



## Technical Report on the Mann Property, Milner Township, Gowganda, Ontario

Prepared for PowerOre Inc.



By  
Spaho Mineral Exploration and Consulting Inc.  
Author: Mehmet Spaho, P. Geo.  
Effective Date: April 14, 2018

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# **1. SUMMARY**

Spaho Mineral Exploration and Consulting Inc. (**SMEC**) was asked by PowerOre Inc. (**PowerOre**), to prepare an Independent Technical Report on the Mann Property (**the Property**) in Ontario.

The purpose of this Report is to summarise the history of results on the Property, present the geology and a geological model of the mineralization found therein, discuss the most recent exploration and drilling program by the previous property owner and to provide recommendations for further exploration of the Mann Property. This Technical Report conforms to National Instrument 43-101 Standards of Disclosure for Mineral Projects (NI 43-101).

## **Property Location, Description and Ownership Status**

The Mann property is located in Milner Township, approximately 5 km southwest of the town of Gowganda in the Larder Lake Mining Division of northeastern Ontario. A 6 km forest access road connects the property with Highway 560. This is about 280 km by road north of Sudbury, along Highways 144 and 560.

The Mann property consist of 18 contiguous unpatented mining claims, containing 59 claims units and covering approximately 852.5 ha.

The Mann Property along with the MacMurchy claims, another small property located in the Gowganda area, was acquired 100% by PowerOre from a spin-out from its parent, Premet Inc., a wholly-owned subsidiary of Orefinders Resources Inc. in return for 11 million shares of PowerOre Inc. Premet purchased the Mann and MacMurchy properties in 2017 from Dundee Sustainable Technologies Inc. which was created from the three-legged amalgamation of companies including Creso Exploration Inc. which acquire the current Mann Property from a combination of an option on two claims and the staking of an additional 16 contiguous claims. The claims are subject to a number royalties described in this report but are otherwise free from any other liens

The Mann Property is in good standing and has excess assessment credits for more than 5 years.

## **History**

The Cobalt-Gowganda Silver mining area of Ontario was one of the most prolific silver mining areas in Canada. Over 600 million troy ounces of silver have been produced from mines in the area since the first vein was discovered in 1903 in Cobalt region, including over 60 millions ounces of silver from the Gowganda District (McIlwaine 1978). Following the discovery of native silver in the Cobalt area,

prospectors began searching for other areas of Nipissing Diabase with which silver deposits are spatially associated. Note that this information is not necessarily indicative of mineralization on the Mann Property that is the subject of this technical report.

Silver was first discovered at the Mann Property in 1908 by Robert Mann, prospector. In 1909 the mine site was opened and operated by Mann Mines Ltd.

During 1914-1920, numerous discoveries resulted in intensive exploration and development on properties around the Mann mine, (Cunningham, L.J., 1987). Some of the most important are (see figures 7-3 and 9-2 in Items 7 and 9 below):

- Bartlett - A 300 foot shaft with 1000 feet of development, trenching and open cuts yielded 146 tons of hand-picked ore containing 40,436 oz. of silver.
- Boyd Gordon - A 150 foot shaft tested 3 veins with short ore shoots. Production totalled 4,678 oz. silver.
- The Mann - Shaft 5 with underground developments, trenching and open cuts resulted in the production of 98,822 oz of silver.
- South Bay and O`Brian - Two shafts of 50 and 100 feet respectively, plus several open cuts, tested a series of silver bearing veins. Production unknown.
- Reeve Dobie - Two shafts tested a mineralized zone 700 feet in length. A small mill was installed. Production was 88,584 oz. of silver.
- Welch - A shaft of unknown depth resulted in production of 1,000 oz. of silver.

In 1952, an area that included the current property was optioned to Sisco Metals of Ontario Ltd. Sisco dewatered Shaft No. 3, completed underground drilling and treated 1,200 tons from the mine dump with an average grade 8 of oz of silver per ton.

In 1961, these claims were acquired by Yellowknife Bear Mines Ltd. and Manridge Mines Limited was incorporated. During 1961-1965, Manridge drilled 74 holes for a total of 8803 feet (2,684 m) and a geophysical survey was completed.

In 1965, the same property was optioned to Zenmac Metal Mines. During 1966-1967, Zenmac completed drilling 85 holes totalling 20,231 feet (6,168 m), along with a striping program and a geochemical survey.

1968-1970, Siscoe Metals completed soil sampling, installed a mining plant, completed underground drilling, and produced a total of 174,412 oz. of silver.

In 1982, Manridge Mines Limited became Manridge Explorations Limited. From 1983 to 1985, Manridge drilled 35 surface holes, on claims that cover the current property, for a total of 5,480 feet (1,671 m), 28 underground holes totalling 1,527 feet (466 m), completed line cutting, geochemical and geophysical surveys, drove 700 feet

of ramp to reach the 125 foot horizon on the "D" zone and completed 150 feet of drifting and 170 feet of raising. Also during this period of time, Manridge produced approximately 30,000 ounces of silver. Operations ceased December 1984 for the winter months.

Exploration and development of the mine started again in 1988. During that year the following work was completed at "D" zone:

- 600 feet of ramping from the 125 feet level to the 210 feet level.
- 11 underground holes (2,500 feet; 762 m).
- 30 surface holes (8,000 feet; 2,439 m).
- Removal of approximately 600 tons of silver bearing rocks with an estimated grade 15 oz. of silver per ton which was stockpiled for future treatment.
- The removal of the pillars and the east end of the stope, estimated at 600 tons with a grade at 15.0 oz. of silver per ton.

The Mann mine was closed in 1988. During of the period 1910-1984, a total of 328,062 ounces of silver were produced from Mann Property.

The Property lay dormant for several years after 1988 and the Manridge claims eventually lapsed. The core area of the old Mann Mine was subsequently staked in 2007 and was optioned to Creso in 2011. Creso extended the 2 core claims by staking an additional 16 contiguous claims.

From September 2011 to March 2012, Creso Exploration Inc. undertook an exploration program on the Property that consisted of line cutting, channel sampling, a geophysical survey, and diamond drilling of 15 holes totalling 1,458 metres.

A significant amount of silver was produced from the Mann Mine over its long history and several mineral resource and reserve estimates of a historical nature were produced for the different mineralized zones. However the author would like to emphasise the fact that there are no current Mineral Resource or Mineral Reserve estimates prepared for the Mann Property. SMEC cautions that a Qualified Person has not done sufficient work to classify the historic estimates as current mineral resources or mineral reserves; PowerOre is not treating the historic estimates as relevant or as current mineral resources or mineral reserves and the historic estimates should not be relied upon. Note that all of these estimates were made prior to the adoption and publication of the CIM Standards of Disclosures for Mineral Resources and Mineral Reserves or of the CIM Best Practices Guidelines. The assumptions, parameters and methods used to prepare the historic estimates are not available and they therefore are not comparable to the categories as defined by the CIM Definition Standards for Mineral

Resource or Mineral Reserve estimates as adopted by the CIM council in 2010. There have been no recent estimates nor is there any new data available that would allow the reporting of current Mineral Resource or Mineral Reserve estimates. Given the inability to verify any of the past data prior to Creso Exploration's work, it is the opinion of the author that the historic data could not be used to support current Mineral Resource or Mineral Reserve estimates. At best SMEC and PowerOre consider these results as indications of the presence of mineralization on the property and we will use the information to guide future exploration but the reader is cautioned not to rely on these estimates.

### **Geology and Mineralization**

The Mann property is underlain by rocks units of the Gowganda Formation, consisting of clastic sedimentary rocks of the Coleman Member. These sediments are intruded by Nipissing Diabase and the Matachewan diabase swarm.

Strong north/south faulting is present. In the vicinity of the Mann property, 3 prominent north/south faults have been identified as the Hangingstone, Mann and 90 Faults. Faulting, transverse to the sill direction, is common and assumes a variety of directions including east/west, northeasterly and northwesterly. Several narrow late diabase dikes strike northeasterly across the property.

Silver, with associated nickel-cobalt-iron arsenides, has been the only productive type of mineralization in the area. The mineralization is in vertical to steeply dipping calcite and quartz-calcite veins.

Silver-bearing veins are common over the entire length of the property. The veins are usually narrow, widening in places to several inches and then pinching to a crack rather abruptly. The ore occurs in short shoots or bunches in the veins, with portions of the vein completely barren. Some veins may be followed in a fairly straight course for several hundreds of feet.

Silver, with associated nickel-cobalt-iron arsenides, has been the only productive type of mineralization on the property; mineralization occurs as native metals, arsenides, sulphides, and oxides. The bulk of the silver is in the native state with minor native bismuth and gold. The arsenides are mainly the cobalt-nickel-iron varieties and the silver is intimately associated with them. This type of mineralization is considered to form Vein Replacement Deposits.

### **Exploration**

PowerOre or its spin-out parent Orefinders have not carried out any exploration on the Mann Property to date. However Creso Exploration Inc., who recently owned the property carried out an exploration program that is described herein. This exploration

consist on line cutting, channel sampling, geophysical survey and compilation of the historical data.

### **Diamond Drilling**

There is no drilling performed by PowerOre Inc and its spin-out parent Orefinders Resources Inc. However Creso Exploration Inc. carried out a diamond drilling during 2011 and 2012. Creso Exploration Inc. drilled 15 diamond core drillholes totalling 1,458 metres, with an average depth of 97 metres.

### **Sample Preparation, Analyses and Security**

PowerOre Inc. has not carried out any exploration to date on the property. However the previous operator did explore the property, the report gives a review of the protocols executed by Creso as implemented and supervised by the author.

### **Data Verification**

PowerOre has not conducted any exploration on the Mann Property to date and as such there is no requirement to undertake any data verification beyond the verification sampling and analyses that was done on the core stored at the Tyrinite Mine. However SMEC did have access to the results of the complete dataset for the exploration performed by Creso, the previous owner, and SMEC conducted data verification procedures on this data. Data verification by SMEC for the Mann Property included a site visit, review of the historical documents, study of geological reports and drill hole database check.

### **Interpretations and Conclusions**

The Mann Property is underlain by rocks of the Gowganda Formation, consisting of clastic sedimentary rocks of the Coleman Member. These sediments are intruded by Nipissing Diabase and by the Matachewan diabase swarm. Most of the known occurrences are hosted by Nipissing Diabase and less commonly by Gowganda Formation. The mineralization occurs in vertical to steeply dipping calcite and quartz-calcite veins.

SMEC is of the opinion that silver mineralized veins are not restricted only in Nipissing Diabase, but veining can and does occur in sediments of the Gowganda Formation. The mineralization is controlled by faults, predominantly Easterly striking, but also Northerly striking. Those faults cut both Nipissing diabase and sediments of Gowganda formation.

SMEC has reviewed the property geology, exploration and drilling methods and results, sampling method and approach, sample and data handling, and has completed verification of the data for the drilling programs during 2011-2012. SMEC offers the following conclusions and opinions:

- Sampling procedures by Creso were in accordance with accepted industry standards and practices.
- SMEC agrees with adequacy of the Creso samples taken, with Creso QA/QC program, with their security of the shipping procedures, and with the sample preparation and analytical procedures used.
- SMEC is of the opinion that the accuracy and precision of assay data generated for Creso during 2011-2012 exploration program, is credible and meet standard industry practice and meet project requirements.
- SMEC is of the opinion that Mann Property database is valid and acceptable for supporting further exploration programs.
- SMEC is of the opinion that the sampling procedures during the earlier phases of exploration and mining between 1908 and 1974, were extremely selective. In general the only sampled zones were those with carbonate veins.

SMEC has defined three zones of interest, ZI1, ZI2 and ZI3, where further drilling should be concentrated.

An IP/Resistivity survey performed during the 2011-2012 exploration program, was successful, in highlighting silver mineralization associated with altered pyritic zones. However, because the survey lines were oriented east-west, the IP/Resistivity anomalies could only be interpreted along north-south profiles whereas the majority of the veins at the Mann Property are predominantly Easterly striking. It is recommended that a north-south IP/Resistivity survey be undertaken on the Property.

### **Recommendations**

SMEC makes the following recommendations for the Mann Property:

- A shallow drilling program on the Mann Property, should focus on three zones of Interest, to verify the historical resources, and possibly extend them.
- A geological mapping program is recommended, that will include lithology, structure, mineralization and the locations of the historical shafts and other historical work on the property to better relate the surface geology with the Creso and older drilling.
- Conduct a lidar survey in order to generate a detailed surface topographic map on the property at a scale of 1:2,500 or 1:5,000.
- Establish a regular cut grid on a 50 metre line spacing.
- It is recommended that PowerOre performs a north-south oriented IP/Resistivity survey to better define the Easterly trending vein structures.

The work recommended by SMEC is estimated to cost \$ 405,000.

## **2.INTRODUCTION**

### **2.1. Terms of Reference**

SMEC was asked by Mr. Charles Beaudry, VP Exploration and Director of PowerOre Inc., to prepare an Independent Technical Report on the Mann Property (**the Property**) in Ontario.

PowerOre Inc. (**PowerOre**), with corporate offices in Toronto, Ontario, is engaged in the exploration and development of mineral properties. The company explores for gold and silver and holds 100 % interest, at the Effective Date, in the Mann and McMurphy properties located in in the Shining Tree gold camp of northern Ontario.

PowerOre Inc. is incorporated under the Canada Business Corporations Act and is seeking a listing on the TSX-V, also called the Toronto Venture Exchange.

PowerOre acquired its interest in the Mann and MacMurphy properties through a spin-out of the assets by Premet Inc. (**Premet**), a wholly-owned subsidiary of Orefinders Resources Inc. (**Orefinders**) via a plan of arrangement with Orefinders receiving shares of PowerOre in the transaction.

This Technical Report on the Mann Property, which is produced in support of listing requirements, describes the property and its mineral titles, summarises the history of exploration results on the Property, presents the geology and a geological model of the mineralization found therein, discusses the most recent exploration program undertaken by the previous owner and provides recommendations for further exploration of the Mann Property.

### **2.2. Sources of Information**

The documentation reviewed, and other sources of information, are listed at the end of this report in the section titled References. All the Mann Mine data such as reports, survey data, production records, financial statements, development reports, maps and plans showing mine workings, geological information and other data were reviewed from historical reports.

From October 2011 to March 2013, the writer performed geological consulting for Creso Exploration Inc., which was the previous owner of the property. During this time the author conducted a drilling program on Mann Property, logged core and supervised logging activities and compiled historical data.

The information, conclusions, opinions and assumptions that are expressed in this report, are those of the author.

### **2.3. Site Visits**

The writer has conducted many site visits in the Shinning Tree-Gowganda area in the past 8 years, including the Mann Property. He has managed exploration programs on neighbouring properties owned by other exploration companies.

The latest visit to property was on February 13, 2018 with Mr. Charles Beaudry. The purpose of this site visit was to inspect the Tyrinite Mine site and core login facility, where the Mann Project drill core is stored. During this visit samples of mineralized core were collected and submitted for analyses to confirm the presence of mineralization on the property and to compare results with the original assays.

### **2.4. List of Abbreviations**

Units of measurement used in this report conform to the SI (metric) system. However, the Imperial System, is occasionally used to describe historical results. All currency in this report is in Canadian dollars unless otherwise noted.

|                 |                                                |                |                                          |
|-----------------|------------------------------------------------|----------------|------------------------------------------|
| cm              | centimetre                                     | m <sup>3</sup> | cubic metre                              |
| ft              | foot                                           | mm             | millimetre                               |
| g               | gram                                           | MSL            | mean sea level                           |
| g/t             | grams per tonne                                | opt            | ounce per short ton                      |
| ha              | hectare                                        | oz             | Troy ounce (31.1035g)                    |
| kg              | kilogram                                       | ppm            | part per million                         |
| km              | kilometre                                      | ppb            | part per billion                         |
| km <sup>2</sup> | square kilometre                               | t              | metric tonne                             |
| m               | metre                                          | UTM            | Universal Transverse Mercator            |
| m <sup>2</sup>  | square metre                                   | WP             | Waypoints                                |
| MNDM            | Ministry of Northern<br>Developments and Mines | SMEC           | Spaho Mineral Exploration &<br>Consultin |

### 3. RELIANCE ON OTHER EXPERTS

This report has been prepared by SMEC for PowerOre Inc. For the purpose of this report there was no reliance on other experts except for the property ownership information which was provided by PowerOre, Premet and Orefinders along with information on the Ontario government MNDM website ([https://www.mci.mndm.gov.on.ca/claims/clm\\_mmen.cfm](https://www.mci.mndm.gov.on.ca/claims/clm_mmen.cfm)). SMEC has not researched property title or mineral rights for the Property and express no opinion as to the ownership status of the property.

The Mann Property claim list shown in Item 4 was provided by PowerOre and was confirmed by reviewing client reports on the Ontario Ministry of Northern Development and Mines (**MNDM**) website to obtain assessment credits and expiry dates. The royalty schedules for the claims that are summarized in Item 4 was provided by PowerOre and has not been verified.

### 4. PROPERTY DESCRIPTION AND LOCATION

#### 4.1. Location

The Mann property is located in Milner Township, approximately 5 km southwest of the town of Gowganda in the Larder Lake Mining Division of northeastern Ontario (Figure 4-1). A 6 km forest access road connects the property with Highway 560. This is about 280 km by road north of Sudbury, along Highways 144 and 560. The location of the shaft 5 of Mann mine, which can be considered the centre of the property is at: 513851 m east, 5274092 m north (UTM NAD83, Zone 17).

The Mann property consist of 18 contiguous unpatented mining claims, containing 59 claims units and covering approximately 852.5 ha (Table 4-1, Figure 4-2).

#### 4.2. Land tenure

PowerOre is 100% owner of the claims constituting the Mann Property as of the Effective Date. PowerOre acquired its interest in the Property from Premet, a wholly-owned subsidiary of Orefinders, through a spin-out of the Mann and MacMurphy properties via a plan of arrangement where Orefinders will receive 11 million shares of PowerOre in return for transfer of its mineral titles to PowerOre.

The claims constituting the Mann Property were originally purchased by Premet from Dundee Sustainable Technologies Inc. (**Dundee**) in 2017. Dundee was created in 2014 from an amalgamation of companies including Creso Exploration Inc. (**Creso**).

Creso had acquired the Property from a combination of optioning two key claims in 2011 (4215932 and 4217970) from 2128700 Ontario Inc. (**218700**), who had staked the said claims and by staking the other 16 claims that constitute the Property. Creso eventually fulfilled its option obligations and 2128700 conveyed the titles to Creso.

The claims are shown in Figure 4-2 and listed in Table 4-1 which shows a reserve of \$151,560., sufficient to maintain the property in good standing for at least 5 years.

The claims are subject to various royalties as outlined in Table 4-2 that vary from 2% to 4% NSR. To the knowledge of SMEC no other royalties or encumbrances are known to exist on the Property.

### **4.3. Environmental and Permitting**

The Mann Property contains a ramp and 5 old shafts. The ramp portal is sealed with a gravel berm and all the shafts have been capped with concrete slabs.

To the knowledge of SMEC there are no significant factors or risks that might affect access to the property or claim on title, or the right or ability to perform work on the property, or to obtain permits and there are no known environmental liabilities to which the project is subject.

No permits are required to undertake prospecting or mapping on mineral claims with crown surface rights but more invasive exploration activities require Plans and Permits, obtained from the MNM. The proposed Work Program will require as yet to be approved work permits.

As part of its Duty to Consult the crown requires that a Memorandum of Understanding be signed between the owner of mineral claims that wishes to conduct exploration and impacted First Nations Communities. PowerOre through its parents, Premet and Orefinders, has had preliminary discussions with impacted First Nations Communities but no MOU has been signed on the Mann Property as of the Effective Date. These agreements for pre-development stage projects are fairly standard and there is good expectation that a MOU agreement will be signed. Once this is done the applications to obtain Work Permits for the activities in the Work Program will be submitted to DNPM and there is good expectation that such permits will be issued to PoweOre. Work permits are valid for a period of three years from the date of issuance.

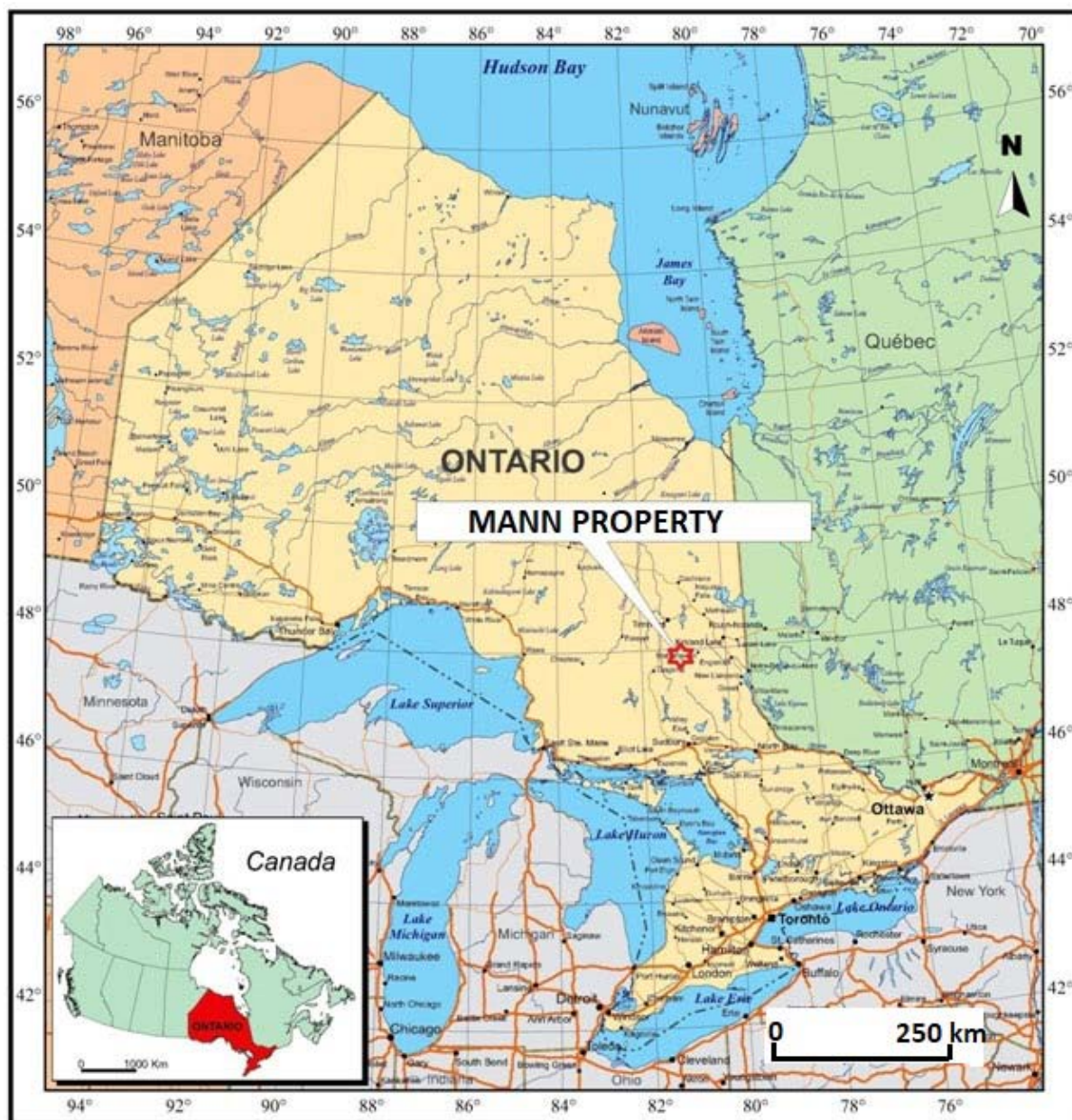


Figure 4-1: Location of Mann Property.

Table 4-1: Mann Property Claims and Assessment Credits.

| Township | Property | Claim # | Units | Ownership | Recording Date | Claim Due Date | Work Required | Total Applied | Total Reserve | Claim Bank |
|----------|----------|---------|-------|-----------|----------------|----------------|---------------|---------------|---------------|------------|
| MILNER   | MANN     | 4215932 | 1     | 100%      | 2007-Jun-05    | 2023-Jun-05    | \$400         | \$5,600       | \$151,561     | \$0        |
| MILNER   | MANN     | 4217970 | 1     | 100%      | 2007-Jun-05    | 2020-Jun-05    | \$400         | \$4,400       | \$0           | \$0        |
| MILNER   | MANN     | 4252695 | 11    | 100%      | 2010-Feb-10    | 2019-Feb-10    | \$4,400       | \$30,800      | \$0           | \$0        |
| MILNER   | MANN     | 4254615 | 3     | 100%      | 2011-Nov-24    | 2018-Nov-24    | \$1,200       | \$6,000       | \$0           | \$0        |
| MILNER   | MANN     | 4255423 | 4     | 100%      | 2011-Aug-17    | 2019-Aug-17    | \$1,600       | \$8,000       | \$0           | \$0        |
| MILNER   | MANN     | 4255424 | 1     | 100%      | 2011-Aug-17    | 2019-Aug-17    | \$400         | \$2,400       | \$0           | \$0        |
| MILNER   | MANN     | 4259225 | 10    | 100%      | 2011-Nov-24    | 2018-Nov-24    | \$4,000       | \$20,000      | \$0           | \$0        |
| MILNER   | MANN     | 4259230 | 3     | 100%      | 2011-Oct-12    | 2019-Oct-12    | \$1,200       | \$6,000       | \$0           | \$0        |
| MILNER   | MANN     | 4259232 | 7     | 100%      | 2011-Oct-12    | 2019-Oct-12    | \$2,800       | \$14,000      | \$0           | \$0        |
| MILNER   | MANN     | 4259234 | 3     | 100%      | 2011-Nov-24    | 2018-Nov-24    | \$1,200       | \$6,000       | \$0           | \$0        |
| MILNER   | MANN     | 4259237 | 1     | 100%      | 2011-Sep-22    | 2020-Sep-22    | \$285         | \$2,915       | \$0           | \$0        |
| MILNER   | MANN     | 4259238 | 2     | 100%      | 2011-Sep-06    | 2019-Sep-06    | \$800         | \$4,000       | \$0           | \$0        |
| MILNER   | MANN     | 4259239 | 1     | 100%      | 2011-Sep-06    | 2019-Sep-06    | \$400         | \$2,400       | \$0           | \$0        |
| MILNER   | MANN     | 4259813 | 1     | 100%      | 2011-Jul-12    | 2019-Jul-12    | \$400         | \$2,400       | \$0           | \$0        |
| MILNER   | MANN     | 4259815 | 1     | 100%      | 2011-Jul-12    | 2019-Jul-12    | \$400         | \$2,400       | \$0           | \$0        |
| MILNER   | MANN     | 4259816 | 1     | 100%      | 2011-Jul-12    | 2019-Jul-12    | \$400         | \$2,400       | \$0           | \$0        |
| MILNER   | MANN     | 4259817 | 2     | 100%      | 2011-Jul-12    | 2019-Jul-12    | \$800         | \$4,000       | \$0           | \$0        |
| MILNER   | MANN     | 4262450 | 6     | 100%      | 2011-Nov-24    | 2018-Nov-24    | \$2,400       | \$12,000      | \$0           | \$0        |

Table 4-2: Mann Property Royalty Schedules.

| Township | Property | Claim # | Units | Ownership | Franco-Nevada | Other                         | NSR Repurchase right | Right of 1st refusal over NSR |
|----------|----------|---------|-------|-----------|---------------|-------------------------------|----------------------|-------------------------------|
| MILNER   | MANN     | 4215932 | 1     | 100%      | 2% Option NSR | 2% NSR - 2128700 Ontario Inc. | 1% for \$1M          | Yes                           |
| MILNER   | MANN     | 4217970 | 1     | 100%      | 2% Option NSR | 2% NSR - 2128700 Ontario Inc. | 1% for \$1M          | Yes                           |
| MILNER   | MANN     | 4252695 | 11    | 100%      | 2% Option NSR |                               |                      |                               |
| MILNER   | MANN     | 4254615 | 3     | 100%      | 2% Option NSR |                               |                      |                               |
| MILNER   | MANN     | 4255423 | 4     | 100%      | 2% Option NSR | 2% NSR - 2128700 Ontario Inc. | 1% for \$1M          | Yes                           |
| MILNER   | MANN     | 4255424 | 1     | 100%      | 2% Option NSR | 2% NSR - 2128700 Ontario Inc. | 1% for \$1M          | Yes                           |
| MILNER   | MANN     | 4259225 | 10    | 100%      | 2% Option NSR |                               |                      |                               |
| MILNER   | MANN     | 4259230 | 3     | 100%      | 2% Option NSR | 2% NSR - 2128700 Ontario Inc. | 1% for \$1M          | Yes                           |
| MILNER   | MANN     | 4259232 | 7     | 100%      | 2% Option NSR | 2% NSR - 2128700 Ontario Inc. | 1% for \$1M          | Yes                           |
| MILNER   | MANN     | 4259234 | 3     | 100%      | 2% Option NSR |                               |                      |                               |
| MILNER   | MANN     | 4259237 | 1     | 100%      | 2% Option NSR | 2% NSR - 2128700 Ontario Inc. | 1% for \$1M          | Yes                           |
| MILNER   | MANN     | 4259238 | 2     | 100%      | 2% Option NSR | 2% NSR - 2128700 Ontario Inc. | 1% for \$1M          | Yes                           |
| MILNER   | MANN     | 4259239 | 1     | 100%      | 2% Option NSR | 2% NSR - 2128700 Ontario Inc. | 1% for \$1M          | Yes                           |
| MILNER   | MANN     | 4259813 | 1     | 100%      | 2% Option NSR | 2% NSR - 2128700 Ontario Inc. | 1% for \$1M          | Yes                           |
| MILNER   | MANN     | 4259815 | 1     | 100%      | 2% Option NSR | 2% NSR - 2128700 Ontario Inc. | 1% for \$1M          | Yes                           |
| MILNER   | MANN     | 4259816 | 1     | 100%      | 2% Option NSR | 2% NSR - 2128700 Ontario Inc. | 1% for \$1M          | Yes                           |
| MILNER   | MANN     | 4259817 | 2     | 100%      | 2% Option NSR | 2% NSR - 2128700 Ontario Inc. | 1% for \$1M          | Yes                           |
| MILNER   | MANN     | 4262450 | 6     | 100%      | 2% Option NSR |                               |                      |                               |

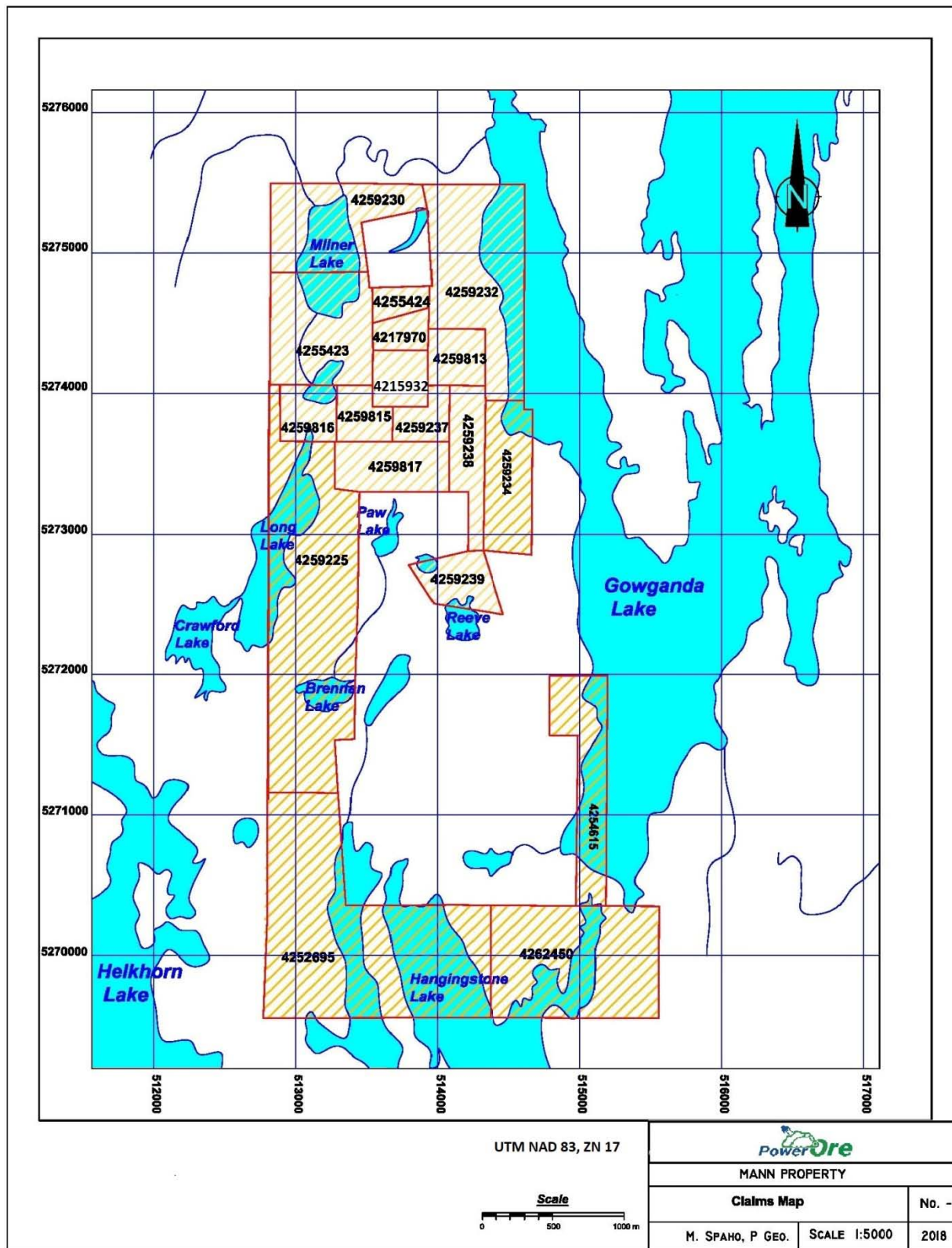


Figure 4-2: Mann Property Claims.

POWERORE INC.

TECHNICAL REPORT NI 43-101, April 14, 2018

## **5.ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE, AND PHYSIOGRAPHY**

### **5.1. ACCESSIBILITY**

Access to the Mann Property is via Highway 560. This is about 280 km by road north of Sudbury and approximately 125 km west of New Liskeard. A 6 km forest road connects the property with Highway 560. Forestry roads and all-terrain vehicle trails provide additional access throughout the property. The property can also be reached by boat on Gowganda Lake, from the town of Gowganda, which borders the lake.

### **5.2. CLIMATE**

The climate of the Property area is continental in nature, with cold winters ( $-10^{\circ}\text{C}$  to  $-35^{\circ}\text{C}$ ) and warm summers ( $+10^{\circ}\text{C}$  to  $+35^{\circ}\text{C}$ ). In this area, winter conditions can be expected from November to early April. Precipitation averages 80 cm. a year with a substantial portion in the form of snow averaging 2.4 m. per year.

Exploration and mining activities on the Property and in the region can take place all year round with very few days lost due to extreme weather conditions.

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

The nearest town to the Mann Property is Gowganda, which is connected to the regional electric power grid. Also, local resources in the area include paved highway access to other northern Ontario population centers, satellite communications and mail service. The sources of mining personnel and related equipment are Kirkland Lake, Sudbury and Timmins, some 85 km east, 280 km south and 180 km north of the Property, respectively.

No mining related infrastructure remains on the Mann Property although there is a network of forestry roads that criss-cross the Property and provides access throughout. There are a number of small lakes present which empty into the larger Gowganda Lake through small streams, providing ample water for drilling, trenching and exploration in general.

### **5.4. PHYSIOGRAPHY**

The Mann Property area represents typical glaciated terrain of the Canadian Shield. The topography is gently rolling, with high points seldom exceeding 50 - 75 m. above local lake levels. Elevations on the Property are generally between 360 m. and

420 m. above sea level. There is only a few percent of outcrop, mostly confined to higher ground. Low ground is covered by deep glacial till and small lakes or swamps. The area has been extensively logged in the past 30 years, so that vegetation is generally small, consisting of second growth poplar, birch, spruce and pine. Poplar, birch and white pine are common on the higher ground and spruce in the lower, wetter areas.

### **5.5. SUFFICIENCY OF SURFACE RIGHTS**

All the mining claims on the Mann Property occur on crown land and as such there is a well-established regulatory framework that governs the issuance of occupation licenses for mining operations, potential tailings disposal and waste disposal areas, possible heap leach pads and potential processing plant sites. SMEC has no reason to believe such permits will not be issued if and when required by the project.

## **6.HISTORY**

The Cobalt-Gowganda Silver mining area of Ontario was one of the most prolific silver mining camps in Canada. Over 600 million troy ounces of silver have been produced from mines in the region since the first vein was discovered in 1903 in Cobalt area, of which over 60 million ounces came from the mines in the Gowganda area (Sergiades, 1968; McIlwaine, 1978). Note that this information is not necessarily indicative of mineralization on the Mann Property that is the subject of this technical report.

Following the discovery of native silver in the Cobalt area, prospectors began searching for other areas underlain by Nipissing Diabase within which silver deposits are spatially associated.

Silver was first discovered at the Mann Property in 1908 by Robert Mann, prospector, in a 13 cm wide calcite vein trending approximately east-west. In 1909 the mine site was opened and operated by Mann Mines Ltd. During 1912-1914 (Sergiades, 1968), No. 3 shaft was sunk to 200 feet with levels at 80 feet, 120 feet and 200 feet. No. 4 shaft was sunk to 80 feet and was connected with No. 3 shaft. (Figure 6-1)

During 1914-1920, numerous discoveries resulted in intensive exploration and development on properties around the Mann mine, (Cunningham, L.J., 1987). Some of the most important are (see figures 7-3 and 9-2 in Items 7 and 9 below):

- Bartlett - A 300 foot shaft with 1000 feet of development, trenching and open cuts yielded 146 tons of hand-picked ore containing 40,436 oz. of silver.
- Boyd Gordon - A 150 foot shaft tested 3 veins with short ore shoots. Production totalled 4,678 oz. silver.
- The Mann - Shaft 5 with underground developments, trenching and open cuts resulted in the production of 98,822 oz of silver.
- South Bay and O`Brian - Two shafts of 50 and 100 feet respectively, plus several open cuts, tested a series of silver bearing veins. Production unknown.
- Reeve Dobie - Two shafts tested a mineralized zone 700 feet in length. A small mill was installed. Production was 88,584 oz. of silver.
- Welch - A shaft of unknown depth resulted in production of 1,000 oz. of silver.

In 1952, an area that included the current property was optioned to Sisco Metals of Ontario Ltd. Sisco dewatered Shaft No. 3, completed underground drilling and treated 1,200 tons from the mine dump with an average grade 8 of oz of silver per ton.

In 1961, these claims were acquired by Yellowknife Bear Mines Ltd. and Manridge Mines Limited was incorporated. During 1961-1965, Manridge drilled 74 holes for a total of 8803 feet (2,684 m) and a geophysical survey was completed.

In 1965, the same property was optioned to Zenmac Metal Mines. During 1966-1967, Zenmac completed drilling 85 holes totalling 20,231 feet (6,168 m), along with a striping program and a geochemical survey.

1968-1970, Siscoe Metals completed soil sampling, installed a mining plant, completed underground drilling, and produced a total of 174,412 oz. of silver.

In 1974, the same property was optioned to J. A. Mortson. No important exploration was completed.

In 1982, Manridge Mines Limited became Manridge Explorations Limited. From 1983 to 1985, Manridge drilled 35 surface holes, on claims that cover the current property, for a total of 5,480 feet (1,671 m), 28 underground holes totalling 1,527 feet (466 m), completed line cutting, geochemical and geophysical surveys, drove 700 feet of ramp to reach the 125 foot horizon on the "D" zone and completed 150 feet of drifting and 170 feet of raising. Also during this period of time, Manridge produced approximately 30,000 ounces of silver. Operations ceased December 1984 for the winter months (Tables 6-1,2,3,4).

Exploration and development of the mine started again in 1988. During that year the following work was completed at "D" zone:

- 600 feet of ramping from the 125 feet level to the 210 feet level.
- 11 underground holes (2,500 feet; 762 m).
- 30 surface holes (8,000 feet; 2,439 m).
- Removal of approximately 600 tons of silver bearing rocks with an estimated grade 15 oz. of silver per ton which was stockpiled for future treatment.
- The removal of the pillars and the east end of the stope, estimated at 600 tons with a grade at 15.0 oz. of silver per ton.

In its last report Mr. Cunningham wrote: "The 1988 program was disappointing and unsuccessful. The poor results were attributed to the isolated location of the project, adverse weather conditions, inadequate road access, and poor performance by mining and drill contractors. As a result much less work was accomplished than had been anticipated" (Cunningham L.J., 1988).

No further exploration work was recorded by Mannridge Exploration on its property and the claims were eventually allowed to lapse. The area remained dormant and inactive until the late 2000's when the two key claims covering the old Mann Mine were restaked and subsequently optioned to Creso Exploration in 2011 who acquired an additional 16 claims by staking. All the work done by Creso was done on the current property held by PowerOre.

**There are no current Mineral Resource or Mineral Reserve estimates prepared for the Mann Property. There have been a number of historic estimates prepared over the years. However, SMEC cautions that a Qualified Person has not done sufficient work to classify the historic estimates as current mineral resources or mineral reserves; PowerOre is not treating the historic estimates as relevant or as current mineral resources or mineral reserves and the historic estimates should not be relied upon. Note that all of these estimates were made prior to the adoption and publication of the CIM Standards of Disclosures for Mineral Resources and Mineral Reserves or of the CIM Best Practices Guidelines. The assumptions, parameters and methods used to prepare the historic estimates are not available and they therefore may not be comparable to the categories as defined by the CIM Definition Standards for Mineral Resource or Mineral Reserve estimates as adopted by the CIM council in 2010. There have been no recent estimates nor is there any new data available that would allow the reporting of current Mineral Resource or Mineral Reserve estimates. Given the inability to verify any of the past data prior to Creso Exploration's work, it is the opinion of the author that the historic data could not be used to support current Mineral Resource or Mineral Reserve estimates. At best SMEC and PowerOre consider these results as indications of the presence of mineralization on the**

property and we will use the information to guide future exploration but the reader is cautioned not to rely on these estimates.

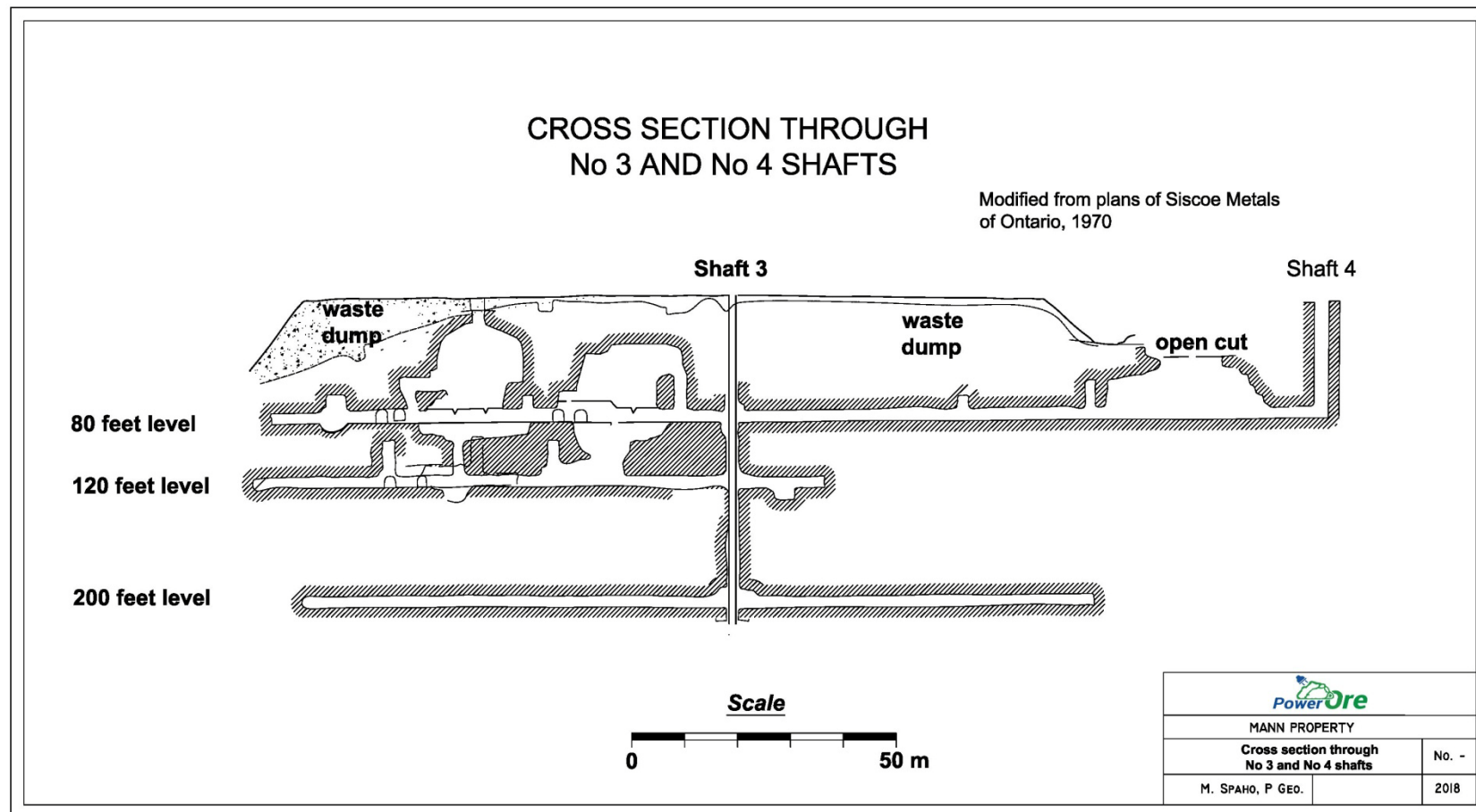


Figure 6-1: Cross section through No 3 and No 4 shafts.

**Table 6-1: Mineral Resources estimated by Siscoe Metals of Ontario Ltd. All the zones described in the table are located on the Mann Property.**

| <b>Zone</b>          | <b>Tons</b> | <b>Grade<br/>oz./t</b> | <b>Total oz.<br/>Silver</b> |
|----------------------|-------------|------------------------|-----------------------------|
| A North Zone         | 1,134       | 43.8                   | 49,686                      |
| A South Zone         | 2,218       | 24.3                   | 53,955                      |
| B Zone               | 1,968       | 75                     | 147,608                     |
| C Zone               | 5,344       | 46.1                   | 246,092                     |
| D Zone               | 1,337       | 65.5                   | 87,513                      |
| C Zone Branch vein   | 1,040       | 17.6                   | 18,380                      |
|                      | 400         | 100                    | 40,000                      |
|                      | 400         | 25                     | 10,200                      |
| Mann #3 3 Shaft Area | 258         | 41                     | 10,578                      |

**Total                                      14,099                      47.2                      665,012**

**Table 6-2: Mann Mine production record. All the production referred in the table are from zone located on the Mann Property.**

| <b>Year</b> | <b>Mine</b>    | <b>Production Oz.</b> |
|-------------|----------------|-----------------------|
| 1910        | Boyd<br>Gordon | 4,678                 |
| 1908-1920   | Mann           | 98,822                |
| 1952        | Mann           | 20,150                |
| 1968-1970   | Mann           | 174,412               |
| 1984        | Mann           | 30,000                |

**Total                                      328,062**

Note: The Mann shafts No1 to 5 and Boyd Gordon are all part of the Mann Property. (see figure 7-3 and 9-2)

The zones that appear in table 6-1 are part of the Mann Property.

**Table 6-3: 1983-1988 mining activities on Mann Property by Manridge Exploration Limited.**

|                          | Programs |       |        |     |       |       |       |       | Total metres |
|--------------------------|----------|-------|--------|-----|-------|-------|-------|-------|--------------|
| Description              | 1983     |       | 1984   |     | 1985  |       | 1988  |       |              |
|                          | feet     | m     | feet   | m   | feet  | m     | feet  | m     |              |
| Surface Drilling         | 3,982    | 1,214 | 2,300  | 701 | 8,000 | 2,438 | 8,000 | 2,438 | 6,791        |
| Underground Drilling     |          |       | 1,527  | 465 | 2,500 | 762   | 2,500 | 762   | 1,989        |
| Ramp to Level (125 feet) |          |       |        |     | 600   | 183   | 600   | 183   | 366          |
| Decline                  |          |       | 700    | 213 |       |       |       |       | 213          |
| Drifting                 |          |       | 150    | 46  |       |       | 140   | 43    | 89           |
| Raising                  |          |       | 110    | 34  |       |       |       |       | 34           |
| Stoping                  |          |       | 1500 t |     |       |       |       |       |              |
| Milling                  |          |       | 1000 t |     |       |       | 600 t |       |              |
| Stockpiling              |          |       | 300 t  |     |       |       |       |       |              |
|                          |          |       |        |     |       |       |       |       | 9,482        |

**Table 6-4: Surface Diamond Drill Holes drilled on Mann Property.**

| <b>No.</b>                    | <b>Company</b>          | <b>Years</b> | <b>No of DDH</b> | <b>Feet</b> | <b>Meters</b> |
|-------------------------------|-------------------------|--------------|------------------|-------------|---------------|
| 1                             | Manridge Mines Ltd.     | 1961-1965    | 74               | 8803        | 2683          |
| 2                             | Zenmac Metal Mines Ltd. | 1966-1967    | 85               | 20231       | 6166          |
| 3                             | Manridge Mines Ltd.     | 1983-1985    | 35               | 5480        | 1670          |
| 4                             | Creso Exploration Inc.  | 2011-2012    | 15               |             | 1458          |
| <b>Total surface drilling</b> |                         |              | <b>209</b>       |             | <b>11978</b>  |

## 7. GEOLOGICAL SETTING AND MINERALIZATION

### 7.1. REGIONAL AND LOCAL GEOLOGY

Milner Township is located in the Shining Tree greenstone belt in the southwestern extension of the Abitibi Sub-province of the Superior Province (Figure 7-1), a major component of the Canadian Shield.

In general terms, the Abitibi Sub-province is comprised of Late Archean metavolcanic rocks, related synvolcanic intrusions and clastic metasedimentary rocks, intruded by later Archean alkaline and calc-alkaline intrusions and Paleoproterozoic diabase dikes. The stratigraphic model of this greenstone belt envisages lithostratigraphic units deposited in autochthonous successions, with their current complex map pattern distribution developed through the interplay of multiphase folding and faulting. (Heather, 1998).

The Shining Tree belt contains a diversity of extrusive and intrusive magmatic rock types ranging from ultramafic through felsic compositions, as well as both chemical and clastic sedimentary rocks. Igneous rocks predominate and include both volcanic and plutonic varieties. The ages of the volcanic rock in the area range between 2,660 and 2,740 Ma (Ayer et al., 2003). This was also a period of orogen-wide shortening across the entire Superior Province, an event that coincided with gold mineralization (von Breemen et al., 2006).

The Shining Tree area underwent a complex and protracted structural history of polyphase folding, development of multiple foliations, ductile high-strain zones, and late faulting. The map of the Shining Tree belt is dominated by regional anticlines and synclines associated with a foliation interpreted to have formed during orogen-wide shortening across the entire Superior Province.

Based on recent mapping and geochronology, Johns (1997, 2003), (Ayer et al., 2003, 2013) recognized 3 distinct packages of Archean supracrustal rocks consisting of older Keewatin-aged assemblages and two "Timiskaming-type" successor groups which unconformably overly the Keewatin stratigraphy. The Keewatin rocks comprise ultramafic, mafic and felsic flows, volcanoclastics, interflow epiclastics and chemical sedimentary rocks. The ultramafic rocks have been highly altered and portray a weak aeromagnetic signature. Mafic volcanics are tholeiitic basalts to calc-alkalic andesites while intermediate to felsic volcanics are calc-alkalic rhyolite to dacite flows, autoclastic and pyroclastic breccias. These rocks have undergone low degrees of metamorphism and have been partially altered to carbonate and sericite, but have not been

penetratively deformed on a regional scale. The Timiskaming-type packages of younger rocks consist of (1) immature sedimentary rocks of the Indian Lake group found in southern Tyrrell and northern Leonard townships and (2) predominantly volcanic and volcanoclastic rocks of the Natal group occurring in Natal Township and west of the Michiwakenda Lake fault in Churchill and Connaught townships.

Following the igneous activity of the Early Precambrian a period of uplift, basin formation, and erosion occurred, resulting in the deposition of rocks of the Huronian Supergroup (McIlwaine, 1978); of this Supergroup only rocks of the Cobalt Group are present in the map-area. The Cobalt Group in the Gowganda area is subdivided as follows:

1. Gowganda Formation which is made up mainly of (McIlwaine 1978):
  - a) Coleman Member - conglomerate, siltstone, k-feldspathic sandstones, and greywackes,
  - b) Firstbrook Member - laminated argillite.
2. The Lorrain Formation made up of pale green to white to pale pink feldspathic sandstones.

The Coleman Member of the Gowganda Formation is widely distributed throughout much of Milner Township, and extends to the north into Van Hise Township. The Coleman Member is lithologically heterogeneous and is composed of numerous clastic rock types, including feldspathic greywacke, arkose, feldspathic sandstone, ferruginous sandstones, argillite and siltstone, conglomerate, and breccia.

Within The Gowganda area, Nipissing intrusions have intruded along the Archean-Proterozoic unconformity and cut Huronian Supergroup metasedimentary rocks as well as older Archean stratigraphy and trondhjemite intrusions. Northerly striking faults, controlled the emplacement of the intrusions. McIlwaine (1978) has interpreted the dominant northerly trending orientation of the Nipissing intrusions to be a result of this fault influenced emplacement. The intrusions in the area are cut by a number of later faults and quartz diabase dikes. The form of intrusions, (irregular shaped, solid bodies, open ring structures and dikes) are believed to be primary and are not significantly modified by later folding and faulting.

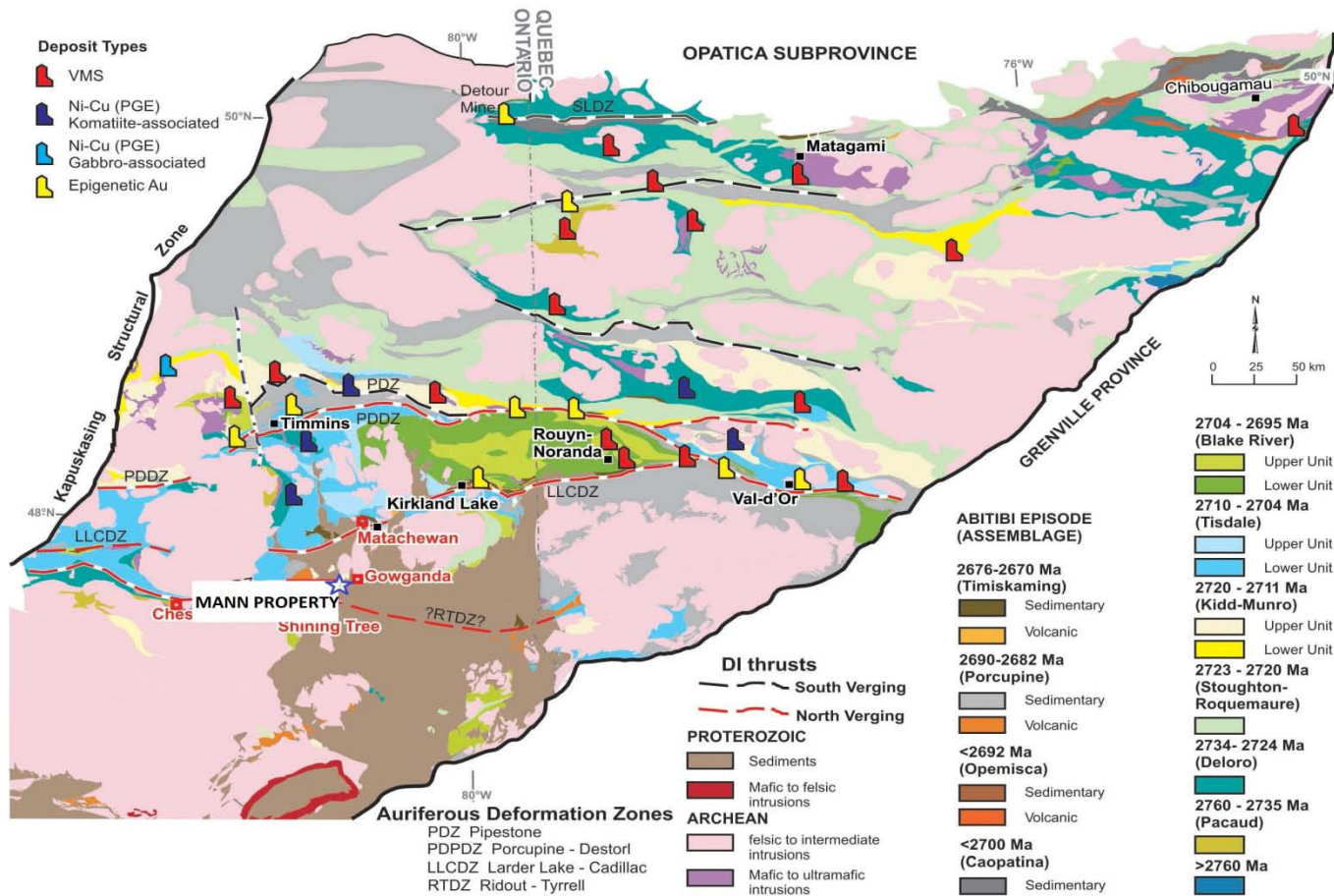


Figure 7-1: Stratigraphic map of the Abitibi greenstone belt (Ayer 1983).

Conrod (1989) describes four Nipissing intrusions in the region:

- Dunkan Lake Intrusion
- Beaton Bay Intrusion
- Milner Lake Intrusion at the Mann Mine Site
- Miller Lake Intrusion at the Castle Mine Site

Several northeast-trending quartz-bearing diabase dikes occur in the area; these dikes are considered part of the Abitibi swarm which extends to the northeast into Quebec. These dikes range in orientation from east-west to N30E and they are essentially vertical and up to 30 m wide. The dikes are composed of massive equigranular, medium-grained diabase which is dark green to greenish grey in colour. They range in age from late Archean to late Proterozoic (Ayer et al., 2003).

## **7.2. LOCAL GEOLOGY**

The Mann property area is located in Milner Township. The local geology of this area is presented in detail by a number of the authors: (McIlwaine 1978; Ayer J.A., 2003; Johns G.W., 2003; Ayer J.A., 2013). The lithological units indicated in this area belongs to the Archean, Proterozoic and the Cenozoic (Figure 7-2).

### **7.2.1. ARCHEAN**

The Archean rocks comprise metavolcanics and associated intrusive rocks, metasediments, intrusive felsic to intermediate plutonic rocks, and intrusive diabase dikes. Chemically, the metavolcanics are subalkalic in composition.

The main exposures of mafic metavolcanics are in south-central Van Hise Township, and in southwest and central Haultain Township, and occur as inliers within the Miller Lake diabase basin. Less extensive outcrops are found in south-central and northwestern Milner Township, northwest and northeast Van Hise Township, and central Nicol Township near Bonsall Lake.

Komatitic volcanic rocks of the subalkalic suite comprise dunitic and peridotitic komatite and their metasomatized equivalents.

The remaining subalkalic rocks are tholeiitic and calc-alkalic, and consist of felsic, intermediate, and mafic units. Both flows and pyroclastic rocks are present, but pyroclastics are rare amongst the mafic rock types. They are mainly tuffs and crystal tuffs that were deposited subaqueously, as evidenced pillowed structures in the mafic volcanics.

The alkalic suite includes rocks of mafic and intermediate composition and these belong chemically to both the potassic and sodic series. They are dark red and light pink rocks, and both flows and pyroclastic rocks occur.

Metasediments comprise greywacke and chert. They are rare and are mainly intercalated with the tuffs.

Felsic Plutonic rocks are exposed over much of north-central Van Hise and Haultain Townships. These granitic rocks represent extreme southwestern limit of the Round Lake Batholith and are actually part of a large inlier in the Huronian cover. Granitic rocks are also exposed in central Nicol Township, north of Wilson Lake.

### 7.2.2. PROTEROZOIC

Proterozoic rocks are widespread in the area and comprise clastic sedimentary rocks of the Gowganda Formation of the Huronian Cobalt Group, intrusive Nipissing diabase and younger cross-cutting diabase dikes.

The Gowganda formation is represented in area from the Coleman and Lorrain Member.

**The Coleman Formation** is widely distributed throughout much of Milner Township, and extends to the north into Van Hise Township along fault zones on either side of Early Precambrian rocks.

The thickness of the Coleman Member is difficult to determine in the area because of faulting, disruption from diabase intrusions, and incomplete sections. Thomson (1968, ) has estimated, from assuming a mean easterly dip of 10 degrees for the bottom of the formation in contact with the metavolcanics in western Milner Township, a thickness of about 670 m in the central part of the township. About 240 m south of the Mann No.3 shaft drill hole data suggest a thickness below the diabase of about 1,200 m.

The Coleman Member of the Gowganda Formation is lithologically heterogeneous and is composed of numerous clastic rock types, including feldspathic greywacke, arkose, feldspathic sandstone, ferruginous sandstones, argillite and siltstone, conglomerate, and breccia.

**Lorrain Formation** rocks underlie most of southeastern Nicol Township and are preserved in downfaulted blocks along the Gowganda Obushkong lake zones. With an assumed mean dip of 10 degrees there is an estimated 900 m of succession in the southeastern part of Nicol Township.

The Formation is composed of a variety of fine-grained quartzose sandstones which are generally arkosic at the base, becoming less feldspathic towards the top, and grading to orthoquartzite. Feldspathic sandstone is the most common in this area.

**Nipissing Diabase** Intrusions of the Gowganda area are interpreted to be the exposures of one or more three dimensional, primary, undulating sheets, consisting of basins, arches and limbs that connect the basins with the arches. The lithologic stratigraphy, whole rock major and trace element distributions, as well as the trends defined by the mineral chemistry, all correlate well. These trends are related to be geometry of the intrusion, as was found for the Cobalt and Sudbury Nipissing Intrusions (Conrod. 1988).

As mentioned above, four Nipissing Diabase Intrusions are described in the area. The form of the intrusions, (irregularly shaped, solid bodies, open ring structures and dikes), are believed to be primary, and are not significantly modified by later folding and faulting. The Nipissing Intrusions in the Gowganda area are the main host for the native silver and cobalt - nickel-arsenide deposits in the area.

The main body of diabase in the map-area is the Miller Lake diabase basin which to the east incorporates local subbasins; these are found around Flatstone Lake and Calcite Lake.

Thomson (1968) states that from drilling in the Mann No.3 shaft workings a true thickness of 82 m can be determined for the diabase. In the Pettipther Lake area a thickness of about 150 m can be ascribed assuming a dip of 35 degrees. The Miller Lake basin has a thickness of 284 m in the Siscoe Mine (McIlwaine 1978). During the Creso Exploration Inc. drilling program in 2011, hole MN11-01 cut the sedimentary formation at 216 m. This suggests a vertical thickness of the diabase, not less than 150 m (Figure 10-1).

### **7.2.3. CENOZOIC**

Pleistocene and Cenozoic deposits represented by sand, gravel and alluvium, occur as blanket outwash and till deposits and as eskers. Along the eastern border of Nicol Township is the only area where the overburden becomes very thick. Numerous eskers with a southeast trend are present in this area. This southeast trend parallels the trend of glacial striae in the area. Sand and gravel pits, used mainly for highway maintenance, are present in Nicol Township.

### **7.2.4. STRUCTURAL GEOLOGY**

Evidence of large-scale folding is present in the Early Precambrian metavolcanics. In these rocks the foliation trend swings from eastward in Van Hise,

Haultain, and northern Nicol Townships to a southward strike in central Nicol Township; dips are steep mainly to the north and east. Top determinations from pillows in two localities suggest these inliers are disconnected segments of an anticline which existed prior to Middle Precambrian sedimentation. Undulations in the Nipissing Diabase are considered primary and not the result of post-emplacement folding. The Huronian rocks have been gently warped.

Faults in the area trend in four main directions: north to north-northwest, northwest, northeast, and east. Criteria used for identifying faults in the area include shearing and brecciation, alteration, topographic lineaments, offsets in geological contacts, and repetitions of formations. Some of the faults that McIlwaine (1978) describes are: Firth Lake-Silverfive Lake Fault, Elkhorn Lake Fault, Gowganda Lake-Obushkong Lake Fault, Jacobs Lake Fault, Mire Lake Fault, Milner Lake Fault, Penassi Lake-Bloom Lake Fault, etc.

### 7.3. PROPERTY GEOLOGY

The Mann property is underlain by rocks units of the Gowganda Formation, consisting of clastic sedimentary rocks of the Coleman Member. These sediments are intruded by Nipissing Diabase and the Matachewan diabase dyke swarm.

#### 7.3.1. GOWGANDA FORMATION

The sedimentary rocks are composed of greywacke, arkose, conglomerate, feldspathic sandstone and siltstone-argillite (Figure 7-3).

**Feldspathic Greywacke** are variable in their texture and colour but have a relatively uniform composition. They are commonly very fine grained rocks, but locally are fine to medium grained. The finer grained rocks are dark to pale. Locally there are fine- to medium-grained rocks which are grey to pink in colour and have a higher feldspar content. The grey wackes are composed of 40 to 60 percent subrounded to subangular quartz, 20 to 40 percent feldspar, 10 to 15 percent rock fragments, 20 to 40 per cent matrix, and minor amounts of opaque minerals including pyrite.

**Arkose** tends to be more coarse-grained than the feldspathic greywacke, but is still a fine-grained rock and thickly bedded to massive. Colour varies from light grey to buff to dark greyish red. They are composed by 50 to 65 percent quartz, 3 to 15 percent potassic feldspar, 15 to 27 percent plagioclase, 7 to 15 percent matrix material with micas, iron oxides, and chlorite observed in minor quantities. Tightly packed rounded to subrounded quartz and feldspar grains range in size from 0.1 to 0.6 mm with 0.2 mm the approximate mode. The red colour is due to fine hematite dust which coats many of the grains.

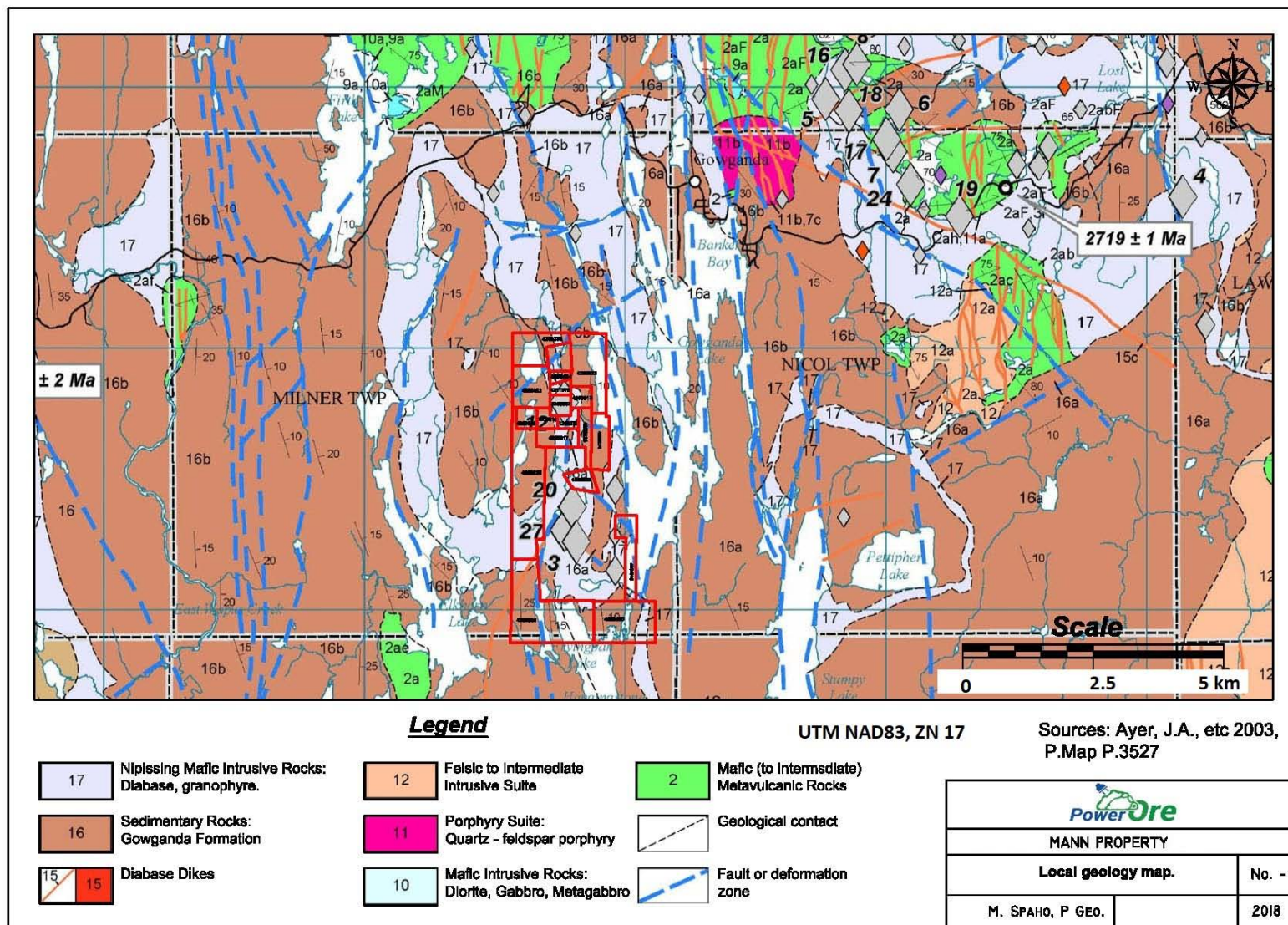


Figure 7-2: Local geology map

**Conglomerate** occurs as lenses along the shores of Milner Bay on Gowganda Lake. The sandy matrix of the conglomerate commonly has a feldspathic greywacke composition. The feldspar grains tend to be more angular than the quartz which ranges from 0.3 to 0.5 mm in diameter. Conglomerate clasts range from pebbles to boulders and are composed mainly of granitic rocks with lesser amounts of gabbro and metavolcanics. They are rounded to sub angular and have a variable packing density.

**Feldspathic sandstone** is a fine-grained pale brownish grey, thickly bedded to massive rock composed of about 70 percent quartz, 10 percent chert, 15 percent feldspar, and 5 percent calcite. The quartz and feldspar grains are densely packed in a quartz and chert (with some chlorite) matrix (about 5 percent). The grains are generally subrounded to subangular, and range from 0.2 to 0.4 mm in diameter.

**Siltstone argillite** is the most abundant rock type in Milner Township. It is a fine-grained, dense, grey to greenish grey, well bedded to massive locally argillaceous rock. The rock contains about 40 to 60 percent quartz and 2 to 5 percent mainly plagioclase feldspar floating in a pasty matrix of chlorite and secondary white mica which makes up 15 to 30 percent of the rock. Quartz grains range from 0.01 to 0.03 mm in diameter.

### **7.3.2. NIPISSING DIABASE**

The property straddles the east limb of a diabase basin structure. On the Mann property the limb dips westerly at about 45 degree and is overlain and underlain by Cobalt Group sediments. It forms a prominent north/south ridge and has an average thickness of about 215 m (Cunningham L.J., 1988).

In the field, outcrops of diabase commonly weather grey to brown and are reasonably well jointed. The texture varies from fine to coarse grained with a narrow 5 cm chill zone at the contacts. The fresh rocks are commonly grey to greenish grey, and with increasing content of hematitic micropegmatite become redder to form the locally known "red-rock". The main rock types in the area are pyroxene gabbro, amphibole gabbro, and granophyre. The laths of plagioclase in the diabase are commonly saussuritized to varying degrees so that determination of the original composition is difficult. The pyroxene is predominantly augitic, and locally titaniferous. Large masses of pyroxene enclose or partially enclose the laths of plagioclase. The pyroxenes are locally altered to chlorite and amphibole. Amphibole is commonly altered to chlorite or biotite and occurs as both primary and secondary amphibole; the latter is commonly actinolite. Quartz occurs as both free quartz and incorporated as intergrowths with albite to form micropegmatite; the albite commonly has a red turbid appearance due to the presence of hematite.

### **7.3.3. STRUCTURAL GEOLOGY**

Strong north/south faulting is present. Mcilwaine (1978) points out that this faulting probably reflects the dominant north/south faulting which controlled the intrusion of the Matachewan dikes and, in part, influenced Gowganda Formation deposition and was active during and after the intrusion of the Nipissing diabase. In the vicinity of the Mann Property, 3 prominent north/south faults have been identified as the Hangingstone, Mann and 90 Faults. A movement of east side down is implied for the 90 Fault, The 90 fault is so named because it follows the No.90 vein at the Mann Mine. The fault truncates the inlier of Lorrain Formation in the diabase just west of Gowganda Lake, north of Reeve Lake. Direction of movement on the Mann Fault, which is exposed in the mine workings, has not been determined.

Faulting, transverse to the sill direction, is common and assumes a variety of directions including east/west, northeasterly and northwesterly.

Several narrow late diabase dikes strike northeasterly across the property.

## **7.4. MINERALIZATION**

Silver, with associated nickel-cobalt-iron arsenides, has been the only productive type of mineralization in the area.

Most of the known occurrences are hosted by Nipissing Diabase and less commonly by Gowganda Formation. The mineralization is in vertical to steeply dipping calcite and quartz-calcite veins.

Silver-bearing veins are common over the entire length of the property. The veins are usually narrow, widening in places to several inches and then pinching to a crack rather abruptly. The ore occurs in short shoots or bunches in the veins, with portions of the vein completely barren. Some veins may be followed in a fairly straight course for several hundreds of feet. In a few places the diabase is intersected with fine cracks which are filled with native silver. The principal veins is No. 3 which Mcilwaine (1978) citing Burrows (1926) describes as follows:

"The vein has been traced 1,300 feet by trenching, while open-cuts and underground operations indicated several ore shots. No. 3 shaft has been sunk to a depth of 200 feet, while No. 4 shaft was sunk to the level 80 foot and connected on this level with No. 3 shaft. The ore shoot pitches west at 45 degrees. The vein is about one to 5.5 inches in width. On the Mann property, there are two pronounced north south ridges. On the west ridge, all of the veins have a strike of a few degrees north of east, whereas on the east ridge there are a number of veins which strike nearly north, in addition to a number which strike east. This has suggested the possibility of faulting."

Minerals found in the veins include:

- native silver, argentite, native bismuth, smaltite, niccolite, chalcopyrite, bornite, galena, pyrite, specularite (Collins 1913, Thomson 1968).
- None-metallic minerals in the veins include: various carbonate minerals, quartz, and chlorite.

Wall rock alteration is present. Next to the vein proper is a chloritic zone and outside of this a thin feldspar rich zone may be present. Sometimes, the zone has a reddish colour and is similar in appearance to granophyre. An important part of the wall rock alteration is carbonatization, which on weathered rock on surface produces cavities.

The veins in the vicinity of the Mann Property can in general be assigned to either of two sets: one with an Easterly and one with Northerly strike. Thomson (1968) notes: "Ore mined to date has come exclusively from Easterly set and all the known but unmined ore occurrences (on the A, B, C and D vein zones), are also on the Easterly set of veins. In the view of the above the writer feels the Easterly set should remain the main target of the exploration."

Also, Thomson believes that "The Mann A, B, C and D vein zones are restricted or occur most abundantly in the central part of the Nipissing sill. Mr. Thomson suggested the Gowganda Formation was essentially devoid of silver veins. He wrote: "In so far as the writer knows, all the veins on the Manridge Property are enclosed in Nipissing diabase. Reports of the occurrences of silver-cobalt veins in Cobalt Group sediments on the Manridge property could not be authenticated. Presumably prospecting and exploration on the Manridge property should be largely restricted to Nipissing diabase."

However, in the 2011-2012 drilling program, Creso Exploration Ltd drilled holes MN12-07 and MN12-08 to test two of the Gradient IP/Resistivity anomalies. Both of the holes cut silver mineralization in sediments of Gowganda formation, grading from 20 g/t to 43 g/t.

SMEC is of the opinion that silver mineralized veins are not restricted only in Nipissing Diabase, but veining can and does occur in sediments of the Gowganda Formation. The mineralization is controlled by faults, predominantly Easterly striking, but also Northerly striking. Those faults cut both Nipissing diabase and sediments of Gowganda Formation.

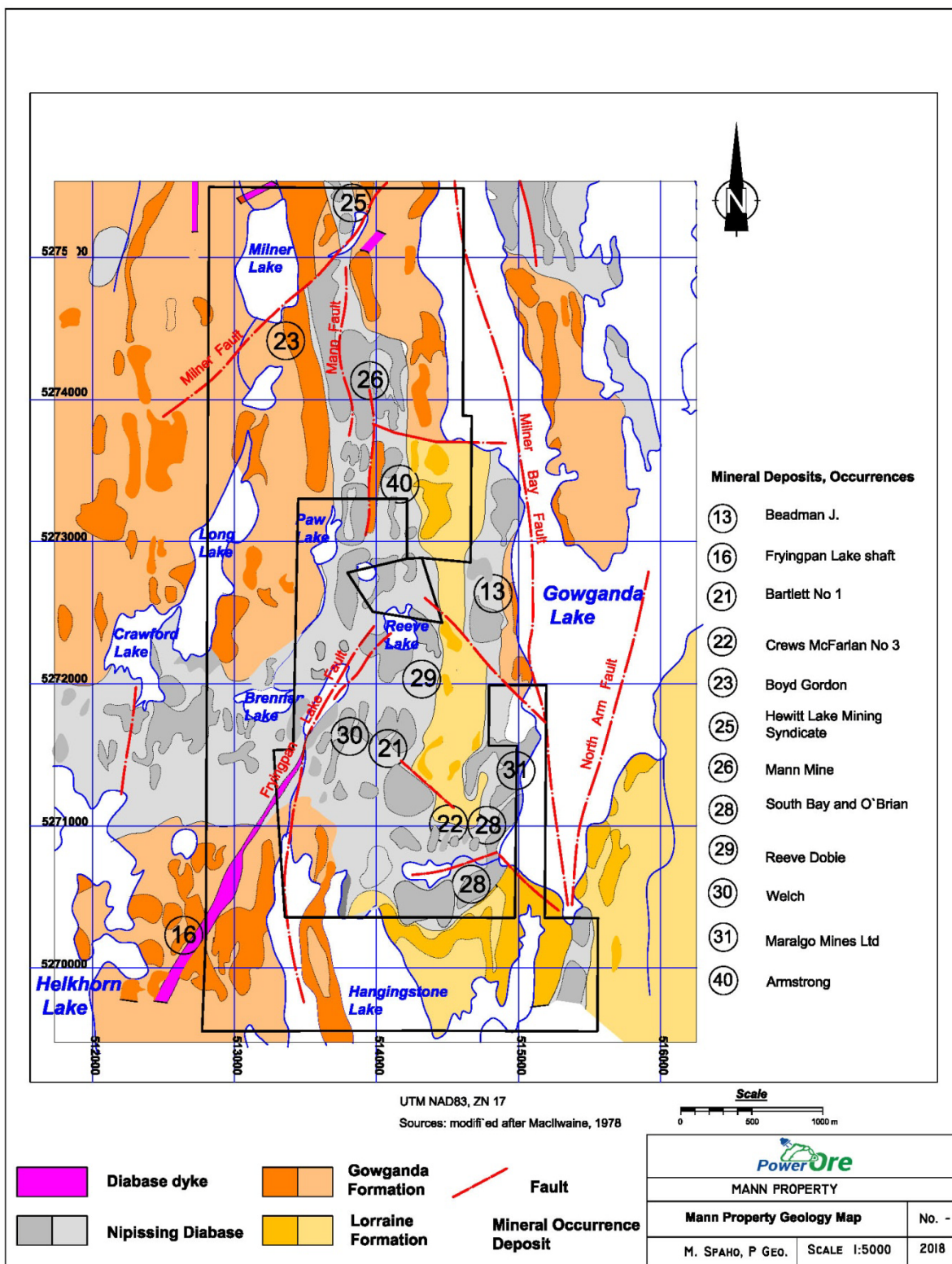


Figure 7-3: Geological map of Mann Property.

## 8. DEPOSIT TYPES

Silver, with associated nickel-cobalt-iron arsenides, has been the only productive type of mineralization on the property; mineralization occurs as native metals, arsenides, sulphides, and oxides. The bulk of the silver is in the native state with minor native bismuth and gold. The arsenides are mainly the cobalt-nickel-iron varieties and the silver is intimately associated with them.

These deposit types are considered **Vein Replacement Deposits**.

A geological and petrographic reconnaissance of Ag sulpharsenide vein system in the Cobalt and Gowganda Mine Camp reveals (Andrews, A.J., etc 1986) :

- The vein systems occur in fault-controlled fracture systems hosted by Huronian sediments, Archean basement rocks, and Nipissing diabase sills of the Cobalt Embayment. Although the host lithologies are widely distributed throughout the Cobalt Embayment and beyond, the Ag-sulpharsenide deposits occur only along the north and northeastern peripheries of this broad domain.
- The vein systems are often extensive; however, Ag-sulpharsenide mineralization is highly restricted in occurrence to within about 200 m of the upper and lower diabase contacts or within the sills themselves. The deposits large enough to be mined occur in two main environments distinguished by the local presence of Huronian sediments or Archean volcanic rocks as the main host lithology. Without exception, all the economically productive deposits occur near the Archean-Huronian unconformity, i.e., specifically where Nipissing diabase sills occur within or in close proximity to steeply dipping volcanic rocks of the Archean basement.
- The ore veins exhibit consistencies in their mineralogy, mineral chemistry, textural relationships, and paragenesis. This suggests that their formation involved broadly uniform hydrothermal conditions established over a large area, resulting from a specific process and event.

## **9.EXPLORATION**

PowerOre or its spin-out parent Orefinders have not carried out any exploration on the Mann Property to date. However Creso Exploration Inc., who recently owned the property carried out an exploration program that is described herein.

### **9.1. CRESO EXPLORATION PROGRAM 2011 - 2012**

In 2011, Creso Exploration Inc. acquired the Mann Property at the historical Mann Mine Site and some areas around it. From September 2011 to March 2012, Creso Exploration Inc. carried out an exploration program on the Mann Property. The program included line cutting, channel sampling, a geophysical survey, and diamond drilling. A field office, including core logging and storage facilities located at the Tyrinite Mine Site, located 25km to the northwest of the Mann Property was used as the base of operations for the exploration program.

#### **9.1.1. Line cutting**

In 2011, a survey grid was cut on the Mann Property over an area of 0.35 km<sup>2</sup>. The grid consisted of 14 east-west lines, 600 m long and spaced 50 m from each other. The survey pickets were placed every 25 m along in the lines.

#### **9.1.2. Channel sampling**

Around 40 m south west of Shaft No 5, a total of 45 samples were collected from 18 cut channels in an old stripped area around 300 meter square and sent to the laboratory for analyses. Three of the best samples returned 7.0, 9.0 and 36.0 g/t silver.

The channels were cut by a saw over a width of 2 inches (5.0 cm), overall north south direction, across carbonate veins. The samples were chipped, described by the geologist and sealed in plastic bags. The geologist transferred all sample intervals to a sample book, where each page in the book represent a unique number with two identical sample tags. One tag was placed in a plastic sample bag with the sample and one aluminium tag was stapled in the channel. The minimum sampling length was 40 cm, while the maximum was 1.5 m. The typical sample length was from 0.7 to 1.0 metres.

The carbonate veins have a width from a few millimetres to 1-5 centimeters, overall east-west strike and are sub-vertical. They appear to be weathered and form negative relief between the diabase rocks. As such some of the vein material may not have been completely sampled in the channels and may not represent the true grade of the mineralization.

### 9.1.3. Geophysical Surveys

From January 10-24, 2012, Creso contracted Insight Geophysics Inc. to perform an Insight Section IP/Resistivity survey on the Mann property. Survey specifications:

Survey Type: 4 Second Time Domain Induced Polarization/Resistivity.

Array Types: Gradient and Insight Section Section Array

AB (Tx dipole spacing): Multiple AB injections (100 m to 100 m)

MN (Rx dipole spacing): 12.5 m. Sampling Interval: 12.5 m.

Apparent resistivity and total chargeability are calculated by the Elrec-Pro receiver. All receiver data is stored in the final data.csv file including all geometry points, primary voltages and voltage decays for further quality control and data reduction as required.

Once the data has been quality reviewed and low quality readings rejected, a depth estimate calculation is made for the remaining data. The depth estimate is based on a uniform half space and does not account for resistivity changes actually encountered at surface or at depth. Changes in half space penetration resulting from the geometry of the receiver dipoles positions relative to transmitter dipoles positions are estimated.

All raw data was plotted using the Insight Section plotting presentation. Total chargeability calculated by the Elrec Pro Receiver is used as standard. Both chargeability and apparent resistivity may be culled for spurious effects resulting from noise or cultural effect. A nonlinear filter is applied to the Insight Section data when applicable. Depending on the surface conditions encountered on the property, the data will also be corrected for topographic and surface effects.

The final reduced field data can then be inverted using the UBC-2D inversion program.

A total of 6 anomalous chargeability trends have been interpreted from the gradient and Insight Sections (figure 9-1).

**Anomaly 1** is a high chargeability response interpreted on all surveyed gradient lines and remains open to the north and the south of the survey block. It strikes approximately NNW-SSE on the west side of the interpreted Mann Fault. The anomaly is interpreted to be crossed by several SW-NE striking inferred faults.

**Anomaly 2** is a high chargeability response interpreted on gradient lines 600N through 200N and remains open to the south of the survey block. It strikes approximately N-S on the east side of the interpreted Mann Fault. The anomaly is thought to be cut by several SW-NE striking inferred faults that have caused the anomaly to be laterally displaced.

**Anomaly 3** is a weak high chargeability response interpreted on gradient lines 800N through 400N. It strikes approximately N-S on the west side of the interpreted Mann Fault. The anomaly is interpreted to be cut by several SW-NE striking inferred faults.

**Anomaly 4** is a weak high chargeability response interpreted on gradient lines 650N through 750N. It strikes approximately N-S on the west side of the interpreted Mann Fault and lies between Anomaly 1 and Anomaly 3.

**Anomaly 5** is a high chargeability response interpreted on all surveyed gradient lines and remains open to the north and the south of the survey block. It strikes approximately NNW-SSE on the west side of the interpreted Mann Fault.

**Anomaly 6** is a high chargeability response interpreted on gradient lines 250N and 200N and remains open to the south of the survey block. It strikes approximately N-S on the east side of the interpreted Mann Fault. The chargeability high anomaly is associated with a resistivity low.

Insight Geophysics recommended that any available geological or other geophysical information be compiled with the IP interpretation to assist in the prioritization of these anomalies. Many of the anomalies are interpreted as being near surface and may be identifiable through surface mapping and/or trenching. Any drill testing can be done using shallow holes to intercept the up dip edge of the anomalies.

#### **9.1.4. Compilation of the historical data.**

SMEC compiled the extensive historical dataset into digital format and used this data to identify several promising exploration targets. Data compilation and processing completed by SMEC is summarized as follows:

- Scanned historical documents as historical mining plans, sections and drilling logs.
- Reviewed available historical exploration and development data of Mann Mine.
- Prepared a detailed map of the mine workings (underground plans, shafts drifts and raises. ( Figure 9-2)

Compilation of the historic data led to the identification of three zones of interest (**ZI1** to **ZI3**), where the focus of further exploration of the Mann Property should be concentrated.

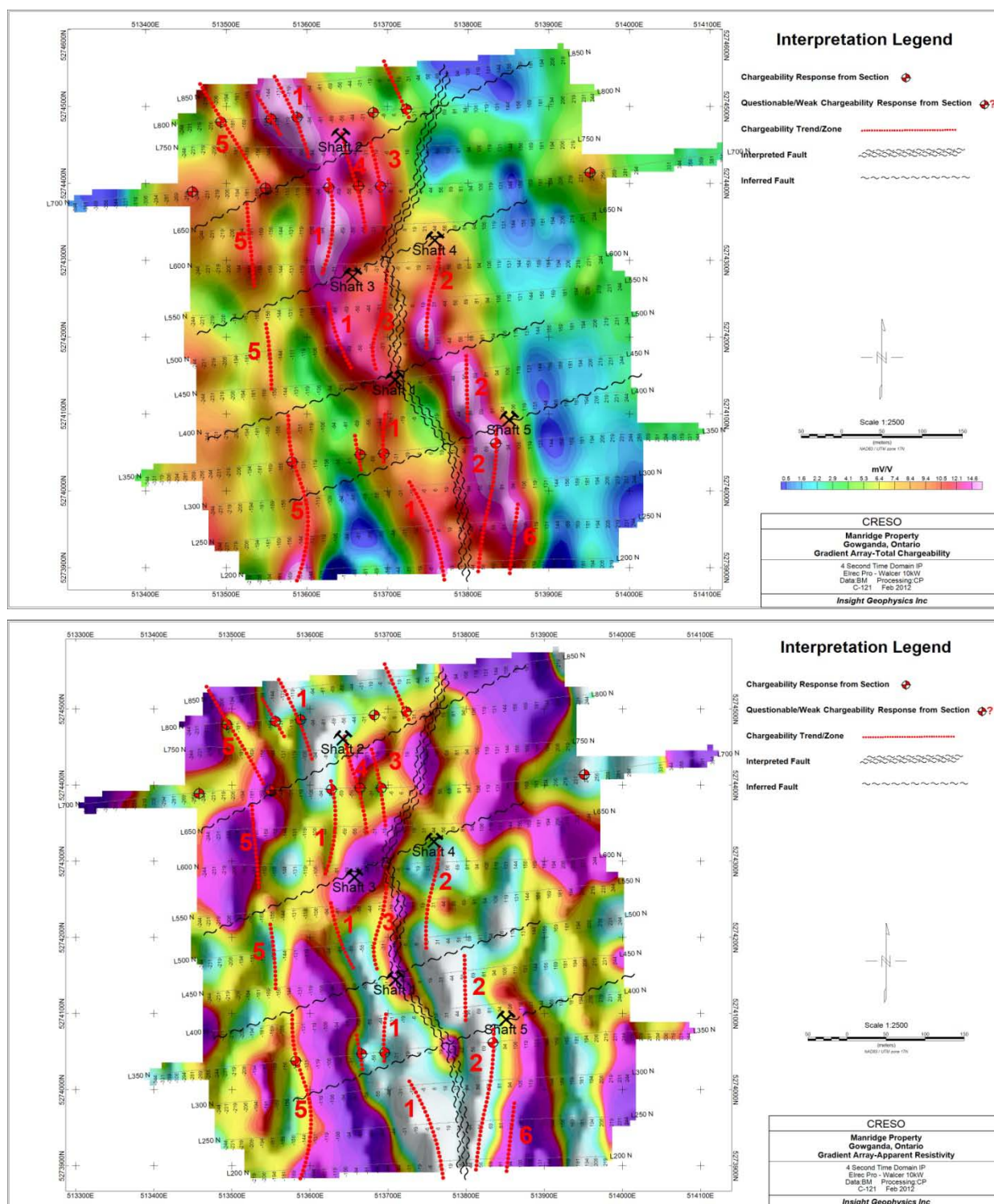


Figure 9-1: Gradient IP Survey-Total Chargeability and Resistivity.

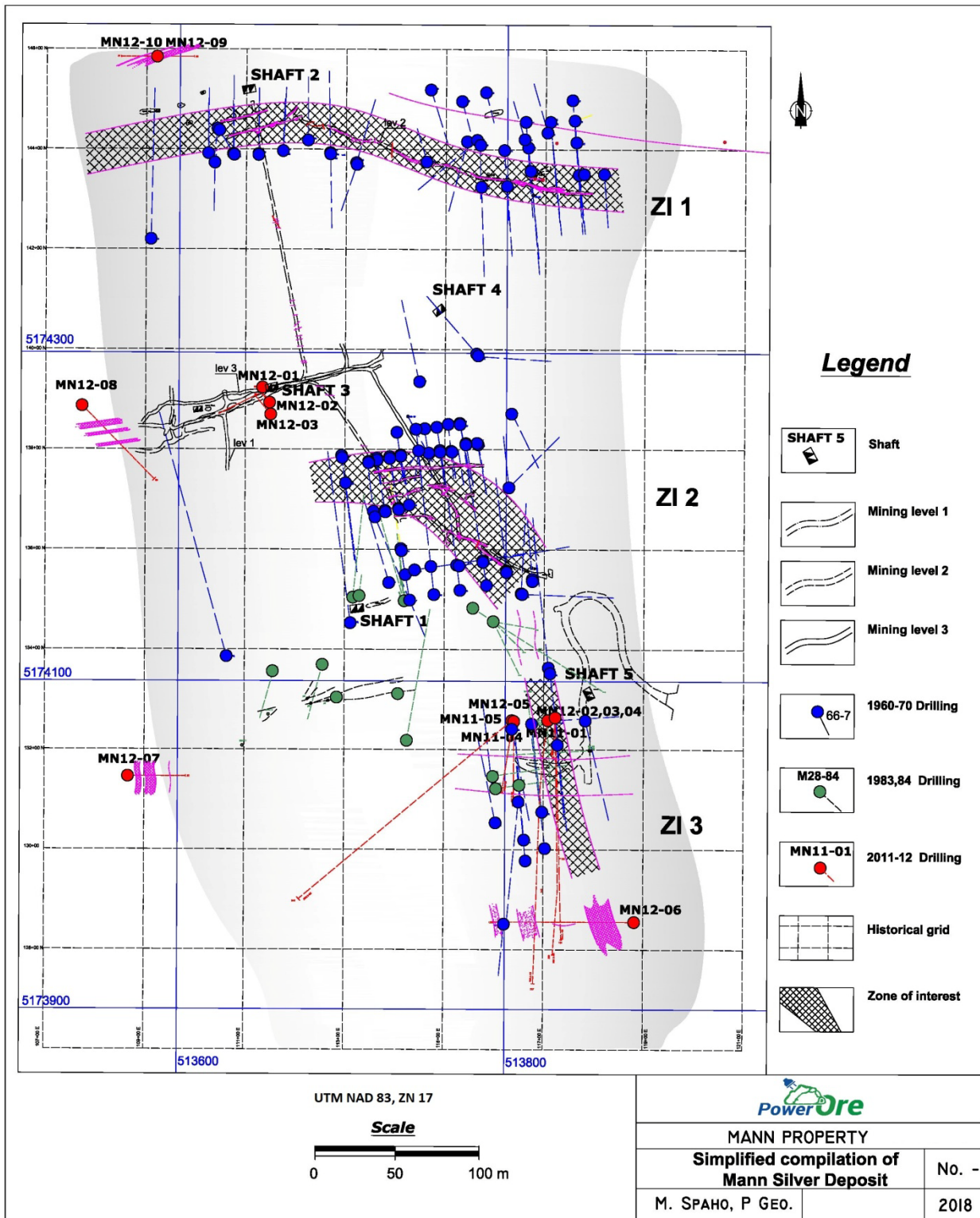


Figure 9-2: Compilation of Mann Silver Deposit.

## **10. DRILLING**

This section is not applicable for PowerOre Inc. as there is no exploration performed by PowerOre Inc and its spin-out parent Orefinders Resources Inc. However Creso Exploration Inc. carried out a diamond drilling during the fall and winter of 2011 and 2012 and the results are presented here.

### **10.1. CRESO DRILLING PROGRAM 2011 - 2012**

From November 2011 to March 2012, Creso Exploration Inc. drilled 15 diamond core drillholes totalling 1,458 metres. (Table 10-1), with an average depth of 97 metres. The purpose of this drilling program was to:

- To verify the historical mineralizations in the vicinity of Shafts 3 and 5.
- To verify some of the IP/Resistivity anomalies interpreted from the geophysical survey.

During the drilling program, M. Spaho and C. Albert were responsible for the supervision of drilling operations, logging the core, as well as sampling and reporting. The drilling contractor was Acklo Diamond Drilling Ltd. (Plate 10-1).

Drill holes MN11-01 to MN11-05 and MN12-04, MN12-05 were drilled south east of Shaft 5, to verify the mineralization of the "D" zone. The hole MN11-01 intersected two silver-rich intervals at 35.5 to 41.5 m and 50.2 to 55.2 m, with grades of 457.0 and 157.0 g/t silver over 6.0 and 5.0 metres, respectively. Also, at 112.9 m, the hole cut a 1.4 m quartz vein grading 1.12 % Cobalt. MN11-03 intersected from 35.85 to 48.7 m, an interval of 12.85 m with a grade 398.0 g/t silver (Figure 10-1, 10-2).

Around 10 m west of Shaft 3, holes MN12-01, MN12-02 and MN12-03 were drilled to depths of 29, 32 and 30 m, respectively. The holes intersected some low grade mineralized intervals. At 24 m hole MN12-03 intersected 0.6 m grading 4.04 g/t Au and 7.0 g/t Ag.

**MN12-06** was drilled to verify Anomaly 6. From 16.6 m to 38.3 m, the hole intersected an interval of 21.5 m grading 59.0 g/t Ag. In addition, at 81.0 m it intersected 0.9 m grading 1.93 g/t Au and 10 g/t Ag (Figure 10-3).

Table 10-1: Drill hole locations and statistics.

| No | Hole ID | LOCATION |           |           | Depth  | Dip    | Azimuth | Date of start | Date of finish |
|----|---------|----------|-----------|-----------|--------|--------|---------|---------------|----------------|
|    |         | Easting  | Northing  | Elevation | Meters | Degree | Degree  |               |                |
| 1  | MN11-01 | 513824.9 | 5274074.1 | 395.0     | 227.00 | 45     | 185     | Nov.02, 2011  | Nov. 06, 2011  |
| 2  | MN11-02 | 513832.5 | 5274077.1 | 395.0     | 194.00 | 45     | 174     | Nov. 07, 2011 | Nov. 16, 2011  |
| 3  | MN11-03 | 513832.5 | 5274077.1 | 395.0     | 209.00 | 45     | 179     | Nov. 11, 2011 | Dec. 19, 2011  |
| 4  | MN11-04 | 513805.3 | 5274075.8 | 391.0     | 74.00  | 45     | 180     | Nov. 17, 2011 | Nov. 19, 2011  |
| 5  | MN11-05 | 513805.3 | 5274075.8 | 391.0     | 245.00 | 45     | 235     | Nov. 20, 2011 | Nov. 25, 2011  |
| 6  | MN12-01 | 513651.0 | 5274278.9 | 400.1     | 29.00  | 80     | 180     | Jan. 07, 2012 | Jan. 11, 2012  |
| 7  | MN12-02 | 513655.3 | 5274269.7 | 399.2     | 32.00  | 70     | 320     | Feb. 17, 2012 | Feb. 17, 2012  |
| 8  | MN12-03 | 513656.0 | 5274262.4 | 399.3     | 30.00  | 60     | 320     | Feb. 18, 2012 | Feb. 18, 2012  |
| 9  | MN12-04 | 513832.2 | 5274079.9 | 395.2     | 32.00  | 45     | 183     | Feb. 19, 2012 | Feb. 19, 2012  |
| 10 | MN12-05 | 513805.7 | 5274077.6 | 391.0     | 62.00  | 45     | 189     | Feb. 21, 2012 | Feb. 22, 2012  |
| 11 | MN12-06 | 513879.0 | 5273953.3 | 386.2     | 122.00 | 45     | 270     | Feb. 23, 2012 | Feb. 27, 2012  |
| 12 | MN12-07 | 513569.6 | 5274041.8 | 389.7     | 50.00  | 45     | 90      | Feb. 29, 2012 | March 1, 2012  |
| 13 | MN12-08 | 513540.9 | 5274267.6 | 390.2     | 89.00  | 45     | 135     | March 3, 2012 | March 5, 2012  |
| 14 | MN12-09 | 513585.9 | 5274480.3 | 400.7     | 32.00  | 45     | 90      | March 6, 2012 | March 6, 2012  |
| 15 | MN12-10 | 513585.9 | 5274480.3 | 400.7     | 31.00  | 45     | 270     | March 6, 2012 | March 7, 2012  |



**Plate 10-1: 2011-2012 drilling program on Mann Property**

**MN12-07 and MN12-08** were drilled to verify Anomaly 5. MN12-07 intersected two mineralized intervals from 7.0 to 11.0 m and from 16.75 to 25.6 m grading respectively 43.0 and 21.0 g/t silver. MN12-08 intersected 5.6 m grading 26.0 g/t silver from 20.4 to 26.0 m, and 2.6 m grading 37.0 g/t Ag from 31.9 m to 34.5 m. (Figure 10-4) Both holes were drilled in Gowganda sediments.

**MN12-09 and MN12-10** were drilled to test the north part of Anomaly 1 and were drilled to a depth of 32.0 and 31.0 m, and with azimuths of 90 and 270 degrees, respectively. Both holes intercepted low grade silver mineralization.

#### **10.1.1. SURVEYING DRILL HOLE COLLARS AND SHAFTS**

All diamond drill holes prior to 2011 were collared based on the mining and cut property grids. Of the historical drill holes, only a few of the 1983-1988 drilling collars were found in the field. The available collars of historical drilling have not been

surveyed. However, the 5 shafts were surveyed with GPS, to correlate historical plans and to approximately locate historical drill holes (Table 10-2).

The shafts, as well as Creso drill hole collars, were surveyed using a Trimble GPS with an accuracy better than 1 m (Plate 10-2). The drill hole collars were referenced to UTM coordinate system, zone 17, using the NAD 83 datum. The elevation is referred to Mean Sea Level (MSL) with a vertical accuracy approximately 1.5 times the horizontal accuracy.

**Table 10-2: Mann Property Shaft Locations.**

| No | Object  | Easting  | Northing  | Elevation |
|----|---------|----------|-----------|-----------|
| 1  | Shaft 1 | 513709.2 | 5274144.2 | 398.1     |
| 2  | Shaft 2 | 513642   | 5274460.6 | 403.4     |
| 3  | Shaft 3 | 513656.7 | 5274278.9 | 400.4     |
| 4  | Shaft 4 | 513758.6 | 5274326.1 | 399.8     |
| 5  | Shaft 5 | 513850.9 | 5274092.4 | 396.3     |



**Plate 10-2: Drill hole collar surveyed during Creso drilling in 2012.**

**10.1.2. DOWN HOLE SURVEYING**

Down hole surveying was conducted with a Reflex Ez-Trac downhole instrument at intervals of 30-50 m. Holes with less than 30 m were not surveyed. Sometimes the readings of the azimuth were influenced by magnetic rocks and in such case the readings were excluded from the calculations of the survey trajectories of the drill holes.

In general the angular deviations of the drill holes have not been a problem on the property. There is generally a clockwise azimuth deflection, especially in holes over 200 m in length.

**10.1.3. SAMPLING**

The mineralized rock at the Mann Property are variously diabase, granophyre and sediments of the Gowganda formation, as well as variable altered and brecciated combinations of them.

The core was transported by drill personnel to the exploration camp at the Tyranite mine site. The core was laid out each morning and evening and geological staff performed a preliminary examination noting basic lithology and mineralization, and updating field sections (Plate 10-3). Core integrity was also examined to identify and resolve potential drilling discrepancies on a daily basis. The core was then photographed and Creso geologists logged the core in detail and examined it visually for the distribution of mineralization. Sampling interval were established by minimum and maximum sampling lengths, determined by geological and structural criteria. The minimum sampling length was 20 cm, while the maximum was 1.5 m. The typical sample length in most of the mineralized zones was from 0.7 to 1.0 metres.

Sample intervals were tagged in a procedure requiring the geologist to mark the start and end of each sample on the core with a grease pencil. The geologist transferred all sample intervals to a sample book, where each page in the book represent a unique number with two identical sample tags. One tag was placed in a plastic sample bag with the sample and the second was stapled in the core box beneath the representative half sample. During this procedure, the location for the insertion of standards and blanks into the sample sequence was noted. Samples were then cut along the length of the core (Plate 10-4).

Once examined, described and sampled, core was moved to an indoor long term storage facility, located on Tyranite mine site (Plate 10-5).

The Principal mineralized intersections for the Creso drill results are listed in Table 10-3.

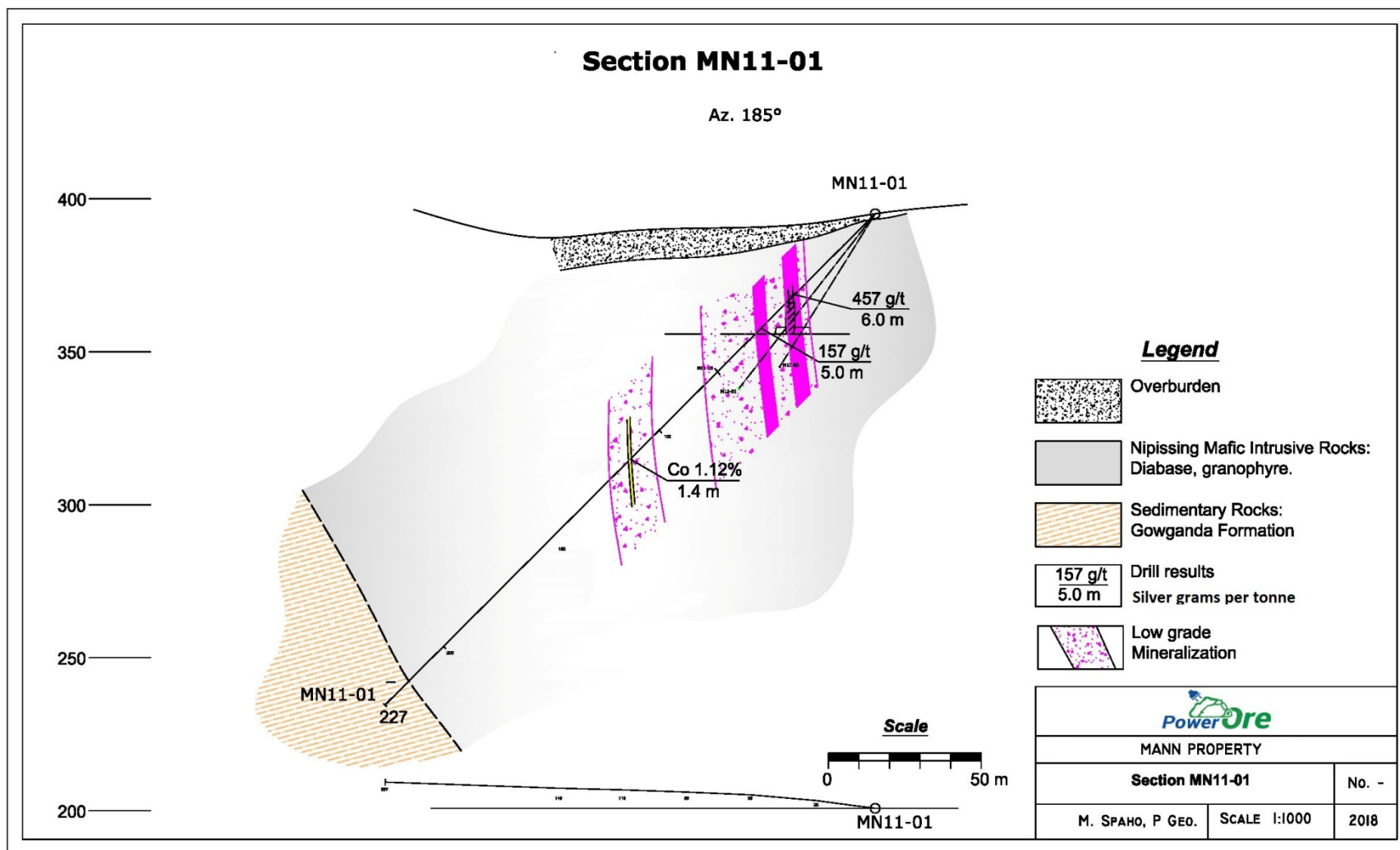


Figure 10-1: Section MN11-01. Results for significant silver and cobalt intersections.

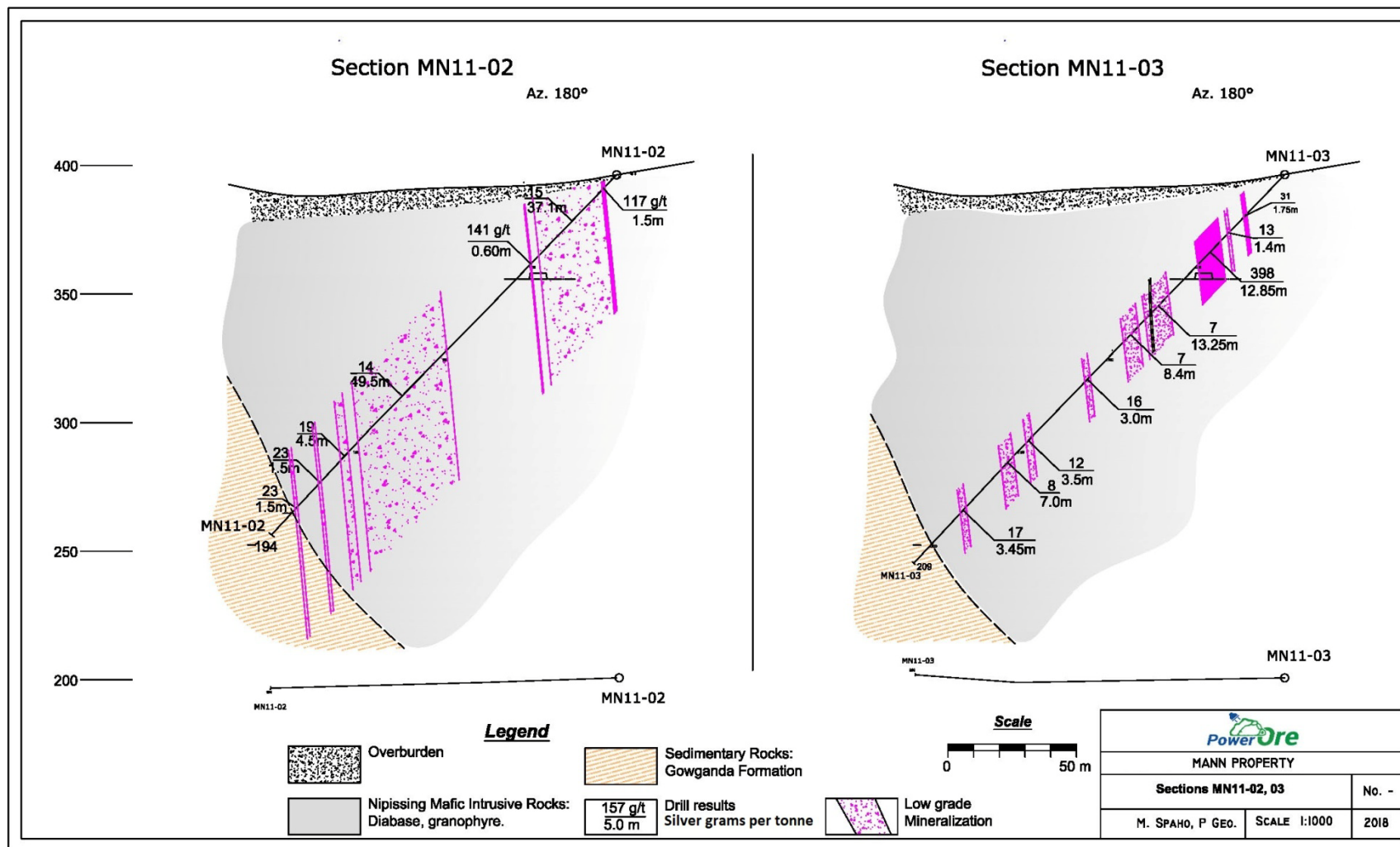


Figure 10-2: Sections MN11-02, MN11-03. Results for significant silver intersections.

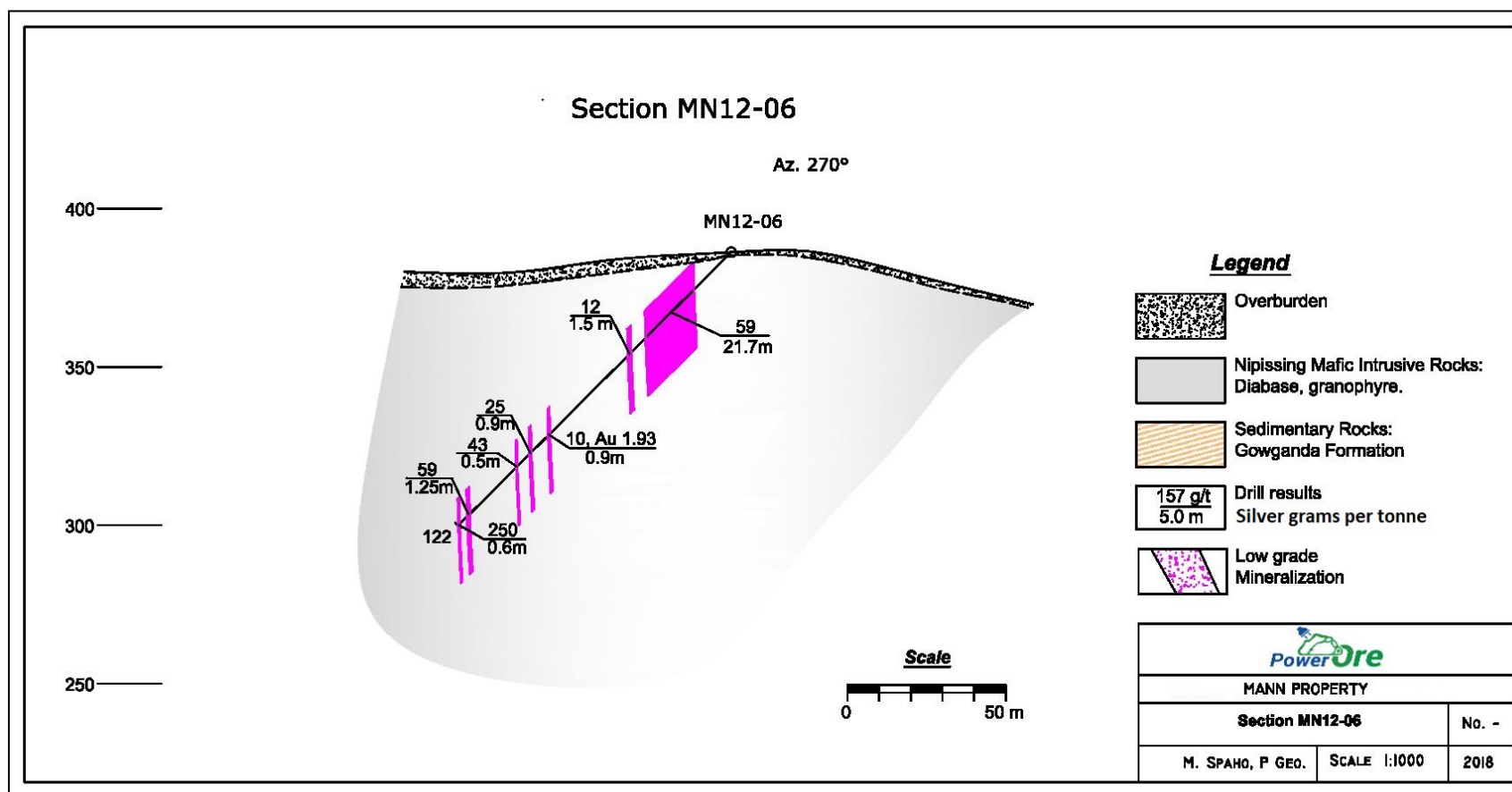


Figure 10-3: Section MN12-06. Results for significant silver intersections.

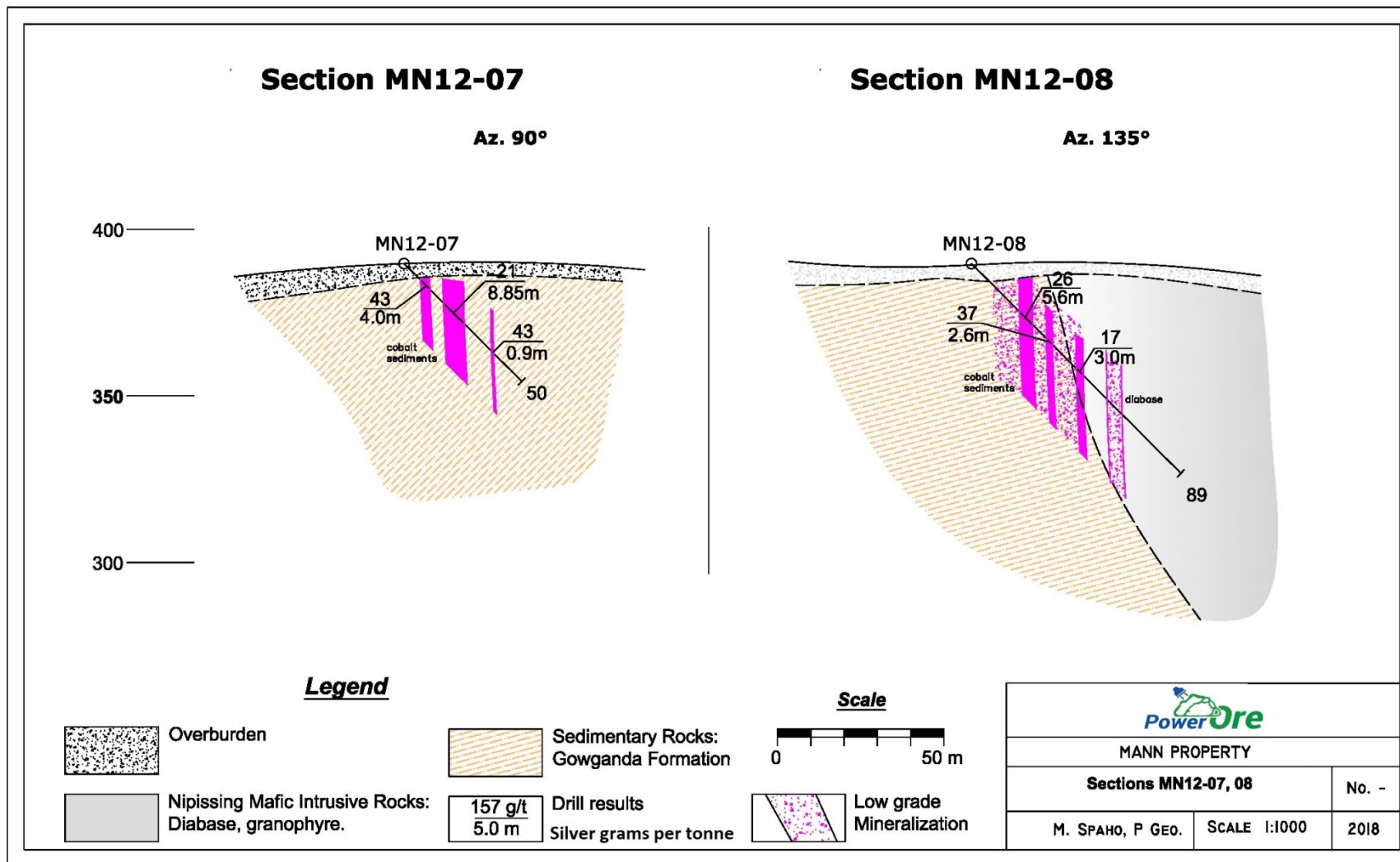


Figure 10-4: Sections MN12-07, 08.

Table 10-3: Summary of Diamond Drill Intersections.

| Drill Hole       | Cut off<br>g/t | From<br>m | To<br>m | Length<br>m | Ag<br>g/t | Au<br>g/t | Co<br>% |
|------------------|----------------|-----------|---------|-------------|-----------|-----------|---------|
| MN11-01          | 10             | 35.50     | 41.50   | 6.00        | 457       |           |         |
| <i>Including</i> |                | 37.00     | 38.00   | 1.00        | 1960      |           |         |
|                  |                | 50.20     | 55.20   | 5.00        | 157       |           |         |
| <i>Including</i> |                | 52.20     | 52.70   | 0.50        | 1210      |           |         |
|                  |                | 112.90    | 114.30  | 1.40        |           |           | 1.12    |
| MN11-02          | 5              | 6.50      | 43.60   | 37.10       | 15        |           |         |
|                  |                | 47.80     | 48.40   | 0.60        | 141       | 0.17      |         |
|                  |                | 95.00     | 144.50  | 49.50       | 14        |           |         |
|                  |                | 153.00    | 157.50  | 4.50        | 19        |           |         |
|                  |                | 161.40    | 162.90  | 1.50        | 23        |           |         |
|                  |                | 179.70    | 181.20  | 1.50        | 23        |           |         |
| MN11-03          | 10             | 21.25     | 23.00   | 1.75        | 31        |           |         |
|                  |                | 35.85     | 48.70   | 12.85       | 398       |           |         |
| <i>Including</i> |                | 35.85     | 41.00   | 5.15        | 979       |           |         |
|                  | 5              | 65.00     | 78.25   | 13.25       | 7         |           |         |
|                  |                | 82.00     | 90.40   | 8.40        | 7         |           |         |
|                  |                | 109.00    | 112.00  | 3.00        | 16        |           |         |
|                  |                | 141.50    | 145.00  | 3.50        | 12        |           |         |
|                  |                | 152.00    | 159.00  | 7.00        | 8         |           |         |
|                  |                | 179.00    | 182.45  | 3.45        | 17        |           |         |
| MN11-04          | 10             | 33.50     | 36.40   | 2.90        | 145       |           |         |
| <i>Including</i> |                | 35.40     | 35.80   | 0.40        | 955       |           |         |
|                  |                | 48.00     | 50.00   | 2.00        | 15        |           |         |
|                  |                | 57.60     | 59.25   | 1.65        | 22        |           |         |
| MN11-05          | 5              | 7.00      | 14.00   | 7.00        | 8         |           |         |
|                  |                | 30.50     | 44.10   | 13.60       | 10        |           |         |
|                  |                | 53.80     | 62.80   | 9.00        | 9         |           |         |
|                  |                | 69.50     | 72.00   | 2.50        | 20        |           |         |
|                  |                | 78.00     | 82.50   | 4.50        | 9         |           |         |
|                  |                | 87.00     | 90.00   | 3.00        | 21        |           |         |
|                  |                | 125.60    | 127.30  | 1.70        | 15        |           |         |
|                  |                | 196.60    | 204.00  | 7.40        | 14        |           |         |

| Drill Hole       | Cut off<br>g/t | From   | To     | Length | Ag             | Au   | Co |
|------------------|----------------|--------|--------|--------|----------------|------|----|
|                  |                | m      | m      | m      | g/t            | g/t  | %  |
| MN12-01          | 5              | 12.00  | 16.00  | 4.00   | 22             |      |    |
|                  |                | 24.00  | 25.00  | 1.00   | 28             |      |    |
| MN12-02          | 10             | 5.70   | 6.95   | 1.25   | 33             |      |    |
|                  |                | 15.30  | 19.40  | 4.10   | 19             |      |    |
|                  |                | 23.80  | 24.60  | 0.80   | 31             |      |    |
|                  |                | 26.60  | 27.10  | 0.50   | 30             | 0.66 |    |
| MN12-03          |                | 15.00  | 16.00  | 1.00   | 50             |      |    |
|                  |                | 24.00  | 24.60  | 0.60   | 7              | 4.04 |    |
| MN12-04          |                | 24.75  | 32.00  |        | Low grade zone |      |    |
| MN12-05          | 10             | 35.40  | 58.00  | 21.50  | 16             |      |    |
| MN12-06          | 10             | 16.60  | 38.30  | 21.70  | 59             | 1.93 |    |
| <i>Including</i> |                | 23.30  | 24.70  | 1.40   | 695            |      |    |
|                  |                | 81.00  | 81.90  | 0.90   | 10             |      |    |
|                  |                | 95.50  | 96.00  | 0.50   | 43             |      |    |
|                  |                | 116.80 | 118.05 | 1.25   | 59             |      |    |
|                  |                | 121.40 | 122.00 | 0.60   | 250            |      |    |
| MN12-07          | 10             | 7.00   | 11.00  | 4.00   | 43             |      |    |
|                  |                | 16.75  | 25.60  | 8.85   | 21             |      |    |
|                  |                | 37.10  | 38.00  | 0.90   | 43             |      |    |
| MN12-08          |                | 20.40  | 26.00  | 5.60   | 26             |      |    |
|                  |                | 31.90  | 34.50  | 2.60   | 37             |      |    |
|                  |                | 44.60  | 47.60  | 3.00   | 17             |      |    |
| MN12-09          | 10             | 3.00   | 10.85  | 7.85   | 11             |      |    |
| MN12-10          | 10             | 3.00   | 4.80   | 1.80   | 29             |      |    |
|                  |                | 12.60  | 14.00  | 1.40   | 29             |      |    |

Because of limited number of drill holes, the relation between sample length and true thickness of the mineralization is unknown.

SMEC is not aware of any drilling, sampling or core recovery factor that could materially impact the accuracy and reliability of results.



**Plate 10-3: Creso core logging facility at Tyranite Mine.**

Silver and gold-bearing certified reference materials or standards and the argillaceous limestone blanks were alternately inserted into the sample sequence at an interval of one standard or blank for every twenty to thirty samples.

Half of the sawn core, standards, and blanks were tagged and sealed in plastic bags, which were put into rice bags and sealed with security tags. The sealed rice bags were shipped to the Lab, or picked up by lab personnel.



Plate 10-4: Tyranite core cutting facility.



Plate 10-5: Creso core storage facility at Tyranite Mine.

## **11. SAMPLE PREPARATION, ANALYSES AND SECURITY**

PowerOre Inc. has not carried out any exploration to date on the property. However the previous operator did explore the property and the following is a review of the protocols executed by Creso as implemented and supervised by the author.

### **11.1. CRESO SAMPLE PREPARATION, ANALYSES AND SECURITY**

Bags of samples for assay were delivered by Creso personnel to ALS Minerals and AGAT preparation facilities in Sudbury.

ALS Canada which is a part of ALS Group, is accredited by the Standards Council of Canada and Canadian Association for Laboratory Accreditation Inc. for specific tests. ALS laboratories in North America are accredited to the ISO 17025:2005 and ISO 150 9001:2008. Sudbury branch laboratory is individually certified to standards within ISO 9001:2008.

AGAT Laboratories is accredited for specific analyses by the following agencies: a) The standards Council of Canada, b) Canadian Association for Laboratory Accreditation and c) Canadian Council of Ministers of the Environment. Also, The AGAT Laboratories is accredited to International Standards Organization ISO 9001:2008 and International Standards Organization ISO/IEC 17025:2005.

Sample preparation includes drying and weighing samples and logging the sample numbers into a sample tracking program. All of the sample is crushed to 70% plus 2 mm with a 250 gm split taken for pulverization to 80-85 % passing a 150 mesh screen. Primary analysis used a 30 gm sample with fire assay, Ag ore grade, Gravimetric finish (method code 202066). The gold was analysed using fire assays- Trace Au, ICP-OES finish (method code 202052).

#### **11.1.1. SECURITY**

Security measures that were taken to ensure the validity and integrity of the samples collected included:

- Chain of custody of drill core from the drill site to the core logging area.
- Core facility and office were kept locked when not in use.
- Core sampling was undertaken by Creso employees under the supervision of geologists.
- Core was shipped to the laboratories by Creso employees or was picked up by AGAT laboratory.

**11.1.2. QUALITY ASSURANCE AND QUALITY CONTROL**

A total of 1,315 samples from 15 holes were sawn and submitted for assay by Creso. In addition to these samples, 26 blanks, and 24 reference standards were submitted, representing approximately 4% of the samples submitted. All samples were analysed for Silver and Gold. A number of them were also analysed and for Cobalt.

Four Certified Reference Materials (CRMs), or standards, were utilized by Creso in the Mann Project, and 24 standards were inserted into the sample series. Field blanks consist of argillaceous limestone blanks.

**11.1.3. CERTIFIED REFERENCE MATERIALS**

CRMs were employed by Creso an appropriate range of grades and mineralization styles that may be expected in their drilling. CRMs are inserted at the rate of one high grade and one low grade standard per 50 samples.

SMEC has compiled and plotted the deviations of the assays of CRMs samples CDN-ME-5, CDN-ME-9, CDN-GS-4B and CDN-GS-1H (Tables 11-1, 11-2, and 11-3, and Figures 11-1 and 11-2).

The table and the plotted graphics showing a deviation of the majority of silver values in range from - 38 to +13 g/t. Exception here is the sample E5253396 with a deviation of -90 g/t Ag. It could be a Lab error and the sample was excluded from the calculation of standard deviation. Calculated standard deviation of CRMs CDN-ME-5, which represent better the grade of the Mann deposit, is given in Table 11-2. The Relative Standard Deviation (%RSD) is 4.3 %. Referred CDN Laboratories Inc., which prepared these standards, define certified standards with an RSD of near or less than +/-5 %.

**11.1.4. BLANKS**

During the drilling programs Creso has sent 26 blank samples to the laboratories (Table 11-3). The performance of the blank material is within expected limits. The assays are under or near 5 grams per ton silver, which was the lower detection limit of the lab. The format of reporting assays that was < 5 pmm, does not allow us to plot these blank samples.

SMEC is of the opinion that the accuracy and precision of assay data generated by ALS Laboratories and AGAT Laboratories in 2012 is credible and meet standard industry practice and meet the requirements of the project.

Table 11-1: Deviation of CRMs samples.

| No. | No. Drill Hole | Sample No. | Standard  | Ag grade Standard | Ag grade samples | Deviation |
|-----|----------------|------------|-----------|-------------------|------------------|-----------|
|     |                |            |           | g/t               | g/t              |           |
| 1   | MN11-01        | L903072    | CDN-ME-5  | 206               | 182              | -24       |
| 2   |                | L903098    | CDN-ME-5  | 206               | 198              | -8        |
| 3   |                | L902029    | CDN-ME-5  | 206               | 205              | -1        |
| 4   |                | L900393    | CDN-ME-5  | 206               | 203              | -3        |
| 5   | MN11-02        | L900439    | CDN-ME-5  | 206               | 213              | 7         |
| 6   |                | L900475    | CDN-ME-5  | 206               | 194              | -12       |
| 8   | MN11-03        | L903130    | CDN-ME-5  | 206               | 208              | 2         |
| 9   |                | L903180    | CDN-ME-5  | 206               | 199              | -7        |
| 10  |                | E5254626   | CDN-ME-5  | 206               | 199              | -7        |
| 11  |                | E5254770   | CDN-ME-9  |                   |                  | 0         |
| 12  | MN11-04        | L903215    | CDN-ME-5  | 206               | 168              | -38       |
| 13  | MN11-05        | E5254133   | CND-GS-1H |                   |                  | 0         |
| 14  |                | E5254203   | CND-GS-4B |                   |                  | 0         |
| 15  | MN12-02        | E5254840   | CDN-ME-5  | 206               | 203              | -3        |
| 16  | MN12-03        | E5254871   | CDN-ME-9  |                   |                  | 0         |
| 17  | MN12-04        | E5254908   | CDN-ME-5  | 206               | 219              | 13        |
| 18  | MN12-05        | E5253266   | CDN-ME-5  | 206               | 205              | -1        |
| 19  | MN12-06        | E5253322   | CDN-ME-9  |                   |                  | 0         |
| 20  |                | E5253391   | CDN-ME-5  | 206               | 211              | 5         |
| 21  | MN12-07        | E5254959   | CDN-ME-9  |                   |                  | 0         |
| 22  | MN12-08        | E5255048   | CDN-ME-5  | 206               | 197              | -9        |
| 23  | MN12-09        | E5252586   | CDN-ME-9  |                   |                  | 0         |
| 24  | MN12-10        | E5253396   | CDN-ME-5  | 206               | 116              | -90       |

Table 11-2: Standard deviation of CRMs samples CDN-ME-5.

| No. | No. Drill Hole | Sample No. | Standard | Ag grade Standard | Ag grade samples | Deviation |
|-----|----------------|------------|----------|-------------------|------------------|-----------|
|     |                |            |          | g/t               | g/t              |           |
| 1   | MN11-01        | L903072    | CDN-ME-5 | 206               | 182              | 24        |
| 2   |                | L903098    | CDN-ME-5 | 206               | 198              | 8         |
| 3   |                | L902029    | CDN-ME-5 | 206               | 205              | 1         |
| 4   |                | L900393    | CDN-ME-5 | 206               | 203              | 3         |
| 5   | MN11-02        | L900439    | CDN-ME-5 | 206               | 213              | -7        |
| 6   |                | L900475    | CDN-ME-5 | 206               | 194              | 12        |
| 7   | MN11-03        | L903130    | CDN-ME-5 | 206               | 208              | -2        |
| 8   |                | L903180    | CDN-ME-5 | 206               | 199              | 7         |
| 9   |                | E5254626   | CDN-ME-5 | 206               | 199              | 7         |
| 10  | MN12-02        | E5254840   | CDN-ME-5 | 206               | 203              | 3         |
| 11  | MN12-04        | E5254908   | CDN-ME-5 | 206               | 219              | -13       |
| 12  | MN12-05        | E5253266   | CDN-ME-5 | 206               | 205              | 1         |
| 13  |                | E5253391   | CDN-ME-5 | 206               | 211              | -5        |
| 14  | MN12-08        | E5255048   | CDN-ME-5 | 206               | 197              | 9         |
|     |                |            |          | Mean              | 202.571          |           |
|     |                |            |          | Std. Dvn          | 8.724            |           |
|     |                |            |          | %RSD              | 4.306            |           |

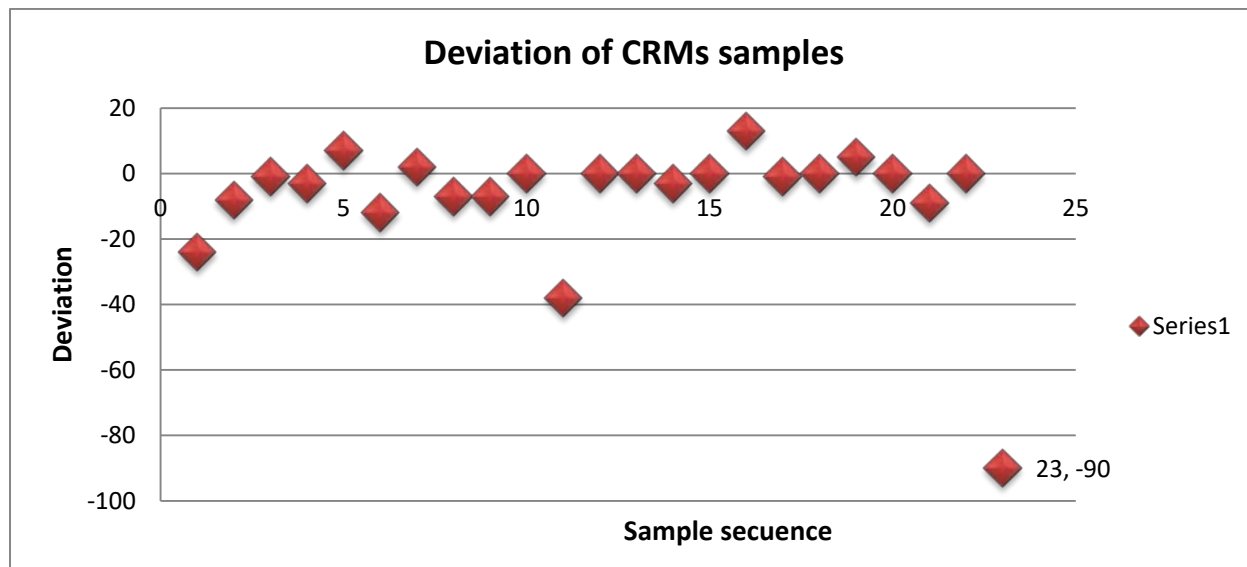


Figure 11-1: Deviation of CRMs samples.

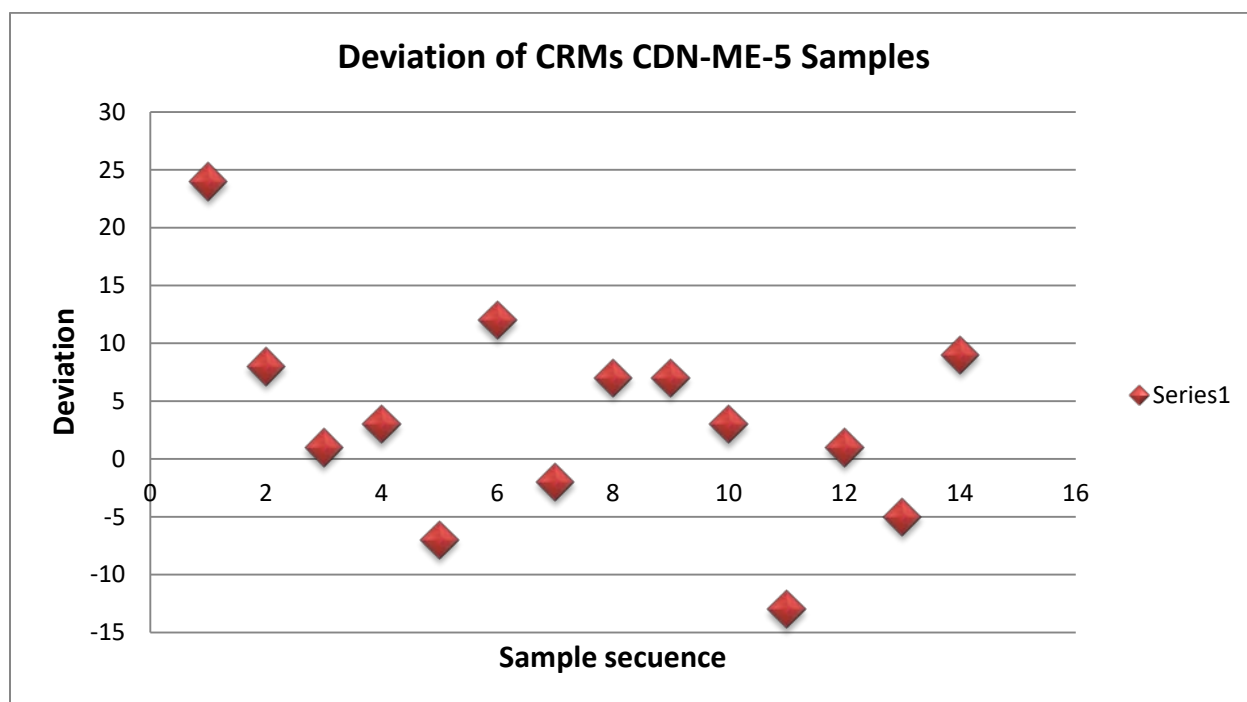


Figure 11-2: Deviation of CRMs CDN-ME-5.

Table 11-3: Assay Results for Blanks.

| No. | No. Drill Hole | Sample No. | Ag grade | Deviation |
|-----|----------------|------------|----------|-----------|
|     |                |            | g/t      |           |
| 1   | MN11-01        | L903077    | <5       |           |
| 2   |                | L903115    | <5       |           |
| 3   |                | L902005    | <5       |           |
| 4   |                | L902018    | <5       |           |
| 5   |                | L902051    | <5       |           |
| 6   | MN11-02        | L900411    | 6        |           |
| 7   |                | L900445    | <5       |           |
| 8   |                | L900550    | <5       |           |
| 9   | MN11-03        | L903142    | <0.5     |           |
| 10  |                | L903185    | <0.5     |           |
| 11  |                | E5254659   | 5        |           |
| 12  |                | E5254771   | <5       |           |
| 13  | MN11-04        | L903243    | 6        |           |
| 14  | MN11-05        | L900594    | <5       |           |
| 15  |                | E5254120   | <5       |           |
| 16  |                | E5254189   | <5       |           |
| 17  | MN12-02        | E5254841   | < 5      |           |
| 18  | MN12-03        | E5254872   | < 5      |           |
| 19  | MN12-04        | E5254909   | < 5      |           |
| 20  | MN12-05        | E5253267   | < 5      |           |
| 21  | MN12-06        | E5253323   | <5       |           |
| 22  |                | E5253392   | <5       |           |
| 23  | MN12-07        | E5254960   | <5       |           |
| 24  | MN12-08        | E5255049   | <5       |           |
| 25  | MN12-09        | E5252587   | <5       |           |
| 26  | MN12-10        | E5253397   | <5       |           |

## **12. DATA VERIFICATION**

Since PowerOre has not conducted any exploration on the Mann Property to date, there is no requirement to undertake any data verification beyond the verification sampling and analyses that was done on the core stored at the Tyrannite Mine. However SMEC did have access to the results of the complete dataset for the exploration performed by Creso, the previous owner and SMEC conducted data verification procedures on this data.

Data verification by SMEC for the Mann Property included a site visit, review of the historical documents, study of geological reports and drill hole database check.

Creso Exploration Inc. used Datashed software for drill hole database management. The drill hole database contained collar, assay, lithology, recovery, mineralization, alteration, structural, and density information.

SMEC performed routine database validation checks specific to verify the integrity of the database records. SMEC also performed visual drill hole trace inspection and checks on extreme and zero assay values, reviewed intervals not sampled or missing, and checked for over-lapping intervals.

SMEC is of the opinion that the drill hole database from the Creso drilling complies with industry standards.

The author of this report carried out a site visit on February 12-15, 2017. During the site visit drill core and logs from several drill holes of the property were located in the Tyrannite Mine core storage facility were reviewed. Several samples were taken from Mann drill holes and were sent to AGAT laboratory for analysis (Table 12-1). A standard was inserted into the batch and the results of Oreas-504b, which has a published value of 3.07 g/t Ag, returned a value that is consistent with the standard at 3.8 g/t Ag.

The results of these samples show significant discrepancies compared with the assays of the 2011-2012 drilling program. This difference in results is explained by one or more of the following reasons:

1. These samples are collected 6 years later with considerable movement of samples in the original core boxes in the intervening years and, as a result, the original from-to intervals could not be determined exactly.
2. Part of the core is missing from some intervals. The best mineralization were removed for marketing reasons or microelement analysis. There were some sampling notes in the boxes to this effect.

3. The high grade of some of the mineralized intervals creates high variability similar to a nugget-effect and as such the assay results from the remaining half of the core can vary by a significant amount.

It is worth mentioning that the higher values in the original assays correspond the higher values in the verification sampling and although in all samples the results were lower than the original values, as explained above, the standard itself returned a slightly higher result than the published value albeit not within the range of the sample results. SMEC is of the opinion that silver grades of the samples taken during the site visit confirm that high grade silver mineralization is present on the Mann Property even though the verification sampling showed significant discrepancies with original results. It is clear that the core storage procedures need to be improved to ensure that for future drilling campaigns the high grade intervals of core return more consistent results during resampling of the core.

Table 12-1: Sample taken during site visit, from Mann drill holes.

| Deposit | Hole ID  | Creso sample         | Sample No. | From  | To     | Width | Creso Ag g/t | Ag g/t |
|---------|----------|----------------------|------------|-------|--------|-------|--------------|--------|
| Mann    | MN11-01  | L903014              | 9151       | 37.30 | 38.00  | 0.70  | 1805         | 939    |
|         |          | L902020              | 9152       | 37.00 | 37.30  | 0.30  | 2320         | 1720   |
|         |          | L902028              | 9153       | 52.20 | 52.70  | 0.50  | 1210         | 742    |
|         | MN11-03  | L903171              | 9154       | 35.85 | 36.50  | 0.65  | 1480         | 648    |
|         | MN12-06  | E5253288             | 9155       | 23.30 | 24.70  | 1.40  | 695          | 46.2   |
|         |          |                      |            | 121.4 |        |       |              |        |
|         |          | E5253390             | 9156       | 0     | 122.00 | 0.60  | 250          | 6.8    |
|         | Standard | Oreas 504 B 3.07 g/t | 9164       |       |        |       |              | 3.8    |

## **13. MINERAL PROCESSING AND METALLURGICAL TESTING**

This section is not applicable to the current report.

## **14. MINERAL RESOURCE ESTIMATES**

This section is not applicable to the current report. There are no mineral resources estimates for the Mann Property.

## **15. MINERAL RESERVE ESTIMATES**

This section is not applicable to the current report. There are no mineral reserves estimates for the Mann Property.

## **16. MINING METHODS**

This section is not applicable to the current report.

## **17. RECOVERY METHODS**

This section is not applicable to the current report.

## **18. PROJECT INFRASTRUCTURE**

This section is not applicable to the current report.

## **19. MARKET STUDIES AND CONTRACTS**

This section is not applicable to the current report.

## **20. ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL OR COMMUNITY IMPACT**

This section is not applicable to the current report.

## **21. CAPITAL AND OPERATING COSTS**

This section is not applicable to the current report.

## **22. ECONOMIC ANALYSIS**

This section is not applicable to the current report.

## 23. ADJACENT PROPERTIES

The silver potential of the Gowganda area was recognized during 1908-1920's and almost all of the silver deposits were discovered during this period. Most of the known occurrences are hosted by Nipissing Diabase and less commonly by Gowganda Formation and metavolcanics. From 1908 to 1969, Van Hise, Haultain, Milner and Nicol Townships have produced 60,186,782 oz. silver and 1,318,754 pounds of cobalt (McIlwaine 1978). Note that this information is not necessarily indicative of mineralization on the Mann Property that is the subject of this technical report.

The Mann Property is surrounded by claims of **Battery Mineral Resources Ltd.** Just 1-3 km south of Mann Mine, are several shafts and historical mines, which have been part of the Mann Property in the past.

**Reeve Dobie Mine.** Is located between Reeve and Dobie Lakes. The main work was from two shafts and an adit. From these workings a total of 88,584 ounces of silver has been produced. During the same period as the exploratory diamond drilling was done at the Mann Mine, Zenmac Metal Mines Ltd drilled numerous drill holes in the vicinity of the Reeve Dobie (McIlwaine 1978).

**Bartlett Mine.** Most of the Bartlett production was from open-cut. During 1918-1940 the mine produced 20,219 ounces of silver and 18 pounds of cobalt. Bartlett No. 1 shaft was put down in early days and is just north-west of the Bartlett open-cut (McIlwaine 1978).

**South Bay and O'Brien.** These old mines are located just east of a small lake west of the Gowganda Lake. A shaft was sunk to a depth of 100 feet. In addition to the shaft, several large open-cuts were made on veins (McIlwaine 1978).

**The Castle silver property** is located in Haultain and Nicol Townships and is owned by Takara Resources Inc. During the period of 1919-1989 the mine produced 9,502,374 ounces silver and 299,847 pounds cobalt (Duplessis C., 2015)

**The Miller Lake O'Brien mine** included a group of claims located northwest of Miller Lake. During the period of 1910-1969 the mine produced 40,736,585 ounces silver and 785,700 pounds of cobalt (Duplessis C., 2015).

The information on the adjacent properties represents historical information and has not been verified by a Qualified Person. **The information is not necessarily indicative of mineralization on the property that is the subject of this Technical Report.**

## **24. OTHER RELEVANT DATA AND INFORMATION**

No additional information or explanation is necessary to make this Technical Report understandable and not misleading.

## **25. INTERPRETATIONS AND CONCLUSIONS**

The Mann Property is located in the Gowganda area, where over 60 million ounces of silver and over 1.3 million pounds of cobalt were produced.

The Property is underlain by rocks of the Gowganda Formation, consisting of clastic sedimentary rocks of the Coleman Member. These sediments are intruded by Nipissing Diabase and by the Matachewan diabase swarm. Most of the known occurrences are hosted by Nipissing Diabase and less commonly by Gowganda Formation. The mineralization occurs in vertical to steeply dipping calcite and quartz-calcite veins.

SMEC is of the opinion that silver mineralized veins are not restricted only in Nipissing Diabase, but veining can and does occur in sediments of the Gowganda Formation. The mineralization is controlled by faults, predominantly Easterly striking, but also Northerly striking. Those faults cut both Nipissing diabase and sediments of Gowganda Formation.

SMEC has reviewed property geology, exploration and drilling methods and results, sampling method and approach, sample and data handling, and has completed verification of the data for the drilling programs during 2011-2012. SMEC offers the following conclusions and opinions:

- Sampling procedures by Creso were done in accordance with accepted industry standards and practices.
- SMEC agrees with adequacy of the Creso samples taken, with Creso QA/QC program, with the security of the shipping procedures, and with the sample preparation and analytical procedures used.
- SMEC is of the opinion that the accuracy and precision of assay data generated for Creso during 2011-2012 exploration program, is credible and meet standard industry practice and meet project requirements. Discrepancies in analytical

results between the original Creso sampling and the results from verification sampling are explained mainly by narrow high grade intervals and removal of some selected pieces from the boxes but that original results were subjected to full quality control procedures and were validated at the time by the author.

- SMEC is of the opinion that Mann Property database is valid and acceptable for supporting further exploration programs.
- SMEC is of the opinion that the sampling procedures during the earlier phases of exploration (i.e. pre Creso) and mining between 1908 and 1974, was extremely selective. In general the only sampled zones were those with carbonate veins.

An IP/Resistivity survey performed during the 2011-2012 exploration program, was successful, in highlighting silver mineralization associated with altered pyritic zones. However, because the survey lines were oriented east-west, the IP/Resistivity anomalies could only be interpreted along north-south profiles whereas the majority of the veins at the Mann Property are predominantly Easterly striking.

SMEC has defined three zones of interest, ZI1, ZI2 and ZI3, where further drilling should be concentrated.

SMEC is not aware of any risks or uncertainties not discussed above that could affect the reliability or confidence in the exploration information reviewed for this report.

## **26. RECOMMENDATIONS**

SMEC makes the following recommendations for the Mann Property:

- A shallow drilling program on the Mann Property, should focus on three zones of Interest, to verify the historical resources, and possibly extend them.
- A geological mapping program is recommended, that will include lithology, structure, mineralization and the locations of the historical shafts and other historical work on the property to better relate the surface geology with the Creso and older drilling.
- Conduct a LIDAR survey in order to generate a detailed surface topographic map on the property at a scale of 1:2,500 or 1:5,000.
- Establish a regular cut grid on a 50 metre line spacing.
- It is recommended that PowerOre Inc performs a north-south oriented IP/Resistivity survey to better define the Easterly trending vein structures.

The work recommended by SMEC is estimated to cost \$ 405,000, including approximately 10% contingency (Table 26-1).

**Table 26-1: Mann Property proposed exploration budget.**

| <b>Activity</b>                    | <b>Num Units</b> | <b>Units</b>     | <b>Unit cost</b> | <b>Cost</b>          |
|------------------------------------|------------------|------------------|------------------|----------------------|
| Geology Compilation                | 12               | kms              | \$ 500.00        | \$ 6,000.00          |
| IP/Resistivity survey              | 10               | Line kms         | \$ 3,000.00      | \$ 30,000.00         |
| Geological compilation and mapping | 20               | man days         | \$ 650.00        | \$ 13,000.00         |
| LIDAR Survey                       | 8                | kms <sup>2</sup> | \$ 625.00        | \$ 5,000.00          |
| Diamond drilling                   | 1500             | metres           | \$ 140.00        | \$ 210,000.00        |
| Assaying                           | 700              | samples          | \$ 45.00         | \$ 31,500.00         |
| Technical Support                  | 30               | man days         | \$ 400.00        | \$ 12,000.00         |
| Geologist                          | 30               | man days         | \$ 650.00        | \$ 19,500.00         |
| Site preparation, plowing          |                  |                  |                  | \$ 4,500.00          |
| Travel, camp and meals             |                  |                  |                  | \$ 13,000.00         |
| Site management, supplies          |                  |                  |                  | \$ 10,000.00         |
| Report update and filing           |                  |                  |                  | \$ 14,000.00         |
| Contingency 10%                    |                  |                  |                  | \$ 36,500.00         |
| <b>Total Budget</b>                |                  |                  |                  | <b>\$ 405,000.00</b> |

## 27. REFERENCES

Amador Gold Corp. 2007, Magnetometer and VLF-EM survey over Milner Property, Milner Township, Ontario

Andrews, A. J., Owsjacki L, Kerrich R, and Strong D. F. 1986 The silver deposits at Cobalt and Gowganda, Ontario. I: Geology, petrography, and whole-rock geochemistry. Canadian Journal of Earth Sciences, 1986, 23(10): 1480-1506

Ayer J.A., Trowell N.F., Josey S., Nevills M. and Valade L. 2003. Geological compilation of the Matachewan area, Abitibi greenstone belt; Ontario Geological Survey, Preliminary Map P.3527, scale 1:100000.

Ayer, J.A., Barrett, T.J., Creaser, R.A., Hamilton, M.A., Lafrance, B. and Stott, G.M. 2013. Section 1: Shining Tree and Gowganda Archean gold study and northern Cobalt Embayment proterozoic vein study; report *in* Results from the Shining Tree, Chester Township and Matachewan Gold Projects and the Northern Cobalt Embayment Polymetallic Vein Project, Ontario Geological Survey, Miscellaneous Release—Data 294

Carter M.W., 1977, Geology of MacMurchy and Tyrrell Twps., Districts of Sudbury and Timiskaming, Ont Geol. Surv., Report 152, Map 2365 Scale 1:31,680

Carter M.W. 1983, Geology of Shining Tree Area. Districts of Sudbury and Timiskaming, Ont Div. Mines, Report 240, Map 2510 Scale 1:50,000

Carter M.W. 1983, Geology of Natal and Knight Twps. Districts of Sudbury and Timiskaming, Ont Div. Mines, Report 152, Map 2465 Scale 1:31,680

Collins, W.H., 1913. The geology of Gowganda Mining Division.

Conrod, D.M. 1989: Petrology and Geochemistry of the Duncan Lake, Beaton Bay, Milner Lake, and Miller Lake Nipissing Intrusions within the Gowganda Area. Ontario Geological Survey, Open File Report 5701

Cunningham, L.J., 1985 Manridge Exploration Ltd, report 41P10NW0101.

Cunningham, L.J., 1987 Manridge Exploration Ltd, report

Cunningham, L.J., 1988 Manridge Exploration Ltd, report

Duplessis C., 2015 Takara Resources Inc., Castle Silver Property, Gowganda, Ontario, Canada. Technical Report NI43-101

Geotech Ltd., 2008 Report on a helicopter-borne versatile time domain electromagnetic (VTEM) geophysical survey, Milner block, Ontario, Canada. For Klondike Silver Corp

Johns G.W., 2003, Precambrian geology, Shining Tree area, Ontario Geological Survey, Preliminary Map P.3521, scale 1:50000.

Harron G.A., 2012, Technical Report on the Shining Tree Project, Tyrell and Knight Townships, Larder Lake Mining Division, Ontario, for Creso Exploration Inc.

Hester, B.W., 1967 Geology of the Silver Deposits near Miller Lake, Gowganda. The Canadian mining and metallurgical bulletin. Volume LXX, 1967.

Heather K.B., 1998. New insights on the stratigraphy and structural geology of the southwestern Abitibi greenstone belt: Implications for the tectonic evolution and setting of mineral deposits in the Superior Province, in the first age of giant ore formation; stratigraphy, tectonics and mineralization in the Late Archean and Early Proterozoic. Papers presented at the PDAC, pp 63-101.

Insight Geophysics Inc., 2012 Geophysical survey interpretation report, Manridge project, for Creso Exploration Inc.

Robinson, D., 2008 Report on diamond drilling, Milner property, for Klondike Silver Corp.

Manridge Explorations Ltd., 1983, 1984 Diamond drilling program, Milner Twsh., Gowganda Silver Property.

McIlwaine, W.H. 1978: Geology of the Gowganda Lake - Miller Lake Silver Area, District of Timiskaming; Ontario Geological Survey Report 175, 161 p. Accompanied by Maps 2348 and 2349, scale 1:31,680 or 1 inch to 1/2 mile.

McPhar Geophysics Ltd., 1963 Report on the induced polarization survey, Mann Ridge Property, Milner Twsh., Ontario, for Yellowknife Bear Mines Ltd.

Sergiades, A.O., 1968 Silver Cobalt Calcite Vein Deposits of Ontario. Ontario Department of Mines. Mineral Resources Circular No 10.

Spaho M. 2012, Report on the Tyrinite Deposit, Tyrinite Property, Ontario, Canada. Prepared for Creso Exploration Inc.

Terraquest Ltd. 1998 Report on a high sensitivity magnetic and spectrometer airborne survey, Block A-Gowganda area, Larder Lake Mining Division, Northern Ontario for Lake Superior Resources Ltd.

Terraquest Ltd., 2010, Operations Report for Creso Exploration Ltd., High Resolution Magnetic, Radiometric & XDS VLF-EM Helicopter Survey, Morel Block & Shining Tree Blocks, Shining Tree, ON. Report B-324

Thomson, R. 1968 Geological report for Siscoe Metals of Ontario Ltd. Manridge Mine Ltd, Milner Twsh., Ontario.

Yellowknife Bear Manridge Mines Ltd. Drilling logs, 1961-1970. Ass.rep. 41P10SW0001

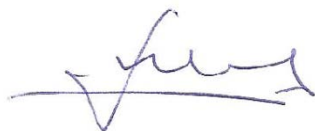
White, M.V., 2012 Report on Creso`s drilling program Mann Property Leonard, Milner and Tyrell Townships, Shining Tree, Gowganda district, Ontario. Prepared for Creso Inc. Assessment report 20011567

## **28. DATE AND SIGNATURE PAGE**

This report titled "TECHNICAL REPORT ON THE MANN PROPERTY, MILNER TOWNSHIP, GOWGANDA, ONTARIO" and dated at Toronto on April 14, 2018, was prepared and signed by Mehmet Spaho.

**Mehmet Spaho P. Geo**

**Consulting Geologist**

A handwritten signature in blue ink, appearing to read 'M. Spaho', written over a horizontal line.

## **29. CERTIFICATE OF QUALIFIED PERSON**

I, Mehmet Spaho, as the author of this report entitled "TECHNICAL REPORT ON THE MANN PROPERTY, MILNER TOWNSHIP, GOWGANDA, ONTARIO", prepared for PowerOre Inc., and dated April 14, 2018, do hereby certify that:

1. I am an independent Consulting Geologist and principal of Spaho Mineral Exploration and Consulting Inc. of Suite 309, 10 Allanhurst Dr., Toronto, ON, M9A 4J5.

2. I am graduate of Polytechnic University of Tirana, Albania, in 1981 with a Bachelor degree in Geological Engineering.

3. I am registered as a Practising member of the Association of Professional Geoscientist of Ontario (No. 2101) and use the title Professional Geoscientist (P. Geo).

4. I have worked as a geologist for a total of 35 years since my graduation. My relevant experience for the purpose of the Technical Report is:

- Twenty three years experience as an Economic and Mapping Geologist in Albania in mineral exploration for precious and base metals, including resource estimation.
- Ten years experience as a Consulting Geologist across Ontario with different exploration mining companies.
- I have performed geological consulting and exploration services in Shining Tree - Gowganda Area since 2010, for different exploration companies.

5. I have read the definition of "qualified person" set out in National Instrument 43-101 (NI 43-101) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.

6. I am responsible for all sections and content of the Technical Report.

7. I visited the Mann property from 12 to 15 February 2018.

8. I have had prior involvement with the property that is subject of the technical Report including logging and supervising login, during 2011-2012 drilling program.

9. I do not hold securities or other interest, either directly or indirectly, in the property or an adjacent property.

10. I am Independent of the PowerOre Inc. and Orefinders Resources Inc. as the Independence is described in Section 1.5 of NI 43-101.

11. I have read NI 43-101, and the Technical Report has been prepared in compliance with NI 43-101 and Form 43-101F1.

12. To the best of my Knowledge, information, and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this April 14, 2018



Mehmet Spaho P. Geo.

