

BAPTY RESEARCH LIMITED

606 Trail Street
Kimberley, B.C. V1A 2M2
Fax (604) 427-2006
Tel (604) 427-7631

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**SUMMARY OF THE
GEOLOGICAL, GEOCHEMICAL
GEOPHYSICAL, DIAMOND DRILLING
AND PHYSICAL WORK PROGRAMS**

FILMED

**ON THE
MCNEIL CREEK PROPERTY
FORT STEELE MINING DIVISION**

NTS 82F/8E // 82G/5W

**49° 21' NORTH LATITUDE
115° 59' WEST LONGITUDE**

**PREPARED FOR
SOUTH KOOTENAY GOLDFIELDS INC.**

BY

**M. BAPTY, P.ENG.
P. KLEWCHUK, GEOLOGIST**

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1.00 SUMMARY

The McNeil Claim group is located 20 kilometers southwest of Cranbrook, B.C. The claims cover a series of Pb-Zn-Ag-Au veins which occur in Middle Aldridge Formation rocks above the Lower-Middle Aldridge contact (LMC).

An exploration program on the McNeil Creek property has successfully established that anomalous base metal mineralization exists at the LMC within a distinctive "Sullivan Horizon" zone, similar in many respects to the fringe of the World class Pb-Zn-Ag Sullivan orebody at Kimberley.

Soil Geochemistry, trenching and diamond drilling have tested a series of sulfide veins which occur in Middle Aldridge rocks immediately above a thick gabbro sill. This vein mineralization is similar in attitude and age to two massive sulfide veins located in similar rocks to the southeast and east; the St. Eugene vein which produced approximately 1.5 million tonnes, and the Vine vein, a relatively new discovery. The mineralized veins at McNeil occur approximately 1000m stratigraphically above the favourable Lower-Middle Aldridge contact and their presence may be an indication of underlying stratiform sulphides.

The favourable results of the 1988 exploration program at McNeil warrant additional work. Both the sulfide vein systems and the stratiform "Sullivan-type" target are recommended for continued drill testing. A first phase budget for \$650,000 is proposed to further evaluate the property.

2.00 INTRODUCTION

2.10 Location and Access

The McNeil Creek property is located 20 to 25 kilometers southwest of Cranbrook, B.C., and is centered approximately at Longitude $115^{\circ} 59'W$, Latitude $49^{\circ} 21'N$ (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 off 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.

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 meters. 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 meters.

2.30 Property

2.31 Geologic Target

The McNeil Creek property is primarily a lead-zinc-silver target but anomalous gold mineralization is known to occur locally. Both vein type massive sulfides and Sullivan type stratiform, stratabound massive sulfides are the target mineralization at McNeil.

2.32 Claim Group and Status

The McNeil Creek property consists of 170 claim units in 12 claims:

Claim	Record No.	Units	Owner	Record Date	Due
Ram 1	1730	4	E. Frost	Nov. 17, 1982	1989
Ram 2	1731	8	"	Nov. 17, 1982	1989
Mar 3	765	12	"	Sept. 20, 1979	1989
Mar 4	2984	8	"	Sept. 11, 1987	1989
Sunny 1	3049	12	R.J. McGowan	Feb. 3, 1988	1990
Sunny 2	3050	20	"	Feb. 3, 1988	1990
Sunny 3	3051	20	"	Feb. 3, 1988	1990
Sunny 4	3052	15	"	Feb. 3, 1988	1990
Sunny 5	3053	15	"	Feb. 3, 1988	1990
Sunny 6	3054	20	"	Feb. 3, 1988	1990
Shyan	3174	20	S.K.G. Inc.*	Aug. 24, 1988	1989
Shyan 2	3175	16	"	Aug. 24, 1988	1989

Total Units 170

*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 are a series of option payments over 6 years beginning in 1988 and an NSR clause with a total payment provision. A 5 kilometer perimeter clause is included and, if the original claims revert back to the owners, 3 years assessment credit are to be provided.

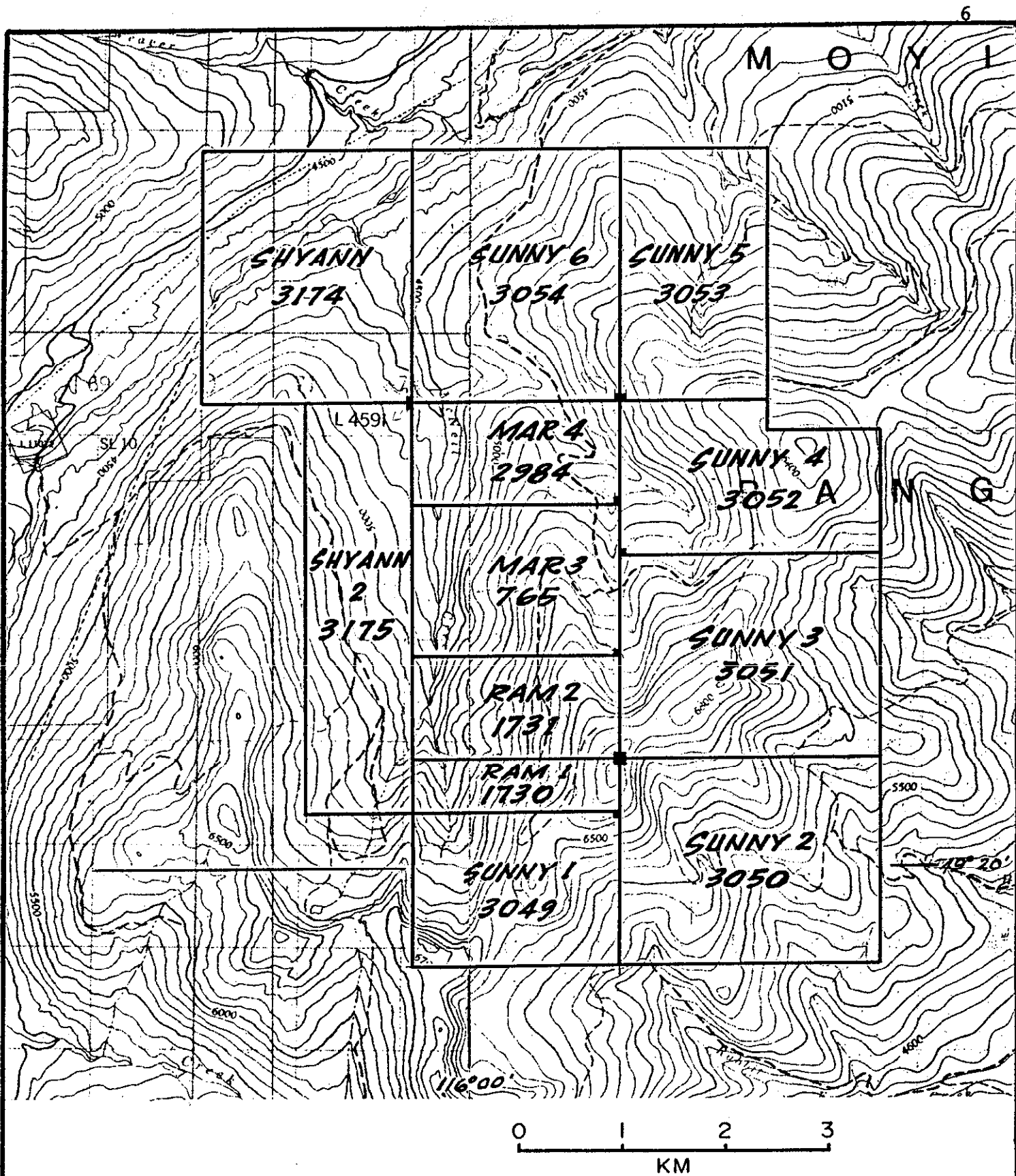


Figure 2

McNEIL CREEK PROPERTY
CLAIM MAP
NTS 82F/8 & 82G/5
Scale 1:50,000

2.40 History

Logging activity exposed Pb and Zn 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 16,606 by F.P. O'Grady, Dec. 7, 1987).

In March, 1988 the property was optioned to South Kootenay Goldfields Inc.

2.50 1988 Program

Linecutting, geophysical surveying, geological mapping, trenching, grid soil and rock geochemistry, and diamond drilling were completed on the McNeil Creek property in 1988 and early 1989. A total of 29.7 kilometers of line was cut, including 3.0 km of baseline. Geophysical surveys consisting of total field ground magnetics, MAX-MIN EM and VLF-EM were completed on the 26.7 km of prepared survey lines. Twenty-nine trenches were dug with a John Deere 690B tracked excavator and 2677 meters of diamond drilling were completed in a total of 8 holes.

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 kilometers 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 (Hoy and Diakow, 1982) comprise a thick accumulation of dominantly basinal turbidites. 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 (Hoy, 1979) suggest the east margin of the basin developed by growth faulting. 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 meters below the sediment surface.

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; descriptions can be obtained from government publications such as Hoy and Diakow (1982) or Hoy (1985).

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 east 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 ranging up to about 1500 meters.

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 meters.

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.

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 meters in this area.

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 meters. 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.

3.30 Mineralization and Target Development

Base metal sulfides and gold mineralization are present on the McNeil Creek property. A series of sulfide-mineralized quartz veins are exposed on surface in the Middle Aldridge quartzites and siltstones in the hangingwall of the gabbro sill on the west limb of the McNeil syncline. These veins carry galena, sphalerite, chalcopyrite and anomalous gold and silver. Cerussite and pyromorphite are extensively developed in the surface trenches from weathering of galena and chalcopyrite is typically oxidized to malachite. The veins are oriented at approximately 120 degrees azimuth and are steeply dipping. This trend is parallel to the St. Eugene vein located on Moyie Lake (production history of about 1.5 million tonnes) and the more recently discovered Vine vein. Lead isotope analysis carried out by the Department of Geological Sciences at UBC has established that the vein galena from the McNeil property is isotopically similar to the St. Eugene and Vine veins, and is of similar age to Sullivan lead. One or more of these mineralized veins on the McNeil Creek property may host mineable tonnage.

This Precambrian age vein lead mineralization may be remobilized from a deeper, bedded base-metal sulfide deposit. Bedrock exposed on the McNeil property is of the lower part of the Middle Aldridge formation. The Sullivan orebody-hosting Lower-Middle Aldridge contact occurs within 300 meters of surface on a small part of the property and within 1500 meters of surface over the rest of the property. Thus the vein sulfides exposed on surface may be remobilized from a stratiform deposit located at the Lower-Middle Aldridge contact; such a stratiform deposit is a prime exploration target at McNeil.

Although vein and stratiform massive Pb-Zn-Ag mineralization are the main targets on McNeil, other possibilities exist.

Anomalous gold in quartz veins in sedimentary rocks, gabbro and fault zones on the property may be related to the McNeil Creek Fault. This north-trending structure is probably correlative with the Palmer Bar Fault to the north which hosts anomalous gold with quartz. The Moyie River, into which McNeil Creek drains, is a prominent placer gold stream. 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.

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 gabbro.

4.00 GEOCHEMISTRY

Soil sampling was conducted on the geophysics grid; samples were collected at 100 meter spacings on lines 200 meters apart (100 meters apart on the detailed north corner of the grid). Soil sampling method consisted of hand dug openings in overburden with a maddock. A depth of 0.30 m usually yielded B horizon soils which were placed in Kraft paper gusset bags and analyzed at Kootenay Analytical Labs in Ainsworth for lead, zinc and silver. Results are shown in Figure 5.

4.10 Lead

A broad, strong lead anomaly follows the hangingwall contact of the gabbro sill, extending about 1400 meters along strike and up to 400 meters wide. One high lead value (760ppm) occurs at 3700N, 3100E on the northeast margin of the survey area and may represent a continuation of the mineralized trend. A few single point anomalies of >100ppm Pb occur elsewhere on the grid, mainly below the footwall contact of the gabbro.

The main lead anomaly evidently reflects the vein mineralization known on surface; the downslope anomalies may be a spurious reflection of this mineralization. Sample density is insufficient to evaluate these single point anomalies.

The anomalies indicated by single point high lead values on the northeast and southeast margins of the grid should be delineated with additional sampling. These high leads are coincident with elevated zinc and silver and may be significant.

4.20 Zinc

Zinc values in the grid area are generally low. There is a reasonable correlation of anomalous zinc values ($>150\text{ppm Zn}$) with the area of high lead, but there is a much broader scatter of isolated one or two sample zinc anomalies than for lead.

4.30 Silver

Silver shows a broad range of values which are difficult to interpret. Four areas with clusterings of $>1\text{ppm Ag}$ are present; two of these correlate roughly with the broad lead anomaly. There is a wide scattering of values $>1\text{ppm Ag}$; eight samples have values $>10\text{ppm Ag}$ (ranging from 11.4 to 42.1 ppm Ag) and none of these correlate with the main lead anomaly. Sites with high silver values should be re-sampled to confirm the results before an interpretation of the data is made. If the anomalous silver results are confirmed then a detailed follow-up program should be conducted to evaluate the presence of high grade silver mineralization.

In summary, lead geochemistry appears to reflect the vein mineralization which has been located and trenched on surface. Because of the broad nature of the anomaly it is not clear whether presently unknown vein mineralization is reflected in the geochem results.

5.00 GEOPHYSICS

A geophysical survey consisting of MAXMIN I Horizontal Loop EM, Total Ground Magnetism and VLF-EM was conducted on the McNeil Creek property in June and July of 1988 by Lloyd Geophysics Ltd. of Vancouver (see separate report by John Lloyd).

Approximately 26.7 km were surveyed.

EM was done to test the shear zones / mineralized quartz veins for their response and to establish continuity. The magnetism survey was done in the hope of defining the gabbro sill which is partially exposed at the hangingwall but not exposed at the footwall. Knowledge of the thickness of the sill is an important factor in projecting the depths of any drill holes which would test the LMC from a collar location within the sill.

5.10 VLF-EM Survey

According to Lloyd (1988) "the VLF-EM survey failed to detect previously discovered NW-SE shear zones by virtue of the fact that there was no transmitting station suitably located so as to provide adequate coupling with these shear zones." A number of very weak VLF-EM conductors were detected by the survey; these may be faults or shears but there is no established continuity between survey lines and, Lloyd states that "due to their very weak nature, they may not have true bedrock sources and could be caused by conductive clays in overburden".

5.20 MAXMIN I Horizontal Loop EM Survey

The MAXMIN I Horizontal Loop EM (HLEM) survey detected a small number of possible conductors. Lloyd (1988) indicates these may or may not be bedrock responses. Rough terrain and a similarity in response between the low frequency (880Hz) and the high frequency (1760Hz) has influenced this tentative conclusion.

The HLEM conductors are not correlative with the VLF-EM conductors. The sulfide-mineralized quartz vein / shear zones known from surface trenches may have been not detected due to a lack of continuity, or to a discontinuous development of conductive sulfide like pyrrhotite or galena.

Weak HLEM responses on Line 4000N and 4100N can be interpreted to have a north alignment and may be related to a north-trending structure paralleling the mag anomaly. DDH M-88-2 was drilled across these conductors. The contact between Middle Aldridge Formation quartzites and the north-trending magnetic dike has a prominent fault associated with it at 128 meters in the drill hole. This location corresponds roughly with the EM conductors seen in the HLEM survey.

5.30 Total Field Ground Magnetic Survey

Most of the survey grid displays no magnetic variation; it is "singularly uninteresting from a magnetic point of view, with variations of 20 nT occurring over more than 90% of the property" (Lloyd, 1988).

One strong magnetic anomaly is present in the north corner of the grid on lines 4000N, 4100N and 4200N. A detailed magnetic contour map is given in Figure 6. The anomaly is open to the north and may be the extreme southern edge of a linear, northerly-aligned anomaly defined by a 1970-71 government aeromagnetic survey (Fig. 7 & Fig. 4). The aeromag anomaly coincides with the McNeil Creek Fault on the north part of the property and is very likely related to this structure. The southern end of the aeromag anomaly hooks to the east, perhaps due to the influence of a northwest-oriented fault which intersects the McNeil Creek Fault at that location, as suggested on Fig. 7.

The ground mag anomaly was trenched and drilled; results are given in sections 6.00 and 7.00.

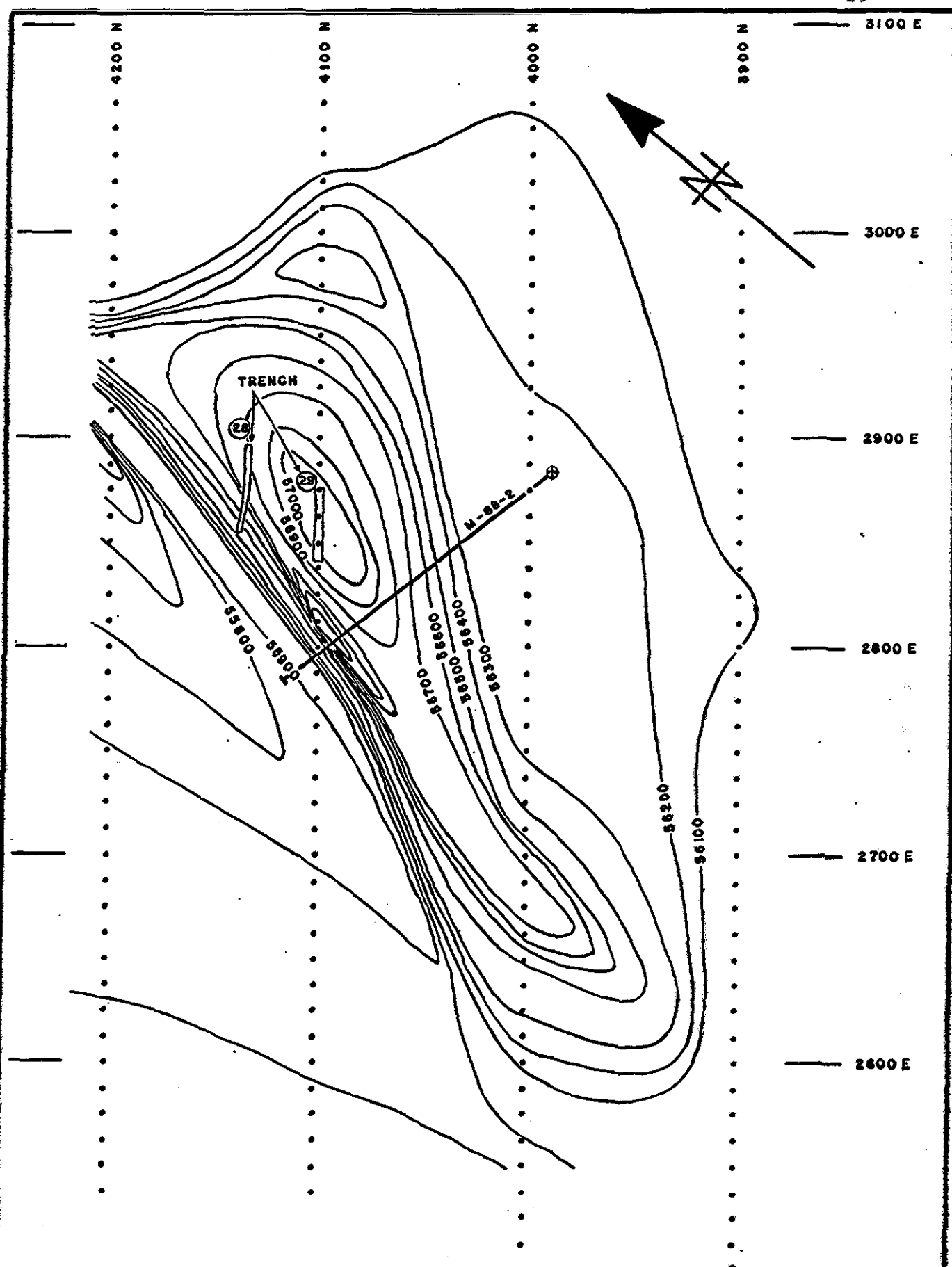


Figure 6

Detailed Contouring of Mag Anomaly
See Also Figure 4. Scale 1:2,500

6.00 TRENCHING

In July, 1988 a John Deere 690B tracked excavator was used to dig a series of trenches on the property. The trenching program evaluated all of the 6 quartz vein / shear zone occurrences known with a series of 27 trenches and an additional 2 trenches tested the ground magnetic anomaly at the north end of the geophysics grid. These trenches totalled 970 lineal metres and had an average depth of 3.0 metres. Location of the trenches is shown on Figure 4 and 11.

Most of the mineralized quartz veins were trenched at or near trenches that were dug prior to 1988 and only one vein structure was trenched over any appreciable strike length. Numerous rock samples were collected and analyzed for a multi-element ICP package plus geochemical gold; geochemical results are included as Appendix I.

Geological information obtained from trench mapping suggests the mineralized quartz veins are relatively narrow and they tend to pinch and swell in both horizontal and vertical directions. Vein thickness varies from a few centimeters to a maximum observed of about 1.5 meters, with 30 cm to 1 meter widths common. Some veins are composite veins with relatively narrow veins occurring near the margins of a larger vein. Thickening of the vein structure, possibly with high concentrations of sulfides, may occur where composite veins coalesce.

Fresh sulfides are rarely seen in the trenches; galena is weathered to cerussite and pyromorphite, chalcopryrite is weathered to malachite, and sphalerite has been weathered to smithsonite. In a few trenches, fresh galena mineralization is present and occurs in a patchy pod-like manner.

The geochemical analyses demonstrate that the veins and associated shear zones are anomalous in a series of elements. Cu, Pb, Zn, Ag and As are commonly strongly anomalous, with Au, W, and Bi being sporadically anomalous. Sr and Th appear to be locally anomalous.

Commonly the adjacent wallrock to the vein zones is quite altered. Biotite-rich quartzites are typically altered to a sandy-textured, soft punky material. This alteration is probably related to intrusion of the veins.

The veins are only known in a relatively narrow zone of metasedimentary rocks in the hangingwall zone of the gabbro sill (see Fig. 8). This observation may be due to limited understanding of the property geology but no sulfide-bearing quartz veins have been traced into the underlying gabbro and it appears that all the mineralized veins are restricted to the overlying quartzite / siltstone package. This suggests a structural control to the veins, with one of the significant factors being the competency contrast between the gabbro and the metasedimentary rocks.

Two trenches (88-9 and 88-23) exposed the sediment-gabbro contact. In both trenches the sediments are quite intensely weathered to soft, punky material yet the immediately adjacent gabbro sill is fresh-looking and competent. In contrast to the gabbro in these trenches, the gabbro at the collar sites of DDH M-88-2 and 7 is quite deeply weathered; drill sites were dug up to 4 meters vertically into weathered gabbro with the blade of a D6 bulldozer and the upper core in both holes shows evidence of weathering. These observations suggest that, although surface weathering is locally quite deep and is obviously responsible for alteration of primary sulfides in the veins to carbonates (cerussite and malachite) and phosphates (pyromorphite), there may still be an alteration process related to intrusion of the veins which has influenced the weathering of immediately adjacent sedimentary wallrocks.

The mag anomaly was trenched on line 4100N (Figs. 4 and 7). An altered felsic rock encountered below about 5 meters of overburden was interpreted to be bedrock. Some of the Cretaceous age felsic intrusives known in the area produce aeromagnetic anomalies. Examples are the Kiakho and Reade Lake stocks (see Hoy, 1987). Samples collected from the trench were non-magnetic and geochem analysis of 2 samples (numbers 6769 and 6770; Appendix I) did not show any anomalous elements present.

Narrow felsic dykes were seen in trenches 88-6, 88-8, 88-25, 88-26 and 88-27. The dykes are anomalous in copper, lead, zinc and arsenic (see Appendix I). Cretaceous (or possibly Tertiary) felsic intrusives in the area are known to be associated with copper and gold mineralization.

The magnetic anomaly was drilled to test for the presence of a mineralized felsic dyke. A magnetite-bearing gabbro dyke was encountered in the hole at a depth of 129 meters. No evidence of a magnetic felsic intrusive was seen in the drill core although one narrow zone of anomalous Cu, Pb, Zn, Ag and Au was encountered (see section 7.20 under Diamond Drilling).

7.00 DIAMOND DRILLING

Eight holes were drilled on the McNeil Creek property in 1988 and early 1989 for a total of 2677 meters. The core is stored in racks at Wycliffe Ranch, private property of Michael Bapty, Kimberley, B.C. Diamond drilling is summarized as follows:

Hole	Depth	Co-ordinates	Azimuth	Dip	Target
M-88-1	171.9m	3383N 3080E	240	-50	Mineralized shear
M-88-2	263.0m	3972N 2910E	282	-50	Mag Anomaly
M-88-3	169.5m	N E	-	-90	LMC*
M-88-4	305.7m	N E	-	-90	LMC
M-88-5	71.6m	N E	062	-45	Mineralized shear
M-88-6	64.3m	N E	024	-44	Mineralized shear
M-88-7	1031.8m	N E	090	-80	LMC
M-89-1	599.2m	N E	-	-90	LMC
Total 2677.0m					

*Lower Aldridge - Middle Aldridge Contact; Sullivan Horizon

Three holes tested sulfide-mineralized quartz vein / shear zone targets, one hole tested the mag anomaly at the north end of the geophysics grid and four holes were intended to test the Lower - Middle Aldridge contact.

7.10 Sulfide-mineralized Quartz Vein / Shear Zone Targets

DDH M-88-1, 5 and 6 tested the vein sulfide targets. DDH M-88-1 tested a shear at the north end of the grid while holes M-88-5 and 6 both tested another vein about 500 meters to the south. Hole locations are on Fig. 4, graphic logs and cross-sections are on Fig.8.

All three holes intersected the target veins where expected following surface projections. This data suggests the veins are quite planar structures and are fairly continuous over short distances.

DDH M-88-1 intersected the vein structure about 47 meters vertically below surface but still encountered some secondary lead mineralization as cerussite in oxidized portions of the vein.

DDH M-88-5 and 6 intersected the vein structure about 52 meters and 40 meters respectively below surface; no secondary mineralization was noted but partial oxidation of the zone has resulted in rusty iron sulfides which masks some of the character of the vein zone.

The vein zones are sulfide-mineralized quartz veins with brecciation and shearing evident. Fragments of brecciated sedimentary wallrock and patchy base metal sulfides are distributed through the zones.

Details of the better intersections are:

Hole	Interval	Length	ASSAY			ANALYSES			
			% Cu	% Pb	% Zn	oz/ton Ag	Au	PPB Au	PPM As
M-88-1	57.2-58.3	1.05m	.14	1.49	.02	.15	.001	12	400
	58.3-59.4	1.10m	.20	2.25	.02	1.16	.001	25	611
Weighted average		2.15m	.17	1.88	.02	0.67	.001	19	508
Approx. true width		2.00m							
M-88-5	57.2-57.7	0.5m	.19	16.51	.38	2.97	.001	5	14
	57.7-58.6	0.9	.13	.36	.68	.15	.001	2	15
Weighted average		1.4m	.15	6.13	.57	1.12	.001	3	15
Approx. true width		1.2m							
M-88-6	50.8-51.5	0.7m	.32	13.88	1.03	2.21	.001	31	162
	51.5-52.3	0.8m	.10	2.33	2.25	.46	.001	3	128
Weighted average		1.5m	.20	7.69	1.68	1.28	.001	16	144
Approx. true width		1.25m							

These results, along with surface trench analyses, demonstrate that good potential exists to develop a mineable tonnage of ore grade material within the sulfide-mineralized quartz vein / shear zone systems.

The fact that both VLF-EM and HLEM surveys did not detect these sheared veins makes it difficult to define specific drill targets along the vein structures. Consideration should be given to utilizing other geophysical techniques to define the structures prior to any extensive drill program.

DDH M-88-1 was continued beyond the shear zone into the upper part of the gabbro sill to evaluate the contact zone as a possible site of pooling of remobilized sulfides. The contact where drilled appears conformable and no build-up of sulfides is present at that location.

7.20 Mag Anomaly Test

DDH M-88-2 was drilled to test the mag anomaly at the north end of the geophysics grid (Fig 4). The hole was collared to cross the anomaly where the highest magnetic response was detected (Fig.7). The hole collared in the footwall zone of the gabbro sill, entered Middle Aldridge rocks at 96.6 meters and back into a gabbro dyke at 129.2 meters (Figs. 4 and 8).

The dyke encountered at 129.2 meters carries appreciable magnetite at its east contact and this is obviously the cause of the mag anomaly. the dyke varies in character from the gabbro sill which the hole collared in by a more foliated, chloritic character, the presence of magnetite, numerous irregular epidote veins, and patchy, disseminated euhedral pyrite (up to 1 1/2% over intervals up to 6 meters).

Within the metasedimentary rocks encountered in the hole between the two intrusives, a narrow, 10cm wide band of quartzite is strongly silicified with vuggy quartz and carries anomalous base metal sulfides; 0.83% Cu, .01% Pb and .06% Zn.

This apparently stratabound copper-rich mineralization is not a common occurrence in the Aldridge Formation and might be considered inconsequential except that, a short distance east of the McNeil property, large boulders of similar dominantly copper mineralization are known. This type of mineralization represents an exploration target which is possibly quite different from the principal vein and stratiform massive sulfide targets. A hole to test the LMC in this area could prove interesting.

7.30 Stratigraphic (Sullivan Target) Tests

DDH M-88-3 was intended to test the LMC at a location inferred from geologic mapping to be approximately 250 meters stratigraphically above the LMC (Fig. 4). A marker intersected at 38 meters in the hole confirmed that the LMC should be near the originally inferred depth. At 131 meters the hole entered a fault zone and continued in the fault to the final depth of 169.5 meters at which point drilling was terminated because the Longyear 38 drill was incapable of continuing. The fault zone contains considerable quartz veining with some disseminated euhedral pyrite. There is evidence in the core of repeated phases of brecciation and silicification. The zone is apparently not very well cemented and the loose brecciated quartz proved impossible to drill through with the 38 machine.

The conglomeratic siltstone zone is 5 meters thick and contains small isolated, rounded clasts, some of which are rimmed with pyrrhotite. The conglomeratic siltstone also contains pyrrhotite laminae and discontinuous pyrrhotite lenses. The laminated siltstone zones carry anomalous zinc mineralization, up to 373 PPM over 1.1 meters; a 7.3 meter interval averages 205 PPM Zn.

At the base of the "Sullivan Horizon" zone is a 1.1 meter wide sheared zone which includes a narrow quartz vein and visible galena. A 40 cm interval within this zone carries 0.83% Pb, .06% Zn, 0.5 oz/ton Ag, .015 oz/ton Au and 1.12% As. The presence of these base and precious metals at the bottom of the "Sullivan Horizon" zone is very encouraging because it is at the base of a generally similar zone that the massive sulfides occur at the Sullivan.

Within the Lower Aldridge Formation cored in DDH M-88-7, zones of alteration with quartz veining and pyrite mineralization carry anomalous Cu, Pb, Zn, Ag, As and Au (maximum values are 344 PPM Cu, 230 PPM Pb, 769 PPM Zn, 26,851 PPM As, and 680 PPB Au). The highest Pb and Zn occur in one 60cm interval; the highest As and Au are in one narrow 10cm interval. This mineralization may be part of a footwall feeder zone system which deposited metals on the sea floor during "Sullivan Horizon" time.

The encouraging intersection provided by DDH M-88-7 was followed up with another stratigraphic test of the LMC by drilling DDH M-89-1 3000 meters southeast of DDH M-88-7 (Fig.4).

This hole intersected a series of gabbro sills and dykes and a small amount of Aldridge Formation metasediments (Fig.10). The LMC was intersected at 270 meters. A 20cm wide zone of broken, chloritic and pyritic core at the contact may be a minor fault zone, but if so, it appears to have minimal displacement. At the LMC the hole goes from overlying thick and medium bedded Middle Aldridge quartzites and minor siltstones to underlying Lower Aldridge thin bedded and laminated pyrrhotitic siltstones with minor quartzite. The rocks (particularly of the Lower Aldridge) are considerably altered by an underlying 150 meter thick gabbro sill; only 33 meters of Lower Aldridge sediments were intersected below the LMC and above the sill (see Fig.10). The change in bedding thickness and lithology, and the presence of abundant disseminated pyrrhotite in the underlying thin bedded sediments is convincing evidence that this is the LMC. A short report on DDH M-89-1 was written in March, 1989 and is included as Appendix III.

DDH M-89-1 tested the LMC just above a gabbro sill and close to a north-trending gabbro dyke which could be a feeder for the sill. In theory this could be a favourable location for sulfides to be present at the LMC because the Sullivan orebody occurs just above a gabbro sill which forms an arch-like structure immediately below the deposit.

The limbs of the gabbro arch apparently transgress bedding of the Lower Aldridge.

The 150 meter thick sill intersected in DDH M-89-1 only 33 meters below the LMC was not seen in DDH M-88-7; two thin gabbro sills do occur in the Lower Aldridge cored by that hole (Figs. 8 and 9), but at a greater distance below the LMC.

Obviously there is considerable variation in both thickness and stratigraphic location of the gabbro sills in the southeast portion of the McNeil Creek property. This situation may be somewhat analogous to that which is present at the Sullivan orebody. These irregularities in the gabbroic intrusions may represent proximity to feeder zones which have also served as conduits for hydrothermal fluids that deposited massive sulfides at the LMC on the McNeil Creek property.

7.40 Discussion

The variation in character of the LMC between DDH M-88-7 and DDH M-89-1 may have significant implications for discovery of a base metal sulfide deposit on the McNeil property.

The presence of a distinctive "Sullivan Horizon" zone in DDH M-88-7 and the absence of such a zone in DDH M-89-1 suggests that conditions were quite different at the sites of the two holes during Sullivan time. The anomalous base metals present in the LMC zone of DDH M-88-7 supports the possibility of a nearby build-up of base metal sulfides at the LMC.

A second attempt at drilling the LMC in the area was made by DDH M-88-4, collared approximately 200 meters southeast of DDH M-88-3 (Fig. 4). The fault in DDH M-88-3 was inferred to be related to the McNeil Creek Fault to the west and thus was considered to have a northerly strike. DDH M-88-4 intersected what is evidently the same fault zone at 281 meters and the hole terminated in this zone at a depth of 305.7 meters (Figs. 8 and 9). The fault evidently strikes northwest, parallel to the Little Lamb Creek Fault mapped by Hoy and Diakow (1982), Fig. 3, to the east of the McNeil Creek Property and dips steeply northeast. Anomalous concentrations of Cu, As and Au are associated with the quartz veining and shearing in the fault zone; higher values occur with pyrite and small carbonate veins.

Late in 1988, DDH M-88-7 was collared approximately 500 meters east of DDH M-88-4 and drilled at -80 degrees due east to test the LMC below the broad soil geochem anomaly seen on surface (Figs. 4 and 5). The hole successfully tested the LMC and continued through the upper part of the Lower Aldridge Formation to a final depth of 1032 meters (Figs. 8 and 9). An interim report on DDH M-88-7, written shortly after the hole was completed, is included as Appendix III.

A distinctive "Sullivan Horizon" zone was encountered from 809.7 to 838.8 meters, consisting of massive to finely laminated siltstone and conglomeratic siltstone.

In 1980 Cominco Ltd. drilled a hole on their Lew claims, approximately 7 km southwest of DDH M-88-7. The hole was collared on the basis of stratigraphic markers present in surface bedrock and was intended as a stratigraphic test of the LMC. In Cominco's opinion, the hole was drilled deep enough to have intersected the LMC but the horizon was not identified in the core. The conclusion reached at that time was that the Lower - Middle Aldridge transition zone had lost its distinctive character in this part of the sedimentary basin, with upper Lower Aldridge rocks being similar in character to lower Middle Aldridge rocks. An alternate interpretation considered is a thickening in the basin at this point with increased thickening of the lower Middle Aldridge section, in which case the Lew hole may have not been drilled deep enough to intersect the LMC.

Assuming either of these interpretations of Cominco's Lew hole is correct, the recent intersection of a distinctive and thick "Sullivan Horizon" zone in DDH M-88-7, contrasting markedly with results obtained in the Lew hole, strongly suggests that the McNeil Creek Fault has played a significant role in the distribution of facies types during deposition of sediments at Sullivan time. The McNeil Creek fault may have been an active fault during Aldridge deposition.

The fault zone conceivably was also the conduit for upward migration of sulfides which accumulated at the LMC. If the McNeil Creek fault had a controlling influence in the deposition of sulfides at the LMC then future drilling of the McNeil property should first test ground close to the fault. Structural complications which probably exist toward the north edge of the property restrict the opportunities for relatively shallow (<1000m) testing of the LMC very far in this direction. A minimum of two additional holes can be confidently located now, to test the LMC near the McNeil Creek fault, east and northeast of DDH M-88-7. Results of this drilling can then be used to direct any additional drilling.

There is evidence of younger (Cretaceous or Tertiary age) mineralization on the McNeil Creek property. Narrow felsic dykes seen in trenches 88-8, 88-26 and 88-27 and a probable wider dyke interpreted in trench 88-29 may be related to such young mineralization. The dyke sampled from trench 88-8 is anomalous in Cu, Pb and Zn (59 PPM Cu, 2179 PPM Pb, 746 PPM Zn); two dykes sampled from trench 88-27 are anomalous in Pb (114 PPM and 549 PPM). The 10cm band of silicified quartzite seen in DDH M-88-2 with 0.83% Cu is anomalous in Pb (131 PPM), Zn (468 PPM), Ag (6.2 PPM), and Au (46 PPB). In DDH M-88-7, a 20cm wide zone of 'quartz sand' at 688.3 meters is high in Cu, Pb, Zn as well as 676 PPM W, 2909 PPM Mn, 593 PPM Sr and 218 PPM Ba. This mineralization may be related to young intrusive-related hydrothermal activity.

8.00 CONCLUSIONS

1. The 33 meter thick "Sullivan Horizon" zone intersected by DDH M-88-7 at the Lower-Middle Aldridge contact is similar in many respects to the "Sullivan Horizon" zone that occurs on the fringes of the Sullivan orebody. The presence of anomalous base metal mineralization and conglomerate indicate that conditions were favourable for deposition of stratiform sulfides at the LMC in the McNeil Creek area.
2. The absence of a "Sullivan Horizon" zone at the LMC in DDH M-89-1 places a favourable perspective on the area near DDH M-88-7.
3. The McNeil Creek fault may be a controlling structure which influenced the deposition of sulfide mineralization at Sullivan time in the McNeil Creek area. Significant changes in the character of the LMC between DDH M-88-7, M-89-1 and Cominco's Lew hole west of the fault support this conclusion.
4. Irregularities in the gabbroic intrusives, established by DDH M-88-7 and DDH M-89-1, may represent proximity to conduits along which the gabbros were emplaced. These conduits may have served as channelways for hydrothermal activity which vented base metals to the sea floor in the present McNeil Creek area during Sullivan time.

5. A series of at least 6 sulfide mineralized veins occur on the McNeil Creek property. These are similar in age and general orientation to the massive sulfide St. Eugene and Vine Veins. Three drill holes which tested two of the veins intersected up to 9% combined Pb and Zn and 1.7 oz/ton Ag over a true width of 1.2 meters. The drilling demonstrates the veins have continuity; a small to moderate sized deposit of economic grade is a reasonable target on the property.
6. The vein mineralization appears restricted to a relatively narrow package of Middle Aldridge Formation rocks immediately above a thick gabbro sill on the west limb of the McNeil syncline. The relationship suggests a structural control for the veins, influenced by the competency contrast between the gabbro and Middle Aldridge rocks.
7. A Precambrian age for the vein lead mineralization establishes the presence of an early mineralizing event at McNeil; the vein sulfides may be remobilized from a stratiform occurrence at the Lower - Middle Aldridge contact.

8. Soil geochemistry successfully detected the zone of vein mineralization exposed on surface; a broad, strong lead anomaly follows the hangingwall contact of the gabbro sill. The anomaly persists to the northeast edge of the grid area and suggests that undiscovered veins occur beyond the grid to the north.
9. Geophysical surveying with VLF-EM, HLEM and ground magnetics failed to detect the known mineralized quartz veins / shear zones, due possibly to poor coupling with VLF-EM transmitter stations and a lack of continuity of conductive material in the veins.
10. Some of the anomalous copper and gold mineralization seen on the McNeil Creek property may be related to younger, Cretaceous or Tertiary age events. Small felsic dykes which are anomalous in base metals and are probably related to young intrusive activity, are present on the property.

9.00 EXPENDITURE STATEMENT DEC. 1988 - MARCH 1989

MAR 4 (2984), MAR 3 (765), RAM 2 (1731), RAM 1 (1730)

GROUP 13 SEPT. 8/88 (RAM GROUP)

FORT STEELE MINING DIVISION

	<u>Aug 1988- Feb 1989</u>	<u>March 1989</u>	<u>Total</u>
Base Map	622.06		622.06
Line Cutting	5,000.00		5,000.00
Geophysics	21,000.00		21,000.00
Trench Sampling & Assaying	4,000.00		4,000.00
Lead Dating	500.00		500.00
Diamond Drilling	222,520.82	54,130.32	276,651.14
Bulldozer	29,644.75		29,644.75
Mobilization	6,462.50		6,462.50
Sampling	2,379.23		2,379.23
Assays	5,532.90	1,654.95	7,187.85
Core Storage	1,422.39		1,422.39
Reclamation	818.76		818.76
Geology	19,726.45	1,946.00	21,672.45
Transportation	3,000.63		3,000.63
Management OH	46,578.48	8,659.69	55,238.17
Project Management	<u>18,892.72</u>		<u>18,892.72</u>
Total	<u>\$388,101.69</u>	<u>\$66,390.96</u>	<u>\$454,492.65</u>

10.00 REFERENCES

1. Hoy, T. (1979). Geology of the Estella - Kootenay King area, Hughes Range, Southeastern British Columbia, B.C. MEMPR Preliminary Map No. 36, 9p.
2. Hoy, T. 1982. "The Purcell Supergroup in Southeastern British Columbia; sedimentation, tectonics and stratiform lead-zinc deposits. In: Precambrian sulphide deposits; H.S. Robinson Memorial Volume (R.W. Hutchinson, C.D. Spence, and J.M. Franklin, Eds.). Geol. Assoc. Can. Special Paper 25.
3. Hoy, T. (1985). The Purcell Supergroup, Fernie West-half, Southeastern British Columbia, Part A - Stratigraphy - Measured Sections, B.C. MEMPR, Bull-76, 79pp.
4. Hoy, T. (1987). Geochemistry, geochronology, and tectonic implications of two quartz monzonite intrusions, Purcell Mountains, Southeastern British Columbia, Can. Journal of Earth Science Vol 25 pp 106-115.
5. Hoy, Trygve, and Diakow, L., 1982. Geology of the Moyie Lake Area, BC MEMPR, Preliminary Map 49.
6. Leech, G.B. (1958). Fernie Map Area, West-half British Columbia, Geol Surv. Can. Paper 58-10 40pp.
7. Lis, M.G. and Price, R.A., 1976. large scale block faulting during deposition of the Windermere Supergroup (Hadrynian) in Southeastern British Columbia: Geol Surv. of Can. Paper 76-1A p. 135-136.
8. Lloyd, John, July, 1988. "A geophysical Report on ground Magnetometer, VLF-EM and Horizontal Loop EM Surveys for Dragoon Resources Ltd.
9. Reesor, J.E., (1981). Geology of Grassy Mountain Map area (82F/8) Purcell Mountains, East Kootenay District, British Columbia. Geol. Surv. Can., Open File 820.

11.00 QUALIFICATIONS

11.10 Author's Qualification

As author of this report 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 BSc degree (1969) from the University of British Columbia and an MSc 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 30th day of March, 1989.

Peter Klewchuk

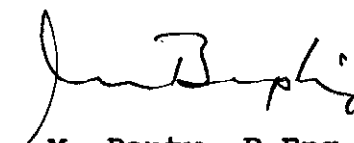
Peter Klewchuk
Geologist

11.20 Contractor's Qualification, McNeil Project

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 606 Trail St., Kimberley, B.C.;
2. I am a graduate of the University of British Columbia with a BASc in Mine Engineering (1968), and have been active in Mine Exploration, Operations, Development, and Administration for twenty-one years;
3. The accompanying report was reviewed and endorsed based upon a series of visits and examinations of the property and the supporting data, throughout the project period;
4. 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.; direct ownership of 25,000 shares of Dragoon Resources Ltd. through a Private Placement; and a warrant to acquire a further 25,000 shares in Dragoon Resources Ltd. subsequent to the above private placement. Dragoon Resources Ltd. is a 50% owner and Managing Partner of South Kootenay Goldfields Inc. I do not expect my interests to change as a result of endorsing or submitting this report;
5. I am a Member of the Association of Professional Engineers of the Province of British Columbia.

Dated at Cranbrook, British Columbia, this 31st day of March, 1989.



M. Bapty, P.Eng.
President

12.00 APPENDICES

12.10 APPENDIX I TRENCH SAMPLING; DESCRIPTIONS & ANALYSES

Sample Number	Description
6724	Trench M1. Fault gouge on FW side of complex zone of quartz veining and shearing. Quartz vein immediately to east. 25cm wide Color banded from yellow-brown and orange-brown to gray and pale blue-green.
6725	Trench M1. Quartz vein adjacent to 6724. 25cm wide. Numerous open space quartz crystals. Yellowish limonitic vugs. Quartz vein at 150/60NE.
6726	20m south of Trench M2 along road. Limonitic, vuggy quartz vein 114/83N.
6727	Trench M2. Grab sample of central part of quartz vein, adjacent to road. Limonitic and vuggy with galena and cerussite.
6728	Trench M2. Grab sample of quartz vein along NE, footwall contact with adjacent unaltered sedimentary rocks.
6729	Trench M2. Upper, south end of main trench exposure. Quartz vein is about 70cm wide. Grab sample of very strongly limonitic, vuggy quartz with pyromorphite.
6730	Trench M1. SW side of NE fault zone. Limonitic orange, yellow and yellow-gray fault gouge. Chip sample over 60cm (representing true thickness of about 35 or 40cm).
6731	Trench M1. Mn-stained, fragmented central felsic material in fault gouge zone. May be felsic dike.
6732	Trench M1. Fault gouge, on NE side of NE fault zone. Orange to gray colored - chip sample over 50cm representing a true thickness of about 25 or 30cm.
6733	Trench M3. Grab of shattered quartz vein with pyromorphite, limonitic vugs, chlorite and weathered biotite.
6734	Trench M4. Grab sample of limonitic quartz vein.
6735	South side of landing, east of L24N L20E. Wavy, 4cm wide limonitic quartz vein in brecciated, limonite-altered sediments.

- 6736 Trench M5. Grab sample of quartz vein with pyromorphite and weathered biotite.
- 6737 Trench M5. South margin of quartz vein - Mn-rich fault gouge, some limonitic staining, possibly minor quartz veining.
- 6738 Trench M6, in diorite. Limonitic quartz vein.
- 6739 Trench M7. Limonite-altered contact zone between sediments and diorite.
- 6740 Trench M7. Quartz vein intruding sediments near diorite contact; vein terminates in sediments. Quartz is clear with limonite staining and limonitic vugs; minor pyrite is present.
- 6741 Trench M7. Dark gray, almost black altered material at contact of finger of diorite. Material is sandy with considerable biotite.
- 6742 Trench M7. Limonitic, strongly cleaved sediments in immediate footwall zone of quartz vein. Pyromorphite occurs with sediments.
- 6743 Trench M7. Quartz vein. Grab sample from central part of vein. Very limonitic with considerable pyromorphite on some surfaces.
- 6744 Trench M7. Limonitic altered, deep reddish-brown colored hangingwall contact zone of quartz vein with sediments. May be some quartz veining in sample.
- 6745 Trench M7. North end of trench. "On strike" with quartz vein. Skarn-like quartz rich rock, not well exposed. Some quartz veining, fine-grained galena (?) and pyrite, some pyromorphite and local coarse-grained amphibole.
- 6746 Quartz vein float (subcropping). Glassy, brownish limonitic quartz with goethite, limonite-encrusted vugs. Approx. grid location Line 21N, 3450E.
- 6747 Quartz vein with weathered biotite, slightly iron stained. Approx. grid location Line 21N, 4400E.
- 6748 Rusty weathering, pyrrhotite-bearing silty quartzite. Approx. grid location Line 21N, 4500E.
- 6749 Quartz vein. Limonitic and vuggy with euhedral quartz crystals, biotite and sericite. Approx. grid location Line 20N, 4250E.

- 6750 Probable felsic dike. White to pale gray color, variably limonitic with weathered (limonitic) spots which may have been sulfides. Vague brecciated texture.
- 6751 Brecciated, altered silty quartzite with epidote veins. Approx. grid location Line 37N, 3150E.
- 6752 Trench M-88-1 north wall. East half (40cm) of fault zone; Mn and limonite-stained fault gouge.
- 6753 Trench M-88-1 north wall. West half (40cm) of fault zone; Mn and limonitic stained brecciated sediments.
- 6754 Trench M-88-7. Chip sample across 25cm wide fault zone. Includes blue-gray fault gouge, brecciated Mn and limonite stained sediments.
- 6755 Trench M-88-8 (downhill of trench M-2). Felsic dike in possible shear zone.
- 6756 Trench M-88-9 (=trench M-9). Shear zone with strong chloritic alteration, limonite spotting, some Mn, in fault gouge. Fault oriented at 147/42SW.
- 6757 Trench M-88-9. Limonite and Mn in fault gouge material with possible quartz veining.
- 6758 Trench M-88-9. Grab sample of altered biotitic sedimentary rock. Rock is sandy and can be crumbled in the hand.
- 6759 Trench M-88-19. Grab sample chipped off quartz vein.
- 6760 Trench M-88-19. Altered diorite on FW side of quartz vein.
- 6761 Trench M-88-13. Chip sample of brecciated quartz vein zone; part of a 1m wide brecciated, Mn and limonite stained zone.
- 6762 Trench M-88-22. 15cm wide fault zone at 127/87N. Quartz veining, limonitic fault gouge with minor pyromorphite.
- 6763 Trench M-88-21. 15cm wide quartz vein at 115/59N.
- 6764 Trench M-88-21. 5cm wide fault zone at 110/59N.
- 6765 Trench M-88-23. Grab sample of bleached, brecciated, limonitic-altered sedimentary rock which carries pyromorphite along fractures. The brecciated zone is about 2m below surface and appears to be a sub-horizontal fault zone trending 005/15W.

- 6766 Trench M-88-24. Rubbly, unoxidized diorite. Sampled to compare with oxidized diorite in Trench M-88-18.
- 6767 Trench M-88-27. Felsic dike 10cm wide, white to light gray color with weak patchy limonite staining. North end of dike exposure.
- 6768 Trench M-88-27. Felsic dike at south end of exposure.
- 6769 Trench M-88-29. Magnetic anomaly on Line 41N at 2875E. Felsic intrusive. Yellow-brown-orange colored, limonite altered; mainly fine-grained feldspar with minor sericite. Brecciated texture.
- 6770 Trench M-88-29. Felsic intrusive from 2865E on Line 41N.
- 6771 Trench M-88-23. Grab sample of limonitic, brecciated sedimentary rock with pyromorphite on fractures (similar to 6765).
- 6772 Trench M-88-23. Quartz vein. 20cm wide, brecciated, limonitic with minor feldspar and pyromorphite.
- 6773 Trench M-88-18. Pegmatite vein with quartz and Beryl (?) elongate, hexagonal pale green crystals comprise up to 50% of the 10cm wide vein. Vein is on the FW side of a 70cm wide shear zone (136/80S) containing reddish oxidized diorite.
- 6774 Trench M-88-18. Quartz vein zone. Chip sample across 40cm width at east edge of zone.
- 6775 Trench M-88-18. Strongly limonite-stained vuggy quartz veining near central part of quartz vein zone.
- 6776 Vuggy quartz veining with strong Mn, some limonite; central part of quartz vein zone, west of 6775.
- 6777 Trench M-88-18. Altered diorite along west contact with quartz vein zone. Strongly reddish oxidized with minor included quartz vein material. Diorite is extensively oxidized along this quartz vein zone.
- 6778 Trench M-88-15. Just north of L26N, 2135E. Limonitic quartz vein with strong pyromorphite mineralization. Vein is about 20cm wide.
- 6779 Trench M-88-16. Quartz vein. White to light gray "bull quartz" with very minor limonitic staining. Vein thickness from 20cm width immediately below overburden to 75cm width about 1.5m lower.

- 6780 Trench M-88-16. Felsic dike, 30cm wide, adjacent to 6779 quartz vein. Dike is white to light gray colored, cross-cuts host bedding, is orange limonitic colored on fractures.
- 6781 Trench M-88-12. Massive galena with minor included quartz veining.
- 6782 Trench M-88-10. Chip sample across 40cm wide shear. Vein pinches to 10cm locally and varies in the amount of quartz it contains. Sampled where quartz is minimal. Pyromorphite and cerussite present.
- 6783 Trench M-88-11. Chip sample across 35cm of quartz veining and fault breccia and gouge. Shear zone is at 164/77E. Adjacent beds are not strongly fractured.
- 6784 Trench M-88-2. Upper trench on open forestry plantation. East 60cm of 1.2m shear zone. 10-15% quartz veining; mostly brecciated sediments, fault gouge, vari-colored from gray to yellow and reddish-brown limonitic.
- 6785 Trench M-88-2. West 60cm of 1.2m shear zone.
- 6786 Trench M-88-3. Chip sample across 70cm wide shear zone. Est. 50% quartz, 50% limonitic fault gouge with pyromorphite. Adjacent beds are strongly brecciated, punky and locally contain pyromorphite on fracture surfaces.
- 6787 Trench M-88-3. Breccia zone. Intensely fractured, darker altered sediments.
- 6788 Trench M-88-4. Chip sample of 15cm wide shear zone at 18.3m from SW end of trench. Considerable pyromorphite present in shear and on fractures in adjacent brecciated beds.
- 6789 Trench M-88-4. Shear zone at 19.5m from SW end of trench. Grab sample of localized mass of cerussite crystals which occur in a bulbous mass along west contact.
- 6790 Trench M-88-4. Grab sample of vuggy limonitic quartz vein with pyromorphite and cerussite from east side of shear zone.
- 6791 Grab sample of intense goethite and limonite developed with quartz vein; minor pyromorphite is present.
- 6792 Trench M-88-5. West 60cm of 1.8m wide shear zone. Limonitic altered fault breccia and gouge.

- 6793 Trench M-88-5. Middle 60cm of 1.8m wide shear zone. Manganese and limonite stained fault breccia with cerussite. Some very strong limonite.
- 6794 Trench M-88-5. East 60cm of 1.8m wide shear zone. Limonitic, cerussite-rich breccia with about 30cm of reddish-brown rotted quartz vein material.
- 6795 Trench M-88-5. Chip sample of 30 to 50cm wide zone adjacent to footwall (west) side of shear zone. Whitish bleached sediments, possibly some felsic dike material plus brecciated quartz veining and mafic, brecciated material.
- 6796 Trench M-88-6. Chip sample across 50cm wide quartz vein/shear zone. Reddish to yellowish manganese and limonitic stained fault breccia.
- 6797 Trench M-88-6. Grab sample of whitish-gray, limonite and manganese stained felsic dike. Small pink phenocrysts of probable K-spar.
- 6798 Trench M-88-25. Chip sample across 50cm wide quartz vein/shear zone. Mostly limonite and manganese stained quartz veining with limonitic vugs; central 10cm wide zone of fault gouge material and whitish possible felsic dike.
- 6799 Trench M-88-25. Possible felsic dike; bleached white, sericitic felsic material.
- 6800 Trench M-88-25. Chip sample of 20cm wide brecciated felsic dike. Chlorite and manganese veinlets; strong vuggy limonite, manganese and glassy goethite are present in adjacent beds.
- 6801 Trench M-88-26. Narrow quartz vein (6 to 12cm wide). Brownish-yellowish rusty quartz with some more intense limonite staining.

12.20 APPENDIX II REPORT ON DDH M-88-7

Drill Hole M-88-7 has intersected a "Sullivan Horizon" zone which compares favorable with stratigraphy marginal to the Sullivan Orebody.

The zone in DDH M-88-7 is recognized by its presence at the Lower-Middle Aldridge contact, by its relationship to overlying marker bands in the Middle Aldridge and by its lithologic character.

The zone consists of massive to very finely laminated argillaceous siltstone. Included are intervals of slump-type 'conglomerate' units which have very few clasts. This package of stratigraphy is quite different from both the overlying Middle Aldridge and underlying Lower Aldridge. The "Sullivan Horizon" zone intersected by DDH M-88-7 may be more similar to equivalent stratigraphy near the Sullivan orebody than to equivalent stratigraphy on Cominco's Vine property approximately 10 kilometers to the northeast.

In contrast, a hole drilled by Cominco approximately 7 km to the southwest of DDH M-88-7, on the Lew claims, was planned to test the Lower-Middle Aldridge contact but never intersected recognizable Lower Aldridge. The hole was collared on the basis of surface stratigraphic control. Results of the Lew hole suggest that the McNeil hole is near the western edge of recognizable Lower aldrige stratigraphy, or, Middle Aldridge strata is dramatically thickened between the McNeil and Lew Holes.

In 1988, Cominco intersected mineralized Sullivan Horizon stratigraphy north of the Kimberley fault and west of the Sullivan deposit. Previous drilling approximately 5 km north of the fault had cored the 'Sullivan Horizon' zone but with no indication of any base metal build-up. Barren and mineralized intersections occur within 5 or 6 km of each other, and demonstrate the need for repeated testing of the favorable zone for proper evaluation.

The 'Sullivan Horizon' zone intersected in DDH M-88-7 is favorable evidence that many of the geologic conditions which characterize the Sullivan orebody are present on the McNeil Property. Further testing of the zone is recommended.

Peter Klewchuk
January 26, 1989

12.30 APPENDIX III REPORT ON DDH M-89-1

DDH M-89-1 was drilled between February 20 and March 6, 1989, to test the Lower-Middle Aldridge contact and was collared 3km south-southeast of DDH M-88-7.

The Lower-Middle Aldridge contact was intersected at 270.0m. The contact is broken and this may be a minor fault; as evidenced by about 20cm of broken core.

The contact at 270.0m is a distinct change from thick and medium bedded quartzites of the Middle Aldridge to thin bedded and laminated siltstone of the Lower Aldridge. Strong pervasive alteration caused by a thick underlying gabbro sill masks the character of these rocks.

Lower Aldridge rock was cored from 270.0m to 303.2m (33.2m). From 303.2m to 579.7m is gabbro with an included quartz-bearing fault zone from 406.2m to 418.8m. Contact relationships demonstrate the gabbro is a sill.

579.7 to 590.7m is altered siltstone, thin bedded and laminated but again quite pervasively altered by silicification and chloritization. Fine disseminated pyrrhotite and vein pyrite are common. No base metals were noted.

At 590.7m an irregular contact with a gabbro dike was encountered; the dike continues to the end of the hole at 599.2m.

DDH M-89-1 did not core much Lower Aldridge but the lithology is distinctive enough that reasonable confidence can be placed in the interpretation that it is Lower Aldridge.

The lack of a distinct "Sullivan Horizon" zone in DDH M-89-1 may be due to elimination of the zone by a fault at the contact, but evidence for such a fault is poor. It appears that the "Sullivan Horizon" zone does not exist in the area of DDH M-89-1 and this interpretation shifts the emphasis back towards DDH M-88-7. Further drilling of the Lower-Middle Aldridge contact is recommended by extending out to the NW from M-88-7. This would test for continued build up of base metal sulfides and the favorable Sullivan Horizon that is indicated by the difference between these two last holes.

HOLE COMPARISON

Feature	M-88-7	M-89-1	Conclusion
Base Metals	present, fractures	absent	(Move North of 88-7 (and West of 89-1
Tourmalinite	absent	absent	
Contact Sills	absent	present, close to NS feeder	
Laminated Sulphides	present	present	
F.W. Conglomerate	present	absent	

P. Klewchuk
Consulting Geologist
March 6, 1989

12.40 APPENDIX IV
LEAD ISOTOPE ANALYSIS

THE UNIVERSITY OF BRITISH COLUMBIA
Department of Geological Sciences
6339 Stores Road
Vancouver, British Columbia
CANADA V6T 2B4
June 17, 1988

M. Bapty, P. Eng.,
Bapty Research Limited,
606 Trail Street,
Kimberley, B.C. V1A 2M2

Dear Mr Bapty,

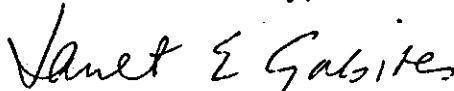
Please find enclosed the results of the lead isotope analyses on the samples from Dragoon's McNeil property that you submitted to our laboratory on May 30, 1988. The results show conclusively that the McNeil property is not related to Sullivan samples from the Lower-Middle Aldridge contact, rather it is related to the Middle Aldridge St Eugene system, and Moyie Intrusions.

Since much of the data in our files is old and of unknown quality, I analysed two samples from Sullivan, one from Society Girl, and two from Vine, along with the two samples from McNeil. This gave me a good comparison for the lead isotopic signatures of Sullivan and later mineralization. The enclosed tables contain both the new analyses and a compilation of old data from deposits in the Lower to Middle Aldridge. Figure 1 shows the results of all new analyses plotted on a standard lead isotope plot. Figure 2 shows all the data, with only averages used for each deposit. The separation between Sullivan and Moyie intrusion-related leads is clear, and McNeil plots with the latter group.

I have sent an invoice for analysis of two galena samples to Dragoon Resources.

Thank you for your interest in our technique as an exploration tool.

Yours sincerely,



Janet E. Gabites
Research Scientist

Encl.

Figure 1. $^{207}\text{Pb}/^{204}\text{Pb}$ versus $^{206}\text{Pb}/^{204}\text{Pb}$ lead isotope plot for new analyses of samples from McNeil, Sullivan, Society Girl, and Vine deposits. The Shale Curve gives model ages.

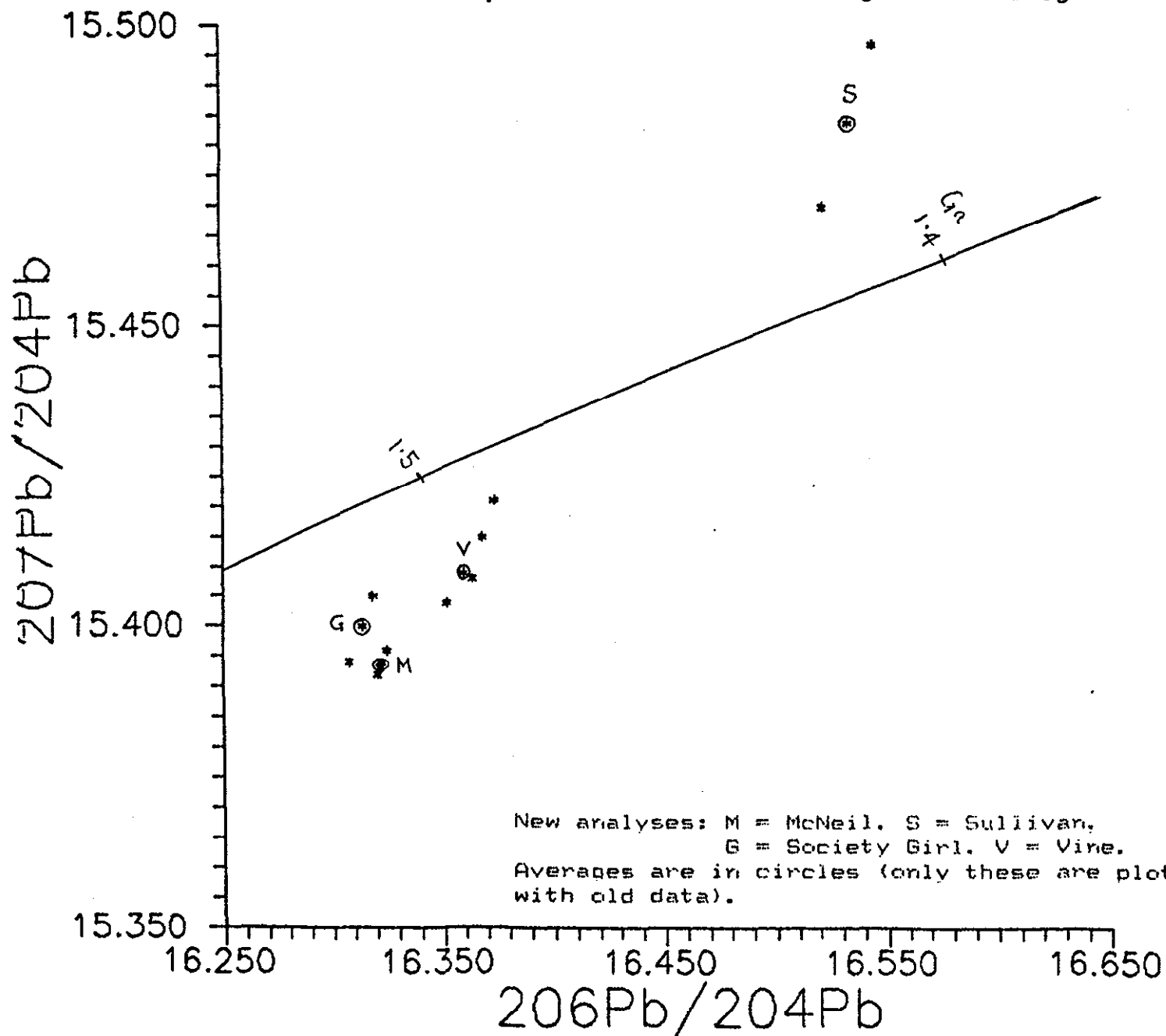
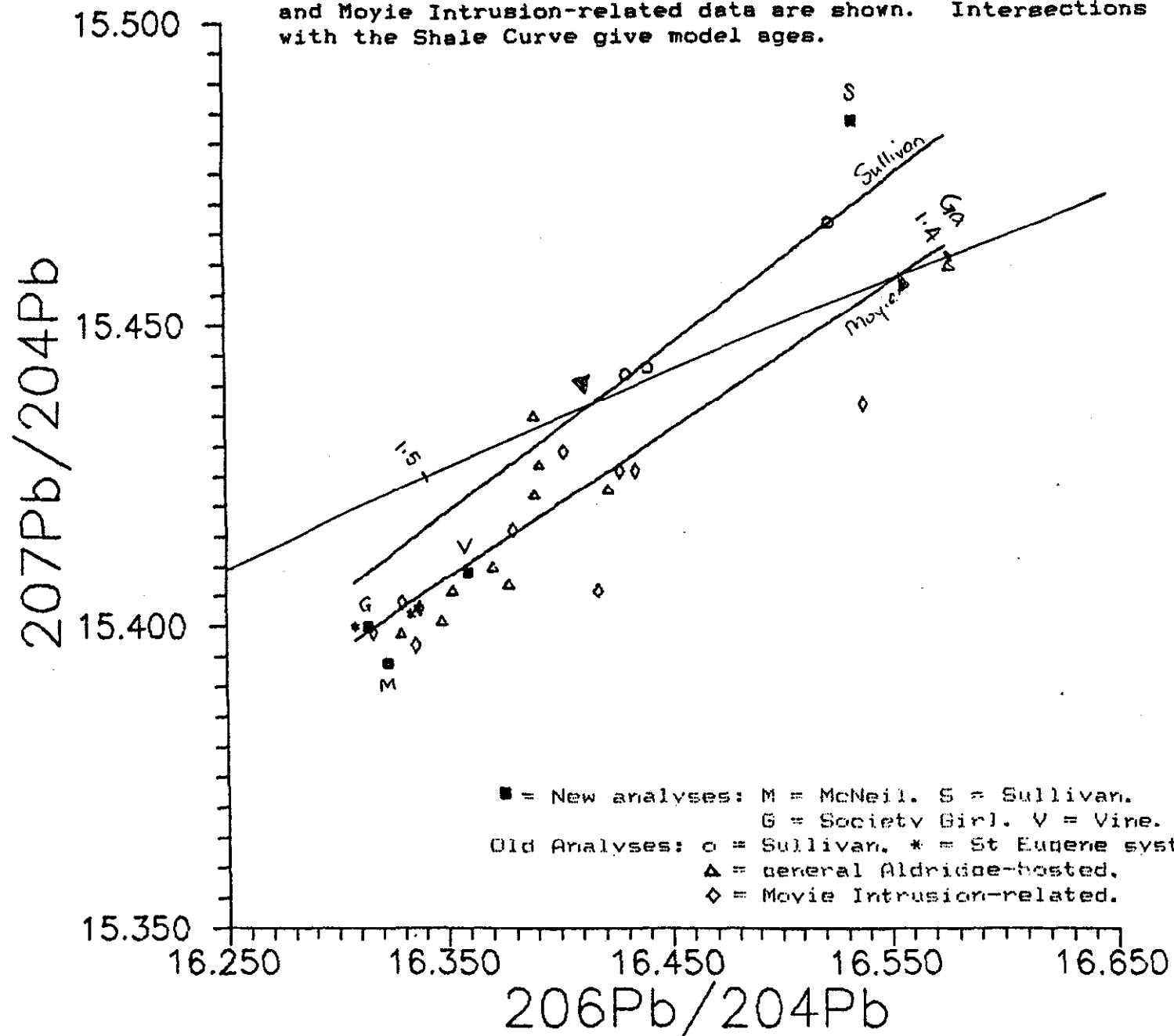


Figure 1. Pb/Pb versus $^{206}Pb/^{204}Pb$ lead isotope plot for all analyses of samples from Lower to Middle Aldridge-hosted deposits. Only an average has been plotted for each deposit. Lines representing least squares fits for Sullivan and Moyie Intrusion-related data are shown. Intersections with the Shale Curve give model ages.



12.50 APPENDIX V

DRILL LOGS

Drill Hole Record

Property McNEIL CREEK District Hole No. M-88-01
Commenced September 18, 1988 Location Tests at Hor. Comp.
Completed September 23, 1988 Core Size NO 2 Corr. Dip -51° Vert. Comp.
Co-ordinates 3393N 3025E Geophysics Grid True Brg. 240° Logged by P. Kiewchuk
Objective Test Vein/Shear system & Stratigraphy to Gabbro % Recov. Date Sept. 21
Sill

Footage From To	Description	Sample No.	Length	Analysis	Claim	T Brg.	Collar Dip	Elev.	Length
0 -3.05	CASING - No core								
1.05-17.7	SILTY QUARTZITE, QUARTZITE & SILTSTONE Light gray to medium bluish gray colored, thin & med thick bedded; rarely laminated or thick bedded. A moderately strong alteration is pervasively developed through all of the core. Local bleaching and purplish to greenish discoloration are related to silicic and chloritic alteration. Small porphyroblasts of biotite occur throughout. Some med. thick beds have been altered to a hornfelsic texture with patchy development of amphibole, chlorite (& chloritized amphibole) and small aggregates of light pink feldspar or garnet. At 18.9m one 12 cm band of hornfels carries minor PbS, ZnS, Cpy and po. Fine-grained ZnS & po are present in most of the hornfelsic patches. Bedding is typically planar, at a uniform 70° to c/a, with minor local wavy or lensey bedding. A few thin silty beds are ripple cross-laminated. Surface oxidation is patchy throughout the interval with many fractures limonitic-stained. At 17.4m a 6mm-1cm wide vein of silica & clay cuts the core at 10-15° to c/a. The silica is a pale buff color and looks amorphous - may be related to felsic intrusive activity. From 26.5m to 28.3m a series of thin quartz or white feldspar veins cut the core at 55° to c/a, 35° to 40° to bedding. These may be intrusive-related as well. At 28.6m one edge of a probable concretion is hornfelsic in character; suggests that other patches of hornfelsic alteration are concretions too. (These are exposed in outcrop								

Drill Hole Record

Property McNeil Creek District Hole No. M-88-01
Commenced Location Tests at Hor. Comp.
Completed Core Size Corr. Dip Vert. Comp.
Co-ordinates True Brg. Logged by PK
Objective % Recov. Date

Footage From To	Description	Sample No.	Length	Analysis	EDM	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
-37.7	Cont. along the main McNeil Ck Road). Sample: 18.5 - 19.0 1.5m	7901	1.5	2	19	245	448	0	8	2		
37.7-39.3	BRECCIA Med. thick quartzites and silty quartzites are irregularly fractured and intruded by thin veinlets of white to light gray quartz (& feldspar?). Quartz is of a fine-grained, granular texture in some places. Some of the white vein material is powdery clay & may be altered feldspar. Sample: 37.7 - 39.3 1.6m	7902	1.6	1	3	22	161	0	1	3		
39.3-56.6	SILTY QUARTZITE, QUARTZITE & SILTSTONE Typically light gray to med. blue-gray colored, medium & thin bedded with a few narrow laminated zones & a few thick beds. Silicic and chloritic alteration are present; silicification results in a dense, mottled appearance with pale gray to purplish & greenish discoloration. Generally very similar to interval from surface to 37.7m. Patchy hornfelsic alteration occurs throughout. Fine grained disseminated po plus biotite along with local ZnS occur in the hornfelsic patches. Bedding is typically planar and fairly consistent at 70° to c/a. At 44.9 a thin fracture has associated with it localized vugginess, plus thin veinlets of pale greenish feldspar? Adjacent biotitic quartzite is altered & softer than unaltered quartzite.											

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[illegible]

711-657

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 100
 100

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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211-2537

Scale

Colour Plot
& Dip

Drill Hole Record

Property	McNEIL CREEK	District	Hole No.	M-88-01
Commenced	Location	Tests at	Hor. Comp.	
Completed	Core Size	Corr. Dip	Vert. Comp.	
Co-ordinates	True Brg.	Logged by	PK	
Objective	% Recov.	Date		

Footage From To	Description	Sample No.	Length	Analysis	Claim	T Brg.	Collar Dip	Elev.	Length
68.5-71.0	SILTSTONE, MINOR SILTY ARGILLITE & QUARTZITE Mainly thin bedded, few med. thick beds, a few very thin or laminated zones A pervasive silicification is present; silty or quartzitic beds are more affected than argillaceous beds. Planar bedding is at 70° to c/a.								
71.0-160.4	SILTSTONE & QUARTZITE, MINOR ARGILLITE Light gray to med. bluish-gray colored, med. and thick bedded with narrow zones of thin bedded more argillaceous beds. Silicification is present throughout and has resulted in pale greenish & purplish discoloration with a mottled texture. Small patches of hornfelsic texture, probable concretions, are scattered through the interval. Amphibole (chloritized), biotite, pink garnet and whitish feldspar-quartz aggregates are common along with minor pyrrhotite. Bedding is quite consistent at 65-70° to c/a. Locally there is minor brecciation with veins of milky white quartz or feldspar this material is very fine grained and appears amorphous. These veins are typically sub-parallel to c/a (5-15°). Typically the immediate wallrock is unaltered by the veins but near 94.5m, within one vein zone, the sedimentary rock is altered to a brownish colored, biotitic material which is softer, more 'punky' than the unaltered rock. 157.2 - 160.4 is dominantly thin bedded. There is no obvious recognizable increase in the degree of alteration as the gabbro contact at 160.4m is approached.								

Scale

Colour Plot
& Dip

Drill Hole Record

Property	McNEIL CREEK	District	Hole No.	M-88-01
Commenced	Location	Tests at	Hor. Comp.	
Completed	Core Size	Corr. Dip	Vert. Comp.	
Co-ordinates	True Brg.	Logged by	PK	
Objective	% Recov.	Date		

Footage From To	Description	Sample No.	Length	Analysis	Claim	T Brg.	Collar Dip	Elev.	Length
160.4-171.9	GABBRO Contact at 160.4m is quite sharp, core is unbroken & the contact is very close to parallel to bedding at 70° to c/a. Adjacent beds in the immediate hanging wall are typically planar while the sediment-gabbro contact is a bit wavy. GABBRO is fine-grained and biotite-rich at 160.4 but gets increasingly coarse grained toward 171.9m. Composition is 15-20% Quartz 20% Feldspar & 60-65% Amphibole, much of which is chloritized. There appears to be no fabric to the amphiboles - they are randomly aligned. Thin veinlets of white to pale green quartz cut the gabbro. These typically contain minor pyrrhotite & chalcopyrite. Disseminated po & cpy are present in minor amounts in the massive gabbro near some quartz veins, but in very minor amounts.								
171.9	END OF HOLE								

Drill Hole Record

Property	MCNEIL CREEK	District		Hole No.	M-88-02
Commenced	SEPT. 24, 1988	Location		Tests at	Hor. Comp.
Completed	OCT. 3, 1988	Core Size		Corr. Dip	-51°
Co-ordinates				True Brg.	Az 282°
Objective	TEST MAGNETIC ANOMALY			% Recov.	
					Date Sept. 26, 1988
					Logged by P. Klewchuk

Footage From	To	Description	Sample No.	Length	Analysis	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
0	-7.9m	Casing, No Core										
7.9	-96.6m	GABBRO										
		Med-coarse grained, dark green. White feldspar content varies but averages about 40%. Minor light gray quartz. 5%, occurs with feldspar. Mafics include amphibole & possible pyroxenes; chloritic alteration is common. Massive with no fabric evident. From surface to 40m core is fairly broken and rusty-oxidized. In pieces the gabbro breaks down to a coarse sand-possibly a surface weathering character. A few thin quartz and quartz-feldspar veins cut the core at various angles to c/a. At 13.1m a broken 2 cm wide white quartz vein is lightly rusty. at 25.9m a 4-5cm wide whitish felsic dike cuts the core at ~30° to c/a. Core is quite broken here and true width is not evident. The vein contains euhedral rusty oxidized pyrite on fracture surfaces, coarse flecks of dark green, often crenulated chlorite and fine specks of a metallic gray mineral. A few thin white quartz veins are scattered through the interval; some of these, e.g. at 67.4 carry euhedral pyrite which is typically oxidized on the margins of the crystals but with a fresh interior. The basal portion of the sill, from about 87.0m to 96.6m is more mafic, strongly chloritized, and is weakly brecciated with numerous very thin quartz-feldspar-epidote veinlets. A few oxidized pyrite crystals occur with these veinlets.										
		Contact at 96.6m is broken but adjacent fractures suggest that it is at ~65° to c/a.										

211-4437

Drill Hole Record

Property	MCNEIL CREEK	District		Hole No.	M-88-02
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	
Co-ordinates				True Brg.	
Objective				% Recov.	
					Date
					Logged by PK

Footage From	To	Description	Sample No.	Length	Analysis	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
96.6	-129.2	QUARTZITE AND SILTSTONE										
		Core is fairly broken, most of the interval is moderately to strongly silicified. Bedding is indistinct through much of the interval but appears to be mainly med. & thin bedded with minor thick beds. Recognizable bedding is fairly consistent at 75-85° to c/a. The interval is entirely altered, mainly silicification which has resulted in bleaching and mottled discoloration to light gray, pale green and purple. Some more greenish patches are chloritized. Chlorite occurs locally as a matrix to brecciation where the siltstone is strongly bleached or albitized to a whitish color. Chlorite is also common on fracture surfaces. Some of the silicified zones are glassy, dense-looking ("cherty") and hard. Small yellow carbonate veins are present locally. In places (e.g. at 122.6m) these carry reddish ZnS, PbS & Cpy. Py & po are also associated with some carbonate veins. Py & po are both common in minor amounts and do occur together in places. At 107.5-107.6 10cm of core is more vuggy - generally small vugs < 3mm across, quite siliceous, with Cpy, py, po possible. Aspy and ZnS. Cpy occurs in small ragged patches as a matrix to vuggy quartz. ZnS occurs in small reddish grain aggregates. Small possible fault zones occur locally; at 105.2 and 106.0, 5-7cm wide 'bedding-parallel' chloritic fault breccia and gouge may be bedding plane faults. Both occur at ~80° to c/a. A similar 1cm wide zone occurs at 111.7m. And 128.4 to 128.8 is mostly fault breccia also at ~80° to c/a. At 112.3m broken core and sand may be another fault.										

211-4437

911-4432

Figure 1

222-4637

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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21-607

**Colour Photo
& Dye**

211-5457

Property	MCDONELL CREEK	District	Hole No.	M-88-3
Commenced		Location	Tests at	Hor. Comp.
Completed		Core Size	Corr. Dip	Vert. Comp.
Co-ordinates			True Brg.	Logged by
Objective			% Recov.	Date

813-8-012

Property	MCNEIL CREEK	District	Hole No.	M-88-3
Commenced		Location	Tests at	Hor. Comp.
Completed		Core Size	Corr. Dip	Vert. Comp.
Co-ordinates			True Brg.	Logged by
Objective			% Recov.	Date

PLATE

Property	McNEIL CK	District	Hole No.	M 88-03
Commenced		Location	Tests at	Hor. Comp.
Completed		Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by PETER KLEWCHUK	
Objective		% Recov.	Date	

211-9497

1

Property		McNEIL CREEK	District	Hole No.	M 88-04				
Commenced		Oct. 23, 1988	Location	Tests at	Hor. Comp.				
Completed			Core Size	Corr. Dip -90°	Vert. Comp.				
Co-ordinates		3372 N 1890E (Geophysics Grid)	True Brg. ---	Logged by Peter Klewchuk					
Objective			% Recov.	Date Oct. 26- , 1988					
Footage	Description	Sample No.	Length	Analysis					
From	To			Au	Cu	Pb	Zn	Ag	As
0-7.3	Casing; No core								
7.3-48.8	SILTY QUARTZITES, SILTSTONE Fine-grained, bluish-gray colored. Med and thick bedded with very few thin beds and laminations. Patchy bleaching is present with pale green and purplish colors; annealed fractures are also bleached locally. Much of the interval is probably silicified. Fracturing is common with fractures ranging from 0° to 70° to c/a. One vertical fracture runs through the core from 28.0m to 29.2m. Thin quartz veins and patchy development of quartz and feldspar near 41.7m and 43.0 carry minor po and ZnS. Bedding: 75° at 9.0m; 75° at 14.1m/ 75° at 18.5m; 75° at 24m; 70° at 30m; 60° at 33.5m; 75° at 39m; 60° at 46m Sample: 42.5 - 43.4 0.9m	39556	0.9	1	61	573	1687	7	8
48.8-49.6	ALTERED SILTSTONE Light gray-green fairly massive, fine-grained, sandy-textured bleached & chloritic altered siltstone. Mottled texture of alteration has obliterated bedding. Very minor fine-grained pyrite is disseminated through the zone. coarse pyrite - porphyroblasts - are concentrated with porphyroblasts of chlorite and muscovite sericite over 5cm of core at 49.3m. This may be a concretionary concentration of these minerals. Sample: 48.8 - 49.6 0.8m	39557	0.8	9	4	2	10	0.399	

Property	McNEIL CREEK	District	Hole No.	M 88-04	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
Commenced	Location	Tests at	Hor. Comp.								
Completed	Core Size	Corr. Dip	Vert. Comp.								
Co-ordinates		True Brg.	Logged by	PK							
Objective		% Recov.	Date								
Footage From To	Description	Sample No.	Length	Analysis							
				Au	Cu	Pb	Zn	Ag	Au		
49.6-63.0	ALTERED SILTSTONE AND QUARTZITE										
	Apparently med & thick bedded but bedding planes are quite indistinct. Dull greenish gray (chloritic alteration) to med. bluish-gray. 49.6 to 57.5 is more strongly chloritic; fractures are coated with a dark green to black chlorite and, locally, with fine granular pyrite. Core is more siliceous from 57.5 to about 61.0m and chloritic again below that. A few thin veins of white, fine-grained quartz are scattered through much of the fine grained siliceous zone (fine-grained quartzites)										
	Sampling: 49.6 - 51.1 1.5m	39558	1.5	1	9	4	28	0.1	18		
	62.2 - 63.0 0.8m	39559	0.8	1	4	2	8	0.1	26		
63.0-64.6	BRECCIATED, ALTERED SILTSTONE										
	Pale gray-green to dark green, mottled, brecciated siltstone (annealed). Possible bedding at 50° to c/a. Dark green to black specks of probable chlorite are concentrated in vague patches throughout. Quartz-carbonate veins cut across the core at 40° to c/a. These range in thickness from < 1mm to 1.5cm wide. Quartz is light gray, carbonate is a very pale light gray - green, almost white. Very dark green to black chlorite & manganese, some with iridescent staining occurs on fractures. At 63.6m a few elongate vugs associated with Qtz-Co. veining carry minor reddish ZnS. The entire interval is chloritized & silicified										
	Sample: 63.0 - 64.6 1.6m	39560	1.6	3	5	8	68	0.1	93		

3

213-4437

4

815-5437

5

211-8431

6

Property		McNEIL CREEK	District	Hole No. M 88-04				Claim	Tr Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
Commenced		Location		Tests at		Hor. Comp.								
Completed		Core Size		Corr. Dip		Vert. Comp.								
Co-ordinates				True Brg.		Logged by PK								
Objective				% Recov.		Date								
Footage	Description	Sample No.	Length	Analysis										
From	To													
-107.9	Cont.													
	77.5 - 78.0 Chloritic, brecciated with about 7-10% sulfides: patchy irregular masses of pyrite, pyrrhotite, and minor chalcopyrite. Pyrite also occurs along thin, 0.5mm veinlets. Irregular whitish quartz veins are common (3% by volume)													
	78.0 - 85.5 Fine-med grained, fairly massive, chloritic. Small 'angular' quartz veins are common. Minor po & py occur in small irregular patches and thin veinlets.													
	85.5 - 86.6 Sheared, brecciated zone; minor fault. Strongest fracturing is at 15° to c/a. Slickensides from 85.4-86.6 are coated with chlorite & graphite; some sheared at 60° to c/a.													
	86.6 - 96.1 Fairly massive, fine-med grained, dull green, somewhat greyish. Short, stubby, thin whitish quartz veins are common throughout; minor small patches of po are present.													
	96.3-107.9 Brecciated, med-dark gray-green; massive to foliated. Veins & irregular patches of quartz with some white feldspar are common. Strongly foliated zones tend to be at 0-10° to c/a, but foliation ranges to 45° to c/a. Small patches and discontinuous veins of po & py are scattered through the interval.													
Sampling	77.0 - 77.5 0.5m	39569	0.5	1	18	7	188	.1	19					
	77.5 - 78.0 0.5m	39570	0.5	19	861	21	120	.6	98					
	84.5 - 85.5 1.0m	39571	1.0	1	274	7	78	.3	32					
	85.5 - 86.6 1.1m	39572	1.1	1	7	5	93	.1	24					

?

211-8437

8

931.037

Results

**Colour Plot
A Day**

811-8431

Results

Color Plot & Cines

211-4

Scale

Colour Plot
& Diagram

Property	McNeill Creek	District	Hole No.	M-88-4																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
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211-4437

Basin

**Colour Plot
& Dip**

Property	McNeil Creek	District	Hole No.	M-88-4
Commenced	Location	Tests at	Hor. Comp.	
Completed	Core Size	Corr. Dip	Vert. Comp.	
Co-ordinates	True Brg.	Logged by		
Objective	% Recov.	Date		
Footage From To	Description	Sample No.	Length	Analysis Au Cu Pb Zn Ag
-281.0m cont.	259.2-259.8 0.6m Qtz veins, chlorite, po, Fault Breccia & gouge at 40° to c/a	39996	0.6m	4 26 16 83 0.1
	259.8-261.2 1.4m Bleached, chloritic broken core	39997	1.4m	2 10 13 56 0.2
	261.2-262.8 1.6m Minor Bx, yellowish CO ₂ veins, minor po	39998	1.6m	1 24 13 56 0.1
	262.8-264.7 1.9m Bleached, brecciated core, thin CO ₂ veins	39999	1.9m	1 12 10 21 0.1
	268.2-269.2 1.0m Bx bleached, minor Qv., po	40000	1.0m	1 24 13 55 0.1
	271.0-272.6 1.6m Bleached, Bx core, py, po. Chlorite, Fault shear at 272.5m at 15° to c/a.	39051	1.6m	3 28 5 13 0.1
	272.6-274.0 1.4m Bleached, Bx core, thin Qtz - CO ₂ veinlets	39052	1.4m	1 23 6 31 0.1
	274.0-275.5 1.5m 1.3m Recovered Bleached, broken core, thin Qtz-CO ₂ veins	39053	1.5m	1 36 10 51 0.1
	275.5-277.0 1.5m 1.3m Recovered, Broken core, bx, thin CO ₂ veins, minor po	39054	1.5m	1 32 8 30 0.1
	277.0-279.2 2.2m Thin veinlets of Qtz, CO ₂ , chloritic, weakly bx, bleached	39055	2.2m	1 31 11 55 0.1
	279.2-281.0 1.8m Bleached, bx, broken core, CO ₂ -Qtz veins, chlorite, minor fault bx.	39056	1.8m	1 23 19 73 0.1

919-22

Property	McNeil Creek	District	Hole No.	M-88-4
Commenced		Location	Tests at	Hor. Comp.
Completed		Core Size	Corr. Dip	Vert. Comp.
Co-ordinates			True Brg.	Logged by
Objective			% Recov.	Date

Footage From To	Description	Sample No.	Length	Analysis																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
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281.0-305.7	FAULT ZONE Bleached, brecciated and sheared siltstone & quartzite. Chloritic-altered throughout. Quartz & carbonate veins are common. Minor pyrite is present locally with brecciation - in some places pyrite forms part of the breccia matrix. Fault gouge and fault breccia are present through much of the interval; shearing ranges from 0° to 40° to c/a and is most commonly about 30° to c/a. Some of the bleached siltstone/quartzite may be albite-alteration. SAMPLING: 281.0-282.9 1.9m 1.1m Recovered Broken. Bx Quartzites, minor fault bx & gouge at 281.0m 282.9-285.3 2.4m 2.0m Recovered. Broken core; local bleaching, chloritic fractures, siltstone & qtzite. 285.3-286.8 1.5m Bx siltstone. Sheared at 30-40° to c/a, chloritic 286.8-288.6 1.8m Sheared, bx siltstone. Minor py, Qtz-CO ₂ veins. Shearing at 30-40° to c/a 288.6-290.8 2.2m " " " " " Shearing locally at 0° to c/a, typically at 35-40° to c/a 290.8-292.6 1.8m Very broken, bleached, bx siltstone, chloritic fractures; minor fault bx. 292.6-295.0 2.4m Very broken core. Chlorite matrix breccia; locally pyrite forms matrix for narrow breccia zone. Few Qtz, CO ₂ veins.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													</

Property	McNeil Creek	District	Hole No.	M-88-4
Commenced		Location	Tests at	Hor. Comp.
Completed		Core Size	Corr. Dip	Vert. Comp.
Co-ordinates			True Brg.	Logged by
Objective			% Recov.	Date

[illegible]

Drill Hole Record

Property **MCNEIL CREEK** District **M-88-05** Hole No. **M-88-05**
 Commenced **Nov 9, 1988** Location **Tests at** Hor. Comp.
 Completed **Nov. 11, 1988** Core Size **Corr. Dip -44°** Vert. Comp.
 Co-ordinates **3507N 2588E (GEOPHYSICS GRID)** True Brg. **062°** Logged by **Peter Klemchuk**
 Objective **TEST MINERALIZED QUARTZ VEIN** % Recov. **Date Nov. 12, 1988**

Footage From To	Description	Sample No.	Length	Analysis Au Cu Pb Zn Ag As	Core Dip	Collar Dip	Elv.	Length	Hole No.	Sheet
0 -3.05	Casing - No Core									
3.05-10.4	QUARTZITE, MINOR SILTSTONE Med. blue-gray colored, mottled by silicic alteration. Mainly thick bedded with a few med. and thin beds. Bedding is at 25-30° to c/a. Silicification occurs throughout; core is bleached along healed fractures and discolored to very pale green and purple. Oxidized fractures are locally micaceous. Patchy hornfelsic alteration locally is probably concretionary; these patches are silicified, chloritic and carry small porphyroblasts of pink feldspar or garnet crystal aggregates.									
10.4-17.6	BIOTITIC SILTSTONE, MINOR QUARTZITE Thin & med. bedded, some laminations & thick beds. The entire interval is brownish discolored with fine and med. grained biotite present throughout. The brownish limonitic oxidation may be due to weathering with the biotite-altered siltstone more susceptible to weathering activity. Alternately the localized pervasive development of biotite may be a localized alteration effect rather than a product of regional metamorphism. Bedding is at 30° to c/a.									
	Sampling: 11.6 - 13.2 1.6m	39580	1.6m	2	14	6	10	0.2		
	13.2 - 14.8 1.6m	39581	1.6m	1	36	8	10	0.2		

211-087

Drill Hole Record

Property **MCNEIL CREEK** District **M-88-05** Hole No. **M-88-05**
 Commenced **Location** Tests at **Hor. Comp.**
 Completed **Core Size** Corr. Dip **Vert. Comp.**
 Co-ordinates **True Brg.** Logged by **PK**
 Objective **% Recov.** Date

Footage From To	Description	Sample No.	Length	Analysis Au Cu Pb Zn Ag As	Core Dip	Collar Dip	Elv.	Length	Hole No.	Sheet
17.6-54.7	SILTSTONE & QUARTZITE Light, med and dark bluish-gray colored. Thin bedding common; some laminations, med and thick beds. Quartzites are med and thick bedded. Bedding is quite consistent at 30° to c/a. Biotite and chlorite alteration are common through much of the core; chlorite is concentrated in more strongly bleached, hornfels-textured zones which are probably concretions. Coarser biotite aggregates of pink garnets and minor po and py are also present in the concretions. A few thin quartz veins are present eg. at 22.8m and 26.3m where the wallrock is quite vuggy over a few cm. 37.7 to 38.4 is weakly bracciated with fracture coatings of massive white fine-grained feldspar. Clay is also present along some fractures. Felsic veinlets coat fractures at 42.3m and 43.9m. Minor 'faults' with a few cm of bracciation and clay gouge occur at 44.0 and 49.6m. Sample: 37.7 - 38.4 0.7m									
		39582	0.7	1	3	14	87	0.1	7	
54.7-57.2	HW ALTERED ZONE: MINOR QUARTZ VEINING Altered siltstone and quartzite, ranging from blue-gray, relatively unaltered to strongly bleached and hornfelsic. A shear at 54.8m is bleached white, possibly albitization, with marginal chlorite and biotite alteration, and patchy reddish-oxidized iron sulfides, either po or py. From the shear at 54.8m to 55.6 is blue-gray, relatively unaltered siltstone. At 55.6m strong bleaching and hornfelsic chlorite, biotite, white feldspar and pink garnets obliterate									

211-087

Property	McNell Creek	District	Hole No. M 22-05
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FILED

Property McNEIL CREEK District _____ Hole No. M 88-05

Commenced	Location	Tests at	Hor. Comp.	Claim	Y Br.	Collar Dip	Elev.	Length	Hole No.
Completed	Core Size	Corr. Dip	Vert. Comp.						
Co-ordinates	True Brq.	Logged by Peter Klewchuk							
Objective	% Recov.	Date							
Footage From To	Description	Sample No.	Length	Analysis					
				Au	Cu	Pb	Zn	Ag	As
-57.7	Veining and fabric is at 45-50° to c/a. Hornfelsic patches make up about 25% of the interval; they are comprised of quartz, feldspar rusty altered sediments, chlorite, biotite, pink garnets and minor chalcopyrite								
	Sample: 57.2 - 57.7 0.5m	39588	0.5	5	78	207	500	5	14
		Assay		00	15	6.8	382	9	
57.7-58.6	ALTERED SILTSTONE, HORNFELS, QUARTZ VEINS Brecciated and bleached siltstone is largely altered to a patchy hornfels consisting of thin quartz veins, chlorite, garnet, and feldspar. Med-dark quartz veining at 20° to 40° to c/a makes up about 30% of the interval. Minor med grained galena is present in some of the quartz veining. Fractures within this zone are strongly rusty oxidized with a rind of rough limonite.								
	Sample: 57.7 - 58.6 0.9m	39589	0.9	2	291	371	595	3.8	15
		Assay		001	13	36	68	15	
58.6-62.9	SILTSTONE AND QUARTZITE Med & thick bedded; a few thin beds and laminations. Light gray to med blue-gray, discolored by silicification which has produced bleaching along healed fractures. Bedding is at 40° to c/a. A few thin chlorite-quartz-garnet veins cut the core at 30° to c/a, oblique to bedding, near 60.3-60.5m								
	Sampling: 58.6 - 60.8 2.2m	39590	2.2	2	42	642	142	6	12
	60.8 - 62.9 2.1m	39591	2.1	1	25	71838	1	26	
		Assay		.001	.01	.01	.09	.01	

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919-2487

Drill Hole Record

Property	MCNEIL CREEK	District	Hole No. M 88-06
Commenced	NOV 11, 88	Location	Tests at
Completed	NOV 13, 88	Core Size	NO 2
Co-ordinates	3052N 2620E (Geophysics Grid)	True Brg. Az	024°
Objective	TEST MINERALIZED QUARTZ VEIN	% Recov.	Date NOV 13, 1988

Footage From To	Description	Sample No.	Length	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
0 - 3.05	CASING - no core									
3.05-10.0	QUARTZITE Med bluish-gray colored, thick bedded with a few thin & med thick beds. Moderate silicification occurs throughout: healed fractures are bleached to a pale greenish color. At 9.7m one thin veinlet/fracture has associated white bleaching with patchy development of biotite and chlorite. Bedding is at 25-30° to c/a.									
10.0-16.8	BIOTITE - ALTERED SILTSTONE Thin & med. bedded, rarely thick bedded, with bedding quite consistently at 30° to c/a. The entire interval is a dull orange-brown color-limonitic - from surface weathering. Much of the core is quite broken and fracture surfaces are rusty with spots of Mn oxide. Fine-grained biotite is extensively developed throughout the interval giving it a noted speckled character.									
16.8-26.6	SILTSTONE, MINOR SILTY QUARTZITE Thin bedded & laminated, rarely med thick. Thicker bedded silty quartzite occurs mainly from 16.8-20.5m. Fine-grained biotite is present throughout concentrated as bands within the thin beds & laminae - evidently a function of original compositional layering. Bedding is consistent at 30° to c/a. Bedding is locally disturbed by soft sediment deformation - complex deformed but bounded by planar beds.									

211-447

Drill Hole Record

Property	MCNEIL CREEK	District	Hole No. M 88-06
Commenced		Location	Tests at
Completed		Core Size	Corr. Dip
Co-ordinates		True Brg.	Logged by PK
Objective		% Recov.	Date

Footage From To	Description	Sample No.	Length	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
26.6-50.1	QUARTZITE, 35% SILTSTONE Med gray, bluish-gray & brownish-gray colored. Quartzites are typically thick and med bedded, siltstones are thin and med bedded. Bedding is quite planar, at 30-35° to c/a. Numerous healed fractures are bleached to a pale gray-green color. Fine-grained biotite is present through all of the siltstones and much of the quartzites. Rusty oxidation is present on fractures down to 30.5m and there is patchy local orange-brown limonitic discoloration present to that depth. Chlorite and pink garnet are concentrated in bleached patches which may be concretions; at 26.7m one of these is parallel to bedding, 5cm wide and zoned with a strongly chloritic outer margin; strong whitish bleaching up to 3 cm wide, occurs outside the chlorite. At 35.2m a narrow (6cm wide) hornfelsic-textured bleached 'concretion' carries minor dark reddish-brown ZnS within patches of pink-orange garnet. Chlorite and biotite are present in the concretion also. At 37.0m about 10cm of core is brecciated with vein matrix of whitish quartz-feldspar around angular fragments of chloritic quartzite. Core is more broken from 46.3m to 48.7m with some gouge on fracture surfaces - minor faulting. Sampling: 26.6 - 26.8 chloritic, bleached concretion 35.1 - 35.3 0.2m Narrow ZnS bearing concretion.	39596 39597	0.2 0.2	6 2	215 18	6 18	2510 2480	1 1	56 17	

211-447

3

813-0007

6

219-4-000

3

211-4-053

Editorial Board

211-4457

Drill Hole Record

Property MCNEIL CREEK District Hole No. M-88-7
 Commenced Location Tests at Hor. Comp.
 Completed Core Size Corr. Dip Vert. Comp.
 Co-ordinates True Brg. Logged by
 Objective % Recov. Date

Footage From To	Description	Sample No.	Length	Analysis	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.
170.4-175.3	SILTSTONE, minor QUARTZITE: MARKER INTERVAL. Mainly thin bedded siltstones, some laminated zones, with a few med. thick quartzites. Laminated marker zones occur through this interval: about 6cm at 170.4; 5cm at 171.0m; 60cm from 173.3-173.9 and possibly at 175.3 (10-15cm). Bleaching and silicification with chloritic alteration persist through this interval too and appear to have affected the nature of the marker zones such that they are fairly indistinct. A few 'tension gash' quartz veins are present similar to overlying interval. Bedding: 60° at 172m; 68° at 175m.									
175.3-197.0m	Est. 75% SILTY QUARTZITES, 25% SILTSTONE Quartzites are typically thick bedded, a few med. thick beds. Color is dark blue-gray, usually mottled from silicification which has produced irregular patches of pale gray-green bleaching along thin healed fractures. Siltstones are thin bedded and laminated, med. to dark gray in color. Bedding is mostly planar with minor waviness which could be due to current activity. Siltstones occur in narrow zones up to ~ 30cm, separated by quartzites. Near 185.5m siltstones are pale brownish bleached & silicified but generally in the interval they appear much less affected by alteration than are quartzites. Core is moderately broken, fracture surfaces are typically coated with chlorite. Disseminated chlorite is common in some siltstone zones. Bedding: 67° at 178.5; 54° at 187.5; 65° at 191m; 58° at 197m.									

211-0427

Drill Hole Record

Property MCNEIL CREEK District Hole No. M-88-7
 Commenced Location Tests at Hor. Comp.
 Completed Core Size Corr. Dip Vert. Comp.
 Co-ordinates True Brg. Logged by
 Objective % Recov. Date

Footage From To	Description	Sample No.	Length	Analysis	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.
197.0-205.6	Est. 85-90% SILTY QUARTZITES, 15% SILTSTONE Thicker bedded, more massive quartzites than overlying interval with generally narrower zones of intervening siltstones. Dark blue-gray color. Less obvious silicification than above but some bleaching and silicification is present. Below 202.9m core is more broken, locally quite rubbly. May be a minor fault zone - no shearing or cleavage is evident. Narrow zones are healed breccia - hairline fractures, no matrix. Bedding: 60° at 199m; 60° at 204.5m.									
205.6-208.4	SILTSTONE Dark gray to brownish-gray, thin bedded with few laminations, a few med. thick beds. Very minor brecciation with quartz and quartz-chlorite vein matrix occurs near 207.5m. Thin quartz veins are present from 205.6-206.3; one vein 2-3mm wide at 0° to 5° to c/a carries minor ZnS, very minor PbS as well as Cpy, Po & Py. Bedding: 61° at 206.3m; 55° at 208m. SAMPLE: 205.6-206.3 0.7m	19080	0.7m	01 2013580.5 4 2						
208.4-234.7	EST. 85% QUARTZITE, 15% SILTSTONE Generally similar to 197-205.6 interval Patchy silicification & bleaching are common. Minor quartz veining is present: some to ~ 4 or 5cm wide. A few carry Cpy, po & very minor ZnS. Most Qv are at 15° to c/a & contain med-coarse gr. Biotite. Locally there is very minor "crackle" type of brecciation with hairline veinlets & small lenses (e.g. <1cm long)									

211-0427

Drill Hole Record

Property	MCNEIL CREEK	District	Hole No.	M-88-7
Commenced	Location	Tests at	Hor. Comp.	
Completed	Core Size	Corr. Dip	Vert. Comp.	
Co-ordinates		True Brg.	Logged by	
Objective		% Recov.	Date	

Footage From To	Description	Sample No.	Length	Analysis	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.
				Cu Pb Zn Ag As Au						
-234.7 con.	of white quartz. Chlorite is common on fracture surfaces & locally bedding-parallel bands are chloritic. One thin band of healed chloritic brecciation at 212.5m is associated with fine dissem. po. Just below this at 212.8m there is a small patch of dissem. Cpy (rounded blebs up to 2.5mm diam.) in greenish bleached siltstone.									
	Small 3-4mm. diam. light pink garnet porphyroblasts are developed adjacent to a quartz vein near 223.8m.									
	At 226.1m and 225.4m narrow 3-4cm. bedding-parallel bands are uncemented breccia; probably minor bedding plane faults.									
	Bedding: 60° at 213m; 61° at 219m; 61° at 227m; 66° at 233.5m.									
	SAMPLING: 211.8-212.9 1.0m One 30cm Qtz vein at 15° to c/a. Minor Cpy, po.	39081	1.0m	205	21	92	7	2	2	1
	215.5-215.9 0.4m Qtz vein 4 cm. wide Blebs of cyp to 8mm diam.									
	v. minor ZnS	39082	0.4m	44	16	67	0	4	3	1
234.7-235.0	BRECCIA									
	Gray-green colored brecciated chloritic siltstone. Thin veinlets of quartz, chlorite, calcite form a matrix to angular fragments of altered sedimentary rock.									
	Minor po, Cpy, ZnS in the veinlets. (About 1m above this interval is 233.7-234.7 is also more strongly chloritic)									
	SAMPLE: 234.7-235.0 0.3m	39083	0.3m	30	4	53	0	1	5	1

211-4427

Drill Hole Record

Property	MCNEIL CREEK	District	Hole No.	M-88-7
Commenced	Location	Tests at	Hor. Comp.	
Completed	Core Size	Corr. Dip	Vert. Comp.	
Co-ordinates		True Brg.	Logged by	
Objective		% Recov.	Date	

Footage From To	Description	Sample No.	Length	Analysis	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.
				Cu Pb Zn Ag As Au						
235.0-237.3	SILTSTONE, 20% QUARTZITE									
	Med. & thin bedded, a few laminations. Quartzites are of med. thickness. Most of the interval is strongly chloritized and bedding planes are indistinct.									
	Core is quite broken. At 237.2m a 4cm wide band of sheared, chloritic fault gouge at 65° to c/a indicates a bedding plane fault. Bedding at 70° to c/a.									
235.0-237.3	SILTSTONE, 20% QUARTZITE									
	Med. & thin bedded, a few laminations. Quartzites are of med. thickness.									
	Most of the interval is strongly chloritized and bedding planes are indistinct.									
	Core is quite broken. At 237.2m a 4cm wide band of sheared, chloritic fault gouge at ~65° to c/a indicates a bedding plane fault. Bedding at 70° to c/a.									
237.3-255.2	~ 65% SILTY QUARTZITE, 35% SILTSTONE									
	Quartzites are thick & med. bedded, dark blue-gray colored, usually with pale green bleaching along healed fractures. Siltstones are thin bedded & laminated, typically more brownish-colored, biotitic and chloritic. Minor sulfides are present locally; at 239.4m a concretionary feature 10cm in diam. contains pink porphyroblasts of garnet & rounded blebs of pyrrhotite. Thin veinlets of po with very minor Cpy & ZnS are scattered through the interval.									
	Bedding: 56° at 240m; 57° at 243.5m; 55° at 247.5m; 66° at 253m; 61° at 255m									

211-4427

Drill Hole Record

Property	McNEIL CREEK	District	Hole No.	M-88-7
Commenced	Location		Tests at	Hor. Comp.
Completed	Core Size		Corr. Dip	Vert. Comp.
Co-ordinates			True Brg.	Logged by
Objective			% Recov.	Date

Footage From To	Description	Sample No.	Length	Analysis	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
255.2-256.3	MARKER ZONE LAMINATED SILTSTONE Entire interval is of marker laminated siltstone with a few narrow "waste" bands which are probably distal turbidites. Bedding at ~62° to c/a.										
256.3-278.1	75% SILTY QUARTZITES, 25% SILTSTONE Quartzites are thick & med. bedded, med-dark bluish-gray. Healed, bleached fractures are common in many of the quartzites. Siltstones are thin bedded & laminated, occurring in zones of 10 to 40cm thick. Chloritic alteration is common in the siltstone zones. Thin light gray to white quartz veins are scattered through the interval, up to ~4cm thick. Most are at 5° to 20° to c/a, a few at about 30°. Minor po & Cpy are present in some of the QV, as well as py. Py also occurs along fractures. Patchy pale brown-gray bleaching occurs locally. At 276.2m a 3-4cm wide fault zone carries fault gouge and quartz veining. Adjacent rocks are broken but not cleaved parallel to the fault zone, suggesting this is a minor break. Two fault-parallel fractures occur within 1.5m below the fault. Bedding: 60° at 261.5m; 60° at 269m; 56° at 274m; 57° at 278m.										
278.1-278.2	FAULT ZONE Crushed core & fault gouge over 15 cm, parallel to bedding. Pale gray-green in color. 1.5cm wide quartz vein extends below fault zone for ~15cm, at 10° to c/a.										

211-447

Drill Hole Record

Property	McNEIL CREEK	District	Hole No.	M-88-7
Commenced	Location		Tests at	Hor. Comp.
Completed	Core Size		Corr. Dip	Vert. Comp.
Co-ordinates			True Brg.	Logged by
Objective			% Recov.	Date

Footage From To	Description	Sample No.	Length	Analysis	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
278.2-301.2	85% QUARTZITES, 15% SILTSTONE Quartzites are thick and med. bedded with bedding planes that can be quite vague. Siltstones are thin bedded & laminated, occurring in narrow zones of 10 to 30cm. Color is usually a dark blue-gray but pervasive alteration; (bleaching) has produced patches of lighter gray and gray-brown coloration. The usual healed fractures with associated bleaching are common in quartzites. A few narrow veinlets of quartz-chlorite are present; at 280.3m an 8cm band of core is weakly brecciated with hairline yellowish carbonate veinlets. At 280.4 to 280.6 a 1.5cm wide quartz vein cuts the core at 15° to c/a. The top end of the vein ends abruptly at a 3mm wide bedding-parallel quartz vein. Part of an elongate (// to bedding) concretion at 293.3m carries coarse biotite and ragged rounded garnet porphyroblasts to 4mm diam. Most of the concretion is lighter in color than the host siltstone. Pyrite is present on some fracture surfaces; minor po occurs with quartz-chlorite veins. Bedding: 56° at 281m; 56° at 286m; 59° at 293m; 58° at 300m										
301.2-302.0	QUARTZ-CHLORITE VEIN ZONE Top 30cm are very fine-grained; light gray silica. Faint laminations are // to bedding - probably intensely silicified quartzite or siltstone. 'Contact' at 301.2m is at ~58° to c/a, // to bedding, but the same material is in contact with chlorite at ~301.5m, at ~15° to c/a. Quartz-chlorite vein with minor										

211-447

1

231-4444

12

1992

13

2014-04-09

14

1992-1993

19

CLASIFICACIÓN

16

111-4-02

Drill Hole Record

Property	McNEIL CREEK	District	Hole No.	M-88-7											
Commenced	Location	Tests at	Hor. Comp.												
Completed	Core Size	Corr. Dip	Vert. Comp.												
Co-ordinates		True Brg.	Logged by												
Objective		% Recov.	Date												
Footage From	To	Description	Sample No.	Length	Analysis					Claim	T Brg.	Collar Dip	Elev.	Length	
-438 cont.		At 424.4m a 14cm zone of fault gouge is parallel to bedding. Rock at 424.2m is fine-grained & glassy in appearance - apparently silicified & possibly related to the minor fault.													
		From 424.5 to 425.3m core is broken & chloritic with local dissem py. Fractures at 20° to c/a are common; may be cleavage related to the minor fault at 424.4m													
		Bedding: 62° at 401m; 65° at 408m; 65° at 415m; 60° at 419m; 68° at 427m; 67° at 429.5m; 68° at 433m; 65° at 436.5m													
438.0-455.5m		EST 70% SILTSTONE, 30% QUARTZITE													
		Similar to overlying interval but siltstones predominate.													
		Quartzites here are typically more bleached with patchy hornfelsic alteration where bands or pods of chlorite, biotite, garnet and rare pyrrhotite occur within light gray to white altered quartzite. Siltstones are variably silicified and some narrow zones are glassy and dark brown to black in color (not tourmalinite)													
		At 436.9m a 1.5-3cm wide QV at 35° to c/a occurs within a zone of lighter bleaching to a light gray-green color, with flecks of chlorite. Alteration may be related to the Q.V.													
		Bedding: 68° at 437.5m; 77° at 440m; 68° at 444.8m; 65° at 451m; 70° at 455.3m.													
		Very minor dissem. po is present in some of the beds & locally (eg. at 444.6m) there is local concentration of po. py & chlorite along bedding planes.													

Drill Hole Record

[illegible]

Footage From To	Description	Sample No.	Length	Analysis
467.2-495.0	EST. 80% SILTSTONE, 20% QUARTZITE			
	Siltstones & argillaceous siltstones are thin bedded & laminated, med.gray-brown and dark blue-gray in color. Most bedding is planar but there is considerable small-scale irregularity with soft sediment deformation/slump features. Locally a few rounded pebbles are present. Med. & thick bedded quartzites are scattered through the interval; dark blue-gray in color with pale gray-green bleaching along healed fractures. Patchy hornfelsic-textured concretions are fairly common with chlorite, biotite and garnet & rare po enclosed by bleached white quartzite.			
	484.6-485.3m Strongly chloritic core around a central zone of mostly healed shearing at ~ 25° to c/a. One open fracture carries a narrow zone of crushed chloritic material - a minor fault. Healed brecciation has a matrix of quartz veining, mostly bedding - parallel to sub-parallel at ~ 30° to c/a. Included in the quartz are irregular patches of pyrrhotite, up to ~ 1cm diam. with relatively minor ZnS, CoV and PbS. Pyrite is also present, both with QV and coated on fracture surfaces. SAMPLE: 484.6-485.3 0.7m	39116	0.7m	42 INT 100 B.4.2
	Bedding: 67° at 469m; 70° at 471m; 73° at 478.5m; 71° at 483m; 69° at 487m; 67° at 491m; 68° at 495m.			
495.0-500.2m	75% QUARTZITE, 25% SILTSTONE			
	Thick bedded quartzites are gray-green to dark blue-gray colored, locally bleached along healed fractures and in areas of (possible) concretionary development of hornfels with dissem. chlorite, biotite & garnet. Minor siltstone is dark			

Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by
Objective		% Recov.	Date

Footage		Description	Sample No.	Length	Analysis					
From	To				1	2	3	4	5	
500.2m	cont.	brownish-gray to black Bedding at 65° to c/a								
-498.3m-		REDUCED TO NO.								
500.2-557.8m		EST. 55% QUARTZITE, 45% SILTSTONE Typical zone of mixed middle Aldridge lithologies. Quartzites are thick & med bedded, commonly dark blue-gray in color with bleaching along healed fractures & scattered patches of hornfelsic development of biotite, chlorite, garnet & pyrrhotite. These patches are probably concretions. Zones of siltstones are up to 1m thick, thin bedded & laminated, dark blue-gray, dark gray & brownish-gray colored. Bedding is commonly planar but there are numerous small irregularities and narrow zones with ragged contacts & rip-up fragments suggesting minor slumping. Minor pyrrhotite occurs throughout, disseminated & in small veinlets. At 515.6m 1cm of core is crushed parallel to bedding; possibly a minor slip zone. At 537m a 3cm wide fault zone of crushed, pale gray bleached siltstone is a bedding - parallel fault zone. Adjacent core is variably bleached & locally crackle-brecciated for 2-3m above & below the fault. More crushed core in a narrow zone at 548m may be a parallel small fault (core is broken). Minor dissem. pyrite occurs on fractures within the zone.								

Results

Course Fees & Days

979-980

Keywords:

Covered Park & Pond

Abstract

2

357-244

2

571-2-40

2017-10-09

174-0-0000

31

201-8-009

32

21-000

Source:
 Survey Plot
 & Date

School 33

County
Contract No.
& Date

School 34

Drill Hole Record

Property McNeil Creek District Hole No. M-88-7
 Commenced Location Tests at Hor. Comp.
 Completed Core Size Corr. Dip Vert. Comp.
 Co-ordinates True Brg. Logged by
 Objective % Recov. Date

Footage From To	Description	Sample No.	Length	Analysis	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.
-982.4 cont.	At 968.2m a 1cm bedding-// band of quartz & pyrite & dolomite & pyrrhotite has coarse cubedra crystals developed in the adjacent siltstone.									
	At 969.0m a 3mm wide, ragged band of py & po is parallel to bedding.									
	From 972.5 to 973.0; A series of 4 quartz-dolomite veins are roughly parallel to bedding. Brecciation, shearing and pyrrhotite are associated. Wall rock is bleached to a dull yellow-gray.									
	From 974.1 to 974.3 a few qtz veins are associated with chloritization & greenish silification. Minor pyrrhotite is also present.									
	At 975.0m a 8cm wide massive milky white quartz vein occurs within broken core but appears to be bedding-// Pyrite and yellow dolomite occur within the QV along the lower contacts. From 975.0 to about 975.2m Qtz. vein s & lenses with pyrite & dolomite + white feldspar occur within disrupted bedding which is strongly bleached to a tan-yellow-gray color. One thin QV at 975.5m carries minor yellowish-green ZnS.									
	SAMPLING: 968.15-968.25 0.1m	39252	0.1m	28 143 27 0.8	26851					580
	968.25-969.05 0.8m	39253	0.8m	34 60 10 0.25	509					10
	972.0-972.5 0.5m	39254	0.5m	27 76 95 0.2	95					3
	972.5-973.0 0.5m	39255	0.5m	14 50 24 0.2	1215					71
	973.0-974.1 1.1m	39256	1.1m	28 83 96 0.1	41					7
	974.1-974.4 0.3m	39257	0.3m	27 63 40 0.1	19					4
	974.4-975.0 0.6m	39258	0.6m	23 81 81 0.1	32					3
	975.0-975.6 0.6m	39259	0.6m	120 230 769 1.8	1782					176

Drill Hole Record

Property McNeil Creek District Hole No. M-88-7
 Commenced Location Tests at Hor. Comp.
 Completed Core Size Corr. Dip Vert. Comp.
 Co-ordinates True Brg. Logged by
 Objective % Recov. Date

Footage From To	Description	Sample No.	Length	Analysis	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.
-982.4 cont.	SAMPLING: cont.									
	975.6-976.5 0.9m	39260	0.9m	11 37 22 0.1	23					15
	Bedding is quite consistently at 80° to c/a.									
982.4-1010.3	70% QUARTZITE, 30° SILTSTONE									
	Quartzites are light to med. gray, thick and med. bedded									
	Intervening zones of siltstone range from single beds (or tops of quartzitic turbidites) to 30 and 40cm bands of thin bedded siltstone, silty argillite and rare argillite. Most bedding is planar but there is local wavy bedding and, at 1000.5m a fold within 5cm of core which is probably soft sediment deformation.									
	A few quartz veins are present in the lower part of the interval.									
	At ~ 1002.1m a 1-1.5cm wide vein at ~ 0° to c/a, occurs on one side of the core for ~ 30cm. Vein is of med. gray mottled quartz with up to 15% irregular clots of pyrrhotite with minor cpy. Margin of the vein has a hornfelsic texture with pink garnets, chlorite & minor biotite.									
	SAMPLE: 1001.0-1001.4 0.4m	39261	0.4m	41 13 44 0.1	4					1
	At 1005.0m a 6cm wide QV cuts the core at 30° to c/a. 3% no clots, 1-2% chlorite clots are randomly distributed in the mottled light gray quartz.									
	SAMPLE: 1004.9-1005.1 0.2m	39262	0.2m	46 22 47 0.1	3					5
	From 1009.6-1010.3m there are a few patches of irregular quartz veining with associated pyrrhotite and chlorite; at ~ 1010.2m a small patch of po carries minor ZnS & PbS.									
	SAMPLE: 1009.6-1010.3 0.7m	39263	0.7m	59 21 77 0.1	3					2

Bedding throughout is at ~ 80° to c/a.

Property	McNeil Creek	District	Hole No.	M-88-7
Commenced		Location	Tests at	Hor. Comp.
Completed		Core Size	Corr. Dip	Vert. Comp.
Co-ordinates			True Brg.	Logged by
Objective			% Recov.	Date

[illegible]

Drill Hole Record

Property McNeil Creek District Hole No. M-89-1
 Commenced Feb. 20, 1989 Location Tests at Hor. Comp.
 Completed March 6, 1989 Core Size HQ Corr. Dip -90° Vert. Comp.
 Co-ordinates 0080N 2500E True Brg. --- Logged by P. Klewchuk
 Objective Test Lower-Middle Aldridge Contact for % Recov. Date Feb. 23, 1989
 Economic Sulfides

Depth meters From To	Description	Sample No.	Length	Analysis	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
0-47.2	CASING: NO CORE (Bedrock probably intersected ~ 38m)										
47.2-113.2m	GABBRO										
	Med. gray-green to dark gray-green colored. Typically med. grained with 10-15% phenocrysts of white feldspar averaging ~ 8mm across. The med. grained groundmass is composed of ~ 60% chloritized amphibole & 40% white plagioclase. Quite homogeneous; there is local fabric consisting of veins & seams of white feldspar at 70-80° to c/a, suggesting the intrusive is a sill. A few veinlets are at 15-20° to c/a. At 68.3m minor shearing with pale greenish feldspar veining is at ~ 35° to c/a. Very minor fine-grained pyrrhotite is present. Localized brecciation and bleaching are present: e.g. at 80.8m but no obvious faulting. Coarsest grain size is from ~ 90-100m. At 105.3m a 4x1cm patch of calcite is rimmed with ragged po & minor Cpy. Below ~ 105.5m grain size is finer & is increasingly fine-grained, with smaller fp. phenocrysts (ave ~ 3mm diam.) to the contact at 113.2m. Contact at 113.2m is wavy, but fairly sharp, at 20° to c/a. A 10cm wide zone is quite fine grained at the contact.										
113.2-117.2	QUARTZITE & SILTSTONE										
	Quite strongly altered; bleached, silicified & chloritized; color varies from pale gray-green to dark gray and blue-gray. Most of the interval is brecciated with bleached hairline fractures. A few thin whitish feldspar veins cut the core at 0° to 20° to c/a near 115m. Med & thin beds predominate with a few thick quartzite beds. Bedding is at 65-70° throughout. Contact at 117.2m is rubbly										

21-447

Drill Hole Record

Property McNeil Creek District Hole No. M-89-1
 Commenced Location Tests at Hor. Comp.
 Completed Core Size Corr. Dip Vert. Comp.
 Co-ordinates True Brg. Logged by
 Objective % Recov. Date

Depth meters From To	Description	Sample No.	Length	Analysis	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
-117.2m cont.	and broken but there is some evidence in fragments that it is bedding-parallel.										
117.2-126.1	GABBRO										
	Med-dark gray-green, generally similar in texture to previous gabbro. Evidently a sill; about 1.5m near each contact is finer grained & FW contact is sharp and bedding-parallel at 68° to c/a. Veinlets of white calcite occur through parts of the gabbro; a local concentration at 126.7 m is oriented at 20° to c/a fine-grained gabbro here is calcareous; from 125.5 to 126.1m gabbro is brecciated, fine-grained, chloritic with irregular veinlets of calcite & pyrrhotite-chalcocopyrite. At 118.7m ~ 15cm of core is mainly calcite; breccia vein filling, probably a minor fault; adjacent core is quite strongly brecciated.										
	SAMPLES: 118.5-119.0 0.5m	39158	0.5m	60 7 1010.220							
	125.5-126.1 0.6m	39159	0.6m	76 10 1380.312							
126.1-141.7	QUARTZITE, 15% SILTSTONE										
	Typically thick & med. bedded quartzites with narrow zones of thin bedded & laminated siltstone and argillaceous siltstone. Chloritic alteration is prominent to ~ 133m - core is more greenish colored and wanes below. Bleaching is also present in the upper part of the interval and the color gets darker downward. Near 127.5m a strongly altered, originally laminated (?) zone with biotite-garnet concentrations along bedding planes carries numerous small fractures with pyrrhotite. Bedding is typically planar, with minor irregularities, and varies from 68° to 78° to c/a.										
	SAMPLE: 127.4-127.9 0.5m	39160	0.5m	27 29 1060.1 2							

21-448

Drill Hole Record

Property	McNeil Creek	District	Hole No.	M-89-1
Commenced	Location	Tests at	Hor. Comp.	
Completed	Core Size	Corr. Dip	Vert. Comp.	
Co-ordinates		True Brg.	Logged by	
Objective		% Recov.	Date	

Footage From To	Description	Sample No.	Length	Analysis	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
				Cu Pb Zn Ag As Au							
215.2 cont.	bands consisting of pyrrhotite, pyrite, chlorite and quartz. Three irregular bands, up to 1cm wide, occur across 10cm of core.										
214.3-215.2	Broken core of silicified, brecciated and crushed quartzite & siltstone										
	Bedding in the central zone is at ~70° to c/a										
	SAMPLING: 210.5-210.9 0.4m	39163	0.4m	12 25 52 0.1 5 1							
	212.7-213.1 0.4m	39164	0.4m	15 13 29 0.1 6 1							
	214.3-215.2 0.9m	39165	0.9m	7 5 36 0.1 2 2							
215.2-224.9	QUARTZITE, 20% SILTSTONE										
	Med. rarely thick bedded quartzites; commonly internally laminated. Alteration is quite strong with brecciation and light gray to pale green discoloration. Silicification appears prevalent. Narrow bands of thin bedded & laminated siltstone are also strongly altered, varying in color from light gray to dark gray-brown. Chloritic alteration is present, with chlorite and pyrite along fractures. At 221.9m core is crushed, bleached to pale gray-green; a minor fault zone. Most cleavage is at 20-30° to c/a but this occurs at various strike attitudes and fault plane may be relatively flat. A 4cm wide band of crushed rock at 216.6m is another minor fault zone, at ~55° to c/a. Bedding: 77° at 217m; 75° at 220m; 72° at 224.5m										

211-447

Drill Hole Record

Property	McNeil Creek	District	Hole No.	M-89-1
Commenced	Location	Tests at	Hor. Comp.	
Completed	Core Size	Corr. Dip	Vert. Comp.	
Co-ordinates		True Brg.	Logged by	
Objective		% Recov.	Date	

Footage From To	Description	Sample No.	Length	Analysis	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
				Cu Pb Zn Ag As Au							
224.9-229.0	SILTSTONE & ARGILLACEOUS SILTSTONE										
	Med. to dark gray, thin bedded & laminated; most of the zone is strongly silicified & small porphyroblasts of sericite/muscovite are common throughout. Fracture surfaces are chloritic with pyrite & a moderate pervasive chloritization occurs throughout. Bedding is consistent at 74° to c/a.										
229.0-270.0	QUARTZITES, 25% SILTSTONE										
	Light, med. & dark gray colored thick & med. bedded quartzites. Small porphyroblasts of chlorite & biotite are spotted through many of the quartzites. Narrow zones of thin bedded & laminated siltstones are typically darker than the quartzites, usually with a brownish tinge. Very minor pyrrhotite is present as patches of fine disseminations and as thin cross-cutting veinlets. Some fracture surfaces are chloritic, usually with minor pyrite. At 230.6m a 1cm wide band of fault gouge // to bedding indicates a minor bedding-plane fault. Bedding: 67° at 231.5m; 72° at 236m; 68° at 241m; 71° at 246m; 69° at 250m; 72° at 254m; 71° at 260m; 65° at 264m; 68° at 268m.										
270.0-303.2m	Contact at 270m is probably a fault; core is broken, chloritic with minor coarse-grained, euhedral pyrite, some crystalline calcite (loose fragments). The fault zone is a maximum of 20cm wide and adjacent rock appears unaffected; therefore it appears that displacement on the fault is relatively minor.										

211-44

Drill Hole Record

Property	McNeil Creek	District	Hole No.	M-89-1
Commenced	Location	Tests at	Hor. Comp.	
Completed	Core Size	Corr. Dip	Vert. Comp.	
Co-ordinates	True Brg.	Logged by		
Objective	% Recov.	Date		

Footage From	To	Description	Sample No.	Length	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.
		SILTSTONE: ALTERED Minor QUARTZITE								
		Predominantly laminated & thin bedded; a few zones appear more massive due to alteration. Color varies from light gray to darker gray-brown; alteration has produced considerable discoloration. Biotite 'spotting' is prevalent throughout and many bedding planes have been 'disrupted' by the growth of metamorphic minerals, primarily biotite. Bedding planes are quite planar; there are a few minor irregularities like wavy beds. Minor fine-grained pyrrhotite is disseminated through the interval and a few po-Qtz veins, usually with chlorite, cut the core at various angles. Fractures tend to be chloritic, with minor pyrite. At 284.2m a 2cm wide fault breccia zone cuts the core at 45° to c/a. Basal 20cm of the interval (303.0-303.2m) is a hornfelsic mass of mainly biotite & whitish feldspar porphyroblasts. Bedding: 73° at 273m; 70° at 279m; 65° at 286m; 66° at 292m; 70° at 288m; 73° at 302.5m								
303.2-394.0		GABBRO								
		Upper contact is parallel to bedding at ~ 70° to c/a. Gabbro is very fine-grained for 10-15cm at upper contact. Texture is fine-med. grained to 304.4m, then increasingly coarse-grained to ~ 307m; mainly coarse grained below that. Color is dark green to gray-green, consisting of chloritized amphibole, feldspar, minor biotite and quartz. Texture is quite varied with local patches of more felsic, coarse-grained material scattered through the sill; some zones are med. & even fine grained. There is evidence of flow banding through much of the interval;								

211-447

Drill Hole Record

Property	McNeil Creek	District	Hole No.	M-89-1
Commenced	Location	Tests at	Hor. Comp.	
Completed	Core Size	Corr. Dip	Vert. Comp.	
Co-ordinates	True Brg.	Logged by		
Objective	% Recov.	Date		

Footage From	To	Description	Sample No.	Length	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.
		-394.0 cont. vague "contacts" between zones of diff. grain size are typically at ~ 70° to c/a. Minor fracturing with white feldspar-quartz veinlets are fairly common. Fine-grained iron sulfides - pyrrhotite - occur disseminated throughout in minor concentrations. At 306-307m, a 1-2cm wide vein of feldspar, quartz and chlorite occurs at 0° to c/a. At 307.3m a 3cm wide shear zone with qtz-feldspar veining cuts the core at 30° to c/a. 331.5-334.8 is a zone of more felsic "gabbro" - more like granodiorite, with pale maroon-colored K-Spars(?) as well as lesser white plagioclase. Minor no with assoc. Cpy occurs in the zone in irregular patches & disseminated. SAMPLES: 331.9-332.9 1.0m 39166 1.0m 551 7 48 0.1 7 332.9-333.9 1.0m 39167 1.0m 440 11 36 0.1 5 From 392.3 to 394.0m texture is more banded with wavy chloritic lenses & quartz veining at 0° to 20° to c/a.								
394.0-395.4		QUARTZ VEIN								
		Massive white mottled quartz with wavy streaks of bands of dark green chlorite. Minor fine-grained euhedral pyrite is dissem. through the chlorite bands. Chlorite streaks are at 10-15° to c/a. SAMPLE: 394.0-395.4 1.4m 39189 1.4m 7 2 5 0.2 3								

211-44

Drill Hole Record

Property	McNeil Creek	District	Hole No.	M-89-1
Commenced	Location	Tests at	Hor. Comp.	
Completed	Core Size	Corr. Dip	Vert. Comp.	
Co-ordinates		True Brg.	Logged by	
Objective		% Recov.	Date	

Footage From To	Description	Sample No.	Length	Analysis	Cu	Pb	Zn	Ag	As
395.4-406.2	GABBRO								
	Dark green, med.-coarse grained. Some chloritic streaking is present, ranging from 15° to 40° to c/a. Narrow white quartz-feldspar veins are present; shearing is evident at one band at 403.1. Veins vary in attitude from 15° to 35° to c/a. Very minor f. gr. pyrite is present with chlorite near some veins.								
406.2-418.8	FAULT ZONE; QUARTZ VEINING								
	Massive, white, mottled & brecciated quartz. Scattered irregular patches of gray-green & dark green chlorite are present. All of the zone is variably broken with patches of fault gouge & breccia. A few fracture surfaces carry minor dissem. fine-grained pyrite. At 410.4 a small piece of broken core (4cm across) contains a patch of massive pyrrhotite, pyrite and chlorite. The sulfide patch is on the outside of the drill hole, 4cm across. Fracturing is strongly developed throughout; mostly at 25-35° to c/a. Fault breccia & chloritic gouge are developed from 412.1m to 413m with fractures from 0 to 30° to c/a.								
	SAMPLING: 406.2-407.5 1.3m	39190	1.3m	1	5	5	0.1	14	
	407.5-409.3 1.8m	191	1.8m	1	5	3	0.1	2	
	409.3-410.0 0.7m	192	0.7m	13	2	8	0.2	2	
	410.0-410.7 0.7m	193	0.7m	102	3	58	0.1	3	
	410.7-412.4 1.7m	194	1.7m	46	2	32	0.2	2	
	412.4-413.9 1.5m	195	1.5m	34	2	34	0.1	10	
	413.9-415.4 1.5m	196	1.5m	8	2	8	0.2	2	
	415.4-416.6 1.2m	197	1.2m	6	2	12	0.1	4	

Drill Hole Record

Property	McNeil Creek	District	Hole No.	M-89-1
Commenced	Location	Tests at	Hor. Comp.	
Completed	Core Size	Corr. Dip	Vert. Comp.	
Co-ordinates		True Brg.	Logged by	
Objective		% Recov.	Date	

Footage From To	Description	Sample No.	Length	Analysis	Cu	Pb	Zn	Ag	As
-418.8 cont.	SAMPLING: 416.6-417.7 1.1m	39198	1.1m	6	2	19	0.1	2	
	417.7-418.8 1.1m	199	1.1m	4	2	16	0.2	2	
418.8-579.7	GABBRO								
	418.8 to 423.0m is streaked with wavy bands of chlorite and quartz enclosing minor irregular fragments of dark green gabbro. Wavy banding is at 0° to 20° to c/a. A few thin veinlets of calcite are mixed in with the quartz.								
	Below 423.0m gabbro is quite massive, coarse-grained, med. to dark green. Thin veinlets of quartz, white feldspar & rarely calcite are scattered through the gabbro; these vary in attitude from 20° to c/a to 60° to c/a.								
	532.5m Reduced to NO								
	Basal portion of the sill is quite massive; decrease in grain size is gradational down to about 579.0m and is quite fine-grained below there. Footwall contact at 579.7m is planar, sharp, parallel to bedding at 68° to c/a. Bedding-parallel cleavage is developed within the bottom 3 cm of the sill. Minor po & very minor Cpy are present. A few very small pink garnets are developed along the contact.								
579.7-590.7	ALTERED SILTSTONE								
	Mainly thin bedded & laminated with a few more massive med. & thick-bedded zones; these may be silty quartzites or silicified massive, weakly laminated siltstone. Bleaching has produced a mottled, patchy discoloration to pale gray-green colors. Bedding is quite planar and at ~ 70° to c/a. Fine dissem. po is common in very minor amounts through most of the interval; locally slightly concentrated in bedding-parallel bands. Pyrite is common as thin veinlets associated with chlorite.								

Drill Hole Record

Property		McNeil Creek	District	Hole No.	M-89-1								Sheet
Commenced	Location	Tests at	Hor. Comp.										
Completed	Core Size	Corr. Dip	Vert. Comp.										
Co-ordinates	True Brq.	Logged by											
Objective	% Recov.	Date											
Footage	Description	Sample No.	Length	Analysis									
From	To			Cu	Pb	Zn	Ag	As	Au				
-590.7 cont.	There is patchy concentration of pyrite at the contact at 590.7m. Vague cross-bedding is evident in one thin bed near 595m.												
	SAMPLE: 590.0-590.7m 0.7m	39200	0.7m	51	14	41	0.1	5	7				
590.7-599.2	GABBRO												
	Contact at 590.7m is sharp, wavy, at ~25° to c/a, indicating this gabbro is a dike. A 6cm wide fine-grained chill contact is present adjacent to the contact. Texture is increasingly coarse grained to 599.2m. Small feldspar phenocrysts up to 8mm across, averaging 3-4mm across, occur within a finer-grained (med.-coarse) groundmass. About 4% of the rock is feldspar phenocrysts. Groundmass is a dark green mixture of ~60% hornblends and 40% white plagioclase. Minor calcite vein ing is present; at 595m calcite veins are associated with epidote and dissem. pyrite. Pyrite, chlorite & locally epidote are present on most fracture surfaces.												
	SAMPLES: 592.5-593.5 1.0m	39201	1.0m	58	16	64	0.1	2	3				
	598.2-599.2 1.0m	39202	1.0m	61	11	52	0.3	2	1				
599.2	End of Hole.												

P. Marshall

12.60 APPENDIX VI

GEOCHEMICAL ANALYSES OF DRILL CORE

GEOCHEMICAL ANALYSIS CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO₃-H₂O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
 THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR NG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
 - SAMPLE TYPE: Core AU** ANALYSIS BY FA+AA FROM 10 GR SAMPLE.

DATE RECEIVED: OCT 19 1988 DATE REPORT MAILED: Oct 21/88 SIGNED BY: C. Long D. TOYE, C. LEONG, B. CHAN, J. WANG; CERTIFIED B.C. ASSAYERS

DRAGOON RESOURCES LTD. File # 88-5299

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Hg	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Cr	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Au**
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM	PPM
7901 G	1	19	245	448	.8	6	3	415	2.24	2	5	ND	9	14	2	2	2	9	1.46	.014	26	10	.41	25	.09	2	2.35	.05	.41	1	2
7902 G	1	3	22	161	.1	6	4	373	1.77	3	5	ND	15	5	1	2	2	13	.40	.018	30	14	.39	18	.10	2	1.25	.01	.36	1	1
7903 G	1	140	55	254	.3	17	9	565	3.55	5	5	ND	8	10	1	2	2	11	.83	.014	15	13	.56	12	.10	5	1.67	.03	.20	1	1
7904 G	1	101	18	109	.1	10	6	451	2.67	2	5	ND	14	9	1	2	2	12	.87	.022	24	12	.54	31	.11	2	1.73	.02	.41	1	1
7905 G	1	195	2215	186	.7	21	14	415	3.86	7	5	ND	15	8	1	16	2	21	.45	.024	25	20	.33	49	.16	2	1.95	.04	.56	1	1
7906 G	1	1415	11120	91	9.2	10	19	1292	3.83	21	5	ND	11	9	2	27	6	31	.58	.013	21	16	.29	9	.13	3	1.66	.02	.17	1	4
7907 G	1	74	1800	63	1.3	7	12	769	2.72	20	5	ND	12	2	1	9	2	5	.16	.011	15	12	.22	16	.10	2	1.05	.01	.25	1	3
7908 G	1	1272	13540	205	5.5	7	6	1993	8.10	400	10	ND	9	5	1	424	2	11	.46	.014	15	10	.12	5	.05	2	1.47	.01	.14	1	12
7909 G	15	1953	20094	159	38.9	14	10	2818	10.53	611	5	ND	7	4	1	539	2	14	.50	.013	15	14	.37	6	.02	2	1.12	.01	.14	1	25
7910 G	1	284	2142	94	1.8	7	4	365	5.72	1022	5	ND	13	7	1	101	2	8	.31	.016	39	9	.18	17	.01	6	1.15	.01	.24	1	38
7911 G	1	34	1940	91	2.9	13	9	814	3.57	21	5	ND	12	7	1	5	2	13	.35	.015	26	13	.29	31	.10	2	1.86	.02	.55	1	22
7912 G	1	10	98	10	.1	20	24	210	1.48	10	5	ND	6	3	1	2	2	31	.18	.004	19	40	.29	1	.10	4	.42	.07	.03	1	2
7913 G	1	4	22	12	.1	7	2	207	1.22	2	5	ND	10	5	1	2	2	15	.26	.024	25	18	.34	7	.07	2	.52	.03	.09	1	1
7914 G	1	166	46	76	.1	18	12	437	2.69	12	5	ND	16	7	1	2	2	10	1.27	.031	21	12	.76	26	.01	2	1.46	.01	.25	1	1
7915 G	5	7354	131	468	6.2	99	39	1095	8.92	13	11	ND	4	7	4	2	2	21	1.67	.049	84	14	2.48	18	.01	4	3.59	.01	.21	5	46
7916 G	1	120	20	52	.1	18	6	445	2.12	7	5	ND	16	6	1	2	2	9	.97	.048	27	11	.68	25	.06	5	1.33	.01	.30	1	2

Assay required for correct result

For Pb > 1%
Ag 25 ppm

GEOCHEMICAL ANALYSIS CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO₃-H₂O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
 THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR NG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
 - SAMPLE TYPE: Core AO* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

DATE RECEIVED: OCT 25 1988

DATE REPORT MAILED: Oct 31/88

SIGNED BY: *C. Long* D. TOYE, C. LEONG, B. CHAN, J. WANG; CERTIFIED B.C. ASSAYERS

BAPTY RESEARCH LIMITED

File # 88-5410

88-02

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Hg	Ba	Ti	B	Al	Na	K	V	Au*
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM	PPM
7917G	1	33	25	53	.1	16	7	457	1.68	11	5	ND	12	6	1	2	2	6	1.31	.042	15	9	.77	13	.01	5	1.12	.01	.25	2	2
7913G	1	77	71	110	.1	17	9	432	2.24	9	5	ND	13	7	1	2	2	5	1.40	.035	15	12	.44	30	.01	7	1.01	.01	.23	1	6
7919G	1	39	8	30	.1	17	9	297	2.89	5	5	ND	10	2	1	2	2	9	.49	.019	12	10	.59	24	.01	4	1.19	.02	.17	1	1
7920G	1	32	13	43	.1	21	12	196	3.04	8	5	ND	13	2	1	2	2	7	.18	.022	11	11	.58	50	.01	4	1.41	.01	.21	3	1
7921G	1	32	57	51	.3	16	11	362	3.11	8	5	ND	10	3	1	2	2	7	.35	.025	8	9	.72	39	.01	3	1.35	.01	.17	2	10
STD C/AU-R	19	58	41	132	6.5	68	30	941	4.19	37	16	8	36	47	17	17	20	56	.47	.083	37	55	.92	175	.06	35	2.01	.06	.14	13	470

GEOCHEMICAL ANALYSIS CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO₃-H₂O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR NG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: Core AD* ANALYSIS BY ACID LEACH/AA FROM 10 GR SAMPLE.

DATE RECEIVED: OCT 30 1988

DATE REPORT MAILED: Nov 9/88

SIGNED BY: *C. Long* D. TOYK, C. LEONG, B. CHAN, J. WANG; CERTIFIED B.C. ASSAYERS

BAPTIST RESEARCH

File # 88-5538

Page 1

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Pb	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Ng	Ba	Ti	B	Al	Na	K	W	Au*
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM	PPM
7922 G	1	26	3	35	.1	25	15	371	3.91	10	5	ND	8	5	1	2	2	38	1.24	.013	9	25	1.06	49	.01	3	1.72	.01	.17	1	1
7923 G	1	28	2	71	.1	44	45	768	9.92	3	5	ND	2	20	1	2	2	377	4.08	.022	2	21	2.25	5	.01	2	2.45	.02	.02	1	1
7924 G	1	97	2	25	.1	25	30	232	9.57	4	5	ND	2	18	1	2	2	442	1.20	.019	3	1	.83	1	.20	2	.97	.02	.02	1	1
7925 G	1	59	2	13	.1	25	155	114	6.34	4	5	ND	1	16	1	2	3	75	.71	.027	2	1	.35	1	.11	2	.43	.03	.01	1	2
7926 G	1	117	3	35	.1	23	31	464	3.56	2	5	ND	2	62	1	2	2	65	3.66	.023	3	4	1.22	5	.10	2	1.55	.02	.04	1	1
7927 G	1	222	8	48	.1	35	28	568	4.45	2	5	ND	1	49	1	2	2	96	2.83	.020	3	7	1.75	5	.13	2	1.84	.02	.03	1	7
7928 G	1	31	4	52	.1	33	29	751	8.31	5	5	ND	2	75	1	2	2	124	10.88	.014	4	6	1.59	2	.07	2	1.68	.01	.02	1	4
7929 G	1	147	5	72	.1	45	23	782	5.46	3	5	ND	2	22	1	2	2	146	3.11	.024	3	21	2.73	7	.17	2	2.77	.02	.04	1	2
7930 G	1	5	~	95	.1	33	39	616	8.22	2	5	ND	1	5	1	2	2	161	.63	.040	2	194	3.40	230	.29	2	4.47	.02	2.53	1	2
7931 G	1	5	2	60	.1	57	22	473	5.19	2	5	ND	1	10	1	2	3	108	.63	.028	2	115	2.47	64	.15	5	2.78	.02	.69	1	1
7932 G	1	5	2	29	.1	33	39	231	2.92	2	5	ND	1	35	1	2	2	64	1.10	.041	2	76	1.04	7	.18	2	1.66	.03	.04	1	1
7933 G	1	17	33	92	.1	14	10	338	2.99	12	5	ND	14	5	1	2	2	8	.18	.017	35	8	.55	25	.01	2	1.36	.01	.20	1	3
7934 G	1	14	12	44	.1	12	7	385	2.42	6	5	ND	13	8	1	2	2	11	.39	.009	30	15	.41	23	.02	2	.94	.01	.15	1	4
7935 G	1	34	45	51	.9	19	12	511	3.78	537	5	ND	11	21	1	8	2	4	.72	.019	13	5	.58	35	.01	5	1.14	.01	.24	1	69
7936 G	1	26	78	100	.1	22	12	542	2.39	630	5	ND	16	47	1	13	2	3	2.10	.022	19	4	.56	40	.01	2	.61	.01	.29	1	32
7937 G	1	7	15	15	.1	10	6	316	2.04	18	5	ND	12	23	1	2	2	3	1.07	.013	22	5	.49	41	.01	8	.73	.02	.21	1	5
7938 G	1	18	9	7	.1	21	19	253	2.43	132	5	ND	10	27	1	3	2	6	1.14	.022	17	5	.48	30	.01	3	.80	.01	.24	1	95
7939 G	1	2	9	5	.1	11	10	227	1.82	60	5	ND	9	29	1	3	2	2	1.32	.023	15	3	.45	27	.01	2	.66	.01	.21	1	64
7940 G	1	4	3	9	.1	13	11	382	2.48	33	5	ND	7	59	1	2	2	3	2.32	.016	14	3	1.01	24	.01	4	.65	.01	.19	1	12
STD C/AU-R	18	60	40	132	6.6	58	21	1023	4.20	44	18	8	37	47	13	17	19	58	.50	.094	39	57	.94	176	.07	38	2.04	.06	.14	12	515

GEOCHEMICAL ANALYSIS CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.

THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR NG BA TI B W AND LIMITED FOR NA K AND AL. NO DETECTION LIMIT BY ICP IS 3 PPM.

- SAMPLE TYPE: Core AU ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

DATE RECEIVED: NOV 9 1988

DATE REPORT MAILED: Nov 15/88

SIGNED BY: C. Ling D. TOYE, C. LEONG, B. CHAN, J. WANG; CERTIFIED B.C. ASSAYERS

BAPTY RESEARCH

File # 88-5732

SAMPLE	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Se	Bi	V	Ca	F	La	Cr	Ng	Ba	Ti	B	Al	Na	K	W	Au*
PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	%	%	%	%	PPM	PPM
C 39555	1	3	2	12	.1	6	3	70	1.26	2	5	ND	12	5	1	2	4	10	.15	.005	11	26	.77	1	.01	2	.79	.02	.01	1	2
C 39556	3	61	573	168	1.7	22	14	462	4.32	8	5	ND	8	21	1	2	10	20	1.03	.037	12	31	.97	25	.01	5	1.29	.02	.16	1	1
C 39557	1	4	2	10	.1	17	9	429	1.91	99	5	ND	13	8	1	2	2	2	1.22	.017	11	27	.26	15	.01	6	.48	.02	.14	1	9
C 39558	2	9	4	28	.1	13	5	256	1.84	18	5	ND	10	5	1	2	3	4	.33	.012	15	9	.23	13	.01	2	.53	.02	.09	1	1
C 39559	1	4	2	8	.1	14	8	312	1.74	26	5	ND	13	12	1	2	2	2	.67	.012	21	16	.37	25	.01	3	.48	.01	.17	1	1
C 39560	1	5	8	68	.1	30	12	1260	5.67	93	5	ND	5	91	1	2	2	16	6.20	.016	4	19	2.52	11	.01	6	.55	.01	.12	1	3
C 39561	1	8	7	27	.1	12	15	1940	7.17	54	5	ND	1	173	3	2	2	8	16.76	.006	2	15	2.71	1	.01	2	.26	.01	.07	1	1
C 39562	2	25	9470	12532	4.4	12	8	305	2.21	15062	5	ND	1	31	89	3163	9	5	1.36	.062	2	10	.36	5	.01	4	.19	.01	.06	1	810
C 39563	1	5	4	137	.1	37	26	1320	5.90	148	5	ND	2	73	1	7	2	47	3.73	.018	4	49	2.79	12	.01	6	1.55	.01	.12	2	7
C 39564	1	3	25	242	.1	37	26	1288	6.38	105	5	ND	2	54	2	9	5	51	5.94	.016	4	74	3.27	5	.01	2	2.55	.01	.68	1	9
C 39565	1	16	9	122	.1	32	21	941	8.39	54	5	ND	3	21	2	4	4	69	1.07	.015	6	82	2.22	4	.01	6	3.02	.01	.07	1	1
C 39566	1	555	6	89	.2	36	19	501	11.41	43	5	ND	4	19	1	5	2	13	.87	.008	5	15	1.19	10	.01	7	1.21	.01	.08	1	1
C 39567	1	170	2	153	.2	13	24	880	10.27	22	5	ND	7	11	1	9	2	41	.47	.007	9	65	1.60	12	.01	6	3.13	.01	.09	1	1
C 39568	1	17	12	95	.1	25	12	678	4.33	17	5	ND	14	6	1	2	3	25	.50	.027	25	35	1.08	21	.11	6	1.96	.01	.20	1	1
C 39569	1	16	7	188	.1	38	26	1246	9.43	195	5	ND	2	11	2	6	2	161	1.52	.024	4	124	3.25	34	.13	11	4.80	.01	.72	2	1
C 39570	1	861	21	120	.6	71	119	866	13.20	96	5	ND	2	9	3	4	5	55	2.14	.019	4	77	1.52	5	.07	2	3.00	.01	.10	2	19
C 39571	1	274	7	78	.3	77	31	529	7.19	32	5	ND	2	5	1	5	3	114	.82	.020	6	191	1.74	1	.05	7	2.45	.02	.03	1	1
C 39572	1	7	5	93	.1	25	17	880	5.55	24	5	ND	2	10	1	3	5	114	2.23	.023	7	72	2.22	1	.10	2	2.70	.02	.04	3	1
C 39573	1	25	8	21	.1	10	6	309	2.34	8	5	ND	11	7	1	2	2	19	1.52	.013	9	33	.46	5	.04	2	.92	.01	.13	1	1
C 39574	1	44	154	6153	.9	14	15	551	2.93	9	5	ND	12	9	77	2	2	13	.83	.023	18	22	.56	27	.08	2	1.31	.01	.12	1	1
STE C/AU-R	18	60	35	132	6.9	71	31	1034	4.29	42	20	8	37	47	19	16	20	60	.50	.090	39	55	.94	174	.07	38	2.06	.06	.13	12	520

- ASSAY REQUIRED FOR CORRECT RESULT -

ACME ANALYTICAL LABORATORIES LTD.

852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6

PHONE (604) 253-3158 FAX (604) 253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO₃-H₂O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN PS SR CA P LA CR MG BA TI B V AND LIMITED FOR NA K AND AL. AD DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: Core AD* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

DATE RECEIVED: NOV 16 1999

DATE REPORT MAILED:

Nov 22/99

SIGNED BY: C. Long

D. TOYE, C. LONG, B. CHAN, J. WANG; CERTIFIED B.C. ASSAYERS

BAPTY RESEARCH

File # 88-5859

SAMPLE#	NO	CU	PB	ZN	AS	NI	CO	MO	FE	AS	U	AU	PH	ST	CD	SB	BI	V	CA	P	LA	CE	MG	BA	TI	B	AL	NA	K	W	AU*
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM	PPM
C 39575	1	42	15	190	.6	30	14	620	3.90	17	5	ND	20	17	1	2	2	15	.69	.021	28	19	.65	40	.06	13	1.49	.01	.24	1	12
C 39576	2	242	108	62	1.1	25	21	201	3.77	10	5	ND	6	9	1	2	3	5	.90	.907	13	10	.16	12	.32	10	.42	.01	.09	1	12
C 39577	1	25	9	34	.3	11	5	240	1.61	9	5	ND	20	15	1	2	2	7	.88	.015	56	10	.30	40	.01	8	1.04	.01	.32	1	2
C 39578	2	152	13	18	.6	52	75	259	3.19	90	5	ND	2	19	1	2	2	1	1.47	.004	5	9	.96	5	.91	8	.25	.01	.95	1	79
C 39579	1	28	23	19	.7	13	6	359	1.57	6	5	ND	10	15	1	2	2	3	.75	.010	16	9	.20	22	.01	9	.41	.02	.15	1	31
C 39580	1	14	6	191	.2	13	3	243	1.74	7	5	ND	16	15	1	2	2	17	.40	.019	30	13	.52	61	.16	10	2.42	.03	1.13	1	2
C 39581	1	36	3	101	.3	20	9	352	3.15	9	5	ND	21	9	1	2	2	20	.25	.042	29	22	.63	63	.19	2	2.19	.01	1.45	2	1
C 39582	1	3	14	57	.1	12	5	417	1.42	7	5	ND	12	20	1	2	2	19	.56	.013	21	17	.56	53	.14	9	2.53	.02	.80	1	1
C 39583	1	144	65	1274	.3	20	12	654	3.71	12	5	ND	11	11	5	2	2	24	.45	.017	17	21	.44	52	.16	4	1.90	.03	.53	1	2
C 39584	8	932	500	19329	1.1	30	40	467	1.33	11	5	ND	2	7	234	2	2	2	.65	.005	2	3	.05	2	.02	6	.36	.01	.03	2	2
C 39585	2	336	295	2698	1.1	17	8	450	1.83	30	5	ND	7	19	11	2	2	9	1.27	.012	7	9	.15	2	.08	10	.95	.01	.03	8	2
C 39586	1	78	672	2309	.5	26	9	721	3.75	21	5	ND	15	15	8	2	2	34	.72	.026	22	32	.42	40	.17	9	1.65	.03	.19	10	1
C 39587	2	3714	1362	4123	3.4	20	17	1055	3.55	17	5	ND	2	19	58	2	3	4	8.25	.004	4	5	.07	1	.02	2	.42	.01	.02	20	2
C 39588	4	1723	19577	3108	95.3	23	22	450	1.90	14	5	ND	1	6	58	68	73	1	1.44	.002	3	2	.02	1	.01	17	.15	.01	.01	101	5
C 39589	5	1297	3712	5954	3.9	23	18	858	2.94	15	5	ND	3	5	35	15	6	3	.73	.004	4	4	.56	1	.03	5	.49	.01	.01	38	2
C 39590	2	42	642	1742	.6	15	6	513	2.54	12	5	ND	12	33	13	2	2	22	.42	.016	14	21	.31	31	.12	5	1.31	.02	.24	40	2
C 39591	3	25	71	538	.2	15	9	397	1.35	26	5	ND	11	12	8	2	2	22	.49	.014	12	22	.23	43	.12	5	1.32	.02	.28	3	1
C 39592	1	7349	25	435	4.5	41	34	1874	5.79	7	5	ND	4	5	9	2	2	1	1.55	.007	2	3	.96	3	.32	2	.54	.01	.32	1	3
C 39593	1	11	12	876	.1	23	9	554	3.25	23	6	ND	15	27	3	2	2	21	.49	.021	21	22	.45	45	.19	6	1.77	.01	.62	1	4
C 39594	1	191	97	1236	.1	19	12	614	1.59	17	5	ND	13	7	12	2	2	21	.25	.017	20	20	.47	17	.12	2	1.41	.01	.23	3	4
C 39595	1	162	47	928	.1	22	12	829	3.27	9	5	ND	9	16	5	2	2	23	1.18	.021	12	22	.63	28	.12	2	2.25	.05	.47	1	3
STD C/AU-2	18	61	39	102	5.6	57	30	1011	4.19	43	17	7	38	48	13	17	13	59	.47	.095	40	55	.84	177	.07	34	1.95	.06	.13	13	470

✓ assay required for correct result

GEOCHEMICAL ANALYSIS CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.

THIS LEACH IS PARTIAL FOR NM FE SR CA P LA CR MG BA TI B V AND LIMITED FOR NA K AND AL. AO DETECTION LIMIT BY ICP IS 3 PPM.

- SAMPLE TYPE: Core AO ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

DATE RECEIVED: NOV 17 1988 DATE REPORT MAILED: NOV 22/88 SIGNED BY: C. Long, D. TOYE, C. LEONG, B. CHAN, J. WANG; CERTIFIED B.C. ASSAYERS

BAPTY RESEARCH File # 88-5890

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Au*
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM	PPM
C 39596	1	215	6	251	.1	14	24	1032	6.55	56	5	ND	7	16	1	2	2	31	.57	.039	17	20	1.45	25	.09	2	3.36	.04	.28	1	6
C 39597	1	19	18	248	.1	11	6	482	2.00	17	5	ND	7	53	3	2	3	14	1.23	.016	15	47	.41	36	.10	2	2.35	.03	.42	3	2
C 39593	1	22	44	1635	.1	24	10	490	2.37	7	5	ND	19	9	4	2	2	14	.35	.029	22	18	.45	38	.11	4	1.80	.02	.60	1	1
C 39599	5	2944	19167	9675	71.9	90	85	1062	11.86	162	5	ND	3	8	76	82	16	6	.52	.006	3	18	.20	19	.03	2	.68	.01	.18	7	31
C 39630	3	1019	24948	21166	14.8	28	28	451	6.52	128	5	ND	4	5	257	25	26	3	.76	.010	5	6	.10	1	.03	2	.35	.01	.02	41	3
C 39601	3	172	3622	2653	2.6	15	12	387	1.73	68	5	ND	7	13	35	2	7	9	1.20	.011	6	46	.21	15	.07	2	1.12	.03	.09	1	1
C 39602	3	68	77	843	.1	16	9	315	1.79	29	5	ND	13	22	4	2	2	23	1.21	.018	16	27	.27	43	.12	4	2.41	.07	.39	1	2
C 39603	1	31	55	519	.1	15	9	386	2.15	23	5	ND	13	13	5	2	2	34	.70	.077	14	60	.32	77	.12	3	1.73	.09	.50	1	1
C 39604	2	335	55	1581	.2	14	5	538	2.00	25	5	ND	5	14	10	2	2	8	2.13	.012	6	12	.17	6	.07	2	.91	.02	.06	1	1
C 39605	1	151	17	676	.1	13	7	667	2.52	21	5	ND	8	15	8	2	2	10	1.76	.025	12	33	.26	1	.10	2	1.33	.02	.06	1	1
C 39506	1	13	6	560	.1	24	11	662	3.51	14	5	ND	20	11	6	2	2	24	.36	.034	30	31	.52	62	.19	3	2.10	.03	1.03	1	1
C 39607	1	47	25	462	.1	15	8	487	1.70	9	5	ND	12	17	5	2	2	17	1.16	.024	22	35	.35	32	.09	3	1.45	.05	.26	1	1
STD C/AU-R	17	60	41	131	6.7	67	30	1016	3.97	43	22	7	37	47	18	16	18	58	.49	.099	38	53	.92	173	.66	33	1.99	.06	.14	12	475

Assay required for correct result

GEOCHEMICAL ANALYSIS CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AS DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: Core AU* ANALYSIS BY ACID LEACH/AA FROM 10 GN SAMPLE.

DATE RECEIVED: NOV 25 1988

DATE REPORT MAILED: Nov 29/88

SIGNED BY: C. Long, D. FOTE, C. LEONG, B. CHAN, J. WANG; CERTIFIED B.C. ASSAYERS

BAPTY RESEARCH

File # 88-6012

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	V PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM	Au* PPB
C 39608	1	19	6	72	.1	22	11	349	3.34	59	5	ND	17	2	1	2	2	17	.09	.025	33	29	.57	85	.15	5	1.43	.01	.99	1	2
C 39609	1	10	27	116	.1	14	7	471	2.89	2	5	ND	14	3	1	2	2	19	.14	.015	36	18	.56	93	.13	2	1.45	.03	.94	1	1
C 39610	1	26	31	88	.1	17	7	318	1.71	2	5	ND	21	5	1	2	2	8	.25	.033	31	9	.24	35	.06	2	.90	.02	.38	1	1
C 39611	1	5	65	120	.1	12	7	331	1.88	6	5	ND	17	10	1	2	2	10	.76	.022	26	13	.40	52	.08	2	1.81	.04	.62	1	1
C 39612	1	4	27	33	.1	14	10	349	3.04	30	5	ND	16	14	1	2	2	2	.50	.016	28	5	.31	28	.01	4	.83	.01	.21	1	2
C 39613	2	7	29	45	.1	12	5	389	2.42	12	5	ND	13	10	1	2	2	15	.53	.014	30	19	.37	23	.01	4	.82	.02	.11	1	1
C 39614	1	10	12	50	.1	16	8	271	2.90	2	5	ND	16	6	1	2	2	16	.24	.022	20	15	.66	57	.08	6	1.27	.01	.62	1	1
C 39615	2	17	17	60	.1	23	10	381	3.35	4	5	ND	11	5	1	2	2	14	.22	.013	20	17	.64	35	.06	4	1.30	.02	.37	1	7
C 39616	1	18	19	69	.1	17	7	389	2.86	5	5	ND	10	7	1	2	2	14	.43	.026	17	16	.55	27	.06	4	1.08	.01	.23	1	1
C 39617	2	5	4	36	.1	14	6	642	2.38	7	5	ND	11	22	1	2	3	9	2.00	.010	25	17	.41	18	.01	2	.89	.02	.12	1	1
C 39618	1	34	8	60	.1	19	8	346	3.06	2	5	ND	20	5	1	2	3	10	.31	.032	53	12	.58	34	.05	3	1.28	.01	.39	1	16
C 39619	2	21	12	35	.1	18	7	312	2.45	11	5	ND	9	4	1	2	2	10	.31	.011	14	15	.41	19	.05	7	.83	.02	.12	2	1
C 39620	2	43	36	29	.1	20	9	396	2.34	8	5	ND	7	11	1	2	3	9	1.19	.011	15	15	.35	24	.05	6	.79	.01	.20	1	1
C 39621	2	17	17	42	.1	19	7	406	2.73	3	5	ND	10	3	1	2	2	10	.11	.014	19	19	.41	17	.02	2	.92	.02	.16	2	1
C 39622	1	13	26	79	.2	17	8	426	2.03	85	5	ND	16	5	1	2	2	4	.15	.020	42	10	.29	44	.01	5	.66	.01	.28	1	9
C 39623	2	11	24	82	.1	17	5	492	2.21	12	5	ND	6	8	1	2	2	8	.65	.005	12	21	.38	12	.03	3	.77	.01	.06	1	1
C 39624	1	14	13	110	.1	39	40	831	5.63	67	5	ND	3	3	1	2	2	114	.54	.016	7	71	2.16	1	.07	3	2.49	.01	.03	1	1
C 39625	1	15	26	104	.1	25	19	1097	6.29	20	5	ND	1	48	2	2	2	114	3.71	.018	4	44	3.22	6	.01	2	2.26	.02	.06	1	1
C 39626	1	22	25	109	.1	23	11	484	3.44	7	5	ND	18	4	1	2	2	12	.22	.021	35	14	.64	30	.07	2	1.35	.01	.41	1	1
C 39627	1	21	23	42	.1	10	6	355	1.69	24	5	ND	6	7	1	2	2	10	.95	.007	12	12	.25	24	.04	4	.56	.01	.13	5	3
C 39628	1	7	24	40	.1	10	6	384	2.22	6	5	ND	15	6	1	2	2	9	.41	.014	30	10	.39	45	.07	3	.92	.01	.33	4	1
C 39629	1	14	19	37	.1	4	3	616	1.26	155	5	ND	7	18	1	2	2	8	3.63	.010	17	10	.20	24	.05	2	.49	.02	.10	1	19
C 39630	1	96	175	94	.2	26	19	548	5.20	2	5	ND	1	38	1	2	2	88	1.20	.018	6	37	1.71	8	.16	4	2.75	.02	.02	1	1
C 39631	1	156	7	29	.3	39	15	273	2.17	2	5	ND	1	8	1	2	2	46	.46	.025	2	17	.81	4	.08	1	1.43	.04	.04	1	2
C 39632	1	113	5	36	.2	32	15	301	2.35	2	5	ND	1	8	1	2	2	44	.46	.022	2	31	.86	4	.07	2	1.38	.04	.03	2	1
C 39633	1	89	29	38	.2	28	11	239	1.81	2	5	ND	1	18	1	2	2	47	.55	.024	2	32	.63	8	.06	5	1.61	.05	.04	2	1
C 39634	1	97	20	49	.1	27	11	234	1.78	2	5	ND	1	36	1	2	2	37	.58	.024	2	33	.78	10	.06	2	1.20	.04	.04	1	1
C 39635	1	97	16	50	.3	33	13	294	2.16	2	5	ND	1	8	1	2	2	37	.45	.021	2	47	.95	3	.08	5	1.09	.02	.02	1	1
C 39636	1	59	11	22	.2	21	8	196	1.51	5	5	ND	1	25	1	2	2	35	.79	.027	2	28	.61	13	.06	2	1.25	.08	.04	2	1
C 39637	1	81	2	21	.2	26	10	221	1.88	2	5	ND	1	6	1	2	2	40	.58	.025	2	34	.71	7	.07	2	.90	.03	.04	2	1
C 39638	1	110	6	34	.2	30	15	406	2.83	2	5	ND	1	6	1	2	2	52	.48	.031	2	51	1.10	3	.08	2	1.27	.03	.04	2	13
C 39639	1	8	12	42	.1	19	10	232	2.93	12	5	ND	17	1	1	2	2	9	.07	.020	7	15	1.23	13	.01	2	1.40	.01	.15	2	15
C 39640	1	13	8	26	.1	8	4	332	1.22	2	5	ND	11	6	1	2	2	5	.81	.021	19	8	.34	17	.03	2	.69	.01	.19	1	1
C 39641	1	126	25	70	.1	18	11	533	1.80	15	5	ND	9	10	1	2	2	4	1.83	.021	8	7	.28	13	.01	3	.58	.01	.17	1	6
STD C/AU-1	17	59	43	132	6.8	67	30	1028	4.18	36	18	7	38	48	19	20	19	59	.50	.088	40	55	.95	175	.07	39	1.89	.06	.15	11	525

M CNEIL

ACME ANALYTICAL LABORATORIES LTD.

852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6

PHONE (604) 253-3158 FAX (604) 253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO₃-H₂O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
 THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR NG BA TI B W AND LIMITED FOR NA K AND AL. NO DETECTION LIMIT BY ICP IS 3 PPM.
 - SAMPLE TYPE: Core AD¹ ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

DATE RECEIVED: JAN 30 1989

DATE REPORT MAILED: Feb 1/89

SIGNED BY: C. Long D. TOYE, C. LEONG, B. CHAN, J. WANG; CERTIFIED B.C. ASSAYERS

BAPTY RESEARCH LIMITED

File # 89-0199

SAMPLE#	NO	Cu	Pb	Zn	Ag	W	Co	Mn	Fe	As	U	Au	Tb	Sc	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Au ²
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM	PPM
C 39951	1	68	53	360	.3	26	12	375	2.46	11	5	ND	6	15	1	2	2	18	.92	.012	9	19	.41	31	.06	2	1.03	.09	.21	1	1
C 39952	1	27	8	45	.1	19	10	404	2.27	5	5	ND	16	14	1	2	2	16	.43	.019	16	16	.63	49	.02	4	1.52	.05	.32	1	-
C 39953	1	3	33	52	.1	6	5	390	2.00	2	5	ND	11	18	1	3	2	19	.82	.014	22	18	.41	94	.06	2	1.24	.04	.28	1	-
C 39954	1	21	11	52	.1	17	7	403	2.68	3	5	ND	10	13	1	2	2	15	.67	.022	26	13	.49	57	.01	3	1.38	.05	.32	2	1
C 39955	1	27	16	71	.1	11	6	348	1.35	2	5	ND	6	11	1	2	2	11	.83	.011	14	13	.33	31	.07	3	.86	.04	.21	4	1
C 39956	1	15	22	48	.1	11	4	294	1.87	2	5	ND	10	9	1	2	2	10	.44	.014	21	14	.39	41	.06	2	.95	.03	.27	2	-
C 39957	1	28	8	31	.1	23	8	525	2.92	27	5	ND	15	19	1	3	2	10	.80	.020	15	8	.52	51	.02	2	1.42	.03	.33	1	1
C 39958	1	26	7	31	.1	14	7	250	2.26	4	5	ND	13	9	1	2	2	5	.26	.014	17	9	.43	45	.01	3	1.06	.07	.25	2	-
C 39959	5	15	121	100	.3	15	6	698	3.89	2	5	ND	8	12	1	2	2	25	1.42	.036	24	23	1.53	49	.08	2	2.15	.04	.35	1	1
C 39960	2	10	222	199	.6	16	6	622	3.28	2	5	ND	8	14	1	2	2	22	1.54	.036	20	21	1.44	35	.97	2	1.94	.04	.34	1	1
C 39961	2	11	29	65	.1	10	8	786	3.33	4	5	ND	8	31	1	2	2	17	3.75	.035	15	17	1.24	22	.01	2	1.80	.03	.16	1	1
C 39962	3	26	20	51	.1	18	12	593	3.12	15	5	ND	8	33	1	2	2	10	1.95	.032	10	10	.66	36	.01	2	1.35	.03	.23	1	2
C 39963	1	44	9	56	.1	22	12	350	3.34	3	5	ND	12	14	1	2	2	11	.47	.021	15	22	.64	47	.01	3	1.43	.04	.27	2	2
C 39964	1	131	16	82	.2	58	28	425	6.16	5	5	ND	12	11	1	2	2	14	.39	.021	8	11	.75	51	.02	4	1.82	.04	.30	2	1
C 39965	1	11	11	85	.1	10	7	345	2.60	9	5	ND	13	13	1	2	2	6	.52	.025	28	26	.42	35	.01	3	1.12	.03	.23	1	1
C 39966	1	26	16	83	.1	9	8	518	2.25	30	5	ND	9	27	1	3	2	2	1.36	.018	23	15	.37	24	.01	6	.97	.02	.17	1	4
C 39967	1	10	15	56	.2	10	6	343	2.01	30	5	ND	10	16	1	3	2	5	.77	.014	20	7	.29	23	.01	5	.74	.03	.14	1	2
C 39968	1	24	13	56	.1	14	10	372	3.14	6	5	ND	13	11	1	2	2	7	.41	.018	14	18	.45	41	.01	5	1.23	.03	.26	1	1
C 39969	1	12	10	21	.1	9	4	489	2.06	14	5	ND	9	21	1	2	2	2	1.27	.013	13	4	.30	24	.01	2	.61	.02	.14	1	1
C 40000	1	24	13	55	.1	14	8	511	2.73	3	5	ND	12	23	1	2	2	7	1.52	.020	13	19	.45	29	.01	3	.96	.04	.24	2	1
STD C/AD-R	19	63	44	132	7.1	69	31	1047	4.36	41	18	8	38	49	20	17	22	61	.49	.097	41	55	.93	178	.07	32	2.07	.06	.13	12	520

ACME ANALYTICAL LABORATORIES LTD.

852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6

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GEOCHEMICAL ANALYSIS CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO₃-H₂O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR NG BA TI B W AND LIMITED FOR NA K AND AL. NO DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: Core AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

DATE RECEIVED: JAN 31 1989 DATE REPORT MAILED: Feb 3/89 SIGNED BY: C. Long D. TOYE, C. LEONG, B. CHAN, J. WANG; CERTIFIED B.C. ASSAYERS

BAPTY RESEARCH LIMITED File # 89-0211

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Au*
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM	PPM
C 39051	1	28	5	13	.1	20	13	659	2.9%	32	5	ND	11	26	1	6	1	3	1.42	.030	8	8	.35	24	.01	2	.64	.01	.23	1	3
C 39052	1	23	6	31	.1	14	8	559	2.4%	5	5	ND	7	28	1	2	2	6	2.49	.013	15	9	.40	12	.01	5	.87	.01	.13	1	1
C 39053	1	35	10	51	.1	18	9	455	2.2%	6	5	ND	8	23	1	2	2	6	1.22	.029	15	18	.45	16	.01	2	1.03	.01	.14	1	1
C 39054	1	32	8	30	.1	19	9	428	2.4%	19	5	ND	14	19	1	8	2	3	.96	.027	15	5	.37	28	.01	4	.87	.01	.24	1	1
C 39055	1	31	11	55	.1	17	9	510	2.3%	10	5	ND	13	23	1	3	2	9	1.13	.020	21	16	.53	24	.01	2	1.16	.01	.21	1	1
C 39056	4	23	19	73	.1	13	9	592	3.1%	11	5	ND	14	26	1	2	2	6	1.36	.029	21	9	.55	25	.01	4	1.12	.01	.20	1	1
C 39057	1	25	8	52	.1	15	8	565	3.0%	34	5	ND	12	20	1	2	2	2	1.15	.022	16	8	.56	26	.01	4	1.21	.01	.20	1	1
C 39058	1	16	21	37	.1	15	8	474	2.6%	29	5	ND	14	16	1	3	2	3	.86	.024	18	5	.46	27	.01	2	.93	.01	.22	2	1
C 39059	1	25	9	52	.1	16	11	795	3.0%	46	5	ND	7	44	1	2	2	6	2.73	.014	11	11	1.03	19	.01	4	1.13	.01	.16	1	3
C 39060	1	25	7	34	.1	16	13	642	3.1%	351	5	ND	8	42	1	2	2	6	2.51	.015	12	5	1.01	27	.01	3	1.04	.01	.22	1	45
C 39061	1	13	13	11	.1	14	8	422	2.4%	905	5	ND	9	27	1	2	2	3	1.46	.020	10	10	.43	29	.01	5	.68	.01	.23	1	89
C 39062	1	17	24	10	.1	17	8	342	2.1%	116	5	ND	11	15	1	2	2	2	.91	.016	18	4	.39	26	.01	2	.82	.01	.22	1	11
C 39063	1	25	3	9	.1	13	8	645	2.7%	48	5	ND	10	39	1	2	2	4	2.40	.019	15	8	.96	25	.01	4	.89	.01	.21	1	21
C 39064	1	10	4	17	.1	22	16	1133	4.8%	73	5	ND	5	67	1	2	2	7	4.48	.018	6	6	2.08	26	.01	3	1.34	.01	.19	1	2
C 39065	1	61	10	10	.1	12	9	392	2.7%	44	5	ND	8	21	1	2	2	2	1.23	.031	9	7	.69	36	.01	2	1.27	.01	.20	1	4
C 39066	2	32	5	9	.1	25	11	459	2.8%	75	5	ND	8	32	1	2	2	2	1.85	.033	8	3	.91	35	.01	2	1.31	.01	.18	1	2
C 39067	2	33	15	10	.1	25	16	376	3.1%	90	5	ND	8	22	1	2	2	2	1.33	.037	8	7	.71	37	.01	4	1.14	.01	.22	1	7
C 39068	2	65	29	8	.2	14	10	290	2.6%	50	5	ND	9	22	1	2	3	3	1.20	.034	9	3	.75	35	.01	3	.96	.01	.20	1	3
C 39069	1	12	4	13	.1	15	12	532	2.9%	48	5	ND	15	56	1	2	2	3	2.99	.035	12	6	1.49	33	.01	4	1.47	.01	.16	1	12
C 39070	1	3	2	38	.1	19	12	175	3.0%	6	5	ND	7	8	1	2	2	12	.38	.012	5	14	2.57	10	.01	6	2.21	.01	.09	2	1
STD C/AU-2	18	61	39	132	7.0	69	30	1033	4.2%	42	18	7	38	47	19	20	25	59	.49	.097	40	55	.96	171	.06	37	2.07	.06	.13	12	520

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GEOCHEMICAL ANALYSIS CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO₃-H₂O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR NG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: Core AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

DATE RECEIVED: FEB 16 1989

DATE REPORT MAILED: Feb 17, 1989

SIGNED BY: *D. J. J.*

D. TOYE, C. LEONG, B. CHAN, J. WANG: CERTIFIED B.C. ASSAYERS

BAPTY RESEARCH LIMITED

File # 89-0338

McNeil

SAMPLE#	MS	CU	PD	ZN	AG	NI	CO	MO	FE	AS	U	AU	TH	ST	CD	SB	BI	7	CA	P	LA	CR	NG	BA	TI	B	AL	NA	K	W	AU*
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	%	%	%	%	PPM	PPM
C 39071	1	85	12	73	.2	50	30	2625	14.05	359	5	ND	1	15	2	17	2	241	.34	.033	5	35	.84	17	.01	3	1.61	.02	.16	1	3
C 39072	1	70	3	27	.1	28	24	254	2.17	2	5	ND	3	12	1	2	2	34	1.10	.046	3	47	.76	2	.06	2	1.95	.07	.05	1	20
C 39073	1	11	19	255	.1	70	35	152	9.90	22	5	ND	2	9	4	2	2	312	1.29	.041	7	86	3.55	63	.19	2	5.70	.01	1.32	2	3
C 39074	1	13	11	97	.1	50	37	711	1.23	9	5	ND	2	6	1	2	2	139	.71	.030	5	70	2.95	24	.11	2	3.93	.02	.34	2	2
C 39075	1	40	20	103	.1	45	15	536	6.75	6	5	ND	11	5	1	3	2	153	.36	.037	13	41	2.63	59	.13	2	3.85	.04	.91	3	1
C 39076	1	100	11	121	.1	53	19	626	8.00	13	5	ND	10	6	2	2	2	176	.30	.012	22	30	3.36	57	.12	2	4.72	.02	1.16	1	1
C 39077	1	5	7	43	.1	15	4	312	2.41	2	5	ND	14	8	1	2	2	45	1.77	.052	5	36	.87	29	.05	2	1.35	.04	.19	3	1
C 39078	1	5	6	41	.1	15	4	262	1.53	2	5	ND	11	7	1	2	2	29	1.22	.019	8	25	.60	30	.04	2	1.14	.03	.23	1	1
STD C	20	62	39	135	7.3	72	31	1055	4.29	41	22	8	39	51	20	18	22	61	.51	.096	41	56	.96	173	.07	33	1.95	.06	.14	11	-

GEOCHEMICAL ANALYSIS CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: Core AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

DATE RECEIVED: MAR 1 1989 DATE REPORT MAILED: March 2/89 SIGNED BY: *C. Long* D. TOYE, C. LEONG, B. CHAN, J. WANG: CERTIFIED B.C. ASSAYERS

BAPTY RESEARCH LIMITED PROJECT-MCNEIL File # 89-0471

SAMPLE#	Mo	Cu	Pb	Zn	As	W	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Hg	Ba	Ti	B	Al	Na	K	W	Au*
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM	PPB
M-88-07 C 39073	1	5	37	37	.1	15	11	449	1.84	32	5	ND	12	39	1	2	2	7	1.36	.023	23	7	.53	26	.31	2	.47	.04	.14	1	4
M-88-07 C 39083	3	101	201	358	.5	23	10	469	1.75	4	5	ND	13	10	2	2	2	18	1.08	.035	25	20	.80	56	.07	2	1.68	.03	.58	4	2
M-88-07 C 39081	1	205	21	92	.2	13	6	258	2.11	2	5	ND	12	8	1	2	2	21	.97	.015	18	23	.37	45	.28	2	.86	.04	.29	1	1
M-88-07 C 39082	2	443	16	67	.4	17	6	268	1.97	1	5	ND	13	5	1	2	2	22	.43	.016	11	27	.35	73	.11	2	.99	.06	.37	1	3
M-88-07 C 39083	1	30	4	63	.1	13	8	497	3.62	5	5	ND	15	4	1	2	2	20	.26	.028	25	21	.72	48	.10	2	1.64	.04	.22	1	1
M-88-07 C 39084	1	12	5	11	.1	5	3	318	1.02	2	5	ND	2	8	1	2	2	12	.96	.001	7	19	.13	14	.62	2	.32	.02	.12	1	6
M-88-07 C 39085	1	28	180	755	1.1	12	8	557	4.22	6	5	ND	14	7	1	2	2	22	.56	.022	31	22	.83	37	.05	2	1.72	.03	.19	12	1
M-88-07 C 39086	2	37	48	432	.2	24	15	402	3.76	15	5	ND	14	7	1	2	2	41	.41	.020	33	33	.69	57	.09	2	1.45	.08	.26	6	2
M-88-07 C 39087	1	204	52	215	.5	71	53	770	10.56	34	5	ND	4	9	2	2	2	159	.47	.022	8	125	1.98	85	.17	2	3.55	.02	1.39	1	6
M-88-07 C 39088	4	42	34	76	.1	19	11	355	1.27	327	5	ND	13	13	1	8	2	6	.26	.020	17	11	.38	27	.01	5	.85	.02	.17	1	23
M-88-07 C 39089	1	116	5	37	.2	31	12	269	2.17	9	5	ND	1	15	1	2	2	55	1.22	.033	2	38	.80	18	.11	2	1.35	.12	.09	1	-
M-88-07 C 39090	1	5	49	69	.1	20	5	278	1.79	2	5	ND	17	3	1	2	2	24	.33	.021	21	22	.71	82	.18	4	1.19	.06	.48	1	-
M-88-07 C 39091	1	8	21	101	.1	20	8	375	2.77	3	5	ND	15	4	1	2	2	27	.35	.018	39	25	.69	98	.16	2	1.43	.06	.74	1	-
M-88-07 C 39092	1	3	26	143	.1	20	10	373	3.07	8	5	ND	19	14	1	2	2	6	.41	.027	41	8	.45	60	.01	2	.88	.02	.27	1	-
M-88-07 C 39093	1	2	14	92	.1	17	7	313	2.62	4	5	ND	17	6	1	2	2	14	.34	.022	32	15	.51	66	.11	2	1.38	.02	.79	1	-
M-88-07 C 39094	3	7	13	126	.1	21	7	377	2.42	8	5	ND	21	5	1	2	2	30	.37	.018	27	45	.44	167	.15	15	1.19	.06	.56	3	-
M-88-07 C 39095	2	21	15	116	.1	17	7	469	2.96	6	5	ND	10	5	1	2	3	24	.38	.014	17	23	.61	92	.15	2	1.44	.07	.78	1	-
M-88-07 C 39096	1	8	32	65	.3	16	9	462	3.14	5	5	ND	14	10	1	2	2	19	.65	.047	22	22	.83	99	.06	2	1.85	.03	.50	1	-
M-88-07 C 39097	1	15	27	139	.2	16	13	527	4.62	8	5	ND	13	7	1	2	2	34	.32	.033	24	31	.99	143	.18	2	2.24	.06	1.07	2	-
M-88-07 C 39098	1	16	2	60	.1	14	7	236	2.64	2	5	ND	15	2	1	2	2	13	.10	.024	33	13	.48	135	.13	6	1.38	.01	.89	1	-
M-88-07 C 39099	1	109	11	97	.1	24	17	403	4.18	18	5	ND	17	4	1	2	3	21	.24	.067	34	19	.82	131	.16	2	1.98	.02	1.25	1	-
M-88-07 C 39100	2	19	14	51	.2	14	6	321	2.16	6	5	ND	12	9	1	2	2	16	.57	.013	18	21	.33	88	.10	19	1.02	.06	.35	1	-
M-88-07 C 39101	6	118	42	66	.2	30	16	251	3.81	16	5	ND	21	3	1	2	2	14	.22	.034	35	13	.60	106	.09	2	1.47	.01	.79	1	-
M-88-07 C 39102	2	8	13	29	.1	17	10	199	1.51	13	5	ND	10	6	1	2	2	8	.33	.010	15	17	.20	40	.05	2	.58	.05	.15	1	-
M-88-07 C 39103	1	96	104	982	.8	18	16	464	4.24	10	5	ND	17	11	1	2	2	23	.25	.015	38	23	.80	65	.10	15	1.74	.10	.55	17	-
M-88-07 C 39104	1	20	9	62	.1	15	8	377	3.80	5	5	ND	20	9	1	2	2	9	.14	.019	27	14	.38	63	.02	6	1.18	.02	.29	1	-
M-88-07 C 39105	7	80	3	64	.1	32	21	381	5.95	13	5	ND	14	4	1	2	2	25	.17	.037	15	22	.94	100	.11	2	2.11	.05	.80	1	-
M-88-07 C 39106	1	52	40	117	.1	21	9	282	3.70	4	5	ND	24	4	1	2	2	19	.13	.028	56	18	.71	98	.12	13	1.70	.02	.82	1	-
M-88-07 C 39107	1	27	65	149	.2	20	11	302	3.63	16	5	ND	16	5	1	2	2	20	.09	.020	39	22	.73	100	.13	4	1.75	.03	1.02	2	-
M-88-07 C 39108	7	9	25	88	.1	16	14	431	2.78	33	5	ND	19	15	1	2	2	24	.29	.024	42	22	.61	88	.08	15	1.47	.05	.54	1	-
M-88-07 C 39109	1	16	35	72	.1	11	4	226	1.76	13	5	ND	13	5	1	2	2	8	.14	.016	30	11	.32	77	.07	17	.94	.02	.51	3	-
M-88-07 C 39110	1	16	73	96	.3	11	6	415	3.55	7	5	ND	12	11	1	16	2	9	.17	.016	25	14	.52	40	.03	2	1.25	.04	.28	1	-
M-88-07 C 39111	1	22	11	45	.1	17	7	152	1.76	4	5	ND	20	7	1	2	2	7	.11	.019	35	8	.29	72	.04	2	.93	.01	.44	1	-
M-88-07 C 39112	1	4	11	98	.1	15	6	292	2.26	2	5	ND	20	4	1	2	2	13	.12	.018	48	13	.39	91	.12	2	1.16	.02	.76	2	-
M-88-07 C 39113	64	328	3035	412	14.0	9	19	43	40.16	2213	5	55	5	2	4	2	2	3	.01	.082	5	7	.03	10	.01	2	.26	.01	.05	3	-
3TD C/AU-R	18	61	42	134	7.4	67	31	1021	4.22	39	21	8	39	49	18	15	17	60	.48	.095	40	56	.94	174	.06	32	1.89	.06	.13	13	505

PROSPECTOR'S
DREAM

GEOCHEMICAL ANALYSIS CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO₃-H₂O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. NO DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: Core AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

DATE RECEIVED: MAR 6 1989 DATE REPORT MAILED: March 7, 1989 SIGNED BY: *[Signature]* D. TOYE, C. LEONG, B. CHAN, J. WANG: CERTIFIED B.C. ASSAYERS

BAPTY RESEARCH LIMITED PROJECT MCNEILL File # 89-0515 Page 1

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Hg	Ba	Ti	B	Al	Na	K	W	Au*
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM	PPM
M-88-07 C 39114	2	110	13	32	.1	21	11	282	2.04	4	5	ND	7	14	1	2	2	11	.37	.008	17	16	.24	32	.05	2	.70	.04	.19	1	2
M-88-07 C 39115	1	9	23	72	.1	9	3	316	1.87	4	5	ND	1	14	1	2	2	11	.75	.052	2	6	.41	10	.03	2	.74	.01	.05	2	1
M-88-07 C 39116	1	42	1117	400	3.4	16	11	421	2.75	2	5	ND	12	17	1	2	2	17	2.75	.029	13	19	.62	32	.06	2	1.97	.03	.13	7	2
M-88-07 C 39117	1	172	30	67	.2	9	6	580	2.02	8	5	ND	9	24	1	2	2	16	2.33	.010	27	11	.33	71	.08	2	.95	.03	.29	1	8
M-88-07 C 39118	2	3	4	8	.1	11	1	45	.29	2	5	ND	2	2	1	2	2	2	.89	.003	4	8	.03	3	.01	2	.50	.01	.05	1	1
M-88-07 C 39119	1	7	8	26	.1	5	2	129	.89	2	5	ND	8	11	1	2	2	7	.25	.008	15	9	.13	13	.04	2	.54	.02	.13	1	1
M-88-07 C 39120	12	687	143	466	.3	23	11	2909	2.44	10	5	ND	17	593	1	10	2	15	5.14	.034	41	23	.29	218	.67	13	1.55	.14	.81	676	6
STD C.AU-R	19	62	44	136	7.3	69	30	1060	4.10	41	21	6	40	51	19	15	22	63	.51	.097	42	58	.91	181	.97	36	2.97	.06	.14	13	525

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	As PPM	Ni PPM	Co PPM	Mn PPM	Fe %	Ag PPM	U PPM	Au PPM	Th PPM	Sc PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM
M-88-07 C 39121	1	1	25	38	1	12	9	237	1.74	28	5	ND	16	14	1	2	2	2	.43	.032	40	3	.25	48	.01	2	.66	.02	.12	2
M-88-07 C 39122	1	5	34	55	1	11	6	389	1.37	2	5	ND	13	7	1	2	2	12	.13	.014	34	15	.44	71	.10	2	1.09	.02	.15	3
M-88-07 C 39123	1	9	10	25	1	9	3	315	1.03	6	5	ND	8	25	1	2	2	10	1.12	.010	16	12	.20	23	.06	2	.53	.03	.10	1
M-88-07 C 39124	1	31	10	66	1	14	10	359	2.85	4	5	ND	16	5	1	2	2	16	.15	.018	34	15	.58	76	.11	2	1.40	.02	.15	2
M-88-07 C 39125	1	11	79	87	1	17	9	573	3.06	2	5	ND	11	24	1	2	2	37	.70	.032	24	30	1.28	60	.16	2	2.64	.11	1.00	2
M-88-07 C 39126	1	25	10	74	1	23	10	258	3.09	5	5	ND	18	4	1	2	2	17	.09	.023	44	16	.61	134	.14	2	1.62	.01	1.05	1
M-88-07 C 39127	1	30	7	79	1	21	11	239	3.50	2	5	ND	18	3	1	2	2	18	.09	.026	38	18	.82	116	.15	5	1.77	.01	1.15	1
M-88-07 C 39128	1	15	13	85	1	23	11	266	2.99	3	5	ND	15	4	1	2	2	19	.09	.019	34	20	.71	100	.12	2	1.59	.03	.87	2
M-88-07 C 39129	1	10	17	98	1	17	10	271	2.80	3	5	ND	19	3	1	2	2	15	.13	.035	39	14	.57	102	.12	5	1.51	.01	.32	2
M-88-07 C 39130	1	27	7	47	1	17	9	229	2.23	2	5	ND	22	5	1	2	2	14	.13	.019	47	14	.52	56	.10	2	1.26	.01	.77	1
M-88-07 C 39131	1	11	9	64	1	12	7	272	2.13	8	5	ND	12	16	1	2	2	13	.52	.066	27	15	.44	91	.09	3	1.22	.04	.59	1
M-88-07 C 39132	2	8	12	39	1	16	7	399	2.46	7	5	ND	12	11	1	2	2	12	.13	.015	23	16	.39	60	.05	2	1.06	.05	.30	1
M-88-07 C 39133	1	9	21	47	1	10	5	432	1.74	8	5	ND	15	30	1	2	2	19	.99	.030	34	22	.36	111	.12	2	1.25	.05	.45	1
M-88-07 C 39134	1	9	16	42	1	10	5	248	1.58	2	5	ND	10	9	1	2	2	14	.43	.012	22	17	.31	52	.09	12	.81	.04	.37	1
M-88-07 C 39135	1	31	10	86	1	22	11	381	3.53	6	5	ND	16	8	1	2	2	23	.22	.042	35	21	.64	102	.14	2	1.71	.03	.87	1
M-88-07 C 39136	1	3	27	43	1	11	4	210	1.46	2	5	ND	12	9	1	2	2	12	.12	.015	28	13	.25	70	.09	2	.58	.03	.50	1
M-88-07 C 39137	1	1	17	37	1	3	3	221	1.98	2	5	ND	8	18	1	2	2	9	.58	.010	16	12	.17	48	.06	2	.58	.05	.21	1
M-88-07 C 39138	1	31	7	20	1	6	7	755	1.41	2	5	ND	7	118	1	2	2	5	4.19	.042	14	10	.19	23	.04	2	.56	.02	.09	1
M-88-07 C 39139	1	1	19	30	1	6	3	237	1.15	2	5	ND	9	15	1	2	2	9	.71	.009	12	10	.19	32	.07	2	.61	.04	.13	1
M-88-07 C 39140	1	10	6	80	1	18	9	271	2.71	7	5	ND	18	5	1	2	2	15	.10	.023	41	16	.52	109	.12	4	1.40	.02	.30	1
M-88-07 C 39141	9	1	44	119	1	7	2	500	1.34	2	5	ND	7	147	1	2	2	14	1.83	.041	19	15	1.01	141	.09	2	3.35	.09	.55	1
M-88-07 C 39142	1	2	12	34	1	7	6	277	1.41	6	5	ND	21	10	1	2	2	15	.26	.022	42	13	.29	95	.09	2	1.00	.02	.56	2
M-88-07 C 39143	1	4	2	75	1	18	10	289	3.07	7	5	ND	16	4	1	2	3	17	.10	.023	22	16	.61	128	.14	2	1.57	.02	.96	2
M-88-07 C 39144	1	16	11	38	1	12	5	390	1.50	4	5	ND	9	11	1	2	2	10	.69	.011	20	16	.23	34	.07	2	.70	.03	.21	1
M-88-07 C 39145	1	30	8	51	1	20	11	240	3.31	2	5	ND	12	3	1	2	2	15	.19	.020	12	13	.58	106	.12	3	1.46	.02	.79	1
M-88-07 C 39146	1	8	7	34	1	9	4	228	1.48	2	5	ND	13	8	1	2	2	13	.29	.018	30	17	.28	65	.09	2	.89	.03	.42	1
M-88-07 C 39147	1	3	26	50	1	9	5	245	1.61	2	5	ND	12	5	1	2	2	13	.20	.013	28	26	.32	91	.10	2	.94	.02	.53	1
M-88-07 C 39148	1	18	11	76	1	14	10	357	3.85	2	5	ND	21	5	1	2	2	21	.22	.019	31	20	.82	152	.15	2	1.96	.01	1.08	1
M-88-07 C 39149	1	9	14	62	1	14	7	270	2.21	4	5	ND	15	4	1	2	2	16	.23	.018	33	29	.43	90	.13	2	1.15	.03	.58	1
M-88-07 C 39150	1	17	10	67	1	13	10	331	3.18	2	5	ND	12	4	1	2	2	19	.17	.016	26	14	.61	156	.15	2	1.68	.02	1.04	1
M-88-07 C 39151	1	13	9	62	1	14	7	293	2.61	2	5	ND	18	4	1	2	2	17	.12	.018	34	30	.54	109	.13	2	1.32	.03	.70	1
M-88-07 C 39152	4	25	37	90	1	16	8	505	2.63	4	5	ND	10	10	1	2	2	30	.55	.038	26	28	1.42	42	.12	2	1.69	.03	.93	2
M-88-07 C 39153	1	25	17	126	1	13	8	287	2.43	3	5	ND	12	4	1	2	2	12	.16	.016	25	33	.48	66	.10	2	1.13	.03	.46	1
M-88-07 C 39154	1	22	6	85	1	16	9	304	3.33	2	5	ND	16	4	1	2	2	20	.10	.021	34	20	.65	128	.15	2	1.66	.02	1.04	2
M-88-07 C 39155	1	21	13	46	1	14	6	208	1.95	2	5	ND	11	5	1	2	2	11	.13	.013	24	40	.36	42	.07	2	.87	.03	.31	1
M-88-07 C 39156	1	1	10	42	1	9	5	217	1.45	5	5	ND	14	10	1	2	2	12	.19	.016	26	20	.28	46	.09	2	.93	.04	.32	1
M-88-07 C 39157	1	7	8	52	1	13	9	251	2.28	7	5	ND	16	4	1	2	2	13	.13	.020	34	23	.44	112	.12	2	1.18	.02	.73	1
STD C	19	62	43	133	7.3	70	31	1944	4.08	44	23	7	39	50	19	15	23	61	.50	.094	41	57	.92	177	.07	31	2.05	.06	.14	13

GEOCHEMICAL ANALYSIS CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3:1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.

THIS LEACH IS PARTIAL FOR NM FE SR CA P LA CR HG BA TI S W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.

- SAMPLE TYPE: Core AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

DATE RECEIVED: MAR 13 1989 DATE REPORT MAILED: March 15/89 SIGNED BY: *C. Long* D. TOYE, C. LEONG, J. WANG: CERTIFIED B.C. ASSAYERS

BAPTY RESEARCH LIMITED PROJECT McNEIL File # 89-0555 Page 1

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Hg	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Au*
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM	PPM
M-89-01 C 39153	1	66	7	101	.2	19	28	1502	6.27	20	5	ND	1	93	6	2	2	163	10.96	.090	7	11	2.12	10	.18	2	3.43	.02	.06	1	1
M-89-01 C 39153	2	76	10	138	.1	24	32	1033	6.72	12	5	ND	3	17	6	2	2	160	3.76	.101	9	17	2.49	8	.29	2	3.31	.05	.06	1	1
M-89-01 C 39153	2	27	29	136	.1	18	10	605	3.68	2	5	ND	9	21	1	2	2	36	1.04	.036	23	33	1.46	100	.15	3	2.07	.09	.58	2	2
M-89-01 C 39161	1	1054	15	2199	1.3	43	34	985	2.93	108	5	ND	4	17	27	2	3	17	5.41	.022	14	15	.57	61	.11	2	1.34	.06	.54	2	2
M-89-01 C 39161	2	512	16	70	.4	53	26	311	4.47	4	5	ND	11	4	1	2	2	20	.29	.015	17	30	.43	69	.14	2	1.13	.06	.53	5	1
M-89-01 C 39162	1	12	25	52	.1	19	11	245	2.69	5	5	ND	17	12	1	2	2	29	.55	.026	2	21	.31	32	.01	2	1.27	.03	.19	1	1
M-89-01 C 39164	1	15	13	29	.1	13	10	197	2.72	6	5	ND	9	5	1	2	2	24	.53	.033	11	20	.53	21	.09	2	.87	.05	.19	5	1
M-89-01 C 39155	1	*	5	35	.1	5	4	133	1.26	1	5	ND	13	4	1	3	2	11	.41	.025	21	12	.34	39	.07	2	.78	.02	.26	3	2
M-89-01 C 39156	1	551	7	48	.1	31	34	512	3.34	7	5	ND	5	15	1	33	2	29	1.65	.145	13	4	.43	2	.07	2	.64	.07	.06	5	3
M-89-01 C 39167	1	440	11	26	.1	25	29	319	3.15	5	5	ND	4	8	2	2	2	38	1.12	.131	12	3	.48	6	.10	2	1.21	.08	.26	4	3

BAPTY RESEARCH LIMITED PROJECT MCNEIL FILE # 89-0555

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SAMPLE#	NO PPM	CU PPM	PB PPM	ZN PPM	AS PPM	NI PPM	CO PPM	MN PPM	FE %	AS PPM	U PPM	AU PPM	TH PPM	SR PPM	CD PPM	SB PPM	BI PPM	V PPM	CA %	P %	LA PPM	CR PPM	MO %	BA PPM	TI %	B PPM	AL %	NA %	K %	W PPM
M-89-01 C 39166	1	63	3	53	.1	14	25	433	3.42	4	5	ND	1	48	2	2	2	88	1.33	.121	8	9	1.15	55	.31	2	1.85	.08	.25	1
M-89-01 C 39169	1	213	7	62	.2	22	26	572	5.69	4	5	ND	4	21	2	2	2	107	.91	.105	10	14	1.41	52	.27	3	2.58	.11	.41	1
M-89-01 C 39170	1	50	5	59	.1	10	28	453	3.93	7	5	ND	1	51	3	2	2	104	2.05	.120	9	5	1.11	71	.29	2	2.35	.09	.27	1
M-89-01 C 39171	4	5	24	28	.1	13	3	166	1.09	2	5	ND	9	4	1	2	2	13	.28	.012	20	23	.25	3	.69	2	.54	.09	.05	1
M-89-01 C 39172	1	50	2	37	.1	20	12	128	3.23	2	5	ND	16	4	2	2	2	19	.17	.038	36	16	.59	135	.15	2	1.72	.03	.93	2
M-89-01 C 39173	2	3	58	207	.1	14	7	376	2.53	22	5	ND	10	5	1	2	2	30	.37	.018	31	34	.68	116	.15	2	1.45	.08	.83	1
M-89-01 C 39174	1	161	58	390	.1	15	11	257	2.89	4	5	ND	11	2	2	2	2	17	.19	.027	20	15	.50	98	.15	2	1.43	.05	.92	1
M-89-01 C 39175	1	68	9	57	.1	31	17	155	3.10	3	5	ND	17	2	1	2	2	12	.17	.029	37	14	.70	89	.38	2	1.29	.02	.39	1
M-89-01 C 39176	2	43	7	53	.1	29	13	239	2.45	7	5	ND	12	3	1	2	2	13	.30	.028	27	15	.47	65	.12	2	1.12	.06	.56	1
M-89-01 C 39177	2	18	14	48	.1	20	6	168	1.51	3	5	ND	12	3	1	2	2	6	.15	.023	26	12	.25	79	.39	6	.90	.02	.56	1
M-89-01 C 39178	1	7	17	59	.1	12	5	292	1.77	4	5	ND	10	5	1	2	2	18	.70	.017	24	20	.45	52	.11	2	.96	.08	.36	1
M-89-01 C 39179	2	3	2	32	.1	13	4	167	1.49	4	5	ND	18	3	1	2	2	9	.19	.024	31	13	.38	66	.03	2	.95	.03	.47	1
M-89-01 C 39180	1	1	9	31	.1	11	4	169	1.14	6	5	ND	12	3	1	2	2	12	.35	.016	22	16	.35	36	.07	2	.68	.07	.19	1
M-89-01 C 39181	2	3	2	47	.1	21	4	277	1.74	4	5	ND	11	4	1	2	2	16	.43	.014	17	24	.29	76	.12	2	.54	.07	.45	1
M-89-01 C 39182	4	2	5	54	.1	15	3	211	1.25	5	5	ND	13	2	1	2	2	17	.41	.012	11	21	.35	34	.09	2	.76	.05	.21	1
M-89-01 C 39183	2	43	3	43	.1	26	12	239	2.36	2	5	ND	21	5	1	2	2	10	.32	.025	33	13	.43	59	.05	5	1.17	.02	.43	2
M-89-01 C 39184	7	31	5	46	.1	17	12	273	2.49	7	5	ND	14	6	1	2	2	12	.65	.021	25	16	.83	47	.02	2	1.45	.05	.25	1
M-89-01 C 39185	1	122	7	38	.1	31	17	362	3.02	5	5	ND	1	11	1	2	2	49	1.51	.041	2	22	.37	7	.17	2	1.59	.17	.07	3
M-89-01 C 39186	1	193	5	32	.1	29	15	318	2.62	2	5	ND	1	15	1	2	2	91	1.57	.042	3	15	.75	17	.18	2	1.41	.20	.10	2
M-89-01 C 39187	1	325	2	29	.2	29	12	241	1.85	4	5	ND	1	20	1	2	2	57	1.40	.029	2	6	.65	14	.19	2	1.48	.20	.08	5
M-89-01 C 39188	1	5	5	44	.1	33	16	551	3.26	8	5	ND	1	10	1	2	2	79	1.38	.029	2	12	1.57	12	.15	2	1.99	.09	.08	1
STD C	20	64	42	138	7.5	74	21	1026	3.89	43	18	7	38	50	21	16	23	61	.48	.095	40	61	.92	176	.08	36	2.00	.05	.14	13

GEOCHEMICAL ANALYSIS CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO₃-H₂O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI Z W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: Core AU* ANALYSIS BY ACID LEACH/AA FROM 10 GR SAMPLE.

DATE RECEIVED: MAR 15 1989 DATE REPORT MAILED: *March 20/89* SIGNED BY: *C. Long*...D. TOYE, C. LEONG, J. WANG: CERTIFIED B.C. ASSAYERS

BAPTY RESEARCH LIMITED PROJECT MCNEIL File # 89-0584 Page 1

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Ti	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Tl	B	Al	Na	K	W	Au*
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM	PPM
M-89-01 C 39189	1	7	2	5	.2	11	2	61	.41	3	5	ND	1	1	1	3	2	5	.66	.002	2	22	.10	4	.01	2	.12	.01	.51	1	1
M-89-01 C 39190	1	1	5	5	.1	10	9	111	.55	14	5	ND	1	2	1	2	4	7	.71	.001	1	5	.13	1	.01	3	.20	.01	.91	1	1
M-89-01 C 39191	2	1	5	3	.1	10	1	102	.45	2	5	ND	1	1	1	2	5	5	1.07	.001	2	34	.12	4	.01	2	.12	.01	.91	1	1
M-89-01 C 39192	1	13	2	8	.2	11	3	131	.73	2	5	ND	1	3	1	2	2	3	1.01	.001	2	4	.16	6	.01	4	.19	.01	.51	1	1
M-89-01 C 39193	1	102	3	58	.1	31	34	709	3.95	3	5	ND	1	12	1	2	2	50	5.57	.043	2	15	1.61	3	.09	2	1.73	.02	.61	1	2
M-89-01 C 39194	1	46	2	32	.2	15	12	600	1.47	2	5	ND	1	17	1	3	4	15	10.82	.009	2	5	.53	1	.32	7	.56	.01	.01	1	1
M-89-01 C 39195	1	34	2	34	.1	14	20	337	1.55	10	5	ND	1	7	1	4	3	35	3.56	.037	2	10	.78	1	.02	2	.99	.01	.01	1	2
M-89-01 C 39196	2	8	2	6	.2	8	2	151	.53	2	5	ND	1	4	1	1	2	7	2.39	.093	2	32	.17	3	.01	2	.19	.01	.31	4	1
M-89-01 C 39197	2	6	2	12	.1	10	2	132	.79	4	5	ND	1	2	1	2	2	14	1.05	.010	2	8	.30	1	.04	4	.40	.02	.01	1	2
M-89-01 C 39198	2	6	2	19	.1	21	6	199	1.20	2	5	ND	1	2	1	3	3	25	.80	.024	2	34	.48	2	.02	3	.57	.02	.01	1	1
M-89-01 C 39199	2	4	2	16	.2	16	5	222	1.23	2	5	ND	1	3	1	2	2	25	.94	.007	2	9	.44	7	.03	4	.59	.02	.02	1	1
M-89-01 C 39200	2	51	14	41	.1	30	29	469	2.99	5	5	ND	12	3	1	3	2	53	.40	.051	22	47	1.45	10	.11	9	1.63	.14	.66	1	7
M-89-01 C 39201	1	58	10	64	.1	16	32	765	4.74	2	5	ND	1	29	1	2	3	119	2.14	.117	7	11	1.79	79	.25	3	2.54	.08	.55	1	32
M-89-01 C 39202	2	61	11	52	.3	18	23	430	3.63	2	5	ND	1	27	1	5	3	97	.99	.050	6	13	1.28	89	.26	2	1.84	.07	.45	1	1
STD C/AU-R	10	63	39	137	7.2	70	31	1649	4.11	38	18	8	36	50	19	15	21	63	.48	.095	40	57	.97	178	.07	37	1.99	.06	.13	12	510

BAPTY RESEARCH LIMITED PROJECT MCNEIL FILE # 89-0584

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SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	S	Au	Tl	Sr	Cd	Sb	Bi	V	Cr	P	La	Cr	Hg	Ba	Ti	B	Al	Na	K	W
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM
M-89-01 C 39203	1	53	49	114	.1	21	9	365	3.07	1	5	ND	10	10	1	2	2	33	.88	.035	21	29	1.48	12	.10	2	1.62	.07	.15	1
M-89-01 C 39204	2	61	33	151	.1	26	11	267	3.26	2	5	ND	11	9	1	2	2	33	.21	.036	20	28	1.29	49	.14	2	1.51	.13	.80	2
M-89-01 C 39205	1	32	33	133	.1	20	10	285	3.45	3	5	ND	10	4	1	2	4	16	.19	.036	20	15	1.17	76	.13	2	1.58	.04	1.07	1
M-89-01 C 39206	1	35	51	149	.1	13	9	360	3.50	1	5	ND	10	13	1	2	4	38	.53	.036	20	31	1.44	35	.18	2	2.00	.11	1.22	1
M-89-01 C 39207	1	1	10	54	.1	46	20	520	4.14	1	5	ND	1	9	1	2	2	76	2.32	.022	1	22	1.75	7	.14	2	2.64	.05	.08	1
M-89-01 C 39208	1	150	8	47	.1	44	24	668	2.81	12	5	ND	1	16	1	2	3	35	1.53	.024	2	22	1.90	12	.09	2	2.34	.09	.08	3
M-89-01 C 39209	1	87	5	10	.2	27	8	245	1.51	1	5	ND	1	9	1	2	2	39	1.13	.020	2	12	.67	13	.07	2	1.07	.10	.11	1
M-89-01 C 39210	1	27	4	15	.1	25	11	276	1.86	1	5	ND	1	10	1	2	3	37	.77	.023	2	16	.90	10	.07	3	1.04	.11	.09	2
M-89-01 C 39211	1	109	7	13	.1	26	8	139	1.64	1	5	ND	1	32	1	2	4	51	1.35	.021	2	28	.47	17	.06	2	2.34	.15	.04	3
M-89-01 C 39212	1	133	3	49	.1	55	27	443	4.10	2	5	ND	1	16	1	2	4	62	.35	.027	2	87	1.86	4	.09	2	2.72	.10	.05	2
M-89-01 C 39213	1	150	9	14	.1	32	10	212	1.75	1	5	ND	1	19	1	3	2	46	1.21	.029	2	30	.73	16	.11	2	1.57	.17	.09	2
M-89-01 C 39214	1	213	15	13	.1	36	18	375	4.56	2	5	ND	11	12	1	2	2	73	.45	.025	16	48	1.71	78	.19	2	2.28	.15	.46	2
STD C	20	63	42	137	7.1	70	31	1649	4.24	41	16	8	58	50	19	14	22	63	.68	.098	40	57	.96	175	.07	36	1.55	.06	.13	13

GEOCHEMICAL ANALYSIS CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO₃-H₂O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: CORE AU* ANALYSIS BY ACID LEACH/AA FROM 10 GN SAMPLES.

DATE RECEIVED: MAR 17 1989 DATE REPORT MAILED: March 20/89 SIGNED BY: C. Long D. TOYE, C. LEONG, J. WANG: CERTIFIED B.C. ASSAYERS

BAPTY RESEARCH LIMITED PROJECT McNEIL File # 89-0606 Page 1

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM	Au* PPM
M-86-07 C 39215	3	17	9	29	.1	13	2	291	3.59	3	5	ND	3	7	1	2	1	5	.47	.005	18	12	.11	15	.03	2	.30	.05	.10	2	3
M-88-07 C 39215	1	59	32	268	.2	26	13	344	4.03	2	5	ND	15	1	1	2	2	14	.22	.024	33	17	.68	84	.11	2	1.36	.02	.72	1	3
M-88-07 C 39217	1	44	5	53	.1	34	11	257	3.15	2	5	ND	12	7	1	2	3	5	.29	.023	15	11	.49	39	.02	3	.89	.01	.26	1	4
M-86-07 C 39215	2	27	12	113	.1	21	9	553	3.62	2	5	ND	10	15	1	2	2	40	.58	.035	15	34	1.49	145	.14	2	2.64	.12	1.97	1	3
M-88-07 C 39219	2	21	16	74	.1	19	9	411	3.76	222	5	ND	6	18	1	3	2	27	.51	.033	14	24	1.11	86	.10	2	1.27	.06	.73	1	1
M-86-07 C 39221	2	33	5	55	.1	14	10	207	3.10	8	5	ND	9	12	1	2	2	6	.38	.031	11	8	.52	54	.03	2	.59	.03	.36	1	2
M-86-07 C 39221	2	27	5	67	.1	21	8	255	1.98	14	5	ND	10	5	1	2	2	13	.21	.031	13	16	.70	88	.09	4	1.14	.05	.74	1	3
M-88-07 C 39221	1	30	10	63	.1	20	9	252	2.12	7	5	ND	11	5	1	2	2	11	.16	.033	23	13	.69	77	.10	2	1.12	.05	.72	1	3
M-86-07 C 39223	2	29	10	63	.1	22	8	244	3.05	3	5	ND	10	5	1	2	2	12	.18	.034	23	15	.72	82	.10	2	1.15	.06	.70	1	1
M-86-07 C 39224	4	31	5	58	.1	23	9	200	2.31	5	5	ND	11	6	1	2	2	9	.21	.034	22	11	.63	65	.07	5	.95	.03	.56	1	2
M-88-07 C 39225	2	28	14	84	.1	21	9	362	3.15	2	5	ND	9	5	1	2	2	25	.27	.034	19	24	1.07	67	.13	2	1.45	.05	.98	1	3
M-88-07 C 39225	2	25	14	143	.1	21	10	542	3.38	2	5	ND	10	11	1	2	2	38	.36	.033	16	31	1.35	90	.16	3	1.86	.06	1.13	1	2
M-88-07 C 39227	3	28	50	373	.1	23	8	357	1.99	2	5	ND	9	6	2	2	2	23	.22	.031	17	22	.97	69	.11	2	1.30	.05	.86	1	7
M-88-07 C 39228	2	38	32	274	.1	20	10	370	3.52	17	5	ND	11	16	2	2	2	20	.41	.035	19	18	1.02	99	.10	2	1.66	.06	.90	1	2
M-86-07 C 39229	3	19	10	107	.1	19	6	310	1.57	2	5	ND	8	7	1	2	2	15	.22	.029	15	15	.83	54	.09	2	1.13	.04	.72	1	3
M-86-07 C 39230	1	14	34	213	.1	13	4	301	1.12	2	5	ND	6	4	1	2	4	17	.18	.013	9	15	.65	38	.08	2	.91	.05	.62	1	4
M-88-07 C 39231	2	16	22	205	.1	12	4	220	1.26	2	5	ND	7	5	1	2	5	10	.17	.018	14	13	.58	39	.05	2	.82	.02	.50	1	2
M-86-07 C 39232	2	23	19	107	.1	15	5	170	1.35	2	5	ND	3	5	1	2	2	6	.15	.020	16	7	.45	35	.04	2	.59	.02	.39	1	2
M-86-07 C 39233	2	14	5	53	.1	12	3	199	1.99	2	5	ND	5	4	1	2	2	8	.16	.017	13	9	.49	32	.05	2	.70	.02	.41	1	1
M-88-07 C 39234	2	17	7	37	.1	11	5	205	2.10	2	5	ND	7	5	1	2	4	7	.18	.017	15	7	.46	34	.05	2	.69	.02	.36	1	3
M-88-07 C 39235	2	22	6	29	.1	18	8	215	2.31	2	5	ND	11	11	1	3	2	6	.26	.021	23	10	.45	53	.04	4	.82	.03	.46	3	1
M-88-07 C 39236	1	26	18	39	.1	14	7	379	2.61	46	5	ND	10	27	1	3	2	4	.81	.018	13	5	.49	34	.01	6	.60	.02	.20	2	1
M-88-07 C 39237	4	37	20	44	.2	16	10	464	2.71	234	5	ND	8	48	1	14	2	2	1.53	.035	7	4	.57	38	.01	3	.62	.02	.21	3	14
M-88-07 C 39238	1	24	83.5	563	13.4	11	5	933	3.18	11995	5	ND	7	55	8	167	3	2	3.60	.013	4	3	.54	22	.01	2	.38	.01	.18	1	420
M-86-07 C 39239	3	13	44	11	.1	13	2	114	.79	34	5	ND	10	10	1	2	2	2	.34	.008	21	8	.07	22	.01	4	.29	.03	.15	3	4
M-88-07 C 39240	1	34	57	72	.2	25	10	383	3.26	52	5	ND	2	9	1	2	2	12	.35	.019	33	8	.55	21	.06	3	.98	.04	.28	1	2
M-86-07 C 39241	2	21	135	84	.6	17	7	657	3.08	1056	5	ND	7	90	1	15	3	3	2.37	.032	8	7	.74	11	.01	2	.50	.02	.18	1	143
M-88-07 C 39242	1	344	27	224	.3	47	25	330	3.10	2	5	ND	1	36	1	2	2	38	1.26	.016	2	34	.99	10	.08	2	2.21	.14	.18	2	3
STD C/AU-R	20	62	42	135	7.5	70	31	1051	4.36	40	21	9	39	51	20	15	21	58	.50	.097	41	59	.94	182	.07	38	1.95	.06	.14	13	520

✓ - ASSAY REQUIRED FOR CORRECT RESULT -

BAPTY RESEARCH LIMITED PROJECT MCNEIL FILE # 89-0606

Page 2

SAMPLE#	Ni PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Hg PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Pt PPM	Se PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM
M-88-07 C 39242	1	39	6	21	.1	24	13	284	3.78	7	5	ND	11	3	1	3	2	18	.08	.021	23	19	.63	124	.16	3	1.49	.36	1.02	2
M-88-07 C 39244	1	10	10	45	.1	17	7	195	2.20	15	5	ND	21	4	1	2	2	12	.10	.023	41	11	.38	108	.10	3	1.09	.93	.74	2
M-88-07 C 39245	2	9	2	61	.1	13	5	357	2.85	2	5	ND	12	4	1	3	2	15	.13	.012	21	17	.64	82	.13	2	1.38	.65	.50	1
M-88-07 C 39245	1	31	6	51	.1	24	12	350	3.74	2	5	ND	13	4	1	2	2	15	.12	.013	38	16	.72	117	.13	4	1.46	.02	.93	1
M-88-07 C 39247	1	19	10	37	.1	50	32	1309	9.58	8	5	ND	4	6	3	2	2	189	1.56	.025	5	63	1.21	321	.37	2	5.29	.04	3.57	1
M-88-07 C 39243	1	22	10	71	.1	15	9	337	2.89	7	5	ND	12	6	1	3	2	10	.23	.026	23	10	.60	72	.36	2	.82	.03	.45	3

GEOCHEMICAL ANALYSIS CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO₃-H₂O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR NH PE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: CORE AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

DATE RECEIVED: MAR 20 1989 DATE REPORT MAILED: March 21/89 SIGNED BY: *C. Long* D. TOYE, C. LONG, J. WANG: CERTIFIED B.C. ASSAYERS

BAPTY RESEARCH LIMITED PROJECT MCNEIL File # 89-0613 Page 1

SAMPLE#	Mo	Cu	Pb	Ze	Ag	Ni	Co	Mn	Fe	As	U	Al	Th	Si	Cd	Se	Bi	V	Ca	P	Ba	Cr	Mg	Ba	Ti	B	Al	Na	K	W	AU*
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM	PPS
M-88-07 C 39259	2	35	145	185	.2	13	10	507	3.51	2	5	ND	11	3	2	2	3	25	.30	.040	29	20	.89	55	.12	2	1.37	.03	.65	1	2
M-88-07 C 39250	1	17	24	69	.1	11	11	277	4.17	18	5	ND	15	5	1	2	2	15	.28	.013	35	16	.50	55	.09	2	1.13	.02	.52	1	1
M-88-07 C 39251	1	33	31	106	.4	6	16	757	6.64	2	5	ND	4	21	1	2	2	14	0.15	.065	9	9	.51	17	.12	4	1.15	.03	.22	1	12
M-88-07 C 39252	3	29	143	27	.8	25	60	908	5.95	26851	5	ND	7	36	1	37	2	4	3.30	.029	3	5	.85	23	.01	3	.38	.02	.13	1	680
M-88-07 C 39253	5	34	63	110	.2	24	11	424	3.12	509	5	ND	10	32	1	10	2	3	1.18	.038	13	5	.60	23	.01	6	.45	.02	.21	1	10
M-88-07 C 39254	2	27	75	95	.2	25	3	581	2.87	95	5	ND	9	52	1	2	2	7	2.16	.042	15	17	.93	27	.01	5	.54	.02	.23	1	3
M-88-07 C 39255	2	14	50	24	.2	21	7	762	2.90	1215	5	ND	7	87	1	7	2	3	3.38	.029	8	14	.93	26	.01	2	.31	.02	.19	1	71
M-88-07 C 39256	4	26	33	96	.1	21	8	537	2.79	41	5	ND	9	74	1	4	2	4	2.75	.040	12	11	.92	32	.01	6	.41	.02	.21	1	7
M-88-07 C 39257	3	27	62	140	.1	20	9	536	2.86	19	5	ND	10	37	1	2	1	17	1.58	.041	24	28	1.05	26	.08	4	1.35	.02	.15	1	4
M-88-07 C 39258	3	23	31	81	.1	19	8	653	3.21	32	5	ND	9	72	1	2	2	4	2.56	.023	15	11	1.02	36	.01	4	.40	.01	.22	1	3
M-88-07 C 39259	1	100	230	769	1.8	25	19	1058	6.69	1982	5	ND	3	85	7	60	2	13	3.74	.065	2	5	1.42	32	.01	2	.35	.01	.23	1	176
M-88-07 C 39260	2	11	37	225	.1	20	7	703	2.92	23	5	ND	3	58	2	2	2	12	3.19	.036	19	19	1.07	25	.02	5	.94	.02	.25	1	15
M-88-07 C 39261	2	41	13	44	.1	13	9	274	2.25	4	5	ND	7	22	1	1	3	11	.93	.011	14	18	.31	21	.06	2	.76	.02	.15	2	1
M-88-07 C 39262	4	46	12	47	.1	14	13	195	1.97	3	5	ND	5	14	1	2	2	10	.91	.038	13	19	.24	9	.04	2	.49	.02	.07	1	5
M-88-07 C 39263	2	59	21	77	.1	21	12	312	3.39	3	5	ND	14	9	1	2	2	25	.26	.015	12	24	.56	77	.11	2	1.28	.02	.57	1	2
M-88-07 C 39264	3	11	14	59	.1	17	4	374	1.98	2	5	ND	6	26	1	2	2	15	.84	.009	8	23	.43	22	.07	3	1.03	.02	.19	1	1
M-88-07 C 39265	1	8	185	232	.2	66	55	802	2.38	601	5	ND	3	20	1	2	3	52	3.20	.025	4	25	.68	34	.09	3	1.47	.03	.20	1	3
M-88-07 C 39266	1	92	34	103	.2	50	25	368	5.59	8	5	ND	16	5	1	2	2	27	.26	.034	28	24	.77	105	.16	2	1.76	.02	.35	1	2
STD C/AU-2	18	62	42	132	5.9	69	31	1052	4.21	44	17	7	39	50	20	20	20	61	.45	.092	40	55	.95	175	.05	36	2.00	.06	.13	13	528

✓ ASSAY REQUIRED FOR CORRECT RESULT.

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Ce PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM
M-88-07 C 39267	1	26	25	88	.1	18	8	507	3.20	3	5	ND	12	13	1	2	2	39	.61	.046	27	31	1.27	40	.14	2	1.63	.03	.93	1
M-88-07 C 39258	2	27	22	64	.1	16	7	493	2.76	65	5	ND	11	20	1	2	2	22	.83	.024	24	20	.93	51	.09	2	1.18	.04	.60	2
M-88-07 C 39269	4	38	18	89	.1	28	14	477	4.21	4	5	ND	11	12	1	2	2	19	.44	.039	29	17	.88	47	.12	4	1.47	.02	.54	1
M-88-07 C 39270	1	7	16	105	.1	12	6	290	2.52	2	5	ND	23	5	1	2	2	14	.13	.020	50	13	.51	86	.12	2	1.31	.01	.79	1
M-88-07 C 39271	1	45	10	263	.1	34	15	261	3.28	45	5	ND	10	6	1	3	2	7	.13	.012	14	8	.33	32	.03	3	.50	.02	.27	1
M-88-07 C 39272	3	34	13	87	.1	23	13	444	3.99	7	5	ND	11	11	1	2	2	43	.40	.038	23	34	1.41	56	.13	3	1.58	.04	.70	1
M-88-07 C 39273	1	7	17	55	.1	11	4	289	1.71	5	5	ND	14	9	1	2	2	15	.20	.012	23	15	.40	64	.08	2	.82	.04	.34	1
M-88-07 C 39274	2	23	213	109	.1	17	8	638	3.19	5	5	ND	11	21	1	2	2	29	2.05	.040	27	31	1.24	42	.14	5	1.83	.04	.96	1
M-88-07 C 39275	1	42	12	57	.1	16	11	266	2.91	2	5	ND	11	13	1	2	2	14	.31	.014	23	17	.40	86	.11	3	1.10	.03	.54	2
M-88-07 C 39276	1	14	15	78	.1	19	8	354	2.86	3	5	ND	13	7	1	2	2	18	.25	.015	24	20	.55	108	.13	3	1.29	.03	.70	2
M-88-07 C 39277	1	51	28	114	.1	26	15	341	4.21	2	5	ND	15	4	1	2	2	19	.16	.019	33	17	.69	104	.13	5	1.66	.01	.83	1
STD C	19	63	38	132	6.8	73	32	1039	4.29	39	16	7	39	50	19	14	23	60	.48	.094	40	54	.95	178	.07	34	2.02	.06	.12	12

ACME ANALYTICAL LABORATORIES LTD.

DATE RECEIVED: JAN 12 1989

852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6

PHONE(604)253-3158 FAX(604)253-1716 DATE REPORT MAILED: Jan 16/89

ASSAY CERTIFICATE

- SAMPLE TYPE: Pulp

AU** AND AG** BY FIRE ASSAY FROM 1/2 A.T.

SIGNED BY..... C. Long D.TOYE, C.LEONG, B.CHAN, J.WANG; CERTIFIED B.C. ASSAYERS

DRAGOON RESOURCES LTD. FILE # 88-5299R

SAMPLE#	Cu %	Pb %	Zn %	Ag** OZ/T	Au** OZ/T
7905 G	.02	.24	.02	.02	.001
7906 G	.15	1.18	.01	.29	.001
7907 G	.01	.19	.01	.05	.001
7908 G	.14	1.49	.02	.15	.001
7909 G	.20	2.25	.02	1.16	.001
7910 G	.03	.24	.01	.07	.001
7911 G	.01	.20	.01	.09	.001
7915 G	.83	.01	.06	.28	.001

ACME ANALYTICAL LABORATORIES LTD.

DATE RECEIVED: NOV 8 1988

852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6

PHONE(604)253-3158 FAX(604)253-1716 DATE REPORT MAILED: Nov 14/88

ASSAY CERTIFICATE

- SAMPLE TYPE: Pulp

SIGNED BY..... C. Long D.TOYE, C.LEONG, B.CHAN, J.WANG; CERTIFIED B.C. ASSAYERS

BAPTY RESEARCH FILE # 88-5299R

SAMPLE#	Pb %	Ag OZ/T
7906 G	1.20	-
7908 G	1.55	-
7909 G	2.39	1.25

ACME ANALYTICAL LABORATORIES LTD.

DATE RECEIVED: NOV 7 1988

852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6

PHONE(604)253-3158 FAX(604)253-1716 DATE REPORT MAILED: Nov 17/88

ASSAY CERTIFICATE

- SAMPLE TYPE: Core

SIGNED BY: C. Leong | D. TOYE, C. LEONG, B. CHAN, J. WANG; CERTIFIED B.C. ASSAYERS

BAPTY RESEARCH LTD. PROJECT MCWEIL FILE # 88-5678

SAMPLE#	Cu %	Pb %	Zn %	Ag OZ/T	Au OZ/T
7946 G	.01	.01	.01	.01	.001
7947 G	.01	.01	.01	.01	.001
7948 G	.01	.01	.01	.01	.001
7949 G	.01	.01	.01	.01	.001
7950 G	.01	.01	.01	.01	.001
C 39551	.01	.01	.01	.01	.001
C 39552	.01	.01	.01	.01	.001
C 39553	.01	.01	.01	.01	.001
C 39554	.01	.01	.01	.01	.001

ACME ANALYTICAL LABORATORIES LTD.

DATE RECEIVED: NOV 24 1988

852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6

PHONE(604)253-3158 FAX(604)253-1716 DATE REPORT MAILED: Dec 1/88

ASSAY CERTIFICATE

- SAMPLE TYPE: Pulp AU** BY FIRE ASSAY FROM 1/2 A.T.

SIGNED BY: C. Leong | D. TOYE, C. LEONG, B. CHAN, J. WANG; CERTIFIED B.C. ASSAYERS

BAPTY RESEARCH FILE # 88-5732R

SAMPLE#	Pb %	Zn %	Au** OZ/T
C39562	.98	1.55	.029

ACME ANALYTICAL LABORATORIES LTD.

DATE RECEIVED: NOV 24 1988

852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6

PHONE(604)253-3158 FAX(604)253-1716 DATE REPORT MAILED: Dec. 15/88.

ASSAY CERTIFICATE

- SAMPLE TYPE: Pulp AG** & AU** BY FIRE ASSAY FROM 1/2 A.T.

SIGNED BY..... D.TOYE, C.LEONG, B.CHAN, J.WANG; CERTIFIED B.C. ASSAYERS

BAPTY RESEARCH LTD. FILE # 88-5732R

SAMPLE#	CU %	PB %	ZN %	AG** oz/t	AU** oz/t
C39562	.01	.98	1.55	.16	.029

ACME ANALYTICAL LABORATORIES LTD.

DATE RECEIVED: JAN 12 1989

852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6

PHONE(604)253-3158 FAX(604)253-1716 DATE REPORT MAILED: Jan. 16/89

ASSAY CERTIFICATE

- SAMPLE TYPE: Pulp

AU** AND AG** BY FIRE ASSAY FROM 1/2 A.T.

SIGNED BY..... D.TOYE, C.LEONG, B.CHAN, J.WANG; CERTIFIED B.C. ASSAYERS

BAPTY RESEARCH LTD. FILE # 88-5732R

SAMPLE#	Cu %	Pb %	Zn %	Ag** OZ/T	Au** OZ/T
C 39574	.01	.02	.76	.02	.001

ACME ANALYTICAL LABORATORIES LTD. DATE RECEIVED: JAN 12 1989
852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6
PHONE(604)253-3158 FAX(604)253-1716 DATE REPORT MAILED: Jan. 17/89.

ASSAY CERTIFICATE

- SAMPLE TYPE: Pulp
AU** AND AG** BY FIRE ASSAY FROM 1/2 A.T.

SIGNED BY..... C. Leung D. TOYE, C. LEONG, B. CHAN, J. WANG; CERTIFIED B.C. ASSAYERS

BAPTY RESEARCH LTD. FILE # 88-5859R

SAMPLE#	Cu %	Pb %	Zn %	Ag** OZ/T	Au** OZ/T
C 39583	.02	.01	.16	.02	.001
C 39585	.03	.03	.30	.03	.001
C 39586	.01	.07	.40	.01	.001
C 39587	.42	.22	.57	.12	.001
C 39590	.01	.06	.19	.01	.001
C 39591	.01	.01	.09	.01	.001
C 39592	.76	.01	.05	.13	.001
C 39593	.01	.01	.10	.01	.001
C 39594	.01	.01	.15	.01	.001

ACME ANALYTICAL LABORATORIES LTD. DATE RECEIVED: NOV 24 1988
852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6
PHONE(604)253-3158 FAX(604)253-1716 DATE REPORT MAILED: Dec. 13/88.

ASSAY CERTIFICATE

- SAMPLE TYPE: Pulp
AU** AND AG** BY FIRE ASSAY FROM 1/2 A.T.

SIGNED BY..... C. Leung D. TOYE, C. LEONG, B. CHAN, J. WANG; CERTIFIED B.C. ASSAYERS

BAPTY RESEARCH LTD. FILE # 88-5859R

SAMPLE#	Cu %	Pb %	Zn %	Ag** OZ/T	Au** OZ/T
C39584	.10	.06	1.22	.02	.001
C39588	.19	16.51	.38	2.97	.001
C39589	.13	.36	.68	.15	.001
C39592	.75	.01	.06	.18	.001

ACME ANALYTICAL LABORATORIES LTD.

DATE RECEIVED: JAN 12 1989

852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6

PHONE(604)253-3158 FAX(604)253-1716 DATE REPORT MAILED:

Jan. 16/89

ASSAY CERTIFICATE

- SAMPLE TYPE: Pulp

AU** AND AG** BY FIRE ASSAY FROM 1/2 A.T.

SIGNED BY *C. Long* D.TOYE, C.LEONG, B.CHAN, J.WANG; CERTIFIED B.C. ASSAYERS

BAPTY RESEARCH LTD.

FILE # 88-5890R

SAMPLE#	Cu %	Pb %	Zn %	Ag** OZ/T	Au** OZ/T
C 39598	.01	.01	.15	.01	.001
C 39601	.01	.33	.27	.07	.001
C 39602	.01	.01	.08	.01	.001
C 39603	.01	.01	.09	.01	.001
C 39604	.03	.01	.16	.01	.001
C 39605	.01	.01	.06	.01	.001
C 39606	.01	.01	.05	.01	.001
C 39607	.01	.01	.04	.01	.001

ACME ANALYTICAL LABORATORIES LTD.

DATE RECEIVED: NOV 24 1988

852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6

PHONE(604)253-3158 FAX(604)253-1716 DATE REPORT MAILED:

Dec. 1/88

ASSAY CERTIFICATE

- SAMPLE TYPE: Pulp

SIGNED BY *C. Long* D.TOYE, C.LEONG, B.CHAN, J.WANG; CERTIFIED B.C. ASSAYERS

BAPTY RESEARCH

FILE # 88-5890R

SAMPLE#	Pb %	Zn %	Ag OZ/T
C39599	13.82	1.03	2.21
C39600	2.33	2.25	.46

ACME ANALYTICAL LABORATORIES LTD.

852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6

PHONE(604)253-3158 FAX(604)253-1716 DATE REPORT MAILED:

DATE RECEIVED: NOV 2 1988

Nov. 10/88

ASSAY CERTIFICATE

- SAMPLE TYPE: Core

SIGNED BY *C. Long* D. TOYE, C. LEONG, B. CHAN, J. WANG; CERTIFIED B.C. ASSAYERS

BAPTY RESEARCH PROJECT MCNEIL FILE # 88-5606A

SAMPLE#	Cu %	Pb %	Zn %	Ag OZ/T	Au OZ/T
C 39017	.01	.01	.01	.02	.001
C 39018	.01	.01	.01	.01	.005
C 39019	.01	.01	.01	.01	.006
C 39020	.01	.01	.01	.01	.002
C 39021	.01	.01	.01	.01	.001

ACME ANALYTICAL LABORATORIES LTD.

852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6

PHONE(604)253-3158 FAX(604)253-1716 DATE REPORT MAILED:

DATE RECEIVED: MAR 21 1989

March 28/89

ASSAY CERTIFICATE

- SAMPLE TYPE: Pulp

SIGNED BY *C. Long* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

BAPTY RESEARCH LIMITED PROJECT MCNEIL FILE # 89-0606R

SAMPLE#	CU %	PB %	ZN %	AG oz/t	AU oz/t
M-88-07 C 39238	.01	.91	.05	.39	.013

ACME ANALYTICAL LABORATORIES LTD.

852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6

PHONE(604)253-3158 FAX(604)253-1716 DATE REPORT MAILED:

DATE RECEIVED: MAR 22 1989

March 28/89

ASSAY CERTIFICATE

- SAMPLE TYPE: Pulp

SIGNED BY *C. Long* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

BAPTY RESEARCH LIMITED PROJECT MCNEIL FILE # 89-0613R

SAMPLE#	CU %	PB %	ZN %	AG oz/t	AU oz/t
M-88-07 C 39252	.01	.01	.01	.03	.018

GEOCHEMICAL/ASSAY CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG.C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN PR SR CA P LA CR NG BA YI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: P1 ROCK P2 SOIL AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

DATE RECEIVED: JUL 23 1988

DATE REPORT MAILED:

Aug 3/88

ASSAYER: C. LEONG, D. TOYE OR C. LEONG, CERTIFIED B.C. ASSAYERS

SOUTH KOOTENAY GOLDFIELDS INC. PROJECT MCNEIL

File # 88-2921

Page 1

SAMPLE#	Mo	Cu	Pb	Zn	Ag	NI	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Au*	Pb	Ag
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM	PPM	%	OZ/T
6782A	13	705	23181	1473	154.3	5	5	401	8.10	71	5	ND	1	2	3	241	53	3	.11	.054	9	2	.01	7	.01	5	.43	.01	.05	168	98	-	-
6783A	6	192	22638	1545	45.8	4	6	420	5.65	206	6	ND	1	4	1	329	10	15	.14	.228	15	13	.20	8	.01	2	1.02	.01	.04	46	11	-	-
6784A	3	258	13967	328	5.0	4	13	737	6.90	384	5	ND	11	2	1	321	19	10	.02	.062	52	7	.03	21	.01	2	.77	.01	.23	3	115	-	-
6785A	1	59	1942	143	.5	3	4	174	3.16	317	7	ND	14	2	1	33	2	4	.02	.040	44	4	.03	20	.01	5	.53	.01	.20	1	6	-	-
6786A	5	742	22839	397	126.4	6	7	1154	7.26	141	5	ND	2	1	1	369	12	13	.06	.313	18	16	.03	7	.01	2	1.16	.01	.06	9	27	-	-
6787A	1	17	2624	582	.1	22	12	1025	3.98	11	5	ND	15	16	1	12	3	21	.24	.021	70	18	.60	51	.15	2	2.18	.01	.73	1	5	-	-
6788A	13	255	23225	484	12.1	6	9	1092	3.05	93	5	ND	1	11	1	23	10	16	.45	.174	35	17	.35	6	.03	2	1.55	.01	.07	1	13	-	-
6789A	2	216	23560	78	25.1	1	1	250	1.22	18	5	ND	1	1	1	421	9	1	.02	.088	12	3	.02	4	.01	2	.18	.01	.01	30	27	78.66	1.33
6790A	4	2207	23551	231	42.6	1	5	495	9.69	35	5	2	2	1	1	734	2	6	.04	.037	11	3	.01	3	.01	2	.46	.01	.03	1	225	56.91	1.56
6791A	4	834	23000	114	22.5	1	5	10197	6.70	203	5	ND	1	1	1	339	2	13	.68	.056	2	6	.02	2	.05	2	1.16	.01	.01	1	345	-	-
6792A	20	4105	23728	251	187.0	4	19	2181	23.25	92	6	ND	7	2	1	806	73	8	.07	.291	24	15	.04	10	.02	2	2.18	.01	.05	74	139	-	-
6793A	12	1286	23669	356	115.7	2	14	2816	11.00	64	5	2	3	1	1	511	30	11	.23	.301	29	19	.03	4	.01	2	1.06	.01	.03	167	86	-	-
6794A	16	1128	23655	480	134.2	4	18	2566	10.64	129	5	2	1	1	1	1237	85	11	.10	.858	43	42	.04	5	.01	2	.94	.01	.02	370	92	-	-
6795A	2	682	23720	221	12.3	2	12	3616	8.20	10	5	ND	4	2	1	102	4	15	.31	.062	10	15	.31	7	.06	2	1.69	.01	.02	18	18	-	-
6796A	17	1471	23660	251	277.1	3	15	1160	14.38	151	5	2	5	1	1	2192	87	17	.05	.270	27	20	.04	7	.02	2	1.70	.01	.02	8	325	-	-
6797A	6	424	23769	127	22.5	2	15	7948	4.53	8	5	ND	7	2	1	422	2	27	.18	.037	15	27	.08	8	.04	4	3.40	.01	.05	1	14	-	-
6798A	13	981	13216	296	42.9	4	13	2037	13.20	205	7	ND	6	2	1	356	12	12	.21	.051	22	5	.06	6	.02	3	1.36	.01	.05	1	52	-	-
6799A	1	100	3999	89	2.9	1	3	190	1.93	70	5	ND	15	1	1	59	3	2	.01	.030	50	4	.02	16	.01	6	.53	.01	.21	1	8	-	-
6800A	5	794	14239	258	94.9	4	15	2170	7.77	701	5	ND	10	2	1	458	4	8	.10	.028	27	7	.05	9	.02	2	2.11	.01	.10	1	32	-	-
6801A	1	63	1228	87	.9	1	3	157	1.47	12	5	ND	1	1	1	25	2	4	.04	.006	6	3	.06	4	.01	3	.25	.01	.05	2	4	-	-
STD C/AU-R	17	62	43	132	7.1	68	29	1045	4.09	40	20	8	38	47	17	19	19	58	.46	.091	40	57	.32	178	.07	32	1.98	.06	.13	12	470	-	-

- ASSAY REQUIRED FOR CORRECT RESULT for Au > 10,000 ppm
Ag > 35 ppm

APPENDIX VII

GEOPHYSICAL REPORT ON McNEIL CREEK PROPERTY, LLOYD GEOPHYSICS

A GEOPHYSICAL REPORT ON A
GROUND MAGNETOMETER,
VLF-EM AND
HORIZONTAL LOOP EM
SURVEY

ON THE MCNEIL CREEK PROPERTY
FORT STEELE MINING DIVISION
CRANBROOK, BRITISH COLUMBIA

LATITUDE 49°21'NORTH
LONGITUDE 115°59'WEST
N.T.S. 82F/8 and 82G/5

FOR

DRAGOON RESOURCES LTD.

BY

John Lloyd, M.Sc., P. Eng.
LLOYD GEOPHYSICS LIMITED

JULY 1988

SUMMARY

During the period June 9 to July 1, 1988 Lloyd Geophysics Limited carried out ground magnetometer, VLF-EM and Horizontal Loop EM surveys on the McNEIL CREEK property near Cranbrook, British Columbia for Dragoon Resources Ltd. Some 31 kilometres of each type of survey was completed.

The magnetometer survey outlined a strong anomaly which is worthy of additional exploration by trenching and drilling.

The VLF-EM survey failed to detect previously discovered NW-SE shear zones by virtue of the fact that there was no transmitting station suitably located so as to provide adequate coupling with these shear zones. Elsewhere a number of weak VLF-EM conductors were detected.

A number of possible horizontal loop EM conductors were identified. There is no reasonable correlation between the weak VLF-EM conductors and the possible horizontal loop EM conductors.

No drilling is recommended for either the VLF-EM or the horizontal loop EM conductors until correlation between the geochemical survey data and the known surface geology has been attempted.

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1. INTRODUCTION

During the period June 9 to July 1, 1988 Lloyd Geophysics Limited carried out ground magnetometer, VLF-EM and horizontal loop EM surveys on the NCNEIL CREEK property for Dragoon Resources Ltd. The property comprises parts of the SUNNY, RAM and MAR claim groups.

Approximately 31 kilometres of magnetometer, 31 kilometres of VLF-EM and 31 kilometres of horizontal loop EM were completed on the property.

2. PROPERTY LOCATION AND ACCESS

The property is located in the Fort Steele Mining Division of British Columbia and consists of 140 units as follows:

<u>Claim Name</u>	<u>Record Number</u>	<u>Expiry Date</u>
SUNNY 1	3049	Feb. 1989
SUNNY 2	3050	Feb. 1989
SUNNY 3	3051	Feb. 1989
SUNNY 4	3052	Feb. 1989
SUNNY 5	3053	Feb. 1989
SUNNY 6	3054	Feb. 1989
RAM 1	1730	Nov. 1988
RAM 2	1731	Nov. 1988
MAR 3	765	Sept. 1988
MAR 4	2984	Sept. 1988

The claims are located in the Moyie Range, 35 kilometres southwest of Cranbrook at latitude 49°21'N and longitude 115°59'W. See Figure 1.

Access to the property is by Highway 3 for 10 kilometres southwest of Cranbrook to Lumberton and then via a 25 kilometre gravel road. The claims are at elevations of between 1600 and 2200 metres, where terrain is partly logged at upper elevations and densely timbered with second growth at lower elevations.

3. GEOLOGY

The property has been mapped by Mr. Peter Klewchuk, who provided a 1:5000 surface geology map of the property to assist in the preparation of this report.

Bedrock exposures are sparse and tend to be along roads. The property is underlain by the Aldridge Formation of Middle Proterozoic Age including the Middle-Lower contact at 500 to 800 metres below surface. The Sullivan orebody at Kimberley occurs just below this contact.

The Middle Aldridge Formation comprises relatively flat-lying, thin to very thick bedded metamorphosed siltstones and quartzites. A series of northwest-southwest shear/fault zones with quartz veins cut the stratigraphy at high angles.

One intrusive, a diorite or gabbro sill, strikes approximately north-south through the central portion of the property. Locally there are phases of the diorite intrusions which contain considerable magnetite. Cretaceous felsic intrusions can also be magnetic.

4. PURPOSE OF THE GEOPHYSICAL SURVEYS

The purpose of the selected geophysical surveys was to outline for drilling and/or trenching any of the following targets which could be reasonably expected to occur on the property. These geophysical targets are described by company geologist Mr. Eric MacDonald as follows:

- 1) Galena, sphalerite, silver vein systems some of which are exposed in outcrop on the property and are similar to the Vine property of Cominco Ltd. These targets could be expected to contain 100,000 to 200,000 tons with lead ranging from 10% to 60% and containing only minor amounts of zinc and iron sulphide. Only minor amounts have been exposed on surface outcrops and these have been variable in grade, width and strike continuity.
- 2) Mineralized shear zones, ranging from 200,000 to 1,000,000 tons of 15 to 20% Pb, 5 to 10% Zn and 10 to 15% iron as sulphides.
- 3) A flat lying stratiform massive sulphide deposit similar to that of the Sullivan ore zone containing 1 to 10 million tons grading approximately 5% Pb, 5% Zn, and 10 to 20% iron as sulphides.
- 4) Fissure vein gold deposits of variable dimensions possibly in the range of 10,000 to 30,000 tons containing 0.3 oz/ton to 1.0 oz/ton Au.
- 5) A crackle breccia type gold deposit of undetermined size relating to a syenite intrusive in the northeast corner of the grid.

5. INSTRUMENT SPECIFICATIONS

5.1 Magnetometer/VLF-EM Equipment

The equipment used was the OMNI PLUS combined magnetometer/VLF-EM system manufactured by EDA Instruments Inc., Toronto, Canada.

The system is completely software/microprocessor controlled. A portable proton precession magnetometer measures and stores in memory the total earth's magnetic field at the touch of a key. It also identifies and stores the location and time of each measurement and computes the statistical error of the reading and stores the decay and strength of the signal being measured. Throughout each survey day a similar base station magnetometer measures and stores in memory the daily fluctuations of the earth's magnetic field. The use of two magnetometers eliminates the need for a network of base stations on the grid. At the end of each day the field data is merged with the base station data in the computer and automatic diurnal corrections are applied to correct the total field data.

The VLF-EM hardware of the OMNI PLUS system has the ability to measure, both the VLF magnetic and electric fields from at least two different transmitting stations. The system requires no operator orientation of the sensor head towards the transmitting stations. This is achieved by the utilization of three orthogonal sensor coils rather than the two sensor coils used in conventional systems.

5.2 Horizontal Loop E.M. Equipment

The equipment used was a portable MAXMIN I ground EM system

manufactured by APEX PARAMETRICS LIMITED, Toronto, Canada.

It is an expansion of the popular MAXMIN II and MAXMIN III systems.

Both receiver and transmitter coils are maintained a fixed distance apart and moved in unison from station to station. In the Horizontal Loop mode, as used in this survey, both the receiver and the transmitter coils are maintained horizontal and coplanar and are joined by a reference cable.

The equipment can be operated at 110, 220, 440, 880, 1760, 3520, 7040 and 14080 Hz with coil separations of 12.5, 25, 50, 100, 125, 150, 200, 250, 300 and 400 metres. Both the in-phase and quadrature components of the secondary magnetic field in % of the primary or transmitted field are measured at each station and plotted at the mid-point between the receiver and transmitter coils.

6. SURVEY SPECIFICATIONS

6.1 Magnetometer Survey

This survey was carried out on lines 200 metres apart and readings were taken at 12.5 metre station intervals. In one strongly anomalous area additional lines were surveyed so that the coverage was completed on lines 100 metres apart in this area.

6.2 VLF-EM Survey

This survey was carried out on lines 200 metres apart and readings were taken at 12.5 metre station intervals. In the area of strong magnetic relief, lines 4100N and 4200N were also surveyed so that coverage was completed on lines 100 metres apart in this area.

Two transmitter stations were selected for this survey:

- (a) Seattle, Washington, USA (NLK 24.8 kHz)
- (b) Cutler, Main, USA (NAA 24.0 kHz)

6.3 Horizontal Loop EM Survey

This survey was carried out on lines 200 metres apart. Readings were taken every 25 metres using a coil separation of 75 metres. Two transmitter frequencies were used viz. 880 and 1760 Hz. Additional lines, 3900N 4100N and 4200N were also surveyed, so that coverage was completed on lines 100 metres apart in this area.

7. DATA PROCESSING

The data collected was processed in the field using a portable Compaq 286 Computer and an Epson printer.

Using appropriate software, the magnetic field data was corrected for diurnal variations by merging it with the base station magnetic data.

The VLF-EM data was automatically downloaded from the field

instrument to the computer. The Horizontal Loop EM data was entered to the computer manually via the keyboard.

For data integrity checks and for a quick review of anomalies all geophysical data was plotted out in profile form on the Epson printer.

Final preparation of maps was carried out in the Vancouver office on an E size (34" x 44") Hewlett Packard plotter.

8. DATA PRESENTATION

The data obtained from the survey described in this report are presented on 6 maps as follows:

<u>Description</u>	<u>Dwg. No.</u>
Total Magnetic Field Profiles	88269-1
Total Magnetic Field Contours	88269-2
VLF-EM Profiles (Seattle)	88269-3
VLF-EM Profiles (Cutler)	88269-4
MaxMin HLEM Profiles (880 Hz)	88269-5
MaxMin HLEM Profiles (1760 Hz)	88269-6

9. DISCUSSION OF RESULTS

9.1 Magnetometer Survey

This survey detected a strong magnetic anomaly on the northern corner of the grid on lines 4000N, 4100N and 4200N. The anomaly is approximately 700 to 1000 nT above

background and is open to the north. It lies directly west of a north south striking diorite sill, which appears to have little or no magnetic signature. It is therefore reasonable to assume that the anomaly is either caused by a different rock type or if indeed the diorite sill is the cause, then its magnetite content is sharply increased on this part of the grid. Regardless of this, the magnetic anomaly is worthy of further exploration.

The remainder of the property is singularly uninteresting from a magnetic point of view, with variations of less than 20 nT occurring over more than 90% of the property.

9.2 The VLF-EM Survey

Before describing the results from this survey, mention should be made about the limitations imposed upon the method arising from the use of fixed location transmitting stations.

The field generated by VLF transmitting stations is primarily horizontal and the direction of this horizontal field is perpendicular to the direction of the transmitting station. Therefore to obtain maximum coupling with a geological conductor it is necessary to select a transmitting station whose direction is co-linear with the geological strike of the conductor.

At first this would seem fairly straight forward since there are generally two or three stations to choose from. Initially we selected Annapolis, unfortunately this station went off the air on the first survey day. We switched to Cutler whose geographical direction is approximately

co-linear with the geological strike of the property only to find that the direction of the primary field was approximately 90° away from the anticipated direction. We have observed this phenomenon over a period of 20 years whilst doing VLF-EM surveys. A number of explanations have been proposed to explain this phenomenon. These include distortion of the primary field due to "focussing" especially in mountainous areas. Variations in the primary field pattern with distance from the station, and a more recent explanation is that the primary field follows "great circle routes" and not true azimuth or geographic direction paths.

Based mainly on signal strength, the only two stations available to us were Seattle and Cutler. The primary fields of these two stations were virtually in opposite (180°) directions and neither were very suitable for maximum coupling with the NW-SE shear zones which are known to occur on the property from geological mapping and trenching.

The VLF-EM data obtained from both Seattle and Cutler are almost identical, and a number of very weak EM conductor axes have been identified and are plotted in Dwg. Nos. 88269-3 and 88269-4. Hopefully these very weak conductors are caused by faults or shears. However, due to their very weak nature, they may not have true bedrock sources and could be caused by conductive clays in overburden.

9.3 Horizontal Loop EM Survey

Whilst every effort was made to maintain the transmitter and receiver coils equidistant and co-planar during the course of the survey, it is clear that the rough terrain

has introduced random variations in the in-phase component of about $\pm 5\%$. The quadrature component of course is not affected in this way, and remains uninterestly smooth throughout the survey area.

The axes of a number of possible EM conductors have been identified and are plotted on Dwg. Nos. 88269-5 and 88269-6. It is important to understand that these conductors may not be genuine bedrock conductors, but may in fact be caused by "noise" due to cable shortening and coil misalignment in rough terrain. Such an explanation for these increased responses is further reinforced by the fact that there is virtually no difference in the amplitude of the responses between the low frequency (880 Hz) and the high frequency (1760 Hz) in either the in-phase or quadrature measurements.

There is no reasonable correlation between the possible Horizontal Loop EM conductors and the previously described weak VLF-EM conductors.

10. CONCLUSION AND RECOMMENDATIONS

From a study of the geophysical data obtained from the various surveys described in this report it has been concluded that

A. The magnetometer survey outlined one strong anomaly in the northern part of the property which is worthy of additional exploration.

B. The VLF-EM survey failed to detect previously discovered NW-SE shear zones by virtue of the fact that

there was no transmitting station suitably located so as to provide adequate coupling with the known shears and at the same time have sufficient signal strength to provide reliable measurements.

- C. There is no reasonable correlation between the weak VLF-EM conductors and the possible Horizontal Loop EM conductors.
- D. The Horizontal Loop EM data suffered from random variations in the in-phase component measurements caused by the rough terrain. These variations were rather small and have most probably not caused any strong conductors to go undetected.

Trenching and/or drilling is recommended for the strong magnetic anomaly located on the northern portion of the property. The drill hole locations should be guided by correlating the magnetic data with the geochemical data and the known surface geology.

No drilling is recommended for the weak VLF-EM and Horizontal Loop EM conductors that have been identified. Instead an attempt should be made to correlate the EM data with the geochemical data and known surface geology, at which time a drilling decision can be made.

Respectfully Submitted
LLOYD GEOPHYSICS LIMITED



John Lloyd, M.Sc., P. Eng.
Geophysicist

July 1988
Vancouver, B.C.

APPENDIX

(i)

Personnel Employed On Survey

<u>Name</u>	<u>Occupation</u>	<u>Address</u>	<u>Dates</u>
J. Lloyd	Geophysicist	Lloyd Geophysics Limited 1110-625 Howe Street Vancouver, B.C. V6C 2T6	July 19-22/88
D. Klit	Geophysicist	"	Jun 9-Jul 1/88
M. Pearson	Instrument Operator	"	Jun 16-Jul 1/88
J. Zondag	Typist	"	July 25-26/88

(ii)

Cost of Geophysical Surveys

Lloyd Geophysics contracted the data acquisition of the MAG. and VLF-EM surveys on a per kilometer basis and the HLEM survey on a per diem basis. Living and travelling expenses, computer data processing, reproduction, interpretation and report writing were extra costs. The total costs incurred by Lloyd Geophysics Limited to complete the MAG., VLF-EM and HLEM surveys was \$20,762.25. The breakdown of these costs are shown below.

	<u>MAG and VLF-EM</u>	<u>HLEM</u>	<u>TOTAL</u>
1. Data Acquisition	\$ 5,468.00	\$ 8,600.00	\$ 14,068.00
2. Truck Charges	660.00	720.00	1,380.00
3. Living & Travel	488.92	907.98	1,396.90
4. Final Maps and Reproduction Costs	1,194.90	1,122.45	2,317.35
5. Interpretation and Report Writing	<u>800.00</u>	<u>800.00</u>	<u>1,600.00</u>
Totals	\$ <u>8,611.82</u>	\$ <u>12,150.43</u>	\$ <u>20,762.25</u>
	\$ 322/km	\$ 455/km	

(iii)

Certification of Author

I, John Lloyd, of 1110-625 Howe Street, in the City of Vancouver, in the Province of British Columbia, do hereby certify that:

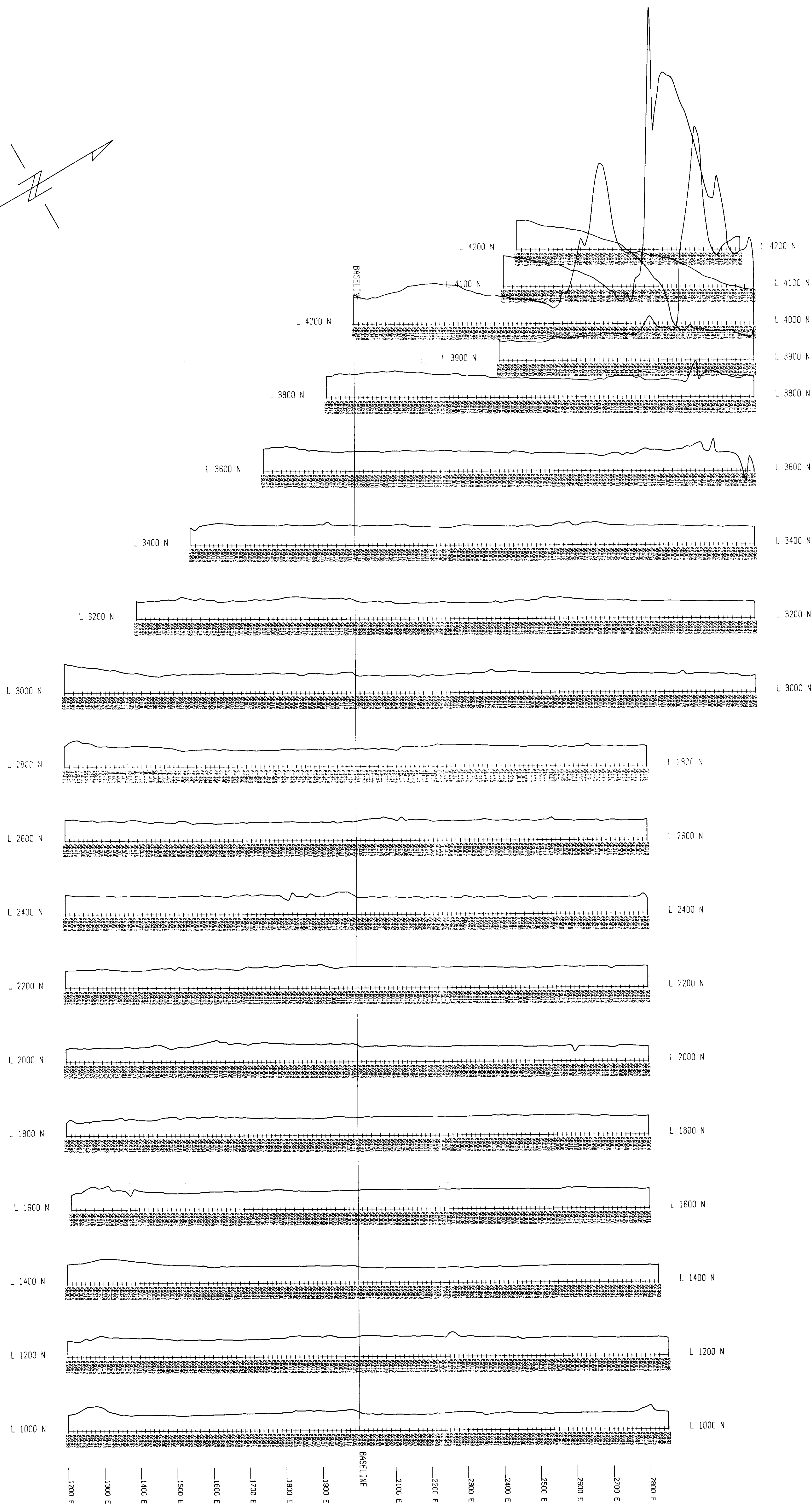
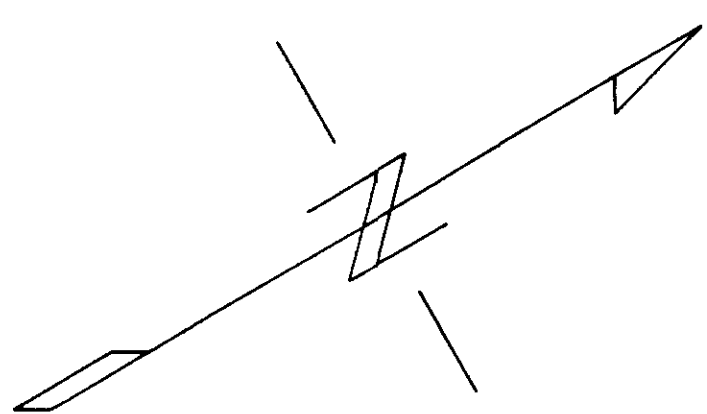
1. I graduated from the University of Liverpool, England in 1960 with a B.Sc. in Physics and Geology, Geophysics Option.
2. I obtained the diploma of the Imperial College of Science and Technology (D.I.C.), in Applied Geophysics from the Royal School of Mines, London University in 1961.
3. I obtained the degree of M.Sc. in Geophysics from the Royal School of Mines, London University in 1962.
4. I am a member in good standing of the Association of Professional Engineers in the Province of British Columbia, the Society of Exploration Geophysicists of America, the European Association of Exploration Geophysicists and the Canadian Institute of Mining and Metallurgy.
5. I have been practising my profession for over twenty-five years.

John Lloyd

John Lloyd, P. Eng.

Vancouver, B.C.

July, 1988



MAGNETIC PROFILES

PROFILE SCALE : 100 nT / cm
PROFILE BASE LEVEL : 55950 nT

INSTRUMENT : EDA OMNI PLUS

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

19,277

SCALE 1 : 5 000
100 0 100 (metres) 200 300 400

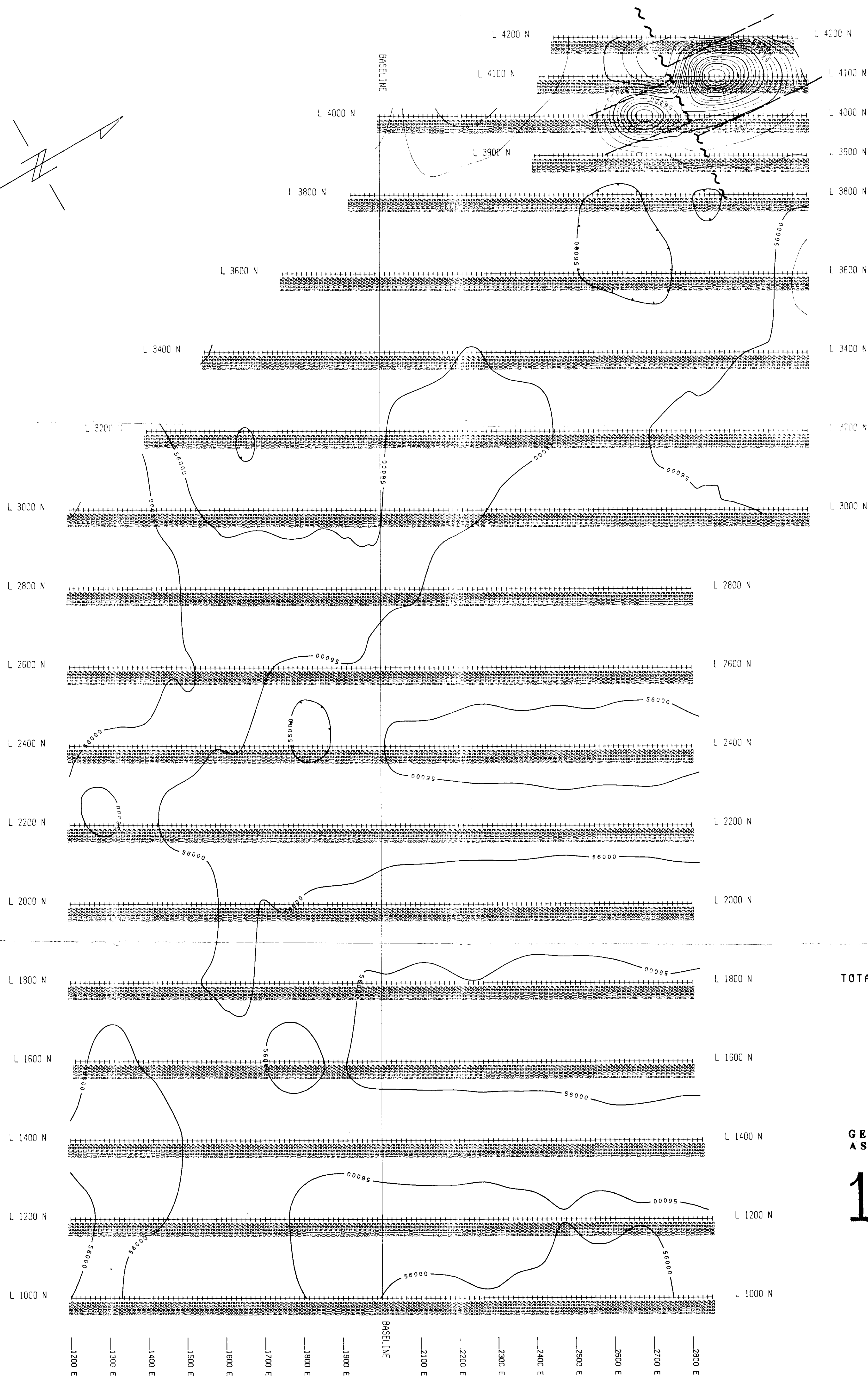
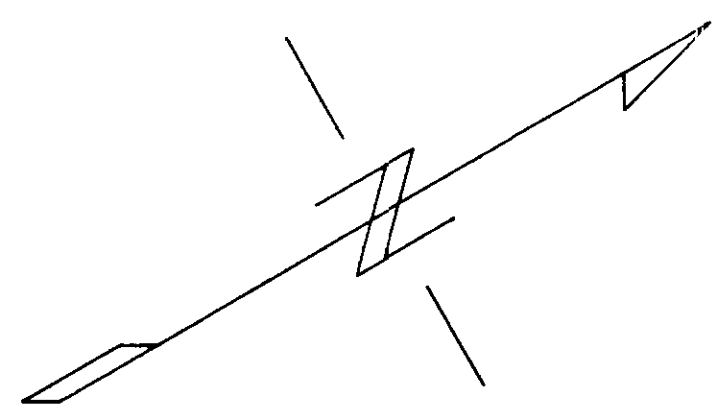
DRAGOON RESOURCES LIMITED

McNEIL CREEK PROPERTY
Cranbrook British Columbia

TOTAL MAGNETIC FIELD PROFILES

NTS 82 F/8 and 82 G/5
MAP SCALE 1 : 5000 DRAWING : 88269-1

LLOYD GEOPHYSICS LIMITED



TOTAL FIELD MAGNETIC CONTOURS

BASIC CONTOUR INTERVAL : 50 nT

INSTRUMENT : EDA OMNI PLUS

FAULT (INTERPRETED)

GEOLOGICAL CONTACT (INTERPRETED)

GEOLOGICAL BRANCH ASSESSMENT REPORT

19,277

SCALE 1 : 5 000

100 0 100 (metres) 200 300 400

DRAGON RESOURCES LIMITED

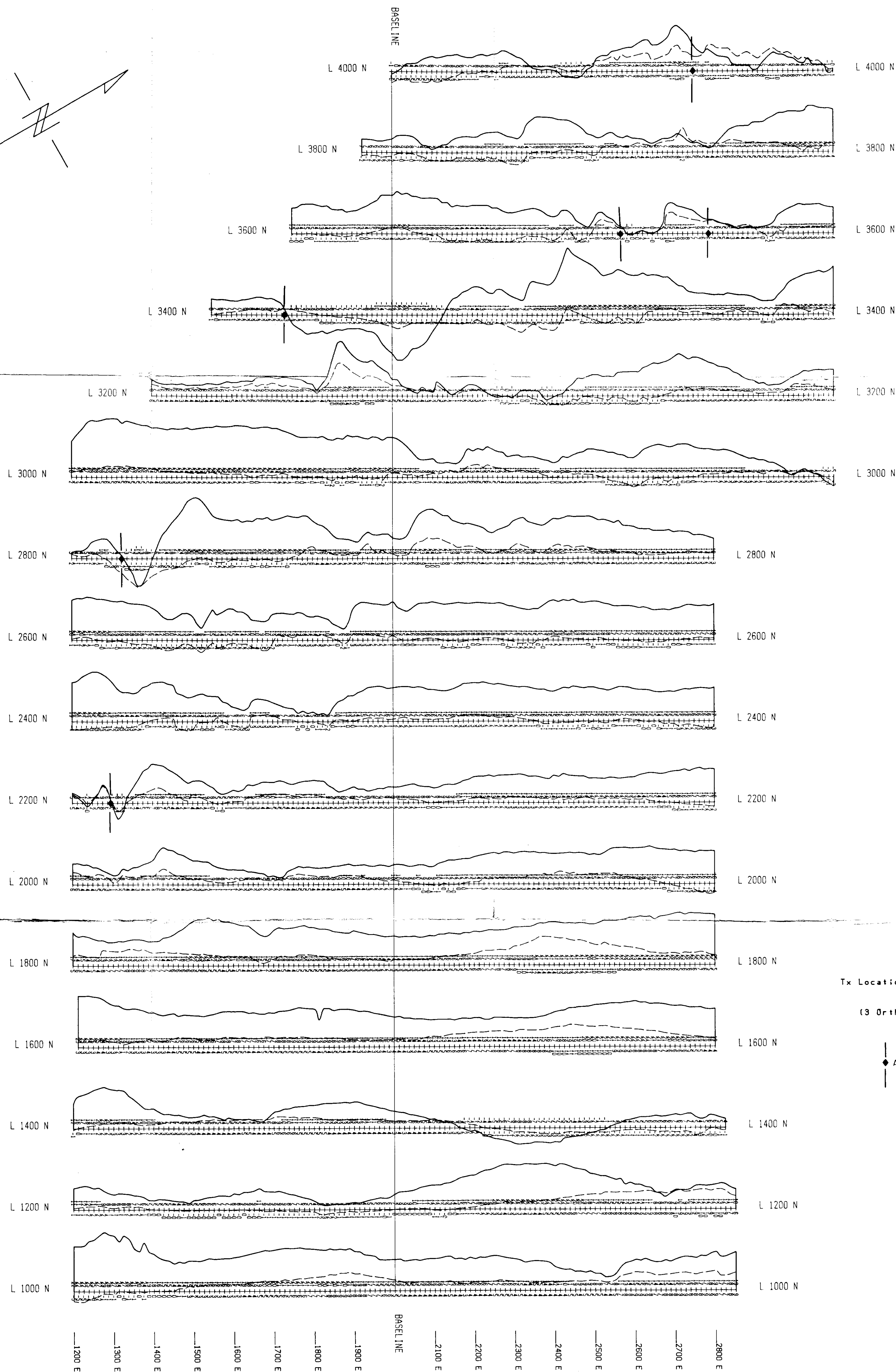
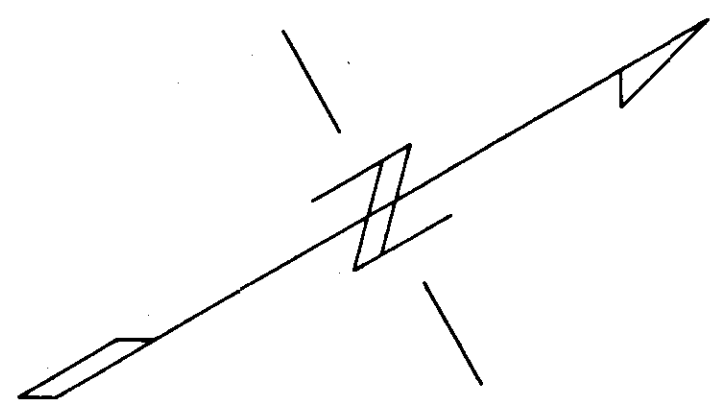
MCNEIL CREEK PROPERTY
Cranbrook British Columbia

TOTAL FIELD MAGNETIC CONTOURS

NTS 82 F/8 and 82 G/5

MAP SCALE 1 : 5000 DRAWING : 88269-2

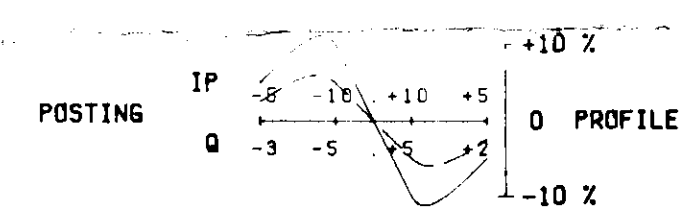
LLOYD GEOPHYSICS LIMITED



VLF - EM PROFILES

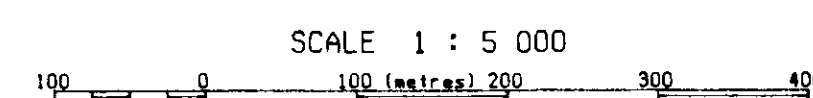
SCALE : 1 cm = 10 %

IN PHASE ———
QUADRATURE - - -



Tx Location : Seattle, Washington (NLK 24.8 kHz)
Instrument : EDA OMNI PLUS
(3 Orthogonal Rx. Coils, Tilt Compensated)

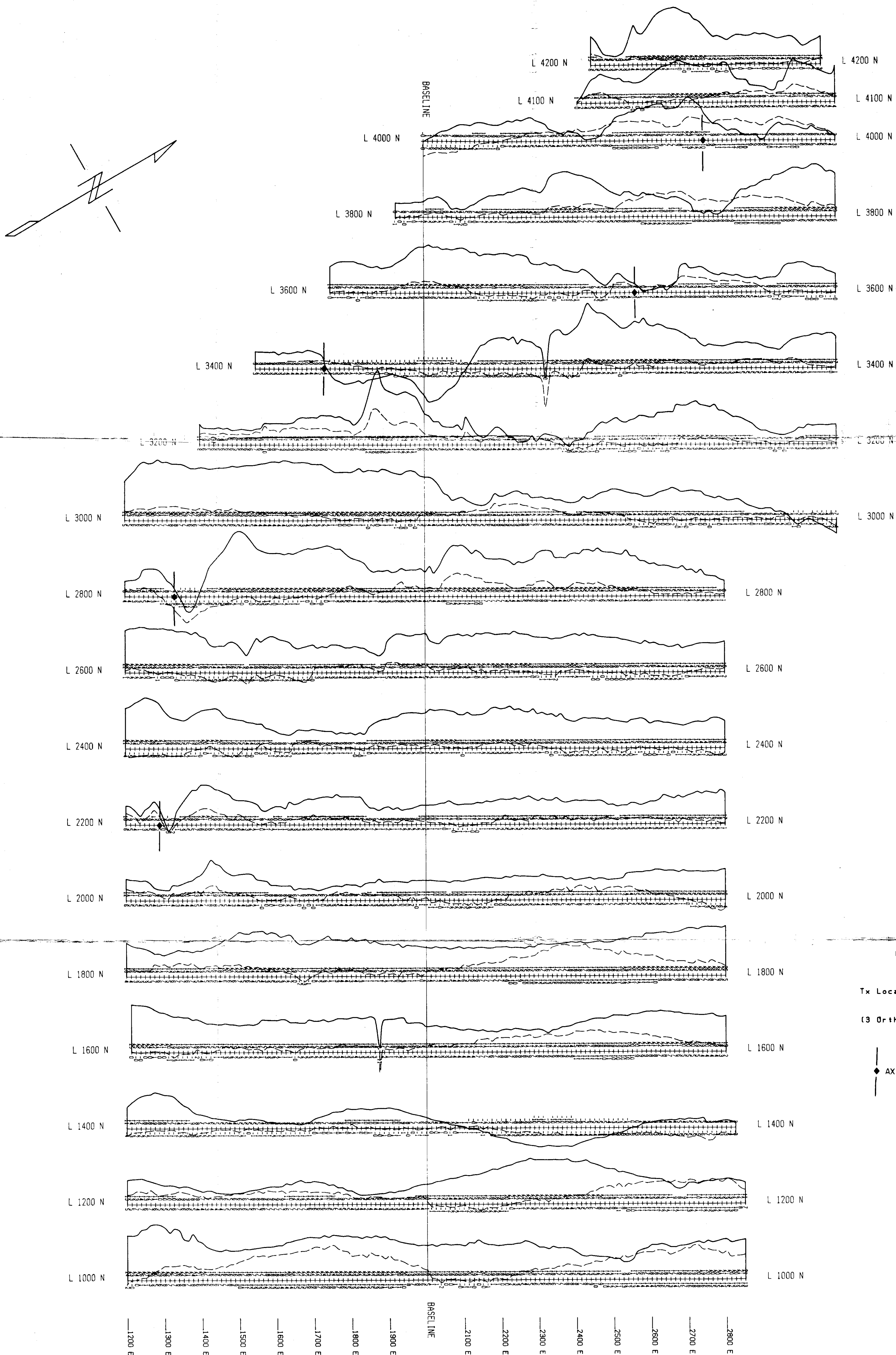
AXIS OF VERY WEAK EM CONDUCTOR



GEOLOGICAL BRANCH
ASSESSMENT REPORT

19,277

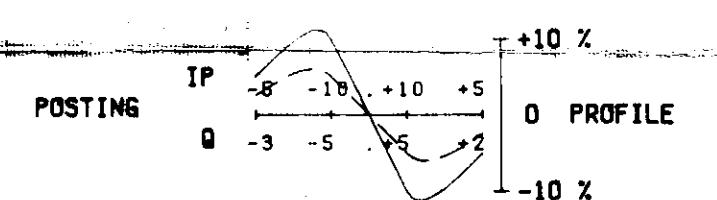
DRAGON RESOURCES LIMITED
McNEIL CREEK PROPERTY Cranbrook British Columbia
VLF-EM PROFILES
NTS 82 F/8 and 82 G/5
MAG SCALE 1 : 5000 DRAWING : 88269-3
LLOYD GEOPHYSICS LIMITED



VLF - EM PROFILES

SCALE : 1 cm = 10 Z

IN PHASE
QUADRATURE



Tx Location : Cutler, Maine (NAA 24.0 kHz)
Instrument : EDA OMNI PLUS
(3 Orthogonal Rx. Coils, Tilt Compensated)

AXIS OF VERY WEAK EM CONDUCTOR

SCALE 1 : 5000

GEOLOGICAL BRANCH ASSESSMENT REPORT

19,277

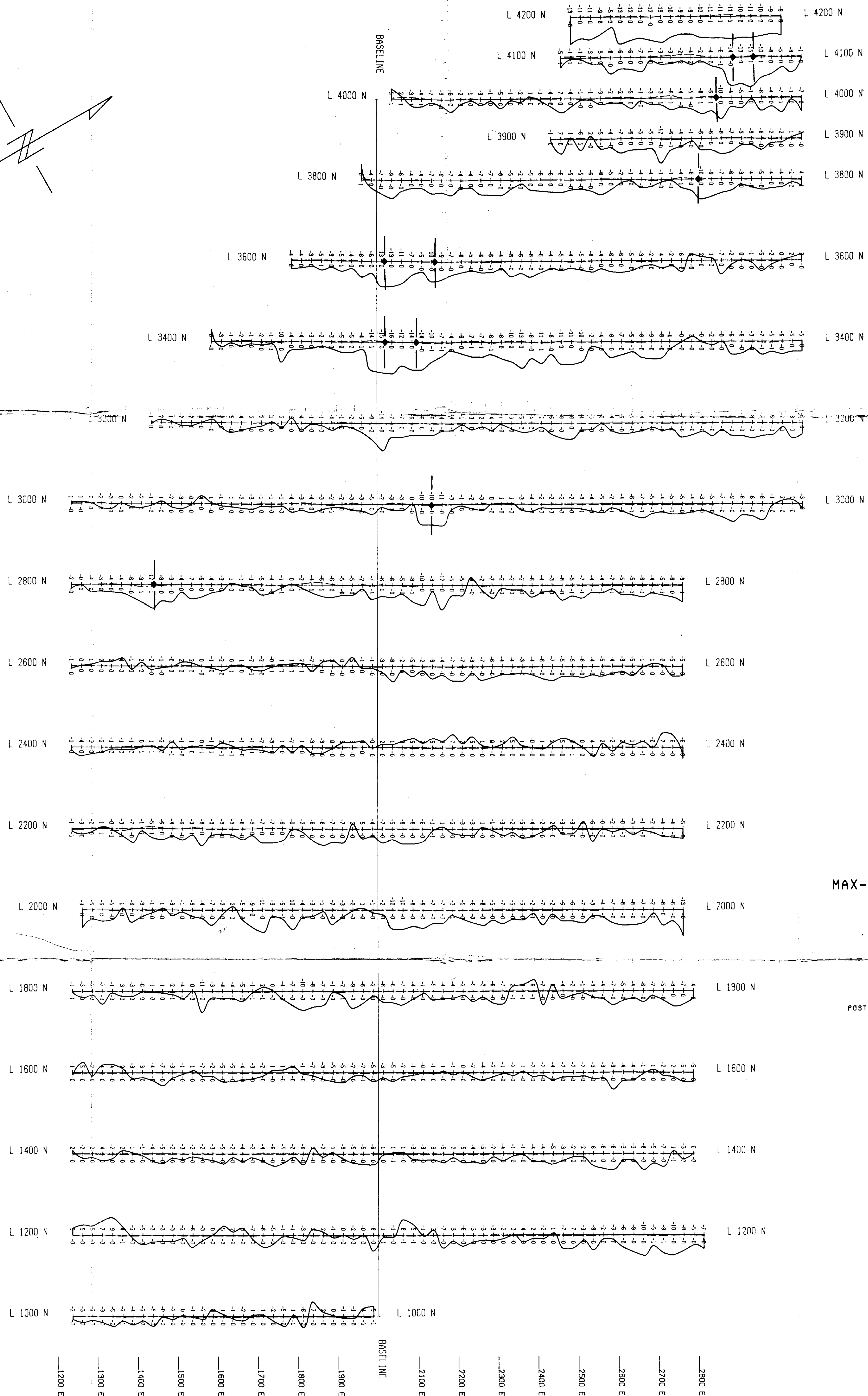
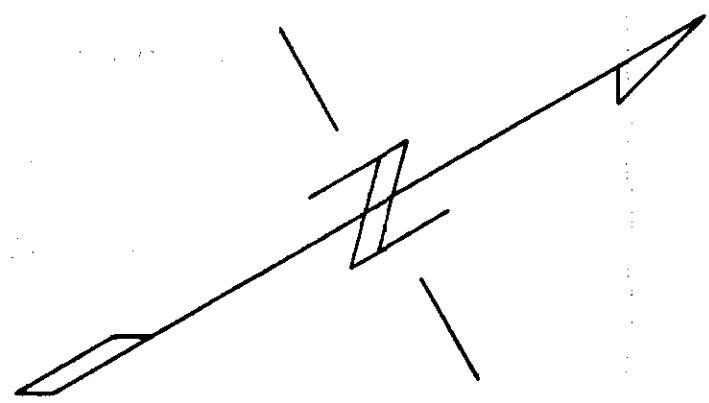
DRAGON RESOURCES LIMITED

McNEIL CREEK PROPERTY
Cranbrook British Columbia

VLF-EM PROFILES

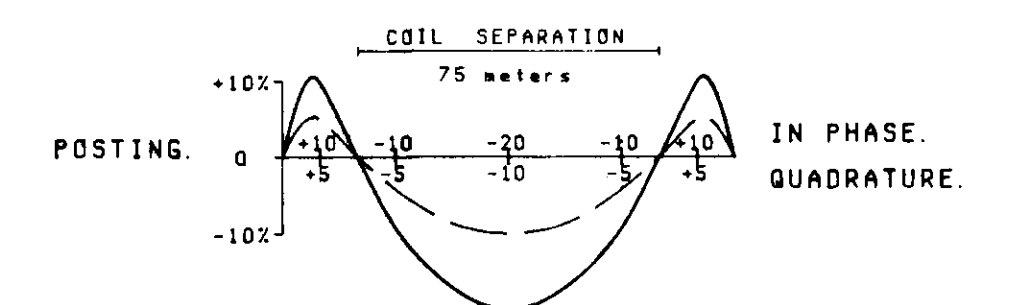
NTS 82 F/8 and 82 G/5
MAP SCALE 1 : 5000 DRAWING : 88269-4

LLOYD GEOPHYSICS LIMITED



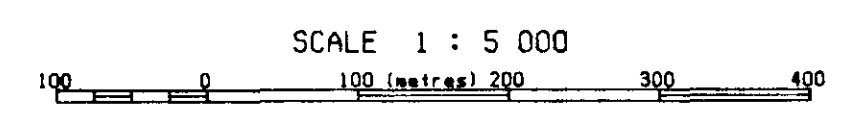
MAX-MIN HORIZONTAL LOOP LEGEND

FREQUENCY 880 Hz
IN PHASE ———
QUADRATURE - - - -



SCALE : 1 cm. = 10 %

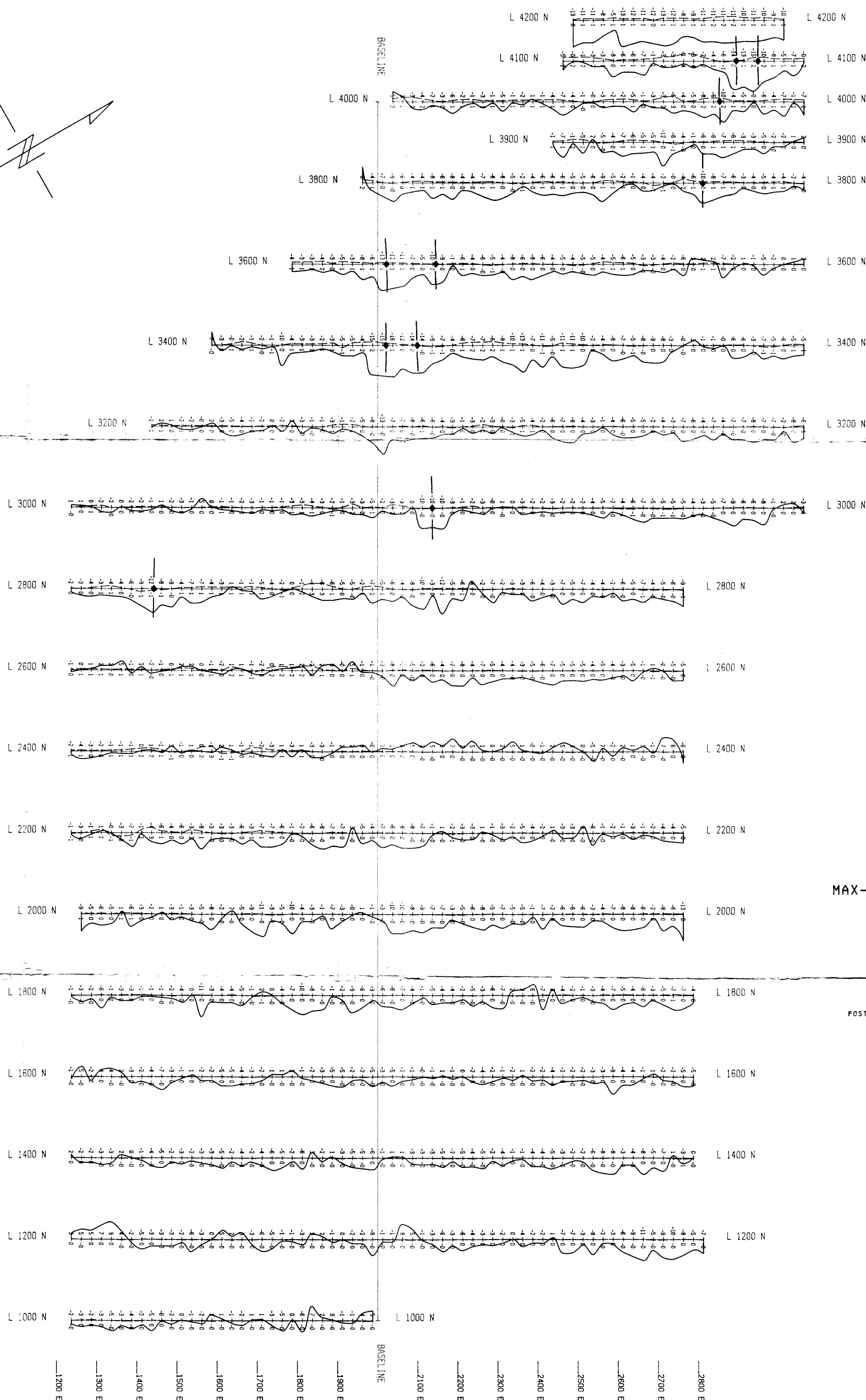
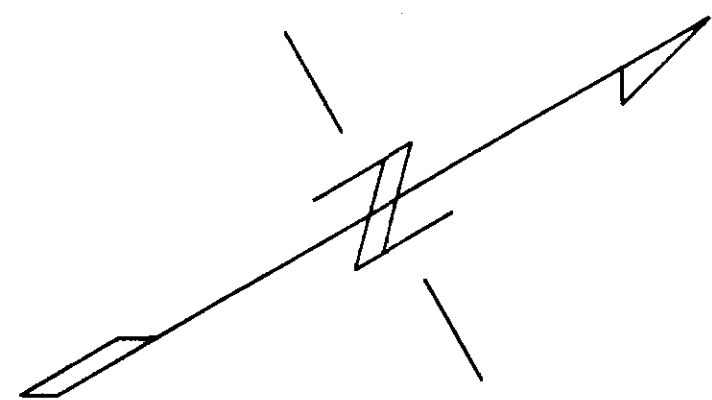
AXIS OF POSSIBLE EM CONDUCTOR



GEOLOGICAL BRANCH
ASSESSMENT REPORT

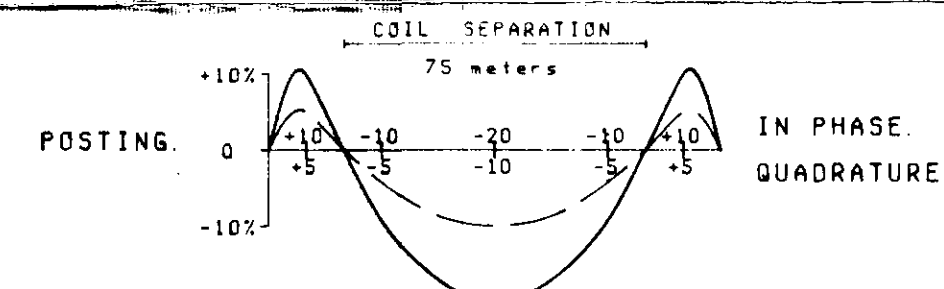
19,277

DRAGON RESOURCES LIMITED
McNEIL CREEK PROPERTY Cranbrook British Columbia
MAXMIN HLEM PROFILES
NTS 82 F/8 and 82 G/5
MHP SCALE 1 : 5000 DRAWING : 88269-5
LLOYD GEOPHYSICS LIMITED



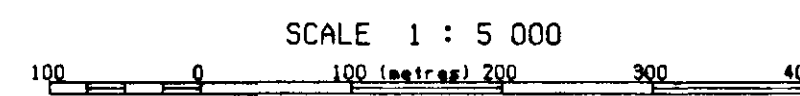
MAX-MIN HORIZONTAL LOOP LEGEND

FREQUENCY 1760 Hz
 IN PHASE ———
 QUADRATURE - - -



SCALE : 1 cm. = 10 %

AXIS OF POSSIBLE EM CONDUCTOR



GEOLOGICAL BRANCH
 ASSESSMENT REPORT

19,277

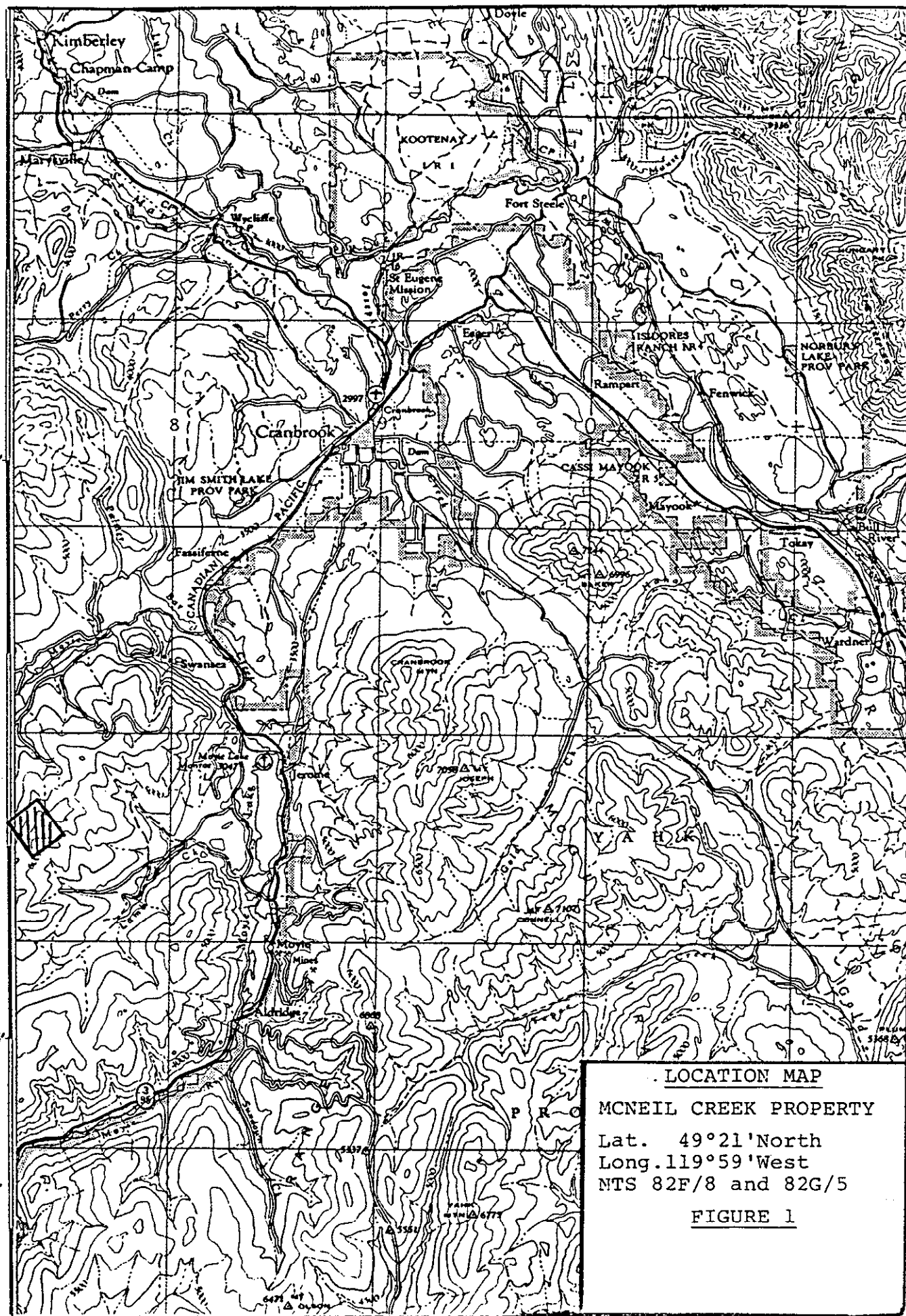
DRAGOON RESOURCES LIMITED

McNEIL CREEK PROPERTY
 Cranbrook British Columbia

MAXMIN HLEM PROFILES

NTS 82 F/8 and 82 G/5
 MAP SCALE 1 : 5000 DRAWING : 88269-6

LLOYD GEOPHYSICS LIMITED



LEGEND

- BEDDING
- CLEAVAGE
- QUARTZ VEIN Inclined, Vertical
- FELSIC DYKE
- FAULT or SHEAR ZONE
- MARKER LOCATION
- TRENCHING - PRE-1988
- 1989
- DRILL HOLE COLLAR LOCATION

GEOLOGICAL BRANCH
ASSESSMENT REPORT

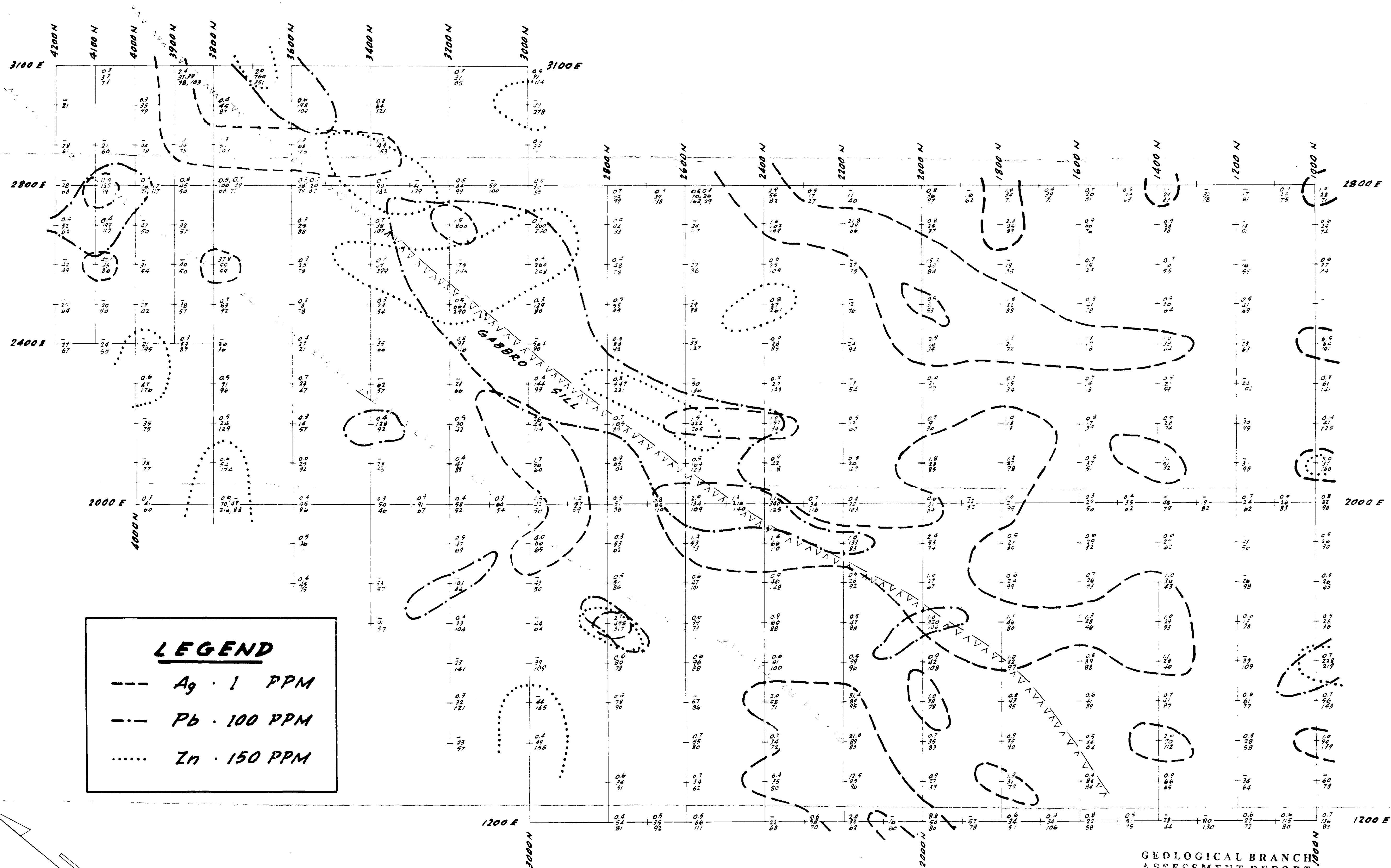
19,277

BAPTY RESEARCH LIMITED / SOUTH KOOTENAY GOLDFIELDS INC.

McNEIL CREEK PROJECT
PROPERTY GEOLOGY

FIGURE 4

DRAWN BY: PK/JM SCALE: 1:5000 DATE: DEC. 17, 1988



GEOLOGICAL BRANCH
ASSESSMENT REPORT

BARTY RESEARCH LIMITED / SOUTH KOOTENAY GOLDFIELDS INC.

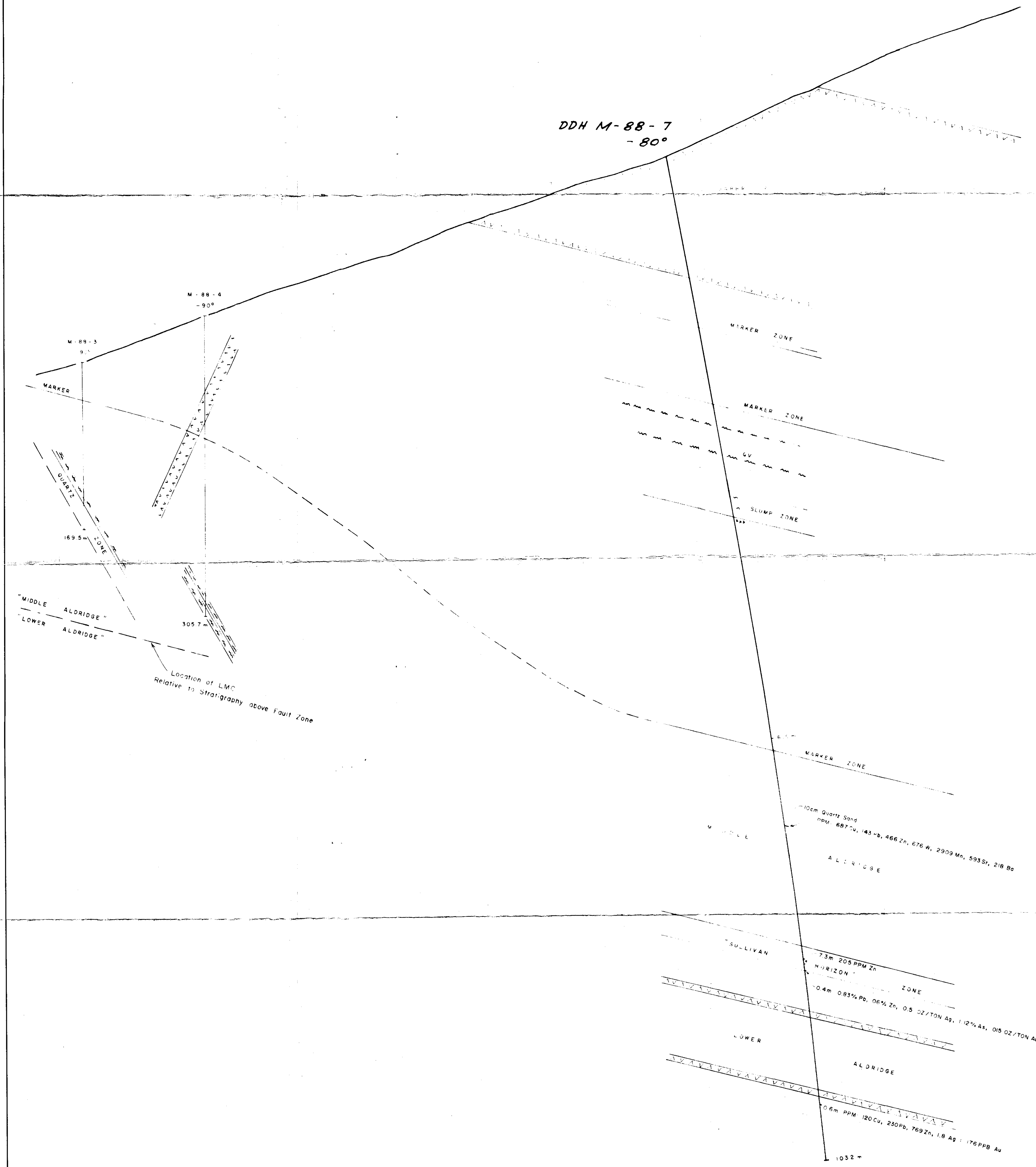
19,277

MCNEIL CREEK PROPERTY

SOIL GEOCHEMISTRY Ag, Pb, Zn

FIGURE 5

DRAWN BY:	JAM	SCALE:	1 : 5000	DATE:	DEC. 10, 1983
LAYOUT BY:	PK/JM				



GEOLOGICAL BRANCH
ASSESSMENT REPORT

19,277

BAPTY RESEARCH LIMITED / SOUTH KOOTENAY GOLDFIELDS INC.

MCNEIL CREEK PROJECT
WEST-EAST CROSS-SECTION
DDH M-88-3, 4 & 7

FIGURE 9

DRAWN BY:	PK/MM	SCALE	DATE
LAYOUT BY:	JMM	1:2000	FEB. 7, 1989

W

E

AXIS
of
MC NEIL SYNCLINECOLLAR
DDH M-89-1

OVERBURDEN

MIDDLE
ALDRIDGE
LOWER
ALDRIDGE
SILL
GABBRO
599.2 m-5600 ft
-5700
-5800
-5900
-6000
-6100
-6200
-6300
-6400GEOLOGICAL BRANCH
ASSESSMENT REPORT

19,277

BAPTY RESEARCH LIMITED/SOUTH KOOTENAY GOLDFIELDS INC.

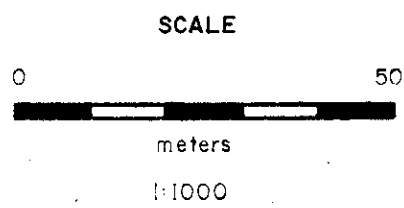
MC NEIL CREEK PROJECT
WEST-EAST CROSS-SECTION
DDH M-89-1

FIGURE 10

DRAWN BY:	PK	SCALE: 1:5000	DATE: APR. 20, 1989
LAYOUT BY:	JMM		

LEGEND

- STRIKE & DIP
- FOLIATION
- MINERALIZED SHEAR
- JOINTS: INCLINED, VERTICAL
- QUARTZ VEIN: STRIKE & DIP
- TRENCH OUTLINE



GEOLOGICAL BRANCH ASSESSMENT REPORT

19,277

Ag - silver
Au - gold
Cu - copper
Pb - lead
Zn - zinc

Sample No., ppm Ag/ppm Pb/ppm Zn/ppm Cu/ppb Au

BAPTY RESEARCH LTD./SOUTH KOOTENAY GOLDFIELDS INC.

MCNEIL CREEK PROPERTY

TRENCH GEOLOGY

WITHIN TRENCHED
AREA, MINERALIZED
ZONE REACHES A MAXIMUM
THICKNESS IN TRENCHES
88-4 & 88-5 WHERE
IT IS UP TO 1.8 m WIDE

