52011SW9400 2.15280 STOUGHTON LAKE

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McVICAR LAKE PROPERTY

(1446)

2.15280

REPORT OF FIELD ACTIVITIES

McVicar Lake Area
Patricia Minig Division

NTS 52 O/11 and 52 O/12

by

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October 30, 1993

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SUMMARY

The McVicar Lake Property comprises 379 contiguous mining claims (490 claim units) located in Northwestern Ontario, NTS 52 O/11 and O/12. The property is an aggregate of approximately 7,840 hectares.

During the period June 1 to August 10, 1993, geological mapping and sampling were completed over several areas in a attempt to better understand and locate new as well as known but poorly defined auriferous zones.

Geologically, the area is underlain by Archean basaltic flows with minor intermediate flows, iron formation and gabbro correlated with the Confederation Assemblage. These lithologies are intruded by a late tonalitic intrusive unit also of Archean age. Late regional deformation, probably during the Kenoran orogenic event, created deformation zones including the regional-scale Bear Head Fault Zone. All lithologies have been metamorphosed to greenschist facies.

The highlight of the summers program was the discovery of a series of trenches from the 1950's in the area south of Lower McVicar Lake. These trenches expose a narrow (average 20 cm), continuous, smoky grey quartz vein (Chellow Vein) which grades up to 16.86 oz/T (578 g/t) Au. The average value from 34 channel samples taken along the vein was 0.84 oz/T (28.8 g/t) Au. Many similarities exist between the Chellow Vein and the Golden Patricia deposit located 30 km to the southeast.

An area of strong shearing, apple green mica (AGM), and quartz veining was exposed at the west end of Lower McVicar Lake. A channel sample from a 10 cm quartz vein returned 8.9 g/t Au. This area possesses many of the characteristics of the original discovery area at the east end of McVicar Lake known as the Altered Zone.

The tonalitic sill at Sor Lake (Sor Lake Sill) is highly anomalous with respect to gold over a area of approximately 100-300 metres wide by 2 km long. Unfortunately the disseminated and discontinuous nature of the mineralization as well as the tenor make this area difficult and expensive to work and evaluate.

The western extension of the Altered Zone was difficult to evaluate due to heavy overburden cover. No anomalous assays were returned although the magnetic image indicates the existence of a structure in the area.

The Belore/Fairservice trench north of Lang Lake failed to generate any anomalous gold values from a series of channel samples.

Note: Soon after the work described in this report was completed, a twelve hole diamond drill program was conducted to test many of the targets mentioned here. Therefore, a further evaluation of the areas of interest based on the drilling results is included.

CONCLUSIONS AND RECOMMENDATIONS

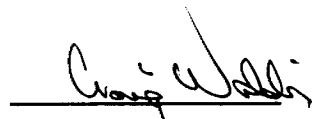
1. The Chellow Vein represents a significant zone of mineralization which appears very similar in character to the Golden Patricia deposit to the southeast. This 20 cm vein, with an average grade of 0.86 oz/T (28.8 g/t) Au, returned the highest gold values ever recorded by BHP on the McVicar Lake property in nine years of work. Unfortunately, follow-up diamond drilling failed to obtain similar values at depth even though the vein was intersected in each hole. The lack of mineralization was likely due to the nugget effect commonly encountered in quartz vein hosted deposits. Even so, further exploration is recommended involving a series of larger bulk samples to better assess the true grade of the vein material.

2. Strong alteration and quartz veining at the AGM zone demonstrated the existence of a large zone of alteration trending through the middle of Lower McVicar Lake. Although surface samples up to 8.9 g/t Au were obtained, follow-up drilling, which encountered impressive widths of alteration and quartz veining, failed to intersect significantly anomalous gold values. Further work along strike is warranted.

3. The Sor Lake Sill, which returned anomalous values over a broad area, appears to lack the focusing mechanism necessary to make this area more attractive. The possible exception is the western Sor trench which contains several large quartz veins. Several drill holes under this zone will assess this portion of the sill.

4. It is recommended the at least one drill hole be targeted on the western extension of the Altered Zone. Based on airborne magnetic images, this feature is known to be directly linked to the main Altered Zone as well as mineralized quartz veins within the Shonia Lake tonalite. A minimum of one drill hole is required to assess the potential of this structure.

5. No further work is recommended for the Belore/Fairservice trench.



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REPORT OF FIELD ACTIVITIES
McVICAR LAKE, ONTARIO (1446)

GENERAL INFORMATION

1.1 Introduction

This report addresses the exploration field efforts of BHP MINERALS CANADA LTD. (BHP) during the period of June 1 to August 10, 1993. A crew of six persons was employed to perform detailed mapping, sampling and prospecting along 100 metre spaced grid lines. A portion of the area worked this year was mapped in 1992 but in less detail and with less emphasis on a zone known as the "Sor Lake Sill". The Lower McVicar/Semia Lake area, was also mapped in 1992 along 400 metre grid lines. The McVicar Lake property is located within the Patricia Mining Division in Northwestern Ontario (NTS 52 O/11 and O/12). The property comprises 379 contiguous mining claim units (7,840 hectares). A list of claims receiving work (this report) is available in Appendix IV.

1.2 Location and Access

This property is located approximately 80 kilometres (km) west of Pickle Lake, Ontario, Figure 1.2a. Access to the property is limited to charter aircraft or helicopter since there are no roads into the region. Charter services were provided by Goldbelt Air Transport Inc. based in Pickle Lake. A proposed winter road from the Golden Patricia mine to the Cat Lake Reserve would pass within 8 kilometres of the McVicar property.

1.3 Topography and Vegetation

The topography is generally flat lying except in an area immediately south of Lower McVicar Lake where relief is up to 10-20 metres due to outcrop cliffs and sand ridges. The entire map area is moderately covered by glacial debris including sandy hills, eskers and till plains. Outcrops cover approximately 10-15% except in areas northwest of Lower McVicar Lake and the eastern portion of the McVicar grid where there is virtually no outcrop exposure.

Vegetation dominantly comprises spruce and muskeg in low lying areas with poplar, birch and pine on sandy ridges. Several areas of blow-down were encountered south of Lower McVicar Lake.

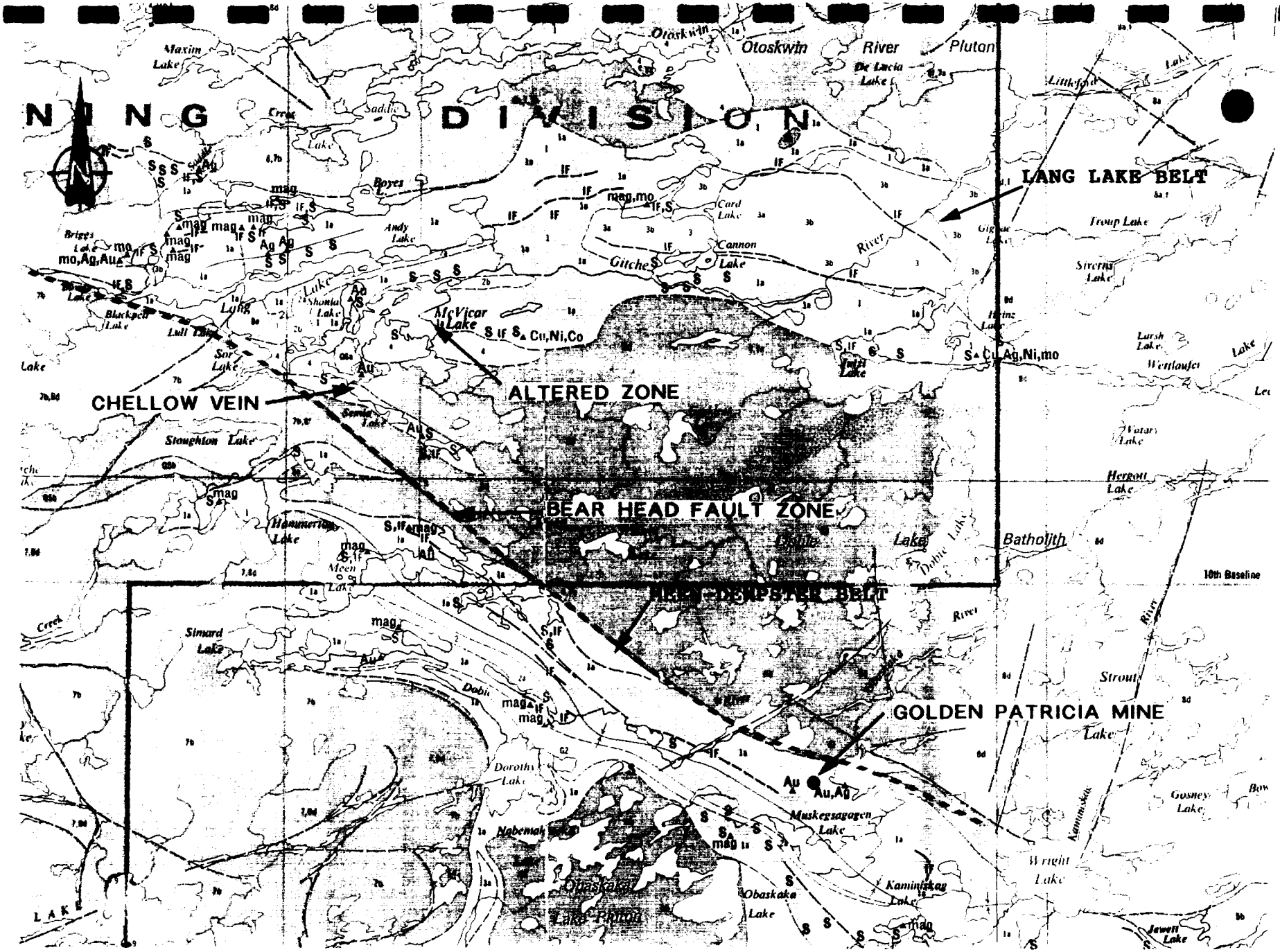


Figure 1.2a.
LOCATION MAP
(from Sage and Breaks, 1982)

Scale 1:253,440 or 1 Inch to 4 Miles

Miles

Kilometres

1.4 Previous Work By BHP MINERALS CANADA LTD.

Previous to June 1993, BHP completed several phases of mapping and diamond drilling with an approximate aggregate footage of 31,155 feet (9496 m) in 85 drill holes. The drilling was complimented by geological, geophysical and geochemical surveys. These explorations have continued since 1985.

The bulk of diamond drilling has tested the extensions of subcropping auriferous mineralization contained within a southeast plunging, intensely sheared and altered dilation zone called the Altered Zone (AZ). This zone, trending along a basalt-gabbro contact, reported up to 0.96 oz/T gold over 6.1 feet (ML-87-27) *(Thomas, 1988)*. A second northwest plunging dilation, the North Flexure (NF), was also extensively drilled. This extension of the AZ reported 0.239 oz/T gold over 6.6 feet (ML-91-54) *(Bonner, 1991a)*. To the west, and along the same structure which hosts the AZ and NF, a third zone was drilled consisting of quartz vein mineralization at the margin of the Shonia Lake tonalitic intrusive. This zone reported 1.65 oz/T gold over 2.0 feet (ML-92-83) *(Bonner, 1992b)*.

Following the work described in this report, a total of 12 holes were drilled to test various targets. See drilling report (Waldie, 1993) for further information with regards to this work.

1.5 Current Exploration Objectives

The objectives of the 1993 field mapping program were to:

1) Map and sample in detail the area comprising Lower McVicar, Semia and Dougie Lakes including the Chellow Gold Mines trenches;
2) More accurately map and sample the area of the Sor Lake Sill tonalite;
3) Determine the nature of the western extension of the Altered Zone Structure in the area west of Shonia Lake;
4) Resample the Belore Mines/Fairservice trench north of Lang Lake;
5) Prospect the tonalites between Shonia and Lower McVicar Lakes.

This work is designed to define specific areas for diamond drill follow-up in the fall of 1993.

GEOLOGY

2.1 Regional Geology

The Lang Lake Greenstone Belt, approximately 40x10 km wide, lies within the Uchi Subprovince of the Superior Structural Province (Figure 1.2a). This relatively small belt is believed to have been tectonically detached from the Meen-Dempster Belt, lying to the south (*Sage and Breaks, 1982*).

The lithologic package includes various units of mafic through to felsic metavolcanics and metapyroclastics. Clastic and chemical metasediments are also present. Late gabbroic intrusives have been subsequently intruded by tonalitic bodies along the southern margin of the belt. All of the rock have undergone metamorphism and while the prefix "meta" is implied it has been omitted from the balance of this report.

Structurally, the southern margin of the Lang Belt is in contact with the Bearhead Fault Zone (BHFZ) *(Osmani, 1989)*. This NW-SE trending transcrustal megafault is recognised over a 500 km length from Lake Winnipeg in Manitoba, where it represents a geological subprovince boundary (Berens River-Sachigo), to approximately 60 km to the SE of the McVicar Lake property within the northern margin of the Meen-Dempster Belt where it disappears. Geophysically, it appears on aeromagnetic maps as a narrow zone of magnetic intensity due to shear-induced alteration of hornblende to magnetite, chlorite and epidote. Mineral lineation and long axes of mineral aggregates typically plunge 5-30° deg to the southeast and sense of shear is dextral.

2.2 Golden Patricia Mine

Located 25 km southeast of the McVicar Lake property is the Golden Patricia mine (Figure 1.2a). This deposit contains approximately 0.87 million tonnes of ore grading 19.9 g/t Au (0.58 oz/T Au) hosted almost exclusively within a distinctive 2 cm to 2 m (average 0.6 m) dense grey cherty quartz "vein" that is laterally continuous for at least 5-6 km to depths of 500 m. The "Golden Patricia Zone" strikes northwest (290°) and dips 70° northeast, with oreshoots plunging at 40° southeast. Contacts of the Zone and host rocks are sharp with absence of wallrock fragments included in the Zone. Gold occurs as free micron-sized grains in quartz, inclusions in idioblastic pyrite and coarse grains in microveinlets, with microveinlet-gold predominating. Wallrock alteration is limited to 30-50 cm on both sides of the Zone being characterized by the presence of biotite, chlorite, calcite and muscovite.

The origin of the deposit is not well understood at this time. Mine geologists interpret the Zone to be a structurally controlled quartz vein emplaced along a splay off the Bear Head Fault Zone. Rodd *(1990)* concludes that it represents a metamorphosed, distal exhalative chert unit hosting epigenetic gold in microveinlets formed late in the metamorphic history of the volcanic succession. Structural and geochronological data, along with the form of the Zone, supports Rodd's conclusions. In any event, unlike most Archean lode gold deposits, the Golden Patricia Zone's narrow width (<2 m) and great lateral continuity make this a distinctive, volcanic-hosted stratiform and strata-bound orebody.

Regional aeromagnetic images, processed by BHP, of the area around the Golden Patricia mine show a distinctive, large kilometre-scale sigmoidal pattern developed in the magnetics with the deposit located at the western end of the feature. Greg Stott (personal communication) of the Ontario Geological Survey (OGS) indicated that the rocks around the Golden Patricia mine have experienced abundant block rotation during the emplacement of the Dobie Lake Batholith which would have created dilation zones for fluids to migrate. It is interesting to note that a smaller but similar sigmoidal feature is observed on the McVicar Lake property in the vicinity of several visible gold bearing smoky quartz veins south of Lower McVicar Lake (see Figure 2.2a). Note: red triangles denote Au mineralization.

2.3 Local Geology

The McVicar Lake Property is underlain by Archean supracrustal volcanics correlated with the Confederation Assemblage (2749 +- 5Ma). Massive to pillowed basaltic and andesitic flows are overlain by felsic pyroclastics and sediments. Large cross-cutting gabbroic intrusives are in turn cross-cut by smaller tonalitic bodies. Detailed lithological descriptions are included in Appendix III.

Aside from the BHFZ discussed above, the major structural feature on the McVicar Lake property is a cross-cutting WNW-ESE fault (the Altered Zone Structure). This fault is characterised by intense alteration and deformation of a brittle-ductile nature. The associated alteration features include increased sericite, carbonate, chlorite, and silica (vein quartz and a local pervasive silica flooding). A hydrothermal carbonate (calcium and/or iron) breccia commonly envelops this shallow dipping (<50°) structure. Also of significance is the intrusion of a tonalite sill into the Altered Zone structure at Shonia Lake. This sill is physically linked to a larger stock on the southern grid area. A second separate sill is recognised in the Sor Lake area.

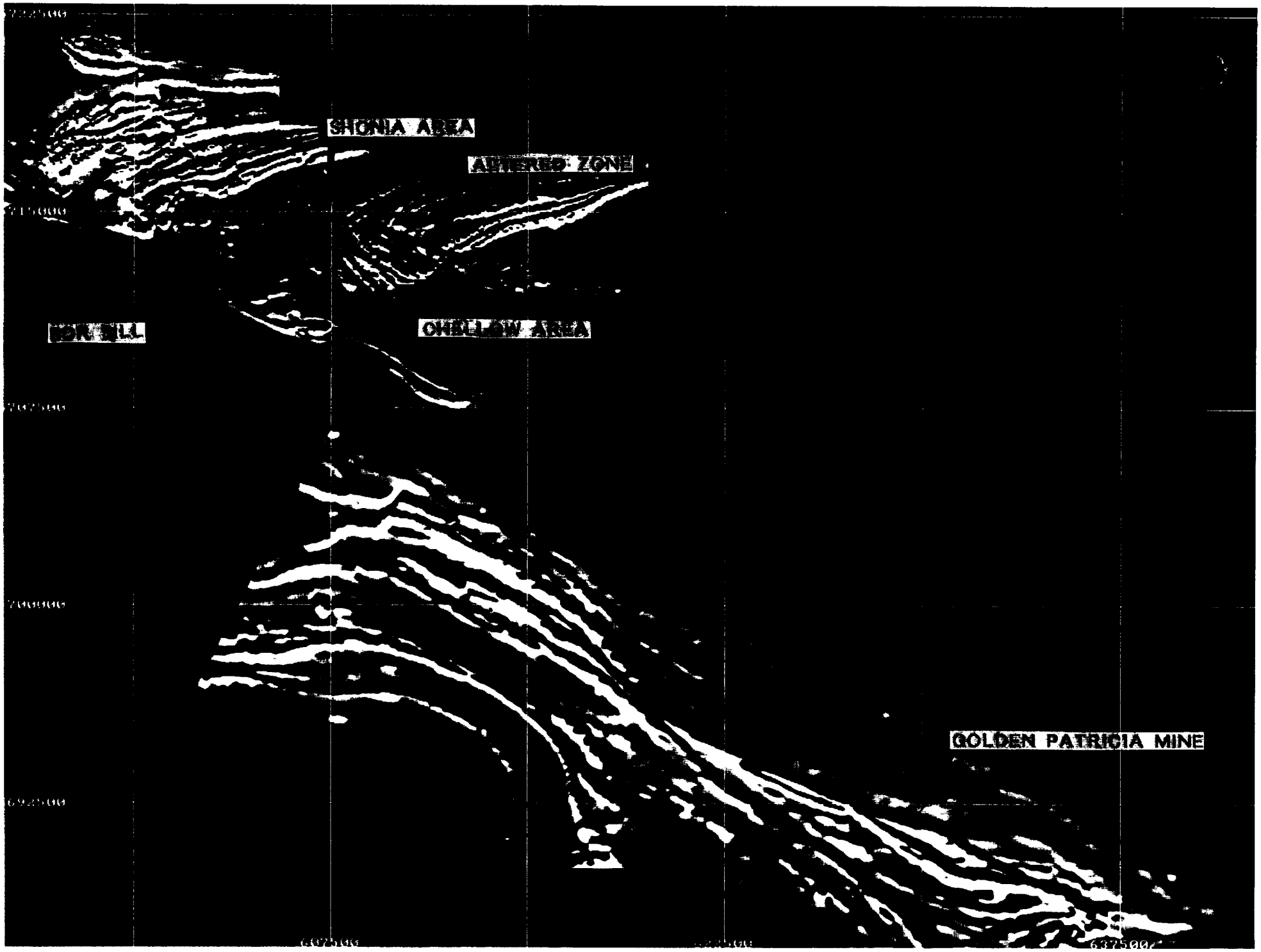


FIGURE 2.2a RESIDUAL MAGNETIC IMAGE (N-S GRADIENT) McVICAR - GOLDEN PATRICIA AREA

The metamorphic grade is greenschist. Weak to intensely developed foliations are known to occur away from the Altered Zone Structure in association with chloritic and sericitic lithologies.

Table 2.3a: **STRATIGRAPHIC COLUMN - McVICAR LAKE PROPERTY**

AGE	GROUP	LITHOLOGY
		Mafic sills
	-------INTRUSIVE-------	
		Tonalite plutons, Granite plutons
	--------INTRUSIVE--------	
		Altered Zone, North Flexure, brecciated basalt,brecciated gabbro, fault gouge
	~~TECTONISM~~~~~~~~	
		Dobie Lake Batholith
	--------INTRUSIVE--------	
ARCHEAN		Gabbro, anorthositic gabbro
	--------INTRUSIVE--------	
	Billett Lake	Greywacke, mudstone, ironstone
	~~UNCONFORMITY~~~~~~~~	
	Confederation Assemblage	Basalt, porphyritic basalt, dacite tuff, dacite tuff-breccia

[Modified after Thomas (1988), Stott and Wallace (1984), Sage and Breaks (1982)]

RESULTS

The following areas were examined in detail: Chellow Trenches, Cliff Zone, AGM Zone, Sor Lake Sill including the Jay Zone and Sor Trenches, the Belore/Fairservice Trench and the Western Extension of the Altered Zone. Other areas investigated include the McVicar Lake Tonalite and the Quartz/Pyrite vein (see Figure 3.0a for locations). These areas were geologically mapped and prospected and where warranted, hydraulic stripping and channel sampling were also completed. Refer to Plan Maps 1, 2 and 3 for the geology of the areas mapped. This report has the benefit of follow-up drilling results *(Waldie, 1993)*, therefore it is possible to further evaluate some of the targets and recommend if further work is warrented.

All anomalous gold (> 100 ppb) assays reported from this field work are tabulated in Table 3.0a (n = 96), a complete report of the analytical results has been included in Appendix I (n = 251).

Table 3.0a: **ANOMALOUS GOLD SAMPLES - McVICAR LAKE 1993**

SAMPLE NUMBER	ROCK TYPE	GRID	LINE	PICKET	GOLD (ppb)	AREA
1001	12	McVicar	45.97E	45.22S	5,300	Sor Sill
1002	12	McVicar	46.00E	45.22S	3,850	Sor Sill
1009	1	Semia	6.65W	0.40N	110	Lower McVicar
1010	8	Semia	7.00W	2.85N	1,100	Lower McVicar- Island
1011	10a	Semia	13.40W	2.50N	2,760	Lower McVicar-Qtz/Py Vn
1012	10a	Semia	13.40W	2.50N	1,250	Lower McVicar-Qtz/Py Vn
1013	10a	Semia	13.40W	2.50N	1,350	Lower McVicar-Qtz/Py Vn
1014	10a	Semia	13.40W	2.50N	1,670	Lower McVicar-Qtz/Py Vn
1017	8	Semia	7.10W	8.25N	100	Lower McVicar-Qtz/Py Vn
1028	10a	Semia	4.00W	3.70S	8,500	Chellow Trench 11
1029	10a	Semia	4.65W	2.97S	18,400	Chellow Trench 11
1031	12	No Grid	McVICAR TONALITE		165	McVicar Tonalite
1032	12	No Grid	McVICAR TONALITE		150	McVicar Tonalite
1033	12	No Grid	McVICAR TONALITE		690	McVicar Tonalite
1034	12	No Grid	McVICAR TONALITE		200	McVicar Tonalite
1035	12	No Grid	McVICAR TONALITE		370	McVicar Tonalite
1036	12	No Grid	McVICAR TONALITE		150	McVicar Tonalite
1038	12	No Grid	McVICAR TONALITE		115	McVicar Tonalite
1074	10a	Semia	21.40W	9.50N	8,880	Lower McVicar- AGM West
1078	10a	Semia	CHELLOW TRENCH 1		578,000	Chellow Trench 1
1079	10a	Semia	CHELLOW TRENCH 1		5,270	Chellow Trench 1
1080	10a	Semia	CHELLOW TRENCH 1		6,000	Chellow Trench 1
1081	10a	Semia	CHELLOW TRENCH 1		9,000	Chellow Trench 1
1082	10a	Semia	CHELLOW TRENCH 1		29,200	Chellow Trench 1
1083	10a	Semia	CHELLOW TRENCH 1		8,170	Chellow Trench 1

SAMPLE NUMBER	ROCK TYPE	GRID	LINE	PICKET	GOLD (ppb)	AREA
1084	10a	Semia	CHELLOW TRENCH	1	6,730	Chellow Trench 1
1085	10a	Semia	CHELLOW TRENCH	1	4,960	Chellow Trench 1
1086	10a	Semia	CHELLOW TRENCH	1	3,370	Chellow Trench 1
1087	10a	Semia	CHELLOW TRENCH	1	5,670	Chellow Trench 1
1088	10a	Semia	CHELLOW TRENCH	1	4,500	Chellow Trench 1
1089	10a	Semia	CHELLOW TRENCH	1	3,000	Chellow Trench 1
1090	10a	Semia	CHELLOW TRENCH	1	533,500	Chellow Trench 1
1091	10a	Semia	CHELLOW TRENCH	1	1,200	Chellow Trench 1
1092	10a	Semia	CHELLOW TRENCH	2	8,100	Chellow Trench 2
1093	10a	Semia	CHELLOW TRENCH	2	1,310	Chellow Trench 2
1094	10a	Semia	CHELLOW TRENCH	2	5,600	Chellow Trench 2
1095	10a	Semia	CHELLOW TRENCH	2	1,580	Chellow Trench 2
1096	10a	Semia	CHELLOW TRENCH	2	412,500	Chellow Trench 2
1097	10a	Semia	CHELLOW TRENCH	3	130	Chellow Trench 3
1098	10a	Semia	CHELLOW TRENCH	3	3,100	Chellow Trench 3
1102	10a	Semia	CHELLOW TRENCH	7	2,050	Chellow Trench 7
1103	10a	Semia	CHELLOW TRENCH	7	350	Chellow Trench 7
1105	10a	Semia	CHELLOW TRENCH	7	150	Chellow Trench 7
1106	10a	Semia	CHELLOW TRENCH	7	210	Chellow Trench 7
1108	4	Semia	CHELLOW TRENCH	11	170	Chellow Trench 11
1109	10a	Semia	CHELLOW TRENCH	11	6,370	Chellow Trench 11
1110	10a	Semia	CHELLOW TRENCH	11	3,180	Chellow Trench 11
1121	10a	No Grid	FLOAT - DOUGIE LK		3,880	Dougie Lake
1125	10a	McVicar	40.50E	46.60S	12,340	Sor Trench
1126	10a	McVicar	40.50E	46.60S	760	Sor Trench
1127	10a	McVicar	40.50E	46.60S	3,060	Sor Trench
2016	12/10a	McVicar	56.00E	46.20S	2,260	Sor Sill - Stripped
2019	13	McVicar	56.00E	46.20S	130	Sor Sill - Stripped
2020	10a	McVicar	56.00E	46.20S	385	Sor Sill - Stripped
2021	12/10a	McVicar	56.00E	46.20S	2,480	Sor Sill - Stripped
2022	12	McVicar	56.00E	46.20S	1,070	Sor Sill - Stripped
2023	12/4	McVicar	52.00E	48.50S	310	Sor Sill
2024	12/4	McVicar	51.00E	46.25S	1,385	Sor Sill
2025	4	McVicar	62.00E	47.50S	285	Sor Sill
2026	12	McVicar	50.10E	46.00S	380	Sor Sill
2027	12	McVicar	48.75E	45.75S	250	Sor Sill
2028	12	McVicar	48.25E	45.75S	125	Sor Sill
2029	12	McVicar	47.25E	46.00S	240	Sor Sill
2032	12	McVicar	47.00E	46.25S	200	Sor Sill
2034	12	McVicar	46.60E	46.00S	440	Sor Sill
2036	10a	McVicar	48.10E	37.60S	170	Sor Sill
2043	12	McVicar	45.50E	46.00S	275	Sor Sill
2045	12	McVicar	45.75E	45.25S	110	Sor Sill
2047	12	McVicar	44.75E	47.15S	235	Sor Sill
2048	12	McVicar	44.70E	46.60S	560	Sor Sill
2055	4	McVicar	54.00E	47.75W	150	McVicar Lake
3032	12	McVicar	40.50E	46.60S	740	Sor Sill
3033	10a	McVicar	40.50E	46.60S	23,300	Sor Sill
3034	12	McVicar	40.10E	46.50S	630	Sor Sill
3035	10a	McVicar	46.25E	39.10S	130	Sor Sill
3036	12	McVicar	46.20E	39.00S	540	Sor Sill
3037	1,1/2	McVicar	40.20E	44.20S	125	Sor Sill
3039	10a	McVicar	40.60E	44.25S	125	Sor Sill
3040	12	McVicar	40.60E	44.25S	375	Sor Sill
3041	10a	McVicar	40.80E	44.25S	535	Sor Sill
3042	10a	McVicar	40.80E	44.25S	495	Sor Sill

SAMPLE NUMBER	ROCK TYPE	GRID	LINE	PICKET	GOLD (ppb)	AREA
3043	12	McVicar	43.05E	46.25S	100	Sor Sill
3047	12	McVicar	39.05E	47.00S	2,010	Sor Sill
3048	12	McVicar	45.20E	39.00S	2,900	Sor Sill
3049	12	McVicar	39.25E	43.60S	600	Sor Sill
3050	12	McVicar	39.20E	45.50S	820	Sor Sill
3051	10a	McVicar	35.75E	44.00S	700	Sor Sill
3052	10a	McVicar	34.50E	44.00S	165	Sor Sill
3056	10a	McVicar	SOR TRENCH		850	Sor Trench
3057	10a	McVicar	SOR TRENCH		240	Sor Trench
3059	10a	McVicar	SOR TRENCH		245	Sor Trench
3060	10a	McVicar	SOR TRENCH		3,780	Sor Trench
3062	10a	McVicar	SOR TRENCH		1,380	Sor Trench
3064	10a	McVicar	39.00E	45.20W	165	Sor Sill
3065	10a	McVicar	39.00E	45.20W	110	Sor Sill
3066	10a	McVicar	SOR TRENCH		2,290	Sor Trench

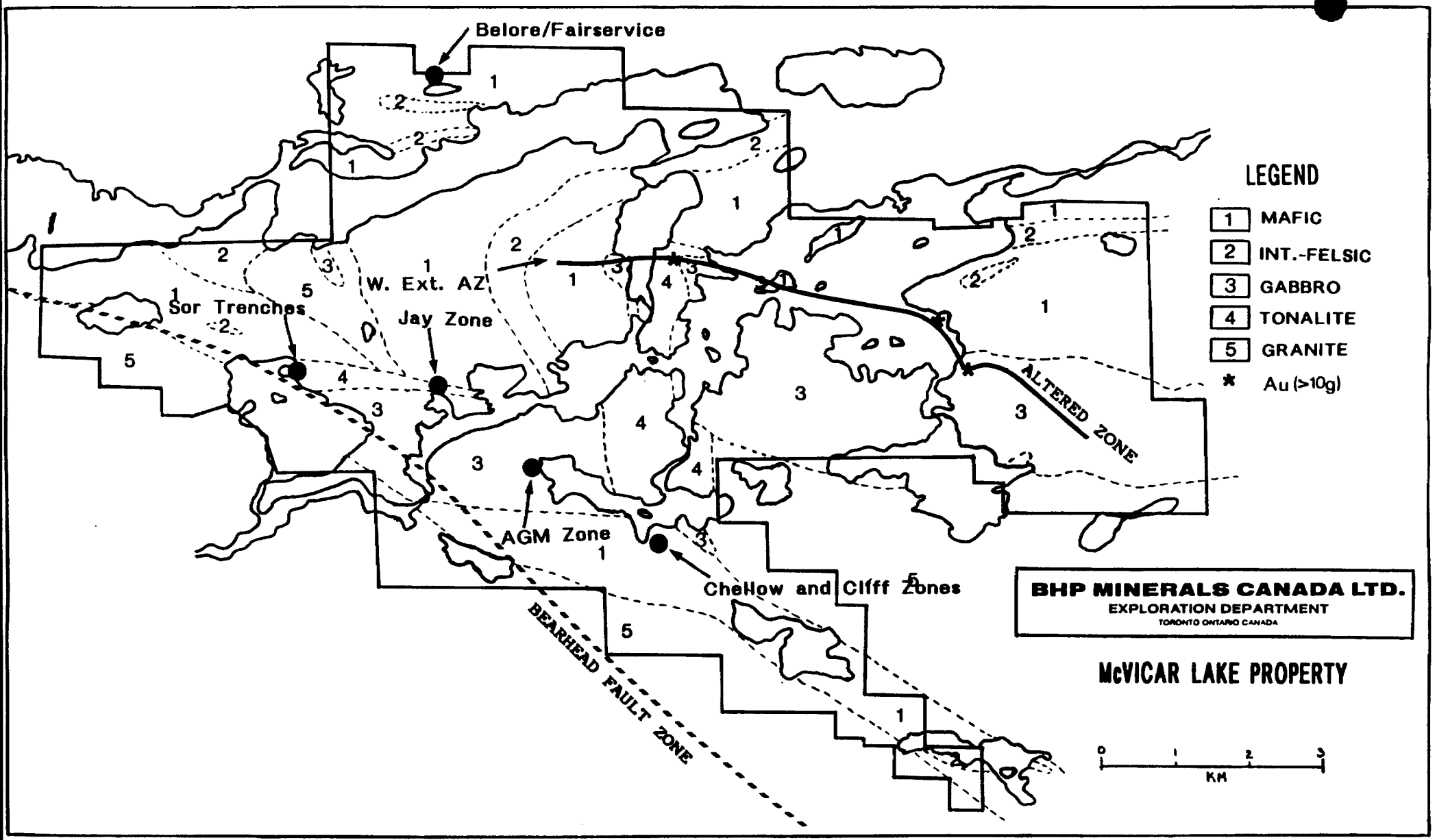


FIGURE 3.0a

AREAS OF INTEREST

Each sample was analysed by Chemex Laboratories Ltd. in Thunder Bay, Ontario, employing a standard fire assay technique (30 gram aliquot - 1 assay ton) with an atomic absorption finish. Results are reported in ppb Au.

3.1 Chellow Vein

The highlight of the summers field work was the discovery of an area containing numerous old trenches which are known collectively as the Chellow Trenches (Plan Map 4a). The largest of these exposes a feature known as the Chellow Vein. Assessment records show a map by M. Watts for Chellow Gold Mines from 1950 with a series of "Au" symbols in the area south of Lower McVicar Lake area. No assay values were provided. A 1959 drill hole by Kenlew Mines intersected the Chellow Vein with visible gold being noted, again with no assay data.

The vein on surface trends at 290/80 and is exposed in several trenches over a strike length of approximately 125 m (Plan Map 4b). The vein is generally smoky grey to white in colour and varies in width from 2-50 cm due to pinching and swelling (see Plates 3.1a to 3.1d). Mineralization is limited to minor pyrite within the vein itself. The host rock is generally barren and appears to be massive to weakly foliated mafic volcanic to gabbro. Numerous samples of visible gold were observed from one portion of the vein. A series of 34 channel samples were cut normal to the vein at approximately 2 metre intervals along the length of the vein exposed in the trenches. The average value of the 34 samples was 0.84 oz/T (28.8 g/t) Au. Three sample (#1078, #1090, #1096) returned assays of 16.86 oz/T (578.1 g/t), 15.56 oz/T (533.5 g/t), and 12.03 oz/T (412.5 g/t) Au respectively. Only five samples of vein material returned values less than 100 ppb Au.

The Chellow Vein was tested with five drill holes *(Waldie, 1993)*each of which intersected the vein. Unfortunately, the average width of 20 cm remained at depth while the tenor of gold mineralization dropped considerably. This was probably due to the general spotty nature of gold in quartz veins.

3.2 Cliff Zone

In 1992, a sample from a 5 cm quartz vein assayed over 2 oz/T (70 g/t) Au *(Sparks, 1992)*. This was one of BHP's original samples from the area now known as the Chellow Trenches area. Resampling of the same trench this year returned values up to 8.5 g/t Au from the same vein. The vein (Plan Map 4a), located approximately 50 metres south of the Chellow Vein, trends at approximately 300/80 and remains very narrow as well as pinching along strike. Shearing is moderately well developed in this occurrence compared to the rest of the Chellow area.

Two drill holes were targeted on this structure *(Waldie, 1993)*. Each hole intersected the zone but failed to return any highly anomalous values.

3.3 Apple Green Mica (AGM) Zone

Prospecting along the west shore of Lower McVicar Lake exposed a zone of sheared anorthositic gabbro with abundant AGM alteration and quartz veining. A detailed geology map



Plate 3.1a Chellow Vein showing banded nature of quartz



Plate 3.1b Close-up of Chellow Vein in Plate 3.1a

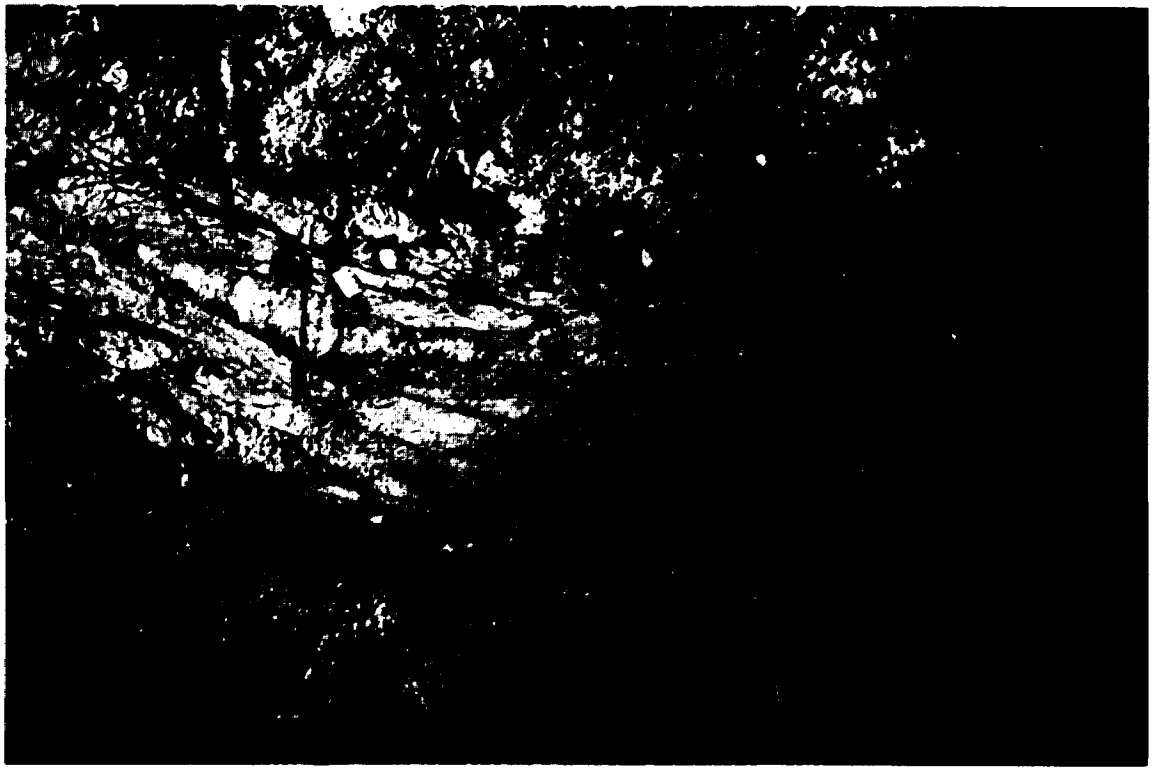


Plate 3.1c Chellow Vein showing pinch and swell nature

Note: Dextral shear sense indicated by vein splays



Plate 3.1d Chellow Vein showing smoky nature of vein

is provided in Fig. 3.3a.

Several zones of AGM alteration, up to 2.5 metres wide, and sheared, contorted quartz veins up to 1.3 metres wide were exposed by stripping over a strike length of approximately 18 metres. Six channel samples tested various lithologies and alterations. The highest assay reported is 60 ppb Au from a zone containing several quartz veins and AGM alteration (sample #1060).

A second stripped zone, 15 metres west of the above mentioned zone, contains similar alteration but with less quartz veining. Two samples were taken, one of which assayed 8.9 g/t Au (sample #1074) from a 10 cm wide quartz vein.

This zone was tested with three short drill holes *(Waldie, 1993)* which intersected some significant quartz veining and AGM alteration. Unfortunately, the gold values were not economic.

3.4 Jay Zone - Sor Lake Sill

While prospecting and mapping within the Sor Lake Sill, a zone of strong sericite altered tonalite with several cm to dm scale quartz veins was discovered. Stripping revealed a zone containing up to 3% pyrite with minor chalcopyrite and weak iron carbonate alteration. A detailed geology map is provided in Fig. 3.4a.

Seven channel samples were taken to assess the quartz veins and altered tonalite exposed in the zone. Three samples returned values greater than 1 g/t Au with the best being 2.5 g/t Au from a sample which cut altered tonalite and a quartz vein (sample #2021).

3.5 Sor Trenches - Sor Lake Sill

Near the base of the peninsula at the northeast corner of Sor Lake are several old trenches which were not filed in the assessment records. Based on the amount of debris and vegetation within them they must be at least 20-30 years old, if not older. Two of the three to four trenches were sampled by BHP and are presented in Figs. 3.5a and 3.5b as the East and West trenches.

Both trenches were cleaned out and stripped off to expose altered tonalite and moderate quartz veining, some of which are smoky and reach a width of 2 metres. Pyrite content reaches 20% in some areas of the tonalite with generally 2-5% pyrite in the quartz.

Nine channel samples were obtained to test various portions of the trenches and stripped zones. Three samples returned values greater than 1 g/t Au, with the best being 3.8 g/t Au from the East trench (sample #3060). The other two samples were from the West trench.

3.6 Belore/Fairservice Trench

A second attempt to obtain anomalous samples from the Belore/Fairservice trench was undertaken, this time with channel samples to collect fresh rock. A value of 14 g/t Au was

reported by the staff geologist for the region in 1990 *(Janes et al., 1990)*. Sampling of the area in 1992 by BHP failed to obtain values greater than 30 ppb Au.

This summer, six channel samples were collected from the same area as the 14 g/t Au sample. The best gold value returned was 10 ppb Au from sheared argillite with 5-10% pyrite and 1-2% chalcopyrite.

One hole was drilled in order to check the down dip character of this zone *(Waldie, 1993)*. Moderately mineralized argillite was intersected but no anomalous values were reported.

3.7 Western Extension of the Altered Zone

In a effort to locate the western extension of the Altered Zone as outlined by a detailed ground magnetics survey *(Diorio, 1993)*, the trace of the magnetic high was walked-out and prospected. Due to the lack of exposure, only four to five outcrops were located in the area of the magnetic anomaly. No evidence of shearing or alteration was encountered. Each of the outcrops were sampled and all returned values less than 5 ppb Au.

3.8 McVicar Lake Tonalite

In order to determine if the tonalitic intrusion south of the Shonia Lake Tonalite is similar in character, as well as auriferous, several days were spent prospecting the area. The outcrops along the north shore are in fact very similar to the altered tonalite observed at Shonia Lake *(Bonner, 1991b)*. Pyrite content in some areas reaches up to 15% with the best value being 690 ppb Au (sample #1033) and the average 100-200 ppb Au. Unfortunately, there is generally a lack of outcrop away from the shorelines. Although the area is interesting, the tenor of mineralization appears low.

3.9 Quartz/Pyrite Vein

Along the south shore of Lower McVicar Lake, west of the creek to Semia Lake, is a 40 cm wide quartz vein with up to 40% pyrite, average 15%, with minor chalcopyrite. The vein was exposed by stripping for a strike length of only a few metres because of heavy till cover. The attitude of the vein is similar to the Chellow Vein but the relationship between the two is unclear. The best assay value returned was 2.8 g/t Au from a sample (#1011) with up to 40% pyrite. The average of four samples of typical vein material was 1.5 g/t Au.

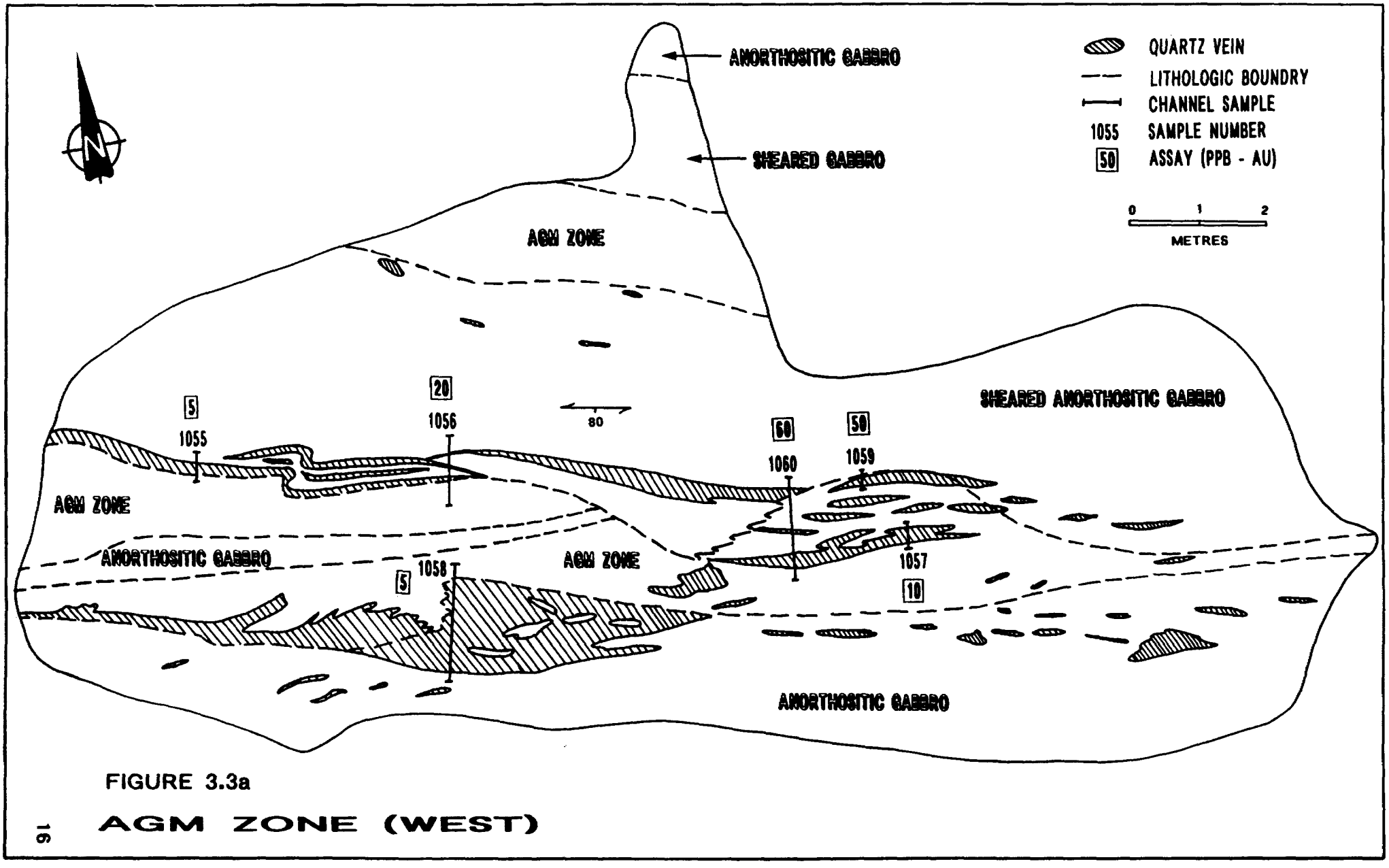
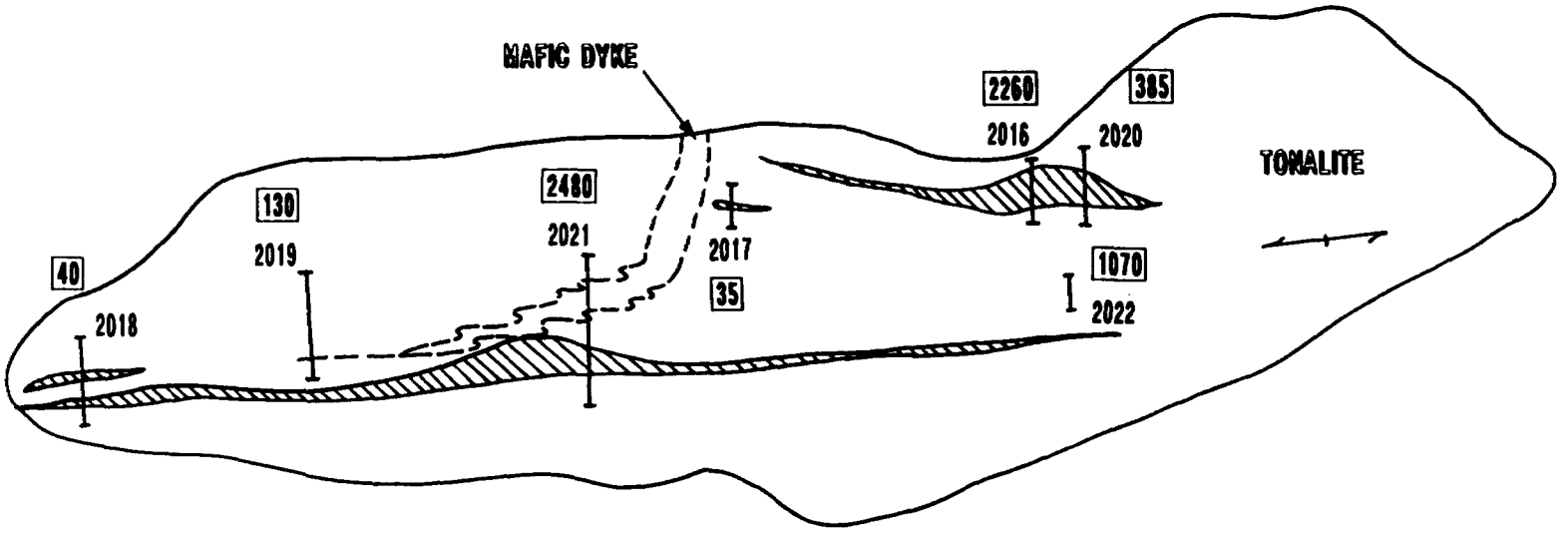


FIGURE 3.3a

AGM ZONE (WEST)

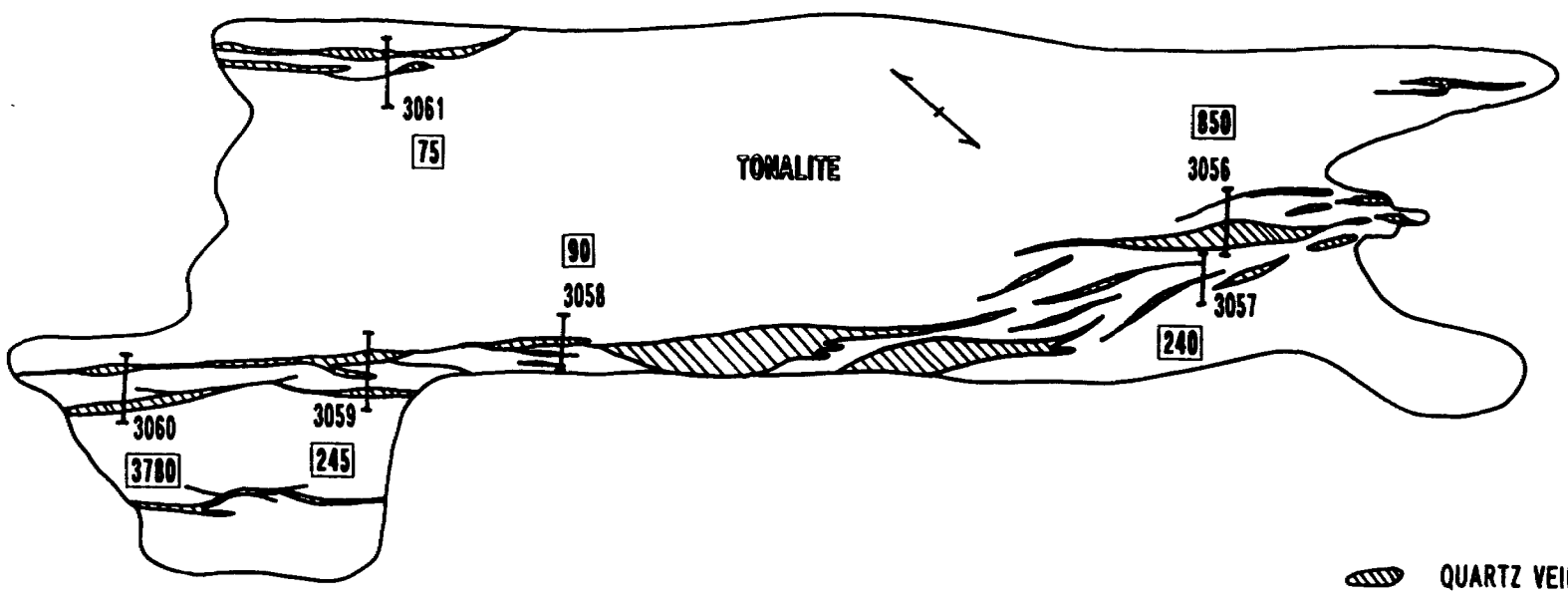


QUARTZ VEIN
LITHOLOGIC BOUNDRY
CHANNEL SAMPLE
2016 SAMPLE NUMBER
1070 ASSAY (PPB - AU)

FIGURE 3.4a

SOR SILL - JAY ZONE

0 1 2
METRES



QUARTZ VEIN
LITHOLOGIC BOUNDRY
CHANNEL SAMPLE
3057 SAMPLE NUMBER
245 ASSAY (PPB - AU)

FIGURE 3.5a

SOR SILL - EAST TRENCH

0 2 4
METRES

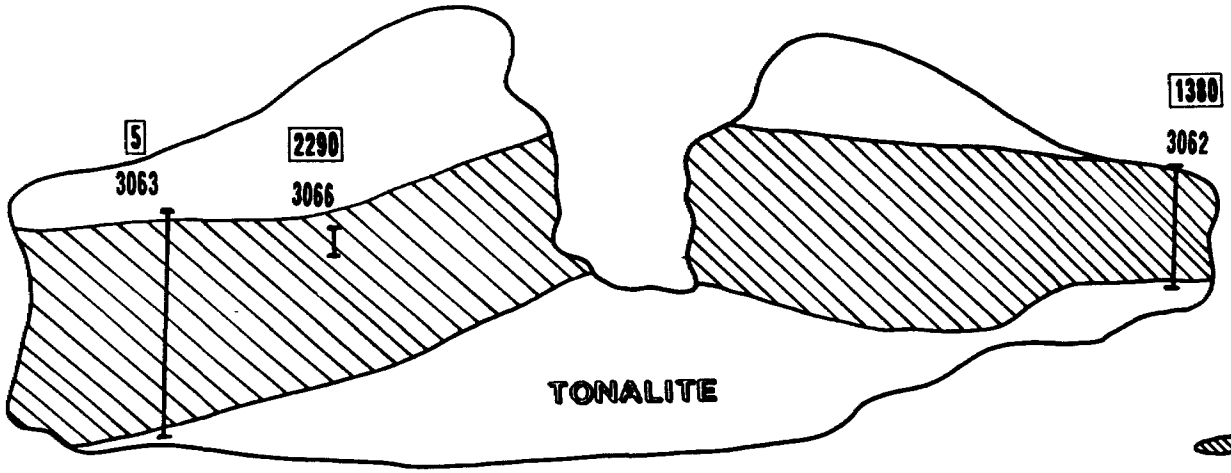


FIGURE 3.5b

SOR SILL - WEST TRENCH

3.10 Humus Geochemistry

The area encompassing the Chellow trenches was selected for a detailed humus survey with a total of 4.9 line kilometres of sampling. Humus was the preferred sample medium based on its ability to concentrate gold and the ease of sampling.

Dried samples were prepared by Chemex Laboratories in Toronto. All samples (n = 202) were analysed for gold utilising a neutron activation technique. Sample locations and results are presented on Plan Map 5. The Report of Analysis is included in Appendix II.

The highest gold value reported was 3 ppb Au, of which there were six. These samples showed very little correlation to the known auriferous zones and failed to highlight any new areas of interest. Humus geochemistry appears to be of limited value in this area as has been demonstrated in other portions of the McVicar property *(Bonner, 1992c)*.

DISCUSSION

Previous exploration by BHP Minerals, extending back to 1985, has successfully extended the Altered Zone Structure from its discovery point on the east shore of McVicar Lake into the Shonia Lake area. To date, the most significant features recognised are the Shonia Lake #1 gold occurrence and the two dilation points; the Altered Zone and the North Flexure. The discovery this year of the Chellow Vein has added another, higher grade, auriferous zone to the list.

Geological mapping, prospecting and sampling in the area of the Sor Lake Sill was successful in locating numerous auriferous outcrops which outline an area of elevated gold values measuring approximately 100 to 300 metres wide by 2 km long. Mineralization is directly proportional to pyrite content within the altered tonalite. The best value returned was 12.3 g/t Au with the average being in the 2 to 3 g/t Au range. Although this area is very interesting and may possibly be of economic interest, the disseminated, discontinuous nature of the mineralization as well as its tenor make this area difficult and expensive to work and evaluate.

The area south of Lower McVicar Lake is considered to be of prime interest and the best prospect for the discovery of an economic deposit. In particular, the Chellow Trenches area, which contains the best values ever recorded on the McVicar property, needs more work to fully explore and evaluate the potential of this portion of the property. The Chellow Vein, although narrow, appears to be quite evenly mineralized along the length sampled, especially along the western portion. The existance of the Cliff Zone to the south indicates the possibility of similar parallel gold-bearing structures in the area. The failure of the follow-up drilling program *(Waldie, 1993)* to intersect significant mineralization should not deter exploration nor prevent further work along this structure. It is recommended that a series of bulk samples be collected to better assess the average grade of the vein material. Analogies between the Chellow Vein and the Golden Patricia deposit to the southeast are striking.

The AGM zone at the west end of Lower McVicar Lake contains impressive widths of alteration and quartz veining as well as values up to 8.9 g/t Au. This zone continues to the east through the middle of the lake and is exposed on an island in the centre of the lake. Although follow-up drilling failed to intersect anomalous gold values, extensive alteration and quartz veining were encountered. Further work along strike is necessary to further evaluate this target.

Due to overburden cover, the western extension of the Altered Zone was difficult to evaluate. The weak but distinct ground magnetic signature *(Diorio, 1993)* indicates the existence of a feature in the area but its character remains unknown at this time. Diamond drilling is the best method of examining this area.

The Belore/Fairservice trench failed to reveal any anomalous values from surface samples or diamond drilling *(Waldie, 1993)* from the area which returned 14 g/t Au in 1990 *(Janes et al., 1990)*.

Humus geochemistry is of limited value on the McVicar Lake property. The samples collected near the Chellow Vein and surrounding area failed to show any increase in gold from background levels. This trend has been seen in most geochemical surveys undertaken on the property in the past. In this case, the sample spacing (25 metres on 100 metre lines) was probably too coarse to pick up the very narrow auriferous vein.

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APPENDIX I

REPORT OF ANALYSIS (ROCK) - McVICAR LAKE 1993

Chemex Labs Ltd.

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P.O. Number :
Account :EEF

CERTIFICATE OF ANALYSIS A9315954

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1446-3012	205	226	< 5	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----			
1446-3013	205	226	< 5	0.4	62	2	540	< 1	< 1	4	< 2	100	-----			

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Total Pages :1
Certificate Date: 30-JUL-93
Invoice No. : I9316769
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CERTIFICATE OF ANALYSIS A9316769

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1446-2018	205	226	40	-----	-----	-----	-----	-----	-----	-----	-----	-----
1446-2019	205	226	130	-----	-----	-----	-----	-----	-----	-----	-----	-----
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900 - 25 ADELAIDE ST. E.
TORONTO, ON
M5C 1Y2

Project : McVICAR - 1446
Comments: ATTN: ROD THOMAS CC: CRAIG WALDIE

Page Number :1
Total Pages :1
Certificate Date: 19-JUL-93
Invoice No. : I9316944
P.O. Number :
Account [redacted]EEF

CERTIFICATE OF ANALYSIS A9316944

SAMPLE	PREP CODE		Au ppb FA+AA	Ag ppm	As ppm	Bi ppm	Cu ppm	Hg ppm	Mo ppm	Pb ppm	Sb ppm	Zn ppm
1446-1038	205	226	115	-----	-----	-----	-----	-----	-----	-----	-----	-----
1446-1039	205	226	35	-----	-----	-----	-----	-----	-----	-----	-----	-----
1446-1040	205	226	< 5	-----	-----	-----	-----	-----	-----	-----	-----	-----
1446-1041	205	226	15	-----	-----	-----	-----	-----	-----	-----	-----	-----
1446-1042	205	226	< 5	-----	-----	-----	-----	-----	-----	-----	-----	-----
1446-1043	205	226	< 5	-----	-----	-----	-----	-----	-----	-----	-----	-----
1446-1044	205	226	80	-----	-----	-----	-----	-----	-----	-----	-----	-----
1446-2023	205	226	310	-----	-----	-----	-----	-----	-----	-----	-----	-----
1446-2024	205	226	1385	-----	-----	-----	-----	-----	-----	-----	-----	-----
1446-2025	205	226	285	11.6	60	< 2	>10000	< 1	< 1	4	< 2	8
1446-3014	205	226	15	0.2	12	< 2	1250	< 1	< 1	12	2	90
1446-3015	205	226	< 5	-----	-----	-----	-----	-----	-----	-----	-----	-----
1446-3016	205	226	< 5	-----	-----	-----	-----	-----	-----	-----	-----	-----
1446-3017	205	226	15	-----	-----	-----	-----	-----	-----	-----	-----	-----
1446-3018	205	226	< 5	-----	-----	-----	-----	-----	-----	-----	-----	-----
1446-3019	205	226	< 5	-----	-----	-----	-----	-----	-----	-----	-----	-----
1446-3020	205	226	< 5	-----	-----	-----	-----	-----	-----	-----	-----	-----
1446-3021	205	226	< 5	-----	-----	-----	-----	-----	-----	-----	-----	-----
1446-3022	205	226	< 5	-----	-----	-----	-----	-----	-----	-----	-----	-----
1446-3023	205	226	< 5	-----	-----	-----	-----	-----	-----	-----	-----	-----

CERTIFICATION: Ian Bichler

Chemex Labs Ltd.

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5175 Timberlea Blvd., Mississauga,
Ontario, Canada L4W 2S3
PHONE: 416-624-2806

To: BHP MINERALS CANADA LTD.

900 - 25 ADELAIDE ST. E.
TORONTO, ON
M5C 1Y2

Project : McVICAR - 1446
Comments: ATTN: ROD THOMAS CC: CRAIG THOMAS

Page Number :1
Total Pages :2
Certificate Date: 24-JUL-93
Invoice No. :19317490
P.O. Number :
Account [redacted]

CERTIFICATE OF ANALYSIS A9317490

SAMPLE	PREP CODE		Au ppb FA+AA	Au oz/T
1446-1045	205	226	30	-----
1446-1046	205	226	5	-----
1446-1047	205	226	< 5	-----
1446-1048	205	226	< 5	-----
1446-1049	205	226	< 5	-----
1446-1050	205	226	95	-----
1446-1051	205	226	< 5	-----
1446-1052	205	226	< 5	-----
1446-1053	205	226	< 5	-----
1446-1054	205	226	< 5	-----
1446-1055	205	226	5	-----
1446-1056	205	226	20	-----
1446-1057	205	226	10	-----
1446-1058	205	226	< 5	-----
1446-1059	205	226	50	-----
1446-1060	205	226	30	-----
1446-1061	205	226	< 5	-----
1446-1062	205	226	< 5	-----
1446-1063	205	226	< 5	-----
1446-1064	205	226	< 5	-----
1446-2026	205	226	380	-----
1446-2027	205	226	250	-----
1446-2028	205	226	125	-----
1446-2029	205	226	240	-----
1446-2030	205	226	< 5	-----
1446-2031	205	226	< 5	-----
1446-2032	205	226	200	-----
1446-2033	205	226	45	-----
1446-2034	205	226	440	-----
1446-2035	205	226	< 5	-----
1446-3024	205	226	< 5	-----
1446-3025	205	226	< 5	-----
1446-3026	205	226	< 5	-----
1446-3027	205	226	< 5	-----
1446-3028	205	226	< 5	-----
1446-3029	205	226	< 5	-----
1446-3030	205	226	30	-----
1446-3031	205	226	< 5	-----
1446-3032	205	226	740	-----
1446-3033	205	226	>10000	0.680

CERTIFICATION: Adriana Alexandru

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Ontario, Canada L4W 2S3
PHONE: 416-624-2806

To: BHP MINERALS CANADA LTD.

900 - 25 ADELAIDE ST. E.
TORONTO, ON
M5C 1Y2

Project : McVICAR - 1446
Comments: ATTN: ROD THOMAS CC: CRAIG THOMAS

Page Number :2
Total Pages :2
Certificate Date: 24-JUL-93
Invoice No. : I9317490
P.O. Number :
Account [redacted]EF

CERTIFICATE OF ANALYSIS A9317490

SAMPLE	PREP CODE		Au ppb FA+AA	Au oz/T
1446-3034	205	226	630	-----
1446-3035	205	226	130	-----
1446-3036	205	226	540	-----
1446-3037	205	226	125	-----
1446-3038	205	226	25	-----
1446-3039	205	226	125	-----
1446-3040	205	226	375	-----
1446-3041	205	226	535	-----
1446-3042	205	226	495	-----

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PHONE: 416-624-2806

To: BHP MINERALS CANADA LTD.

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TORONTO, ON
M5C 1Y2

Project : McVICAR - 1446
Comments: ATTN: ROD THOMAS CC: CRAIG WALDIE

Page Number : 1
Total Pages : 1
Certificate Date: 29-JUL-93
Invoice No. : 19317909
P.O. Number :
Account : [redacted]EF

CERTIFICATE OF ANALYSIS A9317909

SAMPLE	PREP CODE		Au ppb FA+AA
1446-1065	205	226	85
1446-2036	205	226	170
1446-2037	205	226	65
1446-2038	205	226	60
1446-2039	205	226	10
1446-2040	205	226	30
1446-2041	205	226	20
1446-2042	205	226	55
1446-2043	205	226	275
1446-2044	205	226	40
1446-2045	205	226	110
1446-2046	205	226	20
1446-2047	205	226	235
1446-2048	205	226	560
1446-2049	205	226	55
1446-2050	205	226	< 5
1446-2051	205	226	5
1446-2052	205	226	< 5
1446-2053	205	226	90
1446-3043	205	226	100
1446-3044	205	226	85
1446-3045	205	226	45
1446-3046	205	226	< 5
1446-3047	205	226	2010
1446-3048	205	226	2900
1446-3049	205	226	600
1446-3050	205	226	820
1446-3051	205	226	700
1446-3052	205	226	165
1446-3053	205	226	< 5

CERTIFICATION: Adriana Alexandre

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Ontario, Canada L4W 2S3
PHONE: 416-624-2806

To: BHP MINERALS CANADA LTD.

900 - 25 ADELAIDE ST. E.
TORONTO, ON
M5C 1Y2

Project : McVICAR-1446
Comments: ATTN: ROD THOMAS

Page Number :1
Total Pages :2
Certificate Date: 14-AUG-93
Invoice No. : *19318378*
P.O. Number :
Account [redacted]EF

CERTIFICATE OF ANALYSIS A9318378

SAMPLE	PREP CODE	Au ppb FA+AA	Ag ppm	As ppm	Bi ppm	Cu ppm	Hg ppm	Mo ppm	Pb ppm	Sb ppm	Zn ppm	Au oz/T
1446-1066	205 226	< 5	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1446-1067	205 226	< 5	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1446-1068	205 226	< 5	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1446-1069	205 226	< 5	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1446-1070	205 226	10	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1446-1071	205 226	< 5	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1446-1072	205 226	< 5	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1446-1073	205 226	20	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1446-1074	205 226	8880	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1446-1075	205 226	< 5	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1446-1076	205 226	< 5	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1446-1077	205 226	30	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1446-1078	205 226	>10000	1.6	12	8	26	< 1	< 1	6	< 2	34	16.860
1446-1079	205 226	5270	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1446-1080	205 226	6000	0.8	6	8	35	< 1	1	6	< 2	46	-----
1446-1081	205 226	9000	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1446-1083	205 226	8170	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1446-1084	205 226	6730	0.6	18	< 2	7	< 1	< 1	4	< 2	54	-----
1446-1085	205 226	4960	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1446-1086	205 226	3370	0.2	8	4	21	< 1	< 1	6	2	14	-----
1446-1087	205 226	5670	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1446-1088	205 226	4500	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1446-1089	205 226	3000	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1446-1090	205 226	>10000	-----	-----	-----	-----	-----	-----	-----	-----	-----	15.560
1446-1091	205 226	1200	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1446-1092	205 226	8100	0.2	< 2	6	6	< 1	< 1	4	< 2	16	-----
1446-1093	205 226	1310	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1446-1094	205 226	5600	< 0.2	< 2	< 2	3	< 1	< 1	4	< 2	14	-----
1446-1095	205 226	1580	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1446-1096	205 226	>10000	-----	-----	-----	-----	-----	-----	-----	-----	-----	12.030
1446-1097	205 226	130	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1446-1098	205 226	3100	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1446-1099	205 226	< 5	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1446-1100	205 226	70	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1446-1101	205 226	50	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1446-1102	205 226	2050	0.6	< 2	< 2	96	< 1	1	4	< 2	34	-----
1446-1103	205 226	350	1.4	18	< 2	87	< 1	1	6	< 2	56	-----
1446-1104	205 226	< 5	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1446-1105	205 226	150	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1446-1106	205 226	210	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

CERTIFICATION: Ivan Bichler

Chemex Labs Ltd.
[redacted]cal Ch[redacted] * Geo[redacted]sts * F[redacted]ed As[redacted]
5175 Timberlea Blvd., Mississauga,
Ontario, Canada L4W 2S3
PHONE: 416-624-2806

900 - 25 ADELAIDE ST. E.
TORONTO, ON
M5[redacted]

Certificate Date: 14-AUG-93
Invoice No. : 19318378
P.O. Number[redacted]
Account :EEF

Project : McVICAR-1446
Comments: ATTN: ROD THOMAS

CERTIFICATE OF ANALYSIS A9318378

SAMPLE	PREP CODE		Au ppb FA+AA	Ag ppm	As ppm	Bi ppm	Cu ppm	Hg ppm	Mo ppm	Pb ppm	Sb ppm	Zn ppm	Au oz/T
1446-1107	205	226	60	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1446-2054	205	226	< 5	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1446-3055	205	226	< 5	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1446-3056	205	226	850	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1446-3057	205	226	240	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1446-3058	205	226	90	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1446-3059	205	226	245	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1446-3060	205	226	3780	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1446-3061	205	226	75	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1446-3062	205	226	1380	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1446-3063	205	226	< 5	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1446-3064	205	226	165	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1446-3065	205	226	110	0.2	8	< 2	6	< 1	< 1	4	< 2	8	-----

CERTIFICATION: Ian Bichler

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
5175 Timberlea Blvd., Mississauga,
Ontario, Canada L4W 2S3
PHONE: 416-624-2806

To: BHP MINERALS CANADA LTD.

900 - 25 ADELAIDE ST. E.
TORONTO, ON
M5C 1Y2

Project : McVICAR-1446
Comments: ATTN: ROD THOMAS

Page Number : 1
Total Pages : 1
Certificate Date: 14-AUG-93
Invoice No. : 19318379
P.O. Number :
Account : [redacted]EF

CERTIFICATE OF ANALYSIS A9318379

SAMPLE	PREP CODE		Au tot oz/T	Au - oz/T	Au + mg	Wt. - grams	Wt. + grams	Ag ppm	As ppm	Bi ppm	Cu ppm	Hg ppm	Mo ppm	Pb ppm	Sb ppm	Zn ppm
1446-1082	207	226	0.853	0.670	2.595	148	56.89	1.0	4	36	31	< 1	< 1	2	< 2	36

CERTIFICATION: Stuart Bichler

Chemex Labs Ltd.

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Ontario, Canada L4W 2S3
PHONE: 416-624-2806

To: BHP MINERALS CANADA LTD.

900 - 25 ADELAIDE ST. E.
TORONTO, ON
M5C 1Y2

Project : McVICAR-1446
Comments: ATTN: ROD THOMAS

Certificate Date: 17-AUG-93
Invoice No. :19318498
P.O. Number
Account [redacted]EF

CERTIFICATE OF ANALYSIS A9318498

SAMPLE	PREP CODE	Au ppb FA+AA	Ag ppm	As ppm	Bi ppm	Cu ppm	Hg ppm	Mo ppm	Pb ppm	Sb ppm	Zn ppm
1446-1108	205 226	170	-----	-----	-----	-----	-----	-----	-----	-----	-----
1446-1109	205 226	6370	0.2	26	256	261	< 1	< 1	< 2	< 2	24
1446-1110	205 226	3180	0.4	14	44	118	< 1	< 1	< 2	< 2	58
1446-1111	205 226	35	-----	-----	-----	-----	-----	-----	-----	-----	-----
1446-1112	205 226	< 5	-----	-----	-----	-----	-----	-----	-----	-----	-----
1446-1113	205 226	< 5	-----	-----	-----	-----	-----	-----	-----	-----	-----
1446-1114	205 226	< 5	-----	-----	-----	-----	-----	-----	-----	-----	-----

CERTIFICATION: Stan Bickler

Chemex Labs Ltd.
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Ontario, Canada L4W 2S3
PHONE: 416-624-2806

To: BHP MINERALS CANADA LTD.
900 - 25 ADELAIDE ST. E.
TORONTO, ON
M5C 1Y2

Project : McVICAR-1446
Comments: ATTN: ROD THOMAS

Page Number :1
Total Pages :1
Certificate Date: 21-AUG-93
Invoice No. :19319282
P.O. Number :
Account :EEF

CERTIFICATE OF ANALYSIS A9319282

SAMPLE	PREP CODE		Au ppb FA+AA	Au FA g/t
1446-1115	205	226	5	-----
1446-1116	205	226	< 5	-----
1446-1117	205	226	< 5	-----
1446-1118	205	226	< 5	-----
1446-1119	205	226	< 5	-----
1446-1120	205	226	< 5	-----
1446-1121	205	226	3880	-----
1446-1122	205	226	25	-----
1446-1123	205	226	15	-----
1446-1124	205	226	35	-----
1446-1125	205	226	>10000	12.34
1446-1126	205	226	760	-----
1446-1127	205	226	3060	-----
1446-2055	205	226	150	-----
1446-2056	205	226	< 5	-----
1446-3066	205	226	2290	-----

CERTIFICATION: Adriana Alexandru

APPENDIX II

REPORT OF ANALYSIS (HUMUS) - McVICAR LAKE 1993

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
5175 Timberlea Blvd., Mississauga,
Ontario, Canada L4W 2S3
PHONE: 416-624-2806

To: BHP MINERALS CANADA LTD.

33 YONGE STREET, SUITE 610
TORONTO, ON
M5E 1G4

Project : McVICAR-1446
Comments: ATTN: ROD THOMAS

Certificate Date: 10-SEP-93
Invoice No. : I9319283
P.O. Number :
Account :

CERTIFICATE OF ANALYSIS A9319283

SAMPLE	PREP CODE	Au NAA ppb
1446-4000	237 --	2
1446-4001	237 --	2
1446-4002	237 --	3
1446-4003	237 --	< 1
1446-4004	237 --	2
1446-4005	237 --	1
1446-4006	237 --	1
1446-4007	237 --	1
1446-4008	237 --	1
1446-4009	237 --	< 1
1446-4010	237 --	1
1446-4011	237 --	1
1446-4012	237 --	1
1446-4013	237 --	1
1446-4014	237 --	1
1446-4015	237 --	1
1446-4016	237 --	1
1446-4017	237 --	1
1446-4018	237 --	1
1446-4019	237 --	1
1446-4020	237 --	1
1446-4021	237 --	1
1446-4022	237 --	1
1446-4023	237 --	1
1446-4024	237 --	1
1446-4025	237 --	1
1446-4026	237 --	< 1
1446-4027	237 --	1
1446-4028	237 --	1
1446-4029	237 --	1
1446-4030	237 --	< 1
1446-4031	237 --	< 1
1446-4032	237 --	< 1
1446-4033	237 --	< 1
1446-4034	237 --	< 1
1446-4035	237 --	< 1
1446-4036	237 --	< 1
1446-4037	237 --	< 1
1446-4038	237 --	1
1446-4039	237 --	2

CERTIFICATION: Adriana Alexandru

Chemex Labs Ltd.

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Ontario, Canada L4W 2S3
PHONE: 416-624-2806

To: BHP MINERALS CANADA LTD.

33 YONGE STREET, SUITE 610
TORONTO, ON
M5E 1G4

Project : McVICAR-1446
Comments: ATTN: ROD THOMAS

Certificate Date: 10-SEP-93
Invoice No. : I9319283
P.O. Number :
Account : [redacted]

CERTIFICATE OF ANALYSIS A9319283

SAMPLE	PREP CODE	Au NAA ppb
1446-4040	237 --	2
1446-4041	237 --	1
1446-4042	237 --	< 1
1446-4043	237 --	2
1446-4044	237 --	2
1446-4045	237 --	< 1
1446-4046	237 --	< 1
1446-4047	237 --	2
1446-4048	237 --	< 1
1446-4049	237 --	< 1
1446-4050	237 --	< 1
1446-4051	237 --	1
1446-4052	237 --	< 1
1446-4053	237 --	2
1446-4054	237 --	< 1
1446-4055	237 --	1
1446-4056	237 --	1
1446-4057	237 --	1
1446-4058	237 --	< 1
1446-4059	237 --	< 1
1446-4060	237 --	< 1
1446-4061	237 --	1
1446-4062	237 --	2
1446-4063	237 --	1
1446-4064	237 --	1
1446-4065	237 --	1
1446-4066	237 --	1
1446-4067	237 --	1
1446-4068	237 --	1
1446-4069	237 --	1
1446-4070	237 --	3
1446-4071	237 --	3
1446-4072	237 --	2
1446-4073	237 --	2
1446-4074	237 --	< 1
1446-4075	237 --	1
1446-4076	237 --	2
1446-4077	237 --	3
1446-4078	237 --	3
1446-4079	237 --	2

CERTIFICATION: Adriana Alexandru

Chemex Labs Ltd.

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5175 Timberlea Blvd., Mississauga,
Ontario, Canada L4W 2S3
PHONE: 416-624-2806

To: BHP MINERALS CANADA LTD.

33 YONGE STREET, SUITE 610
TORONTO, ON
M5E 1G4

Project : McVICAR-1446
Comments: ATTN: ROD THOMAS

Certificate Date: 10-SEP-93
Invoice No. : 19319283
P.O. Number :
Account :

CERTIFICATE OF ANALYSIS A9319283

SAMPLE	PREP CODE		Au NAA ppb
1446-4080	237	--	< 1
1446-4081	237	--	< 1
1446-4082	237	--	1
1446-4083	237	--	< 1
1446-4084	237	--	1
1446-4085	237	--	1
1446-4086	237	--	1
1446-4087	237	--	2
1446-4088	237	--	1
1446-4089	237	--	1
1446-4090	237	--	2
1446-4091	237	--	< 1
1446-4092	237	--	1
1446-4093	237	--	1
1446-4094	237	--	< 1
1446-4095	237	--	< 1
1446-4096	237	--	1
1446-4097	237	--	1
1446-4098	237	--	2
1446-4099	237	--	1
1446-4100	237	--	1
1446-4101	237	--	1
1446-4102	237	--	2
1446-4103	237	--	1
1446-4104	237	--	1
1446-4105	237	--	1
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1446-4116	237	--	< 1
1446-4117	237	--	< 1
1446-4118	237	--	< 1
1446-4119	237	--	1

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TORONTO, ON
M5E 1G4

Project : McVICAR-1446
Comments: ATTN: ROD THOMAS

Certificate Date: 10-SEP-93
Invoice No. : I9319283
P.O. Number :
Account [redacted]

CERTIFICATE OF ANALYSIS A9319283

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Project : McVICAR-1446
Comments: ATTN: ROD THOMAS

Page Number :1
Total Pages :2
Certificate Date: 03-SEP-93
Invoice No. : *I9319284*
P.O. Number :
Account [redacted]

CERTIFICATE OF ANALYSIS A9319284

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1446-4203	237 --	< 1

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Invoice No. : I9319284
P.O. Number :
Account : [redacted]

CERTIFICATE OF ANALYSIS A9319284

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1446-4239	237 --	2
1446-4240	237 --	1
1446-4241	237 --	2
1446-4242	237 --	1
1446-4243	237 --	1

CERTIFICATION: Adriana Alexandru

APPENDIX III

LITHOLOGICAL DESCRIPTIONS

by S.E. Sparks, B.Sc.
September 1991

APPENDIX III - **McVICAR LAKE LITHOLOGIES**

12 TONALITE: Light grey-green, weathers to white. Massive, medium grained. Composition is quartz and plagioclase with 20% sub-idiomorphic glassy grey quartz crystals. Weak pervasive sericite alteration which increases slightly in intensity toward outer contacts of unit.

7 BRECCIATED AND SHEARED ANORTHOSITIC GABBRO:

Medium green, weathers to white. Massive, fine grained. Moderately, pervasively sericite altered. Moderate silica alteration in patches. Weak apple green mica alteration occurs in patches up to 10 cm long. Moderately to intensely sheared breccia fragments.

7a SHEARED ANORTHOSITIC GABBRO:

Dark green, weathers to buff and dark green. Very fine grained. Moderate to intense pervasive apple green mica, sericite, and chlorite alteration. Weak to moderate pervasive silica alteration. Intensity of all alterations varies throughout unit. Minor pyrite mineralization occurs as dissemination and stringers.

7b BRECCIATED ANORTHOSITIC GABBRO:

Dark green and white, weathers to buff-white. Massive, medium grained. Weak pervasive sericite alteration. Weak carbonate alteration along fractures.

7d SILICIFIED ANORTHOSITIC GABBRO:

Light green-grey, weathers to white. Massive, medium grained. < 1mm anorthositic plagioclase in fine grained mafic matrix. Intense pervasive silica alteration. Trace pyrite mineralization on fracture surfaces.

6a SHEARED BASALT:

Light green-grey, weathers to dark grey-green. Massive, very fine grained. Moderate pervasive sericite alteration. Weak pervasive silica alteration. Moderate carbonate alteration along fractures. Moderately sheared.

4a ANORTHOSITIC GABBRO:

Dark green, weathers to light green-grey. Massive, medium grained. 40% sub-idiomorphic anorthositic plagioclase (1-2 mm diameter) in fine

grained mafic chlorite-rich matrix. Weak pervasive sericite alteration. Moderately sheared.

7a SHEARED ANORTHOSITIC GABBRO:

Light grey to buff and apple green, weathers to apple green and buff. Intensely sericite and apple green mica altered. Carbonate alteration is both pervasive and in 3-5 mm wide veinlets. Intensely sheared but remanent anorthositic texture is apparent. Trace disseminated pyrite. Unit contains 10-20 cm by 5 cm pods of buff-coloured intermediate intrusive which has abundant 1-2 mm clear quartz crystals and which is moderately sericite altered. Intrusion pods lie parallel to schistosity. Shearing occurs in several directions and in some areas occurs in a radial pattern.

7b BRECCIATED ANORTHOSITIC GABBRO:

Light grey to buff matrix, weathers to light buff to white. Matrix is intensely sericite altered; carbonate alteration occurs pervasively and as 3-5 mm veinlets. Inclusions are angular clasts 10-30 cm long by 10 cm wide of apple green mica altered sheared anorthositic gabbro (7a), medium grained intermediate intrusive and intensely silicified anorthositic gabbro.

6b BRECCIATED BASALT:

Dark green and white, weathers to buff-grey. Matrix is moderately carbonate altered fine grained basalt. Carbonate alteration also occurs as irregular veinlets 2-6 mm wide. Inclusions are angular 10-20 cm, composed of medium grained intermediate intrusive and silicified gabbro. Intermediate intrusive also occurs as veinlets. Silicified gabbro occurs as irregular rounded patches 10-20 cm in diameter.

APPENDIX IV

ACTIVE CLAIMS - THIS WORK REPORT

APPENDIX IV - ACTIVE CLAIMS 1993

DISTRICT	CLAIM #	SIZE (ha)	CLAIM SHEET
PA	1133783	64	McVICAR LAKE G-2121
PA	1133784	48	McVICAR LAKE G-2121
PA	1133785	16	McVICAR LAKE G-2121
PA	1133788	48	McVICAR LAKE G-2121
PA	1133789	32	McVICAR LAKE G-2121
PA	1144671	16	McVICAR LAKE G-2121
PA	1144672	16	McVICAR LAKE G-2121
PA	1144673	16	McVICAR LAKE G-2121
PA	1144674	16	McVICAR LAKE G-2121
PA	1144675	16	McVICAR LAKE G-2121
PA	1144676	16	McVICAR LAKE G-2121
PA	1144677	16	McVICAR LAKE G-2121
PA	1144678	16	McVICAR LAKE G-2121
PA	1144679	16	McVICAR LAKE G-2121
PA	1144684	16	McVICAR LAKE G-2121
PA	1144685	16	McVICAR LAKE G-2121
PA	1144686	16	McVICAR LAKE G-2121
PA	1144687	16	McVICAR LAKE G-2121
PA	1144688	16	McVICAR LAKE G-2121
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PA	1144697	16	McVICAR LAKE G-2121
PA	1144699	16	McVICAR LAKE G-2121
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PA	1144748	16	STOUGHTON LAKE G-2228
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PA	1144776	16	STOUGHTON LAKE G-2228
PA	1144777	16	STOUGHTON LAKE G-2228
PA	1144778	16	STOUGHTON LAKE G-2228
PA	1144779	16	STOUGHTON LAKE G-2228
PA	1144780	16	STOUGHTON LAKE G-2228

DISTRICT	CLAIM #	SIZE (ha)	CLAIM SHEET
PA	1144781	16	STOUGHTON LAKE G-2228
PA	1144782	16	STOUGHTON LAKE G-2228
PA	1144783	16	STOUGHTON LAKE G-2228
PA	1144784	16	STOUGHTON LAKE G-2228
PA	1144785	16	STOUGHTON LAKE G-2228
PA	1144786	16	STOUGHTON LAKE G-2228
PA	1144787	16	STOUGHTON LAKE G-2228
PA	1144788	16	STOUGHTON LAKE G-2228
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PA	1144797	16	STOUGHTON LAKE G-2228
PA	1144798	16	STOUGHTON LAKE G-2228
PA	1144973	256	STOUGHTON/McVICAR G-2228/G-2121
PA	1144974	256	McVICAR LAKE G-2121
PA	1173155	16	McVICAR LAKE G-2121
PA	1179714	16	McVICAR LAKE G-2121
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PA	1179716	16	McVICAR LAKE G-2121
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PA	1179719	16	McVICAR LAKE G-2121
PA	1179722	16	McVICAR LAKE G-2121
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PA	1179724	16	McVICAR LAKE G-2121
PA	1179805	256	McVICAR LAKE G-2121
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PA	1179807	192	McVICAR LAKE G-2121
PA	1179808	128	McVICAR LAKE G-2121
PA	1180603	64	McVICAR LAKE G-2121

78 claims 2608 ha

163 claim units

52011SW9400 2.15280 STOUGHTON LAKE

020

2.15280

McVICAR LAKE PROJECT

NTS 52 0/11

INTERPRETATION OF AIRBORNE AND GROUND GEOPHYSICAL SURVEYS

Invl. # 2.4695

PETER DIORIO

BHP MINERALS CANADA LTD.

28 May 1993

52011SW9400 2.15280 STOUGHTON LAKE

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Semia Lake Grid - Total Field Mag Profiles	1:5,000
Semia Lake Grid - Total Field Mag Contours	1:5,000
Semia Lake Grid - 7040 Hz Max-Min Profiles	1:5,000
Semia Lake Grid - 1760 Hz Max-Min Profiles	1:5,000
Semia Lake Grid - 220 Hz Max-Min Profiles	1:5,000
Semia Lake Grid - VLF (Cutler) Profiles	1:5,000
Semia Lake Grid - VLF (Cutler) Fraser Filtered Contours	1:5,000
Sor Lake IP/Resistivity N = 1 Profiles	1:5,000
Sor Lake Chargeability N = 1 Contours	1:5,000
Sor Lake Resistivity N = 1	1:5,000
Sor Lake VLF (Cutler) Profiles	1:5,000
Sor Lake VLF (Cutler) Fraser Filter Contours	1:5,000
Sor Lake Total Field Mag Contours	1:5,000
Sor Lake Total Field Mag Profiles	1:5,000
Shonia West Grid Total Field Mag Contours	1:5,000
Shonia West Grid Total Field Mag Profiles	1:5,000

1. SUMMARY

Four detailed aeromagnetic surveys were reprocessed, merged and imaged to provide a regional overview for the McVicar Lake project. Interpretation of these images has helped revise the geologic picture of the project area and generated most of the discrete targets and target areas. Ground geophysical work, completed in March 1993, has been used to precisely locate these features on the ground and, in the case of IP and EM surveys, to provide other discrete targets.

Aeromagnetic data over the Golden Patricia Mine shows that the deposit does not have a recognizable magnetic signature but occurs in a distinct structural setting which is evident on the aeromagnetic images. The linear and parallel structures northwest of the deposit splay into a horse tail pattern in the immediate deposit vicinity.

Perhaps the most significant outcome of the aeromag interpretation exercise has been a reinterpretation of the Bearhead fault zone. Within the project area the zone is manifested by three major structures (referred to here as BH1, BH2 and BH3) trending roughly 120°. These structures define a corridor 3 to 4 km in width. Sense of motion is dextral. Two of the structures BH1 and BH2, mark the boundary of the greenstone belt and the termination, in the southwest, of the Lang Lake iron formation. BH3 is the McVicar Altered Zone structure and has been extensively explored east of Shonia Lake where the fault appears to be a north dipping trust plane.

A series of minor faults are interpreted to form an anastomosing pattern between BH1 and BH2 within and around fragments of magnetite and sulfide iron formation in the Lower McVicar Lake - Semia Lake areas. This is considered to be the most attractive target area within the project at this time.

In the Sor Lake area, several IP anomalies are identified, however, most of these are attributed to variation in overburden. There are two notable exceptions east of Sor Lake and these provide excellent gold exploration targets.

In the Shonia Lake West area, a detailed ground magnetic survey was performed to trace the aeromagnetic anomaly interpreted to represent BH3. A flexure in BH3 west of Shonia Lake, the intersection of BH3 with interpreted tonolitic and granitic intrusions and the intersection of BH3 the Lang Lake iron formation all represent favourable gold exploration targets.

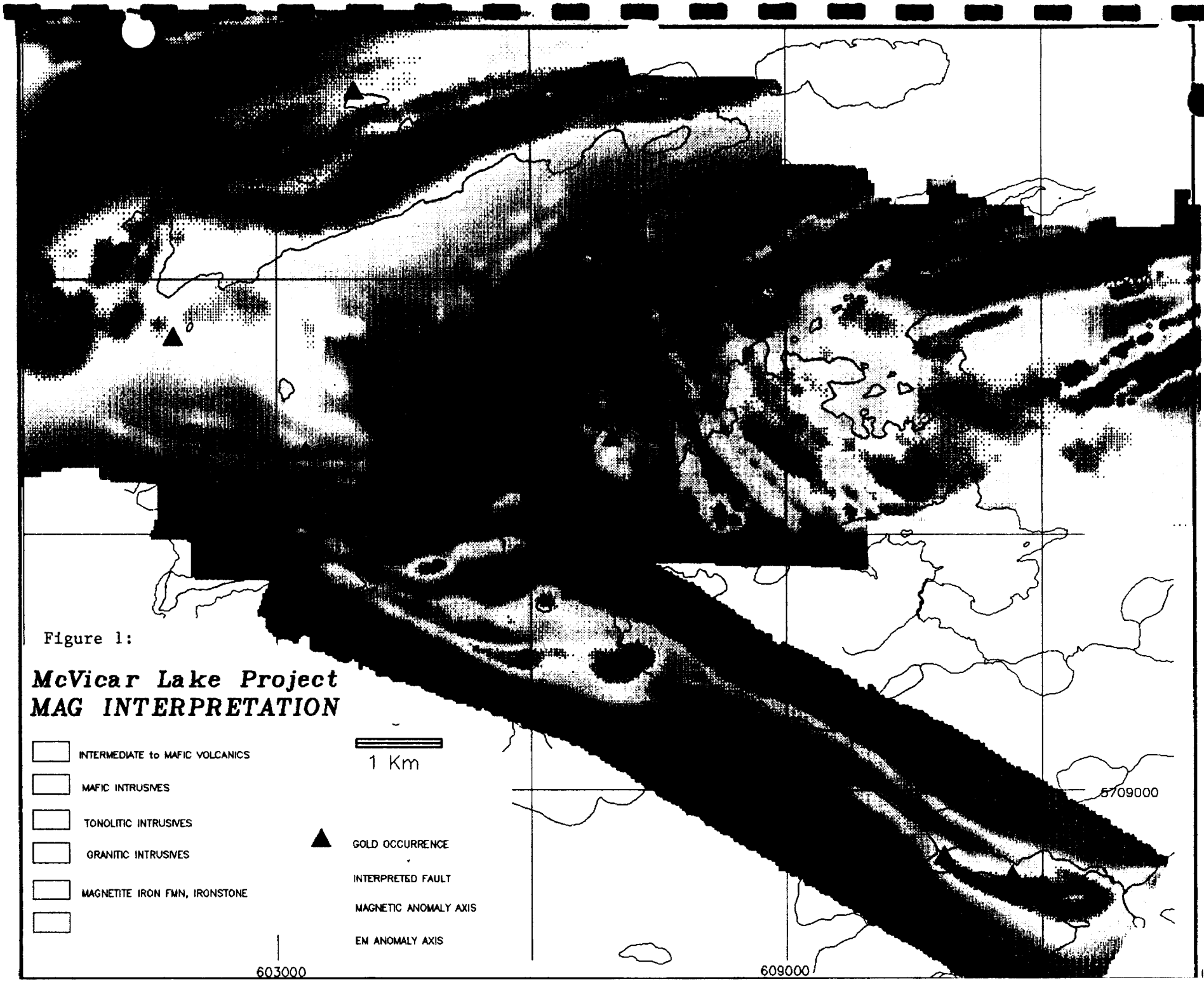


Figure 1:

McVicar Lake Project
MAG INTERPRETATION

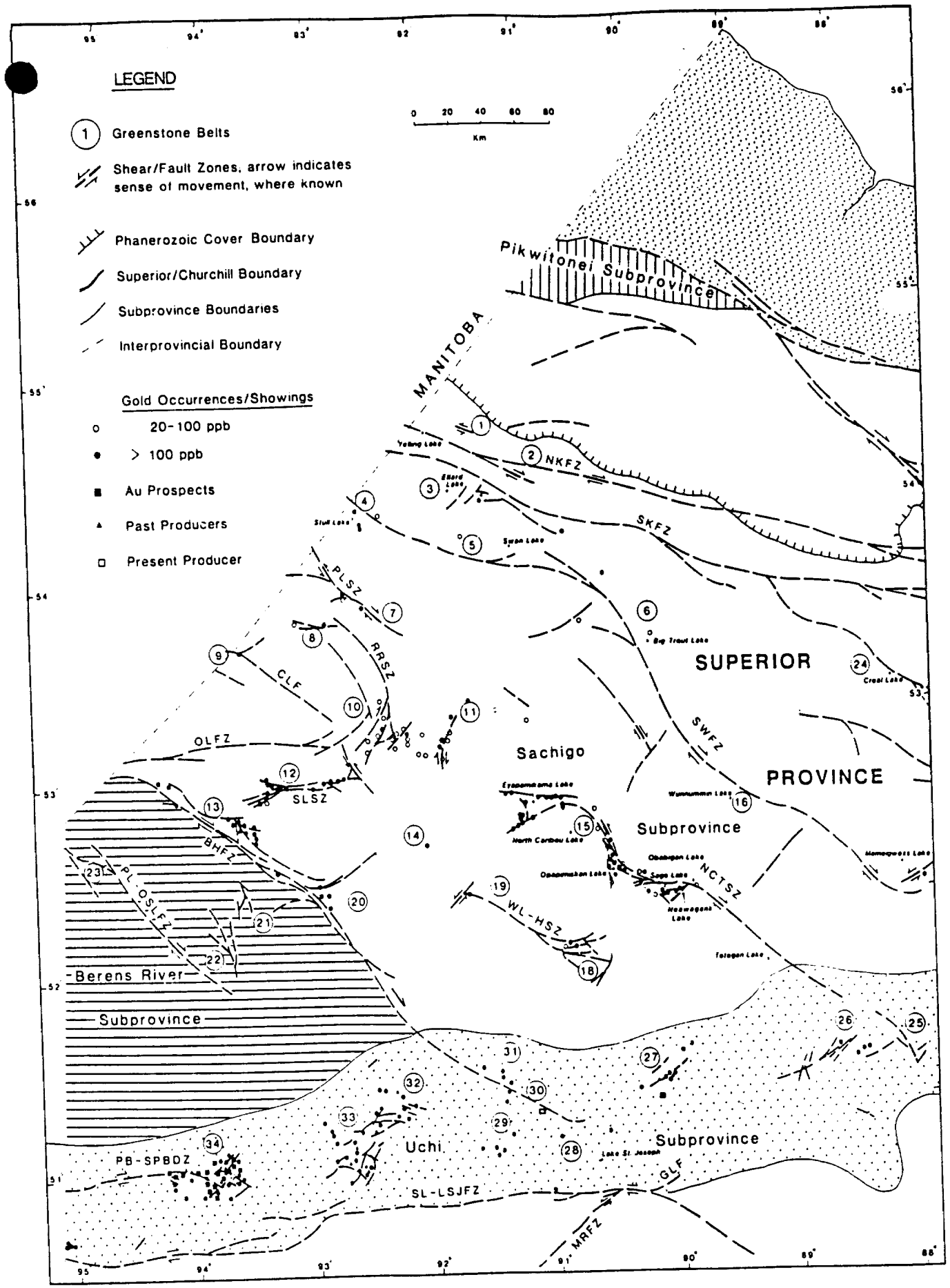


Figure 2: Regional-Scale Fault/Shear Zones in Sachio and Adjacent Sub-Provinces (Osmani and Scott, 1988)

2. AEROMAGNETIC INTERPRETATION

2.1. Data Acquisition and Processing

Four high resolution airborne geophysical data sets were acquired, integrated and process:

1. Lang Lake/McVicar Lake Dighem survey. Mag, VLF and EM. Line separation 100 m. Proprietary BHP Survey 1986.
2. Sor Lake Dighem survey (Mag, VLF and EM) Line separation 100 m. Proprietary BHP Survey 1991.
3. Dougie Lake Aerodat survey. (Mag, VLF) Line separation 50 m. Contour maps obtained from assessment files.
4. Pickle Lake GEOTEM survey. Mag, EM. Line separation 200 m. Digital data purchased from the OGS.

The Dougie Lake data was digitized from contour maps and gridded under contract to Patterson Grant and Watson Limited, Toronto. the four gridded data sets were then brought to a common grid cell size (25 m) and where possible, to a common datum. the first three surveys form a contiguous block, however, the OGS Pickle Lake survey is isolated and has not been levelled to the same datum.

The following images were produced using Geopak RTICAD software and printed in black and white and/or colour on a 400 dpi colour laser printer: Total Field Mag,

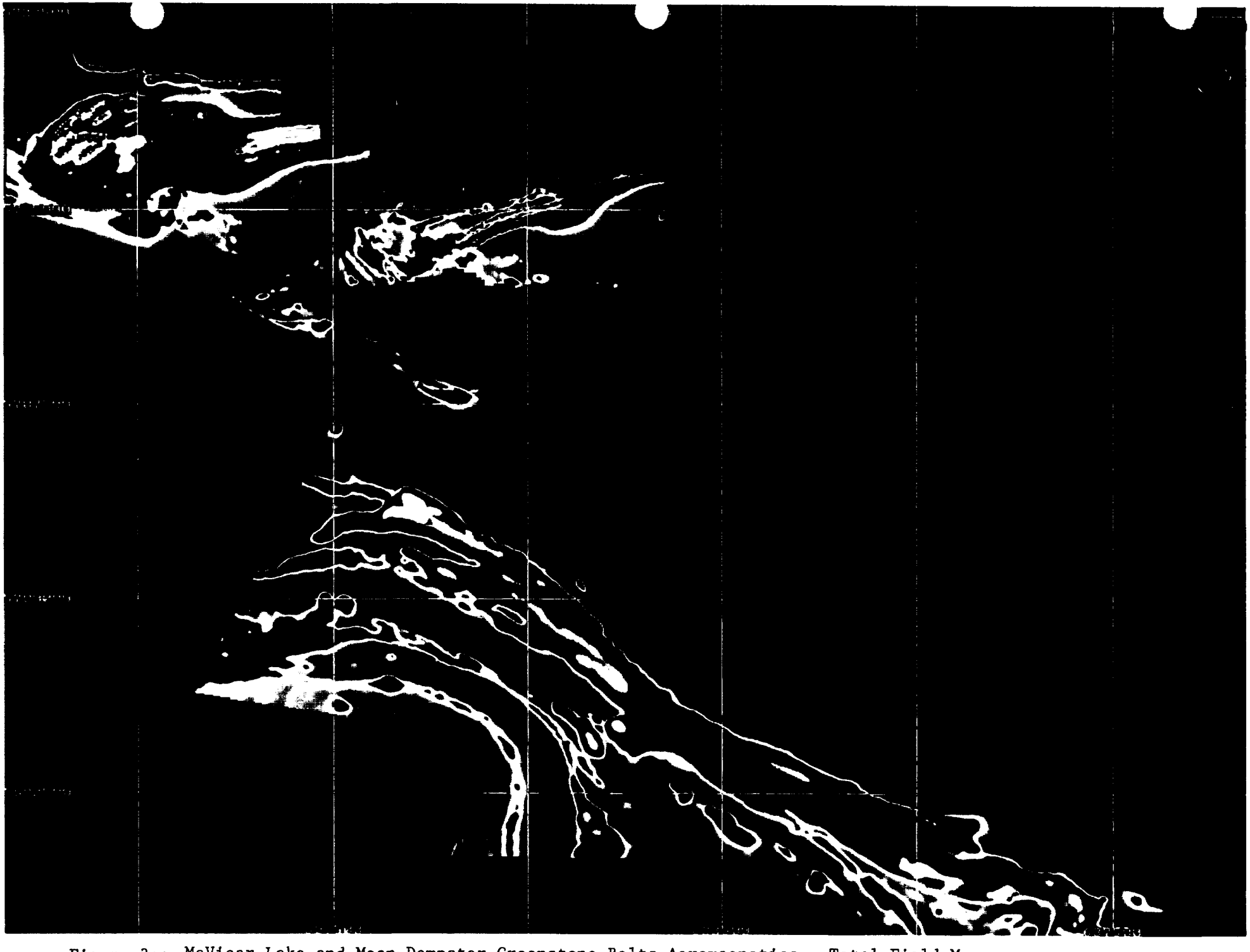


Figure 3a: McVicar Lake and Mean-Dempster Greenstone Belts Aeromagnetics - Total Field Mag

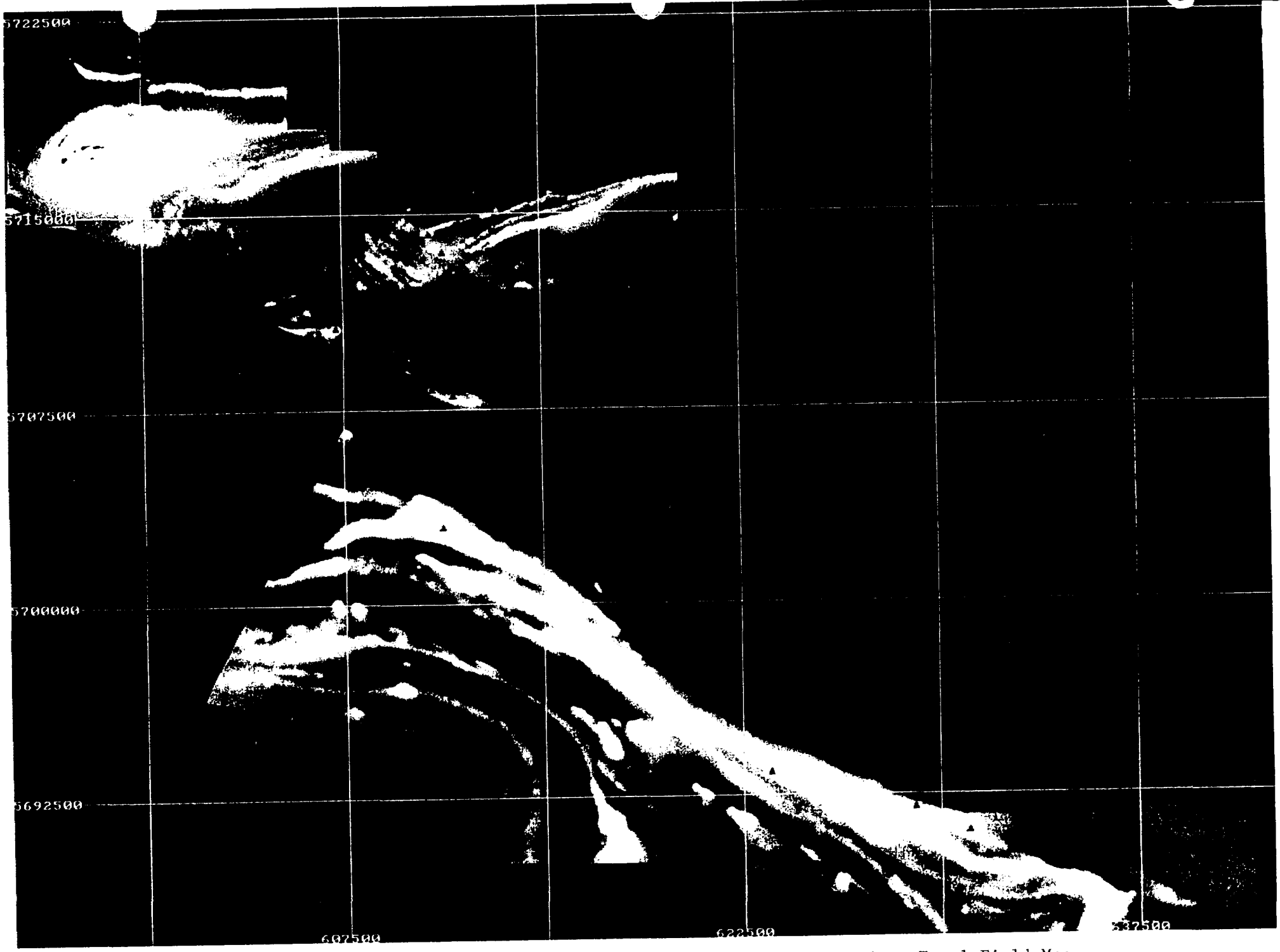


Figure 3b: McVicar Lake and Mean-Dempster Greenstone Belts Aeromagnetic - Total Field Mag

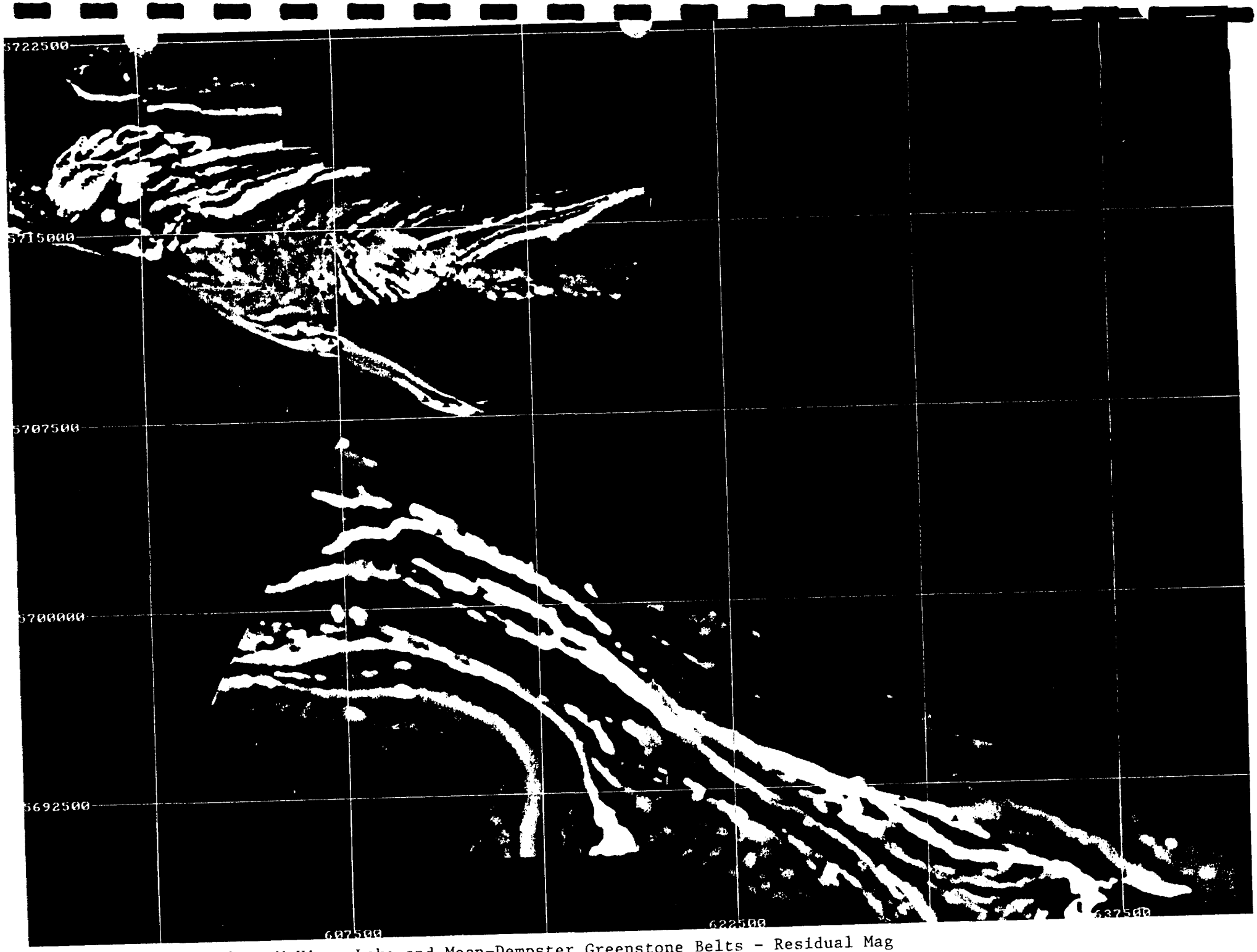


Figure 3c: McVicar Lake and Mean-Dempster Greenstone Belts - Residual Mag

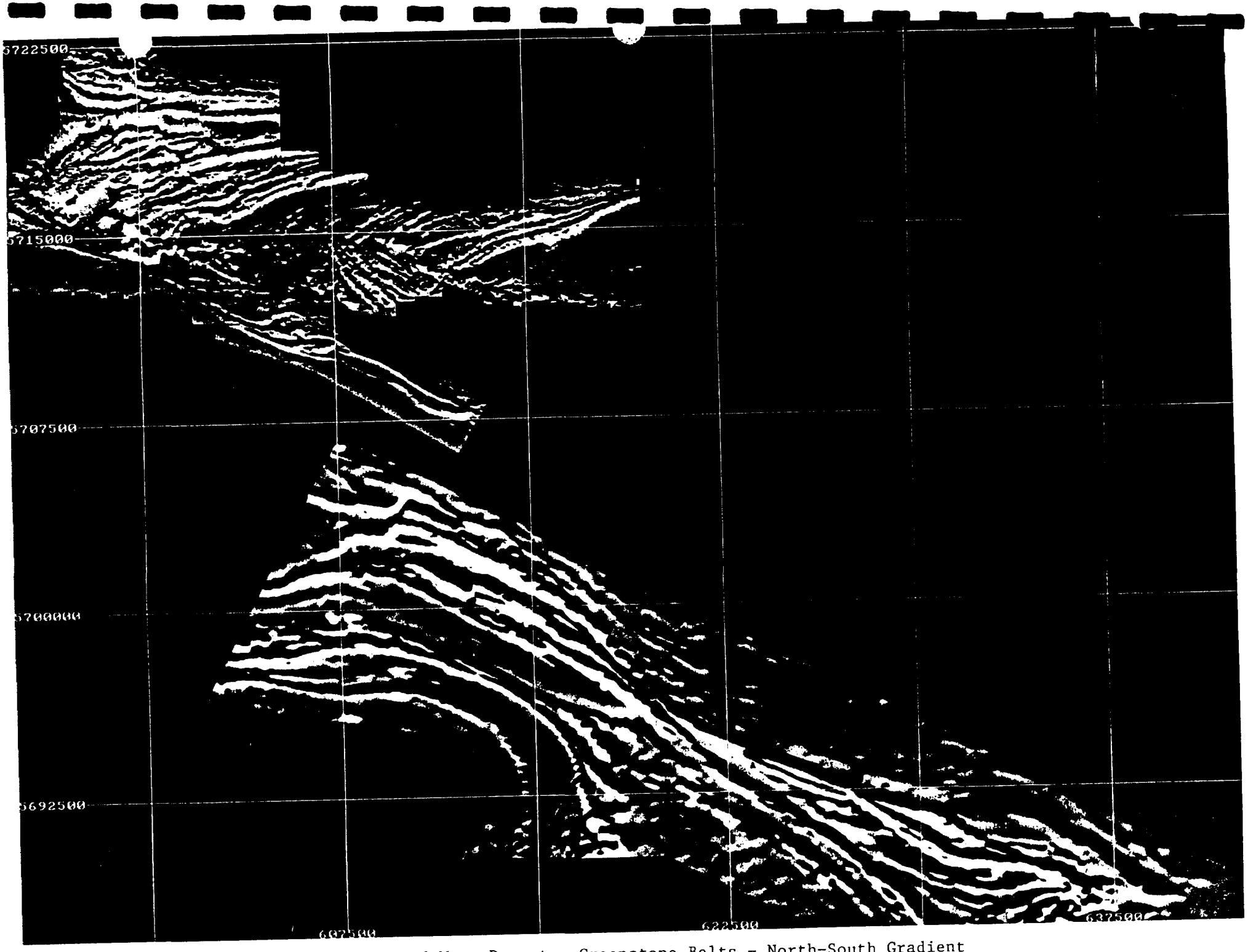


Figure 3d: McVicar Lake and Mean-Dempster Greenstone Belts - North-South Gradient

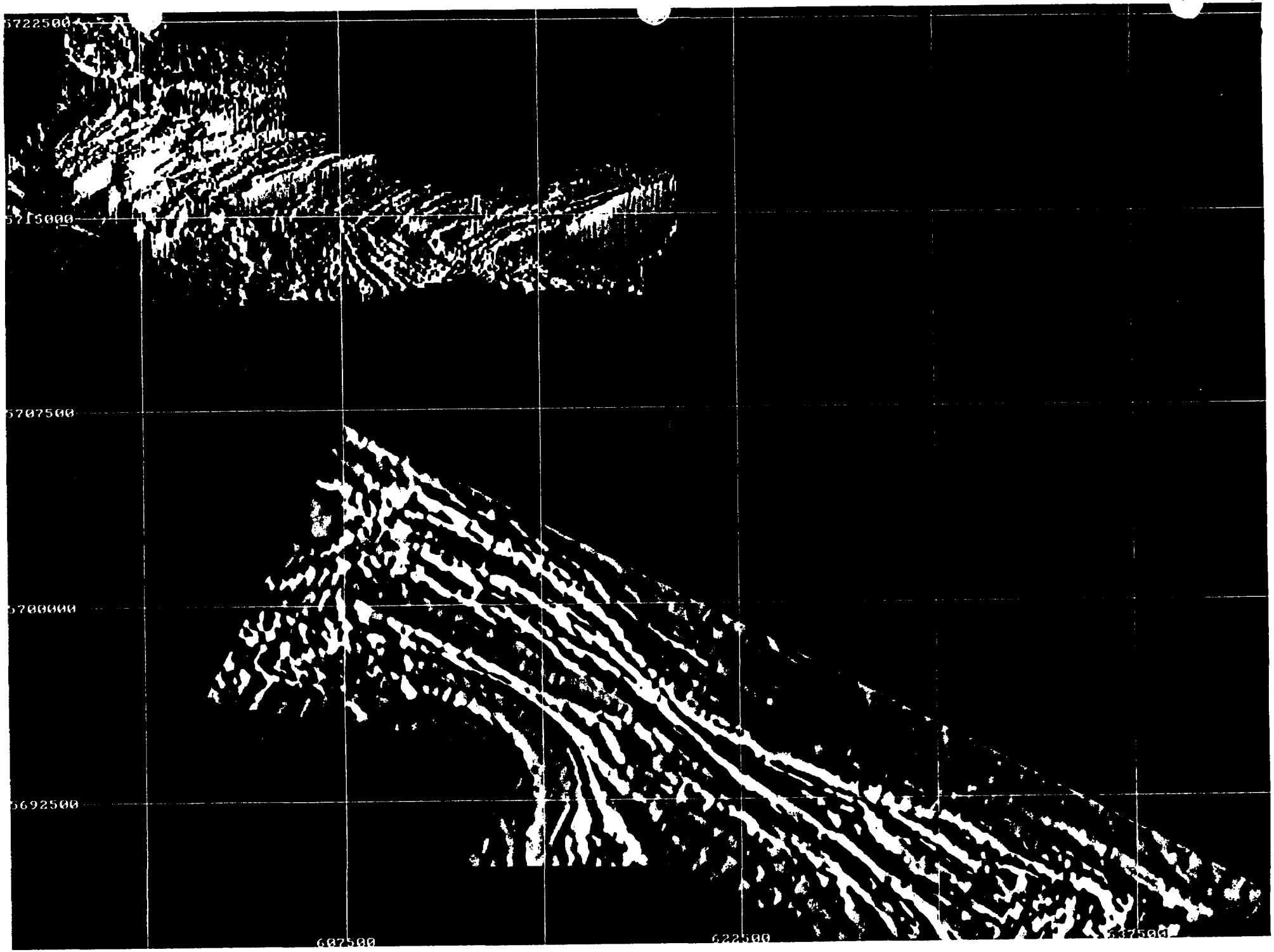


Figure 3e: McVicar Lake and Mean-Dempster Greenstone Belts - East-West Gradient

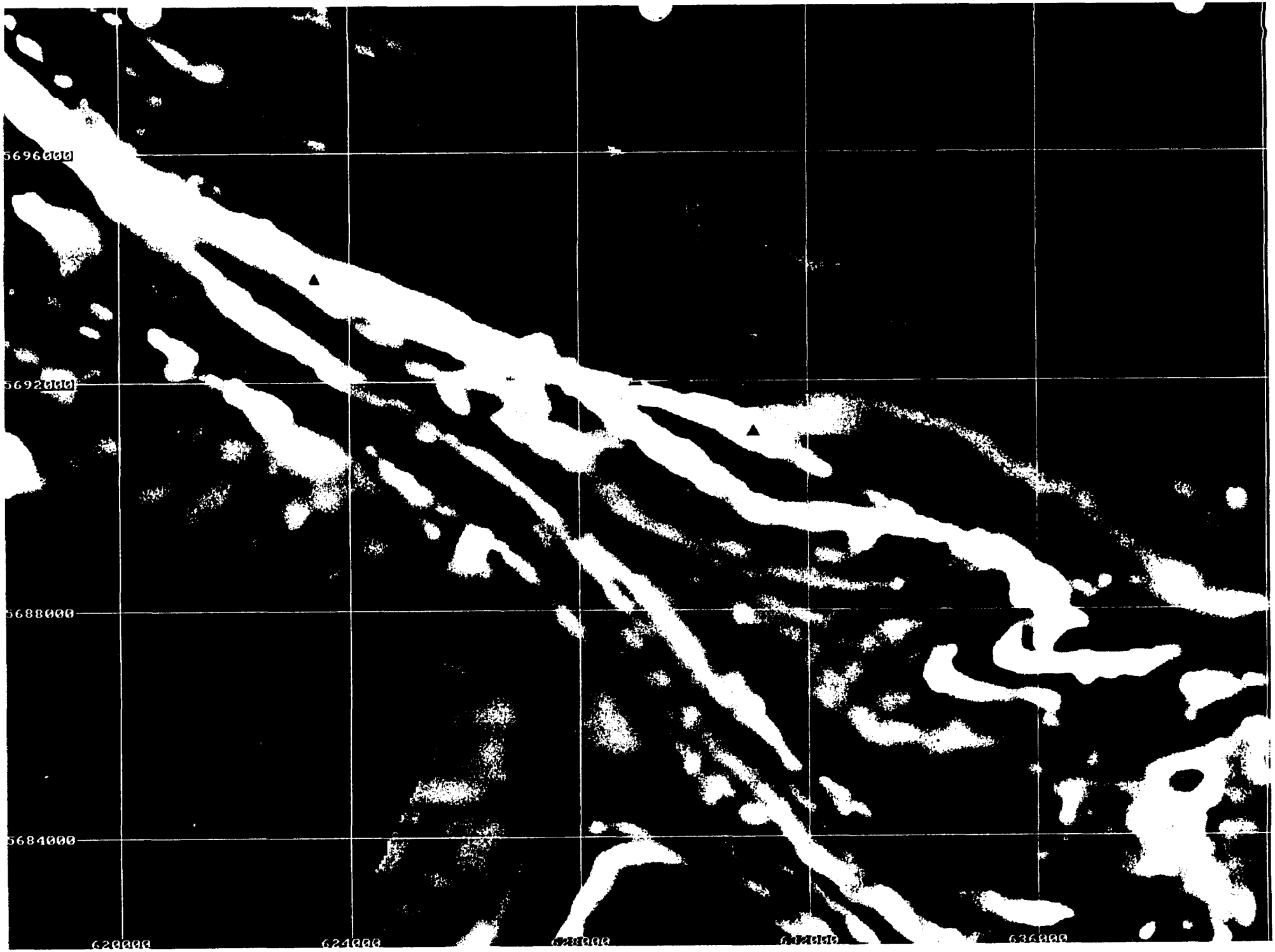


Figure 4a: Golden Patricia Mine Area - Residual Mag

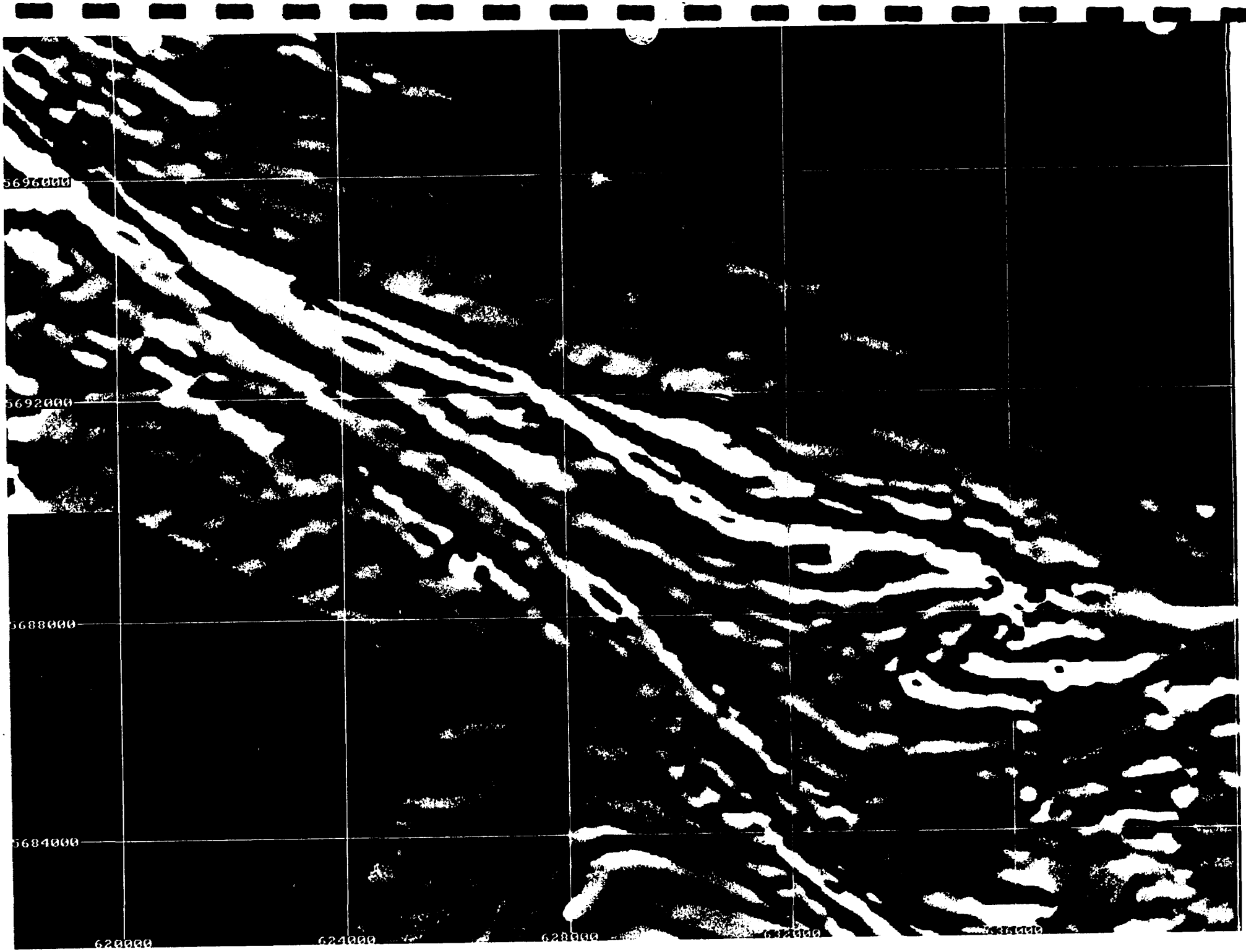


Figure 4b: Golden Patricia Mine Area - North-South Gradient

Residual Mag, East-West Gradient of Mag, North-South Gradient of Mag, VLF (Dighem survey only), and Resistivity (7200 Hz Dighem Survey only).

The residual mag is the total field minus the total field upward continued 200 m. This product is very similar to the calculated vertical gradient.

These data sets were used in three principal ways:

1. to examine the setting of the Golden Patricia deposit
2. to re-assess the geologic map in the McVicar Lake-Semia Lake area
3. to identify discrete targets for ground follow-up.

2.2. Golden Patricia Mine

The surface trace of the mineralized lode of the Golden patricia Mine is shown on Figures 4a and 4b along with several gold occurrences which are represented by triangles. The high grade (20gm/T) lode is a thin (~ 1 m) sheet-like quartz vein which is continuous for more than 3 km in strike extent. The unit dips steeply and strikes east-west, parallel to magnetite iron formation a few hundred meters to the south. There is no discrete magnetic anomaly associated with the vein, however, it occurs in a distinct structural setting which is evident on the mag data. The linear and parallel structures northwest of the deposit splay into a horse tail pattern in the deposit area. The deviation in direction of the major faults implied by such a pattern is favourable to the creation of open space for fluid transport, the major structures provide access

to fluids deep in the crust and the iron formations and basalts provide reducing chemical environments conducive to gold deposition. Some or all of these factors may be important in the formation of the Golden Patricia deposit.

2.3. Bearhead Fault Zone

The Bearhead Fault is a major strike slip fault which is recognized from Lake Winnipeg to Pickle Lake (Figure 2a). There has been considerable speculation by BHP workers regarding the exact trace of the Bearhead Fault in the McVicar project area. The re-examination of the data completed here suggests the Bearhead Fault is best represented by at least three discrete zones which greatly affect the geologic picture. These three zones, labelled BH1, BH2 and BH3 are shown on Figure 1. BH1 and BH2 form a parallel set trending 110° to 120° and bound the sliver of greenstone belt which extends southeast to Semia Lake and Dougie Lake. BH1 and BH2 are expressed by discontinuous, narrow, linear magnetic anomalies which may reflect magnetite iron formation which has been smeared along the plane of deformation. Between BH1 and BH2 are fault bounded sections of greenstone belt which are less deformed. The "S" shaped pattern exhibited by the iron formations between BH1 and BH2 in the Semia Lake/Lower McVicar Lake area imply dextral motion along the faults. This is consistent with the sense of motion observed elsewhere along the BH fault zone (Waldie, personal communication). It is tempting to explain the sliver of greenstone belt extending to Semia Lake as being severed off the end of the Lang Lake iron formation, however, this is inconsistent with dextral sense of motion. Perhaps this sliver of greenstone is preserved as a graben structure with vertical motion along BH1 and BH2.

2.4. McVicar Lake Altered Zone and Vicinity

BH3 appears to be the structure which host the main altered zone at McVicar Lake. It is characterized by the truncation of minor iron formations in the McVicar Lake area and the emplacement of several intrusives. West of Shonia Lake the magnetic character of the zone changes and a narrow dyke appears to occupy this zone.

A comparison of the magnetic anomaly patterns to the north and south of BH3 in the McVicar Lake area shows them to be very similar, with narrow, linear, rhythmically banded magnetic anomalies. However, the strike direction of the anomalies is northeast on the north side of the fault and northwest on the south side of the fault. In several places north of the fault the tow patterns clearly overlap. Despite the similarity in pattern, mapping and drilling indicate the rock types are quite different with ironstone/mafic volcanics north of the BH3 and gabbro to the south. One possible mechanism of reconciling the observed bedrock geology and magnetics is to start with a single east facing fold, intrude the south limb with gabbroic sills to the extent that gabbro becomes the dominant rock type. The north limb was then thrust partially over the south limb along BH3 resulting in the pattern we see today.

Note that east of McVicar Lake and south BH3 the gabbro appear different on the images: large scale layering is absent, the intensity is lower and it hosts extremely conductive sulfide pods which have not been detected west of the McVicar Lake main zone.

Proceeding west to Lang Lake, the BH3 appears to swing northward becoming parallel to BH1 and BH2 before intersecting the iron formation. Aside from those previously explored at the McVicar Lake main zone, the "north flexure" and Shonia, BH3 is considered prospective in three areas: just west of Shonia Lake the zone takes an "S" shaped jog, midway between Shonia and Lang Lakes tonolitic intrusives are evident and where BH3 intersects the iron formation at Lang Lake (particularly in the vicinity of a granitic body which appears to intrude the iron formation). These targets are discussed in greater detail in the section covering ground surveys.

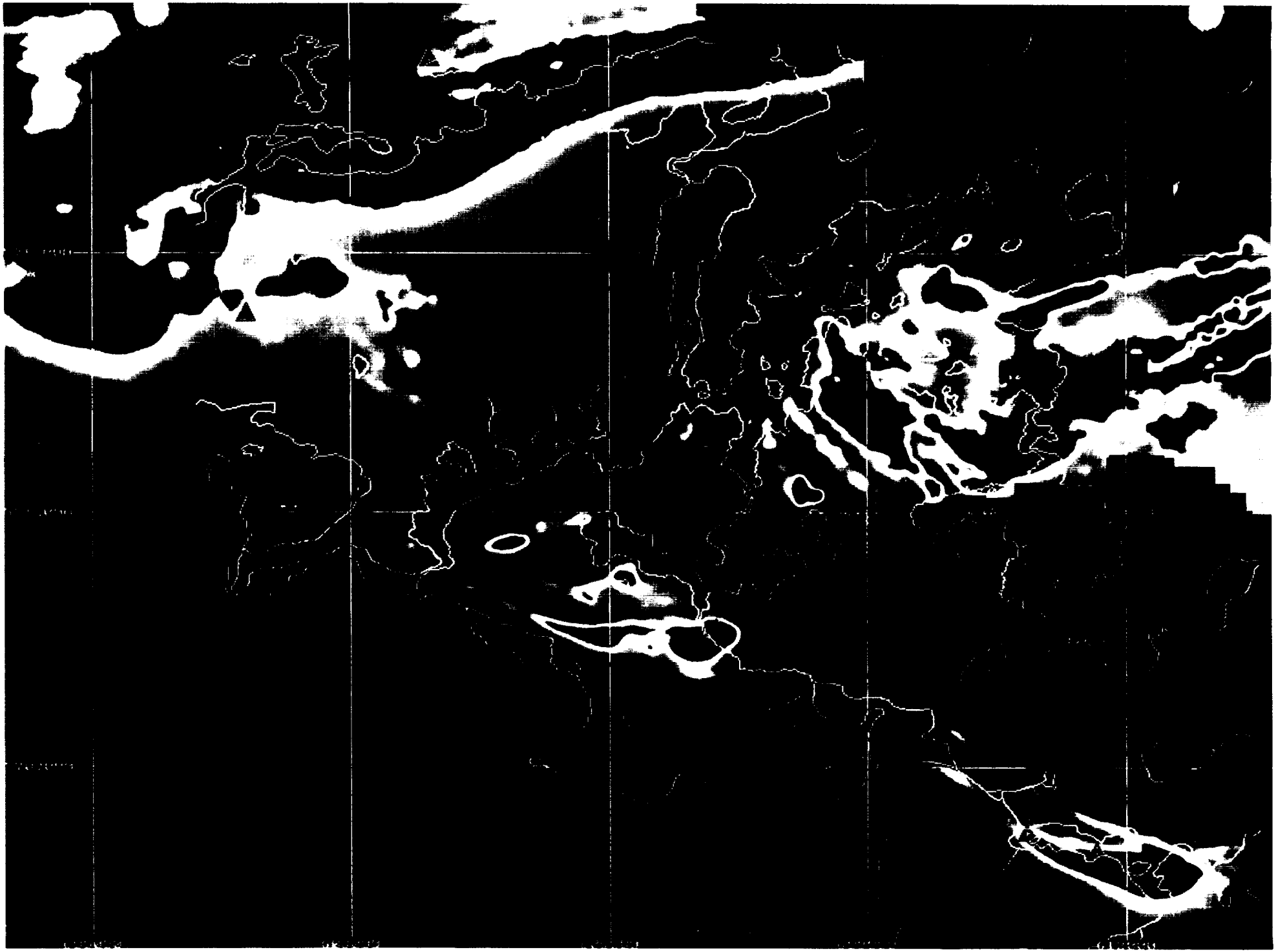


Figure 5a: McVicar Lake Area - Total Field Mag

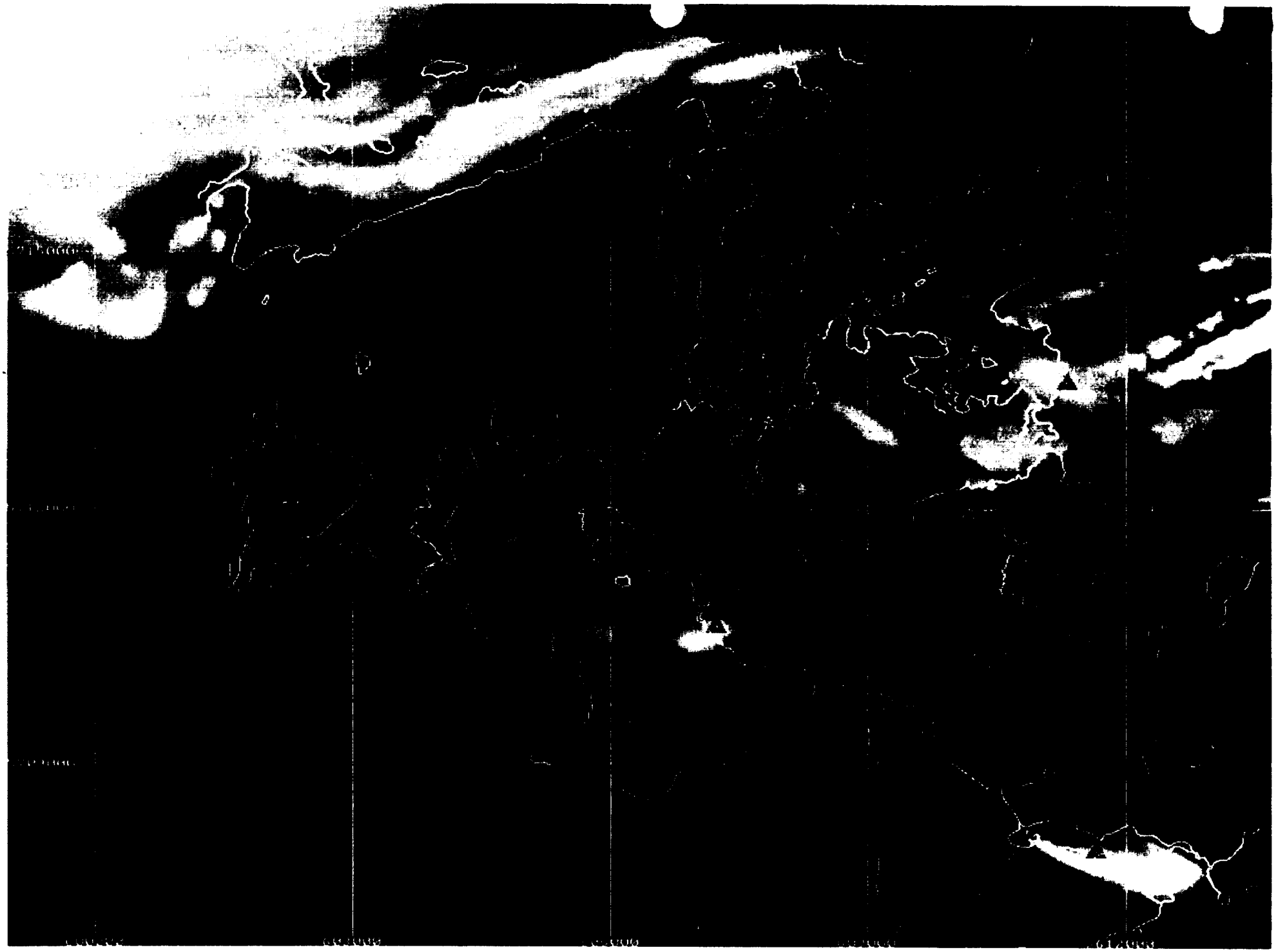


Figure 5b: McVicar Lake Area - Total Field Mag

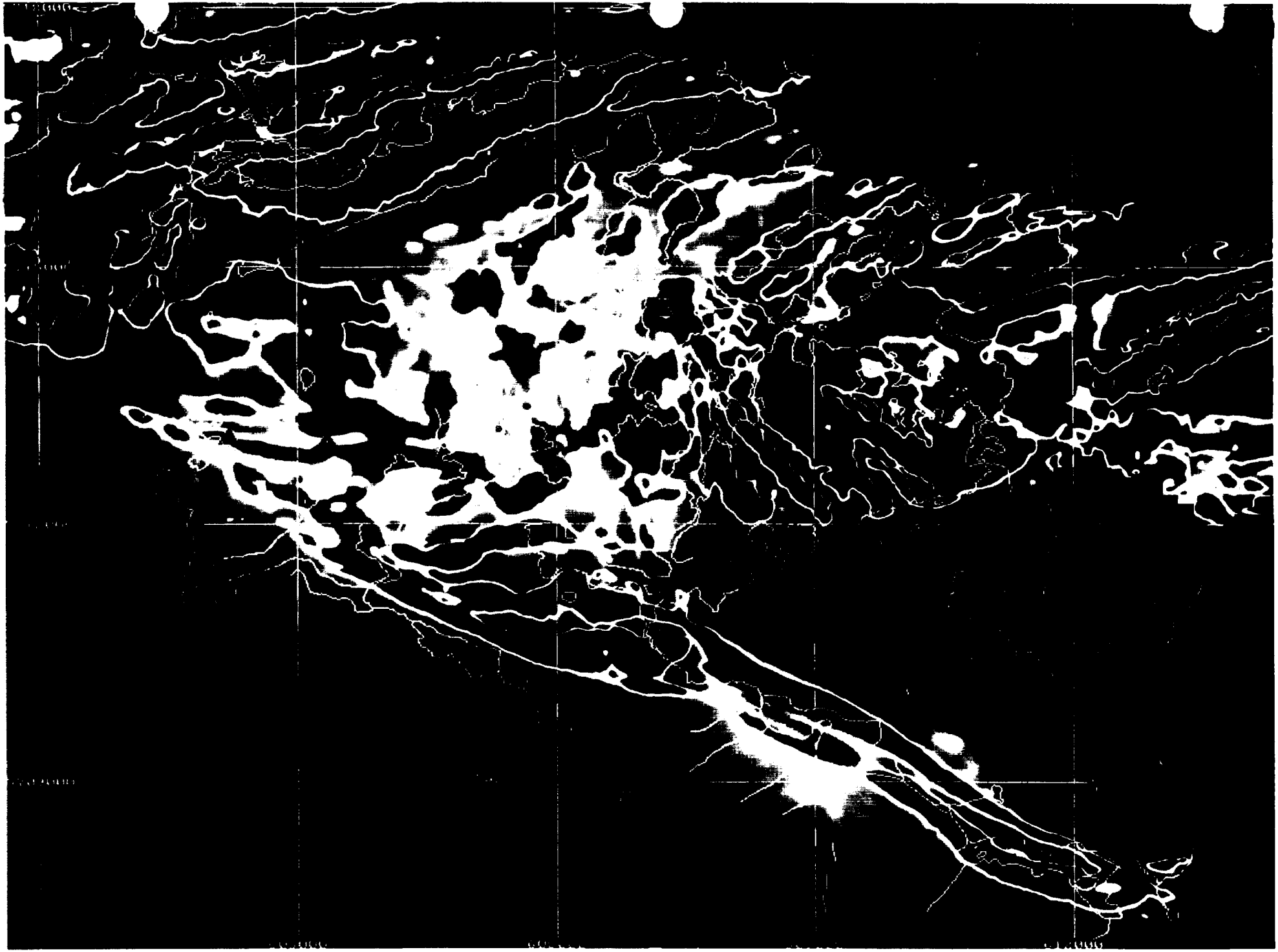


Figure 5c: McVicar Lake Area - Total Residual Mag

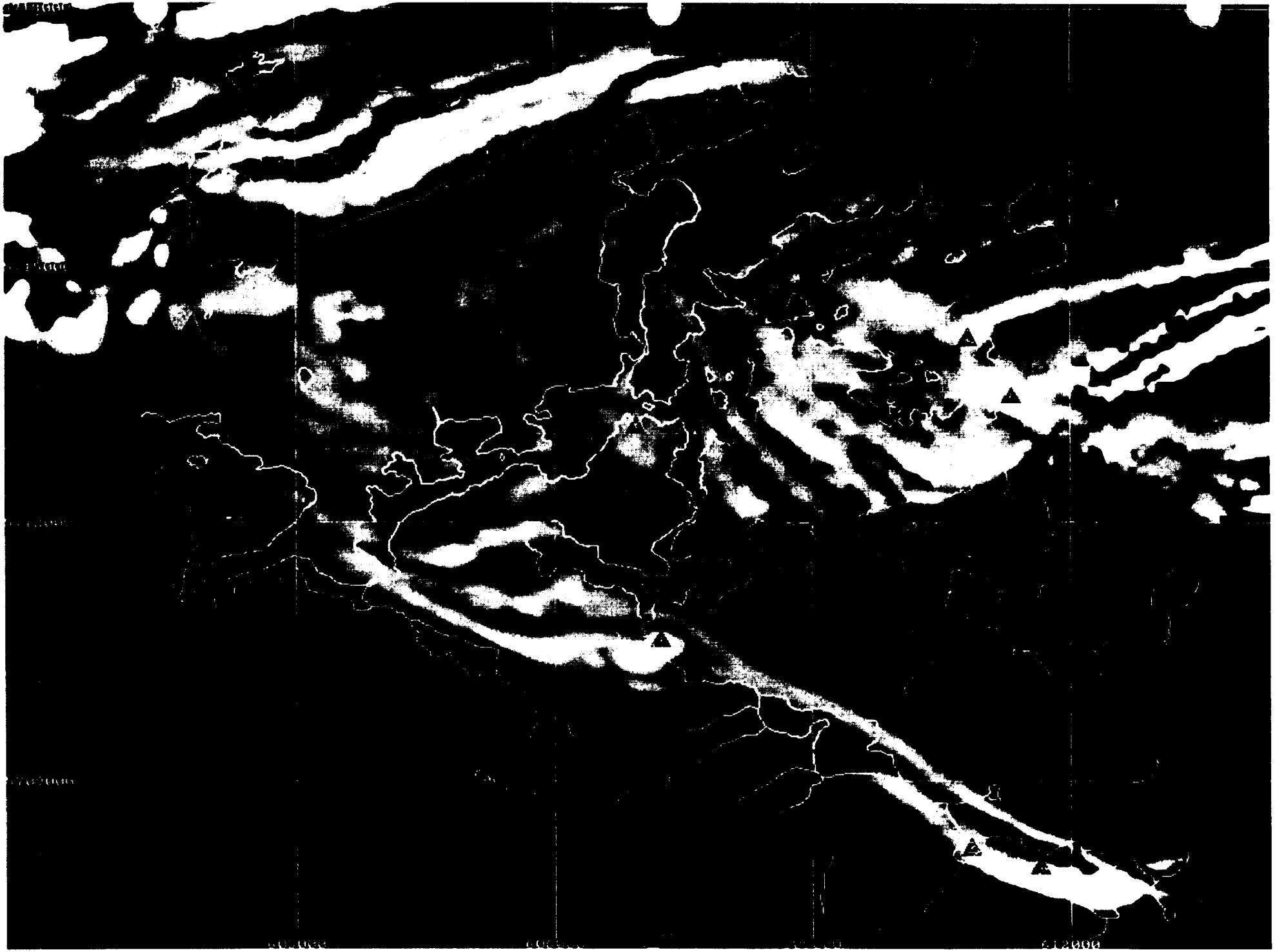


Figure 5d: McVicar Lake Area - Total Residual Mag

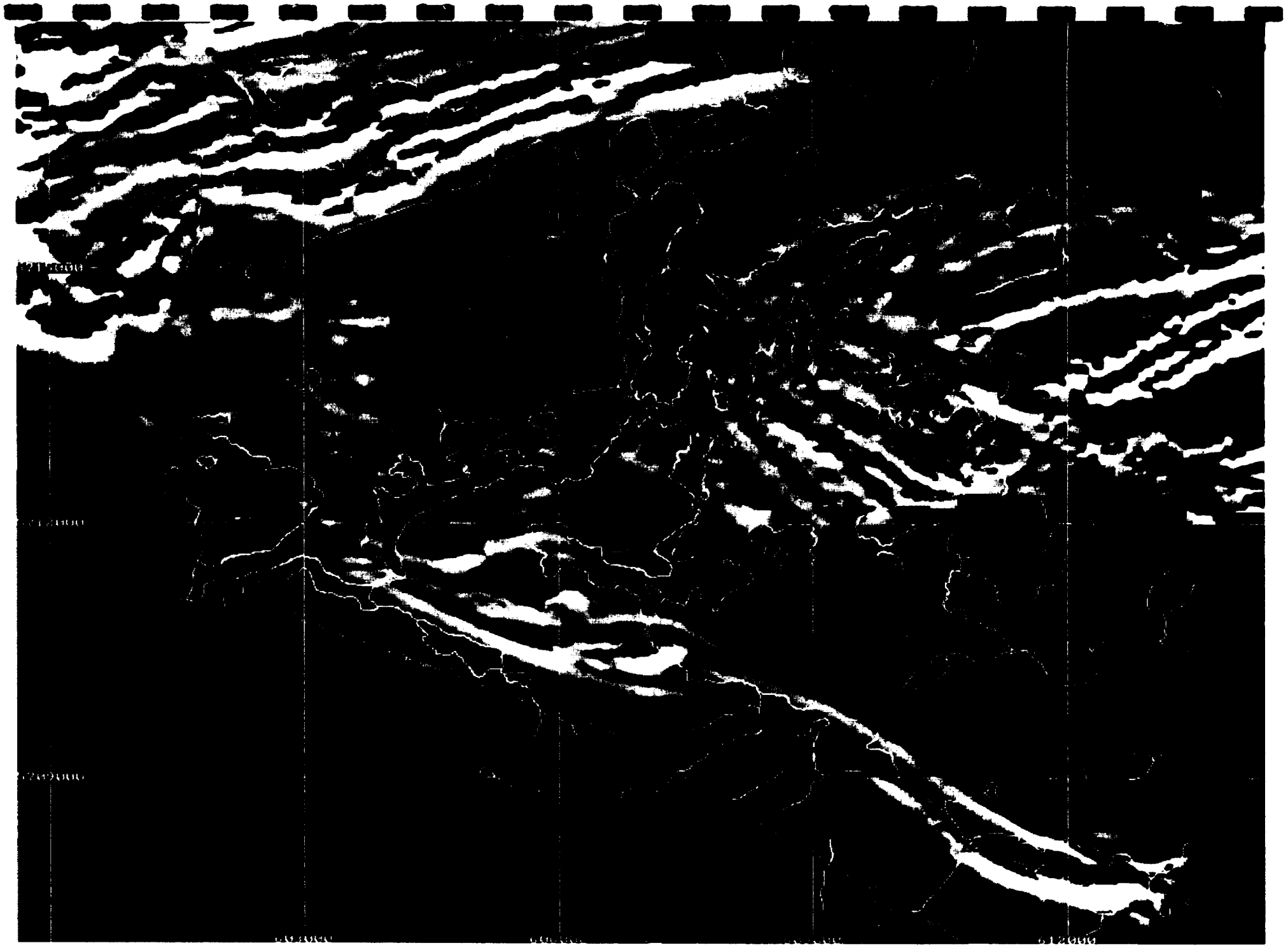


Figure 5e: McVicar Lake Area - North-South Gradient

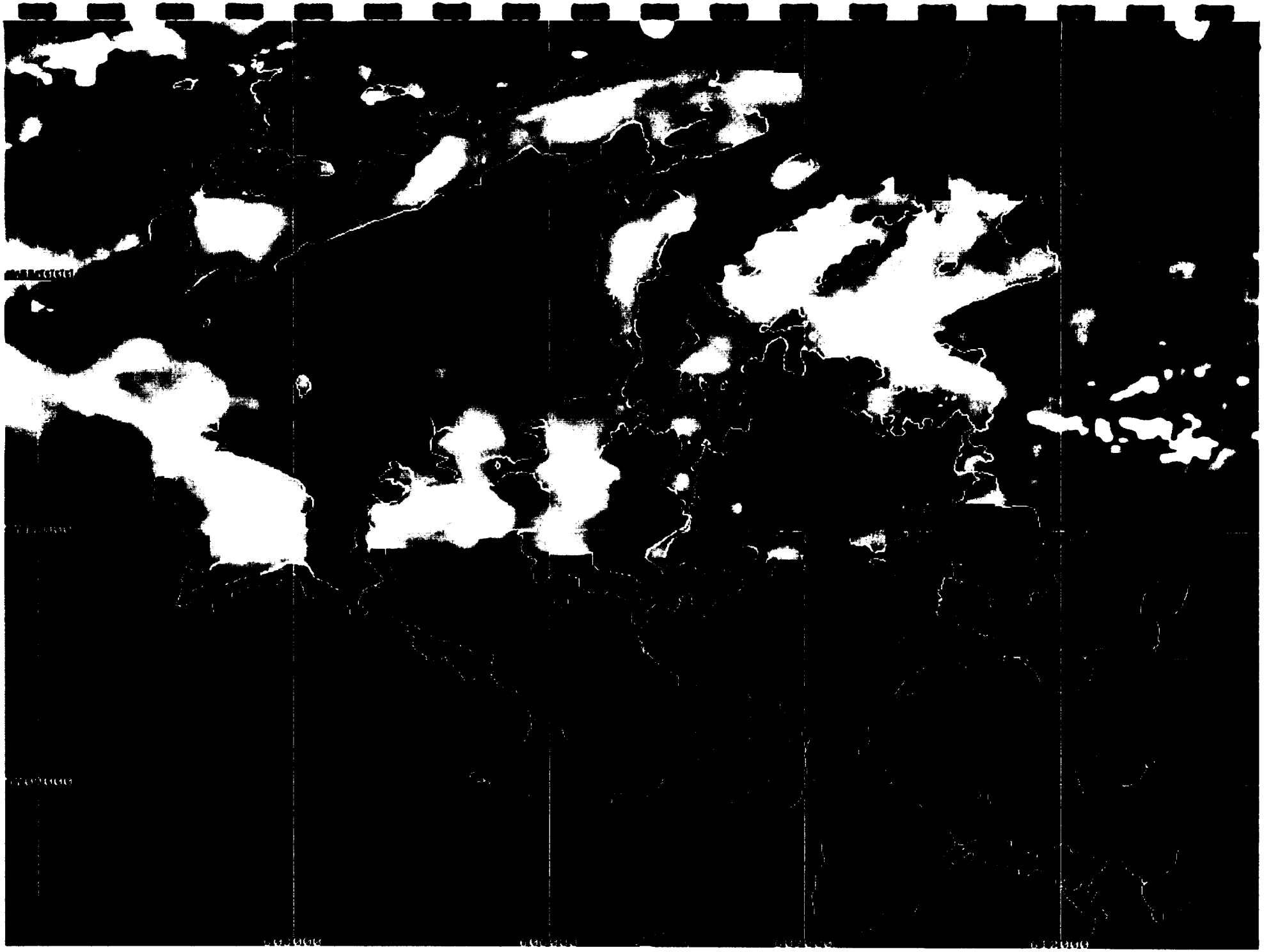


Figure 5g: McVicar Lake Area - Dighem Survey Filtered VLF

3. GROUND GEOPHYSICAL SURVEYS

3.1. Logistics

Ground geophysical surveys were completed in February-March 1993 over three areas. IP (25 m pole-dipole n = 1 to 6), Mag and VLF were completed in the Sor Lake area (Figure 6a). Mag/VLF and Max-Min were completed in the Semia Lake area (Figure 6b) and Mag was measured over an area west of Shonia Lake (Figure 6c).

3.2. Semia Lake / Lower McVicar Lake Area

The ground Mag, VLF and Max-Min data in the Semia Lake area outline a pattern of complex anomalies. Placed in the context of the structure interpreted from the airborne Mag a relatively simple picture emerges. Two major fault structure (BH1 and BH2) trend roughly 115° and bound the area of anomalies. BH1 and BH2 are presumed to follow the axis of the magnetic anomalies which are interpreted to arise from magnetic iron formation being sheared along the plane of deformation. Between BH1 and BH2 fragments of folded but massive iron formation have survived.

As on the airborne data set the magnetic pattern may be explained by a series of structures which form an anastomosing pattern between the two main zones. These are marked by magnetic anomalies, again presumed to be iron formation in the planes of deformation. This anastomosing pattern is indicative of a structural environment

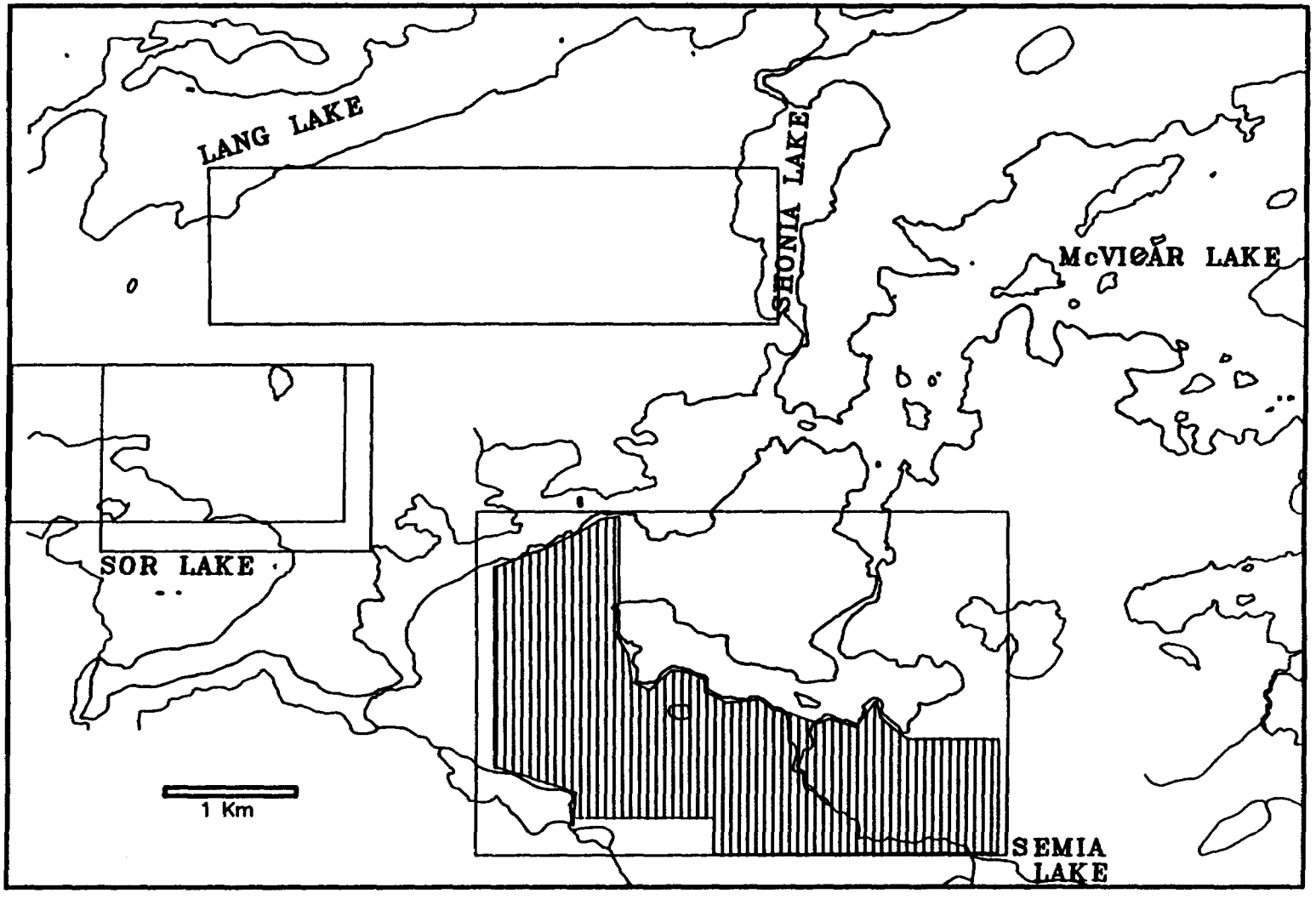


Figure 6a: Location of the Semia Lake Mag/VLF and EM Survey

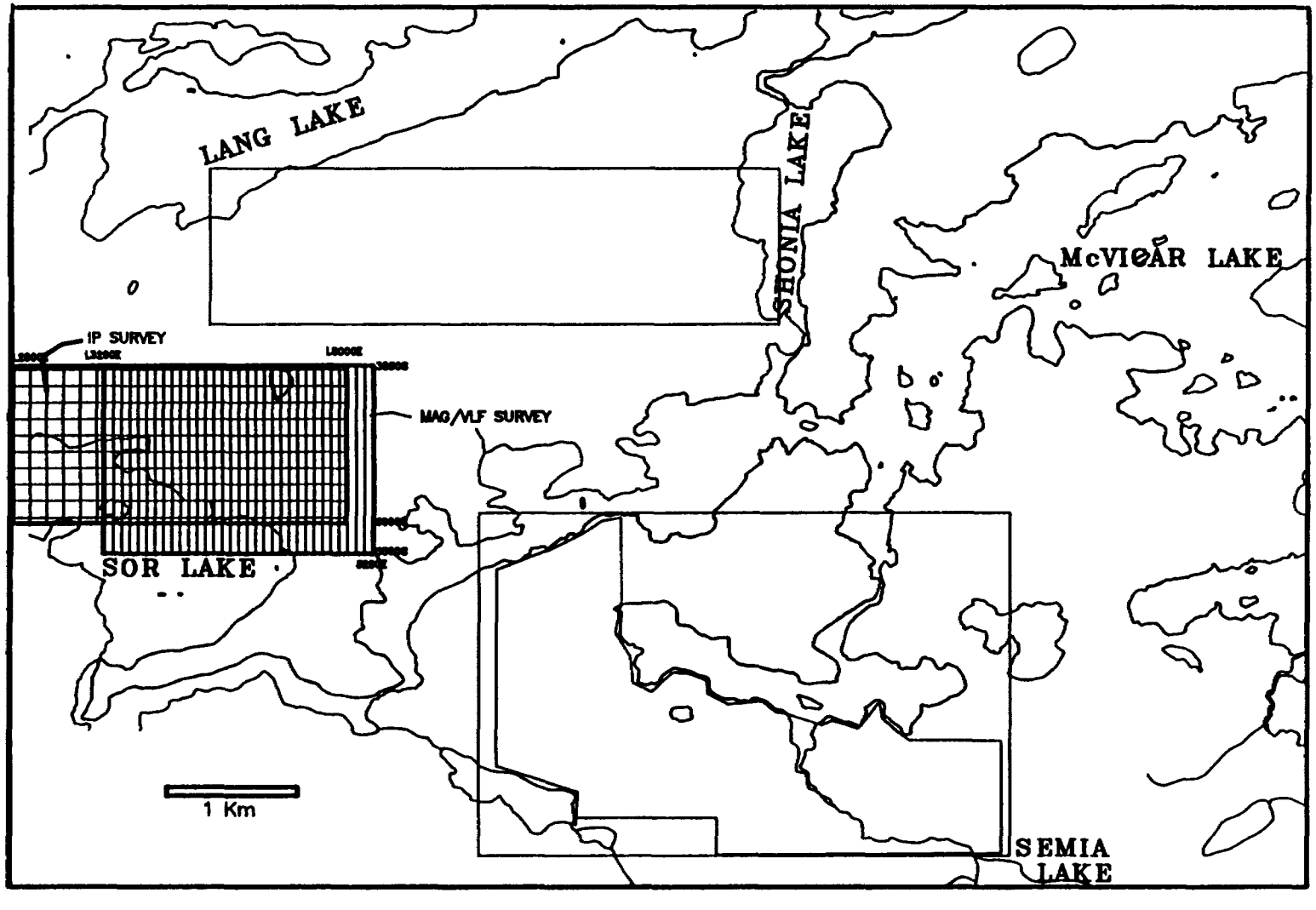


Figure 6b: Location of the Sor Lake IP and Mag VLF Surveys

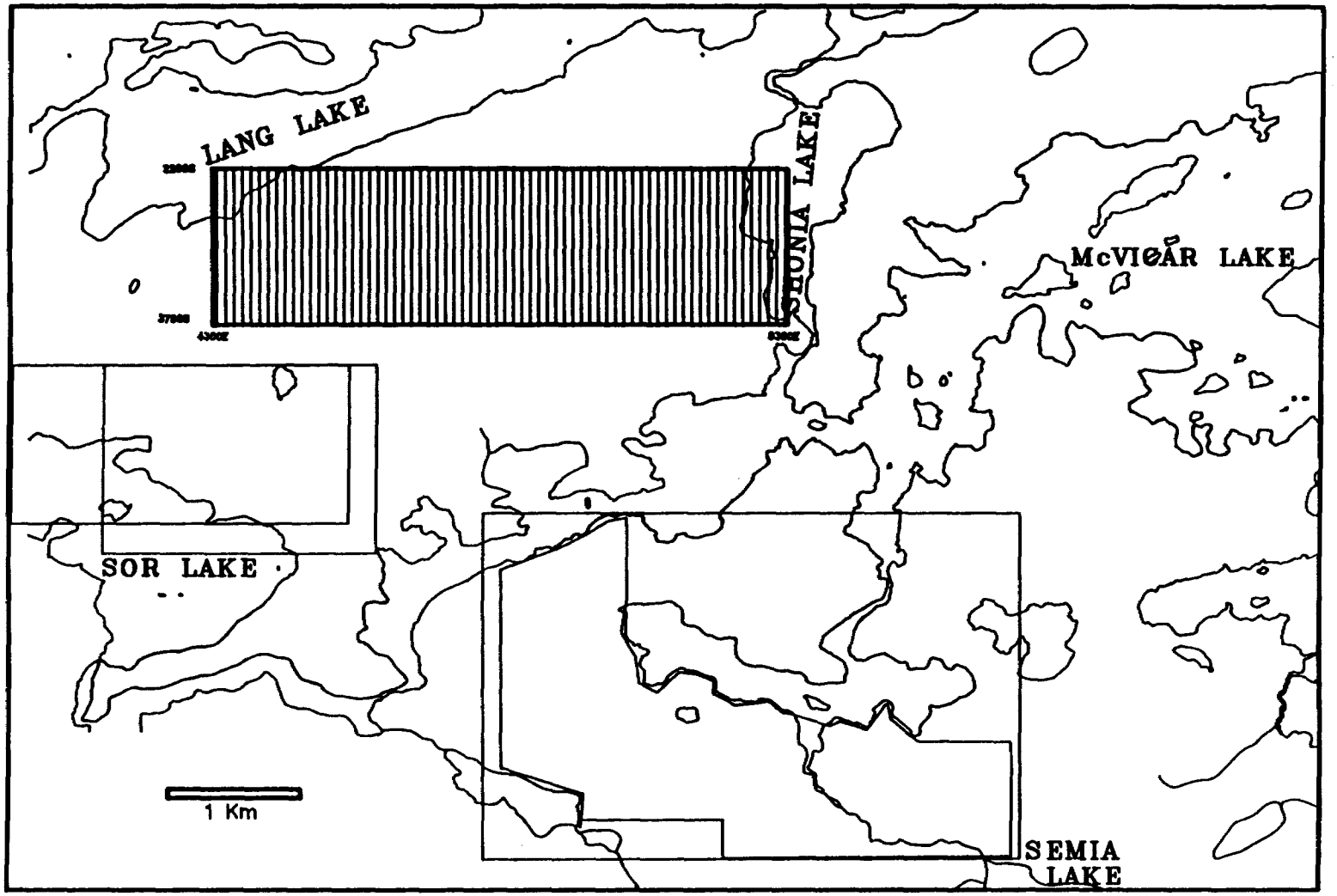


Figure 6c: Location of the Shonia West Mag Survey

which has provided a great deal of ground preparation essential for the formation of major Archean lode gold deposits. Note that a similar, but less developed pattern is recognized at Dougie Lake (2 km southeast of Semia Lake).

3.2.1. EM Anomalies

Anomaly A1 through A4 is an extremely conductive unit with weak, erratic magnetic association. It appears to be conformable with the magnetic stratigraphy and provides a useful marker horizon. The very high conductivity, especially for conductor A1, indicates a probable sulfide source. Sulfide facies iron formation is suspected as a cause for this anomaly. Base metal potential is not considered high (due to the environment), however this target should be pursued with prospecting and soil sampling. More appropriately this unit should be considered prospective as both a chemical trap and ductility anomaly within a structural setting favourable to gold deposition.

Anomaly B is a very weak conductor directly associated with a magnetite iron formation. Such weak conductors are common within BIF units, however, this appears to crosscut the magnetic anomaly and is parallel to BH2 and BH3. This implies a weakly conductive, cross-cutting structure within an iron formation and hence warrants examination.

Anomaly C is weakly conductive and coincides with BH3.

Anomalies D and E are both very weakly conductive and may represent graphitic units with the BIF package or be evidence of local faulting.

3.3. Sor Lake

Mag/VLF and partial IP coverage were completed over the Sor Lake grid. The area encompasses a package of mainly intrusive rocks between BH1 and BH2. East-west trending magnetic anomalies probably reflect the magnetic response from intrusives emplaced along subsidiary structures which join the two main structures. This is reminiscent of the anastomosing pattern observed between Lower McVicar Lake and Semia Lake, however, the sinusoid shape of the cross "structures" is absent.

3.3.1. IP/Resistivity

Very high correlation is noted between apparent resistivity and apparent chargeability. This strongly suggests that both are affected by the same factor probably conductive overburden and/or water. The background chargeability in the bedrock is very high as is the resistivity. Both responses are suppressed by thin, conductive cover. Thus most of the IP "anomalies" are really just thin spots in the cover. A notable exception is on L4000E at 3875S to L4300E at 4060S. Here a very strong IP anomaly flanks a moderately magnetic structure which is

interpreted to mark the BH2 fault zone. This represents an excellent gold exploration target.

A second anomalous area centred near L4900 at 4075S flanks the same magnetic unit. This is slightly less attractive due to its strong correlation with high resistivity, however, both warrant detail ground follow-up to determine the cause of the response and to prospect for alteration, mineralization and gold occurrences.

3.4. Shonia West Mag Survey

The purpose of this survey was to trace the extension of the "altered" zone structure (BH3) west of Shonia Lake to Lang Lake. The zone is recognized as a narrow, weak linear anomaly on the airborne mag and a similar narrow anomaly of 200 to 800 nT on the ground data. The magnetic response may arise from a very narrow dyke which occupies the alteration zone structure. Note that east of Shonia Lake the trace of the altered zone is marked not by a dyke but by disruption in the magnetic pattern resulting from the ironstones/volcanic package to the north of the structure juxtaposed against intrusives south of the zone. West of Shonia Lake the magnetic environment is much quieter and this may permit the recognition of this narrow discrete mag anomaly.

Three areas along this structure (west of Shonia Lake) emerge as prospective for gold exploration:

1. from L8100E to L7500E the structure (or at least the dyke) deviates from its 100° trend and strikes approximately 75°. Assuming any strike slip motion along the structure this presents an area where significant open space may have been developed.

2. At approximately L6200E to L6600E the structure intersects moderate intensity, discordant magnetic anomalies interpreted to arise from tonolitic intrusives. The juxtaposition of the structure with such intrusives has yielded several anomalous gold values immediately east of Shonia Lake.

3. The intersection of the BH3 structure and the iron formation within and northwest of Lang Lake is also considered prospective.

4. RECOMMENDATIONS

The following recommendations are made prior to an anticipated mapping, sampling and prospecting campaign anticipated in June and July 1993. These should be re-evaluated in light of this work prior to drill target selection.

1. The structural setting at Semia Lake/Lower McVicar Lake appears very attractive. the immediate vicinity of all of the oxide and sulfide facies iron formations should be prospected and evaluated geochemically (if surface conditions permit) followed by an aggressive drill campaign. The drill program should be based on comprehensive structural evaluation of the aeromag and mapping derived data.

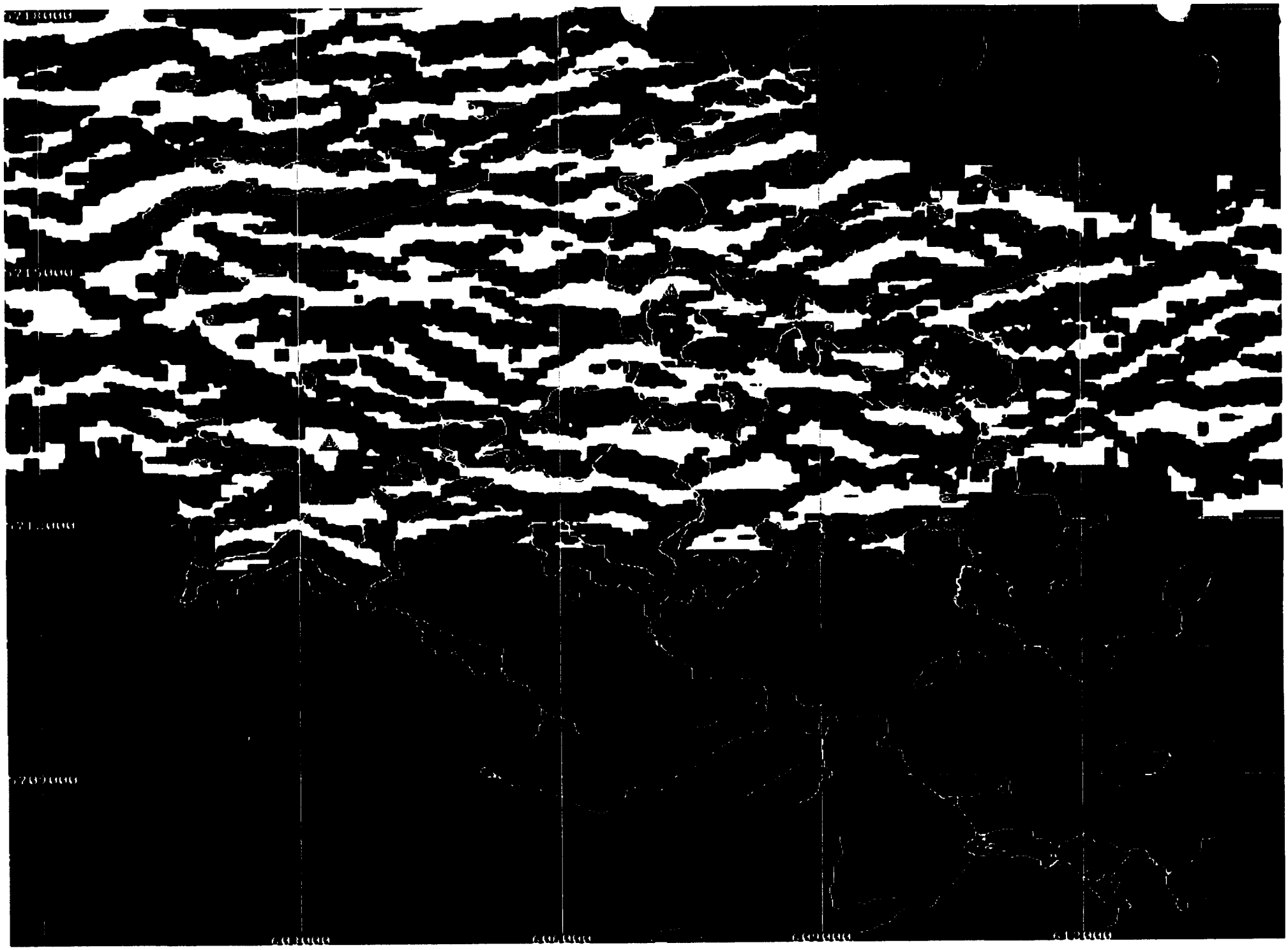


Figure 5f: McVicar Lake Area - Dighem Survey 7200 Hz, Apparent Resistivity

2. The various IP anomalies at Sor Lake should be prospected and sampled if surface conditions permit. In particular, the IP anomaly on L4000E at 3875S to L4300E to 4060E appears to be located in a favourable structural setting and warrants drill testing.

3. BH3 west of Shonia Lake should be exposed and examined for signs of alteration, mineralization and evidence of "ground preparation". If the zone turns out to be a simple dyke then its prospectivity will be significantly downgraded. Particular attention should be paid to the flexure in the structure near L7800E, to the intersection of the structure with the interpreted intrusions and where the structure intersects the Lang Lake iron formation.

REFERENCES

DIGHEM (1991) - McVicar Lake Property Geophysical Survey - Dighem IV

OGS (1986) - Pickle Lake GEOTEM Survey, Digital Data

Osmani, I. A. and Stott, G.M. (1988) - Regional Scale Shear Zones in the Sachigo Subprovince and Their Economic Significance in Summary of Field Work and Other Activities 1988, Ontario Geological Survey Miscellaneous Paper 141

Podolsky, George (1986) - Report on Combined Helicopter-borne Magnetic and VLF Survey, Pickle Lake Area, Ontario, Assessment Files

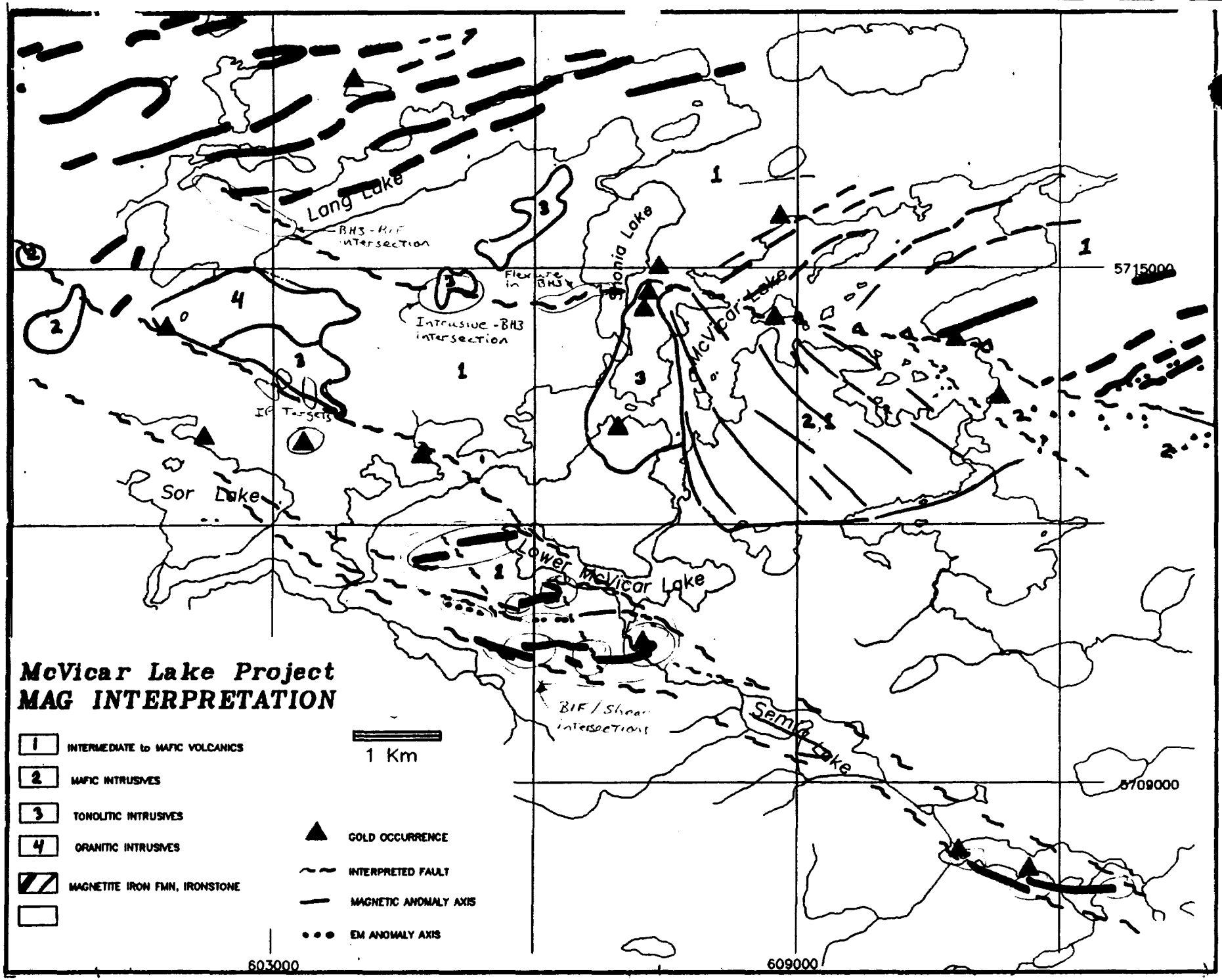


Figure 7: Schematic Representation of Areas Recommended for Follow-Up (shown in red)

52011SW9400 2.15280 STOUGHTON LAKE 900

Ontario

Ministry of Northern Development and Mines

Ministère du Développement du Nord et des Mines

Geoscience Approvals Office
933 Ramsey Lake Road
6th Floor
Sudbury, Ontario
P3E 6B5

Telephone: (705) 670-5853
Fax: (705) 670-5863

Our File: 2.15280
Transaction #: W9330.00001

April 8, 1994

Mining Recorder
Ministry of Northern
Development and Mines
Queen and Fourth
P.O. Box 3000
Sioux Lookout, Ontario

Dear Madam:

RE: APPROVAL OF ASSESSMENT WORK ON MINING CLAIMS PA 1133783 ET AL. IN THE MCVICAR AND STOUGHTON LAKE AREAS.

The Assessment Credits for GEOLOGY and GEOPHYSICS, sections 12 and 14 of the Mining Act Regulations, as listed on the original submission, have been approved as of April 6, 1994.

Please indicate this approval on the claim record sheets.

If you have any questions please call Clive Stephenson at (705) 670-5856.

Yours sincerely

Ron C. Gashinski
Senior Manager, Mining Lands Section
Mining and Land Management Branch
Mines and Minerals Division

CDS/ls

cc: Resident Geologist
Sioux Lookout, Ontario

Assessment Files Library
Toronto, Ontario

Ontario Ministry of Northern Development and Mines

Report of Work Conducted After Recording Claim

W9430.00001

Mining Act

Personal information collected on this form is obtained under the authority of the Mining Act. This information will be used for correspondence. Questions about this collection should be directed to the Provincial Manager, Mining Lands, Ministry of Northern Development and Mines, Fourth Floor, 159 Cedar Street, Sudbury, Ontario, P3E 6A5, telephone (705) 670-7264.

2.15289

Instructions:
- Please type or print and submit in duplicate.
- Refer to the Mining Act and Regulations for requirements of filing assessment work or consult the Mining Recorder.
- A separate copy of this form must be completed for each Work Group.
- Technical reports and maps must accompany this form in duplicate.
- A sketch, showing the claims the work is assigned to, must accompany this form.

Recorded Holder(s)		Client No.
BHP MINERALS CANADA LIMITED		108137
Address		**Telephone No.**
610-33 YONGE STREET, TORONTO, ONTARIO M5E 1G4		416-368-3884
Mining Division	**Township/Area**	**M or G Plan No.**
PATRICIA	MVCICAR LK. AND STOUGHTON LK.	G2121 and G2228
Dates Work Performed From: FEBRUARY 2, 1993	To: AUGUST 10, 1993	

Work Performed (Check One Work Group Only)

	Work Group	Type
	Geotechnical Survey	GEOPHYSICAL SURVEY, GEOLOGICAL MAPPING, HUMUS SURVEY (W10)
	Physical Work, Including Drilling	LINECUTTING EM/MAG/IP/GEOL/GRAD/RESIS
	Rehabilitation	
	Other Authorized Work	
	Assays	
	Assignment from Reserve	

4143

RECEIVED
JAN 21 1994
MINING LANDS BRANCH

94 JAN 13 AM 9:44
RECORDER
PATRICIA
DIVISION

Total Assessment Work Claimed on the Attached Statement of Costs $ 100,900

Note: The Minister may reject for assessment work credit all or part of the assessment work submitted if the recorded holder cannot verify expenditures claimed in the statement of costs within 30 days of a request for verification.

Persons and Survey Company Who Performed the Work (Give Name and Address of Author of Report)

Name	Address
C.J. WALDIE (AUTHOR)	610-33 YONGE ST. TORONTO, ONTARIO M5E 1G4
P. DIORIO (AUTHOR)	610-33 YONGE ST. TORONTO, ONTARIO M5E 1G4
JACK HODGE (linecutting)	RR #1 DEVLIN, ONTARIO P0W 1C0

(attach a schedule if necessary)

Certification of Beneficial Interest * See Note No. 1 on reverse side

I certify that at the time the work was performed, the claims covered in this work report were recorded in the current holder's name or held under a beneficial interest by the current recorded holder.	Date JAN 12 CTW/94	Recorded Holder or Agent (Signature) Craig Waldie

Certification of Work Report

I certify that I have a personal knowledge of the facts set forth in this Work report, having performed the work or witnessed same during and/or after its completion and annexed report is true.

Name and Address of Person Certifying		
CRAIG WALDIE 610-33 YONGE ST. TORONTO, ONTARIO M5E 1G4		
Telepone No. (416)368-3884	**Date** JAN 12 CTW/94	**Certified By (Signature)** Craig Waldie

For Office Use Only

Total Value Cr. Recorded	Date Recorded	Mining Recorder	Received Stamp
$100,900	94 JAN 14		RECORDED JAN 14 1994 Receipt
	Deemed Approval Date 94 APR 14	Date Approved	
	Date Notice for Amendments Sent ✓		

0241 (03/91)

Work Report Number for Applying Reserve	Claim Number (see Note 2)	Number of Claim Units	Value of Assessment Work Done on this Claim	Value Applied to this Claim	Value Assigned from this Claim	Reserve: Work to be Claimed at a Future Date
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	1133785	1	$ 385.00	$ 800.00		
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	1144838 ✓	1	$ 269.00		$ 269.00	
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	1169292 ✓	1	$ 269.00		$ 269.00	
	1169293 ✓	1	$ 269.00		$ 269.00	
	1169294 ✓	1	$ 269.00		$ 269.00	
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Work Report Number for Applying Reserve	Claim Number (see Note 2)	Number of Claim Units	Value of Assessment Work Done on this Claim	Value Applied to this Claim	Value Assigned from this Claim	Reserve: Work to be Claimed at a Future Date
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	1179722 ✓	1	$ 385.00			$385.00
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	1179724 ✓	1	$ 385.00			$385.00
	1179730 ✓	1	$ 269.00			$269.00
	1179731 ✓	1	$ 269.00			$269.00
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	1179740 ✓	1	$ 269.00			$269.00
	1179741 ✓	1	$ 269.00			$269.00
	1179742 ✓	1	$ 269.00			$269.00
	1179745 ✓	1	$ 269.00			$269.00
	1179746 ✓	1	$ 269.00			$269.00
	102		$68,988.00	$36,000.00	$41,975.00	$4,531.00
	Total Number of Claims		Total Value Work Done	Total Value Work Applied	Total Assigned From	Total Reserve

Work Report Number for Applying Reserve	Claim Number (see Note 2)	Number of Claim Units	Value of Assessment Work Done on this Claim	Value Applied to this Claim	Value Assigned from this Claim	Reserve: Work to be Claimed at a Future Date
	1179747 ✓	1	$ 269.00			$269.00
	1179750 ✓	1	$ 269.00			$269.00
	1179751 ✓	1	$ 269.00			$269.00
	1179752 ✓	1	$ 269.00			$269.00
	1179755 ✓	1	$ 269.00			$269.00
	1179756 ✓	1	$ 269.00			$269.00
	1179757 ✓	1	$ 269.00			$269.00
	✓1179805	16	$10,487.00	$12,800.00		
	✓1179806	12	$ 4,165.00	$ 9,600.00		
	✓1179807	12	$ 6,679.00	$ 9,600.00		
	✓1179808	8	$ 4,212.00	$ 6,400.00		
	✓1180582	1	$ 269.00			$269.00
	✓1180593	1	$ 269.00			$269.00
	✓1180594	1	$ 269.00			$269.00
	✓1180596	1	$ 269.00			$269.00
	✓1180603	4	$ 3,410.00	$ 3,200.00		$210.00
	1133786	2		$ 1,600.00		
	119		$100,900.00	$79,200.00	$41,975.00	$7,700.00
	Total Number of Claims		Total Value Work Done	Total Value Work Applied	Total Assigned From	Total Reserve

Work Report Number for Applying Reserve	Claim Number (see Note 2)	Number of Claim Units	Value of Assessment Work Done on this Claim	Value Applied to this Claim	Value Assigned from this Claim	Reserve: Work to be Claimed at a Future Date
	1133787	4		$3,200.00		
	1145280	2		$1,600.00		
	1145282	11		$4,400.00		
	1179810	12		$4,800.00		
	121		$100,900.00	$93,200.00	$41,975.00	$7,700.00
	Total Number of Claims		Total Value Work Done	Total Value Work Applied	Total Assigned From	Total Reserve

Ontario

Ministry of Northern Development and Mines

Ministère du Développement du Nord et des mines

Statement of Costs for Assessment Credit

État des coûts aux fins du crédit d'évaluation

Mining Act/Loi sur les mines

Transaction No./N° de transaction: W9430.00001

2.15280

Personal information collected on this form is obtained under the authority of the **Mining Act**. This information will be used to maintain a record and ongoing status of the mining claim(s). Questions about this collection should be directed to the Provincial Manager, Minings Lands, Ministry of Northern Development and Mines, 4th Floor, 159 Cedar Street, Sudbury, Ontario P3E 6A5, telephone (705) 670-7264.

Les renseignements personnels contenus dans la présente formule sont recueillis en vertu de la **Loi sur les mines** et serviront à tenir à jour un registre des concessions minières. Adresser toute quesiton sur la collece de ces renseignements au chef provincial des terrains miniers, ministère du Développement du Nord et des Mines, 159, rue Cedar, 4e étage, Sudbury (Ontario) P3E 6A5, téléphone (705) 670-7264.

1. Direct Costs/Coûts directs

Type	Description	Amount Montant	Totals Total global
Wages Salaires	Labour Main-d'oeuvre	55,370 ✓	
	Field Supervision Supervision sur le terrain		55,370
Contractor's and Consultant's Fees Droits de l'entrepreneur et de l'expert-conseil	Type LINECUTTING	20,512 ✓	
	ANALYTICAL	6,618 ✓	
			27,130
Supplies Used Fournitures utilisées	Type DRAFTING	608 ✓	
	FUEL	615 ✓	
			1,223
Equipment Rental Location de matériel	Type OUTBOARD MOTOR	360 ✓	
			360
	Total Direct Costs Total des coûts directs		84,083

2. Indirect Costs/Coûts indirects

** Note: When claiming Rehabilitation work indirect costs are not allowable as assessment work.
Pour le remboursement des travaux de réhabilitation, les coûts indirects ne sont pas admissibles en tant que travaux d'évaluation.

Type	Description	Amount Montant	Totals Total global
Transportation Transport	Type AIR SUPPORT	4,588	
			4,588
Food and Lodging Nourriture et hébergement		12,132	12,132
Mobilization and Demobilization Mobilisation et démobilisation		9,101	9,101
	Sub Total of Indirect Costs Total partiel des coûts indirects		25,821
Amount Allowable (not greater than 20% of Direct Costs) Montant admissible (n'excédant pas 20 % des coûts directs)			16,817
Total Value of Assessment Credit (Total of Direct and Allowable Indirect costs)	**Valeur totale du crédit d'évaluation (Total des coûts directs et indirects admissibles**		100,900

Note: The recorded holder will be required to verify expenditures claimed in this statement of costs within 30 days of a request for verification. If verification is not made, the Minister may reject for assessment work all or part of the assessment work submitted.

Note : Le titulaire enregistré sera tenu de vérifier les dépenses demandées dans le présent état des coûts dans les 30 jours suivant une demande à cet effet. Si la vérification n'est pas effectuée, le ministre peut rejeter tout ou une partie des travaux d'évaluation présentés.

Filing Discounts

1. Work filed within two years of completion is claimed at 100% of the above Total Value of Assessment Credit.
2. Work filed three, four or five years after completion is claimed at 50% of the above Total Value of Assessment Credit. See calculations below:

Total Value of Assessment Credit		Total Assessment Claimed
NA	× 0.50 =	

Remises pour dépôt

1. Les travaux déposés dans les deux ans suivant leur achèvement sont remboursés à 100 % de la valeur totale susmentionnée du crédit d'évaluation.
2. Les travaux déposés trois, quatre ou cinq ans après leur achèvement sont remboursés à 50 % de la valeur totale du crédit d'évaluation susmentionné. Voir les calculs ci-dessous.

Valeur totale du crédit d'évaluation		Évaluation totale demandée
	× 0,50 =	

Certification Verifying Statement of Costs

I hereby certify:
that the amounts shown are as accurate as possible and these costs were incurred while conducting assessment work on the lands shown on the accompanying Report of Work form.

that as PROJECT GEOLOGIST (Recorded Holder, Agent, Position in Company) I am authorized

to make this certification

Attestation de l'état des coûts

J'atteste par la présente :
que les montants indiqués sont le plus exact possible et que ces dépenses ont été engagées pour effectuer les travaux d'évaluation sur les terrains indiqués dans la formule de rapport de travail ci-joint.

Et qu'à titre de _____ (titulaire enregistré, représentant, poste occupé dans la compagnie) je suis autorisé

à faire cette attestation.

Signature	Date
CRAIG WALDIE	JAN 12/94

0212 (04/91)

Nota : Dans cette formule, lorsqu'il désigne des personnes, le masculin est utilisé au sens neutre.

April 11/90 C
Feb 4/91

SADDLE LAKE G-2197

STOUGHTON LAKE G-2228

CANNON LAKE G-1978

MEEN LAKE G-2122

91°30' 91°15' 51°37'30" 51°30'

Boyes Lake
Andy Lake
Gitche Lake
McVicar Lake
Semia Lake
N. Vicar Lake

1193360
1193182
1193159
1144973
1144974
1179805
1180603
1179806
1179807
1179808
1179810
1145280
1145282
1133787
1133786
1133789
1133788
1133783
1133784
1133785
122007 122008 122009 122010 122005 122004 122002 122006 122003

2.15280

3M 4M 5M 6M 7M 8M 9M 10M 11M

29' 28' 27' 26' 25' 24' 23' 22' 21' 20' 19' 18' 17' 16'
37' 36' 35' 34' 33' 32' 31'

Sept 6/90 C
March 15/90 C
July 4/90 C
Nov 21/90 C
April 11/91 R
April 5/91 R
April 10/91 R
May 17/91 C+R
June 10/91 C
Aug 7/91 R
Oct 23 91 R
March 16/92 R
MARCH 17/92 R
April 27/92 R
May 1/92 R
JUNE 11/92 R
June 12c
OCT 5/92 R

THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES, AND ACCURACY IS NOT GUARANTEED. THOSE WISHING TO STAKE MINING CLAIMS SHOULD CONSULT WITH THE MINING RECORDER, MINISTRY OF NORTHERN DEVELOPMENT AND MINES, FOR ADDITIONAL INFORMATION ON THE STATUS OF THE LANDS SHOWN HEREON.

515912

LEGEND

- HIGHWAY AND ROUTE No
- OTHER ROADS
- TRAILS
- SURVEYED LINES
  - TOWNSHIPS, BASE LINES ETC
  - LOTS, MINING CLAIMS, PARCELS ETC
- UNSURVEYED LINES
  - LOT LINES
  - PARCEL BOUNDARY
  - MINING CLAIMS ETC
- RAILWAY AND RIGHT OF WAY
- UTILITY LINES
- NON PERENNIAL STREAM
- FLOODING OR FLOODING RIGHTS
- SUBDIVISION OR COMPOSITE PLAN
- RESERVATIONS
- ORIGINAL SHORE LINE
- MARSH OR MUSKEG
- MINES
- TRAVERSE MONUMENT
- REMOTE TOURIST SET-UP (VTR)

DISPOSITION OF CROWN LANDS

TYPE OF DOCUMENT	SYMBOL
PATENT, SURFACE & MINING RIGHTS	●
" SURFACE RIGHTS ONLY	◓
" MINING RIGHTS ONLY	◒
LEASE, SURFACE & MINING RIGHTS	■
" SURFACE RIGHTS ONLY	▬
" MINING RIGHTS ONLY	▣
LICENCE OF OCCUPATION	▼
ORDER IN COUNCIL	OC
RESERVATION	R
CANCELLED	C
SAND & GRAVEL	S

NOTE MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 6 1913 VESTED IN ORIGINAL PATENTEE BY THE PUBLIC LANDS ACT R.S.O. 1970 CHAP 380 SEC 63 SUBSEC 1

REFERENCES

AREAS WITHDRAWN FROM DISPOSITION

M.R.O. - MINING RIGHTS ONLY
S.R.O. - SURFACE RIGHTS ONLY
M.+S. - MINING AND SURFACE RIGHTS

Description	Order No	Date	Disposition	File

34 mar 92 P2:24

MINING RECORDER
PATRICIA
MINES DIVISION

T.L.C. - TRAP LINE CABIN

SCALE 1 INCH = 40 CHAINS

0 1000 2000 4000 6000 8000
0 200 1000 2000
METRES 1 KM 2 KM

AREA

McVICAR LAKE

M.N.R. ADMINISTRATIVE DISTRICT
SIOUX LOOKOUT
MINING DIVISION
PATRICIA
LAND TITLES / REGISTRY DIVISION
KENORA (PATRICIA PORTION)

Ontario Ministry of Natural Resources — Land Management Branch

Date JANUARY, 1984

Number G-2121

5201159W9400 2.15280 STOUGHTON LAKE

Mar. 26/90 C
April 11/90 C
May 17/90 C
July 23/90
July 30/90
July 30/90c
July 30/90c
Jan 30/91
F.C.B. 9/91
Apl. 9/91 R
Apr. 5/91 R
April 10/92
MAY 2d/91
May 20/91 R
Oct. 23/91 R
Oct. 24/91 R
MARCH 17/92 R

Apr 27/92 R
Ap. 28/92 Rein.

BAGGY LAKE G-1945

91°45'

51°37'30"

Pa. 1054595 Pa. 1054596 Pa. 1054597 Pa. 1054598 Pa. 1149900

Saddle Creek

Bowen L. River

Blackpail L.

Berrisond L. Lake

Gitche L. Lake

Boyes Creek

Boyes Lake

1195359 1195360 1195361

Stoughton Lake

Stoughton Creek

Gitche River

1144973

2.15280

B 221

B 222

KAPIKIK LAKE G-2080

McVICAR LAKE G-2121

ZIONZ RIVER G-2280

91°30'

51°30'

THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES AND ACCURACY IS NOT GUARANTEED. THOSE WISHING TO STAKE MINING CLAIMS SHOULD CONSULT WITH THE MINING RECORDER, MINISTRY OF NORTHERN DEVELOPMENT AND MINES FOR ADDITIONAL INFORMATION ON THE STATUS OF THE LANDS SHOWN HEREON.

5159/3

LEGEND

- HIGHWAY AND ROUTE No.
- OTHER ROADS
- TRAILS
- SURVEYED LINES
  - TOWNSHIPS, BASE LINES, ETC.
  - LOTS, MINING CLAIMS, PARCELS, ETC.
- UNSURVEYED LINES
  - LOT LINES
  - PARCEL BOUNDARY
  - MINING CLAIMS ETC.
- RAILWAY AND RIGHT OF WAY
- UTILITY LINES
- NON PERENNIAL STREAM
- FLOODING OR FLOODING RIGHTS
- SUBDIVISION OR COMPOSITE PLAN
- RESERVATIONS
- ORIGINAL SHORELINE
- MARSH OR MUSKEG
- MINES
- TRAVERSE MONUMENT
- REMOTE TOURIST SET-UP (RTS)

DISPOSITION OF CROWN LANDS

TYPE OF DOCUMENT	SYMBOL
PATENT, SURFACE & MINING RIGHTS	●
" , SURFACE RIGHTS ONLY	◒
" , MINING RIGHTS ONLY	◓
LEASE, SURFACE & MINING RIGHTS	■
" SURFACE RIGHTS ONLY	▣
" MINING RIGHTS ONLY	▼
LICENCE OF OCCUPATION	OC
ORDER IN COUNCIL	◔
RESERVATION	⊛
CANCELLED	◔
SAND & GRAVEL	

NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 6, 1913, VESTED IN ORIGINAL PATENTEE BY THE PUBLIC LANDS ACT, R.S.O. 1970, CHAP. 380, SEC. 63, SUBSEC. 1.

REFERENCES

AREAS WITHDRAWN FROM DISPOSITION

M.R.O. MINING RIGHTS ONLY
S.R.O. SURFACE RIGHTS ONLY
M. + S. MINING AND SURFACE RIGHTS

Description	Order No.	Date	Disposition	File

Apr 1/97
3/89
730

94 MAY 17 P2:24

MINING RECORDER
PATRICIA
MINING DIVISION

SCALE 1 INCH = 40 CHAINS

1000 2000 4000 6000 8000
0 500 1000 2000
1 KM 2 KM
METRIC

AREA **STOUGHTON LAKE**

M.N.R. ADMINISTRATIVE DISTRICT
SIOUX LOOKOUT

MINING DIVISION
PATRICIA

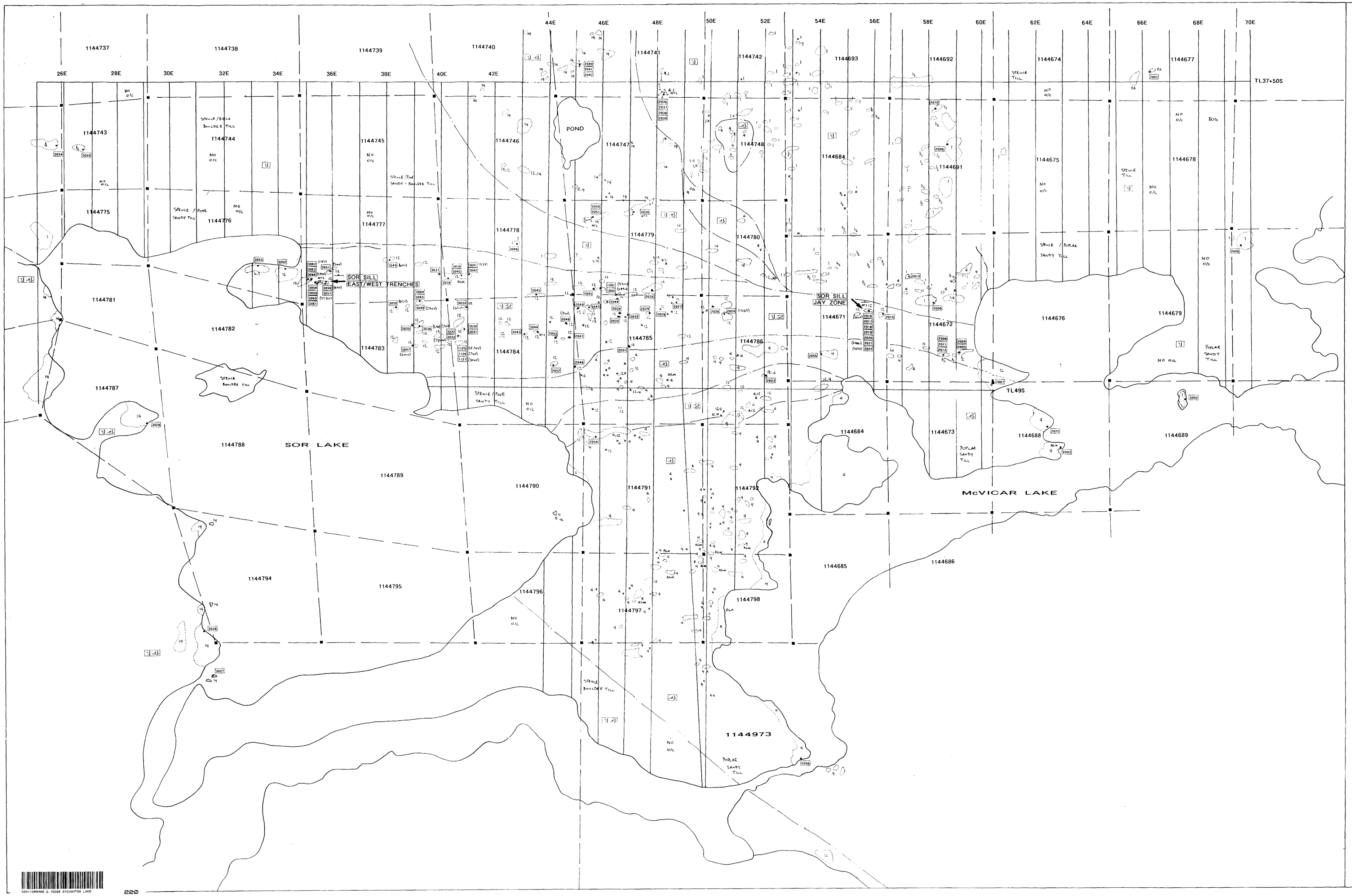
LAND TITLES / REGISTRY DIVISION
KENORA (PATRICIA PORTION)

Ministry of Natural Resources — Land Management Branch
Ontario

Date FEBRUARY, 1984

Number **G-2228**

52011BN9400 2.15280 STOUGHTON LAKE



LEGEND

LATE INTRUSIVES
- 14 GRANITE
- 13 MAFIC DYKE
- 12 TONALITE

McVICAR TECTONITES
- 10 ALTERED ZONE STRUCTURE
  - 10a QUARTZ VEIN
- 8 BRECCIATED/SHEARED GABBRO
- 7 BRECCIATED/SHEARED ANORTHOSITIC GABBRO
- 6 BRECCIATED/SHEARED BASALT

EARLY INTRUSIVES
- 4 GABBRO
  - 4a ANORTHOSITE

INTERMEDIATE INTRUSIVE
- 11 MASSIVE
  - 11a PORPHYRITIC

FELSIC VOLCANICS
- 2 MASSIVE
  - 2a PORPHYRITIC
  - 2b TUFF
  - 2c BRECCIA

MAFIC VOLCANICS
- 1 BASALT
  - 1a PORPHYRITIC
  - 1b PILLOWED
  - 1c TUFF

- SHEARING
- FOLIATION
- VEIN ORIENTATION
- FAULT (SHEAR BOUNDARY)
- CONTACT
- OUTCROP
- SMALL OUTCROP

- BHP CLAIM POST
- TRENCH
- 3005 SAMPLE #
- (2350) ASSAY (>500 PPB AU)

2.15280

BHP MINERALS CANADA LTD.
EXPLORATION DEPARTMENT
TORONTO ONTARIO CANADA

McVICAR LAKE PROPERTY

GEOLOGY

SOR LAKE AREA

DATE	DRAWN	CHECKED	REVISED	N.T.S.	FILE	MAP
NOV 1993	CJW			52 O/11&13		1 OF 3

0 100 200 300 SCALE METRES

PLAN MAP 1

S0011093488 2.15280 STOUGHTON LAKE



LEGEND

LATE INTRUSIVES
- 14 GRANITE
- 13 MAFIC DYKE
- 12 TONALITE

McVICAR TECTONITES
- 10 ALTERED ZONE STRUCTURE
- 10a QUARTZ VEIN
- 8 BRECCIATED/SHEARED GABBRO
- 7 BRECCIATED/SHEARED ANORTHOSITIC GABBRO
- 6 BRECCIATED/SHEARED BASALT

EARLY INTRUSIVES
- 4 GABBRO
- 4a ANORTHOSITE

INTERMEDIATE INTRUSIVE
- 11 MASSIVE
- 11a PORPHYRITIC

FELSIC VOLCANICS
- 2 MASSIVE
- 2a PORPHYRITIC
- 2b TUFF
- 2c BRECCIA

MAFIC VOLCANICS
- 1 BASALT
- 1a PORPHYRITIC
- 1b PILLOWED
- 1c TUFF

- SHEARING
- FOLIATION
- VEIN ORIENTATION
- FAULT (SHEAR BOUNDARY)
- CONTACT
- OUTCROP
- SMALL OUTCROP

- BHP CLAIM POST
- TRENCH
- 3005 SAMPLE #
- (2350) ASSAY (>500 PPB AU)

2.15280

BHP MINERALS CANADA LTD.
EXPLORATION DEPARTMENT
TORONTO, ONTARIO, CANADA

McVICAR LAKE PROPERTY

GEOLOGY

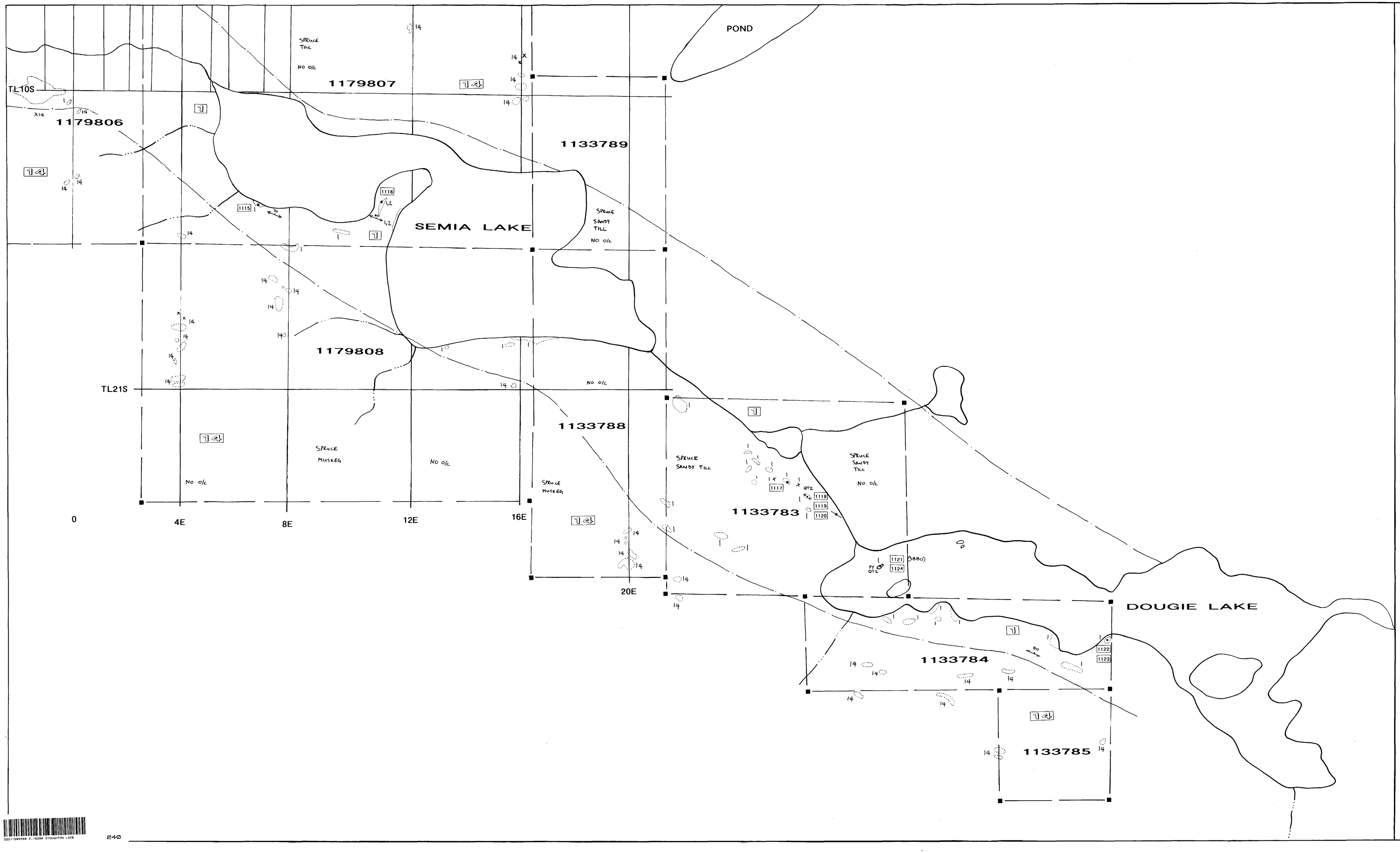
LOWER McVICAR LAKE AREA

DATE	DRAWN	CHECKED	REVISED	N.T.S.	FILE	MAP
NOV 1987	CJW			52 O/11		1 OF 2

0 100 200 300 SCALE METRES

PLAN MAP 2

52011SW9480 2.15280 STOUGHTON LAKE



LEGEND

LATE INTRUSIVES
- 14 GRANITE
- 13 MAFIC DYKE
- 12 TONALITE

McVICAR TECTONITES
- 10 ALTERED ZONE STRUCTURE
  - 10a QUARTZ VEIN
- 8 BRECCIATED/SHEARED GABBRO
- 7 BRECCIATED/SHEARED ANORTHOSITIC GABBRO
- 6 BRECCIATED/SHEARED BASALT

EARLY INTRUSIVES
- 4 GABBRO
  - 4a ANORTHOSITE

INTERMEDIATE INTRUSIVE
- 11 MASSIVE
  - 11a PORPHYRITIC

FELSIC VOLCANICS
- 2 MASSIVE
  - 2a PORPHYRITIC
  - 2b TUFF
  - 2c BRECCIA

MAFIC VOLCANICS
- 1 BASALT
  - 1a PORPHYRITIC
  - 1b PILLOWED
  - 1c TUFF

- SHEARING
- FOLIATION
- VEIN ORIENTATION
- FAULT (SHEAR BOUNDARY)
- CONTACT
- OUTCROP
- SMALL OUTCROP

- BHP CLAIM POST
- TRENCH
- 1117 SAMPLE #
- (2350) ASSAY (>500 PPB AU)

PLAN MAP 3

BHP MINERALS CANADA LTD.
EXPLORATION DEPARTMENT
TORONTO ONTARIO CANADA

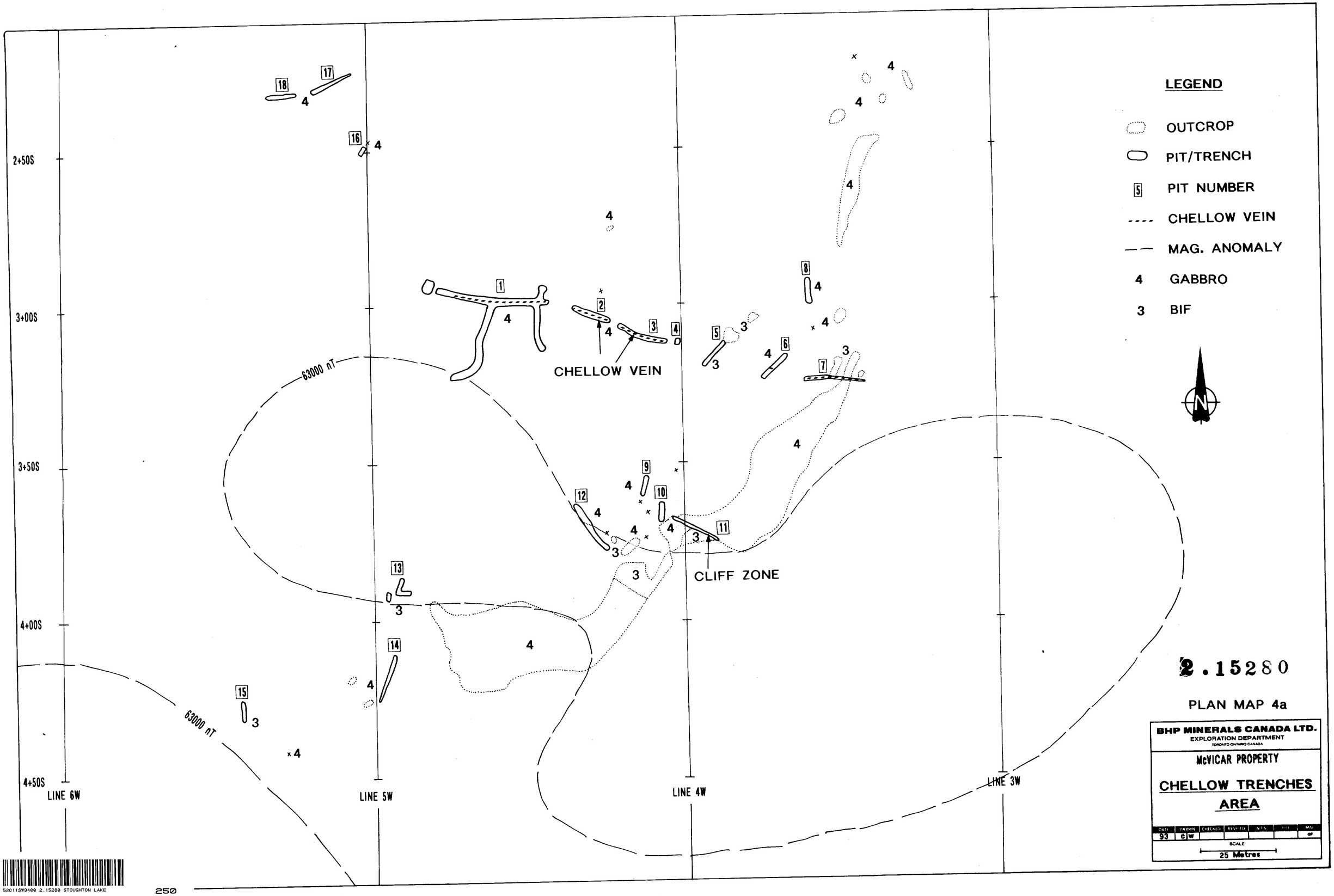
McVICAR LAKE PROPERTY
2.15280

GEOLOGY

SEMIA LAKE AREA

DATE	DRAWN	CHECKED	REVISED	N.T.S.	FILE	MAP
NOV 1993	CJW			52 O/11		3 OF 3

SCALE
0 100 200 300
METRES



2.15280

PLAN MAP 4a

BHP MINERALS CANADA LTD.
EXPLORATION DEPARTMENT
TORONTO ONTARIO CANADA

McVICAR PROPERTY

CHELLOW TRENCHES AREA

DATE	DRAWN	CHECKED	REVISED	N.T.S.			MAP
93	CW						OF

SCALE
25 Metres

52011SW9400 2.15280 STOUGHTON LAKE

2+75S

3+00S

3+25S

3+50S

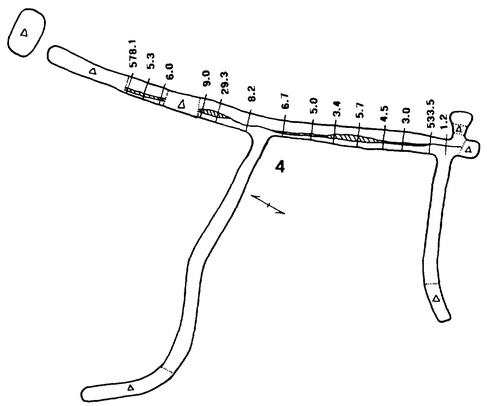
3+75S

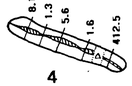
4+00S

LINE 5W

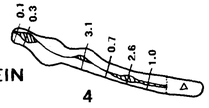
LINE 4W

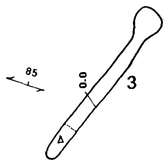
LINE 3W

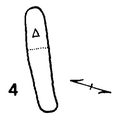


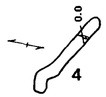


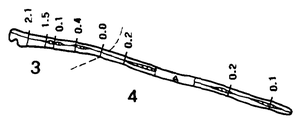
CHELLOW VEIN



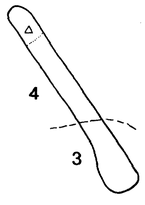


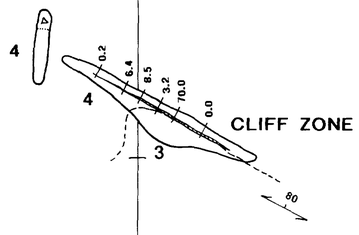












CLIFF ZONE

LEGEND

- PIT/TRENCH
- Δ OVERBURDEN
- QUARTZ VEIN
- CHANNEL SAMPLE
- 29.3 ASSAY VALUE (g/t) Au
- 4 GABBRO
- 3 BIF



2.15280

PLAN MAP 4b

BHP MINERALS CANADA LTD.
EXPLORATION DEPARTMENT
TORONTO ONTARIO CANADA

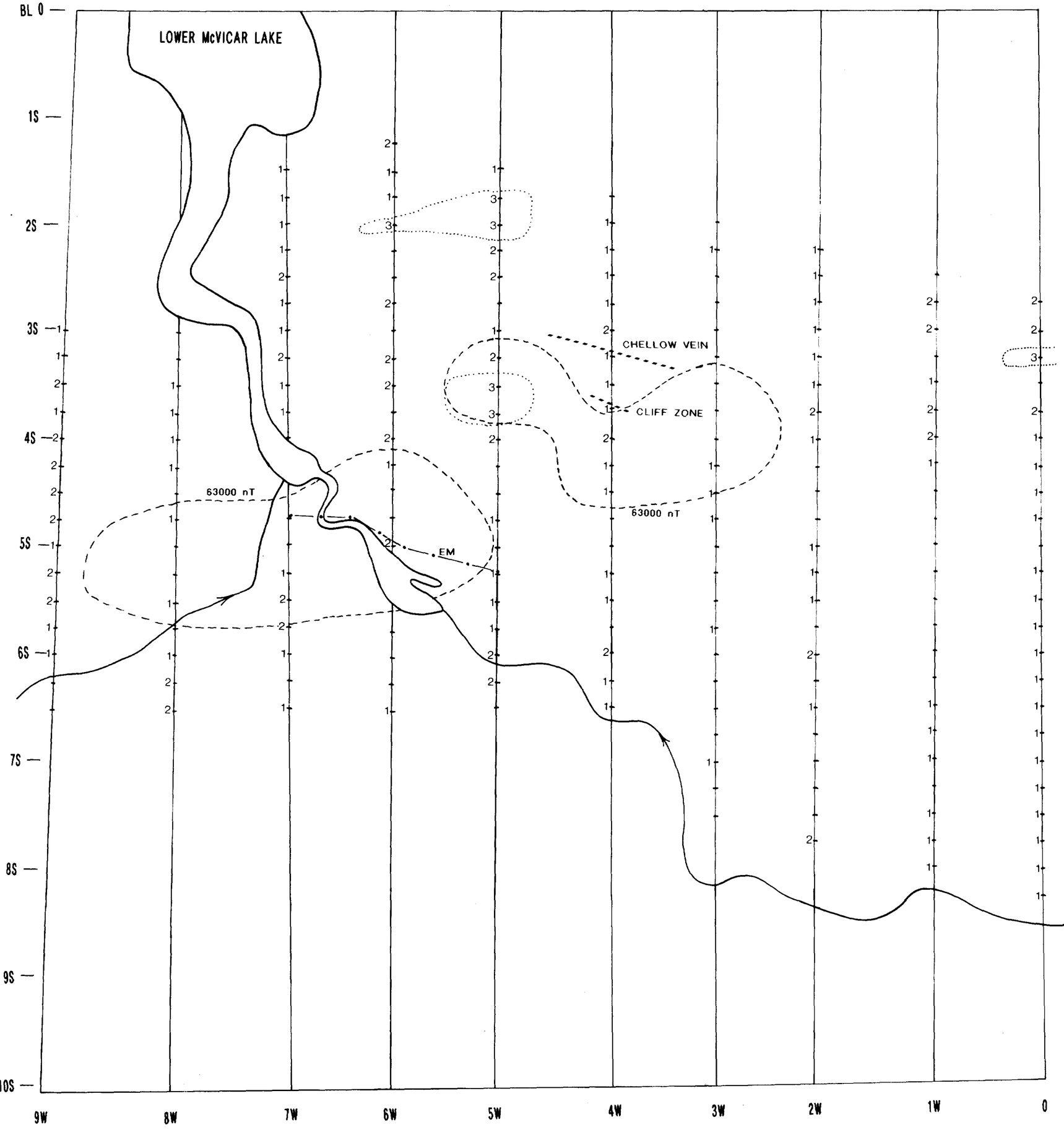
McVICAR PROPERTY

DETAIL OF CHELLOW VEIN AREA

DATE	DRAWN	CHECKED	APPROVED	SCALE	FILE	MAP
93	clw					OP

0 5 10
Metres

52011SW9400 2.15280 STOUGHTON LAKE



MAG. ANOMALY

EM ANOMALY

QUARTZ VEIN

SAMPLE LOCATION

3 ASSAY VALUE (ppb) Au

CONTOUR INTERVAL >2.5 PPB AU

NOTE: WHERE NO ASSAY VALUE IS GIVEN, AU WAS BELOW DETECTION LIMIT OF 1 PPB

TOTAL OF 202 HUMUS SAMPLES

2.15280

BHP MINERALS CANADA LTD.
EXPLORATION DEPARTMENT
TORONTO ONTARIO CANADA

McVICAR PROPERTY

HUMUS SURVEY

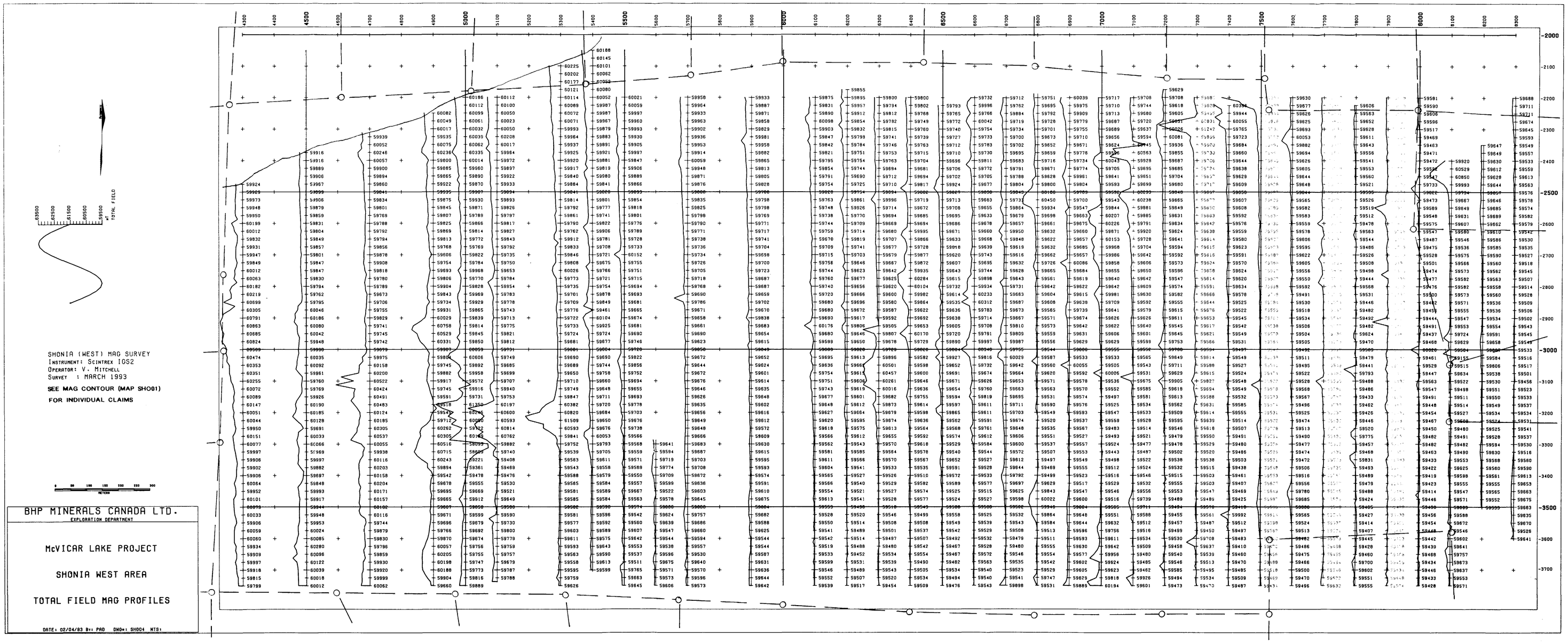
CHELLOW AREA

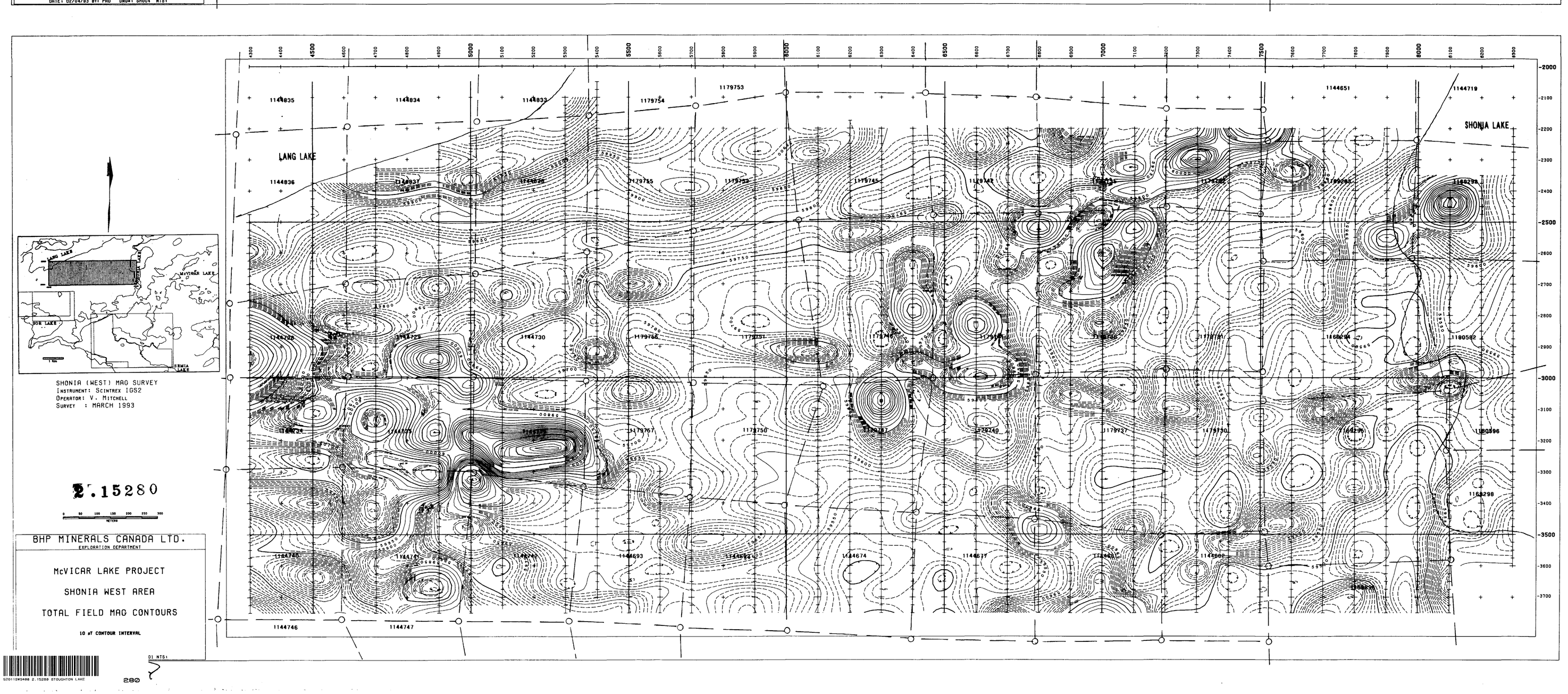
DATE	DRAWN	CHECKED	REVISED	N.T.S.	FILE	MAP
93	cjw					1 of 1

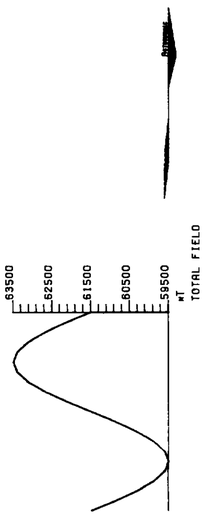
SCALE 0 50 100 Metres

PLAN MAP 5

52011SW9408 2.15280 STOUGHTON LAKE


SHONIA (WEST) MAG SURVEY
INSTRUMENT: SCINTREX IGS2
OPERATOR: V. MITCHELL
SURVEY : MARCH 1993
SEE MAG CONTOUR (MAP SH001)
FOR INDIVIDUAL CLAIMS
TOTAL FIELD
METERS
BHP MINERALS CANADA LTD.
EXPLORATION DEPARTMENT
McVICAR LAKE PROJECT
SHONIA WEST AREA
TOTAL FIELD MAG PROFILES
DATE: 02/04/93 B:: PRO DWG#: SH004 NTS:


LANG LAKE
SHONIA LAKE
SHONIA (WEST) MAG SURVEY
INSTRUMENT: SCINTREX IGS2
OPERATOR: V. MITCHELL
SURVEY : MARCH 1993
2.15280
METERS
BHP MINERALS CANADA LTD.
EXPLORATION DEPARTMENT
McVICAR LAKE PROJECT
SHONIA WEST AREA
TOTAL FIELD MAG CONTOURS
10 nT CONTOUR INTERVAL
01 NTS:
280



SOR LAKE MAG SURVEY
INSTRUMENT: SCINTREX IGS2
OPERATOR: V. MITCHELL
SURVEY : MARCH 1993

SEE MAG CONTOUR (DWG. SOR01)

FOR INDIVIDUAL CLAIMS

0 50 100 150 200 250 300
METERS

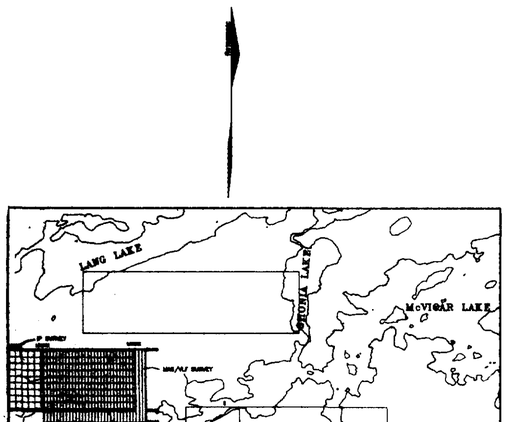
BHP MINERALS CANADA LTD.
EXPLORATION DEPARTMENT

McVICAR LAKE PROJECT

SOR LAKE AREA

TOTAL FIELD MAG PROFILES

DATE: 02/04/93 BY: PAD DWG#: SH004 NTS:



SOR LAKE MAG SURVEY
INSTRUMENT: SCINTREX IGS2
OPERATOR: V. MITCHELL

2.15280

0 50 100 150 200 250 300
METERS

BHP MINERALS CANADA LTD.
EXPLORATION DEPARTMENT

McVICAR LAKE PROJECT

SOR LAKE GRID

TOTAL FIELD MAG CONTOURS

10 nT CONTOUR INTERVAL

NTS:

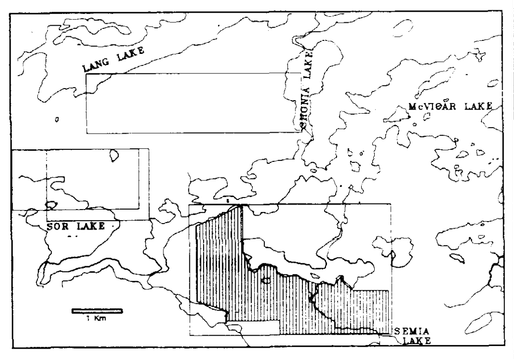
52011SW9400 2.15280 STOUGHTON LAKE

EM ANOMALIES

● HIGH CONDUCTANCE

○ LOW CONDUCTANCE

SEMIA LAKE MAG SURVEY
INSTRUMENT: SCINTREX IGS2
OPERATOR: V. MITCHELL



0 50 100 150 200 250 300
METERS

BHP MINERALS CANADA LTD.
EXPLORATION DEPARTMENT

McVICAR LAKE PROJECT

SEMIA LAKE GRID

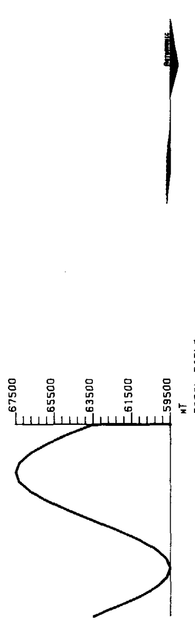
TOTAL FIELD MAG CONTOURS

50 nT CONTOUR INTERVAL

TS+

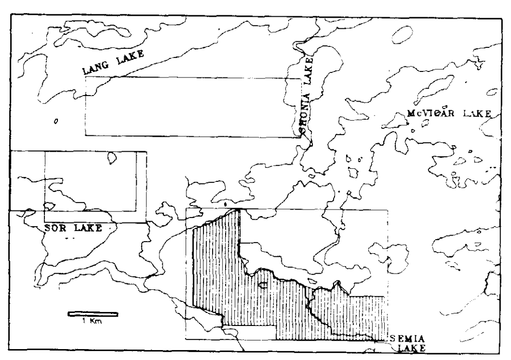
52011SW9400 2.15288 STOUGHTON LAKE

300



REFER TO MAG CONTOUR (MAP SEM01A)
FOR INDIVIDUAL CLAIMS

SEMIA LAKE MAG SURVEY
INSTRUMENT: SCINTREX IGS2
OPERATOR: V. MITCHELL



0 50 100 150 200 250 300
METERS

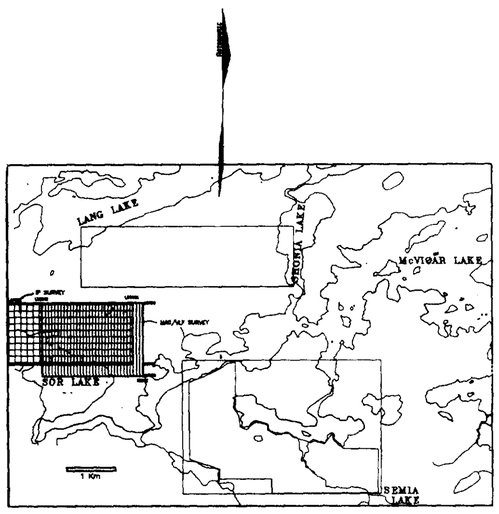
BHP MINERALS CANADA LTD.
EXPLORATION DEPARTMENT

McVICAR LAKE PROJECT

SEMIA LAKE GRID

TOTAL FIELD MAG PROFILES

S2011S93488 J.1S288 STOUGHTON LAKE



SOR LAKE VLF SURVEY
INSTRUMENT: SCINTREX IGS II - VLF 4
OPERATOR: V. MITCHELL
TRANSMITTER: CUTLER MAINE

SEE MAG CONTOUR (DWG. SOR01)

FOR INDIVIDUAL CLAIMS

0 50 100 150 200 250 300
METERS

BHP MINERALS CANADA LTD.
EXPLORATION DEPARTMENT

McVICAR LAKE PROJECT

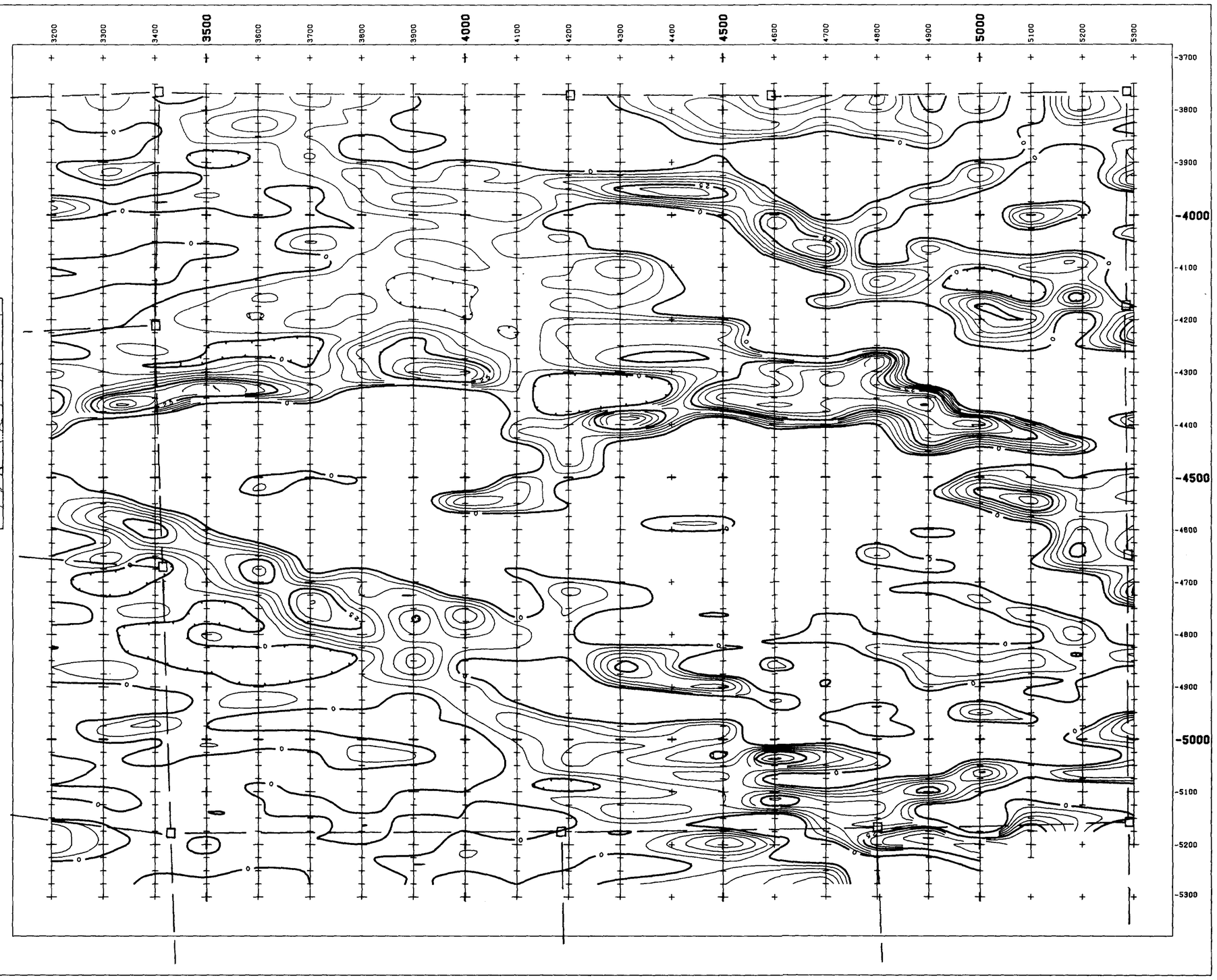
SOR LAKE GRID

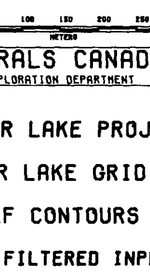
VLF CONTOURS

FRASER FILTERED INPHASE

5 UNIT CONTOUR INTERVAL

DATE: 02/04/93 BY: PAD DWG#: SOR05 NTS:





SOR LAKE MAG SURVEY
INSTRUMENT: SCINTREX IGS2 - VLF 4
OPERATOR: V. MITCHELL
SURVEY : MARCH 1993

SEE MAG CONTOUR (DWG. SOR01)

FOR INDIVIDUAL CLAIMS

2.15280

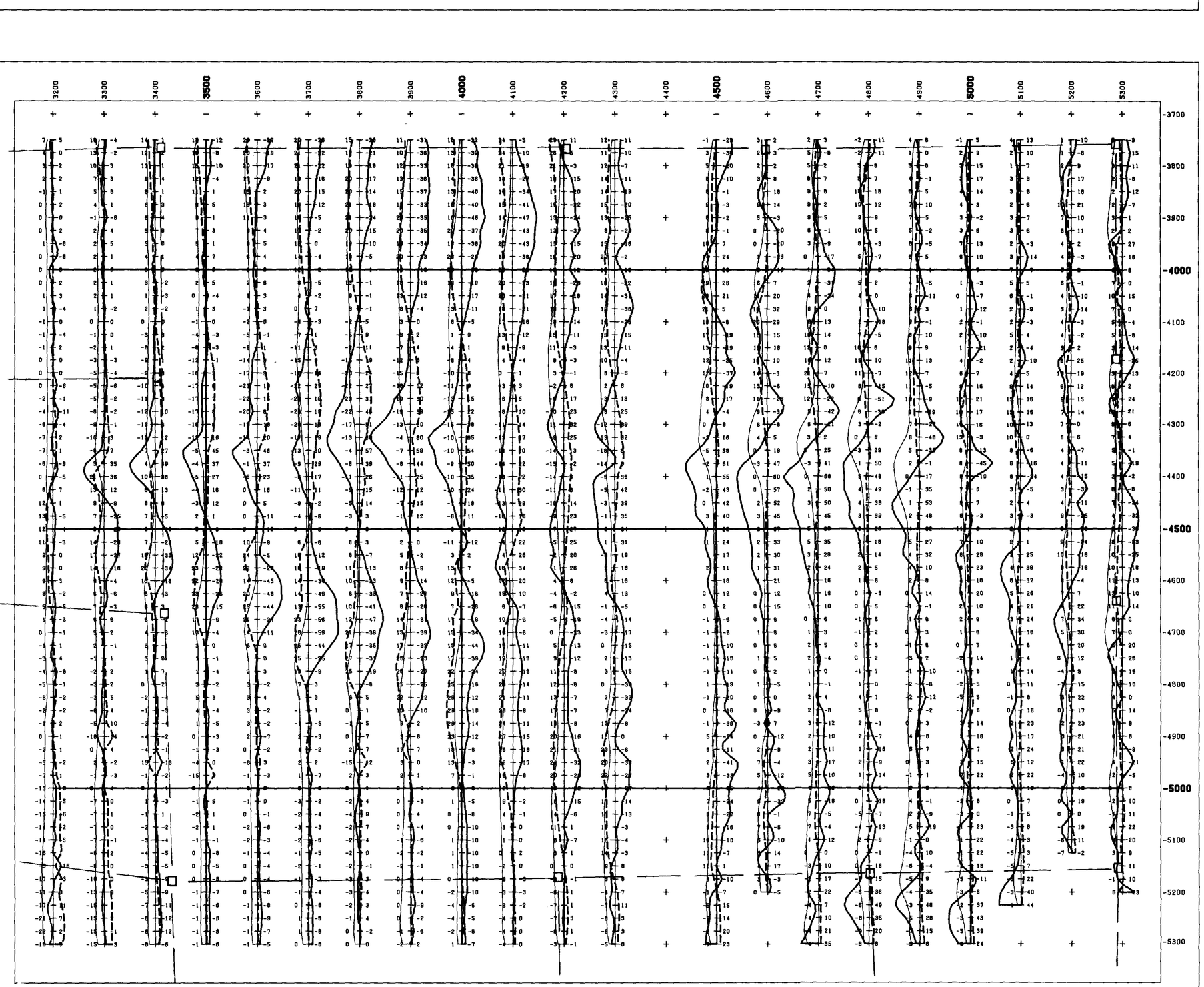
0 50 100 150 200 250 300
METERS

BHP MINERALS CANADA LTD.
EXPLORATION DEPARTMENT

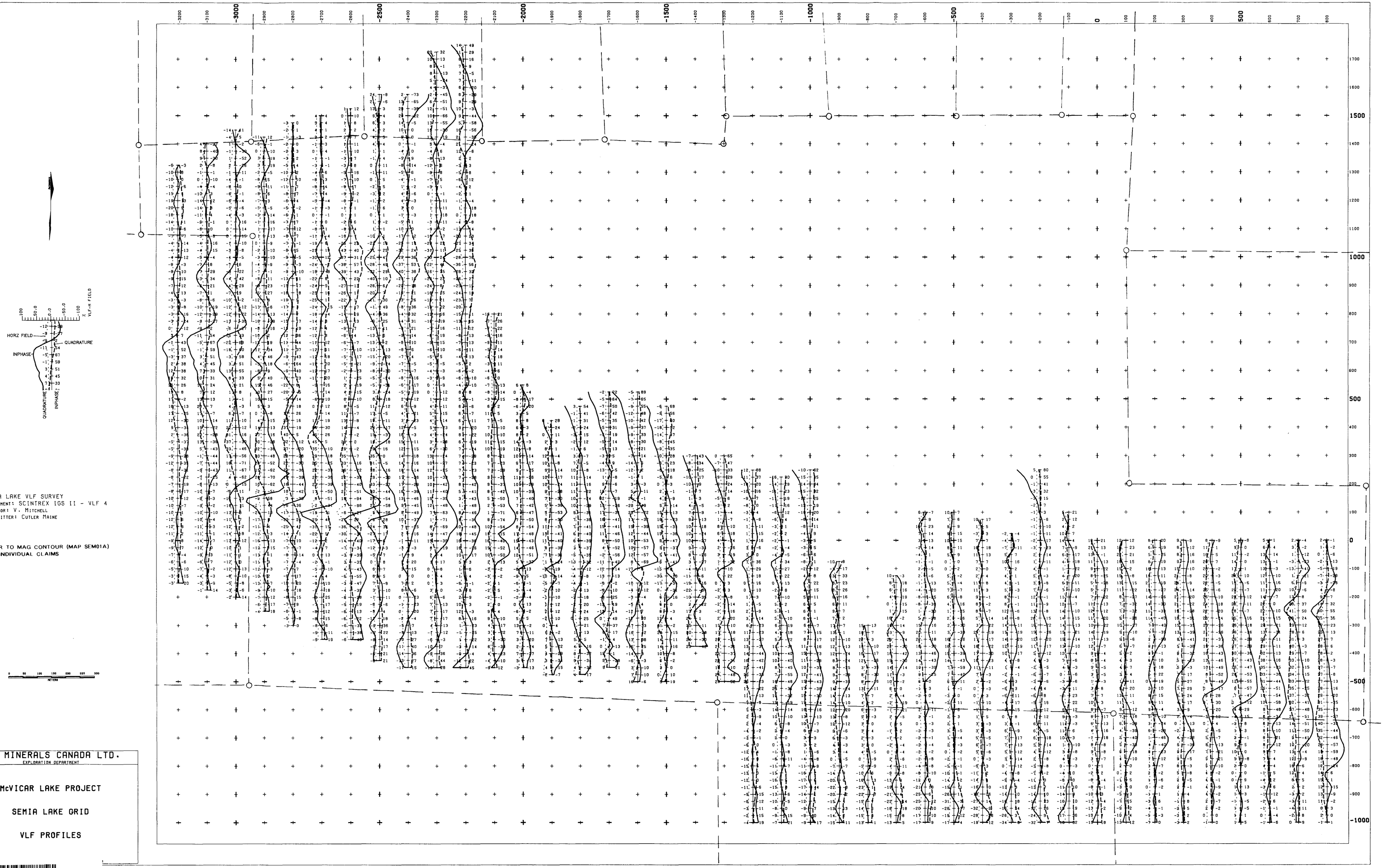
McVICAR LAKE PROJECT

SOR LAKE AREA

VLF PROFILES



52011SW9400 2.15280 STOUGHTON LAKE



SEMIA LAKE VLF SURVEY
INSTRUMENT: SCINTREX IGS II - VLF 4
OPERATOR: V. MITCHELL
TRANSMITTER: CUTLER MAINE

REFER TO MAG CONTOUR (MAP SEM01A) FOR INDIVIDUAL CLAIMS

0 50 100 150 200 250 300
METRES

BHP MINERALS CANADA LTD.
EXPLORATION DEPARTMENT

McVICAR LAKE PROJECT

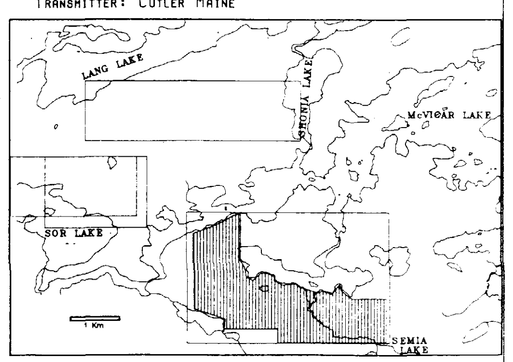
SEMIA LAKE GRID

VLF PROFILES

5201109048@ 2.15288 STOUGHTON LAKE

REFER TO MAG CONTOUR (MAP SEM01A)
FOR INDIVIDUAL CLAIMS

SEMIA LAKE VLF SURVEY
INSTRUMENT: SCINTREX IGS II - VLF 4
OPERATOR: V. MITCHELL
TRANSMITTER: CUTLER MAINE



0 50 100 150 200 250 300
METERS

BHP MINERALS CANADA LTD.
EXPLORATION DEPARTMENT

McVICAR LAKE PROJECT

SEMIA LAKE GRID

VLF CONTOURS

FRASER FILTERED INPHASE

5 UNIT CONTOUR INTERVAL

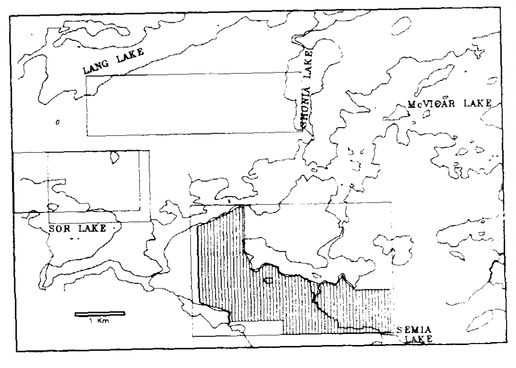
DATE: 82/04/15 FILE:

52011SW9400 2.15200 STOUGHTON LAKE

340

REFER TO MAG CONTOUR (MAP SEM01A)
FOR INDIVIDUAL CLAIMS

SEMIA LAKE MAXMIN SURVEY
INSTRUMENT: APEX PARAMETRICS MAXMIN I
OPERATOR: V. MITCHELL
COIL SEPARATION: 100m



0 50 100 150 200 250 300
METERS

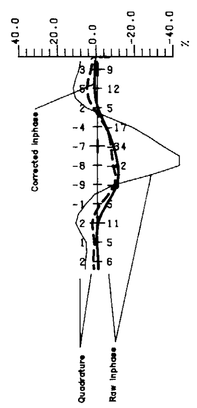
BHP MINERALS CANADA LTD.
EXPLORATION DEPARTMENT

McVICAR LAKE PROJECT

SEMIA LAKE GRID

220 Hz MAXMIN SURVEY

S20112W9480 2.15288 STOUGHTON LAKE



SEMIA LAKE MAXMIN SURVEY
INSTRUMENT: APEX PARAMETRICS MAXMIN I
OPERATOR: V. MITCHELL
COIL SEPARATION: 100m

NOTE: CORRECTED INPHASE = IP1760-IP220 Hz

EM ANOMALIES

● HIGH CONDUCTANCE

○ LOW CONDUCTANCE

REFER TO MAG CONTOUR (MAP SEM01A) FOR INDIVIDUAL CLAIMS

0 50 100 150 200 250 300
METERS

AREA OF SURFACE CONDUCTIVITY

BHP MINERALS CANADA LTD.
EXPLORATION DEPARTMENT

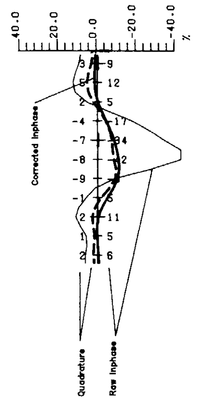
McVICAR LAKE PROJECT

SEMIA LAKE GRID

1760 Hz MAXMIN SURVEY

RAW AND CORRECTED INPHASE

52011W9400 2.15280 STOUGHTON LAKE



SEMIA LAKE MAXMIN SURVEY
INSTRUMENT: APEX PARAMETRICS MAXMIN I
OPERATOR: V. MITCHELL
COIL SEPARATION: 100m

NOTE: CORRECTED INPHASE = IP7040 -IP220

REFER TO MAG CONTOUR (MAP SEM01A)
FOR INDIVIDUAL CLAIMS



BHP MINERALS CANADA LTD.
EXPLORATION DEPARTMENT

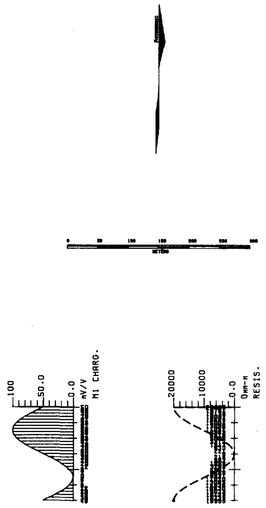
McVICAR LAKE PROJECT

SEMIA LAKE GRID

7040 Hz MAXMIN SURVEY

RAW AND CORRECTED INPHASE

5201159X400 2.15288 STOUGHTON LAKE



2.15280

SOR LAKE IP SURVEY
INSTRUMENT: SCINTREX IPR-11
A-SPACING : 25M
OPERATOR : V. MITCHELL
SURVEY : MARCH 1993

SEE CHARGE CONTOUR (DWG. SOR03)

FOR INDIVIDUAL CLAIMS

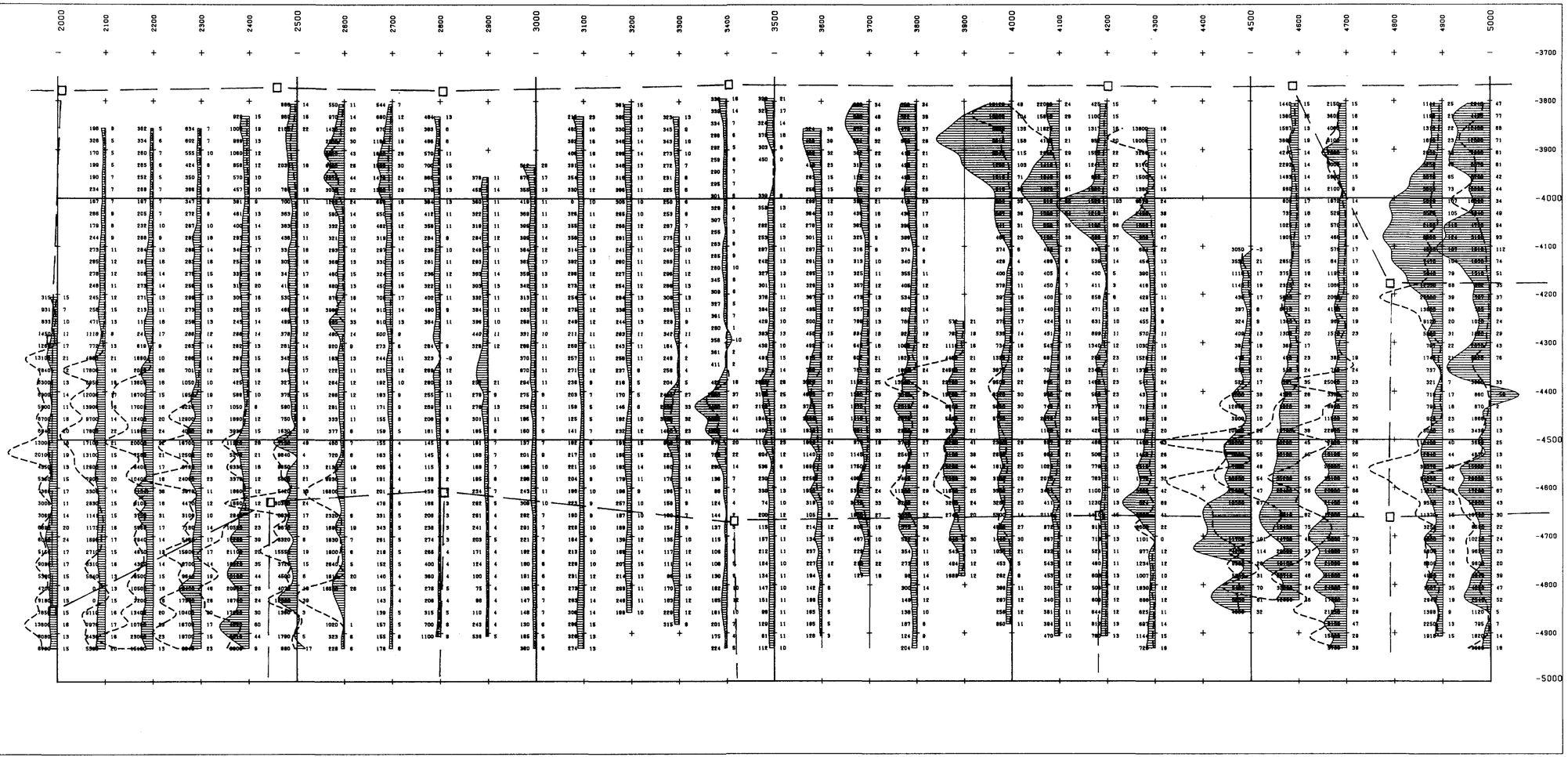
BHP MINERALS CANADA LTD.
EXPLORATION DEPARTMENT

MCVICAR LAKE PROJECT

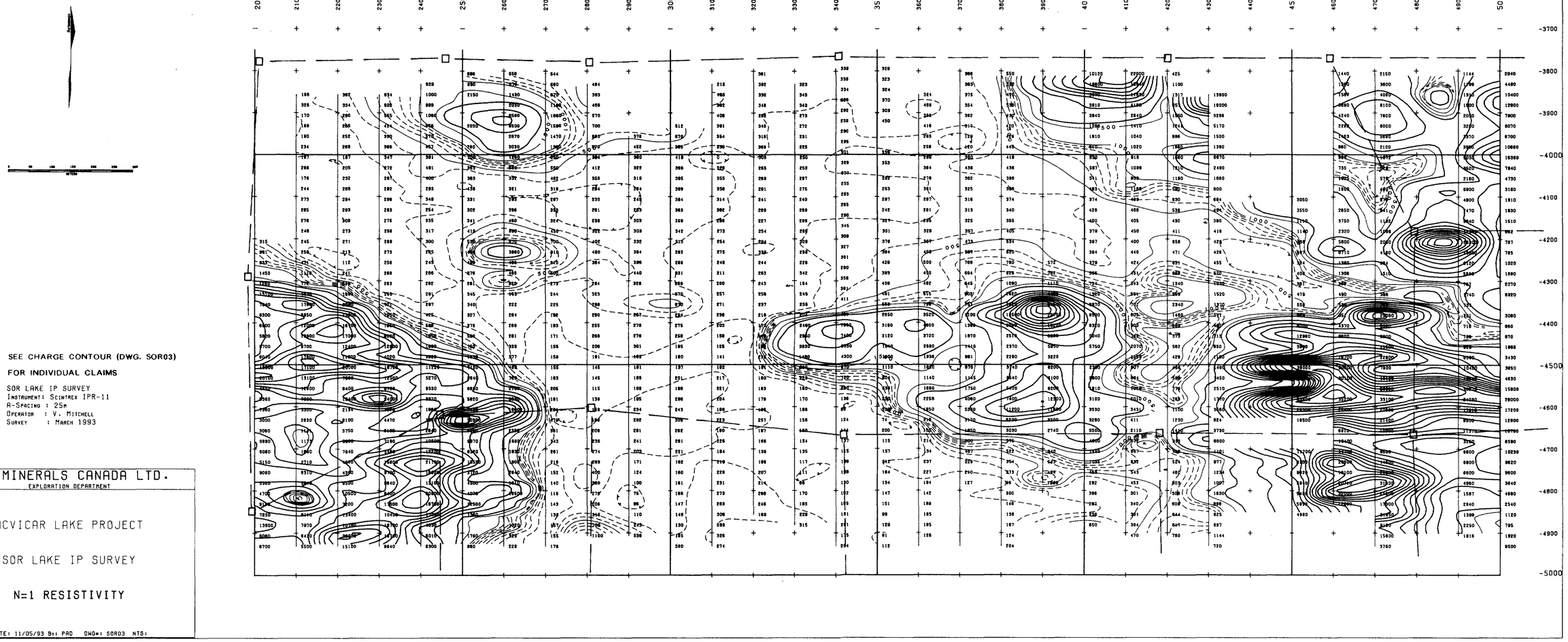
SOR LAKE IP SURVEY

N=1 CHARGEABILITY

AND RESISTIVITY



52011SW9400 2.15280 STOUGHTON LAKE



SEE CHARGE CONTOUR (DWG. SOR03)

FOR INDIVIDUAL CLAIMS

SOR LAKE IP SURVEY
INSTRUMENT: SCINTREX IPR-11
A-SPACING : 25m
OPERATOR : V. MITCHELL
SURVEY : MARCH 1993

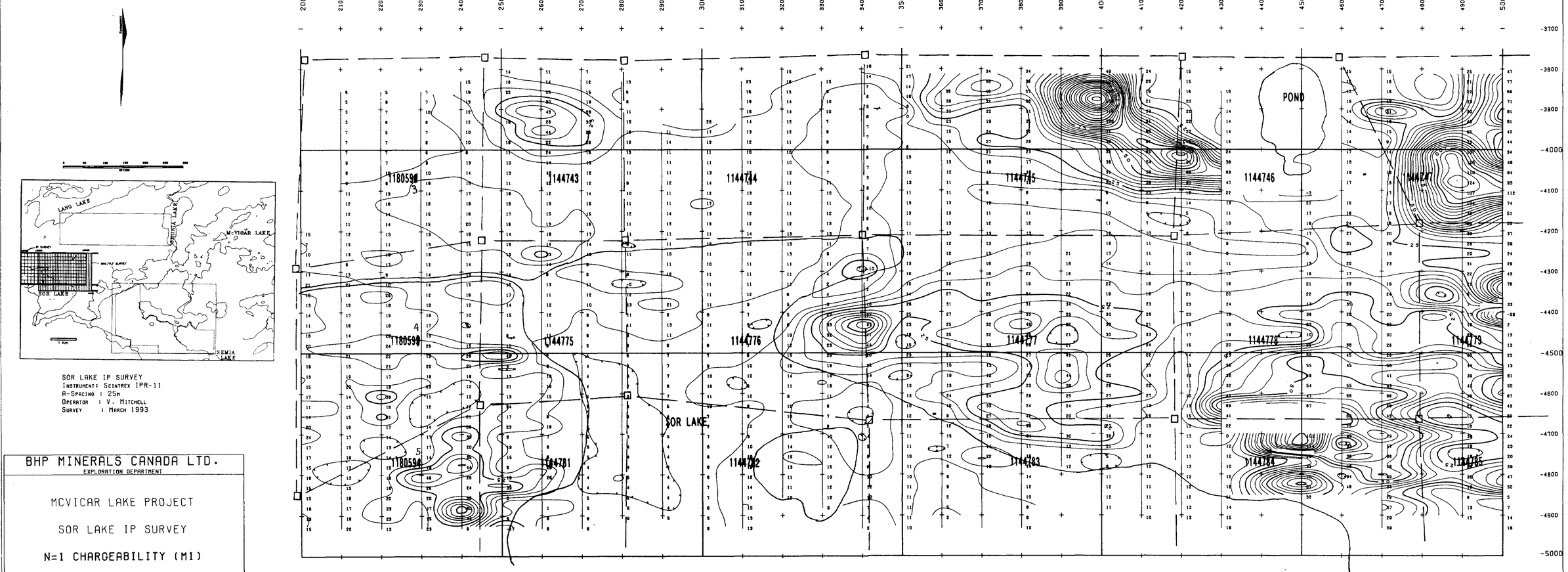
BHP MINERALS CANADA LTD.
EXPLORATION DEPARTMENT

MCVICAR LAKE PROJECT

SOR LAKE IP SURVEY

N=1 RESISTIVITY

DATE: 11/05/93 BY: PAD DWG#: SOR03 NTS:



SOR LAKE IP SURVEY
INSTRUMENT: SCINTREX IPR-11
A-SPACING : 25m
OPERATOR : V. MITCHELL
SURVEY : MARCH 1993

BHP MINERALS CANADA LTD.
EXPLORATION DEPARTMENT

MCVICAR LAKE PROJECT

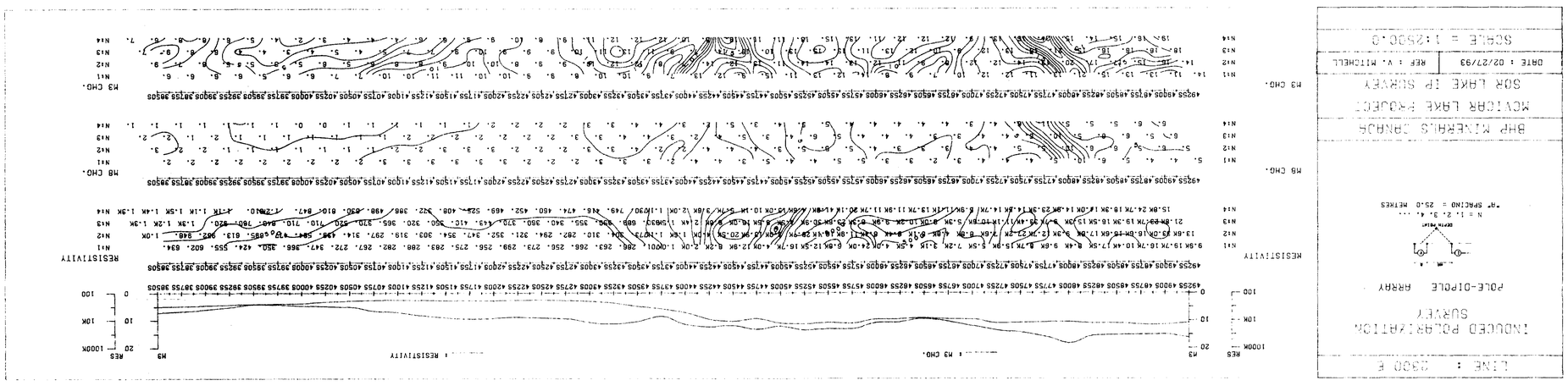
SOR LAKE IP SURVEY

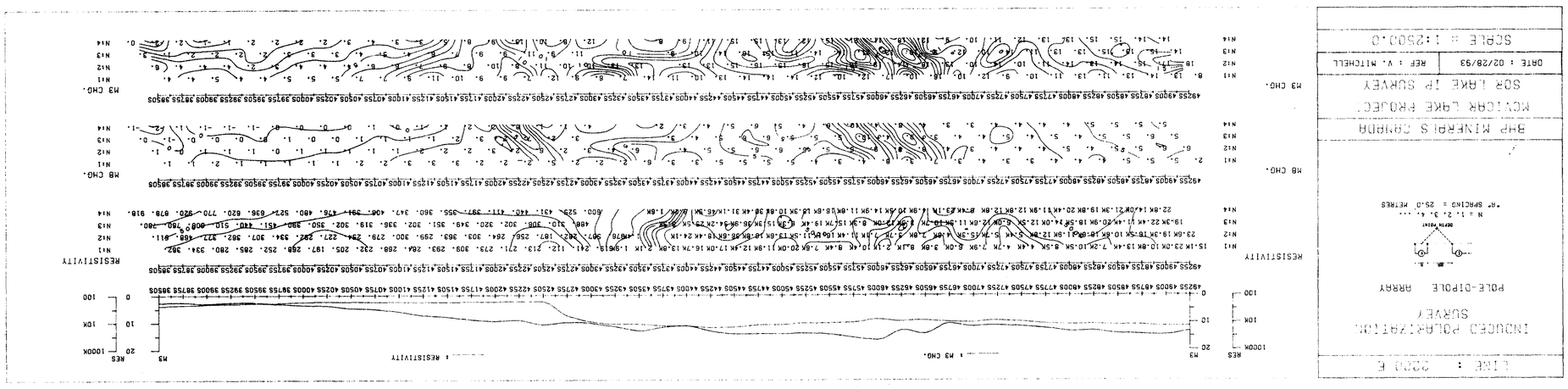
N=1 CHARGEABILITY (M1)

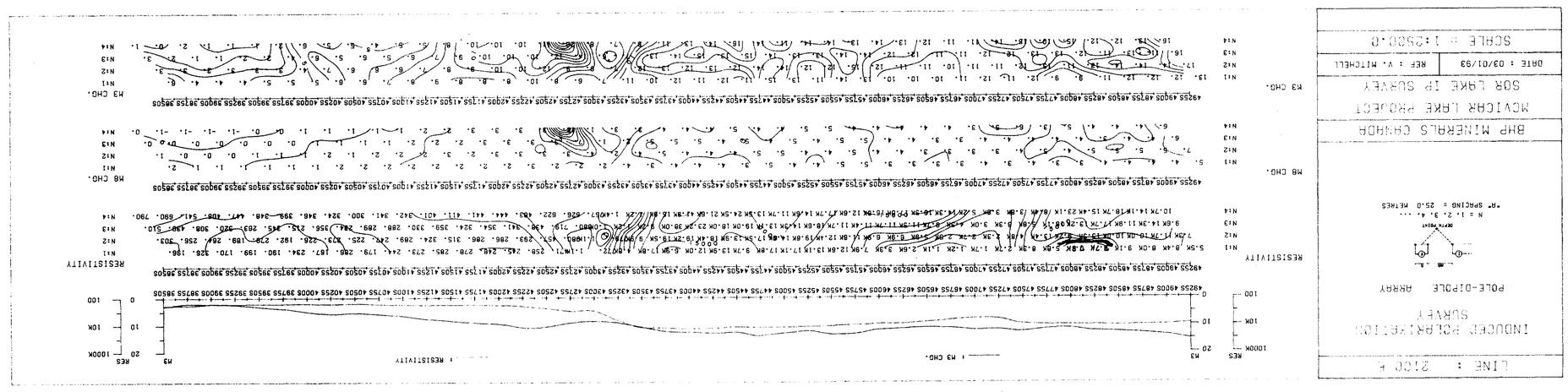
5 mV/V CONTOUR INTERVAL

NTS:

520115W9400 2.15280 STOUGHTON LAKE

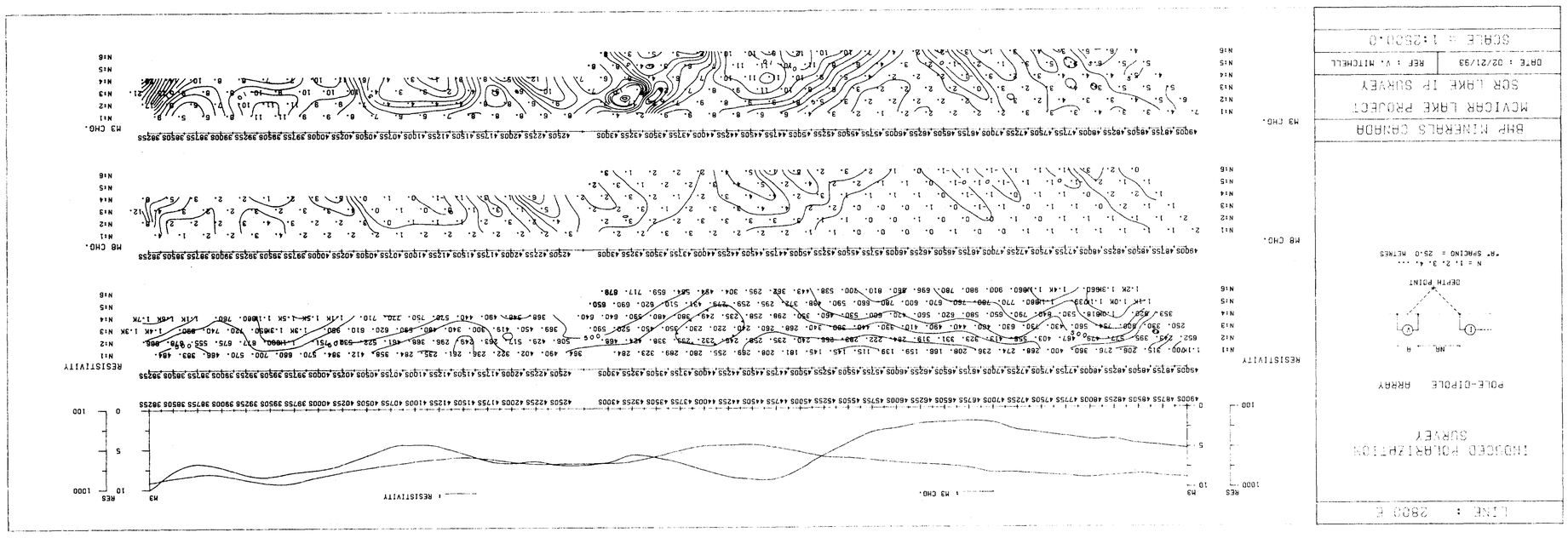

LINE : 0300 E
INDUCED POLARIZATION SURVEY
POLE-DIPOLE ARRAY
"a" SPACING = 25.0 METERS
N = 1, 2, 3, 4, ...
DATE : 02/27/93
REF : V. MITCHELL
SCALE = 1:2500.0
BHP MINERALS CANADA
MCVICAR LAKE PROJECT
SOR LAKE IP SURVEY
M3 CHG.
M8 CHG.
RESISTIVITY
M3 CHG.
RESISTIVITY
RES
M3
N11
N12
N13
N14
0
10
20
100
10K
100K

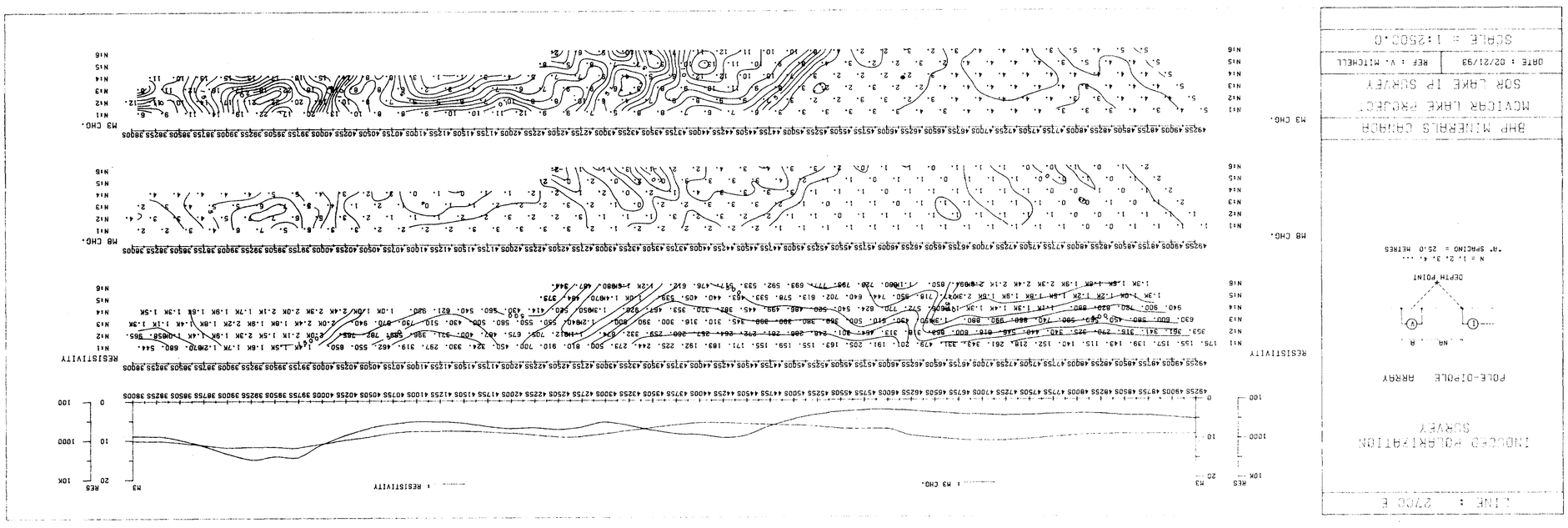

LINE : 2200 E
INDUCED POLARIZATION SURVEY
POLE-DIPOLE ARRAY
"a" SPACING = 25.0 METERS
N = 1, 2, 3, 4, ...
DATE : 02/28/93
REF : V. MITCHELL
SCALE = 1:2500.0
BHP MINERALS CANADA
MCVICAR LAKE PROJECT
SOR LAKE IP SURVEY
M3 CHG.
M8 CHG.
RESISTIVITY
M3 CHG.
RESISTIVITY
RES
M3
N11
N12
N13
N14
0
10
20
100
10K
100K

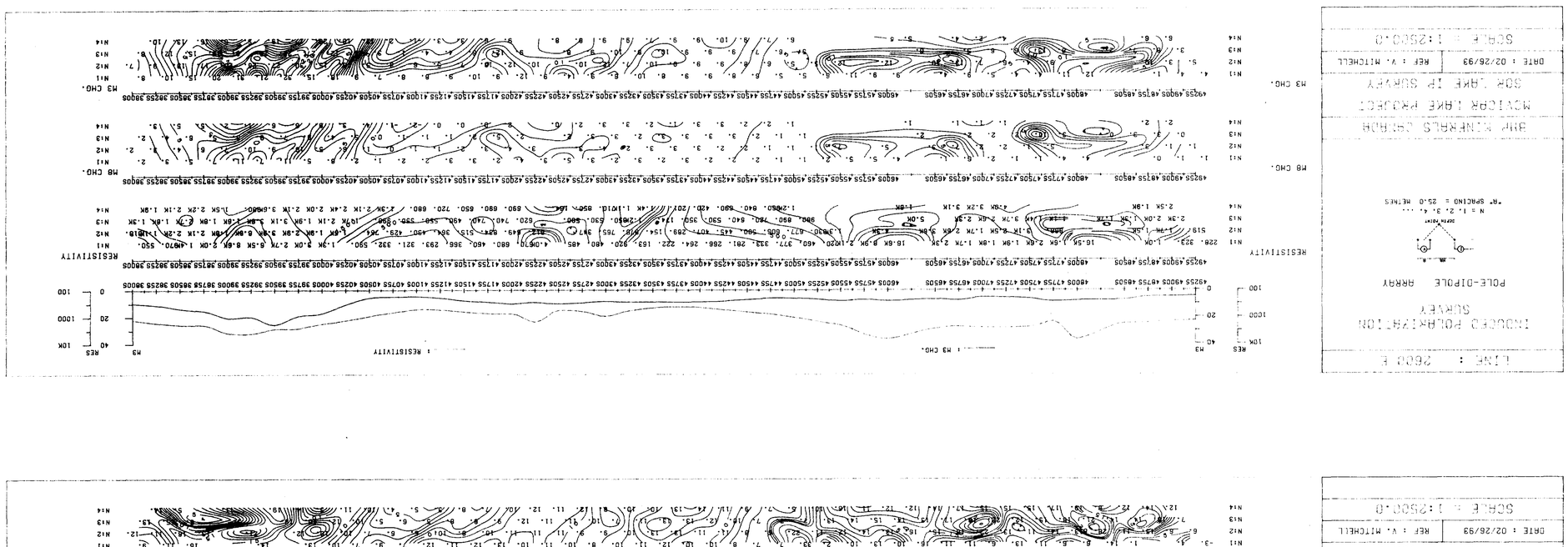

LINE : 2100 E
INDUCED POLARIZATION SURVEY
POLE-DIPOLE ARRAY
"a" SPACING = 25.0 METERS
N = 1, 2, 3, 4, ...
DATE : 03/01/93
REF : V. MITCHELL
SCALE = 1:2500.0
BHP MINERALS CANADA
MCVICAR LAKE PROJECT
SOR LAKE IP SURVEY
M3 CHG.
M8 CHG.
RESISTIVITY
M3 CHG.
RESISTIVITY
RES
M3
N11
N12
N13
N14
0
10
20
100
10K
100K

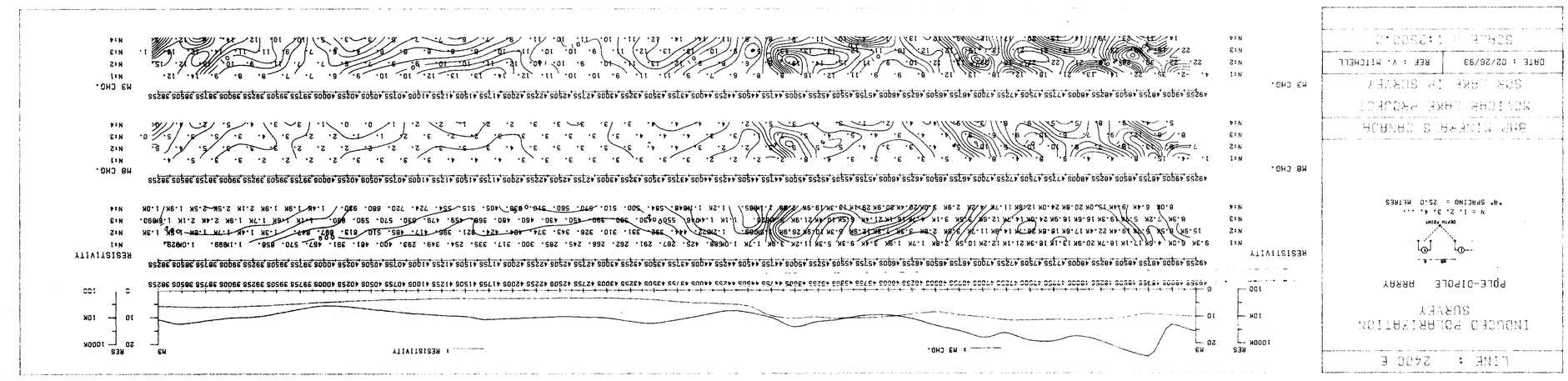
LINE : 2000 E
INDUCED POLARIZATION SURVEY
POLE-DIPOLE ARRAY
"a" SPACING = 25.0 METERS
N = 1, 2, 3, 4, ...
DATE : 03/02/93
REF : V. MITCHELL
SCALE = 1:2500.0
BHP MINERALS CANADA
MCVICAR LAKE PROJECT
SOR LAKE IP SURVEY
M3 CHG.
M8 CHG.
RESISTIVITY
M3 CHG.
RESISTIVITY
RES
M3
N11
N12
N13
N14
0
12
14
100
10K
100K

S2011SN048 2.1528@ STOUGHTON LAKE

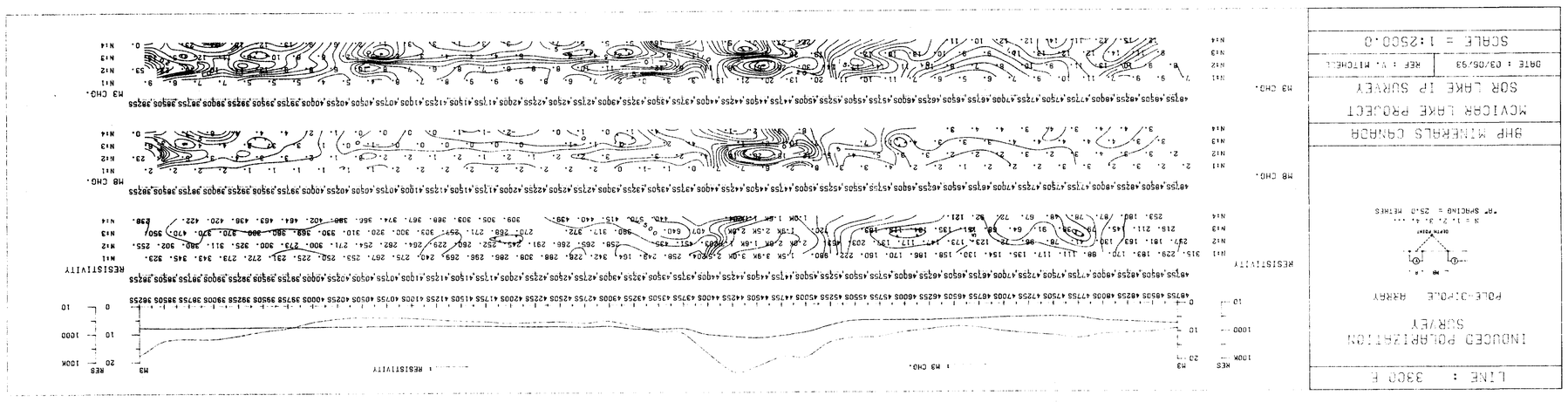


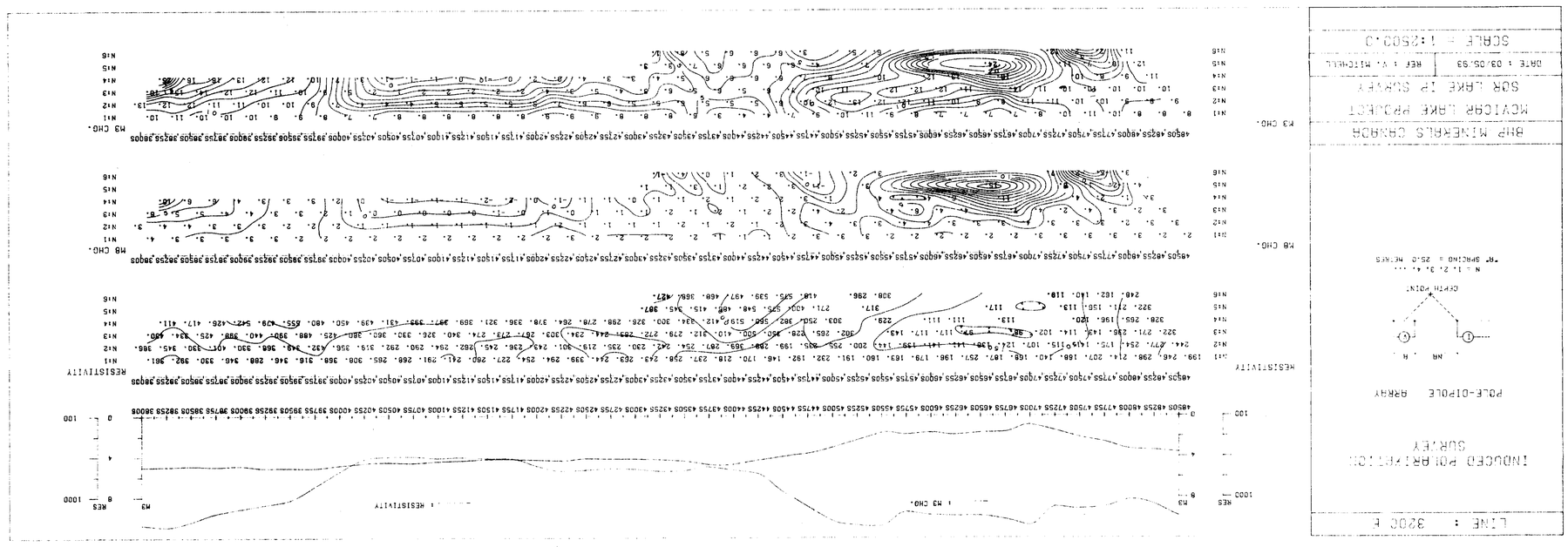


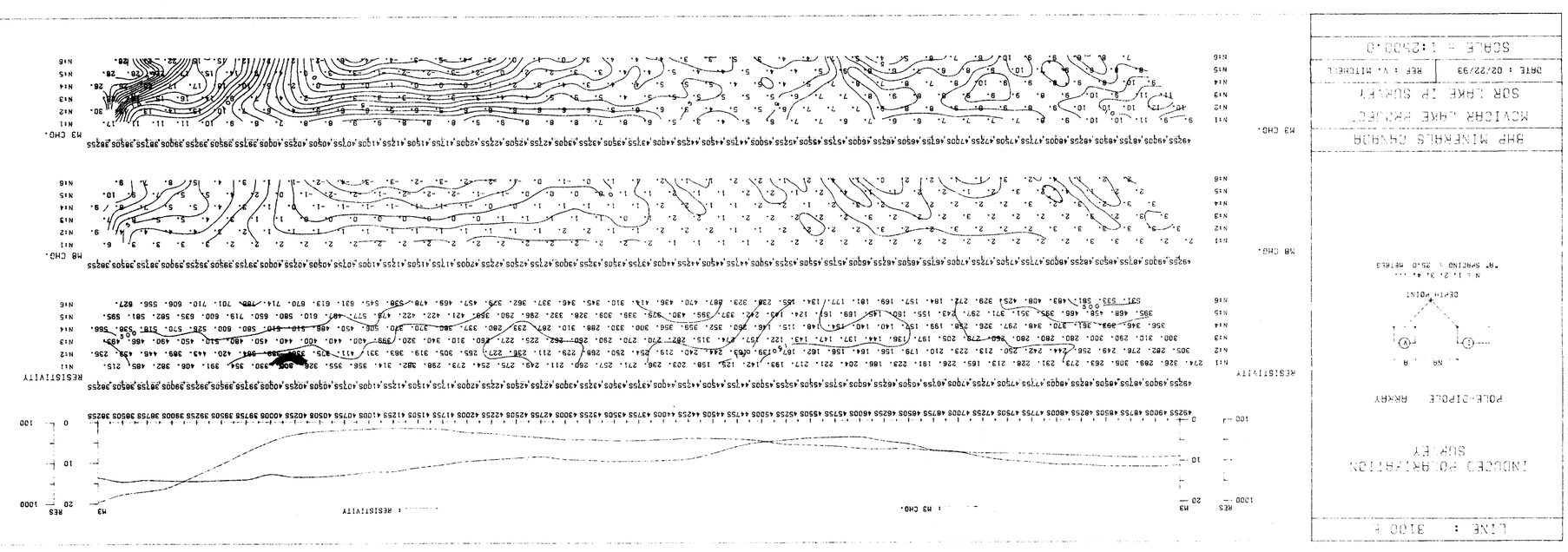


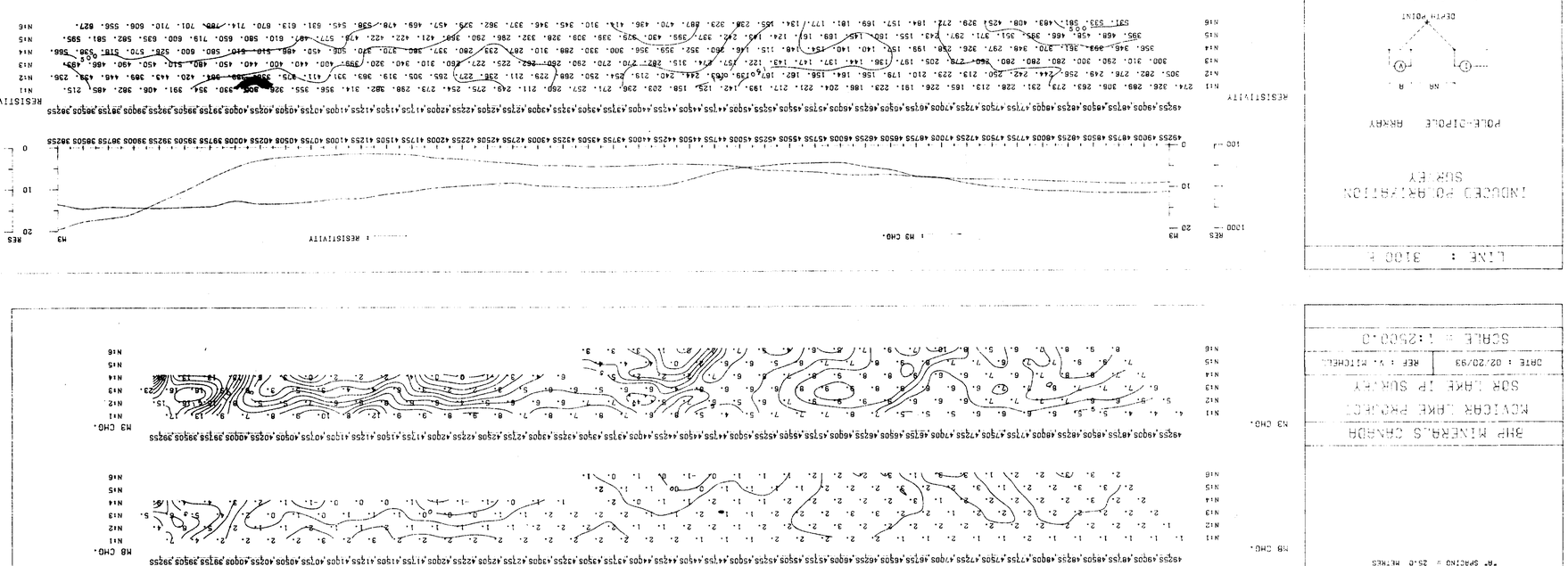


5201189490 2.15288 STOUGHTON LAKE





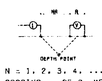




LINE : 3400 E

INDUCED POLARIZATION SURVEY

POLE-DIPOLE ARRAY



N = 1, 2, 3, 4, ...
"A" SPACING = 25.0 METRES

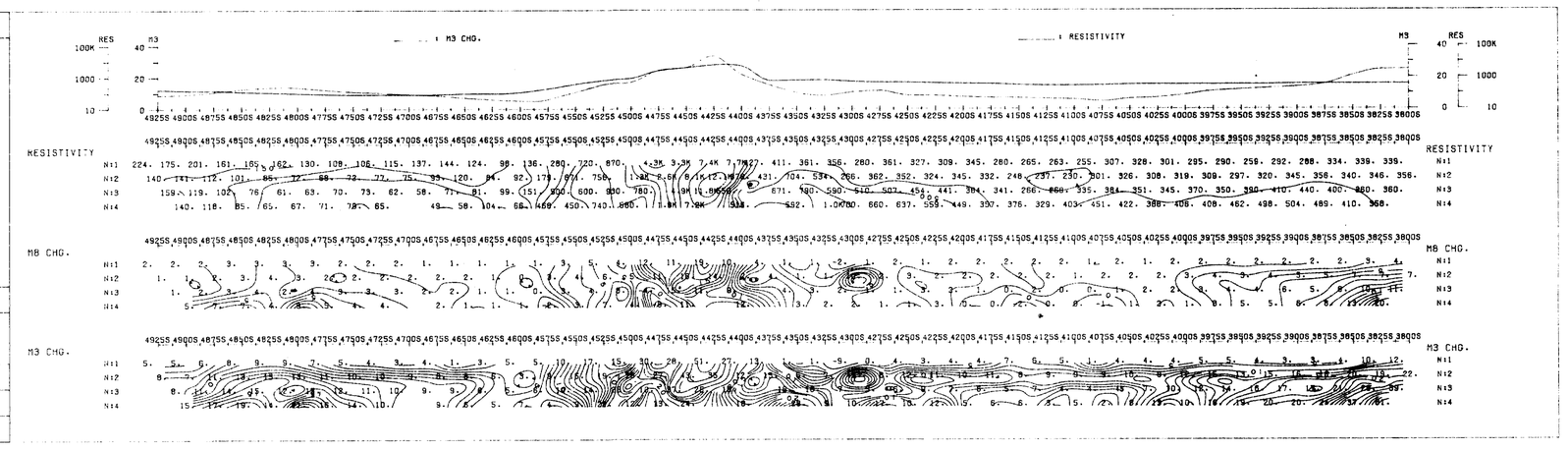
BHP MINERALS CANADA

MCVICAR LAKE PROJECT

SOR LAKE IP SURVEY

DATE : 03/07/93 | REF : V. MITCHELL

SCALE = 1:2500.0



LINE : 3500 E

INDUCED POLARIZATION SURVEY

POLE-DIPOLE ARRAY



N = 1, 2, 3, 4, ...
"A" SPACING = 25.0 METRES

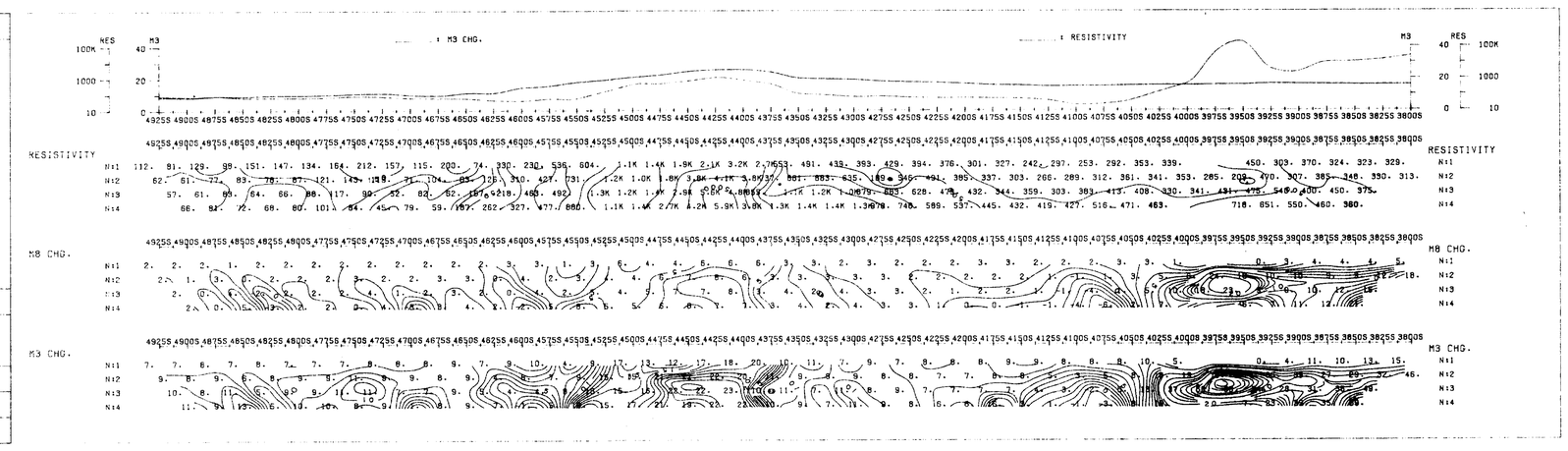
BHP MINERALS CANADA

MCVICAR LAKE PROJECT

SOR LAKE IP SURVEY

DATE : 03/08/93 | REF : V. MITCHELL

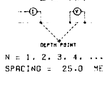
SCALE = 1:2500.0



LINE : 3600 E

INDUCED POLARIZATION SURVEY

POLE-DIPOLE ARRAY



N = 1, 2, 3, 4, ...
"A" SPACING = 25.0 METRES

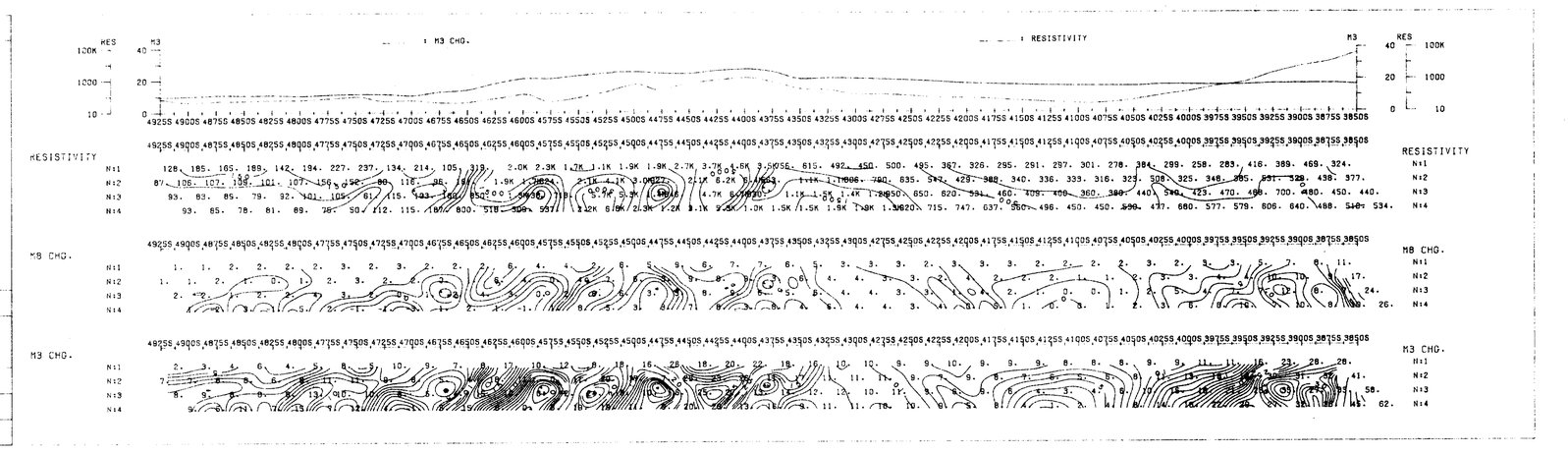
BHP MINERALS CANADA

MCVICAR LAKE PROJECT

SOR LAKE IP SURVEY

DATE : 03/09/93 | REF : V. MITCHELL

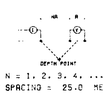
SCALE = 1:2500.0



LINE : 3700 E

INDUCED POLARIZATION SURVEY

POLE-DIPOLE ARRAY



N = 1, 2, 3, 4, ...
"A" SPACING = 25.0 METRES

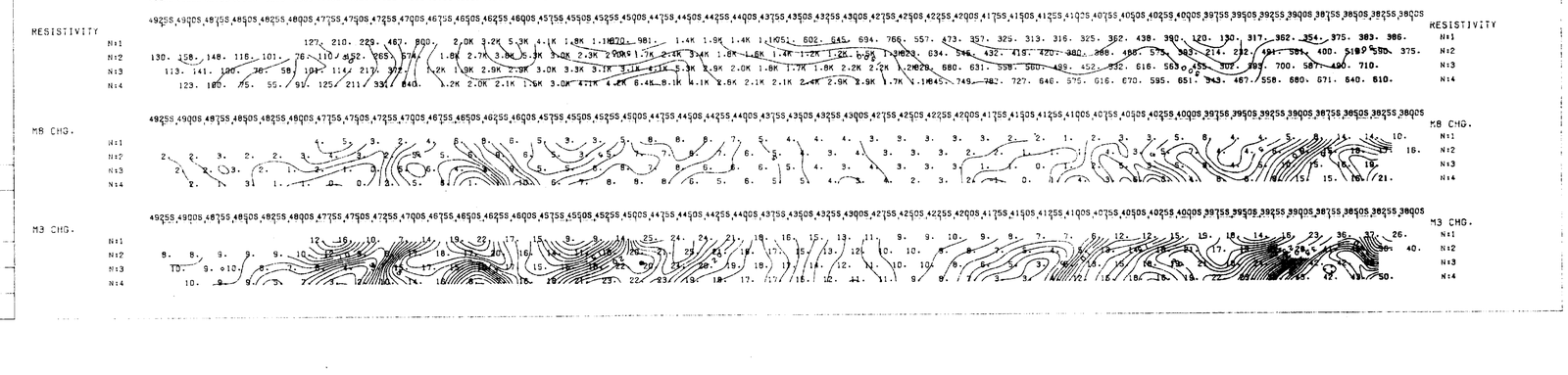
BHP MINERALS CANADA

MCVICAR LAKE PROJECT

SOR LAKE IP SURVEY

DATE : 03/09/93 | REF : V. MITCHELL

SCALE = 1:2500.0



LINE : 3800 E

INDUCED POLARIZATION SURVEY

POLE-DIPOLE ARRAY



N = 1, 2, 3, 4, ...
"A" SPACING = 25.0 METRES

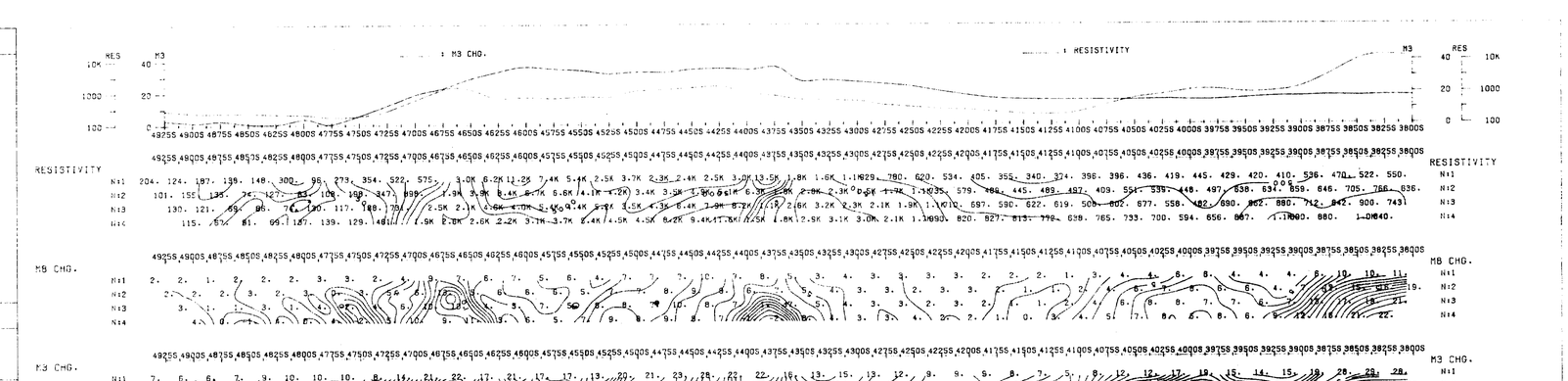
BHP MINERALS CANADA

MCVICAR LAKE PROJECT

SOR LAKE IP SURVEY

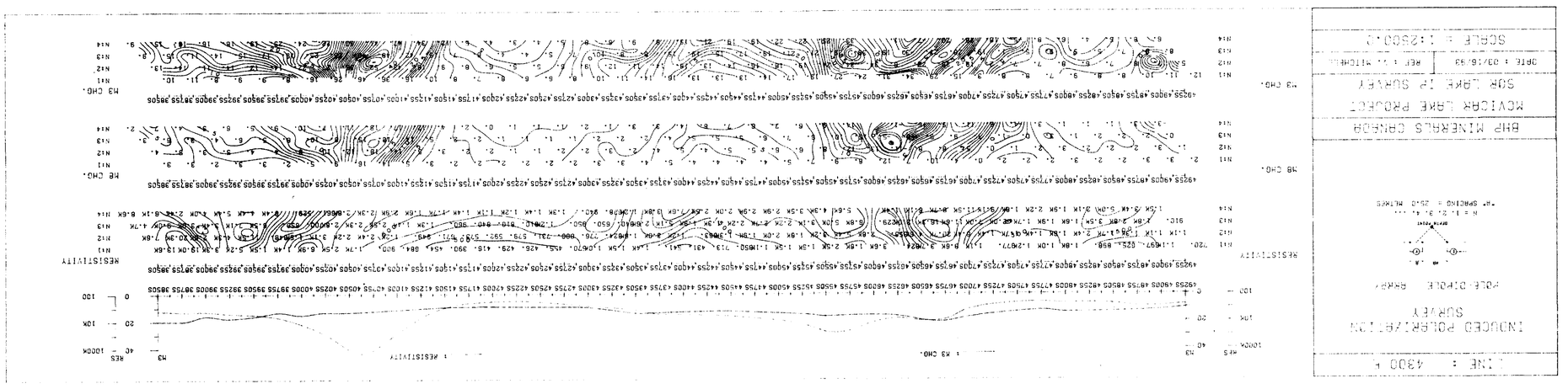
DATE : 03/11/93 | REF : V. MITCHELL

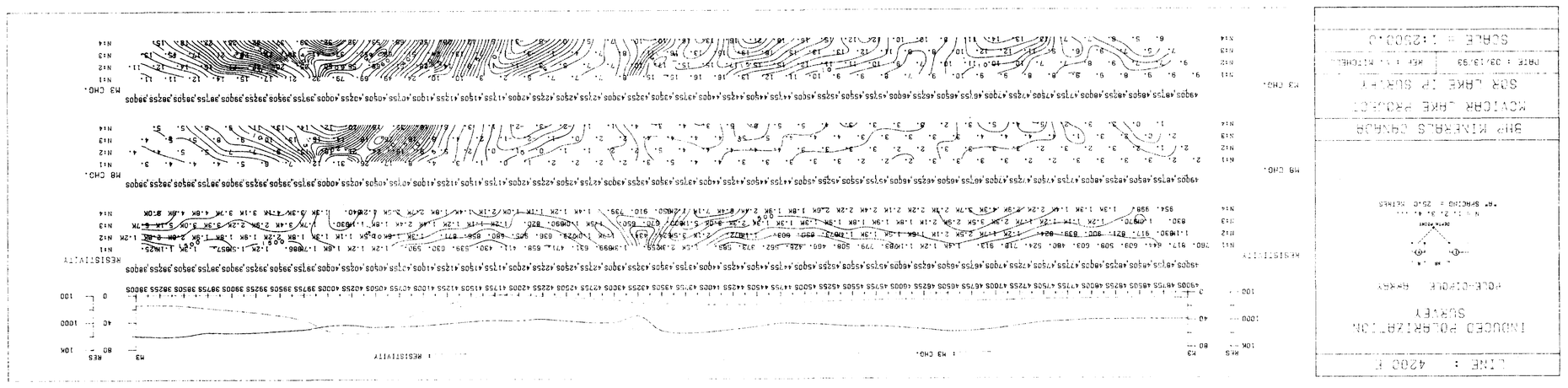
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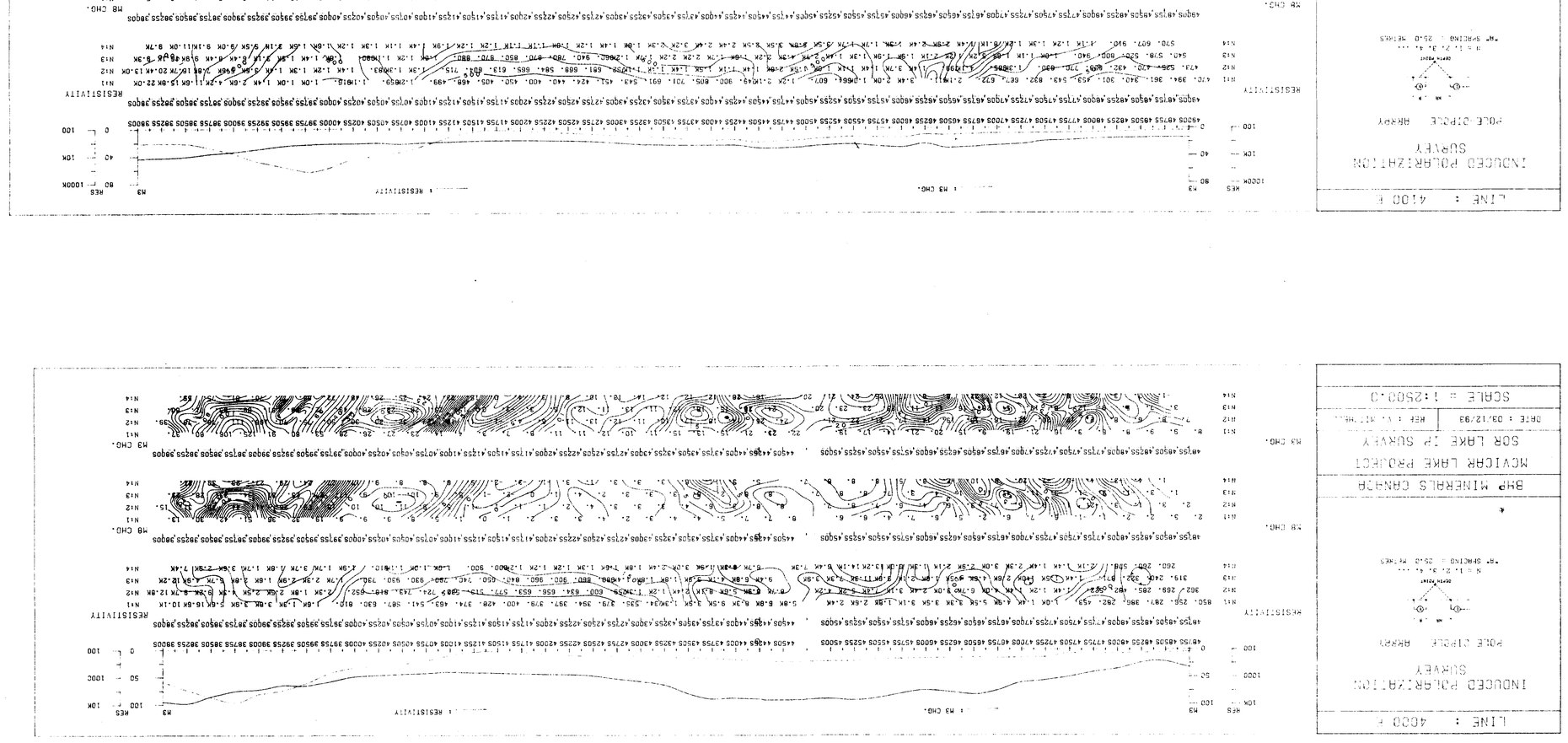


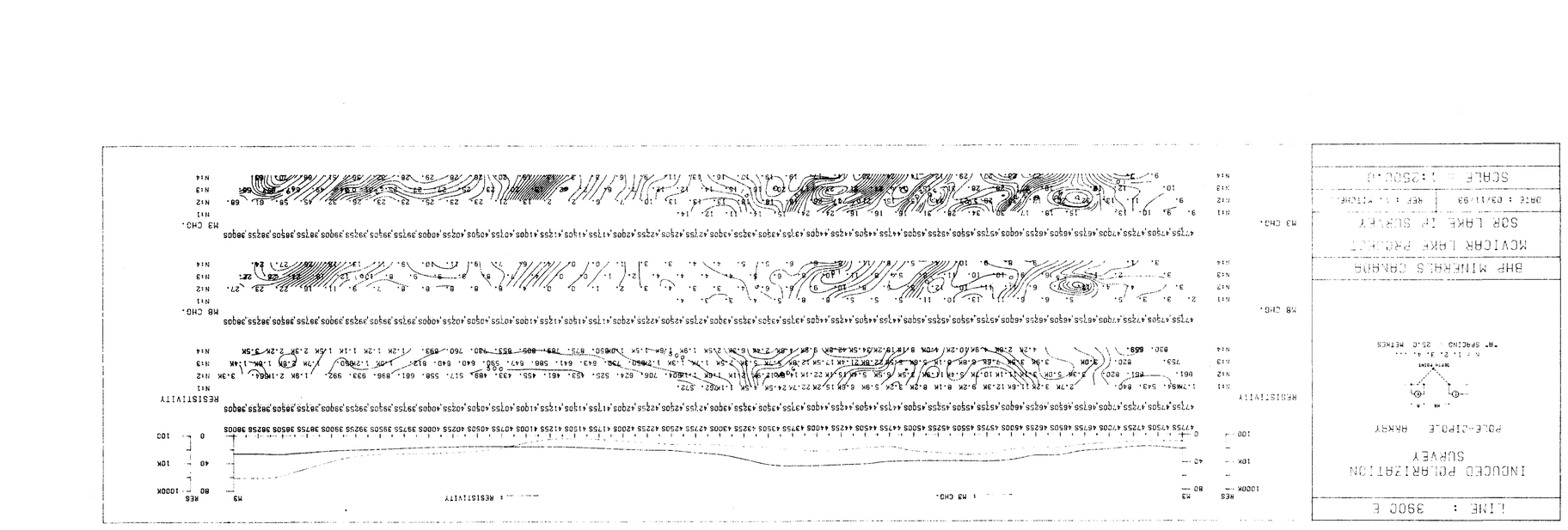
52011SW0480 2.15200 STOUGHTON LAKE

S2071DR5440 2.1:5250 STOUGHTON LAKE









S20115R9400 2.152E0 STOUGHTON LAKE

