GEOLOGICAL, GEOCHEMICAL, GEOPHYSICAL AND DIAMOND DRILLING REPORT

ON THE

BIRCH 1 TO 5 CLAIMS

North Thompson River Area
Kamloops Mining Division
British Columbia

51° 32' North Latitude / 119° 53' West Longitude
N.T.S. 82 M/12W

FOR

GEMSTAR RESOURCES LTD.
431 S.E. Marine Drive
Vancouver, B.C.

BY

J.T. SHEARER, M.Sc., F.G.A.C.
AND
S.P. Butler, B.Sc.
NEW GLOBAL RESOURCES LTD.
548 Beatty Street
Vancouver, B.C.
V6B 2L3

December 12, 1990

Field work completed between September 18 and October 19, 1990

TABLE OF CONTENTS

LIST OF ILLUSTRATIONS AND TABLES

LIST OF FIGURES

LIST OF TABLES

SUMMARY

1) The Birch claim group is located in south-central British Columbia and is approximately 125 kilometres north-northeast of the City of Kamloops and 15 km east of Clearwater. Numerous logging roads provide excellent access to most of the property.

2) The property consists of five modified grid claims, Birch #1 to Birch #5, totalling 48 units. The current expiry date is May 29, 1991 and July 21, 1991. Work documented in this report has been applied for ~~two~~ one years of assessment which will extend the expiry date to 1993.

3) The potential for polymetallic volcanogenic - massive sulfide deposits in the area of the Birch Group has been recognized since the early 1970's. Several economical deposits have been found elsewhere in the Eagle Bay Formation which underlies large portions of the Adams Plateau. The Samatosum deposit near Barrier recently went into production.

4) Foundation Resources Ltd. acquired the ground in May of 1987 and subsequently optioned the Birch 1-4 claims to Gemstar Resources Ltd. Gemstar can earn a 100% interest in the claims (subject to a 10% NPI) by performing certain work requirements before October 15, 1992.

5) A program of detailed geological mapping, soil and silt geochemical sampling, induced polarization geophysics, prospecting and hand trenching was carried out on the Birch #1 to #4 claims between May and July of 1988. This work resulted in the discovery of three new mineralized zones that carry anomalous gold values. In addition to these new mineralized areas, the previously discovered Main Massive Sulfide Zone was re-sampled in 1988.

6) A semi-massive sulfide zone hosted by chlorite schist is located a short distance to the west and up-section from the Main Massive Sulfide Zone. This schist contains abundant pyrite (15-20%) and lesser amounts of galena and sphalerite (less than 1%). Gold values range between 175 and 220 ppb. This zone was not re-examined during 1990.

(7) The most significant zone found in 1988 is located on the west side of the property along an old road and consists of an iron carbonate and siliceous exhalatite unit containing pyrite, chalcopyrite, galena and sphalerite. Six diamond drill holes and two backhoe trenches were completed in this zone in 1990. A blind massive sulfide horizon was discovered by drilling immediately below the exhalitite unit. The holes indicate a northeasterly trend with a shallow to moderate dip to the northwest. Gold values range between 105 and 1450 ppb, while silver values range between 1.6 and 28.8 ppm in drill core. Highly anomalous Pb, Zn and Ag in soil samples located 50 metres north along L8+00W, indicate this zone possibly has an associated base metal-rich lens. Gold values of chip samples in the backhoe trench range up to 1020 ppb gold. This area forms the highest priority target for future exploration, which should focus on the base-metal potential higher up in the stratigraphy to the west.

(8) A third showing was found on the northern part of the Birch #1 claim and consists of intensely pyritized and silicified rhyolite and rhyolite breccia. Fluorite is occasionally found in these rocks. A line of induced polarization in 1988 indicated a strong conductor. Gold values are low but since this unit was poorly exposed, further exploration was required to locate possible gold enriched areas. An induced polarization survey in 1990 indicated a trend parallel to the 1988 hand dug pits. Backhoe trenching exposed an extensive zone of quartz veining and silicification. A diamond drill hole intersected the silicified zone, but only low gold values were encountered.

(9) The induced polarization survey on L7+00W of the Main grid indicates a wide chargeability high to the south of the Exhalative Zone. This anomaly is west of the semi-massive sulfide zone discovered in 1988 and along the extension of the trend of the Main Massive Sulfide Zone.

(10) A Phase II program of detailed geological mapping, follow-up soil geochemistry, further Induced Polarization and backhoe trenching is recommended at a cost of $70,000. A Phase III diamond drill program of $165,000 is contingent on the results of Phase II.

INTRODUCTION

The Birch 1 to 5 claims consisting of 48 contiguous units were staked in May 1987 and July 1989 by New Global Resources Ltd. These claims were acquired by Foundation Resources Ltd. and optioned to Gemstar Resources Ltd.

The ground was originally held by Barrier Reef Resources from 1979 to 1986 as the Foggy claims. A considerable amount of work, including diamond drilling, was completed by Barrier Reef and property optionee, Esso Resources Canada. The claims were allowed to lapse in 1986/87.

Research into the area by New Global Resources indicated that the outcropping massive sulfide zones had not been developed as precious metal exploration targets. Work in the past had been mainly for copper, lead and zinc. The previous drilling program may not have reached the main massive sulfide horizon. Volcanogenic massive sulfide deposits (Kuroko) often exhibit a variety of stratigraphically interrelated but mineralogically distinct ore lenses. Fine grained pyrite (known as yellow ore) with some chalcopyrite is a common type. This usually is overlain by a base metal rich zone containing sphalerite and galena (black ore). Black ore usually occurs either immediately on top of or separated by a tuffaceous band from the yellow ore. Characteristically, these deposits can contain low but economically significant quantities of gold. The association of gypsum, common in the early stages of deposition of the yellow ore, may be anomalous to parts of the "Exhalative showing" on the Birch claims. Regional metamorphism has possibly caused a pervasive recrystallization of the massive sulfides. Apparent banding is sub-parallel to schistosity and crystal size is increased. Lateral changes over short distances are common, as exemplified by the Rea Gold and Samatosum orebodies, only a few hundred metres apart. The Rea deposit is an arsenical pyrite-gold zone, while the Samatosum deposit is high grade silver with negligible arsenic.

The immediate area around the Birch claims is noteable for its abundance and variety of mineralization. The Rexspar uranium and fluorite - rare earth oxide deposits adjoin the Birch ground some 4 kilometres north-northwest and represent

a trachytic volcanic center. The Harper Creek bulk-tonnage copper property with a mineral inventory of several hundred million tons of about 0.4% copper equivalent is located 4 kilometres east. Approximately 50 kilometres to the south of the Birch claims, two significant ore bodies have been recently discovered hosted by the Eagle Bay Formation schists. Rea Gold Corp. along with Minnova Corp. have put into production the Samatosum silver / zinc orebody hosted by sericitic phyllites similar to rocks outcropping on the Birch claims. The Homestake deposit, which lies near the Samatosum Mine, is also hosted by altered and sheared sericite schists of the Eagle Bay Formation.

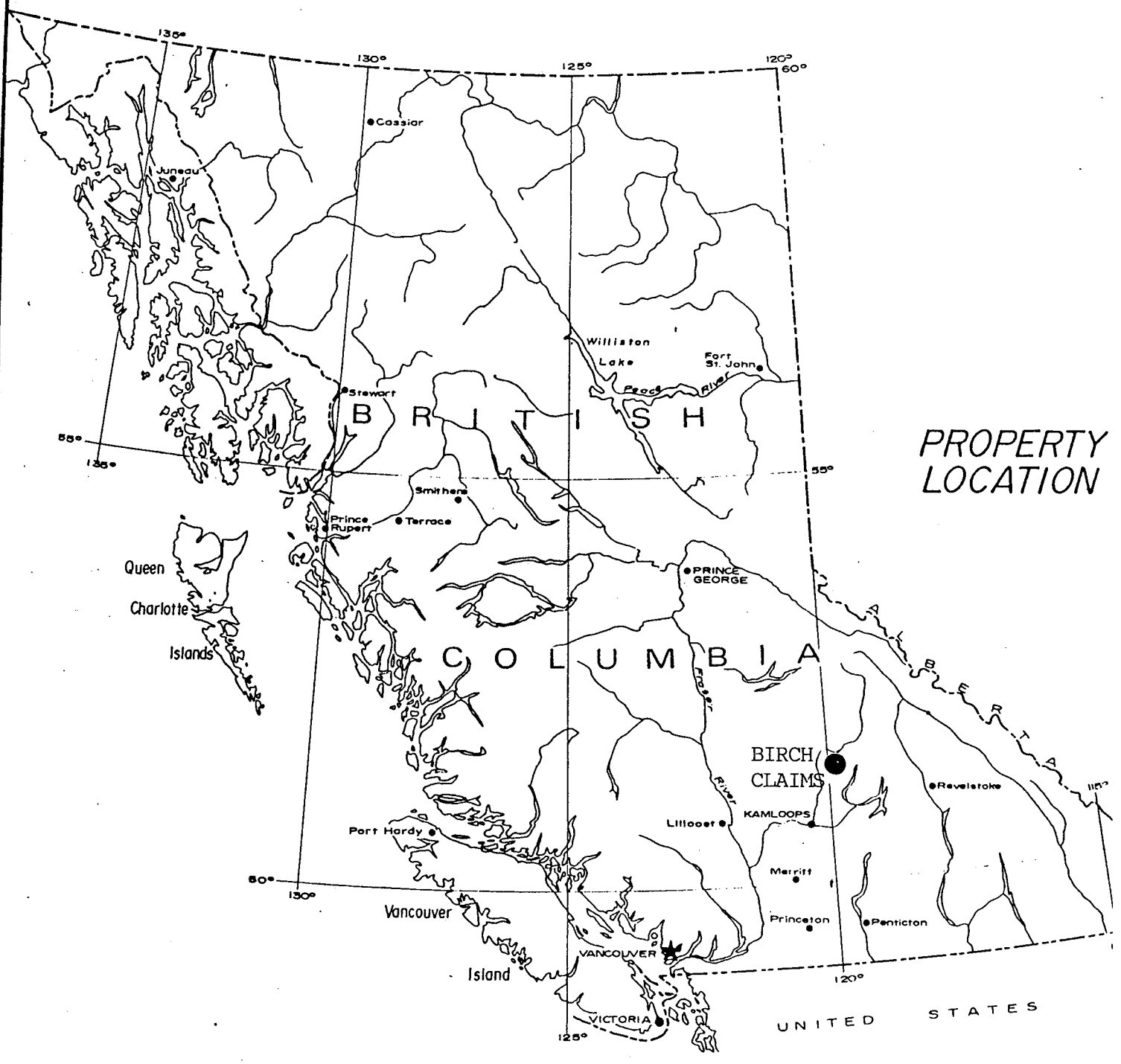
The main massive sulfide zone exposed on the Birch claims appears to have considerable strike length and down dip continuity as shown by geochemical anomalies and geophysical results. Only very limited drill testing has been done and considerably more work needs to be done to evaluate the gold potential of this and other zones.

The 1990 program consisted of follow-up geological mapping, soil geochemistry, limited backhoe trenching, detailed induced polarization and shallow diamond drilling.

LOCATION AND ACCESS

The Birch claims are located some 350 kilometres northeast of Vancouver and 125 kilometres north-northeast of Kamloops in south-central B.C. The property lies 11 kilometres south of the village of Birch Island (Figure 1).

Access to the property is gained by driving 15 kilometres east from Birch Island along the south side of the North Thompson River then 7 kilometres south along the Jones Creek logging road and 11 kilometres west along logging road #71. The approximate geographic center of the property is at 51° 32' north latitude and 119° 53' west longitude.



GEMSTAR RESOURCES LTD.

Figure #1

SCALE

Km. 100 50 0 100 200 300 400 Km

Miles 100 50 0 100 200 Miles

PHYSIOGRAPHY AND VEGETATION

The claims cover part of a northerly trending ridge lying between Foghorn Creek and Lute Creek. Most of the topography is gently sloping to the north and northeast except for that part covering the steep east slope of Foghorn Creek Valley. Elevations vary between 1,463 metres and 1,828 metres.

Part of the property is covered by a dense growth of mature spruce, cedar and fir, however, there are many recently logged clear-cuts.

Outcrop is most abundant along road cuts and creek gulleys.

CLAIM STATUS

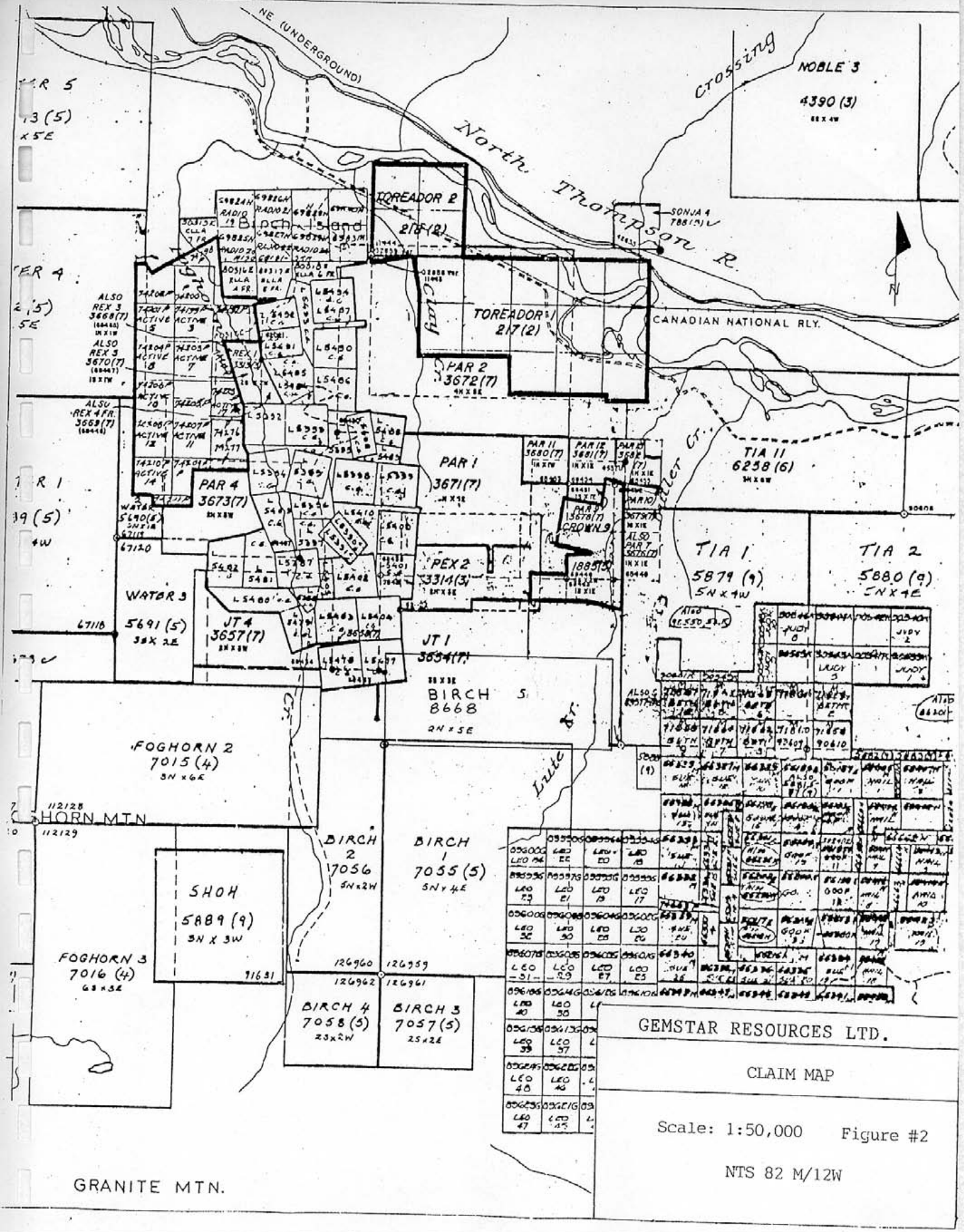
A total of five claims consisting of 48 units were staked by New Global Resources in May 1987 and July 1989. Birch 1 to 4 were then acquired by Foundation Resources Ltd. and optioned to Gemstar Resources Ltd. (see Figure 2). Gemstar also has an option on Birch #5.

TABLE 1

Claim Name	Record No.	No. of Units	Expiry Date
Birch #1	7055	20	May 29, 1992*
Birch #2	7056	10	May 29, 1992*
Birch #3	7057	4	May 29, 1992*
Birch #4	7058	4	May 29, 1992*
Birch #5	8668	10	July 21, 1993*
	Total	48	

* with application of assessment work documented in this report

Gemstar is required to spend an additional $100,000 by both October 15, 1991 and October 15, 1992 to earn a 100% interest in the property. Foundation has the right to buy-back an interest within a certain time limit or remain at a 10% net profits interest.



GEMSTAR RESOURCES LTD.

CLAIM MAP

Scale: 1:50,000 Figure #2

NTS 82 M/12W

FIELD PROCEDURES

Grid lines that had been established on the property by previous operators between 1979 to 1983 required refurbishing to facilitate the soil sampling and induced polarization geophysical survey programs. The grid lines trend north and south from an east-west trending baseline designated 20+00N. The distance between stations was hip-chained to ensure an accurate measuring for the location of station flags. A 25 metre interval between stations was used for the induced polarization survey. Stations were established on lines L6+00W & L7+00W at 10 metre intervals to mark soil sample sites. Brush and deadfall that had grown in or fallen across the cut grid lines since 1983 were removed using a power saw. Two lines, L6+00W and L7+00W, were extended to fully define the induced polarization anomalies. These extensions were flagged but not cut.

The "A" grid was established using compass and hipchain with a 500 m long tie line trending at 245° with cross lines at 100 metre spacings (see Figure 1). The lines are described with the suffix "A" to avoid confusion with previous lines at different azimuths. The lines are flagged at 25 metre intervals to accommodate the induced polarization geophysical survey. This orientation was selected to be parallel to L1+00W from the previous induced polarization survey and perpendicular to the trend of the hand pits from the 1988 program. Line L2A to L5A are 500 m long, with L1A 600 metres long, all at 335° azimuth. The bush and deadfall along L1A and L5A were cleared using a chainsaw in areas outside of the logged off areas to allow easy access for the geophysical equipment operators.

Prospecting and geological mapping traverses were plotted on a 1:5000 contoured base map showing grid lines (Figure 4). Rock samples were collected and specimens saved. Soil samples were plotted on a 1:5000 map as Figure 8 showing the results for lead, gold and zinc.

Sites for detailed soil sampling were selected as a result of studies of previous geological and geochemical surveys with the intent of extending the Exhalative showing and defining the induced polarization anomalies on L6+00W. ~~Very little follow-up work was done around highly anomalous sample sites found by previous operators~~.

Soil samples were collected with a grub hoe at 10 meter intervals along L6+00W & L7+00W. Samples of the "B" horizon were collected at depths ranging between 8 and 26 cm. Each sample was placed in a waterproof kraft bag and then shipped to Chemex Labs Ltd., 212 Brooksbank Avenue, North Vancouver, B.C. The samples were geochemically analyzed for gold, silver, lead, zinc and copper. Sample numbers correspond to the line and station numbers. Soil development usually consists of the following: (1) humus, (2) 2-6 cm thick, white, silty-textured leached horizon; (3) bright, red-brown "B" horizon; (4) yellowish-brown sub "B" horizon. These soils would be expected to be transported to a minor degree although overburden is relatively shallow (less than 5 meters) and probably formed as a residual soil nearby. Analytical procedures and results are outlined in Appendix IV. A total of 77 soil samples were collected.

A dipole-dipole induced polarization survey was conducted over the newly established "A" grid to better define the extent of the siliceous zone and on the Main grid lines L6+00W; L7+00W and L8+00W to delineate the extension of the Exhalative zone. These lines were often extended by the geophysical operator to ensure the survey extended beyond chargeability anomalies. Details of this survey are included in "A Geophysical Report on an Induced Polarization Survey" by Peter E. Walcott, located in Appendix V.

A backhoe trenching program was undertaken to create bedrock exposures around some of the geochemical anomalies. Four trenches were dug and then backfilled following sampling. Three of these were along existing roads and the fourth was off the road along an existing cut-line.

The drill core was logged and split in Clearwater and stored at the Sylvan Court Motel. The down hole length of the core was measured in metres at the drill since the core tube and drill-stem was in 3 m lengths.

A systematic row-by-row testing of the drill core with a scintillometer was performed. All readings were in the background range. This correlates well with the rock sample analysis where no uranium was detected (less than 10 ppm U). Composite samples of the drill core analyzed for thorium had no response. This process was done to ensure that there are no elevated levels of radioactive elements within the area of the project, since it is relatively close to the Rexpar deposit.

EXPLORATION HISTORY

Barrier Reef Resources in conjunction with Craigmont Mines carried out an airborne Dighem II EM survey over the Foggy 11 claim (now Birch claim) during the spring of 1979. This work outlined a low resistivity anomaly. Follow-up work located an outcrop of northeast striking massive sulfide mineralization within sericitic schists.

Soil geochemical sampling and a VLF-EM survey were carried out during 1979 to further expand and define the Dighem II anomaly. Anomalous Cu, Zn and Pb geochemical values generally follow the northeasterly trending Dighem II anomaly for approximately 2,200 metres. The VLF-EM survey outlined several weak, linear conductive zones which lie in or adjacent to the Dighem II anomaly.

During 1980 and 1981 Barrier Reef expanded the geochemical soil sampling program as well as performing reconnaissance prospecting and geological mapping. A second outcrop of massive sulfides was located along with mineralized float boulders expanding the strike length of known mineralization to 900 metres.

In 1982 Barrier Reef optioned the ground to Esso Resources. Esso carried out additional ground EM and magnetometer surveys in 1983 as well more soil geochemistry. A major multi-element anomaly emerged from the survey. This anomaly was found to overlie the mineralized outcrop and to parallel its strike for approximately 700 meters. This area is also anomalous in gold.

Esso Resources drilled two holes in late 1983 (BBC 83.2 and 83.3), about 200 metres apart along strike of the mineralized massive sulfide outcrops. Both of these holes intersected two massive sulfide zones. The two zones are separated by about 35 metres of relatively barren rock. The third hole was drilled in 1984 (BBC 84-1) approximately 200 metres down dip from the first two holes. The lateral equivalent of the mineralized zones found in the first two holes were intersected but they were poorly mineralized. A review of the drill holes and results are listed below:

TABLE 2

Esso Resources Drill Hole Summary (1983 - 1984)

Hole	Core	Length (m)	Inclination	Azimuth
BBC-83 2	BQ	139.1	-45	180
BBC-83 3	BQ	128.0	-45	180
BBC-84 1	BQ	134.4	-90	-

Hole	Best Intersection	Width (m)	(oz/t) Au	(oz/t) Ag	(%) Cu	(%) Pb	(%) Zn
83 2	9.3 - 11.1	1.8	.001	.12	.018	.086	.5
"	73.7 - 74.6	0.9	.01	.21	.056	.007	.012
83 3	31 - 37.1	Banded semi-massive sulfide zone					
"	34.5 - 35.6	1.1	.017	.8	1.2	.662	.065
"	35.6 - 37.1	1.5	.011	.1	.12	.011	.016
84 1	40.2 - 41.2	1.0	.001	.06	.037	.01	.01

Some backhoe trenching by Esso Resources was also conducted over about 100 meters of the best soil geochemical anomaly. These trenches have now mostly sloughed in.

In 1988, New Global Resources completed a work program for Gemstar Resources Ltd. The program included detailed geological mapping, soil and silt geochemical sampling, induced polarization geophysics, prospecting and hand trenching. The work outlined three new showings that carry anomalous gold values. The induced polarization survey indicated the possibility that two of the three Esso drill holes were not drilled deep enough to intersect the main massive sulfide zone.

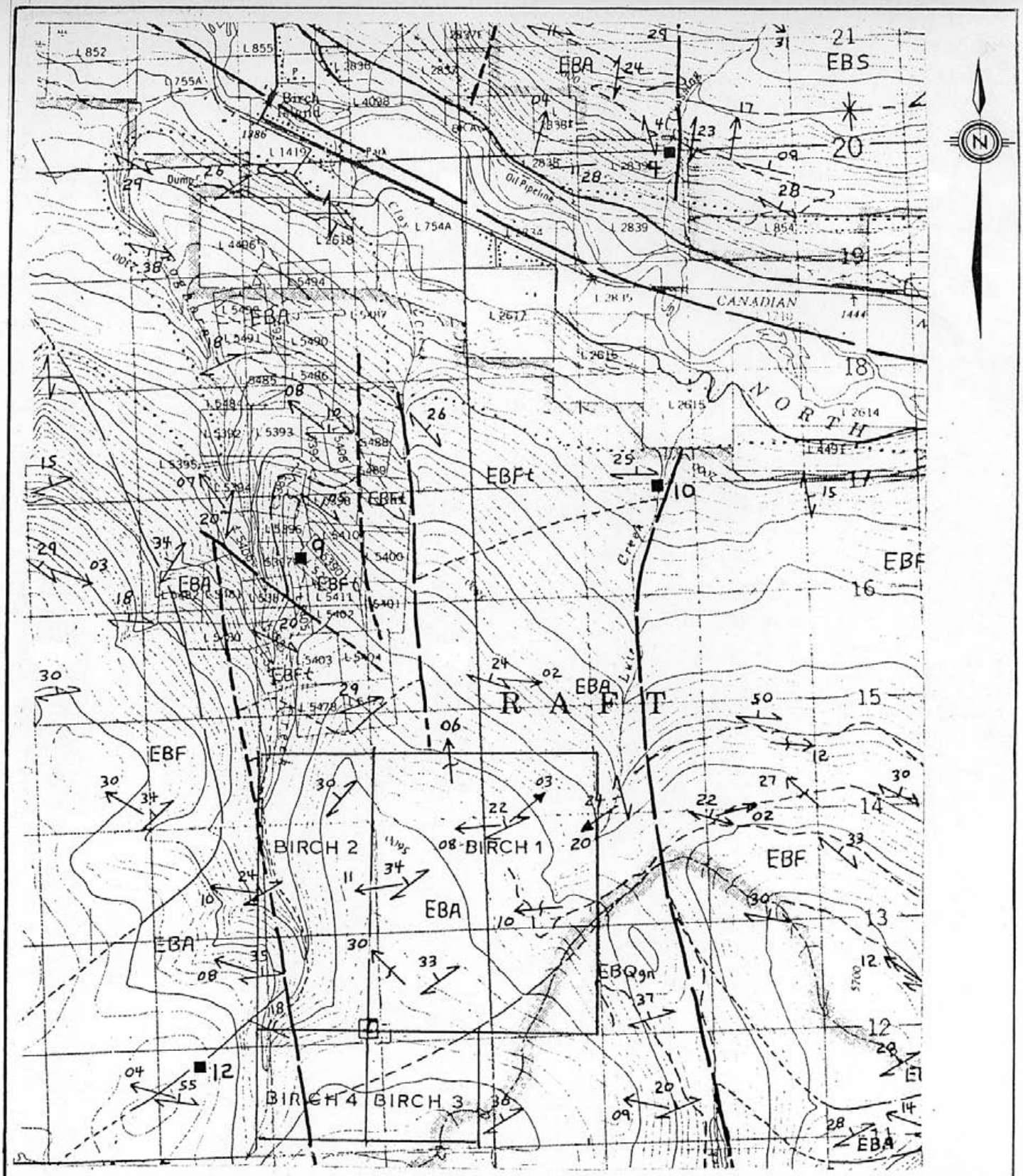
A small geological mapping and sampling program was done in 1989 for Gemstar Resources Ltd. on the Birch #5.

REGIONAL GEOLOGY

The claims are located in the northwest part of the Seymour Arm / Adams Plateau, an area of Lower to Upper Paleozoic sediments and volcanics with common intrusives. The immediate claim area is underlain by Lower Paleozoic (Devonian to Mississippian) rocks of the Eagle Bay Formation. The formation consists of rusty weathering, greenish-grey, feldspathic-chlorite schists, chlorite schist, sericite schists, quartz sericite schists and sericitic quartzites. These units comprise a relatively flat lying plate, occurring as a slightly north-plunging synform. Bedding strikes northeast at azimuth 045° and dips northwesterly from 10° to 35° (see Figure 3).

The Eagle Bay Formation rocks appear to be in thrust contact with early Pennsylvanian to Permo - Triassic Fennel Formation basalts, basic fragmentals, cherts, limestones and argillites approximately 5 kilometres to the west of the Birch claims.

Folding of the mineralized zone on the property may occur to a greater extent than previously thought. Small scale structures appear to indicate that the bedding has been deformed into tight isoclinal folds.



LEGEND

EBA - EAGLE BAY FM. - DEVONIAN - Grey sericite quartz phyllite, sericite-chlorite-quartz schist. From felsic to intermediate volcanics. Sericitic quartzites

EBQgn - EAGLE BAY FM. LOWER CAMBRIAN? Intrusive derived orthogneiss.

FOUNDATION RESOURCES LTD

0 1000 2000 m

SCALE 1:50,000

BIRCH CLAIMS
REGIONAL GEOLOGY

NTS. 82M-12W
Eng: W.B.L.
Date: May 1988

FIGURE 3

PROPERTY GEOLOGY

Geology

The Birch claims are underlain entirely by sheared Eagle Bay rocks. Geological mapping by Esso Minerals (Everett & Cooper, 1983) indicates that the rocks strike northeasterly and dip northwesterly at low angles (Fig. 4, in pocket). Strong schistosity obscures the original fabric of the rocks. On careful examination quartz eyes can frequently be seen, suggesting that the parent rocks in part were probably rhyolites. Pyrite, sericite and chlorite are ubiquitous over most of the property, much more so, than in other areas hosting Eagle Bay rocks (Vollo, 1988). The abundance of pyrite has led to the development of noticeably rusty soils.

Two phases of regional deformation and metamorphism appear to have altered the originally mainly rhyolitic units into a sequence of greenschist facies schistose rocks of varying composition. At least ten distinct horizons underlie the property. The youngest schist units are located on the west side of the property, with progression down section to the oldest units located on the eastern extremity of the property (Fig. 4). Repetition of units likely occur due to folding and thrust faulting. The southern end of the property, particularly in the vicinity of the Birch 3 and 4 claims is underlain by an orthogneiss. The northern portion of the property is underlain by grey phyllites (Fig. 4). A diabase dyke up to 10 meters thick cuts all units and trends northerly roughly paralleling Line 6+00E and extending across the Birch #5 claim. All the above units comprise a relatively flat lying plate with apparent bedding striking between 035° and 060° with northwest dips varying between 10 and 35 degrees.

The units mapped on the property, going from west to east are as follows:

1. **Sericitic to quartz-sericite ± chlorite schists**
   These interbedded units range from yellow to pale green in colour depending on chlorite content and are highly schistose. This unit usually contains 1 to 5% quartz eyes.

2,3. Exhalative Bands and Carbonate Horizon

These two units are interbedded with the sericitic schists. Both units were newly documented in 1988 and are well mineralized with pyrite, chalcopyrite, galena and sphalerite, forming a stratabound horizon.

4. Chlorite schist

This unit covers an extensive area between line 7+00W and the main zone massive sulfide showing exposed in trenches between line 1+00W and line 0+00 (Fig. 4). The chlorite schist is dark green coloured, banded with lamellae of chlorite, feldspar, quartz, $\pm$ ankerite. This unit is commonly well mineralized with pyrite. Galena and sphalerite occur primarily in bands of heavy pyrite mineralization. A new showing was discovered in 1988 within this unit to the west of the main zone massive sulfide horizon.

5. Main Zone Massive Sulfide Horizon

Massive pyrite was discovered by the construction of a logging road at Line 0+00 (Fig. 4) and this horizon was detected by the Dighem airborne survey in 1979. Subsequent trenching by Esso Minerals defined an apparently conformable bed of medium to coarse, granular pyrite, 25 to 35 cm thick, containing anomalous values of lead, zinc, copper, silver and gold (Fig. 4). The massive sulfide horizon has a 35 cm thick hanging wall and 35 cm thick footwall zone of semi-massive banded pyrite. Chalcopyrite, galena and sphalerite are disseminated throughout the massive pyrite zone and along quartz rich bands in the banded semi-massive hanging wall and footwall zones. This horizon is located within the Chlorite Schist unit near its lower contact with sericitic to quartz-sericite schist units.

6. Sericitic Quartzites

This unmineralized massive unit is composed of siliceous sediments, probably quartzite, and thin felsic (rhyolitic to dacitic) flows. Quartz eyes were noted locally. Sericite occurs as thin sheets between quartzite bands. The unit has a distinctive grey-yellow to pink colouration. This unit has an apparent thickness of approximately 130 meters and it conformably overlies a sequence of mineralized and banded quartz-sericite schist.

7. **Chlorite Schist**

This dark green chlorite schist unit is distinguished from the banded chlorite schist located on the western half of the property. This chlorite schist has a gneissic texture. It is dark green coloured and may be a metamorphosed andesitic breccia. Remnant chloritic fragments are found along cleavage planes.

8. **Phyllite**

The area located approximately 150 meters north of the L20+00N baseline is underlain by a variety of phyllitic schists. The phyllites are mainly grey green coloured and have a vitreous glassy sheen and soapy texture.

9. **Rhyolite Breccia**

The 1988 induced polarization survey located a significant chargeability anomaly along L1+00W between 28+50N and 31+50N. Prospecting and trenching uncovered a silicified zone consisting of quartzites, quartzose schists, quartz veins and rhyolite breccias. The rhyolite breccia is a light grey coloured siliceous unit containing angular cherty fragments up to 5 mm in diameter. Pyrite and traces of pyrrhotite are finely disseminated throughout the rock and along the breccia fragment rims. North of the rhyolite breccia is a series of quartz veins and creamy quartzites or quartz flooded sericite schists. Disseminated pyrite ranges from trace to 5% in this section.

10. **Orthogneiss**

This unit is located on the southern Birch 3 and 4 claim. It is a light grey unit of granodioritic composition. The outcrop occurrences exhibit a massive appearance but in areas of shearing this dramatically changes to a laminated form.

MINERALIZATION AND DIAMOND DRILLING

Three new mineralized zones were located during the 1988 exploration program on the Birch claims. Soil sampling and induced polarization surveys conducted in 1988 and 1990 indicate that all of these zones extend significantly beyond the presently limited exposures. The Main Zone Massive Sulfide horizon discovered and investigated by Barrier Reef Resources and Esso Resources between 1979 and 1984 was more precisely defined by the 1988 induced polarization survey. This survey also indicated that probably only one previous diamond drill hole drilled by Esso intersected the Main Zone Massive Sulfide horizon. The potential of this zone remains largely untested. A well defined strike length of 400 meters is indicated and the faulted western extension of the Main Zone Massive Sulfide horizon may be offset to the south.

A diamond drilling program consisting of nine holes of IAX core (thinwall standard but of BQ equivalent size) for a total of 309.5 m (1,015 ft.) were drilled this year. Contract services were provided by Cancor Drilling of Courtenay, B.C. Table 3 is a summary of the drilling in three major areas:

TABLE 3

1990 Drill Hole Summary

Hole No.	Strike	Dip	Length (m)	Target
B90-1	145°	-56.5	20.0	Exhalative zone
B90-2	145°	-75.5	20.5	Exhalative zone
B90-3	155°	-75.5	25.0	Exhalative zone
B90-4	155°	-50.0	20.1	Exhalative zone
B90-5	145°	-70.0	39.0	Exhalative zone
B90-6	145°	-47.0	39.5	Exhalative zone
B90-7	000°	-51.5	39.8	L6+00W IP Chargeability high
B90-8	242°	-47.0	40.0	L6+00W IP Chargeability high
B90-9	280°	-46.5	65.7	IP Chargeability high and backhoe trench ("A" grid)

The three mineralized areas discovered in 1988 and the Main Zone Massive Sulfide horizon exhibit four distinct types of mineralization. The most significant of the showings found in 1988 is the exhalative band located in the western portion of the

property at Line 8+60W station 20+70N (Fig. 4 and 6) This showing is exposed in a ten meter long trench. A 0.3 m to 1.2 m thick white quartz-carbonate Exhalative Unit occurs in an intensely sheared zone. The Exhalative Unit is well mineralized with coarse grained galena, sphalerite, chalcopyrite and pyrite. It is overlain by sericitic and quartz-sericite schists and underlain by sericite schists. The entire outcrop and soils above the outcrop are intensely manganese stained. The attitude of the Exhalative Band is 055°/25° NW. Highly anomalous soil samples taken along Lines 8W and 9W indicate that the zone extends along strike for a distance of approximately 100 meters. Rock chip samples taken across the section of all rock types from the hanging wall to the footwall are summarized below:

TABLE 4

1990 Chip Samples from the Trench on the Exhalative Zone

Sample No.	From (m)	To (m)	Rock Description	Gold ppb	Silver ppm	Lead ppm	Zinc ppm	Copper ppm
511026	0.0	1.2	Sericite schist	50	1.8	70	132	248
511027	1.2	3.5	Qtz-Ser. schist	30	1.0	32	118	639
511028	3.5	4.5	Rusty schist w qtz & carb veinlets	85	2.8	214	318	303
511029	4.5	5.5	Qtz-carb w/strong py	45	2.6	324	214	170
511030	5.5	6.5	qtz-carb w/strong py tr malachite	120	2.4	292	666	292
511031	6.5	7.5	qtz-carb w/strong py	110	9.4	1545	2940	276
511032	7.5	8.5	qtz-carb w/strong py	205	9.0	866	3260	595
511033	8.5	9.5	qtz-carb w/strong py	120	5.8	640	4270	698

A backhoe trench at L8+00W, 21+00N was dug exposing deeply weathered bedrock at about 2.3 meters depth. The following table outlines samples of rock chips collected from the trench wall.

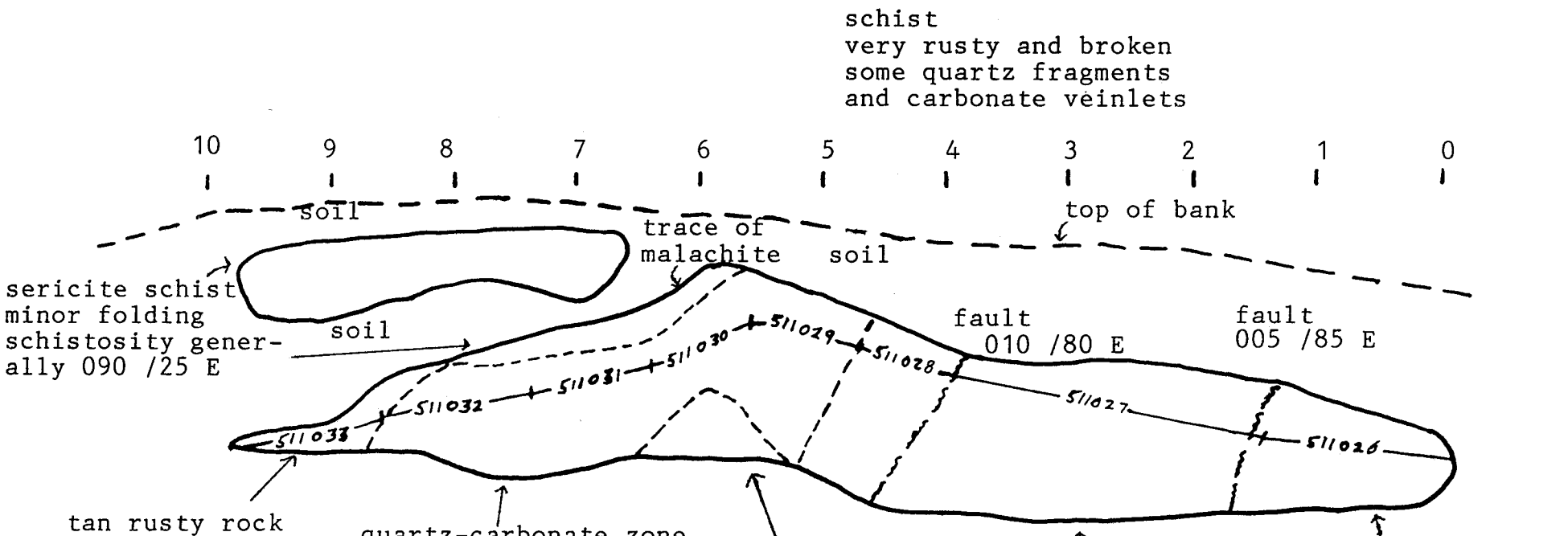


FIGURE 6

0 1 2

GEMSTAR RESOURCES LTD.

BIRCH CLAIMS

EXHALATIVE SHOWING
TRENCH

BIRCH ISLAND, B.C.

NEW GLOBAL RESOURCES LTD.

SCALE: 1 : 50	DRAWN BY: SPB
	DATE: NOV.1990

TABLE 5

L8 + 00W, 21+00N Trench Samples

Sample No.	Rock Description	Gold ppb	Silver ppm	Lead ppm	Zinc ppm	Copper ppm
511023	Sericite schist - bottom of the trench	55	7.4	58	60	328
511024	Rusty red heavily weathered quartzose material	1020	10.0	206	78	1375
511025	Grey-white weathered material w/ quartz vein fragments approximately 1 m above trench bottom	885	5.2	42	8	37

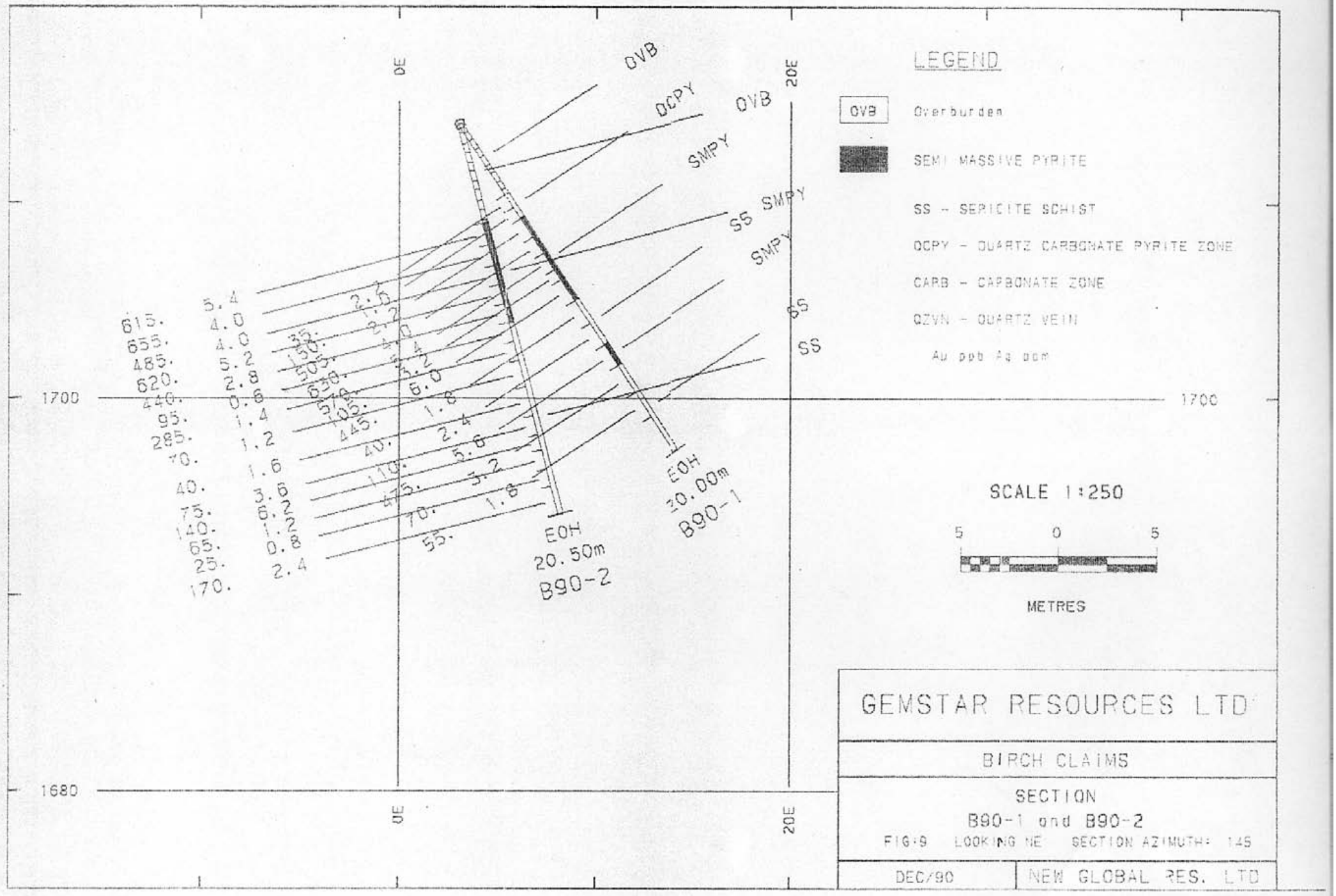
The majority of the diamond drilling was concentrated in the area of the Exhalative showing.

Diamond drilling of the Exhalative showing consisted of six IAX drill holes which all intersected significant widths massive pyrite with some minor chalcopyrite, sphalerite and galena (Figures 9 to 11). The pyrite zones dip moderately to steeply northwest and were from 1.5 to 5.0 m thick in drill core. These holes were drilled from three different set-ups along the road with two holes on each set-up.

The two holes collared at L8+00W also intersected a narrow, steeply dipping quartz vein. This quartz vein does not contain any anomalous Au/Ag values.

The massive pyrite zones are moderate to strongly anomalous in gold, silver and copper and weakly anomalous in lead and zinc. The highest values are in hole 90-6 where 1108 ppb gold and 21.3 ppm silver over 1.9 m was intersected. This is the hole nearest to the trench on L8+00W that returned 1020 ppb gold and 10.0 ppm silver in a sample of very highly weathered bedrock. Also anomalous is the 5.2 m intersection in B90-2 with 1961 ppm Cu and 566 ppb gold over this drill thickness.

Holes B90-7 and B90-8 were drilled to test the IP chargeability highs outlined on L6+00W. Hole B90-7 was targeted toward a resistivity high coincident with a

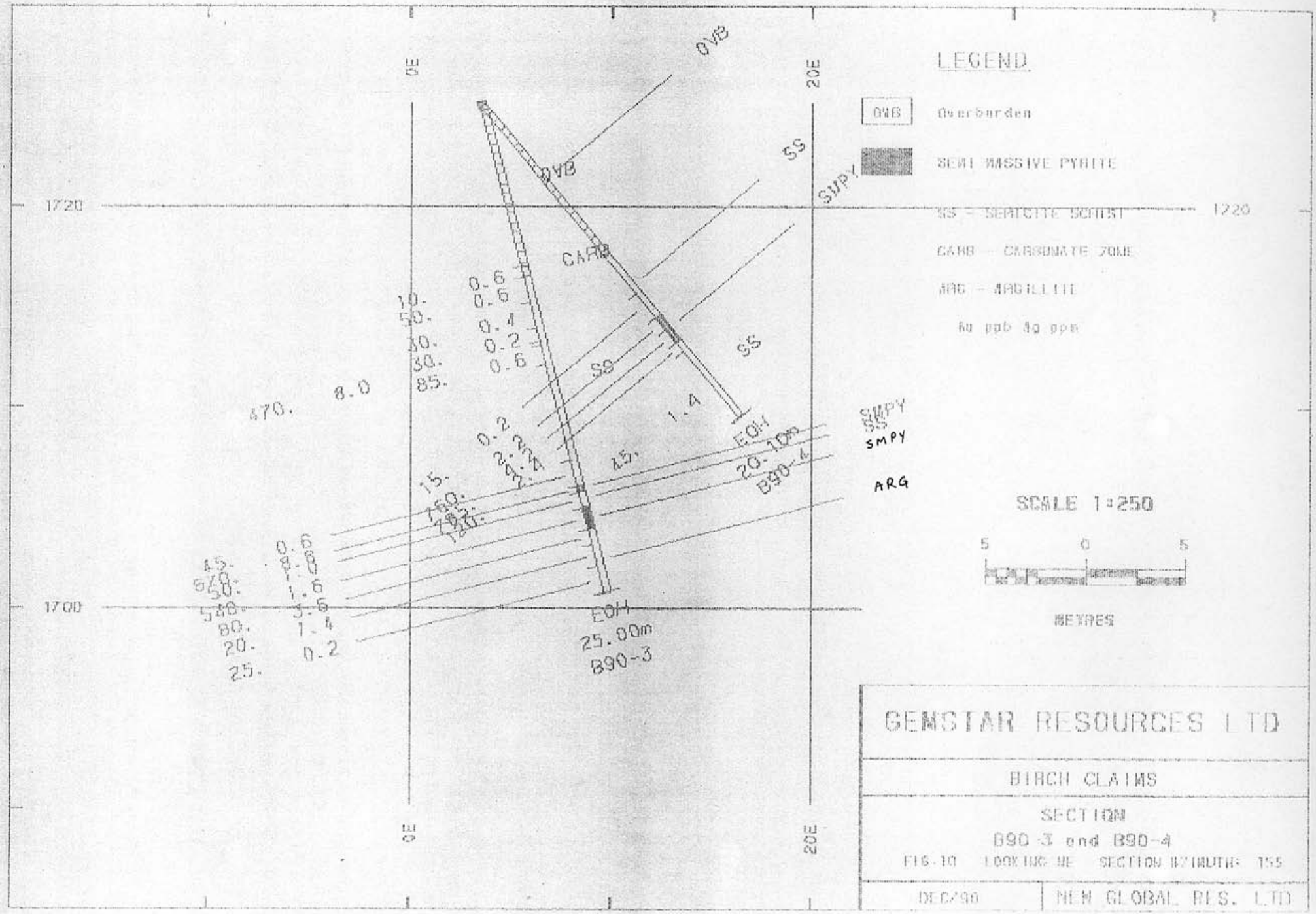


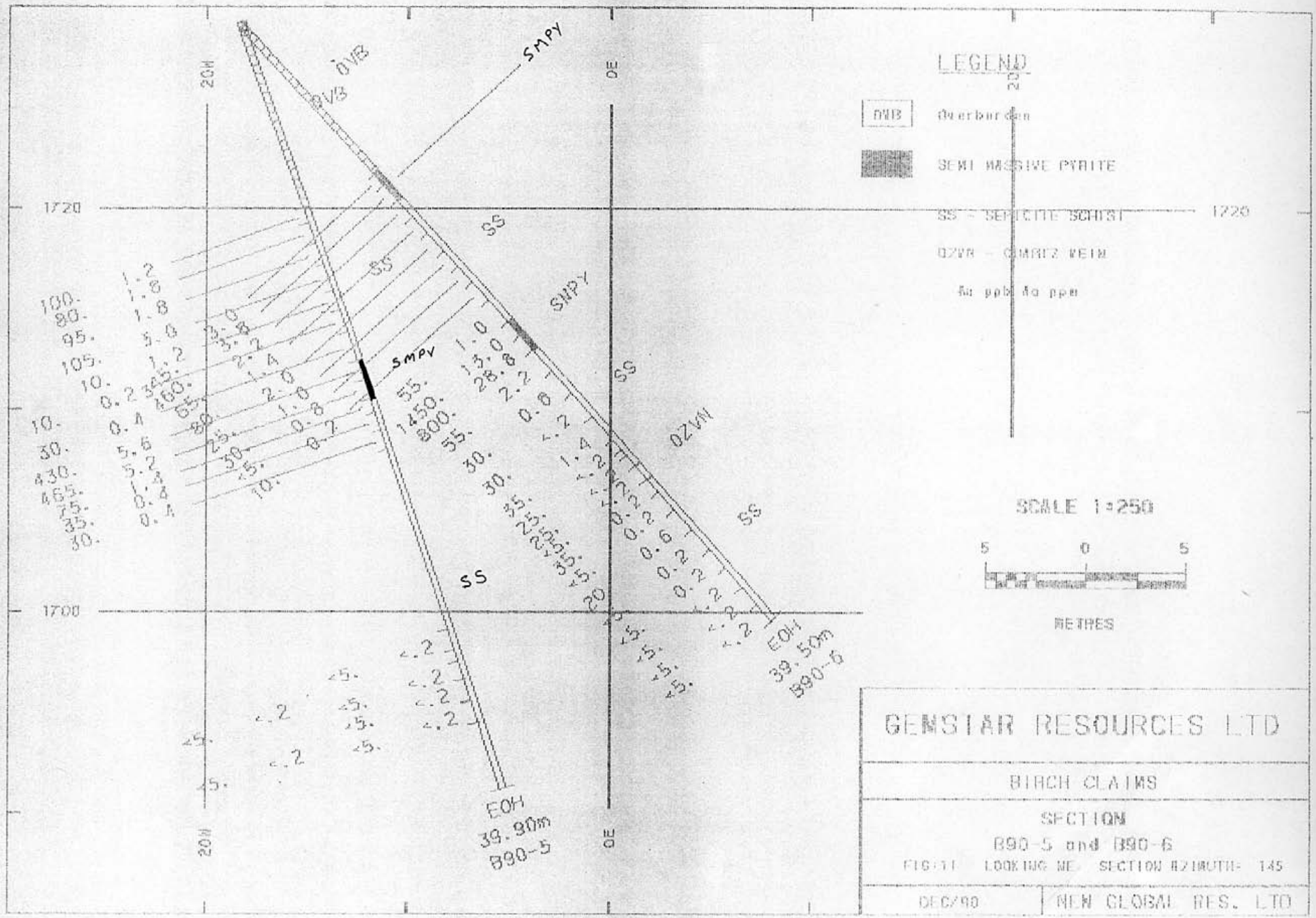
GEMSTAR RESOURCES LTD

BIRCH CLAIMS

SECTION
B90-1 and B90-2
FIG:9 LOOKING NE SECTION AZIMUTH: 145

DEC/90 | NEW GLOBAL RES. LTD


LEGEND
OVB Overburden
SEMI MASSIVE PYRITE
SS - SERICITE SCHIST
CARB - CARBONATE ZONE
ARG - ARGILLITE
Au ppb Ag ppm
SCALE 1:250
5 0 5
METRES
GENSTAR RESOURCES LTD
BIRCH CLAIMS
SECTION
B90-3 and B90-4
FIG-10 LOOKING NE SECTION AZIMUTH: 155
DEC/90
NEW GLOBAL RES. LTD
1720
1700
5E
20E
OVB
SS
SMPY
CARB
ARG
EOH
25.00m
B90-3
B90-4
20.10m



GENSTAR RESOURCES LTD

BIRCH CLAIMS

SECTION
B90-5 and B90-6
FIG:11 LOOKING NE SECTION AZIMUTH= 145

DEC/90 | NEW GLOBAL RES. LTD

chargeability high near 25+00N. The hole intersected chlorite-sericite schists healed by quartz in some areas and calcite/dolomite in others. This healing of fractures by calcite/dolomite is the probable cause of the resistivity high. The carbonate did not react with acid in the field and was logged as gypsum. Later petrographic evidence indicated it to be calcite and dolomite. Diamond drill hole B90-8 was drilled to check the chargeability high that is indicated at the probable fault scarp at the base of the slope of a small (6 m) hill. The hole was drilled perpendicular to this slope to intersect the structure. Neither of these holes returned anomalous values.

The 1988 program outlined an induced polarization chargeability high on L1+00W area 29+50N. Follow-up trenching and sampling found a wide silicified belt associated with rhyolite breccia. This was sampled and mapped by hand-dug pits that indicated increased pyrite associated with the silicified sections.

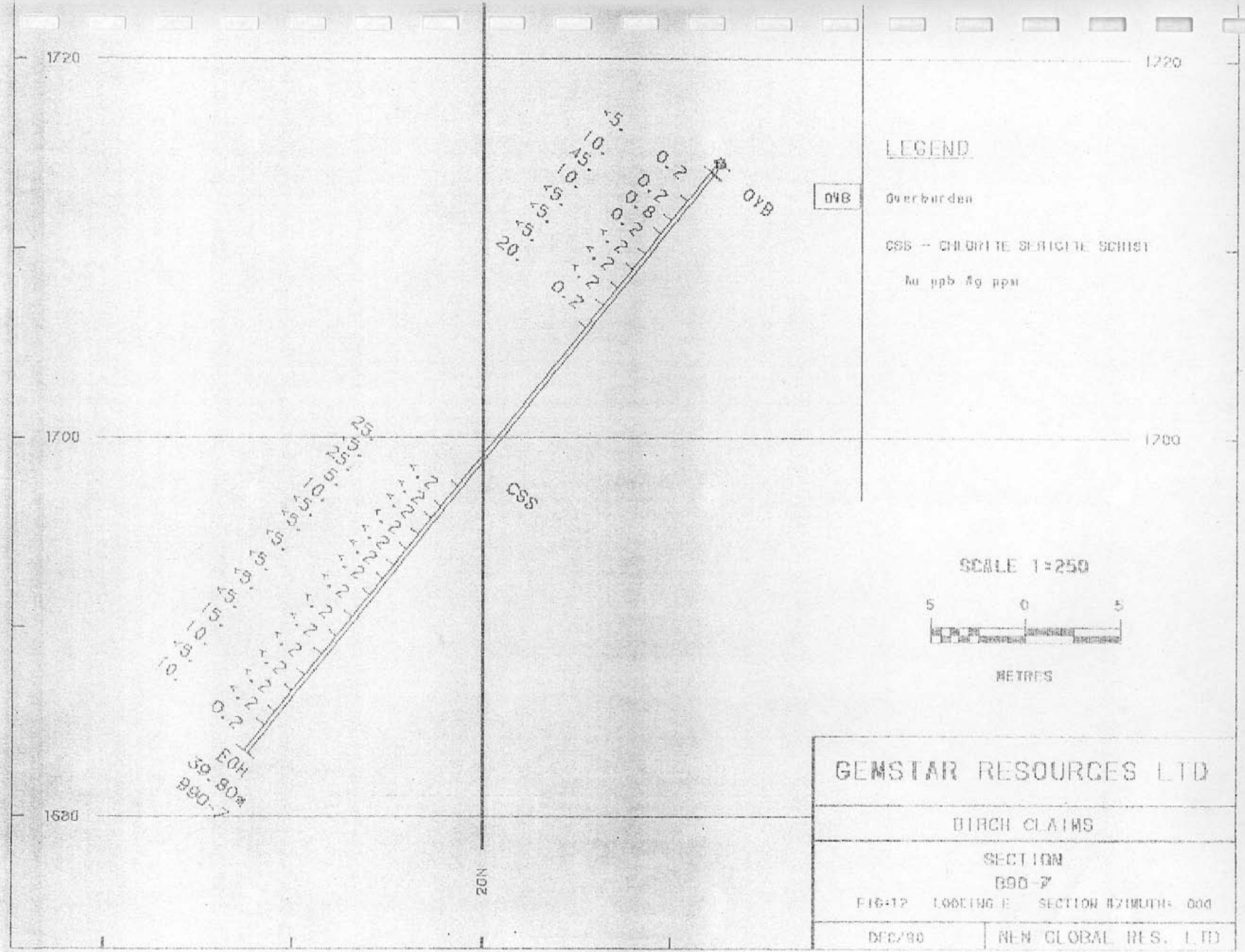
The "A" grid was established in 1990 to systematically test this area. The induced polarization survey indicates a chargeability high in the area of the hand dug pits on L3A near 2+50N and L2A near 31+00N.

A trench was dug along the edge of the road through the lower part of the "A" grid to allow a more continuous sample across the silicified / rhyolite breccia zone. This zone was sampled for 28.9 m with a 4.2 m gap covered by overburden. This trench is relatively perpendicular to the trend of known showings and allows a better understanding of this area than from the previous discontinuous hand-dug pits. Sample results from the 1990 trench are shown in Table 6.

TABLE 6

Chip Samples in the "A" Grid Trench

Sample No.	From (m)	To (m)	Rock Description	Gold ppb	Silver ppm	Lead ppm	Zinc ppm	Copper ppm
511001	0.0	3.9	Chlorite-actinolite schist 120°/10° NE	45	0.2	12	26	16
511002	3.9	6.9	Quartzite with schistosity over-printed	10	0.2	38	8	2



GEMSTAR RESOURCES LTD

BIRCH CLAIMS

SECTION
B90-7

P16-12 LOGGING E SECTION AZIMUTH: 000

DEC/90 | MEN GLOBAL RES. LTD

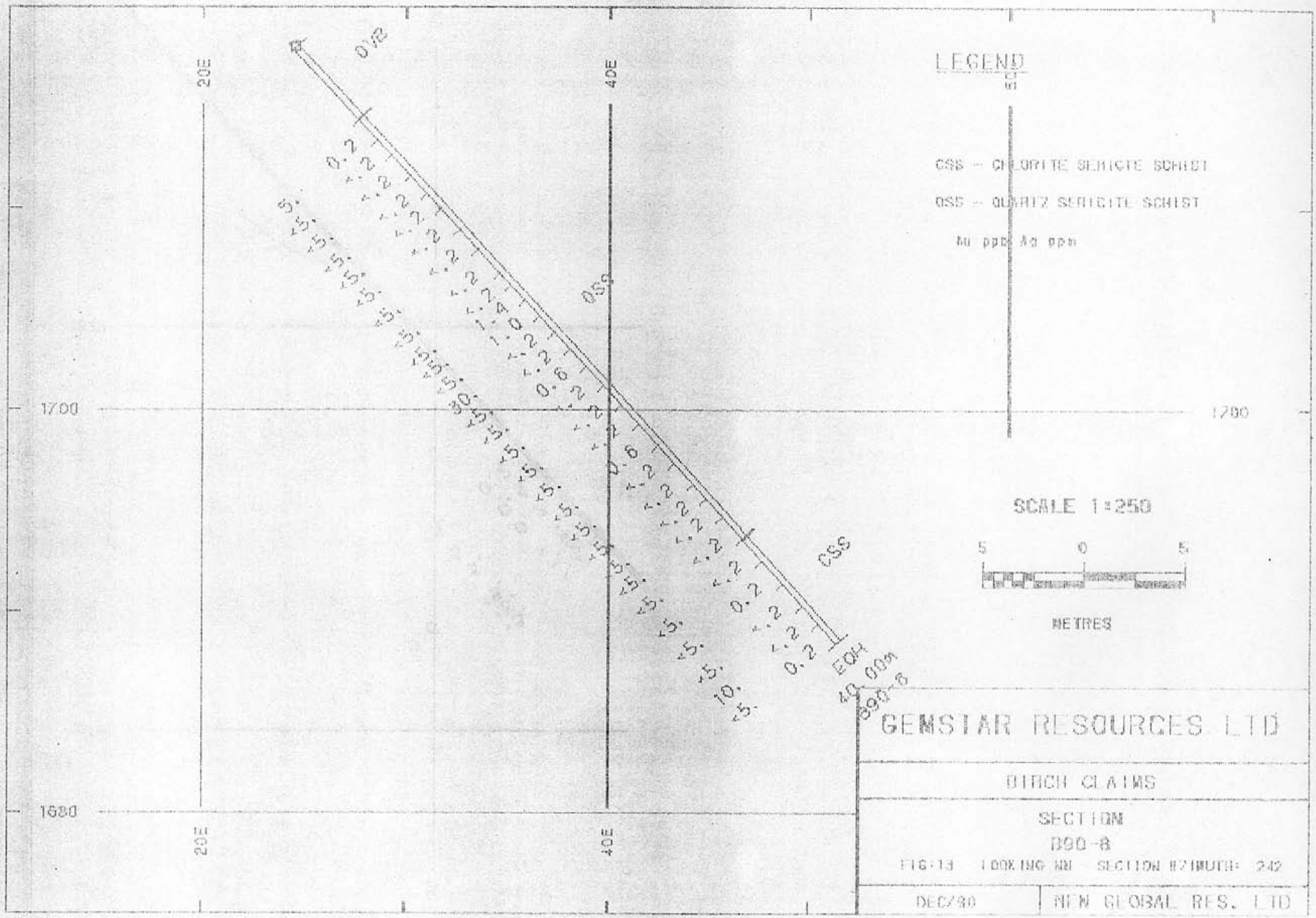

LEGEND
CSS – CHLORITE SERICITE SCHIST
QSS – QUARTZ SERICITE SCHIST
Au ppb Ag ppm
SCALE 1:250
5 0 5
METRES
20E
40E
1700
1680
0+12
DDH
40.00m
DDO-8
GEMSTAR RESOURCES LTD
BIRCH CLAIMS
SECTION
DDO-8
FIG:13 LOOKING NW SECTION AZIMUTH: 242
DEC/90
NEW GLOBAL RES. LTD

TABLE 6 CONT'D

Sample No.	From (m)	To (m)	Rock Description	Gold ppb	Silver ppm	Lead ppm	Zinc ppm	Copper ppm
511003	6.9	7.6	Quartzite w/ pyrite and possible arseno-pyrite	5	0.2	30	14	1
511004	7.6	8.3	Quartz vein	5	0.2	40	26	1
511005	8.3	8.9	Quartzite and qtz vein w/ pyrite	5	0.2	22	8	1
511006	8.9	9.4	Quartz-sericite schist	5	0.2	78	92	3
511007	9.4	11.0	Quartz vein w/ pyrite quartz feldspar inter-bands small schist sections	5	0.6	24	14	5
511008	11.0	12.6	Quartz w/ trace pyrite	5	0.2	32	4	2
511009	12.6	13.7	Quartz flooded w/ 5% pyrite	5	0.2	10	4	3
511010	13.7	14.8	Quartz vein (bull qtz, attitude unavailable)	5	0.2	14	2	1
No Sample	14.8	19.0	Overburden	-	-	-	-	-
511011	19.0	20.1	Quartz & quartzite (bull qtz and quartz flooding)	5	0.2	10	2	2
511012	20.1	20.4	Quartz vein	5	0.2	28	2	2
511013	20.4	20.6	Schist 075°/60°N	5	0.2	2	106	3
511014	20.6	21.5	Quartz vein (contact parallel to schist @ 075°/60°N	5	0.2	54	8	6
511015	21.5	22.9	Quartzite w/ cherty qtz breccia fragments	5	0.2	2	6	6

TABLE 6 CONT'D

Sample No.	From (m)	To (m)	Rock Description	Gold ppb	Silver ppm	Lead ppm	Zinc ppm	Copper ppm
511016	22.9	23.9	Quartzite w/ cherty quartz breccia fragments	5	0.2	18	6	3
511017	23.9	25.0	Sericite schist (115°/15°N schistosity)	10	0.2	26	18	10
511018	25.0	25.5	Quartz vein	5	0.2	58	14	3
511019	25.5	27.3	Tan sericite schist	5	0.2	48	32	8
511020	27.3	27.8	Quartz vein	5	0.2	24	18	3
511021	27.8	28.9	Sericite schist (partially buried)	10	0.2	24	22	5

Overburden exposed in the bottom of the trench beyond 28.9 meters.

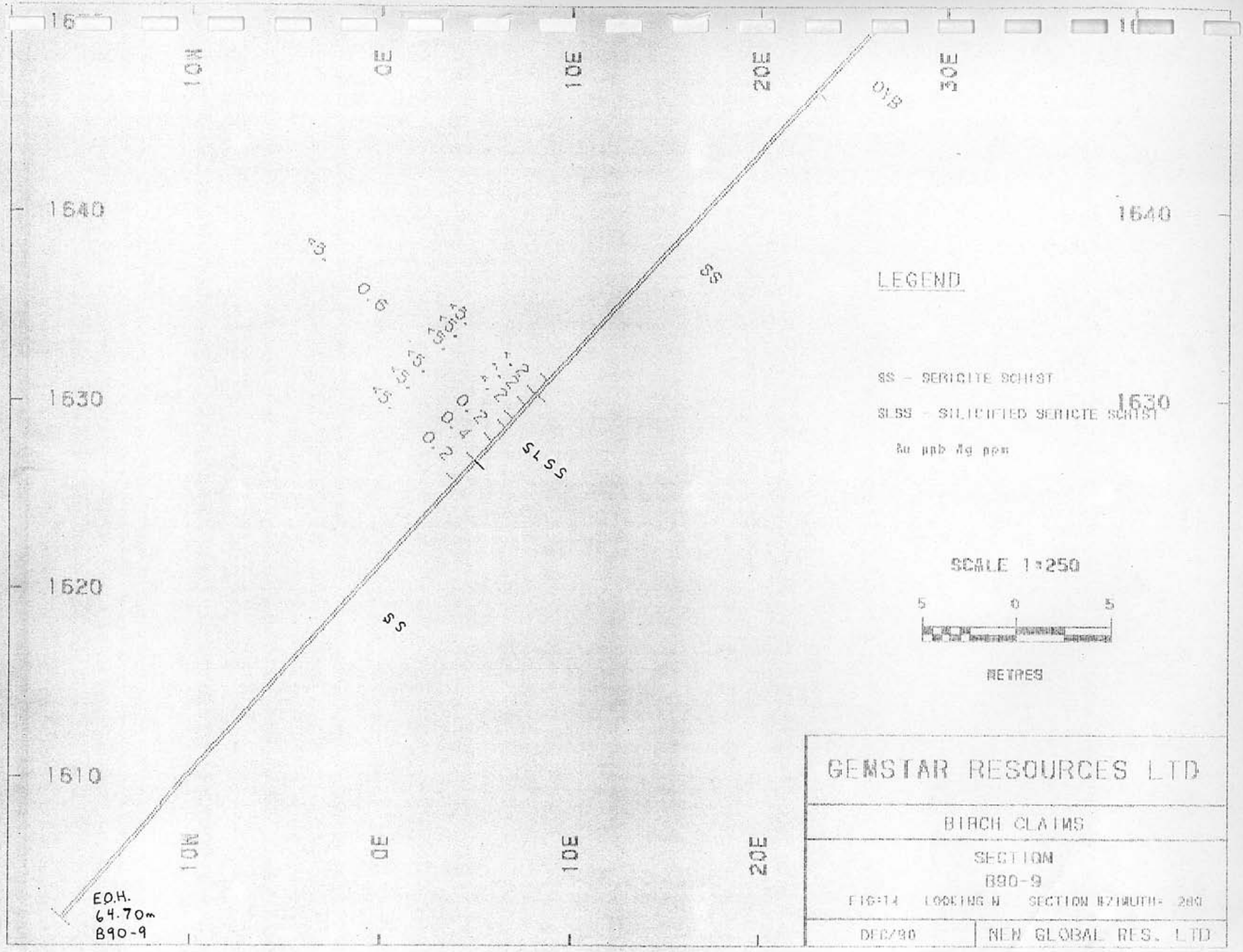
Also a small pit (see Figure 7) was dug to bedrock along the main logging haul road.

TABLE 7

Pit at 4+25A, 3+25N

Sample No.		Rock Description	Gold ppb	Silver ppm	Lead ppm	Zinc ppm	Copper ppm
511022	Grab	Sericite schist w/ minor pyrite and strong rusty soil cap	55	0.2	20	50	4

Diamond drill hole B90-9 was drilled at an azimuth of 280° to investigate the trend outlined in the trench, pits and IP geophysics. This hole intersected sericite schists with a section of quartz veinlets and silicification from 27.0 to 31.5 m (Figure 14). Coarse grained pyrite in quartz veinlets occurs from 28.8 to 29.4 m. This hole does not contain any anomalous mineral values.



GENSTAR RESOURCES LTD	
BIRCH CLAIMS	
SECTION B90-9 FIG:14 LOOKING N SECTION AZIMUTH: 280	
DEC/90	NEW GLOBAL RES. LTD

Kuroko-type volcanogenic massive sulfide ore deposits form in submarine caldera environments. The deposits are formed at the mixing point of cold seawater and fissure-fed hydrothermal fluids. The elements that formed the ore deposits are derived from the leaching of surrounding volcanic and sedimentary rocks by descending seawater and magmatic fluids. Due to the frequently episodic nature of the fissure openings combined with sealing by metal precipitation from ascending fluids, there is often more than one ore deposit or mineral zone within a region or stratigraphic interval. Also because of changes in the deposition, due to changing fluid composition with time and sub-surface alteration of previously deposited minerals, these deposits can have a variety of mineral assemblages.

Kuroko deposits have a large number of typical ore types. Kuroko ore (black ore) is a fine grained sphalerite-galena-pyrite and barite rich ore and forms as "chimneys" and fine layers above and adjacent the hydrothermal vents. Later tectonic movement during late and post deposition commonly due to rhyolite dome formation often cause brecciated and synsedimentary deformation textures. As later fluids continue to rise through the early mineralization, the overlying rocks insulate the lower portions of these deposits to allow higher temperatures. These higher temperatures and later fluids are partially responsible for recrystallization to coarser grained black ore, then development of chalcopyrite-rich yellow ore and finally a pyrite rich ore. There is also commonly a small amount of gold and silver deposited with these deposits, but separate precious-metal rich lenses within certain stratigraphic intervals also occur.

Multiple fissures feeding into these caldera environments can form several isolated deposits and depending on the length of time these fissures remain hydrothermally active a variety of stacked ore lenses can form. These processes appear to have been active in the area of the Birch claims. The next stage of exploration is to locate the associated sulfide lenses with greater economic significance and to look at the lateral stratigraphic equivalents of the known massive sulfides.

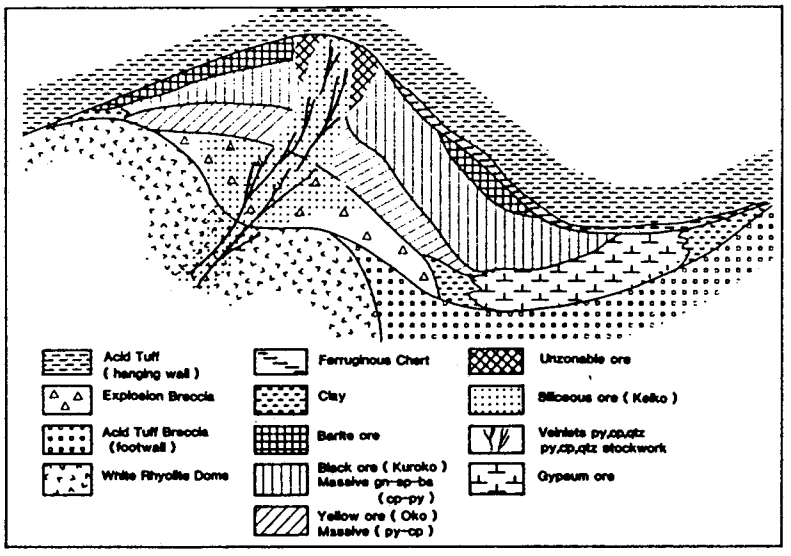


FIG. 56. Idealized cross section of a typical Kuroko deposit. (From Sato, 1974, and Horikoshi and Sato, 1970.)

From Franklin, et. al, 1981

PETROLOGY

A preliminary fifteen specimen suite was examined in thin and polished section. The suite consisted of six massive pyrite, four sericite (muscovite) schist, two chlorite schist, two pervasive alteration zones and one quartz vein.

The massive pyrite specimens all are characterized by highly fractured, irregular, large pyrite lenses which have many very small to 0.8 mm angular gangue inclusions. Relatively, uniformly disseminated 0.1 to 0.4 mm long irregular blebs of chalcopyrite occur throughout the pyrite lenses. Often the chalcopyrite preferentially forms along microfractures. In rare instances, traces of pyrrhotite occur in the chalcopyrite inclusion and exhibit straight, smooth grain boundaries. Sphalerite content is highly variable. It occurs in all massive pyrite specimens but ranges from microscopic traces to several percent by volume. Specimens where the

chalcopyrite or sphalerite content is elevated (Samples B90-5, 19.2; B90-5, 18.1) tend to form isolated larger grains or lenses of these minerals. The larger sphalerite grains and lenses are characterized by abundant very small (less than 0.03 mm) elongated elongated grains of chalcopyrite.

Commonly, the massive sulfide zones are associated with recrystallized bladed (up to 0.6 mm long) quartz and plagioclase gangue. This contrasts with the normally finer grained nature of the sulfide deficient host rocks where quartz grain size typically average around 0.1 mm in diameter.

GEOPHYSICS

(Refer to Induced Polarization Report
by P. Walcott for details, in Appendix V)

Previous geophysical work on the property included a VLF EM survey completed over the main zone massive sulfide horizon by Barrier Reef Resources. This survey showed a very weak response. The low northwesterly dip of the zone, in combination with the north sloping topography and the acute angle of the Annapolis field to the zone, resulted in very poor coupling and therefore, weak response. A Horizontal Loop EM survey by Esso Minerals was relatively flat, also possibly due to poor coupling.

During June of 1988 Gemstar Resources Ltd. conducted an Induced Polarization (I.P.) geophysical survey to better define the limits of the main zone massive sulfide horizon and to re-evaluate a weak anomaly generated by an earlier I.P. survey at the north end of L 0+00 between stations 26+00N and 29+00N (Fig. 5).

A crew from Peter E. Walcott and Associates Ltd. also performed an induced polarization survey between September 29 and October 6, 1990. This was done in two areas: the "A" grid, where five lines were surveyed, and three lines near the Exhalative showing.

The dipole-dipole method was used with a 25 meter dipole and measuring the first to fourth separation. The apparent chargeability and resistivity were recorded and presented in contoured pseudo-sections. Also contoured plans of the 1988 data combined with data from this project were compiled and presented.

The survey was done over the "A" grid to follow-up on a strong chargeability response on line 1W from the 1988 survey and to cover the area of a series of pits in a silicified quartz rich zone. Results indicate that a moderate to strong chargeability response trends towards the northwest, a similar trend to the series of pits dug in 1988. This trend goes through line 3+00A near 2+25, and line 2+00A near 3+00. This anomaly is the target drilled in hole B90-9.

Induced polarization was also done over the projected extension of the Exhalative zone. The equipment failed on the last day due to rain and snow and only partial coverage of this area is available. Line 7+00W was extended to the south to determine the extent of a chargeability high from 16+25N to 19+25N. This is west of the main zone massive sulfide zone and may be an extension of this zone.

There is a series of higher responses near 21+00N on L8+00W (undefined due to incomplete data), 21+25N on L7+00W and 22+00 on L6+00. This response could be the easterly extension of the Exhalative showing that was drilled to the west in this project.

High chargeabilities with low resistivity between 23+00 and 23+75N on L7+00W and 24+75 and 25+50N on L6W also occur. The high resistivity on L6W near 25+00N could be due to quartz or calcite/dolomite healed fractures encountered in hole B90-7. Drill hole B90-8 was drilled to test the other part of this chargeability response.

SOIL GEOCHEMISTRY

A limited program of soil geochemistry was performed in 1990 along lines L6+00W and L7+00W. These lines were chosen to test the possible extension of soil geochemistry anomalies from L8+00W and L9+00W defined during the 1988 program. Also L6+00W was extended to test two induced polarization chargeability highs defined in this program. Sample collection is described in the field procedures sections.

During the 1988 field program, a determination of anomalous values in soil was determined to be:

TABLE 8
Soil Anomaly Strength Chart

Anomaly Strength	Gold	Silver	Lead	Zinc
Background	10 ppb	1.2 ppm	15 - 50 ppm	50 - 125 ppm
Weak anomaly	10 - 40 ppb	1.2 - 2 ppm	50 - 70 ppm	125 - 140 ppm
Moderate strength	40 - 100 ppb	2 - 4 ppm	70 - 100 ppm	140 - 400 ppm
High strength anomaly	100 ppb	4 ppm	100 ppm	400 ppm

Not enough copper analyses are available to determine anomalous values.

The Exhalative zone is reflected by a strong gold-in-soil anomaly within a broad lead and zinc halo which extends downslope to the northwest. The gold-in-soil anomaly does not appear to extend to L7+00W, but a broad zone of lead, zinc and silver anomalies are discontinuously located between 20+60N and 21+30N. Also on L6+00W at 22+30N and 22+40N are coincident anomalous lead, zinc and silver values with up to 1500 ppm zinc and 9.5 ppm silver. These are roughly coincident with a high induced polarization conductor. The lack of a gold and copper values in these areas suggest that they are a separate zone. This may be related to the silver, lead and zinc soil anomaly near L8+00W -21+60N which possibly reflects a

base metal rich ("black ore") horizon of a typical Kuroko-type volcanogenic massive sulfide zone that often occur stratigraphically above the pyrite-chalcopyrite ("yellow ore") horizon. These sulfide horizons have been known to be separated by fine tuffaceous bands at other volcanogenic massive sulfide deposits.

The anomalous values on L7+00W near 20+10N in gold, copper, lead and zinc do not appear to have any continuity to other areas.

Line 6+00W near 26+00N has enhanced gold anomalous values and a broad zinc anomaly with scattered moderate lead and silver values. This area should be followed-up to determine the extent and significance of these values.

CONCLUSIONS AND RECOMMENDATIONS

Polymetallic but mostly pyritic massive sulfide mineralization occurs in several areas within the Birch claims. Two of these zones, the Main Zone Massive Sulfide and the Exhalative Zone Massive Sulfide have been partially investigated by diamond drilling. These zones appear to have considerable strike length and down-dip continuity. Only very limited drill testing has been completed and considerably more work is warranted to evaluate the gold potential of these zones.

The highly varied and rapidly changing nature of the volcanogenic massive sulfide targets in general, both in a lateral and vertical stratigraphic sense, suggest that many other targets remain to be tested on the Birch claims. These targets are indicated by the anomalous induced polarization and geochemical surveys conducted to date.

The following programs are recommended to further explore the property.

Phase II

1) Complete the geological mapping of the property using the orthophoto with attention to the northern and western portions of the claims.

2) Extend the induced polarization geophysics to fill-in the gap between L3W and L7W south of the baseline, with the intention of following up on the trend between the Main Zone Massive Sulfide and the anomaly on Line 7W. Within this area is the semi-massive sulfide zone discovered in 1988.

3) Soil geochemistry is required to follow-up the Line 7W IP anomaly and determine continuity south of the baseline from Line 3W to Line 8W. This will also define the semi-massive sulfide zone discovered in 1988. Also Lines L6W to L10W should be extended out to 29+00N to follow-up on the enhanced soil values on the northerly end of L6W and better define the Exhalative showing.

4) Backhoe trenching of the IP and soil anomaly on Line 8W from 21+50 to 22+00N. Also extend the backhoe trench (now backfilled) over the Exhalative showing on Line 8W to fully understand the bedrock geometrics. Backhoe trenching of targets defined by the IP program to the south of the baseline.

Phase III (contingent on Phase I results)

Diamond drilling of favourable targets following Phase I work.

COST ESTIMATE OF FUTURE WORK

Phase II

1)	Geological mapping and supervision	$ 20,000
2)	Induced Polarization (L3W to L7W)	25,000
3)	Soil sampling and line cutting	5,000
4)	Backhoe trenching	15,000
5)	Analytical	5,000
	Total Phase I	**$ 70,000**

Phase III

Diamond drilling (5,000 feet of drilling) - all in cost	$ 125,000
Geological supervision and core logging	25,000
Analytical	15,000
Total Phase II	**$ 165,000**
TOTAL PHASES I & II	**$ 235,000**

Respectfully submitted,

J.T. Shearer, M.Sc., F.G.A.C.

Sean P. Butler, B.Sc.

REFERENCES

Belik, G.D. (1973): Geology of the Harper Creek Copper Deposits, Unpublished M.Sc. Thesis, The University of British Columbia.

Dawson, J.M. (1981): Geochemical and Geophysical Report on the Foggy #11 Claim. Barrier Reef Resources Ltd., March 20, 1981, 16 pp, BCDM Assessment Report, 9008.

Everett, C.C., and Cooper, W.G., (1983): Geochemical and Geophysical Report on the Foggy A. Group. Esso Resources Canada Ltd., August 25, 1983, 22 pp, BCDM Assessment Report #11503.

Everett, C.C. and Cooper, W.G., (1983): Geochemical and Geophysical Report on Foggy B, Foggy C, Foggy D, Foggy E Groups. Esso Resources Canada Ltd., November 7, 1983, 34 pp. BCDM Assessment Report #11381.

Everett, C.C. and Marr, J.M., (1984): Drilling Assessment Report on the Foggy A. Group. Esso Resources Canada Ltd., November 10, 1984, 14 pp. BCDM Assessment Report #12904.

Franklin, J.M., J.W. Lydon and D.F. Sangster (1981), Massive Sulfide Deposits in Economic Geology, Seventy-Fifth Anniversary Volume, pg. 485 to 627.

Shearer, J.T. (1990): Birch Geological and Geochemical Assessment Report on the Birch 1 to 5 Claims, Gemstar Resources Ltd., July, 1990.

Shearer, J.T. and Lennan, W.B. (1989): Geological, Geochemical and Geophysical Assessment Report on the Birch 1 to 4 Claims, Foundation Resources Ltd., May 1, 1989.

Schiarizza, P., and Preto, V.A., and McLaren, G.P., and Viakow, L.J., 1978-1981, Geology of the Barriere River - Clearwater Area, BCDM Preliminary Map No. 53.

Schiarizza, P., (1986): Open File Map 1986/5 - Geology of the Vavenby Area NTS 82 M/5, 11, 12.

Schiarizza, P. and Preto, V.A., (1987): Geology of the Adams Plateau - Clearwater - Varenby Area, Paper 1987-2. Mineral Resources Division, Geological Survey Branch.

Vollo, N.B. (1988): Report on the Birch Mineral Claims, Clearwater Area for Gemstar Resources Ltd.

APPENDIX I

STATEMENT OF QUALIFICATIONS

STATEMENT OF QUALIFICATIONS

I, JOHAN T. SHEARER, of 1498 Columbia Avenue, in the City of Port Coquitlam, in the Province of British Columbia, do hereby certify:

1. I am a graduate of the University of British Columbia, B.Sc. (1973) in Honours Geology and the University of London, Imperial College (M.Sc. 1977).

2. I have over 20 years of experience in exploration for base and precious metals in the Cordillera of Western North America with such companies as McIntyre Mines Ltd., J.C. Stephen Explorations Ltd., Carolin Mines Ltd. and TRM Engineering Ltd.

3. I am a fellow in good standing of the Geological Association of Canada (Fellow No. F439).

4. I am an independent consulting geologist employed since December 1986 by New Global Resources Ltd. at 548 Beatty Street, Vancouver, British Columbia.

5. I am a co-author of a report entitled "Geological, Geochemical, Geophysical and Diamond Drilling Report on the Birch 1-5 Claims, British Columbia," dated November 12, 1990.

6. I have visited the property in May 1987, August 1988, August 1989 and October 1990 and carried out geological mapping, drill core logging and sample collection. I am familiar with the regional geology and geology of nearby properties. I have become familiar with the previous work conducted on the Birch property by examining in detail the available reports, plans and sections, and have discussed previous work with persons knowledgeable of the area.

7) I do not own or expect to receive any interest (direct, indirect or contingent) in the property described herein nor in securities of Gemstar Resources or Foundation Resources in respect to services rendered in preparation of this report.

8) I consent to authorize the use of the attached report and my name in the company's Statement of Material Facts or other public document.

Dated at Vancouver, British Columbia, this 12 day of December, 1990.

J.T. Shearer, M. Sc., F.G.A.C.
December 12, 1990

STATEMENT OF QUALIFICATIONS

I, SEAN P. BUTLER, of the City of Vancouver, in the Province of British Columbia, do hereby certify that:

1) I am a graduate of the University of British Columbia (1982) with a Bachelor of Science in Geology (B.Sc.).

2) I have practised my profession as an exploration geologist continuously since graduation.

3) I have examined all pertinent reports on the Birch 1 to 5 claims and supervised the line cutting, trenching, diamond drilling, soil sampling and did the geological mapping and core logging on the 1990 project.

DATED at Vancouver, this 12th day of December, 1990.

Sean P. Butler

SEAN P. BUTLER, B.Sc.
December 12, 1990

APPENDIX II

COST STATEMENT FOR 1990 WORK

STATEMENT OF COSTS

1990 WORK ON BIRCH 1-5 CLAIMS

Wages and Benefits	
J.T. Shearer, Geologist, 42 days at $300 per day	$ 12,600.00
M. McClaren, Geologist, 26 days at $300 per day	7,800.00
S.P. Butler, Geologist, 50 days at $300 per day	15,000.00
S.L. Shearer, Prospector, 14 days at $175 per day	2,450.00
D. Cromarty, Core Splitter, 7 days at $225 per day	1,575.00
Sub-total	39,425.00
Transportation	
Red Hawk 4-wheel drive rental	1,528.75
Ford 150 4x4 rental	1,362.20
Gasoline and highway tolls	512.36
Supplies	
Food	431.01
Propane	97.00
Accommodations and Meals	2,171.37
Communications (radio and land phone)	778.20
Field Supplies	1,092.40
Induced Polarization Survey (P. Walcott & Assoc.)	13,512.67
Computer Rental, Software Rental and Programming	4,320.00
Topographic Mapping & Orthophoto (Eagle Mapping Services Ltd.)	5,800.00
Thinsection Preparation (Vancouver Petrographics Ltd.)	294.25
Analytical (Chemex Labs Ltd.)	4,708.75
Diamond Drilling (Cancor Drilling)	24,300.98
Backhoe Trenching (D. Richie Logging)	1,225.00
Reproduction & Word Processing	395.53
Report Preparation	2,400.00
Filing Work (Fees)	960.00
Sub-total	65,890.47
Grand Total	$ 105,315.47

APPENDIX III

LIST OF PERSONNEL AND DATES WORKED

LIST OF PERSONNEL AND DATES WORKED

Name	Position	Address	Dates Worked Birch 1-5
S.P. Butler	Project Geologist	2657 W. 2nd Ave. Vancouver, B.C.	Sept 19, 24-30; Oct 1-19, 23; Nov 1, 2, 6-9, 13-16, 19-23, 26-30; Dec 3-7, 11, 12 (Total 55 days)
J.T. Shearer	Senior Geologist	1498 Columbia Ave. Port Coquitlam, B.C.	Sept 17(½), 18(½), 19(½), 24(½), 25-30; Oct 1, 5, 6-20, 23, 24, 25; Nov 1, 2, 10, 12-16, 19-22; (Total 45 days)
M. McClaren	Senior Geologist	548 Beatty Street Vancouver, B.C.	Sept 26-30; Oct 1, 5, 6-13, 23, 24, 25; Nov 1, 2, 5, 6, 16, 17; Dec 6 (Total 26 days)
S. Shearer	Linecutter Sampler	3345 Mason Avenue Port Coquitlam, B.C.	Sept 24-30; Oct 1-7 (Total 14 days)
D. Cromarty	Core Splitter	634 Wallace Street Hope, B.C.	Oct 14-20 (Total 17 days)

APPENDIX IV

CHEMEX ANALYTICAL

PROCEDURES

AND

ASSAY CERTIFICATES

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221

To: NEW GLOBAL RESOURCES

548 BEATTY ST.
VANCOUVER, BC
V6B 2L3

A9026680

Comments:

CERTIFICATE A9026680

NEW GLOBAL RESOURCES

Project: BIRCH
P.O. # :

Samples submitted to our lab in Vancouver, BC.
This report was printed on 21-NOV-90.

SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
205	146	Geochem ring to approx 150 mesh
294	146	Crush and split (0-10 pounds)
238	146	NITRIC-AQUA REGIA DIGESTION
* NOTE	1:	

The 32 element ICP package is suitable for trace metals in soil and rock samples. Elements for which the nitric-aqua regia digestion is possibly incomplete are: Al, Ba, Be, Ca, Cr, Ga, K, La, Mg, Na, Sr, Ti, Tl, W.

ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
100	146	Au ppb: Fuse 10 g sample	FA-AAS	5	10000
922	146	Ag ppm: 32 element, soil & rock	ICP-AES	0.2	200
921	146	Al %: 32 element, soil & rock	ICP-AES	0.01	15.00
923	146	As ppm: 32 element, soil & rock	ICP-AES	5	10000
924	146	Ba ppm: 32 element, soil & rock	ICP-AES	10	10000
925	146	Be ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
926	146	Bi ppm: 32 element, soil & rock	ICP-AES	2	10000
927	146	Ca %: 32 element, soil & rock	ICP-AES	0.01	15.00
928	146	Cd ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
929	146	Co ppm: 32 element, soil & rock	ICP-AES	1	10000
930	146	Cr ppm: 32 element, soil & rock	ICP-AES	1	10000
931	146	Cu ppm: 32 element, soil & rock	ICP-AES	1	10000
932	146	Fe %: 32 element, soil & rock	ICP-AES	0.01	15.00
933	146	Ga ppm: 32 element, soil & rock	ICP-AES	10	10000
951	146	Hg ppm: 32 element, soil & rock	ICP-AES	1	10000
934	146	K %: 32 element, soil & rock	ICP-AES	0.01	10.00
935	146	La ppm: 32 element, soil & rock	ICP-AES	10	10000
936	146	Mg %: 32 element, soil & rock	ICP-AES	0.01	15.00
937	146	Mn ppm: 32 element, soil & rock	ICP-AES	5	10000
938	146	Mo ppm: 32 element, soil & rock	ICP-AES	1	10000
939	146	Na %: 32 element, soil & rock	ICP-AES	0.01	5.00
940	146	Ni ppm: 32 element, soil & rock	ICP-AES	1	10000
941	146	P ppm: 32 element, soil & rock	ICP-AES	10	10000
942	146	Pb ppm: 32 element, soil & rock	ICP-AES	2	10000
943	146	Sb ppm: 32 element, soil & rock	ICP-AES	5	10000
958	146	Sc ppm: 32 elements, soil & rock	ICP-AES	1	10000
944	146	Sr ppm: 32 element, soil & rock	ICP-AES	1	10000
945	146	Ti %: 32 element, soil & rock	ICP-AES	0.01	5.00
946	146	Tl ppm: 32 element, soil & rock	ICP-AES	10	10000
947	146	U ppm: 32 element, soil & rock	ICP-AES	10	10000
948	146	V ppm: 32 element, soil & rock	ICP-AES	1	10000
949	146	W ppm: 32 element, soil & rock	ICP-AES	10	10000
950	146	Zn ppm: 32 element, soil & rock	ICP-AES	2	10000

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221

To: NEW GLOBAL RESOURCES

548 BEATTY ST.
VANCOUVER, BC
V6B 2L3

Project : BIRCH
Comments:

Invoice Date: 23-NOV-90
Invoice No. : I-9026846
P.O. Number : NONE

CERTIFICATE OF ANALYSIS A9026846

SAMPLE DESCRIPTION	PREP CODE		Au ppb FA+AA	Cu ppm	Pb ppm	Zn ppm	Ag ppm Aqua R					
L6W 21+00N	201	238	15	45	126	94	0.8					
L6W 21+10N	201	238	10	80	122	340	0.7					
L6W 21+20N	201	238	< 5	40	46	126	0.9					
L6W 21+30N	201	238	< 5	124	144	380	0.4					
L6W 21+40N	201	238	< 5	104	230	154	2.2					
L6W 21+50N	201	238	< 5	130	100	465	1.2					
L6W 21+60N	201	238	< 5	70	54	400	0.7					
L6W 21+70N	201	238	< 5	94	38	215	0.7					
L6W 21+80N	201	238	10	164	64	68	0.9					
L6W 21+90N	201	238	< 5	29	26	126	0.5					
L6W 22+00N	201	238	< 5	36	56	110	0.9					
L6W 22+10N	201	238	5	74	64	240	0.9					
L6W 22+20N	201	238	< 5	36	82	110	0.8					
L6W 22+30N	201	238	< 5	86	110	240	1.4					
L6W 22+40N	201	238	< 5	78	194	196	2.0					
L6W 22+50N	201	238	< 5	56	122	166	1.2					
L6W 22+60N	201	238	< 5	40	56	114	0.8					
L6W 22+70N	201	238	< 5	56	230	164	1.0					
L6W 22+80N	201	238	< 5	57	26	200	0.2					
L6W 22+90N	201	238	< 5	56	36	146	0.5					
L6W 23+00N	201	238	5	124	34	200	0.4					
L6W 23+10N	201	238	< 5	70	32	146	0.2					
L6W 23+20N	201	238	< 5	75	34	134	0.6					
L6W 23+30N	201	238	< 5	50	28	116	0.4					
L6W 23+40N	201	238	< 5	22	20	70	0.4					
L6W 23+50N	201	238	< 5	20	18	70	0.4					
L6W 23+60N	201	238	< 5	22	15	62	0.7					
L6W 23+70N	201	238	15	86	30	164	0.2					
L6W 23+80N	201	238	< 5	34	16	126	0.5					
L6W 23+90N	201	238	< 5	33	30	138	0.8					
L6W 24+00N	201	238	< 5	42	30	152	0.8					
L6W 24+10N	201	238	< 5	50	30	180	0.6					
L6W 24+20N	201	238	< 5	52	60	184	0.5					
L6W 24+30N	201	238	< 5	52	20	174	0.2					
L6W 24+40N	201	238	30	100	28	245	0.2					
L6W 24+50N	201	238	< 5	16	14	60	0.3					
L6W 24+60N	201	238	< 5	20	12	64	0.3					
L6W 24+70N	201	238	< 5	20	16	64	0.4					
L6W 24+80N	201	238	< 5	68	18	130	0.2					
L6W 24+90N	201	238	< 5	22	14	80	0.3					

CERTIFICATION: Hart Buckler

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221

To: NEW GLOBAL RESOURCES

548 BEATTY ST.
VANCOUVER, BC
V6B 2L3

Project : BIRCH
Comments:

Invoice Date: 21-NOV-90
Invoice No. : I-9026679
P.O. Number :

CERTIFICATE OF ANALYSIS A9026679

SAMPLE DESCRIPTION	PREP CODE		Au ppb FA+AA	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm
511001	205	294	45	< 0.2	0.38	10	50	< 0.5	< 2	0.01	< 0.5	4	48	16	4.04	< 10	< 1	0.17	10	0.01	70
511002	205	294	10	< 0.2	0.43	< 5	90	< 0.5	< 2	< 0.01	< 0.5	1	50	2	1.51	< 10	1	0.21	20	0.01	10
511003	205	294	< 5	< 0.2	0.51	< 5	120	< 0.5	< 2	< 0.01	< 0.5	1	70	1	2.96	< 10	< 1	0.20	10	0.01	5
511004	205	294	< 5	< 0.2	0.20	< 5	20	< 0.5	2	< 0.01	< 0.5	2	202	1	2.16	< 10	< 1	0.02	< 10	< 0.01	50
511005	205	294	< 5	< 0.2	0.28	< 5	60	< 0.5	< 2	< 0.01	< 0.5	< 1	60	< 1	1.36	< 10	1	0.09	< 10	< 0.01	10
511006	205	294	< 5	< 0.2	0.50	< 5	50	< 0.5	2	0.02	< 0.5	7	146	3	3.74	< 10	< 1	0.09	< 10	0.02	515
511007	205	294	< 5	0.6	0.16	10	20	< 0.5	< 2	0.05	< 0.5	1	189	5	1.11	< 10	< 1	0.04	< 10	0.02	105
511008	205	294	< 5	0.2	0.30	10	80	< 0.5	< 2	< 0.01	< 0.5	< 1	166	2	0.98	< 10	< 1	0.12	10	0.01	25
511009	205	294	< 5	0.2	0.29	5	40	< 0.5	< 2	< 0.01	< 0.5	1	125	3	0.85	< 10	< 1	0.07	10	0.01	20
511010	205	294	< 5	< 0.2	0.09	< 5	< 10	< 0.5	< 2	< 0.01	< 0.5	< 1	180	1	0.50	< 10	< 1	< 0.01	< 10	< 0.01	20
511011	205	294	< 5	< 0.2	0.04	5	< 10	< 0.5	< 2	< 0.01	< 0.5	1	225	2	0.55	< 10	< 1	0.01	< 10	< 0.01	35
511012	205	294	< 5	< 0.2	0.17	5	20	< 0.5	< 2	< 0.01	< 0.5	1	101	2	0.62	< 10	< 1	0.03	10	< 0.01	20
511013	205	294	< 5	< 0.2	1.45	< 5	70	< 0.5	< 2	0.10	< 0.5	14	56	3	3.67	< 10	< 1	0.14	30	0.50	250
511014	205	294	< 5	0.2	0.18	< 5	40	< 0.5	< 2	< 0.01	< 0.5	1	297	6	1.14	< 10	< 1	0.05	< 10	0.01	30
511015	205	294	< 5	< 0.2	0.10	< 5	< 10	< 0.5	< 2	0.01	< 0.5	2	258	6	0.78	< 10	< 1	0.01	< 10	0.01	45
511016	205	294	< 5	0.2	0.37	< 5	120	< 0.5	< 2	0.01	< 0.5	2	184	3	1.71	< 10	< 1	0.20	< 10	0.01	25
511017	205	294	10	< 0.2	0.38	10	50	< 0.5	< 2	0.01	< 0.5	3	91	10	2.44	< 10	< 1	0.20	10	0.01	105
511018	205	294	< 5	0.2	0.16	< 5	10	< 0.5	< 2	0.01	< 0.5	3	192	3	1.70	< 10	< 1	0.03	< 10	< 0.01	30
511019	205	294	< 5	0.2	0.38	5	40	< 0.5	< 2	0.03	< 0.5	7	65	8	3.11	< 10	< 1	0.11	10	0.01	265
511020	205	294	< 5	0.2	0.12	5	10	< 0.5	2	< 0.01	< 0.5	4	167	3	1.17	< 10	< 1	0.03	< 10	< 0.01	95
511021	205	294	10	< 0.2	0.47	5	130	< 0.5	< 2	0.02	< 0.5	2	75	5	3.04	< 10	< 1	0.19	10	0.04	35
511022	205	294	55	< 0.2	0.57	15	140	< 0.5	< 2	0.04	< 0.5	11	46	4	3.78	< 10	< 1	0.20	10	0.02	305
511023	205	294	55	7.4	0.99	180	40	< 0.5	10	0.01	1.0	< 1	75	328	>15.00	< 10	< 1	0.14	10	0.40	40
511024	205	294	1020	10.0	0.85	1205	50	< 0.5	168	0.02	5.0	< 1	128	1375	>15.00	< 10	< 1	0.08	30	0.06	25
511025	205	294	885	5.2	0.20	30	20	< 0.5	10	< 0.01	< 0.5	< 1	372	37	1.10	< 10	< 1	0.06	< 10	0.01	20
511026	205	294	50	1.8	1.46	110	70	< 0.5	2	0.07	0.5	12	72	248	6.11	< 10	< 1	0.21	10	0.78	1845
511027	205	294	30	1.0	1.49	50	50	< 0.5	< 2	1.01	0.5	11	73	639	6.64	< 10	< 1	0.17	< 10	1.35	2250
511028	205	294	85	2.8	0.37	160	20	< 0.5	< 2	8.90	2.0	5	74	303	5.01	< 10	1	0.08	< 10	4.04	8240
511029	205	294	45	2.6	0.24	185	10	< 0.5	< 2	14.40	1.0	5	36	170	4.91	< 10	< 1	0.02	< 10	6.36	>10000
511030	205	294	120	2.4	0.25	300	10	< 0.5	< 2	11.55	3.5	6	98	292	5.92	< 10	< 1	0.03	< 10	4.89	>10000
511031	205	294	110	9.4	0.22	295	< 10	< 0.5	< 2	10.10	14.5	6	70	276	5.37	< 10	1	0.02	< 10	4.76	>10000
511032	205	294	205	9.0	0.44	700	20	< 0.5	22	2.38	14.0	20	129	595	>15.00	< 10	< 1	0.05	< 10	1.18	>10000
511033	205	294	130	5.8	0.44	680	10	< 0.5	6	5.57	24.0	11	121	698	11.85	< 10	< 1	0.04	< 10	2.72	>10000

CERTIFICATION: B. Caughlin

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221

To: NEW GLOBAL RESOURCES

548 BEATTY ST.
VANCOUVER, BC
V6B 2L3

Project : BIRCH
Comments:

Invoice Date: 21-NOV-90
Invoice No. : I-9026679
P.O. Number :

CERTIFICATE OF ANALYSIS A9026679

SAMPLE DESCRIPTION	PREP CODE		Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
511001	205	294	< 1	0.02	4	300	12	< 5	1	7	< 0.01	< 10	< 10	4	< 10	26
511002	205	294	3	0.03	3	60	38	< 5	1	6	< 0.01	< 10	< 10	5	< 10	8
511003	205	294	13	0.05	2	90	30	< 5	1	11	< 0.01	< 10	< 10	8	< 10	14
511004	205	294	52	0.04	3	150	40	< 5	1	5	< 0.01	< 10	< 10	3	< 10	26
511005	205	294	49	0.09	1	20	22	< 5	1	6	< 0.01	< 10	< 10	6	< 10	8
511006	205	294	37	0.05	2	310	78	< 5	4	7	< 0.01	< 10	< 10	8	< 10	92
511007	205	294	43	0.04	5	70	24	< 5	1	6	< 0.01	< 10	< 10	2	< 10	14
511008	205	294	132	0.07	2	70	32	< 5	1	11	< 0.01	< 10	< 10	7	< 10	4
511009	205	294	36	0.09	1	80	10	< 5	< 1	7	< 0.01	< 10	< 10	4	< 10	4
511010	205	294	8	0.06	4	20	14	< 5	< 1	2	< 0.01	< 10	< 10	< 1	< 10	< 2
511011	205	294	4	0.01	3	20	10	< 5	< 1	2	< 0.01	< 10	< 10	1	< 10	2
511012	205	294	112	0.09	4	60	28	< 5	< 1	10	< 0.01	< 10	< 10	1	< 10	2
511013	205	294	3	0.05	15	500	< 2	< 5	4	12	0.02	10	< 10	29	< 10	106
511014	205	294	28	0.02	4	80	54	< 5	< 1	6	< 0.01	< 10	< 10	3	< 10	8
511015	205	294	3	0.01	4	50	< 2	< 5	< 1	2	< 0.01	< 10	< 10	1	< 10	6
511016	205	294	36	0.02	3	30	18	< 5	1	7	< 0.01	< 10	< 10	12	< 10	6
511017	205	294	2	0.02	2	240	26	< 5	1	7	< 0.01	10	< 10	3	< 10	18
511018	205	294	46	0.05	3	120	58	< 5	< 1	5	< 0.01	< 10	< 10	1	< 10	14
511019	205	294	38	0.05	6	330	48	< 5	3	12	< 0.01	< 10	< 10	5	< 10	32
511020	205	294	6	0.02	3	70	24	< 5	1	3	< 0.01	< 10	< 10	1	< 10	18
511021	205	294	8	0.03	3	220	24	< 5	1	11	< 0.01	< 10	< 10	6	< 10	22
511022	205	294	29	0.06	4	360	20	< 5	3	9	< 0.01	< 10	< 10	10	< 10	50
511023	205	294	< 1	0.02	2	950	58	< 5	2	4	< 0.01	20	< 10	131	< 10	60
511024	205	294	2	0.02	1	1360	206	< 5	3	14	0.04	30	< 10	95	< 10	78
511025	205	294	< 1	0.03	5	30	42	< 5	< 1	4	< 0.01	< 10	< 10	4	< 10	8
511026	205	294	< 1	0.05	7	380	70	< 5	4	12	< 0.01	< 10	< 10	26	< 10	132
511027	205	294	< 1	0.04	7	370	32	< 5	5	21	< 0.01	10	< 10	25	< 10	118
511028	205	294	< 1	0.03	5	240	214	< 5	3	86	< 0.01	< 10	< 10	6	10	318
511029	205	294	< 1	0.01	6	380	324	< 5	3	130	< 0.01	< 10	< 10	5	10	214
511030	205	294	< 1	0.02	10	440	292	5	2	107	< 0.01	< 10	< 10	5	20	666
511031	205	294	< 1	0.01	5	420	1545	< 5	2	100	< 0.01	< 10	< 10	3	20	2940
511032	205	294	< 1	0.02	13	450	866	< 5	5	36	< 0.01	10	< 10	8	< 10	3260
511033	205	294	< 1	0.02	9	340	640	< 5	5	68	< 0.01	< 10	< 10	11	20	4270

CERTIFICATION: B. Caughlin

Chemex Labs Ltd.

Analytical Chemists • Geochemists • Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221

To: NEW GLOBAL RESOURCES

548 BEATTY ST.
VANCOUVER, BC
V6B 2L3

Project : BIRCH
Comments:

Page Number : 1-A
Total Pages : 4
Invoice Date: 21-NOV-90
Invoice No. : I-9026680
P.O. Number :

CERTIFICATE OF ANALYSIS A9026680

SAMPLE DESCRIPTION	PREP CODE		Au ppb FA+AA	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm
511101	205	294	35	2.2	0.34	205	10	< 0.5	< 2	8.99	2.0	4	61	179	2.92	< 10	< 1	0.04	< 10	4.55	6790
511102	205	294	150	1.0	0.42	330	10	< 0.5	< 2	7.07	6.5	4	47	205	8.08	< 10	< 1	0.03	< 10	3.43	4150
511103	205	294	505	2.2	0.66	1535	< 10	< 0.5	10	0.88	< 0.5	7	49	1885	>15.00	< 10	< 1	< 0.01	< 10	0.80	1065
511104	205	294	630	4.0	0.27	1425	< 10	< 0.5	28	0.99	2.5	2	48	1485	>15.00	< 10	< 1	0.01	< 10	0.50	720
511105	205	294	570	5.4	0.26	1475	< 10	< 0.5	22	0.38	4.5	2	62	1710	>15.00	< 10	< 1	0.01	< 10	0.23	285
511106	205	294	105	3.2	0.54	350	< 10	< 0.5	< 2	7.14	3.0	3	60	430	7.15	< 10	< 1	< 0.01	< 10	3.66	3350
511107	205	294	445	6.0	0.51	1375	< 10	< 0.5	24	0.46	1.0	< 1	56	1470	>15.00	< 10	< 1	< 0.01	< 10	0.51	645
511108	205	294	40	1.8	2.39	95	40	< 0.5	< 2	0.86	1.0	10	45	135	5.34	< 10	< 1	0.15	< 10	2.28	1165
511109	205	294	110	2.4	2.16	605	40	< 0.5	4	1.12	< 0.5	9	41	218	6.60	< 10	< 1	0.15	< 10	2.14	995
511110	205	294	475	5.6	1.21	880	30	< 0.5	26	0.64	1.0	8	39	1275	>15.00	< 10	< 1	0.08	< 10	1.21	655
511111	205	294	70	3.2	2.19	185	50	< 0.5	4	1.52	3.5	13	53	394	5.41	< 10	< 1	0.16	< 10	2.47	1080
511112	205	294	55	1.8	1.92	120	60	< 0.5	2	1.07	2.5	12	43	201	4.86	< 10	< 1	0.18	< 10	1.92	595
511113	205	294	615	5.4	0.57	1060	10	< 0.5	36	0.58	1.5	< 1	60	1750	>15.00	< 10	< 1	0.01	< 10	0.55	445
511114	205	294	655	4.0	0.40	1375	< 10	< 0.5	32	0.50	0.5	8	65	1820	>15.00	< 10	< 1	< 0.01	< 10	0.29	235
511115	205	294	485	4.0	0.54	1395	10	< 0.5	20	0.37	< 0.5	< 1	65	1985	>15.00	< 10	< 1	0.01	< 10	0.36	250
511116	205	294	620	5.2	0.63	1515	10	< 0.5	20	0.35	3.5	31	49	2890	>15.00	< 10	< 1	< 0.01	< 10	0.60	720
511117	205	294	440	2.8	0.61	2260	10	< 0.5	10	2.44	5.5	26	74	1395	>15.00	< 10	< 1	0.02	< 10	1.44	1055
511118	205	294	95	0.6	2.74	260	60	< 0.5	< 2	1.56	0.5	13	48	228	7.77	< 10	< 1	0.20	< 10	2.77	1325
511119	205	294	285	1.4	2.38	450	50	< 0.5	4	0.77	< 0.5	12	60	724	13.05	< 10	< 1	0.16	< 10	2.17	1015
511120	205	294	70	1.2	2.89	510	50	< 0.5	< 2	0.88	0.5	17	79	293	6.87	< 10	< 1	0.14	< 10	2.74	1205
511121	205	294	40	1.6	2.69	350	50	< 0.5	< 2	0.90	0.5	12	50	135	4.63	< 10	< 1	0.13	< 10	2.71	765
511122	205	294	75	3.6	2.45	290	40	< 0.5	4	0.90	4.5	11	39	329	5.65	< 10	< 1	0.12	< 10	2.48	640
511123	205	294	140	6.2	3.42	310	40	< 0.5	6	0.71	24.0	10	39	286	8.84	< 10	< 1	0.11	< 10	3.31	880
511124	205	294	65	1.2	3.98	150	40	< 0.5	< 2	0.53	< 0.5	7	38	161	8.06	< 10	< 1	0.13	< 10	3.62	770
511125	205	294	25	0.8	2.65	85	60	< 0.5	< 2	0.65	< 0.5	12	36	182	5.30	< 10	< 1	0.17	< 10	2.37	650
511126	205	294	170	2.4	2.03	485	50	< 0.5	< 2	2.03	2.5	21	61	444	11.30	< 10	< 1	0.13	< 10	2.49	1185
511127	205	294	10	0.6	0.57	55	10	< 0.5	< 2	13.20	0.5	4	43	133	5.66	< 10	< 1	0.03	< 10	5.87	7710
511128	205	294	50	0.6	3.08	85	40	< 0.5	< 2	0.97	< 0.5	8	48	345	5.05	< 10	< 1	0.14	10	2.86	1155
511129	205	294	30	0.4	3.13	50	50	< 0.5	< 2	1.00	0.5	11	54	237	4.62	< 10	< 1	0.18	< 10	2.92	910
511130	205	294	30	0.2	2.48	415	80	< 0.5	< 2	2.19	1.0	7	75	425	3.30	< 10	< 1	0.25	< 10	2.75	1045
511131	205	294	470	8.0	1.18	840	10	< 0.5	50	1.37	1.0	26	74	2010	>15.00	< 10	< 1	0.04	< 10	1.46	550
511132	205	294	85	0.6	2.07	310	50	< 0.5	< 2	1.02	1.5	12	41	193	4.57	< 10	< 1	0.14	< 10	1.98	485
511133	205	294	45	0.6	2.71	135	70	< 0.5	< 2	1.31	1.0	14	45	142	5.75	< 10	< 1	0.19	< 10	2.45	1185
511134	205	294	670	8.8	1.69	335	20	< 0.5	68	0.37	1.0	27	44	1115	>15.00	< 10	< 1	0.02	< 10	1.75	1360
511135	205	294	50	1.0	3.80	145	60	< 0.5	< 2	1.08	< 0.5	5	24	340	7.23	< 10	< 1	0.14	< 10	3.29	1250
511136	205	294	540	1.6	0.87	365	10	< 0.5	42	0.32	1.5	33	37	1540	>15.00	< 10	< 1	0.01	< 10	1.02	985
511137	205	294	80	3.6	2.03	250	50	< 0.5	10	0.24	1.0	8	55	630	10.65	< 10	< 1	0.10	< 10	1.68	585
511138	205	294	20	1.4	1.96	435	70	< 0.5	< 2	0.83	1.0	17	83	211	6.50	< 10	< 1	0.13	10	1.95	715
511139	205	294	25	0.2	1.98	220	100	< 0.5	< 2	0.56	1.0	14	93	175	4.90	< 10	< 1	0.21	10	1.57	595
511140	205	294	15	0.2	3.19	60	60	< 0.5	< 2	1.01	0.5	9	72	229	4.52	< 10	< 1	0.18	10	2.87	1070

CERTIFICATION: B. Caughlin

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221

To: NEW GLOBAL RESOURCES

548 BEATTY ST.
VANCOUVER, BC
V6B 2L3

Project : BIRCH
Comments:

Invoice Date: 21-NOV-90
Invoice No. : I-9026680
P.O. Number :

CERTIFICATE OF ANALYSIS A9026680

SAMPLE DESCRIPTION	PREP CODE		Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
511101	205	294	< 1	0.01	4	80	546	< 5	3	82	0.01	< 10	< 10	10	< 10	410
511102	205	294	< 1	0.01	9	310	166	< 5	2	82	< 0.01	< 10	< 10	11	10	1630
511103	205	294	< 1	< 0.01	11	260	208	5	3	13	< 0.01	30	< 10	15	< 10	222
511104	205	294	< 1	< 0.01	10	220	492	< 5	2	13	< 0.01	20	< 10	6	< 10	698
511105	205	294	1	< 0.01	4	200	970	< 5	2	7	< 0.01	20	< 10	4	< 10	836
511106	205	294	< 1	< 0.01	5	220	688	< 5	3	100	< 0.01	< 10	< 10	12	10	698
511107	205	294	< 1	< 0.01	8	380	786	< 5	3	13	< 0.01	20	< 10	9	< 10	390
511108	205	294	< 1	0.03	4	370	326	< 5	6	21	< 0.01	< 10	< 10	40	< 10	470
511109	205	294	< 1	0.04	4	310	180	< 5	5	28	< 0.01	< 10	< 10	34	< 10	184
511110	205	294	< 1	0.02	14	330	586	< 5	4	24	< 0.01	20	< 10	19	< 10	412
511111	205	294	< 1	0.03	15	360	370	< 5	5	38	< 0.01	< 10	< 10	30	< 10	892
511112	205	294	< 1	0.04	6	320	390	< 5	4	28	< 0.01	< 10	< 10	24	< 10	672
511113	205	294	< 1	< 0.01	8	280	492	< 5	3	10	< 0.01	20	< 10	12	< 10	460
511114	205	294	< 1	< 0.01	9	230	390	< 5	3	7	< 0.01	20	< 10	9	< 10	284
511115	205	294	< 1	0.01	7	250	378	< 5	3	8	< 0.01	30	< 10	10	< 10	186
511116	205	294	1	< 0.01	11	310	582	< 5	3	10	< 0.01	30	< 10	12	< 10	912
511117	205	294	< 1	0.01	8	260	362	5	3	45	< 0.01	10	< 10	13	< 10	1255
511118	205	294	< 1	0.06	8	380	90	< 5	7	37	< 0.01	< 10	< 10	43	< 10	356
511119	205	294	< 1	0.05	7	320	114	< 5	6	24	< 0.01	10	< 10	38	< 10	228
511120	205	294	< 1	0.05	40	590	114	5	6	36	< 0.01	< 10	< 10	48	< 10	318
511121	205	294	< 1	0.04	11	380	246	< 5	5	32	< 0.01	< 10	< 10	35	< 10	272
511122	205	294	< 1	0.03	6	320	924	< 5	4	32	< 0.01	< 10	< 10	28	< 10	1220
511123	205	294	< 1	0.03	4	320	2300	< 5	5	27	< 0.01	< 10	< 10	38	10	5480
511124	205	294	< 1	0.03	9	360	244	< 5	6	24	< 0.01	< 10	< 10	45	< 10	378
511125	205	294	< 1	0.04	6	360	160	5	4	24	< 0.01	< 10	< 10	32	< 10	234
511126	205	294	< 1	0.03	10	250	680	5	5	55	< 0.01	< 10	< 10	26	< 10	660
511127	205	294	< 1	0.01	4	230	46	< 5	5	187	< 0.01	< 10	< 10	9	10	148
511128	205	294	< 1	0.03	4	350	118	5	8	20	< 0.01	< 10	< 10	46	< 10	194
511129	205	294	< 1	0.03	1	310	158	< 5	8	29	< 0.01	< 10	< 10	46	< 10	186
511130	205	294	< 1	0.04	3	260	48	5	5	54	< 0.01	< 10	< 10	29	< 10	320
511131	205	294	< 1	0.01	15	330	630	< 5	4	31	< 0.01	10	< 10	18	10	336
511132	205	294	< 1	0.04	3	310	92	< 5	4	28	< 0.01	< 10	< 10	24	< 10	510
511133	205	294	< 1	0.03	4	350	112	< 5	6	37	< 0.01	< 10	< 10	35	10	416
511134	205	294	< 1	0.01	12	400	334	< 5	6	15	< 0.01	20	< 10	29	< 10	220
511135	205	294	< 1	0.02	2	410	48	< 5	10	22	< 0.01	< 10	< 10	60	10	242
511136	205	294	< 1	< 0.01	8	420	98	< 5	4	9	< 0.01	30	< 10	16	< 10	330
511137	205	294	3	0.01	14	380	332	< 5	4	8	< 0.01	10	< 10	27	< 10	280
511138	205	294	1	0.01	33	590	238	5	3	19	< 0.01	< 10	< 10	23	< 10	250
511139	205	294	< 1	0.03	31	440	50	< 5	3	16	< 0.01	10	< 10	26	10	208
511140	205	294	< 1	0.04	3	300	64	< 5	8	30	< 0.01	< 10	< 10	49	10	192

CERTIFICATION: B. Caughlin

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221

To: NEW GLOBAL RESOURCES

548 BEATTY ST.
VANCOUVER, BC
V6B 2L3

Project : BIRCH
Comments:

Invoice Date: 21-NOV-90
Invoice No. : I-9026680
P.O. Number :

CERTIFICATE OF ANALYSIS A9026680

SAMPLE DESCRIPTION	PREP CODE		Au ppb FA+AA	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm
511141	205	294	760	2.2	0.83	815	< 10	< 0.5	60	0.53	1.0	28	158	2430	>15.00	< 10	< 1	< 0.01	< 10	1.28	780
511142	205	294	785	4.2	0.66	835	10	< 0.5	106	0.75	1.0	34	108	2720	>15.00	< 10	< 1	0.01	< 10	1.00	675
511143	205	294	120	2.4	2.63	145	100	< 0.5	14	1.81	3.0	17	238	342	7.01	< 10	< 1	0.28	< 10	2.52	740
511144	205	294	45	1.4	2.63	60	90	< 0.5	2	1.19	1.5	13	100	166	4.40	< 10	< 1	0.28	10	2.30	685
511145	205	294	100	1.2	1.90	110	80	< 0.5	12	1.49	1.0	10	198	400	6.94	< 10	< 1	0.22	< 10	1.94	830
511146	205	294	80	1.8	1.73	160	20	< 0.5	2	1.14	1.0	26	72	390	8.34	< 10	< 1	0.06	< 10	2.15	1110
511147	205	294	95	1.8	2.72	330	70	< 0.5	4	1.30	0.5	24	169	289	10.85	< 10	< 1	0.18	< 10	2.67	860
511148	205	294	105	5.0	2.31	260	80	< 0.5	18	1.44	1.5	20	156	334	10.55	< 10	< 1	0.20	< 10	2.45	765
511149	205	294	10	1.2	2.06	65	120	< 0.5	2	2.35	3.0	10	136	119	4.15	< 10	< 1	0.26	< 10	2.41	995
511150	205	294	10	0.2	2.62	50	70	< 0.5	< 2	1.82	1.0	12	130	53	5.34	< 10	< 1	0.20	< 10	2.90	1300
511151	205	294	30	0.4	1.92	45	70	< 0.5	< 2	1.38	3.0	13	128	176	4.82	< 10	< 1	0.18	< 10	1.94	1150
511152	205	294	430	5.6	1.00	525	20	< 0.5	120	0.65	1.0	15	142	1580	>15.00	< 10	< 1	0.03	< 10	0.81	620
511153	205	294	465	5.2	0.72	800	10	< 0.5	38	0.20	4.5	10	191	1850	>15.00	< 10	< 1	0.01	< 10	0.55	405
511154	205	294	75	1.4	0.89	370	40	< 0.5	2	3.86	1.5	13	171	179	8.70	< 10	< 1	0.11	< 10	2.18	1895
511155	205	294	35	0.4	1.59	110	50	< 0.5	< 2	2.81	1.5	13	159	90	5.32	< 10	< 1	0.12	< 10	2.36	2430
511156	205	294	30	0.4	3.45	170	90	< 0.5	< 2	1.68	< 0.5	28	208	102	7.73	< 10	< 1	0.16	10	3.20	2320
511157	205	294	< 5	< 0.2	3.34	50	170	< 0.5	< 2	1.02	< 0.5	31	107	76	8.39	< 10	< 1	0.24	20	1.60	1315
511158	205	294	< 5	< 0.2	2.58	30	160	< 0.5	< 2	3.71	< 0.5	26	157	59	6.36	< 10	< 1	0.24	< 10	2.26	1190
511159	205	294	< 5	< 0.2	3.32	10	160	< 0.5	< 2	2.70	< 0.5	30	54	69	7.12	< 10	< 1	0.25	< 10	2.03	1055
511160	205	294	< 5	< 0.2	2.59	< 5	120	< 0.5	< 2	3.17	< 0.5	20	55	17	5.46	< 10	< 1	0.24	< 10	1.99	895
511161	205	294	< 5	< 0.2	0.48	15	40	< 0.5	< 2	1.20	< 0.5	5	715	37	3.51	< 10	< 1	0.08	< 10	0.44	250
511162	205	294	< 5	< 0.2	1.77	5	140	< 0.5	< 2	4.28	< 0.5	22	55	59	5.79	< 10	< 1	0.26	< 10	1.96	925
511163	205	294	345	3.0	2.12	440	20	< 0.5	30	0.13	< 0.5	43	157	943	>15.00	< 10	< 1	0.05	< 10	1.76	850
511164	205	294	460	3.8	1.65	445	40	< 0.5	38	0.17	3.0	34	140	994	>15.00	< 10	< 1	0.09	< 10	1.30	685
511165	205	294	65	2.2	1.71	110	60	< 0.5	10	2.10	1.0	11	181	214	5.84	< 10	< 1	0.15	< 10	2.47	1405
511166	205	294	80	1.4	2.25	210	80	< 0.5	4	0.85	1.5	15	146	183	7.58	< 10	< 1	0.20	< 10	2.09	545
511167	205	294	25	2.0	2.21	65	100	< 0.5	8	0.78	0.5	8	126	77	4.22	< 10	< 1	0.25	< 10	1.89	460
511168	205	294	30	1.0	1.95	65	90	< 0.5	< 2	1.85	1.5	14	114	114	4.58	< 10	< 1	0.24	< 10	2.04	825
511169	205	294	< 5	0.8	2.19	35	30	< 0.5	< 2	0.95	4.5	14	49	65	4.37	< 10	< 1	0.09	< 10	2.32	1270
511170	205	294	10	0.2	2.47	30	90	< 0.5	< 2	1.10	0.5	15	113	61	4.34	< 10	< 1	0.27	< 10	2.08	905
511171	205	294	55	1.0	3.18	80	100	< 0.5	4	1.43	< 0.5	7	105	111	5.58	< 10	< 1	0.25	< 10	2.90	1125
511172	205	294	1450	13.0	1.20	515	10	< 0.5	316	0.47	1.0	30	126	2020	>15.00	< 10	< 1	0.02	< 10	1.31	1380
511173	205	294	800	28.8	0.99	1050	20	< 0.5	316	0.64	2.0	24	164	1070	>15.00	< 10	< 1	0.03	< 10	1.02	760
511174	205	294	55	2.2	2.13	905	70	< 0.5	10	0.83	2.0	19	129	211	7.03	< 10	< 1	0.19	10	1.85	1355
511175	205	294	30	0.8	1.35	720	70	< 0.5	< 2	5.52	< 0.5	12	145	63	4.84	< 10	< 1	0.20	< 10	3.34	4300
511176	205	294	30	< 0.2	2.02	80	90	< 0.5	< 2	1.15	< 0.5	13	127	48	5.46	< 10	< 1	0.22	< 10	1.79	1185
511177	205	294	35	1.4	3.52	125	80	< 0.5	< 2	2.30	8.5	38	324	577	7.55	< 10	< 1	0.13	< 10	3.62	2210
511178	205	294	25	< 0.2	2.49	85	140	< 0.5	< 2	2.40	< 0.5	28	125	100	6.33	< 10	< 1	0.27	< 10	2.20	1610
511179	205	294	25	< 0.2	2.85	80	130	< 0.5	< 2	3.73	< 0.5	29	73	109	7.65	< 10	< 1	0.25	< 10	2.69	2240
511180	205	294	< 5	< 0.2	0.13	5	10	< 0.5	< 2	1.91	< 0.5	1	383	4	1.06	< 10	< 1	0.01	< 10	0.35	1060

CERTIFICATION: B. Caglione

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221

To: NEW GLOBAL RESOURCES

548 BEATTY ST.
VANCOUVER, BC
V6B 2L3

Project : BIRCH
Comments:

Page Number : 2-B
Total Pages : 4
Invoice Date: 21-NOV-90
Invoice No. : I-9026680
P.O. Number :

CERTIFICATE OF ANALYSIS A9026680

SAMPLE DESCRIPTION	PREP CODE		Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
511141	205	294	< 1	< 0.01	9	370	172	< 5	4	14	< 0.01	30	<·10	14	< 10	230
511142	205	294	< 1	< 0.01	5	290	214	< 5	3	19	< 0.01	30	< 10	13	< 10	296
511143	205	294	< 1	0.08	9	350	186	< 5	6	51	< 0.01	< 10	< 10	37	10	788
511144	205	294	< 1	0.06	6	360	218	< 5	5	39	< 0.01	< 10	< 10	33	10	428
511145	205	294	< 1	0.04	4	310	144	< 5	4	40	< 0.01	< 10	< 10	24	20	378
511146	205	294	< 1	0.01	7	410	412	< 5	4	31	< 0.01	< 10	< 10	25	10	488
511147	205	294	< 1	0.04	8	780	504	< 5	5	39	< 0.01	10	< 10	37	10	400
511148	205	294	< 1	0.04	7	350	914	< 5	5	51	< 0.01	< 10	< 10	31	20	520
511149	205	294	< 1	0.06	6	330	322	< 5	5	73	< 0.01	< 10	< 10	32	10	698
511150	205	294	< 1	0.04	5	340	86	< 5	6	44	< 0.01	< 10	< 10	34	10	376
511151	205	294	< 1	0.03	5	270	112	< 5	6	33	< 0.01	< 10	< 10	35	10	704
511152	205	294	< 1	0.01	12	400	404	< 5	4	15	< 0.01	20	< 10	16	< 10	370
511153	205	294	< 1	< 0.01	10	350	520	< 5	3	6	< 0.01	20	< 10	12	< 10	1130
511154	205	294	< 1	0.04	28	370	242	5	3	60	< 0.01	< 10	< 10	15	20	346
511155	205	294	< 1	0.04	33	560	138	< 5	4	49	< 0.01	< 10	< 10	26	10	346
511156	205	294	< 1	0.07	102	2340	126	< 5	8	48	< 0.01	< 10	< 10	81	10	214
511157	205	294	2	0.13	36	4150	14	< 5	4	86	0.05	10	< 10	40	10	106
511158	205	294	8	0.09	40	3740	14	< 5	4	114	0.02	< 10	< 10	47	20	94
511159	205	294	< 1	0.10	22	4100	16	< 5	3	95	0.04	< 10	< 10	29	20	94
511160	205	294	< 1	0.10	16	2460	18	< 5	4	92	0.01	< 10	< 10	27	10	82
511161	205	294	< 1	0.06	11	750	12	< 5	< 1	44	< 0.01	< 10	< 10	6	10	56
511162	205	294	< 1	0.07	9	3120	10	< 5	2	126	0.01	< 10	< 10	15	10	62
511163	205	294	< 1	0.01	27	430	256	< 5	6	6	< 0.01	20	< 10	35	< 10	250
511164	205	294	< 1	0.03	23	530	424	< 5	5	10	< 0.01	20	< 10	28	30	744
511165	205	294	< 1	0.04	7	310	384	< 5	4	56	< 0.01	< 10	< 10	21	20	320
511166	205	294	< 1	0.05	8	340	332	< 5	4	30	< 0.01	< 10	< 10	29	30	486
511167	205	294	< 1	0.06	5	370	346	< 5	4	34	< 0.01	< 10	< 10	25	10	244
511168	205	294	< 1	0.07	8	350	370	< 5	5	51	< 0.01	< 10	< 10	27	10	416
511169	205	294	< 1	0.02	5	280	488	< 5	6	21	< 0.01	< 10	< 10	39	10	940
511170	205	294	< 1	0.07	7	300	96	< 5	7	34	< 0.01	< 10	< 10	42	20	254
511171	205	294	< 1	0.06	6	430	146	< 5	8	43	< 0.01	< 10	< 10	48	20	258
511172	205	294	< 1	0.01	3	440	720	< 5	4	14	< 0.01	20	< 10	21	40	316
511173	205	294	< 1	0.01	11	880	1815	< 5	3	18	< 0.01	10	< 10	20	30	518
511174	205	294	< 1	0.05	37	430	244	< 5	4	22	< 0.01	10	< 10	29	20	508
511175	205	294	< 1	0.04	28	530	94	< 5	4	81	< 0.01	< 10	< 10	24	10	94
511176	205	294	< 1	0.05	27	620	28	< 5	6	30	< 0.01	< 10	< 10	40	< 10	82
511177	205	294	< 1	0.03	159	1190	102	< 5	10	49	< 0.01	< 10	< 10	90	10	1070
511178	205	294	< 1	0.06	52	1990	12	< 5	5	55	< 0.01	< 10	< 10	35	10	148
511179	205	294	< 1	0.07	24	4150	14	< 5	5	89	< 0.01	< 10	< 10	49	10	164
511180	205	294	< 1	0.01	7	320	12	< 5	< 1	84	< 0.01	< 10	< 10	2	< 10	14

CERTIFICATION: B. Caplin

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221

To: NEW GLOBAL RESOURCES

548 BEATTY ST.
VANCOUVER, BC
V6B 2L3

Project : BIRCH
Comments:

Invoice Date: 21-NOV-90
Invoice No. : I-9026680
P.O. Number :

CERTIFICATE OF ANALYSIS A9026680

SAMPLE DESCRIPTION	PREP CODE		Au ppb FA+AA	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm
511181	205	294	35	0.2	0.72	85	20	< 0.5	< 2	3.73	1.0	24	34	88	5.49	< 10	< 1	0.06	< 10	2.03	2120
511182	205	294	< 5	0.2	3.10	130	50	< 0.5	< 2	3.15	1.0	41	325	74	7.08	< 10	< 1	0.07	< 10	3.25	1630
511183	205	294	20	0.6	3.33	90	90	< 0.5	< 2	1.18	0.5	34	210	285	8.39	< 10	< 1	0.14	10	2.13	1370
511184	205	294	< 5	0.2	3.34	55	70	< 0.5	< 2	3.24	< 0.5	32	204	63	7.17	< 10	< 1	0.10	< 10	3.23	1480
511185	205	294	< 5	0.2	2.64	25	100	< 0.5	< 2	4.28	0.5	32	180	59	6.97	< 10	< 1	0.16	< 10	3.03	1275
511186	205	294	< 5	< 0.2	2.54	5	120	< 0.5	< 2	4.22	< 0.5	21	54	17	7.12	< 10	< 1	0.15	< 10	2.50	1140
511187	205	294	< 5	< 0.2	2.15	< 5	60	< 0.5	< 2	2.63	< 0.5	14	108	22	4.82	< 10	< 1	0.13	< 10	1.97	845
511188	205	294	< 5	< 0.2	2.18	10	90	< 0.5	< 2	3.05	< 0.5	11	82	23	3.71	< 10	< 1	0.18	< 10	1.98	585
511189	205	294	< 5	0.2	2.84	10	70	< 0.5	< 2	3.58	< 0.5	25	227	21	6.02	< 10	< 1	0.22	< 10	3.24	1200
511190	205	294	10	0.2	3.08	15	40	< 0.5	< 2	3.84	0.5	37	304	57	6.95	< 10	< 1	0.16	< 10	3.75	1780
511191	205	294	45	0.8	3.26	70	50	< 0.5	< 2	2.75	0.5	35	271	313	8.86	< 10	< 1	0.15	< 10	3.31	1810
511192	205	294	10	0.2	2.49	< 5	50	< 0.5	< 2	4.42	0.5	22	219	47	6.51	< 10	< 1	0.15	< 10	3.39	2510
511193	205	294	< 5	< 0.2	2.42	< 5	80	< 0.5	< 2	1.89	< 0.5	12	95	17	4.39	< 10	< 1	0.27	< 10	2.23	1205
511194	205	294	< 5	< 0.2	2.11	< 5	70	< 0.5	< 2	1.99	< 0.5	14	80	36	4.15	< 10	< 1	0.23	< 10	2.17	1230
511195	205	294	< 5	< 0.2	3.00	< 5	90	< 0.5	< 2	2.06	< 0.5	21	163	80	5.88	< 10	< 1	0.23	< 10	2.91	1145
511196	205	294	20	0.2	3.23	< 5	40	< 0.5	< 2	3.19	< 0.5	35	213	222	7.57	< 10	< 1	0.14	< 10	3.63	1930
511197	205	294	25	< 0.2	2.90	70	100	< 0.5	< 2	3.97	0.5	36	210	40	7.14	< 10	< 1	0.25	< 10	3.46	2160
511198	205	294	< 5	< 0.2	3.22	50	90	< 0.5	< 2	3.33	0.5	39	205	35	7.20	< 10	< 1	0.22	< 10	3.43	1650
511199	205	294	25	< 0.2	2.95	90	90	< 0.5	< 2	4.02	0.5	41	209	66	7.42	< 10	< 1	0.21	< 10	3.54	2060
511200	205	294	5	< 0.2	3.90	65	70	< 0.5	< 2	2.94	< 0.5	48	229	41	7.96	< 10	< 1	0.16	< 10	3.71	1555
511201	205	294	10	< 0.2	2.58	35	60	< 0.5	< 2	5.71	< 0.5	37	193	49	6.36	< 10	< 1	0.11	< 10	3.90	2180
511202	205	294	< 5	< 0.2	1.99	15	50	< 0.5	< 2	6.92	< 0.5	40	162	21	6.29	< 10	< 1	0.13	< 10	3.50	1315
511203	205	294	< 5	< 0.2	0.69	5	50	< 0.5	< 2	8.06	< 0.5	22	97	16	5.41	< 10	< 1	0.11	< 10	2.77	1030
511204	205	294	< 5	< 0.2	1.42	15	50	< 0.5	< 2	7.12	< 0.5	32	124	21	5.92	< 10	< 1	0.12	< 10	3.16	1425
511205	205	294	< 5	< 0.2	1.75	30	50	< 0.5	< 2	6.81	0.5	40	166	37	6.16	< 10	< 1	0.12	< 10	3.39	2100
511206	205	294	< 5	< 0.2	1.87	45	50	< 0.5	< 2	6.57	< 0.5	32	153	21	5.92	< 10	< 1	0.11	< 10	3.47	1795
511207	205	294	< 5	< 0.2	2.56	30	30	< 0.5	< 2	5.90	0.5	33	204	31	6.27	< 10	< 1	0.08	< 10	3.89	2040
511208	205	294	15	< 0.2	3.07	40	50	< 0.5	< 2	2.84	< 0.5	40	229	61	7.52	< 10	< 1	0.13	< 10	3.16	1925
511209	205	294	10	< 0.2	3.04	25	60	< 0.5	< 2	3.33	0.5	39	257	44	7.29	< 10	< 1	0.18	< 10	3.33	2080
511210	205	294	< 5	< 0.2	2.95	25	40	< 0.5	< 2	3.39	< 0.5	30	225	91	7.56	< 10	< 1	0.12	< 10	3.48	1780
511211	205	294	10	0.2	2.93	80	20	< 0.5	< 2	2.22	0.5	50	364	409	10.05	< 10	2	0.04	< 10	3.80	1585
511212	205	294	5	0.2	2.82	30	50	< 0.5	< 2	3.60	< 0.5	22	176	61	6.20	< 10	< 1	0.17	< 10	3.19	1650
511213	205	294	< 5	< 0.2	3.56	5	60	< 0.5	< 2	2.33	< 0.5	36	236	109	7.87	< 10	< 1	0.18	< 10	3.26	1250
511214	205	294	< 5	< 0.2	4.16	20	30	< 0.5	< 2	2.20	< 0.5	41	275	190	9.28	< 10	< 1	0.07	< 10	3.69	1465
511215	205	294	< 5	< 0.2	2.80	30	30	< 0.5	< 2	5.25	< 0.5	37	205	115	7.12	< 10	< 1	0.07	< 10	4.08	2200
511216	205	294	< 5	< 0.2	3.37	20	30	< 0.5	< 2	5.24	0.5	35	293	55	7.29	< 10	< 1	0.08	< 10	4.42	2110
511217	205	294	< 5	< 0.2	3.82	45	20	< 0.5	< 2	3.56	< 0.5	42	359	26	7.13	< 10	< 1	0.05	< 10	4.16	1690
511218	205	294	< 5	< 0.2	3.77	5	30	< 0.5	< 2	3.88	< 0.5	34	346	37	6.98	< 10	< 1	0.06	< 10	4.34	1570
511219	205	294	< 5	< 0.2	2.89	20	30	< 0.5	< 2	3.45	0.5	41	277	53	6.50	< 10	< 1	0.07	< 10	3.48	1975
511220	205	294	< 5	< 0.2	2.73	25	30	< 0.5	< 2	5.52	0.5	36	273	66	6.56	< 10	3	0.06	< 10	4.16	2300

CERTIFICATION: B. Caplin

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221

To: NEW GLOBAL RESOURCES

548 BEATTY ST.
VANCOUVER, BC
V6B 2L3

Project : BIRCH
Comments:

Invoice Date: 21-NOV-90
Invoice No. : I-9026680
P.O. Number :

CERTIFICATE OF ANALYSIS A9026680

SAMPLE DESCRIPTION	PREP CODE		Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
511181	205	294	< 1	0.02	15	580	24	< 5	3	87	< 0.01	< 10	< 10	13	10	128
511182	205	294	< 1	0.04	183	1400	22	< 5	8	68	< 0.01	< 10	< 10	86	10	278
511183	205	294	2	0.09	109	2950	6	< 5	7	54	< 0.01	10	< 10	63	10	178
511184	205	294	< 1	0.06	93	1860	10	< 5	10	81	< 0.01	< 10	< 10	79	10	168
511185	205	294	< 1	0.07	88	1700	20	< 5	8	111	< 0.01	< 10	< 10	64	10	128
511186	205	294	< 1	0.05	13	3730	24	< 5	2	123	0.02	< 10	< 10	17	10	102
511187	205	294	< 1	0.05	22	1030	14	< 5	4	58	< 0.01	< 10	< 10	28	< 10	102
511188	205	294	< 1	0.04	7	450	6	< 5	5	65	< 0.01	< 10	< 10	25	10	62
511189	205	294	< 1	0.04	130	1630	4	< 5	8	141	0.04	< 10	< 10	67	10	160
511190	205	294	< 1	0.03	155	1360	8	< 5	10	114	0.04	< 10	< 10	72	20	180
511191	205	294	< 1	0.03	171	1510	12	< 5	9	85	0.04	< 10	< 10	74	10	202
511192	205	294	< 1	0.02	113	1600	8	< 5	9	138	< 0.01	< 10	< 10	53	10	132
511193	205	294	< 1	0.05	20	250	6	< 5	7	58	< 0.01	< 10	< 10	43	30	94
511194	205	294	< 1	0.05	15	220	12	< 5	5	66	< 0.01	< 10	< 10	32	20	80
511195	205	294	< 1	0.04	80	770	8	< 5	8	65	< 0.01	< 10	< 10	56	20	118
511196	205	294	< 1	0.03	137	1140	10	< 5	9	94	0.01	< 10	< 10	68	40	168
511197	205	294	< 1	0.03	130	1120	10	< 5	8	123	0.01	< 10	< 10	55	30	116
511198	205	294	< 1	0.03	159	1290	8	< 5	8	114	< 0.01	< 10	< 10	62	30	132
511199	205	294	< 1	0.03	129	1130	18	< 5	8	123	< 0.01	< 10	< 10	54	30	124
511200	205	294	< 1	0.03	176	1350	10	< 5	8	83	< 0.01	< 10	< 10	66	30	166
511201	205	294	< 1	0.02	120	1200	14	< 5	6	127	< 0.01	< 10	< 10	44	30	132
511202	205	294	< 1	0.04	119	1570	12	5	5	141	< 0.01	< 10	< 10	40	40	110
511203	205	294	< 1	0.05	105	1470	8	< 5	5	154	< 0.01	< 10	< 10	25	30	62
511204	205	294	< 1	0.04	96	1390	8	< 5	5	150	< 0.01	< 10	< 10	29	30	88
511205	205	294	< 1	0.04	100	1580	16	< 5	5	151	< 0.01	< 10	< 10	38	30	106
511206	205	294	< 1	0.02	106	1530	18	< 5	6	144	< 0.01	< 10	< 10	39	30	114
511207	205	294	< 1	0.03	111	1480	12	< 5	7	136	< 0.01	< 10	< 10	57	40	148
511208	205	294	< 1	0.03	126	1130	8	< 5	7	79	< 0.01	< 10	< 10	56	40	152
511209	205	294	< 1	0.03	117	1210	8	< 5	7	93	< 0.01	< 10	< 10	53	30	140
511210	205	294	< 1	0.02	117	1250	6	< 5	7	106	0.01	< 10	< 10	61	40	136
511211	205	294	< 1	0.02	158	610	8	< 5	12	82	< 0.01	< 10	< 10	91	30	174
511212	205	294	< 1	0.03	81	590	30	< 5	9	104	< 0.01	< 10	< 10	63	20	122
511213	205	294	< 1	0.02	145	1200	2	< 5	10	89	< 0.01	< 10	< 10	78	20	124
511214	205	294	< 1	0.03	161	1090	4	< 5	10	68	< 0.01	< 10	< 10	88	30	162
511215	205	294	< 1	0.03	108	970	10	< 5	8	112	< 0.01	< 10	< 10	62	30	134
511216	205	294	< 1	0.03	143	770	2	< 5	10	124	< 0.01	< 10	< 10	84	30	136
511217	205	294	< 1	0.03	175	520	10	< 5	12	79	< 0.01	< 10	< 10	103	20	172
511218	205	294	< 1	0.03	166	470	18	< 5	12	100	< 0.01	< 10	< 10	96	30	182
511219	205	294	< 1	0.04	160	520	24	< 5	8	100	< 0.01	< 10	< 10	72	20	136
511220	205	294	< 1	0.03	136	570	18	< 5	8	123	< 0.01	< 10	< 10	66	20	150

CERTIFICATION: B. Caufield

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221

To: NEW GLOBAL RESOURCES

548 BEATTY ST.
VANCOUVER, BC
V6B 2L3

Project : BIRCH
Comments:

Invoice Date: 21-NOV-90
Invoice No. : I-9026680
P.O. Number :

CERTIFICATE OF ANALYSIS A9026680

SAMPLE DESCRIPTION	PREP CODE		Au ppb FA+AA	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm
511221	205	294	< 5	1.4	2.54	15	40	< 0.5	< 2	6.51	0.5	36	197	22	6.30	< 10	< 1	0.11	< 10	4.20	2260
511222	205	294	< 5	1.0	2.24	35	50	< 0.5	< 2	5.95	0.5	27	164	25	6.45	< 10	< 1	0.14	< 10	3.56	1995
511223	205	294	30	< 0.2	2.59	80	70	< 0.5	< 2	3.47	0.5	37	248	56	7.41	< 10	< 1	0.22	< 10	2.74	1590
511224	205	294	< 5	< 0.2	2.88	5	70	< 0.5	< 2	3.67	1.0	45	209	45	6.61	< 10	< 1	0.24	< 10	2.81	1310
511225	205	294	< 5	0.6	2.45	5	60	< 0.5	< 2	5.61	0.5	29	224	61	6.75	< 10	< 1	0.19	< 10	3.60	1620
511226	205	294	< 5	< 0.2	0.04	< 5	< 10	< 0.5	< 2	0.10	< 0.5	< 1	3	< 1	0.13	< 10	< 1	< 0.01	< 10	0.06	30
511227	205	294	< 5	< 0.2	3.32	5	50	< 0.5	< 2	2.52	0.5	38	249	205	7.51	< 10	< 1	0.16	< 10	3.22	1690
511228	205	294	< 5	< 0.2	3.06	15	40	< 0.5	< 2	3.87	0.5	32	226	75	7.21	< 10	< 1	0.09	< 10	3.91	2430
511229	205	294	< 5	0.6	1.97	< 5	10	< 0.5	< 2	3.97	0.5	35	252	31	5.75	< 10	< 1	0.01	< 10	3.31	1540
511230	205	294	< 5	< 0.2	3.95	< 5	< 10	< 0.5	< 2	2.74	0.5	47	402	19	7.02	< 10	1	< 0.01	< 10	4.37	1035
511231	205	294	< 5	< 0.2	3.56	< 5	< 10	< 0.5	< 2	3.91	1.0	37	414	81	7.19	< 10	< 1	< 0.01	< 10	4.52	1595
511232	205	294	< 5	< 0.2	4.02	< 5	< 10	< 0.5	< 2	3.86	1.5	39	381	224	7.59	< 10	< 1	< 0.01	< 10	4.91	1315
511233	205	294	< 5	< 0.2	3.82	40	30	< 0.5	< 2	3.58	1.5	51	385	144	8.00	< 10	< 1	0.03	< 10	4.67	1460
511234	205	294	< 5	< 0.2	3.13	15	60	< 0.5	< 2	4.13	1.0	36	317	64	6.98	< 10	< 1	0.12	< 10	4.10	1605
511235	205	294	< 5	< 0.2	3.05	< 5	90	< 0.5	< 2	2.28	1.0	33	89	123	7.29	< 10	< 1	0.23	10	2.50	1275
511236	205	294	< 5	0.2	2.50	25	80	< 0.5	< 2	2.74	1.5	37	64	298	7.74	< 10	< 1	0.23	10	2.35	1640
511237	205	294	< 5	< 0.2	2.89	25	70	< 0.5	< 2	2.27	1.0	33	71	212	7.92	< 10	< 1	0.18	10	2.34	1375
511238	205	294	10	< 0.2	3.21	35	100	< 0.5	< 2	2.84	1.5	44	60	105	8.52	< 10	< 1	0.24	10	2.38	1180
511239	205	294	< 5	0.2	2.71	< 5	100	< 0.5	< 2	3.72	1.5	36	87	80	7.61	< 10	< 1	0.25	< 10	2.56	1350
511240	205	294	< 5	< 0.2	1.05	5	140	< 0.5	2	1.83	< 0.5	14	155	8	3.88	< 10	< 1	0.46	10	0.90	945
511241	205	294	< 5	< 0.2	0.50	< 5	110	< 0.5	< 2	1.39	0.5	13	61	5	3.78	< 10	< 1	0.24	10	0.66	540
511242	205	294	< 5	< 0.2	0.30	10	40	< 0.5	< 2	2.38	0.5	7	52	4	2.54	< 10	< 1	0.08	< 10	1.05	850
511243	205	294	< 5	0.6	0.17	< 5	30	< 0.5	< 2	4.22	0.5	5	58	4	2.69	< 10	< 1	0.02	< 10	1.95	1485
511244	205	294	< 5	0.2	0.37	5	70	< 0.5	< 2	2.62	< 0.5	13	43	5	3.35	< 10	< 1	0.16	< 10	1.23	855
511245	205	294	< 5	0.4	0.56	< 5	110	< 0.5	< 2	3.24	0.5	13	61	6	3.70	< 10	< 1	0.27	< 10	1.51	1160
511246	205	294	< 5	0.2	0.60	< 5	80	< 0.5	< 2	2.68	0.5	10	134	9	3.15	< 10	< 1	0.30	< 10	1.25	830

CERTIFICATION: B. Caughlin

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221

To: NEW GLOBAL RESOURCES

548 BEATTY ST.
VANCOUVER, BC
V6B 2L3

Project : BIRCH
Comments:

Invoice Date: 21-NOV-90
Invoice No. : I-9026680
P.O. Number :

CERTIFICATE OF ANALYSIS A9026680

SAMPLE DESCRIPTION	PREP CODE		Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
511221	205	294	2	0.04	122	2620	2	5	6	123	< 0.01	< 10	< 10	57	< 10	134
511222	205	294	< 1	0.04	96	2370	12	5	5	127	< 0.01	< 10	< 10	43	< 10	116
511223	205	294	< 1	0.06	99	1580	28	5	6	101	< 0.01	< 10	< 10	44	< 10	94
511224	205	294	< 1	0.07	128	1640	8	5	6	95	0.02	< 10	< 10	51	< 10	98
511225	205	294	< 1	0.04	99	1600	< 2	5	5	124	< 0.01	< 10	< 10	43	< 10	100
511226	205	294	< 1	< 0.01	1	60	< 2	< 5	< 1	2	< 0.01	< 10	< 10	< 1	< 10	< 2
511227	205	294	< 1	0.04	115	1750	10	< 5	7	84	0.03	< 10	< 10	69	< 10	126
511228	205	294	< 1	0.04	117	1620	4	< 5	7	106	< 0.01	< 10	< 10	68	< 10	140
511229	205	294	< 1	0.04	131	1980	< 2	5	10	172	0.02	< 10	< 10	83	< 10	108
511230	205	294	< 1	0.02	203	1370	< 2	5	14	85	< 0.01	< 10	< 10	127	< 10	184
511231	205	294	2	0.03	160	1870	< 2	5	14	146	< 0.01	< 10	< 10	117	< 10	166
511232	205	294	2	0.02	172	1160	< 2	< 5	15	142	< 0.01	< 10	< 10	126	< 10	204
511233	205	294	2	0.01	167	1060	< 2	5	13	138	< 0.01	< 10	< 10	121	< 10	214
511234	205	294	2	0.04	138	1160	< 2	5	11	165	0.02	< 10	< 10	93	< 10	174
511235	205	294	4	0.08	41	4730	6	< 5	7	130	0.09	< 10	< 10	82	< 10	134
511236	205	294	3	0.09	29	4620	8	< 5	6	138	0.06	< 10	< 10	63	< 10	120
511237	205	294	3	0.07	28	4880	6	< 5	7	109	0.06	< 10	< 10	72	< 10	140
511238	205	294	3	0.07	42	4840	20	5	7	125	0.08	< 10	< 10	82	< 10	126
511239	205	294	5	0.06	34	4270	< 2	< 5	6	148	0.05	< 10	< 10	67	< 10	116
511240	205	294	5	0.06	7	430	36	< 5	3	64	< 0.01	< 10	< 10	16	< 10	28
511241	205	294	10	0.05	5	360	16	< 5	4	92	< 0.01	< 10	< 10	11	< 10	22
511242	205	294	24	0.12	3	590	8	< 5	5	130	< 0.01	< 10	< 10	5	< 10	64
511243	205	294	8	0.09	1	470	8	< 5	7	239	< 0.01	< 10	< 10	3	< 10	40
511244	205	294	7	0.07	4	350	6	< 5	4	109	< 0.01	< 10	< 10	10	< 10	26
511245	205	294	14	0.06	4	380	12	5	4	130	< 0.01	< 10	< 10	12	< 10	34
511246	205	294	2	0.03	5	290	22	5	2	78	< 0.01	< 10	< 10	7	< 10	34

CERTIFICATION: B. Caughlin

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221

To: NEW GLOBAL RESOURCES

548 BEATTY ST.
VANCOUVER, BC
V6B 2L3

Project : BIRCH
Comments:

Invoice Date: 23-NOV-90
Invoice No. : I-9026846
P.O. Number : NONE

CERTIFICATE OF ANALYSIS A9026846

SAMPLE DESCRIPTION	PREP CODE	Au ppb FA+AA	Cu ppm	Pb ppm	Zn ppm	Ag ppm Aqua R
L6W 25+00N	201 238	< 5	70	18	120	0.5
L6W 25+10N	201 238	< 5	60	12	126	0.2
L6W 25+20N	201 238	< 5	10	10	44	0.3
L6W 25+30N	201 238	< 5	32	18	64	0.4
L6W 25+40N	201 238	< 5	30	16	84	0.3
L6W 25+50N	201 238	< 5	36	24	220	2.4
L6W 25+60N	201 238	< 5	70	24	350	0.2
L6W 25+70N	201 238	< 5	65	62	270	1.7
L6W 25+80N	201 238	20	46	16	184	< 0.2
L6W 25+90N	201 238	< 5	130	72	400	0.5
L6W 26+00N	201 238	90	200	56	270	0.4
L6W 26+10N	201 238	10	150	28	178	0.8
L6W 26+20N	201 238	10	106	44	300	0.7
L6W 26+30N	201 238	< 5	130	70	540	2.5
L6W 26+40N	201 238	5	160	200	370	1.7
L6W 26+50N	201 238	< 5	130	50	290	0.3
L7W 20+00N	201 238	15	70	124	144	0.8
L7W 20+10N	201 238	55	200	210	720	1.4
L7W 20+20N	201 238	20	80	205	2000	1.4
L7W 20+30N	201 238	< 5	70	200	450	2.9
L7W 20+40N	201 238	< 5	8	14	40	0.3
L7W 20+50N	201 238	< 5	64	48	196	0.6
L7W 20+60N	201 238	< 5	88	170	480	1.7
L7W 20+70N	201 238	< 5	70	160	700	0.5
L7W 20+80N	201 238	< 5	50	98	640	4.0
L7W 20+90N	201 238	< 5	114	28	430	6.6
L7W 21+00N	201 238	< 5	40	36	220	5.2
L7W 21+10N	201 238	< 5	110	166	470	0.5
L7W 21+20N	201 238	< 5	56	42	280	9.5
L7W 21+30N	201 238	15	190	64	1500	3.7
L7W 21+40N	201 238	< 5	50	56	210	0.8
L7W 21+50N	201 238	< 5	56	56	158	2.1
L7W 21+60N	201 238	< 5	10	8	36	0.4
L7W 21+70N	201 238	< 5	22	56	112	0.7
L7W 21+80N	201 238	< 5	50	22	196	0.3
L7W 21+90N	201 238	< 5	78	14	130	0.3
L7W 22+00N	201 238	< 5	26	4	72	0.4

CERTIFICATION: Ian Bichler

APPENDIX V

INDUCED POLARIZATION REPORT
BY PETER E. WALCOTT AND ASSOCIATES LIMITED

PETER E. WALCOTT & ASSOC. LTD.

A GEOPHYSICAL REPORT

ON

AN INDUCED POLARIZATION SURVEY

Birch Island Area, British Columbia
51° 32' N, 119° 53' W
N.T.S. 82M/12W

Claims surveyed: BIRCH I & 2

Survey Dates: September 29th _ October 6th, 1990

FOR

GEMSTAR RESOURCES LTD.

Vancouver, B.C.

BY

PETER E. WALCOTT & ASSOCIATES LIMITED

Vancouver, B.C.

NOVEMBER 1990

GEOPHYSICAL SERVICES

TABLE OF CONTENTS

APPENDIX

INTRODUCTION.

Between September 29th & October 6th, 1990, Peter E. Walcott & Associates Limited carried out limited (budget controlled) induced polarization (I.P.) surveying over part of a property, located in the Birch Island area of British Columbia, for Gemstar Resources Ltd.

The survey was carried out over two areas, the lines over one of which were established at a N 25° W bearing and over the other in a north-south direction by personnel from New Global Resources Ltd. The survey was a follow-up to the limited June 1988 I.P. survey on which favourable chargeability responses were obtained.

Measurements (first to fourth separation) of apparent chargeability (the I.P. response parameter) and resistivity were made every 25 metres along the lines using the dipole-dipole method of surveying with a 25 metre dipole.

The I.P. data are presented in contour form on individual pseudo-sections bound in this report. In addition the second separation chargeability and resistivity data are shown in contour form on Maps W-481-1 & 2 that accompany this report to which similar data from the main sulphide showing area has been appended.

Unfortunately the survey had to be curtailed on the last budgeted day when the transmitter circuitry became soaked due to the driving rain and snow.

PROPERTY, LOCATION & ACCESS.

The property is located in the Kamloops Mining Division of British Columbia and consists of the following claims:

Claim Name	No. of Units	Record No.	Anniversary Date
Birch #1	20	126959	May 29th
Birch #2	10	126960	May 29th
Birch #3	4	126961	May 29th
Birch #4	4	126962	May 29th

The claims ares situated on a northerly trending ridge lying between Foghorn Creek and Lute Creek, some 100 kilometre north north-east of the town of Kamloops and some 11 kilometres south of the village of Birch Island, British Columbia.

Access is obtained by means of two wheel drive vehicle from Birch Island by a 15 kilometre drive along the south side of the North Thompson River, and thence by a 20 kilometre drive up the Jones Creek logging road.

PREVIOUS WORK.

Previous work on the property consisted of airborne electromagnetic surveys, ground electromagnetic and induced polarization surveying, geochemical surveying, prospecting and geological mapping and diamond drilling carried out by Barrier Reef Resources, Craigmont Mines and Esso Resources between 1979 and 1984, and by Gemstar Resources Ltd. in 1988.

The results of this work are partially documented in reports now held by Gemstar Resources Ltd.

GEOLOGY.

The reader is referred to the previously mentioned reports and the geological, geochemical and geophysical assessment report on the property by W. Brian Lennan F.G.A.C. and J.T. Shearer F.G.A.C. dated May 1989.

Basically the property is underlain by Upper Paleozoic rocks of the Eagle Bay Formation consisting for the most of buff coloured phyllites and quartz sericite schists.

Generally the apparent bedding strikes northeasterly and dips shallowly to the northwest. Small scale structures indicate that tight isoclinal folding has occurred.

Minor disseminated pyrite is found scattered throughout the Eagle Bay phyllite.

Three newly discovered mineralized areas and the main massive sulphide zone horizon exhibit four distrinct types of mineralization to wit (1) the Exhalative Unit mineralized with coarse grained galena, spalerite, chalcopyrite and pyrite sandwiched between quartz sericite schists and a light brown carbonate unit; (2) semi-massive to massive sulphide mineralization hosted by quartz rich bands in a silicified chlorite schist on the banks of Lute Creek (3) a pyrite-rich zone hosted by rhyolite breccias and banded sugary-textured felsic rocks and (4) the coarse granular pyrite accompanied by interstitial galena, chalcopyrite and sphalerite of the massive sulphide unit.

PURPOSE.

The purpose of the survey was to (a) define with the I.P. method the extent of the pyritic zone hosted by the rhyolite breccia prior to investigation by drilling, and (b) to examine the I.P. reponse of the Exhalative Unit with an eye to tracing out the same.

SURVEY SPECIFICATIONS.

The induced polarization (I.P.) survey was carried out using a pulse type system, the principal components of which are manufactured by Huntec Limited of Metropolitan Toronto, Ontario and BRGM Instruments of Orleans, France.

The system consists basically of three units, a receiver (BRGM), a transmitter and a motor generator (Huntec). The transmitter, which provides a maximum of 2.5 kw d.c. to the ground, obtains its power from a 2.5 kw 400 c.p.s. three phase alternator driven by a gasoline engine. The cycling rate of the transmitter is 2 seconds "current-on" and 2 seconds "current-off" with the pulses reversing continuously in polarity. The data recorded in the field consists of careful measurements of the current (I) in amperes flowing through electrodes C_1 and C_2, the primary voltage (V) appearing between any two potential electrodes, P_1 through P_6, during the "current-on" part of the cycle and the chargeability (M_a) presented as a direct readout using a 100 millisecond delay and a 1000 millisecond sample window by the receiver, a digital receiver controlled by a microprocessor - the sample window is actually the total of ten individual windows of 100 millisecond widths.

The apparent resistivity (P_a) in ohm metres is proportional to the ratio of the primary voltage and the measured current, the proportionality factor depending on the geometry of the array used. The chargeability and the resistivity are called apparent as they are values which that portion of the earth sampled would have if it were homogeneous. As the earth sampled is usually inhomogeneous the calculated apparent chargeability and resistivity are functions of the actual chargeability and resistivity of the rocks.

The survey was carried out using the "dipole-dipole" electrode array. This electrode configuration and the methods of presenting the results are illustrated in the appendix. Depth penetration with this array is increased or decreased by increasing or decreasing "a" and/or "n".

In practise, the equipment is set up at a particular station of the line to be surveyed; three transmitting dipoles are laid out to the rear, measurements are made for all possible

SURVEY SPECIFICATIONS cont'd.

combinations of transmitting and receiving dipoles, up to the fourth separation, i.e. n=4: the equipment is then moved 3 "a" feet along the line to the next set-up.

A 25 metre dipole was employed on this survey, and first to fourth separation measurements made every 25 metres along the survey lines.

DISCUSSION OF RESULTS.

The results of the survey should be studied in conjunction with the geology of the property as mapped by Brian Lennan and with the results of the previous I.P. survey by Peter E. Walcott & Associates Limited, both carried out in 1988.

The writer has included the latter data on the plan contour maps of the second separation chargeability and resistivity results - Maps W-481-1 & 2 - to illustrate the varying chargeability background of the underlying rocks - low teens to low twenties caused by the widespread occurrence of pyrite in the formation - and the strength of the main sulphide showing. These maps have been contoured with a northeasterly bias to fit the known geological trend of the area.

As the survey was carried out over two different areas on the property namely the Rhyolite Breccia and the Exhalative Zones, the results for each are best discussed individually.

A Grid.

This grid was located to further investigate the I.P. response of the Rhyolite Breccia discovered in 1988 after trenching the one line anomaly on Line 1.0W.

A moderate to strong complex chargeability response was obtained on Line 300A between 1+50N and 3+25N which correlated very well with the previous results on Line 1.0W- located between Lines 300 and 400A as recovered by the staff of New Global Resources - as illustrated on Map W-481-1.

This zone, as defined by the respective responses on the above mentioned lines, continues northeastwards across Line 200A, where a weaker response was observed, and generally follows the line of the 1988 excavations.

Although the contoured chargeability plan suggests the presence of a second zone trending northeasterly across the grid from Line 500A to Line 100A and open in either direction it is more likely - based on the character of the responses - that the main zone is offset northwesterly to Line 400A by the same

DISCUSSION OF RESULTS cont'd

fault by which the main sulphide zone is also offset and/or terminated at its eastern extremity - Map W-481-1.

As interferring bodies bodies, resistivity changes and electrode positioning can combine to produce asymmetric effects it is difficult to predict dips from I.P. surveys, although a shallow northerly dip is indicated on Line 400A- highest response on side opposite direction of dip - which conforms with those of the local geology.

Main Grid.

Three lines were attempted here over the projected extension of the Exhalative Zone discovered when mapping in 1988. Unfortunately as mentioned previously the transmitter circuitry got water saturated on the planned last two days in the driving rain and snow, and ceased functioning properly, and a decision was made to terminate the survey before drying out the former and determining if it was still operable.

Moderate to high chargeability readings were obtained over most of the coverage area reflecting increased sulphide content in the underlying rocks.

The strongest response was observed on Line 700W between 16+25 and 19+25N due west of the main sulphide showing where no soil sampling appears to have been carried out to date- Map W-481-1. This broad complex zone exhibits somewhat lower resistivity readings as can best be seen on the ten point moving average-filter-profile plot.

The higher responses around 21+00N on Line 800W- undefined at present - , 21+25N on Line 700W, and 22+00N on Line 600W could represent those on the projected stratabound horizon although more work would need to be carried out over its observed occurrence to properly document its response.

Lower resistivities were also associated with the higher chargeability responses between 23+00 and 23+75N on Line 700W and between 24+75 and 25+50N on Line 600W. The strong resistivity high in the middle of the latter could be due to a

DISCUSSION OF RESULTS cont'd.

narrow zone of silification i.e. a quartz healed fracture, etc. As the character of these responses is similar the writer would be tempted to test the stronger one on Line 600W with a hole drilled southeasterly failing further definition by more surveying.

SUMMARY, CONCLUSION & RECOMMENDATIONS.

Between September 29th and October 6th, Peter E. Walcott & Associates Limited undertook a limited induced polarization survey on the Birch claims, North Thompson River area, for Gemstar Resources Limited.

The survey was a continuation of the limited survey carried out in June 1988. It was conducted over two grids, on the one to define the open chargeability anomaly prior to investigation by drilling, and on the other to investigate the response in the area of the mineralized exhalative band again prior to drilling.

The chargeability results over the first grid- Rhyolite Breccia Zone - confirmed the results of the 1988 work and indicated a zone of moderate to strong chargeability response of some 300 metres strike length, open and narrowing to the west.

The results from the second grid - the Exhalative Zone Area - suggested (1) the rocks there had increased sulphide content and (2) the mineralized exhalative horizon continued through to Line 600W although more work is necessary to substantiate this, (3) located a broad complex and as yet undefined anomaly on the extension of Line 700W to the south and (4) indicated stronger narrow zones at the northern ends of Lines 600 and 700W, and possibly 800W.

Although the writer is not familiar with the results of the diamond drilling programme designed to test the above features and carried out in early October he recommends that its results be studied in conjunction with those of the geology and geophysics to plan for more work on the property, particularly if encouraging values were obtained. To date it would appear that the I.P. method will outline areas of increased sulphide concentration but these must be properly delineated before investigation by borehole techniques.

Respectfully submitted,

PETER E. WALCOTT & ASSOCIATES LTD.

Vancouver, B.C.,
November 1990

Peter E. Walcott, P.Eng.

A P P E N D I X

COST OF SURVEY.

Peter E. Walcott & Associates Limited undertook the survey on a daily basis. Mobilization and reporting were extra so that the total cost of the survey was $13,512.67.

PERSONNEL EMPLOYED ON SURVEY.

Name	Occupation	Address	Dates
Peter E. Walcott	Geophysicist	Peter E. Walcott & Assoc. 605 Rutland Court, Coquitlam, B.C. V3J 3T8	Nov.18 - 20th 1990
R. Summerfield	Geophysical Operator	"	Sept. 29th - Oct. 6th, 1990
P. Charlie	Geophysical Assistant	"	"
M. Andrews	Geophysicist	"	"
G. Karacunte	Geophysical Assistant	"	"
J. Walcott	Typing	"	Nov. 22nd, 1990

CERTIFICATION.

I, Peter E. Walcott, of the Municipality of Coquitlam, British Columbia, hereby certify that:

1. I am a graduate of the University of Toronto in 1962 with a B.A.Sc. in Engineering Physics, Geophysics Option.

2. I have been practising my profession for the last twenty eight years.

3. I am a member of the Association of Profession Engineers of British Columbia and Ontario.

4. I hold no interest, direct or indirect, in the securities or properties of Gemstar Resources Ltd., nor do I expect to receive any.

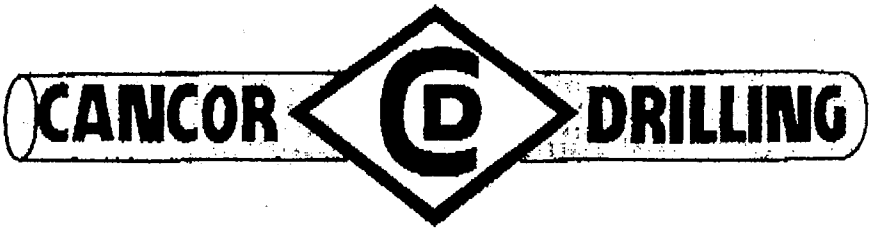
Peter E. Walcott, P.Eng.

Vancouver, B.C.
November 1990

APPENDIX VI

DRILL CONTRACT

"CONTRACT DIAMOND DRILLING"



2411 Cousins Avenue, Courtenay, B.C., Canada V9N 3N6 Ph. (604) 338-7233 FAX (604) 334-1944

DRILLING CONTRACT

THIS AGREEMENT made as of the eighteenth of Sept, 1990.

BETWEEN: New Global Resources
548 Beatty Street
Vancouver
BC
V6B 2L3

(hereinafter called "the Company")

OF THE FIRST PART

and

Cancor Drilling,
2411 Cousins Avenue,
Courtenay, B. C.
V9N 3N6

(hereinafter called "the Contractor")

OF THE SECOND PART

WITNESSETH that in consideration of the payments to be made by the Company and of the premises and mutual promise and agreements herein contained, the parties hereto agree as follows:

1. INTRODUCTION

The Contractor agrees to perform forthwith certain piping and diamond drilling (hereinafter sometimes called "the work") on the land of the Company situated in the Province of British Columbia in the area of Clearwater.

2. PROPERTY

The Company shall allow the Contractor at the Contractors' discretion to look over the property and area to be drilled, and where possible shall indicate the position of set-ups.

During the course of the work the Contractor shall at all times keep the Company's premises free from accumulation of waste material or rubbish and upon completion of the work shall remove all tools, scaffolding, surplus material and rubbish and have the property in a clean condition.

3.(a) DIAMOND DRILLS

The Contractor agrees to supply, but not limited to, one (1) Hydracore Gopher drilling outfit together with the necessary men and supplies to carry on the work to operate 24 hours per day seven days per week.

(b) Mobilization shall commence approx. during the first week of October 1990.

4.(a) FOOTAGE

1,000 ft.

The Contractor agrees to sink by piping and/or bore by core drilling 1,000 feet of IAX (BQ) equivalent. The Company garantees to the Contractor an aggregate minimum footage of 1,000 feet. Measurements to be taken from the top of the casing pipe.

(b) If the Contractor and the Company's representative mutually agree that loose and caving material will prevent successful completion of a hole, the Contractor shall not be obligated to drill to any specified depth. However, should the Company request that further work be carried out in the hole beyond this point, then the Contractor shall continue work in the hole but such continuing work shall be at field cost rates, cost of equipment used or lost, plus ten percent.

(c) The Company shall provide, at no cost to the Contractor, all "rights of way" ingress and egress to all lands that may be required to enable the Contractor to carry out the work as specified. The Contractor shall be permitted to cut and fell any timber on the Company's property as may be required in the course of the work hereunder only with specific Company authorization and the Company shall indemnify and save harmless the Contractor from any assessment for stumpage or other charges of every kind and nature.

5. EQUIPMENT LOSS

Any casing left in hole or abandoned in hole at the Company's request, or rods, casing and any down hole tools lost or destroyed due to ground conditions will be charged to the Company at replacement cost plus ten percent.

6. PRICE PER FOOT FOR PIPING (IAX-BQ equivalent)

The price per foot for piping in over burden for BQ drilling shall be charged at the following rates:

$19.45 per lineal foot.

Reaming casing, if required, shall be charged at field cost rates.

7.(a) PRICE PER FOOT FOR CORE DRILLING

The price per foot for BQ core drilling shall be charged at the following rates:

$19.45 per lineal foot.

(b) REAMING OF DRILL HOLES

Reaming of drill holes will be charged at field cost rates plus replacement cost of diamond products used plus ten percent.

(c) FIELD COST RATES

$28.00 per man hour.
$26.00 per machine hour.

8. WATER SUPPLY

Cost of supplying water to the drill shall be included in the footage rate.

9.(a) MOVING

The cost of moving drill equipment (including tearing down and setting up) from drill site to drill site shall be included in the footage rate.

10. Mobilization costs to job site and return are included in the footage rate.

11. SURVEYING HOLES

The Contractor agrees to supply Inline Clinometer, test tubes and four percent Hydrofluoric acid and take tests, for dip angle only, that may be required by the Company at field cost rates.

12. It is agreed that any unreasonable delay caused by the Company shall be charged to the Company at field cost rates.

13. ADDITIVES

The cost of E-Z mud and cutting oil, if required, is included in the footage rate.

14. DAILY REPORTS

The Contractor agrees to give the Company's representative carbon copies of all daily diamond drill reports daily.

15. (a) CORE

The Contractor will provide BQ core boxes and lids suitable for BQ size core charged to the Company at cost plus ten percent.

(b) If drill road construction is required time involved cutting bush will be charged to the Company at cost.

16. (a) CAMP

It is agreed that the Contractor will supply Camp facilities and a cook for Cancor Drilling personnel.

(b) FUEL

It is agreed that the Contractor will provide fuel for drill and associated equipment.

(c) SUPPLY FLIGHTS

All mob/demob costs that require aircraft or helicopter including periodic supply flights shall be managed and paid for by the Company.

17.(a) ACTS AND REGULATIONS

The Contractor agrees, at its own expense, to comply with all requirements of the Mechanic's Lien Act, Workers' Compensation Act, Unemployment Insurance Act, Hours of Work and Vacations with Pay Act and generally all Federal and Provincial Acts and Regulations concerning employment applicable to the Contractor's operations.

(b) INSURANCE

Cancor Drilling is fully insured with $1,000,000. auto liability insurance, $1,000,000.00 comprehensive general liability insurance.

18. PAYMENT

Invoices will be rendered weekly and will be due and payable in full in Canadian funds upon receipt thereof by the Company.

Interest will be charged at 2% per month on all overdue accounts.

Start up costs of $4,000.00 to be paid upon acceptance of the contract and deducted from the final invoice.

19. PERFORMANCE AND EFFICIENCY

It is mutually agreed that the Company's representative and the Contractor's foreman will cooperate so that as high a percentage of core recovery will be made as due diligence will allow.

The Contractor shall at all times enforce strict discipline and maintain good order among its employees and shall not retain on the worksite any unfit person or anyone not skilled in the work assigned to him.

20. DRILL RESULTS

The Contractor will not give out any information regarding drill results or permit access to any drill core to any person other than the Company's accredited

representatives, except upon specific permission of responsible officials of the Company.

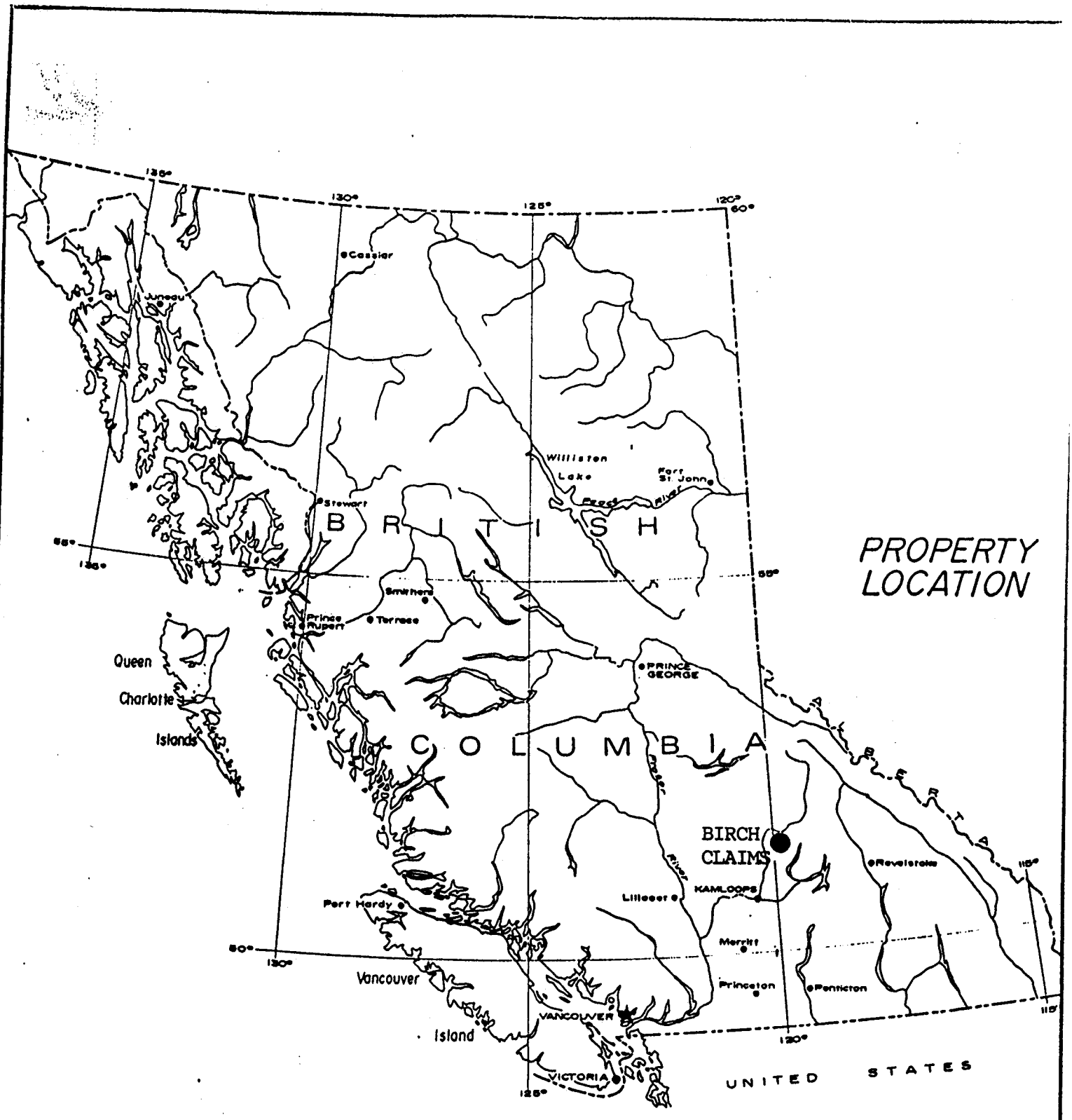
IN WITNESS WHEREOF the parties hereto have executed this Agreement under the hands of their respective proper officers duly authorized on that behalf.

NEW GLOBAL RESOURCES LTD.

by: _____

CANCOR DRILLING

by: _____



GEMSTAR RESOURCES LTD.

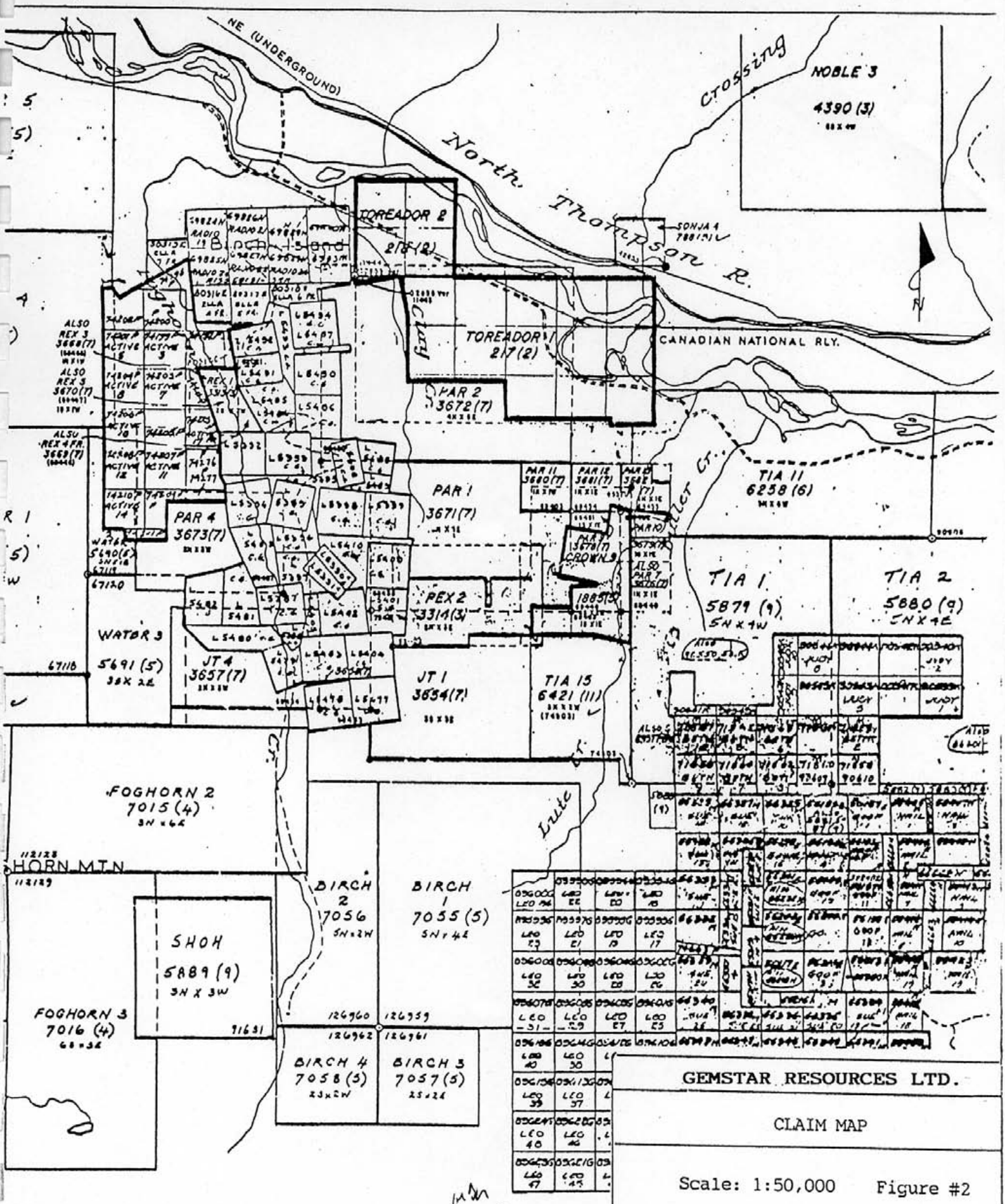
Figure #1

SCALE

Km. 100 50 0 100 200 300 400 Km.

Miles 100 50 0 100 200 Miles

ALTAIR drafting services ltd.

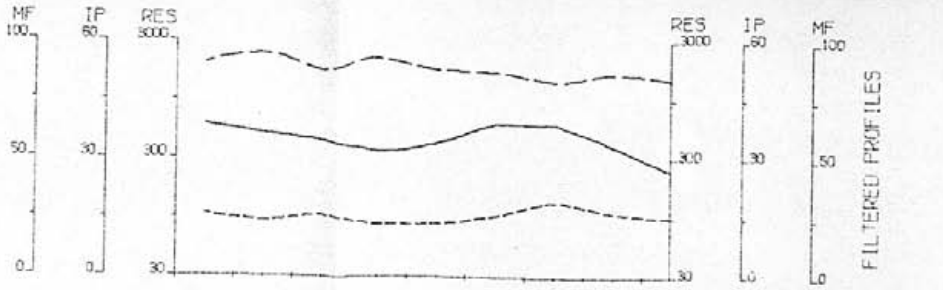


GEMSTAR RESOURCES LTD.

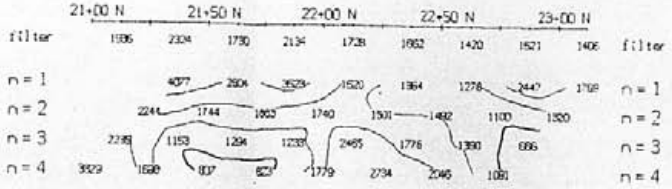
CLAIM MAP

Scale: 1:50,000 Figure #2

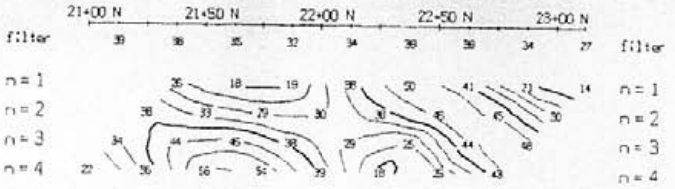
NTS 82 M/12W



TOPOGRAPHY

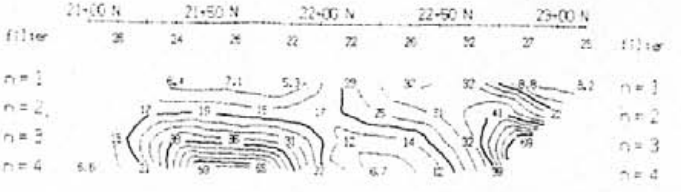


RESISTIVITY
(ohm_m)



CHARGEABILITY
(mVper Volts)

INTERPRETATION

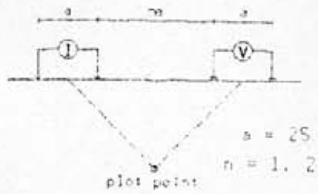


METAL FACTOR
(ohms * 1000)

(GOSOFT Inc. Software for the Earth Sciences. Toronto, Canada

Line 800 W

Dipole-Dipole Array



Filtered Profiles

		filter
Resistivity	————	*
Polarization	————	* *
Metal Factor	- - - - - - - -	* * *
		* * * *

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Instrument: BRGM IP6, HUNTEC 2.5 Kw
Frequency: 0.125 Hz
Operator: R.S.

INTERPRETATION

Well defined, strong increase in polarization with or without marked decrease in resistivity.

Fairly well defined moderate increase in polarization.

Poorly defined polarization increase.

Resistivity feature.

GEMSTAR RESOURCES LTD.

INDUCED POLARIZATION SURVEY

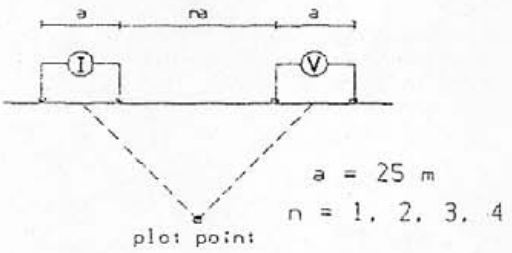
BIRCH CLAIM
BIRCH ISLAND, B.C.

Date: 10/90 N.T.S.: 82 M/12
Interpretation by: P.E.W.
Scale: 1 : 2500

PETER.E. WALCOTT & ASSOC. LTD

Line 700 W

Dipole-Dipole Array



Filtered Profiles

		filter
Resistivity	———	*
Polarization	———	* *
Metal Factor	- - - - -	* * *
		* * * *

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Instrument: BRGM IP6,HUNTEC 2.5 Kw
Frequency: 0.125 Hz
Operator: R.S.

INTERPRETATION

▬▬ Well defined, strong increase in polarization with or without marked decrease in resistivity.

▮▮▮▮▮▮▮ Fairly well defined moderate increase in polarization.

▪▪▪▪▪▪▪▪ Poorly defined polarization increase.

Resistivity feature.

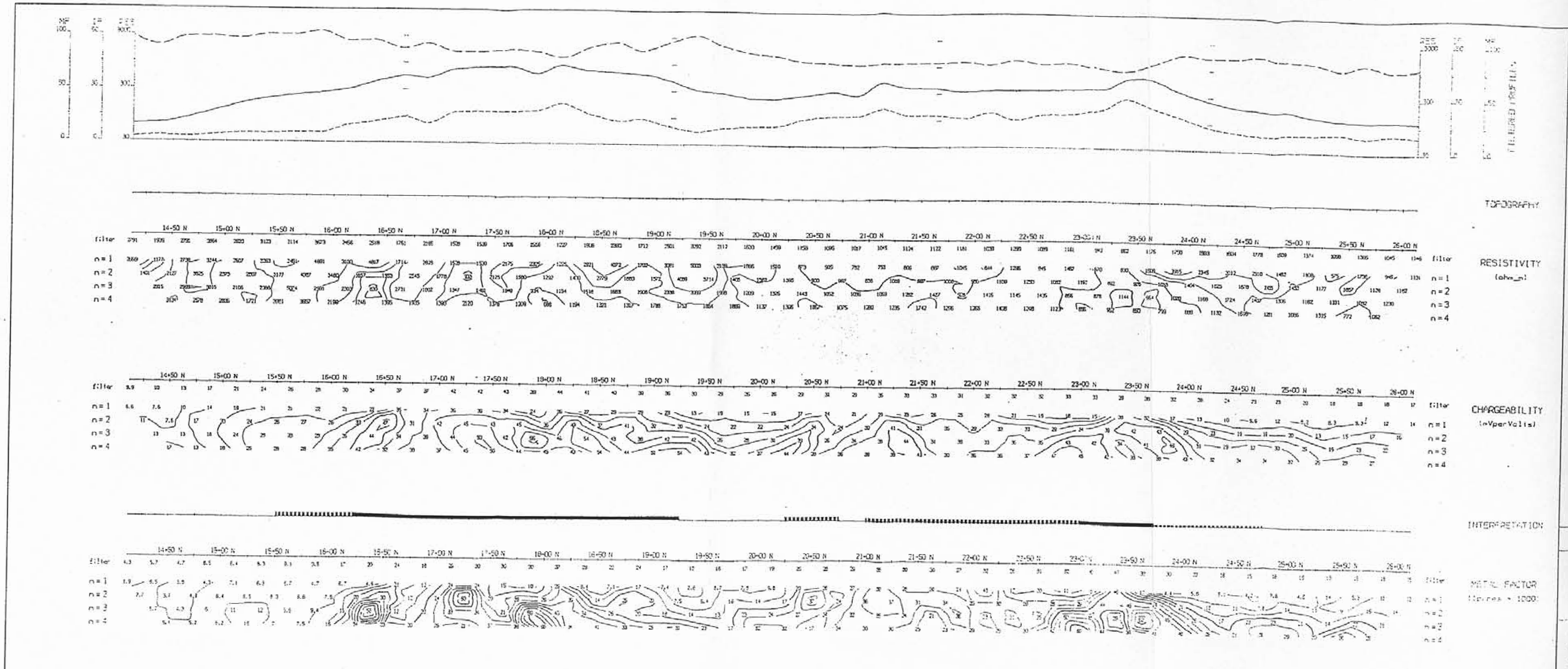
GEMSTAR RESOURCES LTD.

INDUCED POLARIZATION SURVEY

BIRCH CLAIM
BIRCH ISLAND,B.C.

Date: 10/90 N.T.S.: 82 M/12
Interpretation by: P.E.W
Scale: 1 : 2500

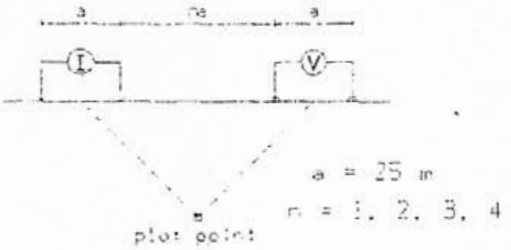
PETER.E. WALCOTT & ASSOC. LTD



GEOSOFT Inc. Software for the Earth Sciences, Toronto, Canada

Line 600 W

Dipole-Dipole Array



Filtered Profiles

		filter
Resistivity	———	*
Polarization	———	* *
Metal Factor	- - - - - - - -	* * *
		* * * *

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10....

Instrument: BRGM IP6, HUNTEC 2.5 Kw
Frequency: 0.125 Hz
Operator: R.S.

INTERPRETATION

Well defined, strong increase in polarization with or without marked decrease in resistivity.

Fairly well defined moderate increase in polarization.

Poorly defined polarization increase.

Resistivity feature.

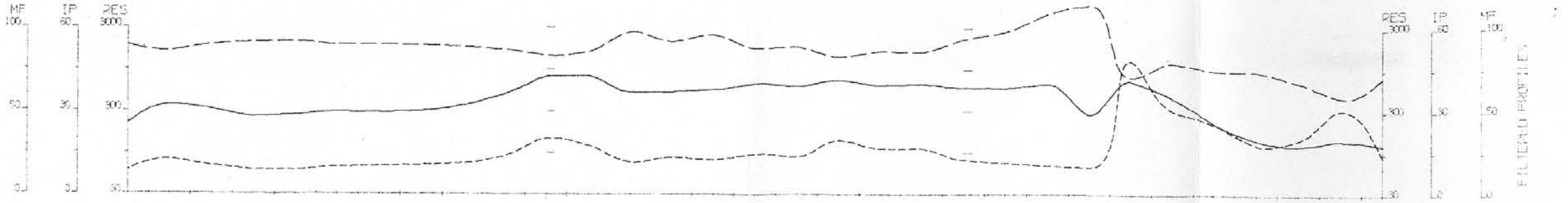
GEMSTAR RESOURCES LTD.

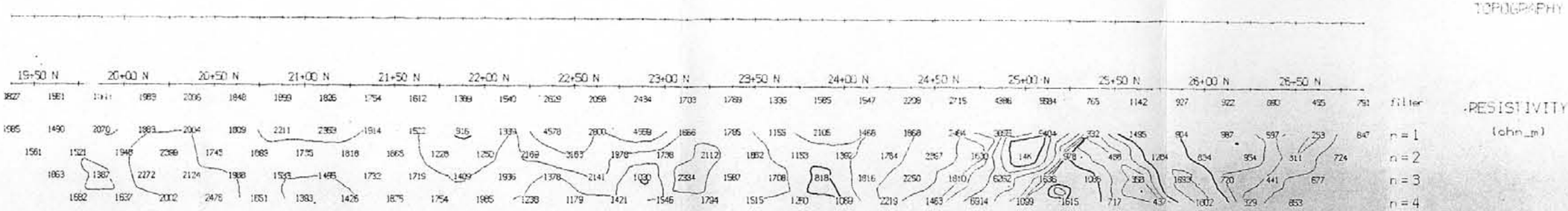
INDUCED POLARIZATION SURVEY

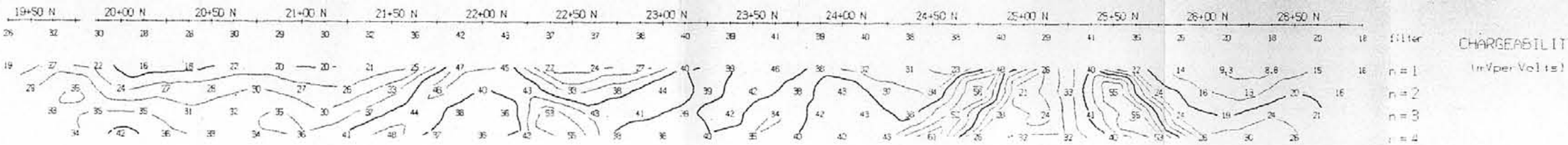
BIRCH CLAIM
BIRCH ISLAND, B.C.

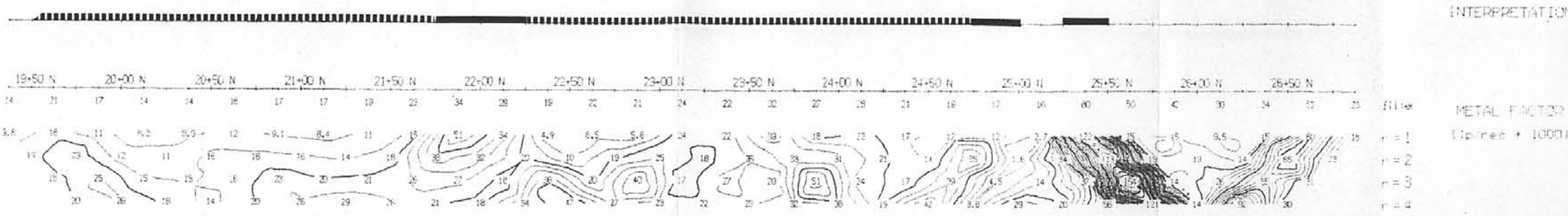
Date: 10/90 N.T.S.: 82 F/12
Interpretation by: P.E.W.
Scale: 1 : 2500

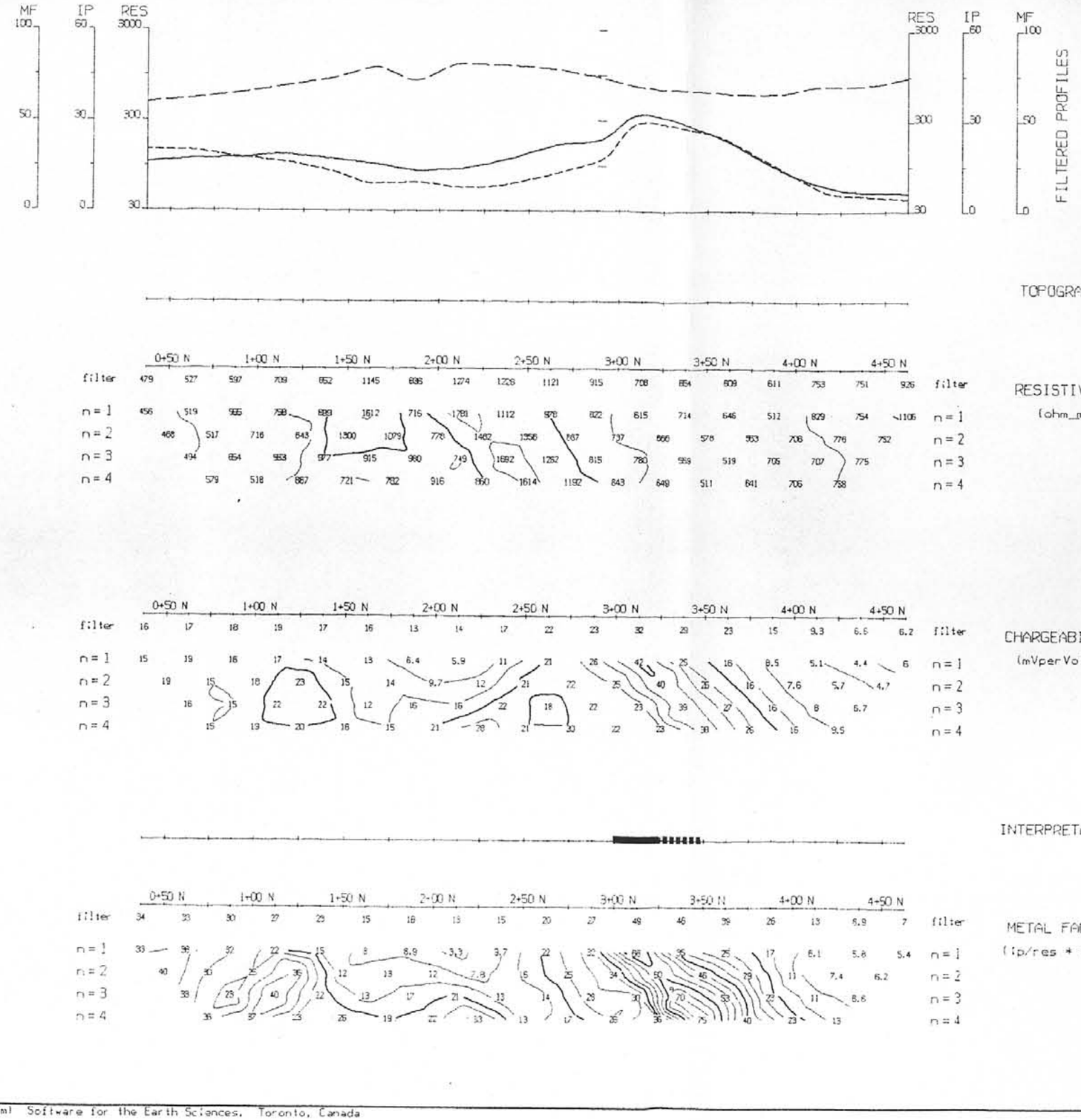
PETER.E. WALCOTT & ASSOC. LTD





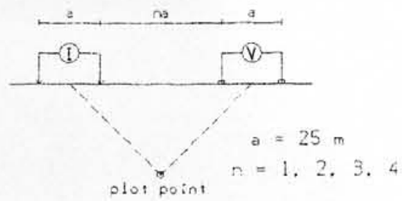






Line 500 W

Dipole-Dipole Array



Filtered Profiles

	filter
Resistivity	*
Polarization	* *
Metal Factor	* * *
	* * * *

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Instrument: BRGM IP6.HUNTEC 2.5 Kw
Frequency: 0.125 Hz
Operator: R.S.

INTERPRETATION

Well defined, strong increase in polarization with or without marked decrease in resistivity.

Fairly well defined moderate increase in polarization.

Poorly defined polarization increase.

Resistivity feature.

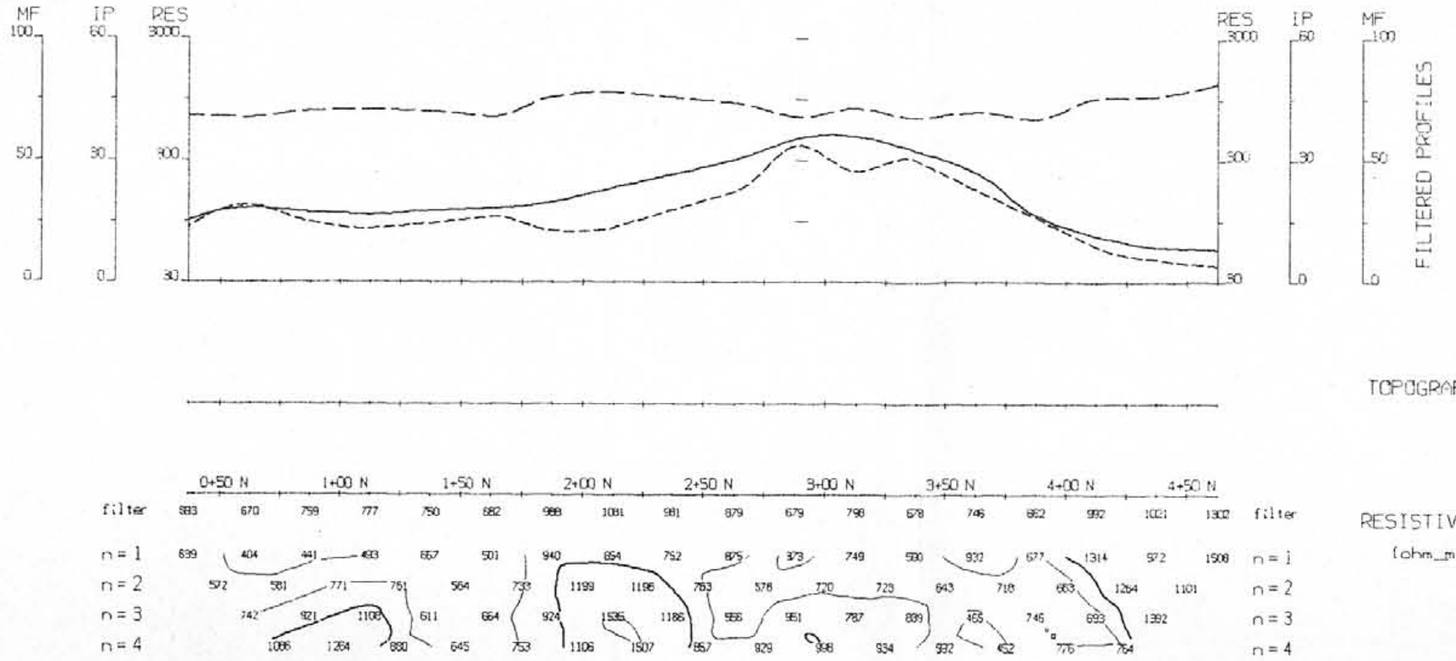
GEMSTAR RESOURCES LTD.

INDUCED POLARIZATION SURVEY

BIRCH CLAIM, A Grid
BIRCH ISLAND, B.C.

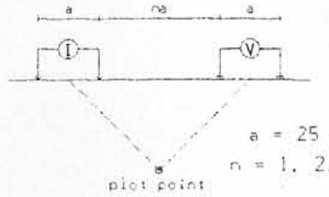
Date: 10/90 N.T.S.: 82 M/12
Interpretation by: P.E.W
Scale: 1 : 2500

PETER.E. WALCOTT & ASSOC. LTD



Line 400 W

Dipole-Dipole Array



Filtered Profiles

	filter
Resistivity	*
Polarization	* *
Metal Factor	* * *
	* * * *

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Instrument: BRGM IP6, HUNTEC 2.5 Kw
Frequency: 0.125 Hz
Operator: R.S.

INTERPRETATION

Well defined, strong increase in polarization with or without marked decrease in resistivity.

Fairly well defined moderate increase in polarization.

Poorly defined polarization increase.

Resistivity feature.

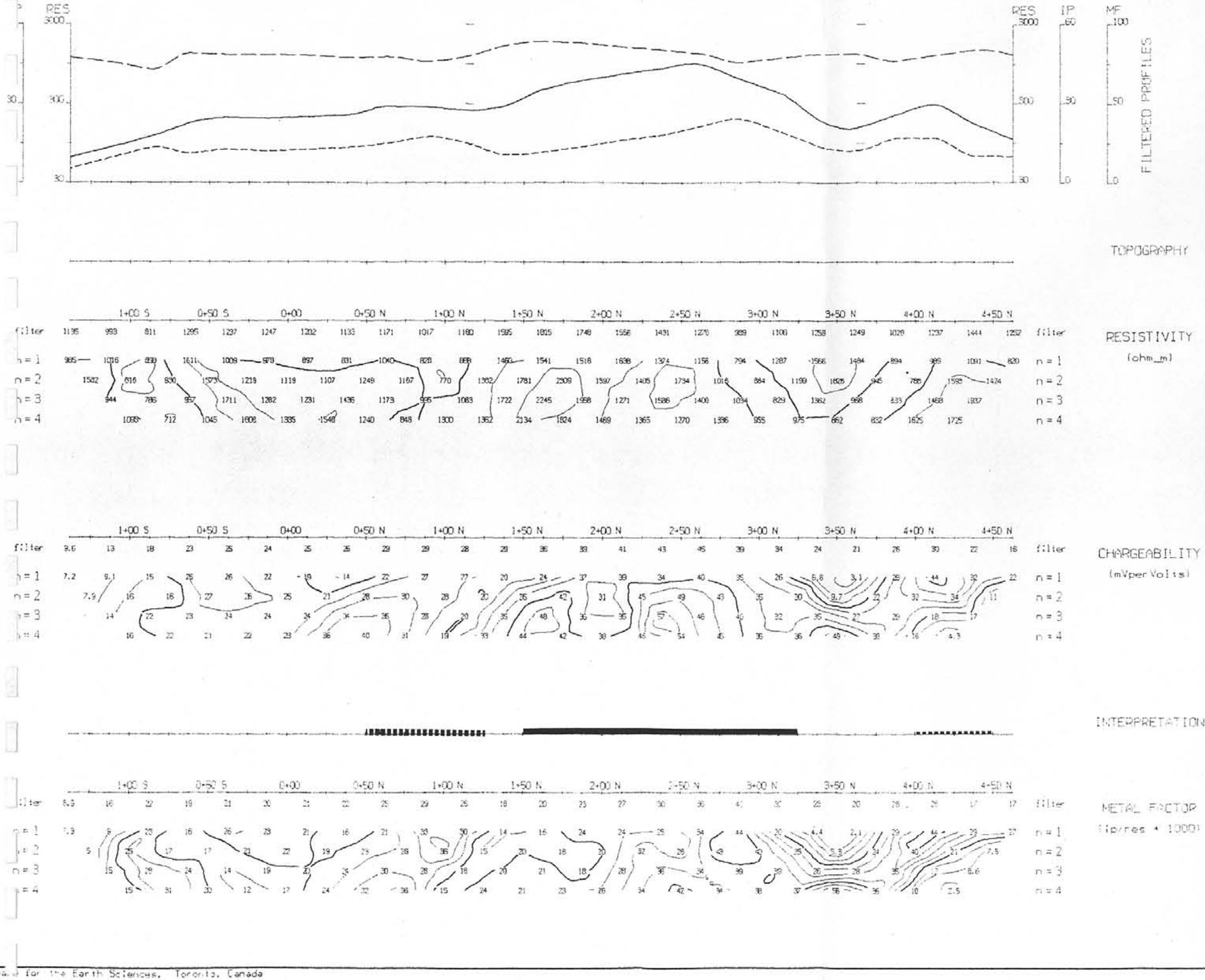
GEMSTAR RESOURCES LTD.

INDUCED POLARIZATION SURVEY

BIRCH CLAIM, A Grid
BIRCH ISLAND, B.C.

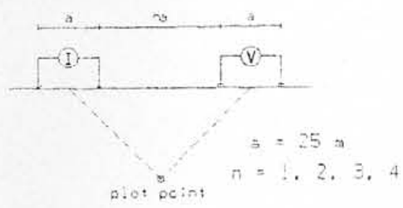
Date: 10/90 N.T.S.: 82 M/12
Interpretation by: P.E.W
Scale: 1 : 2500

PETER.E. WALCOTT & ASSOC. LTD



Line 300 W

Dipole-Dipole Array



a = 25 m
n = 1, 2, 3, 4

Filtered Profiles

	filter
Resistivity	*
Polarization	* *
Metal Factor	* * *
	* * * *

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Instrument: BRGM IP6, HUNTEC 2.5 Kw
Frequency: 0.125 Hz
Operator: R.S.

INTERPRETATION

- Well defined, strong increase in polarization with or without marked decrease in resistivity.
- Fairly well defined moderate increase in polarization.
- Poorly defined polarization increase.

Resistivity feature.

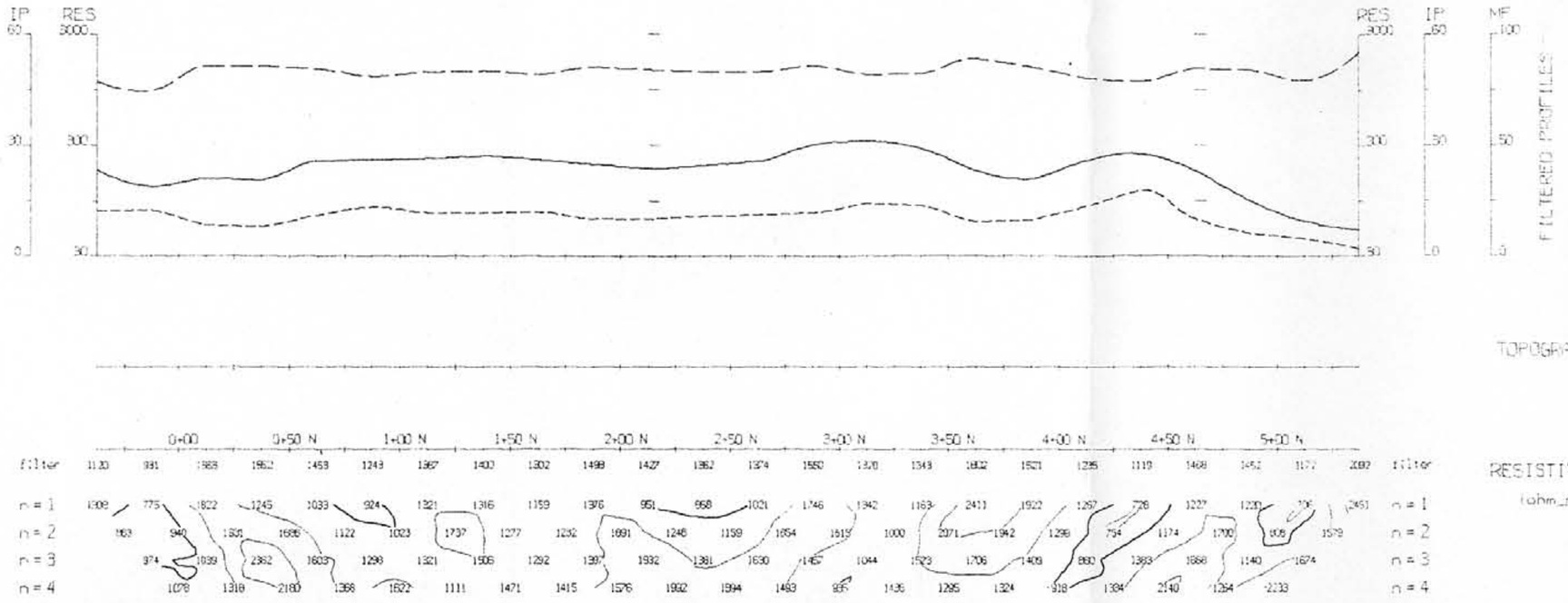
GEMSTAR RESOURCES LTD.

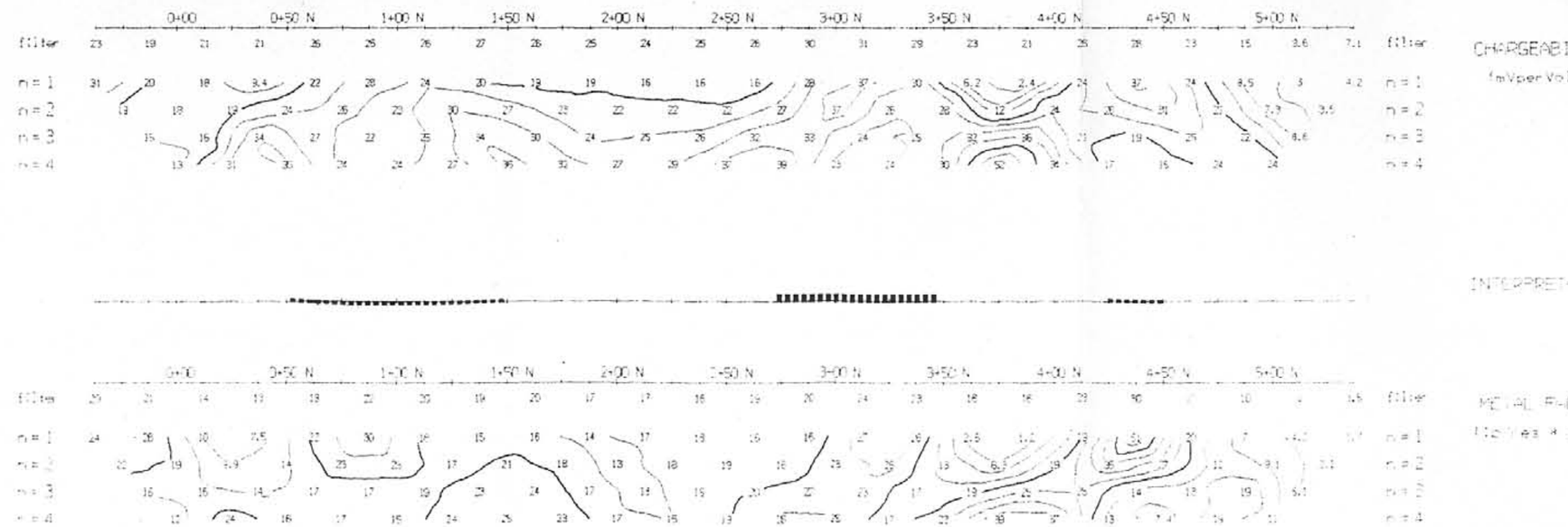
INDUCED POLARIZATION SURVEY

BIRCH CLAIM, A Grid
BIRCH ISLAND, B.C.

Date: 10/90 N.T.S.: 82 M/12
Interpretation by: P.E.W
Scale: 1 : 2500

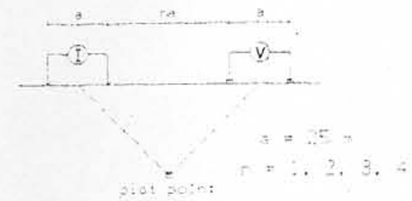
PETER.E. WALCOTT & ASSOC. LTD





Line 200 W

Dipole-Dipole Array



Filtered Profiles

Resistivity
Polarization
Metal Factor

filter

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Instrument: BRGM IP6, HUNTEC 2.5 KW
Frequency: 0.125 Hz
Operator: R.S.

INTERPRETATION

Well defined, strong increase in polarization with or without marked decrease in resistivity.

Fairly well defined moderate increase in polarization.

Poorly defined polarization increase.

Resistivity feature.

GEMSTAR RESOURCES LTD.

INDUCED POLARIZATION SURVEY

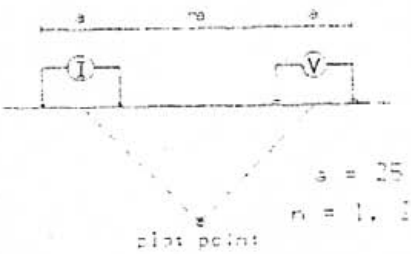
BIRCH CLAIM, A Grid
BIRCH ISLAND, B.C.

Date: 10/90 N.T.S.: 82 M/12
Interpretation by: P.E.W.
Scale: 1 : 2500

PETER E. WALCOTT & ASSOC. LTD

Line 100 W

Dipole-Dipole Array



Filtered Profiles

		filter
Resistivity	————	*
Polarization	————	* *
Metal Factor	- - - - - - - -	* * *
		* * * *

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10....

Instrument: BRGM IP6.HUNTEC 2.5 Kw
Frequency: 0.125 Hz
Operator: R.S.

INTERPRETATION

Well defined, strong increase in polarization with or without marked decrease in resistivity.

▪▪▪▪▪▪▪ Fairly well defined moderate increase in polarization.

▪▪▪▪▪▪▪ Poorly defined polarization increase.

Resistivity feature.

GEMSTAR RESOURCES LTD.

INDUCED POLARIZATION SURVEY

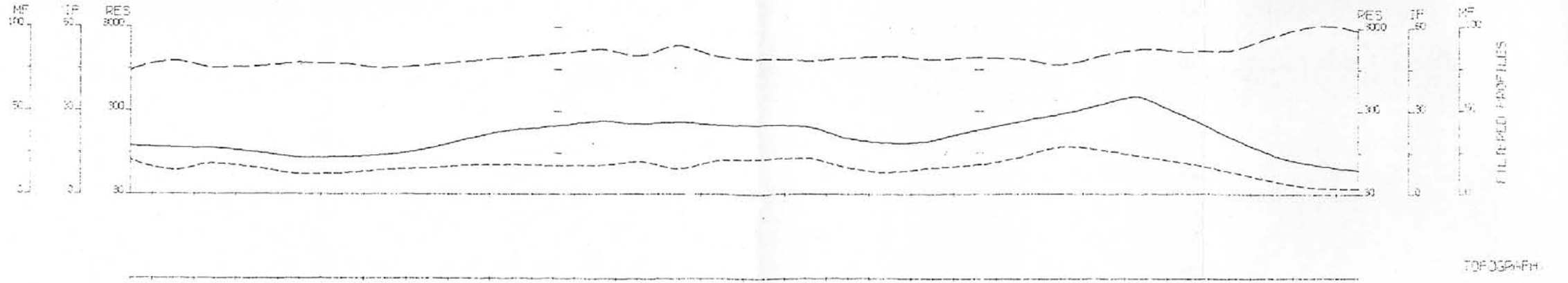
BIRCH CLAIM, A Grid
BIRCH ISLAND, B.C.

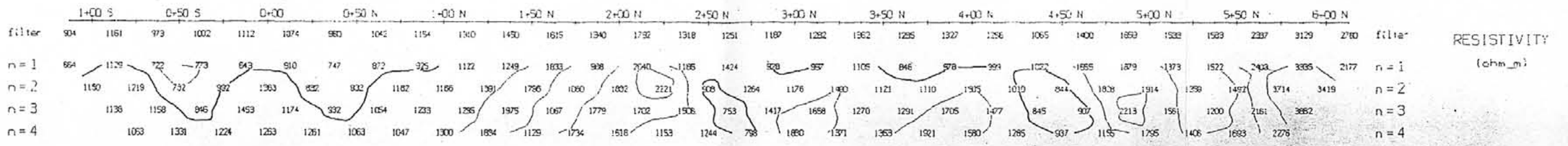
Date: 10/80 N.T.S.: 82 M 1

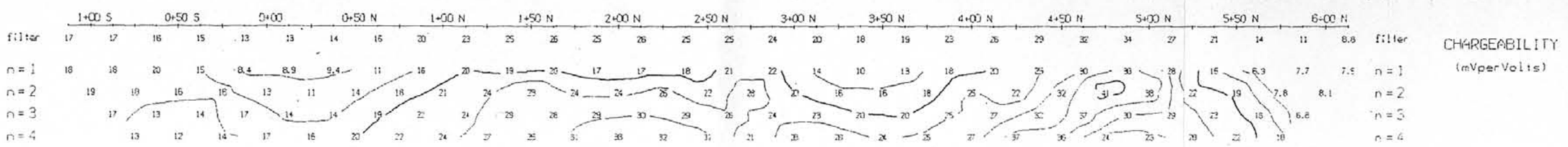
Interpretation by: P.E.W.

Scale: 1 : 2500

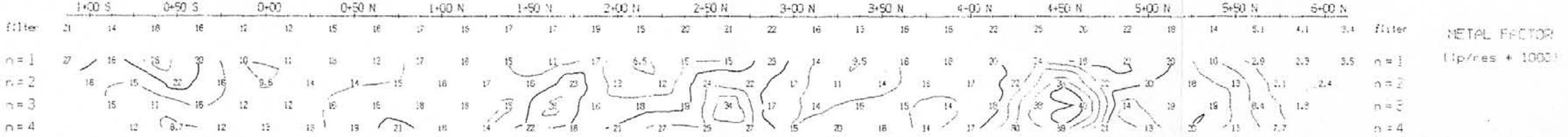
PETER.E. WALCOTT & ASSOC. LTD

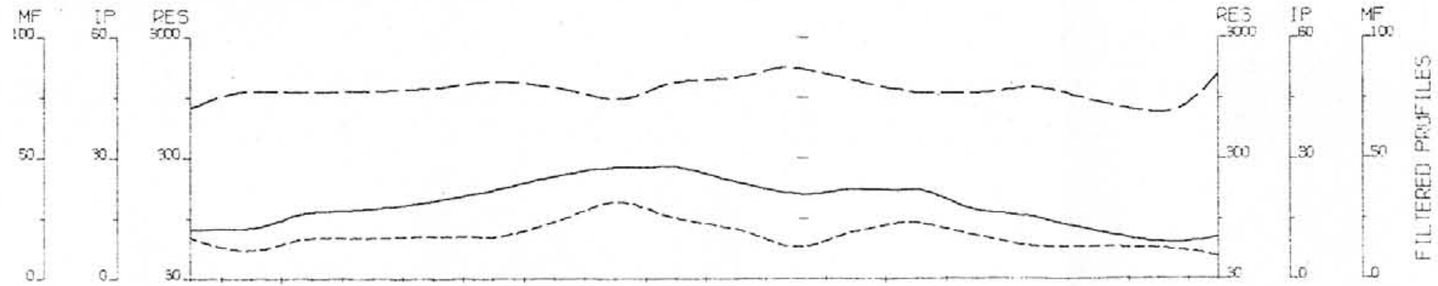




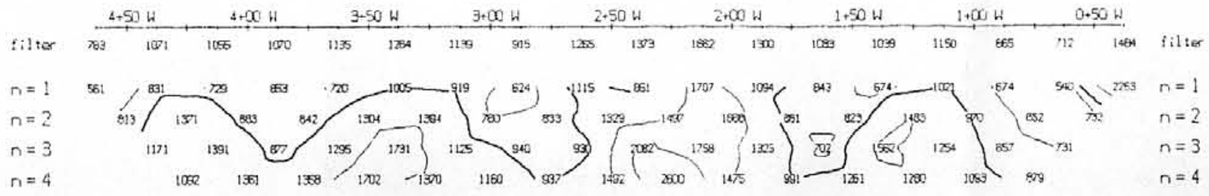


INTERPRETATION

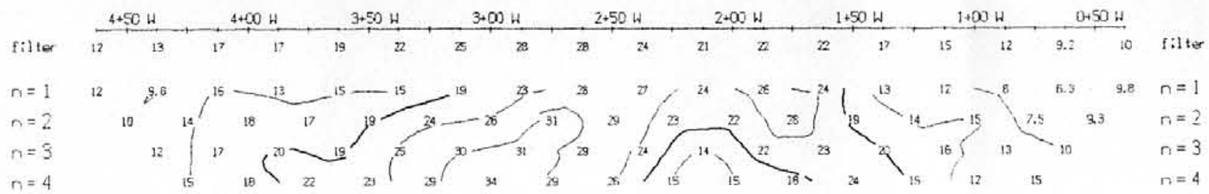




TOPOGRAPHY

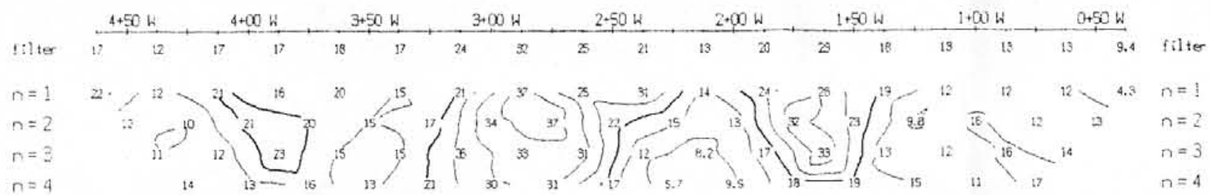


RESISTIVITY
(ohm_m)



CHARGEABILITY
(mVperVolts)

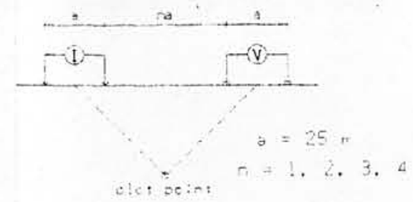
INTERPRETATION



METAL FACTOR
(Ip/res * 1000)

Tie Line 0

Dipole-Dipole Array



Filtered Profiles

	filter
Resistivity ————	*
Polarization ————	* *
Metal Factor - - - - - - - -	* * *
	* * * *

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Instrument: BRGM IP6,HUNTEC 2.5 Kw
Frequency: 0.125 Hz
Operator: R.S.

INTERPRETATION

Well defined, strong increase in polarization with or without marked decrease in resistivity.

▪▪▪▪▪▪▪ Fairly well defined moderate increase in polarization.

Poorly defined polarization increase.

Resistivity feature.

GEMSTAR RESOURCES LTD.

INDUCED POLARIZATION SURVEY

BIRCH CLAIM,A Grid
BIRCH ISLAND,B.C.

Date: 10/90 N.T.S.: 82 M/12
Interpretation by: P.E.W
Scale: 1 : 2500

PETER.E. WALCOTT & ASSOC. LTD

APPENDIX VII

DRILL LOGS

GEMSTAR RESOURCES LTD.

DIAMOND DRILL RECORD

Page: 1
HOLE NO.: B90-1

Co-ords: 2070.0 N -855.0 E
Property: BIRCH

Azimuth: 145.0
Dip: -56.5
Elevation: 1714.0
Length: 20.0

*** SURVEYS ***

Depth	Az.	Dip
0.00m	145.0	-56.5

Date Started: OCT. 9,1990DS
Date Completed: OCT. 9,1990NS
Logged by: SPB
Date Logged: OCT. 10,1990

Drill Type: CANCOR
Core Size: IAX

From (m)	To (m)	Description	Sample No.	From (m)	To (m)	Length (m)	Gold (ppb)	Silver (ppm)	Copper (ppm)	Lead (ppm)	Zinc (ppm)
.00	4.30	OVERBURDEN									
4.30	5.70	QUARTZ CARBONATE PYRITE ZONE									
		Pyrite bands at 70 degrees to core axis in quartz carbonate matrix. Pyrite 1-25%, trace galena, fractures rusty. Rubbly core 4.6-5.0 some core loss.	511101	4.30	5.00	.70	35	2.2	179	546	410
			511102	5.00	5.70	.70	150	1.0	205	166	1630
5.70	10.70	SEMI - MASSIVE PYRITE ZONE									
		75-80% Medium grained pyrite in a silicious matrix, banding at 60-70 degrees to core axis Contacts in rubbly sections. Rubbly core, rusty 6.6-6.8, 10 cm core lost. Trace of chalcopyrite and galena at 5.7m. Section of quartz and schist 8.7-9.4m. Rubbly 8.2-8.8, 9.1-9.6, 10.0-10.6, core losses.	511103	5.70	6.80	1.10	505	2.2	1887	208	222
			511104	6.80	7.80	1.00	630	4.0	1484	492	698
			511105	7.80	8.80	1.00	570	5.4	1712	970	836
			511106	8.80	9.40	.60	105	3.2	430	688	698
			511107	9.40	10.70	1.30	445	6.0	1469	786	390
10.70	13.40	SERICITE SCHIST									
		Medium grey with green tint, schistosity at 60 degrees to core axis 3-7% medium grained pyrite in schist 3-5% quartz	511108	10.70	12.10	1.40	40	1.8	135	326	470
			511109	12.10	13.40	1.30	110	2.4	218	180	184

From (m)	To (m)	Description	Sample No.	From (m)	To (m)	Length (m)	Gold (ppb)	Silver (ppm)	Copper (ppm)	Lead (ppm)	Zinc (ppm)
		and quartz carbonate veinlets at various angles. Core loss 11.9-12.8, 0.8m lost.									
13.40	14.70	SEMI - MASSIVE PYRITE ZONE 75-80% Medium grained pyrite in a silicious matrix. Contacts are in possible fault zones (fractures that are sub-parallel to core axis).	511110	13.40	14.70	1.30	475	5.6	1273	586	412
14.70	20.00	SERICITE SCHIST Medium to dark grey sericite schists. Schistosity at 60 degrees to core axis 5-8% disseminated pyrite in bands parallel to schistosity. Some fractured core 14.7-14.8. Core grinding 0.9m core lost, 18.7-20.0m.	511111	14.70	16.30	1.60	70	3.2	394	370	892
			511112	16.30	17.80	1.50	55	1.8	201	390	672

GEMSTAR RESOURCES LTD.

DIAMOND DRILL RECORD

Page: 1
HOLE NO.: B90-2

Co-ords: 2070.0 N -855.0 E
Property: BIRCH

Azimuth: 145.0
Dip: -75.5
Elevation: 1714.0
Length: 20.5

*** SURVEYS ***

Depth	Az.	Dip
0.00m	145.0	-75.5

Date Started: OCT. 9,1990NS
Date Completed: OCT. 9,1990NS
Logged by: SPB
Date Logged: OCT. 10,1990

Drill Type: CANCOR
Core Size: IAX

From (m)	To (m)	Description	Sample No.	From (m)	To (m)	Length (m)	Gold (ppb)	Silver (ppm)	Copper (ppm)	Lead (ppm)	Zinc (ppm)
.00	5.20	OVERBURDEN									
5.20	10.40	SEMI - MASSIVE PYRITE ZONE									
		75-100% Medium grained pyrite in a silicious matrix. Trace	511113	5.20	6.30	1.10	615	5.4	1751	492	460
		of chalcopyrite and brown sphalerite. A few short (<0.1m)	511114	6.30	7.40	1.10	655	4.0	1818	390	284
		sections of carbonate altered schist (esp. 6.2-6.3m).	511115	7.40	8.40	1.00	485	4.0	1983	378	186
		Sections of rubbly core 6.3-6.5 and 8.6-10.1, 1.3m core	511116	8.40	9.40	1.00	620	5.2	2889	582	912
		lost. Lower contact is gradational.	511117	9.40	10.40	1.00	440	2.8	1394	362	1254
10.40	20.50	SERICITE SCHIST									
		Light to dark grey with weak green tint. Schistosity	511118	10.40	11.40	1.00	95	.6	228	90	356
		approximately 75 degrees to core axis. Occassional quartz	511119	11.40	12.40	1.00	285	1.4	724	114	228
		carbonate veinlets at 40 degrees to core axis.	511120	12.40	13.80	1.40	70	1.2	293	114	318
		Several bands of pyrite (most less than 1cm wide)	511121	13.80	15.30	1.50	40	1.6	135	246	272
		sub-parallel to schistosity, most interesting sections	511122	15.30	16.30	1.00	75	3.6	329	924	1218
		10.8-10.9, 12.2-12.4, 16.3 and 16.8(band approx. 2cm wide	511123	16.30	17.10	.80	140	6.2	286	2302	5480
		of pyrite with 10% sphalerite and trace galena. Very	511124	17.10	18.10	1.00	65	1.2	161	244	378
		rubbly schistose core 19.0 to 20.5, 1.2m core lost.	511125	18.10	19.00	.90	25	.8	182	160	234
			511126	19.00	20.50	1.50	170	2.4	444	680	660

GEMSTAR RESOURCES LTD.

DIAMOND DRILL RECORD

Page: 1
HOLE NO.: B90-3

Co-ords: 2088.0 N -836.0 E

Property: BIRCH

Azimuth: 155.0

Dip: -75.5

Elevation: 1720.0

Length: 25.0

*** SURVEYS ***

Depth	Az.	Dip
0.00m	155.0	-75.5

Date Started: OCT. 10,1990DS
Date Completed: OCT. 10,1990NS
Logged by: SPB
Date Logged: OCT. 11,1990

Drill Type: CANCOR
Core Size: IAX

From (m)	To (m)	Description	Sample No.	From (m)	To (m)	Length (m)	Gold (ppb)	Silver (ppm)	Copper (ppm)	Lead (ppm)	Zinc (ppm)
.00	8.20	OVERBURDEN									
8.20	8.70	CARBONATE									
		Brown-tan and creamy coloured gypsum. Some rusty sections.	511127	8.20	8.70	.50	10	.6	133	46	148
8.70	19.50	SERICITE SCHIST									
		Light grey-green with rusty fractures, 3-5% disseminated	511128	8.70	10.00	1.30	50	.6	345	118	194
		pyrite in bands parallel to schistosity. Schistosity	511129	10.00	11.30	1.30	30	.4	237	158	186
		generally 70-80 degrees to core axis occassionally closer	511130	11.30	12.00	.70	30	.2	425	48	320
		to 60 degrees to core axis. Frequent rubbly sections esp.	511131	12.00	12.20	.20	470	8.0	2005	630	336
		10.0-12.3, 12.0- 12.2 40-50% disseminated pyrite with	511132	12.20	13.20	1.00	85	.6	193	92	510
		dendritic copper?? along one fracture(poor core recovery)	511133	18.20	19.50	1.30	45	.6	142	112	416
		Rubble 13.9-14.6, 14.9-17.3. Core is missing along schistosity planes. Ground core at contact.									
19.50	19.80	SEMI - MASSIVE PYRITE ZONE									
		60-70% Medium grained pyrite in a black silicious matrix.	511134	19.50	19.80	.30	670	8.8	1115	334	220
		Some chalcopyrite (<1%), banding at 65-70 degrees to core									

From (m)	To (m)	Description	Sample No.	From (m)	To (m)	Length (m)	Gold (ppb)	Silver (ppm)	Copper (ppm)	Lead (ppm)	Zinc (ppm)
		axis.									
19.80	20.60	SERICITE SCHIST									
		Same as 8.7 to 19.5.	511135	19.80	20.60	.80	50	1.0	340	48	242
20.60	21.70	SEMI - MASSIVE PYRITE ZONE									
		70% Medium grained pyrite in a silicious matrix. Trace pyrrhotite, sphalerite. Banding at 70 degrees to core axis.	511136	20.60	21.70	1.10	540	1.6	1541	98	330
21.70	25.00	ALTERED ARGILLITE									
		Grey-green argillite with black bands at 70 degrees to	511137	21.70	22.50	.80	80	3.6	630	332	280
		core axis. A few centimeter wide pyrite bands at 22.2 and	511138	22.50	23.60	1.10	20	1.4	211	238	250
		22.5m. Also sericite and pyrite fracture filllings at	511139	23.60	25.00	1.40	25	.2	175	50	208
		various angles 23.9-25.0m.									

GEMSTAR RESOURCES LTD.

DIAMOND DRILL RECORD

Page: 1

HOLE NO.: B90-4

Co-ords: 2088.0 N -836.0 E

Property: BIRCH

Azimuth: 155.0

Dip: -50.0

Elevation: 1720.0

Length: 20.1

*** SURVEYS ***

Depth	Az.	Dip
0.00m	155.0	-50.0

Date Started: OCT. 10,1990NS
Date Completed: OCT. 10,1990NS
Logged by: SPB
Date Logged: OCT. 11,1990

Drill Type: CANCOR
Core Size: IAX

From (m)	To (m)	Description	Sample No.	From (m)	To (m)	Length (m)	Gold (ppb)	Silver (ppm)	Copper (ppm)	Lead (ppm)	Zinc (ppm)
.00	9.60	OVERBURDEN									
9.60	13.60	SERICITE SCHIST Grey and green interbands of well developed schistosity 70-80 degrees to core axis. Occassional qtz veinlet. Core loss generally along schistosity. Contact is gradual increase in pyrite.	511140	12.00	13.60	1.60	15	.2	229	64	192
13.60	15.20	SEMI - MASSIVE PYRITE ZONE 70-75% Medium -coarse grained pyrite, possible trace pyrrhotite. Banding obscured by schistosity. Minor core grinding.	511141	13.60	14.40	.80	760	2.2	2433	172	230
			511142	14.40	15.20	.80	785	4.2	2723	214	296
15.20	20.10	SERICITE SCHIST Grey with green tint, well developed schistosity. Evidence of folding visible in the banding,mostly near 65 degrees to core axis, very poor core recovery.	511143	15.20	15.80	.60	120	2.4	342	186	788
			511144	15.80	20.10	4.30	45	1.4	166	218	428

GEMSTAR RESOURCES LTD.

DIAMOND DRILL RECORD

Page: 1

HOLE NO.: B90-5

Property: BIRCH

Co-ords: 2125.0 N -800.5 E

Azimuth: 145.0

Dip: -70.0

Elevation: 1729.0

Length: 39.9

*** SURVEYS ***

Depth	Az.	Dip
0.00m	145.0	-70.0
39.90		-72.0

Date Started: OCT. 11,1990NS

Date Completed: OCT. 12,1990NS

Logged by: SPB

Date Logged: OCT. 14 AND 15,1990

Drill Type: CANCOR

Core Size: IAX

From (m)	To (m)	Description	Sample No.	From (m)	To (m)	Length (m)	Gold (ppb)	Silver (ppm)	Copper (ppm)	Lead (ppm)	Zinc (ppm)
.00	9.50	OVERBURDEN									
9.50	17.50	SERICITE SCHIST									
		Medium grey green, fine grained with scistosity at 50-70 degrees to core axis. Bands of strong medium grained pyrite at 10.9-11.0m with sphalerite, 12.3-12.45 with trace chalcopyrite. 13.4- 13.6 with trace chalcopyrite, azurite, galena and magnetite. Weak dissem pyrite throughout. Some quartz carbonate veinlets. Contact in rubbly core.	511145	9.50	10.20	.70	100	1.2	400	144	378
			511146	10.20	11.30	1.10	80	1.8	390	412	488
			511147	11.30	12.40	1.10	95	1.8	289	504	400
			511148	12.40	13.80	1.40	105	5.0	334	914	520
			511149	13.80	14.80	1.00	10	1.2	119	322	698
			511150	14.80	16.00	1.20	10	.2	53	86	376
			511151	16.00	17.50	1.50	30	.4	176	112	704
17.50	19.50	SEMI - MASSIVE PYRITE ZONE									
		70% Medium grained pyrite in a quartz chlorite matrix. Trace chalcopyrite, some magnetite bands. Banding 80-90 degrees to core axis.	511152	17.50	18.50	1.00	430	5.6	1578	404	370
			511153	18.50	19.50	1.00	465	5.2	1848	520	1132
19.50	39.90	SERICITE SCHIST									
		Medium green grey banded schist, some chlorite bands with	511154	19.50	20.20	.70	75	1.4	179	242	346

From (m)	To (m)	Description	Sample No.	From (m)	To (m)	Length (m)	Gold (ppb)	Silver (ppm)	Copper (ppm)	Lead (ppm)	Zinc (ppm)
		the sericite. It appears to look like bedding parallel to schistosity at 75-85 degrees to core axis. Occassional light brown grey bands with 3-8% medium to fine grained disseminated pyrite. 19.5-20.2m weak silicification and 30% pyrite. Rubbly core 22.8-23.0, 23.8-24.0, 24.3-25.0, 27.0-27.2, 27.6-27.7, 27.9-28.0 and 36.4-36.7. Increase in silicification 32.6-33.2. Sericite increases below 35.0m. Piece of quartz vein with coarse grained pyrite at 35.2, 5cm long, contacts ground.	511155	20.20	21.10	.90	35	.4	90	138	346
			511156	21.10	22.10	1.00	30	.4	102	126	214
			511157	31.60	32.60	1.00	<5	<.2	76	14	106
			511158	32.60	33.20	.60	<5	<.2	59	14	94
			511159	33.20	34.10	.90	<5	<.2	69	16	94
			511160	34.10	35.20	1.10	<5	<.2	17	18	82
			511161	35.20	35.30	.10	<5	<.2	37	12	56
			511162	35.30	36.40	1.10	<5	<.2	59	10	62

GEMSTAR RESOURCES LTD.

DIAMOND DRILL RECORD

Page: 1

HOLE NO.: B90-6

Co-ords: 2125.0 N -800.5 E

Property: BIRCH

Azimuth: 145.0

Dip: -47.0

Elevation: 1729.0

Length: 39.5

*** SURVEYS ***

Depth	Az.	Dip
0.00m	145.0	-47.0
39.50		-49.0

Date Started: OCT. 12,1990NS

Date Completed: OCT. 13,1990NS

Logged by: SPB

Date Logged: OCT. 15,1990

Drill Type: CANCOR

Core Size: IAX

From (m)	To (m)	Description	Sample No.	From (m)	To (m)	Length (m)	Gold (ppb)	Silver (ppm)	Copper (ppm)	Lead (ppm)	Zinc (ppm)
.00	9.80	OVERBURDEN Casing removed.									
9.80	11.60	SEMI - MASSIVE PYRITE ZONE 60-70% Coarse to medium grained pyrite, trace chalcopyrite in a chlorite and quartz matrix. Rubbly 10.4-10.6 and 10.9-11.0m.	511163	9.80	10.60	.80	345	3.0	943	256	250
			511164	10.60	11.60	1.00	460	3.8	994	424	744
11.60	19.70	SERICITE SCHIST Light to medium grey bands with light green sections, sericite common, some chlorite. Pyrite bands up to 10%, common down to 13.8m, approx. 5% disseminated after 13.8m. Schistosity 65-75 degrees to core axis Core broken 11.6-13.2.	511165	11.60	12.70	1.10	65	2.2	214	384	320
			511166	12.70	13.80	1.10	80	1.4	183	332	486
			511167	13.80	15.00	1.20	25	2.0	77	346	244
			511168	15.00	16.00	1.00	30	1.0	114	370	416
			511169	16.00	17.10	1.10	<5	.8	65	488	940
			511170	17.10	18.30	1.20	10	.2	61	96	254
			511171	18.30	19.70	1.40	55	1.0	111	146	258
19.70	21.60	SEMI - MASSIVE PYRITE ZONE									

From (m)	To (m)	Description	Sample No.	From (m)	To (m)	Length (m)	Gold (ppb)	Silver (ppm)	Copper (ppm)	Lead (ppm)	Zinc (ppm)
		Bands of 70-80% pyrite in a quartz chlorite matrix. A few	511172	19.70	20.60	.90	1450	13.0	2019	720	316
		chlorite sericite sections.	511173	20.60	21.60	1.00	800	28.8	1072	1814	518
21.60	29.20	SERICITE SCHIST									
		Banded schist at 70-75% to core axis. Some chlorite and	511174	21.60	23.00	1.40	55	2.2	211	244	508
		tan bands (possibly ankerite) up to 10% locally. Lower	511175	23.00	24.50	1.50	30	.8	63	94	94
		contact in rubble.	511176	24.50	26.00	1.50	30	<.2	48	28	82
			511177	26.00	27.50	1.50	35	1.4	577	102	1070
			511178	27.50	28.20	.70	25	<.2	100	12	148
			511179	28.50	29.20	.70	25	<.2	109	14	164
29.20	30.10	QUARTZ VEIN									
		Creamy white quartz, fractured, core loss, contacts in	511180	29.20	30.10	.90	<5	<.2	4	12	14
		ground core.									
30.10	39.50	SERICITE SCHIST									
		Sericite with chlorite and pyrite bands at 70 degrees to	511181	30.10	31.00	.90	35	.2	88	24	128
		core axis Increase in pyrite near 32.2, otherwise 3-5%	511182	31.00	32.20	1.20	<5	.2	74	22	278
		disseminated pyrite throughout. Feldspar veinlet in rubble	511183	32.20	33.50	1.30	20	.6	285	6	178
		37.5m. Carbonate fracture fillings 36.5-39.5m. Peice of	511184	33.50	34.80	1.30	<5	.2	63	10	168
		galena with pyrite in quartz veinlet at 36.5. Rubbly core	511185	34.80	36.00	1.20	<5	.2	59	20	128
		33.9-34.5, 37.3-38.4, 39.3-39.5m.	511186	36.00	37.30	1.30	<5	<.2	17	24	102
			511187	37.30	38.40	1.10	<5	<.2	22	14	102
			511188	38.40	39.50	1.10	<5	<.2	23	6	62

GEMSTAR RESOURCES LTD.

DIAMOND DRILL RECORD

Page: 1
HOLE NO.: B90-7

Co-ords: 2475.0 N -607.0 E

Property: BIRCH

Azimuth: .0

Dip: -51.5

Elevation: 1724.0

Length: 39.8

*** SURVEYS ***

Depth	Az.	Dip
0.00m	.0	-51.5
39.80		-51.0

Date Started: OCT. 13,1990NS
Date Completed: OCT. 15,1990DS
Logged by: SPB
Date Logged: OCT. 16,1990

Drill Type: CANCOR
Core Size: IAX

From (m)	To (m)	Description	Sample No.	From (m)	To (m)	Length (m)	Gold (ppb)	Silver (ppm)	Copper (ppm)	Lead (ppm)	Zinc (ppm)
.00	.70	OVERBURDEN									
.70	39.80	CHLORITE SERICITE SCHIST									
		Schistosity near 30 degrees to core axis. Banded medium TO light grey green. Occassional tan coloured bands (ankerite?). Pyrite disseminated and in bands parallel to schistosity. Gypsum? veins and veinlets often parallel to schistosity. Gypsum, pyrite and rust in fracture parallel to core axis 5.4-6.8m. Rubbly core 4.8-5.4, 0.4m core lost. Shearing parallel to schistosity common. Gypsum vein 9.1-9.15. Rubbly 9.9-11.2, 0.7m core lost. Pyrrhotite scattered throughout unit. Fracture parallel to core axis 15.6 Brecciated healed with gypsum and pyrrhotite 17.1m. Rubbly core 18.3-18.6, 19.3-21.5. Band of pyrite parallel to schistosity with trace very fine grained galena and trace chalcopyrite. Schistosity weakly folded near 24m. Schistosity at 45 degrees to core axis near 26m. 27.6-30.0 tan coloured schist, higher quartz and sericite. Rubbly core 27.1-27.33, 29.1-29.3, 32.1, 32.8-33.3, 34.6-34.7 and 35.2-35.8m. Schistosity 60 degrees to core axis near 33m.	511189	.70	2.60	1.90	<5	.2	21	4	160
			511190	2.60	3.90	1.30	10	.2	57	8	180
			511191	3.90	4.80	.90	45	.8	313	12	202
			511192	4.80	6.20	1.40	10	.2	47	8	132
			511193	6.20	7.20	1.00	<5	<.2	17	6	94
			511194	7.20	8.50	1.30	<5	<.2	36	12	80
			511195	8.50	9.70	1.20	<5	<.2	80	8	118
			511196	9.70	11.20	1.50	20	.2	222	10	168
			511197	22.00	23.30	1.30	25	<.2	40	10	116
			511198	23.30	24.10	.80	<5	<.2	35	8	132
			511199	24.10	25.20	1.10	25	<.2	66	18	124
			511200	25.20	26.20	1.00	5	<.2	41	10	166
			511201	26.20	27.30	1.10	10	<.2	49	14	132
			511202	27.30	28.20	.90	<5	<.2	21	12	110
			511203	28.20	29.30	1.10	<5	<.2	16	8	62
			511204	29.30	30.80	1.50	<5	<.2	21	8	88
			511205	30.80	32.10	1.30	<5	<.2	37	16	106

From (m)	To (m)	Description	Sample No.	From (m)	To (m)	Length (m)	Gold (ppb)	Silver (ppm)	Copper (ppm)	Lead (ppm)	Zinc (ppm)
		Rubbly core 37.0-37.2m. Last meter of core not recovered.	511206	32.10	33.30	1.20	<5	<.2	21	18	114
			511207	33.30	34.70	1.40	<5	<.2	31	12	148
			511208	34.70	35.80	1.10	15	<.2	61	8	152
			511209	35.80	37.20	1.40	10	<.2	44	8	140
			511210	37.20	38.10	.90	<5	<.2	91	6	136
			511211	38.10	39.80	1.70	10	.2	409	8	174

GEMSTAR RESOURCES LTD.

DIAMOND DRILL RECORD

Page: 1

HOLE NO.: B90-8

Property: BIRCH

Co-ords: 2548.0 N -588.0 E

Azimuth: 242.0

Dip: -47.0

Elevation: 1718.0

Length: 40.0

*** SURVEYS ***

Depth	Az.	Dip
0.00m	242.0	-47.0
40.00		-48.0

Date Started: OCT. 15,1990NS
Date Completed: OCT. 16,1990DS
Logged by: SPB
Date Logged: OCT. 17,1990

Drill Type: CANCOR
Core Size: IAX

From (m)	To (m)	Description
.00	4.80	OVERBURDEN
4.80	33.00	QUARTZ SERICTE SCHIST Schistosity varies 40-50 degrees to core axis quartz and sericite with local zones of chlorite. Colour medium to light green, bannded. Occassional irregular quartz structures, 2-4% fine grained disseminated pyrite throughout unit, often banded parallel to schistosity. Trace of chalcopyrite often with quartz. Rubbly core 5.2 to 5.5, 7.2 to 8.1 (0.5m core lost). Broken core 15.5-15.9, 0.2m core lost. Quartz 15.4-15.6, 16.1-16.3m. Rubbly 18.9-19.1, 21.1-21.4, 22.3-22.8, 25.2-25.6m. Quartz bands in schistosity 29.3-30.0 with trace chalcopyrite. Rubbly core 31.3-31.7m. Gradational contact - decrease in quartz, increase in chlorite.

Sample No.	From (m)	To (m)	Length (m)	Gold (ppb)	Silver (ppm)	Copper (ppm)	Lead (ppm)	Zinc (ppm)
511212	4.80	6.20	1.40	5	.2	61	30	122
511213	6.20	7.20	1.00	<5	<.2	109	2	124
511214	7.20	8.60	1.40	<5	<.2	190	4	162
511215	8.60	9.80	1.20	<5	<.2	115	10	134
511216	9.80	10.80	1.00	<5	<.2	55	2	136
511217	10.80	12.20	1.40	<5	<.2	26	10	172
511218	12.20	13.50	1.30	<5	<.2	37	18	182
511219	13.50	15.10	1.60	<5	<.2	53	24	136
511220	15.10	15.90	.80	<5	<.2	66	18	150
511221	15.90	16.90	1.00	<5	1.4	22	2	134
511222	16.90	18.00	1.10	<5	1.0	25	12	116
511223	18.00	19.10	1.10	30	<.2	56	28	94
511224	19.10	20.20	1.10	<5	<.2	45	8	98
511225	20.20	21.40	1.20	<5	.6	61	<2	100
511226	21.40	22.70	1.30	<5	<.2	<1	<2	<2
511227	22.70	24.00	1.30	<5	<.2	205	10	126
511228	24.00	25.30	1.30	<5	<.2	75	4	140

From (m)	To (m)	Description	Sample No.	From (m)	To (m)	Length (m)	Gold (ppb)	Silver (ppm)	Copper (ppm)	Lead (ppm)	Zinc (ppm)
			511229	25.30	26.70	1.40	<5	.6	31	<2	108
			511230	26.70	27.90	1.20	<5	<.2	19	<2	184
			511231	27.90	29.30	1.40	<5	<.2	81	<2	166
			511232	29.30	30.30	1.00	<5	<.2	224	<2	204
			511233	30.30	31.50	1.20	<5	<.2	144	<2	214
			511234	31.50	33.00	1.50	<5	<.2	64	<2	174
33.00	40.00	CHLORITE SERICITE SCHIST									
		Medium grey with light grey banding, schistosity 40-45 degrees to core axis. Small quartz vein/veinlet with specks of chalcopyrite at 34.2m. Chalcopyrite visible along narrow fractures. Rubbly core 38.4-38.6m. Slight increase in sericite 39-40m.	511235	33.00	34.50	1.50	<5	<.2	123	6	134
			511236	34.50	36.00	1.50	<5	.2	298	8	120
			511237	36.00	37.50	1.50	<5	<.2	212	6	140
			511238	37.50	38.70	1.20	10	<.2	105	20	126
			511239	38.70	40.00	1.30	<5	.2	80	<2	116

GEMSTAR RESOURCES LTD.

DIAMOND DRILL RECORD

HOLE NO.: B90-9

Property: BIRCH

Co-ords: 3138.0 N 19.0 E

Azimuth: 280.0

Dip: -46.5

Elevation: 1650.0

Length: 64.7

*** SURVEYS ***

Depth	Az.	Dip
0.00m	280.0	-46.5
64.70		-48.0

Date Started: OCT. 16,1990NS
Date Completed: OCT. 18,1990DS
Logged by: SPB
Date Logged: OCT. 18 AND 19,1990

Drill Type: CANCOR
Core Size: IAX

From (m)	To (m)	Description	Sample No.	From (m)	To (m)	Length (m)	Gold (ppb)	Silver (ppm)	Copper (ppm)	Lead (ppm)	Zinc (ppm)
.00	5.00	OVERBURDEN									
5.00	27.00	SERICITE SCHIST Sericite and muscovite schist. Sections are phyllitic with schistosity at 20-25 degrees to core axis. Minor gentle folding visible through most of the interval. Very weak (1-2%) disseminated pyrite. Core recovery poor due to loss along phyllitic surfaces. Some core grinding also visible. Medium grey colour. Contact gradual increasing silicification and quartz veinlets.	511240	26.10	27.00	.90	<5	<.2	8	36	28
27.00	31.50	SILICIFIED SERICITE SCHIST Silicification and quartz veins with minor feldspar and sericite. Coarse grained pyrite in quartz 28.8-29.4m. Lower contact is gradual decrease in silicification.	511241	27.00	27.80	.80	<5	<.2	5	16	22
			511242	27.80	28.80	1.00	<5	<.2	4	8	64
			511243	28.80	29.40	.60	<5	.6	4	8	40
			511244	29.40	30.40	1.00	<5	.2	5	6	26
			511245	30.40	31.80	1.40	<5	.4	6	12	34

From (m)	To (m)	Description	Sample No.	From (m)	To (m)	Length (m)	Gold (ppb)	Silver (ppm)	Copper (ppm)	Lead (ppm)	Zinc (ppm)
31.50	64.70	SERICITE SCHIST Less phyllitic than 5.0-27.0m but locally sections with well developed phyllite textures. Also medium dark grey colour 3-4% fine grained disseminated pyrite. Schistosity at 40 degrees to core axis. Pyrite and a dark very fine grained mineral present. Sericite flakes along the schistosity planes looks almost like a phyllite near 42m. Very poor core recovery. Schistosity at 40 degrees to core axis at 50m. Section with a near phyllitic texture 52.0-54.0m. Gentle small scale folding evident at 54m. Quartz eyes occassionally visible. Schistosoity at 50 degrees to ca at 59.0m. Rounded ground core 63.3-64.7, 30 centimeter core recovered.	511246	31.80	33.30	1.50	<5	.2	9	22	34

APPENDIX VIII

PETROGRAPHIC DESCRIPTIONS

PETROGRAPHIC SUITE

(Birch Claims, 1990 Diamond Drilling)

Specimen Number	Name
B90-1, 4.6 m	Quartz-carbonate zone
B90-1, 6.25 m	Massive pyrite
B90-1, 8.95 m	Calcareous, altered muscovite schist
B90-1, 17.9 m	Sericite (muscovite) schist
B90-3, 8.5 m	Dolomite alteration zone
B90-3, 19.5 m	Chloritic massive pyrite
B90-3, 21.4 m	Massive pyrite
B90-5, 18.1 m	Massive pyrite with accesory chalcopyrite and magnetite
B90-5, 19.2 m	Massive pyrite with accessory sphalerite
B90-6, 11.0 m	Very pyritic muscovite schist
B90-6, 19.7 m	Massive pyrite
B90-6, 29.7 m	Quartz vein
B90-7, 4.4 m	Pyritic, chloritized muscovite schist
B90-7, 4.8 m	Partially recrystallized, chloritic (muscovite) schist
B90-7, 38.3 m	Calcareous chlorite schist

--PETROGRAPHIC ANALYSIS-- November 1990

For: Birch Claims, Clearwater Area

Project: Gemstar Resources Ltd., Vancouver, B.c.

SPECIMEN NUMBER: B90-1, 4.6 meters

Location:

Diamond drill hole B90-1, depth of 4.6 meters.
(immediately below Exhalite showing)

Handspecimen Description:

Light greyish-yellow, irregular fragmental appearance, white to light grey quartz lenses, darker grey carbonate, iron oxide filled vugs.

Field Rock Name: Quartz-Carbonzate Zone

Thinsection Examination:

Estimated Mode:

59%	Calcite
35%	Quartz
1%	Pyrite
tr	Chalcopyrite
tr	Magnetite
tr	Sphalerite
tr	Galena
5%	Muscovite

Prite is the main opaque mineral and contains exsolution blebs of chalcopyrite with lesser sphalerite, galena and magnetite. Pyrite forms euhedral to subhedral cubes which are often surrounded by a roughly layered envelope of anhedral to skeletal pyrite.

The specimen is dominated by coarse grained calcite which often has curved twin lamellea. Calcite replaces slightly sutured quartz grains. Quartz grains average 1 mm in diameter. Minor, later quartz cross-cuts some calcite grains.

One side of the slide has veinlets of muscovite cutting the quartz-rich areas.

Name: Quartz-Carbonate Zone

--PETROGRAPHIC ANALYSIS-- November 1990

For: Birch Claims, Clearwater Area

Project: Gemstar Resources Ltd., Vancouver, B.c.

SPECIMEN NUMBER: B90-1, 6.25 meters

Location:

Diamond drill hole B90-1, 6.25 meters depth.

Handspecimen Description:

Massive pyrite (approximately 85%) within a quartz gangue.

Field Rock Name: Massive Pyrite

Thinsection Examination:

Estimated Mode:

9%	Quartz
84%	Pyrite (traces of chalcopyrite)
tr	Epidote(?)
3%	Muscovite
2%	Orthoclase
2%	Chlorite
tr	Calcite

Muscovite forms small, monominerallic lenses that are altered to chlorite. Quartz occurs mainly as slightly elongated grains with sutured grain boundaries. Quartz also forms narrow, deformed veinlets.

Calcite is found as isolated grains surrounded by quartz or pyrite. Calcite appears to be early.

Orthoclase is closely associated with the quartz lenses. Chalcopyrite forms small irregular (less than 0.5 mm wide) exsolution blebs in the main pyrite mass. The pyrite is highly fractured and has many tiny gangue inclusions.

Name: Massive Pyrite

--PETROGRAPHIC ANALYSIS-- November 1990

For: Birch Claims, Clearwater Area

Project: Gemstar Resources Ltd., Vancouver, B.c.

SPECIMEN NUMBER: B90-1, 8.95 meters

Location:

Diamond drill hole B90-1, 8.95 meters depth.

Handspecimen Description:

Light grey, general mottled appearance caused by bleaching, highly fractured at 70° to core axis, small pyrite lenses elongated subparallel to fracturing, minor iron oxide staining. Bleaching is at right angles to fracturing.

Field Rock Name: Footwall Silicified Zone

Thinsection Examination:

Estimated Mode:

48%	Calcite
37%	Quartz
5%	Chlorite
2%	Pyrite
1%	Sphalerite
tr	Galena
8%	Muscovite

Original rock consisted of a 0.1 mm quartz grain mosaic containing some interstitial muscovite. Pervasive calcite has overprinted and replaced quartz. Coarse, bladed quartz grains (up to 0.8 mm long) occur in association with the opaque grains.

Name: Very Calcareous, Altered Muscovite Schist

--PETROGRAPHIC ANALYSIS-- November 1990

For: Birch Claims, Clearwater Area

Project: Gemstar Resources Ltd., Vancouver, B.c.

SPECIMEN NUMBER: B90-1, 17.9 meters

Location:

Diamond drill hole B90-1, depth of 17.9 meters.

Handspecimen Description:

Alternating light and dark grey, well laminated at 60° to core axis, some layers have abundant disseminated pyrite, cross-cutting carbonate "gash" veinlets at 70° to layering (20° to core axis).

Field Rock Name: Sericite Schist

Thinsection Examination:

Estimated Mode:

28% Quartz
8% Orthoclase
36% Muscovite
4% Pyrite (minor chalcopyrite, sphalerite and magnetite)
10% Plagioclase
6% Calcite
8% Chlorite

Some layers are quite calcareous, although calcite is absent in most of the slide. The specimen consists mainly of fine grained, subrounded quartz in an abundant matrix of felted muscovite. Many of the muscovite layers are kinked.

Distinctly compositionally layered. Coarser quartz and calcite grains (up to 0.4 mm) are associated with the pyrite layers.

The pyrite grains have traces of chalcopyrite and sphalerite. Isolated skeletal magnetite grains were noted occasionally.

Name: Sericite (Muscovite) Schist

--PETROGRAPHIC ANALYSIS-- November 1990

For: Birch Claims, Clearwater Area

Project: Gemstar Resources Ltd., Vancouver, B.c.

SPECIMEN NUMBER: B90-3, 8.5 meters

Location:

Diamond drill hole B90-3, depth of 8.5 meters.

Handspecimen Description:

Brownish stained, coarse crystalline, sparry, highly altered, irregular quartz lenses or fragments. Some light grey areas, minor disseminated pyrite.

Field Rock Name: (Gypsum) / Ankeritic Carbonate

Thinsection Examination:

Estimated Mode:

90%	Calcite
8%	Quartz
2%	Pyrrhotite
1%	Pyrite
tr	Chalcopyrite
tr	Sphalerite

This rock is almost entirely composed of coarse, sparry dolomite in anhedral crystal flakes up to 6 mm long. Dolomite appears to replace quartz.

Quartz forms large grains, up to 2.5 mm in length commonly with pronounced undulatory extinction.

The opaques are preferentially concentrated within the quartz-rich areas although some minor opaques are completely surrounded by dolomite. Pyrite appears to be contemporaneous with pyrrhotite.

Name: Dolomite Alteration Zone

--PETROGRAPHIC ANALYSIS-- November 1990

For: Birch Claims, Clearwater Area

Project: Gemstar Resources Ltd., Vancouver, B.c.

SPECIMEN NUMBER: B90-3, 19.5 meters

Location:

Diamond drill hole B90-3, depth of 19.5 meters.

Handspecimen Description:

Irregular pyrite lenses, subangular close packed - heavily disseminated, quartz-calcite gangue well layered by alternating dark and light grey.

Field Rock Name: Massive Pyrite

Thinsection Examination:

Estimated Mode:

24%	Quartz
6%	Calcite
12%	Chlorite
58%	Pyrite
tr	Chalcopyrite
tr	Sphalerite

Quartz forms grains up to 0.3 mm long, having only slight wavy extinction. Calcite occurs as small irregular lenses closely associated with bands of fiberous chlorite. Chlorite replaces both calcite and quartz. Calcite also occurs as angular inclusions within the pyrite lenses.

The pyrite lenses are characterized by numerous small rounded gangue inclusions (average 0.003 mm). The inclusions give a rough mesh appearance to the pyrite grains. The abundance of chalcopyrite inclusion is absent in this specimen. Minor rounded small sphalerite inclusion were noted.

Chalcopyrite does form small micro-veinlet traces.

Name: Chloritic, Massive Pyrite

--PETROGRAPHIC ANALYSIS-- November 1990

For: Birch Claims, Clearwater Area

Project: Gemstar Resources Ltd., Vancouver, B.c.

SPECIMEN NUMBER: B90-3, 21.4 meters

Location:

Diamond drill hole B90-3, depth of 21.4 meters.

Handspecimen Description:

Large subrectangular to subrounded pyrite lenses up to 8 mm long are densely disseminated and closely packed throughout this specimen, suggestion of laminations by elongated wispy layers of black chlorite, gangue consists of quartz and minor calcite, individual pyrite lenses are highly fractured.

Field Rock Name: Massive Pyrite

Thinsection Examination:

Estimated Mode:

64%	Pyrite
10%	Quartz
6%	Calcite
3%	Chert
15%	Chlorite
1%	Chalcopyrite
1%	Pyrrhotite
1%	Magnetite

Quartz filling interstitial space between pyrite lenses, oriented perpendicular to the pyrite grain boundary. Minor, very fine grained silica (chert) is present. The larger gangue lenses have a "core" of coarser quartz grains up to 0.5 mm in length.

Chlorite occurs as felted masses adjacent to the pyrite lenses.

Pyrite forms large fractured masses which have minor irregular chalcopyrite inclusions. Numerous small pyrrhotite inclusions (up to 0.2 mm) are present. Pyrrhotite also forms large isolated lenses over 1 mm in width and as replacement of pyrite.

Name: Massive Pyrite

--PETROGRAPHIC ANALYSIS-- November 1990

For: Birch Claims, Clearwater Area

Project: Gemstar Resources Ltd., Vancouver, B.c.

SPECIMEN NUMBER: B90-5, 18.1 meters

Location:

Diamond drill hole B90-5, depth of 18.1 meters.

Handspecimen Description:

Irregular subrectangular pyrite lenses closely packed, layered appearance, boudinaged calcite "veinlet" parallel to layering.

Field Rock Name: Massive Pyrite - Magnetite

Thinsection Examination:

Estimated Mode:

58% Pyrite
2% Chalcopyrite
1% Magnetite
28% Quartz
5% Calcite
6% Chlorite

Pyrite lenses very fractured with subrectangular to irregular small inclusions of chalcopyrite common. Rare isolated larger chalcopyrite grains up to 0.6 mm long.

Irregular chalcopyrite veinlet 0.4 mm wide by 2.0 mm long associated with magnetite. Magnetite also forms individual grains up to 0.6 mm long. Magnetite content of the thinsection is much less than the handspecimen.

Quartz occurs as an interlocking mosaic of grains averaging 0.3 mm long. Small areas are comprised of a lineated mass of smaller (0.05 mm) quartz grains.

Chlorite forms irregular veinlets. The calcite "veinlet" has highly irregular calcite matrix around very irregular pyrite grains, some sparry sections are present.

Name: Massive Pyrite with accessory Chalcopyrite and Magnetite

--PETROGRAPHIC ANALYSIS-- November 1990

For: Birch Claims, Clearwater Area

Project: Gemstar Resources Ltd., Vancouver, B.c.

SPECIMEN NUMBER: B90-5, 19.2 meters

Location:

Diamond drill hole B90-5, depth of 19.2 meters.

Handspecimen Description:

Massive pyrite in 2-4 mm subrectangular grains with a central layer of brown sphalerite. Traces of galena associated with sphalerite layer. Gangue of light grey quartz and minor calcite, well layered appearance.

Field Rock Name: Massive Pyrite with Sphalerite

Thinsection Examination:

Estimated Mode:

60%	Pyrite
3%	Sphalerite
tr	Galena
tr	Pyrrhotite
1%	Chalcopyrite
28%	Quartz
5%	Calcite
4%	Muscovite

Sphalerite layer has numerous irregular exsolution blebs of chalcopyrite throughout up to 0.01 mm. Occasionally, irregular to subhedral pyrite inclusions (up to 0.04 mm) also occur in the sphalerite lenses. Galena was observed mainly as trace inclusions along fractures n the pyrite and sometimes associated with larger chalcopyrite inclusions.

Majority of the quartz is slightly elongated especially around the pyrite lenses. Finer grained quartz is associated with interstitial muscovite. Calcite commonly rims the larger pyrite lenses.

Name: Massive Pyrite with accessory Sphalerite

--PETROGRAPHIC ANALYSIS-- November 1990

For: Birch Claims, Clearwater Area

Project: Gemstar Resources Ltd., Vancouver, B.c.

SPECIMEN NUMBER: B90-6, 11.0 meters

Location:

Diamond drill hole B90-6, depth of 11.0 meters.

Handspecimen Description:

Irregular pyrite lenses up to 5 mm long, heavily disseminated in rough layers, approximately 40% pyrite, minor brown sphalerite isolated from the pyrite about 1%. Mostly quartz-sericite gangue, no calcite, foliated.

Field Rock Name: Very Pyritic, Quartzose Sericite Schist

Thinsection Examination:

Estimated Mode:

15%	Plagioclase
23%	Quartz
14%	Muscovite
9%	Chlorite
1%	Calcite
42%	Pyrite
tr	Galena
tr	Sphalerite
tr	Chalcopyrite
tr	Pyrrhotite
1%	Magnetite

Quartz highly recrystallized surrounding the pyrite lenses. Majority of quartz is relatively fine grained (0.05 mm) closely associated with muscovite.

Muscovite occurs as long linear layers. The pyrite lenses replace the muscovite layers. Plagioclase is associated with coarser recrystallized quartz and opaques.

Pyrite lenses contain many gangue inclusions and numerous rounded sphalerite inclusions up to 0.07 mm in length. Sphalerite noted in handspecimen is not well represented in section. Pyrrhotite present as very small inclusions in the chalcopyrite grains. Magnetite occurs as small (0.03 mm) isolated grains disseminated throughout the finer quartz sections.

Name: Very Pyritic Muscovite Schist

--PETROGRAPHIC ANALYSIS-- November 1990

For: Birch Claims, Clearwater Area

Project: Gemstar Resources Ltd., Vancouver, B.c.

SPECIMEN NUMBER: B90-6, 19.7 meters

Location:

Diamond drill hole B90-6, depth of 19.7 meters.

Handspecimen Description:

Approximately 75% pyrite as irregular to coalesing pyrite lenses, rounded to discontinuous layers of quartz gangue.

Field Rock Name: Massive Pyrite

Thinsection Examination:

Estimated Mode:

10%	Quartz
70%	Pyrite
5%	Chlorite (partially replacing plagioclase)
10%	Calcite
5%	Plagioclase
1%	Sphalerite
1%	Chalcopyrite
tr	Galena
tr	Pyrrhotite

Pyrite contains very small inclusion of sphalerite and chalcopyrite but rare large grains of sphalerite and chalcopyrite occur on the edges or close to the large pyrite lenses.

Name: Massive Pyrite

--PETROGRAPHIC ANALYSIS-- November 1990

For: Birch Claims, Clearwater Area

Project: Gemstar Resources Ltd., Vancouver, B.c.

SPECIMEN NUMBER: B90-6, 29.7 meters

Location:

Diamond drill hole B90-6, depth of 29.7 meters.

Handspecimen Description:

White, milky quartz vein, minor calcite, well fractured, minor brown iron oxide staining, some small 1-2 mm diameter drusy vugs, trace of sulfides, some fractures have calcite infilling with yellowish cream colour.

Field Rock Name: Quartz Vein

Thinsection Examination:

Estimated Mode:

94% Quartz
6% Calcite

Quartz forms mostly very large composite grains with pronounced wavy extinction. The grain boundaries of some quartz grains with other quartz grains are granulated to a narrow zone up to 0.2 mm wide consisting of 0.05 mm sized individual grains.

Calcite occurs in irregular lenses which appear to be open space filling around euhedral quartz crystals. Minor replacement of quartz by calcite has occurred. Calcite is present mainly as large sparry grains.

No opaques in section.

Name: Quartz Vein

--PETROGRAPHIC ANALYSIS-- November 1990

For: Birch Claims, Clearwater Area

Project: Gemstar Resources Ltd., Vancouver, B.c.

SPECIMEN NUMBER: B90-7, 4.4 meters

Location:

Diamond drill hole B90-7, depth of 4.4 meters.

Handspecimen Description:

Irregular lenses of pyrite densely disseminated throughout, vuggy-weathered appearance, abundant chlorite and calcite, coarsely layered, pyrite lense up to 7 mm long.

Field Rock Name: Chloritic, Brecciated Massive Pyrite

Thinsection Examination:

Estimated Mode:

22%	Chlorite
3%	Calcite
25%	Quartz
38%	Pyrite
7%	Muscovite
4%	Plagioclase
1%	Hornblende
1%	Chalcopyrite
1%	Hematite
tr	Sphalerite
tr	Pyrrhotite

Hornblende occurs as isolated remnant crystals which have been partially brecciated and replaced by quartz and pyrite. Hornblende crystals are up to 0.8 mm long but are not altered by chlorite.

Chlorite forms fiberous veins and linear lenses throughout the specimen within the finer grained quartz areas.

Quartz forms coarse clear grains up to 1.5 mm associated with the pyrite lenses. An earlier quartz is characterized by much finer grain size (less than 0.1 mm) and is closely mixed with muscovite, calcite and chlorite.

Name: Pyritic, Chloritized Muscovite Schist

--PETROGRAPHIC ANALYSIS-- November 1990

For: Birch Claims, Clearwater Area

Project: Gemstar Resources Ltd., Vancouver, B.c.

SPECIMEN NUMBER: B90-7, 4.8 meters

Location:

Diamond drill hole B90-7, depth of 4.8 meters.

Handspecimen Description:

Irregular quartz lenses within a dark green (chloritic) matrix, narrow (1-3 mm wide) chlorite veinlets, iron oxide stained, trace of calcite, minor disseminated pyrite.

Field Rock Name: Quartz Vein in Chloritic Schist

Thinsection Examination:

Estimated Mode:

48%	Quartz
22%	Calcite (Dolomite?)
5%	Muscovite
15%	Plagioclase
2%	Opaques (Pyrite, Hematite)
8%	Chlorite

Chlorite only occurs within the narrow veinlets associated with fine grained opaques and in the finer quartz layers. No chlorite was noted in the coarser quartz lenses.

Name: Partially Recrystallized Chloritic (Muscovite) Schist

--PETROGRAPHIC ANALYSIS-- November 1990

For: Birch Claims, Clearwater Area

Project: Gemstar Resources Ltd., Vancouver, B.c.

SPECIMEN NUMBER: B90-7, 38.3 meters

Location:

Diamond drill hole B90-7, depth of 38.3 meters.

Handspecimen Description:

Alternating light and dark grey well laminated, abundant disseminated pyrite (approximately 5% pyrite), schistose.

Field Rock Name: Chlorite-Sericite Schist

Thinsection Examination:

Estimated Mode:

Quartz
Dolomite
Chlorite
Opaques (Pyrite)
Plagioclase

Chlorite forms relatively wide sheets and also narrow fiberous veinlets.

Calcite is distributed pervasively throughout the slide replacing quartz.

Name: Calcareous Chlorite Schist

L5A

L4A

L3A

L2A

L1A

4+00N

3+50N

3+00N

2+50N

2+00N

1+50N

NO OUTCROP

NO OUTCROP

NO OUTCROP

NO OUTCROP

NOT MAPPED

NOT MAPPED

ROAD

ROAD

SKIDDER TRAIL

SKIDDER TRAIL

SKIDDER TRAIL

qscs

qscs w/ rusty Py cubes

qscs w/ PY cubes

qscs tan w/ Py

qscs - ss

ss - qscs tan (coloured)

very rusty soil w/ highly weathered Py qscs Trench Sample # 511022

pit w/ rusty qscs w/ qtz boulders

qscs rusty

folded qtz veins in silicified schist

rusty silicified qscs

rusty tan qscs

qtz

B90-9 -46.5° 64.7m

TRENCH "A" 511001 to 511021 - a series of silicified zones and qtz veins in a schist

30°

20°

15°

L11+00W 30+00N (1988 IP STN)

L11+00W 29+50N (1988 IP STN)

L11+00W 29+00N (1988 IP STN.)

bull qtz float

GRID N

25°

ss - Sericite Schist

qscs - Quartz-Sericite-Chlorite Schist

△ - Float (angular) boulders

30° schistosity

ASSESSMENT REPORT

GEOLOGICAL BRANCH

21,527

GEMSTAR RESOURCES LTD.

BIRCH CLAIMS

"A" GRID

GEOLOGY

NEW GLOBAL RESOURCES LTD.	DRAWN BY: S.P.B.
SCALE: 1:1000	DATE: NOV 1990

FIGURE 7

L9100W

L8400W

<5

<5

30

L8100W

Trench minor quartz in schist

265

100

10

<5

10

15

20

30

5

5

5

30

5

10

ROAD

ROAD

DRILL TARGET

SURFACE TRACE

B90-3 and B90-4

B90-5 and B90-6

B90-1 and B90-2

Au (ppb) in soil

Au (ppb) in soils

EXHALATIVE SHOWING TRENCH (SEE FIGURE 6)

SERICITE SCHIST IN PIT

1.4m deep pit in red-black soil (iron-manganese), some quartz, no bedrock

BASELINE (20+00N)

N

GEOLOGICAL BRANCH ASSESSMENT REPORT

21,527

0 10 20 30m

FIGURE 5

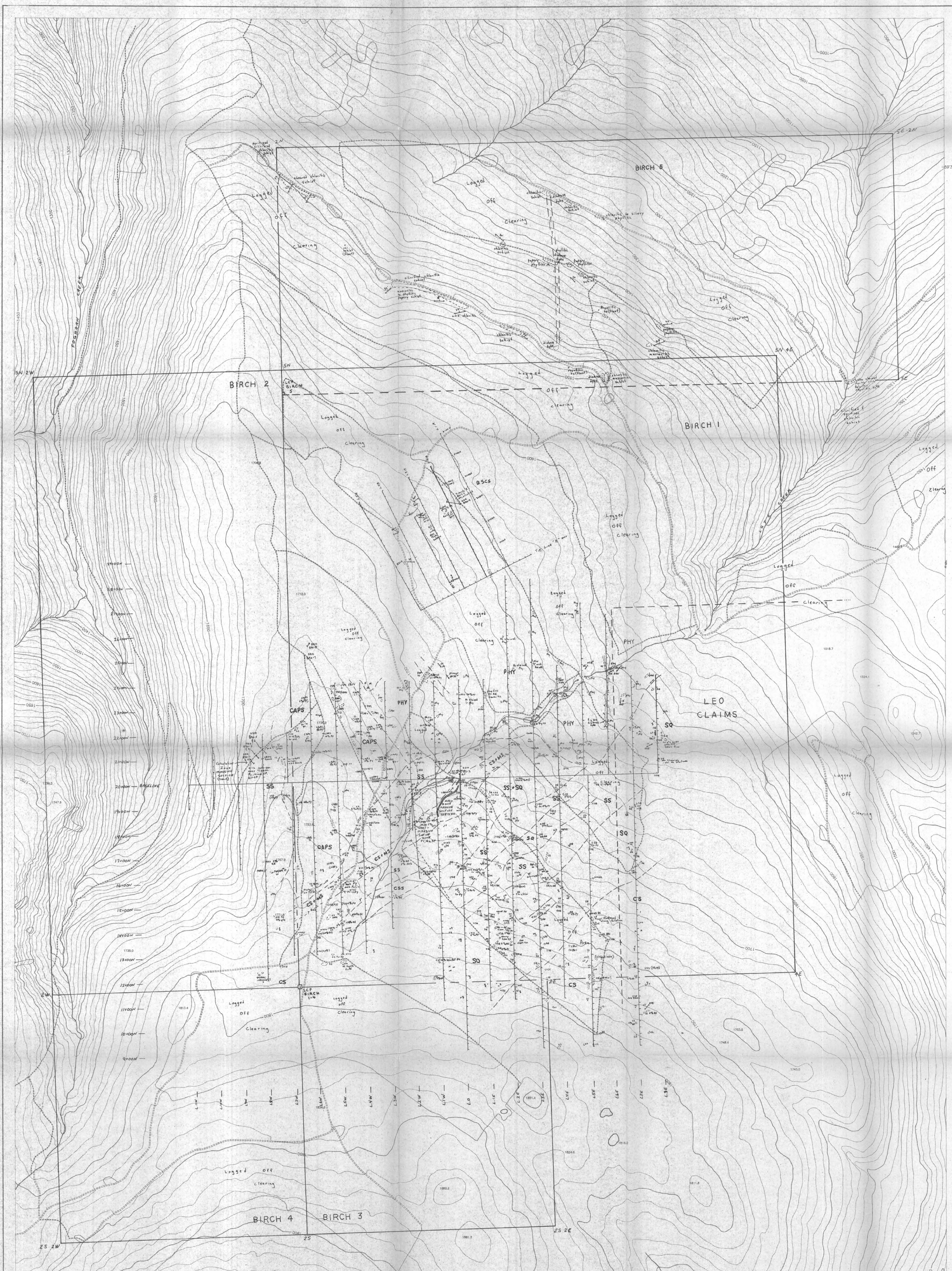
GEMSTAR RESOURCES LTD.

BIRCH CLAIMS

EXHALATIVE SHOWING

DIAMOND DRILLING AND TRENCHING

NEW GLOBAL RESOURCES LTD.	DRAWN BY. S P B
SCALE: 1:500	DATE: NOV. 1990



EAGLE BAY FORMATION - MISSISSIPPIAN

PHYLLITE: grey green platy, vitreous glassy sheen, locally contains fine feldspar phenocrysts possible sediment and intermediate tuff mix. **PHY**

CHLORITE ± ANKERITE ± PYRITE SCHIST: basic volcanic flow, banded gneissic texture with alternating chlorite/feldspar/quartz-quartz/ankerite-and pyrite bands. **CAPS**

SERICITE SCHIST: metavolcanic rocks of probable felsic composition, yellow-yellow brown, highly schistose. (papery) containing tr quartz eyes and feldspars phenocrysts. (banded) containing alternately sericite/quartz-quartz-quartz/feldspar/pyrite± disseminated chalcopyrite/galena/sphalerite bands. (waxy) containing sericite/hematite chlorite. **SS**

SERICITIC QUARTZITE: massive, siliceous sediment quartz eyes were noted locally and may incorporate felsic flow material), grey-yellow-pink, often contains minor amounts of chlorite. **SIL-SS**

QUARTZ-SERICITE-CHLORITE SCHIST: metavolcanic flows of probable intermediate composition, pale green, highly schistose contains 1-5% fine quartz eyes. **QSCS**

CHLORITE SCHIST: metavolcanic rocks of probable basic composition. unit appears to be an andesitic breccia with remnant chloritic fragments noted along cleavage planes, medium-deep green moderately chloritic. **CS**

SILICIFIED, CARBONATIZED QUARTZ-CHALCOPYRITE-GALENA-SPHALERITE STOCKWORK ZONE. **SIL**

SEMI-MASSIVE SULPHIDE-CHLORITE SCHIST HORIZON: banded chlorite schist with 15-80% pyrite (minor chalcopyrite, sphalerite, and galena); chlorite "may" be a hydrothermal alteration product. **MS-CS**

Shaft
Trench
Outcrop
Float
Marsh
Stream
Road
Power Line
Claim Post
Glacial Debris
ICP Sample Location
Thin Section Sample Location
Polished Section Sample Location
Whole Rock Sample Location
Geological Boundary: definite, probable, inferred
Bedding (inclined, vertical)
Foliation (inclined, vertical)
Joining (inclined, vertical)
Quartz Vein (inclined, vertical)
Plunge
Syncline
Anticline

GEOLOGICAL BRANCH ASSESSMENT REPORT

21,527

SCALE 1:5000

0 100 200 300

CONTOUR INTERVAL 10 metres

GEMSTAR RESOURCES LTD.

BIRCH CLAIMS

GEOLOGY

82M/12W

NEW GLOBAL RESOURCES LTD.

DRAWN BY: S.P.B.	DATE: DEC. 1990
SCALE: 1:5000	FIGURE No.: 4

LCP BIRCH 5

LCP BIRCH 1 TO 4

Tie Line "A"

LEO CLAIMS

BASELINE

59°33'

119°52'

N

LEGEND

- x Soil Samples
- • Silt Samples
- □ Rock Samples
- 22, 190, 252 Pb(ppm), Au(ppb), Zn(ppm)
- Au less than 5ppb

GEOLOGICAL BRANCH ASSESSMENT REPORT

21,527

SCALE 1:5000

0 100 200 300

CONTOUR INTERVAL 10 metres

GEMSTAR RESOURCES LTD.

BIRCH CLAIMS

GEOCHEMISTRY

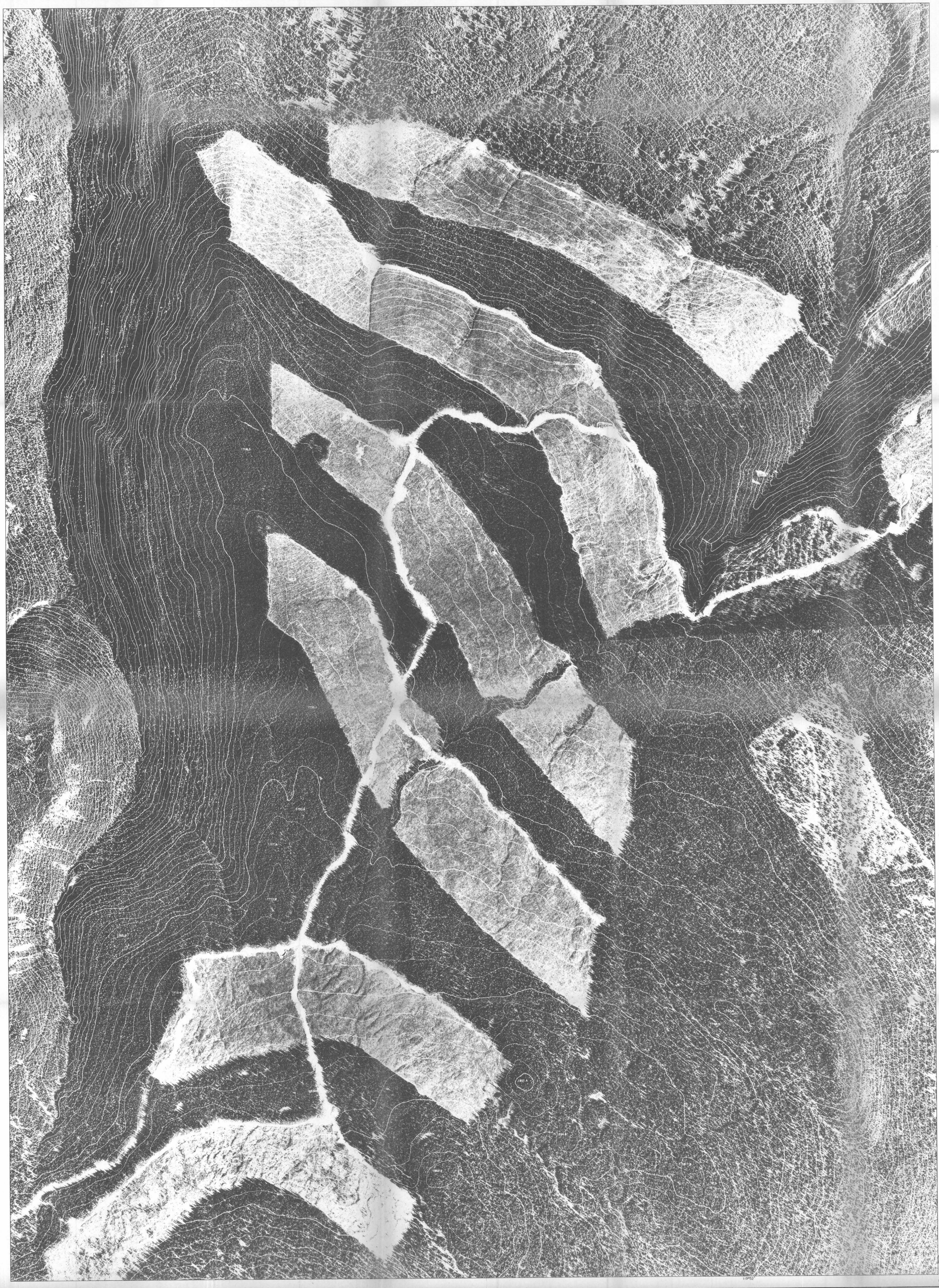
LEAD, GOLD & ZINC

82M/12W

NEW GLOBAL RESOURCES LTD.

DRAWN BY: SPB	DATE: DEC. 1990
SCALE:	FIGURE No.: 8

EAGLE MAPPING SERVICES LTD. (90–95)



EAGLE MAPPING SERVICES LTD. (90–95)

GEOLOGICAL BRANCH
ASSESSMENT REPORT

21,527

SCALE 1:5000

0 100 200 300

CONTOUR INTERVAL 10 metres

GEMSTAR RESOURCES LTD.

BIRCH CLAIMS

ORTHOPHOTO

82M/12W

NEW GLOBAL RESOURCES LTD.

DRAWN BY:	DATE:
SCALE:	FIGURE No.: 15