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NORANDA EXPLORATION CO. LTD.

FILE NO:

DIAMOND DRILLING REPORT

REPORT ON THE

MYSTERY 1 & 2, CHANCE 2 & 4

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Gold Commissioner's Office
VANCOUVER, B.C.

MINERAL CLAIMS

(BARYTEX OPTION)

Liard Mining Division
N.T.S. 104 B/10E

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

Latitude: 56° 40' N
Longitude: 130° 43' W

22,036

NORANDA EXPLORATION COMPANY, LIMITED
(no personal liability)

REPORT BY: ERIC GRILL
MIKE SAVELL

NOVEMBER, 1991

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1.0 SUMMARY

The Chance and Mystery claims were optioned by Noranda Exploration Company, Limited in 1990. The property hosts high grade gold mineralization in a favourable geological setting of andesitic volcanics intruded by mid-Jurassic porphyry intrusives. The 1990 program located quartz veins containing up to 71.6 grams/tonne Au that occur intermittently over a distance of some 900 m in and adjacent to Ernie Creek Canyon. This mineralization appears associated with a linear structure (Ernie Creek Trend) that can be traced for a distance of 4 kilometres on the Barytex Property.

In 1992 induced polarization surveys were undertaken over the West and Alpine grids across the projected "Ernie Creek Trend". Several zones of increased chargeability were detected, the most interesting of which correlates with the Ernie Creek trend on both grids. One response on each grid subsequently drill tested.

Hole #BT-91-1 was collared on the Alpine grid to test a coincident I.P. and Au soil geochem anomaly along the mineralized Ernie Creek trend. It intersected a sequence of andesitic tuffs cut by hornblende porphyry dykes and faults. Millimetre to centimetre scale vuggy quartz veinlets are quite common, but selected core intervals returned weakly anomalous Au values ranging between 15 and 41 ppb, except for the interval from 119.2 to 120.2 which returned a value of 1980 ppb Au. The I.P. response is attributed to fine disseminated pyrite and minor pyrite stringers.

Hole #BT-91-2 was collared on the West grid and intersected a sequence of laminated, calcareous grey siltstones with a few narrow intervals of dacitic to andesitic volcanics. Fine disseminated and fracture filling pyrite and pyrrhotite is present over the entire length of the hole. Trace amounts of chalcopyrite and sphalerite were also observed. No significant analytical results were obtained.

No significant mineralization was intersected. It is unlikely that a major ore body exists close to surface within in the area tested. The nature of the mineralization is narrow and discontinuous. No further work is recommended at this time and the property should be returned to the vendor.

2.0 INTRODUCTION

2.1 GENERAL REMARKS

The Mystery and Chance claims were optioned in January 1990 by Noranda Exploration Limited following the discovery of high grade gold mineralization in outcrop on the Mystery 2 claim, and the presence of copper-gold mineralized float on the Chance 2 and 4 claims. The claims are held under option from Barytex Resources Limited who have an underlying agreement with Mr. S. Todoruk, the original staker.

In 1990 Noranda carried out an exploration program of geologic mapping, prospecting, geochemical sampling, magnetometer and HLEM surveys. This work identified a structural zone trending at 115 degrees Azimuth across the property which hosted fault controlled alteration and several Au-rich pyritic quartz veins.

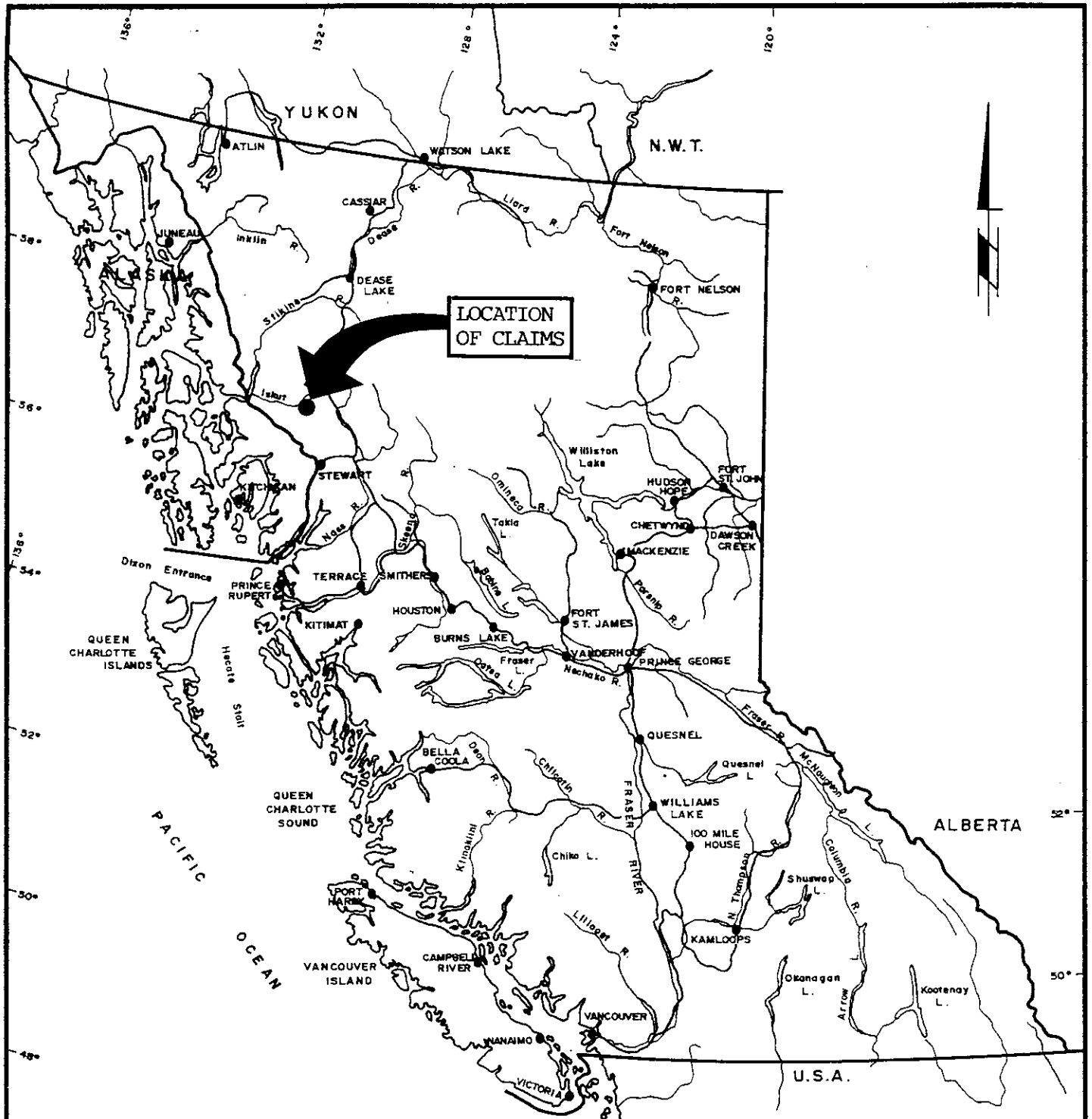
This reports documents the results of the 1991 diamond drilling program which followed geological, prospecting, and induced polarization surveys. A total of 213.4 metres in 2 holes were completed. Diamond drilling was contracted to J.T. Thomas Diamond Drilling Ltd. of Smithers, B.C. Drill pad preparation was contracted to Tim Carlson Blasting Ltd. of Smithers, B.C.

2.2 LOCATION AND ACCESS

The Barytex Property is located approximately 100 km north of the town of Stewart and 50 km southwest of the Stewart-Cassiar Highway #37, on the south side of the Iskut River. The proposed Iskut Road will cross the northwest corner of the claim block.

The claims lie within the Liard Mining Division and are centred at 56° 40' North latitude and 130° 43' West longitude, on the NTS map sheet 104 B/10.

Access to the claims was provided by helicopter chartered from Vancouver Island Helicopters based at Noranda's exploration camp at More Creek, 40 km to the north. A six man tent camp established immediately east of the property near the Alpine Grid provided accomodation for work crews during the early phase of the program. Accomodation for work on the west grid and the diamond drilling program was provided by Noranda's More Creek camp.



0 100 200 KILOMETRES
SCALE : 1 : 8,000,000

| | | |
|---------------|-----------------------------|----------------------|
| REVISED | BARYTEX PROPERTY | |
| | CLAIM LOCATION MAP | |
| PROJ. No. 295 | SURVEY BY: _____ | DATE: Nov. 1990 |
| N.T.S. 104B10 | DRAWN BY: S.K.B. | SCALE: 1 : 8,000,000 |
| DWG. No. | NORANDA EXPLORATION | |
| FIG. 1 | OFFICE: PRINCE GEORGE, B.C. | |

VANCAL 11827

2.3 PHYSIOGRAPHY & VEGETATION

The property lies within the rugged Coast Mountains, which are characterized by steep slopes and U-shaped valleys typical of a glaciated terrain. About 90% of the property can be easily traversed, whereas the remainder is either too steep or covered by glacial ice. Elevation varies from 200 m ASL in the Iskut River valley to over 1700 m ASL along the eastern claim boundary.

Vegetation consists of mature timber with locally thick undergrowth at the lowest elevations, passing into subalpine forest at 1000 metres, and finally into alpine growth characterized by scrub grasses and heather above 1200 metres. At the highest elevations and in areas of recent glacial activity, vegetation is absent.

2.4 CLAIM DATA

The Barytex Mystery and Chance claims were staked in 1987 and optioned by Noranda in 1990. The relevant data is listed below.

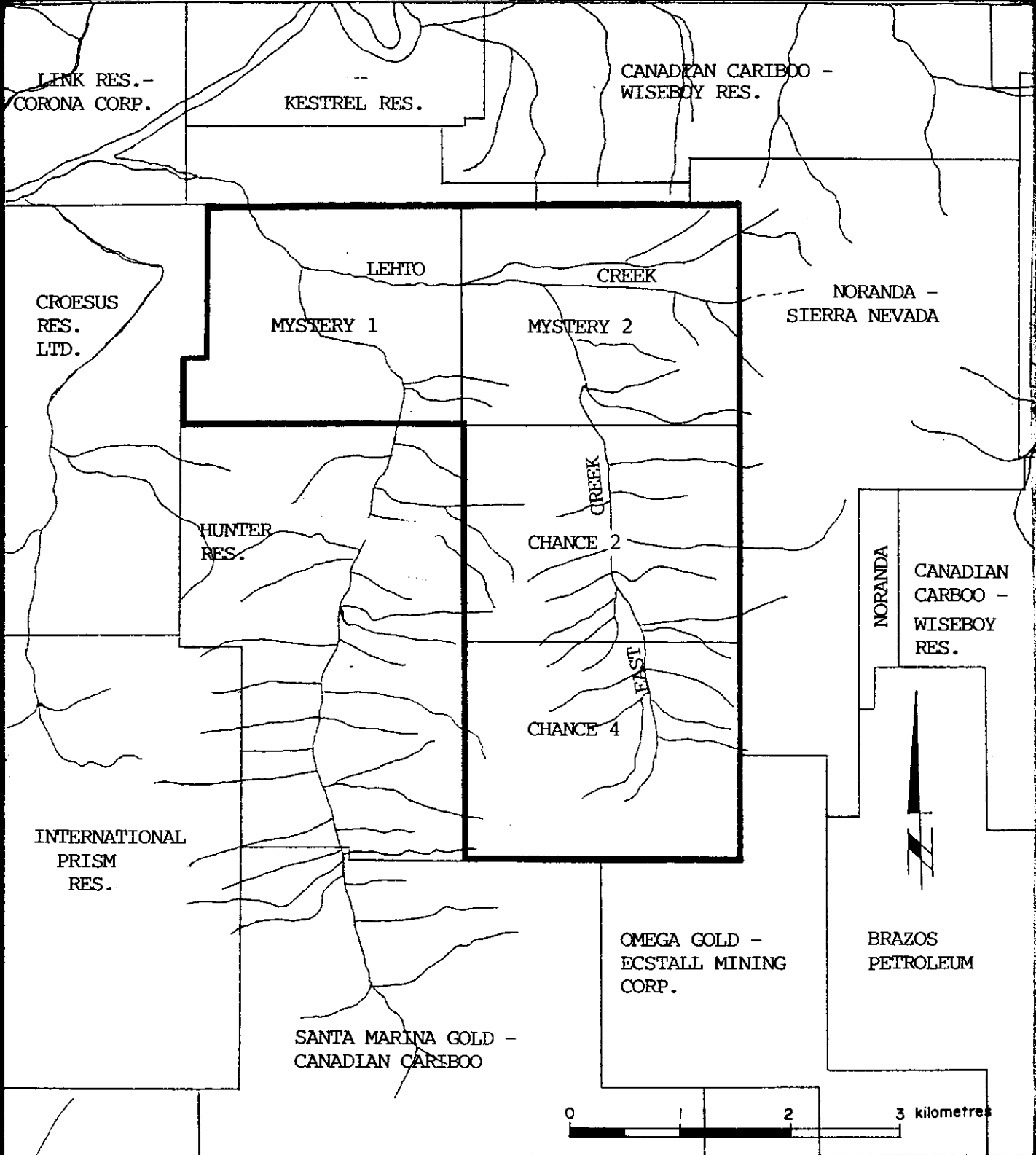
| <u>Name</u> | <u>Units</u> | <u>Record #</u> | <u>Record Date</u> | <u>Expiry Date</u> |
|-------------|--------------|-----------------|--------------------|--------------------|
| Chance 2 | 20 | 4256 | Oct. 16, 1987 | 1994 |
| Chance 4 | 20 | 4648 | June 14, 1987 | 1994 |
| Mystery 1 | 20 | 4649 | June 14, 1987 | 1994 |
| Mystery 2 | 20 | 4650 | June 14, 1987 | 1994 |

2.5 PREVIOUS WORK

The area covered by the Barytex claims has seen little exploration activity until very recently. The first work recorded in the public domain was in 1987 by Pamicon Developments Limited, for Barytex Resources Limited., who carried out limited reconnaissance prospecting and sampling. This program identified favourable geological units and gold-bearing quartz/sulphide vein float.

During 1988, an expanded program including an airborne geophysical survey was carried out with encouraging results. In 1989, Noranda Exploration Company, Limited conducted a property examination confirming the Barytex data and indicated additional mineralization.

The results of Noranda's 1990 exploration program are



| | | |
|---------------|----------------------------|-----------------|
| REVISED | BARYTEX PROPERTY | |
| | CLAIM SKETCH | |
| PROJ. No. 295 | SURVEY BY: _____ | DATE: Nov. 1990 |
| N.T.S. 104B10 | DRAWN BY: _____ | SCALE: 1:50,000 |
| DWG. No. | NORANDA EXPLORATION | |
| FIG. 2 | OFFICE: P.G. | |

reported in "Geological, Geochemical and Geophysical Report on the Barytex Property" by M. Savell and E. Grill which was submitted for assessment purposes.

3.0 REGIONAL GEOLOGY

The area lies near the western edge of the Intermontane Belt of the Canadian Cordillera, where it parallels the Coast Plutonic Complex. Recent work by both the Geological Survey of Canada and the Geological Services Branch of British Columbia provides a framework of the complex geology of this rugged area. The area includes four, unconformity bounded, tectonostratigraphic assemblages: 1) Paleozoic Stikine Assemblage; 2) Triassic-Jurassic volcano-plutonic complexes of Stikinia; 3) Middle and Upper Jurassic Bowser overlap assemblage; and 4) Tertiary Coast Plutonic Complex. (Anderson, 1989) This section of the Intermontane Belt forms the west limb of the "Stikine Arch," a roughly horseshoe shaped area of Upper Triassic to Jurassic stratigraphy that hosts most of the significant mineral deposits in northwest B.C. and the Toadogone gold camp.

The Paleozoic Stikine Assemblage contains the oldest stratigraphy and is divisible into three distinct, volcanic-carbonate units: Early Devonian limestones and intermediate to felsic volcanics; Mississippian bioclastic limestones; and Permian fragmental volcanics and limestone. These rocks are metamorphosed and highly deformed.

The Triassic-Jurassic volcano-plutonic complex (Stewart Complex) consists of both the Triassic Stuhini Group and the Jurassic Hazelton Group. The Stuhini Group consists of limestone and mafic volcanics deposited in an island arc environment. The Stuhini hosts the Snip and Johnny Mountain structural gold deposits. Hazelton rocks consist of andesitic breccias/lavas, felsic tuffs/breccias, and maroon-green volcanic sediments (siltstone, greywacke, conglomerate, and black shale) deposited in an island arc environment. Black shales (Eskay Creek facies) overlying felsic volcanics (Mt. Dilworth Formation) host the Eskay Creek gold deposits. Map units 1 and 2 of the property geology map correlate with Jurassic Hazelton Group Volcanics.

Sub-volcanic intrusions accompany most of the volcanic centres of the Mesozoic island arcs and range from Alaskan type ultramafics to felsic dykes. Distinctive porphyritic dykes link Upper Triassic and Lower Jurassic volcanics with their plutonic equivalents. Many of the significant mineral deposits in the Stewart Complex are found to have a close association with volcanic centres. Map units 3 and 4 of the property geology map belong to this intrusive episode.

The Middle and Upper Jurassic Bowser Overlap Assemblage predominantly consists of turbidite black clastics deposited in the Bowser Basin which formed as a result of uplift to the west due to emplacement of the Coast Range Intrusives.

The Tertiary Coast Plutonic Complex consists of post-tectonic, felsic plutons. Eastward younging of strata and local zones of high strain attest to intrusion and uplift of the complex. This intrusive episode is represented by map unit 5 on the property geology map.

Locally, Tertiary to Recent subaerial volcanics cover low lying areas.

4.0 DIAMOND DRILLING

In early September a unitized, helicopter transportable, hydraulic, wireline JT 2000 drill rig using thinwall BGDGM rods was mobilized to the property. A total of 213.4 metres in two holes was drilled. Low cloud ceilings and thick fog resulted in unscheduled delays and cost overruns during the program. Collar locations are shown on figure 3 and cross sections with geology and analytical results of selected core intervals on figures 4 and 5. The core is currently stored on the property at site BT-91-2.

Hole #BT-91-1 was collared on the Alpine grid at 12588E, 9816N to test a coincident I.P. and Au soil geochem anomaly along the mineralized Ernie Creek trend. It intersected a sequence of andesitic tuffs cut by hornblende porphyry dykes and faults. Alteration is weak except in the main fault zone cut from 86.6 to 97.0 metres where pervasive Fe-carbonate alteration stains the rock orange brown. Millimetre to centimetre scale vuggy quartz veinlets are quite common, but selected core intervals returned only weakly anomalous Au values ranging between 15 and 41 ppb, except for the interval from 119.2 to 120.2 which contained minor chalcopyrite in a few 1 cm thick quartz veinlets and returned a value of 1980 ppb Au. The I.P. response is attributed to the 1

to 4% to fine disseminated pyrite and minor pyrite stringers found to a depth of about 82 metres.

Hole #BT-91-2 was collared on the West grid at 10590E, 10850N to test a strong chargeability anomaly coincident with the projected Ernie Creek Zone. It intersected a sequence of laminated, calcareous grey siltstones with a few narrow intervals of dacitic to andesitic volcanics. Fine disseminated and fracture filling pyrite and pyrrhotite is present over the entire length of the hole. The style of mineralization is similar to that in hornfelsed rocks adjacent to porphyry Cu orebodies. Trace amounts of chalcopyrite and sphalerite were also observed. A zone from 45.1 to 69.5 metres is pervasively fractured and bleached, with 5 to 10% pyrite and pyrrhotite. This zone is considered responsible for the chargeability anomaly. The only significant result from selected core intervals was 125 ppb Au from 10.7 to 15.9 metres in a pyritic dacite.

5.0 CONCLUSIONS

Chargeability anomalies along the Ernie Creek trend reflect disseminated, fracture filling, and fine stringers of pyrite and pyrrhotite. No significant mineralization was intersected. It is unlikely that a major ore body exists close to surface within in the area tested. The nature of the surface mineralization is narrow and discontinuous.

The volcanics intersected in hole #BT-91-1 are considered to belong to the Lower Jurassic Hazleton Group. They are massive with virtually no foliation. The hole on the west grid is at a considerably lower elevation (765 metres less) and the rocks are distinctly foliated, and in outcrop phyllitic. These are more likely Triassic or possibly Permian in age. Both the quartz-sulphide vein mineralization on the Alpine grid and the porphyry type pervasive sulphide mineralization on the West grid are believed to be related to hydrothermal activity that accompanied emplacement of the Lower-Mid Jurassic Lehto porphyry intrusion that transects the property south of the grid areas.

6.0 RECOMMENDATIONS

No further work is recommended at this time and the property should be returned to the vendor.

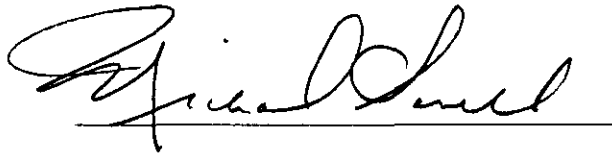
APPENDIX I
STATEMENT OF QUALIFICATIONS

APPENDIX I

STATEMENT OF QUALIFICATIONS

I, Michael Savell, of the City of Prince George, Province of British Columbia, do certify that:

1. I am a geologist residing at 3507 Rosia Road, Prince George, British Columbia.
2. I am a graduate of Dalhousie University, Halifax, Nova Scotia with a Bachelor's of Science (Honours) degree in Geology.
3. I am a member in good standing of the Geological Association of Canada, the Prospector's and Developer's Association and the B.C.-Yukon Chamber of Mines.
4. I presently hold the position of Sr. Project Geologist with Noranda Exploration Company, Limited and have been in their employ since 1980.

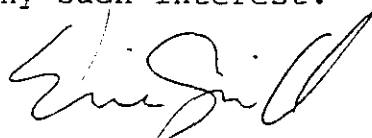


Michael Savell
Sr. Project Geologist
Noranda Exploration Co., Ltd.
(no personal liability)

STATEMENT OF QUALIFICATIONS

I, Eric C. Grill, of 1928 West 35th Avenue, Vancouver, in the Province of British Columbia, do hereby certify that:

1. I am a geologist in the employ of Noranda Exploration Company, Limited (no personal liability).
2. I graduated in 1986 from the University of British Columbia with a Bachelor of Science degree (honours) in Geology.
3. My primary employment since 1986 has been in the field of mineral exploration.
4. This report is based on work supervised and carried out by the author.
5. I have no interest in the property described herein, nor in the securities of any company associated with the property, nor do I expect to acquire any such interest.



Eric C. Grill,
Geologist

APPENDIX II
ANALYTICAL PROCEDURES

ANALYTICAL PROCEDURE

Soils, Silts, Rocks

The samples are dried and screened to -80 mesh. Rock samples are pulverized to -120 mesh. A 0.2 gram sample is digested with 3 ml of $\text{HClO}_4/\text{HNO}_3$ (4 to 1 ratio) at 203°C for four hours, and diluted to 11 ml with water. A Leeman PS 3000 is used to determine elemental contents by I.C.P. Note that the major oxide elements and Ba, Be, Ce, Ga, La and Li are rarely dissolved completely from geological materials with this acid dissolution method.

For Au analyses, a 10.0 gram sample of -80 mesh material is digested with aqua regia and determination made by A.A.

Heavy Mineral Concentrates

The entire concentrate is digested in aqua regia solution, and elemental concentrations of Au, Ag, Cu, Pb, and Zn are determined by A.A.

APPENDIX III

DRILL LOGS

NDRANDA EXPLORATION CO. LTD.
DIAMOND DRILL LOG

PROPERTY : BARYTEX
HOLE No. : BT-91-1
Grid System :
Collar Eastings : 12588.000
Collar Northings : 9816.000
Collar Elevations : 1450.000
Collar Bearing : 0.00
Grid Baseline : 90.00

Collar Inclination : -45.00
Grid Bearing : 0.00
Final Depth : 122.00
Claim No. : MYSTERY 2

PAGE : 1

Logged by : E.G., M.S.
Date : SEPT. 4 1991 - SEPT. 5 1991
Downhole Survey : ACID
Drilled By : J.T. THOMAS
Core Size : BG

| INTERVAL (m) | | MAJOR/MINOR | DESCRIPTION | SAMPLE | INTERVAL (m) | | SAMPLE | GEOCHEMICAL SAMPLES |
|--------------|--------|-------------|--|--------|--------------|-------|--------|---------------------|
| FROM | TO | UNITS | | NUMBER | FROM | TO | WIDTH | |
| 0.00 | 122.00 | | | | | | | |
| 0.00 | 1.52 | | OVERBURDEN | | | | | |
| | | | * | | | | | |
| 1.52 | 18.45 | | ANDESITIC TUFF | 041601 | 1.52 | 3.35 | 1.83 | 18 |
| | | | Pale grey-green, aphanitic, massive ash | 041602 | 3.35 | 6.35 | 3.00 | 6 |
| | | | tuff. Local lapilli tuff. | 041603 | 6.35 | 9.35 | 3.00 | 1 |
| | | | 1.52-3.35 Lapilli tuff. Creamy white to | 041604 | 9.35 | 12.35 | 3.00 | 4 |
| | | | pink, highly siliceous angular fragments | 041605 | 12.35 | 15.35 | 3.00 | 2 |
| | | | from 5 to 40 mm across, in green and/c | 041606 | 15.35 | 18.45 | 3.10 | 2 |
| | | | matrix. Minor limonite on fractures. | | | | | |
| | | | Scattered vuggy, fine (1-3mm) wide irreg | | | | | |
| | | | qtz stringers with black to orange oxide | | | | | |
| | | | stain. Local blurred or fuzzy appearance | | | | | |
| | | | Scattered fine rusty pits due to leached | | | | | |
| | | | dissem. py throughout. | | | | | |
| | | | 1-4% fine dissem. and stringer py. | | | | | |
| | | | 3.35-14.5 Ash tuff. Siliceous, with | | | | | |
| | | | sandy to silty texture, local scattered | | | | | |
| | | | coarser grains over 5 to 15cm intervals. | | | | | |
| | | | Sand sized fragments pale to dark green, | | | | | |
| | | | coarser "crystals" white with diffuse | | | | | |
| | | | edges. Scattered fine qtz veinlets, | | | | | |
| | | | locally vuggy with dark oxide stain. A | | | | | |
| | | | few calcite veinlets. | | | | | |
| | | | 14.5-14.9 Ash tuff. As above, but with | | | | | |
| | | | slightly bleached, yellow-green tinted | | | | | |
| | | | appearance. Fine, 0.5mm long black oxide | | | | | |
| | | | stained hairline fractures and minor py. | | | | | |
| | | | 14.9-18.45 Ash tuff. Scattered fract- | | | | | |
| | | | ures with very weak yellow-green stained | | | | | |
| | | | bleached haloes. | | | | | |
| | | | * | | | | | |
| 18.45 | 27.40 | | HORNBLende-FELDSPAR PORPHYRY DYKE | 041607 | 18.45 | 21.45 | 3.00 | 2 |
| | | | White feldspar and very dark green horn- | 041608 | 21.45 | 24.45 | 3.00 | 13 |
| | | | blende phenocrysts from 1 to 3 mm in a | 041609 | 24.45 | 27.40 | 2.95 | 6. |

PROPERTY : BARYTEX
HOLE No. : BT-91-1

PAGE : 2

| INTERVAL (m) | | MAJOR/MINOR UNITS | DESCRIPTION | SAMPLE NUMBER | INTERVAL (m) | | SAMPLE WIDTH | Au ppb | GEOCHEMICAL SAMPLES |
|--------------|-------|----------------------|--|------------------|--------------|-------|-----------------|-----------|---------------------|
| FROM | TO | | | | FROM | TO | | | |
| | | | pinkish grey aphanitic matrix. Local minor oxide stained hairline fractures. Phenocrysts tend to occur in clusters. 2% fine dissem. py * | | | | | | |
| 27.40 | 46.30 | | ANDESITIC TUFF | 041610 | 27.40 | 30.50 | 3.10 | 8 | |
| | | | As from 1.52 to 18.45. | 041611 | 30.50 | 33.50 | 3.00 | 15 | |
| | | | 27.4-28.0 Ash tuff. Green, siliceous. | 041612 | 33.50 | 36.50 | 3.00 | 36 | |
| | | | Crosscut by 1 to 10mm vuggy oxide stain- | 041613 | 36.50 | 39.50 | 3.00 | 14 | |
| | | | ed qtz veinlets at high core angles (10% | 041614 | 39.50 | 42.50 | 3.00 | 23 | |
| | | | by volume). Minor py in veinlets and | 041615 | 42.50 | 45.50 | 3.00 | 11 | |
| | | | dissem. py throughout. | 041616 | 45.50 | 48.50 | 3.00 | 11 | |
| | | | 28.0-30.5 As above but with fewer qtz veinlets. | | | | | | |
| | | | 30.5-32.5 Ash tuff with scattered sili- ceous lapilli fragments, scattered qtz veinlets and crosscutting oxide lined fractures. Abundant fine leached, ox- idized pits with white 1 mm haloes. | | | | | | |
| | | | 32.5-39.3 Lapilli tuff. Subangular to rounded pale pinkish white siliceous and dark aphanitic mafic fragments, 50 to 80% by volume in a sandy to silty green matrix. Local dark fragments in a white siliceous matrix. 3 cm qtz vein #80 to CA at 35.2m. Rusty, vuggy qtz veinlets at 35m. 3% dissem. and stringer py. | | | | | | |
| | | | 39.3-46.3 Ash tuff. Siliceous, med. green, scattered pale (feldspar) and mafic crystals. A few carb. and chl. veinlets. Rusty fractures throughout. 1-3% fine dissem. and stringer py. * | | | | | | |
| 46.30 | 47.20 | | WELDED LAPILLI TUFF | | | | | | |
| | | | Fine, med. to dark green mafic fragments and ragged, irregular shards, compressed fabric. Upper contact at 35 to CA. * | | | | | | |
| 47.20 | 63.00 | | ANDESITIC TUFF | 041617 | 48.50 | 51.50 | 3.00 | 3 | |
| | | | As from 1.35 to 18.45. | 041618 | 51.50 | 54.50 | 3.00 | 5 | |

NORANDA EXPLORATION CO. LTD.
DIAMOND DRILL LOG

PAGE : 3

YTEX
91-1

| AL (m) TO | MAJOR/MINOR UNITS | DESCRIPTION | SAMPLE NUMBER | INTERVAL (m) | | SAMPLE WIDTH | Au ppb | GEOCHEMICAL SAMPLES |
|--------------|----------------------|---|------------------|--------------|-------|-----------------|-----------|---------------------|
| | | | | FROM | TO | | | |
| | | 47.2-49.1 Lapilli tuff. Large pink siliceous and smaller dark green fragments in a green to milky white siliceous matrix. | 041619 | 54.50 | 57.50 | 3.00 | 11 | |
| | | | 041620 | 57.50 | 60.50 | 3.00 | 1 | |
| | | | 041621 | 60.50 | 63.50 | 3.00 | 38 | |
| | | 49.1-50.7 Fine ash tuff with scattered feldspar crystal. Unaltered. | | | | | | |
| | | 50.7-56.2 Lapilli tuff. Core very broken up. Local bleached intervals with py replacing mafic crystals (?). Dark oxides on some fractures. | | | | | | |
| | | 56.2-60.3 Lapilli tuff. Coarse, heterolithic with large rounded siliceous, white feldspar porphyry fragments, also welded (?) chloritic fragments and rounded dark green fragments. | | | | | | |
| | | 1 to 4% dissem. py. | | | | | | |
| | | 60.3-60.5 As above but with pervasive limonite staining. | | | | | | |
| | | 60.5-63.0 Pale grey-green tuff with coarse, subrounded cloudy white crystal fragments, minor dissem. py and limonite coated fractures, fine leached vugs. | | | | | | |
| | | * | | | | | | |
| 63.60 | | ARGILLIC ALTERED ZONE Pale creamy green, soft, sheared altered tuff, mottled texture. Limonite on fractures. | 041622 | 63.50 | 65.50 | 2.00 | 35 | |
| | | * | | | | | | |
| 68.90 | | WELDED LAPILLI TUFF As from 46.3 to 47.2. Compressed, ragged dark green mafic shards in a fine pale green matrix. | 041623 | 65.50 | 68.90 | 3.40 | 41 | |
| | | * | | | | | | |
| 69.00 | | BRECCIATED, SILICIFIED ZONE Dirty grey to grey-pink siliceous, pyritic clasts in a fine green matrix. Minor qtz veinlets. 10cm of 60% py at centre of zone. | 041624 | 68.90 | 69.90 | 1.00 | 6 | |
| | | * | | | | | | |
| 82.30 | | ANDESITIC TUFF As from 1.52 to 18.45. | 041625 | 69.90 | 72.90 | 3.00 | 4 | |

PROPERTY : BARYTEX
HOLE No. : BT-91-1

PAGE : 4

| INTERVAL (m) | | MAJOR/MINOR UNITS | DESCRIPTION | SAMPLE NUMBER | INTERVAL (m) | | SAMPLE WIDTH | Au ppb | GEOCHEMICAL SAMPLES |
|--------------|--------|----------------------|---|------------------|--------------|--------|-----------------|-----------|---------------------|
| FROM | TO | | | | FROM | TO | | | |
| | | | 69.8-69.9 Band of dark green, mafic, very fine grained volcanic. | | | | | | |
| | | | 69.9-88.2 Lapilli tuff. Contains 5 to 10% by volume of pale subangular to sub-rounded fragments. Minor dissem. py and narrow qtz veinlets. | | | | | | |
| | | | 88.2-88.3 Similar to above, but with 20 to 30% by volume of fragments (feldspar crystals) in a dark green chloritic matrix. | | | | | | |
| 82.00 | 82.30 | | * FAULT BRECCIA Angular fragments of wallrock in a green to brown clayey gouge. | | | | | | |
| 82.30 | 86.60 | | * ANDESITIC TUFF As from 69.9 to 88.2, but less than 5% fragments in first 1.5m. Limonite coated fractures, some pervasive pink to orange tinting due to Fe-carb alteration. | | | | | | |
| 86.60 | 97.00 | | * FAULT ZONE Shattered, extremely broken up core, with narrow (5-15 cm) zones of clayey gouge throughout. 90% recovery. Host is pervasively Fe-carb altered and orange-brown stained. Minor qtz veinlets with leached vugs, limonited coated fractures. | 041626 | 86.60 | 89.60 | 3.00 | 1 | |
| | | | | 041627 | 89.60 | 92.60 | 3.00 | 30 | |
| | | | | 041628 | 92.60 | 95.60 | 3.00 | 9 | |
| | | | | 041629 | 95.60 | 98.60 | 3.00 | 14 | |
| 97.00 | 122.00 | | * ANDESITIC TUFF As from 1.52 to 18.45. | 041630 | 98.60 | 101.60 | 3.00 | 7 | |
| | | | | 041631 | 119.20 | 120.20 | 1.00 | 1980 | |
| | | | 97.0-100.0 Pervasively Fe-carb altered and stained section, shattered as above, but no gouge zones. 5% vuggy qtz veinlets. | | | | | | |
| | | | 100.0-115.9 Ash tuff. Med. grey-green, dull, very fine grained, speckled texture, minor brittle fracturing. Limonite on fractures throughout. Minor dissem. py, less than 1% qtz veinlets. | | | | | | |
| | | | 115.9-122.0 Similar to above, but with | | | | | | |

NORANDA EXPLORATION CO. LTD.
DIAMOND DRILL LOG

PROPERTY : BARYTEX
HOLE No. : BT-91-1

PAGE : 5

| INTERVAL (m) | | MAJOR/MINOR UNITS | DESCRIPTION | SAMPLE NUMBER | INTERVAL (m) | | SAMPLE WIDTH | Au ppb | GEOCHEMICAL SAMPLES |
|--------------|----|----------------------|--|------------------|--------------|----|-----------------|-----------|---------------------|
| FROM | TO | | | | FROM | TO | | | |
| | | | mottled, tuffaceous texture. Some bleaching towards bottom. Two 5mm ank- erite veinlets with cpy at 119.8m, cut CA at 20. | | | | | | |
| | | | * | | | | | | |
| | | | 122.0 END OF HOLE | | | | | | |
| | | | * | | | | | | |
| | | | Abbreviations: | | | | | | |
| | | | and'c andesitic | | | | | | |
| | | | CA core axis (° degrees) | | | | | | |
| | | | carb carbonates | | | | | | |
| | | | chl chloritic | | | | | | |
| | | | cm centimetres | | | | | | |
| | | | cpy chalcopyrite | | | | | | |
| | | | dissem disseminated | | | | | | |
| | | | Fe iron | | | | | | |
| | | | m metres | | | | | | |
| | | | mm millimetres | | | | | | |
| | | | med medium | | | | | | |
| | | | po pyrrhotite | | | | | | |
| | | | py pyrite | | | | | | |
| | | | qtz quartz | | | | | | |
| | | | sph sphalerite | | | | | | |
| | | | * | | | | | | |
| | | | RECOVERY - 1.52 TO 18.45 90% | | | | | | |
| | | | 18.45 TO 86.6 95% | | | | | | |
| | | | 86.6 TO 97.0 90% | | | | | | |
| | | | 97.0 TO 122.0 95-100% | | | | | | |

NORANDA EXPLORATION CO. LTD.
DIAMOND DRILL LOG

PROPERTY : BARYTEX
HOLE No. : BT-91-2

PAGE : 3

| INTERVAL (m) | | MAJOR/MINOR UNITS | DESCRIPTION | SAMPLE NUMBER | INTERVAL (m) | | SAMPLE WIDTH | Au ppb | GEOCHEMICAL SAMPLES |
|--------------|----|----------------------|-----------------------|------------------|--------------|----|-----------------|-----------|---------------------|
| FROM | TO | | | | FROM | TO | | | |
| | | | RECOVERY - 95 TO 100% | | | | | | |

NORANDA EXPLORATION CO. LTD.
DIAMOND DRILL LOG

PROPERTY : BARYTEX
HOLE No. : BT-91-E

PAGE : 2

| INTERVAL (m) | | MAJOR/KIND UNITS | DESCRIPTION | SAMPLE NUMBER | INTERVAL (m) | | SAMPLE WIDTH | Au ppb | GEOCHEMICAL SAMPLES |
|--------------|-------|---------------------|--|------------------|--------------|-------|-----------------|-----------|---------------------|
| FROM | TO | | | | FROM | TO | | | |
| | | | healed, angular breccia zones with sharp crosscutting contacts at 45 degrees to CA. 10% fine disse. py. | | | | | | |
| | | | 45.1-69.5 Pervasively fractured and bleached section, with 5 to 10% disse. and fracture coating py and po, minor trace sph. | | | | | | |
| | | | 33.8-33.9, 44.5-44.8, 52.0-52.1, 58.2-58.3 | | | | | | |
| | | | 58.5-58.6, 68.7-68.8, 78.4-78.5, 73.5-73.6 | | | | | | |
| | | | Near massive veins and stringer zones of py and po, minor cpy, trace sph. | | | | | | |
| | | | * | | | | | | |
| 75.90 | 77.10 | | ANDESITE | | | | | | |
| | | | Pale to medium dull grey-green, fine grained massive andesitic volcanic with calcite filled amygdules. Vaguely banded at approx. 30 cm intervals, possibly flow or pillow contacts. | | | | | | |
| | | | * | | | | | | |
| 77.10 | 82.30 | | CHERTY SILTSTONE | | | | | | |
| | | | Similar in appearance from 28.0 to 75.9, except finer grained, cherty or siliceous and weakly bleached. Brittle and cone fractured throughout. 5% disse. and fracture coating py, po, trace cpy. | | | | | | |
| | | | * | | | | | | |
| 82.30 | 84.88 | | ANDESITE | | | | | | |
| | | | As from 75.9 to 77.1, with a fine speckled texture. Banded texture absent. Minor py | | | | | | |
| | | | * | | | | | | |
| 84.88 | 89.30 | | CHERTY SILTSTONE | 041640 | 85.48 | 88.40 | 3.00 | 3 | |
| | | | As from 77.1 to 82.3. 2 to 3% sulphides. | | | | | | |
| | | | * | | | | | | |
| 89.30 | 91.50 | | ANDESITE | | | | | | |
| | | | As from 82.3 to 84.8 | | | | | | |
| | | | * | | | | | | |
| | | | 91.5 END OF HOLE | | | | | | |
| | | | * | | | | | | |
| | | | see end of log for BT-91-1 for list of abbreviations | | | | | | |
| | | | * | | | | | | |

NORANDA EXPLORATION CO. LTD.
DIAMOND DRILL LOG

PROPERTY : BARYTEX
HOLE No. : BT-91-2
Grid System :
Collar Eastings : 18590.000
Collar Northings : 18850.000
Collar Elevations : 615.000
Collar Bearing : 0.00
Grid Baseline : 90.00

Collar Inclination : -45.00
Grid Bearing : 0.00
Final Depth : 91.50
Claim No. : MYSTERY 2

PAGE : 1

Logged by : M.S.
Date : SEPT. 7, 1991 - SEPT. 8, 1991
Downhole Survey : ACID TEST
Drilled By : J.T. THOMAS
Core Size : B5

| INTERVAL (m) | | MAJOR/MINOR | DESCRIPTION | SAMPLE | INTERVAL (m) | | SAMPLE | GEOCHEMICAL SAMPLES |
|--------------|-------|-------------|---|--------|--------------|-------|--------|---------------------|
| FROM | TO | UNITS | | NUMBER | FROM | TO | WIDTH | |
| 0.00 | 91.50 | | | | | | | |
| 0.00 | 10.70 | | OVERBURDEN | | | | | |
| | | | * | | | | | |
| 10.70 | 15.90 | | DACITE | 041632 | 10.70 | 13.70 | 3.00 | 125 |
| | | | Medium grey, fine grained, massive, speckled, dacitic volcanic or fine intermediate intrusive. Contains 5% fine dissemin. and fracture coating py and po, minor cpy. Bottom contact is sharp but jagged. | 041633 | 13.70 | 16.70 | 3.00 | 9 |
| | | | * | | | | | |
| 15.90 | 22.30 | | CALCAREOUS SILTSTONE | | | | | |
| | | | Pale to medium grey laminated, fine grained calcareous siltstone. Well defined laminations on mm to cm scale. Minor randomly oriented, mm scale Qtz veinlets and py stringers. Fractures are lined with fine py and po with minor cpy, and have mm scale bleached (altered) haloes. Sulphide content ranges from 1 to 5% as dissemin. and fracture coatings. Laminations range from 70 to 80 degrees to DR. | | | | | |
| | | | * | | | | | |
| 22.30 | 28.00 | | DACITE | | | | | |
| | | | As from 10.7 to 15.9. Sulphides as dissemin. and fracture coatings range from 2 to 3%. Several scattered, steep, jagged, milky white calcite veins and blebs, cm scale. | | | | | |
| | | | * | | | | | |
| 28.00 | 75.90 | | CALCAREOUS SILTSTONE | 041634 | 44.20 | 45.20 | 1.00 | 2 |
| | | | As from 15.9 to 22.3, except that color varies from mainly dark to medium grey. | 041635 | 49.70 | 52.70 | 3.00 | 5 |
| | | | Well laminated at 60 to 80 degrees to DR. | 041636 | 52.70 | 55.70 | 3.00 | 3 |
| | | | Sulphides as dissemin. and fracture coatings range from 1 to 5% except as noted below. | 041637 | 55.70 | 58.70 | 3.00 | 13 |
| | | | | 041638 | 58.70 | 61.70 | 3.00 | 7 |
| | | | | 041639 | 69.50 | 72.50 | 3.00 | 7 |
| | | | 38.7-39.0, 44.2-44.5, 47.6-47.9 Silica | | | | | |

APPENDIX IV

ANALYTICAL RESULTS - DRILLCORE

GEOCHEMICAL ANALYSIS CERTIFICATE *Barytex (MS)*Noranda Exploration Co. Ltd. PROJECT 9109-062 295 FILE # 91-4454 Page 1
1050 Davie St., Vancouver BC V6E 1N4

| SAMPLE# | Au* ppb |
|---------------|------------|
| 041601 DR | 18 |
| 041602 DR | 6 |
| 041603 DR | 1 |
| 041604 DR | 4 |
| 041605 DR | 2 |
| 041606 DR | 2 |
| 041607 DR | 2 |
| 041608 DR | 13 |
| 041609 DR | 6 |
| 041610 DR | 8 |
| 041611 DR | 15 |
| 041612 DR | 36 |
| 041613 DR | 14 |
| 041614 DR | 23 |
| 041615 DR | 11 |
| 041616 DR | 11 |
| 041617 DR | 3 |
| 041618 DR | 5 |
| 041619 DR | 11 |
| 041620 DR | 1 |
| 041621 DR | 38 |
| 041622 DR | 35 |
| 041623 DR | 41 |
| 041624 DR | 6 |
| 041625 DR | 4 |
| 041626 DR | 1 |
| 041627 DR | 30 |
| 041628 DR | 9 |
| 041629 DR | 14 |
| 041630 DR | 7 |
| 041631 DR | 1980 |
| 041632 DR | 125 |
| 041633 DR | 9 |
| 041634 DR | 2 |
| RE 041631 DR | 1790 |
| 041635 DR | 5 |
| 041636 DR | 3 |
| STANDARD AU-R | 490 |

RECEIVED
SEP 23 1991

*Copy: Mike
file: 295 Barytex*

- SAMPLE TYPE: P1-P2 CORE P3 ROCK
AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.
Samples beginning 'RE' are duplicate samples.

DATE RECEIVED: SEP 13 1991

DATE REPORT MAILED: *Sept 19/91.*

SIGNED BY.....D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

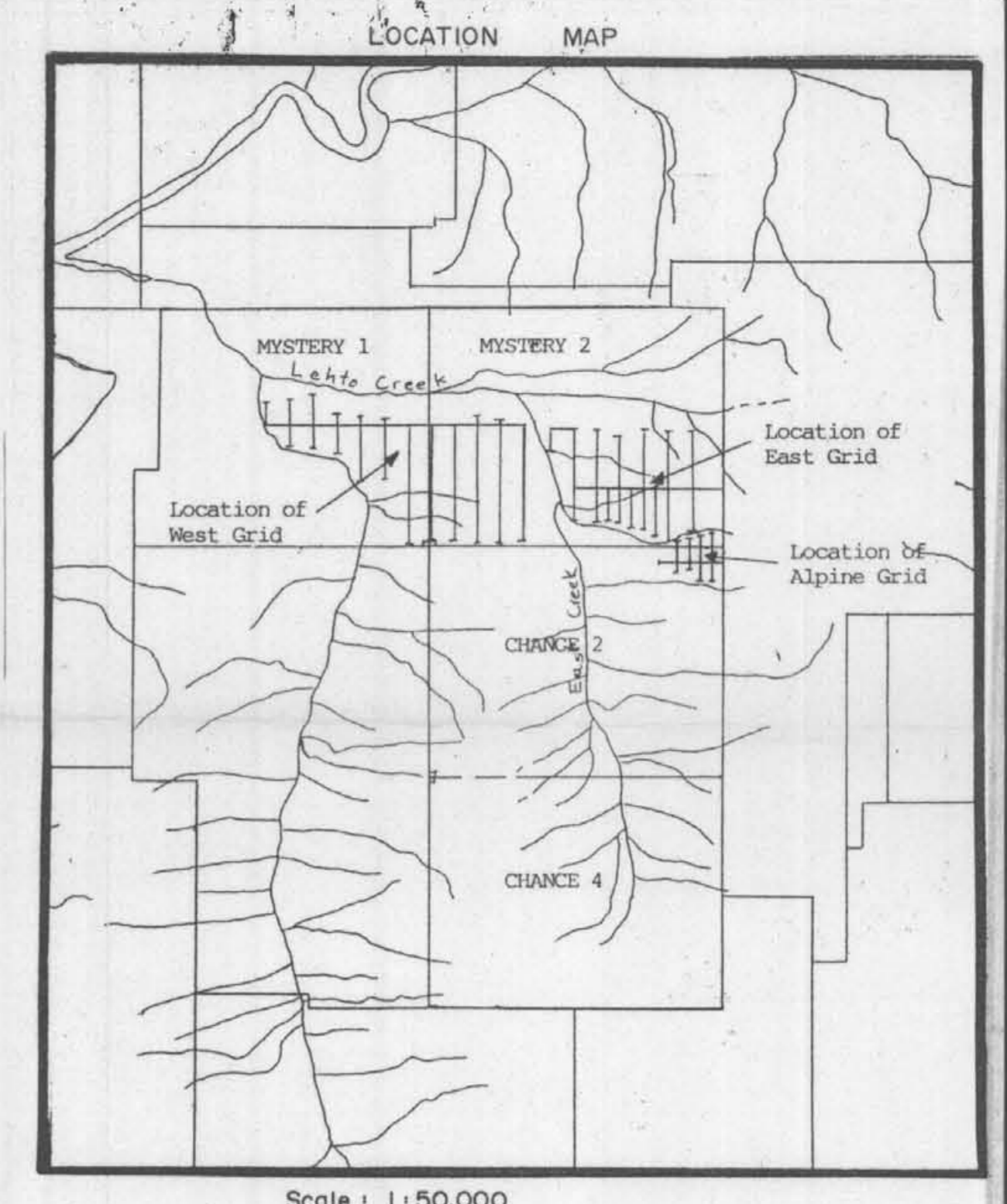
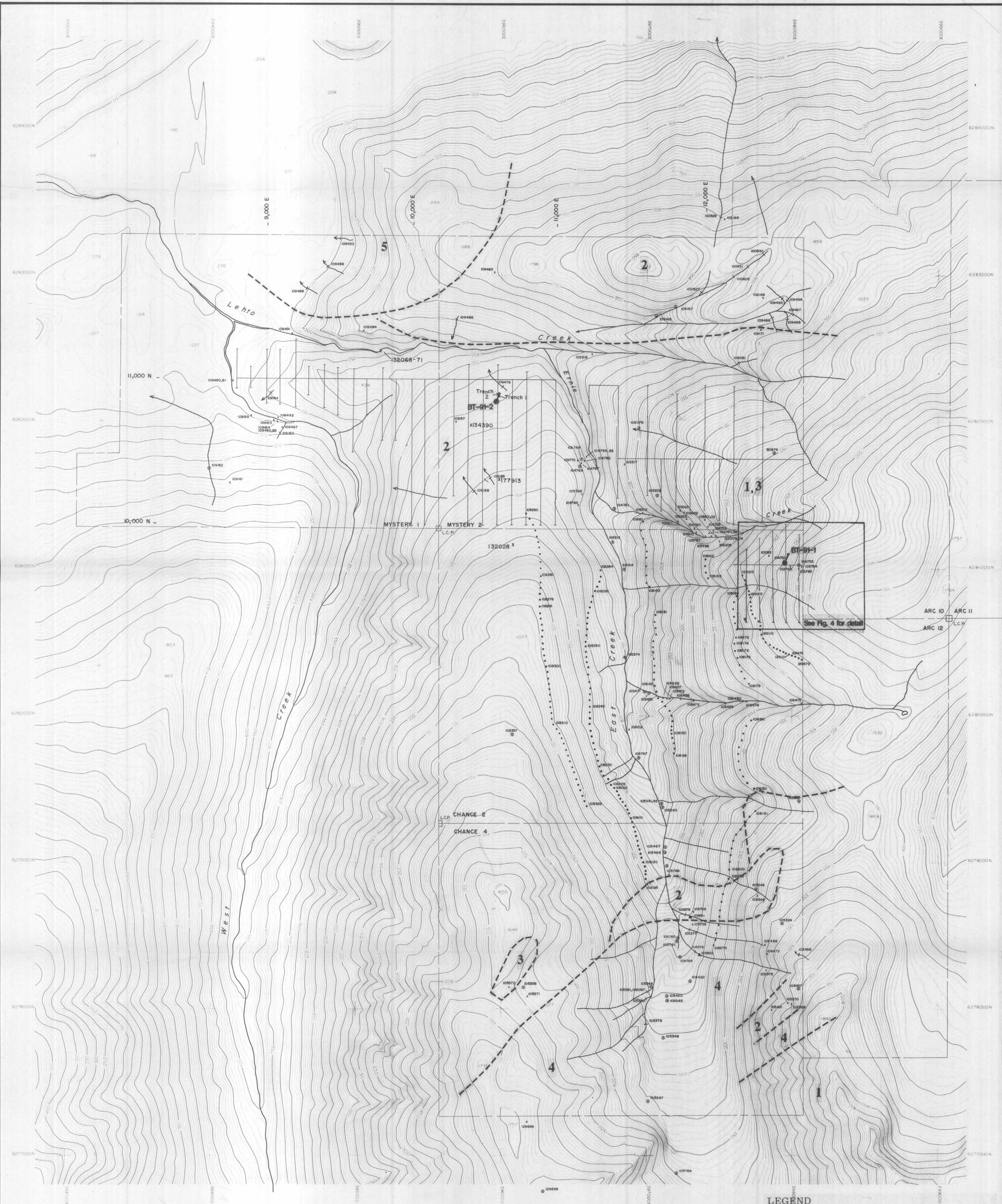
| SAMPLE# | Au* ppb |
|--------------|------------|
| 041637 DR | 13 |
| 041638 DR | 12 |
| 041639 DR | 7 |
| 041640 DR | 3 |
| RE 041640 DR | 7 |

Samples beginning 'RE' are duplicate samples.

APPENDIX V
STATEMENT OF COSTS

CLAIMS : MYSTERY-1, MYSTERY-2, CHANCE-4
DATES : JULY 1 TO OCTOBER 15, 1991
TYPE OF REPORT : DIAMOND DRILLING

| | | |
|----|---|--------------------|
| 1) | WAGES | |
| | Rate per day : \$186.33 | |
| | No. of days : 15 | |
| | Dates : 07/01/91 to 10/15/91 | |
| | TOTAL | \$ 2,794.95 |
| 2) | FOOD, ACCOMMODATION, AND SUPPLIES | |
| | Rate per day : \$38.29 | |
| | No. of days : 41 | |
| | Dates : 07/01/91 to 10/15/91 | |
| | TOTAL | \$ 1,569.89 |
| 3) | TRANSPORTATION | |
| | Rate per day : \$529.92 | |
| | No. of days : 41 | |
| | Dates : 07/01/91 to 10/15/91 | |
| | TOTAL | \$21,726.72 |
| 4) | ANALYSES | |
| | 40 core samples analyzed for Au @ \$15.00 each | \$ 600.00 |
| 5) | CONTRACTORS | |
| | 213.4 metres diamond drilling @ \$73.43 per metre | \$15,669.96 |
| | Drill pad construction : | \$ 2,425.00 |
| 6) | COST OF PREPARATION OF REPORT | |
| | Author | \$ 250.00 |
| | Drafting | \$ 75.00 |
| | Typing | \$ 75.00 |
| | TOTAL | \$ 400.00 |
| | TOTAL COST | \$45,186.52 |



BARYTEX - ROCK SAMPLE ANALYSES 1991

| SAMPLE No. | Cu ppm | Pb ppm | Zn ppm | Ag ppm | As ppm | Au ppm |
|------------|--------|--------|--------|--------|--------|--------|
| 132028 | 41 | 2 | 72 | 0.4 | 100 | 5 |
| 132068 | n.a. | n.a. | n.a. | n.a. | n.a. | 16 |
| 132069 | n.a. | n.a. | n.a. | n.a. | n.a. | 7 |
| 132070 | n.a. | n.a. | n.a. | n.a. | n.a. | 16 |
| 132071 | n.a. | n.a. | n.a. | n.a. | n.a. | 103 |
| 134390 | 56 | 2 | 53 | 0.4 | 138 | 53 |
| 177913 | 11 | 2 | 27 | 0.4 | 2 | 5 |

MYSTERY & CHANCE CLAIMS

SCALE 1:10000
CONTOUR INTERVAL 10 m

LEGEND

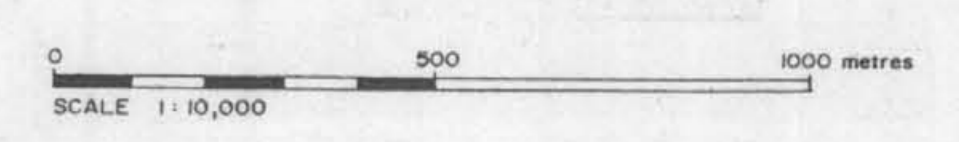
- Geology
1. Andesitic Volcanics - Jurassic
 2. Phylitic Sediments, minor volcanics - Triassic or Permian
 3. Hornblende-feldspar Porphyritic Dykes
 4. Quartz-feldspar Porphyry - Jurassic Lehto Intrusive
 5. Coast Range Intrusives - Cretaceous

GEOLOGICAL BRANCH ASSESSMENT REPORT

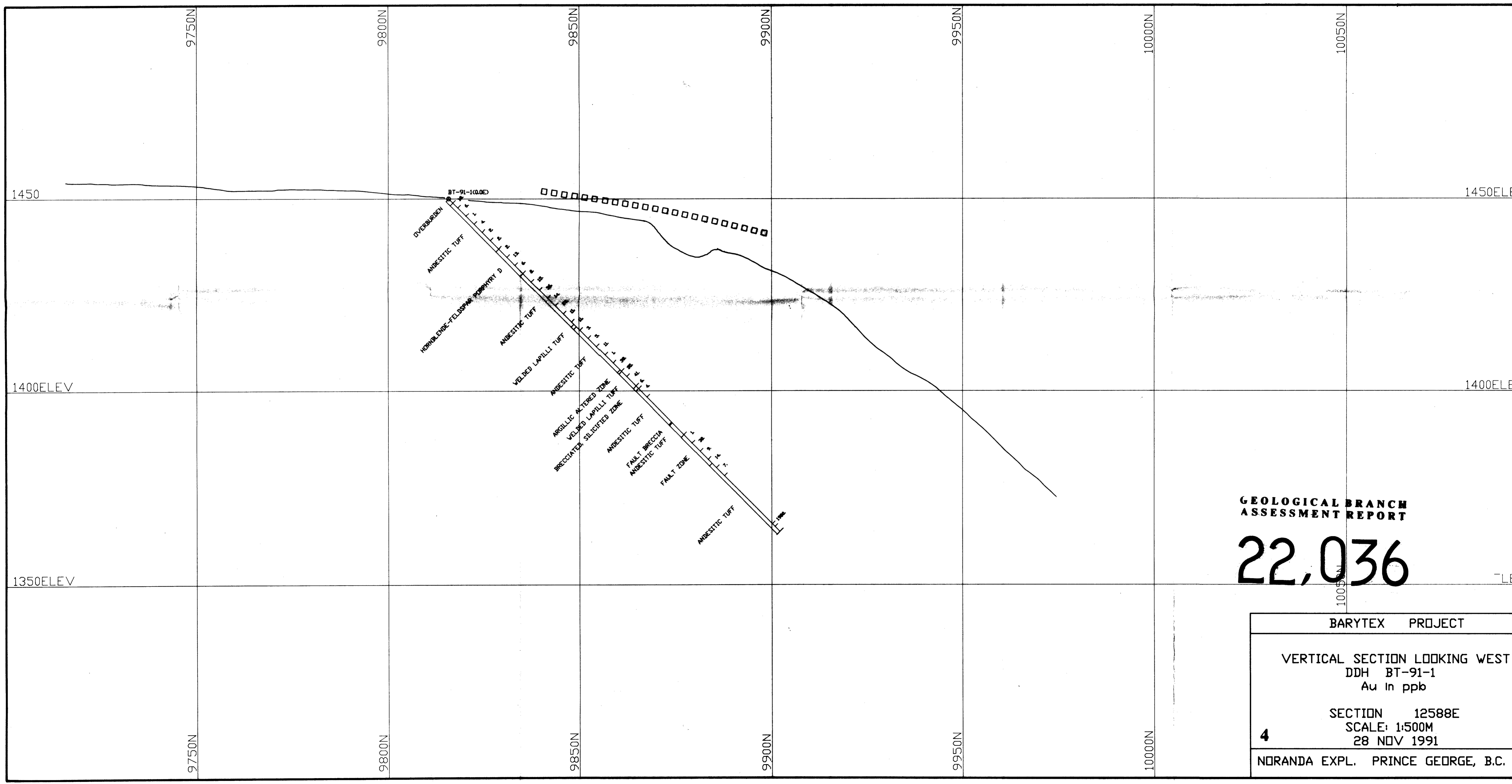
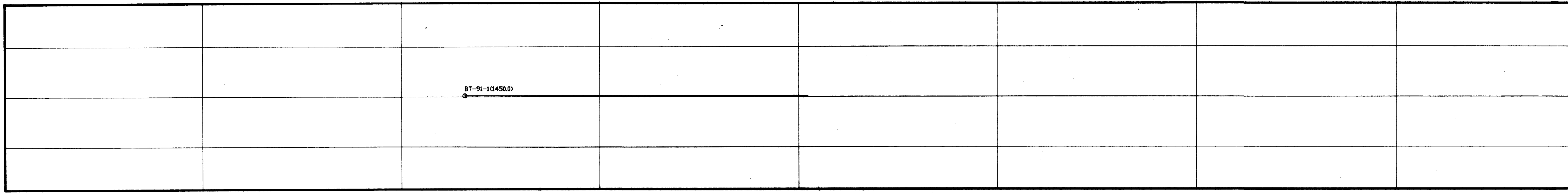
22,036

LEGEND

- Symbols
- Float Sample Location
 - ▲ Heavy Mineral Concentrate
 - Silt Sample Location
 - Soil Sample Location
 - Rock Sample Location
 - ⊙ Drillhole Collar



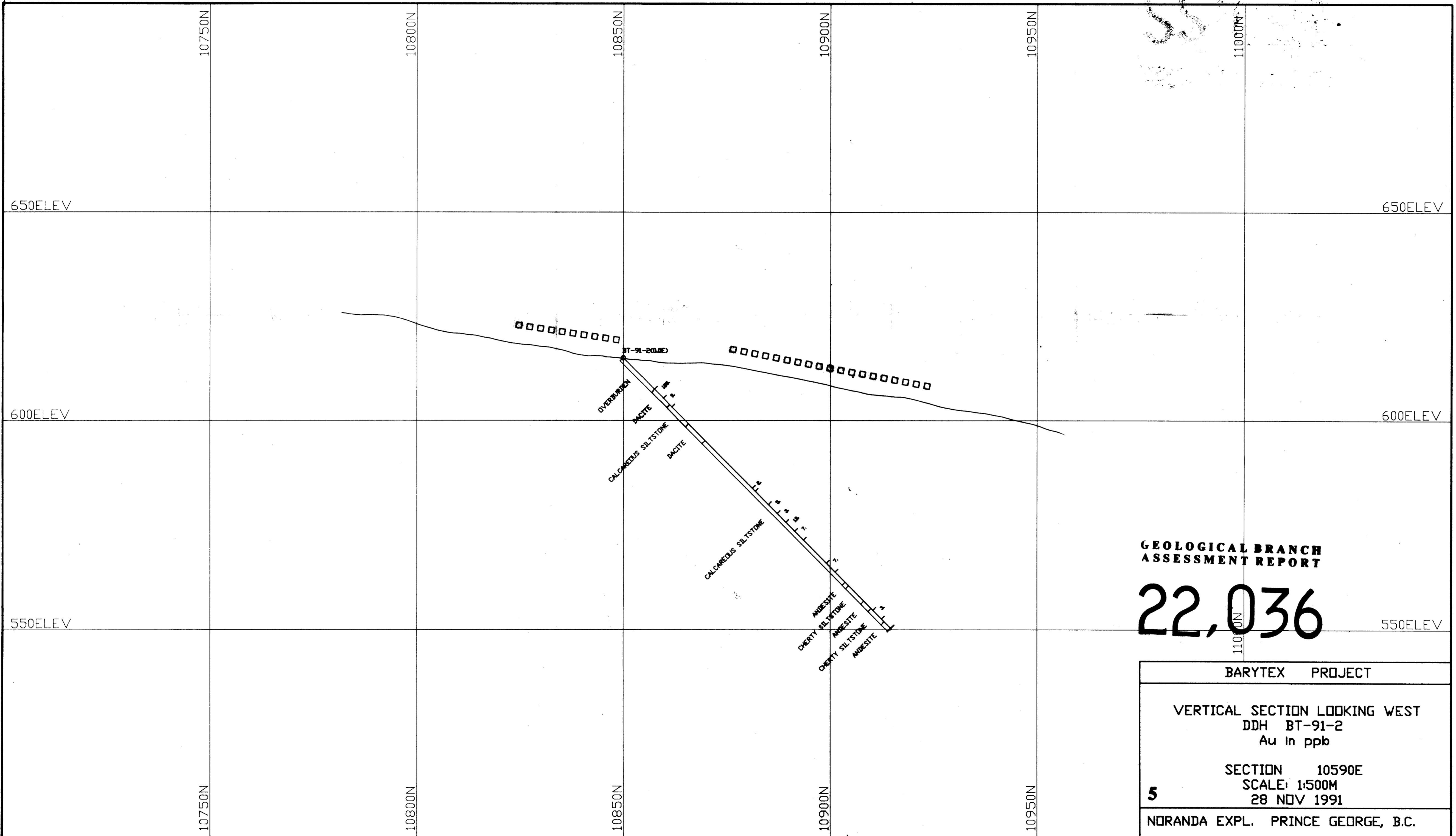
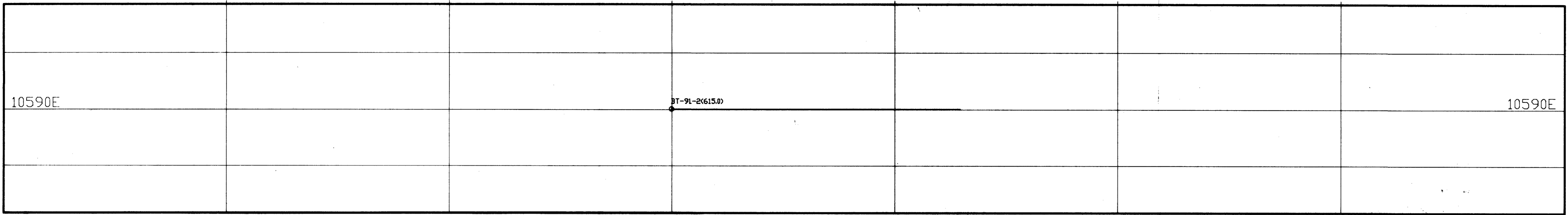
| | | |
|-----------------|---------------------------------|-----------------|
| REVISED | BARYTEX PROJECT | |
| NOV. 91 | SAMPLE LOCATIONS | |
| | GEOLOGY AND DRILLHOLE LOCATIONS | |
| PROJ. No. 295 | SURVEY BY: E.G. | DATE: AUG. 1990 |
| N.T.S. 1:48,100 | DRAWN BY: P.J.L. | SCALE: 1:10,000 |
| DWG. No. 3 | NORANDA EXPLORATION | |
| | OFFICE: PRINCE GEORGE, B.C. | |



GEOLOGICAL BRANCH
ASSESSMENT REPORT

22,036

| | |
|---|-----------------------------------|
| BARYTEX PROJECT | |
| VERTICAL SECTION LOOKING WEST DDH BT-91-1 Au in ppb | |
| SECTION 12588E | |
| SCALE: 1:500M | |
| 28 NOV 1991 | |
| 4 | NORANDA EXPL. PRINCE GEORGE, B.C. |



GEOLOGICAL BRANCH
ASSESSMENT REPORT

22,036

| | |
|---|-----------------------------------|
| BARYTEX PROJECT | |
| VERTICAL SECTION LOOKING WEST DDH BT-91-2 Au in ppb | |
| SECTION 10590E SCALE: 1:500M 28 NOV 1991 | |
| 5 | NORANDA EXPL. PRINCE GEORGE, B.C. |