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GEOLOGIST'S REPORT, KOKSOAK RIVER AREA

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GEOLOGIST'S REPORT

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KOKSOAK RIVER AREA, UNGAVA

PROJECTS 387, 398, 399, 400 & 411

VOLUME 1

December 1962

A.B.Baldwin

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GEOLOGIST'S REPORT

KOKSOAK RIVER AREA, UNGAVA

PROJECTS 387, 398, 399, 400 & 411

GENERAL SUMMARY

PROJECT 387

About 1,170,000 tons of massive sulphides have been outlined in one deposit by diamond drilling. The metal values are in zinc (6.86%), copper (0.70%), lead (1.03%), silver (1.59 oz.) and gold (0.03 oz.) with a total gross value at present metal prices of $25.00 per ton.

Partial gravity and soil geochemical surveys are recommended on the property. Diamond drilling is warranted to test a locality about two miles southeast of the sulphide deposit and to further evaluate the 'down dip' potential of the deposit. A decision to abandon part of the property should be made after completion of this work programme.

PROJECT 398

It is recommended that four claims be maintained in good standing pending results of current work being done in the area by other interests.

PROJECT 399

A brief examination of this 2-claim group is recommended before the property is abandoned.

PROJECT 400

A very limited soil geochemical test programme is suggested before a decision on final abandonment is made.

PROJECT 411

Abandonment of this property is recommended.

GENERAL STATEMENT

The properties described in this report and designated Projects 387, 398, 399, 400 and 411 are located in the northern portion of the Labrador Trough or Geosyncline. This is a geologic province of Late Pre-Cambrian (Huronian) age. It is situated in Northern Quebec (New Quebec or Ungava) and extends from about the 53° parallel northwest to about the 61° parallel. The average width is about 40 miles.

The Trough consists of a generally weakly metamorphosed assemblage of sedimentary and igneous rocks intruded by gabbroic dykes and sills. The sedimentary rocks include recrystallized sandstone, siltstone, argillite, dolomite, iron formation and limestone, and are more common in the western half of the geosyncline. The igneous rocks comprising andesite flows, gabbro sills and minor ultramafic bodies are mainly found in the eastern half of the structure. However due to the regional easterly dipping formations, the sedimentary members probably occur beneath the igneous rocks of the eastern part of the Trough.

Structurally, the rocks of the Labrador Trough have been deformed into a parallel series of open folds. Low angle thrust faults

have been recognized throughout the length of the geosyncline with the northeast rocks having moved over the rocks to the southwest. Cross structures include both faults and folds.

The Labrador Trough rocks unconformably overlie the older gneisses and granites to the west. The east contact is a major fault zone along the south portion of the Trough and a probable metamorphosed unconformity along the north part. The metamorphic rocks (mainly granitic gneisses) to the east are of Grenville type.

The sediments and volcanics of the eastern half of the geosyncline have been isoclinally folded with dips averaging about 30°-40° to the east. This assemblage was intruded by numerous bodies of gabbro with local evidence of differentiation.

Copper, zinc, lead and nickel occurrences are widespread throughout the sedimentary and volcanic rocks of the eastern portion of the geosyncline. The largest known sulphide ore body is in the order of 2 to 3 million tons in the Gerido Lake - Soucy Lake area. Larger tonnages of lower grade material also occur in the area about 140 miles north of the Romanet Lake District.

Hematite enrichments occur in the Schefferville Area and form the basis of a large mining endeavour by The Iron Company of Canada. Farther south beneficiating magnetic iron formation is mined at Wabush Lake.

REGIONAL BASE METAL ORE CONTROLS

The following ore controls are probably the most important pertaining to the base metal mineralization of the Labrador Trough.

Ore Control	Example
1. Sedimentary horizons within or near volcanic and intrusive rocks.	
A. Carbonate Members	Copper: Delhi Pacific, Romanet Lake Area; Chibtown, Romanet Lake Area; Carson Claims, Romanet Lake Area
	Lead: Conwest, Duhamel Lake Area
B. Quartzite and Argillite Members	Copper-Zinc: Ungava Copper, Soucy Lake Area; M.J.Boylen Prospectors, Koksoak River Area.
	Copper: McIntyre Mines, Wapaniskskan Lake Area; Jonsmith Mines, Swampy Bay River Area.

2. Structure - Cross faults, cross folds giving rise to basin and dome structures, brecciation, sharp flexures in the regional strike and regional strike faults that are deep-penetrating breaks could all be important. It is possible that all the known significant base metal occurrences are localized in the eastern half of the Labrador Trough due to the major fault which borders the east side of this structure. This fault is undoubtedly a regional, deep-seated feature analagous to the "Grenville Front" which constitutes the northern edge of the Grenville sub-province of the Canadian Shield.

Ore Control	Example
3. Differentiated basic intrusives. Gabbro sills underlie much of the eastern half of the Labrador Trough. Some of these sills have differentiated phases of anorthositic porphyry or "blotchy gabbro" with associated sulphide mineralization.	Copper: Holannah Mines, Koksoak River Area.
4. Ultrabasic intrusives. Ultrabasic sills occur in the areas east of Lac Effiat (South of Romanet Lake) and north of the Koksoak River.	Copper-Nickel: Holannah Mines, Northeast of Schefferville.
5. Granitic and Gabbroic Intrusives.	
A. Granite	Copper: Gulf Lead, Patu Lake Area; McIntyre Mines, Wapaniskskam Lake Area.
B. Gabbro	Copper: Tache Lake and Delhi Pacific, Romanet Lake Area.

LOCATION

The properties of Projects 387, 398, 399, 400 and 411 straddle the confluence of the Larch and Kaniapiskau Rivers near Longitude 69°30'W and Latitude 57°40'N.

The following partially surveyed townships are located in the region:

5745
5746
5645
5646

PROJECT 387

REFERENCE MAPS

Plate 1 - Property Map - Index Map, Koksoak River Area

Plate 2 - Geological Map, Koksoak River Area

Plate 3 - Staking Map Showing Claim Numbers, Koksoak River Area

Plate 4 - Geological Map, Koksoak Sulphide Zone

Plate 5 - Assay Plan, Koksoak Sulphide Zone

Plates 6 - 10- Diamond Drill Hole Sections - 5000S, 5100S, 5200S, 5300S, 5400S

Plates 11- 12- Magnetometer Survey

Plates 13- 20- Geological Survey - Numbers 1 to 8 (Incl.)

Plates 21- 28- Magnetic-Electromagnetic Survey - Numbers 1 to 8 (Incl.)

PROPERTY

The Project 387 property extends from the confluence of the Larch and Kaniapiskau Rivers south for about 5 miles. The claims were staked in July, September and October of 1961. Staking particulars are as follows:

Staker	Licensee	Date	Claims
O. A. Seeber	O. A. Seeber	July 15, 1961	182478 - 1-5 incl.
	M. J. Boylen	July 5, 1961	182480 - 1-5 "
	Y. R. Seeber	July 16, 1961	184269 - 1-5 "
	P. Boylen	July 16, 1961	182481 - 1-5 "
	A. B. Baldwin	July 17, 1961	184270 - 1-5 "
L. Halladay	L. Halladay	July 18, 1961	184266 - 1-5 "
	C. A. Harris	July 16, 1961	182479 - 1-5 "
	E. Coulter	July 15, 1961	184500 - 1-5 "
	D. Coulter	July 15, 1961	184501 - 1-5 "
	J. Bogie	July 17, 1961	184267 - 1-5 "

Staker	Licensee	Date	Claims
J. Allard	J. Allard	July 16, 1961	184511 - 1-5 incl.
	H. Ritchie	July 16, 1961	184502 - 1-5 "
	V. Kingswood	July 17, 1961	184503 - 1-5 "
	A. Thomson	July 17, 1961	184504 - 1-5 "
	A. Walker	July 18, 1961	184505 - 1-5 "
T. Morrison	B. McLaren	July 17-19, 1961	184268 - 1-4 "
	M. Cohen	July 15, 1961	184506 - 1-5 "
A.B. Baldwin	D. Boylen	Sept. 30, 1961	184510 - 1-5 "
R. Boyd	J. Harris	Oct. 1, 1961	184507 - 1-5 "
	Total		94 claims

GEOLOGY

The property was staked to cover a significant discovery of zinc-copper-silver ore made by O. A. Seeber during the course of a flight through the area.

Trenching of the sulphide deposit was carried out in 1961 in conjunction with a geological mapping programme of the immediate environs by J. Boyd and A. B. Baldwin. Diamond drilling was carried out by Morissette Diamond Drilling Limited in the spring of 1962. The drilling was followed by the mapping on a scale of 200 feet to the inch of the remainder of the property by Peter D. Watt. The geological data and diamond drill hole locations are shown on the accompanying maps.

Traverses were limited to 800-foot intervals between Hepatitis Lake and P. L. 40S on the high land west of the base line because of lack of reference points (no lines were cut in this area) and between Hepatitis Lake and the south boundary west of the base line because of time considerations and absence of favourable formations. The entire area east of 10+00E and north of P.L. 200S was not traversed as it consists of muskeg in the south and sand plain in the north.

The formations follow the general trend of the "Labrador Trough" striking northwest and dipping northeast. A typical cross section across the Project 387 property from west to east would show grey massive siliceous dolomite, slaty very lean iron formation, grey quartzite-phyllite with ferrodolomite interbeds, basic volcanics and gabbroic sills. Basic volcanics occur along and east of the base line. Carbonaceous to graphitic phyllite occurs as shear zones in the quartzite-ferrodolomite and basic volcanics. The iron formation consists partly of blue quartzite and sandy slate. It is laminated, weathers brown and is mildly sheared. Stilpnomelane and limonite are common minerals in the iron formation. Locally grunerite has been observed as radiating rosettes near the contact with volcanic rocks. A band of siderite from 2 to 10 feet in width occurs at the contact with ferrodolomite from Hepatitis Lake to the Koksoak River. The siderite is massive and stained with limonite.

The massive siliceous dolomite zone does not extend to the Koksoak River and is either cut off by faulting or disturbed by folding. A wide band of contorted graphitic phyllite occurs between P.L. 40 S and the river and makes a structural interpretation difficult.

A thin band of gritty sediments occurs immediately east of the property and is included within a large gabbro sill which is situated between the claims and Lauzon Lake.

Short transverse faults are present in the south half of the property especially in the quartzite-ferrodolomite members. Drag folds are not common in this portion and apparently increase in abundance from south to north on the claims. The thicker bands of the ferrodolomite

are in places well brecciated with associated white quartz veins.

Evidence of tight folding is common in the north half of the property especially in the presence of drag folds in massive siliceous dolomite and iron formation. These minor folds plunge both northwest and southeast with the latter perhaps being the more common.

An attempt was made to interpret the detailed structures surrounding the massive sulphide deposit as outcrops are abundant and detailed diamond drilling was carried out on this occurrence. However it is most difficult to work out the complex pattern of folds and thrust faults which must be present to give the present distribution of outcrops.

The geology, magnetic survey and E.M. survey all indicate a zone of magnetic and conductive rocks traversing the property near the base line. The zone would average about 1,200 feet in width and consists of iron and carbon-rich, poorly sorted sediments the most common of which are sandstones, quartzites, carbonaceous phyllites and dolomites. Contacts between the various members are gradational. Most of the geophysical anomalies are caused by graphitic schists carrying from 10 to 20 per cent pyrite and pyrrhotite. The whole zone (about 1,000 feet in true thickness) appears to represent a transitional phase between predominant dolomitic sediments to the west and mainly volcanic rocks to the east.

The zone strikes about N 30° W and dips mainly to the northeast at about 45 degrees. The geology and geophysics indicate two flexures in this zone where the strike changes to N 0° W. The first

is located in the vicinity of P.L. 48 and may be a reason for localization of the massive sulphide deposit. The second is near P.L. 160 S. An untested anomaly in the second area warrants evaluation. This anomaly is a coincident E.M. - magnetic response on P.L. 160 S at 100 W of the base line. Nearby outcrops are of sheared volcanics with sericitic alteration and limonitic staining. This rock association is similar to that prevailing at the sulphide deposit. The magnetic high of over 9,000 gammas on P.L. 160 S compares favourably with a high of over 7,000 gammas on the massive sulphide occurrence.

ECONOMIC GEOLOGY

Plate 4 shows a detailed geological plan of the massive sulphide deposit which outcrops near the base line on P.L. 5200 S. In this area, the various sedimentary members and volcanic rocks have been intensely folded and contorted around a lens of massive pyrite with values in zinc, copper, lead, silver and gold.

The massive sulphides are in an envelope of carbonaceous to graphitic phyllites and schists carrying 15 percent disseminated pyrite and pyrrhotite. A quartzite phase of this phyllite may have been selectively replaced by the ore as most of the base metal mineralization in the locality outside the sulphide body occurs in a white, well-sorted quartzite. Weathering of this pyritic quartzite has left a friable mass of white quartz called 'sugary quartz sand.' This sand is the most characteristic feature of the rock alteration near the ore deposit. The development of magnetite and chlorite in the volcanics is another alteration feature.

White quartzite is well exposed on a ridge on P.L. 44 near the base line. Scattered bands carrying minor mineralization of zinc and copper have been trenched but the values are too low to warrant further interest.

Trenching was also carried out on the main sulphide occurrence and the assay plan is shown on Plate 5.

The band of carbonaceous and graphitic rocks that house the sulphide deposit has been traced for at least 2,400 feet southeast of the occurrence. However these rocks pinch out near P.L. 4400 S or only 800 feet to the northwest. This 'pinch-out' also coincides with the northern limit of base metal values surrounding the deposit. Such a coincidence of 'pinch-out' with mineralization indicates a possible 'facies change' ore control. The termination of the grey, orange-weathering dolomite member near P.L. 4400 S and 3,000 feet west may also be related to a 'facies change' rather than a structural dislocation as previously postulated.

The 'on strike' possibilities of the favourable rocks from P.L. 7600 S to P.L. 400 S have been adequately tested by diamond drilling. Refer to Plates 15 and 16.

ORE RESERVES

Massive sulphide mineralization occurs in diamond drill holes from Section 4600 S to 5400 S. However, intersections of minable widths occur only on Sections from 5100 S to 5400 S. These intersections form the basis for the ore reserve calculations shown on the following page.

PROJECT 387

(Factor 8)

BLOCK	LENGTH (HORIZ. PROJ.)	SLOPE LENGTH (H-L-X Sec 35° (1-221)	WIDTH	TRUE THICKNESS	VOLUME (S.L.xWxT)	TONS	Cu	Zn	Pb	Ag	Au
A	340	415	140	35.0	2,033,500	254,188	0.72 (183,015)	7.92 (2,013,168)	1.09 (277,064)	1.72 (437,203)	
B	290	354	105	37.5	1,395,000	174,375	0.89 (155,194)	6.24 (1,088,100)	0.90 (156,938)	(233,663)	
C	290	354	125	11.0	486,750	60,844	1.15 (69,971)	4.07 (247,635)	0.54 (32,856)	0.99 (60,236)	
D	280	342	100	32.0	1,094,400	136,800	0.78 (106,704)	7.29 (997,272)	1.20 (164,160)	1.75 (239,400)	
E	210	256	100	31.5	806,400	100,800	0.78 (78,624)	7.35 (740,880)	- -	1.64 (165,312)	
F	270	330	75	6.0	148,500	18,563	1.52 (28,216)	9.50 (176,349)	1.02 (18,934)	2.30 (42,695)	
G	270	330	100	24.2	798,600	99,825	0.62 (61,892)	6.85 (683,801)	0.75 (74,869)	1.38 (137,759)	
H	350	427	100	44.0	1,878,800	234,850	0.47 (110,380)	6.84 (1,606,374)	1.15 (270,078)	1.77 (415,685)	
I	280	342	130	16.0	711,360	88,920	0.33 (29,344)	5.37 (477,500)	1.15 (102,258)	1.42 (126,266)	
TOTALS	900 (Approx)	1,100 (Approx)	350 (Approx)	24 (Average)	-	1,169,165	0.70% (823,340)	6.86% (8,031,079)	1.03%	1.59 (1,858,219)	0.03 (Approx)

NUMÉRIQUE

PAGE(S) DE DIMENSION HORS STANDARD NUMÉRISÉE ET POSITIONNÉE À LA SUITE DES PRÉSENTES PAGES STANDARDS.

This work shows the following results:

Tonnage 1,169,165

Metal	Grade	Gross Value ($)
Copper	0.70%	@ 0.30/lb. = 4.20
Zinc	6.86%	@ 0.115/lb. = 15.78
Lead	1.03%	@ 0.10/lb. = 2.06
Silver	1.59 oz	@ 1.07/oz = 1.70
Gold	0.03 oz	@ 37.00/oz = 1.11
	Total Gross Value per Ton - - - -	24.85

The mineralized horizon has been traced for 800 feet along strike with about 350 feet calculated in the ore shoot reserves. The strike of the sulphide body is about 333° (astronomic). The dip is about 35° east. The true thickness is about 24 feet. Drilling has probed the sulphide zone to a vertical depth of about 600 feet or to a point about 1,100 feet down dip from the surface showing.

The sulphide deposit is a massive pyrite body with visible sphalerite, chalcopyrite, galena and minor pyrrhotite-magnetite. It is probably a replacement type deposit occurring within the sedimentary rocks near a volcanic contact.

The sulphide body is open down dip but appears to have been delimited along strike. However, other and possibly larger deposits could occur at other places along the favourable sedimentary zone such as at P.L. 160 S.

WORK PERFORMED

Exploration work was started on the sulphide body in July 1961

and continued intermittently until June 1962. The details of this work programme are as follows:

Type of Work	Amount	Date
Trenching	13 Trenches Total Length 500' Average Width 2' Average Depth 3' Rock Volume 2500 cu.ft.	July-August, 1961
Base Line Cutting and Chaining (Transit Line)	4.5 miles	August, 1961
Picket Line Cutting and Chaining	About 70 miles	August, 1961 February-March, 1962
Magnetometer Survey	About 70 miles	March-April, 1962
Magniphase E.M. Survey	About 34 miles	March-April, 1962
Stadia Levelling (4+00N-54+00S on Base Line and Sulphide Zone)	About 2 miles	August, 1961 April, 1962
Diamond Drilling	11,028 feet - total including Holes 1 to 30 (5,548 feet - Holes 1 to 14 drilled on Sulphide Zone)	March-June, 1962

CONCLUSIONS AND RECOMMENDATIONS

About 1,170,000 tons of copper-zinc-silver ore have been outlined on the Project 387 property. This massive sulphide deposit has been tested to a vertical depth of 600 feet and is still open at depth. A gravity survey should be run over the sulphide body. If a positive response is obtained, then a blanket survey of the anomalous zones on the entire property should be performed and all targets

outlined should be diamond drilled.

Soil samples should be taken and analyzed for heavy metals over selected localities of the property such as the environs of the sulphide zone and near flexures in the regional strike such as P.L. 160 S. This work may prove useful in more adequately evaluating hidden geophysical anomalies on the south portion of the property and on the adjoining Project 400 claims.

Additional diamond drilling may be warranted following the completion of this proposed gravimetric-geochemical programme. The proposed programme should also be used in selecting those claims which should be abandoned in 1963.

ESTIMATED COST

The recommended gravimetric and geochemical work is of a test nature and hence it is difficult to estimate mileage involved in the surveys. However, three men for three weeks should be able to carry out the proposed work. The cost of this test work should not exceed $5,000.00.

Respectfully submitted,

A. B. Baldwin
Field Geologist

Toronto, Ontario
December 1962

PROPERTY UNGAVA AREA - Project 387 PAGE 1

LOCATION P.L. 5100S at 600E BEARING 245° HOLE NO. 387-1

LOGGED BY A.B.Baldwin ELEVATION 960.4 DIP 51° FINAL DEPTH 403'

STARTED March 16, 1962 TESTS (CORRECTED)

FINISHED March 20, 1962 200' - 48°

CASING 28' 400' - 46°

CORE SIZE AXT

FROM	TO	DESCRIPTION
0.0	28.0	CASING
28.0	57.0	PHYLLITE, grey to green, finely banded at 80° to the core, scattered quartzite phases; scattered quartz-carbonate veins; trace of pyrrhotite.
57.0	105.5	GRAPHITE ZONE, black, very graphitic, contorted, with 6% pyrite-pyrrhotite.
105.5	145.5	SULPHIDE ZONE - 80% sulphides - mainly pyrite. 105.5 - 123.0 - Est. 2% Cu, 10% Zn. 123.0 - 135.0 - Est. 0.5% Cu, 5% Zn. 135.0 - 145.5 - Est. 1% Cu, 8% Zn.
145.5	157.0	GRAPHITE ZONE - grades to a carbonaceous and quartz-rich phyllite; 10% pyrite.
157.0	196.0	QUARTZITE - light grey, banding at 45° to the core; banding varies from uniform to contorted. 157 - 170 - 5% pyrite-pyrrhotite. 170- 174 - 50% pyrrhotite with a carbonaceous phase. 174 - 179 - 4% pyrite-pyrrhotite in a quartzite breccia. 179 - 188 - Very light sulphides - banding at about 65° to the core. 188 - 194 - 50% sulphides - mainly pyrite and pyrrhotite with minor sphalerite; well banded at 70° to the core.
196.0	229.0	PHYLLITE - green to grey, banded at 70° to the core; scattered quartz-calcite veins; minor pyrite-pyrrhotite, scattered carbonaceous phases; locally chloritic.
229.0	274.0	ANDESITE - speckled green, sheared at about 70° to the core; scattered quartz-calcite veins; scattered phyllite phases. 260 - 264 - Moderate disseminated magnetite.
274.0	319.0	PHYLLITE - grey to dark grey to greenish, very contorted, scattered quartz veins; minor pyrite-pyrrhotite; locally carbonaceous or chloritic; scattered quartzite phases.

HOLE NO. 387-1 Page 1

8608

PROPERTY UNGAVA AREA - Project 387 PAGE 2

LOCATION _____ BEARING _____ HOLE NO. 387-1

LOGGED BY _____ ELEVATION _____ DIP _____ FINAL DEPTH 403'

STARTED _____ TESTS (CORRECTED)

FINISHED _____

CASING _____

CORE SIZE _____

FROM	TO	DESCRIPTION
319.0	403.0	GRAPHITE ZONE - black, scattered quartz veins, banding at 70° to the core; with 3% pyrite and pyrrhotite.
	403.0	END OF HOLE

HOLE NO. 387-1

Page 2

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SAMPLE RECORD SHEET

PROPERTY- UNGAVA AREA - Project 387

387-1 -HOLE NO
1 -PAGE

SAMPLE NO.	FROM	TO	LENGTH	ASSAYS					DESCRIPTIONS
				% Cu	% Zn	% Pb	Oz.Ag	Oz.Au	
387-1-1	105	110	5.0'	0.37	9.40	0.87	1.17	0.04	
387-1-2	110	115	5.0'	0.76	11.29	1.28	1.88	0.01	
387-1-3	115	120	5.0'	1.05	10.23	1.60	2.64	0.005	
387-1-4	120	125	5.0'	0.91	5.44	0.99	1.34	0.01	
387-1-5	125	130	5.0'	0.90	2.87	0.61	1.00	0.005	
387-1-6	130	135	5.0'	0.42	4.81	0.81	1.40	0.01	
387-1-7	135	140	5.0'	0.64	11.28	1.46	2.61	0.03	
AVERAGE	105	140	35.0'	0.72	7.92	1.09	1.72	0.0157	
~~387-1-8~~	~~140~~	~~145.5~~	~~5.5'~~	~~0.69~~	~~4.28~~	~~0.60~~	~~1.34~~	~~0.02~~	
~~387-1-9~~									
~~387-1-9~~	~~188~~	~~194~~	~~6.0'~~	~~0.13~~	~~1.04~~	~~0.18~~	~~0.13~~	~~Tr.~~	

Townshend & Kent Form No. 8609

387-1 Page 1

PROPERTY UNGAVA AREA - Project 387 PAGE 1

LOCATION P.L. 5200S at 650E BEARING 245° HOLE NO. 387-2

LOGGED BY A.B.Baldwin ELEVATION 959.9 DIP 49° FINAL DEPTH 334'

STARTED March 17, 1962 TESTS (CORRECTED)

FINISHED March 20, 1962 200' - 47°
320' - 46°

CASING 22'

CORE SIZE AXT

FROM	TO	DESCRIPTION
0.0	22.0	CASING
22.0	74.0	PHYLLITE, grey to green, finely banded at 80° to the core; scattered quartzite phases; scattered quart-carbonate veins; trace of pyrrhotite.
74.0	113.5	GRAPHITE ZONE, contorted; about 6% pyrite-pyrrhotite; with average banding at about 80° to the core.
113.5	137.0	SULPHIDE ZONE - over 80% sulphides - mainly pyrite; about 2% Cu and 10% Zn.
137.0	143.0	GRAPHITE ZONE; with much quartz vein material and about 5% pyrite - pyrrhotite and minor chalcopyrite.
143.0	151.0	SULPHIDE ZONE - as above.
151.0	169.0	GRAPHITE ZONE - with more quartzite phases than before; less contorted and less graphitic; less than 5% pyrite-pyrrhotite.
169.0	199.0	QUARTZITE - light grey, 10% pyrite-pyrrhotite; banding at about 70° to the core; locally brecciated and quartz-veined; with greenish phyllite phases. 174-184 - 15% pyrite-pyrrhotite-sphalerite-chalcopyrite.
199.0	225.0	PHYLLITE - green to grey; banded at 70° to the core; scattered quartz-calcite veins; minor pyrite-pyrrhotite; scattered carbonaceous phases; locally chloritic.
225.0	287.0	ANDESITE - speckled green; sheared at about 70° to the core; scattered quartz-calcite veins; scattered phyllite phases.
287.0	323.0	PHYLLITE - grey to dark grey to greenish; very contorted, scattered quartz veins; minor pyrite-pyrrhotite; locally carbonaceous or chloritic; scattered quartzite phases.
323.0	334.0	GRAPHITE ZONE - black, scattered quartz veins; with 3% pyrite and pyrrhotite.
	334.0	END OF HOLE

08

SAMPLE RECORD SHEET

PROPERTY- PROJECT 387 - UNGAVA AREA

387-2 -HOLE NO.
1 -PAGE

SAMPLE NO.	FROM	TO	LENGTH	ASSAYS					DESCRIPTIONS					
				% Cu	% Zn	% Pb	Oz.Ag	Oz.Au	% Ni	Cu.Ft.	Zn.Ft.	Pb.Ft.	Ag.Ft.	AuFt.
387-2-1	113.5	121.0	7.5'	0.49	6.85	1.18	1.56	0.10		3.67	51.35	8.85	11.70	0.75
387-2-2	121.0	126.0	5.0'	1.30	5.75	0.76	1.33	0.02		6.50	28.75	3.80	6.65	0.10
387-2-3	126.0	131.0	5.0'	1.74	9.30	1.28	2.00	0.02		8.70	46.50	6.40	10.00	0.10
387-2-4	131.0	137.0	6.0'	1.37	7.32	0.94	1.35	0.02		8.22	43.92	5.64	8.10	0.12
AVERAGE	113.5	137.0	23.5'	1.11	7.24	1.05	1.51	0.045		27.09	170.52	24.69	36.45	1.07
387-2-5	143.0	151.0	8.0'	0.81	7.94	1.15	1.74	0.02		6.48	63.50	9.20	13.92	0.16
AVERAGE	113.5	151.0	37.5'	0.89	6.24	0.90	1.34	0.033		33.57	234.02	33.89	50.37	1.23
387-2-6	174.0	184.0	10.0'	0.15	0.37	0.17	0.11	0.005	Tr.					

Townshend & Kent Form No. 8609

387-2 Page 1

PROPERTY UNGAVA AREA - Project 387 PAGE 1

LOCATION P.L. 5000S at 600E BEARING 245° HOLE NO. 387-3

LOGGED BY A. B. Baldwin ELEVATION 961.5 DIP 49° FINAL DEPTH 230'

STARTED March 21, 1962 TESTS (CORRECTED)

FINISHED March 23, 1962 200' - 47°

CASING 22'

CORE SIZE AXT

FROM	TO	DESCRIPTION
0.0	22.0	CASING
22.0	27.0	PHYLLITE - grey to green; well banded with quartzite beds at 90° to the core; scattered quartz veins.
27.0	37.0	ANDESITE - speckled green, altered calcitic.
37.0	57.0	QUARTZITE AND PHYLLITE, grey - intimately bedded at about 80° to the core; numerous quartz stringers; with minor pyrrhotite-pyrite stringers.
57.0	75.0	GRAPHITE ZONE - very contorted; with 8% pyrrhotite, pyrite and traces of chalcopyrite.
75.0	77.5	SULPHIDE ZONE - with 70% pyrite and estimated 3% Zn and very low copper.
77.5	83.0	GRAPHITE ZONE - with 20% mineralized quartzite material with heavy pyrite and low sphalerite.
83.0	104.0	SULPHIDE ZONE - with 40% pyrite and pyrrhotite with an estimated 1% Cu and 3% Zn - banding at 80° to the core - the rock is probably a mineralized and sericitized quartzite.
104.0	110.0	104.0 - 110.0 - Graphite zone - with 8% pyrrhotite and pyrite and traces of chalcopyrite.
110.0	127.0	QUARTZITE - light grey; well banded at 70° to the core; with 10% pyrite and minor pyrrhotite and sphalerite and traces of chalcopyrite - Est. 1-2% Zn. 119-125 - Brecciated and veined with pyrite and pyrrhotite.
127.0	148.0	QUARTZITE - light grey; with phyllite interbeds; light disseminated pyrrhotite and pyrite.
148.0	154.0	PHYLLITE, as above
154.0	174.0	ANDESITE, as above
174.0	180.0	QUARTZITE, as above, with 5% pyrrhotite-pyrite and traces of sphalerite-chalcopyrite.

HOLE NO. 387-3 Page 1

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PROPERTY UNGAVA AREA - Project 387 PAGE 2

LOCATION _____ BEARING _____ HOLE NO. 387-3

LOGGED BY _____ ELEVATION _____ DIP _____ FINAL DEPTH 230'

STARTED _____ TESTS (CORRECTED)

FINISHED _____

CASING _____

CORE SIZE _____

FROM	TO	DESCRIPTION
180.0	230.0	ANDESITE - speckled green; with chloritic phyllite phases.
	230.0	END OF HOLE

HOLE NO. 387-3 Page 2

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SAMPLE RECORD SHEET

PROPERTY- UNGAVA AREA - Project 387

387-3 -HOLE NO.
1 -PAGE

SAMPLE NO.	FROM	TO	LENGTH	ASSAYS					DESCRIPTIONS
				% Cu	% Zn	% Pb	Oz.Ag	Oz.Au	Ni
387-3-1	83.0	95.0	12.0'	1.05	2.51	0.47	1.24	0.01	Tr.
387-3-2	95.0	104.0	9.0'	0.83	Tr.	0.16	0.96	0.01	

Townshend & Kent Form No. 8609

PROPERTY UNCAVA AREA - Project 387 PAGE 1

LOCATION P.L. 5300S at 650E BEARING 245° HOLE NO. 387-4

LOGGED BY A. B. Baldwin ELEVATION 962.0 DIP 51° FINAL DEPTH 347'

STARTED March 21, 1962 TESTS (CORRECTED)

FINISHED March 24, 1962 200' - 50°

CASING 10' 340' - 45°

CORE SIZE AXT

FROM	TO	DESCRIPTION
0.0	10.0	CASING
10.0	25.0	PHYLLITE - grey to green; scattered quartz-calcite stringers; scattered quartzite phases; banding at 80° to the core.
25.0	36.0	ANDESITE - speckled greyish green; calcitic; scattered quartz-calcite veins; shearing at 80° to the core.
36.0	59.0	PHYLLITE - grey to green; intimately interbedded with grey quartzite at about 80° to the core; scattered quartz-calcite veins; locally carbonaceous or chloritic.
59.0	62.0	ANDESITE - as above.
62.0	83.0	PHYLLITE - as above; minor pyrrhotite-pyrite; with excellent sedimentary banding at 80° to the core.
83.0	112.0	GRAPHITE ZONE - with 8% pyrrhotite-pyrite.
112.0	141.0	SULPHIDE-GRAPHITE ZONE; with 30% pyrite and traces of sphalerite and chalcopyrite. The rock appears to have been veined with quartz and calcite material and then 'soaked" with pyrite. 136-141 - Massive sulphides; about 80% pyrite; estimated 5% Zn and 0.5% Cu.
141.0	148.0	GRAPHITE ZONE - about 5% pyrite-pyrrhotite; with banding at 80° to the core.
148.0	159.0	SULPHIDE ZONE - estimated 8% Zn and 2% Cu.
159.0	165.0	INTERBEDDED at 90° to the core GRAPHITE AND QUARTZITE - 10% pyrrhotite-pyrite with minor sphalerite and chalcopyrite.
165.0	195.0	QUARTZITE - light grey; with 12% disseminated pyrrhotite and traces of sphalerite and chalcopyrite; moderately contorted; average banding at about 60° to the core.

HOLE NO. 387-4 Page 1

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PROPERTY UNGAVA AREA - Project 387 PAGE 2

LOCATION _____ BEARING _____ HOLE NO. 387-4

LOGGED BY _____ ELEVATION _____ DIP _____ FINAL DEPTH 347'

STARTED _____ TESTS (CORRECTED)

FINISHED _____

CASING _____

CORE SIZE _____

FROM	TO	DESCRIPTION
195.0	234.0	PHYLLITE - grey to green; scattered quartz veins; with minor pyrrhotite and pyrite; chloritic; scattered phases of quartzite and andesite.
234.0	256.0	ANDESITE - speckled green; altered; calcitic; scattered quartz veins; shearing at 65° to the core.
256.0	268.0	GRAPHITE ZONE - with banding at 60° to the core.
268.0	347.0	QUARTZITE - light yellowish green; very contorted; sericitic; veined with much quartz material; minor pyrite and pyrrhotite. 301 - 304 - Dark grey carbonaceous phase. 333 - 336 - Lost core - sericitic phase parallel to the core.
	347.0	END OF HOLE

HOLE NO. 387-4 Page 2

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SAMPLE RECORD SHEET

PROPERTY- UNGAVA AREA - Project 387

387-4 HOLE NO.
1 -PAGE

SAMPLE NO.	FROM	TO	LENGTH	ASSAYS					DESCRIPTIONS
				% Cu	% Zn	% Pb	Oz.Ag	Oz.Au	
387-4-1	121.0	131.0	10.0	0.07	Tr.	-	0.34	0.05	
387-4-2	131.0	141.0	10.0	0.14	2.83	-	1.45	0.05	
387-4-3	148.0	159.0	11.0	1.15	4.07	0.54	0.99	0.02	

Townshend & Kent Form No. 8609

387-4 Page 1

PROPERTY UNGAVA AREA - PROJECT 387 PAGE 1

LOCATION P.L. 5100S at 800E BEARING 245° HOLE NO. 387-5

LOGGED BY A.B.Baldwin ELEVATION 957.5 DIP 60° FINAL DEPTH 439'

STARTED March 24, 1962 TESTS (CORRECTED)

FINISHED March 27, 1962 200' - 55°
400' - 54°

CASING 26'

CORE SIZE

FROM	TO	DESCRIPTION
0.0	26.0	CASING
26.0	55.0	PHYLLITE - dark grey, carbonaceous, well banded at 70° to the core, scattered quartz veins. Lost core - 33-35; 36-38; 50-53.
55.0	96.5	GABBRO - speckled green; medium crystalline; scattered quartz-calcite veins; altered.
96.5	158.0	PHYLLITE, green to greenish grey; speckled with calcite in places (Andesite?); banding at 75° to 80° to the core; scattered quartz-calcite veins; with minor quartzite phases (the entire section resembles that in D.D.H. 387-6 from 14-43). 150-158 - With numerous thin creamy chert bands.
158.0	191.0	GRAPHITE ZONE - with 10% pyrrhotite-pyrite and light chalco-pyrite mainly along partings.
191.0	199.5	QUARTZITE - light grey; well banded at 80¾ to the core; scattered quartz veins; 5% pyrite-pyrrhotite and light sphalerite.
199.5	203.5	GRAPHITE ZONE - with 10% pyrrhotite-pyrite.
203.5	238.5	QUARTZITE - light grey; well banded at 70° to the core; 20% pyrite with 1% combined sphalerite-chalcopyrite in patches with the pyrite.
238.5	242.0	GRAPHITE ZONE - with 10% pyrrhotite-pyrite.
242.0	272.0	QUARTZITE - light grey; with 10% pyrite-pyrrhotite; well banded at 70° to the core. 259-267 - 25% pyrite-pyrrhotite-sphalerite-magnetite-chalco-pyrite. Estimated 0.5% Cu, 3% Zn
272.0	300.0	PHYLLITE - green, chloritic; scattered quartzite bands; with light disseminated pyrrhotite-pyrite, banding at 70°.

HOLE NO. 3 Page

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PROPERTY UNGAVA AREA - Project 387 PAGE 2

LOCATION _____ BEARING _____ HOLE NO. 387-5

LOGGED BY _____ ELEVATION _____ DIP _____ FINAL DEPTH 439'

STARTED _____ TESTS (CORRECTED)

FINISHED _____

CASING _____

CORE SIZE _____

FROM	TO	DESCRIPTION
300.0	357.0	ANDESITE - speckled green; altered; scattered calcite-quartz veins. 331-335 - Light disseminated magnetite with associated pyrrhotite.
357.0	365.0	PHYLLITE - green, chloritic; scattered quartz veins; minor pyrrhotite.
365.0	373.0	PHYLLITE - dark grey; carbonaceous; scattered quartz veins and quartzite phases.
373.0	439.0	INTIMATED BANDED WITH MODERATE CONTORTIONS; light grey QUARTZITE AND MEDIUM GREY TO GREEN PHYLLITE; scattered quartz veins.
	439.0	END OF HOLE

HOLE NO. 387-5 Page 2

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PROPERTY UNGAVA AREA - Project 387 PAGE 1

LOCATION P.L. 5400S at 650E BEARING 245° HOLE NO. 387-6

LOGGED BY A.B.Baldwin ELEVATION 960.9 DIP 51° FINAL DEPTH 260'

STARTED March 25, 1962 TESTS (CORRECTED)

FINISHED March 27, 1962 200' - 50°

CASING 14'

CORE SIZE AXT

FROM	TO	DESCRIPTION
0.0	14.0	CASING
14.0	43.0	PHYLLITE - dark green; with scattered small pinkish garnets; scattered quartz-calcite veins; shearing at 75° to the core.
43.0	65.0	ANDESITE - speckled greyish green; calcitic; scattered quartz-calcite veins.
65.0	110.0	Intimately bedded at about 70° to the core QUARTZITE, PHYLLITE, GREYWACKE, CHERT and CHLORITIC ARGILLITE or GREENSTONE; light grey to dark green; scattered quartz veins with minor associated pyrite-pyrrhotite. 98.0 - 110.0 - 8% pyrrhotite-pyrite as massive bands and associated with much quartz vein material.
110.0	157.0	GRAPHITE ZONE - contorted; with 10% pyrrhotite-pyrite and minor chalcopyrite.
157.0	195.0	QUARTZITE - light grey; fine grained; about 10% pyrrhotite-pyrite in well defined bands at 75° to the core; trace of chalcopyrite; moderately contorted; locally sericitic.
195.0	230.0	QUARTZITE - light grey, fine grained; locally cherty; scattered veins and blebs of quartz; local brecciated phases; minor blebs of pyrrhotite-pyrite. 220 - 230 - 7% pyrrhotite-pyrite.
230.0	233.0	CHLORITE SCHIST OR PHYLLITE, green; chloritic; scattered quartz veins; shearing at 80° to the core.
233.0	260.0	ANDESITE - speckled green; altered; shearing at 50° to the core.
	260.0	END OF HOLE

HOLE NO. 387-6 Page 1

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PROPERTY UNGAVA AREA - Project 387 PAGE 1

LOCATION P.L. 5200S at 900E BEARING 245° HOLE NO. 387-7

LOGGED BY A.B.Baldwin ELEVATION 955.8 DIP 60° FINAL DEPTH 408'

STARTED March 28, 1962 TESTS (CORRECTED)

FINISHED March 30, 1962 200' - 57°
400' - 53°

CASING 36'

CORE SIZE AXT

FROM	TO	DESCRIPTION
0.0	36.0	CASING
36.0	46.0	ANDESITE - speckled green; finely crystalline; scattered quartz-calcite veins.
46.0	104.0	PHYLLITE - dark grey; locally black; carbonaceous to graphitic; scattered quartz-calcite veins; minor pyrrhotite seams; numerous thin beds of light grey quartzite at 70° to 80° to the core.
104.0	154.0	ANDESITE - speckled greyish green; medium crystalline; scattered quartz-calcite veins; slightly sheared at 80° to the core; numerous indistinct lenses of dark green hornblende or chlorite.
154.0	185.0	ARGILLITE - dark green to dark brown; massive; soft; scattered quartz-calcite veins; banded at 80° to the core.
185.0	193.0	ANDESITE - speckled green; finely crystalline scattered quartz-calcite veins.
193.0	231.0	Intimately bedded at 80° to the core, green PHYLLITE, light grey QUARTZITE, and light grey fine grained greywacke; scattered quartz veins; minor pyrite-pyrrhotite.
231.0	247.0	GRAPHITE ZONE - with 10% pyrrhotite-pyrite and a trace of chalcopyrite.
247.0	279.0	SULPHIDE ZONE - greater than 90% pyrite-rich sulphides. Est. 1% Cu, 8% Zn.
279.0	281.0	GRAPHITE ZONE.
281.0	302.0	QUARTZITE - light grey; with green phyllite phases; banding at 80° to the core; scattered quartz veins; minor sulphides.
302.0	306.0	GRAPHITE ZONE - with 10% pyrrhotite-pyrite.
306.0	334.0	QUARTZITE - as above. 311 - 323 - 10% pyrrhotite-pyrite-magnetite and minor chalcopyrite-sphalerite at 80° to the core. 321 - 323 - Light galena with quartz veins. 323 - 334 - Quartzite Breccia.

HOLE NO. 387-7 Page 1

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PROPERTY PROJECT 387 - UNGAVA AREA PAGE 2

LOCATION _____ BEARING _____ HOLE NO. 387-7

LOGGED BY _____ ELEVATION _____ DIP _____ FINAL DEPTH 408'

STARTED _____ TESTS (CORRECTED)

FINISHED _____

CASING _____

CORE SIZE _____

FROM	TO	DESCRIPTION
334.0	373.0	PHYLLITE - greyish green; chloritic; numerous thin light grey quartzite bands; contorted; scattered quartz veins; with minor sulphide mineralization.
373.0	406.0	ANDESITE - speckled green, altered, scattered quartz-calcite veins. 388-398 - Coarsely crystalline - resembles a gabbro.
406.0	408.0	PHYLLITE - green, chloritic; with banding at 80° to the core.
	408.0	END OF HOLE

HOLE NO. 387-7 Page 2

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SAMPLE RECORD SHEET

PROPERTY– UNGAVA AREA – Project 387

387-7 –HOLE NO.
1 –PAGE

SAMPLE NO.	FROM	TO	LENGTH	ASSAYS					DESCRIPTIONS				
				% Cu	% Zn	% Pb	Oz.Ag	Oz.Au	Cu Ft.	Zn Ft.	Pb Ft	Ag Ft	AuFt.
387-7-1	247.0	257.0	10.0	0.69	7.20	1.26	2.00	0.01	6.9	72.0	12.6	20.0	0.10
387-7-2	257.0	267.0	10.0'	1.05	8.25	1.10	1.67	0.02	10.5	82.5	11.0	16.7	0.20
387-7-3	267.0	279.0	12.0'	0.64	6.57	1.23	1.60	0.02	7.68	78.84	14.76	19.2	0.24
AVERAGE	247.0	279.0	32.0'	0.78	7.29	1.20	1.75	0.017	25.08	233.34	38.36	55.9	0.54

Townshend & Kent Form No. 8609

PROPERTY UNGAVA AREA - Project 387 PAGE 1

LOCATION P.L. 5300S at 900E BEARING 245° HOLE NO. 387-8

LOGGED BY A.B.Baldwin ELEVATION 955.4 DIP 60° FINAL DEPTH 403'

STARTED March 28, 1962 TESTS (CORRECTED)

FINISHED March 31, 1962 200' - 58°
403' - 56°

CASING 30'

CORE SIZE AXT

FROM	TO	DESCRIPTION
0.0	30.0	CASING
30.0	42.0	ANDESITE - speckled green; finely crystalline; scattered quartz-calcite veins.
42.0	92.0	PHYLLITE - dark grey; locally black; carbonaceous to graphitic; scattered quartz-calcite veins; minor pyrrhotite seams; numerous thin beds of light grey quartzite at 70° to 80° to the core.
92.0	149.0	ANDESITE - speckled greyish green; medium crystalline; scattered quartz-calcite veins; slightly sheared at 80° to the core; numerous indistinct lenses of dark green hornblende or chlorite.
149.0	184.0	ARGILLITE - dark green to dark brown; massive; soft; scattered quartz-calcite veins; banded at 80° to the core. 172-172; 179-180; - Lost Core.
184.0	195.0	ANDESITE - speckled green; finely crystalline; scattered quartz-calcite veins.
195.0	221.0	Intimatedly bedded at 80° to the core, green phyllite, light grey quartzite, and light grey fine grained greywacke; scattered quartz veins; minor pyrite-pyrrhotite.
221.0	254.5	GRAPHITE ZONE - with 10% pyrrhotite-pyrite and trace of chalcopyrite.
254.5	280.0	SULPHIDE ZONE - mainly massive pyrite. 254.5 - 264.5 - Est. 0.5% Cu, 3% Zn. 264.5 - 270.0 - Est. 1% Cu, 8% Zn.
280.0	285.0	GRAPHITE ZONE - with quartzite phases; 10% pyrrhotite-pyrite-sphalerite; scattered quartz veins.
285.0	293.5	SULPHIDE ZONE - Est. 2% Cu, 10% Zn.
293.5	300.0	GRAPHITE ZONE - 6% pyrrhotite-pyrite-chalcopyrite; scattered quartzite phases.

HOLE NO. 387-8 Page 1

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PROPERTY UNGAVA AREA - Project 387 PAGE 387-8

LOCATION _____ BEARING _____ HOLE NO. 2

LOGGED BY _____ ELEVATION _____ DIP _____ FINAL DEPTH 403'

STARTED _____ TESTS (CORRECTED)

FINISHED _____

CASING _____

CORE SIZE _____

FROM	TO	DESCRIPTION
300.0	346.0	QUARTZITE - light greyp with argillite phases; 5% pyrite-pyrrhotite; scattered quartz veins, banding at 70° to the core. 314-322 - 50% pyrrhotite-pyrite; scattered quartz veins; banding at 80° to the core; with minor sphalerite. 330-346 - Quartzite breccia with 8% pyrrhotite.
346.0	376.0	PHYLLITE - greyish green; chloritic; numerous thin light grey quartzite bands; contorted; scattered quartz veins; minor sulphide mineralization. Lost core - 356-358; 368-369; 373-374.
376.0	403.0	ANDESITE - speckled green, altered, scattered quartz-calcite veins. 392-394 - Disseminated magnetite.
	403.0	END OF HOLE

HOLE NO. 387-8 Page 2

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SAMPLE RECORD SHEET

387-8
1-HOLE NO.
-PAGE

PROPERTY- UNGAVA AREA - Project 387

SAMPLE NO.	FROM	TO	LENGTH	ASSAYS					DESCRIPTIONS				
				% Cu	% Zn	% Pb	Oz.Ag	Oz.Au	Cu Ft.	Zn Ft.	Pb Ft	Ag Ft	Au Ft
387-8-1	254.5	264.5	10.0'	0.37	2.09	-	0.73	0.03	3.70	20.90		7.30	0.30
387-8-2	264.5	269.5	5.0'	0.88	7.51	-	1.23	0.05	4.40	38.55		6.15	0.25
387-8-3	269.5	274.5	5.0'	0.66	11.38	-	2.73	0.04	3.30	56.90		13.65	0.20
387-8-4	274.5	280.0	5.5'	0.89	12.21	-	3.04	0.03	4.89	67.15		16.72	0.16
AVERAGE	254.5	280.0	25.5	0.75	7.20		1.72	0.036	16.29	183.50		43.82	0.91
AVERAGE	264.5	280.0	15.5'	0.81	10.49		2.35	0.04	12.59	162.60		36.52	0.61
387-8-5	285.0	296.0	11.0'	1.10	6.26		1.38	0.02	12.10	68.86		15.18	0.22
AVERAGE	264.5	296.0	31.5	0.78	7.35		1.64	0.026	24.69	231.46		51.70	0.83

Townshend & Kent Form No. 8609

PROPERTY UNGAVA AREA - Project 387 PAGE 1

LOCATION P.L. 5400S at 900 E BEARING 245° HOLE NO. 387-9

LOGGED BY A.B.Baldwin ELEVATION 955.7 DIP 60° FINAL DEPTH 412'

STARTED March 31, 1962 TESTS (CORRECTED)

FINISHED April 2, 1962 200' - 58°
400' - 57°

CASING 16'

CORE SIZE AXT

FROM	TO	DESCRIPTION
0.0	16.0	CASING
16.0	47.0	ANDESITE - speckled green; poorly sheared at 80° to the core; calcitic; scattered quartz-calcite veins. 22-32 - Chlorite schist.
47.0	93.5	PHYLLITE - dark grey to black; carbonaceous to graphitic; scattered quartz-calcite veins; minor pyrrhotite seams; numerous thin beds of light grey quartzite; banding at about 70° to 80° to the core.
93.5	155.0	ANDESITE - speckled greyish green; medium crystalline; scattered quartz-calcite veins; slightly sheared at 80° to the core.
155.0	179.0	ARGILLITE - dark green to dark brown; massive; soft; scattered quartz-calcite veins; banded at 80° to the core.
179.0	208.0	ANDESITE - speckled green; finely crystalline; scattered quartz-calcite veins. 184 - 189 - Numerous small pink garnets.
208.0	243.0	Intimately bedded at 80° to the core, green PHYLLITE, light grey QUARTZITE, and light grey fine grained GREYWACKE; scattered quartz veins; minor pyrite-pyrrhotite.
243.0	251.0	GRAPHITE ZONE - with 10% pyrrhotite-pyrite and trace of chalcopyrite.
251.0	262.0	SULPHIDE ZONE - with 70% sulphides - mostly pyrite. Est. less than 0.5% Cu, 5% Zn.
262.0	272.0	GRAPHITE ZONE - banded at 80° to the core; with 5% pyrite-pyrrhotite and minor chalcopyrite.
272.0	278.0	SULPHIDE ZONE - greather than 90% sulphides - mostly pyrite. Est. 2% Cu, 10% Zn.
278.0	283.0	GRAPHITE ZONE - with quartzite phases; with 3% pyrite-pyrrhotite.

HOLE NO. 387-9 Page 1

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PROPERTY UNGAVA AREA - Project 387 PAGE 2

LOCATION _____ BEARING _____ HOLE NO. 387-9

LOGGED BY _____ ELEVATION _____ DIP _____ FINAL DEPTH 412'

STARTED _____ TESTS (CORRECTED)

FINISHED _____

CASING _____

CORE SIZE _____

FROM	TO	DESCRIPTION
283.0	342.0	QUARTZITE - light grey, well banded with sulphide mineralization at 80° to the core; with 7% pyrite-pyrrhotite and minor chalcopyrite-sphalerite-magnetite. 314-316 - Est. 3% Zn. 316-329 - Minor pyrite-pyrrhotite. 329-336 - 50% pyrrhotite-pyrite. Est. 5% Zn. 336-342 - Quartzite breccia with 3% pyrrhotite-pyrite.
342.0	370.0	PHYLLITE - greyish green; chloritic; numerous thin light grey quartzite bands; contorted; scattered quartz veins; minor sulphide mineralization.
370.0	398.0	ANDESITE - speckled green, altered.
398.0	400.0	PHYLLITE - green; chloritic; with minor pyrrhotite.
400.0	412.0	PHYLLITE - dark grey; carbonaceous; scattered quartz veins; with 2% pyrrhotite.
	412.0	END OF HOLE

HOLE NO. 387-9 Page 2

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PROPERTY- UNGAVA AREA - Project 387

387-9 -HOLE NO.
1 -PAGE

SAMPLE NO.	FROM	TO	LENGTH	ASSAYS					DESCRIPTIONS
				% Cu	% Zn	% Pb	Oz.Ag	Oz.Au	% Ni
387-9-1	243.0	251.0	8.0'	0.10	-	-	0.10	Tr.	Tr.
387-9-2	251.0	262.0	11.0	0.10	1.98	-	0.99	0.01	-
387-9-3	272.0	278.0	6.0'	1.52	9.50	1.02	2.30	0.02	-
387-9-4	329.0	336.0	7.0'	0.15	1.46	-	-	-	Tr.

Townshend & Kent Form No. 8609

387-9 Page 1

PROPERTY UNGAVA AREA - Project 387 PAGE 1

LOCATION P.L. 5300S at 1200E BEARING 245° HOLE NO. 387-10

LOGGED BY A.B.Baldwin ELEVATION --- DIP 50° FINAL DEPTH 570'

STARTED April 3, 1962 TESTS (CORRECTED)

FINISHED April 6, 1962 200' - 58°
400' - 56°
570' - 53°

CASING 10'

CORE SIZE AXT

FROM	TO	DESCRIPTION
0.0	10.0	CASING
10.0	20.0	GRAPHITE ZONE - with 5% pyrrhotite-pyrite as scattered bands and seams.
20.0	23.0	QUARTZITE - light grey; with 5% pyrrhotite-pyrite; banding at 80° to the core.
23.0	43.0	ANDESITE - speckled green; finely crystalline; scattered quartz-calcite veins. Lost Core - 30-31; 33-35.
43.0	47.0	QUARTZITE - light grey; as above.
47.0	71.0	GRAPHITE ZONE - with 7% pyrrhotite-pyrite.
71.0	78.0	IRON FORMATION - light grey to cream; from 1 to 2% disseminated magnetite; scattered quartz veins; with finely crystalline grunerite.
78.0	93.5	QUARTZITE - well banded at 75° to the core; with medium and light grey phases; fine grained; scattered quartz veins.
93.5	96.5	GRAPHITE ZONE - with 10% pyrrhotite-pyrite.
96.5	109.5	IRON FORMATION - as above.
109.5	129.0	PHYLLITE - dark green to grey; chloritic to carbonaceous; with light grey quartzite phases; with 1% pyrrhotite.
129.0	148.5	ANDESITE - speckled green, as above.
148.5	175.0	PHYLLITE - green; chloritic; scattered quartz veins; with 1% disseminated pyrrhotite. 159-162 ✱ Lost core.
175.0	223.0	ANDESITE - speckled green; with scattered dark green hornblende or chlorite blotches.

HOLE NO. 387-10 Page 1

8608

PROPERTY UNGAVA AREA - Project 387 PAGE 2

LOCATION _____ BEARING _____ HOLE NO. ~~387-10~~

LOGGED BY _____ ELEVATION _____ DIP _____ FINAL DEPTH 570'

STARTED _____ TESTS (CORRECTED)

FINISHED _____

CASING _____

CORE SIZE _____

FROM	TO	DESCRIPTION
223.0	279.0	PHYLLITE - dark grey; locally black; carbonaceous to graphitic; scattered quartz calcite veins; with minor pyrrhotite seams; numerous to thin beds of light grey quartzite at 70° to 80° to the core. Lost core - 238-239; 260-262.
279.0	330.0	ANDESITE - speckled greyish green; medium crystalline; scattered quartz-calcite veins; slightly sheared at 80° to the core; numerous indistinct lenses of dark green hornblende or chlorite.
330.0	355.0	ARGILLITE - dark green to dark brown; massive; soft; scattered quartz-calcite veins; banded at 80° to the core.
355.0	367.0	ANDESITE - speckled green; finely crystalline; scattered quartz-calcite veins.
367.0	407.0	Intimately interbedded at 80° to the core green PHYLLITE, light grey quartzite, and light grey, fine grained greywacke; scattered quartz veins; with minor pyrite-pyrrhotite. Lost core - 382-385.
407.0	420.0	GRAPHITE ZONE - with 10% pyrrhotite-pyrite.
420.0	451.5	SULPHIDE ZONE - with about 90% sulphides - mainly pyrite. 420.0 - 437.0 - Est. 0.5% Cu, 4.0% Zn. 437.0 - 451.5 - Est. 1% Cu, 10% Zn.
451.5	453.0	GRAPHITE ZONE - with 10% pyrrhotite-pyrite-chalcopyrite.
453.0	464.0	SULPHIDE ZONE - Est. 1% Cu, 8% Zn.
464.0	532.0	QUARTZITE - light grey; well banded at 80° to the core; locally contorted; with 10% pyrrhotite-pyrite and traces of sphalerite-chalcopyrite-magnetite. 472-479 - Carbonaceous. 464-510 - With 2% magnetite. 515-532 - With green phyllite phases. 523-532 - Brecciated and veined with quartz; with minor magnetite.

HOLE NO. 387-10 Page 2

8608

PROPERTY UNGAVA AREA - Project 387 PAGE 3

LOCATION _____ BEARING _____ HOLE NO. 387-10

LOGGED BY _____ ELEVATION _____ DIP _____ FINAL DEPTH 570'

STARTED _____ TESTS (CORRECTED)

FINISHED _____

CASING _____

CORE SIZE _____

FROM	TO	DESCRIPTION
532.0	558.5	PHYLLITE - green; with quartzite phases; scattered quartzite phases; scattered quartz veins; with minor pyrrhotite-pyrite.
558.5	570.0	ANDESITE - speckled green; altered; scattered quartz-calcite veins.
	570.0	END OF HOLE

HOLE NO. 387-10 Page 3

8608

SAMPLE RECORD SHEET

PROPERTY- UNGAVA AREA - Project 387

387-10 HOLE NO.
1 -PAGE

SAMPLE NO.	FROM	TO	LENGTH	ASSAYS					DESCRIPTIONS				
				% Cu	% Zn	% Pb	Oz.Ag	Oz.Au	Cu x Ft	Zn x Ft.	Pb x Ft.	Ag x Ft.	Au x Ft.
387-10-1	420.0	430.0	10.0'	0.15	4.60	1.07	1.57	0.02	1.50	46.00	10.70	15.70	0.20
387-10-2	430.0	437.0	7.0	0.20	4.07	0.76	1.12	0.03	1.40	28.49	5.32	7.84	0.21
387-10-3	437.0	447.0	10.0'	0.68	10.44	1.31	2.24	0.04	6.80	104.40	13.10	22.40	0.40
387-10-4	447.0	452.5	5.5'	0.71	6.89	1.42	2.05	0.03	3.91	37.90	7.81	11.28	0.17
387-10-5	452.5	464.0	11.5	0.61	7.31	1.18	1.79	0.02	7.02	84.07	13.57	20.59	0.23
AVERAGE			44.0'	0.47	6.84	1.15	1.77	0.028	20.63	300.86	50.50	77.81	1.21

Townshend & Kent Form No. 8609

PROPERTY UNGAVA AREA - Project 387 PAGE 1

LOCATION P.L. 54008 at 1400E BEARING 245° HOLE NO. 387-11

LOGGED BY A.B.Baldwin ELEVATION 949.5 DIP 60° FINAL DEPTH 629'

STARTED April 6, 1962 TESTS (CORRECTED)

FINISHED April 10, 1962 200' - 59°
395' - 54°
600' - 54°

CASING 18'

CORE SIZE AXT

FROM	TO	DESCRIPTION
0.0	18.0	CASING
18.0	54.0	ANDESITE - speckled green, altered, scattered quartz-calcite veins.
54.0	63.5	PHYLLITE - greyish green, well banded with light grey quartzite at 70° to the core; with scattered quartz veins; minor pyrrhotite-pyrite.
63.5	78.5	QUARTZITE, white, pure, with 10% pyrrhotite; scattered phyllite phases, with trace of chalcopyrite.
78.5	88.0	GRAPHITE ZONE - with 7% pyrrhotite-pyrite.
88.0	90.0	QUARTZITE - light grey, with 2% pyrrhotite.
90.0	107.0	ANDESITE - speckled green, altered, with scattered quartz-calcite veins.
107.0	108.0	QUARTZITE - light grey, with 2% pyrrhotite.
108.0	112.0	GRAPHITE ZONE - with 5% pyrrhotite-pyrite.
112.0	114.0	QUARTZITE - light grey; with 2% pyrrhotite.
114.0	138.0	ANDESITE - speckled green, altered, with scattered quartz-calcite veins.
138.0	144.0	GRAPHITE ZONE - with 5% pyrrhotite-pyrite.
144.0	149.0	QUARTZITE - grey, with light pyrrhotite.
149.0	161.0	ANDESITE - light grey, altered, scattered pyrrhotite.
161.0	164.0	QUARTZITE - grey; with light pyrrhotite.
164.0	189.0	GRAPHITE ZONE - with 5% pyrrhotite-pyrite as seams and bands at 75° to the core.

HOLE NO. 387-11 Page 1

8608

PROPERTY UNGAVA AREA - Project 387 PAGE 2

LOCATION _____ BEARING _____ HOLE NO. 387-11

LOGGED BY _____ ELEVATION _____ DIP _____ FINAL DEPTH 629'

STARTED _____ TESTS (CORRECTED)

FINISHED _____

CASING _____

CORE SIZE _____

FROM	TO	DESCRIPTION
189.0	204.0	QUARTZITE - white, pure; with scattered blebs of chlorite material; 1% pyrrhotite.
204.0	237.0	QUARTZITE - light to medium grey; well banded at 80° to the core; scattered quartz veins; minor pyrrhotite; scattered fine grained greywacke phases; locally brecciated.
237.0	246.5	GRAPHITE ZONE - with chlorite phases; 2% pyrrhotite-pyrite; with banding at 75° to the core.
246.5	390.0	ANDESITE - speckled greyish green; scattered green chlorite schist phases; finely to medium crystalline; scattered blebs of green hornblende or chlorite; scattered quartz veins; minor pyrrhotite; shearing at about 60° to the core.
390.0	444.0	PHYLLITE - dark grey, carbonaceous to graphitic; well banded with light grey quartzite at 75° to the core; scattered quartz veins; locally contorted.
444.0	498.0	ANDESITE - speckled green; medium crystalline; with sheared finely crystalline phases at 60° to the core.
498.0	511.0	ARGILLITE - green to dark brown; soft; massive; with scattered crystals of pink garnets.
511.0	541.0	QUARTZITE - slaty grey; with phyllite and greywacke phases; with scattered quartz veins; well banded at 45°-60° to the core.
541.0	563.5	GRAPHITE ZONE - with 10% pyrrhotite-pyrite and traces of chalcopyrite.
563.5	571.0	SULPHIDE ZONE - Est. 0.5% Cu, 4% Zn.
571.0	573.5	GRAPHITE ZONE
573.5	579.0	SULPHIDE ZONE - Est. 1% Cu, 8% Zn.

HOLE NO. 387-11 Page 2

86108

PROPERTY UNGAVA AREA - Project 387 PAGE 3

LOCATION _____ BEARING _____ HOLE NO. 387-11

LOGGED BY _____ ELEVATION _____ DIP _____ FINAL DEPTH 629'

STARTED _____ TESTS (CORRECTED)

FINISHED _____

CASING _____

CORE SIZE _____

FROM	TO	DESCRIPTION
579.0	629.0	QUARTZITE - light grey; well banded at 80° to the core; with 8% pyrite-pyrrhotite as disseminations and as scattered bands; with minor magnetite, sphalerite and chalcopyrite.
	629.0	END OF HOLE

HOLE NO. 387-11 Page 3

8608

SAMPLE RECORD SHEET

PROPERTY- UNGAVA AREA - Project 387

387-11 -HOLE NO.
2 -PAGE

SAMPLE NO.	FROM	TO	LENGTH	ASSAYS					DESCRIPTIONS
				% Cu	% Zn	% Pb	Oz. Ag	Oz. Au	
387-11-1	563.5	571.0	7.5'	0.25	5.43	1.71	1.87	.03	
			2.5						
387-11-2	573.5	579.0	5.5'	0.60	7.72	0.87	1.40	.02	

Townshend & Kent Form No. 8609

387-11

PROPERTY UNGAVA AREA - Project 387 PAGE 1

LOCATION P.I. 52+00S - 14+00E BEARING 245° HOLE NO. 387-12

LOGGED BY L.B.Halladay ELEVATION DIP -60° FINAL DEPTH 654'

STARTED April 11, 1962 TESTS (CORRECTED)

FINISHED April 14, 1962 200' - 52°
400' - 49°
654' - 48°

CASING 30.0'

CORE SIZE AXT

FROM	TO	DESCRIPTION
0.0	30.0	OVERBURDEN
30.0	37.5	ARGILLITE - fine grained, green, slightly chloritic. Bedding at 75° to core axis.
37.5	62.0	ANDESITE - fine grained, green, chloritic, slightly schistose with occasional quartz stringers.
62.0	81.0	PHYLLITE-QUARTZITE-GREYWACKE - interbedded at 65° to core axis.
81.0	127.0	ANDESITE - fine grained, green, massive, some interbanded quartzite (?). Numerous quartz stringers. 91 - 97 - 10% pyrite and pyrrhotite with some magnetite.
127.0	129.6	QUARTZITE - fine grained, light grey, with minor interbedded phyllite - 5% pyrite and pyrrhotite.
129.6	147.0	PHYLLITE - fine grained, black, carbonaceous, well banded at 80° to core axis with thin bands of pyrite and pyrrhotite. A few specks chalcopyrite.
147.0	187.8	ANDESITE - fine grained, green, slightly schistose and chloritic with occasional carbonate stringers.
187.8	227.2	PHYLLITE - similar to 129-147.
227.2	239.0	ANDESITE - similar to 81-127. Minor pyrite and pyrrhotite.
239.0	278.5	Interbedded with GREY QUARTZITE and DARK GREY ARGILLITE. Well banded at 80-90° to core axis.
278.5	288.8	PHYLLITE - fine grained, dark green with minor interbedded quartzite. 278.5 - 279.5 - Graphitic with minor pyrite and pyrrhotite.
288.8	310.5	ANDESITE - similar to 147-187.
310.5	348.0	PHYLLITE - similar to 278-288.

HOLE NO. 387-12 Page 1

8608

PROPERTY UNGAVA AREA - Project 387 PAGE 2

LOCATION _____ BEARING _____ HOLE NO. 387-12

LOGGED BY _____ ELEVATION _____ DIP _____ FINAL DEPTH 654'

STARTED _____ TESTS (CORRECTED)

FINISHED _____

CASING _____

CORE SIZE _____

FROM	TO	DESCRIPTION
348.0	373.5	ANDESITE - fine grained, green, massive.
373.5	433.3	Interbedded green to black PHYLLITE and light grey QUARTZITE. Contorted near upper contact. Numerous quartz stringers with minor pyrite and pyrrhotite. Well banded at 70-90° to core, axis.
433.3	458.0	ANDESITE - similar to 348-373.
458.0	485.0	PHYLLITE (?) - Somewhat similar to 278-288.
485.0	498.0	ANDESITE - similar to 348-373 with considerable carbonate as small flakes.
498.0	524.0	PHYLLITE - fine grained, dark green with considerable carbonate, contorted, minor light grey quartzite.
524.0	550.1	Interbedded QUARTZITE and PHYLLITE. Well banded at 75° to core axis.
550.1	560.5	GRAPHITE ZONE - with 15-20% pyrite and pyrrhotite.
560.5	584.7	SULPHIDE ZONE - massive pyrite, pyrrhotite and up to 8% sphalerite and 3% chalcopyrite. Occasional siliceous fragments.
584.7	596.0	Interbedded QUARTZIE and CARBONACEOUS PHYLLITE.
596.0	598.5	QUARTZITE - fine grained, light grey, with 10% pyrite along bedding at 70° to core axis. A few specks of chalco-pyrite.
598.5	608.5	Interbedded QUARTZITE and PHYLLITE.
608.5	623.0	ANDESITE - fine grained, green, chloritic with minor pyrite and pyrrhotite.
623.0	649.0	QUARTZITE - fine grained, light grey, 30-40% pyrite, pyrrhotite with minor sphalerite and chalcopyrite.

HOLE NO. 387-12 Page 2

8608

PROPERTY UNGAVA AREA - Project 387 PAGE 3

LOCATION _____ BEARING _____ HOLE NO. 387-12

LOGGED BY _____ ELEVATION _____ DIP _____ FINAL DEPTH 654'

STARTED _____ TESTS (CORRECTED)

FINISHED _____

CASING _____

CORE SIZE _____

FROM	TO	DESCRIPTION
649.0	654.0	QUARTZITE - fine grained, light grey-green, with minor sulphides.
	654.0	END OF HOLE

HOLE NO. 387-12 Page 3

8608

SAMPLE RECORD SHEET

PROPERTY- UNGAVA AREA - Project 387

387-12 -HOLE NO.
1 -PAGE

SAMPLE NO.	FROM	TO	LENGTH	ASSAYS					DESCRIPTIONS
				% Cu	% Zn	% Pb	Oz.Au	Oz.Ag	
387-12-1	560.5	570.5	10.0	0.37	7.10	0.68	.02	1.38	80% pyrite, 3% Zn, 0.5% Cu
387-12-2	570.5	575.5	5.0	1.01	5.54	0.50	.02	1.12	80% pyrite, 4% Zn, 1% Cu
387-12-3	575.5	580.5	5.0	0.81	4.29	0.73	.03	1.47	80% pyrite, 4% Zn, 1.5% Cu
387-12-4	580.5	584.7	4.2	0.54	10.88	1.21	.03	1.59	65% pyrite, 5% Zn, 0.5% Cu
AVERAGE			24.2	0.62	6.85	0.75	.025	1.38	

PROPERTY UNGAVA AREA - Project 387 PAGE 1

LOCATION P.L. 48+00S - 6+50E BEARING 245° HOLE NO. 387-13

LOGGED BY L.E.Halladay ELEVATION 959' DIP -50° FINAL DEPTH 236'

STARTED April 15, 1962 TESTS (CORRECTED)

FINISHED April 16, 1962

CASING 18' pulled

CORE SIZE AXT

FROM	TO	DESCRIPTION
0.0	18.0	OVERBURDEN
18.0	44.0	ARGILLITE - fine grained, green, chloritic, finely banded at 90° to the core axis. Numerous quartz stringers along bedding.
44.0	68.0	PHYLLITE -fine grained, green, with minor interbedded light grey quartzite. Numerous quartz-carbonate stringers.
68.0	85.0	Interbedded green PHYLLITE and light grey QUARTZITE, bedding at 80° to core axis. Numerous quartz stringers.
85.0	110.8	GRAPHITE ZONE - fine grained, black, with 15-20% pyrite, pyrrhotite and very minor chalcopyrite. Minor quartzite.
110.8	114.1	QUARTZITE - fine grained, light grey with minor interbedded PHYLLITE. 5-10% pyrite and pyrrhotite.
114.1	117.0	SULPHIDE ZONE - nearly massive pyrite, pyrrhotite and sphalerite, with minor chalcopyrite. Numerous small quartzite fragments.
117.0	119.5	GRAPHITE ZONE - similar to 85-110.
119.5	135.4	Interbedded QUARTZITE and PHYLLITE: similar to 68-85.
135.4	154.0	QUARTZITE - fine grained, light grey, faintly banded, minor pyrite and pyrrhotite.
154.0	208.8	Interbedded QUARTZITE and PHYLLITE; similar to 68-85. 5-10% pyrite and pyrrhotite. Possibly minor greywacke. 154# Minor sphalerite. 172-180 - Considerable carbonate as small flecks - possibly ANDESITE. 187 - Bedding at 75° to core axis.
208.8	226.8	ARGILLITE - fine grained, green, slightly chloritic. Finely bedded at 50° to core axis. Occasional very narrow beds of QUARTZITE.

HOLE NO. 387-13

Page 2

8608

PROPERTY UNGAVA AREA - Project 387 PAGE 2

LOCATION _____ BEARING _____ HOLE NO. ~~387-13~~

LOGGED BY _____ ELEVATION _____ DIP _____ FINAL DEPTH 236'

STARTED _____ TESTS (CORRECTED)

FINISHED _____

CASING _____

CORE SIZE _____

FROM	TO	DESCRIPTION
226.8	236.0	ANDESITE - fine grained, green, chloritic with considerable carbonate (secondary).
	236.0	END OF HOLE

HOLE NO. 387-13

Page 2

8608

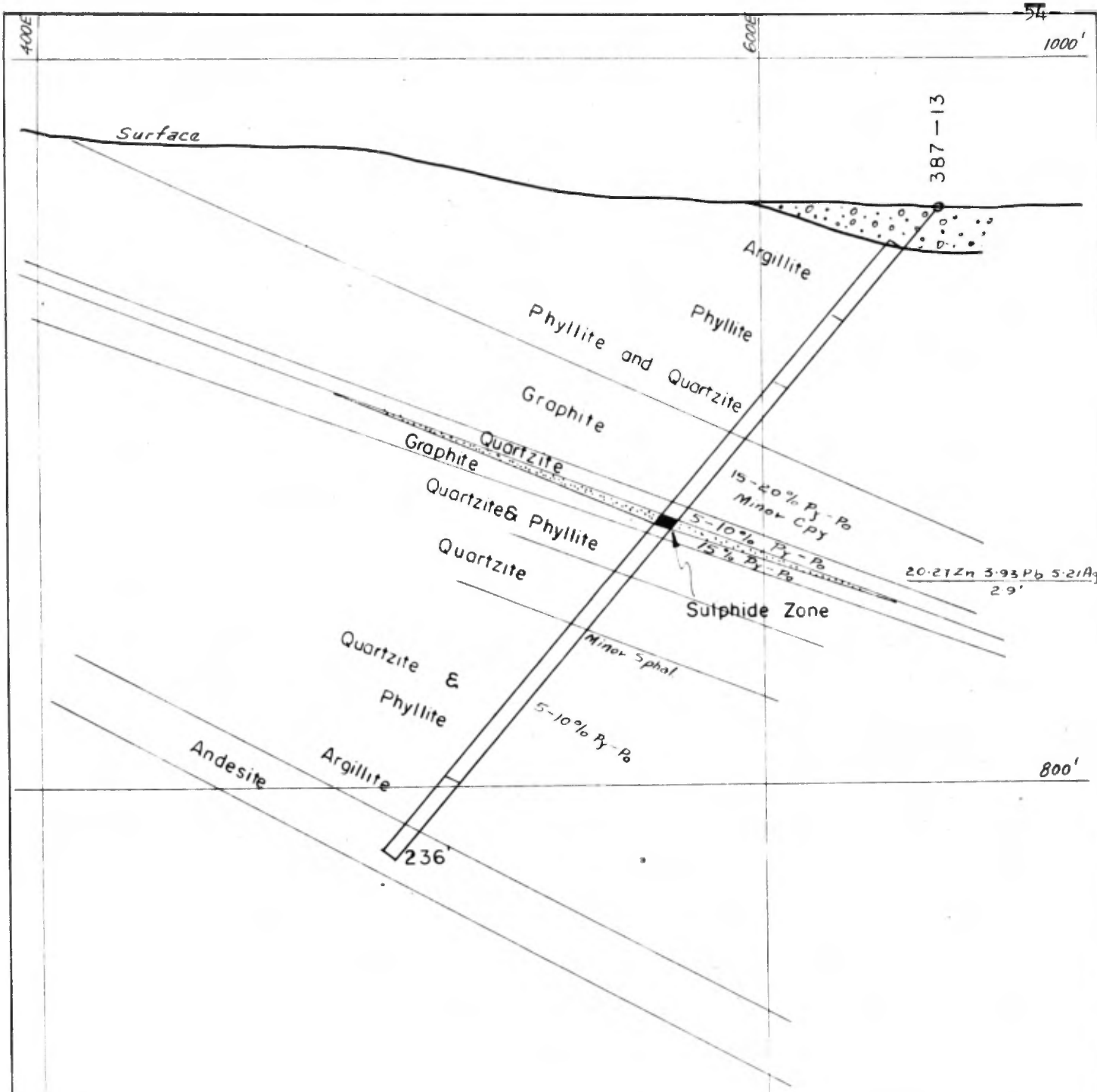
SAMPLE RECORD SHEET

PROPERTY- UNGAVA AREA - Project 387

387-13 -HOLE NO.
1 -PAGE

SAMPLE NO.	FROM	TO	LENGTH	ASSAYS					DESCRIPTIONS
				% Cu	% Pb	% Zn	Oz.Au	Oz.Ag	
387-13-1	114.1	117.0	2.9'	.07	3.93	20.27	.04	5.21	75% pyrite and pyrrhotite, 10% Zn, minor Cu

387-13



PROJECT 387

D.D.H. 387-13

SECTION 48+00S

1" = 40'

PROPERTY UNGAVA AREA - Project 387 PAGE 1

LOCATION 46+00 S - 6+50E BEARING 245° HOLE NO. 387-14

LOGGED BY L.R.Halladay ELEVATION 957' DIP -50° FINAL DEPTH 223'

STARTED April 17, 1962 TESTS (CORRECTED)

FINISHED April 18, 1962 200' = 50°

CASING 13'

CORE SIZE AXT

FROM	TO	DESCRIPTION
0.0	13.0	OVERBURDEN
13.0	28.5	PHYLLITE - fine grained, dark green to black, locally carbonaceous with occasional narrow light grey quartzite bands. Schistosity at 90° to core axis. Minor pyrite and pyrrhotite.
28.5	105.0	ANDESITE - fine grained, green chloritic, slightly schistose, with considerable carbonate as small blebs. Numerous narrow quartz and carbonate stringers. 59 - 63 - Considerable injected quartz. 63 -105 - More chloritic and schistose, some interbedded PHYLLITE (?). Numerous fine carbonate bands, locally contorted.
105.0	135.3	GRAPHITE ZONE - fine grained, black with 15-20% pyrite, pyrrhotite and minor chalcopyrite. Numerous small quartz stringers.
135.3	137.4	QUARTZITE - fine grained, grey-green, cut by numerous quartz stringers, with 5-10% pyrrhotite as large blebs.
137.4	165.0	PHYLLITE - fine grained, green, chloritic, schistose at 45°. Possibly some interbedded ANDESITE. 149 - 152.6 - 5% galence and pyrite in highly chloritic rock.
165.0	170.3	PHYLLITE - fine grained, dark green, poorly banded at 60° to core axis.
170.3	173.0	QUARTZITE - fine grained, grey-green with 5-10% pyrrhotite, banded at 60°, locally contorted.
173.0	182.0	PHYLLITE - similar to 137-165'.
182.0	183.7	QUARTZITE - fine grained, light grey with 30% pyrite and very minor chalcopyrite and sphalerite.
183.7	195.7	PHYLLITE - similar to 137-165'.

HOLE NO. 387-14 Page 1

PROPERTY UNGAVA AREA - Project 387 PAGE 2

LOCATION _____ BEARING _____ HOLE NO. 387-14

LOGGED BY _____ ELEVATION _____ DIP _____ FINAL DEPTH 223'

STARTED _____ TESTS (CORRECTED)

FINISHED _____

CASING _____

CORE SIZE _____

FROM	TO	DESCRIPTION
195.7	223.0	QUARTZITE - fine grained, with narrow alternating light and dark grey bands in first 10 feet. 5% pyrite. 196.5 - Minor sphalerite.
	223.0	END OF HOLE

HOLE NO. 387-14

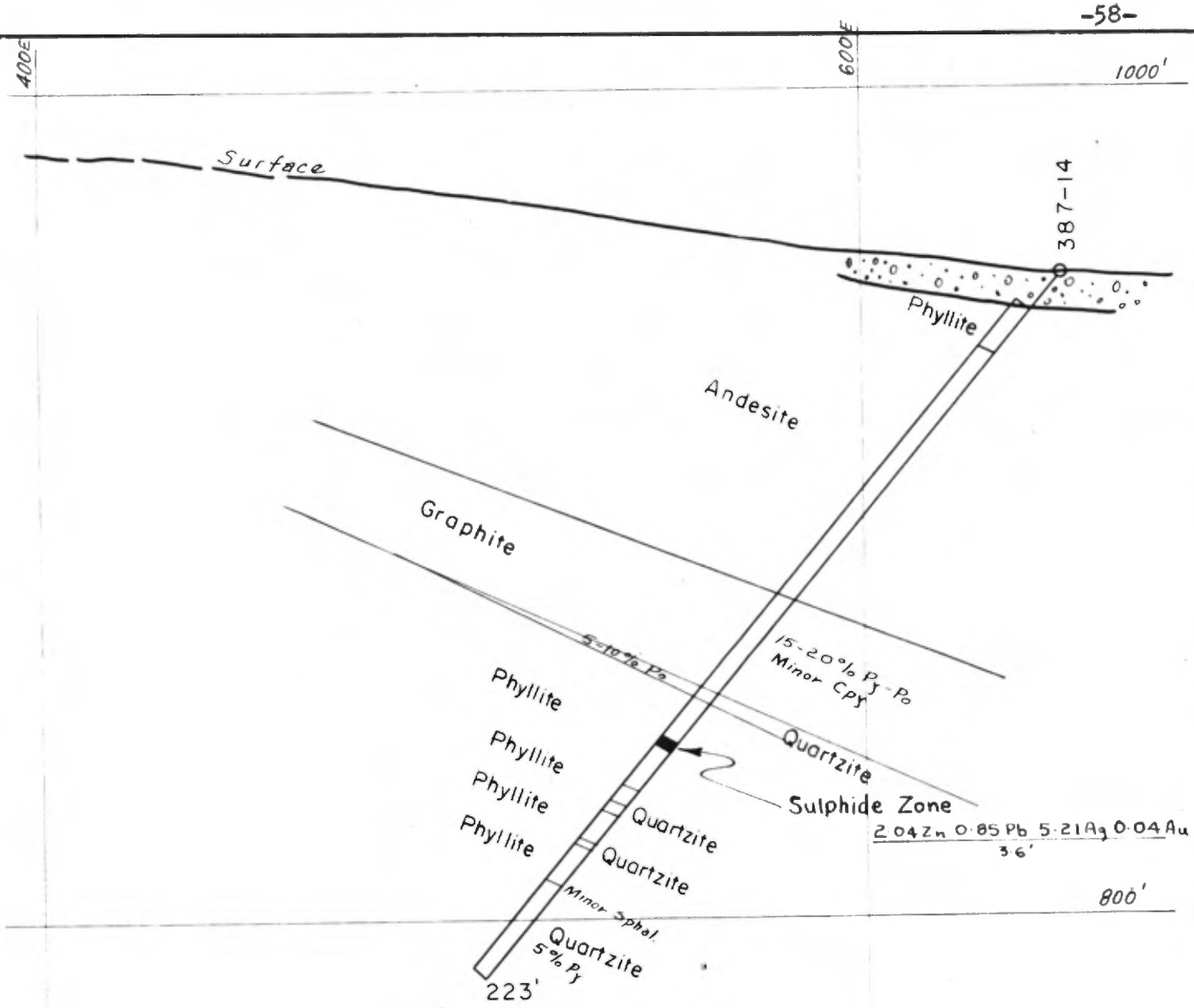
Page 2

SAMPLE RECORD SHEET

PROPERTY- UNCAVA AREA - Project 387

387-14 -HOLE NO.
1 -PAGE

SAMPLE NO.	FROM	TO	LENGTH	ASSAYS					DESCRIPTIONS
				% Pb	% Zn	Oz.Au	Oz.Ag		
387-14-1	149.0	152.6	3.6'	0.85	2.04	.04	5.21		5% galena and pyrite in chlorite schist.



PROJECT 387

D. D. H. 387-14

SECTION 46+00S

1" = 40'

PROPERTY UNGAVA AREA - Project 387 PAGE 1

LOCATION 44+00S - 7+50E BEARING 245° HOLE NO. 387-15

LOGGED BY L.B. Halladay ELEVATION 949' DIP 50° FINAL DEPTH 225'

STARTED April 19, 1962 TESTS (CORRECTED)

FINISHED April 20, 1962

CASING 14' 210' - 51°

CORE SIZE AXT

FROM	TO	DESCRIPTION
0.0	14.0	OVERBURDEN: with water.
14.0	64.4	PHYLLITE - fine grained, grey-green, chloritic, schistosity at 90° to core axis, locally contorted. Numerous narrow quartz-carbonate stringers. Occasional narrow light grey quartzite bands. 53-60 - Black carbonaceous.
64.4	143.3	ANDESITE - fine grained, green, chloritic, schistose at 70-90° to core axis. Possibly some interbedded PHYLLITE. Occasional quartz and carbonate stringers increasing in number with depth.
143.3	148.0	PHYLLITE - fine grained, dark green, 5% pyrite and pyrrhotite. Schistose at 90° to core.
148.0	211.5	INTERBEDDED light grey QUARTZITE and dark grey PHYLLITE. Bedding at 80° to core axis, locally contorted. Numerous quartz-carbonate stringers. 148 - Possible cross-bedding indicating tops UP. 207 - 211.5 - Several sections of predominantly grey quartzite with 10-15% pyrite. 211 - Several stringers and blebs of chalcopyrite.
211.5	222.0	ANDESITE - fine to medium grained, green with numerous carbonate amygdules (?). Schistose and chloritic near both contacts.
222.0	225.0	Interbedded PHYLLITE and QUARTZITE - similar to 148-211'.
	225.0	END OF HOLE

No samples taken

HOLE NO. 387-15

Page 1

PROJECT 387

D. D. H. 387-15

SECTION 44+00S

1" = 40'

PROPERTY UNGAVA AREA - Project 387 PAGE 1

LOCATION 42+00S - 7+50E BEARING 245° HOLE NO. 387-16

LOGGED BY L.B. Halladay ELEVATION 949' DIP -50° FINAL DEPTH 248'

STARTED April 21, 1962 TESTS (CORRECTED)

FINISHED April 22, 1962 215 - 46°

CASING 12'

CORE SIZE AXT

FROM	TO	DESCRIPTION
0.0	12.0	OVERBURDEN - with water.
12.0	57.0	PHYLLITE - fine grained, dark grey-green, schistosity at 90° to core axis. A few narrow quartz-carbonate stringers.
57.0	135.2	ANDESITE - fine grained to medium grained, green, massive with considerable fine carbonate. 85 - Becomes chloritic and slightly schistose with occasional phyllite. bands.
135.2	142.0	PHYLLITE - fine grained, with light and dark grey bands. Schistosity at 75° to core axis. Minor pyrite.
142.0	153.0	ANDESITE - fine grained, green, slightly schistose and chloritic
153.0	163.5	Interbedded light grey QUARTZITE and dark grey PHYLLITE. Well bedded at 75° to core axis. Locally contorted.
163.5	176.5	PHYLLITE - fine grained, dark green, chloritic, Numerous small quartz stringers.
176.5	183.0	ANDESITE - fine grained, green, chloritic, slightly schistose.
183.0	248.0	QUARTZITE - fine grained, light grey with minor interbedded dark grey PHYLLITE. Some included carbonaceous (?) material. Average 30% pyrite, pyrrhotite with numerous blebs and stringers of magnetite and minor chalcopyrite and sphalerite. 218.8 -222.0 - Massive pyrite with magnetite. 236 -248.0 - Considerable injected quartz and light green carbonaceous fragments.
	248.0	END OF HOLE

Not sampled

HOLE NO. 387-16

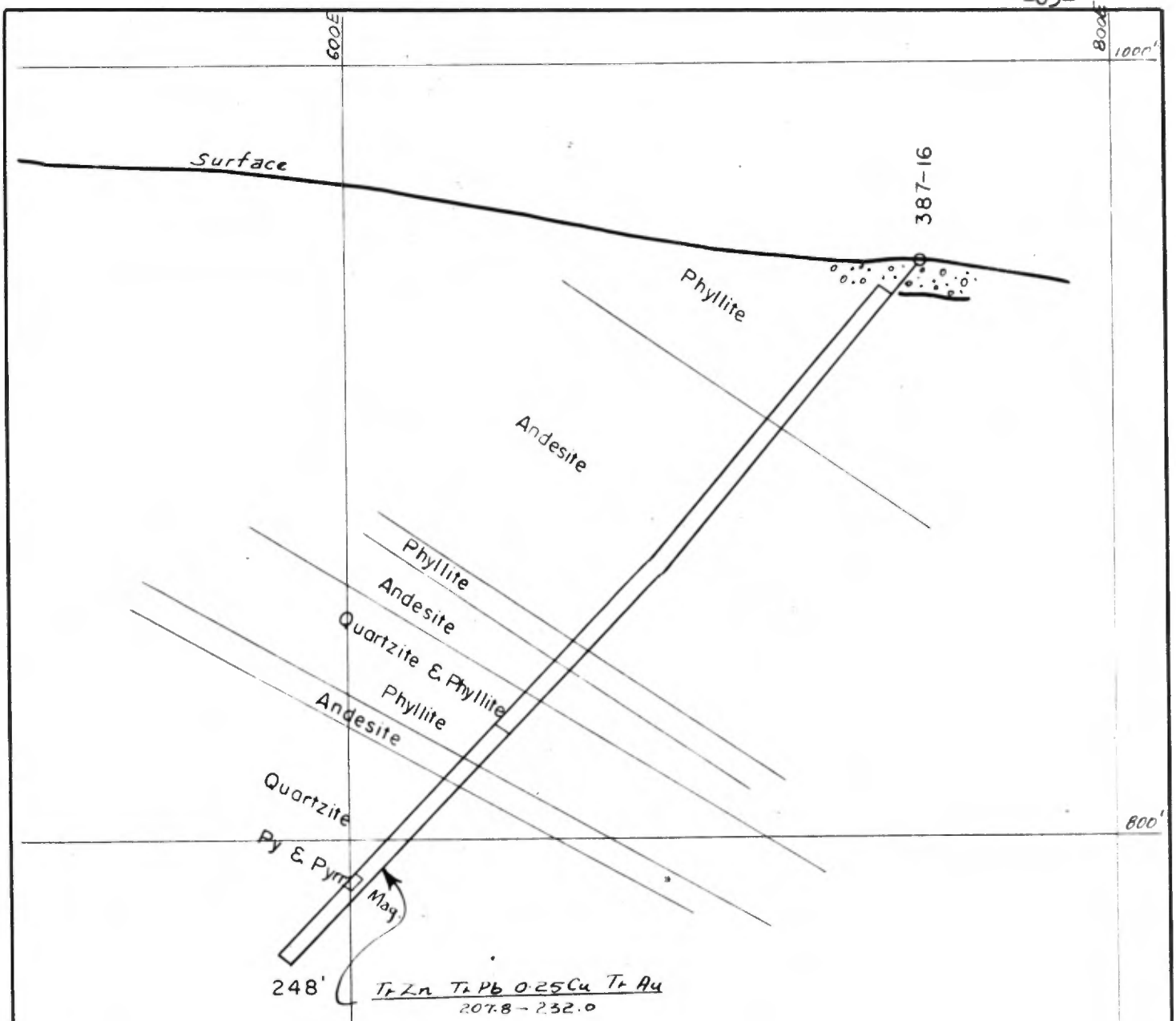
Page 1

SAMPLE RECORD SHEET

PROPERTY- UNGAVA AREA - Project 387

387-16 -HOLE NO.
1 -PAGE

SAMPLE NO.	FROM	TO	LENGTH	ASSAYS					DESCRIPTIONS
				% Cu	Oz. Au	Oz. Ag	% Pb	% Zn	
387-16-1	207.8	218.8	11.0	0.22	Tr.	.03	Tr.	Tr.	20% pyrite, pyrrhotite, magnetite, with minor chalco.
387-16-2	218.8	222.0	3.2	0.17	Tr.	.03	Tr.	Tr.	Massive pyrite, magnetite.
387-16-3	222.0	232.0	10.0	0.34	Tr.	.11	0.05	Nil	35% pyrite, pyrrhotite and magnetite with minor chalcopyrite.



PROJECT 387

D. D. H. 387-16

SECTION 42+00S

1" = 40'

PROPERTY UNGAVA AREA - Project 387 PAGE 1

LOCATION 40+00S - 7+50E BEARING 245° HOLE NO. 387-17

LOGGED BY L.B.Halladay ELEVATION 946' DIP -50° FINAL DEPTH 401'

STARTED April 23, 1962 TESTS (CORRECTED)

FINISHED April 25, 1962 400' - 47°

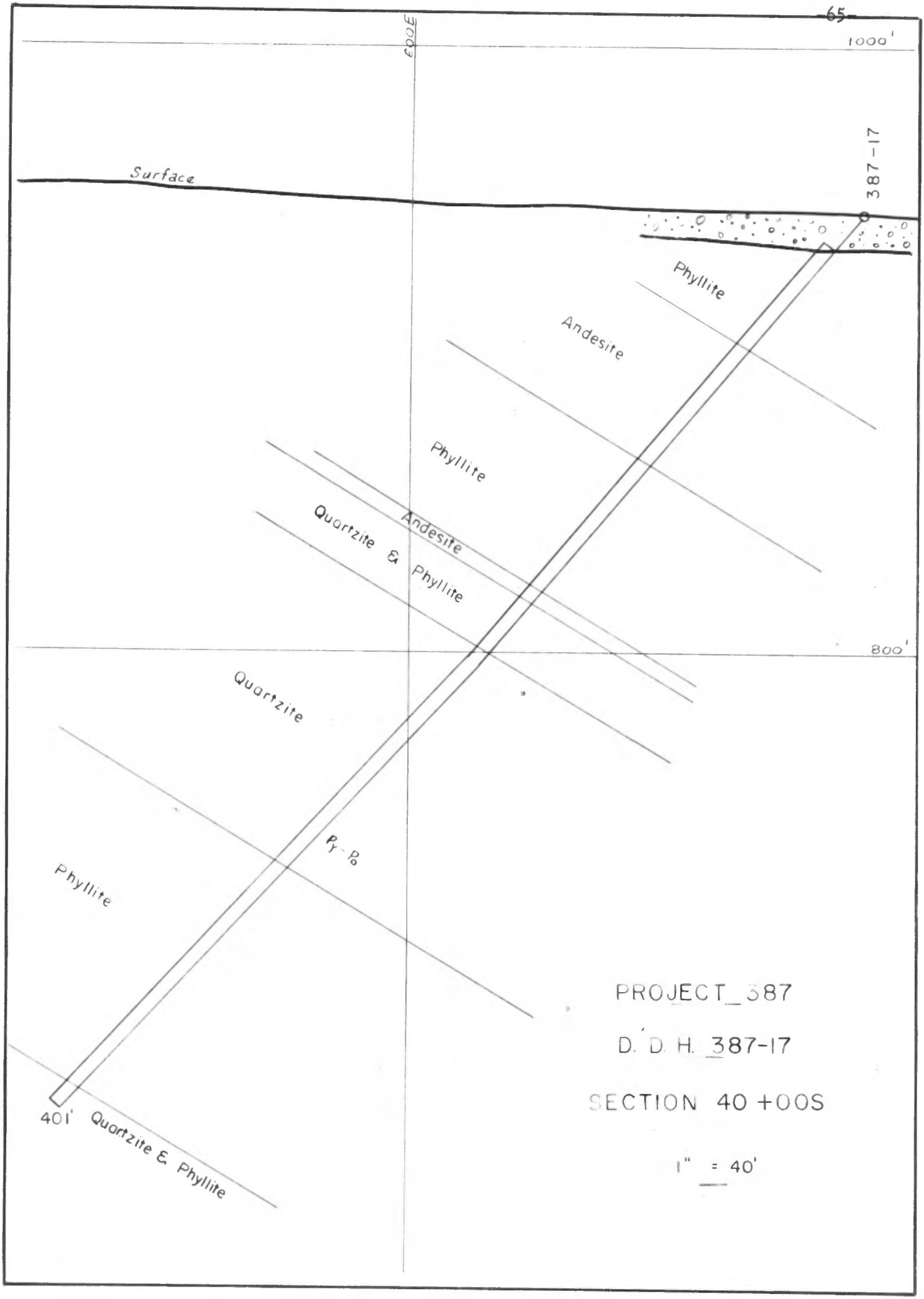
CASING 16.0' Left in hole for water

CORE SIZE AXT

FROM	TO	DESCRIPTION
0.0	16.0	OVERBURDEN - with water.
16.0	61.0	PHYLLITE - fine grained, dark grey-green, finely banded at 90° to core axis, locally contorted.
61.0	110.5	ANDESITE - fine to medium grained, green, locally schistose and chloritic. Occasional quartz carbonate stringers. Some intertedded PHYLLITE. 102 - 1" stringer of massive pyrrhotite.
110.5	166.0	PHYLLITE - fine grained, dark green, chloritic, finely banded with occasional narrow light grey QUARTZITE bands. Banding 80-90° to core axis. Numerous quartz-carbonate stringers along bedding. Minor interbedded ANDESITE.
166.0	171.0	ANDESITE - fine grained, green, with considerable carbonate.
171.0	193.4	QUARTZITE - fine grained, grey, with several thick highly chloritic sections of PHYLLITE also some interbedded GREYWACKE. Several large blebs of pyrrhotite and pyrite.
193.4	291.0	QUARTZITE - fine grained, grey-green, poorly banded with minor green phyllite and considerable carbonate as irregular masses. Numerous quartz stringers giving a brecciated appearance. Several narrow chloritic sections possibly ANDESITE. 258-266 - fine grained, green, argillite (?). 266-269) 280.286.5)- Light grey with 5-10% pyrite, and pyrrhotite.
291.0	392.0	PHYLLITE - fine grained, dark green, chloritic with minor interbedded, very narrow, light grey QUARTZITE. Schistose at 80° to core axis. Numerous quartz-carbonate stringers with minor pyrite, pyrrhotite and chalcopyrite.
392.0	401.0	Interbedded light grey QUARTZITE and grey-green PHYLLITE. Angle of bedding varies considerably. Minor graphite. A few large blebs of pyrrhotite.
	401.0	END OF HOLE

HOLE NO. 387-17

Page 1


600E
1000'
387-17
Surface
Phyllite
Andesite
Phyllite
Andesite
Quartzite & Phyllite
800'
Quartzite
Py-Po
Phyllite
401' Quartzite & Phyllite
PROJECT 387
D. D. H. 387-17
SECTION 40 +00S
1" = 40'

PROPERTY UNGAVA AREA - Project 387 PAGE 1

LOCATION 38+00S - 5+00E BEARING 245° HOLE NO. 387-18

LOGGED BY L.B.Halladay ELEVATION 938' DIP -60° FINAL DEPTH 205'

STARTED April 26, 1962 TESTS (CORRECTED)

FINISHED April 28, 1962 Nil

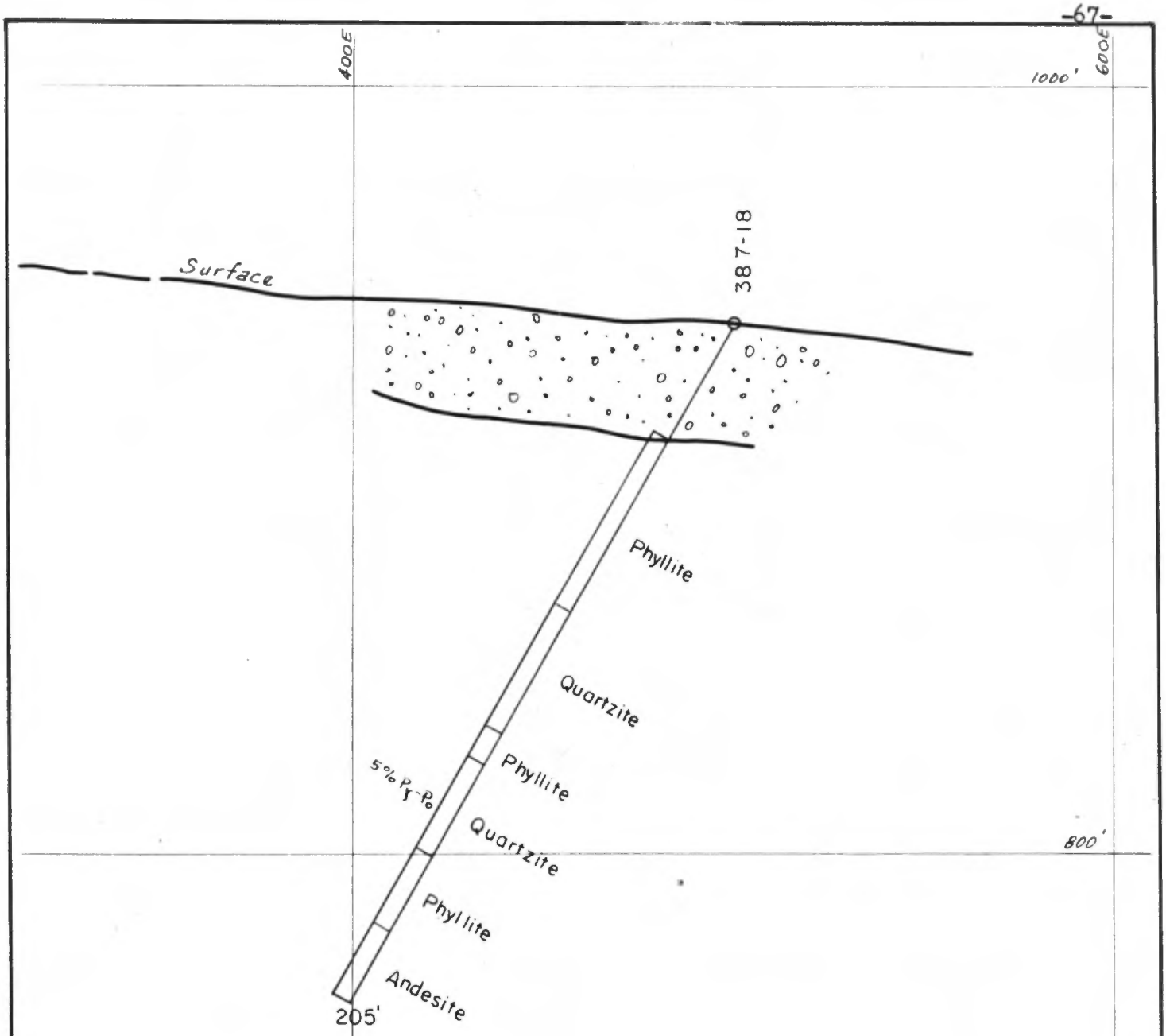
CASING 36' pulled

CORE SIZE AXT

FROM	TO	DESCRIPTION
0.0	36.0	OVERBURDEN
36.0	88.0	PHYLLITE - fine grained, dark green, chloritic, finely banded at 80° to core axis. Numerous narrow quartz-carbonate stringers.
88.0	125.0	QUARTZITE - fine grained, grey, poorly banded with some sericite alteration intruded by numerous quartz stringer and irregular carbonate masses. Occasional blebs and stringers of pyrite and pyrrhotite. 102-107 - Chloritic Phyllite.
125.0	133.6	PHYLLITE - similar to 36-88 with some interbanded andesite.
133.6	161.6	QUARTZITE - similar to 88-125' with section up to 5' of phyllite and andesite. 5% pyrite and pyrrhotite in quartzite.
161.6	184.3	PHYLLITE - PHYLLITE - similar to 36-88' with some interbanded andesite.
184.3	205.0	ANDESITE - fine grained, green, chloritic, schistose at 90° to core axis with short sections of carbonate amygdules and some interbanded PHYLLITE. Occasional quartz-carbonate stringers.
	205.0	END OF HOLE

HOLE NO. 387-18

Page 1



PROJECT 387

D. D. H. 387-18

SECTION 38+00S

1" = 40'

PROPERTY UNGAVA AREA - Project 387 PAGE 1

LOCATION 36+00S - 5+75E BEARING 245° HOLE NO. 387-19

LOGGED BY L.B.Halladay ELEVATION 922' DIP -60° FINAL DEPTH 233'

STARTED April 29, 1962 TESTS (CORRECTED)

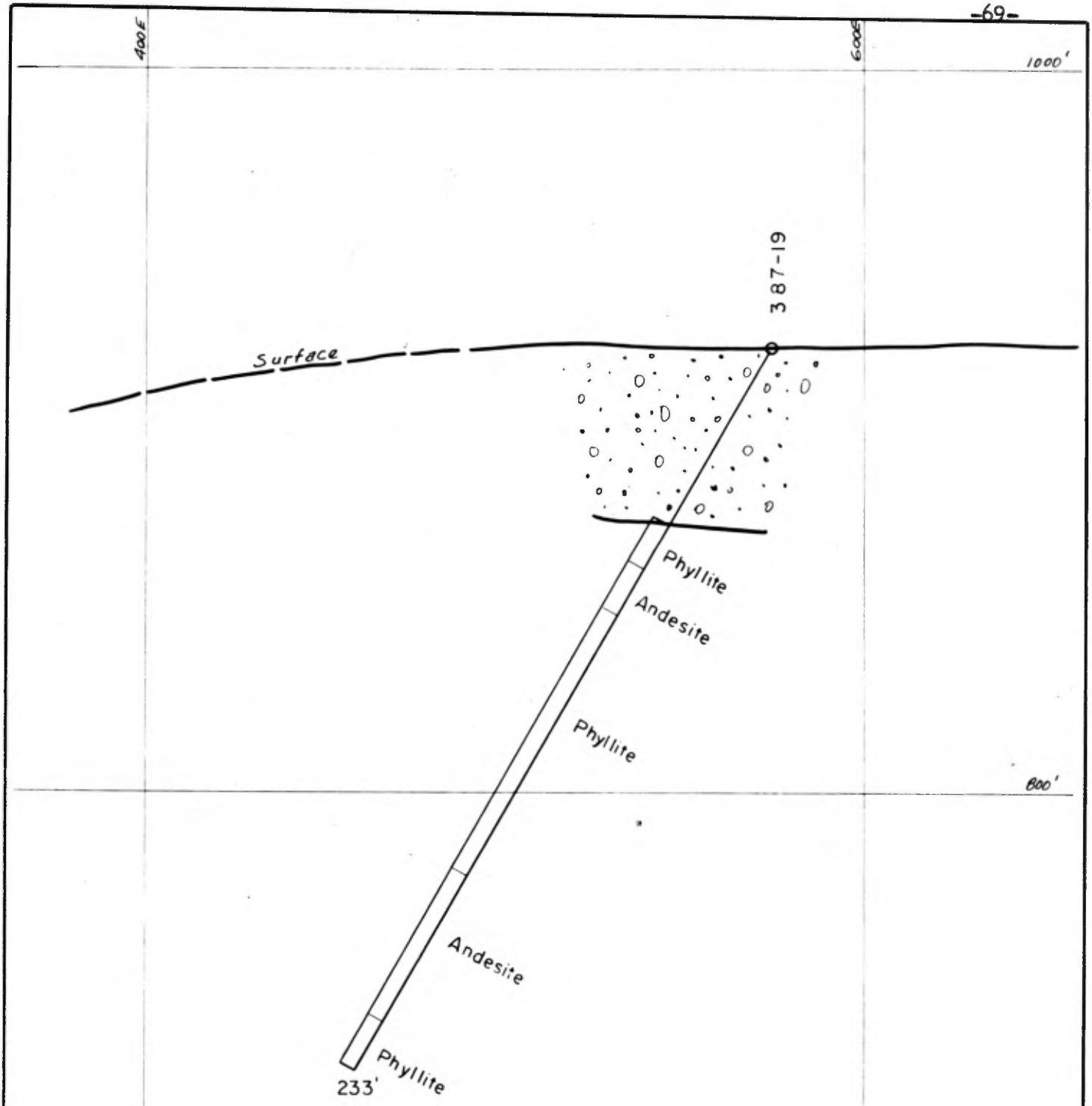
FINISHED May 1, 1962

CASING 58'

CORE SIZE AXT

FROM	TO	DESCRIPTION
0.0	58.0	OVERBURDEN
58.0	72.2	PHYLLITE - fine grained, dark green, chloritic, banded at 75° to core axis.
72.2	86.9	ANDESITE - fine-medium grained, green, chloritic.
86.9	170.8	PHYLLITE - similar to 58-72' with numerous fine quartz-carbonate stringers along bedding. Minor interbedded Andesite.
170.8	217.7	ANDESITE - fine grained, green, schistose at 80° to core axis. Some interbedded phyllite. Numerous quartz stringers.
217.7	233.0	PHYLLITE - fine grained, dark green to black, well banded at 75° to core axis. Locally contorted. 217.7 - 226.0 - Black, carbonaceous.
	233.0	END OF HOLE

HOLE NO. 387-19 Page 1



PROJECT 387

D.D.H. 387-19

SECTION 36+00S

1" = 40'

PROPERTY UNGAVA AREA - PROJECT 387 PAGE 1

LOCATION 28+00S - 4+00E BEARING 245° HOLE NO. 387-20

LOGGED BY L.B.Halladay ELEVATION 775.0' DIP -60° FINAL DEPTH 340'

STARTED May 4, 1962 TESTS (CORRECTED)

FINISHED May 7, 1962

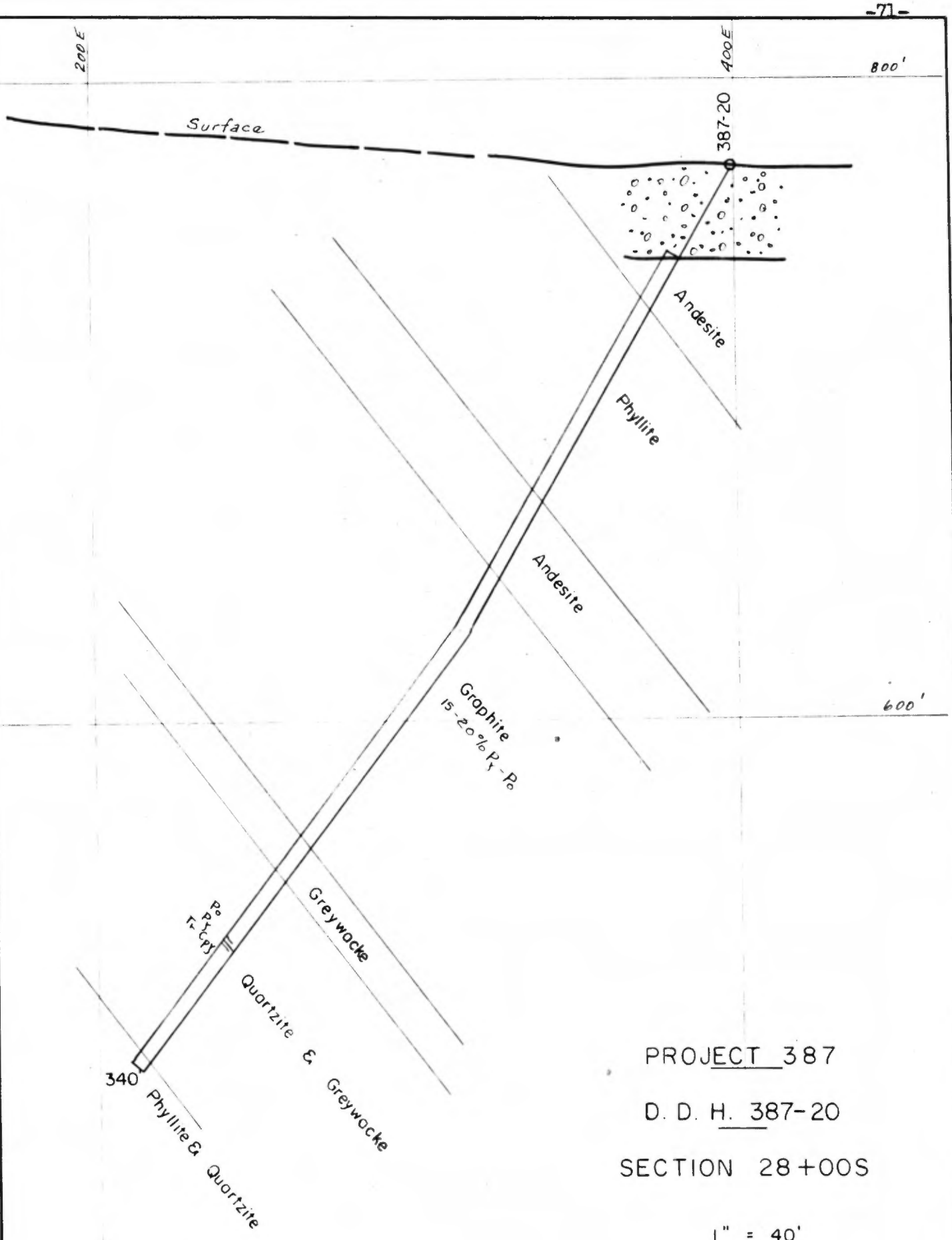
CASING 36' 340' - 54°

CORE SIZE AXT

FROM	TO	DESCRIPTION
0.0	36.0	OVERBURDEN
36.0	53.4	ANDESITE - fine grained, green, chloritic with numerous fine quartz-carbonate stringers.
53.4	122.0	PHYLLITE -fine grained, grey-green, chloritic, well banded at 65° to core axis. Numerous quartz-carbonate stringers along banding. 117 - 122 - black, carbonaceous.
122.0	150.3	ANDESITE - fine to medium grained, green, chloritic with considerable carbonate as small blebs. Schistose at 60° to core axis.
150.3	252.8	GRAPHITE ZONE - fine grained, black, usually well banded at 65-70° to core axis, locally contorted. 15-20% pyrrhotite and pyrite as large blebs and stringers along banding. Occasional small quartz-carbonate stringers.
252.8	265.4	GREYWACKE - fine to medium, dark grey to black with minor interbanded quartzite and occasional flakes of graphite. Several large blebs of pyrite. Poorly banded at 65° to core axis.
265.4	336.0	Interbedded grey QUARTZITE and dark grey GREYWACKE. Poorly banded at 65°. Cut by numerous quartz stringers. Occasional large blebs of pyrrhotite and pyrite. 282 - 293 - Predominantly light grey quartzite with numerous large masses of pyrrhotite, pyrite and traces of chalcopyrite.
336.0	340.0	dark Interbedded/grey PHYLLITE and light grey QUARTZITE. Well and finely banded at 60° to core axis.
	340.0	END OF HOLE

HOLE NO. 387-20

Page 1



PROJECT 387

D. D. H. 387-20

SECTION 28+00S

1" = 40'

PROPERTY UNGAVA AREA - PROJECT 387 PAGE 1

LOCATION 26+00S - 4+00E BEARING S 245° HOLE NO. 387-21

LOGGED BY L.B.Halladay ELEVATION 759' DIP -50° FINAL DEPTH 249'

STARTED May 8, 1962 TESTS (CORRECTED)

FINISHED May 10, 1962 -

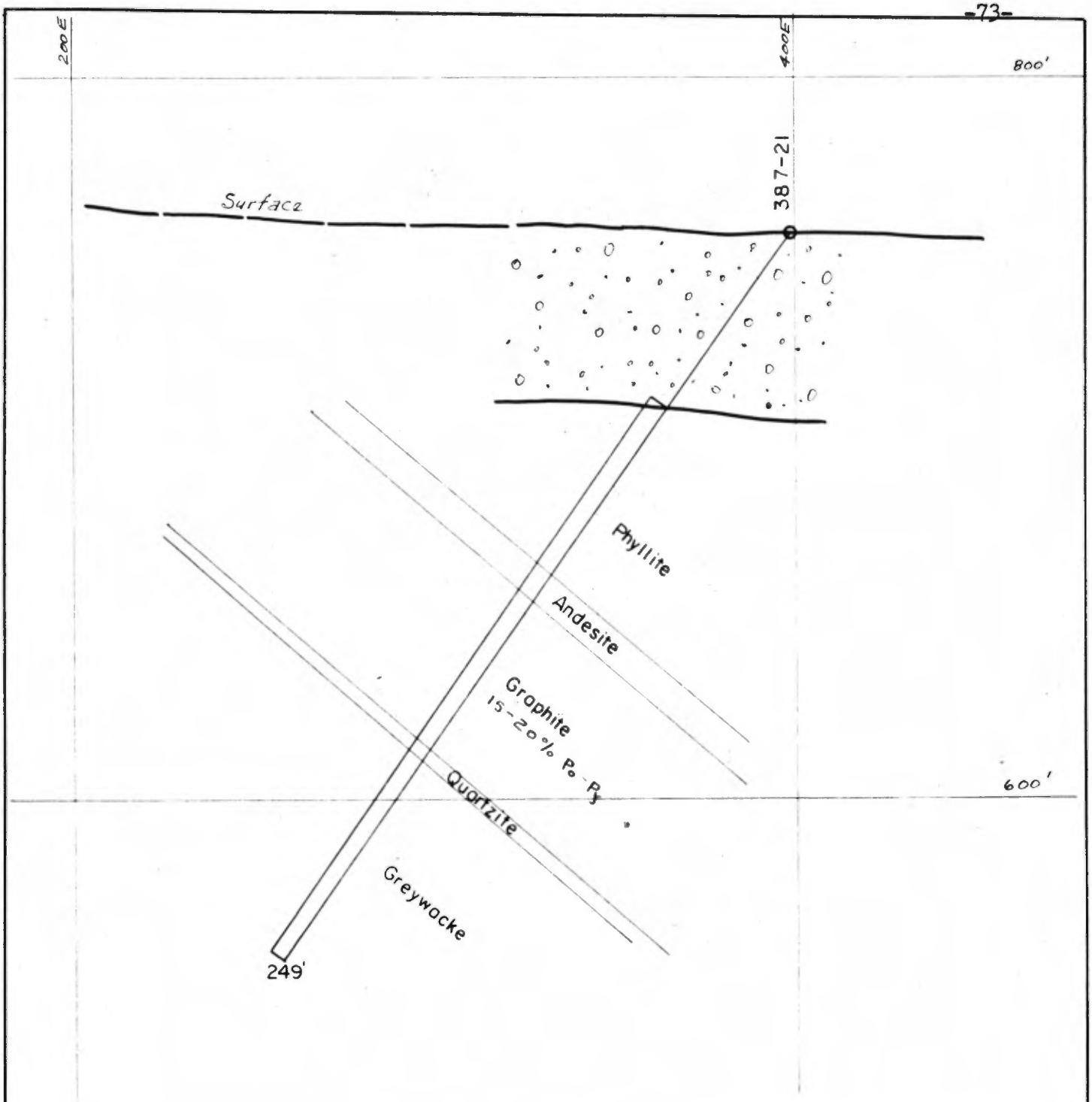
CASING 64'

CORE SIZE AXT

FROM	TO	DESCRIPTION
0.0	64.0	OVERBURDEN
64.0	118.4	PHYLLITE - fine grained, green, chloritic, finely banded at 80-90° to core axis. Numerous quartz-carbonate stringers. 100-107 - Black, carbonaceous. 112-116 - Numerous small grey crystals, possibly garnets.
118.4	127.0	ANDESITE - fine to medium grained, green, chloritic with abundant carbonate crystals.
127.0	177.0	GRAPHITE ZONE - fine grained, black, usually banded at 60° to core axis, locally contorted. 15-20% pyrrhotite and pyrite usually along banding as fine stringers. 150-151 - Quartz carbonate veinlet.
177.0	180.8	QUARTZITE BRECCIA - fine grained, grey, with small quartzite fragments in light green sericitic matrix. Minor pyrrhotite.
180.8	249.0	GREYWACKE - fine to medium grained, grey to dark grey with some interbedded grey quartzite. Locally conglomeratic with fragments of argillite and quartzite up to 2". Varies from well bedded to indistincty at 80-90° to core axis. Occasional small quartz stringers. Possible grain gradation indicates tops up. Minor graphite formed along bedding. Minor disseminated pyrite.
	249.0	END OF HOLE

HOLE NO. 387-21

Page 1



PROJECT 387

D. D. H. 387-21

SECTION 26+00S

1" = 40'

PROPERTY UNGAVA AREA - Project 387 PAGE 1

LOCATION 24+00S - 3+50E BEARING ____ HOLE NO. 387-22

LOGGED BY P. Watt ELEVATION Approx. 749' DIP -48° FINAL DEPTH 304'

STARTED May 11, 1962 TESTS (CORRECTED)

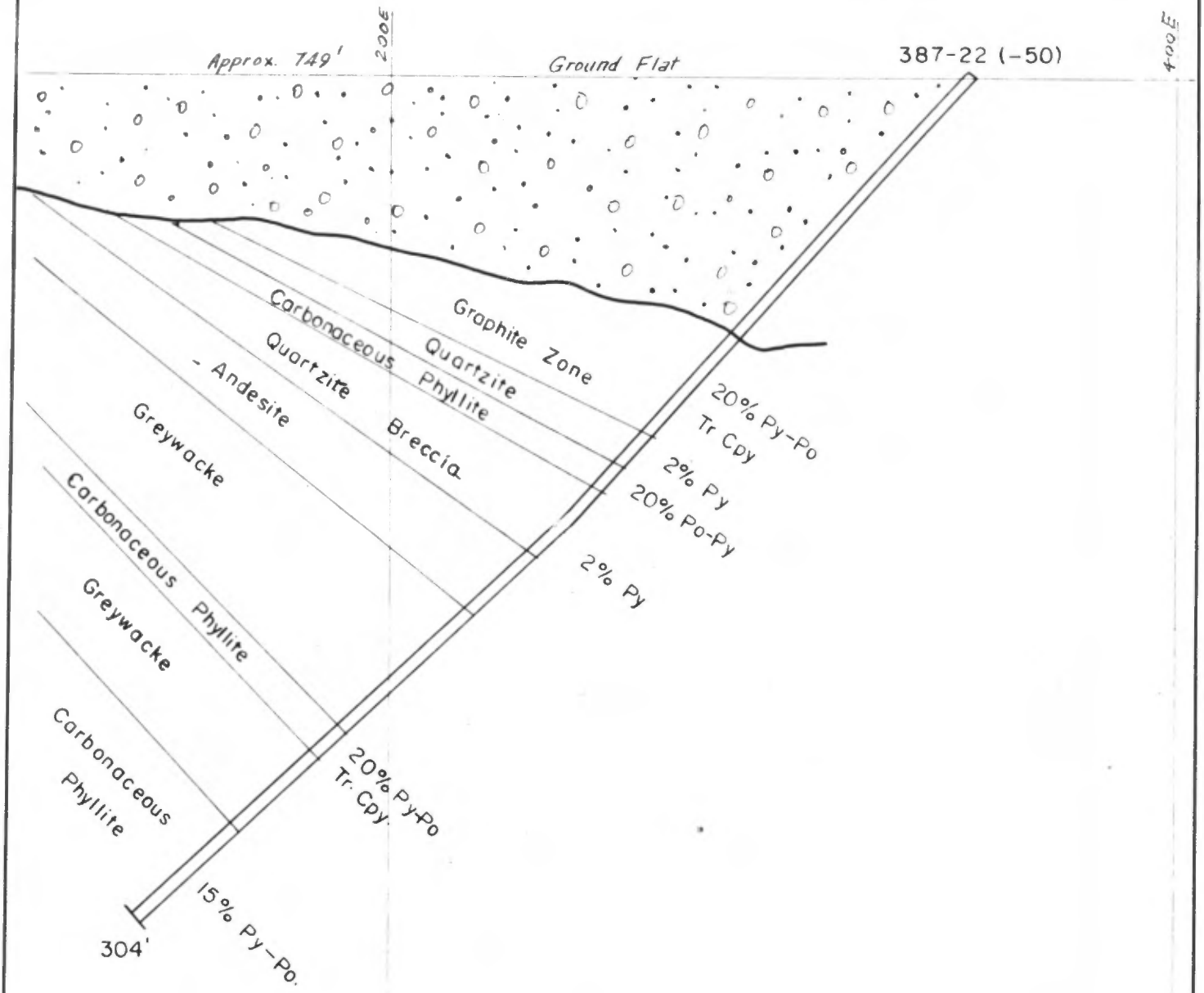
FINISHED May 17, 1962 300' - 42-1/2°

CASING 90'

CORE SIZE AXT

FROM	TO	DESCRIPTION
0.0	90.0	OVERBURDEN - Boulders
90.0	123.5	GRAPHITE ZONE - mostly fine grained, partly contorted, 20% pyrite and pyrrhotite, minor quartz carbonate stringers parallel to schistosity, locally specks of chalcopyrite. 103.0 @ 104.0 - Lost core. 105.5 - 106.0 - " " 110.0 - 111.0 - " " 112.8 - 114.0 - " " 117.0 - 118.0 - " "
123.5	135.0	QUARTZITE - with bands of dolomite and greywacke, dolomite phases purple and greywacke phases dark grey, 2% pyrite.
135.0	142.5	CARBONACEOUS PHYLLITE - with bands of pyrrhotite and pyrite, coare angle at 70°, pyrrhotite and pyrite 20%.
142.5	166.8	QUARTZITE BRECCIA - with a matrix of dolomite and carbonaceous phyllite between the quartzite fragments, quartz-carbonate stringers, 2% pyrite.
166.8	188.0	ANDESITE - with thin bands of greywacke, andesited, speckled and grey; quartz carbonate stringers containing 2% pyrite.
188.0	233.0	GREYWACKE - Quartz and carbonate stringers containing minor pyrite; with dolomite and quartzite bands, purple to dark grey respectively; greywacke also contains minor pyrite and fragments of argillite and quartzite.
233.0	242.2	CARBONACEOUS PHYLLITE - locally contorted, quartz stringers, and 20% pyrite and pyrrhotite with local specks of chalcopyrite
242.2	269.5	GREYWACKE - Same as 188.0 - 233.0.
269.5	304.0	CARBONACEOUS PHYLLITE - fine grained phyllite (black) and fine grained pyrrhotite; pyrite in 1/8" crystals, 15% sulphide; core angle 65°.
	304.0	END OF HOLE

HOLE NO. 387-22 Page 1



PROJECT 387

D. D. H. 387-22

SECTION 24+00S

1" = 40'

PROPERTY Ungava Area - Project 387 PAGE 1

LOCATION 20 + 00S - 3+50E BEARING 245° HOLE NO. 387-23

LOGGED BY P.D.Watt ELEVATION Approx 718' DIP 60° FINAL DEPTH 308'

STARTED May 19, 1962 TESTS (CORRECTED)

FINISHED May 21, 1962 300' - 52°

CASING 42'

CORE SIZE AXT

FROM	TO	DESCRIPTION
0.0	41.5	OVERBURDEN
41.5	53.7	GRAPHITE ZONE - with 20% pyrrhotite and pyrite. Pyrrhotite fine grained, pyrite in 1/8" crystals to fine grained, contorted, minor chalcopyrite at contact with next formation, chalcopyrite found in pyrrhotite and pyrite interstices.
53.7	86.0	QUARTZITE - with minor pyrrhotite and pyrite (about 1-2%) all the way through; quartzite white with interbeds of dark grey dolomite; thins quartz injections. 66.8 - 69.4 - Carbonaceous phyllite with 20-25% pyrrhotite and pyrite with minor chalcopyrite in parts.
86.0	92.0	Interbedded QUARTZITE and PHYLLITE; core angle 75°, quartzite white, phyllite grey.
92.0	102.5	ANDESITE - speckled dark grey; speckles caused by white to grey feldspar chunky crystals, groundmass probably chlorite.
102.5	125.0	GRAYWACKE - Dark grey quartzite and colomite interbeds; white quartzite interbeds too; local pyrite cubes, quartz carbonate stringer up to 4" wide.
125.0	153.0	QUARTZITE 125.0 - 132.3 - White quartzite with 5% pyrrhotite, fine grained. 132.3 - 134.5 - Carbonaceous phyllite, 25% sulphides; minor chalcopyrite in parts. 132.3 - 153.0 - Grey quartzite to white, 5% fine grained pyrrhotite and pyrite cubes.
153.0	175.6	GRAPHITE ZONE - Core angle 70°; 15% pyrrhotite and pyrite.
175.6	189.0	QUARTZITE BRECCIA 175.6 - 182.0 - 8% pyrite cubes with minor pyrrhotite; quartzite (white) fragments with argillite matrix.
189.0	218.0	GREY QUARTZITE or GRAYWACKE; banded light to dark grey, partly interbedded quartzite and argillite or phyllite (?) parts dolomitic; parts contorted; 1 part well mineralized with barren sulphide. Pargs grey speckled ANDESITE one foot wide and 2" wide as in 92.0 - 102.5

HOLE NO. 387-23 Page 1

PROPERTY UNGAVA AREA - Project 387 PAGE 2

LOCATION _____ BEARING _____ HOLE NO. ~~387-23~~

LOGGED BY _____ ELEVATION _____ DIP _____ FINAL DEPTH ~~308'~~

STARTED _____ TESTS (CORRECTED)

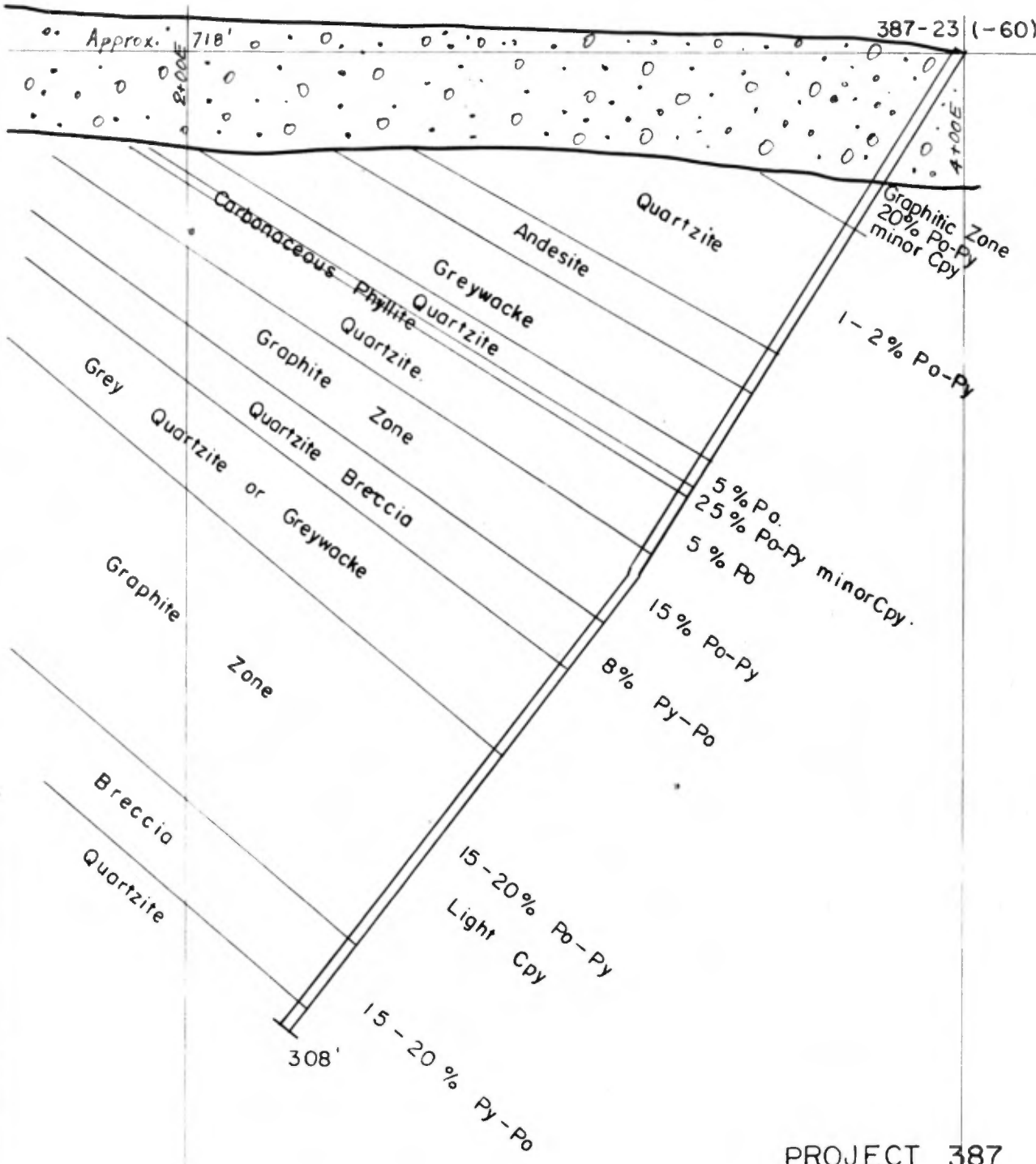
FINISHED _____

CASING _____

CORE SIZE _____

FROM	TO	DESCRIPTION
		189.0 - 218.0 (Continued) Thin cross cutting quartz-carbonate veins throughout. This assemblage is very similar to 53.7-125.0'.
218.0	278.2	GRAPHITE ZONE - core angle 60°. 15-20% pyrrhotite and pyrite; 1% chalcopyrite in parts, over an inch or two.
278.2	298.8	BRECCIA ZONE - interbedded carbonaceous phyllite and grey quartzite, grey quartzite fragments in argillite matrix. 15-20% pyrite and pyrrhotite.
298.8	308.0	QUARTZITE - mostly grey to white quartzite in parts, perhaps silicified by a quartz vein, partly brecciated with siliceous argillite between the quartzite fragments. 298.8 - 301.5 - 15% barren sulphides.
	308.0	END OF HOLE

HOLE NO. ~~387-23~~
Page 2



PROJECT 387

D. D. H. 387-23

SECTION 20+00S

1" = 40'

PROPERTY PROJECT 387 - Ungava Area PAGE 1

LOCATION 16 + 00S - 4+00E BEARING 245 HOLE NO. 387-24

LOGGED BY P.D. Watt ELEVATION Approx. 699' DIP 65° FINAL DEPTH 251'

STARTED May 22, 1962 TESTS (CORRECTED)

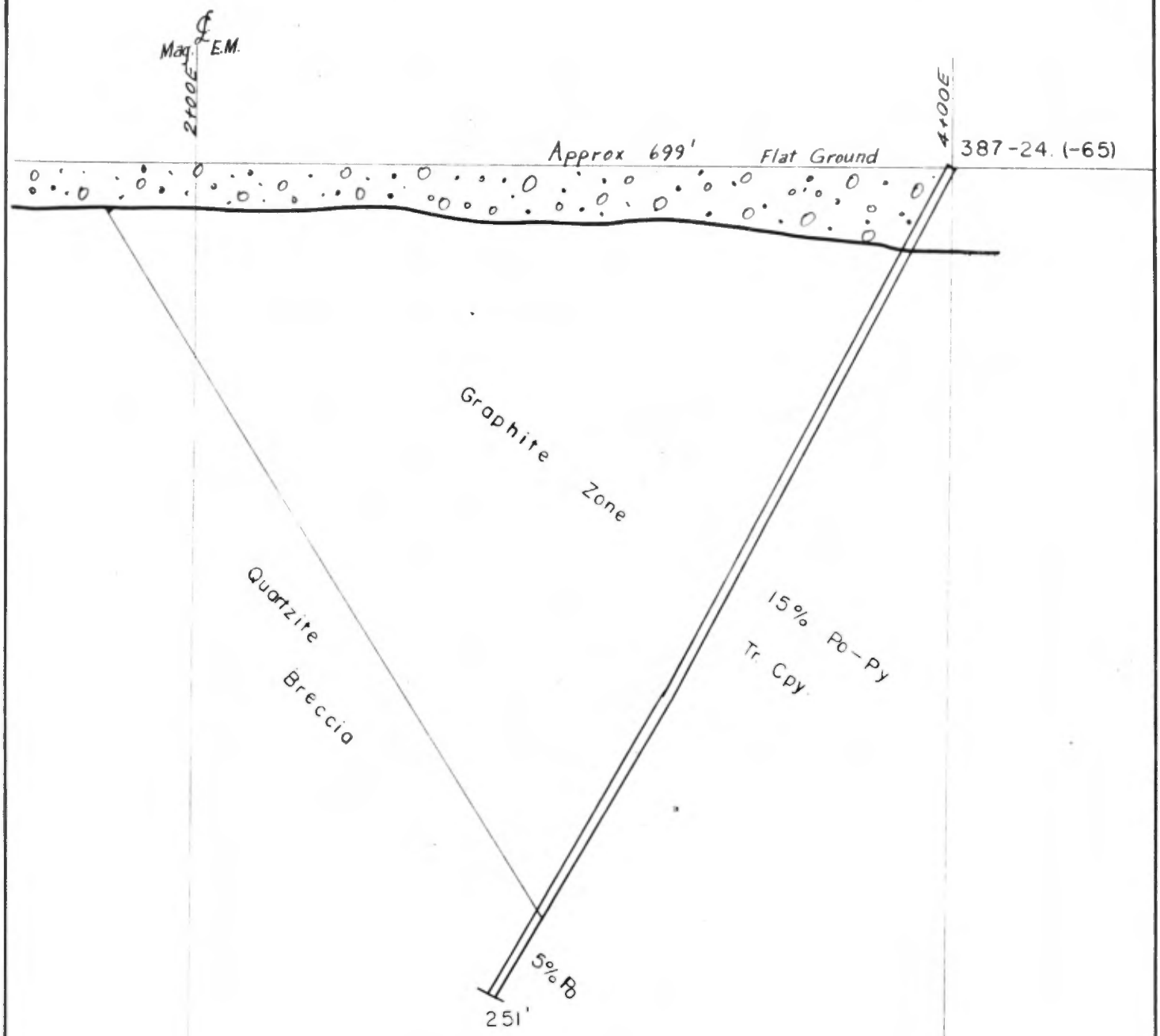
FINISHED May 24, 1962 -

CASING 26'

CORE SIZE AXT

FROM	TO	DESCRIPTION
0.0	26.0	CASING
26.0	225.8	GRAPHITE ZONE - with a bleb of chalcopyrite at 81 feet in a 2" wide quartz vein. 1 inch of 10% sphalerite at 123 ft. Minor chalcopyrite at 138.5 ft. 26.0 - 142.0 - 20-25% pyrite and pyrrhotite. Core angle at 160' is 75°. Minor chalcopyrite over 3" at 166 ft. Minor chalcopyrite over 1" at 178 ft. 142.0 - 225.8 - 15% pyrite and pyrrhotite. Chalcopyrite contained in stringers 1/2" to 1/4" wide. Core angle at 170' is 70°.
225.8	251.0	QUARTZITE BRECCIA - angular fragments of quartz and quartzite in a matrix of grey dolomite and sandstone. Sandstone matrix in part pale green. Quartzite fragments white to grey; 5% pyrrhotite.
	251.0	END OF HOLE

HOLE NO. 387-24



PROJECT 387

D. D. H. 387-24

SECTION 16+00S

1" = 40'

PROPERTY Project 387 - Ungava Area PAGE 1

LOCATION 12 + 00 - 3+00E BEARING 245 HOLE NO. 387-25

LOGGED BY P.D.Watt ELEVATION Approx. 685' DIP 55° FINAL DEPTH 302'

STARTED May 25, 1962 TESTS (CORRECTED)

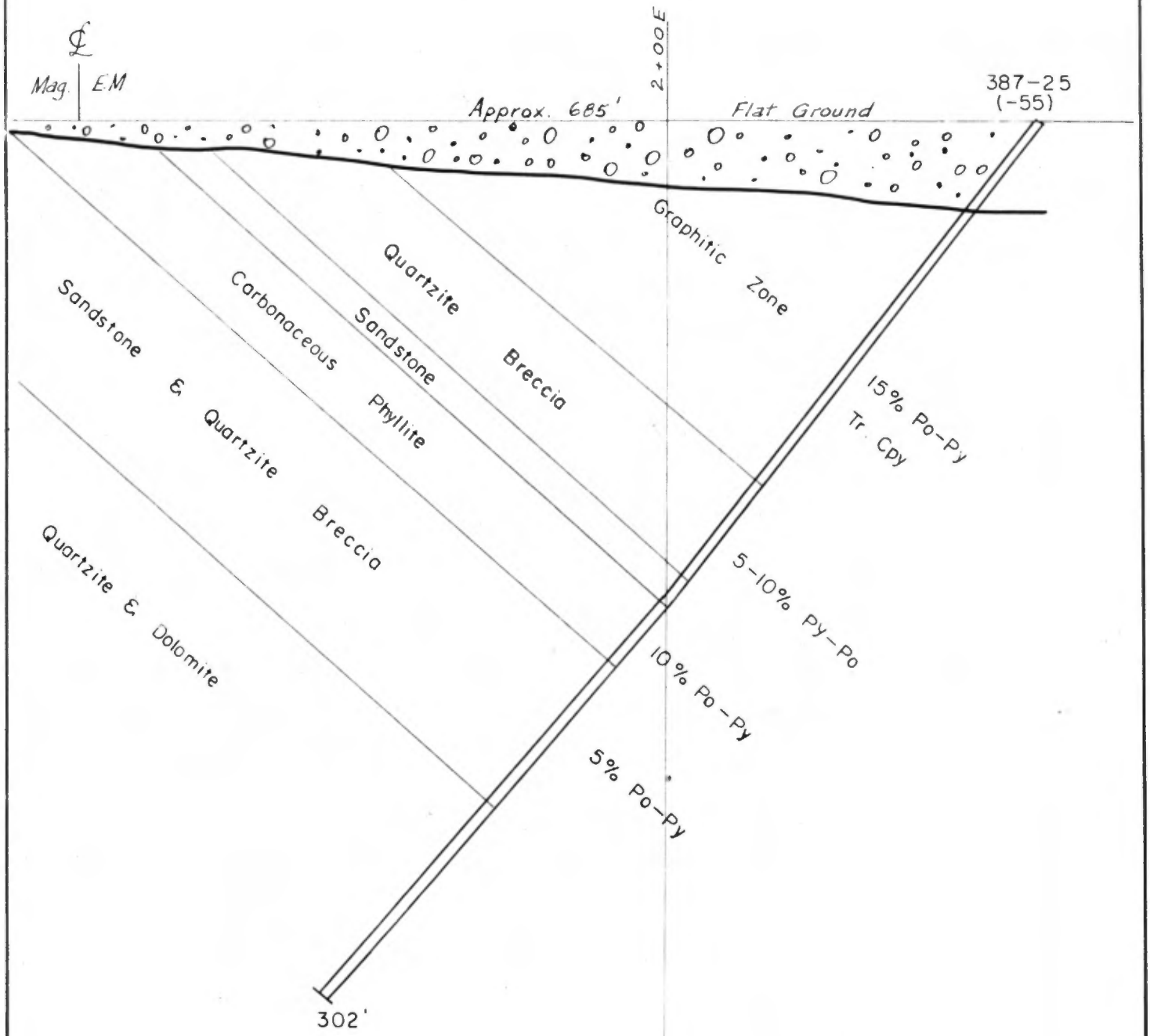
FINISHED May 27, 1962 ---

CASING 32'

CORE SIZE AXT

FROM	TO	DESCRIPTION
0.0	32.0	OVERBURDEN
32.0	122.4	GRAPHITE ZONE - one small bleb of chalcopyrite in the interstice in pyrite in a 1" wide quartz vein. At 106' - 2" of 2% chalcopyrite. 32.0 - 111.6 - 25% pyrite and pyrrhotite; a few quartz-carbonate stringers (thin). 111.6 - 122.4 - 15% pyrite and pyrrhotite in bands. Core angle at 120 ft. is 80°.
122.4	129.8	PHYLLITE BRECCIA - Quartzite fragments in a carbonaceous phyllite matrix. 15% pyrite and pyrrhotite. Pyrite in cubes up to 1/4" in diameter, and pyrrhotite in irregular stringers.
129.8	154.0	QUARTZITE BRECCIA - white quartzite and grey quartzite fragments with dolomite matrix. Grey to green. 5% fine-grained pyrrhotite. 142.0 - 144.0 - Matrix of carbonaceous, phyllite with 5% pyrite cubes.
154.0	163.0	COARSE GRAY SANDSTONE or greywacke. Medium-sized crystals of feldspar visible. Thin argillite partings.
163.0	184.0	CARBONACEOUS PHYLLITE - 10% pyrrhotite and pyrite. Minor quartz-carbonate veins. Core ~~egal~~ angle at 180' is 80°.
184.0	186.0	QUARTZITE BRECCIA - White quartzite fragments, 5% pyrrhotite (fine grained) matrix of grey quartzite, grey to green.
186.0	232.3	GREY SANDSTONE or greywacke. 210.6 - 215.8 - Interbedded white quartzite and grey dolomite. 216 - 217 - Quartz vein with barren pyrite (massive). Sandstone similar to 154 to 163'. Numerous irregular quartz stringers. Coarse grained.
232.3	302.0	Interbedded QUARTZITE and DOLOMITE. Grey to dark green. A few bands of white quartzite. 272 - 284.3 - Same as above but brecciated. 297 - 299.0 - White quartzite with 5% fine grained pyrrhotite. 286.8 - 287.2 - Quartz-carbonate stringer.
	302.0	END OF HOLE

HOLE NO. 387-25



PROJECT 387

D. D. H. 387-25

SECTION 12+00S

1" = 40'

PROPERTY Project 387 - Ungava Area PAGE 1

LOCATION 8 + 00S - 4+00E BEARING 245 HOLE NO. 387-26

LOGGED BY P.D.Watt ELEVATION Approx.631' DIP -55° FINAL DEPTH 688'

STARTED May 28, 1962 TESTS (CORRECTED)

FINISHED June 2, 1962 ---

CASING 20'

CORE SIZE AXT

FROM	TO	DESCRIPTION
0.0	20.0	OVERBURDEN
20.0	113.0	GRAPHITE ZONE - 15% pyrite and pyrrhotite exhibiting peacock colors; odd thin quartz-carbonate stringer.
113.0	167.0	CARBONACEOUS PHYLLITE - 10% pyrrhotite and pyrite. Core angle 80°. 159.0 - 167.0 - Scattered fragments of white quartzite in a matrix of carbonaceous phyllite.
167.0	181.0	QUARTZITE BRECCIA - white quartzite fragments in a matrix of grey quartzite and dolomite. 167.0 - 169.0 - Fine grained disseminated pyrrhotite, 2%.
181.0	255.0	Interbedded WHITE QUARTZITE, GREY QUARTZITE, and GREY DOLOMITE. Dolomite partly with medium sized grains or crystals of carbonate. 220.5 - 227.5 - with partings of barren sulphide. 253.8 - 255.0 - with 2% fine grained pyrrhotite.
255.0	442.0	CARBONACEOUS PHYLLITE - Core angle 70°. 8% pyrite and pyrrhotite. Thin stringers of quartz-carbonate present.
442.0	499.0	FERRODOLOMITE - containing medium sized crystals of orange-yellow carbonate. Matrix is grey dolomite. Interbands of quartzite, and quartz stringers up to 3 inches wide.
499.0	515.5	INTERBEDDED WHITE QUARTZITE, GREY QUARTZITE AND GREY DOLOMITE.
515.5	625.0	GRAPHITE ZONE 515.5 - 580.0 - Crenulated, well mineralized with graphite; 15% pyrite and pyrrhotite; partly contorted. Pyrrhotite predominates. 580.0 - 613.0 - Carbonaceous phyllite. 8% pyrrhotite and pyrite. 613.0 - 618.4 - Quartzite with fine grained disseminated 2% pyrrhotite. 618.4 - 625.0 - Quartzite breccia consisting mainly of carbonaceous phyllite matrix. 2% pyrite, 2% graphite and 2% pyrrhotite.

HOLE NO. 387-26

Page 1

PROPERTY Project 387 - Ungava Area PAGE 2

LOCATION _____ BEARING _____ HOLE NO. 387-26

LOGGED BY _____ ELEVATION _____ DIP _____ FINAL DEPTH 688'

STARTED _____ TESTS (CORRECTED)

FINISHED _____

CASING _____

CORE SIZE _____

FROM	TO	DESCRIPTION
625.0	688.0	INTERBEDDED GREY DOLOMITE, GREY QUARTZITE AND WHITE QUARTZITE. Core angle 60°. 650 - 675 - Predominantly dolomite
	688.0	END OF HOLE

HOLE NO. 387-26

Page 2

NUMÉRIQUE

PAGE(S) DE DIMENSION HORS STANDARD NUMÉRISÉE ET POSITIONNÉE À LA SUITE DES PRÉSENTES PAGES STANDARDS.

PROPERTY UNGAVA AREA - Project 387 PAGE 1

LOCATION 400S - 3+90E BEARING 245° HOLE NO. 387-27

LOGGED BY P.D.Watt ELEVATION Approx. 623' DIP 50° FINAL DEPTH 416'

STARTED June 3, 1962 TESTS (CORRECTED)

FINISHED June 6, 1962

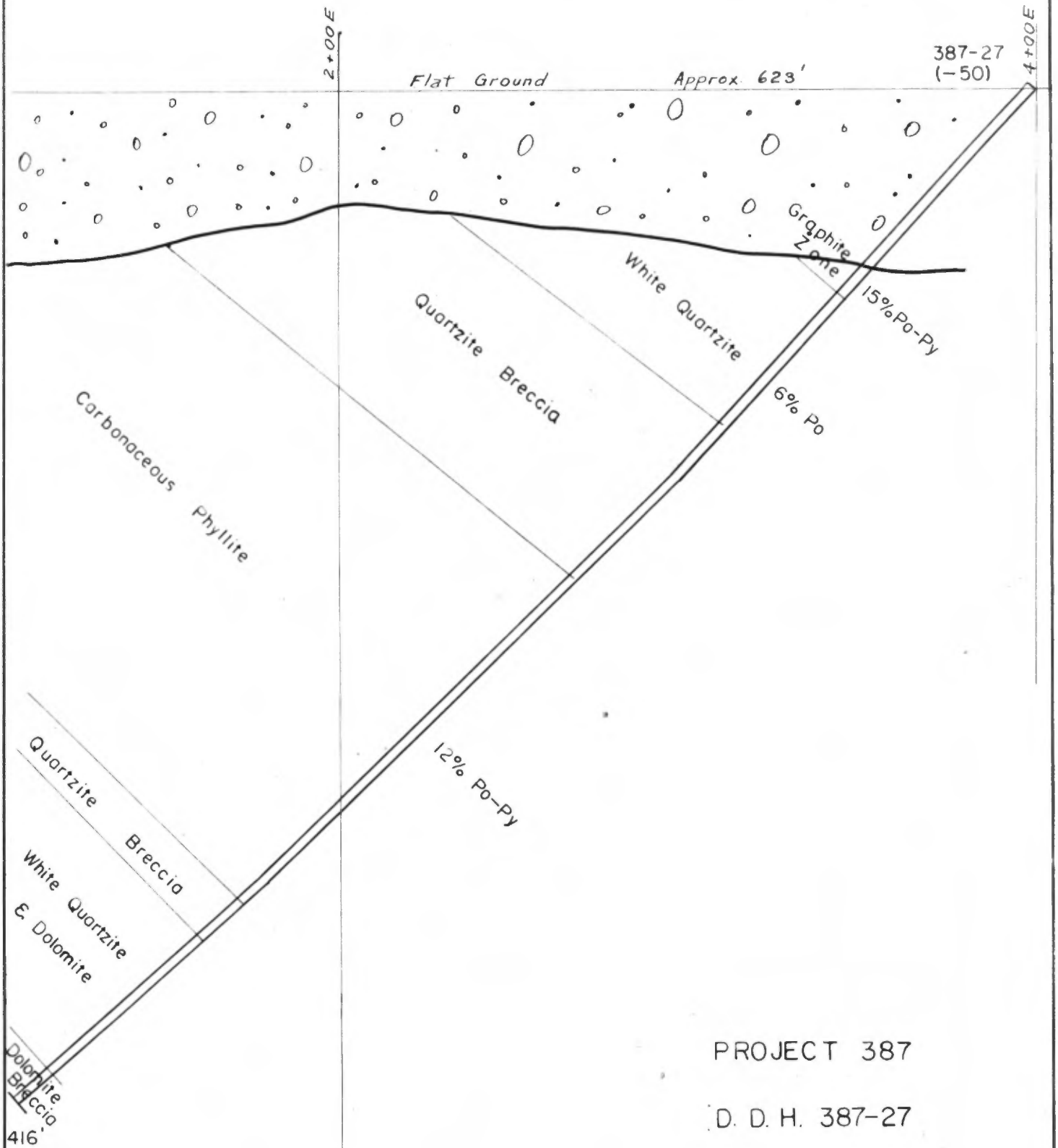
CASING 72' —

CORE SIZE AXT

FROM	TO	DESCRIPTION
0.0	72.0	OVERBURDEN
72.0	82.7	GRAPHITE ZONE - 15% mineralized with pyrite and pyrrhotite. Well mineralized with graphite.
82.7	132.0	WHITE QUARTZITE - with 6% pyrrhotite in stringers and disseminated.
132.0	194.4	QUARTZITE BRECCIA - fragments are white quartzite. Matrix is grey fine grained to medium grained dolomite.
194.4	327.8	CARBONACEOUS PHYLLITE - average of 12% barren sulphide. Core angle 80°. Odd thin quartz stringer.
327.8	343.0	QUARTZITE BRECCIA - fragments of white quartzite in a matrix of fine to medium grained grey dolomite. 325.7 - 337.5 - 5% barren sulphide.
343.0	402.2	INTERBEDDED WHITE QUARTZITE AND DOLOMITE.
402.2	416.0	DOLOMITE BRECCIA
	416.0	END OF HOLE

No sampling

HOLE NO. 387-27



PROJECT 387

D. D. H. 387-27

SECTION 4+00S

1" = 40'

PROPERTY UNGAVA AREA - Project 387 PAGE 2

LOCATION _____ BEARING _____ HOLE NO. 387-28

LOGGED BY _____ ELEVATION _____ DIP _____ FINAL DEPTH 468'

STARTED _____ TESTS (CORRECTED)

FINISHED _____

CASING _____

CORE SIZE _____

FROM	TO	DESCRIPTION
		352.0 - 385.0 - 7% barren sulphide. 385.0 - 387.5 - partly quartzite. Very well mineralized with sulphides. Partly intimate dense pyrrhotite-graphite mentioned in 348.0 - 352.0. Mineralized with chalcopyrite over a cm wide graphite-pyrite-chalcopyrite stringer. One streak of chalcopyrite at 380.5. 387.5 - 389.5 - Ordinary graphite phyllite with 7% barren sulphide. 389.5 - 405.0 - Intimately mixed fine grained pyrrhotite and graphite.
405.0	468.0	Interbedded QUARTZITE and DOLOMITE with odd wuartz vein (thin). 405 - 406 - white quartzite, 7% barren sulphide. Chalcopyrite in one hair-line fracture.
	468.0	END OF HOLE

HOLE NO. 387-28 Page 2

PROPERTY UNGAVA AREA - Project 387 PAGE 1

LOCATION 64 + 00S - 2+00E BEARING 245 HOLE NO. 387-28

LOGGED BY P.D. Watt ELEVATION DIP -50° FINAL DEPTH 468'

STARTED June 9, 1962 TESTS (CORRECTED)

FINISHED June 12, 1962

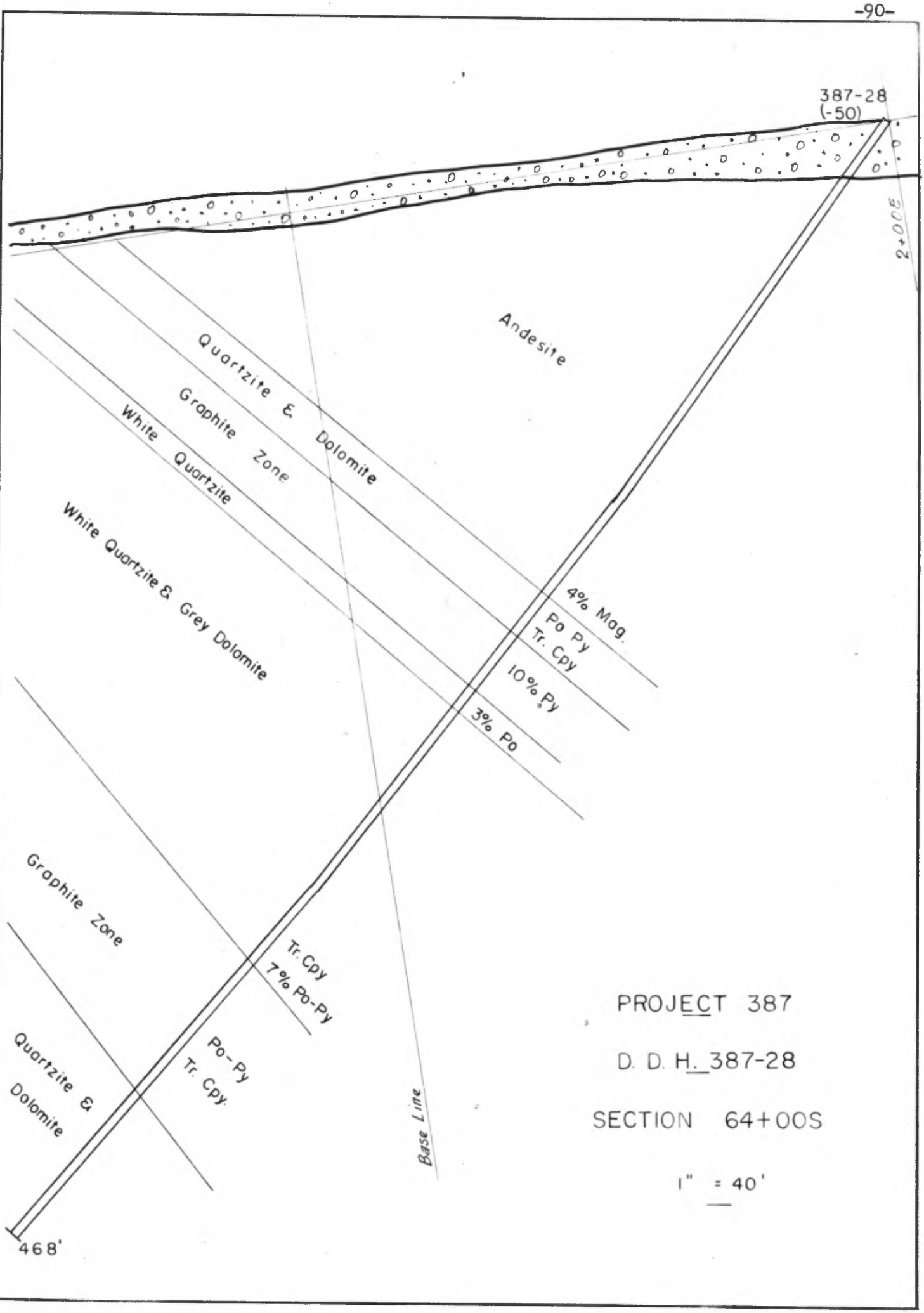
CASING 28'

CORE SIZE AXT

FROM	TO	DESCRIPTION
0.0	23.0	OVERBURDEN
0.0	28.0	CASING
28.0	195.4	ANDESITE - with numerous very thin quartz carbonate stringers parallel to the schistosity. Core angle 70°. About eight 3" quartz-carbonate stringers with quartz semi-glassy and dark blue. Very minor pyrite very scattered throughout. Color green. Minerals mostly chlorite and calcite, also talc present. 98 - 139 - Massive feldspar seems to be all weathered to calcite. 186.0 -190.3 - Chlorite schist with medium to large euhedral crystals of magnetite, very heavy; 4% magnetite. 193.5 -194.0 - Quartz-andesite, massive, small crystals of magnetite, 2%.
195.4	209.5	Interbedded QUARTZ and DOLOMITE, in part argillaceous. 208.5 - 209.5 - White quartzite mineralized with pyrrhotite and pyrite with one or two specks of chalco-pyrite.
209.5	231.0	GRAPHITE ZONE 209.5 - 224.5 - has 20% barren sulphides. 224.5 - 230 - very well mineralized with barren sulphide. 230.0 - 231.0 - massive barren sulphide.
231.0	239.0	WHITE QUARTZITE - with 3% disseminated pyrrhotite and a few very small stringers.
239.0	348.0	INTERBEDDED WHITE QUARTZITE and GREY DOLOMITE. 346.5 - 348.0 - 7% sulphides. Chalco - one speck.
348.0	405.0	GRAPHITE ZONE 348.0 - 352.0 - pyrrhotite and graphite, intimate fine grained mixture, heavy, platinum-grey color.

HOLE NO. 387-28

Page 1


387-28
(-50)
2+00E
Andesite
Quartzite & Dolomite
Graphite Zone
White Quartzite
White Quartzite & Grey Dolomite
4% Mag.
Po Py
Tr. Cpy
10% Py
3% Po
Graphite Zone
Tr. Cpy
7% Po-Py
Po-Py
Tr. Cpy.
Quartzite & Dolomite
Base Line
468'
PROJECT 387
D. D. H. 387-28
SECTION 64+00S
1" = 40'

PROPERTY UNGAVA AREA - Project 387 PAGE 1

LOCATION 600+00S 7+00E BEARING HOLE NO. 387-29

LOGGED BY P.D.Watt ELEVATION - DIP 50° FINAL DEPTH 264'

STARTED June 12, 1962 TESTS (CORRECTED)

FINISHED June 14, 1962

CASING 10'

CORE SIZE AXT

FROM	TO	DESCRIPTION
0.0	10.0	CASING
10.0	110.0	ANDESITE - Mainly consists of talc-chlorite schist, green. 100.6 - 110 and 47 - 60.0 are black 72.0 - 76.5 and 94.5 - 96.5 is speckled andesite. Scattered and very minor pyrrhotite and carbonate. Numerous thin quartz carbonate stringers. Core angle 85°.
110.0	122.0	QUARTZITE - Composed of quartz and talc. 10% barren sulphide in stringers, paralleling the schistosity.
122.0	182.3	GRAPHITE ZONE - Parts 25%, others 10% mineralized with mostly pyrrhotite, but some pyrite also. The chalcopyrite was found in the heavy pyrrhotite parts. 127.4 - 128.0 - 1.5% chalcopyrite. 131.4 - Two specks of chalcopyrite. 137.0 - 137.6 - 1.5% chalcopyrite. 157.0 - One speck of chalcopyrite. Other specks at 173 and 182.3'. The values occur mainly in the pyrrhotite as blebs, rarely in the graphite.
182.3	264.0	ANDESITE - Consists mostly of green to black tacl-chlorite schist. 182.3 - 183.0 - Quartz vein. 192.0 - 222.5 - Speckled andesite. Scattered very thin quartz carbonate stringers and very scattered pyrrhotite specks. Core angle 80°.
	264.0	END OF HOLE

NO SAMPLING

HOLE NO. 387-29

PROJECT 387

D. D. H. 387-29

SECTION 60+00S

1" = 40'

PROPERTY UNGAVA AREA - Project 387 PAGE 1

LOCATION 76 + 00S 10+00E BEARING 245° HOLE NO. 387-30

LOGGED BY P.D.Watt ELEVATION = DIP 50° FINAL DEPTH 578'

STARTED June 16, 1962 TESTS (CORRECTED)

FINISHED June 19, 1962

CASING AXT

CORE SIZE 20'

FROM	TO	DESCRIPTION
0.0	20.0	OVERBURDEN
20.0	23.5	ARGILLITE AND GREY QUARTZITE - Minor scattered pyrrhotite, parts of white quartzite which appears to be silicified dolomite or argillite.
23.5	133.0	ANDESITE 23.5 - 32.5 - Pyroxene schist, minor pyroxene, medium sized prisms. Mostly altered to chlorite and talc. Minor fine grained magnetite. 32.5 - 45.0 - Chlorite talc schist. Partly speckled with carbonate. 45.0 -122.0 - Massive altered basalt. Thin quartz-carbonate stringers, parallel to schistosity, parts with fine grained biotite. 51.0 - Medium-grained magnetite over 4". 85.0 - 88.0 - Medium sized pyroxene prisms, altered to chlorite and talc, partly disseminated pyrrhotite. 122.0 -133.0 - Siliceous and stained brown with iron.
133.0	155.0	WHITE QUARTZITE - 133.0 - 135.5 - Solid sulphide to mineralized with mostly pyrrhotite. 135.5 - 140.8 - Interbedded grey dolomite 50% of rock; very minor pyrrhotite. 140.8 - 155.0 - Minor to mineralized with mostly pyrrhotite. 8% - No values seen.
155.0	202.0	INTERBEDDED GREY QUARTZITE, GREY DOLOMITE AND WHITE QUARTZITE. 155.0 - 174.0 - No white quartzite, partly brecciated. 174.0 - 180.5 - White quartzite with talc and minor disseminated pyrrhotite. Also 176.0 - 178.5 - Graphite zone - 20% barren sulphide. 180.5 - 190.8 - Grey speckled dolomite. 190.8 - 192.5 - Chlorite talc schist with scattered pyrrhotite. 192.5 - 194.5 - Graphite zone, 15% barren sulphide with chalcopyrite in one hair-line fracture. 194.5 - 202.0 - No white quartzite. Also 198.5 - 199.2 - Graphite zone with very minor chalco-pyrite at 199.0; 15% pyrrhotite.

HOLE NO. 387-30 Page 1

PROPERTY UNGAVA AREA - Project 387 PAGE 2

LOCATION _____ BEARING _____ HOLE NO. 387-30

LOGGED BY _____ ELEVATION _____ DIP _____ FINAL DEPTH 578'

STARTED _____ TESTS (CORRECTED)

FINISHED _____

CASING _____

CORE SIZE _____

FROM	TO	DESCRIPTION
202.0	252.0	GRAPHITE ZONE - 15% mineralized with pyrrhotite and pyrite.
252.0	284.0	QUARTZITE BRECCIA - with small rounded to tabular fragments of grey and white quartzite in a grey dolomite and grey argillite. Thin quartz veins. 252.0 - 258.0 - Mineralized with barren shlphide and graphite. Core angle 90°.
284.0	464.8	ANDESITE - Altered to chlorite talc and carbonate. 308.0 - 309.0 - Quartz carbonate vein. 310.0 - 316.0 - Darker green, finely banded. 326 - Fracture 1 cm. wide with minor chalcopyrite. 358.0 - 358.8 - Quartz vein mineralized with pyrrhotite. 440.0 - 455.0 - Dark green thinly banded schist. Also 448.5 - 453.5 - Fine grained glassy magnetite, 15%, disseminated. 455.0 - 457.0 - Interbedded grey dolomite and grey quartzite. 457.0 - 464.8 - Speckled andesite.
464.8	493.0	INTERBEDDED GREY DOLOMITE AND GREY QUARTZITE 492 - 493.0 - Grey argillite with sericite and fine grained disseminated magnetite - 5%.
493.0	521.0	QUARTZITE BRECCIA - As before with a few bands of white quartzite. 512.0 - 521.0 - Mineralized with barren sulphide and graphite.
521.0	542.0	GRAPHITE ZONE - Shearing visible on graphite. 15% barren sulphide.
542.0	553.0	INTERBEDDED GREY DOLOMITE AND QUARTZITE.
553.0	567.5	ANDESITE - Mineralized with pyrrhotite over 2" at 567.2'.
567.5	578.0	GREY DOLOMITE 567.5 - 572.5 - Chloritic argillite. Fine grained magnetite disseminated at 574'.
	578.0	END OF HOLE
		133.0 - 135.5 - Sampled for Nickel

HOLE NO. 387-30 Page 2

NUMÉRIQUE

PAGE(S) DE DIMENSION HORS STANDARD NUMÉRISÉE ET POSITIONNÉE À LA SUITE DES PRÉSENTES PAGES STANDARDS.

PROJECT 398

PROJECT 398

REFERENCE MAPS

Plate 1 - Property Map - Index Map, Koksoak River Area

Plate 2 - Geological Map, Koksoak River Area

Plate 3 - Staking Map Showing Claim Numbers, Koksoak River Area

Plate 29 - Project 398 - Geophysical Plan and D.D.H. Section

PROPERTY

The Project 398 claim group is located about 8 miles northwest of the confluence of the Larch and Kaniapiskau Rivers. The claims were staked in August-September, 1961 and in February 1962. Staking particulars are as follows:

Staker	Licensee	Date	Claims (CANTON SYNS)
L. Katakwapit	L. Katakwapit	August 29, 1961	185498 - 1 to 5 incl.
	M.M. Moore	" 30 "	185618 1 " 5 "
	J.H. Wilson	" 31 "	185619 1 " 4 "
M. Rody	K. Brannigan	" 30 "	185616 1 " 5 "
	E.A. Brannigan	" 31 "	185617 1 " 5 "
C. MacIntish	C. MacIntosh	Sept. 21 "	187248 1 " 5 "
N. Smith	N. Smith	" 21 "	187250 1 " 5 "
K. Liski	K. Liski	Feb. 20 1962	192775 1 " 5 "
	J.R. Parke	21 "	192778 1 " 5 "
		Total -	44 Claims

enfiefs

GEOLOGY

The property was staked to cover a strong and local magnetic anomaly obtained with a helicopter-mounted Sharpe A-3 magnetometer in August, 1961. The anomaly occurs within the same sedimentary formations that are the hosts to the Zn-Cu-Ag deposit on the Project 387 property some 10 miles to the southeast.

These Proterozoic sediments include grey argillite, dolomite, siltstone and sandstone. Metamorphism has changed the rocks to phyllite, schist and quartzite. The formations strike N 40° W and dip about 45° to the northeast.

Bedrock on the claims is totally obscured by thick glacial cover. However, higher land immediately to the east has numerous exposures of gabbroic sills which overlie the sediments.

WORK PERFORMED

Approximately 22 miles of picket lines were cut and chained on the property during the winter of 1962. This work was localized on the following claims: 185616 - 1 to 4, 185617 - 1 to 4, 185498 - 1 to 4, 185618 - 1 to 4, 185250 - 1 to 5 and 187248 - 1 to 5. Picket line interval was 400 feet.

Line chaining was followed by a ground magnetometer survey with the Sharpe A-2 magnetometer with readings taken at 100 foot stations. The magnetometer survey revealed a magnetic anomaly with relief of over 5,000 gammas. The anomaly is about 5,000 feet in length and 3,000 feet in width. Electromagnetic checkwork of the anomaly outlined a conductor some 1,600 feet in length lying immediately west of the 'heart' of the magnetic high.

Diamond drilling was proposed to test the geophysical anomalies. One hole (750 feet in length) was drilled. It was started on April 11 and completed on April 19. The hole entered bedrock at 86 feet. The consolidated formations included graphitic schists, dolomite,

quartzite and phyllite.

The geophysical anomalies were caused by a zone (encountered from 448 to 640 feet) of interbedded graphitic schist and quartzite. The rock contains from 10 to 15 per cent sulphides - mainly pyrite and pyrrhotite. Abundant magnetite and minor sphalerite also occur. Light chalcopyrite was noted in various parts of the hole.

CONCLUSIONS AND RECOMMENDATIONS

Sedimentary formations, known to be favourable host rocks for zinc-copper-silver mineralization in the area, occur on the Project 398 claims. A partial geophysical survey was performed and the single resulting anomaly was tested with one drill hole. The results of the drilling were inconclusive. However, minor zinc-copper mineralization was revealed occurring in sulphide-rich graphitic rocks. Magnetite also occurs associated with the mineralization. This mineral association is identical to that obtaining at the Project 387 sulphide body some 10 miles to the southeast.

Because of the similarity of the geology and mineralization between the Projects 387 and 398 properties, it is recommended that four claims be maintained in good standing. These claims are: 185498 - 1, 185250 - 4 and 5 and 185618 - 1.

Attention should be paid to current exploration activity in the area north of the Koksoak River (notably by Holanna and British Ungava) as any discoveries would have an important bearing on the decision to perform more work on the Project 398 claims.

Respectfully submitted,

A. B. Baldwin

A. B. Baldwin
Field Geologist

Toronto, Ontario
December 1962

PROPERTY UNGAVA AREA - Project 398 PAGE 1

LOCATION 80+00S - 31+00E BEARING 263° HOLE NO. 398-1

LOGGED BY L.B. Halladay ELEVATION DIP -60° FINAL DEPTH 750'

STARTED April 11, 1962 TESTS (CORRECTED)

FINISHED April 19, 1962 200' - 55°
400' - 60°
600' - 55°
740' - 53°

CASING 86' - 68' left in hole

CORE SIZE AXT

FROM	TO	DESCRIPTION
0.0	86.0	OVERBURDEN
86.0	175.0	GRAPHITIC SCHIST - grey to black, finely banded with bands of quartzite. Banding varies from 75° to 90° to core axis, locally contorted. 5% pyrite.
175.0	213.0	DOMOMITE (?) - fine grained, grey, cut by numerous quartz stringers.
213.0	264.0	GRAPHITIC SCHIST - similar to 86-175' - 5% pyrite. 249 - 264 - Core badly broken, highly (80%) graphitic.
264.0	284.5	QUARTZ-CARBONATE VEIN - with inclusions of graphitic material. A few specks chalcopyrite. 267 - 269 - 60% coarsely crystalline pyrite.
284.5	345.4	CARBONACEOUS PHYLLITE - fine grained, grey-green to black with interbedded light grey quartzite. Considerable injected quartz-carbonate in first 30'. Graphitic near upper and lower contacts, very minor chalcopyrite. Schistosity at 70-90° to core axis.
345.4	385.0	DOMOMITE - similar to 175-213'.
385.0	432.0	INTERBEDDED CARBONACEOUS PHYLLITE AND QUARTZITE - similar to 284-345'. 386.5 - 387.5 - Quartz carbonate veinlet with minor pyrite and chalcopyrite. 409.0 - 432.0 - Graphitic with 15% pyrite.
432.0	448.5	DOLOMITE - similar to 175-213'.
448.5	640.0	INTERBEDDED GRAPHITIC SCHIST AND QUARTZITE - similar to 385-432' with a few short sections of dolomite. 487 - several large blebs of sphalerite. 570 -640 - Increase in graphite with 10-15% pyrite and pyrrhotite. Very magnetic probably considerable magnetite present.

HOLE NO. 398-1 Page 1

PROPERTY UNGAVA AREA - Project 398 PAGE 2

LOCATION _____ BEARING _____ HOLE NO. 398-1

LOGGED BY _____ ELEVATION _____ DIP _____ FINAL DEPTH 750'

STARTED _____ TESTS (CORRECTED)

FINISHED _____

CASING _____

CORE SIZE _____

FROM	TO	DESCRIPTION
640.0	750.0	Interbedded dark green to black PHYLLITE and light grey QUARTZITE. 5-10% pyrite and pyrrhotite in first 25' (slightly magnetic. Bedding varies from 50°-80° to core axis. Averages 65°. 700 - 730 - Black carbonaceous.
	750.0	END OF HOLE

HOLE NO. 398-1 Page 2

SAMPLE RECORD SHEET

PROPERTY- UNGAVA AREA - Project 398

398-1 -HOLE NO.
1 -PAGE

SAMPLE NO.	FROM	TO	LENGTH	ASSAYS					DESCRIPTIONS
				Oz. Au	Oz. Ag				
398-1-1	264.0	274.0	10.0'	Tr.	Tr.				
398-1-2	274.0	284.0	10.0'	Tr.	Tr.				

Townshend & Kent Form No. 8609

398-1

PROJECT 399

PROJECT 399 (5741)

PROPERTY

The Project 399 property is situated about 9 miles north of the Project 387 sulphide occurrence. It consists of 2 claims staked by G. Eden for M. Conn on August 28, 1961 under License 185604. cnf

GEOLOGY

Ten claims were originally staked to cover a prominent zone of sulphide mineralization southwest of Erickson Lake. The zone contains copper-nickel values in an anorthositic gabbro sill. It was explored earlier by Holannah, the exploration arm of the Iron Ore Company of Canada. It had been shown as unstaked on the government staking maps of the area. However when recording was taking place, the main part of the zone was reinstated to Holannah resulting in only 2 claims being accepted for recording.

CONCLUSIONS AND RECOMMENDATIONS

The claims have not been worked since staking. It is recommended that a brief examination be carried out in the 1963 field season before an abandonment decision is reached.

Respectfully submitted,

A. B. Baldwin

Toronto, Ontario
December 1962

A. B. Baldwin
Field Geologist

PROJECT 400

PROJECT 400

REFERENCE MAPS

Plate 1 - Property Map - Index Map, Koksoak River Area

Plate 2 - Geological Map, Koksoak River Area

Plate 3 - Staking Map Showing Claim Numbers, Koksoak River Area

Plate 30 - Project 400 - Claim Map Showing Mineralized Occurrences

Plate 31 - Project 400 - Geophysical Map and D.D.H. Section (North Sheet)

Plate 32 - Project 400 - Geophysical Map and D.D.H. Section (South Sheet)

PROPERTY

The Project 400 claim group is located about 5 miles south of the confluence of the Larch and Kaniapiskau Rivers. The claims were staked in August-September, 1961. Staking particulars are as follows:

Staker	Licensee	Date	Claims (5646)
G. Eden	G. Eden	Aug. 30, 1961	185626 - 1 to 5 incl.
	P.A. McDiarmid	Aug. 29, 1961	185609 - 1 to 5 "
J. Boyd	J. Boyd	Aug. 29, 1961	185624 - 1 to 5 "
	W.H. Baldwin	Aug. 28, 1961	185605 - 1 to 5 "
	D. McPherson	Aug. 30, 1961	185606 - 1 to 5 "
	M. Sefton	Aug. 31, 1961	185607 - 1 to 5 "
	W. Sefton	Sept. 1, 1961	185608 - 1 to 5 "
J. Adams	J. Adams	Aug. 26, 1961	185625 - 1 to 5 "
	C.L. McDiarmid	Aug. 27, 1961	185610 - 1 to 5 "
	C. McPherson	Aug. 28, 1961	185611 - 1 to 5 "
	T. Almstrom	Aug. 29, 1961	185612 - 1 to 5 "
	J. Seidel	Aug. 30, 1961	185613 - 1 to 5 "
M. Rody	M. Rody	Aug. 27, 1961	185627 - 1 to 5 "
	G. Waugh	Aug. 28, 1961	185614 - 1 to 5 "
	H.R. Henderson	Aug. 29, 1961	185615 - 1 to 5 "

Total - 75 Claims

GEOLOGY

The property was staked to protect six zinc-lead occurrences found by prospectors T. Morrison and Jos. Allard. These occurrences are scattered along a strike length of 6 miles in well-bedded sandy dolomite formations. Refer to Plate 30. Mineralization consists of sphalerite, galena and pyrite as disseminations in selected beds and with quartz veins. The Project 400 group of claims adjoins the south boundary of the discovery group of Project 387 and is about 4 miles from the Koksoak Sulphide Deposit. The Project 400 claims are underlain by rocks similar to those on the Project 387 property except dolomitic sediments are more abundant on the former. These sediments would be the southeast extension of Group 2a on the Project 387 geological maps. This rock type is the most common formation west of the sulphide deposit.

Overburden in the form of sand deposits is widespread especially along the eastern boundary. Swamps cover most of the main group of claims. Bedrock exposures mainly occur as prominent rounded outcrops protruding through the surrounding swamps.

WORK PERFORMED

Approximately 60 miles of picket lines were cut and chained on the property during the late winter of 1962. This work was localized on the southern portion of the claim group. Picket line interval was 400 feet.

Line chaining was followed by a ground magnetometer survey and a partial Magniphase electromagnetic survey designed to check the

magnetic anomalies.

A series of magnetic highs were outlined extending from P.L. 388+00 to the south boundary. The long, sinuous and 'on strike' nature of the anomalies indicate a formational cause. The generally nearly coincident conductive zone corroborates this conclusion and indicates syngenetic pyrrhotite as the main magnetic and conductive mineral.

Two diamond drill holes were drilled in April-May of 1962 to test the most intense parts of the magnetic-electromagnetic anomalies. These holes, totalling 859 feet, intersected quartzite, dolomite and phyllite. Widespread pyrrhotite-pyrite and lesser amounts of carbonaceous material occur with the sediments. Minor chalcopyrite was also observed. It would appear that the geophysical anomalies represent a zone of quartzite and phyllite (clastic sediments) within a thick zone of dolomite (chemical sediments), the latter of which is exposed in the scattered outcrops on the property.

CONCLUSIONS AND RECOMMENDATIONS

The negative results from the limited diamond drilling programme suggest that no additional exploratory work is warranted on the Project 400 property.

Geochemical soil sampling work has been recommended on the adjacent Project 387 property. Several test soil profiles over the better Project 400 anomalies could also be carried out in conjunction with this work. If these analyses prove negative then abandonment of the claims is recommended.

Respectfully submitted,

A. B. Baldwin
Field Geologist

Toronto, Ontario
December 1962

PROPERTY UNGAVA AREA - PROJECT 400 PAGE 1

LOCATION 420+00S - 15 +50E BEARING 245° HOLE NO. 400-1

LOGGED BY L.E.Halladay ELEVATION - DIP -45° FINAL DEPTH 462'

STARTED April 28, 1962 TESTS (CORRECTED)

FINISHED May 4, 1962 430' - 49°

CASING 56'

CORE SIZE AXT

FROM	TO	DESCRIPTION
0.0	56.0	OVERBURDEN
56.0	100.3	PHYLLITE - fine grained, black, carbonaceous, schistose at 70° to core axis. Occasional narrow quartz stringers.
100.3	215.0	PHYLLITE - fine grained, green, sericitic with occasional light grey quartzite bands. Banding at 80° to core axis. Considerable finely disseminated pyrrhotite and pyrite along banding. 199-205 - Numerous small carbonate crystals. 205-215 - Becomes more chloritic.
215.0	231.0	ARGILLITE - fine grained, dark green, finely bedded at 85° to core axis.
231.0	294.0	PHYLLITE - fine grained, grey-green, chloritic with inter-banded grey QUARTZITE and minor GREYWACKE. Banding at 80° Minor pyrite and pyrrhotite as fine bands along banding.
294.0	311.0	Interbedded dark green to black PHYLLITE and grey GREYWACKE. Well banded at 80° to core axis.
311.0	381.2	CARBONATE ROCK - fine to medium grained, grey, predominantly carbonate crystals with considerable green sericitic interbeds. Pyrite and pyrrhotite occur as fine bands and blebs along banding locally abundant. Banding at 85°. 378-381 - Several short sections of massive pyrrhotite and pyrite with a few specks of chalcopyrite in predominantly fine grained, carbonate rock.
381.2	425.3	PHYLLITE - fine grained, dark green, chloritic, well banded at 80° to core axis. Some interbanded light grey Dolomite (?) increasing with depth.
425.3	462.0	DOLOMITE - varies from very fine grained, light grey-green, well banded to darker grey poorly banded type with some interbanded phyllite. 425.3 - 435.0 - Light color, finely bedded at 85°. 435.0 - 446.0 - Grey in color. 446.0 - 453.0 - Light color, well bedded. 453.0 - 462.0 - Darker grey
	462.0	END OF HOLE

HOLE NO. 400-1

PROPERTY UNGAVA AREA - Project 400 PAGE 1

LOCATION 444+00S - 7+50E BEARING 245° HOLE NO. 400-2

LOGGED BY L.B.Halladay ELEVATION - DIP -45° FINAL DEPTH 397'

STARTED May 6, 1962 TESTS (CORRECTED)

FINISHED May 8, 1962 350' - 45°

CASING 26'

CORE SIZE AXT

FROM	TO	DESCRIPTION
0.0	26.0	OVERBURDEN
26.0	71.4	Interbedded dark green, chloritic PHYLLITE and light grey QUARTZITE. Roughly banded at 90° to core axis.
71.4	78.1	CARBONATE ROCK - medium grained, blue-grey, predominantly carbonate crystals, homogenous, massive.
78.1	94.0	QUARTZITE - fine grained, grey, with interbeds of light green sericite. 10-15% pyrrhotite and pyrite as blebs and stringers most abundant from 79 to 80' with traces of chalcopyrite.
94.0	114.0	AGGLOMERATE (?) small angular fragments of chloritic, dark green, rock in siliceous matrix with interbedded PHYLLITE. Poorly banded at 90°. Possibly sedimentary GRIT.
114.0	158.0	PHYLLITE - fine grained, dark green to brown, chloritic to biotitic with interbedded grey quartzite. Minor pyrite and pyrrhotite.
158.0	290.8	Interbedded grey QUARTZITE and light green sericitic PHYLLITE. Poorly banded at 90°. Occasional chloritic sections, 10% pyrrhotite and pyrite as fine stringers and blebs usually along banding. 225-290 - Somewhat brecciated. 281 - Minor galena in quartz stringer.
290.8	306.0	QUARTZITE (?) fine grained, grey, faintly banded with considerable secondary quartz with minor chlorite, biotite and sericite and 15% pyrrhotite, pyrite and traces of chalcopyrite.
306.0	349.4	DOLOMITE - very fine grained, light green, finely banded at 80° to core axis. Similar to hole 400-1. Minor interbedded chloritic material.
349.4	397.0	Interbedded dark green, chloritic, PHYLLITE and light grey QUARTZITE. Well banded in alternating layers at 75° to core axis. Some injected quartz and cream colored dolomite.
	397.0	END OF HOLE

HOLE NO. 400-2 Page 1

PROJECT 411

PROJECT 411

REFERENCE MAPS

Plate I - Property Map - Index Map, Koksoak River Area

Plate 2 - Geological Map, Koksoak River Area

Plate 3 - Staking Map Showing Claim Numbers, Koksoak River Area

PROPERTY

The Project 411 claim group extends from the confluence of the Larch and Kaniapiskau Rivers northwest for a distance of 7 miles. The claims were staked in February, 1962. Staking particulars are as follows:

Staker	Licensee	Date	Claims
Garnet Flaherty	Garnet Flaherty	Feb. 4, 1962	192774 - 1 to 5 incl.
	B. Campbell	Feb. 5, 1962	192759 - 1 to 5 "
	F. Campbell	Feb. 6, 1962	192760 - 1 to 5 "
	W. Sherrard	Feb. 7, 1962	192761 - 1 to 5 "
	S. Darnbrough	Feb. 8, 1962	192762 - 1 to 5 "
D.G. Harris	D.G. Harris	Feb. 4, 1962	192780 - 1 to 5 "
	W. Murby	Feb. 5, 1962	192767 - 1 to 5 "
	V. Perry	Feb. 6, 1962	192768 - 1 to 5 "
	M. Seyforth	Feb. 7, 1962	192769 - 1 to 5 "
	C. Nealon	Feb. 8, 1962	192773 - 1 to 5 "
E. White	E. White	Feb. 4, 1962	192781 - 1 to 5 "
	V. Sarna	Feb. 5, 1962	192763 - 1 to 5 "
	A. Barnt	Feb. 6, 1962	192764 - 1 to 5 "
	H. Richardson	Feb. 7, 1962	192765 - 1 to 5 "
	W. Gordon	Feb. 8, 1962	192766 - 1 to 5 "
P. Neumann	P. Neumann	Feb. 4, 1962	192772 - 1 to 5 "
	R. Wallace	Feb. 5, 1962	192755 - 1 to 5 "
	J. Campbell	Feb. 6, 1962	192756 - 1 to 5 "
	K. Campbell	Feb. 7, 1962	192757 - 1 to 5 "
	G. Flaherty	Feb. 8, 1962	192758 - 1 to 5 "
A. Megan	A. Megan	Feb. 4, 1962	192771 - 1 to 5 "
	A. Alexander	Feb. 5, 1962	192751 - 1 to 5 "
	O. Berry	Feb. 6, 1962	192752 - 1 to 5 "
	J. Blakslee	Feb. 7, 1962	192753 - 1 to 5 "
	M. Wallace	Feb. 8, 1962	192754 - 1 to 5 "

Staker	Licensee	Date	Claims
R. Croteau	R. Croteau	Feb. 4, 1962	192770 - 1 to 5 incl.
	F. Sherrard	Feb. 5, 1962	192750 - 1 to 5 "
	H. Halpenny	Feb. 6, 1962	192749 - 1 to 5 "
	R. Armstrong	Feb. 7, 1962	192748 - 1 to 5 "
	A. Cossar	Feb. 8, 1962	192747 - 1 to 5 "

Total - 150 Claims

GEOLOGY

The property was staked to protect the 'on formation' ground between the Project 387 Zn-Cu-Ag deposit to the south and the Project 398 magnetic anomaly to the north. The staking was done at a time when considerable staking interest obtained in the area.

Several prominent 'knobs' of bed rock occur on the property. However most of the claims are covered with a thick deposit of glacial debris and information regarding the bedrock geology is gained largely by interpolation.

The consolidated rocks are Proterozoic sediments including argillite, dolomite, siltstone and sandstone. Metamorphism has changed the rocks to phyllite, schist and quartzite. The formations strike N 40° W and dip about 45° to the northeast. A thick gabbroic sill occurs immediately east of the claims.

WORK PERFORMED

A base line was cut on the property for control in a magnetometer survey using a helicopter-mounted Sharpe A-3 instrument. No anomalies were outlined by this survey. Several of the 'knobs' of bedrock were examined the previous year and none carried any visible

mineralization. Several occurrences of pyritic graphite were noted.

CONCLUSIONS AND RECOMMENDATIONS

The limited exploratory work programme carried out on the claims in 1962 failed to indicate localities warranting further work. It is therefore recommended that the claims be abandoned.

Respectfully submitted,

A.B. Baldwin,
Field Geologist.

Dated at
Toronto, Ontario
December 21st, 1962.

GEOLOGIST'S REPORT

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