

MINNOVA

MEMORANDUM

DATE: February 1, 1991
A TO: A. J. Davidson
COPIES A COPIES TO: I. D. Pirie, D. H. Watkins, Terry E. Eldridge
DE FROM: G. S. Wells
SUJET SUBJECT: Fireweed Drill Proposal - Winter 1991

Introduction

The Fireweed property which is located 54 km northeast of Smithers, B.C., was optioned from Canadian United Minerals in 1990 to evaluate the extent and economic potential of mantos/porphyry type mineralization exposed on the claims. The property is underlain by Lower Cretaceous Skeena Group sediments and Tertiary felsic dikes and plug-like intrusions. Seven mineralization zones have been defined along a six km. long east-west trend (Figure 1). Mineralization consists of two types - massive sulphide (po, sph, ± cp) breccia pipes which crosscut the sedimentary sequence and stratiform, replacement-type sulphide (py, sph, gn, tet) zones (mantos) which are hosted in coarse sandstone units. Work to date, has focused largely on the West Zone where an estimated 640,000 tons of 2.2% Zn, 1.3% Pb and 10 opt Ag have been outlined in a stratiform replacement (mantos) zone. This zone and other mineralization exposed on the property are reflected by moderate to weak IP chargeabilities and moderate magnetic highs.

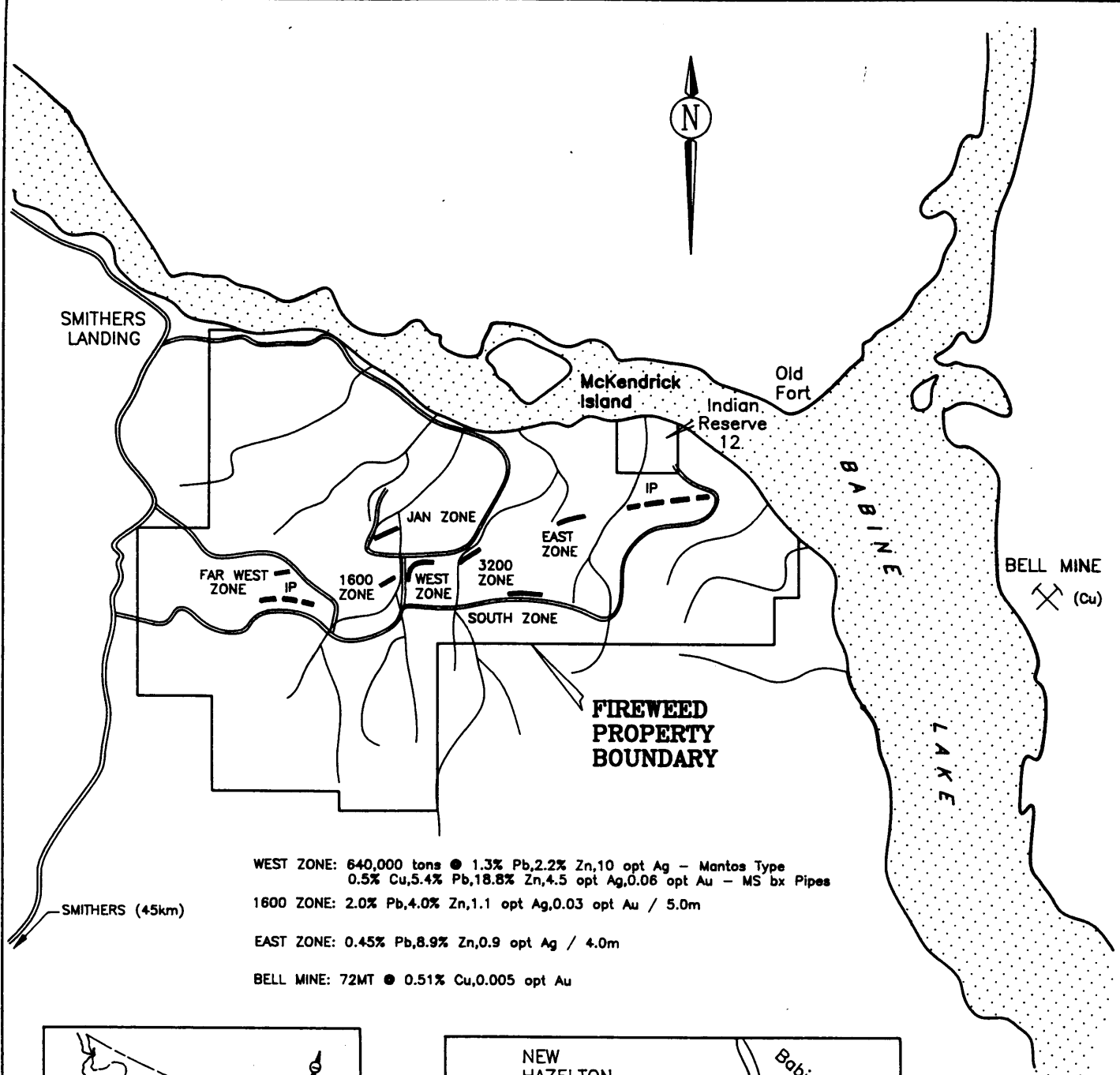
Proposed Drilling

A 20 hole, 2810 meter diamond drill program is proposed to test geophysical anomalies that occur along strike or in the vicinity of known showings. Specific details for each hole are included in Table 1 and locations are shown in Figure 2. Six holes (740 m) will test newly defined IP anomalies in the Far East part of the property. Four holes (600 m) will test moderate IP anomalies and the extent of sulphide mineralization previously

defined in the East Zone (i.e. FW-21: 8.87% Zn, 0.9 opt Ag/4.0 m). Five holes (720 m) will test weak to moderate IP anomalies in the Far West part of the property. Weak IP anomalies along strike from the Jan zone will be tested by three holes totalling 450 meters. Lastly, two holes (300 m) will test weak IP and moderate magnetic anomalies to the west of the South Zone.

Schedule and Costs

Drilling is scheduled to start on or about February 11th. Estimated all-inclusive costs for this 2810 meter program are \$210,750 (\$75/m).

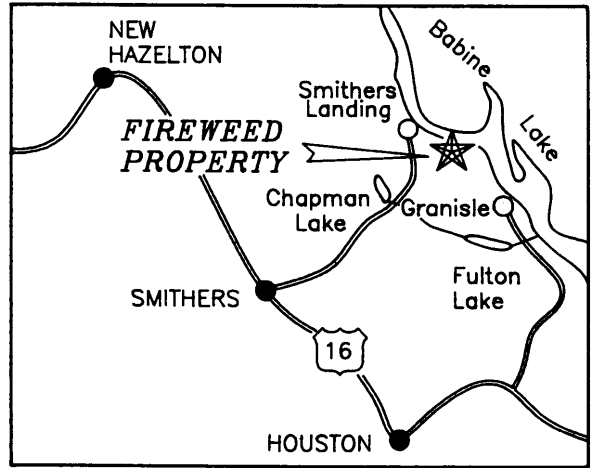
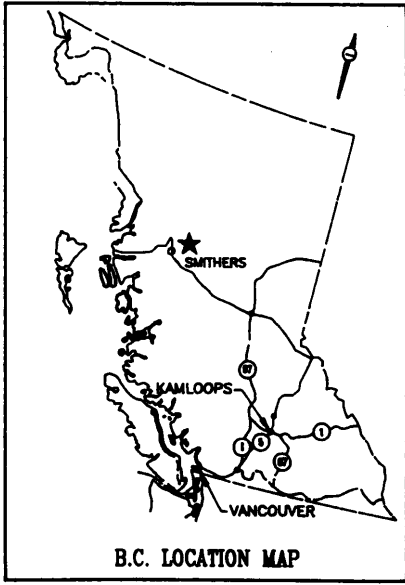


WEST ZONE: 640,000 tons ● 1.3% Pb, 2.2% Zn, 10 opt Ag - Mantos Type
 0.5% Cu, 5.4% Pb, 18.8% Zn, 4.5 opt Ag, 0.06 opt Au - MS bx Pipes

1600 ZONE: 2.0% Pb, 4.0% Zn, 1.1 opt Ag, 0.03 opt Au / 5.0m

EAST ZONE: 0.45% Pb, 8.9% Zn, 0.9 opt Ag / 4.0m

BELL MINE: 72MT ● 0.51% Cu, 0.005 opt Au



FIREWEED PROPERTY CLAIM LOCATION MAP

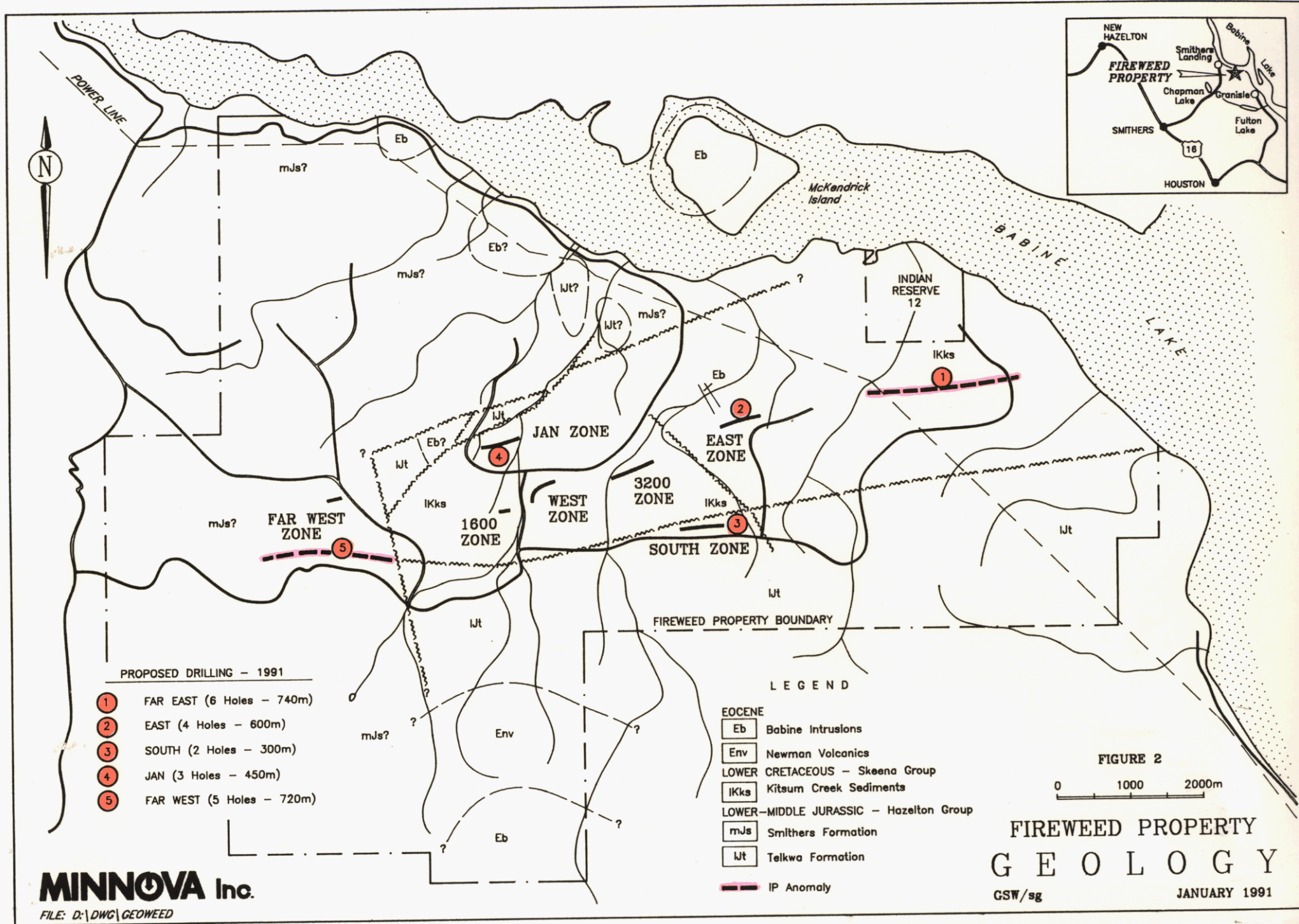


Table 1: Proposed Drilling - Fireweed Property

Far East

<u>Hole</u>	<u>Location</u>	<u>Azim.</u>	<u>Dip</u>	<u>Depth</u>	
P-1	77+00E;9+25N	360°	-45°	150 m	weak IP (5-10 msec)
P-2	79+00E;10+00N	180°	-45°	150 m	well defined IP (10-15 msec)
P-3	81+00E;9+60N	360°	-45°	100 m	diffuse IP (5-10 msec), weak mag
P-4	81+00E;10+30N	360°	-45°	100 m	diffuse IP (5-10 msec), weak mag
P-5	69+00E;9+85N	360°	-45°	120 m	weak IP (5-10 msec)
P-6	65+00E;10+00N	360°	-45°	<u>120 m</u>	weak IP (5-10 msec)
				740 m	6 holes

East Zone

P-7	52+00E;10+50N	360°	-45°	150 m	IP (5-10 msec), 200 m east of FW-21 intersection (8.87% Zn, .9 opt Ag /4.0 m)
P-8	49+00E;7+75N	360°	-45°	150 m	IP (>15 msec) & downdip of FW-21 intersection
P-9	47+00E;7+00N	360°	-45°	150 m	untested IP (10-15 msec) in East Zone
P-10	42+00E;8+00N	360°	-45°	<u>150 m</u>	untested IP (5-10 msec) 250 m west of last hole in East Zone
				600 m	4 holes

Far West Zone

P-11	8+00E;1+20S	180°	-45°	120 m	weak to moderate IP (5-15 msec)
P-12	4+00E;1+75S	180°	-45°	150 m	weak IP (5-10 msec)
P-13	2+00W;1+35N	180°	-45°	150 m	weak, deep IP (5-10 msec, n=4-5), mag high
P-14	4+00W;5+15N	180°	-45°	150 m	weak IP (5-10 msec)

Table 1: Proposed Drilling - Fireweed Property (cont.)

<u>Hole</u> <u>Location</u>	<u>Azim.</u>	<u>Dip</u>	<u>Depth</u>	
P-15 8+00W;0+75S	180°	-45°	<u>150 m</u>	weak-mod IP (5-10 msec)
			720 m	5 holes
<u>Jan Zone</u>				
P-16 16+00E;13+00N	180°	-45°	150 m	weak IP (5-10 msec), mag high at western edge of Jan Zone
P-17 20+00E;14+35N	180°	-45°	150 m	weak IP (5-10 msec) at eastern edge of Jan Zone
P-18 20+00E;13+00N	180°	-45°	<u>150 m</u>	weak IP (5-10 msec) at depth (n=3-5), same target as P-17
			450 m	3 holes
<u>South Zone</u>				
P-19 36+00E;4+25S	360°	-45°	150 m	weak, deep IP (5-10 msec, n=4-5), mag high, 1000 m west of previous drilling in South Zone
P-20 42+00E;1+10S	180°	-45°	<u>150 m</u>	weak IP (5-10 msec) + mag high 400 m west of previous drilling in South Zone
			<u>300 m</u>	2 holes
			TOTAL	2810 m 20 holes