

GEOLOGICAL, GEOCHEMICAL \& GEOPHYSICAL

## REPORT ON THE

EAGLE PROPERTY
(Eagle 1 to 5 Mineral Claims)
OMINECA MINING DIVISION
N.T.S. $93 \mathrm{~N} / 02$
Latitude:
Longitude: $124^{\circ} 5^{\circ} 2^{\prime}$
NORANDA
(no personal liability)
Sept 5 , 1989

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## SUMMARY

The Eagle project is a copper-gold porphyry prospect situated in close proximity to several new Cu-Au prospects, including Mt. Milligan. The objective of the Eagle program was to evaluate the potential for a similar sized system. Soil geochemistry has outlined nine copper anomalies that encompass most of the grid area and several spot gold anomalies, all of which are coincident with the large copper anomalies. Three significant copper-gold showings have been identified on the property to date. The Induced Polarization survey has outlined several anomalous zones that are interpreted to be moderate to strong conductors. The magnetometer survey has outlined a large highly magnetic zone in the south surrounded by a much lower magnetic halo; indicative of a large intrusive body and a possible alteration zone.

Several drill targets have already been outlined, but additional gridwork, soiling and geophysics are recommended to best exploit the property.

## INTRODUCTION

PURPOSE:
The Eagle property was staked to cover two porphyry style Cu showings situated in the same geological setting as the Mt. Milligan Cu-Au porphyry, 50 km to the east.

The 1989 field work consisted of geochemical, magnetometer, geologic, and induced polarization surveys between and around the known copper showings and were designed to evaluate the size potential and precious metal content of the known mineral system.

## LOCATION \& ACCESS:

The Eagle property is located in the Omineca Mining
Division, approximately 210 km northwest of Prince George. The grid work was done on the southern shore at the east end of Tchentlo lake (see Figures 1 \& 2).

Access to the property can be gained by a 23 km boat ride from the Tchentlo Lake Lodge at the west end of the lake, or by float plane and helicopter out of Fort St. James. The property is situated 15 km from all weather logging roads to the south.

## PHYSIOGRAPHY:

The property is located on a gently sloping mountain with an elevation range from 872 metres to 1472 metres. The vegetation is dominantly mature spruce, pine and balsam in the lower areas, while higher up the hill, scrub spruce and pine along with slide alder tend to dominate. There are also common swamp regions which consist of willow and devils club.




CLAIM MAP

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NOR ANDA EXPLORATION office: Prince George

## CLAIM STATISTICS:

The Eagle property consist of 5 claims listed in the table below. Noranda Exploration holds an option to acquire the Eagle $1 \& 2$ claims from the owner, W. H. Halleran. The Eagle 3, 4, and 5 claims were staked by Noranda for $W$. H. Halleran and are part of the option agreement. The claims are shown in Figure 3.


## PREVIOUS WORK:

The earliest recorded work on the property was done on behalf of the West Coast Mining and Exploration Company in August 1966. An Induced Polarization survey was completed on the Nighthawk claim group over the Nighthawk copper showings. The survey delineated a steeply westward dipping responsive body with an estimated thickness of 100 to 200 feet. A second I.P. survey was conducted on the property in 1967. This survey covered an expanded grid in the area of the Nighthawk showings. Three primary anomalies were outlined, one of which is located over the Nighthawk zone. This anomaly was interpreted to be dipping steeply eastward.

The Boranda Exploration Corporation Ltd. conducted work on the property in April to July 1971, which included an EM survey, magnetometer survey, induced polarization survey and a geochemical survey. All of these surveys were done at 1000 foot line spacing and 100 to 200 foot sample spacing. This work covered much of the area on the south shore of Tchentlo Lake.

Several anomalous areas were outlined by the soil geochemistry and geophysics surveys. It was reported that small copper showings were found associated with north trending shears. Samples were analyzed for copper only. Drill core found on the property indicates that approximately 3,000' of diamond drilling had been completed in 1971 and 1974 in the area around the Nighthawk showing, unfortunately no records are available.

There has been no work reported since the 1971 work.

The Eagle 1 and 2 claims were then staked in July 1988 by $W$. H. Halleran. This area was chosen because of it's known copper showings, aeromagnetic signature, and it's similarity to the Mount Milligan and Tas properties (see Figure 3).

REGIONAL GEOLOGY:
The dominant structural feature in the area of the Eagle property is the Pinchi Fault zone. To the west of the Pinchi Fault are the Permian rocks of the Cache Creek Group, and to the east are the Upper Triassic-Lower Jurassic rocks of the Takla Group. The Pinchi Fault zone is trending approximately 160 degrees and runs through the western leg of Tchentlo lake.

The Takla Group rocks are found in a large structural feature called the Quesnel Trough, which is a subdivision of the Intermontane tectonic belt. The Quesnel Trough is fault bounded to the west by the Pinchi Fault, and to the east by a major eastward merging shear zone. The narrow belt of rocks in the Quesnel trough have been traced southward to beyond the international border.

The Quesnel Trough was the site of extensive island-arc volcanism and associated volcanic derived sedimentation. These rocks are members of the Takla Group and are Upper Triassic to Lower Jurassic in age. The most common lithologies within this group are: argillites, augite porphyries, feldspar porphyries, and andesitic tuffs, flows and breccias.

Block faulting and tilting are the dominant structural styles in and around the quesnel Trough. The quesnel trough is in fault contact with older rocks to the east and west and is therefore thought to be a graben.

The Upper Triassic to Middle Jurassic Hogem batholith along with other "Omineca Intrusives" intrude the Takla Group rocks of the Quesnel trough. Garnett et. al, suggests; "There are three phases of the Hogem batholith distinguished on the basis of age and lithology. The earliest phase I consists of diorites, monzonites, and granodiorites. A later phase II consists mainly of syenites. The latest phase III consists of granites and quartz syenites."


## PROPERTY GEOLOGY:

The Eagle property and surrounding area are underlain by the Upper Triassic-Lower Jurassic Takla group. The Takla group is comprised of andesitic and basaltic volcanics, tuffs, breccias, argillites, and shales. The Takla group was later intruded by several phases of the upper Triassic to lower Jurassic Hogem batholith and other "Omineca Intrusions". The Eagle claim group covers an intrusive body that is dominantly a diorite. There are also some small dykes and irregular shaped bodies that have compositions varying from gabbro to granite, but these comprise only a small part of the main intrusive body. Towards the western boundary of the Eagle 3 and 4 claims, there was a biotite hornfels that was interpreted to be the contact zone with the Takla volcanics.

The dominant intrusive phase is light grey green in colour, medium to coarse grained diorite containing $70-80 \%$ plagioclase, 5-15\% magnetite, 5-10\% hornblende, 5-10\% augite, and 1-5\% biotite. A second intrusive phase consists of a light grey medium to coarse grained monzonite containing $50-60 \%$ plagioclase, 5-20\% K-feldspar, 5-15\% magnetite, 5-10\% hornblende, 5-10\% augite and 1-5\% biotite. The sulfides present include pyrite and chalcopyrite; with the content varying from trace in the host rock up to veins of semi-massive sulfide at the Vector showing. Other reported intrusive types including granite and gabbro have only rare occurrences which are usually as small dykes.

Three significant Cu-Au showings have been identified to date: 1) the Nighthawk, 2) the Mid, 3) the Vector.

The Nighthawk showing is located near the highest point of the property. The showing consists of disseminated to semimassive pockets and stockwork veinlets of chalcopyrite and pyrite in altered diorite. Alteration includes chlorite and epidote, and can be easily observed in areas of strong copper mineralization. past diamond drilling was focused on this zone, but unfortunately, results are not available.

The Mid Zone is located in an area of very strong propylitic alteration. The showing is a shear zone approximately 2 m wide that contains 15-20\% pyrite and chalcopyrite in a strong chloritic alteration zone. This showing is only exposed over a few metres in the road cut.

The vector Zone in the north part of the property is a fairly significant copper showing that can be traced in outcrop for up to 350 metres along a creek. This zone contains strong to
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intense propylitic alteration through most of the strike length. The zones of propylitic alteration invariably contain 2-3\% pyrite and 2-5\% chalcopyrite. The most common mode of occurrence of the sulfides is as fracture filling veinlets 1 mm to 8 cm thick (semi-massive sulfide) surrounded by a albite-chlorite-magnetite alteration halo with pervasive finely disseminated sulfides. There are some occurrences of the sulfides with massive magnetite in what appears to be a brecciated zone of the intrusive.

These intrusive rocks are moderately fractured with the principle shear zones trending northwest which corresponds to the orientation of the Pinchi fault zone to the west. The two dominant fractures have average orientations of: 1) strike $150^{\circ}$, dip $65^{\circ}$ East, and, 2) strike $50^{\circ}$, dip $40^{\circ}$ West. The main copper showings are associated with these northwest trending shear zones, with the three main showings forming a roughly linear feature striking at approximately $150^{\circ}$.

## WORK UNDERTAKEN

A total of 366 man days were spent working on the Eagle project between September 5, 1989 and November 5, 1989.

## LINECUTTING:

A total of 30 km of grid lines and access roads were cut. The baseline of the existing grid was cut approximately 2.5 km at 133 degrees. Wing lines were cut 1 km east and west of the baseline every 400 metres. In the area of $\mathrm{L} 41600-43625 \mathrm{~N}$, the line spacing was 200 metres. An old access road was re-cut from Tchentlo Lake to the south end of the grid.

## GEOCHEMISTRY:

A total of 996 B-horizon soil samples were taken using grub hoes and soil augers from depths ranging from 15 to 60 cm . The soil samples were placed in kraft wet-strength paper bags, dried, then shipped to Noranda's lab in Vancouver, B.C. for analysis. They were then analyzed for copper and gold and plotted on 1:5,000 scale maps, Figures $4 \& 5$ (at the rear of this report). Results are in Appendix IV.

## ROCK SAMPLING:

A total of 98 rock samples were collected from the Eagle property. These were shipped to Acme Analytical Laboratories Ltd., Vancouver, B.C. and analyzed by 30 element ICP method and Au. (Appendix IV).

## GEOPHYSICS:

During October 1989, geophysical surveys consisting of magnetics and time-domain I.P. were completed in the grid area. A total of 13 km of Induced Polarization survey and 32.5 km of magnetometer survey were completed. The magnetometer survey covers most of the grid from L40000-L43625N, 39000E-41000E. The induced polarization survey covers most of the grid from L 41600 N , $39000-41000 \mathrm{E}$ to $\mathrm{L} 43625 \mathrm{~N}, 39000-41000 \mathrm{E}$.

Instrumentation -
The magnetometer survey was completed by Noranda personnel and employed an EDA magnetometer system which enabled collected data to be corrected for diurnal variations to an accuracy of 1 to 2 nT via a recording base station. The I.P. surveys were also carried out by Noranda personnel and employed a BRGM IP6 timedomain receiver and a Phoenix Geophysics transmitter. A 50 meter dipole-dipole array was used with readings recorded down to the fifth separation ( $n=5$ ). The I.P. data is presented in pseudosection form at a scale of $1: 5000$ while the magnetic data is presented in contoured, plan form at a scale of 1:5000 (see Figures 7 \& 8).

Discussion of Survey Results -
A. Magnetics Survey

The survey data of the original contoured magnetic map has been processed using a 7 -point moving average filter applied to each survey line to yield a smoother magnetic map. The magnetic interpretation has been transferred to the original map from the filtered map and shows three types of susceptibility signatures.

1) A dominant, very active zone of high magnitudes exhibiting very sharp gradients that are probably a result of very local magnetic features such as disseminated magnetite which is known to occur frequently within highly altered intrusive rocks. This signature could be considered bounded by the 500 nT contour and
is especially prevalent in the general $S W$ area of the grid while also being found in the extreme NW corner. A dike-like feature (\#7) near the baseline trends roughly parallel to the baseline across Lines 43400N - 42825N.
2) A very low susceptibility unit (alteration?) which could be considered bounded by and has lower values than the datum level contour; it is found mainly in the area east of the baseline. Linear breaks (\#3,5,6,8) are prevalent. A narrow and very elongated feature (\#1) lies $W$ of the baseline striking across Lines 43000 N - 41400N. Because of its stretched appearance and its isolation from the rest of the unit, it is believed to be associated with a suspected break that lies immediately to its south.
3) The remainder of the grid shows a magnetic unit which is considerably less active and intense than Unit 1 with local gradients of up to approximately 500 nT . In the areas east of the baseline, this unit appears as "islands" cut by features \#5,6,8 of Unit 2. Some areas of this unit are especially quiet (eg. the area east of feature \#1). These quiet areas may represent a discrete magnetic unit.

There is an especially sharp contact between Units 1 and 3 at Lines 40600 N - $40000 / 40200 \mathrm{E}$. Very high Au geochem results are found in this contact area.

All 3 units are present in the area of magnetic features \#3 and \#4. Features \#3 and \#4 may be fault expressions brought about by, or causing this contact area. This contact area seems to be controlling the western extent of a broad anomalous geochem area since no significant geochem results are present west of the baseline.

Feature \#2 is a distinct body, possibly a narrow, vertical prism, of different susceptibility than the magnetic units discussed above. Its ends well defined by the dipolar contour signatures.
B. I.P. SURVEY
L. $43625 \mathrm{~N}:$ Two broad I.P. zones are outlined here. A shallow, strong polarizable zone is located at the west end of the line. Two high resistivity zones are also identified.
L. 43225 N : A strong, shallow chargeability zone is centred at 39650E which is directly associated with a high resistivity zone.

A moderate, very shallow I.P. signature with a coincident resistivity response is found at 39900 E .
L. $43000 \mathrm{~N}:$ A strong, wide I.P. zone of limited depth extent with coincidental resistivity response is centred at 40000 E and is the extension of the moderate anomaly from the previous line. This zone is marked "A" and is coincident with the magnetic dike feature.
L.42825N: A strong, depth limited I.P. response outcrops and is centred at 40450 E and lies between two high resistivity structures which also outcrop. This anomaly, called Zone B, corresponds to a known showing and a spot high Au geochem. The eastern resistivity structure at 40650 E appears to be either depth limited or an off-line response with its terminus lying zar. The 2 bulls-eye I.P. anomalies at the east portion of the line are considered to be noisy and hence invalid. Readings at the extreme west end are also noisy and have not been recorded.
L.42600N: Zone B continues although it weakens from the previous line. A weak, shallow I.P. anomaly is open at the east end of the line. Structural control could explain the severe bending of the zone here.
L.42425N: Zone $B$ outcrops, strengthens and continues. The depth extent of the zone here is more limited than on L.42825N. A wide, deep and moderate I.P. zone with a complex associated resistivity signature lies immediately to the east of Zone B.
L.42200N: Zone $B$ weakens and narrows. A moderate I.P. response with moderate resistivity lies open at the west end of the line.
L. 42200N: Zone $C$ develops at 39850E, and is associated with moderate resistivity, with the top of the source lying at depth $(30 \mathrm{~m})$. At the west end, Zone D2 appears to blossom at depth with D1 developing at surface. Both are found within highly resistive rocks. A very weak, shallow I.P. response at 40275 E may be a continuation of Zone $B$. At the east end, two chargeable bodies, one shallow and the other at depth, are associated with high resistivity structures.
L.41600N: Zone $C$ is interpreted to broaden and shallow out. Zone $B$ possibly strengthens but is of very limited depth extent. Zone D1 goes to depth while another zone, D3, develops.

## CONCLUSIONS

Three significant $C u-A u$ showings have been identified to date. A large moderate to strong copper geochem anomaly is present over most of the existing grid area. There are several small gold geochem anomalies present as well.

There were several different conductive bodies discovered during the I.P. survey. Some of these anomalies coincide with known mineralization while others are covered with overburden. The I.P. anomalies coinciding with known mineralization offer excellent drill targets.

The magnetic survey shows several areas of distinct magnetic signature. The most dominant is an area of very high (>500 nT) magnetic intensity in the central portion of the grid. This coincides almost exactly with the main copper soil anomaly which covers an area of $2.2 \mathrm{~km} x 1.0 \mathrm{~km}$. This geochem anomaly includes both the Nighthawk and Mid Showings.

## RECOMMENDATIONS

The grid should be extended to the eastern border of the property. These lines should all be soil sampled, prospected, and mapped. The magnetometer survey should also be conducted to cover the eastern part of the property. A more extensive I.P. survey should be conducted in areas of poor bedrock exposure that have significant geochem anomalies. Several drill targets have already been identified from the I.P. survey and prospecting; these should be drilled.

## REFERENCES

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MCFALL, C. C., SAWYER, J. B. P. (1971): Nation Copper Project, Geophysical, Geochemical and Geological Surveys, B.C. Assessment Report No. 3337.

MOURITSEN, S. A., MOURITSEN, G. A. (1967): Geophysical Report on Induced Polarization Survey for West Coast Mining and Exploration on the Nation Copper and Alexander Lake Properties, B.C. Assessment Report No. 1056.

SCHMIDT, U., (1989): Summary Report on the Eagle Property, Omineca Mining Division.

| Name/Address | Position | Dates Worked |  | Man Days |
| :---: | :---: | :---: | :---: | :---: |
| Fraser Stewart |  | 10-31 | Oct | 22 |
| Prince George, BC |  | 01-05 | Nov | 5 |
|  |  | 27-30 | Nov | 4 |
| Andrew Turner Edmonton, Alta | Geologist | 05-30 | Sept | 26 |
|  |  | 01-15 | Oct | 15 |
|  |  | 02-05 | Nov | 4 |
| Mark Liskowich Regina, Sask | Geologist | 08-30 | Sept | 23 |
|  |  | 01-10 | Oct | 10 |
| Bill Kerby Vancouver, BC | Geophysical Assistant | 20-31 | Oct | 11 |
|  |  |  |  |  |
| Ted Wong Vancouver, BC | Geophysicist | 20-31 | Oct | 11 |
|  |  |  |  |  |
| Robert Head Prince George, BC | Field Assistant | 05-08 | Nov | 4 |
|  |  | 15-31 | Oct | 17 |
| Brian Harders <br> Prince George, BC | Field Assistant | 10-15 | Oct | 6 |
|  |  | 05-09 | Nov | 5 |
| Steve Kicey <br> Prince George, BC | Field Assistant | 10-31 | oct | 22 |
|  |  | 05-13 | Nov | 9 |
| Dave Harders <br> Prince George, BC | Field Assistant | 09-30 | Sept | 22 |
|  |  | 01-06 | Oct | 6 |
|  |  | 18-23 | Oct | 6 |
| Bruce Beler <br> Telkwa, BC | Field Assistant | 03-08 | Sept | 6 |
|  |  | 12-16 | Sept | 5 |
| Andrew Ferguson Tasmania | Field Assistant | 07-30 | Sept | 24 |
|  |  | 01-09 | Oct | 9 |
|  |  | 18-31 | Oct | 14 |
| Roy Harders Prince George, BC | Field Assistant | 11-30 | Sept | 24 |
|  |  | 01-15 | Oct | 15 |
|  |  | 19-25 | Oct | 7 |
| Richard Harders <br> Prince George, BC | Field Assistant | 09-30 | Sept | 22 |
|  |  | 01-06 | Oct | 6 |
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| Report on the |
| EAGLE PROPERTY (Eagle 1-5 claims) |

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APPENDIX III: STATEMENTS OF QUALIFICATIONS
Fraser Stewart Field GeologistTed WongAndrew Turner Field GeologistMark Liskowich

Field Geologist
Field Geologist

## APPENDIX

## STATEMENT OF QUALIFICATIONS

I, FRASER J. STEWART, hereby certify that:

1. I am a geologist residing at 302 - 1910 Renwick Crescent, Prince George, B. C.
2. I graduated from the University of Alberta in April 1989, with the degree of Bachelor of Science in Geology.
3. I have been employed by Noranda Exploration Company, Limited as a geologist since May 1989.
*. I personally took part in the surveys described in this report and that this report is based upon a personal knowledge of the property.


Fraser J. Stewart, (B.Sc.)

## STATEMENT E OF QUALIFICATIONS

I, Ted Wong, of the City of Vancouver, Province of British Columbia, hereby certify that:

1. I am a geophysicist residing in Burnaby, B,C.
2. I have graduated from the University of British Columbia in 1983 with a B.Sc. in Geophysics.
3. I am a professional geophysicist, registered with the Association of Professional Engineers, Geologists and Geophysicists of Alberta. I am a licensed professional geophysicist, registered with the Association of Professional Engineers, Geologists and Geophysicists of the Northwest Territories.
4. I have practised by profession on a continual basis since 1984.
5. I have been employed by Noranda Exploration Company, Limited since September, 1989.


Ted T. Wong, P. Geoph.

## STATEMENT OF QUALIEICATTONS

I, Andrew J. Turner, of Edmonton, Province of Alterta, do hereby certify that:

1. I am a Geologist residing at \#1210 Hillsborough place, Edmonton, Alberta.
2. I am a graduate of the University of Alberta with a B.SC. (Honors) in Geology (1989).
3. I am a member in training with the Association of Professional Engineers, Geologists and Geophysicists of Alberta (APEGGA).
4. I have been a contract Field Geologist with Noranda Exploration Company, Limited (no personal liability) since May, 1989.


RELEVANT TRAINING:

B.Sc. (1989) | University of Regina |  |
| :--- | :--- |
|  | Regina, Saskatchewan |
|  | Geology |

## RELEVANT EXPERIENCE:

| May 1989 . | Field Geologist <br> Noranda Exploration Company, Limited Prince George, B. C. |
| :---: | :---: |
| May 1988-Aug - 1988 | Senior Geological Assistant CaMeco/Sask. Mining \& Development Corp. La Rouge, Sask. |
| May 1987-Aug • 1987 | Geological Assistant Saskatchewan Mining \& Development Corp. La Rouge, Sask. |
| June 1986-Aug • 1986 | Geological Assistant Saskatchewan Energy \& Mines Precambrian Division Regina, Sask. |

PROFESSIONAL AFFILIATIONS:

Member, Saskatchewan Geological Society.




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| 137 | 40550 | 76 | 5 |  |  |
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| 14 | $41000 N-406 E 5 E$ | 78 | 10 |  |  |


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|  | $41000 N-40550 E$ | 80 | 5 |  |  |
| 16 | 40675 | 80 | 5 |  |  |
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| 18 | 40755 | 72 | 5 |  |  |
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| 25 | 40975 | 54 | 5 |  |  |
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| 27 | 41こ00N－39125E | 40 | 5 |  |  |
| 28 | 33175 | 146 | 5 |  |  |
| 53 | 33200 | E4 | 5 |  |  |
| 30 | 39른 | 30 | 5 |  |  |
| 31 | 39®50 | 36 | 5 |  |  |
| 32 | 39275 | 34 | 5 |  |  |
| 33 | 33375 | 135 | 5 |  |  |
| 34 | 39400 | 66 | 5 |  |  |
| 35 | 39405 | B8 | 5 |  |  |
| 36 | 37450 | E80 | 5 |  |  |
| 37 | 39475 | E1き | 5 |  |  |
| 58 | 39500 | 64 | 5 |  |  |
| 35 | 375E5 | E® | 5 |  |  |
| 1 | 59550 | 710 | 5 |  |  |
| $\because$ | 35575 | 96 | 5 |  |  |
| $4 E$ | 37600 | E18 | 5 |  |  |
| 43 | 39655 cirg． | 340 | 5 |  |  |
| 44 | 37650 cing． | 190 | 5 |  |  |
| 45 | 35675 | E60 | 5 |  |  |
| 46 | 39700 | 108 | 5 |  |  |
| 47 | 41E00N－357ESE cirg． | $6 \pm$ | 5 |  |  |
| 48 | 41400N－37000E | 64 | 5 |  |  |
| 45 | 390こ5 | 56 | 5 |  |  |
| 50 | 33150 | ㄹ8 | 5 |  |  |
| 51 | 35175 | 134 | 5 | － |  |
| 50 | ЗЭ®00 | 140 | 5 |  |  |
| 53 | 3ヲここ5 | 140 | 5 |  |  |
| 54 | 35050 | E04 | 5 |  |  |
| 55 | 3ヲこ75 | 85 | 5 |  |  |
| 56 | 39300 | 60 | 5 |  |  |
| 57 | 3ヲごら | EO | 5 |  |  |
| 58 | 35350 | 36 | 5 |  |  |
| 59 | 39575 | 74 | 5 |  |  |
| 60 | 39400 | 74 | 5 |  |  |
| 61 | 394E5 | 76 | 5 |  |  |
| GE | 35450 | 10E | E |  |  |
| 63 | 39475 | 104 | 5 |  |  |
| 64 | 37500 | BE | 5 |  |  |
| 65 | 375こ5 | 108 | 5 |  |  |
| － | 35550 | 156 | 5 |  |  |
| 67 | 39600 | 138 | $5{ }^{-}$ |  |  |
| 68 | 37675 | 130 | 5 |  |  |
| 69 | 35700 | 54 | 5 |  |  |
| 70 | 3975 cmp． | 1500 | 5 |  |  |
| 71 | $41400 \mathrm{~N}-33750 \mathrm{E}$ | 54 | 5 |  |  |


| T．$T$. | SAMPLE | pper |  | 8910－056 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| NCO | Na. | Cu | Hu | Fg．S cf | 16 |
|  | 41400N－39775E | Ee | 5 |  |  |
| 73 | 39800 | $\underline{8}$ | 5 |  |  |
| 74 | 378ㅌㅡㅢ | 35 | 5 |  |  |
| 75 | 39850 | 54 | 5 |  |  |
| 76 | 39875 | 35 | 5 |  |  |
| 77 | 33900 | 320 | 5 |  |  |
| 78 | 39925 | 450 | EO |  |  |
| 79 | 39950 | 600 | 5 |  |  |
| 80 | 39975 | 670 | 10 |  |  |
| 81 | 40000 | 610 | 5 |  |  |
| 82 | 40005 | 300 | 50 |  |  |
| 83 | 40050 | Јこ0 | 10 |  |  |
| 84 | 40075 | 50 | 5 |  |  |
| 85 | 40100 | 64 | 5 |  |  |
| 86 | 40125 | 118 | 5 |  |  |
| 87 | 40150 | 76 | 5 |  |  |
| 88 | $40: 75$ | 114 | 5 |  |  |
| 89 | 40200 | 114 | 20 |  |  |
| 50 | 40ここ5 | 74 | 5 |  |  |
| 91 | $40 こ 50$ | 230 | 5 | ＝ |  |
| 9E | $40 こ 75$ | 106 | 5 |  |  |
| 33 | 40300 | 120. | Es |  |  |
| 74 | 4035 | Эこ | 5 |  |  |
| 35 | 40350 | 80 | 5 |  |  |
| 96 | 40400 | 106 | 5 |  |  |
|  | 40450 | 134 | 5 |  |  |
|  | 40475 | 058 | 5 |  |  |
| 39 | 40505 | 60 | 5 |  |  |
| 100 | CHECK NL－6 | 50 | － |  |  |
| 101 | 40550 | 60 | 5 |  |  |
| 102 | 40575 | 7Е0 | 5 |  |  |
| 105 | 40600 | 76 | 5 |  |  |
| 104 | 40505 | 86 | 5 |  |  |
| 105 | 40650 | 36 | 5 |  |  |
| 106 | 40675 | 46 | 5 |  |  |
| 107 | 40700 | 44 | 5 |  |  |
| 108 | 407.50 | 9こ0 | 5 |  |  |
| 103 | 40775 | 1500 | 10 |  |  |
| 110 | 40355 | 38 | 5 |  |  |
| 111 | 40850 | 8こ | 5 |  |  |
| 11玉 | 40975 | 76 | 5 |  |  |
| 113 | 40900 | 36 | 10 |  |  |
| 114 | $41400 \mathrm{~N}-40950 \mathrm{E}$ | 10 O | 5 |  |  |
| 115 | $41600 \mathrm{~N}-33100 \mathrm{E}$ | ミอ | 5 |  |  |
| 116 | 35575 | EE | 5 |  |  |
| 117 | 35400 | 64 | 5 |  |  |
| 118 | こヲ4こ5 | 59 | 5 |  |  |
| 113 | 35450 | 43 | 5 |  |  |
| 120 | 395こ5 | 74 | 5 |  |  |
| 121 | 35550 | 300 | 5 |  |  |
| 1ミロ | 39575 | 440 | 5 |  |  |
| ！ | 37600 | 18 | 5 |  |  |
| 124 | 396こ5 | 80 | 5 |  |  |
| 155 | 35675 | 74 | 5 |  |  |
| 1こら | 39700 | 104 | 5 |  |  |
| $1 \Xi 7$ | 3575 | 30 | 5 |  |  |
| 1 10¢ | $41600 N-39750 E$ | 154 | 5 |  |  |




| T．T． NC． | SAMPLE NC． | Cu | PPE Au | $\begin{aligned} & 8910-03 \\ & \text { Pg. } 8 \mathrm{af} \end{aligned}$ | 16 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 41900N－40FSOE | 750 | 5 |  |  |
| 95 | 40975 | 430 | 5 |  |  |
| 36 | 41800N－41000E | 610 | 5 |  |  |
| 97 | 4E000N－39000E | 30 | 5 |  |  |
| 98 | 39055 | 26 | 5 |  |  |
| 99 | 33050 | 28 | 5 |  |  |
| 100 | CHECK NL－6 | 52 | － |  |  |
| 101 | 33075 | E8 | 5 |  |  |
| 102 | 39100 | 30 | 5 |  |  |
| 103 | 39125 | 30 | 5 |  |  |
| 104 | 37150 | 36 | 5 |  |  |
| 105 | 39175 | 48 | 5 |  |  |
| 106 | 39500 | ㄹ． | 5 |  |  |
| 107 | 39225 | 34 | 5 |  |  |
| 108 | 39こ50 | 160 | 5 |  |  |
| 103 | 39275 | 토 | 5 |  |  |
| 110 | 37300 | 60 | 15 |  |  |
| 111 | 39350 | 45 | 5 |  |  |
| 11玉 | 35400 | 15 | 5 |  |  |
| 113 | 39425 | コニ | 5 |  |  |
| 114 | 33450 | E® | 5 |  |  |
| 115 | 37475 | 3 E | 5 |  |  |
| 116 | 39500 | 30 | 5 |  |  |
| 117 | 395こ5 | 86 | 5 |  |  |
| 115 | 37550 arg． | 54 | 5 |  |  |
| 113 | 33575 | E0 | 5 |  |  |
| －＇ | 39600 | 10 | 5 |  |  |
| 1こ1 | 396E5 | 1 E | 5 |  |  |
| ミニ | 37650 | 10 | E0 |  |  |
| $1 \cong 3$ | 39675 | $1 \pm$ | 5 |  |  |
| 124 | 33700 | Eこ | 10 |  |  |
| 1 12E | 397드 | 100 | 5 |  |  |
| 1こ6 | 35750 | 30 | 5 |  |  |
| 127 | 39775 | $1 こ$ | 5 |  |  |
| 1こ¢ | 35800 | 36 | E |  |  |
| 153 | 39805 | 2E | 5 |  |  |
| 130 | 35850 | 55 | 5 | － |  |
| 131 | 33875 | 400 | 5 |  |  |
| $13 \pm$ | 39500 | 430 | 5 |  |  |
| 133 | 397E5 | 34 | 5 |  |  |
| 134 | 37950 | 340 | 5 |  |  |
| 135 | 39375 | 48 | 5 |  |  |
| 136 | 40000 | 6 E | 5 |  |  |
| 137 | $400 \leqslant 5$ cing． | E000 | 5 |  |  |
| 138 | 40050 | $E 70$ | 5 |  |  |
| 139 | 40075 | 64 | 5 |  |  |
| 140 | 40100 | 70 | 5 |  |  |
| 141 | $401 \cong 5$ | 570 | 5 |  |  |
| 14き | 40150 | 680 | 5 |  |  |
| 143 | 40175 | E0 | 5 |  |  |
| 144 | 40E00 | E¢ | 15 |  |  |
| － | 40 E®5 | 3こ | 5 |  |  |
| 1 | $40 こ 50$ | 15 | 5． |  |  |
| 147 | 40275 | 40 | 5 |  |  |
| 145 | $40 \overline{300}$ | SE | 5 |  |  |
| 143 | 40355 | 35 | 5 |  |  |
| 150 | $4 E 000 N-40350 E$ | 34 | 5 |  |  |


| T．T． Ner． | SAMPLE | PPE |  | 8510－056 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Cu | Au | Fg． 3 Cf | 16 |
|  | 42000N－40375E | 44 | 5 |  |  |
| 3 | 40400 | $4 \Xi$ | 5 |  |  |
| 4 | $404 \pm 5$ | 14 | 5 |  |  |
| 5 | 40450 | 16 | 5 |  |  |
| 6 | 40475 | 2ะ | 5 |  |  |
| 7 | 40500 | 64 | 5 |  |  |
| 8 | 40505 | 30 | 5 |  |  |
| 3 | 40550 | 20 | 5 |  |  |
| 10 | 40575 | EO | 5 |  |  |
| 11 | 40600 | 20 | 5 |  |  |
| 12 | 40655 | 880 | 5 |  |  |
| 13 | 40650 | 310 | 5 |  |  |
| 14 | 40675 | 670 | 5 |  |  |
| 15 | 40700 | 36 | 5 |  |  |
| 16 | 40725 | 14 | 5 |  |  |
| 17 | 40750 | 1 E | 5 |  |  |
| 18 | 40775 | 14 | 5 |  |  |
| 13 | 40800 | 1 13 | 5 |  |  |
| $E 0$ | $408 ะ 5$ | 48 | 5 |  |  |
| 21 | 40850 | 36 | 5 |  |  |
| E2 | 40875 | 160 | 5 |  |  |
| 23 | 40300 | 70 | 5 |  | － |
| 24 | 405 55 | 54 | 5 |  |  |
| 25 | 40350 | 114 | 5 |  |  |
| E6 | 40375 cmg ． | 650 | 5 |  |  |
| $\because 7$ | 4EOOON－41000E cm？ | 540 | 5 |  |  |
|  | 4EEOON－37500E | 15 | 5 |  |  |
| 27 | 33525 | $1 \pm$ | 5 |  |  |
| 30 | 33550 | 16 | 5 |  |  |
| 31 | 35575 | 26 | 5 |  |  |
| 30 | 39600 | ES | 5 |  |  |
| 33 | 33605 | E0 | E |  |  |
| 34 | 33700 | E® | 5 |  |  |
| 55 | 39800 | EO | 5 |  |  |
| 36 | 3э8Е5 | E0 | 5 |  |  |
| 37 | 37850 | E6 | 5 |  |  |
| 38 | 35875 | 254 | 5 |  |  |
| 35 | 39900 | 36 | 5 |  |  |
| 40 | 395드 | 25 | 5 |  |  |
| 41 | 35350 | 80 | 5 |  |  |
| 45 | 4005 | 1こモ | 5 |  |  |
| 43 | 40050 | $13 \pm$ | 5 |  |  |
| 44 | 40075 | 126 | 5 |  |  |
| 45 | 40100 | 6 E | 5 |  |  |
| 46 | $401 E 5$ | 46 | 5 |  |  |
| 47 | 40150 | 45 | 5 |  |  |
| 48 | 40175 | 45 | 5 |  |  |
| 43 | 40050 | 66 | 5 |  |  |
| 50 | $40 こ 75$ | 56 | 5 |  |  |
| 5.1 | 40300 | 76 | 5 |  |  |
| 5 | 403 ES | 64 | 당 |  |  |
| $=7$ | 40375 | 15 | 5 |  |  |
| ＊ | 40400 | EO | 5. |  |  |
| 55 | 40425 | 70 | 5 |  |  |
| 56 | 40450 | 70 | 15 |  |  |
| 57 | 4055 | ㄹ | 5 |  |  |
| 58 | 4EEOON－4O55OE | こ® | 5 |  |  |


| T．T． | SAMPLE |  | FPE | 8910－056 |
| :---: | :---: | :---: | :---: | :---: |
| NGO | NC． | Cu | Au | Fge 10 df 16 |
| ＋ | 4EEOON－40575E | 60 | 5 |  |
| 60 | 40600 | 38 | 5 |  |
| 61 | $406 \pm 5$ | 40 | 5 |  |
| 62 | 40650 | BE | 5 |  |
| 63 | 40675 | 50 | 5 |  |
| 64 | 4릉on－40750E | 130 | 5 |  |
| 65 | 424 －5N－39000E | 34 | 5 |  |
| 66 | 39005 | 56 | 5 |  |
| 67 | 39050 | 46 | 5 |  |
| 68 | 33こ25 | 26 | 5 |  |
| 63 | 39550 | 46 | 5 |  |
| 70 | 39875 | 34 | 5 |  |
| 71 | 39325 | 76 | 5 |  |
| 72 | 39475 | 20 | 5 |  |
| 73 | 39550 | E50 | 5 |  |
| 74 | 396こ5 | 16 | 5 |  |
| 75 | 39650 | 5 | 5 |  |
| 76 | 39675 | 6 | 5 |  |
| 77 | 35700 | 10 | 5 |  |
| 78 | 397こ5 | 14 | 5 |  |
| 73 | 39750 | 14 | 5 |  |
| 80 | 37775 | 6 | 5 |  |
| 81 | 35800 | 5 | 5 |  |
| 82 | 39505 | 40 | 5 |  |
| 83 | ЗЭE50 | 8 | 5 |  |
| R4 | 39575 | E0 | 5 |  |
|  | 35500 | 8 | 10 |  |
| 86 | 39905 | 12 | 5 |  |
| 87 | 35550 | 8 | 5 |  |
| 88 | 39375 | Es | 5 |  |
| 89 | 4005 | 10 | 5 |  |
| 90 | 40050 | 14 | 5 |  |
| 91 | 40075 | Es | 5 |  |
| 35 | $401 \pm 5$ | 16 | 5 |  |
| 93 | 40150 | 19 | 5 |  |
| 34 | 40175 | 28 | 5 |  |
| Э5 | $40 \pm 00$ | $1 \pm$ | 5 |  |
| 96 | 40075 | 30 | 5 |  |
| 37 | 40300 | こ8 | 5 |  |
| 38 | 40355 | 30 | 5 |  |
| 97 | 40350 | 12 | 5 |  |
| 100 | CHECK NL－S | EE | － |  |
| 101 | 40575 | 55 | 5 |  |
| 10E | 40400 | ご | 5 |  |
| 103 | 40500 | 10 | 5 |  |
| 104 | 40505 | 8 | 5 |  |
| 105 | 40550 | 10 | 5 |  |
| 106 | 40575 | 66 | 5 |  |
| 107 | 40600 | 370 | 5 |  |
| 108 | $406 こ 5$ | 10 | 5 |  |
| 103 | 40550 | 36 | 5 |  |
| i＊ | 40700 | ここ | 5 |  |
| $1-$ | 40750 | 46 | 5 |  |
| 112 | 40775 | E® | 5 |  |
| 113 | 40900 | E0 | 5 |  |
| 114 | 40355 | EO | 5 |  |
| 115 | 4E4ESN－40550E | 15 | 5 |  |



| T．T． | SAMPLE <br> NC． | PPG |  | 8510－056 |
| :---: | :---: | :---: | :---: | :---: |
| NCO |  | Cu | Hu | Pg－1E af 16 |
|  | 4E600N－40550］ | 134 | 5 |  |
| 른 | 40575 | 134 | 5 |  |
| 26 | 40600 | 900 | 5 |  |
| 27 | 40655 | 1080 | 15 |  |
| 28 | 40700 | 460 | 5 |  |
| 23 | 40750 | 490 | 5 |  |
| 30 | 40775 | 480 | 5 |  |
| 31 | 40800 | 30 | 5 |  |
| 30 | 40825 | Es | 5 |  |
| 33 | 42600N－40950E | 30 | 5 |  |
| 34 | 428ㄷN－39000E | 14 | 5 |  |
| 35 | 330도 | 玉ロ | 5 |  |
| 36 | 39050 | こ¢ | 5 |  |
| 37 | 39100 | こ8 | 5 |  |
| 38 | $371 \cong 5$ | 18 | 5 |  |
| 33 | 37150 | $1 \pm$ | 5 |  |
| 40 | 39175 | E0 | 5 |  |
| 41 | 39E00 | 16 | 5 |  |
| 42 | 3ヲEE5 | 32 | 5 |  |
| 43 | 39550 | 56 | 5 |  |
| 44 | 39075 | 180 | 5 |  |
| 45 | 33300 | 88 | 5 |  |
| 46 | ЗЗ3E5 | 36 | 30 |  |
| 47 | 37350 | 58 | 5 |  |
| 48 | 39375 | 38 | 5 |  |
| 43 | 39400 | 46 | 5 |  |
| （ ） | 394こ5 | 66 | 5 |  |
| 51 | 39450 | 7ㄴ | 5 |  |
| 50 | 39475 | 155 | 5 |  |
| 53 | 395E5 | 10 | 5 |  |
| 54 | 39550 | ご | 5 |  |
| 55 | 39575 | 5 | 5 |  |
| 56 | 35600 | 36 | 5 |  |
| 57 | 376ミ5 | 48 | 5 |  |
| 58 | 35650 | 2E | 5 |  |
| 59 | 37675 | 30 | 5 |  |
| 50 | 35700 | 50 | 5 |  |
| 61 | $337 \pm$ | 5.3 | 5 |  |
| 6® | 35750 | 30 | 5 |  |
| 63 | 379ㄷ | 45 | EO |  |
| 64 | З 9850 | $5 \Xi$ | 5 |  |
| 65 | 33875 | E6 | 5 |  |
| 66 | 53Э¢0 | 15 | 5 |  |
| 67 | 359E5 | 18 | 5 |  |
| 68 | 35950 | $\bar{B}$ | 5 |  |
| 65 | 35975 | 5 | 5 |  |
| 70 | 40000 | 16 | 155 |  |
| 71 | 4005 | 14 | 35 |  |
| $7 \Xi$ | 40050 | 10 | 5 |  |
| 73 | 40075 | E0 | 5 |  |
| 74 | 40100 | 10 | 5 |  |
|  | 4015 | 8 | 5 |  |
| － | 40150 | 75 | 5 － |  |
| 77 | 40175 | 5® | 5 |  |
| 78 | 40300 | 10 | 5 |  |
| 73 | 403 E 5 | 13 | 5 |  |
| BC） | 4E8ESN－40350E | 10 | 5 |  |




| T． | SAMPLE NC． | РРG |  | 8910－036 |
| :---: | :---: | :---: | :---: | :---: |
| NG． |  | Cu | Au | Pg．15 Cf 16 |
| 1 | 43こもらN－39750E | 44 | 5 |  |
| 47 | 37775 | 16 | 5 |  |
| 4 A | 39800 | 30 | 5 |  |
| 49 | 39825 | 2， | 5 |  |
| 50 | 39850 | 14 | 5 |  |
| 51 | 33875 | 16 | 5 |  |
| 52 | 33900 | 34 | 40 |  |
| 53 | 39725 | 32 | 5 |  |
| 54 | 39950 | EO | 5 |  |
| 55 | 39575 | 10 | 5 |  |
| 56 | 40000 | 60 | 5 |  |
| 57 | 40025 | 68 | 5 |  |
| 58 | 40050 | 62 | 5 |  |
| 59 | 40075 | 42 | 5 |  |
| 60 | 40100 | 16 | 5 |  |
| 61 | 401 こ5 | 8 | 5 |  |
| 62 | 40150 | 6 | 5 |  |
| 63 | 40175 | 6 | 5 |  |
| 64 | 40500 | 10 | 5 |  |
| 65 | 40 륻 | 10 | 5 |  |
| 66 | 40250 | 20 | 5 |  |
| 67 | 40075 | 16 | 5 |  |
| 68 | 40300 | 12 | 5 |  |
| 63 | 403 E ¢5 | 24 | 5 |  |
| 70 | 40350 | 14 | 5 |  |
| 71 | 40375 | 3 З | 5 |  |
| ： | 40400 | ES | 5 |  |
| 73 | 404E5 | E6 | 5 |  |
| 74 | 40450 | 14 | 5 |  |
| 75 | 40475 | E6 | 5 |  |
| 76 | 40500 | 13 | 5 |  |
| 77 | 40555 | 14 | 5 |  |
| 78 | 40550 | 16 | 5 |  |
| 73 | 40575 | 18 | 5 |  |
| 80 | 4JこE5T4－40EOOE | 30 | 5 |  |
| 81 | $45400 \mathrm{C}-330000$ | 8 | 5 |  |
| BE | 570든 | 6 | 5 |  |
| 83 | 39050 | 4 | 5 |  |
| 84 | 35075 | 8 | 5 |  |
| 8 E | 39100 | 6 | 5 |  |
| 86 | 37155 | 8 | 5 |  |
| 87 | 59150 | E | 5 |  |
| 88 | 37175 | 16 | 5 |  |
| 89 | 35®00 | 8 | 5 |  |
| 70 | 33ここ5 | 18 | 5 |  |
| 91 | 3Эこ50 | 15 | 5 |  |
| 9 | 37275 | 42 | 5 |  |
| 93 | 35300 | 40 | 5 |  |
| 94 | 3735 | 6 E | 5 |  |
| 95 | ЗЗЗ50 | ED | 5 |  |
| 96 | 394E5 | 10 | 5 |  |
|  | 35450 | 18 | 5 |  |
| － | 33475 | 14 | 5 |  |
| 95 | 39500 | 16 | 5 |  |
| 100 | CHECK NL－E | 5 | － |  |
| 101 | 335こ5 | 12 | 5 |  |
| 105 | $43400 N-39600 E$ | 24 | 5 |  |



## NGRANDA VANCGUVER LAEORATOFY

Fa: OERTY/LOCATION:EAGLE
Praject NC.
Material
Remarks

## CODE : 8911-0こ1

Sheet: 1 af 3 Geal. :F. S.

Date rec' d: NOV. 09
Date cornpl:NOV. 34

Values in FPM, except where racted.


| T．T． | SAMPLE NC． | PPE |  | 8911－01 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| NC． |  | Cu | Au | Pg． 2 cf | 3 |
|  | $41=00 N-40100 E$ | 560 | 5 |  |  |
| 51 | 40125 | $\because 70$ | 5 |  |  |
| 5 | 40150 | 64 | 5 |  |  |
| 53 | 40175 | 46 | 5 |  |  |
| 54 | 40000 | 7E | 5 |  |  |
| 55 | 402 cs | 10든 | 5 |  |  |
| 56 | $40=50$ | 1こ6 | 5 |  |  |
| 57 | 40275 | 86 | 5 |  |  |
| 58 | 40300 | 118 | 5 |  |  |
| 59 | $403 \geq 5$ | 46 | 5 |  |  |
| 60 | 40350 | 74 | 5 |  |  |
| 61 | 40375 | 56 | 5 |  |  |
| 62 | 40400 | $1 \Xi 6$ | 5 |  |  |
| 63 | 40425 | 78 | 5 |  |  |
| 64 | 40450 | 66 | 5 |  |  |
| 65 | 40475 | 44 | 5 |  |  |
| 66 | 40500 | 56 | 5 |  |  |
| 67 | 40505 | 40 | 5 |  |  |
| 68 | 40550 | ER | 5 |  |  |
| 63 | 40575 | 63 | 5 |  |  |
| 70 | 40600 | ES | 5 |  |  |
| 71 | 40625 | 580 | 5 |  |  |
| 7こ | 40650 | 130 | 5 |  |  |
| 73 | 40575 | 10 | 5 |  |  |
| 74 | 407 도 | 19 | 5 |  |  |
| 75 | 40.750 | 56 | 5 |  |  |
| j | 40800 | $4 \pm$ | 5 |  |  |
| 77 | 408E5 | 36 | 5 |  |  |
| 78 | 40955 | 106 | 5 |  |  |
| 73 | 40950 | 73 | 5 |  |  |
| 80 | 40375 | $4 巴$ | 5 |  |  |
| 81 | $41200 N-41000 E$ | E30 | 5 |  |  |
| Bこ | 4こ4ESN－410ESE | 54 | 5 |  |  |
| 83 | 41050 | シュะ | 5 |  |  |
| B4 | 41100 | 55 | 5 |  |  |
| 85 | 411 ご5 | EO | 5 |  |  |
| 88 | 41150 | 35 | 75 |  |  |
| 87 | 41175 | 134 | 5 | ． |  |
| 83 | $415 \leq 5$ | 104 | 5 |  |  |
| 89 | 41550 | 78 | 5 |  |  |
| 50 | 41275 | 34 | 5 |  |  |
| 31 | 41300 | 1170 | 5 |  |  |
| 5 | 4135 | 7 O0 | 5 |  |  |
| 33 | 41550 | 145 | 5 |  |  |
| 94 | 41375 | 510 | 5 |  |  |
| 95 | 41400 | $6 \approx$ | ㅌ |  |  |
| 56 | 41405 | 84 | 5 |  |  |
| 97 | 41475 | $1 こ 4$ | 5 |  |  |
| 39 | 41550 | 45 | 5 |  |  |
| 95 | 41675 | こロこ | 5 |  |  |
| 100 | CHECK NL－5 | Б® | － |  |  |
|  | $417 \pm 5$ | 28 | 5 |  |  |
| 10 | 41750 | Es | 5 － |  |  |
| 103 | 41775 | 3 30 | E |  |  |
| 104 | 41800 | こ4 | 5 |  |  |
| 105 | 41825 | 34 | 5 |  |  |
| 106 | 4ごESNー4185心E | 45 | $\Xi$ |  |  |


| T．T． | SAMPLE NC． | PPE |  | 8э11－0こ1 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| NC． |  | Cu | Au | Fg． 3 ct | 3 |
| $1{ }^{1}$ | 4こ4こ5N－41875E | 20 | 5 |  |  |
| 108 | 41300 | 14 | 5 |  |  |
| 109 | 419 ¢5 | 50 | 5 |  |  |
| 110 | 41950 | 8 | 5 |  |  |
| 111 | 41975 | 70 | 5 |  |  |
| 112 | 42000 | 18 | 5 |  |  |
| 113 | 42055 | 3 B | 5 |  |  |
| 114 | 42050 | 30 | 당 |  |  |
| 115 | 4E425N－4E075E | Es | 5 |  |  |
| 116 | 42825N－41025E | 56 | 5 |  |  |
| 117 | 41050 | 34 | 5 |  |  |
| 118 | 41075 | 58 | 5 |  |  |
| 113 | 41100 | 60 | 5 |  |  |
| 120 | 41125 | 48 | 5 |  |  |
| 121 | 41150 | 140 | 5 |  |  |
| 122 | 41175 | 1ミ | 5 |  |  |
| 123 | 41500 | 14 | 5 |  |  |
| 124 | $412 \leq 5$ | E6 | 5 |  |  |
| 125 | 41250 | 14 | 5 |  |  |
| 126 | 41275 | EO | 5 |  |  |
| 1 타 | 41.300 | 16 | 5 |  |  |
| $1 \Xi 8$ | 41325 | 115 | 5 |  |  |
| $1 \equiv 9$ | 41350 | 85 | 5 |  |  |
| 130 | 41375 | 100 | 5 |  |  |
| 131 | 41425 | 30 | 5 |  |  |
| 1.0 | 41450 | 44 | 5 |  |  |
| 1 | 41475 | 45 | 5 |  |  |
| 134 | 41500 | 116 | 5 |  |  |
| 135 | $4 \cong 3 \cong 5 N-415$ ESE | 35 | 10 |  |  |
| 136 | 43400N－40000E | $1 \Xi$ | 5 |  |  |
| 137 | 40005 | EO | 5 |  |  |
| 138 | 40050 | E8 | 5 |  |  |
| 137 | 40075 | 8 | 5 |  |  |
| 140 | 40100 | 10 | 5 |  |  |
| 141 | $401 こ 5$ | 14 | 5 |  |  |
| 14 E | 40150 | 8 | 5 |  |  |
| 143 | 40175 | 30 | 5 |  |  |
| 144 | 40595 | 3Е | 5 |  |  |
| 145 | 40950 | E4 | 5 |  |  |
| 145 | 40375 | 14 | 5 |  |  |
| 147 | 40300 | 18 | 5 |  |  |
| 148 | 403 こ5 | こ8 | 5 |  |  |
| 149 | 40350 | 54 | 5 |  |  |
| 150 | CHECK NL－5 | 5 | － |  |  |
| 151 | 40375 | 5 5 | 5 |  |  |
| 15 | 43400N－40400E | 64 | 5 |  |  |
| 153 | $41400 \mathrm{~N}-35050 \mathrm{E}$ | E30 | 5 |  |  |
| 154 | 33075 | こ90 | 5 |  |  |
| 155 | $41400 \mathrm{~N}-33100 \mathrm{E}$ | 135 | 5 |  |  |
| 156 | $43 こ こ 5 N-3 З 000 E ~$ | 1こ | 5 |  |  |



IC - . 500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 hCL-hNO3-H20 AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER. this leach is partial. for mn fe sr ca p la cr mg ba il g h and limited for na k and al; au detection limit by ice is 3 ph. - SAMPLE TYPE: ROCK AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.



## / ASSAY RECOMMENDED




ACMF MAL LCAL LABORATORIES LTDD.
852 E. HASTINGS 8T. VANLOUVER B.C. V6A 1R6
PRONS (604)253-3158 iFAX(60
53-1716 GEOCHEMICAL ANALYBIB CERTIFICATE
ICP - . 500 GRAM SAMPLE IS DIGESTED WITH 3HL 3-1-2 HCL-HNO3-H20 AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITM. MTK
 - SAMPLE TYPE: PIK-P2 CORE/ROCK P3 SILT AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SgMPLE.
 Noranda Exploration Co. Ltd. PROJECT 8910-029 284 . File \# 89-4222





Noranda Explorátion Co. Ltd. PRC SCT 8910-029 284 FILE \# 89-4222

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Geological, Geochemical, Geophysical June, 1990 Report on the
EAGLE PROPERTY (Eagle 1-5 claims)
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APPENDIX V: ANALYTICAL METHOD

## ANALYTICAL METHOD

The methods listed are presently applies to analyse geological materials by the Noranda Geochemical Laboratory at Vancouver. (March, 1984).

## Preparation, of Samples

Sediments and soils are dried at approximately $80^{\circ} \mathrm{C}$ and sieved with a 80 mesh nylon screen. The -80 mesh ( 0.18 mm ) fraction is used for analysis.

Rock specimens are pulverized to -120 mesh ( 0.13 mm ). Heavy mineral fractions (panned samples) are analysed in its entirety. when it is to be determined for gold without further sample preparation. See addendum.

## Analysis of Samples

Decomposition of a 0.200 g sample is done with concentrated perchloric and nitric acid (3:1), digested for 5 hours at reflux temperature. Pulps of rock or core are weighed out at 0.2 g or less depending on the matrix of the rock, and twice as much acid is used for decomposition than that is used for silt or soil.

The concentrations of $\mathrm{Ag}, \mathrm{Cd}, \mathrm{Co}, \mathrm{Cu}, \mathrm{Fe}, \mathrm{Mn}, \mathrm{Mo}, \mathrm{Ni}, \mathrm{Pb}, \mathrm{V}$ and Zn (all from the group A elements of the fee schedule) can be determined directly from the digest (dissolution) with an atomic absorption spectrometer (AA). A Varian-Techtron Model AA-5 or Model AA-475 is used to measure elemental concentrations.

## Elements Requiring Specific Decomposition Method

Antimony - Sb: 0.2 g sample is attached with 3.3 mL of $6 \%$ tartaric acid, 1.5 mL conc. hydrochloric acid and 0.5 mL of conc: nitric acid, then heated in a water bath for 3 hours at $95^{\circ} \mathrm{C}$. Sb is determined directly from the acid solution with an AA-475 equipped with electrodeless discharge lamp (EDL).

Arsenic - As: 0.2-0.4 g sample is digested with 1.5 mL of $70 \%$ perchloric acid and 0.5 mL of conc. nitric acid. A Varian AA-475 equipped with an As-EDL measures the arsenic concentration of the digest.

Barium - Ba: 0.1 g sample is decomposed with conc. perchloric, nitric and hydrofluoric acid. Atomic absorption using a nitrous oxide-acetylene flame determines Ba from the aqueous solution.

Bismuth - Bi: $0.2 \mathrm{~g}-0.3 \mathrm{~g}$ is digested with 2.0 mL of perchloric $70 \%$ and 1.0 mL of conc. nitric acid. Bismuth is determined directly from the digest into the flame of the AA instrument c/w EDL.

Gold - Au: 10.0 g sample (Pan-concentrates see below) is digested with aqua regia (1 part nitric and 3 parts hydrochloric acid). Gold is extracted with Methyl iso-Butyl ketone (MIBK) from the aqueous solution. Gold is determined from the MIBK solution with flame AA.

Magnesium - Mg: $0.05 \mathrm{~g}-0.10 \mathrm{~g}$ sample is digested with 4 mL perchloric/nitric acid (3:1). An aliquot is taken to reduce the concentration to within the range of atomic absorption. The AA475 with a nitrous oxide flame determines Mg from the aqueous solution.

Tungsten - W: 1.0 g sample sintered with a carbonate flux and thereafter leached with water. The leachate is treated with potassium thiocyanate. The yellow tungsten thiocyanate is extracted into tri-n-butyl phosphate. This permits colourimetric comparison with standards to measure tungsten concentration.

Uranium - 0: An aliquot, taken from a perchloric-nitric (3:1) decomposition, usually from the multi-element digestion, is diluted with water and a phosphate buffer. This solution is exposed to laser light, and the luminescence of the uranyl ion is quantitatively measured on the UA-3 (Scintrex).

LOWEST VALUES REPORTED IN PPM

| Ag - 0.2 | Mn -20 | $\mathrm{Zn}-1$ | $\mathrm{Au}-0.1(10 \mathrm{ppb})$ |
| :--- | :--- | :--- | :--- | :--- |
| $\mathrm{Cd}-0.2$ | $\mathrm{Mo}-1$ | $\mathrm{Sb}-1$ | $\mathrm{~W}-2$ |
| $\mathrm{Co}-1$ | $\mathrm{Ni}-1$ | $\mathrm{As}-1$ | $\mathrm{U}-0.1$ |
| $\mathrm{Cu}-1$ | $\mathrm{~Pb}-1$ | $\mathrm{Ba}-10$ |  |
| $\mathrm{Fe}-100$ | $\mathrm{~V}-10$ | $\mathrm{Bi}-1$ |  |





INTERPRETATION

RESISTIVITY (OHM_M)


IP
(mV/v)

METAL FACTOR (IP/res * 1000)


INTERPRETATION
Line 42600 N
Dipole-Dipole Array


GEOLOGIGRARANCH ASSESSMENTRREPNCHT 20,245

INTERPRETATION
Strong increase in polarization
MIHII Moderate increase in polarization

믐 Pronounced resistivity increase
$=\quad$ Pronounced resistivity decrease

Scale 1:5000

|  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| 50 | 0 | $50 \quad 100 \quad 150 \quad 200 \quad 250$ |

EAGLE GRID
INDUCED POLARIZATION SURVEY Line 42600 N

Date: 89/10/19
Interpretation by: L. Bradish







interpretation
resistivity
(OHM-M)

 $\begin{array}{ll}n-1 & \quad 9 \\ n=2\end{array}$
${ }^{23}$

IP
 $\begin{array}{lll}n=1 & 4.2 \\ n=2 \\ n=3\end{array}$

METAL FACTOR (IP/res * 1000 )
filter
$n-1$
$n=2$
$n=3$
$n=4$
$n=5$
nterpretation

## RESISTIVITY

 (OHM_M)Line 43000 N
Dipole-Dipole Array
$\qquad$

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## 20,245

Contours
INTERPRETATION

- Strong increase in polarization

HIIIII Moderate increase in polarization
Pronounced resistivity increase
$=$ Pronounced resistivity decreas

Scale 1:5000

| $\underbrace{\quad$ Scale  $1: 5000$ <br> $50 \quad 100$ <br>  (natras)  <br> 50} |
| :---: |
| EAGLE GRID |
| INDUCED POLARIZATION SURVEY Line 43000 N |
| Date: 89/10/19 Interpretation by: L. Bradish |
| norondo |


interpretation

RESISTIVITY filter

interpretation

METAL FACTOR
(1P/res * 1000)

 $n=2$
$n=3$
$n=4$
$n=5$

filter
(mv/v)
filtor

mis $n=1$
$n=2$
$n=3$
$n=4$
(mv/v)
Line 43225 N
Dipole-Dipole Array


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20,245
Logarithmie
Contours
1.5, 2, 3, 5, 7.5, 10,..

INTERPRETATION

- Strong increase in polarization

WHIII Moderate increase in polarization
믐 Pronounced resistivity increase
$工 \quad$ Pronounced resistivity decrease

Scale 1:5000

MEtal factor (1P/res : 1000)

EAGLE GRID
INDUCED POLARIZATION SURVEY Line 43225 N

