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GEOLOGY AND EXPLORATION

McDAME ASBESTOS DEPOSIT

CASSIAR, B.C.

By

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ABSTRACT

GEOLOGY AND EXPLORATION, McDAME ASBESTOS DEPOSIT, CASSIAR, B.C.

The McDame chrysotile asbestos deposit located near Cassiar in Northern British Columbia is found at depth and on trend to the southeast of the currently mined open-pit Cassiar asbestos deposit. The ultramafic rock hosting the McDame is serpentinized peridotite contained in an ophiolitic sequence preserved within a lower thrust sheet of the Sylvester Allochthon.

The McDame asbestos-bearing ultramafite is considered to represent a separate interleaved fault-bounded slice of rock distinct from the Cassiar asbestos deposit and is located on the west limb of the northerly trending Sylvester Synclinorium.

The stratigraphic package is a series of thrust slices composed of argillite, tuff and volcanic flows, diorite and serpentinite. Contacts between units are often fault controlled. Intrusion of the Cassiar Batholith in midCretaceous time was probably responsible for formation of the Sylvester Synclinorium and later block faulting.

Asbestos mineralization of the McDame deposit was discovered in 1978 by an exploration adit designed to test open-pit asbestos reserves at depth on the Cassiar deposit. Exploration during 1980 and 1981 focussed on underground drilling of a 150 meter strike length of the deposit and in 1983 on geological mapping, airborne and ground magnetic surveys. In 1984 a 622.5 meter borehole was drilled with a 242 meter intersection of McDame ultramafite of which the lower 151 meters contain potentially economic chrysotile asbestos. The McDame deposit averages 90 meters thick, trends north-south, dips easterly and plunges southeasterly. The deposit is estimated to contain geological reserves in the order of 62 million tonnes containing asbestos fibre similar in value to the Cassiar deposit.

The McDame is considered a major world-class asbestos deposit. A decision to develop and mine the deposit will require further substantial underground exploration and evaluation. A 1000 meter exploration adit driven to the footwall of the deposit at the 1415 meter elevation is proposed for 1985 in anticipation of bulk sampling, diamond drilling and mine planning studies in 1986.

INTRODUCTION

This is a status report on the results of Brinco Mining Limited exploration programs conducted largely over the last two years on the McDame chrysotile asbestos deposit located near Cassiar in Northern British Columbia and at depth and on trend to the southeast of Brinco's currently mined open-pit Cassiar asbestos deposit.

The town of Cassiar, located in the Cassiar Mountains some 160 kilometers southwest of Watson Lake, Yukon hosts a population of 1200 people. Note Figure 1. The Cassiar mine provides the sole economic base for Cassiar and the infrastructure for the surrounding region.

The Cassiar asbestos deposit and mine is unique and impressive for British Columbia. It is the only operating asbestos mine in the Canadian Cordillera, and as a current producer rates as the second longest continuing mining operation in the history of the province. Cassiar commenced production in 1953 and to December 31, 1984 a total of 23,164,500 tonnes of asbestos ore has been mined from the Cassiar deposit and 2,048,100 tonnes of high quality/high value asbestos have been produced.

The McDame asbestos deposit location in respect to the Cassiar deposit is illustrated in Figure 2. The ultramafic body hosting the McDame asbestos deposit is considered to represent a separate interleaved fault-bounded slice

of rock structurally and spatially separate and distinct from the Cassiar asbestos deposit.

The McDame is a major world-class asbestos deposit and contains geological reserves of 62 million tonnes with potential for substantial additional reserves.

Current proposals are to complete major underground exploration programs in 1985 and 1986 involving a 1000 meter exploration adit driven to the footwall of the deposit, extensive underground drilling and bulk sampling. Assuming exploration results continue to be favorable and feasibility studies are positive a decision to bring the deposit to production using blockcaving mining methods could be made as early as 1987. If McDame is brought to production the life of mine for the Cassiar operations can be projected well into the twenty-first century.

EXPLORATION HISTORY

The exploration history of the McDame asbestos deposit commenced when definition of in-fill drilling on the Cassiar open-pit deposit from surface was unsuccessful. In 1978 an exploration adit collared at the 1563 meter elevation and designed to provide access for in-fill drilling of these open pit reserves intersected unrelated asbestos-bearing serpentinite below and south of the Cassiar deposit. From May 1978 to April 1980 the adit was driven for 1334 meters. From this adit during 1980 and 1981 12,092 meters of drilling in

37 holes defined a new buried asbestos deposit now called McDame to contain 30.8 million tonnes of asbestos fibre having a fibre value per tonne similar to the Cassiar deposit. The deposit was open to the south and east; however the layout of the adit prevented further underground drilling.

Exploration during 1983 included detailed geological mapping, airborne and ground magnetic surveys and a review of previous exploration drilling. A large area-high magnitude aeromagnetic anomaly was found to extend southerly from the McDame depost indicating that the ultramafite(s) hosting McDame was substantially larger than the drilled deposit, and by correlation the asbestos reserve potential was therefore significantly greater than indicated by the 1980-81 work. In 1984 further detailed ground magnetic and geological surveys were completed and on the basis of geophysical modelling curves a drill hole was spotted on the east side of McDame Mountain with the objective of:

i) defining the causative source of the large airborne and ground magnetic anomaly

ii) testing for a near-surface or possibly up-faulted extension of the McDame deposit

iii) drilling the southerly projected trend of the McDame deposit.

In July 1984 the McDame ultramafite was intersected at 377 meters depth and potential economic asbestos mineralization was intersected over 151 meters from 466.5 meters to 617.4 meters. This drill intersection is located 160 meters south of the 1981 drilling. Reserve calculations based on the 1984 drilling and previous drilling have doubled to 62 million tonnes at a grade and fibre value similar to the Cassiar mine.

REGIONAL GEOLOGY

The McDame asbestos deposit is contained within a separate interleaved fault-bounded slice of serpentinized ultramafite. The deposit occurs within the Sylvester Group on the west limb of a northerly trending synclinorium. The synclinorium now known as the Sylvester Allochthon comprises some +5000 meters of upper Paleozoic chert, volcanic, clastic and ultramafic rocks. This ophiolitic assemblage was highly deformed by thrusting in its early history to form a stock of horizontal, fault-bounded tectonolithologic sheets or slivers. These form a highly variable and shifted tectonic "stratigraphy" in which older units are commonly thust over younger units (Harms, 1985). The fault-bounded thrust sheets pinch and swell laterally and may be exceedingly thin compared to their areal extent. Most Sylvester lithologies are difficult to trace and correlate laterally. The Sylvester Allochthon was then thrust in a northeast direction over autochthonous strata of the North American continental margin in post Triassic to pre mid-Cretaceous times. It now lies as an enormous 200 km long by 20 km wide klippe as illustrated in Figure 3. The basal Sylvester fault is a continuous and planar structure that lies beneath and outcrops around the allochthon. The general distribution of ultramafic bodies is given in Figure 3. These bodies are interpreted to represent fragments of an oceanic lithosphere formed at the axis of an oceanic ridge or rise near the margin of the North American continent or at an island arc at some stage of its history and have moved across the ocean floor by sea-floor spreading and finally lifted above sea level during the obduction processes. The

ultramafic bodies vary considerably in size. The ultramafic rocks have been variably serpentinized (Leaming, 1982) and are black to dark green, weathering light green, and are highly sheared and slickensided along major fault zones, but massive and competent where they have escaped deformation. Most are pyroxene-bearing peridotites and therefore originally were harzburgite and wehrlite. Pyroxenes are commonly represented by bastite, the serpentine pseudomorph after pyroxene. The compositional range of the alpine ultramafic rocks is given in Figure 4.

In the mid to late Cretaceous, quartz monzonite of the Cassiar batholith intruded the western part of the allochthon and was responsible for formation of the Sylvester Synclinorium and later block faulting.

LOCAL GEOLOGY

The geology in the vicinity of the McDame deposit and Cassiar Mine is illustrated in Figure 5.

I would briefly like to review the stratigraphy and structure going generally from oldest to youngest rocks in a west-east transect. The rocks for this discussion are divided into two packages, pre-Sylvester and Sylvester.

The pre-Sylvester rocks include Lower Paleozoic autochthonous shelf-platform carbonates and argillites of the following Groups and ages:

- Lower Cambrian Atan Group, limestone and dolstone
- Cambro-Ordovician Kechika Group, black shale, argillite, limestone
- Ordovician-Silurian Sandpile Group, quartzite, dolstone, minor phyllite
- Devonian McDame Group, limestone, dolstone

All of these rocks trend north-northwest and dip variably to the east. As one approaches the main basal Sylvester Thrust fault the rocks become progressively more deformed. Regionally the basal Sylvester thrust fault lies over the McDame Group carbonates; however, locally the thrust fault crosscuts stratigraphy downward through the McDame Group into the Sandpile Group. Although regionally the Sylvester fault is depicted as a planar continuous structure, locally on McDame Mountain it appears to be close enechelon thrust faults.

The Sylvester Group rocks are upper Paleozoic in age and near the McDame deposit, four major thrust sheets can be distinguished from west to east on McDame Mountain.

Compositionally the rocks are 50 percent clastic and 50 percent volcanic. The argillites are medium to dark grey in color and commonly siliceous or cherty. A black carbonaceous argillite is associated with the Sylvester basal thrust. Locally thin beds of limestone are contained within siliceous argillite. Other varieties of argillite include those intermixed with thin tuff layers.

Volcanic units altered through saussuritization to greenstone were originally basalts and andesites. Both tuffs and flows are recognized.

Diorite units are present and appear similar in color to the greenstone but are generally coarser grained and appear as stratiform sills.

These sedimentary and volcanic rocks are indicative of formation in a relative deep oceanic basin where ridge-type vulcanism was active.

Contained within the Sylvester Group rocks are ultramafic bodies of variable size, shape and form. The ultramafites are peridotites that have been serpentinized to varying degrees. They are strongly magnetic due to a high magnetite content and are the cause of most major magnetic anomalies in the area. The ultramafites locally contain dykes of strongly altered diorite known as rodingite. In the Cassiar area we have identified the ultramafites to occur along no less than three distinct stratigraphic-structural horizons which are probably major thrust fault surfaces. The lowest horizon in a structural sense occurs just above the Sylvester basal thrust fault and contains several ultramafite thrust slices that host the McDame and Cassiar asbestos deposits.

The McDame ultramafite was originally a peridotite of a wehrlite or harzburgite composition that has subsequently been totally converted to serpentine and associated alteration mineral species. In thin section magnetite and talc (2-10%) occur in veinlets and stringers although some magnetite is found as disseminations; chrysotile asbestos fibre (0-20%) as crosscutting veinlets and fractures, pyrite (2-3%) as anhedral blebs associated with disseminated magnetite. The olivine and pyroxenes have been converted to

serpentine and the pyroxene pseudomorph bastite, can locally be recognized. On outcrop brucite is found erratically as a white film.

The pattern of asbestos veins is controlled by the joint system (Gabrielse, 1955) and the veins have probably formed by fracture filling. Offsetting of one veinlet by another is common. In many cases fibre of one joint set merge with fibre of another joint set to produce a split-fibre vein. Economically cross-fibre veins are most important; here fibres are oriented at large angles to the vein walls.

The hanging wall of the McDame ultramafite is marked by shearing and in addition to serpentinization, chloritization, pods of schistose tremolite, talcy-soapstone, zoisite, epidote and clay are present. Nephrite jade which is found on the hanging wall of the Cassiar deposit has not been recognized at McDame. The McDame footwall is characterized by sheared carbonaceous argillite, and gouge, grading to more competent argillite.

STRUCTURE

In the Sylvester Group the dominant deformation structures are thrust faults subparallel to bedding. Other structures include steep faults, fractures and joints. The layering has a general easterly dip but in detail deformation is extensive, beds pinch and swell and are irregular in thickness. This deformation is due to thrusting, variations in facies due to sedimentary and

volcanic process, and later folding and faulting. The thrust-type deformation is useful in explaining the complex stratigraphy and structure of the Sylvester Group.

Normal faulting is prominent in an easterly and northeasterly direction. It is speculated that the orientation of jointing and fracturing is a function of the tectonic deformation that each respective thrust sheet has undergone during thrusting and emplacement and later deformation caused by intrusion of the Cassiar Batholith. There are two dominant joint sets in the footwall argillites (Hewett, 1984), one striking northeast and one striking north. Structures within the hanging wall argillites comprise three main joint sets. Two of the joint sets strike east-northeast, while the third set strikes south-southeast. All three sets subparallel joint sets in the serpentine.

Four major thrust sheets can be distinguished as we go structurally upwards through the Sylvester Group from west to east on McDame Mountain as illustrated in plan on Figure 5 and in cross-section in Figure 6. These major thrust sheets are in turn composed of one or more lesser sheets. The relative ages of the thrust sheets are not known although it is suspected that in many cases older sheets overlie younger sheets. More detailed mapping and possible conodont dating of the strata within each major thrust may resolve the relative and absolute ages of the sheets. Within each thrust sheet a normal sequence of strata is present that becomes relatively younger as one progresses from the footwall to the hanging wall.

Footwall Sheet: This sheet has an apparent thickness of 120 meters, is composed of argillite and volcanics and lies over the basal Sylvester thrust fault and below the McDame Serpentinite sheet.

The basal part of the sheet over the Sylvester thrust is highly deformed and sheared and is marked by carbonaceous or graphitic argillite.

McDame Serpentinite Sheet: This serpentinite ultramafite which hosts the McDame asbestos deposit is exposed on its updip western edge or tail where a sheared and altered 2 to 3 meter wide discontinuous zone can be traced along trend for several hundred meters. This thin edge is altered to talcy and tremolite schist and schistose serpentinite. The McDame ultramafite dips 32 to 50^{o} easterly under McDame Mountain where it attains a thickness of 300 meters and is bounded on its hanging wall and footwall by thrust faults. The McDame ultramafite is a separate thrust sheet or slice of rock distinct from several other enechelon thrust sheets to the north that contain the Cassiar ultramafite and respective asbestos deposit. The McDame asbestos deposit is contained within the ultramafite and is totally buried with the hanging wall rock cover varying from 366 to 457 meters.

Cliffs Sheet: This sheet overlies the McDame serpentinite sheet and is wedge-shaped in plan and section. On surface the sheet is composed of argillites, volcanics and diorite and is in the order of 380 meters thick; it is truncated by the overlying Limestone Sheet. At depth the sheet thins and is truncated by the underlying McDame ultramafite. From limited drilling we

suspect that this sheet is deformed by multiple thrusting and contains several smaller thrust slices.

Limestone Sheet: This sheet overlies the Cliff Sheet and is of undetermined thickness. It is composed of limestones within argillites and volcanics.

EXPLORATION SURVEYS

In June 1983 an airborne magnetic survey was completed in the Cassiar area by Apex Airborne Surveys Ltd. of Vancouver, B.C. in an effort to better define the distribution and extent of known ultramafites and to discover new ultramafites. The airborne system consisted of a Geometrics G803 total field magnetometer which measures field strength to a sensitivity of one gamma. The sensor is suspended 18 meters below the helicopter. The mean terrain clearance was 70 meters above the ground on lines over the McDame deposit area at 200 meters apart. The terrain is very rugged and precipitous ranging in elevation from 1200 to 2100 meters. The survey defined an aeromagnetic anomaly over the McDame and Cassiar deposits as illustrated in Figure 7. The regional total magnetic field is variable but averages in the 58,500 gamma range. A bullet or triangular-shaped anomaly with a threshold of 58,500 gammas and reaching a peak of 59,900 gammas straddles an area of some 1.8 km in length by 1.0 km wide. A northwest-southeast cross-section of this anomaly is illustrated in Figure 8. Subsequent detailed ground magnetic surveys in 1983 and 1984 defined the aeromagnetic anomaly precisely and these results are illustrated in Figure 9. The magnetic anomalies generated by airborne and

ground surveys encompass an area much larger than previously indicated by known distribution of ultramafites. It was immediately suspected that the largest part of magnetic anomaly located to the south of the Cassiar mine was due to a very large buried ultramafic mass which in part or whole was due to the McDame ultramafite. It was further known that these ultramafic bodies could be composed of a single thrust or multiple thrust sheets.

In an effort to further evaluate the anomaly, magnetic modelling curves were constructed in order to give an approximation of the shape, form, and depth of the causative source. We were presented with the model of multiple sources from 180 to 380 $\pm$50 meters depth from surface which represented one or more sheet-like or tabular bodies dipping to the east. Figures 10 and 11 illustrate magnetic/topographic profiles and suggested source configurations, respectively.

Drill testing of the large magnetic anomaly was recommended with the objective of testing the causative source and asbestos potential. Two or more possible deposit scenarios were obvious: i) a near surface deposit including a possible up-faulted part of the McDame asbestos deposit, and ii) an extension, at depth, of the McDame asbestos deposit. It was subsequently decided to test both scenarios with a drill hole to a minimum depth of 450 meters and if an ultramafic body was penetrated to continue the drill hole, if possible, to its footwall contact. In July 1984 after construction of an access road over a waste dump on the southeast side of the Cassiar open-pit, a drill site was set-up on the east side of McDame Mountain in a glacial cirque.

D.W. Coates Diamond Drilling Limited of Vancouver, B.C. utilizing a Longyear 44-type drill completed a 622.5 meter drill hole. The core diameter to 406 meters was HQ size and the remainder of the hole was NQ size. The hole collar (D.D.H. 84-01) was located some 200 meters southeast of the previously drilled-off McDame deposit and directed in a 270° azimuth at a minus 78° dip as illustrated in Figure 12. The drill hole intersected argillite, volcanics and diorite of the Cliff Thrust Sheet before intersecting the McDame Serpentinite Thrust Sheet at 377 meters and in which it continued to the bottom of the hole. Note Figure 13. Asbestos-bearing serpentinite grading 7.6% fibre at a 3% cutoff was intersected over 151 meters from 466.5 to 617.4 meters. A contiguous lower grade intersection of 2% fibre over 50 meters immediately above the higher grade fibre was also intersected.

RESERVES

Three west-east sections constructed perpendicular to the trend of the deposit are given in Figures 14, 15, and 16. These sections illustrate the dip and thickening of the deposit to the east. A vertical longitudinal section parallel to trend is given in Figure 17. A schematic surface projection is given in Figure 18. Reserves have been calculated for a deposit having approximate dimensions of 320 meters north-south trend length, 540 meters of east-west dip length and a thickness of 15 to 150 meters.

The engineering staff at Cassiar using a modified weighting three dimensional block model method have applied certain confidence limits on drill hole information to calculate reserves. Block tonnages within the probable resource area were checked with tonnages for the same area calculated using grid sections and a good correspondence was established.

The geological reserves of fibre-bearing serpentinite at a 3% fibre cutoff total 62,065,000 tonnes at an average fibre grade of 6.5%. The categories with their respective reserves are given below.

Geological Category	Tonnes
Probable	15,385,800
Possible (A)	14,004,000
Possible (B)	32,676,000
Total	62,065,000

The Possible (A) category represents a higher confidence level of reserves and represents tonnage on the drill cross-section of hole DDH 84-01 and by sections traversed by an earlier hole to the south of the probable reserves. The Possible (B) reserves largely represent the assumed downdip extension of the deposit. The calculation of reserves based on results of the 1984 drilling have doubled the reserve from 30,795,000 tonnes to 62,065,000 tonnes.

Reserves are open on trend to the south and downdip to the east. Preliminary interpretations of the size and distribution of the McDame ultramafite based

on its aeromagnetic expression suggest that substantial asbestos reserve potential exists for the McDame asbestos deposit.

FUTURE EXPLORATION

A decision to develop and mine the McDame asbestos deposit will require further substantial underground exploration and evaluation. A 1000 meter exploration adit driven to the footwall of the deposit followed by extensive underground drilling and bulk sampling is proposed for 1985-1986. A production decision, of course, would be contingent on continuing favorable exploration results, mine operating costs, financing, and markets. A schematic section illustrating underground access to the deposit to complete further exploration is illustrated in Figure 19.

ACKNOWLEDGEMENTS

The writer wishes to thank the management of Brinco Mining Limited for permitting release of this information relating to the McDame deposit. Several individuals at Brinco have provided substantial background information and have completed major studies dealing with many aspects of the deposit that are presented in this paper. At the Cassiar Mine these include Messrs. Carew and Pennock, Chief Engineer and Senior Mine Geologist, respectively, and in Vancouver Messrs. Hewton and Lyn, Exploration Manager and Project Geologist, respectively. I would also like to thank Mrs. B. Clegg for typing this paper and Mr. H. Holm for drafting the numerous figures.

REFERENCES

Coleman, R.G., 1971, Petrologic and geophysical nature of serpentinites: Geological Society of America Bulletin V. 82, p. 897-918

Gabrielse, H., and Mansy, J.L., 1980, Structural style in northeastern Cry Lake area, north-central British Columbia: Geological Survey of Canada, Paper 80-1A, p. 33-35

Gabrielse, H., 1963, McDame map area: British Columbia, Geological Survey of Canada, Memoir 319, 138 p.

Gabrielse, H., 1955, Petrology and structure of the McDame ultramafic belt, British Columbia: Unpublished thesis for the degree of Doctor of Philosophy, Columbia University

Gordey, S.P., Gabrielse, H., and Orchard, M.J., 1982, Stratigraphy and structure of Sylvester Allochthon, southwest McDame map area, Northern British Columbia: Geological Survey of Canada, Paper 82-1B, p. 101-106

Harms, T., 1985 (in press) Pre-emplacement thrust faulting in the Sylvester Allochthon, northeast Cry Lake map area, British Columbia

Harms, T., 1984, Structural style of the Sylvester Allochthon, northeastern Cry Lake map area, British Columbia: Geological Survey of Canada, Paper 84-1A, p. 109-112

Hewett, F.G., 1984, Cassiar asbestos mine, Cassiar, British Columbia: in the Geology of Industrial Minerals in Canada, The Canadian Institute of Mining and Metallurgy, p. 258-262

Leaming, S., 1982, Ultramafic and related rocks in Cassiar District, British Columbia: Geological Survey of Canada, Paper 82-1A, p. 417-418

Riordon, P.H., 1981, Geology of asbestos deposits: American Institute of Mining, Metallurgical, and Petroleum Engineers, New York

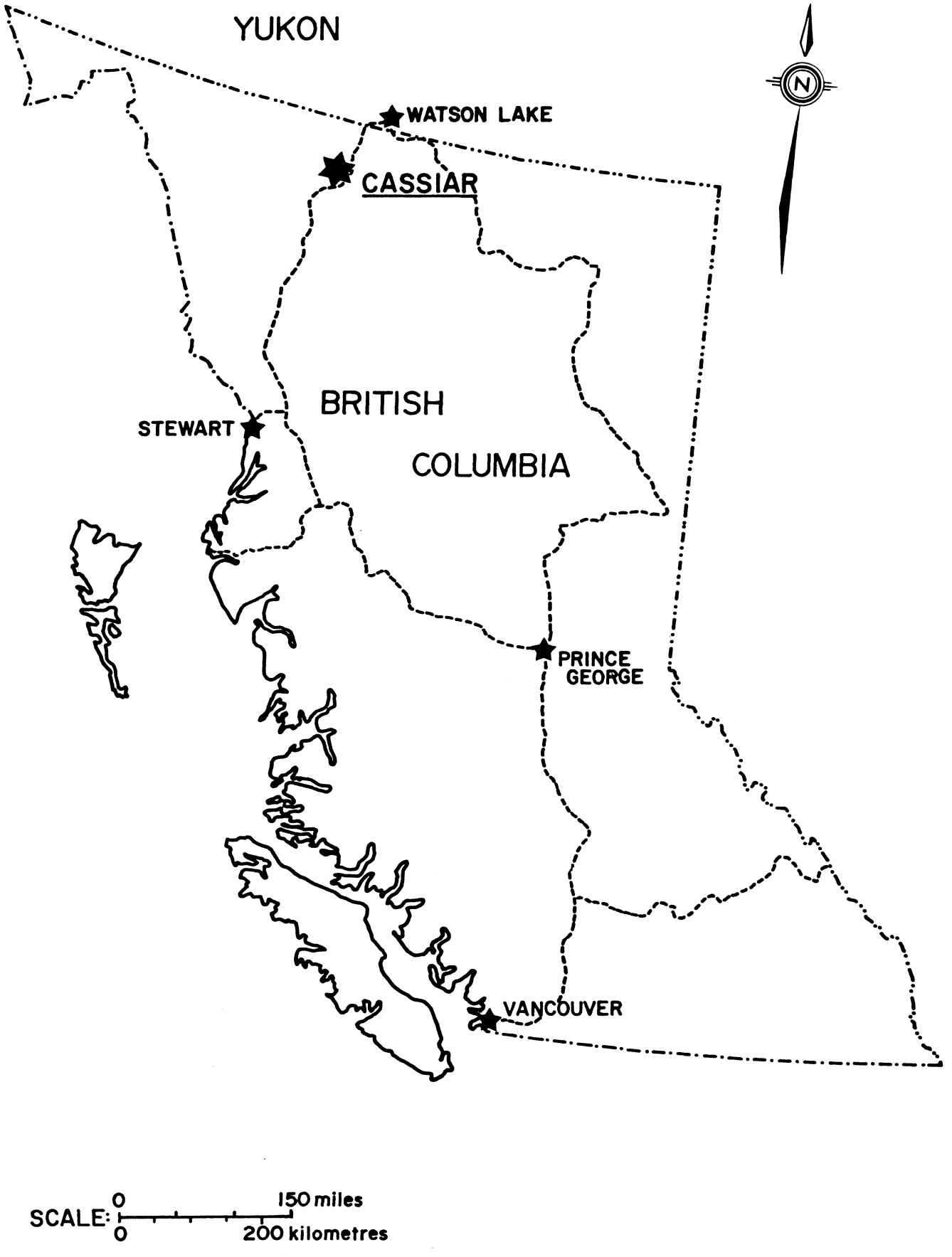


Figure 1 : LOCATION MAP

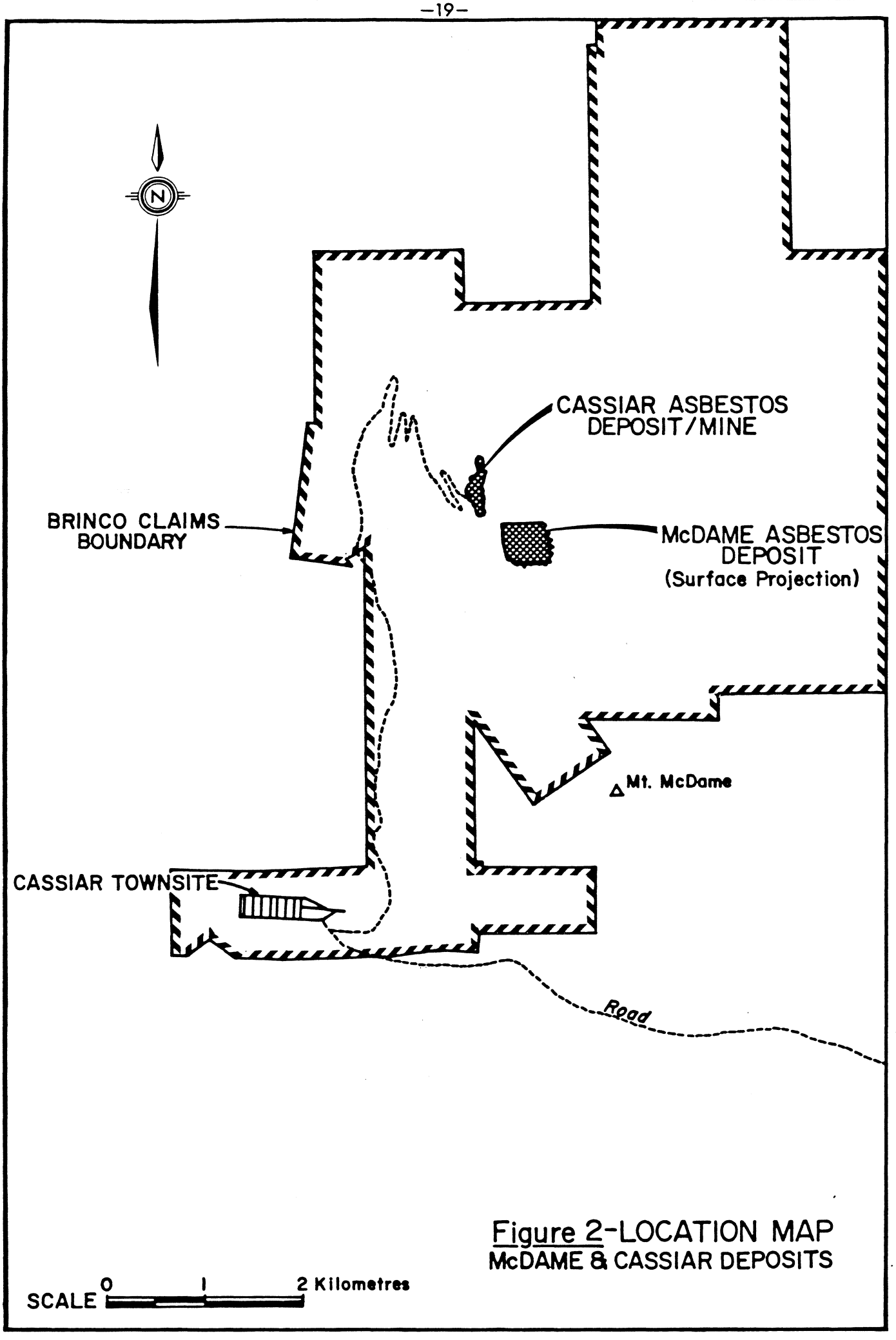


Figure 2-LOCATION MAP
McDAME & CASSIAR DEPOSITS

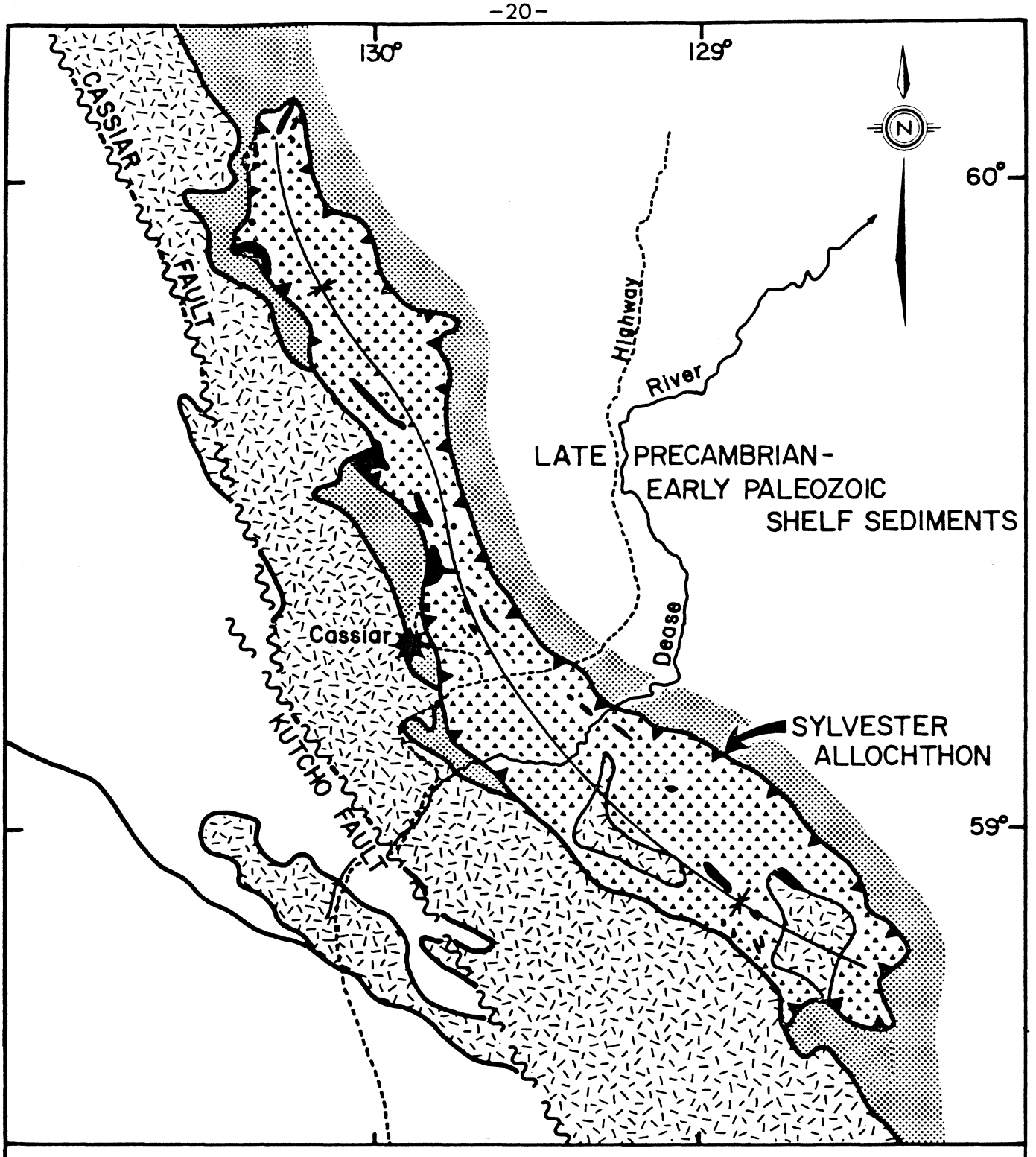


Figure 3
REGIONAL GEOLOGY

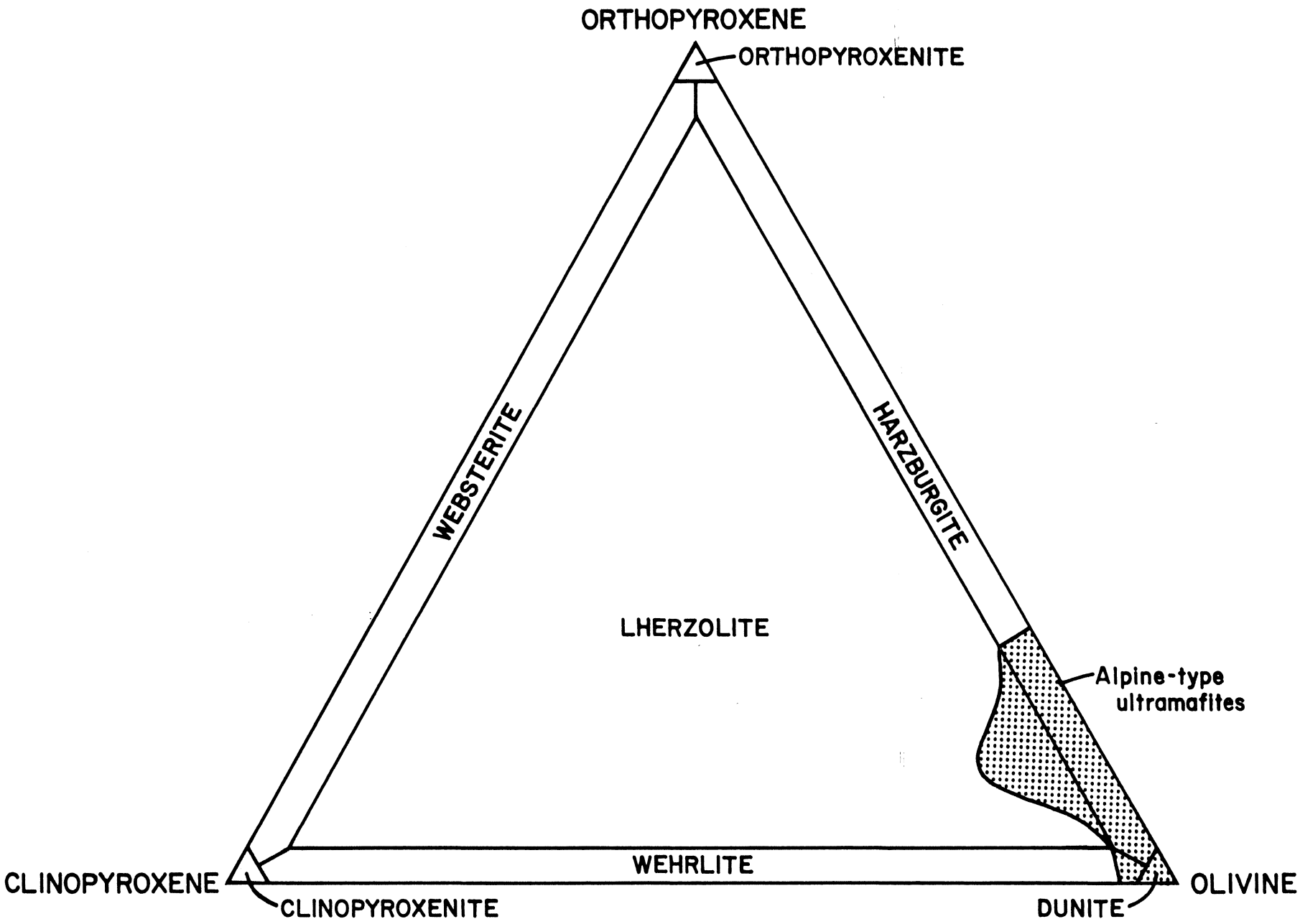


Figure 4 - COMPOSITIONAL RANGE - ALPINE ULTRAMAFITES
(After COLEMAN, 1971)

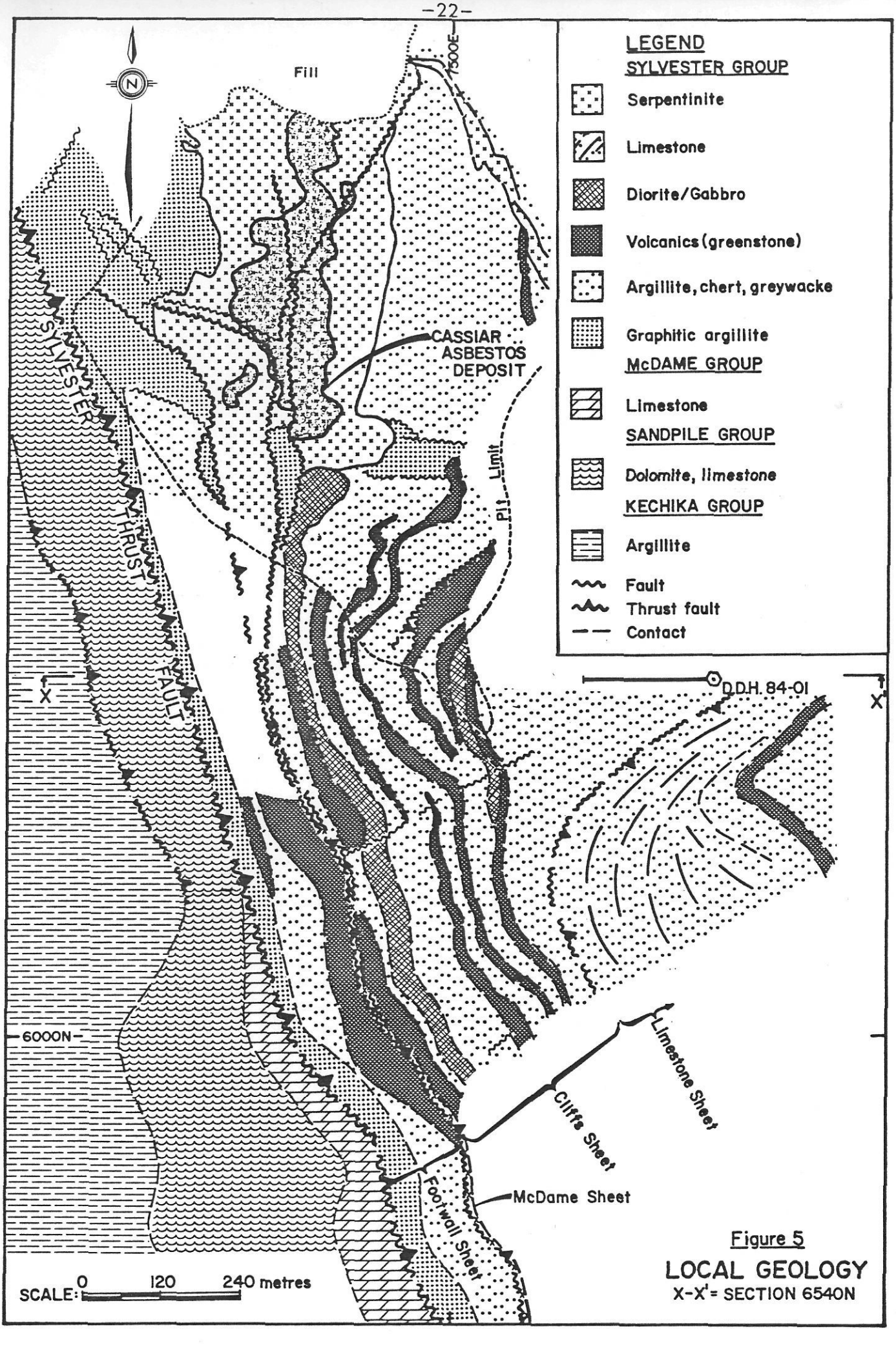


Figure 5

LOCAL GEOLOGY

X-X' = SECTION 6540N

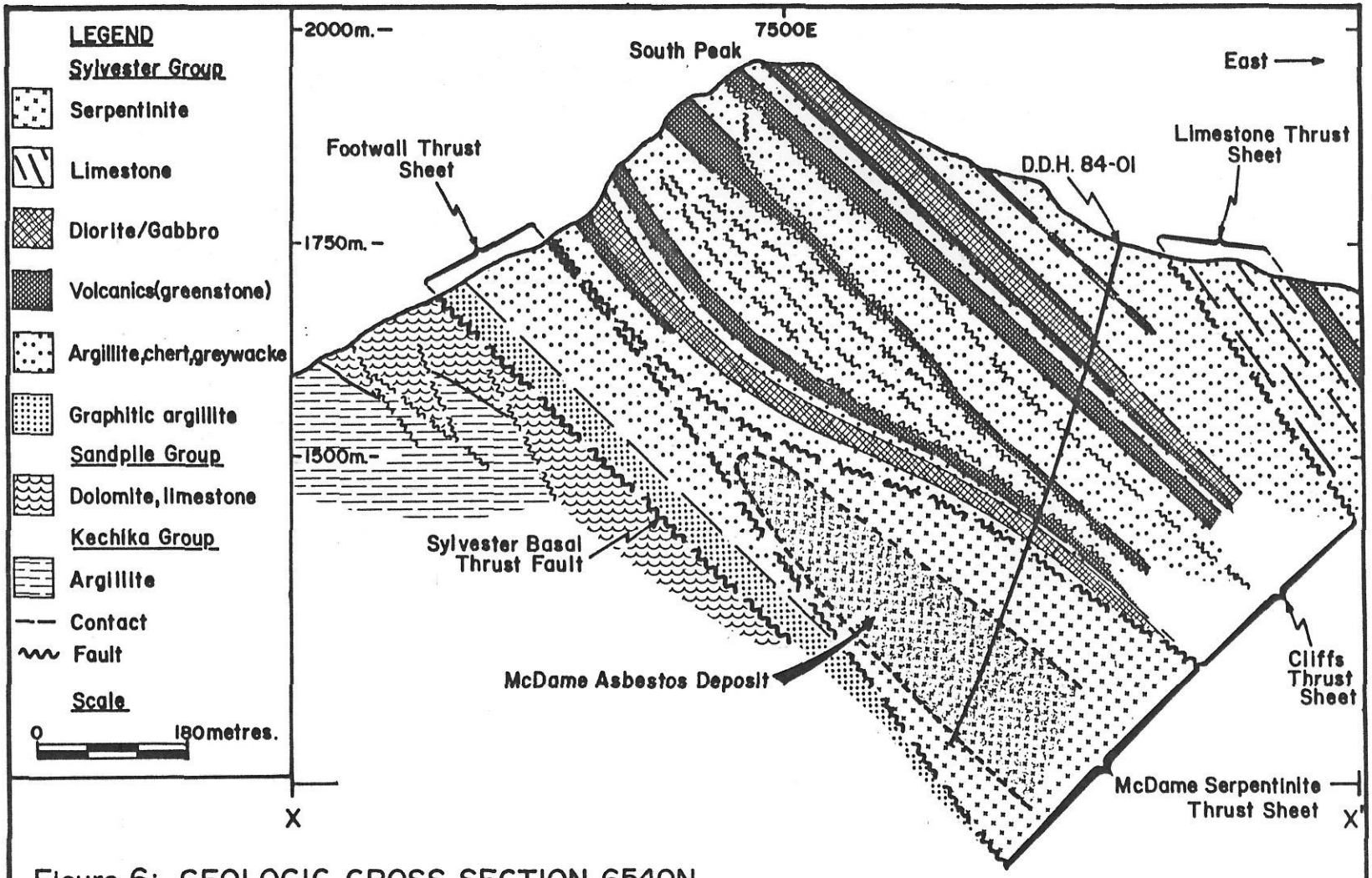


Figure 6: GEOLOGIC CROSS SECTION 6540N

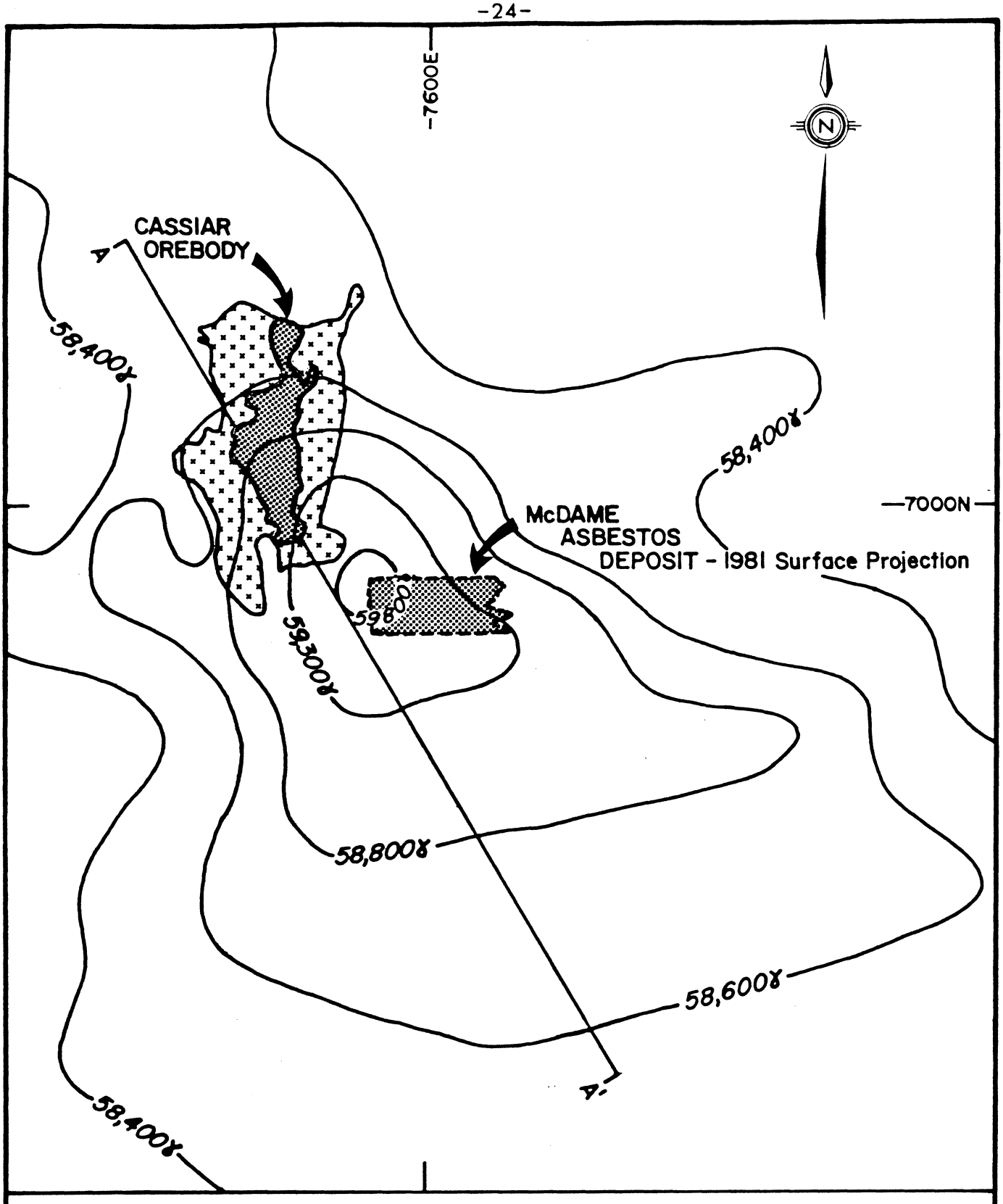


FIGURE 7: AEROMAGNETIC ANOMALY
McDAME & CASSIAR DEPOSITS

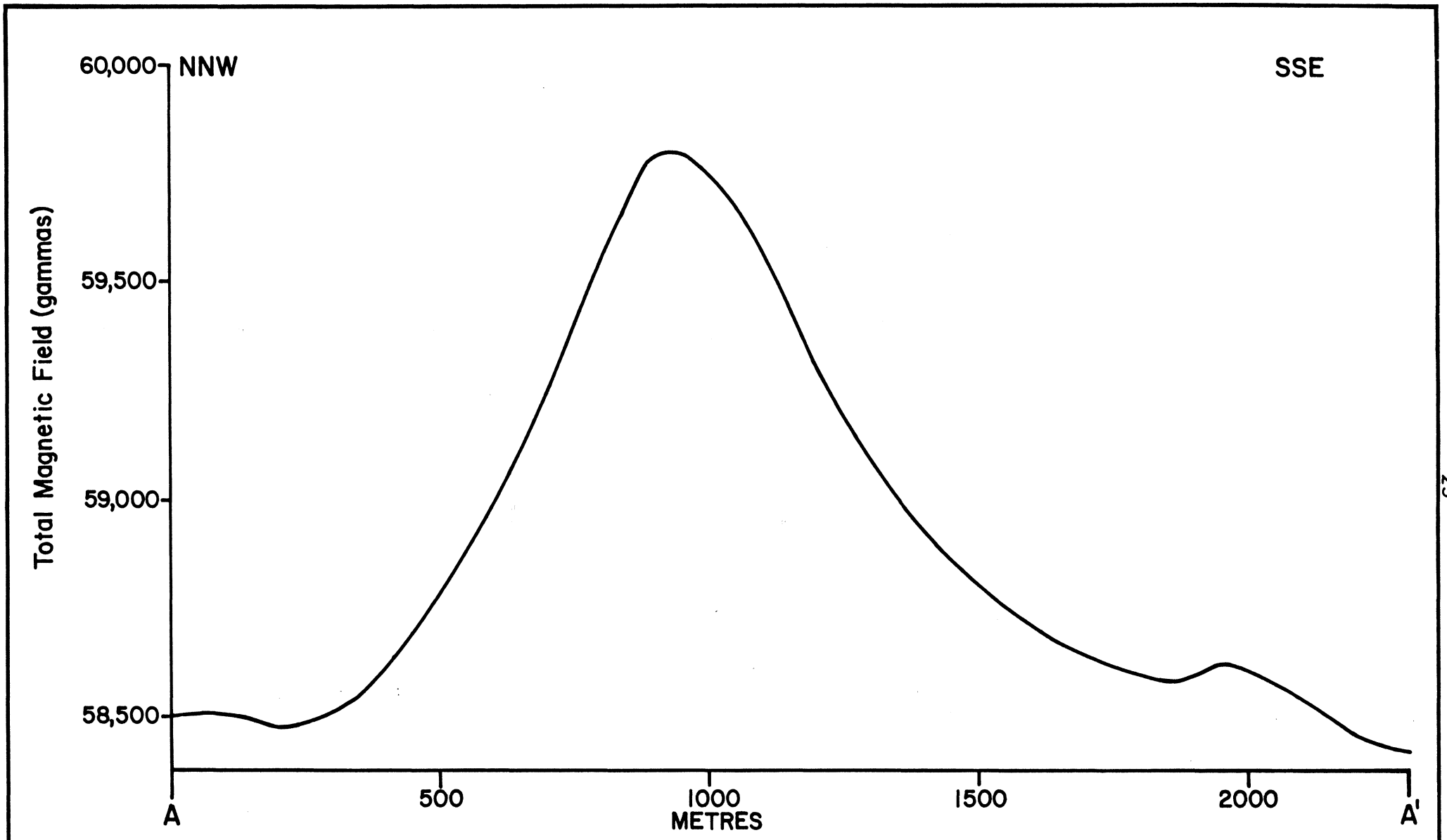
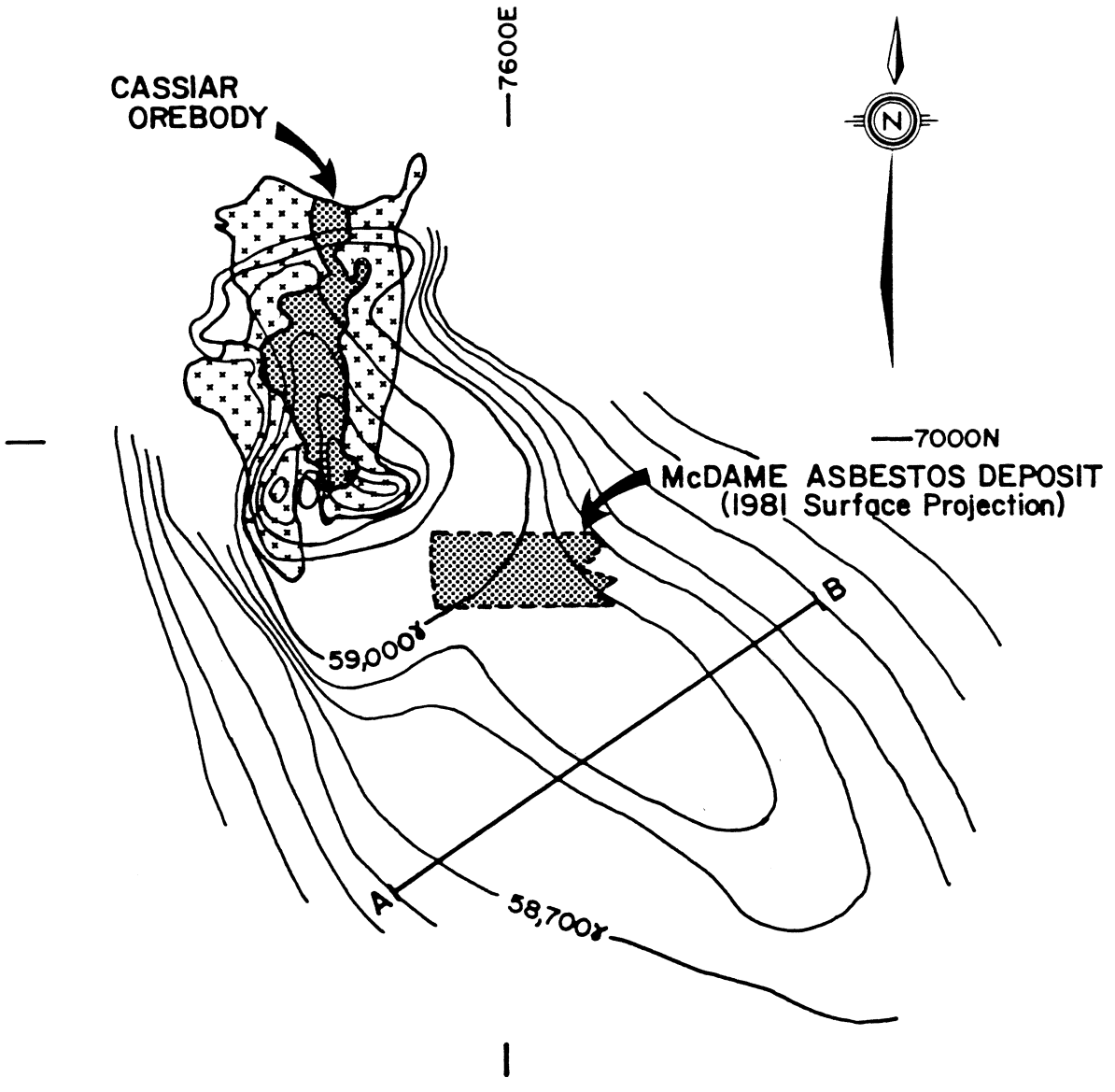


FIGURE 8: AEROMAGNETIC ANOMALY PROFILE



SCALE

0 360 metres

LEGEND

Serpentinite

NOTE: Contours at 100γ intervals below the 59,000γ contour line, and 1000γ intervals above the 59,000γ contour line.

FIGURE 9

GROUND MAGNETIC SURVEY

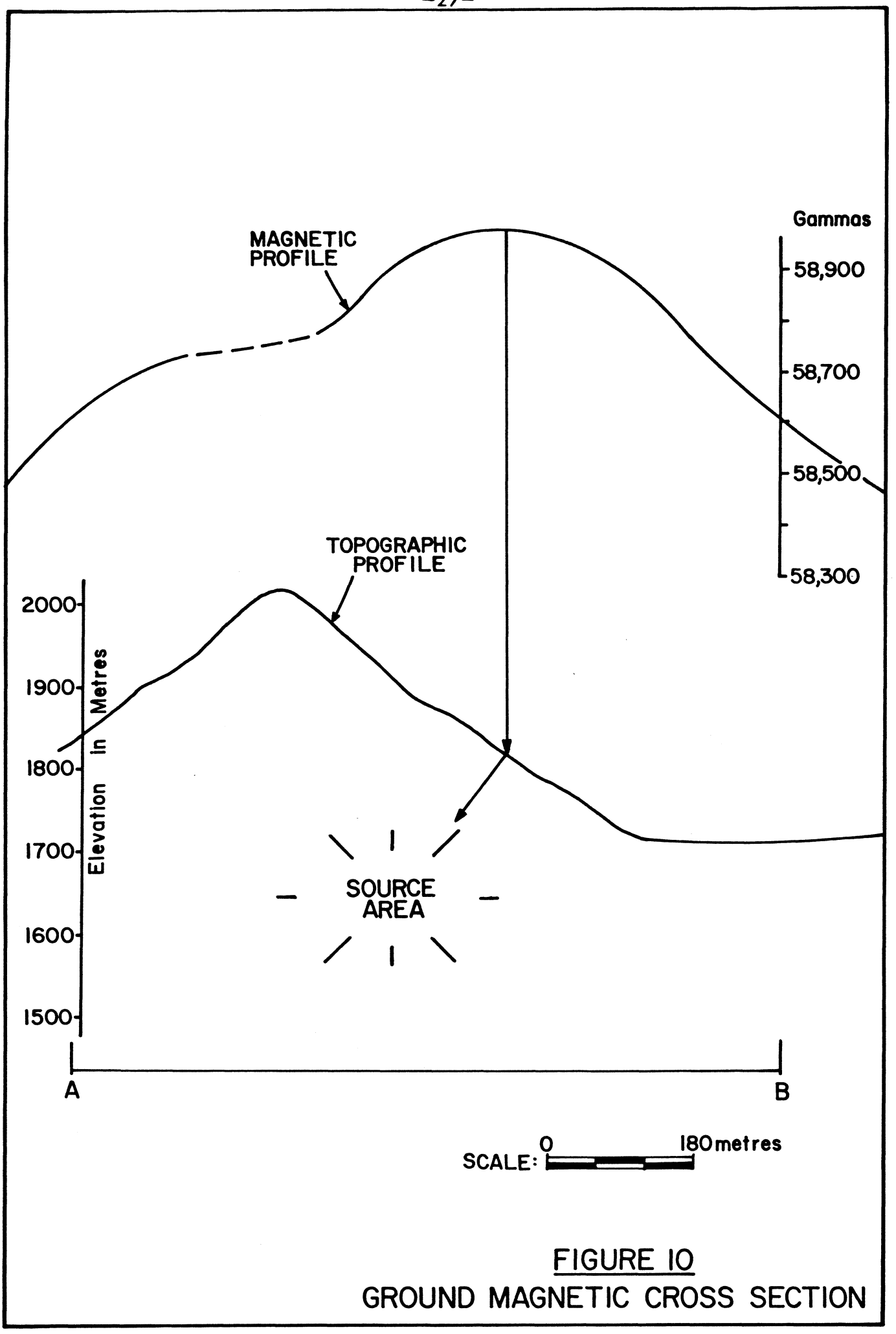


FIGURE 10

GROUND MAGNETIC CROSS SECTION

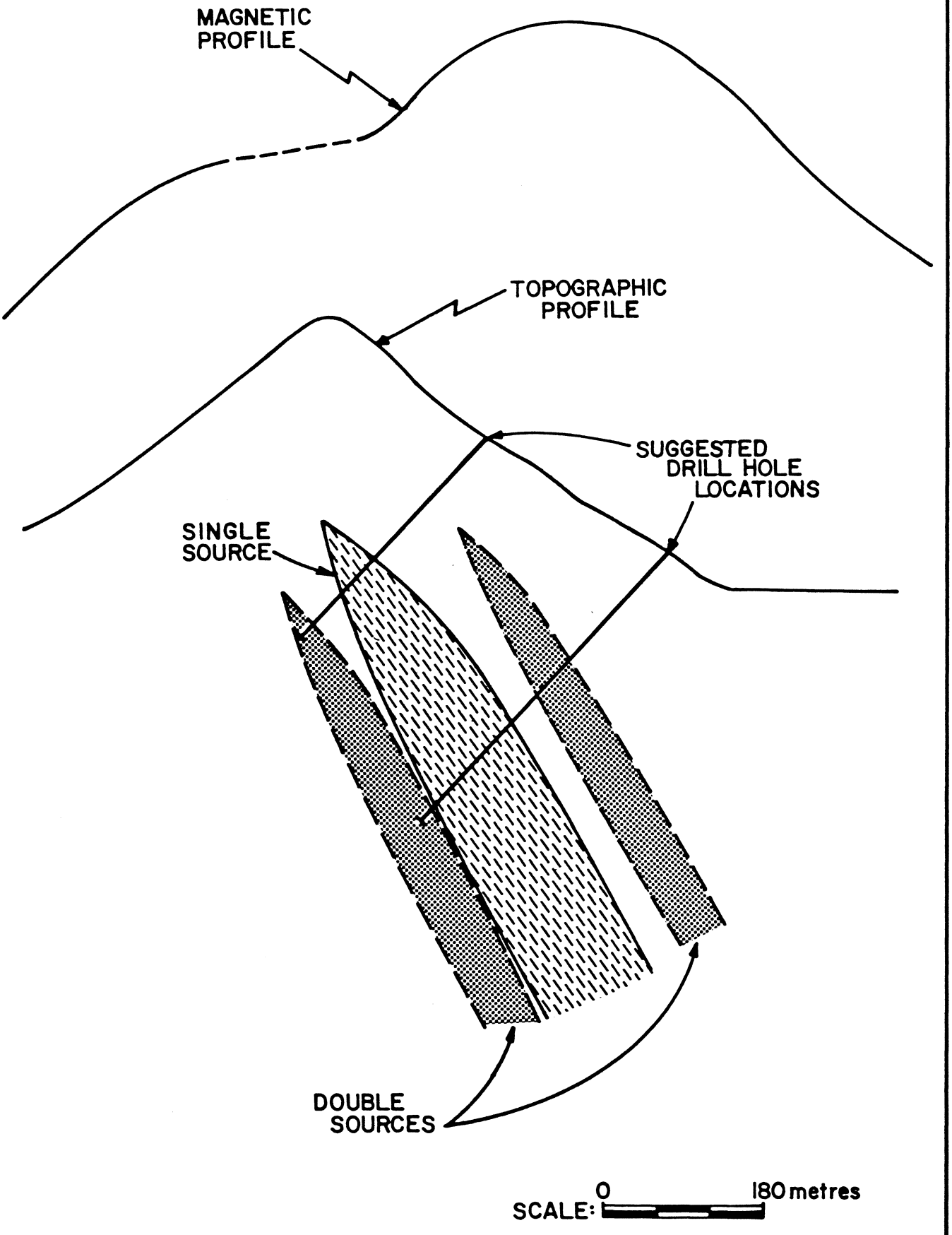


FIGURE 11: GROUND MAGNETIC CROSS SECTION WITH SOURCE CONFIGURATION

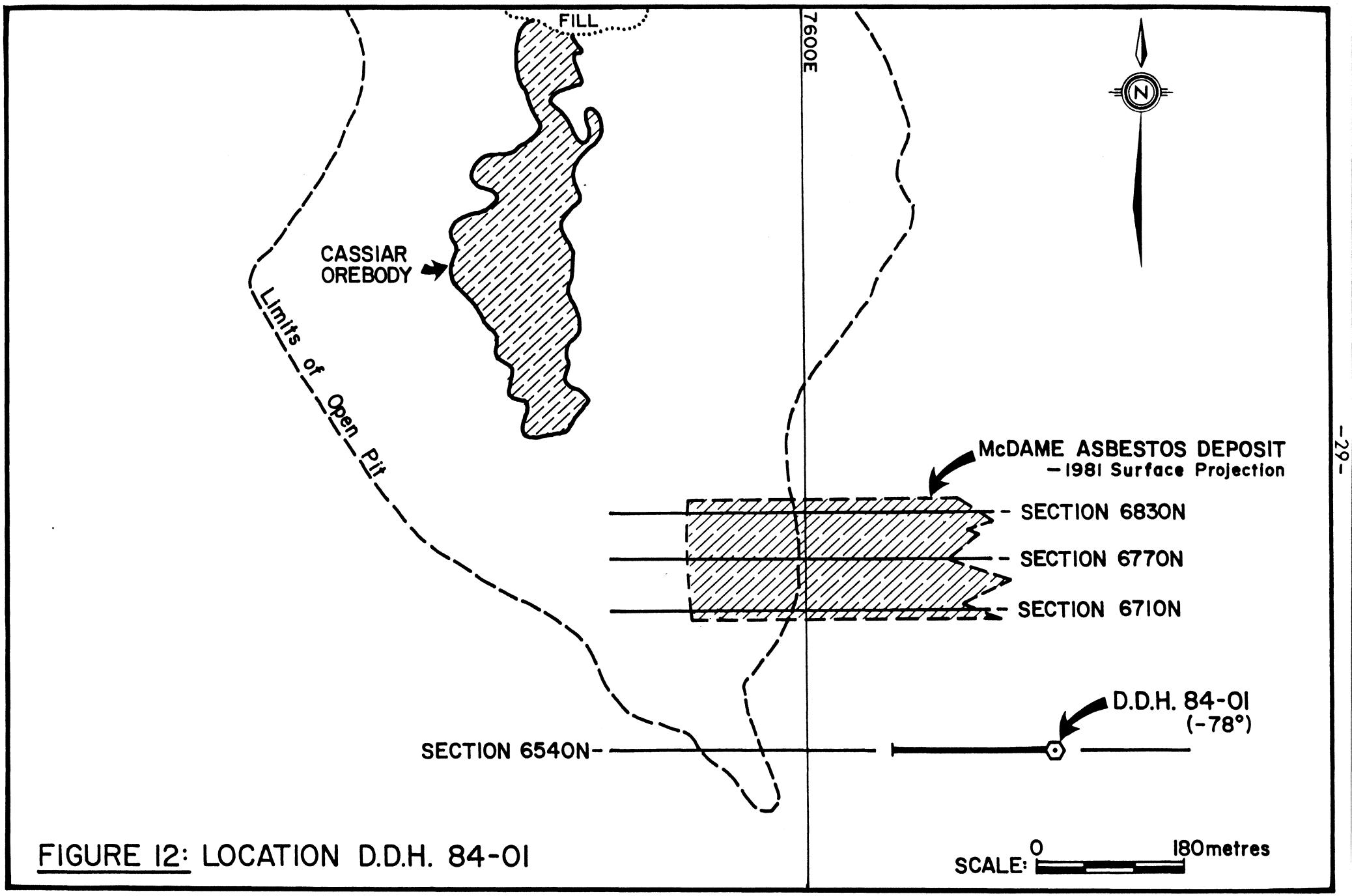


FIGURE 12: LOCATION D.D.H. 84-01

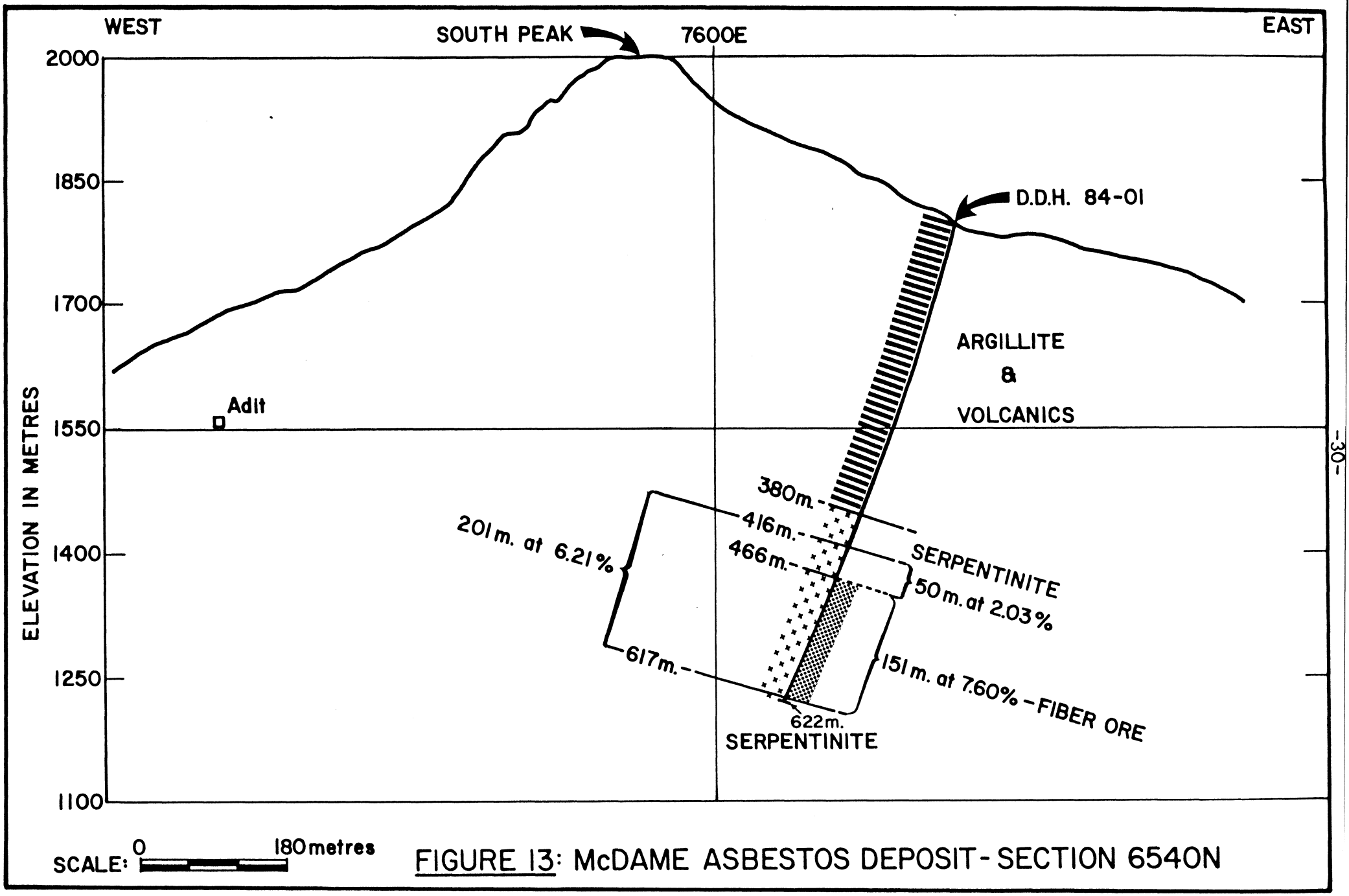


FIGURE 13: McDAME ASBESTOS DEPOSIT - SECTION 6540N

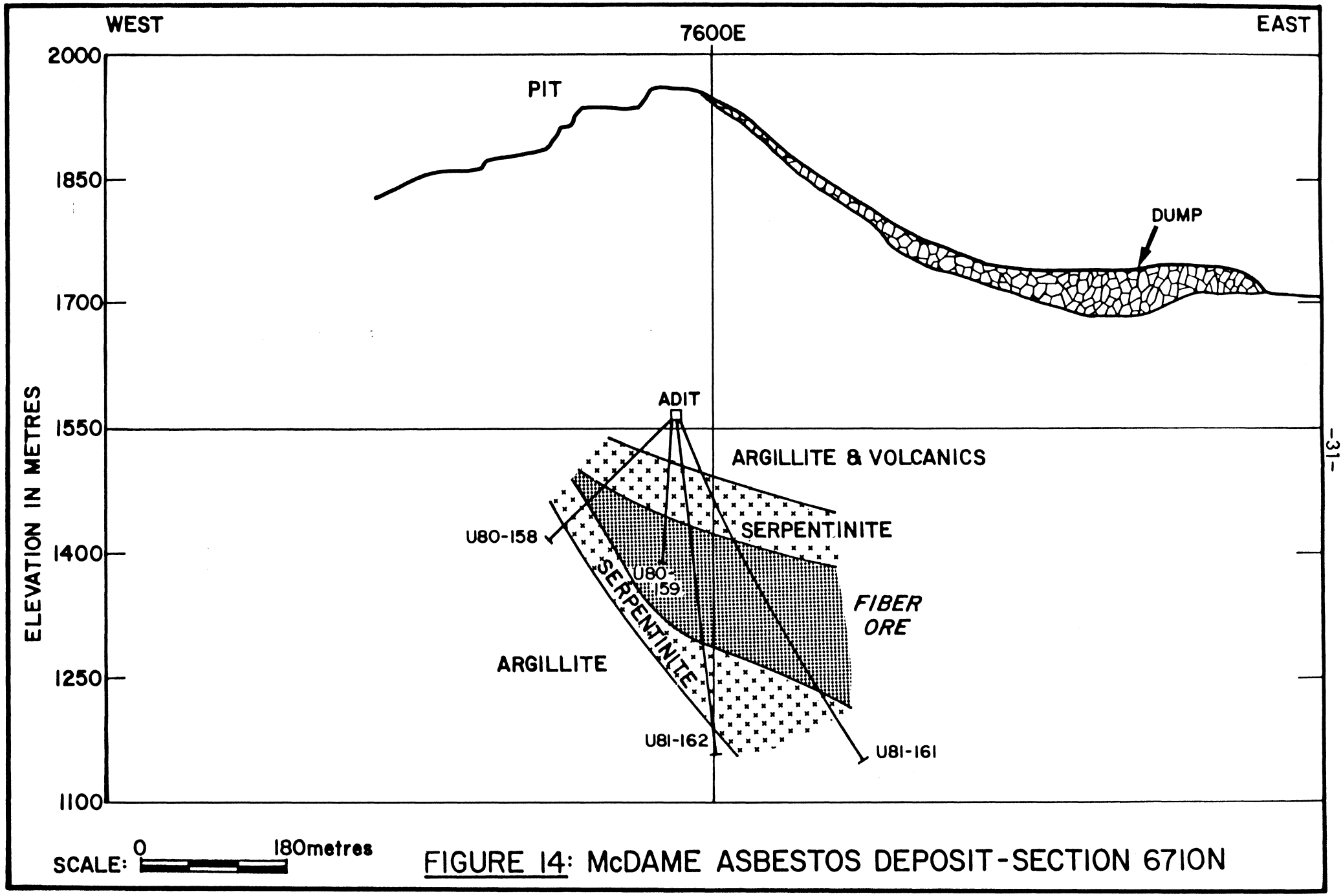


FIGURE 14: McDAME ASBESTOS DEPOSIT-SECTION 6710N

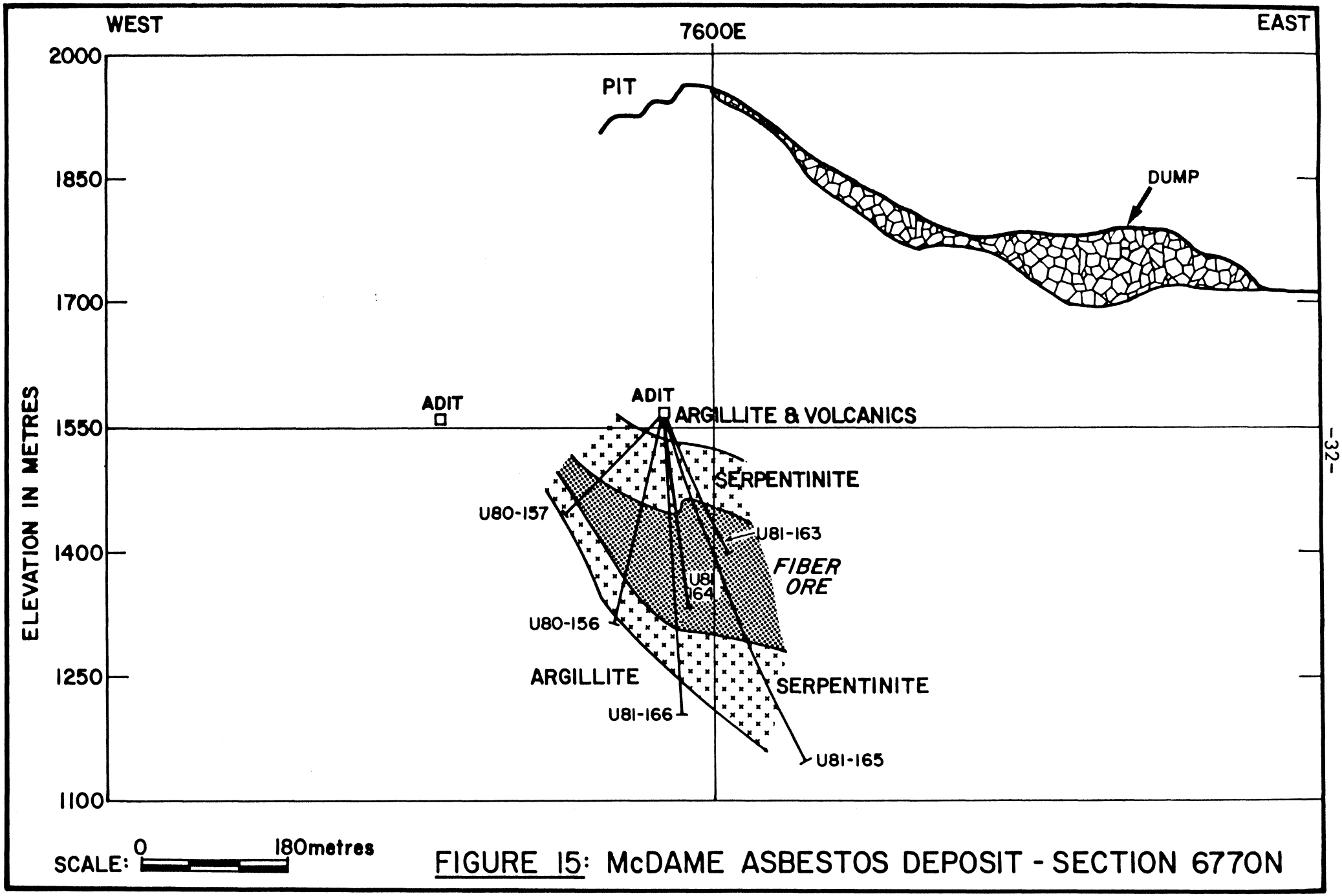


FIGURE 15: McDAME ASBESTOS DEPOSIT - SECTION 6770N

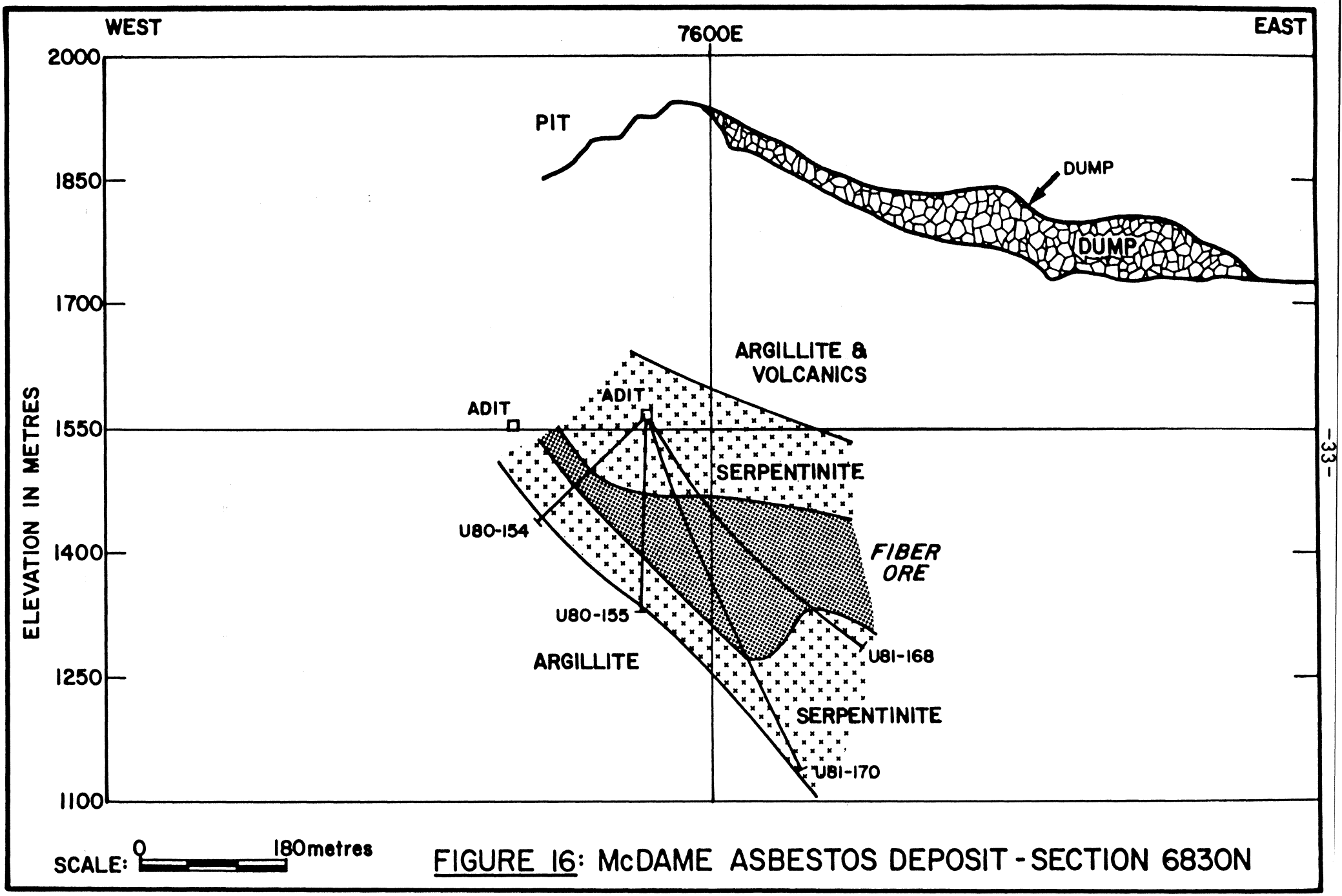


FIGURE 16: McDAME ASBESTOS DEPOSIT - SECTION 6830N

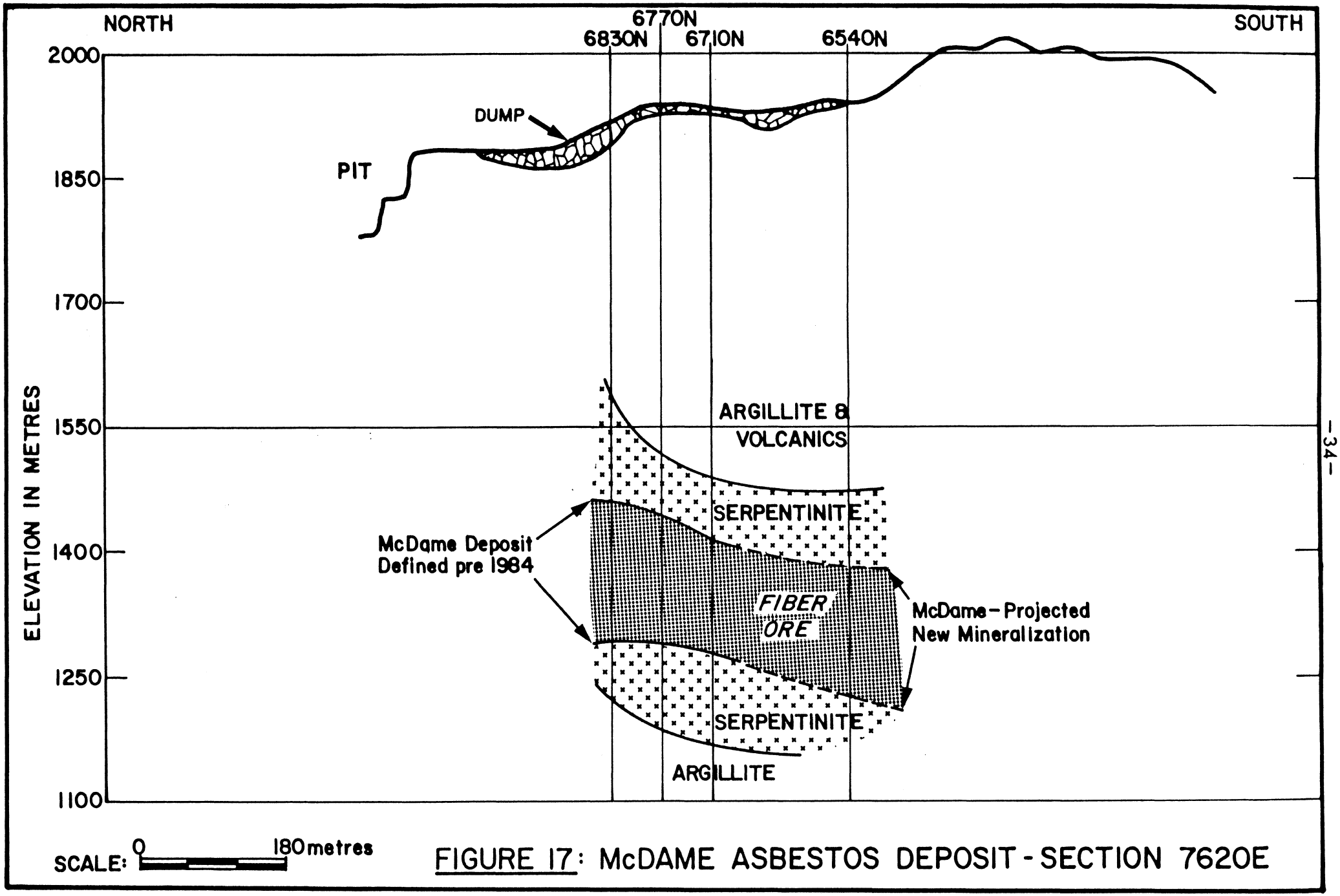


FIGURE 17: McDAME ASBESTOS DEPOSIT - SECTION 7620E

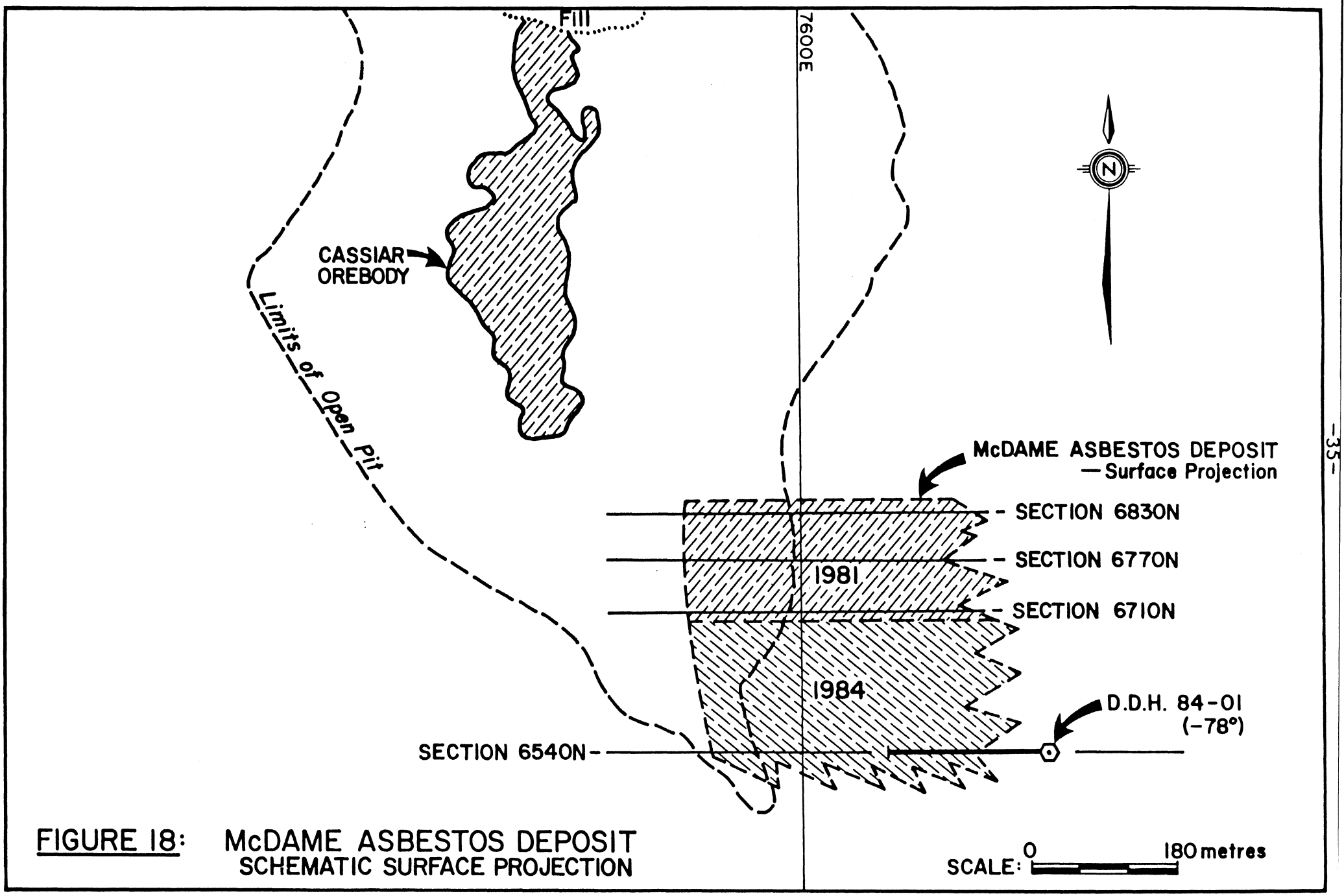


FIGURE 18: McDAME ASBESTOS DEPOSIT
SCHEMATIC SURFACE PROJECTION

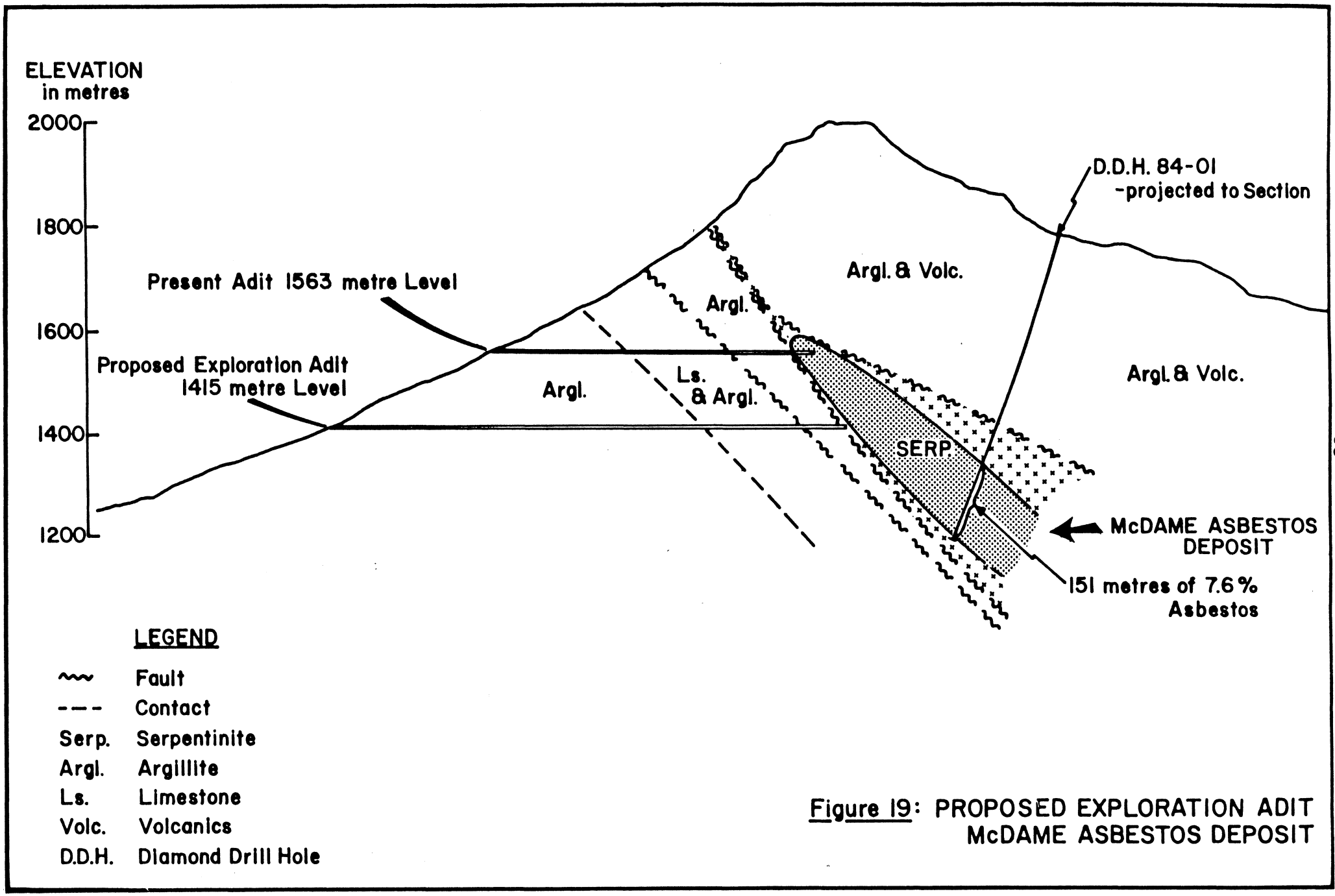


Figure 19: PROPOSED EXPLORATION ADIT
McDAME ASBESTOS DEPOSIT