

DATE: December 13, 1990  
A TO: Ian Pirie  
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DE FROM: C.J. Clayton  
SUJET SUBJECT: EPI AND YARD PROPERTY EXAM

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**Vidette Lake Area**  
**Clinton Mining Division**  
**Latitude: 51° 09'N Longitude: 120° 52'W**  
**NTS 92P/2W**  
**Owner: Michael Dickens**  
**Record Nos. 2027-2030, 2023-2026, 2816-2822, 1940**

### **PROPERTY LOCATION, ACCESS, AND PHYSIOGRAPHY**

The EPI 1-4, K.G.D., and YARD claims (142 units) are located approximately 65 km north of Savona, B.C., 50 km east-northeast of Clinton, and 12 km west of Bonaparte Lake in the Clinton Mining Division. Access is gained by two routes. The first is via the Deadman River road for roughly 55 km from its junction with the Trans Canada Highway, and then via a northeasterly trending rough secondary road across the claims. The second access route is via the 3800 logging road easterly from Clinton which provides access to the two northern claims and is connected to the Deadman River road by the secondary logging road mentioned in the first access route.

The claims straddle the Deadman River at the southeast end of Vidette Lake. Topography of the area is, in general, gently rolling plateau land at an elevation of roughly 1050 metres. The showing area of the EPI claims is exposed in the steeply incised Deadman River valley near Deadman Falls. Relief in this area is approximately 125 metres.

Vegetation consists of pine and Douglas fir with heavier bush and cottonwood trees occurring in the Deadman River canyon.

**SUMMARY OF CLAIM STATUS**

The claims are currently owned by Michael Dickens of Savona, British Columbia. The following table summarises pertinent claim information.

CLAIM	RECORD #	UNITS	DATE RECORDED
EPI #1	2027	20	11 JUL 1986
EPI #2	2028	8	11 JUL 1986
EPI #3	2029	15	11 JUL 1986
EPI #4	2030	2	11 JUL 1986
YARD #1	2023	20	11 JUL 1986
YARD #2	2024	20	11 JUL 1986
YARD #3	2816	18	11 DEC 1988
YARD #4	2817	9	12 DEC 1988
YARD #5	2818	15	14 DEC 1988
YARD #6	2819	1	17 DEC 1988
YARD #7	2820	1	17 DEC 1988
YARD #8	2821	1	17 DEC 1988
YARD #9	2822	1	17 DEC 1988
YARD A. FR	2025	1	11 JUL 1986
YARD B. FR	2026	1	11 JUL 1986
K.G.D.	1940	9	10 DEC 1985
		<u>142</u>	
		TOTAL 142	UNITS

The claims are contiguous and owned by Michael Dickens of Savona, B.C. Chevron Canada Resources Ltd. owns a 20 unit claim block (the Gnome claims) roughly centring the EPI and YARD claims.

**REGIONAL GEOLOGY**

Regionally, the EPI/YARD property is contained within Triassic Nicola group rocks described as being exposed in a window through Miocene sedimentary rocks of the Deadman River formation, and Pliocene plateau lavas. The Nicola volcanics are extensively altered to chlorite rich calcareous greenstones and are intruded by granitic rocks of the Jurassic Thuya and Takomkane Batholiths, and by the Cretaceous Raft and Baldy Batholiths. Occasional Cretaceous quartz +/- feldspar porphyry dykes cut these rocks. Tertiary volcanic and sedimentary rocks overlie older units.

Regional structure consists of north-northwest trending faults, in particular the Pinchi Fault, the Deadman Fault at the

north end of which lies the property, and the Fraser-Straight Creek Fault to the west.

#### PROPERTY GEOLOGY

Late Triassic Nicola Group andesitic lapilli tuff intruded by granitic rocks of the Triassic or Jurassic Thuya Batholith are the dominant rock types on the property. These are overlain by Miocene Deadman River Formation clastics which in turn are overlain by olivine-porphyrific basalt lava flows. Biotite-hornblende granodiorite of the Jurassic Thuya Batholith intrude Nicola volcanics on the Yard #1 claim, and is responsible for contact metamorphism of calcareous Nicola greenstones to garnet-diopside-actinolite talc. This alteration is seen in some drill core.

Siliceous cap rocks seen on the YARD claims are noticeably related to northerly trending gullies and display excellent epithermal type textures. The most pronounced, and well developed, silica cap occurs on the Gnome claims (Chevron) coincident with the Central Gully Fault. This zone is roughly 100 to 200 metres in width and exposed for at least 200 to 300 metres and is characterised by rusty weathering, quartz-chalcedony veining and flooding, vuggy, drusy cavities, and bladed calcite. This fault zone trends northerly onto the YARD claims and southerly towards the EPI claims. To the north the trend of the zone is still apparent however it is not as clearly exposed as on the Gnome claims. It is of note that proceeding to the north, quartz-chalcedonic veining appears superseded by quartz-fluorite veining possibly suggesting a moderate to high temperature system which would not be conducive to gold precipitation in this system.

Proximal to these siliceous zones is a well developed zone of argillic alteration followed by a zone of well developed propylitic alteration. Phyllic alteration is lacking in the silicified zone. This may be due to the absence of felsic rocks in the area, although rare quartz +/- feldspar porphyry dikes of Cretaceous age are known to cut the Nicola Group. In fact, a quartz eye porphyry

was discovered in the immediate area during the property exam.

#### **PROPERTY HISTORY AND PREVIOUS WORK**

Prior to 1986 there is no record of work on the EPI or YARD claims. Most work in this area has been concentrated on the Gnome claims owned by Chevron Canada Resources Ltd. This claim has been explored as a molybdenum prospect in the past, and more recently as a gold prospect. In 1985 or 1986 these claims (Gnome) were optioned to Noranda Exploration Co. Ltd which undertook a diamond drilling program to test the depth extent of a large zone of silicification and quartz-chalcedony veining exposed at surface. Results of this program were not available at the time of the property examination.

In 1988 the EPI/Yard property was optioned to Canadian Nickel Company Ltd, which undertook geological mapping, prospecting, geochemical soil and rock sampling over the southeast and southwest of YARD 1 and YARD 2 claims, as well as the northern part of the EPI 2 claim. This program revealed a north-northeast trending multielemental (Au+/-Ag+/-As+/-Mo) soil anomaly over a width of 200 m and strike length of 400 m on the YARD #2 claim, a partial overlap between an elongate Mo soil anomaly and spot highs of Au, As, and Ag along a northeast linear drainage, and, finally, a third anomaly consisting of a few Au spot highs. Follow-up diamond drilling by Inco in 1988 and 1989 was aimed at evaluating, at depth, surface mineralisation and soil geochemical anomalies associated with north-south lineaments. To date roughly 26 diamond drill holes (19 by Inco) have been drilled in the area (including the Gnome claims) by Inco, Noranda, and Chevron. A total of \$410785.94 has been spent by Inco alone in evaluating the property with 2532.55 metres of drilling recorded in assessment reports.

#### **Drilling Results**

Results of the drilling programs by Inco during 1989 were not encouraging. Three holes drilled on the EPI 2 claim were designed to test alteration zones within the Nicola volcanics exposed

within Deadman Creek. These zones of alteration appear to be structurally controlled, and drilling was directed at testing surface showings at depth. Previous surface samples in this area are reported anomalous in Au (to 1530 ppb), Cu (to 157 ppm), Pb (to 232 ppm), Zn (to 107 ppm), As (to 1922 ppm), Sb (to 215 ppm), Hg (to 11600 ppb), Ge (to 2.2 ppm), Se (to 4.8 ppm), and Te (to 6.0 ppm). Samples taken in this area during the property examination returned anomalous values of Au (to 316 ppb), Ag (to 4.0 ppm), As (to 1991 ppm), Sb (to 235 ppm), and Hg (to 45375 ppb). These samples were all taken from intensely silicified and carbonatized Nicola volcanics associated with structural features. The highest Au value returned from the drilling program was 338 ppb Au over 2.8 metres of chlorite-clay altered Nicola lapilli tuff from a fault zone which surfaces along Deadman Creek.

Drilling on the Yard 2 claim was more extensive. Drilling was concentrated along the Yard fault zone, a zone of chalcedony veins, veinlets, stockworks, and matrix breccia preferentially cutting hanging wall Eocene volcanics and footwall Nicola rocks. Gold values obtained from these holes were characteristically low and most often associated with quartz-calcite-fluorite veining and stockworks. The majority of the samples associated with veining appear to be weakly anomalous in gold (<100ppb) with occasional samples between 500 and 1000 ppb Au. The most significant value reported (1079 ppb Au over 14 m, 4552 ppb Au over 2.77 m) was from hole 72493 and was of an epidote-chlorite-pyrite-calcite-hematite altered diorite/granodiorite cut by pervasive weak quartz-calcite stockwork with local brecciation. Hole 72495 west of 72943 intersected granitoid rocks of the Jurassic Thuya Batholith and one value of 1812 ppb Au is reported. It is unclear whether this sample was of overlying Eocene volcanics or of Jurassic intrusive.

Other work worthy of mention in the immediate area is on the Precisely property which adjoins the K.G.D., EPI 3, and EPI 4 claims to the southeast. Surface work and drilling during 1985 reported 0.28 oz/ton Au over 0.5 m in a surface sample with

subsequent follow-up drilling returning values of 0.16 oz/ton Au and 0.105 oz/ton Au both over 10 feet. These values were reportedly associated with quartz-sulphide veining and disseminated pyrite within altered (predominantly silicified) intrusive rocks.

#### CONCLUSIONS AND RECOMMENDATIONS

From brief review of available assessment reports, and from examination of the property itself a follow-up visit to the area is suggested based on the following observations.

1. It appears the primary focus of past exploration on the property has concentrated on developing gold prospects based on an epithermal vein model. Concentration of drilling programs along the Central Gulley Fault and its extension northerly into the Yard Zone on the Yard property attest to this. The target type sought appears to be a Vidette style quartz vein system as referenced repeatedly in the assessment reports. This type of target does not fit Minnova's current exploration strategy.

2. Although the most obvious features of the property are the Yard Zone and the Central Gulley Fault with their well developed textbook epithermal textures, attention should be granted to the prominent alteration zones apparent on the property. Well developed zones of argillic and propylitic alteration are evident throughout the property, and phyllic alteration may be present but not noted during the examination. Furthermore, note should be made of skarnification of calcareous Triassic Nicola greenstones. Although garnet-diopside-actinolite +/- biotite calc-silicate are mentioned in drill core, emphasis is placed upon the lack of epithermal type alteration rather than recognising the importance of skarn type alteration.

3. In viewing the property as an epithermal type target in the context of a Vidette vein system, the possibility of a large tonnage porphyry type system has been overlooked. The presence of the Jurassic Thuya Batholith, a quartz-monzonite/granite, to the

north increases the potential of this type of deposit within Triassic Nicola Group volcanics. Of note is the 1989 drill program in which a brecciated epidote-chlorite-pyrite-calcite-hematite altered diorite intrusive was encountered in drill core and reportedly contained an average value of 1079 ppb Au over 14 m, including 4552 ppb Au over 2.77 m. This hole, apparently, was not followed up in detail.

4. Assessment reports on this property, and on the adjoining Gnome claims should be obtained, and drill logs reviewed thoroughly concentrating on alteration and mineralization/host rock associations that might indicate a large tonnage porphyry system rather than the epithermal vein type system that historically has been the focus of previous exploration in this area.

5. A return visit to this property is suggested with this new target type in mind. Drill core should be reviewed, and possibly re-sampled, with an alkalic-porphyry type system as target. Exposures of Jurassic intrusions in the area, and their surrounding rocks, should be located and assessed in terms of alteration assemblages and potential for hosting a large tonnage deposit.



1-9, YARD A & B Fr. CLAIMS

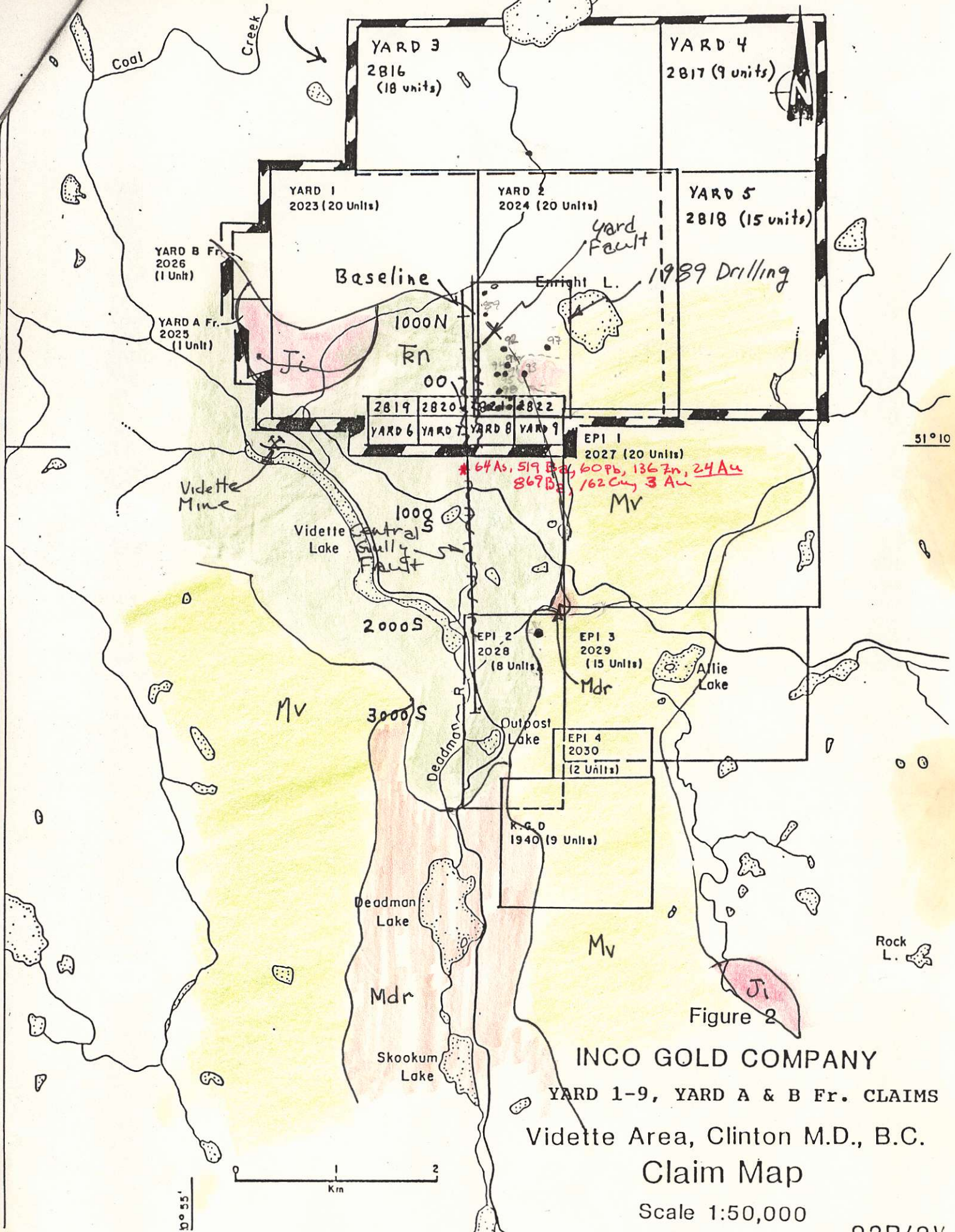
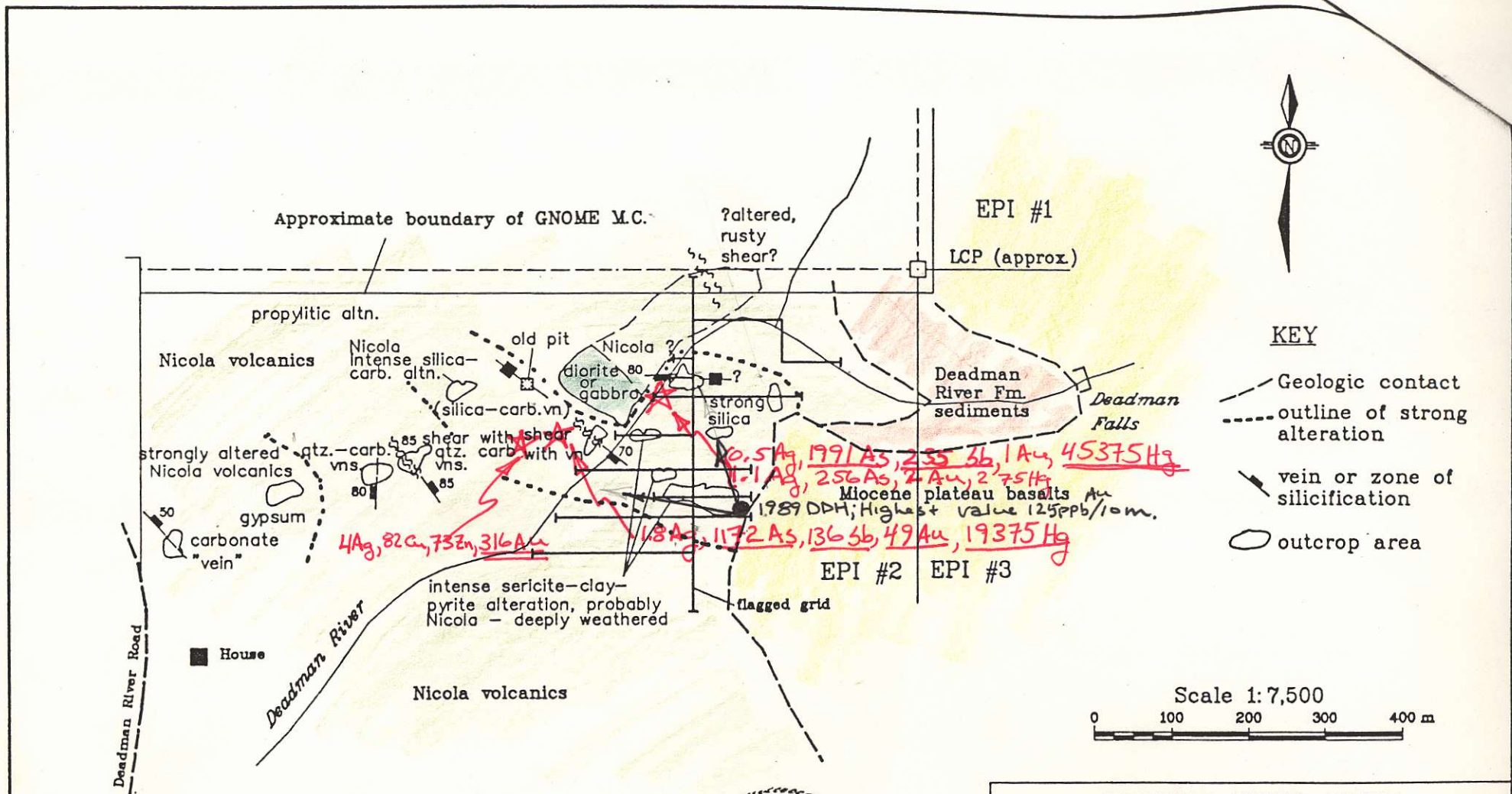


Figure 2

**INCO GOLD COMPANY**  
 YARD 1-9, YARD A & B Fr. CLAIMS  
 Vidette Area, Clinton M.D., B.C.  
**Claim Map**  
 Scale 1:50,000





G.R. Peatfield  
 2 Sept 86



JAGUAR GOLD CORP.			
EPI MINERAL PROPERTY - CLINTON M.D.			
GEOLOGY OF SHOWING AREA			
PLAN No.	DRAWN BY: GEO-COMP	DATE AUG.'86	FIGURE
Originator: GRP		N.T.S. 92P/2W	4
MINEQUEST EXPLORATION ASSOCIATES LTD.			