ARIS SUMMARY SHEET

District Geologist, Kamloops   Off Confidential: 91.10.12

ASSESSMENT REPORT 20577   MINING DIVISION: Similkameen

PROPERTY: Lodestone
LOCATION: LAT 49 27 30   LONG 120 50 00
UTM 10 5480446 657015
NTS 092H07W

CAMP: 012 Nicola Belt

CLAIM(S): Lodestone 1-2
OPERATOR(S): Warke, W.B.
AUTHOR(S): Halliwell, D.
REPORT YEAR: 1990, 57 Pages
COMMODITIES
SEARCHED FOR: Iron,Platinum
KEYWORDS: Tulameen Ultramafic Complex,Magnetite,Chromite
WORK
DONE: Geochemical,Drilling
DIAD 613.0 m 4 hole(s);BQ
SAMP 44 sample(s) ;ME

12-05

ACTION:

FILE NO:

DIAMOND DRILLING & TRENCHING REPORT

CLAIMS: Lodestone 1
Lodestone 2
Lodestone 3
JA #1 Fr.

MINING DIVISION: SIMILKAMEEN

N.T.S.: 92H 7W

LATITUDE: 49o 28' North

LONGITUDE: 120o 49' West

OWNER: Imperial Metals Corp.

OPERATOR: Tiffany Resources Inc.

CONSULTANT: Douglas R. Halliwell

AUTHOR: Douglas R. Halliwell, M.Sc.(Appl.), B.Sc., F.G.A.C.

DATE: November 30, 1990

GEOLOGICAL BRANCH
ASSESSMENT REPORT

20,577

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APPENDICES

1.0 INTRODUCTION

The writer was retained by Tiffany Resources Inc. from September 24, 1990 until October 5, 1990 to supervise a diamond drilling and trenching program on its Lodestone 1 claim near Coalmont, B.C. The purpose of the program was to investigate the source of platinum in soil geochemical anomalies located by an exploration program carried out by Dolmage Campbell and Associates in 1987. The project report describes the results of the drilling and trenching activities.

2.0 LOCATION AND ACCESS

The Lodestone claims are located 20 kilometres west of Princeton, B.C. and 10 kilometres southwest of Coalmont, B.C., centred on the summit of Lodestone Mountain. The co-ordinates of the area are latitude 49o 28' north and 120o 49' west. The diamond drill operated in an area approximately one(1) kilometre to the southeast of the summit. The elevation of the claims is 5,000-6,200 feet (1515-1870 metres) above sea level on gently sloping land.

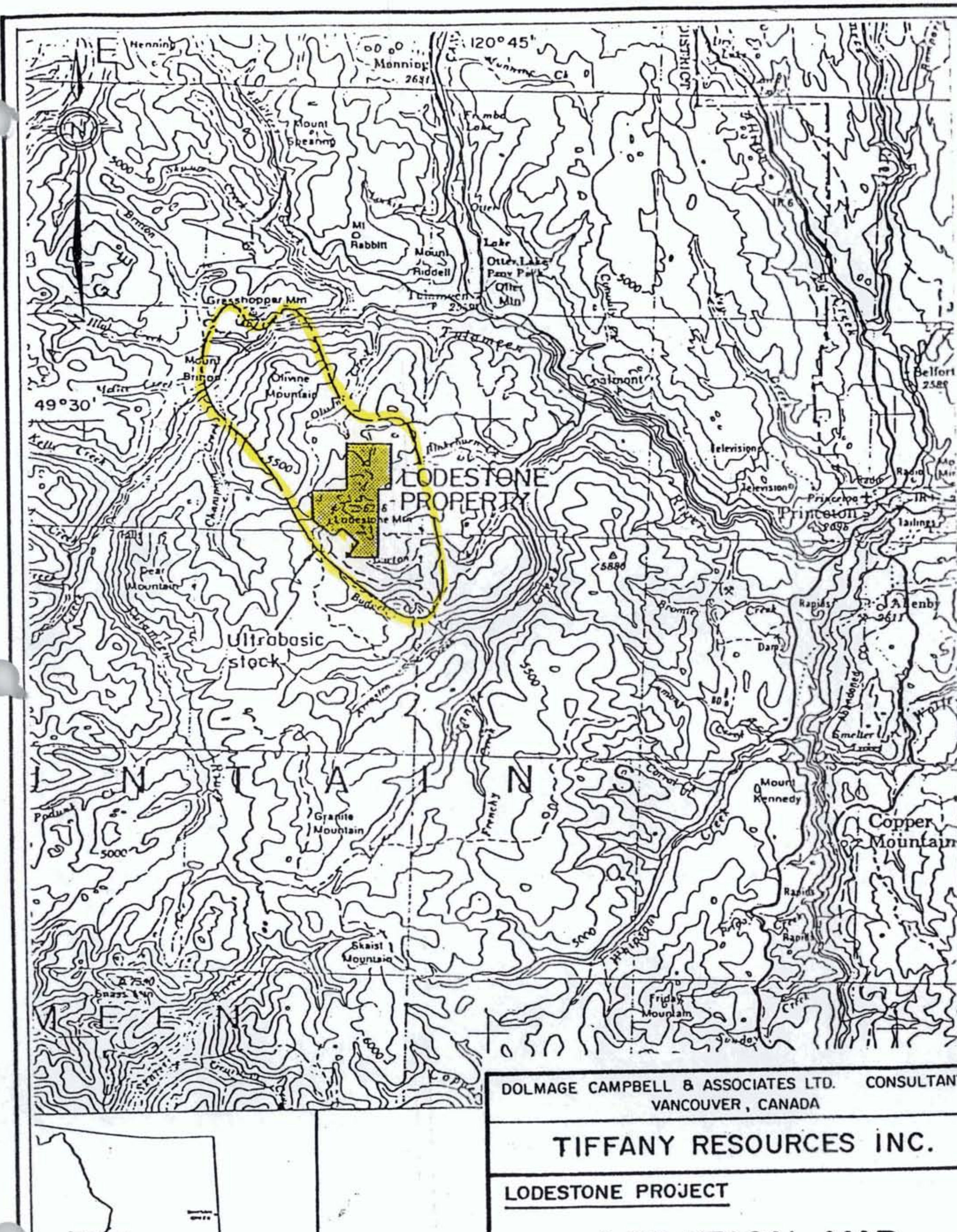
Access is by secondary road (Blakeburn Road) and a network of logging roads (including the Lodestone Lake Brigade Trail) southwest from the town of Coalmont, B.C. to Lodestone Lake and thence southeast to the drilling area. These roads provide direct access to much of the property (Figure 1). Heavy snowfalls limit the field season to the period of late June through early to mid-September.

3.0 PROPERTY

The property is owned by Imperial Metals Corporation and is operated by Tiffany Resources Inc. of Vancouver. The claims were staked and related to legally abandoned claims by Ablett, Dalin, Jardine and Bow of Amex Exploration Services Ltd. of Kamloops, B.C. in 1978.

The property consists of the following claims (Figure 2).

Claim Name	Record No.	No.of Units	Due Date	Staking Date
Lodestone 1	456	18(6Sx3E)	Oct.19/91	Sept.23/78
Lodestone 2	457	12(3Wx4S)	Oct.19/91	Sept.20/78
Lodestone 3	458	16(4Nx4E)	Oct.19/91	Sept.22/78
JA #1 Fr.	723	Fraction	Sept.6/91	-
TOTAL	4 claims	46 units		



DOLMAGE CAMPBELL & ASSOCIATES LTD. CONSULTANTS
VANCOUVER, CANADA

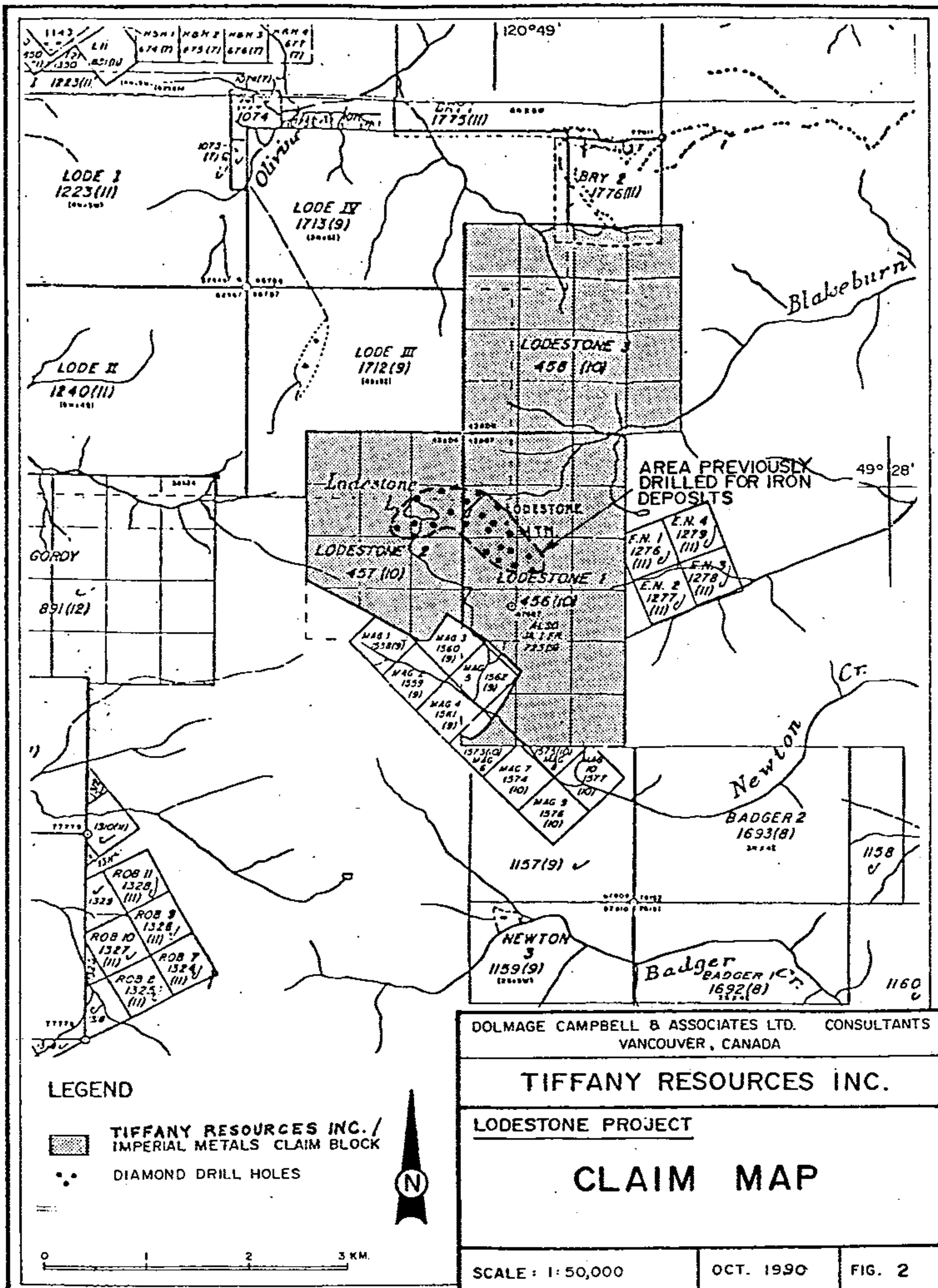
TIFFANY RESOURCES INC.

LODESTONE PROJECT

LOCATION MAP

SCALE: 1:250,000	OCT. 1990	FIG. 1

CHONG



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VANCOUVER, CANADA

TIFFANY RESOURCES INC.

LODESTONE PROJECT

CLAIM MAP

SCALE: 1:50,000 | OCT. 1990 | FIG. 2

All of the drilling and trenching took place in the Lodestone 1 claim.

4.0 PREVIOUS WORK

The Tulameen area is the only area in Canada to have produced native platinum and platinum-iron alloys in placer deposits continuously for the past 100 years. The platinum nuggets are fairly unique in Canada and are closely intergrown with chromite, confirming that they were derived from the Tulameen Ultramafic Complex. Major creeks draining Lodestone Mountain to the west, north and east have all produced native platinum and platinum-iron alloys (isoferroplatinum, tulameenite, etc.).

The earliest government geological mapping of the Princeton-Tulameen area by C. Camsell (1910-13) and H.M.A. Rice (1944-47) lead to the discovery of the Tulameen Ultramafic Complex, a large body of pyroxenite enclosing smaller bodies of peridotite-dunite (GSC Memoirs 26, 243).

The petrology of the Tulameen Ultramafic Complex was the subject of a study by Findlay (1963). The geochemistry of the platinum group elements in the Complex was the subject of a M.Sc. thesis at the University of Alberta by St.Louis(1980-84) and later studies by St.Louis et al (1986); the report describes the relative abundances of Pt, Pd, Os, Ir, Rh and Au in the various lithologies present and describes the mineralization with respect to ore and gangue mineralogy, concentrations, alteration and host lithology; comparing it to mineralization at other Alaskan-type complexes. Chromite occurrences within the Complex were shown to contain several thousand ppb Pt. Current work by S.J. Cook at U.B.C. studies the distribution and behaviour of platinum in the soils of the Complex; data was presented at the May 1990 G.A.C.-M.A.C. Annual Meeting in Vancouver and again in October 1990 at the Vancouver G.S.C. Office; it was shown that concentration of platinum in the soil is sensitive to till type and the mesh fraction analyzed. Platinum concentrations in the minus 70 mesh fraction of C-horizon soils from the Grasshopper Mountain area range from 2 to 885 ppb and are strongly dependent on MgO content (i.e. amount of contained dunite). Till geochemistry appears to provide an effective means of delineating dispersion of platinum-bearing drift.

The earliest available assessment report from the summit area of Lodestone Mountain includes 1"=1/2 mile scale geological mapping by J. Ruckmick (July 1956); a 1 3/4 mile long, northwest-oriented, elongate lens of peridotite is mapped east-northeast of the summit within rocks dipping 55drg-70o west-southwest.

Magnetic surveys and soil sampling for Cu were carried out north of Lodestone Lake by Bethex Explorations Ltd. and Sicintine Mines ASP Group in 1968-70. A 1970 magnetometer survey is the first reported exploration activity in the area by Imperial Metals & Power Ltd. In October 1969, Fort Reliance Minerals and Surveymin Ltd. carried out exploration in FRM claim Blocks A (south of Olivine Mountain), B (southeast of Olivine Creek), C (east and southeast of Lodestone Mountain- in the area of the present-day Lodestone claims) and D (south of Lodestone Mountain). Ruckmick's "peridotite body" east-northeast of the summit of Lodestone Mountain was re-mapped by D.C. Findlay as "olivine pyroxenite" and found to contain up to 195 ppm Cr in Block A and up to 94 ppm Cr (and 5000 ppm Cu) in Block C. The belt of olivine pyroxenite was shown to be faulted-off to the southeast by a northeast-trending fault. The nearby Hop claims were also explored during this period.

The area northwest of the summit of Lodestone Mountain was re-staked as the Lode I - Lode IV claims and explored for base and precious metals by A & M Exploration Ltd. and the Lodestone Mining Corporation Ltd. in November 1983 using B horizon soil, silt and rock sampling techniques. The December 1983 report by D.G. Allen describes the results of exploration in the claims and placer leases for alkalic Cu-Au porphyry deposits; podiform Pt-Cr-Ni chromitite deposits (+/- diamonds) within olivine clinopyroxenites, dunites and peridotites; and Pt-Cu mineralization associated with sulphide-rich horizons within hornblende pyroxenites ("all major world PGE producers produce Pt from sulphide-rich horizons"). A & M and Inter-Canadian Development Corporation carried out 1:5,000 scale geological mapping, soil sampling, stream sediment sampling, VLF-EM and magnetic surveys in 1986. J. Gravel et al report values of 60-212 ppb Pt in ultramafic units and elevated Au and Cu values in basic units when ICP analyses and precious metal assays were carried out at Acme Analytical Labs. Seattle-transmitter VLF-EM surveys proved useful in detecting (northeast-trending?) shear zones. Additional soil sampling and magnetic surveys were carried out in 1987 by Dave Stewart and Inter-Canadian Development Corporation; soil sampling surveys yielded values as high as 62 ppb Pt, 986 ppm Cr, 60 ppm Pd, 152 ppb Au and 535 ppm Cu. Inter-Canadian's 1988 soil sampling, VLF-EM and magnetic surveys as reported by D.J. Brownlee and D.J. Allen delineated four(4) possible target areas in the Lode I-IV claims; the Lode claims are contiguous and immediately northwest of the Lodestone claims. Stewart, Allen and Brownlee collected additional soil samples at 25 metre station-spacings within anomalous areas during 1988. One 400 metre by 400 metre (10-20 point) anomaly lies within olivine clinopyroxenite along the Lodestone 2- Lode III claim boundary approximately one(1) kilometre north to north-

northwest of Lodestone Lake; soils within this anomalous area contain 12-124 ppb Pt, 24-50 ppb Pd and 17-68 ppb Au.

Just to the east of the Lodestone claims lie the Pete, Hop, Dan and JR claims of Platonia Development and Sungold Development International Corporation. In 1988; 1:50,000 scale geological mapping, soil sampling and VLF-EM surveys here succeeded in detecting barren, epidotized northeast and east-northeast trending faults as well as (Cu-Au) mineralized east-southeast and north-northeast fractures. Hydrothermally altered felsic intrusives (syenodiorite, syenogabbro) were found to contain pyrite, chalcopyrite and bornite in fractures and as disseminations as well as elevated precious metal values of up to 0.106 oz/T Au and 3.72 oz/T Ag (Taylor, 1986). D.P. Taylor also reported Cu-Au soil anomalies in the northwest corner of the grid, near the Lodestone claims. A copy of the claim map acquired by the author in Princeton on September 24, 1990 shows the Pete and Also claims lying along the eastern boundary and within the Lodestone 1 claim.

The Lodestone claims were extensively explored for iron in the 1950's and 1960's by United States Steel and Imperial Metals and Power Ltd. A two(2)-volume feasibility study prepared by Wright Engineers (1970) for Imperial Metals estimated iron reserves at 90 million tons proven, 115 million tons probable and 160 million tons inferred. A grade of 17.56 % Fe was calculated for the proven reserves. The proven orebody also contains substantial amounts of Ti and V, with scattered occurrences of disseminated chalcopyrite, pyrrhotite and pyrite; often at the Tulameen Complex-Nicola Group contact (St.Louis, 1987).

The first record of platinum exploration is documented in Imperial Metals Corporation's March 1984 assessment report by I.R. Corvalan on the Lodestone 1, 2 and 3 claims (and the fractional claim). Corvalan selected 99 drill core samples from three(3) 1973 iron exploration holes (3, 8, 9) located east-southeast of Lodestone Lake and analyzed these by ICP for 30 elements; 23 samples received Fe, Cr and Pt assays. None of the samples showed anomalous or significant values in Cr or Pt, with maximum values being 0.07% Cr and 0.005 oz/T Pt. Hydrothermal alteration associated with the pyroxenite of the Lodestone claims was not believed to be related to Pt mineralization.

In 1986, R.L. Wright of Imperial Metals carried out a program of geological mapping and rock geochemistry on the Lodestone claims. A total of 37 rock samples representing the main ultramafic rock types were analyzed for Pt, Pd and Au by fire assay and for 30 other elements by the ICP method at Acme Analytical Laboratories. In addition, streams draining the property were sampled for heavy metals. No gold or platinum mineralization or geochemical anomalies were discovered during this program. Wright indicated that, although the results were not encouraging (with only modest increases in Ni, Pd and Pt in the ultramafics), the work to date had just "scratched the surface" because of the extensive overburden over much of the property. Furthermore, background values were obtained from known platinum placers; this made the sampling and/or analyses suspect. Results of this mapping appear in Section 5.2 of this report. The first detailed petrographic descriptions of lithologies present on the property appeared in this 1986 report. The report recommended that the Lodestone 1 and 2 claims be kept in good standing while the Lodestone 3 claim might be allowed to lapse.

The St.Louis February 1987 report compiles previous geological and geochemical data. The geological mapping appears in this report (Figure 5). It describes five(5) distinct potential hosts for PGE and Au mineralization on the Lodestone claims. These are magnetite-rich, sulphide-rich and magnetite/sulphide-rich hornblende clinopyroxenites as well as hydrothermally altered sulphide-bearing felsic intrusives and the the sulphide-rich contact between the Tulameen Complex and the Nicola volcanics. St.Louis recommended examination, sampling and assaying of existing Imperial Metals' core, percussion cuttings and logs; detailed geological mapping and bedrock sampling of magnetite- and sulphide-enriched zones; trenching and drilling (St.Louis, 1987).

In November 1987, Dr. J.A. Chamberlain and R. Wares of Dolmage Campbell & Associates (1975) Ltd. completed a report on the 1987 field program for Tiffany Resources Inc. and Imperial Metals. A new north-south grid was established for the purpose of carrying out 1:10,000 scale geological mapping and 200 metre by 50 metre soil sampling (complete with 100 metre by 25 metre fill-in soil sampling in selected anomalous areas). A total of 1668, mostly B-horizon, soil samples were analyzed for Pt, Pd, Rh, Au and total PGE's. The geochemical survey resulted in the discovery of a cluster of platinum anomalies in an overburden-covered part of the property. The anomalies peaked at 9 to 18 times the standard deviation and are considered to be highly significant, requiring follow-up work to determine their origin. Anomaly thresholds of 63 ppb Pt, 21 ppb Pd and 40 ppb Au were used to delineate anomalous areas; values as high as 362 ppb Pt (885 ppb Pt was the highest value reported by Cook (1990) at Grasshopper Mountain), 189 ppb Pd, 83 ppb Au and 11 ppb Rh were obtained. Areas of soil anomalies are believed to be underlain by largely by "Magnetite Series" rocks (i.e. clinopyroxenites other than olivine clino-pyroxenites. Platinum anomalies appear to be related to northeast cross-faults which are discernable from aeromagnetic discontinuities and photogeological lineaments. Trenching, sampling and diamond drilling were recommended.

In September 1989, a six(6) hole, 2010 foot long diamond drilling program was carried out to test the platinum in soil anomalies within the "Magnetite Series" rocks. Strong faulting, but no significant mineralization was intersected and no chromite positively identified. The report by G. Partridge for Tiffany and Imperial Metals recommended more and deeper drilling in the same area to explore the contact area between the "Magnetite Series" and the lower olivine-bearing suite (Partridge, 1989).

5.0 GEOLOGY

5.1 Regional Geology

The drilling and trenching area is underlain by rocks of the Tulameen Ultramafic Complex. The complex is an elongated oval shape in plan with its long axis trending northwest. The complex has a surface area about 57 square kilometres (Figure 3).

The late Triassic Tulameen Complex intruded Triassic metavolcanic and metasedimentary rocks of the Nicola Group at a time of regional structural deformation. The ultramafics of the complex are in contact to the west with the Eagle granodiorite; part of the Coast Intrusives and a border phase which is believed to be slightly younger than the ultramafics, but which may join them at depth (Finlay, 1963). Tertiary sediments, including coal, unconformably overlie the ultramafic rocks on their eastern margin. There is evidence in the form of folded banding in the contact areas and elsewhere to indicate that the Tulameen Complex was at least partly solidified during emplacement into its present environment. Any primary magmatic layering that developed prior to emplacement would have been subjected to mixing and related disruptions.

The Tulameen Complex was shown by Findlay (1963) to have a core of olivine clinopyroxenite surrounded by hornblende clinopyroxenite and, in turn, syenogabbro. The Complex is an Alaskan-type or zoned intrusion with a dunitic core (with lesser peridotite), a felsic intrusive periphery and transitional units of olivine clinopyroxenite surrounded by hornblende and/or magnetite clinopyroxenite. The contacts between the ultramafic units are somewhat gradational and are difficult to pin-point in the field. The bodies of dunite up to several kilometres wide occur mostly in the northern parts of the Complex near Grasshopper Mountain (St.Louis et al, 1986).

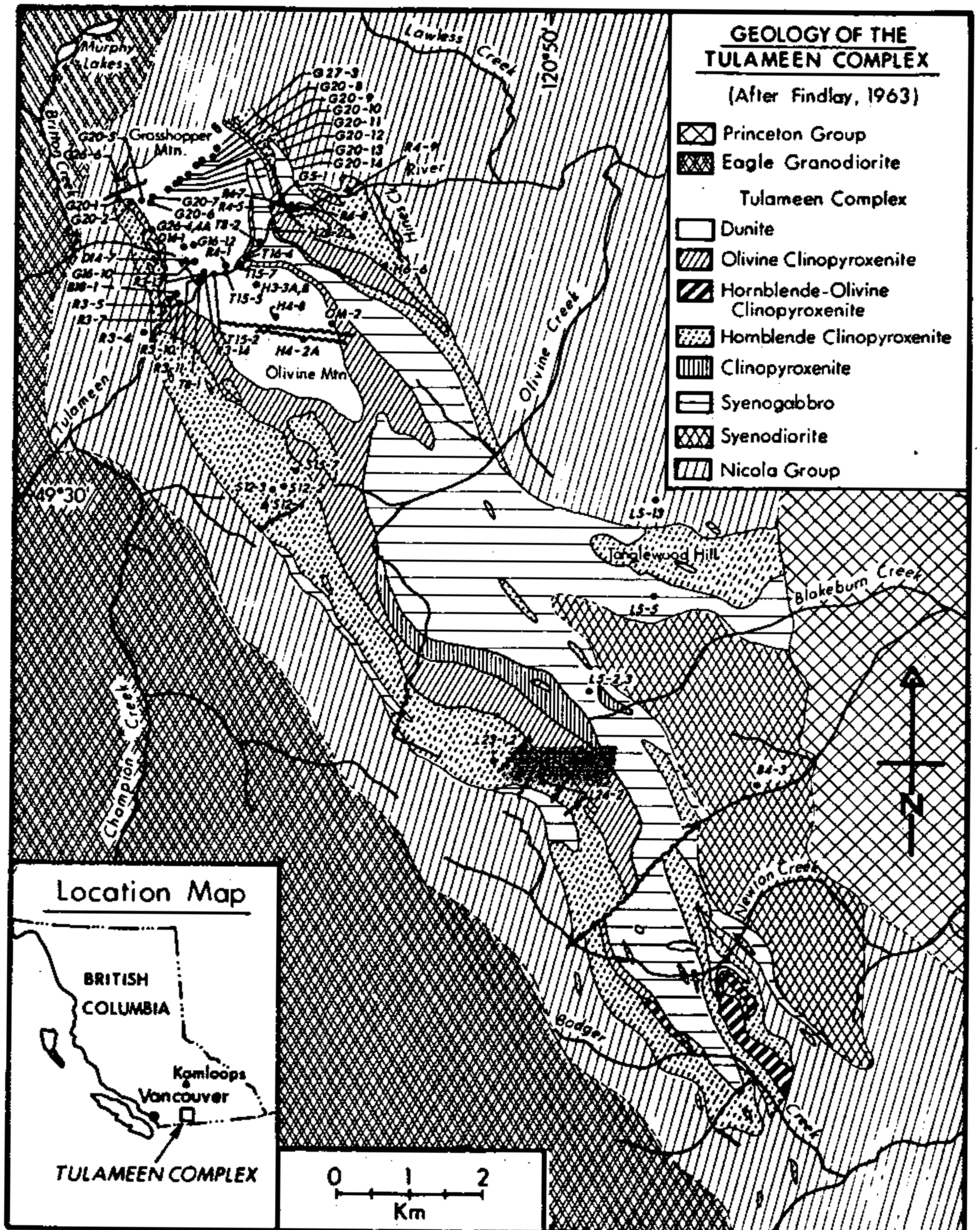


FIG. 3. Location and local geology (after Rice, 1947; and Findlay, 1963, 1969).
After St. Louis et al, 1986.

Interpretation of aeromagnetic domains and photogeological lineaments reveals several probable faults trending northeasterly across the Complex. Other probable faults trend northwest, parallel to its long axis. The vertical east-west cross-section (Figure 4) shows the regional structure of the Tulameen Ultramafic Complex.

5.2 Property Geology

The Lodestone claims centre on the summit of Lodestone Mountain (Figure 5). The rocks in this vicinity are hornblende- and magnetite-rich clinopyroxenites (magnetite series), commonly containing some 12% to 25% magnetite, with the olivine clinopyroxenite and dunite core of the Alaskan-type ultramafic complex outcropping to the north, northeast and east of the summit and Lodestone Lake. The magnetite series occurs as a poorly-defined band 100 to 300 metres wide and up to 1500 metres long which trends north-northwest parallel to the long axis of the Tulameen Ultramafic Complex. The Nicola Group underlies approximately half of the Lodestone 2 claim and one-quarter of the Lodestone 1 claim. The southwest corner of the Lodestone 2 claim lies very close to the Nicola Group-Eagle Granodiorite contact.

Despite the sparse outcrops and roadcuts, 1:20,000 scale geological mapping resulted in the discovery of rare dunite outcrops in sparsely vegetated areas northeast of the Lodestone Peak summit within the mappable olivine clinopyroxenite unit. Peridotite occurs within the dunite as veins, patches and disseminations. Rare disseminated grains of chromite were reported within the dunite. Serpentinite and talc were reported along fractures. The northeast corner of the Lodestone 3 claim may be a second ultramafic centre, for the Tanglewood Hill Ultramafic Zone. Other non-mappable units included biotite-chlorite schist along the western contact of the Zone and light grey dacite (Eagle Granodiorite-related?) porphyry dykes in the southwest corner of the Lodestone 2 claim similar to those observed near Grasshopper Mountain. (Wright, 1986).

Detailed geological mapping of the Lodestone claims (Wright, 1986; Chamberlain & Wares, 1987) indicates that the magnetite series dip 30o-50o and thus underlie the southwestern part of the claims. The northeastern part of the claims is underlain by olivine clinopyroxenite and lesser dunite and peridotite, which thus form the structural footwall of the magnetite series.

Structural mapping is difficult since the northern, southern and western extremities of the claims are overburden-covered. A prominent set of northeasterly-trending discontinuities indicated on the aeromagnetic map (8530G, Princeton) coincides with

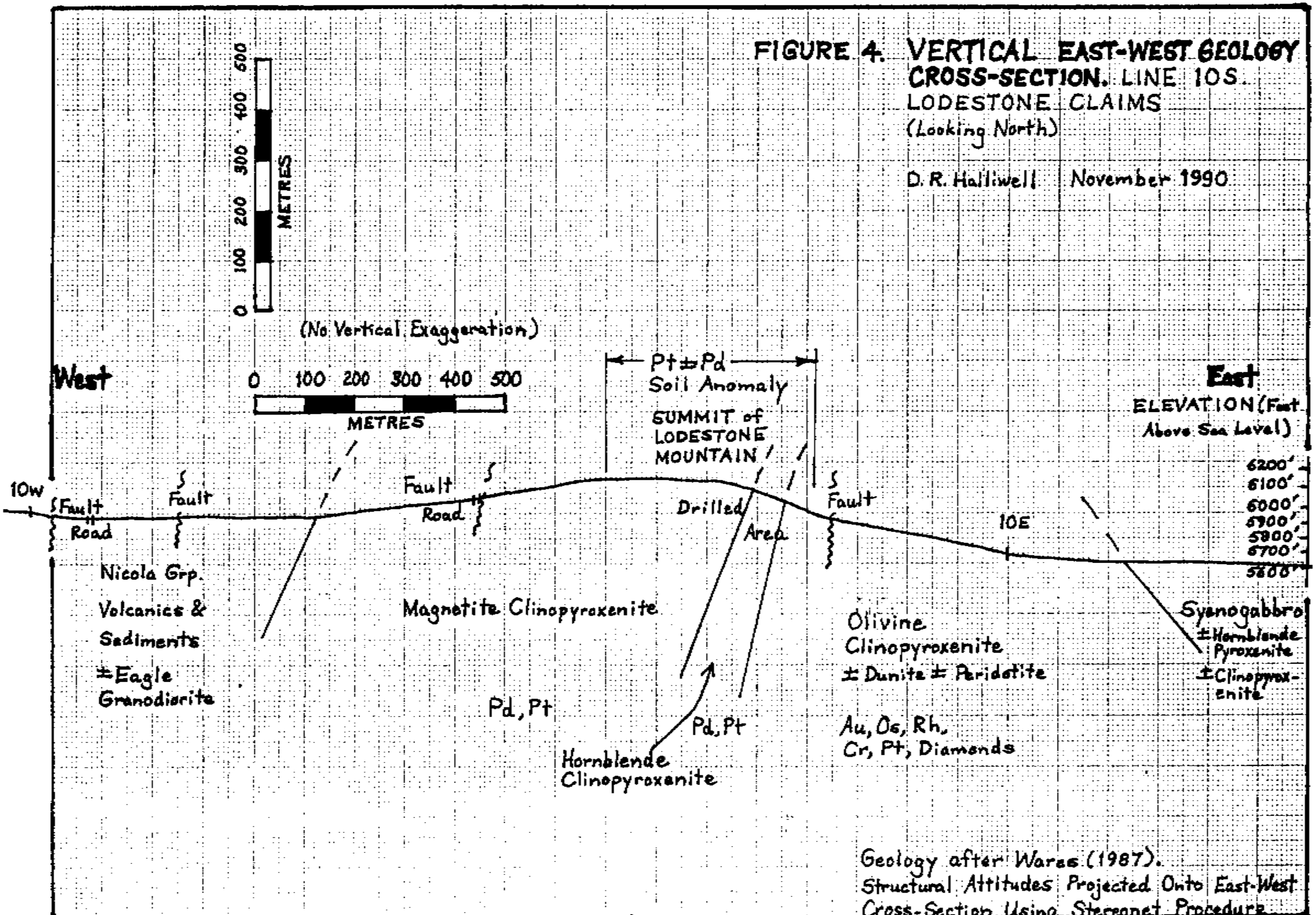
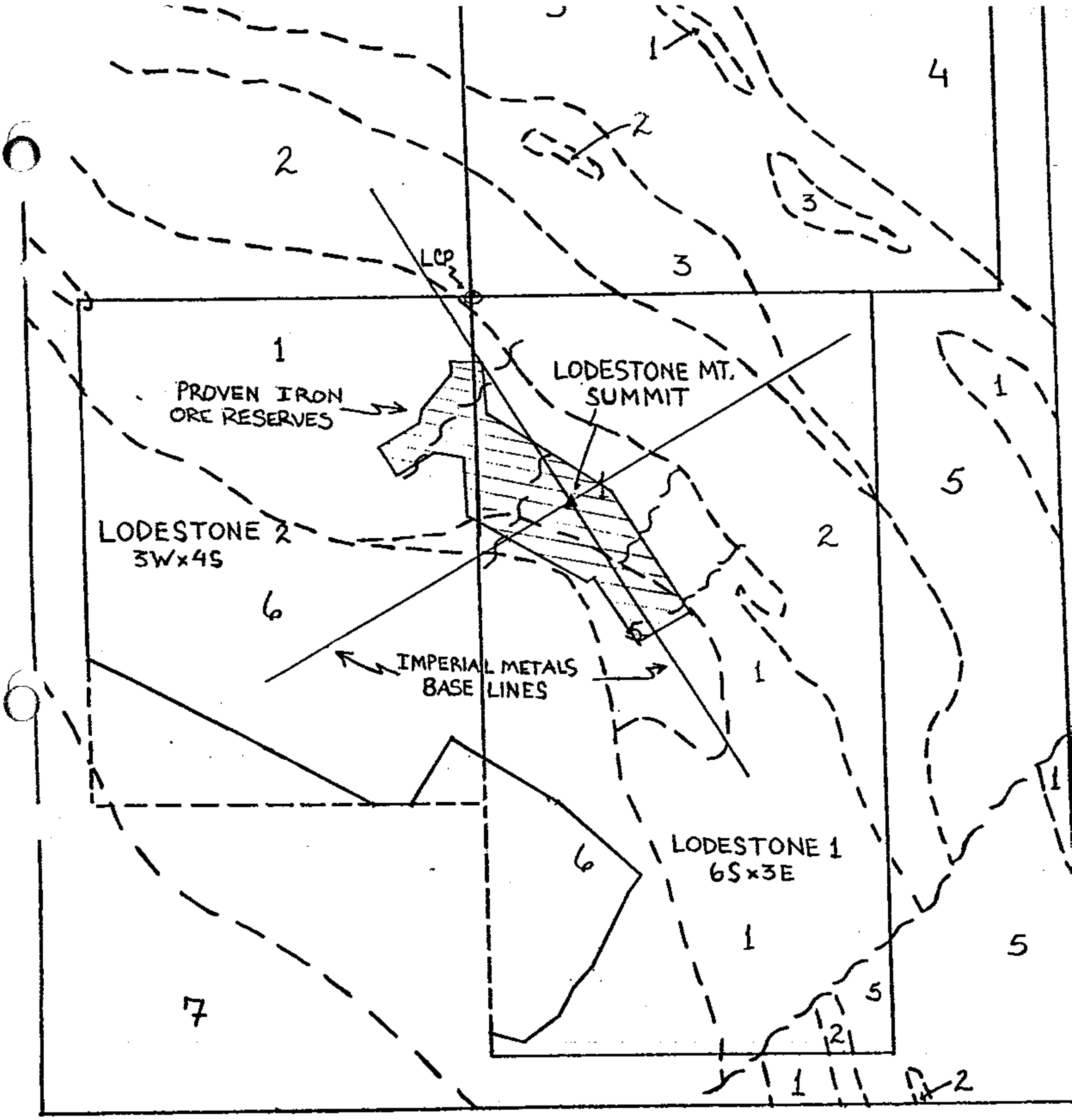


FIGURE 4. VERTICAL EAST-WEST GEOLOGY CROSS-SECTION. LINE 10S.
LODESTONE CLAIMS
(Looking North)

D. R. Halliwell November 1990

Geology after Wares (1987).
Structural Attitudes Projected Onto East-West Cross-Section Using Stereonet Procedure.



1 Hornblende Clinopyroxenite
2 Olivine Clinopyroxenite
3 Clinopyroxenite
4 Syenodiorite
5 Syenogabbro
6 Nicola Group
7 Eagle Granodiorite
Fault
Geological Contact

0 400
meters

T.N.

Figure 5

Tiffany Resources Inc.
Lodestone Groups

Similkameen M. D.
NTS 92H/7W

GEOLOGY OF CLAIMS
After
R. M. St. Louis 2/87

photogeological lineaments. There northeast faults generally are less than 500 metres long. These features, as well as some similar northwesterly-trending discontinuities are interpreted as faults (Figure 5). Some right-lateral displacement of the magnetite series appears to have taken place on the northeast set at the southeast corner of Lodestone 1. The olivine clinopyroxenite is faulted-off at its southeastern end by the same set.

The magnetite occurs as medium to coarse disseminations intergrown with coarse clinopyroxene and hornblende. In places, the magnetite occurs as irregular to elongate masses of up to 12 centimetres in diameter. Previous work on this zone (Wright Engineers, 1970) blocked out 90 million tons averaging 17.56% Fe with much larger potential reserves.

In addition to fine-grained magnetite reserves desired by the coal industry, these rocks contain small amounts of iron-rich chromite. Chromite occurs as thinly disseminated euhedral grains and as small streaks and lenses up to 10 centimetres long, mostly in the olivine clinopyroxenites (Chamberlain & Wares, 1987). It occurs as irregular clusters, fracture-fillings and primary layers elsewhere in the Tulameen Complex (Chamberlain, 1988). Platinum-group elements occur as Pt-Fe alloy inclusions within chromite grains and as sperrylite($PtAs_2$) interstitial to chromite grains in the Tulameen Complex (St.Louis et al, 1986). In the platinum nuggets, Pt alloy acts as a "matrix", being interstitial to euhedral chromite crystals. The (intercumulate) Pt was still in a fluid state when the (cumulate) chromite had already crystallized. Sulphides are extremely rare in the Tulameen Complex and the Lodestone Mountain Property, with disseminated pyrite and lesser chalcopyrite being the most common sulphides present. Indirect evidence from Tulameen Pt nuggets and other world Pt occurrences suggest that Tulameen PGE's formed in a sulphur-deficient environment, were rich in Pt relative to other PGE's and were closely associated with chromite during deposition (Chamberlain & Wares, 1987). PGE's were remobilized during serpentinization and serpentinized rocks of the Tulameen Complex are likely to be richer in Pt than their unaltered equivalents. The Tulameen appears to be more depleted in Ru, Pd, Rh and Ir than other Alaskan-type ultramafic complexes (St.Louis et al, 1986).

Primary PGE mineralization in the Tulameen Ultramafic Complex is likely to be of the orthomagmatic class and related to an Alaskan-type mafic/ultramafic complex. It is not surprising to find modern placer alluvial deposits of PGE's in the Tulameen; these commonly show associations with Alaskan- and Alpine-type intrusions. Such PGE deposits are often associated with alkalic porphyry Cu-Au mineralization; this is the case in the Tulameen, according to assessment reporting from properties east of the Lodestone Mountain Property. The average Pt content of unmineralized mafic and ultramafic rocks is approximately 100 ppb Pt, with a range of 0.1 ppb to 500 ppb. A typical economic PGE deposit may have a mean Pt grade of between 5 and 10 ppm Pt, which is the same order of magnitude as Au deposits. The process(es) which are responsible for the formation of a PGE deposit involve enrichment factors of approximately 1000 (A.J. Macdonald, 1987).

6.0 GEOCHEMISTRY (PLATINUM GROUP)

The relative abundances of noble metals in the Tulameen Complex for various lithologies excluding chromite-rich samples appear in Figure 6. It is worthwhile noting that olivine clinopyroxenite is depleted in Pt and relatively depleted in other noble metals unless it is chromite-rich (St.Louis et al, 1986).

Enrichments in PGE's may or may not suggest the presence of chromitites or PGE reefs (such as the Merensky Reef of the Bushveld Complex). The presence of sulphides may create enrichments in PGE's because PGE's have very much greater partition coefficients into sulphides than Ni or Cu and sulphides act as collectors of PGE's. If a deposit is to contain sufficient PGE's to form a deposit within an intrusion, it should not have experienced sulphide segregation prior to emplacement in its present position. Therefore, plotting of metal ratios (Pd/Rh or Pd/Pt versus Ni/Cu, Ni/Pd versus Cu-Rh or Cu/Pt) are worthwhile tools for PGE deposit exploration (Barnes, 1989). Furthermore, ratios are also inflenced by olivine and chromite crystallization; to eliminate the effects of removal of PGE's (Os, Ir, Ru) and Ni by olivine and chromite, it is necessary to consider the ratios of Pd/Ir or Pd/Rh or Pt/Pd versus Ni/Cu (Barnes, 1989; Musial, 1990).

The five(5) core samples from the olivine clinopyroxenite below the fault zone in Hole 90-1-19 containing 500-922 ppm Cr had their Cu, Ni, Pd, Pt and Rh values used for plotting metal ratios. Samples 90-1-6,7,8,9,11 plot in the chromitite field in all four(4) cases (Figure 6). The samples plot in the ophiolite-chromitite fields in the cases of Ni/Pd versus Cu/Rh and Ni/Pd versus Cu/Pt. The samples plot in the layered intrusive-chromitite fields in the cases of Pd/Rh versus Ni/Cu and Pd/Pt versus Ni/Cu. Samples 90-1-9 and 90-1-11 have the highest Pt contents and plot the best within the chromititic fields. Since Ir was not analyzed for, it was impossible to plot Pd/Ir versus

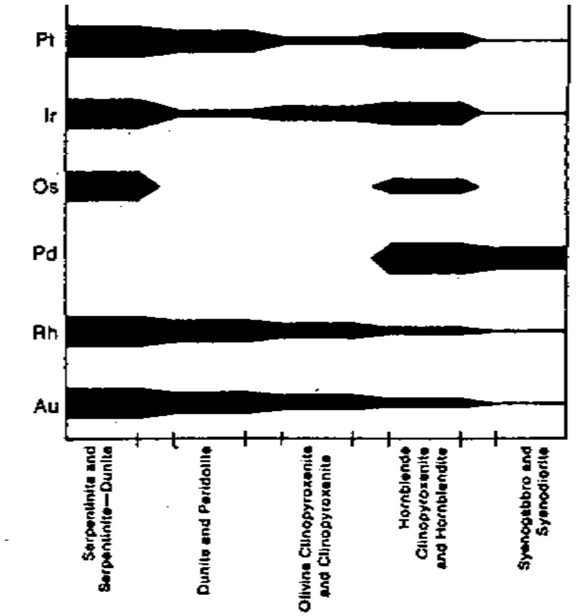


FIG. 6. Relative abundances of the noble metals in the Tul[a]meen Complex according to lithology. Chromite-rich samples hav[e] been excluded: After St.Louis et al, 1986

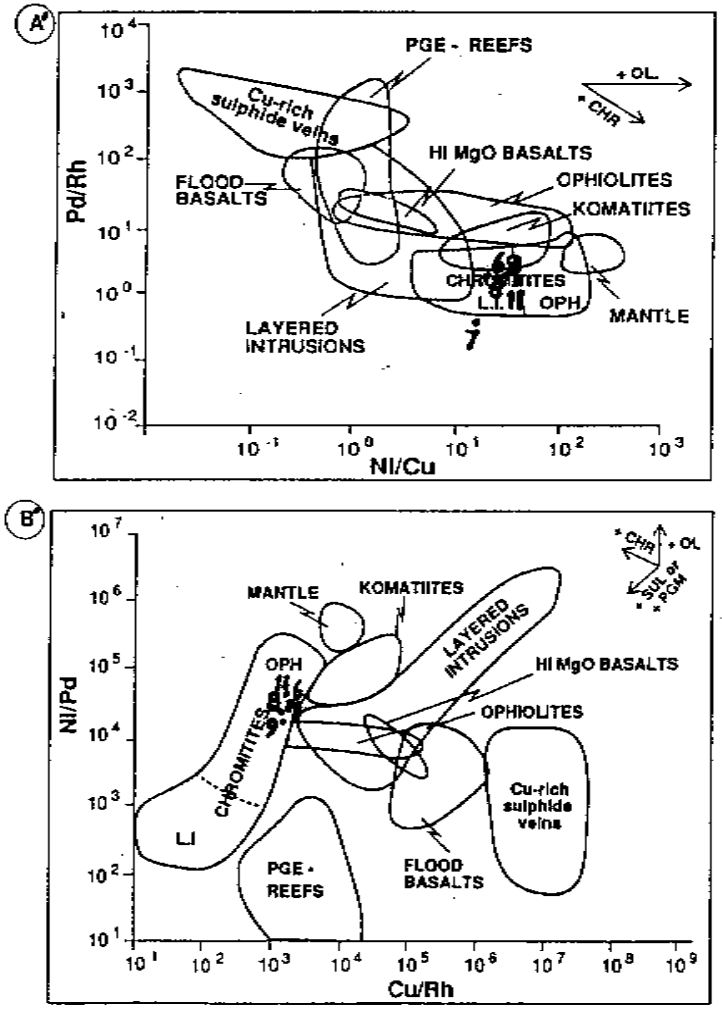
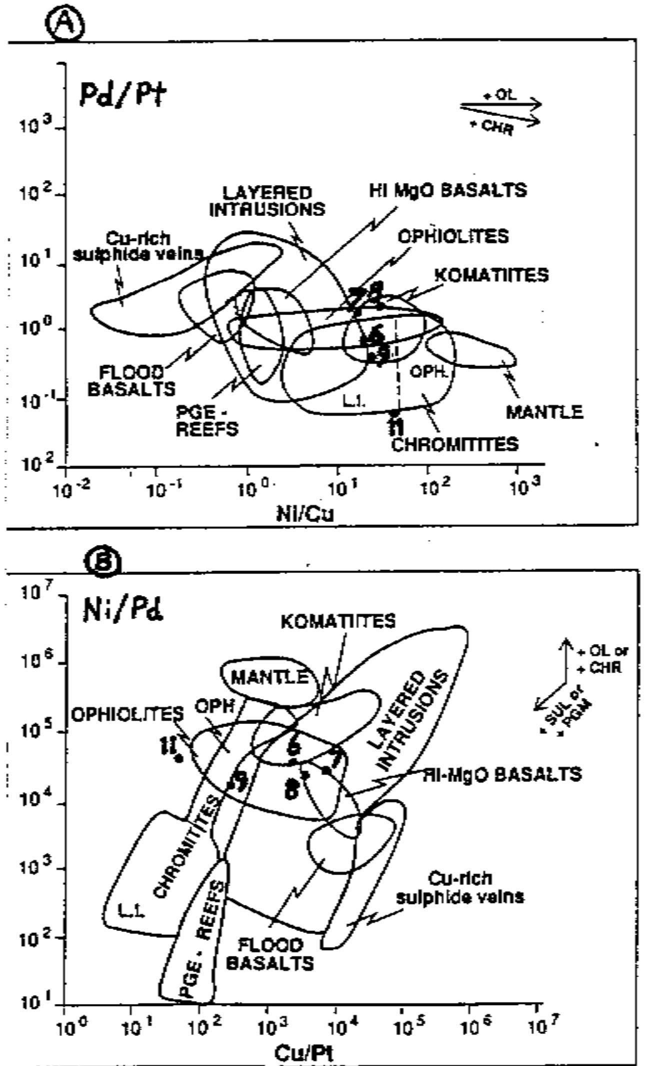


Fig. 6 A'. Pd/Rh versus Ni/Cu and B'. Ni/Pd versus Cu/Rh; for various mafic and ultramafic rock types, Cu-rich sulphide veins and PGE reefs. Vectors indicate the change in the metal ratios for olivine, chromite, sulphide and PGM enrichment. Sources for the fields are listed in Figure 1. (After Barnes, 1989)

Samples

90-1-6 • 6
-7 • 7
-8 • 8
-9 • 9
-11 • 11

Olivine Clinopyroxenite
Serpentinized & Faulted



A. Pd/Pt versus Ni/Cu and B. Ni/Pd versus Cu/Pt: for various mafic and ultramafic rock [C]u-rich sulphide veins and PGE reefs. Vectors indicate the change in metal ratios for olivine [ch]romite, sulphide and PGM enrichment. Sources for the fields are listed in Figure 1. (Barnes, 1989)

Ni/Cu or Ni/Pd versus Cu/Ir to eliminate the effects of removal of PGE's and Ni by olivine and chromite.

Soil sampling in the 1987 program isolated several platinum anomalies. A clustering of anomalous values was noted in the southern part of the map area within a "V"-shaped area between Lines 16+00S to 24+00S, inclusive, and between Stations 4+00E to 14+00E, respectively. Specific sites of 16+00S,7+00E and 20+00S,7+50E yielded values as high as 362 ppb Pt and 242 ppb Pt, respectively. These platinum-in-soil anomalies, northeast-trending faults and favourable lithologies were the targets for drilling in 1989 and 1990.

The northeast-trending faults are thought to be possible controls for Pt-Cu or Pt-Cr-Ni mineralization. These faults occur at the "up-ice" end of 1987 platinum-in-soil anomalies and are believed to be the "line-sources" of mechanical glacial dispersion "fans" or "trains". Current platinum-in-soil dispersion studies suggest that geochemical dispersion in overburden overlying in the Tulameen Complex is typically mechanical-glacial and by mass-wasting (Cook, 1990). Therefore, drill- and trench-testing of these faults might result in the discovery of Pt-Cu or Pt-Cr-Ni mineralization spatially-related to these northeast-trending faults. (Pt-Cr-Ni mineralization related to primary layering and podiform chromitites might be mixed and disrupted).

There are, for example, few platinum-in-soil anomalies "up-ice" of (i.e. north of) one such northeast-trending fault in the vicinity of Hole 90-1-15 and Trench 90-1, for example. The "up-ice" termination of geochemical anomalies can "key" the loci of economic mineralization (Key Lake case history, etc.).

The core is located at:
Project 7 Explorations Ltd.
13117 - 116 th Ave. Surrey, B.C.
V3R 2S6 Tel. 580-2765

7.0 ACTIVITIES & RESULTS

7.1 Diamond Drilling & Sampling

A total of four(4) holes and 2011 feet (613.0 metres) of BQ size diamond drilling was completed between September 22, 1990 and October 5, 1990; inclusive; using a Longyear 38 drill. Drill mobilization commenced September 19 and drill demobilization ended October 8. The drilling contractor was Project 7 Explorations Ltd. The 1987 exploration grid was used to determine collar latitudes and departure along with chain and compass. A pocket altimeter was used to determine elevation above sea level. Drill program statistical data is as follows:

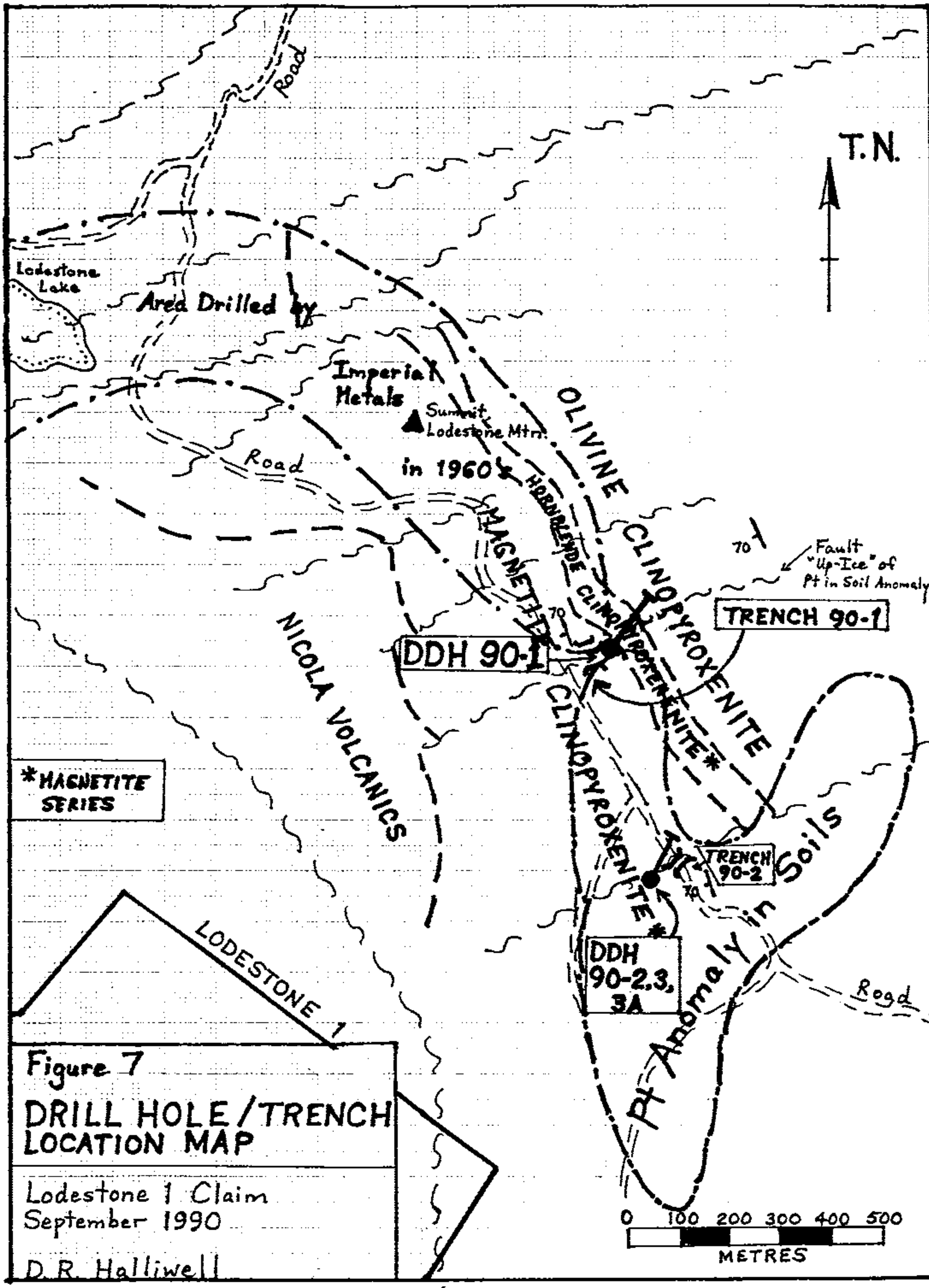


Figure 7
DRILL HOLE / TRENCH LOCATION MAP

Lodestone 1 Claim
September 1990

D.R. Halliwell

Hole No.	Latitude	Departure	Elevation	Bearing	Dip	Length
90-1-13	12+93S	06+30E	5900'a.s.l.	045o	-70o	536.0'
90-2-17	18+99S	07+03E	5825'a.s.l.	000o	-90o	694.0'
90-3A-19	18+89S	07+03E	5825'a.s.l.	040o	-70o	48.0'
90-3-19	18+32S	07+04E	5825'a.s.l.	040o	-70o	733.0'
TOTAL	4 holes					2011.0'

Referring to the drill hole location map (Figure 7) and drill logs (Appendix I), Hole 90-1-13 intersected 13.0 feet of glacial overburden, 252.9 feet of Magnetite Series rocks, olivine clinopyroxenites at 265.9-335.5 feet and then Magnetite Series rocks to the end of hole at 536.0 feet. This hole is inclined (-70o) and drilled across geological strike on a northeast bearing. The upper olivine clinopyroxenite contact is marked by a major fault zone at 254.4-273.6 feet; complete with fault gouges, slickensides, shearing, possible mylonitization and blocky to friable core (core loss is minimal). The upper Magnetite Series rocks include magnetite pyroxenite, hornblende pyroxenite and lesser hornblendite(?). Units are moderately to strongly magnetic, massive, equigranular to porphyrytic and are cut by veinlets of quartz, carbonate and lesser chlorite and hematite. The olivine pyroxenites are often chloritized and serpentinized with veinlets of carbonate, chlorite, serpentine minerals, talc and phlogopite. The lower Magnetite Series rocks are similar to the upper ones and are cut by a leucocratic, non-magnetic, porphyrytic (dacitic?) dyke with sharp upper and lower contacts, complete with chill margins, at 466.7-479.8 feet. The drill encountered difficult ground conditions.

Nineteen core samples representing 2-10 foot intervals were split and sent to Acme Analytical Laboratories for analyses; most of the samples are from the olivine clinopyroxenite unit and the major fault contact between the Magnetite Series and underlying olivine clinopyroxenite unit. Although no chromititic layer or isolated chromite crystals was positively identified, the major fault zone intersected is likely the northeast-trending fault with platinum-in-soil anomalies "down-ice" of it. The olivine clinopyroxenite unit is a favourable host for Pt-Cr-Ni deposits and the presence of serpentinization is upgrading (such alteration is sometimes associated with Pt enrichment). The 19 core samples were analyzed for 30 elements by ICP with Au analyses by fire assay/ICP from a 10 gram sample. There were no significant elevations in Au, Ag, Cu, Pb, Zn or Ni. Five(5) core samples (90-1-6,7,8,9,11) from the lower serpentinized olivine clinopyroxenite portion of the major fault zone contained 500-1000 ppm Cr, the highest being 922 ppm Cr from Sample 90-1-7. This compares favourably with the best values obtained by

Imperial Metals in 1984 (0.07%, or 700 ppm, Cr). These received precious metals analysis by fire assay/ICP of 10 gram samples. Unfortunately, none of the values were significantly anomalous; the highest values of 16 ppb Au (Sample 90-1-9) and 27 ppb Pt (Sample 90-1-11) are within the background values for Tulameen Complex olivine clinopyroxenites (30+/-10 ppb Pt, etc.). ICP values appear in Appendix II. Chromite-rich olivine clinopyroxenites from 12 samples from the Tulameen Complex near Grasshopper Mountain contain 3410+/-2220 ppb Pt (St.Louis et al, 1986).

Diamond drill hole Hole 90-2-19 was drilled to test the intersection of two(2) trends in anomalous Pt +/- Pd concentrations in soil. The drill encountered easier ground conditions than Hole 90-1-13. The vertical hole penetrated 17.0 feet of glacial overburden and 677.0 feet of Magnetite Series rocks. The hole intersected magnetite clinopyroxenite; hematized magnetite clinopyroxenite; and lesser hornblende clinopyroxenite and hornblende clinopyroxenite (hornblendite?) gneiss. The gneissic units occur at 506.5-527.8 feet and 531.3-536.0 feet; the upper unit contains trace disseminated pyrite and chalcopyrite and possible chromite crystals at 522.0-522.6 feet. The hole intersected a shear zone at 383.0-384.3 feet, a fault zone at 387.3-390.5 feet, brecciation at 624.6-631.4 feet and faulting at 631.4-658.0 feet. Hematized units are typically less magnetic due to the destruction of magnetite to form hematite.

Six(6) core samples were taken from each of the two gneissic units where sulphides and possible chromite were observed and representing core lengths of 2.8-6.9 feet. Pt-Cu mineralization within the Magnetic Series and Cu-Au alkalic porphyry mineralization are the exploration targets here, rather than Pt-Cr-Ni podiform chromitites. Unfortunately, neither base metals (Cu, Pb, Zn, Ni) nor precious metals (Au, Ag) were found to be significantly elevated in these 12 core samples analyzed for 30 elements by ICP and Au by fire assay/ICP at Acme.

Hole 90-3A-19 intersected 10.6 feet of glacial overburden and 37.4 feet of magnetite pyroxenite before the angle hole(-70o) was abandoned since the drill rods and core barrel were "mudded in". This hole was collared at the same site as Hole 90-2-19, but encountered more difficult ground conditions.

Hole 90-3-19 was drilled to replace Hole 90-3A-19. The inclined (-70o) hole was drilled at a bearing of N40oE, across geological strike. The hole intersected 11.0 feet of glacial overburden and 722.0 feet of Magnetite Series rocks. The Magnetite Series rocks intersected include magnetite pyroxenite; hornblende pyroxenite; hematized magnetite pyroxenite; and lesser hornblendite, pyroxenite gneisses, and silicified magnetite pyroxenite. A leucocratic, non-magnetic, porphyrytic (dacitic?) dyke with sharp contacts and chill margins was intersected at 262.7-265.1. Brecciated units occur at 54.1-69.0 feet, 229.5-262.7 feet, 682.0-702.7 feet and 707.0-718.5 feet. Fault or fracture zones in magnetite pyroxenite were intersected at 366.7-382.7 feet, 621.1-634.5 feet; these involve fault gouges, slickensides, chlorite-hematite-clay alteration, poor RQD (blocky to friable zones) and some minor core loss. Silicified zones were intersected at 499.9-507.0 feet and 526.8-529.6 feet. Traces of disseminated pyrite and chalcopyrite were observed at 387.0 feet, 485.2-485.6 feet, 496.3-496.6 feet and 642.2 feet within magnetite clinopyroxenite and magnetite clinopyroxenite gneiss.

Seven(7) core samples of sulphide-bearing Magnetite Series rocks and representing 2.0-7.7 foot core lengths were split and sent to Acme Analytical Laboratories for 30-element ICP analyses and Au fire assay/ICP for the purpose of detecting Pt-Cu or Cu-Au mineralization. Unfortunately, there were no elevated base or precious metal values and the core samples warranted no further work.

7.2 Trenching & Sampling

Figure 8 is a 1:250 scale plan showing the location of Trench 90-1 with respect to nearby Hole 90-1-13. The caterpillar trench trends 070o azimuth, subparallelling and overlying the north-northeast- trending fault "up-ice" of the platinum-in-soil anomalies. A baseline was constructed at a 070o azimuth over the 60 metre length of the Trench; the origin of the minigrid is 21 metres from the collar of Hole 90-1-13 at an azimuth of 140o. C-horizon soil samples were collected at 10 metre intervals along the baseline (Samples TS-1-1 to TS-1-7, inclusive). The Trench was geologically mapped and three(3) rock samples (Samples TR-1-1 to TR-1-3, inclusive) were collected on September 30, 1990.

Trench 90-1 is underlain by sheared, hematized and/or chloritized magnetite clinopyroxenite which is locally slickensided at 060o-084o. The hematization may represent alteration close to the core of the fault zone. There are local occurrences of limonite and carbonates. Near B.L. 0+17W, the rocks are weakly foliated, with a strike and dip of 150o-163o and 49o-80o north, respectively. After 30-element ICP analyses and Au fire assay-ICP of the three(3) rock samples at Acme Labs, no significantly elevated base or precious metal values were obtained.

METRIC

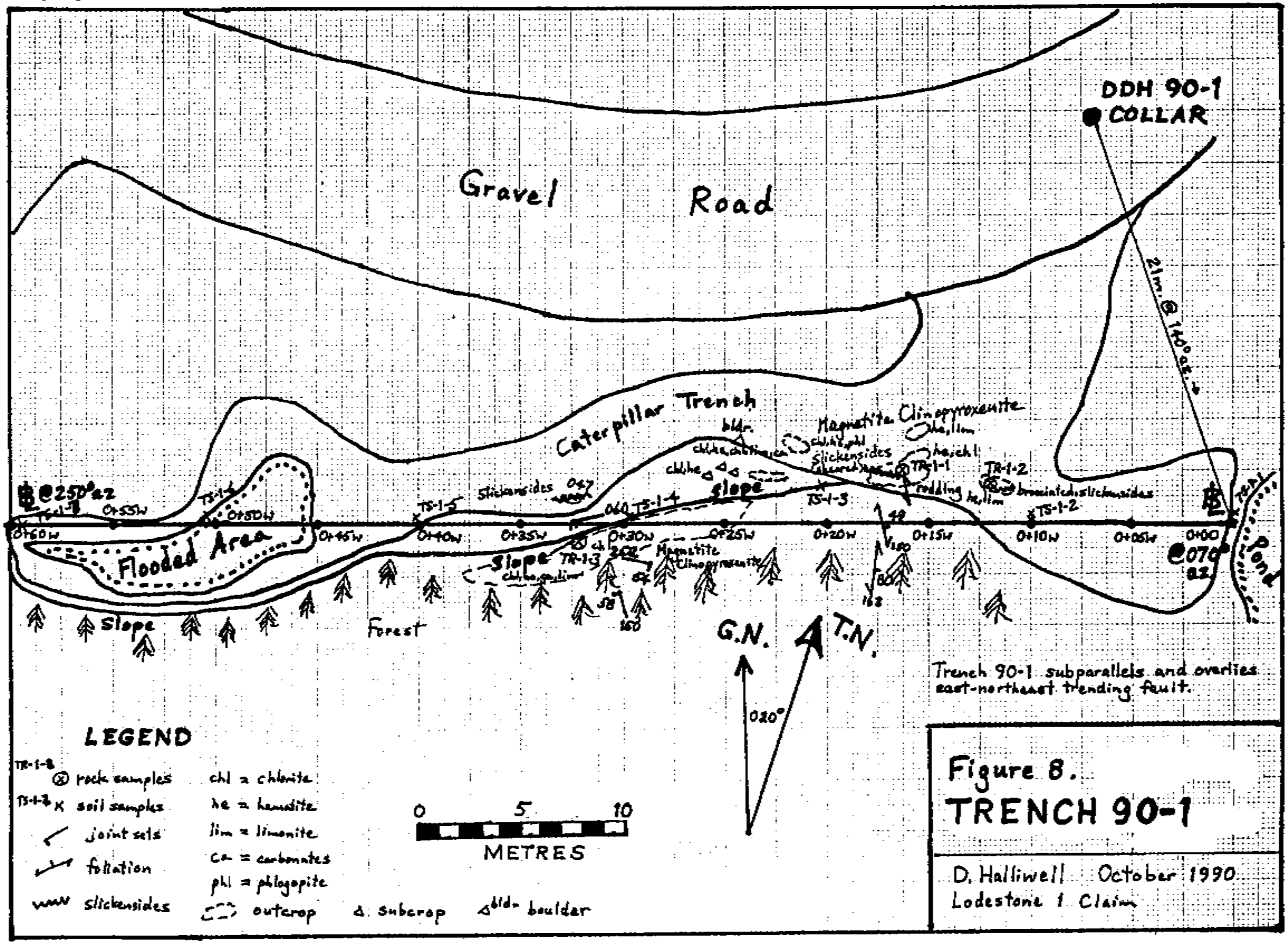


Figure 8.
TRENCH 90-1

D. Halliwell October 1990
Lodestone 1 Claim

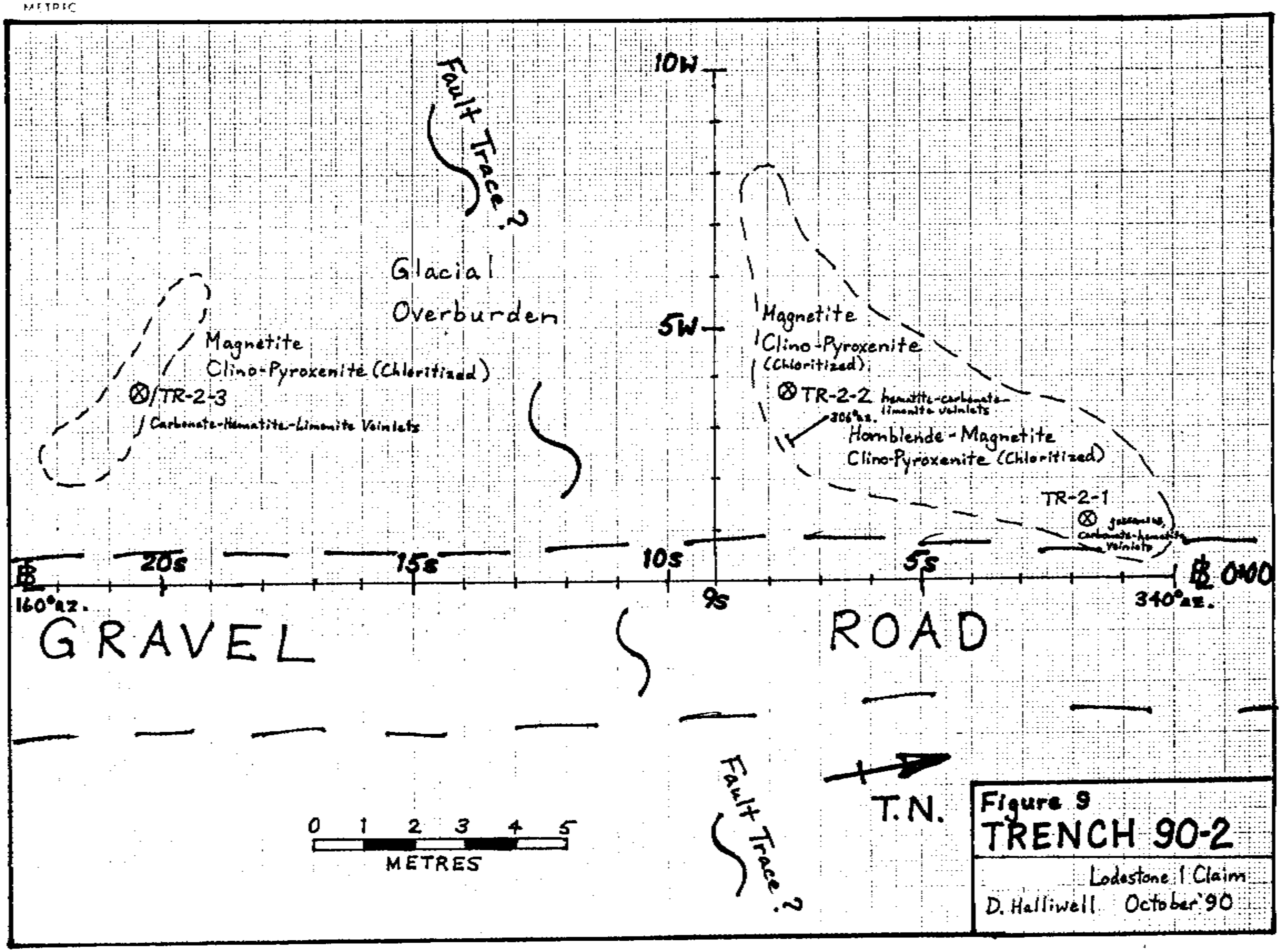


Figure 9
TRENCH 90-2

The Trench 90-1 C-horizon residual(?) soil samples are apple-green to blue-green in colour and are composed of 30-60% silts and clays, 30-60% sand and gravel, and 10% organics. The soil was largely frozen the day it was sampled. The minus 80 mesh soil samples received 30-element ICP analyses at Acme Labs as well as Au analyses by acid leach AA from a 10 gram sample. There were no significantly elevated base or precious metal values from the seven(7) soil samples (Appendix II). Three(3) of the samples contained slightly elevated Cr contents (100-116 ppm Cr). No Pt geochemistry appeared warranted.

Trench 90-2 was constructed approximately 0.85 miles south-southeast of the western end of Trench 90-1 along the road 0.15 miles south-southeast of a "Y"-intersection of two gravel roads. A 20 metre long baseline was constructed along the gravel road at a 160o azimuth. The 20 by 10 metre large area was geologically mapped at a scale of 1:250 on October 4, 1990. Three(3) rock samples (Samples TR-2-1 to TR-2-3, inclusive) were collected, described and sent to Acme Labs for 30-element ICP analyses and Au fire assay/ICP.

The area is underlain by magnetite clinopyroxenite and hornblende-magnetite clinopyroxenite (Figure 9). There was no evidence of major or minor structures in the Trench area. The outcrops were hematized, limonitized, chloritized and carbonatized. No mineralization was observed. There were no elevated base or precious metal values (Appendix II).

8.0 CONCLUSIONS & RECOMMENDATIONS

8.1 Conclusions

No significant PGE, base or precious metal was detected after 2011 feet (4 holes) of drilling, the mapping of two(2) trenches and soil sampling at Trench 90-1 along the surface trace of an east-northeast- trending fault "up-ice" from Pt-Pd soil anomalies in the southern portion of the 1987 grid.

Thirty-eight core samples, six(6) rock samples and seven(7) soil samples received ICP and Au fire assay/ICP analyses. Only five(5) core samples from the fault zone at and below the Magnetite Series-olivine clinopyroxenite contact yielded values (500-922 ppm Cr) warranting noble metal assay follow-up. No significant noble metal values were obtained. The northwest portion of the Pt-Pd soil anomaly and Hole 90-1-13 showed potential for Pt-Cr-Ni mineralization within the olivine clinopyroxenites. The more southerly area near Holes 90-2-19, 90-3A-19 and 90-3-19 showed potential for Ni-Cu and Cu-Au mineralization within sulphide-rich Magnetite Series rocks. The Trench 90-1 C-horizon soil samples yielded only very slight elevations in Cr content.

The five(5) core samples from olivine clinopyroxenite below the fault zone in Hole 90-1-19 containing 500-922 ppm Cr had their Cu, Ni, Pd and Pt values plotted as ratios. All samples plot as either ophiolite-chromitites or layered intrusive-chromitites, suggesting that sulphidde segregation was not experienced prior to emplacement.

8.2 Recommendations

The Lodestone claims warrant further exploration for PGE elements, base metals and Au. The Pt values from rocks and soils of the Lodestone claims are the highest yet reported in the Lodestone Mountain area and compare favourably with the higher values known to occur in the Grasshopper Mountain to the northwest. As St.Louis(1987) recommended, existing Imperial Metals' core, cuttings and logs should be re-examined and samples should be taken for geochemistry and assays for Cr, Pt, Pd, Rh and Au.

Since there is some evidence of mineralization being spatially-controlled by northeast to east-northeast trending faults, relatively inexpensive ground geophysics should be considered. Faults and other possible mineralized structures likely are associated with weak conductors and magnetite destruction. Therefore, VLF-EM surveys (using Seattle's transmitter) are likely to delimit the northeast-trending cross-structures which were drill targets in 1990; this survey was somewhat successful in the properties immediately east of the Lodestone claims (which were explored mostly for Cu-Au alkalic porphyry deposits). Magnetite destruction to form hematite was observed in the Magnetite Series rocks in the vicinity of structures; a basestation-controlled proton precession magnetometer +/- gradiometer survey could be simultaneously be run using EDA or other mag/VLF instrumentation over selected areas. The line- and station-spacings could be 200 metres and 25 metres, respectively with more detailed fill-in work being performed as warranted. This should be (cost-effectively) performed using existing gridlines before they become overgrown and have to be refurbished or recut. The geophysics would chronologically preceed and guide the (later) diamond drilling.

Using existing expertise for consulting purposes, a bulk till sampling follow-up survey should be carried out in selected areas of Pt-Pd soil anomalies. The large 10 pound samples would be collected meticulously only from short-travelled glacial tills and split into minus 80 mesh soil samples, coarse samples for Pt grain counting and description, and fine-grained micron-sized grain analysis. The behaviour of Pt in the coarse-, medium- and fine-grained fractions and the delicacy and size of platinum grains should determine how far the Pt has travelled in the glacial till (and thus the source area(s)). Choice of labs is critical; the lab must have the capability to do the largely-experimental technique of counting Pt grains using techniques similar to Au grain counting of bulk till samples techniques as documented in the geological literature for Au deposits in the LaRonge Domain of Northern Saskatchewan. It is also necessary that the samplers have good knowledge of the glacial materials present in the Princeton-Tulameen area.

Detailed 1:5,000 geological mapping and bedrock sampling should be carried out within the olivine clinopyroxenite belt to delineate exact locations of outcrops and subcrops where dunite and peridotite are observed. Detailed prospecting to find chromitites should be carried out.

Diamond drilling, percussion drilling and trenching should be carried out in 1991 and onwards. Drill targetting on the basis of soil geochemical anomalies alone is a dangerous and unusual practice. All drill targetting should make use of the large volume of previous geological mapping work, collated with VLF-EM conductor, linear magnetic depression, photogeological lineament and bulk till geochemical sampling data.

The 1990 drilling was conducted deeper than the 1989 drilling. Any future drilling in the Magnetite Series rocks should be conducted deep enough to explore the the lower olivine-bearing suite of rocks. Logistically and economically, there must be enough useable drill rods on the property for deeper drilling of up to 1200 feet (this was a problem during the 1990 drilling program).

The northeast portion of the Pt-Pd soil anomalies is lacking in roads and water supplies for drilling circulation; due to these reasons, coupled with time constraints, the area was not drilled in either 1989 or 1990. The area is underlain by olivine clinopyroxenite and lesser dunite and peridotite and represents an untested "up-ice" possible source area for the soil anomalies and the most likely loci of Pt-Cr-Ni chromititic layers or pods, using the Grasshopper Mountain model and other models applicable to Alaskan-type mafic-ultramafic complexes. It should be drill-tested in 1991. Logistically, the drill must be mobilized early enough that there will be time to construct the necessary roads and lay out the necessary long waterlines, completing the work before the September 30 deadline.

The 1986 Wright report for Imperial Metals raised questions about the quality of PGE and Au assays, and ICP analyses using 10 gram samples at Acme Analytical Laboratories; the lab used by Imperial, Tiffany and Cook of U.B.C. (1990); since known Pt placers yielded negative results. Therefore, it may be worthwhile re-running critical samples at a second lab to check for accuracy. Also, the PGE and Au "nugget effect" problem might be lessened by the use of 30 gram samples as well as the 10 gram samples currently used. Exclusive use of 30 gram samples for analysis would create an "apples and oranges" problem, since (to the best of the author's knowledge) all previous sampling has used a 10 gram sample size. In all cases, the lab(s) should be instructed to exercise extreme care during sample preparation since chromite crystals could be lost, affecting Cr ICP results (Cook, 1990 Personal Communication).

In order to test whether PGE's and Ni were removed by olivine or chromite or not, Ir should be analyzed for and ratio plots should be done for Pd/Ir or Pd/Rh versus Ni/Cu using documented methods of Barnes (1989) and Musial (1990).

9.0 ITEMIZED COST STATEMENT

(Including Personnel Data)

EXPENDITURES, SEPTEMBER-NOVEMBER 1990, LODESTONE PROJECT

GEOLOGICAL FEES	Professional Fees-Field	12d x $150/d =	$1,800.00	
	Professional Fees-Reporting	6d x $150/d =	$900.00	
	Expenses-Transportation		$195.98	
	Expenses-Accommodation, Meals		$0.00	
	Expenses-Miscellaneous		$172.24	
	TOTAL			$3,068.22
ANALYSES	Sample Preparation		$134.95	
	ICP Analyses	51 x $3.25 =	$165.75	
	Bondar Au Analyses		$298.50	
	TOTAL			$599.20
DIAMOND DRILLING	Mobilization/Demobilization		$20,000.00	
	Cook	19d x $150/d =	$2,850.00	
	Core Splitter Rental	3 wk x $90.00 =	$270.00	
	Coreboxes & Lids (BQ)	100 x $118.71 =	$1,187.10	
	Cabin Rentals	33c-dx$50.00/c-d=	$1,650.00	
	Equipment Left On-Site for Co.		$2,576.50	
	Caterpillar Time	126h x $160/h =	$20,160.00	
	Fuel, Mud, Additives		$1,647.05	
	Groceries & Supplies		$3,078.60	
	Additional Truck		$1,360.00	
	Shallow Coring	1283f x $30.00/f =	$38,490.00	
	Deep Coring	671 x $35.00/f =	$23,485.00	
	Misc. (57f o/b drill, etc.)		$21,634.98	
	TOTAL			$133,695.00
GRAND TOTAL				$137,362.42

PERSONNEL, 1990 LODESTONE MOUNTAIN PROJECT.

PERSONNEL	JOB TITLE	DATES	ACTIVITIES
Douglas Helliwell	Geologist	September 22- October 5	Field
		October 11- October 12	Fiducial Office Responsibilities
		November 19- November 23	Reporting
		November 28	Reporting, Filing
Bill Loggee	DrillSuper.	September 19- October 6	Supervise Drilling & Trenching
Eugene Kennedy	Asst.Super.	September 19- October 6	Trenching, Assist Drillers
Norm McKay	Driller	September 21- October 6	Day Shift Drilling
R. Hrynko	Helper	September 22- September 28	Day Shift Drilling
D. Puggard	Helper	September 25- October 5	Day Shift Drilling
J. Sorry	Driller	September 22- October 5	
A. Vlatowski	Helper	September 22- October 5	Night Shift Drilling

Project 7 Explorations = Drilling Contractor

10.0 CERTIFICATE OF QUALIFICATIONS

I, Douglas Richard Halliwell, of 1155 Lillooet Road in the District of North Vancouver and Province of British Columbia, hereby certify that:

a) I am a graduate of McGill University in Montreal, Quebec having obtained a **Bachelor of Science** in Geology in 1976 and a **Master of Science (Applied)** in Mineral Exploration in 1980.

b) I have practiced my profession since 1975 in British Columbia, Alberta, Saskatchewan, Ontario, Quebec, Newfoundland and the Northwest Territories in Canada; and in Wyoming in the United States of America.

c) I have been a **Fellow of the Geological Association of Canada** since 1988 and a **Member** of the **G.A.C. Cordilleran Section** since 1987.

d) I have been a **Member** of the **Canadian Institute of Mining & Metallurgy** since 1977, a **Member** of the **Prospectors & Developers Association of Canada** since 1981, and a **Member** of the **Association of Exploration Geochemists** since 1990.

e) My report dated November 30, 1990, concerning the Lodestone Mountain Property is based upon field work on the property between September 22, 1990 and October 5, 1990 and research following this field work.

f) I have no interest in any property, or any company holding property within 10 kilometres of the above-mentioned claims.

g) To the best of my knowledge and belief, information contained in this report is complete and accurate.

Dated at North Vancouver, B.C., this 28th day of November, 1990.

Douglas Richard Halliwell
M. Sc.(Appl.), B.Sc., F.G.A.C.

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APPENDIX I

DIAMOND DRILL LOGS

LATITUDE: 12+93S BEARING: 045drg
DEPARTURE:06+30E DIP: -70drg
ELEVATION:5900.0'DEPTH: 536.0ft

1 foot = 30.5 cm

HOLE NO. 90-1 LONGYEAR 38 BQ CORE

LOGGED BY: D.R. Halliwell

FOOTAGE From	To	CORE DESCRIPTION	CORE ASSAY (ppb) Samp.No.	From	To	Leng.	Pt	Pd	Rh	Au
0.0	13.0	CASING. Glacial Overburden. Cobbles and pebbles of magnetite pyroxenite, hornblende pyroxenite and lesser olivine pyrox.								
13.0	26.5	MAGNETITE PYROXENITE, FRACTURED. Light to medium grey. F.g. Finely laminated. Aphanitic. Strongly magnetic. Fresh. Poor core recovery and RQD. Friable core. Longest piece is 7 cm. long.								
26.5	42.0	MAGNETITE PYROXENITE. Light to medium grey. F.g. Aphanitic. Finely laminated(foliated)at CA 50drg-85drg. Strongly to moderately magnetic. Rare carbonate-quartz veinlets at CA 50drg Poor core recovery and RQD. Blocky core at 31.0-42.0. Moderately sharp lower contact.								
42.0	49.9	ALTERED HORNBLENDE PYROXENITE OR HORNBLENDITE. Light grey to white. F.g. to m.g. Aphanitic. Banded. Locally brecciated. Non-magnetic. Abundant carbonate-quartz+/-hematite veinlets at CA 50drg. Good core recovery. Poor RQD. Banding locally convoluted.	90-1-1	42.0	49.9	7.9	See ICP Results			
49.9	119.2	HORNBLENDE-MAGNETITE PYROXENITE. Medium to dark grey. F.g. to m.g. Aphanitic. Massive. Moderately to strongly magnetic. Rare carbonate-quartz veinlets at CA 0drg-20drg, CA 40-50drg Some fractures contain hematite (after magnetite?). Brecciated textures at 65.0, 96.4-97.7. Carbonate-quartz tension gash fillings at 96.4-97.7. Brittle deformation throughout. Poor core recovery. Core loss at 60.0-66.0, 86.0-90.0, 96.0-106.0. Poor RQD. Blocky core at 60.0-65.5, 76.0-86.0, 102.0-119.2. Blocky to friable core at 65.5-67.8, 68.0-77.3, 94.5-96.3, 105.5-106.0. Slickensides at 72.5 (CA 15drg on fracture at CA 10drg.). Slow drilling due to fracturation. No evidence of faulting. Moderately sharp upper contact.								
119.2	169.0	MAGNETITE PYROXENITE. Porphyrytic, with dark grey m.g. to c.g. subhedral to euhedral clinopyroxene phenocrysts set in a medium grey f.g. aphanitic plagioclase-magnetite(>15%) groundmass. Massive. Strongly magnetic. Rare carbonate-quartz veinlets at CA 10drg-45drg, 55drg-70drg. Fresh. Slick-ensides on CA 20drg fracture at CA 25drg at 131.0. Very good core recovery. Minor core loss. Good RQD. Blocky core at 119.2-131.2. Gradational upper and lower contacts.								
169.0	252.2	HORNBLENDE PYROXENITE. Slightly porphyrytic, with dark grey m.g. to c.g. subhedral to euhedral clinopyroxene and amphibole(hornblende) phenocrysts set in a light grey to light green f.g. aphanitic groundmass of plagioclase and <10% magnetite. Massive. Fresh to weakly patchily chloritized. Rare carbonate-quartz+/-hematite+/-chlorite veinlets at CA 30-35 drg. Dark grey 0.1-0.5 ft. wide magnetite bands at CA 35drg-55drg with sharp upper and lower contacts. Moderately magne-								

LATITUDE: 12+93S BEARING: 045drg
DEPARTURE:06+30E DIP: -70drg
ELEVATION:5900.0'DEPTH: 536.0ft

HOLE NO. 90-1 LONGYEAR 38 BQ CORE
SHEET: 2 OF 4
LOGGED BY: D.R. Halliwell

FOOTAGE From	To	CORE DESCRIPTION	CORE ASSAY (ppb) Samp.No.	From	To	Leng.	Pt	Pd	Rh	Au
		tic. Slickensides at 197.5 (CA 10drg on CA 10drg fracture), 203.1 (CA 40drg on CA 30drg fracture), 231.4 (possible) and 239.0 (CA 20drg-30drg on fracture at CA 25drg). Very good core recovery. Slight core loss at 239.0-244.6. Good RQD. Blocky to friable core at 184.5-186.2, 197.2-198.3, 227.3-229.2, 229.8-233.0, 238.7-239.6. Gradational upper contact. Sharp lower contact (CA 45drg).								
252.2	254.4	MAGNETITE PYROXENITE. Slightly porphyritic, with dark grey m.g. subhedral to euhedral clinopyroxene phenocrysts set in a light grey f.g. aphanitic groundmass of plagioclase and 15-20% magnetite. Strongly magnetic. Massive. Fresh to weakly patchily chloritized. Carbonate-quartz veinlets at various CA angles. Very good core recovery and RQD.	90-1-2	252.2	254.4	2.2	See ICP Results			
254.4	265.9	FAULT ZONE. ALTERED MAGNETITE PYROXENITE. Slightly porphyritic magnetite pyroxenite as above. Moderate pervasive chloritization. Carbonate-quartz+/-hematite+/-chlorite+/-chalcedony veinlets at CA 15drg-65drg. Massive to sheared(mylonitic gneiss?). Weakly magnetic. Fault gouges at 257.2-257.5 (CA 20drg, chlorite-hematite), 264.0-265.9 (CA 20drg-35drg, chlorite-hematite). Good core recovery. Poor RQD. Blocky to friable core at 259.7-265.0.	90-1-3	254.4	260.0	5.6	See ICP Results			
			90-1-4	260.0	263.0	3.0	See ICP Results			
			90-1-5	263.0	265.9	2.9	See ICP Results			
265.9	273.6	FAULT ZONE. SERPENTINIZED OLIVINE PYROXENITE. Light green to light grey f.g. to m.g. oligomict breccia consisting of clinopyroxene, olivine, serpentinite(after olivine), and calcic plagioclase. Non-magnetic. Carbonate+/-chlorite+/-talc+/-serpentinite+/-chalcedony veinlets at CA 15drg-50drg. Moderate pervasive chloritization+/-serpentinization. Fault gouges at 270.5-271.0 (CA 45drg, chlorite), 272.5 (CA 45drg, talc), 273.3-273.5 (CA 40drg,chlorite), 271.8-272.0 (CA 70 drg,talc-chlorite), 273.2-273.4 (CA 40drg,chlorite). Slickensides at 279.2-279.6 (CA 30drg-60drg on fracture at CA 15 drg). Good core recovery. Fair RQD. Blocky to friable core at 269.5-270.0, 281.0-282.7. Gradational contacts. Chalcedonic selvage on carbonate-quartz veinlet systems. Silvery metallic flakes seen at 272.6-273.0.	90-1-6	265.9	271.0	5.1	3	4	4	4
			90-1-7	271.0	273.6	2.6	1	2	4	1
			90-1-8	273.6	277.0	3.4	1	3	2	1
			90-1-9	277.0	280.0	3.0	6	5	2	16
			90-1-10	280.0	283.0	3.0	See ICP Results			
283.0	335.5	SERPENTINIZED OLIVINE PYROXENITE. Porphyritic-mottled with dark grey +/- brick red m.g. anhedral clinopyroxene phenocrysts set in a light green f.g. groundmass of olivine and calcic plagioclase. Ophitic texture. Weak pervasive serpentinization. Non-magnetic to very weakly magnetic. Massive. Fairly abundant carbonate-/-chlorite+/-talc+/-phlogopite(?) veinlets at CA 15drg-55drg. Very good core recovery. Fair RQD. Blocky core at 284.1-286.2, 322.7-325.0. No chromite seen.	90-1-11	283.0	285.0	2.0	27	2	2	1
			90-1-12	285.0	290.0	5.0	See ICP Results			
			90-1-13	290.0	295.0	5.0	See ICP Results			
			90-1-14	295.0	300.0	5.0	See ICP Results			
			90-1-15	300.0	310.0	10.	See ICP Results			
			90-1-16	310.0	320.0	10.	See ICP Results			
			90-1-17	320.0	330.0	10.	See ICP Results			
			90-1-18	330.0	335.5	5.5	See ICP Results			

LATITUDE: 12+93S BEARING: 045drg
DEPARTURE:06+30E DIP: -70drg
ELEVATION:5900.0'DEPTH: 536.0ft

HOLE NO. 90-1 LONGYEAR 38 BQ CORE
SHEET: 3 OF 4
LOGGED BY: D.R. Halliwell

FOOTAGE From	To	CORE DESCRIPTION	CORE ASSAY (ppb) Samp.No.	From	To	Leng.	Pt	Pd	Rh	Au
335.5	371.8	MAGNETITE PYROXENITE. Light to medium grey. F.g. Aphanitic. Massive. Strongly magnetic. Fresh to weakly patchily chloritized. Small jasperoid clasts present. Rare carbonate-quartz +/-chlorite+/-phlogopite(?) veinlets at CA 10drg-40drg. Over 15% magnetite. Sheared along fractures at 344.0-345.0, 366.5-367.0. Very good core recovery and RQD.	90-1-19	335.5	340.0	4.5	See ICP Results			
371.8	374.3	HORNBLENDE PYROXENITE. Similar to magnetite pyroxenite above but weakly magnetic. Small jasperoid clasts. Carbonate-quartz+/-chlorite veinlets at CA 30drg-60drg. Very good core recovery and RQD.								
374.3	387.4	MAGNETITE PYROXENITE. Light to medium grey. F.g. Aphanitic. Massive to sheared (lower contact). Strongly magnetic. Fresh to weakly patchily chloritized. Rare carbonate-quartz veinlets at CA 20drg-40drg. Very good core recovery. Good RQD. Gradational upper contact. Sharp lower (CA 40drg) contact. Over 15% magnetite.								
387.4	394.2	HORNBLENDE PYROXENITE. Porphyrytic, with dark green-grey subhedral clinopyroxene and hornblende phenocrysts set in a light grey f.g. aphanitic groundmass of plagioclase and magnetite(<10%). Massive. Fresh to weakly pervasively chloritized. Carbonate(calcite, orange-brown siderite?)-quartz veinlets at CA 5drg-15drg. Very good core recovery and RQD.								
394.2	436.0	MAGNETITE PYROXENITE. Porphyrytic, with dark green-gray m.g. subhedral clinopyroxene phenocrysts set in light grey f.g. aphanitic groundmass of plagioclase and magnetite(>15%). Locally, phenocrysts are missing. Small jasperoid clasts. Massive to weakly foliated (CA 70drg). Strongly magnetic. Rare carbonate-quartz+/-chlorite+/-chalcedony veinlets at CA 20 drg-40drg. Very good core recovery and RQD. Gradational upper and lower contacts.								
436.0	450.5	HORNBLENDE PYROXENITE. Porphyrytic, with dark green-grey m.g. to c.g. subhedral to euhedral clinopyroxene and hornblende phenocrysts set in a light green-grey f.g. aphanitic groundmass of plagioclase and magnetite(<10%). Massive. Weakly magnetic. Fresh to weakly pervasively chloritized. Very good core recovery. Good RQD. Small jasperoid clasts. Chalcedony veinlets at CA 10drg-30drg.								

LATITUDE: 12+93S BEARING: 045drg
DEPARTURE:06+30E DIP: -70drg
ELEVATION:5900.0'DEPTH: 536.0ft

HOLE NO. 90-1 LONGYEAR 38 BQ CORE
SHEET: 4 OF 4
LOGGED BY: D.R. Palliwell

FOOTAGE From	To	CORE DESCRIPTION	CORE ASSAY (ppb) Samp.No.	From	To	Leng.	Pt	Pd	Rh	Au
450.5	466.7	MAGNETITE PYROXENITE. Slightly porphyrytic, with dark grey f.g. subhedral clinopyroxene phenocrysts set in a light grey v.f.g. aphanitic groundmass of plagioclase and magnetite (>15%). Massive. Fresh. Locally, phenocrysts are missing. Strongly magnetic. Rare carbonate-quartz+/-hematite veinlets at CA 10drg-30drg. Small jasperoid clasts. Very good core recovery and RQD. Gradational upper contact. Sharp lower contact at CA 70drg.								
466.7	479.8	LEUCOCRATIC PORPHYRYTIC DYKE. Porphyrytic, with white subhedral c.g. plagioclase and rare black euhedral c.g. hornblende phenocrysts set in a light grey v.f.g. aphanitic groundmass. Massive. Fresh, increasing purplish hematization downhole. No coarsening of phenocrysts downhole (not a sill?). Chill margins with no phenocrysts at sharp (CA 70 drg) upper and lower (CA 15drg average, convolute) contacts. Non-magnetic. Very good core recovery. Good RQD.								
479.8	536.0	MAGNETITE PYROXENITE. Weakly porphyrytic, with dark grey subhedral f.g. to m.g. clinopyroxene phenocrysts set in a light grey v.f.g. aphanitic groundmass of plagioclase and magnetite(>15%). Ophitic texture. Massive. Strongly magnetic. Fresh to weakly pervasively chloritized. Carbonate-quartz+/-chlorite veinlets atCA 15drg-40drg. Slickensides at 522.5-522.7 (CA 90drg on CA 30drg fracture, with talc and serpentinite. Very good core recovery. Good to fair RQD. Blocky to friable core at 505.8-508.3, 525.0-526.0.								
536.0		EOH								

LATITUDE: 18+89S BEARING; VERTICAL
DEPARTURE:07+03E DIP: -90drg
ELEVATION:5825.0' DEPTH: 694.0ft

HOLE NO.: 90-2 LONGYEAR 38 DRILL, BQ CORE
SHEET: 1 OF 6
LOGGED BY: D.R. Halliwell

CORE ASSAY (ppb)
Samp.No. From To Leng. Pt Pd Rh Au

FOOTAGE From	To	CORE DESCRIPTION
0.0	17.0	CASING. Glacial Overburden.
17.0	26.5	MAGNETITE PYROXENITE. Light to medium grey. F.g. to m.g. Aphanitic to phaneritic. Massive. Ophitic texture. Strongly magnetic. Fresh to weakly pervasively chloritized. Rare carbonate veinlets at CA 55drg-70drg. Fair to poor core recovery. Core loss throughout. Blocky to friable core throughout unit. Gradational lower contact.
26.5	36.0	HEMATIZED MAGNETITE PYROXENITE. Mottled maroon and grey. M.g. Aphanitic to phaneritic. Massive. Clinopyroxene-plagioclase-hematite(after magnetite) mineralogy. Moderately magnetic. Strong patchy hematization. Rare carbonate veinlets at CA 50 drg. Good core recovery. Fair RQD. Blocky core at 26.5-27.5, 28.7-31.0.
36.0	45.3	MAGNETITE PYROXENITE. As above. No carbonate veinlets seen. Very good core recovery. Poor RQD. Blocky core at 36.0-37.5, 39.7-41.4, 41.8-45.3. Magnetite >15%.
45.3	64.8	HORNBLENDE-MAGNETITE PYROXENITE. Slightly porphyritic, with dark grey m.g. to c.g. euhedral to subhedral clinopyroxene and hornblende phenocrysts set in a light green f.g. aphanitic groundmass of plagioclase and 10-15% magnetite. Fresh to weakly patchily chloritized and hematized. Massive. Strong to moderate ferromagnetism. No carbonate veinlets. Good core recovery. Core loss at 53.0-59.0. Poor RQD. Blocky throughout. Gradational contacts.
64.8	98.1	WEAKLY HEMATIZED MAGNETITE PYROXENITE. Slightly porphyritic, with dark grey m.g. subhedral to anhedral phenocrysts set in a light grey f.g. aphanitic groundmass of plagioclase and >15% magnetite (some altering to hematite). Massive. Strong patchy hematization. Strongly to moderately magnetic. Rare carbonate veinlets at CA 50drg-60drg. Good core recovery. Fair RQD. Blocky core at 82.2-84.5, 90.3-91.8, 93.9-96.2. Friable core at 94.3-96.0. Gradational contacts.
98.1	114.2	HEMATIZED MAGNETITE PYROXENITE. Mottled maroon and grey. M.g. Phaneritic to aphanitic. Massive. Clinopyroxene-plagioclase-hornblende-hematite(after magnetite) mineralogy. Ophitic texture. Moderately to strongly magnetic. Strong patchy hematization. Abundant carbonate veinlets at CA 15drg-40drg. Fair core recovery. Core loss at 101.0-105.0. Good RQD. Gradational contacts.
114.2	138.6	WEAKLY HEMATIZED MAGNETITE PYROXENITE. Maroon patches of hematite after magnetite set in a green-grey f.g. to m.g. a-

LATITUDE: 18+89S BEARING: VERTICAL
DEPARTURE:07+03E DIP: -90drg
ELEVATION:5825.0' DEPTH: 694.0ft

HOLE NO.: 90-2 LONGYEAR 38 DRILL, BQ CORE
SHEET: 2 OF 6
LOGGED BY: D.R. Halliwell

FOOTAGE From	To	CORE DESCRIPTION	CORE ASSAY (ppb) Samp.No.	From	To	Leng.	Pt	Pd	Rh	Au
		phanitic to phaneritic groundmass of clinopyroxene and plagioclase. Massive to porphyrytic (maroon patches are not discrete crystals). Moderately magnetic. Weak pervasive chloritization. Strong patchy hematization (after magnetite). Rare carbonate+/-chlorite at CA 50drg-65drg. Good core recovery. Some core loss at 125.0-136.0. Good RQD. Blocky core at 131-132.0, 135.5-136.0, 137.8-138.6. Gradational contacts.								
138.6	180.7	MAGNETITE PYROXENITE. Slightly porphyrytic, with dark grey m.g. subhedral clinopyroxene phenocrysts set in a light green-grey f.g. aphanitic groundmass of plagioclase and magnetite(>15%). Ophitic texture. Massive. Strongly magnetic. Weak pervasive chloritization. Rare carbonate+/-quartz+/-chlorite+/-talc veinlets at CA 10drg-60drg (mostly CA 20drg-40drg). Hematized interval at 147.6-148.2. Very good core recovery. Good RQD. Blocky core at 164.8-166.2, 169.6-170.7. Gradational contacts.								
180.7	230.3	HEMATIZED MAGNETITE PYROXENITE. Slightly porphyrytic, with dark grey m.g. subhedral to euhedral clinopyroxene and hornblende phenocrysts set in a light green-grey f.g. aphanitic groundmass of plagioclase and maroon patches of hematite after magnetite. Ophitic texture. Moderately to strongly magnetic . Massive. Weak pervasive chloritization. Strong patchy hematization. Rare carbonate+/-quartz+/-chlorite+/-talc veinlets at CA 20drg-70drg. Very good core recovery and RQD. Gradational contacts.								
230.3	267.0	MAGNETITE PYROXENITE. Slightly porphyrytic (ophitic texture) with dark green m.g. subhedral clinopyroxene phenocrysts set in a light green-grey f.g. aphanitic groundmass of plagioclase and magnetite(>15%). Massive. Strongly magnetic. Weak pervasive chloritization. Rare carbonate+/-chlorite veinlets at CA 0drg-10drg. Quartz vein at CA 85drg at 257.3-257.5. Chloritic fault gouge at 241.3-241.6 at CA 50drg. Very good core recovery. Fair RQD. Blocky core at 241.5-241.7, 244.1-245.4, 262.0-267.0. Gradational contacts.								
267.0	277.7	HEMATIZED MAGNETITE PYROXENITE. As above, with maroon patches of hematite after magnetite. Massive. Ophitic texture. Weak pervasive chloritization. Strong patchy hematization. Zoned carbonate(core)-quartz-chlorite-hematite(selvage) veinlet at CA 5drg-25drg at 274.7-277.7. Moderately magnetic. Slickensides at CA 35drg on CA 20drg fracture at 276.7-277.0 Poor core recovery at 267.0-270.0, 275.0-277.7. Gradational contacts.								
277.7	319.3	MAGNETITE PYROXENITE. Light green-gray, f.g. to m.g. Aphani-								

FOOTAGE From	To	CORE DESCRIPTION	CORE ASSAY (ppb) Samp.No.	From	To	Leng.	Pt	Pd	Rh	Au
		tic to phaneritic. Massive. Strongly magnetic (>15% magnetite). Weak pervasive chloritization. Rare carbonate veinlets at CA 15drg-20drg. Very good core recovery. Good RQD. Blocky core at 318.0-319.5. Magnetite(>50%) patches. Gradational contacts.								
319.3	321.5	HEMATIZED MAGNETITE PYROXENITE. As above, with magnetite patches altered to maroon hematite. Abundant carbonate veinlets at CA 40drg-50drg. Moderately magnetic. Good core recovery. Fair RQD, with some blocky sections. Sharp (CA 90drg) lower contact.								
321.5	383.0	MAGNETITE PYROXENITE. Light to medium grey. M.g. to f.g. Aphanitic to phaneritic. Massive. Strongly magnetic. Fresh to very slightly patchily chloritized. Rare carbonate+/-quartz+/-chlorite veinlets at CA 5drg-55drg. Very good core recovery. Good RQD. Blocky core at 342.5-343.0 and 370.1-371.4. Occasional magnetite patches. Gradational contacts.								
383.0	384.3	SHEAR ZONE. Porphyrytic, with dark grey m.g. elongate anhedral to subhedral clinopyroxene and hornblende phenocrysts set in a light green-grey f.g. aphanitic groundmass of plagioclase and magnetite(<5%). Foliated (mylonitic gneiss?). Non-magnetic. Slickensides at CA 90drg on CA 10drg fracture at 383.6-383.9. Weak pervasive chloritization. Some hematite in fractures. Good core recovery. Poor RQD throughout. Gradational contacts.								
384.3	387.3	MAGNETITE PYROXENITE. Same as above.								
387.3	390.5	FAULT ZONE. Light to medium grey. M.g. to f.g. Aphanitic. Sheared, with fault gouges at 385.1-385.7 (CA 70drg,chlorite)and 386.2-386.3 (CA 50drg,chlorite-hematite). Moderate pervasive chloritization. Abundant carbonate veinlets at CA 50drg-70drg. Strong carbonatization. Fair core recovery. Fair to poor RQD. Friable core at 386.2-386.7, 389.0-390.4. Sharp upper(CA 70drg) and lower(CA 80drg) contacts.								
390.5	412.0	MAGNETITE PYROXENITE. Light to medium green-grey. F.g.-m.g. Aphanitic to phaneritic. Massive. Strongly magnetic (magnetite >15%). Weak pervasive chloritization. Rare carbonate+/-hematite veinlets at CA 10drg-20drg. Slickensides at CA 80 drg on CA 10drg fracture at 410.0. Trace fracture-related? pyrite seen at 411.0. Occasional black euhedral hornblende phenocryst near slickensided fracture. Very good core recovery. Good RQD. Gradational contacts.								

LATITUDE: 18+89S BEARING: VERTICAL
DEPARTURE:07+03E DIP: -90drg
ELEVATION:5825.0'DEPTH: 694.0ft

HOLE NO.: 90-2 LONGYEAR 38 DRILL, BQ CORE
SHEET: 4 OF 6
LOGGED BY: D.R. Halliwell

FOOTAGE From	To	CORE DESCRIPTION	CORE ASSAY (ppb) Samp.No.	From	To	Leng.	Pt	Pd	Rh	Au
412.0	415.0	HEMATIZED MAGNETITE PYROXENITE. As above, with hematite after magnetite patches. Moderately magnetic. No carbonate veinlets. Very good core recovery. Good RQD. Gradational contacts.								
415.0	448.2	MAGNETITE PYROXENITE. Light green-grey. F.g.-m.g. Aphanitic to phaneritic. Massive. Strongly magnetic (magnetite>15%), as patches. Weak pervasive chloritization. Abundant carbonate+/-hematite+/-epidote+/-siderite? veinlets at all CA angles (mostly CA 15drg-20drg). Brecciated appearance below 427.5. Very good core recovery. Good RQD. Gradational contacts.								
448.4	455.0	HEMATIZED MAGNETITE PYROXENITE. As above, with maroon patches of hematite after magnetite. Moderately magnetic. Good core recovery and RQD.								
455.0	506.5	MAGNETITE PYROXENITE. Light to medium green-grey. F.g.-m.g. Aphanitic to phaneritic. Massive. Strongly magnetic with occasional magnetite(>50%) patches at 474.0-474.5,457.0-457.2. Weak pervasive chloritization. Abundant carbonate+/-epidote veinlets at all CA angles (mostly CA 15drg-25drg). Strongly carbonatized. Local brecciated appearance. Very good core recovery. Good RQD. Blocky core at 485.0-487.2. Gradational upper contact. Sharp (CA 50drg) lower contact.	90-2-1	500.0	506.5	6.5				
506.5	527.8	HORNBLENDE PYROXENITE (OR HORNBLENDITE) GNEISS. Strong convolute (ptygmatically tightly folded) finely-laminated dark to light grey gneiss with abundant white quartz-carbonate+/-chlorite+/-talc laminae and elongate pods oriented at CA 30 drg-70drg (mostly CA 50drg-70drg). Weakly to moderately magnetic. Trace disseminated sulphides (pyrite,chalcopyrite?) <5% at 522.0-522.6. Possible single chromite crystal. Melanocratic laminae(gneissic bands) are comprised of hornblende, lesser clinopyroxene and rare magnetite(<5%). Very good core recovery. Fair to poor RQD, due to fractures along laminae (banding,foliation). Sharp upper (CA 50drg) and lower (CA 60drg) contacts.	90-2-2 90-2-3 90-2-4 90-2-5 90-2-6	506.5 510.0 515.0 520.0 525.0	510.0 515.0 520.0 525.0 527.8	3.5 5.0 5.0 5.0 2.8				
527.8	531.3	MAGNETITE PYROXENITE. As above. Strongly magnetic. Abundant carbonate-quartz veinlets. Good core recovery and RQD. Trace pyrite.	90-2-7	527.8	531.3	3.5				
531.3	536.0	HORNBLENDE PYROXENITE (OR HORNBLENDITE) GNEISS. As above. Weakly magnetic. Strong convolute laminae(gneissic bands). Good core reecovery. Fair RQD. Sharp (CA 60drg) upper contact. Gradational lower contact.	90-2-8 90-2-9 90-2-10 90-2-11 90-2-12	531.3 536.0 540.0 545.0 550.0	536.0 540.0 545.0 550.0 556.9	4.7 4.0 5.0 5.0 6.9				
536.0	556.9	MAGNETITE PYROXENITE. Medium green-grey. F.g.-m.g. Aphanitic to phaneritic. Massive. Strongly magnetic (magnetite>15%).								

LATITUDE: 18+89S BEARING: VERTICAL
DEPARTURE:07+03E DIP: -90drg
ELEVATION:5825.0'DEPTH: 694.0ft

HOLE NO.: 90-2 LONGYEAR 38 DRILL, BQ CORE
SHEET: 5 OF 6
LOGGED BY: D.R. Halliwell

FOOTAGE From	To	CORE DESCRIPTION	CORE ASSAY (ppb) Samp.No.	From	To	Leng.	Pt	Pd	Rh	Au
		Moderate pervasive chloritization. Abundant carbonate +/-quartz+/-hematite veinlets at CA 20drg-80drg. Slickensides at 542.1 at CA 15drg on CA 30drg fracture. Chlorite-hematite fault gouge at CA 50drg at 543.0. Very good core recovery. Good RQD. Gradational upper contact. Sharp (CA 20drg) lower contact.								
556.9	565.4	HEMATIZED MAGNETITE PYROXENITE. Medium grey-green. F.g.-m.g. Aphanitic to phaneritic. Massive. Moderately to strongly magnetic. Abundant carbonate-hematite+/-quartz veinlets at CA 10drg-60drg. Hematized CA 20drg fault gouge at upper contact (556.9-557.1). Slickensides at CA 50drg on CA 40drg fracture at 557.4. Chloritic-hematitic fault gouge at 558.4-558.9. Good core recovery. Fair RQD. Sharp upper (CA 20drg) and lower (CA 15drg-brecciated) contacts.								
565.4	624.6	FAULTED MAGNETITE PYROXENITE. Light green-grey. F.g.-m.g. Aphanitic to phaneritic. Massive. Strongly magnetic (magnetite>15%). Slight ophitic texture. Clinopyroxene-plagioclase -magnetite mineralogy. Weak pervasive chloritization. Magnetite patches of >50% magnetite present. Carbonate+/-hematite+/-quartz/-chlorite+/-talc+/-epidote+/-limonite veinlets at CA 5drg-50drg. Brecciated sharp (CA 15drg) upper contact with chlorite-hematite fault gouge and chloritic slickensides at CA 80drg on CA 10drg fracture. Slickensides at CA 70drg on CA 60drg fracture at 600.1. Massive hematite patch at 599.7-600.0. Fair core recovery. Core loss at 579.0-581.0 and 601.0-602.0. Poor RQD. Blocky to friable core at 574.6-581.0, 605.2-608.0, 612.8-614.0 and 616.3-624.6. Chlorite-hematite slickensides at CA 60drg on CA40drg fracture at 610.5. Chlorite slickensides at CA 40drg on CA 20drg fracture at 612.0. Hematitic CA 20drg fault gouge at 608.3.								
624.6	631.4	BRECCIATED MAGNETITE PYROXENITE. As above, with sharp brecciated upper (CA 30drg) and lower (CA 30drg,serpentirized?) contacts. Strongly magnetic. Clayey fault gouge at upper contact. Carbonate veinlets at CA 30drg-85drg. Slickensides at CA 30drg on CA 60drg fracture at 628.2. Good core recovery. Fair RQD.								
631.4	658.0	FAULTED MAGNETITE PYROXENITE. Dark green-grey. F.g.-m.g. Aphanitic to phaneritic. Ophitic texture. Massive. Strongly magnetic (magnetite >15%). Weak pervasive chloritization. Carbonate+/-quartz+/-chlorite+/-hematite+/-epidote veinlets at CA 20drg-60drg. Brecciated at sharp upper (CA 25drg-30 drg) contact and at 641.1-641.4. Slickensires at CA 70drg on CA 25drg fracture at 632.8, and at CA 60drg on CA 40drg frac								

LATITUDE: 18+89S BEARING: VERTICAL
DEPARTURE:07+03E DIP: -90drg
ELEVATION:5825.0'DEPTH: 694.0ft

HOLE NO.: 90-2 LONGYEAR 38 DRILL, BQ CORE
SHEET: 6 OF 6
LOGGED BY: D.R. Halliwell

FOOTAGE From	To	CORE DESCRIPTION	CORE ASSAY (ppb) Samp.No.	From	To	Leng.	Pt	Pd	Rh	Au
		-ture at 633.2. Very good core recovery. Good to fair RQD. Blocky to friable core at 635.0-637.5, 639.5-641.7 and 644.5 -645.0. Gradational lower contact.								
658.0	678.5	HORNBLENDE PYROXENITE. Dark green-grey. M.g.-f.g. Phaneritic Ophitic texture. Massive. Moderately to strongly magnetic (10-15% magnetite, as patches). Weak pervasive chloritization. Carbonate+/-hematite+/-chlorite+/-talc veinlets at CA 10drg-30drg. Slickensides at CA 80drg on CA 30drg fracture at 679.1-679.5. Very good core recovery. Fair RQD. Blocky to friable core at 660.0-661.0, 671.8-673.0. Gradational upper and lower contacts.								
678.5	694.0	MAGNETITE PYROXENITE. Light green-grey with dark grey magnetite patches. F.g.-m.g. Aphanitic to phaneritic. Ophitic texture. Massive. Strongly magnetic (>15% magnetite). Weak pervasive chloritization. Carbonate+/-hematite+/-chlorite+/-talc veinlets at CA 30drg-65drg. Slickensides at CA 85drg on 25drg fracture at 677.5. Very good core recovery. Good RQD. Blocky to friable core at 682.5-683.0, 684.0-685.2. Gradational upper contact.								
694.0		EOH								

LATITUDE: 18+89S BEARING: 040drg
DEPARTURE:07+03E DIP: -70drg
ELEVATION:5825.0'DEPTH: 48.0ft

HOLE NO.: 90-3A LONGYEAR 38 DRILL, BQ CORE
SHEET: 1 OF 1
LOGGED BY: D.R. Halliwell

FOOTAGE From	To	CORE DESCRIPTION
0.0	10.6	CASING. Glacial Overburden.
10.6	48.0	MAGNETITE PYROXENITE. Light to medium green-grey. Slightly porphyrytic (ophitic texture), with dark grey m.g. clinopyroxene phenocrysts and magnetite patches set in a light green-grey f.g. aphanitic groundmass of plagioclase and lesser amphiboles. Strongly magnetic (magnetite >15%). Weak pervasive chloritization. Rare carbonate veinlets at CA 30 drg-50drg. Very good core recovery. Good RQD. Blocky to friable core at 10.6-21.0, 32,9-33.5, 35.5-41.0, 43.0-46.0, 47.5-48.5.
48.0		EOH. Hole Abandoned. Rods and core barrel mudded-in.

CORE ASSAY (ppb)

Samp.No.	From	To	Leng.	Pt	Pd	Rh	Au

LATITUDE: 18+88S BEARING: 040drg
DEPARTURE:07+04E DIP: -70drg
ELEVATION:5825.0'DEPTH: 733.0ft

HOLE NO.: 90-3 LONGYEAR 38 DRILL, BQ CORE
SHEET: 1 OF 6
LOGGED BY: D.R. Halliwell

FOOTAGE From	To	CORE DESCRIPTION	CORE ASSAY (ppb) Samp.No.	From	To	Leng.	Pt	Pd	Rh	Au
0.0	11.0	CASING. Glacial Overburden.								
11.0	14.0	ALTERED MAGNETITE PYROXENITE. Blue-green. F.g. Aphanitic. Massive. Weakly magnetic. Moderately pervasively chloritized and epidotized. Fair core recovery. Poor RQD. Gradational lower contact.								
14.0	54.1	MAGNETITE PYROXENITE. Light green-grey. M.g.-f.g. Phaneritic Ophitic texture. Massive. Strongly magnetic (>15% magnetite, as patches). Weak pervasive chloritization. Rare carbonate veinlets at CA 15drg-30drg. Very good core recovery. Fair to poor RQD. Blocky to friable core at 17.8-21.0, 22.0-25.5, 29.0-31.0, 31.5-34.0, 35.0-39.0, 46.4-47.0 and 50.7-52.0. Gradational contacts.								
54.1	69.0	BRECCIATED HORNBLENDE PYROXENITE. Light to dark green-grey. M.g.-f.g. Phaneritic to aphanitic. Brecciation of ophitic texture, cut by abundant carbonate+/-phlogopite veinlets at all CA angles (mostly 10drg-30drg). Massive. Weakly to moderately magnetic (<5% magnetite). Clinopyroxene-hornblende-plagioclase mineralogy. Weak pervasive chloritization. Very good core recovery. Good RQD. Blocky to friable core at 54.1-57.3, 58.0-58.6. No hematization. Gradational contacts.								
69.0	73.8	MAGNETITE PYROXENITE. Light green-grey strongly magnetic unit, as above. Weak pervasive chloritization. Rare carbonate veinlets at CA 30drg. Very good core recovery. Good RQD. Gradational contacts.								
73.8	101.4	HEMATIZED MAGNETITE PYROXENITE. Light to dark green-grey with maroon patches. M.g.-f.g. Phaneritic to aphanitic. Ophitic texture. Massive. Weak pervasive chloritization. Carbonate+/-chalcedony+/-chlorite+/-talc+/-phlogopite veinlets at CA 15drg-40drg. Weakly magnetic. Moderate patchy hematitization (after magnetite). Very good core recovery. Good RQD. Gradational contacts.								
101.4	159.9	MAGNETITE PYROXENITE. Medium to dark green-grey. M.g.-f.g. Phaneritic to aphanitic. Ophitic texture. Massive. Strongly magnetic (>15% magnetite). Weak pervasive chloritization. Carbonate+/-quartz+/-chlorite+/-hematite veinlets at CA 20drg-70drg. Magnetite patches with >50% magnetite. Slickensides at CA 50drg on CA 25drg fracture at 111.7-112.0, and CA 60drg on CA 20drg fracture at 138.0-138.3. Very good core recovery. Good RQD. Blocky to friable core at 133.0-136.5, 138.0-139.0, 151.1-153.0 and 160.6-163.6. Gradational upper contact.								

LATITUDE: 18+88S BEARING: 040drg
DEPARTURE:07+04E DIP: -70drg
ELEVATION:5525.0'DEPTH: 733.0ft

HOLE NO.: 90-3 LONGYEAR 38 DRILL, BQ CORE
SHEET: 2 OF 6
LOGGED BY: D.R. Halliwell

FOOTAGE From	To	CORE DESCRIPTION	CORE ASSAY (ppb) Samp.No.	From	To	Leng.	Pt	Pd	Rh	Au
159.9	179.9	HEMATIZED MAGNETITE PYROXENITE. Light to medium green-grey with maroon patches. M.g.-f.g. Phaneritic to aphanitic. Ophitic texture. Massive. Strongly to moderately magnetic (10-15% magnetite). Weak pervasive chloritization. Strong patchy hematization (after magnetite). Rare carbonate+/-quartz +/-chlorite+/-hematite+/-phlogopite veinlets at CA 20drg-55drg. Very good core recovery, RQD. Gradational contacts. Metallic flakes at 173.0(palogopite, muscovite or sulphides?).								
179.9	228.2	MAGNETITE PYROXENITE. Medium green-grey. F.g.-m.g. Aphanitic Ophitic. Massive. Strongly magnetic (>15% magnetita). Weak pervasive chloritization. Carbonate+/-quartz+/-chlorite+/-hematite veinlets at CA 0drg-70drg. Hairline fault gouges at 180.5(CA 45drg, chloritic), 192.7(CA 70drg.hematitic-chloritic). Slickensides at CA 60drg on CA 25drg fracture at 189. Good core recovery. Core loss at 194.0-195.0. Good RQD. Blocky to friable core at 183.0-184.0, 189.0-189.5, 194.0-195.2 215.0-216.0 and 221.0-224.0 Gradational contacts.								
228.2	229.5	HEMATIZED MAGNETITE PYROXENITE. As above, with maroon hematite replacement patches (after magnetite). Moderately magnetic. Brecciated. Fault gouge at lower contact.								
229.5	262.7	MAGNETITE PYROXENITE BRECCIA. Slightly porphyrytic, with occasional black m.g. subhedral to euhedral hornblende phenocrysts and blue-black magnetite patches set in a light to medium green-grey f.g. aphanitic groundmass of clinopyroxene and plagioclase. Brecciated texture. Massive. strongly magnetic (>15% magnetite). Weak pervasive chloritization. Carbonate+/-quartz+/-chlorite veinlets at CA 15drg-40drg. Very good core recovery. Fair to poor RQD. Blocky to friable core at 238.5-240.5, 242.3-244.3, 246.1-249.2, 251.0-254.0, 255.8-259.0, 259.7-260.5, 260.9-262.4. Gradational upper contact and sharp lower (CA 50drg) contact.								
262.7	265.1	PORPHYRY DYKE. Light green-grey. V.f.g. Porphyrytic, with rare black f.g. subhedral amphibole(hornblende?) phenocrysts set in a v.f.g. aphanitic groundmass. Non-magnetic. Massive. V.f.g. chill margins at both upper (CA 50drg) and lower (CA 55drg) contacts. Weak pervasive chloritization. Carbonate veinlets at CA 30drg-40drg. Very good core recovery and RQD.								
265.1	270.0	MAGNETITE PYROXENITE. As above. Rare carbonate veinlets at CA 80drg. Strongly magnetic. Sharp upper contact.								
270.0	271.7	HORNBLENDITE. Dark green to black. C.g. to m.g. Phaneritic. Massive. Porphyrytic, with black hornblende phenocrysts set in a dark green f.g. aphanitic to phaneritic groundmass of clinopyroxene, plagioclase and 10-15% magnetite. Moderately magnetic. Very good core recovery, RQD. Gradational contacts								

LATITUDE: 18+88S BEARING: 040drg
DEPARTURE:07+04E DIP: -70drg
ELEVATION:5825.0'DEPTH: 733.0ft

HOLE NO.: 90-3 LONGYEAR 38 DRILL, BQ CORE
SHEET: 3 OF 6
LOGGED BY: D.R. Halliwell

FOOTAGE From	To	CORE DESCRIPTION	CORE ASSAY (ppb) Samp.No.	From	To	Leng.	Pt	Pd	Rh	Au
271.7	300.5	MAGNETITE PYROXENITE. Mdeium to dark green-grey. M.g.-f.g. Phaneritic to aphanitic. Ophitic texture, with magnetite patches. Massive. Strongly magnetic (>15% magnetite). Weak pervasive chloritization. Carbonate-quartz+/-chlorite veinlets at CA 15drg-70drg. Brecciated texture at 288.1-288.7. Very good core recovery, RQD. Gradational contacts.								
300.5	302.2	HEMATIZED MAGNETITE PYROXENITE. As above, with maroon hema-after magnetite patches. Moderately magnetic. Carbonate+/-chlorite+/-talc veinlets at CA 10drg-20drg. Very good core recovery, RQD. Gradational contacts.								
302.2	325.0	MAGNETITE PYROXENITE. Medium to dark green-grey. M.g.-f.g. Phaneritic to aphanitic. Ophitic texture. Massive. Strongly magnetic (>15% magnetite). Weak pervasive chloritization. Carbonate+/-quartz+/-chlorite veinlets at CA 0drg-25drg. Brecciated texture at 204.0-204.5, 321.7-122.2. Fair core recovery. Core loss at 314.5-315.0. Good RQD. Blocky to friable core at 303.0-307.0, 314.5-315.0. Gradational upper contact. Sharp lower contact.								
325.0	325.7	PYROXENITE GNEISS. As above. Foliated(gneissic) at CA 40drg, with carbonate-quartz-chlorite banding. Sharp upper and lower contacts, both at CA 40drg.								
325.7	358.5	MAGNETITE PYROXENITE. Medium to dark green-grey. F.g.-m.g. Aphanitic to phaneritic. Massive. Strongly magnetic (magnetite>15%). Weak pervasive chloritization. Carbonate+/-quartz +/-chlorite veinlets at CA 25drg-80drg. Very good core recovery. Good RQD. Blocky core at 330.5-333.0, 343.0-345.4, 351.3-353.2. Gradational contacts.								
358.5	359.2	HORNBLENDITE. As above, with black c.g. subhedral hornblende phenocrysts.								
359.2	366.7	MAGNETITE PYROXENITE. As above. Slickensides at CA 75drg on CA 30drg fracture at 361.5-361.7. Hematitic-chloritic fault gouge at CA 40drg at 365.7. Very good core recovery, RQD. Gradational upper contact. Sharp lower (CA 40drg) contact.								
366.7	382.7	FAULT ZONE IN MAGNETITE PYROXENITE. Medium to dark green-grey. C.g. to m.g. Phaneritic. Ophitic texture, locally brecciated (372.5-373.0, 376.2-376.5). Strongly magnetic (magnetite >15%). Weak pervasive chloritization. Abundant carbonate+/-quartz+/-chlorite+/-epidote veinlets at all CA angles (mostly, CA 40drg). Slickensides at CA 65drg on CA 30drg fracture at 372.5 and CA 75drg on CA 15drg at 380.0. Numerous chloritic-hematitic fault gouges at 366.7 (CA 40drg), 367.0-367.5(CA 40drg), 367.8(CA 40drg), 380.5(CA 20drg) and	90-3-1	375.0	382.7	7.7				

LATITUDE: 19+88S BEARING: 040drg
DEPARTURE:07-04E DIP: -70drg
ELEVATION:5825.0 DEPTH: 733.0ft

HOLE NO.: 90-3 LONGYEAR 38 DRILL, BQ CORE
SHEET: 4 OF 6
LOGGED BY: D.R. Halliwell

FOOTAGE From	To	CORE DESCRIPTION	CORE ASSAY (ppb) Samp.No.	From	To	Leng.	Pt	Pd	Rh	Au
		382.5(CA 70drg). Very good core recovery. Fair to good RQD. Blocky to friable core at 366.7-369.8, 372.5-373.3, 376.5-380.9. Trace disseminated pyrite and rare chalcopyrite at 376.5-376.8.								
382.7	471.3	MAGNETITE PYROXENITE. Medium to dark green-grey. F.g.-m.g. Aphanitic to phaneritic. Ophitic texture. Massive. Strongly magnetic (>15% magnetite). Weak pervasive chloritization. Carbonate+/-chlorite+/-epidote veinlets at CA 0drg-75drg. Brecciated texture near upper contact. Trace disseminated pyrite, chalcopyrite at 387.0. Very good core recovery. Good RQD. Blocky core at 382.7-383.7, 390.8-391.4, 392.6-392.9, 396.7-397.2, 398.9-400.0, 410.3-413.0, 466.8-467.4, 471.5-472.5. Gradational contacts.	90-3-2	382.7	389.0	6.3				
471.3	473.0	HORNBLENDE PYROXENITE GNEISS. Light to medium green-grey. F.g. Aphanitic. Gneissically banded at CA 20drg-80drg. Non-magnetic. Weak pervasive chloritization. Carbonate veinlets at CA 20drg-70drg. Very good core recovery, RQD. Sharp upper (CA 80drg) and lower(CA 20drg) contacts.								
473.0	481.1	MAGNETITE PYROXENITE. As above.								
481.0	499.9	MAGNETITE PYROXENITE GNEISS. Light to medium green-grey.F.g. Aphanitic to phaneritic. Gneissically banded (foliated at CA 35drg-80drg, these being ptygmatically folded. Strongly mag-netic (magnetite>15%). Weak pervasive chloritization. Carbonate-quartz+/-chlorite+/-hematite veinlets at CA 50drg-90 drg. Quartz veins/veinlets at CA 80drg at 485.2-485.6, 496.3-496.6 (both associated with trace pyrite). Chloritic fault gouge at CA 30drg at 495.0-495.5. Trace pyrite throughout (noted while splitting core). Very good core recovery, RQD. Gradational contacts.	90-3-3 90-3-4 90-3-5	485.0 490.0 495.0	490.0 495.0 499.9	5.0 5.0 4.9				
499.9	507.0	MAGNETITE PYROXENITE, SILICIFIED. Light green-grey. F.g. Aphanitic. Massive. Weak pervasive chloritization, silicification. Carbonate+/-quartz+/-chlorite veinlets at CA 29drg-50drg. Strongly magnetic. Slickensides at CA 80drg on CA 25 drg fracture at 515.3. Leucocratic-smooth-hard (silicification). Very good core recovery, RQD. Gradational contacts.								
507.0	524.0	MAGNETITE PYROXENITE GNEISS. Light green-grey. F.g.-m.g. Aphanitic to phaneritic. Finely (gneissically) banded, with ptygmatically folded. Weak pervasive chloritization. Carbonate+/-quartz+/-chlorite+/-hematite veinlets at CA 20drg-80 drg. Elongate quartz porphyroblasts elongate at CA 60drg at CA 60drg at 510.3-511.0. Slickensides at CA 85drg on CA 40 drg fracture at 509.0-509.4 and at CA 0drg on CA 35drg fracture at 521.0. Very good core recovery, RQD. Gradational contacts.								

LATITUDE: 18+99S BEARING: 040drg
DEPARTURE:07+04E DIP: -70drg
ELEVATION:5825.0'DEPTH: 733.0ft

HOLE NO.: 90-3 LONGYEAR 38 DRILL, BQ CORE
SHEET: 5 OF 6
LOGGED BY: D.R. Halliwell

FOOTAGE From	To	CORE DESCRIPTION	CORE ASSAY (ppb) Samp.No.	From	To	Leng.	Pt	Pd	Rh	Au
524.0	526.8	MAGNETITE PYROXENITE. As above. Massive. Strongly magnetic. Very good core recovery, RQD. Gradational lower contact. Sharp upper (CA 60drg, chloritic-hematitic fault gouge) upper contact.								
526.8	529.6	MAGNETITE PYROXENITE GNEISS, SILICIFIED. Light green-grey. Smooth. F.g. Finely gneissically banded at CA 70drg-50drg. Weakly magnetic. Weak pervasive chloritization+/-silicification. Slickensides at CA 40drg on CA 45drg at 527.6-527.8. Very good core recovery, RQD. Gradational contacts.								
529.6	532.9	MAGNETITE PYROXENITE GNEISS. As above, without silicification.								
532.9	536.7	HORNBLENDE PYROXENITE GNEISS. Light to medium green-grey. F.g. Aphanitic. Gneissic banding with fine laminations at CA 65drg-80drg. Weak pervasive chloritization. Carbonate-quartz+/-chlorite veinlets at CA 65-80drg. Moderately magnetic. Very good core recovery. Good RQD. Blocky core at 534.5-536.0. Gradational contacts.								
536.7	551.0	MAGNETITE PYROXENITE. Light to medium green-grey. F.g. Aphanitic. Ophitic texture. Massive. Strongly magnetic. Weak pervasive chloritization, carbonate-quartz-chlorite veinlets at CA 45drg-90drg. Chloritic fault gouges at 438.4-438.5 (CA 60drg), 439.1-439.3 (CA 65drg, brecciated below). Very good core recovery, RQD. Gradational contacts.								
551.0	555.9	HEMATIZED MAGNETITE PYROXENITE. Light to medium green-grey. F.g. Aphanitic. Ophitic texture. Massive. Maroon hematitic replacement patches (after magnetite). Moderately magnetic. Weak pervasive chloritization. Carbonate veinlets at CA 0drg-20drg. Very good core recovery, RQD. Gradational contacts.								
555.9	621.1	MAGNETITE PYROXENITE. Light green-grey. F.g.-m.g. Aphanitic to phaneritic. Ophitic texture. Massive. Strongly magnetic (>15% magnetite, as patches). Weak pervasive chloritization Carbonate+/-quartz+/-chlorite+/-talc veinlets at CA 15drg-90drg. Disseminated trace pyrite at 611.5. Brecciated at 573.0 Very good core recovery. Good RQD. Blocky core at 610.0-612, 612.7-614.2. Gradational contacts.								
621.1	634.5	FRACTURE IN MAGNETITE PYROXENITE. As above. Good core recovery. Poor RQD. Friable to blocky throughout. Brecciated texture. Carbonate veinlets at all CA angles. Sharp upper and lower contacts.								
634.5	682.0	MAGNETITE PYROXENITE. As above, with intermittent friable to blocky zones. Moderately to strongly magnetic. Weak pervas-	90-3-6 90-3-7	640.0 642.0	642.0 645.0	2.0 3.0				

LATITUDE: 13+69S BEARING: 040drg
DEPARTURE:07+04E DIP: -70drg
ELEVATION:3825.0'DEPTH: 733.0ft

HOLE NO.: 90-3 LONGYEAR 38 DRILL, BQ CORE

LOGGED BY: D.R. Halliwell

FOOTAGE From	To	CORE DESCRIPTION	CORE ASSAY (ppb) Samp.No.	From	To	Leng.	Pt	Pd	Rh	Au
		ive chloritization. Magnetic bands(at CA 40drg) and patches. Brecciated texture at 646.0. Chloritic fault gouge at CA 50 drg at 655.0. Carbonate veinlets at CA 5drg-40drg. Trace disseminated pyrite at 642.2. Very good core recovery. Fair to poor RQD. Blocky to friable core at 639.0-642.0, 644.5-645.0, 653.0-654.0, 660.0-661.0, 670.5-675.0.								
682.0	702.7	BRECCIATED MAGNETITE PYROXENITE. As above. Brecciated intermittently throughout. Strongly to moderately magnetic. Weak pervasive chloritization. Carbonate veinlets at all angles. Very good core recovery. Poor RQD. Blocky to friable core throughout, especially at (gradational) contacts.								
702.7	707.0	MAGNETITE PYROXENITE. As above. Strongly magnetic. Very good core recovery, RQD.								
707.0	718.5	BRECCIATED MAGNETITE PYROXENITE. As above. Weakly to moderately magnetic. Brecciated throughout. Weak pervasive chloritization. Carbonate+/-chlorite+/-hematite veinlets at CA 10 drg-60drg. Very good core recovery. Poor RQD. Blocky to friable throughout. Gradational contacts.								
718.5	733.0	MAGNETITE PYROXENITE. As above. Ophitic texture. Brecciated texture at 728.5-729.0. Strongly magnetic. Weak pervasive chloritization. Carbonate+/-chlorite+/-hematite veinlets at all CA angles (CA 5drg-70drg). Slickensides at CA 45drg on CA 40drg fracture. Very good core recovery. Fair RQD. Blocky core at 721.0-721.5, 731.0-732.0. Gradational upper contact.								
733.0		EOH.								

APPENDIX II

ASSAYS & GEOCHEMICAL RESULTS

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

GEOCHEMICAL ANALYSIS CERTIFICATE

Tiffany Resources Inc. PROJECT LODESTONE File # 90-5214 Page 1

1970 - 808 Nelson St., Vancouver BC V6Z 2H2 Submitted by: DOUGLAS HALLIWELL

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** ppb
90-1-1	1	1	5	26	.1	22	17	802	5.04	8	5	ND	1	134	.2	2	2	101	17.89	.005	2	14	4.94	24	.01	2	.26	.02	.06	1	5
90-1-2	1	3	2	40	.1	9	23	510	8.32	2	5	ND	1	102	.2	2	2	226	4.39	.190	2	15	1.81	54	.16	3	1.43	.23	.20	1	3
90-1-3	1	9	9	44	.1	11	20	486	3.81	4	5	ND	1	120	.2	4	2	106	3.35	.110	2	17	2.16	55	.09	5	1.91	.10	.19	1	4
90-1-4	1	16	3	57	.1	8	19	634	4.94	6	5	ND	1	122	.2	4	2	130	6.77	.082	2	8	2.07	63	.09	4	1.50	.11	.15	1	3
90-1-5	1	35	3	67	.1	21	28	737	7.09	2	5	ND	1	118	.2	2	2	191	7.65	.083	2	5	3.40	65	.07	3	2.43	.05	.24	1	3
90-1-6	1	10	3	24	.1	199	26	533	3.76	6	5	ND	1	101	.4	2	2	55	9.06	.048	2	585	3.99	36	.03	4	1.00	.02	.10	1	3
90-1-7	1	8	84	57	.1	94	14	423	2.01	3	5	ND	1	109	1.5	3	3	29	10.36	.017	2	922	2.35	46	.03	6	.67	.02	.12	1	2
90-1-8	1	3	2	8	.1	115	18	459	2.35	4	5	ND	1	104	.2	2	2	17	11.34	.006	2	825	3.00	31	.02	7	.38	.01	.04	1	1
90-1-9	1	3	19	19	.1	67	13	612	2.18	5	5	ND	1	139	.7	2	2	30	16.92	.011	2	570	3.81	46	.03	3	.56	.02	.09	2	4
90-1-10	1	3	2	6	.1	62	12	648	1.40	3	5	ND	1	111	.8	4	2	10	19.93	.004	2	367	2.00	24	.01	5	.26	.01	.03	1	2
90-1-11	1	2	4	9	.1	108	20	190	1.84	3	5	ND	1	47	.2	3	2	16	2.84	.005	2	569	2.58	25	.03	7	.38	.01	.03	1	1
90-1-12	1	4	2	4	.1	92	17	148	1.46	7	5	ND	1	30	.8	4	2	11	1.81	.003	2	484	2.39	14	.02	7	.23	.01	.01	1	3
90-1-13	1	4	5	9	.1	93	17	251	1.53	4	5	ND	1	58	.2	3	2	11	5.56	.008	2	374	2.44	21	.01	9	.26	.01	.01	1	4
90-1-14	1	3	2	13	.1	111	22	224	1.84	6	5	ND	1	41	.2	2	2	11	2.99	.006	2	237	3.02	17	.02	9	.28	.01	.01	1	12
90-1-15	1	3	6	7	.1	127	25	266	2.02	6	5	ND	1	46	.2	3	2	11	3.84	.005	2	251	2.71	19	.02	9	.27	.01	.02	1	1
90-1-16	1	2	7	8	.1	123	22	270	1.80	3	5	ND	1	34	.2	2	2	8	2.13	.007	2	176	2.95	22	.02	20	.22	.01	.04	1	1
90-1-17	1	4	2	11	.1	100	20	162	1.70	3	5	ND	1	18	.3	3	2	8	.83	.005	2	118	2.37	21	.02	13	.22	.01	.04	1	2
90-1-18	1	3	2	11	.1	82	17	263	2.18	3	5	ND	1	59	.3	4	2	13	5.52	.004	2	285	2.25	22	.02	7	.29	.02	.02	1	3
90-1-19	1	2	2	23	.1	138	36	298	11.19	2	5	ND	1	25	.2	2	2	62	1.43	.004	2	130	1.60	23	.11	2	.43	.01	.04	1	1
90-2-1	1	1	2	54	.1	37	35	353	13.25	2	5	ND	1	21	.2	3	3	365	1.01	.013	2	56	1.15	29	.26	2	.63	.06	.03	1	4
90-2-2	1	3	4	48	.2	61	26	867	8.27	2	5	ND	1	143	.2	2	2	253	9.20	.031	2	174	2.46	143	.10	2	1.40	.04	.43	1	2
90-2-3	1	18	2	77	.1	79	31	955	8.30	2	5	ND	1	167	.2	2	2	286	9.03	.112	4	217	4.08	107	.07	3	2.67	.01	.33	1	1
90-2-4	1	13	9	57	.1	72	33	969	8.72	2	5	ND	1	173	.2	2	2	270	9.23	.063	3	163	4.44	136	.06	2	2.40	.01	.25	1	2
90-2-5	1	4	2	46	.1	75	32	868	8.69	2	5	ND	1	104	.2	2	2	215	9.33	.018	2	188	4.55	38	.04	2	1.17	.01	.09	1	2
90-2-6	1	1	2	37	.1	68	26	843	8.71	2	5	ND	1	88	.2	2	2	196	11.54	.004	2	176	3.70	70	.06	3	.95	.02	.27	1	1
90-2-7	1	1	2	20	.1	53	17	502	7.37	2	5	ND	1	54	.2	5	2	157	6.76	.004	2	210	1.46	88	.18	2	.66	.05	.27	1	6
90-2-8	1	6	2	30	.2	39	21	778	8.28	2	5	ND	1	69	.2	4	3	228	10.40	.008	2	57	1.98	16	.10	2	1.15	.03	.04	1	1
90-2-9	1	5	2	29	.1	44	20	594	9.34	2	5	ND	1	58	.2	6	4	226	7.85	.003	2	70	1.80	41	.23	3	.89	.06	.21	1	3
90-2-10	1	1	2	33	.1	48	23	618	10.88	2	5	ND	1	53	.2	6	2	269	7.81	.003	2	92	1.75	20	.29	2	.99	.05	.08	1	3
90-2-11	1	1	2	19	.1	35	17	464	8.74	2	5	ND	1	45	.2	2	2	206	6.55	.002	2	125	1.14	24	.27	2	.67	.04	.10	1	3
90-2-12	1	1	2	17	.1	52	18	448	8.47	3	5	ND	1	48	.2	5	2	197	6.15	.003	2	142	1.49	18	.26	2	.61	.08	.02	1	2
90-3-1	1	1	3	46	.1	60	29	377	9.66	2	5	ND	1	34	.2	4	3	305	1.06	.005	2	55	1.85	163	.27	2	1.04	.11	.28	1	2
90-3-2	1	1	2	45	.1	37	30	361	10.75	2	5	ND	1	20	.2	3	2	357	.90	.005	2	28	1.11	20	.26	2	.72	.07	.04	1	2
90-3-3	1	28	2	37	.4	50	27	711	10.44	2	5	ND	1	79	.2	3	2	293	8.83	.005	2	45	2.28	139	.15	2	1.34	.02	.57	1	5
90-3-4	1	13	2	42	.2	62	28	815	9.97	2	5	ND	1	110	.2	2	2	257	10.26	.006	2	111	3.07	72	.10	2	1.12	.02	.25	1	6
90-3-5	1	39	2	35	.2	38	24	775	8.29	2	5	ND	1	106	.2	3	2	223	9.59	.037	2	59	2.05	159	.15	2	1.38	.03	.63	1	2
STANDARD C/AU-R	18	57	36	131	6.8	73	31	1054	3.95	39	20	7	39	52	18.7	15	21	56	.46	.099	38	60	.90	182	.07	37	1.89	.06	.13	12	506

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: P1 TO P2 CORE P3 ROCK P4 SOIL AU** ANALYSIS BY FA\ICP FROM 10 GM SAMPLE.

DATE RECEIVED: OCT 10 1990 DATE REPORT MAILED: Oct 17/90 SIGNED BY.......... D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

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** ppb
90-3-6	1	6	2	20	.1	68	24	256	5.85	4	5	ND	1	17	.2	2	2	126	1.04	.004	2	351	1.25	11	.14	2	.48	.02	.03	1	5
90-3-7	1	7	2	21	.1	68	23	233	5.12	3	5	ND	1	13	.2	3	2	107	.84	.003	2	383	1.20	12	.12	4	.39	.02	.01	1	2

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** ppb
TR-1-1	1	23	2	22	.1	33	19	440	10.02	11	5	ND	1	29	.5	2	2	231	3.75	.005	2	76	.85	19	.29	2	.59	.01	.06	1	1
TR-1-2	1	8	4	67	.1	47	41	490	14.21	6	5	ND	2	15	.3	2	2	454	.65	.003	2	19	1.01	19	.32	2	.78	.03	.02	1	1
TR-1-3	1	6	2	24	.1	74	27	191	10.56	12	5	ND	1	10	.4	2	3	339	.59	.003	2	63	.98	11	.23	2	.56	.03	.03	1	1
TR-2-1	1	6	11	59	.1	42	33	372	12.10	9	5	ND	2	18	.4	2	2	410	.68	.005	2	77	1.13	36	.32	2	.84	.05	.04	1	3
TR-2-2	1	5	5	45	.1	33	28	371	10.09	2	5	ND	2	38	.3	2	2	340	1.00	.012	2	20	1.27	70	.30	2	1.02	.13	.12	1	2
TR-2-3	1	8	3	51	.1	62	36	350	13.44	10	5	ND	2	8	.3	2	2	464	.56	.002	2	74	.74	29	.24	2	.58	.02	.02	1	1

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

GEOCHEMICAL ANALYSIS CERTIFICATE

Tiffany Resources Inc. PROJECT LODESTONE File # 90-5214 Page 4

1970 - 808 Nelson St., Vancouver BC V6Z 2H2 Submitted by: DOUGLAS HALLIWELL

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* ppb
TS-1-1	1	23	3	58	.1	61	44	459	11.24	10	5	ND	3	21	.3	2	3	373	.43	.031	2	64	2.27	112	.19	3	2.24	.01	.08	1	3
TS-1-2	1	32	2	53	.1	59	37	1228	10.98	10	5	ND	2	19	.5	2	2	350	.46	.028	8	74	1.84	166	.18	2	2.46	.01	.15	1	1
TS-1-3	1	15	2	37	.1	65	27	586	9.19	11	5	ND	2	14	.3	2	2	267	.50	.023	2	111	1.67	78	.16	3	1.37	.02	.06	1	1
TS-1-4	1	12	2	31	.1	59	26	295	8.25	9	5	ND	1	11	.2	3	2	280	.41	.019	2	80	1.23	52	.13	5	1.10	.01	.03	1	1
TS-1-5	1	22	3	30	.1	47	20	373	8.14	10	5	ND	1	17	.2	2	2	264	.54	.032	3	94	1.11	84	.13	2	1.44	.02	.03	1	1
TS-1-6	1	16	2	46	.1	55	31	206	9.77	12	5	ND	2	11	.2	2	2	344	.39	.023	2	100	.99	29	.17	4	.75	.01	.03	1	3
TS-1-7	1	51	2	55	.1	60	30	329	8.34	8	5	ND	3	43	.2	2	2	240	.73	.072	4	116	1.77	92	.14	3	1.39	.02	.10	1	1
STANDARD C/AU-S	17	59	36	131	7.0	72	31	1050	3.94	36	22	7	40	53	19.5	15	19	57	.45	.094	38	59	.92	182	.07	34	1.89	.06	.14	11	55

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: SOIL AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

DATE RECEIVED: OCT 10 1990 **DATE REPORT MAILED:** Oct 17/90 **SIGNED BY** .... D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

ACME ANALYTICAL LABORATORIES
852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6
PHONE 253-3158 DATA LINE 251-1011

DATE RECEIVED: OCT 19 1990
DATE REPORT MAILED: Oct.24/90

GEOCHEM PRECIOUS METALS ANALYSIS

Tiffany Resources Inc. PROJECT LODESTONE FILE # 90-5214R

SAMPLE#	Au ppb	Pt ppb	Pd ppb	Rh ppb
90-1-6	4	5	4	4
90-1-7	1	1	2	4
90-1-8	1	1	3	2
90-1-9	16	8	5	2
90-1-11	1	27	2	2
STANDARD FA-R	520	480	516	98

10 GRAM SAMPLE FIRE ASSAY AND ANALYSIS BY ICP/GRAPHITE FURNACE.
- SAMPLE TYPE: CORE PULP

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