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PROPERTY DEVELOPMENT REPORT

McNEIL CREEK

NTS 82 F/8 & 82 G/5

FOR

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1.00 SUMMARY

Property

The McNeil Claim group is located 20-25 kilometres southwest of Cranbrook, B.C. The claims cover stratiform base metal mineralization developed at the "Sullivan Time" Lower-Middle Aldridge contact and a series of Pb-Zn-Ag-Au veins in Middle Aldridge Formation rocks above the Lower-Middle Aldridge contact (LMC).

Program

The 1989 program successfully tested the Sullivan Horizon as well as other stratabound base metal sulphides and mineralized quartz veins within the Aldridge Formation. Twenty-one diamond drill holes, totalling 5621 metres, were completed from September 1989 to February 1990, and tested a series of stratigraphic, structural, geotechnical and geophysical targets.

Ten drill holes tested for bedded sulphides within the Middle and Lower Aldridge Formation. Several occurrences of stratabound zinc mineralization were intersected in the lower Middle Aldridge Formation, the strongest of which are 1.74% Zn from 182.2-182.6 metres in drill hole M-89-3 and 607 ppm Zn over 3.7 metres in drill hole M-89-7. The mineralization generally occurs as banded sphalerite and as fracture fillings and disseminations, and probably represents remobilized bedded sulphides. One drill hole, M-89-8, penetrated the Lower/Middle Aldridge contact (L.M.C.) at 957 metres and intersected a 24.9 metre section of anomalous zinc, with several intervals over 300 ppm. This stratabound anomaly correlates with the "Sullivan Horizon" encountered 1600 metres to the south in diamond drill hole M-88-7 during the 1988 program.

Sulphide mineralized quartz veins were tested with eleven holes, ten of which were collared in lower Middle Aldridge sediments just above the hangingwall of a regionally extensive, thick gabbro sill ("Hiawatha Sill"). The veins occur in hydrothermally altered sediments near the gabbro hangingwall contact in an orthogonal set of fractures of which two are steeply dipping and one is relatively flat. The most encouraging drill intersections are:

i. 13.99% Pb, 2.11% Zn and 4.02 oz/ton Ag from 79.6-80.25 metres in drill hole M-89-14,

ii. 0.78% cu, 0.082 oz/ton Au in massive pyrrhotite and quartz from 51.7-52.6 metres in drill hole M-89-11 and

iii. 565 ppb Au, 16,182 ppm As from 275.1-275.4 metres in M-89-9.

There is a spatial and genetic relationship between the sulphide mineralized quartz veins and the Hiawatha Sill, With the veins occurring near the juncture of the feeder dyke(s) and the sill. Similar intersections are promising exploration targets.

Recommendations

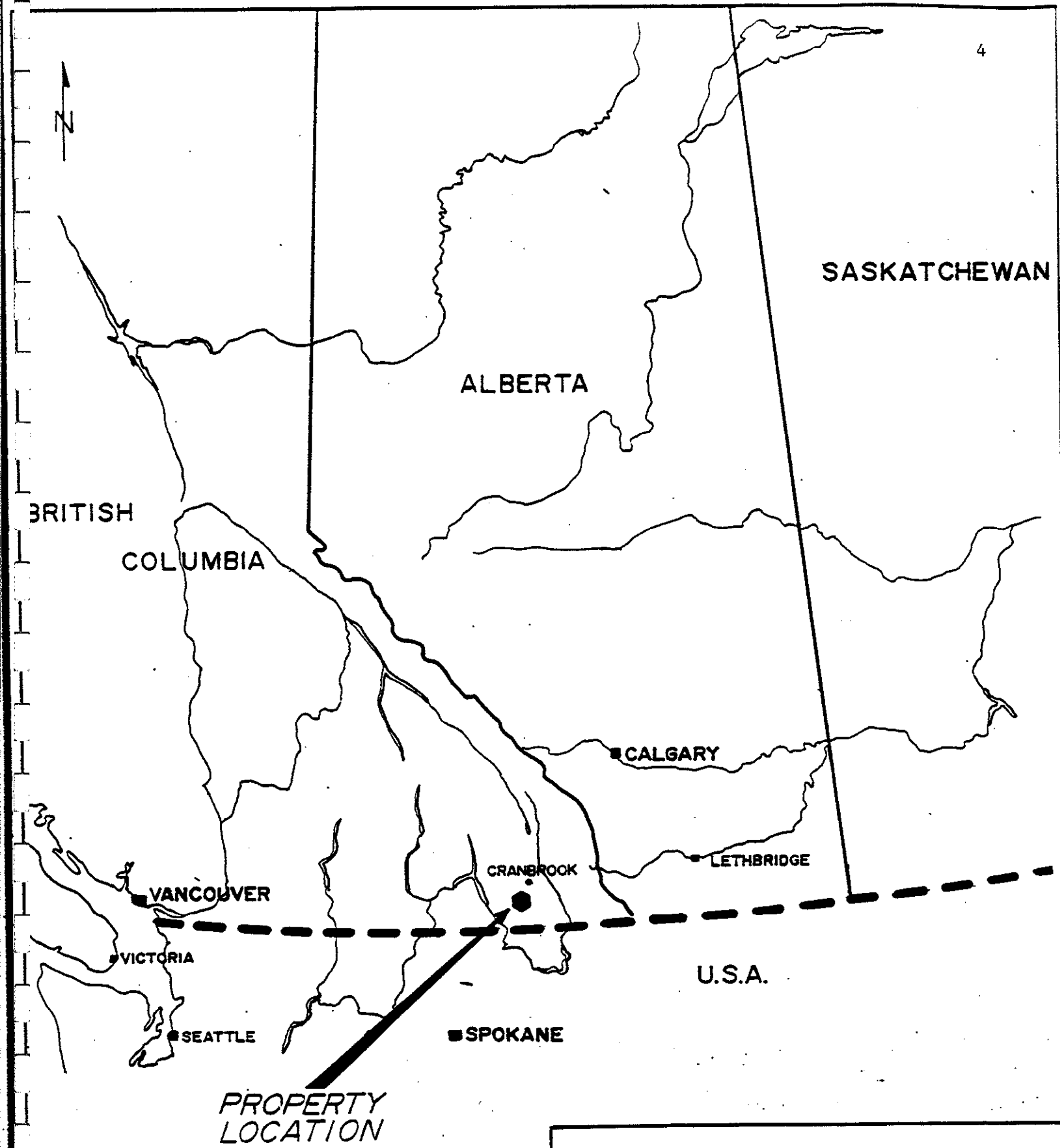
Future exploration should continue to target stratiform and shear controlled base-metal mineralization, and potential gold structures. The recommended $300,000 exploration program for 1990 includes extensive field mapping, geochemical and geophysical surveys, and a follow-up drill program.

2.00 INTRODUCTION

2.10 Location and Access

The McNeil Creek property is located 20 to 25 kilometres southwest of Cranbrook, B.C., and is centered near Longitude 115° 59' W, Latitude 49° 21'N (Fig. 1).

The Property is readily accessible by road. The northern part of the property can be reached by taking the Lumberton road which leaves Highway 3/95 approximately 11 km south of Cranbrook. The southern part of the property is accessible from the Monroe Lake / Lamb Creek road which leaves Highway 3/95 approximately 18 km south of Cranbrook. Logging activity on the southern part of the property occurred some time ago and the tributary roads here are in a deteriorated state.



McNEIL CREEK PROPERTY

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FORT STEELE MINING DIVISION

LOCATION MAP

(FIGURE 1)

2.20 Physiography

The McNeil Creek property is located in the Purcell range of the Columbia Mountains. Topography is moderately rugged with glacially rounded slopes; elevations range from 1370 to 2100 metres. Forest cover consists of Douglas Fir and Larch at lower elevations with Balsam and Alpine Fir at higher elevations. Forest fires which occurred in the last 50 years have resulted in local dense stands of immature Lodgepole Pine. Parts of these stands have been bulldozed and burned and the cleared areas planted by Forestry in the past 5 years. Large portions of the property have been clear-cut logged, to elevations as high as 2000 metres.

2.30 Property

2.31 Geologic Target

Most mineralization seen on property is base metal sulphides, but anomalous gold is known to occur. Both vein type massive sulfides and Sullivan type stratiform, stratabound massive sulfides are exploration targets.

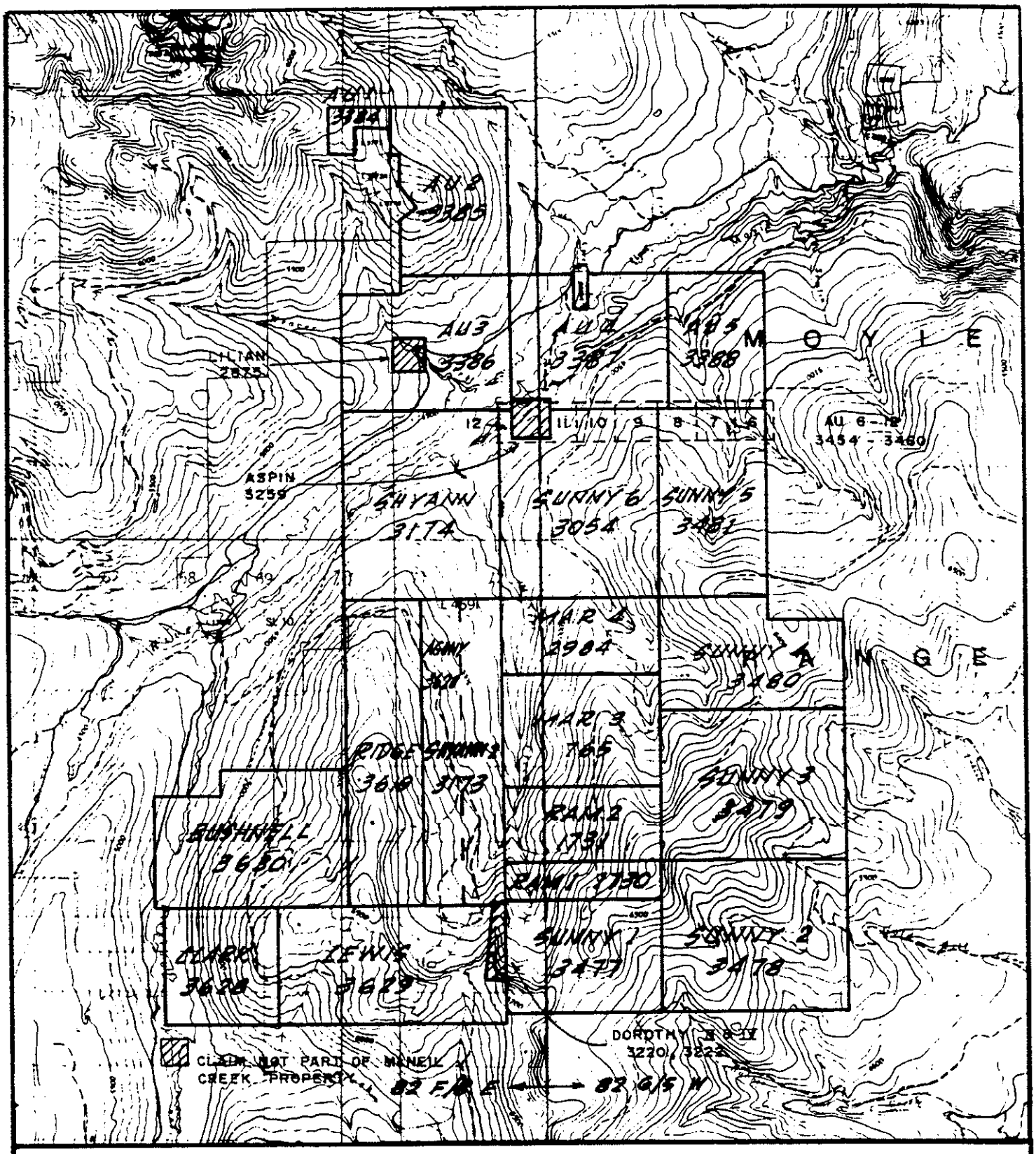
2.32 Claim Group and Status

The McNeil Creek property (Fig. 2) consists of 315 claim units in 29 claims:

Claim	Record No.	Units	Owner	Record Date	Due
Ram 1	1730	4	E. Frost	1982/11/17	1994
Ram 2	1731	8	E. Frost	1982/11/17	1994
Mar 3	765	12	E. Frost	1979/09/20	1994
Mar 4	2984	8	E. Frost	1987/09/11	1994
Sunny 1	3477	12	R.J. McGowan	1989/06/04	1992
Sunny 2	3478	20	R.J. McGowan	1989/06/05	1992
Sunny 3	3479	20	R.J. McGowan	1989/06/05	1994
Sunny 4	3480	15	R.J. McGowan	1989/06/05	1994
Sunny 5	3481	15	R.J. McGowan	1989/06/05	1994
Sunny 6	3054	20	R.J. McGowan	1988/02/03	1994
Shyann	3174	20	S.K.G. Inc.*	1988/08/24	1992
Shyann 2	3175	16	S.K.G. Inc.	1988/08/24	1992
Au 1	3384	4	S.K.G. Inc.	1989/04/11	1992
Au 2	3385	15	S.K.G. Inc.	1989/04/11	1992
Au 3	3386	20	S.K.G. Inc.	1989/04/11	1992
Au 4	3387	16	S.K.G. Inc.	1989/04/11	1994
Au 5	3388	12	S.K.G. Inc.	1989/04/12	1994
Au 6	3454	1	S.K.G. Inc.	1989/05/12	1992
Au 7	3455	1	S.K.G. Inc.	1989/05/12	1992
Au 8	3456	1	S.K.G. Inc.	1989/05/12	1992
Au 9	3457	1	S.K.G. Inc.	1989/05/12	1992
Au 10	3458	1	S.K.G. Inc.	1989/05/12	1992
Au 11	3459	1	S.K.G. Inc.	1989/05/12	1992
Au 12	3460	1	S.K.G. Inc.	1989/05/12	1992
Ridge	3619	16	S.K.G. Inc.	1989/09/22	1992
Agony	3620	8	S.K.G. Inc.	1989/09/22	1992
Clark	3628	9	S.K.G. Inc.	1989/10/03	1992
Lewis	3629	18	S.K.G. Inc.	1989/10/03	1992
Bushnell	3630	20	S.K.G. Inc.	1989/09/29	1992

*South Kootenay Goldfields Inc.

The Ram and Mar claims are under option from E. Frost of Cranbrook and F.P. O'Grady of Kimberley, B.C. Anniversary date of the option agreement is March 23. Terms of the agreement provide for a series of option payments over 6 years beginning in 1988 and an NSR clause with a total payment provision. A 5 kilometre perimeter clause is included. If the original claims revert back to the owners, 3 years assessment credit is to be provided.



McNEIL CREEK PROPERTY

CLAIM MAP

FIGURE 2

0 1000 2000 3000 4000

METRES

2.40 History

Logging activity exposed lead and zinc mineralized quartz veins on what is now the McNeil Creek property in the late 70's; prospector E. Frost made the initial discovery in 1979. That year the St. Eugene Mining Co. (Falconbridge Ltd.)conducted a geochemical survey on the property (Assessment Report 7660 by J.R. Wilson, Oct. 30, 1979). During the next few years Frost trenched and sampled the veins.

During November, 1986 a program of linecutting, geological mapping and soil sampling was conducted by the owners (Assessment Report No. 16,606 by F.P. O'Grady, Dec. 7, 1987).

In March, 1988 the property was optioned to South Kootenay Goldfields Inc. A program of linecutting, geophysical surveying, geological mapping, trenching, grid soil and rock geochemistry, and diamond drilling were completed on the property from May 1988 to March 1989. (Klewchuk and Bapty, 1988).

2.50 1989 Program

Linecutting, geophysical surveying, soil geochemistry and diamond drilling were completed on the McNeil property in 1989 and early 1990. A total of 19.2 kilometres of line was cut, to the north of the 1988 grid, including 1.7 kilometres of additional base-line. Geophysical surveys consisting of UTEM, magnetometer and HLEM were completed over the prepared survey lines, and approximately two kilometres of VLF-EM survey were completed along exploration roads. Twenty diamond drill holes were completed for a total length of 5566 metres. An additional drill hole (DDH M-89-20) was abandoned at 55 metres in overburden.

Field work was performed from August, 1989 to February 1990 under the management of Bapty Research Limited.

Details of expenditures are:

	TOTAL
Tenure	$ 8,375.41
Mapping (Supplies)	1,092.99
Line Cutting	43,776.17
Geophysics	64,333.75
Soil Sampling & Assaying	38,478.00
Bulldozer	5,090.80
Mobilization, Demobilization	9,505.50
Diamond Drilling	756,648.80
Core Sampling and Assaying	6,690.00
Core Handling and Storage	6,021.72
Geology and Transportation	39,174.84
Reclamation	10,663.25
Project Management (Field Supervision, Consulting and Support)	51,795.75
Operator's Fees	107,326.23
Total Program	**$1,148,973.21**

3.00 GEOLOGY

3.10 Regional Geology

Recent mapping by Reesor (1981), Hoy and Diakow (1982), and Hoy (1984) has developed a good understanding of the geology and structure of the Cranbrook area of southeastern B.C. The area lies within the Purcell Anticlinorium, a geologic sub-province which sits between the Rocky Mountain Thrust and Fold Belt to the east and the Kootenay Arc to the West.

In the Core of the Purcell Anticlinorium, the Purcell Supergroup includes up to 11 kilometres of dominantly fine-grained clastic and carbonate rocks. The Anticlinorium is cut by a number of late, regional northeast-trending faults. These faults appear to follow the loci of older structures that had been active intermittently, and locally modified the type, distribution and thickness of late Proterozoic and Paleozoic rocks (Lis and Price, 1976). These changes indicate that, at least locally, these structures were active during deposition of Purcell strata (Hoy, 1979, 1982).

Lower Purcell rocks west of the Rocky Mountain Trench comprise a thick accumulation of dominantly basinal turbidites. (Hoy and Diakow, 1982). Rapid thinning and fining of siltstones to the north, northward-directed paleocurrents, dramatic thickening of turbidites just to the south, and coarse pebble conglomerates located near the basin/platformal transition suggest the east margin of the basin developed by growth faulting. (Hoy, 1979). Early stages in the development of the basin are marked by thick accumulations of Aldridge turbidites and voluminous intrusions of basic sills.

Some of the laterally extensive gabbro sills in the Lower Aldridge and lower part of the Middle Aldridge may be subvolcanic sills that intruded unconsolidated or partially consolidated, water-saturated sediments a few tens or hundreds of metres below the sediment surface. (Hoy, 1979).

The Aldridge Formation is host to one of the world's largest Pb-Zn-Ag deposits. The Sullivan deposit at Kimberley was originally about 160 million tonnes of 12% Pb + Zn with 67 grams per tonne Ag. The stratabound, partly stratiform deposit occurs at the Lower - Middle Aldridge transition zone (the "Lower-Middle Contact" or "LMC").

The distribution of base metal concentrations such as Sullivan, North Star, Stemwinder, St. Eugene, Estella and Kootenay King may be tectonically controlled. The tectonic control may be direct, with zones of crustal weakness localizing deep-rooted basement faults that controlled the outflow of metal-rich fluids, or indirect, with these zones localizing geothermal convective cells that controlled sulfide deposition.

The Aldridge Formation is overlain by a succession of Precambrian formations but these units do not occur on the McNeil Creek property.

3.20 Property Geology

The McNeil Creek Property is entirely underlain by rocks of the Aldridge Formation. Mapping by Hoy and Diakow has defined a gently NNE-plunging syncline which is centered in the south part of the property (Fig. 3).

Lower Aldridge Formation rocks have been mapped on the east limb of the syncline, immediately north of the northeast-trending Moyie Fault. The LMC is projected by Hoy and Diakow (1982) to subcrop in the extreme southeast corner of the claim block (Fig. 3). This contact, which hosts the Sullivan orebody at Kimberley, should be present across all of the property at depths up to 2000 metres.

The west limb of the syncline is cut by the north-trending McNeil Creek Fault, a major steeply west-dipping (?) normal fault with vertical displacement in the order of 1000 metres. Approximately 5 km to the north, the McNeil Creek Fault strikes into the Palmer Bar Fault, a NNE-trending fault showing similar displacement. The Palmer Bar Fault is known to locally carry anomalous gold mineralization with extensive quartz veining. Some of the anomalous gold mineralization encountered by drilling on the McNeil Creek property may be related to a mineralizing event associated with the McNeil Creek Fault.

Several thick, regional, gabbro intrusions ("Moyie Sills") occur on the property. The uppermost of these, the "Hiawatha" sill has been intersected in several exploration drill holes.

South of the McNeil Creek property the Aldridge Formation is cut by the major regional NE-trending Moyie Fault which juxtaposes Precambrian Kitchener Formation rocks on the south against Lower Aldridge Formation rocks on the north, giving a vertical displacement of over 5000 metres.

The east limb of the McNeil syncline is cut by the northwest-trending Little Lamb Creek Fault just east of the McNeil property. This near-vertical fault is east side down with vertical displacement in the order of 300 metres. A fault of similar orientation occurs across the southwest corner of the McNeil Creek property extending into Rabbit Foot Creek. This fault is inferred to be of similar east-side down movement but with minimal displacement.

The structural detail shown on the plan and various sections account for the 1989 drill and field information. Property structure can be interpreted on the basis of the drill hole intersections, supplemented by geophysical data and knowledge of the structural regime. The following structural history is proposed. (Figure 4).

1) Development of the McNeil Creek fault and subsidiary structures.

2) Intrusion of gabbro dykes along these structures with contemporaneous development of sills, and formation of orthogonally oriented, mineralized quartz veins.

3) Development of a local horst block between the N-S striking McNeil Creek Fault and the NW-SE striking fault "F"

4) Consequent development of oblique gravity faults near the juncture of the McNeil Creek and "F" faults. These faults have both vertical and horizontal movement.

It is recognized that this interpretation is complicated by:

i) paucity of traditional Aldridge Formation stratigraphic marker beds, possibly due to tectonism (Note 1).

ii) unreliability of gabbro sills as substitute stratigraphic marker horizons.

iii) difficulty in making a clear distinction between gabbro sill and dyke structures in drill hole intersections.

iv) frequently ambivalent information regarding fault zone orientation vis-a-vis drill core axis and bedding planes resulting in several possible interpretations, and

v) limited surface bedrock exposures and field mapping.

A major east dipping structure (Fault "G"), located on the east side of a gabbro dyke, was intersected in drill holes M-89-4 and 5. Its coincidence with a ground magnetic anomaly and an aeromagnetic anomaly parallel to the McNeil Creek Fault, suggest that it is the McNeil Creek Fault. A similar structure, associated with a ground mag anomaly and gabbro intersections in drill holes M-89-19 and M-88-2, is interpreted as the offset southern extension of Fault "G". This interpretation is formed based on field evidence, but it is recognized that major north-south regional structures such as the McNeil Creek Fault typically have a west dip, and topographic evidence suggests that a second parallel fault outcrops a short distance to the west of the active program area.

The following assumptions were made regarding the Fault "G" structure:

i) it was the focus for emplacement of a feeder dyke for the Hiawatha Sill.

ii) it is either the McNeil Creek Fault, or structurally related to it.

. . . . . .

Note 1: The Hiawatha marker has been identified on the property to the west and southeast, but not in the drilling area. Other potential "non-traditional" markers could not be correlated despite the relatively close spacing of the drill holes.

The nature of the gabbro and fault intersections in hole M-89-19 is enigmatic. The position of the intrusive, coincident with the down dip extension of the sill projected from drill holes M-89-3 and M-89-8, suggests a sill (Fig. 8). The stratiform base metals seen below the gabbro in the three holes supports this interpretation. An alternative interpretation that the gabbro is a dyke structure, is supported by:

i) its relative thinness of 160 metres compared to the normal sill thickness of 220 metres,

ii) a steeply dipping fabric with strong epidote veining throughout most of the intersection,

iii) a generally greater textural variability than that found in sill intersections, and

iv) its lack of a coarse grained phase commonly found in the upper portion of other sill intersections.

Other evidence supporting a dyke structure is its similarity to the unit seen in hole M-89-4 characterized by:

1) strong faulting (Fault G) in the immediate hangingwall of the gabbro dyke(s),

2) an eastward dip to both structures,

3) either magnetite or magnetic pyrrhotite mineralization in the hangingwall fault and/or the dyke,

4) ground magnetic anomalies coincident with the drilled gabbro dyke intersections, and

5) maintenance of the sill/dyke relationship on both sides of the cross-cutting fault "A".

Of further interest, the gabbro intersection in hole M-89-19 is locally anomalous in gold and platinum group elements compared to the sill intersections, with one interval sampling 19 ppb gold, 83 ppb platinum, 63 ppb paladium and 6 ppb rhodium.

Although vein and stratiform massive Pb-Zn-Ag mineralization have been the main targets on McNeil, other possibilities were known to exist. For instance, copper mineralization is present in the veins trenched on surface. Widespread copper mineralization has been seen in the drilling in veins, in narrow stratabound zones, and in sections of gabbro.

Anomalous gold, also widely occurs on the property in quartz veins, sedimentary rocks, gabbro and fault zones, and its presence may be related to the McNeil Creek Fault. This major structure crosses the Moyie drainage to the north, and the Moyie has a long history as a prominent placer gold producer. Although none of the north-flowing tributaries (like McNeil Creek) have any known historic production, there is placer gold present immediately south of the headwaters of McNeil Creek in the upper Lamb Creek and Irishman Creek drainages. Also, a review of Assessment Reports covering claims which were staked in 1989 and now form the west part of the McNeil Creek property, shows reference to a north-trending shear reportedly assayed 0.145 oz/ton gold over a three metre channel sample.

4.00 GEOCHEMISTRY

Soil sampling was done on a grid which is the north and eastward extension of the geophysics grid cut in 1988. Samples were taken at 25 metre spacings on lines 100 metres apart, and analyzed at Kootenay Analytical Labs in Ainsworth for silver, lead and zinc. Results are shown in Figure 13.

4.10 Lead

Several lead anomalies were identified in the 1989 program. They are relatively small compared to the extensive anomaly, coincident with the gabbro sill hangingwall outlined in 1988.

The largest anomaly occurs between 3600N-3900N, and 3500E-4050E. This anomaly has a broad sinuous outline and appears to be coincident with (i) two steeply dipping HLEM anomalies with respective strike directions of approximately 290^{o} and 340^{o}, and (ii) the surface contact of the gabbro sill hanging-wall.

The single point high lead (760 ppm) anomaly located in 1988 at 3700N and 3100E, was more clearly defined by soil sampling on the 1989 grid extension.

A wish-bone shaped anomaly, similar in size to the above, is centered at approximately 4450N, 3000E. This anomaly is a downslope reflection of mineralization occurring at the interpreted outcrop location of the gabbro sill, and/or at a north-south trending HLEM conductor located immediately east of the sill contact. Lead dispersion due to leaching and subsequent aqueous transportation may have occurred along a fault cutting the anomaly.

A small elliptical anomaly, with a maximum Pb value of 475 ppm, is centered at 4900N, 3300E. This anomaly is adjacent to a weak north-south trending HLEM anomaly and the interpreted surface location of the Hiawatha Sill hangingwall contact. The anomaly is also possibly cut by a fault striking on Azimuth 252°. Two very small anomalies situated to the south-west appear to be related to the sill footwall contact.

4.20 Zinc

Zinc values in the grid area are generally low (maximum 422 ppm). The 150 ppm zinc anomaly contours are coincident with the lead anomalies and the zinc/lead ratios are low.

4.30 Silver

Anomalous ($\geq$1 ppm) silver values show a limited range up to a maximum of 5.3 ppm, but generally $\leq$2 ppm. Three anomalies are very small (1-3 points) and occur as restricted areas within the much larger lead-zinc anomalous zones. The largest silver anomaly coincides very well with the lead-zinc anomaly located at 3700N, 3100E. One low (1-1.3 ppm Ag) three point anomaly overlaps a slightly larger zinc anomaly centered at approximately 4000N, 3575E. This latter anomaly is on the projected bedrock/hangingwall contact of the sill.

4.40 Summary

The various anomalies are a reflection of mineralization known to occur:

i) in steeply dipping, sulphide mineralized quartz shear zones

ii) at, or very close to the hangingwall of the gabbro sill and parallel to sub-parallel to it.

The anomalies are typically displaced downslope, and their surface configurations may be partly influenced by cross cutting faults.

5.00 GEOPHYSICS

A series of geophysical surveys, consisting of UTEM, Max-Min I Horizontal Loop EM, and Total Field Magnetics, were conducted on the McNeil Creek property during the period November 3 to December 4, 1989 by S.J. Geophysics Ltd. of Vancouver.

Electromagnetic surveys were done to test for steeply dipping shear zones/ mineralized quartz veins, and for relatively flat lying stratabound sulphides. The magnetic surveys were done to aid in defining the contacts of gabbro sills and dykes.

An additional two line (-2 kilometres) of VLF-EM survey was conducted by Bapty Research staff to assist in fault interpretation.

5.10 UTEM Survey

UTEM (University of Toronto Electro Magnetometer) is a large loop time domain electromagnetic system. This system was primarily used to search for massive to bedded sulphide deposits, both at the Lower/Middle Aldridge (L.M.C.) contact ("Sullivan Horizon") and within the overlying Middle Aldridge formation. Approximately twenty line - kilometres were surveyed, on twenty lines two hundred metres apart, using five separate transmitter loops.

A shallow, apparently flat lying, weak anomaly was located in the south-eastern part of the 1989 grid. Subsequent drilling indicted that this anomaly is due to discontinuous sulphide mineralization at or near the hangingwall contact of the Hiawatha Sill.

This and other conductors were difficult to interpret due to their small size, low conductivity and the large line spacing. The UTEM anomalies coincided with soil geochem anomalies, and steeply dipping conductors were suspected. Part of the area was therefore surveyed, using HLEM, to identify drill targets.

5.20 Maxmin I Horizontal Loop EM Survey (HLEM)

The frequency domain horizontal loop electromagnetic system was used to survey approximately 16 kilometres on 13 lines. This survey was successful in more accurately identifying several steeply dipping weak (<1 mho) conductors. Three of these conductors, with associated Pb/Zn geochemical anomalies, were drill tested, and the source mineralization was identified. The higher frequencies were most effective in detecting the presence of the conductors.

5.30 Magnetic Survey

The magnetometer survey was completed using two Gem-19 Proton Precession memory magnetometers, one as a base station magnetometer, and the other as a field instrument. The purpose of the survey was to trace either fault structures or intrusive contacts having associated magnetite or magnetic pyrrhotite mineralization. The magnetic data primarily reflects the presence of magnetic dykes and faults, whose location is concident with the major north trending McNeil Creek Fault. Aeromagnetic data suggest that the dyke system becomes stronger northward towards the intersection of the McNeil Creek Fault with fault F and the Moyie River Fault.

5.40 VLF-EM Survey

A VLF-EM survey, using a Geonics EM-16 instrument and Hawaii (23.4 kHz) as the base transmitter station, was conducted by Bapty Research staff over a total distance of approximately two kilometres at 12.5 metre intervals. The survey followed two widely spaced north-south oriented exploration roads, to define the location of inferred east-west faults. Results were inconclusive.

6.00 DIAMOND DRILLING

Twenty-one holes were drilled on the McNeil Creek property in 1989 and early 1990 for a total of 5621 metres. The purpose of these holes was to test:

(i) for bedded sulphides within the Middle and Lower Aldridge Formations
(ii) sulphide mineralized quartz vein/shear zones and
(iii) a ground mag anomaly.

Results and conclusions are reviewed in the following discussion.

TABLE 1 DIAMOND DRILL HOLE DATA

HOLE	DEPTH (m)	GRID CO-ORDINATES		AZMITH (°)	DIP (°)	TARGET
M-89-2	304.8	4859N	3332E		-90	L.M.C.*
M-89-3	401.1	4510N	2900E		-90	L.M.C.
M-89-4	111.3	4606N	2931E	270	-45	Mag Anomaly and Bedded Sulphides
M-89-5	164.6	4606N	2931E		-90	" "
M-89-6	255.7	4278N	2707E		-90	Bedded Sulphides
M-89-7	276.1	4594N	3039E		-90	Bedded Sulphides
M-89-8	1083.9	4376N	2948E		-90	Bedded Sulphides & L.M.C.
M-89-9	291.7	3217N	3408E		-90	UTEM Anomaly and Soil Geochem
M-89-10	218.5	3604N	3216E		-90	" "
M-89-11	89.0	4859N	3393E	270	-45	HLEM Anomaly and Soil Geochem
M-89-12	153.0	4859N	3393E	270	-65	" "
M-89-13	121.9	4932N	3466E	270	-45	" "
M-89-14	110.6	3684N	3486E	11	-45	" "
M-89-15	129.8	3684N	3486E	11	-60	" "
M-89-16	126.2	3770N	3412E	11	-45	" "
M-89-17	45.7	3790N	3446E	11	-45	" "
M-89-18	85.3	3714N	3738E	81	-45	" "
M-89-19	887.0+	4122N	3249E		-90	Bedded Sulphides
M-89-20	54.9				-90	L.M.C.*
M-90-1	572.1	5012N	3892E		-90	L.M.C.
MAS 89-1	137.8	=	=	220	-45	Mineralized Shear Zone

* Lower - Middle Aldridge Contact; Sullivan Horizon

\+ Abandoned while still in overburden

= UTM Co-ordinates = 5,471,115N, 570,480E

CORE STORED IN WYCLIFFE B.C.

6.10 Stratiform Sulphide Targets

6.11 Introduction

Nine holes were drilled to intersect bedded sulphides at the Sullivan Horizon, or bedded sulphides within the Middle Aldridge Formation. Hole locations are shown on Figure 4 and a brief synopsis of individual drill hole results is included in Appendix I.

6.12 Discussion

Drill hole M-89-8 intersected base metal sulphides (82 ppm Pb, 222 ppm Zn over a true width of 16 metres) immediately below the L.M.C. This anomaly correlates well stratigraphically with the 7.2 metre true width zinc anomaly (205 ppm) encountered at the "Sullivan Horizon" in drill hole M-88-7. This stratabound mineralization indicates that Sullivan-type synsedimentary sulphide deposition occurred in this region during Lower Aldridge time, but no source direction has yet been defined.

Several holes intersected a series of bedded sulphide intervals, within the lower Middle Aldridge Formation, approximately 120 metres below the Hiawatha Sill. Anomalous intersections are generally in the range 100-250 ppm in zinc, with lesser amounts of lead and copper. The zinc mineralization occurs as fine to medium grained sphalerite, commonly associated with chloritic fractures, but also occasionally as fine disseminations. The spatial congruity of fracture fill, and stratabound zinc sulphides, suggests

i) the original source of the sulphides is syngenetic, and

ii) at least some of the sulphides were remobilized and deposited as fracture fill close to the source.

Evidence for this is shown by the sulphides within the strong zinc anomaly in hole M-89-3 which have a distinctive stratiform character, although metamorphic overprinting has produced re-crystallization and irregular aggregation of the sulphides.

Numerous narrow (0.1-1.0 metres) intersections within the Middle Aldridge have up to 30 ppb gold. These zones always have an association of biotite/chlorite, pyrrhotite, minor pyrite and trace chalcopyrite and they occur either in biotite rich sediments, highly siliceous clasts or concretions. Thin ($\leq$4 cm) "chalcedonic" beds with phyllitic (sericitic) alteration are frequently associated with the clasts. A sample of one chalcedony bed was submitted for petrographic and whole rock analysis (Ref. Appendix III). The presence of tourmaline and anomalously high barium and rare earth elements indicates that these sedimentary beds received chemical input from a process similar to that which produced the Sullivan orebody. Known regional occurrences of stratabound sulphide deposits, within the Middle Aldridge, include the former "Kootenay King" producer. Numerous intersections of stratabound base metal mineralization occur on the McNeil property, within both the Lower and Middle Aldridge Formations suggesting intermittent mineralizing events over a long time period.

6.20 Quartz Vein/Shear Zone Targets

6.21 Introduction

Ten holes were drilled to test steeply dipping and/or flat lying sulphide mineralized quartz vein structures near the hangingwall of the Hiawatha Sill. An additional hole, MAS-89-1 was drilled to intersect a galena-bearing quartz vein located approximately three kilometres north-west of the main drilling area. Hole locations are shown on Figures 3 and 4 and a brief synopsis of individual drill hole results is included in Appendix I.

6.22 Discussion

The quartz vein/shear zones reflect an orthogonal fracture system probably developed contemporaneously with the emplacement of the gabbro sills and dykes. Figure 14 is a photo of the core (M-89-19 at 147 metres) which illustrates, on a small scale, some of the mineralization, alteration, and structural features associated with the quartz vein/shear zones.

The steeply dipping NNW oriented shear system is developed best and has the following characteristics:

i) a strong spatial association with the hangingwall of the gabbro sill,

ii) highly variable widths up to 2.2 metres,

iii) combined lead/zinc grades as high as 15.10%, and

iv) anomalous gold and copper values.

The WNW oriented steeply dipping system is apparently less well developed but contains similar mineralization. The best intersection in the 1989 program was 16.10% combined lead/zinc and 4.02 oz/ton Ag over 0.6 metres in drill hole M-89-14.

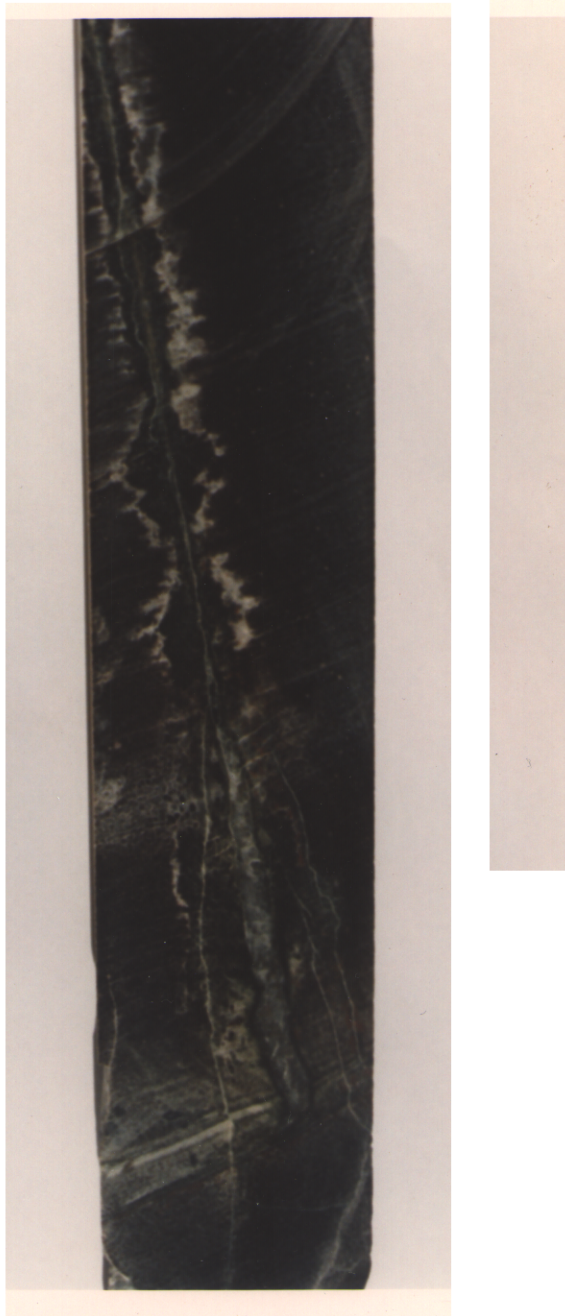
A flat dipping system is indicated by the occasional bedding concordant sulphide mineralized quartz vein and inferred from an interpreted flat-lying UTEM anomaly located in the southeast portion of the 1989 grid. These flat dipping structures, generally close to the gabbro hangingwall contact, also carry anomalous base metal and gold values. The large lead soil geochemical anomaly outlined in 1988 may be a reflection of such flat lying mineralization.

Source of the base metal mineralization is assumed to be either re-mobilized synsedimentary sulphides derived from the intruded sediments, or the gabbroic intrusions themselves.

Anomalous gold values are found with quartz veins, with quartz-carbonate veins, and frequently in the adjacent wall rock. The gold may have been deposited at the same time as the base metal mineralization or it may be an overprinting of a later regional gold mineralizing event during Cretaceous tectonism, with reactivated faults providing the conduits for mineralizing solutions.

. . . . . .

Note: Thick lamprophyre sections occur in drill holes M-89-7 (15 metres) and M-89-8 (27 metres), in an interpreted sill structure concordant with the base of the sill and underlying sediments. Two short (<1.2 metres) biotite-rich "lamprophyre-like" sections occur in drill hole M-89-12 and two narrow (<2 cm) lamprophyre dykes are reported in drill hole M-89-13. Although the contained gold values are low (mean of 26 values is 3 ppb; highest value 15 ppb) these lamprophyres may be associated with the Cretaceous gold mineralizing event. A 0.9 metre massive pyrrhotite section in hole M-89-11, drilled above M-89-12, assayed 0.082 oz/ton Au.



Photograph showing structural and mineralization/alteration features typical of quartz vein/shear zones.

Drill Hole M-89-19: 147.0-147.3 m
Albite: White
Chlorite: Dark Green
Quartz: Pale Gray
Sphalerite: Reddish Brown

Figure 14

The fragmental rock cored in drill hole MAS-89-1 may represent an intraformation conglomerate indicative of faulting during Purcell sedimentation. A number of stratiform lead-zinc deposits in Aldridge sedimentary rocks "are associated with intraformational conglomerate suggesting that local basin development associated with syndepositional faulting was a localized control of mineralization". (Hoy T., 1982). The location of this drill hole, near the juncture of known north-south fault structures and the interpreted north-east trending fault coincident with the Moyie river, may be highly significant. Other fragmental rocks occur in the surrounding district. A fragmental unit mineralized with tourmaline occurs in a drill hole on the Lew claims west of the McNeil Creek property. Both fragmental and tourmalinized rock are characteristic of the Sullivan orebody footwall.

7.00 CONCLUSIONS

1. Drilling of both the L.M.C. and vein targets in 1989 was successful; D.D.H. M-89-8 further tested a base-metal mineralized L.M.C. and a number of holes tested other stratiform and vein sulphides.

2. Stratabound base metal sulphides and associated gold occurrences, in both the Lower and Middle Aldridge Formation, are indicative of a periodic, long term mineralizing event in this area during the early Proterozoic.

3. Base metal mineralized quartz veins are genetically related to and coeval with the intrusion of gabbro feeder dyke(s) and the Hiawatha Sill. Further evaluation of these quartz veins is required, particularly overlying the Hiawatha Sill between approximately 2400N-3200N.

4. Emplacement of the gabbro feeder dykes was controlled by the McNeil Creek Fault. A similar-oriented structure with associated gold mineralization apparently occurs on the former Brook claim, now part of the McNeil Creek property as the recently staked Lewis claim.

5. Gold mineralization in the quartz veins may be due to overprinting during Cretaceous age tectonism and the lamprophyre intrusions are possibly contemporaneous.

6. The McNeil Creek Fault is one of several deep-seated regional faults. It may have been a primary conduit for mineralizing solutions producing both syngenetic (bedded sulphides) and epigenetic (quartz vein) deposits.

7. The McNeil Creek property is centrally located with respect to several base metal and gold prospects, and gold placer operations.

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11.00 QUALIFICATION STATEMENTS

11.10 Author's Qualification

As Author of this report I, Peter M. Daignault certify that:

1. I am a contract geologist with offices at 108-13th Ave. South, Cranbrook, British Columbia.

2. I am a graduate geologist with a B.A. degree (1964) from the University of Saskatchewan.

3. I am a Fellow in good standing of the Geological Association of Canada.

4. I have been actively involved in mining and exploration geology in Canada and Australia for the past 25 years.

Dated at Cranbrook, British Columbia, this 9th day of April, 1990.

Peter M. Daignault, F.G.A.C.
Geologist

11.20 Senior Consultant Geologist's Qualification

As senior consultant geologist on the McNeil Creek Property I, Peter Klewchuk, certify that:

1. I am an independent consulting geologist with offices at 246 Moyie Street, Kimberley, British Columbia.

2. I am a graduate geologist with a B.Sc. degree (1969) from the University of British Columbia and an M.Sc. degree (1972) from the University of Calgary.

3. I am a Fellow in good standing of the Geological Association of Canada.

4. I have been actively involved in mining and exploration geology, primarily in the province of British Columbia, for the past 17 years.

5. I have been employed by major mining companies and provincial government geological departments.

6. I have an indirect interest in this property through a stock option to acquire 25,000 shares in Dragoon Resources Ltd. Dragoon Resources Ltd. is a 50% owner of South Kootenay Goldfields Inc.

Dated at Kimberley, British Columbia, this 9th day of April, 1990.

Peter Klewchuk, M.Sc., F.G.A.C.
Geologist

11.30 Engineer's Qualification

I, Michael Bruce Bapty, of the City of Kimberley, in the Province of British Columbia, hereby certify that:

1. I am a Consulting Mining Engineer and Contractor at 901-Industrial Road #2, Cranbrook, B.C.,

2. I am a graduate of the University of British Columbia with a BASc in Mineral Engineering, and have been active in mine exploration, development, operations and administration for twenty-two years,

3. I am a Member of the Association of Professional Engineers of British Columbia.

4. This reports is based upon fieldwork conducted by our staff and consultants, under my supervision, and visits and examinations of the property and supporting data, from the period July 1989 to February 1990,

5. I have an indirect interest in this property through a senior consultant's (employee) stock option to acquire 45,000 shares in Dragoon Resources Ltd., and further, that my company, Bapty Research Limited directly owns 50,000 shares of Dragoon Resources Ltd. Dragoon is a 50% owner and Managing Partner of South Kootenay Goldfields Inc. which has optioned the property.

   I do not expect my interests to change as a result of submitting this report.

6. I authorize Dragoon Resources Ltd. or Greenstone Resources Ltd. to use this report in a Statement of Material Facts, or as supporting documentation as may be required by any Securities Exchange, Financial Institution, or Superintendent of Brokers.

Dated at Cranbrook, British Columbia, this 9th day of April, 1990.

M. Bapty, P.Eng.

APPENDIX I

SYNOPSES OF DIAMOND DRILL HOLES

A. Synopses of Holes Drilled for Stratiform Sulphide Targets

Drill hole M-89-2 was initially planned as a step-out hole to follow up the Sullivan Horizon intersection in the 1988 drill hole M-88-7. The hole was stopped at 187.8 metres after penetrating a continuous section of gabbro, and was later deepened to a final depth of 328.1 metres, still in gabbro.

Drill hole M-89-3 was collared approximately 550 metres south of M-89-2 in a fresh attempt to drill to the L.M.C. Gabbro was cored from the collar to 58.5 metres followed by Middle Aldridge sediments to hole bottom at 401.1 metres. A 0.4 metre zinc zone (1.74% Zn), intersected at 182.2 metres, appears to be bedded sulphides; it contains sphalerite, magnetic pyrrhotite, minor chalcopyrite and galena. A major fault, intersected from approximately 302-348 metres, was interpreted as being the easterly down dip extension of the McNeil Creek Fault and the hole was stopped at 401.1 metres.

Drill holes M-89-4 (-45^{o}) and M-89-5 (-90^{o}) were drilled 100 metres north of M-89-3 to test the up-dip extension of the magnetic bedded sulphides and the coincident ground mag anomaly.

Hole M-89-4 intersected a strong fault zone from 55.0-64.5 metres, followed by siltstone to 65.5 metres. Quartz veining, strong chloritic alteration, pyrite and local magnetite mineralization are common. Sampling of the more siliceous & pyritic sections yielded only background values for base metals but anomalous gold (17 ppb) for the interval 63.1-66.5 metres. A strongly altered chloritized, silicified, weakly pyritic, strongly brecciated and sheared fine grained gabbro from 66.5-75.0 metres is followed by typically brecciated, variably silicified and chloritized siltstone and quartzite.

The hole ended in fine grained, weakly to strongly magnetic, commonly quartz, calcite and epidote-veined gabbro from 99.8 to 111.3 metres.

Hole M-89-5 intersected a sequence of Middle Aldridge sediments to a depth of 134.5 metres. At 23.2 metres a 2-5 centimetre irregular hydrothermally altered band, contains patchy disseminated chalcopyrite and pyrrhotite; a 0.1 metre sample ran 0.97% copper, 293 ppm lead, 434 ppm zinc, 12.4 ppm silver and 97 ppm gold.

Minor galena and chalcopyrite are associated with pyrite in a series of parallel quartz veins at 124.4 metres; a 0.1 metre sample gave anomalously high copper (80 ppm) and lead (1985 ppm) values. A major fault zone from 134.5 - 153.3 metres is characterized by very strongly chloritized, pyritic, locally brecciated and irregularly quartz and quartz-calcite veined sediments.

The hole ended in a gabbro intersection from 153.3-164.6 metres which may be part of the fault zone; the core is typically quite broken, strongly chloritic, brecciated with thin quartz matrix, and with ubiquitous disseminated pyrite (1-2%).

Hole M-89-6 was drilled to test the strike extension of the favourable zinc zone intersected in hole M-89-3. The hole encountered minor sphalerite mineralization; the best intersections are 175 ppm zinc at 83.9-84.0 metres as fracture fill, and 982 ppm zinc at 112.15-112.25 metres as a 0.2 mm bed of orangey brown sphalerite. A major fault, presumed to be the McNeil Creek Fault, was intersected from approximately 213-229 metre and the hole was stopped at 255.7 metres.

Drill hole M-89-7 was collared to intersect the northward strike extension of the M-89-3 zinc zone. Gabbro and minor lamprophyre was cored from the collar to 98.8 metres and thence Middle Aldridge sediments to the hole bottom at 276.1 metres. A relatively strong (607 ppm) "zinc zone", intersected from 180.1-183.8 metres, may correlate with that encountered in drill hole M-89-3. This section included 0.3 metres of 5161 ppm zinc.

Hole M-89-8 was initially collared to check the eastward down-dip extension of the "zinc zone" and fault "G" previously intersected in drill hole M-89-3. Gabbro and minor lamprophyre were cored from the collar to 185.0 metres, followed successively by Middle Aldridge sediments to 957.0 metres, and Lower Aldridge to the final depth at 1033.9 metres.

Geochemically anomalous base metals (3.0 metres at 58 ppm lead, 363 ppm zinc), were intersected at 362.4 metres. Other lead/zinc geochemical anomalies with significant widths were intersected at 715.4 metres (2.2 metres at 145 ppm lead, 188 ppm zinc) and at 872.8 metres (5.1 metres at 75 ppm lead, 139 ppm zicn). The Lower-Middle Aldridge Contact was intersected at approximately 957 metres, and a 16 metre true thickness zone of anomalous zinc and lead mineralization (the "Sullivan Horizon" zone) was cut from 981.2-1006.1 metres running at 82 ppm lead and 222 ppm zinc. The final 2.1 metres of the drill hole cored part of a strong shear zone, which may be fault "G".

Drill hole M-89-19 also tested the stratigraphy which hosts the stratiform zinc mineralization in drill hole M-89-3. The hole was drilled to 887 metres in lower Middle Aldridge sediments, with the exception of a gabbro intersection from 323-503 metres.

The hole intersected three Pb/Zn geochemical anomalies, typically associated with siliceous/chloritic fractures, above the gabbro contact as follows: 2.4 metres of 679 ppm lead and 383 ppm zinc at 145.4 metres; 1.1 metres of 158 ppm lead and 257 ppm zinc at 161.4 metres; 3.5 metres of 112 ppm lead and 137 ppm zinc at 167.8. An additional 1.8 metre anomaly (364 ppm lead and 409 ppm zinc) was intersected below the gabbro at 625.4 metres.

Two major faults were intersected in drill hole M-89-19. The uppermost fault intersection (69.7-73.2 metres) consists mainly of rock rubble and short ($\leq$20 centimetres) granular to pasty gouge zones and minor tectonic breccia. The other fault, between approximately 314 and 323 metres is immediately above the gabbro intrusive. This interval appears to be a composite fault zone with the more recent event of strong brecciation and shearing (313.9-319.7 metres) partially superimposed on a pre-existing healed tectonic breccia, which is apparent in relatively undisturbed core from 319.7-323.4 metres.

Hole M-90-1 was collared approximately one kilometre north of M-89-8 on the north side of an interpreted north-west trending fault, to test the L.M.C.

Middle Aldridge sediments, including the Moyie (inferred by location) and Monroe stratigraphic markers, were cored to 534.5 metres, followed by gabbro to a final depth of 572 metres. Sulphide mineralization is generally sparse, the best intersection being 102 ppm copper, 185 ppm lead and 503 ppm zinc over 0.2 metres at 411.8 metres, in a chloritized fractured siltstone.

The hole was abandoned when unfavourable factors indicated a projected depth to the L.M.C. of 1850-2000 metres. These factors included:

i) hole collared relatively high in the stratigraphic section as indicated by the positively identified Monroe marker at 92 metres. Regionally the Monroe marker is approximately 830 metres stratigraphically above the L.M.C.

ii) an increasingly (45-55^{o}) unfavourable bedding dip with depth,

iii) the intersection of the Hiawatha gabbro sill which would add ~300 metres hole length to reach the L.M.C.

B. Synopses of Holes Drilled for Quartz Vein/Shear Zone Targets

Drill holes M-89-9 and 10 were drilled to test a flat lying UTEM anomaly located in the southwest corner of the 1989 grid.

Hole M-89-9 cored 241.8 metres of Middle Aldridge sediments and then a gabbro sill. A gabbro dyke with a faulted and brecciated lower contact was intersected from 103.4-109.4 metres, containing a steeply dipping, 0.3 metre pyrrhotite-mineralized quartz vein. Very finely disseminated galena (789 ppm lead) and pyrite occur within fractures between 192.9-193.3 metres, straddling a narrow fault at 193.1 metres. Silicification and epidote alteration are evident at the faulted sill contact. Numerous steep dipping quartz and quartz/carbonate veinlets and fractures, mineralized with pyrrhotite and occasionally chalcopyrite, are present throughout the gabbro section. Anomalous gold (0.4 metre @ 0.017 oz/ton) is associated with arsenopyrite in steeply dipping quartz/carbonate veining at 275.1 metres.

Vertical drill hole M-89-10 cored typical Middle Aldridge sediments to 201.6 metres and thence a gabbro sill. A fault zone consisting mainly of barren, white, chlorite-veined quartz was intersected between 101.5 and 106.7 metres. Xenoliths of chloritized gabbro within the quartz vein and strong propylitization of the country rock suggest that this faulted vein structure is the upward extension of a blind gabbro dyke. A pyrrhotite and chalcopyrite mineralized quartz vein, conformable with the enclosing sediments at 198.4 metres, contains anomalously high gold (17 ppb) and copper (1950 ppm) over 0.5 metres.

Coarse grained galena mineralization in quartz and quartz/calcite veining occurs at about 202 metres; the highest grade intersection (0.3 metres at 202.4 metres) assayed 147 ppm copper, 113 ppm lead, 246 ppm zinc, 0.1 ppm silver and 9 ppb gold.

Drill hole M-89-11 (-45°), was the first of three (M-89-11, 12, 13) drilled to test a steeply dipping HLEM conductor, and coincident lead/zinc soil geochemical anomaly near grid lines 4900N, 3400E. Middle Aldridge sediments were cored to 45.3 metres followed by coarse grained gabbro.

A zone of massive pyrrhotite (70-75%) with gray quartz (20-25%), was intersected between 51.7-52.6 metres. The zone also contains minor pyrite and chalcopyrite, particularly near contacts, and some sphalerite. Hangingwall and footwall contacts are approximately 28-30° to the core axis. This zone assayed 0.78% copper and 0.082 oz/ton gold with anomalously high values in lead (185 ppm), zinc (1123 ppm), silver (3.2 ppm) and palladium (44 ppb).

A weak copper (100-200 ppm) and zinc (250-350 ppm) halo radiates beyond the massive pyrrhotite zone. Anomalous gold (12 ppb over 4.4 metres) occurs in the gabbro below the zone.

The remaining gabbro intersection is characterized by apparently randomly distributed quartz and quartz/chlorite filled fractures, sub-parallel to the core axis, variably mineralized with pyrrhotite and/or pyrite and traces of chalcopyrite. In addition to local high copper and zinc values (up to 1989 ppm Cu, 1765 ppm Zn over 0.7 metres in separate intervals), much of the section is anomalous in gold (maximum of 230 ppb over 0.8 metres).

An unusual feature of the section from 75.3-89.0 metres is the low Pb/Ag ratio (-8:1) compared to a typical range of 100-1000:1.

Drill hole M-89-12 was drilled at -65° from the same drill set-up to intersect the down dip extension of the massive pyrrhotite bearing structure seen in hole M-89-11. Middle Aldridge sediments were cored to 38.8 metres, followed by gabbro. The gabbro is more variable in texture than the typical Hiawatha Sill sections, and may be part of the north trending gabbro dyke system associated with the McNeil Creek Fault. Several highly anomalous copper and/or copper/gold intersections are associated with either:

(i) pyrrhotite and/or pyrite bearing quartz veins, or

(ii) fine grained biotite-rich (lamprophyre ?) gabbro.

The best intersections are:

Interval (m)	Sample length (m)	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Au ppb
39.6-40.8	1.2	896	20	191	1.1	25
41.0-43.8	2.8	1518	22	188	1.7	10
71.6-72.6	1.0	1231	3	101	0.7	1

Hole M-89-13 (-45°) was drilled 100 metres north of M-89-12 to intersect the same HLEM conductor. Middle Aldridge sediments were drilled to a faulted gabbro contact at 61.8 metres. Gabbro dyke (?) was cored to 64.1 followed by quartzite to 80.1 metres, and then gabbro sill (?) to final depth at 120.4 metres. No significant mineralization was encountered in the hole.

Holes M-89-14 to 17 were drilled to intersect an HLEM anomaly, and coincident soil geochem anomaly, near 3700N, 3500E.

Hole M-89-14 (-45°) cored Middle Aldridge sediments throughout its total length of 110.6 metres. A mineralized strongly altered fracture zone was intersected between 77.0-88.5 metres. The best base metal mineralization occurs from 79.6-80.25 metres and consists of coarse grained galena and minor sphalerite in a matrix of quartz, chlorite, brecciated and chloritized siltstone, and garnet porphyroblasts. This latter section assayed 13.99% lead, 2.11% zinc and 4.02 oz/ton silver and was anomalously high in gold (18 ppb).

Drill hole M-89-15 (-60°) was drilled from the same set-up and cored sediments to 96.1 metres and thence gabbro. Quartz veined sediments near the gabbro contact are mineralized with pyrrhotite, pyrite and have local anomalous values in copper and gold. Within the gabbro a well mineralized (20-25% pyrrhotite with minor pyrite and disseminated chalcopyrite) silicified, chloritized, healed breccia occurs between 114.9-115.4 metres and containing minor copper and gold values.

Drill hole M-89-16 was collared to test, along strike, the same HLEM conductor intersected in drill hole M-89-14. Middle Aldridge sediments were cored to 90.1 metres and followed by gabbro. The core from 111.7-119.3 metres exhibits strong skarn alteration with local development of garnet, epidote, pyrite and minor chalcopyrite and the interval 115.6-116.1 metres ran 3560 ppm copper and 63 ppb gold.

Hole M-89-17, collared on the same section as drill hole M-89-16, was drilled to intersect the same HLEM conductor. No significant mineralization was encountered.

Hole M-89-18 was drilled to test an HLEM conductor located within a broad geochemical anomaly near 3700N, 3800E. Middle Aldridge sediments were cored to 54.3 metres and then gabbro. Weak skarn alteration is developed between 37.8-49.2 metres with minor copper, lead and zinc values.

MAS 89-1 was collared approximately three kilometres north-west from the principal drilling area and is located on the Shyann claim. The hole was drilled at -45° to intersect a galena mineralized quartz vein, the existence of which is known from placer mining. Interbedded Middle Aldridge siltstone, quartzite and fragmental zones were intersected throughout the drilled interval of 137.8 metres.

APPENDIX II

PETROGRAPHIC REPORT

PETROGRAPHIC REPORT ON TWO SAMPLES FOR BAPTY RESEARCH LTD.

Report for: P.M. Daignault
Bapty Research Ltd.
606 Trail Street
Kimberley, B.C.
V1A 2M2.

Invoice 8838

March 5, 1990

Two samples were submitted for analysis: #1 is fracture scrapings described as "talcose" for X-ray diffraction, and #2 is possibly a volcanic ash layer for petrographic description.

Sample #1 consists of small fragments of a pure white, soft mineral with semi-vitreous lustre that is sticky when wet. When added to water for the preparation of the X-ray slide, it swelled noticeably. The main X-ray lines, with intensities, were as follows:

2 theta	'd' spacing	Intensity	Identity
5.95	14.85	100	Montmorillonite
8.30	10.65	50	?
15.05	5.91	40	?
20.00	4.44	100	Montmorillonite
26.66	3.34	20	Qtz or Mont
29.43	3.03	20	Calcite or Mont
35.50	2.53	30	Montmorillonite
41.40	2.18	25	Montmorillonite
54.35	1.69	30	"
62.10	1.49	20	"
73.20	1.29	15	"

Thus, although there may be minor amounts of admixed quartz and calcite, as also indicated by a slight grittiness during grinding, the sample is mainly composed of the clay mineral montmorillonite.

Sample #2 is a dark grey to purplish brown, very fine-grained rock with a sedimentary appearance. It is, however, thoroughly pyritized and the purplish cast suggests hornfelsing. It is cut by random thin paler-coloured fractures along the length of which the rock is bleached. There are fine grains of carbonate present which react readily to cold dilute HCl. The rock is moderately magnetic, suggesting that the sulfide may be pyrrhotite or magnetite may be present. In thin section, the modal mineralogy is as follows:

Quartz	60%
Muscovite (sericite)	10%
Opaque (?mainly sulfide, pyrrhotite)	10%
Biotite	5%
Carbonate (calcite)	5%
Tourmaline (?schorlite)	5%
?Epidote or andalusite	2%
?Rutile, sphene	1%
?Apatite	1%
Chlorite (after biotite)	1%

There is no suggestion of any K-feldspar in this sample, although it apparently was not stained for K-spar. Thus any relation to the K-rich bed at Mt. Isa, which is composed principally of microcline (Croxford, 1964) is doubtful. The remainder of the bed has been submitted to Acme Analytuical for whole-rock analysis; I doubt if there will be significant K_2O content.

Instead, the rock is made up of tightly interlocking quartz grains of about 0.05 mm average diameter, with a weak foliation defined by euhedral flakes of mica, mainly muscovite but in places with moderate brown pleochroism indicating biotite. The micas are interstitial to the quartz and also about 0.05 mm long on average. In places the biotite can be seen to be interleaved by the muscovite, suggesting that this was originally a biotite hornf sed rock that has been subjected to sericitization (possibly accompanied by the sulfide).

Carbonate forms anhedral grains of 0.05 to 0.08 mm diameter, mainly near the fractures. It appears to be a late replacement of the rock, possibly also at the time of sericite-sulfide.

Tourmaline is scattered throughout the rock, apparently unrelated to the fractures or sulfides. It forms small (0.05 to 0.1 mm long) euhedral prisms with light green to khaki pleochroism, and appears to be a typical schorlite (Fe-rich tourmaline) rather than the paler-coloured dravite (Mg-rich tourmaline).

There are also clumps of a high-relief, prismatic, clear mineral tenttively identified as epidote or possibly andalusite. It has weak to moderate birefringence and a dusty character that make me lean towards andalusite (grains are only 0.05 mm long). Such a mineral would be possible in a contact metamorphic aureole as also suggested by the biotite.

Small patches of poorly-defined, high-relief mineral with semi-opaque character, generally about 0.03 mm across, are probably mainly rutile or rutile and sphene. Ocasional subhedral clear grains of 0.05 mm diameter with high relief may be apatite. Minor chlorite is found interleaved with biotite.

I would classify this rock as a probable biotite-?andalusite hornfelsed sediment that was probably siliceous originally. The muscovite appears to be at least partly an overprint, possibly during ?hydrothermal alteration and sulfidization. The fine laminations of the rock suggest a siltstone or mudstone protolith. The tourmaline content is interesting in the light of its connection with massive sulfide deposits such as Sullivan, although in this sample it does not appear to be magnesian.

I hope the above descriptions will answer your queries regarding these samples. Shouldyou have any further questions, please do not hesitate to contact me.

Craig H.B. Leitch, Ph.D. P.Eng.

(604) 921-8780 or 228-2646

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

WHOLE ROCK ICP ANALYSIS

Bapty Research Limited (BC) File # 90-0581

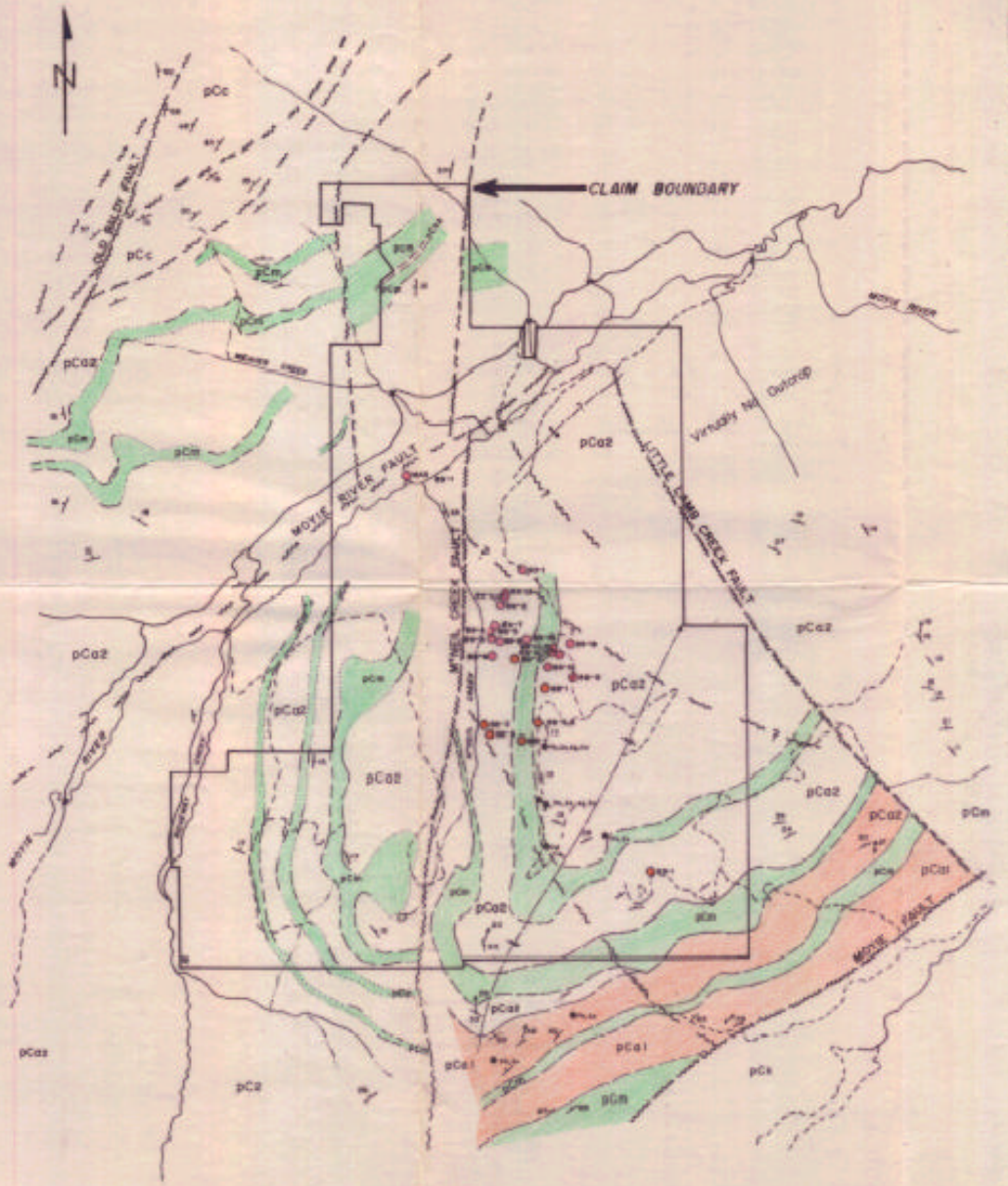
606 Trail St., Kimberley BC V1A 2M2

SAMPLE#	SiO2 %	Al2O3 %	Fe2O3 %	MgO %	CaO %	Na2O %	K2O %	TiO2 %	P2O5 %	MnO %	Cr2O3 %	Ba ppm	La ppm	Zr ppm	Y ppm	Nb ppm	LOI %	SUM %
M89-6	67.56	16.72	3.45	1.35	1.14	2.26	4.14	.67	.12	.08	.008	1696	23	236	35	67	1.9	99.73

A .2000 GRAM SAMPLE IS FUSED WITH 1.2 GRAM OF LIBO2 AND IS DISSOLVED IN 100 MLS 5% HNO3.
- SAMPLE TYPE: Core

DATE RECEIVED: MAR 7 1990 DATE REPORT MAILED: May 14, 1990 SIGNED BY. D. Toye ..D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

SAMPLE 2: 3 centimetre chalcedonic bed at 116.0 metres in drill hole M-89-6



LEGEND

PLEISTOCENE AND RECENT

- TILL, GRAVEL, SAND, AND ALLUVIAL DEPOSITS

LOWER CRETACEOUS

- Kg GRANITE MONZONITE, GRANODIORITE

DEVONIAN (?)

FAIRMEDIAN GROUP

- DLT DARK GRAY TO BLACK, FINE GRAINED FOSSILIFEROUS LIMESTONE; LOCAL MODULAR CHERT BEDS; BASE COMMONLY MARKED BY A FLUVIAL PEBBLE CONGLOMERATE OVERLAIN BY A MEDIUM TO COARSE-GRAINED SANDSTONE
- Dp "PEAVINE CONGLOMERATE"

COBBLE TO COARSE BOULDER, POLYMICTIC PARACONGLOMERATE, WITH SILT TO SAND MATRIX; MASSIVE TO MODERATELY WELL BEDDED

MIDDLE PROTEROZOIC

- yMm MOYIE INTRUSIONS

METADIORITE TO METAGABBRO SILLS AND LOCALLY DYKES

PURCELL SUPERGROUP

- pCr ROSEBERY FORMATION

GRAY TO BLACK ARGILLITE WITH INTERCALATED GREEN SILTSTONE; GREEN SILTY ARGILLITE WITH THIN NAIVE SILTSTONE INTERLAYERS; OCCASIONAL THIN DOLOMITE, STROMATOLITIC DOLOMITE, AND CONGLOMERATE LAYERS

- pCg PURCELL FORMATION

THIN-BEDDED PURPLE AND RED ARGILLITE, SILTSTONE AND QUARTZITE; MINOR GREEN SILTSTONE INTERLAYERS NEAR BASE.

- pCg GATEWAY AND SHEPPARD FORMATION:

UPPER: THIN-BEDDED, FINELY LAMINATED GREEN SILTSTONE; MINOR PURPLE ARGILLITE
MIDDLE: GREEN, BROWN, AND RECESSIVE INDIAN SILTSTONE AND QUARTZITE, INTERBEDS OF GREEN AND PURPLE ARGILLITE; DIAGNOSTIC SALT CRYSTAL CASTS THROUGHOUT
LOWER (SHEPPARD FORMATION): THIN-BEDDED DOLOMITE, STROMATOLITIC DOLOMITE; MINOR, GRAY, AND GREEN SILTSTONE, DOLOMITIC SILTSTONE, AND QUARTZITE; COBBLE-BOULDER POLYMICTIC PARACONGLOMERATE AT BASE

PURCELL SUPERGROUP (CONTINUED)

- pCmc NICOL CREEK FORMATION

PURPLE AND GREEN, DIFFERENTIATED AND VESICULAR BASALT, LOCALLY PORPHYRITIC (CLASSIFIABLE THOLEIITITES); INTERLAYERED GREEN AND PURPLE SILTSTONE LAYERS (UNIT); PURPLE VOLCANICLASTIC SILTSTONE AND SANDSTONE

- pCm VAN CREEK FORMATION

THINLY LAMINATED PALE GREEN AND PURPLE SILTSTONE AND SHALE, CHARACTERISTICALLY RECESSIVE ORANGE WEATHERING; THIN-BEDDED MAROON AND RED ARGILLACEOUS LIMESTONE; GREEN SILTY QUARTZITE; MINOR ARGILLACEOUS LIMESTONE NEAR BASE

- pCk KITCHENER FORMATION

MEDIUM TO DARK GRAY SILTY AND ARGILLACEOUS DOLOMITE, DOLOMITIC ARGILLITE, AND ARGILLACEOUS LIMESTONE; GRAY SILTY DOLOMITE WITH BLACK ARGILLACEOUS PARTINGS; MINOR GREEN SILTSTONE AND ARGILLITE

- pCc(+) PALE YELLOWISH GREEN SILTSTONE AND ARGILLITE WITH LESSER LAYERED BUFF-WEATHERING DOLOMITIC SILTSTONE AND ARGILLITE; MINOR DARK GRAY LIMY ARGILLITE

- pCc CRESTON FORMATION

LIGHT TO MODERATE GREEN SILTSTONE AND ARGILLITE; LESSER GRAY, LIGHT BROWN, AND PURPLE-STAINED SILTSTONE AND ARGILLITE, ARKITE QUARTZITE; MINOR BUFF-WEATHERING DOLOMITIC SILTSTONE

- pCc(+) GENERALLY RUSTY WEATHERING LIGHT TO DARK GRAY SILTSTONE, ARGILLITE AND SILTY QUARTZITE; IRREGULAR-BEDDED DARK GRAY SILTY ARGILLITE; INTERLAYERED GREEN SILTSTONE AND LEAF ARGILLITE

- pCa ALDRIDGE FORMATION

pCa(u) (UPPER ALDRIDGE): THICKLY LAMINATED, RUSTY WEATHERING, LIGHT TO DARK GRAY ARGILLITE AND ARGILLACEOUS SILTSTONE

pCa(m) (MIDDLE ALDRIDGE): THIN TO THICK-BEDDED GRAY QUARTZITE GRADING INTERLAYERED WITH LAMINATED SILTSTONE; SILTSTONE AND RUSTY WEATHERING ARGILLITE DOMINATE NEAR TOP

pCa(l) (LOWER ALDRIDGE): RUSTY WEATHERING SILTSTONE AND QUARTZITE WITH INTERBEDS OF RUSTY ARGILLITE; INTERLAYERED RUSTY WEATHERING QUARTZ WACKE AND SILTSTONE NEAR TOP

SYMBOLS

- ROCK OUTCROP
- GEOLOGICAL CONTACT: DEFINED, APPROXIMATE, ASSUMED
- FAULT: DEFINED, APPROXIMATE, ASSUMED
- THRUST OR REVERSE FAULT
- NORMAL FAULT
- FOLD AXIAL TRACE: ANTICLINE OVERTURNED
- SYNCLINE OVERTURNED
- BEDDING: INCLINED, OVERTURNED
- TOPS UNKNOWN
- FLOW STRUCTURE IN VOLCANICS
- FOLIATION, CLEAVAGE
- LINEATION
- MINOR FOLD AXIS (SHOWING VERGENCE)
- SMALL SHEAR (SHOWING DIP)
- MINERALIZED VEIN (SHOWING TREND)
- MINE, PROSPECT, OR OCCURRENCE
- SILT SAMPLE LOCATION
- EDGE OF MAPPING
- TOPOGRAPHIC CONTOUR (500 ft. INTERVAL)
- ROAD: HARD SURFACE
- LOOSE OR STABILIZED SURFACE
- LAKE

GEOLOGICAL BRANCH ASSESSMENT REPORT

19,989

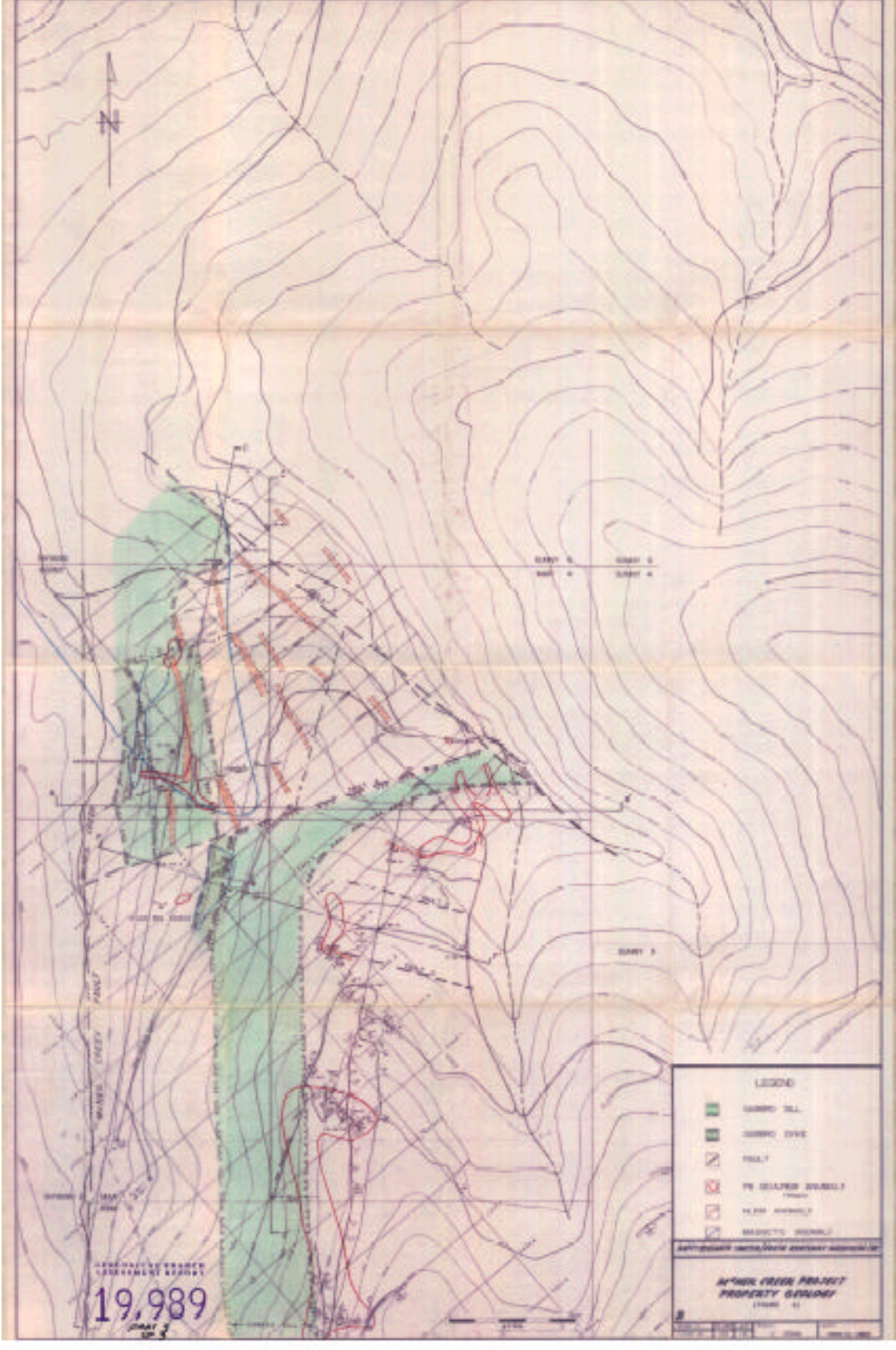
BAPTY RESEARCH LIMITED/SOUTH KOOTENAY GOLDFIELDS INC.

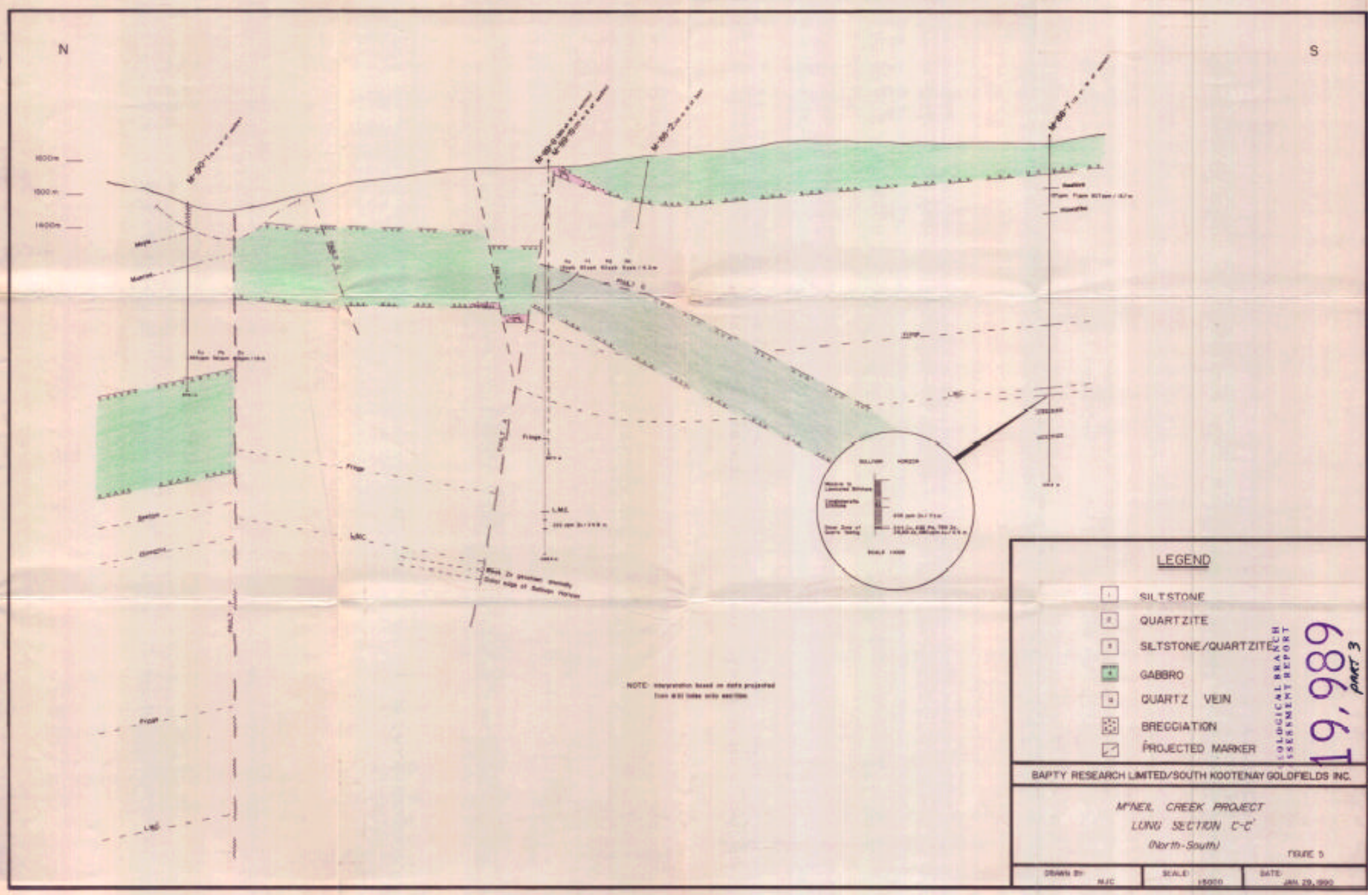
McNEIL CREEK PROJECT

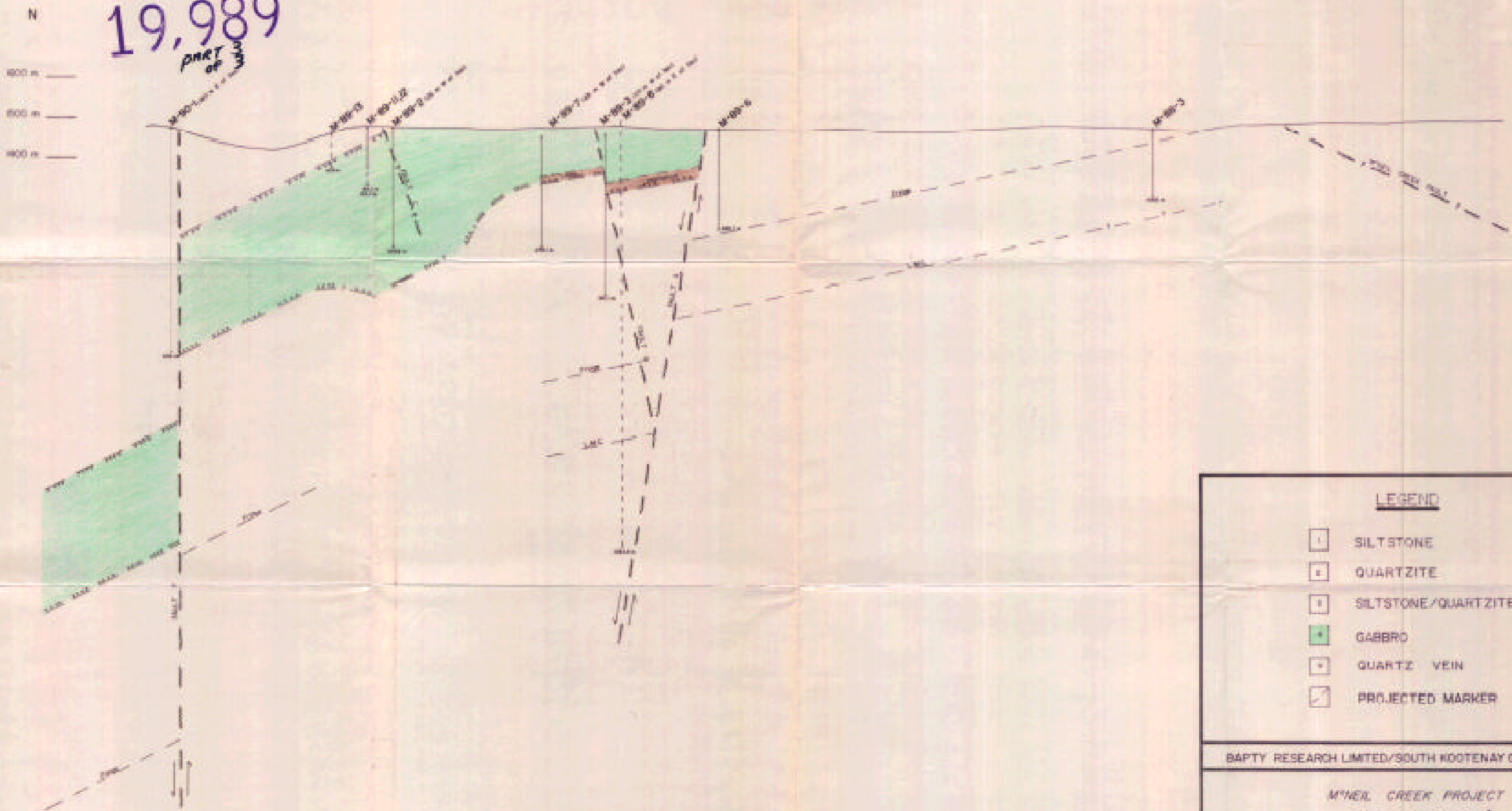
REGIONAL GEOLOGY

FIGURE 3

DRAWN BY	SCALE:	DATE:
MJC	1:50000	FEB. 23, 1990


N
LEGEND
19,989


N
S
1600m
1500 m
1400m
LEGEND
SILTSTONE
QUARTZITE
SILTSTONE/QUARTZITE
GABBRO
QUARTZ VEIN
BRECCIATION
PROJECTED MARKER
NOTE: Interpretation based on data projected from drill holes onto section
BAPTY RESEARCH LIMITED/SOUTH KOOTENAY GOLDFIELDS INC.
MINERAL CREEK PROJECT
LONG SECTION C-C'
(North-South)
FIGURE 5
DRAWN BY: MJC
SCALE: 1:5000
DATE: JAN. 29, 1990
GEOLOGICAL BRANCH
ASSESSMENT REPORT
19,989
PART 3



LEGEND

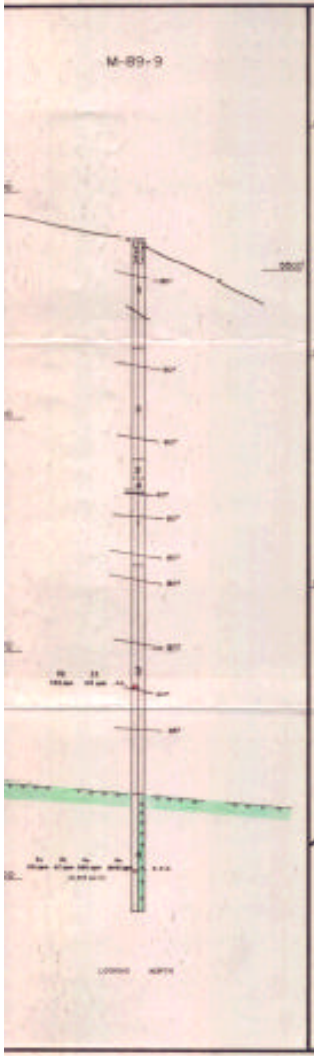
- SILTSTONE
- QUARTZITE
- SILTSTONE/QUARTZITE
- GABBRO
- QUARTZ VEIN
- PROJECTED MARKER

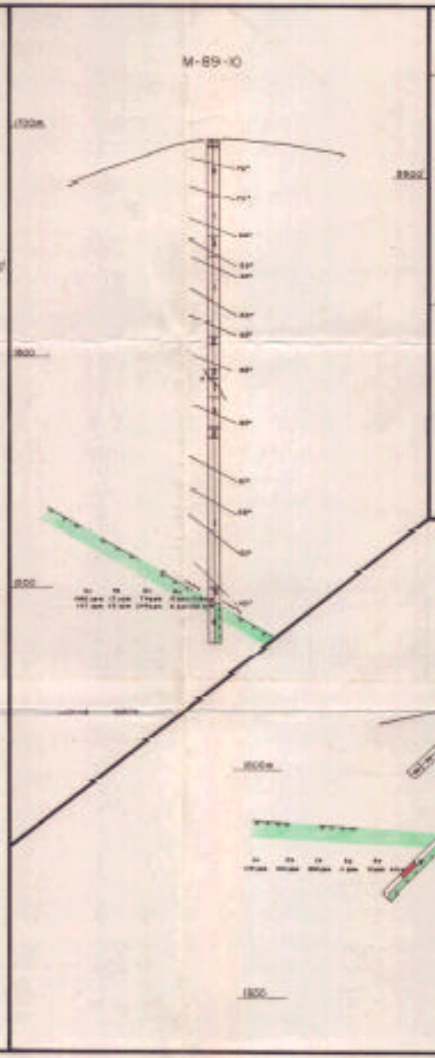
BAPTY RESEARCH LIMITED/SOUTH KOOTENAY GOLDFIELDS INC.

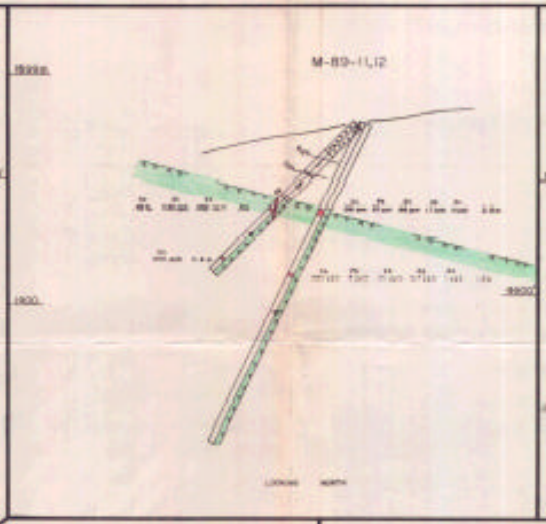
McNEIL CREEK PROJECT
LONG SECTION D-D'
(North-South)

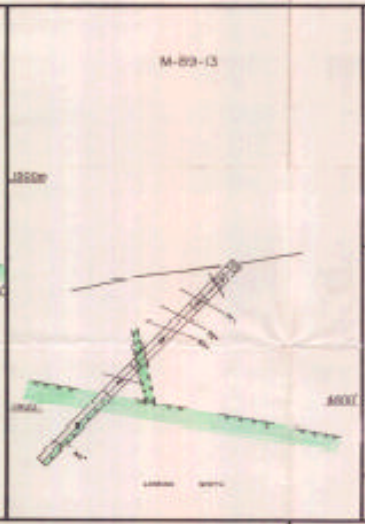
FIGURE 8

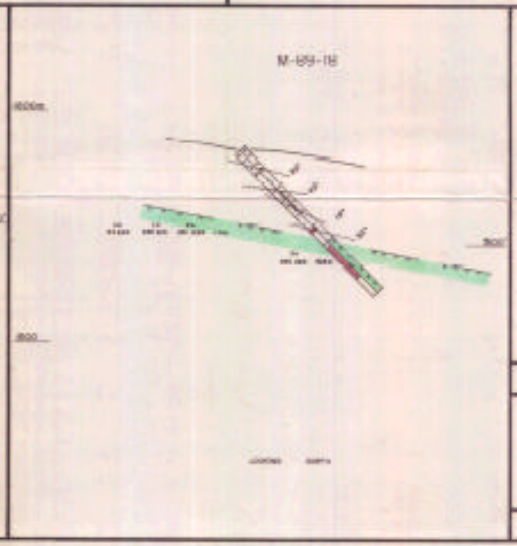
DRAWN BY:	SCALE:	DATE:
M. COOK	1:5000	MAR. 20, 1990











LEGEND

- 1 SILTSTONE
- 2 QUARTZITE
- 3 SILTSTONE/QUARTZITE
- 4 GABBRO
- 5 QUARTZ VEIN
- BRECCIATION
- OVERBURDEN

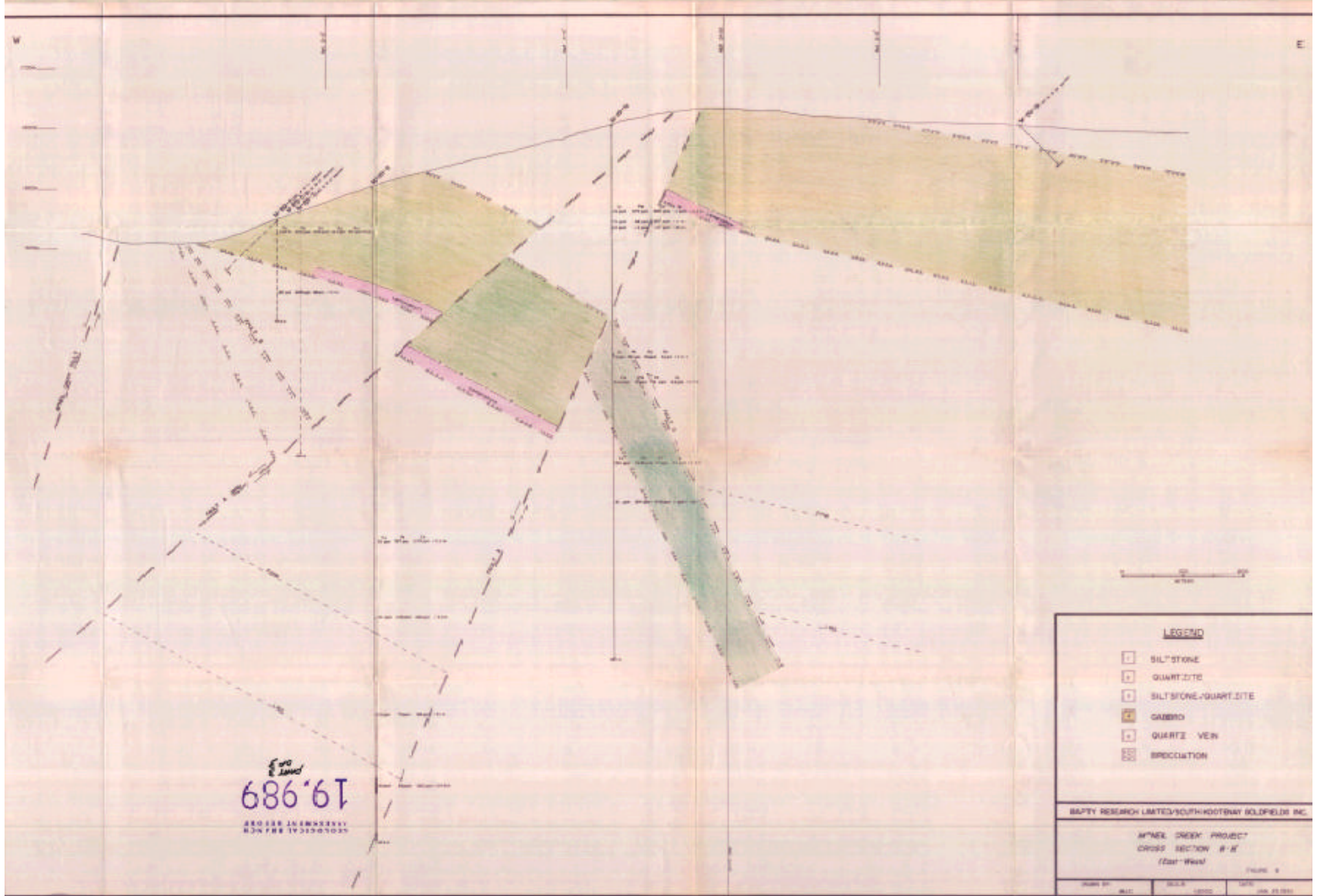
BAPTY RESEARCH LIMITED/SOUTH KOOTENAY GOLDFIELDS INC.

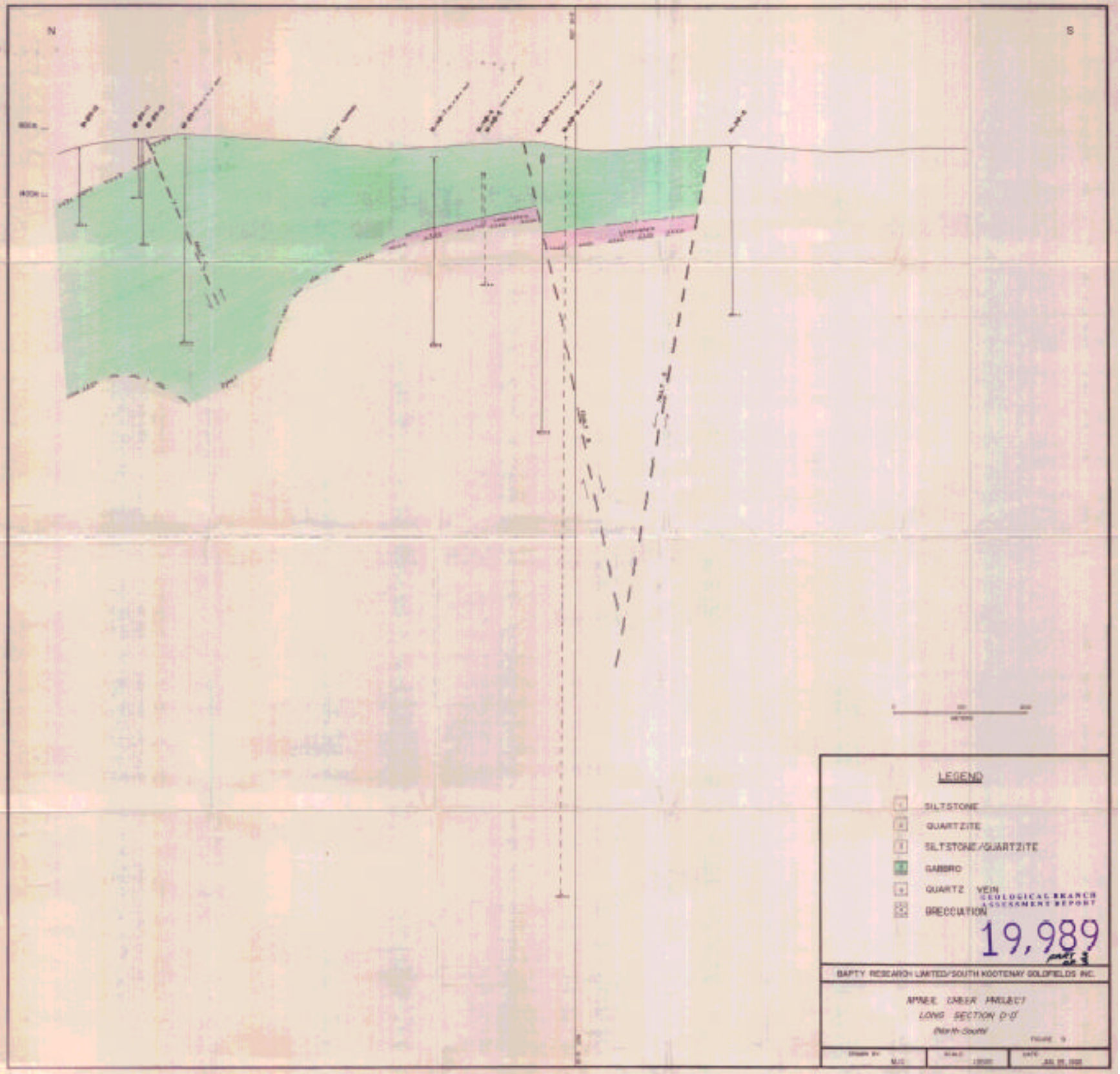
M°NEIL CREEK PROJECT

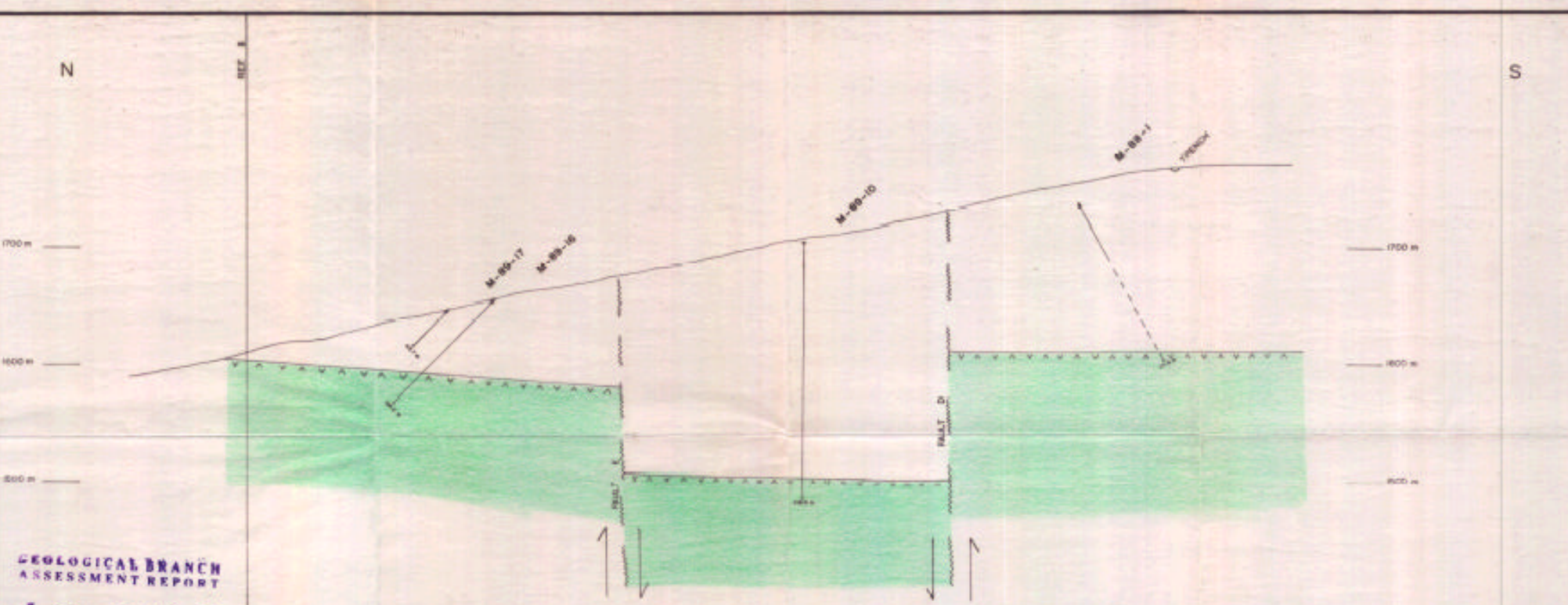
DRILL SECTIONS

FIGURE 7

DRAWN BY	SCALE	DATE
M.J.C.	1:1000	APR. 8, 1990


W
E
LEGEND
SILTSTONE
QUARTZITE
SILTSTONE/QUARTZITE
GABBRO
QUARTZ VEIN
BRECCIATION
BAPTY RESEARCH LIMITED/SOUTH KOOTENAY GOLDFIELDS INC.
MINERAL CREEK PROJECT
CROSS SECTION A-A'
(East-West)
FIGURE 6
19,989





BAPTY RESEARCH LIMITED/SOUTH KOOTENAY GOLDFIELDS INC.

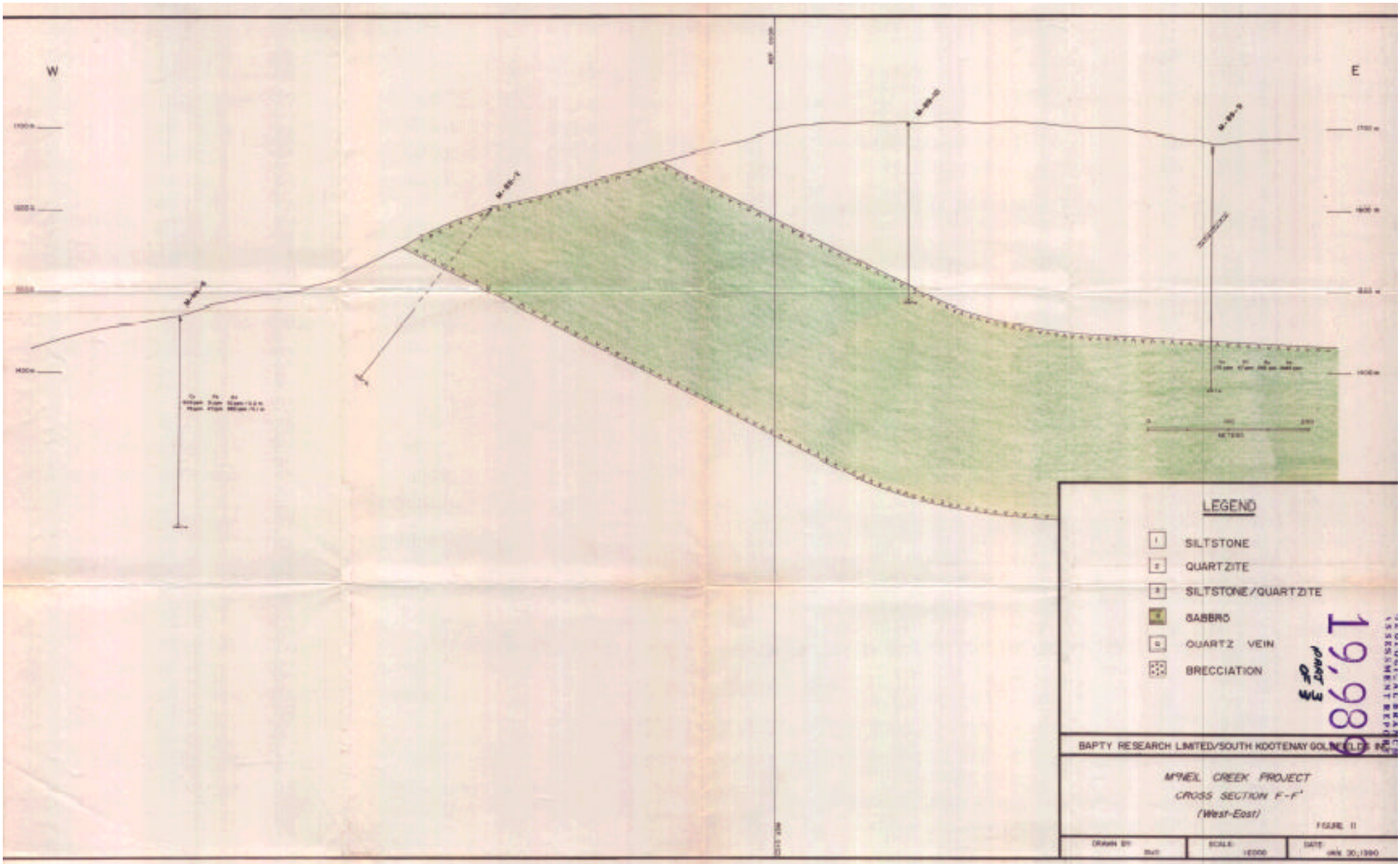
McNEIL CREEK PROJECT

LONG SECTION E-E'

(North-South)

FIGURE 10

DRAWN BY:	SCALE:	DATE:
MJC	1:2000	FEB 2,1990



19,980

REPORT 3 OF 3

ASSESSMENT REPORT

BAPTY RESEARCH LIMITED/SOUTH KOOTENAY GOLD MINES INC.

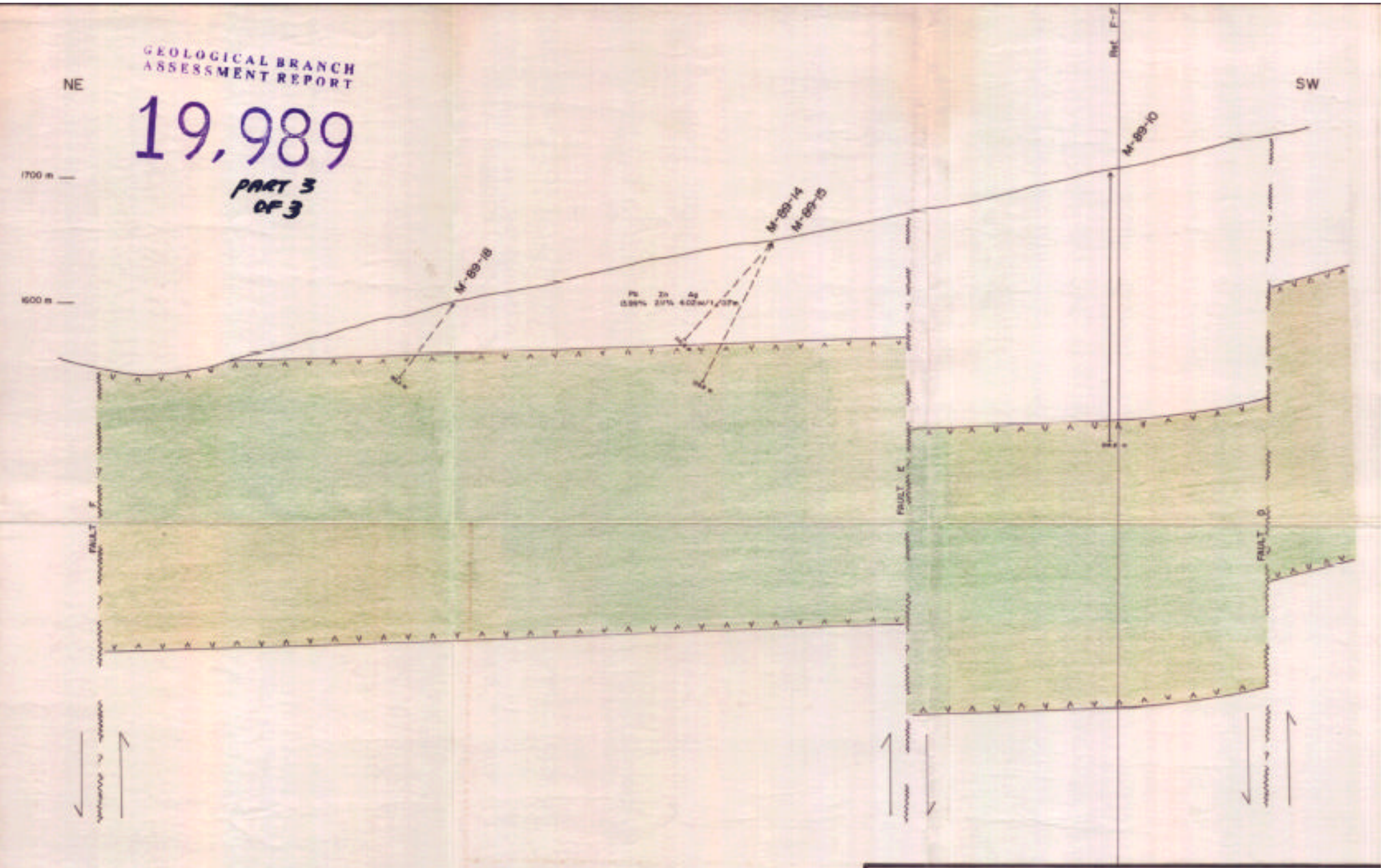
McNEIL CREEK PROJECT

CROSS SECTION F-F'

(West-East)

FIGURE 11

DRAWN BY:	SCALE:	DATE:
Stutt	1:1000	MAY 30, 1990



BAPTY RESEARCH LIMITED/SOUTH KOOTENAY GOLDFIELDS INC.

M°NEIL CREEK PROJECT
LONG SECTION J-J'
Azimuth 035°

FIGURE 12

DRAWN BY:	SCALE:	DATE:
MJC	1:2000	MAR. 5, 1990

N
LEGEND
19,289