

ARIS SUMMARY SHEET

District Geologist, Smithers

Off Confidential: 90.01.23

ASSESSMENT REPORT 18665

MINING DIVISION: Omineca

PROPERTY: Bob Creek

LOCATION: LAT 54 18 00 LONG 126 38 00
UTM 09 6019268 654007
NTS 093L07E

CAMP: 041 New Nadina - Equity Area

CLAIM(S): Lorne

OPERATOR(S): Royalstar Res.

AUTHOR(S): Silversides, D.

REPORT YEAR: 1989, 62 Pages

COMMODITIES

SEARCHED FOR: Gold, Silver, Zinc, Copper

KEYWORDS: Cretaceous, Feldspar Porphyry, Dykes, Breccia, Stockwork, Pyrite
Sphalerite, Chalcopyrite, Arsenopyrite

WORK

DONE: Drilling, Geochemical

DIAD 724.7 m 2 hole(s); NQ
Map(s) - 1; Scale(s) - 1:5000
SAMP 393 sample(s); ME

LOCATED

REPORTS: 06304, 06484, 06737, 06912, 10166, 11976, 12521, 13425, 14698

MINFILE: 093L 009

LOG NO: 0425

RD.

ACTION:

BOB CREEK PROJECT FILE NO:

**1989 DIAMOND DRILL REPORT FOR
ASSESSMENT CREDITS ON THE
LORNE, BETH 4, BETH 5, CLOUD, BETH 11, BETH 12,
BETH 13 AND BETH 14 MINERAL CLAIMS**

OMINECA MINING DIVISION
NTS 93L 7/E
Lat. 54°18'N, Long. 125°38'W

Owner of claims: Royalstar Resources Ltd.
Operator : Noramco Explorations Inc.
Author : D.A. Silversides
Date : April 19, 1989

FILMED

GEOLOGICAL BRANCH
ASSESSMENT REPORT

18,665

Table of Contents

	<u>Page</u>
Introduction	1
Location and Access	1
Property Claims	1
Summary of Work	3
Summary of Costs Applied to Assessment Credits	5
Discussion of Diamond Drill Results	6
Statement of Qualifications	8

List of Figures

Figure 1 - Location Map	after page	2
Figure 2 - Claims	after page	2
Figure 3 - Location of Drill Holes B.C. 89-6,-7 ..	back pocket	

Appendices

- Appendix I - Statement of Work and Grouping Notice, Lorne, Beth 4, Beth 5, Cloud, Beth 11, Beth 12, Beth 13, and Beth 14 claims.
- Appendix II - J.T. Thomas Diamond Drilling
Invoices - Drill Holes B.C.-89-6,-7
- Appendix III - Drill Hole Logs and Analyses Certificates -
Drill Hole B.C.-89-6,-7

Introduction

This report is prepared in order to satisfy assessment credits applied for on the Lorne, Beth 4, Beth 5, Cloud, Beth 11, Beth 12, Beth 13, and Beth 14 mineral claims, Bob Creek Au-Ag (Zn, Cu) prospect. Direct drill costs for holes B.C.-89-6 and -7, drilled during the period January 13-20, 1989, totalled \$62,195.20. A total of \$50,400.00 is allocated to cover 3 years' work credits on each of the 84 metric units comprising the above claims.

Location and Access (see figure 1)

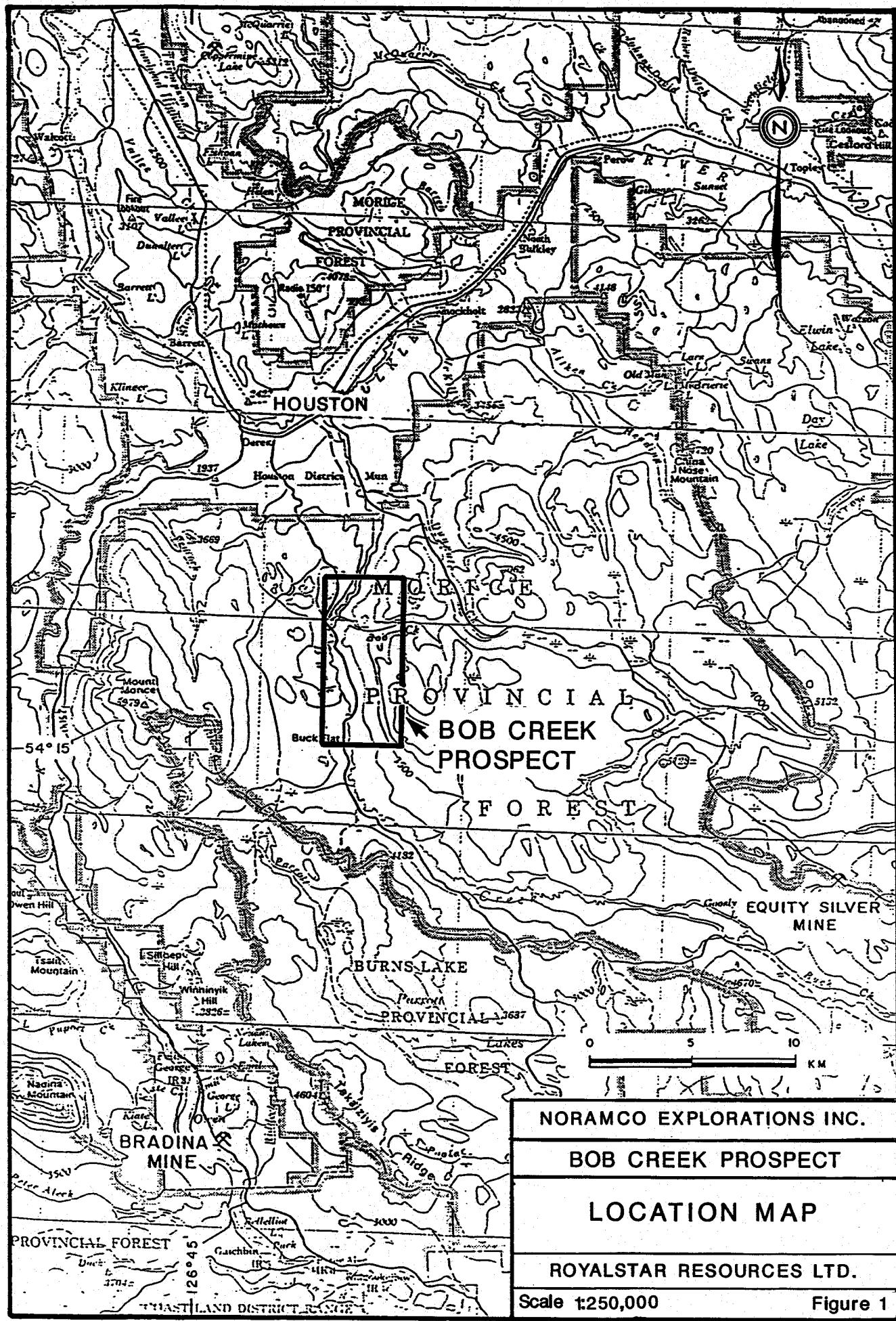
The Bob Creek property is situated in west central British Columbia at latitude 54°18'N, longitude 125°38'W, within the Omineca Mining District, NTS sheet 93 L 7/E.

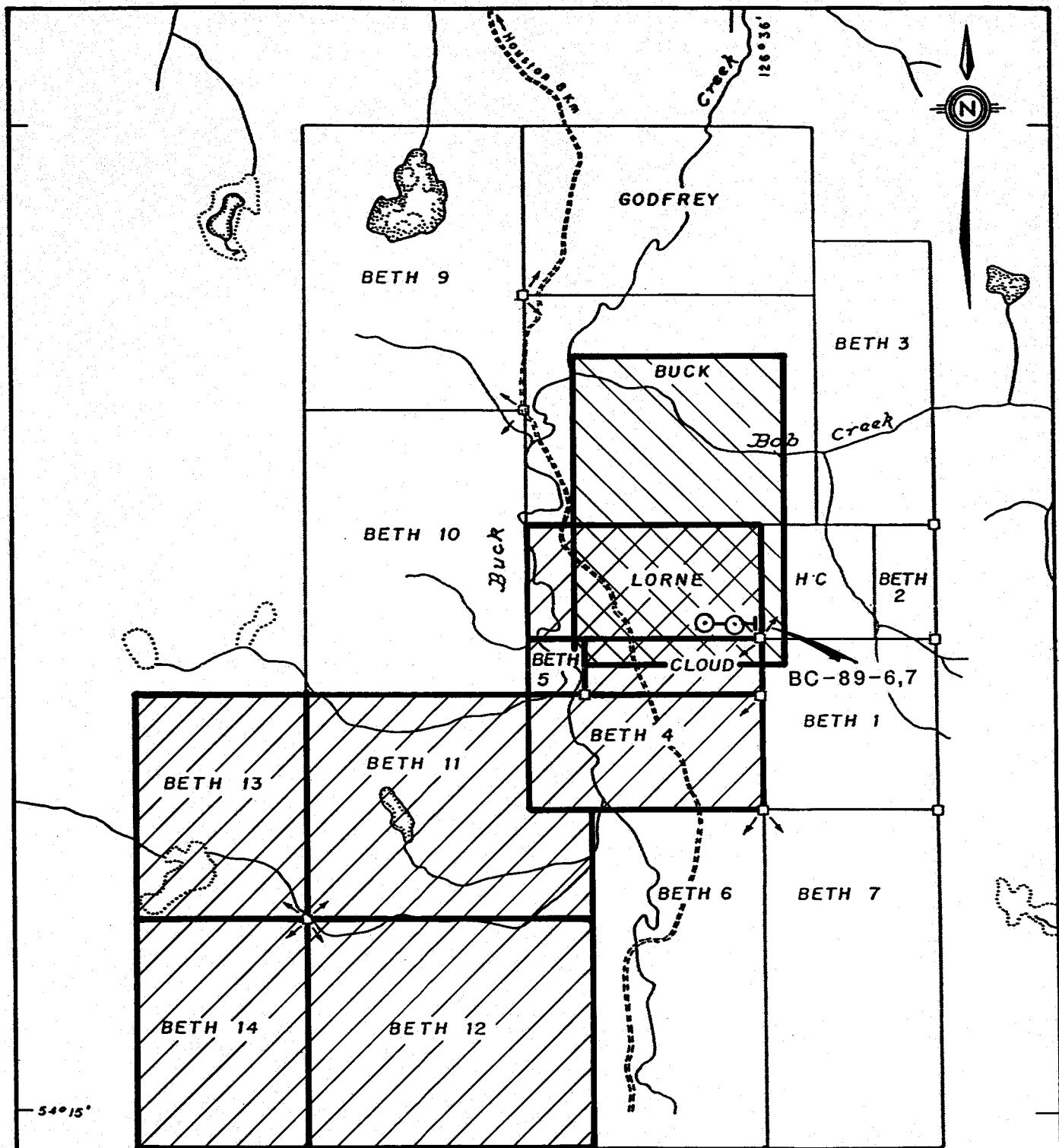
Access is via the Buck Flats road which joins the Yellowhead Highway approximately 1/2 kilometer west of the center of the village of Houston. Houston lies 8 kilometers north of the property. Access within the property is via drill haul roads suited for 4-wheel drive vehicles.

Property Claims (see figure 2)

The property contains 18 claims comprising 210 metric claim units, situated in the Omineca Mining District. The claims are held under option by Royalstar Resources Ltd., Suite 900 - 999 West Hastings St., Vancouver, B.C.

Essential claim data are as follows:





BC-89-6 Diamond drill hole



Location of figure 3



Claims for assessment
credits

0 0.5 1 2 2.5
KM

Scale 1:50,000

NORAMCO EXPLORATIONS INC.

BOB CREEK PROSPECT

CLAIM MAP

ROYALSTAR RESOURCES LTD.

Figure 2

<u>CLAIM NAME</u>	<u>UNITS</u>	<u>RECORD NUMBER</u>	<u>ANNIVERSITY DATE</u>
Godfrey	5	317	7 June 1994
Buck	20	1334	21 June 1997
<u>Lorne</u>	8	1333	21 June 1997*
HC	4	1335	21 June 1994
<u>Cloud</u>	3	812	11 October 1997*
Beth 1	9	3622	2 March 1994
Beth 2	2	3623	2 March 1994
Beth 3	10	3624	2 March 1994
<u>Beth 4</u>	8	3625	2 March 1997*
<u>Beth 5</u>	1	3626	2 March 1997*
Beth 6	18	5526	12 August 1989
Beth 7	18	5527	12 August 1989
Beth 9	20	6833	25 January 1992
Beth 10	20	6834	25 January 1992
<u>Beth 11</u>	20	6835	25 January 1992*
<u>Beth 12</u>	20	6836	25 January 1992*
<u>Beth 13</u>	12	6837	25 January 1992*
<u>Beth 14</u>	12	6838	25 January 1992*
TOTAL	210		

* Anniversary dates as per assessment credits filed on January 23, 1989 in Smithers Recording Office - see Appendix 1.

History

Placer gold was discovered in the gravels of Bob Creek about 1914 and subsequent prospecting identified gossanous and altered rocks outcropping along Bob Creek Canyon as the likely source. Over the intervening years, the property (also known as Gold Brick, Horseshoe, and Buck Creek) has been explored by several companies for deposits of various types, including high grade precious metals, volcanogenic massive sulphides, porphyry copper - molybdenum, and most recently, low grade, large tonnage epithermal precious metals.

Royalstar Resources Ltd. optioned the prospect from Bard Silver and Gold Ltd. in mid-1988 and during the period July, 1988 to February, 1989, a major exploration program including line cutting, extensive induced polarization and magnetic surveys, and 2543 meters of NQ diamond drilling over 8 holes was carried out. Work was conducted by Noramco Explorations Ltd. under contract to Royalstar.

(3)

Three separate zones, the S-13, Canyon, and South, have been defined on the basis of geophysics and diamond drilling. Holes B.C.-89-6,-7 (see figures 2 and 3 for location) are situated in the south zone. The zone is characterized by a strong induced polarization anomaly with chargeability readings of up to 90 milliseconds. No outcrop occurs in the immediate area of drilling.

Summary of Work (see figure 3 for hole locations)

Diamond drill hole BC-89-6 was drilled during the period January 13-16, 1989. Hole parameters are as follows:

Drill Hole Nbr: B.C.-89-6

Core Size: NQ

Length: 380.18 meters

Collar Azimuth: 090°

Inclination: collar = -60°
(acid tests) 102.7 m = -60°
240.0 m = -60°

Elevation: 918 meters ASL (approx.)

Location: L90 + 00 N.
(with respect to
Bob Creek picket
line grid) 102 + 75 East

(4)

Diamond drill hole B.C.-89-7 was drilled during the period January 17-20, 1989. Hole parameters are as follows:

Drill Hole Nbr: B.C.-89-7

Core Size: NQ

Length: 344.51 meters

Collar Azimuth: 090°

Inclination:
collar = -55°
102.7 m = -55°
204.2 m = -55°
283.5 m = -55°

Elevation: 925 meters ASL (approx.)

Location: L90 + 00N
(with respect to
Bob Creek Picket
line grid) 104 + 20E

Drilling was conducted by J.T. Thomas Diamond Drilling Ltd., using a skid-mounted Longyear Super 38 rig, outfitted with NQ equipment. Drill moves employed a D-7 cat. Cold weather and excessive distance to water required the use of a water truck.

Analytical work was carried out by Acme Analytical Laboratories, Vancouver. Drill core was generally sampled in 1 to 2 metre lengths, with the entire hole length analyzed. Elements determined by ICP method include Cu, Pb, Zn, Ag, Mn, As, Cd, Sb, Bi, and Ba. Gold analyses were determined by fire assay - atomic absorption. Diamond drill core is currently stored at the J.T. Thomas shop in Smithers.

Summary of Costs Applied to Assessment Credits

A total of \$50,400 derived from \$62,195.20 drilling costs has been applied to assessment credits. This total was determined as follows:

Drill Hole B.C.-89-06 (Jan. 13-16, 1989)(i) footage charges

0'-1000' @ 21.00/foot =	\$21,000.00
1000'-1247' @ 23.10/foot =	5,705.70

(ii) man and machine hours

38.5 hrs @ 23.00/hr =	885.00
2.0 hrs @ 75.00/hr =	150.00

(iii) water truck charge

4 days @ \$828.00/day =	3,312.00
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(iv) materials consumed

	<u>1,244.00</u>
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B.C.-89-6 TOTAL DRILLING COST	\$32,297.20
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Drill Hole B.C.-89-07 (Jan. 17-20, 1989)(i) footage charges

0'-1000' @ 21.00/foot =	\$21,000.00
1000'-1130' @ 23.10/foot =	3,312.00

(ii) man and machine hours

42 hrs @ 23.00/hr =	996.00
13 hrs @ 75.00/hr =	975.00

(iii) water truck charge

4 days @ \$828.00/day =	3,312.00
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(iv) materials consumed

	<u>642.00</u>
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B.C.-89-7 TOTAL DRILLING COST	\$29,898.00
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TOTAL B.C.-89-6 and B.C.89-7 cost =	\$62,195.20
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Supporting invoices paid to J.T. Thomas are included as Appendix II.

Discussion of Diamond Drill Results

Drill Hole B.C.-89-6

Drill hole B.C.-89-6 was drilled to test very anomalous chargeability values encountered in the induced polarization survey. The core log and analytical results are included in Appendix III. Sample identity members on the analyses certificates can be correlated to sample intervals on the sample data drill log.

Drill Hole B.C.-89-6 intersected interbedded ash tuffs and siltstones, rhyolite tuff and "crackle" breccia, andesite tuffs and flows. These rock units are cut by feldspar porphyry dykes. All rock types are cut by abundant quartz-pyrite veinlets, with trace amounts of sphalerite and chalcopyrite. A highly sheared section of rhyolite tuff from 96.64 meters to 106.70 meters contains up to 50% marcasite.

Rhyolite breccia is generally highly fractured and cut by a diffuse network of grey silicous quartz and chalcedony veinlets. Trace amounts of chalcopyrite are present in the veinlets.

The rhyolite tuffs and breccia contain anomalous gold values, generally ranging from 100 to 300 ppb, as well as anomalous copper values generally ranging from 100 to 250 ppm.

Drill Hole B.C.-89-7

Drill hole B.C.-89-7 was drilled to test the east fringe of very anomalous chargeability values derived from the induced polarization survey. The core log and analytical results are also included in Appendix III.

Drill hole B.C.-89-7 intersected interbedded ash tuffs and siltstones, dacite tuff and flow breccia, and andesite. These are cut by several feldspar porphyry, aplite, and "crowded" quartz-feldspar porphyry dykes. All rock types are cut by quartz-pyrite veinlets with minor quantities of chalcopyrite and sphalerite. Alteration ranges from moderate to strong clay-carbonate, with local patches of strong sericite in the more pyritized sections.

(7)

Very anomalous copper values were obtained throughout most of the hole. Values occur up to 2776 ppm copper and generally range from 100 to 500 ppm copper.

Both drill holes intersected highly pyritized sections, which are interpreted to be the cause of the high chargeability readings obtained in the induced polarization survey. The character of veining, together with very anomalous copper values suggests proximity to a porphyry copper system. Considerable room remains to be drilled, particularly to the north, south and west of these two holes.

D.A. Silversides
D.A. Silversides

April 19, 1989.

STATEMENT OF QUALIFICATIONS

I, David A. Silversides, of 581 Ellis Street, North Vancouver, B.C. certify that:

I am a graduate of the University of British Columbia with a Bachelor of Science Degree in Honours Geology, 1961.

I am a graduate of the University of Manitoba, with a Master of Science degree in Geology, 1968.

I have practised my profession as a geologist since 1961 in British Columbia, Yukon, and Western U.S.A.

The information contained in this report was compiled by myself and that the Bob Creek Property diamond drill program was carried out under my direct supervision during the period November 24-29, 1988.



D.A. Silversides
Western North America
Regional Exploration Manager
Noramco Explorations, Inc.

Appendix I

Statement of Work and 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
 SECTION 28

NOTICE TO GROUP

INDICATE TYPE OF TITLE MINERAL .
 (Mineral or Placer)*

RECEIVED AND RECORDED
 4340
 JAN 23
 GOLD COMMISSIONER,
 SMITIERS, B.C.
 M.R. No. 1000019

RECORDING STAMP

I, DAVID A. SILVERSIDES . Agent for ROYAL STAR RESOURCES LTD .
 (Name) (Name)

C/O NORAMCO EXPLORATIONS INC. 900-999 W. HASTINGS ST .
 (Address) (Address)

900 - 999 W. HASTINGS ST . VANCOUVER, B.C .
 (Telephone) (Postal Code)

• 689-1428 . VGC 2W2 .
 (Telephone) (Postal Code)

Valid subsisting FMC No. 280 843 .

689-1428 . VGC 2W2 .
 (Telephone) (Postal Code)

Valid subsisting FMC No. 280 845 .

FMC Code SIKUDA .

FMC Code ROYREL .

request that the following mineral titles be grouped under group name BOB 2 .

Mining Division OMINICA

Map No. NTS 93L / 7 .

Name of Claim	No. of Units	Title Number
LORNE	8	1333
BETH 5	1	3626
CLOUD	3	812.
BETH 4	8	3625
BETH 11	20	6835
BETH 12	20	6836
BETH 13	12	6837
BETH 14	12	6838

Name of Claim	No. of Units	Title Number

D. A. Silver sides
 (Signature of Applicant)

Appendix II

J.T. Thomas Diamond Drilling Ltd. Invoices

Drill Holes B.C.-89-6,-7.

J. T. THOMAS
DIAMOND DRILLING LTD.

Box 394
Smithers, B.C.
V0J 2N0
Phone: (604) 847-4361

Royal Star Drill 38-9

January 3 - 15, 1989

Branch Office
Box 944
Timmins, Ont. P4N 7H5
Phone: (705) 267-6633
Page One

DIAMOND DRILLING:

<u>Hole No.</u>	<u>Date</u>	<u>Overburden</u> <u>From</u> <u>To</u>	<u>Coring</u> <u>From</u> <u>To</u>	<u>Total</u> <u>Footage</u>	<u>Rate</u>	<u>Amount</u>
BC 89-06	Jan. 13	0 - 60		60	\$21.00	\$ 1,260.00
			60 - 952	892	21.00	18,732.00
				952		\$19,992.00

footage cost Hole 6 = \$19,992.00

J. T. THOMAS
DIAMOND DRILLING LTD.

Box 394
Smithers, B.C.
V0J 2N0
Phone: (604) 847-4361
Royal Star Drill 38-9

January 3 - 15, 1989

Branch Office
Timmins, Ont.
Page Two

MAN & MACHINE HOURS:

<u>Date</u>	<u>Caton</u>	<u>Groot</u>	<u>Beaupre'</u>	<u>Denboer</u>	<u>Drill</u>	<u>Rosenburg</u>
Jan.3						8
Jan.4						8
Jan.5						8
Jan.6						8
Jan.9						8
Jan.10						8
Jan.11						8
Jan.12						8
Jan.13						8
Jan.14						<u>8½</u>
Jan.15			2	2	2	6
		2	2	2		<u>86½</u>

Total Man & Machine Hours: $92\frac{1}{2}$ hours @ \$23.00/hour = \$2,127.50

Man and Machine hours - Hole 6 = 30.5 hrs @ $\frac{\$}{hr}$
= $\frac{\$}{hr}$ 701.50

J. T. THOMAS
DIAMOND DRILLING LTD.

Box 394
Smithers, B.C.
V0J 2N0
Phone: (604) 847-4361
Royal Star Drill 38-9

January 16 - 26, 1989

Branch Office
Timmins, Ont.
Page Two

MAN & MACHINE HOURS:

<u>Date</u>	<u>Caton</u>	<u>Groot</u>	<u>Beaupre</u>	<u>Denboer</u>	<u>Drill</u>	<u>Cat</u>	<u>Rosenburg</u>
Jan. 16						2	8 - hole 6
Jan. 17						8	
Jan. 18						3	8
Jan. 19	3	3				3	8
Jan. 20						7	9
Jan. 21						$3\frac{1}{2}$	
Jan. 23							8
Jan. 24							8
Jan. 25							8
Jan. 26						1	
Jan. 27							8
Jan. 30							8
Jan. 31							8
	3	3				3	19 $\frac{1}{2}$
							97

Total Man & Machine Hours: 106 hours

Less: Credit for Rosenburg Hours
(Jan. 14 & 15) (14 $\frac{1}{2}$ hours)

91 $\frac{1}{2}$ hours @ \$23.00/hour = \$2104.50

Total Cat Hours: 19 $\frac{1}{2}$ hours @ \$75.00/hour = 1462.50

TOTAL: \$3,567.00

Man hours - hole 6 = 8 \times \$23.00 / hour = \$184.00
Cat hours - hole 6 = 2 \times \$75.00 / hour = \$150.00

Man hours - hole 7 = 42 hrs \times \$23.00 / hr = \$966.00
Cat hours - hole 7 = 13 hrs \times \$75.00 / hr = \$975.00

J. T. THOMAS
DIAMOND DRILLING LTD.

Box 394
Smithers, B.C.
V0J 2N0
Phone: (604) 847-4361

Royal Star Drill 38-9

January 16 - 27, 1989

Branch Office
Box 944
Timmins, Ont. P4N 7HS
Phone: (705) 267-6633
Page Three

MATERIALS USED, LOST OR DAMAGED:

<u>Date</u>	<u>Quantity</u>	<u>Item</u>	<u>Cost</u>	<u>Amount</u>
Jan. 16	6	10' NW Casing	\$164.00	\$ 984.00
	1	NW Casing Shoe	260.00	260.00
Jan. 19	1	NQ Bit (reaming cave)	642.00	642.00
Jan. 23	500 ft	Wireline Cable	@\$.60/ft	300.00
Jan. 26	7	10' NW Casing	164.00	1,148.00
	1	NW Casing Shoe	260.00	260.00
			TOTAL:	\$3,594.00

J. T. THOMAS
DIAMOND DRILLING LTD.

Box 394
Smithers, B.C.
V0J 2N0
Phone: (604) 847-4361
Royal Star Drill 38-9

January 16 - 26, 1989

Branch Office
Box 944
Timmins, Ont. P4N 7H5
Phone: (705) 267-6633
Page One

DIAMOND DRILLING:

Hole No.	Date	Overburden From To	Coring From To	Total Footage	Rate	Amount
BC 89-06	Jan. 16		952 - 1000 1000 - 1247	48 247	\$21.00 23.10	\$ 1,008.00 5,705.70
BC 89-07	Jan. 17	0 - 20	20 - 1000 1000 - 1130	20 980 130	21.00 21.00 23.10	420.00 20,580.00 3,003.00
BC 89-08	Jan. 21	0 - 70	70 - 1000 1000 - 1457	70 930 457	21.00 21.00 23.10	1,470.00 19,530.00 10,556.70
				2882'		\$62,273.40

Footage charges - hole 6 =
$$\begin{array}{r} 1,008.00 \\ 5,705.70 \\ \hline 6,713.70 \end{array}$$

Footage charges - hole 7 =
$$\begin{array}{r} 420.00 \\ 20,580.00 \\ 3,003.00 \\ \hline 24,003.00 \end{array}$$

Appendix III

Drill Hole Logs and Analyses Certificates

Diamond Drill Holes B.C.-89-6,-7.

DRILL LOG

HOLE NO. BC-89-6

DRILLING CO.	LOCATION SKETCH	TESTS	DATE STARTED: JAN 15, 1989			PROJECT: BOB CREEK		
			DEPTH	DIP ANGLE	AZIMUTH			
J.T. THOMAS			COLLAR	-60°	090°			
			102.74	-60°	090°	DATE COMPLETED: JAN 17, 1989		
			243.0	-60°	090°	COLLAR ELEV.: 918 metres (approx)		
						NORTHING:		
						EASTING:		
						AZIMUTH: 090°		
						DEPTH: 380.18 METRES,		
HOLE TYPE CORE						CORE SIZE: NQ		
INTERVAL	LITHOLOGY	ALTERATION	MINERALIZATION	REMARKS				
FROM	TO	ROCK TYPE	COLOUR	TEXTURE	(lithology, alteration, mineralization, structure, age relations, etc.)			
0	18.29	CASING			casing set to unoxidized bedrock.			
18.29	22.70	FELDSPAR PORPHYRY	grey porphyritic	med. gr. sericitic	clay/carbonate pyrite	sericitized feldspar porphyry, sericite boulders after biotite(?), medium grained. May where altered to clay / carbonate.		
22.70	32.62	ASH TUFF / SILTSTONE	grey med gr.	fine to strong sericitic	clay/carbonate 2-3% pyrite tr. chalcopyrite tr. sphalerite	thin and well-bedded, fine to medium grained, grey ash tuffs and siltstones. Bedding @ 40° to 60° to C.A.		
						Rock is cut by wispy and hairline thin veins of sericite-silicate and patchy bands of tan colored carbonate (indicative?). Coarse ash tuffs contain up to 10% disseminated pyrite, but only 10% of core interval contains this much pyrite.		
						Contact @ 22.70 m marked by 20 cm of gouge @ 55° to C.A.		
						Rock is extremely brittle and blocky, shattered to 2-5 cm. pieces		

DRILL LOG

HOLE NO. BC 89-6.

INTERVAL		LITHOLOGY		ALTERATION	MINERALIZATION	REMARKS (lithology, alteration, mineralization, structure, age relations, etc.)	
FROM	TO	ROCK TYPE	COLOUR	TEXTURE			
32.62	33.43	FELDSPAR PORPHYRY	grey / green	med. gr. porphyritic	sericite matrix clay/carbonate of plagioclase	1-2% disseminated pyrite	same as interval 18.29-22.70 m, contacts are broken, gouge.
33.43	91.20	ASH TUFF / SILTSTONE	grey / green	fine to med. gr.	sericite	2-3% pyrite, increasing to 4% by 50.0 metres	same as interval 22.10-32.62 m. Core remains very broken and blocky; very abundant gray siliceous hairline thin wavylets.

Good bedding shown at:

- 42.10 m @ 60° to C.A.
- 44.75 m @ 30° to C.A.
- 67.10 m @ 40° to C.A.
- 76.50 m @ 40° to C.A.

Bedding is in .1 to 1.0 cm layers
alternating fine and medium grained tuffs.

Starting at 50 metres, there is a marked
increase in pyrite as disseminations, stringers,
and ovoid patches. Chlorite-talc seams
also become common and rock is extremely
broken from 50 to 60 metres.

76.65 - 76.75: massive pyrite

Good bedding @ 86.7 metres @ 40° to C.A.

DRILL LOG

HOLE NO. BC 89-6

INTERVAL		LITHOLOGY		ALTERATION	MINERALIZATION	REMARKS
FROM	TO	ROCK TYPE	COLOUR	TEXTURE		(lithology, alteration, mineralization, structure, age relations, etc.)
92.10	96.64	RHYOLITE OR DYKE	white OR DYKE	aphanitic	sericitic	2-3 % disseminated pyrite white - greenish colored rhyolite flow or dyke with random and diffuse yellow 1 cm thick greenish sericite-pyrite quartz veinlets. Veinlet spacing averages 1 cm. Rock contains .5 cm. slots of light grey-green sericite and is very broken to 2-3 cm pieces.
						94.0 - 94.45: strong fault zone, clay/ carbonate.
96.64	106.70	RHYOLITE TUFF	dark grey	med. to coarse gr.	strongly altered to clay sericitic	10-50% marcasite 3-5% pyrite up to 1% bornite? rock is very altered, possibly rhyolite tuff and has up to 50% marcasite as disseminated "BB shot" crystals. Section 98.20 - 99.0m is massive dark brown-black marcasite, very soft from ground water solution? Section 105.55 to 106.70 is tuffaceous, contains approximately 30% cream colored fragments set in a grey sericitic and siliceous matrix. Has up to 3% disseminated pyrite and 1% purplish black sulphide-bornite(?)
						@ 105.70m: flow banding fabric @ 40° to C.S.

DRILL LOG

HOLE NO. BC 89-6

INTERVAL		LITHOLOGY		ALTERATION	MINERALIZATION	REMARKS	
FROM	TO	ROCK TYPE	COLOUR	TEXTURE		(lithology, alteration, mineralization, structure, age relations, etc.)	
106.70	127.75	RHYOLITE TUFF/ FLOW AND "CRACKLE" BRECCIA	mottled olive green/ cream/ white.	aphanitic to coarse fragments	moderate to strong clay/carb sericitic	1-15 % pyrite fr. sphalerite fr. chalcopyrite trace to .5% hornite(?)	phyllite tuff, flow breccia, and "crackle" breccia, very variable in texture. Generally cream colored aphanitic angular fragments up to 3 cm in diameter set in a grey-green siliceous matrix. Olive green ovoid clasts, soft, probably carbonate, are common and in some sections resemble lapilli. Rhyolite sections are intensely brecciated (and) bedded with grey silica veinlets, giving a "crackle breccia" appearance. Rock is generally brecciated with irregular gray siliceous bands holding cream colored fragments.
						Pyrite generally occurs disseminated and is variable in content, ranging from 1% to 15% by volume. Pyrite commonly rims fragments and the "olive green" lapilli. Chalcopyrite and dark purple sulphide - bornite(?) occurs as clots in the cream colored fragments and together with pyrite in the more sulphide-rich sections.	
						112.0 - 117.8 m: phyllite crackle breccia, angular light grey fragments.	
						117.80 - 121.8 m: rock is very dark green, is brecciated, has large patches of green chlorite or sercite, and up to	

DRILL LOG					HOLE NO.	
INTERVAL		LITHOLOGY		ALTERATION	MINERALIZATION	REMARKS
FROM	TO	ROCK TYPE	COLOUR	TEXTURE		(lithology, alteration, mineralization, structure, age relations, etc.)
						10% pyrite.
						Section from 121.80 to 187.0 m averages, 10% pyrite by volume and readily explains high T.P. chargeability anomaly on line 90+00N.
						@ 108.84m: 3 cm. seam of pyritic gouge @ 80° to C.A.
						@ 111.70m: 4 cm. seam of white clay/ gouge @ 80° to C.A.
						@ 122.0m: 2 cm. pyritic gouge @ 40° to C.A.
						@ 128.20: 3 cm pyrite seam @ 30° to C.A.
						@ 129.0m: 2 cm pyrite seam @ 25° to C.A.
						142.0 - 142.30m: fault, clay/gouge.
						143.65 - 144.70m: fault, clay/gouge seams @ 50° to C.A.
						147.05 - 147.25m: fault, clay/gouge seams @ 40° to C.A.
						150.30 - 151.05m: fault, clay/gouge.
						The fault zones above from 142.0 - 151.05m

DRILL LOG

HOLE NO. BC 89-6

INTERVAL		LITHOLOGY		ALTERATION	MINERALIZATION	REMARKS
FROM	TO	ROCK TYPE	COLOUR	TEXTURE		(lithology, alteration, mineralization, structure, age relations, etc.)
						are very pyritic and also contain quartz-pyrite-sphalerite stringers, trace amounts of chalcopyrite.
						Chlorite fractures are common starting at 130 m.
						155.45 - 157.25 - fault zone, very broken core, pyritic and chloritic gouge.
						@ 162.00m: 1cm sphalerite-pyrite-quartz seam @ 80° to C.A.
						@ 168.20m: 2 cm. fault gouge @ 20° to C.A.
						175.0 - 175.20m: fault gouge.
						182.40 - 182.60m: fault gouge.
						190.20 - 190.35m: fault gouge, @ 40° to C.A.
						* 200.55 - 204.10m: strong fault, gouge, clay
						@ 195.0 m, cream colored fragments are cut by "crackle" Stockwork of silica and contain blebs of pyrite, bornite (?) sphalerite and chalcopyrite. Fragments are up to 3 cm. in diameter and held together by a grey siliceous-sulfate matrix.

DRILL LOG

HOLE NO. BC 89-6

INTERVAL		LITHOLOGY			ALTERATION	MINERALIZATION	REMARKS (lithology, alteration, mineralization, structure, age relations, etc.)
FROM	TO	ROCK TYPE	COLOUR	TEXTURE			
							213.12 - 213.30 m: fault gouge @ 40° to C.A.
							214.10 - 218.85 m: fine-grained light grey rhyolite flow cut by abundant grey sericitic-silica veins to form "crackle breccia".
							218.50 - 218.85 m: fault breccia.
							218.85 - 219.75 m: fine-grained grey gritty ash tuff. Contact's Show Fault gouge @ 50° to C.A.
							219.75 - 224.0 m: fine-grained light grey rhyolite cut by abundant grey sericitic-silica veins, 2 to 3% pyrite as dissemination. Pyrite content starts to decrease @ 190.0 mches. Have patches of cream-colored rhyolite breccia occurring sporadically up to 224.0 m, then progressing to rhyolite breccia from 224.0 to 242.90 m.
							242.90 - 269.5 m: fine grained cream-white rhyolite cut by very abundant grey silica-sericate Stockwork to form "crackle breccia". Rock contains 1% pyrite and only trace amounts of pyrite.

DRILL LOG

HOLE NO. BC 89-6

INTERVAL		LITHOLOGY		ALTERATION	MINERALIZATION	REMARKS	
FROM	TO	ROCK TYPE	COLOUR	TEXTURE		(lithology, alteration, mineralization, structure, age relations, etc.)	
279.75	327.35	FELSspar PORPHYRY	olive green/ cream plagioclase	med. gr. porphyritic	slight clay/fractional	< .5% pyrite	@ 266.25m: 2 cm vein of pyrite @ 80° to C.A.
327.35	353.32	RHYOLITE TUFF FLOW AND CRACKLE BRECCIA	olive green/ cream	med. to coarse gr.	strongly shattered, siliceous	1% pyrite tr. chalcopyrite	relatively unaltered feldspar porphyry, white plagioclase phenocrysts set in a light olive green matrix. Rock contains trace amounts of fine-grained disseminated pyrite. Good sharp upper contact @ 40° to C.A.
353.32	380.18	ANDESITE TUFF/FLWS	dark green	med. to coarse gr.	chloritic, weak clay on fractures	1-2% pyrite	similar to preceding rhyolite section. Good flow banding @ 343.8m @ 15° to C.A.
END OF HOLE @ 380.18 METRES.							

SAMPLE DATA DRILL LOG

ASSAY LAB: ACME

NUMBER	SAMPLE			CORE			VISUAL ESTIMATES (% ORE MINERALS)	ASSAY RESULTS				
	FROM	TO	LENGTH	% REC	RQD	S.G.						
D 41783	18.29	20.5	2.21	80%	10-20 cm pieces		1-2 % pyrite					
784	20.5	22.0	1.5	100%	"	"	"					
785	22.0	23.5	"	90%	5-10 cm pieces		2-3 % pyrite					
786	23.5	25.0	"	60%	2-3 cm pieces		tr. sphalerite					
787	25.0	26.5	"	40%	"	"	tr. cpy					
788	26.5	28.0	"	60%	"	"	"					
789	28.0	29.5	"	70%	"	"	"					
790	29.5	31.0	"	"	"	"	"					
791	31.0	32.5	"	30%	"	"	"					
792	32.5	34.0	"	70%	"	"	"					
793	34.0	35.5	"	"	"	"	"					
794	35.5	37.0	"	65%	"	"	"					
795	37.0	38.5	"	70%	"	"	"					
796	38.5	40.0	"	85%	"	"	"					
797	40.0	41.5	"	"	"	"	"					
798	41.5	43.0	"	90%	"	"	"					
799	43.0	44.5	"	83%	"	"	"					
800	44.5	46.0	"	90%	"	"	"					
801	46.0	47.5	"	"	"	"	"					
802	47.5	49.0	"	"	"	"	"					
803	49.0	50.5	"	"	"	"	"					
804	50.5	52.0	"	80%	"	"	4% pyrite					
805	52.0	53.5	"	90%	"	"	tr. cpy.					
806	53.5	55.0	"	80%	"	"	"					
807	55.0	56.5	"	80%	"	"	"					
808	56.5	58.0	"	90%	"	"	"					
809	58.0	59.5	"	"	"	"	"					
810	59.5	61.0	"	100%	5-10 cm pieces		"					
811	61.0	62.5	"	30%	2-3 cm pieces		"					
812	62.5	64.0	"	90%	"	"	"					
813	64.0	65.5	"	80%	"	"	"					

SAMPLE DATA DRILL LOG

ASSAY LAB: ACME

SAMPLE				CORE			VISUAL ESTIMATES (% ORE MINERALS)		ASSAY RESULTS					
NUMBER	FROM	TO	LENGTH	% REC	RQD	S.G.								
D41814	63.5	67.0	1.5	90%	2-3 cm pieces		4%	pyrite						
815	67.0	68.5	"	95%	3-10 cm pieces		tr. py, sphalerite							
816	68.5	70.0	"	4	"	"	"							
817	70.0	71.5	"	100%	10-20 cm pieces		"							
818	71.5	73.0	"	4	"	"	"							
819	73.0	74.5	"	4	"	"	"							
820	74.5	76.0	"	4	"	"	"							
821	76.0	77.5	"	4	"	"	"							
822	77.5	79.0	"	4	5-10 cm pieces		10%	pyrite						
823	79.0	80.5	"	4	"	"	"	5%	pyrite					
824	80.5	82.0	"	4	"	"	tr. py, sphalerite							
825	82.0	83.5	"	95%	2-5 cm pieces		"							
826	83.5	85.0	"	4	3-10 cm pieces		"							
827	85.0	86.5	"	4	"	"	"							
828	86.5	88.0	"	4	"	"	"							
829	88.0	89.5	"	4	"	"	"							
830	89.5	91.0	"	4	"	"	"							
831	91.0	92.5	"	80%	1-2 cm pieces		"							
832	92.5	94.0	"	4	"	"	"							
833	94.0	95.5	"	4	"	"	"	"						
834	95.5	97.0	"	4	"	"	"	10-50%	marcasite					
835	97.0	98.5	"	4	3-10 cm pieces		5%	pyrite						
836	98.5	100.0	"	85%	"	"	"	"						
837	100.0	101.5	"	4	"	"	"	"						
838	101.5	103.0	"	100%	5-15 cm pieces		"							
839	103.0	104.5	"	4	"	"	"	"						
840	104.5	106.0	"	4	10-20 cm pieces		5%	pyrite						
841	106.0	107.5	"	4	"	"	tr. py							
842	107.5	109.0	"	4	"	"	"	tr. bornite?						
843	109.0	110.5	"	4	"	"	"	tr. sphalerite						
844	110.5	112.0	"	4	"	"	"	"						

SAMPLE DATA DRILL LOG

ASSAY LAB: ACME

SAMPLE				CORE			VISUAL ESTIMATES (% ORE MINERALS)		ASSAY RESULTS					
NUMBER	FROM	TO	LENGTH	% REC	RQD	S.G.								
D41845	112.0	113.5	1.5	100%	10-20 cm pieces		5%	pyrite, fr. py.						
846	113.5	115.0	"	"	"	"		fr. bornite (?) sphalerite						
847	115.0	116.5	"	"	"	"		"						
848	116.5	118.0	"	"	"	"		"						
849	118.0	119.5	"	"	"	"								
850	119.5	121.0	"	"	"	"		8-10% pyrite						
851	121.0	122.5	"	"	"	"		<.5% bornite (?)						
852	122.5	124.0	"	"	"	"		fr. py., sphalerite						
853	124.0	125.5	"	"	"	"		"						
854	125.5	127.0	"	"	"	"		"						
855	127.0	128.5	"	"	"	"		"						
856	128.5	130.0	"	"	"	"		"						
857	130.0	131.5	"	"	"	"		"						
858	131.5	133.0	"	"	"	"		"						
859	133.0	134.5	"	"	"	"		"						
860	134.5	136.0	"	"	"	"		"						
861	136.0	137.5	"	"	"	"		"						
862	137.5	139.0	"	"	"	"		"						
863	139.0	140.5	"	"	"	"		"						
864	140.5	142.0	"	"	"	"		"						
865	142.0	143.5	"	"	"	"		"						
866	143.5	145.0	"	"	"	"		"						
867	145.0	146.5	"	"	"	"		"						
868	146.5	148.0	"	"	"	"		"						
869	148.0	149.5	"	"	"	"		"						
870	149.5	151.0	"	"	"	"		"						
871	151.0	152.5	"	"	"	"		"						
872	152.5	154.0	"	"	"	"		"						
873	154.0	155.5	"	"	"	"		"						
874	155.5	157.0	"	"	"	"		"						
875	157.0	158.5	"	"	"	"		"						

SAMPLE DATA DRILL LOG

ASSAY LAB: ACME

SAMPLE				CORE			VISUAL ESTIMATES (% ORE MINERALS)		ASSAY RESULTS					
NUMBER	FROM	TO	LENGTH	% REC %	RQD	S.G.								
241876	158.5	160.0	1.5	100%	10-20 cm pieces		8-10% pyrite							
877	160.0	161.5	"	"	except in fault zones		5.5% bornite (?)							
878	161.5	163.0	"	"			fr. py, sphalerite							
879	163.0	164.5	"	"	"	"	"							
880	164.5	166.0	"	"	"	"	"							
881	166.0	167.5	"	"	4	"	"							
882	167.5	169.0	"	"	v	"	"							
883	169.0	170.5	"	"	"	"	"							
884	170.5	172.0	"	"	"	"	"							
885	172.0	173.5	"	"	"	"	"							
886	173.5	175.0	"	"	4	"	"							
887	175.0	176.5	"	4	"	"	"							
888	176.5	178.0	"	"	4	"	"							
889	178.0	179.5	"	4	"	"	"							
890	179.5	181.0	"	"	"	"	"							
891	181.0	182.5	"	4	"	"	"							
892	182.5	184.0	"	4	"	4	"							
893	184.0	185.5	"	4	"	"	"							
894	185.5	187.0	"	"	4	"	"							
895	187.0	188.5	"	"	"	"	5-6% pyrite							
896	188.5	190.0	"	"	"	"	fr. py, bornite,							
897	190.0	191.5	"	4	"	"	sphalerite							
898	191.5	193.0	"	4	"	"	"							
899	193.0	194.5	"	4	"	"	"							
900	194.5	196.0	"	4	"	4	"							
901	196.0	197.5	"	"	"	"	"							
902	197.5	199.0	"	"	"	"	"							
903	199.0	200.5	"	"	14	4	"							
904	200.5	202.0	"	4	"	"	"							
905	202.0	203.5	"	4	"	"	"							
906	203.5	205.0	"	4	4	"	"							

SAMPLE DATA DRILL LOG

ASSAY LAB: ACME

SAMPLE				CORE			VISUAL ESTIMATES (% ORE MINERALS)		ASSAY RESULTS					
NUMBER	FROM	TO	LENGTH	% REC	RQD	S.G.								
D41907	205.0	206.5	1.5	100%	15-20 cm pieces		4-5% pyrite, fr. boronite, Cpy.							
908	206.5	208.0	"	"	"	"								
909	208.0	209.5	"	"	"	"	2-3% pyrite							
910	209.5	211.0	"	"	"	"	fr Cpy.							
911	211.0	212.5	"	"	"	"	"							
912	212.5	214.0	"	"	10-15 cm pieces		"							
913	214.0	215.5	"	"	"	"	"							
914	215.5	217.0	"	"	"	"	"							
915	217.0	218.5	"	"	"	"	"							
916	218.5	220.0	"	"	"	"	"							
917	220.0	221.5	"	"	"	"	"							
918	221.5	223.0	"	"	"	"	"							
919	223.0	224.5	"	"	4	4	"							
920	224.5	226.0	"	"	15-25 cm pieces		"							
921	226.0	227.5	"	"	"	"	"							
922	227.5	229.0	"	"	4	4	"							
923	No Sample				"	"	"							
924	229.0	230.5	"	"	4	4	"							
925	230.5	232.0	"	"	4	4	"							
926	232.0	233.5	"	"	4	4	"							
927	233.5	235.0	"	"	4	4	"							
928	235.0	236.5	"	"	4	4	"							
929	236.5	238.0	"	"	4	4	"							
930	238.0	239.5	"	"	4	4	"							
931	239.5	241.0	"	"	4	4	"							
932	241.0	242.5	"	"	4	4	"							
933	242.5	244.0	"	"	4	4	< 1% pyrite							
934	244.0	245.5	"	"	2	4	"							
935	245.5	247.0	"	"	"	"	"							
936	247.0	248.5	"	"	"	"	"							
937	248.5	250.0	"	"	4	4	"							

SAMPLE DATA DRILL LOG

ASSAY LAB: ACME

SAMPLE				CORE			VISUAL ESTIMATES (% ORE MINERALS)		ASSAY RESULTS					
NUMBER	FROM	TO	LENGTH	% REC	RQD	S.G.								
D 41938	250	251.5	1.5	100%	15-25 cm pieces		<1% pyrite							
939	251.5	253.0	"	"	"	"	"							
940	253.0	254.5	"	"	"	"	"							
941	254.5	256.0	"	"	"	"	"							
942	256.0	257.5	"	"	"	"	"							
943	257.5	259.0	"	"	"	"	"							
944	259.0	260.5	"	"	"	"	"							
945	260.5	262.0	"	"	"	"	"							
946	262.0	263.5	"	"	"	"	"							
947	263.5	265.0	"	"	"	"	"							
948	265.0	266.5	"	"	"	"	"							
949	266.5	268.0	"	"	"	"	"							
950	268.0	269.5	"	"	"	"	"							
951	269.5	271.0	"	"	"	"	1% pyrite							
952	271.0	272.5	"	"	"	"	"							
953	272.5	274.0	"	"	"	"	"							
954	274.0	275.5	"	"	"	"	"							
955	275.5	277.0	"	"	"	"	"							
956	277.0	278.5	"	"	"	"	"							
957	278.5	280.0	"	"	"	"	"							
958	280.0	281.5	"	"	"	"	"							
959	325.5	327.0	"	"	"	"	2.05% pyrite							
960	327.0	328.5	"	"	"	"	1% pyrite, tr. py							
961	328.5	330.0	"	"	"	"	"							
962	330.0	331.5	"	"	"	"	"							
963	331.5	333.0	"	"	"	"	"							
964	333.0	334.5	"	"	"	"	"							
965	334.5	336.0	"	"	"	"	"							
966	336.0	337.5	"	"	"	"	"							
967	337.5	339.0	"	"	"	"	"							
968	339.0	340.5	"	"	"	"	"							

SAMPLE DATA DRILL LOG

ASSAY LAB: ACME .

SAMPLE				CORE			VISUAL ESTIMATES (% ORE MINERALS)		ASSAY RESULTS						
NUMBER	FROM	TO	LENGTH	% REC	RQD	S.G.									
D41969	340.5	342.0	1.5	100%	15-25 cm pieces		1%	pyrite							
970	342.0	343.5	"	"	"	"		"							
971	343.5	345.0	"	"	"	"		"							
972	345.0	346.5	"	"	"	"		"							
973	346.5	348.0	"	"	"	"		"							
974	348.0	349.5	"	"	"	"		"							
975	349.5	351.0	"	"	"	"		"							
976	351.0	352.5	"	"	"	"		"							
977	352.5	354.0	"	"	"	"		"							
978	354.0	355.5	"	"	"	"		"							
979	355.5	357.0	"	"	"	"		"							
980	357.0	358.5	"	"	"	"		"							
981	358.5	360.0	"	"	"	"		"							
982	360.0	361.5	"	"	"	"		"							
983	361.5	363.0	"	"	"	"		"							
984	363.0	364.5	"	"	"	"		"							
985	364.5	366.0	"	"	"	"		"							
986	366.0	367.5	"	"	"	"		"							
987	367.5	369.0	"	"	"	"		"							
988	369.0	370.5	"	"	"	"		"							
989	370.5	372.0	"	"	"	"		"							
990	372.0	373.5	"	"	"	"		"							
991	373.5	375.0	"	"	"	"		"							
992	375.0	376.5	"	"	"	"		"							
993	376.5	378.0	"	"	"	"		"							
994	378.0	379.5	"	"	"	"		"							
995	379.5	380.18	"	"	"	"		"							
	END OF HOLE @ 380.18														

GEOCHEMICAL ANALYSIS CERTIFICATE

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+AA FROM 10 GM SAMPLE.

DATE RECEIVED: FEB 14 1989 DATE REPORT MAILED: Feb 17, 1989 SIGNED BY. N. A. TAYLOR, D. TOYE, C. LEONG, B. CHAN, J. WANG; CERTIFIED B.C. ASSAYERS

NORAMCO EXPLORATION INC. PROJECT BOB CREEK File # 89-0326 Page 1

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Mn PPM	As PPM	Cd PPM	Sb PPM	Bi PPM	Ba PPM	AU** PPB
41783	16	41	53	.7	458	24	1	2	2	22	24
41784	9	25	150	.4	695	10	1	2	2	70	12
41785	147	51	834	3.7	1097	183	3	2	2	56	52
41786	59	12	35	.5	699	94	1	6	2	79	12
41787	93	46	297	.8	873	83	1	3	2	82	30
41788	79	88	487	1.6	860	332	1	4	2	85	62
41789	58	104	260	1.1	1151	266	1	2	2	98	24
41790	179	687	558	5.3	1013	606	2	5	2	84	1520
41791	22	27	97	.6	712	165	1	2	2	68	6
41792	55	428	1406	2.0	2066	313	7	2	2	107	300
41793	204	207	702	3.9	1429	148	3	2	2	98	22
41794	70	58	281	1.9	972	173	1	3	2	120	39
41795	20	17	55	.6	1618	169	1	2	2	129	7
41796	49	185	54	3.8	1292	293	1	2	2	161	35
41797	35	19	52	.8	1499	183	1	3	2	149	24
41798	24	296	189	1.7	1600	279	1	2	3	141	38
41799	9	23	78	.5	1050	45	1	2	2	154	6
41800	20	72	185	1.3	1056	30	1	3	2	155	7
41801	23	45	182	.9	1602	51	1	2	2	126	11
41802	44	50	160	1.2	1171	105	1	2	3	144	18
41803	91	12	60	.9	1135	74	1	2	2	159	9
41804	93	34	115	1.4	967	246	1	3	2	162	41
41805	153	66	146	1.6	779	80	1	2	2	89	17
41806	133	36	111	.9	1594	49	1	2	2	152	14
41807	245	36	176	1.4	1245	61	1	2	2	170	14
41808	122	129	467	1.5	1827	57	2	3	3	137	16
41809	15	15	44	.2	718	23	1	2	3	156	3
41810	5	14	54	.1	750	29	1	2	2	133	5
41811	29	12	64	.2	983	51	1	2	2	177	4
41812	56	64	155	.5	1403	69	1	2	2	190	8
41813	71	15	41	.6	1312	41	1	2	3	145	7
41814	101	26	49	1.2	1277	96	1	2	2	156	33
41815	105	8	48	.8	1148	67	1	3	2	173	9
41816	13	19	62	.3	892	39	1	2	2	93	5
41817	113	10	109	.7	1217	50	1	2	2	151	20
41818	30	8	36	.3	878	52	1	2	2	138	5
STD C/AU-R	63	44	136	7.3	1050	42	19	20	23	181	480

B.C. - 89-6

NORAMCO EXPLORATION INC. PROJECT BOB CREEK FILE # 89-0326

Page 2

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Mn PPM	As PPM	Cd PPM	Sb PPM	Bi PPM	Ba PPM	AU** PPB
41819	141	5	47	.7	775	50	1	2	3	204	4
41820	79	8	60	.2	816	40	1	2	2	161	2
41821	79	13	41	.4	839	57	1	2	3	181	12
41822	578	165	1448	7.3	2054	431	8	6	2	35	380
41823	52	21	65	1.1	1732	79	1	2	2	99	50
41824	243	24	142	1.2	955	98	1	2	4	149	23
41825	12	24	126	.5	1138	49	1	2	2	70	17
41826	120	39	142	.5	827	57	1	5	2	150	5
41827	169	21	54	1.0	698	42	1	2	2	121	8
41828	87	24	48	.7	771	45	1	2	2	117	6
41829	133	33	68	.8	745	40	1	2	2	122	10
41830	246	108	347	1.9	1138	44	2	2	2	121	12
41831	43	83	385	1.4	1844	88	1	2	2	76	.25
41832	17	87	385	.9	1933	79	2	2	2	62	21
41833	24	130	1026	1.1	2609	36	3	2	2	39	27
41834	719	186	1147	2.1	2442	487	5	5	2	17	260
41835	1036	35	504	1.2	1663	373	2	8	2	12	2390
41836	1244	239	2210	11.7	2434	924	11	20	2	20	350
41837	768	115	512	7.1	3651	1988	3	21	2	20	380
41838	855	54	259	6.3	3148	289	1	12	2	21	79
41839	860	1833	5840	14.1	8987	231	30	5	2	28	270
41840	558	379	1775	7.4	2927	355	8	5	2	91	158
41841	74	208	509	1.4	3681	712	2	2	2	83	146
41842	160	346	3262	2.3	7941	66	16	3	2	131	87
41843	134	139	1648	1.5	3445	54	7	2	2	76	74
41844	104	103	395	1.2	1255	73	2	2	3	103	90
41845	353	70	190	2.9	1659	33	1	2	4	55	95
41846	220	52	197	2.2	1008	40	1	2	2	41	91
41847	555	78	272	5.1	1218	62	1	2	2	55	250
41848	565	55	248	7.0	1699	383	1	2	2	66	147
41849	308	68	340	2.1	2307	112	2	2	2	94	173
41850	130	21	154	1.5	1138	124	2	5	2	85	124
41851	152	8	127	.4	1291	22	1	2	2	94	220
41852	96	18	85	.5	1140	62	1	2	2	92	144
41853	252	8	59	1.3	849	24	1	2	2	81	118
41854	190	240	268	2.9	1307	247	1	2	2	67	149
STD C/AU-R	63	45	133	7.1	1033	44	19	20	23	176	525

NORAMCO EXPLORATION INC. PROJECT BOB CREEK FILE # 89-0326

Page 3

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Mn PPM	As PPM	Cd PPM	Sb PPM	B1 PPM	Ba PPM	AU** PPB
41855	131	190	366	2.1	2503	215	2	2	2	36	158
41856	347	50	166	3.3	1369	140	1	2	2	31	620
41857	220	11	63	1.3	1226	51	1	2	2	47	195
41858	239	71	191	1.0	1352	80	1	2	2	69	220
41859	163	8	84	.7	1587	45	1	2	2	77	132
41860	203	12	253	.7	1255	45	1	2	3	55	143
41861	52	64	442	1.1	1616	20	3	3	3	53	106
41862	217	183	716	2.5	1897	90	4	5	2	27	460
41863	313	20	202	2.9	1859	54	2	2	2	47	270
41864	15	41	212	.7	2613	73	1	2	2	48	230
41865	19	46	187	.8	3173	169	1	3	2	69	128
41866	200	108	259	3.2	3698	286	1	5	2	28	210
41867	42	38	77	1.7	3378	43	1	2	2	30	200
41868	106	608	3811	4.7	2762	807	19	3	3	50	166
41869	212	22	52	2.5	1872	74	1	2	2	44	270
41870	213	38	87	2.9	1785	527	1	5	2	28	200
41871	268	14	41	2.1	1723	153	1	5	2	23	260
41872	136	40	467	1.3	1309	100	2	3	2	45	127
41873	320	27	75	2.1	1628	102	1	3	6	25	167
41874	221	127	842	2.2	1136	205	3	2	2	72	71
41875	161	33	146	1.1	1192	85	1	3	2	50	33
41876	164	11	177	.9	1002	24	1	2	3	88	38
41877	143	38	511	1.5	1414	247	2	3	2	76	70
41878	201	217	2652	1.8	1435	58	15	2	2	67	86
41879	135	2823	4138	5.6	2448	94	21	6	2	18	104
41880	15	12	118	.4	1253	112	1	2	2	114	19
41881	13	95	430	.7	2576	500	2	6	2	58	71
41882	14	44	304	1.6	2272	196	2	2	3	32	113
41883	19	8	116	.5	1020	100	1	2	2	91	49
41884	7	11	158	.2	1367	126	1	2	4	124	63
41885	8	13	108	.3	1634	418	1	2	2	122	72
41886	26	33	786	.7	1782	76	3	2	2	96	46
41887	11	76	343	.6	1789	204	2	4	2	67	63
41888	10	32	65	.8	1659	87	1	2	4	42	53
41889	20	116	258	1.0	1784	259	2	2	2	52	111
41890	15	24	85	.6	1550	80	1	2	2	65	195
STD C/AU-R	62	42	132	6.9	1034	42	19	19	18	174	505

NORAMCO EXPLORATION INC. PROJECT BOB CREEK FILE # 89-0326

Page 4

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Mn PPM	As PPM	Cd PPM	Sb PPM	Bi PPM	Ba PPM	AU** PPB
41891	19	49	237	1.3	4500	164	1	2	2	32	25
41892	73	115	401	2.5	2667	702	1	3	2	22	41
41893	47	238	876	1.6	3936	1472	4	4	2	27	76
41894	19	73	242	.9	2797	257	1	2	2	65	54
41895	85	46	159	1.7	1582	33	1	2	2	66	52
41896	120	26	189	2.1	1473	79	1	2	2	83	55
41897	26	47	237	1.4	1917	243	1	2	2	80	44
41898	12	71	149	2.1	3030	89	1	2	2	74	33
41899	11	77	153	1.4	3862	214	1	2	2	75	42
41900	26	83	341	1.5	2783	121	1	2	2	80	48
41901	74	406	492	3.3	1466	168	1	2	2	75	250
41902	35	85	1147	1.3	1463	190	4	2	2	87	46
41903	730	16	201	2.7	1080	12	1	2	10	65	57
41904	24	58	350	1.0	2835	213	2	3	3	69	30
41905	32	198	1034	1.7	3242	752	4	3	2	43	67
41906	155	52	663	1.5	2053	87	2	2	2	92	430
41907	291	18	132	1.6	1146	33	1	2	2	95	112
41908	187	76	1474	1.9	1409	167	6	2	3	96	270
41909	215	43	719	2.4	1874	111	3	3	2	83	240
41910	134	23	108	1.8	1068	56	1	2	2	98	260
41911	112	30	595	1.2	1104	48	2	2	2	88	330
41912	179	33	262	1.8	1106	116	1	2	2	94	400
41913	188	19	63	1.5	791	31	1	2	2	80	123
41914	279	31	346	2.0	845	41	1	2	2	105	38
41915	108	190	178	1.8	1476	298	1	2	3	62	310
41916	57	62	223	.9	1652	561	1	2	2	40	220
41917	261	42	440	1.4	1293	171	1	2	2	83	106
41918	414	28	188	2.1	1112	115	1	2	2	80	110
41919	107	12	194	.9	1038	90	1	2	2	91	450
41920	395	13	229	2.4	1133	17	1	2	2	104	340
41921	13	13	126	.2	931	21	1	2	2	123	230
41922	7	21	92	.3	1028	30	1	2	2	94	18
41924	28	13	52	.3	707	120	1	2	2	81	20
41925	42	11	168	.5	876	56	1	2	2	162	127
41926	317	26	106	1.8	1122	33	1	2	2	119	880
STD C/AU-R	62	42	137	7.4	1058	43	20	19	22	179	525

NORAMCO EXPLORATION INC., PROJECT BOB CREEK FILE # 89-0326

Page 5

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Mn PPM	As PPM	Cd PPM	Sb PPM	Bi PPM	Ba PPM	AU** PPB
41927	651	43	198	3.9	1498	33	1	2	2	99	1090
41928	58	94	518	.7	1742	988	2	2	2	96	225
41929	898	51	529	4.8	1098	93	2	2	2	99	485
41930	11	13	100	.1	675	22	1	2	2	94	28
41931	8	32	160	.2	1125	82	1	2	2	81	65
41932	76	63	337	.6	1397	23	1	2	2	74	56
41933	121	11	108	.7	774	21	1	2	2	121	88
41934	362	19	90	2.3	664	46	1	2	2	124	450
41935	38	4	152	.4	863	92	1	2	2	138	35
41936	130	20	107	1.0	624	81	1	2	2	193	129
41937	200	51	740	2.6	1395	141	3	2	2	107	395
41938	41	13	429	.5	922	63	1	2	2	157	275
41939	10	43	594	.3	1691	92	3	2	3	158	530
41940	14	21	147	4.2	1160	90	1	2	2	140	89
41941	93	8	57	1.6	765	23	1	2	2	73	295
41942	52	4	55	.4	784	15	1	2	2	53	106
41943	9	16	343	.1	1004	29	1	2	2	94	25
41944	5	3	83	.1	1202	21	1	2	2	73	14
41945	26	2	76	.1	740	5	1	2	2	97	158
41946	5	9	53	.1	706	10	1	2	2	437	75
41947	38	88	227	.5	1487	16	1	2	2	231	135
41948	48	85	389	.6	2177	47	1	2	2	128	89
41949	24	69	1091	.2	1166	18	3	2	2	169	59
41950	136	48	337	.9	1065	14	1	2	2	49	350
41951	158	16	389	1.3	1100	34	1	2	2	104	212
41952	25	8	106	.4	919	6	1	2	2	178	152
41953	6	13	96	.2	629	2	1	2	2	147	225
41954	11	18	461	.1	520	5	2	2	2	215	62
41955	79	22	665	.5	893	19	2	2	2	106	183
41956	112	10	560	1.0	1282	73	2	2	2	96	84
41957	27	6	65	.4	1122	26	1	2	3	97	116
41958	8	2	71	.2	1709	24	1	2	2	107	7
41959	3	6	50	.2	1631	48	1	2	2	202	3
41960	72	7	95	.4	1278	22	1	2	2	195	46
41961	118	31	369	1.0	744	21	1	2	2	181	2
41962	119	15	350	.9	1389	32	2	2	3	190	64
STD C/AU-R	61	43	133	7.2	1037	41	19	19	24	177	490

NORAMCO EXPLORATION INC. PROJ. BOB CREEK FILE # 89-0326

Page 6

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Mn PPM	As PPM	Cd PPM	Sb PPM	Bi PPM	Ba PPM	AU** PPB
41963	149	14	178	1.2	921	28	1	2	2	158	305
41964	91	29	259	.6	612	26	1	2	2	148	280
41965	18	8	88	.2	964	3	1	2	2	137	149
41966	74	2	98	.3	720	13	1	2	2	139	750
41967	93	40	320	.6	875	44	1	2	2	180	305
41968	83	22	192	.5	832	26	1	2	2	134	475
41969	77	44	300	.6	979	28	1	2	2	114	1010
41970	66	21	476	.4	842	13	2	2	2	121	475
41971	48	40	731	.4	704	24	3	2	3	119	72
41972	83	18	198	.3	815	14	1	2	2	117	155
41973	151	81	1321	.5	852	34	5	2	2	105	81
41974	67	102	1071	.3	1089	166	3	2	2	82	101
41975	124	145	857	.5	1190	106	4	2	2	88	125
41976	57	186	911	.4	1329	256	5	2	2	77	174
41977	92	45	281	.5	1419	219	2	2	2	165	96
41978	99	19	84	.4	822	140	4	2	21	191	215
41979	86	19	64	.2	1046	58	2	2	2	143	53
41980	28	6	73	.1	1006	15	2	2	2	155	19
41981	34	25	115	.1	1165	203	2	2	2	201	15
41982	65	21	99	.1	938	63	4	2	2	279	2
41983	42	29	81	.1	955	19	2	2	2	170	5
41984	42	28	98	.2	1052	25	2	2	2	115	13
41985	18	17	74	.1	931	22	1	2	2	74	7
41986	17	3	66	.1	1032	25	2	2	2	99	18
41987	70	30	138	.3	1121	122	1	2	2	188	6
41988	27	17	125	.1	1122	23	2	2	2	110	1
41989	51	14	92	.1	983	25	2	2	2	130	93
41990	32	3	68	.1	702	11	1	2	2	52	62
41991	26	12	67	.1	837	16	1	2	2	51	4
41992	54	19	73	.1	798	25	1	2	2	64	9
41993	48	17	65	.2	711	10	1	2	4	59	37
41994	122	14	72	.2	777	9	1	2	13	57	24
41995	47	7	78	.1	715	14	2	2	2	105	240
STD C/AU-R	63	39	138	7.5	1053	43	20	18	25	179	525

DRILL LOG

HOLE NO. BC 89-7

DRILLING CO.	LOCATION SKETCH	TESTS	DATE STARTED: JAN. 17, 1989	PROJECT: BOB CREEK	
J. T. THOMAS		DEPTH COLLAR 102.74m 104.26m 283.53m	DIP ANGLE -55° -55° -55° -55°	AZIMUTH 090° 090° 090° 090°	
			DATE COMPLETED: JAN. 20, 1989.	N.T.S.: 93 L 7/E	
			COLLAR ELEV.: 925 metres (approx.)	LOCATION: BOB CREEK GRID 6 90+00N / 104+20E .	
			NORTHING:		
			EASTING:		
			AZIMUTH: 090°		
			DEPTH: 344.51 METRES .	DATE LOGGED: FEB, 1989	
HOLE TYPE CORE			CORE SIZE: NQ	LOGGED BY: D. A. SIKVERSIDES	
INTERVAL	LITHOLOGY	ALTERATION	MINERALIZATION	REMARKS	
FROM	TO	ROCK TYPE	COLOUR	TEXTURE	
0	6.09	CASING			(lithology, alteration, mineralization, structure, age relations, etc.) casing set to unweathered bedrock.
6.09	41.86	ASH TUFFS/ SILTSTONE	grey gr.	fine moderate to strong sericite	intercalated grey ash tuffs and siltstone, similar to unit at top of hole 89-6. Core is very broken and blocky, some sections have 1-2 cm pieces with poor core recovery. Rock is cut by grey siliceous hairline thick streaks, with veining @ 1 cm. spacing.
41.86	47.86	FELDSPAR PORPHYRY.	light grey/ green	fine to med. gr porphyritic	moderate to strong clay/carbonate of plagioclase. Good bedding @ 12.0 m. @ 30° to C.A. 34.75 - 35.67: fault gouge, very blocky 43.10 - 44.86: fault zone, very shattered, gouge. 46.25 - 47.86: Fault gouge, chalcopyrite in gouge pieces.
47.86	72.62				

DRILL LOG					HOLE NO. BC 89-7.	
INTERVAL		LITHOLOGY		ALTERATION	MINERALIZATION	REMARKS
FROM	TO	ROCK TYPE	COLOUR	TEXTURE		(lithology, alteration, mineralization, structure, age relations, etc.)
					clay seams are common.	
					3-5% pyrite fr. chalcopyrite fr. bornite (?)	feldspar porphyry white plagioclase phenocrysts (20%) up to .5 cm in diameter set in light gray-green aphanitic matrix (70%). Generally strong clay/carbonate alteration of plagioclase.
						upper contact portion very broken and clay rich; rock cores well however.
						Soft, dark green talcose or carbonate clots up to .5 cm common, altered butite?
						2-3% very fine grained disseminated pyrite and trace amounts of chalcopyrite and purple sulphide - bornite (?) throughout rock.
						Quartz phenocrysts occur very rarely.
						@ 66.48: 2 cm. veinlet of pyrite @ 45° to C.A. Rock shows general clay alteration from 65.80 to 71.5 m.
						@ 68.45: 2 cm clay/gauge @ 45° to C.A.
						71.4 - 71.5: fault breccia.
						Lower contact at 72.62 m shows good chal - flow banding @ 40° to C.A.

DRILL LOG

HOLE NO. BC- 89-7.

INTERVAL		LITHOLOGY		ALTERATION	MINERALIZATION	REMARKS
FROM	TO	ROCK TYPE	COLOUR	TEXTURE		(lithology, alteration, mineralization, structure, age relations, etc.)
72.62	74.35	DACITE TUFF / FLOW BRECCIA	mottled green / grey	coarse strong clay, sheared	2-3% disseminated pyrite. .5% bornite (?)	mottled grey-green dacite (?) tuff, angular fragments up to 2 cm. in diameter. Rock contains approximately .5% purple-hued sulphide-bornite (?)
74.35	86.5	FELDSPAR PORPHYRY	light grey / green	med. gr. strong clay / porphyritic carbonate	2-3% pyrite fr. chalcopyrite fr. bornite	same as porphyry in interval 74.86 - 72.62 m., but has more very thin bluish quartz veinlets. Lower contact at 86.5 m. sharp @ 40° to C.A.
86.50	114.30	DACITE TUFF / ANDESITE	mottled grey / green to dark green.	med to moderate to strong clay / carbonate	2-3% pyrite fr. sphalerite	intercalated light green/grey dacite tuffs and flow breccia and dark green andesite tuff. mostly (80%) dacite tuff. Rock is cut by thin banded bluish-grey quartz stockwork. Veins average .2 cm. in thickness and 1-2 cm. spacing. Trace amounts of chalcopyrite, pyrite, sphalerite occurs in veinlets. 2-3% pyrite occurs as disseminations.
114.30	144.20	FELDSPAR PORPHYRY	cream to dark grey	fine gr. strong clay (carbonate) porphyritic patchy sericite	2-3% pyrite fr. chalcopyrite fr. bornite (?) fr. sphalerite	fine-grained feldspar porphyry, similar to Interval 74.35-86.5 m., but has more thin bluish-grey quartz veinlets. Rock is strongly shattered, with quartz stockwork @ 1-2 cm. Spacing, veinlets average .1 cm. in thickness. Rock is generally pervasively clay altered and very scaly.

DRILL LOG

HOLE NO. BC 89-7.

INTERVAL		LITHOLOGY		ALTERATION	MINERALIZATION	REMARKS
FROM	TO	ROCK TYPE	COLOUR	TEXTURE		(lithology, alteration, mineralization, structure, age relations, etc.)
122.5	123.47					very shattered ground, fault zone.
140.0	142.20					very shattered one.
144.20	146.35	FAULT GOUGE	dark grey	gouge clay / carbonate	1-2% pyrite	Strong fault zone, no angle to core dips measurable.
146.35	225.78	DACITE TUFF / ANDESITE	grey / green to dark green	fine grained relatively unaltered to med. weak clay / carbonate.	< 1% pyrite	intercalated light gray to green dacite tuffs / clay breccias and dark green Andesite tuffs and flows. Intervol is mainly (80%) dacite, similar to section 86.50 m to 114.30 m, except rock is relatively unaltered, except for section 146.35 - 154.89 adjacent to fault zone.
						Rock contains less than 1% pyrite. Patchy zones of hairline thin grey Silicic acid stockwork and increase towards the porphyry @ 225.78 m.
						@ 160.0 m, good bedding @ 70° to C.A.
						Pyrite content increases towards 225.78 m and by 222.5 m, reaches 2-3% by volume.
						No assays between interval 155.5-222.5m.

DRILL LOG

HOLE NO. BC 89-7

INTERVAL		LITHOLOGY		ALTERATION	MINERALIZATION	REMARKS	
FROM	TO	ROCK TYPE	COLOUR	TEXTURE		(lithology, alteration, mineralization, structure, age relations, etc.)	
225.78	233.5	FELDSPAR PORPHYRY	gray - light green	fine to med gr. porphyritic	patchy clay / carbonate in higher pyrite areas.	2-3% pyrite fr. chalcopyrite	<i>Feldspar porphyry similar to 114.30 - 114.20 m, but not as intensely altered.</i>
							<i>Rock is cut by bluish gray quartz stockwork, and also has green carbonate ovoids possibly from alteration of biotite?</i>
							<i>Upper contact @ 225.78 m sharp @ 55° to C.A. lower contact also sharp @ 50° to C.A.</i>
233.50	245.42	DACITE TUFF / FLOW BRECCIA	gray / green	fine grained	strong sericite.	2-3% pyrite fr. chalcopyrite	<i>fine-grained, gray to light green dacite tuff's and flows; cut by gray sericite having thin stockworks.</i>
							<i>@ 236.0 m, 3 cm broken veinlet of quartz-sphalerite-pyrite.</i>
245.42	259.15	FELDSPAR PORPHYRY	grey - light green	fine to med gr., porphyritic	patchy clay/carbonate, sericite.	2-4% pyrite fr. chalcopyrite	<i>similar to interval 225.78 - 233.5 m, except rock is more altered and occasional patches of strong clay/carbonate and sericite are common.</i>
							<i>Bluish-gray quartz stockwork present and contains very fine-grained chalcopyrite which appears to become more evident down-hole.</i>
259.15	261.15	DACITE TUFF / FLOW BRECCIA	grey / green	fine gr.	strong sericite	2-4% pyrite fr. chalcopyrite	<i>same as 233.50 - 245.42 m, very shattered core.</i>

DRILL LOG

HOLE NO. BC 89-7

INTERVAL		LITHOLOGY		ALTERATION	MINERALIZATION	REMARKS	
FROM	TO	ROCK TYPE	COLOUR	TEXTURE		(lithology, alteration, mineralization, structure, age relations, etc.)	
261.15	273.47	FELDSPAR PORPHYRY	grey porphyritic	fine gr.	sericite patches	2-4% pyrite tr. chalcopyrite	Same as interval 245.42-259.15 m. @ 262.8 m: 5 cm. gouge @ 45° to C.A. Good flow banding @ 259.0 m @ 60° to C.A.
273.47	287.95	DACITE TUFF/ FLOW BRECCIA	grey / green	fine gr.	strong sericite	2-4% pyrite tr. chalcopyrite	271.45 - 272.0 m: inclusion of shattered dacite tuff, upper contact @ 50° to C.A. same as interval 233.50-245.42 m, hairline thin sericite stockworks persists. @ 275.0 m: 3 cm quartz-pyrite-chalcopyrite vein @ 20° to C.A.
287.95	303.28	FELDSPAR PORPHYRY	grey / green	fine gr. porphyritic	strong patchy sericite	3-5% pyrite tr. chalcopyrite	similar to interval 261.15-273.47 m, but pyrite content has increased up to 5% by volume with a corresponding increase in sericite alteration.
303.28	304.13	BASIC DYKE	med. grey	aphanitic	nil	nil	medium grey, aphanitic, post mineral basic dyke. Upper and lower contacts sharp @ 50° to C.A.
304.13	329.15	QUARTZ FELDSPAR PORPHYRY (CROWDED)	grey	med. gr. porphyritic	strong patchy sericite, clay/carbonate of plagioclase	4-6% pyrite, tr. chalcopyrite	Quartz feldspar porphyry, medium grained, strongly altered to sericate. Phenocrysts are plagioclase (30%), ragged sericite patches (30%), possibly pseudomorphs

DRILL LOG

HOLE NO. BC 89-7

INTERVAL		LITHOLOGY		ALTERATION	MINERALIZATION	REMARKS	
FROM	TO	ROCK TYPE	COLOUR	TEXTURE		(lithology, alteration, mineralization, structure, age relations, etc.)	
329.15	333.3	DACITE TUFF FLOW BRECCIA	grey / green	fine gr.	strong sericite	2-3% pyrite fr. chalcopyrite	after potash feldspar and biotite, set in a grey sericitic matrix (40%). Occasional glauconite, pyroclast present. Rock is similar to crowded porphyry in hole 89-8. 308.0 - 310.0 : clay/gauge, seams @ 30° to C.A.
333.3	334.15	"APLITE"	grey	fine gr., aplitic	strong sericite	5-8% pyrite fr. chalcopyrite	Contact sharp @ 329.15 @ 55° to C.A. same as interval 273.47-287.95 m.
334.15	336.65	DACITE TUFF FLOW BRECCIA	grey / green	fine gr.	strong sericite	2-3% pyrite	fine grained, aplitic textured, a few white feldspars / grey sericite. Rock possibly very similar to fine-grained feldspar porphyry unit. Fine-grained disseminated pyrite up to 8%, trace amounts of chalcopyrite.
336.65	343.10	"APLITE"	grey	fine gr. aplitic	strong sericite	5-8% pyrite fr. chalcopyrite	same as section 333.3 - 334.15 m. Sharp contact @ 343.10 m @ 50° to C.A.

SAMPLE DATA DRILL LOG

ASSAY LAB: ACME

NUMBER	SAMPLE			CORE			VISUAL ESTIMATES (% ORE MINERALS)		ASSAY RESULTS					
	FROM	TO	LENGTH	% REC	RQD	S.G.	1-2 cm pieces	2-10 cm pieces	"	"	"	"	"	"
D41996	6.09	8.25	2.14	35%	1-3 cm pieces		1-2% pyrite, tr. cpy							
997	8.23	9.50	1.27	80%	2-10 cm pieces		"							
998	9.50	11.28	1.78	75%	"	"	"							
999	11.28	15.24	3.96	15%	1-3 cm pieces		"							
42000	15.24	17.07	1.83	60%	"	"	"							
1	17.07	18.80	1.83	70%	"	"	"							
2	18.90	20.12	1.22	65%	"	"	"							
3	20.12	21.5	1.38	85%	5-10 pieces		"							
4	21.5	23.0	1.5	100%	"	"	"							
5	23.0	24.5	"	"	"	"	"							
6	24.5	26.0	"	80%	3-5 cm pieces		"							
7	26.0	27.5	"	100%	5-15 cm pieces		"							
8	27.5	29.0	"	90%	2-10 cm pieces		"							
9	29.0	30.5	"	100%	5-15 cm pieces		"							
10	30.5	32.0	"	"	10-20 cm pieces		"							
11	32.0	33.5	"	95%	2-10 cm pieces		"							
12	33.5	34.75	1.25	90%	1-3 cm pieces		"							
13	34.75	36.28	1.53	65%	"	"	"							
14	36.28	38.10	1.82	85%	3-5 cm pieces		"							
15	38.10	39.0	0.9	100%	5-10 cm pieces		"							
16	39.0	40.5	1.5	"	"	"	"							
17	40.5	41.76	1.26	85%	3-5 cm pieces		"							
18	41.76	42.98	1.22	80%	"	"	"							
19	42.98	44.20	1.22	75%	"	"	"							
20	44.20	44.81	0.61	20%	1-3 cm pieces		"							
21	44.81	46.25	1.44	90%	"	"	"							
22	46.25	47.86	1.61	75%	3-10 cm pieces	2-3% pyrite, tr. cpy								
23	47.86	49.0	1.14	50%	1-3 cm pieces	"	"							
24	49.0	50.5	1.5	95%	5-10 cm pieces	"	"							
25	50.5	52.0	"	100%	10-20 cm pieces		"							
26	52.0	53.5	"	"	"	"	"							

SAMPLE DATA DRILL LOG

ASSAY LAB: ACME

SAMPLE				CORE			VISUAL ESTIMATES (% ORE MINERALS)	ASSAY RESULTS
NUMBER	FROM	TO	LENGTH	% REC	RQD	S.G.		
242027	53.5	55.0	1.5	100%	10-20 cm pieces		2-3% pyrite	
28	55.0	56.5	"	"	"	"	tr. py, sphalerite	
29	56.5	58.0	"	"	"	"	"	
30	58.0	59.5	"	"	"	"	"	
31	59.5	61.0	"	"	"	"	"	
32	61.0	62.5	"	"	"	"	"	
33	62.5	64.0	"	"	"	"	"	
34	64.0	65.5	"	"	"	"	"	
35	65.5	67.0	"	"	"	"	"	
36	67.0	68.5	"	"	"	"	"	
37	68.5	70.0	"	"	"	"	"	
38	70.0	71.5	"	90%	3-10 cm pieces		"	
39	71.5	73.0	"	100%	"	"	"	
40	73.0	74.5	"	"	10-20 cm pieces		"	
41	74.5	76.0	"	"	"	"	"	
42	76.0	77.5	"	"	"	"	"	
43	77.5	79.0	"	"	"	"	"	
44	79.0	80.5	"	"	"	"	"	
45	80.5	82.0	"	"	"	"	"	
46	82.0	83.5	"	"	"	"	"	
47	83.5	85.0	"	"	"	"	"	
48	85.0	86.5	"	"	"	"	"	
49	86.5	88.0	"	"	"	"	"	
50	88.0	89.5	"	"	"	"	"	
51	89.5	91.0	"	"	"	"	"	
52	91.0	92.5	"	"	"	"	"	
53	92.5	94.0	"	"	"	"	"	
54	94.0	95.5	"	"	"	"	"	
55	95.5	97.0	"	"	"	"	"	
56	97.0	98.5	"	"	"	"	"	
57	98.5	100.0	"	"	"	"	"	

SAMPLE DATA DRILL LOG

ASSAY LAB: ACME .

NUMBER	SAMPLE			CORE			VISUAL ESTIMATES (% ORE MINERALS)		ASSAY RESULTS						
	FROM	TO	LENGTH	% REC	RQD	S.G.									
D42058	100.0	101.5	1.5	100%			10-20 cm pieces	2-3% pyrite							
59	101.5	103.0	"	"	"	"		fr. py, sphalerite							
60	103.0	104.5	"	"	"	"		"							
61	104.5	106.0	"	"	"	"		"							
62	106.0	107.5	"	"	"	"		"							
63	107.5	109.0	"	"	"	"		"							
64	109.0	110.5	"	"	"	"		"							
65	110.5	112.0	"	"	"	"		"							
66	112.0	113.5	"	"	"	"		"							
67	113.5	115.0	"	"	"	"		"							
68	115.0	116.5	"	"	"	"		"							
69	116.5	118.0	"	"	"	"		"							
70	118.0	119.5	"	"	"	"		"							
71	119.5	121.0	"	"	5-10 cm pieces			"							
72	121.0	122.5	"	"	"	"		"							
73	122.5	124.0	"	"	"	"		"							
74	124.0	125.5	"	"	"	"		"							
75	125.5	127.0	"	"	"	"		"							
76	127.0	128.5	"	"	"	"		"							
77	128.5	130.0	"	"	"	"		"							
78	130.0	131.5	"	"	"	"		"							
79	131.5	133.0	"	"	"	"		"							
80	133.0	134.5	"	"	"	"		"							
81	134.5	136.0	"	"	"	"		"							
82	136.0	137.5	"	"	"	"		"							
83	137.5	139.0	"	"	"	"		"							
84	139.0	140.5	"	"	"	"		"							
85	140.5	142.0	"	"	"	"		"							
86	142.0	143.5	"	"	"	"		"							
87	143.5	145.0	"	"	gouge / clay			< 1% pyrite							
88	145.0	146.5	"	"	"	"		"							

SAMPLE DATA DRILL LOG

ASSAY LAB: ACME

SAMPLE				CORE			VISUAL ESTIMATES (% ORE MINERALS)		ASSAY RESULTS										
NUMBER	FROM	TO	LENGTH	% REC	RQD	S.G.													
D42089	146.5	148.0	1.5	100%			2-3 cm pieces		< 1%	pyrite									
90	148.0	149.5	"	"	"	"			"										
91	149.5	151.0	"	"	"	"			"										
92	151.0	152.5	"	"	"	"			"										
93	152.5	154.0	"	"	"	"			"										
94	154.0	155.5	"	"			5-10 cm pieces		"										
95	222.5	224.0	"	"			10-20 cm pieces		2-3%	pyrite									
96	224.0	225.5	"	"	"	"			"										
97	225.5	227.0	"	"	"	"			"										
98	227.0	228.5	"	"	"	"			"										
99	228.5	230.0	"	"	"	"			"										
100	230.0	231.5	"	"	"	"			"										
101	231.5	233.0	"	"	"	"			"										
102	233.0	234.5	"	"	"	"			"										
103	234.5	236.0	"	"	"	"			"										
104	236.0	237.5	"	"	"	"			"										
105	237.5	239.0	"	"	"	"			"										
106	239.0	240.5	"	"	"	"			"										
107	240.5	242.0	"	"	"	"			"										
108	242.0	243.5	"	"	"	"			"										
109	243.5	245.0	"	"	"	"			"										
110	245.0	246.5	"	"	"	"		2-3%	pyrite										
111	246.5	248.0	"	"	"	"			fr. cpy.										
112	248.0	249.5	"	"	"	"			"										
113	249.5	251.0	"	"	"	"			"										
114	251.0	252.5	"	"	"	"			"										
115	252.5	254.0	"	"	"	"			"										
116	254.0	255.5	"	"	"	"			"										
117	255.5	257.0	"	"	"	"			"										
118	257.0	258.5	"	"	"	"			"										
119	258.5	260.0	"	"			5-10 cm pieces		"										

SAMPLE DATA DRILL LOG

ASSAY LAB: ACME -

SAMPLE				CORE			VISUAL ESTIMATES (% ORE MINERALS)		ASSAY RESULTS					
NUMBER	FROM	TO	LENGTH	% REC	RQD	S.G.								
D 420120	260.0	261.5	1.5	100%	5-10 cm pieces		2-4%	pyrite						
121	261.5	263.0	"	"	10-25 cm pieces		tr.	cpy						
122	263.0	264.5	"	"	"	"		"						
123	264.5	266.0	"	"	"	"		"						
124	266.0	267.5	"	"	"	"		"						
125	267.5	269.5	"	"	"	"		"						
126	269.5	270.5	"	"	"	"		"						
127	270.5	272.0	"	"	"	"		"						
128	272.0	273.5	"	"	"	"		"						
129	273.5	275.0	"	"	"	"		"						
130	275.0	276.5	"	"	"	"		"						
131	276.5	278.0	"	"	"	"		"						
132	278.0	279.5	"	"	"	"		"						
133	279.5	281.0	"	"	"	"		"						
134	281.0	282.5	"	"	"	"		"						
135	282.5	284.0	"	"	5-10 cm pieces			"						
136	284.0	285.5	"	"	"	"		"						
137	285.5	287.0	"	"	"	"		"						
138	287.0	288.5	"	"	"	"		"						
139	288.5	290.0	"	"	10-25 cm pieces			"						
140	290.0	291.5	"	"	"	"		"						
141	291.5	293.0	"	"	"	"		3-5% pyrite, tr cpy						
142	293.0	294.5	"	"	"	"		"						
143	294.5	296.0	"	"	"	"		"						
144	296.0	297.5	"	"	"	"		"						
145	297.5	299.0	"	"	"	"		"						
146	299.0	300.5	"	"	"	"		"						
147	300.5	302.0	"	"	"	"		"						
148	302.0	303.5	"	"	"	"		"						
149	303.5	305.0	"	"	"	"		"						
150	305.0	306.5	"	"	"	"		4-5% pyrite, tr cpy						

SAMPLE DATA DRILL LOG

ASSAY LAB: ACME

SAMPLE				CORE			VISUAL ESTIMATES (% ORE MINERALS)		ASSAY RESULTS						
NUMBER	FROM	TO	LENGTH	% REC	RQD	S.G.									
142151	306.5	308.0	1.5	100 %	15-25 cm pieces		4-5% pyrite								
152	308.0	309.5	"	"	"	"	fr. cpy								
153	309.5	311.0	"	"	"	"	"								
154	311.0	312.5	"	"	"	"	"								
155	312.5	314.0	"	"	"	"	"								
156	314.0	315.5	"	"	"	"	"								
157	315.5	317.0	"	"	"	"	"								
158	317.0	318.5	"	"	"	"	"								
159	318.5	320.0	"	"	"	"	"								
160	320.0	321.5	"	"	"	"	"								
161	321.5	323.0	"	"	"	"	"								
162	323.0	324.5	"	"	"	"	"								
163	324.5	326.0	"	"	"	"	"								
164	326.0	327.5	"	"	"	"	"								
165	327.5	329.0	"	"	"	"	"								
166	329.0	330.5	"	"	"	"	"								
167	330.5	332.0	"	"	"	"	"								
168	332.0	333.5	"	"	"	"	"								
169	333.5	335.0	"	"	"	"	"								
170	335.0	336.5	"	"	"	"	"								
171	336.5	338.0	"	"	"	"	"								
172	338.0	339.5	"	"	"	"	"								
173	339.5	341.0	"	"	"	"	"								
174	341.0	342.5	"	"	"	"	"								
175	342.5	344.0	"	"	"	"	"								
176	344.0	344.51	0.51	"	"	"	"								
END OF HOLE @				344.51 METRES											

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

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 CU YE SR CA P LA CR NG BA TI B V AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPB.

SAMPLE TYPE: CORE AU** ANALYSIS BY ICP-MS FROM 10 GM SAMPLES.

DATE RECEIVED: JUN 20 1989 DATE REPORT MAILED: Feb 25, 1989 SIGNED BY. D. TOTI, C. LEONG, B. CHAN, J. WANG; CERTIFIED B.C. ASSAYERS

NORAMCO EXPLORATION INC. PROJECT BOB CREEK File # 89-0380 Page 1

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Mn PPM	As PPM	Cd PPM	Sb PPM	Bi PPM	Ba PPM	Au** PPB
41996	178	7	99	1.1	1067	88	1	2	2	110	21
41997	245	25	106	1.0	1256	294	1	6	2	100	25
41998	339	75	890	3.4	1306	2175	3	39	2	49	270
41999	179	42	229	.9	654	269	1	9	2	93	38
42000	182	23	779	1.1	2320	166	3	6	2	100	.22
STD C/AU-R	62	40	133	7.0	1025	42	19	17	23	181	505

GEOCHEMICAL ANALYSIS CERTIFICATE

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 NG 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+AA FROM 10 GM SAMPLE.

DATE RECEIVED: FEB 20 1989 DATE REPORT MAILED: Feb 25, 1989 SIGNED BY. D. TOYE, C. LEONG, B. CHAN, J. WANG; CERTIFIED B.C. ASSAYERS

NORAMCO EXPLORATION INC. PROJECT BOB CREEK File # 89-0380 Page 1

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Mn PPM	As PPM	Cd PPM	Sb PPM	Bi PPM	Ba PPM	Au** PPB
41001	170	18	109	.8	1606	101	1	3	2	160	24
41002	99	15	64	.7	1356	74	1	2	2	136	29
41003	669	15	219	1.3	1198	92	1	2	2	71	133
41004	488	10	54	.7	694	83	1	2	2	101	54
41005	373	10	46	.8	976	66	1	2	2	86	51
41006	299	29	236	1.1	1254	96	2	2	2	64	64
41007	257	18	115	.8	1641	78	1	2	2	91	47
41008	105	20	89	.8	1566	40	1	2	2	114	33
41009	79	16	205	.7	1742	57	1	2	2	138	20
41010	400	45	573	2.0	1632	50	3	2	2	92	58
41011	164	63	768	3.4	1286	90	4	2	2	100	65
41012	133	166	1033	3.1	1026	75	5	3	2	101	66
41013	255	23	472	1.2	944	102	1	2	2	101	47
41014	394	93	1029	2.4	1517	383	4	7	2	83	122
41015	336	9	201	.8	1272	74	1	2	2	123	86
41016	278	20	1644	.9	2135	72	5	2	2	101	36
41017	140	70	910	1.5	2609	191	3	3	2	112	48
41018	227	24	177	1.7	1959	167	1	3	2	99	59
41019	401	64	207	2.8	1712	676	1	7	2	60	177
41020	373	19	182	1.9	1798	88	1	4	2	83	61
41021	477	36	465	3.2	1291	226	1	6	2	44	84
41022	2076	10	156	2.7	1465	88	1	2	11	46	340
41023	726	21	90	1.1	1907	30	1	2	3	49	86
41024	673	70	152	3.9	2320	71	1	2	2	48	80
41025	661	32	555	3.4	3153	69	2	2	2	37	47
41026	40	578	817	2.0	5821	154	2	2	2	48	32
41027	31	573	1069	1.4	5392	97	3	2	2	54	19
41028	16	218	642	.6	4793	76	2	2	2	76	18
41029	21	355	655	.9	5028	45	2	2	2	91	17
41030	34	651	1348	1.9	6129	172	5	2	2	70	46
41031	33	489	1953	1.4	5239	80	6	2	2	104	22
41032	29	297	2437	.7	4926	19	8	2	2	106	14
41033	40	70	2220	.6	5332	18	8	2	2	83	18
41034	19	89	1371	2.3	5571	187	5	2	2	48	84
41035	299	81	2807	4.7	2525	54	9	2	17	16	86
41036	591	104	1267	7.7	4558	88	6	2	36	24	81
STD C/AU-R	62	42	139	7.3	1040	42	19	16	23	176	510

NORAMCO EXPLORATION INC. PROJECT BOB CREEK FILE # 89-0380

Page 2

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Mn PPM	As PPM	Cd PPM	Sb PPM	Bi PPM	Ba PPM	Au** PPB
41037	308	128	1173	2.9	4244	35	4	2	3	48	47
41038	294	42	1367	2.3	3186	37	4	2	2	77	21
41039	189	14	464	.9	3261	28	2	2	3	103	19
41040	448	7	52	.8	1391	36	1	2	2	106	37
41041	268	14	57	.5	1294	14	1	2	2	116	7
41042	354	11	57	.5	857	10	1	2	2	100	28
41043	461	16	77	.9	1150	18	1	2	2	76	22
41044	537	10	58	1.0	1123	12	1	2	2	70	35
41045	275	15	51	.4	935	8	1	2	2	75	26
41046	288	8	59	.3	833	17	1	2	2	91	17
41047	355	15	59	.5	960	10	1	2	2	81	15
41048	478	13	55	.5	1329	14	1	2	2	75	23
41049	192	17	97	1.2	1082	43	1	2	3	94	35
41050	374	4	46	.5	1020	5	1	2	2	129	38
41051	561	6	57	.7	956	22	1	2	2	75	49
41052	128	8	44	.3	626	7	1	2	2	115	12
41053	329	8	43	.5	1040	14	1	2	2	149	29
41054	193	18	69	.5	1341	22	1	2	3	123	30
41055	190	146	1467	1.7	3304	310	7	4	2	60	118
41056	170	17	76	.5	1153	19	1	2	2	95	65
41057	170	11	51	.4	1124	12	1	2	3	44	16
41058	474	3	77	.6	1313	45	1	2	2	50	37
41059	190	14	56	.6	1365	39	1	2	2	61	19
41060	217	9	44	.4	921	31	1	2	3	109	22
41061	114	18	48	.4	1166	21	1	2	2	54	17
41062	146	27	71	.8	1224	54	1	2	3	53	32
41063	138	20	94	.8	1705	133	1	2	2	57	56
41064	96	8	98	.5	1193	22	1	2	2	62	41
41065	154	5	52	.4	822	7	1	2	2	66	13
41066	199	4	52	.5	1509	25	1	2	2	95	14
41067	104	156	792	.8	1856	55	3	2	2	94	28
41068	107	32	1270	1.4	2774	65	4	2	2	79	53
41069	347	146	481	2.4	1657	265	2	2	3	57	107
41070	375	6	51	1.4	1244	33	1	2	2	72	32
41071	279	10	40	.8	782	11	1	2	2	64	31
41072	366	11	54	1.0	986	16	1	2	2	99	43
STD C/AU-R	63	42	135	7.3	1046	42	18	20	23	179	505

NORAMCO EXPLORATION INC. PROJECT BOB CREEK FILE # 89-0380

Page 3

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Mn PPM	As PPM	Cd PPM	Sb PPM	Bi PPM	Ba PPM	Au** PPB
41073	402	11597	17329	27.8	2105	1389	74	36	2	17	850
41074	726	22	60	2.3	861	28	1	2	2	51	30
41075	596	27	56	.7	632	8	1	2	2	55	31
41076	324	13	47	.9	913	17	1	2	2	54	25
41077	257	11	62	.7	1087	17	1	2	2	62	18
41078	362	23	177	1.6	1339	41	1	2	2	46	32
41079	299	10	53	1.1	915	9	1	2	2	52	26
41080	505	3	129	.8	685	6	1	2	2	40	28
41081	804	5	122	.9	849	11	1	2	3	30	31
41082	219	4	80	.5	806	7	1	2	2	48	22
41083	678	13	38	1.8	716	15	1	2	2	52	31
41084	924	59	76	1.6	765	16	1	2	2	42	32
41085	835	24	68	1.1	735	12	1	2	3	50	41
41086	637	19	47	.7	826	17	1	2	2	66	24
41087	640	17	58	.8	700	30	1	2	2	51	33
41088	612	144	905	3.0	1481	215	5	14	4	47	42
41089	323	88	892	3.2	1918	199	4	6	2	41	45
41090	265	98	403	2.2	2530	142	3	3	3	50	44
41091	201	32	140	.8	1229	101	1	2	3	57	28
41092	548	46	119	1.3	1320	127	1	2	2	45	49
41093	787	6	36	.8	937	97	1	3	3	68	39
41094	284	2	36	.3	909	83	1	2	2	71	29
41095	274	2	27	.3	452	12	1	2	2	126	28
41096	319	7	26	.3	424	11	1	2	4	92	33
41097	335	6	44	.3	419	6	1	2	2	72	25
41098	778	4	44	.9	525	6	1	2	2	43	54
41099	481	5	51	.6	904	11	1	2	2	34	36
41100	534	10	70	.6	1077	11	1	2	2	28	37
41101	254	4	36	.3	782	8	1	2	2	33	18
41102	146	2	35	.1	838	7	1	2	2	207	10
41103	62	4	46	.3	959	4	1	2	2	407	5
41104	155	389	907	1.1	1116	50	3	2	2	153	49
41105	272	7	50	.3	852	10	1	2	4	138	24
41106	103	9	45	.2	719	24	1	3	2	211	4
41107	233	4	39	.4	688	7	1	2	2	172	13
41108	112	2	29	.1	594	7	1	2	2	180	11
STD C/AU-R	60	39	138	7.5	1050	43	18	20	21	182	470

NORAMCO EXPLORATION INC. PROJECT BOB CREEK FILE # 89-0380

Page 4

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Mn PPM	As PPM	Cd PPM	Sb PPM	Bi PPM	Ba PPM	Au** PPB
41109	938	6	49	.5	381	47	1	2	4	101	81
41110	757	10	52	.5	373	12	1	2	3	93	49
41111	713	182	144	1.2	628	35	1	2	2	54	74
41112	681	11	25	.4	477	2	1	2	2	61	16
41113	913	2	26	.6	460	2	1	2	10	85	22
41114	1052	21	38	.5	340	2	1	2	5	77	71
41115	764	5	25	.5	360	2	1	2	2	64	43
41116	964	2	22	.5	354	2	1	2	10	55	46
41117	533	5	19	.4	403	3	1	2	2	29	118
41118	1783	14	37	.7	319	2	1	2	3	40	77
41119	1070	9	32	.7	373	10	1	2	2	48	81
41120	1747	19	79	1.4	363	58	1	2	11	38	201
41121	2776	445	515	4.2	796	33	3	2	16	27	56
41122	559	29	73	.5	341	13	1	2	2	93	34
41123	646	14	52	.5	364	8	1	2	2	71	45
41124	1116	16	42	.6	417	14	1	2	2	69	47
41125	971	4	30	.6	441	4	1	2	2	63	64
41126	925	8	32	.8	540	2	1	2	3	72	21
41127	533	2	26	.5	683	8	1	2	2	78	21
41128	934	2	37	.5	461	5	1	2	3	76	27
41129	1300	2	46	.7	353	8	1	2	10	60	36
41130	729	3	32	.4	248	10	1	2	2	55	23
41131	189	2	23	.1	374	47	1	2	2	136	11
41132	265	3	36	.1	507	19	1	2	2	51	12
41133	207	3	30	.1	408	75	1	2	3	116	14
41134	103	2	33	.2	491	69	1	2	2	169	5
41135	90	2	25	.1	524	48	1	2	3	259	2
41136	95	2	24	.1	404	41	1	2	2	279	4
41137	238	2	18	.1	299	44	1	2	2	152	8
41138	508	2	22	.2	216	21	1	2	3	109	11
41139	683	6	33	.3	208	2	1	2	3	59	24
41140	704	6	35	.3	253	2	1	2	2	58	18
41141	469	11	31	.2	264	2	1	2	2	52	11
41142	533	7	28	.2	228	2	1	2	2	50	8
41143	402	2	25	.1	212	2	1	2	2	56	18
41144	390	2	29	.3	494	2	1	2	2	49	12
STD C/AU-R	63	40	137	7.5	1036	44	19	18	21	180	480

NORAMCO EXPLORATION INC. PROJECT BOB CREEK FILE # 89-0380

Page 5

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Mn PPM	As PPM	Cd PPM	Sb PPM	Bi PPM	Ba PPM	Au** PPB
41145	279	7	27	.3	500	3	1	2	3	42	7
41146	502	14	32	.7	401	3	1	2	2	64	15
41147	289	2	32	.4	355	2	1	2	2	53	18
41148	195	9	46	.3	293	13	1	2	2	159	10
41149	213	38	73	.6	1562	40	1	2	2	99	19
41150	516	2	32	.5	377	44	1	2	2	57	11
41151	441	13	39	1.2	368	21	1	2	2	57	4
41152	451	30	50	.6	321	19	1	2	2	59	22
41153	479	10	30	.5	360	23	1	2	2	50	8
41154	485	5	30	.4	402	5	1	2	2	47	5
41155	194	111	124	.8	575	23	1	2	2	50	21
41156	318	10	28	.8	410	12	1	7	2	54	5
41157	354	2	31	.4	539	8	1	2	2	56	23
41158	327	66	128	1.5	693	35	1	14	2	47	7
41159	559	5	22	.7	672	43	1	2	2	49	12
41160	408	7	18	.6	504	20	1	2	2	37	5
41161	218	6	20	.3	506	22	1	2	2	41	4
41162	131	4	18	.3	501	9	1	2	2	43	4
41163	70	3	11	.3	3397	12	1	2	2	38	6
41164	136	2	14	.5	1700	21	1	2	2	39	20
41165	295	5	21	.4	668	17	1	2	2	35	13
41166	200	5	31	.4	419	52	1	2	2	84	31
41167	184	4	48	.8	362	76	1	2	2	58	36
41168	515	277	891	3.2	656	83	6	2	2	45	55
41169	305	8	25	.7	1305	22	1	2	2	44	20
41170	98	5	33	.3	506	34	1	2	2	108	23
41171	114	3	24	.2	335	34	1	2	2	39	7
41172	316	5	30	.4	482	50	1	2	2	27	16
41173	212	3	31	.3	509	24	1	2	2	31	8
41174	411	3	26	.4	698	26	1	2	2	26	12
41175	112	6	28	.5	1031	25	1	2	2	44	25
41176	248	14	28	.7	645	31	1	2	2	75	47



Province of
British Columbia

Ministry of
Energy, Mines and
Petroleum Resources

ASSESSMENT REPORT
TITLE PAGE AND SUMMARY

TYPE OF REPORT/SURVEY(S)	TOTAL COST
DIAMOND DRILLING	36,000.

AUTHOR(S) SILVERSIDES, D. A. SIGNATURE(S) *D. A. Silversides*

DATE STATEMENT OF EXPLORATION AND DEVELOPMENT FILED JAN. 23, 1989. YEAR OF WORK 1988.

PROPERTY NAME(S) BOB CREEK (Buck Creek)

COMMODITIES PRESENT Au - Ag (Zn, Cu)

B.C. MINERAL INVENTORY NUMBER(S), IF KNOWN

MINING DIVISION OMINECA NTS 93L 7E

LATITUDE 54° 18' N LONGITUDE 125° 38' W

NAMES and NUMBERS of all mineral tenures in good standing (when work was done) that form the property [Examples: TAX 1-4, FIRE 2 (12 units); PHOENIX (Lot 1706); Mineral Lease M 123; Mining or Certified Mining Lease ML 12 (claims involved)]:

Godfrey (317), Buck (1334), Lorne (1333), Cloud (812), HC (1335),
Beth 1 (3622), Beth 2 (3623), Beth 3 (3624), Beth 4 (3625), Beth 5 (3626),
Beth 6 (5526), Beth 7 (5527), Beth 9 (6833), Beth 10 (6834), Beth 11 (6835),
Beth 12 (6836), Beth 13, 6837, Beth 14 (6835)

OWNER(S) . ROYAL STAR RESOURCES LTD.

MAILING ADDRESS

200-900-999 W. HASTINGS ST.
VANCOUVER, B.C. V6C 2W2

SUB-RECORDER
RECEIVED

APR 21 1989

OPERATOR(S) (that is, Company paying for the work)
(1) NORAMCO EXPLORATION INC (2) M.R.# \$
..... VANCOUVER, B.C.

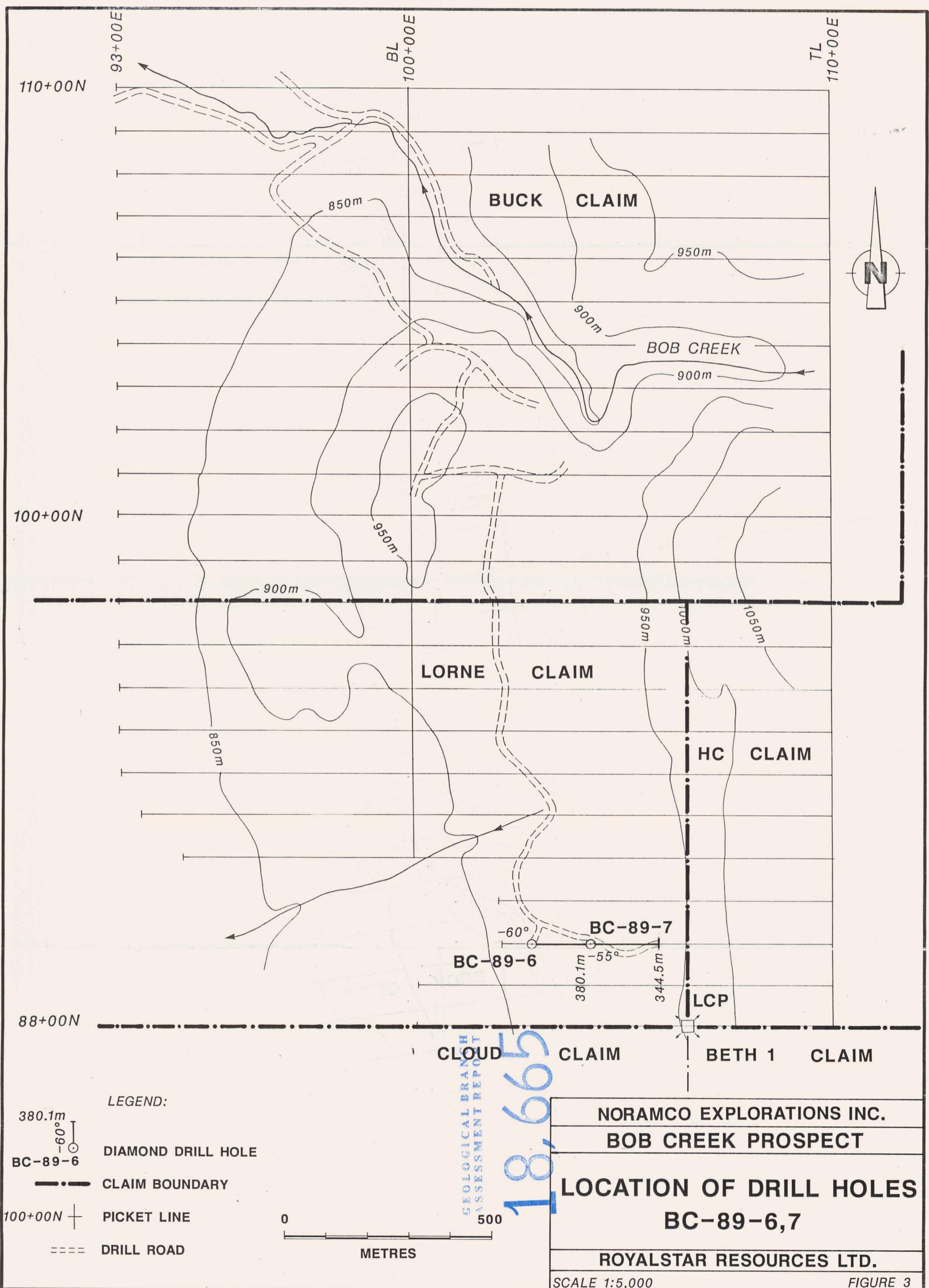
MAILING ADDRESS

900-999 WEST HASTINGS ST.
VANCOUVER, B.C.
V6C 2W2

SUMMARY GEOLOGY (lithology, age, structure, alteration, mineralization, size, and attitude):

... Au-Ag (Cu, Zn) mineralization occurs associated with
... upper Cretaceous quartz-feldspar porphyry dykes and
... breccias. Mineralization, consisting of pyrite, sphalerite,
... minor chalcopyrite and arsenopyrite, occurs in a quartz
... stockworks.

REFERENCES TO PREVIOUS WORK



**NORAMCO EXPLORATIONS INC.
BOB CREEK PROSPECT**

**LOCATION OF DRILL HOLES
BC-89-6,7**

ROYALSTAR RESOURCES LTD.

FIGURE 3