CHAPPELLE PROJECT

PROSPECTUS

DU PONT OF CANADA EXPLORATION LIMITED

March, 1977

CHAPPELLE PROJECT

PROSPECTUS

PROPERTY FILE

PREPARED FOR

DEPUTY MINISTER OF MINES

PROVINCE OF BRITISH COLUMBIA

BY

DU PONT OF CANADA EXPLORATION LIMITED

March, 1977

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FIGURES

SUMMARY

In 1974 Du Pont of Canada Exploration Limited optioned 168 mineral claims covering about 11 square miles in the Sturdee River area from Kennco Explorations (Western) Limited. By terms of the agreement Du Pont has earned a 50.1% interest in the claims subject only to placing the property into production by December 31, 1981. The agreement is in the process of amendment with the object of providing Du Pont with a 100% recorded ownership in the claims.

The property contains several quartz vein systems and exploration on one of these, named Vein A, has delineated a shoot calculated to contain a drill-indicated reserve of 53,566 tons grading 0.952 ounces gold per ton and 21.70 ounces silver per ton. An additional 9,014 tons grading 0.306 ounces gold per ton and 7.46 ounces silver per ton are available at a lower cut-off grade.

Additional exploration is envisaged during the production period to explore for further shoots in Vein A and possibly in one or more of the other veins on the property. An

intercept of 0.58 ounces gold per ton in one hole beneath the presently delineated shoot on Vein A indicates the possible existence of another shoot, or the displaced top of the presently delineated shoot apexing about 200 feet below its base.

A total of about $1.6 million has been spent on the property since the discovery of gold-silver mineralization in 1969. Du Pont proposes to proceed with plans to develop the property to production providing a final feasibility study supports the presently indicated viability of an operation.

The property is currently accessible only by aircraft landing on a gravel airstrip which is connected to the property by a 5 mile road. The proposed northern extension of the Omineca Road to Sturdee River valley, which has the potential for a 5000 foot long airstrip situated within 7 miles of the mine-site, will provide the required access to support an operation.

A combination of open-pit and underground cut and fill mining methods are envisaged with feed supplied to a 50 ton concentrator near the mine-site. Metallurgical tests on representative samples indicate satisfactory recoveries with conventional milling procedures.

The area occupied by the mine, mine waste storage, concentrator, tailings disposal and a 40 man camp will probably be less than 50 acres. Chemical and biological data collected in 1976 provide acceptable baseline information on the aquatic environment, in addition to an assessment of the impact on the watersheds of the 1976 exploration activities which included underground mining.

INTRODUCTION

In 1968 Kennco Explorations (Western) Limited carried out geochemical reconnaissance surveys in the search for porphyry copper deposits in the vicinity of the Hogem batholith in north central British Columbia. Many base metal anomalies were defined which were considered to be of further interest. During follow-up of one of these, quartz containing high grade gold-silver values was discovered. Subsequent exploration led to the discovery of its source, near the head of a small creek, 11 miles NNW of the confluence of Sturdee River and Firesteel River.

Early in 1974, Du Pont optioned the property, which consists of 168 mineral claims covering about 11 square miles. Ten of these claims totalling 390 acres, have been surveyed in Lot 1040.

Under terms of an agreement with Kennco, Du Pont has earned a 50.1% interest in the property subject only to placing the property into production by December 31, 1981. The agreement is in the progress of amendment with the object of providing Du Pont with a 100% recorded ownership in the claims.

Exploration work carried out by Du Pont since 1974 has been concentrated on the delineation of the Vein A gold-silver deposit, in addition to testing of its near-surface extensions and exploration of other veins on the property. The work has included a total of 18,627 feet of surface diamond drilling in 57 holes, 195 feet of underground diamond drilling in 7 holes and 613 feet of drifting and raising. A previous operator completed 761 feet of drifting and 1793 feet of underground diamond drilling in 11 holes.

A total of about $1.6 million has been spent on the property since the discovery of gold-silver mineralization in 1969. Du Pont is sufficiently encouraged by the economic potential of the Vein A deposit to proceed with plans to develop the property to production providing a final feasibility study supports the presently indicated viability of an operation. Establishment of road access into the area is considered essential to a production decision.

Fig. 3 View north across Sturdee River to Chappelle area. South end Black Lake to right of centre. Site of proposed airstrip in Sturdee River valley extends off photo to left. Present road from Black Lake airstrip extends up valley to the northwest. Cassiar-Omineca Mountains on skyline. Arrow points to Vein A.

GEOLOGY

The Chappelle property lies near the eastern margin of the Intermontane Belt (Figs. 2 and 3). The vein systems which contain the gold-silver mineralization occur within a small window of Takla Group volcanic rocks of Upper Triassic age, which are intruded by granitic stocks of the Omineca Intrusions and overlain unconformably by Jurassic and younger volcanic and sedimentary rocks (Figs. 4 and 5). The oldest rocks recognized are occasional wedges of crystalline-limestone, up to 500 feet or more in thickness, which form part of the Asitka Group of Permian age. To the north and east, the Takla group rocks are unconformably overlain by Toodoggone Group rocks of Lower to Middle Jurassic age which also contain gold-silver bearing quartz veins. The Toodoggone Group rocks are unconformably overlain by Sustut Group sedimentary rocks of Upper Cretaceous to Tertiary age.

Rocks in the property area have been subjected to extensive normal block faulting from Jurassic to Tertiary time and by thrusting of the Asitka Group rocks over the Takla Group rocks during Middle Jurassic time.

Individual quartz veins and quartz vein systems occur intermittently within a belt 2 to 3 miles wide extending for 10 miles from the Lawyers property situated 5 miles northwest of Vein A on the Chappelle property to the SHA claims occurrence, 5 miles south-southeast of Vein A (Fig. 4).

Although most of the veins carry low gold and silver values, only Vein A on the Chappelle property and possibly the Amethyst Gold Breccia Zone on the Lawyers property of Kennco Explorations (Western) Limited contain precious metals in sufficient quantity to be considered of potential economic significance, based on current knowledge.

On the Chappelle property, seven quartz vein systems have been investigated. Six of these lie within an area of 0.3 square miles and one lies about 1.5 miles east of Vein A. The veins occupy two principal trends: northeast and east-southeast.

Vein A is part of a quartz vein system composed of two or more subparallel veins which trend northeasterly, dip from 80° southeast to about 70° northwest, and which occupy a prominent fault zone (Fig. 6). The quartz vein system has been traced for a strike length of 1400 feet across a width varying from 5 to 25 feet. Individual veins within the system vary from 1.5 feet to about 30 feet in width (Figs. 7 to 23). Drilling indicates that the vein system persists for at least 500 feet vertically from surface. Vein A is the most southeasterly of the two principal veins in the vein system and where both veins have been intersected in drill holes, they generally lie about 50 feet apart.

Throughout most of its length Vein A lies within altered Takla Group porphyritic tremolite andesite and dacite, which are intensely silicified on vein walls. At intervals, Vein A lies partly along a contact between quartz feldspar porphyry on the northwest and Takla Group volcanic rocks on the southeast. Near its southwest limit a lobe of quartz feldspar porphyry extends northwesterly along the contact between a small stock

of syenomonzonite and a wedge of Asitka Group marble. Dykes of quartz feldspar porphyry intrude Takla volcanic rocks on the hangingwall side of Vein A and trend subparallel to Vein A.

The quartz vein system is cut by numerous cross-faults which offset portions of individual veins, commonly for 1 to 50 feet and in one instance for an inferred plan offset of 90 feet in a small graben structure. Most of the faults are northwesterly trending normal and reverse faults dipping to the northeast and dip-slip strike faults dipping at shallow angles, generally to the southeast.

The abrupt termination of the northeast limit of gold-silver mineralization in Vein A is assumed to coincide with a strong cross-fault and the search for the offset portion of the known gold-silver deposit remains a principal exploration target.

A variety of quartz vein textures and cross-cutting relationships indicate a complex history of veining with multiple depositional stages. Much of the quartz is massive and drusy whereas a distinctive earlier ribboned variety is common, particularly near vein contacts. The quartz varies in colour from white to grey to dark grey.

MINERALIZATION

Gold-silver values are generally associated with highly fractured and occasionally brecciated white to grey, vuggy quartz veins containing 1 to 8 percent pyrite, and to a lesser extent occur in silicified wall-rock. Xenoliths of altered country rock frequently occur in the veins. The only other common gangue mineral is carbonate which fills fractures.

Higher grade mineralization is associated with grey quartz which occasionally contains visible acanthite (Ag_2S), commonly associated with disseminated grains of chalcopyrite and very minor sphalerite.

Various polished section and electron-microprobe studies have been completed on Chappelle mineralization. These studies show that the common sulphide minerals which are associated with the gold-silver minerals are pyrite (90%), chalcopyrite (5%), sphalerite (3%), and galena (1%). The balance includes bornite, chalcocite, covellite, polybasite and stromeyerite..

Gold occurs principally as grains of electrum up to 50 microns in diameter frequently associated with acanthite which occurs as irregular grains up to 3 mm in diameter.

Surface oxidation in the Vein A area extends to a depth of 5 metres or more below surface and is reflected by the presence of hematite, jarosite, and goethite as pyrite alteration products in vugs and fractures.

The only mineralization of potential economic interest presently known on the property is the gold and silver in Vein A. Copper and zinc, which occur in minor amounts, may possibly rank as concentrate credits, but their total value is of minor importance based on the present reserve.

MINERAL RESERVES

Mineral reserves have been calculated by a modified polygon method (Fig. 24) in order to accommodate both detailed surface sampling of the vein (Table I) and 18 mineralized drill intercepts in the vein. Composite grade and tonnage estimates are tabulated in Table II. Partial corroboration of drill-indicated grade and width has been obtained by underground workings in the deposit.

Assumptions used in calculating Case 1 of the mineral reserve are as follows:

1. Minimum mining thickness 5 feet.
2. Cut-off grade of $75/ton at $100/oz Au and $4.50/oz. Ag.
3. Recovery of 90% of in place value of each ton in the reserve.
4. Dilution factor 20%.
5. Tonnage factor 11.7 cu.ft/ton.
6. Entire reserve can be mined, probably by a combination of open-pit and cut-and-fill mining methods.

Case II considers the value of ore at $150/oz Au and $4.50/oz Ag.

Case III considers a decrease in operating costs to $50/ton which permits mining of an additional 9,014 tons averaging 0.306 oz Au/ton and 7.46 Ag/ton, for a weighted average value of $64.17 per ton based on other Case I assumptions.

Case IIa considers the value of the larger tonnage at the Case II prices.

The data are summarized as follows:

Case	Tons	Au ozs/ton	Ag ozs/ton	Average diluted recovered value per ton
I	53,566	0.952	21.70	$192.85
II	53,566	0.952	21.70	$240.45
IIa	62,580	0.859	19.65	$217.27
III	62,580	0.859	19.65	$174.32

POTENTIAL FOR ADDITIONAL RESERVES

A single mineralized shoot in one vein is unusual. Accordingly, the greatest potential for increasing reserves at the property lies in exploration at depth and on the extensions of Vein A. As indicated in the section entitled 'Geology', the abrupt termination of the northeast portion of Vein A is assumed to coincide with faulting and the search for the offset portion of the known gold-silver deposit remains a principal exploration target.

An intercept of 0.58 oz Au/ton in Hole 74-16, indicates the possible existence of another shoot, or the displaced top of the presently delineated shoot apexing about 200 feet below its base. However, more drilling is required before the potential importance of this mineralization can be determined, and further exploration of this target can be achieved most economically from underground stations.

Six other quartz veins have been indicated on the property and five of these lie within one mile of Vein A. Only a minor amount of exploration has been carried out on these veins, the majority being on the West Chappelle and North Quartz Zone, lying about 5000 feet southwest, and 3000 feet northeast of Vein A, respectively.

MINING CONCEPT

The present concept for development of the property is that the delineated reserve in Vein A would be developed for production at an initial milling rate of 50 tons per day. Milling would proceed on a year-round basis operating at 80% of its capacity to treat about 14,200 tons annually.

As an alternative to an operation involving only underground mining methods, it has been proposed that the portion of the deposit lying within 50 feet from surface would be mined by open-pit, with bench heights of 10 to 15 feet in order to provide selective mining and to ensure that maximum flexibility is achieved to minimize dilution and to optimize recovery of the valuable minerals. A 45^{o} pit slope is proposed for this shallow pit. Ore would be produced by mining in the summer months during the first part of the operation, and would be stockpiled adjacent to the concentrator. The waste would be dumped near the pit area (Fig. 25) and because of its fragmentation qualities, could be a source of backfill in underground mining.

the portion of the deposit lying beneath the part of the reserve which could be mined by open-pit methods would be mined by cut and fill methods. Stope development would consist of raises driven from the 5400 level upward to the surface to serve as ore passes in the lower part, and service-ventilation entrances in the upper part of each raise. To support the wall rocks before fill is introduced, shotcreting and/or rock bolts with wire mesh screen can be considered, if such are necessary.

A thin concrete floor, four to six inches thick, would be poured or blown over the top of the fill to serve as suitable footings for mobile equipment and to save as much as possible of the fines. It is anticipated that four or five stopes would be in operation, on a continuous basis, to provide feed for the mill, over a two year period.

During mining, exploration would also be carried out to attempt to discover additional reserves and extend the life of the operation.

TRANSPORTATION

The mine workings at an elevation of 5400 feet and the present camp site at an elevation of 5000 feet are reached by a 5 mile long, 4-wheel drive access road from Black Lake airstrip, a 3000 foot long gravel strip at an elevation of 2500 feet. The approaches and extension limitations on the present airstrip limit the size of aircraft that can be accommodated.

By the end of 1977, the Omineca Road will be accessible from the south to Moose Valley, which lies about 30 miles by air from Black Lake airstrip. The B.C. Department of Mines is arranging to complete road access studies in 1977 from Moose Valley to a proposed airstrip site on Sturdee River, about 2 miles from Black Lake, with the objective of completing a pilot road, constructed to winter haulage standards by 1978.

From the Sturdee River Valley, which has the potential for a 5000 foot long airstrip, accessible to Hercules aircraft, a new 5 mile gravel road would connect with the upgraded present road to the mine site from the Black Lake airstrip. Total length of road from the mine-site

to the proposed Sturdee River airstrip would be about 7 miles. Equipment, fuel, supplies and personnel would travel between southern points and the property by either air or road.

The northern extension of the Omineca Road to the proposed Sturdee River airstrip will effect a reduction in overall operating and installed capital costs and provide the required reassurance to on-site personnel at a relatively remote location from both a psychological and safety view-point. In addition, the extension of the road will provide access to the public at large to nearby Tatlatui Provincial Park, which is currently accessible only by float equipped aircraft or helicopters.

The British Columbia Railway now passes 55 miles south-west of the property, but there is no direct land access to the railway. Following completion of the Omineca Road to the proposed Sturdee River airstrip, the nearest existing connection by road to the B.C. Railway is via Takla Landing, a distance of 205 miles. Consideration has also been given to construction of a road down Sustut River to the B.C. Railway at Connelly. This would provide a 90 mile road link between the Chappelle property and the B.C. Railway.

POWER

The peak power demands estimated are:

Compressors	200 H.P.
Mill	200 H.P.
Miscellaneous	100 H.P.
Total	500 H.P. or 373 Kw.

Most of the electric power required could be provided by one 300 Kw diesel-electric unit. However, to provide additional power, if required, and for stand-by purposes, two 300 Kw units with two control panels and one synchronizing panel are proposed. Oil storage tanks at the Sturdee River airstrip and at the plant would also be required.

An average diesel fuel requirement of 1.0 gallons per hour, or 240 gallons per day are estimated.

CONCENTRATOR

A 50 ton mill designed to treat the ore in accordance with recently completed metallurgical tests is proposed. The optimum treatment method can only be determined by a detailed study of the economic factors involved, including capital and operating costs, freight and smelter charges, payments and deductions. It is however, almost certain that the most profitable method would involve a combination of flotation and cyanidation.

Gold and silver recoveries up to 99.0% and 98.2% respectively have been obtained on recent tests of a representative sample, using a combination of flotation and cyanidation of the tailing, after fine grinding. The concentrate prior to cyanidation assayed 4.00 oz Au/ton and 76.0 oz Ag/ton and contained 95.1% of the gold and 94.1% of the silver.

Water supply would be derived from a small lake perched at an elevation of 5500 feet, about one mile northwest of the proposed mill-site which would probably lie at an

elevation of 5000 feet about one-half mile south of the mine-site (Fig. 25).

It is anticipated that water from the tailings disposal site would be recycled to the mill.

TAILINGS DISPOSAL

Tailings disposal is proposed by diking about 2 acres in the floor of the valley near the camp site which leads tc Black Lake (Fig. 25). The dikes will be constructed of locally available material lined with a suitable impermeable membrane to prevent seepage.

Ample area is present to construct the proper facilities for a reserve two to three times that currently delineated.

MANPOWER REQUIREMENTS

Manpower requirements will be influenced by results of a final feasibility study which will determine the optimum mining and milling methods to be employed. Based on a preliminary evaluation the following personnel will be required during production:

	No. of Employees
Mining	
Shiftbosses	2
Miners	4
Trammers	1
Milling	
Mill superintendent	1
Millmen	3
Crusherman	1
Labourer	1
Plant	
Master mechanic	1
Bulldozer/grader operator	1
Truck driver	1
Labourers	2

Mechanic	1
Electrician	1
Carpenter	1
Power plant operators	3
Mine Office	
Accountant	1
Clerk/First Aidman	1
Warehouseman	1
Mine Staff	
Manager	1
Engineer/geologist	1
Assayer	1
Sampler/Engineer's Helper	1
Camp	3
Total	34

HOUSING

A 40-man camp with bunk-houses, kitchen, dining and recreation units would be provided to accommodate personnel involved in mill construction and mine development. The same facility would be used to accommodate employees required during production.

The camp would probably be established in the same general area as the present field camp, within one mile of the mine-site and within walking distance of the concentrator.

ENVIRONMENTAL

Chemical and biological data were collected in the property area and as far distant as Black Lake by an outside consultant during the summer and fall periods, 1976. The data provide acceptable baseline information of the aquatic environment, in addition to an assessment of the impact on the watersheds of the 1976 exploration activities which included underground mining.

The natural levels of sulphide, arsenic, silver, gold, lead and mercury were less than the analytical detection limits. Very low levels of colour in suspended solids were also noted.

Incremental increases in water constituents attributable to the mine mouth discharge have not resulted in levels deemed harmful to the biological resources of the stream draining the general mining area.

A semi-quantitative spectrographic analysis of a representative concentrate failed to detect arsenic, antimony, and uranium, among other elements.

Development and subsequent restoration of disturbed sites will be in accordance with the Guidelines established by the Reclamation Branch of the Department of Mines and Petroleum Resources.

TABLE I

SURFACE SAMPLING LINE AVERAGES

Block	Avg. Width (ft)	Avg. Au (oz/t)	Avg. Ag (oz/t)	Avg. line interval	No. of sample lines
A	9.0	1.97	15.6	37'	1
B	10.0	0.36	3.75	57.5'	1
C	9.0	0.247	2.268	38.5'	1
D	15.0	1.112	15.54	30.5'	2
E	9.0	0.40	5.37	18.0'	1
F	11.4	0.977	14.57	5.0'	14
G	9.0	0.73	18.94	5.0'	5
H	11.9	0.986	24.44	5.0'	5
I	9.0	0.867	16.59	7.7'	3
J	9.3	0.308	10.60	5.5'	4
K	8.94	0.260	5.43	5'	7
L	9.5	0.836	21.13	9.5'	4
M	9.4	0.889	21.65	5'	5

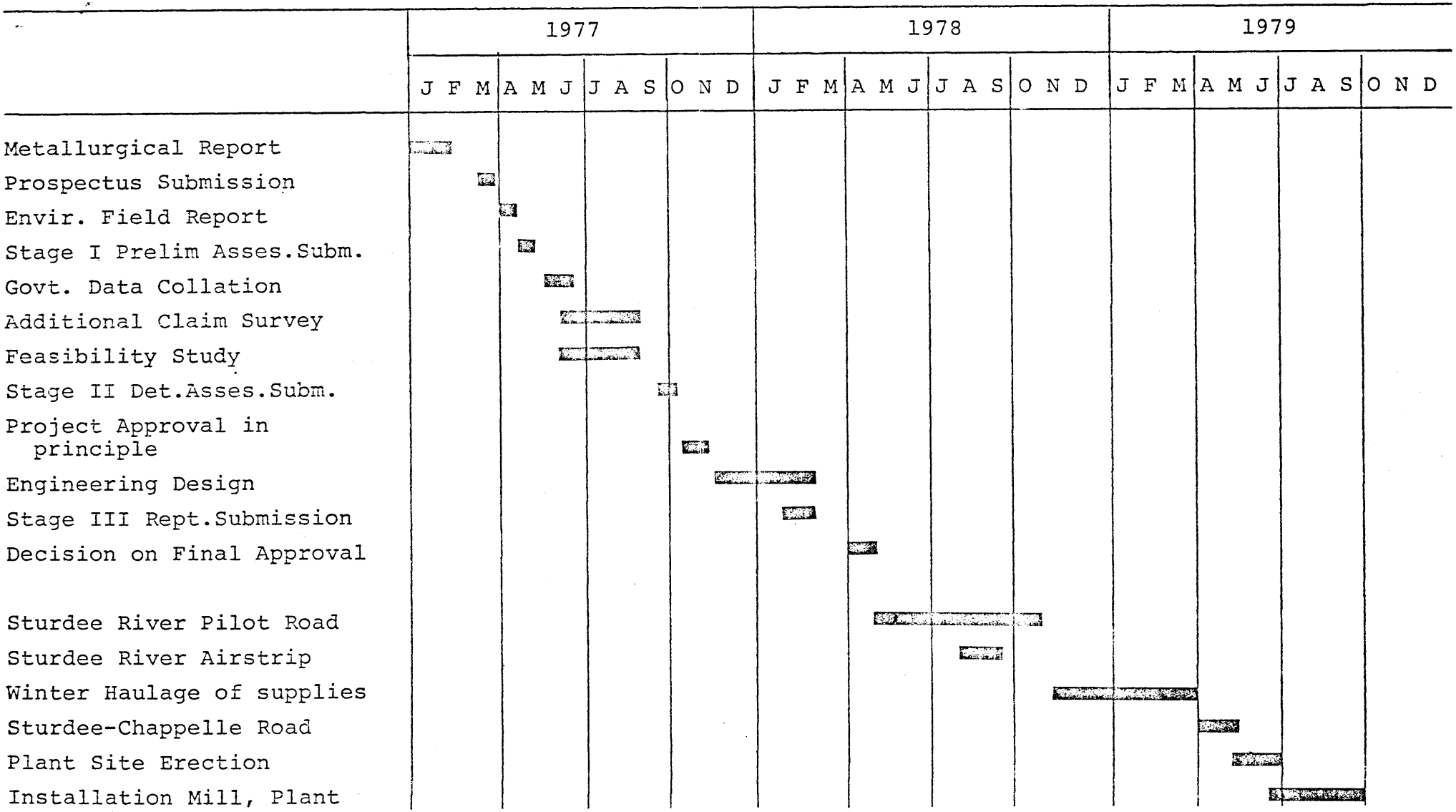
TABLE II

CHAPPELLE GRADE AND TONNAGE ESTIMATE

Block No.	Diluted Tons	Diluted recoverable grade Au oz/t	Ag oz/t	Recoverable value Au @ $100/oz Ag @ $4.50/oz
1	1,800	1.418	11.232	$192.38
2	3,105	0.436	20.419	135.52
8 + 9	3,313	1.320	34.992	289.51
10	1,560	0.806	11.189	130.99
12	1,740	0.703	10.49	117.55
14 + 15	2,594	0.513	5.645	76.67
16	609	0.629	13.64	124.22
17	1,179	0.710	17.57	150.18
18	526	0.624	11.945	116.17
21 + 22	10,703	1.368	46.62	346.59
26	3,735	0.423	13.644	103.66
29	3,508	1.822	39.45	359.68
31	9,434	0.647	6.113	92.24
32	2,776	0.602	15.21	128.65
33	1,692	1.852	31.421	326.57
34	4,187	0.747	4.450	94.76
35	1,105	0.647	15.59	134.87
	53,566	0.952	21.70	$192.85

SCHEDULE

CHAPPELLE PROJECT



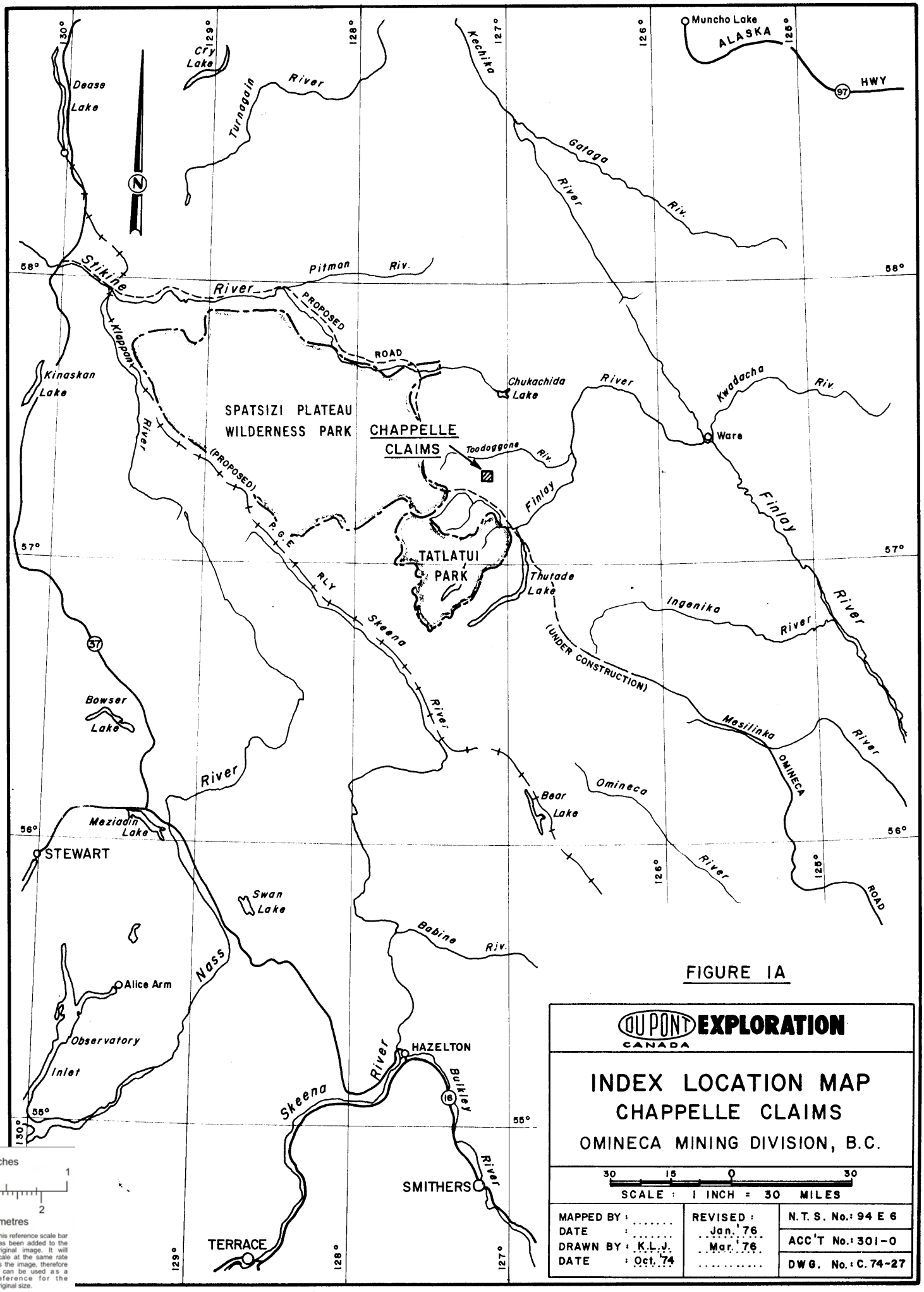


FIGURE 1A

DUPONT EXPLORATION CANADA

INDEX LOCATION MAP
CHAPPELLE CLAIMS
OMINECA MINING DIVISION, B.C.

30 15 0 30

SCALE : 1 INCH = 30 MILES

MAPPED BY :	REVISED : Jan. '76	N.T.S. No.: 94 E 6
DATE :	Mar. '76	ACC'T No.: 301-0
DRAWN BY : K.L.J.	.....	DWG. No.: C.74-27
DATE : Oct. '74		

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centimetres

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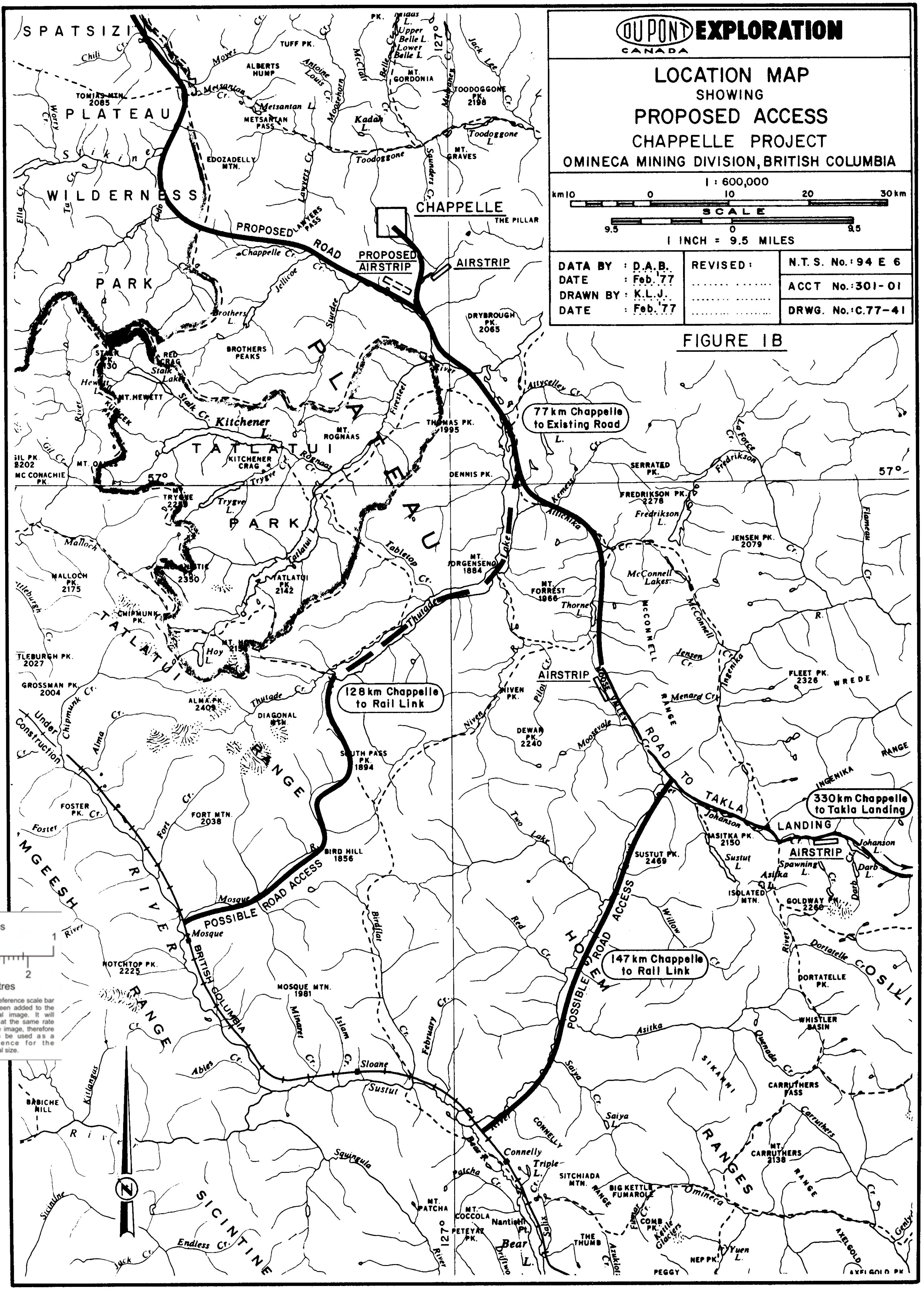
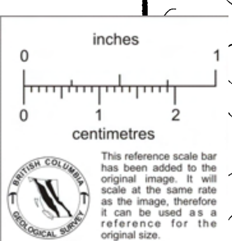
BRITISH COLUMBIA GEOLOGICAL SURVEY


DUPONT EXPLORATION
CANADA
LOCATION MAP
SHOWING
PROPOSED ACCESS
CHAPPELLE PROJECT
OMINECA MINING DIVISION, BRITISH COLUMBIA
1 : 600,000
km 10 0 10 20 30 km
SCALE
9.5 0 9.5
1 INCH = 9.5 MILES
DATA BY : D.A.B.
DATE : Feb. '77
DRAWN BY : K.L.J.
DATE : Feb. '77
REVISED :
N.T.S. No. : 94 E 6
ACCT No. : 301-01
DRWG. No. : C.77-41
FIGURE 1B
CHAPPELLE
PROPOSED ROAD
PROPOSED AIRSTRIP
AIRSTRIP
77 km Chappelle to Existing Road
128 km Chappelle to Rail Link
147 km Chappelle to Rail Link
330 km Chappelle to Takla Landing
POSSIBLE ROAD ACCESS
OSE VALLEY ROAD TO TAKLA LANDING
SPATSIZI PLATEAU WILDERNESS PARK
TATLATUI PLATEAU PARK
TATLATUI RANGE
SKEENA RIVER RANGE
BRITISH COLUMBIA
SICINTINE RANGE
HOGEM RANGES
SIKANNI RANGES
Under Construction
57°
127°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BRITISH COLUMBIA GEOLOGICAL SURVEY

PROPERTY FILE

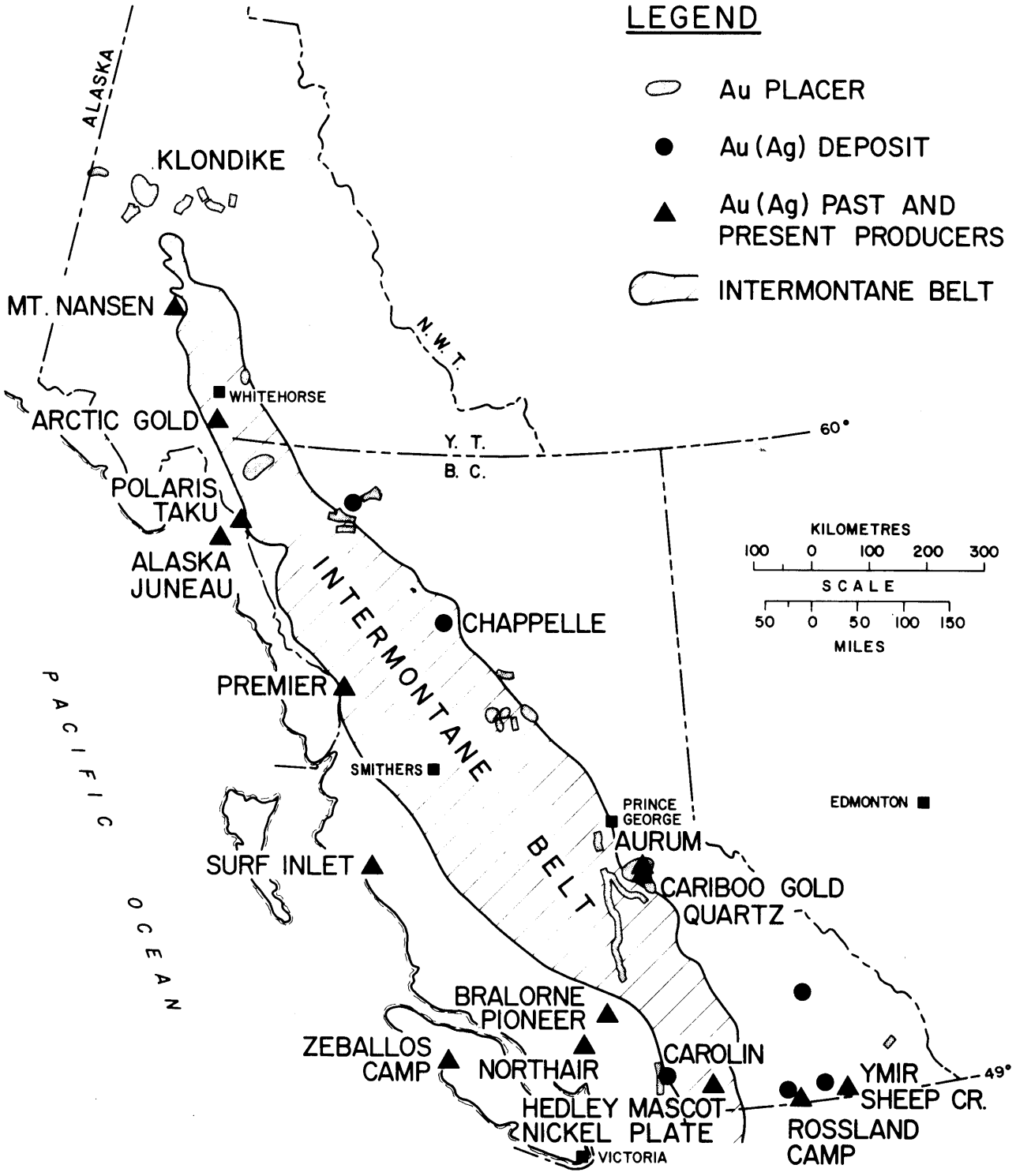


FIGURE 2

PRINCIPAL LODE & PLACER GOLD DEPOSITS CANADIAN CORDILLERA

FIGURE 4

REGIONAL GEOLOGY

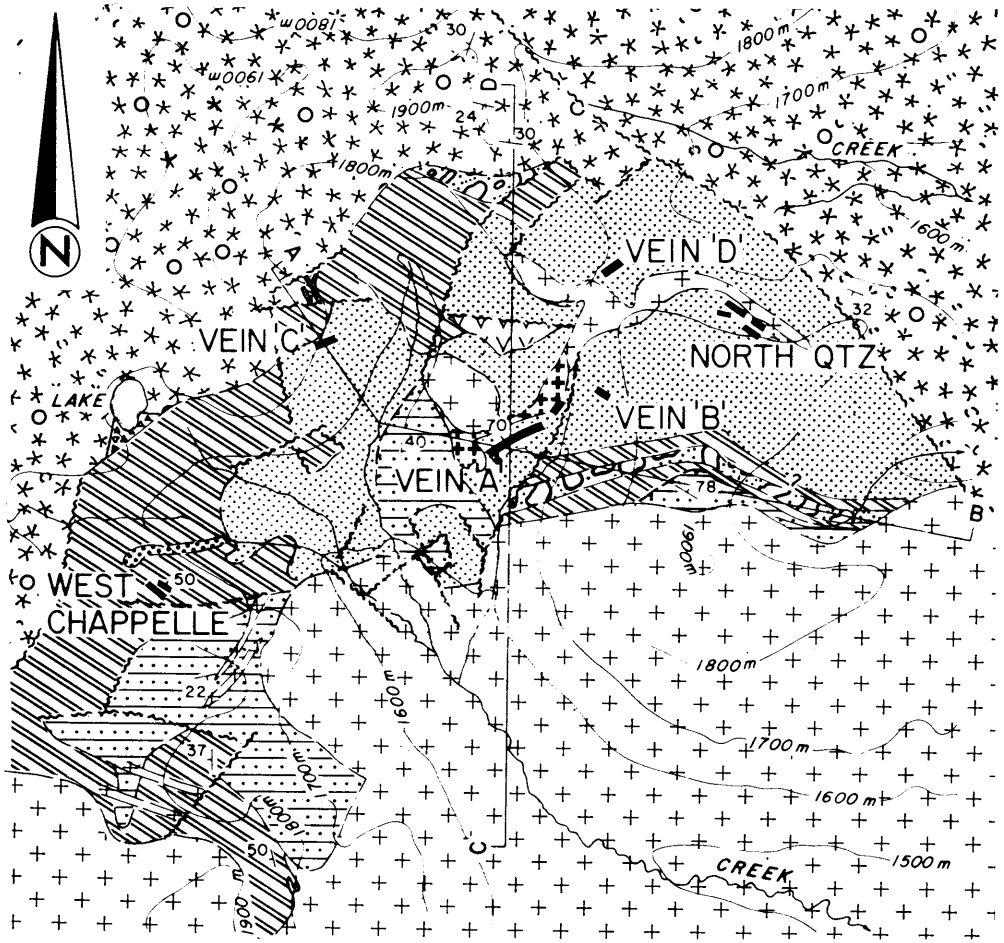
CHAPPELLE AREA

OMINECA MINING DIVISION, BRITISH COLUMBIA

LEGEND

- ALLUVIUM
- SUSTUT
- TOODOGGONE
- OMINECA
- TAKLA
- ASITKA
- QTZ. VEINS, STOCKWORKS
- MINERAL SHOWINGS

KILOMETRES
2 1 0 2 4 6
SCALE
1 0 1 2 3
MILES



LEGEND

- OVERBURDEN
- BASIC DYKE
- FELD. PHY. DYKE
- TDG.
  - FELD. PHENODACITE
  - TUFF BRECCIA
- QTZ. VEIN
- QTZ. FELD. PHY.
- OMINECA: GRNDIO., QTZ. MONZ., SY. MONZ., MONZ.
- TAKLA
  - PHY. FELD. ANDESITE
  - PYROCL. BRECCIA
  - F.G. ANDESITE
  - TREM. ANDESITE PHY.
- ASITKA: MARBLE, CHERT, SKARN
- CONTACT
- FAULT
- TRUST FAULT
- 70 BEDDING

METRES
300 0 300 600 900
SCALE
800 0 800 1600 2400
FEET

FIGURE 5

LOCAL GEOLOGY

CHAPPELLE AREA

OMINECA MINING DIVISION, BRITISH COLUMBIA

PROPERTY FILE

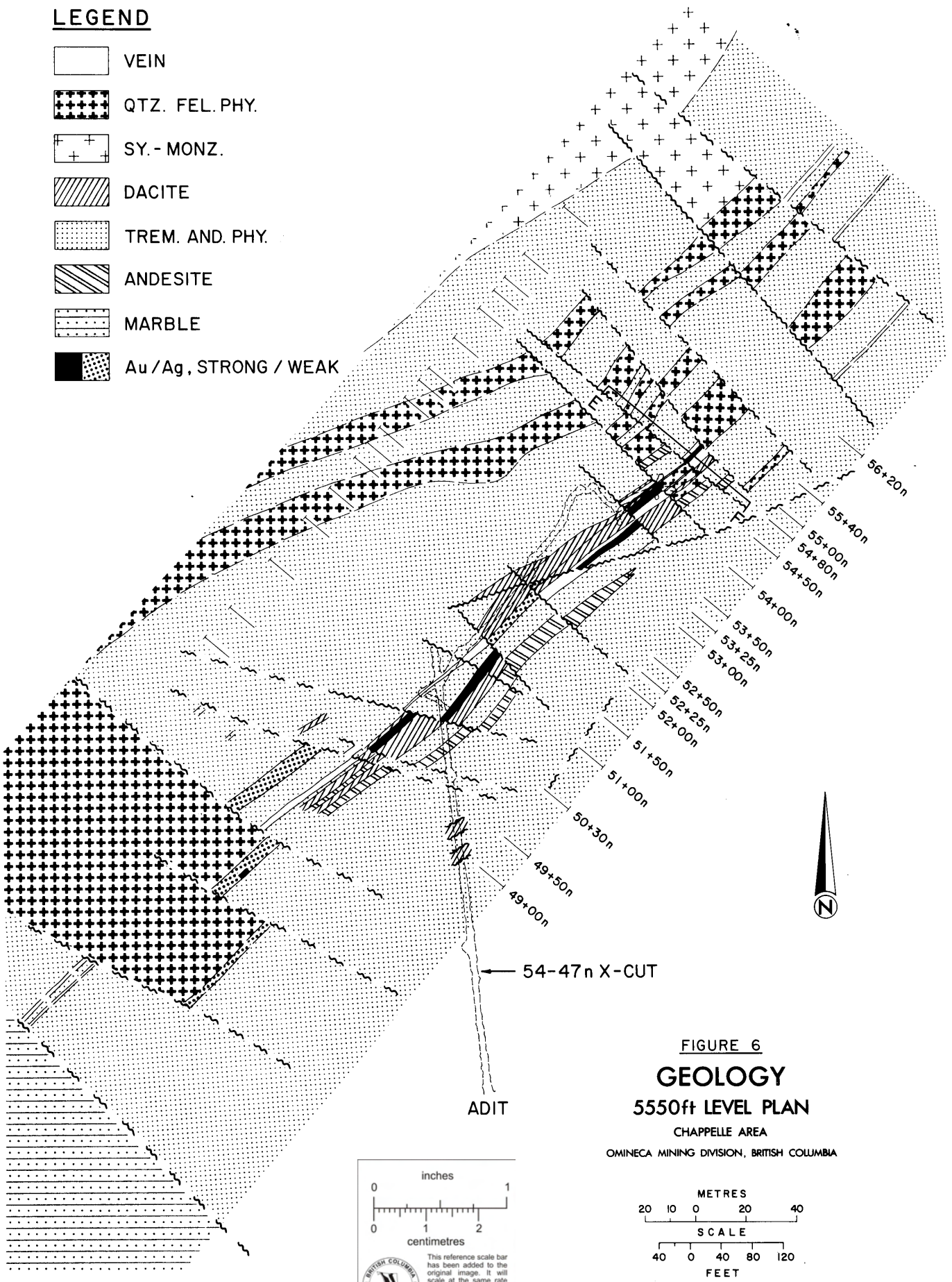


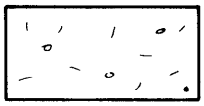
FIGURE 6

GEOLOGY

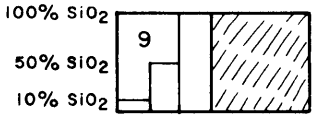
5550ft LEVEL PLAN

CHAPPELLE AREA

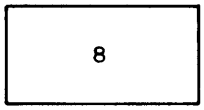
OMINECA MINING DIVISION, BRITISH COLUMBIA



OVERBURDEN

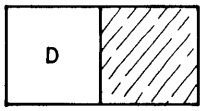


QUARTZ VEIN, BANDED CHLORITIC QUARTZ VEIN

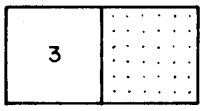


QUARTZ FELDSPAR PORPHYRY

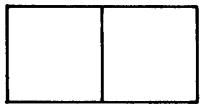
DARK GREEN ANDESITE



DACITE



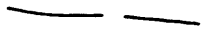
AUGITE PHENOANDESITE



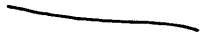
MINERALIZATION SIGNIFICANT, POSSIBLY SIGNIFICANT

FAULT, ASSUMED

FAULT, OBSERVED, SHOWING RELATIVE MOVEMENT



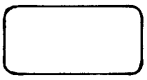
CONTACT, ASSUMED



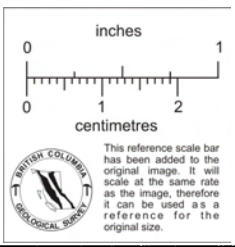
CONTACT, OBSERVED

Au oz/ton/Ag oz/ton
FEET

GRADE AND INTERVAL



MINE OPENING

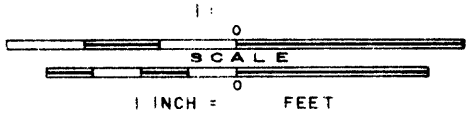


DUPONT CANADA **EXPLORATION**

LEGEND FOR GEOLOGICAL SECTIONS

CHAPPELLE MINE

OMINECA MINING DIVISION, BRITISH COLUMBIA



DATA BY : K.A.MacL.	REVISED :		N.T.S. No. : 94 E 6
DATE : Feb.'77			ACCT No. : 301-01
DRAWN BY : K.L.J.			DRWG No. : C.77-20
DATE : Feb.'77			

WEST

5+00 e | 6+00 e | 7+00 e | 8+00 e | 9+00 e | 10+00 e

EAST

5800'

5700'

5600'

5500'

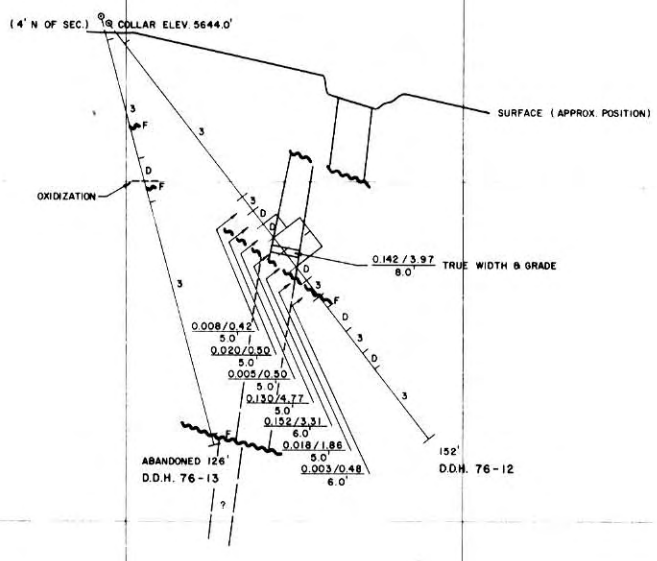
5400'

5300'

5200'

5100'

5000'



54-47n CROSS CUT NORTHWEST

FIGURE 7

DUPONT EXPLORATION

SECTION 49+00n
LOOKING NORTH
CHAPPELLE MINE
OMINECA MINING DIVISION, BRITISH COLUMBIA

SCALE
20 10 0 20 40

MAPPED BY	K.A. Weal	REVISED	N.T.S. No. 94 E 6
DATE	JULY '76	JAN '77	
DRAWN BY	R.A.J.		ACCT No. 501-01
DATE	SEPT. '76		DRWG No. ~~C.76-55~~

DRWG No. C.77-21

WEST

5+00 e

6+00 e

7+00 e

8+00 e

9+00 e

10+00 e

EAST

5800'

5700'

5600'

5500'

5400'

5300'

5200'

5100'

5000'

POSITION VERY APPROX. VEIN PROJECTION FROM SURFACE PLAN

D.D.H. 73 - U 8

151' (FOOT OF HOLE 2' S OF SEC.)

0.606 / 28.36 / 5.0' TRUE WIDTH & GRADE

0.031 / 3.0 / 2.5'

0.750 / 34.70 / 4.0'

CROSS CUT POSITION 15' N OF SECTION

54-47n CROSS CUT NORTHWEST

D.D.H. 73 - U 10

(FOOT OF HOLE 5' S OF SEC.) 162'

inches

0 1

0 1 2

centimetres

This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.

FIGURE 8

DU PONT CANADA EXPLORATION

SECTION 49+50n

LOOKING NORTH

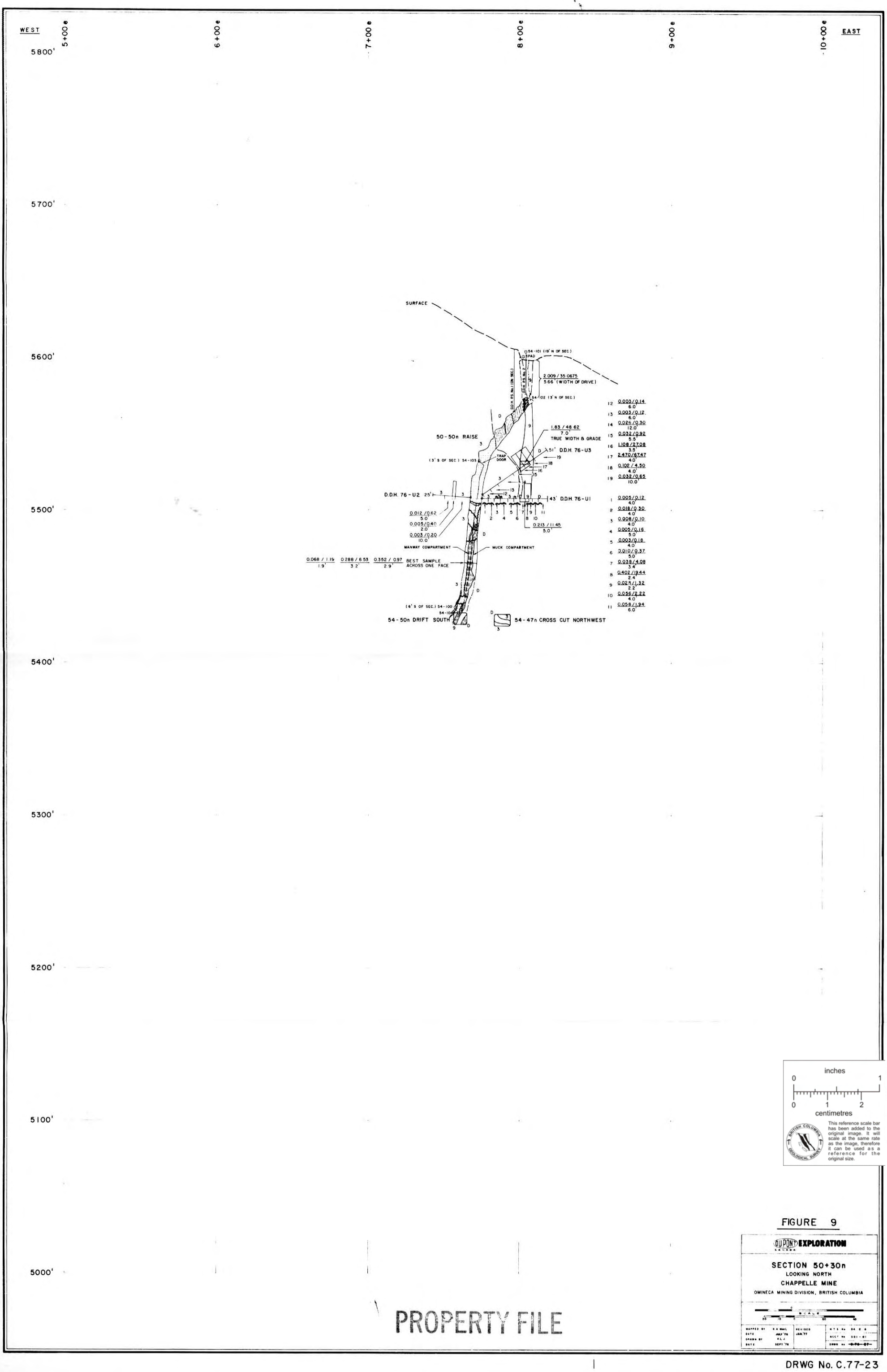
CHAPPELLE MINE

OMINECA MINING DIVISION, BRITISH COLUMBIA

SCALE

MAPPED BY	R.A.W.	REVISED	NTS No. 94 E 6
DATE	JULY '76	JULY '77	ACCT No. 301 - 01
DRAWN BY	R.L.J.		DRWG No. C-76-52
DATE	SEPT '76		

DRWG No. C. 77-22



inches
0 1
0 1 2
centimetres

This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.

FIGURE 9

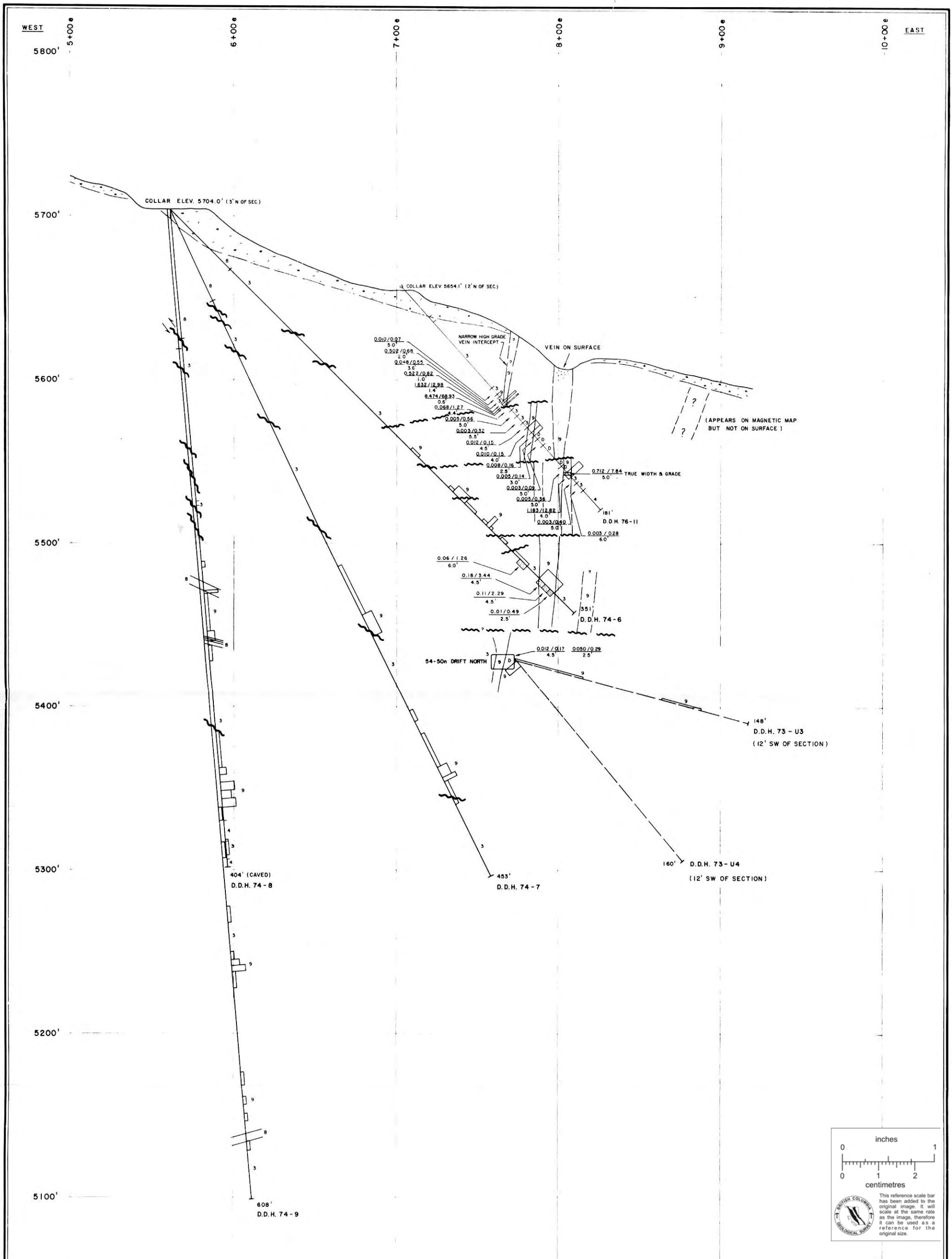
DUPONT EXPLORATION CANADA

SECTION 50+30n
LOOKING NORTH
CHAPPELLE MINE
OMINECA MINING DIVISION, BRITISH COLUMBIA

SCALE 20 10 0 20 40

MAPPED BY	R.A. Bleel	REVISED JAN.'77	N.T.S. No. 94 E 6
DATE	JULY '76		ACCT No. 301-01
DRAWN BY	K.L.J.		DRWG No. C-76-27
DATE	SEPT. '76		

DRWG No. C.77-23



inches
0 1
0 1 2
centimetres

This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.

FIGURE 10

DUPONT EXPLORATION CANADA

SECTION 51+00n
LOOKING NORTH
CHAPPELLE MINE
OMINECA MINING DIVISION, BRITISH COLUMBIA

SCALE
20 10 0 20 40

MAPPED BY R.A.M.
DATE JULY '76
DRAWN BY K.L.J.
DATE SEPT.'76
REVISED JAN.'77
NTS No. 94 E 8
ACCT. No. 201-01
DRWG No. C.77-24

DRWG No. C.77-24

WEST

5+00e

6+00e

7+00e

8+00e

9+00e

10+00e

EAST

5800'

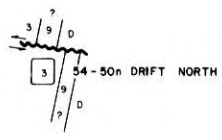
5700'

TRENCH

APPROX SURFACE

5600'

5500'



5400'

5300'

5200'

5100'

5000'

inches

0 1

0 1 2

centimetres

This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.

FIGURE 11

DUPONT EXPLORATION CANADA

SECTION 51+50n

LOOKING NORTH

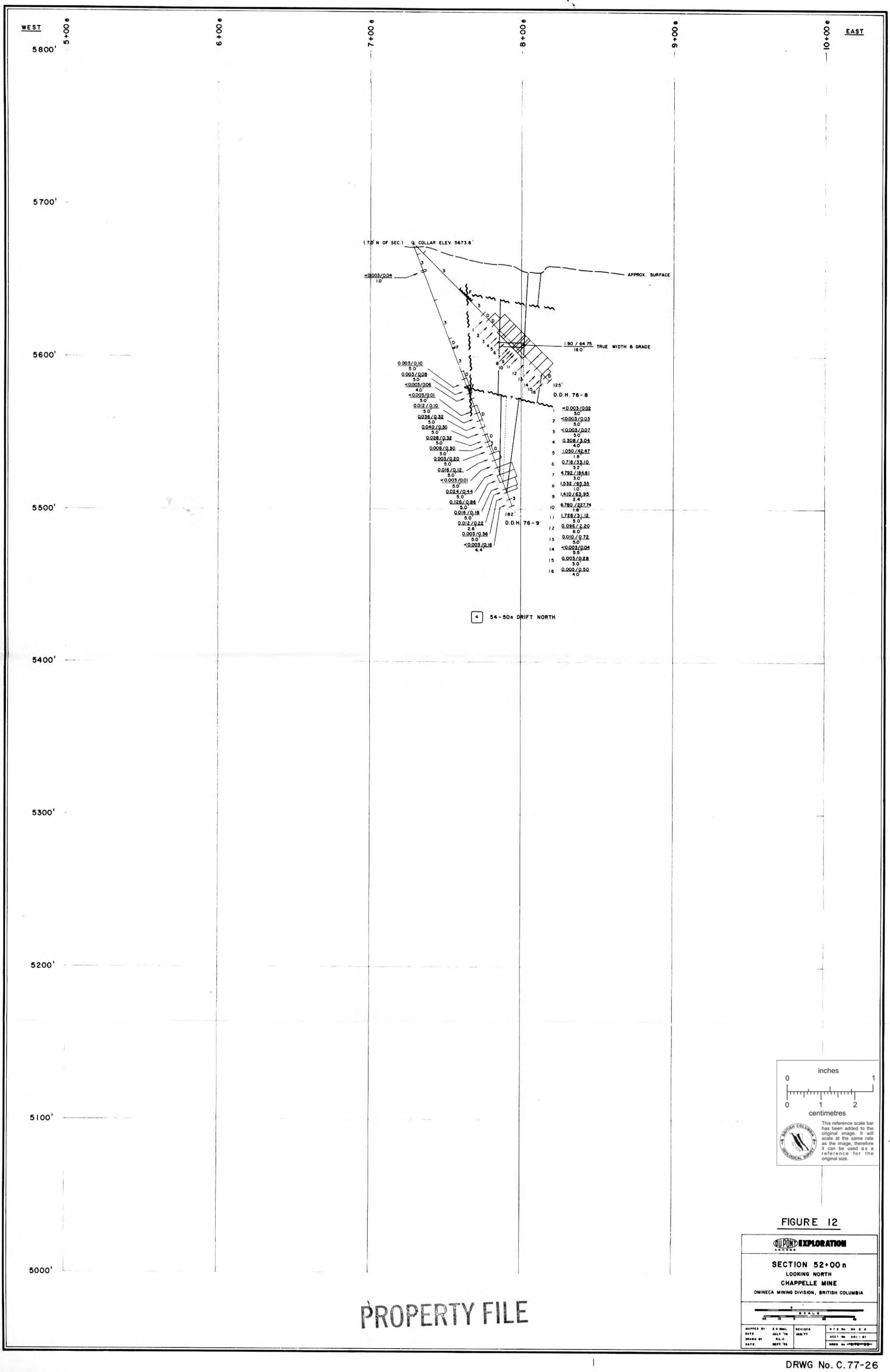
CHAPPELLE MINE

OMINECA MINING DIVISION, BRITISH COLUMBIA

SCALE

MAPPED BY	K.A.WHEL	REVISED	N.T.S. No. 94 E-6
DATE	JULY '78	JAN '79	ACC'T No. 201-01
DRAWN BY	K.L.J.		DRWG No.
DATE	SEPT. '78		

DRWG No. C.77-25



inches
0 1
0 1 2
centimetres

This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.

FIGURE 12

DU PONT EXPLORATION CANADA

SECTION 52+00n
LOOKING NORTH
CHAPPELLE MINE
OMINECA MINING DIVISION, BRITISH COLUMBIA

SCALE
20 10 0 20 40

MAPPED BY	R.A. Shiell	REVISED	N.T.S. No. 94 E 9
DATE	JULY '76	MAR.'77	ACCT No. 201-01
DRAWN BY	R.L.J.		DRWG No. C.77-26
DATE	SEPT.'76		

DRWG No. C.77-26

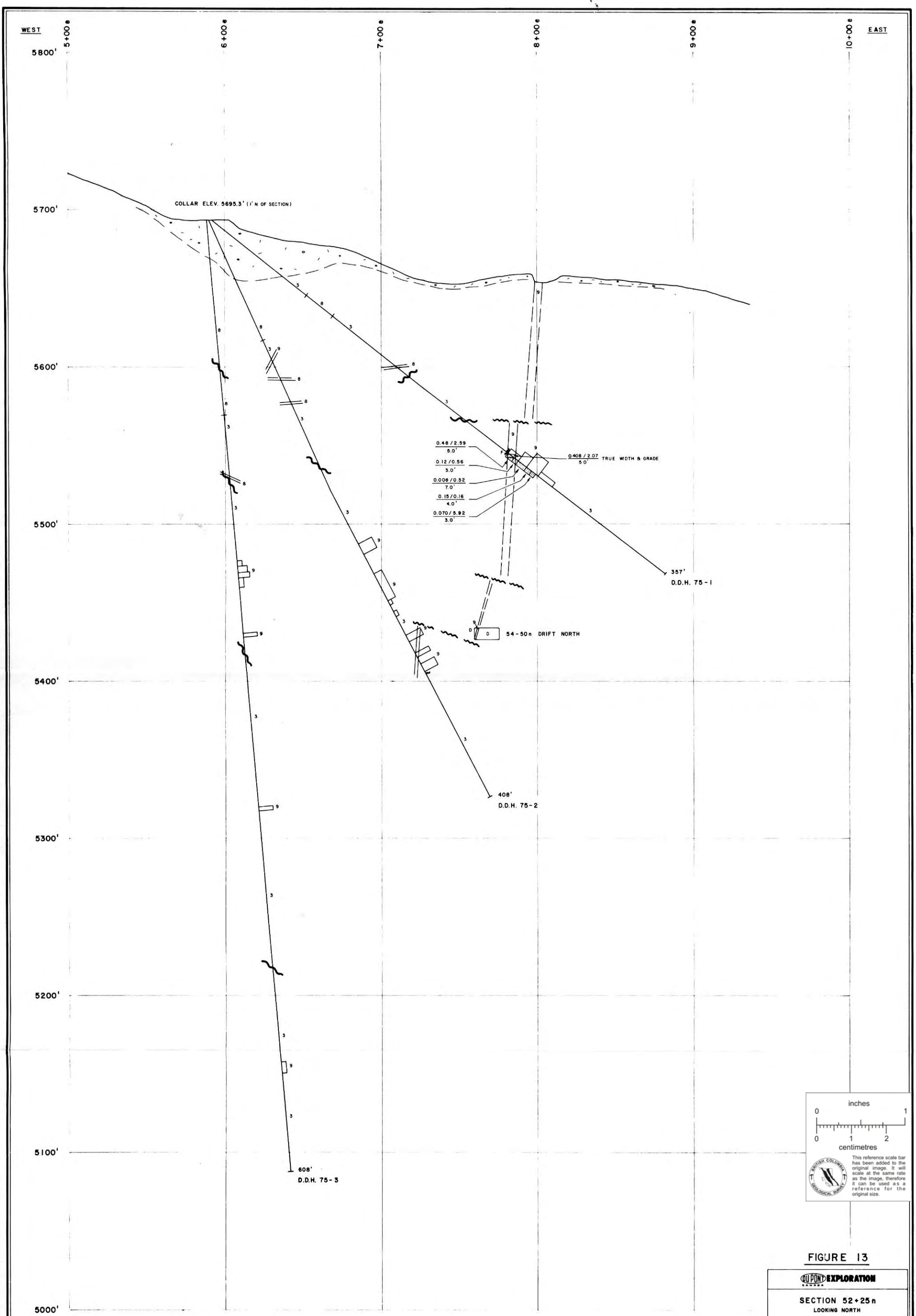


FIGURE 13

DU PONT EXPLORATION CANADA

SECTION 52+25n
LOOKING NORTH
CHAPPELLE MINE
OMINECA MINING DIVISION, BRITISH COLUMBIA

SCALE

MAPPED BY	K.A. Weal	REVISED	N.T.S. No. 94 E 6
DATE	JULY '76	JAN.'77	ACCT No. 301 - 01
DRAWN BY	K.L.J.		DWGS No. C-77-27
DATE	JAN.'77		

DRWG No. C.77-27

WEST

5+00e

6+00e

7+00e

8+00e

9+00e

10+00e

EAST

5800'

5700'

5600'

5500'

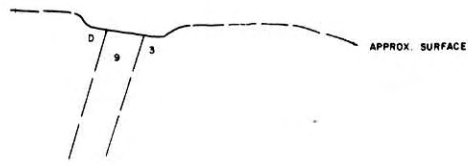
5400'

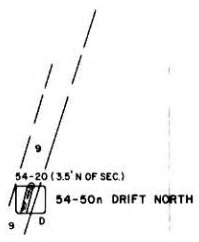
5300'

5200'

5100'

5000'





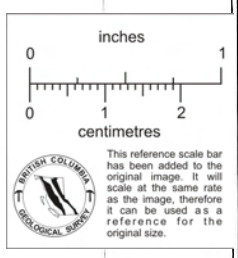


FIGURE 14

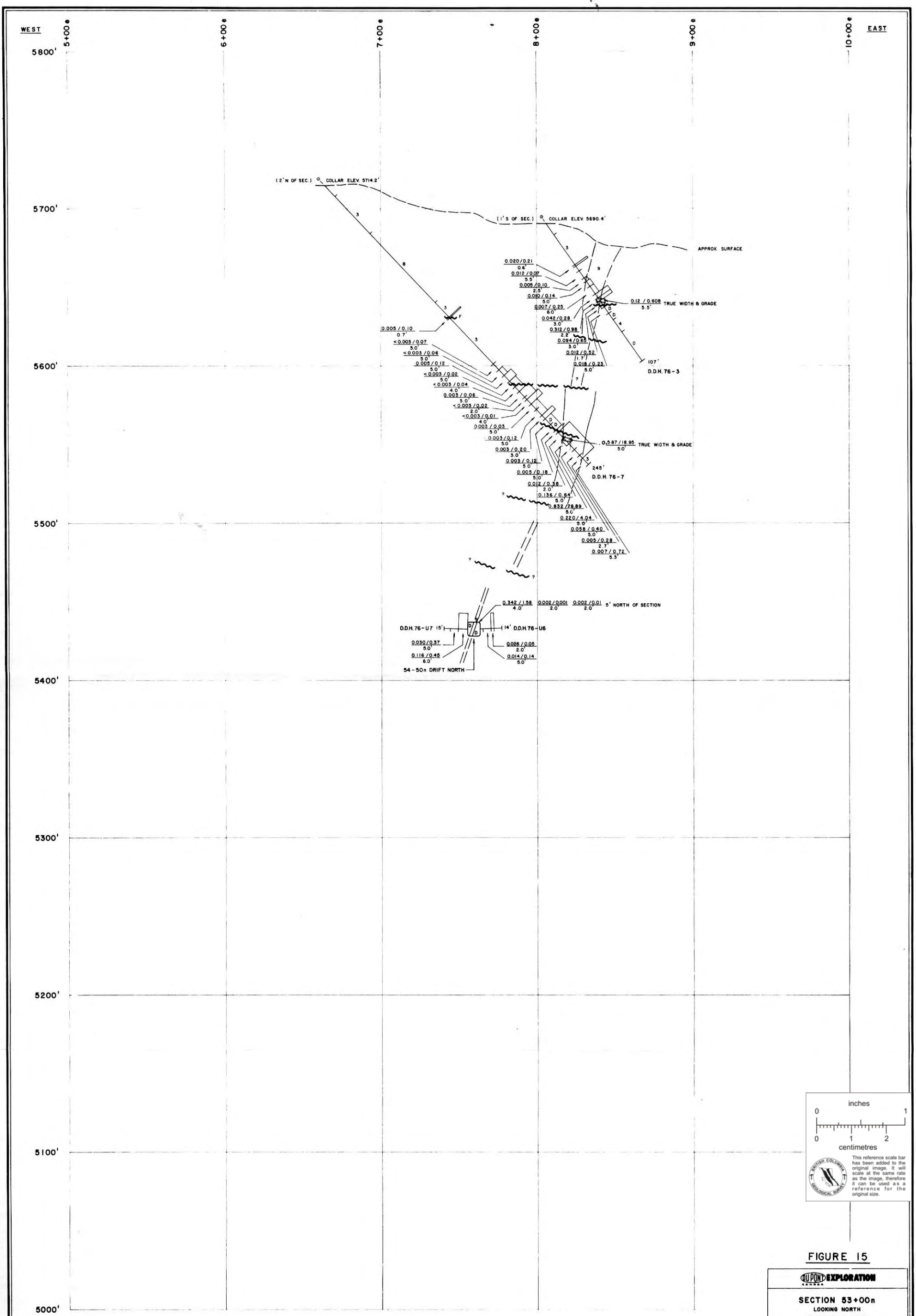
DUPONT EXPLORATION CANADA

SECTION 52+50n
LOOKING NORTH
CHAPPELLE MINE
OMINECA MINING DIVISION, BRITISH COLUMBIA

SCALE

MAPPED BY	K.S. Noel	REVISED	N.T.S. No. 94 E 8
DATE	JULY '76	AUG '77	ACCT. No. 301-01
DRAWN BY	W.L.J.		DRWG. No. C-77-28
DATE	SEPT '76		

DRWG No. C.77-28



inches
0 1
0 1 2
centimetres

This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.

FIGURE 15

DU PONT EXPLORATION CANADA

SECTION 53+00n
LOOKING NORTH
CHAPPELLE MINE
OMINECA MINING DIVISION, BRITISH COLUMBIA

SCALE
20 10 0 20 40

MAPPED BY	R.A. Wall	REVISED	N.T.S. No.: 94 E 8
DATE	JULY '76	JAN.'77	ACCT No.: 501-01
DRAWN BY	R.L.V.		DRWG No.: C-77-29
DATE	SEPT. '76		

DRWG No. C.77-29

WEST

5+00 E

6+00 E

7+00 E

8+00 E

9+00 E

10+00 E

EAST

5800'

5700'

5600'

5500'

5400'

5300'

5200'

5100'

5000'

APPROX. SURFACE

9

54-50n DRIFT NORTH

0.202 / 0.16
2.5'

0.060 / 0.18
2.0'

(FROM LEFT SIDE)

D.D.H. 76-U5 24'

9

23' D.D.H. 76-U4

0

0.010 / 0.11
4.0'

0.012 / 0.12
4.0'

0.005 / 0.06
5.0'

0.008 / 0.22
3.0'

inches
0 1
0 1 2
centimetres

This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.

BRITISH COLUMBIA GEOLOGICAL SURVEY

FIGURE 16

DUPONT EXPLORATION CANADA

SECTION 53+25 n
LOOKING NORTH
CHAPPELLE MINE
OMINECA MINING DIVISION, BRITISH COLUMBIA

SCALE

MAPPED BY : K.S. Nicol	REVISED :	N.T.S. No. : 94 E 6
DATE : JULY '76	JAN. '77	ASSET No. : 501 - 01
DRAWN BY : K.A.H.		DWG. No. : C-77-30
DATE : SEPT. '76		

WEST

5+00 e

6+00 e

7+00 e

8+00 e

9+00 e

10+00 e

EAST

5800'

5700'

5600'

5500'

5400'

5300'

5200'

5100'

5000'

COLLAR ELEV. 5738.2'

VEIN ON SURFACE

5.54 / 131.70
4.0'

0.08 / 1.84
3.5'

0.66 / 5.52
4.5'

2.53 / 5.749
9.5'

TRUE WIDTH & GRADE

350'
D.D.H. 74 - 10

NO SIGNIFICANT VALUES

54-22 (3.5' S. OF SEC.)

54-50n DRIFT, NORTH
0.368 / 0.45
4.0'
ON F.W. (RIGHT SIDE)
15' N. OF SECTION

401'
D.D.H. 74 - 11

558'
D.D.H. 74 - 12

inches
0 1
0 1 2
centimetres

This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.

FIGURE 17

DU PONT EXPLORATION CANADA

SECTION 53+50n
LOOKING NORTH
CHAPPELLE MINE
OMINECA MINING DIVISION, BRITISH COLUMBIA

SCALE

MAPPED BY	K.A.Neal	REVISED	N.T.S. No. 94 E 6
DATE	JULY '76	SEPT '76	ASSY No. 301 - 81
DRAWN BY	K.A.N.		DRWG No. C.76-11
DATE	JUNE '76		

DRWG No. C. 77-31

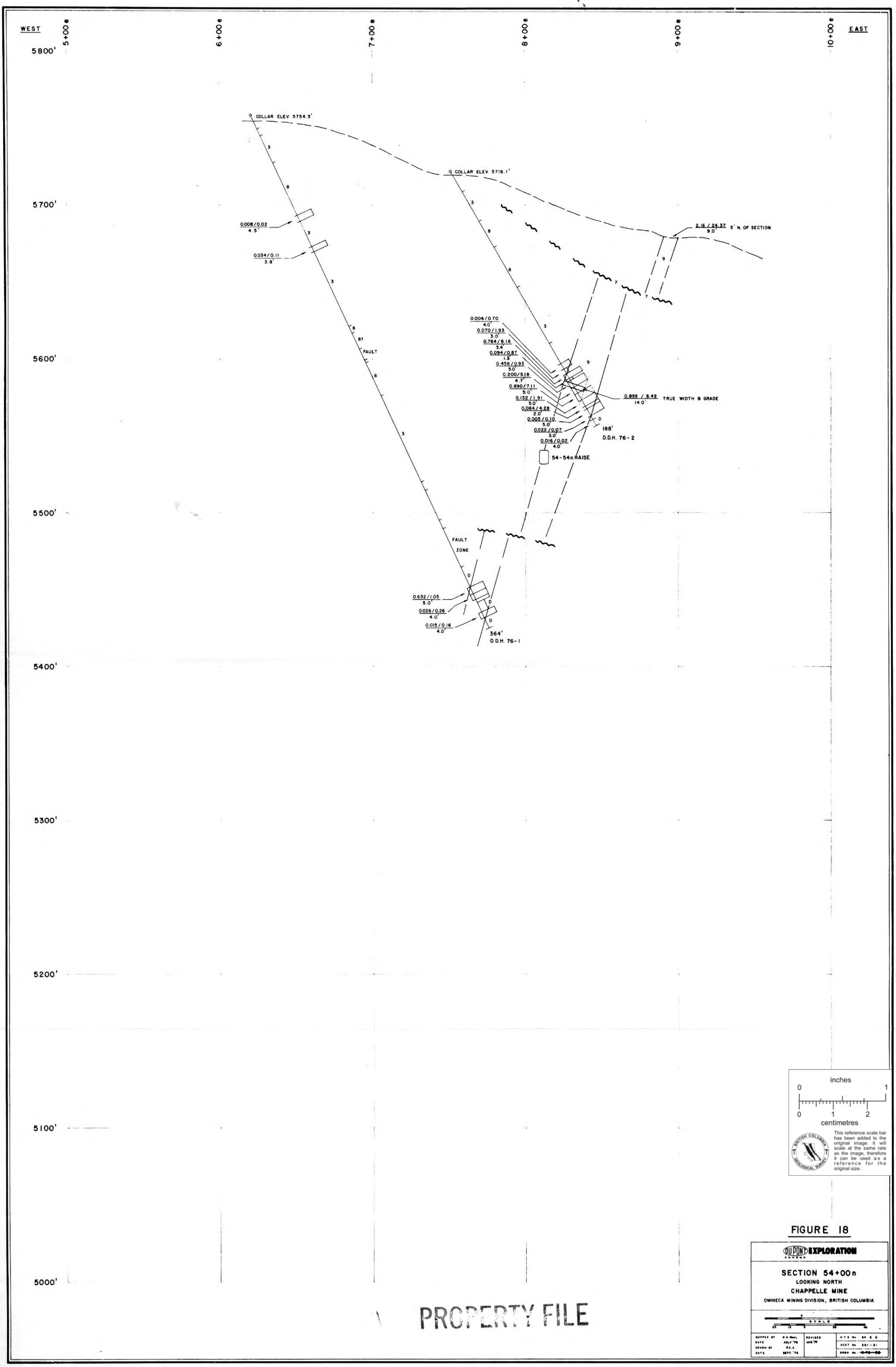


FIGURE 18

DU PONT EXPLORATION CANADA

SECTION 54+00n
LOOKING NORTH
CHAPPELLE MINE
OMINECA MINING DIVISION, BRITISH COLUMBIA

SCALE
0 10 5 20 40

MAPPED BY	R.A.Hall	REVISED	N.T.S. No. 94 E 6
DATE	JULY '76	JAN '79	ACCT No. 501-01
DRAWN BY	K.L.J.		DRWG No. C-77-32
DATE	SEPT. '76		

DRWG No. C. 77-32

WEST

5+00e

6+00e

7+00e

8+00e

9+00e

10+00e

EAST

5800'

5700'

5600'

5500'

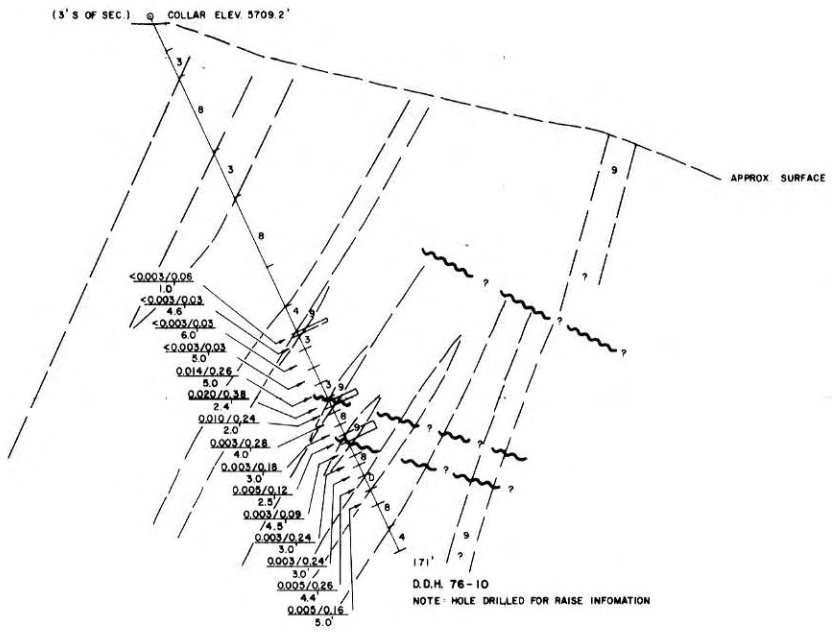
5400'

5300'

5200'

5100'

5000'



inches
0 1
0 1 2
centimetres

This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.

FIGURE 19

DUPONT EXPLORATION

SECTION 54+50n
LOOKING NORTH
CHAPPELLE MINE
OMINECA MINING DIVISION, BRITISH COLUMBIA

SCALE
20 10 0 20 40

MAPPED BY	R.A.Wall	REVISED	N.T.S. No. 94 E 6
DATE	JULY '76	AUG '77	ACCT No. 501-01
DRAWN BY	K.A.J.		DRWG No. C-77-33
DATE	SEPT '76		

DRWG No. C.77-33

WEST

5+00 e

6+00 e

7+00 e

8+00 e

9+00 e

10+00 e

EAST

5800'

5700'

5600'

5500'

5400'

5300'

5200'

5100'

5000'

COLLAR ELEV. 5735.6'

VEIN ON SURFACE

1.038 / 6.16
10.0'
TRUE WIDTH & GRADE

216'
D.D.H. 74 - 13

0.13 / 0.97
2.2'

0.40 / 1.46
4.0'

0.99 / 15.79
2.6'

0.05 / 0.36
1.4'

1.61 / 6.97
4.0'

0.65 / 7.53
2.0'

2.752 / 46.39
6.5'
TRUE WIDTH & GRADE

5.31 / 87.67
2.5'

0.86 / 16.12
4.0'

273'
D.D.H. 74 - 14

0.003 / 0.21
4.5'

0.005 / 0.20
4.0'

0.01 / 0.02
4.0'

348'
D.D.H. 74 - 15

0.58 / 0.24
4.0'

488'
D.D.H. 74 - 16

inches
0 1
0 1 2
centimetres

This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.

FIGURE 20

DUPONT EXPLORATION CANADA

SECTION 54+80n
LOOKING NORTH
CHAPPELLE MINE
OMINECA MINING DIVISION, BRITISH COLUMBIA

SCALE
20 10 0 20 40

MAPPED BY - K.S.Bird,	REVISED - AUG.'77	N.T.S. No - 94 E 6	
DATE - JULY '76		ACCT No - 201 - 01	
DRAWN BY - R.L.J.		DRWG No - C-77-34	
DATE - JUNE '76			

DRWG No. C.77-34

WEST

EAST

5+00e

6+00e

7+00e

8+00e

9+00e

10+00e

5800'

5700'

5600'

5500'

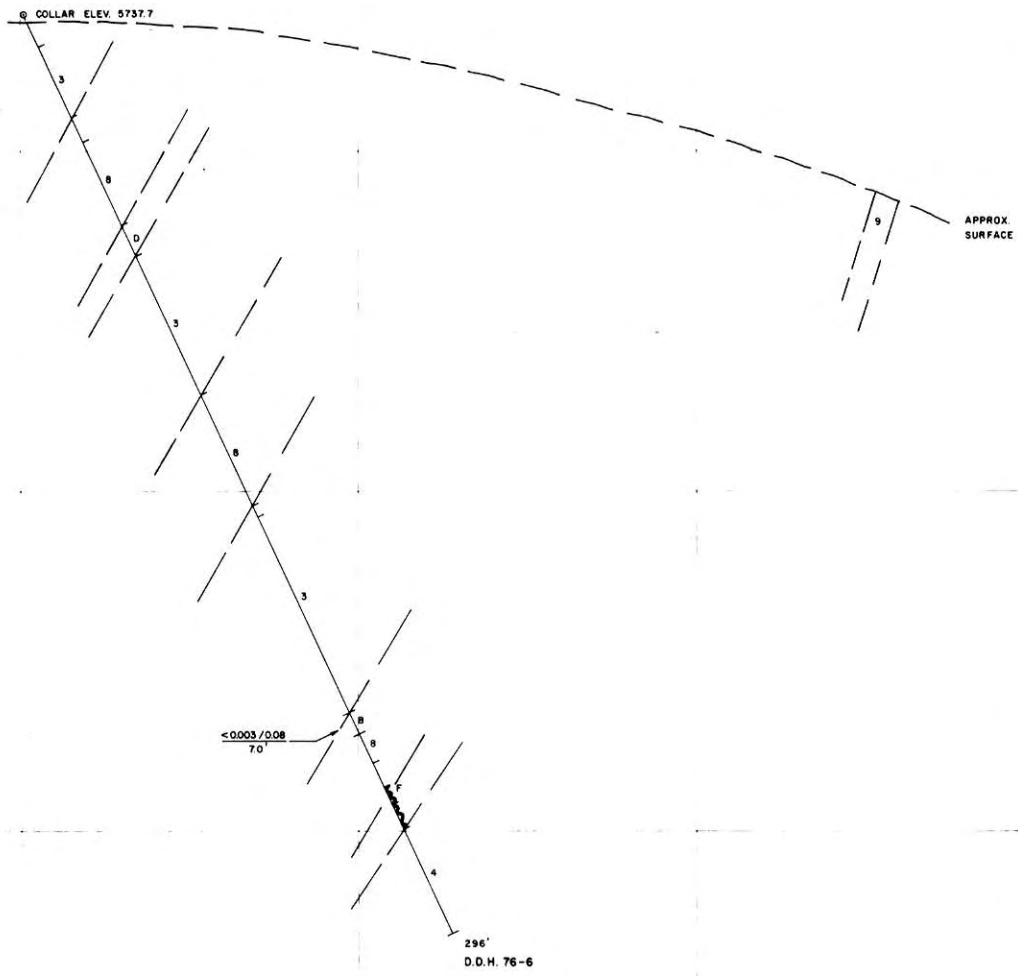
5400'

5300'

5200'

5100'

5000'



inches
0 1
0 1 2
centimetres

This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.

FIGURE 21

DUPONT EXPLORATION CANADA

SECTION 55+00n
LOOKING NORTH
CHAPPELLE MINE
OMINECA MINING DIVISION, BRITISH COLUMBIA

SCALE
20 10 0 20 40

MAPPED BY	K.A. Hall	REVISED	N.T.S. No: 94 E 6
DATE	JULY '76	Jan '77	ACCT No: 501-01
DRAWN BY	K.L.J.		DRWG No: C-77-35
DATE	SEPT. '76		

DRWG No. C. 77-35

WEST

5+00 e

6+00 e

7+00 e

8+00 e

9+00 e

10+00 e

EAST

5800'

5700'

5600'

5500'

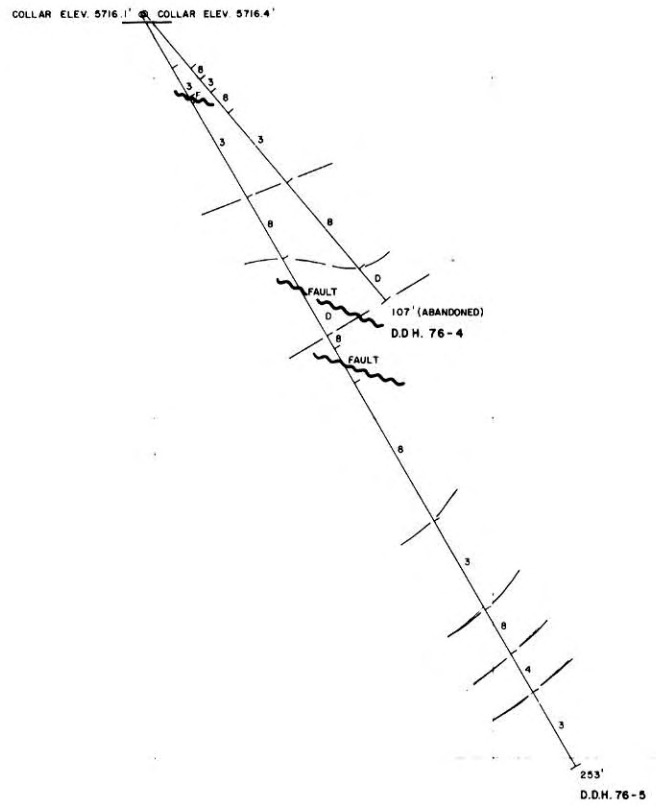
5400'

5300'

5200'

5100'

5000'



inches

0 1

0 1 2

centimetres

This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.

FIGURE 22

DUPONT EXPLORATION CANADA

SECTION 55+40n

LOOKING NORTH

CHAPPELLE MINE

OMINECA MINING DIVISION, BRITISH COLUMBIA

SCALE

MAPPED BY	K.A. Weal,	REVISED	N.T.S. No. 94 E 6
DATE	JULY '76	JAN '77	
DRAWN BY	R.L.J.		ACCT No. 201-01
DATE	SEPT. '76		DRWG No. C-77-36

DRWG No. C.77-36

WEST

5+00e 6+00e 7+00e 8+00e 9+00e 10+00e

EAST

5800'

5700'

5600'

5500'

5400'

5300'

5200'

5100'

5000'

COLLAR ELEV. 5785.9'

COLLAR ELEV. 5750.8'

396'
D.D.H. 74-17

378'
D.D.H. 74-18

GYPSUM ALTERATION BELOW 416'

0.192 / 0.02
3.2'

0.114 / 0.02
4.0'

518'
D.D.H. 75-4

608'
D.D.H. 75-8

inches
0 1
0 1 2
centimetres

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FIGURE 23

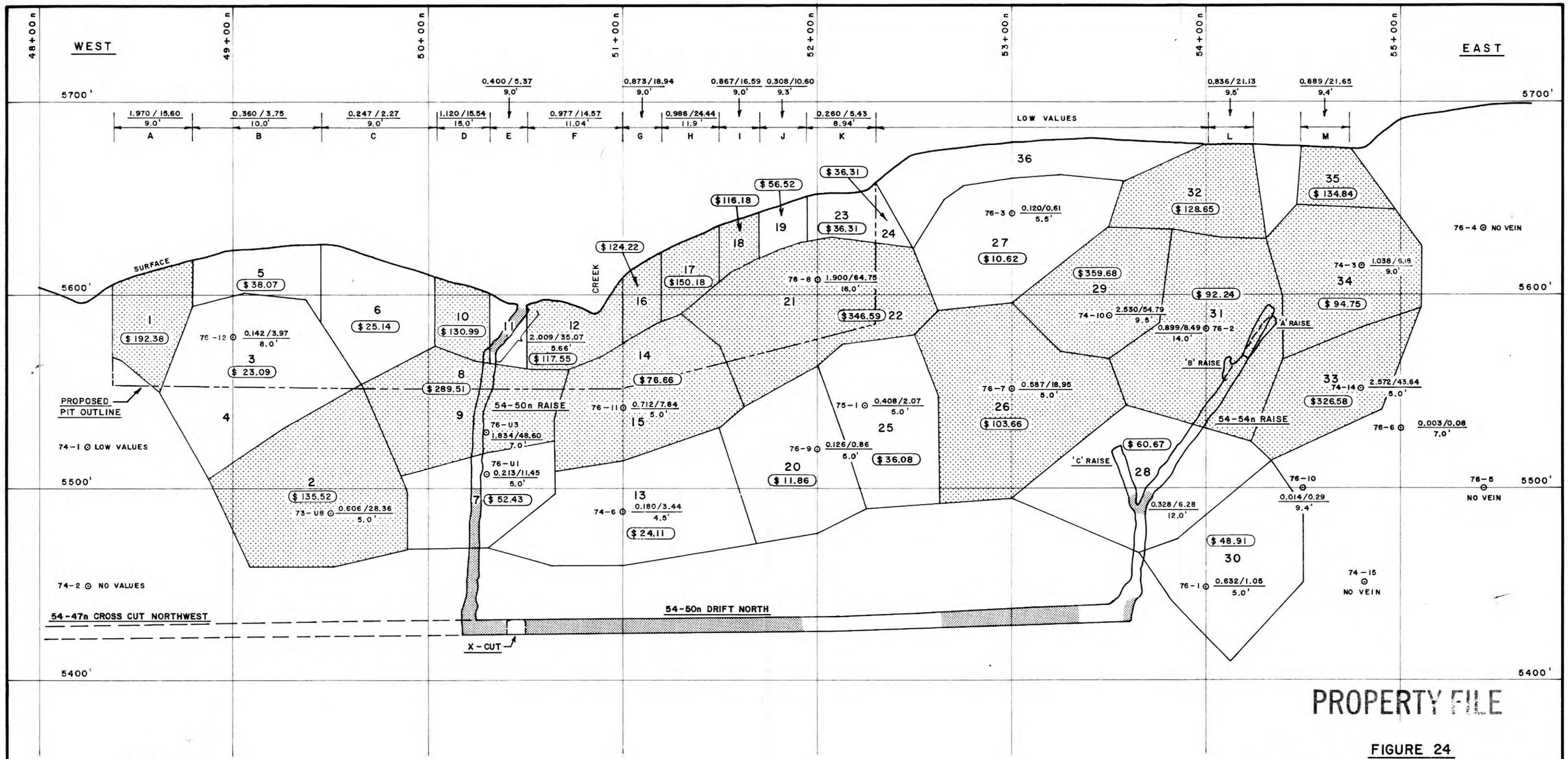
DUPONT EXPLORATION
CANADA

SECTION 56+20n
LOOKING NORTH
CHAPPELLE MINE
OMINECA MINING DIVISION, BRITISH COLUMBIA

SCALE

MAPPED BY	E.A.U.	REVISED	N.T.S. No. 94 E 6
DATE	JULY '76	AUG '77	AGGT No. 201-01
DRAWN BY	E.A.J.		DRWG. No. C-77-37
DATE	AUG '76		

DRWG No. C. 77-37



PROPERTY FILE

LEGEND

- 5 — GRADE & TONNAGE BLOCK
- PROPOSED PIT OUTLINE
- SECTION OF MINE OPENING IN VEIN
- $75.00 / TON MINIMUM VALUE
- ($ XX.XX) — RECOVERABLE VALUE PER TON AT Au PRICE $100.00 / OZ. Ag PRICE $4.50 / OZ.

inches 0 1 — centimetres 0 1 2

This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.

THE GRADE AND TONNAGE ESTIMATES DEPEND ON THESE SAMPLING POINTS

FIGURE 24

DUPONT EXPLORATION CANADA

LONGITUDINAL PROJECTION - VEIN 'A'
SHOWING
BLOCK GRADES
CHAPPELLE PROPERTY
OMINECA MINING DIVISION, BRITISH COLUMBIA

1 : 0 SCALE 50 25 0 50
1 INCH = 50 FEET

DATA BY	K.A.M.	REVISED:	N.T.S. No.: 94 E 6
DATE	Jan. '77		ACCT No.: 301-01
DRAWN BY	K.L.J.		DRWG. No.: C.77-1
DATE	Jan. '77		

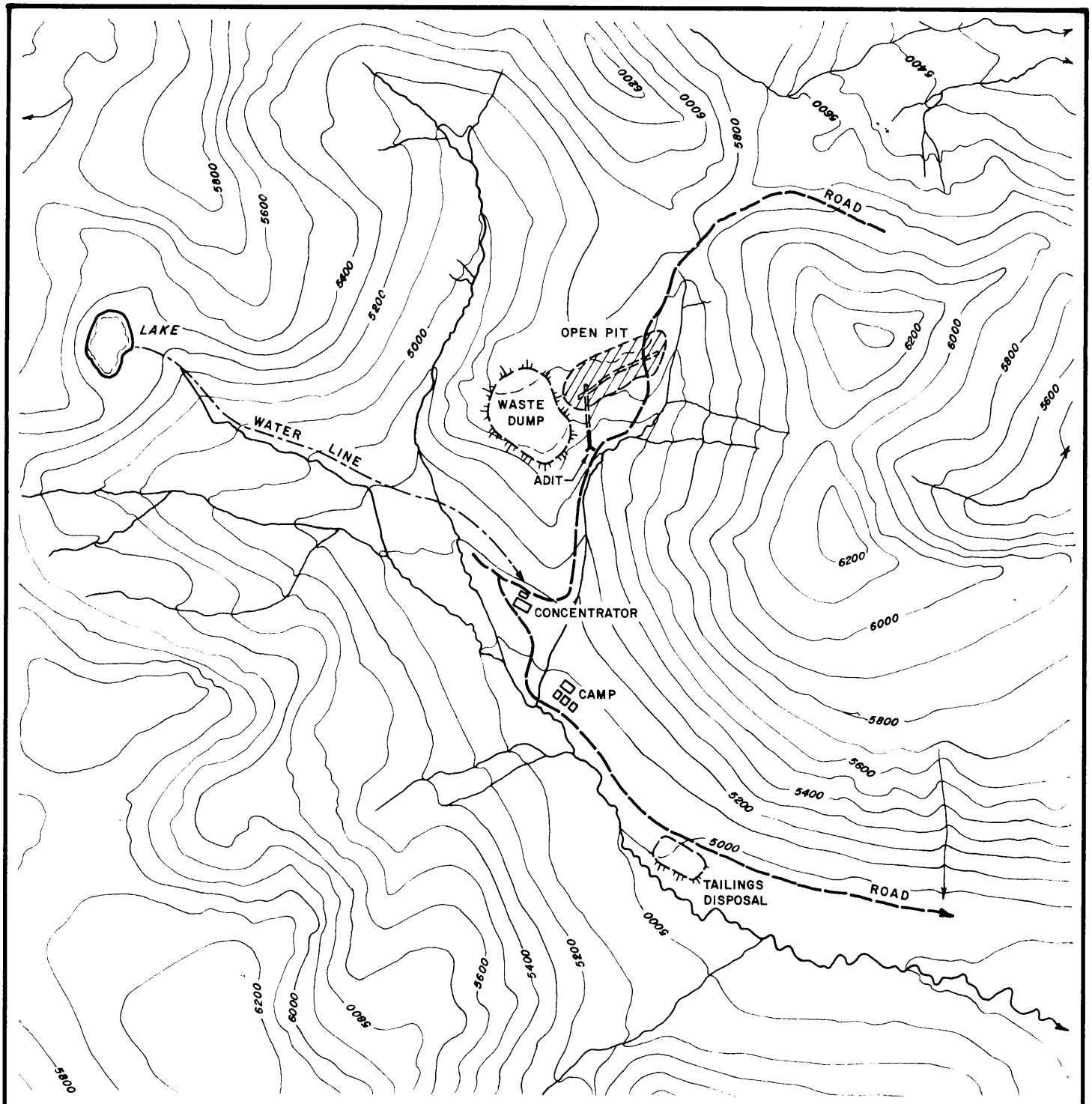


FIGURE 25

DUPONT EXPLORATION CANADA

PRELIMINARY MINE AND SURFACE PLANT SITES
CHAPPELLE PROJECT
OMINECA MINING DIVISION, BRITISH COLUMBIA

SCALE
1320 0 1320
1 INCH = 1320 FEET (approx.)

DATA BY	D.A.B.	REVISED	N.T.S. No. 94 E 6
DATE	Feb.'77		ACCT. No. 301-01
DRAWN BY	K.L.J.		DRWG No. C.77-60
DATE	Feb.'77		

inches
0 1
0 1 2
centimetres

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BRITISH COLUMBIA GEOLOGICAL SURVEY