Technical Report on the Melgurd Lake Property

Pelican Narrows Area

Saskatchewan

Report Prepared for:

Boreal Gold Inc.

Northern Mining District-Saskatchewan

NTS Map Area

63 M 1

Latitude: 55°10' 20" N

Longitude: 102°14'30" E

John G. Pearson, M.Sc., P.Geo., FGC, FEC(Hon) July 24,2024

Contents

1.0 SUMMARY	4
2.0 INTRODUCTION	6
3.0 RELIANCE ON OTHER EXPERTS	6
4.0 PROPERTY DESCRIPTION AND LOCATION	7
5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY	10
6.0 HISTORY	11
7.0 GEOLOGICAL SETTING AND MINERALIZATION	12
7.1 Regional Geology	12
7.2 Property Geology	15
8.0 DEPOSIT TYPE	18
9.0 EXPLORATION	19
11.0 SAMPLE PREPARATION, ANALYSES AND SECURITY	27
12.0 DATA VERIFICATION	28
13. MINERAL PROCESSING AND METALLURGICAL TESTING	29
14.0 MINERAL RESOURCE ESTIMATES	30
15.0 ADJACENT PROPERTIES	31
16 OTHER RELEVANT DATA AND INFORMATION	33
17.0 INTERPRETATION AND CONCLUSIONS	34
18.0 RECOMMENDATIONS	35
19.0 REFERENCES	36
20.0 SIGNATURE PAGE	
21.0 CERTIFICATE OF QUALIFICATIONS	40

List of Figures:

Figure 1: Mineral Potential map showing the location of the Melgurd Lake Project
Figure 4: Compilation of supracrustal and intrusive lithologies in the Pelican Narrows - Wildnest Lake
areas (from Rayner et al., 2009)15
Figure 5: Geology of the Melgurd Lake Property showing the outline of the claim boundaries, the
location of alteration minerals and the location of the HBED Drill Holes (alteration mineral locations and drill holes are from the Saskatchewan Geoatlas), for Legend see Figure 3
Figure 6: Surficial Geology of the Amisk Lake - Pelican Narrows area (McMartin et al. 2007)
Figure 7: Flight Line locations over the Melgurd Lake property showing the location of the flight lines and
tie lines (Masson et al. 2023)
Figure 8: Geological map of the Melgurd Property showing the location of TDEM target conductors. For
geological legend see Figure 3
Figure 9: Airborne Magnetic and TDEM maps showing the location of the two conductors of Anomaly
NW 1
Figure 10: Airborne Magnetic and TEDM maps showing the location of the the relationship of magnetics
and EM signature of the NW 2 Conductor22
Figure 11: Airborne Conductor labelled as NW 3 overlying the interpreted geological map
Figure 12: TEDM response of the WT 3, WT 4 and WT 5 conductors that flank the west side of Keep Lake
extending to Melgurd Lake. Note the location of WT 3. The other conductors are part of the conductive
zone extending to the south
Figure 13: The WT 5 Conductor showing the TEDM response overlying the horizontal magnetic gradient.
The image to the right shows the TDEM response overlying the interpreted geology
Figure 14: Target NT 6 lies in the far northeast part of the survey. It lies on the edge of a transition in the
magnetic characteristic of the rocks
Figure 15: Geological map of the Wildnest - Melgurd Lake area showing the claim location map and
identifying the location of the competitor claims

List of Tables:

Table 1: Claim List detailing the ownership, hectares and effective date of the claims as listed with the	ē
Saskatchewan Mineral Registry	9
Table 2: Summary of Melgurd Project TEDM Conductors	21
Table 3: Detailed costs of the proposed Phase 1 Exploration Program on the Melgurd Lake Property	35

1.0 SUMMARY

The Melgurd Lake property is located in east central Saskatchewan approximately 62 km NW of Flin Flon, Manitoba. The property is accessible via float or ski equipped, fixed wing aircraft to Melgurd Lake or via helicopter from Flin Flon. Flin Flon and the adjacent community of Creighton, SK are serviced by daily scheduled flights from Winnipeg. Manitoba Highway 10 and Saskatchewan Highway 106 link Flin Flon and Creighton with Winnipeg and Prince Albert respectively.

The property consists of 11 mineral claims totalling 7422 ha with the center of the property lying at approximately 55°10′20″N Latitude and 102°14′30″E Longitude. Under the terms of the agreement Boreal Gold can obtain 100% of the property from the vendors (Richard Masson, and Michael Alexander) by making escalating payments, issuing shares and work commitments to the vendors over a five-year period which, if completed, would consist of total work commitments of \$1,010,000, payments of \$130,000 and issuing of shares to the vendors totalling 1,150,000. Upon the completion of the payments, shares and the work commitments Boreal Gold Inc. will hold 100% of the property subject to the remaining Net Smelter Return of 2%, one half of which can be purchased for \$500,000.

The author has previously prepared a NI-43101 report on the property for Boreal Gold Inc. dated July 7, 2022 and had visited the property on July 5, 2022. At that time no exploration work had been carried out by Boreal Gold Inc. on the property. The author carried out a second property visit on July 19, 2024

The Melgurd Property lies within the southern margin of the Kisseynew Lithotectonic Domain near its contact with the Flin Flon Domain. The zone is an area of structurally overlapping and stratigraphically equivalent lithologies, which, in this area, is continuous between both domains. The Property is underlain by a sequence of intermediate to felsic Amisk Group volcanics metamorphosed to upper amphibolite grade interlayered with metasediments equivalent to the Burntwood Group pelitic gneiss and Missi Group metasedimentary rocks. The supracrustal rocks have been intruded by a several granodioritic to tonalitic bodies and have been affected by up to five ductile deformation events.

The interest in the Property stems from the potential of the property to host Volcanic Hosted Massive Sulphide Deposits (VMS). The Schotts Lake VMS deposit lies 5 km to the SW and on strike with the lithologies of the Melgurd Claim Group. The latest resource estimate for the Schotts Lake deposit is 1,983,850 tonnes grading 0.61% Cu and 1.35% Zn. This should be considered an historical resource estimate and does not comply with resource categories defined in 'NI-43101 Standards For Disclosure for Mineral Projects' and is provided for Information only. The author has not done sufficient work to classify the historical estimate as current mineral resource, and the issuer is not treating the historical estimate as a current mineral resource. The Manson Lake Gold Deposit lies 7 km to the SSW of the Melgurd property on structures and stratigraphy that trend to the NNW onto the Melgurd Property. This deposit has an historical resource estimate of 660,000 tons grading 0.10 oz/to Au. This also should be considered an historical (non-NI-43101) resource estimate and does not comply with resource categories defined in 'NI-43101 Standards For Disclosure for Mineral Projects' and is provided for Information only. The author has not done sufficient work to classify the historical estimate as current mineral resource, and the issuer is not treating the historical estimate of 660,000 tons grading 0.10 oz/to Au. This also should be considered an historical (non-NI-43101) resource estimate and does not comply with resource categories defined in 'NI-43101 Standards For Disclosure for Mineral Projects' and is provided for Information only. The author has not done sufficient work to classify the historical estimate as current mineral resource, and the issuer is not treating the historical estimate as a current mineral resource.

Two previous exploration programs have been carried out on the Melgurd Property. Saskatchewan Mining Development Corporation (SMDC) carried out a program to follow up a 17-ppb gold in lake sediment anomaly identified in a 1985 government survey. The Saskatchewan Geoatlas also identifies a number of drill holes by Hudson Bay Exploration and Development Co. Ltd. (HBED) during the winter of

1960 within the property however there are no records available that report on the results of this program.

The Schotts Lake deposit and other VMS type showings in the Wildnest Lake/Kakinagimak Lake area are characterized by the presence of significant alteration zones of consisting of anthophyllite – garnet +/- cordierite +/- cummingtonite. Within the property boundary are similar zones of alteration identified in the Keep Lake – Scott Lake area and in the Cornell Bay area of Kakinagimak Lake. The Manson Bay gold rich sulphide mineralization is a quartz-rich gneiss that contains hornblende-feldspar-biotite and locally chlorite and tourmaline crystals. Minerals present include trace to 15% pyrite, trace to 20% pyrrhotite, up to 10% graphite, trace to 12% chalcopyrite, trace to 10% sphalerite, trace galena and associated gold mineralization.

During the period December 1, 2022 to February 16, 2023, Boreal Gold Inc. contracted Axiom Exploration Services to carry out an airborne 757 km Time Domain Electromagnetic (TDEM)/Magnetic survey over the Melgurd property with a traverse line spacing of 100 m and tie lines oat a spacing of 1000 m. An interpretation and evaluation of this data identified 10 target areas and rated them based on conductance, magnetic and lithologic association. In the northwest part of the property, the three highest priority targets are associated with a folded sequence of felsic to intermediate metavolcanics with local present garnet/anthophyllite alteration. A second sequence of priority targets occurs in the east Keep Lake/Scott Lake area also associated with intermediate to felsic metavolcanics and locally present garnet/anthophyllite/pyrite/chalcopyrite alteration.

In order to evaluate the potential for both VMS Cu/Zn and associated gold mineralization the following Phase 1 exploration program is proposed:

- 1. Linecutting and HLEM surveying of conductors in the Scott Lake, Keep Lake, Cornell Bay and Melgurd lake area to detail the location of the conductive bodies
- Geological mapping of the Keep Lake Scott Lake supracrustal sequence to trace the felsic volcanic horizons and their relationship with the bounding sediments as well as to identify any VMS style alteration assemblages (anthophyllite/garnet/cordierite/cummingtonite). This mapping should also focus on the structural geology of the area to identify structures with the potential to host gold mineralization
- 3. Geological mapping and prospecting of the Cornell Bay area and the area to the SW to trace out the supracrustal stratigraphy, identify volcanic rocks and also examine the area for the potential for the VMS style alteration assemblages.

The cost of this program is \$150,000. Further exploration programs are contingent on the results of the Phase 1 program.

2.0 INTRODUCTION

The author was retained by Boreal Inc. to update a National Instrument 43101 Compliant Technical Report on the Melgurd Lake Property. The original report is date July 7, 2022 (Pearson, 2022). The purpose of this report is to summarize the public domain technical data on the property in the context of current Volcanic Hosted Massive Sulphide (VMS) and Epigenetic Gold Deposit models, review the exploration that has taken place since 2022 and to provide recommendations for future exploration programs.

Boreal Gold Inc. is a private mineral exploration company focused on the development of base metal and gold deposits in the Flin Flon Domain of Manitoba and Saskatchewan in Canada. Data utilized in this report was compiled from the Saskatchewan Mineral Assessment Data Base (SMAD), Saskatchewan Geological Survey reports, the Saskatchewan Mineral Deposits Index (SMDI) information supplied by Boreal Gold Inc. on exploration work carried out on the property and technical publications which are cited in Section 19.

The author first visited the site visit on July 5, 2022 in the preparation of an NI-43101 Technical Report dated July 7, 2022 and again visited the property on July 19, 2024. The author is familiar with the geology of the area having previously mapped the area around the Schotts Lake base metal deposit and the Dolly Gold Deposit at the north end of Mari Lake (Pearson, 1986) as part of project on the metallogeny in the Kisseynew Domain while employed with the Saskatchewan Geological Survey and having carried out exploration in the Flin Flon area for over 15 years. The author inspected the felsic and intermediate metavolcanic and metasedimentary lithologies on the property at the eastern and northern areas of Keep Lake during a property visit on July 5, 2022. On July 19,2024 the author visited the Melgurd Lake Camp (UTM Location 0679002E/6122314N) area and examined metasedimentary lithologies in that area.

The author does not have, nor has he previously had any material interest in the Company or the vendor. The relationship with the Company and the Vendor is solely a professional association between the Company, the vendor and the author.

Since the original report, Boreal Gold Inc. has carried out an airborne Time Domain EM and Magnetometer survey which has outlined a number of EM conductors on the property as well as provided a detailed magnetic map.

3.0 RELIANCE ON OTHER EXPERTS

This Report has been prepared by John Pearson for Boreal Gold Inc. The information, opinions, conclusions and recommendations are based on

- information available to the author at the time of this report
- assumptions, qualifications and conditions as set forth in this report
- data, reports and other technical information supplied by the company and from third party sources.

For the purpose of this report, the author has relied on ownership information taken from the Mineral Administration Registry Saskatchewan (MARS) website (<u>Welcome to MARS (isc.ca)</u>) and found that the property is in good standing as described in Section 4 of this report.

The author did not rely on other experts in connection with the preparation of this Report.

The author is not aware of any legal, political, environmental or tax matters with respect to the property.

Except for the purposes of legislation under provincial securities laws, any use of this report by any third party, is at the party's sole risk.

4.0 PROPERTY DESCRIPTION AND LOCATION

The Melgurd Lake Property is located in east central Saskatchewan (Figure 1). The property consists of 11 mineral claims totalling 7422.1 hectares (Table 1) located approximately 50 km north northeast of the city of Flin Flon, MB and the adjacent town of Creighton, SK.

The area is covered by NTS Map Sheets 63 M 1 (Figure 2). The center of the property lies at 55°10'20"N



Figure 1: Mineral Potential map showing the location of the Melgurd Lake Project

Latitude and 102°14'30"W Longitude / UTM Location (NAD 83, Zone 13) 675650E / 6117400N.

There are no defined mineral resources on the property although there are two mineral deposits to the south of the property. These are identified under Section 6 of this report.

There are no environmental liabilities to which the property is subject.

In order to conduct mineral exploration activities on Crown land within Saskatchewan, surface disturbance permits are required from the Ministry of Environment before any work can be started. The permits vary depending on the program and may include, but are not limited to: Forest Product, Aquatic Habitat Protection, Work Authorization and/or Temporary Work Camp permits.

In order to obtain the appropriate permits, an application must be submitted to a Ministry of Environment Ecological Protection Specialist. Drilling programs will normally also require a Temporary Water Rights License for Industrial Water Use obtained through the Water Security Agency. A Notification Form may be required to be completed and submitted to the Department of Fisheries and Oceans Canada.

The Mineral Exploration Guidelines forSaskatchewan20162016Draft.pdf (saskmining.ca)details the

general information that should be included on the application. For more detail regarding the content of each section the proponent should refer to the applicable Best Management Practice (BMP).

The Ministry of Environment Ecological Protection Specialist for northern Saskatchewan is based in Prince Albert and can be reached through the website <u>Permits - Environment - Government of</u> <u>Saskatchewan</u>. Keep in mind that the application may be sent to outside agencies for the purpose of application review and consultation with First Nations and Métis communities. If there is information included in the application that is proprietary, the proponent must advise the Ecological Protection Specialist and submit a separate proposal that can be sent to outside agencies. It is also incumbent on the proponent that they contact the Peter Ballantyne Cree Nation to inform them of the work that is to be undertaken and follow any guidelines that they may propose.



Figure 2: Claim map for Boreal Gold Inc.'s Melgurd Lake Property

The mineral property is jointly held by Richard Masson and Michael Alexander and is subject to a five-year option agreement (dated May 26, 2022) with Boreal Gold Inc. Under the terms of the Option Agreement Boreal will obtain 100% interest in the property subject to a Net Smelter Return (NSR) royalty of 1% to each of the property holders (total 2%) under the following terms:

1. The vendors will receive \$10,000 within 10 days of completion of Crowd Funding with a work commitment of \$110,000 in the first year of the option.

- 2. On the first anniversary Boreal will pay the vendors \$10,000 and issue 20,000 shares of Boreal Gold
- 3. On the second anniversary Boreal will pay the vendors \$15,000 and issue 30,000 shares of Boreal Gold and have a work commitment of \$150,000
- 4. On the third anniversary Boreal will pay the vendors \$20,000 and issue 50,000 shares of Boreal Gold and have a work commitment of \$150,000
- 5. On the fourth anniversary Boreal will pay the vendors \$25,000 and issue 450,000 shares of Boreal Gold and have a work commitment of \$300,000.
- 6. On the fifth anniversary Boreal will pay the vendors \$50,000 and issue 600,000 shares of Boreal Gold and have a work commitment of \$300,000
- 7. 50% of the NSR can be purchased for \$500,000

The above commitments total cash payments of \$130,000, 1,150,000 shares of Boreal Gold and a work commitment of \$1,010,000. Upon the completion of the payments, shares and the work commitments Boreal Gold Inc. will hold 100% of the property subject to the remaining NSR.

Table 1: Claim List detailing the ownership, hectares and effective date of the claims as listed with the Saskatchewan Mineral Registry.

Disposition Number	Claim Holder	Area ha	Effective Date	Good Standing
MC00015897	Richard Masson: 100.000%	812.1	4/18/2022	7/17/2026
MC00015898	Richard Masson: 100.000%	926.9	4/18/2022	7/17/2026
MC00015899	Richard Masson: 100.000%	791.4	4/18/2022	7/17/2026
MC00015900	Richard Masson: 100.000%	1057.2	4/18/2022	7/17/2026
MC00015891	Richard Masson: 100.000%	593.4	4/18/2022	7/17/2026
MC00015892	Richard Masson: 100.000%	394.0	4/18/2022	7/17/2026
MC00015893	Richard Masson: 100.000%	598.7	4/18/2022	7/17/2026
MC00015894	Richard Masson: 100.000%	495.6	4/18/2022	7/17/2026
MC00015895	Richard Masson: 100.000%	926.9	4/18/2022	7/17/2026
MC00015896	Richard Masson: 100.000%	463.7	4/18/2022	7/17/2026
MC00017097	Richard Masson: 100.000%	362.2	4/17/2023	7/16/2027
Total		7422.1		

To the authors knowledge there are no other royalties, back-in rights, payments or other agreements which encumber the property. Additionally, to the authors knowledge there are no environmental liabilities to which the property is subject. Also, to the authors knowledge, there are no significant factors and risks that may affect access, title, or the right or ability to perform work on the property.

5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

The property is accessible via float or ski equipped, fixed wing aircraft to many of the larger lakes on the property including Melgurd, Kakinagimak, and Keep plus several others. The nearest fixed wing aircraft water base is in Flin Flon, MB. Flin Flon and the adjacent community of Creighton, SK are serviced by daily scheduled flights from Winnipeg. Manitoba Highway 10 and Saskatchewan Highway 106 link Flin Flon and Creighton with Winnipeg and Prince Albert respectively

An Electrical Power transmission line linking the Hydroelectric Power Generating Dam at Island Falls with Flin Flon lies 10 km to the east of the property.

The Flin Flon area is an active mining area and as such, there is a large skilled mining force that is readily available for any new developments that are to take place in the region of the Melgurd Property.

The area of the Melgurd Property lies within the Churchill River Upland Ecoregion as defined by Sask Environment – Saskatchewan Conservation Data Center.

The region is typical of the Precambrian Shield and is characterized by a mix of bedrock outcrops, glacial deposits, wetlands and lakes (the following is largely taken from <u>Saskatchewan</u> <u>Conservation Data Centre (biodiversity.sk.ca)</u>).

This ecoregion is located along the southern edge of the Precambrian Shield in north-central Saskatchewan and Manitoba. It is marked by cool summers and very cold winters. The mean annual temperature is approximately -2.5°C. The mean summer temperature is 12.5°C and the mean winter temperature is -18.5°C. The mean annual precipitation ranges from 400 - 500 mm. This ecoregion is classified as having a subhumid high boreal ecoclimate. It forms part of the continuous coniferous boreal forest that extends from northwestern Ontario to Great Slave Lake in the southern Northwest Territories. The predominant vegetation consists of closed stands of black spruce and jack pine with a shrub layer of ericaceous shrubs and a ground cover of mosses and lichens. Black spruce is the climatic climax species. Depending on drainage, surficial material and local climate, trembling aspen, white birch, white spruce, and to a lesser extent balsam fir, occupy significant areas, especially in the eastern section. Bedrock exposures have fewer trees and are covered with lichens. Closed to open stands of stunted black spruce with ericaceous shrubs and a ground cover of sphagnum moss dominate poorly drained peat-filled depressions. Permafrost is distributed throughout the ecoregion, but is only widespread in organic deposits. Although local relief rarely exceeds 25 m, ridged to hummocky, massive Archean to Proterozoic rocks form steeply sloping uplands and lowlands. Small to large lakes compose 30 - 40% of the ecoregion and drain northeastward via the Churchill, Nelson and Seal river systems. In the western part of the ecoregion, uplands are covered with discontinuous sandy acidic tills, whereas extensive thin clayey lacustrine deposits and locally prominent, sandy fluvioglacial uplands are common in the eastern section. Exposed bedrock occurs throughout the ecoregion and is locally prominent. Dystric and Eutric Brunisols are associated with sandy uplands, whereas Gray Luvisols occur on clayey lacustrine uplands and loamy to silty fluvioglacial deposits. On level and in depressional areas, Gleysolic soils are associated with clayey sediments, whereas Mesisols and Organic Cryosols are associated with shallow to deep peatlands. A pulpwood and dimension lumber industry operates to a limited extent in the southern part of the ecoregion. Wildlife includes barren-ground caribou, moose, black bear, lynx, wolf, beaver, muskrat,

snowshoe hare and red-backed vole. Bird species include raven, common loon, spruce grouse, bald eagle, gray jay, hawk owl, and waterfowl, including ducks and geese.

Climate data can be accessed at the following website: <u>Region PELICAN NARROWS | Climate Atlas of</u> <u>Canada.</u>

Nearly the entire property has been burned in a forest fire approximately 15 years ago and as such the area has extensive dead fall and subsequent regrowth which makes surface exploration challenging.

6.0 HISTORY

The interest in the property stems from the discovery and subsequent work carried out to the south of the property in the Wildnest Lake/Schotts Lake area (Figure 3) and the prospective geology that is contiguous from these properties onto the Melgurd property. This includes the Schotts Lake VMS deposit -4.8 k south of the property boundary and the Manson Bay Gold deposit 7.8 km SSW of the property (See Section 15.0 Adjacent Properties). The author has not been able to verify the information on the Schotts Lake and Manson Bay properties and also caution that the information from these properties is not necessarily indicative of any mineralization on the Melgurd Lake Property that is the subject of this technical report.

The area within the boundaries of the Boreal Gold Inc. property has not undergone significant exploration.

A pyrite occurrence is identified in the SMDI (#0324) termed the TIP Claims Pyrite Occurrence located on the NW shore of a small unnamed lake, 1.6 km west of the north end of Melgurd Lake. The showing consists of an occurrence of pyrite-pyrrhotite mineralization in metamorphosed volcanic rocks (Cheeseman, 1956).

Within the Saskatchewan Mineral and Petroleum Geoatlas, 55 drill holes are reported on the property with no supporting documentation (<u>Saskatchewan GeoATLAS Mapping</u>). These holes, drilled by HBED are labelled with the prefix MGK and were drilled in January and February 1960. There is no available documentation detailing the drill target, the results etc. The location of these drill holes is shown in Figure 5.

In 1985 the Geological Survey of Canada released Open File 1129 – the results of a regional lake sediment sampling program which included gold. In the Melgurd Lake area a single sample had a value of 17 ppb which was one of the highest values in the region.

In 2008 the GSC analyzed till Geochem samples from archived samples. A Single sample on the east side of Kakinagimak Lake gave anomalous W values. (GSC Open File Report 2008-1/GSC Open File 5799, updated in 2012 as Campbell and Dredge, 2012).

Also, in 2008 the Geological Survey of Canada released an airborne radiometric and magnetic survey which covers the property area (Harvey et al., 2008).

In addition to the above, a search of the Saskatchewan Mineral Assessment Data Base (SMAD, <u>ER -</u> <u>Assessment Search (saskatchewan.ca)</u>) identifies the following:

- 1969 Hill Oil and Gas carried out a regional airborne magnetic survey (SMAD Assessment File (No. 63M-0001)
- 1986 87 SMDC (Saskatchewan Mining Development Corp.) staked mineral claim CBS 6305 in the Melgurd Lake area and carried out an exploration program in the southeast area of Melgurd Lake. The program was to follow up the anomalous Au in lake sediment anomaly identified in the GSC Open File 1129 and the site of 1950's trenching in the area that reportedly contained an auriferous sulphide occurrence. This survey was unable to find the old trenches but did detect several areas of bedrock gold enrichment within the Nokomis transition rocks. The 1987 program consisted of rock and soil Geochem surveys and identified values up to 165 ppb Au which correlated with a distinctive vari-textured gabbro -norite zone locally containing interstitial chalcopyrite, pyrrhotite, pyrite and magnetite (SMAD Assessment Files 63M01-0029, 0032).

7.0 GEOLOGICAL SETTING AND MINERALIZATION

7.1 Regional Geology

The region lies within the Paleoproterozoic Trans-Hudson orogen (Zwanzig and Bailes, 2010). The property lies within the southern margin of the Kisseynew Lithotectonic Domain near its contact with the Flin Flon Domain. The zone is an area of structurally overlapping and stratigraphically equivalent lithologies, which is continuous between both domains.

The correlation of the stratigraphy in the area north of Flin Flon has had a complicated history given the change in structural style and metamorphic grade in the region (Ashton et al., 1986, Zwanzig et al., 1995). The high- grade rocks in the Kisseynew Lake – Pelican Narrow Lake area were originally called the Kisseynew Gneiss by Bruce (1918) to demonstrate their uncertain relationship to the supracrustal rocks of the Flin Flon Domain. In Manitoba, the Kisseynew gneisses were subdivided into the Sherridon Group, comprising interlayered quartzo-feldspathic paragneiss and ortho-amphibolites hosting the Cu-Zn mineralization at Sherridon (Bateman and Harrison, 1946) and the Nokomis Group, comprising micaceous gneisses and para-amphibolites in the Batty Lake area (Robertson, 1953). This terminology has been extended and modified by several workers to other areas. Bailes (1971) correlated the Nokomis Gneisses with the Amisk Group and the Sherridon quartzo-feldspathic unit with the Missi Group while subsequent work and dating by Maxeiner et al. (2007, and references therein) has indicated that intercalated with the Missi Group are the Nokomis and Sherridon groups which have been renamed the Burntwood Group.

In the project area Maxeiner et al. (2007), Maxeiner and Ashton (2012a) and Rayner et al. (2009) have detailed a complex stratigraphy with supporting age relationships (Figures 3 and 4). Although not present in the current map area, the base of the stratigraphy is built on Archean rocks of the Sahli Granite and other Archean aged migmatites and mylonites. Of interest for the Wildnest Lake/Kakinagimak Lake area are the supracrustal rocks of the Amisk Gp volcanics and their metamorphosed equivalents at ~1.88 Ga, Hanson Lake volcanics at 1.88 to 1.86 Ga an (Figure 3). These are overlain by Burntwood Gp (metamorphosed turbidites, pelites and, wackes and arenites dated at 1.855 – 1.841 Ga and Missi Group equivalent metasedimentary rocks at 1.84 to 1.83 Ga. The contact between the Burntwood and Missi groups may mark a transition from sedimentation in a predominantly deep-water environment to more shallow-water conditions. Maxeiner et al (2008) suggest depositional continuity between the two groups, with potential facies variations from a fluvial Missi Group environment, through a shallow-water, near-shore environment (quartzitic rocks), to graphitic deep-water deposits of the Burntwood Group. Interpreted thrusts developed during generation of F1 folds later disrupted some of the stratigraphic relationships (Maxeiner et al. 2008). These supracrustal rocks are intruded by a series of igneous rocks

varying from gabbro in the Melgurd Lake area to the youngest Jan Lake granite (1767 Ma) and later pegmatite.



Figure 3: Geology of the Wildnest - Melgurd Lake property area showing the location of the Melgurd Lake Property the location of the Schotts Lake and Manson Bay mineral deposits (Maxeiner and Ashton, 2012a and 2012b, Geological Legend follows).



Supracrustal and plutonic rocks in the Kakinagimak Lake area, are metamorphosed to upper amphibolite facies. About 50% of the area is underlain by granodioritic to tonalitic foliates and gneisses inferred to be circa 1.86 Ga old. The remainder is made up of about 30% migmatitic, generally graphitic, sedimentary rocks and about 20% mafic to felsic volcanic rocks inferred to be >1.87 Ga old. All of these rocks were affected by five ductile deformation events. Primary features are not preserved in the sedimentary or volcanic rocks, but the latter contain abundant evidence of potential metamorphosed hydrothermal alteration zones, now preserved as garnet-anthophyllite assemblages (Figure 5). South of Keep Lake, the volcanic succession hosts the Schotts Lake deposit. The Keep Lake Scott Lake area is dominated by garnetiferous intermediate to felsic volcanic rocks exhibiting garnet-anthophyllite alteration and local sulphide occurrence (Maxeiner et al. 2008).

Major structural lineaments interpreted to be late brittle faults trend to the north and northeast.



Figure 4: Compilation of supracrustal and intrusive lithologies in the Pelican Narrows - Wildnest Lake areas (from Rayner et al., 2009).

7.2 Property Geology

Within the property boundaries are two areas of possible interest for the presence of economic VMS type mineralization (the Scott Lake – Keep Lake area and the Cornell Bay area). The supracrustal sequence extending from the Schotts Lake/Wildnest Lake area includes the north-south trending sequence of intermediate to felsic volcanics extending from the Manson Bay and Schotts Lake area through Keep Lake – Scott Lake area and are bound by Burntwood River pelitic rocks to the east and mixed calcic sedimentary rocks/garnetiferous -quartzofeldspathic gneiss and felsic calc-silicate-intermediate – mafic volcanic rocks and their magmatic equivalents to the west (Figure 5). This sequence appears to pinch out to the north of Scott Lake and is mapped again in the structurally complex area to the NW in the Cornell Bay area of Kakinagimak Lake. In the Scott Lake area, the rocks generally strike N-S and dip 20 to 40° E while in the Cornell Bay area the strike swings to NNW and 25 to 45° NE with linear fabrics trending 20 to 40° NE.

Maxeiner (2008) notes that the Keep Lake area is dominated by garnetiferous intermediate to felsic volcanic rocks exhibiting garnet-anthophyllite alteration and local sulphide occurrences including chalcopyrite (Figure 5) which are suggestive of lateration associated with VMS type deposits. The presence of anthophyllite-garnet minerals in the Cornell Bay areas is also suggestive of alteration zones associated with VMS type deposits (Maxeiner, 2007).

The surficial geology of the property is composed largely of glacio-lacustrine deposits, particularly in the area north of Schotts lake (Figure 6) and extending to the Melgurd lake area and as such presents a significant challenge to soil geochemistry.



Figure 5: Geology of the Melgurd Lake Property showing the outline of the claim boundaries, the location of alteration minerals and the location of the HBED Drill Holes (alteration mineral locations and drill holes are from the Saskatchewan Geoatlas), for Legend see Figure 3.





Figure 6: Surficial Geology of the Amisk Lake - Pelican Narrows area (McMartin et al. 2007)

8.0 DEPOSIT TYPE

The property has the potential for Volcanic Hosted Massive Sulphide Cu/Zn deposits similar to those encountered in the Flin Flon – Snow Lake – Hanson Lake areas. The Flin Flon Domain contains two types of VMS deposits based on their lithotectonic setting (Franklin et al. 2005) – mafic associated and bimodal-mafic associated. Mafic associated deposits in the Flin Flon Domain include the Coronation, Birch Lake, Flexar and Konuto Mines. These deposits are characterized by high Cu and Au grades with low Zn content (see Franklin et al, 2005). This type of deposit is set in mature intra-oceanic backarc settings and are hosted entirely within mafic volcanics. Bimodal-mafic associated deposits are characterized by the Flin Flon, 777, Callinan and Trout Lake deposits and are associated with small rhyolite domes. This type of deposit is also characterized by more extensive footwall alteration zones enriched in Mg and Fe which at lower metamorphic grade include chlorite and more distally zones of Na depletion characterized by sericite and quartz. At higher metamorphic grades, for example those at the Stall and Chisel Mines in the Snow Lake camp, this alteration is present as anthophyllite-garnet, anthophyllite-cordierite, and/or cummingtonite and quartz-muscovite-aluminosilicate (which may manifest as andalusite, sillimanite or kyanite depending on the metamorphic grade). The Schotts Lake deposit fits into this model.

The second area of possible interest is modelled on the Manson Bay gold rich sulphide mineralization which consists of a silicified horizon within a northeast-trending shear zone. This zone is interpreted to be a VMS deposit although the presence of the faulting along Manson Bay has created a silicified zone interpreted to be a quartz-rich gneiss with mineralization within this silicified shear zone. The mineralization within this deformed the zone has been traced over a strike length of 2400 ft (731.5 m) within this silicified shear zone. The mineralized horizon is a quartz-rich gneiss that contains hornblende-feldspar-biotite and locally chlorite and tourmaline crystals. Minerals present include trace to 15% pyrite, trace to 20% pyrrhotite, up to 10% graphite, trace to 12% chalcopyrite, trace to 10% sphalerite, trace galena and associated gold mineralization. This zone lies within a broad zone of conductivity which appears to have been strongly silicified along the major structure fault that extends from Manson Bay to Keep and Scott Lake. The alteration assemblage with chlorite, tourmaline etc. is atypical of a Flin Flon style VMS deposit.

9.0 EXPLORATION

During the period December 1, 2022 to February 16, 2023, Boreal Gold Inc. contracted Axiom Exploration Services to carry out a airborne Time Domain Electromagnetic (TDEM)/Magnetic survey over the Melgurd property (Figure 6). This survey total 757.7 kilometers with a traverse line spacing of 100 m and tie lines oat a spacing of 1000 m (Masson et al., 2023).



Figure 7: Flight Line locations over the Melgurd Lake property showing the location of the flight lines and tie lines (Masson et al. 2023).

An evaluation and interpretation of this data (Masson and Groom, 2024) focussed on electromagnetic conductors identified in the TDEM survey for their potential to host VMS deposits. This interpretation identified 10 targets which are summarized below in Table 3, with the location of each shown in Figure 8.



Figure 8: Geological map of the Melgurd Property showing the location of TDEM target conductors. For geological legend see Figure 3.

The Conductors in the Cornell Bay area in the northwest part of the property are given the highest priority be Masson and Groom (2024). The conductive package associate with NW 1 (Figure 9) is the highest priority given by Masson and Groom, they have depths to top ranging from 30 to 100 m and conductance of 45 to 50 siemens and are associated with distinct magnetic features.

Conductor NW 2 (Figure 10) lies to the south and parallel to NW 1. It is composed of a single strong conductor (60 S) and a flanking weaker conductor which appears to flank a Magnetic high The depth to top of this conductor is estimated at 60 m.

Conductor NW 3 is actually a series of conductors on the western side of Cornell Bay and are labelled 3A 1 and 3B3 which appear to lie within the same geological unit. Target 3A1 is a series of conductors with conductance varying from 15 to 30 S and lying adjacent to magnetic anomalies. Target NW3B3 lies to the northwest of NW3A1 and is labelled 4 on Figure 11. It has a conductance of 30 siemens and a strike length of 350 m.

Table 2: Summary of Melgurd Project TEDM Conductors	•
---	---

Anomaly	Centr	e Point	Number		Stro	ng	Weak		Priority	
Name			of							
			Targets							
	East	North		Depth	Strike	Conductance	Depth	Strike	Conductance	
				to	Length	(S)	to Top	Length	(S)	
				Тор	(m)		(m)			
				(m)						
NW1	670232	6122973	2	30	240	45	100	300	50	1
NW2	670246	6122334	2	60	280	100	55	150	5	2
NW3A1	673975	6122160	2	20	330	30	40	220	30	3
NW3B3	673640	6122380	1	7	350	30				6
WT1	675220	6119250	1	2	700	20				10
WT2	675169	6116120	3	10	500	40	70	300	35	7
WT3	677499	6122943	1	5	500	50				8
WT4	676803	6120064	1	8	600	40				9
WT5	676453	6115500	2	20	550	60	98	550	60	4
NET6	679060	6123111	2	9	200	90	10	200	60	5



Aeromagnetic Data at

EM Data at Late





Figure 10: Airborne Magnetic and TEDM maps showing the location of the the relationship of magnetics and EM signature of the NW 2 Conductor



EM dB_z/dt Chn30 - Claim boundary /Geology underlay



22

The WT series of conductors lie in the package of north-south trending rocks that flank Scott Lake and extend to Melgurd Lake. Conductors WT 1 and WT2 are very nearly on strike with each other to the west of Keep lake and Scott Lake while Conductors labelled WT 3, WT 4 and WT 5 lie to the east of Scott and Keep Lake extending as far as Melgurd Lake.

Conductor WT 1 is given the lowest priority by Masson and Groom (2024), has a strike length of 700 m and a conductance of 20 S. Conductor WT 2 is interpreted as a series of thin conductors varying in strength from 6 S to 40 S.

Conductors WT 3,4 and 5 are interpreted as a long thin strip of conductors down the main Melgurd survey area (Figures 8 and 12)



Figure 12: TEDM response of the WT 3, WT 4 and WT 5 conductors that flank the west side of Keep Lake extending to Melgurd Lake. Note the location of WT 3. The other conductors are part of the conductive zone extending to the south.

Figure 12 shows the conductive package that extends for approximately 9 km extending from the Keep Lake area Melgurd lake. The northern most of these (WT 3) lies on the northern part of Melgurd Lake. It is interpreted to have a strike length of 500 m and a conductance of 50 S. To the south, along strike is WT 4 which is a stronger zone of conductive material along this structure. It has a strike length of 600 m and a conductivity of 40 S. Conductor WT 5 is an isolated conductor along this conductive trend which has one of the largest responses at late time of this series of conductors (Figure 13).



Ch33 Bz Target 5 Horizontal magnetic gradient underlay

Ch33 Bz Target 5 Geology Underlay

Figure 13: The WT 5 Conductor showing the TEDM response overlying the horizontal magnetic gradient. The image to the right shows the TDEM response overlying the interpreted geology.



Figure 14: Target NT 6 lies in the far northeast part of the survey. It lies on the edge of a transition in the magnetic characteristic of the rocks.

Target NT 6 lies in the far northeast part of the survey. It lies on the edge of a transition in the magnetic characteristic of the rocks as well as on the eastern edge of a slight rise (15 m) in topography. It has a strike length of 200 m and a conductance of 90 S. There is also a secondary conductor extending to the south which has a strike length of 200 m and a conductance of 60 S.

10.0 DRILLING

The Company has not yet carried out any drilling on the property. The historical drilling is described in Section 6 of this report.

11.0 SAMPLE PREPARATION, ANALYSES AND SECURITY

The Company has not yet carried out any sampling on the property. The historical sampling is described in Section 6 of this report

12.0 DATA VERIFICATION

The author has not carried out any sampling on the property. Site visits have been carried out by the author on July 5, 2022 at which time the author examined outcrops in the Keep Lake area and on July 19, 2024 at which time the author examined outcrops in the Melgurd lake area.

In the author's opinion, the data provided by Boreal Gold Inc., that available in the assessment files of Saskatchewan Mineral Assessment Data Base and in publications of the Saskatchewan Geological Survey are adequate for the purposes used in this technical report.

13. MINERAL PROCESSING AND METALLURGICAL TESTING

No Mineral Processing or Metallurgical Testing has been undertaken on the property nor on samples from the property.

14.0 MINERAL RESOURCE ESTIMATES

No mineral resource or mineral reserves have been defined on the property.

15.0 ADJACENT PROPERTIES

The Melgurd property lies 7 km north of the Manson Bay Au deposit and 5 km to the north of the Schotts Lake deposit (Figure 15). The claims that host the Schotts Lake deposit are held by Eagle Plains Resources and tie on to the southern boundary of Boreal Gold Inc's property.

The Schott's Lake Deposit was originally discovered by J.A. Syme in 1953. Subsequent to the discovery the property has undergone several ownership changes and campaigns of exploration and drilling by a variety of operators (Saskatchewan Mineral Deposit Index (SMDI) Number 0320 ((link <u>- Government of Saskatchewan - Mineral Deposit Query</u>)). Aur Resources provided the latest resource estimate 1,983,850 tonnes grading 0.61% Cu and 1.35% Zn. The original source of this resource estimate is not publicly available and is here taken from the SMDI posting. This should be considered an historical (non-NI-43101) resource estimate and does not comply with resource categories defined in 'NI-43101 Standards For Disclosure for Mineral Projects' and is provided for Information only. The author has not done sufficient work to classify the historical estimate as current mineral resource, and the issuer is not treating the historical estimate as a current mineral resource. The author has not been able to verify the information on the Schotts Lake and Manson Bay properties and also caution that the information from these properties is not necessarily indicative of any mineralization on the Melgurd Lake Property that is the subject of this technical report.



Figure 15: Geological map of the Wildnest - Melgurd Lake area showing the claim location map and identifying the location of the competitor claims.

The other significant mineral property, also lying to the south of the Boreal Gold property is the Manson Lake Gold deposit located on Manson Bay, Wildnest Lake (SMDI Number 2280, there termed the 'Man-1 Grid Cu-Au Zone' (Link: - Government of Saskatchewan - Mineral Deposit Query)). The property has been held by several owners since the area was first staked in 1954 following the discovery of the Schotts Lake deposit and is currently held by SKRR Exploration Inc. This property has also undergone several ownership changes and exploration campaigns since that time. Gold mineralization was first identified by Hudson Bay Exploration and Development (HBED) in 1985 who had optioned the ground from Raydor Resources of Flin Flon. The property was transferred to Mingold Resources Limited (a subsidiary of HBED) in 1987 who completed a further 43 drill holes and outlined the Cu-Au zone of mineralization. Following the completion of the drill program Mingold estimated that the zone contained 660,000 tons grading 0.10 oz/to Au (this estimate is a non-NI43101 compliant Historic Resource). The original source of this resource estimate is not publicly available and is here taken from the SMDI posting. This resource estimate does not comply with resource categories defined in 'NI-43101 Standards For Disclosure for Mineral Projects' and is provided for Information only. The author has not done sufficient work to classify the historical estimate as current mineral resource, and the issuer is not treating the historical estimate as a current mineral resource. Mineralization on the Manson Lake Gold deposit is not necessarily indicative of any mineralization on the Melgurd Lake Property that is the subject of this technical report.

The Manson Bay gold rich sulphide mineralization lies within a northeast-trending shear zone. This zone is interpreted to be a VMS deposit although the presence of the faulting along Manson Bay has created a silicified zone interpreted to be a quartz-rich gneiss with mineralization within this silicified shear zone traced over a strike length of 2400 ft (731.5 m) within this silicified shear zone. The mineralized horizon contains hornblende-feldspar-biotite and locally chlorite and tourmaline crystals. Minerals present include trace to 15% pyrite, trace to 20% pyrrhotite, up to 10% graphite, trace to 12% chalcopyrite, trace to 10% sphalerite, trace galena and associated gold mineralization

Other properties to the west and east of the southern boundary of the Boreal claims are held by Ripple Exploration Ltd and Brunswick Exploration Inc. (Figure 15). Other claims in the area are Michael Carl Charles Grundmann. There is no current reported work being carried out on these properties.

16 OTHER RELEVANT DATA AND INFORMATION

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

17.0 INTERPRETATION AND CONCLUSIONS

The property is an early-stage exploration project that has had little modern or historic exploration.

The volcanic succession trending through the Melgurd Lake property is contiguous with the Flin Flon/Amisk Lake volcanics that host the economic mineral deposits of the area. The sequence includes felsic to intermediate volcanic rocks intercalated with siliceous and calcic metasedimentary rocks of the Missi and Burnwood Groups, all of which have been subjected to upper amphibolite metamorphic grade such that few primary textures are preserved.

The presence of two significant zones of mineralization in the Wildnest Lake area, in lithologies and structures that are contiguous with the Melgurd property indicate the potential for VMS and Epigenetic Gold deposits on the property. Specifically, the presence of the VMS Schotts Lake Cu/Zn deposit in felsic to intermediate volcanics with attendant anthophyllite/garnet/cummingtonite alteration indicates that the volcanic sequence in the area is prospective for this type of deposit. Additionally, the presence of anthophyllite-garnet alteration in the Keep Lake and Cornell Bay area of Kakinagimak Lake may indicate the presence of hydrothermal alteration associated with a potential VMS style deposit.

The second area of possible interest is modelled on the Manson Bay gold rich sulphide mineralization which consists of a silicified horizon within a northeast-trending shear zone. This zone is interpreted to be a VMS deposit although the presence of the faulting along Manson Bay has created a silicified zone interpreted to be a quartz-rich gneiss with mineralization within this silicified shear zone. The mineralization within this deformed the zone has been traced over a strike length of 2400 ft (731.5 m) within this silicified shear zone. The mineralized horizon is a quartz-rich gneiss that contains hornblende-feldspar-biotite and locally chlorite and tourmaline crystals. This zone lies within a broad zone of conductivity which appears to have been strongly silicified along the major fault that extends from Manson Bay to Keep and Scott Lake. The alteration assemblage with chlorite, tourmaline etc. is atypical of a Flin Flon style VMS deposit.

The author has not been able to verify the information on the Schotts Lake and Manson Bay properties and also caution that the information from these properties is not necessarily indicative of any mineralization on the Melgurd Lake Property that is the subject of this technical report.

The Airborne TDEM and Magnetic Survey has identified 10 zones of conductivity that could host an economic sulphide deposit. The most prospective of these would be those associated with zones of anthophyllite/garnet/cummingtonite alteration and mafic to felsic volcanic rocks. In particular TDEM targets NW1, NW 2, NW 3A1 and WT5 have been identified with the highest priority. Targets NW1 and NW2 occur on the western edge of Cornell Bay area of Kakinagimak Lake with or on folded rocks interpreted to be felsic to mafic volcanic rocks with zones of anthophyllite – garnet alteration. Target WT 5 west of Keep Lake also lies within intermediate to felsic volcanic rocks with nearby zones of alteration including garnet, anthophyllite and sulphides including pyrite, pyrrhotite and chalcopyrite.

Nearly the entire property has been burned in a forest fire approximately 15 years ago and as such the area has extensive dead fall and subsequent regrowth. As such field work on the property will be challenging and add to the cost of any ground surveys.

The author Is not aware of any significant risks and uncertainties with regards to the Melgurd Lake property outside of the normal exploration risk. In conclusion, the Author believes that the Melgurd Lake Property has the potential to host economic VHMS style base metal/golddeposits based on the history that each of these types of deposits have been successfully discovered and mined In the Flin Flon area.

18.0 RECOMMENDATIONS

The results of Airborne TDEM and Magnetic survey carried out on the Melgurd Property accompanied by the geological mapping and the recognition of alteration assemblages that are indicative of hydrothermal alteration shown in Figures 3 and 5 provides the basis for the next phase of exploration.

Specifically, the initial program recommended here includes:

- 1. Linecutting and HLEM surveying of conductors in the Scott Lake, Keep Lake, Cornell Bay and Melgurd lake area to detail the location of the conductive bodies.
- Geological mapping of the Keep Lake Scott Lake supracrustal sequence to trace the felsic volcanic horizons and their relationship with the bounding sediments as well as to identify any VMS style alteration assemblages (anthophyllite/garnet/cordierite/cummingtonite). This mapping should also focus on the structural geology of the area to identify structures with the potential to host gold mineralization.
- 3. Geological mapping and prospecting of the Cornell Bay area and the area to the SW to trace out the supracrustal stratigraphy, identify volcanic rocks and also examine the area for the potential for the VMS style alteration assemblages.
- 4. Carry out orientation geochem surveys testing utilizing basal till sampling, Ah soil horizon geochemistry and Mobile Metal Ion soil geochemistry to identify the method that best defines gold dispersion trains and/or proximal gold mineralization and then utilize that data to systematically sample the areas of mapped structural complexity.

Table 3: Detailed costs of the proposed Phase 1 Exploration Program on the Melgurd LakeProperty.

Phase 1						
Activity	Cost					
Linecutting - 50 km @ \$2000/km	\$100,000					
Geophysics - HLEM Ground Surveys 45 km @ \$200/km	\$8,000					
Geochemistry - Basil Till Sampling + Analysis (40 samples). Sampling costs 10 days @ \$500 + Analysis 40 samples @ \$50/sample	\$7,000					
Geochemistry: Geochem orientation surveys and follow-up surveys: 200 samples, 4 men @ \$2000,/day/10 days - Sample analysis = \$40/sample	\$26,000					
Geological Mapping - Geologist + assistant/ 5 days @ \$800/day	\$4,000					
Air Support/ Summer program Otter mob/demob \$4000/185 - 2 supply flights @ \$500	\$5,000					
TOTAL	\$150,000					

Follow up exploration and drilling is contingent on the results of the above program.

19.0 REFERENCES

Ashton, K.E., Wheatley, K.J., Moser, D., Paul, D. and Wilcox, K.H., 1986: The Kisseynew gneisses of Saskatchewan: Update; in Summary of Investigations, 1986, Saskatchewan Geological Survey, Saskatchewan Energy and Mines, Miscellaneous report 86-4, p.145-149.

Bailes, A.H., 1971: Preliminary compilation of the geology of the Snow Lake-Flin Flon- Sherridon area; Manitoba Department of Miners and Natural Resources, Mines Branch, Geological Paper GP71-1, 27p.

Bateman, J.D. and Harrison, J.M., 1946: Sherridon, Manitoba; Geological Survey of Canada Map 862A with descriptive notes.

Bruce, E.L., 1918: Amisk – Athapapuskow Lake district; Geological Survey of Canada Memoir 105.

Campbell, J.E., Dredge, L.A. (2012). A trans-jurisdiction database of till composition across the Circum-Kisseynew area, Manitoba and Saskatchewan. Geological Survey of Canada, **Open File** 7064. (more) Survey Description In 2008, till samples (3 kg and 10 kg at each site) were collected at new and previously identified anomalous sites (GSC OFs 5464 and 5799)

Cheesman, R.L. (1956): The Geology of the Mari Lake Area, Northeastern Saskatchewan; Sask. Dep. Miner. Resour., Rep. 23, 40p

Gibson, H., Lafrance, B., Pehrsson. S., DeWolfe, M, Gilmore, K., Simard, R. and Pearson, B.F., 2013; The Volcanological and Structural Evolution of the Paleoproterozoic Flin Flon Mining District, Manitoba: The Anatomy of a Giant VMS System, 2013; Geological Association of Canada–Mineralogical Association of Canada Joint Annual Meeting, Winnipeg May, 2013; Open File OF2013-6 Field Trip Guidebook FT-C; 57 p.

Goldfarb, R.J., Baker, T., Dubé, B., Groves, D.I., Hart, C.J.R. and Gosselin, P., 2005: Distribution, Character, and Genesis of Gold Deposits in Metamorphic Terranes in Economic Geology 100th Anniversary Volume, pp 407-450.

Franklin, J.M., Gibson, H.L., Jonason, I.R., and Galley A.G., 2005: Volcanogenic Massive Sulfide Deposits, in Economic Geology One Hundredth Anniversary Volume, 1905 -5005, editors Hedenquist,, J.W., Thomopson, J.F.H., Goldfarb, R.J. and Richards, J.P. pp. 523 – 560.

Harvey, B J A; Carson, J M; Coyle, M; Dumont, R; Ford, K L; Buckle, J L., 2009: North Hanson geophysical survey, Attitti Lake, NTS 63 M/01 and parts of 63 K/13, 63 L/16 and 63 N/04, Saskatchewan / Levé géophysique North Hanson, Attitti Lake, SNRC 63 M/01 et parties de 63 K/13, 63 L/16 et 63 N/04, Saskatchewan; Geological Survey of Canada, Open File 5711, 2008, 10 sheets.

Maxeiner, R.O., 2007; Geology of the Kakinagimak Lake area, northwestern Flin Flon Domain (part of NTS 63M/01); in Summary of Investigations 2007, volume 2, Saskatchewan Ministry of Energy and Mines Misc. Rep. 2007-4.2, CD-ROM, Paper A-3, 18p.

Maxeiner, R>O., Cliveti, M. and Morelli, R., 2008: Geology of the Wunehikun Bay (Mirond Lake) area, northwestern Flin Flon Domain and Jones Lake area, southwestern Kisseynew Domain (parts of 63M/01, /02, /07 and/08; in Summary of Investigations 2008, Volume 2, Sask Ministry of Energy and Resources, Misc. Rep. 2008 -4.2, CD-ROM Paper A-3, 20-.

Maxeiner, R.O. and Ashton, K.E. ,2012a: Geological compilation of the northern Sask craton and southern Glennie–Flin Flon complex in the Pelican Narrows area, Saskatchewan, northeast sheet: McArthur-Kipahigan lakes area (parts of 63M/08 and 63N/05); Sask. Geological Survey, Sask. Ministry of the Economy, Geoscience Map 2012-1, 1:50 000-scale.

Maxeiner, R.O, and Ashton, K.E., 2012b: Geological compilation of the northern Sask craton and southern Glennie – Flin Flon complex in the Pelican narrows area, Saskatchewan (parts of 63M/01,/02,/06,/07, and /08 and parts of 63N/04 and/05); Sask Geological Survey, Sask Ministry of the Economy, Geoscience Map 2012-1, set of four 1:50000 scale maps.

Masson, S.L., Masson, R., Coatzee, T., Engdahl, D., Hobson, V., Bello, B.: 2022-2023 Airborne Time Domain Electromagnetic Survey Report on the Melgurd Lake Property, Saskatchewan (NTS 63M/1), 103 p.

Masson, S.L. and Groom, R.W., 2024: Boreal Gold Inc. TDEM and Aeromagnetic Airborne Survey Daga Analyses and Modeling, Melgurd Lake, SK, Assessment Report, 47 p.

Maxeiner, R.O. Cliveti, M, Rayner, N, and Morelli, R. (2007): Geology and Geochronology f the Pelican Narrows Area, Northwest Flin Flon Domain; <u>95106-OH2008 TS3 Maxeiner 1 (2).pdf</u>

Maxeiner, R.O., Cliveti, M., and Morelli, R. (2008) Geology of the Wunehikun Bay (Mirond Lake) area, northwestern Fliun Flon Domain, and the Jones Lake area, southwestern Kisseynew Domain (parts of 63m/01, /02, /07, /08): in Summary of Investigations 2008, Volume 2, Saskatchewan Geological Survey, Sask. Ministry of Energy and Resources, Misc. Rep. 2008-4.2, CD-ROM, Paper A-3, 20 p.

McMartin, I, Campbell, J.E., Dredge, L.A. and Grunsky, E., 2007; Till geochemistry from archived samples collected over the Glennie, Kiosseyunew and Flin Flon domains, east-central Saskatchewan; Geological Survey of Canada Open File 5464, Saskatchewan Industry and Resources Open File 2007-13, 23 p.

Pearson, J.G.: 2022, Technical Report on the Melgurd Lake Claim Group, Pellican Narrows area, report prepared for Boreal Gold inc., 35 p.

Rayner, N.M., Maxeiner, R.O., and Creaaser, R.A. (2009) New U-Pb and Sm-Nd results from the Pelican Narrows area: 1865 to 1857 Ma successor arc sedimentation from juvenile sources, 1857 Ma juvenile successor arc plutonism,. And 1837 Ma Missi Group sedimentation in Summary of Investigations 2009, Voume 2, Saskatchewan Geological Survey, Sask. Ministry of Energy and Resources, Misc. Rep. 2009-4.2, Paper A-9 15 p.

Regional lake sediment geochemical reconnaissance data, east-central Saskatchewan; Geological Survey of Canada. Geological Survey of Canada, Open File 1129, 1984, 146 pages (8 sheets), <u>https://doi.org/10.4095/129940</u>

Pearson, J.G., 1986: Kisseynew Metallogeny: the geology of the Schotts lake base metal deposit and the Dolly gold occurrence; ; in Summary of Investigations, 1986, Saskatchewan Geological Survey, Saskatchewan Energy and Mines, Miscellaneous report 86-4, p.123-127.

Robertson, D.S., 1953: Batty Lake map-area, Manitoba; Geological Survey of Canada Memoir 271.

Zwanzig, H.V. and. Bailes, A.H., 2010: Geology and geochemical evolution of the northern Flin Flon and southern Kisseynew domains, Kisseynew-File lakes area, Manitoba (parts of NTS 63K, N); Manitoba Innovation, Energy and Mines, Manitoba Geological Survey, Geoscientific Report GR2010-1, 135 p.

Zwanzig, H.V., Ashton, K.E., and Scheldweitz, D.C.P., 1995: Geology, Flin Flon belt – Kisseynew belt transition zone, Manitoba-Saskatchewan; Geological Survey of Canada Open File 3054, Scale 1:100,000

20.0 SIGNATURE PAGE

This report titled "Technical Report on of the Melgurd Lake Claim Group" and dated July 7, 2022 was prepared and signed by:

John. J. Rearson.

John G. Pearson, M.Sc., P. Geo., FGC, FEC(Hon)

Dated at Saskatoon, SK July 24, 2024



21.0 CERTIFICATE OF QUALIFICATIONS

I, John G. Pearson, M.Sc, P.Geo. FGC, FEC (Hon), as author of this report entitled "Technical Report on the Melgurd Lake Claim Group" prepared for Boreal Gold Inc. and dated July 24, 202, do hereby certify that:

- 1. I am a Consulting Geologist residing at 1418 Fairbrother Crescent, Saskatoon, SK, S7S 1H7.
- 2. I am responsible for all aspects of this Technical Report
- 3. I am a graduate of the University of Saskatchewan in 1972 with a Bachelor of Science (Advanced) degree in Geology and in 1979 with a Master of Science degree in Geology.
- 4. I am a registered Professional Geoscientist in the Province of Saskatchewan (Registration Number 04096)
- 5. I have worked as a geologist for a total of 50 years since my graduation. My relevant experience for the purpose of this Technical Report is
 - a. 1.5 years as a mine geologist with the Granduc Operating Company at the Granduc Mine, Stewart, BC.
 - b. 1.5 year in exploration for Unconformity Uranium deposits.
 - c. 10 years as Resident Geologist for the Saskatchewan Geological Survey based in Creighton, SK carrying out mapping and research projects on the gold deposits of the Flin Flon Amisk Lake area.
 - d. 15 years of active exploration experience with Cominco/Teck Cominco Ltd. throughout the Canadian Shield and the Arctic Islands of Canada, Greenland and Turkey carrying out exploration in a wide variety of geological models and geological terrains. The various commodity groups and deposits worked on include VMS Cu/Zn deposits, Magmatic Ni, Cu, PGM deposits, Sediment hosted Pb/Zn deposits, and Carbonate hosted Zn/Pb deposits.
 - e. 7 years as a consulting geologist in the exploration for and evaluation of Rare Earth Element deposits, Porphyry Copper deposits and Epithermal Gold deposits.
 - f. Attendance at a number of short courses and conference and on field trips concerning a variety of magmatic base and precious metal deposits and a variety of sediment-hosted base metal and uranium deposits in North America.
 - g. Publication of a number of papers on Saskatchewan gold deposits and presentations at a number of professional conferences and groups on Saskatchewan gold deposits, Magmatic Ni/Cu/PGM deposits and Rare Earth Element Deposits.
- 6. I have read the definition of "qualified person" set out in National Instrument 43-101 (NI43-101) and certify that by reason of my education, affiliation with a professional association (as defined in NI43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI43-101.
- I visited the Melgurd Property on July 5, 2022 and examined the metavolcanic lithologies in the Keep Lake area I preparation for a NI-43101 Technical Report on the property dated July 7, 2022. I again visited the property on July 27, 2024.
- 8. I am independent of Boreal Gold Inc. and the vendors applying the test set out in Section 1.4 of National Instrument 43-101.
- 9. I prepared a NI-43101 Technical Report on the Melgurd Lake Property dated July 7, 2022.
- 10. I am responsible for all aspects of this technical report.
- 11. I have read National Instrument 43-101, and the Technical Report has been prepared in compliance with National Instrument 43-101 and Form 43-101F1.

12. To the best of my knowledge, at the effective date of this report (July 24, 2024), and belief, the information in the Technical Report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.

Dated at Saskatoon, SK July 24, 2024

John. J. Rearson.

John G. Pearson, M.Sc., P.Geo., FGC, FEC (Hon)

