ISN 13166

MAP NO.	ASSESSMENT REPORT X	DOCUMENT NO.:	092017
	PROSPECTUS	MINING DISTRICT:	WHITEHORSE
	CONFIDENTIAL	TYPE OF WORK:	Geology, Trenching
115 G 3, 6	OPEN FILE		

REPORT FILED UNDER: Conwest Exploration Ltd.

DATE PERFORMED: 1953 DATE FILED: September 3, 1953

LOCATION: LAT.: 61°30'N AREA: Arch Creek

LONG.: 139°40'W VALUE $:

CLAIM NAME & NO.: DONJEK 1-16

WORK DONE BY: J.R. Woodcock

WORK DONE FOR: Conwest Exploration Ltd.

DATE TO GOOD STANDING		REMARKS: #20 MUSKETEER

File: Genera.Reports   INSERT NEW RECORDS   Browse: Review Add Change

Record 1 of 1

==

Report #: [redacted]
Year: 1953
NTS: 115 G 5, 115 G 6
Mining District: Whitehorse
Area: Arch Creek
Property Name: MUSKETEER
Property ID #: 20
Commodity: Cu, Ni
Claims: DONJEK 1-16
Lat Long: 61 30'N, 139 40'W
Company: Conwest Exploration Ltd
Author: J. R. Woodcock
Type of report: Assessment
Comments: Mapping; prospecting, trenching, road-building

Type entry or use ? command   55K Avail..

Assessment report
approved 13 Nov. 1953

092017

Report on
DONJEK GROUP
Arch Creek, Y. T.
by
J. R. Woodcock.

LOCATION:

The Donjek 1 - 16 mineral claims, were staked in early August 1952. The claims start in the main Donjek Valley, about one mile North of Arch Creek and, extending Southeasterly for roughly 3 miles, enter the Arch Creek drainage. On surveying the original location lines, major discrepancies in lengths of lines became apparent, necessitating the staking of 11 additional claims to properly cover the ground within the end boundaries of the original group.

Access to the claims may be by either;

(a) using the Hudson Bay Mining and Smelting Company Quille Creek road to the pass between the Quille Creek and Arch Creek drainage and thence by foottrail down Arch Creek for 4 to 5 miles.

(b) leaving the old road Donjek crossing, just Northwest of the third trestle and following the river flats for roughly 12 miles upstream to Arch Creek and then by foottrail for 2 1/2 miles approximately to the main showing on the Donjek No. 1 M.C.

WORK DONE:

Work completed within the assessment year of the Donjek claims consisted of:

1. Metal tags affixed to original plaim posts
2. Compass and chain survey of all location lines
3. Additional claims (11) staked to cover properly all ground between the original end lines of the Donjek 1 - 16 M.C.

2017

Donjek Group - Cont.

4. The area within and adjacent to the claim boundaries prospected.

5. A claim map and geologic map compiled from data obtained from the above work. Areial photographs were used in conjunction with the claim survey, for plotting detail of geology during the field traverses.

6. Bed rock trenching and sampling of the main showing. This comprised 140 lineal feet of rock trench with an average cross section of 10 sq. ft. or 52 cu. yds.

7. One mile of trail cut out.

8. One half mile road cut out suitable for truck use.

GEOLOGY:

Rock types: The Arch Creek area is largely underlain by interbedded sedimentary and volcanic rocks of Permian age* The rocks, within the boundaries of Donjek Group are, except for the presence of a few small intrusions, largely the coarse pyroclastics characteristic of the lower part of the Permian section.

Several types of small intrusions occur in the area examined:

(1) Peridotite, which can be found near most of the nickel ore in the Kluane Ranges, was found as a dike in Arch Creek. The dike, if projected, would enter the Donjek 13 M.C., but gravel cover prevented it being traced. It contains sparse disseminated chalcopyrite and pyrrhotite.

(2) Gabbro, which occurs in small plugs, was found in several places: the north corner of the Donjek 5 M.C.: on boundary between Donjek 7 M. C. and Donjek 25 M. C.; and near post No. 1 of the Donjek 1 M. C. It is the host rock for any nickel-copper mineralization found on the Donjek Group.

* Age established by Dr. J. Muller, Geological Survey.(personal communication)

Geology - Cont.

(3) The other intrusive rocks are grouped together under acid and intermediate intrusions. This group includes rhyolite, quartz-monzonite, and quartz-diorite.

STRUCTURE: Areal geology done by J. Muller has indicated a probable anticline with axis just NE of Arch Creek. (see map #3) The Donjek Group lying near this axis is underlain by the Lower Permian pyroclastics. At higher elevations, to the northeast, the upper members of the Permian section are exposed, consisting of interbedded volcanics and sediments. Similar interbedded pyroclastics and sediments, dipping steeply NE, are exposed in the canyon of Arch Creek near its confluence with the Donjek River. This latter occurrence of Upper Permian rocks, at the base of the mountains, apparently dipping beneath Lower Permian rocks, indicates either a major fault trending N. W. along Arch Creek Valley with the S.W. block dropping relative to the N.E. block, or an overturned limb of the anticline mentioned above.

MINERALIZATION:

Disseminated sulphides (pyrite, chalcopyrite, pyrrhotite, and nickel sulphides) occur in the gabbro plug at Station 1 (see claim map #1) This plug, which is exposed in the wall of a V-shaped gully, is 230 feet long and 60 feet wide at its thickest place, and is exposed over a vertical interval of 120 feet (see sample map #2). It is completely surrounded by volcanic rocks with a probable fault contact on the SW side and a very irregular intrusive contact on the NE side.

The mineralization is irregular in distribution, both in total quantity of sulphides and in relative abundances of each sulphide. This mineralization seems to be related to shear zones which strike N 15^{0}W and dip 60^{o}NE. These shear zones contain quartz-calcite stringers usually under two inches thick. The sulphides are disseminated throughout the

Mineralization - Cont.

rock in and near the shear zones only where these zones cut the gabbro. The volcanic rock is unfavorable as a host rock. Three of these zones cut the plug. Samples 5 and 6 are taken across one, samples 2 and 7 across a second, and sample 8 across a third.

Approved
13 Nov. 53.

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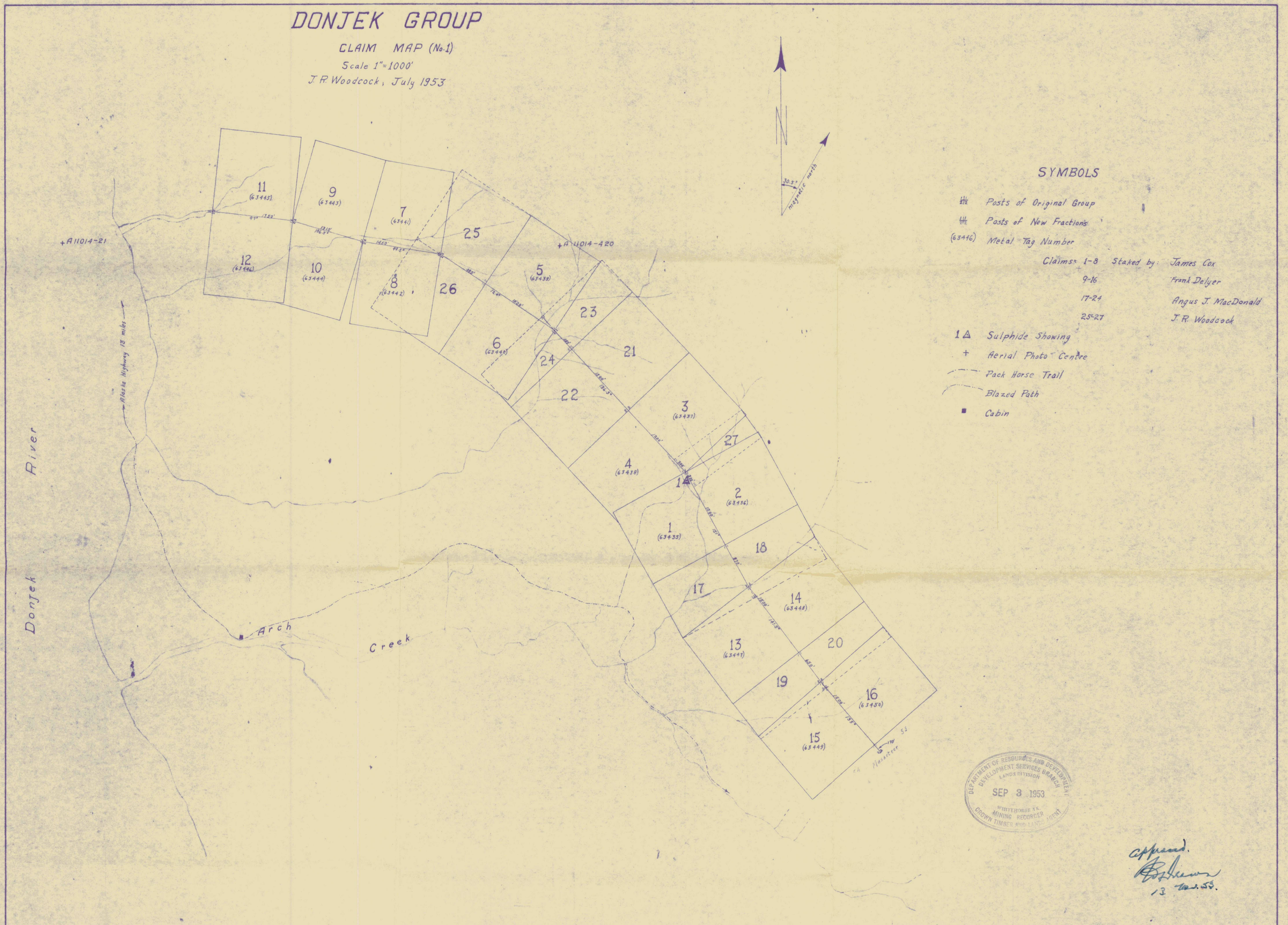

DONJEK GROUP
CLAIM MAP (No.1)
Scale 1"=1000'
J. R. Woodcock; July 1953
SYMBOLS
Posts of Original Group
Posts of New Fractions
(63446) Metal Tag Number
Claims: 1-8 Staked by: James Cox
9-16 Frank Delyer
17-24 Angus J. MacDonald
25-27 J. R. Woodcock
1△ Sulphide Showing
+ Aerial Photo Centre
Pack Horse Trail
Blazed Path
Cabin
N
30.5°
magnetic north
+A11014-21
+A 11014-420
Alaska Highway 13 miles
Donjek River
Arch Creek
11 (63445)
12 (63446)
9 (63443)
10 (63444)
7 (63441)
8 (63442)
25
26
5 (63439)
6 (63440)
23
24
21
22
3 (63437)
4 (63438)
27
2 (63436)
1 (63435)
18
17
14 (63448)
13 (63447)
20
19
16 (63450)
15 (63449)
97° 1350'
1310' 106.5°
1450' 99.5°
980'
124° 1500'
1300' 136.5°
1200'
1200'
1500' 141.5°
650'
1500' 135°
170'
Musketeer
53
DEPARTMENT OF RESOURCES AND DEVELOPMENT
DEVELOPMENT SERVICES BRANCH
LANDS DIVISION
SEP 3 1953
WHITEHORSE Y.K.
MINING RECORDER
CROWN TIMBER AND LANDS AGENT

0 9 2 0 1 7

SAMPLE MAP (No. 2)

DISSEMINATED-SULPHIDE DEPOSIT

Station 1 on Donjek No 1 M.C.

Scale 1" = 20'

LEGEND

🟩 Volcanic Rock

🟪 Basic Intrusive

🟨 Overburden

Creek Bed

Probable Fault

Contour (Approximate Location)

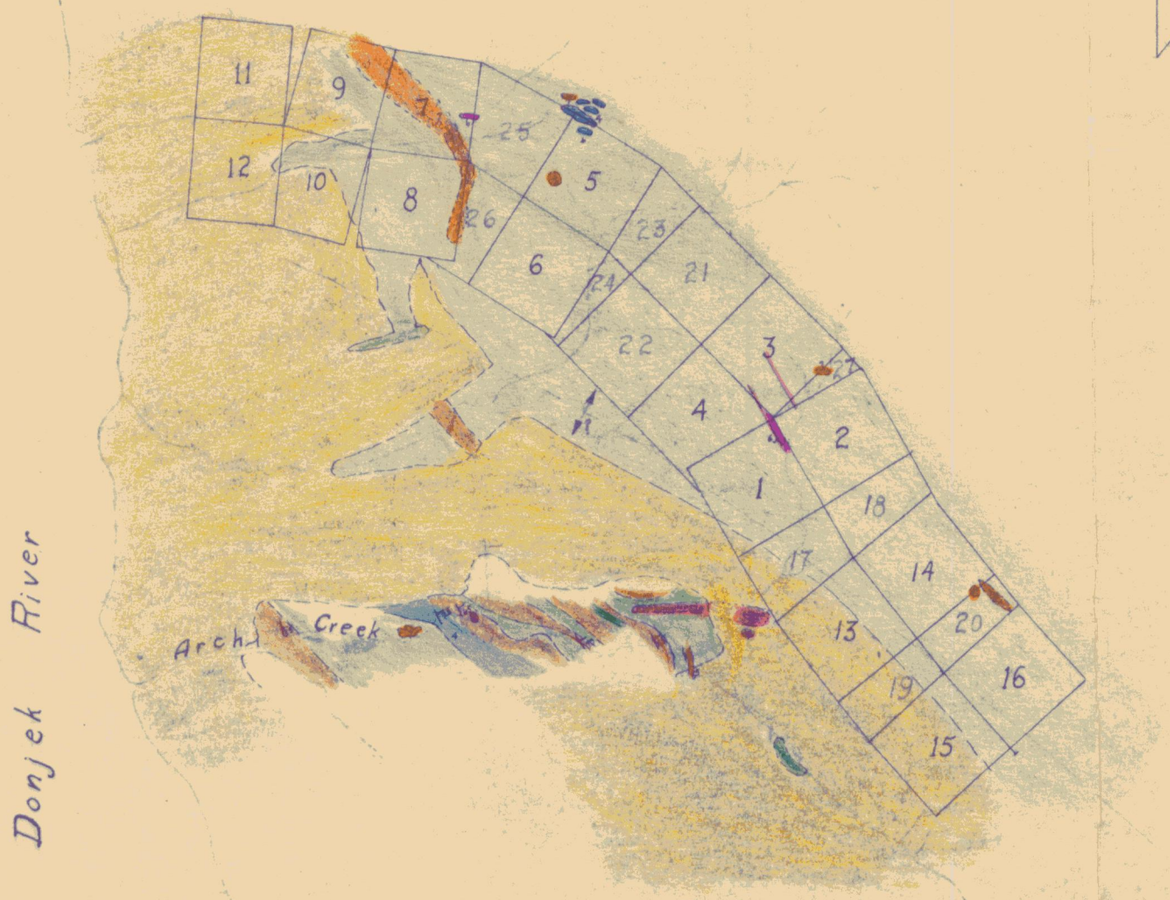
approved
[illegible]
13 Nov. 52

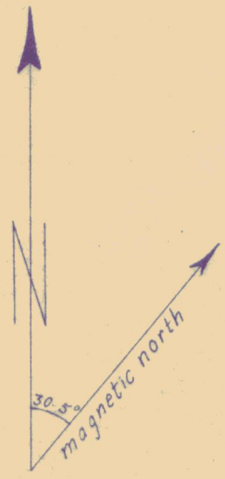
DONJEK GROUP

MAP No. 3

Scale: 1" = 2500'

J. R. Woodcock July, 1953





LEGEND

QUATERNARY:

7 gravel and overburden

PERMIAN:

2 Volcanics — coarse pyroclastics, andesites

3 Sediments — black thinly-bedded limestone, quartzite, greywacke, conglomerate black slate, chert

1 Massive Limestone

INTRUSIVES:

5 Peridotite

6 Gabbro

4 Acidic & Intermediate Rocks — rhyolite, quartz-monzonite

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fault

anticlinal axis (approximate location)

approved
13 Nov. 53.