PROBE MINES LIMITED

McFauld's Lake Project
James Bay Lowlands, Ontario

Technical Report
2004

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Frontispiece

Otters arriving at McFauld's Lake

Summary

The McFauld's Lake Project consists of 300 claims staked by Probe Mines Limited, located in the James Bay Lowlands approximately 300km north of Nakina, Ontario. The area was staked owing to the discovery of at least four volcanogenic massive sulphide (VMS) deposits, which lie less than 3 kilometers from Probe's boundary, by Spider Resources since 2002. The area represents a virtually unexplored greenstone belt, and has the potential of developing into a new and important base and precious metal mining camp.

The McFauld's Lake Project is underlain by Archaean felsic and felsic to intermediate fragmental and tuffaceous units of the Sachigo Volcanic Belt. In addition to numerous geophysical conductors, the property is also distinguished by the presence of sulphide-mineralized volcanic horizons, identified during drilling, which are highly anomalous in base metals.

Airborne and ground geophysical surveys and diamond drilling completed to date indicate that the eastern claim block has three distinct volcanic horizons containing the base and precious metal-bearing horizons, which have a drill-indicated strike length of 2.3km and a potential strike length of up to six kilometers. To the west, only one hole was drilled, which encountered late granitic and dioritic intrusives.

The geological and geophysical data suggests that the McFauld's Lake Project has a strong potential for hosting base metal sulphide mineralization of the volcanogenic massive sulphide-type. The property fits a variety of criteria in the descriptive model of VMS deposits, including the presence of felsic volcanics and the presence of other massive sulphide occurrences. Given the encouraging data from the first program, a second, advanced, phase of exploration is recommended, consisting of electromagnetic and magnetic surveys, to further define known conductors and locate new anomalies, followed by diamond drilling to test anomalies identified by the various surveys. A geophysical grid of approximately 166 line kilometers, with lines oriented in an east-west direction, is proposed to cover the significant AEM anomalies and area of potential mineralization. As an initial estimate, ten drill holes of approximately 200m each are recommended to test the area of the geophysical survey. The cost of this program will be approximately $685,000.

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1. Introduction

This report represents the first technical summary/compilation of Probe Mines Limited ("the Company") for the recently acquired McFauld's Lake Project located in the James Bay Lowlands of Ontario. The purpose of the report is to disclose technical elements regarding the Company's acquisition, which constitute a material change.

The report provides a compilation of previous work performed on the property by persons or companies involved in the mineral exploration industry and by its current owners, as well as a description of the salient physical attributes of the property, i.e., geological, geophysical and geochemical, interpretation of this factual data and recommendations and proposed budgets for further exploration of the property.

The majority of the geological and geophysical data concerning the McFauld's Lake area was taken from publications of the Ontario Geological Survey while accounts of known mineralization were obtained from reports and public disclosures of Spider Resources Inc. ("Spider") hosted on their website (www.spiderresources.com). The author made a site visit to the property on September 15th, 2004.

The McFauld's Lake property is part of the Archean Sachigo Volcanic Belt (SVB), located in the James Bay Lowlands of Ontario approximately 300 km north of the town of Nakina, Ontario (Fig. 1.1). The volcanic sequence, in the area of interest, is overlain by a thin sequence of Paleozic sedimentary cover rocks. The area has attracted significant attention owing to the recent discovery of volcanogenic massive sulphide (VMS) deposits (Franklin, 2003) by Spider Resources, a junior exploration company working in the area. Excitement was first generated in the area following the unexpected diamond drilling discovery of VMS mineralization containing Cu, Pb and Zn and minor Au and Ag, over what were thought to represent kimberlite targets. Following a period of intensive exploration, at least four polymetallic sulphide showings have been discovered near the Probe Mines claims. However, before the discoveries very little work was undertaken in the area by either government geological surveys or exploration companies, and as a result very little geological information is available. The project comprises 300 unsurveyed and unpatented mineral claim staked as two blocks of 180 and 120 contiguous claims. The claim blocks are situated adjacent to the sulphide discoveries of Spider (Fig. 1.2), north and along strike within the volcanic package as inferred from airborne magnetic data.

The area is believed to be underlain by a mixed sequence of mafic and intermediate volcanics with minor felsic volcanics, clastic metasedimentary rocks and iron formation belonging to the SVB. Sub-economic base metal mineralization is present on the property, however numerous geological and geophysical indicators point to a strong potential for economic VMS-type mineralization within its boundaries.

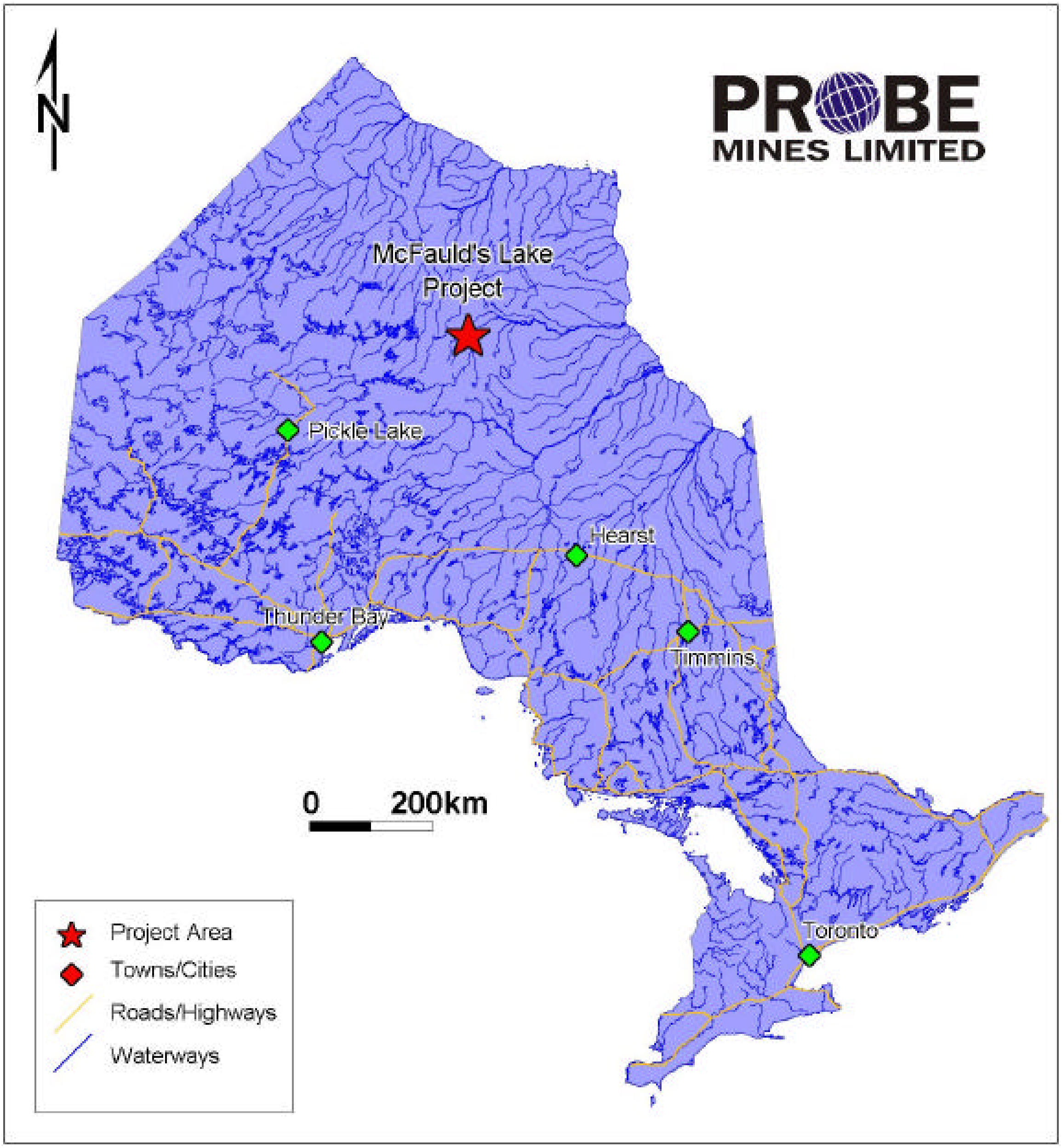

Fig 1.1 Location of the McFauld's Lake Project, James Bay Lowlands, Ontario

1.1 Terms of Reference

This report uses standard System International (SI) units. The coordinate system used for georeferencing is UTM NAD 83 (Zone 16) for the McFauld's Lake area, with units of meters, and structural data is given in degrees, using the right hand rule convention (dip is always to the right of the strike measurement). For planar features strike measurement is always given first, followed by dip, and for linear features, such as fold axes, it is dip/dip angle. Some common abbreviations found in the text are defined as follows:

OGS	Ontario Geological Survey
UTM	Universal Trans Mercator (geographic)
NAD	North American Datum (geographic)
SVB	Sachigo Volcanic Belt
VMS	Volcanogenic Massive Sulphide (deposit type)
REE	Rare Earth Elements
g/t	grams per tonne (equivalent to ppm)
ppm/ppb	parts per million/billion
---	Concentrations below detection (for ease in viewing geochemical data)
MSL	Mean Sea Level (0m)
EM	Electromagnetic (geophysics)
AEM	Airborne Electromagnetic (geophysics)
HLEM	Horizontal Loop Electromagnetic (geophysics)
IP	Induced Polarization (geophysics)
TDEM	Time Domain Electromagnetics
?	Gamma (1 gamma = 1 nanoTesla), magnetic units

1.2 Disclaimer

Land tenure information and assessment reports have been extracted from the Ontario Ministry of Northern Development and mines web site (www.mndm.gov.on.ca/MNDM), which contains the following disclaimer:

"Use this Internet service at your own risk. The Ministry of Northern Development and Mines disclaims all responsibility for the accuracy of information provided. Material in this service involves a new use of technology, which may cause errors and therefore the information may be inaccurate or incomplete.

The Ministry of Northern Development and Mines cannot and does not warrant the accuracy, completeness, timeliness, merchantability or fitness for a particular purpose of any information available through this service. Furthermore, the Ministry of Northern Development and Mines does not guarantee in any way that it is providing all the information that may be available. The Ministry of Northern Development and Mines shall not be liable to you or anyone else for any loss or injury caused in whole or part by the Ministry of Northern Development and Mines in procuring, compiling, or delivering this service and any information through the service. In no event will the Ministry of

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Geological data and information used in this report have also been gathered from government reports and company websites and provided by Probe Mines Limited. The author has declined use of previous interpretations and relies only on the factual data contained within the published and unpublished documents.

A significant volume of material was taken from press releases of Spider Resources, which contain the following disclaimer:

"*The TSX Venture Exchange has not reviewed and does not accept responsibility for the adequacy or accuracy of this release*".

This report is intended as a technical summary of available factual data for Probe Mines Limited on its McFauld's Lake Project. The author does not accept responsibility for use by third parties of the material contained in this report outside the scope of the stated objective.

1.3 Property Location and Access

The McFauld's Lake Project falls within the Sachigo Volcanic Belt (SVB) of northern Ontario, and comprises 300 unsurveyed and unpatented claims staked in two blocks of 180 and 120 contiguous claims forming the "western" and "eastern" blocks, respectively. The claims are separated by approximately 3.2 kilometers of staked claims owned by Spider Resources, which are part of a contiguous claim block containing at least four massive sulphide discoveries (Fig. 1.2).

Access to the property is by way of float/ski-equipped fixed-wing aircraft or helicopter from one of a number of communities found along Highway 11. Three companies have been used to date, and include Superior Helicopters from Long Lac, Ontario, Expedition Helicopters of Cochrane and Nakina Air Services, located in Nakina, Ontario. Local access to the properties can be achieved by helicopter, or snowmobile in winter. No water access exists for the properties.

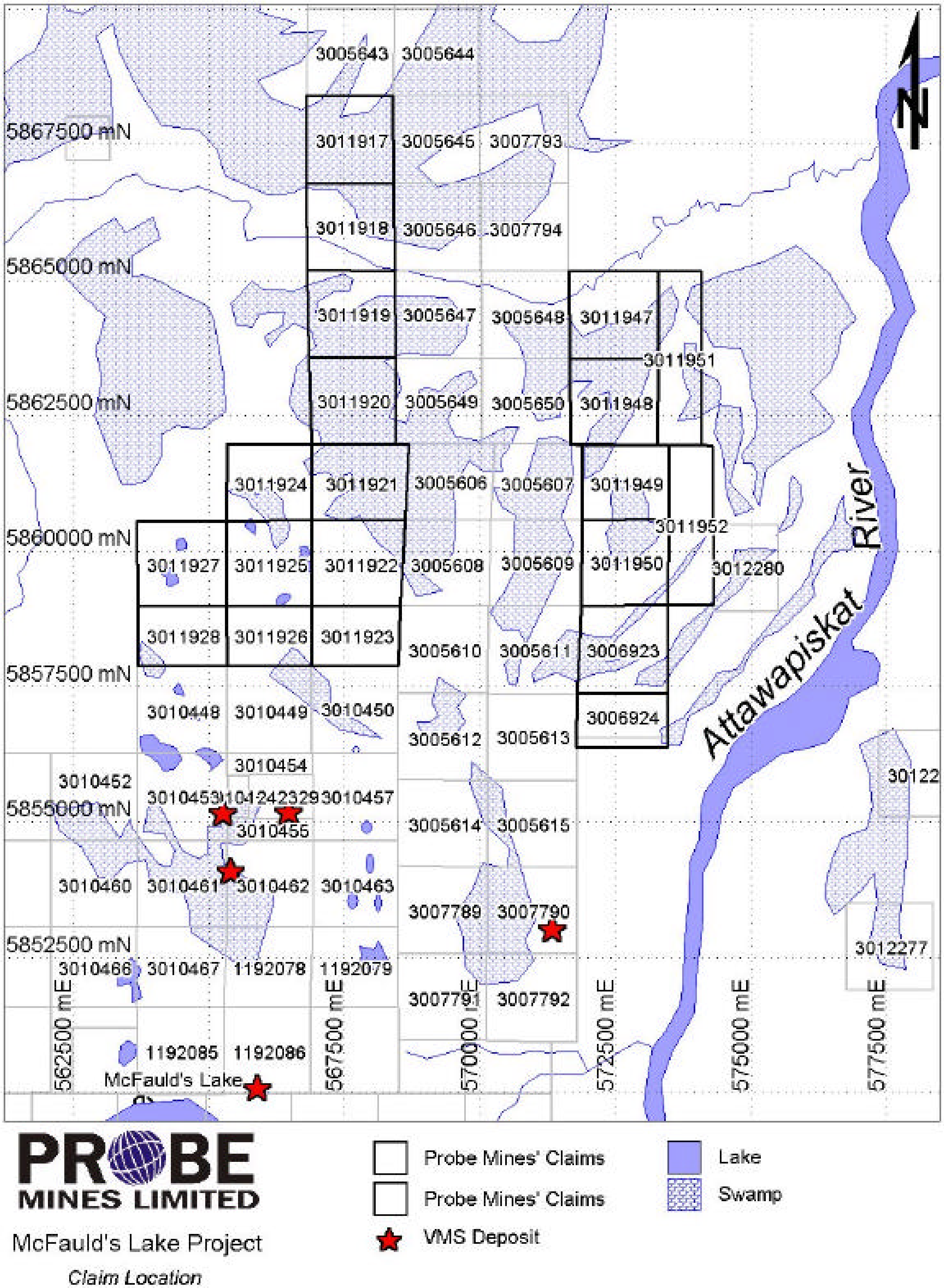


Figure 1.2 Claim locations of McFauld's Lake properties, NW Ontario

1.4 Land Tenure

The 300 unsurveyed and unpatented claims comprise twenty separate mineral licenses (Fig. 1.2, Table 1.1), which grant the title-holder mineral rights to the area. All claims are recorded in the name of Probe Mines Limited, and, to the author's knowledge, there are no current or pending challenges to the mineral claims and 100% ownership is maintained by Probe Mines. There are no outstanding nor pending adverse environmental issues attached to the property. Regulatory permits are not required for the recommended exploration activities outlined in this report.

No assessment reports have been previously submitted by Probe Mines Limited and $120,000 in assessment credits or payment will be required to maintain all of the claims in good standing in the year following their respective due dates (Table 1.1). The maintenance deadline of December 8, 2005 will be met through exploration expenditures that fulfill the criteria of the Ministry of Northern Development and Mines of Ontario as eligible work expenditures.

Table 1.1 Land Tenure information for the McFauld's Lake Project

License No.	Claims	Area	Holder	Date Recorded	Date Due	Work Required
P 3006924	8	BMA 527854	PROBE MINES	2004-MAR-03	2006-MAR-03	$3,200.00
P 3006923	16	BMA 528854	PROBE MINES	2004-MAR-03	2006-MAR-03	$6,400.00
P 3011947	16	BMA 528854	PROBE MINES	2003-DEC-08	2005-DEC-08	$6,400.00
P 3011948	16	BMA 528854	PROBE MINES	2003-DEC-08	2005-DEC-08	$6,400.00
P 3011949	16	BMA 528854	PROBE MINES	2003-DEC-08	2005-DEC-08	$6,400.00
P 3011950	16	BMA 528854	PROBE MINES	2003-DEC-08	2005-DEC-08	$6,400.00
P 3011951	16	BMA 528854	PROBE MINES	2003-DEC-08	2005-DEC-08	$6,400.00
P 3011952	16	BMA 528854	PROBE MINES	2003-DEC-08	2005-DEC-08	$6,400.00
P 3011917	16	BMA 528861	PROBE MINES	2003-DEC-08	2005-DEC-08	$6,400.00
P 3011918	16	BMA 528861	PROBE MINES	2003-DEC-08	2005-DEC-08	$6,400.00
P 3011919	16	BMA 528861	PROBE MINES	2003-DEC-08	2005-DEC-08	$6,400.00
P 3011920	16	BMA 528861	PROBE MINES	2003-DEC-08	2005-DEC-08	$6,400.00
P 3011921	16	BMA 528861	PROBE MINES	2003-DEC-08	2005-DEC-08	$6,400.00
P 3011922	16	BMA 528861	PROBE MINES	2003-DEC-08	2005-DEC-08	$6,400.00
P 3011923	12	BMA 528861	PROBE MINES	2003-DEC-08	2005-DEC-08	$4,800.00
P 3011924	16	BMA 528861	PROBE MINES	2003-DEC-08	2005-DEC-08	$6,400.00
P 3011925	16	BMA 528861	PROBE MINES	2003-DEC-08	2005-DEC-08	$6,400.00
P 3011926	12	BMA 528861	PROBE MINES	2003-DEC-08	2005-DEC-08	$4,800.00
P 3011927	16	BMA 528861	PROBE MINES	2003-DEC-08	2005-DEC-08	$6,400.00
P 3011928	12	BMA 528861	PROBE MINES	2003-DEC-08	2005-DEC-08	$4,800.00
Total	**300**					**$120,000**

1.5 Topography

The claim blocks are found within the James Bay Lowlands of Ontario, an area characterized by a plain of low relief, which gently slopes towards James Bay to the northeast. Elevation in the property area is approximately 250m above means sea level (MSL), with local variations of typically less than 10m. An exception occurs along the Attawapiskat River, where elevations can change by up to 30m. Hydrographic features include the Attawapiskat River and numerous small creeks and rivers, although no drainage features are found within the immediate area of the claims (Fig. 1.2). Owing to the thick clay deposits and low relief, the area is poorly drained, resulting in numerous lakes, swamps and muskeg areas. Lakes in the area can reach up to 5km in diameter, with the largest being McFauld's Lake itself, located approximately seven kilometers south of the property.

1.6 Previous Work

No exploitable mineral deposits are known in the area surrounding the McFauld's Lake Project, although recent exploration by Spider Resources suggest the potential for economic base metal (Cu-Pb-Zn) volcanogenic massive sulphide (VMS) deposits is high. The bulk of the previous work data available is taken from public disclosure documents provided by Spider Resources, as no published assessment work is available.

Prior to the discovery of VMS mineralization in the Sachigo Volcanic Belt (SVB) only limited physical examination of the area was undertaken by the Ontario Geological Survey (OGS), and consisted of regional-scale mapping (Thurston *et. al*., 1975) and airborne magnetic surveys (OGS). Owing to topography, geological exposures are scarce and, within the claim boundaries, consist only of Ordovician sedimentary rocks. River cuts found to the west of the properties contain outcrops of mafic flows and mafic intrusives (subvolcanic?) found as layers within meta-granitoid rocks (Thurston *et. al*., 1975). Volcanic horizons typically show subvertical to vertical dips. A provincial airborne magnetics survey provides the most accurate depiction of the subsurface geology, displaying an arcuate belt of layered rocks approximately 100km in length.

The recent interest in the diamond potential of the James Bay Lowlands has triggered a number of regional-scale geochemical surveys in the area (OFR-6097 Spider 3; OFR-6108 James Bay), which evaluate heavy mineral geochemistry of stream sediments. However, the presence of Paleozoic rocks overlying the prospective volcanics tends to nullify the effect of surficial geochemistry for the area.

Most of the information available regarding volcanic rocks in the McFauld's Lake area comes from recent exploration by Spider Resources on its adjacent mineral properties. To date diamond drilling by Spider has intersected a number of VMS occurrences, the most notable being McFauld's #1 and #3, which are located less than 3km south of Probe Mines properties. The VMS mineralization was first identified by De Beers Canada Exploration Inc. ("De Beers") in the Fall of 2002, while exploring for kimberlite.

Reverse circulation drilling encountered base metal sulphides, i.e., chalcopyrite, sphalerite, associated with volcanic flows consisting of highly altered mafic and felsic lithologies (Franklin, 2003). Metal zonation in sulphide mineralization is poorly developed, however, Cu-rich stringer-style mineralization has been identified in the footwall, while Zn values tend to increase in the hanging wall direction (Franklin, 2003), suggesting that VMS processes are active.

1.7 Deposit Model

A descriptive model of VMS deposits is best applied to the data available for the McFauld's Lake Project and environs. VMS deposits are major sources of copper, zinc, lead, silver and gold, with by-products including tin, cadmium, antimony and bismuth. The deposits belong to a larger class of concordant massive sulphide deposits, which can be considered as having formed through discharge of hydrothermal fluids onto the seafloor. VMS deposits occur exclusively in geological domains containing volcanic rocks extruded on the sea floor, and there is no preferred geotectonic environment, although, like submarine volcanic sequences, they are more commonly found near plate margins (Sawkins, 1976). VMS deposits are not restricted to any geochemically distinct volcanic sequence, although there may be a preferential association with evolved calc-alkaline members (Solomon, 1976). There is a spatial association among VMS deposits, with most occurring in clusters associated with a particular level in the stratigraphic sequence. This "favourable horizon" often contains structural or topographic features responsible for the localization of deposits. The deposits also tend to be associated with felsic volcanic rocks, with approximately 50% related to areas of rhyolitic domes and felsic fragmental rocks. Sedimentary rocks are often an integral part of a VMS terrane, and indicate periods of volcanic quiescence, a break required for the deposition of sulphides from hydrothermal fluids emanating from submarine vents. The deposits themselves display a remarkably consistent mineralogical zonation, probably related to the thermal gradient developed around the vent. The vent itself typically consists of a stockwork system containing the richest Cu ore, while within the sulphide mound itself an outward zonation of Fe-Cu to Fe-Cu-Zn-Pb to Fe-Zn-Pb-Ba and finally Fe-Ba is developed.

The McFauld's Lake area satisfies a number of the requirements for the formation of VMS deposits, being underlain by submarine volcanics, including minor felsic volcanics, and most importantly occurring within the stratigraphic horizon where other massive sulphide deposits have been discovered.

1.8 Regional Geology

The McFauld's Lake properties are located in the Superior Province of Northern Ontario, an area of 1,572,000 km^2, which represents 23% of the earth's exposed Archean crust (Thurston, 1991). The Superior Province is divided into numerous Subprovinces (Fig. 1.3), each bounded by linear faults and characterized by differing lithologies, structural/tectonic conditions, ages and metamorphic conditions. These Subprovinces can be classified as one of four types: 1) Volcano-plutonic, consisting of low-grade metamorphic greenstone belts, typically intruded by granitic magmas, and products of multiple deformation events; 2) Metasedimentary, dominated by clastic sediments and displaying low grade metamorphism at the subprovince boundary and amphibolite to granulite facies towards the centers; 3) Gneissic/plutonic, comprised of tonalitic gneiss containing early plutonic and volcanic mafic enclaves, and larger volumes of granitoid plutons, which range from sodic (early) to potassic (late); and 4) High-grade gneissic subprovinces, characterized by amphibolite to granulite facies igneous and metasedimentary gneisses intruded by tonalite, granodioritic and syenitic magmas (Card and Ciesieliski, 1986). The McFauld's Lake claim blocks lie within the Sachigo metasedimentary subprovince.

1.8.1 Sachigo Subprovince

The Sachigo Subprovince represents the northernmost extent of exposed Archean basement rocks of the Superior Province (Fig 1.4). To the west, the Sachigo is bounded by the Trans-Hudson-Orogen (THO) (1.8 Ga), while to the northwest the subprovince is in contact with granitoid and mafic/ultramafic rocks of the Thompson Belt, a collisional zone formed during the THO. To the east, the Sachigo is delimited by the Winisk River Fault, which separates the Superior Province from rocks of the THO Fox River Belt, while the southern limit of the Sachigo subprovince is defined by the Berens River subprovince, a granite-greenstone terrane.

Much less is known about the Sachigo subprovince than the more accessible granite-greenstone belts to the south, with most work concentrating on the handful of isolated greenstone belts found enclosed within the granitic and gneissic units (e.g. Bennet and Riley, 1969; Ayres, 1974; Card and Ciesielski, 1986; Thurston et al., 1991). However, a number of differences can be noted between the greenstone belts of the Sachigo subprovince and younger greenstone terranes to the south, and include some of the oldest ages for greenstones in the Superior Province (2.9 to 3.0 Ga) (Corfu and Wood, 1986; Thurston et al., 1991); and an unusual sequence of quartz-rich metasediments within a sequence of mafic and felsic volcanic rocks (Thurston et al., 1991). The Berens River granite-greenstone subprovince, immediately to the south of the Sachigo, is interpreted to represent a deeply eroded arc or micro continental core, while rocks of the Sachigo are considered remnants of widespread, early (3.0 Ga) sialic crust (Thurston et al., 1991). Geological similarities between the Sachigo, Berens River, and the Uchi subprovince, situated to the south of the Berens River subprovince, have prompted some researches to define an Uchi-Sachigo-Berens River superterrane (Card and Ciesielski, 1986; Thurston et al., 1991).

Figure 1.3 The Superior Province, and subprovinces, of Ontario

Felsic/Intermediate Intrusives

Granitic rocks represent the dominant lithologies in the Sachigo subprovince and include, from oldest to youngest: gneissic tonalites; foliated tonalites; a muscovite granodiorite–granite series; and a diorite-monzonite-granodiorite suite (Thurston et al., 1991).

Gneissic Tonalites

These intrusives are possibly the oldest example of plutonic rocks (Thurston et al., 1991), and can be divided into melanocratic (>20% amphibole) and leucocratic (<20% amphibole) series, although dominated by the latter. Rocks are heterogeneous, and are typically cut by several generations of granitic dykes, and may contain mafic inclusions up to kilometers in diameter (Thurston et al., 1991). The origin of these inclusions can be traced back to supracrustal xenoliths and tectonized mafic dykes. Tonalitic rocks of the Sachigo subprovince are batholithic in proportion, and display a general west to northwest strike in their layering, which shows divergence around younger intrusives and

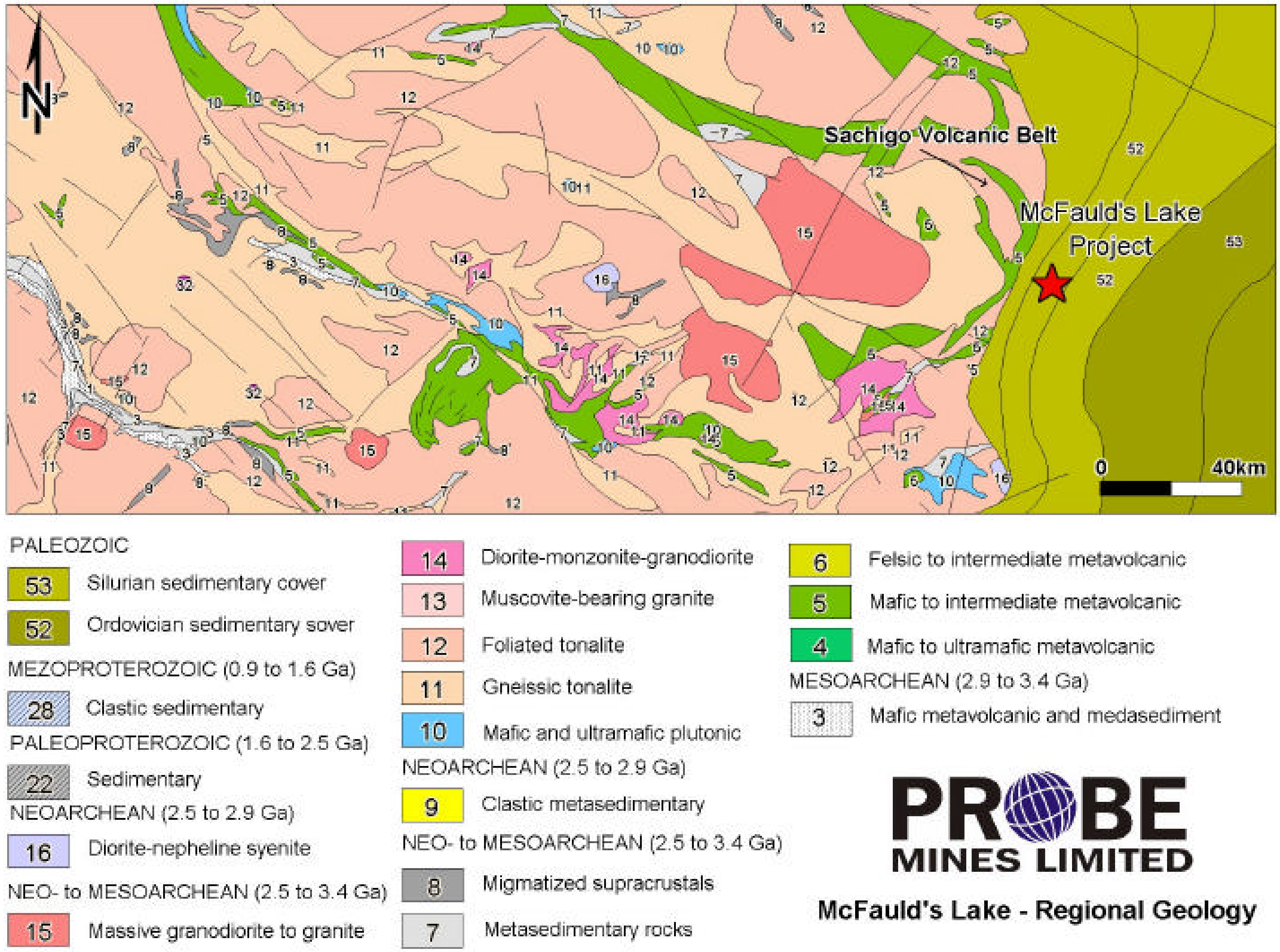


Figure 1.4 – Regional geology of the eastern Sachigo subprovince, McFauld's Lake area

in the vicinity of shear zones. Contact relationships with greenstone terranes are almost invariably tectonic, while more gradational with other felsic intrusives (Thurston et al., 1991).

Foliated Tonalite

Foliated tonalites include amphibole-bearing and biotote-bearing varieties, and typically form irregular batholiths and stocks at the interface between greenstone terranes and massive tonalite in the Sachigo subprovince (Stone, 1989; Thurston et al., 1991). Amphibole-bearing tonalite typically contains less than 20% mafic minerals, usually as hornblende, while more felsic versions are dominated by biotite in their mafic assemblages. Rocks are generally medium- to coarse-grained, and relatively homogeneous, although megacrysts and clotty amphibole are common in hornblende tonalites and granodiorites (Thurston et al., 1991). The intrusions are well foliated, with foliation described by oriented lenticles of quartz, plagioclase, biotite and hornblende (Thurston et al., 1991).

Massive Granodiorite-Granite

Within the granodiorite to granite suite granodiorites predominate, with feldspar megacrystic granodiorite and biotite granodiorite forming the two most voluminous lithologies (Thurston et al., 1991). Megacrystic varieties are grey to pink, and contain feldspar megacrysts up to 2cm in length, and generally less than 15% mafic constituents including possible relict clinopyroxene (Thurston et al., 1991). Magnetite is common in this series and accounts for its high magnetic signature in regional aeromagnetics. Massive biotite granodiorites are a weakly foliated, pale pink rock, containing irregular pods of pegmatitic material (Thurston et al., 1991). Mafic minerals, dominated by biotite, typically make up less than 10% of the rock.

Muscovite-Bearing Granite

Members of this suite range from granodiorite to granite, and are coarse-grained to pegmatitic, often containing metasedimentary xenoliths. They include two-mica granites and leucogranites, which are usually associated with major shear zones in the Sachigo subprovince. Their young ages (2653 Ma), compared to two-mica granites in the southern Superior Province, smaller sizes and tectonic association suggest that these granites may have formed from melting of metasedimentary units during late block-to-block movement (Thurston et al., 1991).

Diorite-Monzonite-Granodiorite

These rocks represent the youngest felsic/intermediate intrusions in the Sachigo subprovince, and range between quartz diorite and quartz monzonite. Mafic mineral assemblages can be high, up to 30%, with hornblende typically dominant over biotite, and occasional pyroxene (Thurston et al., 1991). Rocks of this suite show a spatial association with mafic intrusives, and usually display a gradational transition to gabbroic compositions. The rocks are generally inclusion-rich, and this, coupled with the mafic mineralogy, suggests that they are mantle derived, similar to monzodiorite plutons in the southern Superior (Stern et al., 1989).

Mafic Intrusive Rocks

Pre-tectonic mafic intrusive rocks in the Sachigo subprovince are considered to be synvolcanic by Thurston et al. (1991), and comprise predominantly mafic to ultramafic sills. Post-tectonic magmatism in the northwestern Superior Province includes three diabase dyke swarms, comprising the 2171 Ma Marathon swarm, 1888 Ma Molson Swarm and the 1267 Ma MacKenzie Swarm.

Big Trout Lake Intrusive Complex

The Big Trout Lake intrusive complex represents the largest exposed mafic-ultramafic intrusion and consists of a folded 5000m thick sill containing a 500m thick lower ultramafic sequence of dunite, chromite and chromite-rich layers overlain by homogeneous peridotite. Two batches of tholeiitic magma are indicated in the formation of the sill (Borthwick and Naldrett, 1984).

1.9 Property Geology

Very little is known about the geology of the McFauld's Lake area, with most of the information obtained from recent drilling in the area of the VMS discoveries at the eastern extent of the volcanics (Franklin, 2003). Within the eastern section of the belt, in the area of the claims, a thin (<40m) section of Paleozoic sedimentary rocks, comprised predominantly of limestone, overlies the volcanic package. The volcanic sequence at this location is comprised of highly altered mafic and felsic volcanic rocks, which have in some cases undergone extensive Mg-metasomatism to form talc-magnetite alteration. In most cases this replacement alteration has occurred to such a degree as to make primary lithologies indiscernible, with all units resembling basaltic flows (Franklin, 2003). The hydrothermal character of the talc-magnetite rock has been established to a fair degree of confidence through whole rock geochemical comparisons utilizing major and trace element characteristics, while precursor lithologies have been demonstrated to be a bimodal population of basaltic and rhylotic-dactic volcanic rocks (Franklin, 2003). The character of the felsic sequence suggests that there was significant heat available to the system, which indicates a greater potential for the formation of VMS mineralization in the volcanic strata.

Owing to the buried nature of the volcanics in this area, property-scale structural data is unavailable, however, fine structural features are preserved in core samples, and comprise predominantly folding, varying from open to isoclinal. In layered sequences a weak S1 foliation is developed parallel to sub-parallel to layering, while rare S2 foliations could be discerned oblique to S1, typically 30-35° from the earlier foliation.

1.9.1 Mafic Volcanics

Mafic volcanics comprise a suite of calc-alkaline basalts and chloritic basalts, with some strata being composed of spherulitic varieties (Franklin, 2003). Very little descriptive data is available for the basalts, however, drill sections indicate that it dominates the volcanic sequence in both the hanging wall and footwall sections (Franklin, 2003). The calc-alkaline nature of the basaltic rocks is suggested by high LREE/HREE ratios, however, alteration makes this determination difficult.

1.9.2 Felsic Volcanics

Original logging of Spider Resources' diamond drill core from the McFauld's area indicated that felsic volcanic rocks were rare in the sequence, however, Franklin (2004) demonstrates geochemically that they occur in much greater quantities than first thought. Although obfuscated by alteration, felsic volcanics occur in both fragmental and massive flow varieties, and can be distinguished from basaltic members through their distinctive REE and immobile element patterns. Their enrichment in REE, and the flat patterns, are indicative of high temperature rhyolites, which are often associated with VMS terranes (Lesher et al., 1986; Franklin, 2003). In drill sections, the felsic volcanics do not correlate well with each other, suggesting they are laterally discontinuous. Within Probe's claims, diamond drilling has identified several felsic volcanic layers comprising predominantly coarse-grained lapilli tuffs and fragmental units, as well as fine-grained ash-fall tuffs. Alteration is present in these units, however preserved sections reveal the highly siliceous nature of the rocks.

1.9.3 Alteration

Talc-magnetite, which is not a common alteration assemblage associated with VMS deposits, predominates in the sulphide mineralized McFauld's Lake volcanics in the area of the discoveries (Franklin, 2003). Originally mapped as iron formation, Franklin (2003) has shown that talc-magnetite zones were produced by hydrothermal alteration of basalt and rhyolite, caused by Mg-bearing brines in seawater convective cells, and not altered ultramafic rock. This alteration formed talc-magnetite "mounds" at seafloor vents by reaction of low-temperature (90-150°C) hydrothermal fluids with surrounding rocks.

A number of geochemical characteristics indicate the hydrothermal origin of the Talc, as opposed to formation through alteration of ultramafic rocks, including low Cr and Ni content and positive Eu anomalies (Franklin, 2003). Alteration in the McFauld's Lake volcanics is distinguished by almost total loss of Na and Ca, and significant enrichment in Mg and Fe, which is typical of VMS alteration geochemistry (Franklin, 2003). More common to rocks within the Probe Mines' section is a strong chloritization and carbonatization of the volcanic units, occasionally with the development of accessory magnetite and biotite.

1.9.4 Mineralization

The McFauld's Lake area contains impressive diamond drill intersections of base and precious metal-bearing massive sulphides, up to 42m wide at McFauld's #3, with significant grades of Cu and Zn (Table 1.2). To date more than four individual zones have been identified in the area, spaced as far as 14km apart, by Spider Resources (Spider Resources, press releases).

No truly descriptive accounts of mineralization exist for the VMS occurrences, however, sufficient analytical data is available to indicate that sulphide mineralization is typical of VMS-style deposition, i.e., contains significant base metal component (Table 1.2). To date, drilling suggests that that sulphide mineralization is copper-rich and lead-poor, with Zn:Cu ratios similar to those in the bimodal mafic-dominated Noranda-type deposits (Franklin, 2003). The high Zn:Pb ratios support this comparison, and are in sharp contrast to the younger bimodal felsic and bimodal siliciclastic deposits typical of Kuroko-type and Bathurst-type deposits, respectively.

Table 1.2 – Selected drill core analyses, Spider Resources, McFauld's Lake area

Deposit	Drill Hole	Width (m)	Cu	Zn	Au	Ag
McFauld #1	M-03-06	5.60	2.89	0.45	N/A	N/A
McFauld #1	M-03-07	6.90	3.55	N/A	N/A	N/A
McFauld #2	M-03-12	12.5	1.81	N/A	N/A	N/A
McFauld #3	M-03-18	25.75	0.51	4.83	0.07	2.73
McFauld #3	M-03-18	9.5	0.72	7.95	0.06	3.15
McFauld #3	M-03-20	5.87	2.80	0.02	0.50	15.50
McFauld #3	M-03-20	4.2	0.26	11.8	Tr	1.57
McFauld #3	M-03-21	13.81	5.50	0.34	0.52	15.40
McFauld #3	M-04-23	15.0	4.06	0.03	0.55	13.81
McFauld #3	M-04-23	36.73	0.40	0.62	0.04	1.20
McFauld #3	M-04-24	12.09	1.81	0.07	0.10	3.36
McFauld #3	M-04-25	6.23	0.43	0.05	0.06	1.15
McFauld #3	M-04-41	8	6.50	3.45	0.42	15.5

N/A – Not Available

Cu and Zn values in wt.%, Au and Ag in ppm

1.10 Exploration

Probe Mines has entered into a first phase of exploration on their McFauld's Lake property, comprising airborne and ground geophysical surveys and diamond drilling in order to evaluate the potential of the claims for hosting VMS deposits. In January 2004, airborne electromagnetic and magnetic data covering the Probe property, was purchased from Billiken Management Services Inc. ("Billiken") and re-processed by Scott Hogg and Associates with interpretation by Aulak Inc., and independent geophysical consulting firm. A number of multi-channel, bedrock conductors were identified and a ground EM survey, comprising time-domain EM (TDEM) techniques, was completed in April, 2004 in order to re-locate and better resolve airborne anomalies.

1.10.1 Airborne Electromagnetic Survey

In August, 2003, Billiken contracted Fugro Airborne Surveys to carry out a magnetic and EM survey over the McFauld's Lake area. A total of 312 line kilometers of the survey were extracted for Probe Mines, covering the properties and including a one-kilometer buffer zone (Fig. 1.5).

Survey Specifications

The survey was carried out between July 26th and August 10th 2003 from an airbase in Pickle Lake, Ontario. Lines were oriented NW-SE (135°), and spaced at 300m. The survey was flown using a Casa twin turboprop, with spatial data recorded by an airborne Novatel 4E-315R 12-channel GPS receiver, with differential correction data obtained from a Novatel GPS base station. The coordinate system used was UTM NAD 83 (GRS 1980 ellipsoid) in zone 16.

Magnetic readings were taken with a Scintrex CS-2, cesium magnetometer housed in a towed bird, while a Geotem 1000 system was used to take EM measurements. The EM system was configured to read 20 channels (5 on-time/15 off-time) on Z, X and Y axial coils. Fugro carried out initial field and office processing, while Scott Hogg and Associates undertook advanced processing of the data (Appendix I). Aulak Inc., and independent geophysical consulting company provided an interpretive analysis of the data.

Survey Results

The AEM survey identified 75 discrete EM conductors, consisting of numerous multi-channel responses, which can be roughly grouped into seven clusters of anomalies (Fig 1.6). Within each cluster a full spectrum of anomalies, from weak to strong, was present and required follow-up work. The most prospective of the anomalies from each cluster

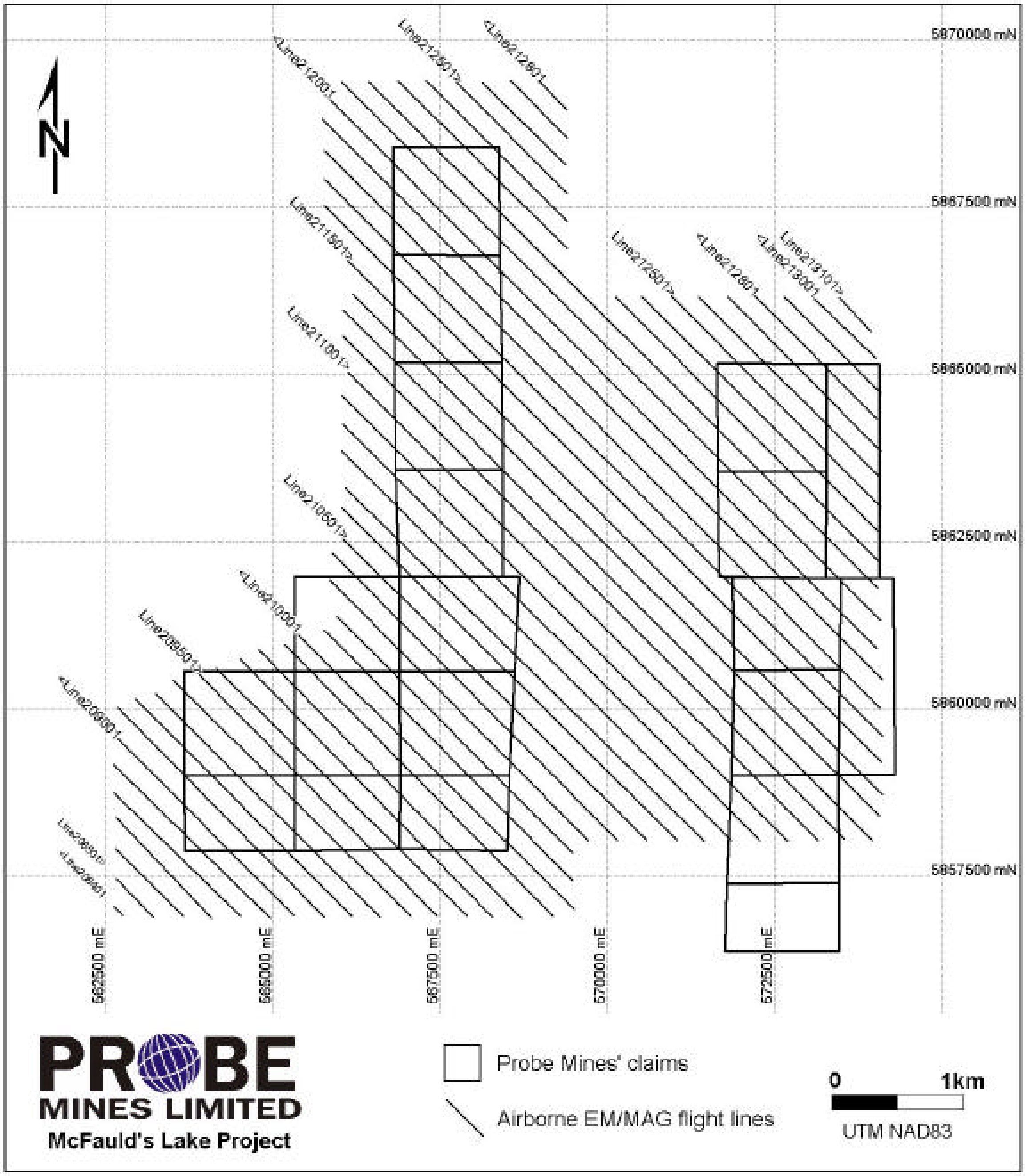
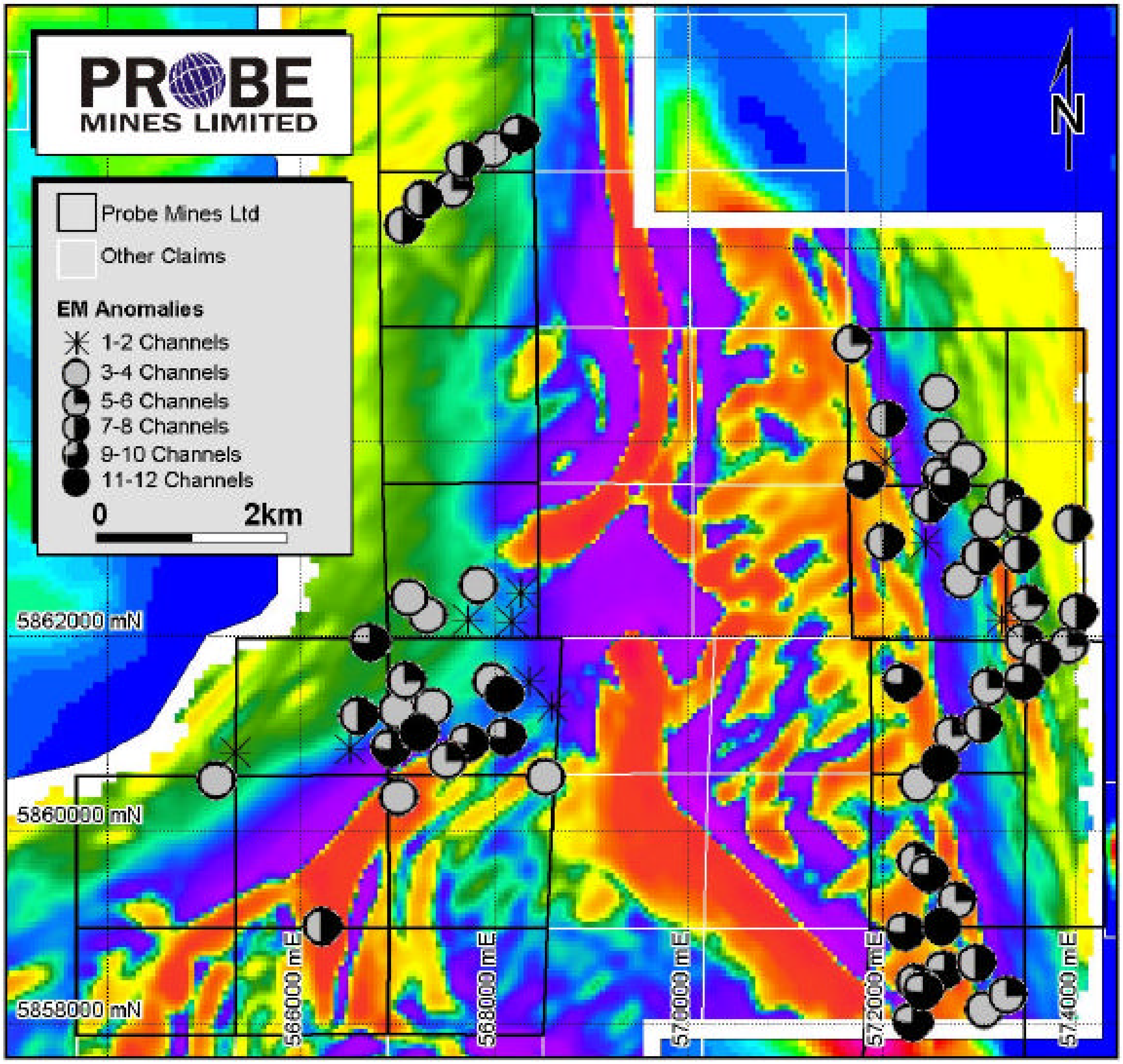


Figure 1.5 Flightlines for airborne EM-magnetic survey, McFauld's Lake Project



Figur 1.6 AEM conductors, McFauld's Lake Project

were chosen by Aulak Inc from the airborne data, and seven grids were designed for ground geophysical follow-up surveys.

1.10.2 Ground Electromagnetic Survey

In order to better resolve AEM anomalies, a ground geophysical program consisting of seven grids was established over selected AEM targets, and time-domain electromagnetic (TDEM) loop and magnetic surveys were carried out in March of 2004 (Fig 1.7). Discovery I'tnl Geophysics of Springdale, Newfoundland carried out the program.

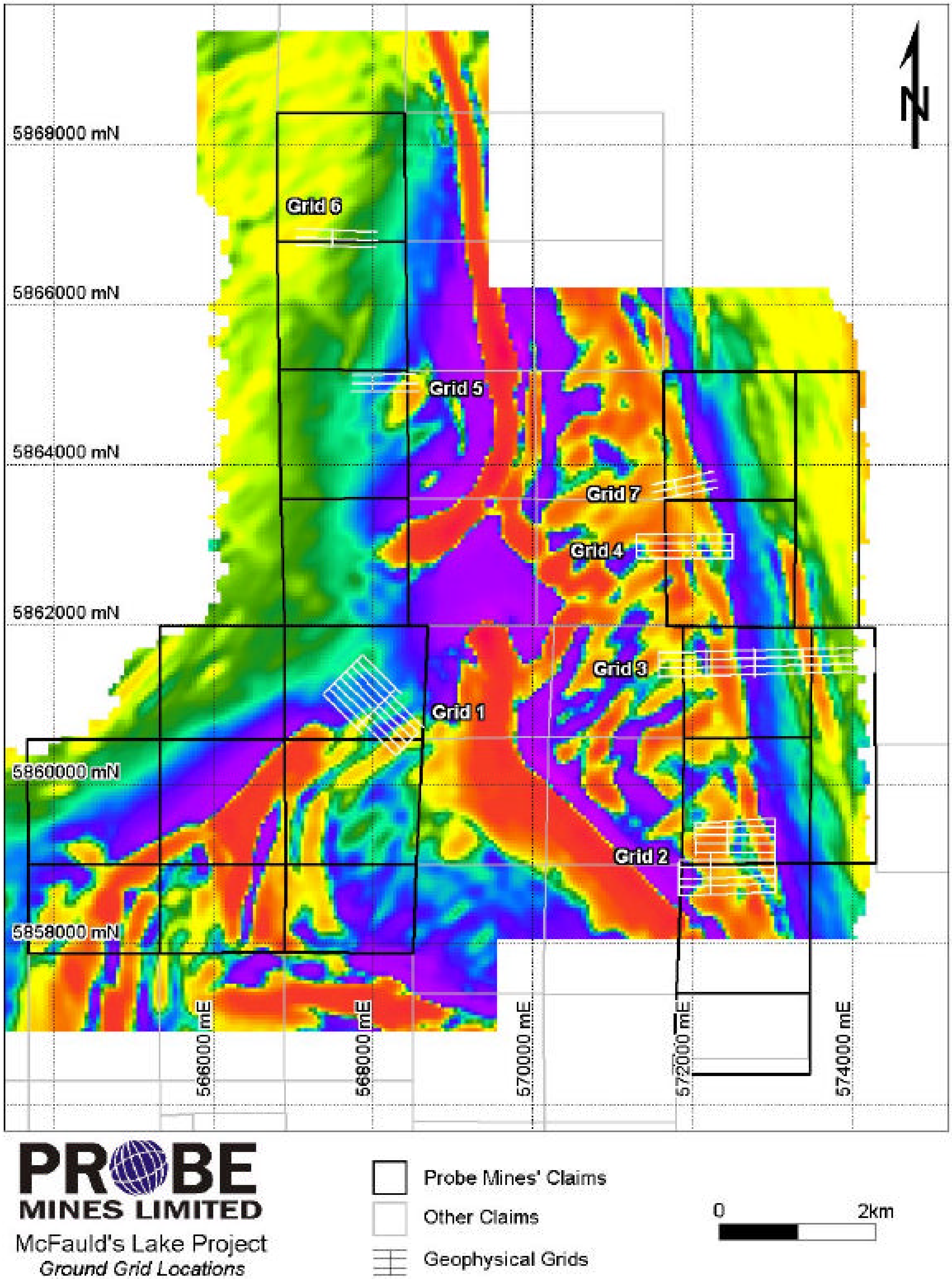


Figure 1.7 Location of ground TDEM-magnetic grids, McFauld's Lake Project

Survey Specifications

Electromagnetic readings were accomplished using time domain loop surveys employing a GEONICS EM-37 Transmitter and GEONICS Digital PROTEM Transient Electromagnetic Receiver (Appendix II). Grids were established using 100m-spaced lines, with readings taken on 25m intervals for EM and 12.5m for magnetics. Loop sizes were 500m by 500m for larger grids (1-4), and 400m loops for smaller grids (5-7).

Conductivity, measured in siemens, for each conductor was rated on a relative scale where conductors with the highest conductivity were designated "strong" conductors, and anomalies of lower conductance were rated as "moderate" to "weak".

Survey Results

The ground surveys successful identified the AEM anomalies and provided a much higher resolution image of the bedrock anomalies. A total of 20 multi-channel bedrock conductors were identified, with only two occurring as point anomalies. The remaining 20 conductors occur as discrete anomalies occurring over at least two, and up to ten, lines (the greatest width possible on these specific grids), most coincident with positive magnetic anomalies (Fig. 1.8). The anomalies are referenced by Grid, as follows:

(a) <u>Grid 1</u>

Grid 1 represented the largest AEM anomaly, occurring as an isolated and complex lobe of electromagnetic conductors, with a strike length of approximately 1.2km and width of 0.45km. A grid consisting of eight lines up to 1.2km long and oriented NW-SE paired with a 500mx500m loop identified a series of four parallel northeast-striking moderate to weak conductors dipping to the northwest (Fig. 1.8a).

(b) <u>Grid 2</u>

Given its size, Grid 2 was arranged as a double loop array consisting of two 500mx500m loops. Both in-loop and off loop conductors were identified, and comprise some of the strongest responses of the survey. Three north-trending strong to moderate conductors were identified, which dip steeply to the east (Fig 1.8b). Conductors range in length from 400m to 900m, the latter representing the full extent of the grid. All three anomalies are coincident with high magnetic values, with the eastern anomaly slightly offset from a discrete positive magnetic lobe. The two western conductors are spatially associated with more subtle magnetic highs parallel to a strongly magnetic layer.

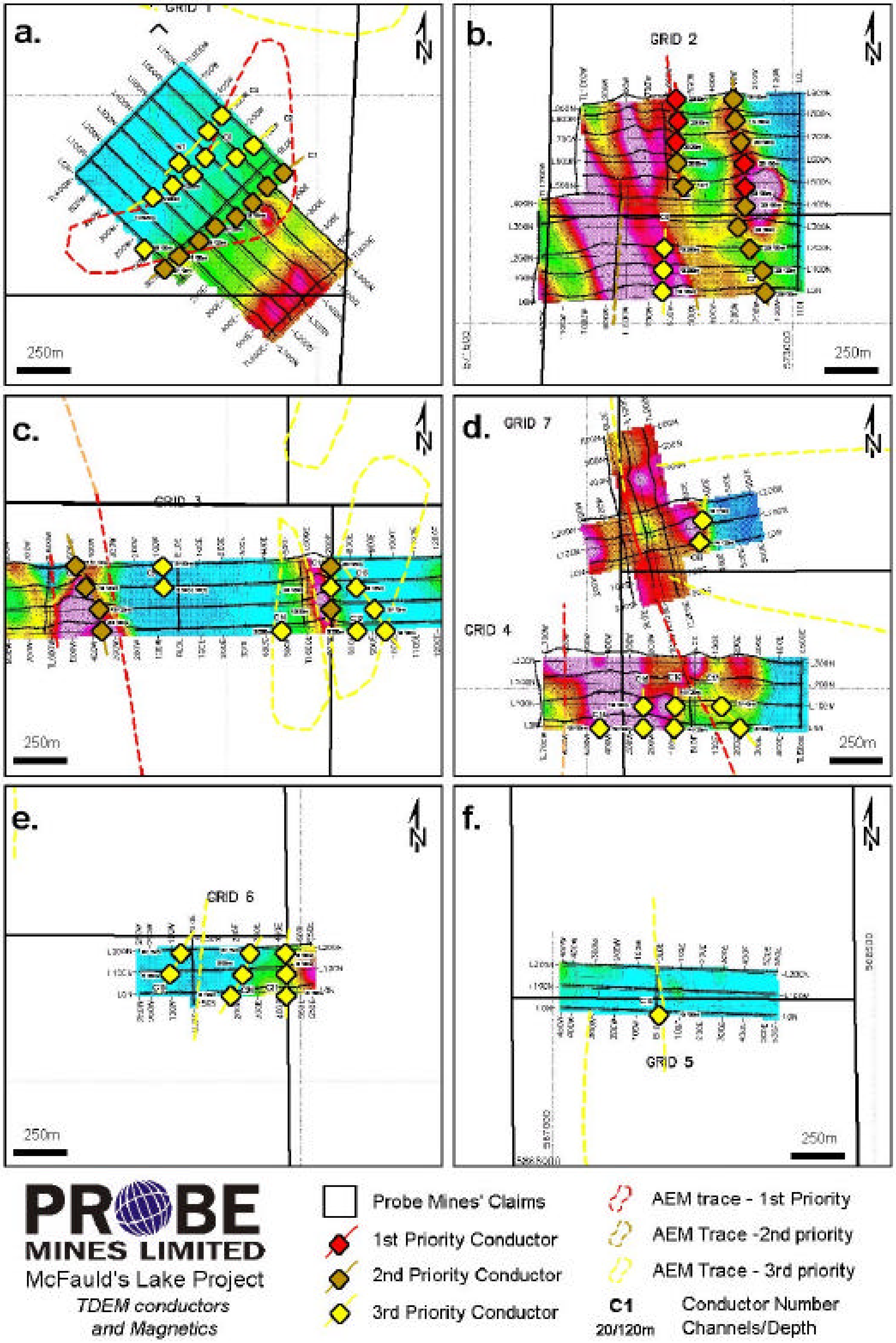


Figure 1.8 TDEM and magnetic data for ground grids: a) Grid 1; b) Grid 2; c) Grid 3; d) Grids 4 (south) and 7 (north); e) Grid 6; and f) Grid 5

Grid 3

Grid 3 was designed to test two separate conductive zones described by the airborne data, consisting of a north-trending anomaly to the west and a zone of increased conductivity to the east, similar to readings expected for altered bedrock. A 300m wide by 2.7km long grid, utilizing two loops (500mx500m), was established to test the area. Six unique conductors were indicated by the TDEM survey, ranging from point anomalies (2) to 300m long moderate to weak strength conductors, with most displaying a north south strike. The two zones identified by the airborne EM survey are better resolved by the data, with both occurring over positive magnetic anomalies, and representing the strongest conductivity (Fig 1.8c). To the east of the easternmost AEM anomaly, a northwest trending anomaly with a strike length of at least 200m is described by the data. This offset anomaly is not associated with a positive magnetic feature and, in contrast, sits in an area of lower magnetic susceptibility.

Grid 4

A number of conductors were identified on Grid 4, and comprise a series of north-trending weak anomalies, read on two lines, to the west and a northwest-trending weak anomaly to the east (Fig. 1.8d). A single, point anomaly is found on Line 0N to the west of the multiple-line conductors. The EM signature of Grid 4 is very similar to that obtained on Grid 3, with both grids displaying eastern offset anomalies from the regional trend. As with Grid 3, the northwest-trending anomaly is conspicuously present within a region of lower magnetic susceptibility.

Grid 5

Geophysical results for Grid 5 were disappointing, with only a single, point anomaly described by the data. The anomaly occurs in an area of low magnetic character, with no easily discernible features (Fig 1.8e).

Grid 6

Grid 6 contains an interesting series of three south-trending conductors, which appear on all lines. The anomalies are categorized as weak, but show strong consistency, emanating from an isolated magnetic anomaly to the east (Fig. 1.8f).

Grid 7

Grid 7 contains a single weak anomaly, read over two lines, coincident with a conspicuous lobe of magnetically high material. As with most conductors in the eastern claims, the anomaly trends north south and dips steeply to the east (1.8g).

2. Diamond Drilling

In July of 2004 a preliminary diamond drilling program was initiated to test selected ground geophysical targets identified from the TDEM survey. The program consisted of five diamond drill holes (DDH) ranging between 160 and 207m in length for a total of 936m (Fig. 2.1; Table 2.1). Vision Exploration Services of Timmins, Ontario was contracted for the diamond drilling program.

Table 2.1 Drill hole data for McFauld's Lake Project

DDH#	Easting	Northing	Elevation	Azimuth	Dip	Depth
MCF04-01	568,148	5,861,085	250m	135°	50°	203m
MCF04-02	572,525	5,859,350	250m	270°	55°	183m
MCF04-03	572,869	5,859,144	250m	270°	54°	207m
MCF04-04	572,361	5,861,366	250m	90°	60°	160m
MCF04-05	573,400	5,861,487	250m	90°	55°	183m
					Total	**936m**

2.1 Drilling Results

The diamond drilling at McFauld's lake was a technical success as four of the five conductors were explained sufficiently. Only one conductor was not identified in bedrock, however, this anomaly may represent a surface conductor caused by thick clay deposits identified during drilling of MCF04-01. Overburden anomalies such as this are not uncommon in this area.

Based on models of known mineralization (Franklin, 2003), sulphide horizons are interpreted to reach the Archean-Paleozoic interface, which rarely exceeds 50m depth. The drill program of Probe Mines was designed to intersect conductive bodies at 100m depth from surface. The 50m buffer was considered sufficient to allow for variations in bedrock topography.

2.1.1 Geology

DDH-MCF04-01

The first drill hole of the program was collared on Grid 1 to test a large TDEM anomaly and encountered only massive varieties of late granite and diorites (Fig 2.2). The granitic unit consists of a grey to light green massive, equigranular rock comprised of medium- to coarse-grained quartz (30%), potassium feldspar (40%) and plagioclase (15%) with up to 15% hornblende and minor biotite. In local sections the granite is weakly epidotized. Underlying the granite is a massive section of diorite comprised of up to 30% coarse,

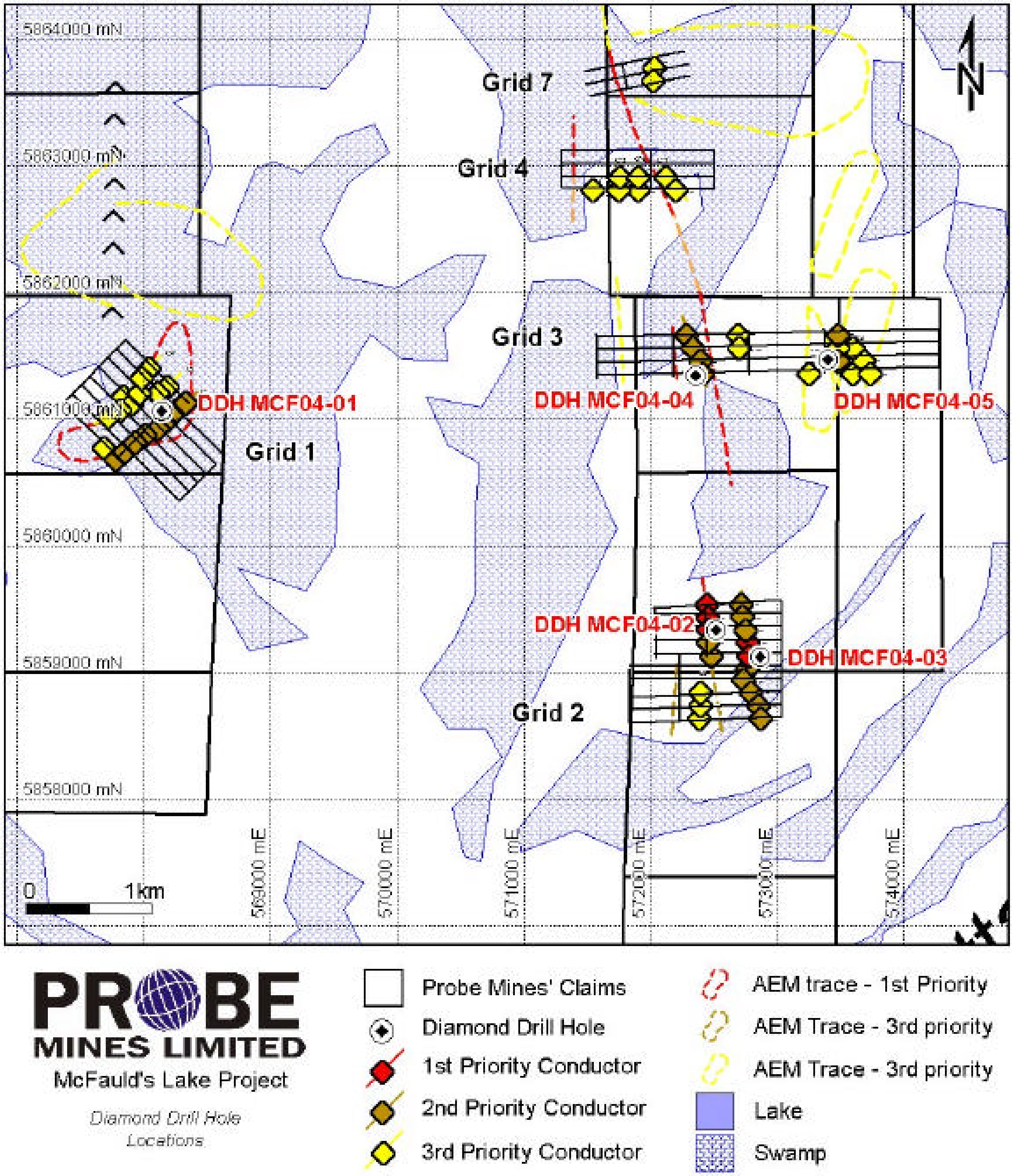


Figure 2.1 Diamond drill hole locations, McFauld's Lake Project

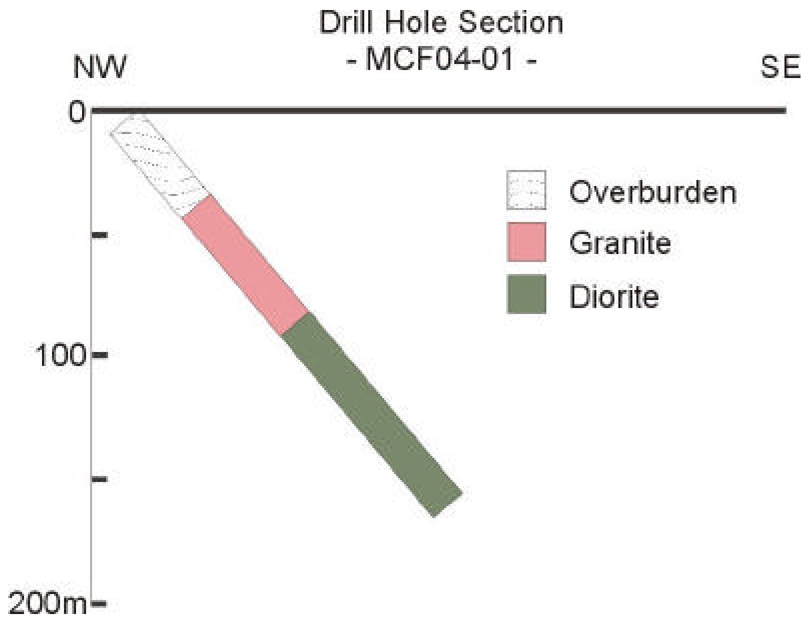


Figure 2.2 DDH MCF04-01, NW-SE section

anhedral to subhedral amphibole within a matrix of white to pale pink feldspar. Locally this unit contains 0.5m sections of up to 90% amphibole, which probably represent volatile-rich sections of the original melt. The diorite shows a downhole gradation to more amphibole-rich (40-50%) varieties with up to 10% biotite. Crystal morphology changes as well with both amphibole and feldspar showing more subhedral crystals, and locally feldspar occurs as a phenocryst phase.

The hole is virtually unmineralized, with less than 1% sulphide throughout. Quartz veining is common, however they are typically barren with little to no alteration. The rocks are non-magnetic. Core angles are difficult to assess in the massive sections, however, S1 foliations average 40° throughout the section.

DDH-MCF04-02

Diamond drill hole MCF04-02 was designed to test a long sinuous TDEM anomaly on Grid 2 and was successful in intersecting felsic to intermediate volcanics containing some base metal sulphide mineralization (Fig 2.3). The hole was collared in a thick (100m) section of dark grey intermediate volcanic containing local sections of hornblende porphyroblasts typically aligned parallel to the S1 foliation. This intermediate volcanic shows a sharp contact with inter-layered felsic volcanic, medium- to coarse-grained fragmental and fine-grained tuffaceous horizons, which continue to the end of the hole (183m depth). Within the felsic volcanics is a one meter section of massive to semi-massive sulphides comprised of predominantly pyrite-pyrrhotite with lesser amounts of sphalerite and trace chalcopyrite. A 2m-thick, fine-grained, chlorite-altered felsic tuff layer within the coarse fragmentals hosts the mineralized horizon. Within the drill section core angles average approximately 35°.

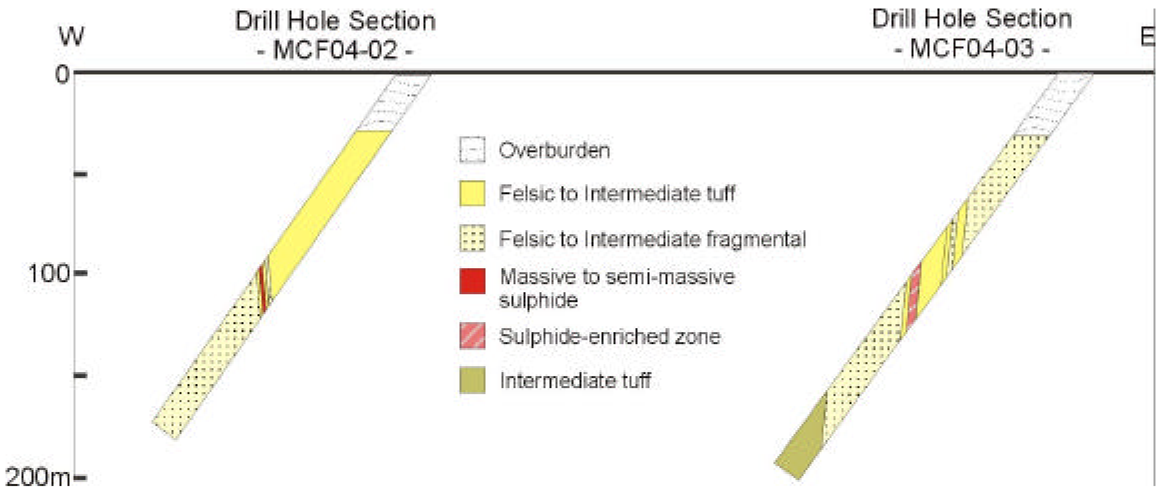


Figure 2.3 DDHs MCF04-02, MCF04-03, E-W sections

DDH-MCF04-03

Diamond drill hole MCF04-03 was collared approximately 300m southeast of MCF04-02 and intersected a similar sequence of volcanics (2.3). The hole was collared in a thick (188m) sequence of inter-layered felsic volcanic fragmental units, lapilli tuff and fine-grained tuffaceous horizons, which were followed by 19m of felsic to intermediate volcanics to the end of the hole. Within the felsic horizon a 9 m thick sulphide zone is present containing up to 30% pyrite and pyrrhotite, with minor sphalerite and trace chalcopyrite, associated with strongly chloritized and sericitized volcanic tuffs and lapilli tuffs. In addition, the felsic horizon contains a 5m-thick layer of green, chloritized volcanic containing up to 10% garnet porphyroblasts and magnetite tetrahedral. This unit, which is very distinct, was intersected approximately 20m higher than the sulphide-bearing volcanics. In hole 3 core angles, taken from bedding planes and S1 foliations, average between 30 and 35°.

DDH-MCF04-04

Diamond drill hole MCF04-04 is the westernmost hole of two on Grid 3, and is located approximately 2.3km north of hole MCF04-03 (Fig. 2.4). Hole 4 is the only hole drilled in this program to intersect Paleozoic limestones, which were thought to underlie the entire area of Probe's claims (OGS REF). Lithologies encountered are similar to those in MCF04-03, comprising a section of interlayerd felsic fragmentals, lapilli tuffs and tuffs and intermediate to felsic lapilli tuffs and tuffs. Differentiation between felsic and felsic to intermediate tuffs is subjective, and is based on local chlorite content and, more rarely, the presence of amphibole. Within the drill section is a 33m wide felsic unit comprising interbedded lapilli tuffs and ash tuffs containing an 18m unit of sulphidized and chlorite-sericite altered volcanics. Sulphides in this section approach 30% locally, and consist of predominantly pyrrhotite and pyrite with trace sphalerite and rare chalcopyrite. A change in the azimuth of DDH 4 from previous holes has resulted in core angles averaging 70°.

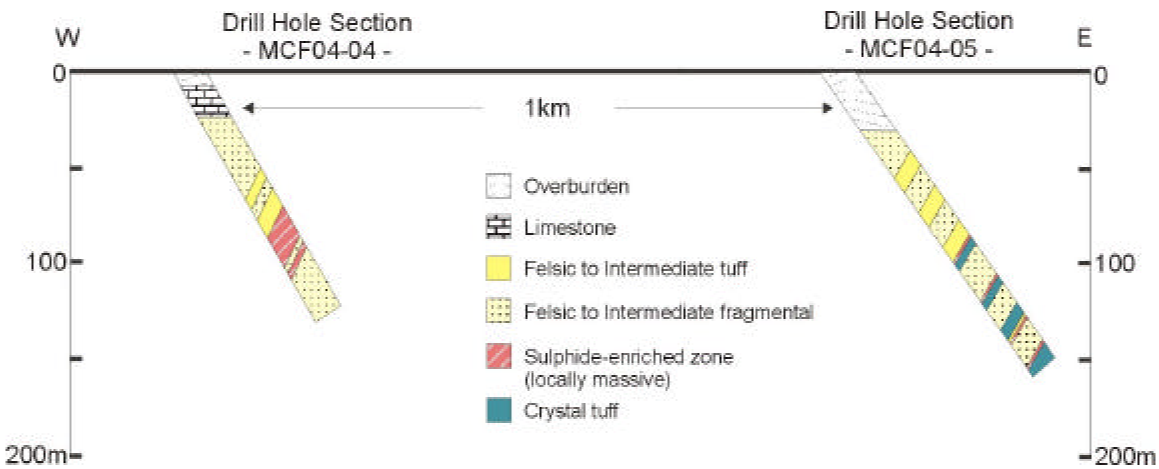


Figure 2.4 DDHs MCF04-04 and MCF04-05, E-W sections

DDH-MCF04-05

Volcanic rocks in the easternmost section of Grid 3 fall typically in the more intermediate range of compositions and consist of interbedded dark green, chlorite-rich, tuffs, lapilli tuffs and crystal tuffs (Fig. 2.4). Sulphide mineralization is common within the section and comprises up to 10% disseminated pyrrhotite, typically aligned parallel to S0/S1, and locally semi-massive to massive pyrite-pyrrhotite with minor sphalerite and trace chalcopyrite. These sulphide sections are typically restricted in width, rarely attaining more than 0.5m in thickness, and almost always occur at the contact between lapilli tuffs or tuffs and crystal tuffs. In one case, the contact is marked by a 0.5m thick aphanitic siliceous unit, which resembles chert, immediately overlying 0.5m of massive to semi-massive pyrite-pyrrhotite. As with DDH-04, core angles are much better than the initial three holes, averaging 65°.

2.2.2 Geochemistry

Sampling Methodology

In order to quantify base-metal abundances in sulphide-bearing horizons, selected sections were sampled for assay throughout diamond drill holes MCF04-02 to MCF04-05. Samples of drill core were split in two, by saw, with half sent for assay and the other kept as a reference and check sample in the event that duplicate assays are required. The criteria used to select sample sites were based primarily on sulphide content, however, lithological relationships were also taken into account. As a general rule, only those samples with sulphide concentrations greater than 5% were taken, however, some exceptions did occur when the geological setting looked favourable for potential gold mineralization. In most cases horizons containing abundant sulphide were sampled in their entirety, although in extremely thick sections of monotonous mineralization only selected intervals were sampled as representative of the entire section. The remainder of these sections will be sampled at a later date if warranted. Sample size was determined by the overall width of a selected section with lithology and mineralization being used to discriminate individual samples of interest. Generally samples of 0.9m were taken in longer sections of similarly mineralized rocks, however, sample size was reduced to as low as 0.3m in areas of particular interest or where lithology and mineralization was distinct.

All 86 core samples (Table 2.2) were sent to SGS Mineral Services in Toronto for analysis of Cu, Pb, Zn, Au and Ag concentrations. All samples were prepared by crushing of the entire sample and milling a 200g split in Cr steel. The base metals Cu, Pb, and Zn were analysed using sodium peroxide fusion/ICP-OES, all with 100ppm detection limits. Gold was analysed using fire assay with an atomic absorption (AA) finish while silver used an aqua regia digestion followed by AA. Detection limits were 0.005ppm and 0.01ppm, respectively, for Au and Ag.

Sample Security

While in the field, drill core was stored on site on designated core storage racks. Following sample selection, boxed intervals were sealed and shipped to a locked warehouse in Nakina, Ontario and then transported by Probe Mines to Toronto, where samples were stored and prepared (saw) in a gated and locked storage facility. Samples were then delivered by a Probe employee to the SGS laboratories receiving department, at which point the samples entered into the labs chain of custody. To the author's knowledge at no point was there a breach in the security or integrity of the samples between the time of collection to their submittal to the lab, at which point the samples entered into the protocol of SGS mineral services chain of custody.

Geochemical Results

Results for drill core samples ranged from highly anomalous maximum values of 1300, 400 and 8600ppm for Cu, Pb and Zn, respectively, to below detection (100ppm). Maxima for silver and gold are 3.4g/t and 747ppb, respectively. When geochemically anomalous intervals are encountered, results typically show a positive correlation between the base metals and silver, and to a lesser degree gold.

Table 2.2 Geochemical results for McFauld's Lake diamond drill core

Sample	DDH#	width (true)	Au (ppb)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)
315076	MCF04-02	0.4	---	---	---	100	---
315077	MCF04-02	0.3	---	---	---	---	---
315078	MCF04-02	0.5	---	---	---	100	---
315079	MCF04-02	0.5	---	---	---	300	---
315080	MCF04-02	0.8	---	---	---	200	---
315081	MCF04-02	0.3	6	---	---	100	---
315082	MCF04-02	0.5	217	---	---	100	---
315083	MCF04-02	0.4	7	---	---	100	---
315084	MCF04-02	0.4	10	---	---	---	---
315085	MCF04-02	0.6	8	---	---	100	---
315086	MCF04-02	0.6	8	---	---	---	---
315087	MCF04-02	0.4	---	---	---	---	---
315088	MCF04-02	0.7	---	---	---	---	---
315089	MCF04-02	0.6	6	---	---	100	---
315090	MCF04-02	0.5	---	---	---	100	---
315091	MCF04-02	0.6	22	---	---	100	---
315092	MCF04-02	0.5	6	---	---	200	0.3
315093	MCF04-02	0.5	20	1300	300	8600	3.4
315094	MCF04-02	0.5	11	200	---	1100	1
315095	MCF04-02	0.4	146	---	---	---	---
315096	MCF04-03	0.6	6	---	---	100	---
315097	MCF04-03	0.5	20	200	---	300	0.5
315098	MCF04-03	0.2	26	---	---	---	---
315099	MCF04-03	0.4	---	---	---	---	---
315100	MCF04-03	0.1	---	100	---	200	---
415210	MCF04-03	0.1	---	---	---	100	---
415211	MCF04-03	0.1	14	---	---	100	---
415212	MCF04-03	0.4	10	---	---	---	---
415213	MCF04-05	0.5	6	---	---	600	---
415214	MCF04-05	0.5	52	200	---	500	1
415215	MCF04-05	1.0	---	---	---	100	---
415216	MCF04-03	0.6	12	100	---	400	0.6
415217	MCF04-03	0.6	17	---	---	300	0.3
415218	MCF04-03	0.6	16	---	---	400	0.4
415219	MCF04-03	0.5	16	100	100	600	0.8
415220	MCF04-03	0.4	20	---	---	400	0.4
415221	MCF04-03	0.4	16	100	100	800	1
415222	MCF04-03	0.3	16	---	---	400	0.3
415223	MCF04-03	0.4	17	200	---	500	0.5
415224	MCF04-03	0.4	19	---	---	400	---
415225	MCF04-03	0.8	16	200	---	500	0.5
415226	MCF04-03	0.6	17	---	---	300	---
415227	MCF04-03	0.2	26	300	---	400	0.4
415228	MCF04-03	0.5	67	1000	400	2700	3
415229	MCF04-03	0.6	15	---	---	600	---
415230	MCF04-03	0.6	11	---	---	100	---
415231	MCF04-03	0.6	8	---	---	200	---
415232	MCF04-03	0.6	15	---	---	300	---
415233	MCF04-03	0.8	8	---	---	100	---
415234	MCF04-04	0.8	17	---	---	300	---
415235	MCF04-04	0.3	21	---	---	200	0.3

Sample	DDH#	width (true)	Au (ppb)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)
415236	MCF04-04	0.8	---	---	---	100	---
415237	MCF04-04	0.4	14	100	---	300	0.4
415238	MCF04-04	0.8	20	---	---	200	---
415239	MCF04-04	0.5	13	---	---	300	---
415240	MCF04-04	1.0	21	100	---	400	0.3
415241	MCF04-04	1.0	12	---	100	500	---
415242	MCF04-04	1.1	---	---	---	---	---
415243	MCF04-04	0.8	14	---	---	300	---
415244	MCF04-04	0.8	14	---	---	400	---
415245	MCF04-04	0.8	20	100	---	600	0.6
415246	MCF04-04	0.8	---	---	---	200	---
415247	MCF04-04	1.1	17	---	---	200	---
415248	MCF04-04	0.7	17	---	---	300	---
415249	MCF04-04	0.5	13	100	---	100	0.4
415250	MCF04-04	0.8	18	---	---	100	---
415251	MCF04-04	0.8	8	---	---	100	---
415252	MCF04-04	0.8	8	---	---	100	---
415253	MCF04-04	0.8	6	---	---	200	---
415254	MCF04-04	0.8	6	---	---	200	---
415255	MCF04-04	0.8	6	---	---	100	---
415256	MCF04-04	0.8	11	---	---	200	---
415257	MCF04-05	0.5	9	---	---	200	---
415258	MCF04-05	0.8	9	---	---	100	---
415259	MCF04-05	0.5	42	100	---	200	0.6
415260	MCF04-05	0.3	32	---	---	300	0.3
415261	MCF04-05	0.5	12	---	---	100	---
415262	MCF04-05	0.5	19	---	---	100	---
415263	MCF04-05	0.7	5	---	---	100	---
415264	MCF04-05	0.3	7	---	---	100	---
415265	MCF04-05	0.5	27	300	300	1900	2.1
415266	MCF04-05	0.5	28	500	100	6700	1
415267	MCF04-05	0.4	12	---	---	200	---
415268	MCF04-05	1.1	7	---	---	100	---
415269	MCF04-05	0.3	13	---	---	100	0.3
415270	MCF04-05	0.3	747	---	---	100	---

--- concentration below detection

All four drill holes within the volcanic package returned highly anomalous base and precious metal concentrations associated with rocks containing sulphide mineral enrichment. Hole MCF04-02 contained the highest grade interval, with one 0.5m section of massive sulphide containing over 10,000ppm combined Cu-Pb-Zn and 3.4g/t Ag. To the east, a 0.5 m section of semi-massive sulphide in felsic tuffs from hole MCF04-03 graded 4100ppm combined Cu-Pb-Zn with 3g/t Ag. Although intersecting a substantial thickness of mineralized volcanic, hole MCF04-04 returned the lowest anomaly with 700ppm combined Cu-Pb-Zn and only 0.6g/t Ag. Unexpectedly, hole MCF04-05, the more intermediate section of volcanics, to the east of hole MCF04-04 produced the second largest geochemical anomaly, with 7300ppm combined Cu-Pb-Zn and 1g/t Ag over 0.5m. The highest concentrations of gold were contained in altered sections of volcanic, most notably in holes 2 and 5, over narrow widths.

3. Data Verification

3.1 Site Visit

In order to verify some of the physical data presented in this report a site-visit was made, by the author, to the McFauld's Lake Project on September 15, 2004. At the time the author viewed diamond drill core at Probe's camp facilities.

3.2 Data

The author has taken factual information from a number of Ontario Government publications that are assumed to be accurate and complete. In the author's experience, published documents of the Ontario Geological Survey have been through numerous reviews from supervisory and/or editorial committees, and represent reliable facts and interpretations of data. Information regarding the VMS deposits discovered by Spider Resources was taken from reports and press releases publicly disclosed by the reporting issuer and are taken at "face value". No external checks have been attempted as the data do not unduly influence the recommendations for future exploration activities outlined in this report. Dr. Franklin, the author of the preliminary review of the VMS occurrence, from which most of the geological data of the surrounding area was summarized, is a well-respected professional geoscientist in Ontario and was hired as an independent consultant by Spider Resources.

Geophysical data has been taken from digital archives produced by the Government of Ontario, were purchased from Billiken Management and collected by contractors for Probe Mines. These data show a continuum of coherent readings, and are considered valid measurements by the author. The anomalies represented by these data are therefore considered real and accurate depictions of physical features found at these locations.

All geophysical data obtained from private sources and contractors has gone through a rigorous process of quality control and assurance, and has met the minimum criteria required for interpretation. Aulak Inc., an independent geophysical consultancy company, undertook quality control and quality assurance of the data, as well as interpretation of the results.

SGS Mineral Services of Toronto, a reputable firm who has provided service to the minerals industry for a protracted period of time, performed geochemical analyses. The lab has been visited by Probe Mines prior to submittal of samples, which found the operation to conform to the highest standards of quality. An internal verification process is provided by the lab in the form of duplicate analyses and analysis of standards, the former being used on this project.

4. Discussion

4.1 Magnetics

Airborne and ground magnetic surveys carried out over Probe Mines properties at McFauld's Lake indicate that they lay on the edge of an extensive arcuate belt of volcanic rocks extending approximately 50km to both the north-northwest and west. Within the volcanics are broad bands of magnetically high and low material presumably derived from the layered nature of volcanic terranes. In the case of the McFauld's #3 VMS deposit, magnetic readings delineate the magnetite talc alteration in the host volcanics very well, however, other sulphide deposits discovered in the surrounding area do not show up as well in magnetic surveys. In the western block of Probe's property, the area is distinguished by very low magnetic susceptibility, which diamond drilling has shown to be caused by massive granitic and dioritic intrusives, which underlie the area. To the east the comparatively high magnetic character of the rocks are reflected in the lithological change to felsic and intermediate volcanics.

4.2 Electromagnetics

4.2.1 Airborne Electromagnetics

Numerous airborne electromagnetic (AEM) anomalies are present within the area of the McFauld's Lake Project, ranging from weak surficial (quadrature) responses to strong, multi-channel bedrock conductors. Thick clay deposits in the area tend to complicate the AEM patterns, however, with proper interpretation, these surficial effects can be reduced.

Within the data four distinct groupings of AEM can be discerned, with a single linear array in the northwest of the property, a large cluster in the southwest and two separate north-south-trending linear conductors in the east (Fig. 1.6).

4.2.1 Ground Electromagnetics

In order to further resolve the airborne electromagnetic data, seven separate ground grids were established over selected targets within the four groups of AEM anomalies and time-domain EM was carried out. The TDEM data was successful in reproducing the airborne results and does provide additional information regarding orientation and strength of the corresponding AEM targets.

Grid 1

Grid 1 consisted of a number of apparently sheeted conductors displaying a shallow dip to the northwest. Diamond drilling was unable to explain this anomaly and it is considered to represent an overburden conductor caused by the thick clay in the area. Geological evidence further supports this as only granitic and dioritic intrusives were encountered in the target area, and are not likely hosts for conductive bodies.

Grid 2

Three distinct conductors were delineated by ground TDEM surveys on Grid 2 with two, the central and eastern, being tested by diamond drilling. These occur as south-trending, west-dipping linear features of 400m and 900m in length, respectively, with both explained by base metal-bearing sulphide mineralization hosted by felsic volcanic rocks. In comparison, both conductors exhibit similar characteristic in terms of signal strength, being read on all 20 channels and displaying moderately high conductivity, however differ in their spatial associations, with the eastern conductor being of slightly shallower dip and greater depth. This would suggest that the eastern conductor was of greater size, however, drill results contradict this with the central conductor represented by a thicker section of massive sulphide than that of the eastern zone. One explanation may be found in the drilling azimuth, which is in the same direction as the dip of the strata. The greater model depth of the eastern conductor would result in the mineralized horizon being intersected at a shallower depth, and not at the point of strongest geophysical response. This horizon may therefore thicken and/or become more massive with depth.

The result of the drilling confirms two distinct felsic volcanic horizons containing base metal sulphide mineralization, with the potential of increasing size and sulphide content with depth. In addition, geophysical data indicate that these two zones extend both north and south from the diamond drill holes.

Grid 3

Grid 3 is represented by two linear, south-trending, west-dipping conductors tested by drill holes MCF04-04 and MCF04-05. In both cases drilling defined thick sections of felsic and felsic to intermediate volcanics, which host base metal-bearing sulphide mineralization. To the west, hole MCF04-04 tested a linear conductor identified on both airborne and TDEM surveys. Mineralization consists of a thick (18m) section of sulphidized, chlorite- and sericite-altered volcanics containing local accumulations of up to 30% pyrite, pyrrhotite and minor sphalerite and chalcopyrite. Although an impressive intersection, base metal concentrations were lower than anomalous values measured in holes 2, 3 and 5. The eastern conductor, tested by drill hole MCF04-05, differed from other conductors in its EM characteristics being bounded on both sides by broad diffuse zones of conductivity similar to those associated with broad alteration haloes. Geological evidence of such alteration haloes was not readily distinguished in core samples, however, the subjective classification of more intermediate composition may in fact be a manifestation of pervasive regional Fe alteration. Without further geochemical evidence this remains unknown. Mineralization also differed in this area, being comprised of thin (<0.5m) sections of disseminated to massive sulphide restricted to contacts between crystal tuffs and fine-grained tuffs.

Grids 4, 5, 6 and 7

Ground EM anomalies on the remaining four grids were not tested during this first phase of diamond drilling, however, many similarities exist between conductors explained on Grids 2 and 3, and those identified on Grids 4 and 7 (Fig. 1.8). Grids 5 and 6, on the western claim block, can not be directly correlated to the other grids and, without geological evidence, little interpretation can be made.

4.3 Economic Potential

Diamond drilling has identified four zones of base metal anomalous sulphide mineralization hosted by felsic fragmental and tuffaceous volcanics. What is not clear are the relationships between the four zones. To the south drill holes MCF04-02 and MCF04-03 tested two distinct geophysical conductors separated by a distance of approximately 300m. Geophysical modeling suggests that the eastern conductor, represented by rocks in MCF04-03, to be deeper than that to the west, and given the westerly dip of the rocks, would signify a separate conductive horizon. Relationships between these horizons and the sulphide mineralization in Hole MCF04-04, 2 km to the north, are not as readily distinguished. However, the mineralization style, a thick (18m) section of lesser concentration, i.e., up to 30% sulphide, would suggest that this horizon may be correlated to the eastern horizon on Grid 2. As well, extrapolation of airborne EM data suggests that the two horizons are part of a long, although possibly discontinuous, horizon. The large (1km) distance between sulphide mineralization identified in Holes 4 and 5 indicate that the latter represents a third distinct sulphide horizon. Grid three is the only one to extend this far to the east and therefore the strike length of this conductor cannot be quantified. The potential strike lengths of the western and eastern sulphide zones, however, can be inferred from diamond drilling, ground TDEM and airborne data. At least one potential horizon has been identified in drilling for approximately 2.3km, between Grids 2 and 3, while ground geophysics has delineated similar conductors on grids spaced over 5km along the projected strike length. In addition, figure 1.6, shows the trace of a long sinuous AEM anomaly that can be followed for almost six kilometers, and roughly corresponds to conductors observed in the widely spaced grid data. These data would suggest that at least one of the conductive volcanic horizons may extend almost the entire length of the 8km property.

The most important indicator of economic potential are the highly anomalous base and precious metal concentrations found in the sulphide mineralized horizons, with the highest values corresponding to increase sulphide content. The nature of the base metal abundances, i.e., positive correlation of Cu, Pb, Zn, Ag and Au, and the geological setting, felsic volcanic fragmental and tuffaceous units, suggest mineralization of the volcanogenic massive sulphide (VMS) variety. This, coupled with the occurrence of larger VMS bodies to the southwest, would suggest a high potential for the presence of similar bodies along one or all of the three sulphide-bearing volcanic horizons within the property boundaries. To date, Probe Mines has only conducted limited ground geophysical surveys in the area of the three horizons, and preliminary drilling has only been sufficient to confirm the presence of the prospective horizons. In addition, little is still known about the strike length and down dip extensions of the mineralization, which may potential increase in thickness, sulphide content and grade in any direction. As well, other bodies of greater economic importance may occur between the measured grids, which represent only a small fraction of the prospective volcanic horizons on the property, which may extend for as much as six kilometers.

The property itself represents a viable target for VMS deposits given the presence of strata representing active periods of volcanism, which allow for the development of sulphide layers as per the general model for the formation of these deposits. The importance of these potential horizons is reinforced by the presence of larger sulphide bodies in the area, as VMS deposits tend to occur in clusters (Sawkins, 1976). The McFauld's Lake Project fulfills a number of criteria for the formation of VMS-type deposits, and the suggestion of a volcanic horizon, with associated EM conductors, on the property indicates its high potential for hosting VMS mineralization.

5. Recommendations

In the author's opinion, the McFauld's Lake Project merits future exploration expenditures owing to the encouraging geological and geophysical indications for the presence of VMS-type deposits within Probe Mines Limited's claims. An advanced program of ground geophysics and diamond drilling is proposed as the second phase of exploration. A high-resolution ground magnetic and electromagnetic survey is recommended, which will allow sufficient data for accurate modeling of size, depth and orientation of the three prospective horizons. A cut grid of 100m spacing and 25m station intervals is indicated for the survey, with magnetic measurements taken at no less than 12.5m spacing and electromagnetic readings at 25m. A total of 75 lines and eight tie lines, totaling approximately 166 line kilometers along a north-trending baseline of 7.5 kilometers, are required to provide adequate coverage of the anomalies (Fig. 5.1). An horizontal loop electromagnetic (HLEM) survey such as MaxMin II, will be sufficient to read the AEM anomalies.

Information obtained from the geophysical survey will be used to evaluate conductors, with drill targets being selected from the priority anomalies. A program of no less than 10 holes, at an average depth of 200m is proposed initially to test EM anomalies identified on the grids. Further exploration can be planned based on the results of this program.

5.1 Phase I Budget

The following table presents estimated costs for the recommended Phase I exploration program:

Table 5.1 Estimated costs for Phase II exploration program

Item	**Quantity/Unit Cost**	**Expenditure**
Survey Grid	166 km @ $440/km	$73,040
Magnetic survey	166 km @ $100/km	$16,600
EM Survey (HLEM)	166 km @ $250/km	$41,500
Drilling	2000m @ $60/m	$120,000
Geologist (logging)	45 days @ $400/day	$18,000
Transportation (air)	Helicopter/fixed wing	$300,000
Camp	45 days @ $350/day	$15,750
Miscellaneous costs		$10,000
Subtotal		*$594,890*
Contingency	~15%	$90,110
Total		**$685,000**

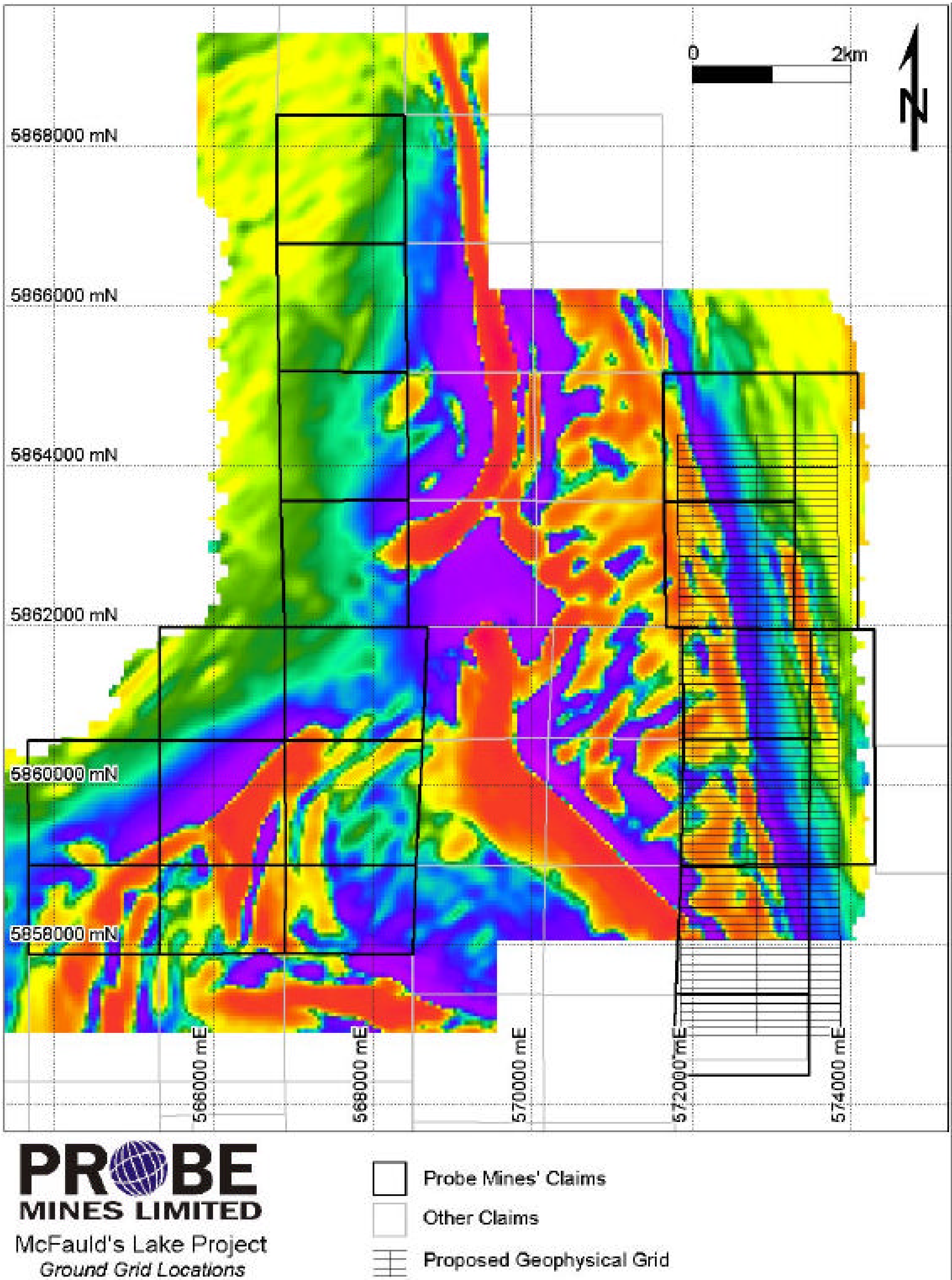


Figure 5.1 Location of proposed ground geophysical grid, McFauld's Lake Project

6. Conclusions

Geological and geophysical data obtained for the McFauld's Lake Project indicates a strong potential for hosting polymetallic sulphide mineralization of the type typically associated with submarine volcanic environments, i.e., VMS-type, and the property merits further exploration expenditures. A number of conclusions can be drawn from the data, and these are:

1) The property is underlain by felsic and felsic to intermediate fragmental and tuffaceous volcanic units of the Sachigo Greenstone Belt;

2) The property contains numerous airborne electromagnetic anomalies of bedrock origin;

3) Ground geophysical survey confirmed the presence of bedrock conductors, and provided additional information regarding size, strength and orientation of the bodies

4) The properties occur in an area of recent VMS discoveries and suggests the possibility for additional deposits, as VMS deposits tend to form in clusters, e.g., Noranda and Bathurst camps;

5) Diamond drilling, comprising five holes, on the eastern claim block of probe mines has identified three distinct felsic volcanic layers, which contain sulphide mineralization with highly anomalous base metal (Cu-Pb-Zn) and precious metal (Au-Ag) concentrations;

6) The prospective horizons identified are open along strike and down-dip from the sulphide drill intersections;

7) The McFauld's Lake Project contains viable VMS exploration targets and requires additional evaluation in the form of field testing through geophysical and geological surveys. A program of electromagnetic and magnetic surveys, followed by diamond drilling is proposed. The cost of this second phase of exploration is $685,000.

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8. Certification and Date

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I, *Howard Lahti,* do hereby certify that:

1. I am a consulting geologist, and reside at 1158 Woodstock Road, Fredericton NewBrunswick, E3B 7S1

2. I graduated with a Bachelor of Science degree from the University of New Brunswick in 1968; a Master of Science degree from the University of New Brunswick in 1971 and a Doctor of Philosophy degree from the University of New Brunswick in 1978.

3. I am a member, in good standing, of the Association of Professional Engineers and Geoscientists of New Brunswick (Member Number 5594).

4. I have worked as a geologist for a total of 37 years since my graduation from university.

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

6. I am responsible for the preparation of all sections of the technical report titled McFauld's Lake Project, James Bay Lowlands, Ontario, Technical Report 2004 and dated *October 30, 2004* relating to the McFauld's Lake Project. I visited the McFauld's Lake Project on September 15, 2004.

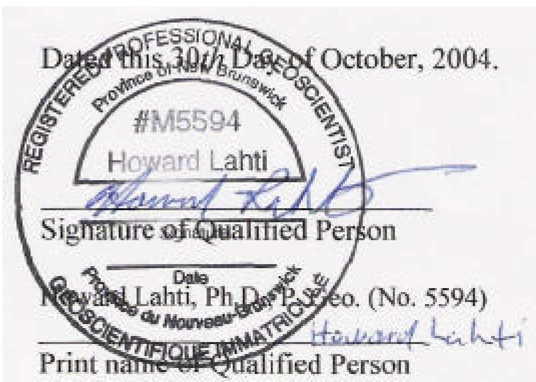
7. I have not had prior involvement with the property that is the subject of the Technical Report.

8. I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission to disclose which makes the Technical Report misleading.

9. I am independent of the issuer, applying all of the tests in section 1.5 of National Instrument 43-101.

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

11. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.


Dated this 30*th* Day of October, 2004.

Signature of Qualified Person

Howard Lahti, Ph.D., P.Geo. (No. 5594)

Print name of Qualified Person