

LOG NO: 11-27	RD.
ACTION:	
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SHAFT PROPERTY

1990 DIAMOND DRILLING REPORT FOR
ASSESSMENT CREDITS ON THE
COT, ROADSIDE FR., COT FR., MAS FR., TEE FR.,
FLAT FR., AU 2, AU 4, STAR OF THE WEST
AND PRINCESS MINERAL CLAIMS

NELSON MINING DIVISION
NTS 82F/6W
LAT. 49°26'10"; LONG. 117°16'40"

GEOLOGICAL BRANCH
ASSESSMENT REPORT

20,481

OWNER OF CLAIMS: OTTO JANOUT, OTAKAR JANOUT, CHARLES PITTMAN, ROBERT BOURDON
& TOM CHERRY

OPERATOR: NORAMCO MINING CORPORATION

AUTHOR: W.J. LEWIS & T.E. LISLE

DATE: NOVEMBER 20, 1990

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Introduction

This report was prepared in order to satisfy assessment credits applied on the Cot, Roadside Fr., Cost Fr., Mas Fr., Tee Fr., Flat Fr., Au 2, Au 4, Star of the West and Princess mineral claims and fractions. Direct drilling and analytical costs for Hole SH 90-1, drilled during the period June 21 to July 1, 1990, totalled \$18,662.00. Costs associated with site preparation and road building was \$2,627.00. A total of \$17,400 is allocated to the cover 5 -10 year's work credits on the two post and fractional claims comprising the above claim group.

Location and Access - See Fig. 1

The Shaft Property is located approximately seven kilometres south of the West Kootenay city of Nelson in south-eastern British Columbia, Lat. 49°26'10"; Long. 117°16'40"; NTS 82F/6W.

Highway #6A connecting Nelson to Salmo, B.C. runs southeast through the Cottonwood Creek Valley and the eastern portion of the property. Access from highway 6A is by the Giveout Creek and Gold Creek forestry roads, and by a number of four-wheel drive roads which run throughout the claims.

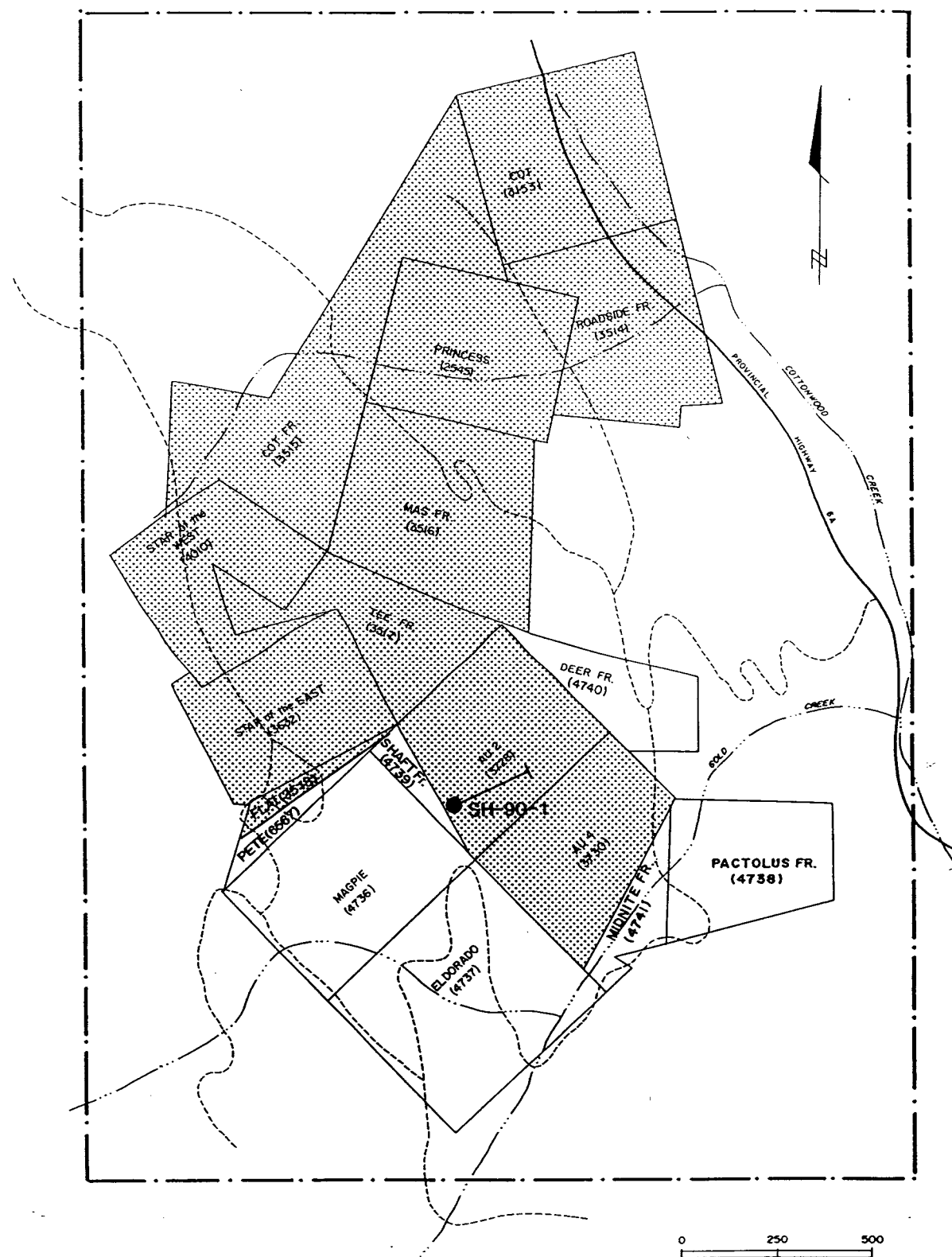
The claims are located on the northeast flanks of Toad Mountain, and much of the property covers the steeply forested slopes draining northeast into Cottonwood Creek. Elevations on the property range from about 800 metres in Cottonwood Creek, to 1,514 metres in the western section of the claims.

Property - See Fig. 2

The Shaft property comprises 18 two-post claims and fractional mineral claims located and recorded in the Nelson Mining Division. Claim particulars are as follows:

<u>Claims</u>	<u>Record No.</u>	<u>Expiry Date</u>	<u>Units</u>
<u>Cot</u>	3513	Sept. 13, 2000*	1
<u>Roadside Fr.</u>	3514	Sept. 13, 2000*	1
<u>Cot Fr.</u>	3515	Sept. 13, 2000*	1
<u>Mas Fr.</u>	3516	Sept. 13, 2000*	1
<u>Tee Fr.</u>	3517	Sept. 13, 2000*	1
<u>Flat Fr.</u>	3518	Sept. 13, 2000*	1
<u>Au 2</u>	3728	June 5, 2000*	1
<u>Au 4</u>	3730	June 5, 2000*	1
<u>Star of the West</u>	4010	Jan. 4, 2000*	1
Star of the East	3632	Jan. 3, 2000	1
Magpie	4736	July 20, 1994	1
Eldorado	4737	July 20, 1994	1
Pactolus Fr.	4738	July 20, 1993	1
Shaft Fr.	4739	July 20, 1994	1
Deer Fr.	4740	July 20, 1993	1
Midnite Fr.	4741	July 20, 1993	1
<u>Princess</u>	2545	Nov. 1, 2000*	1
Pete	6567	Aug. 14, 1991	<u>1</u>
		Total	<u>18</u>

* Anniversary dates as per assessment credits filed on September 11, 1990 in Nelson Recording Office - see Appendix II.



- 4-WHEEL DRIVE ACCESS
- GROUP 1 AREA FILED FOR ASSESSMENT CREDITS
- DIAMOND DRILL HOLE LOCATION
- LOCATION OF FIGURE 8

NORAMCO EXPLORATIONS INC.
SHAFT PROJECT - 2013
CLAIMS LOCATION
FIG. 2
NORAMCO MINING CORP.

History

The early history of the property is unknown but several old workings and crown-granted claims point to exploratory work in the early part of the century, possibly around 1900 - 1904.

The Shaft Property was partly investigated by Lacana Mining Corporation in 1984. Lacana completed geochemical surveys, some trenching and sampling and conducted airborne magnetic - electromagnetic surveys.

In 1987, South Pacific Gold carried out a program of line cutting, geological mapping, geochemical soil sampling, magnetic and induced polarization / resistivity surveys, and six NQ diamond drill holes aggregating 762 metres. Drilling was confined to a copper-gold occurrence referred to as the Shaft showing.

Golden News Resources Inc. optioned the property in 1989. Noramco Explorations, on behalf of Golden News Resources, completed a program including linecutting (14.7 kilometres), magnetic-VLF/EM surveying (14.2 and 21.05 line kilometres respectively), IP-Resistivity surveying (3.3 line kilometres), geochemical sampling (589 soil and 173 rock samples analyzed for 30 element ICP and Au FA/AA) and detailed geological mapping during the period September - October, 1989.

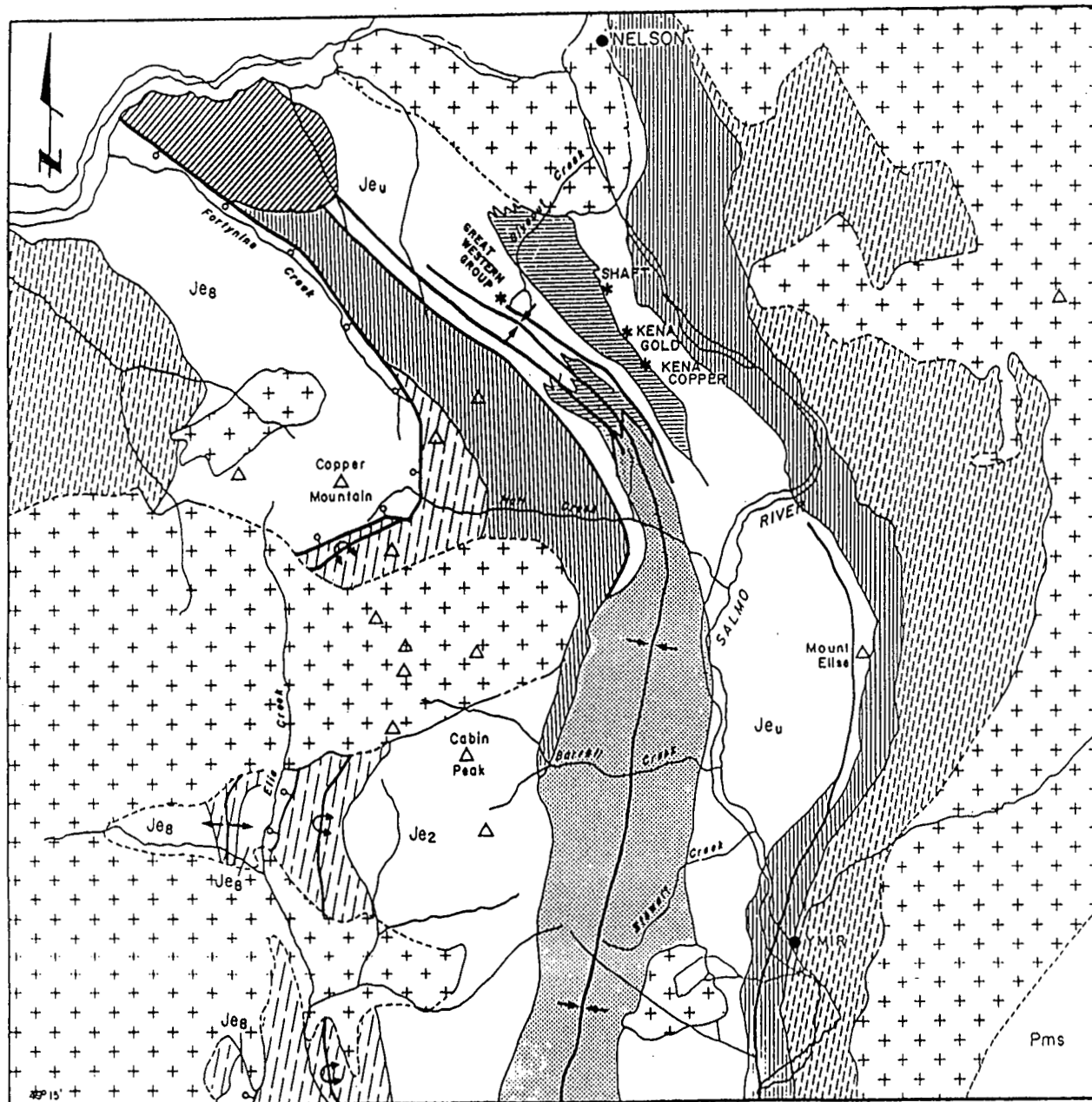
Results of this work, combined with those of previous exploration companies indicate three drill targets were present; the Dighem, Princess and Silver King Porphyry Contact Zones - see Figure 3 for locations.

Noramco Mining Corporation optioned the property from Golden News in June, 1990 and assumed the option agreement obligations to the prospector vendors.

Regional Geology - See Fig. 3

The property is on the eastern limb of the Hall Creek syncline, a south-plunging fold associated with intense shearing that dominates the structure of the Nelson Map Area. The syncline incorporates mainly volcanic and sedimentary rocks of the lower Jurassic Rossland Group intruded by stocks of granodiorite related to the middle Jurassic Nelson Batholith.

The Rossland Group comprises a basal assemblage of fine-grained clastic rocks of the Archibald Formation, volcanic rocks of the Elise Formation, and clastic rocks of the overlying Hall Formation.



LEGEND

MIDDLE JURASSIC

++ NELSON intrusions

LOWER OR MIDDLE JURASSIC (?)

diorite (?)

LOWER JURASSIC

ROSSLAND GROUP

SILVER KING intrusions

HALL FORMATION

ELISE FORMATION

upper Elise

Je_u intermediate to mafic crystal and fine tuff

Je_g intermediate lapilli and crystal tuff

lower Elise

Je₂ mafic pyroclastic breccia

mafic flow breccia, flows

ARCHIBALD FORMATION / YMR GROUP

PALEOZOIC

Pms metasedimentary rocks

△ MOUNTAIN TOP

↕ ANTICLINE

↕ SYNCLINE

— FAULT

○ FAULT (circle indicates downthrown slope)

— HIGHWAY

0 5 KM

NORAMCO EXPLORATIONS INC.

SHAFT PROJECT - 2013

REGIONAL GEOLOGY

FIG. 3

NORMACO MINING CORP.

After Hoy and Andrew, 1989

Property Geology - See Figs. 4, 5, 6, and 7

The Shaft Property is underlain by members of the upper Elise Formation, an intermediate to basic assemblage including augite porphyry basaltic flows, and part of a cyclical sequence of pyroclastic rocks that grade upward from coarse lapilli tuff through crystal and fine-grained bedded tuff.

The upper Elise Formation is intruded by a number of synvolcanic plagioclase porphyries including the Silver King Porphyry. It is also intruded by fine to medium-grained 'dioritic' sill-like complexes. At the Shaft Property, one of these units is described as being up to 50 metres in width, and 5.0 km in length. This unit is significant in that it hosts the Shaft and Cat prospects.

The Hall Creek syncline near the Shaft Property trends northwest. A regional foliation related to this trend dip southwest.

Mineralization is widespread within the claims and comprises the following types:

- (i) chalcopyrite, pyrite and magnetite as disseminations and fracture fillings in brecciated and altered diorite sills in a northwest trending zone of shearing near the contact of the Silver King Porphyry. Two showings are exposed in trenches, the Shaft and the Cat, and if mineralization is continuous between these two, the implied strike length of the zone is in excess of 800 meters.

Significant gold and copper values have been obtained from surface sampling and diamond drilling by previous exploration companies. Surface grades have ranged up to 0.18% opt Au and to 1.86% Cu over 4 to 5 meter widths of shearing. Diamond drilling, confined to a 100 meter strike length of the Shaft showing area and comprising 5 short holes, returned values of up to 0.265 opt Au and 1.13% copper over 4.1 meters of apparent thickness.

- (ii) pyrite, pyrrhotite, minor chalcopyrite and arsenopyrite occur as disseminations in a northwest-trending 200 meter wide band of mafic, felsic and crystal tuffs in the central part of the property. The area is marked by zones up to several metres wide of intense alteration consisting of limonite and manganese oxide, sericite, carbonate and quartz veinlets. Grab samples taken from old dumps from caved adits during Noramco's initial examination returned values as high as 4.28 grams/tonne gold, .25% copper, and 1% arsenic. This area is referred to as the Dighem Zone, named after a coincident moderate strength EM conductor defined by previous airborne magnetic-electromagnetic surveys.

Property Geology (cont'd...)

- (iii) disseminated to crudely banded massive pyrite, chalcopyrite and magnetite occur in dump material from old (early 1900's) caved adits referred to as the Princess showing situated in the northeast part of the property. Mineralized rock includes highly chloritized tuff and limestone. Grab samples of dump material have returned assays as high as 4.78 grams/tonne gold and 1.6% copper.
- (iv) galena, sphalerite, pyrite and minor chalcopyrite occurs in three areas situated between the Cat-Shaft and Dighem zones, as bands in siliceous foliated tuff; however, gold values of only up to .434 grams/tonne have been obtained.

Results of the Fall 1989 work carried out by Golden News, combined with those of previous exploration companies indicate the following exploration targets:

1. Dighem Zone

Alteration/mineralization of the Dighem Zone is characterized by a strong coincident soil geochemical-geophysical anomaly suggesting the Zone is 200 metres wide and 1,200 metres long.

The geochemical soil anomaly consists of highly anomalous and relatively persistent copper and arsenic values ranging from 165 to 1,064 ppm and 20 to 468 ppm respectively, and sporadic gold values of up to 35 ppb.

The geophysical anomaly consists of:

- (i) A very strong IP/resistivity anomaly 200 metres wide by 1,200 metres long (high chargeability readings of 40 to 60 milliseconds, background of 6 milliseconds and low resistivity values of 100 to 1,000 ohm meters, background of 2,000 to 5,000 ohm meters).
- (ii) A band of high magnetic relief (2,000 gammas) within the area of high chargeability-low resistivity. The cause of this magnetic feature is at present unknown but is suspected being due to bands of magnetite. Quantities of pyrrhotite observed in outcrops are believed to be insufficient to cause the high magnetic relief.
- (iii) Three northwest-trending VLF-EM conductors within the zone. The conductors have been traced out for 450 metres (limit of the survey coverage) and are open for extension to the northwest and southeast.

The Dighem Zone was rated the top priority drill target in view of its strong geochemical-geophysical response. No previous drilling has been conducted and the occurrence of significant gold values and very anomalous copper-arsenic values obtained in very limited outcrop samples lended strong support to its potential.

Property Geology (cont'd...)

The zone is presumed to dip steeply westward, parallel to the regional schistosity. An abrupt cutoff in the magnetic pattern on its eastern margin suggests it is fault-bounded to the east. This postulated fault boundary is referred to as the "Dighem Break".

2. Princess Zone

This area contains "replacement type" mineralization in the form of disseminated to massive chalcopyrite, pyrite and magnetite in tuff and limestone material from old dumps. The area has scant outcrop.

Sporadic anomalous copper and gold values are present in soils in the vicinity. A weak chargeability anomaly of 20 to 46 milliseconds occurs immediately upslope and to the southwest of the showings and is open to further extension to the southeast.

3. Silver King Porphyry Contact Zone

This area situated along the contact of the Silver King porphyry stock is characterized by a large strong soil geochemical anomaly with gold values ranging from 30 to 1,010 ppb. The anomaly area is at least 300 metres wide and 1,100 metres in length, extending southward on to the Kena property claims.

Rock chip sampling of pyritized and sheared diorite and Silver King plagioclase porphyry returned values as high as 2,490 ppb gold in the area of anomalous gold in soils. No drilling testing the Silver King porphyry contact zone was carried out by previous companies. The large soil anomaly suggested potential for large low-grade gold mineralization similar to area being tested by Pacific Sentinel on their Great Western Property immediately to the west.

4. Shaft - Cat Zone

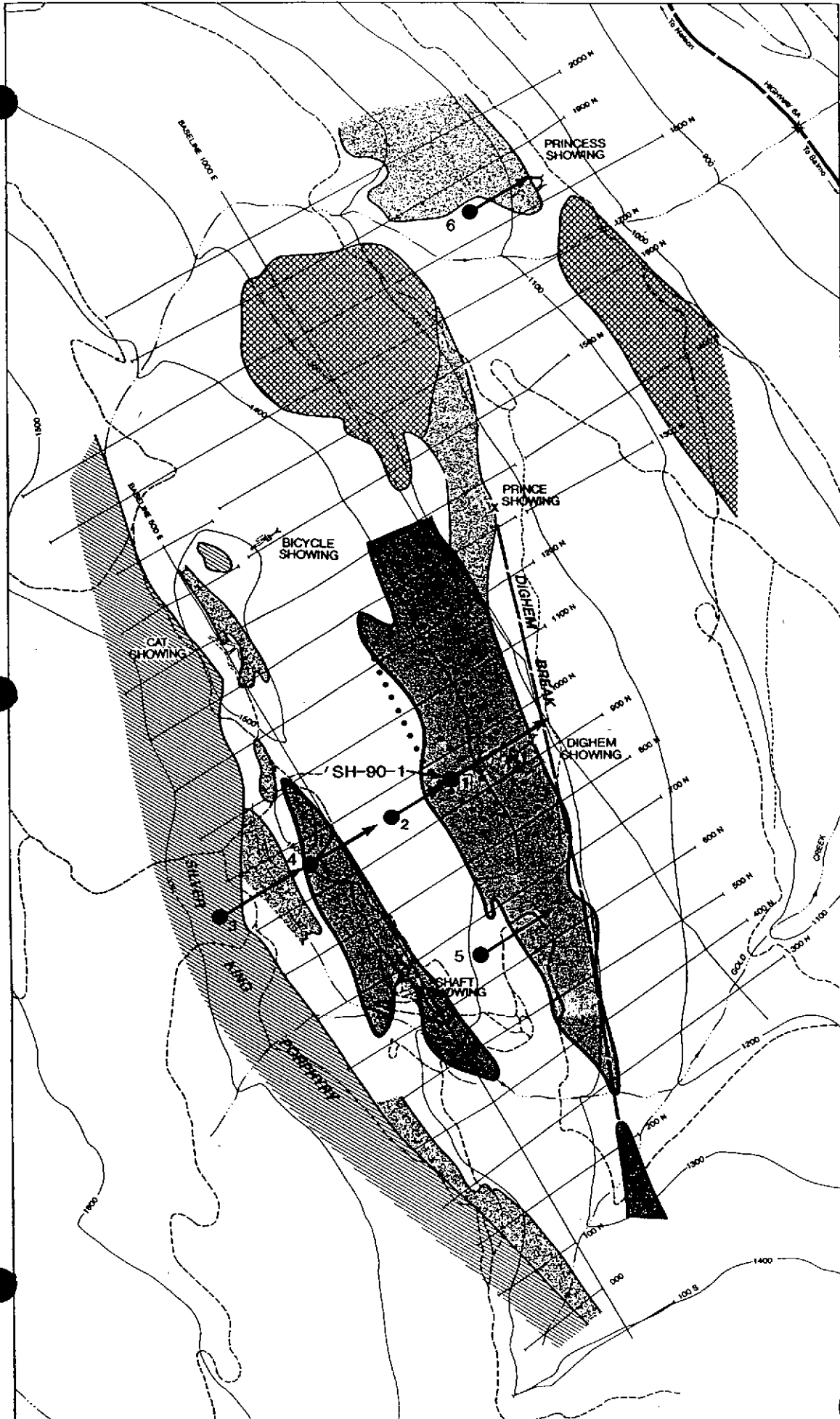
The Shaft - Cat Zone has been only drilled for 100 metres of its postulated 800 metre strike length. Drilling has to date been unable to establish continuity in gold and copper grades. It remains as a second priority target.

Property Geology (cont'd...)















5. Other Targets

The scattered sphalerite, galena and chalcopyrite mineralization west of the Dighem Zone has in places the appearance of disrupted stratiform mineralization (contorted banding of sulphides evident). More detailed prospecting and mapping is necessary to determine if this mineralization is a viable drill target.

An area of anomalous gold in soils occurs on the north banks of Gold Creek between the elevations of 1,150 and 1,200 metres above sea level. Further detailed prospecting is warranted to determine if this area is a drill target.



LEGEND

-  NELSON GRANODIORITE
-  SILVER KING PORPHYRY
-  DIORITE
-  ELISE FORMATION
-  1500 Elevation contour in metres
-  Creek
-  Road, mainly 4-wheel drive
-  Trail
-  Adt
-  Shaft
-  Grid line
-  I.P. chargeability anomaly - 40 to 60 milliseconds
-  VLF-EM conductor
-  1990 Diamond drill hole

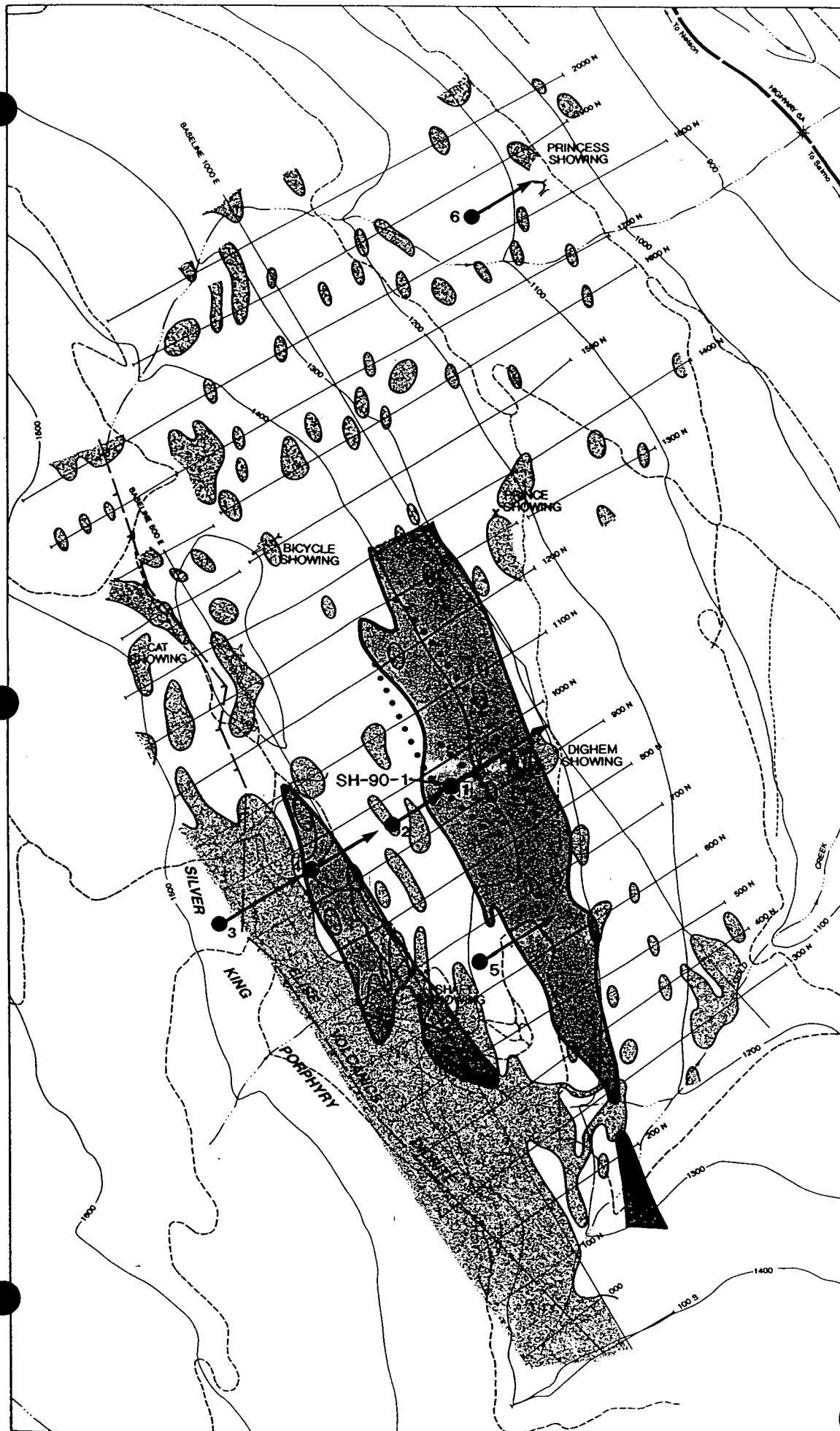
0 100 200
Scale in Metres



SHAFT PROJECT - 2013

SUMMARY MAP:
GEOLOGY, IP CHARGEABILITY,
VLF-EM CONDUCTORS
& LOCATION OF PROPOSED
DRILL HOLES

FIG. 4

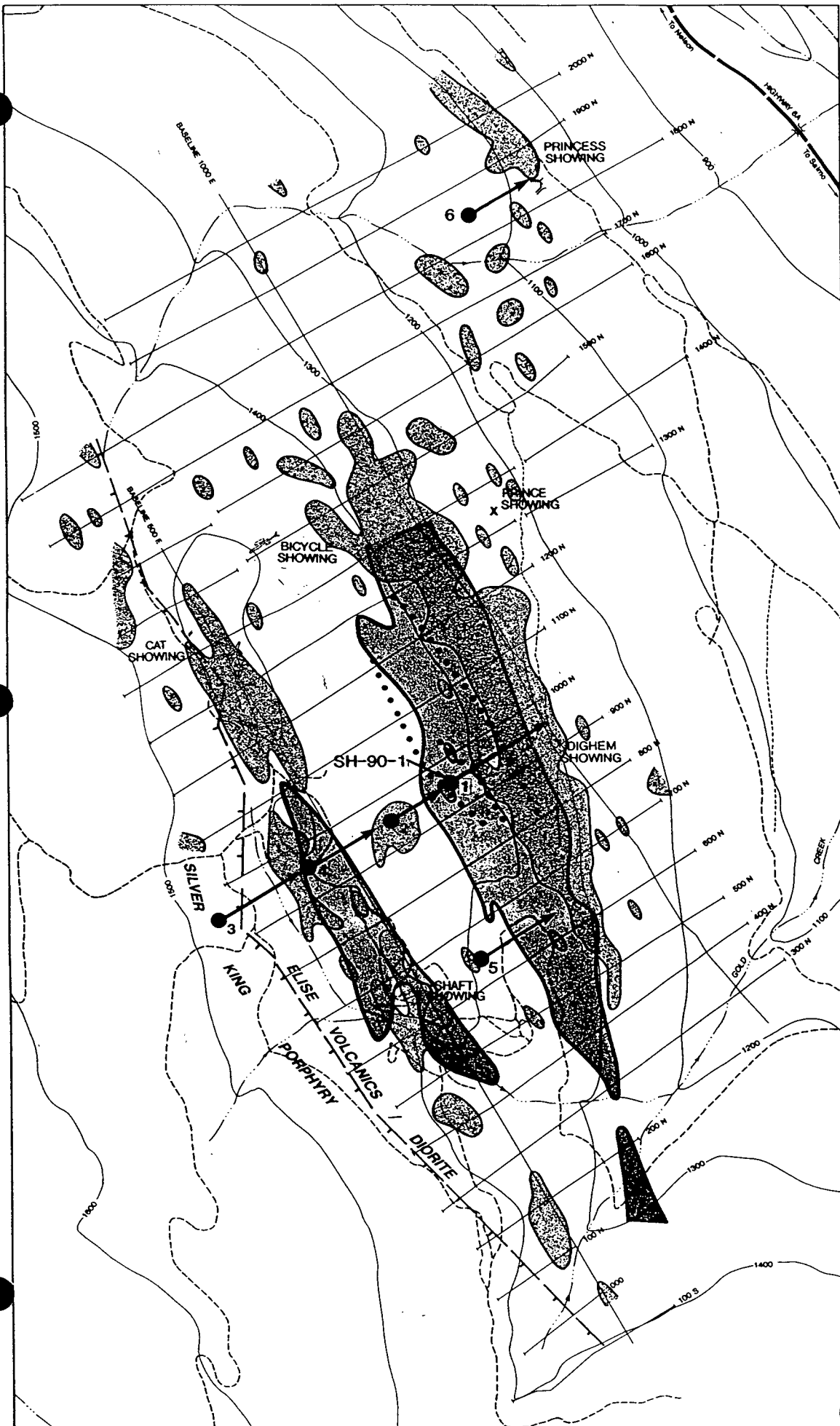


LEGEND

- 1500 Elevation contour in metres
- Creek
- Road, mainly 4-wheel drive
- Trail
- Adit
- Shaft
- Grid line
- I.P. chargeability anomaly - 40 to 80 milliseconds
- VLF-EM conductor
- 1990 Diamond drill hole
- +30 ppb gold in soils

0 100 200
Scale in Metres

SHAFT PROJECT - 2013
SUMMARY MAP:
 AREAS OF +30 ppb
 GOLD in SOILS
 FIG. 5

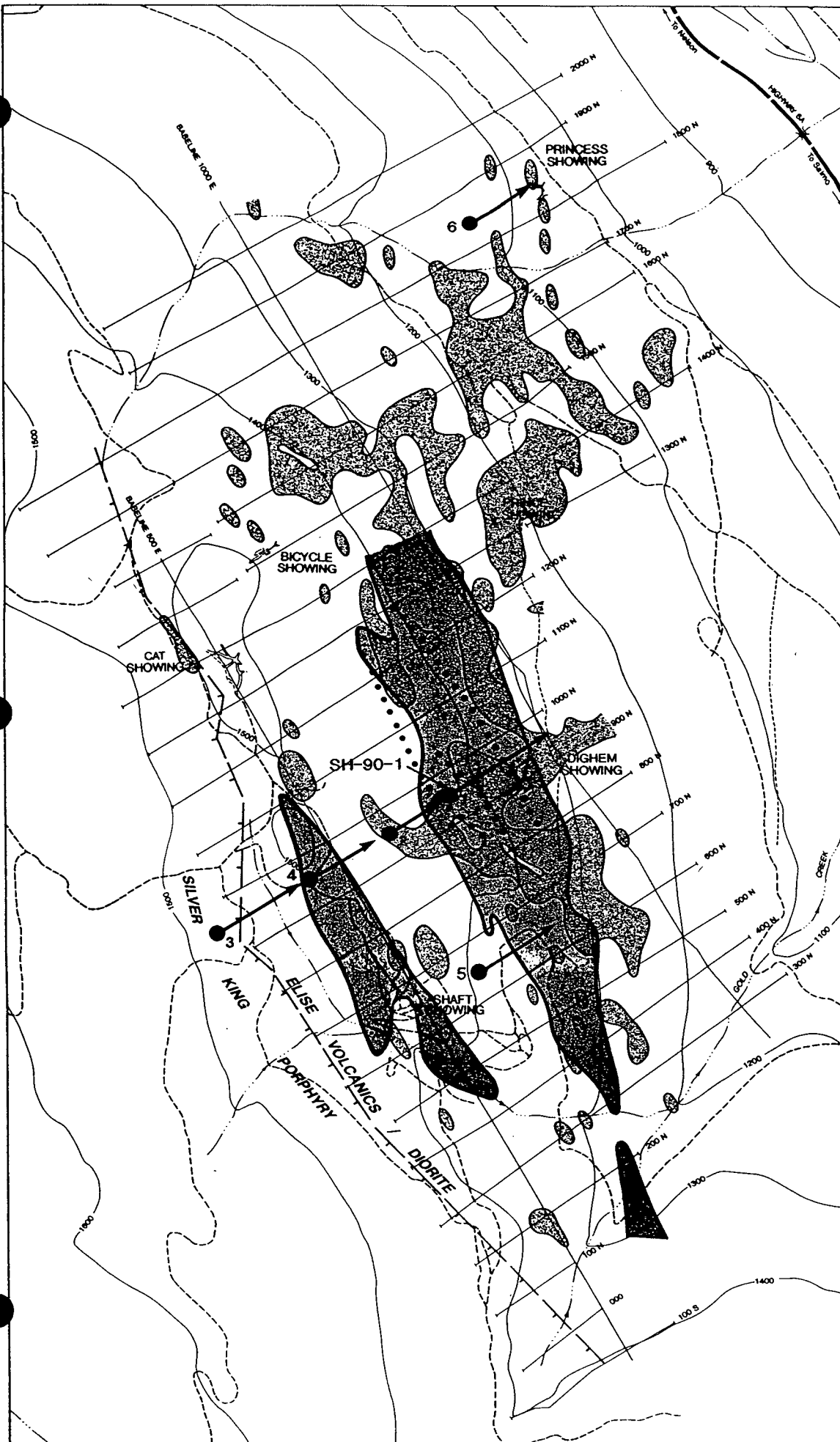


LEGEND

- 1500 Elevation contour in metres
- Creek
- Road, mainly 4-wheel drive
- Trail
- Adit
- Shaft
- Grid line
- I.P. chargeability anomaly - 40 to 60 milliseconds
- VLF-EM conductor
- 1990 Diamond drill hole
- +165 ppm copper in soils

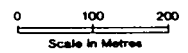
0 100 200
Scale in Metres

SHAFT PROJECT - 2013
SUMMARY MAP:
AREAS OF +165 ppm
COPPER in SOILS
FIG. 6



LEGEND

- 1500 Elevation contour in metres
- Creek
- Road, mainly 4-wheel drive
- Trail
- Adit
- Shaft
- Grid line
- I.P. chargeability anomaly
- 40 to 60 milliseconds
- VLF-EM conductor
- 1990 Diamond drill hole
- +20 ppm arsenic in soils



SHAFT PROJECT - 2013

SUMMARY MAP:

AREAS OF +20 ppm

ARSENIC in SOILS

FIG. 7

Summary of Drill Hole SH 90-1 (See Figures 2, 3 to 8 for Hole Location)

Diamond drill hole SH 90-1 was drilled during the period June 21 to July 1, 1990 as a test of the Dighem Zone. Hole parameters are as follows:

Drill Hole: SH 90-1

Core Size: NQ

Length: 345.77 metres

Collar Azimuth: ~060°

Inclination: Collar -65°
(Acid Tests) 81.68 M -64°
196.89 M -62°
288.33 M -61°
345.63 M -60°

Elevation: 1,431.0 Metres ASL (approx.)

Location: 9+50N
7+37E

(With respect to Shaft picket line grid.)

Drilling was conducted by Lone Ranger Diamond Drilling Company Ltd. using a Longyear '44' diamond drill mounted on a T.D. 15 bulldozer. Water was pumped from a creek located approximately 200 - 300 metres from the drill site.

Analytical work was carried out by Acme Analytical Laboratories, Vancouver. Drill core was generally sampled in 1.5 metre lengths with the entire hole to 269.0 metres analyzed after which only selected intervals were analyzed to the end of the hole at 345.77 metres. A 30 element I.C.P. analysis was conducted by Acme on all samples. Gold analysis from drill hole 90-1 is reported by Fire Assay - ICP from 10 gram samples, as current ICP techniques are reported by Acme to be comparable or more accurate than an AA finish. The diamond drill core is currently stored on site along with all other previous drill core.

Diamond drill logs are included as Appendix III and Acme Analytical Lab Results as Appendix IV. The hole collared in and remained in siliceous tuff to 198.40 metres. This unit is mineralized with up to 3% pyrite, 2% to 5% finely disseminated pyrrhotite, traces of chalcopyrite, sphalerite and rare traces of arsenopyrite and galena. From 198.40 metres to 239.56 metres, the hole cut an assemblage of fine-grained tuff and augite-crystal tuff that in places is highly altered. From 239.56 metres to 345.77 metres, the hole encountered weakly altered coarse lapilli tuff.

Summary of Drill Hole SH 90-1 (cont'd...)

With few exceptions, the analysis revealed generally low background concentrations for copper, lead, zinc, arsenic and gold.

Persistent traces of chalcopyrite in the siliceous tuff yielded anomalous values in the 100 - 400 ppm range with two widely separated samples grading +1,400 ppm Cu. Below the siliceous tuff, copper content is commonly 100 ppm.

Lead assays range to 207 ppm; zinc assays range to 775 ppm; and arsenic assays range to 2,162 ppm. The high arsenic assay is coincident with a high lead (207 ppm) and two consecutive samples that yielded 477 and 849 ppb gold in the intercept from 201.50 to 204.50m. Arsenopyrite and galena were noted in the highly altered rocks of this section.

Summary of Costs Applied to Assessment Credits

A total of \$17,400.00 derived from \$21,289.00 drilling, road building and analytical costs has been applied to assessment credits. This total was determined as follows:

Drill Hole SH 90-1 (June 21 - July 1, 1990)

I) Lone Ranger Invoice

Mobilization		\$ 1,000.00
Casing to 40'		570.00
Footage Charges 40' - 500' @ 13.00/foot	7,280.00	
500' - 1,000' @ 14.00/foot	5,600.00	
1,000' - 1,116' @ 15.00/foot	1,740.00	
Acid Tests 2	120.00	


II) Leber Mines Ltd.

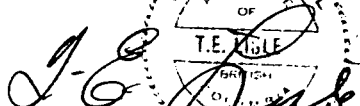
Mob. & Demob.		\$ 152.00
D7 Dozer 30 hours @ 82.50/hour	2,475.00	

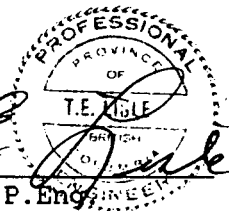
III) Acme Analytical Costs

192 Samples Drill Core @ 12.25/sample	\$ 2,352.00
SH 90-1 Total Cost	\$ 21,289.00

Supporting invoices are included as Appendix V.


W.J. Lewis, B.Sc.
Noranco Explorations Inc.


T.E. Lisle, P.Eng.



References

- Andrew, K. and Höy, T. (1988): Preliminary Geology and Mineral Occurrences in the Rossland Group between Nelson and Ymir, Southeastern British Columbia, B.C. Ministry of Energy, Mines and Petroleum Resources, Open File 1988-1.
- Andrew, K. and Höy, T. (1988): The Shaft Showing, Elise Formation, Rossland Group, B.C. Ministry of Energy, Mines and Petroleum Resources, Exploration in British Columbia 1988, pages B21-B28.
- Dvorak, Z. (1894): Dighem III Survey of the Nelson Area, British Columbia, Lacana Mining Corp., December 1989.
- Frebold, H. and Little, H.W. (1962): Paleontology, Stratigraphy, and Structure of the Jurassic Rocks in Salmo Map Area, British Columbia, Geological Survey of Canada, Bulletin 81.
- Frebold, H. and Tipper, H.W. (1970): Status of the Jurassic in the Canadian Cordillera of British Columbia, Alberta, and Southern Yukon, Canadian Journal Earth Sciences, Volume 7, Number 1, pages 1-20.
- Höy, T. and Andrew, K. (1988): Preliminary Geology and Geochemistry of the Elise Formation, Rossland Group, between Nelson and Ymir, Southeastern British Columbia, B.C. Ministry of Energy, Mines and Petroleum Resources, Geological Fieldwork, 1987, Paper 1988-1, pages 19-30.
- Höy, T. and Andrew, K. (1989a): Geology of the Nelson Map Area, Southeastern British Columbia, B.C. Ministry of Energy, Mines and Petroleum Resources, Open File 1989-11.
- Höy, T. and Andrew, K. (1989b): The Rossland Group, Nelson Map Area, Southeastern British Columbia, B.C. Ministry of Energy, Mines and Petroleum Resources, Geological Fieldwork, 1988, Paper 1989-1, pages 33-43.
- Jenks, J. (1988): The Shaft Mineral Claims, Nelson Mining Division, British Columbia, South Pacific Gold Corp. private report, January 1988.
- Label, J.L. (1990): Report on Magnetic and VLF-EM Geophysical Surveys, Noramco Explorations Inc., January 1990.
- Little, H.W. (1960): Nelson Map Area, West-half, British Columbia, Geological Survey of Canada, Memoir 308, 205 pages.
- _____ (1982): Geology, Bonnington Map Area, British Columbia, Geological Survey of Canada, Map 1571A.

References (cont'd...)

Mulligan, R. (1952): Bonnington Map Area, British Columbia, Geological Survey of Canada, Paper 52-13, 37 pages.

Seyward, M. (1988): Geophysical Report on a Magnetometer, VLF-EM, Pulse-EM IP survey on the Shaft Project, Nelson Mining Division, B.C. Ministry of Energy, Mines and Petroleum Resources, Assessment Report 17472.

Silversides, D.A. (1989): Shaft Property, Project Status Report, August 24, 1989.

Tipper, H.W. (1984): The Age of the Jurrassic Rossland Group of Southeastern British Columbia, in Current Research Part A, Geological Survey of Canada, Paper 84-1A, pages 631-632.

Lisle, T.E. and Lewis, W.J. (1990): Geological and Geochemical Report on the Shaft Property, Nelson Mining Division for Noramco Explorations Inc. and Golden News Resources Inc., March 1990

Lisle, T.E. and Silversides, D.A. (1990): Diamond Drilling Report on the Shaft Property, Drill Holes SH 90-1 to SH 90-6, Nelson Mining Division for Noramco Explorations Inc., September 10, 1990

APPENDIX I

STATEMENT OF QUALIFICATIONS

Statement of Qualifications

I William J. Lewis of 305 - 6689 Willingdon Avenue, Burnaby, B.C. do hereby certify that:

- I am a Geologist employed by Noramco Exploration Inc. with a business address of #900 - 999 West Hastings Street, Vancouver, B.C.

- I am a graduate of the University of British Columbia with a Bachelor of Science Degree in Geology, 1985.

- That I am a member in good standing of:
 - Geological Association of Canada

- That I assisted in preparation of this report describing the drill program carried out at the Shaft Property by Noramco Explorations Inc. on behalf of Noramco Mining Corp.



William J. Lewis, B.Sc.
November 1990

Statement of Qualifications

I Thomas E. Lisle of 145 West Rockland Road in The District of North Vancouver do hereby certify:

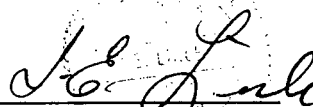
- That I am a geologist with business address at #4-1543 Lonsdale Avenue, North Vancouver, British Columbia.

- That I am a graduate of the University of British Columbia and hold a Bachelor of Science degree granted in 1964.

- That I am a member in good standing of:
 - Geological Association of Canada
 - The Canadian Institute of Mining and Metallurgy
 - Associate of Professional Engineers of B.C.

- That I carried out field work related to the Shaft Property from June 19, 1990 to July 31, 1990.

- That I assisted in preparation of this report describing the drilling program carried out at the Shaft Property by Noramco Explorations Inc. on behalf of Noramco Mining Corp.


T.E. Lisle, P. Eng.
November 1990

APPENDIX II

STATEMENT OF WORK & GROUPING NOTICE



Province of British Columbia
Ministry of Energy, Mines and Petroleum Resources
MINERAL RESOURCES DIVISION — TITLES BRANCH

DOCUMENT No. _____
OFFICE USE ONLY

Mineral Tenure Act
Sections 25, 26 & 27

STATEMENT OF WORK — CASH PAYMENT

10:30 AM PAID MR
GOVERNMENT AGENT
SEP 11 1990 870.08
NELSON
TRANS. # _____
RECORDING STAMP

Indicate type of title MINERAL
(Mineral or Placer)

Mining Division: NELSON
1. WILLIAM LEWIS
(Name)
900 999 W. HASTINGS ST.
(Address)
VANCOUVER B.C.
(604) 689-1428 V6C 2W2
(Telephone) (Postal Code)
Valid subsisting FMC No. 290707
FMC Code LIEWLW

Agent for OTTO UTAKA JANOUT ROBERT BOURKE
 CHARLES PITTMAN JAMES CHERRY
 310 1509 MARLTON (Nagel) WHITE ROCK B.C.
 1424 CEDAR ST. NIELSON B.C.
 907 W. RICHMOND ST (Address) NIELSON B.C.
 2870 SILVER KING RD. NIELSON B.C.
 5361834 352-6815 40 4415 SWB VIL 5
 352-7071 354-4202 VIL 2E9 VIL 1C
(Telephone) (Postal Code)
Valid subsisting FMC No. 294762 29476
 JANOUR PITCO CHERT 29476
FMC Code JANOUR BOURKE

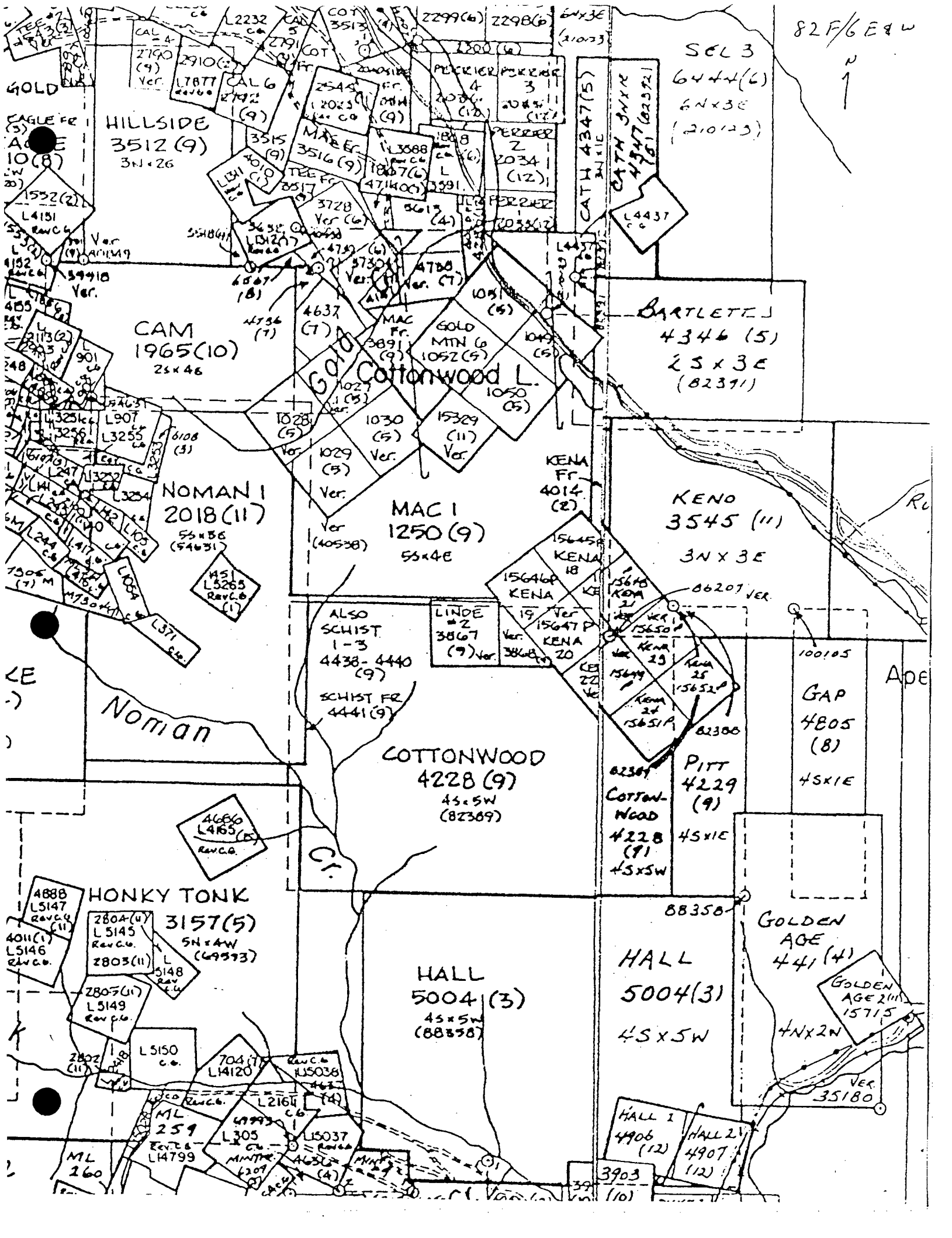
STATE THAT: (NOTE: If only paying cash in lieu, turn to reverse and complete columns G to J and Q to T.)

1. I have done, or caused to be done, work on the Au 2, STAN OF THE EAST, TEE FA
PRINCESS Claim(s)
Record No(s). 3728, 3632, 3517, 2545
Work was done from JUNE 21, 19 90, to JULY 1, 19 90 ;
and was done in compliance with Section 50 of the Mineral Tenure Act and
Section 19(3) of the Regulation YES NO

I hereby request that the claims listed in Column G on this Statement of Work be Grouped and I confirm that
all claims listed are contiguous YES NO
FEE — \$10.00

TYPE OF WORK
PHYSICAL: Work such as trenches, open cuts, adits, pits, shafts, reclamation, and construction of roads and trails. Details as required under section 13 of the Regulations, including the map and cost statement, must be given on this statement.
PROSPECTING: Details as required under section 9 of the Regulations must be submitted in a technical report. Prospecting work can only be claimed once by the same owner of the ground, and only during the first three years of ownership.
GEOLOGICAL, GEOPHYSICAL, GEOCHEMICAL, DRILLING: Details must be submitted in a technical report conforming to sections 5 through 8 (as appropriate) of the Regulations.
PORTABLE ASSESSMENT CREDIT (PAC) WITHDRAWAL: A maximum of 30% of the approved value of geological, geophysical, geochemical and/or drilling work on this statement may be withdrawn from the owner's or operator's PAC account and added to the work value on this statement.

TYPE OF WORK (Specify Physical (Include details), Prospecting, Geological, etc.)	VALUE OF WORK		
	Physical	*Prospecting	*Geological etc.
<u>ROAD WORK (USE OF CAT TO BUILD ROADS TO RAIL STES)</u>	<u>2,627</u>		<u>18,662</u>
<u>DIAMOND DRILLING (REPORT TO FOLLOW)</u>			
TOTALS	<u>A 2,627 +</u>	<u>B</u>	<u>+ C 18,662 = D 21,289</u>
PAC WITHDRAWAL — Maximum 30% of Value in Box C Only from account(s) of _____			<u>E → E</u>
		TOTAL	<u>F 21,289</u>
* Who was the operator (provided the financing)? Name <u>NURANU MINING CO.</u> Address <u>900 999 WEST HASTINGS ST.</u> <u>VANCOUVER B.C.</u> Phone: <u>(604) 689-1428</u> <u>V6C 2W2</u>	Transfer amount in Box F to reverse side of form and complete as required.		



82 F/6 E 8 W



SEL 3
6444(6)
6N x 3E
(210123)

GOLD
EAGLE FR
AGE
10(8)

HILLSIDE
3512 (9)
3N x 26

1532(2)
L4151

455
2113(2)
2203

3256
L3255
L3254

7505 M
(7)

Noman

4888
L5147
Rav. Co.
(11)

4011(1)
L5146
Rav. Co.

ML
259
L4799

ML
260

CAM
1965(10)
2S x 46

NOMAN I
2018(11)
5S x 56
(54631)

Noman

HONKY TONK
3157(5)
5N x 4W
(69593)

L5150
c.o.

L305
L4799

COTTONWOOD
4228 (9)
4S x 5W
(82389)

MAC I
1250 (9)
5S x 4E

ALSO
SCHIST
1-3
4438-4440
(9)
SCHIST FR
4441(9)

COTTONWOOD
4228 (9)
4S x 5W
(82389)

HALL
5004 (3)
4S x 5W
(88358)

HALL
5004(3)
4S x 5W
(88358)

HALL I
4906
(12)

HALL 2
4907
(12)

KENA
FR
4014
(2)

KENA
18

LINDE
#2
3867
(9) Ver.

19 Ver.
15647 P
KENA
20

62309
Cotton-
wood
4228
(9)
4S x 5W

62309
Cotton-
wood
4228
(9)
4S x 5W

88358

HALL
5004(3)
4S x 5W
(88358)

HALL I
4906
(12)

HALL 2
4907
(12)

3903
(10)

BARTLETT
4346 (5)
2S x 3E
(82391)

KENO
3545 (11)
3N x 3E

15645
KENA
18

15646
KENA
19

15647
KENA
20

15648
KENA
21

15649
KENA
22

15650
KENA
23

100105
GAP
4805
(8)

4SKIE

88358

GOLDEN
AGE
441 (4)

GOLDEN
AGE 2
15715
4N x 2W
VER.
35180

Ape

APPENDIX III
DRILL LOGS, SUMMARY DRILL LOGS,
AND ANALYSIS CERTIFICATES
FOR DRILL HOLE SH 90-1

DRILL LOG

HOLE NO. 5H 90-1

DRILLING CO. LONE RANGER DIAMOND DRILLING COMPANY.	LOCATION SKETCH	TESTS			DATE STARTED:	PROJECT:
		DEPTH	DIP ANGLE	AZIMUTH	JUNE 26, 1990	SHAFT 2013
		COLLAR	-65°		DATE COMPLETED:	N.T.S.: BZF/6W1.
		81.68	-64°		COLLAR ELEV.:	LOCATION:
		196.89	-62°		NORTHING:	NELSON H.O.
		288.33	-61°		EASTING:	LAT. 49° 26' 10"
		345.63	-60°		AZIMUTH:	LONG. 117° 16' 40"
					DEPTH:	DATE LOGGED: July/90
HOLE TYPE	CORE				CORE SIZE:	LOGGED BY: T.E. Lisle

INTERVAL METRES		LITHOLOGY			ALTERATION	MINERALIZATION	REMARKS
FROM	TO	ROCK TYPE	COLOUR	TEXTURE			(lithology, alteration, mineralization, structure, age relations, etc.)
0	12.19	CASING.					
12.19	198.40	SILICEOUS TUFF	GREY- BROWN BROWN	FINE TO MEDIUM- GRAINED	CARBONATE SILICA BIOTITE	TRACE - 3% pyrite 2% - 5% pyrochloite Trace chalcopyrite Trace sphalerite.	<p>Tuff is commonly fine-grained. It has been extensively altered to a brown carbonate-biotite-rich rock (hardly) and is locally cherty. The tuff has been silicified by a abundant white quartz-carbonate veins and fractures that commonly occur as laminations in the 45° to 70° foliation. Some of the veins have a pink cast and resemble porphyritic intrusive stringers.</p> <p>The tuff is mineralized with disseminated pyrite and pyrochloite and trace amounts of chalcopyrite and sphalerite. The iron sulphides also occur as coarse selvages adjacent to veins.</p> <p>12.19 - 20.32 M Fine to medium grained tuff. Banding at 45° - 50° to c.a. 20.12 - 20.32 M Quartz Vein.</p>
					Weak chlorite.	2-3% pyrite 2-3% pyrochloite Trace chalcopyrite	

DRILL LOG

HOLE NO. 54 90-1

INTERVAL		LITHOLOGY			ALTERATION	MINERALIZATION	REMARKS
FROM	TO	ROCK TYPE	COLOUR	TEXTURE			(lithology, alteration, mineralization, structure, age relations, etc.)
12.19	198.40				Weak chlorite.	22% - 32% pyrite. 32% - 52% pyrrhotite. To locally 50% Coy.	20.52 - 36.30 M. Fine-grained. Gray to mottled brown. Brown alteration occurs as irregular banding, on diffuse clust-like masses.
						1% pyrite. 4% pyrrhotite.	36.30 - 59.74 20% - 22% is mottled brown. Foliation - Banding 50° - 60° to C.A.
						To 1% pyrite. 52% pyrrhotite.	59.74 - 73.15 M. Fine-grained. Banding at 50° - 60°. 4 cm quartz-vein at 72.10 M. Scattered quartz - carb. fractures.
						1%? pyrite. 22% - 52% pyrrhotite. To Coy.	73.15 - 82.70 M. Top of section is brown. Not as highly foliated. (Banding at 55° - 62° to C.A.) Below 1/2 M is oxidized. (Fault)? 73.15 - 74.0 M 2-4% pyrite; 23% po. is gray to dark-gray medium-grained section.
					Weak chlorite.	To Azite. 32% - 52% pyrrhotite.	82.70 - 104.20 M 20% - 40% is mottled brown. Tuff is fine-grained with local feldspathic sections. Abundant siliceous laminae and fractures - Weakly chloritic.
						32% - 42% pyrrhotite.	104.20 - 104.80 M Feldspathic tuff. Cherty.
						4-5% pyrrhotite.	104.80 - 111.56 M As in 82.70 - 104.20 M.
			Green	Medium	Chloritic	To 1% pyrite. 1-5% pyrrhotite. Trace chalcopyrite.	111.56 - 116.90 M. Plagioclase + Azite crystal tuff. Silicified. Foliation 55° - 60° to C.A. Weakly mottled brown.
				Brained			
			Pale green green.		Carbonate-clay? Chlorite? (Bright Green)	22% pyrite. 22% pyrrhotite.	116.90 - 117.85 M Altered f.g. tuff - foliated (sheared) at 50° - 55° to C.A. - Contacts gradational & brecciated.

DRILL LOG

HOLE NO. SH 90-1

INTERVAL		LITHOLOGY			ALTERATION	MINERALIZATION	REMARKS
FROM	TO	ROCK TYPE	COLOUR	TEXTURE			(lithology, alteration, mineralization, structure, age relations, etc.)
12.19	198.40		Gray - Green	Fine to Medium- Grained	Chloritic	1% - 2% pyrite 2-3% pyrrhotite	117.85 - 120.70M Interbedded? fine-grained and feldspathic medium-grained tuff. Foliation at 50°-60° to C.A. Weakly brown altered. Irregularly silicified.
			Gray - Green to brown.	Fine - Grained	Chloritic	Trace - 1% pyrite 4-5% pyrrhotite. Trace chalcopirite	120.70 - 130.37M. Highly silicified with pink intense streaks. Foliation 55°-70° to C.A. 120.70 - 123.75M - Section more highly veined by quartz-carbonate; or quartz-carbonate related to weak pale grey-green carbonate-clay? alteration in foliation shears. Well broken 123.75 - 124.60M. 3-8% pyrrhotite.
				Fine - Grained	Chloritic	2-3% pyrite 1-2% pyrrhotite.	130.37 - 137.10M Gray-green to pink-brown. Section to 133.50 is brecciated, broken and sheared at 30°-50° to C.A. Silicification irregular - local strong chlorite-pyrite fracture.
			Green.			1-2% pyrite 2-3% pyrrhotite	137.10 - 138.50M Augite Crystal Tuff. Moderately siliceous. Gradational contacts.
			Gray - Green to Brown	Fine - Grained		1% pyrite 3-5% pyrrhotite. Trace chalcopirite	138.50 - 144.10M Gradac locally to feldspathic tuff, 30-40% mottled brown. Section marked by irregular chloritic-siliceous fractures. Abundant carbonate laminations/fractures.
							144.10 - 198.40M. Fine-grained siliceous tuff as above.
						Trace pyrite 3% - 4% pyrrhotite Tr. chalcopirite	144.10 - 164.10 30% - 40% of section is mottled brown, locally in strong foliation bands 60°-70° to C.A. 163.37M - Pale carbonate-clay? shear, locally chloritic.

DRILL LOG

HOLE NO. SH 90-1

INTERVAL		LITHOLOGY			ALTERATION	MINERALIZATION	REMARKS
FROM	TO	ROCK TYPE	COLOUR	TEXTURE			(lithology, alteration, mineralization, structure, age relations, etc.)
12.19	198.40		Grey-Green to Brown			Tr - locally 1% Cp-1 1-5% pyrrhotite. 3-5% pyrrhotite. 1% pyrite	<u>144.10 - 198.40 M.</u> 164.10 - 166.40 Plagioclase ± Anorthite crystal tuff. Locally siliceous. Weak gradation to fine-grained 166.40 - 172.52 M. Fine to medium-grained grades locally to argite-rich tuff. Variably silicified. Weakly chloritic. 172.52 - 191.30 M. Fine-grained grey-green grading to feldspathic tuff. Foliation 60-70° 3-8% pyrrhotite. Local foliation shear. 191.30 - 193.15 M. Fine to Med-grain feldspathic tuff. 2-3% siliceous intrusive stringer at 55° to C.A. 193.15 - 198.40 M. Fine to Medium-grained, locally chloritic. Section from 196.5 - 198.80 is a pale grey carbonate-clay alteration zone, locally brecciated at 70° to C.A. with stringy quartz-carbonate and 3-4% pyrite-pyrrhotite. Well broken. Irregular silicification.
198.40	212.30	Tuff	Green, Olive-brown, Yellow-Grey	Fine to Medium-Grained	Carbonate Clay? Quartz Chlorite	22-3% pyrite. 1% pyrrhotite.	Section is increasingly broken and altered to a yellow-grey rock with a bright-green chlorite? The zone represents a transition from the siliceous unit above to a weakly altered unit below. 198.40 - 203.76 M. Highly altered, abundant quartz-carbonate veins and fractures that vary from 15-45° to C.A. with local shear. Section contains black v.e.s. sulphide (arsenopyrite). Traces of chalcopyrite, sphurite, galena.

DRILL LOG

HOLE NO. SH 90-1

INTERVAL		LITHOLOGY			ALTERATION	MINERALIZATION	REMARKS
FROM	TO	ROCK TYPE	COLOUR	TEXTURE			(lithology, alteration, mineralization, structure, age relations, etc.)
198.40	212.30		Green.			2-3% pyrite. 2% pyrrhotite	203.76-207.80M. Fine to medium-grained tuff grading to augite crystal tuff. Section is chloritic, weakly siliceous, and has weak quartz-carbonate fracture and laminations.
						2% pyrite 1-2% pyrrhotite	207.80M.-212.30M. Section extensively altered by carbonate-quartz-clay? + sericite + chlorite (Bright-apple-green chlorite)? - Banding 65°-70° to C.A. with local shear at 210.25M. - Bottom contact is broken. - Traces V.F.S. black sulphide.
212.30	237.50	AUGITE CRYSTAL TUFF	Dark-Green	Fine to Coarse Grained	Alteration is weak except at naked.	1% pyrite. Trace pyrrhotite. Trace chalcopyrite	Section is highly altered to 214.80M as in above unit. Section contains up to 10% 1-5 mm deformed augite crystals and small mafic clasts, and grades locally to a fine-grained andesitic? tuff. Foliation 65-75° to C.A. - 217.8-218.40M - Clay-carbonate-silicea (limonitic) - 232.60-233.2 M - Bleached alteration zone with quartz-carbonate veins at 70° to C.A. - 234.30-237.50M. Weakly altered. - Locally stringy quartz-carbonate veining.
237.50	239.56	TUFF (ANDOSITIC)	Gray (Brownish-Green)-Black.	Fine Grained	Quartz-Carbonate	2% Pyrite.	Section contains 40% very fine-grained black cherty interbeds to 2 cm. wide, and trending at 65° to C.A. Locally abundant white carbonate-quartz fractures and laminations.

D R I L L L O G

HOLE NO. SH 90-1

INTERVAL		LITHOLOGY			ALTERATION	MINERALIZATION	REMARKS
FROM	TO	ROCK TYPE	COLOUR	TEXTURE			(lithology, alteration, mineralization, structure, age relations, etc.)
239.56	345.77	LAPILLI TUFF	Dark - Grey to Green to brown.	Fine to Coarse clastic	Carbonate Chlorite Epidote		The unit is commonly coarse-grained with variations to fine-grained sections. It is normally massive, weakly foliated and weak to moderately altered. The coarse unaltered section may include up to 25% clasts that are rounded to sub-angular and range to about 5cm in diameter. The clasts include; pale to dark crystal tuff, micritic fine tuff, augite crystal tuff (basalt)? Porphyritic andesite, and fine-grained intrusive rocks. The clasts commonly occur in a feldspathic crystal tuff matrix.
			Grey - Green.			1% - 2% pyrite 1% - 2% pyrochlore	239.56 - 245.0M. Transition zone includes deformed fine-grained augite crystal tuff grading to lapilli tuff containing greyish-brown tuff layers in foliation at 65°-70° to S. - Abundant white carbonate + quartz laminations and fractures to 3.0cm. - Locally broken and altered - Gradational contacts.
			Dark Grey - Green.		Carbonate Quartz Epidote.	1% pyrite.	245.0 - 252.60M Section varies from fine-grained grey-green tuff through feldspathic tuff to lapilli tuff. Foliation 60°-65° to C.A. 246.4 - 247.4 Quartz-epidote-carbonate altered 249.9 - 250.2 Pale limonitic quartz-carbonate alteration zone with MnO ₂ .
					Carbonate. Epidote	± 1% pyrite.	252.60 - 270.05M. Lapilli Tuff. 252.6 - 256.50 Grey-brown plagioclase crystal tuff. Biotite alteration? Narrow f.c. tuff interbed at 261.50-261.70M

DRILL LOG

HOLE NO. SH 90-1

INTERVAL		LITHOLOGY			ALTERATION	MINERALIZATION	REMARKS
FROM	TO	ROCK TYPE	COLOUR	TEXTURE			(lithology, alteration, mineralization, structure, age relations, etc.)
239.56	345.77	LAPILLI TUFF	Grey to Green to weak Brown		Carbonate. Weak chlorite. Biotite?	Trace - 1% pyrite.	270.05 - 286.0 M. Mottled grey. Weak epidote alteration in clasts and locally coarse quartz-carbonate ± epidote fractures, and very fine carbonate microfractures. 272.64 M. Limonitic carbonate-altered shear at 10° to C.A. 280.9 - 281.10 is limonitic. Alteration related to narrow carbonate-pyrite fractures trending from 0°-15° to C.A. Section from 281.1 - 282.8 M is pervasively altered to a beige-grey colour. Balance of section has weak alteration selvages along 0°-30° carbonate veins.
			Grey to Green to Weak Brown		Carbonate Weak chlorite Weak epidote.	To - 1% pyrite.	286.0 - 303.58 M. Generally massive. Weak veining by carbonate-quartz. Section to 296.5 M has weakly epidote altered clasts. Local chloritic fractures are associated with carbonate. - After 296.5 M, rock has weak brown cast. - Weak banding at 70° to C.A. - 303.58 M - Strong quartz-carbonate vein at 50° to C.A. - Section has evidence of rare bluish-grey quartz eyes 1-2 mm in diameter. (cf. bottom of hole # SH 90-6.)

DRILL LOG

HOLE NO. SH 90-1

INTERVAL		LITHOLOGY			ALTERATION	MINERALIZATION	REMARKS
FROM	TO	ROCK TYPE	COLOUR	TEXTURE			(lithology, alteration, mineralization, structure, age relations, etc.)
239.56	345.77	LAPILLI TUFF			Chlorite. Sericite. Carbonate-quartz	1% - 2% pyrite.	303.50 - 307.50M As above. 60% of section is altered to a beige carbonate-rich zone with strong quartz-carbonate veins at 30°-50° to C.A. Weak chlorite, Trace sericite.
					Carbonate-quartz Chlorite Epidote		307.50 - 313.50M Weakly altered with chlorite epidote, minor carbonate-quartz veins and traces of hematite hematitic at 313.50M.
						Tr - 1% pyrite.	313.50 - 315.80M. Fine-grained section. Highly broken and laminated along strong 0°-30° fractures, with carbonate-quartz veining. 315.5 - 315.8M. Beige-green alteration around vague clasts. Bottom contact at 150' to C.A.
			Dark Grey		Epidote. Weak chlorite.	Trace Pyrite. Trace magnetite.	315.80 - 333.92M. As in 307.5 - 313.50M - Weak epidote-altered clasts. - Silica-epidote alteration in 0.5-5cm bands trending at 75°-80° to C.A. Weak carbonate ± hematite.
					Weak chlorite. Weak epidote	Tr. to 1% pyrite.	333.92 - 345.77M. As above. 333.92 - 334.67M Pervasive beige-grey alteration with carbonate-quartz veins and weaker narrow zones at 337.20, 339.70, 344.50M - Matrix fine-grained zones locally resemble deformed bed at about 70° to C.A. - Carbonate-quartz fractures are commonly weak.
	345.77	END OF HOLE					

SAMPLE DATA DRILL LOG

ASSAY LAB: ACME ANALYTICAL LABS

SAMPLE (METRES)				CORE			VISUAL ESTIMATES (% ORE MINERALS)	ASSAY RESULTS				
NUMBER	FROM	TO	LENGTH	% REC	RQD	S.G.		Cu PPM	Pb PPM	Zn PPM	Ag PPM	Au ^{AA} PPM
93001	12.19m	14.0m	1.81m	94%			107	16	207	9	5	
93002	14.0m	15.5m	1.5m	100%			187	18	275	3	5	
93003	15.5m	17.0m	1.5m	99%			187	17	259	58	6	
93004	17.0m	18.5m	1.5m	98%			115	11	266	25	3	
93005	18.5m	20.0m	1.5m	99%			106	31	321	98	1	
93006	20.0m	21.5m	1.5m	100%			296	8	129	44	1	
93007	21.5m	23.0m	1.5m	100%			268	25	266	15	4	
93008	23.0m	24.5m	1.5m	96%			1427	14	631	5	12	
93009	24.5m	26.0m	1.5m	98%			85	20	91	10	2	
93010	26.0m	27.5m	1.5m	100%			122	7	76	4	1	
93011	27.5m	29.0m	1.5m	100%			172	19	130	84	1	
93012	29.0m	30.5m	1.5m	100%			142	17	181	2	1	
93013	30.5m	32.0m	1.5m	100%			232	9	159	5	1	
93014	32.0m	33.5m	1.5m	100%			115	10	129	16	2	
93015	33.5m	35.0m	1.5m	100%			76	2	63	6	1	
93016	35.0m	36.5m	1.5m	100%			103	13	65	7	1	
93017	36.5m	38.0m	1.5m	100%			213	14	173	12	11	
93018	38.0m	39.5m	1.5m	100%			151	12	166	9	16	
93019	39.5m	41.0m	1.5m	100%			170	13	173	150	10	
93020	41.0m	42.5m	1.5m	100%			141	11	207	231	9	
93021	42.5m	44.0m	1.5m	80%			112	10	156	51	5	
93022	44.0m	45.5m	1.5m	75%			133	12	126	17	6	
93023	45.5m	47.0m	1.5m	100%			208	15	156	9	8	
93024	47.0m	48.5m	1.5m	100%			202	15	114	24	22	
93025	48.5m	50.0m	1.5m	100%			176	17	133	10	24	
93026	50.0m	51.5m	1.5m	100%			204	13	116	20	35	
93027	51.5m	53.0m	1.5m	90%			171	8	120	7	34	
93028	53.0m	54.5m	1.5m	90%			203	10	103	5	47	
93029	54.5m	56.0m	1.5m	100%			148	4	110	73	31	
93030	56.0m	57.5m	1.5m	100%			164	7	92	9	50	
93031	57.5m	59.0m	1.5m	100%			139	6	107	6	34	

SAMPLE DATA DRILL LOG

ASSAY LAB: ACME ANALYTICAL LAB

SAMPLE (METRES)			CORE			VISUAL ESTIMATES (% ORE MINERALS)	ASSAY RESULTS				
NUMBER	FROM	TO	LENGTH	% REC	RQD		S.G.	Cu PPM	Pb PPM	Zn PPM	As PPM
93032	59.0m	60.5m	1.5m	100%			130	6	91	2	33
93033	60.5m	62.0m	1.5m	100%			146	12	118	11	33
93034	62.0m	63.5m	1.5m	100%			141	7	121	2	41
93035	63.5m	65.0m	1.5m	100%			141	9	110	3	23
93036	65.0m	66.5m	1.5m	98%			159	13	89	2	24
93037	66.5m	68.0m	1.5m	96%			162	14	76	2	21
93038	68.0m	69.5m	1.5m	95%			179	9	100	21	28
93039	69.5m	71.0m	1.5m	94%			173	7	105	3	89
93040	71.0m	72.5m	1.5m	98%			146	8	101	2	17
93041	72.5m	74.0m	1.5m	80%			189	14	118	125	18
93042	74.0m	75.5m	1.5m	85%			264	10	141	8	40
93043	75.5m	77.0m	1.5m	100%			297	7	239	6	16
93044	77.0m	78.5m	1.5m	98%			339	7	236	11	21
93045	78.5m	80.0m	1.5m	90%			916	10	180	7	57
93046	80.0m	81.5m	1.5m	92%			206	5	162	2	39
93047	81.5m	83.0m	1.5m	82%			162	10	144	6	33
93048	83.0m	84.5m	1.5m	85%			165	6	93	2	63
93049	84.5m	86.0m	1.5m	100%			160	5	103	8	41
93050	86.0m	87.5m	1.5m	100%			153	6	121	2	35
93051	87.5m	89.0m	1.5m	100%	10-50cm FAC		155	6	123	2	33
93052	89.0m	90.5m	1.5m	100%	1-35cm FAC		234	8	117	78	31
93053	90.5m	92.0m	1.5m	100%	10-50cm FAC		144	6	150	4	14
93054	92.0m	93.5m	1.5m	100%	5-70cm FAC		142	4	184	3	19
93055	93.5m	95.0m	1.5m	100%	5-75cm FAC		164	9	145	4	25
93056	95.0m	96.5m	1.5m	98%	5-25cm FAC		194	10	119	2	12
93057	96.5m	98.0m	1.5m	92%	1-20cm FAC		187	6	74	4	14
93058	98.0m	99.5m	1.5m	100%	15-40cm FAC		231	6	83	8	20
93059	99.5m	101.0m	1.5m	100%	6-30cm FAC		222	6	83	4	11
93060	101.0m	102.5m	1.5m	100%	2-36cm FAC		146	7	84	3	13
93061	102.5m	104.0m	1.5m	100%	6-31cm FAC		205	8	94	5	21
93062	104.0m	105.5m	1.5m	100%	2-25cm FAC		181	7	90	3	11

SAMPLE DATA DRILL LOG

ASSAY LAB: ACME ANALYTICAL LABS

SAMPLE (METRES)				CORE			VISUAL ESTIMATES (% ORE MINERALS)	ASSAY RESULTS				
NUMBER	FROM	TO	LENGTH	% REC	LOG	S.G.		Cu ppm	Pb ppm	Zn ppm	As ppm	Au ^{ppb}
93063	105.5m	107.0m	1.5m	100%	1-28cm F26		221	5	103	7	27	
93064	107.0m	108.5m	1.5m	100%	5-65cm F26		178	5	115	2	23	
93065	108.5m	110.0m	1.5m	97%	0.5-10cm F26 Matrix F26		124	7	97	2	5	
93066	110.0m	111.5m	1.5m	100%	1-27cm F26 Matrix F26		147	9	64	4	21	
93067	111.5m	113.0m	1.5m	100%	8-40cm F26		232	5	92	3	51	
93068	113.0m	114.5m	1.5m	100%	20-50cm F26		211	3	57	12	30	
93069	114.5m	116.0m	1.5m	97%	5-40cm F26		229	6	78	8	14	
93070	116.0m	117.5m	1.5m	97%	5-30cm F26		114	14	90	30	7	
93071	117.5m	119.0m	1.5m	100%	4-27cm F26 Matrix F26		129	18	111	12	4	
93072	119.0m	120.5m	1.5m	100%	10-20cm F26		122	2	89	13	15	
93073	120.5m	122.0m	1.5m	100%	1-15cm F26		101	8	121	16	15	
93074	122.0m	123.5m	1.5m	100%	1-23cm F26		392	10	84	27	26	
93075	123.5m	125.0m	1.5m	90%	51cm-10cm F26 Matrix F26		274	8	79	7	17	
93076	125.0m	126.5m	1.5m	94%	47-55cm F26 Matrix F26		291	11	66	9	67	
93077	126.5m	128.0m	1.5m	97%	5-20cm F26		1	2	1	2	10	
93078	128.0m	129.5m	1.5m	100%	5-15cm F26 Matrix F26		276	7	71	11	17	
93079	129.5m	131.0	1.5m	86%	21cm-10cm F26 Matrix F26		249	7	79	114	16	
93080	131.0m	132.5m	1.5m	90%	21cm-20cm F26 Matrix F26		203	7	85	56	20	
93081	132.5m	134.0m	1.5m	97%	1-20cm F26 Matrix F26		281	7	100	15	28	
93082	134.0m	135.5m	1.5m	98%	1-35cm F26 Matrix F26		206	7	122	3	26	
93083	135.5m	137.0m	1.5m	98%	5-32cm F26		221	6	90	8	24	
93084	137.0m	138.5m	1.5m	98%	5-30cm F26		169	4	67	2	31	
93085	138.5m	140.0m	1.5m	100%	5-25cm F26		176	4	68	2	30	
93086	140.0m	141.5m	1.5m	100%	4-28cm F26		220	4	80	2	4	
93087	141.5m	143.0m	1.5m	100%	15-60cm F26		198	3	81	7	8	
93088	143.0m	144.5m	1.5m	100%	10-70cm F26		171	3	75	2	21	
93089	144.5m	146.0m	1.5m	100%	8-37cm F26		197	5	57	6	19	
93090	146.0m	147.5m	1.5m	100%	10-43cm F26		126	3	52	4	11	
93091	147.5m	149.0m	1.5m	100%	10-45cm F26		103	4	55	17	4	
93092	149.0m	150.5m	1.5m	100%	10-50cm F26		162	4	58	2	16	
93093	150.5m	152.0m	1.5m	100%	5-64cm F26		267	4	62	2	18	

SAMPLE DATA DRILL LOG

ASSAY LAB: ACME ANALYTICAL LAB

SAMPLE (METRES)				CORE			VISUAL ESTIMATES (% ORE MINERALS)	ASSAY RESULTS				
NUMBER	FROM	TO	LENGTH	% REC	RQD	S.G.		Cu ppm	Ph ppm	Zn ppm	As ppm	Au ^{ppm} PPA
93094	152.0m	153.5m	1.5m	100%	5-80cm P46		208	6	83	26	19	
93095	153.5m	155.0m	1.5m	100%	8-34cm P46		154	4	75	7	10	
93096	155.0m	156.5m	1.5m	100%	10-17cm P46		234	4	82	3	12	
93097	156.5m	158.0m	1.5m	100%	5-35cm P46		217	6	92	4	16	
93098	158.0m	159.5m	1.5m	100%	10-35cm P46		203	3	92	7	18	
93099	159.5m	161.0m	1.5m	100%	10-70cm P46		287	6	99	4	24	
93100	161.0m	162.5m	1.5m	100%	10-50cm P46		352	7	53	2	23	
93101	162.5m	164.0m	1.5m	100%	1-25cm P46		373	5	101	80	50	
93102	164.0m	165.5m	1.5m	100%	2-70cm P46		1940	4	775	2	33	
93103	165.5m	167.0m	1.5m	<100%	15-65cm P46		316	4	144	5	17	
93104	167.0m	168.5m	1.5m	99%	5-70cm P46		183	4	118	6	24	
93105	168.5m	170.0m	1.5m	≤100%	6-25cm P46 4-65cm P46		194	4	108	3	42	
93106	170.0m	171.5m	1.5m	100%	8-65cm P46		301	4	64	5	65	
93107	171.5m	173.0m	1.5m	100%	6-50cm P46		212	5	96	3	38	
93108	173.0m	174.5m	1.5m	100%	10-40cm P46		244	7	47	2	21	
93109	174.5m	176.0m	1.5m	100%	10-35cm P46		379	8	93	2	4	
93110	176.0m	177.5m	1.5m	100%	4-50cm P46		357	4	103	2	6	
93111	177.5m	179.0m	1.5m	100%	2-35cm P46		379	6	60	2	1	
93112	179.0m	180.5m	1.5m	100%	2-30cm P46		303	7	88	2	2	
93113	180.5m	182.0m	1.5m	100%	5-30cm P46		368	6	71	6	28	
93114	182.0m	183.5m	1.5m	100%	5-70cm P46		397	5	56	6	7	
93115	183.5m	185.0m	1.5m	100%	15-70cm P46		576	7	82	2	9	
93116	185.0m	186.5m	1.5m	100%	8-70cm P46		380	7	96	4	4	
93117	186.5m	188.0m	1.5m	100%	8-25cm P46		372	6	82	8	11	
93118	188.0m	189.5m	1.5m	100%	10-00cm P46		403	6	84	3	20	
93119	189.5m	191.0m	1.5m	≤100%	12-70cm P46		444	6	61	4	40	
93120	191.0m	192.5m	1.5m	99%	10-50cm P46		253	2	53	3	30	
93121	192.5m	194.0m	1.5m	≤100%	2-25cm P46		421	5	57	6	37	
93122	194.0m	195.5m	1.5m	100%	2-10cm P46 2-25cm P46 2-35cm P46		339	70	308	7	65	
93123	195.5m	197.0m	1.5m	100%	2-15cm P46 2-25cm P46 2-35cm P46		245	64	186	69	16	
93124	197.0m	198.5m	1.5m	≤100%	2-170cm P46 10-55cm P46		454	5	88	7	35	

SAMPLE DATA DRILL LOG

ASSAY LAB: ACME ANALYTICAL LAB

SAMPLE (METRES)				CORE			VISUAL ESTIMATES	ASSAY RESULTS						
NUMBER	FROM	TO	LENGTH	% REC	ROD	S.G.	(% ORE MINERALS)	Cu ppm	Pb ppm	Zn ppm	As ppm	Au** ppm		
93125	198.5m	200.0m	1.5m	~100%	21cm - 25cm FAC			136	147	324	61	33		
93126	200.0m	201.5m	1.5m	100%	21cm - 25cm FAC			64	16	116	98	15		
93127	201.5m	203.0m	1.5m	~85%	21cm - 25cm FAC			114	207	76	2162	477		
93128	203.0m	204.5m	1.5m	~80%	21cm - 25cm FAC			185	4	92	16	849		
93129	204.5m	206.0m	1.5m	100%	21cm - 25cm FAC			215	4	76	12	46		
93130	206.0m	207.5m	1.5m	100%	21cm - 25cm FAC			184	5	115	4	40		
93131	207.5m	209.0m	1.5m	100%	21cm - 25cm FAC			260	4	127	29	17		
93132	209.0m	210.5m	1.5m	100%	21cm - 25cm FAC			121	3	123	71	16		
93133	210.5m	212.0m	1.5m	100%	21cm - 25cm FAC			96	4	80	71	7		
93134	212.0m	213.5m	1.5m	~99%	21cm - 25cm FAC			120	2	85	12	8		
93135	213.5m	215.0m	1.5m	~97%	21cm - 25cm FAC			117	2	74	5	12		
93136	215.0m	216.5m	1.5m	~100%	21cm - 25cm FAC			127	2	74	8	9		
93137	216.5m	218.0m	1.5m	100%	21cm - 25cm FAC			87	2	163	2	1		
93138	218.0m	219.5m	1.5m	100%	21cm - 25cm FAC			130	2	69	7	4		
93139	219.5m	221.0m	1.5m	~95%	21cm - 25cm FAC			133	2	47	7	5		
93140	221.0m	222.5m	1.5m	91%	21cm - 25cm FAC			103	2	64	8	6		
93141	222.5m	224.0m	1.5m	~95%	21cm - 25cm FAC			88	4	72	3	3		
93142	224.0m	225.5m	1.5m	100%	21cm - 25cm FAC			117	2	47	4	5		
93143	225.5m	227.0m	1.5m	100%	21cm - 25cm FAC			129	2	38	7	1		
93144	227.0m	228.5m	1.5m	~98%	21cm - 25cm FAC			81	2	31	6	5		
93145	228.5m	230.0m	1.5m	81%	21cm - 25cm FAC			104	2	38	5	1		
93146	230.0m	231.5m	1.5m	~90%	21cm - 25cm FAC			94	2	41	8	3		
93147	231.5m	233.0m	1.5m	100%	21cm - 25cm FAC			127	2	45	10	5		
93148	233.0m	234.5m	1.5m	100%	21cm - 25cm FAC			109	2	61	12	7		
93149	234.5m	236.0m	1.5m	100%	21cm - 25cm FAC			134	2	62	8	4		
93150	236.0m	237.5m	1.5m	100%	21cm - 25cm FAC			121	2	64	8	10		
93151	237.5m	239.0m	1.5m	~72%	21cm - 25cm FAC			97	7	263	45	20		
93152	239.0m	240.5m	1.5m	~98%	21cm - 25cm FAC			99	4	141	49	21		
93153	240.5m	242.0m	1.5m	93%	21cm - 25cm FAC			140	14	124	2	15		
93154	242.0m	243.5m	1.5m	~87%	21cm - 25cm FAC			133	8	85	5	41		
93155	243.5m	245.0m	1.5m	~96%	21cm - 25cm FAC			93	3	113	3	10		

SAMPLE DATA DRILL LOG

ASSAY LAB: ACMI ANALYTICAL LAB

SAMPLE (METRES)			CORE		VISUAL ESTIMATES (% ORE MINERALS)	ASSAY RESULTS					
NUMBER	FROM	TO	LENGTH	% REC		RQD	S.G.	Cu ppm	Pb ppm	Zn ppm	As ppm
93156	245.0m	246.5m	1.5m	100%	2-65cm Frag 6-45cm Frag		18	2	105	5	3
93157	246.5m	248.0m	1.5m	~46%	2-1-30cm Frag 1-25cm Frag 5-30cm Frag		17	2	74	2	3
93158	248.0m	249.5m	1.5m	~90%	2-1-30cm Frag		32	2	84	6	7
93159	249.5m	251.0m	1.5m	99%	2-1-30cm Frag		27	4	83	2	1
93160	251.0m	252.5m	1.5m	~100%	1-15cm Frag 4-35cm Frag		14	4	91	2	9
93161	252.5m	254.0m	1.5m	97%	4-35cm Frag		3	5	94	2	12
93162	254.0m	255.5m	1.5m	~100%	2-40cm Frag		4	8	93	2	11
93163	255.5m	257.0m	1.5m	99%	5-35cm Frag		24	7	89	6	65
93164	257.0m	258.5m	1.5m	97%	8-60cm Frag		14	2	81	2	86
93165	258.5m	260.0m	1.5m	97%	2-35cm Frag		22	5	100	2	4
93166	260.0m	261.5m	1.5m	~97%	8-50cm Frag		16	3	77	2	4
93167	261.5m	263.0m	1.5m	98%	2-1-25cm Frag		23	5	88	2	5
93168	263.0m	264.5m	1.5m	94%	2-25cm Frag		17	3	83	2	2
93169	264.5m	266.0m	1.5m	100%	10-45cm Frag		16	5	90	2	2
93170	266.0m	267.5m	1.5m	100%	5-40cm Frag		21	3	81	4	2
93171	267.5m	269.0m	1.5m	99%	5-30cm Frag		41	3	80	2	1
SELECTED SAMPLES FROM THIS POINT TO TIME (END) OF THIS HOUR											
93174	272.0m	273.5m	1.5m	97%	2-1-50cm Frag 2-1-30cm Frag 2-1-30cm Frag		17	20	80	13	8
93179	279.5m	281.0m	1.5m	84%	2-1-40cm Frag 2-1-40cm Frag		22	12	87	56	4
93180	281.0m	282.5m	1.5m	98%	2-1-40cm Frag 2-1-40cm Frag		26	20	97	23	9
93181	282.5m	284.0m	1.5m	100%	2-1-15cm Frag 2-1-15cm Frag		10	22	65	31	7
93182	284.0m	285.5m	1.5m	100%	2-1-45cm Frag 2-1-45cm Frag		21	12	61	15	5
93194	302.0m	303.5m	1.5m	47%	8-25cm Frag		29	8	65	15	10
93195	303.5m	305.0m	1.5m	100%	2-1-25cm Frag 2-1-25cm Frag		11	5	56	8	4
93196	305.0m	306.5m	1.5m	100%	2-1-30cm Frag 2-1-30cm Frag		14	2	57	7	7
93197	306.5m	308.0m	1.5m	100%	2-1-30cm Frag 2-1-30cm Frag		15	3	90	12	4
93201	312.5m	314.0m	1.5m	89%	2-1-10cm Frag 2-1-10cm Frag		15	6	45	3	11
93202	314.0m	315.5m	1.5m	90%	2-1-25cm Frag 2-1-25cm Frag		19	4	74	36	8
93203	315.5m	317.0m	1.5m	100%	2-1-45cm Frag 2-1-45cm Frag		24	2	105	3	10

SAMPLE DATA DRILL LOG

ASSAY LAB: ACME ANALYTICAL LAB

NUMBER	SAMPLE (METERS)			CORE			VISUAL ESTIMATES (% ORE MINERALS)	ASSAY RESULTS				
	FROM	TO	LENGTH	% REC	ROD	S.G.		Cu ppm	Pb ppm	Zn ppm	Ag ppm	Au ppm
93204	317.0m	318.5m	1.5m	100%	1.13m fine 2-35cm fine			18	3	86	11	2
93207	321.5m	323.0m	1.5m	100%	1-35cm fine 2-15cm fine			12	5	103	2	2
93215	337.5m	338.0m	1.5m	100%	1-13cm fine 2-15cm fine			12	203	73	27	21
93220	341.0m	342.5m	1.5m	100%	1-13cm fine 2-15cm fine			24	3	77	5	7
93221	342.5m	344.0m	1.5m	100%	1-13cm fine 2-15cm fine			14	2	77	3	378
93222	344.0m	345.77m	1.77m	100%	2-15cm fine			20	2	77	2	10
	END	OF	1706E									

APPENDIX IV

ACME ANALYTICAL LAB RESULTS SHEETS

GEOCHEMICAL ANALYSIS CERTIFICATE

Noramco Exploration Inc. PROJECT 2013 File # 90-2380

900 - 999 W. Hasting St., Vancouver BC V6C 2W2 Submitted by: T. LISLE

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Au**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppb
A 93001	2	107	16	207	.8	21	25	1843	7.12	9	5	ND	1	32	2.1	2	2	148	1.27	.127	2	30	2.64	90	.15	2	2.95	.09	1.37	1	5
A 93002	2	187	18	275	.7	19	27	1507	6.92	3	5	ND	1	41	2.8	2	2	133	1.43	.126	2	28	2.64	129	.12	2	2.64	.07	1.26	1	5
A 93003	1	187	17	259	.6	17	23	1767	6.34	58	5	ND	1	119	2.0	2	4	84	2.62	.122	3	21	2.55	90	.09	2	2.13	.04	.97	1	6
A 93004	1	115	11	266	.6	15	24	1742	6.23	25	5	ND	1	50	1.4	2	2	151	1.82	.130	2	31	2.66	144	.16	3	2.88	.07	1.59	1	3
A 93005	1	106	31	321	.5	12	24	1569	6.60	98	5	ND	1	81	2.1	2	2	127	1.90	.128	2	23	2.55	64	.12	3	2.62	.08	1.26	1	1
A 93006	1	296	8	129	.5	15	23	903	5.87	44	5	ND	1	72	.2	2	2	93	1.98	.127	2	15	2.26	124	.10	2	2.32	.07	.95	1	1
A 93007	1	268	25	266	.9	21	29	1341	7.52	15	6	ND	1	66	3.3	2	10	73	2.90	.128	3	29	1.92	81	.09	3	2.03	.05	.62	1	4
A 93008	1	1427	14	631	2.4	23	27	1054	7.93	5	5	ND	1	27	5.9	2	2	71	1.82	.118	2	45	2.24	80	.10	3	2.19	.01	.91	1	12
A 93009	2	85	20	91	.5	13	28	1055	7.42	10	5	ND	1	59	.6	2	7	108	1.47	.130	2	20	2.42	70	.13	5	3.42	.17	1.48	1	2
A 93010	3	122	7	76	.6	15	28	672	6.54	4	5	ND	1	35	.2	2	5	117	.99	.131	2	20	1.84	94	.13	2	2.37	.12	1.17	1	1
A 93011	2	172	19	130	.7	16	27	959	7.15	84	5	ND	1	68	.9	3	4	119	1.52	.136	2	19	2.29	116	.11	3	2.83	.11	1.17	1	1
A 93012	2	142	17	181	.6	15	23	1292	6.81	2	6	ND	1	67	1.5	2	2	161	1.65	.136	2	25	2.42	161	.16	2	3.64	.19	1.65	1	1
A 93013	1	232	9	159	.7	19	26	1647	8.21	5	6	ND	1	48	1.1	2	2	139	1.27	.135	2	23	2.32	140	.16	2	3.43	.11	1.52	1	1
A 93014	1	115	10	129	.6	18	31	1141	7.83	16	5	ND	1	56	1.2	2	2	87	1.52	.129	2	16	2.13	94	.10	3	2.57	.09	1.03	1	2
A 93015	1	76	2	63	.3	18	29	717	6.69	6	5	ND	1	19	.9	2	2	97	.73	.138	2	20	2.39	93	.14	4	2.71	.06	1.41	1	1
A 93016	1	103	13	65	.5	17	27	715	6.66	7	5	ND	1	29	.2	2	2	86	.97	.139	2	20	2.45	98	.12	2	2.87	.08	1.32	1	1
STANDARD C/AU-R	18	58	42	131	7.2	69	31	1027	4.07	37	21	7	37	52	18.3	15	18	55	.54	.095	36	58	.94	184	.07	36	1.97	.06	.14	11	485

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O 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 TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM. - SAMPLE TYPE: Core AU** ANALYSIS BY FA\ICP FROM 10 GM SAMPLE.

DATE RECEIVED: JUL 9 1990 DATE REPORT MAILED: *July 12/90* SIGNED BY: *C. Leong* D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

GEOCHEMICAL ANALYSIS CERTIFICATE

Noramco Exploration Inc. PROJECT 2013 File # 90-2422

900 - 999 W. Hasting St., Vancouver BC V6C 2W2 Submitted by: W.J. LEWIS

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au** ppb
A 93017	1	213	18	173	1.5	20	25	1339	8.05	12	5	ND	1	51	1.2	2	2	162	1.87	.121	2	32	2.52	42	.24	2	2.98	.07	1.80	1	11
A 93018	1	151	12	166	1.5	17	24	1797	6.70	9	5	ND	1	104	.7	2	2	154	3.36	.119	3	34	2.53	59	.20	2	2.61	.04	1.46	1	16
A 93019	1	170	13	173	1.6	14	25	1933	7.11	150	5	ND	1	86	.5	2	2	171	2.99	.129	4	15	2.54	76	.21	2	2.83	.05	1.61	3	10
A 93020	1	141	11	207	1.4	14	23	2147	7.12	231	5	ND	1	114	.7	5	2	160	2.94	.123	4	16	2.71	92	.20	7	2.71	.04	1.61	1	9
A 93021	1	112	10	156	1.6	15	20	1829	6.73	51	5	ND	2	85	.5	2	2	164	2.45	.127	4	23	2.46	105	.18	2	2.66	.06	1.51	1	5
A 93022	1	133	12	126	1.5	22	22	1076	6.95	17	5	ND	2	42	.3	2	2	174	1.13	.122	2	24	2.49	96	.21	2	2.54	.04	1.59	1	6
A 93023	1	208	15	156	1.5	13	26	1125	8.08	9	5	ND	1	44	.8	2	2	188	1.21	.128	2	11	2.33	98	.23	2	2.89	.10	1.58	1	8
A 93024	1	202	15	114	1.3	23	26	1310	7.31	24	5	ND	2	97	.7	2	4	132	3.08	.123	2	38	1.94	95	.18	3	2.75	.11	1.31	1	22
A 93025	2	176	17	133	1.4	22	25	1218	7.56	10	5	ND	1	41	.6	2	4	153	1.64	.112	2	24	2.02	81	.18	2	2.17	.04	.89	1	24
A 93026	1	204	13	116	1.6	39	28	1555	6.74	20	5	ND	1	75	.6	3	5	140	3.19	.093	2	71	2.11	107	.16	2	1.95	.04	.93	1	35
A 93027	1	171	8	120	1.2	37	26	1575	5.96	7	5	ND	1	58	.4	2	5	146	3.47	.086	2	72	2.12	144	.17	2	2.17	.04	1.29	1	34
A 93028	1	203	10	103	1.3	39	27	1688	6.05	5	5	ND	1	68	.4	2	6	137	4.62	.089	2	76	1.82	121	.17	2	1.83	.04	.96	1	43
A 93029	1	198	9	110	1.3	38	28	1678	6.13	73	5	ND	1	143	.8	2	5	150	5.45	.089	2	66	2.08	109	.15	3	2.03	.03	.79	1	31
A 93030	1	164	7	92	1.1	44	28	1288	5.66	9	5	ND	1	67	.4	2	5	114	4.29	.092	2	73	1.56	98	.16	3	1.57	.03	.51	1	50
A 93031	1	139	6	107	1.1	37	28	1233	5.64	6	5	ND	1	58	.2	2	4	138	2.88	.093	2	69	1.92	157	.19	2	2.11	.04	1.22	1	34
A 93032	1	130	6	91	.9	36	26	1176	5.27	2	5	ND	1	61	.2	2	2	116	2.78	.092	2	60	1.57	113	.19	2	1.77	.05	.95	1	33
A 93033	1	146	12	118	1.2	33	28	1425	6.23	11	5	ND	1	42	.4	2	4	145	2.58	.106	2	62	1.96	124	.19	2	2.14	.04	1.29	1	33
A 93034	2	141	7	121	1.5	21	24	1434	6.38	2	5	ND	2	39	.4	2	3	146	1.97	.123	3	37	1.88	116	.19	2	2.13	.05	1.42	1	41
A 93035	2	141	9	110	1.2	21	23	1319	6.19	3	5	ND	2	48	.3	2	3	140	2.23	.122	3	31	1.80	99	.18	2	2.07	.05	1.28	1	23
A 93036	1	159	13	89	1.0	17	20	884	5.97	2	5	ND	2	46	.2	2	4	108	1.56	.119	3	14	1.45	52	.14	2	1.74	.05	.83	1	24
A 93037	1	162	14	76	1.2	16	20	880	5.69	2	5	ND	2	38	.4	2	4	104	1.85	.115	2	13	1.25	42	.14	3	1.49	.06	.76	1	21
A 93038	1	179	9	100	1.0	26	23	1109	5.92	21	5	ND	2	77	.4	2	2	128	2.47	.117	4	44	1.74	70	.14	2	1.79	.04	.78	1	28
A 93039	1	143	7	105	1.1	24	22	1129	5.40	3	5	ND	2	44	.2	2	5	127	1.93	.112	4	46	1.66	122	.17	2	1.97	.05	1.22	1	89
A 93040	2	146	8	101	.9	23	20	986	5.52	2	5	ND	2	34	.2	2	2	132	1.37	.115	4	43	1.77	100	.17	2	1.92	.04	1.01	1	17
A 93041	3	189	14	118	1.4	22	22	1179	5.83	125	5	ND	2	121	.5	5	4	115	2.27	.114	3	31	1.73	68	.12	2	1.73	.04	.80	1	18
A 93042	1	264	10	141	1.1	21	25	1700	6.13	8	5	ND	2	64	.3	2	5	143	2.92	.129	3	32	1.74	99	.19	2	2.27	.04	1.21	1	40
A 93043	1	297	7	239	.9	13	23	1833	6.06	6	5	ND	2	71	.4	2	2	180	3.14	.112	4	9	1.95	197	.26	2	2.99	.04	1.83	1	16
A 93044	1	339	7	236	.9	8	21	2083	6.06	11	5	ND	1	65	.3	2	2	172	2.74	.115	4	3	2.01	267	.25	2	3.01	.05	1.80	1	21
A 93045	2	916	10	180	1.3	11	22	1784	5.86	7	5	ND	2	72	.6	2	7	147	3.11	.106	3	6	1.65	138	.19	2	2.20	.04	1.12	1	57
A 93046	1	206	5	162	1.0	11	23	1664	6.10	2	5	ND	2	62	.3	2	2	168	2.69	.117	3	5	1.93	234	.24	2	2.91	.05	1.90	1	39
A 93047	1	162	10	144	1.2	11	26	1411	6.72	6	5	ND	2	47	.5	2	3	179	1.99	.133	3	4	2.08	119	.18	2	2.66	.05	1.44	2	33
A 93048	1	165	6	93	.9	14	24	1229	5.95	2	5	ND	2	74	.2	2	6	121	2.94	.129	3	7	1.49	70	.16	2	2.10	.08	1.08	1	63
STANDARD C/AU-R	18	63	40	133	7.5	73	31	1026	4.02	37	22	7	39	52	18.5	15	19	58	.51	.094	38	59	.93	182	.09	35	1.96	.06	.13	11	490

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O 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 TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
 - SAMPLE TYPE: Core AU** ANALYSIS BY FA/ICP FROM 10 GM SAMPLE.

DATE RECEIVED: JUL 11 1990 DATE REPORT MAILED: *July 13/90* SIGNED BY: *C. Leong* .D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

SH-90-1

GEOCHEMICAL ANALYSIS CERTIFICATE

Noramco Exploration Inc. PROJECT 2013 File # 90-2605 Page 1

900 - 999 W. Hasting St., Vancouver BC V6C 2W2

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Au**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppb
A 93049	1	160	5	103	.4	17	21	1332	5.44	8	5	ND	1	120	.5	2	5	141	3.26	.118	4	20	1.63	47	.15	4	2.02	.06	.72	1	44
A 93050	1	153	6	121	.3	19	25	1514	6.04	2	5	ND	1	63	.3	2	3	143	2.68	.105	2	20	1.75	101	.20	3	2.49	.07	1.26	1	35
A 93051	1	155	6	123	.6	13	24	1370	6.30	2	5	ND	1	53	.3	2	3	169	2.51	.131	3	16	1.97	101	.22	4	2.65	.07	1.24	1	33
A 93052	1	234	8	117	.8	16	24	1264	6.24	78	5	ND	1	54	.4	2	3	155	1.95	.120	3	12	1.92	96	.18	2	2.51	.07	1.20	1	31
A 93053	1	144	6	150	.4	8	21	1474	5.77	4	5	ND	1	80	.4	2	2	179	1.74	.128	3	4	2.16	108	.24	2	2.95	.07	1.42	1	14
A 93054	1	142	4	184	.5	9	23	1569	6.07	3	5	ND	1	35	.5	2	2	187	1.45	.126	3	4	2.21	141	.24	4	3.15	.07	1.67	1	19
A 93055	1	164	9	145	.5	12	24	1331	6.10	4	5	ND	2	56	.4	2	4	146	2.24	.121	3	10	1.75	92	.20	2	2.57	.10	1.28	1	25
A 93056	1	194	10	119	.7	21	24	1130	6.06	2	5	ND	2	84	.5	2	3	138	3.13	.119	3	30	1.98	78	.16	5	2.47	.10	1.01	1	12
A 93057	2	187	6	79	.5	20	21	931	5.17	4	5	ND	2	58	.3	2	4	109	2.98	.114	3	20	1.36	57	.16	2	1.52	.06	.52	1	14
A 93058	2	231	6	83	.8	24	22	969	5.53	8	5	ND	2	79	.2	2	4	93	3.31	.105	2	28	1.29	57	.15	2	1.63	.07	.46	1	20
A 93059	1	222	6	83	.6	32	26	927	5.98	4	5	ND	1	111	.2	2	6	102	2.65	.102	2	36	1.52	61	.15	4	1.89	.08	.52	1	11
A 93060	1	196	7	89	.5	21	24	937	6.42	3	5	ND	1	40	.3	2	3	115	2.05	.108	2	14	1.65	94	.18	2	1.97	.06	.80	6	13
A 93061	1	205	8	94	.9	16	22	982	6.16	5	5	ND	2	51	.4	2	6	131	2.31	.128	2	8	1.77	90	.19	3	2.12	.08	.79	1	21
A 93062	1	181	7	90	.7	13	24	874	5.91	3	5	ND	2	45	.4	2	3	139	1.48	.130	3	12	1.85	67	.18	2	1.94	.06	.66	1	11
A 93063	1	221	5	103	.7	22	26	1044	6.48	7	5	ND	2	65	.5	2	3	139	2.57	.127	3	16	1.83	89	.20	4	2.18	.07	.83	4	27
A 93064	1	178	5	115	.5	9	24	1151	6.34	2	5	ND	2	90	.3	2	3	127	2.31	.145	4	2	1.72	90	.19	3	2.42	.09	.89	1	23
A 93065	2	124	7	97	.6	9	18	1011	5.13	2	5	ND	2	112	.3	2	2	84	2.33	.130	4	2	1.85	68	.14	5	2.31	.08	.68	1	5
A 93066	1	147	9	64	.9	39	25	651	6.77	4	5	ND	2	31	.3	2	5	68	1.46	.139	2	32	1.59	63	.13	4	1.67	.04	.44	1	21
A 93067	1	232	5	92	.7	109	38	939	6.53	3	5	ND	1	51	.5	2	7	100	2.03	.105	2	127	2.06	78	.19	8	2.17	.08	.50	1	51
A 93068	1	211	3	57	.5	137	30	721	5.31	12	5	ND	1	53	.4	3	6	65	2.14	.102	2	117	1.38	41	.15	5	1.52	.09	.20	1	30
A 93069	1	229	6	78	.6	94	36	827	6.59	8	5	ND	1	55	.5	2	6	98	2.24	.090	2	105	1.95	76	.16	2	2.00	.05	.44	2	14
A 93070	1	114	14	90	.6	103	25	1234	5.31	30	5	ND	1	274	.4	11	2	79	4.43	.087	2	99	2.63	48	.10	2	1.87	.04	.29	1	7
A 93071	1	129	18	111	.7	59	21	1342	5.89	12	5	ND	1	266	.7	2	4	145	4.06	.101	3	80	3.18	84	.11	3	2.34	.03	.40	1	9
A 93072	1	122	2	89	.5	92	22	1030	4.67	13	5	ND	1	95	.4	4	2	121	3.04	.088	2	103	2.35	84	.15	6	2.26	.06	.48	1	15
A 93073	1	101	8	121	.4	103	20	1544	5.15	16	5	ND	1	233	.5	2	3	169	4.49	.084	3	147	3.59	162	.12	4	3.11	.05	.80	1	15
A 93074	1	392	10	84	.8	29	26	1507	7.21	27	5	ND	2	234	.6	2	3	95	6.71	.116	4	23	1.58	43	.06	4	1.90	.03	.26	17	26
A 93075	1	274	8	79	.7	24	25	1318	7.62	7	5	ND	2	83	.7	3	2	111	4.98	.129	2	30	1.40	31	.12	2	1.76	.02	.14	1	17
A 93076	1	291	11	66	1.0	24	22	1138	6.73	9	7	ND	3	81	.5	2	4	91	4.54	.121	3	25	1.24	40	.12	3	1.76	.04	.25	1	67
A 93077	1	1	2	1	.1	1	1	32	.18	2	5	ND	1	2	.2	2	2	2	.12	.003	2	1	.04	1	.01	2	.04	.01	.01	1	10
A 93078	1	276	7	71	.8	37	29	938	6.86	11	5	ND	1	96	.5	2	2	130	3.20	.112	2	31	1.62	63	.15	4	2.08	.11	.44	5	17
A 93079	1	249	7	79	.7	61	24	1153	5.85	114	5	ND	2	218	.5	2	2	121	5.70	.106	4	61	1.98	46	.11	2	2.47	.06	.36	1	16
A 93080	1	203	7	85	.5	28	19	1052	5.55	56	7	ND	2	293	.5	2	6	121	5.91	.116	7	40	2.33	13	.05	4	2.74	.02	.17	1	20
A 93081	1	281	7	100	.7	38	23	1278	6.65	15	5	ND	2	128	.5	2	6	192	3.99	.117	5	61	2.57	33	.15	4	2.77	.05	.23	1	28
A 93082	1	206	7	122	.5	16	25	1347	6.88	3	5	ND	3	149	.6	2	4	205	4.09	.140	6	19	2.70	26	.16	2	2.99	.05	.24	1	26
A 93083	1	221	6	90	.5	21	27	983	6.14	8	5	ND	2	84	.2	2	6	131	3.05	.147	5	21	1.75	43	.18	6	1.97	.06	.41	7	29
A 93084	1	169	4	67	.5	22	28	720	5.08	2	5	ND	2	110	.2	2	2	90	2.65	.147	5	22	1.40	35	.18	6	1.84	.07	.51	1	31
A 93085	1	176	4	68	.6	11	20	868	5.24	2	5	ND	2	120	.3	2	6	141	3.53	.125	3	8	1.71	108	.20	4	2.16	.07	.79	1	30
STANDARD C/AU-R	18	59	37	132	7.2	72	31	1003	3.94	42	20	8	40	53	18.4	16	20	61	.50	.098	41	59	.92	166	.09	37	1.93	.06	.13	12	487

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O 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 TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM. - SAMPLE TYPE: Core AU** ANALYSIS BY FA/ICP FROM 10 GM SAMPLE.

DATE RECEIVED: JUL 17 1990 DATE REPORT MAILED: *July 24/90* SIGNED BY: *C. Leong* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au** ppb
A 93088	1	171	3	75	.3	16	19	782	5.41	.2	5	ND	1	79	.2	2	6	106	1.85	.118	2	15	1.61	179	.21	2	2.47	.13	1.02	1	21
A 93089	1	197	5	57	.6	35	19	646	5.18	.6	5	ND	2	63	.3	2	6	87	2.39	.111	2	32	1.14	116	.18	2	1.59	.11	.52	1	19
A 93090	1	126	3	52	.4	43	19	571	4.37	.4	6	ND	2	79	.2	2	4	73	2.17	.112	2	33	1.16	98	.16	2	1.69	.09	.59	1	11
A 93091	1	103	4	55	.2	22	18	678	4.64	.17	5	ND	2	107	.2	2	2	93	2.61	.114	3	16	1.38	56	.16	6	1.81	.05	.50	1	4
A 93092	1	162	4	58	.5	17	19	579	4.83	.2	5	ND	2	52	.2	2	5	88	1.52	.121	3	13	1.26	63	.17	4	1.69	.06	.57	1	16
A 93093	1	267	4	62	.6	17	20	898	5.66	.2	5	ND	2	112	.2	2	4	83	3.41	.115	2	13	.96	51	.14	2	1.69	.09	.52	2	18
A 93094	1	208	6	83	.4	19	22	826	5.37	.26	5	ND	2	58	.2	2	4	111	2.21	.115	2	20	1.70	66	.15	2	1.96	.04	.59	1	19
A 93095	1	154	4	75	.2	21	22	862	5.20	.7	5	ND	2	68	.2	2	3	112	2.33	.115	2	34	1.69	62	.16	15	1.97	.06	.46	1	10
A 93096	1	234	4	82	.5	17	21	711	5.71	.3	5	ND	2	66	.2	2	6	134	1.58	.115	2	12	1.74	140	.16	7	2.05	.06	.98	1	12
A 93097	2	217	6	92	.5	16	22	1026	5.77	.4	6	ND	2	259	.2	2	4	149	2.25	.115	2	13	2.18	147	.18	3	2.78	.06	1.10	1	16
A 93098	1	203	3	92	.4	35	22	869	5.54	.7	6	ND	2	291	.2	2	4	113	2.40	.108	2	47	1.95	80	.15	3	2.29	.05	.80	1	18
A 93099	2	287	6	99	.7	40	24	805	5.99	.4	5	ND	2	59	.3	2	20	93	2.64	.105	2	43	1.71	73	.14	2	2.26	.08	.79	11	74
A 93100	2	352	3	53	.6	24	27	764	5.75	.2	5	ND	2	55	.2	2	17	42	3.51	.138	4	15	.67	18	.11	7	1.06	.05	.17	15	73
A 93101	2	373	5	101	.7	18	24	1149	6.73	.80	5	ND	2	86	.4	2	16	92	3.97	.117	3	15	1.47	25	.11	3	1.65	.04	.42	42	50
A 93102	1	1440	4	775	3.9	21	25	781	5.34	.2	5	ND	2	61	8.5	2	6	76	2.35	.138	3	24	1.14	36	.15	2	1.52	.04	.53	8	33
A 93103	1	316	4	144	.3	14	24	909	4.96	.5	5	ND	1	97	.3	2	3	93	1.25	.145	3	8	1.51	94	.20	2	2.35	.07	1.15	1	17
A 93104	1	183	4	118	.2	19	24	1019	6.14	.6	5	ND	2	75	.4	2	8	98	1.71	.144	3	13	1.68	110	.21	6	2.49	.05	1.38	1	29
A 93105	1	194	4	108	.2	18	24	1105	6.14	.3	5	ND	2	66	.2	2	9	101	2.60	.152	3	20	1.49	59	.18	11	2.16	.07	.77	23	42
A 93106	1	301	4	69	.7	38	28	770	5.69	.5	5	ND	2	48	.2	2	19	47	2.99	.128	2	42	.89	19	.13	22	1.14	.05	.11	7	65
A 93107	1	212	5	96	.3	26	24	664	5.02	.3	5	ND	2	78	.2	2	3	85	1.59	.150	4	34	1.40	64	.18	3	1.92	.06	.78	12	38
A 93108	1	344	7	97	.6	18	21	765	6.21	.2	5	ND	2	28	.2	2	6	134	1.57	.125	2	16	1.67	91	.17	2	1.88	.05	.96	1	21
A 93109	2	379	8	93	.6	11	22	600	6.02	.2	5	ND	3	20	.3	2	3	131	.75	.120	3	8	2.08	95	.14	2	2.00	.05	1.00	1	4
A 93110	1	357	4	102	.5	11	19	781	6.81	.2	5	ND	2	24	.2	2	3	179	1.14	.136	2	7	2.58	142	.18	2	2.55	.05	1.17	1	6
A 93111	2	379	6	60	.6	9	22	483	5.19	.2	5	ND	4	56	.2	2	2	92	1.76	.115	4	6	1.29	98	.14	2	1.64	.11	.71	1	1
A 93112	3	303	7	88	.5	15	26	572	6.45	.2	5	ND	2	38	.2	2	4	139	1.36	.129	2	17	2.08	93	.15	2	2.00	.05	.66	1	2
A 93113	2	368	6	71	.7	13	23	614	6.25	.6	5	ND	2	42	.2	2	5	120	2.01	.122	2	14	1.68	67	.15	4	1.93	.08	.77	1	28
A 93114	2	397	5	56	.7	13	27	597	6.55	.6	5	ND	3	53	.3	2	2	88	2.29	.128	3	12	1.11	60	.13	2	1.47	.08	.60	1	7
A 93115	1	576	7	82	1.1	14	29	772	7.26	.2	5	ND	3	44	.4	2	5	117	2.30	.122	2	12	1.73	91	.14	2	2.04	.07	.88	1	9
A 93116	2	380	7	96	.5	24	25	781	6.21	.4	5	ND	1	80	.4	2	2	87	2.20	.097	2	21	1.43	99	.12	5	2.45	.15	.82	1	4
A 93117	3	372	6	82	.6	14	26	773	6.54	.8	5	ND	2	60	.4	2	3	110	2.30	.122	2	12	1.73	67	.15	2	2.16	.10	.56	1	11
A 93118	1	403	6	84	.6	24	26	683	6.83	.3	5	ND	1	25	.4	2	8	146	1.31	.123	2	39	2.12	128	.18	3	2.26	.06	1.00	1	20
A 93119	2	444	6	61	.7	24	34	689	6.83	.4	5	ND	1	53	.2	2	13	74	1.99	.117	2	19	1.24	64	.13	2	1.95	.12	.50	1	40
A 93120	3	253	2	53	.3	43	21	609	4.42	.3	5	ND	1	40	.2	2	9	71	1.85	.091	2	31	1.08	61	.16	5	1.30	.08	.24	1	30
A 93121	2	471	5	57	.8	43	36	561	7.26	.6	5	ND	2	36	.2	2	13	75	1.85	.091	2	28	1.10	47	.14	5	1.21	.06	.30	104	37
A 93122	5	339	70	308	.6	31	28	763	5.80	.7	5	ND	2	52	4.9	2	17	96	2.78	.106	2	32	1.49	42	.14	4	1.58	.05	.34	32	65
A 93123	2	245	64	186	.8	19	21	1168	5.17	.69	5	ND	2	328	2.8	3	3	85	5.87	.113	4	24	1.91	21	.05	4	1.64	.02	.22	1	16
STANDARD C/AU-R	18	57	38	132	7.2	72	29	1019	3.99	.61	22	7	40	52	18.6	15	18	58	.51	.095	39	60	.92	182	.09	35	1.97	.06	.13	13	490

SH-90-1

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Tl %	B ppm	Al %	Na %	K %	W ppm	Au** ppb
A 93124	1	454	5	88	.6	19	28	1050	6.33	7	5	ND	1	137	.6	2	4	133	3.64	.105	2	23	2.21	11	.12	5	2.76	.02	.06	1	35
A 93125	1	136	147	324	2.8	21	29	1579	6.26	61	8	ND	1	669	6.0	3	4	70	6.60	.084	3	19	2.59	19	.01	9	1.31	.01	.16	1	33
A 93126	1	64	16	116	.4	23	24	1508	5.98	98	5	ND	1	567	1.0	2	2	142	7.99	.016	3	32	3.40	27	.01	3	2.45	.01	.13	1	15
A 93127	8	114	207	76	.9	20	18	1538	4.55	2162	6	ND	2	540	.6	12	28	28	11.52	.056	4	6	3.76	22	.01	11	.45	.01	.12	1	477
A 93128	1	185	4	92	.7	18	25	934	5.31	16	5	ND	2	110	.4	2	138	114	3.36	.096	4	31	1.65	45	.10	3	1.73	.05	.18	20	849
A 93129	1	215	4	76	.4	21	28	795	5.08	12	5	ND	2	67	.4	2	11	86	2.80	.118	5	35	1.37	21	.12	3	1.53	.04	.10	1	46
A 93130	1	184	5	115	.2	20	26	1279	6.44	4	5	ND	3	127	.3	2	8	156	3.92	.117	6	44	2.48	25	.08	2	2.56	.02	.09	1	40
A 93131	1	260	4	127	.2	21	28	1427	6.74	29	5	ND	2	197	.7	2	4	149	4.95	.101	5	37	2.71	37	.01	8	1.94	.02	.07	1	17
A 93132	1	121	3	123	.1	51	29	1173	5.85	71	5	ND	1	328	.6	2	2	47	5.30	.074	2	53	3.42	39	.01	2	.87	.01	.10	1	16
A 93133	1	96	4	80	.1	39	28	1008	5.65	31	5	ND	1	361	.6	2	2	51	5.16	.068	3	43	3.26	82	.01	2	.86	.01	.11	1	7
A 93134	1	120	2	85	.1	24	30	1115	6.68	12	5	ND	1	228	.6	2	2	99	5.18	.075	3	58	3.12	96	.01	2	1.61	.02	.07	1	8
A 93135	1	117	2	79	.1	26	27	928	5.77	5	5	ND	1	176	.4	2	2	126	4.49	.074	3	73	2.63	39	.08	4	2.16	.03	.09	1	22
A 93136	1	127	2	74	.1	29	28	869	5.62	8	5	ND	1	159	.6	2	2	128	4.06	.076	3	77	2.52	49	.13	11	2.26	.04	.16	1	9
A 93137	1	87	2	163	.1	45	29	758	6.05	2	5	ND	1	129	2.3	2	2	144	3.66	.071	3	145	3.62	81	.11	3	2.96	.04	.23	1	1
A 93138	1	130	2	69	.1	34	24	605	4.30	7	5	ND	1	116	.5	2	2	99	3.44	.073	3	109	2.21	77	.14	3	2.11	.05	.26	1	4
A 93139	1	133	2	47	.1	28	19	510	3.38	7	5	ND	1	86	.3	2	2	84	2.06	.079	2	50	1.48	105	.19	7	1.68	.06	.34	1	5
A 93140	1	103	2	64	.1	38	24	844	4.73	8	5	ND	1	231	.4	2	2	110	4.40	.070	3	78	2.51	72	.11	4	1.94	.03	.22	1	6
A 93141	2	88	4	77	.2	41	23	681	4.76	3	5	ND	3	129	.6	2	2	119	3.03	.084	4	88	2.34	132	.16	5	2.27	.05	.33	1	3
A 93142	1	117	2	47	.1	36	21	513	3.49	4	5	ND	1	85	.2	2	2	85	2.64	.071	2	65	1.67	88	.16	5	1.63	.06	.27	1	5
A 93143	1	129	2	38	.1	72	19	435	2.86	7	5	ND	1	66	.2	2	3	70	2.10	.069	2	109	1.86	118	.15	3	1.71	.06	.33	1	1
A 93144	1	81	2	31	.1	82	17	403	2.45	6	5	ND	1	64	.2	2	3	55	2.26	.061	2	147	1.85	118	.13	3	1.71	.06	.33	1	5
A 93145	1	109	2	38	.1	63	21	464	3.23	5	5	ND	1	83	.2	2	2	78	2.82	.066	2	160	2.24	165	.17	9	1.97	.06	.51	1	1
A 93146	1	94	2	41	.1	56	19	496	3.22	8	5	ND	1	95	.3	2	2	76	2.91	.061	2	126	1.92	210	.18	3	1.96	.05	.69	1	3
A 93147	1	127	2	45	.1	61	21	526	3.50	10	5	ND	1	109	.4	3	2	82	2.80	.065	2	125	2.15	149	.12	5	1.85	.04	.43	1	5
A 93148	1	109	2	61	.1	58	24	646	4.25	12	5	ND	1	116	.2	2	2	98	3.50	.071	2	115	2.38	223	.15	5	2.23	.04	.57	1	7
A 93149	1	134	2	62	.1	45	24	633	4.21	8	5	ND	1	95	.4	2	3	105	3.22	.080	2	93	1.83	247	.20	7	2.13	.04	.56	1	4
A 93150	1	121	2	69	.2	48	24	809	4.77	8	5	ND	2	175	.3	2	2	115	3.78	.078	2	105	2.31	279	.15	5	2.33	.03	.65	1	10
A 93151	5	97	7	263	.2	35	20	893	5.04	45	5	ND	2	311	2.0	3	2	62	5.73	.096	3	28	1.99	83	.02	3	.75	.02	.15	1	20
A 93152	2	99	4	141	.1	27	22	813	4.94	49	5	ND	1	136	1.0	2	2	144	4.52	.095	3	41	1.71	127	.14	6	2.01	.04	.40	1	21
A 93153	2	140	19	129	.1	23	27	1007	5.50	2	5	ND	1	112	.6	2	2	159	4.79	.100	3	35	1.81	191	.21	2	2.54	.04	.66	1	15
A 93154	1	133	8	85	.2	13	23	731	4.09	5	5	ND	2	66	.3	2	5	103	3.23	.117	3	11	1.25	92	.16	2	1.75	.06	.24	1	41
A 93155	1	93	3	113	.1	20	17	854	4.54	3	5	ND	3	67	.5	2	2	101	3.89	.100	4	43	1.60	115	.16	2	2.26	.04	.40	1	10
A 93156	1	18	2	105	.1	8	10	875	4.45	5	5	ND	4	74	.3	2	2	78	2.53	.107	6	12	1.37	75	.15	3	2.13	.04	.34	1	3
A 93157	1	17	2	79	.2	9	9	713	3.36	2	5	ND	3	116	.2	2	2	53	2.72	.103	5	14	1.10	43	.14	6	1.62	.04	.18	1	3
A 93158	1	32	2	84	.1	10	9	630	3.44	6	5	ND	3	88	.2	2	3	68	1.93	.104	5	14	1.21	43	.15	6	1.65	.05	.12	1	7
A 93159	1	27	4	83	.1	9	10	853	4.12	2	5	ND	3	114	.3	2	2	66	2.97	.106	11	16	1.32	23	.07	5	1.95	.04	.13	1	1
STANDARD C/AU-R	18	58	37	132	7.1	68	31	955	3.74	43	18	6	36	51	18.1	16	20	55	.49	.087	37	55	.88	180	.09	33	1.84	.05	.13	11	543

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Tl %	B ppm	Al %	Na %	K %	W ppm	Au** ppb
A 93160	19	19	4	81	.1	10	9	869	4.15	.2	5	ND	2	175	.3	2	2	68	2.94	.098	9	16	1.30	71	.15	9	2.01	.04	.36	1	9
A 93161	1	3	5	94	.1	4	5	737	3.35	.2	5	ND	3	119	.2	2	2	55	2.17	.121	14	6	1.00	81	.16	2	1.66	.06	.39	1	12
A 93162	1	4	8	93	.1	3	4	706	3.19	.2	5	ND	4	111	.2	2	2	52	2.21	.125	14	5	.91	96	.17	2	1.57	.05	.50	1	11
A 93163	1	24	7	83	.1	4	6	769	3.46	.6	5	ND	3	143	.2	2	2	45	2.36	.114	14	6	.93	41	.10	2	1.40	.04	.23	2	65
A 93164	1	14	2	81	.1	10	10	803	4.27	.2	5	ND	2	142	.2	2	2	73	2.36	.105	9	18	1.37	102	.20	3	2.06	.05	.52	1	86
A 93165	1	22	5	100	.1	9	11	832	4.34	.2	5	ND	2	204	.2	2	2	76	1.93	.104	10	16	1.30	215	.22	2	2.05	.05	.89	1	4
A 93166	1	16	3	79	.1	10	10	778	3.58	.2	5	ND	1	173	.2	2	2	60	1.95	.102	8	17	1.24	148	.25	3	1.99	.05	1.02	1	4
A 93167	1	23	5	88	.1	9	10	797	3.80	.2	5	ND	2	140	.2	2	2	56	2.49	.097	10	14	1.22	158	.18	5	2.00	.04	.80	1	5
A 93168	1	17	3	83	.1	10	10	711	3.59	.2	5	ND	1	96	.2	2	2	62	1.51	.102	7	16	1.41	187	.27	3	2.19	.04	1.14	1	2
A 93169	1	16	5	90	.1	9	9	740	3.77	.2	5	ND	1	114	.2	2	2	66	1.43	.101	7	16	1.46	149	.29	5	2.36	.05	1.30	1	2
A 93170	1	21	3	81	.1	9	10	705	3.40	.4	5	ND	1	112	.2	2	2	63	1.55	.103	6	14	1.34	170	.27	2	2.07	.04	1.14	1	2
A 93171	1	41	3	80	.1	11	11	702	3.21	.2	5	ND	1	86	.2	2	2	60	1.78	.092	6	18	1.33	190	.25	4	1.99	.04	.89	1	1
STANDARD C/AU-R	18	57	40	132	7.2	69	31	1012	3.96	37	18	7	37	53	18.3	15	18	56	.51	.089	37	59	.93	180	.09	34	1.96	.06	.14	13	496

SH-90-1

GEOCHEMICAL ANALYSIS CERTIFICATE

Noramco Exploration Inc. PROJECT 2013 SHAFT File # 90-3078

900 - 999 W. Hastings St., Vancouver BC V6C 2W2 Submitted by: B. LEWIS

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Mi	Co	Mn	Fe	As	U	AU	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	U	Au**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	ppm	ppm	
A 93174	1	17	20	80	7	7	9	730	3.68	13	5	ND	1	98	2	3	2	50	1.99	106	8	23	1.13	149	13	4	1.80	.05	.74	1	8
A 93179	1	22	12	87	1.8	9	10	647	3.48	56	5	ND	1	83	2	2	2	60	1.90	108	8	23	1.02	119	17	2	1.46	.06	.50	1	4
A 93180	50	26	20	97	2.2	5	8	848	3.14	23	5	ND	2	134	2	2	2	16	4.28	101	11	11	.69	43	101	5	.77	.02	.25	1	9
A 93181	3	10	22	65	.6	6	8	884	3.68	31	5	ND	2	136	2	2	2	41	2.67	105	7	15	1.08	117	11	3	1.37	.04	.58	1	7
A 93182	5	21	12	61	.7	7	10	889	3.71	15	5	ND	1	154	3	2	2	31	3.53	102	7	18	.99	51	105	4	1.09	.03	.45	1	5
A 93194	2	29	8	65	.4	7	9	943	3.91	15	5	ND	1	108	3	4	3	48	2.29	109	8	16	1.11	69	11	5	1.57	.07	.56	1	10
A 93195	2	11	5	56	.3	5	8	1248	3.87	8	5	ND	2	201	2	2	2	27	4.16	101	10	12	1.01	96	104	3	.84	.03	.37	1	4
A 93196	4	14	2	57	.3	6	9	1120	3.70	7	5	ND	2	160	4	2	3	32	3.21	105	10	14	.94	98	107	5	1.08	.04	.47	1	7
A 93197	1	15	3	90	.2	6	9	839	3.43	12	5	ND	3	178	2	2	2	20	3.01	119	15	11	.94	170	102	5	.77	.02	.35	1	4
A 93201	1	15	6	95	.1	4	9	839	3.95	3	5	ND	2	79	2	2	2	50	2.15	112	12	20	.93	165	11	2	1.59	.05	.69	1	11
A 93202	2	19	4	74	.4	3	9	1082	3.67	36	5	ND	3	38	7	2	2	14	4.00	111	18	5	.10	47	101	7	.64	.03	.28	1	8
A 93203	1	24	2	105	.3	9	10	876	3.95	3	5	ND	2	100	2	4	2	55	2.41	111	9	24	1.08	194	14	4	1.79	.05	.75	2	10
A 93204	2	18	3	80	.2	9	10	714	3.31	11	5	ND	1	128	2	3	2	53	1.77	115	9	18	.96	159	17	3	1.65	.06	.83	1	2
A 93207	1	12	5	103	.1	5	9	675	3.50	2	5	ND	1	85	2	3	2	57	1.53	118	9	15	1.16	202	18	7	1.81	.06	.88	1	2
A 93215	1	12	203	73	1.5	3	8	911	3.53	27	5	ND	2	160	2	2	4	40	2.73	106	12	12	1.02	146	109	5	1.29	.04	.55	1	21
A 93220	1	24	3	77	.2	7	10	814	3.97	5	5	ND	1	68	2	4	2	57	1.89	105	7	26	1.26	234	17	4	1.99	.07	.85	2	7
A 93221	1	14	2	77	.2	6	7	736	3.33	3	5	ND	1	83	2	2	2	47	1.62	109	6	17	1.07	200	17	4	1.79	.09	.81	1	378
A 93222	1	20	2	77	.1	7	8	698	3.11	2	5	ND	1	86	2	2	2	49	1.46	109	7	17	1.09	172	16	3	1.70	.07	.73	1	10
STANDARD C/AU-R	18	62	37	133	7.1	69	32	1052	3.97	41	19	.7	37	53	18.7	15	20	56	.51	1093	38	60	.87	180	107	36	1.88	.07	.13	14	485

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O 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 TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM. - SAMPLE TYPE: Core AU** ANALYSIS BY FA/ICP FROM 10 GN SAMPLE.

DATE RECEIVED: AUG 1 1990

DATE REPORT MAILED:

Aug 8/90

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

APPENDIX V

INVOICES FOR DRILL HOLE SH 90-1

LEBER MINES LTD.
UNDERGROUND MINE DEVELOPMENT
DIAMOND DRILLING - SURFACE & UNDERGROUND

(604) 352-3064

Box 674 Nelson, V1L 5R4

Fax (604) 352-3013

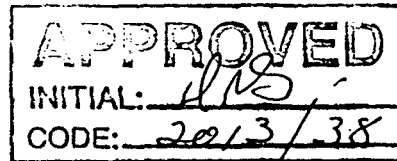
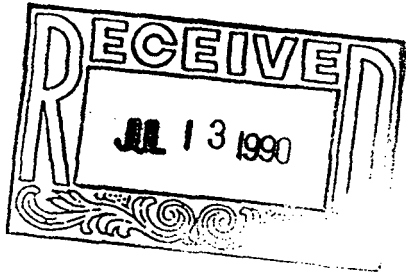
July 5, 1990

Noramco Mining Corp.
Suite 900 - 99 West Hastings Street
Vancouver, B.C.
V6C 2W2

STATEMENT

To roadbuilding and bulldozing, Gold Creek, Nelson, B.C. June 21 - 25, 1990.

D7 Dozer	30 Hours @ \$82.50	\$2,475.00
Mob & Demob		<u>152.00</u>
Total		<u>\$2627.00</u>



LONERANGER DIAMOND DRILLING

NORAMCO EXPLORATIONS INC.
#900 - 977 W. HASTINGS ST.
VANCOUVER B.C.
V6C 2W2

2160 VERNON ST., LUMBY, B.C. V0E 2G0
BOX 441, LUMBY, B.C. V0E 2G0
TELEPHONE: (604) 547-6839

JULY 3, 1990.

Send via courier

INVOICE FOR WORK DONE ON SHARP PROPERTY - NELSON B.C.

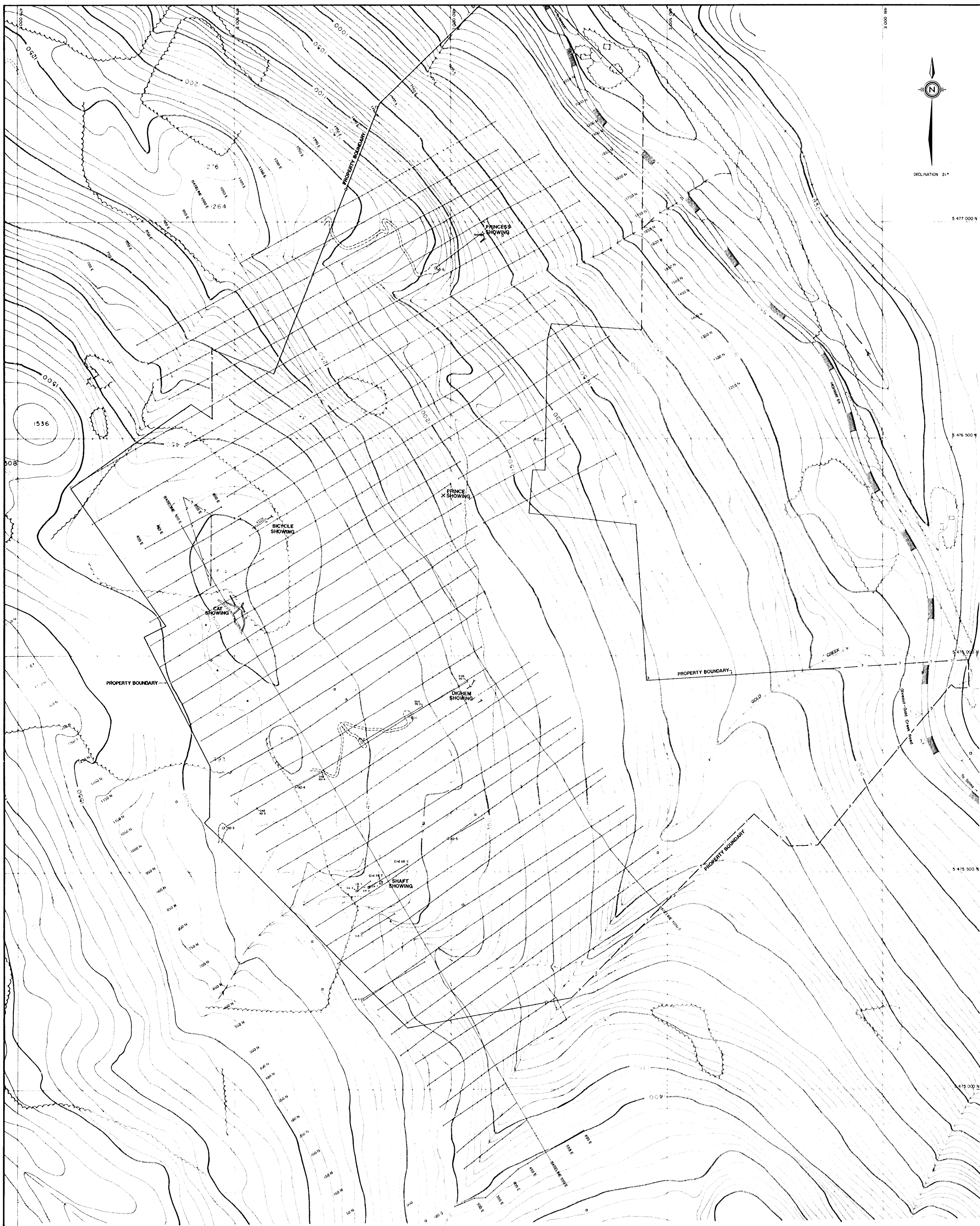
DURING JUNE, 1990

TIME SHEET	PROB	CASING 0-30' @ \$14.00	CASING 40-100' @ \$5.00	0-600' @ \$13.00	CORING 600-1000' @ \$14.00	1000-1500' @ \$15.00	ACID TEST
1	✓						
2	✓						
3		30	10	124			
4				104			
5				78			
6				100			
7				150			
8				4	145		1
9					91		
10					150		1
11					14	116	
TOTAL		30	10	560	400	116	2
TOTAL \$	\$1000.00	\$420.00	\$50.00	\$7280.00	\$5600.00	\$1740.00	\$120.00

TOTAL DUE \$16,310.00

PLEASE REMIT TO
LONE RANGER DIAMOND DRILLING
BOX #41
LUMBY B.C.
V0E 2G0.

APPROVED
INITIAL: UAS
CODE: 2013/38



DECLINATION 21°

5 477 000 N

5 476 500 N

5 476 000 N

5 475 500 N

5 475 000 N

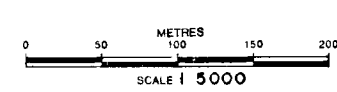
LEGEND

- CREEK
- ROAD, MARKLY 4-WHEEL DRIVE
- - - TRAIL
- OUTCROP
- ADIT
- SHAFT
- ◇ DIAMOND DRILL HOLE
- AREA OF FLOT
- LOCATED CLAIM POST
- GRID LINE & STATION
- CORE SHACK
- SWAMP

5 476 000 N UTM COORDINATES

20,481
 GEOLOGICAL SEARCH
 ASSESSMENT REPORT

NOTE: Basemap is compiled from 1988 South Pacific Gold Corp. data and 1989 Noramco field work



NORAMCO MINING CORPORATION SHAFT PROJECT Group No.1 Location of Drill Holes SH-90-1	
DRAWN BY: [Name] CHECKED BY: [Name]	DESIGNED BY: Y.E. LISLE/W.J. LEWIS DATE: 2015 SCALE: 1:5000