SULPETRO MINERALS LIMITED

REPORT of WORK

CADIEUX ZINC PROSPECT

OMEP PROGRAM OM83-9-C9

April 15, 1983 to October 31, 1983

January 1984
Toronto, Canada

Alar Soever
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TABLE OF

List of Figures

Tables

Sheets in Pocket

Appendices

INTRODUCTION

General

This report covers work carried out on Sulpetro Minerals, Cadieux Mines property under designated OMEP program OM83-9-C9. The purpose of work under this program was to locate by geophysical and overburden drilling additional mineralization, to strip known zones for detailed mapping and sampling, and to diamond drill known zones at depth or to test new zones upon discovery.

The period of designation of the program, originally April 15, 1983 to August 31, 1983, was extended until October 31, 1983 in order to permit sufficient time for the diamond drilling program to be completed.

Location and Access

The Cadieux Mines property is located in Admaston Township, Renfrew County, approximately 100 kilometres west of Ottawa and 7 kilometres southwest of the Town of Renfrew. The property is easily accessible by County Road #2 going south from Renfrew and then going southwest on a secondary county road, locally known as Pucker Street.

Property Status

Sulpetro Minerals Cadieux Mines property consists of the following land parcels in Admaston Township, Renfrew County.

...../2

1) Mining rights purchased from Cadieux Mines Limited (Lot 1, Concession II; E½ Lot 2, Concession II; Lots 1 and 2, Concession III and W½ Lots 1 and 2 Concession IV). These mining lands total 363.2 hectares.

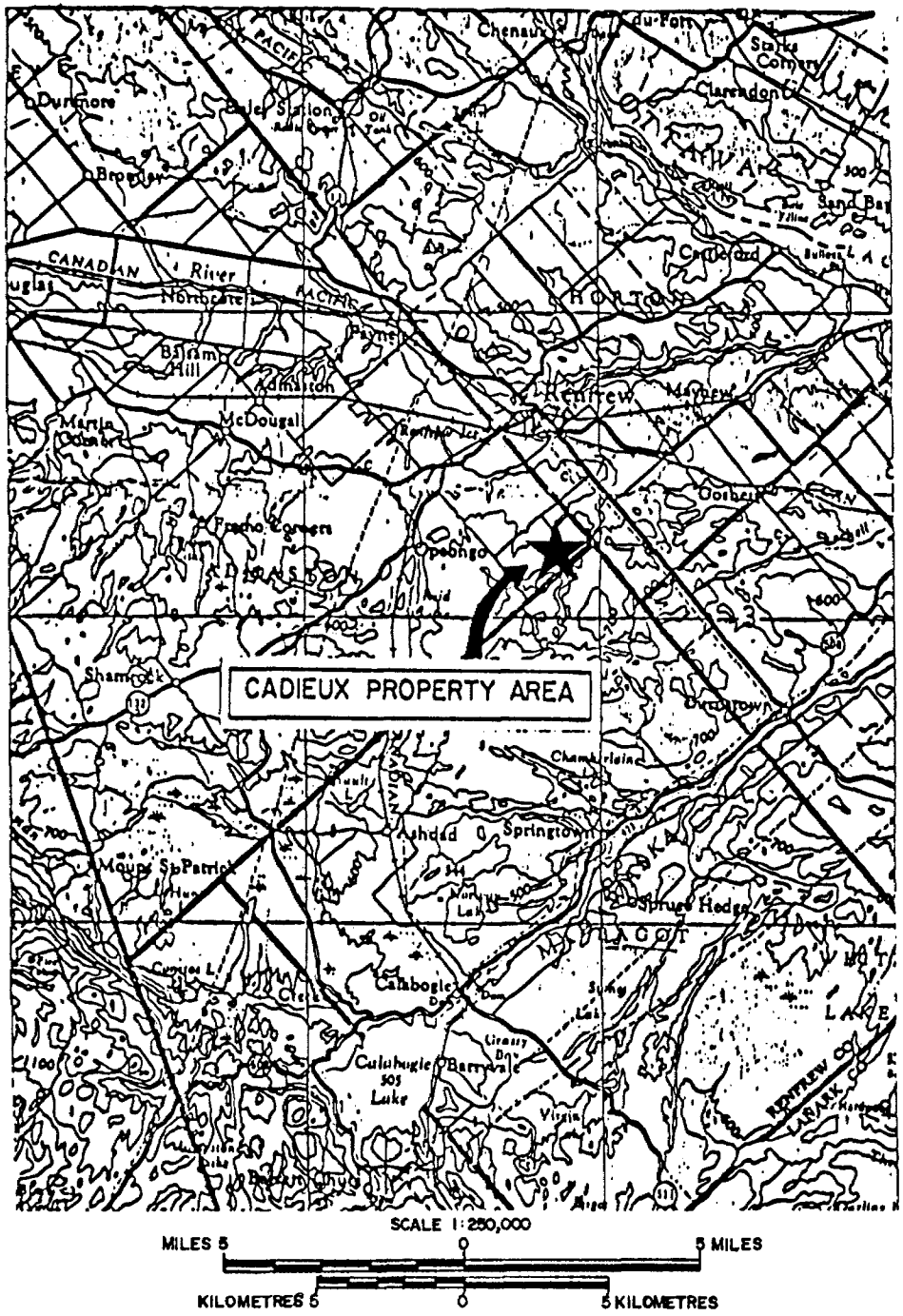
2) Surface rights covering key parts of these mining lands. (Lot 2, Concession III and part of Lot 1, Concession III). A total of 88.6 hectares.

3) An option to purchase mineral and surface rights (E½, Lots 1 and 2, Concession IV). A total of 79.2 hectares.

The location map (Figure 1) shows the location and property boundaries of the Cadieux property.

History and Development

The first discovery of sphalerite on the property is reported to have been made during the summer of 1922 by Joseph Legree, on Lot 2 Concession III. Joseph Legree and William Dean proceeded to acquire mineral rights to the property and opened an exploration pit later that year. Early exploration continued in the area as two separate mining properties controlled by two different companies. During the period 1922 to 1924 the showing was commonly referred to as the 'Renfrew zinc prospect'. In 1925, Coniagas Mines Limited optioned the property and continued exploration with numerous surface strippings and five diamond drill holes. Early in 1926, Ottawa Valley Mines Limited optioned the property, sinking four more diamond drill holes. In 1926, the British Metal Corporation Limited attained ownership and continued surface exploration and drilled seven more diamond drill holes.



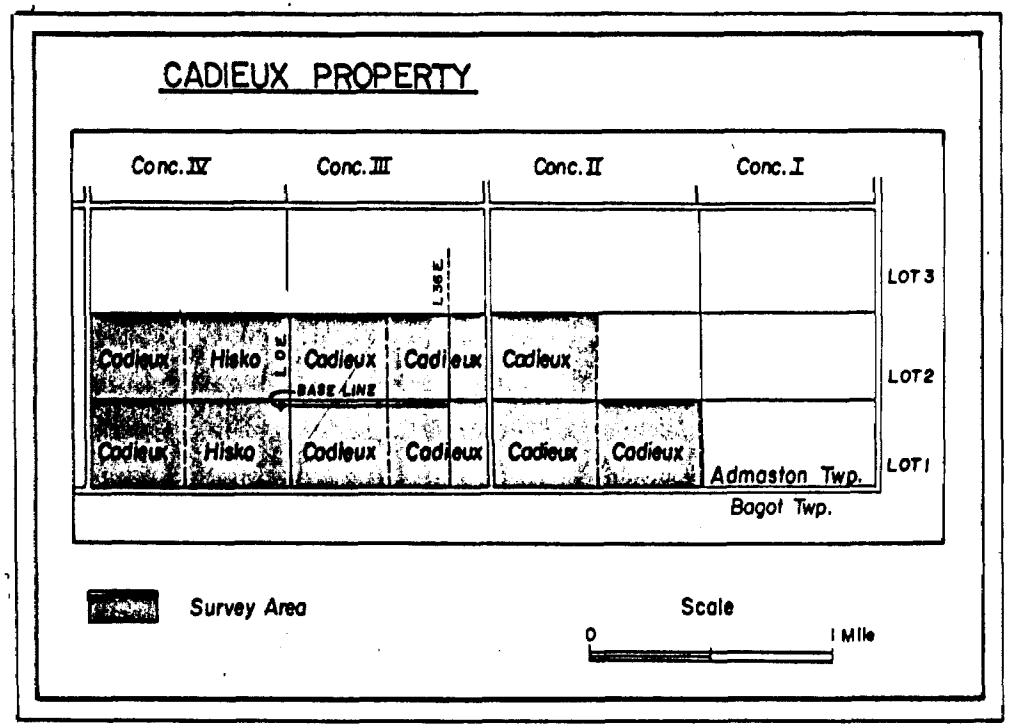


Figure No.1

SULPETRO MINERALS LIMITED
TORONTO, CANADA

CADIEUX PROPERTY: Admaston Twp. S.E.Ontario

LOCATION AND PROPERTY STATUS

APPROX LAT & LONG OF LOWER RT COR OF DWG ° ' " LATITUDE ° ' " LONGITUDE	PROJECT NO 3196	SHEET NO ___ OF ___
	REPORT NO ___	NTS 31F/7

An eighteen year lapse in activity followed this initial exploration period. In 1944, the Canadian Department of Mines and Resources carried out a flotation test and metallurgial study on two ore specimens from the showing. In 1947, New Calumet Mines Limited acquired control of Lots 1 and 2, Concession III, placing thirty-one (31) more diamond drill holes. In 1948, this property was transferred to Cadieux Mines Limited, who placed seven more subsurface holes. Lomega Gold Mines Limited took a lease on the east half of Lots 1 & 2 Concession IV in 1950. (Hisko property). In September of 1950, Lomega transferred control to Renprior Mines Limited. Renprior Mines proceeded to construct a mill on the property with a capacity of 35 to 50 tons per day. During June and July of 1951, the first mining operation on the showing successfully extracted over 60 tons of concentrate, containing 55 percent zinc, 6 percent lead and minor amounts of silver and gold. In September of 1951, Renprior Zinc Mines Limited acquired the property (Hisko Property, E½ Lot 1, Concession IV) and began the most extensive exploration carried out in the showing's history. This work included numerous trenches, forty-five drill holes and a geophysical survey.

Discouraging results forced Renprior Zinc Mines to abandon the property. In 1972, the third major period of exploration in the area began when Kerr Addison Mines Limited optioned the property from Cadieux Mines Limited. Kerr Addison carried out detailed geochemical, geological and geophysical surveys considering the potential of other hidden zinc bearing horizons in the area. Limited diamond drilling (5 drill holes) and trenching failed to outline any new zinc bearing horizons.

During the summer of 1978, Sulpetro Minerals Limited (St. Joseph Explorations Limited) became the twelfth company to hold mineral rights on the Renfrew property.

During the period from 1978 to early 1981 Sulpetro Minerals carried out detailed geologic mapping, and soil sampling programs over the entire Cadieux property. A total of 251 metres of trenching and 4423 m of diamond drilling were also completed. Some orientation type geophysical surveys were also carried out.

The results of this work extended the known mineralization, locating significant, but subeconomic mineralization within the previously discovered zones. A broad area of soil geochemical anomalies covered and surrounded the area of the known zones. This area was largely covered by glacial till. Good potential for locating additional mineralization was thought to exist in this area.

In order to assess this potential a program of bedrock sampling was initiated in 1981. Bedrock samples from beneath the till were collected using a Wacker percussion drill outfitted with a Holman flow through sampling bit. This bedrock sampling program revealed the presence of zinc mineralization in the immediate area of the known zones.

Table 1 contains a summary of the activity on the Cadieux property during the past 59 years.

TABLE 1

SUMMARY OF HISTORY AND DEVELOPMENT OF RENFREW ZINC SHOWING

1922	Discovery by J. Legree Exploration of the showing as two mining sections, referred to as the 'Renfrew Zinc Prospect'.	
1925	Coniagas Mines Limited - option trenching and 5 DDH's (C-1 to C-5)	Total of 1483 feet
1926	Ottawa Valley Mines Limited - option 4 DDH's (S-1 to S-4)	Total of 1187 feet
1926	British Metal Company Limited - 7 DDH's (BMC-1 to BMC-7)	Total of 1487 feet
1944	Flotation and Metallurgic study by Department of Mines and Resources	
1947	New Calumet Mines Limited 13 DDH's (A-1 to A-13)	Total of 2287 feet
1948	Cadieux Mines Limited 4 DDH's (A-series)	Total of 1327 feet
1949	7 DDH's (A-series)	Total of 2889 feet
1950	7 X-Ray holes (A-series)	Total of 825 feet
1950	Lomega Gold Mines Limited	
1950	Renprior Mines Limited Mill construction	
1951	60 tons of concentrate milled	
1951	Renprior Zinc Mines Limited 45 DDH's	Total of 7000 feet
1972	Kerr Addison Mines Limited 5 DDH's	Total of 1500 feet
1978	St. Joseph Explorations Limited (Sulpetro Minerals Limited)	
1979	7 DDH's (SJ-1 to SJ-7)	Total of 1023 metres
1980	12 DDH's (SJ-8 to SJ-19)	Total of 1990 metres
1981	8 DDH's (SJ-20 to SJ-27)	Total of 1410 metres

Objectives of 1983 Program

Aims of the program proposed for 1983 were to:

1) Strip areas where overburden drilling and other previous work had indicated the presence of zinc mineralization.

2) Map and sample these areasso as to gain a better understanding of the nature and scope of this mineralization.

3) Carry out further bedrock sampling using the overburden drill in an attempt to locate additional mineralization.

4) Carry out orientation type geophysical surveys over the newly exposed mineralization.

5) Test the mineralization at depth by diamond drilling.

STRIPPING, MAPPING, TRENCHING and SAMPLING

Introduction

In April 1983 a program of stripping was initiated on the Cadieux property in order to expose the bedrock in areas where the presence of zinc mineralization had been indicated by bedrock sampling and/or previous diamond drilling. The aim of this program was to examine the character and extent of this mineralization in order to determine its cross-sectional geometry and to allow better interpretation of diamond drilling results.

Bulldozing

The initial phase of this stripping program involved removal of vegetation and overburden from the areas to be examined. The vegetation on the property, consisted mostly of second growth mixed forest and as such contained no marketable timber. Attempts made to interest local lumber companies in logging the areas to be stripped met with failure. Some trees were removed by local residents given permission to cut firewood on the property. The rest of the vegetation had to be removed during bulldozing.

During the period from April 18 to May 5, 1983, bulldozers were used to remove remaining vegetation and overburden from the areas to be exposed. Two D-8 bulldozers, rented from Smiths Construction Limited in Arnprior were utilized. A total of 198.5 hours of bulldozer time were consumed at a rate of $90/hour, for a total cost of $17,865.

A total of about 16,100 m^2 in 3 areas was stripped of overburden (see Sheet 1). The overburden, consisting mainly of glacial till, ranged from 0 to 2.5 m thick, with an average depth of about 1 m.

The bulldozing was effective in removal of most of the overburden. An average of only 10 cm of loose material remained on the bedrock surface. In a few places where the outcrop surface was blocky or extremely uneven, small pockets of thicker overburden remained.

Problems were encountered in the eastern end of Area 1, which lay beneath the level of an adjacent swamp. This area rapidly became flooded under about 1 m of water which seeped up through seams in the underlying bedrock.

Washing Outcrop

In order to clean the outcrop surface for mapping, trenching and sampling purposes it was necessary to remove the loose overburden which remained after bulldozing had been completed.

This task was accomplished by using fire pumps to supply water at high pressure to wash the outcrop surface. Water could be easily pumped from the flooded east end of Area 1 and adjacent swamps. A rented Gorman Rupp , Model 61.5 DP fire pump was used, as well as Sulpetro's own Wajax Mark III fire pump. The high pressure water was capable of removing up to about 0.3 m of loose overburden, which was washed into depressions adjacent to the outcrop areas. In small pockets of thicker overburden Sulpetro's J-5 Bombardier, equipped with a blade and Davis D-100 backhoe, was used to aid in removal of overburden.

In the eastern end of Area 1, which was flooded, water had to be pumped out before washing of outcrop could proceed. This was accomplished using a rented Gorman Rupp Model 13A2,3" Trash Pump. After washing, outcrop exposure in the stripped areas averaged about 70 percent.

Geologic Mapping

After washing of the outcrop had been completed the stripped areas were mapped. Mapping was carried out at a scale of 1:200, using a plane table and alidade. The mapping was tied to control points established by transit survey. At this time the mapping of Area 3 is incomplete owing to early snowfall in November of 1983. Sheets 2 and 4 are geologic maps of the stripped areas at a Scale of 1:200. The results of the mapping are discussed in the section on geology.

Trenching

After geologic mapping, trenches were blasted across the exposed zones of mineralization. This was to provide a more detailed three dimensional look at the mineralization, and to provide a fresher surface for sampling as the outcrop surface itself is slightly oxidized, generally to a depth of <1 cm. The trenching was only partly successful in exposing completely fresh rock. The marble in the trenched areas was generally penetrated by fractures and seams, along which there was some weathering. Break during blasting tended to be along these features and thus the floors of the trenches often showed some minor oxidation.

Problems were encountered in trenching the Upper East Zone where breaking along seams caused the rock to break into slabs too large to handle. Sand blasting was carried out, but

added little improvement. The trenches on this zone had to be abandoned and little sampling could be carried out owing to the blocky nature of the disrupted outcrop surface.

After blasting had been completed, the trenches were cleaned of rubble. This task was carried out using Sulpetro's J-5 Bombardier outfitted with a Davis D-100 backhoe, pick and shovel methods, and manual labour. After the rubble had been cleared from the trenches, they were washed clean using water under high pressure provided by fire pumps.

A total of 37 trenches were excavated totalling 301 metres in length. Eight of the trenches had to be abandoned due to poor break. The trenches were 0.6 m deep except in areas with blocky ground where it was necessary to make them 1.2 m deep in order to attempt to obtain a satisfactory break.

Channel Sampling

After the trenches had been cleaned out, channel sampling was carried out. Some channel sampling was also carried out on the outcrop surface where it was feasible to do so. The mineralization on both the outcrop surface and on the floors of the trenches was in places partly oxidized. This oxidation was very minor, usually consisting only of a thin oxide coating on the sulphide grains seldom penetrating more than 1 cm into the rock.

Channel sampling was carried out using a Stihl Model TS350 Cut Quick Saw to make two parallel cuts into the bedrock. A hammer and chisel was then used to chip out the material between the two cuts. In general the width of the channels was 3 to 4 cm while the depth ranged from 2 to 4 cm. A short variable sample length was used, grouping material of similar grade, and sample width, and depth.

Samples were sent to Bondar-Cleg & Company Limited in Ottawa for analysis. Samples were analyzed for Pb and Zn by normal assay methods. The first batch of samples was also analyzed for Fe in order to quantify the amount of Fe-sulphides present.

Three channels C-11, C-14 and C-20 were resampled in order to establish reliability and reproductability of results. In general, reproductability and reliability of results was good. A slight variation was noted in lead values near the lower end of the detectability scale. Values which had initially been in the 0.002% to 0.003% range on initial sampling returned values from 0.010% to 0.018% upon resampling.

A total of 210.35 m of channel sampling was carried out, yielding 364 samples, averaging 0.58 m per sample.

Sheet 3 is a detailed assay plan showing the results of the channel sampling. Assay results are included as Appendix A. A more detailed discussion of the results obtained is contained in the section on mineralization.

Staffing

All washing, mapping, trenching and channel sampling was carried out by employees of Sulpetro Minerals Limited. This work was carried out during periods from May 24 to July 21, September 20 to September 27, and October 11 to October 28, 1983. Some mapping and sampling remains to be completed in Area 3. This could not be completed in the fall of 1983 due to early snowfall.

Assistance was obtained from staff at Sulpetro's O'Brien Division in order to carry out the trenching.

GEOLOGY

Regional Setting

The Cadieux property is situated within a belt of Grenville Supergroup marbles in an area dominated by late Precambrian supracrustal rocks of the Grenville Province. This belt of marbles is at least 25 km long and the marbles appear to overlie and be intercalated with rocks of probable volcanic derivation. These supracrustal rocks have been intruded by a variety of intrusive rocks and subjected to high grade metamorphism and multiphase deformation.

Geology of the Property and Surrounding Area

The Cadieux property is located at the northern end of a belt of Grenville Supergroup marbles. This marble belt strikes northeast-southwest and is bounded to the northwest and southeast by metasediments of possible volcanic derivation. To the southwest of the property a double plunging antiformal structure with a core of felsic volcanic rocks mantled by Fe rich metasediments is exposed in the axis of the marble belt. It plunges northeasterly under the Cadieux property. A similar structure consisting of intermediate to mafic metavolcanics is located northeast of the property. A major granitic intrusion, the Hurd's Lake Granite occurs just to the southeast of the property, while a syentic intrusion is found just to the northeast.

All of the central part of the Cadieux property is underlain predominantly by marbles of the Grenville Supergroup. Other rock types mentioned above are restricted to areas near the limits of the property. All of the known mineralization on the property is hosted by the marble units.

Geology of the Stripped Areas

The geology of the stripped areas is shown on Map Sheets 2 and 4. Most of the stripped areas are underlain by Grenville Supergroup marbles. Locally they contain some intrusive units, of amphibolite and quartz-feldspar pegmetite. A few narrow paragneiss bands also occur within the marble sequence. All the rock units encountered are listed and briefly described on the legends on Sheets 2 and 4.

The marbles on the property are subdivided into calcitic, dolomitic, and silicated dolomitic marbles. Silicated dolomitic marbles are defined as those which contain greater than 15% silicate minerals, primarily tremolite, diopside, and serpentine. Further subdivisions are made based on the nature and type of accessory minerals present. Under this classification major mappable units on the property include dolomitic marbles (2a), tremolitic dolomitic marbles (3T), diopsidic-tremolitic marbles (3b), massive diopside and diopside quartz rock (3bb and 3c), serpentine rock (3s) and calcitic marbles (1). There are locally variations within these major units and contacts between some, are in places poorly defined. Other mappable units include bands and boudins of amphibolite and paragneiss as well as a few boundins of quartz-feldspar pegmatite.

Area 1

Area 1 is underlain entirely by fairly pure dolomitic marble (2a). This marble often contains some fine tremolite needles. Locally it is stained a brick red to hematite staining.

The Swamp Zone mineralization is exposed in the central part of the eastern end of Area 1. A narrow band of high grade mineralization is exposed about 10mN of the Swamp Zone and some scattered disseminated mineralization exists in the western end of the stripped area. Several narrow bands of paragneiss are present in the stratigraphic interval which hosts the mineralization. A large boudin of pegmatite is present just to the south of the Swamp Zone, and other smaller boudins are present scattered throughout Area 1. An amphibolite dike cuts across the north-eastern corner of the area.

Strike is generally N40°E to N60°E, with the latter direction being more prevalent in the eastern end of the area. Dips vary from near vertical to 65°S. No major structures are apparent within the area.

Area 2

Area 2 is underlain by a complexly folded sequence of tremolitic dolomitic marbles, diopsidic tremolitic marbles, diopside and diopside quartz rocks, and some fairly pure dolomitic marbles.

This sequence hosts the East Zones, Road Zone and Electrode Zone mineralization.

The marble sequence is crosscut by two zones of highly altered rock containing pink calcitic marble, serpentine and serpentinized diopside, and bands and boudins of amphibolite. Locally slickensides can be seen in the serpentinous material and there are signs of intense shearing. These crosscutting altered zones are therefore thought to represent former fault zones along which there has been some intrusion of mafic dike material, now amphibolite.

Of the two such zones, the smaller one which appears to predate later folding, runs westerly from just south of the Upper East Zone to just east of the Lower East Zone. There it appears to be folded around and appears to continue into a major amphibolite lense just south of the Electrode Zone.

The more major of these zones, trends northeast-southwest across the southern part of the area, from just south of the Middle East Zone to just southeast of the Upper East Zone. It is a major structure which can be traced across the entire property. The "A" Zone is hosted with the altered rocks of this structure. This structure forms the boundary between the silicated marbles of Area 2 and the purer dolomite of Area 1. It is therefore impossible to relate the Swamp Zone mineralization stratigraphically to that observed in Area 2.

Structure within Area 2 is complex. The rocks appear to have been subjected to multiphase deformation. The geometry of the major mappable units suggests the refolding of early phase folds during a subsequent period of deformation.

These later phase folds can be mapped with the stripped area where they fold major lithologic units as well as the mineralization. The nose of one of these folds was mapped in the Road Zone area.

A steeply dipping axial planar foliation striking about N50°E has developed during this later period of folding. A lineation has also developed parallel to these later phase fold axes. These second phase features are mappable in the orientation of individual mineral grains and small boudins.

Area 3

Area 3 is underlain by a sequence of silicated dolomitic marbles and minor pure dolomitic marbles. The major shear zone which trends northeast-southwest across the property is exposed along the southern edge of this area. In this area, this shear zone is characterized by pink highly altered calcitic marbles, serpentinized diopside and pathces of quartz. Some parts of the zone are hematitic. A smaller shear zone, also trending northeast-southwest is present in the northern part of the area. The Central Zone mineralization is exposed within this area. Strike throughout area 3 is about N40°E and dips are steep. No major structures can be mapped with the area.

MINERALIZATION

Swamp Zone

The Swamp Zone mineralization is hosted within the dolomitic marbles of Area 1. The mineralization consists of a narrow zone of disseminated to submassive sphalerite (minor pyrite and galena) mineralization trending northeast through the central part of Area 1.

Grade and width of the mineralization appears to improve from west to east. Values in the lower grade western end of the zone average 3% Zn/1.5 m. To the east the mineralization becomes more massive in nature with values increasing to 13.4% Zn/0.73 m in C-6 and 6.15% Zn/2.86 m in C-2. It should be noted the latter average includes 1.20 m which could not be sampled due to the nature of the surface and was thus not given any Zn value in the average. Values in C-2 reach as high as 18.9%Zn/0.61 m. Some lead is also present in the eastern end of the Swamp Zone with short sections of C-2 assaying as high as 1.09% Pb.

A small narrow high grade zone is present 10 m north of the Swamp Zone. Values here (C-1 and C-3) range from 18-20% Zn over ~0.5 m. Some lead is also present (C-3 - 3.52% Pb, 20.0% Zn/ 0.44 m).

Some disseminated low grade sphalerite (minor pyrite) mineralization is also present south of the Swamp Zone. Best values here are 2-3% Zn/ 1 m. (C-8 - 3.12% Zn/1.15 m and C-9 - 2.52% Zn/0.85 m)

"A" Zone

The "A" Zone mineralization is located within highly altered calcitic marbles and serpentine rock present within the major shear zone which cuts along the south edge of Area 2.

The mineralization consists of narrow streaks of pyrite and sphalerite within these altered units. The bedrock surface here is deeply weathered and oxidized so the exact nature of the mineralization is difficult to determine. The oxidized material sampled assayed from 2 to 6% Zn (C-43 2.68% Zn/ 1.70 m; C-42 3.65% Zn/1.74 m).

Upper East Zone

The Upper East Zone mineralization is hosted within the tremolitic marbles of Area 2. The mineralization consists of disseminated sphalerite (minor pyrite) mineralization in a zone about 30 m long and up to 4 m wide.

The mineralization is intimately associated with the clusters of tremolite needles found within the host unit.

The nature of the break when trenches were blasted across this zone made channel sampling impossible. Visual estimates and previous assaying indicates an average grade of about 5% Zn for this zone.

Electrode Zone

This is a narrow zone of mineralization hosted by dolomitic marble and diopside rock flanking a major amphibolite lense. The zone is folded by late phase folding. Strike length is at least 30 metres with a width of just over a metre. Channel samples C-40 and C-41 gave assays of 4.66% Zn/1.25 m and 4.14% Zn/ 1.32 m respectively.

Middle East Zone

The Middle East Zone is hosted within the diopside tremolitic marbles of Area 2. The mineralization consists of disseminated to submassive sphalerite. Very little pyrite is present. Some galena can be observed in the higher grade eastern end of the zone.

Grade within the zone is erratically distributed as the zone consists of patches of higher grade material within a larger zone of disseminated mineralization. Assays of this higher grade material range up to 16.8% Zn while the disseminated material grades 1 to 4% Zn. Distribution of the higher grade material appears to be controlled by the distribution of diopside with the zone.

Strike length of the middle east zone is in the neighbourhoood of 50 m. Widths range as high as 6.72 metres, average true width being approximately 2-3 metres. Best grades appear to be located near the eastern end of the zone with assays as high as 8.90% Zn/2.49 m (C-16).

The zone is affected by late phase folding, and because of this and the nature of the bedrock surface, channel sampling on the western end of the zone is at a poor angle to strike. Sampling there gives grades of ~5% Zn (C-21 - 5.56% Zn/5.15 m; C-22 - 5.39% Zn/1.54 m; C-23 - 4.83% Zn/2.01 m). Poor sample orientation on the west end and the erratic distribution of higher grade material makes it impossible to come up with a totally reliable average grade for the entire zone, but calculations show it to be approximately 5-6% Zn.

Lower East Zone

The Lower East Zone is hosted by tremolitic dolomitic marbles and is situated just to the north of the Middle East Zone. The tremolitic marbles which host the Lower East Zone also host the Upper East Zone mineralization. The mineralization consists of disseminated sphalerite and minor pyrite, commonly intimately associated with clusters of tremolite needles. The zone is situated in the nose of a late phase fold strucuture. The full extent of the mineralized zone cannot be determined due to the nature of the outcrop exposure. Average grade at surface appears to be 4% Zn over a true width of about 3 metres.

Road Zone

The Road Zone mineralization is located at the contact of dolomitic and silicated dolomitic marbles in a late phase fold structure. The mineralization consists of disseminated to massive sphalerite with 1-2% pyrite and some galena. Locally grades are very high (eg. 31.7% Zn, 8.24% Pb/0.22 m in C-36) but such areas of high grade are fairly restricted. Average grade for the zone is estimated at 5%.

Central Zone

The Central Zone mineralization is hosted by the sequence of silicated dolomitic marbles in Area 3. Host rocks are similar to those which host the Middle East Zone mineralization. The mineralization consists of disseminated to submassive sphalerite with some pyrite. Galena is prominent to the east end of this zone. Channel sampling has not been completed at this time but average grade is estimated to be 6-8% Zn.

CONCLUSIONS and RECOMMENDATIONS

Results of the stripping, mapping, trenching and sampling have demonstrated that potentially economic zinc mineralization exists within the sequence of Grenville marbles which underlie the Cadieux property. This sequence of marbles is cut by several major shear zones of varying ages.

Good grade mineralization is present within the Swamp, Road, Central and East Zones. It is recommended that this mineralization be tested by diamond drilling as to its inferred down plunge extension along late phase fold axes.

DIAMOND DRILLING

Objectives

Based on results of the stripping carried out in 1983, as well as existing data a diamond drilling program was planned for the fall of 1983. Objectives of this program were to test the Swamp Zone and the Middle and Lower East Zones along their inferred down plunge extensions.

Drilling

During the period from October 13 to November 2, 1983 767.2 metres of diamond drilling in 8 holes was completed. Only costs up to and including October 31, 1983 are eligible expenditures under OMEP Program OM83-9-C-9. The drilling was carried out by St. Lambert Diamond Drilling of Valleyfield Québec and supervised by Alar Soever and A.L. Sangster. Core size was B.Q. Average cost for drilling, exclusive of analysis and supervision costs was $53.39 per metre. All the core is stored at Sulpetro's Core Storage facility in Irondale Ontario.

Sheet 1 shows the location of the holes drilled. Table 2 shows the location, direction, depth, target, and results of the holes. Drill sections and logs are included as Appendix B.

Results

Holes SJ-28 to 31 were drilled to test the Swamp Zone. Results show good continuity and grade of mineralization down the inferred plunge direction. Of the four holes only SJ-30 failed to hit significant mineralization. This would appear to

TABLE 2 DIAMOND DRILL HOLE DATA

HOLE	EASTING	NORTHING	AZIMUTH	DIP	LENGTH	TARGET	RESULTS
SJ-28	L24E+50ME	1+58N	132°	-45°	197.2 m	Swamp Zone	14.45% Zn/5.3 m + 7.8 m of oxidized material
SJ-29	L24E	1+04N	140°	-45°	93 m	Swamp Zone	16.96% Zn, 1.26% Pb/ 6.4 m
SJ-30	L23E	0+72N	140°	-45°	60 m	Swamp Zone just E of surface exposure	15.1% Zn/1.5 m near top of hole, zone is faulted north and was directly under drill
SJ-31	L23E	0+44N	320°	-45°	60 m	Swamp Zone, where it is faulted north of surface exposure	5.02% Zn/9.95 m
SJ-32	L20E	1+59N	140°	-45°	81 m	Lower East Zone on section 20E	6.08% Zn/3.30 m *
SJ-33	L20E	1+40N	140°	-45°	60 m	Middle East Zone on section 20E	5.09% Zn/3.70 m
SJ-34	L22E	1+68N	140°	-45°	84 m	Middle East Zone	tr Zn, Hole went over top of zone
SJ-35	L22E	2+13N	140°	-45°	132 m	Middle or Lower East 50 m below SJ-21 (10.16% Zn/4.1 m)	3.07% Zn/8.05 m

be because the Swamp Zone is faulted north just east of its surface exposure. SJ-31 was drilled to test this hypothesis and intersected mineralization (5.02% Zn/9.95 m) about 10 m to the north of the east end of the surface exposure. SJ-29 and 28 drilled further down plunge intersected 1.26% Pb, 16.96% Zn/ 6.4 m and 14.45% Zn/5.3 m respectively. The zone remains open to depth.

Holes SJ-32 to 35 were drilled to test the Middle and Lower East zones. Hole SJ-32 intersected 6.08% Zn/3.30 m in the Lower East Zone. This is slightly higher grade than the mineralization observed on surface. Holes SJ-33 and SJ-35 intersected values of 5.09% Zn/3.70 m and 3.07% Zn/8.05 m in the Middle East Zone. SJ-34 appears to have gone over the top of the zone.

Drilling on the Lower and Middle East Zones confirmed these zones continue to depth down plunge. Grade and widths appear to be similar to those observed on surface. Both zones are open to depth.

Conclusions and Recommendations

The diamond drilling demonstrated that good grade zinc (minor lead) mineralization is present at depth in the Swamp Zone. Additional drilling is highly recommended to test this zone to depth.

Additional mineralization exists in the Middle and Lower East Zones but it is of lower grade. These zones are also open to depth and deserve attention as lower priority drill targets.

OVERBURDEN DRILL BEDROCK SAMPLING

Introduction

Sulpetro Minerals has been carrying out a program of bedrock sampling beneath the till on the Cadieux and Hisko property utilizing a Wacker portable percussion drill to obtain the samples. The objective of this program is to outline restricted areas of mineralization to test by trenching or drilling. The results being presented in this report represent an extension of an existing data base. From May 25th to June 12th, 339 samples were collected by R. Jackson and M. Wallace; and from October 14th to 20th, 147 samples were collected by R. Jackson and L. Stoliker.

Part of the work in October was of an orientation nature in an area where no previous sampling had been carried out. On the East Grid of Cadieux (Sheet 5) south of the base line, a large area of bedrock is covered by a thick, highly compact till. A soil survey in this area gave some indication of a weak soil anomaly having the characteristics of a till streak. The objectives of the percussion drill program were to determine the depth penetration capabilities of the Wacker drill in this terrain and to trace up-ice, if possible, the source of the soil anomaly.

Sampling and Analytical Procedures

Bedrock chip samples were obtained from beneath the overburden using a Wacker portable percussion drill. Samples were collected every 10 m along lines 15 m apart. If sulphides

were observed, more detailed sampling was carried out at 5 m stations on lines 7.5 m apart. If the till could not be penetrated through to the bedrock surface, a sample of the till was obtained from the maximum depth of penetration.

The samples were sent to Bondar-Clegg & Co. Ltd. in Ottawa where they were crushed to -200#. The elements Pb, Zn, and Cd were determined by atomic absorption spectrophotometry after an HNO_3-HCl hot acid digestion.

Pleistocene Stratigraphy

Most of the Cadieux-Hisko property is covered by a relatively thin and discontinuous oxidized loosely compacted sandy till. Thickness is generally less than one metre but ranges up to 2.5-3.0 metres locally. In places it has the appearance of having been water sorted to a minor degree. The lower portion of the till has a high percentage of locally derived carbonate pebbles whereas the upper portion is composed of a higher percentage of amphibolite and granite pebbles of slightly more distal origin.

On the East Grid (Sheet 5) to the south of the base line, a large prominent till ridge occurs with fluting elongated along the direction of ice movement. Trenching and percussion drilling have revealed two distinct layers of till in this area. The upper till is the same as the one which covers most of the property. It's thickness is about 2.5-3.0 metres. The lower till is a relatively unoxidized hard compacted clay till with relatively few large pebbles but with many very small pebbles or grit. Close examination of these pebbles reveals.

a high percentage of Paleozoic limestone accounting for its 'cemented' nature. This till was probably deposited in an early advance and owing to its cemented nature, it was not entirely eroded during the second advance.

With the exception of the till ridge where a till thickness of 10-15 metres is suspected, surface topography generally reflects bedrock topography. In the low lying areas, there has been minor development of alluvium and peat on top of the till surface.

Trace Element Geochemistry of the Bedrock Surface

The distribution of Pb, Zn and Cd in bedrock is presented on Sheets 5a, B & C and 6A, B & C. A statistical summary of the data is as follows:

Element	Pb	Zn	Cd
Minimum Value	1	5	0.2
Maximum Value	28,000	25,500	36.6
Geometric Mode	5	20	0.2
Geometric Mean	5.8	47	0.28
Treshold	25	125	1.0

The geometric mode is probably the best estimate of the average trace element content of dolomite and silicated dolomite. The threshold is defined as the upper limit of the background population (99.9 percentile at 95% confidence limit) as inferred from the form of the cumulative frequency curves (Figures 1, 2).

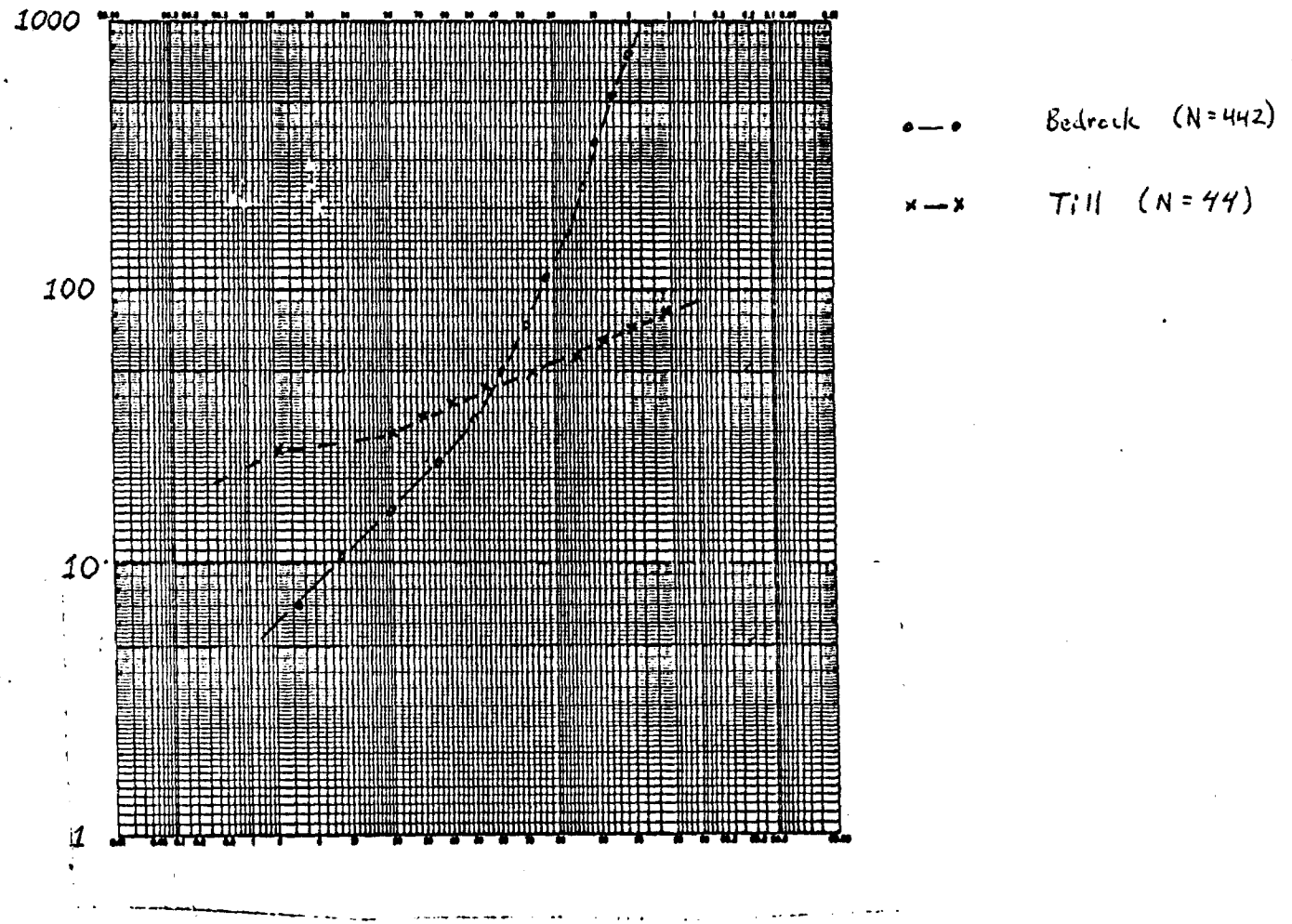


FIGURE 2

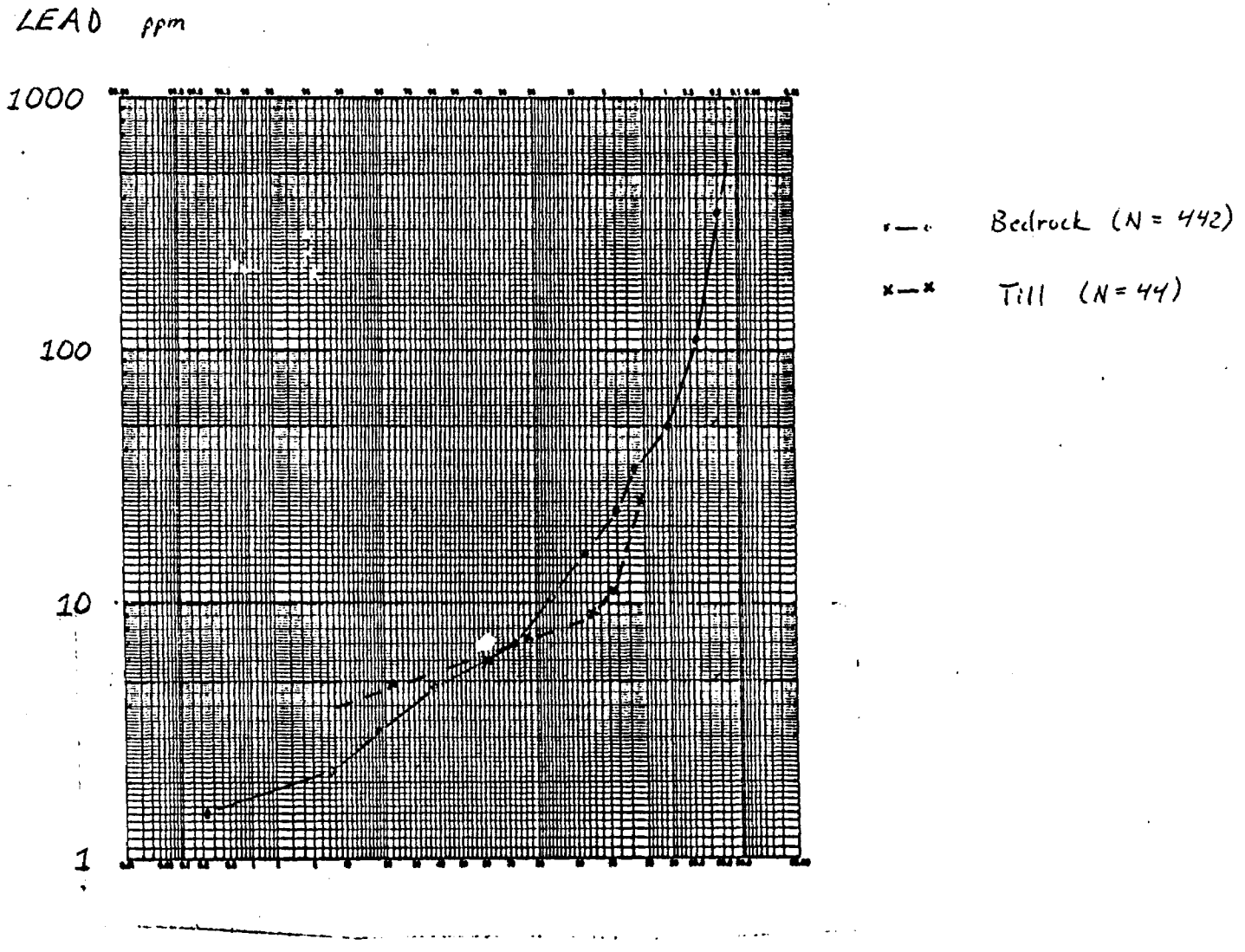


FIGURE 3

On the West Grid, (Sheet 6) one anomaly is clearly defined between lines 5+50E and 8+00E. The Zn-Cd anomaly has a hook shape to it by with anomalous Pb located over the bend in the hook. This anomaly is interpreted to reflect one mineralized band located at the nose of a fold. It is partially exposed in surface outcrop.

Four other anomalies are partially outlined by Zn $\pm$Cd but only the one located between lines 1+25W and 0+50W appears to be significant. It is partially exposed in old trenches. The other anomalies probably represent low grade mineralization of limited economic potential at least near surface.

On the East Grid, one small Zn Cd anomaly on line 1+05E is located adjacent to an area of high background Zn. However, it is not considered to have any economic significance near surface. A weak Zn anomaly is also located at 4+50E/0+25N.

Application of Percussion Drilling to an Area of Compact Till

The distribution of Pb, Zn, and Cd in till is presented on maps along with the bedrock data. A statistical summary of the data is as follows:

Element	Pb	Zn	Cd
Minimum Value	4	25	0.2
Maximum Value	28	139	0.2
Geometric Mode	6	27, 45	0.2
Geometric Mean	6.6	41	0.2
Threshold	14	120	0.2

The depth of the till samples ranged from 3 to 5 metres south of station 0+90S. Elsewhere, the till is less than 2 to 3 metres thick. Most of the samples are from the lower compact till. No anomalies of any significance were obtained.

The soil anomaly in the surface till would not appear to be related to a glacial smear in the lower till. It's source probably lies up-ice of the compact till ridge. A weak bedrock anomaly occurs at line 4+50E/0+25N and could be the source but more work is required in this area.

The estimated thickness of till in the area of the compact till ridge is 5-15 metres. Penetration by percussion drilling did not exceed 5 metres. In order to extend the bedrock sampling into this area, a more powerful overburden drill is required. An auger system might be the most effective.

Conclusions and Recommendations

A number of bedrock anomalies were identified by a percussion drilling survey but only two of these are thought to reflect significant mineralization near surface and these are:

1) PbZnCd anomaly between lines 5+50E and 8+00E at approximately 1+00N (west grid).
2) Zn $\pm$Cd anomaly on the Hisko property between lines 0+50W and 1+25W at approximately 0+25N (west grid).

Both of these anomalies are partially exposed at surface but further trenching is recommended.

In the area of compact till on the East Grid south of the base line, percussion drilling using the Wacker drill is not an effective means of obtaining bedrock samples. A more powerful overburden drill, possibly an auger system, is recommended for this area.

A weak soil anomaly in the surface till surface of the base line is not related to a glacial dispersion fan in the lower compact till but likely has its source up-ice of the till ridge. A weak bedrock anomaly at line 4+50E/0+25N could possibly be its source. More bedrock sampling is recommended for this area.

GEOPHYSICS

In June 1983, orientation type IP and SP surveys were carried out over both the newly exposed zones and some previously known zones of mineralization. In addition a magnetometer survey was carried out over the entire property to aid with structural interpretation and trace amphibolitic horizons. The surveys are reported on in Cadieux property, Magnetic IP - SP - Surveys, October 1983 by J.L. Wright. This report is attached as Appendix C.

Respectfully Submitted

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FINANCIAL SUMMARY

The actual costs of the programme well exceeded the budget and for this reason we have not included our costs for final report preparation, depreciation on vehicles and equipment, and miscellaneous supplies.

Due to the nature of the programme and the staffing requirements, it was difficult to differentiate between the various segments of the programme. As a result the following is a summary of the total costs:

Analytical costs	$ 9,505.80
Diamond drilling	36,280.82
Explosives	4,119.09
Food and Lodging	6,562.20
Oil and gas	5,355.38
Rental of equipment	20,493.82
Salaries	54,442.60
Telephone	727.70
	$137,487.41

No documentation is included for oil and gas expenses or for telephone charges as the amounts involved are small. However, documentation is available at our office.

I certify that, to the best of my knowledge and belief, the above figures are true and correct.

Graeme M. Gordon, R.I.A.
Treasurer/Controller

A P P E N D I X A

CHANNEL SAMPLE ASSAY RESULTS

ZONE	CHANNEL	SAMPLE	FROM	TO	m	%Zn	%Pb	m%Zn	m%Pb	NOTES
Small Zone north of Swamp Zone (west channel of 2)	C-1 sampled N → S	197001	0.0	0.78	0.78	0.19	0.002	0.15		18.8% Zn/0.57 m from 0.78 to 1.35 m
		2	0.78	1.35	0.57	18.8	0.073	10.72		
		3	1.35	2.29	0.94	0.15	0.004	0.14		4.81% Zn/2.29 m from 0.0 to 2.29 m
East end of Swamp Zone in pit	C-2 sampled N → S	197004	0.0	0.35	0.35	2.48	0.035	0.87		0.14% Pb, 6.15% Zn/2.86 m including gaps (calculated at 0%) 0.31% Pb, 7.31% Zn/ 0.71 m from 0.0 to 0.71 m 0.09% Pb, 9.85% Zn/1.26 m from 1.60 to 2.86 including 0.31 m gap from 2.21 to 2.52.
		5	0.35	0.50	0.15	18.2	1.09	2.73	0.16	
		6	0.50	0.71	0.21	7.56	0.28	1.59	0.06	
		7	1.60	2.21	0.61	18.9	0.18	11.53	0.11	
		8	2.52	2.86	0.34	2.60	0.006	0.88		
Small Zone north of Swamp Zone (east channel of 2)	C-3 sampled N → S	197009	0.0	1.22	1.22	0.12	0.008	0.15	0.01	3.52% Pb, 20.0% Zn/0.44 m from 1.22 to 1.66 m
		10	1.22	1.66	0.44	20.0	3.52	8.80	1.55	
		11	1.66	2.55	0.89	0.42	0.023	0.37	0.02	0.62% Pb, 3.65% Zn/2.55 m from 0.0 to 2.55 m
Swamp Zone middle trench of 3	C-4 sampled S → N	197012	0.0	0.85	0.85	0.34	0.040			3.84% Zn/1.45 m from 0.85 to 2.30 m.
		13	0.85	2.30	1.45	3.84	0.035			
		14	2.30	2.85	0.55	0.29	0.007			
		15	2.85	3.70	0.85	0.55	0.005			
		16	3.70	4.90	1.20	0.15	0.003			
		17	4.90	6.35	1.45	0.30	0.003			

...../2

ZONE	CHANNEL	SAMPLE	FROM	TO	m	%Zn	%Pb	m%Zn	m%Pb	NOTES
Swamp Zone 7mW of W trench	C-5 sampled N ->S	197018	0.0	0.64	0.64	0.58	0.004			4.44%Zn/1.24 m from 0.64 - 1.88 m
		19	0.64	1.88	1.24	4.44	0.003			
		20	1.88	2.08	0.20	0.21	0.009			
Swamp Zone top of west edge of eastern trench	C-6 Sampled S ->N	197021	0.0	1.96	1.96	0.52	0.009			
		22	2.08	2.86	0.78	1.12	0.006	0.87		13.4%Zn/0.73 m from 2.86 - 3.59 m
		23	2.86	3.59	0.73	13.4	0.086	9.78		
		24	3.59	4.42	0.83	1.08	0.004	0.90		4.94%Zn/2.34 from 2.08 - 4.42 m
		25	4.42	4.92	0.50	0.082	0.004			
		26	4.92	5.59	0.67	0.37	0.004			
		27	5.59	6.72	1.13	1.48	0.004			
		28	6.72	7.34	0.62	1.94	0.003			
		29	7.34	7.50	0.16	0.69	0.003			
		30	7.50	8.62	1.12	1.08	0.003			
Swamp floor of west trench	C-7 Sampled S ->N	197031	0.50	0.54	0.54	0.052	0.007			2.08%Zn/1.61 m from 0.54 - 2.15
		32	0.54	2.15	1.61	2.08	0.029			
		33	2.15	4.20	2.05	0.43	0.003			
East end south part of Swamp Zone	C-8 Sampled S ->N	197034	0.0	1.00	1.00	1.06	0.003			3.12%Zn/1.15 m from 1.00 - 2.15 m
		35	1.00	2.15	1.15	3.12	0.003			
		36	2.15	4.15	2.00	0.22	0.003			
West end of south part of Swamp Zone	C-9	197037	0.0	0.85	0.85	2.52	0.002			2.52%Zn/0.80 m

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ZONE	CHANNEL	SAMPLE	FROM	TO	m	%Zn	%Pb	m%Zn	m%Pb	NOTES
Middle East Zone lmW of eastern trench	C-10 Sampled N ->S	197038	0.0	0.26	0.26	0.24	0.004			1.90%Zn/1.54 m from 0.26 - 1.80 m
		39	0.26	1.05	0.79	2.90	0.004			
		40	1.12	1.50	0.38	0.64	0.007			
		41	1.50	1.80	0.30	1.32	0.004			
		42	1.80	2.30	0.50	0.24	0.009			
Middle East Zone floor 2nd trench from east end	C-11 Sampled N ->S	197043	0.0	1.65	1.65	0.087	0.004			4.84%Zn/2.15 m from 1.65 - 3.80 m
		44	1.65	2.75	1.10	4.52	0.003	4.97		
		45	2.75	3.35	0.60	2.80	0.003	1.68		
		46	3.35	3.80	0.45	8.36	0.003	3.76		
		46B	3.80	4.60	1.20	1.92	0.019			
Middle East floor 4th trench from east end	C-12 sampled N - S	197047	0.0	0.32	0.32	4.48	0.003	1.43		NOTE: 0.57, 058 are added going north from 0.00 m continuous with 197047 4.08%Zn/4.54 m from 0.50N - 4.04S
		48	0.32	0.60	0.28	1.40	0.003	0.39		
		49	0.60	0.94	0.34	4.16	0.003	1.41		
		50	0.94	2.51	1.57	2.40	0.003	3.77		
		51	2.51	2.90	0.41	3.56	0.003	1.46		
		52	2.90	3.72	0.82	3.68	0.004	3.02		
		53	3.72	4.04	0.32	16.8	0.003	5.38		
		54	4.04	4.70	0.66	1.72	0.010			
		55	4.70	5.08	0.38	2.32	0.024			
		56	5.08	6.06	0.98	0.42	0.029			
		57	0.0	0.50	0.50	3.36	0.003	1.68		
		58	0.50	0.90	0.40	1.36	0.003			

...../4

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ZONE	CHANNEL	SAMPLE	FROM	TO	m	%Zn	%Pb	m%Zn	m%Pb	NOTES
Middle East	C-13	197059	0.0	0.71	0.71	2.36	0.003	1.68		3.33%Zn/6.72 m from 0.0 -
Zone 5th trench	sampled	60	0.71	1.10	0.39	4.16	0.003	1.62		6.72 m
from E end	N ->S	61	1.10	1.72	0.62	2.30	0.003	1.43		4.27%Zn/3.29 m from 3.43 -
		62	1.72	2.62	0.90	1.76	0.002	1.58		6.72 m
		63	2.62	3.43	0.81	2.48	0.002	2.01		4.38%Zn/3.00 m from 3.43 -
		64	3.43	3.85	0.42	3.98	0.002	1.67		6.43 m
		65	3.85	4.21	0.36	6.68	0.003	2.40		4.44%Zn/2.58 m from 3.85 -
		66	4.21	4.35	0.14	6.00	0.003	0.84		6.43 m
		67	4.35	5.00	0.65	0.83	0.003	0.54		
		68	5.00	5.20	0.20	0.35	0.003	0.07		
		69	5.20	5.50	0.30	9.28	0.003	2.78		
		70	5.50	5.66	0.16	7.96	0.003	1.27		
		71	5.66	5.90	0.24	0.62	0.003	0.15		
		72	5.90	6.43	0.53	6.44	0.003	3.41		
		73	6.43	6.72	0.29	3.06	0.002	0.89		
		74	6.72	7.20	0.48	0.33	0.002			
		75	7.25	7.41	0.16	1.36	0.002			
		76	7.41	7.63	0.22	1.22	0.002			
		77	7.63	7.95	0.32	0.16	0.002			
		78	7.95	8.25	0.30	0.11	0.003			
		79	8.50	9.00	0.50	0.26	0.002			
		80	9.00	9.17	0.17	0.41	0.005			

...../5

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ZONE	CHANNEL	SAMPLE	FROM	TO	m	%Zn	%Pb	m%Zn	m%Pb	NOTES
Middle East Zone 3rd trench from E end	C-14 sampled N ->S	197081	0.0	0.50	0.50	0.49	0.002			
		82	0.50	0.76	0.26	0.036	0.003			
		83	0.76	0.96	0.20	0.048	0.002			
		84	0.96	1.16	0.20	2.38	0.003			
		85	1.20	1.55	0.35	5.88	0.003	2.06		0.84%Pb, 5.50%Zn/3.23 m
		86	1.55	1.75	0.20	14.1	0.002	2.82		from 1.20 - 4.43 m
		87	1.75	2.14	0.39	5.60	0.005	2.18		
		88	2.14	3.03	0.89	4.56	0.008	4.06	0.01	
		89	3.03	3.98	0.95	6.04	0.015	5.74	0.01	
		90	3.98	4.11	0.13	3.36	7.82	0.44	1.02	
		91	4.11	4.43	0.32	1.44	5.22	0.46	1.67	
		92	4.43	5.26	0.83	0.96	0.20			
		93	5.26	5.85	0.59	0.24	0.039			
Middle East 1mE of 2nd trench from E end	C-15 sampled N ->S	197094	0.0	0.20	0.20	0.16	0.010			6.31%Zn/1.04 m from 0.20 - 1.24 m
		95	0.20	0.59	0.39	4.84	0.008	1.89		
		96	0.59	0.84	0.25	12.30	0.007	3.06		3.78%Zn/2.04 m from 0.20 - 2.24 m
		97	0.84	1.24	0.40	4.00	0.008	1.60		
		98	1.24	2.24	1.00	1.16	0.085	1.16		
Middle East 1mE of 3rd trench from E end	C-16 sampled N ->S	197099	0.0	0.18	0.18	1.45	0.017			8.90%Zn/2.49 m from 0.18 - 2.67 m
		100	0.18	0.60	0.42	13.20	0.040	5.54		
		101	0.60	0.90	0.30	3.64	0.011	1.09		
		102	0.90	1.29	0.39	12.60	0.008	4.91		
		103	1.29	1.73	0.44	3.48	0.009	1.53		
		104	1.73	2.67	0.94	9.66	0.018	9.08		
		105	2.67	3.49	0.82	0.88	0.29			

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ZONE	CHANNEL	SAMPLE	FROM	TO	m	%Zn	%Pb	m%Zn	m%Pb	NOTES
Middle East Zone -resample of C-11 -floor of 2nd trench from E end	C-17 Sampled N →S	197106	1.65	2.75	1.10	5.44	0.010	5.98		5.21%Zn/2.15 m from 1.65 - 3.80 m
		107	2.75	3.35	0.60	2.12	0.016	1.27		
		108	3.35	3.80	0.45	8.76	0.010	3.94		
		109	3.80	4.60	1.20	2.80	0.018			
Middle East Zone top of W edge of 2nd trench from E end of Middle East Zone	C-18 sampled N →S	197110	0.0	0.39	0.39	1.80	0.017			6.87%Zn/1.89 m from 0.39 - 2.28 m or 6.35%Zn/2.10 m from 0.39 - 2.49 m or 5.41%Zn/2.81 m from 0.39 - 3.20 m
		111	0.39	1.00	0.61	6.68	0.010	4.07		
		112	1.00	1.55	0.55	6.16	0.017	3.39		
		113	1.55	1.79	0.24	2.40	0.010	0.58		
		114	1.79	2.28	0.49	10.1	0.008	4.95		
		115	2.28	2.49	0.21	1.64	0.041	0.34		
		116	2.49	3.20	0.71	2.64	0.020	1.87		
Middle East Zone resample C-14 3rd trench from E end of Middle E Zone	C-19 sampled N →S	197117	0.96	1.16	0.20	2.36	0.011	0.47		0.73%Pb, 5.40%Zn/3.23 m from 1.20 - 4.43 m
		118	1.20	1.55	0.35	1.76	0.011	0.62		
		119	1.55	1.75	0.20	9.92	0.010	1.98		
		120	1.75	2.14	0.39	7.24	0.012	2.82		
		121	2.14	3.03	0.89	5.64	0.009	5.02		
		122	3.03	3.98	0.95	6.16	0.028	5.85		
		123	3.98	4.11	0.13	6.40	0.44	0.83	0.06	
		124	4.11	4.43	0.32	0.96	6.88	0.31	2.20	
		125	4.43	5.26	0.83	1.00	0.52			
Middle East Zone resample C-13 5th trench from E end of Middle E Zone	C-20 sampled N →S	197126	0.0	0.71	0.71	2.48	0.026	1.76		3.97%Zn/6.72 m from 0.0 - 6.72 m (C-13) 4.99%Zn/3.29 m from 3.43 - 6.72 m (C-13)
		127	0.71	1.10	0.39	4.88	0.010	1.90		
		128	1.10	1.72	0.62	3.40	0.011	2.11		
		129	1.72	2.62	0.90	2.32	0.019	2.09		
		130	2.62	3.43	0.81	2.96	0.011	2.40		
		131	3.43	3.85	0.42	4.16	0.008	1.75		

...../7

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ZONE	CHANNEL	SAMPLE	FROM	TO	m	%Zn	%Pb	m%Zn	m%Pb	NOTES
	C-20 Cont'd	132	3.85	4.21	0.36	7.28	0.008	2.62		5.31%Zn/3.00 m from 3.43 - 6.43 m
		133	4.21	4.35	0.14	3.80	0.007	0.53		
		134	4.35	5.00	0.65	4.28	0.010	2.78		4.27%Zn/5.72 m from 0.71 - 6.43 m
		135	5.00	5.20	0.20	0.34	0.005	0.07		
		136	5.20	5.66	0.46	10.30	0.010	4.74		
		137	5.66	5.90	0.24	1.96	0.010	0.47		
		138	5.90	6.43	0.53	5.56	0.008	2.95		
		139	6.43	6.72	0.29	1.72	0.010	0.50		
Middle East Zone 4'deep trench N of Middle E Zone	C-21 sampled S →N	197140	0.0	0.85	0.85	3.24	0.008			140 sampled vertically down S face 149 sampled vertically down N face rest of samples along bottom of trench. 5.56%Zn/5.15 m 0.0 - 5.15 m 6.03%Zn/4.50 m 0.0 -4.50 m
		197141	0.0	0.62	0.62	6.56	0.008	4.07		
		142	0.62	1.30	0.68	6.56	0.008	4.46		
		143	1.30	1.83	0.53	2.88	0.008	1.53		
		144	1.83	2.40	0.57	3.48	0.006	1.98		
		145	2.40	2.95	0.55	3.80	0.010	2.09		
		146	2.95	3.80	0.85	8.40	0.090	7.14		
		147	3.80	4.50	0.70	8.40	0.007	5.88		
		148	4.50	5.15	0.65	2.32	0.009	1.51		
		197149	0.0	0.80	0.80	2.44	0.007			
Middle East Zone long trench on W end of zone	C-22 sampled N →S	197150	0.0	0.29	0.29	1.72	0.006	0.50		N end continuous with C-23 3.79%Zn/5.63 m from 2.75 on C-23 to 1.83 m on C-22 5.39%Zn/1.54 m from 0.29 - 1.83 m 4.08%Zn/1.04 m from 3.28 - 4.32 m
		151	0.29	0.79	0.50	8.56	0.006	4.28		
		152	0.79	1.05	0.26	3.56	0.009	0.93		
		153	1.05	1.83	0.78	3.96	0.007	3.09		
		154	1.83	2.53	0.70	0.92	0.009	0.64		
		155	2.53	2.62	0.09	4.40	0.008	0.40		
		156	2.62	2.85	0.23	1.04	0.010	0.24		
		157	2.85	3.28	0.43	1.68	0.008	0.72		
		158	3.28	3.89	0.61	4.28	0.008	2.61		
		159	3.89	4.32	0.43	3.80	0.007	1.63		

(Cont'd)

ZONE	CHANNEL	SAMPLE	FROM	TO	m	%Zn	%Pb	m%Zn	m%Pb	NOTES
	C-22 Cont'd	197160	4.32	4.81	0.49	0.70	0.007	0.34		
		161	4.81	5.12	0.31	2.16	0.008	0.67		
		162	5.12	5.43	0.31	0.70	0.008	0.22		
		163	5.43	5.76	0.33	0.77	0.010	0.23		
		164	5.76	6.15	0.39	1.72	0.007	0.67		
		165	6.15	7.20	1.05	0.64	0.008	0.67		
		166	7.20	7.70	0.50	1.20	0.005	0.60		
		167	7.85	8.28	0.43	0.34	0.008	0.15		2.44%Zn/3.58 m from 8.28 -
		168	8.28	8.75	0.47	4.56	0.006	2.14		11.86 m
		169	8.75	10.00	1.25	2.72	0.008	3.40		
		197170	10.00	10.75	0.75	1.84	0.006	1.38		
		171	10.75	11.40	0.65	0.67	0.008	0.44		
		172	11.40	11.86	0.46	3.00	0.008	1.38		
		173	11.86	12.68	0.82	1.35	0.008	1.12		
		174	12.68	13.41	0.73	1.56	0.008	1.14		
		175	13.41	14.73	0.32	0.73	0.010	0.23		
		176	14.73	15.30	0.57	0.14	0.009	0.08		
Middle East Zone -joins N end of C-22	C-23 sampled N -> S	197177	0.0	0.60	0.60	0.63	0.006			
		178	0.60	0.88	0.28	0.23	0.006			
		179	0.88	1.48	0.60	0.70	0.009			
		180	1.48	1.68	0.20	0.26	0.008			
		181	1.68	1.86	0.18	0.056	0.010			
		182	1.86	2.15	0.29	0.26	0.014			4.83%Zn/2.01 m from 2.75 -
		183	2.15	2.50	0.35	0.42	0.008			4.76 m
		184	2.50	2.75	0.25	1.00	0.008			2.36%Zn/1.01 m from 5.42 -
		185	2.75	3.43	0.70	6.64	0.009	4.65		6.55 m continuous with
		186	3.45	4.25	0.80	4.76	0.008	3.81		section at beginning of
		187	4.25	4.76	0.51	2.48	0.006	1.25		C-22
		188	4.76	4.95	0.19	1.03	0.005			3.79%Zn/5.63 m from 2.75 on
		189	4.95	5.42	0.47	0.58	0.006			C-23 to 1.83 m on C-22
		190	5.42	5.73	0.31	1.28	0.008	0.40		
		191	5.85	6.16	0.31	2.60	0.008	0.81		
		192	6.16	6.55	0.39	3.00	0.010	1.17		

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ZONE	CHANNEL	SAMPLE	FROM	TO	m	%Zn	%Pb	m%Zn	m%Pb	NOTES
Lower East	C-24	197193	0.0	0.30	0.30	0.90	0.008			
S end is 1.25 m	sampled	194	0.30	0.43	0.13	0.67	0.008			
east of C-23	S ->N	195	0.43	1.12	0.69	1.00	0.007			
-in eastern		196	1.12	1.85	0.73	1.00	0.008			
trench Lower		197	1.85	2.04	0.19	0.67	0.007			
East Zone		198	2.04	2.60	0.56	0.88	0.008			
		199	2.60	3.20	0.60	0.83	0.008			
		197200	3.20	3.59	0.39	0.70	0.008			
		201	3.59	4.08	0.49	0.89	0.008			
		202	4.08	4.90	0.82	2.00	0.012	1.64		
		203	4.90	5.86	0.96	2.68	0.010	2.57		
		204	5.86	6.24	0.40	1.27	0.010	0.51		
		205	6.24	6.36	0.12	4.16	0.010	0.50		
		206	6.36	6.83	0.47	0.70	0.010	0.33		2.50%Zn/6.46 m from 4.08 -
		207	6.83	7.44	0.61	3.92	0.008	2.39		10.54 m
		208	7.44	7.89	0.45	0.80	0.006	0.36		
		209	7.89	8.92	1.03	3.44	0.006	3.54		3.38%Zn/1.47 m from 7.89 -
		210	8.92	9.36	0.44	3.24	0.004	1.43		9.36 m
		211	9.36	9.96	0.60	1.12	0.004	0.67		
		212	9.96	10.54	0.58	3.84	0.004	2.23		
		213	10.54	11.30	0.76	1.00	0.006	0.76		

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10/.....

ZONE	CHANNEL	SAMPLE	FROM	TO	m	%Zn	%Pb	m%Zn	m%Pb	NOTES
Lower East -west trench -slope steep 0.0 - 1.38	C-25 sampled S ->N	197214	0.0	0.95	0.95	1.24	0.008			
		215	0.95	1.38	0.43	0.66	0.008			
		216	1.55	1.72	0.17	0.68	0.016			3.00%Zn/1.07 m from 1.72 - 2.79
		217	1.72	1.92	0.20	4.64	0.012	0.93		
		218	1.92	2.39	0.47	2.80	0.010	1.32		
		219	2.39	2.79	0.40	2.40	0.008	0.96		
		220	2.79	3.05	0.26	0.80	0.004	0.21		
		221	3.05	3.45	0.40	0.49	0.006	0.20		
		222	3.45	4.00	0.55	3.72	0.004	2.05		5.35%Zn/2.27 m from 3.45 - 5.72 m
		223	4.00	4.40	0.40	3.32	0.004	1.33		
		224	4.40	4.55	0.15	0.45	0.006	0.07		3.84%Zn/4.23 m from 1.72 - 5.95 m
		225	4.55	5.09	0.54	0.57	0.008	0.31		
		226	5.09	5.72	0.63	13.3	0.008	8.38		
		227	5.72	5.95	0.23	2.16	0.008	0.50		
Lower East on o/c surface 4mE of east trench	C-26 sampled N ->S	197228	0.0	1.0	1.0	3.24	0.010	3.24		3.11%Zn/5.75 m from 0.0 - 5.75 m
		229	1.0	2.0	1.0	2.00	0.008	2.00		
		230	2.0	3.0	1.0	4.00	0.010	4.00		3.86%Zn/2.40 m from 2.0 - 4.4 m
		231	3.0	4.0	1.0	3.40	0.012	3.40		
		232	4.0	4.4	0.4	4.64	0.006	1.86		
		233	4.4	5.0	0.6	2.44	0.010	1.46		
		234	5.0	5.75	0.75	2.56	0.012	1.92		
		235	5.75	6.85	1.10	1.28	0.008	1.41		
		236	6.85	7.87	1.02	0.66	0.006	0.67		

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11/.....

ZONE	CHANNEL	SAMPLE	FROM	TO	m	%Zn	%Pb	m%Zn	m%Pb	NOTES
Lower East 2mW of eastern trench	C-27 sampled S -> N	197237	0.0	1.05	1.05	3.56	0.010	3.74		
		238	1.05	1.94	0.89	3.72	0.010	3.31		
		239	1.94	2.29	0.35	3.24	0.008	1.13		4.62%Zn/3.45 m from 0.0 - 3.45 m
		240	2.29	2.75	0.46	8.48	0.006	3.90		
		241	2.75	3.45	0.70	5.52	0.006	3.86		
		242	3.45	4.00	0.55	1.36	0.006	0.75		
		243	4.00	4.91	0.91	1.56	0.006	1.42		
		244	4.91	5.27	0.36	0.80	0.006	0.29		
Lower East 2.5mW of C-27 just N of middle trench on Lower East Zone	C-28 sampled N -> S	197245	0.0	0.53	0.53	0.63	0.014	0.33		
		246	0.53	1.55	1.02	3.96	0.008	4.04		
		247	1.55	2.25	0.70	5.88	0.008	4.12		4.22%Zn/2.85 m from 0.53 - 3.38 m
		248	2.25	2.49	0.24	1.52	0.008	0.36		
		249	2.49	3.38	0.89	3.96	0.008	3.52		
		250	3.38	3.68	0.30	1.12	0.008	0.34		
Lower East middle trench continues from C-28	C-29 sampled N -> S	197251	0.0	0.80	0.80	2.72	0.006			2.72%Zn/0.80 m from 0.0 - 0.80 then gap with weathered diopside
		252	0.93	1.49	0.56	2.12	0.010	1.19		
		253	1.49	2.15	0.66	2.64	0.006	1.74		
		254	2.15	2.72	0.57	1.40	0.010	0.80		
		255	2.72	3.08	0.36	2.76	0.008	0.99		2.05%Zn/3.12 m from 0.93 - 4.05 m
		256	3.08	4.05	0.97	1.72	0.016	1.67		
		257	4.05	4.60	0.55	0.34	0.014			2.91%Zn/72 m from 0.53 on C-28 to 4.05 m on C-29
		258	4.60	5.05	0.45	0.19	0.008			
		259	5.05	5.43	0.38	0.14	0.012			
		260	5.43	6.50	1.07	0.27	0.014			
		261	6.50	6.93	0.43	0.20	0.010			
		262	6.93	7.38	0.45	1.56	0.004			
		263	7.38	7.63	0.25	0.56	0.004			
		264	7.63	7.91	0.28	2.16	0.006	0.60		
		265	7.91	8.35	0.44	3.96	0.006	1.74		2.77%Zn/2.22 m from 7.63 - 9.85 m
		266	8.35	8.74	0.39	0.41	0.006	0.16		
		267	8.74	9.05	0.31	4.96	0.008	1.54		

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12/.....

ZONE	CHANNEL	SAMPLE	FROM	TO	m	%Zn	%Pb	m%Zn	m%Pb	NOTES
	C-29	268	9.05	9.48	0.43	0.80	0.012	0.34		
	Cont'd	269	9.48	9.85	0.37	4.76	0.018	1.76		
		197270	9.85	10.28	0.43	0.90	0.014			
Lower East	C-30	197271	0.0	0.88	0.88	5.44	0.008	4.79		
S end 3.5mW of	sampled	272	0.88	1.33	0.45	0.64	0.010	0.29		4.32%Zn/4.50 m from 0.0 - 4.50 m
N end of C-28	S ->N	273	1.33	1.68	0.35	1.28	0.012	0.45		
on o/c surface		274	1.68	2.30	0.62	3.88	0.012	2.41		4.93%Zn/2.82 m from 1.68 - 4.50 m
		275	2.30	2.69	0.39	1.52	0.010	0.59		
		276	2.69	2.95	0.26	9.52	0.010	2.49		
		277	2.95	3.48	0.53	2.16	0.006	1.14		
		278	3.48	3.71	0.23	12.7	0.008	2.92		
		279	3.96	4.50	0.54	8.04	0.008	4.34		
		197280	4.50	5.10	0.60	1.20	0.006	0.72		
North East Zone	C-31	197281	0.0	0.37	0.37	1.56	0.012	0.58		6.27%Zn/1.92 m from 0.37 - 2.29 m
west trench	sampled	282	0.37	0.75	0.38	3.60	0.010	1.37		
	S ->N	283	0.75	1.49	0.74	8.56	0.008	6.33		4.66%Zn/2.98 m from 0.0 - 2.98 m
		284	1.49	1.91	0.42	4.60	0.014	1.93		
		285	1.91	2.05	0.14	1.56	0.008	0.22		
		286	2.05	2.29	0.24	9.08	0.005	2.18		
		287	2.29	2.68	0.39	2.24	0.010	0.87		
		288	2.68	2.98	0.30	1.40	0.010	0.42		
		289	2.98	3.40	0.42	1.00	0.008	0.42		
North East Zone	C-32	197290	0.0	0.70	0.70	2.32	0.010	1.62		294 broken out of 293
∿3 m east of	sampled	291	0.70	1.28	0.58	0.50	0.014	0.29		
C-31	N ->S	292	1.28	2.28	1.00	2.96	0.012	2.96		1.95%Zn/2.92 m from 0.0 - 2.92 m
		293	2.28	2.70	0.42	0.49	0.008	0.21		
		294	2.70	2.92	0.22	2.76	0.020	0.61		
		293	2.92	3.60	0.68	0.49	0.008	0.33		

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13/.....

ZONE	CHANNEL	SAMPLE	FROM	TO	m	%Zn	%Pb	m%Zn	m%Pb	NOTES
Road Zone channel across qtz diop rock off east end	C-33 sampled N -> S	197295	0.0	0.95	0.95	1.40	0.006	1.33		
		296	0.95	1.55	0.60	2.76	0.004	1.66		1.69%Zn/2.50 m
		297	1.55	1.98	0.43	1.56	0.006	0.67		
		298	1.98	2.50	0.52	1.08	0.008	0.56		
Road Zone across N arm east end - ends in mineralization covered by o/b	C-34 sampled N -> S	197299	0.0	0.46	0.46	0.22	0.008			6.26%Zn/1.97 m from 1.46 - 3.43 m sampling ends in mineralization covered by o/b.
		300	0.46	1.46	1.00	0.30	0.012			
		301	1.46	2.21	0.75	11.4	0.010	8.55		
		302	2.21	2.75	0.54	4.00	0.012	2.16		
		303	2.75	3.43	0.68	2.40	0.008	1.63		
Road Zone 4mW of C-34	C-35 sampled N -> S	197304	0.0	0.25	0.25	0.62	0.014	0.16		
		305	0.25	0.44	0.19	4.64	0.008	0.88		
		306	0.44	1.18	0.72	1.76	0.014	1.27		3.86%Zn/2.13 m from 0.25 - 2.38 m
		307	1.18	1.54	0.36	8.56	0.024	3.08		
		308	1.54	2.38	0.84	3.56	0.014	2.99		
		309	2.38	2.95	0.57	1.48	0.010	0.84		
Road Zone east trench east wall does not cut whole zone due to nature of exposure	C-36 sampled S -> N	197310	0.0	0.68	0.68	7.20	0.105	4.90	0.07	
		311	0.68	0.90	0.22	31.7	8.24	6.97	1.81	
		312	0.90	1.27	0.37	7.20	0.74	2.66	0.27	0.87%Pb, 9.31%Zn/2.65 m fro
		313	1.27	1.48	0.21	1.60	0.54	0.34	0.11	0.0 - 2.65 m
		314	1.48	1.80	0.32	11.00	0.105	3.52	0.03	
		315	1.80	2.10	0.30	2.96	0.016	0.89	0.005	
		316	2.10	2.65	0.55	9.80	0.018	5.39	0.01	

...../14

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ZONE	CHANNEL	SAMPLE	FROM	TO	m	%Zn	%Pb	m%Zn	m%Pb	NOTES
Road Zone	C-37	197317	0.0	0.43	0.43	2.00	0.006			
east trench	sampled	318	0.43	1.04	0.61	1.40	0.014			
west wall	S -> N	319	1.04	1.25	0.21	2.76	0.020	0.58	0.005	
		320	1.25	1.91	0.66	2.96	0.040	1.95	0.02	0.97%Pb
		321	1.91	2.61	0.70	4.20	0.020	2.94	0.01	
		322	2.61	3.29	0.68	2.60	2.40	1.77	1.64	4.21%Zn/2.54 m from 1.91 -
		323	3.29	3.61	0.32	6.68	1.68	2.14	0.54	4.46 m
		324	3.61	4.26	0.65	3.04	0.092	1.98	0.06	0.58%Pb
		325	4.26	4.46	0.20	9.40	1.12	1.88	0.22	
		326	4.46	4.89	0.43	1.16	0.042	0.50	0.02	3.56%Zn/4.74 m from 1.04 -
		327	4.89	5.36	0.47	1.96	0.072	0.92	0.03	5.78 m
		328	5.36	5.78	0.42	5.32	0.42	2.23	0.18	
		329	5.78	6.15	0.37	0.51	0.012			
Road Zone	C-38	197330	0.0	1.08	1.08	0.51	0.012			
west trench	sampled	331	1.08	1.95	0.87	2.20	0.066	1.91	0.06	
	N -> S	332	1.95	2.74	0.79	1.48	0.066	1.17	0.05	0.26%Pb
		333	2.74	2.93	0.19	11.2	2.75	2.13	0.40	
		334	2.93	3.90	0.97	1.60	0.24	1.55	0.23	2.40%Zn/2.82 m from 1.08 - 3.90 m
		335	3.90	4.39	0.49	0.75	0.018			
		336	4.39	5.00	0.61	2.80	0.012			
		337	5.00	5.74	0.74	0.18	0.016			
		338	5.74	6.20	0.46	0.41	0.018			
Road Zone	C-39	197339	0	0.58	0.58	0.53	0.010			
6mW of C-33	sampled	340	0.58	0.95	0.37	0.67	0.008			0.77%Zn/3.05 m from 0.0 -
	N -> S	341	0.95	1.68	0.73	0.73	0.006			3.05 m
		342	1.68	2.55	0.87	0.86	0.006			
		343	2.55	3.05	0.50	1.00	0.002			

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ZONE	CHANNEL	SAMPLE	FROM	TO	m	%Zn	%PB	m%Zn	m%Pb	NOTES
Electrode	C-40	197344	0	0.54	0.54	0.59	0.004			
Zone east	sampled	345	0.54	1.04	0.50	5.48	0.008	2.74		4.66%Zn/1.25 m from 0. 54 -
trench	N ->S	346	1.04	1.19	0.15	2.52	0.002	0.38		1.79 m
		347	1.19	1.79	0.60	4.52	0.006	2.71		
		348	1.79	2.97	1.18	0.29	0.010			
Electrode	C-41	197349	0.0	0.88	0.88	0.42	0.004			4.14%Zn/1.32 m from 0.88 -
Zone 2.5 mW	sampled	350	0.88	1.10	0.22	9.36	0.002	2.06		2.20 m
of C-40	N -> S	351	1.10	2.20	1.10	3.10	0.004	3.41		
A-Zone	C-42	197352	0.0	1.07	1.07	2.20	0.018	2.35		
eastern	sampled	353	1.07	1.74	0.67	5.96	0.020	3.99		
trench	N -> S	354	1.74	2.41	0.67	0.36	0.010			3.65%Zn/1.74 m from 0.0 -
		355	2.41	2.89	0.48	0.35	0.010			1.74 m
		356	2.89	3.51	0.62	0.080	0.005			
		357	3.51	3.87	0.36	0.14	0.004			
		358	3.87	4.97	1.10	0.050	0.004			
A-Zone west	C-43	197359	0.0	0.62	0.62	0.28	0.009			
trench	sampled	360	0.62	1.43	0.81	0.85	0.030			2.68%Zn/1.70 m from 1.43 -
	N -> S	361	1.43	2.50	1.07	2.24	0.030	2.40		3.13 m
		362	2.50	3.13	0.62	3.42	0.010	2.15		

APPENDIX B

DIAMOND DRILL LOGS and SECTIONS

CADIEUX PROPERTY - Drill Log and Section Abbreviations

blk - black
gr - green
gry - grey
pk - pink
wh - white

lt - light
med - medium
dk - dark
vfg - very fine grained
fg - fine grained
mg - medium grained
cg - coarse grained

tr - trace
m̄ - minor
w̄ - with

alt'd - altered
bdd - banded
diss - disseminated
intbdd - interbanded
mass - massive
mix - mixed
rk - rock
var - variable

amph - amphibole (amphibolite)
ap - apatite
bio (bt) - biotite
calc - calcite (calcitic)
calc-sil - calc-silicate
crysln - crystalline
diop - diopside
dol - dolomite (dolomitic)
gn - galena
hb - hornblende
hem - hematite (hematitic)
lst - limestone
lm.sil - lime silicate
mb - marble
peg - pegmatite
pgneiss - paragneiss
phlog - phlogopite
plag - plagioclase
po - pyrrohotite
py - pyrite
qtz - quartz
qtzite - quartzite
sch - schist
serp - serpentine
serp'd - serpentinized
sil - silicated
trem - tremolite (tremolitic)

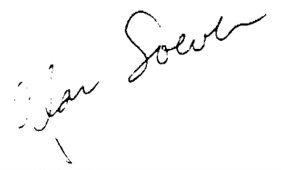
SULPETRO MINERALS LIMITED — DRILL LOG — HOLE NO. SJ-28

PROPERTY: CADIEUX	TP OR AREA: ADMASTON	AZIMUTH: 132°	DATE STARTED: Oct. 14, 1983	
PROJECT: 3196	LOT & CONC.: Lot 2 Con. 3	DIP: -45	DATE COMPLETED: Oct. 19, 1983	
Core size - BQ	CO-ORDINATES: L24+50mE	LENGTH: 197.2	DRILLED BY: St. Lambert DD	
GRID NO.	~1+58N	COLLAR ELEV.: ~ 2 m	LOGGED BY: A. SOEVER	

CORRECTED DIP TESTS

Depth	MBrg	TBrg	Dip
61.5	-	-	-45
127.5	-	-	-44
196	-	-	-42

LOCATION SKETCH OF HOLE



METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
			OBJECTIVES:- To test Swamp Zone ~20-25 m above SJ-22.					
0.0	6.1		OVERBURDEN					
6.1	18.3		CALC-SILICATE GNEISS					
			- med grey to green, f.g. moderately well banded calcsilicate gneiss 40-45% quartz 25-30% pale green diopside 15-20% feldspar ~ 5% phlogopite & dark brown mica - speckled with 3-5% diss po - locally some f.g. brown glassy apatite? CA 25-30°					
			-15.0-15.7 - short section of m.g. mottled pink to dark green, pink calcite-serp'd diop. rock consisting of 50% med green to dark serp'd diopside 30% pink to brick red calcite 25% quartz and 5% phlogopite					
18.3	21.8		BRICK RED CALCITE & SERPENTINE ROCK					
			- m.g., mottled grey to brick red calcitic marble with sections of dark grey Fe oxide stained serpentine rock. - patches of cg grey quartz at 18.8, 19.2, 19.4, 21.5 - 19.6-20.5 - section of well banded dark grey, Fe oxide stained serpentine phlogopite rock CA 20-25°					

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
21.8	22.4		DIOPSIDE-QUARTZ ROCK - pale green m.g. partly serp'd diopside rock w 10-15% off white calcite & locally patches pale grey quartz.					
22.4	27.4		PINK CALCITE MARBLE - pink to off white m.g. to c.g. calcite marble w. 30-40% pale green partly serp'd m.g. diopside - locally up to 5% brown mica - at 24.2 & 26.3-26.5 bands of f.g. calcsilicate gneiss similar to that in top of hole CA 25°					
27.4	35.8		BIOTITE-SERPENTINIZED DIOPSIDE GNEISS -f.g. to m.g., green to black serpentine biotite gneiss - 40-50% serpentinized diopside - 25-35% biotite - minor feldspar & quartz - locally slightly coarser grained patches of quartz diop rock CA varies from ~0-20°					
35.8	41.2		PINK CALCITIC MARBLE - pink to locally brick red calcitic marble mottled with 5% pale green partly serpentinized diopside - ~1% diss phlog, locally minor quartz - locally fractures healed with white calcite seen in core - there are 2 sets of these, one w CA ~0°, other w CA 55° - dark green biotite serpentine patches at 35.9-36.0, 38.5-38.9, 39.1-39.2, 40.4-40.6, with 5% f.g. diss po - some f.g. po, & hematitic material along fine healed fractures w core angle of 0° CA 0-10°					

SULPETRO MINERALS LIMITED DRILL LOG HOLE NO. SJ-28

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	% Pb	% Zn
41.2	50.6		PINK CALCITE, SERPENTINIZED DIOPSIDE QUARTZ ROCK						
			- m.g cg, highly variable rock composed of 50% pink to grey cg to mg calcite, 30% pale green serpentinized diopside and variable amounts of quartz.						
			- some dark green serpentine patches $\bar{w}$ biotite and up to 5% po and hematite filled fractures.						
			- 41.2-42.3 short section of white dolomitic marble $\bar{w}$ 10-15% serp'd diopside.						
			- 47.4-47.9 section of cg green serp'd diopside quartz rock $\bar{w}$ only minor off white calcite.						
50.6	74.7		PINK CALCITIC MARBLE						
			- mg, pink calcitic marble $\bar{w}$ 10-15% light grey quartz and 10% pale green serpentinized diopside						
			- locally vfg dark grey patches of vfg quartz and grey calcite with 5-10% vfg diss, py, po and minor vfg sphalerite.						
			- patches of brown mica at 59.5, 63.1-63.5, 67.4m						
			- bands of micaceous grey serpentine rock at 58.2-59.0 m and 66.2-66.6 m CA 10-15°						
			- 59.0-61.8 m section of white dol mb $\bar{w}$ 1-2% brown mica						
			- fractures healed $\bar{w}$ calcite running subparallel to core 52.3-53.6						
			- short section of white dolomitic marble with only minor off white calcite 69.1-70.1						
			- band of ~15% sph 20% py and some galena from 69.7-70.0						
			est <1% Zn	812	69.1	69.6	0.5	0.03	0.96
			est 7% Zn, 1% Pb	813	69.6	70.0	0.4	0.30	7.63
			est tr Zn	814	70.0	70.1	0.1	0.34	0.13
			CA 20-25°						

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
74.7	80.0		DOLOMITIC MARBLE					
			off white, mg dolomitic marble - <1% each of cg serp'd diopside and fg diss py. - patches of brown mica associated with serp'd diopside and up to 5% diss py and po from 74.7-75.7, 76.8 and 77.3 - in micaceous patches CA = 20°					
80.0	93.8		CALCITE MARBLE					
			- cream coloured, mg calcite marble, very pure except for trace fg diss brown phlogopite and very occasional patches of light brown serpentine - one or two grains of diss py at 91.9 m CA from diss plog flakes at 92.7 m 15-20°					
93.8	123.9		DOLOMITIC MARBLE					
			- white to off white mg dolomitic marble - relatively pure-a few diss grains of phlogopite + py - 1-2% diss earthy oxide grains at 95.4-97.1, 107.2, 109.5-110.3 - similar in appearance to oxidized grains just above swamp zone (140.7-147.6 m) - pyritic bands w 5-10% py and 5-10% sph at 117.7-117.9, and 118.4, and 119.4					
123.9	133.7		TREMOLITIC DOLOMITIC MARBLE					
			- mg off white dolomitic marble with 5-10% large pale grey to slightly green serpentinized tremolite needles-1-2% vfg deep red oxide grains - locally a pink colour due to red oxidation associated with the oxide grains - 129.2-129.3, 129.5-130.8 dolomite is altered to a mauve calcite locally w vugs up to 1 cm across in which are growing white calcite crystals.					

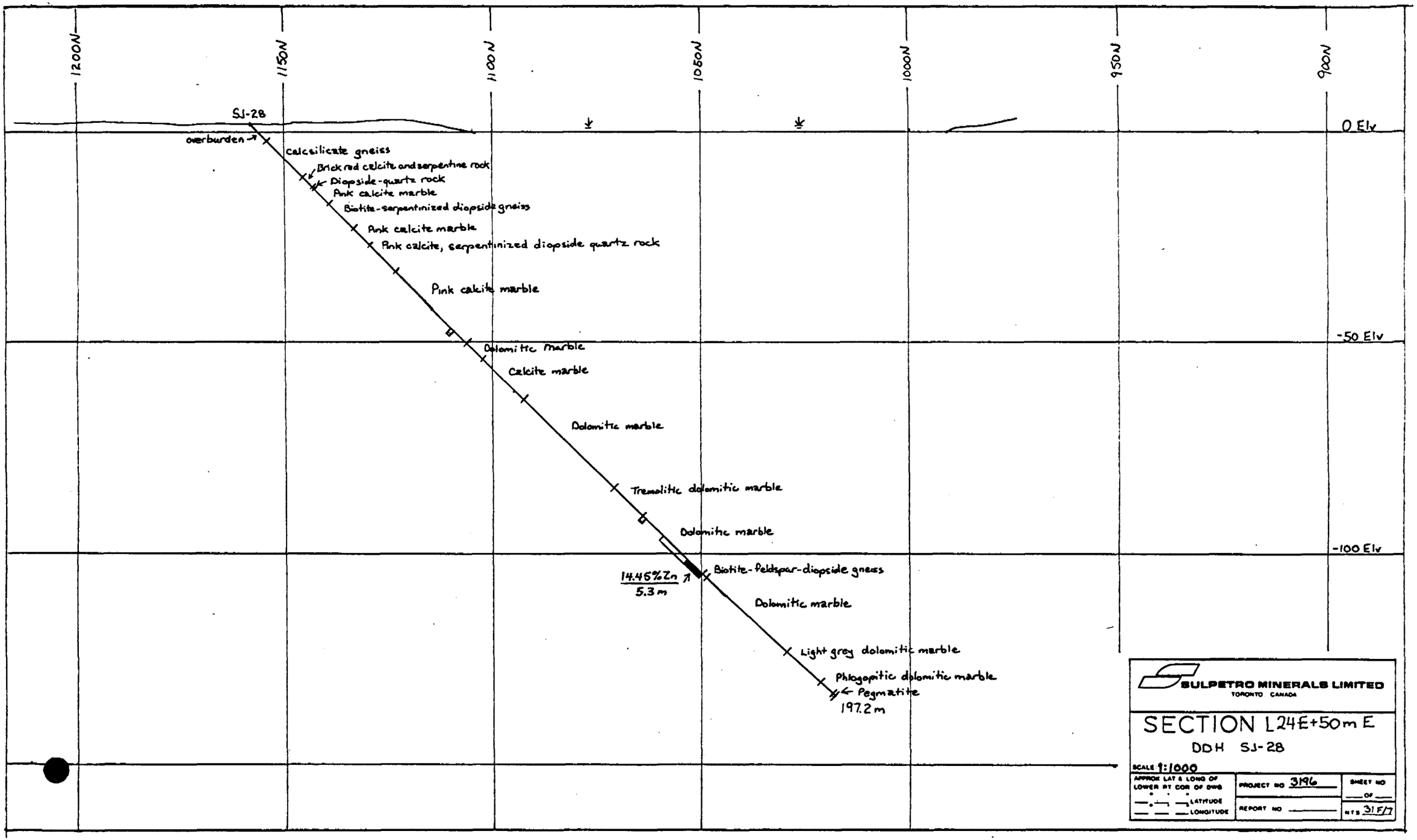
SULPETRO MINERALS LIMITED DRILL LOG HOLE NO. SJ-28 SHEET 5 OF 7

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS % Pb	ASSAYS % Zn	
133.7	153.8		DOLOMITIC MARBLE							
			- white to pale grey, mg dolomitic marble							
			- often stained reddish by Fe oxides-generally traces of vfg Fe oxide grains, 5% serp'd tremolite needles and traces of phlogopite							
			- 133.7-134.6 - unit has fractured, fractures are healed with a black serpentinous material w red Fe oxide-section from 134.0-134.6 is predominantly this material CA N35°	815	133.7	134.0	0.3	0.036	0.42	
				816	134.0	134.5	0.6	0.10	0.82	
			- 147.3-147.7 - patch of phlogopite and talc							
			- 140.7-147.4 - unit is highly altered with 10-20% earthy red Fe oxide, 2-3% phlogopite and green mica and 15% serpentine patches							
			- the red oxide seems to be an alteration or replacement of sphalerite							
			- a few sphalerite grains are seen at 143.1							
			- also a relatively unaltered section at 143.4-144.0 contains fresh sphalerite instead of the red oxide	817	140.7	141.7	1.0	0.012	0.42	
				818	141.7	142.7	1.0	0.022	0.53	
				819	142.7	143.4	0.7	0.018	0.96	
			- 147.4-147.6 - band of finely banded serpentine and phlogopite and red Fe oxide, a narrow band of the same material is at 147.2 - this appears to represent an old fault as everything above it is altered while below it the dolomitic marble is relatively unaltered. CA 50°	820	143.4	144.0	0.6	0.006	4.76	
				821	144.0	145.0	1.0	0.014	0.70	
				822	145.0	146.0	1.0	0.022	0.48	oxidized section
				823	146.0	147.0	1.0	0.012	0.12	
				824	147.0	147.4	0.4	0.020	1.14	
				825	147.4	147.6	0.2	0.060	1.38	
				826	147.6	148.5	0.9	0.012	0.88	
			- 147.7-153.8 - off white to pale grey dolomitic marble w 5-10% pale grey serpentinized tremolite	827	148.5	148.8	0.3	0.008	19.7	14.45%/5.3 m
			- minor diss phlog and green mica	828	148.8	149.2	0.4	0.010	2.42	no lead
			- bands of diss to submassive sphalerite and py, a undentified black vfg black mineral is locally associated with the sphalerite CA 40-45°	829	149.2	150.0	0.8	0.010	12.2	
				830	150.0	150.6	0.6	0.014	25.2	
				831	150.6	151.5	0.9	0.016	11.6	
			est <1% Zn							
			est 8% Zn 10-15% py							
			est 1-2% Zn 1-2% py							
			est 5% Zn 8% py							
			est 10% Zn 7% py							
			est 5% Zn 1-2% py							

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS % Pb	ASSAYS % Zn
			est 18% Zn 1% py	832	151.5	152.2	0.7	0.028	25.9
			highly oxidized ?? est	833	152.2	152.9	0.7	0.074	2.44
			est 2% Zn 2% py	834	152.9	153.1	0.2	0.006	2.72
			est 9% Zn 2% py	835	153.1	153.8	0.7	0.002	20.0
153.8	154.9		BIOTITE FELDSPAR DIOPSIDE GNEISS						
			- pale green grey, fg to mg gneiss composed of 40% grey feldspar, 30% pale green serp'd diopside, 25% biotite, and 5% vfg diss py. CA 35-40°						
154.9	181.8		DOLOMITIC MARBLE						
			- fairly clean white mg dolomitic marble						
			- 154.9-161.6 - mg off white dolomitic marble locally stained a light pink due to minor Fe oxides. 5-10% fine dark green grey needles of tremolite						
			2 clots of light brown phlogopite at 155.4, 155.6-155.7, 156.6-156.8						
			- massive dark green serpentine at 156.8-157.4, 157.8, 158.0						
			- 1-2% earthy red Fe oxide,						
			- tracesdiss py						
			- 161.6-165.9 - similar to above but less tremolite and oxide						
			- only 2-3% tremolite needles and traces vfg py						
			- 165.9-172.5 - clean white dol mb in 1% vfg diss py						
			- some broken blocky core from 170.0-172.5						
			- 172.5-175.0 - pink altered dolomite w serpentine, talc and minor Fe oxides - some vugs partly filled in secondary calcite.						
			- 175.0-181.8 - white mg dolomitic marble in ~1% vfg diss py and locally 1-2% light brown phlogopite						

SULPETRO MINERALS LIMITED DRILL LOG HOLE NO. SJ-28

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
181.8	192.6		LIGHT GREY DOLOMITIC MARBLE					
			- pale to light grey mg dolomitic marble w 1-2% fg diss graphite and <1% fg diss py and phlog					
			- 181.8-184.5 - unit is moderately well banded w darker more graphitic bands in 3-5% diss graphite CA 55-60°					
			- 184.5-192.6 - unit is mottled grey to pale grey w 1-2% fg diss graphite - 1-2% fg brown phlog locally stained pink due to presence of minor red Fe oxides					
			- patches of pale green serpentine at 191.8-198.9, 192.1, 192.3-192.6					
192.6	196.5		PHLOGOPITIC DOLOMITIC MARBLE					
			- white to very pale grey mg dolomitic marble w 3-5% diss light brown phlogopite and 1-2% diss py					
			- patches of qtz-diopside rock at 192.8 and 195.8					
			- patches with diss cg dark brown mica at 195.4-196.0 and at 196.4					
			- 196.4-196.5 - pink and grey calcite w 5-10% dk brown diss phlog CA 60°					
196.5	197.2		PEGMATITE					
			- cg pale grey to green rock composed of 60% pale, grey cg feldspar, 20% pale green diopside and 20% quartz					
197.2			END OF HOLE					
			CASING LEFT IN PLACE NO CEMENT CORE RECOVERY ~100% CORE STORED AT SULPETRO's FACILITY IRONDALE, ONTARIO					



SULPETRO MINERALS LIMITED
TORONTO CANADA

SECTION L24E+50m E

DDH SJ-28

SCALE 1:1000

APPROX LAT & LONG OF LOWER RT COR OF DHB
° ' °
LATITUDE
LONGITUDE

PROJECT NO 3196

REPORT NO

SHEET NO
OF

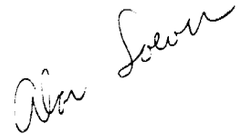
NTS 31F/7

SULPETRO MINERALS LIMITED — DRILL LOG — HOLE NO. SJ-29

PROPERTY	TP OR AREA	AZIMUTH	DATE STARTED
CADIEUX	ADMASTON	140°	Oct. 20, 1983
PROJECT	LOT & CONC.	DIP	DATE COMPLETED
3196	Lot 2 Conc 3	-45°	Oct. 21, 1983
Core size - BQ	CO-ORDINATES. L24+00E	LENGTH 93 m	DRILLED BY St. Lambert DD
GRID NO. 1+04N		COLLAR ELEV. ∿2.5 m	LOGGED BY A. SOEVER

CORRECTED DIP TESTS			
depth	MBrg	TBrg	Dip
91.5	-	-	-42°

LOCATION SKETCH OF HOLE



METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
			OBJECTIVES:- To test Swamp Zone ∿ 20 m above SJ-8					
0.0	4.0		OVERBURDEN					
4.0	15.5		DOLOMITIC MARBLE					
			- white mg dolomitic marble, locally stained pink due to the presence of minor Fe oxide					
			- <1% fg diss py and phlogopite					
			- locally 5% clusters of partly serpentinized tremolite needles.					
			- stained pink due to the presence of 2-3% fg diss Fe oxides at 7.5-8.4, 10.0-10.2, 12.0-12.3, 14.8-15.5					
			- these sections are also more serpentinized and contain 3-5% phlog.					
			- broken blocky core from 4.0-5.5 m, 5.8-6.0 m, 7.6 - 7.8 m, 8.7-9.0 m					
			CA not well defined but ∿ 25°					
15.5	17.2		SERPENTINE DOLOMITIC MARBLE					
			- white to stained pink dolomite marble mottled with 10% mg to cg serpentinized tremolite needles.					
			- <1% fg diss py, sometimes partly oxidized and 1-2% diss phlogopite					
17.2	19.8		SERPENTINE CALCITE MARBLE					
			- mg pink calcitic marble mottled w 30-35% patches of partly serpentinized tremolite					
			- large patches of dark grey green serpentine at 17.4-17.7 m.					

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
19.8	22.0		SERPENTINE DOLOMITIC MARBLE - mg white dolomitic marble mottled w 10-15% partly serpentinized mg to cg tremolite					
22.0	27.4		CALCITIC MARBLE - light pink to green mg calcitic marble w 5-10% very pale green partly serpentinized tremolite - locally some small vugs. -clot of phlogopitic serpentinous material at 24.7					
27.4	30.9		DOLOMITIC MARBLE - white to slightly stained pink dolomitic marble - ~1% diss py and phlogopite, 2-5% individual partly serpentinized tremolite needles - oxidation of py more evident as proceed down hole CA 30-35°					
30.9	35.9		SLIGHTLY HEMATITIC TREMOLITIC MARBLE - mg light pink to reddish to pale grey dolomitic marble - 3-5% diss oxidized py grains and 5-10% very fine individual partly serpentinized tremolite needles - 1-2% diss phlogopite - highly brecciated sections of serpentine and white mica with clasts of dolomite at 31.1-31.7 and 31.9-32.1 - fracture pattern from subparallel to core to 10-15° to core - these fractures at 33.1 are offset by later fractures in CA of ~60°					
35.9	40.3		FRACTURED HEMATITIC DOLOMITIC MARBLE - highly fractured unit of hematitic pale grey dolomitic with very fine and cm scale fractures with CA 10-15° - fractures are healed w serpentine & phlogopite + talc - major fracture from 36.0-36.5 contains brecciated clasts of dolomite					

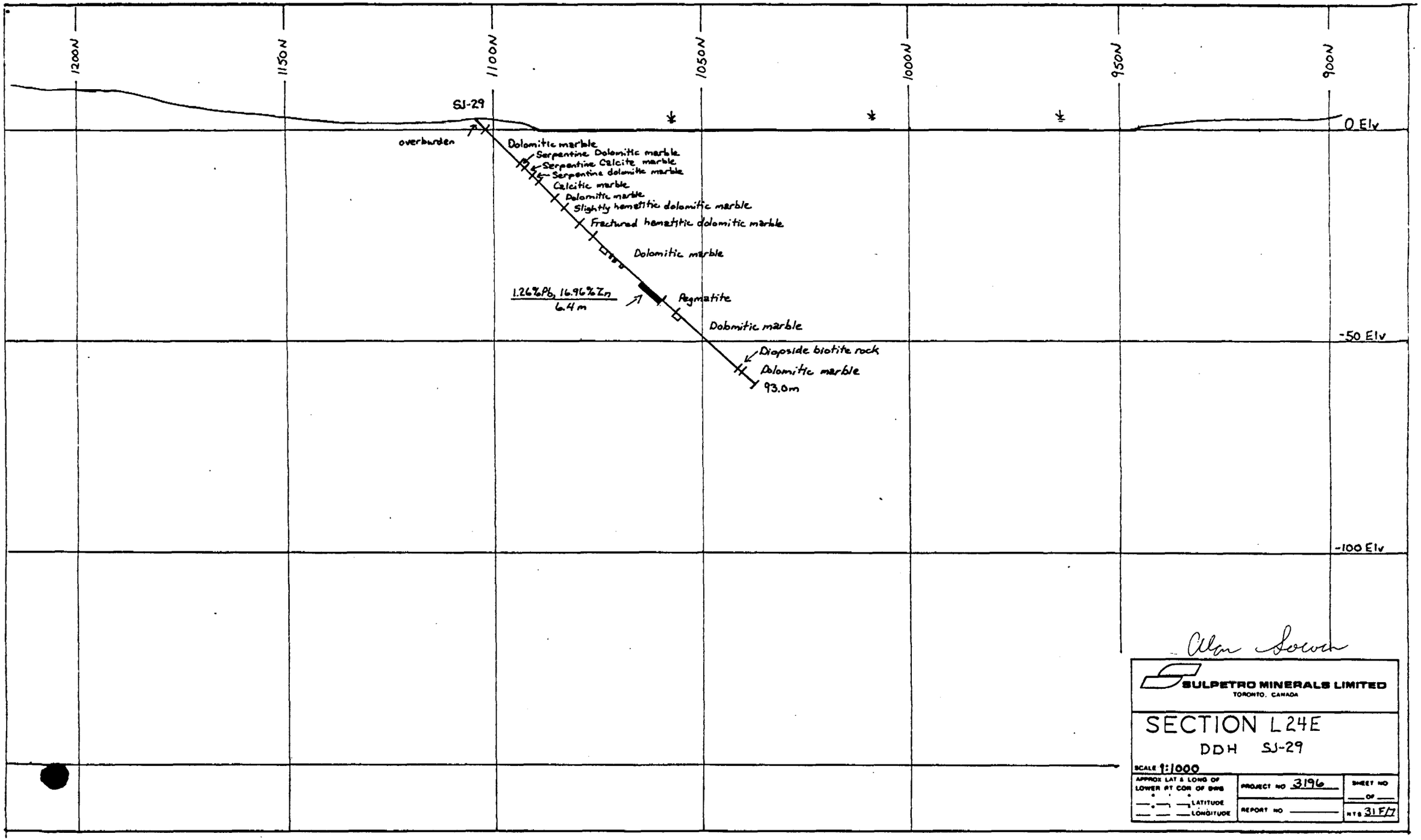
METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS % Pb	ASSAYS % Zn	
			- unit itself contains 3-5% fg diss Fe oxide grains and 5-10% fg dark green serpentinized tremolite grains							
40.3	63.5		DOLOMITIC MARBLE							
			- white mg dolomitic marble w 5% mg pale grey partly serpentinized tremolite needles							
			- often serpentinized tremolite needles are rimmed by pale phlogopite - 1-2% fg diss py and sph.							
			- 43.5-44.8 marble is altered serpentinous with 5-10% grains of earthy red Fe oxide CA 45-50°							
			- 44.8-45.2 - rock is unaltered and fresh w 2% diss sphalerite and 3-4% py	836	43.5	44.8	1.3	0.012	0.78	
				837	44.8	45.2	0.4	0.006	6.16	
			- bands of fg diss sph and py at 46.2							
			- 46.4-46.8, 46.9, 47.7-48.5, 49.4, 50.0-50.2, 50.3-50.7, 50.8 CA 35°							
			- best sections from 46.4-46.8, 47.7-48.5, 50.0-50.7 est 4.0% Zn 1-2% py	838	46.4	46.8	0.4	0.008	5.62	
			est 1-2% Zn 1% py	839	47.7	48.5	0.8	0.010	1.86	
			est 1-2% Zn 1% py	840	50.0	50.7	0.7	0.010	3.80	
			- 56.6-63.0 - bands of disseminated to massive mineralization consisting of sphalerite, pyrite and some galena							
			- 56.6-56.9 - submassive sphalerite in phlogopite and pyrite est. 3-4% Zn 5% py	841	56.6	56.9	0.3	0.33	10.8	
			- 56.9-58.1 - submassive sph w py and some galena est 25% Zn, 12% py, 2% Pb	842	56.9	58.5	1.6	3.00	26.5	
				843	58.5	59.1	0.6	1.56	15.9	
			- 59.1-60.1 - diss sph and py est 3% Zn 5% py	844	59.1	60.1	1.0	0.76	5.72	1.26% Pb
			- 60.1-60.8 - diss sph, py and galena est 6% Zn 4% py 3% Pb	845	60.1	60.8	0.7	0.68	10.7	16.96% Zn/6.4 m
				846	60.8	61.4	0.6	0.12	5.32	
			- 60.8-61.4 - few bands of dis sph est 1% Zn tr py	847	61.4	63.0	1.6	0.58	23.1	
			- 61.4-63.0 - diss to submassive sph, py & galena est 15% Zn 15% py 1-2% Pb	848	63.0	63.4	0.4	0.42	1.32	
			- 63.0-63.4 - traces diss sph & py est tr Zn, py CA variable from 35-55°							

SULPETRO MINERALS LIMITED DRILL LOG HOLE NO. SJ-29

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS % Pb	ASSAYS % Zn
63.4	67.2		PEGMATITE						
			- coarse grain to locally fg pink to grey rock-60% cg pale pink to grey feldspar, 20% grey quartz and 20% pale green dipside						
			- traces fg py and sph						
			- both edges of pegmatite are pale green, diopside rich with phlogopite bands at the contact with the marble						
67.2	87.3		DOLOMITIC MARBLE						
			- white to pale grey dolomitic marble						
			- 67.2-70.8 - white to pale grey dolomitic marble with 3-5% diss pale brown phlogopite, tr py						
			- 5-10% very pale partly serpentinized tremolite needles						
			- bands of disseminated sphalerite & pyrite 67.2-68.4	849	67.2	68.4	1.2	0.32	4.64
			- bands of submassive sphalerite 67.7-67.8						
			- patches of cg green serpentine with phlogopite and pink calcite at 68.8-69.0, 69.2						
			- 70.8-71.8 - altered section of above dolomite, stained pink by 3-5% fg diss oxide grains - 3-4% pale green mica-seams of green mica and serpentine at 41.1, 41.4 and 41.5 m CA 30°						
			- 71.8-87.3 - white mg dolomitic marble, with 1-2% fg diss phlogopite & py - 5% slightly serpd tremolite						
			- trace diss sph 73.2-73.5						
			- band of pale green serpentine, pink calcite, phlogopite and pale yellow forsterite at 73.6-74.0						
			- 10-15% pale yellow to green phlogopite, with minor serpentine at 75.4 to 76.3						
			- band of dark green serpentine with phlogopite and brown sugary forsterite at 80.4-80.6						
			- some cg phlogopite assoc in serpentine and pink calcite at 81.1-81.4						
			- fine fractures CA 30° at 81.5						

SULPETRO MINERALS LIMITED DRILL LOG HOLE NO. SJ-29

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
87.3	88.5		DIOPSIDE BIOTITE ROCK - fg to mg med green to black rock composed predominantly of med green diopside with variable amounts of biotite - 10-50% - locally traces of white calcite - 2-3% diss py and po					
88.5	93.0		DOLOMITIC MARBLE - white fg to mg dolomitic marble in traces diss py and phlogopite					
93.0			END OF HOLE CASING LEFT IN NO CEMENT CORE RECOVERY ~100% CORE STORED AT SULPETRO's FACILITY Irondale, Ontario					



Alan Sowa

SULPETRO MINERALS LIMITED
TORONTO, CANADA

SECTION L24E
DDH SJ-29

SCALE 1:1000

APPROX LAT & LONG OF LOWER PT COR OF DHB
LATITUDE
LONGITUDE

PROJECT NO 3196

REPORT NO

SHEET NO
OF

NTS 31 F/7

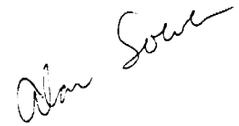
SULPETRO MINERALS LIMITED — DRILL LOG — HOLE NO. SJ-30

PROPERTY	TP OR AREA	AZIMUTH	DATE STARTED
CADIEUX	ADMASTON	140°	Oct. 22, 1983
PROJECT	LOT & CONC.	DIP	DATE COMPLETED
3196	Lot 2 Con 3	- 45°	Oct. 24, 1983
Core size - BQ	CO-ORDINATES. 2200E surveyed	LENGTH 60 m	DRILLED BY St. Lambert DD
GRID NO.	0+72N	COLLAR ELEV. 1.6 m	LOGGED BY A. SOEVER

CORRECTED DIP TESTS

depth	mbrg	tbrg	dip
58.5	154	143	-42

LOCATION SKETCH OF HOLE



METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS % Pb	ASSAYS % Zn
			OBJECTIVES:- To test Swamp Zone mineralization at 2200E just E of stripped area.						
0.0	6.4		OVERBURDEN						
6.4	60.0		DOLOMITIC MARBLE						
			- off white to very pale grey mg dolomitic marlbe with up to 2% diss phlogopite and 1-2% diss py and 5% partly serp'd tremolite needles.						
			- clot of phlogopite at 6.6 m						
			- traces diss sph and py from 6.8-7.3, with est 2-3% Zn from 7.0-7.3 m CA ~10°						
			- clot of grey massive fg to mg tremolite 7.3-7.5						
			- clot of serpentinized tremolite from 7.6-8.0						
			- bands of submassive sphalerite 8.5-10.0 m est 8-10% Zn	850	8.5	10.0	1.5	0.006	15.1
			- traces vfg diss sphalerite from 10.0-16.9						
			- section from 12.2-13.8 has ~10-15% pale tremolite needles						
			- 17.4-18.1 - section of pale green and med green serpentine is 10-15% phlogopite and minor white calc CA 5-10°						
			- 20.1-20.8 - banded dark green serpentine w sugary brown apatite and phlogopite and diss py						
			- irregular patch runs down one side of core CA within patch ~5°						
			- 21.4-21.6, 21.9-22.0 - patches of pale green serpentine and talc in minor pink calcite CA 25°						
			- 25.6-27.3 - altered section with 3-5% diss Fe oxide, pale green serpentine and pale green phlogopite						
			- 35.8-36.9 - speckled with brown phlogopite and fine dark green serpentine						

SULPETRO MINERALS LIMITED DRILL LOG HOLE NO. SJ-30 SHEET 2 OF 2

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
			- slightly more phlogopite and serpentinous section from 40.6-43.0					
			- band of green serp'd tremolite at 44.6 CA 30°					
			- band of green serp'd tremolite in some phlogopite and traces py 58.4-58.6 CA ∠ 30°					
60.0			END OF HOLE					
			CASING PULLED					
			NO CEMENT					
			CORE RECOVERY ∠ 100%					
			CORE STORED AT SULPETRO's FACILITY Irondale, Ontario					

SULPETRO MINERALS LIMITED — DRILL LOG — HOLE NO. SJ-31

PROPERTY	TP OR AREA	AZIMUTH	DATE STARTED
CADIEUX	ADMASTON	320°	Oct. 24, 1983
PROJECT	LOT & CONC.	DIP	DATE COMPLETED
3196	Lot 2 Con 3	45°	Oct. 25, 1983
Core size - BQ	CO-ORDINATES. 2205E surveyed	LENGTH 60 m	DRILLED BY St. Lambert
GRID NO.	0+44N	COLLAR ELEV. ∿ 1.5 m	LOGGED BY A.L. SANGSTER

CORRECTED DIP TESTS

depth	mbrg	tbrg	dip
59.5	334	323	-45

LOCATION SKETCH OF HOLE

Alan Sowa

METRES FROM	METRES TO	SECTION	DESCRIPTION
			OBJECTIVES:- To test Swamp Zone where it is faulted N at 2205E (surveyed).
0.00	8.15		OVERBURDEN
8.15	16.70		DOLOMITE MARBLE
			- medium to coarse grained, white to buff dolomite
			- contains about 5% tremolite altered to brown serpentine - TR phlogopite and pyrite
			- 8.40-8.60 - tr sphalerite
			- 11.20-11.60 - highly tremolitic
			- Core angles - @ 11.50 - 55° to axis
			- @ 15.50 - 65° to axis
16.70	17.55		PEGMATITE
			- quartz and K-spar with grains to 3"
			- overall greenish colour reflects fine altered calc-silicates
17.55	23.50		DOLOMITE MARBLE
			- buff to pinkish turning to white by 19 m
			- similar to above with 2 or 3% silicates but greater percentage of phlogopite and less tremolite
			- traces of pyrite
			- 19.30-19.50 - band tremolite + serpentine
			- 20.75-20.85 - 50% phlogopite
			- 20.85-20.95 - dark green serpentine
			- 22.80 - clot of phlog - 10 cm
			- 23.40 - 5 cm est 8% zinc
			- Core angles - @ 17.55 - 80° to axis
			- @ 22.50 - 45° to axis
			- @ 23.50 - 75° to axis

SAMPLE NO.	FROM	TO	LENGTH

ASSAYS

SULPETRO MINERALS LIMITED DRILL LOG HOLE NO. SJ-31

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS % Pb	ASSAYS % Zn	
23.50	24.25		CALCAREOUS PARAGNEISS							
			- 40% phlogopite and biotite - 20% diopside and serpentine - 40% calcareous material of variable composition							
			- tr pyrite							
			- Core angle - @ 24.25 - 70° to axis							
24.25	25.45		DOLOMITE MARBLE							
			- 2-3% phlogopite							
			- 24.25-24.78 - sphalerite est 5%-6% Zn	851	24.25	24.78	0.53	0.12	15.2	
25.45	26.80		PEGMATITE							
			- quartz-diopside rock pegmatitic textures - first ½ meter brecciated							
			- 2 cm mica selvage at end of section							
26.80	38.57		CALCAREOUS DOLOMITE MARBLE							
			- clean white dolomite marble with variable Ca-Mg ratio to calcareous dolomite composition							
			- minor phlogopite - pyrite and tremolite							
			- 20 cm at 30% phlogopite at 37.50 with massive band unidentified yellow brown-massive mineral							
			- section contains multiple bands of sphalerite as listed	852	27.18	27.85	0.67	1.52	17.8	
			- 27.18-27.85	853	27.85	28.23	0.38	0.018	4.24	
			- 27.85-28.23	900	28.23	30.16	1.93	0.002	0.04	
			-30.16-30.50	854	30.16	30.50	0.34	0.22	8.60	
			- 30.93-31.38	3829	30.50	30.93	0.43	0.008	8.88	
			- 34.20-37.13 (7 bands) - 2-3%	855	30.93	31.38	0.45	0.36	10.3	
				3830	31.38	34.20	2.82	0.090	0.78	5.02%Zn/9.95 m
				856	34.20	37.13	2.93	0.31	7.76	
			Fault (?) 30.50-30.93 - buff calcite marble with 30% phlogopite							
			- leached and broken - core angle 10°							

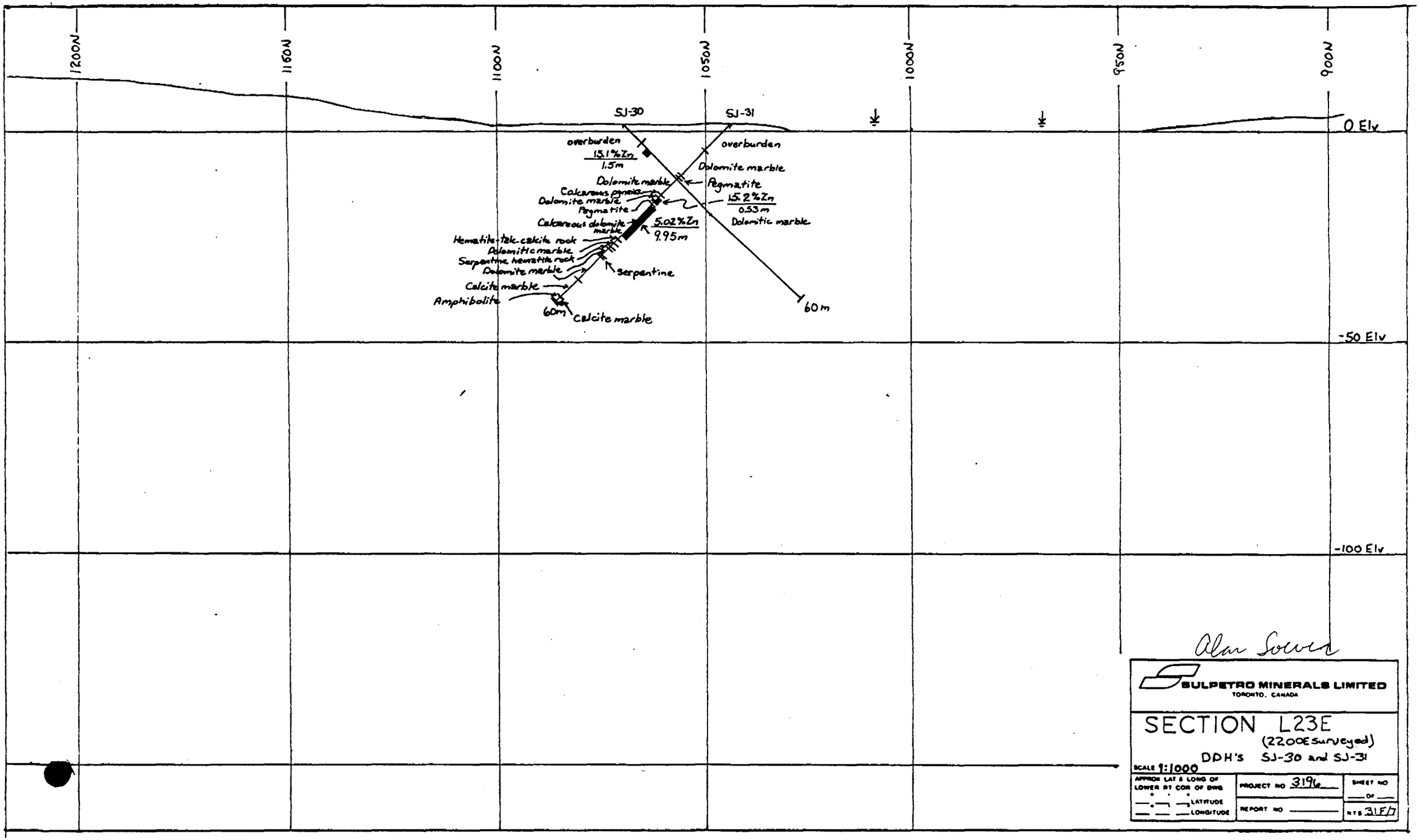
SULPETRO MINERALS LIMITED DRILL LOG HOLE NO. SJ-31

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
			Core angles - @ 27.20 - 85° to axis					
			- @ 30.30 - 60° to axis					
			- @ 36.00 - 45°-60° to axis					
			- @ 37.50 - 60° to axis					
38.57	39.65		HEMATITE-TALC-CALCITE ROCK					
			- scarlet red and darker red hematite to 40% with calcite					
			- slipperty feel indicates substantial talc content which is not easily visible					
			- minor calc-silicates					
39.65	40.90		DOLOMITIC MARBLE					
			- white to pinkish - contains minor tremolite with talc alteration					
			- tr pyrite and phlogopite - all above contain hematite alteration to greater or lesser degree					
40.90	41.35		SERPENTINE-HEMATITE RK					
			- 10 cm of serpentine					
			- talc followed by red stained diopside - serpentine rock					
			- 10% hematite-contains network of fine fractures					
			- mica selvage at each end					
			- altitude of selvages arratic - top end more or less 90° bottom end more or less 45° to axis - probably structural contrasts.					
41.35	42.75		DOLOMITE MARBLE					
			- white to pinkish - contains 5-10% talc					
			- serpentine alteration of tremalite and minor phlogopite and hematite spots (after pyrite ?)					
			- Core angle - @ 4180 - 55° to axis					

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
42.75	42.85		SERPENTINE					
			- green and brown serpentine - seam may be altered dike					
42.85	45.45		DOLOMITE MARBLE					
			- Pink to red stained hematitic dolomite marble - mainly phlogopite (5%) with traces of serpentine and pyrite - contains erratic red hematite spots as alteration product around phlog					
45.45	52.20		DOLOMITE MARBLE					
			- white clean dolomite at 45.45 red staining with hematite spots grades into marble with 10% pyrite indicating hematite is probably a result of oxidation of pyrite - pyrite 5% to 48 m with second 5% pyrite section from 51.25 to 52.20 - section contains 2-5% 1 cm tremolite phenocrysts altered to serpentine-talc - @ 47.65 - 1" with disseminated black metallic mineral with pyrite - not magnetite - may be franklinite - Core angles poor and not locally consistent est 45-60°					
52.20	58.05		CALCITE MARBLE					
			- grey to buff to pink calcite marble - colour increases with depth to amphibolite with green serp in last meters - sections weakly phlogopitic with minor brown serp - Core angles poor - no est.					

SULPETRO MINERALS LIMITED DRILL LOG HOLE NO. SJ-31

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
58.05	59.20		AMPHIBOLITE					
			- dark green - fine grained amphibolite with 30% leucocratic phase (plag) and 70% hlold, chlorite, biotite phase					
			- minor pyrite and very weakly calcareous					
			- Core angle - @ 58.05 - 90°					
			- @ 59.20 - 40°					
			- internal 50-70°					
59.20	60.00		CALCITE MARBLE					
			- clean white with traces green serpentine					
60.00			END OF HOLE					
			CASING LEFT IN					
			NO CEMENT					
			CORE RECOVERY ~100%					
			CORE STORED AT SULPETRO's FACILITY Irondale, Ontario					



Alan Sower

SULPETRO MINERALS LIMITED
TORONTO, CANADA

SECTION L23E
(2200E surveyed)
DDH's SJ-30 and SJ-31

SCALE 1:1000

APPROX LAT & LONG OF LOWER RT COR OF DWG
LATITUDE
LONGITUDE

PROJECT NO 3196
REPORT NO
SHEET NO
OF
NTS 31F/7

SULPETRO MINERALS LIMITED — DRILL LOG — HOLE NO. SJ-32

PROPERTY	TP OR AREA	AZIMUTH	DATE STARTED
CADIEUX	ADMASTON	140°	Oct. 25, 1983
PROJECT	**LOT & CONC.**	**DIP**	**DATE COMPLETED**
3196	Lot 2 Con 3	-45	Oct. 27, 1983
Core size - BQ	**CO-ORDINATES.** L20E 1+69N	**LENGTH** 81 m	**DRILLED BY** St. Lambert
GRID NO.		**COLLAR ELEV.** ≈ 15 m	**LOGGED BY** A.L. SANGSTER

CORRECTED DIP TESTS

depth	mbrg	tbrg	dip
80.5	153	142	44

LOCATION SKETCH OF HOLE

Alan Sangster

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
			OBJECTIVES:- To test Lower East Zone on L20E.					
0	3.00		OVERBURDEN					
3.00	12.20		SILICATED DOLOMITE-DIOPSIDE					
			- mostly white to buff (altered) dolomite with 20-30% pale to bright green fresh and altered (to serpentine) diopside - minor tremolite and pyrite - minor local phlogopite - first two meters broken and surface leached and broken contains 50% biotite paragneiss with some serpentine - sand of diopside serpentine, biotite paragneiss 8.65 to 8.90 - Core angles - @ 6.10 - 40° - @ 9.50 - 45°					
12.20	15.45		DIRTY CALCAREOUS, SILICATED DOLOMITE					
			- part tremolite and part diopside calcareous dolomite and with abundant pods and irregular bands of phlogopite - some pink calcite present (5%) - tr sphalerite					
15.45	21.70		SILICATED DOLOMITE-DIOPSIDE-TREMOLITE					
			- mixed grey green, weakly calcareous, tremolitic dolomite and pale to medium green diopside dolomite - tremolitic varieties contain 2-3% pyrite with local phlogopite and small red brown garnets - diopside bearing sections cleaner with traces of pyrite and phlogopite - section ends with hematite staining and more serpentine in last 30 cm					

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
			- No reliable core angles					
21.70	24.70		DOLOMITE					
			- white dolomite with patches of red hematite staining associated with reticulate fracturing - contain minor tremolite - serpentine-mica clot at 23.90 - tr phlog - No reliable core angles					
24.70	25.95		CALCITE MARBLE-PARAGNEISS					
			- 60% salm n pink calcite marble with medium to dark green serpentinized diopside - 40% calcareous biotite paragneiss - rock types interbedded with conspicuous pyrite at contacts - Core angle - @ 25.00 - 65°					
25.95	28.70		DIOPSIDE ROCK					
			- 80% massive diopside - pale green - 70% white phlogopitic dolomite - tr pyrite, sph - section ends in 10 cm diopside - serpentine- mica selvage					
28.70	30.45		CALCITE QUARTZ DIOPSIDE MARBLE					
			- distinctive rock consisting of 20% quartz to 2 cm diameter with 40% each of corase grained salmon pink calcite and green diopside with minor phlogopite - No good core angles					
30.45	30.90		PARAGNEISS					
			- non calcareous biotite diopside - quartz paragneiss - Core angles - @ 30.55 - 75°					

SULPETRO MINERALS LIMITED DRILL LOG HOLE NO. SJ-32

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS % Pb	ASSAYS % Zn	
30.90	48.05		SILICATED DOLOMITE TREMOLITE							
				857	32.70	33.80	1.10	0.006	3.36	
			- Mostly diopside silicated dolomite with short sections richer in tremolite	858	35.33	36.65	1.30	0.006	2.48	
			- phlogopite common between 39-40 m to 20-25%							
			- contains sphalerite and 1 to 5% pyrite with or near mineralized sections	859	42.05	42.80	0.75	0.008	3.04	
				860	42.80	43.70	0.90	0.006	16.1	
			- more massive diopside towards bottom	3831	43.70	44.50	0.80	0.002	0.24	6.08% Zn/3.30 m
			- sphalerite traces 0.5% present between assayed sections	861	44.50	45.35	0.85	0.006	3.64	
48.05	56.90		DOLOMITE AND SILICATED DOLOMITE							
			- white phlogopite dolomite marble							
			- phlogopite 0-20% and quite erratic distribution							
			- local minor yellow - green serp							
			- 20 cm phlog serp at 49.5, 50 cm tiotite - yellow brown granular apatite at 54.00							
			- contains slots and bands of massive diopside increasing to base of section - tr pyrite							
			- Core angle - @ 56.50 - 75°							
56.90	59.50		DIOPSIDE							
			- massive diopside with traces of pyrite and sph							
			- very sparse.							
59.50	60.40		QUARTZITE							
			- massive-weakly pyritic grey quartzite - sparse fine grained diopside							
			- paragneiss band at 59.95-60.00							
			- Core angle - @ 60.00 - 55°							
60.40	67.05		SILICATED DOLOMITE							
			- as 48.05 to 56.90 above							

SULPETRO MINERALS LIMITED DRILL LOG HOLE NO. SJ-32 SHEET 4 OF 4

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
67.05	74.50		PARAGNEISS-CALCSILICATE-CALCITE-QUARTZ					
			A very complex unit consisting of 50% biotite-diopside paragneiss interbedded with massive calc-silicate-quartz-diopside, pink calcite-diopside and quartz					
			- pink calcite-diopside					
			- traces of pyrite present					
			- Core angles vary between 45° and 60°					
74.50	75.95		CALCITE MARBLE					
			- buff clean coarse grained calcite marble					
75.95	80.30		SILICATED DOLOMITE					
			- sub massive pale green diopside					
			- two minor phlog bands - minor pyrite and weak tr sphalerite					
80.30	81.00		CALCITE MARBLE					
			- pink, coarse grained calcite marble with quartz rimmed by diopside at 80.75					
81.00			END OF HOLE					
			CASING LEFT IN					
			NO CEMENT					
			CORE RECOVERY ~100%					
			CORE STORAGE AT SULPETRO's FACILITY Irondale, Ontario					

SULPETRO MINERALS LIMITED — DRILL LOG — HOLE NO. SJ-33

PROPERTY	TP OR AREA	AZIMUTH	DATE STARTED
CADIEUX	ADMASTON	140°	Oct. 27, 1983
PROJECT	LOT & CONC.	DIP	DATE COMPLETED
3196	Lot 2 Con 3	-45°	Oct. 28, 1983
Core size - BQ	CO-ORDINATES. L20E 1+40N	LENGTH 60 m	DRILLED BY St. Lambert
GRID NO.		COLLAR ELEV. ~ 14 m	LOGGED BY A.L. SANGSTER

CORRECTED DIP TESTS			
depth	mbrg	tbrg	dip
59.5	156	145	45

LOCATION SKETCH OF HOLE

Alan Sangster

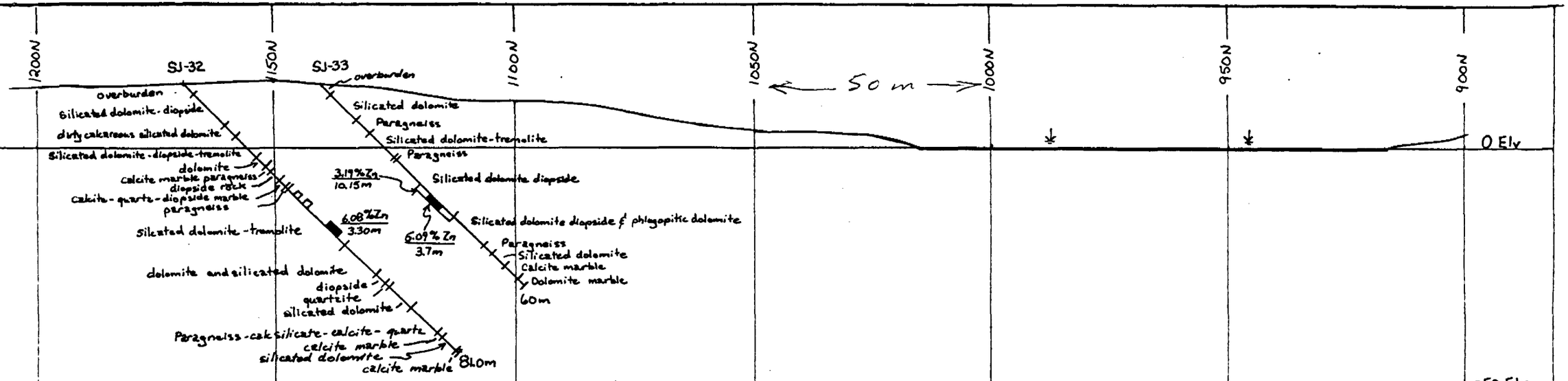
METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
			OBJECTIVES:- To test Middle East Zone on L20E.					
0	2.4		OVERBURDEN					
2.4	10.40		SILICATED DOLOMITE					
			- 80% pale green diopside with grey-white dolomite - contains 1-2% phlogopite overall with increase to 10% in wider dolomite bands - contains 3% mica selvages of 1-2 cm - minor quartz in last meter - tr pyrite and occasional single grains sphalerite - Core angle - @ 9.30 - 75° to axis					
10.40	14.35		PARAGNEISS					
			- banded to massive biotite diopside - feldspar paragneiss - tr pyrite - Core angles - @ 11.50 - 65° to axis					
14.35	21.80		SILICATED DOLOMITE-TREMOLITE					
			- grey to locally pinkish dolomite and weakly calcareous dolomite with 20% clots of grey, green tremolite (1-3 cm) with minor diopside. - pyrite ubiquitous at 1-3% - sparse phlogopite and serpentine - a trace SPHALERITE content begins at about 19.00 m - 20 cm mica - serpentine-calcsilicate clot at 21.00 - No good core angles					

SULPETRO MINERALS LIMITED DRILL LOG HOLE NO. SJ-33

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS		
21.80	22.40		PARAGNEISS							
			- 60% biotite - 40% dolomite							
22.40	39.40		SILICATED DOLOMITE DIOPSIDE							
			- variably silicated dolomite - both tremolite and diopside present - diopside predominates overall as creamy white to very pale greenish clots	862	29.25	31.60	2.35	0.008	1.20	
				863	31.60	32.45	0.85	0.006	2.16	
				864	32.45	34.10	1.65	0.006	3.80	5.09% Zn/3.7 m
			- varies from 70-30% to massive over short sections	865	34.10	36.15	2.05	0.006	6.12	
			- trace phlogopite and only few trades of pyrite - much less than above silicated dolomite	866	36.15	37.00	0.85	0.006	1.56	3.19% Zn/10.15 m
				867	37.00	38.10	1.10	0.008	0.87	
			- mineralized throughout with lower grade SPHALERITE disseminated throughout section	868	38.10	39.40	1.30	0.004	5.12	
39.40	48.00		SILICATED DOLOMITE-DIOPSIDE and PHLOGOPITIC DOLOMITE							
			- silicated dolomite as above with strong traces SPHALERITE							
			- beds are 10-40 cm thick and alternate with fine to medium grained dolomite containing 10-15% fine to medium grained phlogopite - sphalerite tends not to occur in phlogopitic sections							
			- overall 1% Zn							
			- last 40 cm are 50% phlogopite in selvages near contact of paragneiss							
48.00	50.40		PARAGNEISS							
			- quartz-biotite-diopside and hornblende -biotite-diopside paragneiss - well banded with interbeds of pink calcite-diopside rock - minor py							
			- Core angles - @ 48.40 - 55° to axis - regular							
50.40	54.10		SILICATED DOLOMITE							
			- medium to pale green diopside (colour intensity decreases away from mafic) with white to pink dolomite and calcareous dolomite							
			- minor phlogopite as selvages at 51.20							
			- Core angle at 51.20 - 45° to axis							

SULPETRO MINERALS LIMITED DRILL LOG HOLE NO. SJ-33

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
54.10	57.90		CALCITE MARBLE					
			- buff; clean calcite marble					
57.90	60.00		DOLOMITE MARBLE					
			- weakly silicated dense white to greenish dolomite marble with 10-20% diopside and minor serp - minor hematite staining along microfractures - tr sphalerite at 58.00					
60.00			END OF HOLE					
			CASING LEFT IN					
			NO CEMENT					
			CORE RECOVERY ~100%					
			CORE STORAGE AT SULPETRO's FACILITY Irondale, Ontario					



Alan Lowe

SULPETRO MINERALS LIMITED
TORONTO CANADA

SECTION L20E

DDH's SJ 82 and SJ-33

SCALE 1:1000

APPROX LAT & LONG OF LOWER RT COR OF DWG LATITUDE LONGITUDE	PROJECT NO 3196 REPORT NO	SHEET NO OF NTS 31F/7

SULPETRO MINERALS LIMITED — DRILL LOG — HOLE NO. SJ-34

PROPERTY	TP OR AREA	AZIMUTH	DATE STARTED
CADIEUX	ADMASTON	140°	Oct. 28/83
PROJECT	LOT & CONC.	DIP	DATE COMPLETED
3196	Lot 2 Con 3	-45°	Oct. 29/83
Core size - BQ	CO-ORDINATES. L22E, 1+68N	LENGTH 84 m	DRILLED BY St. Lambert
GRID NO.		COLLAR ELEV. N 13 m	LOGGED BY A.L. SANGSTER

CORRECTED DIP TESTS			
depth	mbrg	tbrg	dip
83.50	161	150	44

LOCATION SKETCH OF HOLE

Alan Sawyer

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS %Pb	ASSAYS % Zn
			OBJECTIVES:- To test Middle East Zone 25 m below SJ-21						
0	1.80		OVERBURDEN						
1.80	3.70		SILICATED DOLOMITE-DIOPSIDE - white to pale grey green mottled diopside bearing silicated dolomite - minor quartz, phlogopite and serpentine - 5 cm serpentine phlogopite selvage separates from next unit.						
3.70	19.15		WEAKLY SILICATED CALCITE MARBLE - pink to grey and white mottled calcite marble - contains small greenish diopside and grey qtz grains (10-20%) in pinker areas - some coarse quartz to 2 or 3 cm in lower part - red staining 12.00-12.80 m - elsewhere minor patches - minor phlogopite and pyrite						
19.15	25.50		WEAKLY SILICATED DOLOMITE - diopside with minor tremolite in a mixture of dolomite marble and calcareous dolomite marble - accessories include 5-10% phlogopite locally with pyrite - sphalerite is present throughout as traces increasing in east 0.85 m - marble became calcitic in this section CA at 21.10 - 60° to axis	869	24.70	25.55	0.85	0.008	5.76

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS % Pb	ASSAYS % Zn
25.50	33.25		PARAGNEISS-CALCSILICATE						
			- this section different than normal - contains usual biotite diopside paragneiss with calc-silicate interbeds						
			- last meter pinkish and fine grained and is probably garnet rich						
			- interbeds from 30-40% of unit instead of pink calcite - quartz - they contain both dark and pale green diopside with a feldspar, probably plagioclase, phlogopite and dolomite with minor calcite - some diopside is altered to serpentine						
			CA @ 25.80 70° to axis						
			@ 31.50 45° to axis						
33.25	37.15		SILICATED-DOLOMITE-DIOPSIDE-TREMOLITE						
			- sub massive calc-silicate composed of pale green diopside with 20% tremolite and 10% white dolomite						
			- minor pyrite and serpentine alteration						
37.15	38.90		Fe SULPHIDE SILICATED DOLOMITE						
			- as above except that section contains 20-30% mixed pyrite-pyrrhotite	870	37.15	38.90	1.75	0.006	0.036
38.90	57.45		SILICATED DOLOMITE-DIOPSIDE-TREMOLITE						
			- first part to 43 m quite dirty with abundant phlogopite disseminated and in bands with serpentine						
			- diopside generally medium green in much of this section	871	40.80	41.70	0.90	0.006	2.92
			- weak SPHALERITE mineralization 40.80-41.70 - elsewhere traces 0-tr pyrite and serpentine						
			- below 43 m section cleaner with less phlogopite in marble and resolved into discrete bands 5-20 cm thick of disseminated phlogopite, mica paragneiss or selvages as follows: 44.60, 44.95, 45.90, 46.25, 48.25, 51.00, 54.40, 54.70 , 54.95, 55.15, 55.25, 56.30, 56.80, 57.30,						

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS % Pb	ASSAYS % Zn
			- marble portion well silicated with diopside - tremolite-phlogopite common 1-2% with traces of pyrite						
			- section contains widely scattered traces of sphalerite 1% - eg. 43.50-43.80, 45.30-46.30 and others	872	50.15	50.95	0.80	0.010	2.08
			- best sections assayed 50.15-50.95 - est. 1%						
			CA @ 45.00 50° to axis						
			@ 55.10 40° to axis						
57.45	65.95		MIXED PARAGNEISS-CALC SILICATE-CARBONATE-QUARTZ						
			- a very mixed bag with interbedded biotite-diopside paragneiss with carbonate calcsilicate quartz beds -						
			- paragneiss contains biotite diopside and probably plagioclase and is locally calcareous						
			- calc-silicate interbeds vary in composition from one to another - from top down they include diopside-carbonate-phlogopite, diopside-phlogopite, tremolite-plagioclase-calcite, calcite-quartz-diopside - SPHALERITE est at 2-3% over 30 cm at 603 m						
			- Tr pyrite and minor serpentine						
			CA @ not read unit contorted						
64.95	66.15		CALCITE-QUARTZ-DIOPSIDE						
			- part of previous unit but separated and as it is cleaner -quartz appear to be breccia fragments - calcite pink CA @ 65.75 25° to axis						
66.15	84.00		WEAK-MODERATE SILICATED MARBLE-TREMOLITE						
			- pale grey green tremolite-phlogopite sparse but present throughout - biotite-serp clots or paragneiss beds at 70.60, 73.00, 74.50, 76.00, 76.40, 80.00						
			- SPHALERITE TRACES at 68.50, 69.95, 70.00, 70.15, 73.60 - very minor						
			- after 74.75 silicates decrease and are a minor component CA @ 68.80 45° to axis						
84.00			END OF HOLE						
			CASING LEFT NO CEMENT CORE RECOVERY ~100%	CORE STORAGE AT SULPETRO's FACILITY Irondale, Ontario					

SULPETRO MINERALS LIMITED — DRILL LOG — HOLE NO. SJ-35

PROPERTY	TP OR AREA	AZIMUTH	DATE STARTED
CADIEUX	ADMASTON	140°	Oct. 30, 1983
PROJECT	LOT & CONC.	DIP	DATE COMPLETED
3196	Lot 2 Con 3	-45°	Nov. 2, 1983
Core size - BQ	CO-ORDINATES. L22E , 2+13N	LENGTH 132.00	DRILLED BY St. Lambert
GRID NO.		COLLAR ELEV. ✓13 m	LOGGED BY A.L. SANGSTER

CORRECTED DIP TESTS

depth	mbrg	tbrg	dip
59.5	159	148	-43
131.5	163	152	-42

LOCATION SKETCH OF HOLE

Alan Sowden

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
			OBJECTIVES:- To test Lower East Zone 25 m below SJ-21.					
0	1.5		OVERBURDEN					
1.5	17.15		DOLOMITE - medium to coarse grained grey dolomite - quite dirty looking in part due to surface oxidation and part due to phlog. partings & paragneiss interbeds - contains sparse temolite CA may be 70°-80° but not good quality					
17.15	18.00		PARAGNEISS - siliceous biotite -phlogopite paragneiss - contains minor dolomite patches CA 70° to axis					
18.00	22.10		SILICATED DOLOMITE-DIOPSIDE-TREMOLITE - interbedded submassive diopside and tremolite marble-phlogopite knots and disseminations - trace pyrite					
22.10	29.55		MIXED PARAGNEISS-DOLOMITE and SILICATED DOLOMITE - a complex unit of interbedded siliceous mica paragneiss (25%) - silicated diopside marble (25%) and weakly silicated dolomite - one 20 cm diopside unit contains 30% quartz-phlogopite is common in the marbles - Tr pyrite CA @ 24.50 65° to axis @ 29.00 85° to axis					

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
29.55	35.15		DOLOMITE MARBLE - unit consists of 60% clean, white dolomite marble with 40% sections of massive diopside mottled with medium grey, fine grained calcite and coarse grained pink calcite - very distinctive - contains phlogopite partings					
35.15	38.50		DOLOMITE - phlogopite rich buff dolomite with the mica concentrated in bands - Tr pyrite CA @ 35.80 70° to axis @ 37.70 65° to axis					
38.50	43.40		DOLOMITE - clean white dolomite with only a few phlogopite partings - contains several minor SPHALERITE sights - more prominent at 39.85, 40.70, 49.90, 43.10-43.35					
43.40	46.30		SILICATED CALCITE MARBLE-DOLOMITE - coarse, pale green diopside and salmon pink calcite - minor creamy dolomite					
46.30	49.10		DOLOMITE - white dolomite - Tr SPHALERITE at 48.35 - bit calcareous					
49.10	53.30		CALCITE MARBLE - grey to white, clean calcite marble					

SULPETRO MINERALS LIMITED DRILL LOG HOLE NO. SJ-35

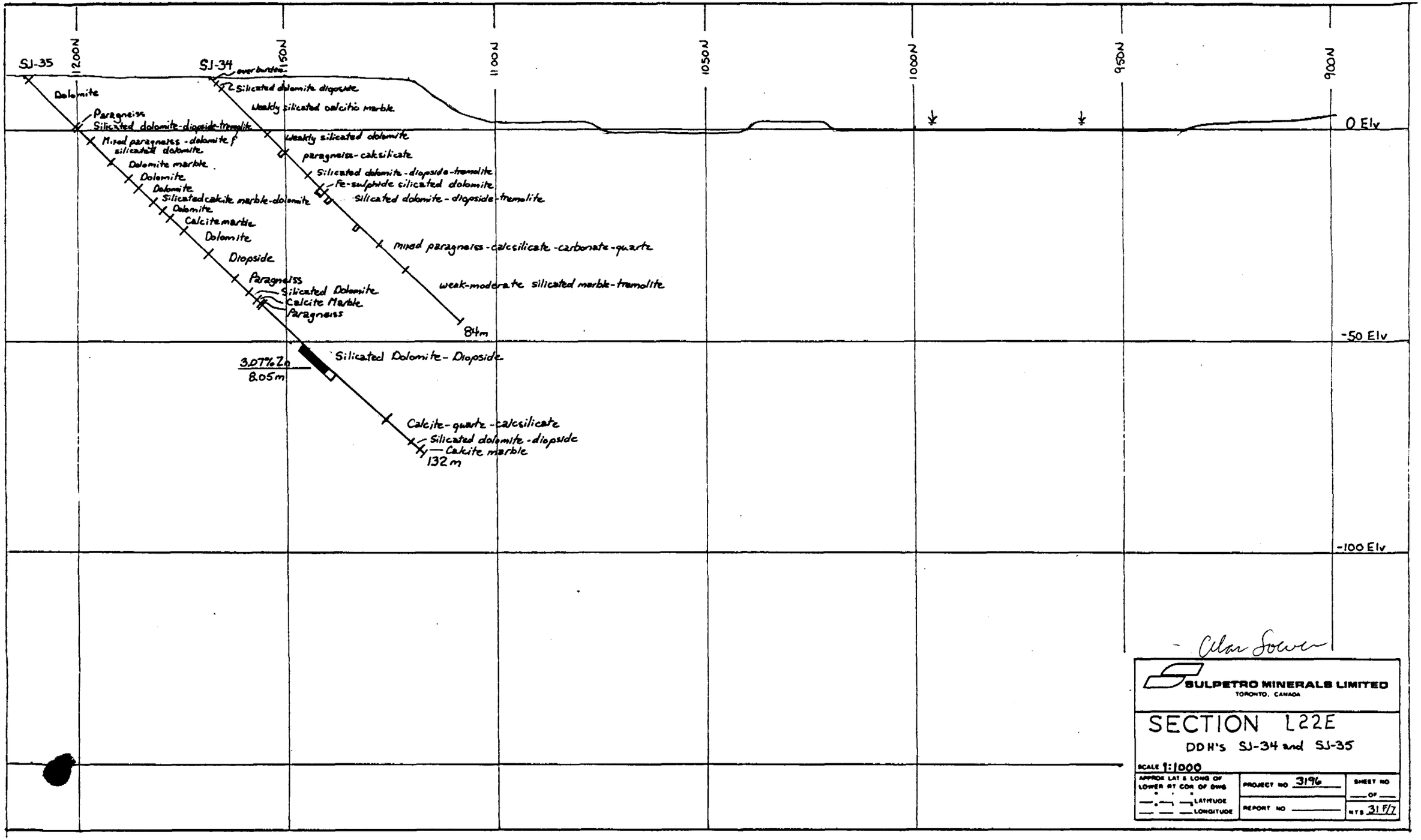
METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
53.30	61.40		DOLOMITE - mottled grey, weakly fetid dolomite - weakly silicated with diopside and tremolite altered to serpentine - phlogopite common - Tr py, sphalerite - contains 5 paragneiss interbeds 40 cm to 3 cm CA @ 56.50 60° to axis					
61.40	70.10		DIOPSIDE - massive pale green diopside-colour darkens 1 m before paragneiss - contains dolomite - bed from 63.60-64.50 - minor pink dolomite					
70.10	74.95		PARAGNEISS - well banded nornblende biotite diopside pgn to 72.30 then loses part of greenish black colour to grey brown - probably represents decrease in diopside and hornblende and increase in biotite and plagioclase - after 73.00 m - unit consists of 50% banded paragneiss above and 50% well silicated dolomite interbedded - not pink calcite this time - traces phlogopite in silicated dolomite CA @ 71.90 75° to axis @ 74.75 65° to axis					
74.95	77.55		SILICATED DOLOMITE - pale green diopside (20-30%) with phlogopite and non phlogopitic dolomites - SPHALERITE traces at 77.00-77.55					
77.55	78.75		CALCITE MARBLE - pink to white calcite marble - minor diopside first 20-30 cm - trace SPHALERITE at 77.65					

SULPETRO MINERALS LIMITED DRILL LOG HOLE NO. SJ-35

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS % Pb	ASSAYS % Zn	
78.75	78.85		PARAGNEISS							
			- 10 cm biotite, feldspar, talc paragneiss at contact							
78.85	120.00		SILICATED DOLOMITE-DIOPSIDE							
			- 10% phlogopite dolomite marble, with local pyrite, pyrrhotite and SPHALERITE well silicated with pale green diopside - SPHALERITE traces at 84.00, and beyond 1%							
			- 85.50 to 91.50 - sub massive diopside							
			- SPHALERITE traces continue to 93.65 where increase in continuity of sphalerite corncides with decrease in silication	873	93.65	94.20	0.55	0.004	3.72	
			- after mineralized interval, silication with diopside and some tremolite picks up to (30-50%) - still interbedded with dolomite containing regularly to erratic patches of phlogopite - minor pyrite	874	94.20	95.85	1.65	0.006	4.80	
				875	95.85	97.60	1.75	0.004	1.44	3.31% Zn/5.20 m
				876	97.60	98.85	1.25	0.006	3.76	
				877	98.85	100.65	1.80	0.004	0.30	3.07% Zn/8.05 m
			- thin paragneiss interbeds seen in other holes not present here	878	100.65	101.70	1.45	0.012	4.80	
				879	101.70	103.65	1.95	0.008	0.68	
			- last traces of SPHALERITE by 107.50	880	103.65	104.20	0.55	0.008	0.39	
			- 17.80-18.10 - bed of quartz (chert ?) with traces of calc-silicates							
			- alteration described in next unit being about 119.00 m							
			CA @ 94.60 55° to axis @ 100.50 60° to axis @ 112.50 75° to axis @ 118.00 60° to axis							
120.00	127.75		CALCITE-QUARTZ-CALCSILICATE							
			- alternating pink and grey calcite with green diopside and, fragments of quartz from pin head to several centimeters							
			- this is a cataclastic rock, and represents breaking and partial recrystalization - diopside altered to serpentine - even some of the calcite appears cataclastic - core soft and easily broken - a PUNK ROCK							

SULPETRO MINERALS LIMITED DRILL LOG HOLE NO. SJ-35

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
			- 123.60-124.65, 125.70-125.80 - contains paragneiss units with crushed carbonate interbeds - deformed micaceous bands at 126.25 to 126.45 - from here - diopside % increases - rock appears more competant CA at 124.50 75° to axis					
127.75	130.70		SILICATED DOLOMITE-DIOPSIDE - medium to light green - sparse traces sphalerite and py					
130.70	132.00		CALCITE MARBLE - pink and grey calcite marble - minor diopside					
132.00			END OF HOLE CASING LEFT NO CEMENT CORE RECOVERY 100% CORE STORAGE AT SULPETRO's FACILITY Irondale, Ontario					



- Allan Sower

SULPETRO MINERALS LIMITED
TORONTO, CANADA

SECTION L22E

DDH's SJ-34 and SJ-35

SCALE 1:1000

APPROX LAT & LONG OF LOWER RT COR OF DWG
LATITUDE
LONGITUDE

PROJECT NO 3196

SHEET NO ___ OF ___

REPORT NO

NTS 31 F/7

A P P E N D I X C

CADIEUX PROPERTY

MAGNETIC IP-SP-SURVEYS

SULPETRO MINERALS LIMITED

INTER OFFICE MEMORANDUM

DATE October 18, 1983 TO A. Soever

SUBJECT CADIEUX GEOPHYSICS - 1983 FROM J.L. Wright

INTRODUCTION

During June of 1983 magnetometer, induced polarization (IP), and self potential (SP) surveys were completed over portions of the Cadieux property (Project #3196). The magnetics are intended as an aid to geologic mapping. Specifically, to help delineate the marble-gneiss contact as well as locate local amphibolite concentrations within the marbles. It is felt these concentrations may be a locus for zinc mineralization. The IP and SP surveys were tests to determine if Cadieux type mineralization yields an interpretable response and if so delineate its form.

SURVEY PROCEDURE

Each technique is reviewed separately in the following.

Magnetometer Survey

Tabulated below are certain logistical details concerning the survey.

Instrumentation:	Barringer GM-122 Magnetometer Scintrex MBS-2 Base Station
Base Station Loca:	Southwest point of Cedar Point Lodge property, Calabogie, Ontario
Base Station Value:	57760 gammas
Line Spacing:	50m & 100m
Station Interval:	12.5m
Personnel:	J.L. Wright, D. Ward
Survey Dates:	June 11-15, 1983
Parameter Read:	Amplitude of the total magnetic field
Production:	60.0 line-km (approx.)

...../2

The raw field data were diurnally corrected employing a strip chart generated by the Scintrex MBS-2 base station. Additive constants are scaled from this chart and applied to the raw field data. Following this a datum of 57000 gammas was removed and the results plotted on three (3) portions of the grid map at a scale of 1:2000. Finally, contouring was implemented employing an interval of either 100 gammas or 200 gammas depending upon the portion of grid involved. Prints of these maps can be found in the accompanying map pocket.

Induced Polarization (IP) Survey

Logistical details concerning the survey appear below.

Instrumentation:	RX - Elliot R20A TX - Huntec L0P0
Array:	Dipole-dipole; a = 10m; n = ½, 1-5
Personnel:	J.L. Wright, D. Ward
Survey Dates:	June 21-23, 1983
Parameters Read:	Resistivity (ohm-meters) Chargeability (milliseconds)
Production:	Four (4) dipole-dipole sections employing five (5) multilevel set-ups

Both the resistivities and chargeabilities were drafted on standard pseudo-sections. Subsequent contouring employed intervals of logarithmic for the resistivities and 5 msec. (linear) for the chargeabilities. Units are ohm-meters for the resistivities and milliseconds for the chargeabilities which conform to the Newmont M331 standard as defined by the Elliot Geophysical Co. Copies of the four pseudo-sections can be found in the map pocket at the rear of the report.

Self Potential (SP) Survey

Logistical details concerning the survey follow:

Instrumentation:	Data Precision Digital Multimeter
Station Interval:	1m
Personnel:	J.L. Wright, D. Ward
Survey Dates:	June 16, 1983
Parameter Read:	Potential Difference (millivolts)
Production:	Nine (9) lines each of approximately 30-50m length.

Although the lines are randomly oriented so as the traverse known mineralized zones, each is located relative to a known survey point. Orientation is roughly at right angles to the strike. The voltage differences are plotted in profile form employing scales of 1:100 horizontally and 1cm = 5mv vertically. The reference pot was placed at the zero coordinate of each of the nine (9) profiles. Also depicted on the profile plots are the known mineralized zones as inferred from surface observations. Prints of the nine (9) profiles can be found in the accompanying map pocket.

As mentioned previously both the IP and SP surveys were conducted over irregularly spaced lines so as to traverse known mineralization. Included with the previously discussed data is a map of the Cadieux area over which these test lines were run. Scale is 1:200 and on this are plotted the IP and SP lines.

INTERPRETATION

Each survey technique is reviewed separately in the following.

Magnetometer Survey

Background over the grid ranges about 57700 gammas with a regional trend dropping from west to east at a rate of 100-150

gammas/km. This is based on observations within the magnetically quiet marble unit. Total amplitude variation over the three grid sheets is approximately 2500 gammas excluding obvious cultural contamination. The dominant textural features are exhibited by the marble-gneissic lithologies. As would be expected the marbles show a relatively subdued response with variations generally not exceeding 200 gammas. Within this are localized higher frequency anomalies, particularly on the central sheet, sourced by amphibolite concentrations. The gneisses present a contrasting texture typified by high frequency hash-like responses with total amplitude offsets of 1500 gammas or larger being common.

The western grid sheet suggests a marble unit sandwiched between gneiss units. Limits for the northern contact are approximately L13W, 50N -to- L0.5W, 350N. The southern contact appears to slope from L13W, 450S -to- L7W, 610S. This essentially is a wedge of gneiss in the southwest corner of the map sheet. Some interfingering is indicated in the vicinity of L11W, 375S. The other dominant feature on the west sheet is an obvious dike extending from L0, 530S -to- L9W, 300N at which point it becomes lost in the gneissic magnetic texture.

The central map sheet has only limited coverage. Only marble units appear to be present. Localized highs at L22E, 180N; L22E, 100N -to- L18E, 105N; and L10E, 90N -to- L8E, 75N are likely related to amphibolitic concentrations.

The eastern map sheet again indicates marbles sandwiched between gneissic units. Limits for the southern contact are L0, 420S -to- L12.5E, 280S A left lateral offset or S-fold could occur in the vicinity of L7E, 350S. Overburden cover on the contact trace from L1E -to- L6E has subdued responses noticeably. The northern

marble-gneiss contact extends from L6.5E, 590N -to- L13E, 100S in an arcuate trace. Fairly extreme infolding of the gneiss and marble is indicated near L3.5E -to- L6.5E at the 300N to 450N level. This is an area of structural complexity.

Induced Polarization (IP) Survey

At the top of each pseudo-section immediately beneath the resistivity section coordinates is a marker outlining the mineralized zone tested by the particular set-up. Listed below are the four lines and zones tested by each.

Line 1: A-Zone/Swamp Zone
Line 2: G-Zone
Line 3: Road Zone
Line 4: Hisko Zone

The individual lines are reviewed below.

Line 1:

The Swamp Zone produces a faint response quite indicative of a body with limited depth extent. This is centered at coordinate 0. The anomaly would likely not be recognized without prior knowledge of a possible target. The A-Zone yields no really recognizable anomaly. Another response begins near approximately 9N.

Line 2:

The G-Zone produces no recognizable anomaly. However, a closely adjacent response at 1S obliterates any weaker anomaly caused by the G-Zone.

Line 3:

The Road Zone produces a classic well formed anomaly at station 0. Their is no doubt this is directly related to the Road Zone. A faint low resistivity correlation is also suggested.

Line 4:

The Hisko Zone yields a well formed but deeper sourced response. This is consistent with known geometries in the area.

Those zones that responded (i.e. Swamp, Road, Hisko) revealed quite a spread in anomaly strength which is obviously related to sulfide (excluding ZnS) content. If enough chargeable material is present the zones are detectable.

Self Potential (SP) Survey

As with the IP results, various zones were tested by various SP lines. Tabulated below are the SP lines and corresponding zones tested.

Line 1: Swamp Zone
Line 2: Swamp Zone
Line 3: A-Zone
Line 4: G-Zone
Line 5: Upper East Zone
Line 6: Middle East Zone
Line 7: Lower East Zone
Line 8: Road Zone
Line 9: Central Zone

Of the eight (8) zones tested only the Middle East Zone produced any response which could be considered anomalous. This should be a negative SP potential directly over the body. It would appear the deep weathering and subsequent redox cell formation mechanism are not present at the Cadieux property.

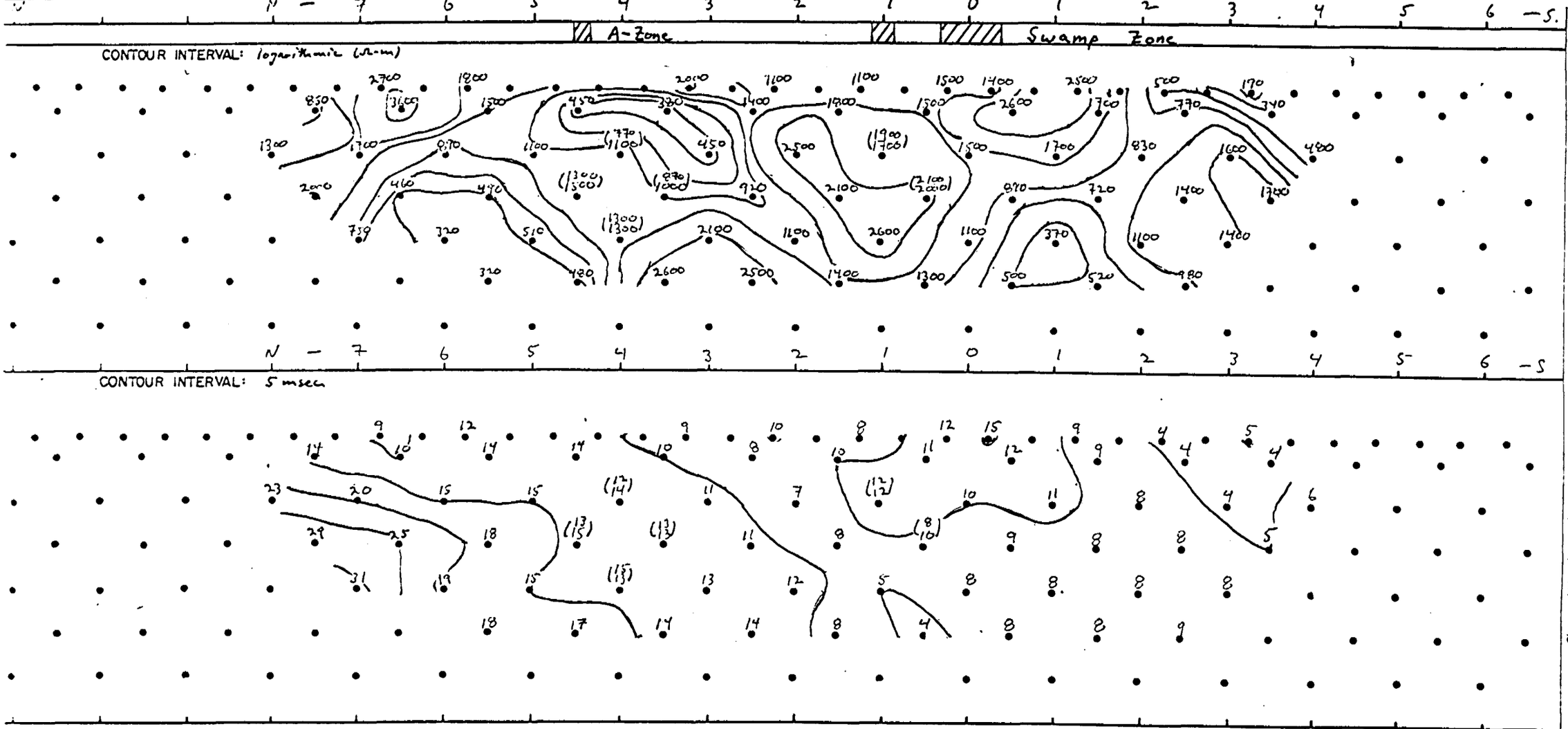
CONCLUSIONS and RECOMMENDATIONS

The magnetics map the gneiss-marble contact to some extent. At two locals; L7E, 350S and L3.5E -to- L6.5E, 300N-450N (east map sheet), structural complexity is definitely suggested. Further detailed magnetic surveying employing a square grid should seriously be contemplated in these areas.

The IP program suggests certain of these types of zones respond sufficiently to be detectable. Should unexplored ground be recognized serious considerations should be given to fairly detailed IP coverage.

The SP method does not appear to produce identifiable anomalism. Its use for exploration as regards these types of deposits in this environment is dubious.

J.L. Wright
Senior Staff Geophysicist



Apparent Resistivity (ohm-m)

Chargeability (m-sec)

DATE June 21/21

LINE #1 BEARING N-S

SARRAN 10m

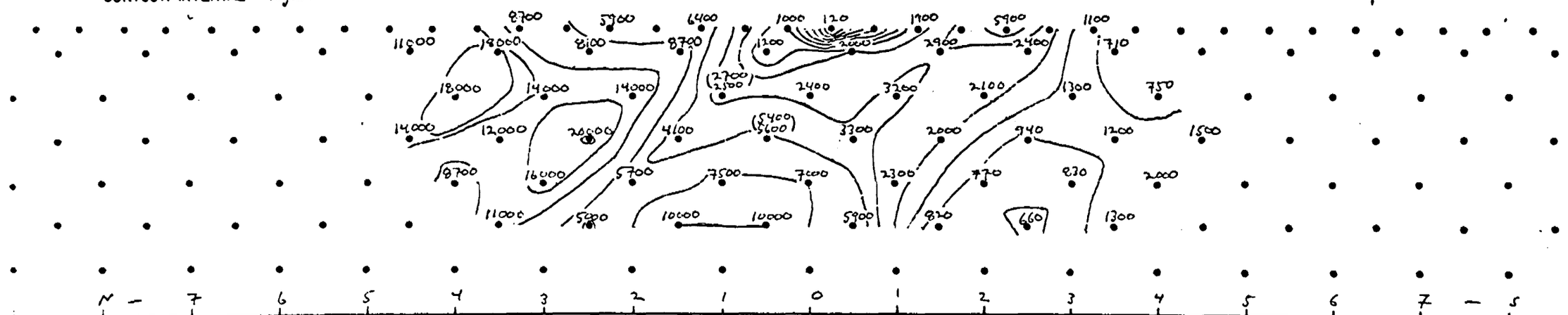
SULPETRO MINERALS LIMITED
TORONTO, CANADA

PROJECT 376

AREA Cadiz

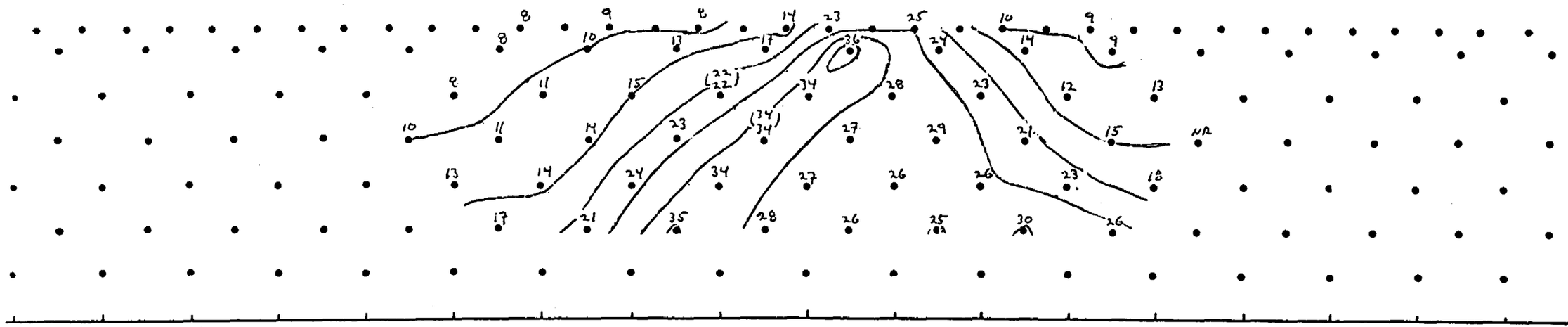
G-Zone

CONTOUR INTERVAL: logarithmic (ohm-m)



N — 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 — S

CONTOUR INTERVAL: 5 msec.



Apparent Resistivity (ohm-m)

Chargeability (m-sec)

DATE June 22/82

LINE SPREAD 10m INSPIRING N-S #2

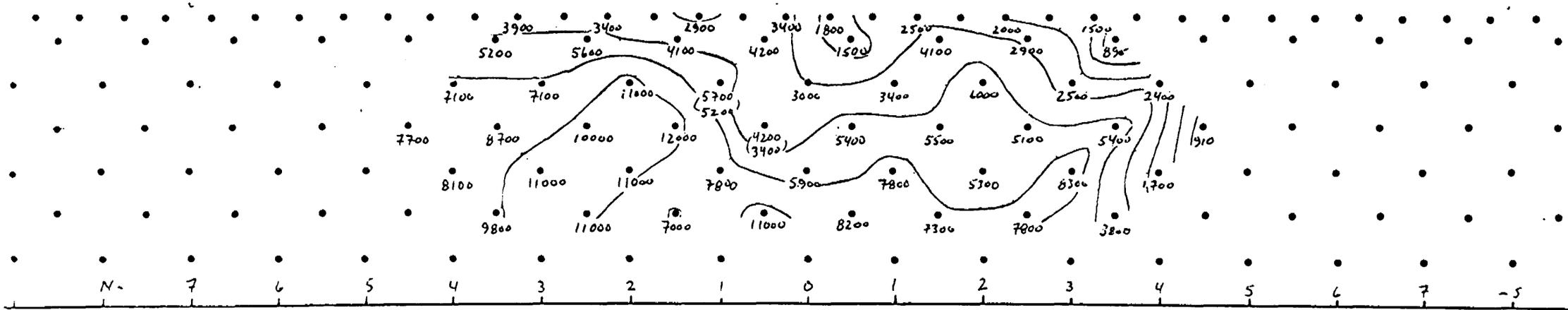
SULPETRO MINERALS LIMITED
TORONTO, CANADA

PROJECT 3186

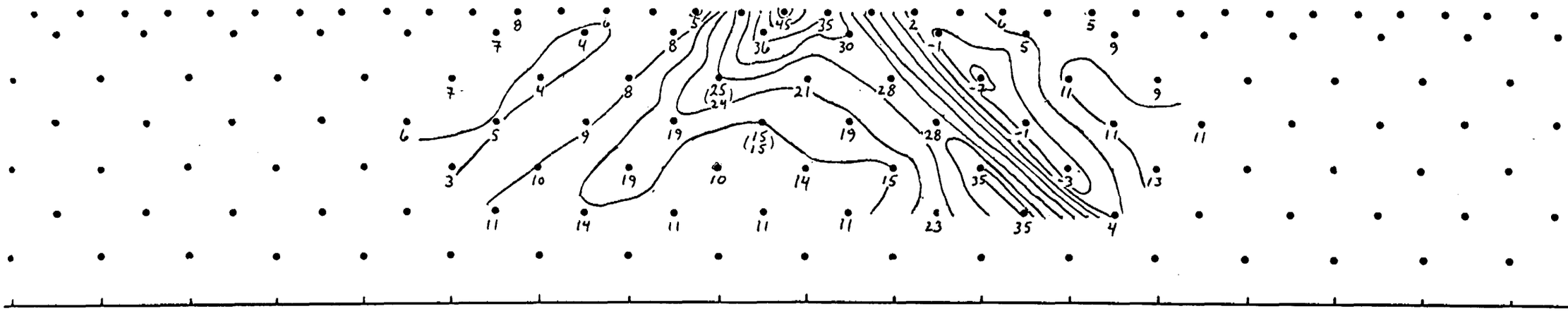
AREA Cotton

Road Zone

CONTOUR INTERVAL: Logarithmic (ω-m)



CONTOUR INTERVAL: 5 msec.



Apparent Resistivity (ohm-m)

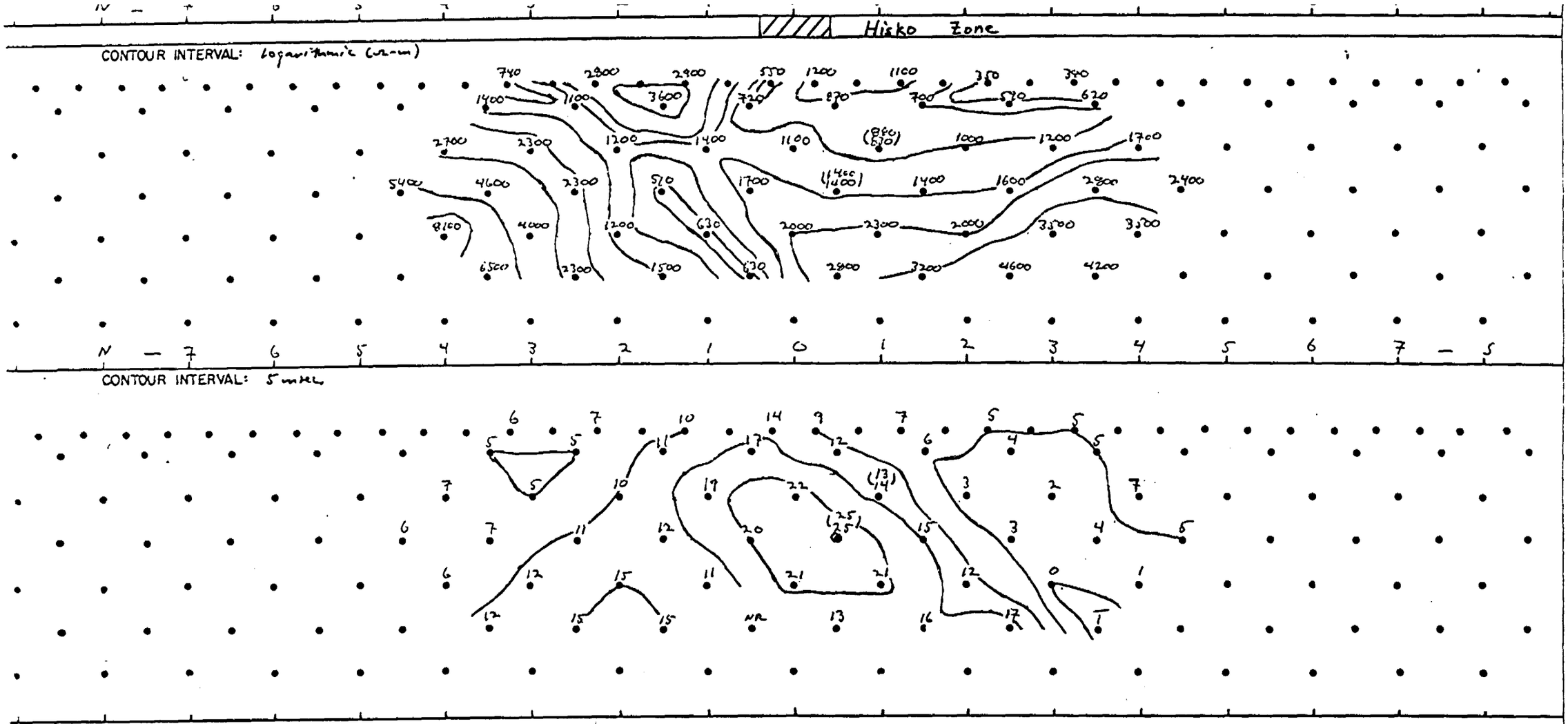
Chargeability (m-sec)

DATE 6/23/83

LINE #3

SPREAD - 10m, BEARING N-S

SULPETRO MINERALS LIMITED
TORONTO, CANADA
PROJECT 3196
AREA CADILLAC



SULPETRO MINERALS LIMITED
TORONTO, CANADA

PROJECT 3176.1

DATE June 21/82

SPREAD - Ion LINE #4 BEARING N-S

SHEETS in POCKET

Sheet 1 - Locations of Diamond Drill Holes and Stripped Areas

Sheet 2 - Swamp, Road and East Zones - Geology

Sheet 3 - Swamp, Road and East Zones - Detailed Assay Plan

Sheet 4 - Central Zone - Geology

Sheet 5A - East Grid - Zinc in Bedrock

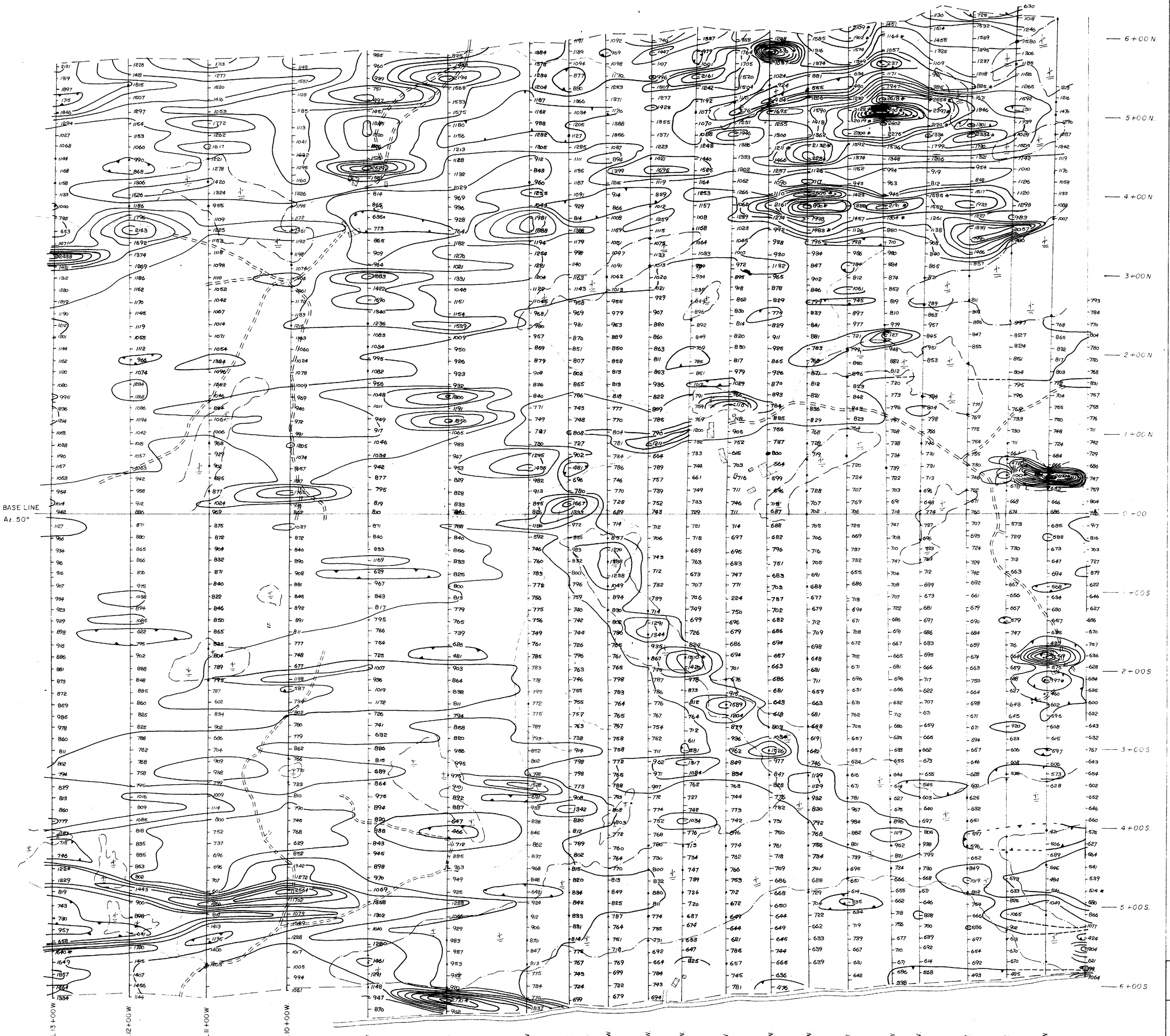
Sheet 5B - East Grid - Lead in Bedrock

Sheet 5C - East Grid - Cadmium in Bedrock

Sheet 6A - West Grid - Zinc in Bedrock

Sheet 6B - West Grid - Lead in Bedrock

Sheet 6C - West Grid - Cadmium in Bedrock



Instrumentation: Barringer GM-122 Magnetometer
Scintrex MBS-2 Base Station
Base Station Location: South-west point of Cedar Point Lodge property, Calabogie, Ontario
Base Station Value: 57760 gammas
Datum Subtracted: 57000 gammas
Line Spacing: 50 m.
Station Interval: 15 m.
Contour Interval: 200 gammas
* Forced Reading
Personnel: J.L. Wright, D.Ward
Survey Dates: June 7-9, 1983

LEGEND

152017 B horizon sampled

52019 A horizon sampled

Swamp

Building

Road

Track

Trail

ST. JOSEPH EXPLORATIONS LIMITED
TORONTO CANADA

ON 83-9-C-9

ADMASTON TOWNSHIP, E. ONTARIO
HISKO PROPERTY; CADIEUX PROPERTY WEST GRID

MAGNETOMETER SURVEY

SCALE 1 2000

APPROX. LAT. & LONG. OF LOWER RT. COR. OF SWG: LAT. 45°56' LONG. 76°58'

PROJECT NO. 3196-1, 3196

SHEET NO. 1 OF 1

REPORT NO. 31F/7

63.4244

L0+00 L0+50E L1+00E L1+50E L2+00E L2+50E L3+00E L3+50E L4+00E L4+50E L5+00E L5+50E L6+00E L6+50E L7+00E L7+50E L8+00E L8+50E L9+00E L9+50E L10+00E L10+50E L11+00E L11+50E L12+00E L12+50E L13+00E

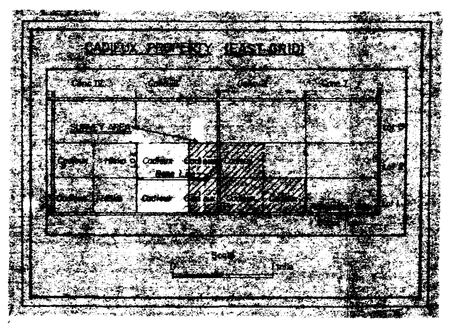
L15+00E L16+00E L17+00E L18+00E L19+00E L20+00E L21+00E

6+00 N. 5+00 N. 4+00 N 3+00 N. 2+00 N. 1+00 N. Base Line 0+00 (050°) 1+00 S. 2+00 S. 3+00 S. 4+00 S. 5+00 S. 6+00 S.

Instrumentation: Barringer GM-122 Magnetometer
Scintrex MBS-2 Base Station
Base Station Location: South-west point of Cedar Point Lodge property, Calabogie, Ontario
Base Station Value: 57760 gammas
Datum Subtracted: 57000 gammas
Line Spacing: 50 m.
Station Interval: 12.5 m.
Contour Interval: 200 gammas
F Forced Reading
Personnel: J.L. Wright, D.Ward
Survey Dates: June 11-15, 1983.

EXPLANATION

- Road
- Track, trail
- Swamp, stream
- Open field
- Power line
- Building
- Fence



OM83-9-C-9

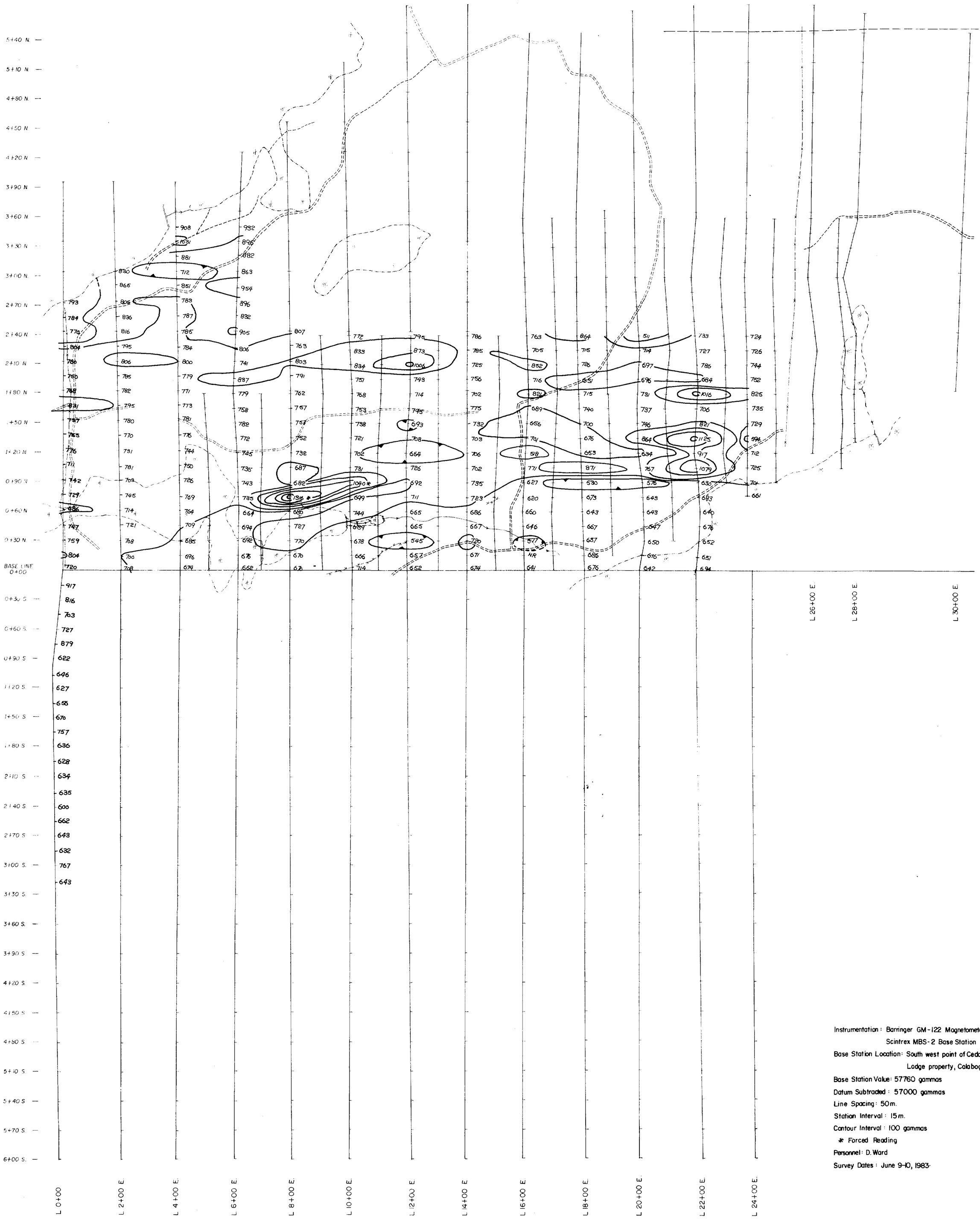
SULPETRO MINERALS LIMITED
CALGARY, CANADA

CADIEUX PROPERTY EAST, ADMASTON TWP, S.E. ONTARIO

MAGNETOMETER SURVEY

SCALE 1:2,000

BEARING AND DISTANCE OF LOWER LEFT COR. OF DWG.	PROJECT NO. 3196	SHEET NO.
LATITUDE	REPORT NO. 63-4244	OF
LONGITUDE		NTS 31F/7



Instrumentation: Barringer GM-122 Magnetometer
Scintrex MBS-2 Base Station
Base Station Location: South west point of Cedar Point Lodge property, Calabogie, Ontario
Base Station Value: 57760 gammas
Datum Subtracted: 57000 gammas
Line Spacing: 50m.
Station Interval: 15m.
Contour Interval: 100 gammas
* Forced Reading
Personnel: D. Ward
Survey Dates: June 9-10, 1983.

N

Alan Howe

SULPETRO MINERALS LIMITED
TORONTO CANADA

OM83-9-C-9

CADIEUX PROPERTY: Admaston Twp. S.E. Ontario

MAGNETOMETER SURVEY

SCALE 1:2,000

APPROX. LAT. & LONG. / POWER REF. FOR GRID
LATITUDE
LONGITUDE

PROJECT NO. 3196

REPORT NO. 63.4244

SHEET NO. ... OF ...

NTS 31F/7...

AREA No. 2

ROAD ZONE

LOWER EAST ZONE

(G-ZONE)
ELECTRODE ZONE

MIDDLE EAST ZONE

BUSH ROAD

AREA No. 1

EXPLANATION

8 GRANITIC ROCKS
- 929 d Diopside bearing pegmatite

6 MAFIC INTRUSIVE ROCKS
- 932 b Biotite amphibolite
- 932 c Amphibolite

4 PARAGNEISS
- 948 k Diopside-feldspar-biotite paragneiss

3 SILICATED DOLOMITIC MARBLES (>15% Silicates)
- 916 b Diopside ± tremolite marble
- 962 T Tremolite marble
- 916 bb Massive diopside
- 916 TT Massive tremolite
- 916 bc Quartz-diopside ± tremolite marble
- 916 c Quartz diopside tremolite rock
- 909 s Serpentine rock

2 DOLOMITE MARBLES
- 902 a White dolomitic marble ± minor phlogopite, pyrite (<2%)
- 902 t Dolomitic marble with fine tremolite actinolite needles

1 CALCITE MARBLES
- 917 a Coarse grained white calcite marble ± minor phlogopite, pyrite
- 917 d Dirty micaceous calcsilicate marble ± diopside ± tremolite ± pyrite ± amphibolite
- 917 p Pink coarse grained calcite marble
- 917 g Diopside ± quartz bearing calcite marble

ABBREVIATIONS
- hem Hematitic
- R Rusty weathering

MINERALIZATION
- Disseminated sphalerite ± pyrite ± galena
- Estimated > 2% Zinc

SYMBOLS
- Survey point
- Edge of stripped area
- Outcrop
- Geological contact: definite, assumed
- Schistosity, gneissosity, metamorphic layering
- Mineral stretching or lineation
- Boudins
- Slicken side
- Minor folding, style as shown
- Trench
- Channel sample: assay (>2% Zinc/2m.)
- Diamond drill hole

Mapping: A. Soever
Date: June - July 1983

Sampling: A. Soever, D. Windsor, R. Jackson
Date: June, July & October, 1983

N.B. S
1

5+40 N. —
5+10 N. —
4+80 N. —
4+50 N. —
4+20 N. —
3+90 N. —
3+60 N. —
3+30 N. —
3+00 N. —
2+70 N. —
2+40 N. —
2+10 N. —
1+80 N. —
1+50 N. —
1+20 N. —
0+90 N. —
0+60 N. —
0+30 N. —
BASE LINE 0+00 — 70 N.
0+30 S.
0+60 S.
0+90 S.
1+20 S.
70 S
I.P. No.4
1+50 S. —
1+80 S. —
2+10 S. —
2+40 S. —
2+70 S. —
3+00 S. —
3+30 S. —
3+60 S. —
3+90 S. —
4+20 S. —
4+50 S. —
4+80 S. —
5+10 S. —
5+40 S. —
5+70 S. —
6+00 S. —

1200 N.
1100 N.
1000 N.

S.P. No.9
0
30 S.

S.P. and I.P. lines in this area are shown on Sheet 1 - scale: 1:200

1800 E.
2000 E.
2200 E.

L 0+00
L 2+00 E.
L 4+00 E.
L 6+00 E.
L 8+00 E.
L 10+00 E.
L 12+00 E.
L 14+00 E.
L 16+00 E.
L 18+00 E.
L 20+00 E.
L 22+00 E.
L 24+00 E.
L 26+00 E.
L 28+00 E.
L 30+00 E.

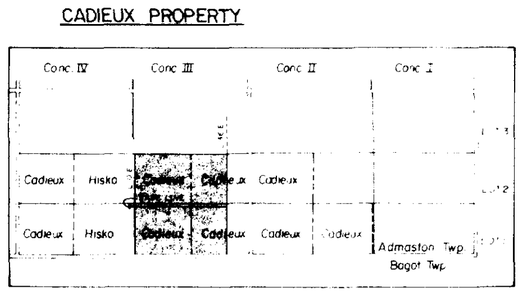
EXPLANATION

- Road
- Bush road, trail
- Swamp, beaver dam
- Stream
- Building
- New surveyed grid co-ordinate

BASE MAP	KUYPERS	Compiled from earlier base maps	13/04/83
BASE MAP	KUYPERS	Addition of more topographic features	10/02/84 No.1
GEOPHYSICS	KUYPERS	Line locations - 1983 Geophysical Surveys	22/02/84

Alan Sowa

CADIEUX PROPERTY



SULPETRO MINERALS LIMITED
TORONTO CANADA

OM 83-9-C-9

CADIEUX PROPERTY : Admaston Twp.
S.E. Ontario

Self Potential and Induced Polarization Line Location

SCALE 1:2,000

APPROX LAT & LONG OF LOWER RT COR OF GRID
° ' "
° ' " LATITUDE
° ' " LONGITUDE

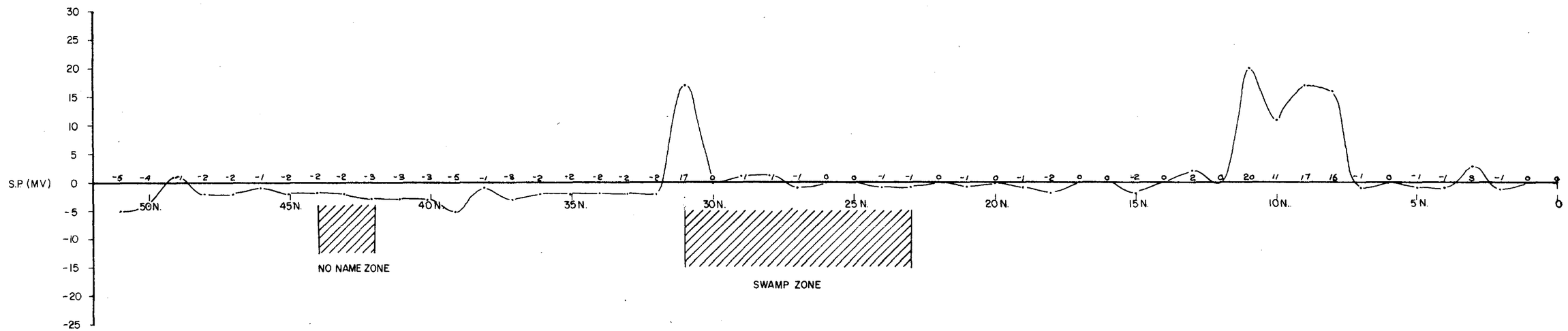
PROJECT NO. 3196

REPORT NO. 83-4244

SHEET NO. 2 OF 2

N.T.S. 31F/7

SELF POTENTIAL SURVEY



Instrumentation : Data Precision Digital Multimeter
Personnel : J.L. Wright, D. Ward
Survey Date : June 16, 1983

10 N : at 1FS 2

Alan Solven

SULPETRO MINERALS LIMITED
TORONTO. CANADA

ON 83-9-C-9

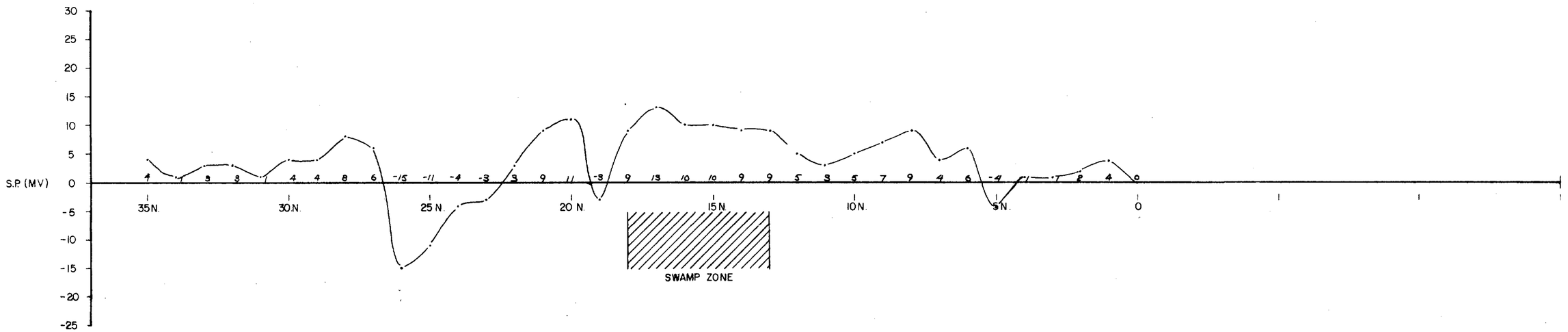
CADIEUX PROPERTY: Admaston Township S.E. Ontario

Self Potential Survey Line No: 1

SCALE 1:100

APPROX. LAT. & LONG OF LOWER RT COR OF DWG ° ' " LATITUDE ° ' " LONGITUDE	PROJECT NO 3196 REPORT NO. 83-4244	SHEET NO ___ OF ___ N.T.S. 31 F/7

SELF POTENTIAL SURVEY



STATIONS (METRES)

METRES 4 0 4 METRES

Instrumentation : Data Precision Digital Multimeter
Personnel : J.L. Wright, D. Ward
Survey Date : June 16, 1983.

27 N : 13 feet west of IFS 3

Alan Soucie

SULPETRO MINERALS LIMITED
TORONTO CANADA

OMB3-9-C-9

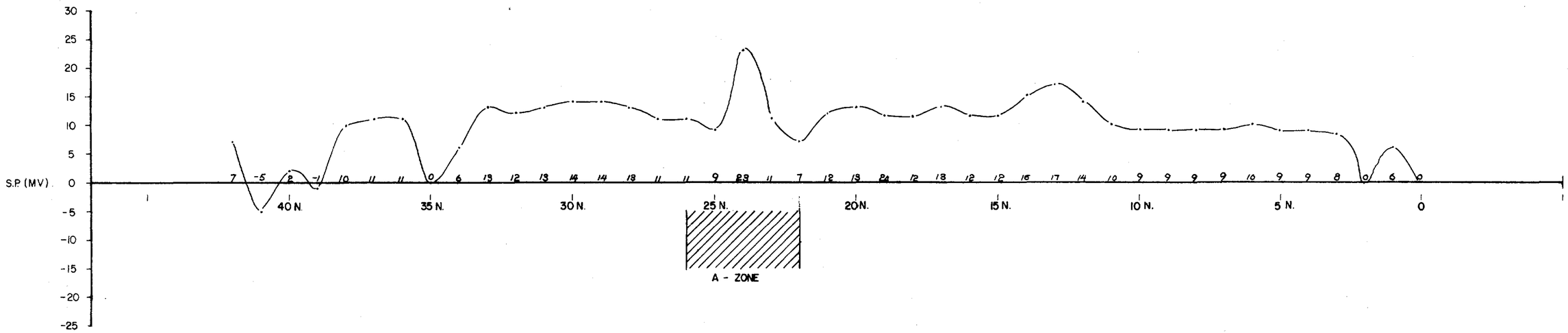
CADIEUX PROPERTY: Admaston Township S.E. Ontario

Self Potential Survey Line No: 2

SCALE 1:100

APPROX LAT & LONG OF LOWER RT COR OF DWG ° ' " LATITUDE LONGITUDE	PROJECT NO 3196 REPORT NO 63-4244	SHEET NO. OF NTS 31 F/7

SELF POTENTIAL SURVEY



STATIONS (METRES)

METRES 4 0 4 METRES

Instrumentation : Data Precision Digital Multimeter
Personnel : J.L. Wright, D. Ward
Survey Date : June 16, 1983.

42 N: 10 feet east of F 59

Alan Soever

SULPETRO MINERALS LIMITED
TORONTO, CANADA

CADIEUX PROPERTY: Admaston Township S.E. Ontario

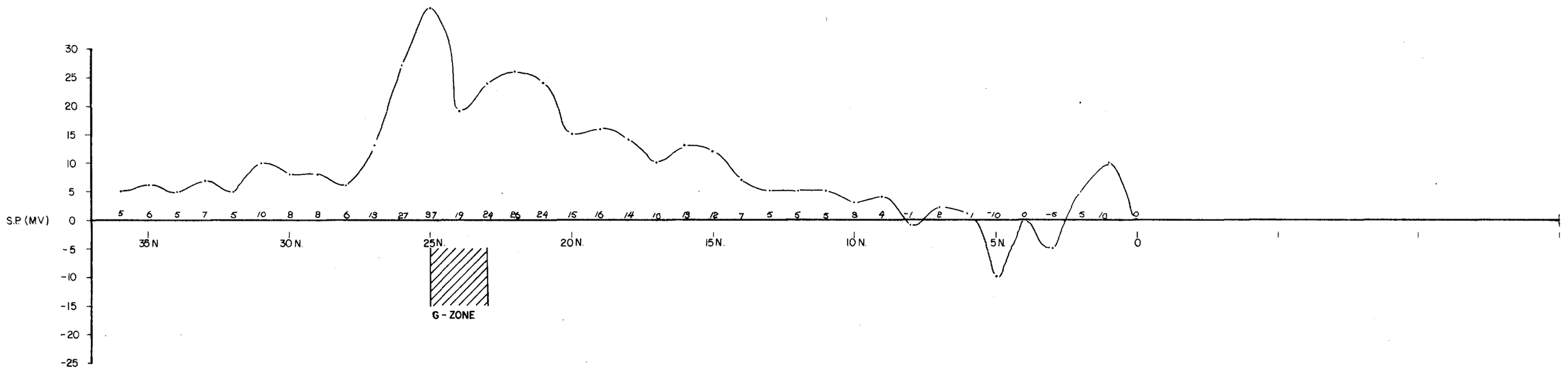
Self Potential Survey Line No: 3

SCALE: 1:100

OM82-9-C-16

APPROX. LAT. & LONG. OF LOWER RT. COR. OF DWG. ° ' " LATITUDE ° ' " LONGITUDE	PROJECT NO. 3196	SHEET NO. ___ OF ___
	REPORT NO. 63.4244	N.T.S. 31 F/7

SELF POTENTIAL SURVEY



STATIONS (METRES)

METRES 4 0 4 METRES

Instrumentation : Data Preasion Digital Multimeter
Personnel : J.L. Wright, D. Ward
Survey Date : June 16, 1983

23 N : 20 feet west of IFS 5

Alan Soever

SULPETRO MINERALS LIMITED
TORONTO. CANADA

OMB3-9-C-9

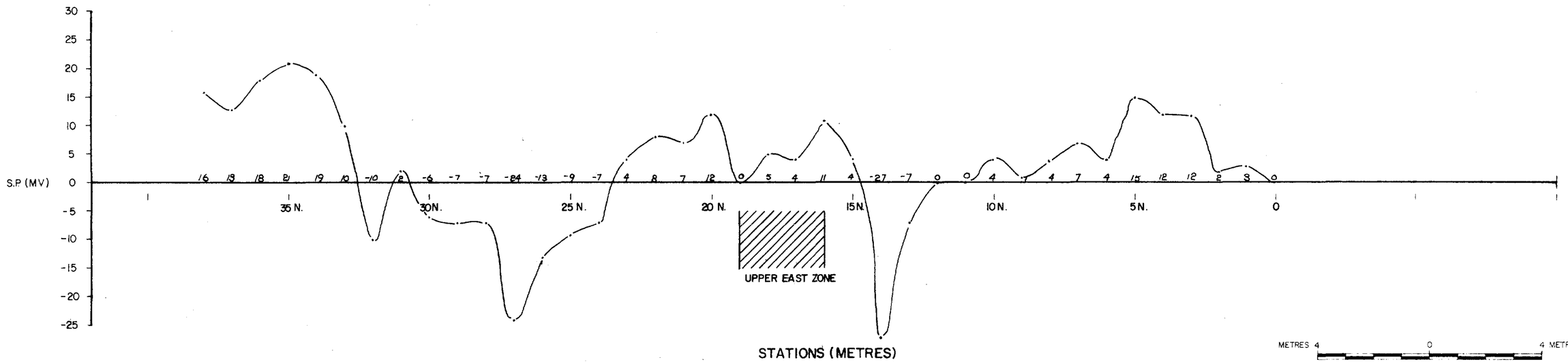
CADIEUX PROPERTY: Admaston Township S.E. Ontario

Self Potential Survey Line No: 4

SCALE: 1:100

APPROX LAT. & LONG OF LOWER RT COR OF DWG ° ' " LATITUDE ° ' " LONGITUDE	PROJECT NO. 3196 REPORT NO. 63-4244	SHEET NO. ___ OF ___ N.T.S. 31 F/7

SELF POTENTIAL SURVEY



METRES 4 0 4 METRES

Instrumentation : Data Precision Digital Multimeter
Personnel : J.L. Wright, D. Ward
Survey Date : June 16, 1983

19 N. : 12 feet west of FS 10

Alan Soucy

SULPETRO MINERALS LIMITED
TORONTO, CANADA

OMB3-9-C-9

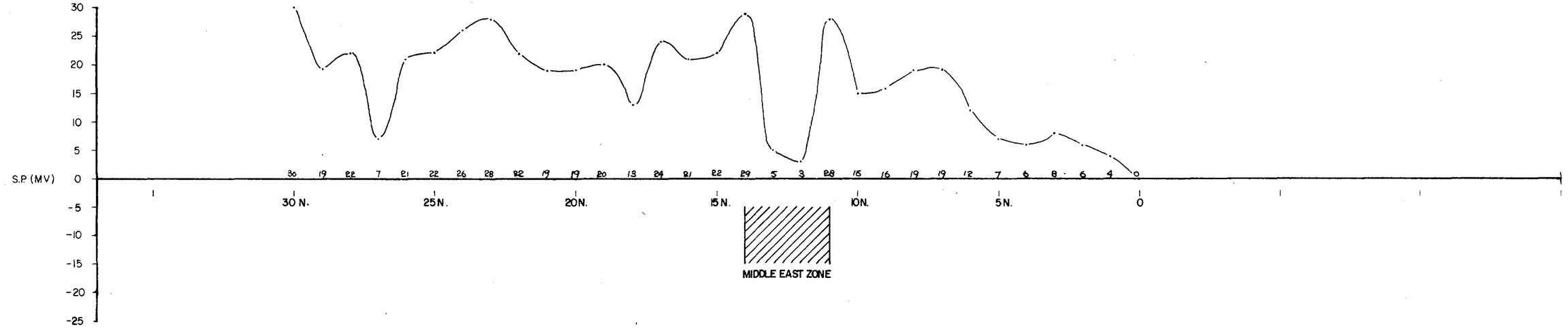
CADIEUX PROPERTY, Admaston Township S.E. Ontario

Self Potential Survey Line No: 5

SCALE: 1:100

APPROX LAT. & LONG OF LOWER RT COR OF DWG ° ' " __° __' __" LATITUDE __° __' __" LONGITUDE	PROJECT NO 3196 REPORT NO 63.4244	SHEET NO __ OF __ NTS 31 F /7

SELF POTENTIAL SURVEY



STATIONS (METRES)

METRES 4 0 4 METRES

Instrumentation : Data Precision Digital Multimeter
Personnel : J.L. Wright, D. Ward
Survey Date : June 16, 1983.

18 N: 0·5 metres east of IFS 9

Alan Sower

SULPETRO MINERALS LIMITED
TORONTO, CANADA

OM83-9-C-9

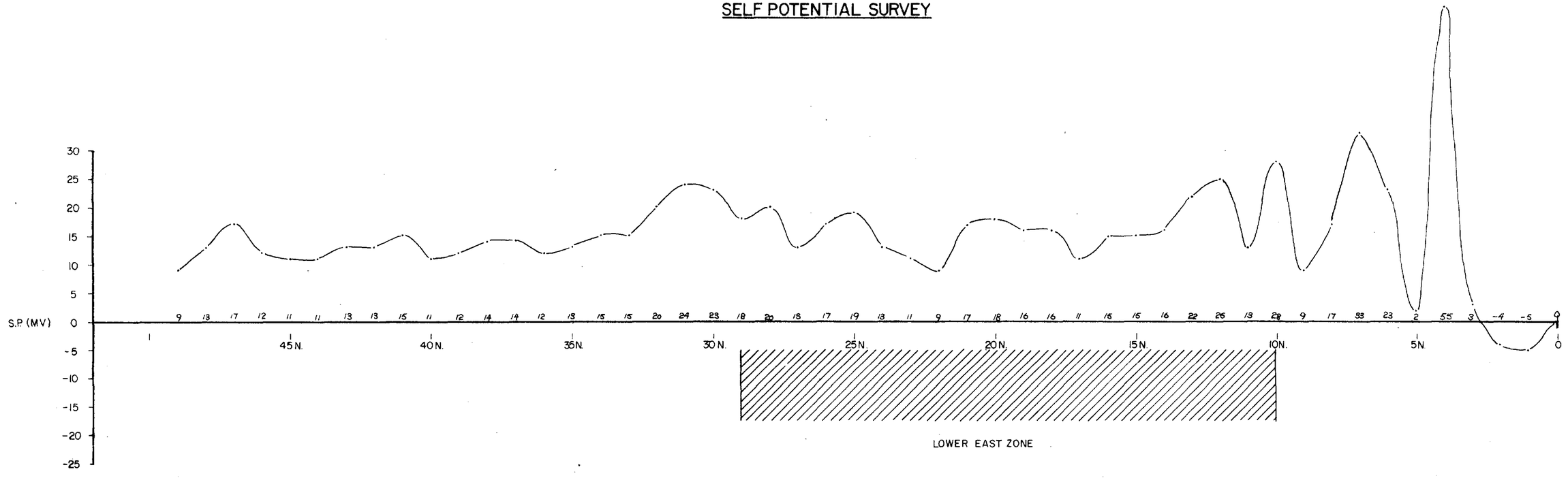
CADIEUX PROPERTY: Admaston Township S.E. Ontario

Self Potential Survey Line No: 6

SCALE: 1:100

APPROX LAT & LONG OF LOWER RT COR OF DWG. ° ' " LATITUDE ° ' " LONGITUDE	PROJECT NO. 3196	SHEET NO. OF
	REPORT NO. 83.424	N.T.S. 31 F/7

SELF POTENTIAL SURVEY



STATIONS (METRES)

METRES 4 0 4 METRES

Instrumentation : Data Precision Digital Multimeter
Personnel : J.L. Wright, D. Ward
Survey Date : June 16, 1983

O-BASE : at IFS 10

Alan Soever

SULPETRO MINERALS LIMITED
TORONTO, CANADA

OM83-9-C-9

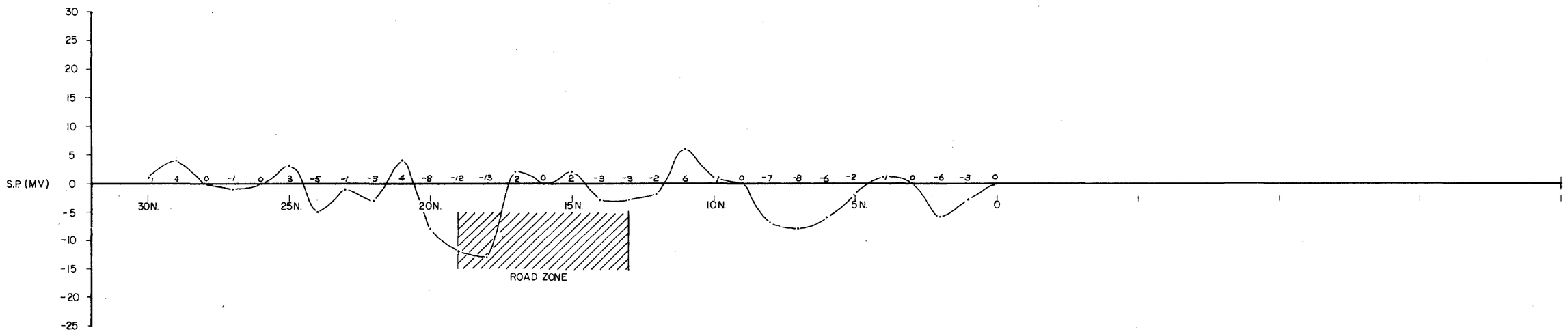
CADIEUX PROPERTY: Admaston Township S.E. Ontario

Self Potential Survey Line No: 7

SCALE: 1:100

APPROX LAT & LONG OF LOWER RT COR OF DWG ° ' " —°— LATITUDE — — LONGITUDE	PROJECT NO 3196 REPORT NO 63.4244	SHEET NO OF NTS 31 F/7

SELF POTENTIAL SURVEY



STATIONS (METRES)

METRES 4 0 4 METRES

Instrumentation : Data Precision Digital Multimeter
Personnel : J.L. Wright, D. Ward
Survey Date : June 16, 1983

65 N : at FS 15

Alan Bowes

SULPETRO MINERALS LIMITED
TORONTO, CANADA

OM 83-9-C-9

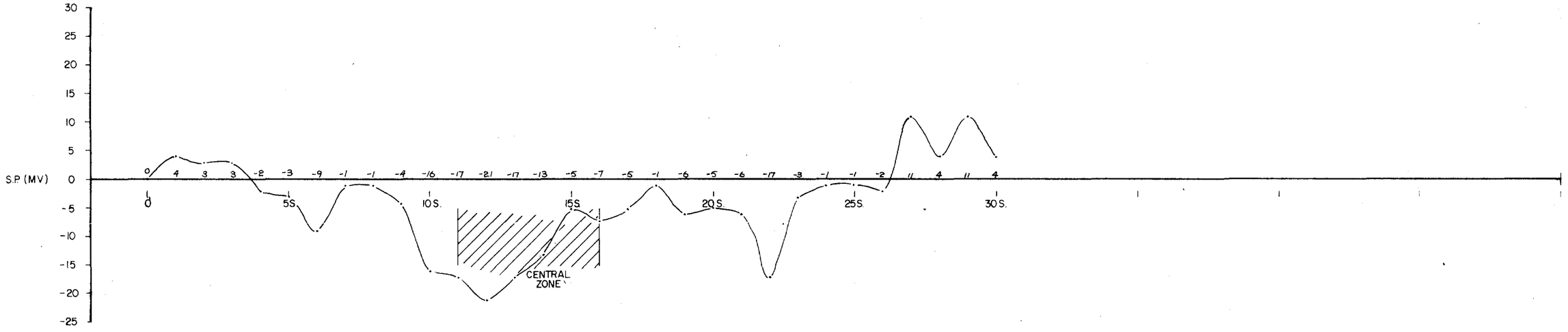
CADIEUX PROPERTY: Admaston Township
S.E. Ontario

Self Potential Survey Line No: 8

SCALE 1:100

APPROX LAT & LONG OF LOWER RT COR OF DWG ° ' " ___ ° ___ ' ___ " LATITUDE ___ ___ ___ LONGITUDE	PROJECT NO 3196 REPORT NO 63.4244	SHEET NO ___ OF ___ N.T.S. 31 F/7

SELF POTENTIAL SURVEY



STATIONS (METRES)

METRES 4 0 4 METRES

Instrumentation : Data Precision Digital Multimeter
Personnel : J.L. Wright, D. Ward
Survey Date : June 16, 1983

14 S: at drill-casing

Alan Sowa

SULPETRO MINERALS LIMITED
TORONTO, CANADA

OM83-9-c

CADIEUX PROPERTY Admaston Township S.E. Ontario

Self Potential Survey Line No: 9

SCALE 1:100

APPROX LAT & LONG OF LOWER RT. COR. OF DWG. ° ' " LATITUDE ° ' " LONGITUDE	PROJECT NO 3196	SHEET NO. ___ OF ___
	REPORT NO 63.4244	NTS 31 F /7

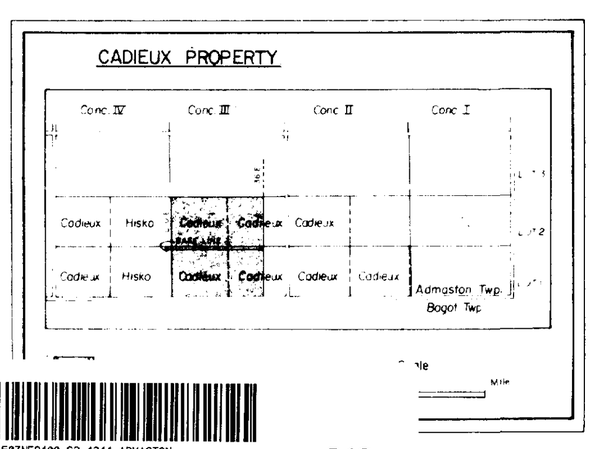
Stripped Area

SJ-28 Diamond drill hole 1983

Compiled by: A. Soever and D. Windsor
January, 1984.

EXPLANATION

- Road
- Bush road, trail
- Swamp, beaver dam
- Stream
- Building
- New surveyed grid co-ordinate



REVISION, RECORD & STATUS

				REVISION NO.
BASE MAP	KUYPERS	Compiled from earlier base maps	13/04/83	
BASE MAP	KUYPERS	Addition of more topographic features	10/02/84	No. 1
COMPILATION	KUYPERS	Location of 1983 Drilling and Detail Mapping	10/02/84	

Ola Soever

SULPETRO MINERALS LIMITED
TORONTO CANADA

OM83-9-C-9

CADIEUX PROPERTY: Admaston Twp. S.E. Ontario

LOCATION OF STIPPED AREAS & DIAMOND DRILL HOLES

SCALE 1:2,000

APPROX LAT & LONG OF LOWER R.H. COR. OF DWG
° ' " LATITUDE
° ' " LONGITUDE

PROJECT NO. 3196

REPORT NO. 63-4244

SHEET NO. 1 OF 6

NTS 31F/7

AREA No. 2

ROAD ZONE

LOWER EAST ZONE

ELECTRODE ZONE

MIDDLE EAST ZONE

AREA No. 1

BUSH ROAD

EXPLANATION

8 GRANITIC ROCKS
- d Diopside bearing pegmatite

6 MAFIC INTRUSIVE ROCKS
- b biotite amphibolite
- c Amphibolite

4 PARAGNEISS
- k Diopside feldspar biotite paragneiss

3 SILICATED DOLOMITIC MARBLES (>15% Silicates)
- b Diopside ± tremolite marble
- T Tremolite marble
- bb Massive diopside
- TT Massive tremolite
- bc Quartz diopside ± tremolite marbe
- c Quartz diopside tremolite rock
- s Serpentine rock

2 DOLOMITE MARBLES
- a White dolomitic marble ± minor phlogopite, pyrite (<2%)
- f Dolomitic marble with fine tremolite actinolite needles

1 CALCITE MARBLES
- a Coarse grained white calcitic marble ± minor phlogopite, pyrite
- d Early micaceous calcsilicate marble ± diopside ± tremolite ± pyrite ± amphibolite
- p Pale coarse grained calcite marble
- g Diopside ± quartz bearing calcite marble

ABBREVIATIONS
- hem Hematitic
- R Rusty weathering

MINERALIZATION
- Disseminated sphalerite ± pyrite ± galena
- Estimated >2% Zinc

SYMBOLS
- Survey point
- Edge of stripped area
- Outcrop
- Geological contact definite, assumed
- Schistosity, gneissosity, metamorphic layering
- Mineral stretching or lineation
- Boudins
- Slicken side
- Minor folding, style as shown
- Trench
- Channel sample assay (>2% Zinc/2m)
- Diamond drill hole
- Sheared zone
- Early phase synform
- Early phase antiform
- Late phase synform

Mapping: A.Soever
Date: June, July 1983

Sampling: A. Soever, D.Windsor, R.Jackson
Date: June, July & October, 1983

Interpretation: A.Soever
Date: February 1984

31F07NE9400 63.4244 ADMASTON

AREA No. 2

1200 N.

2000 E.

2050 E.

2100 E.

ROAD ZONE

LOWER EAST ZONE

ELECTRODE ZONE

MIDDLE EAST ZONE

1150 N.

1100 N.

1050 N.

BUSH ROAD

C-36

m	% Zn	% Pb
0.55	9.80	0.018
0.30	2.96	0.018
0.30	11.0	0.016
0.21	1.60	0.104
0.37	7.20	0.076
0.22	3.17	0.24
0.68	7.70	0.05

C-34

m	% Zn	% Pb
0.46	0.22	0.004
1.00	0.30	0.010
0.75	11.4	0.010
0.54	4.00	0.012
0.08	2.40	0.008

C-39

m	% Zn	% Pb
0.56	0.83	0.010
0.37	0.67	0.008
0.73	0.73	0.006
0.87	0.96	0.006
0.56	1.40	0.010

C-33

m	% Zn	% Pb
0.95	1.40	0.006
0.60	2.76	0.004
0.41	1.35	0.008
0.52	1.06	0.006

C-37

m	% Zn	% Pb
0.37	0.51	0.040
0.42	5.37	0.42
0.47	1.96	0.012
0.43	1.16	0.048
0.20	9.40	1.12
0.65	3.04	0.090
0.72	0.68	1.68
0.68	2.60	0.40
0.70	4.20	0.020
0.66	2.90	0.060
0.21	2.76	0.020
0.81	1.40	0.014
0.49	2.00	0.006

C-35

m	% Zn	% Pb
0.25	0.62	0.014
0.14	4.04	0.008
0.72	1.76	0.014
0.36	9.56	0.024
0.84	9.56	0.014
0.57	1.48	0.116

2.87% Pb, 9.31% Zn
2.54m

0.97% Pb, 4.21% Zn
1.74m

0.58% Pb, 3.56% Zn
1.74m

3.89% Zn
2.13m

6.66% Zn
1.87m

0.77% Zn
3.05m

1.69% Zn
1.50m

0.26% Pb, 2.40% Zn
2.82m

FS 14

FS 15

FS 13

C-30

4.32% Zn
4.50m

4.22% Zn
2.85m

or 2.91% Zn
7.20m

4.62% Zn
3.45m

2.5% Zn
0.46m

5.11% Zn
5.75m

3.84% Zn
1.23m

5.35% Zn
2.27m

3.70% Zn
1.07m

2.77% Zn
2.22m

4.83% Zn
2.0m

1.29% Zn
5.63m

5.39% Zn
54m

3.56% Zn
5.15m

3.08% Zn
1.04m

2.44% Zn
3.56m

4.65% Zn
3.00m

3.65% Zn
6.72m

C-13, C-20

4.08% Zn
4.47m

0.78% Pb, 5.45% Zn
2.23m

8.90% Zn
2.49m

6.31% Zn
1.06m

3.7% Zn
21.4m

1.10% Zn
1.4m

5.89% Zn
99m

5.49% Zn
2.51m

5.03% Zn
2.62m

0.27% Zn
1.92m

or 4.66% Zn
2.98m

1.32% Zn
0.42m

FS 8

FS 12

FS 10

FS 9

FS 11

FS 6

FS 7

C-25

m	% Zn	% Pb
0.23	2.16	0.134
0.63	1.33	0.068
0.54	0.57	0.008
0.15	0.48	0.006
0.40	3.32	0.004
0.55	3.72	0.044
0.40	0.93	0.006
0.29	0.86	0.044
0.40	2.40	0.048
0.47	2.80	0.160
0.20	4.64	0.092
0.17	–	–
0.43	0.66	0.006
0.95	1.24	0.008

C-23

m	% Zn	% Pb
0.60	0.63	0.006
0.28	0.23	0.006
0.82	0.70	0.009
0.20	0.28	0.006
0.75	0.056	0.432
0.28	0.28	0.014
0.35	0.42	0.008
0.25	1.00	0.020
0.70	6.64	0.020
0.80	4.76	0.008
0.51	2.48	0.006
0.19	1.03	0.006
0.47	0.58	0.006
0.31	1.28	0.008
0.71	2.90	0.026
0.39	3.00	0.020
0.29	1.72	0.026
0.50	3.56	0.006
0.26	3.56	0.009
0.78	3.96	0.007
0.70	0.92	0.009
0.00	4.40	0.008
0.23	1.04	0.010
0.43	1.68	0.006
0.61	4.28	0.008
0.45	3.80	0.007
0.49	0.76	0.007
0.31	2.16	0.006
0.31	6.70	0.006
0.32	0.77	0.010
0.39	1.72	0.007
1.05	0.64	0.008
0.50	1.20	0.015
0.15	–	–
0.43	0.54	0.006
0.47	4.56	0.006
1.25	2.72	0.038
0.75	1.84	0.406
0.65	0.67	0.008
0.48	3.04	0.008
0.62	1.72	0.028
0.73	1.56	0.008
1.32	0.73	0.016
0.51	0.14	0.016

C-21

m	% Zn	% Pb
0.90	2.44	0.007
0.65	0.32	0.005
0.70	5.96	0.007
0.85	8.40	0.009
0.55	3.80	0.010
0.57	3.48	0.006
0.51	2.88	0.008
0.88	9.56	0.008
1.02	9.56	0.008
0.85	5.24	0.008

C-50

m	% Zn	% Pb
0.60	1.20	0.006
0.54	8.04	0.008
0.25	–	–
0.23	1.27	0.006
0.15	2.68	0.196
0.20	9.52	0.010
0.19	1.52	0.010
0.62	3.88	0.012
0.35	1.28	0.012
0.45	0.94	0.010
0.95	5.49	0.008

C-28

m	% Zn	% Pb
0.53	0.63	0.014
0.0	3.30	0.008
0.70	5.88	0.008
0.5	1.12	0.008
0.9	2.72	0.008
1.7	–	–
0.58	2.12	0.010
0.66	1.64	0.006
0.57	1.48	0.010
0.56	2.76	0.006
0.87	1.72	0.016
0.56	1.34	0.014
0.85	0.14	0.006
0.7	0.21	0.014
0.45	0.20	0.014
0.45	1.96	0.004
0.75	0.58	0.004
0.78	2.16	0.008
0.44	3.96	0.008
0.59	0.41	0.006
0.9	4.96	0.008
0.49	0.80	0.008
0.77	4.76	0.018
0.49	0.90	0.014

C-24

m	% Zn	% Pb
0.76	1.04	0.006
0.56	3.84	0.114
0.06	1.12	0.004
0.46	3.74	0.014
1.7	7.44	0.006
0.45	0.96	0.018
0.82	1.96	0.010
0.47	0.78	0.010
0.12	4.76	0.010
0.40	1.27	0.010
0.76	2.64	0.012
0.5	2.64	0.012
0.64	0.84	0.018
0.74	0.70	0.014
0.60	0.83	0.014
0.56	0.88	0.004
0.19	0.67	0.007
0.13	1.04	0.006
0.61	1.00	0.007
0.19	0.67	0.008
0.82	0.96	0.008

C-27

m	% Zn	% Pb
0.56	0.80	0.008
0.91	1.56	0.006
0.55	1.36	0.006
0.70	5.52	0.008
0.46	8.48	0.008
0.55	3.24	0.008
0.89	9.72	0.010
1.05	9.56	0.010

C-31

m	% Zn	% Pb
0.42	1.00	0.008
0.30	1.40	0.010
0.39	2.24	0.010
0.24	9.08	0.008
0.14	1.56	0.048
0.42	4.92	0.014
0.74	8.56	0.018
0.38	9.64	0.016
0.37	1.50	0.012

C-26

m	% Zn	% Pb
1.00	3.24	0.006
1.00	1.06	0.008
1.00	4.20	0.010
1.00	3.90	0.012
0.46	4.64	0.006
0.65	2.44	0.010
0.75	2.56	0.012
1.10	1.28	0.004
1.42	0.96	0.006

C-32

m	% Zn	% Pb
0.71	1.30	0.010
0.56	1.50	0.014
1.01	2.34	0.012
0.42	0.49	0.008
0.22	2.76	0.020
0.88	0.43	0.006

C-41

m	% Zn	% Pb
0.88	0.42	0.004
0.22	9.36	Trace
1.16	9.10	0.004

C-12

m	% Zn	% Pb
0.42	1.50	0.008
0.53	3.36	0.008
0.52	4.48	0.008
0.28	1.40	0.008
0.14	4.06	0.008
1.1	2.48	0.008
0.4	5.96	0.008
0.5	1.68	0.004
0.12	10.8	0.008
1.10	1.72	0.016
0.34	2.52	0.014
0.38	0.42	0.009

C-16

m	% Zn	% Pb
0.18	1.45	0.012
0.42	18.2	0.040
0.30	3.64	0.010
0.36	10.6	0.008
0.14	9.45	0.010
0.44	9.66	0.018
0.82	11.8	0.274

C-11, C-17

m	% Zn	% Pb
1.65	11.80	0.024
1.0	4.96	0.006
0.34	1.46	0.010
0.45	8.56	0.006
1.20	2.36	0.010

C-15

m	% Zn	% Pb
0.60	0.16	0.016
0.59	4.04	0.008
0.25	12.3	0.012
0.40	11.0	0.008
1.04	1.16	0.092

C-18

m	% Zn	% Pb
0.46	1.80	0.012
0.68	6.11	0.016
0.55	6.16	0.012
0.24	2.46	0.010
0.49	1.01	0.006
1.21	1.64	0.040
0.67	2.64	0.106

C-10

m	% Zn	% Pb
0.26	0.24	0.004
0.79	2.30	0.004
0.38	0.64	0.004
0.76	1.32	0.004
0.50	0.24	0.008

C-3, 20

m	% Zn	% Pb
0.71	2.42	0.014
0.96	4.10	0.012
1.62	2.85	0.007
0.90	2.04	0.010
1.81	2.72	0.007
0.42	4.67	0.005
0.36	6.04	0.005
0.14	4.84	0.005
0.85	2.56	0.007
0.20	0.50	0.004
0.46	9.56	0.006
0.24	1.29	0.006
0.57	6.00	0.005
0.69	2.59	0.006
0.49	0.13	0.002
0.05	–	–
0.16	1.86	0.002
0.24	1.62	0.002
0.82	0.44	0.002
0.36	0.11	0.002
0.25	–	–
0.50	< .26	0.002
0.17	< .41	0.006

C-14, 19

m	% Zn	% Pb
0.54	0.49	0.002
0.26	0.36	0.003
0.20	0.48	0.002
0.20	2.37	0.007
0.04	–	–
0.45	3.82	0.007
0.26	21	0.006
1.31	0.42	0.002
0.84	3.10	0.002
0.96	0.10	0.002
1.1	4.88	4.13
0.42	1.25	0.15
0.85	0.98	1.37
0.59	0.74	0.030

C-22

m	% Zn	% Pb
0.45	0.52	0.002

C-8

m	% Zn	% Pb
2.00	0.22	0.002
1.15	3.12	0.003
1.00	1.06	0.003

EXPLANATION

- Survey point
- Edge of stripped area
- Outcrop
- Disseminated sphalerite ± pyrite ± galena
- Estimated > 2% Zinc
- A: < 1% Zinc
- B: 1 - 4% Zinc
- C: 4 - 9% Zinc
- D: > 9% Zinc
- Channel sample
- C-24: Reference number
- Assay average

Mapping: A. Soever
Date: June - July, 1983

Sampling: A. Soever, D. Windsor, R. Jackson
Date: June, July & October, 1983

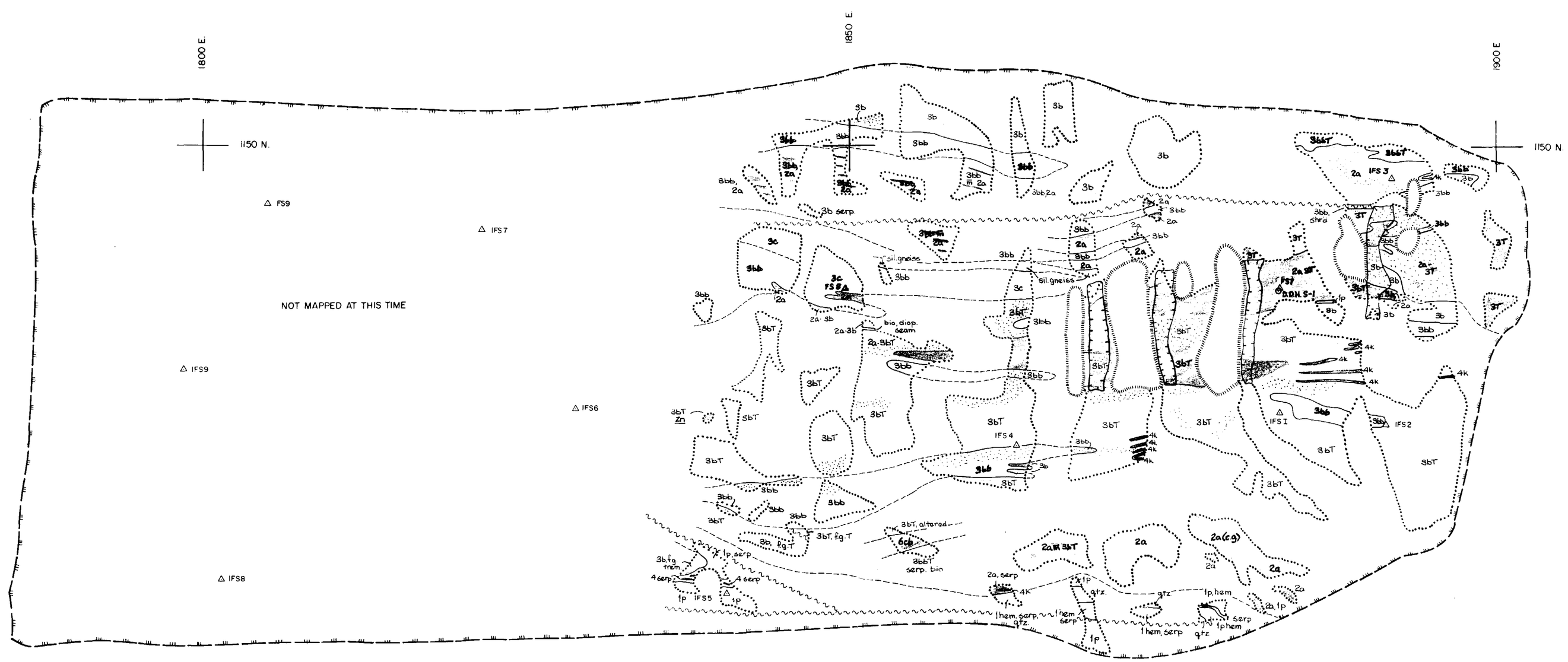
SAMPLING KUYPERS 1983 Detail M

1000 E.

2050 E.

2100 E.

AREA No. 3



EXPLANATION

8 GRANITIC ROCKS
- 929 d Diopside bearing pegmatite

6 MAFIC INTRUSIVE ROCKS
- 932 b Biotite amphibolite
- 932 c Amphibolite

4 PARAGNEISS
- 948 k Diopside - feldspar - biotite paragneiss

3 SILICATED DOLOMITIC MARBLES (>15% Silicates)
- 910 b Diopside ± tremolite marble
- 962 T Tremolite marble
- 916 bb Massive diopside
- 916 TT Massive tremolite
- 916 bc Quartz - diopside ± tremolite marble
- 916 c Quartz diopside tremolite rock
- 909 s Serpentine rock

2 DOLOMITE MARBLES
- 902 a White dolomitic marble ± minor phlogopite, pyrite (<2%)
- 902 t Dolomitic marble with fine tremolite actinolite needles

1 CALCITE MARBLES
- 917 a Coarse grained white calcite marble ± minor phlogopite, pyrite
- 917 d Dirty micaceous calcsilicate marble ± diopside ± tremolite ± pyrite ± amphibolite
- 917 p Pink coarse grained calcite marble
- 917 g Diopside ± quartz bearing calcite marble

ABBREVIATIONS

hem	Hematite	R	Rusty weathering
serp	Serpentine	trem	Tremolite
qtz	Quartz	sil	Siliceous
f.g.	Fine grained	c.g.	Coarse grained

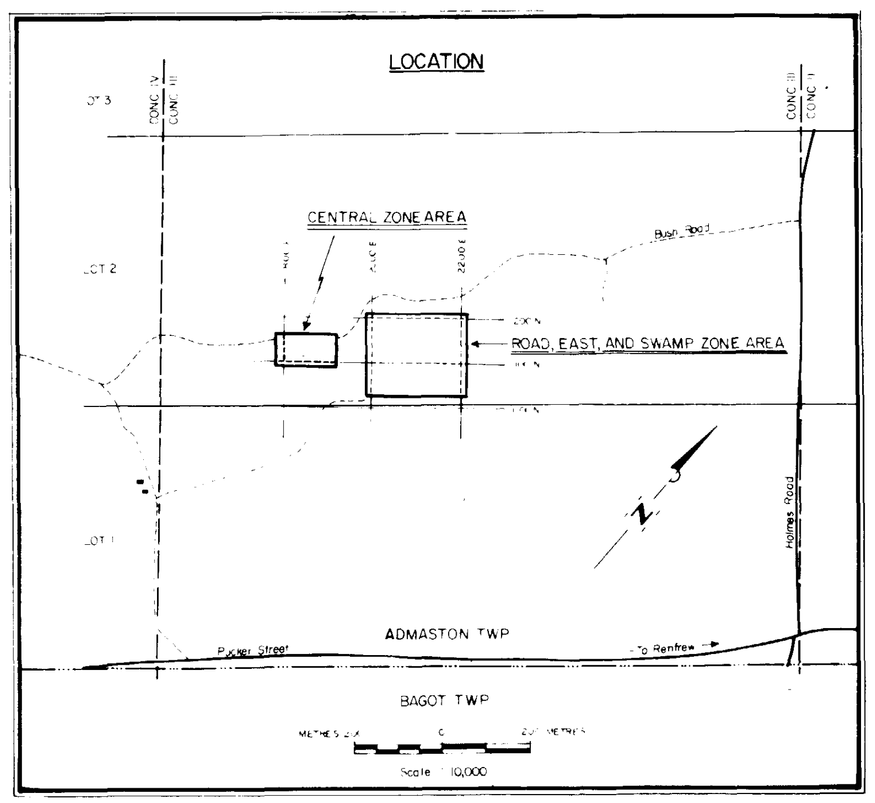
MINERALIZATION

▨ Disseminated sphalerite ± pyrite ± galena
▨ Estimated > 2% Zinc

SYMBOLS

△ Survey point
Edge of stripped area
Outcrop
Geological contact definite, assumed
Trench
Sheared zone
○ Diamond drill hole
Rubble

Mapping: A. Soever
Date: October 1983



31F07NE9400 63.4244 ADMASTON

370

GEOLOGY KUYPERS 1983 Detailed Mapping 13/01/84

Alan Soever

SULPETRO MINERALS LIMITED

OM83-9-C-9

CADIEUX PROPERTY Admaston Twp
S.E. Ontario

CENTRAL ZONE

GEOLOGY

1:200

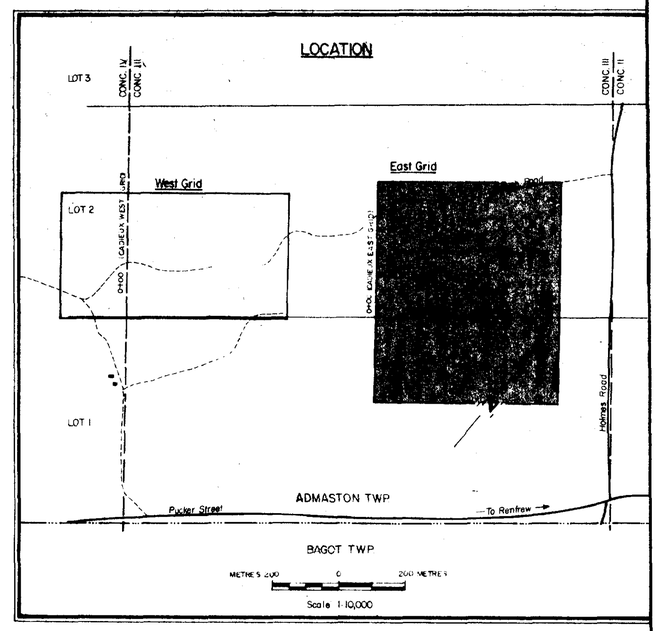
AREA 3

3196

4 6

63-4244

31 F/7



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(35) (40) (28)
(44) (26) (52, 25)
(42) (38) (40)
(78) (28) (53)
(189) (37)

4+50 E.
5+00 E.
BASE LINE.

Sample Type: Bedrock and/or glacial till
Sample Preparation: Bedrock pulverized to -150*
Till sieved to -80*
Analysis: Pb, Zn, Cd by HCl-HNO_3 digestion/atomic absorption determination
Laboratory: Bondar-Clegg and Co., Ltd.
Field Personnel: R.Jackson, L.Sloliker, M.Wallace
Survey Dates: May 25 - June 12, 1983
October 14 - 20, 1983

Sample Series: 189000

bedrock sample 400
glacial till sample (404)

ZINC

10,000 p.p.m.
1,000 p.p.m.
500 p.p.m.
125 p.p.m.

40 20 0 20 40
METRES

DRAWING RECORD & STATUS				
WORK CATEGORY	NAME	DESCRIPTION	DATE	REVISION NO
BASE MAP	KUYPERS	For 1983 Bedrock Sampling	19/01/84	
GEOCHEM.	KUYPERS	1983 Bedrock - Zinc p.p.m.	20/01/84	
GEOCHEM.	KUYPERS	Contouring - Zinc p.p.m.	30/01/84	

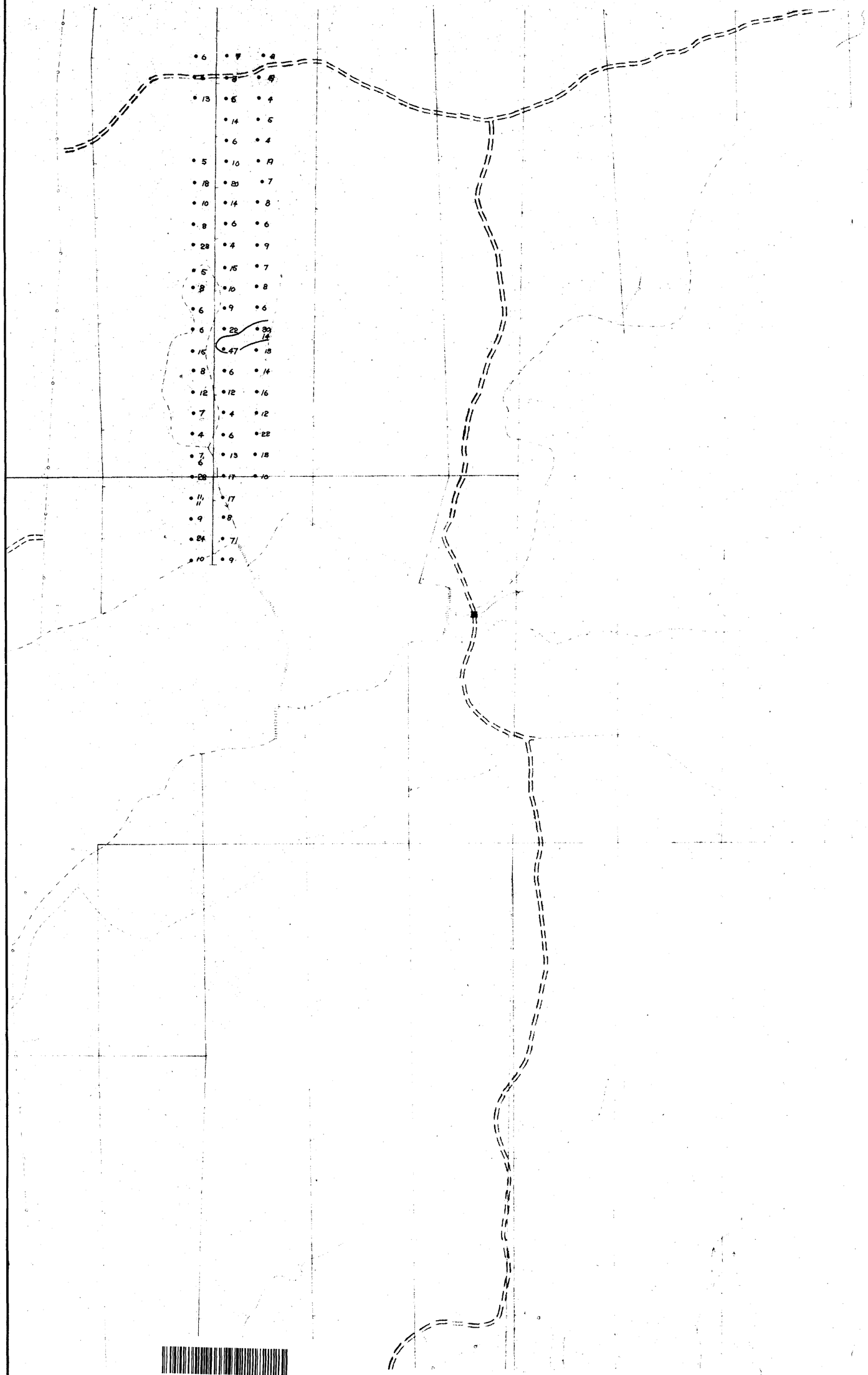
SULPETRO MINERALS LIMITED
TORONTO CANADA

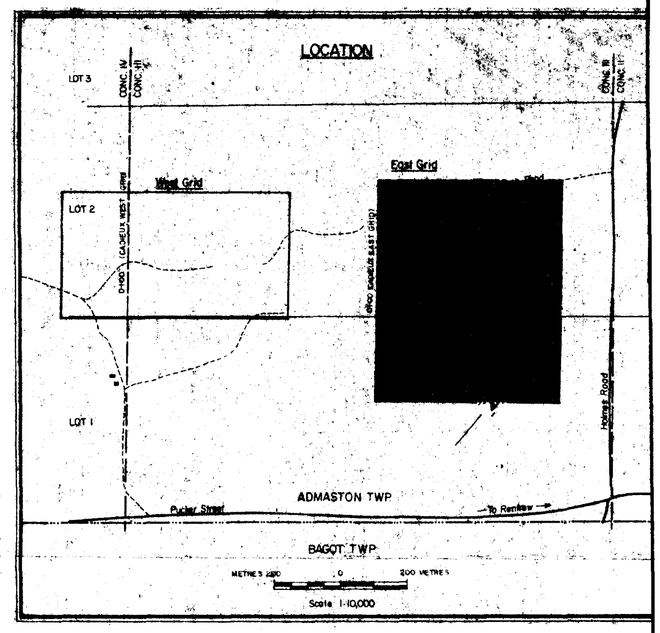
CADIEUX PROPERTY: Admaston Twp. S.E. Ontario
EAST GRID
Bedrock Survey: ZINC p.p.m.
SCALE 1:1,000
OM83-9-C-9

APPROX. LAT. & LONG. OF LOWER RT. COR. OF DWG.
° ' "
° " LATITUDE
° " LONGITUDE

PROJECT NO 3196
SHEET NO 5A OF 6
REPORT NO 83-4244
N.T.S. 31E/7

31F07NE9400 83.4244 ADMASTON





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(6) (6) (7)
(9) (6) (8)
(28) (6)

BASE LINE

4+50 E

5+00 E

Sample Type: Bedrock and/or glacial till
Sample Preparation: Bedrock pulverized to -150#
Till sieved to -80#
Analysis: Pb, Zn, Cd by $HCl-HNO_3$ digestion/atomic absorption determination
Laboratory: Bondar-Clegg and Co., Ltd.
Field Personnel: R.Jackson, L.Stoliker, M.Wallace
Survey Dates: May 25 - June 12, 1983
October 14-20, 1983.

Sample Series : 189000

bedrock sample 400

glacial till sample (404)

LEAD

1000 p.p.m.
250 p.p.m.
100 p.p.m.
25 p.p.m.

40 20 0 20 40
METRES

DRAWING RECORD & STATUS

WORK CATEGORY	NAME	DESCRIPTION	DATE	REVISION NO.
BASE MAP	KUYPERS	For 1983 Bedrock Sampling	19/01/84	
GEOCHEM.	KUYPERS	1983 Bedrock - Lead p.p.m.	20/01/84	
GEOCHEM	KUYPERS	Contouring - Lead ppm.	30/01/84	

SULPETRO MINERALS LIMITED
TORONTO, CANADA

CADIEUX PROPERTY: Admaston Twp.
S.E. Ontario.

EAST GRID

Bedrock Survey: LEAD p.p.m.

SCALE: 1:1,000

OM83-9-E-109

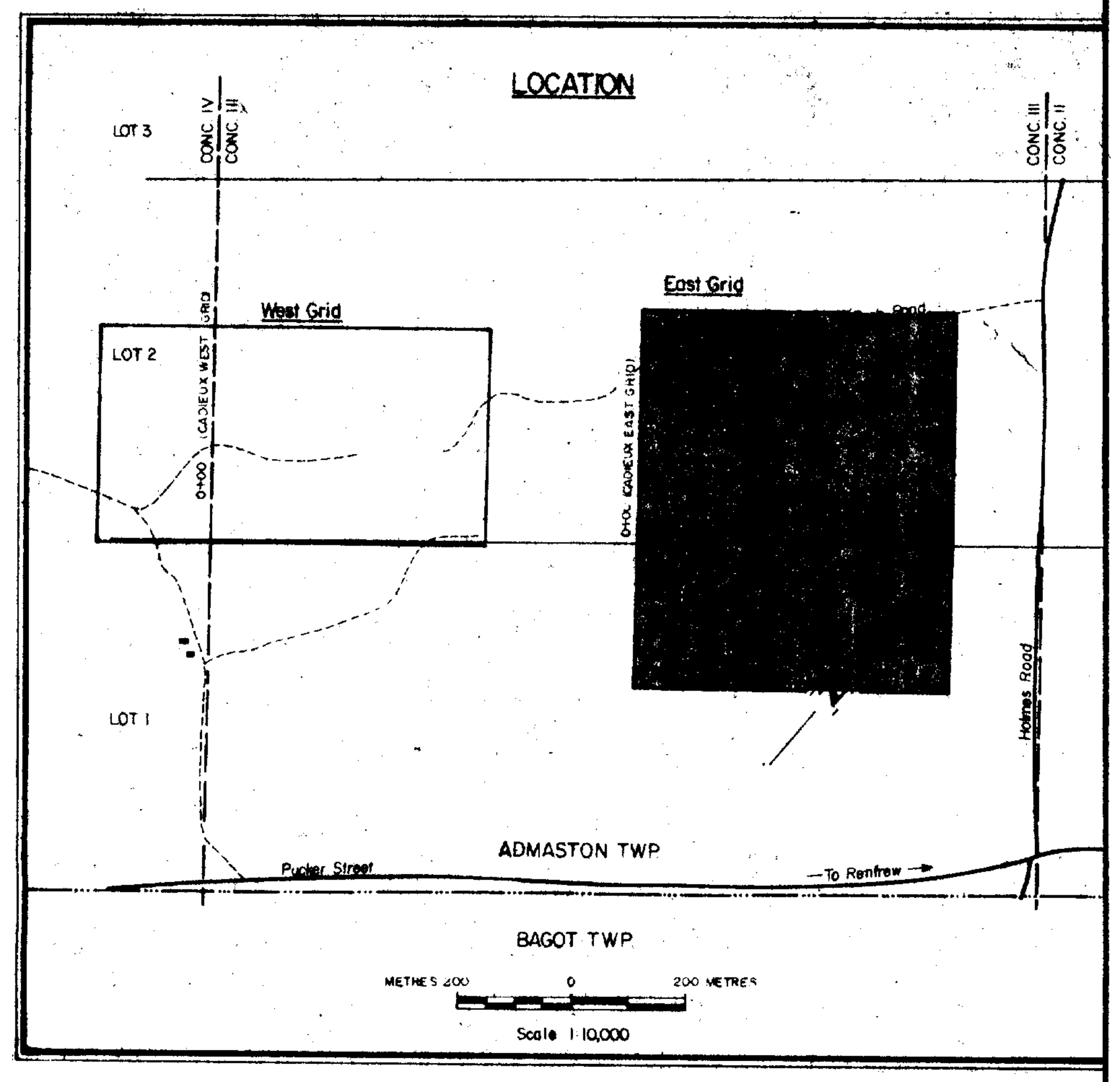
APPROX LAT & LONG OF LOWER RT COR. OF DWG
° ' " LATITUDE
° ' " LONGITUDE

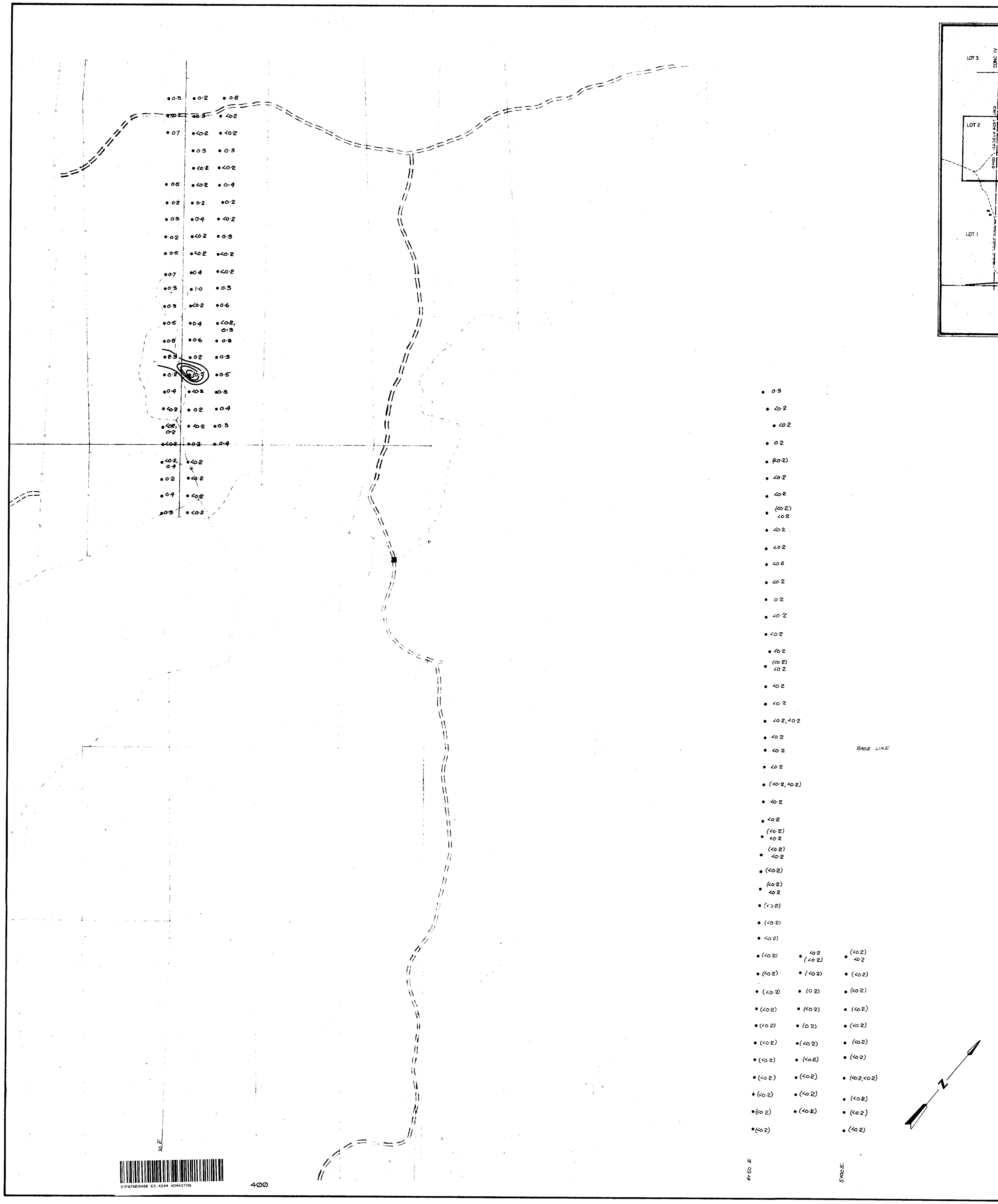
PROJECT NO. 3196

SHEET NO. 58 OF 6

REPORT NO 83-4244

NTS 31F/7





Sample Type: Bedrock and/or glacial till
Sample Preparation: Bedrock pulverized to -150*
Till sieved to -80*
Analysis: Pb, Zn, Cd by $HCl-HNO_3$ digestion/atomic absorption determination
Laboratory: Bondar-Clegg and Co., Ltd.
Field Personnel: R.Jackson, L.Stoliker, M.Wallace
Survey Dates: May 25 - June 12, 1983
October 14 - 20, 1983

Sample Series: 189000

bedrock sample 400
glacial till sample (404)

CADMIUM

- 10 p.p.m.
- 5.0 p.p.m.
- 2.5 p.p.m.
- 1.0 p.p.m.

40 20 0 20 40
METRES

DRAWING RECORD & STATUS

WORK CATEGORY	NAME	DESCRIPTION	DATE	REVISION NO
BASE MAP	KUYPERS	For 1983 Bedrock Sampling	19/01/84	
GEOCHEM.	KUYPERS	1983 Bedrock - Cadmium p.p.m.	20/01/84	
GEOCHEM.	KUYPERS	Contouring - Cadmium p.p.m.	30/01/84	

Alan Solan

SULPETRO MINERALS LIMITED
TORONTO, CANADA

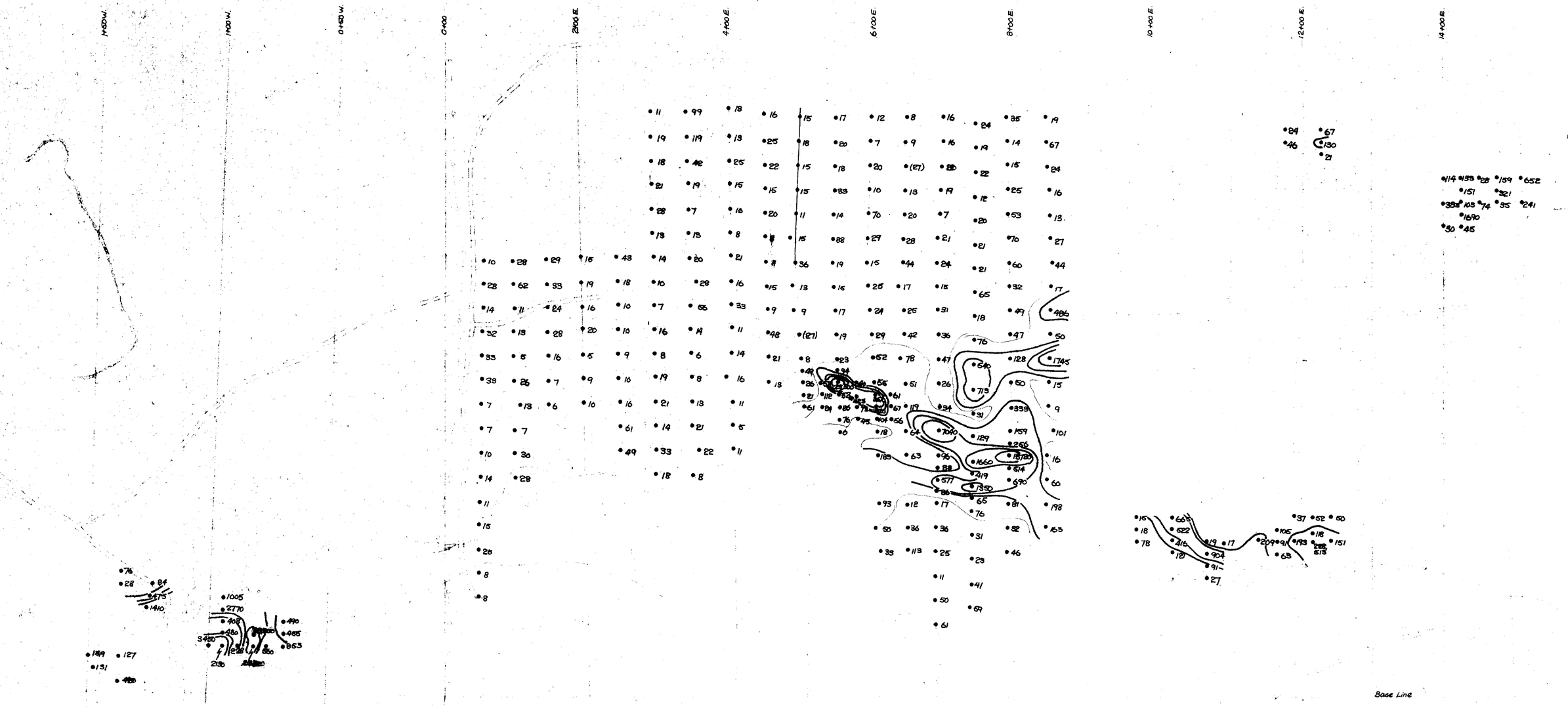
CADIEUX PROPERTY: Admaston Twp. S.E. Ontario

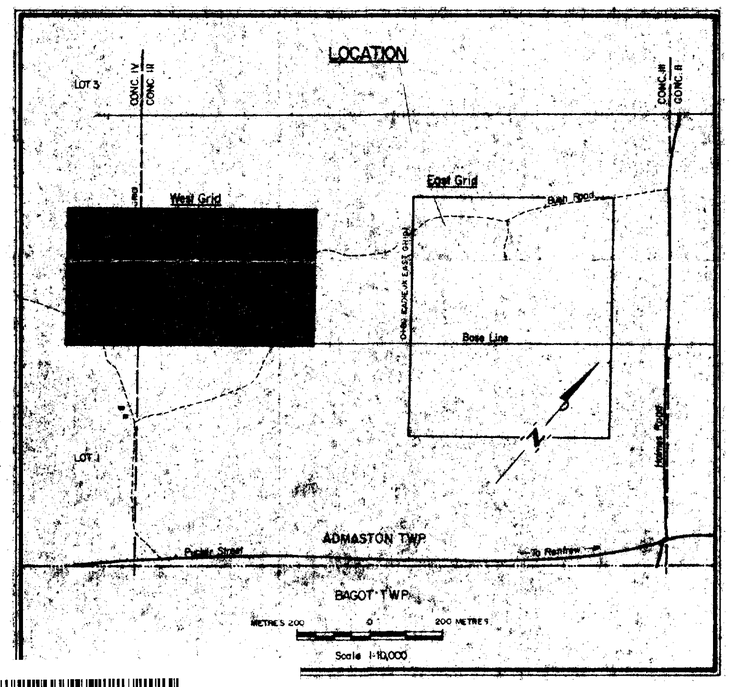
EAST GRID

Bedrock Survey: CADMIUM p.p.m.

SCALE 1:1,000 . OM 83 # 9-C-9

APPROX. LAT. & LONG. OF LOWER RT. COR. OF DWG LATITUDE LONGITUDE	PROJECT NO. 3196 REPORT NO. 63.4244	SHEET NO. 5C OF 6 N.T.S. 31F/7





Sample Type: Bedrock and/or glacial till
Sample Preparation: Bedrock pulverized to -150#
Till sieved to -80#
Analysis: Pb, Zn, Cd by $HCl - HNO_3$ digestion/atomic absorption determination
Laboratory: Bondar-Clegg and Co., Ltd.
Field Personnel: R. Jackson, L. Stoliker, M. Wallace
Survey Dates: May 25 - June 12, 1983.
October 14-20, 1983.

Sample Series: 189000

bedrock sample • 400

glacial till sample • (404)

ZINC

—— 10,000 p.p.m.
—— 1,000 p.p.m.
—— 500 p.p.m.
—— 125 p.p.m.

40 20 0 20 40
METRES

DRAWING RECORD & STATUS

WORK CATEGORY	NAME	DESCRIPTION	DATE	REVISION NO.
BASE MAP	KUYPERS	For 1983 Bedrock Sampling	19/01/84	
GEOCHEM.	KUYPERS	1983 Bedrock - Zinc p.p.m.	19/01/84	
GEOCHEM.	KUYPERS	Contouring - Zinc p.p.m.	30/01/84	

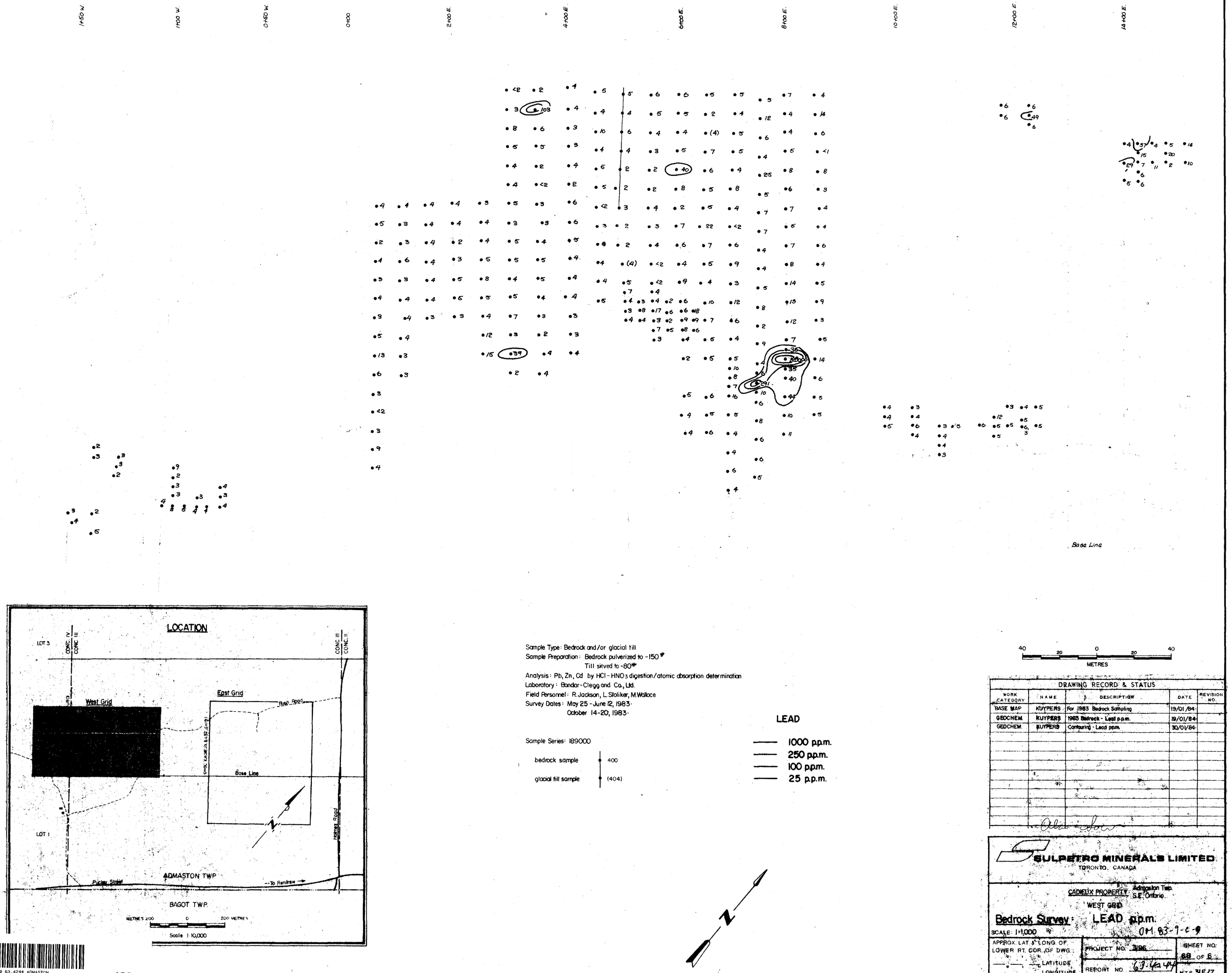
SULPETRO MINERALS LIMITED
TORONTO, CANADA

CADIEUX PROPERTY: Admaston Twp. S.E. Ontario
WEST GRID
Bedrock Survey: ZINC p.p.m.
SCALE: 1:1,000
6M 83-9-c-9

APPROX LAT & LONG OF LOWER RT COR OF DWG
LATITUDE
LONGITUDE

PROJECT NO 3196
SHEET NO 6A OF 6
63.4244
NTS 31F/7

31F07NE9400 63.4244 ADMASTON



Sample Type: Bedrock and/or glacial till
Sample Preparation: Bedrock pulverized to -150 #
Till sieved to -80#
Analysis: Pb, Zn, Cd by HCl - HNO_3 digestion/atomic absorption determination
Laboratory: Bondar-Clegg and Co., Ltd.
Field Personnel: R.Jackson, L.Stoliker, M.Wallace
Survey Dates: May 25 - June 12, 1983.
October 14-20, 1983.

Sample Series: 189000

bedrock sample • 400

glacial till sample • (404)

LEAD

1000 p.p.m.
250 p.p.m.
100 p.p.m.
25 p.p.m.

40 20 0 20 40
METRES

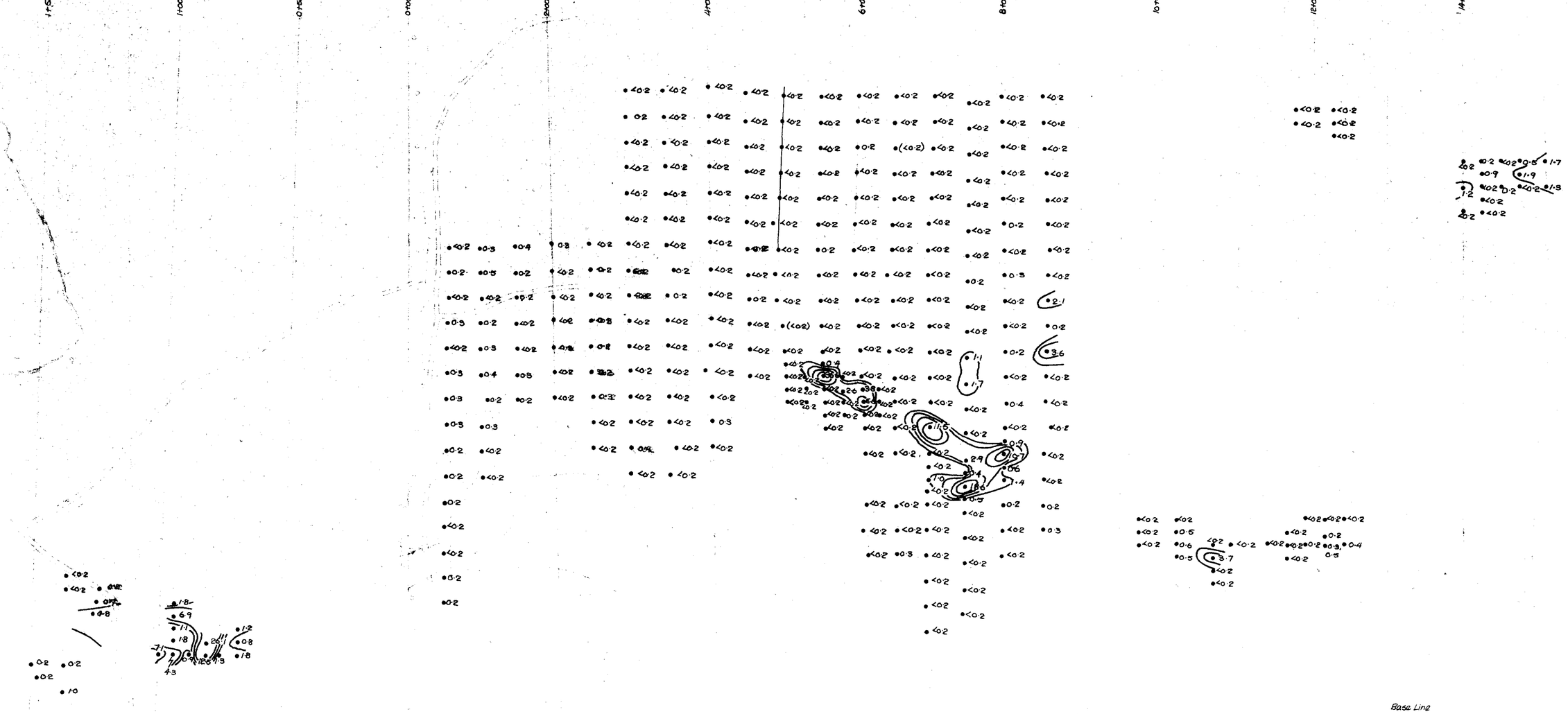
DRAWING RECORD & STATUS				
WORK CATEGORY	NAME	DESCRIPTION	DATE	REVISION NO.
BASE MAP	KUYPERS	For 1983 Bedrock Sampling	19/01/84	
GEOCHEM.	KUYPERS	1983 Bedrock - Lead p.p.m.	19/01/84	
GEOCHEM.	KUYPERS	Contouring - Lead ppm.	30/01/84	

SULPETRO MINERALS LIMITED
TORONTO, CANADA

CADIEUX PROPERTY Admaston Twp.
S.E. Ontario.
WEST GRID
Bedrock Survey: LEAD p.p.m.
SCALE: 1:1,000 OM 83-9-C-9

APPROX. LAT. & LONG. OF LOWER RT. COR. OF DWG.
LATITUDE
LONGITUDE
PROJECT NO. 396
REPORT NO. 83-4244
SHEET NO. 6 OF 6
N.T.S. 31F/7

1+50 W. 1+00 W. 0+50 W. 0+00 2+00 E. 4+00 E. 6+00 E. 8+00 E. 10+00 E. 12+00 E. 14+00 E.



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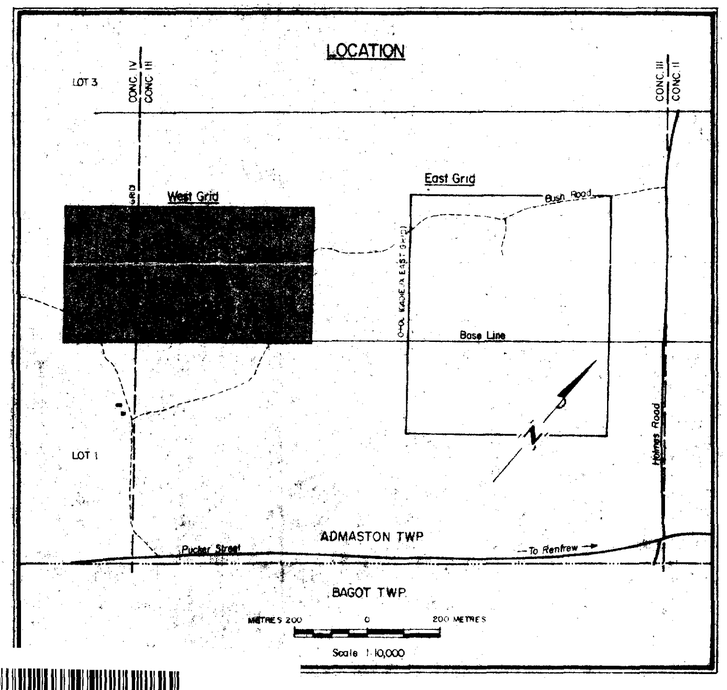


Sample Type: Bedrock and/or glacial till
Sample Preparation: Bedrock pulverized to -150#
Till sieved to -80#
Analysis: Pb, Zn, Cd by HCl - HNO3 digestion/atomic absorption determination
Laboratory: Bondar-Clegg and Co., Ltd.
Field Personnel: R. Jackson, L. Stoliker, M. Wallace
Survey Dates: May 25 - June 12, 1983.
October 14-20, 1983.

Sample Series: 189000

bedrock sample 400

glacial till sample (404)

CADMIUM

10 p.p.m.
5·0 p.p.m.
2·5 p.p.m.
1·0 p.p.m.

40 20 0 20 40
METRES

DRAWING RECORD & STATUS				
WORK CATEGORY	NAME	DESCRIPTION	DATE	REVISION NO.
BASE MAP	KUYPERS	For 1983 Bedrock Sampling	19/01/84	
GEOCHEM.	KUYPERS	1983 Bedrock - Cadmium p.p.m.	19/01/84	
GEOCHEM.	KUYPERS	Contouring - Cadmium p.p.m.	30/01/84	

SULPETRO MINERALS LIMITED
TORONTO, CANADA

CADIEUX PROPERTY: Admaston Twp.
S.E. Ontario
WEST GRID
Bedrock Survey: CADMIUM p.p.m.
SCALE 1:1,000
ØM83-9-C-9

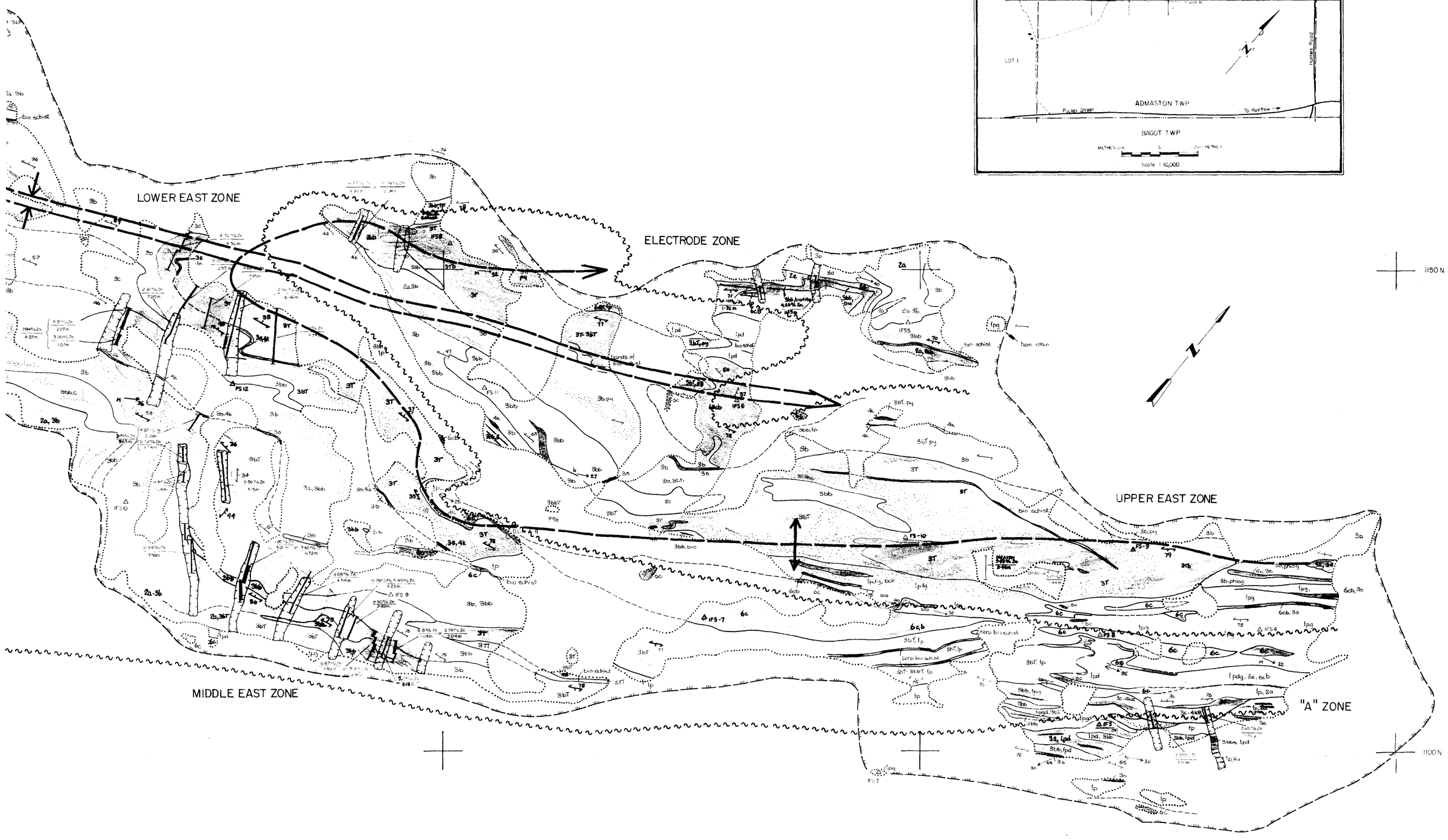
APPROX LAT. & LONG. OF LOWER R.H. COR. OF DWG.
LATITUDE
LONGITUDE

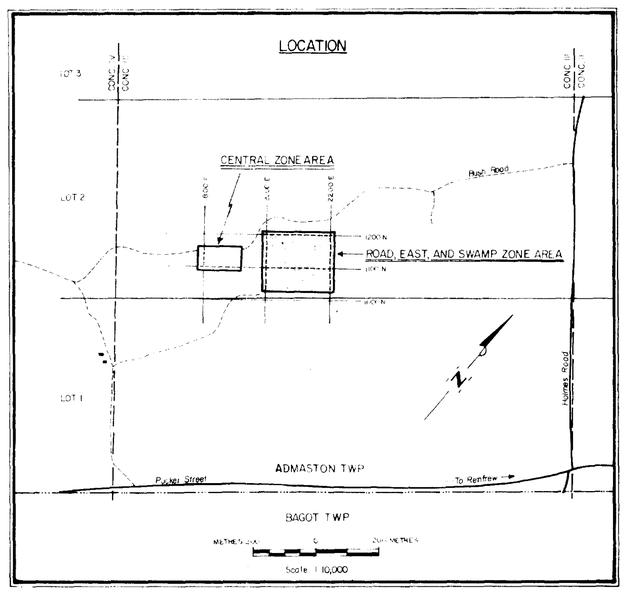
PROJECT NO. 3196
REPORT NO. 83-4244
SHEET NO. 6C OF 6
N.T.S. 31F/7

31F07NE9400 83.4244 ADMASTON


AREA No. 2
AREA No. 1
LOWER EAST ZONE
(G-ZONE)
ELECTRODE ZONE
MIDDLE EAST ZONE
UPPER EAST ZONE
"A" ZONE
SWAMP ZONE
BUSH ROAD
SP No. 1
SP No. 2
SP No. 3
SP No. 4
SP No. 5
SP No. 6
SP No. 7
I.P. No. 1
I.P. No. 2
2100 E
2150 E
2200 E
1200 N
1150 N
1100 N
1050 N
1000 N
LOCATION
CENTRAL ZONE AREA
ROAD, EAST AND SWAMP ZONE AREA
ADMASTON TWP
BAGOT TWP
Scale 1:10,000
SYMBOLS
Survey point
Edge of stripped area
Outcrop
Geological contact: definite, assumed
Schistosity, gneissosity, metamorphic layering
Mineral stretching or lineation
Boudins
Slicken side
Minor folding, style as shown
Trench
Channel sample assay (>2% Zinc/2m.)
Diamond drill hole
ng: A. Soever
June - July 1983
ing: A. Soever, D. Windsor, R. Jackson
June, July & October, 1983
N.B. SP No. 9 and I.P. No. 4 are situated to the west of this map - Refer to Sheet 2.
DRAWING RECORD & STATUS
GEOLOGY KUYPERS 1983 Detail Mapping and Channel Sampling 03/01/84
GEOPHYSICS KUYPERS Line locations - 1983 Geophysical Surveys 20/01/84
SULPETRO MINERALS LIMITED
OM83-9-C-9
CADIEUX PROPERTY: Admaston Twp. S.E. Ontario
ROAD, EAST AND SWAMP ZONES
Self Potential and Induced Polarization Line Location
SCALE 1:200
3196
1 2
31F/7
63.4244

AREA No. 2





SYMBOLS

- Survey point
- Edge of stripped area
- Outcrop
- Geological contact: definite, assumed
- Schistosity, gneissosity, metamorphic layering
- Mineral stretching or lineation
- Boudins
- Slicken side
- Minor folding: style as shown
- Trench
- Channel sample: assay (>2% Zinc/2m)
- Diamond drill hole
- Sheared zone
- Early phase synform
- Early phase antiform
- Late phase synform

...pping: A. Soever
...e: Late July 1983

...mpling: A. Soever, D.Windsor, R.Jackson
...e: June, July & October, 1983

...erpretation: A. Soever
...te: February 1984

AREA No. 1

GEOLOGY	KUYPERS	1983 Detail Mapping and Channel Sampling	03/01/84
GEOLOGY	KUYPERS	Structural Interpretation	22/02/84

Alan Soever

SULPETRO MINERALS LIMITED

OM83-9-C-9

CADIEUX PROPERTY Admaston Twp. S.E. Ontario

ROAD, EAST AND SWAMP ZONES

GEOLOGY AREA 1&2

1:200

3196

2 6

63-4244

SEPT 7

AREA No. 2

AREA No. 1

2100 E.

2150 E.

2200 E.

1200 N.

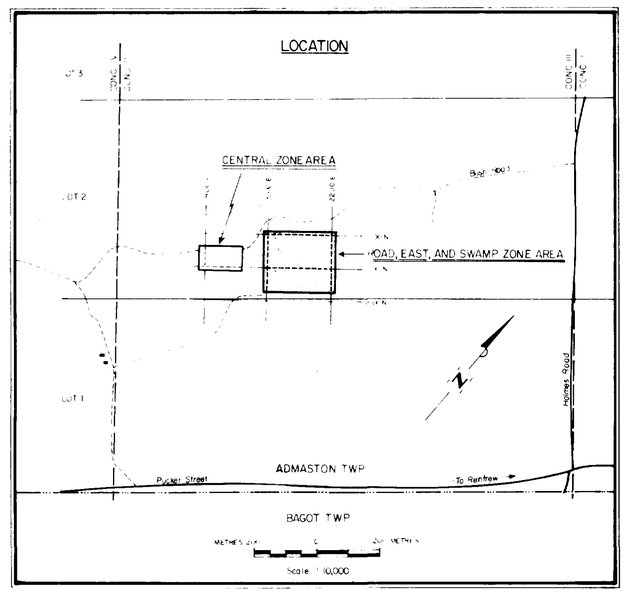
1150 N.

1100 N.

1050 N.

1000 N.

LOCATION



LOWER EAST ZONE

ELECTRODE ZONE

MIDDLE EAST ZONE

UPPER EAST ZONE

"A" ZONE

SWAMP ZONE

BUSH ROAD

C-30

m	% Zn	% Pb
0.60	1.20	0.006
0.54	8.04	0.008
0.25	–	–
0.23	12.7	0.008
0.53	2.16	0.002
0.26	9.52	0.010
0.39	1.52	0.010
0.62	3.86	0.012
0.35	1.28	0.012
0.45	0.94	0.010
0.98	5.94	0.008

C-28

m	% Zn	% Pb
0.51	0.63	0.014
1.00	5.06	0.008
0.70	5.88	0.006
0.14	1.92	0.008
0.89	3.96	0.008
0.30	1.12	0.008
0.80	2.72	0.006
1.15	–	–
0.58	2.12	0.010
0.88	2.64	0.006
0.57	1.90	0.010
0.36	2.76	0.006
0.97	1.72	0.006
0.35	0.34	0.014
0.45	0.19	0.006
0.35	0.44	0.014
1.07	0.27	0.014
0.43	0.90	0.011
0.45	1.96	0.004
0.75	0.56	0.004
0.28	2.16	0.006
0.44	3.96	0.006
0.35	0.41	0.006
0.31	4.96	0.006
0.47	0.90	0.012
0.77	4.76	0.018
0.47	0.90	0.014

C-29

% Zn	% Pb
0.63	0.006
0.23	0.006
0.70	0.009
0.26	0.006
0.056	0.010
0.26	0.014
0.42	0.008
1.04	0.020
0.64	0.009
4.76	0.008
2.48	0.006
1.03	0.006
0.58	0.006
1.25	0.008
2.50	0.008
3.00	0.010
1.72	0.006
3.56	0.006
3.56	0.009
3.96	0.007
0.82	0.002
4.40	0.006
1.04	0.010
1.68	0.008
4.28	0.006
3.80	0.007
0.76	0.007
2.16	0.005
2.70	0.006
0.77	0.010
1.72	0.007
0.64	0.006
1.20	0.005
–	–
0.34	0.006
4.56	0.006
2.72	0.008
1.84	0.006
0.67	0.008
3.60	0.006
1.35	0.008
1.56	0.006
0.73	0.006
0.14	0.004

C-24

m	% Zn	% Pb
0.76	1.04	0.006
0.56	9.84	0.014
0.10	1.12	0.004
0.42	5.24	0.014
1.04	3.44	0.006
0.45	0.92	0.006
0.6	7.56	0.004
0.47	0.70	0.010
0.12	4.16	0.010
0.40	1.27	0.010
0.96	2.68	0.010
0.52	7.00	0.012
0.89	0.89	0.018
0.94	0.70	0.006
0.60	0.83	0.004
0.56	0.84	0.004
0.19	0.67	0.007
0.73	1.06	0.006
0.61	1.00	0.007
0.15	0.67	0.008
0.50	0.90	0.006

C-27

m	% Zn	% Pb
0.36	0.80	0.010
0.91	1.96	0.006
0.55	1.36	0.006
0.70	5.92	0.006
0.46	8.48	0.006
0.35	3.24	0.008
0.89	3.72	0.010
1.05	1.56	0.010

C-31

m	% Zn	% Pb
0.42	1.00	0.008
0.30	1.40	0.010
0.39	2.24	0.010
0.24	9.08	0.008
0.14	1.56	0.006
0.42	4.60	0.014
0.74	8.56	0.008
0.38	1.84	0.010
0.37	1.56	0.012

C-26

m	% Zn	% Pb
1.00	3.24	0.006
1.01	2.16	0.008
1.00	4.00	0.010
1.00	3.40	0.012
0.46	4.64	0.006
0.85	2.44	0.010
0.75	2.56	0.012
1.10	1.28	0.008
1.06	0.86	0.006

C-32

m	% Zn	% Pb
0.76	1.50	0.010
0.58	1.50	0.014
1.00	2.96	0.012
0.42	0.49	0.008
0.22	2.76	0.020
0.68	0.49	0.006

C-41

m	% Zn	% Pb
0.88	0.42	0.004
0.22	9.36	Trace
1.16	3.16	0.004

C-40

m	% Zn	% Pb
0.54	0.59	0.004
0.75	5.46	0.008
0.15	2.52	0.002
0.60	4.52	0.008
1.15	0.29	0.010

C-43

m	% Zn	% Pb
0.42	0.28	0.008
0.81	0.85	0.030
1.07	2.24	0.090
0.63	3.47	0.030

C-42

m	% Zn	% Pb
0.07	2.20	0.018
0.67	5.96	0.020
0.67	0.36	0.010
0.48	0.35	0.010
0.42	0.80	0.005
0.36	0.14	0.004
1.10	0.056	0.004

C-1

m	% Zn	% Pb
0.78	0.19	0.002
0.57	18.8	0.073
0.94	0.15	0.004

C-3

m	% Zn	% Pb
1.20	0.12	0.006
0.44	Ø.0	15%
0.49	0.41	0.023

C-9

m	% Zn	% Pb
0.45	2.52	0.002

C-8

m	% Zn	% Pb
2.00	0.22	0.002
1.15	3.12	0.043
1.00	1.05	0.063

C-5

m	% Zn	% Pb
0.91	0.38	0.004
1.24	4.44	0.103
0.20	1.21	0.009

C-7

m	% Zn	% Pb
2.05	0.43	0.003
1.41	4.06	0.026
0.54	0.052	0.007

C-4

m	% Zn	% Pb
1.40	0.30	0.004
1.20	0.15	0.003
0.85	0.25	0.005
0.55	0.29	0.007
1.45	1.64	0.055
0.85	0.34	0.040

C-6

m	% Zn	% Pb
1.12	0.06	0.003
0.16	0.69	0.003
0.62	1.94	0.003
1.13	1.46	0.004
0.67	0.37	0.004
0.50	0.082	0.001
0.85	1.08	0.004
0.73	15.4	0.086
0.76	1.12	0.016
0.12	–	–
1.96	0.52	0.009

C-2

m	% Zn	% Pb
0.35	2.48	0.015
0.15	18.2	1.03
0.21	7.56	0.28
0.84	–	–
0.61	1.89	0.18
0.31	–	–
0.34	2.60	0.006

C-10

m	% Zn	% Pb
1.05	11.40	0.004
20	4.96	0.006
0.54	0.36	0.010
0.45	0.76	0.006
1.20	6.76	0.010

C-11,17

m	% Zn	% Pb
1.05	11.40	0.004
20	4.96	0.006
0.54	0.36	0.010
0.45	0.76	0.006
1.20	6.76	0.010

C-15

m	% Zn	% Pb
0.60	0.16	0.006
0.39	4.84	0.006
0.25	12.3	0.107
0.40	4.10	0.008
1.00	1.16	0.055

C-16

m	% Zn	% Pb
0.26	0.24	0.004
0.79	0.30	0.004
0.38	0.64	0.007
0.50	1.52	0.014
0.50	0.24	0.009

C-18

m	% Zn	% Pb
0.89	1.90	0.017
0.61	6.48	0.080
0.55	6.16	0.017
0.24	2.40	0.010
0.49	1.01	0.006
0.21	1.64	0.004
0.71	2.64	0.006

C-12

m	% Zn	% Pb
0.42	1.36	0.008
0.50	3.36	0.068
0.32	4.48	0.008
0.28	1.40	0.004
0.14	4.16	0.004
0.7	2.46	0.008
0.4	1.96	0.004
0.16	1.68	0.004
0.12	1.72	0.010
0.36	4.32	0.014
0.98	0.42	0.009

C-14,19

m	% Zn	% Pb
0.50	0.49	0.002
0.26	0.036	0.008
0.20	0.148	0.042
0.20	2.37	0.047
0.04	–	–
0.75	3.62	0.047
0.20	24	0.006
0.73	9.42	0.109
0.89	5.12	0.109
0.35	6.10	0.022
0.15	4.88	4.13
0.52	1.20	6.05
0.83	0.98	0.37
0.59	0.24	0.030

C-13,20

m	% Zn	% Pb
0.71	2.42	0.014
0.39	4.52	0.047
1.62	2.85	0.047
0.90	2.04	0.010
1.81	2.72	0.007
0.42	4.07	0.008
0.36	0.59	0.005
0.14	4.96	0.005
0.65	2.56	0.010
0.20	0.35	0.004
0.46	9.56	0.006
0.24	1.29	0.006
0.53	6.60	0.005
0.29	2.80	0.005
0.48	0.33	0.002
0.05	–	–
0.16	1.56	0.002
0.62	1.22	0.002
0.32	0.96	0.002
0.30	0.11	0.009
0.75	–	–
0.50	0.26	0.002
0.17	0.41	0.006

C-21

m	% Zn	% Pb
0.80	2.44	0.007
0.65	2.48	0.009
0.70	9.48	0.007
0.85	8.40	0.009
0.55	3.80	0.010
0.57	3.48	0.006
0.57	2.98	0.008
0.68	0.56	0.008
0.62	9.56	0.006
0.95	3.24	0.009

C-22

% Zn	% Pb
0.63	0.006
0.23	0.006
0.70	0.009
0.26	0.006
0.056	0.010
0.26	0.014
0.42	0.008
1.04	0.020

C-41

m	% Zn	% Pb
0.88	0.42	0.004
0.22	9.36	Trace
1.16	3.16	0.004

C-40

m	% Zn	% Pb
0.54	0.59	0.004
0.75	5.46	0.008
0.15	2.52	0.002
0.60	4.52	0.008
1.15	0.29	0.010

C-43

m	% Zn	% Pb
0.42	0.28	0.008
0.81	0.85	0.030
1.07	2.24	0.090
0.63	3.47	0.030

C-42

m	% Zn	% Pb
0.07	2.20	0.018
0.67	5.96	0.020
0.67	0.36	0.010
0.48	0.35	0.010
0.42	0.80	0.005
0.36	0.14	0.004
1.10	0.056	0.004

C-1

m	% Zn	% Pb
0.78	0.19	0.002
0.57	18.8	0.073
0.94	0.15	0.004

C-3

m	% Zn	% Pb
1.20	0.12	0.006
0.44	Ø.0	15%
0.49	0.41	0.023

C-9

m	% Zn	% Pb
0.45	2.52	0.002

C-8

m	% Zn	% Pb
2.00	0.22	0.002
1.15	3.12	0.043
1.00	1.05	0.063

C-5

m	% Zn	% Pb
0.91	0.38	0.004
1.24	4.44	0.103
0.20	1.21	0.009

C-7

m	% Zn	% Pb
2.05	0.43	0.003
1.41	4.06	0.026
0.54	0.052	0.007

C-4

m	% Zn	% Pb
1.40	0.30	0.004
1.20	0.15	0.003
0.85	0.25	0.005
0.55	0.29	0.007
1.45	1.64	0.055
0.85	0.34	0.040

C-6

m	% Zn	% Pb
1.12	0.06	0.003
0.16	0.69	0.003
0.62	1.94	0.003
1.13	1.46	0.004
0.67	0.37	0.004
0.50	0.082	0.001
0.85	1.08	0.004
0.73	15.4	0.086
0.76	1.12	0.016
0.12	–	–
1.96	0.52	0.009

C-2

m	% Zn	% Pb
0.35	2.48	0.015
0.15	18.2	1.03
0.21	7.56	0.28
0.84	–	–
0.61	1.89	0.18
0.31	–	–
0.34	2.60	0.006

C-10

m	% Zn	% Pb
1.05	11.40	0.004
20	4.96	0.006
0.54	0.36	0.010
0.45	0.76	0.006
1.20	6.76	0.010

C-11,17

m	% Zn	% Pb
1.05	11.40	0.004
20	4.96	0.006
0.54	0.36	0.010
0.45	0.76	0.006
1.20	6.76	0.010

C-15

m	% Zn	% Pb
0.60	0.16	0.006
0.39	4.84	0.006
0.25	12.3	0.107
0.40	4.10	0.008
1.00	1.16	0.055

C-16

m	% Zn	% Pb
0.26	0.24	0.004
0.79	0.30	0.004
0.38	0.64	0.007
0.50	1.52	0.014
0.50	0.24	0.009

C-18

m	% Zn	% Pb
0.89	1.90	0.017
0.61	6.48	0.080
0.55	6.16	0.017
0.24	2.40	0.010
0.49	1.01	0.006
0.21	1.64	0.004
0.71	2.64	0.006

C-12

m	% Zn	% Pb
0.42	1.36	0.008
0.50	3.36	0.068
0.32	4.48	0.008
0.28	1.40	0.004
0.14	4.16	0.004
0.7	2.46	0.008
0.4	1.96	0.004
0.16	1.68	0.004
0.12	1.72	0.010
0.36	4.32	0.014
0.98	0.42	0.009

C-14,19

m	% Zn	% Pb
0.50	0.49	0.002
0.26	0.036	0.008
0.20	0.148	0.042
0.20	2.37	0.047
0.04	–	–
0.75	3.62	0.047
0.20	24	0.006
0.73	9.42	0.109
0.89	5.12	0.109
0.35	6.10	0.022
0.15	4.88	4.13
0.52	1.20	6.05
0.83	0.98	0.37
0.59	0.24	0.030

C-13,20

m	% Zn	% Pb
0.71	2.42	0.014
0.39	4.52	0.047
1.62	2.85	0.047
0.90	2.04	0.010
1.81	2.72	0.007
0.42	4.07	0.008
0.36	0.59	0.005
0.14	4.96	0.005
0.65	2.56	0.010
0.20	0.35	0.004
0.46	9.56	0.006
0.24	1.29	0.006
0.53	6.60	0.005
0.29	2.80	0.005
0.48	0.33	0.002
0.05	–	–
0.16	1.56	0.002
0.62	1.22	0.002
0.32	0.96	0.002
0.30	0.11	0.009
0.75	–	–
0.50	0.26	0.002
0.17	0.41	0.006

C-21

m	% Zn	% Pb
0.80	2.44	0.007
0.65	2.48	0.009
0.70	9.48	0.007
0.85	8.40	0.009
0.55	3.80	0.010
0.57	3.48	0.006
0.57	2.98	0.008
0.68	0.56	0.008
0.62	9.56	0.006
0.95	3.24	0.009

C-22

% Zn	% Pb
0.63	0.006
0.23	0.006
0.70	0.009
0.26	0.006
0.056	0.010
0.26	0.014
0.42	0.008
1.04	0.020

C-41

m	% Zn	% Pb
0.88	0.42	0.004
0.22	9.36	Trace
1.16	3.16	0.004

C-40

m	% Zn	% Pb
0.54	0.59	0.004
0.75	5.46	0.008
0.15	2.52	0.002
0.60	4.52	0.008
1.15	0.29	0.010

C-43

m	% Zn	% Pb
0.42	0.28	0.008
0.81	0.85	0.030
1.07	2.24	0.090
0.63	3.47	0.030

C-42

m	% Zn	% Pb
0.07	2.20	0.018
0.67	5.96	0.020
0.67	0.36	0.010
0.48	0.35	0.010
0.42	0.80	0.005
0.36	0.14	0.004
1.10	0.056	0.004

C-1

m	% Zn	% Pb
0.78	0.19	0.002
0.57	18.8	0.073
0.94	0.15	0.004

C-3

m	% Zn	% Pb
1.20	0.12	0.006
0.44	Ø.0	15%
0.49	0.41	0.023

C-9

m	% Zn	% Pb
0.45	2.52	0.002

C-8

m	% Zn	% Pb
2.00	0.22	0.002
1.15	3.12	0.043
1.00	1.05	0.063

C-5

m	% Zn	% Pb
0.91	0.38	0.004
1.24	4.44	0.103
0.20	1.21	0.009

C-7

m	% Zn	% Pb
2.05	0.43	0.003
1.41	4.06	0.026
0.54	0.052	0.007

C-4

m	% Zn	% Pb
1.40	0.30	0.004
1.20	0.15	0.003
0.85	0.25	0.005
0.55	0.29	0.007
1.45	1.64	0.055
0.85	0.34	0.040

C-6

m	% Zn	% Pb
1.12	0.06	0.003
0.16	0.69	0.003
0.62	1.94	0.003
1.13	1.46	0.004
0.67	0.37	0.004
0.50	0.082	0.001
0.85	1.08	0.004
0.73	15.4	0.086
0.76	1.12	0.016
0.12	–	–
1.96	0.52	0.009

C-2

m	% Zn	% Pb
0.35	2.48	0.015
0.15	18.2	1.03
0.21	7.56	0.28
0.84	–	–
0.61	1.89	0.18
0.31	–	–
0.34	2.60	0.006

SAMPLING KUYPERS 1983 Detail Mapping and Channel Sampling 12/01/84

Alan Bowen

SULPETRO MINERALS LIMITED

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ROAD, EAST AND SWAMP ZONE

ASSAY PLAN AREA: 1&2

Scale 1:200

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63.4244 | 31 F/7