

LOG NO:	30-08	ED.
ACTION:		
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GEOLOGICAL AND GEOCHEMICAL  
ASSESSMENT REPORT

on the

BIRCH 5 CLAIM  
(BIRCH GROUP Includes BIRCH #1 to #5)

North Thompson River Area  
Kamloops Mining Division  
British Columbia  
51 33' North Latitude/119 52' West Longitude

**SUB-RECORDER  
RECEIVED**  
**AUG 27 1990**  
M.R. # \_\_\_\_\_ \$ \_\_\_\_\_  
VANCOUVER, B.C.

NTS 82M/12W

For

Gemstar Resources Ltd.  
240-1055 West Hastings St.  
Vancouver, B.C.

By

J.T. Shearer, M.Sc., FGAC  
New Global Resources Ltd.  
548 Beatty St.  
Vancouver, B.C.  
V6B 2L3

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

20,218

JUNE 1 1990  
Vancouver

Field work completed between July 22 and July 26 1989

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**SUMMARY**

- 1) The Birch claim group is located in south-central British Columbia and is approximately 125 kilometers north-northeast of the City of Kamloops. Numerous logging roads provide access to most areas 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.
- 3) The potential for gold mineralization occurring in polymetallic volcanogenic massive sulfide deposits in the area of the Birch group has been recognized since the early 1970's. Several economically viable deposits have been found elsewhere on the Eagle Bay Formation units, which underlie the area and a large portion of the Adams Plateau.
- 4) New Global Resources Ltd. acquired the ground by staking in May 1987, and July 1989 and subsequently optioned the claims to Foundation Resources Ltd. and Gemstar Resources Ltd.
- 5) A program of geological mapping, geochemical sampling and prospecting was carried out on the Birch 5 claim between July 22 and July 26, 1989 which confirms that the favourable rhyolitic rocks trend northward onto the Birch 5 claim.
- 6) Recommendations are made for an Induced Polarization survey and small diamond drill program on the Birch #1 - #5 claims.

## INTRODUCTION

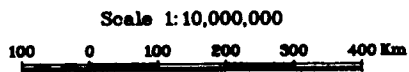
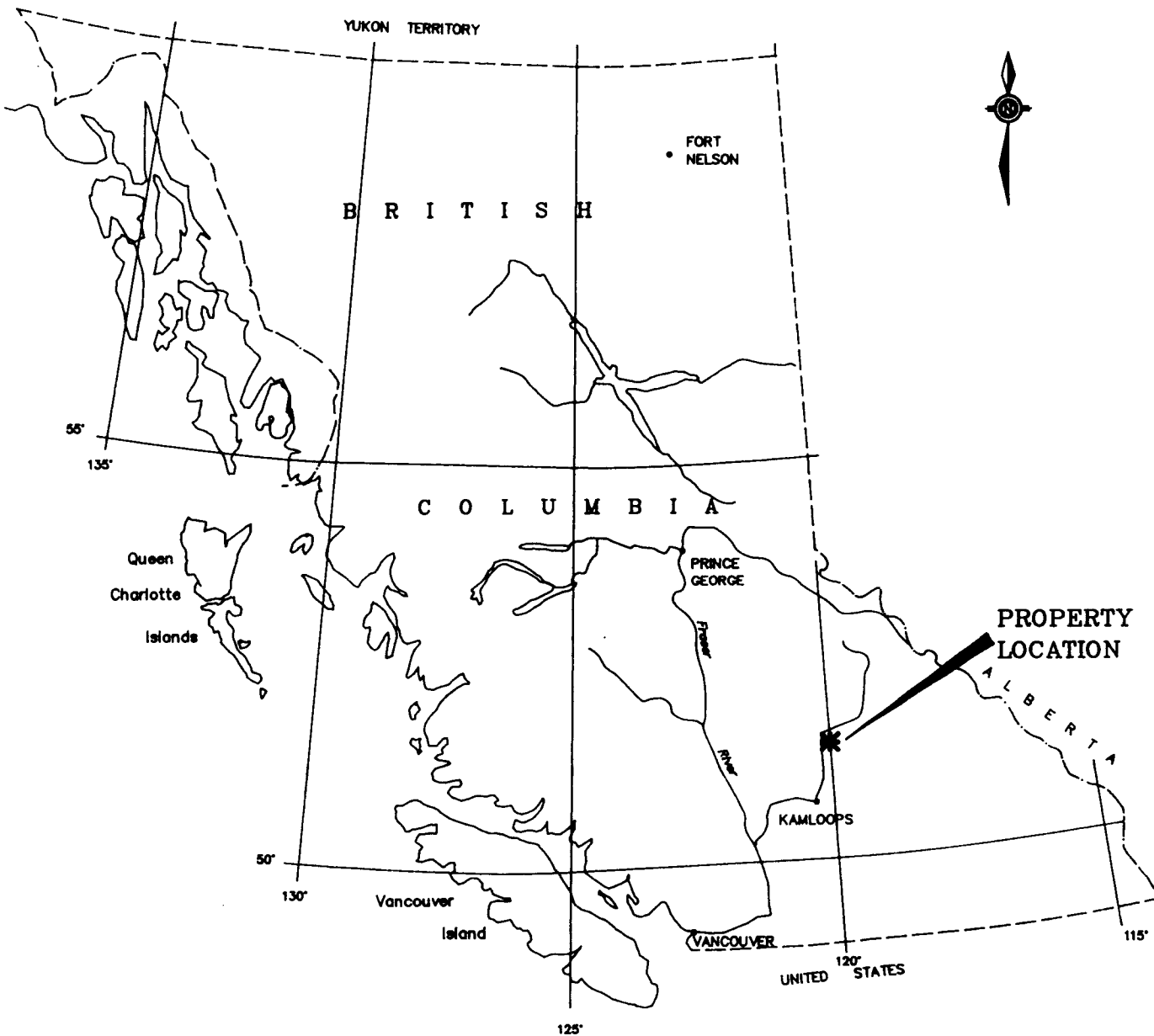
The Birch #1 to #5 claims, consisting of 48 contiguous units, were staked in May 1987 and July 1989 by New Global Resources Ltd. These claims have since been acquired by Foundation Resources Ltd. and Gemstar Resources Ltd.

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 outcropping volcanogenic massive sulfide exploration targets had not been developed as precious metal exploration targets. Work in the past has been mainly for copper, lead and zinc.

The immediate area around the Birch claims is notable for its abundance and variety of mineralization. The Rexspar uranium and fluorite - rare earth oxide deposits adjoin the Birch ground some 2 kilometres north-northwest. The Harper Creek bulk-tonnage copper property is located 4 kilometres east. Approximately 50 kilometres to the south of the Birch claims, two significant ore bodies have been recently discovered in similar rocks. These orebodies are hosted by the Eagle Bay Formation schists. Rea Gold Corp. along with Minnova Corp. have discovered a silver/zinc orebody hosted by sericitic phyllites similar to rocks outcropping on the Birch claims. The Homestake deposit which lies near the Rea Gold deposit 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 work (Shearer and Lennan 1989). Only very limited drill testing has been done and considerably more work needs to be done to evaluate the gold potential of this zone. Prospecting, in 1988, resulted in 2 new zones being discovered which were anomalous in gold.



**GEMSTAR RESOURCES LTD.**

**BIRCH 5 CLAIM**

**LOCATION MAP**

SCALE:  
AS NOTED

DATE:  
JUNE '90

N.T.S.  
82M/12W

DRAWN BY:  
GEO-COMP

FIGURE: **A**

During 1988, work on the Birch #1 claim defined a pyritized and siliceous rhyolite to rhyolite breccia unit located near the northern boundary of the claim. This felsic unit forms extensive gossons. A prospecting, preliminary geological mapping and geochemical sampling program was carried out on the property (Birch #5) from July 19 to July 26, 1989.

#### **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 and then 20 kilometres south and west along the Jones Creek logging road. The approximate geographic center of the property is at 51 33' north latitude and 119 53' west longitude.

#### **PHYSIOGRAPHY AND VEGETATION**

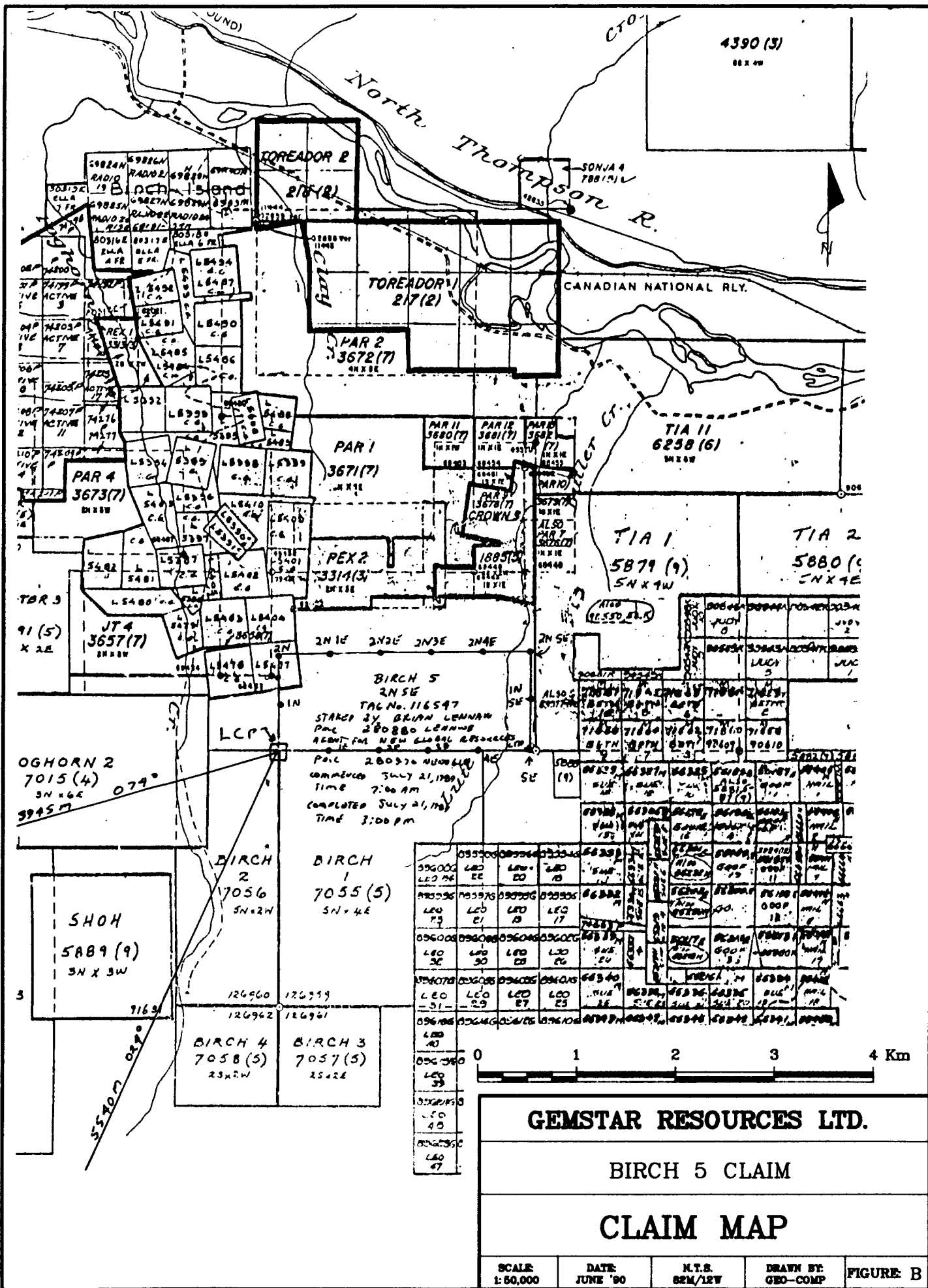
The claims cover part of a northerly trending ridge lying between Foghorn Creek and Lute Creek. Most of the topography is gently sloping to the north and northeast except for that part covering the steep east slope of Foghorn Creek Valley. Elevations vary between 1646 metres and 1036 metres.

Most of the property is covered by a dense growth of mature spruce, cedar and fir. There are widespread open areas due to recent clear-cut logging.

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. These were then



BIRCH 5  
 2NS6  
 TAG No. 116547  
 STAKED BY BRINA LEMNA  
 P.M.C. 280880 LEMNA  
 A.B.M.T. FOR NEW GLOBAL RESOURCES LTD.  
 P.M.C. 280976 MULLER  
 COMMENCED JULY 21, 1988  
 TIME 7:00 AM  
 COMPLETED JULY 21, 1988  
 TIME 3:00 PM

055000	055000	055000	055000	055000	055000
LEO 26	LEO 27	LEO 28	LEO 29	LEO 30	LEO 31
055000	055000	055000	055000	055000	055000
LEO 32	LEO 33	LEO 34	LEO 35	LEO 36	LEO 37
055000	055000	055000	055000	055000	055000
LEO 38	LEO 39	LEO 40	LEO 41	LEO 42	LEO 43
055000	055000	055000	055000	055000	055000
LEO 44	LEO 45	LEO 46	LEO 47	LEO 48	LEO 49

**GEMSTAR RESOURCES LTD.**

**BIRCH 5 CLAIM**

**CLAIM MAP**

SCALE 1:50,000	DATE JUNE '90	N.T.S. 62M/12W	DRAWN BY GEO-COMP	FIGURE: B
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sold to Foundation Resources Ltd., and optioned to Gemstar Resources Ltd.(see Figure 2).

TABLE 1

<u>CLAIM NAME</u>	<u>RECORD No.</u>	<u>No. OF UNITS</u>	<u>EXPIRY DATE</u>
Birch #1	7055	20	May 29, 1991*
Birch #2	7056	10	May 29, 1991
Birch #3	7057	4	May 29, 1991
Birch #4	7058	4	May 29, 1991
Birch #5	8668	<u>10</u>	July 21, 1991
		Total	48

\*with application of assessment work documented in this report.

**FIELD PROCEDURES**

Prospecting and geological mapping traverses were plotted on a 1:5000 base map showing roads, geologic information, lithochemical samples and some silt and soil sites (Figures 4 and 5). Rock samples were collected and specimens saved. Certain rock samples were analyzed and these are located on Figure 4. Road locations were taken from up-to-date forestry maps.

Silt samples were collected at irregular intervals along Lute Creek and its many tributaries. The sample sites were selected to re-test anomalous samples collected previously and to test areas upstream and downstream from the anomalous sample sites.

**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 geochemical values generally follow the northeasterly trending Dighem II anomaly for approximately 2200 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 as 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 metres. This area is also anomalous in gold.

In late 1983 Esso Resources drilled two holes about 200 metres apart along the strike of the massive sulfide outcrop and its suspected extension. Two mineralized zones were intersected in the holes. These two massive sulfide zones were separated by 35 metres of poorly mineralized rock. In 1984, Esso drilled a third hole some 200 metres down dip (to the northwest) from the first two holes. The lateral equivalents of the intersections in the first two holes were located but were poorly mineralized. Some trenching was conducted over about 100 metres of the best soil anomaly. These trenches are still in good condition, although the walls have sloughed-in to a moderate extent.

Foundation Resources Ltd. in conjunction with Gemstar Resources explored and re-evaluated the ground to the south of the Birch #5 claim (Birch #1 - #4 claim area) in 1988. This project was successful in locating several new showings that have the potential to carry precious metal concentration. This work indicated that some of these mineralized horizons trended northeasterly onto ground now covered by the Birch 5 claim. A small mapping, sampling and prospecting program was conducted

during July 1989 on the Birch #5 claim and is the subject of this report.

### **REGIONAL GEOLOGY**

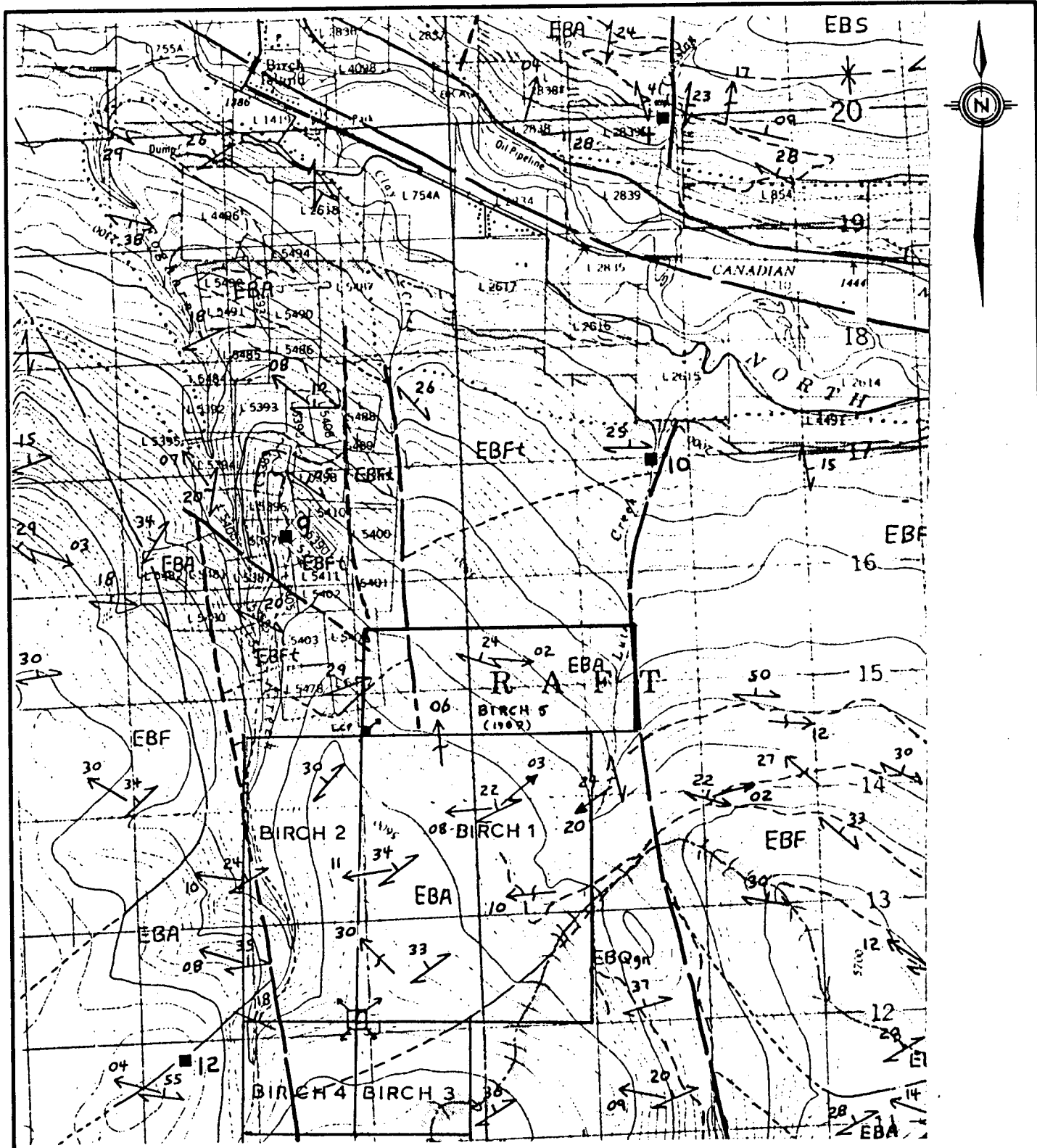
The claims are located in the northwest part of the Seymour Arm/Seymour Plateau, an area of Lower to Upper Paleozoic sediments and volcanics which are intruded by Mesozoic plutons. The immediate claim area is underlain by Upper Paleozoic (Devonian to Mississippian) rocks of the Eagle Bay Formation. The 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. The apparent 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-Permo Triassic Fennel Formation basalts, basic fragmentals, cherts, limestones and argillites approximately 5 kilometres to the west.

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. Attention to these details in any future mapping project will help define the structural geology of the property.

### **PROPERTY GEOLOGY**

The Birch claim #5 is 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. Strong schistosity obscures the original fabric of the rocks. On careful examination quartz eyes can frequently be seen, and were originally partly of rhyolitic composition. Pyrite, sericite and chlorite are ubiquitous over most of the property much more so than in other areas hosting Eagle



**LEGEND**

- EBA EAGLE BAY FM.  
 DEVONIAN - Grey sericite  
 quartz phyllite, sercitie-  
 chlorite-quartz schist.  
 From felsic to intermediate  
 volcanics. Sericitic  
 quartzites
- EBQgn EAGLE BAY FM  
 LOWER CAMBRIAN?  
 Intrusive derived orthogneiss

**GEMSTAR RESOURCES LTD.**

**BIRCH 5 CLAIM**

**REGIONAL GEOLOGY**

SCALE 1:50,000	DATE JUNE '90	N.T.S. 82M/12W	DRAWN BY: GEO-COMP	FIGURE: C
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Bay rocks. The abundance of pyrite has led to the development of noticeably rusty soils.

Two phases of regional deformation and metamorphism have changed the 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. Repetition of units likely occur due to folding and thrust faulting. A diabase dyke up to 10 metres thick cuts all units and trends northerly. All the above units comprise a relatively flat lying sequence with apparent bedding striking between 035 and 060 with northwest dips varying between 10 and 35 degrees.

The rock types encountered on the property (Birch #5 claim) are described below and outcrops are plotted on Figure 4.

**Chlorite schist:** This unit is dark green coloured and strongly foliated. The rock breaks readily along foliation planes and tends to be flaggy weathering. Remnant chloritic fragments found along cleavage planes suggests this rock type was derived from an andesitic breccia or agglomerate. The largest exposure of this rock type occurs in the north-central part of the property along the most northerly road. Other small outcrops of chlorite schist are found between outcrops of phyllitic rocks. This suggests the chlorite schist occurs as units of varying thickness interbedded with phyllitic rocks. Sample NOK-1, NOK-2, BP 89-1 and BP 89-2 are of this rock type. Only Sample BP 89-2 contained an anomalous gold value of 50 ppb Au.

**Phyllite:** This rock type is characterized by a grey to silvery grey colour, occasionally grading to a light green colour when chlorite is present. It has a vitreous glassy sheen and soapy texture. It is often very flaggy or thinly laminated and when found exhibiting this feature, is described as "papery phyllites". This unit appears to trend northeasterly across the property from

the southern most logging road to the northern most logging road. Mineralization is generally absent in this unit.

**Silicified Chlorite Schist:** This rock type is dark green in colour, banded with lamellae of chlorite, feldspar, quartz and ankerite. This rock type is, for the most part, well mineralized with pyrite. On the Birch #5 claim, these rocks contain slightly anomalous amounts of gold, silver, lead and zinc. Samples BP 89-3, NOK-3, NR-1 and NR-2 are from this rock type. Gold values range from 25 to 180 ppb gold, lead values range from 13 to 780 ppm, zinc values range from 48 to 130 ppm and silver ranges from less than 0.2 to 4.5 ppm (Figure 4 and 5). Traces of galena (very fine grained) was observed in Sample NOK-3. This rock type is found primarily at the northwestern corner of the property near the end of the southern most logging road traversing the property and in a bluff along Lute Creek near the road crossing at the southeast corner of the property. At this southeastern location, the silicified chlorite schist is in contact with and overlain by a very rusty and pyritic unit of rhyolitic breccia. The contact strikes N60-65 E and dips 25 NW.

**Rhyolitic Breccia:** This rock type is light grey coloured and siliceous. It contains cherty angular fragments up to 5 mm in diameter. Pyrite and pyrrhotite are finely disseminated throughout the rock and are also found along the rims of breccia fragments. Purple coloured fluorite occurs as fracture fillings. Float samples of this material are represented by Samples NOK-4 and NOK-5. This rock type found on the Birch #5 claim is similar in colour, texture and mineralization to outcrops of siliceous (rhyolite) breccia located on the northwest projection of line 0+00 on the Birch #1 claim (Vollo, 1988, p.4, Figure 4). The float material, as located by Sample NOK-4 in particular, appears to be aligned with the northeasterly strike projection of the Birch #1 outcrops of the rhyolitic breccia. However, the outcrop of rhyolitic breccia located in a bluff along Lute Creek near the road crossing at the southeast corner of the Birch #5 claim does not

appear to align itself along strike with the Birch #1 claim outcrop and thus may represent a separate unit of this material. Samples NOK-4 and 5 are weakly anomalous in gold, 10 and 35 ppb Au respectively, while the southeastern outcrop of rhyolitic breccia as represented by Sample BP 8-4 is moderately anomalous in gold at 60 ppb Au and strongly anomalous in lead and zinc (150 and 350 ppm respectively). Sphalerite and galena were not observed. On the Birch #1 claim, a strong IP anomaly along line 1+00W between stations 29+00N and 29+50 appears to be associated with this intensely altered and pyritized rock type.

**Diabase Dyke:** This dark, charcoal grey, aphanitic dyke was found in all three road cuts that traverse the Birch #5 claim. The dyke ranges from 1 to 3 metres in thickness and strikes southerly and has a vertical dip. Mapping carried out on the Birch #1 claim in 1988 located a diabase dyke of similar colour, composition and texture. The plot of this dyke on Figure 4 indicates the dyke traverses the Birch #5 and Birch #1 claims. The alignment of the outcrop locations of the dyke on all the logging roads going from north to south indicates the dyke is very straight with few if any major deflections along its strike length. There is no mineralization found within or adjacent to the dyke.

## **GEOCHEMISTRY**

Soil sampling programs conducted by Barrier Reef Resources and Esso Resources from 1980 to 1983 focussed on the Main Zone Massive sulfide showing on Birch #1 claim. A multielement anomaly emerged directly overlying the trend of the massive sulfide horizon and its extensions. Of 800 soil samples collected, only 72 were analyzed for gold. These samples were taken directly over the massive sulfide zone and projected NE and SW extensions. Values ranged from 16 to 123 ppb gold. The gold anomaly located along Line 8+00W between station 20+80N and 21+10N is significant as it is on the projected 055 line of strike of the Exhalative horizon.

Silt samples collected in 1989 on the Birch #5 claim are plotted on Figure 5. Gold results are all less than 5 ppb Au and also low for Lead, Zinc and Silver.

**CONCLUSIONS AND RECOMMENDATIONS**

Polymetallic sulfide mineralization, occurring in four different styles of deposition has been demonstrated on the Birch Claims, in an environment in which ore deposits have been found elsewhere in the area. Deposits of this type can be very different in character over relatively short distances, as exemplified by the Rea Gold and Samotosum orebodies, only few hundred metres apart. The Rea ore deposit is an arsenical pyrite-gold zone, while the Samotosum is a high-grade silver deposit, with negligible arsenic. Each soil anomaly should therefore be persistently explored until its cause is known, and any sulfide zone should be followed along strike and dip as far as practical, as a possible lead to an orebody.

The following program is recommended to explore the property:

Stage 1

1. Prepare an accurate photogrammetric topographic map at a scale of 1:2500 with 10 meter contours to provide survey control.
2. Complete 1:2500 and 1:500 scale geologic mapping on the entire property with particular attention to the northern half and western edge of the property.
3. Test survey the Main Zone Massive Sulfide horizon, Exhalative horizon and North Rhyolite Breccia with VLF-EM, on lines at 330 , using the Seattle field. If the test is successful, use this method to pinpoint the source of other soil anomalies.
4. Extend the Induced Polarization survey northeastward from the anomalous northern section of L 1+00W. This would test more of the sulfide (pyrite) and fluorite bearing rhyolitic breccia and help delineate its attitude. Trench targets by using a backhoe.
5. Extend soil sampling, particularly on the northern half of the property. A 20 meter spacing on lines 100 meters apart going in



a northerly direction is recommended. In the vicinity of the Exhalative horizon soil sampling should be completed at 10 meter intervals on new lines placed at 50 meter spacings between the present 100 meter lines. Lines 8+00W and 9+00W should be extended to station 29+00N as should Lines 10+00W and 11+00W. The new lines would be lines 7+50W, 8+50W and 9+50W. This would assist in delineating the possible strike extensions of the Exhalative horizon.

6. Backhoe trench the gold-zinc soil and silt anomaly along Lines 3+00E and 3+25E and the Exhalative horizon.

Stage II

1. Contingent on results in Stage I, diamond drill all promising targets.

**COST ESTIMATE OF FUTURE WORK**

Stage I

1) Geological mapping and prospecting	\$ 30,000.00
Orthophoto base map, core logging	
2) Line cutting - grid extension	8,000.00
3) Geochemical soil sampling and drill core assays	10,000.00
4) Induced polarization survey	14,000.00
5) Diamond drilling, 800 metre BQ at \$110/metre	88,000.00
<b>Total</b>	<b>\$150,000.00</b>

Respectfully submitted

J.T. Shearer, M.Sc., FGAC  
June 1, 1990.

**REFERENCES**

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Shearer, J., T. and Lennan, W.B. (1989): Geological, Geochemical and Geophysical Report on the Birch 1 - 4 claims, Assessment Report for Gemstar Resources Ltd., 21 pp. May 1, 1989

**APPENDIX 11**

STATEMENT OF COSTS FOR  
1989 ON THE BIRCH 5 CLAIM  
July 22 - July 26 1989.

**STATEMENT OF COSTS**

PROGRAM: Geological mapping, prospecting, limited  
geochemistry, on Birch 5 Claim.

**WAGES AND BENEFITS**

J.T. Shearer, M.Sc. Geologist	
1 day @ \$300.00 per day	300.00
N. O'Keefe, B.Sc. Geologist	
7 days @ \$200.00 per day	1,400.00
Brian Lennan, B.Sc. Geologist	
7 days @ \$250.00 per day	<u>1,750.00</u>
Subtotal	3,450.00

**EXPENSES**

Camp Rental, 4 days @ 73.75 per day	295.00
Hotel and Meals	588.48
Truck Rental	920.34
Highway Toll	20.00
Gas	165.65
Analytical Chemex Labs Ltd.	285.53
Report Preparation, Wordprocessing, Reproduction	500.00
Drafting	<u>260.00</u>
Subtotal	3,035.00
<b>GRAND TOTAL</b>	<b>\$6,485.00</b>

*J. Shearer*

APPENDIX I

STATEMENT OF QUALIFICATIONS

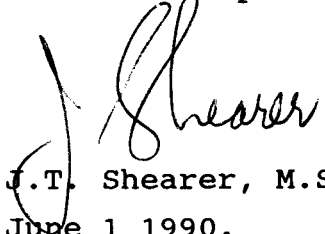
J.T. SHEARER, M.Sc., FGAC

## STATEMENT OF QUALIFICATIONS

I, Johan T. Shearer of the City of Port Coquitlam, in the Province of British Columbia, do hereby certify:

1. I graduated in Honours Geology (B.Sc. 1973) from the University of British Columbia and the University of London, Imperial College, (M.Sc. 1977).
2. I have practised my profession as an Exploration Geologist continuously since graduation and have been employed by such mining companies as McIntyre Mines Ltd., J.C. Stephen Explorations Ltd., Carolin Mines Ltd. and TRM Engineering Ltd. I am presently employed by New Global Resources Ltd.
3. I am a fellow of the Geological Association of Canada. I am also a member of the Canadian Institute of Mining and Metallurgy, the Geological Society of London and Mineralogical Association of Canada.
4. I have prospected and supervised the geochemical sampling on the Birch Claims from May 30 - July 15, 1988. This report is an interpretation of the results.
5. I hold seed shares in Foundation Resources Ltd. I have no interest in Gemstar Resources or affiliated companies.

Dated at Vancouver, British Columbia.

  
J.T. Shearer, M.Sc., FGAC  
June 1 1990.

**APPENDIX 111**

LIST OF PERSONNEL AND DATES WORKED

LIST OF PERSONNEL AND DATES WORKED

Name	Position	Address	Dates Worked Birch 5
J.T. Shearer, M.Sc.	Senior Geologist	3832 St. Thomas St. Port Coquitlam, B.C.	July 24, 1989 (6 days)
W.B. Lennan, B.Sc.	Project Geologist	876 Lynwood Ave. Port Coquitlam, B.C.	July 22 -28 1989 (7days)
N.O'Keefe, B.Sc.	Geologist	548 Beatty St., Vancouver, B.C.	July 22 -28 1989 (7days)



APPENDIX IV

ANALYTICAL PROCEDURES AND  
ASSAY CERTIFICATES - BIRCH CLAIMS

Chemex Labs Ltd.

Field Work Completed Between  
May 30 and July 15, 1988



# 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 5

Comments:

Page No.: 1  
Tot. Pages: 1  
Date: 14-AUG-89  
Invoice #: I-8922292  
P.O. #:

## CERTIFICATE OF ANALYSIS A8922292

SAMPLE DESCRIPTION	PREP CODE	Au ppb FA+AA	Pb ppm	Zn ppm	Ag ppm Aqua R						
BLB89-1	201 ---	< 5	40	160	0.2						
BLB89-2	203 ---	5	68	150	0.2						
BLB89-3	201 ---	< 5	56	142	0.2						
BLB89-4	203 ---	5	27	200	0.2						
BLB89-5	201 ---	5	71	175	0.3						
BLB89-6	203 ---	< 5	54	135	< 0.2						
LP+255E	201 ---	< 5	58	210	< 0.2						
1E+340E	203 ---	< 5	24	80	< 0.2						
2E+253E	203 ---	10	56	135	< 0.2						

CERTIFICATION: Stan B. Baker



# Chemex Labs Ltd.

Analytical Chemists • Geochemists • Registered Assayers

212 BROOKSBANK AVE. NORTH VANCOUVER,  
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To: NEW GLOBAL RESOURCES

548 BEATTY ST.  
VANCOUVER, BC  
V6B 2L3

Project: BIRCH 5

Comments:

Page No. : 1  
Tot. Pages: 1  
Date : 15-AUG-89  
Invoice # : I-8922293  
P.O. # :

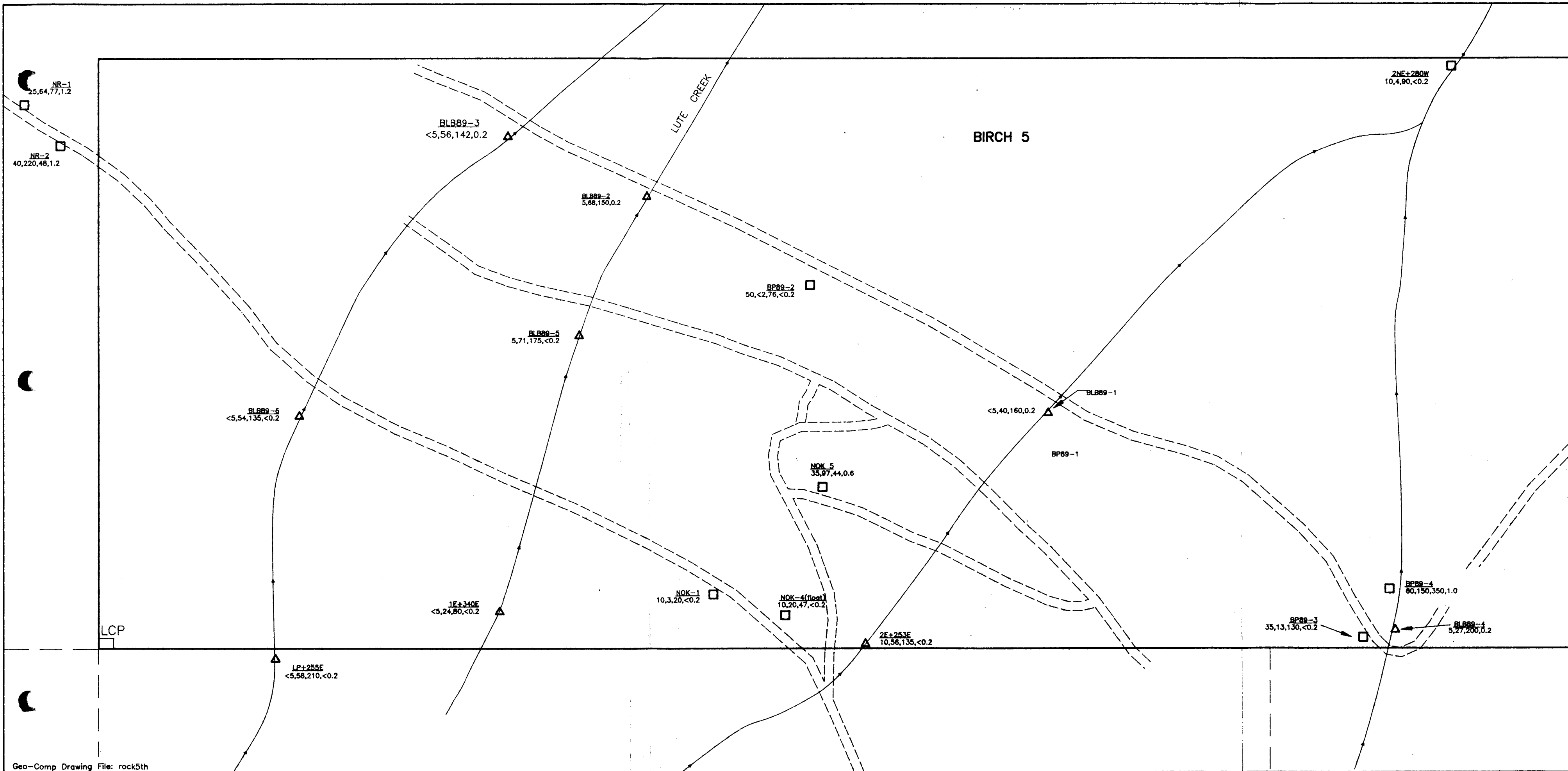
BIRCH 5

## CERTIFICATE OF ANALYSIS A8922293

SAMPLE DESCRIPTION	PREP CODE	Au ppb FA+AA	Pb ppm	Zn ppm	Ag ppm Aqua R						
BP89-2	205 ---	50	< 2	76	< 0.2						
BP89-3	205 ---	35	13	130	< 0.2						
BP89-4	205 ---	60	150	350	1.0						
2NSE+280W	205 ---	10	4	90	< 0.2						
NOK-1	205 ---	10	3	20	< 0.2						
NOK-2	205 ---	10	29	31	< 0.2						
NOK-3	205 ---	180	780	190	4.5						
NOK-4	205 ---	10	20	47	< 0.2						
NOK-5	205 ---	35	97	44	0.6						
NR-1	205 ---	25	64	77	1.2						
NR-2	205 ---	40	220	48	1.2						

CERTIFICATION :

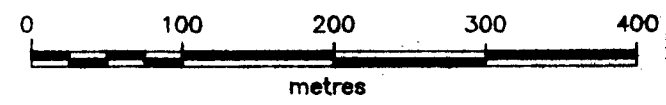
*Hart Sieber*



20218



- LEGEND**
- ← CREEK
  - ROAD
  - NOK-1  
BP89-2  
NR-1  
ROCK SAMPLE
  - ▲ 1E+340E SILT SAMPLE
  - 10, 20, 47, 0.2  
ppb Au,ppm Pb,ppm Zn,ppm Ag



<b>GEMSTAR RESOURCES LTD.</b>				
<b>BIRCH 5 CLAIM</b>				
<b>ROCK &amp; SOIL GEOCHEMISTRY</b>				
SCALE: 1:5,000	DATE: JUNE '90	N.T.S. 82M/12W	DRAWN BY: GEO-COMP	FIGURE: 2

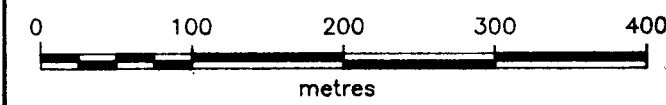


# GEOLOGICAL BRANCH ASSESSMENT REPORT

# 20,218

### LEGEND

- X NOK-4 FLOAT ROCK SAMPLE SITE
- O NOK-1 ROCK GRAB SAMPLE FROM OUTCROP
- OUTCROP
- ↗ 23 FOLIATION AND DIP - PARALLEL OR SUBPARALLEL TO ORIGINAL BEDDING
- STREAM
- LOGGING ROAD
- CONTACT OBSERVED IN OUTCROP
- ? POSSIBLE LOCATION OF DIABASE DYKE



GEMSTAR RESOURCES LTD.				
BIRCH 5 CLAIM				
GEOLOGY				
SCALE: 1:5,000	DATE: JUNE '90	N.T.S. 82M/12W	DRAWN BY: GEO-COMP	FIGURE:

## BIRCH 5

LUTE CREEK

DIABASE DYKE

chloritic schist

chloritic schist

chloritic to silvery  
phyllitic o/c

BP 89-2  
50ppb Au  
76ppm Zn

papery  
phyllitic

chloritic schist

phyllitic  
DIABASE  
DYKE

chloritic schist

papery  
Phyllitic

BP89-1 (not assayed)

NOK-5  
Rhyolitic  
bx float

silicified chloritic  
schist

muscovitic  
to phyllitic  
papery schist

more chloritic  
towards east

chloritic  
schist

NOK-1

DIABASE  
DYKE

NK-4

Rhyolitic bx  
float

DIABASE  
DYKE

chloritic  
muscovitic  
schist

BP89-4  
60ppb Au  
1ppm Ag  
150ppm Zn

yellow stained  
pyritic rich  
felsitic  
rhyolitic tuff

BP89-3  
35ppb Au

silicified & pyritized  
chloritic schist

LCP

pyritized  
silicified  
schist  
chloritic  
NR-2  
40ppb Au  
1.2ppm Ag  
220ppm Pb

sheared chloritic  
schist

NOK-3  
180ppb Au  
4.5ppm Ag

NK-2  
float  
chloritic schist float