

**Technical Report  
On the  
Dash Lake Property  
Kenora Mining Division  
Northwestern Ontario**

**Prepared for  
Shafer Resources Corp.**  
Suite 1600-609 Granville Street  
Vancouver, British Columbia  
V7Y 1C3

Prepared by:  
**D. Cullen, P.Geo., J. Garry Clark, P.Geo. and S. Siemieniuk, P.Geo.**  
Clark Exploration Consulting  
941 Cobalt Crescent  
Thunder Bay, ON  
P7B 5Z4

**January 21<sup>st</sup>, 2019**

## TABLE OF CONTENTS

<b>Item 1: Summary .....</b>	<b>5</b>
<b>Item 2: Introduction .....</b>	<b>7</b>
<b>Item 3: Reliance on Other Experts.....</b>	<b>7</b>
<b>Item 4: Property Description and Location.....</b>	<b>8</b>
<b>Item 5: Accessibility, Climate, Local Resources, Infrastructure and Physiography .....</b>	<b>11</b>
<b>Item 6: History .....</b>	<b>14</b>
<b>Item 7: Geological Setting and Mineralization.....</b>	<b>17</b>
<b>7.1 Regional Geology .....</b>	<b>17</b>
<b>7.2 Property Geology.....</b>	<b>17</b>
<b>7.3 Mineralization.....</b>	<b>18</b>
<b>Item 8: Deposit Types .....</b>	<b>22</b>
<b>Item 9: Exploration.....</b>	<b>22</b>
<b>Item 10: Drilling .....</b>	<b>23</b>
<b>Item 11: Sample Preparation, Analysis and Security.....</b>	<b>23</b>
<b>Item 12: Data Verification .....</b>	<b>23</b>
<b>Item 13: Mineral Processing and Metallurgical Testing.....</b>	<b>24</b>
<b>Item 14: Mineral Resource.....</b>	<b>24</b>
<b>Item 15: Mineral Reserve Estimates .....</b>	<b>24</b>
<b>Item 16: Mining Methods .....</b>	<b>24</b>
<b>Item 18: Project Infrastructure .....</b>	<b>24</b>
<b>Item 19: Market Studies and Contracts .....</b>	<b>24</b>
<b>Item 20: Environmental Studies, Permitting and Social or Community Impact.....</b>	<b>24</b>
<b>Item 21: Capital and Operating Costs .....</b>	<b>25</b>
<b>Item 22: Economic Analysis.....</b>	<b>25</b>
<b>Item 23: Adjacent Properties.....</b>	<b>25</b>
<b>Item 24: Other Relevant Data and Information .....</b>	<b>25</b>
<b>Item 25: Interpretation and Conclusions .....</b>	<b>26</b>
<b>Item 26: Recommendations .....</b>	<b>27</b>
<b>26.1: Proposed Budget.....</b>	<b>28</b>

**Item 27: References ..... 29**  
**Item 28: Certificate of Qualifications ..... 31**

**TABLE OF FIGURES**

**Figure 1. Property Location ..... 12**  
**Figure 2. Dash Lake Property Claims..... 13**  
**Figure 3. Regional Geology..... 19**  
**Figure 4. Property Geology ..... 20**  
**Figure 5. Dash Lake Soil Survey..... 21**

## **DATE and SIGNATURE PAGE**

This report titled “Technical Report on the Dash Lake Property, Kenora Mining Division, Northwestern Ontario”, and dated January 21st, 2019 was prepared and signed by the following authors:

Dated at Thunder Bay, Ontario  
January 21<sup>st</sup>, 2019

“Desmond Cullen”

Desmond Cullen, P.Geo.

“J. Garry Clark”

J. Garry Clark, P.Geo.

“Steven Siemieniuk”

Steven Siemieniuk, P.Geo.

**Item 1: Summary**

Clark Exploration Consulting of Thunder Bay, Ontario was contracted by Shafer Resources Corp. (“Shafer”), to review historic data for their Dash Lake Property (the “Property”), identify its merits, propose an appropriate exploration program and budget for gold exploration on the property, and prepare a Technical Report (the “Report”) compliant with NI 43-101 and suitable for inclusion in a prospectus document for the purposes of a financing or listing application by Shafer.

Shafer’s Property is located in the Brooks Lake and Dash Lake Areas of the Kenora Mining Division in northwestern Ontario, approximately 90 kilometres north of the town of Fort Frances, Ontario and 30 kilometres east of the town of Nestor Falls, Ontario. The UTM co-ordinates for the approximate centre of the claim block are 458900 Easting, 5440000 Northing (NAD 83, UTM Zone 15). The Property has annual work requirements of \$15,600.00.

The Property consists of 44 contiguous unpatented mining claims, including 10 boundary cell mining claims and 34 single cell mining claims encompassing a total area of approximately 815 hectares (8.15 square kilometres).

The claims are held 100% by Perry English, and under the terms of an option agreement with Perry English (and his wholly-owned numbered company, 1544230 Ontario Inc.), Shafer can earn a 100% interest in the Property by making a payment of \$6,000 cash, issuing 500,000 shares of Shafer Resources Corp., and incurring a minimum of \$75,000 in exploration expenditures. P. English retains a 1.5% net smelter royalty (“NSR”) on 15 of the claims, and Abitibi Royalties Inc. and Tripleflag Mining Finance Ltd. (formerly “Aurico Metals Canadian Royalty Partnership” (a wholly-owned subsidiary of Aurico Metals Inc.)) each hold a 0.75% NSR on the other 29 claims.

The Property is located at the western end of the Late Archaean Savant Lake-Crow Lake Belt in the Western Wabigoon Subprovince of the Superior Province in north western Ontario. The Wabigoon Subprovince is a 900 km long, east-west trending, composite volcanic and plutonic terrane comprising distinct eastern and western domains separated by rocks of Mesoarchean age. Rocks of the Western Wabigoon Subprovince separate gneissic terranes of the Quetico Subprovince to the south and greenstones of the English River Subprovince to the north.

Gold deposits in the region occur in carbonate +/- sericite-altered shear zones and are spatially related to felsic dykes. The Helena Lake fault zone which passes through the Property is presumed to be a splay off the Pipestone – Cameron Lake Fault Zone with which many gold prospects are associated.

In the Helena Lake area, gold mineralization is usually associated with disseminated pyrite, and rarely with arsenopyrite (e.g. McChip). Quartz stringers are reported on the Lun-Echo Prospect (Van Ingen 1990).

Observations on the attitudes of the two main foliations of the Hook Bay showings by M. Atkins (1988) suggested that the gold mineralization might be localized in shoots within sheared andesite trending 360° azimuth and dipping up to 65° east in a broad shear zone trending 020° azimuth with vertical dips. As the intersection of these foliations plunges steeply northwards, the initial drilling by Freewest was targeted to intersect the surface showings at depth, dipping steeply eastwards and plunging steeply northwards. However, the results indicate that the mineralized zones have only moderate dips to the east, apparently conformable with a footwall metagabbro "sill" which trends 020° azimuth (Van Ingen 1990).

The soil geochemical survey done by Shafer in 2018 also indicates the presence of anomalous gold and arsenic in the soils in the area over the interpreted contact between the mafic and ultramafic rocks to the east and the metasediments (felsic metavolcanics?) to the west.

It is recommended that Shafer conduct a program of mapping, prospecting and sampling as well as further soil geochemistry sampling to expand and in-fill the previous soil geochemistry program from the fall of 2018.

The mapping, prospecting and sampling should attempt to focus on the area where anomalous gold and arsenic values were returned from the 2018 program, as well as trying to relocate the trenches at the old showings on the Property (i.e. the Hook Bay, Lun-Echo and McChip Occurrences) on the west shore of Helena Lake. If time and budget allows, further sampling of the felsic intrusive in the southwest corner of the Property, at the east end of Dash Lake, should also be done.

**Item 2: Introduction**

Clark Exploration Consulting of Thunder Bay, Ontario was contracted by Shafer Resources Corp. (“Shafer”), to review historic data for the Dash Lake Property (the “Property”), identify its merits, propose an appropriate exploration program and budget for gold exploration on the property, and prepare a Technical Report (the “Report”) compliant with NI 43-101 and suitable for inclusion in a prospectus document for the purposes of a financing or listing application by Shafer.

Shafer’s Property is located in the Brooks Lake and Dash Lake Areas of the Kenora Mining Division in northwestern Ontario, approximately 90 kilometres north of the town of Fort Frances, Ontario and 30 kilometres east of the town of Nestor Falls, Ontario. The UTM co-ordinates for the approximate centre of the claim block are 458900 Easting, 5440000 Northing (NAD 83, UTM Zone 15). The Property has annual work requirements of \$15,600.00.

Shafer’s Property consists of 44 contiguous unpatented mining claims. The Property consists of 10 boundary cell mining claims and 34 single cell mining claims encompassing a total area of approximately 815 hectares (8.15 square kilometres).

Gold deposits in the region occur in carbonate +/- sericite-altered shear zones and are spatially related to felsic dykes. The Helena Lake fault zone which passes through the Property is presumed to be a splay off the Pipestone – Cameron Lake Fault Zone with which many gold prospects are associated.

In the Helena Lake area, gold mineralization is usually associated with disseminated pyrite, and rarely with arsenopyrite (e.g. McChip). Quartz stringers are reported on the Lun-Echo Prospect (Van Ingen 1990).

**Item 3: Reliance on Other Experts**

The author has relied on previous exploration reports as referenced in Section 27.0 References. These reports may or may not have been completed by qualified persons as defined by NI 43-101. After reviewing the reports and associated data the author is satisfied the data presented is accurate.

For the purposes of this report the author has relied on ownership information provided by Shafer, as well as claim information available on the web site of the Ontario Ministry of Energy, Northern Development and Mines. The author has not researched property title or mineral rights for the property and expresses no opinion as to the ownership status of the property

#### Item 4: Property Description and Location

Shafer's Property is located in the Brooks Lake and Dash Lake Areas of the Kenora Mining Division in northwestern Ontario, approximately 90 kilometres north of the town of Fort Frances, Ontario and 30 kilometres east of the town of Nestor Falls, Ontario. The UTM co-ordinates for the approximate centre of the claim block are 458900 Easting, 5440000 Northing (NAD 83, UTM Zone 15). The Property has annual work requirements of \$15,600.00.

On April 10, 2018, Ontario converted their manual system of ground and paper staking, and maintaining unpatented mining claims to an online system. All active, unpatented claims were converted from their legally defined location by claim posts on the ground or by township survey to a cell-based provincial grid. Mining claims are now legally defined by their cell position on the grid and coordinate location in the MLAS (Mining Land Administration System) map viewer.

Shafer's Property consists of 44 contiguous unpatented mining claims. The Property consists of 10 boundary cell mining claims and 34 single cell mining claims encompassing a total area of approximately 815 hectares (8.15 square kilometres). The claims are listed in Table 1, and are shown in Figure 2.

The claims are held 100% by Perry English, and under the terms of an option agreement with Perry English (and his wholly-owned numbered company, 1544230 Ontario Inc.), Shafer can earn a 100% interest in the Property by making a payment of \$6,000 cash, issuing 500,000 shares of Shafer Resources Corp., and incurring a minimum of \$75,000 in exploration expenditures, as follows:

1. upon signing of the Agreement, pay \$6,000 and issue 100,000 shares;
2. within ten days of completion of the minimum of \$75,000 in Exploration Expenditures, issue 100,000 shares
3. within 10 days of delivery of a National Instrument 43-101 report on the Property that meets the requirements to list on the Exchange, issue 200,000 shares; and
4. after listing on the Exchange, upon the earlier of completion of an initial Phase 1 work program of not less than \$100,000, or the date which is twelve months from listing on the Exchange, Shafer will have 90 days to decide whether or not to issue a final 100,000 shares for 100% right, title and interest in the Property.

Perry English retains a 1.5% net smelter royalty ("NSR") on 15 of the claims, and Abitibi Royalties Inc. and Tripleflag Mining Finance each hold a 0.75% NSR on the other 29 claims.

The Ontario Mining Act requires Exploration Permit or Plans for exploration on Crown Lands. The permit and plans are obtained from the MNDM. The processing periods are 50 days for a permit and 30 days for a plan while the documents are reviewed by MENDM and presented to the Aboriginal communities whose traditional lands will be impacted by the work. The authors recommend the company discuss the recommended exploration with the MNDM to determine the plan and/or permit required as well as the Aboriginal communities to consult.

The government of Ontario requires expenditures of \$400 per year per cell for staked claims, prior to expiry, to keep the claims in good standing for the following year. Boundary claims (i.e. claims where the new cell was covered by more than one owner) require expenditures of \$200 per year. The report must be submitted by the expiry date.

No mineral resources, reserves or mine existing prior to the mineralization described in this report are known by the authors to occur on the Property.

It should be noted that while some of these claims have an anniversary date of November 25<sup>th</sup>, 2018, the necessary work has been filed with the MENDM to keep these claims in good standing, and the claims are still active with the work report pending.

**Table 1. Dash Lake Property Claims**

<b>Claim Number</b>	<b>Claim Type</b>	<b>Township/Area</b>	<b>Anniversary Date</b>	<b>Work Required</b>
111285	Boundary Cell Mining Claim	Brooks Lake Area	11/25/2018	\$ 200
111286	Boundary Cell Mining Claim	Brooks Lake Area	11/25/2018	\$ 200
271351	Boundary Cell Mining Claim	Dash lake Area	11/25/2018	\$ 200
331285	Boundary Cell Mining Claim	Brooks Lake Area	11/25/2018	\$ 200
112561	Boundary Cell Mining Claim	Dash lake Area	5/26/2019	\$ 200
158018	Boundary Cell Mining Claim	Dash lake Area	5/26/2019	\$ 200
158019	Boundary Cell Mining Claim	Dash lake Area	5/26/2019	\$ 200
238585	Boundary Cell Mining Claim	Brooks Lake Area	5/26/2019	\$ 200
271350	Boundary Cell Mining Claim	Brooks Lake Area	5/26/2019	\$ 200
331286	Boundary Cell Mining Claim	Dash lake Area	5/26/2019	\$ 200
103194	Single Cell Mining Claim	Dash lake Area	11/25/2018	\$ 400
111287	Single Cell Mining Claim	Dash lake Area	11/25/2018	\$ 400

<b>Claim Number</b>	<b>Claim Type</b>	<b>Township/Area</b>	<b>Anniversary Date</b>	<b>Work Required</b>
172302	Single Cell Mining Claim	Dash lake Area	11/25/2018	\$ 400
174553	Single Cell Mining Claim	Dash lake Area	11/25/2018	\$ 400
174554	Single Cell Mining Claim	Dash lake Area	11/25/2018	\$ 400
173860	Single Cell Mining Claim	Dash lake Area	11/25/2018	\$ 400
190575	Single Cell Mining Claim	Dash lake Area	11/25/2018	\$ 400
190576	Single Cell Mining Claim	Dash lake Area	11/25/2018	\$ 400
220359	Single Cell Mining Claim	Dash lake Area	11/25/2018	\$ 400
252576	Single Cell Mining Claim	Dash lake Area	11/25/2018	\$ 400
267559	Single Cell Mining Claim	Dash lake Area	11/25/2018	\$ 400
276215	Single Cell Mining Claim	Dash lake Area	11/25/2018	\$ 400
324293	Single Cell Mining Claim	Dash lake Area	11/25/2018	\$ 400
336144	Single Cell Mining Claim	Dash lake Area	11/25/2018	\$ 400
103306	Single Cell Mining Claim	Dash lake Area	5/26/2019	\$ 400
112562	Single Cell Mining Claim	Dash lake Area	5/26/2019	\$ 400
112563	Single Cell Mining Claim	Dash lake Area	5/26/2019	\$ 400
118389	Single Cell Mining Claim	Dash lake Area	5/26/2019	\$ 400
137777	Single Cell Mining Claim	Dash lake Area	5/26/2019	\$ 400
155008	Single Cell Mining Claim	Dash lake Area	5/26/2019	\$ 400
158020	Single Cell Mining Claim	Dash lake Area	5/26/2019	\$ 400
171036	Single Cell Mining Claim	Dash lake Area	5/26/2019	\$ 400
171966	Single Cell Mining Claim	Dash lake Area	5/26/2019	\$ 400
202658	Single Cell Mining Claim	Dash lake Area	5/26/2019	\$ 400
210687	Single Cell Mining Claim	Dash lake Area	5/26/2019	\$ 400
264630	Single Cell Mining Claim	Dash lake Area	5/26/2019	\$ 400
264631	Single Cell Mining Claim	Dash lake Area	5/26/2019	\$ 400
267556	Single Cell Mining Claim	Dash lake Area	5/26/2019	\$ 400
267557	Single Cell Mining Claim	Dash lake Area	5/26/2019	\$ 400
267558	Single Cell Mining Claim	Dash lake Area	5/26/2019	\$ 400
295034	Single Cell Mining Claim	Dash lake Area	5/26/2019	\$ 400

<b>Claim Number</b>	<b>Claim Type</b>	<b>Township/Area</b>	<b>Anniversary Date</b>	<b>Work Required</b>
313264	Single Cell Mining Claim	Dash lake Area	5/26/2019	\$ 400
335454	Single Cell Mining Claim	Dash lake Area	5/26/2019	\$ 400
331536	Single Cell Mining Claim	Dash lake Area	5/26/2019	\$ 400
<b>Total</b>				<b>\$15600</b>

### **Item 5: Accessibility, Climate, Local Resources, Infrastructure and Physiography**

Access to the Property is east from Nestor Falls on the Airport Rd. to the Pipestone - Tri Lake Rd., and east on the Pipestone - Tri Lake Rd. for about 17 km to the Derby Rd., and east for about 13 km to the Phinney Rd., which crosses onto the Property in the northwest corner. The Pipestone – Tri Lake Road requires a permit from the Ministry of Natural Resources from January 1<sup>st</sup> to September 30<sup>th</sup>.

The Property consists of topography characterized by small hills surrounded by narrow incised valleys that appear to align with both with structural features of the underlying bedrock and glacial direction. Small wetland areas occupy topographic depressions. Tree cover consists of white and jack pine, birch, spruce and balsam on elevated topography, and cedar, spruce, birch and tamarack in swampy lowlands. Overburden is comprised of boulder laden glacial till and outwash deposits, with muskeg and organic deposits in low-lying areas. Poorly exposed outcrop is estimated to make up no more than 10% of the total area.

The area exhibits a northern boreal climate, with short, warm summers and cold winters with moderate snowfall. Freezing temperatures can be expected from late October through mid-May. Ground access to the property might be hampered in spring by wet and slippery conditions along roads and trails.

The closest community is Nestor Falls, Ontario, with a population of approximately 550. Nestor Falls is located approximately 28 km west of the Property on Highway 71. Nestor Falls is a forestry and tourism oriented community and could be a source of some exploration and mining equipment, supplies and personnel.

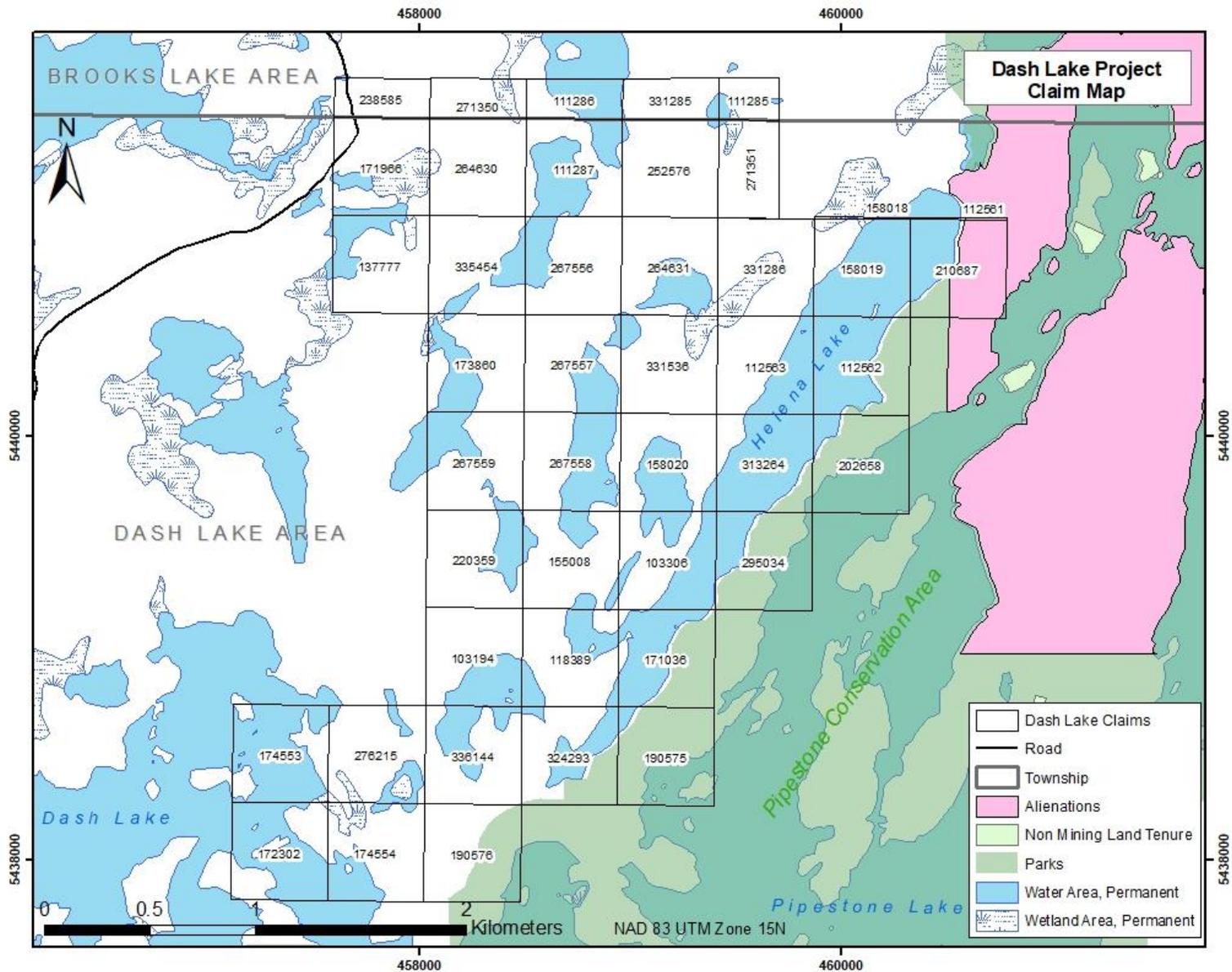
The area is serviced by Highway 71 extending south to Fort Frances on Highway 11 (a distance of approximately 90 km), and north to Highway 17 just east of Kenora (a distance of 120 km). Rail transportation is available via the Canadian National and Canadian Pacific Railways – both lines pass approximately

equidistant to the Property along Highways 11 and 17. Several small lakes, ponds and streams on the claim group could supply limited quantities of water. Electrical power is available along Highway 71.

Figure 1. Property Location



Figure 2. Dash Lake Property Claims



**Item 6: History**

1959: Lun-Echo Gold Mines Ltd. drilled two drill holes in the area of the Lun-Echo Showing (Figure 4) in order to check below two trenches that returned erratic gold values up to 30.79 oz. Au/ton in quartz stringers within a zone of weak to moderate schistosity (Thorpe 1987). The holes were drilled at -45 degrees for 415 ft., and -65 degrees for 204 ft, with the best assay being 0.04 oz. Au/ton over 15 ft.

1984: Southwind Resources Explorations Ltd. conducted ground magnetic and VLF-EM surveys on their property which covered the north-central and eastern portion of the current Property. Nine VLF-EM conductors were identified, with three of them recommended as initial drill targets. These claims were subsequently restaked under a joint venture between McChip Resources Inc. and Jascan Resources Inc. (see below).

1986: A joint venture between McChip Resources Inc. and Jascan Resources Inc. drilled four holes on their property which covered much of the northern part of Shafer's Property. Two of the holes were drilled west of the main gold showings to test an area of felsic volcanic with sulphides and an associated VLF conductor, and the other two holes were drilled in the area of the McChip Showing to test for the possible extension of that showing. The best assay returned from the program was 0.079 oz. Au/ton over 1.0 ft. from a 4 inch quartz-carbonate vein with 5% pyrite; no further work was recommended on the known mineralized zones (Thorpe 1987).

1988 – 1990: Freewest Resources Inc. acquired a property on the west side of Helena Lake (covering roughly the eastern half of Shafer's Property) after obtaining assays of 3.0 oz./ton Au over 4.1 ft. from trench 4 and 1.25 oz./ton Au over 1.0 ft. from trench 1 (which was at line 0+00 of Freewest's grid) in the area of Hook Bay (Van Ingen 1990). Freewest conducted a magnetometer and VLF-EM survey during the winter in early 1989, followed by an IP survey the following summer. In early 1990 Freewest conducted a diamond drilling program consisting of 1463 metres in 13 holes, with ten of the holes testing the Hook Bay Prospect, two holes stepping out to the south of the Hook Bay Prospect to test the host fault zone, and one hole to the west of this area to test VLF-EM and IP anomalies in felsic volcanics.

Van Ingen (1990) reported that several gold zones were intersected in the drilling, and that lateral continuity of the relatively high gold values was not established between drill sections which were at 50 m intervals. Stratigraphically highest and seen only in hole H90-5 is the arsenopyrite-quartz "Vein Zone" with an assay of 15.9 g Au/T over 0.65 m. The surface showings coincide with the upper zone in core in which the best assay was 3.0 g Au/T over 1.3 m, also in hole H90-5. The lower zone corresponds

with a linear swamp on surface, with relatively high grades obtained from hole H90-6 on section 1+00S (31.1 g Au/T over 1.35 m) and H90-10 on section 2+00S (18.0 g Au/T over 1.0 m). The lower zone is open to at least section 3+00S and at depth, but on section 1+00S only geochemically anomalous values of Au were obtained in H90-13, which was drilled under H90-06 (Van Ingen 1990).

The Hook Bay Prospect and drill intersections appear to be on the same structure as the McChip and Lun-Echo showings to the north (Van Ingen 1990).

1993 – 1996: Phelps-Dodge Corporation of Canada Ltd. held a property that covered the central to northwest portion of Shafer's Property as well as ground further west, and was considered prospective for base metal massive sulphide mineralization. Phelps-Dodge conducted a 259 km airborne DIGHEM<sup>V</sup> electromagnetic, magnetic and VLF survey, followed by 32.6 km of a ground magnetic survey and 28.6 km of Max Min II electromagnetic survey.

Phelps-Dodge subsequently drilled three diamond drill holes, with two of them occurring on Shafer's Property just south of the north boundary. The holes were drilled to test an HLEM anomaly and intersected 60 metres of massive to semi-massive pyrite with associated graphite, hosted by variably altered intermediate to felsic volcanic rock. Although it was reported that no anomalous gold values were obtained, the wide sulphide interval intersected suggests that a volcanogenic hydrothermal system was active in the vicinity, and further work was recommended (Johnson 1996).

1995 – 2005: Throughout this period Michael Chute conducted a number of exploration programs consisting of reconnaissance prospecting, systematic prospecting and geological mapping on claims on the east side of Dash Lake and also covering the ground immediately east and north of the lake. Chute's work tended to focus on whole rock, trace element and rare earth element analysis, as well as assay and thin section petrographic analysis.

Chute reported that "Gold mineralization associated with quartz-sericite-pyrite alteration within the East Dash Lake rhyodacites and adjacent rocks is widespread over large continuous areas of the two larger peninsulas along the southern claim boundary of claim 161626, the eastern shore of the lake and the island at the mouth of the bay which leads to Pipestone Lake. Anomalous gold values are associated with the pyritic alteration zones. Gold values from 156 samples of the Dash Lake felsic suite range from <1 to 1990 ppb and average 46 ppb." (Chute 2005).

2011: Soldi Ventures Inc. conducted a prospecting and sampling program on a large property that covered the west and southwest corner of Shafer's

Property. Most of the work that was done on Shafer's current Property was done around the eastern end of Dash Lake in the southwest corner, including the islands within the lake and the surrounding shorelines. Bowdidge (2011) reported that the highlight of the program was the recognition of the high background gold content of the Dash Lake Stock, which he states has many characteristics that make it favourable for gold mineralization. Bowdidge reports that the area is underlain by a distinctive quartz-phyric phase of the trondhjemite intrusive with sericite alteration and widespread disseminated pyrite, and that "most of the gold contents of samples in this area are anomalous, with values up to 0.844 g/t Au".

## ITEM 7: GEOLOGICAL SETTING AND MINERALIZATION

### 7.1 Regional Geology

The Property is located at the western end of the Late Archaean Savant Lake-Crow Lake Belt in the Western Wabigoon Subprovince of the Superior Province in north western Ontario. The Wabigoon Subprovince is a 900 km long, east-west trending, composite volcanic and plutonic terrane comprising distinct eastern and western domains separated by rocks of Mesoarchean age. Rocks of the Western Wabigoon Subprovince separate gneissic terranes of the Quetico Subprovince to the south and greenstones of the English River Subprovince to the north.

The Western Wabigoon Subprovince is dominated by mafic volcanic rocks that mostly range in composition from tholeiitic to calc-alkaline, with large tonalitic plutonic intrusions. The volcanic rocks were largely deposited between about 2.74 and 2.72 Ga and are interpreted to represent oceanic crust (tholeiites) and volcanic arcs (calc-alkaline rocks) and are overlain by volcano-sedimentary sequences deposited at about 2.71 to 2.70 Ga. These rocks are locally overlain unconformably by coarse clastic sedimentary rocks but these do not have a widespread distribution, most likely due to erosion.

Edwards (1980) states that the rocks in the area of the Property comprise a sequence of mafic and lesser felsic metavolcanic rocks, and complexly interbedded clastic and chemical metasedimentary rocks which are folded into a broad northeast-trending anticline. The Phinney-Dash Lake complex, a synvolcanic quartz-feldspar porphyry intrusion and related extrusive and exhalative rocks, occupies the axial zone of the northeastern portion of this anticline and fed the felsic volcanism that immediately overlies it to the east and south. Metamorphic grade in the area is middle greenschist facies.

### 7.2 Property Geology

The following discussion of the Property geology is based on Van Ingen (1990).

The main geological feature of the Property is the faulted contact zone between felsic volcanic to the west and younger mafic volcanic to the east. The nature of this contact is obscure because the fault zone is poorly exposed and because it is occupied by thick, sill-like mafic intrusive that resemble mafic volcanic in part. The mafic intrusives usually contain quartz, magnetite and leucoxene. Elsewhere in the Pipestone Lake area and possibly on the Property as well, there are ultramafic intrusive and lamprophyre dykes. Several felsic dykes have been mapped on the Property and are presumed to be offshoots of the felsic stocks at Dash Lake and Phinney Lake.

The whole assemblage was folded and intruded syntectonically during the Archean, first by the trondhjemite batholiths to the west, and then by the syenodiorite batholiths to the south. A diabase dyke of Proterozoic age extends across the area.

While most of the faulting in the area was probably related to the emplacement of the felsic stocks and batholiths in two main stages, there were presumably earlier faults such as those that controlled the emplacement of the felsic volcanic and mafic intrusives. Reactivation of some faults occurred after the diabase dykes were intruded.

### **7.3 Mineralization**

Gold deposits in the region occur in carbonate +/- sericite-altered shear zones and are spatially related to felsic dykes. The Helena Lake fault zone which passes through the Property is presumed to be a splay off the Pipestone – Cameron Lake Fault Zone with which many gold prospects are associated.

In the Helena Lake area, gold mineralization is usually associated with disseminated pyrite, and rarely with arsenopyrite (e.g. McChip). Quartz stringers are reported on the Lun-Echo Prospect (Van Ingen 1990).

Observations on the attitudes of the two main foliations of the Hook Bay showings by M. Atkins (1988) suggested that the gold mineralization might be localized in shoots within sheared andesite trending 360° azimuth and dipping up to 65° east in a broad shear zone trending 020° azimuth with vertical dips. As the intersection of these foliations plunges steeply northwards, the initial drilling by Freewest was targeted to intersect the surface showings at depth, dipping steeply eastwards and plunging steeply northwards. However, the results indicate that the mineralized zones have only moderate dips to the east, apparently conformable with a footwall metagabbro “sill” which trends 020° azimuth (Van Ingen 1990).

Figure 3. Regional Geology

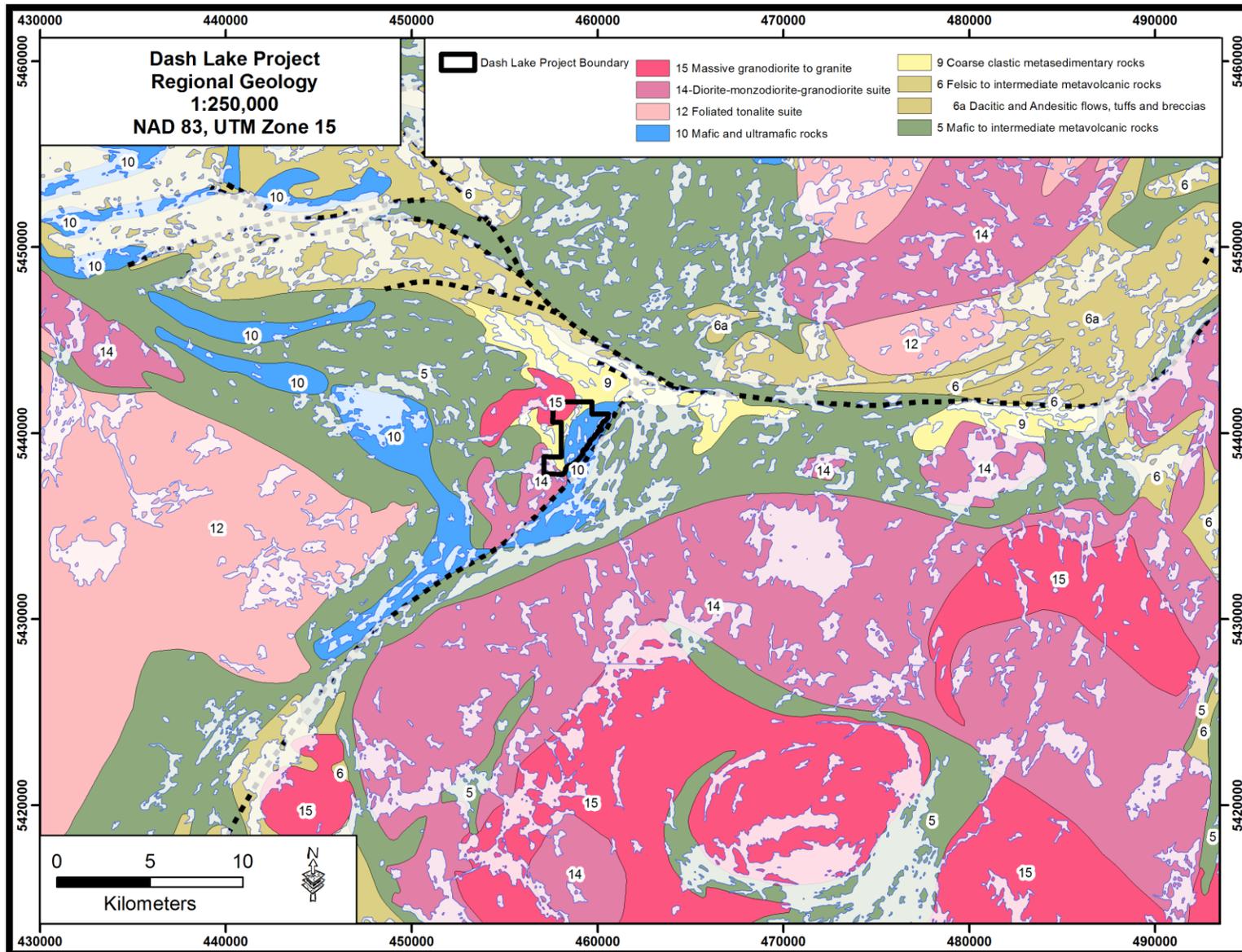


Figure 4. Property Geology

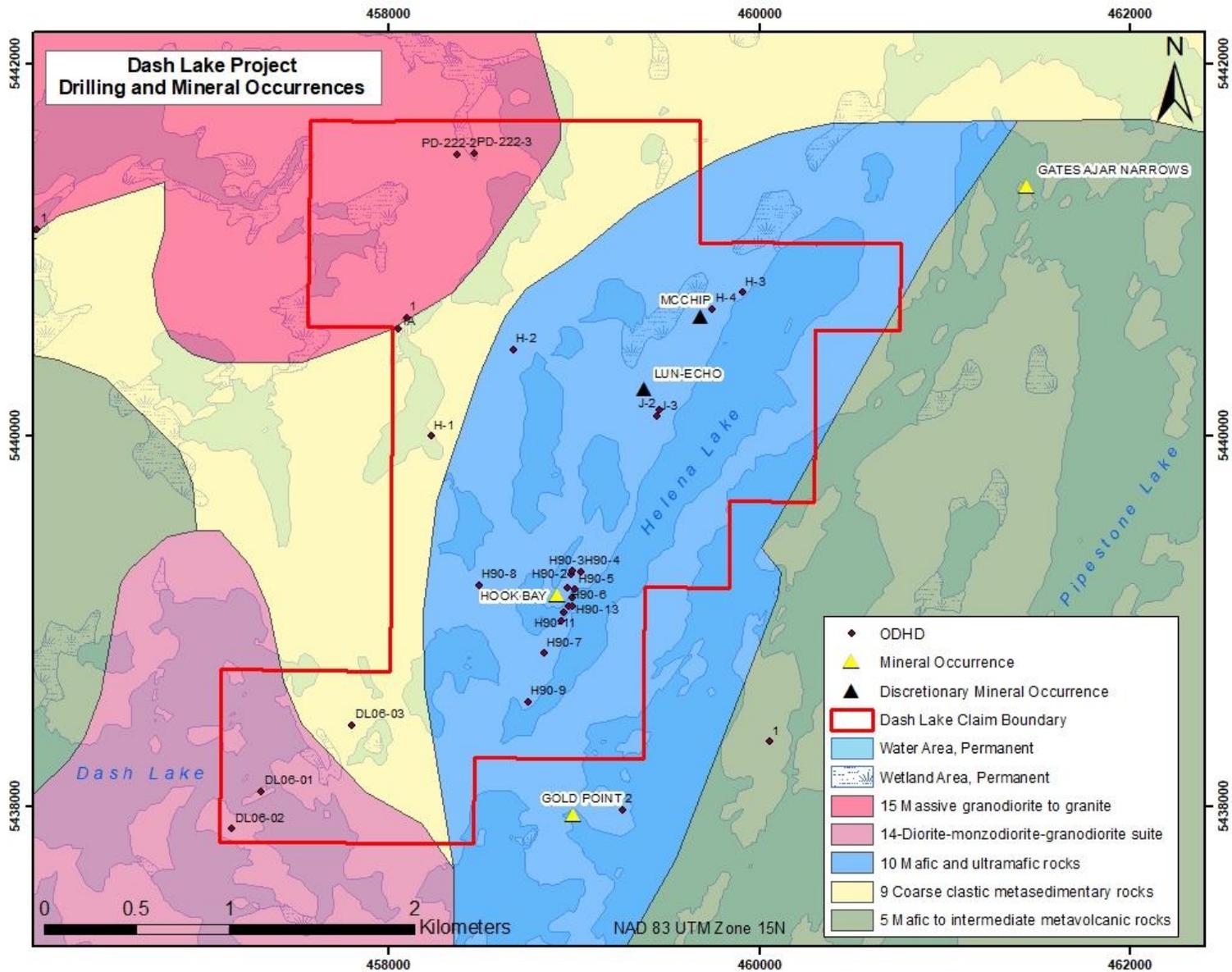
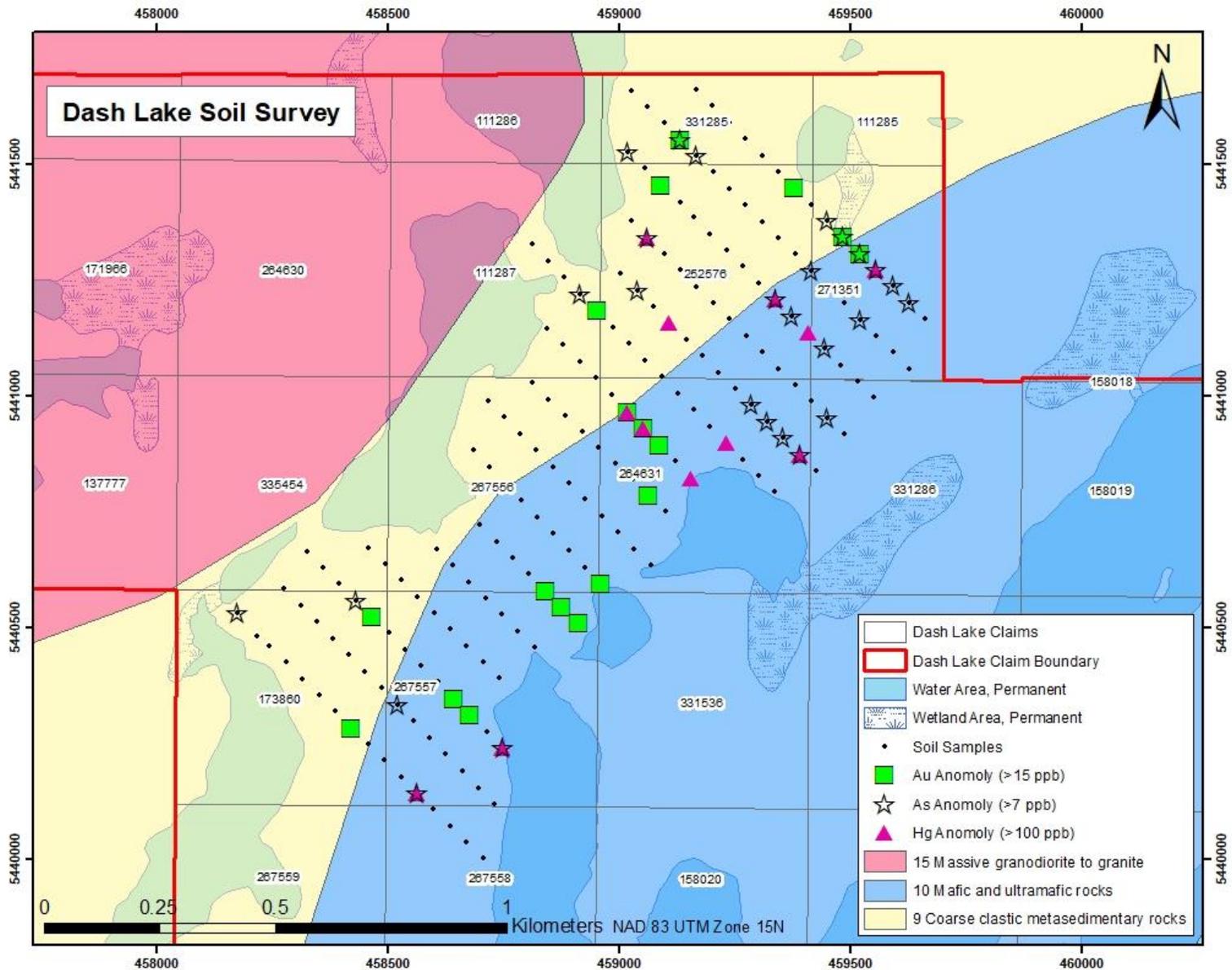


Figure 5. Dash Lake Soil Survey



**Item 8: Deposit Types**

The deposit type being targeted by Shafer on their Property is the “greenstone-hosted quartz-carbonate vein deposit” as defined by Robert et. al. (1997).

Deposits of this group, typified by the Mother Lode and Grass Valley and including many important Precambrian examples, consist of quartz-carbonate veins in moderately to steeply dipping brittle-ductile shear zones and locally in related shallow-dipping extensional fractures. They are commonly distributed along major fault zones in deformed greenstone terranes of all ages. Veins have strike- and dip-lengths of 100 to 1000 m either singly or, more typically, in complex vein networks. They are hosted by a wide variety of lithologies but there are district specific lithologic associations.

The veins are dominated by quartz and carbonate, with lesser amounts of chlorite, scheelite, tourmaline and native gold; pyrite, chalcopyrite and pyrrhotite comprise less than 10 vol.% of the veins. The ores are gold-rich (Au:Ag = 5:1 to 10:1) and have elevated concentrations of As, W, B, and Mo, with very low base metal concentrations. Despite their significant vertical extent (commonly > 1 km), the deposits lack any clear vertical mineral zoning. Wallrock alteration haloes are zoned and consist of carbonatization, sericitization and pyritization. Halo dimensions vary with the composition of the host lithologies and may envelope entire deposits in mafic and ultramafic rocks.

**Item 9: Exploration**

In the fall of 2018, Shafer performed an initial exploration program on the Property consisting of a soil geochemical survey and prospecting.

The prospecting/mapping program was carried out by S. Siemieniuk (one of the Authors of this Report) from October 22<sup>nd</sup> to the 28<sup>th</sup>, and attempted to locate the known mineral occurrences along the west side of Helena Lake; unfortunately the trenches could not be located and sampled during this work, and therefore no samples were retrieved. It should be noted that there was no record found regarding when these trenches were excavated, and it was reported that they were already present at the Lun-Echo Showing when Lun-Echo drilled in 1959 (Lun-Echo 1960 and Thorpe 1987). This work also constitutes the Property visit by a Qualified Person for the purposes of this Technical Report.

The soil geochemistry survey was conducted from October 17<sup>th</sup> to November 2<sup>nd</sup>, and consisted of taking B-horizon soil samples over a grid that was laid out to cover the interpreted contact between the mafic and ultramafic rocks to the east and the metasediments to the west. The samples were analysed by AGAT Labs in Thunder Bay, using analytical procedure (201-074) Aqua Regia Digest - Metals Package, ICP/ICP-MS finish. A total of 197 samples were retrieved, with

gold assay results ranging from <5 ppb to 146 ppb. The results are plotted in Figure 5, with anomalous values highlighted for gold (>15 ppb), arsenic (>7 ppb) and mercury (>100 ppb).

### **Item 10: Drilling**

Shafer has not yet performed any drilling of its own. For a summary of previous drilling on the Property, see “Item 6: History”.

### **Item 11: Sample Preparation, Analysis and Security**

For the soil geochemistry survey, sample locations were determined by GPS waypoints entered into the samplers GPS before each day in the field. Samples were laid out to be taken at roughly 25 metre intervals where possible, on lines of 100 metre spacing. The target horizon was a medium to light brown layer of soil referred to as the upper B horizon. The target soil was not always obtainable due to thick swamps where A0 and A1 soil dominated and areas where the leached grey E horizon was several feet thick. When the B horizon was not available to sample, no sample was taken.

Samples were taken using either a spade or hand auger which was wiped clean between sites. The sampled material was then placed in kraft paper bags and labeled with a marker with the appropriate sample number. The site location was recorded using a GPS which generally displayed a better than 3m accuracy. At each sample location important data notes were also recorded including soil type and percentages, vegetation, location slope, drainage and any comments the sampler felt could be important.

The samples were delivered in one batch to AGAT Labs in Thunder Bay for analysis, using analytical procedure (201-074) Aqua Regia Digest - Metals Package, ICP/ICP-MS finish.

### **Item 12: Data Verification**

The data presented in this report has come primarily from the assessment files available at the Ontario Ministry of Energy, Northern Development and Mines. The authors can verify that the information has been presented accurately as reported in those files and reports.

There were no limitations placed on the Authors in conducting the verification of the data or the Property visit. Some of the data relied upon predates National Instrument 43-101 and was therefore not completed by qualified persons. The

author is of the opinion that these data sets were adequate for the completion of the technical report.

**Item 13: Mineral Processing and Metallurgical Testing**

Shafer has not yet done any mineral processing studies or metallurgical testing on the Property.

**Item 14: Mineral Resource**

There is no mineral resource defined on the Property.

**Item 15: Mineral Reserve Estimates**

Not applicable.

**Item 16: Mining Methods**

Not applicable.

**Item 18: Project Infrastructure**

Not applicable.

**Item 19: Market Studies and Contracts**

Not applicable.

**Item 20: Environmental Studies, Permitting and Social or Community Impact**

The Ontario Mining Act requires Exploration Permit or Plans for exploration on Crown Lands. The permit and plans are obtained from the MNDM. The processing periods are 50 days for a permit and 30 days for a plan while the documents are reviewed by MNDM and presented to the Aboriginal communities whose traditional lands will be impacted by the work. The authors recommend the company discuss the recommended exploration with the MNDM to determine the plan and/or permit required as well as the Aboriginal communities to consult.

**Item 21: Capital and Operating Costs**

Not applicable.

**Item 22: Economic Analysis**

Not applicable.

**Item 23: Adjacent Properties**

Not applicable.

**Item 24: Other Relevant Data and Information**

The author is unaware of any further data or relevant information that could be considered of any practical use in this report. The author is not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission to disclose which makes the Technical Report misleading.

## Item 25: Interpretation and Conclusions

The previous work done on Shafer's Property has indicated the presence of anomalous, and locally high grade gold mineralization.

Gold deposits in the region occur in carbonate +/- sericite-altered shear zones and are spatially related to felsic dykes. The Helena Lake fault zone which passes through the Property is presumed to be a splay off the Pipestone – Cameron Lake Fault Zone with which many gold prospects are associated.

In the Helena Lake area, gold mineralization is usually associated with disseminated pyrite, and rarely with arsenopyrite (e.g. McChip). Quartz stringers are reported on the Lun-Echo Prospect (Van Ingen 1990).

Van Ingen (1990) reported that several gold zones were intersected in the drilling at the Hook Bay showings, and that lateral continuity of the relatively high gold values was not established between drill sections which were at 50 m intervals. Stratigraphically highest and seen only in hole H90-5 is the arsenopyrite-quartz "Vein Zone" with an assay of 15.9 g Au/T over 0.65 m. The surface showings coincide with the upper zone in core in which the best assay was 3.0 g Au/T over 1.3 m, also in hole H90-5. The lower zone corresponds with a linear swamp on surface, with relatively high grades obtained from hole H90-6 on section 1+00S (31.1 g Au/T over 1.35 m) and H90-10 on section 2+00S (18.0 g Au/T over 1.0 m).

Observations on the attitudes of the two main foliations of the Hook Bay showings by M. Atkins (1988) suggested that the gold mineralization might be localized in shoots within sheared andesite trending 360° azimuth and dipping up to 65° east in a broad shear zone trending 020° azimuth with vertical dips. As the intersection of these foliations plunges steeply northwards, the initial drilling by Freewest was targeted to intersect the surface showings at depth, dipping steeply eastwards and plunging steeply northwards. However, the results indicate that the mineralized zones have only moderate dips to the east, apparently conformable with a footwall metagabbro "sill" which trends 020° azimuth (Van Ingen 1990).

The soil geochemical survey done by Shafer in 2018 also indicates the presence of anomalous gold and arsenic in the soils in the area over the interpreted contact between the mafic and ultramafic rocks to the east and the metasediments (possibly felsic metavolcanics?) to the west.

**Item 26: Recommendations**

It is recommended that Shafer conduct a program of mapping, prospecting and sampling as well as further soil geochemistry sampling to expand and in-fill the previous soil geochemistry program from the fall of 2018.

The mapping, prospecting and sampling should attempt to focus on the area where anomalous gold and arsenic values were returned from the 2018 program, as well as trying to relocate the trenches at the old showings on the Property (i.e. the Hook Bay, Lun-Echo and McChip Occurrences) on the west shore of Helena Lake. Once these showings have been relocated, mechanical stripping using an excavator, followed by washing and sampling, should be done on the showings in order to try to expand the exposure, and confirm and expand the gold mineralization. Accessibility to this area with an excavator would have to be determined first.

If time and budget allows, further sampling of the felsic intrusive in the southwest corner of the Property, at the east end of Dash Lake, should also be done.

**26.1: Proposed Budget**

Mapping, Prospecting and Sampling	
Geologist for 21 days @ \$700/day .....	14,700
Technician/assistant for 21 days @ \$450/day.....	9,450
21 days room and board for 2 @ 300/day .....	6,300
Transportation	
truck, gas	
21 days @ \$125/day .....	2,625
Soil Geochemical Sampling	
2 technicians for 14 days @ \$300/day .....	8,400
14 days room and board for 2 @ 300/day.....	4,200
Transportation	
truck, gas	
14 days @ \$125/day .....	1,750
Mechanical Stripping	
120 hours @ \$125/hour .....	15,000
Washing, Mapping and Sampling	
Geologist for 21 days @ \$700/day .....	14,700
Assistant for 21 days @ \$450/day.....	9,450
Pump and Hose Rental	
21 days @ \$200/day .....	4,200
Room and Board	
2 people 21 days @ \$300/day.....	6,300
Transportation	
truck, gas	
21 days @ \$125/day .....	2,625
Assays 500 @ \$35/sample .....	17,500
Reports and Maps.....	5,000
Contingencies .....	<u>5,000</u>
<b>Total Proposed Budget</b>	<b>\$127,200</b>

**Item 27: References**

**Note:** Notations listed in the references below in the format “AFRI 52F04SE0004” refer to assessment files archived with the Ontario Ministry of Energy, Northern Development and Mines on the MNDM website ([www.geologyontario.mndm.gov.on.ca/](http://www.geologyontario.mndm.gov.on.ca/)).

Adomaitis, P., 1989. Report on the Combined Geophysical Surveys Conducted for Sparton – Freewest, Helena Lake, Ontario. AFRI 52F04SE0003.

Atkins, W.M., 1988. Report on the Helena Lake Gold Property for the Freewest Resources Inc. and Sparton Resources Inc. JV, Dash Lake Area, Ontario.

Bowdidge, C., 2012. Soldi Ventures Inc., Dash Lake Property, Perry English Option, Northwest Ontario; Report on Prospecting, Sampling and Analysis, 2011 Summer Season. AFRI 20000007549.

Chute, M.E., 2005. Rhyodacite Alteration Geochemistry, Dash Lake Claim Group, Kenora Mining Division. AFRI 20000000812.

Edwards, G.R. 1980. Geology of the Schistose Lake Area, District of Kenora; Ontario Geological Survey Report 194, 67p. Accompanied by Map 2421, scale 1:31 680 or 1 inch to 1/2 mile.

Gledhill, T., 1984. A Report on Geophysical Surveys of the Helena Lake Gold Property for Southwind Resources Explorations Ltd. AFRI 52F04SE0019.

Johnson, M.R., 1996. Report of the Diamond Drilling at the Phinney Dash Property, Ontario; NTS 52 F4; Project 222. AFRI 52F04NE0023.

JVX Ltd., 1989. Report on the Induced Polarization Survey on the Sparton – Freewest Joint Venture, Helena Lake Property, Nestor Falls Area, Northwestern Ontario. AFRI 52F04SE0002.

Lun-Echo, 1960. Diamond Drill Logs, Plan and Section for 1960 Drilling. AFRI 52F04SE0021.

Robert, F., Poulsen, K.H., and Dube, B., 1997. Gold Deposits and Their Geological Classification. *In* “Proceedings of Exploration 97: Fourth Decennial International Conference on Mineral Exploration” *edited by* A.G. Gubins, 1977, p.209-220.

Thorpe, W.H., 1987. Helena Lake Claims, NTS: 52-F-4, McChip – Jascan Joint Venture. AFRI 52F04SE0654.

Van Ingen, R., 1990. Report on the Diamond Drilling Program, Freewest Resources Inc. – Sparton Resources Inc. Joint Venture, Helena Lake, Kenora Mining Division, Ontario. AFRI 52F04SE0004.

**Item 28: Certificate of Qualifications****Desmond Cullen**

49 Husu Rd., R.R. #2  
Kaministiquia, Ontario  
Canada, P0T 1X0

Telephone: 807-633-6960, Fax: 807-622-4156

Email: desmond63@hotmail.com

**CERTIFICATE OF QUALIFIED PERSON**

I, Desmond Cullen, P.Geo. (#0164) do hereby certify that:

1. I am a consulting Professional Geologist living at 49 Husu Rd., R.R.#2, Kaministiquia, Ontario
2. I graduated with the degree of Honours Bachelor of Science (Geology) from Lakehead University, Thunder Bay, in 1988
3. "Technical Report" refers to the report titled "Technical Report on the Dash Lake Property, Kenora Mining Division, Northwestern Ontario" dated January 21<sup>st</sup>, 2019.
4. I am a registered Professional Geoscientist with the Association of Professional Geoscientists of Ontario (#0164) and a member Ontario Prospectors Association.
5. I have worked as a Geologist for 30 years since my graduation from university.
6. I have read the definition of "qualified person" set out in National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements as a Qualified Person for the purposes of NI 43-101.
7. I have worked extensively in Northwestern Ontario, and also Indonesia, China and Mongolia since graduating University.
8. I have not visited the Dash Lake Property.
9. I have reviewed and edited the entire Technical Report.
10. I am independent of the party or parties (the "issuer") involved in the transaction for which the Technical Report is required, other than providing consulting services, and in the application of all of the tests in section 1.5 of NI 43-101.
11. I have had no prior involvement with the mineral Property that forms the subject of this Technical Report.
12. I have read NI-43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that Instrument and Form.

13. As of the date of this certificate, and 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 21<sup>st</sup> day of January, 2019.

**SIGNED**

“Desmond Cullen”

---

Desmond Cullen, P.Geol.

J. Garry Clark  
941 Cobalt Crescent  
Thunder Bay, Ontario  
Canada, P7B 5Z4  
Telephone: 807-622-3284, Fax: 807-622-4156

## **CERTIFICATE OF QUALIFIED PERSON**

I, J. Garry Clark, P. Geo. (#0245), do hereby certify that:

1. I am the owner of Clark Expl. Consulting Inc. with an office at 941 Cobalt Crescent, Thunder Bay, Ontario.
2. I graduated with the degree of Honours Bachelor of Science (Geology) from Lakehead University, Thunder Bay, in 1983. I have written qualifying gold property reports for companies such as Discovery Harbour and Rainy River Resources both companies having gold potential on their properties.
3. "Technical Report" refers to the report titled " Technical Report on the Dash Lake Property, Kenora Mining Division, Northwestern Ontario" dated January 21<sup>st</sup>, 2019.
4. I am a registered Professional Geoscientist with the Association of Professional Geoscientists of Ontario (#0245).
5. I have worked as a Geologist for 35 years since my graduation from university.
6. I have read the definition of "qualified person" set out in National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements as a Qualified Person for the purposes of NI 43-101 and am independent of the vendor of the property.
7. I am responsible for the complete review and editing of the Technical Report.
8. I am independent of the party or parties (the "issuer") involved in the transaction for which the Technical Report is required and in the application of all requirements in Section 1.5 of N.I. 43-101.
9. I have had no other prior involvement with the mineral Property that forms the subject of this Technical Report.
10. I have read N.I. 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that Instrument and Form.

11. As of the date of this certificate, and 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 21<sup>st</sup> day of January, 2019.

SIGNED

“J. Garry Clark”

---

J. Garry Clark, P.Geol.

Steven E. D. Siemieniuk  
310 Talbot Street  
Thunder Bay, Ontario  
Canada, P7A 1J7  
Telephone: 807-683-3063, Fax: 807-622-4156  
Email: thesiemieniuks@gmail.com

## CERTIFICATE OF QUALIFIED PERSON

I, Steven E. D. Siemieniuk , P. Geo. (#2288), do hereby certify that:

1. I am a consulting geologist working for Clark Expl. Consulting Inc. with an office at 941 Cobalt Crescent, Thunder Bay, Ontario.
2. I graduated with the degree of Honours Bachelor of Science (Geology) from Lakehead University, Thunder Bay, in 2009. My Honours Thesis was completed on the characterization of alteration and mineralization on the Elora Gold Property, Northwestern Ontario. I also partially completed my M.Sc. at Lakehead University focusing on the computer-aided predictive modeling of gold deposits. During employment I have worked on numerous Gold projects.
3. "Technical Report" refers to the report titled "Technical Report on the Dash Lake Property, Kenora Mining Division, Northwestern Ontario" dated January 21<sup>st</sup>, 2019.
4. I am a registered Professional Geoscientist with the Association of Professional Geoscientists of Ontario (#2288) and a member Ontario Prospectors Association.
5. I have worked as a Geologist for 9 years since my graduation from university.
6. I have read the definition of "qualified person" set out in National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements as a Qualified Person for the purposes of NI 43-101 and am independent of the vendor of the property.
7. I conducted the prospecting/mapping program on behalf of Shafer Resources from October 22<sup>nd</sup> to the 28<sup>th</sup>, 2019.
8. I am independent of the party or parties (the "issuer") involved in the transaction for which the Technical Report is required, other than providing consulting services, and in the application of all requirements in Section 1.5 of N.I. 43-101.

9. I have had no prior involvement with the mineral Property that forms the subject of this Technical Report.

10. I have read N.I. 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that Instrument and Form.

11. As of the date of this certificate, and 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 21<sup>st</sup> day of January, 2019.

SIGNED

“Steven E. D. Siemieniuk”

---

Steven Siemieniuk, P.Geol.