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Province of
British Columbia

Ministry of
Energy, Mines and
Petroleum Resources

GOLD COMMISSIONER

ASSESSMENT REPORT

FORT STEELE MINING DIVISION
CRANBROOK, B.C.

TITLE PAGE AND SUMMARY

TYPE OF REPORT/SURVEY(S)

Drilling (DDCH #6458)

TOTAL COST

\$28,451.72

AUTHOR(S) P. W. Ransom

SIGNATURE(S)

P. W. Ransom

DATE STATEMENT OF EXPLORATION AND DEVELOPMENT FILED

Nov 21
May 6, 1985

YEAR OF WORK 1985

PROPERTY NAME(S)

PINE FR.

COMMODITIES PRESENT

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

MINING DIVISION . . . Fort Steele

NTS

~~826/12~~ 82F/9E

LATITUDE 49° 43' N

LONGITUDE

116° 01' 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)]:

The Sullivan Group of mineral claims contains 680 Crown-granted mineral claims, one mineral lease and 913 mineral claims or units held by assessment as listed on the attached sheet.

OWNER(S)

(1) Cominco Ltd.

(2)

MAILING ADDRESS

Box 2000

Kimberley, B.C., V1A 2G3

OPERATOR(S) (that is, Company paying for the work)

(1) As above

(2)

MAILING ADDRESS

As above

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

14,150

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

The drill hole intersected highly cleaved and sheared argillite, silicified metasediments and a gabbro intrusive body; all part of the Middle Proterozoic Aldridge Formation. Only minor sulphide mineralization is present.

REFERENCES TO PREVIOUS WORK

(over)

COMINCO LTD.
Sullivan Mine
Kimberley Operations

BC Geological Survey
Assessment Report
14150

SULLIVAN MINE GROUP OF MINERAL CLAIMS

December 31, 1984

Number of Units

1. Crown Granted	680
2. Held by Assessment:	
Luke Group	75
Rho Group	20
Med Group	15
Donna, Etc. Group	15
Uke Group	11
Mar Group	17
Bad Group	36
Late Group	91
Mat Group	268
Jackpot	1
8 Dip M.C.	56
14 Fal M.C.	84
3 Golf M.C.	17
2 Quark M.C.	12
7 Reverted 2 Post Crown-granted	7
3 Fin M.C.	18
Tip, Sun, Hope, Cue, Reverted Crown-granted M.C.	24
3 Mead M.C.	36
9 Gin M.C.	<u>110</u>
Sub Total Group 2	913
3. Greenhorn Mineral Lease	<u>1</u>
GRAND TOTAL (1 + 2 + 3)	1594

A.L. Burrows/ml
December 20th 1984

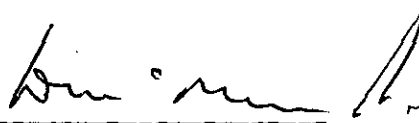
COMINCO LTD.

SULLIVAN MINE

KIMBERLEY, B.C.

PINE ASSESSMENT REPORT

Endorsed For
Release By:



D. Murdoch
Chief Geologist, Kimberley

TABLE OF CONTENTS

	<u>Page</u>
Introduction	1
Index Map	2
Drilling Surface Plan	3
Detailed Technical Data and Interpretation	4
Itemized Cost Statement	5
Author's Qualifications	6
Appendix - Invoices and Diamond Drill Log	7-23

1. Specific Location

DDH 6458, the hole being reported on, was drilled 2,000 feet west of the north part of the Sullivan orebody. Access to the drill site is by private road.

2. Property Description

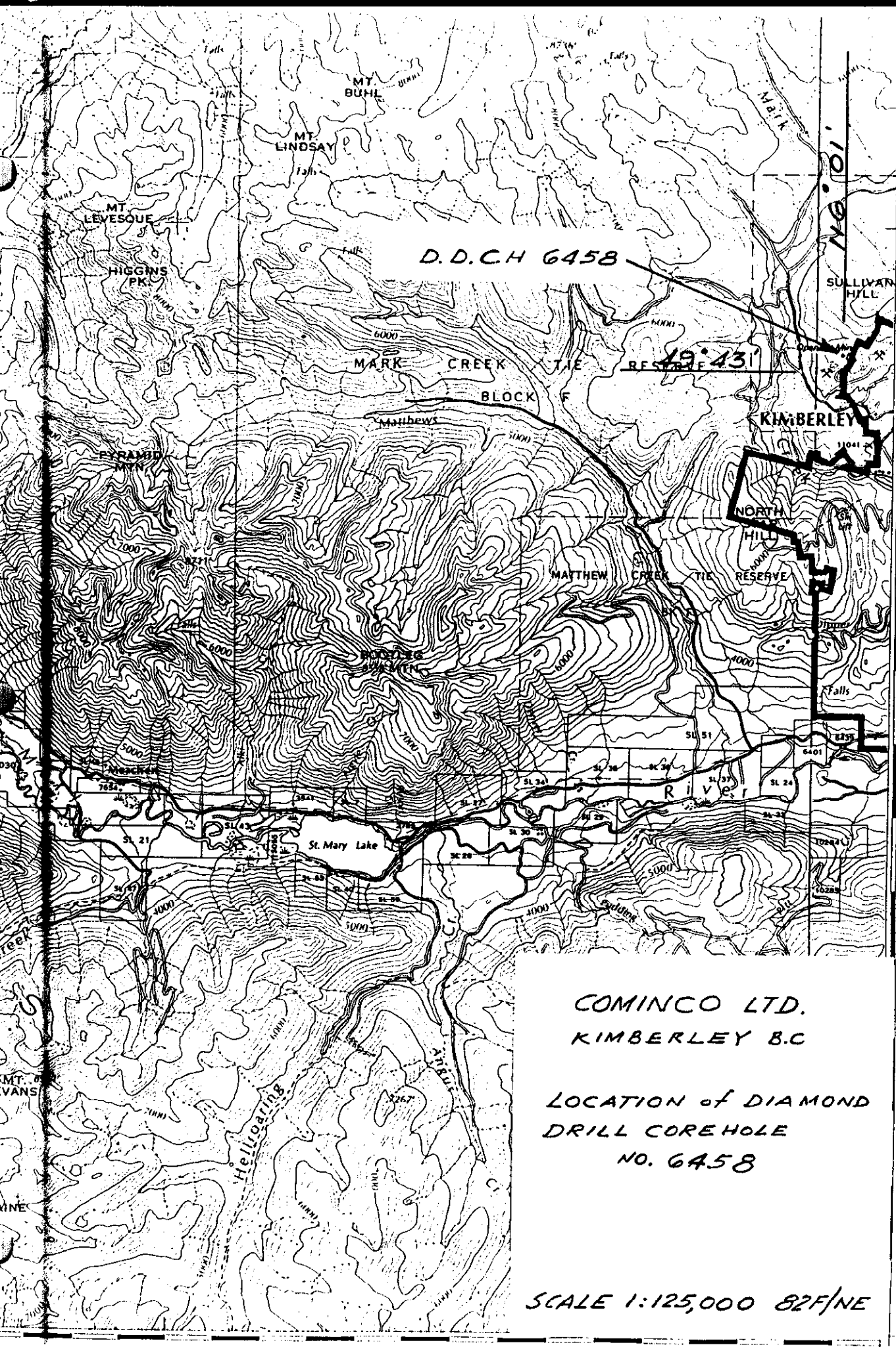
The property being investigated forms part of the Sullivan Mine claim group, owned by Cominco Ltd. Cominco has operated the mine for about 75 years. The Sullivan stratiform Ag-Pb-Zn-Fe sulphide deposit is one of the most important of its type worldwide and has contributed significantly to the mineral wealth generated in the province of British Columbia.

3. Drilling

One hole is being reported on. It was collared at -90° dip and was drilled to a depth of 247 metres using H wireline tools 9.6 cm in diameter.

4. Claims Explored

DDH 6458 was drilled on the Pine Crown Granted Mineral Claim.



45'

To Kimberley To Cranbrook
6 miles 17 miles

COMINCO LTD.
KIMBERLEY B.C.

LOCATION of DIAMOND
DRILL COREHOLE
NO. 6458

SCALE 1:125,000 82F/NE

49° 10'

CRAPER
L. 13220
51.65

2001
6120.6 ELEV.

③ U
L

SKY
L. 10994
51.65 A

BLUE FR.
L. 10997
41.87 A

BERRY FR.
L. 13208
45.54 A

HAWES
L. 13207
46.97 A

HEEL

13215
51.65 A
16000

LAW
L. 10985
51.65 A

TINA FR.
L. 10998
28.48 A

1993
5844.6 ELEV.

KEN
L. 12006
48.16 A

COMET
L. 12007
51.61 A

OIL
L. 10986
51.65 A

LORRY
L. 10999 FR.
31.96 A

ANNIE
L. 12005
45.52 A

DIXIE FR.
L. 12004
47.27 A

14000

GAS
L. 9979
51.65 A

D.D.C.H. #6458

DEER

TAR
L. 10137
31.25 A
FR.

PINE FR.
L. 12003
41.64 A

WATER TANK
No. 23 SHAFT
No. 29 SHAFT

L. 12000
48.64 A
R 3923
R 3921

CRAB
L. 10138
51.65 A

BEN FR.

TRAIL SULLIVAN MINE

CROCK FR.
L. 10140
48.24 A

CRAM
L. 5931
49.59

MAC
L. 6189
R. 3933

COMINCO LTD.
KIMBERLEY B.C.

LOCATION of
DIAMOND DRILL CORE
HOLE # 6458
PINE FR. LOT 12003

YPRES

JEW FR.
L. 2409
41.0 A
R 3934

L. 5932
48.24 A

0 96 192 288 384 480 m.

SCALE 1:9600

Detailed Technical Data And Interpretation

A. Objective

The objective of drilling DDH 6458 was to locate stratiform Ag-Pb-Zn-Fe sulphide ore.

B. Results

DDH 6458 intersected metasedimentary rock with scattered fracture and disseminated pyrrhotite. Sphalerite was observed but is much less abundant than pyrrhotite.

C. Interpretation

0 - 4.0 m	Overburden and weathered bedrock.
4.0 - 95.0 m	Predominantly argillite, medium grey (greenish) with light grey and black laminae, intensely cleaved to 37.5 m and schist 37.5 to 95.0 m, folds noted throughout.
95.0 - 243.0 m	Metasedimentary rock, probably silicified quartzitic wacke, wacke and subwacke. Primary sedimentary bedding was noted but is rare, brecciation is common. Altered igneous rocks, probably metagabbro, occur from 185 to 194 and from 197 to 199 m. Pyrrhotite, although not particularly abundant, is present in scattered fractures, aggregates and disseminations. Pyrrhotite is disseminated along laminations between 225.3 and 225.9 m. Sphalerite was observed only in trace quantities at a few points.
243.0 - 247.0 m	Gabbro.

D. Conclusion

DDH 6458 intersected sheared argillite, altered siliciclastic rocks, and gabbro, all part of the Middle Proterozoic Aldridge Formation. No ore was intersected.

Itemized Cost Statement

Page 5.

DDH 6458

Start: May 28, 1985
Finish: June 4, 1985

Contractor: Longyear Canada Inc.
Location: Kimberley, B.C.

<u>Drilling Costs, Contractor</u>	<u>Invoice No.</u>	<u>Amount</u>
Drilling 0 - 810 feet (247 m)	7166	\$ 10,955.00
	7286	6,660.00
Move In	7166	2,765.00
Move From	7286	1,817.00
Reaming	7286	94.00
Testing	7286	94.00
	7166	94.00
Equipment Left In Hole	7286	559.04

Cominco And Other Charges

Site preparation and move drill		2,174.00
Hauling Contractor	P.O. 117672	275.00
Drill Mud		775.68
Core Boxes		279.00
Vehicles, Rental		200.00
Supervision, log, report		<u>1,710.00</u>
TOTAL		<u>\$ 28,451.72</u>

Author's Qualifications

As author of this report, I, Paul W. Ransom, certify that:

I am a geologist active in minerals exploration.

I am a graduate of McGill University with a degree of Bachelor of Science.

I have been continuously engaged in mining and exploration geology for eighteen years.

I am a member of the Geological Association of Canada.

I supervised Cominco Ltd.'s Sullivan Mine area exploration drilling program in 1985.

A handwritten signature in cursive script, reading "P.W. Ransom", is written over a horizontal line.

P.W. Ransom, G.A.C.



Kimberley Operations

APPENDIX

INVOICES AND DIAMOND DRILL LOGS



DIAMOND DRILLING AGREEMENT

EAST KOOTENAYS

1985

THIS IS SCHEDULE C TO THE AGREEMENT

DATED APRIL 2, 1985

BETWEEN COMINCO LTD. AND

Longyear Canada Inc.

This Schedule sets forth the rates referred to in subsection 4.02 of the Agreement.

RATES FOR SERVICES PERFORMED
BY CONTRACTOR

RATES PER FOOT

HQ

NQ

BQ

1. Drilling Rate for HQ, NQ and BQ
wireline core drilling:

0 - 500 feet of depth	21.25	17.90	17.90
500 - 1000 feet of depth	22.50	18.80	18.80
1000 - 1500 feet of depth	24.00	19.80	19.80
1500 - 2000 feet of depth	25.65	21.20	21.20
2000 - 2500 feet of depth	27.60	22.90	22.90
2500 - 3000 feet of depth		24.95	24.95

2. Drilling and casing of overburden
as required:

HW Casing

NW Casing

A. Rate per foot of hole depth

0 - 100 feet of depth	22.50	22.50
100 - 200 feet of depth	24.00	24.00
200 - 300 feet of depth	25.65	25.65

B. If the total depth of overburden exceeds 300 feet in any one hole the Contractor will have the option of charging rates as specified in 2 A. or the Field Cost Rate for all casing required deeper than 300 feet.

C. Where it is necessary to telescope casing it is agreed and understood that only the rate for the largest casing used will be charged throughout the telescoped section.

3. Reaming and casing of hole in bedrock if required. Reaming will only be charged when the diameter of the hole is increased.

Field Cost Rates

4. Moves.

A. It is agreed that the moving of drill equipment, supplies and personnel from the highway truck discharge point to the initial drill site, between drill sites and return from final drill site to the highway truck loading point will be for the Company's account at a rate of:

\$39.50 per man hour.
Drill rental will not be charged during drill moves.

B. Moving shall be interpreted to include breaking rods, tearing down and dismantling machinery, moving, setting up, loading or off-loading equipment and installation of water line, pumps and heaters.

5. Mobilization and demobilization of the Contractor's crew complete with entire equipment and supplies from the Contractor's base of operations to the first drill site and return to Contractor's base of operations from the last drill site on completion of the work.

\$2,400.00
~~\$1,500.00~~ 50% payable on receipt of first invoice, 50% payable on completion of the work.

6. Fuel for the operation of drill, camp, tractor, water pumps and all ancillary equipment will be supplied by the Contractor.

No charge to the Company.

7. Lubricants. All lubricants for the operation of the drill and all ancillary equipment will be supplied by the Contractor.

No charge to the Company.

8. Mud. Drilling mud and additives supplied by the Contractor shall be charged to the Company at a rate of:

Cost plus 12 % f.o.b. drill site.

Note: Cominco Ltd. intends to have drilling mud and additives available at its core laboratory near the Sullivan Mine. For drilling located within the Kimberley watershed, vegetable oil supplied by the Company shall be used instead of diesel oil for Qwik Trol dispersal.

9. Cement will be supplied by the Contractor as required and charged to the Company at a rate of:

Cost plus 12 % f.o.b. drill site.

10. A. Casing. The Contractor will supply casing as required to carry on the work. Casing that is left in holes at the request of the Company will be charged to the Company at a rate of:

Cost plus nil % f.o.b. drill site.

- B. Recovery of casing from holes if requested by the Company will be charged to the Company at a rate of:

Field cost rates.

11. Drill rods, core barrels, core bits, reaming shells, casing shoes and other down-hole tools lost or damaged in holes without negligence on the part of the drill crew during a period when work is being performed at field cost rates will be charged to the Company at:

Cost plus nil %.

12. Core delivery. The Contractor will deliver the core to the Company once per day as follows: For the Sullivan Mine program - to the core lab at the mine; for the Regional Program - to a local facility in Invermere or to the Cranbrook office.

\$ nil per delivery.

13. Cementing for lost circulation, if required and agreed to by the Company's Representative, will be performed by the Contractor at:

Field cost rates.

14. Travel Time for shift changes from nearest available commercial accommodation to drill site and return.

\$ nil per man hour.

15. Field Cost Rates: It is agreed that the field cost rates shall be interpreted here and hereinafter to be:

Labour - \$ 32.00 per man hour.

Drill Rental (and ancillary equipment)

\$ 30.00 per machine hour.
(If two drills are quoted and rates are different, please specify.)

Materials and supplies consumed:

Cost plus nil %.

PAGE 4.

16. Delays.

- A. Any delays caused or requested by the Company will be charged to the Company at a rate of: \$ 39.50 per man hour.
- B. All other delays, such as mechanical breakdowns, shortage of supplies, materials, tools, or drill crew, etc. will be for the Contractor's account including freight. No charge to the Company.
- C. Delays caused by mechanical breakdowns or other aspects of the tractor operation or due to road plowing will be charged to the Company at: \$ 39.50 per man hour, no machine rental.

17. Water Lines.

- A. The Contractor will supply 2000 feet of water line, complete with a Bean 435 or equivalent pump capable of supplying an adequate supply of water to the drill and complete with up to a 300-foot lift. No charge to the Company.
- B. Should the work require water lines of greater length the Contractor will supply line required and the Company will pay for the installation and maintenance of the entire water line at a rate of: Field cost rates including freight if additional equipment required.

18. Radio Communication. The Contractor will supply radio communication between his 4-wheel drive vehicles and logging vehicles operated by Crestbrook Forest Industries and, for the Blondie, for logging vehicles operated by Revelstoke Sawmill Ltd. No charge to the Company.

19. Logging and surveying if required, tools and/or instruments will be supplied by the Company. Drill crew will be charged to the Company at: \$ 47.00 per man hour.

20. Core Boxes as required will be supplied by the Company at: No charge to the Contractor.

21. Freight and service transportation once drilling has commenced the transportation of any additional equipment and supplies required by the Contractor will be for the Contractor's account. No charge to the Company.

PAGE 5.

22. Accommodation. The Contractor's crew will be domiciled in the nearest available commercial accommodation at:

No charge to the Company.

23. Chert Surcharge. An extremely hard rock known locally as "chert" is occasionally encountered. If according to Cominco's representative this rock is encountered, the drilling rates noted in Item 1 shall be increased by:

50%



DIAMOND DRILLING DIVISION
721 Aldford Avenue
Annacis Island, New Westminster, B.C. V3M 5P5
Telephone: 604-524-2511
Telex: 43-51280

Cominco Limited
P. O. Box 2000
Kimberley, B.C.
V1A 2G3

Invoice No. 7166
Cust. No. 6348
Job No. 6362
Dest. 062

Invoice Date June 11, 1985
for May 1985

To: Invoice for Diamond Drilling performed near Kimberley, B.C. during period May 11 - 31, 1985. Per Agreement dated April 2, 1985.

Hole No.	Size	From	To	Total	Rate	Amount
6457	Overburden	0	100	100	22.50✓	2,250.00 ✓
	"	100	101	1	24.00✓	24.00 ✓
	HQ Wireline	101	500	399	21.25✓	8,478.75 ✓
	"	500	1000	500	22.50✓	11,250.00 ✓
	"	1000	1305	305	24.00✓	7,320.00 ✓
6458	Overburden	0	12	12	22.50✓	270.00 ✓
	HQ Wireline	12	500	488	21.25✓	10,370.00 ✓
	"	500	514	14	22.50✓	315.00 ✓
				1879		40,277.75 ✓

Moves

To Hole 6457 - 72 Man Hours @ 39.50
Hole 6457 to 6458 - 70 Man Hours @ 39.50

2,844.00 ✓
2,765.00 ✓
5,609.00 ✓

Client Testing

Hole 6457 - 7 Man Hours @ 47.00
Hole 6458 - 2 Man Hours @ 47.00

329.00 ✓
94.00 ✓
423.00 ✓

Reaming + Lost Circulation - Hole 6457

22 Man Hours @ 32.00
11 Machine Hours @ 30.00
1 HQ Bit 6R 32497
Prorated Use - See Later Invoice

704.00
330.00
797.15

1,831.15 ✓

Left in Hole
Hole 6457

10 HW 10' Casing @ 157.24
1 HW Shoe Econo

1,572.40
262.15
1,834.55 ✓



Canada Inc.
CONTRACT DRILLING DIVISION
721 Aldford Avenue
Annacis Island, New Westminster, B.C. V3M 5P5
Telephone: 604-524-2511
Telex: 43-51280

Cominco Limited - 2 - Invoice No. 7166

Ref: Invoice 7164
Did Read
Client Testing

2½ Man Hours @ (47.00) Credit (117.50) Cr.

Should Read
Client Testing

1 Man Hour 47.00

Moves
From Hole 6456

4 Man Hours @ 39.50	158.00	205.00	87.50
			50,062.95
			=====

Charge the following amounts to associated codes:

Code	
VEX - 113 - 130 - W 279	1027.00
6112.56	87.50
6112.57	36,082.45
6112.58	12,866.00

Water delays of 1 hour on May 16, 17, 21 and 22 were not charged. An adjustment should follow.

P. Ranson
Jun 24/85

Longyear

Longyear Canada Inc.

CONTRACT DRILLING DIVISION

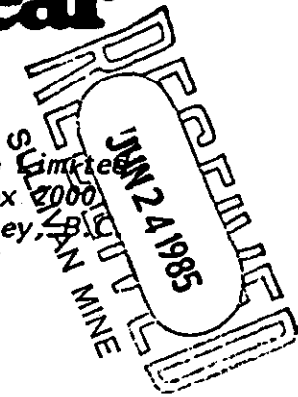
721 Aldford Avenue

Annacis Island, New Westminster, B.C. V3M 5P5

Telephone: 604-524-2511

Telex: 43-51280

Cominco Limited
P.O. Box 2000
Kimberley, B.C.
V1A 2G3



Invoice No. 7286

Cust. No. 6348

Job No. 6362

Dest. 062

ORIGINAL

Invoice date June 14, 1985
for June, 1985

To: Invoice for diamond drilling performed near Kimberley, B.C. during period June 1-5, 1985 per agreement dated April 2, 1985

Hole No.	Size	From	To	Total	Rate	Amount
6458	HQ Wireline	514	810	296 ✓	22.50 ✓	6,660.00 ✓

Moves

Hole 6458 to Storage

46 Man hours @ \$39.50

1,817.00 ✓

Client Testing

Hole 6548

2 Man hours @ \$47.00

94.00 ✓

Reaming

Hole 6457

Prorated Use Re HQ Bit GR 32497 - See Later Inv -----

Hole 6458

2 Man hours @ \$32.00

64.00

1 Machine Hour

30.00

94.00

94.00 ✓

Left In Hole

Hole 6458

3 HW 2' Casing @ \$46.55

139.65 ✓

Longyear

Longyear Canada Inc.

CONTRACT DRILLING DIVISION

721 Aldford Avenue

Annacis Island, New Westminster, B.C. V3M 5P5

Telephone: 604-524-2511

Telex: 43-51280

17

Cominco Limited

-2-

Invoice No. 7286

1 HW 10' Casing
1 HW Shoe Econo

157.24 ✓

262.15

559.04 ✓

\$9,224.04 ✓
=====

TERMS -- NET 30 DAYS -- INTEREST CHARGED AT 24% PER ANNUM ON OVERDUE ACCOUNTS

DATE				JUNE 15, 1985					
Date	Man Hours	Machine Hours	Hours	Consumables	Date	Man Hours	Machine Hours	Hours	Consumables
39.50					47.00				
CUMULATIVE TOTAL					CUMULATIVE TOTAL				
JUNE 1				1	JUNE 1				1
2				1	2				1
TOTAL				2	TOTAL				2
MOVES					MOVES				
JUNE 3 38				✓	JUNE 3 38				✓
4 8				✓	4 8				✓
TOTAL 46					TOTAL 46				

DATE				JUNE 15, 1985					
Date	Man Hours	Machine Hours	Hours	Consumables	Date	Man Hours	Machine Hours	Hours	Consumables
39.50					47.00				
CUMULATIVE TOTAL					CUMULATIVE TOTAL				
JUNE 1				1	JUNE 1				1
2				1	2				1
TOTAL				2	TOTAL				2
MOVES					MOVES				
JUNE 3 38				✓	JUNE 3 38				✓
4 8				✓	4 8				✓
TOTAL 46					TOTAL 46				

Diamond Drill Geological Log For D.D.H.

6458



LAT. 12,721.07 DEP. 568.39 ELEV. 5220.88
DIP: -90° AZIM.: - LENGTH: 810 Feet

HORIZ. COMP. VERT. COMP.
DATE COLLARED: May 29, 1985 DATE COMPLETED: June 3, 1985

CORE STORAGE:
DRILLED ON CLAIM(S): Pine
OBJECTIVE: To locate ore west of the Sullivan Mine

PLANNED LENGTH: 800'
TERMINATION COMMENTS: Intersected gabbro arch at 796.5'.

DRILLED BY: Longyear Canada Inc.
TYPE DRILL: 44
CORE SIZE: HQ
PERFORMANCE COMMENTS: Good

CASING REMAINING IN HOLE (LENGTH & SIZE): 12'

TYPE CAP & SEALING METHOD: Welded cap

OTHER MATERIAL REMAINING IN HOLE:

SURVEY INSTRUMENT USED: Sperry Sun

ADDITIONAL DOWN HOLE TESTS:

GENERAL COMMENTS: Down Hole Survey:

Depth	Dip	Azm.	
200'	-85.3°	139°	S 41E
402'	-82.0°	137°	S 43E
602'	-80.6°	133°	S 47E
802'	-78.0°	122°	S 58E

LOG LEGEND

BED THICKNESS CLASSIFICATION

BEDS	Very Thick Bedded
	100 cm
	Thick Bedded
	30 cm
	Medium Bedded
	10 cm
LAMINAE	Thin Bedded
	3 cm
	Very Thin Bedded
	1 cm
	Laminated
	0.3 cm
	Thinly Laminated

LITHOLOGY ABBREVIATIONS

OQ - Orthoquartzite
SA - Subarkose
QW - Quartz Wacke
QCW - Quartzitic Wacke
W - Wacke
SW - Sub Wacke
AG - Argillite

D.D.H. 6458

Diamond Drill Geological Log



Objective:		Sampled:		40 Scale	
Logged By:		Date:		Color Plot & Dips	
Block:		Sect.:		Ore Classes & Aver.	
Place:		App. Bear:		App. Dip.:	
Length:					
From	To	Discard:	Reason:		
	(Feet)				
0.0	13.0	Overburden and weathered bedrock. No core recovered.			
13.0	123.0	Argillite, minor subwacke, predominantly light grey, characterized by both black and light grey laminae, laminae contacts are generally sharp and flat, particularly the black ones. Light grey laminae tend to be wavy both on top and bottom. The rock is characterized by pervasive slaty cleavage and folding is common. Quartz veinlets are common, some are flat and parallel to cleavage, others predate cleavage and have a pygmatic appearance. Cleavage is known, from mapping, to dip north. Directional parameters noted below are based on that fact.			
Depth	Bdg. Dip	Cleavage Dip			
20'	O.T. 65°N to flat, South	25°N	Small fold, plunges gently --N290		
		and back to 60°N			
24'	O.T. 51°N	35°N			
35'	O.T. 60°N	31°N			
50'	90°	26°N	Several folds 40'-45'		
55'	O.T. 48°N	40°N			
65'	50°N	50°N	No cutting relationship noted.		
73'	90°	40°N			
84'	55°N	35°N			
81'	37°N	25°N	Bdg. and cleav. are parallel to 98'.		
99	90°N	53°	Folding		
105-108'	Second foliation: kink bands.			Core Size	
112'	25°	25°	1-2cm QW beds, intrafolial disruption. HQ		
112.5'	90°	55°	cleavage recorded at 114'		
114-115'	Kink banding			Note No.	Page
121'	43°	53°	6458		1

Diamond Drill Geological Log



Objective:		Sampled:		40 Scale	
Logged By:		Date:		Color Plot & Dips	
Composites:				Ore Classes & Aver.	
Block:	Sect:	Place:	App. Bear:	App. Dip:	Length:
From	To	Discard:	Reason:		
123.0	312.0	Schist, same general lithology as preceeding interval. Bedding is discernable to 230' with dips from 90° to 0°, most commonly sub-parallel to shearing. Shearing core angles: 44° @ 133', 60° @ 149', 40° @ 155', 60° @ 174', 47° @ 182', 45° @ 195', 55° @ 211' (bedding c/a 45°), 57° @ 225', 60° @ 242', 58° @ 259', 58° @ 270', 65° @ 285', 63° @ 294', 60° @ 308'. From 280' schist is progressively lighter in colour - more bleached looking. Kink banding noted at several locations. From 222.5 to 234 are several predominantly quartz segregations up to 10cm wide; one 1.5 cm wide at 233 contains deep reddish brown sphalerite to 1 cm wide.			
312.0	342.0	Metasedimentary rock, possibly was quartzitic wacke initially, brecciated (healed) and silicified, sheared in places.			
342.0	345.0	Brecciated and sheared quartzite/pyrite rock.			
345.0	412.0	Silicified metasediment, brecciated and/or sheared (variations in intensity), pyrrhotite noted.			
412.0	607.0	Silicified metasediment, healed fractures throughout. Short intervals of breccia or shearing, minor broken core. Primary bedding plane contacts suspected in a few places but none are convincing. Several gouge and breccia zones up to 25 cm thick 552-562.5'. Hornfelsic alteration 604.0 - 607.0. Markedly less siliceous below 570'.			
607.0	637.0	Highly altered igneous (?) rock. Colour is dark grey with fine white flecks (porphyritic?). There is probably some included sediment.			
637.0	645.0	Metasediment, hornfelsic texture. Base of interval gradational into underlying rock.			
				Core Size	
				Hole No.	Page
				6458	2

2987-

Diamond Drill Geological Log



Objective:		Sampled:						40 Scale	
Logged By:		Date:		Composites:		Color Plot & Dip:		Ore Glasses & Aver.	
Block:	Sect.:	Place:	App. Bear:	App. Dip:	Length:				
From	To	Discard:	Reason:						
645.0	654.0	Highly altered igneous (?) rock, similar to 607.0 - 637.0'.							
654.0	704.0	Hornfels, probably originally a wacke (not silicified). Foliation (schistosity and mineral alignment) 52° to core and bedding varies from 0° to 45° to core at 665'. Pyrrhotite is present in a network of scattered fractures and disseminated grains (often aligned parallel to foliation). Very hard interval with reddish-brown (biotite?) alteration from 694 - 696'.							
704.0	728.0	W, SW (minor QW), medium grey (greenish), beds not discernable. There is pyrrhotite scattered throughout much of this interval as veinlets and aggregates up to 1 cm long. Sulphide alignment of 45° at 706' suggests laminations. Distribution of sulphide aggregates between 712 and 718 suggests intraclast filling (no clasts recognized). Sphalerite noted in 1 mm veinlet at 704 and it may accompany some of the pyrrhotite as fine dust.							
728.0	769.0	Wacke, long intervals possibly SW. Colour is medium grey. Bedding is vague, however, a few contacts and laminated intervals are convincing. Bedding to core: 63° @ 729', 60° @ 741', 61° @ 76'. Pyrrhotite is present in scattered veinlets and weakly disseminated along foliation planes in restricted spots. From 739-741' is a laminated interval within which pyrrhotite is disseminated along bedding (possibly associated with fine biotite).							
769.0	773.0	Wacke, medium grey, contorted bedding and, possibly clasts.							
773.0	796.5	Wacke, progressively more siliceous below 786'. Good laminae @ 79° @ 778', bdg (?) , 69° @ 793'. Weak breccia texture noted at some locations, possibly related to underlying intrusion. Pyrrhotite and pyrite in some fractures. Bleached halos around pyrrhotite grains in fragmental-like rock 790 - 793'.					Core Size		
					Hole No.	6458	Page	3	

Diamond Drill Geological Log



Objective:			Sampled:				40 Scale						
Logged By:			Date:		Composites:		Color Plot & Dip						
Block:		Sect:	Place:	App. Bear:	App. Dip.:	Ore Classes & Aver.							
From	To	Discard:	Reason:										
796.5	810.0			Gabbro. Fine-grained 796.5 - 803'. Medium-grained 803 - 810'.									
<p><i>P. W. Ranson</i></p>				<p>Core Size</p> <p>Hole No. 6458</p> <p>Page 4</p>									

2507-