

MAP NO.: 115 I 3  
ASSESSMENT REPORT X  
PROSPECTUS  
CONFIDENTIAL X  
OPEN FILE

DOCUMENT NO: 092505  
MINING DISTRICT: Whitehorse  
TYPE OF WORK: Trenching, packsack drilling

REPORT FILED UNDER: Asbestos Corporation (Exploration) Ltd

DATE PERFORMED: 1959 DATE FILED: July 28, 1959

LOCATION: LAT.: 62°04'N AREA: MT Nansen

LONG.: 137°08'W VALUE \$:

CLAIM NAME & NO.: BILLY 1-30

WORK DONE BY: E. G. Robinson

WORK DONE FOR: Asbestos Corporation (Exploration) Ltd

DATE TO GOOD STANDING:	

REMARKS: # 40 MT NANSEN  
Two bulldozer trenches in 1958 exposed rusty quartz-folds per porphyry which was further explored by 8 packsack drillholes totalling 122.8 m. The drill core showed intense kaolinization and sericitization, and contained pyrite and galena.

July 28, 1959

CONFIDENTIAL

DICKSON GOLD OPTION  
CARMACKS, YUKON TERR.  
BILLY CLAIM GROUP

SUMMARY

The Billy Group, consisting of 30 contiguous claims, lies immediately north of the Brown McDade claims.

The claims are underlain primarily by porphyritic granite which covers most of the central and northeastern portion of the area. Volcanics, consisting of basalts and quartz-feldspar porphyry occur in the northeastern portion of the map-area while to the south diorite, quartz-feldspar porphyry and syenitic rocks are common.

Two bulldozer trenches have been excavated on Billy M.C. #25 (1958) exposing quartz-feldspar prophyry with some rusty. Closer examination of these zones was made by Packsack diamond drilling. 8 Holes, totalling 403 feet were drilled.

LOCATION AND ACCESS

The Billy Group, consisting of 30 contiguous claims, straddles Back Creek and extends northwards to Victoria Creek immediately north of the Brown McDade claims.

The claim group is located at latitude 62° 04'N and longitude 137° 08'W some 5 miles northwest of Victoria Lake and about 110 air miles from Whitehorse. These claims are most easily accessible by air from Whitehorse to Victoria Lake or the air strip situated between the lake and the claims.

TOPOGRAPHY

The elevation of the area varies from 3500 ft. in Back and Victoria Creeks to slightly over 5000 ft. on top of the ridge which trends southeast through the claim group. Portion of the ground which straddles the ridge lies above the timber line but the bulk of the valley is covered by dense buck brush and sporadic spruce trees. The outcrops are limited to the ridges, both between Back and Victoria Creeks and in the southwest portion of the area between Pony and Back Creeks.

EXPLORATION

The area including the Billy Group has been mapped by the G.S.C. on a scale of 1" = 4 miles (H.S. Bostock, G.S.C. Memoir 189, 1936). Considerable surface and underground development has been completed on the Brown McDade Property to the southwest together with small scale placer mining on Back Creek immediately west of the claims. The claims were staked by G. Dickson who prospected the area and found small amounts of gossan float. Trenching by bulldozer and reconnaissance geological mapping were undertaken by E.G. Robinson in 1958. Two trenches, totalling 1000 ft. in length were cut and some 1,166 cubic yards of broken ground were excavated.

092505

CONFIDENTIAL



EXPLORATION (CONT'D)

The current investigation of the claims included 8 Packsack diamond drill holes installing 403 feet on Billy M.C. 25 together with geological mapping at a scale of 500 feet to the inch and detailed mapping of the trenches and their immediate vicinity on a scale of 25 feet to the inch.

Four samples were taken for assay purposes; 2 from drill cores and two from sludge samples.

GEOLOGY

The Billy Claim Group is underlain by granite, and minor syenites, quartz porphyries, basalts and hybrid dioritic rocks. The granite underlies most of the area and is well exposed along the main ridge which trends diagonally from Billy M.C.'s 2 and 9 southeast past M.C. 23. Elsewhere there are no further exposures of granite except for a small outcrop immediately west of Billy M.C. 25. From the general distribution of float the area of granite extends to the southwest of Back Creek where there is a gradual decrease in quartz to give syenitic and monzonitic phases rich in hornblende. Along the southwest extremity of the map area a series of outcrops expose diorite, granite and associated intrusives, together with gneissic hybrid sedimentary rocks which probably comprise remnants of Bostocks' metamorphosed Precambrian Yukon Group. Drilling along the trenches on Billy M.C. 25 has exposed an area of quartz feldspar porphyry.

Towards the northeastern portion of the map area the granite is intruded by narrow dykes and larger bodies of quartz and quartz-feldspar porphyry. Between Billy M C 15 and 16 an area of basaltic rocks is exposed which probably belongs to the Nansen Group. These rocks include fine-grained basalt, porphyritic basalt, basalt breccia and tuffaceous material.

Small amounts of quartz float and gossan attracted attention to the area but this appears to be of minor significance.

GRANITE

Granite probably underlies most of the claim area. The granite is generally medium to coarse-grained and commonly porphyritic. It consists of about 25% quartz, 50% medium-grained feldspar and with about 15% large phenocrysts of pinkish potassic feldspar. Hornblende is the dominant mafic mineral and comprises some 15% of the rock. This hornblende is commonly altered to chlorite but in a few places the hornblende is replaced by biotite. Epidote and iron oxides are common in most areas.

The phenocrysts are composed of pink potassic feldspar and reach a maximum size of 1" to 1-1/4" by 1/2" or 3/4" square. These phenocrysts contain oblong streaks and square patches of white kaolinized material along the crystal lattice directions and give the impression of zoning.

The granite is cut by fine-grained aplitic material and small veins of quartz but no pegmatite veins were observed. Rusty quartz float and gossan material is scattered in places but does not appear to be of any significance. Jointing is common though the attitudes vary considerably. The most prominent set strikes about S40°E and dips at 70°SW.

092505

..... 3

**CONFIDENTIAL**

## GRANITE (CONT'D).

The granite is cut by a fine-grained siliceous quartz-feldspar porphyry on Billy M.C. 18. The dyke is about 10 ft. wide and strikes S40°E. To the northwest a further area of quartz-feldspar porphyry occurs within the granite on Billy MC 2 & 4.

Away from the main ridge there are no outcrops but scattered float fragments indicate that the granite extends southwestwards to Back Creek and then grades into a medium-grained hornblende syenite. The syenite commonly displays a prominent lineation of the hornblende crystals but with no outcrops present the trend is uncertain.

## DIORITE & SYENITE

In the extreme south of the area along the ridge near the boundary of the Billy group a number of exposures of dioritic rocks are found. These exhibit a typical dioritic composition but show a lineation which suggests that they may be of hybrid origin and may represent metamorphosed sediments of the Yukon Group. On the southern corner of Billy MC 30 a small outcrop of light coloured gneissic quartzite occurs which contains small amounts of biotite, feldspar and epidote. The rock probably represents a metamorphosed sediment.

## QUARTZ-FELDSPAR PORPHYRY

Three major areas of porphyry occur within the map-area. Two of these occur in the northern portion and the third has been exposed by pack sack drilling in the trenches on Billy M.C. 25.

The Quartz-porphyry in the northeast consists of large euhedral quartz crystals in a fine-grained grey matrix. The phenocrysts exhibit perfect double terminations and do not appear to be corroded at all. The rock does not form any outcrops but occurs as abundant very weathered float in contact with granite to the west and basalts of the Nansen group to the east. These basalts vary considerably but do not outcrop over a very large area. In contact with the quartz feldspar to the west the rock is composed of fine-grained bluish basalt followed by porphyritic basalt and basalt breccia down the slope. The weathered surface throughout is rusty and dark brown in colour but small blocks and white phenocrysts distinguish the porphyritic basalt which contains lathes of plagioclase and crystals of a mafic mineral probably augite. Further variations show large angular light to bluish fragments which comprise as much as 50% of the rock. The fragments range in size from minute grains to 3" in length. Occasional fragments contain 1-2 mm. crystals of augite. Manganese dendrites occur on some of the fractures. The rock is shattered and breaks easily to form a rocky scree.

## BILLY 25

Within the trenches on Billy 25 scattered float indicates the presence of quartz-feldspar porphyry. The rock is very friable and slightly rusty. 8 Packsack diamond drill holes were drilled giving a total of 403 ft. These holes exposed slightly altered friable quartz-feldspar porphyry containing a few minor bands of pyrite. The rock consists of about 10% quartz, increasing at times to 15 and 20% towards the east. However, in the top of DH 5 the porphyry changes abruptly into a rock devoid of quartz.

The quartz occurs as phenocrysts averaging 1/8 to 1/4" in size. Generally the grains are glassy to transparent with a slight bluish sheen in places. Many of the quartz grains are heavily corroded and rounded. Trace amounts of pyrite occur in fractures in some of the quartz phenocrysts.

CONFIDENTIAL

092505

..... 4

BILLY 25 (CONT'D).

Phenocrysts of feldspar also occur scattered through much of the rock though even at depth these have been altered to Kaolin and sericite with small amounts of limonite. This yellow brown alteration commonly outlines the crystal from suggesting pseudomorphs. Perfect carlsbad twins which suggest orthoclase have been removed from the core. This iron staining is probably derived from the alteration of pyrite cubes which commonly occur within the feldspar crystals, although it might also be derived from the oxidation of iron from the surrounding rock.

The groundmass of the porphyry which comprises up to 70% of the rock is highly kaolinized and sericitized. The rock is white to pale green with mottled limonitic staining after pyrite. Small amounts of muscovite are common as 1/8 hexagonal books together with small stubby crystals of apatite.

Both pyrite and galena have been identified. Pyrite is a common accessory mineral through much of the rock but is concentrated along a few bands, a few feet in width. Trace amounts of galena occur as minute grains scattered in some sections of the core.

Hydrothermal alteration in the form of kaolinization and sericitization, together with surface weathering and limonite staining have caused strong alteration throughout the holes.

In D.H. 5 the quartz-feldspar porphyry is in contact with a fine-grained blue grey syenitic material which also occurs as float down the slope towards Back Creek.

STRUCTURE

The paucity of outcrop and deep weathering have successfully obscured all traces of structure. However, from the parts of the district the oldest rocks are usually diorites and basalts of the Nansen Group which have been intruded by granitic and associated alkaline rock types such as syenite and monzonite. The age of the quartz feldspar porphyry is doubtful as both an older and a younger relationship is suggested in some outcrops in the vicinity.

*E. G. Robinson*

E. G. Robinson

EGR/VMcC

CONFIDENTIAL

092508

CONFIDENTIAL

C.3685-A

BY HAND

Drawer 700,  
Whitehorse,  
Yukon Territory.  
4th August, 1959.

Mr. M. E. Almstrom,  
Mining Inspector.

Re: Asbestos Corporation(Exploration) Ltd.

Enclosed herewith original copy of Geological Report carried out by Dr. E. G. Robinsen on the Dickson Gold Option near Carmacks, Y.T., and dated 28th July, 1959.

When your appraisal has been approved by the Commissioner may I be advised of the amount to be credited for assessment work on this group of thirty (30) mineral claims.

  
(W. M. Emery)  
Mining Recorder

WME/RM

Enc.

092505

CONFIDENTIAL

7 August/61.

Gordon Dickson gave permission  
for John Foxraker to peruse report.  
Map to be returned

John

03 25 05

CONFIDENTIAL

7 AUGUST 1957

JOHN FOWERAKER

CAN-EXPLORATION

CAPITOL HOTEL

1 MAP BILLY CLAIMS

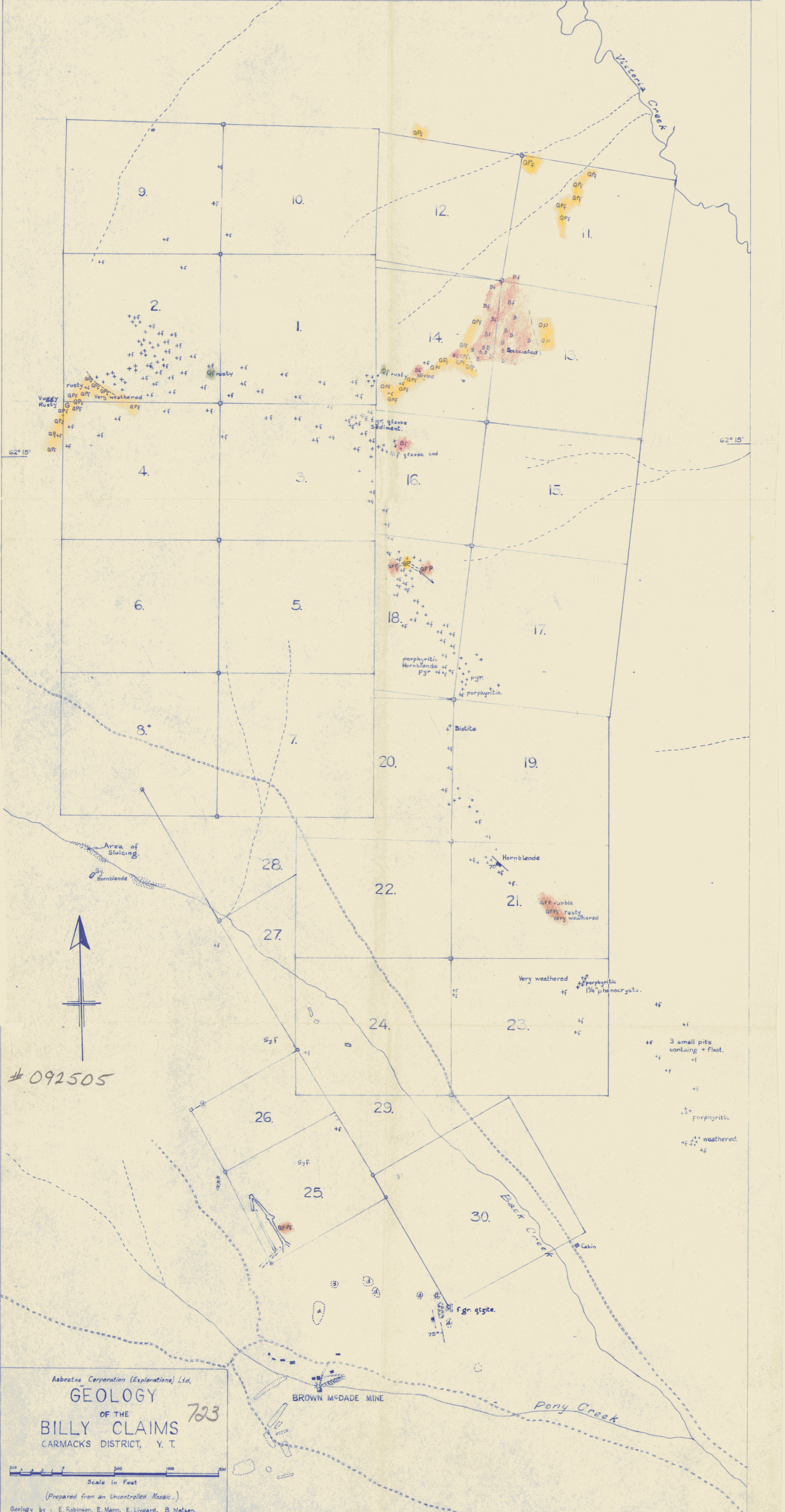
1 COPY (PHOTOSTAT)

BILLY CLAIM GROUP  
28 JULY 1957

John C Foweraker

CONFIDENTIAL

68 35 00



# 092505

723

Asbestos Corporation (Explorations) Ltd.  
**GEOLOGY**  
 OF THE  
**BILLY CLAIMS**  
 CARMACKS DISTRICT, Y. T.

Scale in Feet  
 (Prepared from an Uncontrolled Mosaic.)  
 Geology by: E. Robinson, E. Mann, E. Livgard, B. Matsen.