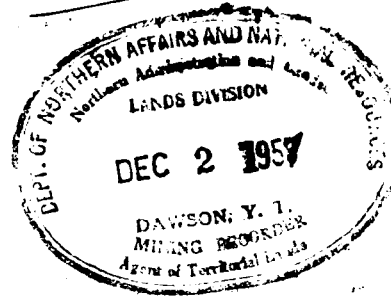


116-C-7

Work No. 42739-42800  
Q 52551-52556



GEOLOGICAL REPORT  
ON THE  
AIDA, DAISY, DOLLY, LORNA, MARY, TEDDY,  
and CLAIM NOS. 1-20 CLAIM GROUPS

CLINTON CREEK AREA

Y.T

by

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Chief Geologist,  
Asbestos Corporation (Explorations) Limited

Thetford Mines

November, 1957.

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LIST OF CONTENTS

	<u>Page</u>
<b>GENERAL DESCRIPTION</b>	1.
<b>PURPOSE AND METHOD OF INVESTIGATION</b>	1.
<b>ACCESSIBILITY</b>	2.
<b>TOPOGRAPHY</b>	3.
<b>GENERAL GEOLOGY</b>	3.
<b>ECONOMIC GEOLOGY</b>	5.

GEOLOGICAL REPORT  
ON THE  
AIDA, DAISY, DOLLY, LORNA, MARY, TEDDY,  
and CLAIM NOS. 1-20 CLAIM GROUPS  
CLINTON CREEK AREA, Y.T.

GENERAL DESCRIPTION

The Aida, Daisy, Dolly, Lorna, Mary, and Teddy claim groups are situated in the vicinity of the geographic point latitude 64°29', longitude 140°46'. The six groups are grouped together and referred to in this report under the general term Claim Group A. The claim Nos. 1-20 claim group is located in the vicinity of the geographic point latitude 64°26', longitude 140°38'. The claim group is referred to in this report as Claim Group B. Claim Groups A and B both occur north of Clinton Creek, approximately fifty miles north west of Dawson; the two general groups are approximately four miles apart.

Claim Group A consists of 48 claims; Claim Group B consists of 20 claims (see maps at back of report).

PURPOSE AND METHOD OF INVESTIGATION

The field work described below was carried out with the purpose of locating asbestos in commercial quantities.

During the period May 15 - June 22, 1957, a 12-man field party consisting of a party chief, assistant party chief, eight laborers, a cook and cook's helper, and permanently supported by a helicopter devoted 12-1/2 days to work in Claim Groups A and B.

Much of the work consisted of hand-excavating 800 cu. yds. of material from 4 trenches dug to test an asbestos bearing zone found on Teddy No.7 claim while Claim Group A was being staked in the spring of 1957. In addition, general prospecting was carried out, during the course of which numerous prospect pits, 2 to 3 ft. deep were dug in areas covered with over-burden.

A 7-man field party, permanently supported by a helicopter, spent the period August 19 - 31 working in Claim Groups A and B. The claims were mapped geologically and were intensely prospected. Both the mapping and prospecting were carried out by digging numerous pits along closely-spaced traverse lines. A main purpose of the work was to gain a better definition of areas underlain by peridotite.

Almost none of the pits encountered bedrock. Most of them hit rock chips and/or angular boulders. In preparing the geologic maps considerable weight has been given to the type of rock fragments found in the pits.

#### ACCESSIBILITY

Cassiar Asbestos Corporation has recently built an aeroplane landing strip on its property several miles up Clinton Creek. From the strip, Claim Group A can be reached by walking 2 miles northward, and Claim Group B by walking 2 miles back down Clinton Creek along the all-weather road, which Cassiar Asbestos Corporation expected to complete in the fall of 1957 between a point on the Dawson - Alaskan Sixty-mile Road some 40 miles from Dawson and its Clinton Creek property. Freighter boats can go down the Yukon River from Dawson to the mouth of the Forty mile River, then up that river to the mouth of Clinton Creek.

There are several heliports within Claim Group A and one within Claim Group B.

### TOPOGRAPHY

Both claim groups are almost all below timberline.

Elevations in Claim Group A range between 2000 and 2500 ft. above sea level; in Claim Group B between 1500 and 2500 ft. above sea level.

The general region is unglaciated and is characterized by mainly steep-sided, heavily-wooded valleys.

### GENERAL GEOLOGY

Claim Group A contains approximately 8 per cent outcrop; Claim Group B contains approximately 1 per cent outcrop. The scanty outcrop, however, coupled with the data obtained from the pitting indicate the presence of the following rock types in the two general claim groups.

Slate: most prevalent rock type in Claim Group B. It is mainly greyish black to black and breaks into thin flakes. The same, or similar, sedimentary rock occurs adjacent to peridotite in Cassiar Asbestos Corporation's property on Clinton Creek.

Quartzite: most prevalent rock type in Claim Group A. It is mainly rusty-brown white-flecked, and thinly-bedded. It appears to contain a considerable amount of barren quartz veining.

Quartz-mica-schist: similar in color to the quartzite and probably gradational into it. It has a very apparent schistosity.

Limestone: a dark, fine-grained rock with white encrustations on the surface has questionably been referred to as limestone. Such rock occurs only very locally in Claim Group A.

Peridotite: described under the general heading "Economic Geology".

Diorite: a dark, fine to medium-grained igneous rock. Appears to be gradational into peridotite and probably has been magmatically differentiated from it.

The available outcrop gives very little evidence concerning the stratigraphy or structural geology. The stratigraphic sequence among the slate, quartzite, quartz-mica-schist and possible limestone is not known. In both of the general claim groups there is some evidence that the peridotite occurs as rather flat-lying bodies intruded into a rather gently-dipping stratigraphic sequence. In Claim Group A such evidence occurs on the left limit of the creek running through Lorna No.2 claim; in Claim Group B, similar evidence occurs in the outcrop areas within No.4 claim and along the west side of No.2 claim.

There is the suggestion that a major fault occurs along Easter Creek in Claim Group A. There is strong evidence that a small but very definite fault occurs in the northern portion of Teddy No.7 in the same claim group. This fault is marked by a sharp

topographic break well-illustrated both on the ground and in aerial photographs. It appears certain that the faulting occurred after the intrusion of the basic and ultrabasic rocks.







#### ECONOMIC GEOLOGY

The peridotite which occurs in both Claim Group A and Claim Group B is highly serpentinized. It is light to dark green, blocky to highly broken, and does not include abundant quantities of "fish-scale" serpentine. It is the type of serpentinized peridotite which appears to be a favorable host for asbestos.

The exploration work described above did not disclose any indication of asbestos occurring in commercial quantities. In Teddy No.7 claim in Claim Group A an asbestos-bearing zone was encountered containing chrysotile fibre up to 3/4" long. Subsequent trenching showed that the zone was of minor importance. Very short chrysotile fibre was found locally both in pits and in outcrop on both of the general claim groups.

In the case of Claim Group A, the pitting showed that peridotite underlies a very large area, including almost all of the western half of the group. Peridotite is exposed, commonly poorly, in less than 25% of that area. It follows that large areas underlain by peridotite remain insufficiently tested. The indicated presence of faulting through the peridotite areas in Claim Group A is an encouraging feature.

# LEGEND

-  Soil, sand, clay
-  Quartzite, quartz-mica-schist, quartz
-  Black slate, siltstone
-  Limestone
-  Serpentinized peridotite
-  Diorite

Outcrop area

Interpreted lithologic contact

Fault

Pit - 2 to 3 feet deep

Creek

Helicopter landing site (heliport)

N.B. Topographic control is based on 1/2 mile - 1 inch topographic maps and on 1 mile - 1 inch aerial photographs.

The pit locations are only approximately correct.





Almost none of the pits encountered bedrock. Most of them hit rock chips and/or angular boulders. In preparing this map considerable weight has been given to the type of rock fragments found in the pits.





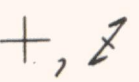


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ASBESTOS CORPORATION LIMITED  
 GEOLOGIC MAP  
 OF THE  
 AIDA, DAISY, DOLLY, LORNA, MARY and  
 TEDDY CLAIM GROUPS  
 CLINTON CREEK AREA, YUKON  
 SCALE: 1 inch = 1000 feet  
 DRAWN BY P. W. K. Field Geology by  
 WARSCHALL & D. GRANA  
 DATE: Nov. 12, 1957

# LEGEND

-  Soil, sand, clay
-  Quartzite, quartz-mica-schist, quartz
-  Black slate, siltstone
-  Serpentinized peridotite

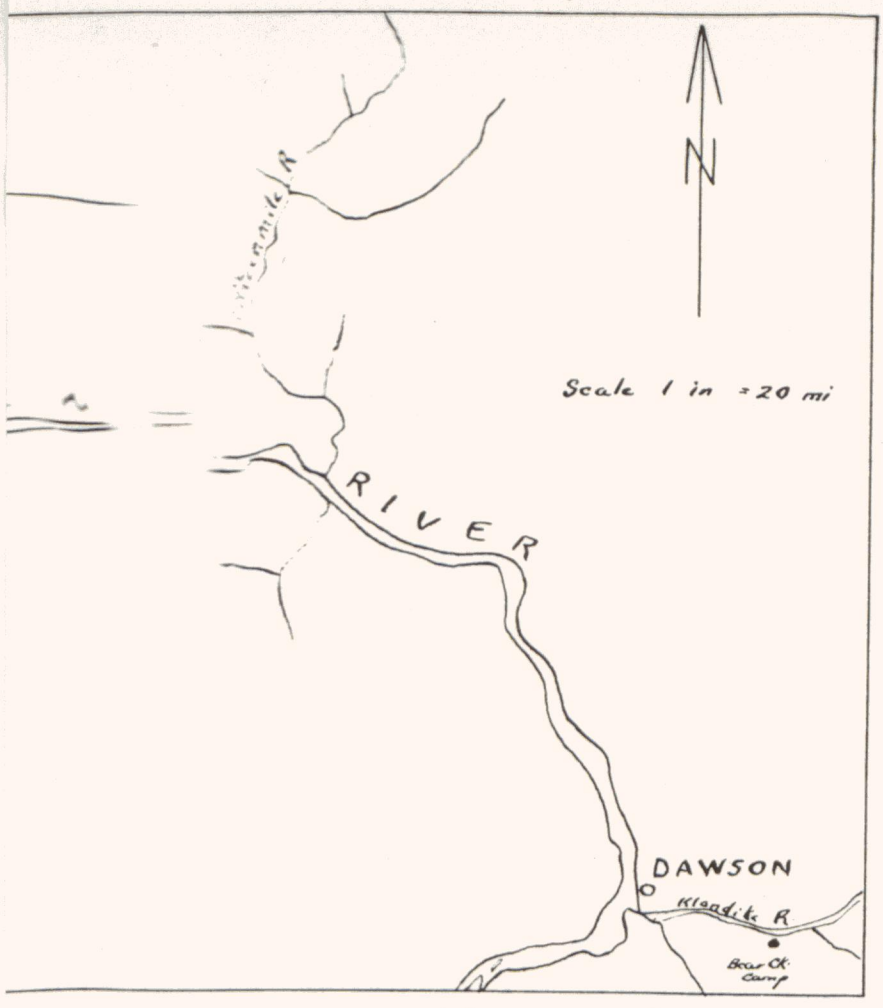
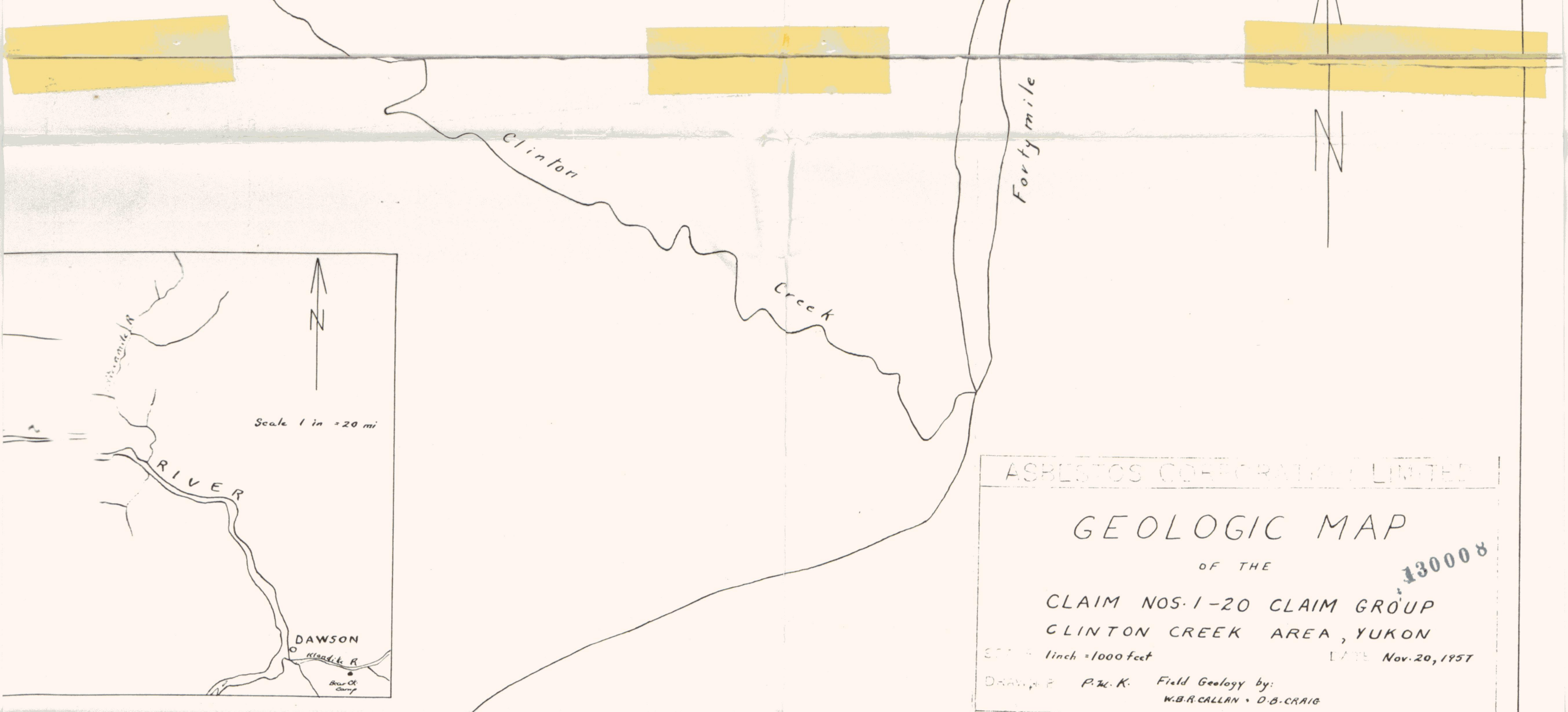
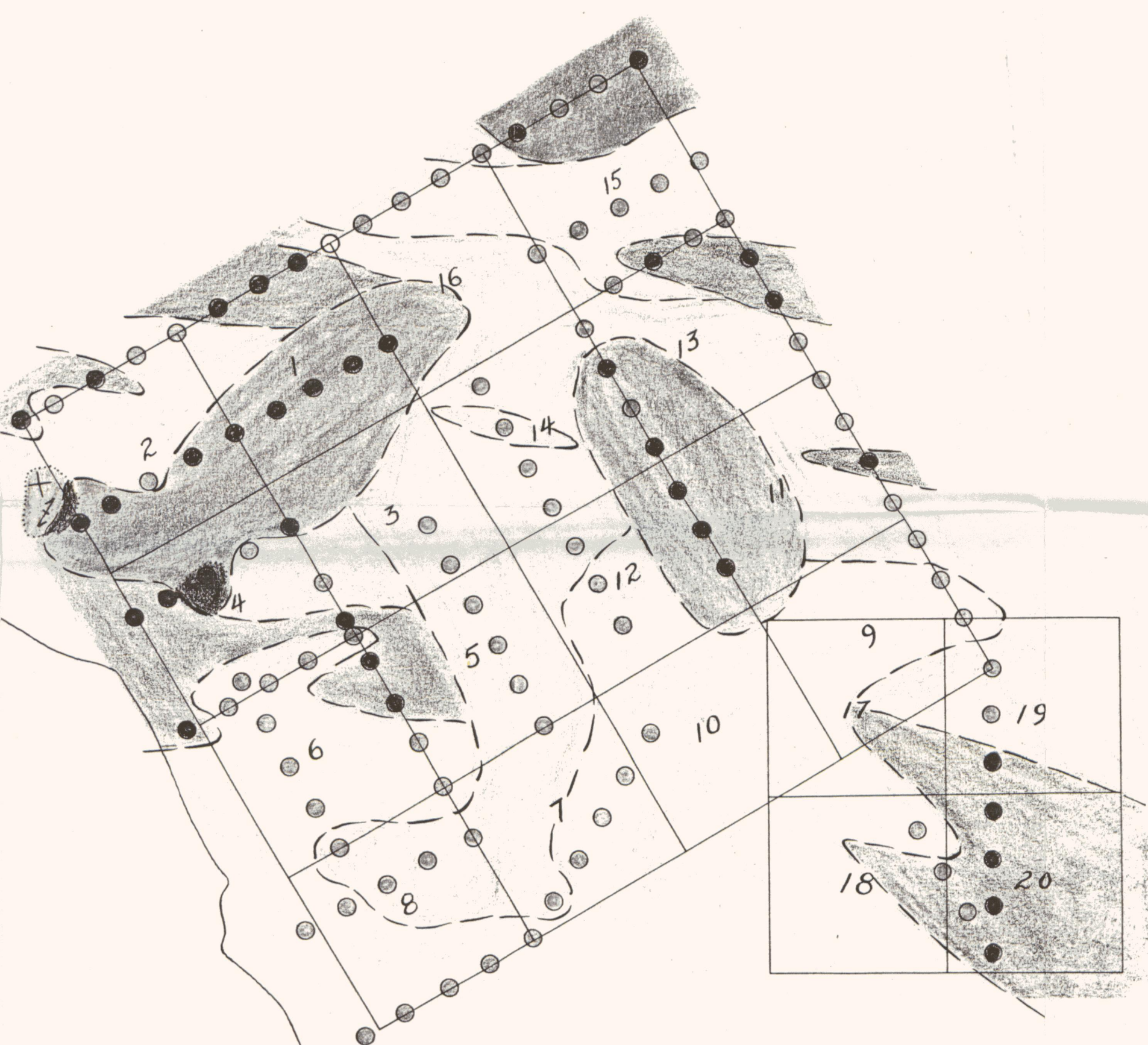
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- Outcrop area 
- Interpreted lithologic contact 
- Attitude of bedding (flat-lying), jointing (vertical) 
- Pit - 2 to 3 feet deep 
- Creek 

N.B. Topographic control is based on 1/2 mile = 1 inch topographic maps and on 1 mile = 1 inch aerial photographs.

The pit locations are only approximately correct.

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ASBESTOS CORPORATION LIMITED  
 GEOLOGIC MAP  
 OF THE  
 CLAIM NOS. 1-20 CLAIM GROUP  
 CLINTON CREEK AREA, YUKON  
 Scale 1 inch = 1000 feet  
 DRAWN BY P.W.K. Field Geology by: W.B.R. CALLAN & D.B. CRAIG  
 130008  
 Nov. 20, 1957