

# MINNOVA

MEMORANDUM

DATE:

A  
TO: March 10, 1988

COPIES A  
COPIES TO:

Ian Pirie, Alex Davidson

826170

DE  
FROM:

Colin Burge

SUJET  
SUBJECT:

**FIRE LAKE PROPERTY 92G/16E**

---

The Fire Lake property consists of a 100 unit block located at the north end of Harrison Lake about 1.5 hrs drive southeast of Pemberton. The ground is currently held by Hycroft Resources and Development and has been brought to our attention by Jim Christie of Englefield Resources of Vancouver. Englefield is presently earning a 50% interest in the ground by spending \$500K by June 1990.

The property has been touted as a gold play and mapping and reports are complete with the necessary buzzwords of epithermal gold environments (hydrothermal breccias, chalcedony and even jasperoids).

After examining the core from 3 drill holes located 50 meters apart which test the optimum stratigraphy I am confident that the target on the property should be volcanogenic massive sulphides. The values and the geologic environment are remarkably similar to the high grade polymetallic Coronation zone mineralization. The location of the prospect, close to the Harrison Lake structure (known to be gold bearing) and the abundance of highly anomalous gold values suggest that any syngenetic ores found on the property will be considerably enriched with respect to precious metals.

Pending a visit to the property and if we can negotiate a satisfactory deal with Englefield I would highly recommend we begin exploration on this ground immediately.

## **Geology:**

The Fire Lake group is a pendant consisting of volcano-sedimentary rocks of the upper Jurassic to lower Cretaceous age (possible Gambier correlative).

The stratigraphy drill-tested by Englefield consists of proximal felsic flows and crystal tuffs (quartz phyric) with overlying felsic (?) lapilli tuffs. This succession is capped by andesitic rocks and possible argillites.

**Structure:**

As is the case in Britannia and in the Coronation stratigraphy a "deformation" zone exists that may post date the the establishment of a footwall type alteration zone. A second phase of deformation may be present suggested by the appearance of kink folds in some of the core

**Mineralization:**

The felsic clastic rocks are saturated with fine grain pyrite in places up to 20% and occasional quartz-sulphide stringers up to 20cm wide occur. In fact 87-7 hit a 10 to 15 cm. slug of massive pyrite anomalous in copper (+700 ppm). This intersection is open downdip and plunges are unknown.

**Alteration:**

All three holes examined were collared in and remained entirely within strong to intense sericite and or chlorite alteration. Englefield has attempted to split the core with rather unfortunate results due to the well developed fabric. A 10 to 20 meter thick zone of silicification occurs structurally above the chlorite altered flow and is associated with higher gold values. It is possible that this is a silicified stockwork system.

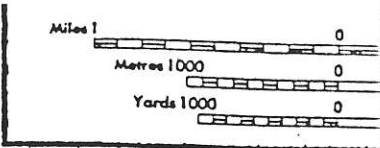
**Work Done:**

Englefield drilled 8 holes from three different sections 50 meters apart. Because the holes were drilled by Drillcar three were essentially abandoned and surface showings were tested to a depth of about 70 meters.

**Deal:**

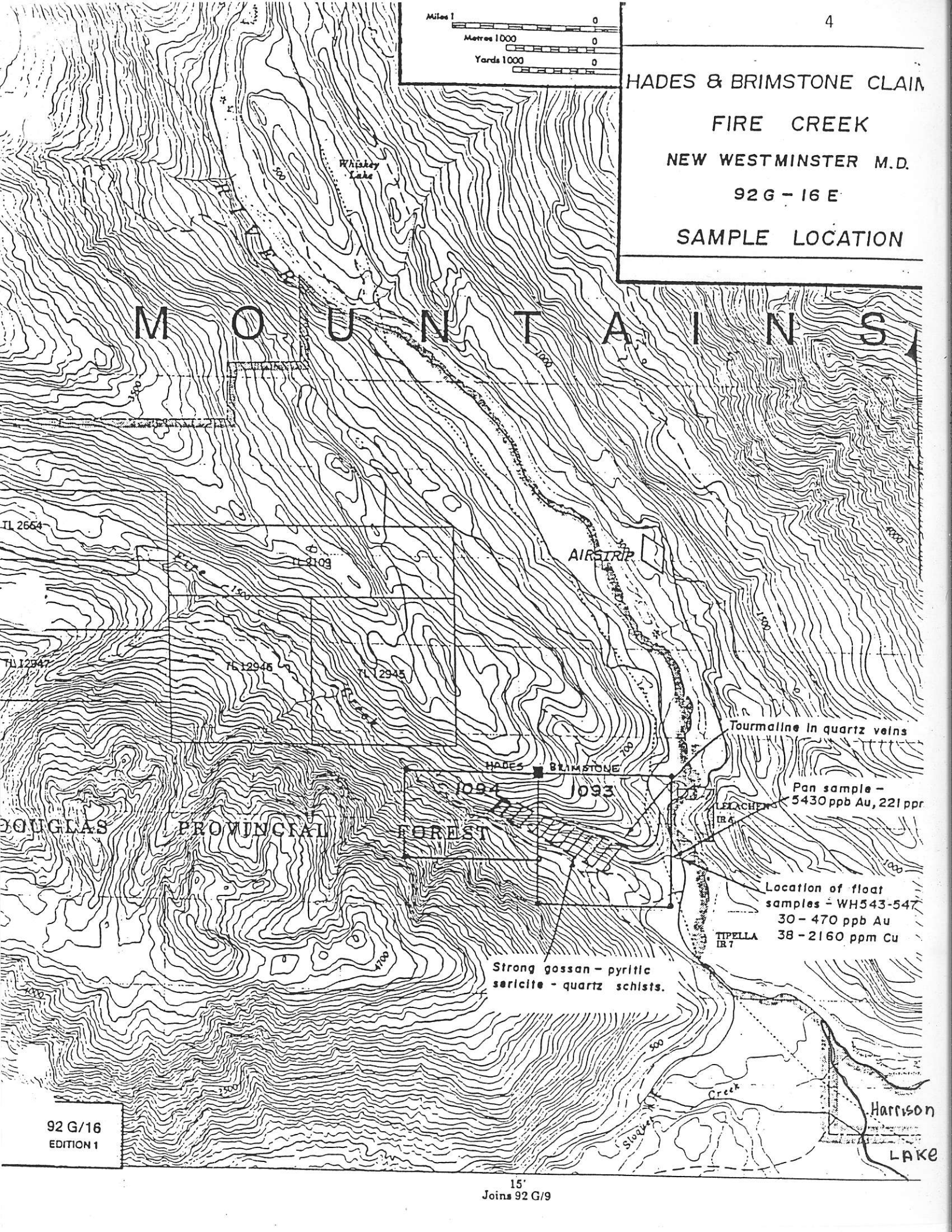
Englefield has spent \$160K to date and must spend an additional \$250K by late June but we could probably could defer until the end of the summer providing \$500K total is spent by June 1990). At that time Minnova by spending \$330K will have 35% interest, Englefield 15% and Hycroft a 50% in the joint venture. Englefield is also looking for a cash payment of \$50K.

Presumably these terms are negotiable and as it turns out I think they realize that they require Minnova's exploration expertise for this kind of target.



HADES & BRIMSTONE CLAIM  
 FIRE CREEK  
 NEW WESTMINSTER M.D.  
 92 G - 16 E  
 SAMPLE LOCATION

M O U N T A I N S



TL 2664

TL 12847

DOUGLAS

PROVINCIAL

FOREST

AIRSTRIP

Whiskey Lake

HADES BRIMSTONE

1094

1093

Tourmaline in quartz veins

Pan sample -  
5430 ppb Au, 221 ppb Ag

LEACHEN IR 6

Location of float samples - WH543-547  
30 - 470 ppb Au

38 - 2160 ppm Cu

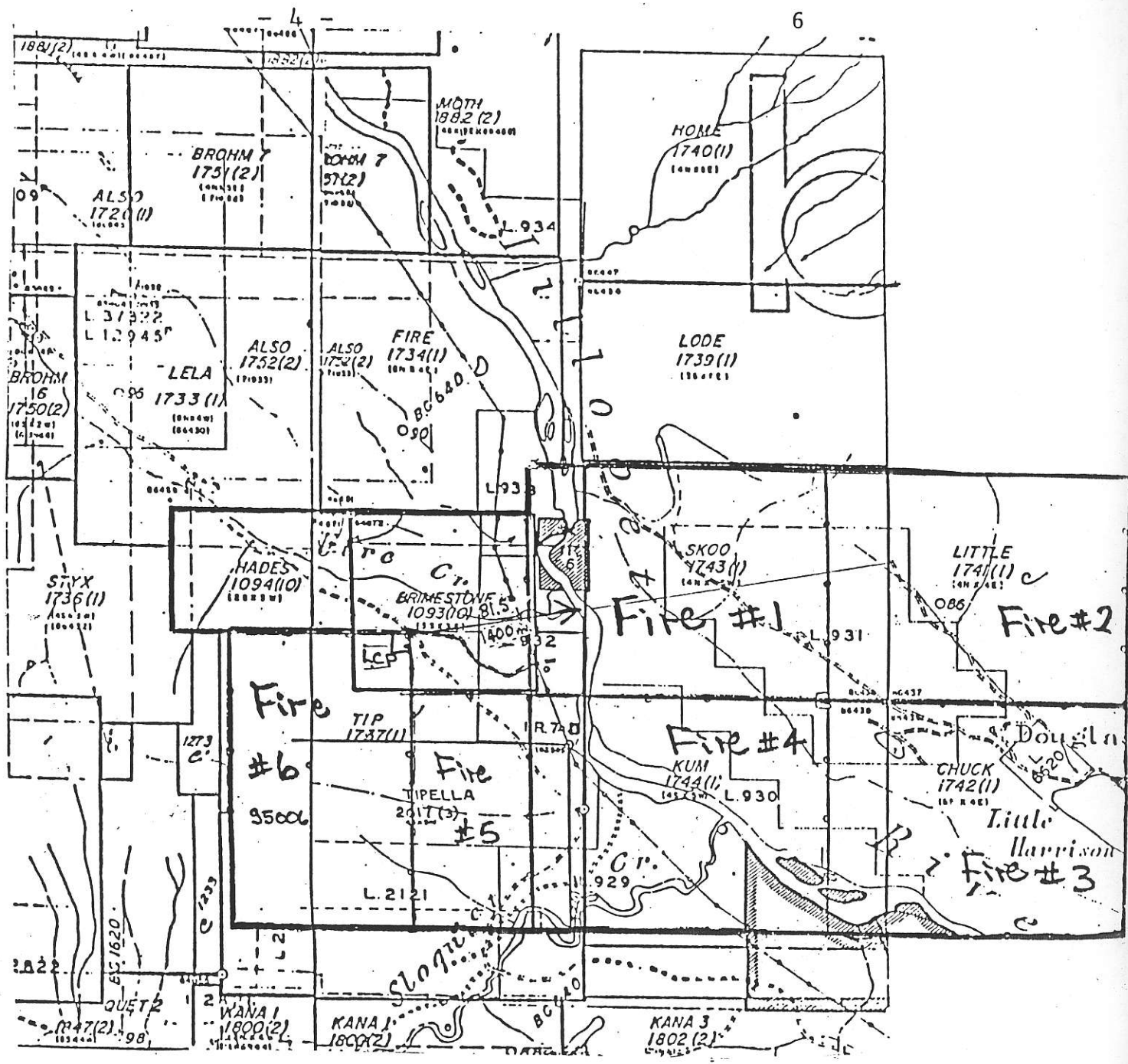
TIPELLA IR 7

Strong gossan - pyritic sericite - quartz schists.

Harrison

LAKE

92 G/16  
EDITION 1



**FIGURE 2.** Claim Location Map:  
 Brimstone, Hades and Fire Mineral Claims  
 New Westminster Mining Division  
 British Columbia.

REPORT: V88-00958.4

CHECK ASSAYS - FIRE CREEK

PROJECT: NONE GIVEN

PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Au OPT	Ag OPT
---------------	---------------	--------	--------

SAMPLE WIDTH 1.5 m

D2 87DH-1-55	ACME .012	0.012	0.02
D2 87DH-1-56	.021	0.019	0.06
D2 87DH-1-57	.048	0.054	0.24
D2 87DH-1-58	.027	0.026	0.20
D2 87DH-1-59	.049	0.033	0.16

} CONTIGUOUS

D2 87DH-1-60	.173	0.116	0.15
D2 87DH-3-87	.028	0.044	0.09
D2 87DH-3-88	.022	0.023	0.07
D2 87DH-3-89	.032	0.028	0.13
D2 87DH-3-90	.005	0.007	0.05

D2 87DH-3-91	.017	0.020	0.10
D2 87DH-4-9	.008	0.008	0.06
D2 87DH-4-10	.049	0.025	0.10
D2 87DH-4-33	.029	0.019	0.08
D2 87DH-4-34	.031	0.036	0.11

D2 87DH-4-35	.017	0.026	0.09
D2 87DH-4-37	.033	0.042	0.12
D2 87DH-4-38	.012	0.014	0.03
D2 87DH-5-9	.005	0.004	0.04
D2 87DH-5-10	.045	0.028	0.04

D2 87DH-5-11	.113	0.089	0.11
D2 87DH-5-12	.006	0.008	0.02
D2 87DH-7-27	.008	0.012	<0.02
D2 87DH-7-28	.024	0.033	0.16
D2 87DH-7-33	.023	0.026	0.09

D2 87DH-7-34	.017	0.021	0.06
D2 87DH-7-35	.056	0.060	0.26
D2 87DH-7-36	.027	0.028	0.11
D2 87DH-9-17	.003	0.004	0.06
D2 87DH-9-18	.046	0.023	1.13

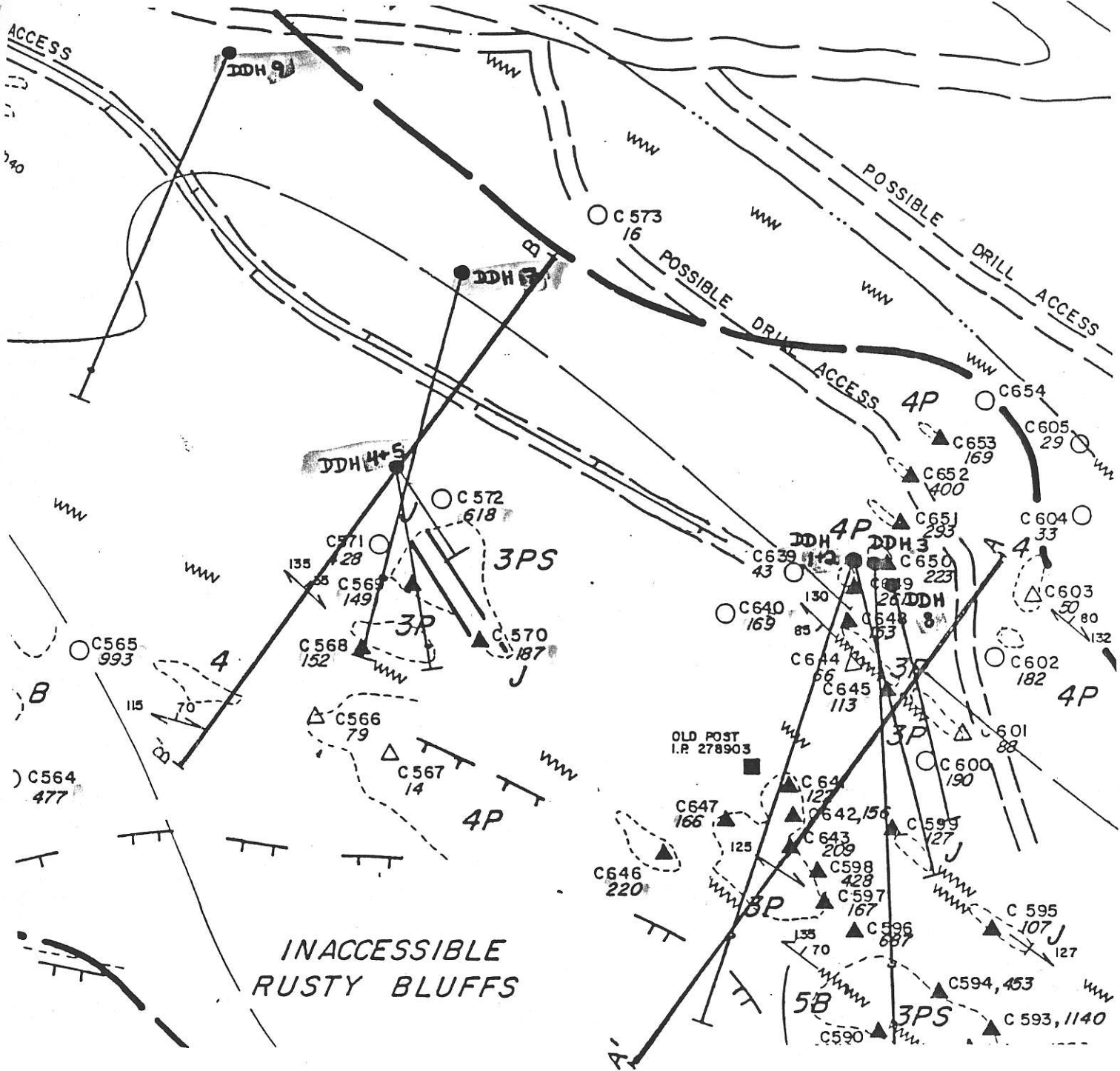
D2 87DH-9-19	.005	0.007	0.33
D2 87DH-9-38	.016	0.017	0.04
D2 87DH-9-39	.024	0.025	0.11
D2 87DH-9-40	.013	0.017	0.09
D2 87DH-9-41	.012	0.016	0.35

*Handwritten signature*

BASE METAL AND SILVER RESULTS

HOLE NUMBER	INTERCEPT METRES	LENGTH METRES	PPM				
			Cu	Pb	Zn	Ag	As
DH-1	31.8 - 33.3	1.5	8427	265	1338	73.4	2405
DH-2	26.3 - 22.8	1.5	12644	130	5622	14.8	27
DH-2	35.3 - 36.8	1.5	4959	337	2429	30.2	1410
DH-2	53.3 - 54.8	1.5	11019	542	1626	126.8	1997
DH-2	54.8 - 56.3	1.5	9204	307	1940	127.8	1836
DH-3	24.0 - 25.5	1.5	1945	287	4405	14.9	555
DH-3	25.5 - 27.0	1.5	1242	446	5697	9.8	337
DH-3	33.0 - 34.5	1.5	3455	4949	16219	46.0	1076
DH-3	85.5 - 87.0	1.5	2698	36	1187	14.3	817
DH-3	168.0 - 169.5	1.5	2205	601	4765	10.5	195
DH-9	10.8 - 12.3	1.5	1446	80	3819	13.2	411
DH-9	12.3 - 13.8	1.5	4696	351	22253	51.5	1194
DH-9	33.3 - 34.8	1.5	7113	1448	1863	122.5	2392
DH-9	67.8 - 69.3	1.5	1593	63	611	12.1	648
DH-9	69.3 - 70.8	1.5	1330	338	4331	13.9	555

\* 10,000 PPM = 1.0%  
 34.1 PPM = 1 oz. /TON



DRILL HOLE and CROSS SECTION LOCATIONS

C 426 = SAMPLE #  
 220 = Au ppb