Nordic Minerals Ltd.

Compilation Report on Disposition S-111969

Douglas Lake, Saskatchewan

Flin Flon Mining District

310625 E 6069700 N

UTM NAD83 Zone 14

NTS 63K12

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June 2020

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Introduction

Nordic Minerals Inc. holds a disposition in the Flin Flon Greenstone Belt, which is known to host many world-class volcanogenic massive sulphide (VMS) deposits. There are more than 30 producing base and precious metal deposits of varying size hosted within the Flin Flon Greenstone Belt, which has been explored since the discovery of the Mandy Mine in 1915.

Research and compilation on behalf of Nordic Minerals Ltd. was conducted from May to June 2020, by Orix Geoscience Inc. for the purpose of providing a detailed summary of the property and recommendations for future exploration.

Since 1954 geophysical surveys, mapping, trenching, sampling, and drilling has been intermittent on the property resulting in two showings recognized by the Saskatchewan Ministry of Energy and Resources, the Douglas Lake Copper Showing and the GAW 5 and 6 Copper Showing. Several other proximal copper and gold showings occur along trend within one kilometer of the property.

In recent years, high-resolution geophysical surveys and updated mapping have covered portions of the property. This includes versatile time domain electromagnetic (VTEM) geophysical survey data and part of the Flin Flon Targeted Geoscience Initiative provided detailed mapping on the eastern portion of Douglas Lake. Electromagnetic (EM) anomalies have been identified on and immediate adjacent to the property and the detailed mapping along with surface data provides insight to the general trend and structures that have the potential to host base and precious minerals.

Geophysical and geological defined exploration targets have been identified through the compilation of the aforementioned public and private data.

Location and Access

Nordic Minerals' S-111969 disposition is located three kilometers southwest of the town of Creighton, Saskatchewan and four kilometers southwest of the city of Flin Flon, Manitoba. A railway line services Flin Flon from the North and South and the Flin Flon regional airport is located in the community of Bakers Narrows 15 kilometers southeast of the city (Figure 1).

Access to the disposition can be gained by Saskatchewan Highway 167 which bisects the property from East to southwest. A powerline can be utilized for ease of access along the West side of the claim. The northern section of Douglas Lake occurs on the southeast portion of the disposition and can be accessed by boat (Figure 2). Special regulations prohibit the use of boat motors on Douglas Lake. The area has a relief of up to 32 m with the highest point at 354 m and lowest point at 322 m.

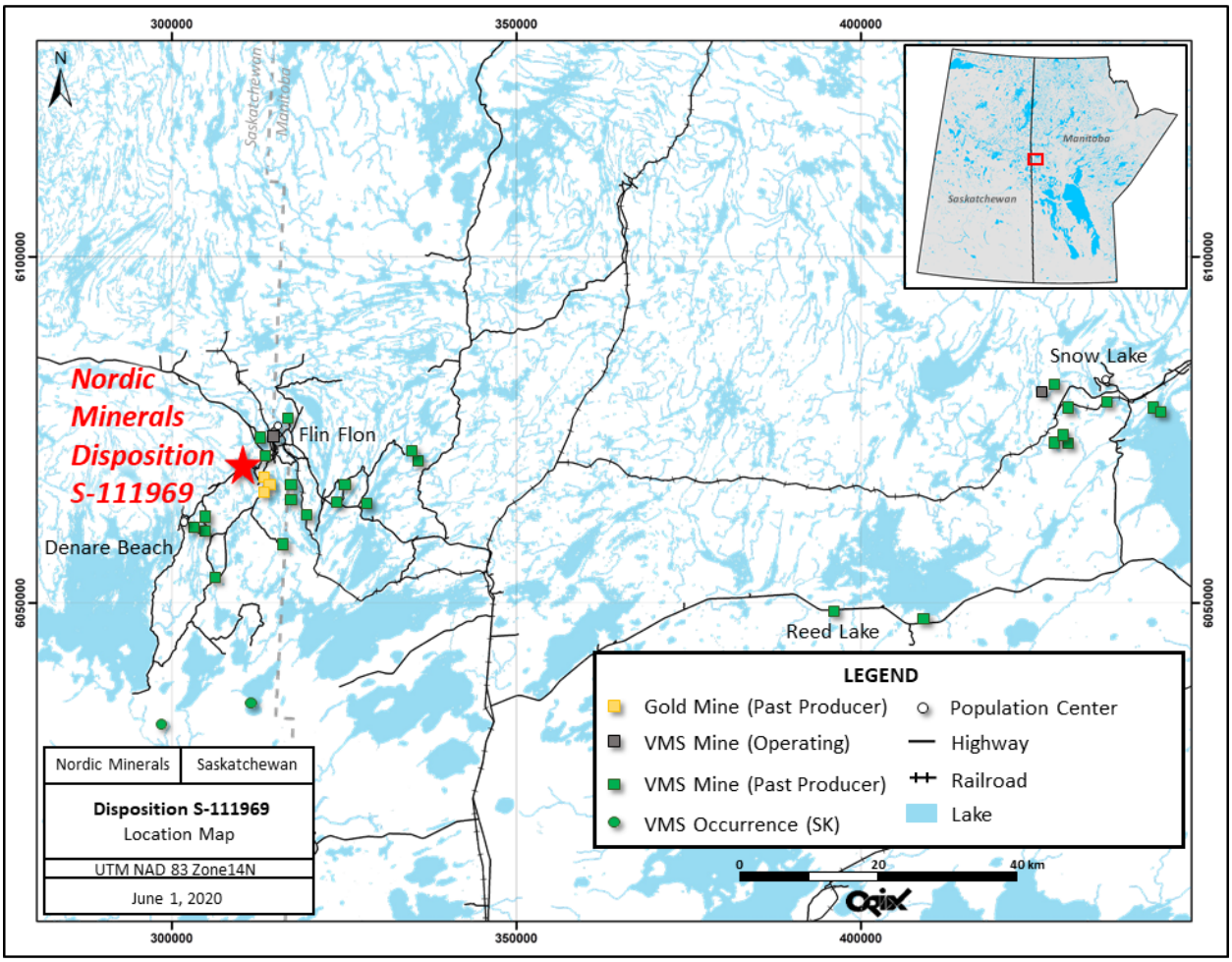


Figure 1: *Location map of Nordic Minerals' S-111969 disposition within the Flin Flon area.*

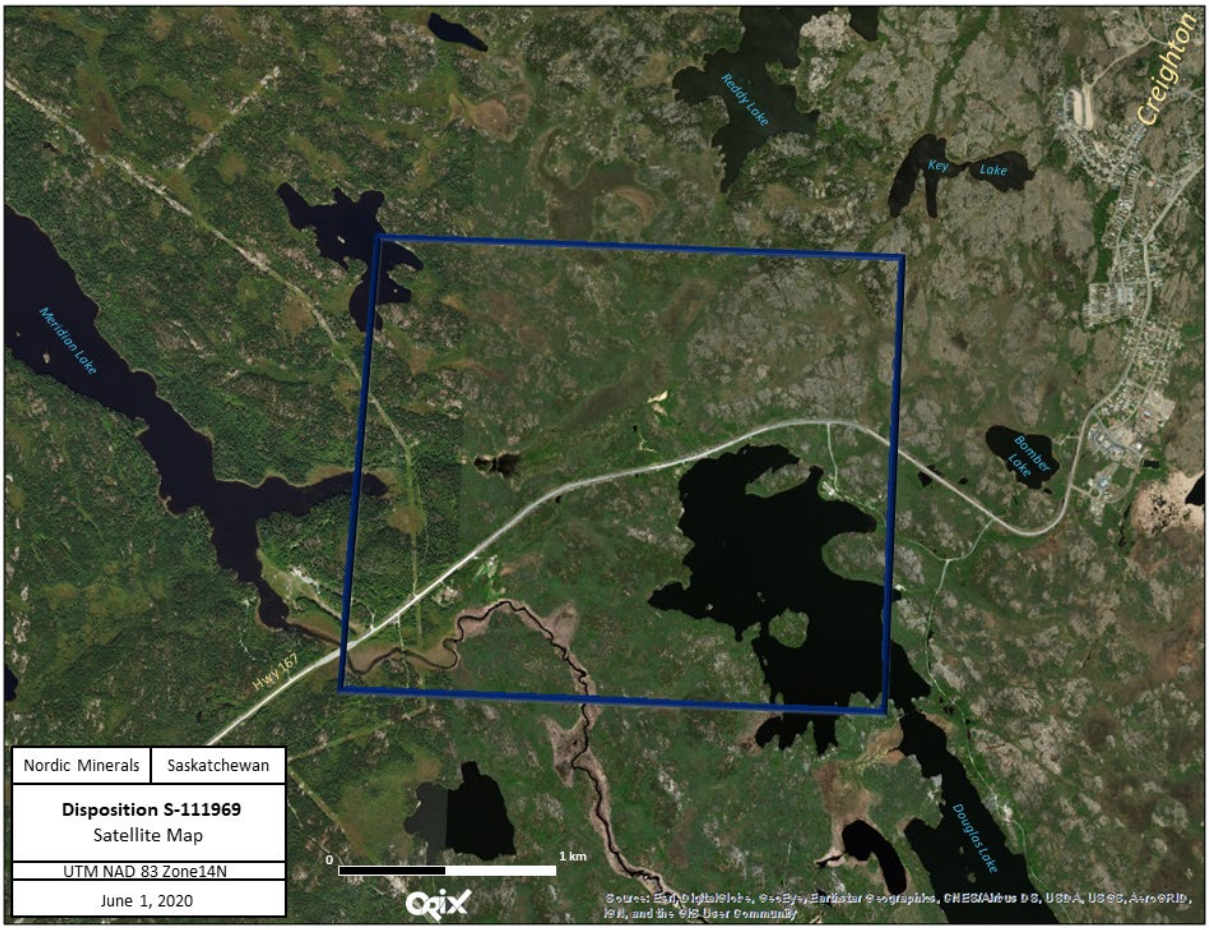


Figure 2: *Satellite Map of the Nordic Minerals Douglas Lake Property highlighting the local infrastructure and topography.*

Property

Nordic Minerals' Douglas Lake property consists of the wholly owned S-111969 mineral disposition and 15 deemed partial cells (Figure 3). Partial cells were added to mineral dispositions to accommodate for the SaskGrid system in the establishment of the electronic parcel mapping system by the Saskatchewan Ministry of Energy and Resources in 2012. The addition of the partial cells has added 119 hectares to the S-111969 mineral disposition package which currently encompasses 486 hectares, with a total perimeter of nine kilometers. The disposition has an effective date of November 7, 2011 and is in good standing until February 4, 2021.

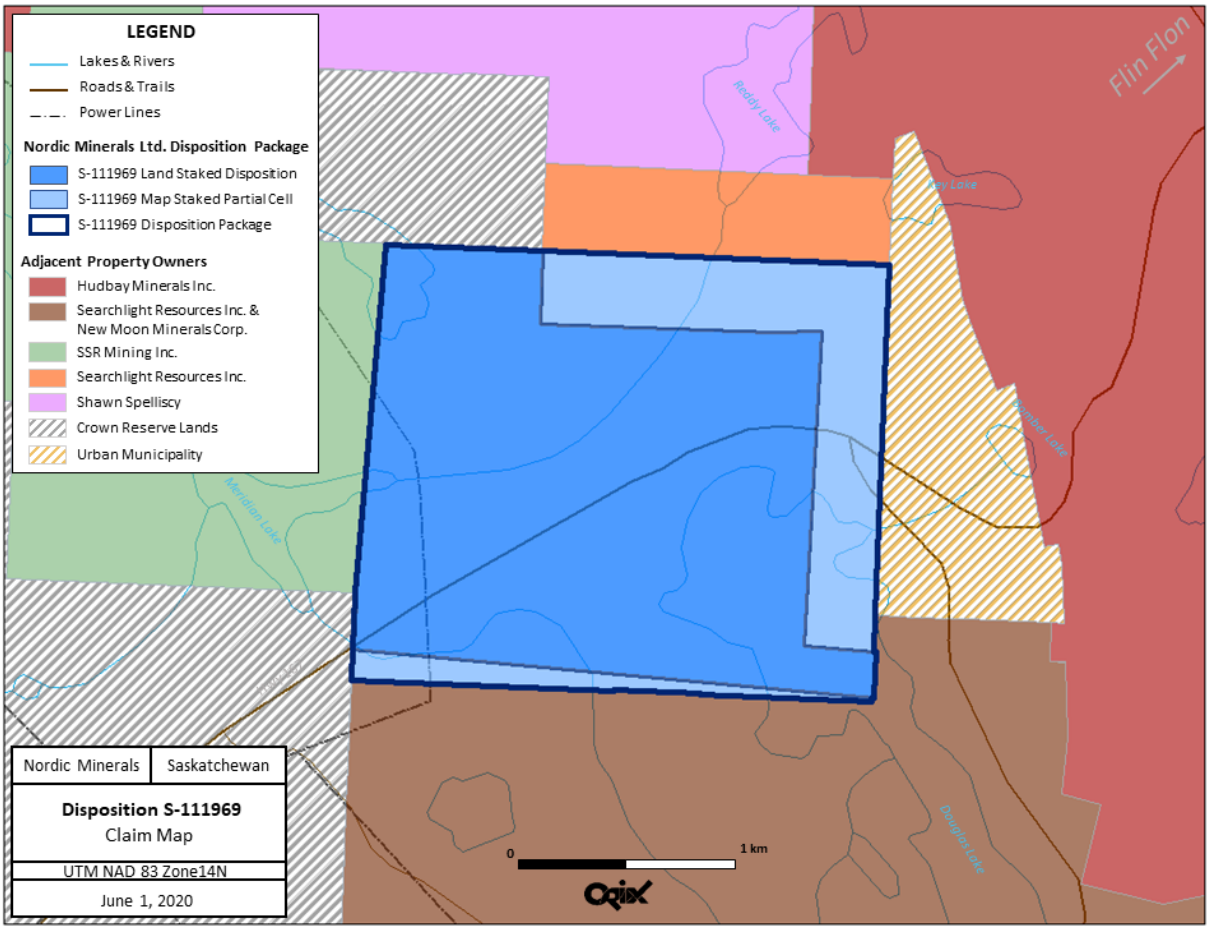


Figure 3: *Disposition map of S-111969 including land and map staked cells, and neighbouring landowners.*

Project Work History

From 1953-1954, Hudson Bay Exploration & Development Company conducted an electromagnetic survey over the Douglas Lake area as the first recorded work on the property. Trenching in 1970 by W.J. Reid discovered the Douglas Lake Copper Showing, the first of two showings on the property. The GAW 5 and 6 Showing, also located on the property, was discovered by Hudson Bay Exploration & Development Company ground-truthing and EM anomaly on the GAW 3 grid and drilling from 1987-1993. The Unity Gold-Copper Showing was also discovered during the same campaign two kilometers southeast of the property along strike of the structures in the area. Several other showings also occur along strike including the Bomber Lake Copper Showing discovered once again by Hudson Bay Exploration & Development Company in the KET-series drilling from 1980-1984, the COR Gold Prospect by Flin Flon Mines Ltd. in 1983-1984, and the past producing Newcor Gold Mine which was first discovered by J. Tikkanen in 1933.

Mapping of the geology and structure was done on the property and in the Douglas Lake area by D.J. Thomas from 1989 to 1993, West of Douglas Lake by R.M. Morelli in 2010, and on the East side of

Douglas Lake by K. MacLaughlan in 2006, 2007, and 2009 as part of the transborder Flin Flon Targeted Geoscience Initiative by the Manitoba and Saskatchewan Geological Surveys. High-resolution geophysics was conducted most recently in 2011 and 2014.

Since acquiring the property in 2011, Nordic Minerals has performed sampling and reconnaissance programs in 2012, 2013, and 2017 to locate and resample historical trenches, known mineral showings, and prospect for additional VMS mineral occurrences (Table 1).

Highlights of the showings on and proximal to the property recognized by the Saskatchewan Ministry of Energy and Resources are outlined in Table 2. A full description of each showing is provided in Appendix 1.

Table 1: Work history of the Douglas Lake property.

Year	Location	Title Holder/Mapper	Activity	Report Reference
1953-1954	Property	Hudson Bay Exploration & Development Company	EM survey	63K12-0010
1967	Property	Robin Studer	EM Survey with no anomalies found	63K12-0063
1970	Property	W.J Reid	7 trenches totaling 4637-cubic ft. ***Douglas Lake Cu Showing***	63K12-0030
1980-1984	Proximal – Southeast Strike	Hudson Bay Exploration & Development Company	17 diamond drill holes, including GAW-3, 4 and KET-1-15. EM & Mag surveys covering Douglas and Bootleg Lake area. ***Bomber Lake Cu Showing***	63K12-0113, 63K12-0124, 63K12-0126, 63K12-0131, 63K12-0121, 63K12-0122, 63K12-0138
1983-1984	Proximal – Southeast Strike	Flin Flon Mines Ltd.	19 diamond drill holes totaling 1500 ft. Sampling of historical COR trenches ***COR Au Prospect.***	63K12-0133
1987-1991	Property & Proximal – Southeast Strike	Hudson Bay Exploration & Development Company	Ground and airborne geophysics (EM, VLF, total mag), soil sampling, prospecting. 25 diamond drill holes totaling 7441 ft (GAW 5-7, UNI 1-20, PAT 36-37). ***GAW 5 & 6 Showing; Unity Au-Cu Showing***	63K12-0173, 63K12-0153, 63K12-0158, 63K12-0160, 63K12-0165
1989	Property	D.J. Thomas	Bedrock mapping of the region	MAW00405
1993	Property	Hudson Bay Exploration & Development Company	3 diamond drill holes totaling 2401 ft (GAW 8-10)	63K12-0179
2010	Property	R.M. Morelli	Bedrock mapping of the region	Sask. Ministry of Energy and Resources, Misc. Rep. 2010-4.2

Year	Location	Title Holder/Mapper	Activity	Report Reference
2010	Property	R-L. Simard, et al.	Bedrock mapping of the region	Sask. Ministry of Energy and Resources, Geoscience Map 2010-2
2011	Property	St. Eugene Mining Corp.	Airborne Geophysics	63L09-0468
2012-2013	Property	Nordic Minerals Ltd.	Prospecting and reconnaissance, at samples collected; Prospecting, 17 samples collected	MAW00405
2014	Property	Nuclear Waste Management Organization	Airborne Geophysics	MAW00706
2017	Property	Nordic Minerals Ltd.	Surface sampling for a total of 50 grab samples.	Kushner, D.S. 2017

Regional Geology

The Douglas Lake property is strategically located in the Flin Flon Mining District within the Paleoprotoerozoic Flin Flon Greenstone Belt of the Trans-Hudson Orogen in Saskatchewan (Figure 4). The Flin Flon belt is made up of a collage of 1.92 to 1.87 Ga, predominantly juvenile oceanic rocks and 1.87 to 1.83 Ga successor arcs, basins and plutonic rocks. The Saskatchewan portion of the Flin Flon Greenstone Belt is composed of predominantly juvenile, tholeiitic, mafic volcanic and volcaniclastic rocks. The rhyolite, though volumetrically minor, is economically significant. The Flin Flon Greenstone Belt is unconformably overlain by 1.83 to 1.85 Missi Group which is predominantly continental sandstone and conglomerate. The Missi Group is cut by the distinctive suite of ultramafic to monzonitic intrusions *ca.* 1842 Ma known as the Boudary Intrusions. Regional sinistral and dextral shearing and late brittle dextral faulting post-date folding and thrust faulting (Thomas 1992; MacLaughlan, 2007).

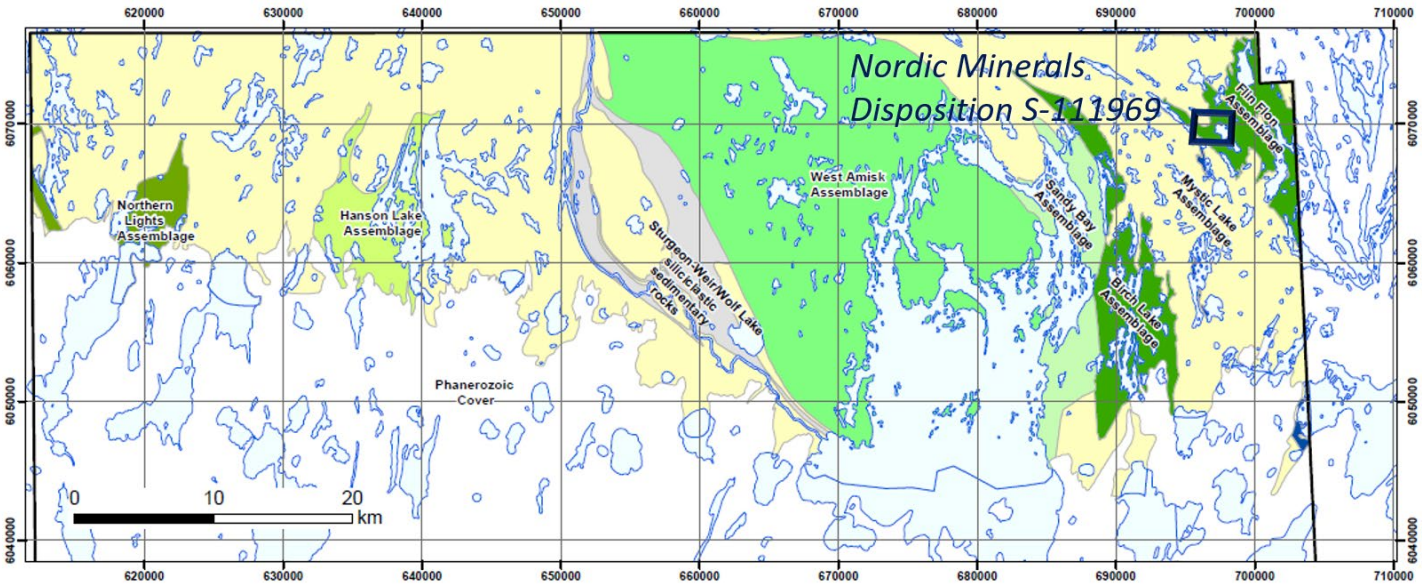
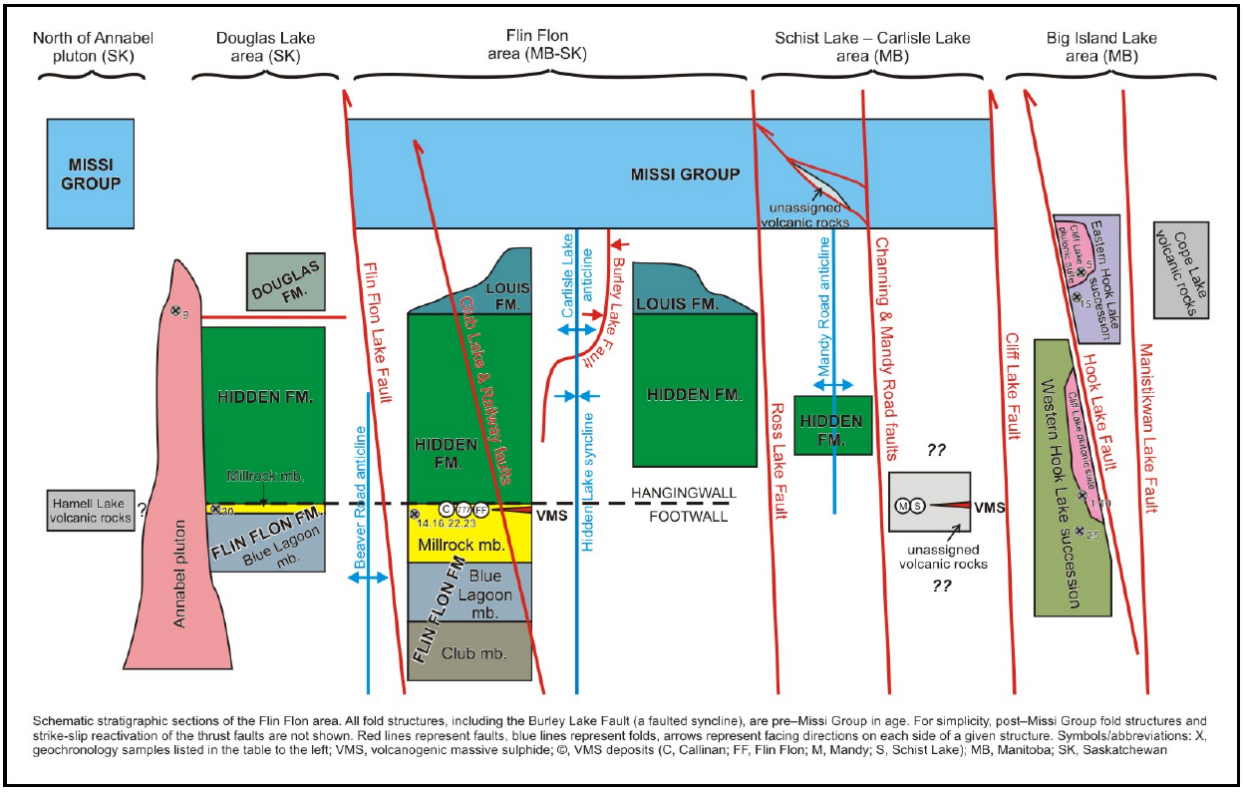


Figure 4: *Tectonostratigraphic Assemblage Map of the Exposed Shield in the Flin Flon area of Saskatchewan (Morelli, 2010).*

The stratigraphy of the Flin Flon mine succession is subdivided into the VMS-bearing footwall unit known as the Flin Flon formation, which is overlain by the hanging wall, Hidden formation and subsequently the Louis formation. The Flin Flon formation is subdivided from oldest to youngest into the Club, Blue Lagoon, and Millrock members. The Club member is characterized by aphyric mafic flows, rhyolite flows and rhyolite-bearing volcaniclastic rocks. The Blue Lagoon member comprises plagioclase porphyritic volcaniclastic rocks and minor flows. The Millrock member, notable for hosting the Flin Flon, Callinan and Triple 7 deposits, comprises heterolithic mafic breccia, mafic tuff and rhyolite flows and autoclastic and resedimented rhyolite breccias (MacLaughlan, 2007). The hanging wall Hidden formation is a series of aphyric and plagioclase porphyritic basaltic andesite flows and sills with abundant fine-grained, thinly-bedded interflow sediments (DeWolfe and Gibson, 2006).

In the Douglas Lake area, the Millrock member is a relatively thin unit where the rhyolites are demonstrating a lack of flow features and associated autoclastic or resedimented breccias, which suggests that this rhyolite is likely intrusive (Bailey 2006; MacLaughlan, 2007). The hanging wall Hidden formation is overlain by a fault followed by the Douglas formation, not observed in the Flin Flon Mine succession (Figure 5). The Douglas Formation is a series of heterolithic and mafic volcanic tuffs, lapilli-tuffs, tuff breccias and breccias, along with pillowed aphyric and plagioclase-phyric basalt flows (Simard et al., 2013)



Schematic stratigraphic sections of the Flin Flon area. All fold structures, including the Burley Lake Fault (a faulted syncline), are pre–Missi Group in age. For simplicity, post–Missi Group fold structures and strike-slip reactivation of the thrust faults are not shown. Red lines represent faults, blue lines represent folds, arrows represent facing directions on each side of a given structure. Symbols/abbreviations: X, geochronology samples listed in the table to the left; VMS, volcanogenic massive sulphide; ©, VMS deposits (C, Callinan; FF, Flin Flon; M, Mandy; S, Schist Lake); MB, Manitoba; SK, Saskatchewan

Figure 5: *Schematic stratigraphy of the Flin Flon area (Manitoba-Saskatchewan) and Douglas Lake areas (Saskatchewan) (Simard et al. 2013).*

Property-scale Geology

Detailed mapping in the Douglas Lake area by Thomas (1989-1993) and MacLaughlan (2005-2010) have been compiled with regional mapping by Morelli (2010) to provide a geological map of the Douglas Lake property (Figure 6). The regionally mapped mafic and intermediate volcanics are intruded by the Annabel, Mystic Lake and Reynard Plutons on the West side of the property (Morelli, 2010). The detailed mapping on the East side of the property identifies the succession of the Douglas formation represented by all major subdivisions. The Hidden formation occurs as portions of the Reservoir member, a series of heterolithic volcaniclastic rocks with subdivisions of mafic breccia with minor felsic clasts, mafic and felsic lapilli tuff, and mafic lapilli tuff and breccia with felsic clasts, along with mafic volcaniclastic rocks with subdivisions of tuff and lapilli tuff, lapilli tuff and tuff breccia, and massive and plane-bedded tuff, and finally a series of aphyric to weakly (<5%) plagioclase-phyric basalt cryptoflows and flows, and associated breccia with sparse peperite which can be either massive and pillowed or peperitic (MacLaughlan, 2010).

The West Arm Shear Zone extends from the South side of the Annabel Pluton in the southwest corner of the property. Parallel northwest trending strike-slip faults are coincident with the lithologic contacts of the Douglas and Hidden formations where one fault marks the contact of the two formations. Extensional faults were observed by Thomas (1990, 1992) throughout the property.
Property scale geological mapping (1:5,000) by the Saskatchewan Geological Survey (K. MacLachlan, 2006) at the south end of Douglas Lake has determined the lower sequence of the Douglas formation to be comprised of plagioclase phyric mafic to intermediate flows and volcaniclastic rocks (Figure 4). The dominant lithology is a crystal rich heterolithic tuff commonly lapilli but locally tuff-breccia and mafic but with rare felsic clasts. These rocks are stratigraphically above an eastern succession of Hidden formation mafic flows with pillows and local hyaloclastite. Semi-conformable zones of silicification are mapped.

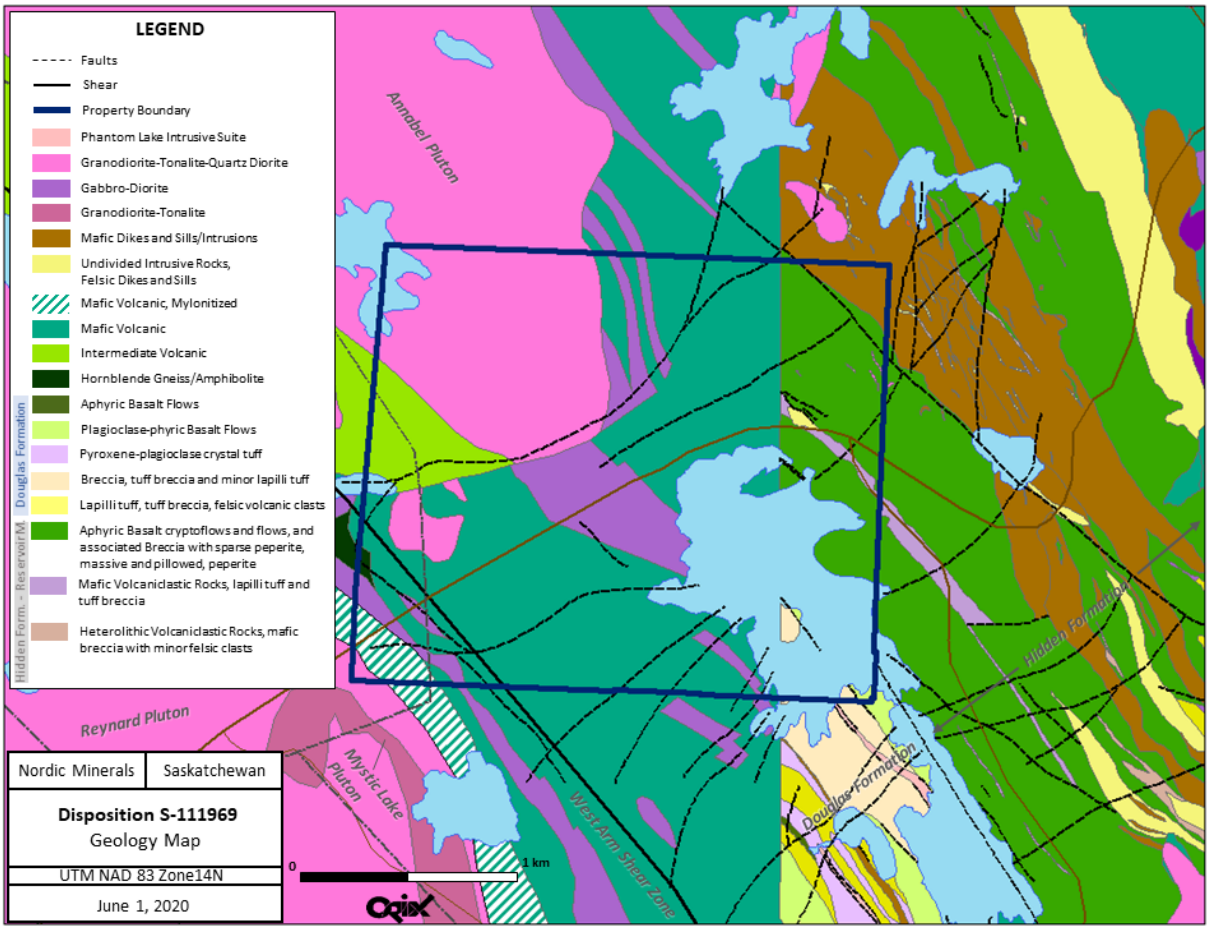


Figure 6: *Geology of the Douglas Lake area (modified from Thomas, 1990 and 1992; MacLaughlan 2010; Morelli 2010).*

In 2006, MacLachlan made the following discussion and conclusion regarding the project.
"The nature and intensity of the silicified amoeboid flow tops of unit 10 is similar to that in the footwall of major VMS deposits in both Snow Lake, Manitoba and Noranda, Quebec (H. Gibson, pers. comm., 2006). Several of the Au/Cu-Au showings and past producers in the Douglas Lake area are associated with massive sulphides, bedding-parallel disseminated sulphides, and Cu- and Zn-bearing sulphides, suggesting a link to VMS mineralization. Along the east shore of Douglas Lake, there is an abrupt change from predominantly aphyric flows to plagioclase porphyritic volcaniclastic rocks, which suggests the presence of a subsidence structure coincident with a change in magma type. Two of the past producing mines in this area (Newcor and Bootleg/Rio) occur at or near this horizon (Figure 7). These observations suggest a favourable environment for the formation of VMS mineralization (Gibson et al., 1999) stratigraphically above the Myo member, and more specifically at the base of the Douglas formation of Thomas (1992).

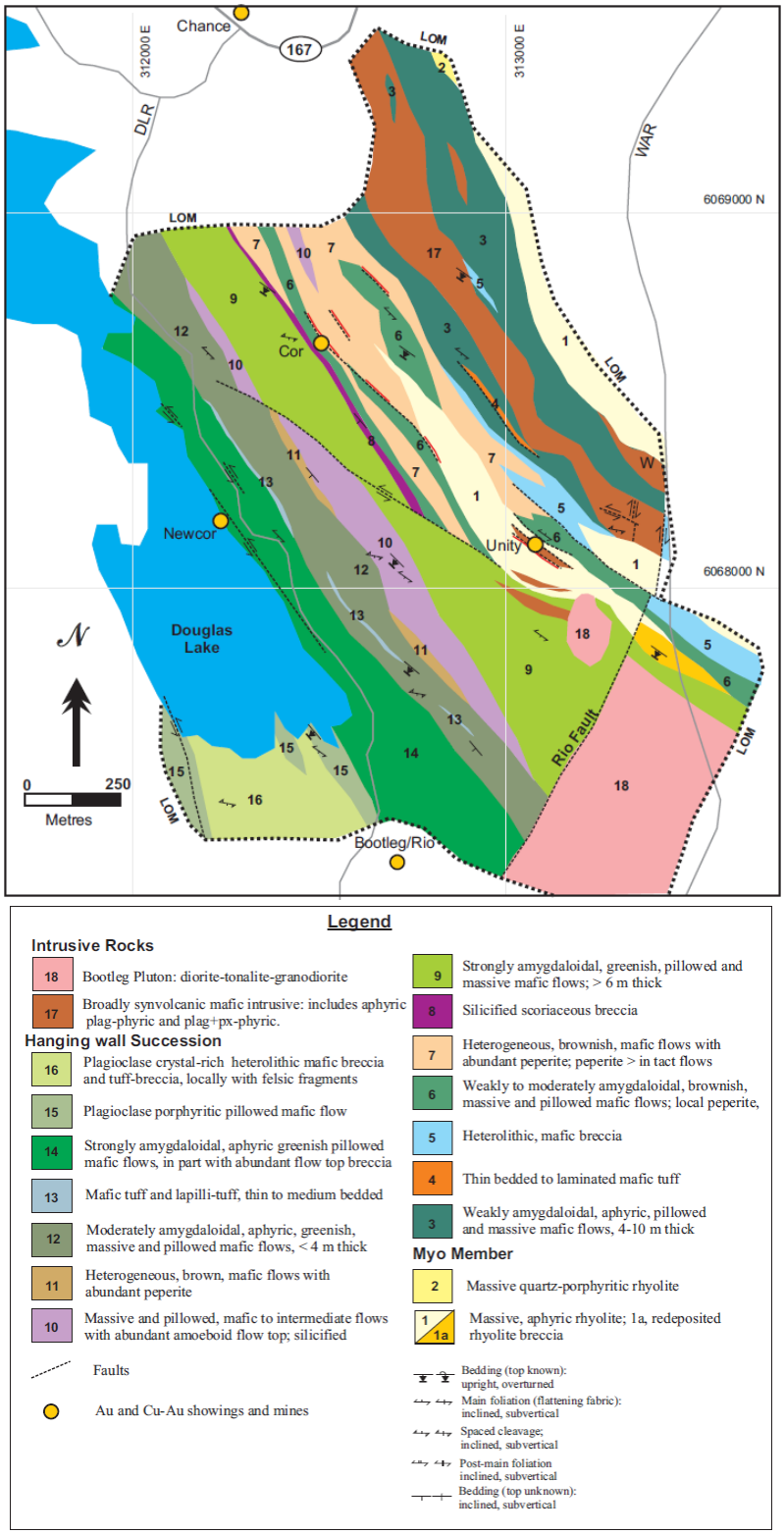


Figure 7: *Detailed Geology of the southeast section of Douglas Lake (MacLaughlan, 2006).*

Highlights from 1:10,000 mapping are referenced in Manitoba Geological Survey Report of Activities 2009 by Simard and MacLachlan (2009):

"A quartz-porphyritic rhyolitic sill (previously referred to as the Myo intrusions), dated at 1888.9 ±1.7 Ma (Bailey, pers. comm., 2006), cuts the top of the ca. 1890 Ma Flin Flon formation (Rayner, in press) and the base of the overlying Hidden formation on the west side of the Flin Flon Fault at a very low angle. These relationships suggest a very short hiatus in volcanism between the formation of the VMS deposits and the resurgence of volcanism and subsidence recorded in the hangingwall stratigraphy".

During the 2017 mapping and sampling program Kushner observes the lithologies associated with the Hidden formation and Douglas formation.
"The last composition and abundance within brecciated rocks differ greatly from southwest to northeast (Figure 8). In closest contact with the Douglas formation to the northeast, clasts are predominantly basaltic, 50 – 70% of the groundmass, 20 – 50 cm in size, well rounded, prolate, and have a fabric of 325°/90°. Sulfides are present as an accessory mineral in both the groundmass and clasts. Further to the southwest clast abundance decreases substantively (0 – 30% clasts) before a shift to a heavily brecciated unit (>70% clasts) consisting of felsic tuff clasts. Tuff clasts are 1 – 50 cm in size, angular to sub-rounded, equant, and do not have a discernable fabric. Sulphides are not as abundant in this area of the Hidden formation. Furthest to the southeast the dominant lithology is a massive lapilli tuff with sparse accessory sulphides. A sequence of rhyolitic intrusions (Figure 9) is observed and traced for over 300 m from a bleached outcrop on the western shore of Douglas Lake further inland at 335°/78°. These intrusions range in size from 1 – 10+ m.

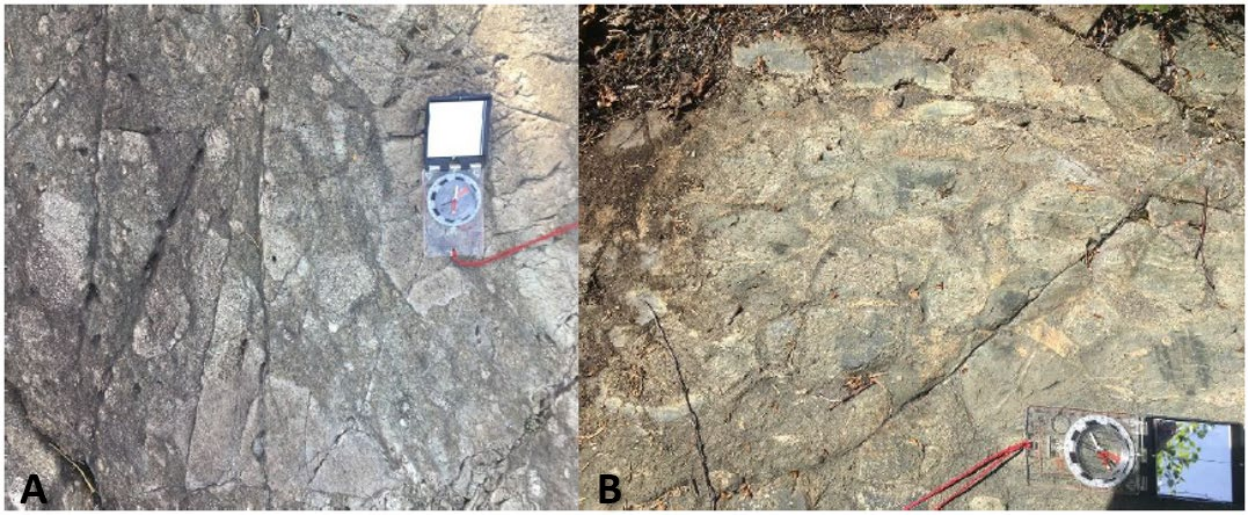


Figure 8: *Clast composition in the Hidden formation. Angular brecciated tuff clasts with mafic groundmass (A); Well-rounded mafic clasts with felsic groundmass (B) (Kushner 2017).*

Douglas formation units are located at the northeastern portion of the claim directly off provincial highway 167. These outcrops have previously been stripped and bleached leaving high surface visibility. The unit is dark-greyish green to rusty brown on the weathered surface and black on a fresh surface (Figure 9). Overall the unit is pillowed and strongly amygdaloidal (Figure 9) with minor amounts of

localized chlorite alteration. Shear zones within this unit are traced over 200 m are observed at approximately 340°/90°. A rhyolitic intrusion 2.5 m wide is observed at approximately 340°/90° near the central northern part of the unit. Sulfides are present ubiquitously as an accessory mineral and in some localized areas, specifically near shear zones, may comprise 5 – 10% of the volume."

Figure 9: *Rhyolitic Dikes within tuff (A); Granitic pluton containing quartz veining (B); Douglas formation basalts within stripped and bleached area (C); Douglas formation basalts with amygdules (D).*

The Synvolcanic granitic unit is compositionally a granite to granodiorite which has intruded the northwestern quadrant of the claim (Figure 9). The unit is medium grained, plagioclase-porphyritic to the upper-easternmost portions and contains K-feldspar phenocrysts 1 – 5 mm in size to the west and southern boundaries. No fabrics are observed within the granite. Accessory sulfides of pyrite and chalcopyrite are observed throughout.

"Quartz veins intrude all observed units at an average orientation of 345°/85°. The majority (>90%) are milky white and some are visibly oxidized at surface. Width varies between approximately 1.5 m to < 1 cm and an average width of approximately 10 cm. Of the quartz veins sampled, minor amounts of sulphides are in the oxidized veins and none are in the milky white variety. Deformation is atypical and most run parallel to bedding and existing faults or fractures (Figure 9)."

Summary of Showings and Sampling

There are 9 showings recognized in the Saskatchewan Mineral Deposit Index (SDMI) which occur either on or within two kilometers of the Douglas Lake property (Figure 10). The majority are within less than one kilometer and occur southeast along the northwest trend of the strike-slip faults in the area. The SMDI highlights are outlined in Table 2 and the full descriptions of all gold and copper showings on or near the property is provided in Appendix 1.

Table 2: Highlights of the Saskatchewan Mineral Directory Index (SMDI) showings on and proximal to the Douglas Lake property.

Showing Name	Easting (UTM83 Z14)	Northing (UTM83 Z14)	Location	Primary Commodity	Secondary Commodity	Highlights
GAW-5 (Part of the GAW-5 & GAW-6 Showing)	310046	6068965	On Property	Cu	Zn	Drill hole Intersected series of dacitic and andesitic porphyrys, tuffs and flows hosting disseminations of pyrite, pyrrhotite and chalcopyrite. Highlight intersection assayed 0.97% Cu over 0.7 ft
GAW-6 (Part of the GAW-5 & GAW-6 Showing)	310329	6068842	On Property	Cu	Zn	Drill hole Intersected series of dacitic and andesitic porphyrys, tuffs and flows hosting disseminations of pyrite, pyrrhotite and chalcopyrite. Intersections assayed up to 0.48% Cu
Douglas Lake North Cu Showing	311239	6070050	On Property	Cu	Ag, Au	4 pits excavated, with grab samples returning as high as 3.93% Cu and channel samples as high as .62% Cu
Dodo Au Showing	310702	6067910	Proximal South	Au	Cu	4 drillholes which intersected altered and sheared brecciated andesitic volcanics. Most sulphide zones intersected were barren, only returning 0.01 oz/ton Au in DODO-1 and 0.12% Cu in DODO-4
Newcor Au Mine	312255	6068220	Proximal Southeast	Au	Ag, Cu, Zn	Au mineralization with aspy in quartz veins and stringers, with the main vein average a width of 18ft. Six tons of test ore assays at 0.625 oz/ton Au, 0.88% Ag, 4.105 Zn%, 0.4% Cu and 22.26% As.

Showing Name	Easting (UTM83 Z14)	Northing (UTM83 Z14)	Location	Primary Commodity	Secondary Commodity	Highlights
Unity Au-Cu Showing	313096	6068180	Proximal Southeast	Au	Cu	Au mineralization is associated with a fault zone and quartz veining. UNI-series drilling assayed a high of 2.49 oz/ton Au over 0.1 ft.
Cor Au Prospect	312523	6068640	Proximal East	Au	As, Cu, Py, Cv	10 pits exposed bedrock over 300ft. Py-cpy occur as massive veinlets in quartz veins and disseminated in wallrock. 1983 sampling of trenches showed values as high as 1.35 oz/ton Au and 2.92 oz/ton Ag. Drilling also assayed up to 0.421 oz/ton Au, 1.80 oz/ton Ag and 1.80% Cu. COR83 contained the highest intersection of 9.32oz/ton Au, 13.3 oz/ton Ag and 4.91% Cu over 0.5 ft.
Bomber Lake Cu Showing	312445	6069790	Proximal East	Cu	Ag, Au, Sf	Massive py-cpy mineralization exposed in outcrop and subsequently drilled in 1968 and 1981-1984. Typical assay results returned anywhere from 0.40 up to 4.3% Cu, 0.01 up to 0.92 oz/ton Au, 0.05 up to 2.66 oz/ton Ag
Chance Claim Drillholes	312292	6069550	Proximal East	Cu	Ag, Au	2 drillholes in 1961 intersected quartz veins and stringers in a fault zone. Sulphides were noted along vein contact zones with the andesite, with assays returning values as high as 1.28% Cu, 0.28 oz/ton Au and 1.32 % Ag over 0.3 m.
Rye Option Au-Cu Showing	311581	6071370	Proximal North	Au	As, Cu, Mt, Po, Py	Mineralization occurs as disseminations with the volcanics and quartz veins. Drill intersections returned assays up to 0.26 oz/ton Au, 2.41 oz/ton Ag, and 2.93% Cu.

Prior to Nordic Minerals Ltd. ownership of disposition S-111969, 41 historical samples have been assayed for various elements during mapping programs by the Saskatchewan Ministry of Energy and

Resources between 1989 and 2007. During three different programs in 2012, 2013, and 2017 Nordic Minerals an additional 82 samples with the focus on base metals in and around known occurrences and throughout the property. Four samples returned >1000 ppm copper in and around the Douglas Lake Cu Showing (Figure 10) and northwest of the GAW 5 & 6 Showing. An additional 14 samples resulted in anomalous copper values from 250-1000 ppm (Figure 11). Elevated gold values, although not economical, where identified in shear zones and quartz veins. A full list of assay values is provided in Appendix 2 and 3.

Sampling has primarily occurred along roads, trails, cut lines, and lake edges leaving a lack of representation in the volcanics in the northeast and southcentral portions of the property. Consideration may be warranted in these areas in subsequent programs.

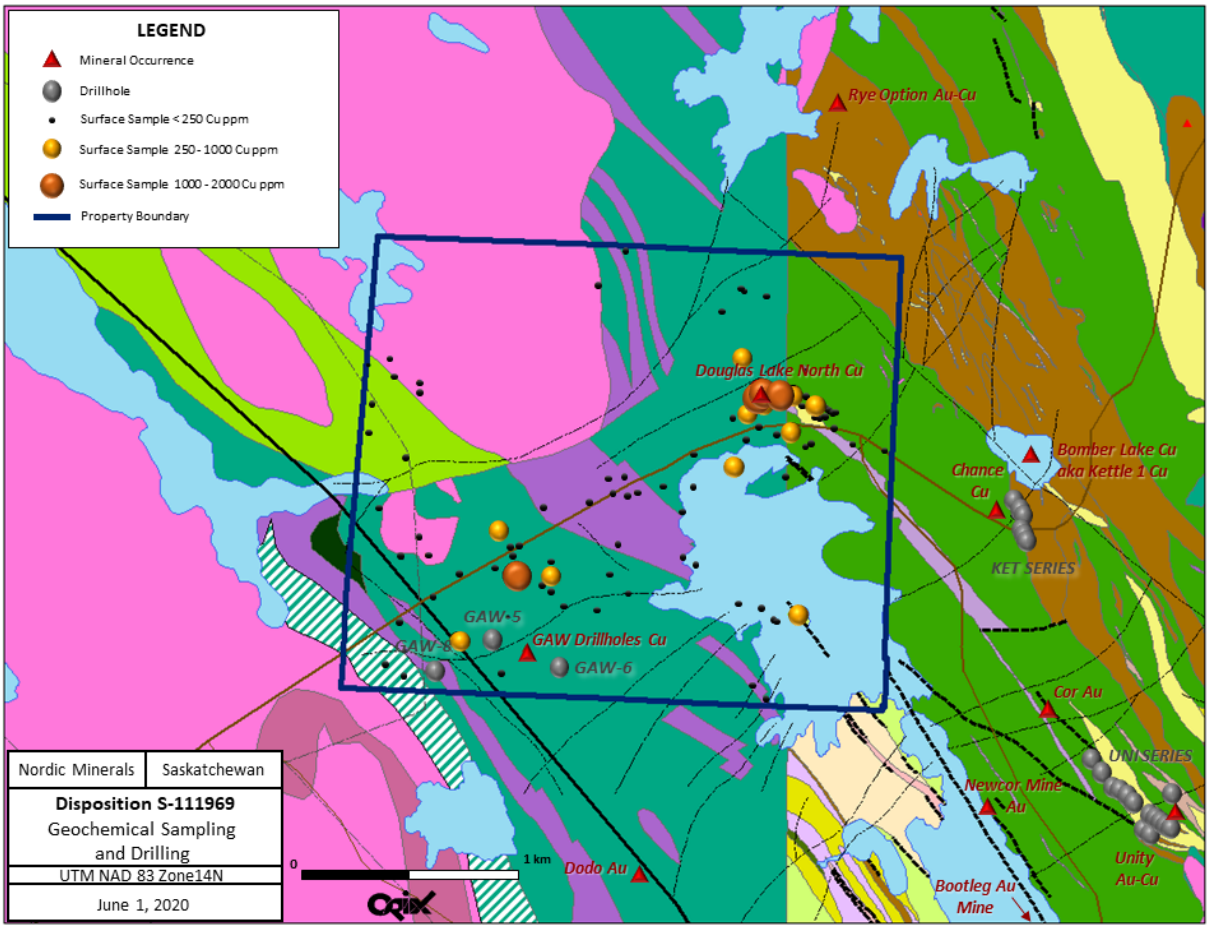


Figure 10: *Copper values and locations of historic and recent sampling, historic drilling and showings with base geology.*

Figure 11: *Trenches at Douglas Lake Copper Showing (Krebs 2012).*

Summary of Historical Drilling Results

Three historic drillholes were drilled on the property as part of the GAW 3 Grid series conducted by the Hudson Bay Exploration and Development Company. In 1989, GAW-5 and GAW-6 encountered sulphide mineralization with elevated copper values as high as 0.97% over 0.7 ft and 0.48% over 1.6 ft respectively and collectively are considered a single SMDI showing. As part of this compilation the locations of GAW-5 and GAW-6 were georeferenced using the original assessment maps and correlate well with the location of the drill pad confirmed during reconnaissance by Krebs in 2012 (Figure 12) and Kushner in 2017. GAW-8 was drilled in 1993 in order to test gold anomalies, although no significant precious or base metal values were returned (Figure 13).

GAW-5, drilled at Az040°/-45° to a terminal depth of 469.2 ft (143 m), intersected a series of light grey, fine-grained, poorly foliated dacites, dacite porphyries, porphyritic dacite tuffs, brecciated dacites with carbonate and quartz infillings, dacite crystal tuffs with cherty interbands followed by a series of andesitic to dacitic flows with minor interbedded rhyolite to dacite flow material. This sequence hosts disseminations of up to 0.5% pyrite, 1% pyrrhotite ± minor chalcopyrite.

Figure 12: *Historical drill road to GAW 5 drill site (Krebs 2012).*

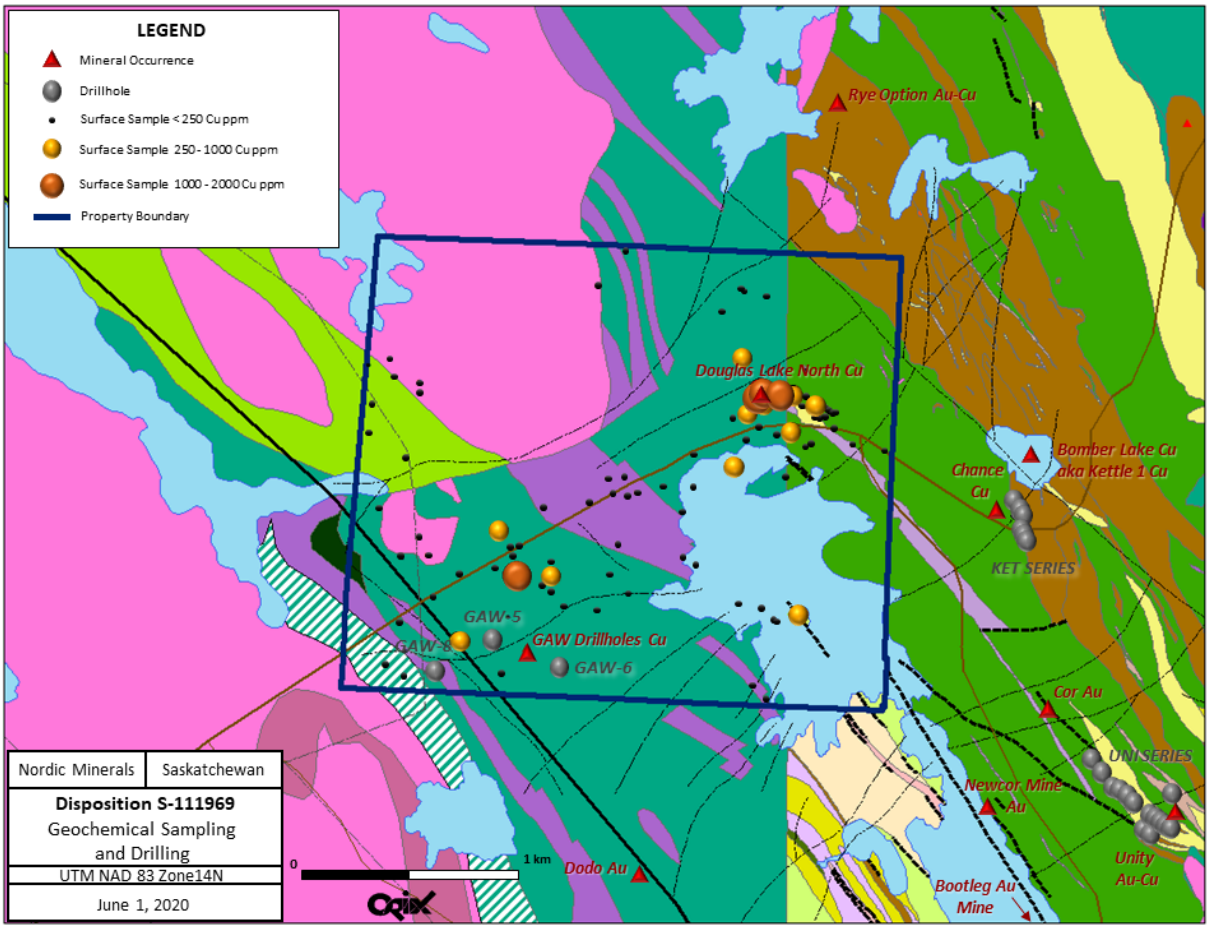


Figure 13: *Mineral occurrences, drillholes, and surface sampling in the Douglas Lake area.*

GAW-6, drilled at Az090°/-45° to a terminal depth of 439.6 ft (134 m), intersected light grey to greenish grey, fine to medium- grained, dacite porphyry followed by light greyish green to grey, fine grained,

medium to well foliated andesite porphyry and andesite flows and tuffs. The andesite tuff contains interbeds of brecciated rhyolite porphyry, brecciated rhyolite and porphyritic dacite lithic tuff. The rocks host up to 0.5% pyrite and trace pyrrhotite ± minor chalcopyrite as disseminations.

GAW-8, drilled at Az055°/-45° to a terminal depth of 912.1 ft (278 m), intersected a series of andesitic to dacitic tuffs and flows intercalated with graphitic argillite and intruded by feldspar porphyry. The graphitic argillite is commonly reported to contain elevated levels of pyrrhotite which may have caused the anomaly.

Table 3 highlights the mineralized zones of the GAW holes located on the property. The full drill logs and assay results are provided in Appendix 4.

Table 3: Drilling results and geology from historical GAW series holes 5, 6, and 8 on disposition S-111969.

BHID	FROM (ft)	TO (ft)	WIDTH (ft)	Au (oz/t)	Ag (oz/t)	Cu (%)	Zn (%)	SULPHIDE CONTENT	GEOLOGY
GAW-5	79.6	80.3	0.7	---	----	0.97	----	1-5% cpy	Porphyritic Andesite
GAW-6	154.2	155.6	1.4	----	----	0.30	----	0.1% cpy	Dacite Porphyry
GAW-6	405.4	407	1.6	----	----	0.48	0.10	0.1% py	Porphyritic Dacite Lithic Tuff
GAW-6	408.9	410.1	1.2	----	----	0.14	----	0.5% cpy, 0.1%py	Porphyritic Dacite Lithic Tuff
GAW-8	133.8	134.5	0.7					0.5% cpy, 3-5% py	Andesite Tuff
GAW-8	265.4	270.9	5.5					1-2% py, 17-20% po	Graphitic Argillite
GAW-8	270.9	271.9	1					1-2% py, 0.1- 1.0% po	Graphitic Argillite
GAW-8	271.9	275.2	3.3					2-3% py, 15-17% po	Graphitic Argillite
GAW-8	363.7	364.7	1					0.1-0.5% cpy	Porphyritic Fragmental (Lapilli) Andesite Tuff
GAW-8	367.3	370.1	2.8					0.5% cpy	Porphyritic Fragmental (Lapilli) Andesite Tuff
GAW-8	373.4	375	1.6					0.5% cpy	Porphyritic Fragmental (Lapilli) Andesite Tuff
GAW-8	375	376.6	1.6					0.1-0.5% cpy	Porphyritic Fragmental (Lapilli) Andesite Tuff
GAW-8	420.9	422.2	1.3					0.5% cpy, 0.1%py	Schistose Biotitic Andesitic Tuff
GAW-8	423.6	424.6	1					0.1% cpy	Schistose Biotitic Andesitic Tuff
GAW-8	444.9	446	1.1					0.1-0.5% cpy	Schistose Biotitic Andesitic Tuff
GAW-8	450.2	451.2	1					0.1% cpy	Schistose Biotitic Andesitic Tuff
GAW-8	479.9	481.3	1.4					0.5% cpy	Schistose Biotitic Andesitic Tuff

BHID	FROM (ft)	TO (ft)	WIDTH (ft)	Au (oz/t)	Ag (oz/t)	Cu (%)	Zn (%)	SULPHIDE CONTENT	GEOLOGY
GAW-8	505.2	507	1.8					0.1-0.5% cpy, 0.1% po	Schistose Biotitic Andesitic Tuff
GAW-8	542.8	544	1.2					1% po	Argillaceous Andesite Tuff
GAW-8	544	545.5	1.5					3-4% po, 0.1% py	Argillaceous Andesite Tuff
GAW-8	545.5	547.5	2					2-3% po, 0.1% py	Argillaceous Andesite Tuff
GAW-8	547.5	549.3	1.8					1-2% po, 0.1% py	Argillaceous Andesite Tuff

Two showings occur southeast along strike of the Douglas Lake property, each with drill programs to test gold anomalies. The Bomber Lake Cu (aka Kettle 1 Cu) Showing is 825 m along strike from the property boundary and hosts copper, silver, and gold mineralization. The showing was drilled by the Hudson Bay Exploration and Development Company from 1980-1984 and returned up to 0.92 oz/ton over 2.3 ft gold in KET-5 and 2.66 oz/ton silver and 4.3% copper over 0.7 ft in KET-8. Economic values for copper, silver and gold occurred in KET-3 to -6, KET-8, and KET-11 to -13 (Table 4).

The Unity Au-Cu Showing is located two kilometers from the Douglas Lake property boundary. The mineralization comprising the showing is associated with a fault zone which intersects amygdaloidal andesite breccia, interlayered with massive dacitic flow volcanics or its intrusive equivalent. The zone consists of several parallel shears which strike 315° and dip 70° to 80° SW.

The parallel shears, together with the intervening altered and unaltered wall-rock, form a zone up to 20 ft (6.1 m) wide. Carbonatization is negligible but silicification and sericitization of the wall-rock is intense. Quartz occurs as irregular stringers in the altered rock and as veins within and parallel to the shears. Pyrite, pyrrhotite and chalcopyrite occur disseminated through the altered wall-rock and as small veinlets associated with the quartz veins which occupy the shears. Minor gold values were returned from a 6-inch wide quartz-calcite vein.

Between 1987 and 1991, Hudson Bay completed drill holes UNI-1 to -10, 17, 18, and 20 to test the Unity Showing, drill holes UNI-15, 16, and 19 to test the Unity Structure, and drill holes UNI 11 to -14 to test a number of anomalies in the general area (AF 63K12-0173). The drill holes intersected minor pyrite, pyrrhotite, chalcopyrite, and sphalerite was intersected.

The Newcor Au Mine and Cor Au Prospect occur in parallel faults as the Unity Au-Cu Showing both less than one kilometer from the property boundary. The SMDI descriptions of all gold and copper showings is provided in Appendix 1.

Table 4: Drilling results from historical KET- and UNI-series proximal to disposition S-111969.

DRILLHOLE ID	FROM (ft)	TO (ft)	WIDTH (ft)	Au (oz/t)	Ag (oz/t)	Cu (%)	Zn (%)
UNI-01	108.3	110	2.7	0.115	0.51	0.53	---
UNI-02	110.9	113.7	2.8	0.02	0.35	0.26	---
UNI-03	68.5	70.7	2.2	0.03	----	----	---
UNI-04	85.3	97.4	2.1	0.04	----	----	---
UNI-05	114.8	116.9	2.1	0.33	----	----	---
UNI-06	62.4	63.2	0.8	0.26	----	----	---
UNI-06	72.4	73.5	1.1	0.43	----	----	---
UNI-08	203.4	204.9	1.5	0.07	----	----	---
UNI-09	239.7	241.5	1.8	0.07	----	----	---
UNI-10	83.6	85.1	1.5	0.05	----	0.2	---
UNI-10	105.7	106.3	0.6	0.09	----	0.29	---
UNI-16	225.3	225.8	0.5	0.04	----	0.34	---
UNI-17	141.3	144.1	0.9	0.05	----	----	2.4
UNI-17	199.1	200.1	1	0.27	----	0.46	0.2
UNI-17	308	308.6	0.6	0.13	----	----	---
UNI-18	153.3	153.9	0.6	0.18	----	----	---
UNI-18	175.9	176	0.1	2.49	----	0.06	---
UNI-18	213	213.5	0.5	0.17	----	----	---
UNI-20	66	67	1	0.08		----	----
KET-3	72.8	73.3	0.5	0.02	0.36	0.52	0.005
KET-3	73.3	73.7	0.4	0.44	2.54	1.01	0.1
KET-3	73.7	74	0.3	0.2	0.5	0.36	0.1
KET-4	72	72.6	0.6	0.24	0.18		
KET-4	75.1	75.8	0.7	0.14	0.08	0.34	0.1
KET-4	75.8	76.2	0.4	0.005	0.005	0.08	0.1
KET-4	81.8	82	0.2	0.01	0.11		
KET-4	82	83.6	1.6	0.005	0.1		
KET-4	83.6	83.8	0.2		0.005	0.37	
KET-4	86	86.4	0.4	0.01	0.35		
KET-4	86.4	89.6	3.2	0.005	0.005	0.62	0.2
KET-4	107	109	2	0.22	0.46	0.06	0.2
KET-4	116.8	117.1	0.3	0.7	0.16		
KET-4	117.1	119.9	2.8	0.01	0.19		
KET-4	119.9	120.3	0.4	0.005	0.14		
KET-4	120.3	121	0.7		0.12	0.13	0.1
KET-5	46	48.3	2.3	0.92	1.4	0.005	0.005
KET-5	48.3	49.3	1	0.01	0.35	0.37	0.1
KET-5	154.5	154.9	0.4	0.2	0.91	2.22	0.1
KET-6	57	58	1		0.14	0.005	
KET-6	74.5	75.2	0.7	0.12	0.12	0.14	
KET-6	138.6	139.4	0.8		0.14	1.59	0.2

DRILLHOLE ID	FROM (ft)	TO (ft)	WIDTH (ft)	Au (oz/t)	Ag (oz/t)	Cu (%)	Zn (%)
KET-6	139.4	141.1	1.7	0.12	0.96	0.29	
KET-6	141.6	142.7	1.1	0.01	0.41	0.62	0.2
KET-6	146.8	147.6	0.8	0.01	0.87	1.52	0.1
KET-6	150.7	152	1.3	0.12	0.58	0.76	0.1
KET-7	46.7	47	0.3	0.9	0.2		
KET-7	99.5	100.4	0.9	0.01	0.17	0.39	
KET-8	170.1	171.1	1	0.01	0.88	1.64	0.1
KET-8	171.1	172.1	1	0.01	0.19	0.33	0.1
KET-8	172.1	172.6	0.5	0.06	0.18	0.1	0.1
KET-8	172.6	173	0.4	0.01	0.25	0.26	0.1
KET-8	239.5	240.2	0.7	0.12	2.66	4.3	0.2
KET-8	240.2	240.8	0.6	0.16	0.98	1.21	0.1
KET-9	110.5	111.4	0.9	0.01	0.21	0.005	0.005
KET-9	175	176	1	0.36	0.26	0.08	0.7
KET-9	222	223.6	1.6	0.06	0.12		
KET-9	246.3	247	0.7	0.22	0.14		
KET-9	247	247.8	0.8	0.01	0.11		
KET-9	254	254.8	0.8	0.01	0.07		
KET-9	254.8	256	1.2	0.01	0.23	0.32	0.1
KET-9	256	257	1	0.06	0.74	0.17	0.005
KET-10	229.7	230.4	0.7	0.01	0.29		
KET-10	244.8	246	1.2	0.06	0.54	1.19	0.1
KET-10	246.4	246.9	0.5	0.22	0.68	0.56	0.1
KET-10	277	277.5	0.5		0.1	0.33	
KET-10	277.5	278.4	0.9	0.1	0.23		
KET-10	325.6	326.7	1.1	0.01	0.23	0.83	
KET-10	326.7	328	1.3	0.34	2.02	0.93	
KET-11	72.6	73.4	0.8	0.16	0.44	0.52	
KET-11	612	612.7	0.7	0.01	0.49	0.64	0.1
KET-11	612.7	614	1.3	0.01	0.23	0.24	
KET-11	614	615.1	1.1	0.1	1.06	0.77	
KET-11	615.1	615.8	0.7	0.01	0.35	0.45	0.1
KET-12	150.6	151.5	0.9				0.5
KET-13	89.3	91	1.7	0.04	0.33	0.39	
KET-13	91.4	93	1.6	0.3	1.14	1.35	
KET-13	510.8	511.2	0.4	0.01		1.54	
KET-13	512.9	513.6	0.7	0.01		0.24	
KET-13	514.7	516.2	1.5	0.02	0.55	0.78	0.1
KET-13	516.2	517.2	1	0.04	1.41	0.94	0.1
KET-13	517.2	518.2	1		0.1	0.06	
KET-13	518.2	519.2	1	0.03	1.45	1.23	0.1
KET-13	520.2	521.2	1		0.1	0.47	

DRILLHOLE ID	FROM (ft)	TO (ft)	WIDTH (ft)	Au (oz/t)	Ag (oz/t)	Cu (%)	Zn (%)
KET-13	522.2	523	0.8	0.02	0.26		
KET-13	523	523.7	0.7	0.01	0.13	0.17	
KET-13	528.5	529.9	1.4	0.01		0.37	
KET-13	572.3	572.7	0.4	0.02		0.84	

Geophysical Surveys

Two geophysical surveys have been flown over a portion of the property in recent years. A heliborne VTEM plus survey was flown in 2011 with a line spacing of 100 meters. It covered a total area of 143 square kilometers, including the southwest half of the Nordic property. Among the various interpretations from the survey the calculated vertical gradient (CVG) of the magnetic field and the calculated dB/dt time constant (Tau) of the electromagnetic results giving an indication of conductance, best identified anomalies on the property.

Resistivity Depth Images (RDI's) were calculated along several flight lines. These provide a geometric approximation and depth of the conductive targets, with the depth of investigation depending on the conductance of the rocks. Figure 14 illustrates how tops of conductive units, or flat or slightly sloping lens type conductors (Figure 14(1)) and steeply dipping conductors (Figure 14(2)) are represented in the RDI. These conductors can be at varying depths from surface up to 200 meters.

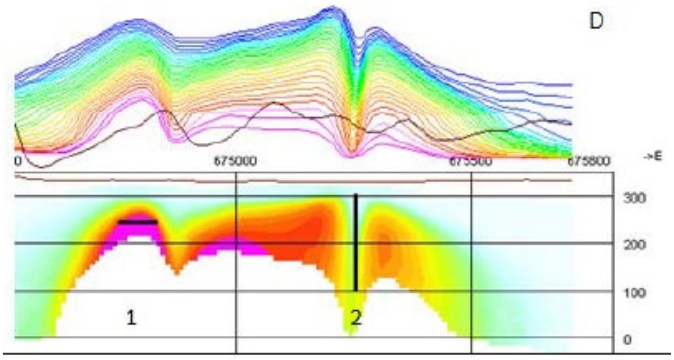


Figure 14: *Example of an RDI sections with assumed target types 1 &2 (Geotech 2011).*

The RDI section of line L2890 transects the property and correlates to the GAW showing conductor and the northwest trending West Arm Shear Zone on the southwest corner of the property (Figure 15 and 16).

All the electromagnetic data were subjected to an anomaly recognition process using the B-Field and dB/dt profiles, and the anomalies were classified according to calculated conductance into one of six categories (Figure 15). Note that both the road and power lines cause anomalies in the interpretation.

Another survey flown in 2014, also with a line spacing of 100 meters, covered most of the property with the exception of the lower southwest corner. The first vertical derivative of the reduction to the pole

magnetic field (1VDRTP) is displayed to fill the area not covered by the CVG from the 2011 VTEM survey (Figure 17).

The magnetic highs and the lows immediately to the East of the highs correlate well with the West Arm Shear Zone and the contact between the Douglas Formation and the Hidden Formation, both trending

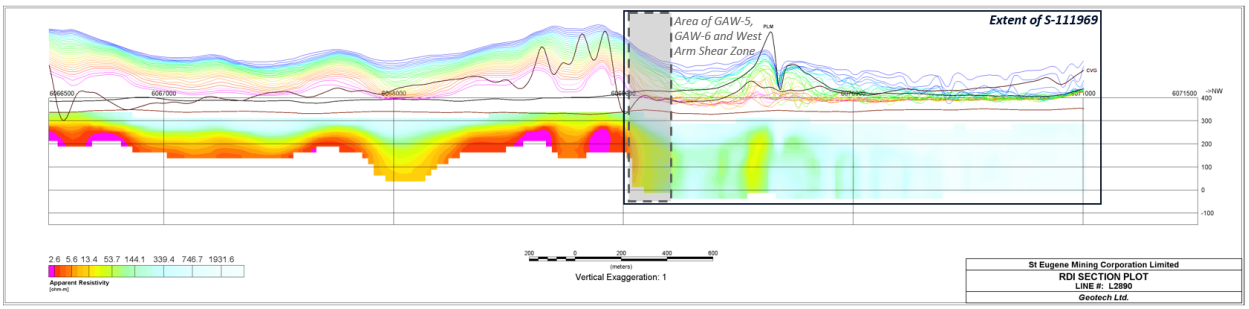


Figure 15: *RDI section plot L2890 displaying conductive zones (Geotech 2011). Outline of the extent of S-111969 added for reference.*

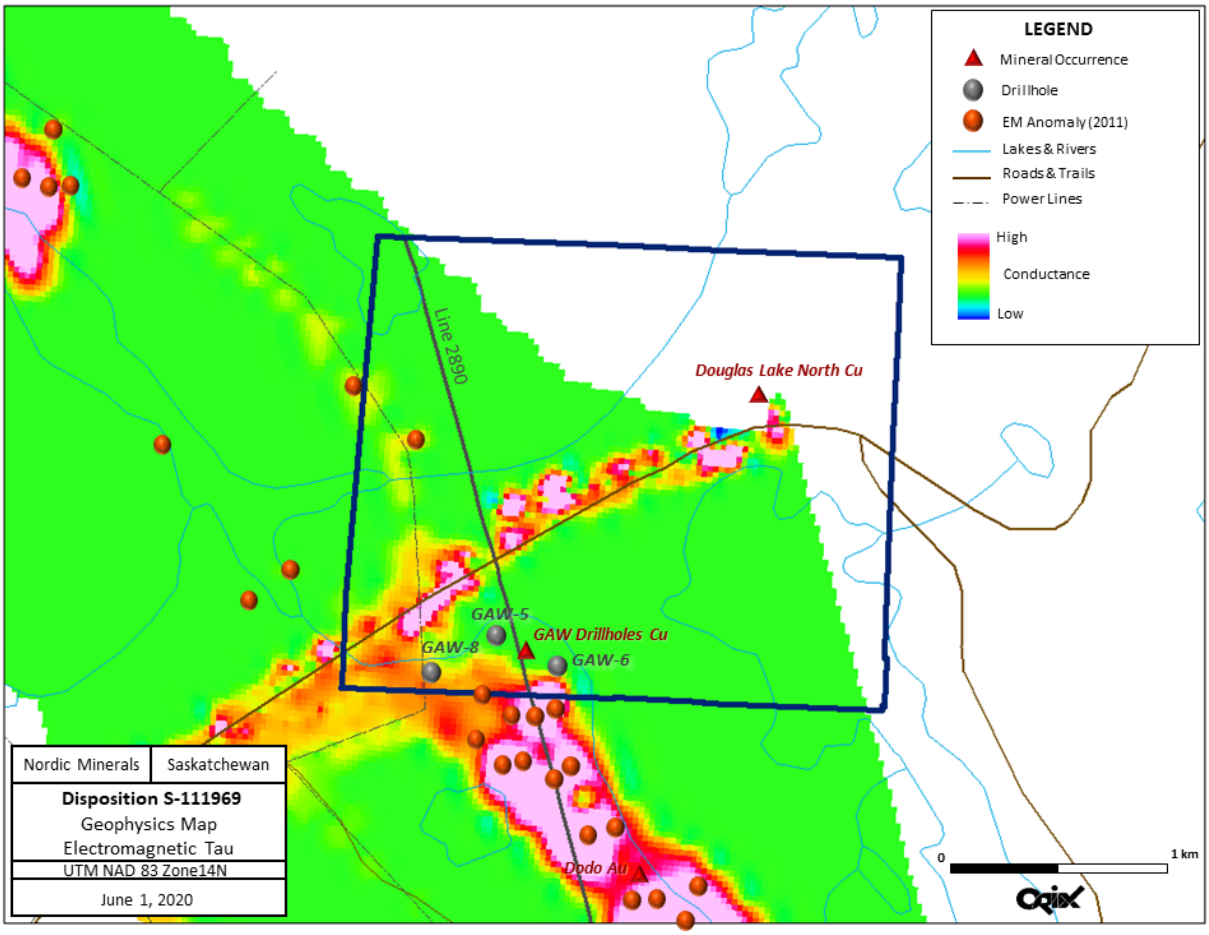


Figure 16: *Electromagnetic Tau indicating the conductance of the area. Note the interference of the ground conductance from the road and powerline.*

northwest. Several showings (GAW Cu, Dodo Au) also appear along the West Arm Shear Zone and in the area along and on parallel faults to the Douglas-Hidden Formation (Newcor Mine Au, Cor Au, Douglas Lake North Cu) suggesting the shears and faults are potential locations for mineral concentration. The possibility of magnetically destructive zones immediately to the east of the structures could be a potentially altered zone (Figure 18).

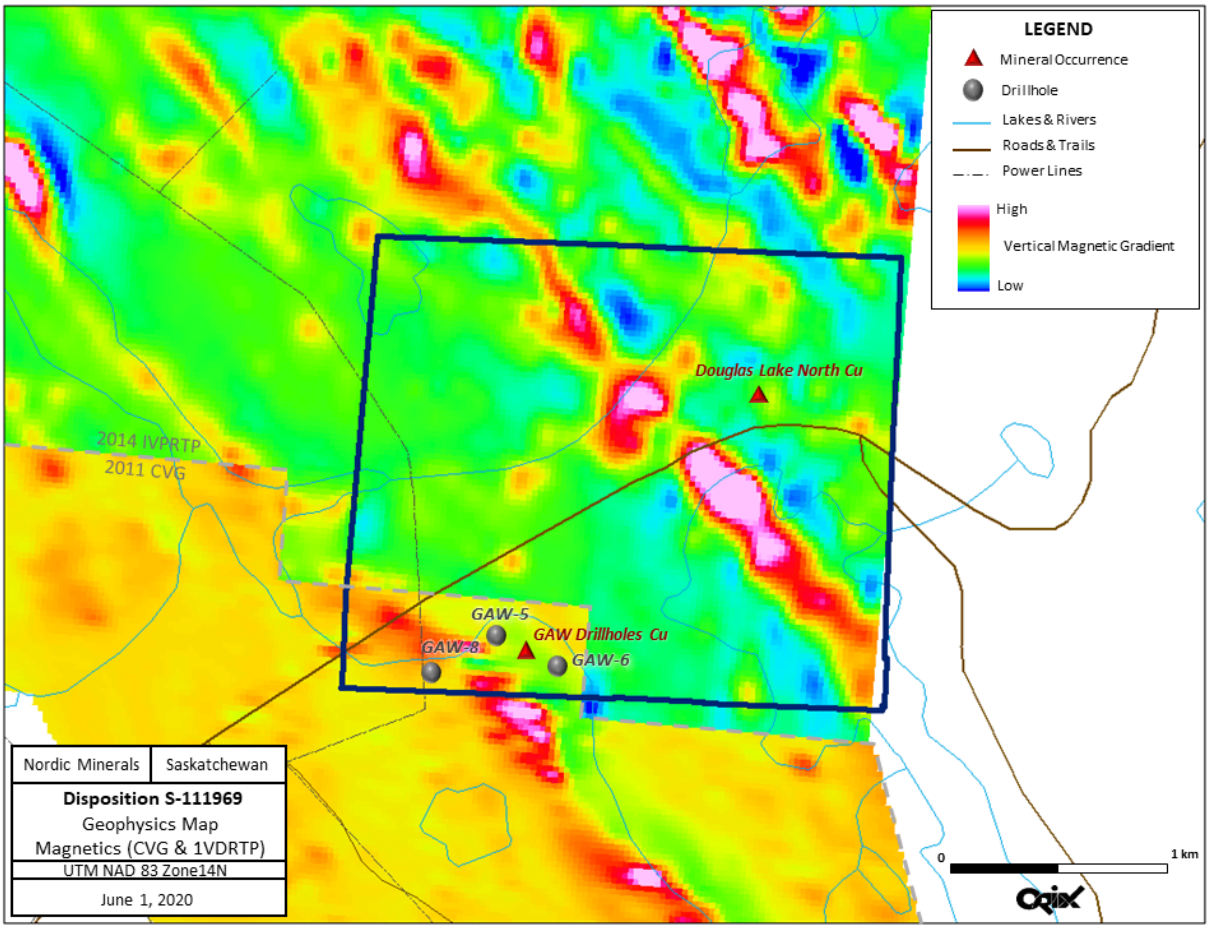


Figure 17: *Calculated Vertical Gradient (2011) and 1st Derivative Reduction to the Pole (2014) magnetic surveys over the Douglas Lake area.*

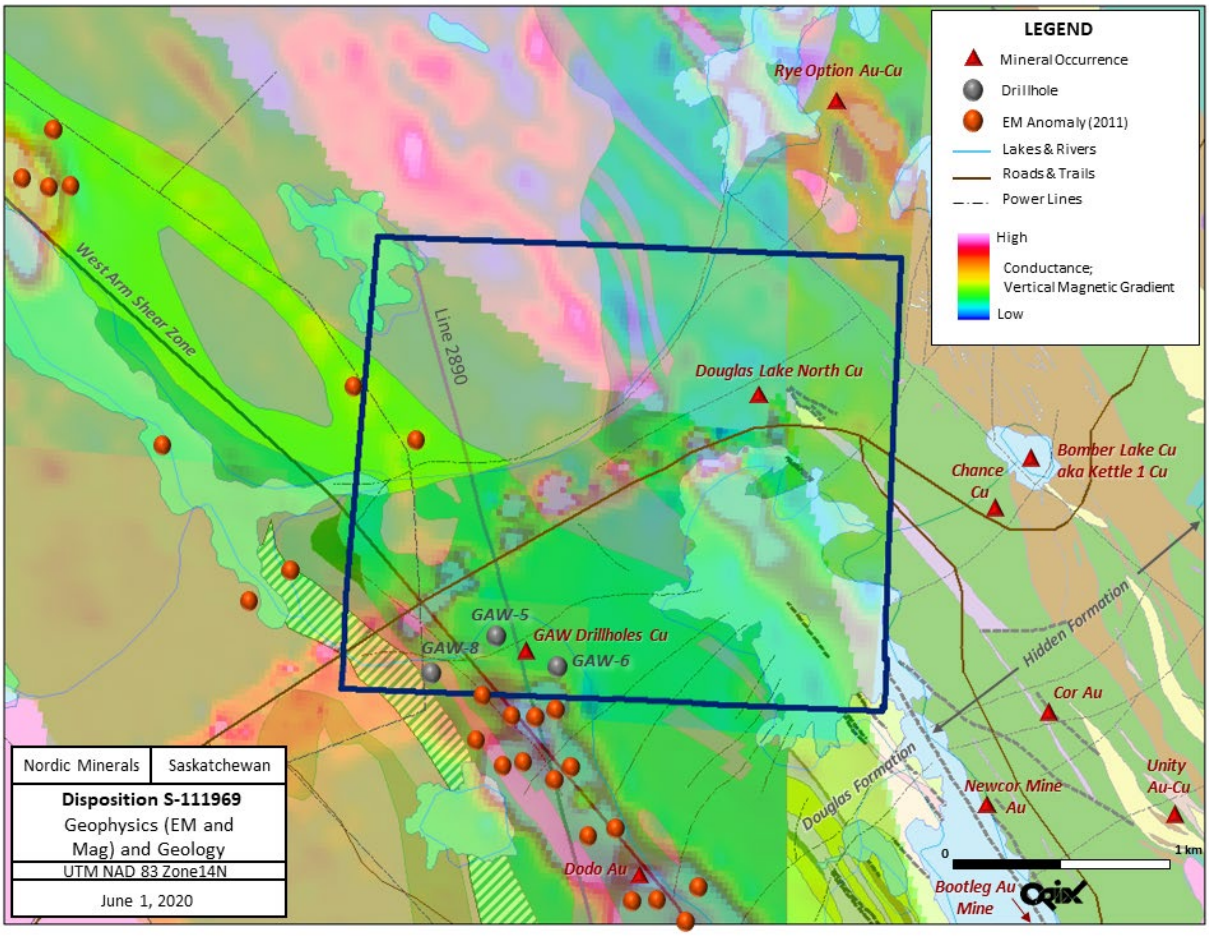


Figure 18: *Geophysical surveys overlain by geology, mineral occurrences, and drilling.*

Observations and Recommendations

The geological mapping and geophysical surveys in the region have provided high quality data on a large portion of the property. Since the available data has been collected as part of several programs for multiple properties, further detailed geological mapping and sampling are warranted to cover more of the property and further develop the geological understanding of the property as follows:

- A continuation of detailed mapping from the 2010 Flin Flon TGI Map with a focus on the North portion of the property up to the Annabel Pluton and the southwest portion West of Douglas Lake.
- An investigation of the magnetic anomaly under Douglas Lake and into the Annabel Pluton.
- Sampling programs focused on areas along structural features and high conductance.
- A further defined geophysical survey dependent on the results of the previous recommendations covering the northeastern half of the property that was not covered in 2011.

Areas of precious and base metal exploration to consider given the current available information are along structural features such as shears, faults, and contacts having a northwestern trend, and the area of high conductance in the vicinity of the GAW 5 & 6 showing (Figure 19). All of these areas have produced encouraging results from surface sampling or have not been previously investigated.

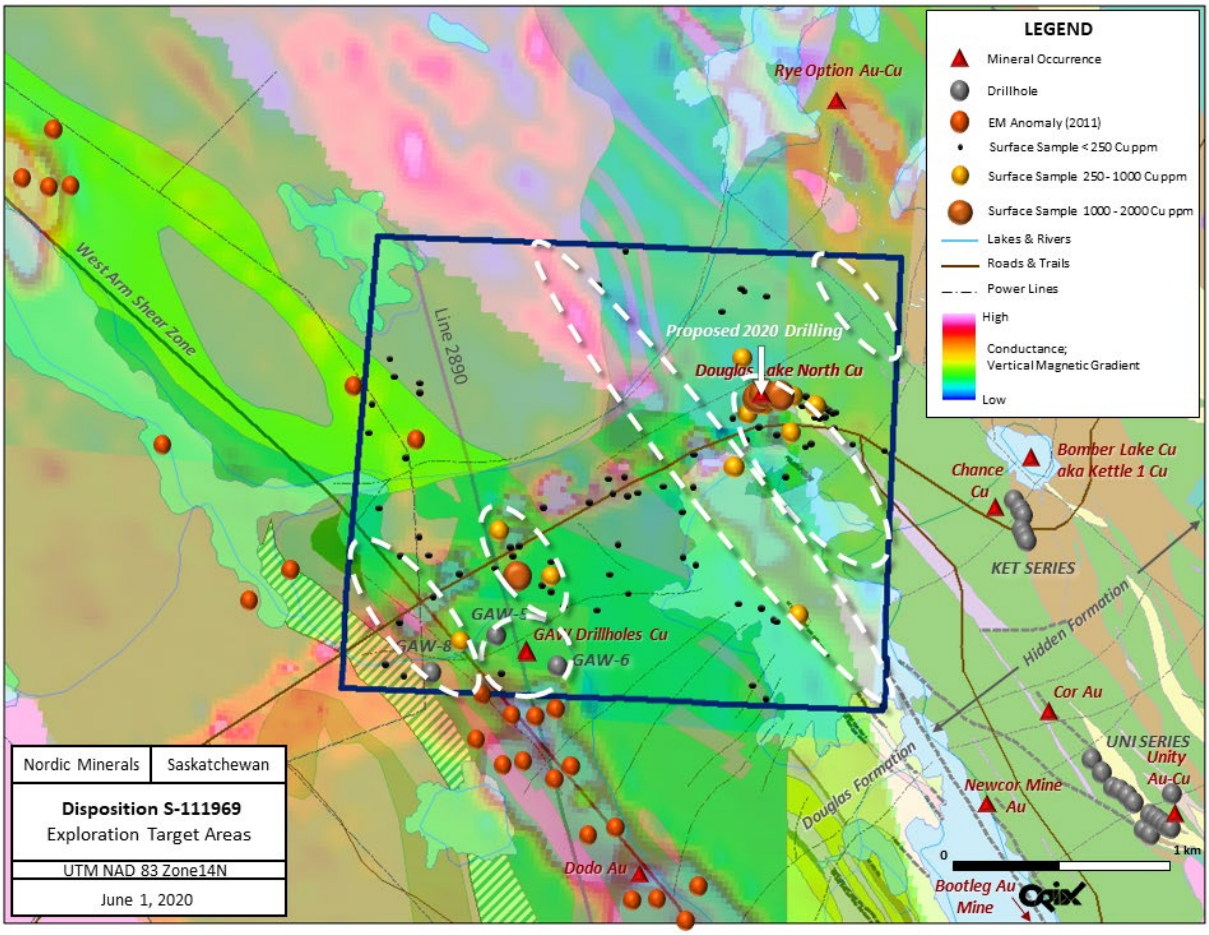


Figure 19: *Target areas for future exploration and proposed drilling site for 2020. Geophysical surveys overlain by geology, mineral occurrences, and drilling are displayed for correlation.*

References

Bates, M., and Mushayandebvu, M. (2015): Phase 2 Geoscientific Preliminary Assessment; Acquisition, Processing and interpretation of High-Resolution Airborne Geophysical Data; The Town of Creighton, Saskatchewan, Prepared for Nuclear West Management Organization by Sander Geophysics Limited, 82 p.

DeWolfe, Y.M. and Gibson, H.L., (2005): Physical description of the Bomber, 1920 and Newcor members of the Hidden formation, Flin Flon, Manitoba (NTS 63K16SW); in Report of Activities 2005, Man Industry, Economic Development and Mines, Manitoba Geological Survey, p7–19.

Geotech Ltd. (2011): Interpretation report on a helicopter-borne versatile time domain electromagnetic (VTEM^{plus}) and horizontal magnetic gradiometer geophysical survey, Amisk North Gold Project, Flin Flon, Saskatchewan for: St. Eugene Mining Corporation Limited by: Geotech Ltd., 141 p.

MacLachlan, K. (2006): Stratigraphy, structure, and silicification: new results from mapping in the Flin Flon mining camp, Creighton, Saskatchewan; *in* Summary of Investigations Volume 2, 2006, Saskatchewan Geological Survey, Saskatchewan Industry and Resources, Miscellaneous Report 2006-4.2, 25 p.

Morelli, R.M. (2010): Provisional interpretive map of Sub-Phanerozoic geology, Flin Flon Domain and eastern Glennie Domain, (parts of NTS 63L and 63K) 1:200 000 scale, prelim. Map with Summary of Investigations 2010, Volume 2, Saskatchewan Geological Survey, Sask. Ministry of Energy and Resources, Misc. Rep. 2019-4.2.

Morelli, R.M. and MacLachlan, K. (2012): Saskatchewan Gold: Mineralization Styles and Mining History; Sask. Ministry of Energy and Resources, Rep. 262, 171p.

Simard, R-L. and MacLachlan, K. (2009): Highlights of the new 1:10 000 scale geology map of the Flin Flon area, Manitoba and Saskatchewan (part of NTS 63K12, 13); in Report of Activities 2009, Manitoba Innovation, Energy and Mines, Manitoba Geological Survey, p. 6–14.

Simard, R-L., MacLachlan, K. Gibson, H.L., DeWolfe, Y.M., Devine, C.A., Kremer, P.D., Lafrance, B., Ames, D., Syme, E.C., Bailes, A.H., Bailey, K., Price, D., Pehrsson, S., Lewis, E.M., Lewis, D. and Galley, A.G. (2013): Geology of the Flin Flon area, Manitoba and Saskatchewan (parts of NTS 63K12, 13); Manitoba Innovation, Energy and Mines, Manitoba Geological Survey, Geoscientific Report GR2012-2, 67 p.

Thomas, D.J. with B.A. Reilley (1991): Revision Bedrock Geology: Bootleg and Birch Lakes Area: Sask. Geol. Surv. Summ. Invest. 1991; P.9-16.

Thomas, D.J. (1992): Highlights of investigations around the Flin Flon Mine: reassessment of the structural history; in Summary of Investigations 1992, Saskatchewan Geological Survey; Sask. Energy Mines, Misc. Rep. 92-4, p3-15.

Statement of Qualifications

I, Laura Winter, B.Sc., P.Geo., Senior Project Geologist of Orix Geoscience Inc., hereby certify that:

1) I am a geologist currently employed by Orix Geoscience Inc., with a business address at 428 Portage Avenue, Suite 610, Winnipeg, MB R3C OE2.
2) I graduated with a B.Sc. degree in Geological Sciences from University of Manitoba, Winnipeg (2009).
3) This certificate applies to the report titled "Compilation Report on Disposition S-111969." authored by Laura Winter, B.Sc., P.Geo., dated June 2020.
4) As of the date of this certificate, to the best of my knowledge, information and belief, the report contains all scientific and technical information that is required to be disclosed to make the report not misleading.
5) As of the date of this certificate, I do not hold any shares, options, or warrants of Nordic Minerals Inc.
6) I am a registered member of the Engineers and Geoscientists of Manitoba (Member #33199) and I have been a geologist continuously working since 2009.

Signed: June 1, 2020

Laura Winter, B.Sc., P.Geo.

Appendix 1: Douglas Lake SMDI Showings

GAW-5 and GAW-6 Showing

http://www.economy.gov.sk.ca/dbsearch/MinDepositQuery/default.aspx?ID=2417

SMDI #:	2417
Showing Name:	Drill holes GAW-5 and GAW-6
Disposition:	S-111969
Location:	Douglas Lake - southwest of northwest tip: GAW 3 grid
NTS Area:	63K12
TRM:	66-30-1
UTM13-Northing (NAD83/Zn13):	6069206.48
UTM13-Easting (NAD83/Zn13):	696497.97
Commodity:	Cu
Associated Commodities:	Zn
Type:	Drillhole
Mineral Resource Assessment:	Occurrence
Mineral Deposit Type:	Volcanic-Associated Massive Sulphide: Bimodal-Mafic
Geological Domain:	Flin Flon
Revised On:	1994/09/26

Drill hole GAW-5 is located on the GAW-3 grid 0.89 km (0.55 mile) due east of the southeast tip of Meridian Lake on the inside of a large loop in the creek that flows between Meridian and Bootleg Lakes. Drill hole GAW-6 is located 0.31 km (0.19 mile) southeast of drill hole GAW-5.

The showing area, as mapped by Thomas and Reilly in 1991, is underlain by Douglas Lake Assemblage Unit 22 or pyroxene-plagioclase crystal mafic tuff. The tuffs have been intruded by a series of northwest-trending feldspar-porphyritic granite to granodiorite dykes. This sequence of rocks has been cut by a series of northeast- and northwest-trending faults.

Drill hole GAW-5 intersected a series of light grey, fine-grained, poorly foliated dacites, dacite porphyries, porphyritic dacite tuffs, brecciated dacites with carbonate and quartz infillings, dacite crystal tuffs with cherty interbands followed by a series of andesitic to dacitic flows with minor interbedded rhyolite to dacite flow material. This sequence hosts disseminations of up to 0.5% pyrite, 1% pyrrhotite ± minor chalcopyrite.

Drill hole GAW-6 intersected light grey to greenish grey, fine to medium- grained, dacite porphyry followed by light greyish green to grey, fine grained, medium to well foliated andesite porphyry and andesite flows and tuffs. The andesite tuff contains interbeds of brecciated rhyolite porphyry, brecciated rhyolite and porphyritic dacite lithic tuff. The rocks host up to 0.5% pyrite and trace pyrrhotite ± minor chalcopyrite as disseminations.

The better intersections encountered by the two drill holes are as follows:

DRILLHOLE NUMBER	INTERSECTION (FT)	WIDTH (FT)	OUNCES PER TON AU	AG	PCT CU	PCT ZN	INTERSECTION GEOLOGY
GAW-5	79.6 - 80.3	0.7	----	----	0.97	----	andesite: cpy
GAW-6	154.2 - 155.6	1.4	----	----	0.30	----	dacite ppy:cpy
	405.4 - 407.0	1.6	----	----	0.48	0.10	dacite tuff:py
	408.9 - 410.1	1.2	----	----	0.14	----	dacite tuff:py

Drill hole GAW-5 intersected a series of felsic volcanic rocks. Brecciated and unbrecciated dacite, plagioclase porphyritic dacite, dacite porphyry (50% plagoclase phenocrysts), and porphyritic dacite crystal tuff (20% plagioclase phenocrysts) are intermixed with narrow (2 foot) basaltic intervals, minor subordinate porphyritic andesite and andesite to dacite flow rocks and rhyolite to dacite flow rocks. Drill hole GAW-6 intersected massive dacite porphyry, brecciated quartz-porphyritic rhyolite brecciated rhyolite, and feldspar-porphyritic dacite lithic tuff with interbands of amygdaloidal flow, andesite tuff, porphyritic andesite tuff, and andesite porphyry breccia.

On 13 April 1977, the showing area was staked as CBS 3018 by Hudson Bay Exploration and Development Company Limited. In 1978, Hudson Bay completed one drill hole well northeast of the showing (AF 63K12-0092).

In 1979, B. Schreiner completed a compilation of the Quaternary geology of the shield that includes the showing area. R. MacDonald completed a 1:250,000 compilation and preliminary geology map that includes the showing area in 1981. In 1981, a ground EM survey was completed over the south extension of the GAW-3 grid (AF 63K12-0122). In the same year, 3 drill holes were completed on the grid southeast of the showing (AF 63K12-0113).

In 1984, Hudson Bay Exploration completed a ground magnetic survey on the GAW-3 grid (AF 63K12-0138).

In 1987, J. Campbell remapped the Quaternary geology of NTS block 63K at a scale of 1:20,000 for the Saskatchewan Geological Survey. In 1988, Hudson Bay completed a ground magnetic survey (AF 63K12-0153) plus VLF-EM, humus sample and lithogeochemical sample surveys over the grid (AF 63K12-0158).

In 1989, Hudson Bay completed three drill holes on the GAW-3 grid (AF 63K12-0160). Drill holes GAW-5 and -6 encountered the mineralization that constitutes this showing.

In 1991, D.J. Thomas and B.A. Reilley geologically mapped the showing area at a scale of 1:20,000 for the Saskatchewan Geological Survey. In 1993, Hudson Bay Exploration completed drill hole GAW-8 slightly west of the showing and drill hole GAW-9 to the southeast of the showing (AF 63K12-0179). The drill holes failed to intersect significant mineralization. On 1 October 1994, CBS 3018 was allowed to lapse.

Assessment

63K12-0092;-0113;-0122;-0138;-0153;-0158;-0160;-0179; MAW00405

Literature

Byers, A.R., S.J.T. Kirkland and W.J. Pearson (1965): Geology and Mineral Deposits of the Flin Flon Area, Saskatchewan: Sask. Geol. Surv. Rept. No. 62; 95p. Schreiner, B.T. (1979): Quaternary Geology of the Percambrian Shield Area, Saskatchewan: Sask. Geol. Surv. Summ. Invest. 1979; p68-74. Macdonald, R. (1981): Compilation Bedrock Geology: Pelican Narrows and Amisk Lake Areas (NTS 63M, 63L, part of 63N and 63K): Sask. Geol. Surv. Summ. Invest. 1981; p16-23. Campbell, J.E. (1987): Quaternary Geology of the Amisk East Area: Sask. Geol. Surv. Summ. Invest. 1987; p148-150. Thomas, D.J. with B.A. Reilley (1991): Revision Bedrock Geology: Bootleg and Birch Lakes Area: Sask. Geol. Surv. Summ. Invest. 1991; P.9-16.

Douglas Lake North Cu Showing

http://www.economy.gov.sk.ca/dbsearch/MinDepositQuery/default.aspx?ID=0040

SMDI #:	0040
Showing Name:	Douglas Lake North Cu Showing
Disposition:	S-111969
Location:	Douglas Lake, north of
NTS Area:	63K12
TRM:	66-30-1
UTM13-Northing (NAD83/Zn13):	6070424.47
UTM13-Easting (NAD83/Zn13):	697447.94

Commodity: Cu

Associated Commodities: Ag ; Au

Type: Outcrop grab

The showing, which is located approximately 200 m (656.2 ft) north of the northwest end of Douglas Lake, consists of four pits that occur within northwest-trending, sheared basaltic volcanics of the Amisk Group.

Four pits were excavated on the showing and samples returned the following assays:

Pit No.	Au (oz./ton)	Ag (oz./ton)	% Cu	Width ft (m)
1	0.02	0.04	0.39	7.0 2.1
1	0.02	0.08	3.93	grab
2	0.01	0.04	0.19	grab
3	0.02	0.08	0.62	3.9 1.2
3	----	----	0.22	3.0 0.9
4	trace	0.02	0.06	10.0 3.0

In 1991, D. Thomas geologically mapped the showing area as being underlain by unit 5 and 5a. Unit 5 is an series of aphyric to plagioclase-porphyritic intermediate to mafic flows and unit 5a is a series of pillowed mafic to intermediate flows which contain abundant quartz amygdules.

Between 1953 and 1954, Hudson Bay Exploration and Development completed an electromagnetic survey over the showing area.

In 1967, the showing area was covered by MARS 1 to 24 claim group. In this year, R. Studer conducted a regional EM survey for Meridian Mining and Exploration Company Limited that covered the showing area (AF 63K12-0063). No anomalies were detected in the showing area.

In 1972, W.J. Reid dug 4 pits on the JET 7 and 9 and KAY 6 claims, a few hundred feet north of Highway No. 35 at the northern end of Douglas Lake (AF 63K12-0030). Copper mineralization was reported from pit 1 on the KAY 6 claim and from pit 3 located on the JET 9 claim. The assays returned the values listed above. A further two trenches were completed in 1974.

Assessment

63K12-0030;-0063; MAW00405

Literature

DMR Rept. No. 62, Map 62C;

Newcor Au Mine

http://www.economy.gov.sk.ca/dbsearch/MinDepositQuery/default.aspx?ID=0005

SMDI #:	0005
Showing Name:	Newcor Au Mine
Disposition:	S-111100
Location:	Douglas Lake southeast shore
NTS Area:	63K12
TRM:	66-30-1
UTM13-Northing (NAD83/Zn13):	6068680.48
UTM13-Easting (NAD83/Zn13):	698616.9
Commodity:	Au
Associated Commodities:	Ag ; Au ; Cu ; Zn
Type:	Mine
Mineral Resource Assessment:	Developed Prospect with Reserves/Resources
Mineral Deposit Type:	Structurally-Controlled Mesothermal Lode Gold
Geological Domain:	Flin Flon
Revised On:	2009/08/07
Mineral Resource Assessment:	Occurrence
Mineral Deposit Type:	Volcanic-Associated Massive Sulphide: Bimodal-Mafic
Geological Domain:	Flin Flon

Revised On: 2009/08/07

The deposit was first discovered, staked and trenched by J. Tikkanen in 1933.

In 1934, the Flin Flon Gold Mining Syndicate was formed to acquire and develop the prospect. During the period 1935 to 1937, a 460 ft (140 m), 2 compartment shaft with levels at 125, 225, 325, and 440 ft (38.1, 68.6, 99.1 and 134.1 m respectively) was constructed. The property was acquired by Flin Flon Gold Mines Limited in 1936, and subsequently the Douglas Lake Mines Limited in 1937, who leased it to Wampum Gold Mines limited in 1942. The property was purchased by Newcor Mining & Refining Limited in 1943 and by Asfe Mines Limited in 1951, who held the property until 1959 when it lapsed. The property was staked the same year by G.F. Thompson the same year as the COR claims and later, ML 5106 held by H.L. Thompson.

In 1944, 6 tons of test ore was shipped to Ottawa and returned the values listed above. The Flin Flon smelter refused to accept the ore due to its high arsenic content and consequently, in 1947, a 200 ton/day reduction mill and a 125 ton/day smelter were set up on the site to process stockpiled ore. Gold and arsenic were produced in 1947. In 1949, ore reserves were listed. Arsenic trioxide (20 tons) remained on the property. Development work completed prior to 1949, in addition to the shaft, included 15,000 ft (4572 m) of diamond drilling. Development work since 1957 consisted of 4 drill holes, minor trenching and assaying. By 1972, the deposit was within KAY claim No. 1. In this year, W. Reid completed 1 trench (AF 63K12-0074). No assay results were given. In 1973, Reid completed trenches on KAY claims, 1, 4 and 6 (AF 63K12-0077).

In 1972, H.L. Thompson completed a drill hole on the property (AF 63K12-0071). Between 1974 and 1977, drill hole ZN-1 was completed (AF 63K12-0083).

On 13 April 1977, Hudson Bay Exploration staked the showing as CBS 3018.

By 1980, the deposit was within ML 5106. D. Martin completed mineralogical and metallurgical tests on the ore (AF 63K12-0114). In 1980, Abaco Canada Consultants geologically mapped and sampled the minesite (AF 63K12-0103). In 1981, Abaco completed a ground EM survey over the minesite (AF 63K12-0106).

In 1983, D. Martin regained control of the property and resampled the 6 old pits and trenches that consitiute the original COR Showing (SMDI. 0014) and completed 19 drill holes on the COR Showing (AF 63K12-0133). At this time, Vista released an ore reserves calculation (Northern Miner Magazine 3/11/1984, 19/7/1984). In 1988, Hudson Bay Exploration completed ground VLF-2 and magnetic surveys over the showing (AF 63K12-0153). In the same year, Vista released a revised ore reserves calculation.

On October 1, 1994, CBS 3018 was allowed to lapse.

Assessment

63K12-0008;-0013;-0018;-0041;-0045;-0071;-0072;-0077;-0083;-0103;-0106; 63K12-0114;-0133;-0153;

Literature

Ansdell, M. and Kyser, K. (1992): Mesothermal Gold Mineralization in a Proterozoic Greenstone Belt - Western Flin Flon Domain, Sask.: Economic Geology volume 87, p1496-1524. DMR Rept. No. 36, p14; DMR Rept. No. 62, p71, Map 62C, Fig 4; GSC Pap. 71-27 p22; GSC Map 1078 A;

DATE | RESERVES LISTED | COMMENTS

1949	49,000 tons averaging 0.45 oz/ton Au and 15% As.	Newcor Mining and Refining Limited
1983	42,528 tons grading 0.313 oz/ton Au (0.16 cut-off), 0.88 oz/ton Ag, 4.10% Zn, 0.4% Cu plus 156,000 tons of probable reserves with a similar grade.	Vista Mines Ltd.
1988	Indicated reserves of 90,122 tons grading 0.216 oz/ton Au.	Vista Mines Ltd.

In 1944, 6 tons of ore were mined and the ore was shipped to Ottawa for assay.

In 1947, a 200 ton per day reduction mill and a 125 ton per day smelter were set up to process stockpiled ore. An unreported amount of gold and arsenic were produced in 1947. In 1950, 20 tons of arsenic trioxide were shipped. At this time, 20 tons of arsenic trioxide remained on the property.

Dodo Showing

http://www.economy.gov.sk.ca/dbsearch/MinDepositQuery/default.aspx?ID=0007

SMDI #:	0007
Showing Name:	Dodo Au Showing
Disposition:	S-103714
Location:	Wekach - Bootleg Lakes
NTS Area:	63K12
TRM:	66-30-1
UTM13-Northing (NAD83/Zn13):	6068242.49
UTM13-Easting (NAD83/Zn13):	697095.95
Commodity:	Au
Associated Commodities:	Cu

Type:	Drillhole
Mineral Resource Assessment:	Bedrock Geochemical Anomaly
Mineral Deposit Type:	Volcanic-Associated Massive Sulphide: Bimodal-Mafic
Geological Domain:	Flin Flon
Revised On:	2009/08/07

The showing consists of numerous diamond drill holes which intersected graphitic, sheared, altered and brecciated andesitic volcanics of the Amisk Group. The rock units host light to locally over widths of 1 to 9 ft (0.3 to 2.7 m) heavy pyrite-pyrrhotite mineralization. Minor chalcopyrite was also noted.

Assays were low, returning 0.01 oz./ton Au over 2.9 to 5.5 ft (0.88 to 1.68 m) and 0.12% Cu over 0.5 ft (0.15 m). Gold values were only intersected in drill hole no. 1 on DODO claim No. 3. The majority of the sulphide zones were found to be barren.

DRILLHOLE NUMBER	INTERSECTION (FT)	WIDTH (FT)	OUNCES/TON AU	AG	PCT CU	PCT ZN	HOST ROCK
DODO-1	200.0 - 205.5	5.5	0.01	---	----	----	altered graphitic rock
	257.9 - 260.8	2.9	0.01	---	----	----	altered graphitic rock
	261.9 - 264.9	3.0	0.01	---	----	----	altered graphitic rock
DODO-2	298.1 - 300.0	1.9	0.01	---	----	----	limey siliceous flows
DODO-3	22.2 - 23.0	0.8	0.01	---	----	----	carbonate-altered andes
	100.0 - 105.0	5.0	0.01	---	----	----	limey, siliceous andes
	115.0 - 125.0	10.0	0.01	---	----	----	limey, siliceous andes
DODO-4	260.0 - 264.0	4.0	----	---	0.12	----	limey, siliceous andes

In 1991, D. Thomas geologically mapped the rocks in the immediate showing area as Douglas Lake Assemblage unit 30 or a heterolithic volcaniclastic breccia composed of dominantly felsic fragments. This has been intruded by unit 46 or granodiorite and tonalite dykes.

In 1954 the Hudson Bay Mining and Smelting Company, Limited conducted an electromagnetic survey over the DODO 1 to 4, MICKEY 1 to 8, LEY 1 to 11 LHS 17 and MAYBOB claims in the Wekach to Bootleg Lake area. The survey outlined numerous long, northwest-trending electromagnetic anomalies over a width of 10,000 ft (3048 m) extending from the northern shore of the main section of Wekach Lake to a point 4000 ft (1219 m) northwest of the northern end of Bootleg Lake near Meridian Creek.

Diamond drilling later the same year on several of these anomalies intersected the rock units listed above. Hole 9 hit massive Py-Po zones.

Earlier work on the JOHN Claims during 1948 to 1951 consisted of several trenches and one 74 ft (22.6 m) drill hole halfway (AF 63K12-0014) between Bootleg Lake and Highway No. 35. Only minor pyrrhotite mineralization was intersected. The ground was restaked as the BINGO 1-12 claims by C. Young and V. Couchie in 1959. Further work consists of minor trenching on the PAR no. 1 claim in 1970 by Meridian Mining and Exploration Limited (AF 63K12-0052).

In May 1977, the showing was covered by the PAT claims (S-94205). In 1984, Hudson Bay completed a ground magnetic survey over the showing area (AF 63K12-0138) and in 1988, they completed VLF-2 and magnetic surveys over the showing (AF 63K12-0153). In the fall of 1988, further VLF-EM and humus and rock sampling were completed over the GAW-3 grid (AF 63K12-0158). The assay returns over the showing area were low.

Assessment

63K12-0010;-0014;-0015;-0028;-0052;-0138;-0158;

Literature

DMR Rept. No. 62, Map 62C;

Chance Claim Drill holes 1 and 2 Showing

http://www.economy.gov.sk.ca/dbsearch/MinDepositQuery/default.aspx?ID=0026

SMDI #:	0026
Showing Name:	Chance Claim Drill holes 1 and 2
Disposition:	S-111102
Location:	Douglas-Bomber Lakes: FFS 3 Grid
NTS Area:	63K12
TRM:	66-30-1
UTM13-Northing (NAD83/Zn13):	6070008.47
UTM13-Easting (NAD83/Zn13):	698540.9
Commodity:	Cu
Associated Commodities:	Ag ; Au

Type: Drillhole

Mineral Resource Assessment: Occurrence

Mineral Deposit Type: Structurally-Controlled Mesothermal Lode Gold

Geological Domain: Flin Flon

Revised On: 2009/08/07

The showing consists of several drill holes which intersected pyrrhotite, sphalerite and chlacopyrite mineralization. The drill holes area located on the CHANCE no. 1 claim, east of Douglas Lake, and north of Highway 35.

The drill holes intersected northwest-trending Amisk Group andesitic volcanics cut by a 320° fault zone traceable for 225 ft (68.6 m) and dying out at either end. Lenticular quartz veins up to 30 inches (76 cm) wide, quartz stringers, calcite stringers and epidote-rich zones were intersected in the fault zone.

Pyrite, pyrrhotite, sphalerite and chalcopyrite were noted along quartz-epidote-rich andesite contact zones and also within the quartz veins. The veins are interpreted to be fracture fillings. Assays from altered zones returned the following values.

DRILLHOLE NUMBER	INTERSECTION ft	m	CU	PCT AU	OUNCES PER TON AG
1	80.0-81.0	24.4-24.7	----	0.06	----
	92.0-93.0	28.0-28.3	----	----	0.1
2	32.0-34.5	9.8-10.5	0.10	0.01	0.13
	34.5-35.5	10.5-10.8	1.28	0.28	1.32
	35.5-36.0	10.8-11.0	1.09	0.08	1.36

During the 1960 to 1961, period Conwest Exploration Company excavated 6 trenches, and drilled 2 holes totalling 271 ft (82.6 m) on the CHANCE Claim Group (AF 63k12-0006). The two holes on the CHANCE No. 1 are discussed above.

By 1981, the showing was within Hudson Bay Exploration disposition ML 5295. By 1996, the showing was covered by Hudson Bay Exploration and Development ML 5518.

In 2004, Hudson Bay completed a ground TDEM survey that covered the showing (AF 63K12-NW-0214).

Assessment

63K12-0006;-0061;-0214;

Literature

Bailey, K.A. (2005): Bedrock Geology, Myo Rhyolite Distribution Map, Creighton, Saskatchewan: Sask. Geol. Surv. Summ. Invest. 2005-4.2 map 5.2. DMR Rept. No. 62, pp66,67, Map 62C;

Bomber Lake Cu or Kettle 1 Cu Showing

http://www.economy.gov.sk.ca/dbsearch/MinDepositQuery/default.aspx?ID=0038

SMDI #:	0038
Showing Name:	Bomber Lake Cu Showing or Kettle 1 Cu Showing
Disposition:	ML 5518
Location:	Douglas - Bomber Lakes: FFS 3 Grid
NTS Area:	63K12
TRM:	66-30-1
UTM13-Northing (NAD83/Zn13):	6070261.47
UTM13-Easting (NAD83/Zn13):	698672.9
Commodity:	Cu
Associated Commodities:	Ag ; Au ; Sf
Type:	Trench
Mineral Resource Assessment:	Developed Prospect without Reserves/Resources
Mineral Deposit Type:	Structurally-Controlled Mesothermal Lode Gold
Geological Domain:	Flin Flon
Revised On:	2009/08/07

The showing, which is located 0.75 km (0.47 mile) east of the north end of Douglas Lake, consists of massive pyrite-chalcopyrite mineralization in north-northwest-trending Amisk Group basic volcanics.

The main prospect, named KETTLE No. 1, is located halfway between the road to Douglas Lake and the southwest corner of Bomber Lake. The showing mineralization was exposed in outcrop and trenching. Initially, three packsack drill holes totalling 222 ft (67.7 m) were completed. All holes intersected massive mineralization similar to that exposed on the surface. Typical drill hole intersections were:

Drillhole Number	Interval (ft)	(m)	Au (both oz./ton)	Ag	% Cu	Location of hole
ddh 1	23.0 - 24.0	7.0- 7.3	0.020	1.60	0.85	under E trench
	56.0 - 61.0	17.1-18.5	0.035	0.70	0.50	
ddh 2	36.0 - 39.0	11.0-11.9	0.120	1.25	0.80	under G trench
	39.0 - 43.0	11.9-13.1	0.055	0.65	0.40	
ddh 3	7.0 - 8.0	2.1- 2.4	0.180	0.60	0.55	under D trench
	15.5 - 16.5	4.7- 5.0	0.190	1.95	0.60	
	59.0 - 63.0	18.0-19.2	0.015	0.05	TR	
	73.0 - 74.0	22.3-22.6	0.015	0.15	0.45	
KET-1	48.3 - 49.1	14.7-15.0	0.010	0.27	0.51	2% cpy,2-4% py
KET-2	62.4 - 63.0	19.0-19.2	0.040	0.44	0.33	1-2% cpy,5-6% py
	78.2 - 78.0	23.8-24.1	-----	0.84	0.27	1% cpy,5-6% py
KET-3	72.8 - 73.3	22.2-22.3	0.020	0.36	0.52	2-3% cpy,3% py
	73.3 - 73.7	22.3-22.5	0.440	2.54	1.01	4-5% cpy,5-6% py
	73.7 - 74.0	22.5-22.6	0.300	0.50	0.36	3-5% cpy,4-5% py
KET-4	61.6 - 62.1	18.8-18.9	-----	----	0.28	tr-1% cpy, 5-6% py
	62.1 - 62.6	18.9-19.1	-----	----	0.42	tr-1% cpy, 5-6% py
	75.1 - 75.8	22.9-23.1	0.140	0.08	0.34	1-2% cpy,8-12% py
	83.6 - 83.8	25.2-25.5	-----	TR	0.37	1-2% cpy,2-3% py
	86.4 - 89.6	26.3-27.3	0.010	0.35	0.62	tr cpy,3-4% py
KET-5	48.3 - 49.3	14.7-15.0	0.010	0.35	0.37	1% cpy,5% py
	154.5 -154.9	47.1-47.2	0.200	0.91	2.22	3-5% cpy,2-3% py
KET-6	138.6 -142.7	42.2-43.5	0.000	0.70	1.21	1-5% cpy,1-5% po
	146.8 -148.4	44.7-45.2	0.005	0.44	0.80	2-4% cpy,9% py
KET-7	99.5 -100.4	30.3-30.6	0.010	0.17	0.39	tr-1% cpy,2-3% py
KET-8	239.5 -240.8	73.0-73.4	0.166	1.88	2.87	3-15% cpy,4-8% po
KET-9	174.4 -176.0	53.2-53.6	0.206	0.19	0.04	tr-1% cpy,1-2% sph
	246.3 -247.0	75.1-75.3	0.220	0.14	----	3-4% po,1-2% py
KET-10	244.8 -246.9	74.6-75.3	0.880	0.47	0.81	1-3% cpy,sph,py,po
	326.7 -328.0	99.6-99.9	0.340	2.02	0.93	1-4% cpy,1-2% po
KET-11	72.6 - 73.4	22.1-22.4	0.160	0.55	0.52	1-2% cpy,1% po
	612.0 -615.8	186.5-187.7	0.036	0.54	0.51	1-2% cpy,1-3% po
KET-12	455.3 -456.4	138.4-139.1	-----	----	0.27	1-2% cpy,3-6% po
KET-13	89.3 - 93.0	27.1-28.3	0.150	0.64	0.77	25% py,22% po,mt
	516.2 -519.2	157.3-158.3	0.023	0.98	0.74	1-4% cpy,1-2% po
MNR-1	190.6 -191.2	58.1-58.3	134 ppb	----	1.28	NSS py-po-cpy
	191.2 -192.0	58.3-58.5	205 ppb	----	0.65	NSS py-po-cpy

MNR-2 313.0 -314.3 95.4-95.7 215 ppb ---- N/A diss py-po
363.9 -366.1 110.9-111.6 507 ppb ---- N/A diss py-po
366.1- 368.4 111.6-112.3 543 ppb ---- N/A diss py-po
* samples from ddh MNR-1 and MNR-2 were run for Pt/Pd. The returns were <10 ppb Pt and <1.0 ppb Pd plus <0.01% Ni and up to 0.03% Zn.

Trace zinc and molybdenite values were also noted. Native copper was identified locally. Selected grab samples returned up to 2.20% Cu, 2.90 oz/ton and 0.46 oz./ton Au. Some of the trenches were sampled. The following values were returned:

Trench Number	Sample ft.	Width M.	Oz./ton Au	Oz./ton Ag	% Cu
B	3.00	0.91	0.025	0.30	0.20
C	6.50	1.98	0.010	0.25	0.20
C	3.00	0.91	0.020	0.20	0.20
D	1.50	0.46	0.085	0.65	1.10
E	6.50	1.98	0.065	1.65	1.30
G	3.35	1.02	0.730	4.10	2.00
H	1.65	0.50	0.140	0.40	0.35

The showing is a typical mesothermal deposit which consists of a series of 320°-trending, steeply dipping quartz-carbonate-arsenopyrite-chalcopyrite- pyrrhotite veins within a sheared, silicified, hematized and carbonatized basalt to andesite that has, locally, been intruded by diorite. Disseminated to near solid sulphide py-po mineralization contains up to 15% chalcopyrite plus minor sphalerite and magnetite.

Prior to 1936, Flin Flon Gold Mining Syndicate conducted trenching (and drilling ?) on Vein 3.

The main prospect, on KETTLE claim no. 1, was exposed in outcrop and by later trenching in 1968 by J. Krassilowsky, J. Reid and D. McDougall. Further trenching was conducted and grab samples were taken.

The property was optioned by Torwest Resources Ltd. later in 1968. Torwest Resources completed further trenching and bulldozer stripping of the main zone, as well as the drilling of 3 packsack drill holes totalling 222 ft (67.7 m) [63K12-0059]. All holes intersected the massive mineralization exposed in the surface, and typical drill intersections are listed above. A sample taken from the E trench assayed 1.30% Cu, 1.65 oz./ton Ag and 0.065 oz./ton Au across a width of 2.0 m.

Later in 1968, the property was high-graded. A total of 27.925 tons were shipped to the Hudson Bay Mining and Smelting Company Ltd. smelter in Flin Flon for processing.

In 1980, Hudson Bay Exploration and Development completed a ground EM survey over the showing area. In the period 1981 to 1982, Hudson Bay Exploration drilled 11 holes (totalling 814 m) in the vicinity of the Bomber Lake showing.

Gold is noted on map 1078a in the vicinity, lying between the stripped area and the southwest shore of Bomber Lake. By 1981, Hudson Bay Exploration disposition ML 5295 covered the showing. Hudson Bay completed 7 drill holes (KET-1 to 7) on the showing (AF 63K12-0124). In 1982, Hudson Bay Exploration completed drill holes KET-8 to 11 on the showing (AF 63K12-0126). The results of this drill program are given above. Between 1983 and 1984, drill holes KET-12 to 15 were completed on the

showing (AF 63K12-0131). Holes KET-12 and 13 returned minor values.

On 12 April 1987, D. Ruttan, J. Reid, and J. Krassilowsky staked the showing area as S-98861. On 30 January 1997, the claim was transferred to Mid North Resources Limited. In 2004, Mid North completed anomaly drill holes MNR-1 and MNR-2 immediately south of the showing (AF 63K12-0209). The assay results are given above. The claim was allowed to lapse on 1 November 2004.

In 2004, Hudson Bay Exploration and Development completed aTDEM survey on the FFS 3 grid that covered the showing (AF 63K12-NW-0214).

Assessment

63K12-0059;-0124;-0126;-0131;-0209;-0214;

Literature

Ansdell, M. and Kyser, K. (1992): Mesothermal Gold Mineralization in a Proterozoic Greenstone Belt - Western Flin Flon Domain, Sask.: Economic Geology volume 87, p1496-1524. Bailey, K.A. (2005): Bedrock Geology, Myo Rhyolite Distribution Map, Creighton Saskatchewan: Sask. Geol. Surv. Summ. Invest. 2005-4.2 CD ROM map 5.2. DMR Rept. No. 62, Map 62C; GSC Map 1078A; Maclaughlan, K, Gibson, H., Bailey, K. (2002): Stratigraphic and Intrusive Relationships in the Myo Lake Section, Flin Flon Mine Sequence, Creighton, Saskatchewan: Sask.Geol. Surv. Summ. Invest. 2002V2; 12p,

The property was high-graded in 1968 and 27.925 tons of ore were shipped to the Flin Flon smelter for processing. The ore graded 12.40% Cu, 0.45 oz/ton Au, and 2.42 oz/ton Ag.

Cor Au Prospect

http://www.economy.gov.sk.ca/dbsearch/MinDepositQuery/default.aspx?ID=0014

SMDI #:	0014
Showing Name:	Cor Au Prospect
Disposition:	S-111100
Location:	Douglas Lake: FFS 3 Grid
NTS Area:	63K12
TRM:	66-30-1
UTM13-Northing (NAD83/Zn13):	6069124.48
UTM13-Easting (NAD83/Zn13):	698847.89

Commodity: Au

Associated Commodities: As ; Cu ; Py ; Cv

Type: Outcrop grab

Mineral Resource Assessment: Prospect

Mineral Deposit Type: Structurally-Controlled Mesothermal Lode Gold

Geological Domain: Flin Flon

Revised On: 2009/08/07

The bedrock consists of massive andesite which is altered to a chlorite-carbonate schist over widths of 2 to 5 ft (0.6 to 1.5 m) where it is cut by a fault. The zone contains a lenticular quartz vein with a maximum thickness of 14 inches (36 cm). Arsenopyrite, pyrite and chalcopyrite occur disseminated in the schistose wall-rock and form massive veinlets in the quartz which also contains a small amount of tourmaline. In addition to the main vein, stringers and veinlets of quartz occupy three sets of fractures in the andesite. One set is parallel to the fault, the second strikes north and dips steeply east and west, and the third set strikes at right angles to the trend of the fault and dips vertically to 40° NW.

In 1983, D. Martin sampled the showing trenches. The following results were returned:

TRENCH NUMBER	OUNCES/TON AU	AG	% CU	PB	% ZN	AS
1	0.045	0.44	0.27	<0.01	<0.01	0.50
2	1.350	1.31	0.59	<0.01	<0.01	3.37
3	1.170	2.92	1.77	<0.01	<0.01	1.43
4	0.220	0.62	1.28	<0.01	<0.01	1.54
5	0.016	0.20	0.42	<0.01	<0.02	0.07
6	0.265	0.70	0.13	<0.01	<0.02	1.95

The mineralization is hosted by a strongly deformed quartz vein. The earliest phase of mineralization is a pyrite-chalcopyrite-arsenopyrite suite. The pyrite locally altered to hematite. A later phase of chalcopyrite-arsenopyrite mineralization forms rims around earlier pyrite mineralization. Minor covellite, sphalerite calaverite and native gold are present. The native gold is found within the arsenopyrite.

In 1983, nineteen drill holes were completed to outline the mineralization. Intersections assayed up to 0.421 oz./ton Au, 1.80 oz./ton Ag and 1.80% Cu. Drill hole COR83-15 intersected 9.32 oz./ton Au, 13.3 oz./ton Ag and 4.91% Cu over 0.5 feet.

The Cor prospect is about 1600 ft (488 m) east of the north end of the narrows in Douglas Lake or approximately 1500 ft (457 m) north-northeast of the Newcor Shaft. A fault zone which strikes 318° and dips 70° to 80° SW has been exposed in 10 pits over a length of 300 ft (91.4 m).

By 1980, the showing was within ML 5106. In 1981, Abaco Canada Consultants Ltd. optioned the property.

In 1983, D. Martin sampled the original trenches of the Cor Showing and completed 19 drill holes on the zone (AF 63K12-0133). The results of this work are given above.

On 9 September 1998, as part of a consolidation, the showing was covered by Hudson Bay Exploration and Development ML 5518.

In 2004, Hudson Bay completed a ground TDEM survey over FFS 3 grid that covered the showing (AF 63K12-NW-0214).

Assessment

63K12-0133;-0214;

Literature

DMR Rept. No. 62, p67, Map 62C; GSC Map 1078 A;

Unity Au-Cu Showing

http://www.economy.gov.sk.ca/dbsearch/MinDepositQuery/default.aspx?ID=0013#top

SMDI #:	0013
Showing Name:	Unity Au-Cu Showing
Disposition:	ML 5518
Location:	Douglas Lake area: FFS 3 Grid
NTS Area:	63K12
TRM:	66-30-1
UTM13-Northing (NAD83/Zn13):	6068717.48
UTM13-Easting (NAD83/Zn13):	699457.87
Commodity:	Au

Associated Commodities:	Cu
Type:	Trench
Mineral Resource Assessment:	Prospect
Mineral Deposit Type:	Structurally-Controlled Mesothermal Lode Gold
Geological Domain:	Flin Flon
Revised On:	2009/08/07

The occurrence or the Unity North and South Showings are located approximately 2400 ft (732 m) east of the Newcor Shaft.

The mineralization comprising the showing is associated with a fault zone which intersects amygdaloidal andesite breccia, interlayered with massive dacitic flow volcanics or its intrusive equivalent. The zone consists of several parallel shears which strike 315° and dip 70° to 80° SW.

The parallel shears, together with the intervening altered and unaltered wall-rock, form a zone up to 20 ft (6.1 m) wide. Carbonatization is negligible but silicification and sericitization of the wall-rock is intense. Quartz occurs as irregular stringers in the altered rock and as veins within and parallel to the shears. Pyrite, pyrrhotite and chalcopyrite occur disseminated through the altered wall-rock and as small veinlets associated with the quartz veins which occupy the shears. Minor gold values were returned from a 6 inch wide quartz-calcite vein.

Drill testing encountered the following intersections:

DRILLHOLE NUMBER	INTERSECTION (FT)	WIDTH (FT)	OUNCES PER TON AU	AG	PCT CU	PCT ZN	TARGET
UNI-01	108.3 - 110.0	2.7	0.115	0.51	0.53	---	Showing
UNI-02	110.9 - 113.7	2.8	0.020	0.35	0.26	---	Showing
UNI-03	68.5 - 70.7	2.2	0.030	----	----	---	Showing
UNI-04	85.3 - 97.4	2.1	0.040	----	----	---	Showing
UNI-05	114.8 - 116.9	2.1	0.330	----	----	---	Showing
UNI-06	62.4 - 63.2	0.8	0.260	----	----	---	Showing
	72.4 - 73.5	1.1	0.430	----	----	---	
UNI-08	203.4 - 204.9	1.5	0.070	----	----	---	Showing
UNI-09	239.7 - 241.5	1.8	0.070	----	----	---	Showing
UNI-10	83.6 - 85.1	1.5	0.050	----	0.20	---	Showing
	105.7 - 106.3	0.6	0.090	----	0.29	---	
UNI-16	225.3 - 225.8	0.5	0.040	----	0.34	---	Unity Str.
UNI-17	141.3 - 144.1	0.9	0.050	----	----	2.4	Showing

	199.1 - 200.1	1.0	0.270	----	0.46	0.2	Showing
	308.0 - 308.6	0.6	0.130	----	----	---	
UNI-18	153.3 - 153.9	0.6	0.180	----	----	---	Showing
	175.9 - 176.0	0.1	2.490	----	0.06	---	
	213.0 - 213.5	0.5	0.170	----	----	---	
UNI-20	66.0 - 67.0	1.0	0.080	----	----	---	Showing

The showing may be an extension of the Cor Prospect mineralized horizon or SMDI 0014.

The showing was discovered in 1936 by North of 54 Mines Ltd. on the VIOLA claim. In September of this year, Flin Flon Gold Mines Ltd. optioned the property and completed drilling which delineated sporatic gold mineralization over a strike length of 0.5 mile. The option ceased in 1937.

The occurrence has been explored by 6 rock trenches over a length of 250 ft (76.2 m). The gold content of the zone is not known. None-the-less, it is marked on map 1078A as a gold occurrence.

In March of 1950, the claim was transferred to Hudson Bay Exploration and Development and later became part of the Flin Flon Mining Lease.

In 1987, Hudson Bay completed 11 drill holes to further test the Unity North and Unity South Showings (AF 63K12-0173). Only minor gold values over narrow widths were returned. Between 1987 and 1988, ground magnetic and VLF-EM surveys were completed over the showing (AF 63K12-0174).

In 1988, Hudson Bay completed geochemical sampling on ML 5041.

In September 1989, Hudson Bay completed a ground magnetic survey and prospecting, soil, and humus sampling on the FF5-3 grid on S-102075 (AF 63K12-0165). No anomalous values were returned. This claim was staked in October 1983 to cover a sliver of open ground between ML 5041 and ML 5106.

Between 1987 and 1991, Hudson Bay completed drill holes UNI-1 to -10, 17, 18, and 20 to test the Unity Showing, drill holes UNI-15, 16, and 19 to test the Unity Structure, and drill holes UNI 11 to -14 to test a number of anomalies in the general area (AF 63K12-0173). The drill holes intersected minor pyrite, pyrrhotite, chalcopyrite, and sphalerite was intersected. The better intersections are reported above.

Between 1988 and 1990, Hudson Bay completed ground VLF-EM and magnetic surveys over the grid which covers the showing (AF 63K12-0174).

On 9 September 1998, Hudson Bay consolidated ML 5041 and ML 5361 and the showing was covered by ML 5518.

In 2004, Hudson Bay Exploration completed a ground TDEM survey over the

Assessment

63K12-0165;-0173;-0174;-0214;

Literature

DMR Rept. No. 62, pp75-76, Map 62C; MacLaughlan, K., Gibson, H., Bailey, C. (2002): Stratigraphic and Intrusive Relationships in the Myo Lake Section, Flin Flon Mine Sequence, Creighton, Saskatchewan: Sask. Geol. Surv. Summ. Invest. 2002V2; 12p.

Rye Option Au-Cu Showing

http://www.economy.gov.sk.ca/dbsearch/MinDepositQuery/default.aspx?ID=2570

SMDI #:	2570
Showing Name:	Rye Option Au-Cu Showing
Disposition:	S-111103
Location:	Reddy Lake - southeast tip: WAN 65 grid, WAG 6 grid
NTS Area:	63K13
TRM:	66-30-1
UTM13-Northing (NAD83/Zn13):	6071765.45
UTM13-Easting (NAD83/Zn13):	697675.93
Commodity:	Au
Associated Commodities:	As ; Cu ; Mt ; Po ; Py
Type:	Drillhole
Mineral Resource Assessment:	Prospect
Mineral Deposit Type:	Volcanic-Associated Massive Sulphide: Bimodal-Mafic
Geological Domain:	Flin Flon
Revised On:	2009/08/06

The Rye Option Showing is located just east of the southeast bay of Reddy Lake - a small lake located 0.72 km (0.45 mile) southeast of the south tip of Creighton Lake. The showing is located 1.61 km (1.0 mile) west of SMDI 0062 on WAN 65 grid at WAG 6 cross-grid coordinates 131+00W and 131+00S.

The showing area, as mapped by D.J. Thomas in 1992, is underlain by the contact between Unit 46 or the Annabel Lake intrusion and a sliver of Amisk Group Units 8a and 8b or the Bomber Lake Member of the Hidden Lake Basalts. Unit 46 consists of the medium- to coarse-grained biotite (±hornblende) granodiorite phase of the Annabel Lake Intrusion. The Bomber Lake Member of the Hidden Lake Basalts

consists of a series of aphyric, thin- to medium-layered, pillowed, sparsley to non-amygdaloidal, pillowed to massive mafic flows.

The rocks in the Flin Flon area have experienced two distinct periods of faulting. Early faulting, which occurred at the end of the folding of Amisk and Missi rocks, consists of large-scale thrust faulting on the overturned limbs of large regional folds. The late period of faulting gave rise to a series of regional, north-trending fractures which have been named the Ross Lake Fault System. This system includes north-northwest-striking and steeply east-dipping oblique slip faults, northwest-striking splay faults, south-dipping (convex to the north) thrust faulting, and northeast-striking steeply northwest-dipping faults. The rocks have been folded and re-folded by numerous generations of isoclinal folds whose axial traces trend slightly west of north.

The Rye Option Au-Cu Showing occurs in a northeast-trending fault which forms the contact between the strongly sericitized margin of the Annabel Lake Intrusive or Creighton Lake Stock granodiorite to the northwest and Amisk Group mafic metavolcanic flow rocks to the southeast. The showing consists of up to 4% pyrite, 2% chalcopyrite, trace to 3% magnetite, and trace amounts of pyrrhotite, tetrahedrite, and arsenopyrite. The mineralization occurs as disseminations within the metavolcanics, as fracture infillings, and as disseminations within contorted quartz veining. Drill intersections returned:

DRILLHOLE NUMBER	INTERSECTION (M)	WIDTH (M)	OUNCES/TON AU	AG	PCT CU	PCT ZN	INTERSECTION GEOLOGY
WAG-50	34.2 - 35.4	1.2	0.01	----	0.33	0.1	py-cp: mafic flow
	151.7 - 152.1	0.4	0.01	----	0.45	0.1	py-cp: mafic flow
	152.9 - 153.2	0.3	0.26	----	0.66	0.2	py-cp: mafic flow
	174.1 - 174.4	0.3	----	0.28	0.43	0.1	py-cp: gabbro
	196.2 - 197.6	1.4	0.03	----	0.88	0.2	po-cp: mafic flow
	198.6 - 199.8	1.2	0.01	----	0.68	0.1	py-cp: mafic flow
	199.8 - 200.7	0.9	0.01	----	1.22	0.1	py-cp: mafic flow
	200.7 - 201.2	0.5	0.04	0.96	2.93	0.3	cpy+py: NSS strgr
	201.2 - 201.7	0.5	0.01	0.85	1.26	0.1	py-cp: qtz vein
WAG-55	64.6 - 65.2	0.7	----	----	0.96	0.1	1-2% cp: qtz vein
	214.0 - 216.0	2.0	----	----	0.47	---	py+cp: shear zone
	216.0 - 218.0	2.0	----	----	0.43	---	py+cp: shear zone
	220.0 - 222.0	2.0	----	----	0.53	---	3% py+2% cp:shear
	224.5 - 225.5	1.0	0.02	2.41	0.38	---	py+po+cp+tetrahed
WAG-56	162.0 - 164.0	2.0	----	----	0.34	---	
	189.0 - 191.0	2.0	----	----	0.38	0.3	

In 1913, prospecting led to the discovery of numerous gold-bearing quartz veins between Flin Flon and Amisk lakes. In 1914, prospectors Alex Creighton and the Mosher and Dion brothers discovered the Flin Flon Main Mine orebody immediately east of showing area. Between 1914 and 1918, E.L. Bruce geologically mapped the showing area at a scale of 3 inches to 1 mile for the Geological Survey of Canada. In 1921, F.J. Alcock completed a plane table and alidade geological survey of the Flin Flon area.

Between 1945 and 1945, C.H. Stockwell geologically mapped the Flin Flon area at a scale of 1000 feet to 1 inch for the Geological Survey of Canada. Between 1955 and 1956, A.R. Byers and S.J.T. Kirkland mapped the showing area at a scale of 1:31,680 for Saskatchewan Energy and Mines.

In the early 1960s, the immediate showing area was staked as ALF claim No. 213 (S-85399). No work was reported and the claim was allowed to lapse. In the mid 1960s Hudson Bay Exploration and Development completed five drill holes on the Rye Option to test a sulphide stringer zone which parallels the southeast shore of Reddy Lake. These drill holes returned up to 0.06 oz/ton Au and 2.00% Cu over 0.4 to 1.6 foot widths. Work on the Rye Option was never reported to Saskatchewan Energy and Mines.

On 13 October 1988, Hudson Bay Exploration and Development staked the immediate showing area as S-98737. In 1989, Hudson Bay completed ground VLF-EM and magnetic surveys over the WAG 6 grid (AF 63K13-0059). In February 1990, Hudson Bay completed drill holes WAG-49 and -50 to test the Rye Zone mineralization (AF 63K13-0066). Drill hole WAG-50 encountered the values reported above.

In 1991, Hudson Bay completed a further five drill holes (FFS-1 to -5) on the WAG 6 and 6S grids (AF 63K13-0067) and three drill holes (WAG-55 to -57) on the Rye Showing (AF 63K13-0068).

In 1992, Hudson Bay completed further ground HLEM, VLF-EM, and magnetic surveys on the property (AF 63K13-0070). In this year, D.J. Thomas geologically mapped the showing area at a scale of 1:20,000 for the Saskatchewan Geological Survey.

In 1998,Hudson Bay completed a ground magnetic survey on the WAG 6 grid (AF 63K12-0205). In the following year, a TDEM survey was completed on the grid (AF 63K13-0089).

Assessment

63K12-0205, 63K13-0003;-0009;-0010;-0011;-0014;-0019;-0059;-0066;-0067;-0068; 63K13-0070;-0089;

Literature

Alcock, F.J. (1923): Flin Flon map area, Manitoba and Saskatchewan: Geol. Surv. Can. Summ. Rep., 1922, ptC, p1-36. Byers, A.R., S.J.T. Kirkland , and W.J. Pearson (1965): Geology and Mineral Deposits of the Flin Flon Area: DMR Rep. No. 62, 95p. Stockwell, C.H. (1946): Flin Flon-Mandy area, Manitoba and Saskatchewan: Geol. Surv. Can. Pap. 46-14; 5p. Stockwell, C.H. (1960): Flin Flon-Mandy, Manitoba and Saskatchewan: Geol. Surv. Can. Map 1078A (with marginal notes). Thomas, D.J. (1992): Revision Bedrock Geology, Creighton Lake-Flin Flon Lake Area (parts of NTS 63K-12, 63K-13): Sask. Geol. Surv. Summ. Invest. 1992; p3-15.

Appendix 2: Nordic Minerals Surface Samples

SAMPLE ID	YEAR	COMPANY	EASTING (UTM14E)	NORTHING (UTM14N)	SULPHIDES	DESCRIPTION	Au ppm	Au ppb	Ag ppm	Cu ppm	Ni ppm	Pb ppm	Zn ppm
183201	2012	Nordic - Krebs	311234	6070046	no	Aphanitic, plg, hbl, (chl) tuffacious material between pillows	<0.2		<1	184	15	7	91
183202	2012	Nordic - Krebs	311234	6070046	po, trace cpy	Aphanitic, plg, hbl, (chl), sample from core of pillow/block	<0.2		1	606	12	31	69
183203	2012	Nordic - Krebs	311174	6069963	cpy	qz vein with minor mafic material	<0.2		2	825	11	<5	60
183204	2012	Nordic - Krebs	311174	6069963	py trace, in rock and on fracture surfaces	Aphanitic, plg, hbl, (chl), mafic tuff	<0.2		<1	71	13	<5	113
183205	2012	Nordic - Krebs	311174	6069963	no	Aphanitic, plg, hbl, (chl) stretched qz amygdules, mafic	<0.2		<1	70	13	<5	150
183206	2012	Nordic - Krebs	311112	6069949	trace py	Phaneritic, bt, qz, plg, hbl tonalite/quartz diorite	<0.2		<1	15	13	8	60
183207	2012	Nordic - Krebs	311112	6069949	no	Aphanitic, plg, hbl, (chl) stretched qz amygdules, mafic	<0.2		<1	73	22	11	103
183208	2012	Nordic - Krebs	311154	6070215	po, (trace cpy)	Aphanitic, plg, hbl, tuffacious material between pillows	<0.2		<1	733	15	7	134
183209	2012	Nordic - Krebs	311190	6070208	no	Aphanetic qz, plg, hbl "chert rich horizon"	<0.2		<1	80	11	14	53
183210	2012	Nordic - Krebs	311381	6070060	py, trace po	Aphanitic, plg, hbl, tuffacious material between pillows	<0.2		1	740	21	6	102
183211	2012	Nordic - Krebs	309876	6068951	py, po	Aphanitic, plg, hbl, tuffacious material, slightly cherty	<0.2		<1	274	114	11	49
183212	2012	Nordic - Krebs	311413	6069069	trace po & py	Aphanitic, plg, hbl, tuffacious material between pillows, rock slightly magnetic magnetite ?	<0.2		<1	290	36	9	125
183213	2012	Nordic - Krebs	311308	6069045	trace py	Aphanitic, plg, hbl, tuffacious material from heterolithological tuff breccia	<0.2		<1	143	43	<5	76
183214	2012	Nordic - Krebs	311259	6068690	no	Aphanitic, plg, hbl, plg phenocryst tuff	<0.2		<1	146	12	6	89

SAMPLE ID	YEAR	COMPANY	EASTING (UTM14E)	NORTHING (UTM14N)	SULPHIDES	DESCRIPTION	Au ppm	Au ppb	Ag ppm	Cu ppm	Ni ppm	Pb ppm	Zn ppm
183215	2012	Nordic - Krebs	310104	6069061	no	Aphanitic, plg, hbl, tuffacious material between pillows minor carbonate	<0.2		<1	5	57	<5	82
688601	2013	Nordic - Muir	310301	6069302		Rhyolite, grey fresh, light grey weathered.		8.1	<1	80.3	21	3.9	69
688602	2013	Nordic - Muir	310259	6069199		Rhyolite, grey fresh, dark grey weathered.		3.5	<1	133.6	3.7	6.9	63
688603	2013	Nordic - Muir	311385	6070058		Rhyolite, grey fresh, light grey weathered.		<0.5	<1	8.1	7	1.7	42
688604	2013	Nordic - Muir	311379	6070056		Basalt, dark grey fresh, grey weathered, Fe oxidized surface.		6.1	0.5	448.2	8.8	3.5	116
688605	2013	Nordic - Muir	311187	6070208		Rhyolite, grey fresh, light grey weathered.		1.2	<1	33.8	2.7	9.5	96
688606	2013	Nordic - Muir	311160	6070520		Basalt, dark grey fresh, grey weathered, pillowed.		<0.5	0.1	216.4	3.8	5.2	46
688607	2013	Nordic - Muir	311150	6070527		Basalt, dark grey fresh, grey weathered, accessory pyrite.		<0.5	<1	107.3	2.1	1.2	45
688608	2013	Nordic - Muir	311065	6070430		Basalt, dark grey fresh, grey weathered.		5.2	<1	168.8	5.5	15	103
688609	2013	Nordic - Muir	311351	6069691		Basalt, dark grey green fresh, grey weathered, pillowed.		<0.5	<1	169.7	5.2	16	108
688610	2013	Nordic - Muir	310644	6069164		Dacite, dark grey fresh, grey weathered, plagioclase phenocrysts, Fe oxidized surface.		4.2	<1	6.8	5.4	6.4	68
688611	2013	Nordic - Muir	311326	6070049		Basalt, dark grey fresh, grey weathered.		85	1.2	1008.4	11	2.5	125
688612	2013	Nordic - Muir	311300	6070069		Basalt, dark grey fresh, grey weathered.		<0.5	0.1	103.7	11	5.7	80
688613	2013	Nordic - Muir	311253	6070011		Gabbro, fine grained,		43	1.3	507	11	9.8	71
688614	2013	Nordic - Muir	311227	6070052		Basalt, dark grey fresh		41	1.6	1190.2	18	7.3	57
688615	2013	Nordic - Muir	311240	6070067		Basalt, dark grey fresh, grey weathered, Qtz veins, Cu oxidized surface.		150	1.8	1774.3	6.8	7.3	64
688616	2013	Nordic - Muir	311434	6070166		Basalt, dark grey green fresh, grey weathered.		7.5	<1	29.2	4	7.1	15

SAMPLE ID	YEAR	COMPANY	EASTING (UTM14E)	NORTHING (UTM14N)	SULPHIDES	DESCRIPTION	Au ppm	Au ppb	Ag ppm	Cu ppm	Ni ppm	Pb ppm	Zn ppm
688617	2013	Nordic - Muir	311441	6070159		Basalt, dark grey green fresh, grey weathered, Fe oxidized surface.		6.6	0.1	105.1	1.9	4.5	75
DL-17-1	2015	Nordic - Kushner	309652	6069777		plag porphyritic granite, massive, ~5% phenocrysts k-feld 1-5mm, few quartz veins 0.3-2cm wide @334/85		<2	<0.2	46	30	1	82
DL-17-2	2015	Nordic - Kushner	309652	6069777		plag porphyritic granite, massive, ~5% phenocrysts k-feld 1-5mm, few quartz veins ~10cm wide @334/85		<2	<0.2	33	6	2	40
DL-17-3	2015	Nordic - Kushner	309498	6070021		~10 cm wide qtz vein from qtz vein, vis sulf		<2	<0.2	6	1	5	13
DL-17-4	2015	Nordic - Kushner	309575	6070213		host granodiorite w/ vis sulf		2	<0.2	51	33	5	88
DL-17-5	2015	Nordic - Kushner	309575	6070213		~50 cm wide qtz vein white w/o vis sulf		<2	<0.2	1	<1	<1	3
DL-17-6	2015	Nordic - Kushner	309575	6070213		greissened 4 cm wide qtz vein		<2	<0.2	142	13	1	20
DL-17-7	2015	Nordic - Kushner	309482	6070189		greissened qtz vein @ 355/88, host granite no longer plag phyric		3	0.2	42	11	<1	31
DL-17-8	2015	Nordic - Kushner	309595	6070135		~5 cm vein and host granite, no vis sulf, vein @ 335/90		<2	<0.2	3	1	2	7
DL-17-9	2015	Nordic - Kushner	309707	6070064		qtz vein w/ no vis sulf @350/90, plag phyric granite host		49	0.7	111	2	4	6
DL-17-10	2015	Nordic - Kushner	309707	6070114		white qtz vein ~50 cm wide, discontinuous, vis. For ~10 m		<2	<0.2	9	3	6	23
DL-17-11	2015	Nordic - Kushner	311489	6070007		Grab sample from plag-phyric basalt		<2	0.3	193	8	1	16
DL-17-11(0A)	2015	Nordic - Kushner	311489	6070007		Shear zone? w/ ~5-10% sulf		<2	0.4	208	4	1	123
DL-17-11(0B)	2015	Nordic - Kushner	311489	6070007		10 m up trench (North)		<2	0.2	137	2	<1	70
DL-17-11(0C)	2015	Nordic - Kushner	311489	6070007		10 m down trench (South)		<2	<0.2	32	1	<1	56
DL-17-11(5m)	2015	Nordic - Kushner	311489	6070007		5 m East of trench		<2	0.6	256	2	7	84
DL-17-11(10m)	2015	Nordic - Kushner	311489	6070007		10 m West of trench		<2	0.2	74	7	7	65

SAMPLE ID	YEAR	COMPANY	EASTING (UTM14E)	NORTHING (UTM14N)	SULPHIDES	DESCRIPTION	Au ppm	Au ppb	Ag ppm	Cu ppm	Ni ppm	Pb ppm	Zn ppm
DL-17-12	2015	Nordic - Kushner	311489	6069957		greissened qtz vein ~70 cm wide, continuous over outcrop		<2	<0.2	7	<1	6	7
DL-17-13	2015	Nordic - Kushner	311489	6069957		greissened basalt		10	0.7	121	<1	4	54
DL-17-14	2015	Nordic - Kushner	311489	6069957		greissened basalt		<2	0.3	204	1	<1	39
DL-17-15A	2015	Nordic - Kushner	311370	6069068		clasts of basalt flow w/ vis sulf, Flow fabric @ 325/90, ~50-70% clasts		<2	0.3	99	16	3	77
DL-17-15B	2015	Nordic - Kushner	311370	6069068		flow matrix w/ sulf		<2	0.3	100	12	9	80
DL-17-16A	2015	Nordic - Kushner	311370	6069068		Vis. Nat. Cu in clast?		<2	0.2	91	25	<1	68
DL-17-16B	2015	Nordic - Kushner	311370	6069068		Vis. Nat. Cu in clast?		<2	0.2	114	24	<1	64
DL-17-17A	2015	Nordic - Kushner	311297	6069050		Vis. Nat. Cu in clast?		2	<0.2	116	21	1	54
DL-17-17B	2015	Nordic - Kushner	311247	6069100		flow matrix w/ vis sulf, ~10% clasts		<2	<0.2	93	19	4	55
DL-17-19	2015	Nordic - Kushner	311137	6069116		tuff w/o clasts		2	<0.2	138	27	11	188
DL-17-20A	2015	Nordic - Kushner	310891	6069530		heavy tuff clasts (~70%), plag phyric dykes between 1.5-10 m wide @335/78		<2	0.2	37	5	3	67
DL-17-20B	2015	Nordic - Kushner	310891	6069530		heavy tuff clasts (~70%), plag phyric dykes between 1.5-10 m wide @335/79		3	0.2	156	9	4	99
DL-17-20C	2015	Nordic - Kushner	310891	6069530		heavy tuff clasts (~70%), plag phyric dykes between 1.5-10 m wide @335/80		<2	<0.2	16	5	7	84
DL-17-20D	2015	Nordic - Kushner	310891	6069530		heavy tuff clasts (~70%), plag phyric dykes between 1.5-10 m wide @335/81		<2	0.2	8	23	1	166
DL-17-21	2015	Nordic - Kushner	310600	6069389		~1 m wide discontinuous qtz vein. No vis sulf			<0.2	152	1	7	55
DL-17-21A	2015	Nordic - Kushner	310600	6069389		~30% vis tuff clasts		<2	<0.2	2	9	3	43
DL-17-22A	2015	Nordic - Kushner	310143	6069245		qtz vein w/ vis sulf		10	1.3	449	8	<1	221
DL-17-22B	2015	Nordic - Kushner	310143	6069245		qtz vein w/ vis sulf		<2	0.2	84	<1	1	92
DL-17-22C	2015	Nordic - Kushner	310143	6069245		flow matrix w/ vis sulf, ~10-30% mafic clasts		17	1.1	1350	1	6	52

SAMPLE ID	YEAR	COMPANY	EASTING (UTM14E)	NORTHING (UTM14N)	SULPHIDES	DESCRIPTION	Au ppm	Au ppb	Ag ppm	Cu ppm	Ni ppm	Pb ppm	Zn ppm
DL-17-22D	2015	Nordic - Kushner	310143	6069245		flow matrix w/ vis sulf, ~10-30% mafic clasts		12	0.6	692	1	5	114
DL-17-23	2015	Nordic - Kushner	310298	6069246		host rock w/ sulf, massive, NE trending qtz veins		3	0.4	325	1	1	57
DL-17-24A	2015	Nordic - Kushner	310298	6069172		plag-phyric tuff w/o clasts. Vis sulf.		<2	<0.2	34	23	<1	74
DL-17-24B	2015	Nordic - Kushner	310298	6069172		plag-phyric tuff w/o clasts. Vis sulf.		<2	<0.2	38	18	<1	58
DL-17-25	2015	Nordic - Kushner	310510	6069084		plag-phyric tuff w/o clasts. No vis sulf., near historic drill site		2	<0.2	38	14	6	83
DL-17-26	2015	Nordic - Kushner	310568	6069249		plag-phyric tuff w/o clasts. No vis sulf.		<2	0.3	97	19	3	77
DL-17-27A	2015	Nordic - Kushner	310059	6069448		~50 cm wide heterogeniously greissened qtz vein, host is plag-phyric tuff, 1.5-10 m wide felsic dykes observed @ 320/90		82	0.5	555	4	3	49
DL-17-28	2015	Nordic - Kushner	310549	6069678		1-5 cm wide deformed white qtz veins in mafic flows (?),		2	0.2	52	9	<1	102
DL-17-29A	2015	Nordic - Kushner	310050	6069283		Host rock roadside sample w/ no vis sulf, location has mafic dyke 2+ m wide		57	0.3	95	8	<1	99
DL-17-29B	2015	Nordic - Kushner	310050	6069283		mafic dyke 2+ m wide w/ white qtz veins, no vis sulf		190	0.3	130	8	<1	110
DL-17-30	2015	Nordic - Kushner	310125	6069333		Shear fabric w/ chloite alteration		<2	<0.2	9	3	2	60
DL-17-31	2015	Nordic - Kushner	310125	6069333		mafic dyke 3+ m wide		<2	<0.2	134	4	<1	122
DL-17-32	2015	Nordic - Kushner	310632	6069689		greissened qtz vein 10 cm wide, vis sulf.		<2	0.3	22	12	<1	143
DL-17-33A	2015	Nordic - Kushner	311380	6069890		host rock w/ vis sulf.		19	<0.2	277	6	30	156
DL-17-33B	2015	Nordic - Kushner	311380	6069890		greissened qtz vein ~4 cm wide w/. Vis sulf		<2	<0.2	27	13	5	115

Appendix 3: Douglas Lake Surface Samples

Separate spreadsheet attached.

Appendix 4: Douglas Lake GAW Drillhole Logs

Form No. 630 **HUDSON BAY EXPLORATION AND DEVELOPMENT COMPANY LIMITED**

DIAMOND DRILL LOG

PROPERTY: Gaw			LOCATION: Meridian Creek, Sask.
CLAIM No: CBS 3018			CORE SIZE: BQ
HOLE No: Gaw 5	ANGLE: -45°		DIRECTION: (Grid) N40°E
DEPTH: 469.2' (143M)	GRID No: Gaw 3		CO-ORDINATES: 86+12N, 16+70W
DATE STARTED: January 12, 1989			DATE FINISHED: January 14, 1989
DRILLED BY: Midwest Diamond Drilling			LOGGED BY: Rod MacQuarrie

DEPTH From	DEPTH To	DESCRIPTION OF CORE
0	10	Casing (BW, Recovered)
10.0	22.3	DACITE: Light grey, very fine grained, relatively homogeneous, poorly foliated. The rock is probably a flow, but lacks diagnostic features.
22.3	28.5	PORPHYRITIC DACITE: Light grey, fine grained, relatively homogeneous, weakly foliated. Contains 30% anhedral plagioclase phenocrysts up to 4mm across and occasional mafic phenocrysts.
28.5	33.7	DACITE: As at 10.0-22.3. There is a fine porphyritic (quartz phenocrysts) texture locally.
33.7	39.0	PORPHYRITIC DACITE CRYSTAL TUFF: Light grey, fine to medium grained, relatively homogeneous, weakly foliated. The tuff contains about 20% anhedral plagioclase phenocrysts and crystal fragments up to 3mm across, 10% anhedral quartz phenocrysts up to 2mm across, 5% mafic phenocrysts up to 3mm across, and occasional small angular lithic fragments.
39.0	52.2	BRECCIATED DACITE: Light grey, fine grained, heterogeneous, poorly foliated. The dacite is finely porphyritic, with quartz and feldspar phenocrysts. It is cut by numerous quartz-carbonate veinlets with a little wall-rock silicification. There is a very fine grained reddish brown mineral (probably an iron oxide) along margins of most of the veinlets.

Form No. 630 A

Hole No. Gaw 5

Page No. 2

DEPTH From	DEPTH To	DESCRIPTION OF CORE
39.0	52.2	Mineralization: 33801 41.2-42.5 No visible sulphides 33802 42.5-44.3 No visible sulphides 33803 44.3-45.9 No visible sulphides 33804 45.9-48.0 No visible sulphides 33805 48.0-50.1 No visible sulphides 33806 50.1-52.2 No visible sulphides
52.2	53.8	DACITE PORPHYRY: Light grey, medium grained, heterogeneous, poorly foliated. Contains about 50% subhedral plagioclase phenocrysts up to 3mm across. Mineralization: 33807 52.2-53.8 No visible sulphides
53.8	65.3	CARBONATE RICH PORPHYRITIC DACITE BRECCIA: Light grey, medium grained, heterogeneous, moderately well foliated. There are fine networks of carbonate veinlets locally. Core angle to foliation is about 65°. 59.7-61.0 Fracture zone, coloured by hematite and chlorite Mineralization 33808 53.8-55.8 No visible sulphides 33809 55.8-57.1 No visible sulphides 33810 57.1-59.7 No visible sulphides 33811 59.7-62.1 No visible sulphides 33812 62.0-63.4 No visible sulphides 33813 63.4-65.3 No visible sulphides
65.3	79.6	DACITE PORPHYRY CRYSTAL TUFF: Light grey, medium grained, relatively homogeneous, poorly foliated. Contains about 50% subhedral plagioclase phenocrysts up to 4mm across and about 5% mafic phenocrysts. The rock is cut by carbonate-filled fractures, with a little wall-rock silicification. Mineralization: 33814 65.3-66.9 No visible sulphides 33815 66.9-68.3 No visible sulphides 33816 68.3-71.3 No visible sulphides 33817 71.3-73.3 No visible sulphides 33818 73.3-75.5 No visible sulphides 33819 75.5-78.0 No visible sulphides 33820 78.0-79.6 No visible sulphides

Form No. 630 A

Hole No. Gaw 5

Page No. 3

DEPTH From	DEPTH To	DESCRIPTION OF CORE
79.6	80.3	PORPHYRITIC ANDESITE: Dark green, medium grained, homogeneous, poorly foliated. It is uncertain whether this section represents a fragment, layer or dike. It contains a very fine grained reddish brown mineral and scattered crystals of chalcopyrite, without any other sulphides. Mineralization: 33821 79.6-80.3 1-5% chalcopyrite
80.3	129.8	DACITE PORPHYRY CRYSTAL TUFF: As at 65.3-79.6, but more extensively brecciated. Includes folded cherty bands at 89.9-91.2. The rock is cut by carbonate veinlets, some with reddish brown material (iron oxide?) along margins. 102.0-109.5 dacite breccia. Mineralization: 33822 80.3-82.8 No visible sulphides 33823 82.8-85.3 No visible sulphides 33824 85.3-88.0 No visible sulphides 33825 88.0-89.9 No visible sulphides 33826 89.9-91.2 No visible sulphides 33827 91.2-92.9 No visible sulphides 33828 92.9-94.5 No visible sulphides 33829 94.5-97.2 No visible sulphides 33830 97.2-98.9 No visible sulphides 33831 98.9-100.2 No visible sulphides 33832 100.2-102.0 No visible sulphides 33833 102.0-105.0 No visible sulphides 33834 105.0-107.6 No visible sulphides 33835 107.6-109.5 No visible sulphides
129.8	164.1	ANDESITE DACITE (FLOW?): Greenish grey to light grey, fine grained, heterogeneous, poorly foliated. Extensively brecciated locally, with a little wall-rock silicification. Mineralization: 33836 137.7-139.8 Trace pyrite 33837 139.8-141.5 Trace pyrrhotite, trace pyrite & chalcopyrite 33838 141.5-143.3 Trace pyrite 33839 153.2-154.7 Trace pyrite

Form No. 630 A

Hole No. Gaw 5

Page No. 4

DEPTH From	DEPTH To	DESCRIPTION OF CORE
129.8	164.1	33840 154.7-157.1 Trace pyrrhotite, trace pyrite, trace chalcopyrite 33841 157.1-159.1 Trace pyrite 33842 159.1-161.1 Trace pyrite 33843 161.1-162.1 Trace pyrite 33844 162.1-164.1 Trace pyrite
164.1	177.4	RHYOLITE-DACITE (FLOW?) Grey, very fine grained, heterogeneous, poorly foliated. The rock is extensively fractured. Mineralization; 33845 164.1-166.5 Trace pyrite 33846 166.5-168.3 Trace pyrite 33847 168.3-170.2 Trace pyrite 33848 170.2-172.1 Trace pyrite 33849 172.1-173.9 Trace pyrite 33850 173.9-175.6 Trace pyrite 33851 175.6-177.4 Trace pyrite
177.4	227.1	ANDESITE DACITE: Light greenish grey, fine to medium grained, relatively homogeneous, poorly foliated. The rock has a granular texture, with scattered quartz grains, in most places. There are numerous carbonate veinlets. Mineralization: 33852 210.8-212.5 1% pyrrhotite, 0.5% pyrite
227.1	236.4	ANDESITE DACITE BRECCIA: Light greenish grey, fine grained, heterogeneous, irregularly banded. Core angle at 230'=35°.
236.4	244.6	ANDESITE DACITE: As at 177.4-227.1
244.6	246.8	BASALT: Dark green, fine grained, heterogeneous, well foliated. The section from 245.8 to 246.8 is plagphyric.
246.8	255.8	BRECCIATED PORPHYRITIC ANDESITE DACITE: Light greenish grey, fine to medium grained, heterogeneous, poorly foliated.

Form No. 630 A

Hole No. Gaw 5

DEPTH From	DEPTH To	DESCRIPTION OF CORE
255.8	257.9	PORPHYRITIC ANDESITE: Green, medium grained, heterogeneous, poorly foliated.
257.9	297.0	BRECCIATED PORPHYRITIC ANDESITE DACITE: As at 246.8-255.8 the rock is cut by shear zones with pink carbonate veinlets at 280.0-281.1, 282.8-283.4. There is some silicification locally. The core angles to shearing average about 45°. Mineralization: 33853 279.6-281.7 No visible sulphides 33854 281.7-283.4 No visible sulphides 33855 283.4-284.7 No visible sulphides 33856 284.7-286.0 No visible sulphides 33857 286.0-288.4 No visible sulphides 33858 288.4-290.2 No visible sulphides 33859 290.2-292.0 No visible sulphides 33860 292.0-294.6 No visible sulphides 33861 294.6-297.0 No visible sulphides
297.0	469.2	MASSIVE DACITE PORPHYRY: Light grey, medium grained, homogeneous, poorly foliated. Contains about 50% subhedral plagioclase phenocrysts up to 6mm across, and 5% euhedral to subhedral pyroxene phenocrysts up to 4mm across. The rock is extensively brecciated and is silicified locally. 400.1-406.0 Finely porphyritic dacite 440.8-442.8 Sheared and slightly chloritized with the core angle to shearing equal to 61°. Mineralization: 33862 297.0-299.6 No visible sulphides 33863 299.6-301.8 No visible sulphides 33864 301.8-304.6 No visible sulphides 33865 304.6-306.5 No visible sulphides 33866 306.5-308.0 No visible sulphides 33867 308.0-309.7 No visible sulphides 33868 360.9-363.7 Trace pyrite 33869 363.7-365.4 Trace pyrite 33870 365.4-367.6 Trace pyrite 33871 438.2-440.8 No visible sulphides 33872 440.8-442.8 No visible sulphides 33873 461.5-463.4 No visible sulphides 33874 463.4-465.0 No visible sulphides
469.2		END OF HOLE 1989 February 20 /wd

Form No. 504-R1

HUDSON BAY EXPLORATION AND DEVELOPMENT CO. LTD.

DIAMOND DRILL RECORD

HOLE No. GAW 5 DATE BEGAN JANUARY 12, 1989 DATE COMPLETED JAN. 14 '89

AREA MERIDIAN CREEK, SASK. PROJECT No. 236 DEPTH 469.2' (143M)

CLAIM CBS 3018 CO-ORD 86+12N HORIZONTAL LENGTH

GRID GAW 3 16+70W DIRECTION (GRID) N40°E

SHEET No. 1 OF 4 CORE SIZE BQ ELEVATION ANGLE -45°

ACID TESTS
50M -38°15'
140M -35°00'

CORRECTED DIP TESTS

R. MACQUARRIE Resident Geologist

DEPTH	NUMBER	WIDTH	ASSAY AU	AG	CU	ZN	AVERAGES WIDTH	AU	AG	CU	ZN	REMARKS
0-10'	CASING	10.0'										BW, RECOVERED
10.0-41.2	WASTE	31.2										
41.2-42.5	33801	1.3	-	-	-	-						
42.5-44.3	02	1.8	-	-	-	-						
44.3-45.9	03	1.6	-	-	-	-						
45.9-48.0	04	2.1	-	-	-	-						
48.0-50.1	05	2.1	-	-	-	-						
50.1-52.2	06	2.1	-	-	-	-						
52.2-53.8	07	1.6	-	-	-	-						
53.8-55.8	08	2.0	-	-	-	-						
55.8-57.1	09	1.3	-	-	-	-						
57.1-59.7	33810	2.6	-	-	-	-						
59.7-62.0	11	2.3	-	-	-	-						
62.0-63.4	12	1.4	-	-	-	-						
63.4-65.3	13	1.9	-	-	-	-						
65.3-66.9	14	1.6	-	-	-	-						
66.9-68.3	15	1.4	-	-	-	-						
68.3-71.3	16	3.0	-	-	-	-						
71.3-73.3	17	2.0	-	-	-	-						
73.3-75.5	18	2.2	-	-	-	-						
75.5-78.0	19	2.5	-	-	-	-						
78.0-79.6	33820	1.6	-	-	-	-						
79.6-80.3	21	0.7	-	-	.57	-						
80.3-82.8	22	2.5	-	-	-	-						
82.8-85.3	23	2.5	-	-	-	-						
85.3-88.0	24	2.7	-	-	-	-						
88.0-87.9	25	1.9	-	-	-	-						

Form No. 504-R1

HUDSON BAY EXPLORATION AND DEVELOPMENT CO. LTD.

DIAMOND DRILL RECORD

CORRECTED DIP TESTS

HOLE No. GAW 5 DATE BEGAN ..... DATE COMPLETED .....

AREA ..... PROJECT No. ..... DEPTH .....

CLAIM ..... CO-ORD ..... HORIZONTAL LENGTH .....

GRID ..... DIRECTION .....

SHEET No. 2 of 4 CORE SIZE ..... ELEVATION ..... ANGLE .....

Resident Geologist

DEPTH	NUMBER	ASSAY WIDTH	AU	AG	CU	ZN	AVERAGES WIDTH	AU	AG	CU	ZN	REMARKS
89.9-91.2	33826	1.3	—	—	—	—						
91.2-92.9	27	1.7	—	—	—	—						
92.9-94.5	28	1.6	—	—	—	—						
94.5-97.2	29	2.7	—	—	—	—						
97.2-98.9	33830	1.7	—	—	—	—						
98.9-100.2	31	1.3	—	—	—	—						
100.2-102.0	32	1.8	—	—	—	—						
102.0-105.0	33	3.0	—	—	—	—						
105.0-107.6	34	2.6	—	—	—	—						
107.6-109.5	35	1.9	—	—	—	—						
109.5-137.7	WASTE	28.2										
137.7-139.8	33836	2.1	—	—	—	—						
139.8-141.5	37	1.7	—	—	—	—						
141.5-143.3	38	1.8	—	—	—	—						
143.3-153.2	WASTE	9.9										
153.2-154.7	33839	1.5	—	—	—	—						
154.7-157.1	33840	2.4	—	—	—	—						
157.1-159.1	41	2.0	—	—	—	—						
159.1-161.1	42	2.0	—	—	—	—						
161.1-162.1	43	1.0	—	—	—	—						
162.1-164.1	44	2.0	—	—	—	—						
164.1-166.5	45	2.4	—	—	—	—						
166.5-168.3	46	1.8	—	—	—	—						
168.3-170.2	47	1.9	—	—	—	—						
170.2-172.1	48	1.9	—	—	—	—						
172.1-173.9	49	1.8	—	—	—	—						
173.9-175.6	33850	1.7	—	—	—	—						

Form No. 504-R1

HUDSON BAY EXPLORATION AND DEVELOPMENT CO. LTD.

DIAMOND DRILL RECORD

HOLE No. GAW 5 DATE BEGAN ..... DATE COMPLETED .....

AREA ..... PROJECT No. ..... DEPTH .....

CLAIM ..... CO-ORD ..... HORIZONTAL LENGTH .....

GRID .... DIRECTION .....

SHEET No. 3 of 4 CORE SIZE ..... ELEVATION ..... ANGLE .....

CORRECTED DIP TESTS

Resident Geologist

DEPTH	NUMBER	ASSAY WIDTH	AU	AG	CU	ZN	AVERAGES WIDTH	AU	AG	CU	ZN	REMARKS
175.6-177.4	33851	1.8	—	—	—	—						
177.4-210.8	WASTE	33.4										
210.8-212.5	33852	1.7	—	—	—	—						
212.5-279.6	WASTE	67.1										
279.6-281.7	33853	2.1	—	—	—	—						
281.7-283.4	54	1.7	—	—	—	—						
283.4-284.7	55	1.3	—	—	—	—						
284.7-286.0	56	1.3	—	—	—	—						
286.0-288.4	57	2.4	—	—	—	—						
288.4-290.2	58	1.8	—	—	—	—						
290.2-292.0	59	1.8	—	—	—	—						
292.0-294.6	33860	2.6	—	—	—	—						
294.6-297.0	61	2.4	—	—	—	—						
297.0-299.6	62	2.6	—	—	—	—						
299.6-301.8	63	2.2	—	—	—	—						
301.8-304.6	64	2.8	—	—	—	—						
304.6-306.5	65	1.9	—	—	—	—						
306.5-308.0	66	1.5	—	—	—	—						
308.0-309.7	67	1.7	—	—	—	—						
309.7-360.9	WASTE	51.2										
360.9-363.7	33868	2.8	—	—	—	—						
363.7-365.4	69	1.7	—	—	—	—						
365.4-367.6	33870	2.2	—	—	—	—						
367.6-438.2	WASTE	60.6										
438.2-440.8	33871	2.6	—	—	—	—						
440.8-442.8	72	2.0	—	—	—	—						
442.8-461.5	WASTE	18.7										

63K 12- NW-0160

Form No. 504-R1

HUDSON BAY EXPLORATION AND DEVELOPMENT CO. LTD.

DIAMOND DRILL RECORD

HOLE No. GAW 5 DATE BEGAN ..... DATE COMPLETED .....

AREA ..... PROJECT No. ..... DEPTH .....

CLAIM ..... CO-ORD ..... HORIZONTAL LENGTH .....

GRID ..... DIRECTION .....

SHEET No. 4 OF 4 CORE SIZE ..... ELEVATION ..... ANGLE .....

CORRECTED DIP TESTS

Resident Geologist

DEPTH	NUMBER	WIDTH	ASSAY AU	AG	CU	ZN	AVERAGES WIDTH	AU	AG	CU	ZN	REMARKS
461.5-463.4	33873	1.9	—	—	—	—						
463.4-465.0	74	1.6	—	—	—	—						
465.0-469.2	WASTE	4.2										
469.2	END OF HOLE											

63K 12- NW-0160

Form No. 630 **HUDSON BAY EXPLORATION AND DEVELOPMENT COMPANY LIMITED**

DIAMOND DRILL LOG

PROPERTY:	Gaw		LOCATION: Meridian Creek, Sask.
CLAIM No:	CBS 3018		CORE SIZE: BQ
HOLE No:	Gaw 6	ANGLE: -45°	DIRECTION: (Grid) East
DEPTH:	439.6' (134m)	GRID No: Gaw 3	CO-ORDINATES: 78+00N, 10+7SW
DATE STARTED:	January 14, 1989		DATE FINISHED: January 15, 1989
DRILLED BY:	Midwest Diamond Drilling		LOGGED BY: Rod MacQuarrie

DEPTH From	DEPTH To	DESCRIPTION OF CORE
0	4	Casing (Bw, recovered) (broken rock)
4	37.7	MASSIVE DACITE PORPHYRY: Light greenish grey, medium to fine grained, relatively homogeneous, poorly foliated. Contains about 40% subhedral plagioclase phenocrysts up to 5mm across and scattered mafic (pyroxene) phenocrysts.
37.7	86.9	PORPHYRITIC DACITE: Light grey, fine grained, relatively homogeneous, poorly foliated. In most places the dacite is finely porphyritic, but locally it becomes more coarsely porphyritic, with both felsic and mafic phenocrysts. The core angle to banding at 77' equals 40°. Mineralization: 33875 37.7-38.7 No visible sulphides 33876 50.2-52.2 Trace chalcopyrite 33877 52.2-54.1 Trace chalcopyrite 33878 54.1-55.8 No visible sulphides 33879 55.8-57.7 No visible sulphides 33880 57.7-59.5 No visible sulphides 33881 59.5-61.7 Trace chalcopyrite 33882 61.7-63.6 No visible sulphides
86.9	168.5	MASSIVE DACITE PORPHYRY: As at 4.0-37.7 95.7-95.9 Fracturing, with local silicification 107.2-110.7 Sheared, with quartz-carbonate veinlets and a schistose texture. Core angle to shearing equals 75°. Mineralization: 33883 95.6- 96.6 No visible sulphides 33884 107.2-108.7 No visible sulphides 33885 108.7-110.7 Trace chalcopyrite 33886 151.7-152.9 No visible sulphides

Form No. 630 A

Hole No. Gaw 6

Page No. 2

DEPTH From	DEPTH To	DESCRIPTION OF CORE
86.9	168.5	Mineralization: 33887 152.9-154.2 Trace chalcopyrite 33888 154.2-155.6 No visible sulphides 33889 155.6-157.1 No visible sulphides
168.5	188.4	CARBONATE RICH ANDESITE PORPHYRY BRECCIA: Light greyish green, fine grained, heterogeneous, irregularly foliated. The porphyry is sheared and chloritized and is broken into fragments within a matrix (about 25%) of white carbonate stringers. Mineralization: 33890 182.4-183.7 Trace pyrite 33891 183.7-185.6 0.5% pyrite
188.4	191.9	ANDESITE (DIKE?): Light greenish grey, fine grained, relatively homogeneous, well foliated (at 191.0-191.9). Core angle at 191.5=80°.
191.9	206.9	BRECCIATED RHYOLITE QUARTZ PORPHYRY: Grey, medium grained, relatively homogeneous, poorly foliated. Mineralization: 33892 198.4-200.0 No visible sulphides 33893 200.0-201.9 Trace pyrite 33894 201.9-204.6 No visible sulphides 33895 204.6-206.9 No visible sulphides
206.9	208.4	SCHISTOSE ANDESITE TUFF: Dark green, fine grained, heterogeneous, well foliated. Core angle = 35°. Mineralization: 33896 206.9-208.4 No visible sulphides.
208.4	211.7	BRECCIATED RHYOLITE: Light grey, fine grained, heterogeneous, well foliated. Mineralization: 33897 208.4-210.0 No visible sulphides 33898 210.0-211.7 No visible sulphides

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Form No. 630 A

Hole No. Gaw 6

Page No. 3

DEPTH From	DEPTH To	DESCRIPTION OF CORE
211.7	254.0	ANDESITE FLOW: Dark greyish green, fine grained, heterogeneous, well to poorly foliated. Core angles at 213'=30°, 250'=40°.
254.0	347.3	AMYGDULAR ANDESITE FLOWS: Dark greyish green, fine grained, heterogeneous, well to poorly foliated. Locally, the rock is more silicic than andesite, or silicified. The amygdules are quartz-filled. Core angles at 275'=50°, 300'+59°, 325'=65° Mineralization: 33899 265.8-268.1 Trace pyrrhotite, pyrite and chalcopyrite 33900 283.7-285.0 Trace pyrite 33901 323.7-326.2 Trace pyrite and chalcopyrite 33902 339.0-341.2 Trace pyrite 33903 341.2-342.7 0.5% pyrite 33904 342.7-344.3 Trace pyrite 33905 344.3-346.3 Trace pyrite 33906 346.3-347.3 Trace pyrite
347.3	376.9	ANDESITE TUFF: Dark greyish green, fine grained, heterogeneous, well foliated. There appear to be poorly defined lapilli or flow-breccia fragments locally. Core angles at 350'=61°, 375'=56°. Mineralization: 33907 347.3-348.3 Trace pyrite
376.9	396.3	PORPHYRITIC ANDESITE: Greyish green, medium to fine grained, relatively homogeneous, moderately well foliated. Contains about 20% fine grained (less than 2mm). Felsic and mafic phenocrysts. The rock is probably a crystal tuff.
396.3	429.6	PORPHYRITIC DACITE LITHIC TUFF: Light grey, fine to coarse grained, heterogeneous, poorly foliated. The rock consists mostly of fine grained angular lithic fragments, both felsic and mafic volcanic types 1 to 20mm across. It also contains feldspar phenocrysts, the proportion increasing downwards. The rock is cut by scattered carbonate veinlets with occasional crystals of chalcopyrite in the veinlets and adjacent country rocks.

Form No. 630 A

Hole No. Gaw 6

Page No. 4

DEPTH From	DEPTH To	DESCRIPTION OF CORE
396.3	429.6	Mineralization: 33908 398.9-400.3 No visible sulphides 33909 400.3-402.5 No visible sulphides 33910 402.5-403.9 No visible sulphides 33911 403.9-405.4 No visible sulphides 33912 405.4-407.0 Trace pyrite 33913 407.0-408.9 Trace pyrite 33914 408.9-410.1 Trace pyrite, 0.5% chalcopyrite 33915 410.1-412.4 Trace pyrite and chalcopyrite 33916 412.4-413.9 No visible sulphides
429.6	437.3	BRECCIATED ANDESITE FLOW: Greenish grey, fine grained, heterogeneous, irregularly foliated. The rock is cut by a network of carbonate veinlets. There appears to be some silicification associated with the brecciation, particularly near the upper and lower contacts. Mineralization: 33917 429.6-431.6 No visible sulphides 33918 431.6-433.6 No visible sulphides 33919 433.6-435.6 No visible sulphides 33920 435.6-437.5 No visible sulphides
437.3	439.6	PORPHYRITIC DACITE LITHIC TUFF: As at 396.3-429.6
	439.6	END OF HOLE 1989 March 02 /wd

Form No. 504-R1

HUDSON BAY EXPLORATION AND DEVELOPMENT CO. LTD.

DIAMOND DRILL RECORD

HOLE No. GAW 6 DATE BEGAN JANUARY 14, 1989 DATE COMPLETED JAN 15 '89

AREA MERIDIAN CREEK, SASK. PROJECT No. 236 DEPTH 439.6' (134M)

CLAIM CBS 3018 CO-ORD 78+00N, HORIZONTAL LENGTH

GRID GAW 3 10+75W DIRECTION (GRID) EAST

SHEET No. 1 OF 3 CORE SIZE BQ ELEVATION ANGLE -45°

ACID TESTS

50M BROKEN
100M -39°00'
131M -36°30'

CORRECTED DIP TESTS

R. MACQUARRIE Resident Geologist

DEPTH	NUMBER	WIDTH	ASSAY AU	AG	CU	ZN	AVERAGES WIDTH	AU	AG	CU	ZN	REMARKS
0'-4.0'	CASING	4.0										BW, RECOVERED
4.0-37.7	WASTE	33.7										
37.7-38.7	33875	1.0	—	—	—	—						
38.7-50.2	WASTE	11.5										
50.2-52.2	33876	2.0	—	—	—	—						
52.2-54.1	77	1.9	—	—	—	—						
54.1-55.8	78	1.7	—	—	—	—						
55.8-57.7	79	1.9	—	—	—	—						
57.7-59.5	33880	1.8	—	—	—	—						
59.5-61.7	81	1.8	—	—	—	—						
61.7-63.6	82	1.9	—	—	—	—						
63.6-95.6	WASTE	32.0										
95.6-96.6	33883	1.0	—	—	—	—						
96.6-107.2	WASTE	10.6										
107.2-108.7	33884	1.5	—	—	—	—						
108.7-110.7	85	2.0	—	—	—	—						
110.7-151.7	WASTE	41.0										
151.7-152.9	33886	1.2	—	—	—	—						
152.9-154.2	87	1.3	.01	—	—	—						
154.2-155.6	88	1.4	—	—	.30	—						
155.6-157.1	89	1.4	—	—	—	—						
157.1-182.4	WASTE	25.3										
182.4-183.7	33890	1.3	—	—	—	—						
183.7-185.6	91	1.9	—	—	—	—						
185.6-198.4	WASTE	12.8										
198.4-200.0	33892	1.6	—	—	—	—						
200.0-201.9	93	1.9	—	—	—	—						

63K 12-NW-0160

Form No. 504-R1

HUDSON BAY EXPLORATION AND DEVELOPMENT CO. LTD.

DIAMOND DRILL RECORD

HOLE No. GAW 6 DATE BEGAN ..... DATE COMPLETED .....

AREA ..... PROJECT No. ..... DEPTH .....

CLAIM ..... CO-ORD ..... HORIZONTAL LENGTH .....

GRID ..... DIRECTION .....

SHEET No. 2 OF 3 CORE SIZE ..... ELEVATION ..... ANGLE .....

CORRECTED DIP TESTS

Resident Geologist

DEPTH	NUMBER	WIDTH	ASSAY AU	AG	CU	ZN	AVERAGES WIDTH	AU	AG	CU	ZN	REMARKS
201.9-204.6	33894	1.9	–	–	–	–						
204.6-206.9	95	2.3	–	–	–	–						
206.9-208.4	96	1.5	–	–	–	–						
208.4-210.0	97	1.6	–	–	–	–						
2100-211.7	98	1.7	–	–	–	–						
211.7-265.8	WASTE	54.1										
265.8-268.1	33899	2.3	–	–	–	–						
268.1-283.7	WASTE	15.6										
2837-285.0	33900	1.3	–	–	–	–						
2850-3237	WASTE	38.7										
3237-326.2	33901	2.5	–	–	–	–						
326.2-339.0	WASTE	12.8										
339.0-341.2	33902	2.2	–	–	–	–						
341.2-342.7	03	1.5	–	–	–	–						
342.7-344.3	04	1.6	–	–	–	–						
344.3-346.3	05	2.0	–	–	–	–						
346.3-347.3	06	1.0	–	–	–	–						
347.3-348.3	07	1.0	–	–	–	–						
348.3-398.9	WASTE	50.6										
398.9-400.3	33908	1.4	–	–	–	–						
400.3-402.5	09	2.2	–	–	–	–						
402.5-403.9	33910	1.4	–	–	–	–						
403.9-405.4	11	1.5	–	–	–	–						
405.4-407.0	12	1.6	–	–	.48	.1						
407.0-408.9	13	1.9	–	–	–	–						
4089-410.1	14	1.2	–	–	.14	–						
410.1-412.4	15	2.3	–	–	.03	–						
412.4-413.9	16	1.5	–	–	–	–						

63K 12- NW-0160

Form No. 504-R1

HUDSON BAY EXPLORATION AND DEVELOPMENT CO. LTD.

DIAMOND DRILL RECORD

HOLE No. GAW 6 DATE BEGAN ..... DATE COMPLETED .....

AREA ..... PROJECT No. ..... DEPTH .....

CLAIM ..... CO-ORD ..... HORIZONTAL LENGTH .....

GRID ..... DIRECTION .....

SHEET No. 3 OF 3 CORE SIZE ..... ELEVATION ..... ANGLE .....

CORRECTED DIP TESTS

Resident Geologist

DEPTH	NUMBER	WIDTH	ASSAY AU	AG	CU	ZN	AVERAGES WIDTH	AU	AG	CU	ZN	REMARKS
413.9-429.6	WASTE	15.7										
429.6-431.6	33917	2.0	—	—	—	—						
431.6-433.6	18	2.0	—	—	—	—						
433.6-435.6	19	2.0	—	—	—	—						
435.6-437.5	33920	1.9	—	—	—	—						
437.5-439.6	WASTE	2.1										
439.6	END OF HOLE											

63K 12- NW-0160

Form No. 630 **HUDSON BAY EXPLORATION AND DEVELOPMENT COMPANY LIMITED**

DIAMOND DRILL LOG

PROPERTY: GAW CLAIMS			LOCATION: Douglas Lake, Sask.
CLAIM No: CBS 3018			CORE SIZE: BQ
HOLE No: Gaw 8	ANGLE: -45°		DIRECTION: N55°E
DEPTH: 278 m (912.1')	GRID No: Gaw 3		CO-ORDINATES: L: 86+00N; 26+80W
DATE STARTED: February 3, 1993			DATE FINISHED: February 6, 1993
DRILLED BY: Midwest Diamond Drilling			LOGGED BY: K.A. Zazulak

DEPTH From	DEPTH To	DESCRIPTION OF CORE
0.0	4.0	CASING: 4' BW casing; bedrock setup; casing removed; BQ hole plug at 6 m cemented with 1 bag Portland.
4.0	72.2	ANDESITE(-DACITE) TUFF: -fine grained; dark green (to greenish grey); weak to locally moderately foliated. -locally finely laminated thin beds and locally contains elongate clasts (parallel to foliation) averaging 1 mm x 4 mm. -section between 4-32.5 is fractured and blocky (poor recovery - broken core). -the unit contains numerous less than 1 mm wide quartz-carbonate fracture fillings randomly oriented. -local minor hematite and limonite staining along oxidized fracture planes. -trace epidote along fracture planes. -trace local disseminated pyrite. -core angle: 48': 41° (bedding?) 70': 65° (bedding?) -the unit grades to andesitic tuff down hole towards lower contact (more dacitic uphole).
72.2	79.4	FELDSPAR PORPHYRY INTRUSIVE: -fine grained; dark grey; massive to local weakly foliated. -this unit contains up to 15-18%, 1-3 mm average size (may reach up to 10 mm maximum) white to flesh coloured subround to subhedral feldspar phenocrysts within a siliceous rhyodacitic matrix. -sharp intrusive contacts (sheared gradational edges).

Form No. 630 A

Hole No. Gaw 8

Page No. 2

DEPTH From	DEPTH To	DESCRIPTION OF CORE
79.4	93.3	ANDESITE TUFF: -as between 4.0-72.2'. -core angle: 90' : 60° (foliation) -this unit is more mafic appearing than previously described and is more massive and only locally contains finely laminated tuffaceous beds.
93.3	101.3	FELDSPAR PORPHYRY INTRUSIVE: -as described between 72.2-79.4'. -upper contact - 83°. -lower contact - 81°.
101.3	208.8	ANDESITE TUFF: -as described between 4.0-72.2'. -this unit is locally very finely laminated and contains local narrow massive (flow?) interlayers. -overall the unit contains a moderate amount of white quartz-carbonate as fracture fillings and partings parallel to developed foliation. -local minor chloritization along foliation planes (slip?). -minor in situ brecciation (fine scale). -core angles: 125': 78° (bedding?) 158': 69° (bedding?) 175': 78° (bedding?) -Mineralization: 133.8-134.5 - 0.5% chalcopyrite, 3-5% pyrite, trace pyrrhotite as wispy thin stringers parallel to bedding planes and developed foliation. -the unit contains local narrow graphitic argillaceous beds (less than 1-2 cm) which host trace pyritic stringers. -section between 180.2-182.1' is a feldspar porphyry intrusive with sharp contacts and contains up to 20%, less than 1-2 mm feldspar phenocrysts. -locally possible massive flow interlayers up to 4-6' wide towards lower contact.
208.8	230.1	QUARTZ-FELDSPAR PORPHYRY INTRUSIVE: -fine grained; dark grey; massive to weakly foliated. -the unit contains up to 35-40%, 1-2 mm subround white feldspar phenocrysts within a fine grained dacitic appearing matrix which contains up to 3-5%, biotite ragged shards parallel to foliation and may reach up to 1-2 mm x 8 mm in size.

Form No. 630 A

Hole No. Gaw 8

Page No. 3

DEPTH From	DEPTH To	DESCRIPTION OF CORE
208.8	230.1	Continued: -this unit is weakly pervasively carbonate enriched. -the unit also contains 1-3%, 1 mm roundish grey quartz "eyes" throughout. -homogeneous overall appearance. -sections between 213.3-213.7' 215.3-217.0' 217.6-218.2' are sheared interlayers of mafic tuff in which they are intensely sheared due to the intrusion and carbonate alteration resulting in sections which approach a chlorite-carbonate schist in appearance.
230.1	265.4	<u>BASALT-ANDESITE TUFF/FLOW:</u> -fine grained; dark green; massive to weakly foliated. -this unit contains narrow 1-2' wide massive flow sections interlayered amongst very finely laminated tuffaceous sections which may contain mafic chloritic clasts up to 1-2 mm x 4-6 mm in size (average size is less than 1-2 mm in size) elongate parallel to foliation (bedding). -there is no apparent gradation of clast size. -section between 254.1-260 is moderately carbonate altered. -trace pyrite and pyrrhotite disseminations locally. -core angle: 240' : 68° (bedding) 257' : 67° (bedding) -gradational lower contact between 263.4-265.4' (argillite contaminated).
265.4	275.2	<u>SULPHIDE BEARING (GRAPHITIC) ARGILLITE:</u> -fine grained; black; fine scale bedding; well laminated appearance. -this unit contains contorted swirling (ptygmatic) laminations less than 1 mm wide up to 1 cm wide with 10% mafic tuff interlayered laminations locally. -possible top direction downhole? -overall the unit contains 17-20% pyrite and pyrrhotite mineralization which floods the unit and suspends subangular to subround argillite fragments up to 1-2 cm in size and locally forms a matrix suspending these clasts. Mineralization: 265.4-270.9: 1-2% pyrite and 17-20% pyrrhotite which floods the unit. Trace chalcopyrite bleb at 265.8'.

Form No. 630 A

Hole Nº. Gaw 8

Page Nº. 4

DEPTH From	DEPTH To	DESCRIPTION OF CORE
265.4	275.2	Continued: 270.9-271.9': 1-2% pyrite, trace-1% pyrrhotite within a mafic tuff interlayer. 271.9-275.2': 2-3% pyrite and 15-17% pyrrhotite as stringers and partings within the unit. -overall the unit has trace-1% graphite along slip planes. -core angle: 271' : 57º(bedding) -lineation at 272' indicates a plunge of 6º North.
275.2	283.7	<u>BASALT-ANDESITE TUFF:</u> -as described between 230.1-265.4'. -smoky grey quartz vein between 281.9-282.2'. -section between 279.3-280.6' is intensely sheared with a graphitic argillite interlayer between 280.4-280.6' looking like a fault gouge being muddy and clastic. -core angle: 280' : 77º (shear foliation) -gradational lower contact.
283.7	297.1	<u>MASSIVE ANDESITE FLOW:</u> -fine grained; dark green; massive. -non descript massive homogeneous flow unit with moderate amount of randomly oriented hairline to 1-2 mm wide quartz-carbonate infilled fractures. -some sections grade to a fine grained diorite in appearance. -shear section between 296.0-297.1'.
297.1	377.2	<u>PORPHYRITIC FRAGMENTAL (LAPILLI) ANDESITE TUFF (TO DEBRIS FLOW?):</u> -fine grained; dark green; massive to weakly foliated. -this unit grades from a fine grained mafic unit (flow-like) to a coarser clastic mafic unit which hosts up to 40% heterolithic mixture of less than 1 mm up to 1 cm (average size 1-3 mm) subangular to subround clasts slightly elongate and only locally weakly oriented parallel to weak foliation. These clasts range from mafic to felsic compositions with no gradation of size or composition within a predominantly mafic andesitic fine grained matrix. -the unit also contains up to 10-15%, less than 2-3 mm (may reach up to 1 cm) subhedral feldspar phenocrysts. -minor amount of hairline randomly oriented quartz carbonate infilled fractures throughout. -section between 314.6-315.3' is a coarse grained feldspar porphyry intrusion with 25%, 1 cm long pink to flesh coloured elongate laths of feldspar.

Form No. 630 A

Hole No. Gaw 8

Page No. 5

DEPTH From	DEPTH To	DESCRIPTION OF CORE
297.1	377.2	Continued: -the unit contains pervasive epidotization of sections 1-3 feet wide locally: 327.0-329.3 331.6-334.4 336.5-342.3 -this heterolithic tuffaceous unit locally approaches a debris flow in appearance. -core angle: 328': 73° (bedding?) -the unit becomes increasingly more siliceous downhole grading to a rhyodacite in appearance. Mineralization: 363.7-364.7': trace-0.5% chalcopyrite blebs associated with late quartz-carbonate fracture fillings and alteration. 367.3-370.1': 0.5% chalcopyrite blebs. 373.4-375.0': 0.5% chalcopyrite blebs. 375.0-376.6': trace-0.5% chalcopyrite blebs. -sharp lower contact.
377.2	380.3	<u>SHEARED BIOTITE ALTERED ANDESITIC TUFF:</u> -fine grained; dark green; well shear foliated to schistose. -the andesite tuff is intensely sheared with significant biotite alteration along shear (slip) foliation planes in which the unit approaches a biotite/chlorite-carbonate schist in appearance. -the unit is intensely quartz-carbonate injected along shear foliation planes amounting up to 25% of the unit. -weak remnant (lapilli?) mafic clasts may be observed locally. -core angle: 380' : 78° (shear foliation).
380.3	400.3	<u>(SILICIFIED) PORPHYRITIC FRAGMENTAL LAPILLI ANDESITE TUFF:</u> -as described between 297.1-377.2'. -overall the unit is weak to moderately pervasively silicified in which the unit approaches a rhyodacite in appearance. -sheared lower contact between 398.8-400.3'.
400.3	410.5	<u>QUARTZ FELDSPAR PORPHYRY:</u> -as described between 208.8-230.1'. -sharp upper and lower contacts with 1-2 foot wide sheared contact margins.

Form No. 630 A

Hole No. Gaw 8

Page No. 6

DEPTH		DESCRIPTION OF CORE
From	To	
410.5	515.0	SCHISTOSE BIOTITIC ANDESITIC (TO DACITIC) TUFF: -fine grained; dark greenish grey; well shear foliated to schistose; fine scale laminated appearance (bedding). -the unit is a finely bedded tuffaceous andesite to dacite with up to 15% biotite along slip (shear) foliation planes which contain a minor amount of quartz-carbonate injected parallel to shear planes. -clasts have been stretched and elongate parallel to shear foliation creating a weak "lit par lit" appearance. -locally within schistose sections the laminations are tightly crenulated and ptygmatic in appearance. -no apparent gradation in bedding is visible. -possible weak overprinting of a pervasive silicification? -trace possible lapilli sized clasts locally. -core angle: 411' : 64° (shear foliation) 432' : 57° (shear foliation) 452' : 73° (shear foliation) 472' : 65° (shear foliation) 508' : 37° (shear foliation) -lineation at 415' is 32° North. -lineation at 419' is 47° North. -lineation at 439' is 35° North. -lineation at 507' is 23° North. Mineralization: 420.9-422.2': 0.5% chalcopyrite, trace pyrite as local blebs associated with late injected quartz (± carbonate) veinlet parallel to schistosity. 423.6-424.6': trace chalcopyrite blebs. 444.9-446.0': trace-0.5% chalcopyrite blebs with late quartz stringers. 450.2-451.2': trace chalcopyrite blebs. 451.9-452.9': trace chalcopyrite blebs. 479.0-481.3': trace-0.5% chalcopyrite blebs. 505.2-507.0': trace pyrrhotite, trace-0.5% chalcopyrite in a chlorite-quartz schist interlayer. -local trace chalcopyrite blebs throughout. -sharp lower contact.
515.0	542.8	ANDESITE FLOW/TUFF: -as described between 101.3-208.3'. -this unit contains up to 5-7% biotite along tuffaceous bedding planes.

DEPTH From	DEPTH To	DESCRIPTION OF CORE
515.0	542.8	Continued: -local trace pyrrhotite, pyrite and chalcopyrite blebs associated with late quartz-carbonate fracture fillings. -core angle: 519' : 50° (bedding?) 536' : 63° (bedding?) -ambiguous lower contact.
542.8	553.6	<u>ARGILLACEOUS ANDESITE TUFF:</u> -fine grained; dark greenish grey; finely laminated (bedding) appearance. -this unit contains 30-40% argillite laminations and beds interlayered with 60-70% andesite tuff. -there are also minor siltstone-greywacke appearing beds interlayered within this assemblage -argillite and tuff beds range from 1 mm up to 1-2 cm width. -gradation of beds exists but top directions are inconclusive one way or the other. -argillaceous beds are locally weakly graphitic (trace amount). -core angles: 545' : 60°(bedding) 552' : 63°(bedding) Mineralization: 542.8-544.0': 1% pyrrhotite as blebs and disseminations along argillaceous beds. 544.0-545.5': 3-4% pyrrhotite, trace pyrite as wispy stringers parallel to bedding. 545.5-547.5': 2-3% pyrrhotite, trace pyrite as wispy stringers parallel to bedding. 547.5-549.3': 1-2% pyrrhotite, trace pyrite as wispy stringers.
553.6	586.1	<u>HETEROLITHIC LAPILLI FRAGMENTAL ANDESITE-DACITE TUFF (MILLROCK?):</u> -fine grained; dark greyish green; well foliated, moderately bedded unit. -this unit contains 25-30% up to 1-2 cm x 4-6 cm lapilli sized subangular to subround elongate (parallel to foliation) clasts within a fine grained andesitic to dacitic matrix. The clasts range in composition from mafic to felsic composition with no apparent gradation in clast size or composition. -the fine grained matrix is biotitic with sections containing up to 10-15% biotite within dacitic to greywacke/siltstone appearing interlayers. Within mafic sections the unit contains a predominance of clasts averaging 1 mm x 5 mm in size of mafic composition.

Form No. 630 A

Hole No. Gaw 8

Page No. 8

DEPTH From	DEPTH To	DESCRIPTION OF CORE
553.6	586.1	Continued: -minor amount of hairline quartz-carbonate infilled randomly oriented fractures. -trace pyrrhotite and pyrite blebs locally. -core angle: 570' : 63°(bedding?). 578' : 60°(bedding?)
586.1	589.5	FELDSPAR PORPHYRY INTRUSION: -fine grained; dark grey; massive. -the unit contains up to 15-17%, 3-10 mm long white lathes of feldspar phenocrysts which are subhedral and randomly oriented within a fine grained dacitic appearing matrix. -sharp intrusive contacts.
589.5	619.4	MIXED ARGILLITE-ANDESITE TUFF: -fine grained; dark greenish grey; well bedded fine scale laminated appearance. -this unit contains argillite/siltstone sequences interlayered amongst andesitic (to dacitic?) tuffaceous sections of a proportion of 20-30% argillite to 70-80% andesite tuff. -faint gradation of bedding visible with possible bedding tops fining uphole? -minor pyrrhotite mineralization associated with argillaceous interlayers as wispy thin stringers and blebs parallel to bedding. -core angle: 595' : 62°(bedding) 612' : 72°(bedding)
619.4	647.0	PORPHYRITIC FRAGMENTAL (LAPILLI) ANDESITE (TO DACITIC) TUFF: -as described between 297.1-377.2'.
647.0	658.5	MIXED ARGILLITE-ANDESITE TUFF: -as described between 589.5-619.4'. -core angle: 658' : 65°(bedding) -ambiguous lower contact.
658.5	670.4	ANDESITE-DACITE TUFF: -as described between 4.0-72.2'. -this section contains numerous 1-2 mm wide randomly oriented hairline quartz-carbonate infilled fractures. -ambiguous lower contact.

Form No. 630 A

Hole No. Gaw 8

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DEPTH From	DEPTH To	DESCRIPTION OF CORE
670.4	689.5	ANDESITE FLOW/TUFF: -fine grained; dark green; massive to weakly foliated. -massive andesite flow sections (local trace amygdules?) are interlayered with narrow foliated tuffaceous sections less than 1-2′ wide. -the unit is locally brecciated (in situ). -minor weak epidotization associated with late fractures. -minor quartz-carbonate infilled fracture fillings subparallel to weak foliation. -sharp lower contact.
689.5	738.5	HETEROLITHIC LAPILLI FRAGMENTAL ANDESITE-DACITE TUFF(MILLROCK?): -as described between 553.6-586.1′. -core angle: 703′ : 62°(foliation) 713′ : 63°(bedding) 733′ : 65°(bedding) -diorite with sheared forceful intrusive contacts between 720.6-723.9′.
738.5	755.0	QUARTZ-FELDSPAR PORPHYRY INTRUSION: -as described between 208.8-230.1′. -sharp intrusive contacts. -the unit contains 2-4% up to 10-15 mm diameter euhedral white feldspar phenocrysts which locally may be zoned. These larger phenocrysts are randomly distributed amongst the 1-4 mm average sized feldspar within the unit. -trace-1% bluish round quartz eyes up to 1-2 mm in size.
755.0	764.5	ANDESITE FLOW: -fine grained; dark green; massive. -minor amount of hairline randomly oriented quartz-carbonate infilled fractures. -homogeneous overall flow unit.
764.5	822.2	HETEROGENEOUS LAPILLI FRAGMENTAL ANDESITE-DACITE TUFF: -as described between 553.6-586.1′. -core angle: 779′ : 61°(bedding) 809′ : 66°(bedding). -dacitic tuff interlayer between 785.3-789.6′. -gradational lower contact.

Form No. 630 A

Hole No. Gaw 8

Page No. 10

DEPTH From	DEPTH To	DESCRIPTION OF CORE
822.2	828.3	ANDESITE TUFF/FLOW:
		-as described between 230.1-265.4'.
828.3	838.6	QUARTZ-FELDSPAR PORPHYRY:
		-as described between 208.8-230.1'.
838.6	912.1	HETEROGENEOUS LAPILLI FRAGMENTAL ANDESITE TUFF:
		-as described between 553.6-586.1'.
		-core angle: 897' : 60°(bedding?)
912.1(278 m)		END OF HOLE
		KZ/ef
		May 27, 1993

Form No. 504-R1

HUDSON BAY EXPLORATION AND DEVELOPMENT CO. LTD.

DIAMOND DRILL RECORD

HOLE No. GAW-8 DATE BEGAN February 3, 1993 DATE COMPLETED February 6/93

AREA Douglas Lake, Man. PROJECT No. 236 DEPTH 278m (912.1')

CLAIM CBS-3018 CO-ORD L 86+00N HORIZONTAL LENGTH —

GRID GAW-3 26+80W DIRECTION N55°E (025°Az)

SHEET No. 1 of 2 CORE SIZE BQ ELEVATION — ANGLE -45°

CORRECTED DIP TESTS

30m - 44°30'
90m - 46°00'
150m - 45°15'
210m - 45°00'
275m - 45°15'

K.A. ZAZULAK Resident Geologist

DEPTH	NUMBER	WIDTH	ASSAY AU	AG	CU	ZN			AVERAGES WIDTH	AU	AG	CU	ZN		REMARKS
0.0 - 4.0	CASING	4' BW	casing; bedrock setup; casing removed; BQ hole plug at 9m - cemented 1 bag Portland												
4.0 - 133.8	waste														
133.8 - 134.5	38301	0.7	x	-	-	-									
134.5 - 264.5	waste														
264.5 - 265.4	38302	0.9	x	-	-	-									
265.4 - 267.1	303	1.7	x	-	-	-									
267.1 - 269.0	304	1.9	x	-	-	-									
269.0 - 270.9	305	1.9	x	-	-	-									
270.9 - 271.9	306	1.0	x	-	-	-									
271.9 - 273.8	307	1.9	x	-	-	-									
273.8 - 275.2	308	1.4	x	-	-	-									
275.2 - 276.1	309	0.9	x	-	-	-									
276.1 - 362.7	waste														
362.7 - 363.7	38310	1.0	x	-	-	-									
363.7 - 364.7	311	1.0	x	-	-	-									
364.7 - 367.3	312	2.6	x	-	-	-									
367.3 - 370.1	313	2.8	x	-	-	-									
370.1 - 373.4	314	3.3	x	-	-	-									
373.4 - 375.0	315	1.6	x	-	-	-									
375.0 - 376.6	316	1.6	x	-	-	-									
376.6 - 377.2	317	0.6	x	-	-	-									
377.2 - 420.1	waste														
420.1 - 420.9	38318	0.8	x	-	-	-									
420.9 - 422.2	319	1.3	x	-	-	-									
422.2 - 423.6	320	1.4	x	-	-	-									
423.6 - 424.4	321	1.0	x	-	-	-									
424.4 - 425.8	322	1.2	x	-	-	-									
425.8 - 445.0	waste														
445.0 - 446.0	63313	1.0	x	-	-	-									

63K12-NW-0179R

Form No. 504-R1

HUDSON BAY EXPLORATION AND DEVELOPMENT CO. LTD.

DIAMOND DRILL RECORD

HOLE No. GAW-8 DATE BEGAN ..... DATE COMPLETED .....

AREA ..... PROJECT No. ..... DEPTH .....

CLAIM ..... CO-ORD ..... HORIZONTAL LENGTH .....

GRID ..... DIRECTION .....

SHEET No. 2 of 2 CORE SIZE ..... ELEVATION ..... ANGLE .....

CORRECTED DIP TESTS

Resident Geologist

DEPTH	NUMBER	WIDTH	ASSAY AU	AG	CU	ZN			AVERAGES WIDTH	AU	AG	CU	ZN		REMARKS
446.0 - 450.0	waste														
450.0 - 451.2	63314	1.2	x	–	–	–									
451.2 - 451.9	waste														
451.9 - 452.9	63315	1.0	x	–	–	–									
452.9 - 479.0	waste														
479.0 - 480.1	38323	1.1	x	–	–	–									
480.1 - 481.3	324	1.2	x	–	–	–									
481.3 - 505.2	~~325~~	waste													
505.2 - 507.0	38325	1.8	x	–	–	–									
507.0 - 542.7	waste														
542.7 - 544.0	38326	1.3	x	–	–	–									
544.0 - 545.5	327	1.5	x	–	–	–									
545.5 - 547.5	328	2.0	x	–	–	–									
547.5 - 549.3	329	1.8	x	–	–	–									
549.3 - 912.1	waste														
End of Hole:	278 m (912.1')														

63K12-NW-0179R