 metres or less (based on variography).
14. No Measured mineral resources or mineral reserves of any category were identified.
15. Zinc-equivalency for lead was calculated based on relative metal prices, demonstrated processing recoveries (86% & 84 % for lead and zinc, respectively), and estimated smelter returns 95% & 85 % for lead and zinc).

15.1.6 Summary of Mineral Resources

In both the Main and Northeast Zones, Measured plus Indicated mineral resources totalled 7.8 million tonnes with average grades of 5.3 % zinc and 1.7 % lead (refer to Table 15-6).

Inferred mineral resources totalled 3.7 million tonnes with average grades of 4.2 % zinc and 1.5 % lead.

Table 15-6: Summary of non-diluted mineral resources – both zones.

Resource Category	ZnEq.% Cut-off	Tonnes	Zn (%)	Pb (%)	Zn Eq.%
<i>Measured</i>	0.50	2,094,000	3.11	1.67	5.12
<i>Indicated</i>	0.50	5,903,000	3.23	1.65	5.22
<i>Measured+Indicated</i>	0.50	7,997,000	3.20	1.66	5.19
<i>Inferred</i>	0.50	3,817,000	2.29	1.45	4.03
Measured*	0.75	2,075,000	3.14	1.68	5.16
Indicated*	0.75	5,770,000	3.30	1.69	5.32
Measured+Indicated*	0.75	7,845,000	3.25	1.69	5.28
Inferred*	0.75	3,677,000	2.35	1.51	4.16
<i>Measured</i>	1.50	1,845,000	3.41	1.87	5.65
<i>Indicated</i>	1.50	4,988,000	3.66	1.93	5.98
<i>Measured+Indicated</i>	1.50	6,833,000	3.59	1.92	5.89
<i>Inferred</i>	1.50	2,858,000	2.77	1.88	5.03
<i>Measured</i>	2.00	1,597,000	3.73	2.11	6.26
<i>Indicated</i>	2.00	4,430,000	3.93	2.15	6.51
<i>Measured+Indicated</i>	2.00	6,027,000	3.88	2.14	6.44
<i>Inferred</i>	2.00	2,450,000	3.01	2.13	5.58

Refer to Table 15-1 and Table 15-5 for resource estimation notes.

Base case for this study denoted by “*”



15.1.7 Comparison of Estimated Block Grades With Blasthole Sampling from Production

During surface mining that ScoZinc carried out in 2007-2008, blastholes were sampled and assayed for zinc content. The mineral resource block model for the Main Zone, which was estimated using diamond drilling samples, was compared with the results from closely-spaced blast hole samples that were collected during the recent surface mining operation. Jason Baker, a mining engineer formerly with ScoZinc Limited, carried out this comparison work (Baker, 2011).

The large number of blast holes are shown graphically in Figure 15-19. The solid bench models that were constructed for comparison purposes are shown in Figure 15-20.

During operations at Scotia Mine, blast hole data was recorded along with the assay data for each blast hole (refer to Figure 15-19). A single assay was calculated for each blast hole (i.e. If a blast hole had a depth of 10 meters, then a single assay value covered the entire 10 meter length). Spacing between blast holes was 10 ft. The blast hole data was imported into Gemcom software and a block model was created.

Blocks in the block model were interpolated for Zn grade using the blast hole assay intervals within the solid. The blast hole block model was constructed with the following orientation:

Origin = 8500 X, 6700 Y, 520 Z

Rotation = 0 degrees

Block Size = 5m x 5m x 5m

Blocks were interpolated for grade by the Inverse Distance Cubed method. A search ellipse with dimensions of X=10m, Y=10m, Z=10m was used in the interpolation. Once the block model was created volumetrics were performed on the blast hole solids using the resource block model as well as the new blast hole block model, and results were compared.

Results of the comparison were reported in Table 15-7 and shown graphically in Figure 15-21. The results compared well. For all benches, zinc grades from the resource block model were slightly, but not significantly greater than the blast hole data. The blast hole model volume was slightly greater.

The resulting metal content in the resource block model was actually 7-8 % less than that predicted by blast hole samples. Meaning, the estimated block grades of the mineral resource block model may be slightly underestimated. In other words, it is possible that there is slightly more metal in the ground than estimated by the block model.

Table 15-7: Results of comparison between blast hole and resource model.

Model	Bench	Volume (m³)	Zn Grade (%)
Scozinc	505	189,500	1.48
Blast Hole	505	217,400	1.67
Scozinc	495	196,300	1.26
Blast Hole	495	231,500	1.09
Scozinc	485	158,800	1.43
Blast Hole	485	166,000	1.27
Scozinc	475	49,500	1.86
Blast Hole	475	55,650	1.62
Scozinc	465	16,600	2.89
Blast Hole	465	20,500	2.40
Total Scozinc	All Benches	610,700	1.47
Total Blast Hole	All Benches	691,050	1.40

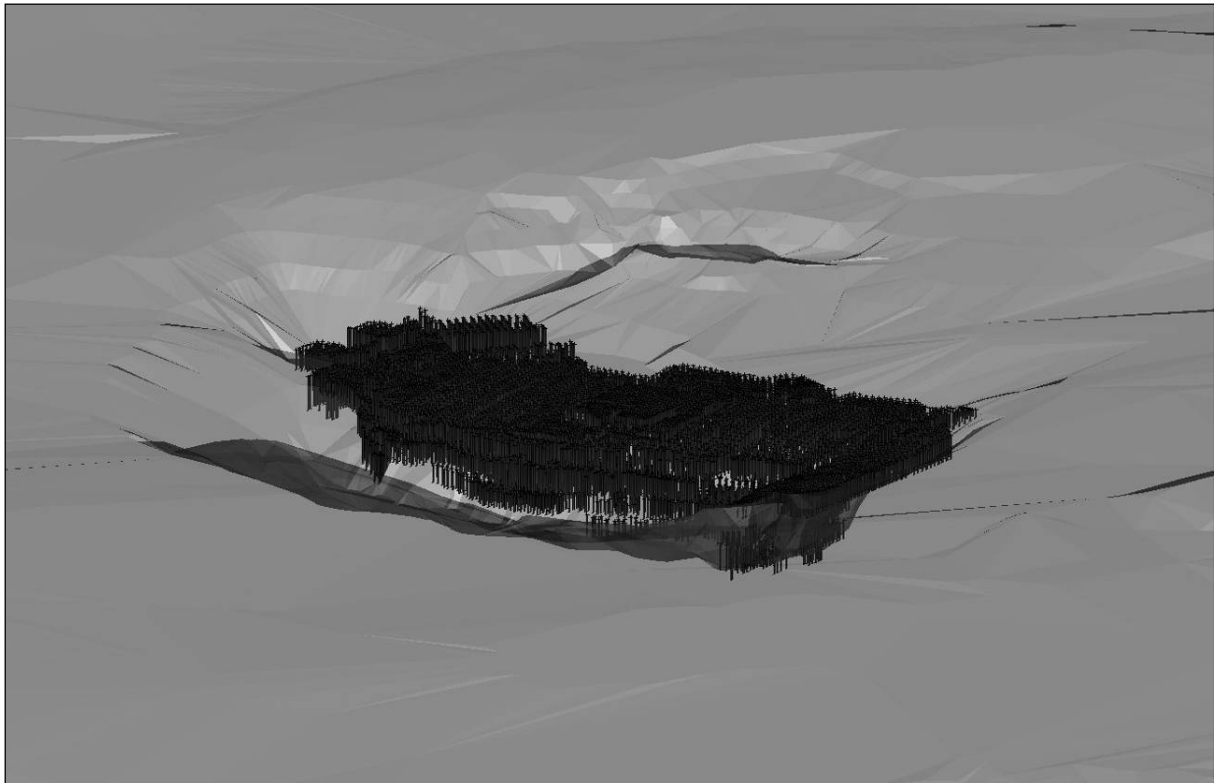


Figure 15-19: 3D view of the pit showing blast holes.



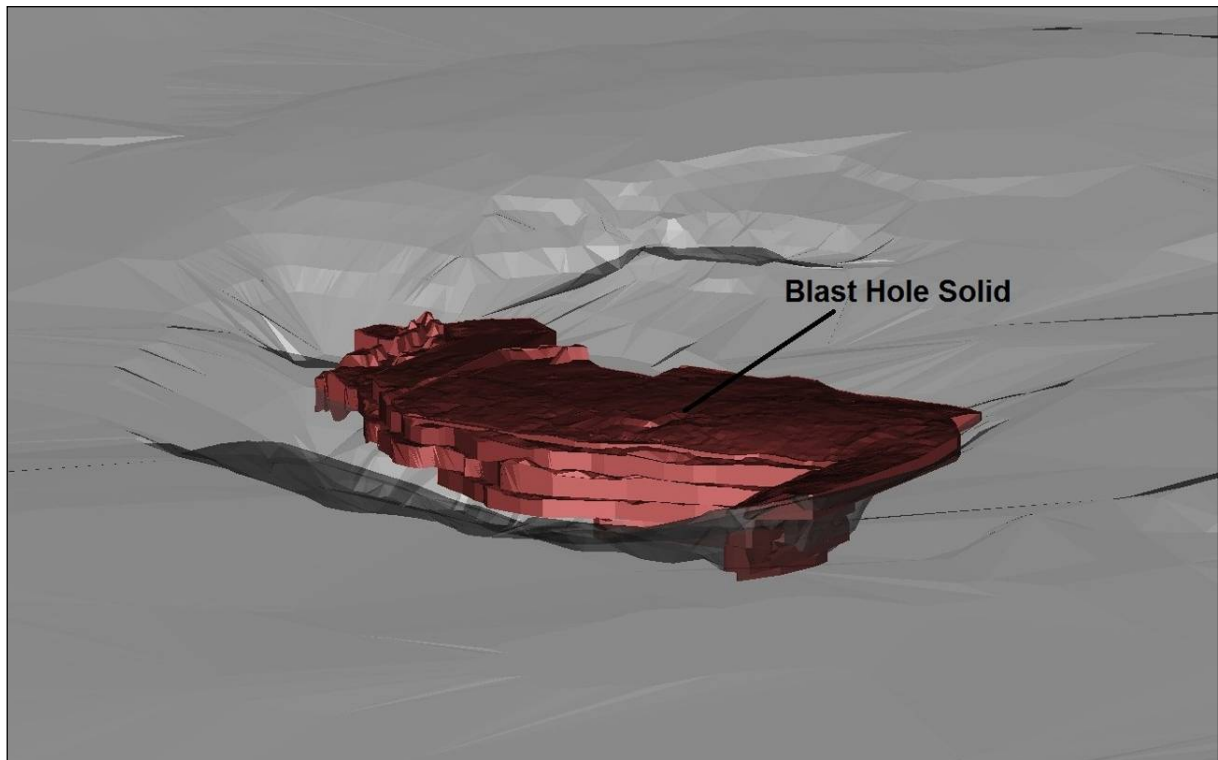
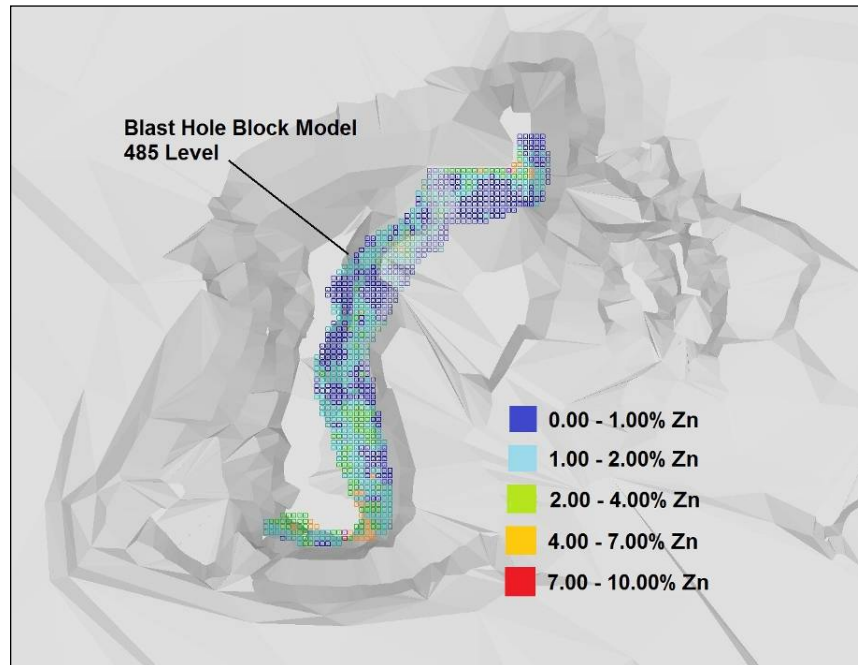


Figure 15-20: 3D view of the pit showing the bench models that were constructed.



Blast Hole Block Model



Mineral Resource Block Model

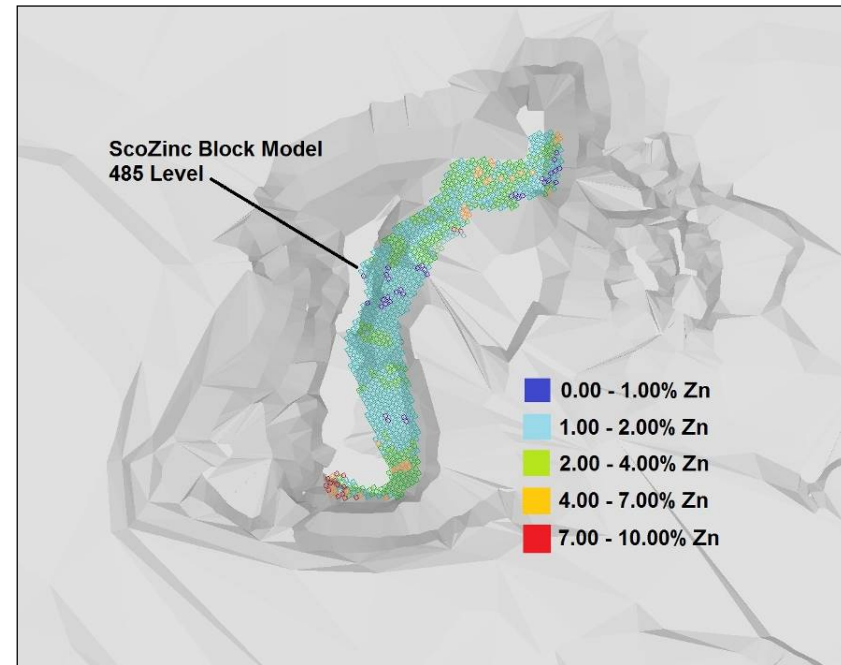


Figure 15-21: Blast hole and resource block model results, 485 m Level.

15.1.8 Comparison of Current Estimate with Previous (2006) Estimate

The results of the current estimate were compared with previous mineral resource estimates.

In 2007-2008, ScoZinc mined material mostly in the Measured and Indicated categories, with some coming from the Inferred category.

For the 2011 mineral resource update (Roy et al, 2011), the major change was a reinterpretation of the Northeast Zone that resulted in increases for the Indicated and Inferred categories compared with the 2006 estimate (Roy et al, 2006) (refer to Table 15-8)

The major change that was made for the current estimate was the reinterpretation of the Main Zone at a lower cut-off grade that resulted in increases for the Measured and Indicated categories, but a slight decrease in the Inferred category compared with the 2011 estimate.

As expected, the Main Zone reinterpretation at a lower cut-off grade caused an increase in tonnes but a slight decrease in grade (refer to Table 15-9).

Table 15-8: Comparison of current estimate with previous (2006) estimate.

Category	Change in Tonnes	Change in Percent Zinc	Change in Percent Lead
Measured	+195,000	-0.7	+0.1
Indicated	+2,410,000	-1.0	-0.5
Measured+ Indicated	+2,605,000	-0.9	-0.3
Inferred	+1,877,000	-0.7	+0.4

Table 15-9: Comparison of current estimate with previous (2011) estimate.

Category	Change in Tonnes	Change in Percent Zinc	Change in Percent Lead
Measured	+735,000	-1.3	-0.3
Indicated	+2,270,000	-0.4	-0.1
Measured+ Indicated	+3,005,000	-0.7	-0.2
Inferred	-573,000	-0.3	+0.2

15.1.9 Gypsum

Prior to 2004, very little sampling and assaying for gypsum was done. Past drilling campaigns focused solely on zinc and lead. Prior to 2004, much of the gypsum core was saved; however, much of it was improperly stored and the gypsum weathered away.



In 2004, fourteen vertical holes were drilled that penetrated the gypsum resource. These holes were sampled and assayed for gypsum. Most of the samples were also assayed for chloride. The chloride assay was for all chlorides – chloride ions from any source.

Examination of the core revealed that the gypsum was relatively hard and pure. There were very few clay interbeds as appear at National Gypsum's deposit in nearby Milford. The gypsum graded into anhydrite, typical of Nova Scotia gypsum deposits. There was no clear contact between the two rock types.

A preliminary assessment of gypsum quality was carried out using the holes that were drilled in 2004. A cut-off grade of 85 % gypsum was used. Where the hole entered the gypsum was defined as the top contact. Where the hole left the gypsum, meaning where the hole left the gypsum horizon and passed into material with an average gypsum grade of less than 85 % (in other words, into anhydrite), was defined as the bottom contact.

The average gypsum thickness was 31 metres with a range of 9-85 metres. The gypsum was covered by 16-61 metres of overburden, averaging 38 metres. The average stripping ratio was 1.7.

The subset of samples within the gypsum consisted of sixty-nine (69) samples from fourteen holes. More than half of these samples (44 of them) were also assayed for chloride. The length-weighted average grade was 93 % gypsum. The length-weighted average chloride content was 43 ppm. Only one sample contained over 100 ppm chloride – this sample averaged 142 ppm over three metres.

Table 15-10: Raw (non-weighted) assay statistics.

Statistic	Gypsum	Cl
Mean	92.8	41.3
Standard Error	0.41	3.88
Median	93.9	43
Mode	93.9	11
Standard Deviation	3.4	26
Sample Variance	11.8	661
Kurtosis	0.4	3.9
Skewness	-1.1	1.2
Range	14.17	138
Minimum	83.57	4
Maximum	97.74	142
Count	69	44

The reader should note that this analysis represents only an arithmetic analysis of gypsum quality and chloride content. No spatial statistics were calculated. Therefore, this is only an indication of gypsum quality – not an accurate estimate. The gypsum sample spacing is currently too wide for meaningful calculation of Resources or Reserves.

There are many bags of gypsum sample rejects available for mineral processing work. These are stored at the Scotia Mine site. Also, the core was sawed in half for sampling and the remaining halves were stored in a dry facility. The sample pulps are also readily available for further assay work.



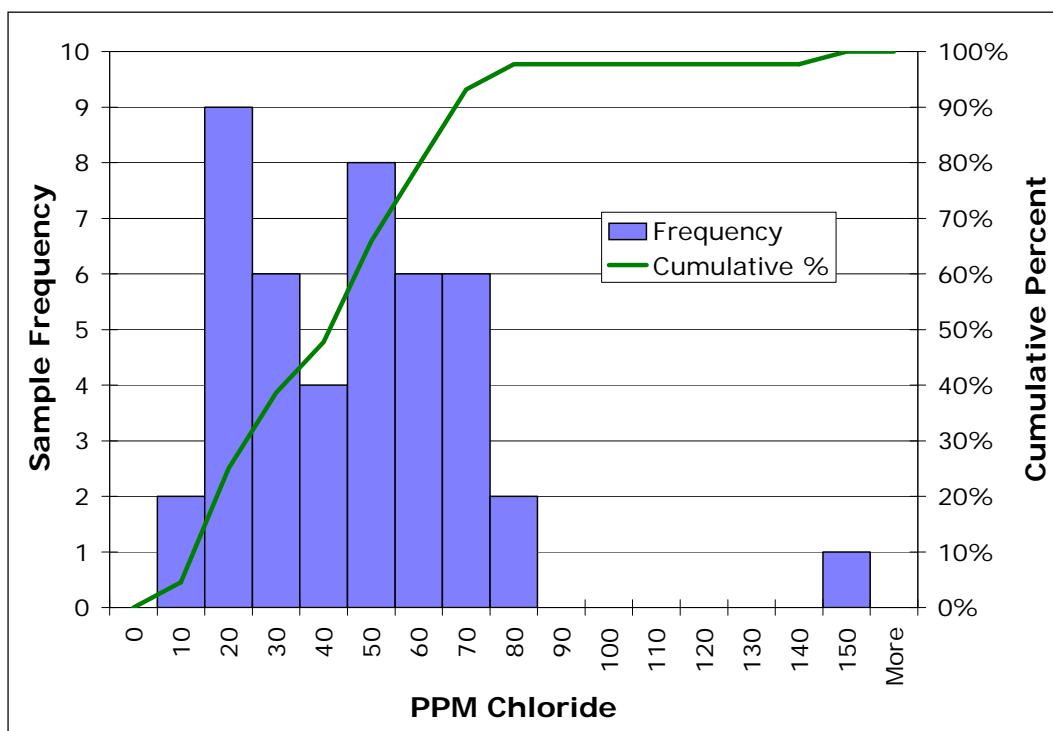
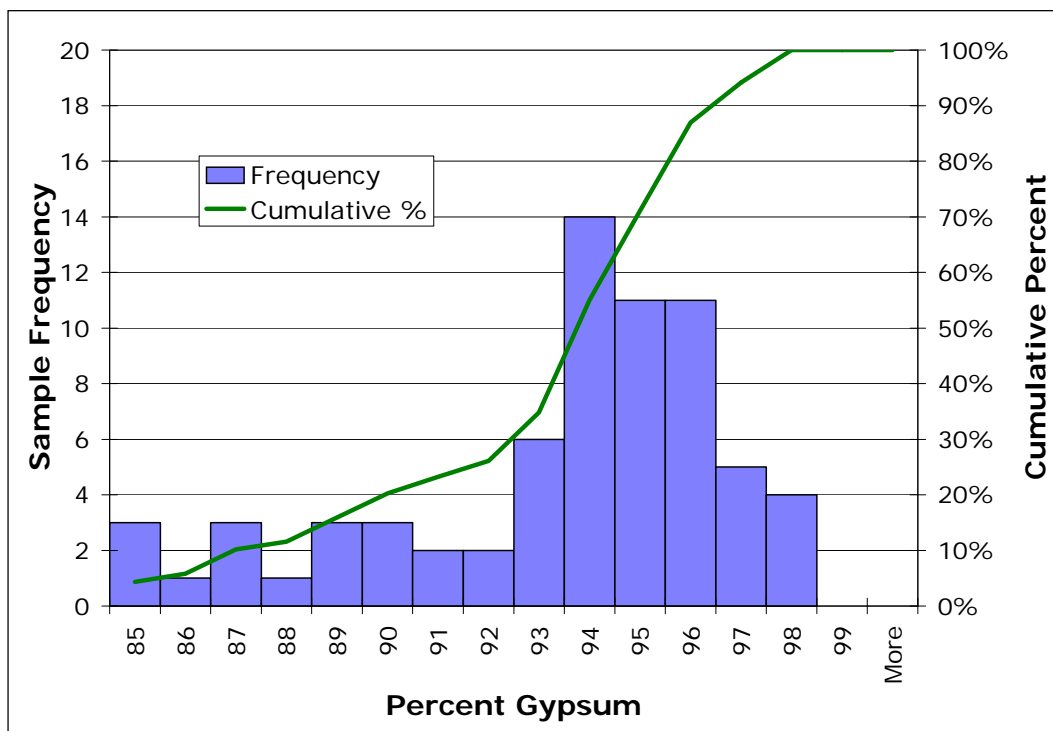


Figure 15-22: Gypsum and chloride histograms.



15.1.10 Items that May Affect the Mineral Resources

There are a certain amount of mineral resources, mostly in the Northeast Zone, that have been identified below the river and highway (refer to Figure 15-11).

Gays River has caused water problems for past underground mining operations. The river's flood plain is sandy and permeable. The current environmental registration document permits shifting the river toward the highway (refer to **Error! Reference source not found.**), which would allow the pit to expand northward.

However, current plans do not include diverting the river and, in the author's opinion, a significant amount of additional permitting work would be required prior to encroaching on the current river bed.

15.2 Getty Deposit

Cullen *et al* (2011) estimated the Getty Deposit's mineral resources. The following (i.e.: the entirety of Section 15.2) is an excerpt from that report.

15.2.1 General

"The definition of mineral resource and associated mineral resource categories used in this report are those recognized under National Instrument 43-101 and set out in the Canadian Institute of Mining, Metallurgy and Petroleum Standards on Mineral Resources and Reserves *Definitions and Guidelines* (the CIMM Standards).

15.2.2 Geological Interpretation Used In Resource Estimation

"All areas of zinc-lead mineralization included in the current resource are restricted to the Getty Deposit carbonate bank and occur within dolomitized Gays River Formation lithologies. For resource model purposes the Getty Deposit is considered an extension of the adjacent Gays River Deposit and both are classified as carbonate-hosted, stratabound zinc-lead deposits of the Mississippi Valley Type (MVT). Mineralization is localized in carbonate bank lithofacies that developed above and around paleo-topographic basement highs comprised of Cambro-Ordovician Goldenville Formation greywacke and slate. By definition, Gays River Formation lithologies are laterally equivalent to laminated and thin bedded limestones of the Macumber Formation.

"Zinc and lead mineralization of economic proportions is exclusively developed within dolomitized carbonate bank lithologies at Getty and is considered directly comparable to that seen on the adjacent Scotia Mine property. Sphalerite and galena are the dominant sulphide minerals present but trace amounts of marcasite/pyrite occur locally, typically as cavity-lining phases that post-date the zinc-lead mineralizing stage. Silver does not occur in economic proportions in this district but does report to Scotia Mine concentrates at levels of about one ounce per tonne. A similar presence at Getty may exist. Barite is absent from the deposit, as is celestite, but traces of fluorite have been reported (Kontak, 1998, 2000; Sangster et. al., 1998).

"As noted earlier, several types of lead and zinc mineralization are represented in the related Scotia Mine and Getty Deposits, the most important of which are (1) submassive to massive replacements of carbonate bank



lithofacies by sphalerite and galena, typically along steeply dipping carbonate bank front intervals that face the open paleo-basin, (2) disseminated, replacement and porosity filling phases within various carbonate bank lithologies adjacent to and within bank-front intervals, and (3) in rare vein and irregular vug settings or as matrix mineralization between greywacke clasts or boulders in a basal breccia unit that typically separates carbonate bank lithologies from basement greywacke. The dominant type of mineralization in the Getty Deposit is disseminated in nature.

15.2.3 Methodology of Resource Estimation

15.2.3.1 Overview of 2011 Estimation Procedure

“The Getty mineral resource estimate is based on a three dimensional block model developed using Surpac Version 6.0.3 modeling software and the validated project drill hole database. The database includes results from 181 historic diamond drill holes completed by Getty as well as 4 holes completed by Esso and 138 diamond drill holes completed by Acadian in 2007-2008. The current resource outline includes 84 historic holes and 94 Acadian holes, although additional holes from both sources occur adjacent to the outline and were used for geological and block model peripheral constraint definition purposes.

“The first step in development of the resource model was creation of a set of interpreted geological cross sections presenting lithocoded rock types interpreted from drill logs as well as lead and zinc core sample assay interval data. These served to establish an understanding of carbonate bank geometry and grade distribution trends present in the deposit and were later augmented by contour plans depicting overburden depth, dolomite thickness and basement surface configurations. Sections were created using the local project grid at a nominal spacing of 50 meters, with adjustment of this spacing made as necessary to provide complete coverage of the deposit. Geological and grade distribution models developed from the sections were used to guide and assess subsequently developed versions of the three-dimensional block model.

“Assay results from the validated project database were initially assessed through calculation of distribution statistics for both zinc and lead populations after compositing to a common 1.0 meter support base. In total, 1672 composites were created from analytical results for 1794 original core samples. Frequency distribution and probability plots for the composite data set were also prepared and results were interpreted as showing that the few high grade samples present were reflections of valid mineralization styles for which block-scale correlations could be reasonably expected. This assertion reflects observations made during underground mining of high grade portions of the adjacent Gays River Deposit. Composites showing high zinc and lead grades occur in several areas along the north-facing bank front of the Getty Deposit, as is the case at Scotia Mine, but these are typically lower in grade, thinner and spatially less extensive than similar high grade areas at Scotia Mine. On the basis of combined factors, no requirement for high grade capping of assay results in the Getty data set was established.

“The Getty Deposit model was developed within a three-dimensional, peripheral constraint (or solid) created in Gemcom Surpac Version 6.0.3 initially based on a combination of two contributing parameters, these being (1) a minimum grade % (zinc plus lead) value of 1.00% with a minimum down-hole intercept length of 3.0 meters, and (2) lateral limits to the deposit solid defined on the basis of midpoints between mineralized and non-mineralized drill holes or a maximum 25 meter projection from a mineralized hole where no other constraining hole was



present. The grade cut-off was assigned as a reflection of the deposit's near-surface location and associated potential for open pit development.

"While not as complex as that at Scotia Mine, the carbonate bank front configuration at Getty is irregular and the solid developed for deposit modelling purposes is characterised by numerous promontories and re-entrants. This is particularly true along north-facing bank front intervals that show spatial association with areas of best zinc and lead mineralization. This configuration approximates a series of variably-oriented panels of dipping mineralization that, although correlative, show strike and dip changes along the length of the deposit. The current peripheral deposit constraint solid for the block model reflects this variation and is based on that developed for the earlier Acadian resource estimate (Cullen et al., 2007). However, it differs from the earlier constraint by accommodating the new drill holes by Acadian and being comprised of 26 sub-domains reflecting areas of common mineralized zone orientation. As detailed later in this report, block grade interpolation was separately carried out in each sub-domain using unique search ellipse orientations.

"Spatial variability of mineralized zone trends at Getty prevented development of experimental variograms for the lead and zinc data set that reflected continuity of the mineralized zone to the degree seen in the original geological cross section model. This issue was addressed by Roy et al. (2006) at the Gays River Deposit through three-dimensional transformation of their deposit model that "unfolded" the various mineralized segments to a common surface. Transformed data supported acceptable variogram models and these were subsequently used to establish parameters for grade interpolation into their block model.

"In contrast to the method used at Scotia Mine, mineralized trend variability along the Getty Deposit was addressed in the current model through development of the 26 orientation domain solids within which grade interpolation was constrained. Composite populations within individual domains typically did not provide an adequate number of sample pairs to create well developed experimental variograms. However, useful variogram models for the largest northwest trending sub-domain were initially developed and these were augmented by variogram models calculated for the entire composite population occurring within the peripheral deposit constraint. In the latter case it was recognized that geometric aspects of the deposit could factor negatively in the evaluative process. Based on combined results of the two approaches, the strike and dip directions of the mineralized zones were determined to show the highest degrees of grade correlation at longest range values. This directly supported earlier qualitative geological assessment of the grade trends. Geometric aspects of the mineralized zones were used in conjunction with variogram results to select interpolation ellipse axial ranges, with common ranges used in all sub-domains in conjunction with unique assigned orientation parameters. Block grades were assigned to the 26 deposit sub-domains using inverse distance squared (ID^2) interpolation methodology.

"Results of the grade interpolation process were initially checked against geological cross sections to assess conformity and to provide primary validation of the final deposit block model. A further check on the resource model was completed using Nearest Neighbour grade interpolation methodology on the deposit solid. Resource figures reflecting ID^2 interpolation and a range of minimum grade cutoff values, beginning at 2.0% (zinc + lead), constitute the final resource estimate documented in this report.

15.2.3.2 Capping of High Grade Assay Values



“Zinc and lead grades for all drill core samples were reviewed and descriptive statistics calculated for both the raw data set and that reflecting 1 meter composite support. The latter are presented below in Table 15-11 and include only those holes that intercept the deposit solid.

Table 15-11: Descriptive Statistics: 1 Meter Drill Core Composites In Resource Solid

Parameter	Zinc	Lead
Mean	1.46%	1.00%
Variance	1.94	2.53
Standard Deviation	1.39	1.59
Coefficient of Variation	0.948	1.580
Maximum	11.30	18.54
Minimum	0.00	0.00
Number	1961	1961

“Maximum zinc and lead grades at 1 meter composite support are 11.30% and 18.54% respectively and reflect zones of higher grade mineralization that are considered spatially coherent and correlative at block scale within the deposit. These form a meaningful part of the grade distribution spectrum of the deposit and are associated with valid geological domains. On this basis, high grade lead and zinc values were not capped for use in the current resource estimate.

15.2.3.3 Compositing of Drill Hole Data

“One meter down-hole composites of raw core sample assay values were created for each drill hole, with this length representing the dominant sample interval used by Acadian in the 2007-2008 drilling program. Historic drilling program sample length statistics for all holes are presented in Table 15-12. A review of associated rank and percentile figures shows that 99 percent of the historic samples measure less than 2.0 meters in length, 75 percent measure 1.52 meters or less in length and 39 percent measure less than 1.0 meter in length. Average length of historic samples is 1.15 meters.

Table 15-12: Core Sample Length Descriptive Statistics

Parameter	Historic Core Sample Length (m)	Acadian Core Sample Length (m)
Mean	1.15	1.00
Variance	0.222	0.063
Standard Deviation	0.47	0.25
Coefficient of Variation	0.411	0.250
Maximum	4.26	6
Minimum	0.02	0.38
Number	855	939

“With respect to Acadian sampling, associated rank and percentile figures show that 95 percent of samples measure 1.0 meter or less in length and 99% of samples measure 2.0 meters or less in length in length. Average length of Acadian core samples is 1.00 meters. Sampling of high grade intervals in historic drill holes was typically



carried out based on geological contacts with no minimum sample length parameters applied. This may in part be reflected in samples from historic programs with lengths of less than 0.5 meters.

"In total, 1672 assay composites at 1.0 meter support were calculated within the resource estimation solids from the combined historic drill hole and Acadian drill hole data set.

15.2.3.4 Calculation of Equivalent Zinc

"The previous Mercator resource estimate for the Getty Deposit reported by Cullen et al. (2008) presented a zinc equivalent parameter of zinc equivalent = (zinc% + lead %). Riddell (1976) also used a zinc% + lead% factor to define resource cutoff values and included the parameter in the associated resource estimate. Use of zinc% + lead% to define cutoff values was not retained for the current estimate.

"Market conditions at the effective date of this report have changed since the 2008 resource estimate. Based on (1) review of London Metal Exchange 27 month forward contract pricing for lead and zinc, (2) consideration of current and future market pricing projections prepared for Selwyn (Brook Hunt, 2010), (3) availability of 2007-2008 milling recovery data from Scotia Mine, and (4) provision of relevant smelter return factors, the authors have chosen to redefine zinc equivalent for current purposes. Zinc Equivalent % (Zn Eq.%) for this report is defined as $Zn \% + (Pb \% \times 1.18)$, based on mill recoveries of 89.3% for zinc and 89.5% for lead, \$US1.10/lb Zn and \$US1.15/lb Pb metal pricing and smelter returns of 85% for Zn and 95% for Pb. A 2.00% Zn Eq. resource statement cutoff value was used and reflects open pit development potential.

15.2.3.5 Variography

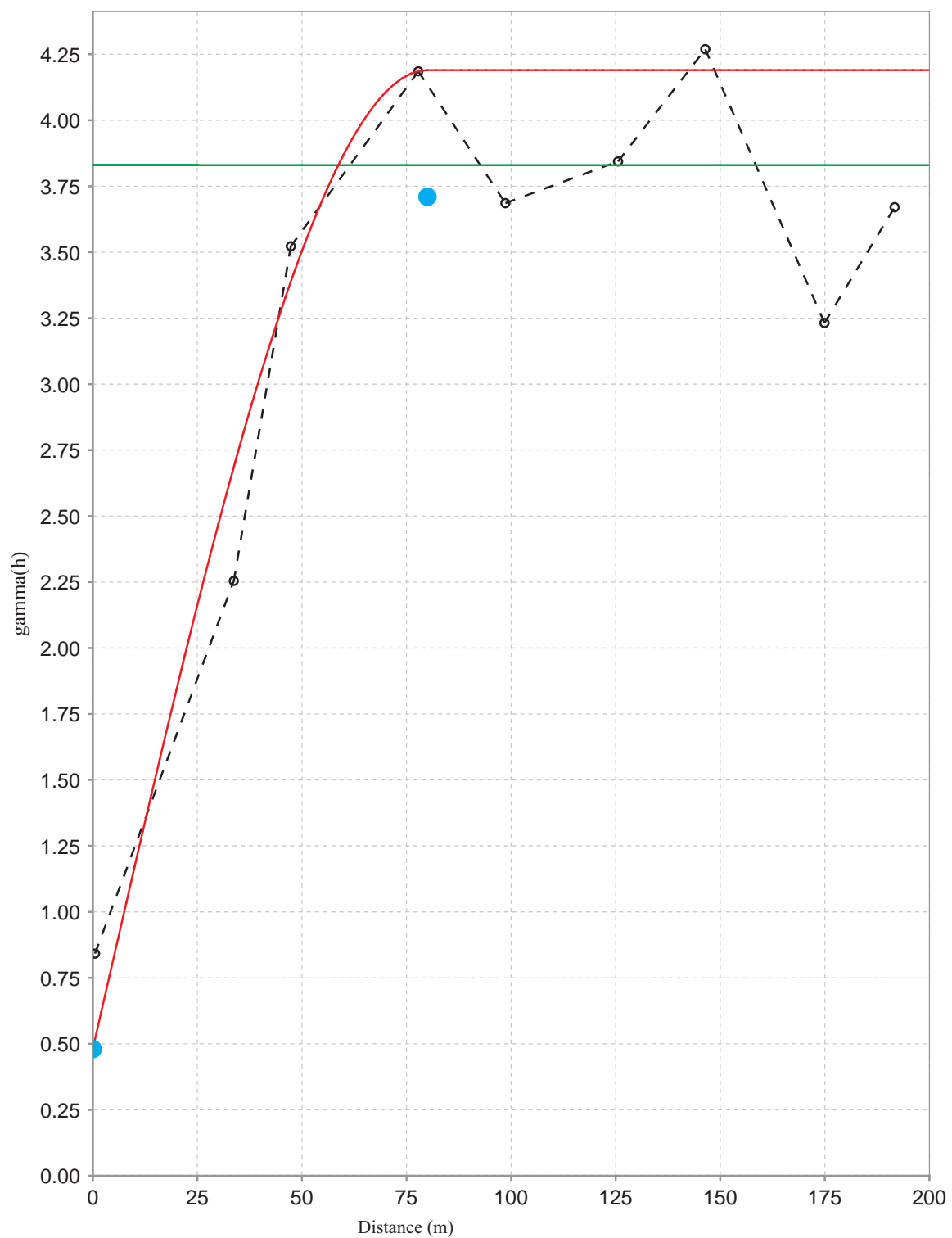
"As reported by Cullen et al. (2008), an initial assessment of variography for the deposit area was carried out for historic drill hole data by creation of experimental variograms for combined zinc plus lead (zinc + lead) values for the largest northwest trending sub-domain of the deposit that corresponds with mineralization developed along the contact between overlying evaporite and extending southwest into the dolomitized bank proper. Further details pertaining to deposit sub-domains are presented in the following sections. In plan projection the selected sub-domain measures approximately 700 meters in length by 200 meters in average width and forms a broad corridor of northwest striking, flat-lying to northeast-dipping mineralized carbonate that shows restriction of most mineralization to a relatively narrow, 150 meter elevation interval. Local irregularities of the mineralized carbonate's trend are present in this corridor and take the form of promontories and re-entrants that have associated variations in strike and dip components.

"Experimental variograms for the selected sub-domain were calculated at various lags and bearings within a horizontal reference plane and resulted in selection of spherical variogram models for major and semi-major axes of continuity in orientations that correspond to the dominant geological strike and dip directions within the sub-domain. Representative variogram models for these two axial components are presented in Figure 15-23 and Figure 15-24 and show ranges of 75 meters and 100 meters respectively. Experimental variograms were also calculated in the same horizontal reference plane for the entire composite data set occurring within the deposit peripheral constraint and these provided definition of spherical variogram models showing similar major and semi-major axis orientations as those calculated for the northwest sub-domain, but with higher degrees of



complexity resulting from combination of data from the various orientation sub-domains present within the deposit.





- Normal
- Variance
- Variogram Model
- Variogram Structures

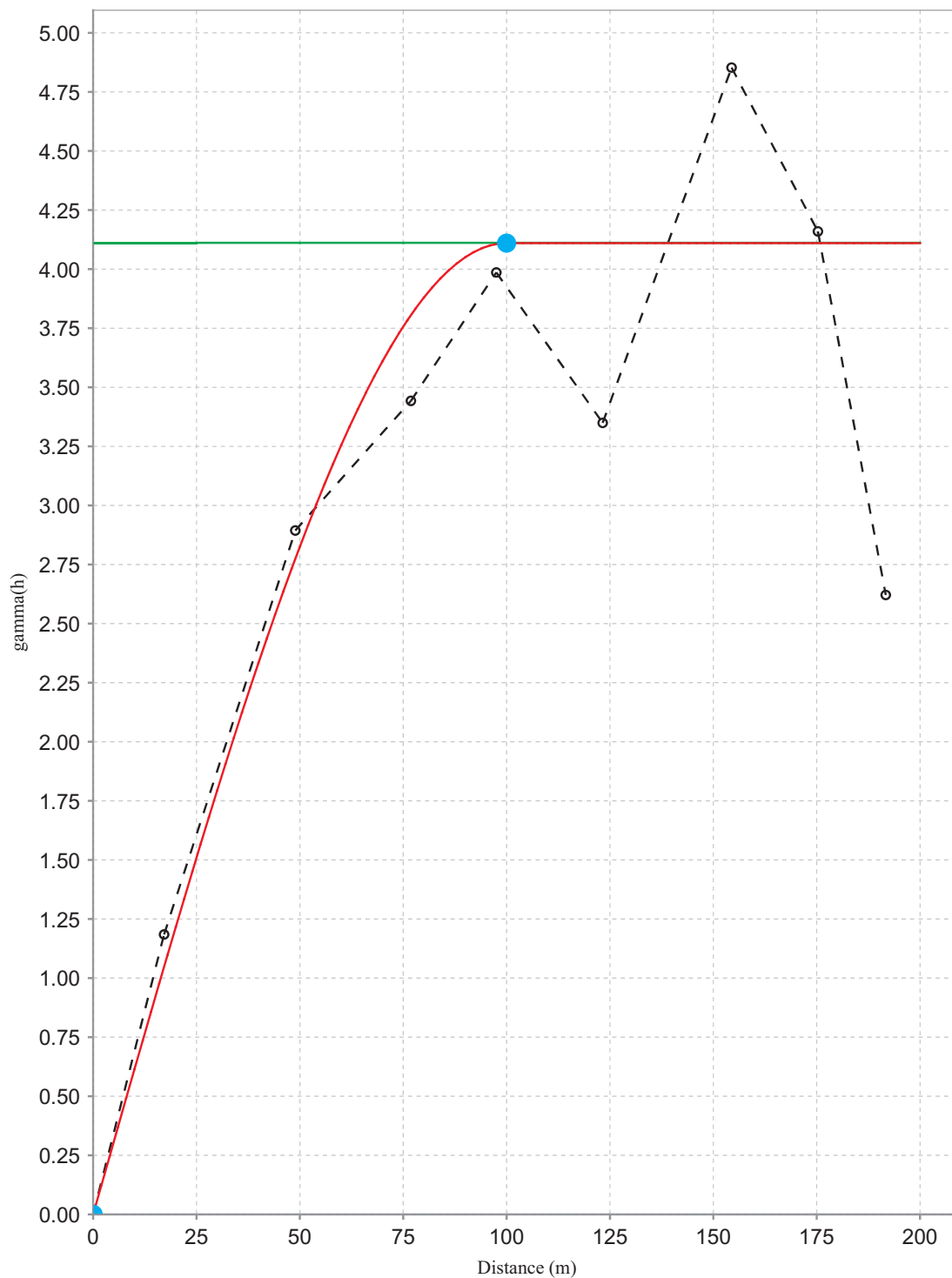


Figure 17-23

Experimental Variogram in Sub-Domain 1
Azimuth 150 Degrees Grid
Getty Deposit

Date: April 2011

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- Normal
- Variance
- Variogram Model
- Variogram Structures

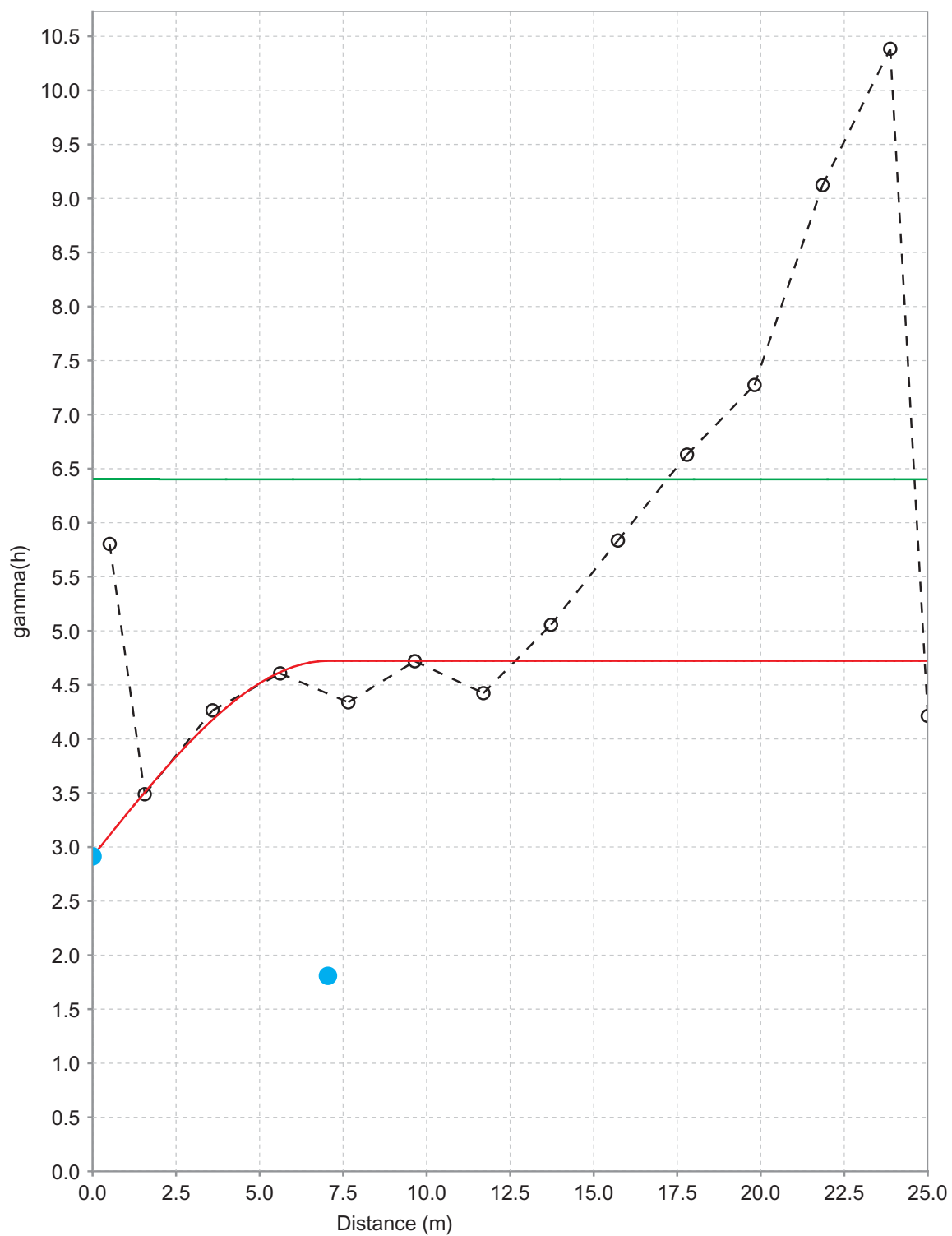


Figure 17-24

Experimental Variogram in Sub-Domain 1
Azimuth 75 Degrees Grid
Getty Deposit

Date: April 2011

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- Normal
- Variance
- Variogram Model
- Variogram Structures



Figure 17-25
Experimental Variogram
Downhole
Getty Deposit

Date: April 2011

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From Cullen et al, 2011.

“Down hole experimental variograms and spherical model variograms were also prepared to assess grade continuity and correlation trends vertically within the dolostone unit that hosts the deposit. Figure 15-25 presents the best resulting down-hole variogram model and supports a range of 12 meters at a lag of 2 meters. This range is interpreted as reflecting the average mineralized thickness of the host carbonate within the deposit peripheral constraint and was considered during selection of a minor axis range value for the grade interpolation search ellipse.

“Ranges for variograms defined for the main northwest trending sub-domain were assumed to be applicable in the other deposit sub-domains, based on (1) correlation of the modeled continuity trends with local geological strike and dip directions and (2) independent confirmation of grade continuity based on systematic review and interpretation of multiple geological and assay cross sections through the deposit. In combination, these assumptions largely reflect the recognized stratabound character of the zinc and lead mineralization within the Gays River Formation host sequence in the Getty Deposit area.

15.2.3.6 Setup of 2011 Three Dimensional Block Model

“Block model total extents were defined in local grid coordinates as being from 6000 meters East to 7145 meters East and from 6300 meters North to 7150 meters North. The model extends in elevation from 150 meters to 700 meters relative to the Scotia Mine local grid that has a datum of mean sea level plus 500.11 meters. The nominal topographic surface in the Getty Deposit area occurs between the 550 meter and 520 meter local grid elevations and all resource solids respect the bedrock/overburden surface defined by the resource drill hole data set. As noted earlier, all drill holes in the Getty resource database are coordinated to both the Scotia Mine local grid and to UTM Zone 20 (NAD83) and collar coordinates for the local grid are reported in Appendix 2. The local grid closely reflects the 3rd Modified Transverse Mercator (MTM) projection for Nova Scotia (ATS 77 datum).

“A standard block size for the model was established at 2.50 meters x 2.50 meters x 2.50 meters, with no sub-blocking. Descretization within blocks was 1 x 1 x 1 and no block rotation was applied. The chosen block size reasonably reflects the character of mineralization within the deposit and also provides approximation of a mining unit size that could be applicable in development of this style of base metal deposit.

“All historic drill holes were lithocoded using the lithocode system originally established by Westminer for the Gays River Deposit. This system was also being used in the Getty Deposit drilling program by Acadian.

“Resource estimation was completely constrained within a peripheral deposit solid developed from wireframing of mineralized envelope limits on geological cross sections cut through the deposit. A minimum 1.0% (zinc + lead) value over a minimum 3.0 meter down hole sample length was used initially to define wire-framed mineralized envelope limits for a peripheral deposit constraint, with slight modifications made locally as required after inspection of the resultant solid. Lateral or down-dip deposit limits were typically created at midpoints between holes that mark the mineralized zone to non-mineralized zone transition or at a distance of 25 meters from a mineralized drill hole, the lesser distance being utilized.

“To properly accommodate deposit geometry during modelling, twenty-six grade interpolation sub-domains were established within the block model peripheral constraint and these are illustrated in (Figure 21). Sub-domains reflect areas of common geometric orientation of the mineralized carbonate and were established as discrete three dimensional constraints within which block grade interpolation could be carried out. Contributing



composites for block grade interpolation were not constrained within the sub-domains, to ensure that modeling allowed grade continuity to exist across sub-domains boundaries. Fifteen sub-domains occur contiguously within the main northwest trending deposit outline and the remaining 11 occur contiguously within the southwest zone of the deposit that, at the minimum cut-off used in this report, has been modeled as a separate mineralized area immediately adjacent to the main deposit ([refer to] Figure 15-26).

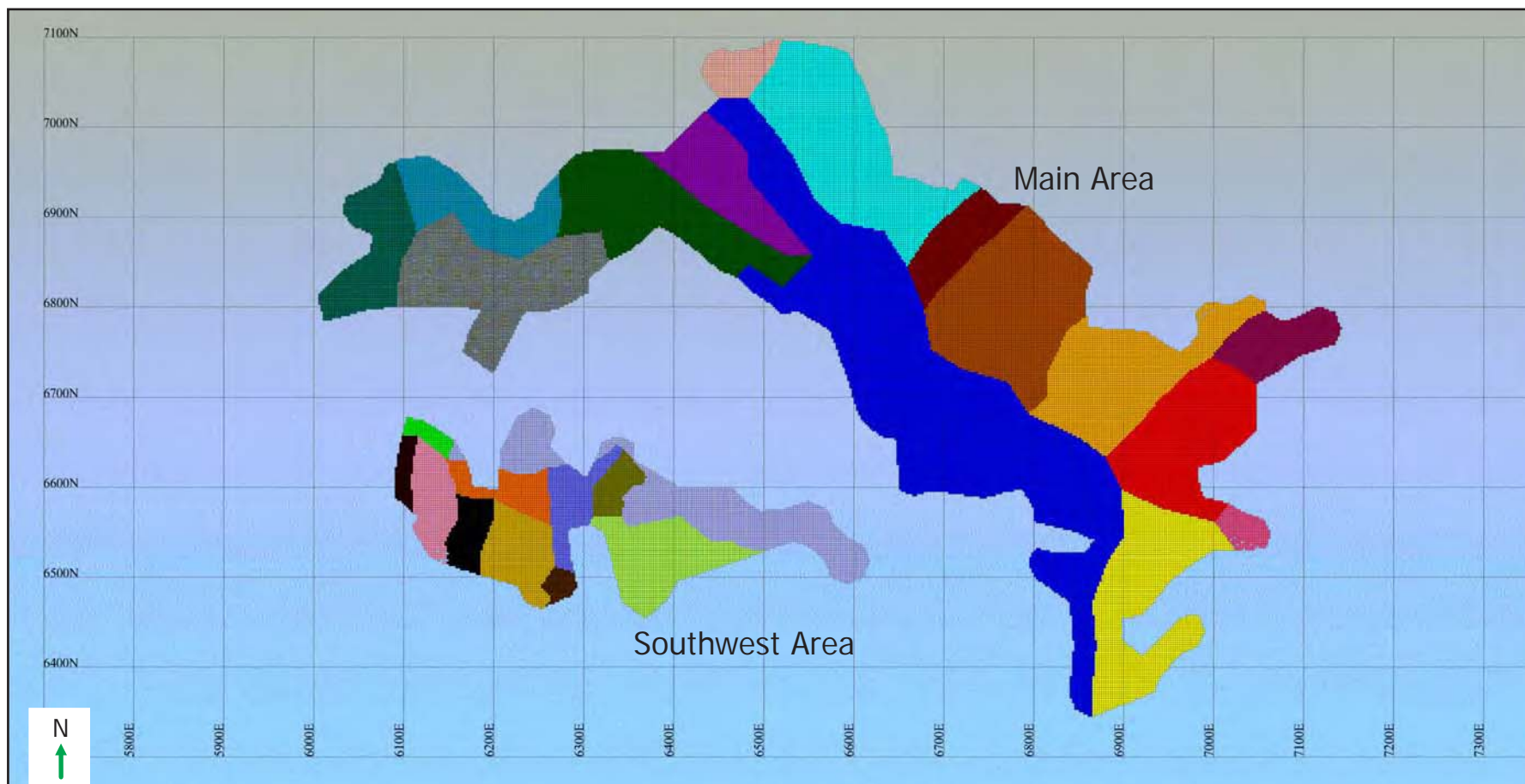
15.2.3.7 Assignment of Resource Estimate Cutoff Values

"A minimum cutoff value of 2.0 % zinc equivalent was used for reporting the current mineral resource estimate. This value was selected to reflect recognized potential for open pit development of the deposit and processing of ore at the adjacent Scotia Mine milling complex.

15.2.3.8 Material Densities

"No historic collection of Specific Gravity (SG) data for either the Scotia Mine or Getty Deposits was identified in historic records. However, during the course of the 2007-2008 drilling program, Mercator selected 120 dolostone and basal breccia pulp samples representing the grade range within the deposit and submitted these to ALS Chemex in Sudbury, ON for the purpose of Specific Gravity (SG) determination. Pycnometer and methanol laboratory methodology was utilized as set out in the ALS Chemex OA-GRA-08b laboratory protocol. Analytical results for zinc and lead had previously been received for all of the samples submitted for SG determination. No porosity factor was used in the specific gravity calculations.





LEGEND

Interpolation Domains
with Identifiers

Main Area

- M1
- M2
- M3
- M4
- M5
- M6
- M7
- M8
- M9
- M10
- M11
- M12
- M13
- M14
- M15

Southwest Area

- S1
- S2
- S3
- S4
- S5
- S6
- S7
- S8
- S9
- S10
- S11

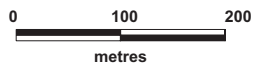


Figure 17-26

Plan View of Getty Deposit
Grade Interpolation Sub-Domains

Date: April 2011

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From Cullen et al, 2011.

“Specific gravity (SG) values for the block model were assigned by calculation based on a base dolostone SG value of 2.82 g/cm³ and application of the formula set out below that assigns SG values based on zinc and lead block grades plus the base dolostone value. Zinc is assumed to be present as sphalerite and lead to be present as galena. This approach is consistent with methodology used for the previous Getty Deposit resource estimate by Mercator (Cullen et al., 2008) and follows the earlier example of MineTech International Limited (Roy et al., 2006) for calculation of mineral resources and reserves supporting the recent feasibility study for Acadian’s adjacent Scotia Mine project.

“The 120 SG determinations from the Acadian drilling program were used to assess the assignment equation and results correlated sufficiently well to maintain its use. However, the equation was modified through increase of the original base dolostone SG value of 2.7 g/cm³ to 2.82g/cm³. SG values calculated for each block were multiplied by corresponding block volumes and results summed according to applied cutoff parameters to obtain tonnage values for the deposit model. For purpose of review, descriptive statistics for calculated block density values used in the current deposit model are presented in Table 18. A tabulation of SG values for all analysed samples appears in Appendix 3.

Table 15-13: Descriptive Statistics: Block Model Density Values

Parameter	Value
Mean	2.86
Variance	0.001
Standard Deviation	0.028
Coefficient of Variation	0.010
Maximum	3.27
Minimum	2.82
Number	209757

15.2.3.9 Interpolation Ellipsoid and Resource Estimation

“Inverse Distance Squared (ID²) grade interpolation was used to assign block model metal grades, with blocks being fully constrained by limits of the 26 separate resource domain solids. Variogram models were used in conjunction with geological model attributes to guide assignment of major, semi-major and minor axis range values for interpolation ellipses used in the current model. Unique search ellipse orientation parameters were developed that reflect local geological strike and dip components for mineralized carbonate in each of the 26 interpolation domains and axial orientations were assigned to conform to this geometry.

“Major and semi-major axial range values for the ellipsoids were set at 75.00 meters for each domain and in no case exceeded the maximum major and semi-major range values indicated by the selected assay composite variogram models. The 75.00 meter range in both major and semi-major orientations was considered sufficient to insure block grade interpolation from 3 contributing drill holes in a 25 meter spaced drill pattern. Minor axis ranges of 37.5 meters were assigned to ensure full exposure to the thickness of stratabound mineralization within all sub-domains. This value exceeds the down-hole variogram range mentioned above and is fifty percent of the selected major and semi-major axis range values. Minor axis range selection was weighted on the basis of

the deposit geological model to ensure inclusion of the full host sequence stratigraphic thickness in all sub-domains. Orientation parameters pertaining to the 26 grade interpolation sub-domains appear in Table 15-14 and Figure 15-27 presents a graphic representation of the various search ellipses superimposed on the block model.

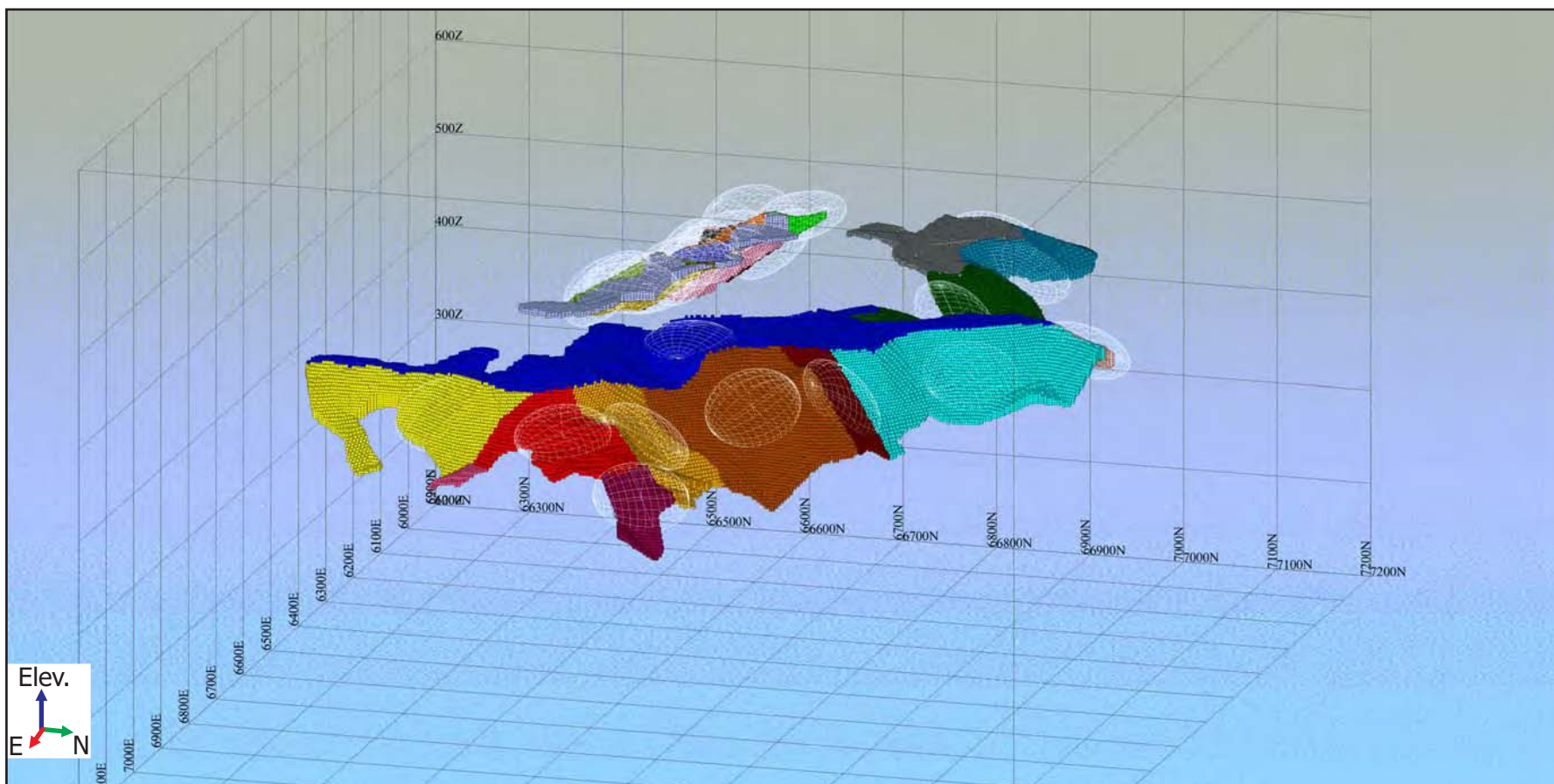
Table 15-14: Search Ellipse Parameters for Interpolation Domains

Interpolation Domain Name	Azimuth (Degrees)	Plunge (Degrees)	Dip (Degrees)
Main 1	0	0	0
Main 2	0	0	0
Main 3	306	-22.5	-33.5
Main 4	306	-20.5	37
Main 5	0	-24	0
Main 6	250	-25	-18
Main 7	295	-33	0
Main 8	47	-31	35
Main 9	36	-20	-27
Main 10	33	-23	-10
Main 11	43	-15	30
Main 12	132	-24	15
Main 13	43	-8.5	-10
Main 14	0	0	0
Main 15	58	23	0
South 1	103	0	0
South 2	90	-5	-31.5
South 3	190	10	-20
South 4	176	26	16
South 5	108	0	-30
South 6	307	0	22
South 7	184	41	4
South 8	180	41	-45
South 9	193	44	7
South 10	194	38	-24
South 11	197	41	42

“A maximum of 12 included sample composites was established for estimation of individual block grades, with no more than 4 composites allowed from a single drill hole.

“These parameters ensured both multiple drill hole inclusion in block grade estimations and lateral grade projection between drill holes in dip and strike orientations. Single passes of ID² grade interpolation were separately completed for the zinc and lead data sets within each of the 26 interpolation sub-domains and results were initially reported at grade cut-offs of 1.50%, 2.00%, 2.50% and 3.00% (zinc equivalent).

“Grade distribution within the block model was assessed against vertical geological and grade cross sections cut through the deposit at nominal spacings of 50 to 70 meters and also against horizontal sections cut through the model at 10 meter elevation intervals. Metal distribution trends observed in the sections were considered acceptable against the geological model. Figure 15-28 though Figure 15-31 present perspective views of block model grade distribution trends at specified cut-off values.



LEGEND

Interpolation Domains
with Identifiers

Main Area

- M1
- M2
- M3
- M4
- M5
- M6
- M7
- M8
- M9
- M10
- M11
- M12
- M13
- M14
- M15

Southwest Area

- S1
- S2
- S3
- S4
- S5
- S6
- S7
- S8
- S9
- S10
- S11



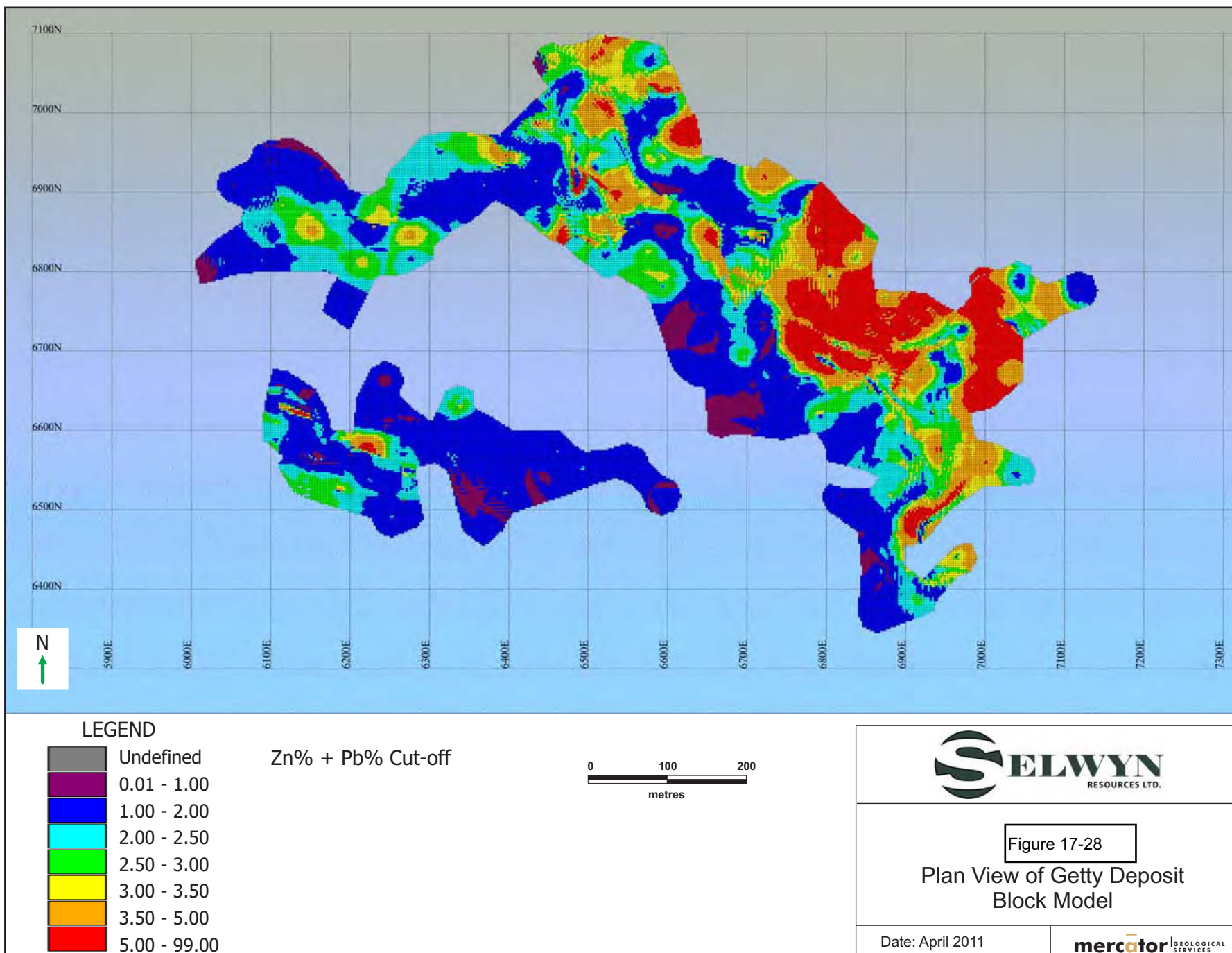
Figure 17-27

View of Grade Interpolation
for Getty Block Model
Looking Southwest

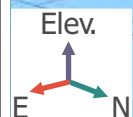
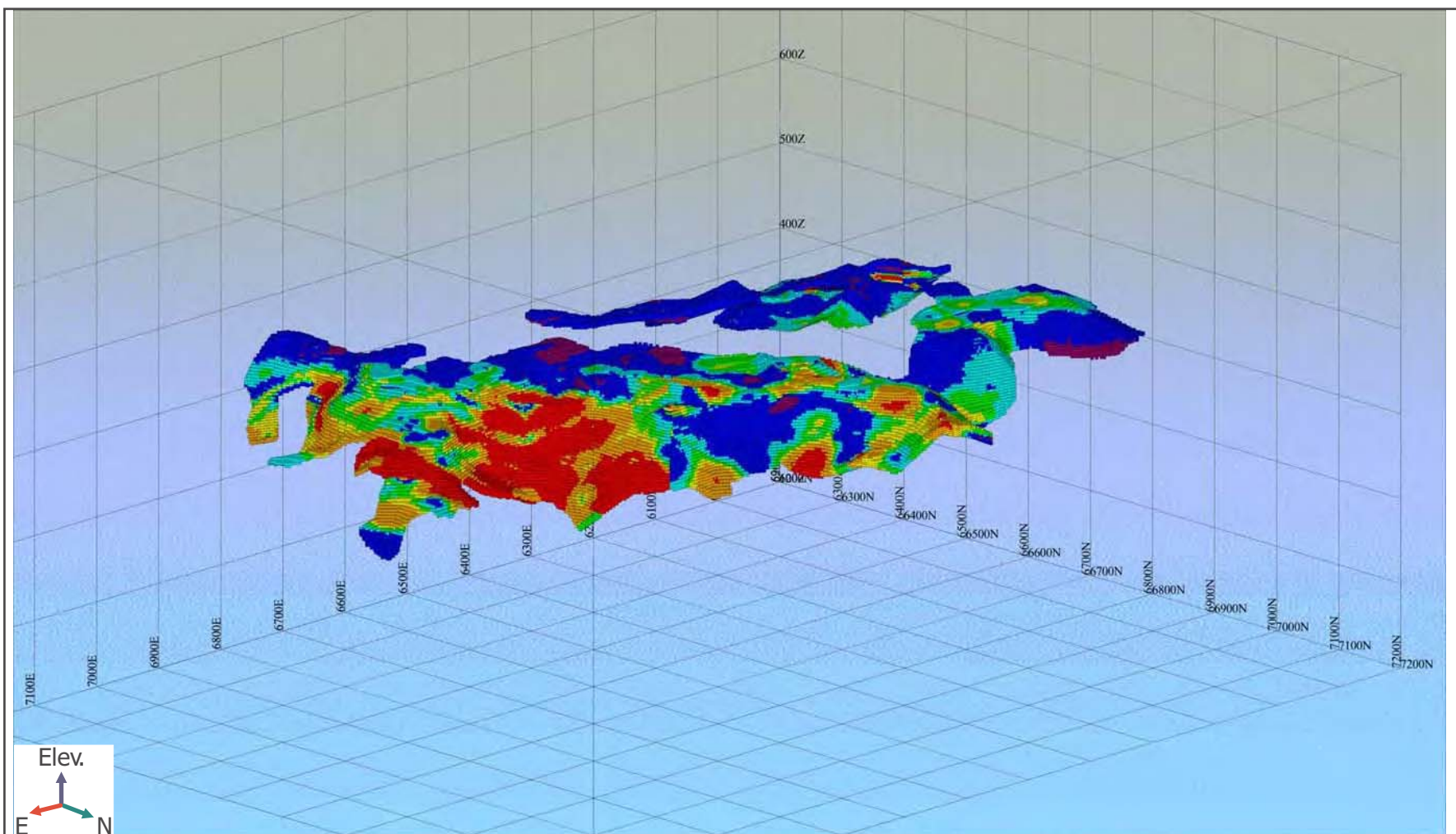
Date: April 2011

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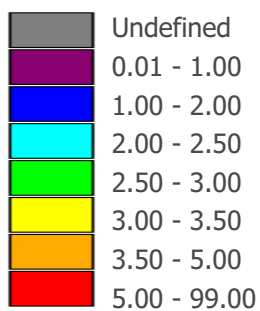
From Cullen et al, 2011.



From Cullen et al, 2011.



LEGEND



Zn% + Pb% Cut-off



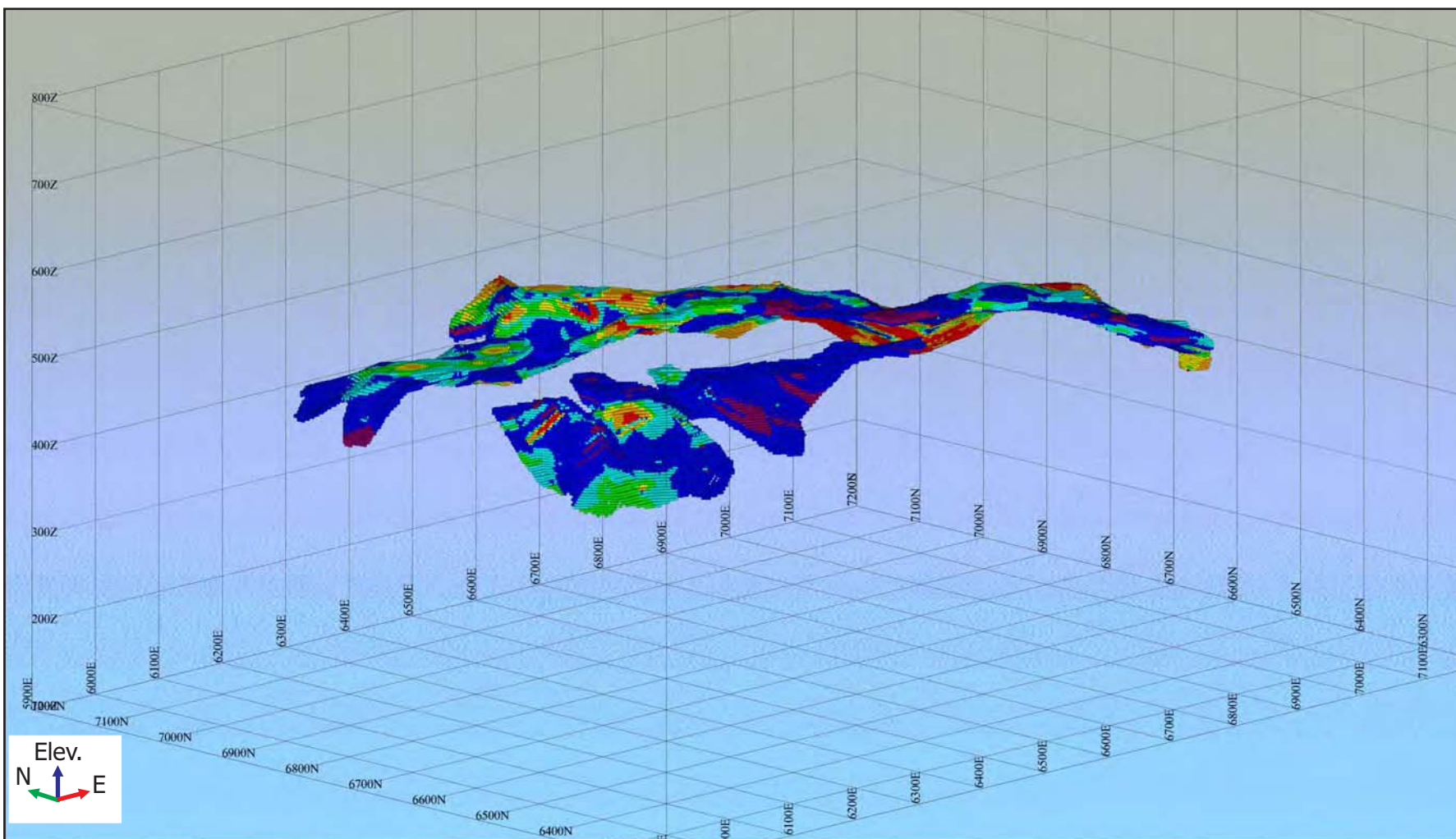
Figure 17-29

Perspective View of Getty Deposit
Grade Distribution
Looking Southwest

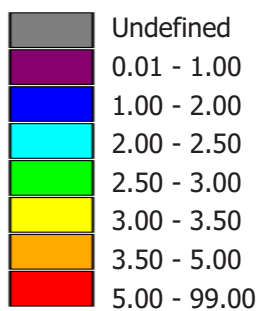
Date: April 2011

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LEGEND



Zn% + Pb% Cut-off



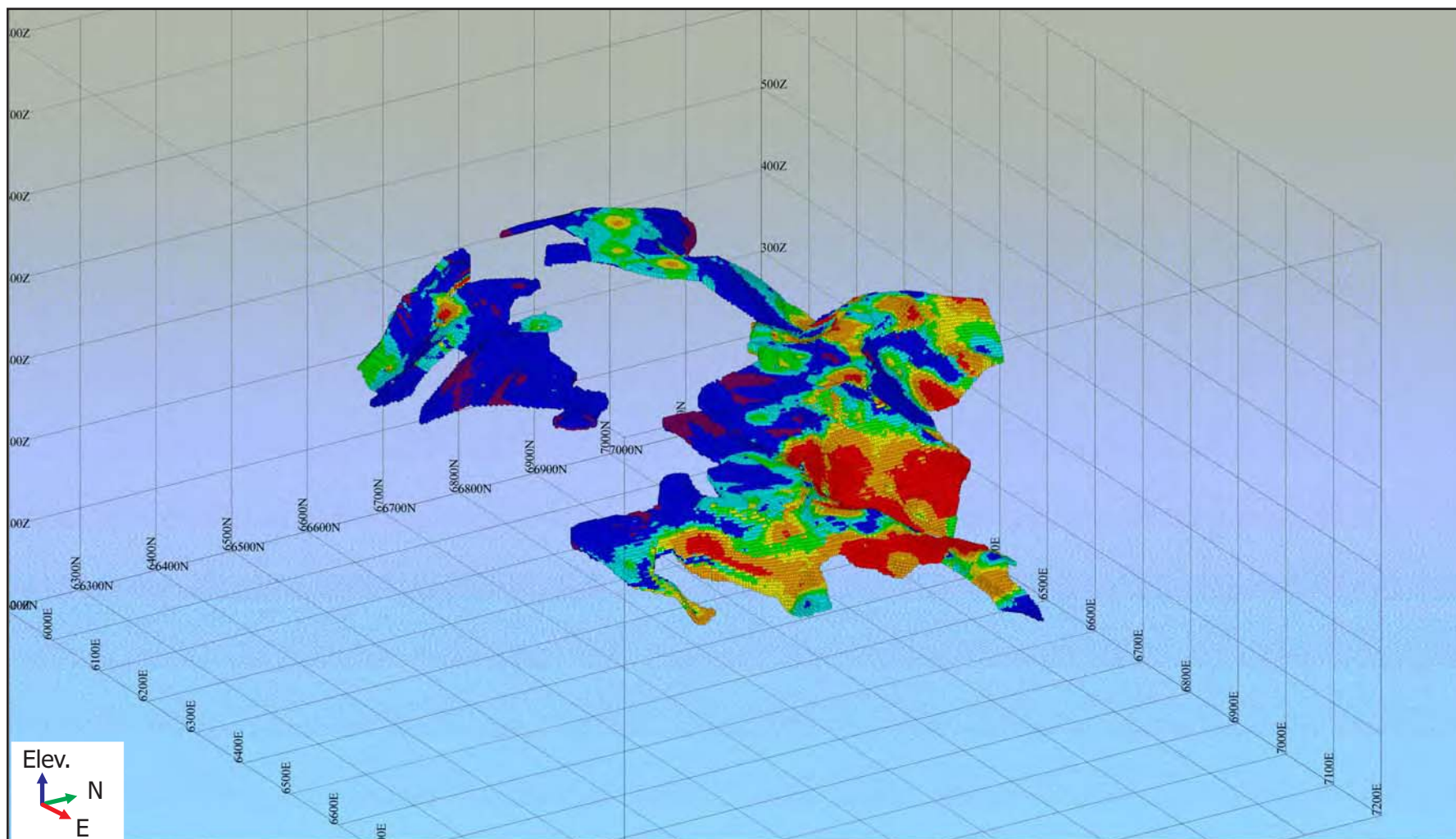
Figure 17-30

Perspective View of Getty Deposit
Grade Distribution
Looking Northeast

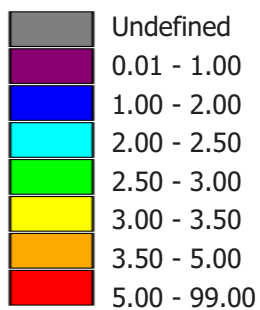
Date: April 2011

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LEGEND



Zn% + Pb% Cut-off



Figure 17-31

Perspective View of Getty Deposit
Grade Distribution
Looking Northwest

Date: April 2011

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From Cullen et al, 2011.

15.2.3.10 Resource Classification

“Mineral resources presented in the current estimate have been assigned Inferred, Indicated and Measured resource categories that reflect increasing levels of confidence with respect to spatial configuration or resources and corresponding grade assignment within the deposit. Several factors were considered in defining resource category assignments, including drill hole spacing, geological interpretations and integrity of supporting data sets. Results of the 2007-2008 core drilling program by Acadian provided the most important upgrading factor to the deposit data set in comparison to the 2007 resource estimate which previously reported Inferred mineral resource. The new Acadian drill holes provided a nominal drill hole spacing of approximately 50 meters by 50 meters over much of the deposit area and constituted a major degree of infilling with respect to more broadly spaced historic drill holes that supported the previous estimate. The increased drill hole density factor was augmented by additional QA/QC program results associated with twinning of 10 historic drill holes during the 2007-2008 Acadian drill program and also by re-logging and sampling of 10 historic drill holes for which archived core was available. Positive results from all noted programs served to upgrade overall confidence in the project data set and justified definition of higher category resources.

“Definition parameters for each resource category specified in the current Getty estimate are set out below and Figure 15-32 illustrates distribution of categories in plan view.

“Measured Resources: All blocks with grades based on three drill holes and a minimum of 9 included samples, with not more than 4 composites from a single drill hole, for which the averaged distance to included samples was 28 meters or less with no sample greater than 50% of the major axis range (37.5m) from the block were categorized as Measured mineral resources.

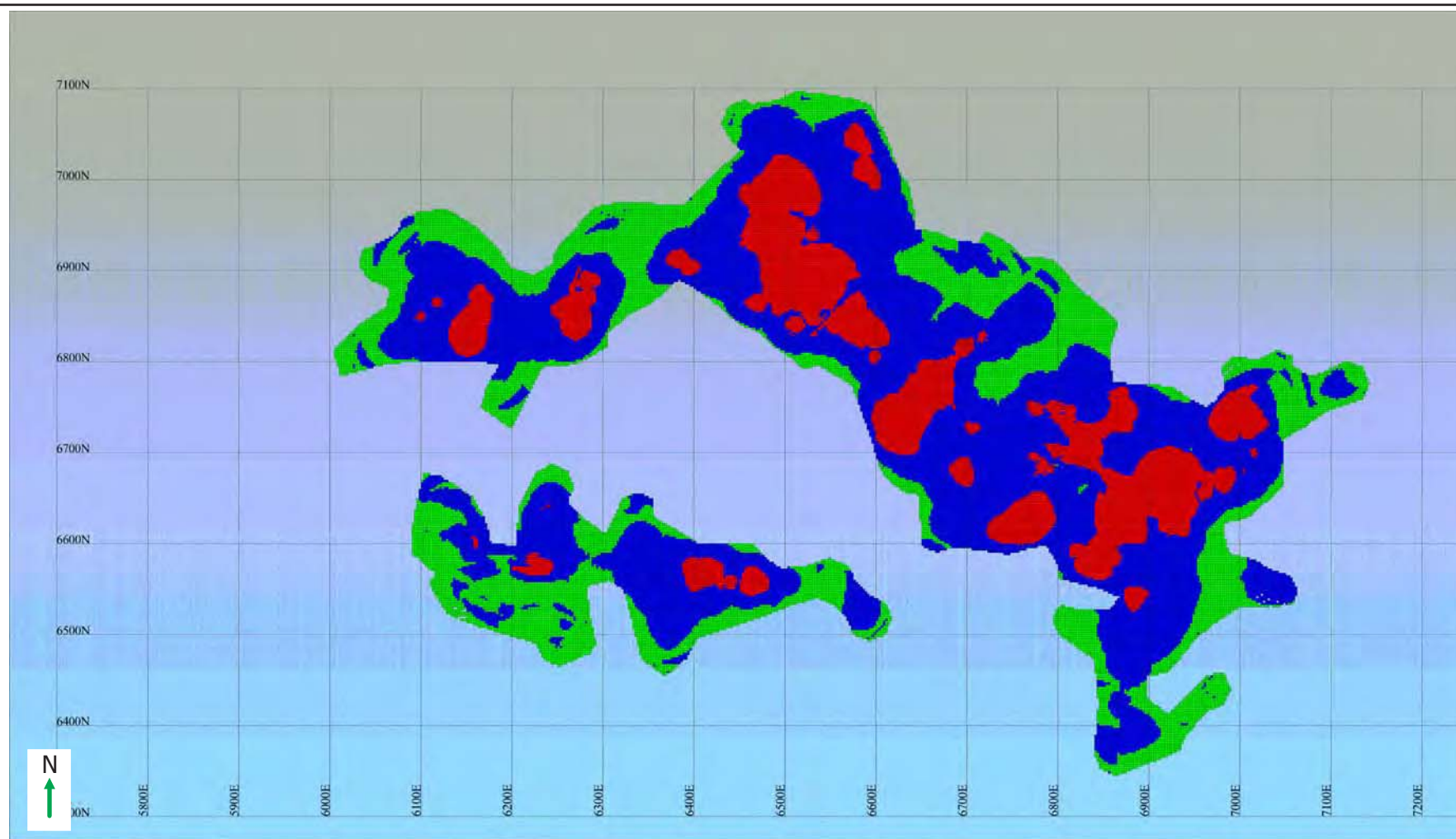
“Indicated Resources: All blocks with grades based on two or more drill holes and a minimum of 5 included samples, with not more than 4 composites from a single drill hole, for which the averaged distance to included samples was 40 meters or less with no sample greater than 75% of the major axis range (56.5m) from the block were categorized as Indicated mineral resources.

“Inferred Resources: All blocks present within the deposit solid that did not meet other resource category requirements and for which interpolated grades were present were categorized as Inferred mineral resources.

15.2.3.11 Statement of Mineral Resource Estimate at Effective Date

“Table 15-15 presents a statement of the updated mineral resource estimate for the Getty zinc-lead deposit supported by content of this technical report. The estimate is considered to be compliant with both the CIM Standards and disclosure requirements of NI-43-101. The effective date of the estimate is deemed to be March 30, 2011. All parameters utilized in the 2008 resource estimate were applied to this revised estimate with the exception of the Zinc Equivalent % calculation factor. For the current resource estimate Zinc Equivalent % (Zn Eq %) has been defined as $Zn \% + (Pb \% \times 1.18)$ and is based on mill recoveries of 89.3% for zinc and 89.5% for lead, \$US1.10/lb Zn and \$US1.15/lb Pb metal pricing and smelter returns of 85% for Zn and 95% for Pb.





Legend

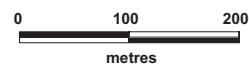
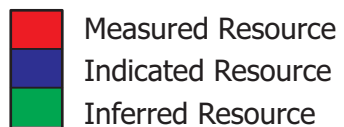


Figure 17-32

Plan View of Getty Deposit
Resource Categories

Date: April 2011

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From Cullen et al, 2011.

Table 15-15: Mineral Resource Estimate for Getty Deposit- March 30, 2011.

Getty Deposit - Resource Statement - Zn Eq. % * Cut-off					
Resource Category	Zn Eq. % Cut-off	Tonnes (Rounded)	Zinc %	Lead %	Zinc Eq %*
Measured	1.50	1,930,000	1.81	1.26	3.30
Indicated	1.50	3,790,000	1.62	1.21	3.05
Indicated + Measured	1.50	5,720,000	1.68	1.23	3.13
Inferred	1.50	1,350,000	1.52	1.31	3.06
Measured	*2.00	1,550,000	1.97	1.45	3.68
Indicated	*2.00	2,810,000	1.82	1.44	3.51
Indicated + Measured	*2.00	4,360,000	1.87	1.44	3.57
Inferred	*2.00	960,000	1.73	1.59	3.60
Measured	2.50	1,180,000	2.14	1.68	4.12
Indicated	2.50	1,950,000	2.06	1.70	4.07
Indicated + Measured	2.50	3,130,000	2.09	1.69	4.09
Inferred	2.50	680,000	1.95	1.88	4.16
Measured	3.00	860,000	2.34	1.95	4.64
Indicated	3.00	1,300,000	2.35	2.03	4.74
Indicated + Measured	2.50	2,160,000	2.35	2.00	4.70
Inferred	3.00	460,000	2.21	2.23	4.85

Notes: (1) Zinc Equivalent % (Zn Eq.%) = Zn % + (Pb % x 1.18) and is based on mill recoveries of 89.3% for zinc and 89.5% for lead, \$US1.10/lb Zn and \$US1.15/lb Pb metal pricing and smelter returns of 85% for Zn and 95% for Pb, (2) * denotes the 2.00% Zn Eq. resource statement cutoff value that reflects open pit development potential

15.2.3.12 Validation of Model

Comparison to Geological Sections

“Results of block modeling were compared on a section by section basis with corresponding interpreted geological and grade distribution sections prepared prior to block model development. This showed that block model grade patterns show good correlation with those interpreted from the geological sections and that the stratabound character of the mineralization was being properly represented. Results of visual inspection are interpreted as showing an acceptable degree of consistency between the block model and the independently derived sectional interpretation, thusly providing a measure of validation against the geological model developed for the deposit.



Comparison of Composite Database and Block Model Grades

“Descriptive statistics were calculated for those portions of the drill hole composite population falling within the total deposit peripheral constraint and these figures were compared to corresponding values calculated for the resource estimate block model. Results of the comparison are tabulated in Table 15-16. Mean drill hole assay composite grades for zinc and lead compare closely with corresponding zinc and lead grades calculated for the entire block model and provide a check on bias within the model with respect to the underlying total assay composite population.

Table 15-16: Comparison of Drill Hole Assay Composite and Block Model Grades

Parameter	*Total Model Grade (Zn%)	*Total Model Grade (Pb%)	Composites Grade (Zn%)	Composites Grade (Pb%)
Mean	1.43	1.01	1.46	1.00
Variance	0.86	0.99	1.94	2.53
Standard Deviation	0.93	1.00	1.39	1.59
Coef. of Variation	0.648	0.990	0.948	1.580
Maximum	10.27	14.52	11.30	18.54
Minimum	0.00	0.00	0.00	0.00
Number	209,757	209,757	1961	1961

**Defined as all blocks having interpolated grades within the deposit peripheral constraint*

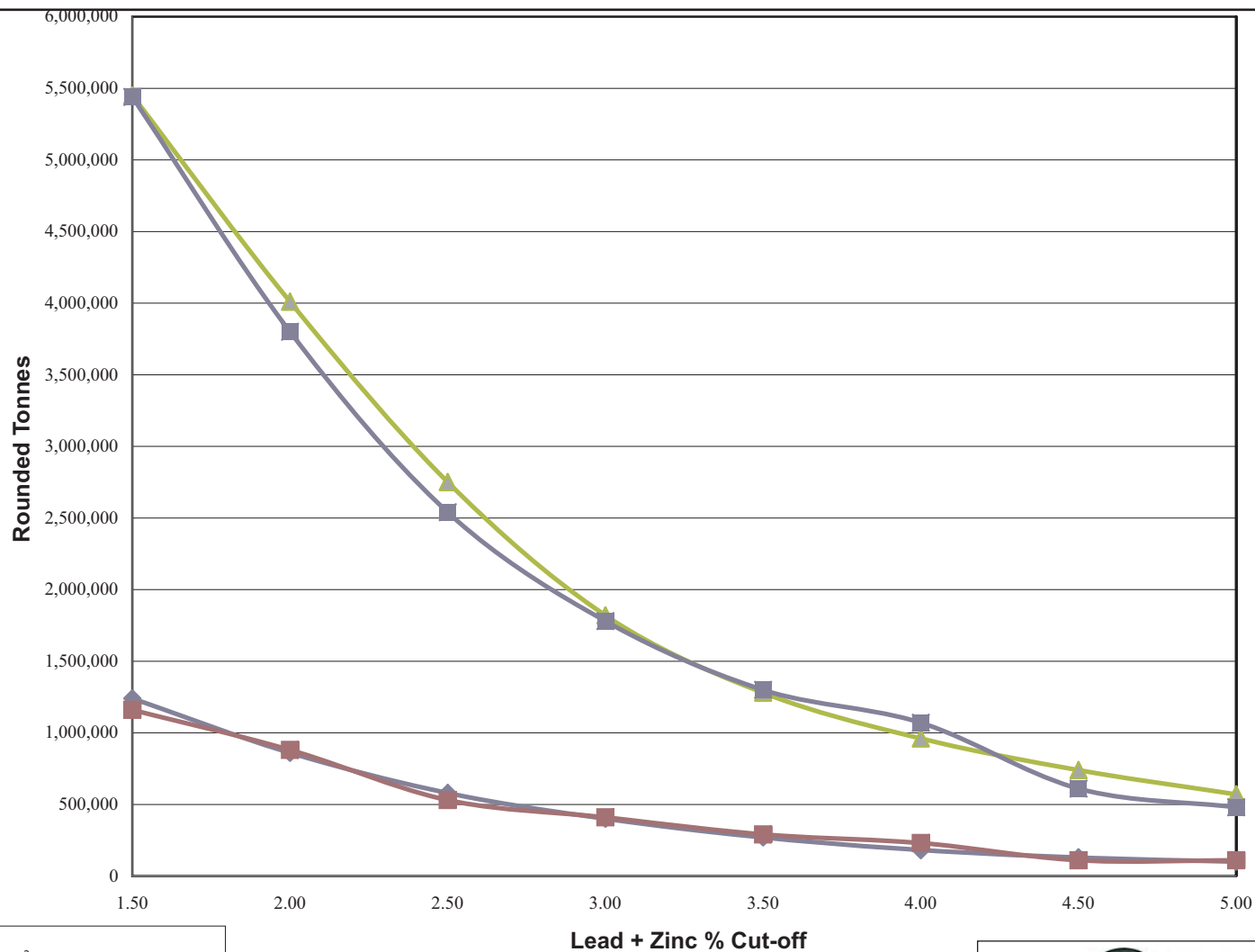
Comparison of With Nearest Neighbour Grade Interpolation Model

“The ID² block model was checked using Nearest Neighbour (NN) grade interpolation methodology within the same resource solids used for the ID² method and associated weighted average drill hole intercepts appear in Appendix 2. Assigned block resource categories were constant between models as were metal cut-off values. Results of the NN estimation appear in Table 15-17 and Figure 15-33 provides a comparison to ID2 model results.

Table 15-17: Results of Nearest Neighbour Block Model Estimate

Cutoff: Pb%+Zn%	Resource Category	Tonnes (Rounded)	Pb %	Zn%	Pb%+Zn%
2.00	Measured	1,480,000	1.44	1.90	3.34
2.00	Indicated	2,320,000	1.51	1.96	3.47
2.00	<i>Indicated Plus Measured</i>	<i>3,800,000</i>	<i>1.48</i>	<i>1.94</i>	<i>3.42</i>
2.00	Inferred	880,000	1.58	1.81	3.39
2.50	Measured	1,050,000	1.75	2.07	3.82
2.50	Indicated	1,490,000	1.90	2.27	4.17
2.50	<i>Indicated Plus Measured</i>	<i>2,540,000</i>	<i>1.84</i>	<i>2.19</i>	<i>4.03</i>
2.50	Inferred	530,000	2.05	2.15	4.20
3.00	Measured	700,000	2.07	2.31	4.38
3.00	Indicated	1,080,000	2.19	2.56	4.75
3.00	<i>Indicated Plus Measured</i>	<i>1,780,000</i>	<i>2.14</i>	<i>2.46</i>	<i>4.60</i>
3.00	Inferred	410,000	2.24	2.41	4.64





- ◆ ID² Inferred Tonnes
- NN Inferred Tonnes
- ▲ ID² Measured and Indicated Tonnes
- NN Measured and Indicated Tonnes

NN equals Nearest Neighbour Interpolation Method
ID² equals Inverse Distance Squared Interpolation Method



Figure 17-33
Comparison of Block Model
Interpolation Methods

Date: April 2011

mercator GEOLOGICAL SERVICES

From Cullen et al, 2011.

“Grade and tonnage figures for the two block models correlate well at all cutoff values and are interpreted as providing an acceptable check of the ID2 model.

15.2.4 *Comments on Previous Resource or Reserve Estimates*

“Three historic mineral resource estimates were reviewed for purposes of this report and these were referenced previously in section 5.2. The first was prepared in 1976 for Getty by MPH Consulting Limited (Riddell, 1976) and apparently followed earlier in-house estimates by Getty. Subsequently, an in-house assessment was prepared by Esso (MacLeod, 1980) and in 1992 Westminer also completed an estimate (Hudgins and Lamb, 1992). Results of these programs are presented in Table 15-18 and, as noted earlier, all are historic in nature, pre-date NI 43-101 and are not compliant with current CIMM Standards. As such, they should not be relied upon.

Table 15-18: Historic Tonnage and Grade Estimates for Getty Deposit

(Estimates Are Not Compliant With NI 43-101 or CIMM Standards)					
Reference	Cutoff	Tonnes	Pb %	Zn %	Zn + Pb %
Riddell (1976)	2% Zn + Pb	4,005,000	1.84	1.87	3.02
*MacLeod (1980)	1.5% Zn +Pb	3,078,000	1.37	1.60	2.97
**Hudgins and Lamb (1992)	**1.5% Zn Eq.	4,500,000	1.33	1.87	3.20

* Diluted and Minable;

**Zn Eq. = Zn% + 0.60 x Pb%

Notes: With regard to the historic mineral resource estimates stated above 1) a qualified person has not done sufficient work to classify the historical estimate as current mineral resources or mineral reserves; 2) the issuer is not treating the historical estimate as current mineral resources or mineral reserves as defined in sections 1.2 and 1.3 of NI43-101; and 3) the historical estimate should not be relied upon.

“Support documents provided for the historic estimates showed that those of Getty and Esso were based on drill-hole-centered polygonal methods with tonnage weighting to establish final deposit grade. A single density factor of 11.5 cubic feet per ton (~2.78g/cm³) was used in the Riddell (1976) estimate and this appears to have been used by MacLeod (1980) before application of a 10% tonnage reduction factor to drill hole intercepts. Westminer employed a cross-sectional method using Surpac® mining software to determine resource area limits and volume and used a single density factor of 2.75 g/cm³ to estimate tonnage. Deposit grade was calculated as the length-weighted average of all drill hole intercepts, but spatial distribution of grade within the deposit was not specifically addressed.

“A summary review of supporting file information for the historic estimates was completed for current purposes and it is apparent that the noticeably lower tonnage figure quoted by Esso reflects exclusion of certain drill holes based on the report’s development potential assumptions. The higher lead grade in the MPH estimate is also notable but main contributing factors were not clearly identified.

“Riddell (1976) completed a preliminary economic assessment for open pit development of a 3.6 million ton (3.3 million tonne) portion of the deposit at a diluted grade of 1.28% Pb and 1.74% Zn. Modeling parameters included options of a stand-alone mill, custom milling of ore at Esso’s adjacent Gays River site and development of a jointly-owned mill complex in association with Esso. Analysis showed that a 20 year model producing at 182,000



tons per year with a dedicated mill was uneconomic. However, 10 year projects producing at 375,000 tons per year were financially attractive in both the custom milling and jointly owned mill models.

“In 1980 Esso reported on economic aspects of developing the deposit based on an insitu tonnage and grade model of 3.1 million diluted tons (2.8 million tonnes) grading 1.37% Pb and 1.60% Zn (MacLeod, 1980). This study concluded that mining the deposit through open-pit methods as an ore supplement to the Gays River deposit was economically viable, provided that important operating assumptions were met. Positive Net Present Value figures at 15% discounting were returned for 1000 and 1250 ton per day production rates, with the Gays River operation absorbing certain operating and capital cost components. George (1985) again reviewed deposit economics for Getty and used economic analysis applied to tonnage and grade curves to show that a deposit size of approximately 8 million tons was necessary to justify stand-alone profitable development at realizable metal grades. The earlier MPH work was also reviewed and some of the economic models updated. None of the work indicated that profitable stand-alone development of the deposit could be expected under existing market conditions of the time.

“Hudgins and Lamb (1992) reported on preliminary economic analysis of a 3.9 million tonne portion of the total resource at their assigned grade and concluded that a positive economic case could be made for development of the property as a “top-up” source of feed for the Gays River concentrator. Assumptions included sharing of various operating costs with the Gays River operation and that the full 1500 tonne per day capacity of the Gays River concentrator would not be required for underground production.

“In review, each of the historic estimates reflects specific assumptions considered appropriate at the time of preparation. This includes exclusion of certain historic drill holes, establishment of different maximum depth criteria and use of differing minimum grade and width cut off values. The current estimate does not directly reflect any of the parameter sets used in the early programs and results are therefore different. However, all historic programs model the Getty Deposit as a relatively low grade accumulation of lead and zinc having potential for open pit development. From the grade and tonnage perspective the earlier estimates are generally consistent with results of the current estimate and provide relevant views of the deposit under historic market conditions.

“The first NI 43-101 compliant Getty resource estimate completed by Mercator for Acadian (Cullen et al. 2007) was based solely on historical drilling and the entire resource was assigned to the Inferred resource category. Inferred designation reflected drill hole spacing and historical nature of the supporting database. The associated block model provided a well developed view of geological and grade trends within the deposit area and also highlighted the need to carry out a substantial amount of infill drilling before higher category resources could be defined for the deposit. Table 15-19 presents results of the Cullen et al. (2007) resource estimate, which, on a total tonnage basis, is approximately 19% smaller than total tonnage at the same cutoff value for the 2008 resource at comparable average grades.

Table 15-19: Getty Deposit Mineral Resource Estimate - December 2007*

Resource Category	Zn Equivalent % Threshold**	Tonnes (Rounded)	Lead %	Zinc %	Zinc% + Lead %
Inferred	2.00	4,160,000	1.40%	1.81%	3.21%
Inferred	2.50	2,860,000	1.60%	2.06%	3.66%
Inferred	3.00	1,970,000	1.82%	2.26%	4.08%
Inferred	3.50	1,300,000	2.09%	2.42%	4.51%



Notes: * Estimate is compliant with NI 43-101 and CIM Standards; ** Zn Equivalent calculated as Zn Equivalent = (Zn% + Pb %)

“Completion of infill drilling was recommended and ultimately carried out during the 2007-2008 Acadian drilling campaign that totalled 138 holes in the deposit area. Addition of results for the 138 drill holes is the principal difference between the 2008 resource data set and that used in the 2007 estimate, with the designation of higher category resources in reflecting increased confidence in deposit geology and grade distribution models (Cullen et al., 2008). The NI 43-101 compliant 2008 estimate is summarized in Table 15-20.

Table 15-20: Getty Deposit Mineral Resource Estimate – November 2008*

Resource Category	Zinc% +Lead% Threshold**	Tonnes (Rounded)	Lead %	Zinc %	Zinc% + Lead %
Measured	2.00	1,470,000	1.48	2.02	3.50
Indicated	2.00	2,540,000	1.48	1.91	3.39
Indicated Plus Measured	2.00	4,010,000	1.48	1.95	3.43
Inferred	2.00	860,000	1.65	1.82	3.48
Measured	2.50	1,070,000	1.74	2.22	3.97
Indicated	2.50	1,680,000	1.78	2.21	3.99
Indicated Plus Measured	2.50	2,750,000	1.76	2.21	3.98
Inferred	2.50	580,000	1.98	2.09	4.07
Measured	3.00	740,000	2.04	2.47	4.52
Indicated	3.00	1,080,000	2.13	2.54	4.67
Indicated Plus Measured	3.00	1,820,000	2.09	2.51	4.61
Inferred	3.00	400,000	2.34	2.37	4.71

* Estimate is compliant with NI 43-101 and CIM Standards; ** Zn Equivalent calculated as Zn Equivalent = (Zn% + Pb %)

“A portion of this tonnage increase is directly attributable to change in base SG value for the block model, from 2.7 g/cm³ in 2007 to 2.82 g/cm³ in 2008. The remaining change is attributed to incremental extension of local deposit limits on the basis of 2007-2008 drilling program results.”



15.3 Summary of Mineral Resources – Gays River and Getty Deposits

The Gays River Deposit's mineral resource estimate was prepared by Doug Roy, M.A.Sc., P.Eng. and Tim Carew, P.Geo. of MineTech International Limited. The Getty Deposit's mineral resource estimate was prepared by Cullen *et al* (2011) of Mercator Geological Services. The estimates were separately prepared using slightly different parameters, the most significant of which were different zinc-equivalent grade formulae and different block cut-off grades for resource reporting.

15.3.1 Gays River Deposit

In both the Main and Northeast Zones, Measured plus Indicated mineral resources totalled 7.8 million tonnes with average grades of 5.3 % zinc and 1.7 % lead (refer to Table 15-21).

Inferred mineral resources totalled 3.7 million tonnes with average grades of 4.2 % zinc and 1.5 % lead.

Table 15-21: Summary of non-diluted mineral resources – both zones.

ResourceCategory	ZnEq.%Cut-off	Tonnes	Zn (%)	Pb (%)	Zn Eq.%
Measured*	0.75	2,075,000	3.14	1.68	5.16
Indicated*	0.75	5,770,000	3.3	1.69	5.32
Measured+Indicated*	0.75	7,845,000	3.25	1.69	5.28
Inferred*	0.75	3,677,000	2.35	1.51	4.16

Base case for this study denoted by “*”

Refer to Table 15-1 and Table 15-5 for resource estimation notes.

15.3.2 Getty Deposit

Using a zinc-equivalency ratio of 1 % lead = 1.17 % zinc and a block cut-off grade of 2 % zinc-equivalent, Cullen *et al* (2011) determined that Measured plus Indicated mineral resources totalled 4.4 million tonnes with average grades of 1.9 % zinc and 1.4 % lead (refer to Table 15-22). Inferred mineral resources totalled 1.0 million tonnes with average grades of 1.7 % zinc and 1.6 % lead.

Table 15-22: Getty Deposit mineral resources (from Cullen *et al*, 2011).

Resource Category	Zn Eq. % Cut-off	Tonnes (Rounded)	Zinc %	Lead %	Zinc Eq %*
Measured	2.00	1,550,000	1.97	1.45	3.68
Indicated	2.00	2,810,000	1.82	1.44	3.51
Indicated + Measured	2.00	4,360,000	1.87	1.44	3.57
Inferred	2.00	960,000	1.73	1.59	3.60

Notes: (1) Zinc Equivalent % (Zn Eq.%) = $Zn \% + (Pb \% \times 1.18)$ and is based on mill recoveries of 89.3% for zinc and 89.5% for lead, \$US1.10/lb Zn and \$US1.15/lb Pb metal pricing and smelter returns of 85% for Zn and 95% for Pb.



15.3.3 Gays River And Getty Deposits Combined

A summary of the mineral resources for both deposits was prepared. The reader is warned that the Gays River and Getty mineral resource estimates were prepared by different authors using different parameters.

Table 15-23: Combined mineral resources, Gays River and Getty deposits.*

Resource Category	Zn Eq. % Cut-off	Tonnes (Rounded)	Zinc %	Lead %	Zinc Eq %*
Measured	Varies	3,625,000	2.64	1.58	4.54
Indicated	Varies	8,580,000	2.82	1.61	4.75
Measured+ Indicated	Varies	12,205,000	2.76	1.60	4.68
Inferred	Varies	4,637,000	2.22	1.53	4.05

* 1% Lead = 1.2 % Zinc.

* See Table 15-21 and Table 15-22 for the Zinc equivalent % cut-off used for each zone



16. Conclusions

Using a cut-off grade of 0.75 % zinc-equivalent for the Gays River Deposit, a zinc-lead-mineralised zone was outlined with a straight-line strike length of almost four kilometres. The neighbouring Getty Deposit measures over one kilometre along strike.

Outcrops are rare, but both deposits sub-crop under the unconsolidated glacial till overburden. The dolostone host rock drapes over a paleo-shoreline of metasediments at dip that varies between 30-40 ° and vertical, averaging 40-60 °. Thickness varies from less than one metre to over ten metres in true thickness.

The zinc is contained in a very low-iron sphalerite that is highly marketable.

Mineral resources were identified in Measured, Indicated and Inferred categories.

For the Gays River deposit, in both the Main and Northeast Zones, Measured plus Indicated mineral resources totalled 7.8 million tonnes with average grades of 5.3 % zinc and 1.7 % lead. Inferred mineral resources totalled 3.7 million tonnes with average grades of 4.2 % zinc and 1.5 % lead.

Using a zinc-equivalency ratio of 1 % lead = 1.17 % zinc and a block cut-off grade of 2 % zinc-equivalent, Cullen *et al* (2011) determined that Measured plus Indicated mineral resources totalled 4.4 million tonnes with average grades of 1.9 % zinc and 1.4 % lead. Inferred mineral resources totalled 1.0 million tonnes with average grades of 1.7 % zinc and 1.6 % lead.

The majority of the outlined mineral resources could likely be mined using surface mining methods.

For the Gays River Deposit, some of the identified mineral resources are located underneath Gays River. Sandy soil lies underneath Gays River, so mining close to the river would be susceptible to water inundation. In other words, the mineral resources that lie close to, or underneath Gays River would be relatively more expensive to recover due to the added cost of either (a) diverting the river or (b) recovering the resources using underground mining methods. Both scenarios are possible and therefore available to Selwyn if needed.

The deposit is a property of merit that warrants additional work.

18. Recommendations

Additional work is only recommended on the Gays River deposit at this time; however, the Authors recognize there are recommendations in Cullen et al. (2011) that will need to be considered in the future.

The total cost of the recommended proposed work is \$900,000-1,020,000.

Proposed Phase 1

The authors are proposing that Selwyn undertake an updated Preliminary Economic Assessment (“PEA”) using its internal team of Qualified Persons. This updated PEA, first published on August 30, 2011, would use the new mineral resource estimate for the Gays River and Getty deposits from the current study to update the mine plan and financial modeling that would possibly redefine project economics in the current market. The Authors approximate this work to cost between \$150,000 and \$200,000.

Proposed Phase 2

In advance of any further drilling being done on the Gays River and Getty deposits, the Authors are recommending that the Northeast zone be revisited and remodeled under a similar cut-off scheme to the work done during this study for the Main Zone and its Southwest extension. Previous work used a 0.5% zinc equivalent cut-off above 100 metres and a 2.0% zinc equivalent cut-off below. It is assumed that given the positive results of this current study, further mineralization could be identified through more detailed analysis, thereby better defining the mineralizing system that will allow for a more accurate assessment for future drilling. The Authors approximate that this remodeling work to cost between \$35,000 and 40,000.

For the Getty deposit, Cullen et al. (2011) used a 1% (zinc plus lead) cut-off; meaning it is possible that there is additional zinc-lead mineralization outside of the currently modeled solids. This remodeling would also align the modeling of the Getty deposit with that of the Gays River deposit and will allow for a more accurate assessment for future drilling. The Authors approximate this remodeling work to cost between \$35,000 and \$40,000.

As part of Phase 2 work, the Authors are proposing that Selwyn re-examine the RQD and RMR geomechanical data collected in the 2011 drilling program and use it to better define criteria for the physical properties of the host rocks to the Gays River and Getty deposits. It is approximated that this geomechanical assessment to cost between \$30,000 and \$40,000.

Proposed Phase 3

Contingent upon the results of the updated PEA proposed in Phase 1 above, timing for any drilling activities as part of Phase 3 would need to be based upon an updated mine plan using the new mineral resource estimate of the current study. Also, any future drilling should also consider the known timelines for gaining permits for mining from the Nova Scotia Government in respect of the

Northeast zone and Getty deposit, which are outside of Selwyn's current Environmental Assessment and Industrial Approval.

At this time, the Authors are only recommending a drilling program on the Northeast zone because of the immediate potential synergies with the zinc-lead mineralization of the Main Zone and its Southwest Extension. Drilling additional meters on the Northeast zone would not only further define and increase the confidence categories of the mineral resource, but would also allow for the collection of further geomechanical data and hydrogeological information. The Authors, based upon the 2011 drilling on the Main Zone, approximate that a drill program on the Northeast zone 5,000 metres to cost between \$800,000 and \$900,000.



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Certificate of Principal Author

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

- 1) I am a Mining Engineer employed by MineTech International Limited, with an office at 1161 Hollis St, Halifax, Canada.
- 2) I graduated with a Bachelor of Engineering degree in Mining Engineering from the Technical University of Nova Scotia (now Dalhousie University) in 1997 and with a Master of Applied Science degree in Mining Engineering from Dalhousie University in 2000.
- 3) I am a Professional Engineer (Mining), registered with the Association of Professional Engineers of Nova Scotia (Registered Professional Engineer, No. 7472). I am a member of the Canadian Institute of Mining, Metallurgy and Petroleum (“CIM”) and of the Prospectors and Developers Association of Canada (“PDAC”).
- 4) I have worked as a mining engineer for 15 years since graduating from university. This work has included the estimation of resources and reserves for precious metals, base metals and industrial minerals, as well as participation in pre-feasibility and feasibility studies.
- 5) I have read the definition of “qualified person” set out in National Instrument 43-101 (“NI 43-101”) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfil the requirements to be a “qualified person” for the purposes of NI 43-101.
- 6) I was the Principal Author of the report titled “Updated Resource Report for the Gays River Zinc-Lead Deposit, Including the Getty Deposit, Nova Scotia, Canada,” dated October 8, 2012. I authored all sections of the report except Sections 14.1.2 (mineral processing during 2007/2008), 15.1.3 (Main Zone resources) and 15.1.7 (comparison of block model with blast hole samples). As the Principal Author of the report, I personally supervised, directed and reviewed work that was carried out by the other authors and take full responsibility for their work.
- 7) I have read NI 43-101 and Form 43-101F1. This Technical Report has been prepared in accordance with that Instrument and Form.
- 8) I visited the Scotia Mine property many times since 2004. As an independent consultant, I supervised exploration work on the property including diamond drilling and trenching. I carried out several assignments for ScoZinc as an independent consultant during the period 2006-2011, including authoring a reclamation plan. I last visited the property in 2010.
- 9) I have had prior involvement with ScoZinc Limited and the property that is the subject of the Technical Report (refer to Item 8 for details).
- 10) I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission to disclose which makes the Technical Report misleading.
- 11) I am independent of the issuer, Selwyn Resources Limited, applying all of the tests in Section 1.4 of NI 43-101 and Section 3.5 of NI 43-101 CP. Accordingly, I am also independent of ScoZinc Limited and Acadian Mining Limited.
- 12) I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them, including electronic publication in the public company files on their websites accessible by the public.
- 13) As of the date of this certificate, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the report not misleading.

“Douglas Roy” (Original Signed and Sealed)

Dated this 8th day of October, 2012.
 William Douglas Roy, M.A.Sc., P. Eng.
 Consultant Mining Engineer
 MineTech International Limited

Certificate of Co-Author

I, Jason King Dunning, B.Sc., M.Sc., P.Geo., do hereby certify that:

- 1) I am a Professional Geologist employed by Selwyn Resources Ltd., with an office at Suite 700, 509 Richards Street, Vancouver, British Columbia, V6B 2Z6, Canada.
- 2) I graduated with a Bachelor of Science degree in Earth Sciences from the Carleton University, Ottawa, Ontario, Canada in 1994 and with a Master of Science degree in Earth Sciences from Laurentian University, Sudbury, Ontario, Canada.
- 3) I am a Professional Geologist, registered with the Association of Professional Engineers and Geoscientists of British Columbia (No. 29312), and registered with the Association of Professional Geoscientists of Ontario (No. 0725). I am a member of the Geological Association of Canada (“GAC”), Canadian Institute of Mining, Metallurgy and Petroleum (“CIM”), Society of Economic Geology (“SEG”), and of the Prospectors and Developers Association of Canada (“PDAC”).
- 4) I have worked as a geologist for 18 years since graduating from university. This work has included the management of exploration field programs, estimation of resources, and property valuations; as well as participation in preliminary economic assessment, pre-feasibility and feasibility studies.
- 5) I have read the definition of “qualified person” set out in National Instrument 43-101 (“NI 43-101”) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfil the requirements to be a “qualified person” for the purposes of NI 43-101.
- 6) I was a Co-Author of the report titled “Updated Resource Report for the Gays River Zinc-Lead Deposit, Including the Getty Deposit, Nova Scotia, Canada,” dated October 8, 2012. I directed and reviewed work that was carried out by the other authors, and was responsible for validating the content included from a previously filed NI 43-101 report, Cullen et al. (2011) – “Technical Report on a Mineral Resource Estimate, Getty Deposit”.
- 7) I have read NI 43-101 and Form 43-101F1. This Technical Report has been prepared in accordance with that Instrument and Form.
- 8) I have visited the Scotia Mine property several times between January and present, most recently on September 19th 2012
- 9) Prior to the closing of the acquisition of ScoZinc Limited, I had no involvement with ScoZinc Limited or Acadian Mining Corporation.
- 10) I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission to disclose which makes the Technical Report misleading.
- 11) I am non-independent of the issuer, and am employed as the Vice President Exploration for Selwyn Resources Limited.
- 12) I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them, including electronic publication in the public company files on their websites accessible by the public.
- 13) As of the date of this certificate, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the report not misleading.

“Jason King Dunning” (Original Signed and Sealed)

Dated this 8th day of October, 2012.

Jason King Dunning, B.Sc., M.Sc., P.Geo.
Vice President Exploration
Selwyn Resources Ltd.

Certificate of Co-Author

I, Timothy J Carew, do hereby certify that:

1. I reside at 12955 Fieldcreek Lane, Reno, NV 89511, USA
2. I am a graduate from the University of Rhodesia with a B.Sc. (Hons) Degree in Geology (1970), and of the University of London (RSM – 1982), with a M.Sc. Mineral Production Management degree, and I have practiced my profession continuously since that time.
3. I am a member of the Association of Professional Geoscientists and Engineers of British Columbia (Membership Number 19706).
4. I am a consulting geoscientist and the Principal of Reserva International LLC., a company incorporated in Nevada, USA.
5. I am a Qualified Person for the purposes of NI 43-101 with regard to a variety of mineral deposits and have knowledge and experience with Mineral Resource and Mineral Reserve estimation parameters and procedures and those involved in the preparation of technical studies. I am personally familiar with the characteristics of the deposit in this study from previous work on the deposit. I last visited the deposit on September 19th, 2012.
6. I have read the definition of “qualified person” set out in National Instrument 43-101 (“NI 43- 101”) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfil the requirements to be a “qualified person” for the purposes of NI 43-101.
7. I was responsible for mineral resource estimation of the Main Zone (Section 15.1.3) of the report entitled “Updated Mineral Resource Report for the Gay’s River Zinc-Lead Deposit, Including the Getty Deposit, Nova Scotia, Canada” dated October 8, 2012.
8. I have no personal knowledge as of the date of this certificate of any material fact or change, which is not reflected in this report.
9. Neither I, nor any affiliated entity of mine, is at present, under an agreement, arrangement or understanding or expects to become, an insider, associate, affiliated entity or employee of ScoZinc Limited, Selwyn Resources Limited or any associated or affiliated entities.
10. Neither I, nor any affiliated entity of mine own, directly or indirectly, nor expect to receive, any interest in the properties or securities of ScoZinc Limited, Selwyn Resources Limited or any associated or affiliated companies.
11. Neither I, nor any affiliated entity of mine, have earned the majority of our income during the preceding three years from ScoZinc Limited, Selwyn Resources Limited or any associated or affiliated companies.
12. I have read NI 43-101 and Form 43-101F1 and have prepared this report in compliance with NI 43-101 and Form 43-101F1, and have prepared the above mentioned sections of the report in conformity with generally accepted Canadian mining industry practice.
13. I consent to the filing of this report with any stock exchange and other regulatory authority and any publication by them, including electronic publication in the public company files on their websites accessible by the public.

Signed by

“Timothy Carew” (Original Signed and Sealed)

Timothy J. Carew, P.Geo., B.Sc., M.Sc.

Dated this 8th day of October, 2012.

CONSENT of AUTHOR

TO: Selwyn Resources Ltd., Alberta Securities Commission, Manitoba Securities Commission, Ontario Securities Commission, Nova Scotia Securities Commission, New Brunswick Securities Commission, Securities Commission of Newfoundland and Labrador, TSX Venture Exchange and Toronto Stock Exchange and British Columbia Securities Commission

I, Doug Roy, M.A.Sc., P.Eng, do hereby consent to the filing, with the regulatory authorities referred to above, of the technical report entitled, “Updated Resource Report for the Gays River Zinc-Lead Deposit, Including the Getty Deposit, Nova Scotia, Canada” (the “Technical Report”), with an effective date of October 8, 2012. I also consent to the written disclosure of the Technical Report and of extracts from or a summary of the Technical Report in the written disclosure in the news release of Selwyn Resources Limited being filed.

I also certify that I have read the written disclosure being filed and I do not have any reason to believe that there are any misrepresentations in the information derived from the Technical Report or that the written disclosure in the news release of Selwyn Resources Ltd., dated August 24, 2012, contains any misrepresentation of the information contained in the Technical Report.

Dated this 8th day of October, 2012

“Douglas Roy” [Original signed and sealed]

Doug Roy, M.A.Sc., P.Eng.
Mining Engineer
MineTech International Limited
Halifax, Canada



CONSENT of AUTHOR

TO: Selwyn Resources Ltd., Alberta Securities Commission, Manitoba Securities Commission, Ontario Securities Commission, Nova Scotia Securities Commission, New Brunswick Securities Commission, Securities Commission of Newfoundland and Labrador, TSX Venture Exchange and Toronto Stock Exchange and British Columbia Securities Commission

I, Jason Dunning, M.Sc., P.Geo., do hereby consent to the filing, with the regulatory authorities referred to above, of the technical report entitled, “Updated Resource Report for the Gays River Zinc-Lead Deposit, Including the Getty Deposit, Nova Scotia, Canada” (the “Technical Report”), with an effective date of October 8, 2012. I also consent to the written disclosure of the Technical Report and of extracts from or a summary of the Technical Report in the written disclosure in the news release of Selwyn Resources Limited being filed.

I also certify that I have read the written disclosure being filed and I do not have any reason to believe that there are any misrepresentations in the information derived from the Technical Report or that the written disclosure in the news release of Selwyn Resources Ltd., dated August 24, 2012, contains any misrepresentation of the information contained in the Technical Report.

Dated this 8th day of October, 2012

“Jason Dunning” [Original signed and sealed]

Jason Dunning, M.Sc., P.Geo.
President
Selwyn Resources Limited
Vancouver, Canada



CONSENT of AUTHOR

TO: Selwyn Resources Ltd., Alberta Securities Commission, Manitoba Securities Commission, Ontario Securities Commission, Nova Scotia Securities Commission, New Brunswick Securities Commission, Securities Commission of Newfoundland and Labrador, TSX Venture Exchange and Toronto Stock Exchange and British Columbia Securities Commission

I, Timothy J. Carew, P.Geo., B.Sc., M.Sc., do hereby consent to the filing, with the regulatory authorities referred to above, of the technical report entitled, “Updated Resource Report for the Gays River Zinc-Lead Deposit, Including the Getty Deposit, Nova Scotia, Canada” (the “Technical Report”), with an effective date of October 8, 2012. I also consent to the written disclosure of the Technical Report and of extracts from or a summary of the Technical Report in the written disclosure in the news release of Selwyn Resources Limited being filed.

I also certify that I have read the written disclosure being filed and I do not have any reason to believe that there are any misrepresentations in the information derived from the Technical Report or that the written disclosure in the news release of Selwyn Resources Ltd., dated August 24, 2012, contains any misrepresentation of the information contained in the Technical Report.

Dated this 8th day of October, 2012

“Tim Carew” [Original signed and sealed]

Timothy J. Carew, P.Geo., B.Sc., M.Sc.
Mining Geologist
Reserva International
Reno, NV, USA



* Y-T-D Silver Since Sept 1/90
* Y-T-D Cadmium Since Oct 1/90

Appendix 2: Mineral lease and exploration licence claims and ownership history



May 2, 2011

Mr. Grant Ewing
ScoZinc Limited
15601 Highway 224
Cooks Brook, Nova Scotia
B0N 1Y0

Re: **Mineral Lease No. 10-1**
Gays River, Nova Scotia

Dear Mr. Ewing:

Enclosed please find Mineral Lease No. 10-1, as duly signed by the Minister of Natural Resources. This document is an original and the Registrar retains the counterpart. This Lease is a renewal of Mineral Lease No. 90-1.

Section 7 of the Lease requires the Lessee to maintain a reclamation security for the term of the Lease. A security in the amount of \$2,600,000 is required and must be posted with the Registry of Mineral and Petroleum Titles within thirty days of this letter (June 1, 2011). As the Department currently holds \$712,210 in reclamation security, an additional amount of \$1,887,790 is required within thirty days. Should you fail to provide this additional security within this period, you would not be in compliance with the Lease. The non-compliance matter will be referred to the Minister and the Lease may be forfeited for non-compliance of Section 7 of the Lease, in accordance with Section 167 of the *Mineral Resources Act*.

Please note that you are required to file a report in Form 16 of the Mineral Resources Regulations on or before March 1 of each year. Also, please note that rentals for this Lease are due on or before April 2, 2012 and every April 2 thereafter until expiry of the Lease.

Sincerely,



Michael A. MacDonald
Executive Director
Mineral Resources Branch

Encl.

cc A. Davidson
J. MacNeil
T. Lamb



(pursuant to the *Mineral Resources Act*, S.N.S. 1990, c. 18, s. 58)

This Mineral Lease issued April 2, 2010

BY: HER MAJESTY THE QUEEN, in right of the
PROVINCE OF NOVA SCOTIA, represented by
the Minister of Natural Resources
(hereinafter called the “Lessor”)

TO: SCOZINC LIMITED, a body corporate with
registered office at 15601 Highway 224, Cooks
Brook in the PROVINCE OF NOVA SCOTIA

(hereinafter called the “Lessee”)

Subject to the payment of the rents and royalties herein reserved and compliance with the terms of this Lease, the Lessor hereby grants unto the Lessee, subject to the provisions of this Lease and the *Mineral Resources Act*, exclusive rights to ALL MINERALS, SAVING AND EXCEPTING Coal, potash, salt, and uranium, on the following claims in that certain area situated at or near Gays River in the County of Halifax, as outlined on the attached plan as shown in Schedule A and described as follows:

Claim(s)	Tract(s)	Claim Reference Map
NOP	5	11E03B
JKPQ	19	11E03B
BCDEFGKLMNOPQ	20	11E03B
DEKLMNOP	28	11E03B
ABCDFGHJKQ	29	11E03B

and which are also shown on the maps in the files of the Registrar, Department of Natural Resources, at Halifax, Nova Scotia and which comprise 615 hectares, more or less.

1. In this Lease, “Act” means the *Mineral Resources Act* and *Mineral Resources Regulations* as amended, or replacements thereof, and except where the context otherwise requires, words in this Lease have the same meaning as in the Act.

2. The term of this Lease is 20 years beginning on the date this Lease is issued, subject to compliance with the Act.
3. This Lease shall be renewed for a further 20 years upon application to the Minister within the 6 months immediately preceding the date of expiration of this Lease, provided that the Lessee is *bona fide* working the Lease and is in compliance with the Act and the provisions of this Lease.
4. The Lessee shall not enter upon or conduct any surface excavation, surface mining or other surface work upon any lands until the Lessee has obtained the consent of the landowner or tenant or a surface rights permit to enter upon or conduct the work.
5. The Lessee shall pay a yearly rental to the Registrar, as prescribed in Section 70 of the *Mineral Resources Regulations*, for each claim included under this Lease. The rental is payable yearly in advance, the first payment to be made on April 2nd after the date of this Lease, and thereafter on April 2nd in each year.
6. The Lessee shall pay a royalty to the Mine Assessor, as prescribed in Section 121 of the Act or Section 71 of the *Mineral Resources Regulations*, or at such other rate as shall from time to time be imposed by the Order of the Governor in Council.
7. The Lessee shall maintain a security for the performance of the proposed reclamation program in an amount and form prescribed in Section 77 of the *Mineral Resources Regulations*.
8. The Lessee shall file an annual report on mining operations in Form 16 on or before March 1 of each year of this Lease specifying all work performed on the area covered by this Lease during the previous calendar year.
9. The Lessee shall indemnify and save harmless the Lessor from any and all claims, demands, losses, damages, actions or other suits that may hereafter arise out of, or as a result of, any exploration, mining, milling or any other act or omission.
10. Unless this Lease is renewed pursuant to the Act, all rights under this Lease absolutely revert to the Lessor upon the surrender, abandonment, expiration or termination of this Lease for any reason whatsoever.
11. This Lease cannot be assigned or transferred in whole or part by the Lessee without the prior written consent of the Minister of Natural Resources.
12. Any notice pursuant to this Lease is valid if given in accordance with Sections 15 of the *Mineral Resources Regulations*, and addressed to the Lessee at Scozinc Limited 15601 Highway 224, Cooks Brook, Nova Scotia B0N 1Y0, Attention: Stacey Stone, and to the Lessor at the Department of Natural Resources, P.O. Box 698, Halifax, Nova Scotia, B3J 2T9, Attention: The Minister of Natural Resources.
13. The Lessee shall be registered to do business in Nova Scotia and must maintain the registration in good standing during the term of this Lease.

14. The provisions of this Lease are binding upon and endure to the benefit of the Lessee, its successors and permitted assigns, and will remain in full force until such time as the Lessee has fulfilled its obligations created under this Lease.
15. The Lessee shall provide the Registrar with written notification
- (a) whenever it is anticipated that production will be suspended for longer than 60 days;
 - (b) immediately following a production suspension of longer than 60 days;
 - (c) whenever it is anticipated that the Lessee will resume production.
16. The Lessee shall provide the Minister with 6 months notice in writing of the Lessee's intent to permanently terminate mining operations. If the Lessee is required, through no fault of the Lessee, to suddenly and permanently terminate mining operations, the Lessee, the legal representative of the Lessee or any creditor of the Lessee must immediately notify the Minister.
17. The Lessee shall hold and maintain in good standing all approvals required by the Nova Scotia Department of Environment and all permits required under all other applicable legislation.
18. Time is of the essence in this Lease.
19. If there is any inconsistency between any provisions of the Act and this Lease, the Act prevails over this Lease to the extent of the inconsistency.

Executed in the name of the Minister of Natural Resources on May 4, 2011,
at Halifax, in the County of Halifax.

In the presence of

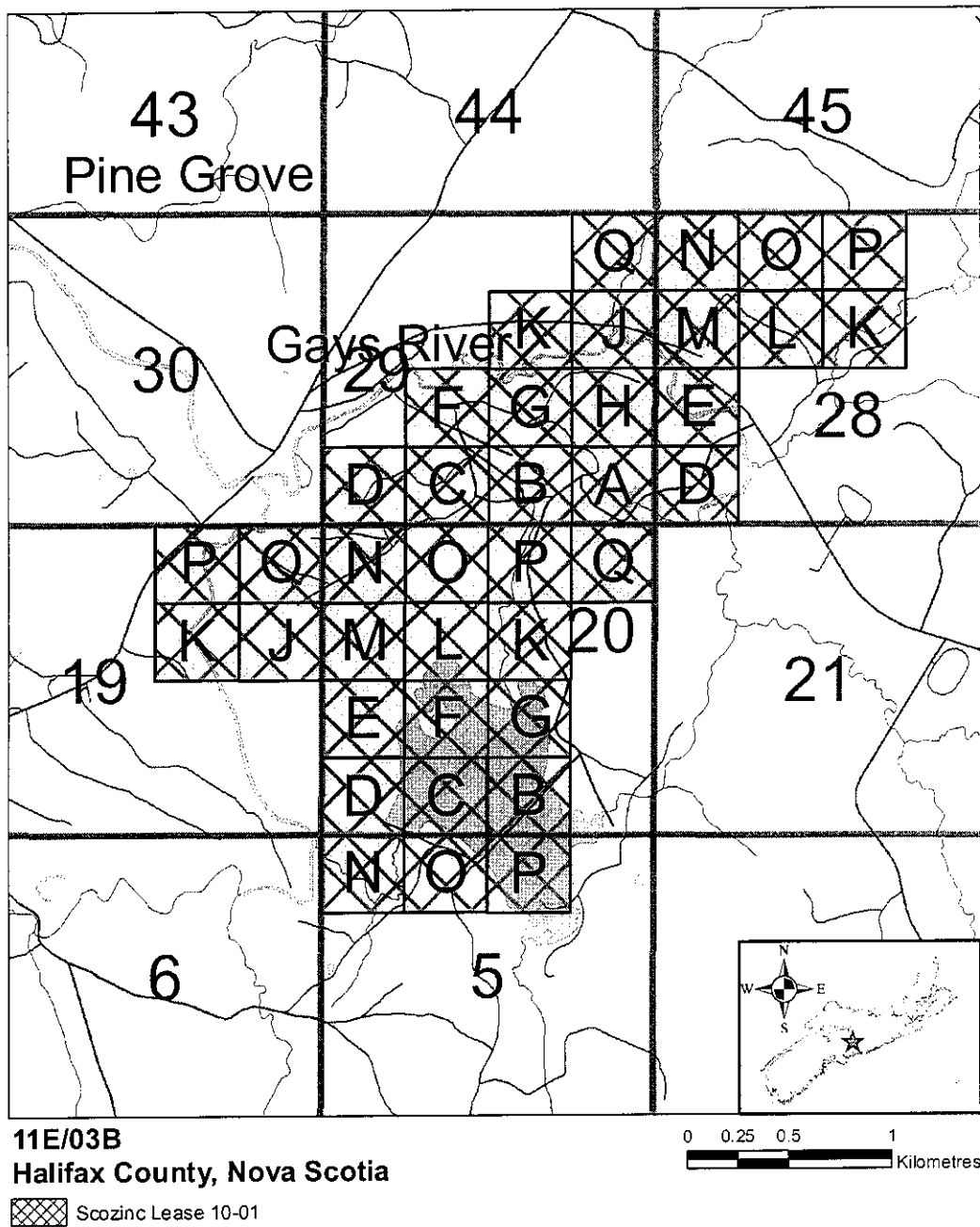
Barbara Hunt
Witness

Charlie Parker
Minister of Natural Resources

(Seal)
Jean King
Witness

Stacey Dore
Lessee

Schedule A
Plan of Scozinc
Lease 10-1



By FAX : 902-425-6350

February 17, 2006

Ms. Barbara (Basia) H. Dzieranowska
McInnes Cooper Barristers & Solicitors
P.O. Box 730
Halifax, NS B3J 2V1

Dear Ms. Dzieranowska:

Re: Search of Title - Scozinc Limited

Mining Lease No. 90-1

Please accept this letter as confirmation that Registry records indicate that Mining Lease No. 90-1 is in good standing and issued to Scozinc Limited as at today's date. Specifically, Mining Lease No. 90-1 consists of the following thirty-eight (38) claims:

LEASE NUMBER	CLAIMS	TRACT	CLAIM REFERENCE MAP	ANNIVERSARY DATE
90-1	NOP	5	11E3B	Apr. 2/06
	JKPQ	19	11E3B	
	BCDE FGK	20	11E3B	
	LMNO PQ			
	DEKL MNOP	28	11E3B	
	ABCD FGH JKQ	29	11E3B	

The following table outlines the chronology of title which resulted in the issuance of Lease No. 90-1. The beginning of title begins at the bottom of the table with the issuance of five (5) Prospector Licences. Only the claims that are currently held under lease 90-1 are listed.

Licence/ Lease Number	Claims	Tract	Claim Reference Map	Licensee	Date	Comments
L 90-1	NOP	5	11E3B	Scozinc Limited	Nov. 13, 2002	November 13, 2002 receipt of the Certificate of Name Change, dated November 5, 2002, confirming the name change from Pasminco Resources Canada Ltd. to Scozinc Limited. (Certificate of Name Change - RJSC Registry No. 3064626.)
	JKPQ	19	11E3B			
	BCDE FGK LMNO	20	11E3B			
	PQ					
	DEKL MNOP	28	11E3B			
	ABCD FGH JKQ	29	11E3B			
				Pasminco Resources Canada Ltd.	March 20, 2002	March 20, 2002 receipt of Certificate of Amendment, dated March 4, 2002, confirming the name change from Pasminco Resources Canada Company to Pasminco Resources Canada Ltd. (Certificate of Amendment - RJSC Registry Number 3064626.)
				Pasminco Resources Canada Company	March 28, 2000	March 28, 2000 receipt of Certificate of Name Change, dated October 29, 1999, confirming the name change from Savage Resources Canada Company to Pasminco Canada Company. (Certificate of Name Change - RJSC Registry No. 3002877.)
				Savage Resources Canada Company	Dec. 23, 1996	Transfer of Lease No. 90-1 from WMC International Limited to Savage Resources Canada Company. (Transfer No. 4792 registered Dec. 23, 1996.)
				WMC International Limited	July 18, 1994	Receipt of notice of name change from Westminer Canada Limited to WMC International Limited.
				Westminer Canada Limited	Apr 2, 1990	Lease issued effective April 2, 1990. Issuance authorized by Order in Council No. 90-483.

Licence/ Lease Number	Claims	Tract	Claim Reference Map	Licensee	Date	Comments
DL 0092	NOP JKPQ	5 19	11E3B 11E3B	Seabright Resources Inc.	Sept. 25, 1985	Transfer of Development Licence Nos. 0092 & 0091 from Esso Resources Canada Limited to Seabright Resources Inc. (Transfer No. 4372 registered Sept. 25, 1985).
DL 0091	BCDE FGK LMNO PQ DEKL MNOP ABCD FGH JKQ	20 28 29	11E3B 11E3B 11E3B	Esso Resources Canada Limited	July 4, 1982	
L 78-3	NOP JKPQ BCDE FGK LMNO PQ DEKL MNOP ABCD FGH JKQ	5	11E3B	Esso Resources Canada Limited	July 3, 1982	Lease No. 78-3 surrendered July 3, 1982.
		19	11E3B			
		20	11E3B			
		28 29	11E3B 11E3B		Feb. 14, 1979	Transfer of Lease No. 78- 3 from Imperial Oil Limited to Esso Resources Canada Limited (Transfer No. 4032 registered February 14, 1979).
				Imperial Oil Limited	July 4, 1978	Lease 78-3 issued effective July 4, 1978 as the result of the consolidation of Lease Nos. 78-1 & 78-2.
L 78-2	DEKL MNOP ABGH JKQ	28 29	11E3B 11E3B	Imperial Oil Limited	July 4, 1978	Lease Nos. 78-2 & 78-1 consolidated and recorded as Lease No. 78-3.
L 78-1	NOP JKPQ BCDE FGK LMNO PQ CDF	5 19 20 29	11E3B 11E3B 11E3B 11E3B			Lease Nos. 78-2 & 78-1 issued effective July 4, 1978.

Licence/ Lease Number	Claims	Tract	Claim Reference Map	Licensee	Date	Comments
DL 0039	DEKL MNOP ABGH JKQ	28 29	11E3B 11E3B	Imperial Oil Limited	Dec. 21, 1977	Transfer of " <i>all the right title and interest in and to</i> " Development Licence Nos 0039 & 0040 from Preuvier Mines Ltd. to Imperial Oil Limited. (Transfer No. 3972 registered December 21, 1977).
DL 0040	CDF NOP JKPQ BCDE FGK LMNO PQ	29 5 19 20	11E3B 11E3B 11E3B 11E3B	Imperial Oil Limited - Preuvier Mines Ltd.	July 4, 1977	Development Licence Nos. 0039 & 0040 issued to Imperial Oil Limited & Preuvier Mines Ltd. effective July 4, 1977.
EL 0052	DEKL MNOP ABCD FGH JKQ	28 29	11E3B 11E3B	Imperial Oil Limited - Preuvier Mines Ltd.	Jan 20, 1977	Transfer of Exploration Licence No. 0052 from Cuvier Mines Ltd. to Imperial Oil Limited (60% undivided interest) & Preuvier Mines Limited (40% undivided interest) by means of Transfer No. 3930 which was registered on January 20, 1977.
				Cuvier Mines Ltd.	July 2, 1975	Licence issued in its 4 th year of issue to Cuvier Mines Ltd. effective July 2, 1975.

Licence/ Lease Number	Claims	Tract	Claim Reference Map	Licensee	Date	Comments
EL 0122	NOP JKPQ BCDE FGK LMNO PQ	5 19 20	11E3B 11E3B 11E3B	Imperial Oil Limited - Preuvier Mines Ltd.	Jan 20, 1977	Transfer of Exploration Licence No. 0122 from Cuvier Mines Ltd. to Imperial Oil Limited (60% undivided interest) & Preuvier Mines Limited (40% undivided interest) by means of Transfer No. 3930 which was registered on January 20, 1977.
				Cuvier Mines Ltd.	July 24, 1975	Licence issued in its 4 th year of issue to Cuvier Mines Ltd. effective July 24, 1975.
New Mineral Resources Act in force June 1, 1975						
PL 4061	BCDE FGK LMNO PQ	20	11E3B	Cuvier Mines Ltd.	July 24, 1974	Prospector Licence Nos. 4061, 4058 & 4060 issued to Cuvier Mines Ltd. effective July 24, 1974.
PL 4058	NOP	5	11E3B			
PL 4060	JKPQ	19	11E3B			
PL 3190	ABCD FGH JKQ	29	11E3B	Cuvier Mines Ltd.	May 22, 1974	Prospector Licence Nos. 3190 & 3191 issued to Cuvier Mines Ltd. effective May 22, 1974.
PL 3191	DEKL MNOP	28	11E3B			
PL 10161	BCDE FGK LMNO PQ	20	11E3B	Cuvier Mines Ltd	July 24, 1973	Prospector Licence Nos. 10161, 10158 & 10160 issued to Cuvier Mines Ltd. effective July 24, 1973.
PL 10158	NOP	5	11E3B			
PL 10160	JKPQ	19	11E3B			
PL 9112	ABCD FGH JKQ	29	11E3B	Cuvier Mines Ltd	May 22, 1973	Prospector Licence Nos. 9122 & 9113 issued to Cuvier Mines Ltd. effective May 22, 1973.
PL 9113	DEKL MNOP	28	11E3B			

Licence/ Lease Number	Claims	Tract	Claim Reference Map	Licensee	Date	Comments
PL 6573	BCDE FGK LMNO PQ	20	11E3B	Cuvier Mines Ltd	July 24, 1972	Transfer of Prospector Licence Nos. 6573, 6566 & 6574 from J. H. Morgan to Cuvier Mines Ltd. (Transfer No. 3649). Prospector Licence Nos. 6573, 6566 & 6574 issued to J. H. Morgan effective July 24, 1972.
PL 6566	NOP	5	11E3B	J. H. Morgan		
PL 6574	JKPQ	19	11E3B			
PL 6044	ABCD FGH JKQ	29	11E3B	Cuvier Mines Ltd.	May 13, 1972	Transfer of Prospector Licence Nos. 6044 & 6043 from Avarud Hudgins to Cuvier Mines Ltd. (Transfer No. 3641). Prospector Licence Nos. 6044 & 6043 issued to Avarud Hudgins effective May 13, 1972.
PL 6043	DEKL MNOP	28	11E3B	Avarud Hudgins		
EL - Exploration Licence DL - Development Licence PL - Prospector Licence L - Lease RJSC - Registry of Joint Stock Companies						

A review of the Registry Agreement Ledger for documents recorded on Mining Lease No. 90-1 and prior mineral titles, as outlined in the above chronology, and in the name of the current and previous title holders, indicates that the following documents have been recorded as agreements:

Agreement Number	Date	Parties to the Agreement	Comments
788	May 29, 1973 (Date Received)	Cuvier Mines Limited Lura Corporation Imperial Oil Limited	Agreement dated 1st November 1972
792	June 26, 1973 (Date of Letter)	Imperial Oil Limited	Letter of Incorporation

Agreement Number	Date	Parties to the Agreement	Comments
793	May 29, 1973 (Date Received)	Cuvier Mines Limited Lura Corporation Imperial Oil Limited	Agreement dated 1st November 1972
846	Feb 1, 1976 (Agreement Date)	Cuvier Mines Ltd. Preussag Canada Limited	
847	Feb 1, 1976 (Agreement Date)	R.P. Mills J.H. Morgan Preussag Canada Limited	Financing Agreement
848	Feb 1, 1976 (Agreement Date)	Cuvier Mines Ltd. Preussag Canada Limited	Preuvier Shareholders Agreement
849	Feb 1, 1976 (Agreement Date)	Cuvier Mines Ltd. Preuvier Mines Limited	
850	Feb 1, 1976 (Agreement Date)	Cuvier Mines Ltd. Preussag Canada Limited	Joint Venture Agreement
860	Dec 15, 1976 (Date Registered)	Preuvier Mines Limited Montreal Trust Company	Agreement dated March 15, 1976 Trust Indenture
883	Nov 15, 1977 (Date Registered)	Cuvier Mines Ltd. Preuvier Mines Limited Imperial Oil Limited	Agreement dated Sept 30, 1977
884	Nov 15, 1977 (Date Registered)	Cuvier Mines Ltd. Preuvier Mines Limited Preussag Canada Limited	Agreement dated Sept 30, 1977
885	Dec 15, 1977 (Date Registered)	Preuvier Mines Limited Montreal Trust Company	Release of Trust Indenture
892	Feb 1, 1978 (Date of Letter)	Esso Minerals Division of Imperial Oil Limited	Gays River Project
1279	Aug 3, 1982 (Date of Agreement)	Mosher Limestone Company Limited Esso Resources Canada Limited	
A0191	Oct 19, 2001 (Date Registered)	Pasminco Resources Canada Company Regal Consolidated Ventures Limited	Agreement dated Sep 20, 2001

The above review of the Registry's Agreement Index also included the following two (2) agreements that referenced a former title holder. No reference to a mineral right could be determined as at the time of the search.

Agreement Number	Parties to the Agreement	Comments
1277	Seabright Resources Inc.	Agreements & Letters of Intent
1320	Seabright Resources Inc. Tri-Explorations Inc.	

Exploration Licence No. 06268

Registry records indicate that Exploration Licence No. 06268 is in good standing and issued to Scozinc Limited as at today's date. Specifically, Exploration Licence No. 06268 consists of the following twenty-eight (28) claims:

LICENCE NUMBER	CLAIMS	TRACT	CLAIM REFERENCE MAP	ANNIVERSARY DATE
06268	ABCD EFGH LMN ABC EFGH DE JKLM NOPQ	19 18 7	11E3B 11E3B 11E3B	May 2/06

The following table outlines the chronology of title which resulted in the issuance of 06268. The beginning of title starts at the bottom of the table with the issuance of four (4) Exploration Licences. Only the claims that are currently held under exploration licence no. 06268 are listed.

Licence Number	Claims	Tract	Claim Reference Map	Licensee	Date	Comments
06268	ABCD EFGH LMN ABC EFGH DE JKLM NOPQ	19 18 7	11E3B 11E3B 11E3B	Scozinc Limited	May 2, 2005	Exploration Licence No. 06268 issued in its 9 th year of issue to Scozinc Limited effective May 2, 2005. Exploration Licence No 06268 replaced Exploration Licence No. 06166.

Licence Number	Claims	Tract	Claim Reference Map	Licensee	Date	Comments
06166	ABCD EFGH LMN ABC EFGH DE JKLM NOPQ	19 18 7	11E3B 11E3B 11E3B	Scozinc Limited	May 2, 2004	Exploration Licence No. 06166 issued in its 8 th year of issue to Scozinc Limited effective May 2, 2005. Exploration Licence No. 06166 was issued as the result of the regrouping of Exploration Licence Nos. 04727, 02684, 04460 & 06165.
04727	DE JKLM NOPQ ABC EFGH	7 18	11E3B 11E3B	Scozinc Limited Alex C. Thomson	Sept 28, 2004 Oct 25, 2001	Exploration Licence No. 04727 transferred from Alex C. Thomson to Scozinc Limited. Transfer No. 4926 registered September 28, 2004. Exploration Licence No. 04727 issued to Alex C. Thomson effective October 25, 2001.

Licence Number	Claims	Tract	Claim Reference Map	Licensee	Date	Comments
02684	AB FGH	19	11E3B	Scozinc Limited	Nov. 13, 2002	November 13, 2002 receipt of the Certificate of Name Change, dated November 5, 2002, confirming the name change from Pasminco Resources Canada Ltd. to Scozinc Limited. (Certificate of Name Change - RJSC Registry No. 3064626.)
				Pasminco Resources Canada Ltd.	March 20, 2002	March 20, 2002 receipt of Certificate of Amendment, dated March 4, 2002, confirming the name change from Pasminco Resources Canada Company to Pasminco Resources Canada Ltd. (Certificate of Amendment - RJSC Registry Number 3064626.)
				Pasminco Resources Canada Company	March 28, 2000	March 28, 2000 receipt of Certificate of Name Change, dated October 29, 1999, confirming the name change from Savage Resources Canada Company to Pasminco Canada Company. (Certificate of Name Change - RJSC Registry No. 3002877.)
				Savage Resources Canada Company	Nov 11, 1999	Exploration Licence No. 04727 transferred from Michael P. Cullen to Savage Resources Canada Company. Transfer No. 4855 registered November 1, 1999.
				Michael P. Cullen	Nov 5, 1996	Exploration Licence No. 02684 issued to Michael P. Cullen effective November 5, 1996.

Licence Number	Claims	Tract	Claim Reference Map	Licensee	Date	Comments
04460	CDE	19	11E3B	Scozinc Limited	Sept 28, 2004	Exploration Licence No. 04460 transferred from Alex C. Thomson to Scozinc Limited. Transfer No. 4926 registered September 28, 2004.
				Alex C. Thomson	Nov. 10, 2000	Exploration Licence No. 04460 issued to Alex C. Thomson effective November 10, 2000.
06165	LMN	19	11E3B	Scozinc Limited	Sept 28, 2004	Exploration Licence No. 06165 issued to Scozinc Limited effective Sept 28, 2004.

Exploration Licence No. 06304

Registry records indicate that Exploration Licence No. 06304 is in good standing and issued to Scozinc Limited as at today's date. Specifically, Exploration Licence No. 06304 consists of the following one (1) claim:

LICENCE NUMBER	CLAIMS	TRACT	CLAIM REFERENCE MAP	ANNIVERSARY DATE
06304	E	29	11E3B	Oct 13/06

The following table outlines the chronology of title which resulted in the issuance of 06304. The beginning of title starts at the bottom of the table with the issuance of Exploration Licence No. 05743.

Licence Number	Claims	Tract	Claim Reference Map	Licensee	Date	Comments
06304	E	29	11E3B	Scozinc Limited	Oct 13, 2005	Exploration Licence No. 06304 issued in its 2nd year of issue to Scozinc Limited effective Oct 13 2, 2005. Exploration Licence No 06304 replaced Exploration Licence No. 05743.
05743	E	29	11E3B	Scozinc Limited	Oct 13, 2004	Exploration Licence No. 05743 issued to Scozinc Limited effective Oct 13 2, 2004.

Exploration Licence No. 06303

Registry records indicate that Exploration Licence No. 06303 is in good standing and issued to Scozinc Limited as at today's date. Specifically, Exploration Licence No. 06303 consists of the following five (5) claim:

LICENCE NUMBER	CLAIMS	TRACT	CLAIM REFERENCE MAP	ANNIVERSARY DATE
06303	LMNOP	29	11E3B	Oct 25/06

The following table outlines the chronology of title which resulted in the issuance of 06303. The beginning of title starts at the bottom of the table with the issuance of Exploration Licence No. 04728.

Licence Number	Claims	Tract	Claim Reference Map	Licensee	Date	Comments
06303	LMNOP	29	11E3B	Scozinc Limited	Oct 25, 2005	Exploration Licence No. 06303 issued in its 5th year of issue to Scozinc Limited effective Oct 25 2, 2005. Exploration Licence No 06303 replaced Exploration Licence No. 04728.
04728	LMNOP	29	11E3B	Scozinc Limited	Sept 28, 2004	Exploration Licence No. 04728 transferred from Alex C. Thomson to Scozinc Limited. Transfer No. 4926 registered September 28, 2004.
				Alex C. Thomson	Oct 25, 2001	Exploration Licence No. 04728 issued to Alex C. Thomson effective Oct 25, 2001.

Exploration Licence No. 05851

Registry records indicate that Exploration Licence No. 05851 is in good standing and issued to Scozinc Limited as at today's date. Specifically, Exploration Licence No. 05851 consists of the following fifteen (15) claims:

LICENCE NUMBER	CLAIMS	TRACT	CLAIM REFERENCE MAP	ANNIVERSARY DATE
05851	FGH JKL OPQ EFG KLM	45 46	11E3B 11E3B	Nov 5/06

The following table outlines the chronology of title which resulted in the issuance of 05851. The beginning of title starts at the bottom of the table with the issuance of Exploration Licence No. 02689.

Licence Number	Claims	Tract	Claim Reference Map	Licensee	Date	Comments
05851	FGH JKL OPQ EFG KLM	45 46	11E3B 11E3B	Scozinc Limited	Nov 5, 2004	Exploration Licence No. 05851 issued in its 10th year of issue to Scozinc Limited effective Nov 5 , 2004. Exploration Licence No 05851 replaced Exploration Licence No. 02689.

Licence Number	Claims	Tract	Claim Reference Map	Licensee	Date	Comments
02689	FGH JKL OPQ EFG KLM	45 46	11E3B 11E3B	Scozinc Limited	Nov. 13, 2002	November 13, 2002 [*] receipt of the Certificate of Name Change, dated November 5, 2002, confirming the name change from Pasminco Resources Canada Ltd. to Scozinc Limited. (Certificate of Name Change - RJSC Registry No. 3064626.)
				Pasminco Resources Canada Ltd.	March 20, 2002	March 20, 2002 receipt of Certificate of Amendment, dated March 4, 2002, confirming the name change from Pasminco Resources Canada Company to Pasminco Resources Canada Ltd. (Certificate of Amendment - RJSC Registry Number 3064626.)
				Pasminco Resources Canada Company	March 28, 2000	March 28, 2000 receipt of Certificate of Name Change, dated October 29, 1999, confirming the name change from Savage Resources Canada Company to Pasminco Canada Company. (Certificate of Name Change - RJSC Registry No. 3002877.)
				Savage Resources Canada Company	Nov 1, 1999	Exploration Licence No. 04727 transferred from Michael P. Cullen to Savage Resources Canada Company. Transfer No. 4855 registered November 1, 1999.
				Michael P. Cullen	Nov 5, 1996	Exploration Licence No. 02689 issued to Michael P. Cullen effective Nov 5, 1996.

Exploration Licence No. 05792

Registry records indicate that Exploration Licence No. 05792 is in goodstanding and issued to Scozinc Limited as at today's date. Specifically, Exploration Licence No. 05792 consists of the following forty-two(42) claims:

LICENCE NUMBER	CLAIMS	TRACT	CLAIM REFERENCE MAP	ANNIVERSARY DATE
05792	DE MN	42	11E3B	Jan 20/06
	ABCD EFGH JKLM NOPQ	41	11E3B	
	EF LM NO	32	11E3B	
	ABCD EFGH JKLM NOPQ	33	11E3B	

The following table outlines the chronology of title for Exploration Licence No. 05792.

Licence Number	Claims	Tract	Claim Reference Map	Licensee	Date	Comments
05792	DE MN	42	11E3B	Scozinc Limited	Jan 20, 2005	Exploration Licence No. 05792 issued to Scozinc Limited effective Jan 20, 2005.
	ABCD EFGH JKLM NOPQ	41	11E3B			
	EF LM NO	32	11E3B			
	ABCD EFGH JKLM NOPQ	33	11E3B			

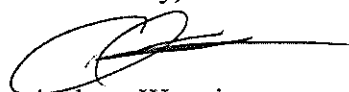
A review of the Registry Agreement Ledger for documents recorded on Exploration Licence Nos. 06268, 06304, 06303, 05851 & 05792 and prior mineral titles, as outlined in the above five chronologies, and in the name of the current and previous title holders, indicates that the following documents have been recorded as agreements:

Agreement Number	Date	Parties to the Agreement	Comments
A0191	Oct 19, 2001 (Date Registered)	Pasminco Resources Canada Company Regal Consolidated Ventures Limited	Agreement dated Sep 20, 2001 L 90-1 EL 02684, 02689
S0224	Jul 20, 2004 (Date Received)	Alex C. Thomson Scozinc Ltd.	EL 04727, 04460

Agreement Number	Date	Parties to the Agreement	Comments
A0228	Oct 8, 2004 (Date Received)	Alex C. Thomson Scozinc Ltd.	Document dated Oct 1, 2002 EL 04727, 04460
A - Agreement S - Summary of Agreement			L - Lease EL - Exploration Licence

If you have any questions please do not hesitate to get in contact with me at (902) 424-8156. I remain,

Yours truly,



Andrew Wenning
Assistant Registrar of
Mineral & Petroleum Titles

AW/

Encl. Invoice

October 9, 2012

Mr. Michael Hannon

Dear Mr. Hannon

Re: Confirmation of Title - Scozinc Limited

Please accept this letter that Registry records indicate that as at October 4, 2012, the following mineral rights (Exploration Licence Nos. 05851, 06268, 06303, 06304, 06517, 06518, 06959, 08905, 08936, 09069, 09070, 09759, 09760, Mineral Lease 10-1), are issued to Scozinc Limited.

Exploration Licence	Licensee	Map	Tract	Claims	Annual Anniversary Date	Remarks
05851	Scozinc Limited	11E3B	45 46	EF GHL EFG	05 Nov. 2012	Renewed for 16 th year commencing Nov. 5, 2011
06268	Scozinc Limited	11E3B	19 18 7	ABCDEFGHLMN ABCEFGH DEJKLMNPOQ	02 May, 2012	Under renewal application 19666 for 16 th year
06303	Scozinc Limited	11E3B	29	LM NOP	25 Oct. 2012	Renewed for an 11 th yr commencing October 25, 2011 .
06304	Scozinc Limited	11E3B	29	E	13 Oct. 2012	Renewed for an 8 th year commencing Oct. 13, 2011.
06517	Scozinc Limited	11E3B	6	NOPQ	01 Feb. 2013	Renewed for a 7 th year commencing Feb. 1, 2012
06518	Scozinc Limited	11E3B	7	CF	01 Feb. 2013	Renewed for a 7 th year commencing Fe. 01, 2012
06959	Scozinc Limited	11E3B	17 30 31 32 42 43 44	Q ABCD EFGHJKLMNPOQ ABCDEFGHJKLMOPQ ABGHJK AB ABCDEFGHJK ABCDEFGHJKLM	20 Oct. 2012	Renewed for a 6 th yr commencing Oct. 20, 2011.
08905	Scozinc Limited	11E3B	45	ABCDEM N	20 Oct. 2012	Renewed for a 3 rd year commencing Oct. 20, 2011
08936	Scozinc Limited	11E3B	18	NOP	21 Dec. 2012	Renewed for a 3rdyr commencing Dec. 21, 2011.
09069	Scozinc Limited	11E3B	20 21 26 27 28	AHJ ABCDEFGH JKLM NOPQ EFGHJKLMNPOQ ABCDEFGHJKLOPQ ABCFGH	19 Aug., 2013	Under renewal application no. 19930 for an 8th yr commencing Aug. 19, 2012.

Exploration Licence	Licensee	Map	Tract	Claims	Annual Anniversary Date	Remarks
			46 47	ABCD ABCDFGH		
09070	Scozinc Limited	11E3A 11E3B	36 37 38 39 57 58 59 25 48	NOP ABCDEFGH JKLM OPQ EFGH JKLM NOPQ M NOPQ EMN ABCDEFGHJKLMNPOQ ABCDGH EFGJKLMNPOQ ABCDEF GH	26 Apr. 2013	Under renewal application no. 19584 for a 7th yr commencing Apr. 26, 2012.
09759	Scozinc Limited.	11E3B	32	Q	19 May, 2013	Under renewal application no. 19677 for a 2 nd yr commencing May 19, 2012.
09760	Scozinc Limited.	11E3B	42 43 44	GHJKPQ LMNOPQ NOPQ	19 May, 2013	Under renewal application no. 19678 for a 2 nd yr commencing May 19, 2013.
Mineral Lease	Scozinc Limited	11E3B	5 19 20	NOP JKPQ BCDEFGKLMNOPO	02 Apr. 2013	Expires 02 Apr. 2030

Yours truly

John Donahue

Appendix 3: Real property titles and lease agreements.



TITLE SEARCH SUMMARY CHART
LANDS OF SCOZINC LIMITED AT MARCH 2006

HALIFAX COUNTY PARCELS

<u>Our Parcel Number</u>	<u>PID</u>	<u>Description</u>	<u>Encumbrances/Comments</u>
1	369363	No. 277 Hwy. (No Lot Number)	(1) 30 Year Lease to Gallant Aggregates Ltd. Commencing May 15, 2003.
2	522623	No. 224 Hwy. (No Lot Number)	(1) Subject to Gallant Lease
3	40227936	No. 224 Hwy. Lot T & T1	(1) Subject to Gallant Lease; (2) Lot T1 is separated from Lot T by Hwy. 224; (3) Lot T is situated in both Halifax County and Colchester County (2 pids) (4) Last Subdivision Plan on file approved consolidation of Lots T and G to form TG, however, Lot G not owned by Scozinc and has own PID.
4	40227951	No. 224 Hwy. Lot B-2	Subject to Gallant Lease
5	40227969	No. 224 Hwy. Lot B-3	Subject to Gallant Lease
6	40227985	No. 224 Hwy. Lot B-4	Subject to Gallant Lease
7	40290256	No. 224 Hwy. Lot A-4	(1) Subject to Gallant Lease; (2) Subject to Possible Old Road Easement in favour of Crown – No longer signs of Road in 1976, but still appears in desc.
8	40290264	15601 Hwy. 224 Lot B&C-2	(1) Subject to Gallant Lease; (2) Consolidated Description Req'd as parcel is still described using 2 descriptions.
9	40291452	No. 224 Hwy. Lots A, A1, A2, A3	(1) Subject to Gallant Lease; (2) Consolidated Description Req'd as parcel is still described using 4 descriptions.
10	40292559	No. 224 Hwy. Lot T-2	(1) Subject to Gallant Lease; (2) Similar to parcel 3, Lot T-2 is situated in both Halifax and Colchester County (2 pids).
11	40312092	No. 227 Hwy.	Subject to Gallant Lease

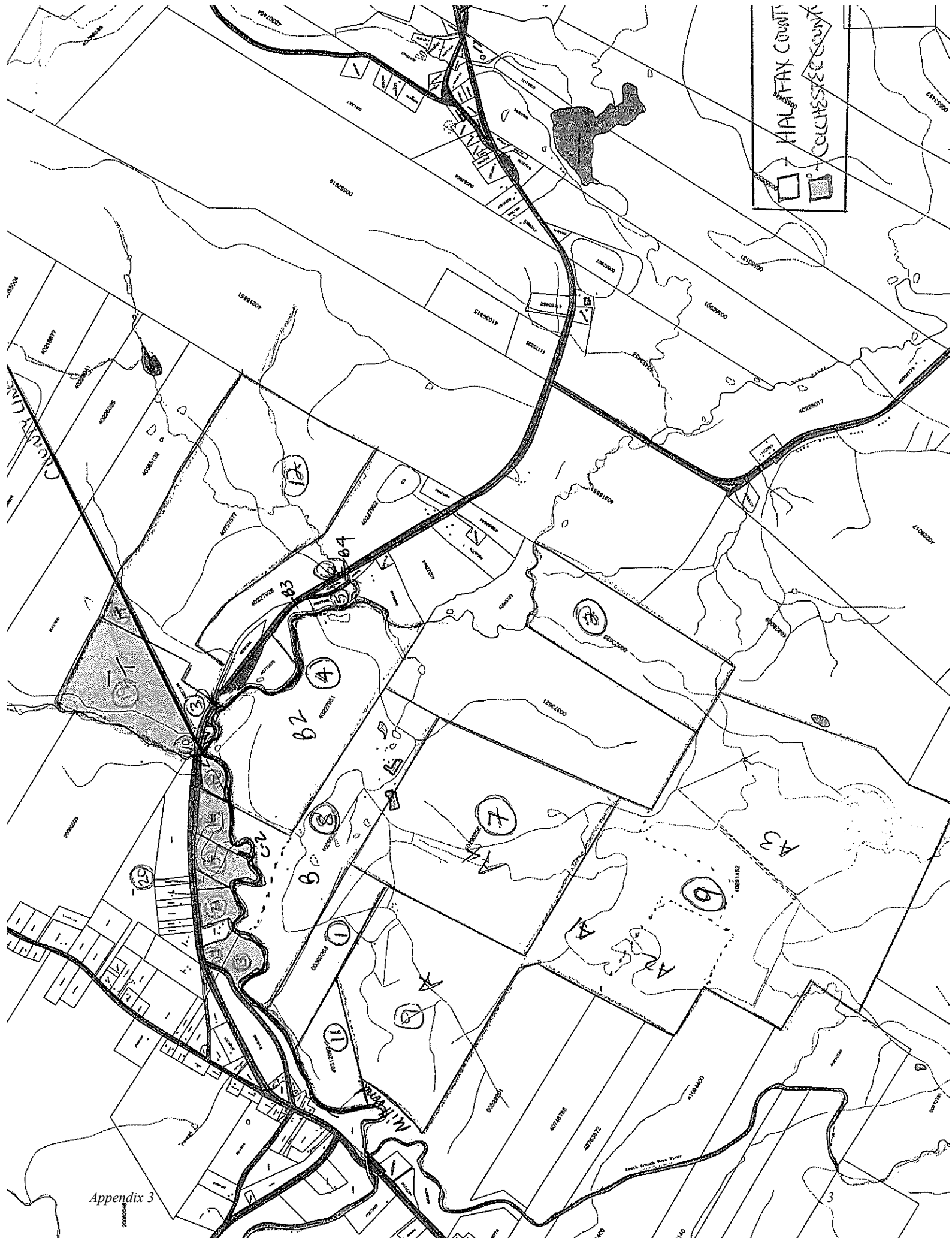
		(No Lot Number)	
12	40757577	No. 224 Hwy. Lot 89-1	(1) Subject to Gallant Lease; (2) Together With and Subject To Easement for Road Crossing Lot; (3) Lot 89-1 is situated in both Halifax and Colchester County (2 pids).

COLCHESTER COUNTY PARCELS

<u>Our Parcel Number</u>	<u>PID</u>	<u>Description</u>	<u>Encumbrances/Comments</u>
13	20158176	No. 224 Hwy. (No Lot Number)	NIL
14	20416384	No. 224 Hwy. (No Lot Number)	NIL
15	20080529	No. 224 Hwy. Lot C-1	Subject to 99 Year Sand Removal Lease in favour of Nora Recreation Development Company Limited, commencing Jan. 1, 1986.
16	20080511	No. 224 Hwy.	Subject to Sand Lease
17	20223400	No. 224 Hwy. Lot 89-1	Same as Parcel 12 – this is the Colchester County portion of the same lot.
18	20223418	No. 224 Hwy. Lot T-2	(1) Same as Parcel 10 – this is the Colchester County portion of the same lot; (2) Subject to Sand Lease.
19	20080495	No. 224 Hwy. Lot T	(1) Same of Parcel 3 – this is the Colchester County portion of Lot T; (2) Subject to Sand Lease.
20	20313250	No. 224 Hwy. Lot 3	Subject to Sand Lease
21	20158184	No. 224 Hwy.	NIL

Note: Our Colchester Title Searcher failed to find any record of the Gallant Lease against the Colchester parcels. Similarly, our Halifax Title Searcher failed to find any record of the Sand Lease against the Halifax parcels. There is also a Mortgage and Debenture that affected many of these parcels, both of which were released by a document recorded in both counties despite the wording of the document only referring to one of the counties. In summary, the fact that the parcels overlap both counties has caused some confusion in the past. Any future documents to be recorded against the properties should be sent to both county registries.

** Please see attached map for overview of the parcels and their locations.



Statement of Registered and Recorded Interests

Land Registration Date/Time: 2011-12-12 12:03:51
Date/Time of Issuance of SRI: 2012-02-27 11:47:18
Date/Time of Parcel Register Update: 2012-02-27 11:46:26

Registration District: HALIFAX COUNTY
User Reference:

PARCEL INFORMATION:

Parcel Identification Number (PID): 41094400
Civic Address and Lot Number: DUTCH SETTLEMENT ROAD CARROLLS CORNER
Condominium Corp. Number:
General Location of the Parcel: CARROLLS CORNER
Parcel Access Type: NO ACCESS

REGISTERED OWNER'S INFORMATION:

Owner Name: SCOZINC LIMITED
Qualifier:
Interest Type: FEE SIMPLE
Document Reference: 100164012 2012-02-24 15:14:36

Instrument Type: DEED
Address of Owner: 15601 NO 224 HIGHWAY HWY
COOKS BROOK NS CA
B0N 1Y0
Non-resident of Nova Scotia? NO

MANNER OF TENURE: NOT APPLICABLE
Description of Tenure:

NON-ENABLING INSTRUMENTS:

QUALIFICATION:

The names lists for Tenant in Common interest holders that are not registered pursuant to the *Land Registration Act* have been obtained from Property Online and have not been searched for completeness or accuracy. No representations or opinions are made with respect to these Tenants in Common. The list of Tenants in Common not registered pursuant to the *Land Registration Act* cannot be relied upon as advice on the current state of title of those interests in the subject parcel. A search of the records at the appropriate Registry of Deeds office is required to determine the current owner(s) of the Tenants in Common not registered pursuant to the *Land Registration Act*.

*Indicates Parcel Register changes in process

Statement of Registered and Recorded Interests

Land Registration Date/Time: 2011-12-12 12:01:38
Date/Time of Issuance of SRI: 2012-02-27 11:47:16
Date/Time of Parcel Register Update: 2012-02-27 11:46:00

Registration District: HALIFAX COUNTY
User Reference:

PARCEL INFORMATION:

Parcel Identification Number (PID): 40746786
Civic Address and Lot Number: NO 277 HIGHWAY CARROLLS CORNER
Condominium Corp. Number:
General Location of the Parcel: CARROLLS CORNER
Parcel Access Type: NO ACCESS

REGISTERED OWNER'S INFORMATION:

Owner Name: SCOZINC LIMITED
Qualifier:
Interest Type: FEE SIMPLE
Document Reference: 100164012 2012-02-24 15:14:36

Instrument Type: DEED
Address of Owner: 15601 NO 224 HIGHWAY HWY
COOKS BROOK NS CA
B0N 1Y0
Non-resident of Nova Scotia? NO

MANNER OF TENURE: NOT APPLICABLE
Description of Tenure:

NON-ENABLING INSTRUMENTS:

QUALIFICATION:

The names lists for Tenant in Common interest holders that are not registered pursuant to the *Land Registration Act* have been obtained from Property Online and have not been searched for completeness or accuracy. No representations or opinions are made with respect to these Tenants in Common. The list of Tenants in Common not registered pursuant to the *Land Registration Act* cannot be relied upon as advice on the current state of title of those interests in the subject parcel. A search of the records at the appropriate Registry of Deeds office is required to determine the current owner(s) of the Tenants in Common not registered pursuant to the *Land Registration Act*.

Statement of Registered and Recorded Interests

Land Registration Date/Time: 2011-12-12 11:53:12
Date/Time of Issuance of SRI: 2012-02-27 11:47:13
Date/Time of Parcel Register Update: 2012-02-27 11:45:47

Registration District: HALIFAX COUNTY
User Reference:

PARCEL INFORMATION:

Parcel Identification Number (PID): 522201

Civic Address and Lot Number: DUTCH SETTLEMENT ROAD GAYS RIVER LOT B-10
Condominium Corp. Number:
General Location of the Parcel: GAYS RIVER
Parcel Access Type: NO ACCESS

REGISTERED OWNER'S INFORMATION:

Owner Name: SCOZINC LIMITED
Qualifier:
Interest Type: FEE SIMPLE
Document Reference: 100164012 2012-02-24 15:14:36

Instrument Type: DEED
Address of Owner: 15601 NO 224 HIGHWAY HWY
COOKS BROOK NS CA
B0N 1Y0
Non-resident of Nova Scotia? NO

MANNER OF TENURE: NOT APPLICABLE
Description of Tenure:

BURDENS ON THE REGISTERED INTERESTS:

Interest Holder Name: SOZINC LIMITED
Qualifier:
Interest Type: LICENSEE (BURDEN)
Document Reference: 98330708 2011-05-17 15:20:46

Instrument Type: LEASE
Address of Interest Holder: POST OFFICE BOX 730
HALIFAX NS CA
B3J 2V1

NON-ENABLING INSTRUMENTS:

*Indicates Parcel Register changes in process

QUALIFICATION:

The names lists for Tenant in Common interest holders that are not registered pursuant to the *Land Registration Act* have been obtained from Property Online and have not been searched for completeness or accuracy. No representations or opinions are made with respect to these Tenants in Common. The list of Tenants in Common not registered pursuant to the *Land Registration Act* cannot be relied upon as advice on the current state of title of those interests in the subject parcel. A search of the records at the appropriate Registry of Deeds office is required to determine the current owner(s) of the Tenants in Common not registered pursuant to the *Land Registration Act*.

Statement of Registered and Recorded Interests

Land Registration Date/Time: 2011-12-12 11:57:06
Date/Time of Issuance of SRI: 2012-02-27 11:47:07
Date/Time of Parcel Register Update: 2012-02-27 11:46:13

Registration District: HALIFAX COUNTY
User Reference:

PARCEL INFORMATION:

Parcel Identification Number (PID): 40763872
Civic Address and Lot Number: NO 277 HIGHWAY CARROLLS CORNER
Condominium Corp. Number:
General Location of the Parcel: CARROLLS CORNER
Parcel Access Type: NO ACCESS

REGISTERED OWNER'S INFORMATION:

Owner Name: SCOZINC LIMITED
Qualifier:
Interest Type: FEE SIMPLE
Document Reference: 100164012 2012-02-24 15:14:36

Instrument Type: DEED
Address of Owner: 15601 NO 224 HIGHWAY HWY
COOKS BROOK NS CA
B0N 1Y0
Non-resident of Nova Scotia? NO

MANNER OF TENURE: NOT APPLICABLE
Description of Tenure:

NON-ENABLING INSTRUMENTS:

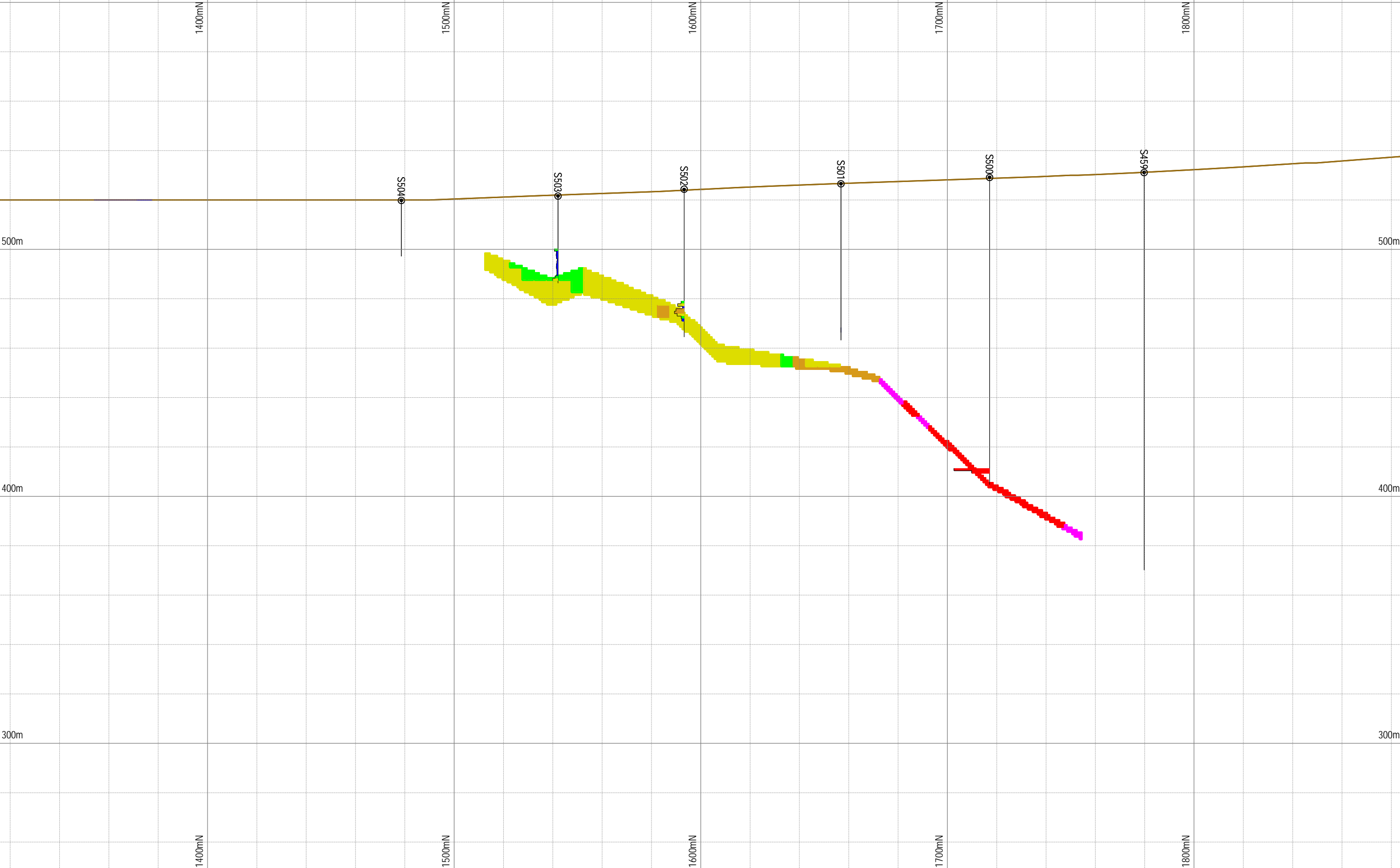
QUALIFICATION:



The names lists for Tenant in Common interest holders that are not registered pursuant to the *Land Registration Act* have been obtained from Property Online and have not been searched for completeness or accuracy. No representations or opinions are made with respect to these Tenants in Common. The list of Tenants in Common not registered pursuant to the *Land Registration Act* cannot be relied upon as advice on the current state of title of those interests in the subject parcel. A search of the records at the appropriate Registry of Deeds office is required to determine the current owner(s) of the Tenants in Common not registered pursuant to the *Land Registration Act*.

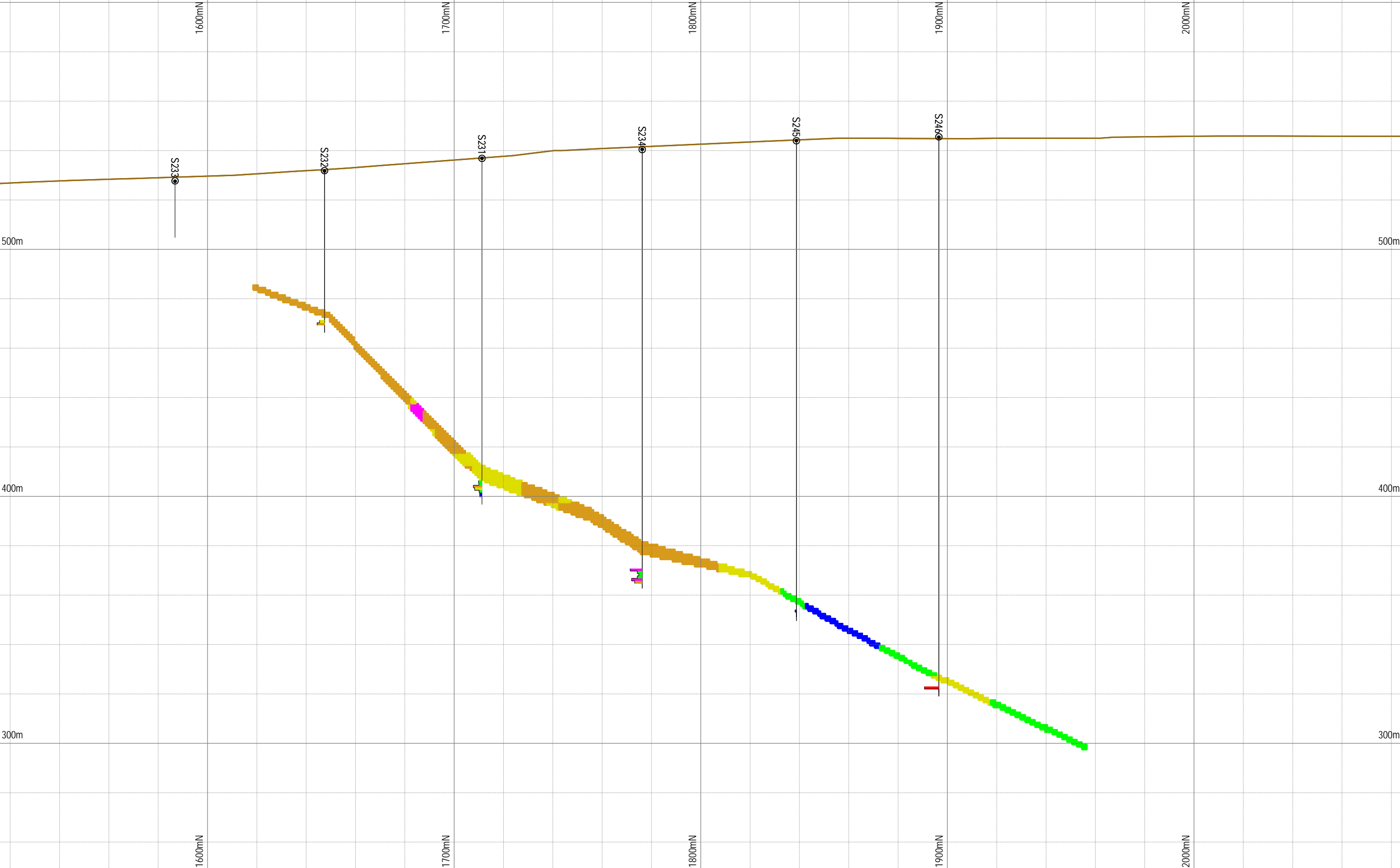
*Indicates Parcel Register changes in process



Appendix 4: Cross-sections, Northeast Zone

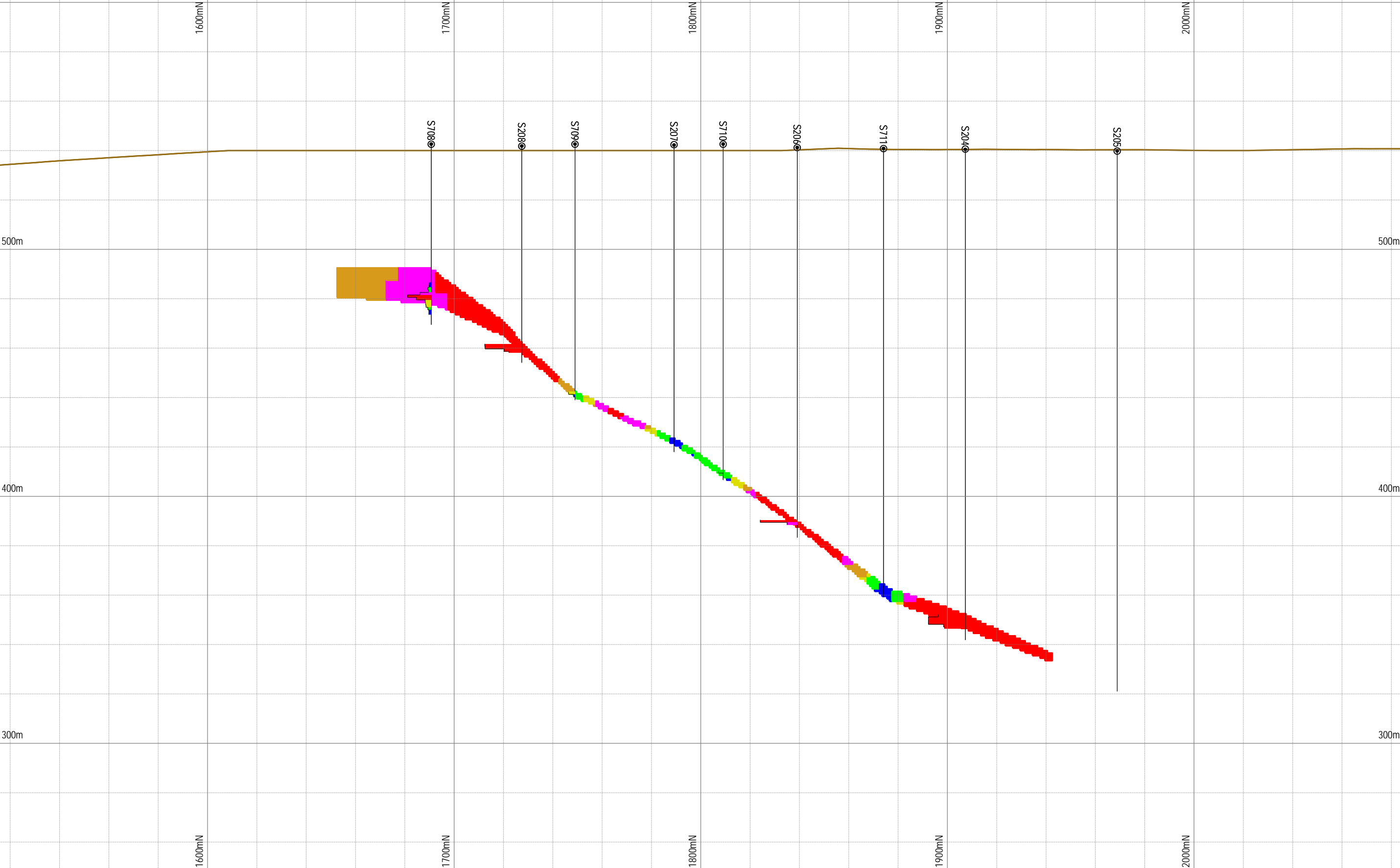


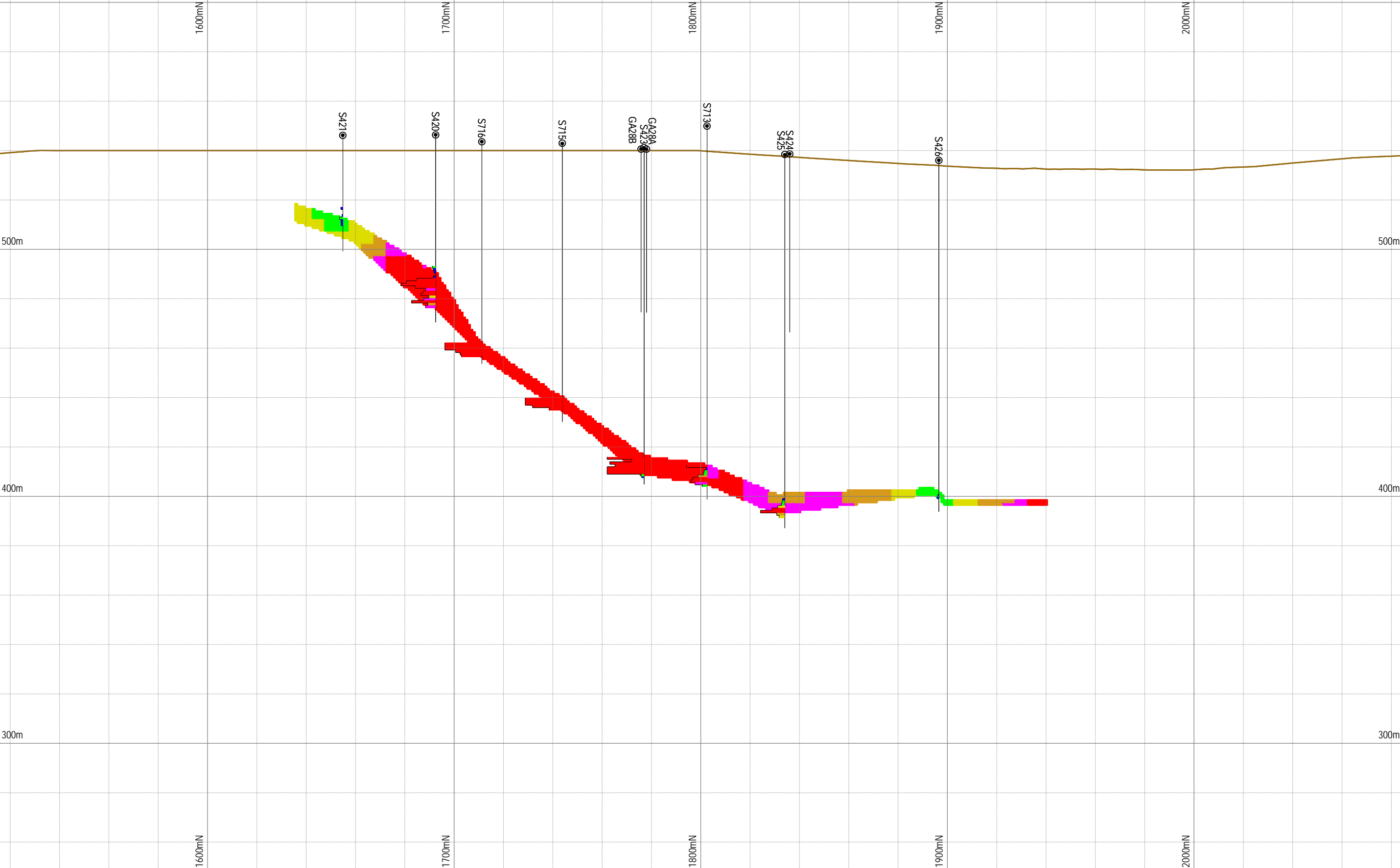




<div><div>MINETECH INTERNATIONAL LIMITED</div><div>HALIFAX, CANADA</div><div>1161 HOLLIS ST., SUITE 211, B3P 2A3</div><div>(902) 429-4049</div><div>WWW.MINETECHINT.COM</div></div> <div></div>	<div>Block Grades (%Zn-Eq):</div> <table><tr><td><div>0 to 1</div></td><td><div>3 to 4</div></td></tr><tr><td><div>1 to 2</div></td><td><div>4 to 5</div></td></tr><tr><td><div>2 to 3</div></td><td><div>>= 5</div></td></tr></table>	<div>0 to 1</div>	<div>3 to 4</div>	<div>1 to 2</div>	<div>4 to 5</div>	<div>2 to 3</div>	<div>>= 5</div>	<div>Notes:</div> <div>1. Site grid.</div> <div>2. Data rotated 30 deg CW about site grid origin.</div> <div>3. 1% Lead = 1.5% Zinc</div>	<div>Hole Collars:</div> <div>Historical Hole</div> <div>"Newer" Hole</div>	<div>Scale</div> <div>1 : 1500</div> <div><div>20020</div><div>0</div><div>20m</div></div>	<div>Plot Date</div> <div>05-May-2011</div> <div>Plot File: 12600E</div> <div>Drawn by:</div> <div>Doug Roy, M.A.Sc., P.Eng.</div>	<div>Northeast Zone</div> <div>Cross-Section</div> <div>12600E</div>	<div></div> <div>Scotia Mine</div> <div>Gays River, Nova Scotia</div>
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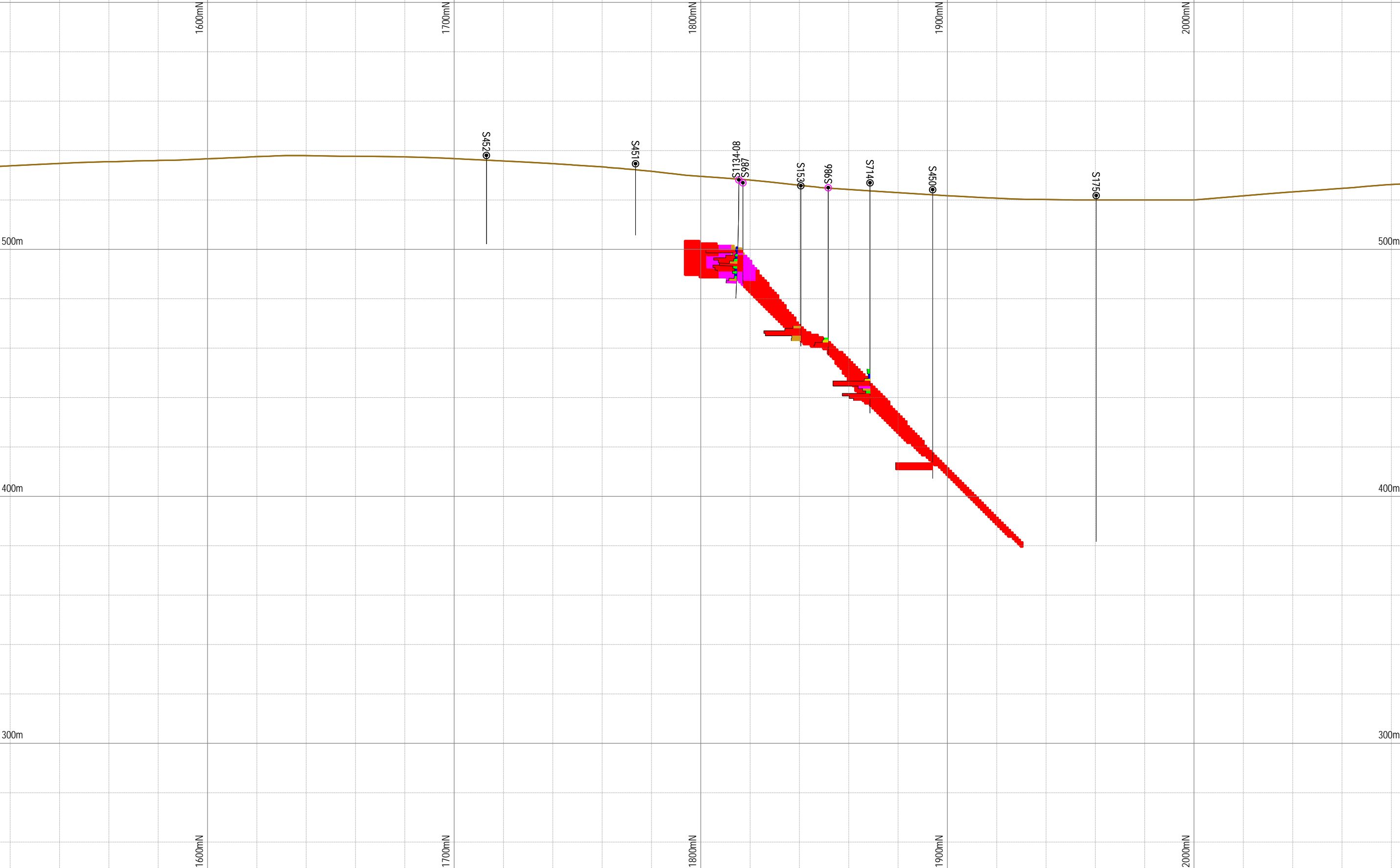




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	<div>0 to 1</div>	<div>3 to 4</div>											
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<div>2 to 3</div>	<div>>= 5</div>												

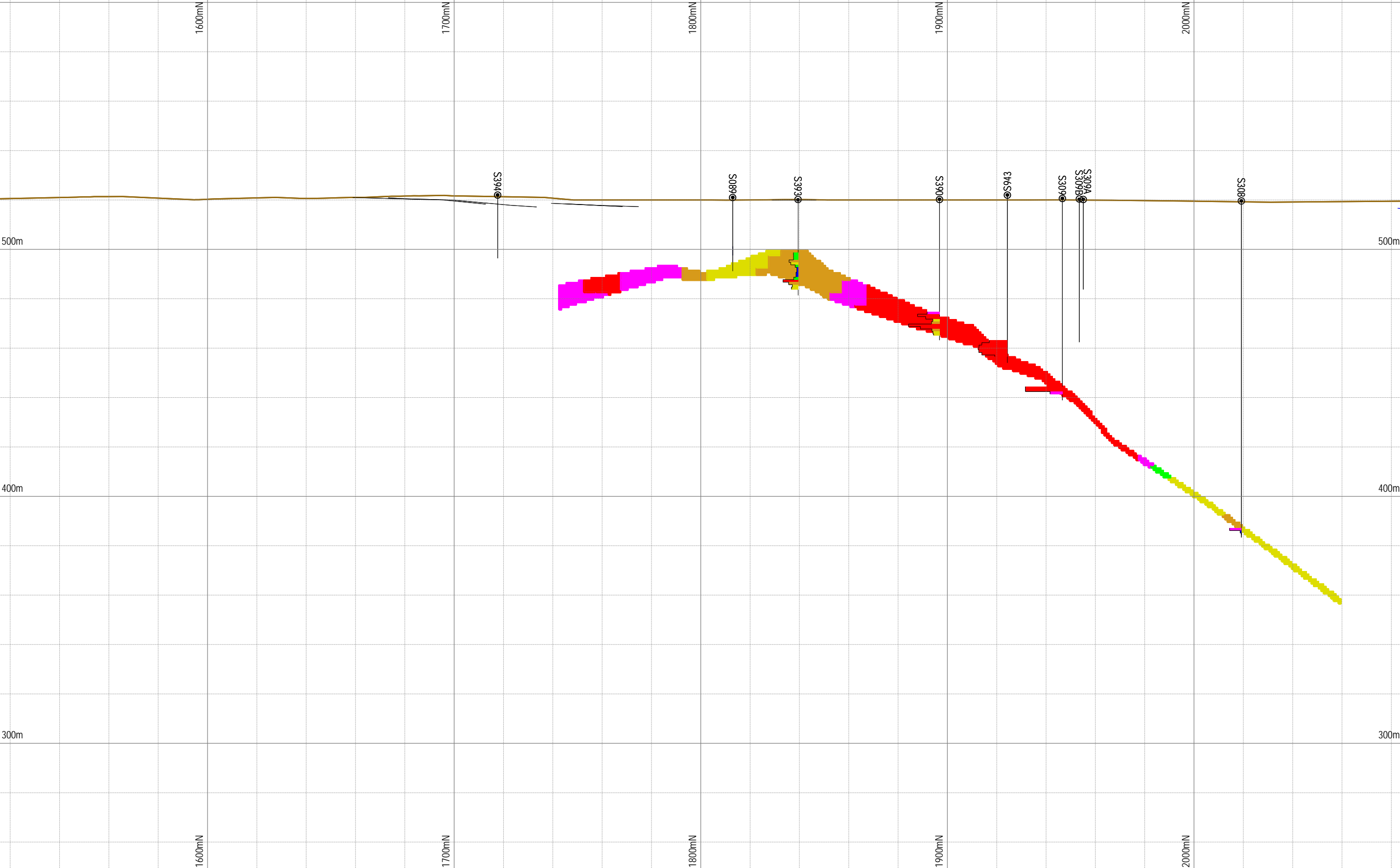







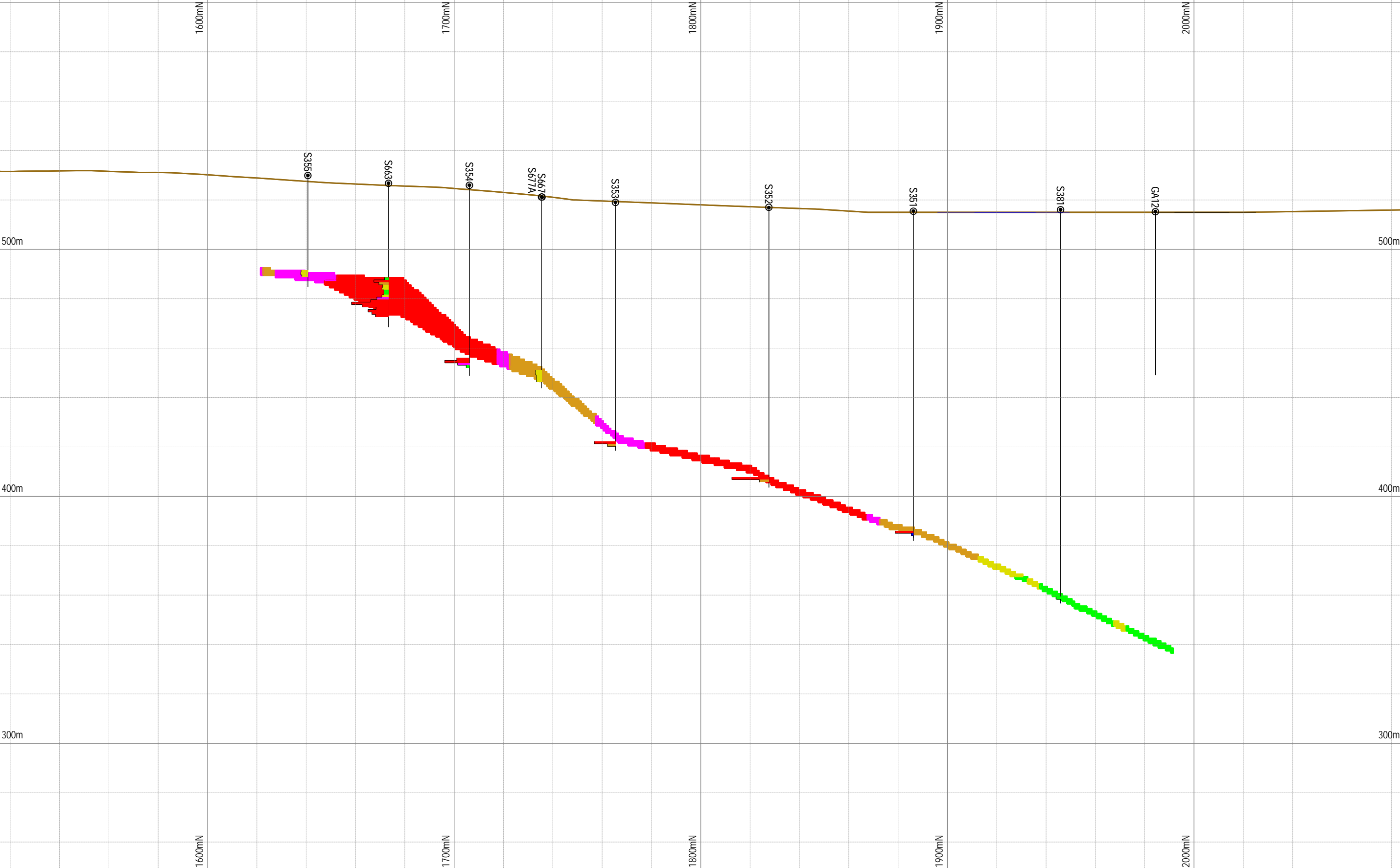
<div><div>MINETECH INTERNATIONAL LIMITED</div><div>HALIFAX, CANADA</div><div>1161 HOLLIS ST, SUITE 211, B3P 2A3</div><div>(902) 429-4049</div><div>WWW.MINETECHINT.COM</div></div> <div></div>	<div>Block Grades (%Zn-Eq):</div> <table><tr><td><div>0 to 1</div></td><td><div>3 to 4</div></td></tr><tr><td><div>1 to 2</div></td><td><div>4 to 5</div></td></tr><tr><td><div>2 to 3</div></td><td><div>>= 5</div></td></tr></table>	<div>0 to 1</div>	<div>3 to 4</div>	<div>1 to 2</div>	<div>4 to 5</div>	<div>2 to 3</div>	<div>>= 5</div>	<div>Notes:</div> <div>1. Site grid.</div> <div>2. Data rotated 30 deg CW about site grid origin.</div> <div>3. 1% Lead = 1.5% Zinc</div>	<div>Hole Collars:</div> <div>Historical Hole</div> <div>"Newer" Hole</div>	<div>Scale</div> <div>1 : 1500</div> <div><div>20020</div><div><div></div></div></div>	<div>Plot Date</div> <div>05-May-2011</div> <div>Plot File: 12225E</div>	<div>Drawn by:</div> <div>Doug Roy, M.A.Sc., P.Eng.</div>	<div>Northeast Zone</div> <div>Cross-Section</div> <div>12225E</div>	<div></div> <div>Scotia Mine</div> <div>Gays River, Nova Scotia</div>
	<div>0 to 1</div>	<div>3 to 4</div>												
	<div>1 to 2</div>	<div>4 to 5</div>												
<div>2 to 3</div>	<div>>= 5</div>													





<div><div>MINETECH INTERNATIONAL LIMITED</div><div>HALIFAX, CANADA</div><div>1161 HOLLIS ST., SUITE 211, B3P 2A3</div><div>(902) 429-4049</div><div>WWW.MINETECHINT.COM</div></div> <div></div>	<div>Block Grades (%Zn-Eq):</div> <table><tr><td><div>0 to 1</div></td><td><div>3 to 4</div></td></tr><tr><td><div>1 to 2</div></td><td><div>4 to 5</div></td></tr><tr><td><div>2 to 3</div></td><td><div>>= 5</div></td></tr></table>	<div>0 to 1</div>	<div>3 to 4</div>	<div>1 to 2</div>	<div>4 to 5</div>	<div>2 to 3</div>	<div>>= 5</div>	<div>Notes:</div> <div>1. Site grid.</div> <div>2. Data rotated 30 deg CW about site grid origin.</div> <div>3. 1% Lead = 1.5% Zinc</div>	<div>Hole Collars:</div> <div>Historical Hole</div> <div>"Newer" Hole</div>	<div>Scale</div> <div>1 : 1500</div> <div><div>20020m</div></div>	<div>Plot Date</div> <div>05-May-2011</div> <div>Plot File: 12075E</div> <div>Drawn by:</div> <div>Doug Roy, M.A.Sc., P.Eng.</div>	<div>Northeast Zone</div> <div>Cross-Section</div> <div>12075E</div>	<div></div> <div>Scotia Mine</div> <div>Gays River, Nova Scotia</div>
	<div>0 to 1</div>	<div>3 to 4</div>											
<div>1 to 2</div>	<div>4 to 5</div>												
<div>2 to 3</div>	<div>>= 5</div>												



MINETECH INTERNATIONAL LIMITED HALIFAX, CANADA 1161 HOLLIS ST., SUITE 211, B3P 2A3 (902) 429-4049 WWW.MINETECHINT.COM		Block Grades (%Zn-Eq): <table border="0"><tr><td>0 to 1</td><td>3 to 4</td></tr><tr><td>1 to 2</td><td>4 to 5</td></tr><tr><td>2 to 3</td><td>>= 5</td></tr></table>	0 to 1	3 to 4	1 to 2	4 to 5	2 to 3	>= 5	Notes: 1. Site grid. 2. Data rotated 30 deg CW about site grid origin. 3. 1% Lead = 1.5% Zinc	Hole Collars: Historical Hole "Newer" Hole	Scale 1 : 1500 20 0 20m 	Plot Date 05-May-2011 Plot File: 11850E	Drawn by: Doug Roy, M.A.Sc., P.Eng.	Northeast Zone Cross-Section 11850E	 Scotia Mine Gays River, Nova Scotia
			0 to 1	3 to 4											
1 to 2	4 to 5														
2 to 3	>= 5														



<div><div>MINETECH INTERNATIONAL LIMITED</div><div>HALIFAX, CANADA</div><div>1161 HOLLIS ST, SUITE 211, B3P 2A3</div><div>(902) 429-4049</div><div>WWW.MINETECHINT.COM</div></div> <div></div>	<div>Block Grades (%Zn-Eq):</div> <table><tr><td><div>0 to 1</div></td><td><div>3 to 4</div></td></tr><tr><td><div>1 to 2</div></td><td><div>4 to 5</div></td></tr><tr><td><div>2 to 3</div></td><td><div>>= 5</div></td></tr></table>	<div>0 to 1</div>	<div>3 to 4</div>	<div>1 to 2</div>	<div>4 to 5</div>	<div>2 to 3</div>	<div>>= 5</div>	<div>Notes:</div> <div>1. Site grid.</div> <div>2. Data rotated 30 deg CW about site grid origin.</div> <div>3. 1% Lead = 1.5% Zinc</div>	<div>Hole Collars:</div> <div>Historical Hole</div> <div>"Newer" Hole</div>	<div>Scale</div> <div>1 : 1500</div> <div><div>20020m</div></div>	<div>Plot Date</div> <div>05-May-2011</div> <div>Plot File: 11600E</div> <div>Drawn by:</div> <div>Doug Roy, M.A.Sc., P.Eng.</div>	<div>Northeast Zone</div> <div>Cross-Section</div> <div>11600E</div>	<div></div> <div>Scotia Mine</div> <div>Gays River, Nova Scotia</div>
	<div>0 to 1</div>	<div>3 to 4</div>											
	<div>1 to 2</div>	<div>4 to 5</div>											
<div>2 to 3</div>	<div>>= 5</div>												

Appendix 5: Diamond drill hole logs (2004-2008).



1. Collars

HOLE-ID	LENGTH	East	North	RL
S967	29.00	11,021.39	1,572.01	517.60
S968	23.00	10,989.45	1,575.68	516.30
S969	17.00	10,948.71	1,579.92	516.50
S970	20.00	10,977.63	1,606.40	515.60
S971	19.00	10,971.04	1,551.20	516.20
S972	33.00	11,059.01	1,702.37	522.20
S973	83.00	10,841.26	1,579.02	535.30
S974	83.00	10,841.10	1,579.34	535.30
S975	134.00	10,842.36	1,724.92	528.20
S976	104.00	10,842.36	1,724.92	528.20
S977	103.00	12,501.05	1,634.45	525.00
S978	107.00	12,561.40	1,676.97	527.00
S979	98.00	11,005.46	1,906.61	518.20
S980	20.00	11,044.33	1,655.54	515.90
S981	33.40	10,907.85	1,170.95	550.00
S982	137.00	12,510.26	1,698.41	529.00
S983	130.00	12,559.17	1,707.13	528.00
S984	98.00	11,954.01	1,888.16	521.00
S985	92.00	11,950.03	1,937.46	521.00
S986	68.00	12,068.98	1,851.69	525.00
S987	41.00	12,064.13	1,817.08	527.00
S988	95.00	10,461.20	1,745.33	545.00
S989	98.00	10,443.17	1,786.11	546.00
S990	103.00	10,219.30	1,817.55	547.00
S991	95.90	10,222.53	1,777.93	550.00
S1130-08	71.00	12,196.57	1,690.03	543.47
S1131-08	120.00	12,184.47	1,817.58	536.65
S1132-08	124.00	12,255.69	1,779.35	541.13
S1133-08	82.00	12,328.42	1,702.15	541.18
S1134-08	48.00	12,078.86	1,815.46	528.13
S1135-08	93.00	12,101.09	1,859.36	526.72
S1136-08	78.00	11,991.22	1,876.52	522.85
S1137-08	47.00	11,956.39	1,853.69	522.56
S1138-08	86.00	11,818.43	1,910.43	518.66
S1139-08	113.00	12,115.30	1,879.77	525.94
S1140-08	117.00	12,450.80	1,694.46	532.98
S1141-08	117.00	12,495.43	1,677.73	529.75
S1142-08	91.00	12,260.57	1,725.04	542.69
S1143-08	221.00	12,367.38	1,878.78	544.09
S1144-08	63.00	12,049.49	1,830.07	526.31
S1145-08	82.50	12,018.99	1,875.63	523.70
S1146-08	60.00	12,273.14	1,745.58	541.87

2. Downhole Surveys

HOLE-ID	DISTANCE	DIP	AZIMUTH
S967	0.0	-90.0	30.00
S967	29.0	-90.0	30.00
S968	0.0	-90.0	30.00
S968	23.0	-90.0	30.00
S969	0.0	-90.0	30.00
S969	17.0	-90.0	30.00
S970	0.0	-90.0	30.00
S970	20.0	-90.0	30.00
S971	0.0	-90.0	30.00
S971	19.0	-90.0	30.00
S972	0.0	-90.0	30.00
S972	33.0	-90.0	30.00
S973	0.0	-90.0	30.00
S973	83.0	-90.0	30.00
S974	0.0	-90.0	30.00
S974	83.0	-60.0	30.00
S975	0.0	-90.0	30.00
S975	134.0	-90.0	30.00
S976	0.0	-60.0	30.00
S976	104.0	-60.0	30.00
S977	0.0	-90.0	30.00
S977	103.0	-90.0	30.00
S978	0.0	-90.0	30.00
S978	107.0	-90.0	30.00
S979	0.0	-90.0	30.00
S979	98.0	-90.0	30.00
S980	0.0	-90.0	30.00
S980	20.0	-90.0	30.00
S981	0.0	-90.0	30.00
S981	33.4	-90.0	30.00
S982	0.0	-90.0	30.00
S982	137.0	-90.0	30.00
S983	0.0	-90.0	30.00
S983	130.0	-90.0	30.00
S984	0.0	-90.0	30.00
S984	98.0	-90.0	30.00
S985	0.0	-90.0	30.00
S985	92.0	-90.0	30.00
S986	0.0	-90.0	30.00
S986	68.0	-90.0	30.00
S987	0.0	-90.0	30.00
S987	41.0	-90.0	30.00
S988	0.0	-90.0	30.00
S988	95.0	-90.0	30.00
S989	0.0	-90.0	30.00
S989	98.0	-90.0	30.00
S990	0.0	-90.0	30.00
S990	103.0	-90.0	30.00
S991	0.0	-90.0	30.00
S991	95.9	-90.0	30.00
S1130-08	0.0	-90.0	30.00
S1131-08	0.0	-88.0	188.90
S1131-08	36.0	-88.7	224.20
S1131-08	120.0	-88.0	188.90

HOLE-ID	DISTANCE	DIP	AZIMUTH
S1132-08	0.0	-90.0	30.00
S1132-08	22.0	-88.5	152.90
S1132-08	62.0	-88.0	129.40
S1132-08	120.0	-87.4	149.80
S1133-08	0.0	-90.0	30.00
S1133-08	39.0	-88.7	145.20
S1133-08	82.0	-88.0	166.80
S1134-08	0.0	-90.0	30.00
S1134-08	48.0	-86.4	144.80
S1135-08	0.0	-90.0	30.00
S1135-08	20.0	-86.4	143.70
S1135-08	93.0	-87.1	60.06
S1136-08	0.0	-90.0	30.00
S1136-08	78.0	-87.3	43.80
S1137-08	0.0	-90.0	30.00
S1138-08	0.0	-90.0	30.00
S1138-08	48.0	-88.3	113.90
S1138-08	86.0	-88.9	133.30
S1139-08	0.0	-90.0	30.00
S1140-08	0.0	-90.0	30.00
S1140-08	54.0	-88.1	69.00
S1141-08	0.0	-90.0	30.00
S1141-08	24.0	-87.1	56.20
S1141-08	117.0	-87.9	65.50
S1142-08	0.0	-90.0	30.00
S1142-08	33.0	-87.9	2.60
S1142-08	90.0	-87.5	78.50
S1143-08	0.0	-90.0	30.00
S1143-08	50.0	-87.5	50.00
S1143-08	115.0	-87.8	78.50
S1143-08	220.0	-87.0	26.50
S1144-08	0.0	-90.0	30.00
S1144-08	33.0	-88.6	290.00
S1144-08	63.0	-88.8	260.20
S1145-08	0.0	-90.0	30.00
S1146-08	0.0	-90.0	30.00

3. Lithology

HOLE-ID	FROM	TO	Form Code
S967	0.00	6.00	7
S967	6.00	19.80	4
S967	19.80	22.00	2
S967	22.00	29.00	1
S968	0.00	2.70	7
S968	2.70	15.60	4
S968	15.60	16.40	2
S968	16.40	23.00	1
S969	0.00	2.00	7
S969	2.00	11.10	4
S969	11.10	14.20	2
S969	14.20	17.00	1
S970	0.00	2.50	7
S970	2.50	14.90	4
S970	14.90	20.00	1
S971	0.00	2.90	7
S971	2.90	13.10	4
S971	13.10	15.50	2
S971	15.50	19.00	1
S972	0.00	12.30	7
S972	12.30	30.70	4
S972	30.70	33.00	1
S973	0.00	71.00	7
S973	71.00	79.90	4
S973	79.90	81.20	2
S973	81.20	83.00	1
S974	0.00	33.00	7
S974	33.00	66.60	6
S974	66.60	79.10	4
S974	79.10	81.50	2
S974	81.50	83.00	1
S975	0.00	42.00	7
S975	42.00	50.00	5
S975	50.00	123.40	5
S975	123.40	127.40	4
S975	127.40	132.40	2
S975	132.40	134.00	1
S976	0.00	46.90	7
S976	46.90	96.50	5
S976	96.50	98.45	4
S976	98.45	101.50	2
S976	101.50	104.00	1
S977	0.00	26.00	7
S977	26.00	37.00	5
S977	37.00	94.10	5
S977	94.10	95.60	4
S977	95.60	99.40	2
S977	99.40	103.00	1
S978	0.00	25.80	7
S978	25.80	29.00	5
S978	29.00	99.90	5
S978	99.90	100.60	4

HOLE-ID	FROM	TO	Form Code
S978	100.60	101.60	2
S978	101.60	107.00	1
S979	0.00	28.90	7
S979	28.90	32.00	5
S979	32.00	93.10	5
S979	93.10	94.30	4
S979	94.30	96.10	2
S979	96.10	98.00	1
S980	0.00	3.10	7
S980	3.10	16.20	4
S980	16.20	20.00	1
S981	0.00	25.60	7
S981	25.60	27.00	0
S981	27.00	29.00	2
S981	29.00	33.40	1
S982	0.00	13.60	7
S982	13.60	29.50	5
S982	29.50	133.05	5
S982	133.05	133.30	4
S982	133.30	133.60	2
S982	133.60	137.00	1
S983	0.00	16.00	7
S983	16.00	26.00	5
S983	26.00	127.00	5
S983	127.00	127.40	4
S983	127.40	127.45	2
S983	127.45	130.00	1
S984	0.00	56.00	7
S984	56.00	89.10	5
S984	89.10	90.00	5
S984	90.00	93.40	4
S984	93.40	94.70	2
S984	94.70	98.00	1
S985	0.00	18.50	7
S985	18.50	92.00	5
S986	0.00	36.40	7
S986	36.40	60.75	5
S986	60.75	64.40	4
S986	64.40	68.00	1
S987	0.00	20.00	7
S987	20.00	27.40	5
S987	27.40	34.70	4
S987	34.70	40.40	2
S987	40.40	41.00	1
S988	0.00	61.00	7
S988	61.00	95.00	5
S989	0.00	54.50	7
S989	54.50	98.00	5
S990	0.00	48.50	7
S990	48.50	103.00	5
S991	0.00	57.90	7
S991	57.90	95.90	5

4. Assays

HOLE-ID	FROM	TO	%PB	%ZN	Sample Number
S967	6.00	8.00	0.78	0.00	90012
S967	8.00	10.00	1.16	0.00	90013
S967	10.00	12.00	1.44	0.00	90014
S967	12.00	14.00	0.82	0.29	90015
S968	2.70	4.70	3.38	0.29	90016
S968	4.70	6.70	1.29	0.02	90017
S968	6.70	8.70	0.86	0.01	90018
S968	8.70	10.70	1.36	0.00	90019
S969	2.00	4.00	2.24	0.00	90008
S969	4.00	6.00	1.70	0.07	90009
S969	6.00	8.00	1.12	0.04	90010
S969	8.00	10.00	2.15	0.00	90011
S970	2.50	4.50	1.76	0.83	90004
S970	4.50	6.50	0.39	0.02	90005
S970	6.50	8.50	1.61	0.07	90006
S970	8.50	10.50	0.32	0.01	90007
S971	2.90	4.90	4.63	0.00	90001
S971	4.90	6.90	0.98	0.03	90002
S971	6.90	8.90	0.31	0.00	90003
S972	12.30	14.30	1.62	0.06	90048
S972	14.30	16.30	1.86	0.18	90049
S972	16.30	18.30	1.36	0.23	90050
S972	18.30	20.30	0.23	0.25	90051
S972	20.30	22.30	0.57	0.04	90052
S972	22.30	26.00	0.78	0.32	90053
S972	26.00	28.90	0.59	0.02	90054
S972	28.90	30.70	10.30	0.01	90055
S973	71.00	73.00	0.56	1.40	90020
S973	73.00	74.00	1.29	0.60	90028
S973	74.00	75.00	11.90	14.98	90029
S973	75.00	76.00	6.59	0.15	90030
S973	76.00	78.00	1.00	0.19	90031
S973	78.00	79.90	0.35	0.03	90032
S974	66.80	68.80	2.46	2.22	90021
S974	68.80	70.80	4.57	3.67	90023
S974	70.80	72.80	3.79	0.01	90024
S974	72.80	74.80	0.62	0.05	90025
S974	74.80	76.80	2.38	0.10	90026
S974	76.80	79.10	0.94	4.06	90027
S975	123.40	125.40	0.33	1.04	90033
S975	125.40	127.40	0.21	0.84	90034
S975	127.40	127.70	2.34	1.34	90035
S975	127.70	129.50	0.85	0.43	90036
S976	96.50	98.10	5.01	1.08	90063
S976	98.10	98.45	7.66	0.23	90062
S976	100.35	101.65	0.72	0.08	90064
S977	94.10	95.40	0.87	0.20	90082
S977	95.40	95.60	1.84	0.01	90083
S977	95.60	96.00	0.00	0.00	
S977	96.00	96.40	6.77	0.01	90084
S978	99.90	100.60	1.42	0.67	90079
S978	100.60	101.60	3.89	0.78	90080
S978	101.60	101.90	0.00	0.00	
S978	101.90	102.20	0.00	0.00	

HOLE-ID	FROM	TO	%PB	%ZN	Sample Number
S979	93.10	94.30	3.48	4.60	90075
S979	94.80	95.20	1.01	0.39	90076
S980	3.10	5.10	2.38	0.02	90042
S980	5.10	8.00	1.65	0.05	90043
S980	8.00	10.00	1.70	0.04	90044
S980	10.00	12.00	0.09	0.06	90045
S980	12.00	14.00	0.46	0.00	90046
S980	14.00	16.20	0.93	0.00	90047
S981	25.60	27.30	0.15	0.01	90074
S982	133.05	133.30	2.14	0.83	90060
S982	133.30	133.60	0.84	0.32	90061
S982	133.60	135.05	0.00	0.00	
S982	135.05	136.50	0.00	0.00	
S983	127.00	127.40	2.08	0.39	90070
S983	127.40	129.00	0.00	0.00	
S983	129.00	130.60	0.00	0.00	
S984	89.10	90.10	4.06	4.64	119114
S984	90.10	92.30	3.41	1.05	119115
S984	92.30	93.50	0.02	0.57	119117
S984	93.50	94.70	0.07	1.11	119116
S986	60.70	61.40	0.65	0.53	119107
S986	61.40	62.80	1.55	0.02	119108
S986	62.80	64.40	3.81	0.04	119109
S987	27.40	27.90	18.52	7.28	119098
S987	27.90	28.90	2.98	0.49	119099
S987	28.90	29.90	1.75	0.47	119100
S987	29.90	30.90	5.37	2.74	119101
S987	30.90	31.90	6.50	3.26	119102
S987	31.90	32.90	3.83	1.15	119103
S987	32.90	34.90	6.98	1.72	119104
S987	34.90	35.90	3.90	4.54	119105
S987	35.90	36.90	0.09	0.05	119106
S1130-08	57.70	59.00	0.12	0.79	
S1130-08	59.00	60.00	0.41	2.12	
S1130-08	60.00	61.00	1.23	9.61	
S1130-08	61.00	62.00	2.96	2.76	
S1130-08	62.00	63.00	0.62	2.12	
S1130-08	63.00	64.00	0.41	1.86	
S1130-08	64.00	65.00	0.29	0.97	
S1130-08	65.00	66.00	0.17	0.51	
S1130-08	66.00	66.50	1.22	0.42	
S1131-08	112.20	112.80	0.55	1.81	
S1131-08	112.80	114.00	0.40	0.06	
S1131-08	114.00	114.25	2.83	3.81	
S1132-08	113.70	115.00	1.09	0.50	
S1132-08	115.00	116.30	0.05	0.00	
S1132-08	116.30	117.10	0.07	0.02	
S1132-08	117.10	117.70	1.26	19.67	
S1132-08	117.70	117.95	0.60	4.47	
S1132-08	117.95	118.55	0.21	1.99	
S1133-08	73.20	74.00	1.25	1.44	
S1133-08	74.00	75.00	0.24	1.91	
S1133-08	75.00	75.80	0.25	2.54	
S1134-08	24.00	25.00	0.03	0.06	

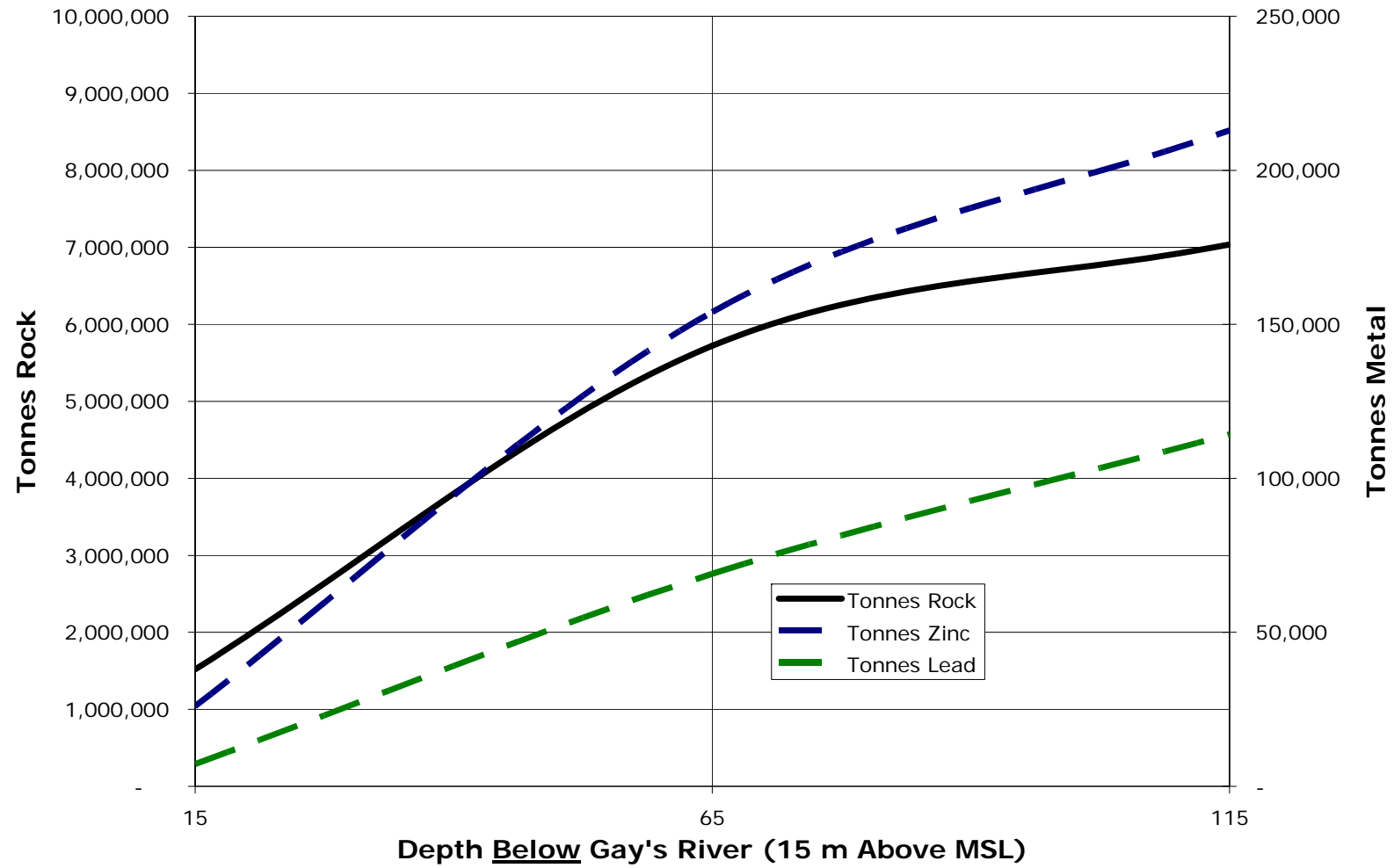
HOLE-ID	FROM	TO	%PB	%ZN	Sample Number
S1134-08	25.00	26.00	0.02	0.31	
S1134-08	26.00	27.00	0.03	0.19	
S1134-08	27.00	28.00	0.19	0.42	
S1134-08	28.00	29.00	0.20	0.58	
S1134-08	29.00	30.00	0.21	0.20	
S1134-08	30.00	31.00	0.22	0.81	
S1134-08	31.00	32.00	0.08	0.85	
S1134-08	32.00	33.00	0.03	1.50	
S1134-08	33.00	34.00	0.38	2.61	
S1134-08	34.00	35.00	0.62	6.30	
S1134-08	35.00	36.00	0.13	1.53	
S1134-08	36.00	37.00	0.09	0.79	
S1134-08	37.00	38.00	0.10	1.69	
S1134-08	38.00	39.00	0.07	0.85	
S1134-08	39.00	40.00	0.07	0.89	
S1134-08	40.00	41.00	0.04	3.09	
S1134-08	41.00	42.00	0.97	2.78	
S1135-08	83.40	84.15	0.42	0.46	
S1135-08	84.15	84.85	0.39	0.21	
S1135-08	84.85	85.90	8.82	17.52	
S1135-08	85.90	87.00	1.79	0.68	
S1136-08	69.00	69.70	3.30	5.56	
S1136-08	69.70	71.00	0.53	0.23	
S1136-08	71.00	72.00	1.49	0.99	
S1136-08	72.00	73.20	1.44	0.97	
S1138-08	76.80	77.50	0.32	0.89	
S1138-08	77.50	78.00	1.04	0.29	
S1138-08	78.00	78.60	0.28	0.08	
S1138-08	78.60	79.30	3.06	0.96	
S1139-08	108.00	108.80	7.47	3.26	
S1139-08	108.80	110.00	0.00	0.00	
S1139-08	110.00	111.20	0.00	0.00	
S1140-08	107.50	108.20	0.05	3.01	
S1140-08	108.20	109.00	0.23	0.47	
S1140-08	109.00	110.10	0.32	1.47	
S1141-08	97.20	97.50	0.00	0.23	
S1141-08	101.20	102.20	0.02	1.08	
S1141-08	104.80	105.50	0.03	2.29	
S1141-08	105.50	106.50	0.28	11.49	
S1141-08	106.50	107.50	0.00	18.24	
S1141-08	107.50	108.00	0.03	2.89	
S1141-08	108.00	109.00	0.03	2.27	
S1142-08	78.40	79.00	42.03	21.92	
S1142-08	79.00	80.00	20.03	10.01	
S1142-08	80.00	81.00	3.31	7.43	
S1142-08	81.00	82.00	1.15	5.85	
S1142-08	82.00	83.30	0.75	8.66	
S1143-08	204.00	204.40	0.06	0.14	
S1143-08	204.40	206.00	0.00	0.00	
S1143-08	206.00	207.60	0.00	0.00	
S1144-08	45.00	46.00	0.71	0.59	
S1144-08	46.00	47.00	0.20	0.14	
S1144-08	47.00	48.00	0.32	0.29	
S1144-08	48.00	49.00	0.44	0.11	
S1144-08	49.00	50.00	16.78	3.40	
S1144-08	50.00	51.00	8.23	5.43	
S1144-08	51.00	52.00	3.23	4.16	
S1144-08	52.00	53.30	0.28	2.14	

HOLE-ID	FROM	TO	%PB	%ZN	Sample Number
S1144-08	53.30	54.00	0.08	1.25	
S1144-08	54.00	55.00	0.04	3.72	
S1144-08	55.00	56.00	1.65	2.78	
S1144-08	56.00	56.70	1.11	0.18	
S1145-08	72.20	73.20	14.44	16.34	
S1145-08	73.20	74.20	4.25	5.10	
S1145-08	74.20	75.00	3.37	2.60	
S1145-08	75.00	75.40	1.62	2.72	

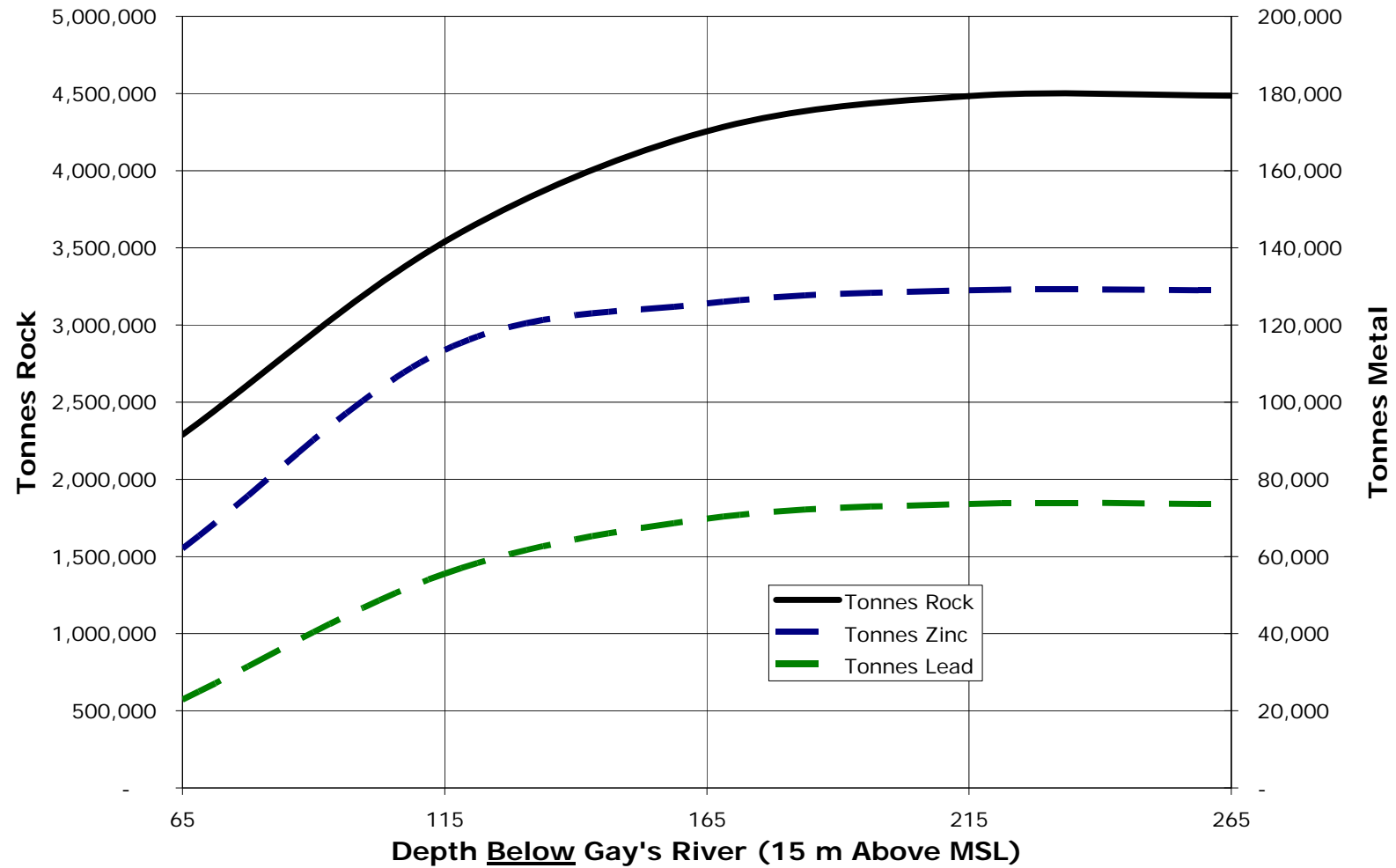
Appendix 6: Resources by Depth



Main Zone - Uncategorised Resources by Depth



Northeast Zone - Uncategorised Resources by Depth



Appendix 7: Acme Laboratory Methods Datasheets



METHOD SPECIFICATIONS

GENERAL SAMPLE PREPARATION METHODS

Receiving: Samples arrive via courier, post or by client drop-off; shipment inspected for completeness.

Sorting and Inspection: Samples sorted and inspected for quality of use (quantity and condition). Pulp samples inspected for homogeneity and fineness.

SOILS

SS80, S230, SSXX Drying and Sieving: Wet or damp soil samples are dried at 60°C (Air dried or 40°C if specified by the client). Soil and sediment sieved to -80 mesh (SS80) or -230 mesh (S230), unless client specifies otherwise (SSXX). Sieves cleaned by brush and compressed air between samples.

SP100, SCP100 Pulverizing: Soils are pulverized to -100 mesh ASTM with an option of using a mild-steel pulverizer (SP100) or a ceramic pulverizer (SCP100), per 100g.

ROCKS AND DRILL CORE

R200-250, R200-500, R200-1000: Rock and Drill Core crushed to 80% passing 10 mesh (2 mm), homogenized, riffle split (250g, 500g, or 1000g subsample) and pulverized to 85% passing 200 mesh (75 microns). Crusher and pulverizer are cleaned by brush and compressed air between routine samples. Granite/Quartz wash scours equipment after high-grade samples, between changes in rock colour and at end of each file. Granite/Quartz is crushed and pulverized as first sample in sequence and carried through to analysis.

P200, PSCB: Samples requiring pulverizing only are dried at 60°C and pulverized to 85% passing 200 mesh (75 microns), using a mild-steel pulverizer (P200), per 250g or a ceramic pulverizer (PSCB), per 100g.

M150, M200s: Rock and Drill Core are crushed, pulverized and sieved, save +150 and -150 mesh fractions (M150) or +200 and -200 mesh fractions (M200) for metallic Au or Cu analysis. Typically 500g samples are sieved.

HPUL: Rock and Drill Core are pulverized by using a mortar and pestle.

VEGETATION

PM1: Plant material is dried then milled to 1mm

VA475: Up to 0.1 kg of wet vegetation is ashed by heating to 475°C.

WWSH: Plant samples are washed with Type-1 water then dried at 60°C prior to analysis, per 100g.

METHOD SPECIFICATIONS

GROUP 7TD AND 7TX – ASSAY FOUR-ACID DIGESTION

Package Codes: 7TD1, 7TD2, 7TD3, 7TX1
Sample Digestion: HF-HNO₃-HClO₄ acid digestion
Instrumentation Method: ICP-ES (7TD, 7TX), ICP-MS (7TX)
Applicability: Rock and Drill Core

Method Description:

0.5g sample split is digested to complete dryness with an acid solution of H₂O-HF-HClO₄-HNO₃. 50% HCl is added to the residue and heated using a mixing hot block. After cooling the solutions are made up to volume with dilute HCl in class A volumetric flasks. Sample split of 0.1g may be necessary for very high-grade samples to accommodate analysis up to 100% upper limit.

Element	Group 7TD Detection	Group 7TX Detection	Upper Limits
Ag	2 g/t	0.5 ppm	300 g/t
Al*	0.01%	0.01%	
As	0.02%	5 ppm	
Ba*	-	5 ppm	
Be	-	5 ppm	
Bi	0.01%	0.5 ppm	
Ca*	0.01%	0.01%	
Cd	0.001%	0.5 ppm	
Ce	-	5 ppm	
Co	0.001%	1 ppm	
Cr*	0.001%	1 ppm	
Cu	0.001%	0.5 ppm	
Fe*	0.01%	0.01%	
Hf*	-	0.5 ppm	
K	0.01%	0.01%	
La	-	0.5 ppm	
Li	-	0.5 ppm	
Mg	0.01%	0.01%	
Mn*	0.01%	5 ppm	
Mo	0.001%	0.5 ppm	
Na	0.01%	0.01%	
Nb*	-	0.5 ppm	
Ni	0.001%	0.5 ppm	
P	0.01%	0.01%	
Pb	0.02%	0.5 ppm	10%

Element	Group 7TD Detection	Group 7TX Detection	Upper Limits
Rb	-	0.5 ppm	
S*	0.05%	0.05%	
Sb	0.01%	0.5 ppm	
Sc	-	1 ppm	
Sn*	-	0.5 ppm	
Sr	0.01%	5 ppm	
Ta*	-	0.5 ppm	
Th	-	0.5 ppm	
Ti*	-	0.001%	
U	-	0.5 ppm	
V	-	10 ppm	
W*	0.01%	0.5 ppm	
Y	-	0.5 ppm	
Zn	0.01%	5 ppm	
Zr*	-	0.5 ppm	40%

Limitations:

*This digestion is only partial for some Cr and Ba minerals and some oxides of Al, Fe, Hf, Mn, Nb, S, Sn, Ta, Ti, W and Zr if refractory minerals are present.

METHOD SPECIFICATIONS

G812 AND G813: SPECIFIC GRAVITY

Package Codes:	G812 to G813
Sample Digestion:	None – Direct Measurement
Applicability:	Rock, Drill Core

Method Description:

G812 Specific Gravity Pulp, SG: A split of dry pulp is weighed to a class A volumetric flask. Flask and pulp are weighed precisely on a top-loading balance. Measure and record the weight then calculate for specific gravity.

G813 Specific Gravity Core, SG: Analysis can be conducted on whole samples of rock or core in irregular shape. Specific gravity is determined by measuring the displacement of water. A sample is dried at 105°C to remove all moisture then allowed to cool. The sample of the rock or drill core is first weighed in air then submerged in a container of water. Measure the mass of immersed sample and record the weight then calculate for specific gravity. Sample can also be coated with a thin layer of hot wax so that any soluble material in the core or rock is not in contact with the water.