MPH

SUMMARY REPORT ON GEOLOGY, GEOPHYSICS, AND DIAMOND DRILLING

FITZWATER GROUP
(Fitz, Water, Lat, Port, and Starboard claims; Aud and Aud 2 Fr.)

Alberni, Victoria Mining Divisions
British Columbia
NTS 92F/2 49°03'N Lat., 124°38'W Long.
for
CREW MINERALS INC.
February 26, 1988
T. Neale, B.Sc.

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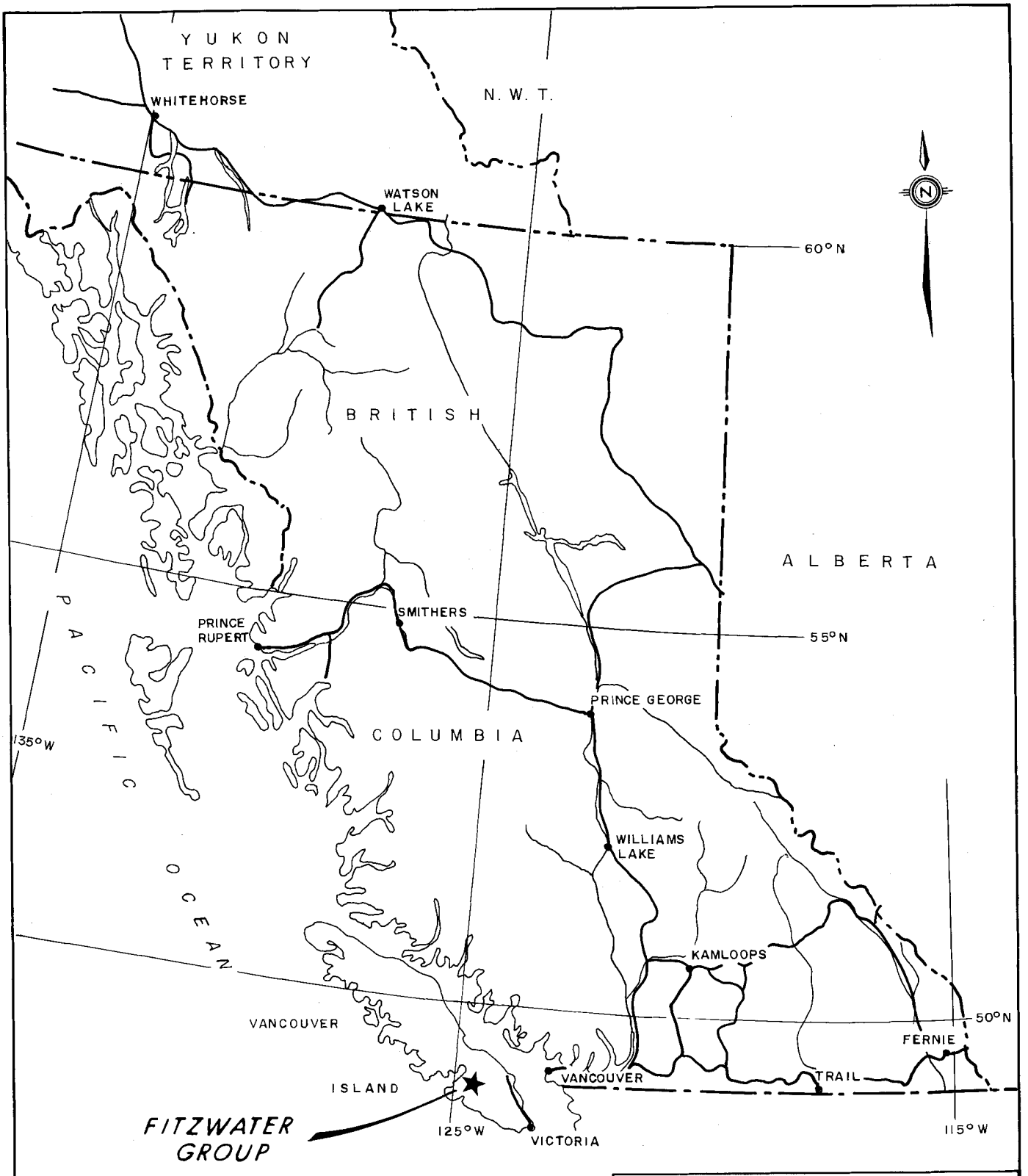


TP RESOURCES LTD.	
GENERAL LOCATION MAP FITZWATER GROUP VICTORIA, ALBERNI MINING DIVISIONS	
Project No: V 227	By: T. N.
Scale: 1 : 8 000 000	Drawn: J. S.
Drawing No: FIG. 1	Date: FEB. 1988.

MPH Consulting Limited

SUMMARY

Phase IIIa and IIIb geological, geochemical, geophysical, and diamond drilling exploration of the Crew Minerals Inc. Fitzwater property was carried out from July 26 to November 21, 1987. A large zone (1400 m long by 500 m wide) of coincident IP chargeability and Au ± Ag, Zn, As soil geochemical anomalies in an area underlain by Buttle Lake Formation limestone and calcareous siltstone was discovered. Sulphide-bearing quartz and quartz-carbonate veins exposed on surface within the anomalous zone returned results of up to 44.57 g/t Au, 16.16% Zn, up to 1.92% Pb, and up to 347.0 g/t Ag. Diamond drilling intersected sulphide-rich quartz and quartz-carbonate veins which yielded results of up to 1.95 g/t Au over 0.27 m and 0.72 g/t Au over 0.84 m.

1.0 INTRODUCTION

This report summarizes work carried out on the Fitzwater property by MPH Consulting Limited for Crew Minerals Inc. from July 26, 1987 to November 21, 1987. It is a summary of Phase IIIa and IIIb work for the purposes of fulfilling FAME requirements. The work carried out includes 12 km^2 of 1:10,000 scale and 5 km^2 of 1:2500 scale geological mapping, 23.85 line-km of soil sampling (1006 samples analyzed for Au and by 30-element ICP), 80 m of backhoe trenching, 11.2 line-km of linecutting, 10.825 line-km of dipole-dipole IP surveying, and 869 m of diamond drilling in 9 holes from 4 setups.

Additional work (Phase IIIc) carried out the property from November 22, 1987 to February 20, 1988 comprising 1437 m of diamond drilling in 10 holes from 5 setups is not included in this report as results are not yet complete. When all results are available a full report on all Phase III work carried out on the Fitzwater property will be prepared.

2.0 LOCATION, ACCESS, TITLE

The Fitzwater Group of claims is located 22 km southeast of Port Alberni on the northern slopes of Mt. Spencer and along the Rift Creek valley in the Victoria and Alberni Mining Divisions of British Columbia (Figures 1, 2). The Fitzwater Group is centred at roughly 49°03'N latitude, 124°38'W longitude on NTS Mapsheet 92F/2. All of the claims are located within the Alberni Mining Division, except the Lat, Aud Fraction and Aud 2 Fraction claims which are in the Victoria Mining Division.

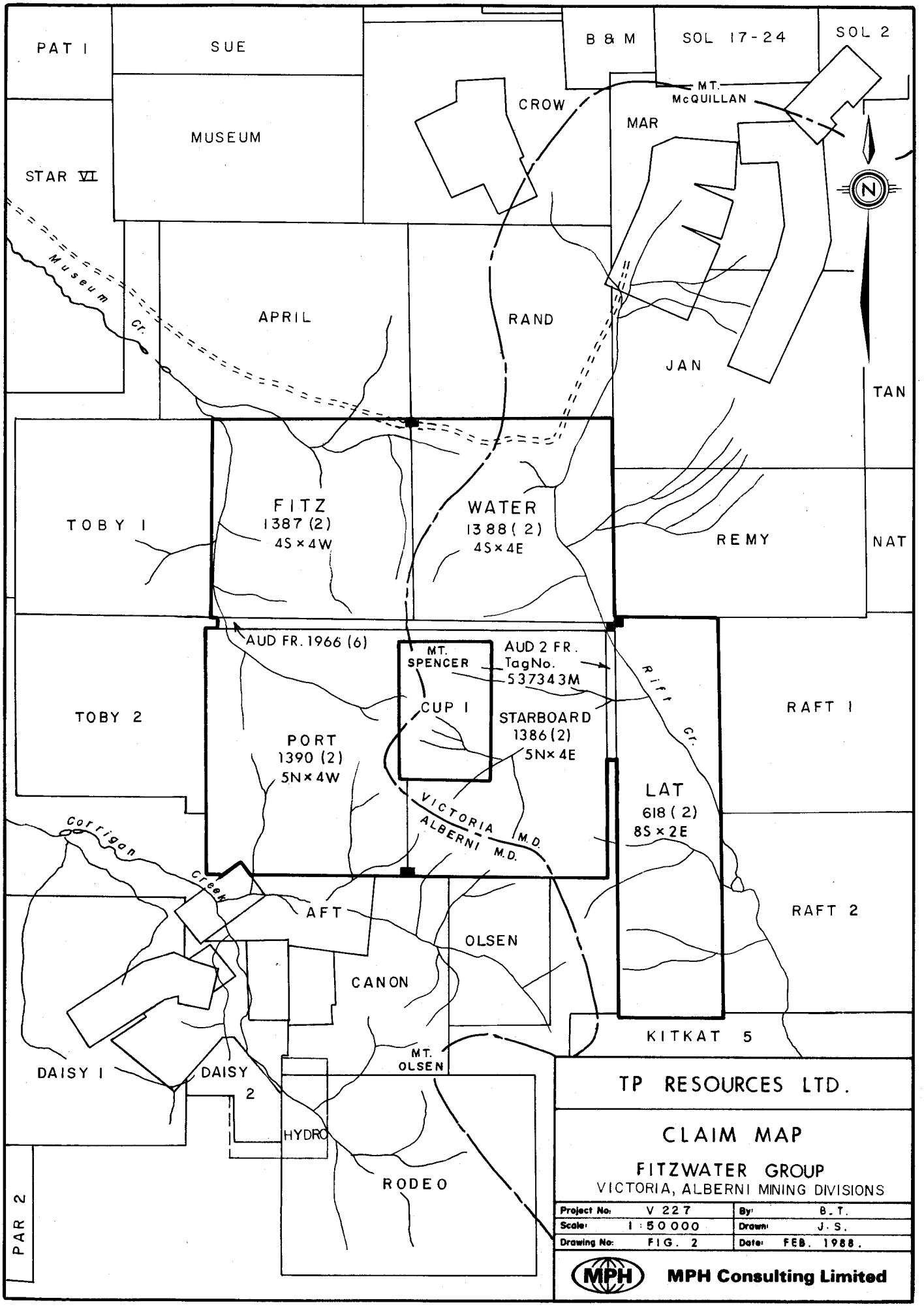
Access to the Fitzwater Group claim block is provided by the all-weather gravel Bamfield Road from Port Alberni to Franklin River, then the Thistle Mine Road and Museum Road up Museum Creek. The Museum Road runs through the northern portion of the Fitz and Water claims. Numerous logging roads provide good access to the Water and Lat claims; only one road goes into the Fitz claim. The southwest part of the property may be accessed via the Corrigan Creek Road from the Bamfield Road.

Claim information is summarized below:

Claim	Record No.	Units	Anniversary Date	Owner	Year Registered
Fitz	1387(2)	16	25/02/90	Ladysmith Minerals Ltd.	1982
Water	1388(2)	16	25/02/91	" " "	1982
Lat	618(2)	16	25/02/90	" " "	1982
Starboard	1386(2)	20	25/02/90	Lode Resource Corp.	1982
Port	1390(2)	20	25/02/90	" " "	1982
Aud Fr.	1966(6)	1	24/06/90	E. Hayes*	1987
Aud 2 Fr.	537343M	1		T. Naciuk*	1988
	Total	**90**			

* in trust for TP Resources Ltd.

The Aud 2 Fraction has not yet been assigned a record number. All of the claims were grouped as the Fitzwater Group by Notice to Group dated February 25, 1988. Crew Minerals Inc. is the operator of the property by virtue of option agreements with the claim owners. Anniversary dates include work filed on February 25, 1988.



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CLAIM MAP

FITZWATER GROUP

VICTORIA, ALBERNI MINING DIVISIONS

Project No:	V 227	By:	B. T.
Scale:	1 : 50 000	Drawn:	J. S.
Drawing No:	FIG. 2	Date:	FEB. 1988.

MPH Consulting Limited

3.0 PREVIOUS WORK

Government geological work in the area includes mapping by C.H. Clapp (1912 and 1914); J.E. Muller and D.J.T. Carson (1969); J.E. Muller (1977 and 1980); and A. Sutherland Brown (1986).

A regional aeromagnetic survey flown by Hunting Survey Corp. Ltd. in 1962 included the Fitzwater Group area.

During the years 1963-1966, Gunnex Ltd. carried out a regional mapping program with limited prospecting and silt sampling. They completed a list of all known mineral occurrences in the area and visited many of them.

An extensive exploration program was carried out on the Mary Group (Cup claim), surrounded by the present Fitzwater Group, by Gunnex from 1964-66, and by others from 1967 to 1981.

A brief program of geological mapping and rock sampling was carried out on the Fitzwater Group by MPH Consulting Limited for Schreiber Resources Ltd. in June 1984 (Hawkins, 1984). This work revealed possible evidence than much of the claim block is underlain by Sicker Group rocks, rather than rocks of the Karmutsen Formation as shown by regional mapping. In addition, an area of interest was located along the Panther Road, on the northeastern corner of the Water claim. In this area, several large (up to 30 cm) pieces of massive pyrite float were found. A sample returned 130 ppb Au and 1.0 ppm Ag. Several outcrops of pyritic epidotized andesite or basalt south of the pyrite float returned values of up to 210 ppb Au.

During the spring of 1986, geological mapping, rock sampling, prospecting and soil and silt sampling were carried out over claims of the Fitzwater Group (Neale and Hawkins, 1986). Phase I exploration located a wide zone of intense quartz carbonate

alteration on the Water claim and a pyritic argillite horizon on the Lat claim. Soil geochemical Au anomalies were located within this zone of alteration. There is evidence to suggest that the Mine Flow Unit, which hosts the Thistle Mine and the Panther Road showings on the adjacent Thistle property, trends toward these anomalous gold soil sample concentrations.

Phase II exploration, including 1:10,000 scale geological mapping; rock, soil, and silt sampling; and VLF-EM and magnetometer surveying was carried out from February to December 1986 (Hawkins and Getsinger, 1986). This work located values of up to 5.76 g/t Au in float rock samples collected just west of the property boundary, leading to the subsequent addition of the Port and Starboard claims to the property. A small soil grid in this area also yielded anomalous Au values.

4.0 REGIONAL GEOLOGY, STRUCTURE AND ECONOMIC SETTING

Upper Paleozoic **Sicker Group** rocks and Lower Mesozoic Vancouver Group rocks are the predominant rock units in the Port Alberni-Nitinat River area. These units are eugeosynclinal sequences of volcanic and sedimentary rock. The Sicker Group has been subdivided by Muller (1980) from oldest to youngest as follows: Nitinat Formation, Myra Formation, Sediment-Sill Unit and Buttle Lake Formation.

The **Nitinat Formation** consists of predominantly mafic flow breccias, agglomerates including massive flow and rare pillow basalts, with local interbedded basaltic tuff. Uralitized gabbroic rocks underlie and intrude the volcanics and are believed to be feeder dykes, sills and magma chambers to the volcanics.

The **Myra Formation** unconformably overlies the Nitinat Formation and in the Nitinat-Cameron River area comprises a lower basaltic tuff and breccia unit, a middle banded pelitic feldspathic tuff and argillite unit, and an upper thick-bedded feldspathic tuff and breccia unit. At Myra Creek at the south end of Buttle Lake, volcaniclastic rocks consisting of dominantly rhyocacitic and rhyolitic tuff, lapilli tuff and breccia with quartz porphyry and minor mafic flows and argillite, are host to Westmin Resources' Myra, Lynx, Price and H-W massive sulphide (Cu, Zn, Pb, Au, Ag, Cd) deposits.

The **Sediment-Sill Unit** contains thinly bedded to massive argillite, siltstone and chert with interlayered sills of diabase. It is transitional between the Myra and Buttle Lake Formations.

The **Buttle Lake Formation** comprises a basal green and maroon tuff overlain by crinoidal and calcarenitic limestone with minor chert nodules and lesser amounts of argillite, siltstone greywacke and chert.

The Middle and Upper Triassic **Vancouver Group Karmutsen Formation** unconformably overlies the Buttle Lake Formation limestone, and is the thickest and most widely distributed sequence of rocks on Vancouver Island. The Karmutsen Formation, which is well exposed southeast of Port Alberni, comprises pillowed basalt, massive basalt and pillow breccia. Pillow lavas occur locally near the base of the section. Flows are commonly aphanitic and amygdaloidal.

The Upper Triassic **Quatsino Formation** massive to thick-bedded limestone occurs south of Mt. Spencer, and in contact areas with intrusive rocks, is host to the majority of known economic skarn deposits on Vancouver Island.

North-northwesterly trending axial uplifts are believed to be the oldest (before Late Cretaceous) structural features of south-central Vancouver Island. Additional tilting, folding and uplift occurred after the Late Cretaceous. Sicker Group rocks occur at the core of these uplifts. Asymmetric northwest-trending, southwest-verging antiforms with subvertical southwest limbs and moderately dipping northwest limbs, mapped in the Buttle Lake and Cameron-Nitinat River areas, are thought to have formed during the Jurassic.

Economic Setting

Volcanogenic massive sulphide deposits are presently the most economically significant exploration targets within Sicker Group volcanic rocks. Known deposits include Westmin Resources' Buttle

Lake Mine deposits, where ore minerals include sphalerite, chalcopyrite, galena, tetrahedrite-tennantite, minor bornite and covellite hosted by pyritic rhyolitic to rhyodacitic volcanic and pyroclastic rocks of the Myra Formation. Proven reserves of the Lynx, Price and Myra deposits are 926,600 t grading 1% Cu, 0.9% Pb, 7.4% Zn, 2.06 g/t Au (0.06 oz/ton), 89.1 g/t Ag (2.06 oz/ton) 1983. Mineable ore reserves of the H-W deposit based on a 2700 t/day production rate and $33 Cdn. cut-off grade, are 13,302,000 tonnes grading 2.02 g/t Au (0.059 oz/ton), 30.38 g/t Ag (0.886 oz/ton), 1.91% Cu, 0.27% Pb, 4.48% Zn (McKnight, 1987).

The Twin J Mine orebodies near Duncan on Mt. Sicker, which are approximately 46 m apart, contain pyrite, chalcopyrite, sphalerite and minor galena in a barite-quartz-calcite gangue and chalcopyrite in quartz and occur in schists derived from the Myra Formation. Total production from 1898 to 1964 was 277,400 t producing 1,383,803 g Au, 29,066,440 g Ag, 9,549,590 kg Cu, 20,803,750 kg Zn, 164,590 kg Pb and 4.5 kg Cd.

Recent exploration on the Lara property (56 km southeast of the Fitzwater Property) has traced massive sulphides in the Coronation zone along a strike length of 1500 m, over a true width of 3.9 m. Published reserves are 837,000 tonnes grading 3.26 g/t Au, (0.095 oz/ton), 89.5 g/t Ag (2.61 oz/ton), 3.59% Zn, 0.62% Cu, and 0.81% Pb. Two kilometres to the north four diamond drill holes intersected several polymetallic horizons over a strike length in excess of 2.4 km (Northern Miner, January 1987).

In the Port Alberni area, five past producing mines occur. These include the Thistle Mine (3 km north of the Fitzwater property) which contains disseminated and massive sulphide mineralization within pyritic, quartz-sericite schists and at their contact with chlorite altered mafic volcanics of the Sicker Group.

Exploration by Westmin Resources Ltd. has located 16 Cu and/or Au occurrences over a strike length of 4.6 km grading up to 16.8 g/t Au (0.049 oz/ton) over 2.1 m (Benvenuto, 1984).

The Havilah Mine, Vancouver Island Gold Mine, Black Panther Mine and 3-W Mine are quartz vein deposits within Sicker Group rocks and/or Island Intrusions diorite which produced Au, Ag with or without Cu, Pb and Zn.

5.0 PHASE III EXPLORATION

5.1 Property Geology and Mineralization

Geological mapping has shown the Fitzwater Group to be underlain by rocks of the Paleozoic Sicker Group and Triassic Vancouver Group (Figure 3). Volcano-sedimentary rocks (Unit 2) have been mapped east of Rift Creek. They consist of thin bedded lithic tuff, pyritic chert, and basaltic flows to diabasic sills. The flow units may be correlative with the "Mine Flow Unit" (Benvenuto, 1984) which hosts the Thistle Mine (to the northwest). The volcano-sedimentary rocks lie in the northeast part of the Water claim, strike northeast with moderate to steep dips to the southeast, and overlie Unit 1 volcanics.

Unit 1 volcanics outcrop on most of the Lat claim and on the eastern part of the Water claim. They consist of massive basaltic flows, pillow basalts, agglomeratic lapilli tuffs, and flow breccia. Strikes are generally northwest with steep dips to the northeast. North to northwest-trending regional shear zones and associated faults crosscut Units 1 and 2. These intensely foliated zones are characterized by sericitic and ankeritic alteration. Slickensides on fault surfaces indicate possible east-west movement.

The Buttle Lake Formation (Unit 5) outcrops on south-central and northeastern parts of the Water claim, and the central area of the Lat claim. It consists mainly of interbedded light grey bioclastic (crinoidal) limestone and medium grey to black calcareous siltstone. Buttle Lake Formation rocks form a dip slope, being in unconformable contact (dipping 25°E to 30°E) with underlying Unit 1 volcanics and themselves underlying Triassic Vancouver Group volcanics to the west. Undulatory bedding and intense local shearing within the Buttle Lake Formation may have resulted from a combination of paleotopography and folding related to regional and local deformation.

The Buttle Lake Formation is host to several near surface, shallowly dipping gold-bearing quartz and quartz-carbonate veins (locally up to 30 cm thick). Total sulphide content of up to 75% includes variable combinations of pyrite-arsenopyrite-sphalerite-chalcopyrite-galena-pyrrhotite. Phase IIIc diamond drilling has discovered several intensely altered quartz-carbonate veined, polymetallic sulphide-enriched horizons at depth within the Buttle Lake Formation. These horizons have not yet been found in outcrop.

Triassic Vancouver Group (Unit 6) rocks underlie most of the remainder of the Fitzwater Group. They are characterized by maroon weathering and consists of massive basaltic flows, pillow basalts, and pillow breccias.

A summary of highlights from rock sampling within the 1987 grid area is listed by zone (Figure 3) below.

Sample#	**Type**	**Au g/t**	**Other g/t**

1. M6 Creek Zone - the veins are exposed along 175 m of strike (* indicates sample taken along vein for continuity, usually 2 m length):

20031*	6-10 cm wide vein chip	32.40	
20033*	4- 5 cm " " "	8.67	
20035*	2- 5 cm " " "	0.79	
20036*	4- 8 cm " " "	29.83	
20038*	10 cm " " "	41.28	
20040*	5- 8 cm " " "	17.14	
20051	grab	11.18	24.0 Ag
20052	"	7.27	91.9 Ag
20053	"	16.94	32.2 Ag
20054	"	22.32	61.7 Ag
20055	"	4.18	48.0 Ag
20056	"	12.24	347.0 Ag
20057	"	3.98	41.1 Ag
20086*	10-20 cm wide vein chip	5.35	
20091*	10 cm " " "	36.14	
20092	1.0 m chip	0.69	
20094*	10 cm wide vein chip	33.70	
20097*	10 cm " " "	13.61	

Sample#	Type	Au g/t	Other g/t
20100*	10 cm wide vein chip	25.75	
20200	grab	10.25	17.4 ppm Ag
22652*	12 cm wide vein chip	13.06	
22654*	15 cm " " "	23.31	
22656*	15 cm " " "	6.31	
22658*	15 cm " " "	7.65	
22660*	12 cm " " "	12.99	
22662*	10 cm " " "	17.66	
22665	grab	0.72	

2. 23+50S Creek Zone - veins strike oblique to the creek, exposed along 100 m of strike:

20026	grab	7.34	
20027	"	44.57	16.16% Zn
20041	"	8.02	
20042	"	9.94	
20043	"	6.93	
20085	"	13.27	
22751	"	5.35	
22752	"	24.24	

3. Nicki Creek Zone - veins strike approximately perpendicular to the creek, exposed along a 125 m section:

20137	grab	1.82	14.7 ppm Ag
20140	"	12.62	27.4 Ag, 7.88% Zn
20141	"	1.34	9.3 ppm Ag
20142	"	0.86	46.6 Ag, 1.92% Pb, 2.62% Zn

4. M3 Road Zone - approximately 175 m x 150 m zone (surface area) exposed along road and as indicated by soils:

2969	grab	41.04	188.7 ppm Ag, 114,870 ppm Zn
20155	"	5.18	19,135 ppm Zn
20170	"	31.34	21.0 ppm Ag
20171	"	17.66	132.5 ppm Ag, >99,999 ppm Zn
20172	"	2.54	32.3 pm Ag, 38,409 ppm Zn
22670	"	35.04	

Sample#	Type	Au g/t	Other g/t

5. M4 Road Zone (M4 Road) - approximately 200 m x 200 m zone (surface area) exposed along road and as indicated by soils:

20126	grab	3.98	26.1 Ag
20133	"	3.02	4,211 ppm Zn
20199	"	7.20	17.6 ppm Ag
22674	"	1.41	
22675	"	5.93	
22676	"	1.30	
22678	4 m chip	3.15	
22679	grab	1.34	

6. 11+00 Zone (L11+00S) - approximately 200 m x 100 m zone (surface area) exposed along road and as indicated by soils:

20016	grab	1,200 ppb	2,204 ppm Zn
20175	"	23.25	6.7 ppm Ag

7. North Rift Creek Zone - local zones exposed along N. Rift Creek and the nearby Panther Road:

20112	grab	1,960 ppb
20115	"	700 ppb
20192	"	0.45

5.2 Soil Geochemistry

A total of 1006 soil geochemical samples was collected at 25 m intervals along a 23.85 line-km grid and analyzed for gold by atomic absorption and for a 30 element suite by ICP during the Phase IIIa exploration program. The result was the discovery of a significant broad zone (1400 m long, 500 m wide) of highly anomalous gold geochemistry with coincident silver, zinc, and arsenic anomalies overlying the Buttle Lake Formation (Figure 4).

At least 3 discrete zones, generally striking north-northwest to south-southeast, can be identified within the broader anomaly. The strongest, Zone 1, is approximately 725 m long (from 16+75S to L24+00S) and up to 275 m wide. Geochemical highlights from this zone are as follows:

Station	Gold (ppb)	Other (ppm)
L23+00S 0+50E	15,000	33.7 Ag, 810 Zn, 11582 As, 479 Cu, 629 Pb
L22+00S 2+00E	5,600	4.6 Ag, 131 Zn, 207 As, 140 Cu, 186 Pb
" 1+75 E	4,200	4.9 Ag, 131 Zn, 158 As, 110 Cu, 157 Pb
L21+00S 2+00E	2,020	2.6 Ag, 418 Zn, 123 Cu
L19+50S 1+25E	2,240	1.2 Ag, 344 Zn
" 0+00E	1,240	1.0 Ag, 1214 Zn, 169 As

Phase IIIc diamond drilling has concentrated on this zone.

Zone 2 is approximately 1200 m long (from L26+00S to L14+00S) and up to 100 m wide. Geochemical highlights from this zone include:

Station	Gold (ppb)	Other (ppm)
L1+00E 37+50S	1,160	(1986 grid)
L26+00S 2+75E	380	
L23+50S 3+25E	350	614 Zn
L19+50S 4+75E	550	101 Zn

Zone 3, approximately 100 m long (from L21+50S to L20+50S) and 100 m wide is limited in extent by topography and stream boundaries. Highlights from this zone include:

Station	Gold (ppb)	Other (ppm)
L20+50S 0+75W	300	724 Zn
" 1+25W	200	1.2 Ag, 646 Zn
L21+50S 0+50W	190	1.1 Ag, 232 Zn, 113 Cu

Geological mapping and prospecting has shown that the anomalies described above are related to sulphide mineralization in quartz veins and quartz-carbonate altered zones related to shearing.

5.3 Trenching

A back-hoe excavator was used to expose rocks underlying high soil geochemical values in two locations (Figure 3). The 11+00S trench (approximately 40 m long) tested a 1986 soil geochemistry high of 2100 ppb Au (1987 soil re-sample returned a value of 1600 ppb Au). Trenching revealed that at least one silicified hornblende feldspar porphyritic dyke with crosscutting quartz-calcite veins occurs in the area. The best result from rock samples from the area is 4300 ppb Au, 1.5 ppm Ag, and 294 ppm Cu from a grab sample. Adequate exposure was not achieved for proper chip sampling. The 22+00S trench (approximately 40 m long) exposes rocks adjacent to gold geochemical highs of 5600 ppb and 4200 ppb (soil geochemistry Zone 1). The peak rock sample value (0.022 oz/T Au (0.75 g/t), 6.7 ppm Ag, 1113 ppm As, 480 ppm Cu) was returned from a 0.75 m chip sample across a bioclastic siltstone crosscut by several quartz-carbonate filled shears containing 4-7% pyrite and trace arsenopyrite. Further trenching is required to explain more adequately the high soil values in this area.

5.4 Induced Polarization Geophysics Survey

A 2.5 kW Huntec system was used to conduct 10.825 line-km of dipole-dipole IP geophysics with 25 m station spacing. The geophysical survey resulted in the identification of at least 4 north-northwest to south-southeast trending chargeability anomalies (Figure 4). Anomaly A, strongly correlative with soil Zone 3 and moderately correlative with the southern extension of soil Zone 1, is at least 600 m long and 100 m wide. It has intrinsic chargeabilities ranging from 20 to 70 milliseconds, generally with corresponding resistivity lows. Anomaly B is strongly correlative with soil Zone 1. It has intrinsic chargeabilities ranging from 25 to 50 milliseconds, locally extending to depth, and generally with corresponding resistivity lows. Anomaly C, within the broad soil anomaly, is up to 300 m long and 75 m wide with intrinsic chargeabilites ranging from 22 to 30 milliseconds, locally with corresponding resistivity lows. Anomaly D consists of two narrow north-south trending polarizable horizons which appear to merge into one chargeability anomaly at about L21+00S. It is up to 500 m long and 75 m wide with intrinsic chargeabilities of up to 60 milliseconds extending to depth. This zone is moderately correlative with soil Zone 2.

The strong positive correlation between the soil geochemistry and chargeability surveys when considered with the underlying geology, indicates a dual cause for the pattern of anomalies seen on the Fitzwater Group. Specific high geochemical and/or chargeability anomalies are due to the near surface subcropping of gold-bearing sulphide-enriched quartz veins or quartz-carbonate shear zones. The north-northwest to south-southeast trend of the geochemical/geophysical anomalies reflects orientations of the quartz veins subparallel to bedding as well as regional bedding orientations. The southern portion of chargeability Anomaly D, showing two polarizable horizons with an intervening

chargeability low, likely reflects interbedded argillaceous/non-argillaceous calcareous siltstone horizons. This type of effect also contributes to the larger trends of chargeability anomalies. IP grid extensions are required to further delimit and define these anomalies.

5.5 Diamond Drilling

Phase IIIb consisted of a total of 2852 feet (869 m) of diamond drilling in 9 holes from 4 drill pad locations (Figures 3, 4). Results are summarized below.

DDH Fitz-1-87

Total Depth: 117.32 m

Objective: To intersect the M3 Road showing (1.197 oz/T, 40.80 g/t Au) and a chargeability high at depth.

Lithologies Intersected: Entire hole in interbedded light to medium grey bioclastic calcareous siltstone and black calcareous siltstone. The vein intersected in the 51.00 m to 51.25 m interval projects to M3 Road showing (vein contains 30% pyrite, 30% sphalerite). The IP high is probably a result of the draping effect caused by this sulphide rich vein and the underlying contact between non-argillaceous and argillaceous rocks.

Highlights:

From (m)	To (m)	Interval (m)	Au oz/T	Au g/t	Other (ppm)
3.66	4.14	0.48	0.008	0.27	
4.14	4.35	0.21	0.033	1.13	
51.00	51.25	0.25	0.025	0.86	
62.90	63.80	0.90	0.012	0.41	
83.08	83.24	0.16	70 ppb		2.9 Ag, 102 Cu, 2910 Zn, 1417 Pb

DDH Fitz-2-87

Total Depth: 78.01 m

Objective: To achieve a second intersection of the high grade M3 Road showing and to complete the geological profile in this section of the property.

Lithologies Intersected: Intercalated character seen in Fitz-1-87 does not repeat. Upper 50 m consists of light grey bioclastic (crinoidal) calcareous siltstone. From 50 m to end of hole is dark grey to black calcareous siltstone. Interval of gold-bearing quartz-carbonate veining within calcareous siltstones from 35.76 m to 36.90 m loosely correlates with M3 Road showing.

Highlights:

From (m)	To (m)	Interval (m)	Au oz/T	Au g/t	Other (ppm)
35.76	35.88	0.12	0.101	3.46	10.6 Ag, 5484 Zn, 806 As, 218 Cu, 541 Pb
35.88	36.02	0.14	0.012	0.41	1.7 Ag, 394 Zn, 159 As
36.02	36.74	0.72	0.002	0.07	108 Zn
36.74	36.90	0.16	0.012	0.41	362 Zn, 113 As

DDH Fitz-3-87

Total Depth: 123.42 m

Objective: To intersect high soil geochemistry, projection of M4 Road showing (4 m chip sample returning 0.092 oz/T, 3.15 g/t Au), and flank of IP chargeability high.

Lithologies Intersected: Interbedded dark grey to black calcareous siltstone and light to medium grey, locally bioclastic, calcareous siltstone dominate section to 75.97 m. Quartz-carbonate veining occurs sporadically throughout, but with minimal mineralization. Minor Fe-carbonate and sericitic alteration associated with strong foliation occurs from 63.95 m to 75.97 m. Fine to medium-grained tuffs and lapilli tuffs complete section to end of hole. High zinc values at top of hole may relate to local soil geochemistry anomaly. M4 Road showing not intersected as volcanic contact is closer to surface than expected. Local chargeability highs probably due to variable argillaceous content in calcareous siltstones.

Highlights:

From (m)	To (m)	Interval (m)	Au oz/T	Au g/t	Other (ppm)
6.26	7.01	0.75			1.0 Ag, 141 Zn, 56 Pb
7.29	8.02	0.73			0.6 Ag, 137 Zn
115.00	115.84	0.84	0.021	0.72	1.2 Ag, 179 Cu, 222 As
118.93	119.08	0.15	40 ppb		1.0 Ag, 601 Zn, 857 Cu

DDH Fitz-4-87

Total Depth: 142.61 m

Objective: To intersect coincident IP chargeability and gold soil geochemistry highs. To begin to define nature of contact between Buttle Lake and underlying volcanics in this area of the property.

Lithologies Intersected: Upper section consists of interbedded dark grey to black calcareous siltstone and light to medium grey, locally bioclastic, calcareous siltstone. Narrow (less than 4 cm) quartz and quartz-carbonate veinlets containing up to 30% total sulphides (mainly pyrite and sphalerite; mode 2-4% total sulphides) occur sparsely throughout Buttle Lake Formation section, to 92.58 m. Moderate Fe-carbonate and sericitic alteration associated with strong foliation and moderate brecciation occurs from 92.58 m to 97.71 m. Dark green fine-grained tuff completes section to end of hole. Moderate gold, silver, zinc, and copper values throughout top of hole likely contribute to local high soil geochemistry. Combination of above and variable argillite content likely contributes to local chargeability anomaly.

Highlights:

From (m)	To (m)	Interval (m)	Au oz/T	Au g/t	Other (ppm)
11.08	11.20	0.12	290 ppb		1.1 Ag, 15309 Zn, 407 Cu
15.25	15.46	0.21	70 ppb		0.6 Ag, 958 Zn
69.17	69.44	0.27	0.057	1.95	3.6 Ag, 137 As, 80 Pb
79.75	80.04	0.29	150 ppb		296 Zn, 55 As
125.98	126.45	0.47	40 ppb		1.0 Ag, 1340 Zn, 129 Cu, 355 Pb

DDH Fitz-5-87

Total Depth: 109.70 m

Objective: To intersect coincident soil geochemistry and IP chargeability anomalies and to provide a more complete geological profile of this area of the property.

Lithologies Intersected: Section to 86.52 m consists of inter-bedded dark grey to black calcareous siltstone and light to medium grey, locally bioclastic, calcareous siltstone. Sparse quartz and quartz-carbonate veinlets with up to 25% total sulphides (mainly pyrite; mode 1-3% total sulphides) occur throughout section. Moderate Fe-carbonate and sericitic alteration associated with strong foliation and moderate local brecciation occurs from 86.52 m to 89.82 m. Dark green fine-grained to lapilli tuff completes section to end of hole. Weak gold, silver, zinc, and copper values at top of hole likely contribute to local high soil geochemistry. Combination of above and presence of dark grey (argillaceous) calcareous siltstone in upper section of hole likely accounts for local chargeability anomaly.

Highlights:

From (m)	To (m)	Interval (m)	Au oz/T	Au g/t	Other (ppm)
8.59	8.93	0.14	50 ppb		0.6 Ag, 797 Zn
11.38	11.52	0.14	90 ppb		166 As, 6858 Zn, 124 Cu
47.54	47.73	0.19	270 ppb		1.0 Ag, 591 Zn, 314 As

DDH Fitz-6-87

Total Depth: 78.87 m

Objective: To intersect the projection to depth of the M4 Road showing (see Fitz-3-87 objectives) and local IP chargeability anomaly.

Lithologies Intersected: Section to 52.82 m consists of interbedded dark grey to black, locally bioclastic, calcareous siltstone and light to medium grey, locally bioclastic, calcareous siltstone. Minor quartz and quartz-carbonate veinlets, locally sulphide-enriched (up to 5% pyrite) occur throughout upper 63 m of hole. Moderate to intense Fe-carbonate and sericitic alteration occurs from 52.82 m to 58.12 m (associated with strong foliation and local intense brecciation). Fine-grained volcanic tuff completes the section to end of hole. Local chargeability highs are likely a result of argillite content variations. The projection of the M4 Road showing was not intersected due to shallow occurrence of volcanics.

Highlights:

From (m)	To (m)	Interval (m)	Au oz/T	Au g/t	Other (ppm)
11.42	11.89	0.47	140 ppb		
12.32	12.43	0.11	120 ppb		0.7 Ag, 18928 Zn, 138 Cu, 119 As
21.03	21.23	0.20	180 ppb		216 As

DDH Fitz-7-87

Total Depth: 69.50 m

Objective: To intersect local IP chargeability anomaly and provide a complete geological profile for this area of the property.

Lithologies Intersected: Section to 45.24 m consists of interbedded dark grey, calcareous siltstones and light grey, locally bioclastic, calcareous siltstones as in hole 6. Intensely sheared and Fe-carbonate/sericite/hematite altered siltstones occur to 57.70 m. Fine to medium-grained dark green volcanic tuffs complete the section to end of hole. Local chargeability highs are likely a result of argillite content variations. The contact between Buttle Lake Formation and underlying volcanics, strikes approximately north-northwest and dips east (25-30°) based on its geometry in the drill holes.

Highlights:

From (m)	To (m)	Interval (m)	Au oz/T	Au g/t	Other (ppm)
20.80	21.02	0.22	0.018	0.62	470 Cu, 30643 Zn, 1.9 Ag, 153 As, 212 Cd
21.64	21.83	0.19	0.046	1.58	461 Cu, 22113 Zn, 2.4 Ag, 581 As, 175 Cd

DDH Fitz-8-87

Total Depth: 71.65 m

Objective: To intersect coincident high IP chargeability and gold soil geochemistry.

Lithologies Intersected: Section to 46.43 m consists of interbedded dark grey calcareous siltstones and light grey, locally bioclastic, calcareous siltstones as in holes 6, 7. Quartz and quartz-carbonate veinlets, with sparse sulphide enrichment common throughout section. Section from 46.43 m to 58.61 m consists of interbedded Fe-carbonate/sericite-altered strongly foliated calcareous siltstone and dark green fine-grained tuff (extremely oxidized at lower tuff contact). Dark green fine-grained tuff, locally chlorite-altered, completes section to end of hole. Coincident geophysical and geochemical anomalies are likely due to the presence of a sulphide-rich horizon at the same approximate depth as an increase in argillite content (at approximately 11 m depth).

Highlights:

From (m)	To (m)	Interval (m)	Au oz/T	Au g/t	Other (ppm)
10.88	11.11	0.23	0.016	0.55	1006 Zn, 145 As
11.28	11.38	0.10	0.029	0.99	536 Zn, 231 As
37.76	37.87	0.11	80 ppb		27.2 Ag, 3264 Zn, 7193 Pb, 280 Cu
39.89	40.01	0.12	0.044	1.51	5250 Zn, 253 As
56.26	56.55	0.29	0.033	1.13	262 Zn, 118 As

DDH Fitz-9-87

Total Depth: 78.35 m

Objective: To intersect the projection to depth of the M4 Road showing (see Fitz-3-87 objectives). To intersect local chargeability high.

Lithologies Intersected: Section to end of hole consists of interbedded light to medium grey, locally bioclastic, calcareous siltstone and dark grey calcareous siltstone. Narrow tuffaceous intercalations were intersected from 52.27 m to 52.42 m and from 56.39 m to 56.48 m. An argillaceous horizon with an associated quartz vein containing approximately 50% pyrite was intersected from 20.40 m to 21.34 m (likely accounts for local chargeability anomaly). This may correlate with the projection of the M4 Road showing but is relatively unmineralized (40 ppb Au, 547 Zn, 162 As).

No significant intersections.

6.0 CONCLUSIONS

1. Phase III geological, geochemical, and geophysical exploration of the Fitzwater Group has resulted in the delineation of a large zone (1400 m long by 500 m wide) of coincident IP chargeability and Au ± Ag, Zn, As soil geochemical anomalies in an area underlain by Sicker Group Buttle Lake Formation limestone and calcareous siltstone.

2. Mineralization exposed on surface within the anomalous zone consists of quartz and quartz-carbonate veins up to 30 cm wide and containing up to 75% sulphides. Rock sample results from the showings include 41.28 g/t Au over 10 cm and, from grab samples, 12.24 g/t Au, 347.0 g/t Ag; 44.57 g/t Au, 16.16% Zn; 41.04 g/t Au, 188.7 ppm Ag, 114,870 ppm Zn; 46.6 ppm Ag, 1.92% Pb, 2.62% Zn.

3. Diamond drilling was carried out in an area of secondary interest due to active logging in the area of primary interest. Results indicate that in this area of the property many of the IP chargeability highs are due to argillaceous horizons in the calcareous siltstones. A number of sulphide-rich quartz and quartz-carbonate veins also contribute to the IP anomalies, as well as to the geochemical anomalies. Mineralized intersections include 0.27 m grading 1.95 g/t Au, 0.84 m grading 0.72 g/t Au, and 0.26 m grading 1.82 g/t Au. Values of up to 27.2 ppm Ag, 7193 ppm Pb over 0.11 m and 30,643 ppm Zn over 0.22 m were also returned.

4. Phase IIIc diamond drilling was carried out in the area of surface showings. Results will be reported when available.

Respectfully submitted
MPH CONSULTING LIMITED

T. Neale, B.Sc.

February 26, 1988

CERTIFICATE

I, T. Neale, do hereby certify:

1. That I am a graduate in geology of The University of British Columbia (B.Sc. 1978).

2. That I have practised as a geologist in mineral exploration for 12 years.

3. That the opinions and conclusions contained herein are based on fieldwork carried out on the Fitzwater Group by MPH Consulting Limited personnel from July to November 1987.

4. That I own no direct, indirect, or contingent interest in the subject property or shares or securities of Crew Minerals Inc. or associated companies.

T. Neale, B.Sc.

Vancouver, B.C.
February 26, 1988

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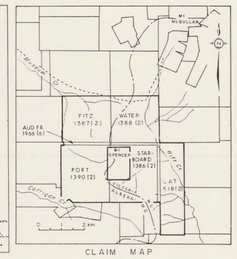
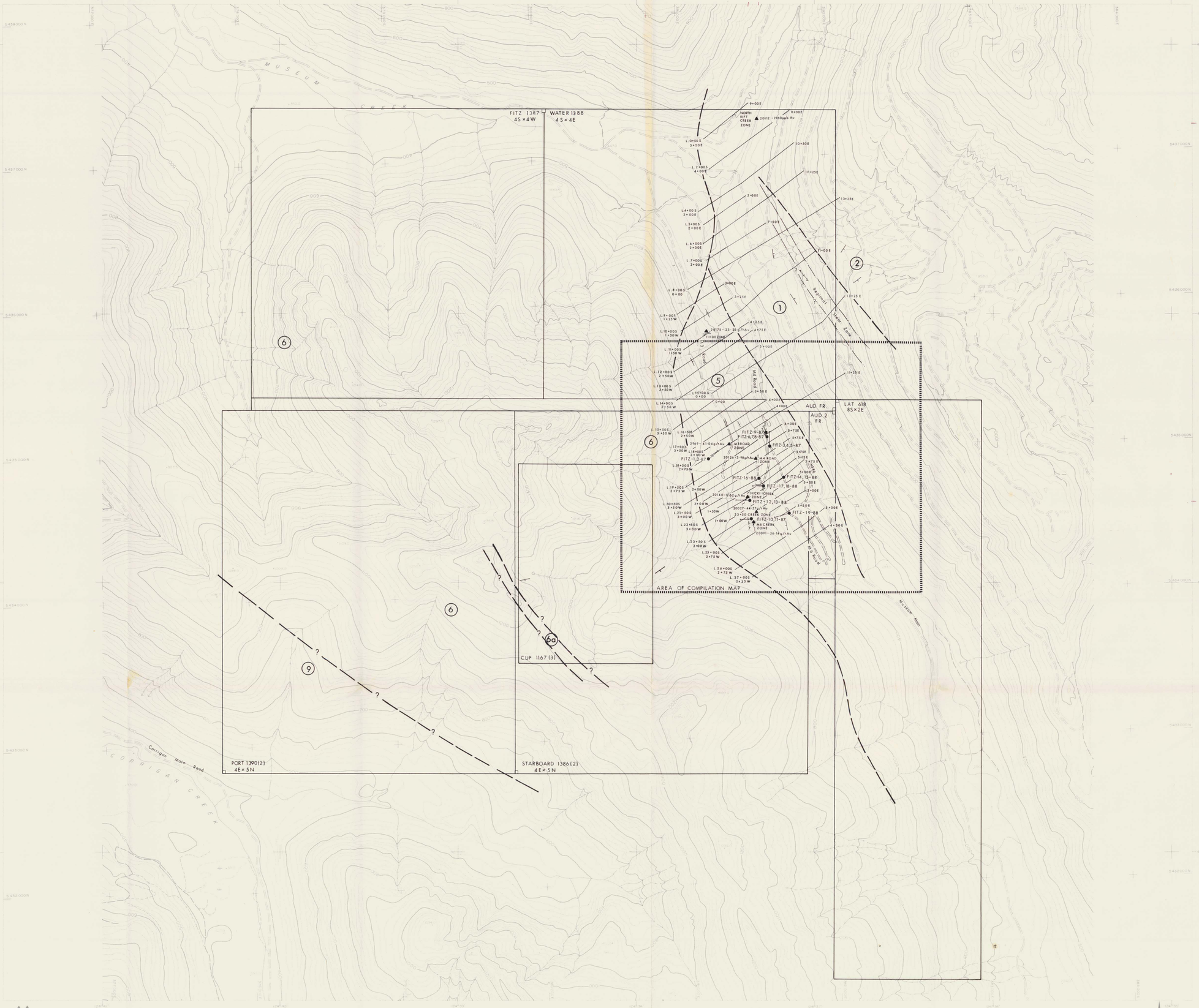


CLAIM MAP



LEGEND

GENERAL LITHOLOGIES

		Stratigraphic Correlation
JURASSIC		
9	Granodiorite	Island Intrusions
TRIASSIC		
Vancouver Group		
6	Dark green to black massive to pillowed and pillow breccia basalts. Local calcite amygdules; commonly hornblende and/or feldspar porphyritic. Local hematite alteration. Sparse carbonate alteration. Trace disseminated pyrite throughout.	Karmutsen Formation
	a) Intraformational(?) Bryozoan limestone horizon.	
PALEOZOIC		
Sicker Group		
5	Interbedded light grey bioclastic (crinoidal) limestone and medium grey to black calcareous siltstone and argillite. Local crinoidal biohermns. Local graphitic laminations and horizons. Local intense brecciation accompanied by iron carbonate and quartz stockwork veining (commonly host to pyrite-chalcopyrite-sphalerite ± arsenopyrite ± pyrrhotite ± galena mineralization).	Buttle Lake Formation
2	Bedded dark green lapilli tuffs to fine-grained tuffs.	Myra Formation
1	Medium to dark grey-green interbedded massive basaltic flows and lapilli to agglomeratic lapilli tuffs. Calcite and iron carbonate-filled amygdules common. Chlorite and amphibole porphyritic texture common. Trace fine-grained disseminated pyrite and chalcopyrite.	Nitinat Formation

SYMBOLS

- Geological contact (approximate, assumed)
- Shear zone boundary
- Fault, showing dip
- ▲ 20175 — Anomalous rock sample with result
- Bedding
- Foliation (vertical)
- L 11+00S — 11+00E — Grid line
- ● FITZ-1, 2-87 — Collar of diamond drill hole(s)
- Trench
- Road
- Claim boundary with LCP

0 200 400 600 800 1000 m

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PROPERTY PLAN, GEOLOGY AND GRID LOCATION MAP
FITZWATER GROUP
VICTORIA AND ALBERNI MINING DIVISIONS

Project No:	V 227	By:	T.M.N.
Scale:	1:10000	Drawn:	J.S.
Drawing No:	3	Date:	FEBRUARY 1988.

MPH Consulting Limited

McElhanney

PRELIMINARY RECONNAISSANCE TYPE MAPPING

LEGEND
GENERAL LITHOLOGIES
SYMBOLS
General lithological contact
Fault (dip direction indicated)
General local bedding orientation
Highlight soils (ppb Au)
Anomalous gold soil geochemistry
≥ 160 ppb Au
≥ 80 ppb Au
Drill hole collar location
ANOMALOUS INDUCED POLARIZATION GEOPHYSICS
Measured chargeabilities ≥25 ms
Chargeability high (ms)
Correlating resistivity low
I.P. ANOMALY AT SURFACE
Estimated intrinsic chargeability (ms)
Estimated dip
I.P. ANOMALY AT DEPTH
Estimated intrinsic chargeability (ms)
Estimated depth (m)
CLAIM MAP
WATER 1388 (2)
AUD FRACTION
LAT (618)
2E × 8S
STARBOARD (1386)
4E × 5N
CUP 1 (1167)
RIFT CREEK
Nicky Creek
M6 Creek
M 3 Road
M 4 Road
M 2B Road
M 2G Road
M 2B1 Road
M 2 Road
M 5 Road
M 6 Road
Mukum Main Road
FITZ-1,2-87
FITZ-3,4,5-87
FITZ-6,7,8-87
FITZ-9-87
FITZ-10,11-88
FITZ-12,13-88
FITZ-14,15-88
FITZ-16-88
FITZ-17,18-88
FITZ-19-88
0 50 100 150 200 m
NTS 92F/2
GEOLOGICAL BRANCH
ASSESSMENT REPORT
16,731
T P RESOURCES LTD.
COMPILATION MAP
FITZWATER GROUP
VICTORIA AND ALBERNI MINING DIVISIONS
Project No: V 227
By: T.M.N.
Scale: 1:2500
Drawn: J.S.
Drawing No: 4
Date: FEBRUARY 1988
MPH Consulting Limited