

32E12SE0002 W9380-00302 HOBUTZELL

**MIKWAM JOINT VENTURE  
ASSESSMENT REPORT  
TRADER RESOURCE CORP.  
NOVEMBER 1993**



**Submitted by:**

**P. Coad,  
Royal Oak Mines Inc.  
Timmins, Ontario**

**November 1993**

## SUMMARY

A total of nine holes, MK92-1 through MK92-9 (2,597m), were diamond drilled on the Mikwam Joint Venture in NE Ontario during 1992. During Phase 1 (June 16-July 3, 1992) diamond drill holes MK92-1 through MK92-6 were completed for a total of 1,600m. Note - MK92-6 was drilled in Dieppe Twp., Quebec (400m). During Phase 2 (December 1-16, 1992) holes MK92-7 through MK92-9 were completed for a total of 997m. Holes MK92-1 through MK92-5 were drilled in the A8 Area, where Newmont reported an ore grade intersection in 11985 (i.e. 7.95 gpt Au (2.9m) in hole 26085A1). MK92-1 returned the best intersection in 1992, grading 5.61 gpt Au (7.2m) or 0.164 opt Au (23.6'), including 8.157 gpt Au (4.3m) or 0.238 opt Au (14.1') at a vertical depth of 160m. The most significant assays occur within semi-massive pyrite and associated arsenopyrite and not in the spatially associated quartz, which is hosted within a quartz-eye phyric, sericitized and siliceous intermediate-felsic tuff. There is a possibility that the above intersection represents sulphidization of an iron formation unit, expressed near surface by a magnetic axis "peak-high". All the stratigraphy logged during Phase 1 is definitely folded and available information indicates that I.P. anomalies represent fault structures.

Phase 2 drilling focused in the "102" Area of Hoblitzell Twp., in the Golden Shield portion, or western part, of the Mikwam Joint Venture. The stratigraphy is marked by variably magnetic iron formation and high iron-tholeiites to the north and tuffaceous sediments to the south. Significant gold values were intersected in all three holes, however no ore grade intersections were encountered. Highest gold values occur with variably sulphidic quartz veins within or near magnetite-rich rocks. The tuffaceous-sediments are dirtied by finely disseminated magnetite (+/- chlorite and biotite) with local clasts and are locally QE (colourless) phyric. The tuffaceous-sediment package is locally marked by variable widths of albitization and hematization, particularly strong in the L-102 to L-105 area - note strong anomalous gold values are locally spatially associated with this alteration (i.e. 780 ppb Au over 4.5m at 108.50-113.00 in MK92-8). Blue quartz-eyes are locally present in the altered tuffaceous sediments. This alteration horizon within the tuffaceous sediments should provide a useful regional stratigraphic marker.

Massive, banded pyrite exhalite with garnets was intersected over 0.17m at the basalt/sediment contact in MK92-9 (291 ppm Cu).

A total of \$368,106.34 (unloaded) was expended during 1992. Average direct drilling costs totalled \$99.26 per metre.

**TABLE OF C**



010C

	<b>Page</b>
Summary	(i)
Commodities	1
Deposit Type	1
Location	1
Access	1
Property	2
Ownership	2
Mineral Inventory	2
Expenditures	2
Introduction	2
Previous Work	3
Regional Geology	3
Mikwam Geology	4
Results of 1992 Program - Phase 1	5
Results of 1992 Program - Phase 2	6
1994 Budget Proposal	9
References	10

**APPENDICES**

Appendix A	Summary Logs
Appendix B	Field Logs
Appendix C	Geological Legend
Appendix D	Schedule A - Claim List (Township Grouping)
Appendix E	Geological Sections and Plans

**COMMODITIES**

Au.

**DEPOSIT TYPE**

Vein-type gold mineralization (i.e. Casa Berardi) and exhalative-type? sulphide-gold mineralization (i.e. Estrades and Agnico-Eagle). Les Mines Casa Berardi are located 15 kms ENE of the eastern boundary of the Mikwam property. Published reserves at Les Mines Casa Berardi, to the end of 1991, are 9.4 million tons (proven and probable) grading 0.25 o.p.t. Au and 2.6 million tons (possible) grading 0.15 o.p.t. Au (Northern Miner, August 10, 1992).

**LOCATION (NTS 32E/5, 5, 11, 12; -49°30'N, 79°45'W)**

The Mikwam property forms a linear band straddling most of Hoblitzell Twp. and all of Noseworthy and Bradette Twps. in northeast Ontario. These three townships all occur within the Larder Lake Mining Division 155 kms northeast of Timmins, Ontario. The eastern boundary of the property is located in Dieppe Twp. in northwest Quebec (Figure 1). The property is approximately 36 kms long and in Noseworthy Twp., its widest point, is 7 kms wide.

**ACCESS**

Access to the Mikwam property is limited to helicopter and in rare locations to fixed wing aircraft during the summer and fall periods. Larger tracked, muskeg-type vehicles can negotiate local terrain in this period, but creeks and rivers offer major obstacles to complete access.

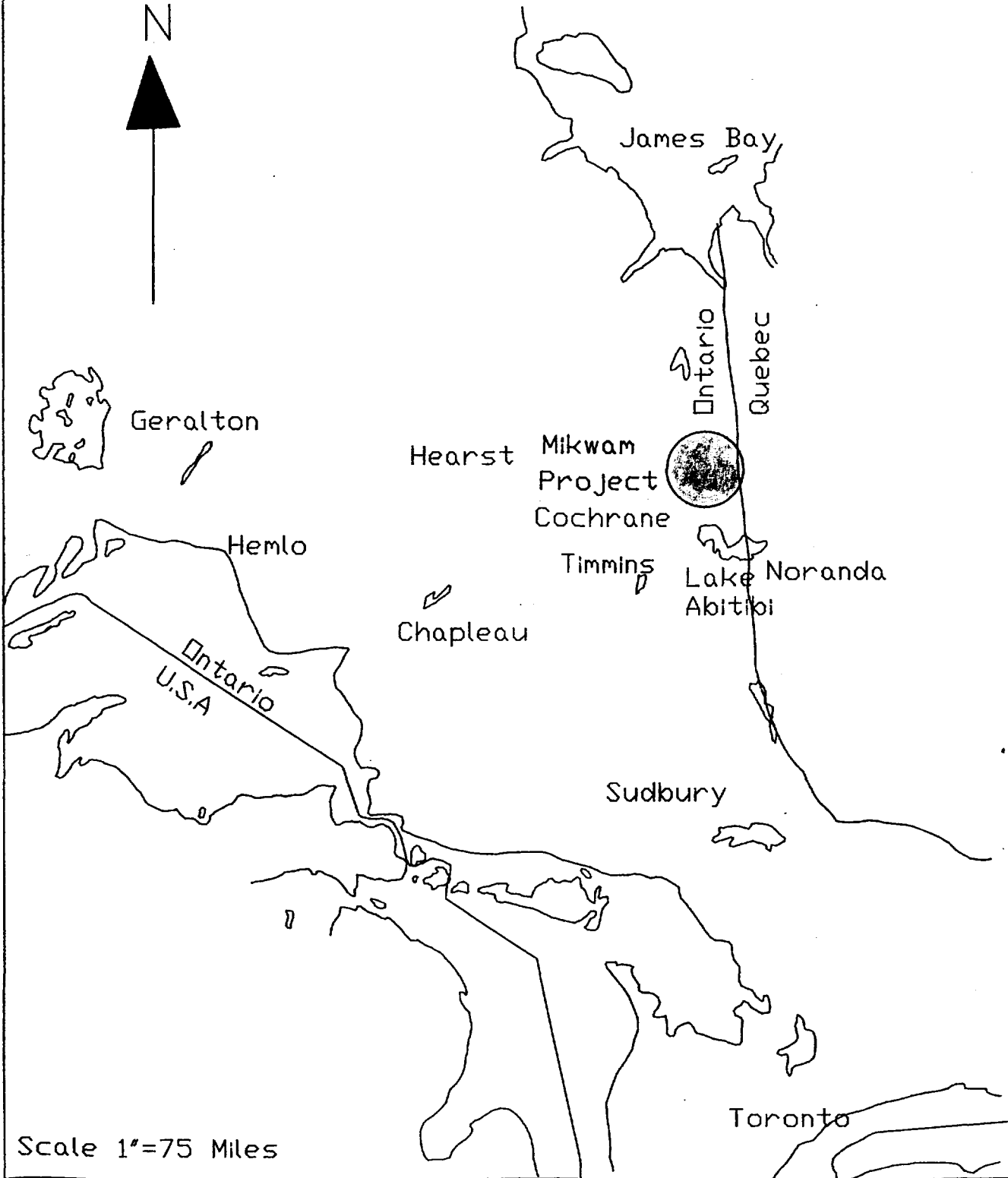
In winter it is possible to traverse the entire property on an existing network of winter roads which have been generated over the last eight to ten years by Newmont and other major companies such as Noranda and Esso Minerals who have also been active in the area.

Ice bridges, however, must be constructed on the Turgeon River, if access is desired from the east via La Sarre, Quebec, or on the Burntbush River, if access directly to the central and/or western parts of the property via Cochrane, Ontario is preferred.

A winter road system currently extends across Bradette, Noseworthy and Hoblitzell townships. In the east it links up with the all-weather Casa Berardi road in Dieppe Twp., Quebec. The Casa Berardi road itself originates 34 kms north of Villebois, off the Selbaie road. In the west, Newmont's road connects with the northern winter extension of the gravelled Tomlinson (township) road which in turn adjoins Abitibi's all-weather Trans Limit Road which runs between Cochrane and Iroquois Falls and the Quebec-Ontario border north of Lake Abitibi.



# REGIONAL LOCATION MAP



Scale 1"=75 Miles

## **PROPERTY**

The Mikwam property consists of 588 contiguous, unpatented claims stretching across Hoblitzell, Noseworthy and Bradette Twps. in Ontario and into Dieppe Twp. in Quebec (12 claims) - see appended Schedule A (Appendix D) for a listing of the individual claims (Township Grouping).

## **OWNERSHIP**

The Mikwam property is a Joint Venture between Trader Resource Corporation (50%), Hemlo Gold Mines Inc. (30%), and Freewest Resources Inc. (20%). Golden Shield Resources Ltd. retains a 15% net profits interest in the westernmost 97 claims as per an underlying agreement with Newmont. The 1992 diamond drill program was completed by Trader Resource Corporation.

## **MINERAL INVENTORY**

None.

## **EXPENDITURES**

Approved expenditures (loaded) between January 1 and December 31, 1992, on the Mikwam Joint Venture totalled \$423,322.29. Total direct expenditures (unloaded) totalled \$368,106.34. Direct drilling costs totalled \$257,788.43, or \$99.26 per metre. A detailed account of the Mikwam expenditures is listed in Table 1.

## **INTRODUCTION**

During April through June of 1992, the entire Mikwam Joint Venture project was computerized and incorporated into Royal Oak's Lynx computer system in Timmins. All previous geological legends used by previous operators were modified to mesh with Royal Oak's regional geological legend (see Appendix C).

The 1992 diamond drill program was completed in two phases. Phase 1 was completed between June 16 and July 3, 1992, utilizing one Bradley Bros. Limited diamond drill, with helicopter support from a camp setup in a gravel pit near the north end of the Tomlinson road. Six holes were completed for a total 1,600m of BQ core. Five holes were drilled in the A8 Area (Noseworthy Twp., Ontario) and one hole was drilled in Dieppe Twp, Quebec. All casing was left in the holes. All core was logged on site and subsequently strapped and transported to Royal Oak's core sawing facilities in Timmins for processing. All holes were assayed in their entirety, either in specified sawed intervals or as a "grab sample", whereby "buttons" of whole core were selected over a specified interval for fire assaying and A.A. finish (1AT) by Royal Oak's assay laboratory in Schumacher, Ontario. Selected intervals of core were also analyzed for arsenic. All rejects/pulps are catalogued and stored for future reference. All core is labelled and racked in an all-weather storage facility in Schumacher.

TABLE 1

TRADER RESOURCE CORPORATION  
STATEMENT OF APPROVED EXPENDITURES  
1992 (TO DECEMBER 31, 1992)

Total 2597m  
(400 m in  
Quebec)

PROJECT NAME: Mikwam TRADER & INTEREST (VESTED): 50%  
PROPERTY NAME: Mikwam TRADER & INTEREST (EARNING):  
REFERENCE NO.: 2703 % EXPENDITURES APPLIED: 100%

2197m in  
ONTARIO

ACCOUNT NO.	DESCRIPTION OF ACTIVITY	DEC 31 YTD TOTAL
5500	AREA/MISC.	\$ 1242.50
5505	OFFICE RENT	1451.78
5510	MANAGEMENT FEE	10.35
5515	OFFICE SUPPLIES	1392.50
5520	COMPUTER SERVICES	6074.45
5525	PROFESSIONAL SERVICES	66635.13
5530	SUPPORT SALARIES	0.00
5535	CONSULTANTS	3535.00
5540	VEHICLE LEASE	4161.87
5545	FUEL	1350.80
5550	TRAVEL & EXPENSES	708.19
5560	PROPERTY MANAGEMENT & TAXES	5904.79
5595	PETROGRAPHY/RESEARCH	200.69
5600	ASSAYS	14210.30
5615	SURFACE CONTRACT DRILLING	257788.43
5625	CORE SAMPLE/STORAGE	3439.56

84.6%

TOTAL DIRECT EXPENDITURES	\$ 368106.34
TOTAL INDIRECT EXPENDITURES (15% OF \$368106.34)	55215.95
TOTAL APPROVED EXPENDITURES FOR 1992	\$ 423322.29

311,417.96  
ONTARIO

TOTAL APPROVED EXPENDITURES FOR 1992 BY PARTNER:	
TRADER RESOURCE (50% SHARE)	\$ 211661.15
HEMLO GOLD (30% SHARE) ] NORFREE COMBINED 50%	126996.69
FREEWEST (20% SHARE) ] SHARE = \$ 211661.14	84664.45

P. Green  
NOV 10, 1993

TOTAL APPROVED EXPENDITURES FOR 1992 BY QUARTER:	
1ST QUARTER	\$ 12750.45
2ND QUARTER	229358.82
3RD QUARTER	42939.07
4TH QUARTER	138273.95

APPROVED BY: P. G. Rook-Green  
NAME: P. G. ROOK-GREEN  
TITLE: CONTROLLER

APPROVED BY: R. F. Burns  
NAME: R. F. BURNS  
TITLE: VICE PRESIDENT

Phase 2 was completed between December 1 and 16, 1992, also utilizing one Bradley Bros. Limited diamond drill and the same logistical procedures as in Phase 1. All core was logged and processed in Royal Oak's core logging/sawing facilities in Timmins. Arsenic analyses were not completed during Phase 2, however a number of specimen intervals were analyzed for copper, zinc, silver and lead, along with the usual gold fire assay.

### **PREVIOUS WORK**

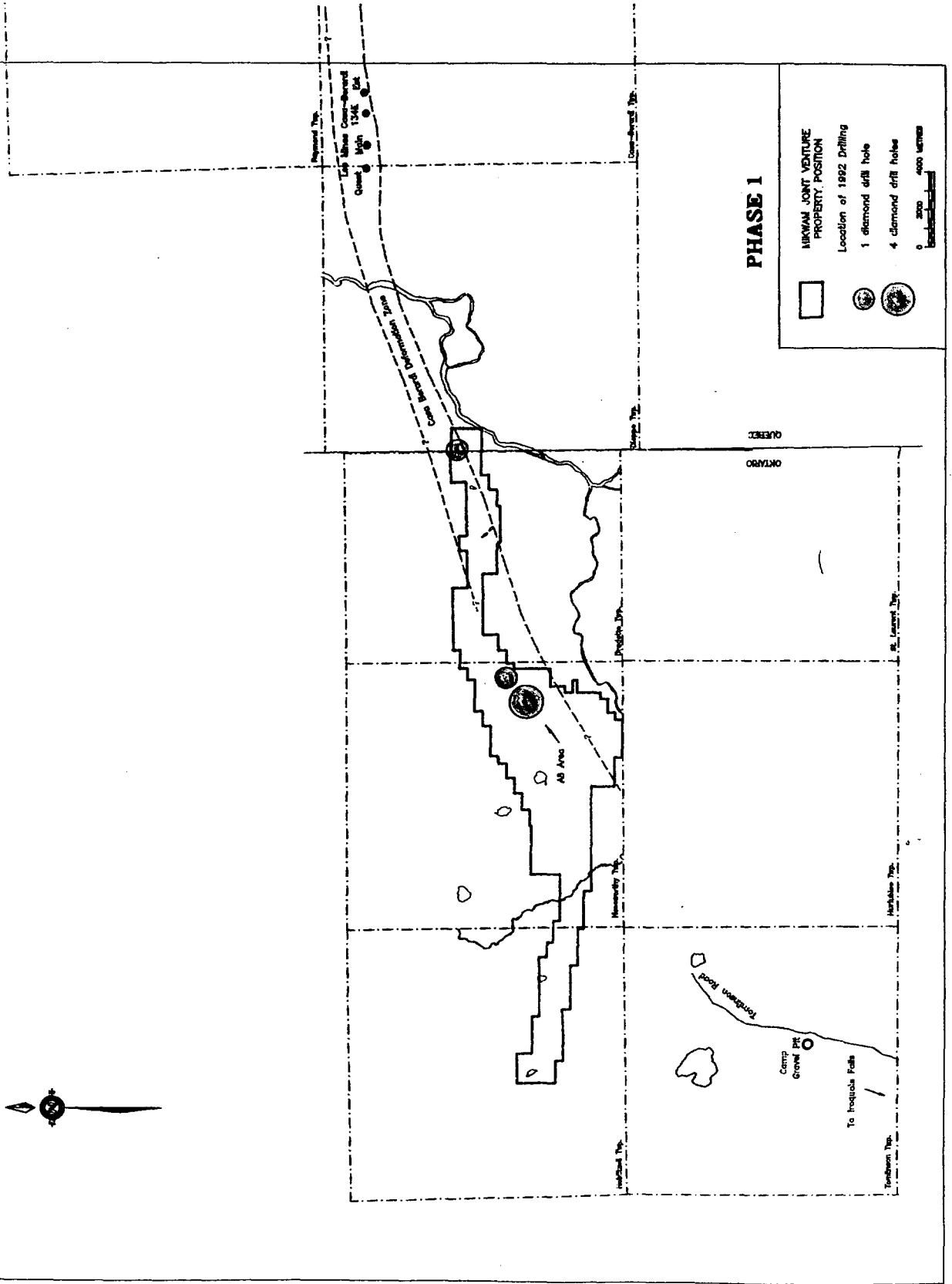
Newmont and joint venture partner Dupont Canada Exploration Limited (50%) first staked the Mikwam property in 1981 and 1982. Dupont underwent a series of name changes between 1984 and 1991 to eventually become Royal Oak Mines Inc. (Dupont Canada Exploration Ltd., to Dupont Canada Inc., to 130020 Canada Inc., to CSA Minerals Inc., to CSA Minerals Corp., to Consolidated CSA Minerals Inc., to Pamorex Minerals Inc., to Royal Oak Mines Inc.). Royal Oak transferred its 50% interest in the Mikwam Joint Venture to Trader Resource Corporation in March, 1992, and retains a 51% ownership of Trader Resource. Newmont sold its portion of the joint venture to Noranda/Freewest in 1989 and subsequently Noranda sold its interest to Hemlo Gold.

The joint venture believed that the Mikwam property exhibited excellent exploration potential because Hudson Bay had intersected gold mineralization in Quebec near the provincial boundary - this mineralization had arsenopyrite associated with it. Also, Newmont may have been privy to the fact that Inco had pulled a significant intersection on what is now known as Les Mines Casa Berardi - Main deposit in 1981. The joint venture gridded the property (100 m lines) and completed ground magnetometer (entire property), HLEM (Mikwam grid) and I.P. (Golden Shield grid, portions of Mikwam) surveys. These survey results were used to focus overburden drilling (406 holes) across the entire length of the property. Diamond drilling (105 holes - 22,772 m) was done to test various geochemical (till heavy mineral concentrates - HMC) and geophysical anomalies and to provide property-wide stratigraphic information. Eight diamond drill holes (2,362 m) were completed by the current Joint Venture in 1990.

### **REGIONAL GEOLOGY**

The Mikwam property lies within the northern part of the Early Precambrian Abitibi Greenstone Belt of the Superior Structural Province. It occupies a position on the north flank of a northwesterly-trending lobe of the main Abitibi Belt between the northernmost Detour lobe and the main Timmins-Noranda-Val d'Or trend to the south.

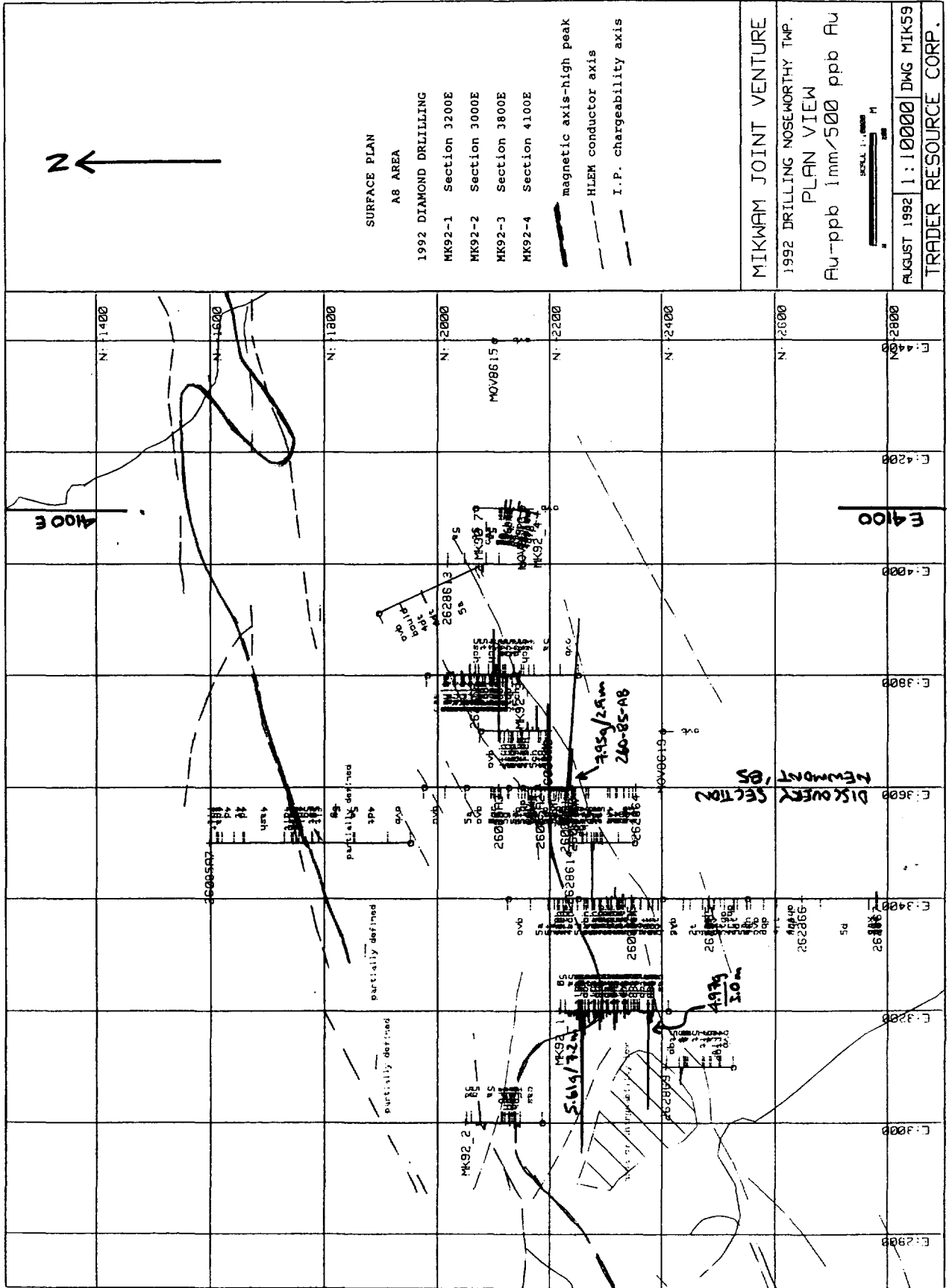
Regional reconnaissance mapping was most recently conducted in the area by the Ontario Geological Survey in 1978 as part of a larger regional mapping program. The resulting Geological Map, No. 2453 (1:100,000 scale) by G.W. Johns, depicts a thick mafic to intermediate volcanic succession centred in St. Laurent and Hurtubise townships.



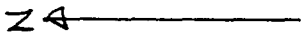
**PHASE I**

- MIKWAM JOINT VENTURE  
PROPERTY POSITION**
- Location of 1992 Drilling
- 1 diamond drill hole
  - 4 diamond drill holes
- 0 2000 4000 METERS





N: -1000



L633412

MOV86\_8 φ

L633413

MOV84\_2 φ

MOV84\_3 φ

N: -1500

MIKWAM JOINT VENTURE	
1992 DRILLING NOSEWORTHY TRP.	
PLAN VIEW	
AUGUST 1992	DWG MIK65
TRADER RESOURCE CORP.	

L633414

L633417

MOV85\_6 φ 2628617

MOV85\_10 φ

L633416

MOV85\_15 φ

MOV85

MK92\_51+

MOV85\_5 φ

MOV85\_9 φ

MOV85\_1 φ

MOV84\_4 φ

MOV85\_7 φ

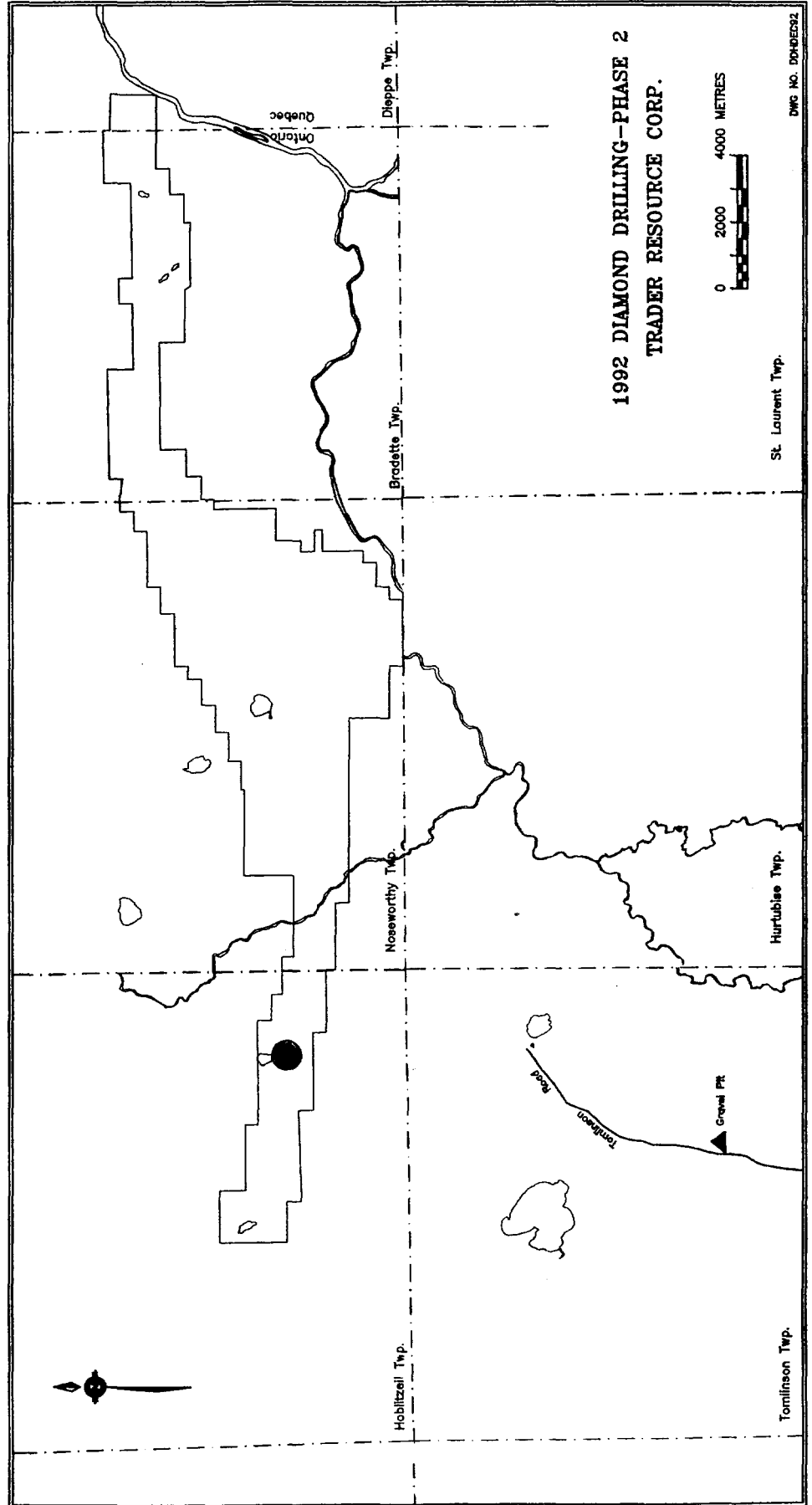
MOV84\_9 φ

L633415

MOV84\_6 φ

E: 5500

N: -2000



1992 DIAMOND DRILLING-PHASE 2  
TRADER RESOURCE CORP.



DWG. NO. DRDRE22

St. Laurent Twp.

Hurlbise Twp.

Tomlinson Twp.

Dieppe Twp.

Brodette Twp.

Noseworthy Twp.

Hoblitzell Twp.

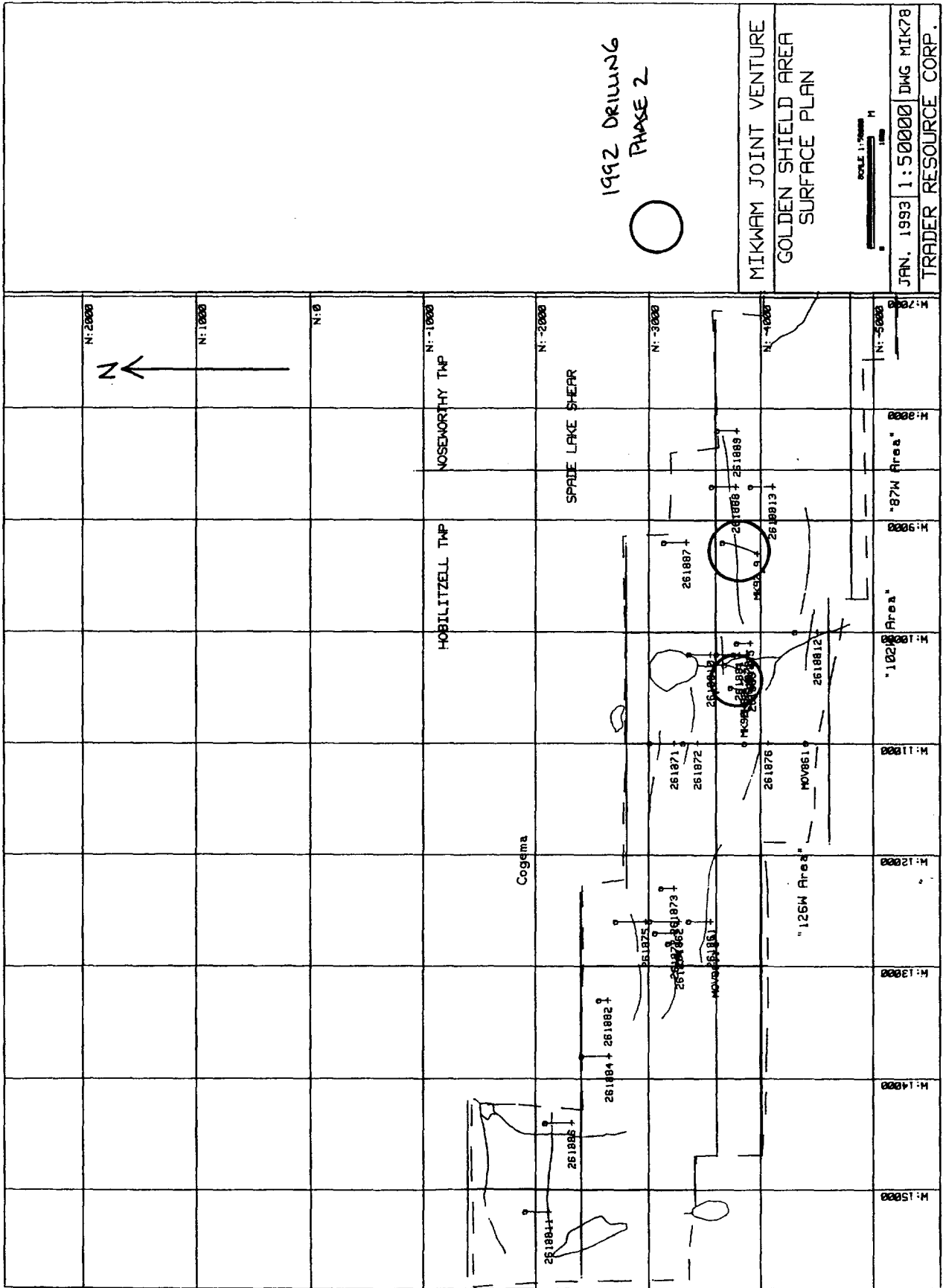
Ontario  
Quebec

Tomlinson Road

Crew Pit







Overlying the mafic volcanics to the north is a thick sequence of intermediate to felsic metavolcanic rocks centred in Bradette township. This mixed volcanic sequence extends westward into southern Noseworthy and northeastern Hurtubise townships where they abruptly appear to fade out. The more felsic stratigraphy is capped by a thick series of epiclastic and chemically derived metasediments. The sediments directly overlie the mafic volcanic pile in Hoblitzell township. No major intrusive bodies have been identified as yet in the upper part of the volcano-sedimentary pile on or about the Mikwam property. North of the sediments the terrain is gneissic (Corstorphine, 1991).

### MIKWAM GEOLOGY

The Mikwam property covers approximately 36 kms of projected westerly strike extension of the Casa Berardi Fault Zone (CBFZ), commencing approximately 15 kms west of the Gold Pond gold deposits, now referred to as Les Mines Casa Berardi. The "Golden Pond Main" deposit was found in 1981 by Inco Gold and in 1983 the Golden Knight Company obtained an agreement with Inco and earned a 40% share in the property in exchange for exploration financing. A reverse circulation drilling program began the same year and contributed greatly to the identification of anomalous gold zones. Inco-Golden Knight discovered the "Golden Pond East" zone in 1984 and the "Golden Pond West" and 134E (the continuity of the "Golden Pond Main" zone on the Dome Exploration ground) deposits in 1985.

TVX Gold (formerly Inco Gold) and Golden Knight Resources have recently announced the discovery of two new gold zones about 100m NE of their jointly owned Casa Berardi Est mine, on the north side of the east-west trending Casa Berardi fault (Northern Miner, August 10, 1992). Les Mines Casa Berardi are developed within argillaceous/greywacke/sediments with spatially associated conglomeratic/agglomeratic/tuffaceous sediments, iron formation and mafic volcanics. The ore can be hosted in structured quartz vein "masses" or be associated with altered tuffaceous sediments mineralized with disseminated pyrite and arsenopyrite. The ore, particularly in La Mine Casa Berardi Ouest, is associated with complex folding near to faults/sediment/volcanic contacts. Sericite and silica alteration is particularly prevalent adjacent to ore zones. Fine grained arsenopyrite is apparently present throughout Les Mines Casa Berardi stratigraphy and background gold values in all rock types averages a minimum of 100 ppb Au (Coad, 1990).

Reserves to the end of 1991 totalled 9.4 million tons (proven and probable) grading 0.25 opt Au and 2.6 million tons (possible) grading 0.15 opt Au. Average cash cost is an excellent US\$186 per oz. In 1991, production totalled 119,000 ounces (592,000 tons of ore).

The exact position of the westward extension of the Casa Berardi Fault Zone (CBFZ) into Ontario has not been formally recognized, however it is possible that the southern limit of the CBFZ might "track" through the Dieppe portion of the Mikwam property. Previous diamond drilling in the Dieppe portion of the Mikwam property indicated that the stratigraphy consists of a steeply dipping, east-west trending package of mafic volcanics in the south, followed northward by a complex package of intercalated sediments and tuffs containing greywacke, argillite, conglomerate, intermediate to felsic

tuffs/pyroclastics and local oxide iron formation. The exact nature of the northern limits of the property are unknown. The fact that two new gold-bearing zones have been discovered north of the east-west trending Casa Berardi fault (Northern Miner, August 10, 1992) implies that similar occurrences might also exist south of the Casa Berardi fault and that basically the entire east-west trending Casa Berardi deformation zone exhibits potential for hosting economic deposits.

Recent descriptions of the Casa Berardi geology and associated mineralization are described by Pilote et al (1990) and Lacroix et al (1990).

### **RESULTS OF THE 1992 PROGRAM - PHASE 1**

Summary and detailed field logs are appended to this report (Appendices A and B). The reader should review these individual logs and pertinent sections and plans (Appendix E) for a detailed account of the 1992 diamond drilling results. Table 2 - **Summary of 1992 Diamond Drilling** - lists the significant assay results and pertinent geological facts gleaned from the drilling. A complete list of pertinent assay results is also included in Table 3. The following points highlight the salient information gleaned from the 1992 Phase 1 program:

1. The Mikwam stratigraphy is folded with variable dip attitudes, as marked by the oblique angle that the F1 cleavage foliation makes with the bedding, microfold structures, crenulation cleavage and repeated "like-units" across stratigraphy.
2. The high-grade intersection obtained in MK92-1 (i.e. 5.61 g/t Au/7.2m, or 0.164 opt Au/23.6', including 8.157 g/t Au/4.3m, or 0.238 opt Au/14.1') occurs in semi-massive pyrite with locally associated disseminated fine grained to coarse grained arsenopyrite. High arsenic values coincide with high gold values. The pyrite is also fine to medium grained and exhibits a crude banding fabric - possibly tectonic. Limited petrographic work indicates that the pyrite is recrystallized and riddled with silicate inclusions and possibly fine grained inclusions of pyrrhotite (?). The sulphide masses are relatively strongly conductive. The semi-massive sulphides occur within an interval of relatively heavy quartz development. The quartz is massive, glassy, variably coloured and locally dirtied with inclusions. The significant assays occur within the sulphide sections and not the quartz - see Table 3. The most immediate host lithology to the sulphide-quartz package is a yellow, moderate to strongly sericitized and siliceous quartz-eye phyrlic intermediate to felsic tuff (4tqp). Local green mica "zits" can be discerned in this unit as well as crude bands of iron-carbonate with associated pyrite. Note - one can discern thin bands of semi-massive pyrite/arsenopyrite without associated quartz veins. Crenulation cleavage is evident within the tuff unit. The argillite unit (5a) which forms a halo about the mineralized package in MK92-1 is moderately silicified (i.e. relatively hard to scratch).

3. The magnetic axis ("high-peak") that forms a crude Z-shaped fold between section 3000E and 3200E is explained by the presence of oxide and chlorite iron formation on section 3000E (i.e. MK92-2), however it is not explained on section 3200E (i.e. MK92-1). It would appear that the mineralized "zone" (i.e. 5.61 g/t Au/7.2m at 218.0-225.2m in semi-massive pyrite/quartz in MK92-1) might represent the magnetic axis high, however at this particular elevation the iron formation has possibly been sulphidized and blitized by quartz veining. This is significant because it might have implications for future exploration on the entire Mikwam property (i.e. Tadpole Lake area). The "chargeability low" which is centred on section 3000E might possibly represent an area of relatively flat-dipping stratigraphy with spatially associated quartz veining and possible sulphides.
4. A felsic quartz porphyry unit which was intersected at the bottom of hole MK92-4 on section 4100E appears to also be present in relatively the same stratigraphic position on section 3400E and possibly may extend as far west as the Tadpole Lake area, 7 kms to the west. This may have important regional exploration implications because DDH 262867 on 3400E intersected a sedimentary horizon south of the felsic quartz porphyry (i.e. conglomerate/debris flow) and previous holes in the Tadpole Lake area stopped in porphyry. Note - an anomalous value of 554 ppb Au/0.3m was intersected at the bottom of 262867, spatially associated with 20% quartz-ankerite with 2% pyrite and trace sphalerite.
5. It would appear that visible grains of gold and elevated values of arsenopyrite obtained from HMC do not guarantee proximity to mineralized bedrock. DDH MK92-4, which was drilled under overburden hole 86-16 (11 pristine gold grains in HMC) on section 5600E failed to intersect economic values. It is quite probable that much of the HMC has been affected by an east-west sense of local glacial transport parallel to stratigraphy and structure.

### **RESULTS OF THE 1992 DIAMOND DRILLING - PHASE 2 - GOLDEN SHIELD AREA**

The reader should review individual logs and pertinent sections and plans for a detailed account of the 1992 diamond drilling Phase 2 results. Table 2 - Summary of 1992 Diamond Drilling - lists the significant assay results and pertinent geological facts gleaned from the drilling. A complete list of pertinent assay results is also included in Table 3. The following points highlight the salient information gleaned from the 1992 Phase 2 program:

1. No ore grade intersections were encountered, however significant anomalous geochemical gold values were encountered in all three holes. Best values are as follows:
  - MK92-7** 1.3 gpt Au (5.10m), including 8.98 gpt Au (0.5m), or 0.262 opt Au (16'), in chloritic magnetic iron formation at 18.50-23.60m (19% quartz and trace-3% pyrite associated)
  - MK92-8** 885 ppb Au (2.0m) at 78.50-80.50m (4% quartz + 2.5% albite + 1% pyrite associated) in albitized and hematized QE phytic tuffaceous sediment

**MK92-9** 1.08 gpt Au (0.50m) at 37.50-38.00 in a quartz-tourmaline-pyrite zone within variably magnetic basalt [also 187 ppb Au (5.56m) with 17% quartz, 20% albite and 7% pyrite at 127.64-133.20m on the basalt/sediment contact; also 0.17m of massive banded pyrite (garnets nearby) with 291 ppm Cu, in basalt near the basalt/sediment contact].

Highest gold values in all three holes occur with variably sulphidic quartz veins within or near magnetite-rich rocks.

2. The evidence for folded stratigraphy in the Golden Shield Area ("102 Area") is not as readily apparent as in the A8 Area. Microfold structures are only locally discerned and F1 cleavage foliation was only recognized in one or two instances. This is possibly due to the dirty nature of the tuffaceous-sediments (i.e. dirtied by finely disseminated magnetite with local chlorite/biotite and variably albitized and hematized - see below).
3. The northern stratigraphy in the area intersected by drilling is marked by chloritic and magnetic fine grained iron formation and/or chloritic and magnetic, fine grained massive featureless high Fe-tholeiitic basalt with local vague pillow structures. These magnetic rocks are variably biotized with local garnet development. In hole MK92-9, pink garnets are spatially associated with the presence of semi-massive clots or bands of pyrite in basalt near the basalt/sediment contact. Here garnets may occur as isolated anhedral crystals or as coalesced continuous bands up to 0.5 cm in width. Note - local blue QE's are developed in the basalt.

The southern stratigraphy is marked by "dirty-looking" tuffaceous-sediments which are locally QE (colourless) phyrlic and speckled by fine grained disseminated magnetite and chlorite-biotite. Stretched clasts are locally discerned. Note - 17.50m of albitized intermediate-felsic tuffaceous-sediment QE and albite phyrlic was intersected in the high Fe-tholeiite in MK92-9 (i.e. collar of hole).

4. Quartz-calcite-albite-tourmaline-chlorite-muscovite quartz veins (strike and tensional orientations) with variable pyrite contents occur within either the iron formation/basalt package or tuffaceous-sediment package. These veins are typically pitted and vuggy. Local sericite alteration is present as an alteration halo on some veins. Highest grade gold values occur with quartz veins located within or near strongly magnetic rocks. These latter veins also tend to carry higher percentages of pyrite. Quartz veining is well developed on the basalt (iron formation)/sediment contact in both holes MK92-7 and MK92-8. Pink-orange aphanitic albite and silicification is particularly strong on the above contact in MK92-9, however a value of 187 ppb Au (5.56m) was only returned with the associated 17% quartz, 20% albite and 7% pyrite. This value is still significant from an exploration perspective.

5. The tuffaceous-sediments, particularly in holes MK92-7 and MK92-8, are marked by an approximately 60m wide (horizontal) zone of variable albitization and hematization located approximately 65m horizontally to the south of the tuffaceous-sediment/basalt (iron formation) contact (MK92-7). This altered zone is marked by porphyritic textures of fine to coarse grained whitish to pale pink albite or wisps, patches/bands of aphanitic to medium grained pink (orange) albite variably "washed" with pink-red-orange hematite alteration. Sections of these altered tuffaceous-sediment could be easily mistaken for granodiorite. The importance of this observation has been emphasized by logging the interval 294.50-296.16 in MK92-9, as granodiorite (8 gd) and explaining in the comments what the protolith actually represents. Textural relationships suggest that the albitization predates the introduction of quartz veining. Fine grained disseminated pyrite tends to occur in these areas, as does local anomalous gold values (i.e. 780 ppb Au over 4.5m at 108.50-113.00m with trace quartz and trace to 0.5% pyrite in albitized and weakly hematized QE phytic tuffaceous-sediment in MK92-8). This zone of alteration is only weakly developed but present in the sediments located 1.1 km to the east in hole MK92-9.

Albitization was also present in iron formation in hole MK92-7 near the iron formation/sediment contact. This interval returned 431 ppb Au (5.88m) with variably quartz and pyrite associated.

It is quite possible that the above recognized zone of albitization and hematization in the tuffaceous-sediments in the Golden Shield area might continue as far to the east as the Tadpole Lake area (possibly further?), where 1-2mm diameter blue QE's with disseminated very fine grained magnetite were logged in an albite-bearing intermediate to mafic quartz-feldspar porphyry (MK90-1). This possibility will be followed up by re-examining historic drill holes.

6. Massive, slightly pitted banded pyrite was intersected over 0.17m at 127.47-127.64 in basalt near the basalt/sediment contact (MK92-9). Very thin delicate bands of magnetite mark the banding in the sulphides. This interval returned 291 ppb Cu, 44 ppm Zn, 28 ppm Pb, 2.1 ppm Ag and 105 ppb Au. Pink garnets are spatially associated with pyrite bands and clots to the north of this intersection.
7. Local anomalous base metals occur within the tuffaceous-sediments. Strong chlorite, local garnet development and local chloritoid (?) is spatially recognized with areas exhibiting visible fine grained reddish-brown sphalerite and local chalcopyrite [i.e. 1200 ppm Zn, 141 ppm Cu, 0.7 ppm Ag (1.5m) at 44.00-45.50m in moderately magnetic intermediate tuff in MK92-7). Approximately 2-3% PbS with trace sphalerite in a 2.5 cm boudinaged quartz vein (strike) was intersected at 313.64m in chloritized tuffaceous-sediment with 1-4% clasts (MK92-9). Ribbony pyrite bands/lamellae occur 4 cm from this vein.

MIKIAM JOINT VENTURE  
1992 DIAMOND DRILL HOLE SUMMARY

TABLE 2

HOLE NO.	NORTH. EAST.	AZ.	DIP	LENGTH (m)	TARGET AREA	PURPOSE	RESULTS	COMMENTS	
MK92-1	2410S	3200	360	-50	275	A8	TO TEST I.P. ANOMALY & MAGNETIC AXIS HIGH, 150m NE OF DDH 86-9 (L-3100E, 2550S)	INTERSECTED 4.97 g/t AU (3.0m) @ 51.4-54.5 & 5.62 g/t AU(7.2m) @ 218.0-225.2 IN SEMI-MASSIVE PYRITE/ARSENOPYRITE WITH SPATIALLY ASSOCIATED QUARTZ	DID NOT INTERSECT VERTICAL PROJECTION OF I.P. ANOMALY NEAR COLLAR; HOWEVER HOLE COLLARED IN ARGILLITE/GRAPHITE WITH ASSOCIATED RUBBLE & GOUGE (I.E. A FAULT). MAGNETIC AXIS NOT EXPLAINED
MK92-2	2185S	3000	360	-50	200	A8	TO TEST I.P. ANOMALY, HLEM CONDUCTOR & MAGNETIC HIGH ON L-3000E, 100m SOUTH OF BASELINE (2000S)	BEST GOLD: 1.78 g/t AU (1.5m) @ 71.0-72.5 IN IRON FORMATION	MAGNETIC AXIS "PEAK-HIGH" DUE TO OXIDE/CHLORITIC IRON FORMATION; I.P. ANOMALY POSSIBLY DUE TO FORMATIONAL CONTACT(?). HLEM NOT EXPLAINED
MK92-3	1980S	3800	180	-60	280	A8	TO UNDERCUT 100m BELOW THE MINERALIZATION INTERSECTED IN DDH 262-86-8 (L3800E, 2250S)	INTERSECTED 2.04 g/t AU(2.9m) @ 203.1-206.0 & 2.81 g/t AU (2.17m) @ 218.83-221.0 WITH MINOR ASSOCIATED QUARTZ-ANK VEINS & TR PYRITE	FLAT CORE ANGLES FROM 200.0-280.0m INDICATE DRILLING DOWN A FOLD LIMB NEAR A FOLD NOSE
MK92-4	2066S	4100	180	-55	195	A8	TO UNDERCUT OVERBURDEN HOLE 86-16 WHICH RETURNED AN HMC RICH IN ASPY/PY, WITH 11 PRISTINE GOLD GRAINS	INTERSECTED SEVERAL ANOMALOUS GOLD-BEARING AREAS IN SEDIMENT (MINOR VEINING & SULPHIDES). BEST: 0.825 g/t AU (1.5m) @ 102.5-104.0	GREY, SILICEOUS QUARTZ-FELDSPAR PORPHYRY AT BOTTOM OF HOLE
MK92-5	1440S	5600	180	-60	250	AREA NE A8	TO UNDERCUT OVERBURDEN HOLE MOV85-4 WHICH RETURNED ANOMALOUS ARSENIC VALUES IN HMC & TEST 38m WIDE HLEM CONDUCTOR	MASSIVE PYRITE IN GRAPHITE FROM 65.23-65.31 RETURNED 0.205 g/t AU (0.08m). ANOMALOUS GOLD VALUES THROUGHOUT HOLE. BEST: 0.445 g/t AU(4.5m) @ 216.5-221.0 IN SERICITIZED CONGLOMERATE & MASSIVE BASALT (1% QTZ & TR PY ASSOCIATED)	HLEM CONDUCTOR DUE TO 64.5m WIDE GRAPHITIC ARGILLITE (CONDUCTIVE WITH A SOUTH FLAT DIPPING ATTITUDE). PROBABLY DRILLING DOWN A FOLD LIMB NEAR A FOLD NOSE
MK92-6	923N	400	360	-58	400	DIEPPE	TO UNDERCUT MINERALIZATION IN DDH 260831A (158 ppb AU/25.09m) & SECTION GEOLOGY IN 260841	INTERSECTED ANOMALOUS GOLD VALUES IN SEDIMENTARY-TUFFACEOUS PACKAGE. BEST: 2.23 g/t AU (0.5m) @ 377.5-380.0 IN SEMI-MASSIVE PYRITE (30% PY & 5% ASPY) WITH 1% QUARTZ-ANKERITE VEINING IN SERICITIZED FELSIC SCHIST	STRATIGRAPHY ON SECTION 400E ALSO TIGHTLY FOLDED

HOLE NO.	NORTH. EAST.	AZ.	DIP	LENGTH (m)	TARGET AREA	PURPOSE	RESULTS	COMMENTS
MK92-7	3670S	10297W	180	-52	297	GOLDEN SHIELD TO UNDERCUT 100m BELOW INTERSECTION OF 1.52 g/t AU OVER 5.5m in DDH 260883 ON L-103+00W	INTERSECTED 19% QTZ AND TR-3% PY WITH 1312 ppb AU OVER 5.1m (18.50-23.60) INCLUDING 8.98 gpt AU (0.262 opt AU) OVER 0.5m (21.50-22.00m) IN CHLORITIC-MAGNETIC IRON FORMATION. INTERSECTED 85% QTZ AND 2.5% PY WITH 2486 ppb AU OVER 1.2m (79.40-80.60m) INCLUDING 4.6 gpt OR 0.138 opt AU OVER 0.60m (80.00-80.60m) ON THE CHLORITIC IRON FORMATION/TUFFACEOUS SEDIMENT CONTACT. VALUES OF 1200 ppm ZN, 141 ppm CU AND 0.7 gpt AG OVER 1.5m (44.00-45.50m) IN MOD. MAGNETIC INTERMEDIATE TUFF	STRATIGRAPHY IN HOLE MARKED BY CHLORITIC (VARIABLY MAGNETIC) I.F. TO NORTH AND TUFFACEOUS-SEDIMENTS TO SOUTH. QUARTZ-CALCITE +/- TOURMALINE +/- CHLORITE VEINS OCCUR IN BOTH DOMAINS, HOWEVER HIGHEST GOLD VALUES WITH VEINS WITHIN OR NEAR MAGNETIC-RICH ROCKS. ALBITIZED I.F. NEAR THE TUFFACEOUS-SEDIMENT CONTACT CONTAINS 431 ppb AU (5.88m) VARIABLE QTZ + PY ASSOCIATED. LOWER ONE-THIRD OF HOLE MARKED BY VARIABLY ALBITIZED AND HEMATIZED TUFFACEOUS-SEDIMENTS (BEST GOLD: 925 ppb AU (1.5m) 246.0-247.5m.
MK92-8	3720S	10500W	180	-45	200	GOLDEN SHIELD TO TEST GOLD-BEARING STRUCTURE 200m TO THE WEST OF FENCE MARKED BY DDH'S MK92-7 AND 260883 ON L-103+00W	INTERSECTED FOUR CLOSELY SPACED INTERVALS WITH STRONG ANOMALOUS GOLD BETWEEN 69.50 AND 138.50m, WITH MINOR QUARTZ-ALBITE VEINING AND MINOR PYRITE IN VARIABLY ALBITIZED + HEMATIZED TUFFACEOUS SEDIMENT. BEST: 885 ppb AU (2.0m) AT 78.50-80.50m (4% QTZ + 2.5% ALBITE + 1% PY ASSOCIATED)	A VALUE OF 780 ppb AU (4.5m) AT 108.50-113.00m IS SPATIALLY ASSOCIATED WITH ONLY TRACES OF QUARTZ AND TRACE TO 0.5% PYRITE IN ALBITIZED AND WEAKLY HEMATIZED QE PHYRIC TUFFACEOUS-SEDIMENT. FAULT STRUCTURE ON 1:10000 COMPILATION BIASECTS WIDE AREA OF ALBITIZATION AND ANOMALOUS GOLD VALUES [IE. 472 ppb AU (23.10m) AT 115.40-138.50m*]. SEE SECTION DWG NO. MIK 76.
MK92-9	3650S	9200W	180	-48	500	GOLDEN SHIELD TO TEST GOLD-BEARING STRUCTURE 0.5 km WEST OF FENCE MARKED BY DDH'S 260888 AND 2608813 ON L-87+00W	INTERSECTED TWO QUARTZ + PYRITE + TOURMALINE ZONES IN VARIABLY MAGNETIC BASALT [IE. 22% QTZ + 5% PY WITH 343 ppb AU (8.2m) AT 36.50-44.70m AND 10.5% QTZ + 2% PY WITH 299 ppb AU (15.5m) AT 62.20-78.00m]. INTERSECTED 17% QTZ + 20% ALBITE (ORANGE-PINK) + 7% PY WITH 187 ppb AU (5.56m) AT 127.64-133.20m ON BASALT/SEDIMENT CONTACT. VALUES OF 291 ppb CU, 44 ppm ZN, 28 ppm PB, 2.1 ppm AG AND 105 ppb AU IN 0.17cm OF BANDED MASSIVE PYRITE IN BASALT NEAR BASALT/SEDIMENT CONTACT.	LOCAL ANOMALOUS GOLD VALUES IN SEDIMENT PACKAGE TO SOUTH OF BASALT STRATIGRAPHY [IE. 241 ppb AU (19.08m)* AT 340.35-359.43m AND 403 ppb AU (5.15m)]. STRATIGRAPHY MAINTAINS OVERALL CHARACTER BETWEEN L105+00 AND L92+00W (IE. 1.1km) HOWEVER ON L-9200W, SEDIMENTS ONLY LOCALLY AND WEAKLY TO MODERATELY ALBITIZED. GARNETS PRESENT WITH PYRITE-RICH AREAS IN BASALT NEAR MAIN CONTACT AREA.

\* INCLUDES GEOCHEM GRABS



TABLE 3

MIKWAM JOINT VENTURE  
SIGNIFICANT RESULTS FROM 1992 DRILL PROGRAM

INTERVAL (m)	ROCK TYPE	WIDTH (m)	ASSAY (g/t)	QTZ/ANK %	PY %	ASPY %	PO %	SPH %	MT %	CP %
MK92-1 =====	42.50- 44.00	ARGILLITE	1.50	0.995	4.5	0.2	-	-	-	-
	47.00- 48.50	TUFF	1.50	1.060	1.5	TR	-	-	-	-
	51.50- 53.00	TUFF/SED	1.50	8.770	4.97g/3.0m	3.0	TR	-	TR	-
	53.00- 54.50	TUFF/SED	1.50	1.170	(0.145 opt/9.8')	4.0	0.4	-	0.4	-
	112.10-113.05	FAULT	0.95	0.615	0.63g/1.21m	2.5	3.5	-	-	-
	113.05-113.31	TUFF/SED	0.26	0.685	(0.018 opt/3.97')	-	-	-	-	-
	132.30-134.00	TUFF/SED	1.70	1.030	0.852g/3.2m	2.5	-	-	-	-
	134.00-135.50	TUFF/SED	1.50	0.650	(0.025 opt/10.50')	1.0	2.0	-	-	-
	136.69-138.69	TUFF	2.00	1.540	1.55g/2.15m	3.5	1.0	-	-	-
	138.69-138.84	FAULT	0.15	1.680	(0.045 opt/7.05')	-	-	-	-	-
	158.00-159.50	ARGILLITE	1.50	0.515	-	3.5	0.5	-	-	-
	165.50-167.00	TUFF	1.50	0.685	-	11.0	3.5	-	-	-
	171.50-172.42	ARGILLITE	0.92	0.960	-	6.5	3.5	TR	-	-
	175.00-176.00	ARGILLITE	1.00	0.855	1.27g/2.0m	32.5	TR	0.2	-	-
	176.00-177.00	ARGILLITE	1.00	1.680	(0.037 opt/6.56')	13.0	3.0	-	-	-
	178.00-179.00	ARGILLITE	1.00	0.550	-	18.0	4.5	TR	-	-
	188.50-189.40	QTZ	0.90	0.855	-	95.0	5.5	-	-	-
	191.00-191.60	FAULT	0.60	0.585	-	3.0	-	-	-	-
	203.63-204.00	ARGILLITE	0.37	1.030	0.734g/0.87m	30.0	25.0	-	TR	-
	204.00-204.50	QTZ	0.50	0.515	(0.021 opt/2.85')	-	-	-	-	-
	205.50-206.00	FELSIC TUFF	1.50	0.585	-	-	2.0	0.2	-	-
	213.10-213.60	FELSIC TUFF	0.50	0.855	-	10.0	5.0	-	-	-
	213.60-214.00	QTZ	0.40	2.130	-	95.0	4.0	-	-	-
	214.00-215.00	QTZ	1.00	0.480	0.611g/4.9m	99.0	0.4	0.1	-	-
	215.00-216.00	QTZ	1.00	0.205	(0.018 opt/16.08')	97.5	2.5	-	-	-
	216.00-217.00	QTZ	1.00	0.310	-	96.5	2.5	-	-	-
	217.00-218.00	QTZ	1.00	0.720	-	90.0	4.0	-	-	-
	218.00-218.70	QTZ	0.70	2.430	-	95.0	1.5	-	-	-
	218.70-219.50	SMS	0.80	8.500	-	40.0	30.0	3.5	-	-
	219.50-220.30	SMS	0.80	12.200	8.157g/4.3m	20.0	50.0	4.0	-	-
	220.30-221.00	SMS	0.70	6.170	(0.238 opt/14.1')	70.0	30.0	-	-	-
	221.00-221.50	SMS	0.50	12.700	-	2.0	65.0	10.0	-	-
	221.50-222.50	QTZ	1.00	5.550	5.615g/7.2m	85.0	10.0	4.0	-	-
	222.50-223.00	SMS	0.50	4.590	(0.164 opt/23.6')	45.0	35.0	0.2	-	-
	223.00-223.50	QTZ	0.50	1.750	-	85.0	10.0	0.2	-	-
	223.50-224.20	QTZ	0.70	1.610	-	85.0	15.0	TR	-	-
	224.20-225.20	FELSIC TUFF	1.00	1.650	-	3.0	20.0	4.0	-	-
	225.20-225.68	FELSIC TUFF	0.48	0.615	-	1.5	15.0	2.5	-	-
	225.68-226.50	QTZ	0.82	0.855	-	95.0	3.5	TR	-	-
	226.50-227.00	QTZ	0.50	0.135	0.506g/4.3m	95.0	2.5	-	-	-
	227.00-227.50	QTZ	0.50	1.170	(0.015 opt/14.11')	90.0	10.0	-	-	-
	227.50-228.20	QTZ	0.70	0.375	-	95.0	1.5	-	-	-
	228.20-229.50	ARGILLITE	1.30	0.205	-	2.5	3.5	-	-	-
	233.00-234.50	ARGILLITE	1.50	0.790	-	2.0	-	-	-	-
MK92-2 =====	71.00- 72.50	OXIDE IRON FM	1.50	1.780	-	0.3	-	-	-	10.0
	152.00-153.50	ARGILLITE	1.50	0.650	6.5	TR	-	-	-	-
MK92-3 =====	137.42-137.60	FAULT	0.18	0.925	-	-	-	-	-	-
	203.10-205.06	FELSIC TUFF	1.96	1.060	2.04g/2.9m	4	TR	-	-	-
	205.06-206.00	TUFF-SED	0.94	4.080	(0.059 opt/9.5')	0.4	-	-	-	-
	211.93-212.20	CONGLOMERATE	0.27	0.960	-	15	7.0	-	-	-
	218.83-221.00	CONGLOMERATE	2.17	2.810	2.81g/2.17m	0.5	0.3	-	-	-
					(0.082 opt/7.1')					
MK92-4 =====	87.63- 89.00	SILTSTONE	1.37	0.615	0.683g/2.67m	-	0.2	-	-	-
	89.00- 90.30	SILTSTONE	1.30	0.755	(0.020 opt/8.76')	0.3	TR	-	-	-
	102.50-104.00	ARGILLITE	1.50	0.825	-	0.4	TR	-	-	-
	129.50-131.00	ARGILLITE	1.50	0.790	-	2.5	0.5	-	-	-

	INTERVAL (m)	ROCK TYPE	WIDTH (m)	ASSAY (g/t)	QTZ/ANK %	PY %	ASPY %	PO %	SPH %	MT %	CP %
32-5 =====	218.50-221.00	CONGLOMERATE	1.50	0.515	1.0	TR	-	-	-	-	-
MK92-6 =====	377.50-378.00	SEMI-MASSIVE SULPHIDES	0.50	2.230 (0.065 opt/1.6')	1.0	30.0	5	-	-	-	-
MK92-7 =====	18.00- 18.50	IFch1	0.50	0.520	55.0	2.5	-	-	-	-	-
=====	18.50- 23.60	IFch1	5.10	1.300	19.0	TR-3	-	-	-	-	-
incl.	21.50- 22.00	IFch1	0.50	8.980	15.0	3.0	-	-	-	-	-
	23.60- 24.50	TUFF	0.90	2.200	0.5	0.5	-	-	-	-	-
	71.00- 73.70	ALB.IF	2.70	0.850	0.3	1.0	-	-	-	-	-
	79.40- 80.60	QV	1.20	2.500	85.0	2.5	-	-	-	-	-
incl.	80.00- 80.60	QV	0.60	4.700	85.0	3.5	-	-	-	-	-
	147.50-149.00	HEM LAPILLI-TUFF	1.50	0.590	2.0	2.0	-	-	-	-	-
	221.00-222.50	ALB LAPILLI TUFF	1.50	0.960	0.4 (t)	1.0	-	-	-	-	-
	246.00-247.50	ALB HEM TUFF	1.50	0.930	-	-	-	-	-	-	-
MK92-8 =====	31.00- 32.00	QZONE	1.00	0.620	95.0	5.0	-	-	-	-	-
=====	38.00- 38.30	FAULT	0.30	0.760	0.2	2.5	-	-	-	-	-
	69.50- 75.50	ALB-HEM TUFF	6.00	0.790 *	0.5	1.5	-	-	-	-	-
	78.50- 80.50	ALB-HEM TUFF	2.00	0.890	4.0	1.0	-	-	-	-	-
	108.50-113.00	ALB-WK HEM TUFF	4.50	0.780	TR	0.5	-	-	-	-	-
	115.40-138.50	ALB-WK HEM TUFF	23.10	0.470 *	0.5	0.25	-	-	-	-	-
MK92-9 =====	37.50- 38.00	QZONE	0.50	1.080	85.0	10.0	-	-	-	-	-
=====	44.00- 44.70	QZONE	0.70	0.690	45.0	4.0	-	-	-	-	-
	67.00- 68.00	QZONE	1.00	0.520	5.0	1.0	-	-	-	-	-
	70.00- 71.00	QZONE	1.00	0.520	15.0	-	-	-	-	-	-
	75.00- 77.00	QZONE	2.00	0.790	2.8	3.0	-	-	-	-	-
	119.00-120.50	BASALT	1.50	0.790	2.0	TR	-	-	-	-	-
	130.00-131.00	QZONE	1.00	0.620	15.0	15.0	-	-	-	-	-
	185.00-195.00	SEDIMENT	10.00	0.860	0.3	TR	-	-	-	-	-
	216.50-218.00	SEDIMENT	1.50	0.520	1.5	TR	-	-	-	-	-
	266.00-267.00	CONGLOM.	1.00	0.520	0.5	0.5	-	-	-	-	-
	320.00-322.20	TUFF	2.20	0.650	0.3	0.5	-	-	-	-	TR
	340.35-340.95	SEDIMENT	0.60	0.620	2.5	TR	-	-	-	-	-
	371.00-372.50	CONGLOM.	1.50	0.690	1.0	TR	-	-	-	-	-
	381.12-383.00	HEM TUFF	1.88	0.690	4.5	TR	-	-	-	-	-
	435.00-436.00	ALB. CGL	1.00	0.930	2.5	2.5	-	-	-	-	0.15

\* GEOCHEMICAL GRABS INCLUDED

(9)

**1994 BUDGET PROPOSAL**

Details of the 1994 budget have not been finalized, however it is hoped to complete a diamond drill program in the A8 Area. No diamond drilling was completed during 1993.

**REFERENCES**

Coad, P.R. (1990)

**Structural Characteristics of Casa Berardi Deposits - Implications for Mikwam Exploration (internal memo - Pamorex Minerals Inc.)**

Corstorphine, W. (1991)

**Report on 1990 Mikwam Diamond Drilling, Noseworthy and Bradette Twps., Ontario (internal report - Noranda Exploration Company Limited (NPL))**

Johns, G.W. (1979)

**Burntbush Lake-Detour Lake Area, Southern Part, NTS 32E/4, 5 + 12S, Cochrane District, Ontario, Ontario Geological Survey Map P-2243, 1:50000**

Lacroix, S., Simard, A., Pilote, P., and Dube, L. (1990)

**Regional Geologic Elements and Mineral Resources of the Harricana-Turgeon Belt, Abitibi of NW Quebec in The Northwestern Quebec Polymetallic Belt: A Summary of 60 years of Mining Exploration, CIM, Special Vol. 43**

Pilote, P., Guha, J., Daigneault, R., Robert, F., Cloutier, J., and Golightly, P. (1990)

**The Structural Evolution of the Casa Berardi East Gold Deposits, Casa Berardi Township, Quebec in The Northwestern Quebec Polymetallic Belt: A Summary of 60 Years of Mining Exploration, CIM, Special Vol. 43**

SUMMARY LOG

**Hole Number:** MK92-1  
**Date Drilled:** June 16-19, 1992  
**Contractor:** Bradley Bros. Ltd. (Noranda)  
**Project:** Mikwam Joint Venture (2703)  
**Location:** A8 Area  
**Township:** Noseworthy  
**Claim No.:** L-633435 (collar), L-633434 (EOH)  
**Co-ordinates:** L-3200E, 2410S, Azimuth 360°, dip 50°  
**Length:** 275m  
**Casing:** 34(BW) 31(NW) left in hole  
**Purpose:** To test geophysical I.P. anomaly and magnetic axis high 150m NE of DDH 86-9 (L-3100E, 2550S)  
**Logged by:** P. Coad

*all logs completed within two days of completion of hole*

## RESULTS

### GEOLOGY

Stratigraphy intersected in this hole is positioned near a fold nose as evidenced by the oblique angle that the F1 cleavage foliation makes with the bedding. Micro-fold structures and crenulation cleavage occur locally throughout the entire hole. Axis of magnetic high possibly represents a fold nose of iron formation which does not reach the trace of MK92-1. I.P. anomaly not fully tested as hole collared too far north.

Intersected 26% Qtz + 3% Py @ 171.5-218.7 (47.2m) and 58% Qtz + 21% Py @ 218.7-228.2 (9.5m), including 2.6% Aspy @ 218.6-226.5 (7.8m). Best assay: 5.62 g/t Au (7.2m) @ 218.0-225.20m, including 8.16 g/t Au (4.3m) @ 218.70-223.0.

### SAMPLING

88% of the hole was sawed and fire assayed for gold (1 A.T.) with an atomic absorption finish and 12% of the hole (32m) was grabbed, with "buttons" of core selected over a specified interval for fire assaying and A.A. finish, as above (total specimens n=187). All pulps and rejects were saved for future reference. Analytical work performed by Royal Oak Mines Inc. Assay Laboratory in Schumacher, Ontario.

### CORE/REJECTS

Drill core and rejects are stored at Royal Oak Mines Schumacher core logging facilities in Schumacher, Ontario.

(3)

<u>FOOTAGE</u>	<u>LITHOLOGY</u>
0.00- 34.00	<b>Overburden</b>
34.00- 39.41	<b>Argillite</b>
39.41- 42.50	<b>Tuffaceous-Sediment QE Phyrlic</b> Weak-moderately sericitized, 2.5% Qtz
42.50- 44.00	<b>Argillite</b> Weak sericite next to qtz-ank veins
44.00- 51.50	<b>Tuffaceous-Sediment QE Phyrlic</b> Weak-moderately sericitic with green mica F1 cleavage @ 5-40°, oblique to bedding @ 40-60°
51.50- 54.50	<b>Tuffaceous-Sediment</b> Crenulated; 4.97 g/t Au (3.0m)
54.50- 56.00	<b>Argillite</b> Weak-moderately sericitized, tr sphal. in QV @ 54.7
56.00- 76.10	<b>Tuffaceous-Sediment QE Phyrlic</b> Weak-moderately sericitic, local green mica, 3.5% Qtz @ 56.0- 57.5
76.10- 81.50	<b>Argillite</b>
81.50- 86.60	<b>Tuffaceous-Sediment QE Phyrlic</b> Tr. sphal. & aspy. in 0.66mm QV @ 85.90
86.60- 91.28	<b>Argillite</b> Weakly sericitic and crenulated
91.28- 96.50	<b>Tuffaceous-Sediment QE Phyrlic</b>
96.50-109.90	<b>Argillite</b> Local sericite next to QV-Ank, crenulated, 3.5% Qtz @ 99.5- 101.0 and 105.5-107.0, minor Py
109.90-112.10	<b>Tuffaceous-Sediment QE Phyrlic</b> Moderately sericitic, crenulated and contorted

(4)

**FOOTAGE****LITHOLOGY**

112.10-113.05	<b>Fault</b> Complex Qtz-calcite-pyrite vein (flat), vuggy, runs length of brittle fault
113.50-113.31	<b>Tuffaceous-Sediment QE Phyrlic</b> Moderately sericitic
113.31-113.55	<b>Argillite</b>
113.55-116.00	<b>Tuffaceous-Sediment QE Phyrlic</b>
116.00-131.00	<b>Argillite</b> Crenulated; complex cross-cutting pitted Py-quartz-carbonate fractures cut obliquely across bedding
131.00-131.54	<b>Fault</b>
131.54-132.30	<b>Argillite</b>
132.30-138.69	<b>Tuffaceous-Sediment QE Phyrlic</b> Weak to moderately sericitic
138.69-138.84	<b>Fault</b>
138.84-140.80	<b>Tuffaceous-Sediment QE Phyrlic</b> Weak to moderately sericitic and crenulated
140.00-141.23	<b>Fault</b>
141.23-141.87	<b>Tuffaceous-Sediment QE Phyrlic</b> 4.5% blue-grey QV's define folding
141.87-142.00	<b>Fault</b> Brittle with angular fragments in silicified/carbonate matrix
142.00-154.30	<b>Tuffaceous-Sediment QE Phyrlic</b> Weak to moderately sericitic and crenulated, 2% Qtz + 4% Py with tr Aspy @ 147.5-149.0
154.30-154.70	<b>Quartz-Pyrite Vein</b> Possibly refolded late tension fracture? 7% Qtz + 20% Py with tr Aspy



(5)

**FOOTAGE****LITHOLOGY**

154.70-157.10	<b>Tuffaceous-Sediment QE Phyrlic</b> Weak to strongly sericitic
157.10-160.50	<b>Argillite</b> Crenulated; bedding @ 35° and F1 @ 30°
160.50-168.43	<b>Tuffaceous-Sediment QE Phyrlic</b> Cross-fractures with Qtz-Py-carbonate (pitted), 3.5% Qtz + 1% Py
168.43-169.15	<b>Argillite</b>
169.15-171.50	<b>Tuffaceous-Sediment QE Phyrlic</b> Local cross-fractures with Qtz-Py-carbonate
171.50-172.42	<b>Argillite</b> Siliceous with 4.5% QV and 2% Ank; 3.5% Py, tr Aspy
172.42-173.00	<b>Quartz Vein</b> Aphanitic, glassy, dirty with inclusions and sericite lamellae, poss. folded? 0.5% Py and tr Aspy
173.00-179.70	<b>Argillite</b> Siliceous, matrix argillite weakly conductive, 14% blue-grey QV dirtied by tr Aspy dusting and 2.5% Py; 1.27 g/t Au (2.0m) @ 175.0-177.0m
179.70-179.98	<b>Tuffaceous-Sediment QE Phyrlic</b> Moderately sericitized and crenulated, 0.5% QTZ + 1.5% Py
179.98-187.00	<b>Argillite</b> Siliceous, folded and crenulated, 9% Qtz + 2% Py and tr Aspy
187.00-189.40	<b>Quartz Vein</b> Glassy, aphanitic and dirtied with black fractures and zits, with cloudy ankerite in background, 92% Qtz + 4% Py and tr sphal.
189.40-191.00	<b>Argillite</b> Siliceous, 14% Qtz + 2% Py
191.00-191.60	<b>Fault</b> Graphitic rubble

(6)

**FOOTAGE****LITHOLOGY**

191.60-204.00	<b>Argillite</b> Siliceous, 6% Qtz + 3% Py and tr chalcopyrite and sphalerite
204.00-205.50	<b>Quartz Vein</b> Glassy, aphanitic and dirty-looking, 6% Py and tr Aspy
205.50-213.60	<b>Intermediate-Felsic QE Phyrlic Tuff</b> Moderate to strongly sericitic, local bands(?) of buff Fe-carbonate with minor Py and tr Aspy associated, local bands of Py + Aspy without quartz associated, local green mica, 7% Qtz + 3% Py with tr Aspy and pyrrhotite (magnetitic)
213.60-218.70	<b>Quartz Vein</b> Glassy, grey-white-blue and dirtied with clots and lamellae of yellow-green sericite, 2% Py with tr Aspy; 0.837 g/t Au (5.1m)
218.70-221.50	<b>Semi-Massive Sulphides</b> Fine to coarse grained, close-packed euhedral pyrite in masses with scattered euhedral fine to coarse grained arsenopyrite, @ 219.50-220.30; sulphidic tuff with very fine grained Aspy (banding @ 0°); 35% Qtz + 42% Py + 4% Aspy; 9.73 g/t Au (2.8m)
221.5-222.50	<b>Quartz Vein</b> 10% Py and 4% Aspy; 5.55 g/t Au (1.0m)
222.50-223.00	<b>Semi-Massive Sulphides</b> 35% Py + tr Aspy, 45% Qtz; 4.59 g/t Au (0.50m)
223.00-224.20	<b>Quartz Vein</b> 15% Py with tr Aspy; 1.67 g/t Au (1.20m)
224.20-225.68	<b>Intermediate-Felsic Tuff</b> Sericitic with 2.5% Qtz and 18% very fine grained Py and 3.5% Aspy, banding @ 0-22°; 1.31 g/t Au (1.48m)
225.68-228.20	<b>Quartz Vein</b> Highly fractured with graphite in fractures out contact, 4% Py with tr Aspy
228.20-230.77	<b>Argillite</b> Siliceous with 3% Qtz + 5% Py

(7)

**FOOTAGE****LITHOLOGY**

230.77-231.00

**Fault**

231.00-263.12

**Argillite**

Siliceous, folding evident; 0-3.0% Qtz and 0-5.0% Py and local tr Aspy

263.12-275.00

**Greywacke**

Variable bedding attitudes, folded; 15% Qtz with minor Py @ 274.5-275.0

275.00

**EOH**

MIKWAM JOINT VENTURE  
SIGNIFICANT RESULTS FROM 1992 DRILL PROGRAM

MK92-1

INTERVAL (m)	ROCK TYPE	WIDTH (m)	ASSAY (g/t)	QTZ/ANK %	PY %	ASPY %	PO %	SPH %	MT %
42.50- 44.00	ARGILLITE	1.50	0.995		4.5	0.2	-	-	-
47.00- 48.50	TUFF	1.50	1.060		1.5	TR	-	-	-
51.50- 53.00	TUFF/SED	1.50	8.770	4.97g/3.0m	3.0	TR	-	TR	-
53.00- 54.50	TUFF/SED	1.50	1.170	(0.145 opt/9.8')	4.0	0.4	-	0.4	-
112.10-113.05	FAULT	0.95	0.615	0.63g/1.21m	2.5	3.5	-	-	-
113.05-113.31	TUFF/SED	0.26	0.685	(0.018 opt/3.97')	-	-	-	-	-
132.30-134.00	TUFF/SED	1.70	1.030	0.852g/3.2m	2.5	-	-	-	-
134.00-135.50	TUFF/SED	1.50	0.650	(0.025 opt/10.50')	1.0	2.0	-	-	-
136.69-138.69	TUFF	2.00	1.540	1.55g/2.15m	3.5	1.0	-	-	-
138.69-138.84	FAULT	0.15	1.680	(0.045 opt/7.05')	-	-	-	-	-
158.00-159.50	ARGILLITE	1.50	0.515		3.5	0.5	-	-	-
165.50-167.00	TUFF	1.50	0.685		11.0	3.5	-	-	-
171.50-172.42	ARGILLITE	0.92	0.960		6.5	3.5	TR	-	-
175.00-176.00	ARGILLITE	1.00	0.855	1.27g/2.0m	32.5	TR	0.2	-	-
176.00-177.00	ARGILLITE	1.00	1.680	(0.037 opt/6.56')	13.0	3.0	-	-	-
178.00-179.00	ARGILLITE	1.00	0.550		18.0	4.5	TR	-	-
188.50-189.40	QTZ	0.90	0.855		95.0	5.5	-	-	-
191.00-191.60	FAULT	0.60	0.585		3.0	-	-	-	-
203.63-204.00	ARGILLITE	0.37	1.030	0.734g/0.87m	30.0	25.0	-	TR	-
204.00-204.50	QTZ	0.50	0.515	(0.021 opt/2.85')	-	-	-	-	-
205.50-206.00	FELSIC TUFF	1.50	0.585		-	2.0	0.2	-	-
213.10-213.60	FELSIC TUFF	0.50	0.855		10.0	5.0	-	-	-
213.60-214.00	QTZ	0.40	2.130		95.0	4.0	-	-	-
214.00-215.00	QTZ	1.00	0.480	0.611g/4.9m	99.0	0.4	0.1	-	-
215.00-216.00	QTZ	1.00	0.205	(0.018 opt/16.08')	97.5	2.5	-	-	-
216.00-217.00	QTZ	1.00	0.310		96.5	2.5	-	-	-
217.00-218.00	QTZ	1.00	0.720		90.0	4.0	-	-	-
218.00-218.70	QTZ	0.70	2.430		95.0	1.5	-	-	-
218.70-219.50	SMS	0.80	8.500		40.0	30.0	3.5	-	-
219.50-220.30	SMS	0.80	12.200	8.157g/4.3m	20.0	50.0	4.0	-	-
220.30-221.00	SMS	0.70	6.170	(0.238 opt/14.1')	70.0	30.0	-	-	-
221.00-221.50	SMS	0.50	12.700		2.0	65.0	10.0	-	-
221.50-222.50	QTZ	1.00	5.550	5.615g/7.2m	85.0	10.0	4.0	-	-
222.50-223.00	SMS	0.50	4.590	(0.164 opt/23.6')	45.0	35.0	0.2	-	-
223.00-223.50	QTZ	0.50	1.750		85.0	10.0	0.2	-	-
223.50-224.20	QTZ	0.70	1.610		85.0	15.0	TR	-	-
224.20-225.20	FELSIC TUFF	1.00	1.650		3.0	20.0	4.0	-	-
225.20-225.68	FELSIC TUFF	0.48	0.615		1.5	15.0	2.5	-	-
225.68-226.50	QTZ	0.82	0.855		95.0	3.5	TR	-	-
226.50-227.00	QTZ	0.50	0.135	0.580g/5.8m	95.0	2.5	-	-	-
227.00-227.50	QTZ	0.50	1.170	(0.017 opt/19.03')	90.0	10.0	-	-	-
227.50-228.20	QTZ	0.70	0.375		95.0	1.5	-	-	-
228.20-229.50	ARGILLITE	1.30	0.205		2.5	3.5	-	-	-
233.00-234.50	ARGILLITE	1.50	0.790		2.0	-	-	-	-

**SUMMARY LOG**

**Hole Number:** MK92-2

**Date Drilled:** June 19-21, 1992

**Contractor:** Bradley Bros. Ltd. (Noranda)

**Project:** Mikwam Joint Venture (2703)

**Location:** A8 Area

**Township:** Noseworthy

**Claim No.:** L-633437

**Co-ordinates:** L-3000E, 2180S, Azimuth 360°, dip 50°

**Length:** 200m

**Casing:** 60(BW) 60(NW) left in hole

**Purpose:** To test geophysical I.P. anomaly and HLEM conductor and interpreted axis of magnetic high on L-3000E, 100m south of the base line (2000S)

**Logged by:** P. Coad

## RESULTS

### **GEOLOGY**

Stratigraphy intersected in this hole is also positioned near a fold nose as evidenced by the oblique angle that the F1 cleavage foliation makes with the bedding.

Intersected 7% Qtz + 0-3% Py and tr Aspy @ 144.5-167.0 (21m). Geophysical anomalies not explained; magnetic high due to oxide iron formation (magnetite-chert-chlorite). Best assay: 1.78 g/t Au (1.5m) @ 71.0-72.50 in I.F.

### **SAMPLING**

81% of the hole was sawed and fire assayed for gold (1 A.T.) with an atomic absorption finish and 19% of the hole (37.06m) was grabbed, with "buttons" of core selected over a specified interval for fire assaying and A.A. finish, as above (total specimens n=75). All pulps and rejects were saved for future reference. Analytical work performed by Royal Oak Mines Inc. Assay Laboratory in Schumacher, Ontario.

### **CORE/REJECTS**

Drill core and rejects are stored at Royal Oak Mines core logging facilities in Schumacher, Ontario.

(3)

<u>FOOTAGE</u>	<u>LITHOLOGY</u>
0.00- 59.98	<b>Overburden</b>
59.98- 72.50	<b>Iron Formation-Oxide</b> 3-20% Mt and minor Py
72.50- 74.28	<b>Iron Formation-Chloritic</b>
74.28- 76.50	<b>Argillite</b> Non-conductive, open folding exhibited
76.50- 76.90	<b>Fault</b> Graphitic, non-conductive
76.90- 82.46	<b>Argillite</b> Chloritic, tight folds exhibited
82.46- 88.20	<b>Iron Formation-Chloritic</b> Minor chert and magnetite bands; 2-4% blue-grey QV's tightly folded
88.20- 90.70	<b>Iron Formation-Oxide</b> 30% Mt with minor Py, excellent folds cut in half by vertical faults
90.70-107.00	<b>Iron Formation-Chloritic</b>
107.00-110.50	<b>Iron Formation-Oxide</b> 6% Qtz + minor Py, 25% Mt
110.50-164.00	<b>Argillite</b> Folded and crenulated; 7% Qtz + 0-3% Py and local tr Aspy @ 144.5-167.0 (21m)
164.00-188.00	<b>Greywacke</b> Argillaceous with folding and crenulation; 0.5-4.5% Qtz + 0.5-3.5% Py and tr sphal, local X-fractures with qtz-py-ank
188.00-200.00	<b>Argillite</b> Minor greywacke component @ 191.74, 1-2 cm Aspy-rich band, 0.5-3% Qtz + minor to 3.5% Py
200.00	<b>EOH</b>

MIKWAM JOINT VENTURE  
SIGNIFICANT RESULTS FROM 1992 DRILL PROGRAM

MK92-2

INTERVAL (m)	ROCK TYPE	WIDTH (m)	ASSAY (g/t)	QTZ/ANK %	PY %	ASPY %	PO %	SPH %	MT %
71.00- 72.50	OXIDE IRON FM	1.50	1.780	-	0.3	-	-	-	10.0
152.00-153.50	ARGILLITE	1.50	0.650	6.5	TR	-	-	-	



## SUMMARY LOG

**Hole Number:** MK92-3

**Date Drilled:** June 21-23, 1992

**Contractor:** Bradley Bros. Ltd. (Noranda)

**Project:** Mikwam Joint Venture (2703)

**Location:** A8 Area

**Township:** Noseworthy

**Claim No.:** L-633431 (collar), L-633430 (EOH)

**Co-ordinates:** L-3800E, 1980S, Azimuth 180°, dip -60°

**Length:** 280m

**Casing:** 60(BW) 60(NW) left in hole; hole makes water

**Purpose:** To undercut 100m below the mineralization intersected in DDH 262-86-8 (L-3800E, 2250S)

**Logged by:** P. Coad

## RESULTS

### GEOLOGY

Hole climbed 4° in 60m of overburden and as a result intersected the projected target at 60m rather than 100m vertical. From approximately 200-280m, bedding (and possibly F1 foliation) at 0-30° to core axis. This suggests that latter part of hole drilled down the margin of a south dipping fold limb? A cleavage foliation, oblique to bedding, was observed throughout the hole. Iron formation (chloritic/chert/magnetite) was intersected at the middle and bottom of the hole - this lithology was not logged in 262-86-8.

Intersected 20% Qtz + 1.5% Py and 1.5% Aspy @ 217.47-218.85 (1.36m), however veining at flat angle to core axis. Best assay: 2.04 g/t Au (2.9m) @ 203.1-206.0m in felsic tuff-tuff/sediment. Also 2.81 g/t Au (2.17m) @ 218.83-221.0 in conglomerate.

### SAMPLING

80% of the hole was sawed and fire assayed for gold (1 A.T.) with an atomic absorption finish and 20% of the hole (54.83m) was grabbed, with "buttons" of core selected over a specified interval for fire assaying and A.A. finish, as above (total specimens n = 127). All pulps and rejects were saved for future reference. Analytical work performed by Royal Oak Mines Inc. assay laboratory in Schumacher, Ontario.

### CORE/REJECTS

Drill core and rejects are stored at Royal Oak core logging facilities in Schumacher, Ontario.

(3)

<u>FOOTAGE</u>	<u>LITHOLOGY</u>
0.00- 61.00	<b>Overburden</b>
61.00- 61.26	<b>Fault</b> Graphitic argillite (45°)
61.26- 62.58	<b>Argillite</b> Graphitic, weakly conductive
62.58- 62.67	<b>Fault</b>
62.67- 66.50	<b>Argillite-Graphitic</b>
66.50- 66.66	<b>Fault</b> Rubble, gouge @ 40°
66.66- 71.93	<b>Argillite-Graphitic</b> 6% Qtz + 3% Py (folded)
71.93- 72.18	<b>Fault</b>
72.18- 74.20	<b>Argillite</b>
74.20- 90.50	<b>Graphitic Argillite</b> Blocky ground with frequent gouge slips, crenulated
90.50- 94.00	<b>Argillite</b> Minor graphite and weak greywacke component; 25% Qtz, minor Py
94.00- 94.60	<b>Fault</b> In-contact marked by gouge @ 55°
94.60-114.12	<b>Greywacke</b> Minor argillaceous component
114.12-114.40	<b>Fault</b> In-contact marked by gouge and carbonate/pyrite vein (35°)
114.40-119.00	<b>Greywacke</b> Weakly sericitic and locally crenulated

(4)

<u>FOOTAGE</u>	<u>LITHOLOGY</u>
119.00-119.20	<b>Fault</b> 3 cm of gouge and blocky ground
119.20-120.66	<b>Greywacke</b> Weakly sericitic, grading indicates tops downhole to south
120.66-123.50	<b>Argillite</b> Folded with graphite on slips
123.50-137.42	<b>Greywacke</b> Weak to moderately sericitic, crenulated, folded with local "bulls-eyes"; 1% Qtz + 1% Py
137.42-137.60	<b>Fault</b> Brittle, also with 1 cm of gouge; 0.925 g/t Au (0.18m)
137.60-143.00	<b>Greywacke</b> Weak to moderately sericitic, local chlorite with 1.5-2.5% Qtz
143.00-157.85	<b>Argillite-Graphitic</b> Frequent fold "bulls-eyes"; 1% Qtz + 1% Py; tr pyrrhotite, cpy and sphal @ 150.5-152.0
157.85-158.00	<b>Fault</b>
158.00-160.75	<b>Argillite</b> Thin screens of weak sericite alteration
160.75-161.34	<b>Fault</b> Breccia and blocky ground, graphite on 40 slips
161.34-163.35	<b>Argillite</b> Minor reddish-hematite in QVs, and local calcite speckling
163.35-166.55	<b>Iron Formation-Chloritic</b> 1% Qtz + 4% Py + 2% Mt, fold "bulls-eye" defines shallow plunge?
166.55-174.66	<b>Tuffaceous-Sediment QE + Plagio</b> Porphyritic, chloritic, speckled by calcite crystals

(5)

**FOOTAGE****LITHOLOGY**

174.66-181.29	<b>Iron Formation-Chloritic</b> 1% QTZ + 2% Py
181.29-181.80	<b>Tuffaceous-Sediment QE Porphyritic</b>
181.80-182.63	<b>Iron Formation-Chloritic</b> Local blue Qtz "knots"
182.63-194.00	<b>Conglomerate</b> 1-25% stretch clasts (20:1) in QE porph. matrix, moderate to strongly sericitic, 2% Qtz + 2% Py, tr sphal. @ 191.0-192.5
194.00-196.70	<b>Tuffaceous-Sediment QE Porphyritic</b> Poss. tops by grading down hole to south
196.70-199.50	<b>Tuffaceous-Sediment QE Porphyritic</b> Moderate to strongly sericitic, pinkish carbonate on flat slips/joint planes
199.50-200.08	<b>Quartz Vein</b> Blue-grey with sericite lamellae, 0.5% Py
200.08-201.10	<b>Greywacke</b> Moderately argill. with 4.5% Py in bands
201.10-202.70	<b>Conglomerate</b> Schistose with 20:1 stretching of buff mafic and sericitized clasts in QE porphyritic matrix, moderate to strongly sericitic
202.70-203.10	<b>Tuffaceous-Sediment QE Porphyritic</b> Moderate to strongly sericitic
203.10-205.06	<b>Intermediate-Felsic Tuff?</b> Very fine grained, waxy brown-green, fold "bulls-eye" suggests flat plunge or "skipping" a contact? 2.04 g/t Au (2.9m)
205.06-206.92	<b>Tuffaceous-Sediment</b> Weak to moderately sericitic (whitish muscovite); fault gouge @ 205.87 (35°)

(6)

**FOOTAGE****LITHOLOGY**

206.92-208.40	<b>Tuffaceous-Sediment QE Phyrlic</b> Weak sericite and moderate argill. component; 1.5% Qtz + 3% Py + 0.25% Aspy
208.40-213.5	<b>Conglomerate</b> Moderately sericitic with 20:1 stretching of mafic and green mica clasts, <2% clasts; 1.5% Qtz + 1% Py + tr Pyrrhotite; 0.96 g/t Au (0.27m) @ 211.93-212.2
213.50-214.58	<b>Tuffaceous-Sediment QE Phyrlic</b>
214.58-215.28	<b>Tuff-Sediment?</b> Waxy yellow-green, poss. correlates with intermediate-felsic tuff above
215.28-216.00	<b>Conglomerate</b> 2% stretched clasts in sericitized QE porphy. matrix
216.00-217.47	<b>Greywacke</b> Fine grained and weakly sericitic
217.47-221.00	<b>Conglomerate-Tuff</b> 2.81 g/t Au (2.17m) @ 218.83-221.0
221.00-222.60	<b>Tuffaceous-Sediment QE Porphyritic</b>
222.60-224.00	<b>Tuff-Sediment or Intermediate-Felsic Tuff?</b> Medium yellow-green, moderate to strongly sericitic
224.00-230.00	<b>Conglomerate or Tuff-Sediment</b> Strongly sericitic and schistose, with crenulation "bulls-eyes"
230.00-233.00	<b>Greywacke</b> Fine grained and weak to moderately sericitic
233.00-257.90	<b>Tuffaceous-Sediment QE Phyrlic</b> Moderate to strongly sericitic, siliceous with 0.5-10% QE
257.90-280.00	<b>Iron Formation-Chloritic</b> Approx. 5% buff-white cherty bands with minor associated Mt
280.00	<b>EOH</b>

MIKWAM JOINT VENTURE  
SIGNIFICANT RESULTS FROM 1992 DRILL PROGRAM  
MK92-3

INTERVAL (m)	ROCK TYPE	WIDTH (m)	ASSAY (g/t)	QTZ/ANK %	PY %	ASPY %	PO %	SPH %	MT %
137.42-137.60	FAULT	0.18	0.925	-	-	-	-	-	-
203.10-205.06	FELSIC TUFF	1.96	1.060	2.04g/2.9m (0.059 opt/9.5')	4	TR	-	-	-
205.06-206.00	TUFF-SED	0.94	4.080	0.4	-	-	-	-	-
211.93-212.20	CONGLOMERATE	0.27	0.960	15	7	-	-	-	-
218.83-221.00	CONGLOMERATE	2.17	2.810	2.81g/2.17m (0.082 opt/7.1')	0.5	0.3	-	-	-

## SUMMARY LOG

**Hole Number:** MK92-4

**Date Drilled:** June 24-26, 1992

**Contractor:** Bradley Bros. Ltd. (Noranda)

**Project:** Mikwam Joint Venture (2703)

**Location:** A8 Area

**Township:** Noseworthy

**Claim No.:** L-633429

**Co-ordinates:** L-4100E, 2066S, Azimuth 180°, dip -55°

**Length:** 195m

**Casing:** 73(BW) 61(NW) left in hole

**Purpose:** To undercut overburden hole OB86-16 (L-4100E, 2155S) which returned a HMC rich in arsenopyrite and pyrite grains and 11 pristine gold grains.

**Logged by:** P. Coad



(2)

## RESULTS

### GEOLOGY

Stratigraphy intersected in this hole is also positioned near a fold nose as evidenced by the oblique angle that the F1 cleavage foliation makes with the bedding. Thin screens of chloritic iron formation were obtained within the argillite package; the argillite becomes noticeably more chloritic in these instances. The quartz-feldspar porphyry intersected at the bottom of the hole may provide a useful regional marker.

Intersected 5% Qtz + tr Py, Po and tr Aspy @ 92.0-96.5 (4.5m); 10% Qtz + 1% Aspy @ 104.0-107.3 (3.3m); 5% Qtz + 0.5% Py, tr Aspy @ 121.17-128.0 (6.83m); 9% Qtz + 3% Py @ 149.0-158.0 (9.0m). Best assay: 0.683 g/t Au (2.67m) @ 87.63-90.30m in siltstone.

### SAMPLING

86% of the hole was sawed and fire assayed for gold (1 A.T.) with an atomic absorption finish and 14% of the hole (27.54m) was grabbed, with "buttons" of core selected over a specified interval for fire assaying and A.A. finish, as above (total specimens n=75). All pulps and rejects were saved for future reference. Analytical work performed by Royal Oak Mines Inc. assay laboratory in Schumacher, Ontario.

### CORE/REJECTS

Drill core and rejects are stored at Royal Oak Mines core logging facilities in Schumacher, Ontario.

(3)

<u>FOOTAGE</u>	<u>LITHOLOGY</u>
0.00- 70.00	<b>Overburden</b>
73.00- 77.20	<b>Argillite-Graphitic</b> Blocky, with local gouge, weakly conductive
77.20- 80.62	<b>Greywacke-Siltstone</b> Very fine grained and banded, light grey-white
80.62- 87.63	<b>Argillite</b> Minor greywacke component, local fold "bullseye", local olive green chlorite with blue-grey QV's
87.63- 90.30	<b>Siltstone-Greywacke</b> Very fine grained, banded, minor 2-14cm wide cherty bands
90.30- 90.90	<b>Argillite</b> Graphitic, 2.5% pitted qtz veins
90.90- 96.50	<b>Siltstone-Greywacke</b> Blocky, 5% Qtz with tr Py, Po and Aspy @ 92.0-96.5 (4.5m)
96.50- 97.82	<b>Argillite</b> Chloritic and argillaceous, folded
97.82- 98.30	<b>Iron Formation-Chloritic</b> Blocky with 5-10% cherty bands, 15% Qtz + 5% Py + 3% Mt
98.30- 98.90	<b>Argillite-Chloritic</b>
98.90-100.76	<b>Iron Formation-Chloritic</b> Local strong olive green chlorite next to grey-blue QV, local buff iron carbonate with cherty bands, 2% Qtz + 4.5% Py + 1% Mt
100.76-104.00	<b>Argillite</b> Chloritic and argillaceous; 0.825 g/t Au (1.5m) @ 102.5-104.0m
104.00-107.30	<b>Siltstone-Greywacke</b> Very fine grained, weakly sericitic; 10% Qtz + 1% Aspy (3.3m)
107.30-108.90	<b>Tuffaceous-Sediment QE Porphyritic</b> Chloritic, with very fine grained QE; 3.5% Qtz + tr Py, Po, Cpy and Aspy

(4)

**FOOTAGE****LITHOLOGY**

108.90-114.12	<b>Siltstone-Greywacke</b> Minor white, siliceous bands, gouge @ 113.57 and 114.12
114.12-140.00	<b>Argillite</b> Chloritic and argillaceous; 5% Qtz + 0.5% Py and tr Aspy @ 121.17-128.0 (6.83m); 0.79 g/t Au (1.5m) @ 124.50-131.0m
140.00-141.30	<b>Tuffaceous-Sediment QE Porphyritic</b> Weakly sericitic, fold @ 140.40 plunges @ 40°
141.30-158.57	<b>Argillite</b> Blocky, banded and finely crenulated; 9% Qtz + 3% Py @ 149.0-158.0 (9.0m)
158.57-160.37	<b>Conglomerate</b> Moderately sericitic, schistose with 20:1 stretching ratio, local QE's in matrix and local green mica fragments
160.37-163.08	<b>Siltstone-Greywacke</b> Very fine grained and porphyritic in very fine grained colourless QE (0.5-3%), gouge on out-contact (oblique to bedding @ 45°)
163.08-166.26	<b>Conglomerate</b> Schistose and moderately to strongly sericitic; 0-2.5% Qtz + minor Py
166.26-166.72	<b>Fault</b> Brittle with angular, relatively closely packed fragments in siliceous or calcite matrix; 2% Py and possibly very fine grained Aspy?
166.72-171.76	<b>Felsic-Intermediate Schist</b> Moderately to strongly sericitic, laminated with yellow bands intercalated with grey bands, near out-contact start to pick up very fine grained QE's
171.76-195.00	<b>Felsic Porphyry</b> Dark grey with 1-25% variably sized, colourless QE and 0-2.5% plagioclase, local carbon and possibly chlorite on flat slips (locally strongly conductive)
195.00	<b>EOH</b>

MIKWAM JOINT VENTURE  
SIGNIFICANT RESULTS FROM 1992 DRILL PROGRAM  
MK92-4

INTERVAL (m)	ROCK TYPE	WIDTH (m)	ASSAY (g/t)		QTZ/ANK %	PY %	ASPY %	PO %	SPH %	MT %
87.63- 89.00	SILTSTONE	1.37	0.615	0.683g/2.67m (0.020 opt/8.76')	-	0.2	-	-	-	-
89.00- 90.30	SILTSTONE	1.30	0.755		0.3	TR	-	-	-	-
102.50-104.00	ARGILLITE	1.50	0.825		0.4	TR	-	-	-	-
129.50-131.00	ARGILLITE	1.50	0.790		2.5	0.5	-	-	-	-

## SUMMARY LOG

**Hole Number:** MK92-5

**Date Drilled:** June 26-28, 1992

**Contractor:** Bradley Bros. Ltd. (Noranda)

**Project:** Mikwam Joint Venture (2703)

**Location:** A8 Area

**Township:** Noseworthy

**Claim No.:** L-633413

**Co-ordinates:** L-5600E, 1440S, Azimuth 180°, dip -60°

**Length:** 250m

**Casing:** 57(BW) 51(NW) left in hole

**Purpose:** To undercut overburden hole MOV85-4 (L-5600E, 1500S) which returned anomalous Arsenic values in HMC, and also to test a 38m wide HLEM conductor.

**Logged by:** P. Harvey, P. Coad

(2)

## RESULTS

### **GEOLOGY**

The foliation in the hole changed abruptly at the upper contact of the conductive graphitic argillite, from a steep north dip to a moderate south dip, suggestive of a time break and/or other structural complication in the area.

An 8cm band of massive (bedded?) pyrite within graphitic argillite was intersected at 65.23m, which may explain the arsenic values in MOV85-4. The unusually wide HLEM conductor was explained by a 64.5m interval of strongly conductive graphitic argillite, which was cut at about 20° to the core axis (i.e moderate south dip). No significant amount of veining and/or sulphides was intersected in the hole; 0.515 g/t Au (1.5m) @ 218.5-221.0 in conglomerate.

### **SAMPLING**

58% of the hole was sawed and fire assayed for gold (1 A.T.) with an atomic absorption finish and 42% of the hole (80.5m) was grabbed, with "buttons" of core selected over a specified interval for fire assaying and A.A. finish, as above (total specimens n=85). All pulps and rejects were saved for future reference. Analytical work performed by Royal Oak Mines Inc. assay laboratory in Schumacher, Ontario.

### **CORE/REJECTS**

Drill core and rejects are stored at Royal Oak Mines core logging facilities in Schumacher, Ontario.

(3)

<u>FOOTAGE</u>	<u>LITHOLOGY</u>
0.00- 58.00	<b>Overburden</b>
58.00- 65.23	<b>Argillite-Graphitic</b> Blocky, strongly conductive
65.23- 65.31	<b>Massive Pyrite (+ Aspy?)</b> Banded
65.31- 76.50	<b>Argillite-Graphitic</b> Microfolds, pyrite balls
76.50- 86.00	<b>Conglomerate</b> Matrix graphitic
86.00- 90.90	<b>Massive Mafic Volcanic</b> Weakly sericitic
90.90-101.60	<b>Conglomerate</b> Moderate to locally strongly sericitic
101.60-104.00	<b>Conglomerate</b> Matrix graphitic
104.00-110.00	<b>Conglomerate</b> Sericitic, locally trace green mica fragments
110.00-113.00	<b>Conglomerate, Heterolithic</b> Silicified matrix
113.00-115.20	<b>Conglomerate</b> Sericitic
115.20-122.00	<b>Massive Mafic Volcanic</b>
122.00-125.00	<b>Conglomerate</b> Matrix graphitic
125.00-191.00	<b>Argillite</b> Graphitic throughout, highly conductive. Bedding at 10-20° to core axis

(4)

<b><u>FOOTAGE</u></b>	<b><u>LITHOLOGY</u></b>
191.00-194.00	<b>Conglomerate</b> Matrix graphitic
194.00-197.00	<b>Conglomerate</b> Heterolithic, matrix sericitic
197.00-205.00	<b>Conglomerate</b> Matrix graphitic
205.00-210.50	<b>Mafic Volcanic</b> Sericitic
210.50- 215.00	<b>Conglomerate</b> Sericitic
215.00-217.90	<b>Mafic Volcanic</b> Weakly sericitic
217.90-231.20	<b>Conglomerate</b> Weakly sericitic; 0.515 g/t Au (1.5m) @ 218.5-221.0
231.20-234.10	<b>Argillite</b> Graphitic, conductive
234.10-234.40	<b>Quartz Vein</b> Ribbon texture, trace pyrite
234.40-240.50	<b>Argillite/Conglomerate</b> Graphitic
240.50-243.50	<b>Conglomerate</b> Graphitic matrix
243.50-250.00	<b>Conglomerate</b> Siliceous
250.0	<b>EOH</b>



MIKWAM JOINT VENTURE  
SIGNIFICANT RESULTS FROM 1992 DRILL PROGRAM  
MK92-5

INTERVAL (m)	ROCK TYPE	WIDTH (m)	ASSAY (g/t)	QTZ/ANK %	PY %	ASPY %	PO %	SPH %	MT %
218.50-221.00	CONGLOMERATE	1.50	0.515	1.0	TR	-	-	-	-

SUMMARY LOG

**Hole Number:** MK92-7

**Date Drilled:** December 1-6, 1992

**Contractor:** Bradley Bros. Ltd. (Noranda)

**Project:** Mikwam Joint Venture (2703)

**Location:** Golden Shield Area

**Township:** Hoblitzell

**Claim No.:** L-628660

**Co-ordinates:** L-102+97W, 3670S, Azimuth 180°, dip -52°

**Length:** 297m

**Casing:** 10 (BW), left in hole and capped

**Purpose:** To undercut 100m below intersection of 1.52 g/t Au over 5.5m in DDH 260883 on L-103+00W

**Logged by:** P. Coad

(2)

**RESULTS****GEOLOGY**

Hole collared in chloritic (biotitic) iron formation (moderately-strongly magnetic) with local pink garnets and minor chloritoid. Thin screens of intermediate-felsic tuff (weakly to moderately magnetic) are intercalated within the IF which continues to 80.60m. Intermediate-felsic tuff and lapilli tuff (colourless to blue quartz-eye phyrlic) continues down the hole to 233m. This clastic unit is disseminated with magnetite and locally marked by intervals of hematization which tend to contain higher pyrite contents. Albitization occurs locally within the IF and also down-the-hole further in intermediate-felsic lapilli tuff. Quartz veining and slightly elevated pyrite values are coincident with this albitization.

The following intervals of quartz veining and pyrite mineralization were encountered. The best gold assays returned were 8.98 gpt or 0.262 opt Au over 0.5m, and 4.6 gpt or 0.138 opt Au over 0.6m in two separate areas. See below for details.

<u>Interval</u>	<u>Quartz</u>	<u>Sulphides</u>	<u>Gold (ppb)</u>	<u>Host</u>
18.00- 18.50 (0.5m)	55%	2.5% Py	515	IF chloritic
18.50- 23.60 (5.1m)	19%	tr-3% Py	1312*	IF chloritic
23.60- 32.00 (8.4m)	0-10%	tr Py, Cp, Zn	315**	IF chloritic
72.62- 78.50 (5.88m)	0.5-15%	0-3.5% Py	431	Albitized IF
79.40- 80.60 (1.2m)	85%	2.5% Py	2486***	Tuff
80.60-105.50 (24.9m)	0-10%	0-0.5% Py	62	Hematized Tuff
119.60-120.60 (1.0m)	85%	tr Py & Mt	<35	Tuff
120.60-181.50 (60.9m)	0-20%	0-2% Py	****	Intervals of Hematized Tuff
197.0-197.50 (0.5m)	75%	1% Py	<35	Albitized Tuff

\* includes 0.262 opt Au/0.5m @ 21.50-22.00m

\*\* includes 2.19 gpt/0.9m @ 23.60-24.90m

\*\*\* includes 0.138 opt Au/0.6m

\*\*\*\* best 585 ppb Au (1.5m) @ 147.50-149.00m. Remainder averages <35 ppb Au, except 310 ppb Au (1.4m) @ 120.60-122.00m

Values of 1200 ppm Zn, 141 ppm Cu and 0.7 gpt Ag (<35 ppb Au) over 1.5m were returned from 44.00-45.50m (moderately magnetic intermediate tuff). Also 381 ppm Zn, 93 ppm Cu, 1 gpt Au, 945 ppb Au over 9.0m from 20.00-29.00m, in chloritic iron formation.

**SAMPLING**

87% of the hole (n=196) was sawed and fire assayed for gold (1 A.T.) with an atomic absorption finish and 13% of the hole (n=7) was grabbed with "buttons" of core selected over a specified interval for fire assaying and A.A. finish as above (total specimens n=203, representing 100% of the hole). Sixteen of the above specimens were also analyzed for Ag, Cu and Zn. All pulps and rejects were saved for future reference. Analytical work performed by Royal Oak Mines Inc. Assay Laboratory in Schumacher, Ontario.

**CORE/REJECTS**

Drill core and pulps/rejects are stored at Royal Oak Mines Schumacher core logging facilities in Schumacher, Ontario.

(4)

METRAGELITHOLOGY

0.00- 10.10	<b>Overburden</b>
10.10- 15.50	<b>Iron Formation - Chloritic</b> Moderately to strongly magnetic with 10-15% pink garnets, local QE and trace pyrite.
15.50-18.00	<b>Intermediate-Felsic Lapilli Tuff - QE Phyrlic</b> 1.5-2.0% py and minor quartz veins.
18.00-18.50	<b>Quartz-Carbonate Vein</b> Minor black tourmaline and 2.5% pyrite; 515 ppb Au (0.5m).
18.50-23.60	<b>Iron Formation - Chloritic</b> Approximately 19% quartz-carbonate veins (deformed) with sericitic alteration halos (tr-3% pyrite). Unit moderately-strongly magnetic. 1312 ppb Au (0.038 g/t Au) over 5.1m; includes 0.262 g/t Au from 21.5-22.0m.
23.60-24.50	<b>Intermediate-Felsic Tuff - QE Phyrlic</b> 0.064 g/t Au (0.9m).
24.50-32.00	<b>Iron Formation - Chloritic</b> Moderately to strongly magnetic, with local fine grained to coarse grained garnets and local chloritoid in chlorite-rich bands; sphalerite as halos in calcite vein at 27.0m - note sphalerite and chalcopyrite also on slip! Quartz-carbonate veins (8-10%) with trace pyrite. Best: 410 ppb Au (0.5m) at 28.50-29.00m.
32.00-35.50	<b>Intermediate-Felsic Tuff</b> Bladed muscovite crystals in calcite fracture? Sent for X-ray.
35.50-39.40	<b>Iron Formation - Chloritic</b> Moderately-strongly magnetic; 0.5-3.0% quartz with trace pyrite.
39.40-64.00	<b>Intermediate-Felsic Tuff</b> Speckled by fine grained magnetite crystals; local calcite speckling and weak albitization, local pink garnets. Unit weakly-strongly magnetic; tr-8% quartz with 0-1% pyrite and tr cp.

**METRAGE****LITHOLOGY**

- 64.00-72.62      **Iron Formation - Chloritic**  
Moderately to strongly magnetic; albitization as scattered fine to medium grained anhedral-subhedral crystals - locally as patches (pink-orange tint). 0-1.0% quartz with 0-1.0% pyrite. Best: 340 ppb Au (1.62m) at 71.00-72.62m.
- 72.62- 78.50      **Albitized Zone**  
Albitized as medium grained "zits" (pink tint) in moderately magnetic rock: protolith is iron formation. 0.5-15% quartz-carbonate with 0-3.5% pyrite; local sericite alteration. Halo on QV's. 431 ppb Au (5.88m).
- 78.50- 79.40      **Iron Formation - Chloritic**  
Hematized and albitized - local garnets and blue quartz-eyes. Moderately to strongly magnetic; 1% quartz-carbonate veins with trace pyrite.
- 79.40- 80.60      **Quartz Vein**  
White albite and chloritic wisps/voids and sericite and hematite alteration halo in host IF; 1.5-3.5% pyrite; 2486 ppb Au (1.2m); includes 4.7 gpt or 0.138 opt Au (0.6m).
- 80.60-105.50      **Intermediate-Felsic Tuff (local lapilli) QE Phyrlic**  
Hematized and moderately to strongly magnetic; local albitization; 0-10% quartz with local tourmaline; 0-0.5% pyrite. Best: 205 ppb Au (1.5m) at 95.00-96.50m.
- 105.50-110.50      **Intermediate-Felsic Tuff - QE Phyrlic**  
Chloritic and biotitic, local blue QE. Best: 205 ppb Au (2.0m) at 108.50-110.50m.
- 110.50-114.70      **Intermediate-Felsic Lapilli Tuff - QE Phyrlic**  
Tr quartz and pyrite.
- 114.70-115.10      **Tuffaceous-Sediment?**  
Sericitic-hematitic alteration halo with blue QE about QV - offset 4 cm by left-handed fault (10°); 1% pyrite and trace quartz; facing up-hole to north by grading.
- 115.10-119.00      **Intermediate-Felsic Lapilli Tuff - QE Phyrlic**  
Moderately-strongly magnetic. Best: 275 ppb Au (0.9m) at 115.10-116.00m.
- 119.00-119.60      **Tuffaceous-Sediment**  
5% quartz and tr pyrite.

(6)

METRAGELITHOLOGY

- 119.60-120.60      **Quartz Vein**  
Tr-0.2% pyrite and local disseminated magnetite.
- 120.60-181.50      **Intermediate-Felsic Lapilli Tuff - QE Phyrlic**  
Moderately magnetic due to disseminated fine grained magnetite crystals. Cp in thin band @ 125.00m; chloritic (darkened by magnetite) @ 120.60-125.00, 132.75-141.50, 155.00-164.00, 170.00-181.50. Hematitic @ 125.00-132.75, 141.50-155.00. Quartz-albite veining ranges from 0-20% with 0-2% pyrite. Sulphides stronger in hematized areas. Local minute garnets. Best: 585 ppb Au (1.5m) at 147.50-149.00m.
- 181.50-182.55      **Quartz Vein**  
1-2% tourmaline.
- 182.55-197.00      **Intermediate-Felsic Tuff - QE and Albite Phyrlic**  
Moderately to strongly magnetic, albitized.
- 197.00-197.50      **Quartz Vein**  
Host is magnetic tuff; black tourmaline and chlorite in QV; 1% pyrite.
- 197.50-234.28      **Intermediate-Felsic Lapilli Tuff - QE and Albite Phyrlic**  
Chloritic (moderately-strongly magnetic with crystals), siliceous and locally pink-red coloured by hematite alteration; unit albitized by medium to coarse grained crystals!! 0-2.0% QV and tr-3.0% pyrite in local thin bands. Note pyrite content increases with intensity of albitization! Best: 960 ppb Au (1.5m) at 221.00-222.50m.
- 234.28-234.32      **Fault Gouge (77°)**
- 234.32-297.0      **Intermediate-Felsic Lapilli Tuff - QE and Albite Phyrlic**  
Grey-green-pink due to varying degrees of chlorite, biotite and hematite alteration. Unit is variably albitized as isolated crystals and as patches or bands. Unit weakly to moderately magnetic due to finely disseminated magnetite grains. Blue QE. Minor quartz-calcite veining with only minor pyrite (see log for detail). Best: 925 ppb Au (1.5m) at 246.00-247.50m; 219 ppb Au (6.1m) at 258.00-264.10m.
- 297.0      **E.O.H.**

## SUMMARY LOG

**Hole Number:** MK92-8

**Date Drilled:** December 7-9, 1992

**Contractor:** Bradley Bros. Ltd. (Noranda)

**Project:** Mikwam Joint Venture (2703)

**Location:** Golden Shield Area

**Township:** Hoblitzell

**Claim No.:** L-628655

**Co-ordinates:** L-105+00W, 3720N, Azimuth 180°, dip -45°

**Length:** 200m

**Casing:** 10m (BW), left in ground and capped

**Purpose:** To test gold-bearing structure 200m to the west of fence marked by MK92-7 and 88-3 on L-103+00W

**Logged by:** P. Coad



(2)

**RESULTS****GEOLOGY**

Entire hole intersected a package of intermediate-felsic lapilli tuff-QE phyrlic (grey-blue) and noticeably albitized after 40.65m. These rocks could easily be sediments. Unit is variably magnetic due to finely disseminated magnetite. Intersected a structured quartz zone from 29.00-39.75m (10.7m), averaging 32% quartz and 3% pyrite. This zone is also marked by albitization, carbonatization and tourmalinization. Two additional quartz zones were intersected at 156.00-160.30m (4.3m - 24% quartz and 3% pyrite) and 168.50-169.10 (0.60m - 15% quartz and 1.5% pyrite). All significant intersections are listed below.

<u>Interval</u>	<u>Quartz</u>	<u>Sulphides</u>	<u>Gold (ppb)</u>	<u>Host</u>
29.00- 39.75 (10.75m)	32%	3% Py	235	Qtz tourmaline-albite zone in hematized & sericitized tuff sediment
69.50- 75.50 (6.0m)	0.5%	1.5% Py	797*	Albitized & hematized tuffaceous-sediment
78.50- 80.50 (2.0m)	4% 2.5% albite	1% Py	885	Albitized & hematized tuffaceous sediment
108.50-113.00 (4.5m)	trace	tr-0.5% Py	780	Albitized - weakly hematized QE phyrlic tuffaceous sediment
115.40-138.50 (23.1m)	0.5%	0.25% Py	472**	Albitized - weakly hematized tuffaceous sediment
156.00-160.30 (4.3m)	24%	3% Py	91	Quartz zone with calcite and minor tourmaline

\* Interval includes geochem grab from 69.5-73.5 (4.0m) with 685 ppb Au

\*\* Interval includes geochem grabs from 115.4-125.0 (9.6m - 585 ppb Au), and 130.4-138.5 (8.1m - 445 ppb Au)

(3)

**SAMPLING**

74% of the hole (n=110) was sawed and fire assayed for gold (1A.T.) with an atomic absorption finish and 26% of the hole (n=9) was grabbed with "buttons" of core selected over a specified interval for fire assaying and A.A. finish as above (total specimens n=119, representing 100% analysis of the hole). All pulps/rejects are saved for future reference. Analytical work was performed by Royal Oak Mines Inc. Assay Laboratory in Schumacher, Ontario.

**CORE/REJECTS**

Drill core and rejects are stored in locked premises at Royal Oak Mines Inc. Schumacher core logging facilities in Schumacher, Ontario.

(4)

**METRAGE****LITHOLOGY**

0.00- 10.00	<b>Overburden</b>
10.00- 29.00	<b>Intermediate to Felsic QE Phyrlic Tuff</b> Moderately magnetic and hematized - local lapilli clasts. Best: 410 ppb Au (1.2m) at 27.30-28.50m.
29.00- 39.75	<b>Quartz Zone</b> Pitted quartz-tourmaline-albite-calcite veining in hematitic tuff/sediment. Bleached buff alteration halos. QE phyrlic (hematitic) tuff/sediment with 5% pyrite from 34.0-35.0m. Fault @ 36.6m (50° gouge) and 38.0-38.30 (20°). Entire zone averages 32% quartz and 3% pyrite. Best: 615 ppb Au (1.0m) at 31.00-32.00m; 280 ppb Au (4.75m) at 35.00-39.75m.
39.75- 40.15	<b>QE Phyrlic Tuff/Sediment</b> Hematized.
40.15- 40.65	<b>Fault Zone</b> 5% quartz and 2% albite (2% pyrite). 275 ppb Au (0.5m).
40.65-126.06	<b>Intermediate Felsic Lapilli Tuff/Sediment</b> QE and albite phyrlic (i.e. albitized). Locally hematized. Minor pyrite and quartz-carbonate veining. 797 ppb Au (6.0m) at 69.50-75.50m, includes geochem sample of 685 ppb Au (4.0m) at 69.50-73.50m; 321 ppb Au (10.2m) at 77.70-87.90m; 271 ppb Au (17.56m) at 108.50-126.06m (includes geochem sample). Note: 780 ppb Au (4.5m) at 108.50-113.00m.
126.06-126.27	<b>Fault Zone</b> 275 ppb Au (0.21m).
126.27-156.00	<b>Intermediate-Felsic Lapilli Tuff/Sediment</b> QE and albite phyrlic (i.e. albitized). 0-15% quartz and tr-2.0% pyrite; local blue QE and weakly to moderately magnetic. Best: 410 ppb Au (12.23m) at 126.27-138.50m, includes geochem samples of 445 ppb Au (8.1m) at 130.40-138.50m, 108 ppb Au (17.5m) at 138.50-156.00m (includes geochem sample of 70 ppb Au (8.8m) at 141.70-150.50m).

(5)

**METRAGE****LITHOLOGY**

156.00-160.30

**Quartz Zone**

Folded quartz-carbonate-tourmaline; local green mica zits in bleached sericitized halos. Interval averages 24% quartz and 3% pyrite. 91 ppb Au (4.3m).

160.30-168.50

**Intermediate-Felsic Tuff/Sediment**

Weakly-moderately magnetic due to disseminate magnetite crystals. Quartz vein (35%) @ 164.00-165.00m with 0.5% tourmaline and 1% pyrite. Best: 105 ppb Au (1.5m) at 161.00-162.50m.

168.50-169.10

**Quartz Zone**

15% quartz + 2.5% carbonate + 1.5% pyrite.

169.10-200.00

**Intermediate-Felsic Tuff/Sediment**

Locally albitized. 0-20% quartz with 0-2% pyrite. Best: 170 ppb Au (3.5m) at 171.00-174.50m and 170 ppb Au (1.5m) at 179.00-180.50m.

200.00

**E.O.H.**

## SUMMARY LOG

**Hole Number:** MK92-9

**Date Drilled:** December 10-16, 1992

**Contractor:** Bradley Bros. Ltd. (Noranda)

**Project:** Mikwam Joint Venture (2703)

**Location:** Golden Shield Area

**Township:** Hoblitzell

**Claim No.:** L-628673 (collar) L-628668-L628669 (EOH)

**Co-ordinates:** L-92+00W, 3650S, Azimuth 180°, dip -48°

**Length:** 500m

**Casing:** 19m (BW), left in ground and capped

**Purpose:** To test gold-bearing structure 0.5 km west of fence marked by DDH's 88-8 and 88-13 (i.e. L-87+00W)

**Logged by:** P. Coad

(2)

**RESULTS****GEOLOGY**

Hole collared in albitized intermediate-felsic lapilli tuff with variably quartz veining and then into a thick package of basalts (high Fe-tholeiite - variably magnetic) with sections of strong biotite and local garnet development. A mineralized zone (5.56m) with 17% quartz (+20% albite) and 7% pyrite marks the contact between the above basalt package to the north and sediments to the south which are variably altered (i.e. hematized and albitized) and weakly to moderately magnetic due to finely disseminated magnetite. Both strike and tension veins/veinlets of quartz-calcite-albite-tourmaline occur throughout these sediments.

All significant intersections are listed below:

<u>Interval</u>	<u>Quartz</u>	<u>Sulphides</u>	<u>Gold (ppb)</u>	<u>Host</u>
36.50- 44.70 (8.2m)	22%	5% Py	343	Basalt (tourm.)
62.20- 78.00 (15.5m)	10.5%	2% Py	299	Basalt (biotized & tourm.)
127.47-127.64 (0.17cm)	0%	98% Py	105	(291 ppm Cu, 44 ppm Zn, 28 ppm Pb, 2.1 ppm Ag)
127.64-133.20 (5.56m)	17% +20% albite	7% Py	187	Sediment

(3)

**SAMPLING**

48% of the hole (n=182) was sawed and fire assayed for gold (1A.T.) with an atomic absorption finish and 48% of the hole (n=24) was grabbed with "buttons" of core selected over a specified interval for fire assaying and A.A. finish. This represents 96% of the hole being analyzed (n=206). All rejects were saved for future reference. Analytical work was performed by Royal Oak Mines Inc. Assay Laboratory in Schumacher, Ontario.

**CORE/REJECTS**

Drill core and pulps/rejects are stored in locked premises at Royal Oak Mines Inc. Schumacher core logging facilities in Schumacher, Ontario.

(4)

METRAGELITHOLOGY

0.00- 19.00	<b>Overburden</b>
19.00- 36.50	<b>Albitized Intermediate-Felsic Tuffaceous-Sediment-QE and Albite Phyric</b> Siliceous, weakly-moderately magnetic; 1-15% albite crystals as disseminations and patches; local blue QE. Trace-3% quartz and trace-3.5% pyrite.
36.50- 38.00	<b>Quartz Zone</b> Dirtied by chlorite and tourmaline. Orange-pink aphanitic albite and calcite associated. 63% quartz and 10% pyrite. Host is massive chloritic basalt (?). Averages 683 ppb Au (1.5m).
38.00- 52.20	<b>Intercalated Basalt (High Fe-Tholeiite) and Quartz Zones</b> Veining also marked by pink-orange calcite-albite and black tourmaline. Locally strongly magnetic. Averages 6% quartz and 2% pyrite with traces of Cp. Best: 411 ppb Au (3.7m) at 41.00-44.70m.
52.20- 62.20	<b>Basalt (High Fe-Tholeiite)</b> Weakly-strongly magnetic; local dusting by tourmaline and biotite. Averages 1% quartz, 3% tourmaline and trace pyrite with trace Cp veins in pillow interstices?
62.20- 64.15	<b>Quartz Zone</b> Averages 11% quartz and trace pyrite and 1% Cp.
64.15- 67.00	<b>Basalt (High Fe-Tholeiite)</b> Averages 1% quartz and trace pyrite.
67.00- 78.00	<b>Quartz Zone</b> Mg-chlorite associated with quartz-calcite veins; local buff alteration halos - typically pitted. Pink-orange albite and black tourmaline associated. Averages 12% quartz and 2% pyrite. 359 ppb Au (12.0m). Best: 925 ppb Au (1.0m) at 75.00-76.00m.
78.00-105.56	<b>Basalt (High Fe-Tholeiite)</b> Predominantly massive and biotized; local pink garnets. Weakly-moderately magnetic. Averages 0.5% quartz, 2% calcite and 1% pyrite. Best: 340 ppb Au (1.5m) at 78.50-80.00m.
105.56-106.67	<b>Mylonite</b>



(5)

METRAGELITHOLOGY

106.67-106.84

**Lamprophyre?**

106.84-127.47

**Basalt (High Fe-Tholeiite)**

Dark green-brown due to biotite alteration. Weakly to strongly magnetic. Local small amygdules. Averages 2% quartz and 0.25% pyrite with traces of chalcopyrite. Best: 790 ppb Au (1.5m) at 119.00-120.50m.

127.47-127.64

**Massive Sulphides**

Banded and pitted pyrite with very thin partings of fine grained magnetite. Calcite gangue averages 98% pyrite. 105 ppb Au, 291 ppm Cu, 44 ppm Zn, 28 ppm Pb, 2.1 ppm Ag.

127.64-128.40

**Basalt (High Fe-Tholeiite)**

Massive, biotitic and moderately to strongly magnetic; 1-10% garnets with local blue QE. Averages 4% pyrite and 20% magnetite.

128.40-133.20

**Quartz Zone**

Quartz veining, silicification, albitization (aphanitic - orange-pink), tourmaline and magnetite in bleached sediment. Coarse garnets at in-contact. Averages 19% quartz, 23% albite, 8% pyrite and 11% magnetite. 211 ppb Au (4.8m). Best: 615 ppb Au (1.0m) at 130.00-131.00m.

133.20-148.70

**Sediment**

Grey with biotite near in-contact. Weakly hematitic; flame-structures (139.00m) indicate tops up-hole to north. Averages 2.5% quartz and 0.25% pyrite.

148.70-149.57

**Mafic Dike?**

Mottled grey-pink with possible epidote-sericite; local blue QE; possibly altered sediment.

149.57-219.25

**Sediment**

Fine grained with pinhead QE (local blue tinted) and local garnets. Weakly to moderately magnetic. Minor quartz-calcite-albite-tourmaline veins. Averages 2.5% quartz and 0.25% pyrite. Best: 753 ppb Au (11.6m) at 183.40-195.00m; includes geochem sample of 855 ppb Au (10.0m) at 185.00-195.00m.

(6)

METRAGELITHOLOGY

219.25-220.39	<b>Lamprophyre</b> Biotized.
220.39-266.0	<b>Sediment</b> Minor garnets in areas of chlorite-biotite alteration; local blue QE; minor strike and tension veins of quartz-calcite-albite-tourmaline exhibit chlorite (Mg) alteration halos. Locally weak sericite and coarse white mica. Quartz vein 40% at 243.00-243.60m and 263.00-264.00m (20%). Best: 310 ppb Au (1.5m) at 237.50-239.00m.
266.00-269.00	<b>Sediment-Conglomerate</b> 1-3% stretched clasts. Minor quartz-calcite-albite veins (<0.5%). Strike and tensional; left-handed (1cm) fault (20°) at 269.00m. Best: 515 ppb Au (1.0m) at 266.00-267.00m.
269.00-293.54	<b>Sediment</b> Minor minute dark argillaceous chips. Minor crenulation cleavage evident. Local blue QE. Garnets in areas of chlorite development. Quartz-calcite-tourmaline veins boudinaged. Also tensional veinlets. Average 0.5% quartz and trace pyrite. Best: 340 ppb Au (1.5m) at 288.50-290.00m.
293.54-294.50	<b>Lamprophyre?</b> Banded, biotized with calcite partings and knots.
294.50-296.16	<b>Albitized Sediment</b> Could be mistaken for "granodiorite" - just grey-pink albitized-hematized-biotized clastic sediment. Unit dirtied by fine grained magnetite.
296.16-310.42	<b>Sediment</b> Minor albitization; garnets in areas of chloritization. Minor quartz veining and trace to 2% pyrite.
310.42-312.26	<b>Lamprophyre</b> Biotized with minor stretched chloritized clasts. 7.5% combined quartz-calcite with trace pyrite.

(7)

**METRAGE****LITHOLOGY**

312.26-314.00

**Sediment-Conglomerate**

1-4% stretched chloritic fragments; possible variolitic clast at 312.86m; 0.5% garnets - locally form continuous bands; 2-3% PbS with trace ZnS in 2.5 cm QV (strike); 1-2.5 cm wide pyrite band/lamellae 4 cm from this QV. Averages 0.5% quartz, 3% pyrite, 2% PbS and trace ZnS. 35 ppb Au, 59 ppm Cu, 116 ppm Zn, 102 ppm Pb, 0.7 ppm Ag (1.74m).

314.00-315.50

**Albitized Sediment**

Chloritic with local garnets and 0.5% pinkish subhedral albite.

315.5-359.43

**Albitized & Hematized Tuffaceous Sediment**

Less than 1-4% dark stretched clasts. Albitization as discrete crystals, aphanitic wisps (orange-pink) and local patches or bands (i.e. 325.3-326.73); QV's exhibit pink alteration (hematite) halos. Unit dirtied by fine grained disseminate magnetite. Local coarse bronzy mica and biotite on vein margins. Averages 1% quartz and 1% pyrite. 650 ppb Au (2.2m) at 320.00-322.20m; 241 ppb Au (19.08m) at 340.35-359.43m (includes geochem intervals).

359.43-362.10

**Sediment**

Chloritic and locally strongly magnetic; 1-10% fine to medium grained pink garnet. Averages 3% quartz and 0.5% pyrite. 191 ppb Au (2.67m).

362.10-376.15

**Sediment-Conglomerate**

Hematized with 1-10% stretched pink clasts in lighter pink matrix; local blue QE. Averages 0.5% quartz and trace pyrite. 403 ppb Au (5.15m) at 371.00-376.15m.

376.15-380.93

**Tuffaceous-Sediment**

Weakly hematitic; cross cleavage (i.e. oblique to bedding) suggested by micro-diamond pattern.

380.93-381.12

**Fault Zone**

Brittle-fault with angular fragments in clay sericite matrix (50°); secondary tensional fault (35°) within main fault; 2% quartz.

(8)

METRAGELITHOLOGY

381.12-384.14

**Hematized Tuffaceous-Sediment**

Frequent 20-30° slips with local micro breccia (thrusts?). Speckled by disseminated fine grained magnetite. Averages 3% quartz and trace pyrite. Best: 685 ppb Au (1.88m) at 381.12-383.00m.

384.14-388.80

**Tuffaceous-Sediment**

Weakly magnetic and hematized. At 387.50, 5 cm sericitized band with crenulation cleavage.

388.80-389.43

**Quartz Vein**

Pale green-yellow alteration halos. Streaks of black non-conductive carbon and chlorite associated. 10% quartz and 2.5% coarse pyrite.

389.43-467.16

**Sediment-Conglomerate**

Weakly to moderately hematized with 1-10% clasts (variable lithologies and variably stretched). Albitization picks up after 434.0m. Local blue QE and minor tourmaline. Averages 2% quartz and 0.5% pyrite. Both strike and tensional veins. Best: 310 ppb Au (2.54m) at 402.96-405.50m; 275 ppb Au (1.1m) at 427.50-428.60m; 400 ppb Au (3.0m) at 433.00-436.00m.

467.16-500.00

**Tuffaceous Sediment**

Hematized and chloritic and moderately albitized. Weakly to moderately magnetic. Local epidote with quartz in area of strong hematization/albitization (483.40-485.75m). Averages 1% quartz and trace pyrite.

500.00

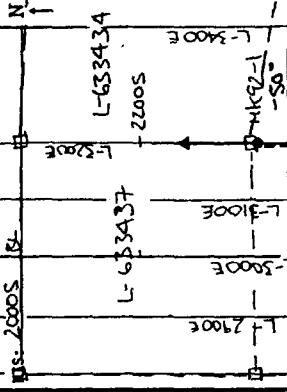
**E.O.H.**

TRADER RESOURCE CORPORATION / MIRWAM JOINT VENTURE

Project No: 2703

Category: A8

Page 1 of 13



HOLE #: MK92-2410S  
 NORTHING: 3200 E  
 EASTING: 2750  
 LENGTH: 2750  
 TWP: Norworthy Twp.  
 Claim: 633435, 633434  
 Drilled by: Bradley Brothers Ltd  
 Core Stored: Timmins  
 Casing/Size: 34 BW, 31 NW (80)  
 Start: June 16, 1992  
 Finish: June 19, 1992  
 Purpose/Results: TO test I.P.  
 ANOMALY AND STRATIGRAPHY 100m  
 core of 262-869. Interspersed 26% QTZ, 3%  
 Py from 171.5-28.70 (47.2m) and 58% QTZ, 21%  
 Py from 216.70-228.20 (91.5m) thickness 2.67%

Dist	Azim	Dip	Dist	Azim	Dip	Dist	Azim	Dip
0	360°	-50°	200			TEST		
65m		-45°	275			"		
150m		-46°	275		43°	ACID		

Rock Description				Alteration Parameters				Structure				Alteration Parameters				Structure									
Dist	Com	Grs	Text	Co	Alt	Name	B	A1	F	A2	Qtz	Cal	Ank	%	Py	Po	Cpy	Sph	Asp	Mt	RQ	Sampl #	Wth	Comments	
34.0	SS	fg	brn	BK	gy	SE	D	40			0.5		0.5		0.2										CASING LEFT IN. (34 BW + 31 NW) SEDIMENT - ARGILLITE Gray, blk, blkly with waxy slips, 2 cm gauge @ 37-84 (60)
34.4	SS	fg	brn	BK	gy	SE	D	60		1.0		1.0	1.0		1.0							13501	1.41		SEDIMENT - ARGILLITE O.C. marked @ 1.57m by Abals in 2 cm band, rusty calc on QV margins
41.0	SS	fg	brn	gy	SE	STEP	B	50		1.0		1.0	1.0		0.5							13502	1.59		Tuffaceous - Sediment - Quartz - Pyrite (0-1.0%), calciferous and 20.5mm at 34.42, 2 cm gauge (rusty) 45' tightly bedded arg. blk vein
42.5	SS	fg	brn	gy	SE	STEP	B	40		1.5		3.0	2.0		0.20							13503	1.5		Mixed Argill. and tuffaceous sed. (Calciferous arg. - about 2%) with brown calc. @ 41.20 (4cm); not seen all
44.0	SS	fg	brn	gy	SE	STEP	B	40		1.5		3.0	1.0		0.20							13504	1.5		Argill. Sediment - (slightly waxy and soft) rest to thin QV's; limonite nodules in matrix (see below photo)
45.5	SS	fg	brn	gy	SE	STEP	B	45		1.5		1.0	1.0		0.10							13505	1.5		Tuff - Sediment Quartz - Pyrite likely bedding; gray-green with stringy





TRADER RESOURCE CORPORATION / MIKWAM JOINT VENTURE

Dist	Name1	Sample#	Width	Au (g/T)		Au	Cu		Zn		Pb		ppm				%		
				nfa	cfa		ppb	%	ppm	%	ppm	%	ppm	%	Ag	Ni	Co	As	SiO2
470		13506	1.5	1070															
480		13507	1.5	1.06															
500		13508	1.5	2.05															
510		13509	1.5	1.85															
520		13510	1.5	8.770															
530		13511	1.5	1.170															
540		13512	1.5	0.170															

1

2

3



Dist	Rock Description				Structure				Alteration Parameters (%)				Wth	Comments									
	Com	Grs	Text	Co Alt	Name1	B	A	F	A2	Qtz	Cal	Ank			%	Py	Po	Cpy	Sph	Asp	Mt	RQ	Sampl #
59.0	SS	fg	hnd	yg	zn	Stgp								0.5	0.20					65	13514	1.5	Mud. Sensitive with well sorting increased. E. Sp. - white - blue (UV) - local green matrix. Ben. - local (20). (local part on in QV. Pass "moss" at QV beds? for biofilms.
60.5	SS	fg	hnd	yg	zn	Stgp								0.10						60	13515	1.5	Tuff - Sed - OE - phytic Wk - mod. sea. with local sp. in matrix. Local (20). minor comp. by as matrix dissem. & etc. K/S/Cl/lt
62.0	SS	fg	hnd	yg	zn	Stgp															13516	1.5	Tuff - Sediment - OE - phytic (fg.) Green due to mud. local component and local phytic sensitive. Finely laminated cemented. Unit locally laminated parted.
63.5	SS	fg	hnd	yg	zn	Stgp															13517	1.5	
65.5	SS	fg	hnd	yg	zn	Stgp															13518	2.0	
67.0	SS	fg	hnd	yg	zn	Stgp															13519	1.5	Tuff - Sediment - OE - phytic Wk - mod. sensitive with local OE Inclined 45 deg. pitted & laminated.
68.0	SS	fg	hnd	yg	zn	Stgp															13520	1.0	
69.5	SS	fg	hnd	yg	zn	Stgp															13521	1.5	
71.0	SS	fg	hnd	yg	zn	Stgp															13522	1.5	
72.5	SS	fg	hnd	yg	zn	Stgp															13523	1.5	
74.0	SS	fg	hnd	yg	zn	Stgp															13524	1.5	
76.0	SS	fg	hnd	yg	zn	Stgp															13525	2.1	Tuff - Sed with small component of limonitic sand 28 cm. Pass Fault C-60. Microcracks in unit
77.00	SS	fg	hnd	yg	zn	Stgp															13526	0.90	Argillaceous Sediment Green-black with fine banding - dull. cream. sand.
78.5	"	"	hnd	yg	zn	Stgp								0.2							13527	1.5	
80.0	"	"	hnd	yg	zn	Stgp								0.10							13528	1.5	
81.5	"	"	hnd	yg	zn	Stgp								0.3							13529	1.5	a.s. granular.
83.0	SS	"	hnd	yg	zn	Stgp								0.3							13530	1.5	Tuff - Sediment - OE - phytic Green due to wk - mod. sea. etc.



Dist	Rock Description				Structure				Alteration Parameters (%)							Comments								
	Com	Grs	Text	Co Alt	Named	B	A1	F	A2	Qtz	Cal	Ank	%	Py	Po		Cpy	Sph	Asp	Mt	RQ	Sampl #	Wth	
84.5	SS	fg	band	VA	SS																	13531	1.5	Dolomite cement.
86.0	SS	fg	band	VA	SS	B 45				0.25		2						0.10				13532	1.5	Tuff - Sediment OE porphy. Upper part mantled by vuggy, immature Ox. Dolomite cement. trace sp. & clay in 0.66 mm' fraction OX - white? C 85-90
88.6	SS	fg	band	VA	SS	B 30				0.5		0.5	0.10									13533	0.6	
89.0	SS	fg	band	VA	SS	B 45							0.10									13534	2.4	Argillaceous sediment - locally cement.
91.5	SS	fg	band	VA	SS	B 55																13535	2.28	Argill. sediment Guba - yellow & blk. cat. Partings w/ka bentonite + limonitic fresno (C) (3cm) (90.76 (30'))
92.0	SS	fg	band	VA	SS	B 40																13536	0.72	Tuff - Sediment - OE porphy. Yell. spots due to wlf - wheel skin. Upper part 0.5' to 1' OE (local alt Fe-thal. band - thin local Cement) Thin Y. can wide alt Fe-thal band of Fe-cats speckling. (C 98.15, Y can may be local alt. to carb band, dolomite cement whereas rest OE.
93.5	SS	fg	band	VA	SS	B 40				0.4		2.0	1.5									13537	1.5	
94.0	SS	fg	band	VA	SS	B 40				0.4		3.0	0.5									13538	1.5	
96.5	SS	fg	band	VA	SS	B 20	F 20			1.5		1.0	0.4									13539	1.5	Tuff - sed - OE Porphy. Darkened by argill. cement; cement.
98.0	SS	fg	band	VA	SS	B 40				2.0		1.5	0.2									13540	1.5	Argillaceous sediment rich with dark partings, local thin mud on slip
99.5	SS	fg	band	VA	SS	B 52				1.5		1.0										13541	1.5	Local thin sea partings rest to (W)



Dist	Rock Description				Structure				Alteration Parameters (%)										Comments				
	Com	Grs	Text	Co Alt	Name1	B	A1	F	A2	Qtz	Cal	Ank	%	Py	Po	Cpy	Sph	Asp		Mt	RQ	Sampl #	Wth
101.0	SS	fg	band	gy	mg	Sa	B	60		3.5	2.0		0.3							60	13542	1.5	Argill. Sed. - wks sen adj. to 0.5. 1.5 cm wide gr. matk vein (0.5%) with dirty indur C 100.24 m.
101.5	SI	fg	can	gy	sen	Sa	B	40		0.5			0.10								13543	0.5	
102.80	SS	fg	can	gy	mg	Sa	B	40	F	15	1.0		0.10								13544	2.5	
104.50	SS	fg	can	gy	mg	Sa	F	35		0.30			0.10								13545	0.70	Sediment - clay + scaly light yellow mud scaly beds F + E, lenticles
105.5	SS	fg	can	gy	mg	Sa	B	40		1.0	1.0		0.10								13546	1.0	Argill. Sediment F + E, scaly beds F + E, lenticles
107.0	SS	fg	can	gy	mg	Sa	B	50		3.5	2.5		0.40								13547	1.5	Argill. Sed. Scaly beds F + E, lenticles
108.5	"	"	can	gy	mg	Sa	F	30		2.0	1.5		0.4								13548	1.5	As clay - complex lenticles - lenticles + g. GE
109.90	"	"	"	"	"	Sa	F	50		2.0	1.5		0.10								13549	1.40	Argill. Sed. - Complex lenticles by break @ 65
11.50	SS	fg	can	gy	mg	Sa	B	0	F	60	1.0	2.5		0.10							13550	1.6	Tuff - Sediment lenticles canal/clybit building 400 tonne feet/scale with scaly bed
12.0	"	"	"	"	"	Sa	B	30		1.0			0.10								13551	0.6	lenticles canal/clybit building 400 tonne feet/scale with scaly bed
13.05						FAULT	F	0		2.5	2.0		3.5								13552	0.45	FAULT - brittle pale green/ten water break messy fault length of fault, fig - cont. by shale string



Dist	Rock Description				Alteration Parameters (%)										Comments									
	Com	Grs	Text	Co	Alt	Name1	B	A1	F	A2	Qtz	Cal	Ank	%		Py	Po	Cpy	Sph	Asp	Mt	RQ	Sampl #	Wth
1331	SS	fg	bed	yl	Sc	Skp																13553	0.26	sc. c. 14' and 10' slip chert Tuff - Sed - OE phytic yellow, mod. recrystall. o.c. broken 25' fault/slip silt waste.
113-SS	SS	fg	bed	blk	Sc		B. 47			0.20					0.20						0	13554	0.24	Agglite
114-10	SS	fg	con	yl	Sc	Skp									1.0						70	13555	0.36	Tuff. Sediment - OE phytic yel, mod. str recrystall. local green mica dics. fibrous fractures with white v. bed / py (stony) cat bedding.
114-04	"	"	"	"	"	"	B 10	F 60							1.0							13556	1.5	F.C. 50, D. 10, 100, 1000 / con Sarcularious sediment Complexly crystalline, py with ch(?) on X-bedding fract
117-50	SS	fg	con	gb	Sc		B 40	F 10		0.20	0.10				1.0							13557	1.5	
114-00	SSS	fg	bed	gb	Sc			F 45		1.5	1.0	1.5			0.5						50	13558	1.5	Aggl. Sediment Crd. silt with approx 0.5 on f rusty core.
120-5	Sc	fg	con	gb	Sc					2.0	0.5	2.5			3.0							13559	1.5	Aggl. Sed.
122-0	"	"	con	gb	Sc			F 50		2.5	0.5	2.0			2.5							13560	1.5	Dotted 67/100, veins / pitted / waxy Hgt. py x lds and raised zone bed, X-fractures with py + carbonate.
123-50	SS	fg	bed	gb	Sc		B 45			1.5		1.5			3.5							13561	1.5	Aggl. Sediment - 9' con with py - 67 - con local (40') cult building process small slips? Aggl. Sediment Aggl. silt (unavailable - check on National eyes of old regill beds? X-bed & py tabs.
125-0	SS	fg	con	gb	Sc		B 45	F 40		0.20		1.0			0.20							13562	1.5	
126-50	"	"	con	"	Sc			F 45		0.2		1.5			0.50							13563	1.5	





Dist	Rock Description				Structure				Alteration Parameters (%)				RQ	Sampl #	Wth	Comments										
	Com	Grs	Text	Co	Alt	Name1	B	A1	F	A2	Qtz	Cal					Ank	‡	Py	Po	Cpy	Sph	Asp	Mt		
128.0	SS	fg	cur	gb											3.0								13564	1.5	Aggl. v. fine Coarser Py - Qtz - Carb. X-cutting fractures - locally vuggy / pitted local druse-like	
128.50	SS	fg	cur	gb											2.5									13565	1.5	Aggl. v. fine Carbon - shered out unit. Res High fill chert in bed. At 128.15 1-2 cm wide X-fract with pale green argill. mud? and crinoidal debris X-fract? shaly, crystalline Py/Qtz/Carb (Lenticles - carb)
131.0	SS	fg													0.5									13566	1.5	
131.54															2.0									13567	1.5	Vuggy - chert fault in Aggl. Sediment - ephemitic, pale green argill. carb. Silt like with logged vuggy fault carb. s.c.a.y
132.30	SS	fg	brn	gb	sen										0.70									13568	0.76	Drill. Sediment with scoriaceous vuggy marked by 15' fault/slip.
134.0	SS	fmj	brn	yg	sa										1.5									13569	1.20	Partly cross-section - OE phase vill. clay, with local scoriaceous Py - Qtz - Carb. X-cutting fract/slip.
135.51	SS	fmj	cur	yg	sa										2.0									13570	1.50	Vuggy F. chert - (15-40) Py + Qtz in X-cutting fract.
136.6	SS	fmj	cur	yg	sa										1.0									13571	1.19	Vuggy, light silt in argill. chips?



Dist	Rock Description				Structure				Alteration Parameters (%)										Comments				
	Com	Grs	Text	Co Alt	Name	B	A	F	A2	Qtz	Cal	Ank	%	Py	Po	Cpy	Sph	Asp		Mt	RQ	Sampl #	Wth
13572	SS	fg	band	Y6	SEA					1.5		2.0		1.0							13572	2.0	Tuff. Sed - OE phytic wk-mod. sensitive delicate X-fract. with Py. 13572 X2 can nylon clip @ 08°C. 0.5-20.
13573					fault	F 20															13573	0.15	fault - pitted/waxy angular frag in contact, siliceous mod. waxy
13574	SS	fg	can	Y6	SEA	B 15	F 20			1.0	3.0		1.0								13574	1.16	Tuff. Sed - OE phytic Fract. can.
13575	SS	fg	band	Y6						1.5	2.5		1.5								13575	.80	X-waxing pitted @ 7°C. can fract.
13576					fault					2.0	2.5		5.0							10	13576	0.15	Iron. pitted/waxy @ 7°C/ can/ Py fault cutting 15 step C. can wax. can. 14 can
13577	SS	fg	band	Y6	SEA					4.5											13577	0.64	Tuff. Sed - OE phytic Mod. sensitive with bands of glauconite @ 7°C. pitting fault
13578					fault	F 20				1.5	1.0		2.0								13578	0.13	fault - brittle with angular frags in siliceous matrix
13579	SSS	fg	can	Y6	SEA	B 30	F 40			2.5	1.0		0.10							0	13579	1.0	Volcanic - S. diatom - OE phytic mod. sensitive. Fine cannel might be called "siliceous-@ 7°C. siliceous"
13580	SS	fg	can	Y6	SEA	B 30				3.5			0.25								13580	1.5	Tuff. Sed - OE phytic wk-mod. sensitive with local discoloration.
13581										2.5			0.30								13581	1.5	Iron. can. Py - @ 7°C. can in contact & angular parallel to foliation.
13582										2.0	1.0		4.0								13582	1.5	
13583										2.5	1.0		3.5								13583	1.5	
13584										1.0	0.5		1.5								13584	1.5	
13585										1.0	0.5		1.5								13585	0.5	













Dist	Rock Description				Structure				Alteration Parameters (%)										Comments			
	Com	Grs	Text	Co Alt	Name1	B A1	F A1	F A2	Qtz	Cal	Ank	%	Py	Po	Cpy	Sph	Asp	Mt		RQ	Sampl #	Wth
1850	SS	Sa	brd	blk sil	Sa	B SD			10		10		4.5				.10			13616	1.0	Amalitic - RUK Siliceous - v. hard to scratch; vfg to 6g. mg. py at discon and as bands, bands of blk gang-lime QZ with lower rate as before, loss vfg aspt.
1860									2.5		1.5		2.5				.10			13617	1.0	→ quartz vein - glassy/divided with blk fractures/bite. vfg by - pass vfg aspy; cloudy white in QZ
1870									150		2.0		2.5							13618	1.0	
1875									95				2.5							13619	0.5	
1880									99		1.5		1.5							13620	0.5	
1885									95		10.0		4.0							13621	0.5	
1890									85				5.5							13622	0.90	
190	SS	Sa		blk sil	Sa				50		3.0		3.5							13623	0.60	Amalitic - siliceous ± QZ.
1910	SS	Sa	HV	"	Sa				210				1.5							13624	1.0	o.c. 22 - slip - graphitic
19160	SSS			blk QV	FRUCT				30											13625	0.60	Fract - graphitic visible
1925	SS	Sa	fld	blk sil	Sa				40		1.5		3.0							13626	0.9	Amalitic with folded gang - Stone QZs, washing v. hard
1940	SS	Sa			Sa				100		4.0		3.0							13627	1.5	At 192.51 0-5° fault marked with carbonate.
1955	SS	Sa			Sa				40		1.5		2.0							13628	1.5	
1970	SS	Sa			Sa	B 46			20		1.0		2.5							13629	1.5	
1985	SS	Sa	brd	blk sil	Sa				25		2.0		1.5							13630	1.5	Amalitic - Mat as blk - shil hard Quartz + folding in gang - Stone QZ
2000					Sa				25		2.5		1.5							13631	1.5	
2015					"				50		1.5		1.5							13632	1.5	
202					"				150		1.5		2.5							13633	0.5	
202.5					"				150		2.0		3.5							13634	0.5	
203					"	B 70			50		1.0		3.0							13635	0.5	
203-63					Sa				50		1.0		2.5							13636	0.65	Internal fract in gang - Stone QZ!
2040	SS	Sa		blk sil	Sa	B 55			30.8		0.2		25.0							13637	0.37	Internal fract in QZ
2045					QV				90		1.5		5.0							13638	0.50	QV - glassy + spang. dirty
2050					QV				95		1.5		3.0							13639	0.50	
205.5					QV	B 70			90		1.0		10.0							13640	0.50	Small bands local (?)



TRADER RESOURCE CORPORATION / MIKWAM JOINT VENTURE

Dist	Rock Description			Structure			Alteration Parameters (%)							RQ	Sampl #	Wth	Comments						
	Com	Grs	Text	Co	Alt	Name1	B	A1	F	A2	Qtz	Cal	Ank					%	Py	Po	Cpy	Sph	Asp
206.0	SS	Smy		VL	SEA	Atgp									2.0				.25		13641	0.5	Intermediate - foliate Tuff (?)
207.0										0.5		3.5			2.5				.10		13642	1.0	Yellow med-st siliceous silt
208.0										0		2.5			3.0	1.5			.10		13643	1.0	Yellow med-st siliceous silt
209.0										3.0		2.5			2.5	0.5			.10		13644	1.0	physis (D.S. S.O.I.) fog - long. columnar
210.5										5.0		2.5			3.0	1.0			.45		645	1.5	physis, med dk silt in delicate
211.5										1.5		3.0			4.5				.10		646	0.5	hardline breccias, local coarse sands
212.0							B	40		3.0		3.0			1.0				.10		647	0.5	of buff F-C. (1-2 cm) - py aspect
212.5							D	25		10.0		3.0			4.0				.10		648	0.5	aspy with calcareous / local green
213.0			SAL							35.0		3.0			1.5	0.5			0.20		13650	0.50	med rate, no con off towards py /
213.60			"							10.0		3.0			5.0						13651	.50	aspy without con.
214.0										9.5		4.0			4.0						13652	.40	Quartz vein - sulphide zone
215.0										9.5		4.0			2.5				.10		13653	1.0	slaty, gray-whitish - blue, dirty
216.0										9.5		2.5			2.5						13654	1.0	with inclusions of. waps / con
217.0										9.5		1.5			2.5						13655	1.0	green - med. resistant (?) Semi-mat
218.0										9.0		1.5			4.0						13656	1.0	py rocks (fog - con. subvertical py
219.0										9.5		1.5			1.5						13657	.70	with con. - XRD aspy
219.50							B	15		20		2.5			3.0						13658	.60	aspy at vlg diss in silic tuff + mg. XRD
220.50							B	20		20		3.0			5.0						13659	.60	Host is tuffon - sulphide tuff?
221.0										20		3.0			3.0						13660	.70	
221.5							B	35		2.0		4.0			6.5				10.0		13661	.50	con. XRD aspy in bands ± near XRD line py
222.5										8.5		2.5			10				4.0		13662	1.0	
223.0										4.5		1.5			3.5				.20		13663	.50	
223.5										8.5		4.5			3.5				.25		13664	.50	
224.5										8.5		4.5			1.5				.10		13665	1.0	
225.20										3.0		3.0			2.0				4.6		13666	1.0	Tuff, vlg diss / rounded py + aspy
225.68							B	22		1.5		3.5			1.5				2.5		13667	.48	
226.60										9.5		3.5			3.5				.10		13668	0.50	
227.0										9.5		3.5			2.5						13669	0.50	
227.50										9.5		3.5			1.0						13670	0.50	
228.20										9.5		3.5			1.5						13671	.70	highly fractured - dk. Graph in fract near o.s
229.0	SS						B	45		2.5		3.5			3.5						13672	1.20	Prasitite - sill conns
230.77	"						B	65		3.0		3.0			3.0						13673	1.22	Foliated py band *
231.0	"									1.0		3.0			3.0						13674	.25	
232.0	"									2.0		3.0			3.0						13675	1.0	Amphibole - siliceous, laminated, v. dark







MK 92-1

ROYAL OAK ANALYTICAL LABORATORY

CERTIFICATE OF ANALYSIS

Exploration 2703

Entered July 1/92

DATE: JUNE 30/92

MK-92-1

	SAMPLE NUMBER	A <sub>4</sub> ppb	A <sub>4</sub> ppm				
1	D-13501	135					
2	02	445					
3	03	375					
4	04	995					
5	05	105					
6	06	70					
7	07	-	1.06				
8	08	205					
9	09	35					
10	10	-	8.77				
11	11	-	1.17				
12	12	170					
13	13	<35					
14	14	135					
15	15	170					
16	16	105					
17	17	205					
18	18	70					
19	19	205					
20	20	70					
21	21	35					
22	22	135					
23	23	170					
24	D-13524	<35					

1000 ppb = 1 ppm = 1 g  
 102 = 34.265 g





ROYAL OAK ANALYTICAL LABORATORY

CERTIFICATE OF ANALYSIS

EXPLORATION 2703

NK-92-1

DATE: JUNE 30/92

	SAMPLE NUMBER	A <sub>4</sub> ppb	A <sub>4</sub> ppm					
1	D-13525	135						
2	26	70						
3	27	<35						
4	28	<35						
5	29	<35						
6	30	<35						
7	31	<35						
8	32	<35						
9	33	<35						
10	34	<35						
11	35	70						
12	36	105						
13	37	105						
14	38	<35						
15	39	<35						
16	40	70						
17	41	135						
18	42	240						
19	43	205						
20	44	340						
21	45	340						
22	46	205						
23	47	70						
24	D-13548	<35						

ROYAL OAK ANALYTICAL LABORATORY

CERTIFICATE OF ANALYSIS

EXPLORATION 2703  
MK 92-1

DATE: JUNE 30/92

	SAMPLE NUMBER	A <sub>4</sub> ppb	A <sub>4</sub> ppm					
1	D-13549	240						
2	50	<35						
3	51	<35						
4	52	615						
5	53	685						
6	54	70						
7	55	205						
8	56	<35						
9	57	<35						
10	58	<35						
11	59	70						
12	60	170						
13	61	275						
14	62	<35						
15	63	105						
16	64	70						
17	65	105						
18	66	135						
19	67	275						
20	68	240						
21	69	-	1.03					
22	70	650						
23	71	170						
24	D-13572	-	1.54					

ROYAL OAK ANALYTICAL LABORATORY

CERTIFICATE OF ANALYSIS

EXPLORATION 2703

DATE: JUNE 30/92

NK-92-1

	SAMPLE NUMBER	A <sub>4</sub> ppb	A <sub>4</sub> ppm					
1	D-13573	-	1.68					
2	D-13574	310						
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								

ROYAL OAK ANALYTICAL LABORATORY

CERTIFICATE OF ANALYSIS

EXPLORATION 2703

DATE: JUNE 30/92

NK-92-1

	SAMPLE NUMBER	Au ppb	Ag ppm					
1	D-13575	275						
2	76	170						
3	77	135						
4	78	205						
5	79	105						
6	80	105						
7	81	135						
8	82	70						
9	83	275						
10	84	310						
11	85	135						
12	86	275						
13	87	70						
14	88	205						
15	89	<35						
16	90	<35						
17	91	70						
18	92	515						
19	93	35						
20	D-13594	135						
21								
22								
23								
24								

ROYAL OAK ANALYTICAL LABORATORY

CERTIFICATE OF ANALYSIS

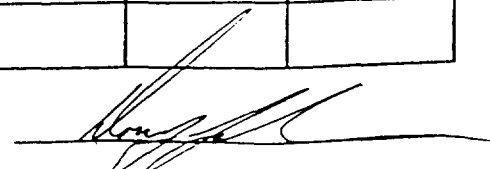
Exploration 5600-2703

DATE: July 6, 1992

NK-92-1

	SAMPLE NUMBER	Au oz/ton	Au ppb	Au ppm	As ppm		
1	D-13595	.003	105				
2	96	.005	170				
3	97	.020	685				
4	98	.008	275				
5	99	.006	205				
6	13600	.011	375				
7	01	.001	35				
8	02	.028	960		156.		
9	03	.006	205		204.		
10	04	.011	375		103.		
11	05	.003	105		253.		
12	06	.025	855		310.		
13	07	.049	1680	1.68	98.		
14	08	.011	375		79.		
15	09	.016	550		198.		
16	10	<.001	<35		74		
17	11	.007	240		196.		
18	12	.002	70		107.		
19	13	<.001	<35				
20	14	.004	135		283.		
21	15	.013	445		247.		
22	16	.005	170		235.		
23	17	.004	135		172.		
24	D-13618	.003	105		* 94.		

Lab16 \* ADDED TO REPORT

Chief Chemist: 

ROYAL OAK ANALYTICAL LABORATORY

CERTIFICATE OF ANALYSIS

EXPLORATION 56001-2703

DATE: July 6/92

NK-92-1

	SAMPLE NUMBER	As oz/ton	As ppb	As ppm	As ppm			
1	D-13619	.007	240		179.			
2	20	.012	410		112.			
3	D-13621	.007	240		132.			
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								

ROYAL OAK ANALYTICAL LABORATORY

CERTIFICATE OF ANALYSIS

EXPLORATION 5600-2703

NK-92-1

DATE: July 2/92

	SAMPLE NUMBER	A <sub>4</sub> μg/ton	A <sub>4</sub> ppb	A <sub>4</sub> ppm	As ppm			
1	D-13622	.025	855					
2	23	.006	205		80.			
3	24	.008	275		133.			
4	25	.017	585					
5	26	.011	375		287.			
6	27	.004	135		294.			
7	28	.003	105		139.			
8	29	.002	70		296.			
9	30	.001	35					
10	31	.001	35					
	32	.001	35					
12	33	.003	105					
13	34	.006	205					
14	35	.007	240					
15	36	.004	135		222.			
16	37	.030	1030	1.03	241.			
17	38	.015	515		236.			
18	39	.006	205		89.			
19	40	.015	515		262.			
20	41	.017	585		911.			
21	42	.003	105		334.			
22	43	.006	205		320.			
	44	.004	135		897.			
24	D-13645	.013	445		443			

ROYAL OAK ANALYTICAL LABORATORY

CERTIFICATE OF ANALYSIS

EXPLORATION 5600-2703

DATE: July 2/92

NK-92-1

	SAMPLE NUMBER	Au oz/ton	Au ppb	Au ppm	As ppm			
1	D-13646	.003	105		349.			
2	47	.005	170		75.			
3	48	.010	340					
4	49	.011	375					
5	50	.005	170					
6	51	.025	855					
7	52	.062	2130	2.13				
8	53	.014	480					
9	54	.006	205					
10	55	.009	310					
11	56	.021	720					
12	D-13657	.071	2430	2.43				
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								



ROYAL OAK ANALYTICAL LABORATORY

CERTIFICATE OF ANALYSIS

EXPLORATION 5600-2703

DATE: July 2/92

NK-92-1

	SAMPLE NUMBER	Au oz/ton	Au ppb	Au ppm	As ppm			
1	D-13646	.003	105		349.			
2	47	.005	170		75.			
3	48	.010	340		410.			
4	49	.011	375		439.			
5	50	.005	170		1170.			
6	51	.025	855		986.			1
7	52	.062	2130	2.13				
8	53	.014	480					
9	54	.006	205					
10	55	.009	310					
11	56	.021	720					
12	D-13657	.071	2430	2.43				
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								

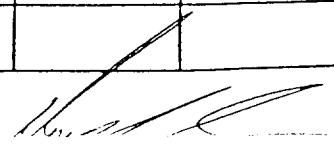
ROYAL OAK ANALYTICAL LABORATORY

CERTIFICATE OF ANALYSIS

EXPLORATION 5600-2703

DATE: Aug 14/92

	SAMPLE NUMBER	Au oz/tan	Au ppb	Au ppm	As ppm			
1	D-13654				330.			
2	55				174.			
3	56				531.			
4	57				1320.			
5	58				2850.			
6	13663				2360.			
7	64				1100.			
8	65				1120.			
9	66				2210.			
10	67				486.			
11	13669				155.			
12	70				1000.			
13	71				<del>291.</del>			
14	13673				405.			
15	74				609.			
16	75				148.			
17	76				37.			
18	77				80.			
19	78				37.			
20	79				35.			
21	80				110.			
22	81				110.			
23	82				100.			
24	D-13683				124.			



ROYAL OAK ANALYTICAL LABORATORY

CERTIFICATE OF ANALYSIS

EXPLORATION 5600-2703

DATE: July 6/92

NK-92-1

	SAMPLE NUMBER	Au oz/ton	Au ppb	Au ppm	As ppm			
1	D-13658	.248	-	8.50				
2	59	.355	-	12.2				
3	60	.180	-	6.17				
4	61	.371	-	12.7				
5	62	.162	-	5.55				
6	63	.134	-	4.59				
7	64	.051	1750	1.75				
8	65	.047	1610	1.61				
9	66	.048	1650	1.65				
10	67	.018	615					
11	68	.025	855					
12	69	.004	135					
13	70	.050	1710	1.71				
14	71	.011	375		255.			
15	72	.006	205					
16	73	.005	170					
17	74	.004	135					
18	75	.005	170					
19	76	.002	70					
20	77	.023	790					
21	78	.003	105					
22	79	.006	205					
	80	.002	70					
24	D-13681	.002	70					

ROYAL OAK ANALYTICAL LABORATORY

CERTIFICATE OF ANALYSIS

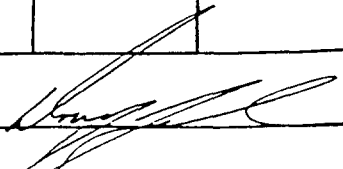
EXPLORATION 5600-2703

DATE: July 6/92

NK-92-1

	SAMPLE NUMBER	Au oz/ton	Au ppb	Au ppm	As ppm			
1	D-13682	.013	445					
2	83	.002	70					
3	84	.014	480					
4	85	.007	240					
5	13686	.002	70					
6	D-13000	.006	205					
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								

Lab16

Chief Chemist: 



ROYAL OAK ANALYTICAL LABORATORY

CERTIFICATE OF ANALYSIS

EXPLORATION 2703

DATE: Aug 26/92

	SAMPLE NUMBER	As ppm						
1	13000	101						
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								

TRADER RESOURCE CORPORATION / MIKWAM JOINT VENTURE

Dist	Name1	Sample#	Width	Au (g/T)		Au	Cu		Zn		Pb		ppm				\$			
				nfa	cfa		ppb	%	ppm	%	ppm	%	Ag	Ni	Co	As		SI02	Na2O	
107.0		13708	6.0	.035																
108.5		13709	1.5	.035																
108.50		13710	1.5	.035																
111.50		13711	1.5	.035																
113.0		13712	1.5	.035																
114.50		13713	1.5	.105																
131.0		13714	16.5	.035																
132.5		13715	1.5	.035																
134.0		13716	1.5	.035																
135.5		13717	1.5	.035																
137.0		13718	1.5	.035																

TRADER RESOURCE CORPORATION / MINWAN JOINT VENTURE

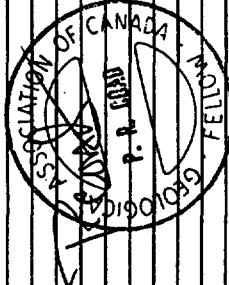
HOLE #: **13728** Page **4** of **5**

Dist	Rock Description				Structure				Alteration Parameters (%)							Comments							
	Com	Grs	Text	Co Alt	Name1	B	A1	F A2	Qtz	Cal	Ank	%	Py	Po	Cpy		Sph	Asp	Mt	RQ	Sampl #	Wth	
13719	SS	fs	bed	BK avg	Ss	B 50	F 05	1.5			0.5		.10							13719	1.5	argillite - sandst with black gray-blue qtz veins with minor calc. Ank.	
13720								1.0			1.0		.10								13720	1.5	cleanly disconformable
13721								1.5			0.5		.10								13721	1.5	X fract (30) with carbon. + v. py
13722								1.5			0.5		.10								13722	1.5	X fract (30) above to bedding (30)
13723								1.5			0.5		.10								13723	1.5	X fract with carbonate / Qtz and to py
13724								3.5			2.5		.10								13724	1.5	W (S) c.a. (0.60m)
13725								5.0			2.0		.10								13725	1.5	flat QV - possible to joint? pink X fract.
13726								15.0			2.0		.10								13726	1.5	QV (calcite) as above sub. events bedding / local breccia on vein etc.
13727								60.0			3.0		.10								13727	1.5	
13728								4.0			2.5		.10								13728	1.5	all above with folded QV
13729								1.5			1.0		.10								13729	1.5	Blocky flat joint
13730								1.5			1.0		.10								13730	1.5	Blocky, folded / normal. Still flat joint
13731								3.0					.30								13731	1.5	3 carbonate breccia band (?) with 6-1/2 v. py; interval visibility #
13732								3.0					.30								13732	1.5	minor flat faulting
13733								0.25					.10								13733	1.5	sph (red) in QV
13734								2.5			1.5		.20								13734	1.5	a.c. marked by flat fault 7 carb + sph
13735								2.5			1.0		.40								13735	1.5	Greenish - more gray silty beds.
13736								3.0			2.0		.20								13736	1.5	
13737								10.0					.20								13737	1.5	
13738								0.5					.40								13738	1.5	
13739								1.5					.140								13739	1.5	
13740								1.0					.125								13740	1.5	
13741								2.5			1.5		.05								13741	1.5	gray sph in gray-blue QV. bk
13742								2.5			1.0		.05								13742	1.5	gray sph with mod. argill component
13743								4.5			1.0		.05								13743	1.5	karst. doming
13744								0.2					.06								13744	1.5	
13745								1.5					.10								13745	1.5	folded QV
13746								1.5					.15								13746	1.5	
13747								1.5					.20								13747	1.5	
13748								1.5					.20								13748	1.5	X fractures 7 602 - py - Ank.
13749								1.5					.20								13749	1.5	py in 12cm long. dusty QV.
13750								1.5					.20								13750	1.5	
13751								1.5					.20								13751	1.5	





Dist	Rock Description				Alteration Parameters (%)										RQ	Samp#	Wth	Comments							
	Com	Grs	Text	Co Alt	Name1	B	A1	F	A2	Qtz	Cal	Ank	%	Py					Po	Cpy	Sph	Asp	Mt		
183.5	SS	fg	lmd	sp	ang	sq				2.0		1.0		0.5							13780	1.5	Complete card's cut folded/knotted		
185.0	SS																					14001	1.5	Pyrite matrix and QV	
186.5																						14002	1.5		
188.0																						14003	1.5		
189.5	SS	fg	lmd	bg	ang	sq				0.5	0.2		0.5									14004	1.5	Argillite - predominantly with mica quartz component.	
191.0																						14005	1.5	Bound, mica QV	
192.5																						14006	1.5	At 191.10, 1-2 cm wide concentrated fg. py (cut by cleavage/foliation) in solution - At 191.7, 2-3 mm wide band with matrix (fg) of esp. appears to be in silts - with band parallel to bedding.	
194.0																									
195.5																									
197.0																									
198.5																									
200.0																									
Box																									





MK 92-2

CERTIFICATE OF ANALYSIS

Exploration 5600-2703

DATE: July 6/92

NK-92-2

	SAMPLE NUMBER	Au oz/ton	Au ppb	Au ppm				
1	D-13687	.007	240					
2	88	.011	375					
3	89	.001	35					
4	90	.001	35					
5	91	.002	70					
6	92	.009	310					
7	93	.005	170					
8	94	.006	205					
9	95	.052	1780	1.78				
10	96	.001	35					
11	97	.014	480					
12	98	<.001	<35					
13	99	.002	70					
14	13700	<.001	<35					
15	01	.001	35					
16	02	.006	205					
17	03	.008	275					
18	04	.002	70					
19	05	.001	35					
20	06	<.001	<35					
21	07	<.001	<35					
22	08	<.001	<35					
23	09	<.001	<35					
24	D-13710	<.001	<35					

ROYAL OAK ANALYTICAL LABORATORY

CERTIFICATE OF ANALYSIS

Exploration 5800-2703

DATE: July 6/9

NK-92-2

	SAMPLE NUMBER	Au oz/ton	Au ppb	Au ppm				
1	D-13711	<.001	<35					
2	D-13712	<.001	<35					
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								

CERTIFICATE OF ANALYSIS

EXPLORATION 5600-2703

DATE: July 6/92

NK-92-2

	SAMPLE NUMBER	Au oz/ton	Au ppb	Au ppm				
1	D-13713	.003	105					
2	14	<.001	<35					
3	15	<.001	<35					
4	16	<.001	<35					
5	17	<.001	<35					
6	18	<.001	<35					
7	19	.002	70					
8	20	.002	70					
9	21	.001	35					
10	22	.001	35					
11	23	<.001	<35					
12	24	<.001	<35					
13	25	.002	70					
14	26	<.001	<35					
15	27	.007	240					
16	28	<.001	<35					
17	29	.019	650					
18	30	<.001	<35					
19	31	<.001	<35					
20	32	<.001	<35					
21	33	<.001	<35					
22	34	<.001	<35					
23	35	<.001	<35					
24	D-13736	<.001	<35					

ROYAL OAK ANALYTICAL LABORATORY

CERTIFICATE OF ANALYSIS

EXPLORATION 5600-2703

DATE: July 6/92

NK-92-2

	SAMPLE NUMBER	Au oz/ton	Au ppb	Au ppm				
1	D-13737	6.001	635					
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								

## CERTIFICATE OF ANALYSIS

EXPLORATION 5600-2703DATE: July 6/92

NK-92-2

	SAMPLE NUMBER	Au oz/ton	Au ppb	Au ppm				
1	D-13738	.004	135					
2	39	.004	135					
3	40	.002	70					
4	41	.007	240					
5	42	.002	70					
6	43	.001	35					
7	44	.008	275					
8	45	<.001	<35					
9	46	<.001	<35					
10	47	.002	70					
	48	<.001	<35					
12	49	<.001	<35					
13	137 50	<.001	<35					
14	14001	<.001	<35					
15	02	<.001	<35					
16	03	<.001	<35					
17	04	<.001	<35					
18	05	<.001	<35					
19	06	.001	35					
20	07	.001	35					
21	08	.001	35					
22	09	.004	135					
	10	<.001	<35					
24	D-14011	.002	70					

Lab16

Chief Chemist: 



CERTIFICATE OF ANALYSIS

EXPLORATION 5600-2703

DATE: Aug 14/92

MK92-1

	SAMPLE NUMBER	Au oz/tan	Au ppb	Au ppm	As ppm			
1	D-13684	} MK92-1			160.	/		
2	85				329.	/		
3	86				145.	/		
4	MK92-2 D-13687				3.	/		
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								



TRADER RESOURCE CORPORATION / MIKWAM JOINT VENTURE

Dist	Name	Sample #	Width	Au (g/T)		Au	Cu		Zn		Pb		ppm				%		
				nfa	cfa		ppb	%	ppm	%	ppm	%	ppm	%	Ag	Ni		Co	As
61.0																			
61.26																			
62.58																			
62.67																			
63.50																			
65.00																			
66.150		14012	1.5																
66.66																			
69.00		14013	1.34																
69.50		14014	1.5																
71.0		14015	1.5																
76.03		14016	1.93																
78.18		14017	1.25																
74.20		14018	2.02																
83.00		14019	8.8																
84.50		14020	1.5																
86.0		14021	1.5																
87.5		14022	1.5																
89.0		14023	1.5																
90.50		14024	1.5																

Dist	Rock Description				Alteration Parameters (%)										Structure	Comments							
	Com	Grs	Text	Co Alt	Name1	B	A1	F	A2	Qtz	Cal	Ank	%	Py			Po	Cpy	Sph	Asp	Mt	RQ	Sampl #
90.0	SS	fg	cm	gy	5a	B	75	F	50	25		0.5		0.70							14025	1.5	Argillit Mudcr. evaporite and weak matrix compacted. SW & green matrix or tile? C 71.0-71.46 (SS), thin black
94.0	SS	fg	blk	gy	5a	D	55	F	10		0.5			0.5						10	14026	2.0	Argillit Evaporite, black and ruddy - 0.5 m of ground sand
97.0					Fault						0.25										14027	0.40	Fault - in ct. Gauge C 55 - base of soil ruddy, 2-3.5 cm checkers
96.50	SS	fg	blk	gy	avg	B	55	F	10	2.5	0.5			0.2							14028	1.5	Graywacke - minor argill. comp.
96.0	SS	fg	blk	gy	avg	B	40				0.5										14029	1.5	
95.5					avg	B	50			3.5		1.0		0.10							14030	1.5	Graywacke
101.0					avg	B	60			0.5	0.5			0.50							14031	1.5	Gray - black due to mod. argill. comp.
102.5						B	70	F	55	0.45		2.5									14032	1.5	
104.0						B	70	F	65	1.0		0.5									14033	1.5	
105.5						B	75	F	70	1.5		1.5		0.40							14034	1.5	ch or spid (?) in grt; chest at C 104.5-105.5
107.0						B	40	F	55			1.5		0.5							14035	1.5	
108.5						B	50	F	55			1.5		0.4							14036	1.5	
110.0						B	70	F	55			1.0		0.5							14037	1.5	
111.5						B	45	F	70	0.5	2.0	0.5		0.5							14038	1.5	Probable (see discussing C 110.18 - 110.5 fine cement.
113.0						B	45	F	70		0.5			1.0							14039	1.5	U. thin cont. lamellae parallel bedding
114.12						B	45	F	60		2.0			0.5							14040	1.2	Fault - in ct. (gauge + chest / gy vein) Base ruddy
114.40						F	35				2.0			0.5							14041	1.8	
116.00	SS	fg	blk	gy	zn	B	40	F	40	0.2	0.5			0.2							14042	1.60	Graywacke white granitic, strongly - used with bedding silty and darker argill. beds. Green fine (clined to spon)
117.50	"	"	blk	gy	zn	B	40	F	40	1.5	1.0			0.5							14043	1.5	Base with argill.
119.00	SS	"	"	"	"	B	45	F	40												14044	1.5	White granitic
121.20						Fault															14045	0.20	Fault - blk with 3 cm of gray
120.46	SS	fg	blk	gn	zn	B	45			0.5				0.40						2.0	14046	1.40	Bedding - blk above hole to fault; blk zn.

TRADER RESOURCE CORPORATION / MIKWAM JOINT VENTURE

Dist	Name1	Sampl #	Width	Au (g/T)		Au	Cu		Zn		Pb		ppm				%	
				nfa	cfa		ppb	%	ppm	%	ppm	%	ppm	%	Ag	Ni	Co	As
92.0		14025	1.5	.035														
94.0		14026	2.0	.035														
94.60		14027	0.60	.035														
96.50		14028	1.9	.035														
98.0		14029	1.5	.070														
99.5		14030	1.5	.035														
101.0		14031	1.5	.035														
102.5		14032	1.5	.035														
104.0		14033	1.5	.035														
105.5		14034	1.5	.035														
107.0		14035	1.5	.035														
108.5		14036	1.5	.035														
110.0		14037	1.5	.035														
111.5		14038	1.5	.035														
113.0		14039	1.5	.340														
114.12		14040	1.72	1.2575														
114.91		14041	2.8	1.070														
116.00		14042	1.60	.035														
117.50		14043	1.5	.035														
119.00		14044	1.5	.035														
120.20		14045	0.20	.035														
120.69		14046	1.46	.035														

Dist	Rock Description				Structure				Alteration Parameters (%)						Comments								
	Com	Grs	Text	Co Alt	Name1	B	A1	F	A2	Qtz	Cal	Ank	%	Py		Po	Cpy	Sph	Asp	Mt	RQ	Sampl #	Wth
122.00	SS	fg	hard	cb	Sc	B	SS	F	40	1.5	0.5	1.0		0.5							14047	1.74	Photo taken bases 8-12 to 11.5m etc.
123.5	SS	fg	hard	cb	Sc	B	SS	F	50	1.5	1.0			2.0							14048	1.5	Amphibole with glauconite component
125.0	SS	fg	hard	cb	Sc	B	SS	F	50	2.0	1.0			3.5							14049	1.5	Blocky E local quartz/mud on slips - folded
126.5	SS	fg	hard	cb	Sc	B	SS	F	50	5.0	1.0			2.5							14050	1.5	Compaction - "fish scale" - 1/2" py bands
128.0	SS	fg	hard	cb	Sc	B	SS	F	65	0.5	1.5			0.5							14051	1.5	Blocky / crystalline
129.5	SS	fg	hard	cb	Sc	B	SS	F	70	0.2	1.5			1.0							14052	1.5	Compaction - v. widely sensitive
131.0	SS	fg	hard	cb	Sc	B	SS	F	55	0.3				0.10							14053	1.5	Compaction - widely sensitive, green-yellow
132.5	SS	fg	hard	cb	Sc	B	SS	F	60	0.2	3.5			0.10							14054	1.5	Compaction - widely sensitive, green-yellow
134.0	SS	fg	hard	cb	Sc	B	SS	F	65	2.0	1.5			0.10							14055	1.5	widely sensitive with narrow angle comp
135.5	SS	fg	hard	cb	Sc	B	SS	F	55	0.5	2.5			0.10							14056	1.5	local green chert with GWS
137.0	SS	fg	hard	cb	Sc	B	SS	F	65	2.0	1.0			0.10							14057	1.5	widely sensitive
139.5	SS	fg	hard	cb	Sc	B	SS	F	75	2.5											14058	1.7	mod. sensitive; stretched green-blue expanded beds
139.5	SSS	fg	hard	cb	Sc	F	SS														14059	1.8	Fract - brittle with 0.5-1.0 cm gauge + Hry
140.0	SS	fg	hard	cb	Sc	B	SS	F	55	2.5											14060	0.70	Wk-mod. sen. shaly bed thin-bedded blue-grey silty beds parallel to bedding (F) still changing. Wk-mod. sen. local chert for assoc GWS
141.5	SS	fg	hard	cb	Sc	B	SS	F	70	2.0				0.5							14061	1.5	Wk-mod. sen. local chert for assoc GWS
143.0	SS	fg	hard	cb	Sc	B	SS	F	75	1.5	2.0			0.10							14062	1.5	Wk-mod. sen. variable local chert attitudes
144.5	SS	fg	hard	cb	Sc	B	SS	F	75	2.5											14063	1.5	Wk-mod. sen. local chert for assoc GWS
146.0	SS	fg	hard	cb	Sc	B	SS	F	40	3.0	0.5			1.0	1.0					14064	1.5	Blocky - sensitive	
147.5	SS	fg	hard	cb	Sc	B	SS	F	50	2.0	1.0			2.5							14065	1.5	Blocky - green - gray - widely sensitive with
149.0	SS	fg	hard	cb	Sc	B	SS	F	50	4.0	1.5			1.5							14066	1.5	Wk-mod. sen. local chert for assoc GWS
150.5	SS	fg	hard	cb	Sc	B	SS	F	50	5.0	1.5			0.5							14067	1.5	Wk-mod. sen. local chert for assoc GWS
152.0	SS	fg	hard	cb	Sc	B	SS	F	60	1.5				0.5							14068	1.5	Wk-mod. sen. local chert for assoc GWS
153.5	SS	fg	hard	cb	Sc	B	SS	F	60	1.5	4.0			2.0	1.0						14069	1.5	Blocky - sensitive
155.0	SS	fg	hard	cb	Sc	B	SS	F	50	3.0	1.5			2.5							14071	1.5	Blocky - sensitive
156.5	SS	fg	hard	cb	Sc	B	SS	F	55	2.5	1.5			2.5							14072	1.5	Blocky - sensitive







GRADER RESOURCE CORPORATION / MIKWAH JOINT VENTURE

Dist	Name1	Sampl#	Width	Au (g/T)		Au	Cu		Zn		Pb		ppm				SiO2	Na2O
				nfa	cfa		ppb	%	ppm	%	%	ppm	%	ppm	%	Ag		
157.85		14073	1.85	.035														
158.00		14074	1.5	.035														
159.50		14075	1.5	.035														
160.75		14076	1.25	.035														
161.34		14077	1.59	.035														
162.5		14078	1.14	.035														
163.35		14079	1.85	.035														
164.0		14080	1.65	.070														
165.5		14081	1.5	.035														
166.55		14082	1.5	.035														
174.66		14083	8.11	0.70														
176.0		14084	1.34	.035														
177.5		14085	1.5	.035														
179.0		14086	1.5	.035														
180.5		14087	1.5	.035														
181.29		14088	0.79	.035														
181.80		14089	0.51	.035														
182.63		14090	0.53	.035														

Ist	Rock Description				Alteration Parameters (%)										RQ	Samp. #	Wth	Comments				
	Com	Grs	Text	Co Alt	Name	B	A1	F	A2	Qtz	Cal	Ank	+	Py					Po	Cpy	Sph	Asp
146.00	SSS	frag	prop.	yg	Sc	B	SS			1.5				1.5						146.01	1.87	Conglomerate Approx. 1-25% striated clasts in 0.6 prop. full matrix
146.00	SS	frag	prop.	yg	Sc	B	SS			2.0				3.5	1.5					146.02	1.5	Mat - silt matrix, red weathering
146.50	SS	frag	prop.	yg	Sc	B	SS			3.0				1.0						146.03	1.5	Mat - silt matrix, red weathering
147.00	SS	frag	prop.	yg	Sc	B	SS			1.5				2.0						146.04	1.5	Mat - silt matrix, red weathering
147.50	SS	frag	prop.	yg	Sc	B	SS			1.0				1.0	0.5					146.05	1.5	Approx 20% OES are spinel-like to locally fine (red) and fine Silt. OES clasts(?) are variable, but matrix local green water clastic. Spinel speckles in OES in clay clst (146.20)
148.00	SSS	frag	prop.	yg	Sc	B	SS			3.5				2.0						146.06	1.5	
148.50	SS	frag	prop.	yg	Sc	B	SS			1.5				1.5						146.08	1.5	Mat is broken green (cl) and collect spinel from 146.5-147.5; pass repeated IF cl. off hole?
149.00	SS	frag	prop.	yg	Sc	B	SS			1.5				1.5						146.09	1.5	Mat - sediment OES fine Unit good from cl mat and fine down hole - pass stops to south. O.C. Sharp 20.
149.50	SS	frag	prop.	yg	Sc	B	SS			1.0				2.5	1.5					146.10	2.7	
150.00	SS	frag	prop.	yg	Sc	B	SS			1.0				1.0	1.0					146.11	1.0	
150.50	SSS	frag	prop.	yg	Sc	B	SS			0.5				1.0						146.12	1.5	Mat - silt matrix, red weathering
151.00	SS	frag	prop.	yg	Sc	B	SS			0.5				1.0						146.13	1.5	Mat - silt matrix, red weathering
151.50	SSS	frag	prop.	yg	Sc	B	SS			0.5				1.0						146.14	1.5	Mat - silt matrix, red weathering
152.00	SSS	frag	prop.	yg	Sc	B	SS			0.5				1.0						146.15	1.5	Mat - silt matrix, red weathering
152.50	SSS	frag	prop.	yg	Sc	B	SS			0.5				1.0						146.16	1.5	Mat - silt matrix, red weathering
153.00	SSS	frag	prop.	yg	Sc	B	SS			0.5				1.0						146.17	1.5	Mat - silt matrix, red weathering
153.50	SSS	frag	prop.	yg	Sc	B	SS			0.5				1.0						146.18	1.5	Mat - silt matrix, red weathering
154.00	SSS	frag	prop.	yg	Sc	B	SS			0.5				1.0						146.19	1.5	Mat - silt matrix, red weathering
154.50	SSS	frag	prop.	yg	Sc	B	SS			0.5				1.0						146.20	1.5	Mat - silt matrix, red weathering
155.00	SSS	frag	prop.	yg	Sc	B	SS			0.5				1.0						146.21	1.5	Mat - silt matrix, red weathering
155.50	SSS	frag	prop.	yg	Sc	B	SS			0.5				1.0						146.22	1.5	Mat - silt matrix, red weathering
156.00	SSS	frag	prop.	yg	Sc	B	SS			0.5				1.0						146.23	1.5	Mat - silt matrix, red weathering
156.50	SSS	frag	prop.	yg	Sc	B	SS			0.5				1.0						146.24	1.5	Mat - silt matrix, red weathering
157.00	SSS	frag	prop.	yg	Sc	B	SS			0.5				1.0						146.25	1.5	Mat - silt matrix, red weathering
157.50	SSS	frag	prop.	yg	Sc	B	SS			0.5				1.0						146.26	1.5	Mat - silt matrix, red weathering
158.00	SSS	frag	prop.	yg	Sc	B	SS			0.5				1.0						146.27	1.5	Mat - silt matrix, red weathering
158.50	SSS	frag	prop.	yg	Sc	B	SS			0.5				1.0						146.28	1.5	Mat - silt matrix, red weathering
159.00	SSS	frag	prop.	yg	Sc	B	SS			0.5				1.0						146.29	1.5	Mat - silt matrix, red weathering
159.50	SSS	frag	prop.	yg	Sc	B	SS			0.5				1.0						146.30	1.5	Mat - silt matrix, red weathering
160.00	SSS	frag	prop.	yg	Sc	B	SS			0.5				1.0						146.31	1.5	Mat - silt matrix, red weathering
160.50	SSS	frag	prop.	yg	Sc	B	SS			0.5				1.0						146.32	1.5	Mat - silt matrix, red weathering
161.00	SSS	frag	prop.	yg	Sc	B	SS			0.5				1.0						146.33	1.5	Mat - silt matrix, red weathering
161.50	SSS	frag	prop.	yg	Sc	B	SS			0.5				1.0						146.34	1.5	Mat - silt matrix, red weathering
162.00	SSS	frag	prop.	yg	Sc	B	SS			0.5				1.0						146.35	1.5	Mat - silt matrix, red weathering
162.50	SSS	frag	prop.	yg	Sc	B	SS			0.5				1.0						146.36	1.5	Mat - silt matrix, red weathering
163.00	SSS	frag	prop.	yg	Sc	B	SS			0.5				1.0						146.37	1.5	Mat - silt matrix, red weathering
163.50	SSS	frag	prop.	yg	Sc	B	SS			0.5				1.0						146.38	1.5	Mat - silt matrix, red weathering
164.00	SSS	frag	prop.	yg	Sc	B	SS			0.5				1.0						146.39	1.5	Mat - silt matrix, red weathering
164.50	SSS	frag	prop.	yg	Sc	B	SS			0.5				1.0						146.40	1.5	Mat - silt matrix, red weathering
165.00	SSS	frag	prop.	yg	Sc	B	SS			0.5				1.0						146.41	1.5	Mat - silt matrix, red weathering
165.50	SSS	frag	prop.	yg	Sc	B	SS			0.5				1.0						146.42	1.5	Mat - silt matrix, red weathering
166.00	SSS	frag	prop.	yg	Sc	B	SS			0.5				1.0						146.43	1.5	Mat - silt matrix, red weathering
166.50	SSS	frag	prop.	yg	Sc	B	SS			0.5				1.0						146.44	1.5	Mat - silt matrix, red weathering
167.00	SSS	frag	prop.	yg	Sc	B	SS			0.5				1.0						146.45	1.5	Mat - silt matrix, red weathering
167.50	SSS	frag	prop.	yg	Sc	B	SS			0.5				1.0						146.46	1.5	Mat - silt matrix, red weathering
168.00	SSS	frag	prop.	yg	Sc	B	SS			0.5				1.0						146.47	1.5	Mat - silt matrix, red weathering
168.50	SSS	frag	prop.	yg	Sc	B	SS			0.5				1.0						146.48	1.5	Mat - silt matrix, red weathering
169.00	SSS	frag	prop.	yg	Sc	B	SS			0.5				1.0						146.49	1.5	Mat - silt matrix, red weathering
169.50	SSS	frag	prop.	yg	Sc	B	SS			0.5				1.0						146.50	1.5	Mat - silt matrix, red weathering
170.00	SSS	frag	prop.	yg	Sc	B	SS			0.5				1.0						146.51	1.5	Mat - silt matrix, red weathering
170.50	SSS	frag	prop.	yg	Sc	B	SS			0.5				1.0						146.52	1.5	Mat - silt matrix, red weathering
171.00	SSS	frag	prop.	yg	Sc	B	SS			0.5				1.0						146.53	1.5	Mat - silt matrix, red weathering
171.50	SSS	frag	prop.	yg	Sc	B	SS			0.5				1.0						146.54	1.5	Mat - silt matrix, red weathering
172.00	SSS	frag	prop.	yg	Sc	B	SS			0.5				1.0						146.55	1.5	Mat - silt matrix, red weathering
172.50	SSS	frag	prop.	yg	Sc	B	SS			0.5				1.0						146.56	1.5	Mat - silt matrix, red weathering
173.00	SSS	frag	prop.	yg	Sc	B	SS			0.5				1.0						146.57	1.5	Mat - silt matrix, red weathering
173.50	SSS	frag	prop.	yg	Sc	B	SS			0.5				1.0						146.58	1.5	Mat - silt matrix, red weathering
174.00	SSS	frag	prop.	yg	Sc	B	SS			0.5				1.0						146.59	1.5	Mat - silt matrix, red weathering
174.50	SSS	frag	prop.	yg	Sc	B	SS			0.5				1.0						146.60	1.5	Mat - silt matrix, red weathering
175.00	SSS	frag	prop.	yg	Sc	B	SS			0.5				1.0						146.61	1.5	Mat - silt matrix, red weathering
175.50	SSS	frag	prop.	yg	Sc	B	SS			0.5				1.0						146.62	1.5	Mat - silt matrix, red weathering
176.00	SSS	frag	prop.	yg	Sc	B	SS			0.5				1.0						146.63	1.5	Mat - silt matrix, red weathering
176.50	SSS	frag	prop.	yg	Sc	B	SS			0.5				1.0						146.64	1.5	Mat - silt matrix, red weathering
177.00	SSS	frag	prop.	yg	Sc	B	SS			0.5				1.0						146.65	1.5	Mat - silt matrix, red weathering
177.50	SSS	frag	prop.	yg	Sc	B	SS			0.5				1.0						146.66	1.5	Mat - silt matrix, red weathering
178.00	SSS	frag	prop.	yg	Sc	B	SS			0.5				1.0						146.67	1.5	Mat - silt matrix, red weathering
178.50	SSS	frag	prop.	yg	Sc	B	SS			0.5				1.0						146.68	1.5	Mat - silt matrix, red weathering
179.00	SSS	frag	prop.	yg	Sc	B	SS			0.5				1.0						146.69	1.5	Mat - silt matrix, red weathering
179.50	SSS	frag	prop.	yg	Sc	B	SS			0.5				1.0						146.70	1.5	Mat - silt matrix, red weathering
180.00	SSS	frag	prop.	yg	Sc	B	SS															



TRADER RESOURCE CORPORATION / MIKWAJ JOINT VENTURE

Dist	Rock Description				Structure				Alteration Parameters (%)				RQ	Sampl #	Wth	Comments						
	Com	Grs	Text	Co Alt	Name1	B	A1	F	A2	Qtz	Cal	Ank					%	Py	Po	Cpy	Sph	Asp
202.60	SSS	fg	bed	vs	sluff	B 30														14106	.53	o.c. C 35. Tuff - sediment of phytic Hed. str. massive
203.10	SS	bag	bed	gy	sluff	B 30														14107	0.80	Tuff - sediment of phytic Grouped due to weak correlation, likely detrital, likely detrital
205.06	SS	vlg	bed	gy	sluff	B 20			1.5		2.5		.10							14108	1.96	Fine med. - Felsic Tuff of Tuff - 8d 1 Pt. many brown grains - similar to detrital / bed (?) seen in zone in MK92; many grains C 0-48. 2 beds. Lullabyes C 204.2 - 204.40 Suggest that physis - local grains with fields
206.0	SSS	vlg	bed	gy	sluff	B 15			0.40											14109	0.84	Tuff - sediment?
206.42	"	"	"	gy	sluff	B 25														14110	0.92	Grainy, waxy tuff or sediment? - possibly more structured phase of above. Just about more whitish massive and crystalline, fault gouge C 35. C 205.87 (1.5 cm x massive fragments). Bedding C 0-30
208.40	SSS	fg	bed	gy	sluff	B 10	F 85	1.5		2.0			.30					.25		14111	1.98	Tuff - sediment of phytic Grouped - black due to ink for t small det. comp. in - et marked by granitic slip 30'; fig. out in matrix (one over)
209.0	SS	fg	bed	vs	sluff	B 15	F 80	1.0		2.0			2.5	.10						14112	0.60	Grainy Massive, bedded with 20' x stretching, stretched bed with t. fan mass. detrital, o.c. marked by gouge / fault C 70. Local detrital - detrital sections
210.34	SSS	fg	bed	vs	sluff	B 45		1.0					.10							14113	1.54	
211.93	"	"	"	"	sluff	B 40		0.2					.25							14114	1.51	



TRADER RESOURCE CORPORATION / MIKWAM JOINT VENTURE

HOLE # :

Page 7 of 9

Dist	Rock Description					Alteration Parameters (%)										RQ	SampI #	Wth	Comments			
	Com	Grs	Text	Co	Alt	Name1	B A1	F	A2	Qtz	Cal	Ank	%	Py	Po					Cpy	Sph	Asp
212.20	SS	fg	band	gr	chl	Sc		F 40	15.0					7.0						14115	0.72	Conglomerate (?)
213.5	SSS	fg	Sm	yg	Sc	B 6	F 80	1.5		2.0				1.0						14116	1.5	Conglomerate Mud concrete and of porphyry (± 0.5%), bending / fol. (?) 0-140 fol clear / C 80
214.58	SS	fg	band	yg	Sc	Step	B 10													14117	1.08	→ Tuff-sediment. of porphyry (0.5%) Representative fine grained hp of Sc o.s. rolling P 58.
215.28		fg	yg	Sc	AT	B 30	F 50													14118	0.20	Tuff-sediment? relaxed well-sorted, vfg buff (?) - poor conglomerate with At unit above?
216.00	SSS	fg	yg	Sc	Sc	B 20		0.5						1.0						14119	0.72	Conglomerate approx 2% shelled (20%) clasts in of porphyry matrix
217.12	SSS	fg	band	gr	Sc	B 25								1.0						14120	1.57	Conglomerate Fine grained and vfg crushed Thin, also argill bed (?), vfg of in matrix (20.5%), lower 1/2 in C of base.
218.55	SSS	fg	band	yg	Sc	B 10		20.0		2.5				1.5						14121	1.36	Conglomerate? Shelled, str matrix with 2% shelled 20.1 clasts (?)
220.0	SSS	fg	yg	Sc	Sc	B 14	F 80	0.5						0.30						14122	2.17	OC. marked by fault (?) Conglomerate - Tuff Mudstone - silt matrix with < 2% shelled (20%) clasts (alt. matrix), matrix is fine porph. (0.5%)

TRADER RESOURCE CORPORATION / MIKWAM JOINT VENTURE

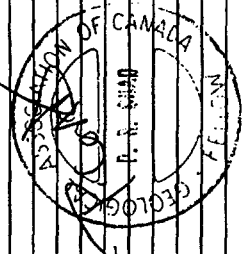
Dist	Name	Sample #	Width	Au (g/T)		Au	Cu		Zn		Pb		ppm			%	
				nfa	cfa		ppb	%	ppm	%	ppm	Ag	Ni	Co	As	SiO2	Na2O
212.20		14115	0.27	0.960													
213.5		14116	1.3	0.070													
214.51		14119	1.08	0.135													
215.28		14118	0.70	0.035													
216.00		14119	0.72	0.035													
217.47		14120	1.47	0.070													
218.83		14121	1.36	0.205													
221.0		14122	2.17	2.810													

Dist	Rock Description					Structure					Alteration Parameters (%)					Wth	Comments						
	Com	Grs	Text	Co	Alt	Name1	B	A1	F	A2	Qtz	Cal	Ank	%	Py			Po	Cpy	Sph	Asp	Mt	RQ
222.0	SSS	Ang	hnd	gy	del	StgP	B	S							.10							14123	Tuff - Sediment of porphyritic 0.5-100% vfg - w.g. GE
226.0	SSS	vfg	hnd	yg	sa	St	B	O	F	FS	0.5	0.5			.10							14124	Tuff - Sediment (?) or 4? Mgd. yel-green med. str. scintic, vfg, bedding 0-30.
225.5	SSS	fg	hnd	yl	sa	Sc																14125	Conglomerate or Tuff - cell?
227.0																						14126	Shaly schist, yellow-green, med- str. bedded with stream
228.5																						14127	Str. bedded with stream
230.0																						14128	Bedding 0-30% with cleavage P 20-40°, curved, + "bulky-angle"
231.5	SSS	fg	hnd	yl	sa	Sg	B	30	F	50	0.30				.10							14129	Conglomerate / Tuff - med (?)
233.0							B	20	F						.10							14130	Fig. and int. med. scintic base, fault 230.65 - dipping slips (30)
234.5	SSS	Ang	hnd	yl	sa	StgP	B	20														14131	Tuff - Sediment - GE porphyritic
236.0							B	0	F	60												14132	Yellow med-str scintic with
237.5							B	5			0.25				.10							14133	0.5-5% GE (coloured). poss. unit is extremely striated clay?
238.0							B	5														14134	unit is extremely striated clay? thin bed streaks with delicate line? Bedding (E-W) F1 0-50, Unit grading suggest pxc ferrug up hole to 236.15, 238.70, carbonate/pj slips 0-15
236.52	SSS	Ang	hnd	yl	sa	StgP	B	0			0.40				0.25							14135	Tuffaceous - Sediment GE porphyritic
237.90	SSS	Ang	hnd	yl	sa	StgP	B	10			0.25											14136	Yellow med-str scintic and vfg. med. med. to 236.15, 0.5-10% GE





Dist	Rock Description				Alteration Parameters (%)										Comments						
	Com	Grs	Text	Co Alt	Name1	B A1	F A2	Qtz	Cal	Ank	%	Py	Po	Cpy		Sph	Asp	Mt	RQ	Sampl #	Wth
278.0	SS	fg	band GR	ch1	IFck1	B S	F BS					0.50	0.10				0.5		14157	2011	Iron formation - chloritic Approx 5% buff/chalky cherty bands with local minor alt associated, clay bedding @ 0-25; local "bullseye" textures
280.0	SS	fg	band GR	ch1	IFck1	B S	F G0	1.0				2.5					5.0		14158	2.0	Carbonate beds relatively abundant and present by picks up with cherty bands - also more int.
280.0																					





ROYAL OAK ANALYTICAL LABORATORY

CERTIFICATE OF ANALYSIS

Exploration 5600-2703

DATE: July 6/92

NK-92-3

	SAMPLE NUMBER	Au oz/ton	Au ppb	Au ppm				
1	D-14012	.006	205					
2	13	<.001	<35					
3	14	<.001	<35					
4	15	<.001	<35					
5	16	<.001	<35					
6	17	.010	340					
7	18	.005	170					
8	19	.007	240					
9	20	<.001	<35					
10	21	.004	135					
11	22	.008	275					
12	23	.002	70					
13	24	.001	35					
14	25	.001	35					
15	26	<.001	<35					
16	27	<.001	<35					
17	28	<.001	<35					
18	29	.002	70					
19	30	<.001	<35					
20	31	<.001	<35					
21	32	<.001	<35					
22	33	<.001	<35					
23	34	<.001	<35					
24	D-14035	<.001	<35					

ROYAL OAK ANALYTICAL LABORATORY

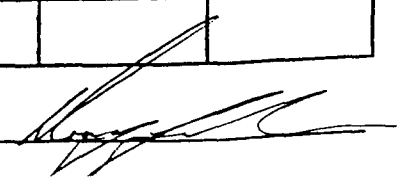
CERTIFICATE OF ANALYSIS

EXPLORATION 5600-2703

DATE: July 6/92

NK-92-3

	SAMPLE NUMBER	Au oz/ton	Au ppb	Au ppm				
1	D-14036	<.001	435					
2	37	<.001	435					
3	38	<.001	435					
4	39	.010	340					
5	40	.002	275					
6	41	.002	70					
7	42	<.001	435					
8	43	<.001	435					
9	44	<.001	435					
10	45	<.001	435					
11	46	<.001	435					
12	47	<.001	435					
13	48	<.001	435					
14	49	<.001	435					
15	50	<.001	435					
16	51	<.001	435					
17	52	<.001	435					
18	53	<.001	435					
19	54	<.001	435					
20	55	<.001	435					
21	56	<.001	435					
22	57	<.001	435					
23	58	<.001	435					
24	D-14059	.027	925					

Chief Chemist: 

ROYAL OAK ANALYTICAL LABORATORY

CERTIFICATE OF ANALYSIS

EXPLORATION 5600-2703

NK-92-3

DATE: July 6/92

	SAMPLE NUMBER	Au oz/ton	Au ppb	Au ppm				
1	D-14060	<.001	<35					
2	61	<.001	<35					
3	62	<.001	<35					
4	63	<.001	<35					
5	64	<.001	<35					
6	65	<.001	<35					
7	66	<.001	<35					
8	67	<.001	<35					
9	68	<.001	<35					
10	69	<.001	<35					
11	70	<.001	<35					
12	71	<.001	<35					
13	72	<.001	<35					
14	73	<.001	<35					
15	74	<.001	<35					
16	75	<.001	<35					
17	76	<.001	<35					
18	77	<.001	<35					
19	78	<.001	<35					
20	79	<.001	<35					
21	80	.002	70					
22	81	<.001	<35					
23	14082	<.001	<35					
24								

ROYAL OAK ANALYTICAL LABORATORY

CERTIFICATE OF ANALYSIS

EXPLORATION 5600-2703

DATE: July 10/92

NK-92-3

	SAMPLE NUMBER	Au oz/ton	Au ppb	Au ppm				
1	D-14083	.002	70					
2	84	<.001	<35					
3	85	<.001	<35					
4	86	<.001	<35					
5	87	<.001	<35					
6	88	<.001	<35					
7	89	<.001	<35					
8	90	<.001	<35					
9	91	<.001	<35					
10	92	.002	70					
11	93	.001	35					
12	94	<.001	<35					
13	95	<.001	<35					
14	96	<.001	<35					
15	97	<.001	<35					
16	98	<.001	<35					
17	99	<.001	<35					
18	14100	<.001	<35					
19	01	<.001	<35					
20	02	<.001	<35					
21	03	.008	275					
22	04	.002	70					
23	05	.001	35					
24	D-14106	<.001	<35					

ROYAL OAK ANALYTICAL LABORATORY

CERTIFICATE OF ANALYSIS

Exploration 5600-2703

DATE: July 10/92

NK-92-3

	SAMPLE NUMBER	Au oz/ton	Au ppb	Au ppm				
1	D-14107	.005	170					
2	08	.031	1060	1.06				
3	09	.119	-	4.08				
4	10	.001	35					
5	11	.009	310					
6	12	.007	240					
7	13	.004	135					
8	14	.001	35					
9	15	.028	960					
10	16	.002	70					
11	17	.004	135					
12	18	.001	35					
13	19	<.001	<35					
14	20	.002	70					
15	21	.006	205					
16	22	.082	2810	2.81				
17	23	.003	105					
18	24	.014	480					
19	25	.004	135					
20	26	.003	105					
21	27	.002	70					
22	28	.001	35					
23	29	.002	70					
24	D-14130	.003	105					



ROYAL OAK ANALYTICAL LABORATORY

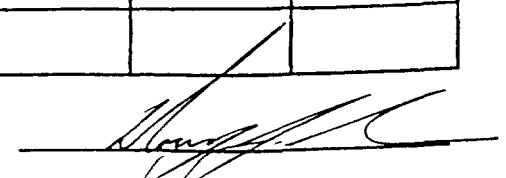
CERTIFICATE OF ANALYSIS

EXPLORATION 5600-2703

DATE: July 10/92

NK-92-3

	SAMPLE NUMBER	Au oz/ton	Au ppb	Au ppm				
1	D-14131	.002	70					
2	32	<.001	<35					
3	33	<.001	<35					
4	34	.001	35					
5	35	<.001	<35					
6	36	.005	170					
7	37	.006	205					
8	D-14138	.011	375					
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								



HOLE #: MK92-4 NORTHING: -2066 EASTING: 4100 (November)  
 TWP: Moose Jaw Drilled by: Exdley Bas Ltd. Logged by: R. [unclear]  
 Claim: L-633429 Core stored: [unclear]

Length: 195 m  
 Start: June 24, 1992  
 Finish: June 26, 1992  
 MTS: K120005  
 N: L-633428  
 M: MK92-A Az 185° -SS (2066, 4400E)  
 L: L-633429

Purpose/Remarks: To undercut Overburden  
 to underburden (L-9100E 2150S)  
 Instructed SW 602 + 1/2 m (104-107.20) 5/8 602 to 5/8 R  
 to 602 + 1/2 m (121.17-122) 9/16 602, 3/16, 9/16 (199-198)  
 HOVE MAKES H<sub>2</sub>O. Intersected several anomalous gold-bearing zones  
 Best: 0.825 g/t Au (L-5m @ 102.5-104.0)

Rock Description			Alteration Parameters (%)					Structure			Comments												
Dist	Com	Grs	Text	Co	Alt	Named	B	A	F	A2	Qtz	Cal	Ank	Py	Po	Cpy	Sph	Asp	Mt	RQ	Sampl #	Wth	
71.0						Case																	
72.0	SS	fg	bed	blk	gr	Sa	B	50						0.10							14135	42	
76.5	SS	1/8	bed	gnl		Sa	B	40						0.10							14140	1.5	
80.62	SS	1/8	bed	gnl		Sa	B	50	F	80				0.10							14141	2.12	
81.50	SS	fg	bed	gb		Sa	B	55	F	70	0.2		1.5	0.10							14142	0.8	
82.00	SS	1/8	bed	gnl		Sa	B	45			0.5		1.0	0.10							14143	1.50	
84.5	SS	fg	bed	gb	gr	Sa	B	50			0.25			0.10							14144	1.5	
86.0	SS	w	"	bg	gr	Sa	B	0			1.5		1.0	0.50							14145	1.5	
87.5	SS	fg	bed	gb	gr	Sa	B	60	F		2.5		1.5	1.0	1.10						14146	1.63	
89.00	SS	1/8	bed	gnl	sil	Sa	B	60	F	65				0.2							14147	1.57	
90.30	SS	fg	bed	gb	arg	Sa	B	55			0.3			1.10							14148	1.10	

Best mud casing left in + capped.  
 Available - Graphitic  
 Blotchy, variable case, give on P.C.  
 area - weakly conductive  
 Grey matrix - Silts tone  
 Gray - white, v. to fine grained,  
 bedded with dark grey bands in  
 lighter grey grained matrix. P.C.  
 sharp SS  
 Argillite - minor (v. fine) component  
 clay size with pitted / fossiliferous, silty due  
 to flat partings  
 Local fine scale, bedding 0-40  
 Local chert 2-3m (thinly bedded)  
 Argillite - minor (v. fine) component  
 to P.C. area; rubble / gneiss P.C.  
 Silts tone - Graphitic  
 v. to f.g.; green-white, silts tone -  
 argillite - minor 2-4m over  
 of chert - silty sediment. 10-20m - 88-72

TRADER RESOURCE CORPORATION / MIKWAM JOINT VENTURE

Dist	Name1	Sampl #	Width	Au (g/T)		Au	Cu		Zn		Pb		ppm				%	
				nfa	cfa		ppb	%	ppm	%	ppm	%	ppm	%	Ag	Ni	Co	As
73.6		CASE																
77.20		14139	4.2	.070														
78.5		14140	1.3	.135														
80.62		14141	2.12	.070														
81.50		14142	0.88	.070														
82.00		14143	1.50	.035														
84.5		14144	1.5	.070														
86.0		14145	1.5	.070														
87.63		14146	1.43	.205														
89.00		14147	1.57	.615														
70.30		14148	1.30	.755														

Dist	Rock Description				Alteration Parameters (%)										RQ	Sampl #	Wth	Comments			
	Com	Grs	Text	Co Alt	Name1	B A1	F A2	Qtz	Cal	Ank	%	Py	Po	Cpy					Sph	Asp	Mt
90.90	SS	fg	fold	gy	SS	B 60		2.5				0.40						14149	0.6	Argillite - graphite bedded, pitted gvt.	
92.00	SS	vfgy	bed	gvt	SS													10	14150X	1.1	Siltstone - calcareous greyish - white, v. blocky ground
93.50	SS	vfgy	bed	gvt	SS	B 60		2.0	1.5			0.10						14151	1.5	minor argillite	
94.00	"	"	"	"	SS	B 60		2.0				0.10	0.10					14152	1.5	minor argillite C 94.70	
95.50	"	"	"	"	SS	B 55		1.0				0.10	0.20					14153	1.80		
96.50	"	"	"	SS	SS	B 75		2.0	2.5			0.10						14154	1.70	bedded argillite - calcareous pitted + highly folded	
97.50	SS	fg	bed	gvt	SS	B 35	F 70	0.25				0.10						14155	1.32	Argillite - calcareous & argillaceous bedded with folding evident	
98.50	SS	fg	bed	gvt	IFcal	B 40		1.50				5.0						14156	1.4	Even Formation - chloritic Approx 5-10% chlorite bands, v. blocky ground.	
99.50	SS	fg	bed	gvt	SS	B 35		5.0				1.0						14157	1.60	Argillite - chloritic	
100.70	SS	fg	bed	gvt	IFcal	B 45		2.0	1.5			4.5						14158	1.86	Even Formation - chloritic Approx 10% greenish-grey, clayey bedded; local str chl next to gvt. Local bed argillite areas & clayey beds. Heavy pitted py bands; ss bed C 99.7-100.	
102.50	SS	fg	ven	gvt	SS	B 35	F 55	1.0	0.2			1.0						14159	1.34	Argillite - chl & argill O.C. marked by slip + argillite	
104.0	"	"	"	"	SS	B 40	F 80	0.4				1.0						14160	1.5	More argillite overlies 20 ft Siltstone - greenish-grey, argillite, fg, sandy bedded, wavy ss.	
104.70	SS	vfgy	bed	gvt	SS	B 50		1.5				1.0						14161	1.30	Pitted argillite - calcareous & argillaceous	
105.30	SS	vfgy	bed	gvt	SS	B 55		1.50				1.0						14162	1.0		
107.50	"	"	"	"	SS	B 30		10.0	1.0			0.5						14163	1.6		



RADER RESOURCE CORPORATION / MIKWAM JOINT VENTURE

Lst	Rock Description				Structure				Alteration Parameters							RQ	Samp#	Wth	Comments									
	Com	GrS	Text	Co Alt	Name1	B	A1	F	A2	F	A2	Qtz	Cal	Ank	%					Py	Po	Cpy	Sph	ASP	Mt			
115.0	SS	dg	pr	gt	chl	Stap	B	15	F	20	3.5		0.5		1.0	0.20	1.0			1.0		14164	1.6				uff - sediment - 0.6 Porphyritic 0.4 Qz (0.5-2.0%)	
116.0	SS	ug	bd	gn		Sc	B	10			0.20		0.4									14165	1.10				Silicate - coarse uff to f-g, banded, quartz - white - light pink grain; minor white bands are above silicates. Gage (45) 113.57 and (46) 112	
117.0							B	20			0.20		0.5		1.0							14166	1.5					
118.0							B	25			1.5		0.5									14167	1.5					
119.0							B	40			0.3											40	14168	1.12				
120.0	SS	fg	bd	gb	chl	Sc	B	40	F	15	1.5		0.5		2.0							14169	1.8					Argillite - chloritic, pitted (UCT)
121.0	SS	fg	bd	chl		Sc	B	50					0.5									14170	1.0					
122.0						Sc	B	38					0.5									14171	1.5					
123.0						Sc	B	50			0.3		0.5		1.0							14172	1.5					1.2-3.5 cm cherty band, dk green chl. zone
124.0						Sc	B	50					0.3		1.0							14173	2.12					
125.0	SS	fg	fld	gb	arg	Sc	B	35	F	10	3.0		5.0		1.0							14174	1.85					Argillite - granitic - silk
126.0							B	30			3.0		3.5		1.0							14175	1.0					blackish - pink to drk - dark veins (filled)
127.0							B	45	F	7.5	1.5		2.0		1.0							14176	1.0					local ch/px zone & filled pitted vns
128.0							B	35	F	7.5	1.5		1.8		0.50							14177	1.0					Blocky/mottled
129.0							B	35	F	7.5	1.5		1.8		1.5							14178	1.0					
130.0	SS	fg	fld	gb	arg	Sc	B	45	F	20	1.0		0.5		1.0							14179	2.0					Argillite - mottled, 0.5 on core bot.
131.0	SS	fg	fld	gb	arg	Sc	B	50	F	20	0.5		0.5		0.10							14180	1.5					ch/px zone 129.10 - 129.5 & dk
132.0	SS	fg	fld	"	arg	"	B	40			1.5		1.0		0.50							14181	1.5					non-magnetic bands
133.0	SS	fg	fld	"	arg	"	B	60			2.5		1.5		1.5							14182	1.5					Scm gph - blue and 131.77
134.0						"	B	60			1.5		1.5		0.5							14183	1.5					Blocky
135.0						"	B	60			1.0		1.0		1.0							14184	1.5					Blocky/mottled
136.0	SSS	fg	fld	"	arg	"	B	55			1.0		1.0		0.40							14185	1.5					
137.0						"	B	60	F	70	2.0		1.0		0.5							14186	1.5					Blocky due to 15' joint marks / laminaritic
138.0						"	B	50			0.5		2.5		0.5							14187	1.5					mod. gph. component, blocky
139.0	SS	fwg	gt	zn		Stap	B	50			1.0		2.5		1.5							14188	1.5					uff - sediment (2% porphy. (fg)) w/ky quartz, fold (146.40), purple db
140.0	SS	fg	fld	gn		Sc	B	55			1.0		2.0		2.0							14189	1.7					Argillite - block - gray
141.0							B	55			1.5		2.5		0.5							14190	1.5					Final banding unaccounted for / fold area / dark vns
142.0							B	40			3.0		3.5		1.0							14191	1.5					



Rock Description										Alteration Parameters (%)										Comments				
Dist	Com	Grs	Text	Co	Alt	Name	B	A1	F	A2	Qtz	Cal	Ank	%	Py	Po	Cpy	Sph	Asp	Mt	RQ	SampI #	Wth	Comments
14.5	SS	fg	bed	fg	avg	Sc	B 40				0.5		1.0		1.0							14192	1.5	Argillite - continuous
14.10			"	"	"	"	B 40	F 75			0.5		1.5		1.5							14193	1.5	
15.5	SS	"	"	"	"	"	B 30				7.0		3.0		2.0							14194	1.5	
15.20			"	"	"	"	B 25	F 50			4.0		2.5		2.5							14195	1.5	
15.25	SS	fg	bed	fg	avg	"	B 5				10.0		2.0		3.5							14196	1.5	
15.0	"	"	"	"	"	"	B 10	F 55			15.0		3.0		4.0							14197	1.5	Local chl (blue-green) essse near QV
15.0			"	"	"	"	B 18				10.0		2.0		5.0							14198	1.0	
15.10			"	"	"	"	B 30				10.0		1.5		4.0							14199	1.0	chl essse c QV2 / mark MINING
15.57	SS					"	B 20				5.0		1.5		2.0							14200	1.0	
15.57						"	B 20				0.10		0.5		2.0							14201	1.5	
16.37	SSS	fg	bed	fg	sea	Sc	B 55				0.5		1.5		0.5							14202	1.8	Conglomerate (?) Schistose med. sericite cal with 20:1 stretching - local green mica clast; QV purple (c. 0.5%)
16.50	SSS	ufg	bed	ufg	sea	SS	B 25				0.2		0.5		0.5							14203	1.5	Siltstone - fine Arenaceous, f.g. light green Partly in v. of QV (c. 0.5-1.0%) oblique grain slip @ 45° c.o.c. area
16.08	"	"	"	"	"	"	B 50						2.0		0.5							14204	1.78	
16.0	SSS	fg	bed	fg	sea	Sc	B 45						0.5		1.0							14205	1.92	Conglomerate - schistose, shaly with 20:1 stretched clast (?) Porphy. in v. of QV med. silt. sea local green mica / clast.
16.26	"	"	"	"	"	"	B 35	F 75			2.5		1.0		1.0							14206	1.0	
16.72	SS					SIL	F 45						0.5		1.0							14207	1.76	
16.72	SS					SIL	F 45						2.5		2.0							14208	1.66	Fault / Shale (Tight) Populon clast cemented by silt. matrix + also calcit. v.f.g P4; press. eff?
16.85	SSS	fg	bed	fg	sea	Asch	B 22				0.25		0.5		1.0							14209	1.78	Schist - Intruded. schist Med. silt. sericite band, laminated with fine bands, blocky / layered, local

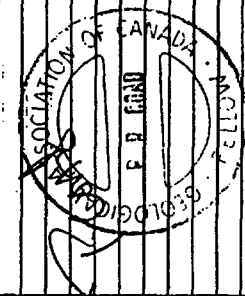




TRADER RESOURCE CORPORATION / MIKAWAM JOINT VENTURE

HOLE # \_\_\_\_\_ Page 2 of 2

Dist	Rock Description				Alteration Parameters (%)										Comments								
	Com	Grs	Text	Co Alt	Name1	B	Al	F	A2	Qtz	Cal	Ank	%	Py		Po	Cpy	Sph	Asp	Mt	RQ	Sampl #	Wth
170.0	SS	Py	Ln	Yg	Sc	As	Ln			0.2	0.5										14210	1.5	chert on slips; zebra-banding appearance Mod-Str texturite - streaked Unit higher up. purple in vfg ore o.s. sharp C 22
171.76	SS	Py	Ln	Yg	Sc	As	Ln			0.2	0.2										14211	1.76	
140	SS	Ln	Py	Gy	Sil	As	P			0.10	0.10			0.10							14212	22.24	Felsic Porphyry No clay, silicates quartz - rare (1-2% f.g - c.s. calcite ore) and white plagi (0-2.5% f.g - min. sub. Xels), frequent flat to 15° carbonate-ch. kfs. from approx. 188 upward. % of plagi. increases to ± 1-3%
150	SS	Ln	Py	Gy	Sil	As	P			1.5	1.0			0.10							14213	1.0	
150	SS	Ln	Py	Gy	Sil	As	P			1.5	1.0			0.10							14213	1.0	Felsic Porphyry, to tan slip in 612/ank/tekt; sub. Xels of mag - c.s. py 16 metric 1-4% plagi. 1-15% ore. Carbon in 15° slip - laterally str. carbonate. Slip due. 1-2 mm wide over 30 cm.
150																							





ROYAL OAK ANALYTICAL LABORATORY

CERTIFICATE OF ANALYSIS

EXPLORATION 5600-2703

DATE: July 10/92

NK-92-4

	SAMPLE NUMBER	Au oz/ton	Au ppb	Au ppm				
1	D-14139	.002	70					
2	40	.004	135					
3	41	.002	70					
4	42	.002	70					
5	43	<.001	<35					
6	44	.002	70					
7	45	.002	70					
8	46	.006	205					
9	47	.018	615					
10	48	.022	755					
11	49	.002	70					
12	50	<.001	<35					
13	51	.002	70					
14	52	.002	70					
15	53	.001	35					
16	54	.004	135					
17	55	.001	35					
18	56	.002	70					
19	57	<.001	<35					
20	58	.002	70					
21	59	.002	70					
22	60	.024	825					
23	61	.001	35					
24	D-14162	.001	35					

ROYAL OAK ANALYTICAL LABORATORY

CERTIFICATE OF ANALYSIS

EXPLORATION 5600-2703

DATE: July 10/92

NK-92-4

	SAMPLE NUMBER	Au oz/tan	Au ppb	Au ppm				
1	D-14163	.001	35					
2	64	.001	35					
3	65	<.001	<35					
4	66	.003	105					
5	67	.001	35					
6	68	.006	205					
7	69	.003	105					
8	70	.005	170					
9	71	.003	105					
10	72	.002	70					
11	73	.001	35					
12	74	.001	35					
13	75	.001	35					
14	76	<.001	<35					
15	77	.001	35					
16	78	.003	105					
17	79	<.001	<35					
18	80	<.001	<35					
19	81	.023	790					
20	82	.004	135					
21	83	<.001	<35					
22	84	<.001	<35					
3	D-14185	<.001	<35					
4								

ROYAL OAK ANALYTICAL LABORATORY

CERTIFICATE OF ANALYSIS

EXPLORATION 5600-2703

DATE: July 14/92

MK-92-4

	SAMPLE NUMBER	Au oz/ton	Au ppb	Au ppm				
1	D-14186	.006	205					
2	87	.014	480					
3	88	.001	35					
4	89	.004	135					
5	90	.004	135					
6	91	.004	135					
7	92	.001	35					
8	93	.005	170					
9	94	.005	170					
10	95	.004	135					
11	96	6.001	235					
12	97	.001	35					
13	98	.005	170					
14	99	.007	240					
15	14200	.003	105					
16	01	.007	240					
17	02	.006	205					
18	03	.004	135					
19	04	.002	70					
20	05	.005	170					
21	06	.004	135					
22	07	.002	70					
23	08	6.001	235					
24	D-14209	.003	105					

ROYAL OAK ANALYTICAL LABORATORY

CERTIFICATE OF ANALYSIS

EXPLORATION 5600-2703

DATE: July 14/92

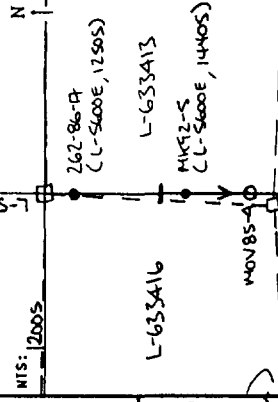
MK-92-4

	SAMPLE NUMBER	Au oz/ton	Au ppb	Au ppm				
1	D-14210	<.001	<35					
2	11	<.001	<35					
3	12	<.001	<35					
4	D-14213	<.001	<35					
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								

TRADER RESOURCE CORPORATION / MIKWAM JOINT VENTURE

Project No: 2703 Category: AB

Page 1 of 11



LENGTH: 250.0 m  
 Start: June 26, 1992  
 Finish: June 28, 1992

ELVN: 30MB  
 EASTING: 5600E  
 NORTHING: -1440

Drilled by: R. (Name) / P. Harvey  
 Core stored: (Name) Size: 57 (mm) 51 (mm) left in.

Purpose/Results: To drill under  
 and under hole MON 85-A (L-5600E, 1500S)  
 with enameled As valves in track and to  
 test MEM computer. Results: MSV PY  
 from 6523-6525 returned 0.205 g/ton (0.06%)  
 Anomalous gold values occur throughout hole.  
 (e), 445 g/ton Au from 2165-2210m.  
 L-633414

Dist	Azim	Dip	Dist	Azim	Dip	Dist	Azim	Dip	Dist	Azim	Dip
0	150	-60	0	150	-60	0	150	-60	0	150	-60
65	150	-59	65	150	-59	65	150	-59	65	150	-59
140	150	-59	140	150	-59	140	150	-59	140	150	-59
250	180	-61	250	180	-61	250	180	-61	250	180	-61

Rock Description		Alteration Parameters																				
Com	Grs	Text	Co	Alt	Na	F	A2	Qtz	Cal	Ank	%	PY	Po	Cpy	Sph	Asp	Mt	RQ	Sampl	#	Wth	Comments
57.0																						57m BM, 51m NW casing left in hole
6523	SS	fg	hnd	HK	gv	sgv	B.66	1.5	0.2		7								14214	8.23		Graphitic - Anisitic Dk grey, pitted, blocky with local fine banding / bedding. 1-10% py balls with what quartz pressure shadows - beddy flattened strongly conductive.
76.50	fg	hnd				HS		0.5	0.5	0.5	98								14215	1.08		Moisture Pyrite with 3x1.5cm clut of graphite. py widely sand 1, 2 - 1cm or E orange brown ant(?) in X beddings in G17
76.50	fg	hnd	hbk	gk	sgv			0.5		0.5	5									11.91		Graphitic - Anisitic local mineralized structures, local py-balls with radial textures in hnd py C 67.14-67.70. bedded C 55-60, lost core due to expanding at 68m (1.52) 71m (1.22), 74m (1.52) 77m (3.66) some associated lower contact level contact etc. see sketch.





Rock Description				Alteration Parameters (%)										RQ	Sampl #	Wth	Comments							
Dist	Com	Grs	Text	Co	Alt	Na	B	A1	F	A2	Qtz	Cal	Ank					%	Py	Po	Cpy	Sph	Asp	Mt
77.0	SS			GY		5c					0.5	0.5	0.5	0.5	0.1								0.5	Control in rubble core to complement - need several frags of 1/2 in. - may 10 cm at 77m. Not other graphite in altered.
78.5	SS			GY	gr	5c	60				0.5	0.5	0.5		10								1.5	As w 5c at 77.0, with in sample through. Several secondary frags and 10% less py. - through. Graph bands can define pit at 60. 0.5 in bands mass. At base through unit - is 77.5. St. of rock pitted can pits + rare bio fracte slips.
80.0	SS			GY	gr	5c	60				0.5		0.5		10									As 78.5
81.5	SS			GY	gr	5c	60				0.5		0.5		10									As 78.5, strike coarser grained - cubes up to 1 cm across
83.0	SS			GY	gr	5c	55				0.5		0.5		3									As 78.5, with 10-20% angular argillite frags to 3 cm throughout, less py. as in clusters. B.B. Bedding quality varied ±0.1 - None?
84.5	SS			GY	gr	5c					0.5		0.5		3									As 78.5, looks arg frags of 83.0
86.0	SS			GY	gr	5c	50				2.0		2.0		3									As 78.5, graph some define pit. Lower could not distinct. 1 cm gr, fresh margins at 90° to pit at 85.7







TRADER RESOURCE CORPORATION / MIKAWA JOINT VENTURE

HOLE # : 103.1

Page 4 of 11

Dist	Rock Description				Structure				Alteration Parameters (%)										Wth	Comments				
	Com	Grs	Text	Co	Alt	Name1	B	A1	F	A2	Qtz	Cal	Ank	%	Py	Po	Cpy	Sph			Asp	Mt	RQ	Sampl#
99.4	M		Grts	GY	Ser	5c				0.5		0.5	0.5		3							14230	0.9	As 92.5, black by frays
101.0				GY	Ser	5c				0.5					2							231	1.6	Black around core; fine FT; 0.6 in last Vuggy, graph frays, 2-5%.
101.6					Ser	5c				0.5					3							232	0.6	Vuggy, graph frays
103.1				GY	GR	5c	65			5.0					5							233	1.5	In graph frays to 10% of total, with 45% py. 3 x 2 cm QV at 102.3, 102.5, 103.0 Diss py throughout matrix; veins brown.
104.0				GY	GR	5ac				0.5					10							234	0.9	As or 103.1 py in graphite frays to 750% of matrix + graph along <u>103.1</u> plane to 'beds' to 2-3 cm; esp. thousands 104.0 Frays calcite py preferred through - see w graph.
105.5	M			GY	Ser	5c	65			0.5					3							235	1.5	Sharp contact at 104 to 104.5 Ser Conglom on 92.5 etc. 3% fr py + fr-1% fusible clast mm scale. Mid-sty seritic matrix and ser fabric frays 104.5-104.7 - FT - Blacky core -
107.0	M			GY	Ser	5c				0.5					3							236	1.5	As 105.5
109.5	M			GY	Ser	5c				3					20							237	2.5	As 105.5, or fr py - envelopes frays along FTH; internal 107.5-107.6 is mass py Vuggy + minor blacky core - 2.5 cm frays
110.0	M			GY	Ser	5c				3					5							14238	1.5	As 105.5, or diss py and frays of py to 3cm Vuggy core. Fr fusible frays.



Dist	Rock Description				Alteration Parameters (%)							RQ	Sampl #	Wth	Comments		
	Com	Grs	Text	Co	Alt	Si	Si	Si	Si	Si	Si					Si	Si
111.5	M			GY	Silt	Sc									14239	1.5	Similar to above, unit is silicified; frags more visible. Porphy + fu frags
113.0	M			GY	Silt	Sc									240	1.5	As 111.5 Backy 111.6-111.8
114.5	M			GY	Silt	Sc									241	1.5	Transition to Sazite as above 111.5 class # + 1/4 fuel frags 2mm. See frags to 3cm.
115.2	M			GY	Silt	Sc									242	1.7	As 114.5.
116.14					Silt	3m									243	1.7	Silicified pale grey massive unit w/ 'eggshell' fracture As 87.5 Diss pl throughout.
116.9					Silt	5t									244	1.6	Dark grey buff - py throughout as for clastic + calc. Sp. con. of at 116.14; see on file.
118.4				gran	Silt	3m									245	1.5	As 116.14, minor cumulated feldspars
119.5					Silt	3m									246	1.1	As 116.14
120.1					Silt	5t									247	0.6	Coarsely bedded buff; some scale frags, rare fuel frags. Dark grey-black.
122.0					Grn	Sc									248	1.7	Graphitic luster seams surround frags; diss py throughout; 1 x 2cm bounding qv at 121.6 0.5m core lost; FH at 121.9 - ground core.
123.5					Grn	Sc									249	1.5	As 122.0 1 x 2cm qv at 122.1
125.0					Grn	Sc									250	1.5	As 122.0; 1 x 2cm qv at 124.0; at 40' CA Frags 1-5cm.





Dlst	Rock Description				Alteration Parameters (%)										RQ	Sampl #	Wth	Comments							
	Com	Grs	Text	Co	Alt	Name1	B	A1	F	A2	Qtz	Cal	Ank	%					Py	Po	Cpy	Sph	Asp	Mt	
126.5	S		SHD	BK	GRA	5a					20											15001	1.5	Sheep contact marked by BN 125.0-125.3 to be graphitic argillite, w typically 10-20% qz-carb varying along folia at low angle to CA. 3-10% Pt as fq clusters often 2cm throughout	
134.0	S		SHD	BK	GRA	5a	20			10					5							15002	7.5	As 126.5 Highly conductive. Folth 10-30° throughout. Avg = 30° CA. mm-cm boundary nearby qz's per to folia. Argillite well laminated. Stained last. Numerous graphitic slips parallel to folia.	
146.0	S		SHD	BK	GRA	5a	20			20					5							003	12	As 134.0 - Folth 0°-35°; generally = 20° CA 141.5 - 141.7 Graphitic F-LT at 27°	
155.4	M				Sil	5a	0	10		5					0.5							004	9.4	Almost change at 146 to less graphitic argillite - mostly siliceous? is competent, pale grey + lacks graphitic slips. Bedding 0-10° CA; w finest cleavage at 10° CA. Lower nearby qz's base of Pt specular	
155.9						GFZ	15																	0.5	Graphitic rubble core in low angle fault.
160.0	S		SHD	BK	GRA	5a	20			20					5							005	4.1	Graphitic argillite at 154 site. Numerous graphitic slips per to folia 5-30°	
160.6						5c				10					2							006	0.6	Common w fangs 0.5-5 mm in graphitic matrix higher than 160.0 fangs!	
170.0			SHD	BK	GRA	5a	20			10					5							007	7.1	Black argillite argillite w folia 5-30° by 20° CA Pt bands to 3 cm. Typically v. conductive	



TRADER RESOURCE CORPORATION / MIKWAM JOINT VENTURE

HOLE #:

Page 7 of 11

Dist	Rock Description			Structure			Alteration Parameters (%)							RQ	Sampl #	Wth	Comments							
	Com	Grs	Text	Co	Alt	Name1	B	A1	F	A2	Qtz	Cal	Ank					%	Py	Po	Cpy	Sph	Asp	Mt
179.0				BK	GRA	5a		20			10				5							1500B	9.0	Strongly conductive graphitic enstatite as above. Bldgs at 20°=10°. Under cleavage at 70°. Py balls > 2cm throughout. Fragmented by 172.5-173.0 - con angular - arg frags & mineral.
188.4				BK	GRA	5a		20			10				5							009	9.4	As above - py balls and bedrock at 179.2 at 20° CA. Strongly conductive. Bldgs at 187.7-188.1
190.0				BK	GRA	5a				20					5							010	1.6	10cm QV conf. to F.A. at 20°. 188.4-188.6
191.0				BK	GRA	5a		40		10					5							011	1.8	Bldgs graphitic enstatite; lower conduct over 1.0m
192.5					GRA	5c		20		1					5							012	1.5	Good contact to tetrahedral conglomerate. Graphitic inclusions on frags, and 1-5cm; as eff.
194.0					GRA	5c		20		0.5					10							013	1.5	Pyg lesser amt of graph matrix. Rare clear wavy qv's
195.5					Ser	5c				0.5					3							014	1.5	Good example of Mikro Gulk weak sericitic + minor graphitic through matrix - Frags on scale, rounded matrix supported by fine glassy-grey dust - see fabric vol - graphitic.
197.0					Ser	5c				2.0					2							015	1.5	As 195.5, graphitic 196-197. AV bands defined w py 196.8-197.0
198.5					GRA	5c				1.0					1							016	1.5	Graphitic matrix - Mikro Gulk.



TRADER RESOURCE CORPORATION / MIKWAH JOINT VENTURE

HOLE #: [REDACTED] Page 8 of 11

Rock Description				Alteration Parameters (%)							RQ	Sample #	Wth	Comments										
Dist	Com	Grs	Text	Co	Alt	Name	B	A1	F	A2					Qtz	Cal	Ank	%	Py	Po	Cpy	Sph	Asp	Mt
200.0				GY	GRA	Sc					0.5				3							15017	1.5	Conglom. w/ graphitic matrix, w/ wavy bands of sericite and rare fuchsite clasts.
201.5					GRA	Sc	30				2				1							018	1.5	As 200, cm wavy laminated qtz vch at 200.4; Ser + fuchsite clasts
203.0					GRA	Sc	30				1				1							019	1.5	Sericite, locally; cm scale rounded latho frags - <del>the</del> highly packed, clast + fv frags bedding uniform 330°
204.0					GRA	Sc					0.5				1							020	1.0	As 200
205.0					GRA	Sc					0.5				1							021	1.0	As 200
210.5	M	tg		Ser		3m					1.0				1							022	5.5	Sharp contact at 205.0 at 40° into massive frag 1/4 1/2" wide, locally wavy ser. add. rare 0.5m qtz + bands of qtz; 11.000 A throughout block filled at 40°
212.0				Ser		Sc					3				0.1							023	1.5	Sharp contact into good out. of textural. Conglom. frags - clast - qtz - fuch - ser. of. Platy - amplitic sub-ang. angular, 0.5 - 3 cm. in weak sericite matrix of some frags. Bands + frags of qtz. Frags 50-60% of unit.
213.5				Ser		Sc	40				1				0.1							024	1.5	As 212.0; minor graphitic on. Felt. planes Lath. conchoidal frags at 70°
215.0				Ser		Sc																025	1.5	As 212.0; 20% frags, minor graphitic matrix. 213.7 - graphitic slits at 30° 214-215 - transition to fine gr. Cong. Tuff.



TRADER RESOURCE CORPORATION / MIKWAM JOINT VENTURE

HOLE #:

Page 7 of 11

Dist	Rock Description				Structure				Alteration Parameters (%)							RQ	Sampl #	Wth	Comments				
	Com	Grs	Text	Co Alt	Name	B	A1	F	A2	Qtz	Cal	Ank	%	Py	Po					Cpy	Sph	Asp	Mt
216.5	M		Fract		3m				1.0					0.1							15026	1.5	Fractured weak sericite alt'd massive Mn Vlc block filld 20-30° As 216.5 etc.
217.9	M		Fract		3m				1.0					0.1							027	1.4	As 216.5
219.5	M			Ser	5c	20			1.0					0.1							028	1.6	Sc on 212, well filld at 20° Sericite + minor graphite debris foll. rounded knto frags max 2-5 cm 212
221.0	M			Ser	5c				1.0					0.1							029	1.5	As 212; knto, mixed w 3m
222.5	M			Ser	5c				1.0					0.1							030	1.5	Sericite, knto, frags = 3cm
224.0	M			Ser	5c				3.0					1.0							031	1.5	Sericite / Silicified knto 5mm gr w to M at 223.0
225.5	M			Ser	5c	25			1.0					0.1							032	1.5	knto 5c + intercalated 3mm
227.0	M			Ser	5c				3.0					0.5							033	1.5	Sericite frags + matrix, overall is Silicified BV banding.
228.4				Ser	5c	20			0.5					0.1							034	1.4	Sericite alt'd, Silicified; minor fracs.
230.0				Ser	5c				5.0					0.5							035	1.6	can clear banding of gr fr to folia at 20° 228.4-228.7. Md sericite - bands of sericite <cm throughout
231.2				Ser	5c	30			5.0					3.0							036	1.2	Md Sericite, FolK 20-40° at 231.0 2-5% M, fine laminae towards 231.2, as clay in veins



TRADER RESOURCE CORPORATION / MIKWAM JOINT VENTURE

Dist	Name#	Sample#	Width	Au (g/T)		Au	Cu		Zn		Pb		ppm				%		
				nfa	cfa		ppb	%	ppm	%	%	ppm	%	ppm	%	Ag	Ni	Co	As
216.5		15226	1.5	.770															
217.9		27	1.4	.410															
219.5		28	1.6	.410															
221.0		29	1.5	.515															
222.5		30	1.5	.035															
224.0		31	1.5	.035															
225.5		32	1.5	.070															
227.0		33	1.5	.070															
228.4		34	1.4	.035															
230.0		35	1.6	.035															
231.2		36	1.2	.035															

Dist	Rock Description				Alteration Parameters (%)							RQ	Samp. #	Wth	Comments					
	Com	Grs	Text	Co Alt	Name1	B Al	F A2	Qtz	Cal	Ank	%					Py	Po	Cpy	Sph	Asp
233.0	S		S4D	GRA	5a	25		50				0.5						15037	1.8	Graphitic Argillite; conductive Sharp contact at 231.2 at 40° Sheared, 80%, 4cm qtz bounded drg Filt
234.1	S		S4D	GRA	5a		50					0.5						038	1.1	As 233.0
234.4					QV	55	75					0.5						039	0.3	Ribbon bot milky Qtz at 55°; sharp contacts, to py ass w min graph ribbons at cm intervals in vein.
236.0				GRA	5a	20	20				5.0							040	1.6	Graphitic argillite/largamente, stained in way with (spaced) w qtz - unit siliceous, qtz violet streakwork, graphitic slips throughout frmp seen in 5c unit scattered through, form 10% of total
237.5				GRA	5a		5				3							041	1.5	As 236
239.0				GRA	5a		2				0.5							042	1.5	As 236
240.5				GRA	5a	30	2				0.5							043	1.5	As 236
242.0				GRA	5c		5				0.5							044	1.5	Lesser Graphitic material than matrix, fine gr - coarse till 241.0 - 242.0
243.5				GRA	5c	20	5				0.5							045	1.5	Bandas + frags of 20's; fa - coarse till. Metro. Transition - Graphitic - Siliceous matrix
245.0				Sil	5c		5				1.0							046	1.5	Coarse beds; see Filt frag to 3cm Graphitic - Siliceous matrix.
246.5				Sil	5c		10				3.0							047	1.5	As 245







ROYAL OAK ANALYTICAL LABORATORY

CERTIFICATE OF ANALYSIS

EXPLORATION 5600-2703

DATE: July 14/92

MK-92-5

	SAMPLE NUMBER	Au oz/ton	Au ppb	Au ppm				
1	D-14214	.004	135					
2	15	.006	205					
3	16	<.001	<35					
4	17	.001	35					
5	18	.004	135					
6	19	<.001	<35					
7	20	<.001	<35					
8	21	<.001	<35					
9	22	.001	<35					
10	23	.002	70					
11	24	.001	35					
12	25	<.001	<35					
13	26	<.001	<35					
14	27	<.001	<35					
15	28	<.001	<35					
16	29	.002	70					
17	30	<.001	<35					
18	31	<.001	<35					
19	32	.002	70					
20	33	<.001	<35					
21	34	.013	445					
22	35	.004	135					
23	36	<.001	<35					
24	D-14237	.003	105					

ROYAL OAK ANALYTICAL LABORATORY


CERTIFICATE OF ANALYSIS

EXPLORATION 5600-2703

DATE: July 14/92

MK-92-5

	SAMPLE NUMBER	Au oz/ton	Au ppb	Au ppm				
1	D-14238	<.001	<35					
2	D-14239	<.001	<35					
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								

Chief Chemist: 

ROYAL OAK ANALYTICAL LABORATORY

CERTIFICATE OF ANALYSIS

EXPLORATION 5600-2703

DATE: July 14/92

MK-92-5

	SAMPLE NUMBER	Au oz/ton	Au ppb	Au ppm				
1	D-14240	.002	70					
2	41	<.001	<35					
3	42	<.001	<35					
4	43	<.001	<35					
5	44	<.001	<35					
6	45	<.001	<35					
7	46	<.001	<35					
8	47	<.001	<35					
9	48	<.001	<35					
10	49	.003	105					
11	14250	.001	35					
12	15001	.006	205					
13	02	.003	105					
14	03	.002	70					
15	04	.002	70					
16	05	.001	35					
17	06	.002	70					
18	07	.003	105					
19	08	.002	70					
20	09	<.001	<35					
21	10	<.001	<35					
22	11	.007	240					
23	12	.001	35					
24	D-15013	.003	105					



ROYAL OAK ANALYTICAL LABORATORY

CERTIFICATE OF ANALYSIS

EXPLORATION 5600-2703

MK-92-5

DATE: July 14/92

	SAMPLE NUMBER	Au oz/ton	Au ppb	Au ppm				
1	D-15014	.005	170					
2	15	<.001	<35					
3	16	<.001	<35					
4	17	<.001	<35					
5	18	<.001	<35					
6	19	<.001	<35					
7	20	<.001	<35					
8	21	<.001	<35					
9	22	<.001	<35					
10	23	<.001	<35					
11	24	<.001	<35					
12	25	<.001	<35					
13	26	.005	170					
14	27	.012	410					
15	28	.012	410					
16	29	.015	515					
17	30	<.001	<35					
18	31	<.001	<35					
19	32	.002	70					
20	33	.002	70					
21	34	<.001	<35					
22	35	<.001	<35					
23	36	<.001	<35					
24	D-15037	.003	105					

ROYAL OAK ANALYTICAL LABORATORY

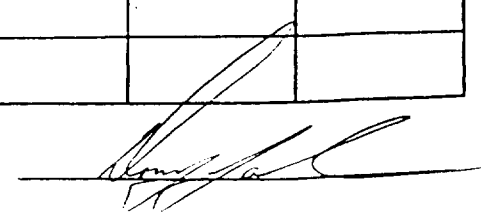
CERTIFICATE OF ANALYSIS

EXPLORATION 5600-2703

DATE: July 14/92

NK-92-5

	SAMPLE NUMBER	Au oz/ton	Au ppb	Au ppm				
1	D-15038	.004	135					
2	39	.004	135					
3	40	.006	205					
4	41	.003	105					
5	42	.003	105					
6	43	.005	170					
7	44	<.001	<35					
8	45	.001	35					
9	46	.004	135					
10	47	.010	340					
11	48	.008	275					
12	D-15049	.007	240					
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								

Chief Chemist: 

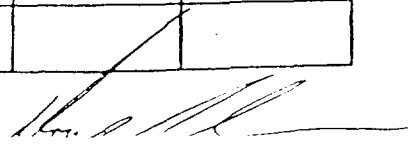
ROYAL OAK ANALYTICAL LABORATORY

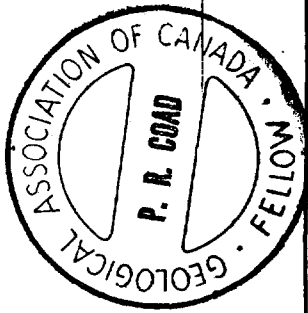
CERTIFICATE OF ANALYSIS

EXPLORATION 5600-2703

DATE: July 29/92

	SAMPLE NUMBER	Au oz/ton	Au ppb	Au ppm	As ppm			
1	D-13502	MK92-1			329.			
2	08				56.			
3	11				47.			
4	14				33.			
5	18				28.			
6	13525				25.			
7	13652				148.			
8	58				1470.			
9	59				1680.			
10	60				1050.			
11	61				1990.			
12	62				1890.			
13	68				222.			
14	13672				340.			
15	14215	MK92-5			173.			
16	D-15190	MK92-6			2810.			
17								
18								
19								
20								
21								
22								
23								
24								





RADER RESOURCE CORPORATION / MIKWAM JOINT VENTURE

Project No: 2703

Category:

Page 1 of 12

HOLE #: ~~2703-1~~ NORTHING: ~~297~~ EASTING: ~~88-1~~

LENGTH: 297

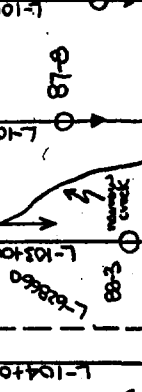
88-1

RWP: Hoblitzell  
 Claim: L-628660  
 Drilled by: Svedley Bros.  
 Core Stored: Timmins

start: DEC. 1, 1992  
 Finish: DEC 6, 1992

88-3

Dist	Azim	Dip	Dist	Azim	Dip	Dist	Azim	Dip
0	50	-52	300	207	-44			
15	192	-41						
50	202	-48						
225	196	-48						



Purpose/Results: TO UNDERCUT 100m below intersection of L-5291 & L-1031000. An area SS in 26085 gm L-1031000. Indicated 9 different areas of quartz veining with 4-35% Py. Sect assay 8.98 gpt of 262 gpt Au/0.5 m and a separate assay of 4.7 gpt or 1.08 gpt Au/0.5 m

1:5000

Rock Description				Structure				Alteration Parameters				Comments & denotes geochemical grab										
Com	Grs	Text	Co Alt	Name1	B	A1	F A2	Qtz	Cal	Ank	\$		Py	Po	Cpy	Sph	Asp	Mt	RQ	Sampl #	Wth	
				CASE																		CASING
	SS	fg	bed	gr chl	IFchl	B	6S	0.75				.10							14251	0.9		Iron Formation - dk green-brown (10% -15% pink garnets), weak-str magnetic; blue ppt in matrix.
	SS	fg	bed	chl	IFchl	B	6S	0.40				.10							14252	1.5		Glaucous grz inlets (+) mid-str magnetic
	SS	fg	bed	chl	IFchl	B	SS	0.10				.10							14254	1.5		IFchlnic - 1-5% grt + lighter pale yellow/white bands; garnets present in chl. bands
	SS	fg	bed	chl	Atgcp	B	SS	0.5				1.5							14255	1.5		Intervened - Felsic Tuff - OF phytic fine assem py. chnt locally chloritic. Out-let magnetic due to include chl + pyrr. IF garnets: local pyrrite & gr.
	SS	fg	bed	gr chl	Atgcp	B	60	0.25				2.0							14256	1.0		Intervened - Felsic ls (10%) buff - OF phytic. Shaded by light red (red) bands, 0.5-1% grt. Biss. py between in chl/bt (10%) zones.
	SS	fg	bed	gr chl	GV	B	6S	5S	10.0			2.5							14257	0.5		Quartz vein E pink-white carb. (congl. rock); minor blk frays. Biss. f.e.r.e. in 60% zone. Fin. BV



Rock Description				Alteration Parameters (%)										Comments									
St	Com	Grs	Text Co Alt	Name1	B	A1	F	A2	Qtz	Cal	Ank	%	Py		Po	Cpy	Sph	Asp	Mt	RQ	Sampl #	Wth	
																							In ch I.F. host - wks mod. magnetite
19.5	SS	fg	hard gy	IFcal	B	SS	Y	6S	20	50			2.5		.10					14258	1.0		IF chloritic + fine grained magnetite. Mod-st magnetite; alt - coarse veins. Sph - wks - yell alteration haloes, diss - ag to mag - py in carbonate in ch (labeled thin in py in ch (bt?)) - wks form - veins enhanced.
20.0	SS	fg	hard gy	IFcal	B	SS			0.5				2.0							14259	0.5		Iron formation - chl + bt. Folding - mod - str magnetite; see alt - lath I.F. folded GVS
21.0	SS	fg	hard gy	IFcal	O	SS						.10	.10							14260	1.0		IF chloritic - with 5-10% cse grains; local thin bands mag part; strongly magnetic.
21.5	SS	fg	hard gy	GN					50	50			1.5		0.5					14261	0.5		GN - folded in I.F. - ag - c.g. - wks - mag - py in vein + matrix. Thin red-brown sph bands in matrix. Matrix relatively hard to scratch.
22.0	SS			IFcal					15	0.5			3.0							14262	0.5		Mod - str magnetic - chl + bt. folded GVS - py to c.g. mod - wks py
22.5	SS			IFcal	O	SS			10	50			3.0		0.2					14263	0.5		Mixed IFcal + lath mod half. Folded GVS (0.5) veins
23.0	SS			IFcal					12	2.0			1.0							14264	0.5		IF chl - but bleached lath - wks - veins on GVS, chl + py alt wks. GVS, diss - ag, wks in light matrix. Mod - str magnetic - lath GN - wks - bt. - lath form part (piss 2.5?)
24.0	SS			GN	B	SS			15				3.0							14265	1.0		GVS. Mod + calcite - veins enhanced part. Mod diss out in chalc.



Dist	Rock Description				Alteration Parameters (%)										Comments									
	Com	Grs	Text	Co	Alt	Name1	B	A1	F	A2	Qtz	Cal	Ank	%		Py	Po	Cpy	Sph	Asp	Mt	RQ	Sampl #	Wth
2450	SS	fg	lnd	gn	fa	flg	B	66			0.5	0.25			0.5							14266		Matrix = IF chl (mod-str magnetite) Interbedded - felsic tuff - OE (gray) 1/2" OE, bands of light green - yellow calcs, mod. magnetite.
2500	SS	fg	lnd	gy	chl	IFchl	B	50			50				.10							14267		IF chl - mod-str magnetite chert is chl + siltitic.
2600				gy	chl	IFchl				0.75					0.5	0.5						14268		IF chl - 17% garnets, size 0.5 (40) Colorless cov. of 0.2-0.3 - local wsp. chloritoid. Abs in chl-rich/mt sediment.
2650						IFchl				1.0					0.5							14269	0.5	garnet seen
2700						"				1.0					0.5							14270	0.5	Calcite veins 2-5 inches - followed by chl & chloritoid. Garnets in chl-rich areas (1-5%), mod-str magnetite.
2750	SS		lnd		chl	IFchl	b	60	V	90	5	1.0			0.2	1.5	0.2					14271	0.5	IF chl - strongly magnetite & garnet (1-5%) gn-banded
2800	"	"	"	"	"	"	B	50		5	1.5				1.0	0.2						14272	0.5	
2850	"	"	"	"	chl	"				20	0.5											14273	0.5	1-2% mag. garnets
2900	"	"	"	"	"	"				10	4.0											14274	0.5	mod-str magnetite
3050	SS		"		chl	IFchl	B	65			3.0											14275	1.5	
3100			"		chl	"	B	60			2.5				.10							14276	1.5	IF chl - whitish carbonate speckled. Local chert like brown in calcite veins. Mod. magnetite.
3350	SS	fg	lnd		chl	fl	B	65		0.5	1.0				.10							14277	1.5	Interbedded tuff - chl + ft - mt - mod. magnetite. Plus chl IF. *
3400	"	"	"	"	chl	fl	B	60		0.5	1.5											14278	1.5	Local calcite veins / calcite veins - green X-rayed. + local garnets with coarse carbonate + local garnets. X-rayed. chert is mt-mod. carb. speckled.
3500	"	"	"	"	chl	fl				0.2	0.2											14279	0.5	
3650	SS	fg	lnd	gy	chl	IFchl	B	65		3.0	2.0											14280	1.0	IF chl - mod-str magnetite, chl + ft









Rock Description			Alteration Parameters (*)																						
lst	Com	Grs	Text	Co	Ait	Name1	B	A1	F	A2	Qtz	Cal	Ank	*	Py	Po	Cpy	Sph	Asp	Mt	RQ	Sampl#	Wth	Comments	
62.0	SS	fg	sd	gy	hem	4T	B	SS			2.5	1.5			0.5							14297	1.5	Intermed. Jct / IF ch (?)	
63.0						4T																14298	1.0	Md. magnetic. Pink stained	
64.0						4T					0.5											14299	1.0		
65.0	SS	fg	sd	gy	als	IFcal					0.2	0.2			0.2							14300	1.0	IFcal - dk green-ilk, magnetic	
66.5						"																14301	1.5	(gy) with alteration as	
68.0	S	fg	sd	wk	als	"																14302	1.5	cracked subround grains and	
69.5						"																14303	1.5	local patches (clasts) with diffuse	
																									magnetic patches with a pinkish
																									green tint local to pink granit
																									in fabric - not even; poss
																									mineral granules in elct; patches
																									local pop (dissolved) in patches
71	SS	fg		gy	als	IFcal	B	TD			1.0				1.0							14304	1.5	IFcal - gy magnetic - alteration	
72.02						IFcal	B	TD			0.5				1.0							14305	1.52	local - strongly Disaggrate. local	
73.7						A2zone									1.5							14306		alteration	
																									ALTERED ZONE - pink gran - work
																									fg - calc alteration zkt - patchy
																									IF, local magnetic due to dks
74.5A	SS	fg	sd	gy	als	IFcal	B	TD			0.5	0.5			0.5							14307		IFcal - magnetic, alteration zkt	
75.0						A2zone					0.5	0.5										14308		pink sandy	
																									local stained WHITE zkt - pink tint
75.5	S	fg	sd	pk	hem	A2zone	B	TD			3.0	1.0										14309		MD. magnetic	
76.0																							14310		ALTERED ZONE - Patchy
76.5						A2zone					5.0	1.5			1.5							14311			
77.0																							14312		why here: local magnetic
77.6	S	fg	sd	pk	hem	A2zone					15.0	10.0			3.5							14313		10% patchy - dk to calc + fg - calc	
																									gy dks. Hem. ilk brown.
78.5	S	fg	sd	pk	hem	A2zone					5.0	4.0			1.0							14314		ALTERED ZONE - it was magnetic -	
																									hem. Hem. Frn. local ser. alt beds
																									so calc
79.0	S	fg	sd	pk	als	IFcal					1.0	1.0			0.5							14315		IFcal + hem F. calc. local granit	
																									local blue ss. zone; local - dr. magnetic







Dist	Rock Description				Structure							Alteration Parameters (*)										Comments			
	Com	Grs	Text	Co	Alt	Name1	B	A1	F	A2	Qtz	Cal	Ank	%	Py	Po	Cpy	Sph	Asp	Mt	RQ		Sampl #	Wth	
1510	S	Very	bed	gy	SA	57	B	80			0.2				10							14339		Tuffaceous sediment? U fine scattered with fine duss. py. calcules in white sil with 4-5 cm wide in hole - also weak brown in hole - see scattered blue QZ's in sil - hole - hole effect by 10-15. small 1-4 cm LH effect; after hole effect causes pseudo white effect. Graded - into what want suggests - tops up hole to north.	
1600	S	Very	bed	gy	SA	41									10							14340		Informed Lepilli Tuff - Russell Sltp (cc. sediment) ± 1-1.5% blue QZ: mod. str. magnetic due to dis. brown. Mt., ubiquity of clasts + silts brown clasts; pink silts with QZ. wt. mod. magnetic - local bands of albite.	
1715	S	Very	bed	gy	SA	41	B	75		0.5					10							14341			
1910	S	Very	bed	gy	SA	41				0.2					24							14342			
1916	S	Very	bed	gy	SA	57				5.0	1.5				0.2							14343			Tuff - sediment (cc. sand) chlor + biotite, folded on
2000										90	1.5				1.0							14344			
2016										80	1.5				2.0							14345			Quartz vein (calcules) - heavy ch. inclusions + pink albite local dissem. Mt in albite / carbonate.
2220	S	Very	bed	gy	SA	41				0.2	0.2				10							14346			Informed Lepilli Tuff
2255										200					10							14347			
2355										0.2					10							14348			mod. magnetic clasts and O.S. seen and subrounded; sp in thin bands
2510										0.3					20							14349			mod. - magnetic - mod. brown.
2665	S	Very	bed	gy	SA	41	B	80		1.5					10							14350			Informed Lepilli - (green) Tuff brownish, local clast 3
2810										0.15	0.10				10							14351			









List	Rock Description				Alteration Parameters (*)										Structure	Comments								
	Com	Grs	Text	Co	Alt	Name1	B	A1	F	A2	Qtz	Cal	Ank	+			Py	Po	CPY	Sph	Asp	Mt	RQ	Sampl #
181.50	S	fg		gy	chl	414p	67k				2.5	1.0		MS	1.5	1.0						14381		Inferred. Tuff - salt + chl + OE gy with chl, pot cells + mineral formation + epid (?); chl fractures in large area.
182.55				gy	chl	414p	V70			950			MS	20		(1-2% humm.)						14382		
189.30	S	long	hard	gy	chl	414p	670			0.10												14383	67k	Inferred. Tuff - OE (blues gang) + white. For porphy. 1-15% Combined: local streaks of brown chl. Mk-mod. argentic due to wet spreading Pb. shield (epidite)?
192.0	S	long	hard	gy	chl	414p	670			0.20					0.20							14384	77k	Inferred. Tuff - porphy. as above. minor gy + py; wk-mod argentic due to dissemin. of epidite (fine)
197.50				chl	gy		V70			750	1.0		MS	0.5	1.0							14385		Argentic. Minor with local thin portions of black tourmaline + chlorite in 4' unit, mod. argentic due to dissemin. of epidite
197.70	S	long	hard	gy	chl	414p	670								0.5							14386		Inferred - false bed - porphyritic to OE + white albite (10-15% combined); mod. argentic
200.5	S	long	hard	pk	hem	414p									0.5							14387		Hemichal / oxidized porphy. Inferred - false bed. 1/5 py epid in late fractures; fine to coarse mod. albite
201.5	S	fg		gy	chl	414p				0.10			(mod. epid)		0.10							14388		1% epid fractures - wk-mod argentic white hem - epid form. 10-20% hem. ALBINATION + py on edge of 6' bed chl + Hem - str. argentic
202.0	S			pk	hem	414p	B70			0.10					1.0							14389		
202.5	S			pk	hem	414p	B70								2.0							14390		
203.0	S			chl			B70															14391		



Dist	Rock Description				Alteration Parameters							RQ	Samp1 #	Wth	Comments														
	Com	Grs	Text	Co Alt	Name1	B	A1	F	A2	Qtz	Cal					Ank	%	PY	Po	Cpy	Sph	Asp	Mt						
2075	S	frag	prop	gy	sil	alt				0.25				0.5											14392			intermed-alkalic Porphy. Epither. Tuff border on whitish plagioclase (1-10%) + 1-4% calcic plagioclase - fine gr. silicified + epithermal epithermal (± 5% clastic - fine gr. silicified) - local magnetic, local silicified - local post-epithermal - local silicification in coarse matrix	
2075	S	frag	prop	gy	sil	alt				0.20				0.10												393			
2105	S	frag	prop	gy	sil	alt				0.20				0.20												394			
2120	S	frag	prop	gy	sil	alt				0.15				0.20												395			
2155	S	frag	prop	gy	sil	alt				0.2				0.10												396			
2155	S	frag	prop	gy	sil	alt				0.2				0.25												14397			
2165	S	frag	prop	gy	sil	alt								0.10												14398			
2180	S	frag	prop	gy	sil	alt								0.5												397			
2195	S	frag	prop	gy	sil	alt								0.10												400			
2210	S	frag	prop	gy	sil	alt				0.20				0.2												14400			
2225	S	frag	prop	gy	sil	alt				0.2 (F)				0.2												14402			
2240	S	frag	prop	gy	sil	alt				0.3				0.3												403			
2255	S	frag	prop	gy	sil	alt								0.10												404			
2270	S	frag	prop	gy	sil	alt								0.15												405			
2285	S	frag	prop	gy	sil	alt				0.20				0.3												406			
2300	S	frag	prop	gy	sil	alt				0.20				0.20												14407			
2315	S	frag	prop	gy	sil	alt				0.25				0.25												14408			
2330	S	frag	prop	gy	sil	alt				0.2				0.30												14409			
2350	S	frag	prop	gy	sil	alt								0.5												14410			
2390	S	frag	prop	gy	sil	alt								0.5												14411			
2390	S	frag	prop	gy	sil	alt								0.5												14412			
2390	S	frag	prop	gy	sil	alt				0.15				0.2												14413			
2405	S	frag	prop	gy	sil	alt								0.2												14414			
2410	S	frag	prop	gy	sil	alt								0.2												14415			
2455	S	frag	prop	gy	sil	alt				0.25				0.25												14416			
2455	S	frag	prop	gy	sil	alt				0.25				0.25												14417			
2455	S	frag	prop	gy	sil	alt				0.10				0.15												14418			
2455	S	frag	prop	gy	sil	alt				0.10				0.15												14419			



Ist	Rock Description				Structure				Alteration Parameters				Cpy Sph	Asp Mt	RQ	Sampl #	Wth	Comments
	Com	Grs	Text	Co Alt	Name1	B	A1	F	A2	Qtz	Cal	Ank						
231.0	S	fg	prop	pk	hem	4Hsp	B	70		.10				.10		14421	3S	hem + silic (wk magnetite)
232.0	S	fg	prop	pk	hem	4Hsp	B	65						.10		14422		hem + silic (wk magnetite)
233.0	S	fg	prop	pk	hem	4Hsp	B	60		0.4				.05		14423		hem + silic (wk magnetite)
234.0	S	fg	prop	pk	hem	4Hsp	B	60		0.5				.15		14424		hem + silic (wk magnetite)
235.0	S	fg	prop	pk	hem	4Hsp	B	60		0.5				.25		14425		hem + silic (wk magnetite)
236.0	S	fg	prop	pk	hem	4Hsp	B	60		0.2				.35		14426		hem + silic (wk magnetite)
237.0	S	fg	prop	pk	hem	4Hsp	B	60		0.1				.15		14427		hem + silic (wk magnetite)
238.0	S	fg	prop	pk	hem	4Hsp	B	60		0.2				.05		14428		hem + silic (wk magnetite)
239.0	S	fg	prop	pk	hem	4Hsp	B	60		0.2				.05		14429		hem + silic (wk magnetite)
240.0	S	fg	prop	pk	hem	4Hsp	B	60		0.2				.05		14430		hem + silic (wk magnetite)
241.0	S	fg	prop	pk	hem	4Hsp	B	60		0.3				.05		14431		hem + silic (wk magnetite)
242.0	S	fg	prop	pk	hem	4Hsp	B	60		0.3				.10		14432		hem + silic (wk magnetite)
243.0	S	fg	prop	pk	hem	4Hsp	B	60		2.0				.15		14433		hem + silic (wk magnetite)
244.0	S	fg	prop	pk	hem	4Hsp	B	60		1.5				.10		14434		hem + silic (wk magnetite)
245.0	S	fg	prop	pk	hem	4Hsp	B	60		2.0				.10		14435		hem + silic (wk magnetite)
246.0	S	fg	prop	pk	hem	4Hsp	B	60		2.0				.10		14436		hem + silic (wk magnetite)
247.0	S	fg	prop	pk	hem	4Hsp	B	60		2.0				.10		14437		hem + silic (wk magnetite)
248.0	S	fg	prop	pk	hem	4Hsp	B	60		2.0				.10		14438		hem + silic (wk magnetite)
249.0	S	fg	prop	pk	hem	4Hsp	B	60		2.0				.10		14439		hem + silic (wk magnetite)
250.0	S	fg	prop	pk	hem	4Hsp	B	60		2.0				.10		14440		hem + silic (wk magnetite)
251.0	S	fg	prop	pk	hem	4Hsp	B	60		2.0				.10		14441		hem + silic (wk magnetite)
252.0	S	fg	prop	pk	hem	4Hsp	B	60		2.0				.10		14442		hem + silic (wk magnetite)
253.0	S	fg	prop	pk	hem	4Hsp	B	60		2.0				.10		14443		hem + silic (wk magnetite)
254.0	S	fg	prop	pk	hem	4Hsp	B	60		2.0				.10		14444		hem + silic (wk magnetite)
255.0	S	fg	prop	pk	hem	4Hsp	B	60		2.0				.10		14445		hem + silic (wk magnetite)









ROYAL OAK ANALYTICAL LABORATORY

CERTIFICATE OF ANALYSIS

EXPLORATION 5600-2703

DATE: Dec 11/92

	SAMPLE NUMBER	Au oz/ton	Au ppb	Ag ppm	Cu ppm	Zn ppm		
1	D-14251	<.001	<35					
2	52	.002	70					
3	53	.001	35					
4	54	<.001	<35					
5	55	.001	35					
6	56	.002	70					
7	57	.015	515					
8	58	.016	550					
9	59	.010	340					
10	60	.001	35	0.6	91.	720.		
11	61	.007	240	1.6	123.	640.		
12	62	.262	-	1.8	41.	150.		
13	63	.013	445	2.2	33.	93.		
14	64	.063	2160	0.4	13.	54.		
15	65	.001	35	2.2	21.	190.		
16	66	.084	2190	0.5	30.	530.		
17	67	.007	240	0.4	89.	230.		
18	68	.001	35	0.7	158.	220.		
19	69	<.001	<35	0.6	75.	210.		
20	70	.006	205	0.7	87.	920.		
21	71	.002	70	1.7	300.	530.		
22	72	.002	70	0.7	99.	320.		
23	73	<.001	<35	0.7	89.	310.		
24	D-14274	.012	410	1.1	146.	330.		

ROYAL OAK ANALYTICAL LABORATORY

CERTIFICATE OF ANALYSIS

EXPLORATION 5600-2703

DATE: DEC 11/92

	SAMPLE NUMBER	Au oz/ton	Au ppb	Au ppm				
1	D-14275	<.001	<35					
2	76	<.001	<35					
3	77	<.001	<35					
4	78	<.001	<35					
5	79	<.001	<35					
6	80	<.001	<35					
7	D-14281	<.001	<35					
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								

ROYAL OAK ANALYTICAL LABORATORY

CERTIFICATE OF ANALYSIS

EXPLORATION 5600-2703

DATE: DEC 10/92

	SAMPLE NUMBER	Au oz/ton	Au ppb	Au ppm	Ag ppm	Cu ppm	Zn ppm
1	D-14282	<.001	<35				
2	83	<.001	<35				
3	84	<.001	<35				
4	85	<.001	<35				
5	86	<.001	<35		0.7	141.	1200.
6	87	<.001	<35				
7	88	<.001	<35				
8	89	<.001	<35				
9	90	<.001	<35				
10	91	<.001	<35				
11	92	<.001	<35				
12	93	<.001	<35				
13	94	<.001	<35				
14	95	<.001	<35				
15	96	<.001	<35				
16	97	<.001	<35				
17	98	<.001	<35				
18	99	<.001	<35				
19	14300	.001	35				
20	01	<.001	<35				
21	02	<.001	<35				
22	03	.001	35				
23	04	.004	135				
24	D-14305	.010	340				

ROYAL OAK ANALYTICAL LABORATORY

CERTIFICATE OF ANALYSIS

EXPLORATION 5600-2703

DATE: Dec 10/92

	SAMPLE NUMBER	Au oz/ton	Au ppb	Au ppm				
1	D-14306	.047	1610					
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								

ROYAL OAK ANALYTICAL LABORATORY

CERTIFICATE OF ANALYSIS

EXPLORATION 5600-2703

DATE: Dec 11/92

	SAMPLE NUMBER	Au oz/ton	Au ppb	Au ppm				
1	D-14307	.002	70					
2	08	<.001	235					
3	09	.006	205					
4	10	.002	70					
5	11	.012	410					
6	12	.003	105					
7	13	.010	340					
8	14	.004	135					
9	15	<.001	235					
10	16	.007	240					
	17	.138	-					
12	18	<.001	235					
13	19	<.001	235					
14	20	<.001	235					
15	21	<.001	235					
16	22	<.001	235					
17	23	<.001	235					
18	24	<.001	235					
19	25	<.001	235					
20	26	<.001	235					
21	27	<.001	235					
22	28	.006	205					
23	29	<.001	235					
24	D-14330	.004	135					



ROYAL OAK ANALYTICAL LABORATORY

CERTIFICATE OF ANALYSIS

EXPLORATION 5600-2703

DATE: Dec 11/92

	SAMPLE NUMBER	Au oz/ton	Au ppb	Au ppm				
1	D-14331	.002	70					
2	32	<.001	<35					
3	33	.005	170					
4	34	<.001	<35					
5	35	<.001	<35					
6	36	<.001	<35					
7	37	.006	205					
8	38	<.001	<35					
9	D-143 39	<.001	<35					
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								

ROYAL OAK ANALYTICAL LABORATORY

CERTIFICATE OF ANALYSIS

EXPLORATION 5600-2703

DATE: DEC 11/92

	SAMPLE NUMBER	Au oz/ton	Au ppb	Au ppm				
1	D-14340	.008	275					
2	41	.003	105					
3	42	<.001	<35					
4	43	<.001	<35					
5	44	<.001	<35					
6	45	<.001	<35					
7	46	.009	310					
8	47	<.001	<35					
9	48	<.001	<35					
10	49	<.001	<35					
11	50	<.001	<35					
12	51	<.001	<35					
13	52	<.001	<35					
14	53	<.001	<35					
15	54	<.001	<35					
16	55	<.001	<35					
17	56	<.001	<35					
18	57	<.001	<35					
19	58	<.001	<35					
20	59	<.001	<35					
21	60	<.001	<35					
22	61	<.001	<35					
23	62	<.001	<35					
24	D-14363	<.001	<35					

ROYAL OAK ANALYTICAL LABORATORY

CERTIFICATE OF ANALYSIS

EXPLORATION 5600-2703

DATE: Dec 11/92

	SAMPLE NUMBER	Au oz/ton	Au ppb	Au ppm				
1	D-14364	<.001	<35					
2	65	.017	585					
3	66	<.001	<35					
4	67	.001	35					
5	68	.001	35					
6	69	<.001	<35					
7	70	<.001	<35					
8	71	.001	35					
9	72	<.001	<35					
10	73	<.001	<35					
11	74	<.001	<35					
12	75	<.001	<35					
13	76	<.001	<35					
14	77	<.001	<35					
15	78	<.001	<35					
16	79	<.001	<35					
17	80	<.001	<35					
18	81	<.001	<35					
19	82	<.001	<35					
20	83	<.001	<35					
21	84	<.001	<35					
22	85	<.001	<35					
23	86	<.001	<35					
24	D-14387	<.001	<35					

ROYAL OAK ANALYTICAL LABORATORY

CERTIFICATE OF ANALYSIS

EXPLORATION 5600-2703

DATE: DEC 11/92

	SAMPLE NUMBER	Au oz/ton	Au ppb	Au ppm				
1	D-14388	<.001	<35					
2	89	<.001	<35					
3	90	<.001	<35					
4	91	<.001	<35					
5	92	<.001	<35					
6	93	<.001	<35					
7	D-143 94	<.001	<35					
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								

ROYAL OAK ANALYTICAL LABORATORY

CERTIFICATE OF ANALYSIS

EXPLORATION 5600-2703

DATE: DEC 14/9

	SAMPLE NUMBER	Au oz/ton	Au ppb	Au ppm				
1	D-14395	<.001	<35					
2	96	<.001	<35					
3	97	<.001	<35					
4	98	<.001	<35					
5	99	<.001	<35					
6	14400	<.001	<35					
7	01	<.001	<35					
8	02	.028	960					
9	03	<.001	<35					
10	04	<.001	<35					
11	05	<.001	<35					
12	06	<.001	<35					
13	07	<.001	<35					
14	08	.002	70					
15	D-14409	<.001	<35					
16								
17								
18								
19								
20								
21								
22								
23								
24								

ROYAL OAK ANALYTICAL LABORATORY

CERTIFICATE OF ANALYSIS

EXPLORATION 5600-2703

DATE: DEC 15/92

	SAMPLE NUMBER	Au oz/ton	Au ppb	Au ppm				
1	D-14410	.003	105					
2	11	.002	70					
3	12	.002	70					
4	13	.002	70					
5	14	.002	70					
6	15	.007	240					
7	16	.002	70					
8	17	.001	35					
9	18	.005	170					
10	19	.027	925					
	20	.005	170					
12	21	.001	35					
13	22	.002	70					
14	23	.003	105					
15	24	.005	170					
16	25	.005	170					
17	26	.012	410					
18	27	.004	135					
19	28	.005	170					
20	29	.003	105					
21	30	.012	410					
22	31	.007	240					
23	32	<.001	<35					
24	D-14433	.002	70					

ROYAL OAK ANALYTICAL LABORATORY

CERTIFICATE OF ANALYSIS

EXPLORATION 5600-2703

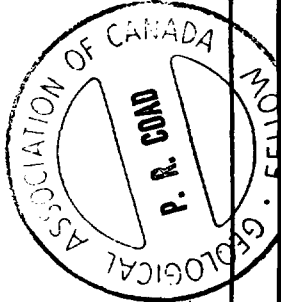
DATE: DEC 15/92

	SAMPLE NUMBER	Au oz/ton	Au ppb	Au ppm				
1	D-14434	<.001	<35					
2	35	<.001	<35					
3	36	.004	135					
4	37	.001	35					
5	D-14438	.006	205					
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								









RADER RESOURCE CORPORATION / MIRWAM JOINT VENTURE  
 Project No: 2703 Category: Page 1 of 4

HOLE #: [REDACTED] NORTHING: [REDACTED] EASTING: [REDACTED] LENGTH: [REDACTED]  
 MTS: [REDACTED] MTS: [REDACTED]  
 Drilled by: Bradley Bros  
 Claim: L-625655 Core Stored: [REDACTED] Logged by: P. COOD  
 Start: DEC-7-1992  
 Finish: DEC-9-1992

1st Azim Dip Dist Azim Dip Dist Azim Dip  
 200 205 -43  
 200 205 -43  
 200 205 -43  
 Purpose/Results: To test old-bearing structure 200 m to the west of fence marked by MK92-7 and 88-3 on L-103-100 W. Intersected S. structural zone AT 29.0-31.75 m (10-7m) with 32% 072 grad 5% Py. No other alteration observed. Only 235 gpb in 360 gpb. See log for details. 1:5000

1st	Com	Grs	Text	Co	Alt	Name	Structure				Alteration Parameters				Py	Po	Cpy	Sph	Asp	Mt	RQ	Sampl #	Wth	Comments	
							B	A1	F	A2	Cal	Ank	%	Py											Py
19.0																									
17.5	S	fg		pk hem	41gp	41gp	6.70	1.0	1.0	0.5	0.50	0.50									14454	2.5		Alteration - Felsic Porphyritic (QP) with silicates + hematite; alk-mud. very fine due to fine grain. diss. alk. Res. structural lapilli	
20.0	S	fg	hem	gy	41gp	41gp	6.52	1.5	1.5	0.5	0.10	0.10										14455	3.5		Green due to alk specking; local folding
21.5			hem	gy	41gp	41gp	6.70	0.5	0.5	0.10	0.10	0.10										14456			Locky due to flat joints
24.5	S	fg	hem	gy	41gp	41gp	6.70	0.5	0.5	0.15	0.15	0.15										14457			mod. micaceous
26.0	S	fg	hem	gy	41gp	41gp	6.70	0.10	0.10	0.10	0.10	0.10										14458			local waste - glass
27.0	S	fg	hem	gy	41gp	41gp	6.72	1.0	1.0	0.20	0.20	0.20										14459			mod. micaceous
28.0	S	fg	hem	gy	41gp	41gp	6.72	1.0	1.0	0.20	0.20	0.20										14460			Intermed. felsic Qzst on sed - obs. hem
29.0	S	fg	hem	gy	41gp	41gp	6.70	1.5	1.5	0.5	0.5	0.5										14461			Iron fm (mod. micaceous) Finely banded
30.0	S	fg	hem	gy	41gp	41gp	6.70	1.5	1.5	0.5	0.5	0.5										14462	0.5		Fined streaked lapilli
31.0	S	fg	hem	gy	41gp	41gp	6.70	15.0	2.0	2.5	2.5	2.5										14463	1.0		Filled chamber - white-splk-alk. folded 072
32.0	S	fg	hem	gy	41gp	41gp	6.70	10.0	3.5	3.5	3.5	3.5										14464	1.0		hem is hematitic with red. fg. - ss. v. g. g. py
33.0	S	fg	hem	gy	41gp	41gp	6.70	9.5	3.5	3.5	3.5	3.5										14465	1.0		local stem and soil / alk inclusions in 802
34.0	S	fg	hem	gy	41gp	41gp	6.70	4.5	3.5	3.5	3.5	3.5										14466	1.0		filled 072 + hem etc. alk carbon (1000)
35.0	S	fg	hem	gy	41gp	41gp	6.70	4.5	3.5	3.5	3.5	3.5										14467	1.0		Assemblage is bleached with 10% gpb
35.0	S	fg	hem	gy	41gp	41gp	6.70	4.5	3.5	3.5	3.5	3.5										14468	1.0		hem with green alk. (sulfid)
35.0	S	fg	hem	gy	41gp	41gp	6.70	4.5	3.5	3.5	3.5	3.5										14469	1.0		local alk / gpb alk. sulfid
35.0	S	fg	hem	gy	41gp	41gp	6.70	4.5	3.5	3.5	3.5	3.5										14468	1.0		fg (probably) with hem. alk / sed with







Dist	Rock Description				Structure				Alteration Parameters (*)						RQ	Sampl #	Wth	Comments					
	Com	Grb	Text	Co	Alt	Named	B	A1	F	A2	Qtz	Cal	Amk	+					Py	Po	Cpy	Sph	Asp
52.0	SS	fg	bed	PK	hom	4Hgp									0.25						15258		Bed host E-pink calcite + epidote, w/od. mtk
60.0	fg		gy	dal	4Hgp					0.50					0.50						15259	8.0	Approx 3% albite structure lapilli with host calcite, mtk, horn. Laid alk (hard) bands w/oa out. calc.
61.5	fg	bed	PK	hom	4Hgp					0.5					0.20						15260 15261		bed host calcite, fractured 25-30% calcite (fractured - mtk)
63.5	"	"	gp	hom	4Hgp					0.3											15262		mod. magmatic, minor flow obs
65.0	"	"	PK	"	"					0.5					0.5						15263		mod. magmatic
66.5	S	fg	bed	PK	"					0.5					0.10						15264		
68.0	"	"	PK	"	"					0.5					0.10						15265		
69.5	"	"	PK	"	"					0.5					0.10						15266		± 3% albite Xcls; calcite
73.5	fg	prep	gy	dal	4Hgp										0.10						15267	4.0	altered, 1-20% mtk, w/od. mtk, w/od. horn
74.0	fg	prep	PK	hom	4Hgp					2.0					2.0-2.5						15268		mtk magmatic
74.5	fg	prep	PK	hom	4Hgp					0.1					3.0						15251		Approx 1-2.5% alb. - local horn/blebs local green mica zfs in alt. beds
75.5	fg	prep	"	"	"					2.5					3.0						15270		10% SS Kals shc. / fractured; 10 cm sample dark calcite / good texture / py vein + 0.5 cm interval of bleaching / silicification / py
77.0	fg	prep	PK	hom	4Hgp					0.5					0.40						15271		1-15% alb. Xcls (se-eliminated), mtk, mtk
77.7	"	"	"	"	"					1.0					0.3						15272		green-mtk, 1-8% alb 3' blue-pink brown silica on calcite cells
78.5	"	"	"	"	"					2.5					0.5						15273		shc. more diffuse than v. good fg. mg. py: mod. mtk, mtk, mtk bleached silicas
79.0	vtg	vd	hom	4Hgp						1.5					1.0						15274		11 cm pitted silica / albite vein (fractured) with v. good py; ± 0.5% alb. Xcls.



Dist	Rock Description				Structure				Alteration Parameters (%)				Wth	Comments								
	Com	Grs	Text	Co Alt	Name1	B	A1	F	A2	Qtz	Cal	Ank			%	Py	Po	Cpy	Sph	Asp	Mt	RQ
90.5		frag	prop	gp						0.10	0.10			0.20							15275	albitized. 1-10% dk kaphli mod maghite
81.5		prop	gy	chl	411gp					0.5	0.5		four	0.10							15276	locally chert 1-15% alk kaphli mod maghite
82.0										0.5	1.5			0.30							15277	locally (mod) ore
84.5										0.5	1.5			0.10							218	
85.4										0.5	1.5			0.30							15275	
86.5										0.5	1.0			0.10							15280	
87.0	SS								(4)	0.5	1.0			0.40							15281	
88.0														1.0							15282	1-4% alk kaphli & wldy kaphli mod maghite
90.5	SS	frag	prop	gy	chl	411gp				0.5	1.5			2.0							15283	mod maghite (chertoid)
91.0										0.5	1.5			1.5							15284	1-4% alk kaphli
93.0		frag	prop	gy	chl	411gp	F7S			0.10				0.10							15285	alk kaphli, mod maghite, siliceous mod maghite, calcite & chert mod maghite
96.5		frag	prop	py	hem	411gp	F7D			0.5				0.10							15286	locally (mod) ore; 1-20% alk kaphli mod maghite & calcite in matrix 1-5% alk kaphli
98.0		frag	prop	gy	chl	411gp	F7D							0.10							15287	
99.5		frag								2.5				0.10							15288	green-siliceous buff-poss calc(?) 1-2% alk kaphli, chert
101.0										0.5				0.20							15289	
102.5										2.0	2.5			0.5							15290	10 cm patch of alk kaphli. Mod to mod chert locally 25% chert 2 wk from base, 17% alk mod maghite. 30% wldy alk
104.0										1.5				0.5							15291	hem in host (kaphli) from thin ore
105.5														0.5							15292	
107.0										0.4				0.5							15293	1-10% alk
108.5										0.10	0.10			1.0							15294	1-25% alk (alk kaphli) - mod white; siliceous wldy hem
109.5										0.10	0.10			0.5							15296	
110.0		frag												1.0							15297	green-siliceous, wldy ore alk - mod kaphli mod hem
113.0		frag	prop	py	hem	411gp	F7E			0.5				0.40							15298	mod maghite, 1-15% py-alk kaphli; siliceous hem
114.5										0.5	2.0			0.25							15299	1-15% alk kaphli
115.0														0.50							15300	1-20% alk kaphli, mod-alk maghite alk kaphli - mod to pale green





Dist	Rock Description				Alteration Parameters (%)										Comments							
	Com	Grs	Text	Co Alt Name1	B	A1	F	A2	Qtz	Cal	Ank	%	Py	Po		Cpy	Sph	Asp	Mt	RQ	Sampl #	Wth
125.0	fg		part	gr	15	75			0.35	0.2			0.10							153014		1-3% els, 22% leplli, 4% quartz - mik non-c. 60% P 118.5. 70% silice (60%) with 0.2% quartz in P 125.20.
126.00	fg		part	gr				0.5					0.10							153017		1-7% silice Xfals - 0.2%
126.12	S			part	10	70			0.5				10							15303		medium fine in spot/silice/heads medium
128.0	fg			part				0.10					0.5							15304		1-3% silice, 20% quartz, 10% mica green quartz (10%) 2 patches els silice. (10% white quartz in 10% mica partly medium) 10% mica
128.5	fg			part				0.20					0.4							15305		same as 128.0; 10% mica 0.2% calcite - medium vein 2% mik in vein (SIT)
130.0	fg			part				7.0	1.5				1.5	0.10						15306		Residual Sfr. siliceous (dissected patches) heads 1-15% fg - c.g. silice Med. magnetic
130.5	fg			part				0.75					0.5							15307	0.1	
131.0	fg			part				1.5	3.5				0.10							15308		minor silice Xfals
131.5	fg			part				1.5	1.5				0.10							15309		0.5-1.0% silice; siliceous medium abundant - dissem. Xfals + patches
131.70	fg			part				1.5	1.5				0.5							15310		
131.90	fg			part				1.5	1.5				0.5							15311	0.30	
130.5	fg			part				0.10					0.20							15312	0.8	mf - med magnetic; 1-15% med. grain silice; med blue ore
131.0	fg			part				2.0	1.5				0.40							15313		Siliceous, dk. cal. buff - minor blue ore + silice Partic. thin (+) buff - head c. sil. 100%
131.50	fg			part				1.5	1.0				1.0							15314		minor alkali phase bleached halos (SIT veins) finely banded, cld + sil. buff
132.0	fg			part				3.0	2.5				0.5							15315		
132.0	fg			part				3.0	2.5				0.5							15316		
132.5	fg			part				12	1.5				2.0							15317		
133.0	fg			part				5	3.5				2.5							15318		
133.0	fg			part				40	4.5				1.5	5.0						15319		local green mica in sil. halo; silice X-charge fine to med. sized stuff
133.0	fg			part				4.5	2.5				2.0	2.0						15320		
133.0	fg			part				4.5	2.5				2.0	2.0						15321		



Dist	Rock Description					Structure					Alteration Parameters (%)					RQ	Sampl #	Wth	Comments				
	Com	Grs	Text	Co	Alt	Named	B	A1	F	A2	Qtz	Cal	Ank	%	PY					PO	Cpy	Sph	Asp
1610	SS	vg	chl	u	u					0.5				0.5	vfg						15322		Silicious (dark) < 0.5% det. cl. 1-1.5% fine phos; det. 300um. Pk. of albite not to coat mount. wk. m. det. 100um.
1620	SS	u	u	u	u					1.0	1.5			0.4	u						15323		
1630	SS	u	u	u	u					1.0	3.0			0.4	u						15324		
1640	SS	u	u	u	u					1.0	3.0			0.4	u						15325		
1650	SS	u	u	u	u					1.0	0.5			0.5	u						15326		
1660	SS	u	u	u	u					1.0	0.5			0.5	u						15327		
1670	SS	u	u	u	u					1.0	0.5			0.5	u						15328		
1680	SS	u	u	u	u					1.0	0.5			0.5	u						15329		
1690	SS	u	u	u	u					1.0	0.5			0.5	u						15330		
1700	SS	u	u	u	u					1.0	0.5			0.5	u						15331		
1710	SS	u	u	u	u					1.0	0.5			0.5	u						15332		
1720	SS	u	u	u	u					1.0	0.5			0.5	u						15333		
1730	SS	u	u	u	u					1.0	0.5			0.5	u						15334		
1740	SS	u	u	u	u					1.0	0.5			0.5	u						15335		
1750	SS	u	u	u	u					1.0	0.5			0.5	u						15336		
1760	SS	u	u	u	u					1.0	0.5			0.5	u						15337		
1770	SS	u	u	u	u					1.0	0.5			0.5	u						15338		
1780	SS	u	u	u	u					1.0	0.5			0.5	u						15339		
1790	SS	u	u	u	u					1.0	0.5			0.5	u						15340		
1800	SS	u	u	u	u					1.0	0.5			0.5	u						15341		
1810	SS	u	u	u	u					1.0	0.5			0.5	u						15342		
1820	SS	u	u	u	u					1.0	0.5			0.5	u						15343		
1830	SS	u	u	u	u					1.0	0.5			0.5	u						15344		
1840	SS	u	u	u	u					1.0	0.5			0.5	u						15345		
1850	SS	u	u	u	u					1.0	0.5			0.5	u						15346		
1860	SS	u	u	u	u					1.0	0.5			0.5	u						15347		
1870	SS	u	u	u	u					1.0	0.5			0.5	u						15348		
1880	SS	u	u	u	u					1.0	0.5			0.5	u						15349		
1890	SS	u	u	u	u					1.0	0.5			0.5	u						15350		
1900	SS	u	u	u	u					1.0	0.5			0.5	u						15351		
1910	SS	u	u	u	u					1.0	0.5			0.5	u						15352		
1920	SS	u	u	u	u					1.0	0.5			0.5	u						15353		
1930	SS	u	u	u	u					1.0	0.5			0.5	u						15354		
1940	SS	u	u	u	u					1.0	0.5			0.5	u						15355		
1950	SS	u	u	u	u					1.0	0.5			0.5	u						15356		
1960	SS	u	u	u	u					1.0	0.5			0.5	u						15357		
1970	SS	u	u	u	u					1.0	0.5			0.5	u						15358		
1980	SS	u	u	u	u					1.0	0.5			0.5	u						15359		
1990	SS	u	u	u	u					1.0	0.5			0.5	u						15360		
2000	SS	u	u	u	u					1.0	0.5			0.5	u						15361		

15359-15361: det. 100um. 15359: det. 100um. 15360: det. 100um. 15361: det. 100um.



ROYAL OAK ANALYTICAL LABORATORY

CERTIFICATE OF ANALYSIS

EXPLORATION 5600-2703

DATE: Dec 15/92

	SAMPLE NUMBER	Au oz/ton	Au ppb	Au ppm				
1	D-14439	<.001	<35					
2	40	<.001	<35					
3	41	<.001	<35					
4	42	<.001	<35					
5	43	.002	70					
6	44	<.001	<35					
7	45	<.001	<35					
8	46	.006	205					
9	47	<.001	<35					
10	48	<.001	<35					
11	49	.003	105					
12	50	<.001	<35					
13	51	<.001	<35					
14	52	.002	70					
15	53	<.001	<35					
16	54	<.001	<35					
17	55	<.001	<35					
18	56	<.001	<35					
19	57	.002	70					
20	58	.002	70					
21	59	<.001	<35					
22	D-14460	<.001	<35					
23								
24								

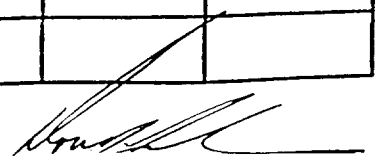
ROYAL OAK ANALYTICAL LABORATORY

CERTIFICATE OF ANALYSIS

EXPLORATION 5600-2703

DATE: DEC 15/92

	SAMPLE NUMBER	Au oz/ton	Au ppb	Au ppm				
1	D-14461	.012	410					
2	62	.001	35					
3	63	.003	105					
4	64	.001	35					
5	65	.018	615					
6	66	.004	135					
7	67	.005	170					
8	68	.004	135					
9	69	.007	240					
10	70	.008	275					
11	71	.007	240					
12	72	.022	755					
13	73	.008	275					
14	74	.006	205					
15	75	.001	35					
16	76	.008	275					
17	D-14477	.009	310					
18								
19								
20								
21								
22								
23								
24								



ROYAL OAK ANALYTICAL LABORATORY

CERTIFICATE OF ANALYSIS

EXPLORATION 5600-2703

DATE: Dec 15/92

	SAMPLE NUMBER	Au oz/ton	Au ppb	Au ppm			
1	D-15251	.002	70				
2	52	.001	35				
3	53	<.001	<35				
4	54	<.001	<35				
5	55	<.001	<35				
6	56	.006	205				
7	57	<.001	<35				
8	58	.002	70				
9	59	<.001	<35				
10	60	<.001	<35				
	61	.005	170				
12	62	<.001	<35				
13	63	<.001	<35				
14	64	<.001	<35				
15	65	<.001	<35				
16	66	<.001	<35				
17	67	.020	685				
18	68	.055	1890				
19	69	.002	70				
20	70	.031	1060				
21	71	.001	35				
22	72	.001	35				
	73	.006	205				
24	74	.007	240				



ROYAL OAK ANALYTICAL LABORATORY

CERTIFICATE OF ANALYSIS

EXPLORATION 5600-2703

DATE: DEC 16/92

	SAMPLE NUMBER	Au oz/ton	Au ppb	Au ppm				
1	D-15275	.032	1100					
2	76	.008	275					
3	77	.005	170					
4	78	.003	105					
5	79	.002	70					
6	80	.003	105					
7	81	.010	340					
8	82	.001	35					
9	83	<.001	<35					
10	84	.002	70					
11	85	<.001	<35					
12	86	.001	35					
13	87	.010	340					
14	88	.008	275					
15	89	.002	70					
16	90	.003	105					
17	91	.003	105					
18	92	.002	70					
19	93	<.001	<35					
20	94	.001	35					
21	95	.001	35					
22	96	.016	550					
23	97	.024	825					
24	D-15298	.025	855					

ROYAL OAK ANALYTICAL LABORATORY

CERTIFICATE OF ANALYSIS

EXPLORATION 5600-2703

DATE: Dec 16/92

	SAMPLE NUMBER	Au oz/ton	Au ppb	Au ppm				
1	D-15299	.003	105					
2	15300	.005	170					
3	01	.017	585					
4	02	.006	205					
5	03	.008	275					
6	04	.010	340					
7	05	.004	135					
8	06	.020	685					
9	07	.013	445					
10	08	.002	70					
11	09	.006	205					
12	10	.006	205					
13	11	.005	170					
14	12	.002	70					
15	13	.002	70					
16	14	.004	135					
17	15	.002	70					
18	16	.008	275					
19	17	.005	170					
20	18	.002	70					
21	19	.001	35					
22	20	.003	105					
23	21	.001	35					
24	D-15322	.002	70					

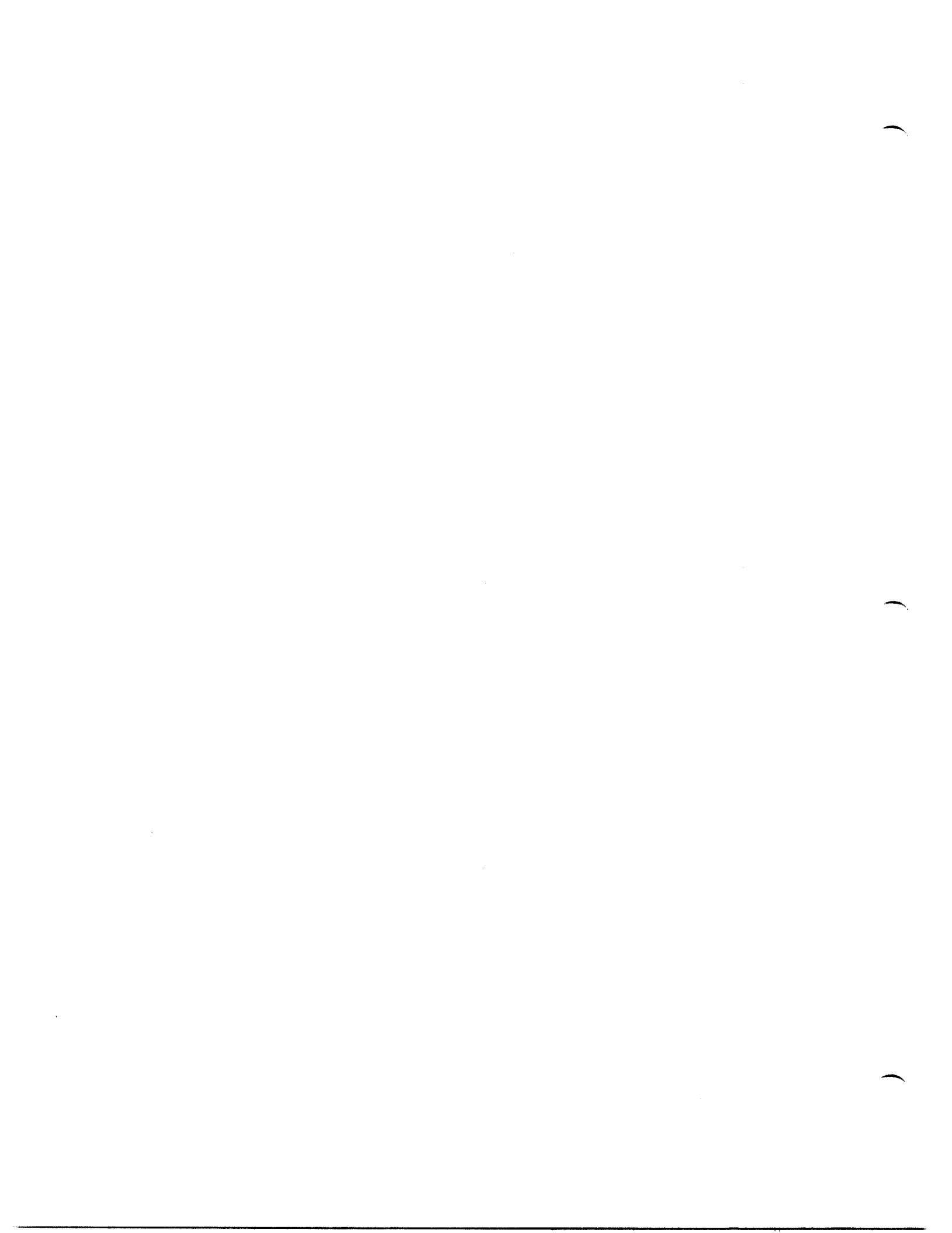
ROYAL OAK ANALYTICAL LABORATORY

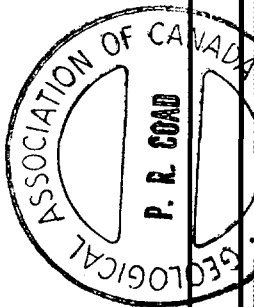
CERTIFICATE OF ANALYSIS

EXPLORATION 5600-2703

DATE: Dec 16/92

	SAMPLE NUMBER	Au oz/ton	Au ppb	Au ppm				
1	D-15323	.003	105					
2	24	.001	35					
3	25	<.001	<35					
4	26	<.001	<35					
5	27	<.001	<35					
6	28	<.001	<35					
7	29	<.001	<35					
8	30	<.001	<35					
9	31	.005	170 <del>35</del>					
10	32	<.001	<35					
11	33	.001	35					
12	34	.004	135					
13	35	.005	170					
14	36	.001	35					
15	37	<.001	<35					
16	38	.002	70					
17	39	<.001	<35					
18	40	<.001	<35					
19	41	<.001	<35					
20	42	.002	70					
21	43	<.001	<35					
22	44	.001	35					
23	D-15345	.001	35					
24								





TRADER RESOURCE CORPORATION / MIKWAM JOINT VENTURE  
 Project No: 2703 Category: MTS: BL 36-1005 08-8 N  
 Page 1 of 16

HOLE #: [REDACTED] NORTHING: [REDACTED] EASTING: [REDACTED] LENGTH: [REDACTED]  
 TWP: H2111211 Drilled by: Bradley Bros. (Mikwam) Logged by: R. COAD Start: DEC 10, 1992  
 Claim: L-2873, 2874, 2875 Core stored: [REDACTED] Casing/Size: 5/8" (AW. left in top) Finish: DEC 16, 1992

Dist	Asim	Dip	Dist	Asim	Dip	Dist	Asim	Dip
1	80	-48	300	201	-46			
50	187	-44	400	265	-47			
100	194	-46.5						
200	194	-46						

Rock Description		Structure					Alteration Parameters					Comments										
Com	Grs	Text	Co	Alt	Name	B	A1	F	A2	Qtz	Cal		Ank	Py	Po	Cpy	Sph	Asp	Mt	RQ	Sampl #	Wth
	fg	mp	gy	ms	41FP					0.25				0.10						15346		NO-SAMPLE ALYTTED INTERMED-FELSIC LAPILLI TUFF - dk due to disson int, chlorite and chert. matrix. wk - mod magetic (1-15% alk. Xpk - obs + local patches). py in matrix + wells of QV; later blue OE
21.5	mp	gy	ms	41FP						2.5	1.5			0.5						15347		
23.0				"						2.5				1.0						34		
24.5				"						2.0				1.0						34		
26				"						0.10				0.5						15360		
27.5				"										0.10						15351		
29.0				"		B70	√	60		3.0				1.0						357		
30.5				"						2.0				1.5						353		
32.0				"						0.5				0.2						354		
33.5				"										0.10						355		
34.95				"						0.2	0.5			0.10						15356		
36.5	fg	mp	gy	ms	41FP					0.40				3.0						15357		
36.50				"						(Pulse)				3.5						15358		
37.50	SS	hd			Q20ME					85.0	5.0			10.0						15359	1.0	
38.0	SS	"			Q20ME					20.0				5.0						15360	5	

only 187 ggs (S.G. 2.65) intersected with Pyrite (2.95) at 127.47 - 127.47 (127.00) 105 ggs, 21 ggs, 21 ggs, 21 ggs.  
 Alteration Parameters: only 187 ggs (S.G. 2.65) intersected with Pyrite (2.95) at 127.47 - 127.47 (127.00) 105 ggs, 21 ggs, 21 ggs, 21 ggs.  
 Comments: NO-SAMPLE  
 ALYTTED INTERMED-FELSIC LAPILLI  
 TUFF - dk due to disson int, chlorite and chert. matrix. wk - mod magetic (1-15% alk. Xpk - obs + local patches). py in matrix + wells of QV; later blue OE  
 Mg-ckl = QV, ± 1-10% lapilliduck  
 0.31-7-31.50 - patch of light green (cont epid?) where alkalis exhibit pink tint  
 ALYTTED TUFF (pinked to white alkali) in 10% green matrix; poss pill-nim(?)  
 34.52(?)  
 MAGNETIC ALKALI (d. blue); wk - mod magetic alkali (alkali) coarsened into matrix?  
 Siliceous.  
 Disturbed by alk chl scattering + 5-10% burned  
 Crested at surface  
 At 34.5 in 072. Host 2m.C.  
 3% disc int in chl host.

TRADER RESOURCE CORPORATION / MIKWAH JOINT VENTURE

Dist	Name1	Sample#	Width	Au (g/T)		Au	Cu		Zn		Pb		ppm			%		
				nfa	cfa		ppb	ppm	ppm	ppm	ppm	ppm	ppm	Ag	Ni	Co	As	SiO2
19.0																		
20.0		15346	1.0	.001		35												
21.5		15347	1.5	.001		35												
23.0		15348	1.5	.001		35												
24.5		15349	1.5	.001		35												
26.0		15350	1.5	.003		105												
27.5		15351	1.5	.003		105												
29.0		15352	1.5	.001		35												
30.5		15353	1.5	.001		35												
32.0		15354	1.5	.001		35												
33.5		15355	1.5	.001		35												
34.5		15356	0.95	.004		135												
35.5		15357	1.55	.002		70												
36.5		15358	1.0	.006		205												
37.5		15359	1.0	.011	Chemical	375												
38.0		15360	0.5	.038		1300												

opt pps

Rock Description										Alteration Parameters (%)										Comments	
Com	Grs	Text	Co	Alt	Name1	B A1	F A2	Qtz	Cal	Ank	+	Py	Po	Cpy	Sph	Asp	Mt	RQ	Sampl#	Wth	
SS	fg	hnd	gv	del	2	F 45		2.5			huv	5.0	0.5	0.45			10		15361	1.5	Fr-Tourmaline - Basalt (Flicker and in hand). Sp in Qtz (local)
SS	fg	hnd	gv	del	2			3.0	MS 2.8	huv	10.0	4.0				20.0			15362	1.5	Local alk feldspar leached to kaolinite
SS	fg	hnd	gv	del	2			4.0	MS 0.5	huv	5.0	0.0							15363	1.70	10% tourmaline, trace speck of plagioclase
SS	fg	hnd	gv	del	2			1.5	0.5	huv	3.0	3.0				10.0			15364	1.0	one 2.5mm clast of pink-orange alkali feldspar
SS	fg	hnd	gv	del	2			0.5	2.5	huv	2.0	5.0				3.5			15365	1.50	tourmaline in matrix on Qtz, 3% orange-pink alkali feldspar
SS	fg	hnd	gv	del	2			1.50		huv	3.5	5.0				5.0			15366	1.0	tourmaline in matrix and matrix (pass H+ test); pink alkali feldspar
SS	fg	hnd	gv	del	2			1.50		huv	20.0	4.0							15367	1.7	Qtz, 1-5% orange alkali feldspar; one pink Qtz
SS	fg	hnd	gv	del	2			1.0											15368	1.8	unk - mod. magnetite
SS	fg	hnd	gv	del	2			1.0				1.0							MS 369	4.9	Basalt (Fe-Tourmaline) matrix; pass faint X-coverage local Qtz
SS	fg	hnd	gv	del	2			3.0		huv	3.0	3.0							15370	1.0	swartz (tr op cases); non-magnetic
SS	fg	hnd	gv	del	2			3.0		huv	5.0	2.5							15371	1.50	thin in and near-poll Qtz (?)
SS	fg	hnd	gv	del	2			2.5	1.0	huv	2.0	2.5							15372	1.70	unk - mod magnetite; local leached feldspar (green)
SS	fg	hnd	gv	del	2			0.3		huv	0.5	1.0							15373	1.50	pass plagioclase? Folded. 2 Qtz
SS	fg	hnd	gv	del	2			2.5	2.5	huv	15.0								15374	1.5	unk - str magnetite; tourmaline wash
SS	fg	hnd	gv	del	2			0.40	3.5	huv	1.5								15375		unk - str magnetite
SS	fg	hnd	gv	del	2			0.7	2.0	huv	2.5								MS 376	3.0	described by feldspar - misc. tourmaline; 30.0% feldspar (57.7%)
SS	fg	hnd	gv	del	2			1.0	0.5	huv	2.5								15377		lighter green, almost basaltic
SS	fg	hnd	gv	del	2			0.10	0.10	huv	1.0								15378	2.8	Structured, lighter green basaltic & local masses of light green Qtz; stained by pinkish tourmaline (?) ; non-magnetic
SS	fg	hnd	gv	del	2			1.50		huv	MS	1.5							15379		mod. str magnetite
SS	fg	hnd	gv	del	2			2.5				1.0							15380	0.65	magnetite
SS	fg	hnd	gv	del	2			1.0	1.0	huv	MS	0.20							15381	1.5	unk
SS	fg	hnd	gv	del	2			1.0	1.5	huv	1.0	1.0							15382	1.5	folded. Qtz/CO <sub>2</sub> kinks; non-magnetic
SS	fg	hnd	gv	del	2			2.5	1.5	huv	1.5	0.50							15383	0.5	unk - str magnetite





ist	Rock Description				Structure				Alteration Parameters (*)							Comments							
	Com	Grs	Text	Co Alt	Name1	B	A1	F	A2	Qtz	Cal	Ank	+	Py	Po		Cpy	Sph	Asp	Ht	RQ	Sampl #	Wth
76.0	SS	fg	band	bg	BT	QZANE	F 70			5				1.0							15384	1.0	green chd. extra mica. Qtz 10% veins 15% fauna; local buff alt. holes - local pathing 2.5% feldspar pitted; 1% fauna. f.g. to c.g. f.g. 2.0% fauna. pitted. Qtz; whitish buff-grey - NK pitted / wavy; wk-str. vegetative
78.0	SS	fg	band	bg	BT	QZANE	F 70			30				3.0							15385	1.0	
79.0	SS	fg	band	bg	BT	"	"			25				4.5							15386	1.0	
79.0	SS	fg	band	bg	BT	"	"			15				3.0							15387	1.0	
79.0	SS	fg	band	bg	BT	QZANE	F 70			45				3.0							15388	1.0	
79.0	SS	fg	band	bg	BT	"	"			2.5				1.5							15389	1.0	
79.0	SS	fg	band	bg	BT	"	"			50				3.0							15390	1.0	
79.0	SS	fg	band	bg	BT	"	"			4.0				4.5							15391	1.0	
79.0	SS	fg	band	bg	BT	"	"			1.5				3.0							15392	1.0	
79.0	SS	fg	band	bg	BT	QZANE	F 70			4.0				2.5							15393	1.0	
79.0	SS	fg	band	bg	BT	"	"			5.0				2.0							15394	1.0	
79.0	SS	fg	band	bg	BT	"	"			1.0											15395	1.0	
80.0	SS	fg	band	bg	BT	"	"			1.5				0.5							15396	1.0	
81.0	SS	fg	band	bg	BT	"	"			1.0				0.5							15397	1.0	
82.0	SS	fg	band	bg	BT	"	"			2.0				0.4							15398	1.0	
83.0	SS	fg	band	bg	BT	"	"			1.0				0.5							15399	1.0	
84.0	SS	fg	band	bg	BT	"	"			0.5				0.5							15400	1.0	
87.0	SS	fg	band	bg	BT	"	"			3.0				0.5							15401	1.0	
89.0	SS	fg	band	bg	BT	"	"			1.5				0.5							15402	1.0	
90.0	SS	fg	band	bg	BT	"	"			2.0				0.5							15403	1.0	
92.0	SS	fg	band	bg	BT	"	"			1.5				0.5							15404	1.0	
93.0	SS	fg	band	bg	BT	"	"			0.5				0.5							15405	1.0	
95.0	SS	fg	band	bg	BT	"	"			1.5				2.0							15406	1.0	
96.0	SS	fg	band	bg	BT	"	"			1.0				1.0							15407	1.0	
100.0	SS	fg	band	bg	BT	"	"			0.5				1.0							15408	7.5	
101.0	SS	fg	band	bg	BT	"	"			1.0				0.0							15409	1.0	
101.0	SSS	fg	band	bg	BT	"	"			0.10				0.0							15410	1.0	
101.0	SS	fg	band	bg	BT	"	"			0.10				0.0							15411	1.0	
101.0	SS	fg	band	bg	BT	"	"			0.10				0.0							15412	1.0	

Alteration Parameters (\*)

Structure

Rock Description

Comments

Wth

Sampl #

RQ

Ht

Asp

Sph

Cpy

Po

Py

+

Ank

Cal

Qtz

A2

F

A1

B

Name1

Co Alt

Text

Grs

Com

ist

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0

101.0







St	Rock Description				Alteration Parameters (%)							RQ	Sampl #	Wth	Comments									
	Com	Grs	Text	Co	Alt	Named	B	A1	F	A2	Qtz					Cal	Ank	%	Py	Po	Cpy	Sph	App	Mt
131.5	vtg	hld	pd		QZONE						10.0	3.0		MS	35.0	15				S	15437	0.5	1-2% tourmaline, dirty & coarse. local pyrite in ground (leads)	
132.0	vtg		pd		QZONE					15	2.5		"	MS	40.0	5.0					15433	0.5	Host sediment	
132.25	"				QZONE					25			"	MS	70.0	3.5					15434	0.25	1-3% tourmaline (blk), inclusions of pyrite	
133.10	vtg	hld			QZONE					5.0				MS	50	3.5				15	15435	1.5	Mid. Nv magnetite	
134.0	vtg	hld	bt	st		B	TS			0.5						.10					15436		Sediment (brown - gray); mid bl. wk - str magnetite	
135.5	vtg	hld	bt	st						0.10	1.5						.10				15437		First three obs (0.5-10%), white ?	
137.0	vtg	hld	bt	st						0.10	1.5										15438		"	
138.5	vtg	hld	bt	st						1.5	1.5										15439		1-4% fs. OE	
140.5	vtg	hld	bt	st						1.0	2.0										15440		Fluorite - structures - tops up to 10 ft N	
141.5	vtg	hld	bt	st						1.5	3.0										15441		bleached chert; local str magnetite	
143.0	vtg	hld	bt	st						1.0	2.0										15442		wk brown	
144.5	vtg	hld	bt	st						1.5	2.0										15443		silic. w/ky magnetite	
146.5	vtg	hld	bt	st						2.5	1.5										15444		v. wk hematite	
147.5	vtg	hld	bt	st		B	SO			3.5	2.0										15445		wk red brown (?) on vein margins	
148.2	vtg	hld	bt	st						1.5	3.0										15446		Seal brown altered helms	
149.5					2?																			Mafic dike? Mottled gray - pink ? dense brown + pass good particles - local fine OE. fine all - red; local thin pale green ophiolitic bands cellular
150.10	vtg		bt			B	SO				1.0										15447	4.5	Sediment - local fg OE; minor bleaching; w/ky magnetite; 21% granules	
151.0	vtg		bt							4.5	2.5										15448		w/ky magnetite; chert (?)	
164.0	vtg		bt							0.20											15449	9.0	Microcrystalline, local granule (<0.5%) local calcite veins	

















st	Rock Description				Alteration Parameters (%)										RQ	Sampl #	Wth	Comments					
	Com	Grs	Text	Co Alt	Name1	B	A1	F	A2	Qtz	Cal	Ank	%	Py					Po	Cpy	Sph	Asp	Mt
2690	SS	fg		chl	sc	B	SS	V	60	.10	.10		MS	2.0	1.5						15492		2cm wide fissured veins of orange-pink chalcite/Qtz ± string pyrite. Chalcite ± 0.5% string pyrite.
2690	S	fg		chl	sc					0.10	0.5					.10					15493		local left handed (1cm) 20° fault
2890	S	fg	g	chl	st	B	SS			0.50	0.5				.10						15494		Sediment with sections of fgs. quartz sediment/wacke (i.e. matrix dark asphalt. dark) locally dark associated to weak chalcite and pyrite. No native; SX 1/2 cm streaked chalcite 2890.5m. local discolor. fgs. pyrite in delicate calcite in (N/S) predominantly strike vein with bounding, however local tension veinlets, small chalcite resistant to 2760 (27%) at 2890.5m. massive - calcification, local blue grey in dark mass
2890	SS	fg	band	chl	S	B	SO			2.0	0.5				.10						15495		local matrix Qtz grains (mass); ± 0.5% quartz. Pyrite. calcite - Qtz veinlet (0.5-1cm) with disc. wt. Strike veins Qtz, highly brecciated. 1-2 cm quartz (Qtz) of pink-orange chalcite - siliceous.
2900	SS	fg	band	chl	S					3.5	2.0		low	2.0	2.0						15496		local sub-surface pyrite crystals with intergrowths & local matrix on surface of sample. Chalcite - Qtz - pyrite veins approx. 0.5% pink quartz (fg). local thin delicate veins of chalcite in Qtz.



TRADER RESOURCE CORPORATION / MIKWAH JOINT VENTURE

HOLE #:

List	Rock Description				Structure				Alteration Parameters (%)										Comments					
	Com	Grs	Text	Co Alt	Name1	B	A1	F	A2	Qtz	Cal	Ank	%	Py	Po	Cpy	Sph	Asp		Mt	RQ	Sampl #	Wth	
29354		fg	band	gy	del	S				0.45	0.5			0.10	0.10						154978		local fg. - mag. grains in dark ch. areas; biotite/dolomite margins of ch.	
29365	SS	fg	band	br	UMP	F	65			band + pink	4.0			0.10									1%	lampbrushy? banded, substituted with fine calcite partings and fossils. Biot. biotized / foliated and o.c. mottled by thin yellowish cemented bands.
29416	SS	fwy	band	gp	hem	B	65			0.6	1.5												1.66	Crystalline - just altered - hematite - high calcite cement; slanted slightly lapilli cement; local diffuse grey. Calcite altered as well. At 2000 ft. 1.5 cm or less - pink-orange ell. nodules. Unit divided by 1/2" int. bedding. widely hematized ± 0.5-1.5% fg. calcite grains / block
29710		fg	band	gp	hem	S	B	65		1.0	2.0			2.0								15498		Sediment - grey-green with 0.5-1.5% grains in dark matrix. local biotite on margins of ortho-calcite veins. 1/2 cm py band. 0.5-1.5% pyritized calcite - small veins (S) 0.15 (included in spec sample).
29712		fg	band	gy	del	S				0.3	0.45			.10								15499		Lamp. or extraordinary L <sup>2</sup> sed. (veins) - distinct laminae; local shal. chert.
29716	SS		band	br	UMP	F	70			2.5	5.0			.10								15500		Chert band classic with ± 1-4% chert nodules; local shal. chert.
29718	S	fg	band	del	Sc	F	60			0.5				3.0		P6	2.0	1.0				15226		Chert band classic with ± 1-4% chert nodules; local shal. chert. variable from 0.3-1.5; 0.5 to local





RADER RESOURCE CORPORATION / MIKWAM JOINT VENTURE

HOLE # : ~~318.5~~

Dist	Rock Description				Alteration Parameters (t)										Comments									
	Com	Grs	Text	Co Alt	Name	B	A1	F	A2	Qtz	Cal	Ank	t	Py		Po	Cpy	Sph	Asp	Mt	RQ	Sampl #	Wth	
315.5	fg		ppph	chl	Sfp					0.5	0.5			1.5			0.20		3.5		15227			Pink Garnets; local garnets form conchoidal thin bands approx 2-3% PS in ch (2.5cm) (w/ 318.64CS but bandaged slightly) Ir spiral in vein. Banded orthopyroxene bands/clinopyroxene 4 cm from vein (py exclusive yellow tint)
317.0	fg			chl	Sf					0.3	0.30			0.20										DC chl ed. with local sf in chl-rich bands. local qtz. Pinkish albite Kfs (sub). complex calcite - orth - py - sph - mt veins (S)
318.5	fg			chl	S					2.5	1.0			0.5							15229			local minor sheathed chl frags local albization in tension veins. local see biotite assoc. local fluid ore white mineral on with chl after halo by fig. discon net
320.0	fg			gp	AlB	Sf								1.5					5.0		15230			Altered (ie. pinky) garnet patches/ bands and isolated AlB - bit hematite with albite. At 318.63, 2-3 cm banded band of wsv mt with 3% fg. - mag. silty ragged py Garnets locally weak at close with green chlorite (ch) and clay like ore. < 1.5% sheathed fragments other wsv mt (colored) near above band
322.0	fg			Sf	chl	Sf				0.30				0.5	0.10						15231			Approx 1-3% sheathed chlor/ small frags. 1-5% fg mag garnets in chlorite-mt areas. local py-py intergrowths



Dist	Rock Description				Structure				Alteration Parameters (%)							Comments							
	Com	Grs	Text	Co Alt	Named	B	A1	F	A2	Qtz	Cal	Ank	%	Py	Po		Cpy	Sph	Asp	Mt	RQ	Sampl #	Wth
340.20	fg	prop	6P	ALB	Silt					0.56	0.30			.10							15232	13.0	Tuff- sediment with 1-4% mica to local grains examined. Sphalerite dark clasts, what divided and speckled by discolor. mt veins (wit - mod. magnetic) Unit altered by X100, diffuse iron hematite microp (orange - pink) and later lake bands or zones (y. 32.5.3 - 32.6.33) This zone zone could be misinterpreted by an intrusive. Check unit is wit - mod. hematized. Local cse benzyl mica on RTZ margins
340.35	fg	prop	pk	ALB	Silt					10.0	0.5			0.60							15233		MATIALIZED + HEMATIZED TUFF SED with some spherulitic clasts (22%) d.c. is sharp (60) and unworked by GW. Unit is more red-pink next to GW. Defined by discolor. mt + hematite / chlor. local partied ore/leadite
340.55	fg	band	gy	dkl	S					2.5				0.00							15234		SEDIMENT - POSSIBLY LEAD IF chloritic and moderately magnetic due to discolor. magnetite, spherulitic cse. Abnormally banded
340.55	SS	band	fg	MB	Silt					0.5	(glauconite - black band)			0.5							15235		HEMATIZED + HEMATIZED SED altered by discolor
340.60	fg	band	fg	"	Silt					0.30				0.5							15236		Structure + texture see mt by cse. This is similar to 8V - similar in 8V
340.61	fg	band	pk	"	Silt					0.50				0.5							15237		Unit hematized. Sphalerite. Magnetite spherulitic. Local cse
340.65	SS	fg	prop	pk	S	F	70			2.5	1.0			0.5							15238		hematized and fine grained to spherulitic - local cse as apparent
340.71.5	S	fg	prop	pk	Silt					3.5	1.5			1.5							15239		hematized and fine grained to spherulitic - local cse as apparent
340.70	SS	fg	prop	pk	Silt	F	65			2.0	3.0			1.5							15240	4.5	hematized and fine grained to spherulitic - local cse as apparent



Dist	Rock Description				Structure							Alteration Parameters (%)							Comments				
	Com	Grs	Text	Co Alt	Name1	B	A1	F	A2	Qtz	Cal	Ank	%	Py	Po	Cpy	Sph	Asp		Mt	RQ	Sampl #	Wth
355.13		FUG	brch	PK	ALB	5L4	F60			0.5	0.5		100	1.0							15241R	7.73	ALUMINIZED + HEMATIZED CLASSIC Pink-red and dirtied by oil stream wt (wk magnetic) ALBITE shd are fgs mlf and subdivided. local see py KHS in QVCT. local pitting in AN. In solution this mat would be called granodiorite. Py-bearing QV included in gneiss.
360.5		fg	brd	gy	chl	S			2.5	0.5				0.5							15242		local bleaching on QV, wk-mold magnetic
362.10		fg	brd	gy	chl	S	B70		5.0	1.5				0.5							15243		definitely banded. med-str magnetic. local bands of 1-10% fgs-mg granoids
368.0		S	knobs		PK	HGM	SC		0.10	0.10				0.10							15244	5.9	approx 1-10% shoshonite pink clasts in lighter pink-fine matrix (spotted by fgs mlf; mlf magnetic. used for gneiss matrix. flat joints)
369.5		SS			PK	HGM	SC		0.5	0.5				0.20							15245		Class less obvious. Fine grained and more shaly, visible Q 76f - 36.5 - 6.5% pyrites and 66V. pos on garnet Kfs.
371.0		S			PR	HGM	SC		1.0	1.5				0.10							15246		Shaly matrix. 1% shaly fgs local blue Q; minor albite Kfs
372.5		SS			PR	HGM	SC		2.5	2.0				1.5							15247		Shaly matrix ± 1-2% shaly fgs
374.0		SS			"	"	SC	F70	0.5	1.5				1.0							15248		Shaly matrix. mlfic mag
378.5		SS			PR	ARM	SC		0.5	1.5				0.4							15249		talky hematite, with magnetic diamond & mica - (brown) suggest X-clause
380.5		SS			PR	HGM	SC		0.5	0.5				1.0							15250		At 378.5 and 380.5 Al 378.5 and 380.5
383.5		SS			GP	HGM	ST	F70		0.5				0.10							15251	4.78	talky hematite, with magnetic diamond & mica - (brown) suggest X-clause
387.2							FZONE	F50	2.0												15252		pyrite - calcite rock zone in clay matrix - QV gneiss; 2nd oblique fault in matrix fault at 35.









Rock Description				Structure				Alteration Parameters				Alteration Parameters				Alteration Parameters						
Com	Grs	Text	Co Alt	Name1	B	A1	F	A2	Qtz	Cal	Ank	+	Py	Po	Cpy	Sph	Asp	Mt	RQ	Sampl #	Wth	Comments
405.5	SS	frag	SP	chl	Sc	B	70		0.10				0.20							14709		Excellent variety of clasts; some stretched (str) - wholly magnetic due to dissemin. mt
407.0		frag	chl	Sc					0.10	0.5			2.0							14710		Less stretch by clast - vacuum? Also minute subrounded black clasts?
408.5		u	chl	Sc						0.10			2.5							14711		Local thin d. lens or clasts lamp. (bt) local SS blue GRF; wood. magnetic
417.8	SS	frag	SP	chl	Sc				0.10	1.0		Pink/white clay in slips (4)	1.0							14712	9.3	Locally 0-10% pink-whole rounded clast frags. unit traced to stretch. 1-10% stretch clast. Strike vein of GRF - calcite, yllk chlorite (415.36-415.41 SS) - witness point from 415-417.8 < 2.7 clasts - lens - sample destructive
418.10			pk	OV					10	3.5	(4)		2.0							14713		Shiny green - white mica (?) & GRF-chalk (see for slip (5°); pink hem. alt. below
419.50		frag	SP	hem	Sc	B	75		0.3	1.5			0.35							14714	6.8	Wholly leached. Clasts more evident after 421.5 - 44' 420.80, flat pitted pink / calcite vein with ep. clst. possibly calcite. locally? u or diffuse grains (mag. s.s.)
419.5	SS	frag	SP	chl	Sc	B	75		1.5	0.5			2.5							14715		Approx. 10% stretched, v. lg. clasts and mica. Local blue GRF
419.5	SS	u	SP	hem	Sc				2.0				0.15							14716		Strike and basal (locally to bed)
421.50			Sc	OV					35.0	2.0			2.5							14717	3.0	Deformed (pink-green - yell) halos. mag. s.s. - py. bounded. strike veins. disson



Lst	Rock Description				Alteration Parameters (%)										Wth	Comments							
	Com	Gls	Text	Co Alt	Name	B	A1	F	A2	Qtz	Cal	Ank	%	Py			Po	Cpy	Sph	Asp	Mt	RQ	Sampl #
4350	fg		sp chl	sc					0.5	0.10				1.0								14718	< 2% clasts (fg); local quartz veining
4350	"	prph	gp	ms	sc																	3.5	Approx 1-1.5% subround Qtz grains
4350		prph		ms	sc			2.0					0.5									14719	Approx 1-3% ch. Kfs, horn
4350				"	sc			1.0	1.5			max	0.5	6.50								14720	holes on QV; also local alg-chl
4350				"	sc			2.5	1.5			"	1.0	2.5								14721	sp & py on margins of (fine QV); then lamella of alk flow in Qtz
44716	SS	prph	pg	hem	sc	F 70		0.75	0.35			max	0.60	0.10								14722	Altered to Hematized and Residuum Approx 1% stretched chlorite clasts, absent of isolated Kfs and local patite often focused about QV. Local pink-orange-buff frings. Pink-whites patite on local only points (Kfs) local alk sulfate bulk QV's which are locally pitted/waggy; Qtz included in sample
45230	SS	prph	gp	hem	st	F 70		0.15	0.20				0.10									14723	whly hematized. 0.5-4% chs Kfs. QV relatively hemat belows. local chlorite bt. brown in veins pat-mat wavy fr. local blacky due to local sample points
45340	SS	fg	prph	chl	st	F 60		1.50	2.5				0.5									14724	siliceous-fung - v. whly hematized
45375	SS	fg	po	hem	st	F 60		1.0	1.5				0.45									14725	Pink-Orange hematized and local altered (fg to mg. Kfs); local epid QV's associated
45400	SS	fg	prph	pg	hem	st	F 75	0.10	0.30				1.0									14726	Hematized & moderately Hematized Hem-ss. local bleaching on QV Strike-slip veins. 1-1.5% chs. Kfs 0.5. mented by 1-2 cm wide (20%) tension



ROYAL OAK ANALYTICAL LABORATORY

CERTIFICATE OF ANALYSIS

EXPLORATION 5600-2703

DATE: Dec 16/92

	SAMPLE NUMBER	Au oz/ton	Au ppb	Au ppm				
1	D-15346	<.001	<35					
2	47	<.001	<35					
3	48	<.001	<35					
4	49	<.001	<35					
5	50	.003	105					
6	51	.003	105					
7	52	<.001	<35					
8	53	<.001	<35					
9	54	<.001	<35					
10	55	<.001	<35					
11	56	.004	135					
12	57	.002	70					
13	58	.006	205					
14	59	.011	375					
15	60	.038	1300					
16	61	.002	70					
17	62	.003	105					
18	63	.013	445					
19	64	.011	375					
20	65	.007	240					
21	66	.009	310					
22	67	.020	685					
	68	<.001	<35					
4	D-15369	.010	340					

ROYAL OAK ANALYTICAL LABORATORY

CERTIFICATE OF ANALYSIS

EXPLORATION 5600-2703

DATE: DEC 16/92

	SAMPLE NUMBER	Au oz/ton	Au ppb	Au ppm				
1	D-15370	<.001	<35					
2	71	<.001	<35					
3	72	<.001	<35					
4	73	.002	70					
5	74	<.001	<35					
6	75	<.001	<35					
7	76	<.001	<35					
8	77	<.001	<35					
9	78	<.001	<35					
10	79	.009	310					
11	80	.002	70					
12	81	<.001	<35					
13	82	<.001	<35					
14	83	<.001	<35					
15	84	.015	515					
16	85	.011	375					
17	86	.004	135					
18	87	.015	515					
19	88	.008	275					
20	89	.005	170					
21	90	.004	135					
22	91	.010	340					
23	92	.027	925					
24	D-15393	.019	650					

ROYAL OAK ANALYTICAL LABORATORY

CERTIFICATE OF ANALYSIS

EXPLORATION 5600-2703

DATE: DEC 16/92

	SAMPLE NUMBER	Au oz/ton	Au ppb	Au ppm				
1	D-15394	.004	135					
2	95	.006	205					
3	96	.010	340					
4	97	<.001	<35					
5	98	<.001	<35					
6	99	<.001	<35					
7	15400	<.001	<35					
8	01	<.001	<35					
9	02	<.001	<35					
10	03	<.001	<35					
11	04	.001	35					
12	05	.005	170					
13	06	<.001	<35					
14	07	<.001	<35					
15	08	<.001	<35					
16	09	<.001	<35					
17	10	<.001	<35					
18	11	<.001	<35					
19	12	<.001	<35					
20	13	<.001	<35					
21	14	<.001	<35					
22	15	<.001	<35					
23	16	<.001	<35					
24	D-15417	<.001	<35					

ROYAL OAK ANALYTICAL LABORATORY

CERTIFICATE OF ANALYSIS

EXPLORATION 5600-2703

DATE: Dec 17/92

	SAMPLE NUMBER	Au oz/ton	Au ppb	Au ppm	Ag ppm	Cu ppm	Zn ppm	Pb ppm
1	D-15418	<.001	<35					
2	19	.023	790					
3	20	.002	70					
4	21	.001	35					
5	22	<.001	<35					
6	23	<.001	<35					
7	24	<.001	<35					
8	25	<.001	<35					
9	26	.003	105		2.1	291	44.	28.
10	27	<.001	<35		0.7	44.	138.	21.
11	28	<.001	<35		3.4	37.	77.	14.
12	29	.001	35					
13	30	.005	170					
14	31	.018	615					
15	32	.010	340					
16	33	.003	105					
17	34	.002	70					
18	35	<.001	<35					
19	36	.001	35					
20	37	<.001	<35					
21	38	.001	35					
22	39	.011	375					
23	40	<.001	<35					
24	D-15441	.001	35					



ROYAL OAK ANALYTICAL LABORATORY

CERTIFICATE OF ANALYSIS

EXPLORATION 5600-2703

DATE: DEC 17/92

	SAMPLE NUMBER	Au oz/ton	Au ppb	Au ppm				
1	D-15442	<.001	<35					
2	43	<.001	<35					
3	44	<.001	<35					
4	45	.001	35					
5	46	<.001	<35					
6	47	.003	105					
7	48	<.001	<35					
8	49	<.001	<35					
9	50	<.001	<35					
10	51	.006	205					
11	52	<.001	<35					
12	53	<.001	<35					
13	54	.002	70					
14	55	<.001	<35					
15	56	.010	340					
16	57	<.001	<35					
17	58	.006	205					
18	59	.001	35					
19	60	<.001	<35					
20	61	.007	240					
21	62	<.001	<35					
22	63	.025	855					
23	64	.005	170					
24	D-15465	<.001	<35					

ROYAL OAK ANALYTICAL LABORATORY

CERTIFICATE OF ANALYSIS

EXPLORATION 5600-2703

DATE: DEC 17/92

	SAMPLE NUMBER	Au oz/ton	Au ppb	Au ppm				
1	D-15466	<.001	<35					
2	67	<.001	<35					
3	68	.001	35					
4	69	<.001	<35					
5	70	.015	515					
6	71	<.001	<35					
7	72	.008	275					
8	73	<.001	<35					
9	74	<.001	<35					
10	75	<.001	<35					
11	D-15476	.009	310					
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								

ROYAL OAK ANALYTICAL LABORATORY

CERTIFICATE OF ANALYSIS

EXPLORATION 5600-2703

DATE: Dec 18/92

	SAMPLE NUMBER	Au oz/ton	Au ppb	Au ppm				
1	D-15477	.002	70					
2	78	.001	35					
3	79	.001	35					
4	80	.002	70					
5	81	<.001	<35					
6	82	<.001	<35					
7	83	.001	35					
8	84	<.001	<35					
9	85	<.001	<35					
10	86	<.001	<35					
11	87	<.001	<35					
12	88	<.001	<35					
13	89	<.001	<35					
14	90	<.001	<35					
15	91	.015	515					
16	92	<.001	<35					
17	93	.002	70					
18	94	<.001	<35					
19	95	.001	35					
20	96	.010	340					
21	97	<.001	<35					
22	98	<.001	<35					
22	99	<.001	<35					
24	D-15500	<.001	<35					

ROYAL OAK ANALYTICAL LABORATORY

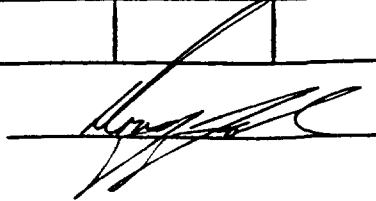
CERTIFICATE OF ANALYSIS

EXPLORATION 5600-2703

DATE: Dec 18/92

	SAMPLE NUMBER	Au oz/ton	Au ppb	Au ppm	Ag ppm	Cu ppm	Zn ppm	Pb ppm
1	D-15226	<.001	<35		0.7	59.	116.	102.
2	27	<.001	<35		0.4	28.	172.	12.
3	28	<.001	<35		0.4	22.	68.	5.
4	29	<.001	<35		0.4	46.	67.	8.
5	30	<.001	<35		0.3	25.	54.	5.
6	31	.019	650					
7	32	.001	35					
8	33	.001	35					
9	34	.018	615					
10	35	<.001	<35					
11	36	.011	275					
12	37	<.001	<35					
13	38	.007	240					
14	39	.013	445					
15	40	.006	205					
16	D-15241	.007	240					
17								
18								
19								
20								
21								
22								
23								
24								

Lab16

Chief Chemist: 

ROYAL OAK ANALYTICAL LABORATORY

CERTIFICATE OF ANALYSIS

EXPLORATION 5600-2703

DATE: Dec 22/92

	SAMPLE NUMBER	Au oz/ton	Au ppb	Au ppm				
1	D-15242	.008	275					
2	43	.004	135					
3	44	.004	135					
4	45	.001	35					
5	46	.003	105					
6	47	.020	685					
7	48	.010	340					
8	49	.007	240					
9	15250	.008	275					
10	14701	.002	70					
11	02	.020	685					
12	03	<.001	<35					
13	04	.004	135					
14	05	<.001	<35					
15	06	.002	70					
16	07	.001	35					
17	08	.001	35					
18	09	.009	310					
19	10	.003	105					
20	11	.002	70					
21	12	<.001	<35					
22	13	<.001	<35					
23	14	.004	135					
24	D-14715	.002	70					

ROYAL OAK ANALYTICAL LABORATORY

CERTIFICATE OF ANALYSIS

EXPLORATION 5600-2703

DATE: Dec 22/92

	SAMPLE NUMBER	Au oz/ton	Au ppb	Au ppm				
1	D-14716	<.001	<35					
2	17	.008	275					
3	18	<.001	<35					
4	19	.003	105					
5	20	.005	170					
6	21	.027	925					
7	22	<.001	<35					
8	23	<.001	<35					
9	24	<.001	<35					
10	25	<.001	<35					
11	D-14726	<.001	<35					
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								

**ALPHA-NUMERIC GEOLOGY LEGEND**  
**FOR**  
**GEOLOGICAL COMPILATIONS**  
**TIMMINS - KIRKLAND LAKE**

**Revised August 1992**

**1 KOMATIITIC VOLCANICS**

<b>1</b>	Unsubdivided
<b>1s</b>	Serpentinized, massive, polysutured, peridotitic komatiite
<b>1ox</b>	Olivine-spinifex textured peridotitic komatiitic flows
<b>1px</b>	Pyroxene-spinifex textured basaltic komatiitic flows
<b>1mb</b>	Massive basaltic komatiite
<b>1m</b>	Massive
<b>1p</b>	Pillowed
<b>1c</b>	Carbonatized peridotitic komatiite
<b>1t</b>	Talcose
<b>1b</b>	Basaltic komatiite
<b>1cb</b>	Carbonatized basaltic komatiite

**2 THOLEIITIC VOLCANICS**

<b>2</b>	Unsubdivided
<b>2m</b>	Massive
<b>2p</b>	Pillowed
<b>2a</b>	Amygdaloidal
<b>2apl</b>	Amygdaloidal pillow lava
<b>2v</b>	Variolitic
<b>2t</b>	Tuff, lapilli-tuff
<b>2b</b>	Breccia
<b>2c</b>	Carbonatized
<b>2pb</b>	Pillow Breccia
<b>2h</b>	Hyaloclastite
<b>2ag</b>	Agglomerate
<b>2am</b>	Amphibolitized
<b>2scf</b>	Spherulitic, chicken-feed
<b>2sch</b>	Schistose
<b>2sh</b>	Shear
<b>2F</b>	Dominantly Fe-tholeiite
<b>2M</b>	Dominantly Mg-tholeiite
<b>2AL</b>	Dominantly AL-tholeiite
<b>2I</b>	Dominantly Icelandite



### 3 CALC-ALKALIC MAFIC VOLCANICS (MAFIC-INTERMEDIATE VOLCANICS)

3	Unsubdivided
3a	Andesite
3m	Massive
3p	Pillowed
3t, 3lt	Tuff, lapilli-tuff
3b	Breccia
3c	Carbonatized
3am	Amphibolitized
3pb	Pillow brx
3sh	Shear

### 4 INTERMEDIATE-FELSIC VOLCANICS

4d	Dacite	
4rd	Rhyodacite flows	
4dt	Dacite tuffs	
4dp	Dacite pyroclastics	
4da	Agglomerate-breccia, conglomerate	
4dlt	Dacite lapilli tuff	
4dm	Dacite massive flow	
4p	Intermediate-felsic pyroclastics	
4r	Rhyolite-undifferentiated	
4sch	Intermediate-felsic schist	
4sh	Shear	
4rm	Massive rhyolite	
4rt	Rhyolite tuff	
4rlt	Rhyolite lapilli tuff	
4ra	Rhyolite agglomerate	
qp	(quartz-eye porphyritic)	
pp	(plagioclase-porphyritic)	
4phyl	Phyllite	
		<b>P</b> denotes Primitive
		<b>E</b> denotes Evolved

**5 SEDIMENTS**

<b>5</b>	Unsubdivided	
<b>5a</b>	Argillite	
<b>5c</b>	Conglomerate	
<b>5g</b>	Greywacke	
<b>5sl</b>	Slate	
<b>5p</b>	Porphyritic, qp (quartz-eye porphyritic), pp (plagioclase-porphyritic)	
<b>5d</b>	Debris flow	
<b>5q</b>	Quartzite	
<b>5qw</b>	Quartz wacke	
<b>5gr</b>	Graphite	
<b>5ch</b>	Chert	
<b>5ag</b>	Agglomerate	
<b>5t</b>	Tuffaceous-sediment	
<b>5s</b>	Siltstone	
<b>5ss</b>	Sandstone	
<b>5sch</b>	Schist	
<b>5sh</b>	Shear	
<b>5ex</b>	Exhalite	
<b>5tqp</b>	Quartz porphyritic tuff	
<b>5phyl</b>	Phyllite	<b>K</b> denotes Keewatin
<b>GFZ</b>	Graphitic Fault Zone	<b>T</b> denotes Timiskaming

**6 ULTRAMAFIC INTRUSIVE ROCKS**

<b>6</b>	Unsubdivided
<b>6s</b>	Serpentinized diorite-peridotite
<b>6ph</b>	Pyroxene-hornblende
<b>6c</b>	Carbonatized
<b>6tm</b>	Talc-magnesite

**7 MAFIC INTRUSIVE ROCKS**

7	Unsubdivided
7a	Anorthosite
7d	Diorite
7g	Gabbro
7qg	Quartz gabbro
7pg	Pegmatoidal gabbro
7l	Lamprophyre
7ib	Intrusive breccia
7n	Nipissing Diabase-type sills

**8 FELSIC INTRUSIVE ROCKS**

8	Unsubdivided
8qp	Quartz porphyry
8fp	Feldspar porphyry
8qfp	Quartz feldspar porphyry
8f	Felsite, p (porphyritic), qp (quartz-eye porphyritic), pp (plagioclase-porphyritic)
8hbt	Hornblende-biotite trondhjemite
8pm	Porphyritic monzonite
8gd	Granodiorite
8pg	Porphyritic granodiorite
8lg	Leucocratic granodiorite
8hd	Hornblende diorite
8qd	Quartz diorite
8p	Porphyry
8a	Aplite
8s	Syenite
8g	Granite or quartz-rich syenite
8t	Trachyte

**9 MATACHEWAN DIABASE**

**10 HURONIAN SEDIMENTS**

10a	Arkose
10w	Wacke
10arg	Argillite
10c	Conglomerate

**11 QUARTZ DIABASE****12 OLIVINE DIABASE****IRON FORMATION**

IFo	Oxide
IFs	Sulphide (py-po)
IFc	Carbonate
IFj	Jasper
BIF	Banded iron formation
IFchl	Chlorite-rich
IFgr	Graphitic

**SULPHIDES**

DS	Disseminated sulphides
SS	Stringer sulphides
MS	Massive sulphides
SMS	Semi-massive sulphides

**OXIDES**

Mt	Magnetite (80-100%)
----	---------------------

QAV	Quartz ankerite veining
-----	-------------------------

**ALTERATION**

These abbreviations are used after a lithology, if desired.

<b>3m,s</b>	Would denote a massive calc-alkalic mafic volcanic which is sericitized
<b>chl</b>	Chloritic
<b>chty</b>	Cherty
<b>s or ser*</b>	Sericitic
<b>sil</b>	Silicified
<b>ank</b>	Ankerite
<b>cc</b>	Calcite
<b>c</b>	Carbon
<b>cb</b>	Carbonate
<b>h</b>	Hematite
<b>alb</b>	Albitized
<b>fu</b>	Fuchsitic
<b>mt</b>	Magnetite
<b>sh</b>	Sheared
<b>tcb</b>	Talc carbonate schist
<b>tcs</b>	Talc chlorite schist
<b>gr</b>	Graphitic
<b>arg</b>	Argillaceous
<b>sch</b>	Schist
<b>gt</b>	Garnet
<b>oxd</b>	Oxidized
<b>bl</b>	Bleached
<b>epd</b>	Epidote
<b>serp</b>	Serpentinized

\* where computer space permits, use ser

**TEXTURE**

<b>fg</b>	Fine grained
<b>mg</b>	Medium grained
<b>cg</b>	Coarse grained
<b>bx</b>	Breccia
<b>frag</b>	Fragments
<b>pf</b>	Primary fragmentals
<b>tf</b>	Tectonic fragmentals
<b>qp</b>	Quartz phyric
<b>qfp</b>	Quartz feldspar phyric
<b>fp</b>	Feldspar phyric
<b>pyr</b>	Pyroclastics
<b>bed</b>	Bedded
<b>bnd</b>	Banded

**SCHEDULE A**

**CLAIM LIST**

**Bradette Twp., Ontario**

L591375-378 incl.	( 4)
L591380-394 incl.	(15)
L624881-884 incl.	( 4)
L633372-411 incl.	(40)
L633452-491 incl.	(40)
L633628-634 incl.	( 7)
L633637-638 incl.	( 2)
L634392-394 incl.	( 3)
L636955-962 incl.	<u>( 8)</u>
	123

**Hoblitzell Twp., Ontario**

L628595-630 incl.	(36)
L628634-684 incl.	<u>(51)</u>
	87

**Noseworthy Twp., Ontario**

L624885-900 incl.	(16)
L624981-990 incl.	(10)
L628685-694 incl.	(10)
L633106-107 incl.	( 2)
L633130-132 incl.	( 3)
L633269-273 incl.	( 5)
L633312-371 incl.	(60)
L633412-451 incl.	(40)
L633548-566 incl.	(19)
L633627	( 1)
L633641-656 incl.	(16)
L634364-391 incl.	(28)
L733738-758 incl.	(21)
L733761	( 1)
L784535-536 incl.	( 2)
L810232-273 incl.	(42)
L814606-615 incl.	(10)
L839437-475 incl.	(39)
L839487-527 incl.	<u>(41)</u>
	366

**Dieppe Twp., Quebec**

420620, 1-5 incl.	( 5)
420621, 1-5 incl.	( 5)
420622, 1-2 incl.	<u>( 2)</u>
	12

**GRAND TOTAL** 588

**TOTAL ACRES** 24,042 (9,729 hectares)

AFRO



Ministry of Northern Development and Mines

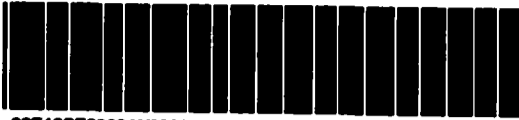
Ontario

# Report of Work Conducted After Recording Claim

Mining Act

Transaction Number: 00302

Personal information collected on this form is obtained under the authority this collection should be directed to the Provincial Manager, Mining Lan Sudbury, Ontario, P3E 6A5, telephone (705) 670-7284.



32E12SE0002 W9390-00302 HOBLITZELL

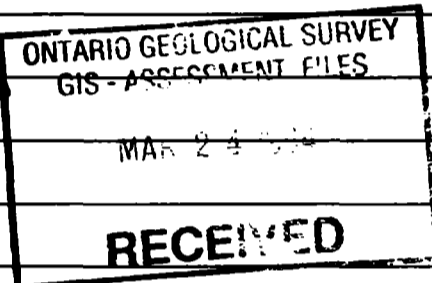
900 9

- Instructions:**
- Please type or print and submit in duplicate
  - Refer to the Mining Act and Regulations Recorder.
  - A separate copy of this form must be completed for each Work Group.
  - Technical reports and maps must accompany this form in duplicate.
  - A sketch, showing the claims the work is assigned to, must accompany this form.

Recorded Holder(s) <b>ROYAL OAK MINES Inc. for Trader Resource Corp.</b>		Client No. <b>136226</b>
Address <b>P.O. BAG 2010, Timmins, Ont, P4N 7K7</b>		Telephone No. <b>705-360-1141</b>
Mining Division <b>LARDER</b>	Township/Area <b>BRADLETTE, Hoblitzell, NORWORTHY</b>	M or G Plan No.
Dates Work Performed	From: <b>June 15 DECEMBER 1</b>	To: <b>July 3, 1992 DECEMBER 16, 1992</b>

### Work Performed (Check One Work Group Only)

Work Group	Type
<input type="checkbox"/> Geotechnical Survey	
<input checked="" type="checkbox"/> Physical Work, Including Drilling	<b>Diamond drilling</b>
<input type="checkbox"/> Rehabilitation	
<input type="checkbox"/> Other Authorized Work	
<input type="checkbox"/> Assays	
<input type="checkbox"/> Assignment from Reserve	



Total Assessment Work Claimed on the Attached Statement of Costs \$ **311,418.00**

**Note:** The Minister may reject for assessment work credit all or part of the assessment work submitted if the recorded holder cannot verify expenditures claimed in the statement of costs within 30 days of a request for verification.

### Persons and Survey Company Who Performed the Work (Give Name and Address of Author of Report)

Name	Address
<b>Paul Coad</b>	<b>528 Murray St, Timmins, Ontario, P4N 7A9</b>
<b>Peter Harvey</b>	<b>P.O. Box 1555, South Porcupine, Ont., P0N 1H0</b>
<b>Bradley Bus. Ltd.</b>	<b>P.O. Box 2367, Rouyn-Noranda, Quebec J9X 5A9</b>

(attach a schedule if necessary)

### Certification of Beneficial Interest \* See Note No. 1 on reverse side

I certify that at the time the work was performed, the claims covered in this work report were recorded in the current holder's name or held under a beneficial interest by the current recorded holder.

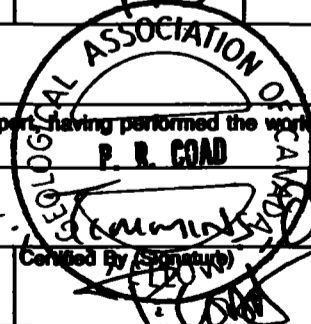
Date: **Nov 10 1993**      Recorded Holder or Agent (Signature): **Paul Coad**

### Certification of Work Report

I certify that I have a personal knowledge of the facts set forth in this Work report, having performed the work or witnessed same during and/or after its completion and annexed report is true.

Name and Address of Person Certifying: **Paul Coad 528 Murray St. Timmins, Ontario, P4N 7A9**

Telephone No.: **705-264-1806**      Date: **Nov 10, 1993**      Certified By (Signature): **P. Coad**



### For Office Use Only

Total Value Cr. Recorded <b>\$132528</b>	Date Recorded <b>Nov 16/93</b>	Mining Recorder <b>Larry Stohr</b>	Received Stamp <b>33 NOV 16 AM 9 28</b> <b>RECEIVED</b>
<b>Revised \$17,8890.</b>	Deemed Approval Date <b>Feb 14/94</b>	Date Approved <b>Feb 10/94.</b>	
Date Notice for Amendments Sent			













Number for Applying Reserve	Claim Number (see Note 2)	of Claim Units	Assessment Work Done on this Claim	Value Applied to this Claim	Value Assigned from this Claim	Reserve: Work to be Claimed at a Future Date
	633346			800.00		
	633347			u		
	633350			u		
	633351			u		
	633352			800.00		
	633353			770.00		
	633354			800.00		
	633355			u		
	633356			800.00		
	633357			800.00		
	633358			u		
	633359			u		
	633360			u		
	633362			u		
	633363			u		
	633364			u		
	633365			u		
	633366			u		
Total Number of Claims			Total Value Work Done	Total Value Work Applied	Total Assigned From	Total Reserve

Credits you are claiming in this report may be cut back. In order to minimize the adverse effects of such deletions, please indicate from which claims you wish to prioritize the deletion of credits. Please mark (✓) one of the following:

1.  Credits are to be cut back starting with the claim listed last, working backwards.
2.  Credits are to be cut back equally over all claims contained in this report of work.
3.  Credits are to be cut back as prioritized on the attached appendix.

In the event that you have not specified your choice of priority, option one will be implemented.

**Note 1:** Examples of beneficial interest are unrecorded transfers, option agreements, memorandum of agreements, etc., with respect to the mining claims.

**Note 2:** If work has been performed on patented or leased land, please complete the following:

I certify that the recorded holder had a beneficial interest in the patented or leased land at the time the work was performed.	Signature	Date
---	-----------	------









Report Number for Applying Reserve	Claim Number (see Note 2)	Number of Claim Units	Value of Assessment Work Done on this Claim	Value Applied to this Claim	Value Assigned from this Claim	Claimed at Reserve: Work to be Claimed at a Future Date
	633 418			800.00		
	633 419			"		
	633 420			"		
	633 421			"		
	633 427			"		
	633 428			"		
	633 429		28,028.00	800.00	12,000.00	16,028.00 PRC
	633 430		34,256.00	"	<del>12,000.00</del>	<del>25,298.00</del> PRC
	633 431		6,228.00	"	6,228.00	0
	633 432			"		
	633 433			"		
	633 434		12,457.00	558.00 PRC	12,000.00	457.00
	633 435		6,228.00	400.00 PRC	6,228.00	0
	633 437		46,713.00	400.00 PRC	12,000.00	34,713.00
	633 558			400.00 PRC		
	633 562			400.00 PRC		
	634 374			400.00 PRC		
Total Number of Claims			34,133,910	1,358.00		176,374.00

REVISIONS OF  
 THIS SHEET  
 PRC 12/13/10  
 PRC 12/13/10

Credits you are claiming in this report may be cut back. In order to minimize the adverse effects of such deletions, please indicate from which claims you wish to prioritize the deletion of credits. Please mark (✓) one of the following:

- Credits are to be cut back starting with the claim listed last, working backwards.
- Credits are to be cut back equally over all claims contained in this report of work.
- Credits are to be cut back as prioritized on the attached appendix.

In the event that you have not specified your choice of priority, option one will be implemented.

Note 1: Examples of beneficial interest are unrecorded transfers, option agreements, memorandum of agreements, etc., with respect to the mining claims.

Note 2: If work has been performed on patented or leased land, please complete the following:

I certify that the recorded holder had a beneficial interest in the patented or leased land at the time the work was performed.	Signature	Date
---	-----------	------





Ministry of  
Northern Development  
and Mines

Ministère du  
Développement du Nord  
et des mines

**Statement of Costs  
for Assessment Credit**

**État des coûts aux fins  
du crédit d'évaluation**

**Mining Act/Loi sur les mines**

Transaction No./N° de transaction  
9380 • 00302

Personal information collected on this form is obtained under the authority of the Mining Act. This information will be used to maintain a record and ongoing status of the mining claim(s). Questions about this collection should be directed to the Provincial Manager, Minings Lands, Ministry of Northern Development and Mines, 4th Floor, 159 Cedar Street, Sudbury, Ontario P3E 6A5, telephone (705) 670-7264.

Les renseignements personnels contenus dans la présente formule sont recueillis en vertu de la Loi sur les mines et serviront à tenir à jour un registre des concessions minières. Adresser toute question sur la collecte de ces renseignements au chef provincial des terrains miniers, ministère du Développement du Nord et des Mines, 159, rue Cedar, 4<sup>e</sup> étage, Sudbury (Ontario) P3E 6A5, téléphone (705) 670-7264.

**1. Direct Costs/Coûts directs**

Type	Description	Amount Montant	Totals Total global
Wages Salaires	Labour Main-d'oeuvre		
	Field Supervision Supervision sur le terrain		
Contractor's and Consultant's Fees Droits de l'entrepreneur et de l'expert- conseil	Type DDIA	218,089.00	
	Assays	12,022.00	
Supplies Used Fournitures utilisées	Type Computer	5,139.00	
	core storage	2910.00	
	Blades		
Equipment Rental Location de matériel	Type Other various things - see detailed cost statement	11,622.00	
<b>Total Direct Costs</b> <b>Total des coûts directs</b>			

**2. Indirect Costs/Coûts indirects**

\*\* Note: When claiming Rehabilitation work Indirect costs are not allowable as assessment work.  
Pour le remboursement des travaux de réhabilitation, les coûts indirects ne sont pas admissibles en tant que travaux d'évaluation.

Type	Description	Amount Montant	Totals Total global
Transportation Transport	Type vehicle lease	3521.00	
	fuel	1143.00	
Food and Lodging Nourriture et hébergement		599.00	
Mobilization and Demobilization Mobilisation et démobilisation			
<b>Sub Total of Indirect Costs</b> <b>Total partiel des coûts indirects</b>			5263.00
<b>Amount Allowable (not greater than 20% of Direct Costs)</b> <b>Montant admissible (n'excedant pas 20 % des coûts directs)</b>			
<b>Total Value of Assessment Credit</b> <b>(Total of Direct and Allowable Indirect costs)</b>		<b>Valeur totale du crédit d'évaluation</b> <b>(Total des coûts directs et indirects admissibles)</b>	311,418.00

Note: The recorded holder will be required to verify expenditures claimed in this statement of costs within 30 days of a request for verification. If verification is not made, the Minister may reject for assessment work all or part of the assessment work submitted.

Note : Le titulaire enregistré sera tenu de vérifier les dépenses demandées dans le présent état des coûts dans les 30 jours suivant une demande à cet effet. Si la vérification n'est pas effectuée, le ministre peut rejeter tout ou une partie des travaux d'évaluation présentés.

**Filing Discounts**

1. Work filed within two years of completion is claimed at 100% of the above Total Value of Assessment Credit.
2. Work filed three, four or five years after completion is claimed at 50% of the above Total Value of Assessment Credit. See calculations below:

Total Value of Assessment Credit	Total Assessment Claimed
	× 0.50 =

**Remises pour dépôt**

1. Les travaux déposés dans les deux ans suivant leur achèvement sont remboursés à 100 % de la valeur totale susmentionnée du crédit d'évaluation.
2. Les travaux déposés trois, quatre ou cinq ans après leur achèvement sont remboursés à 50 % de la valeur totale du crédit d'évaluation susmentionné. Voir les calculs ci-dessous.

Valeur totale du crédit d'évaluation	Evaluation totale demandée
	× 0,50 =

**Certification Verifying Statement of Costs**

I hereby certify:  
that the amounts shown are as accurate as possible and these costs were incurred while conducting assessment work on the lands shown on the accompanying Report of Work form.

that as I. COAD, Sr. Project Geologist I am authorized  
(Recorded Holder, Agent, Position in Company)

to make this certification

**Attestation de l'état des coûts**

J'atteste par la présente :  
que les montants indiqués sont le plus exact possible et que ces dépenses ont été engagées pour effectuer les travaux d'évaluation sur les terrains indiqués dans la formule de rapport de travail ci-joint.

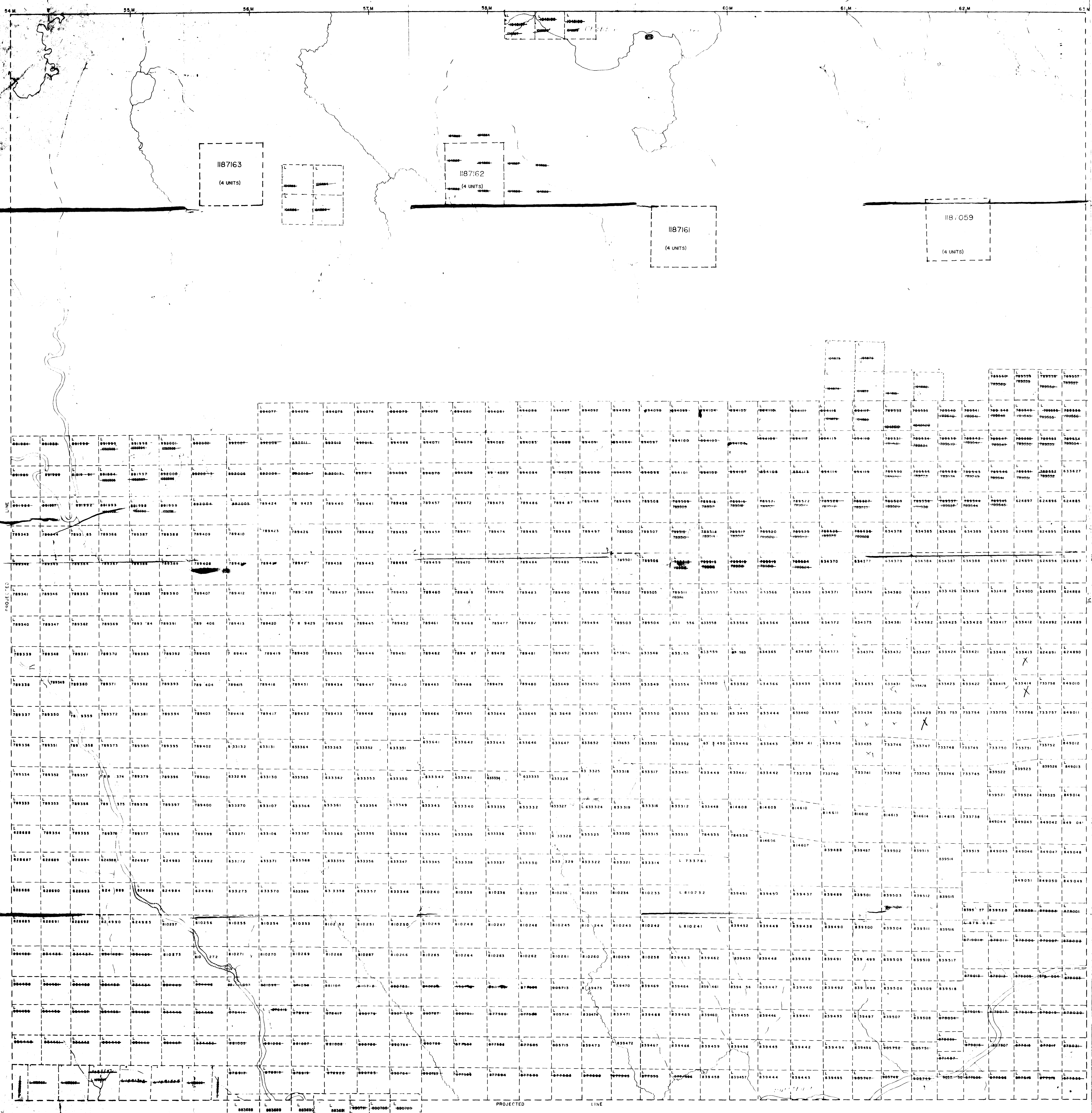
Et qu'à titre de P. R. STAD je suis autorisé  
(titulaire enregistré / représentant, poste occupé dans la compagnie)

à faire cette attestation

Signature I. COAD Date NOV. 10, 1993







1187163  
(4 UNITS)

1187162  
(4 UNITS)

1187161  
(4 UNITS)

1187059  
(4 UNITS)

**LEGEND**

HIGHWAY AND TRAIL	
TRAIL	
UNSUBSIDIZED LINE	
PARCEL BOUNDARY	
MINING CLAIMS ETC.	
PAVING AND RIGHT OF WAY	
NEIGHBORHOOD	
EXISTING RIGHTS	
SUBSIDIZED LINE	
REGULATIONS	
ORIGINAL BOUNDARY	
MINING CLAIMS ETC.	
TRAIL	

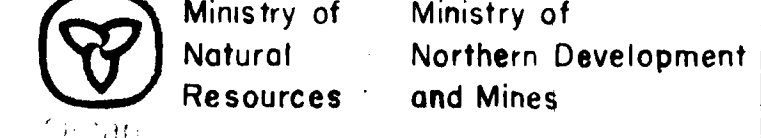
**DISPOSITION OF CROWN LANDS**

TYPE OF DOCUMENT	SYMBOL
PATENT SURFACE & MINING RIGHTS	
MINING RIGHTS ONLY	
LEASE SURFACE & MINING RIGHTS	
SURFACE RIGHTS ONLY	
MINING RIGHTS ONLY	
LEASE OF MINING RIGHTS	
ORDER IN RESPECT OF	
RESERVATION	
CANCELLED	
SANITARY ZONE	
Remote tourist set-up	
NOTE: MINING RIGHTS PATENTED PRIOR TO 1974	
AND SURFACE RIGHTS PATENTED BY THE PUBLIC	
AND SURFACE RIGHTS PATENTED BY THE PUBLIC	

Scale 1:20 000

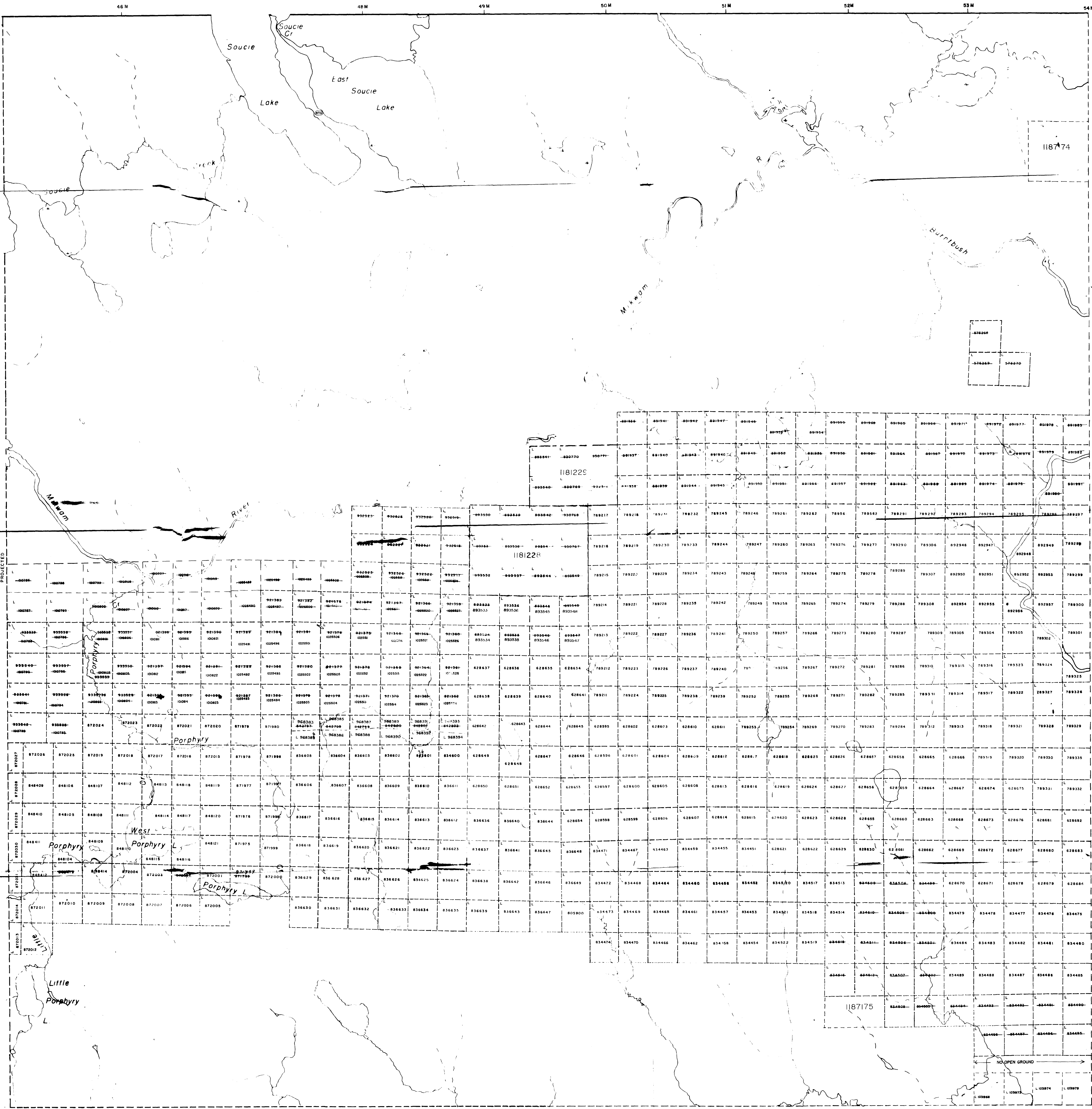
THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES AND ACCURACY IS NOT GUARANTEED. THOSE WISHING TO MAKE MINING CLAIMS SHOULD CONSULT WITH THE MINING RECORDER, MINISTRY OF NORTHERN DEVELOPMENT AND MINES FOR ADDITIONAL INFORMATION ON THE STATUS OF THE LANDS SHOWN HEREIN.

TOWNSHIP  
**NOSEWORTHY**  
M.N.R. ADMINISTRATIVE DISTRICT  
**COCHRANE**  
MINING DIVISION  
**LARDER LAKE**  
LAND TITLES / REGISTRY DIVISION  
**COCHRANE**



SEPTEMBER, 1986  
**G-3549**

Received Oct 27/86



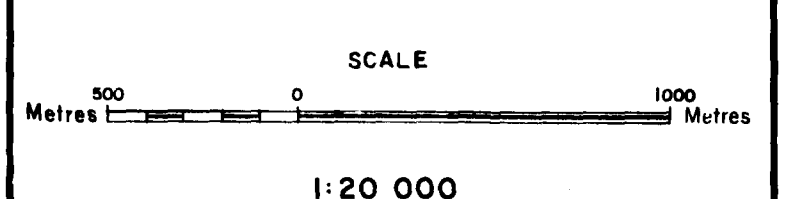
**LEGEND**

HIGHWAY AND ROUTE No.	
OTHER ROADS	
TRAILS	
SURVEYED LINES	
TOWNSHIPS, BASE LINES, ETC.	
LOTS, MINING CLAIMS, PARCELS, ETC.	
UNSURVEYED LINES	
LOT LINES	
PARCEL BOUNDARY	
MINING CLAIMS ETC.	
RAILWAY AND RIGHT OF WAY	
UTILITY LINES	
NON-PERENNIAL STREAM	
FLOODING OR FLOODING RIGHTS	
SUBDIVISION OR COMPOSITE PLAN	
RESERVATIONS	
ORIGINAL SHORELINE	
MARSH OR MUSKEG	
MINES	
TRAVERSE MONUMENT	

**DISPOSITION OF CROWN LANDS**

TYPE OF DOCUMENT	SYMBOL
PATENT, SURFACE & MINING RIGHTS	
" SURFACE RIGHTS ONLY	
" MINING RIGHTS ONLY	
LEASE, SURFACE & MINING RIGHTS	
" SURFACE RIGHTS ONLY	
" MINING RIGHTS ONLY	
LICENCE OF OCCUPATION	
ORDER IN COUNCIL	
RESERVATION	
CANCELLED	
SAND & GRAVEL	
Scenic or Tourist Set-Asp	

NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 1915, VESTED IN ORIGINAL PATENTEES BY THE PUBLIC LANDS ACT, R.S.O. 1918, CHAP. 360, SEC. 63, SUBSEC. 1.



THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES AND ACCURACY IS NOT GUARANTEED. THOSE WISHING TO STATE MINING CLAIMS SHOULD CONSULT WITH THE MINING RECORDS, MINISTRY OF NORTHERN DEVELOPMENT AND MINES, FOR ADDITIONAL INFORMATION ON THE STATUS OF THE LANDS SHOWN HEREON.

BLAKELOCK TOWNSHIP  
PROJECTED

NOSEWORTHY TOWNSHIP  
PROJECTED

TOMLINSON TOWNSHIP  
PROJECTED

DATE OF ISSUE  
**JUNE 18 1994**  
LARDER LAKE  
MINING RECORDS OFFICE

TOWNSHIP  
**HOBLITZELL**  
M.N.R. ADMINISTRATIVE DISTRICT  
COCHRANE  
MINING DIVISION  
LARDER LAKE  
LAND TITLES / REGISTRY DIVISION  
COCHRANE

Ministry of Natural Resources  
Ontario

Date: OCTOBER 1986      Number: **G-3513**



G-3213      HOBLITZELL TWP      G-3213



L:3100

NORTH

MK92-1  
(24105, 3240E)  
-50, Az 260

I.P.  
ANOMALY

MAGNETIC AXIS  
HIGH

I.P.  
ANOMALY

497 g/t (3.0m)  
SI.S-54S  
(2% Qtz, 2% Ank, 0.5% Py, 0.5% Rb)

TREND  
OF  
MINERALIZED ZONE?

562 g/t (7.2m)  
21b-22S.2  
(52% Qtz, 25% Py, 3% Asp, tr sph)

fold repeated py beds! Range: 12-25 cm wide; Best .40 g/t Au / 1.5m!

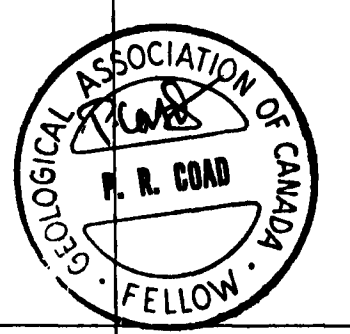
variable bedding angles (i.e. folded)

Silicified

MK92\_1  
275m (Ech)  
197m V.

LEGEND

- 12 OLIVINE DIABASE
- 11 QUARTZ DIABASE
- 10 MORONIAN SEDIMENT
- 9 HATCHERMAN DIABASE
- 8 FELSIC INTERMEDIATE ROCKS
- 7 MAFC INTERMEDIATE ROCKS
- 6 ULTRAMAFIC INTERMEDIATE ROCKS
- 5 SEDIMENT
- 4 INTERMEDIATE-FELSIC VOLCANICS
- 3 CALCALKALIC MAFC VOLCANICS (MAFC-INTERMEDIATE VOLCANICS)
- 2 THOLEIITIC VOLCANICS
- 1 BONAHTIC VOLCANICS
- IRON FORMATION
- SULPHIDES
- ORE
- ALTERATION
- TEXTURE

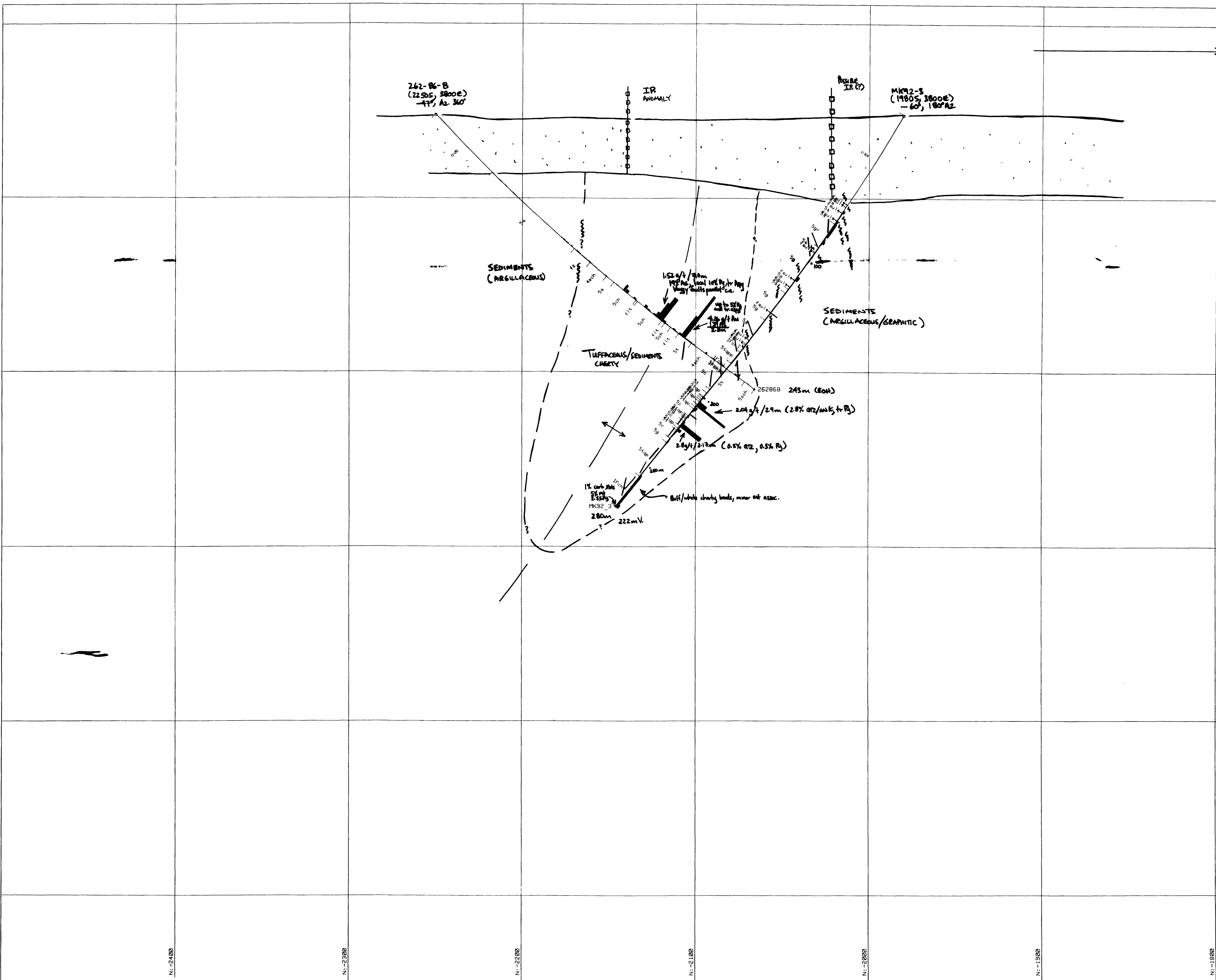


MIKWAM JOINT VENTURE  
1992 DRILLING NOSENORTHY TWP.  
SECTION 3200 EAST - MK92-1  
Au-ppb 1mm/200 ppb Au

JULY 1992 | 1:1000 | DMG MIK49  
TRADER RESOURCE CORP.







L: 3100

NORTH →

L: 3000

L: 2900

L: 2800

L: 2700

N: 2400

N: 2300

N: 2200

N: 2100

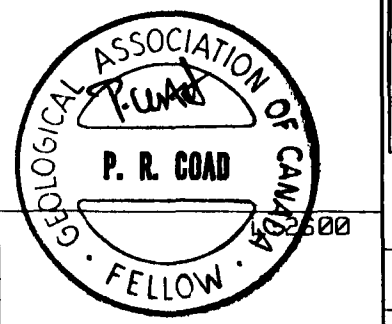
N: 2000

N: 1900

N: 1800

**LEGEND**

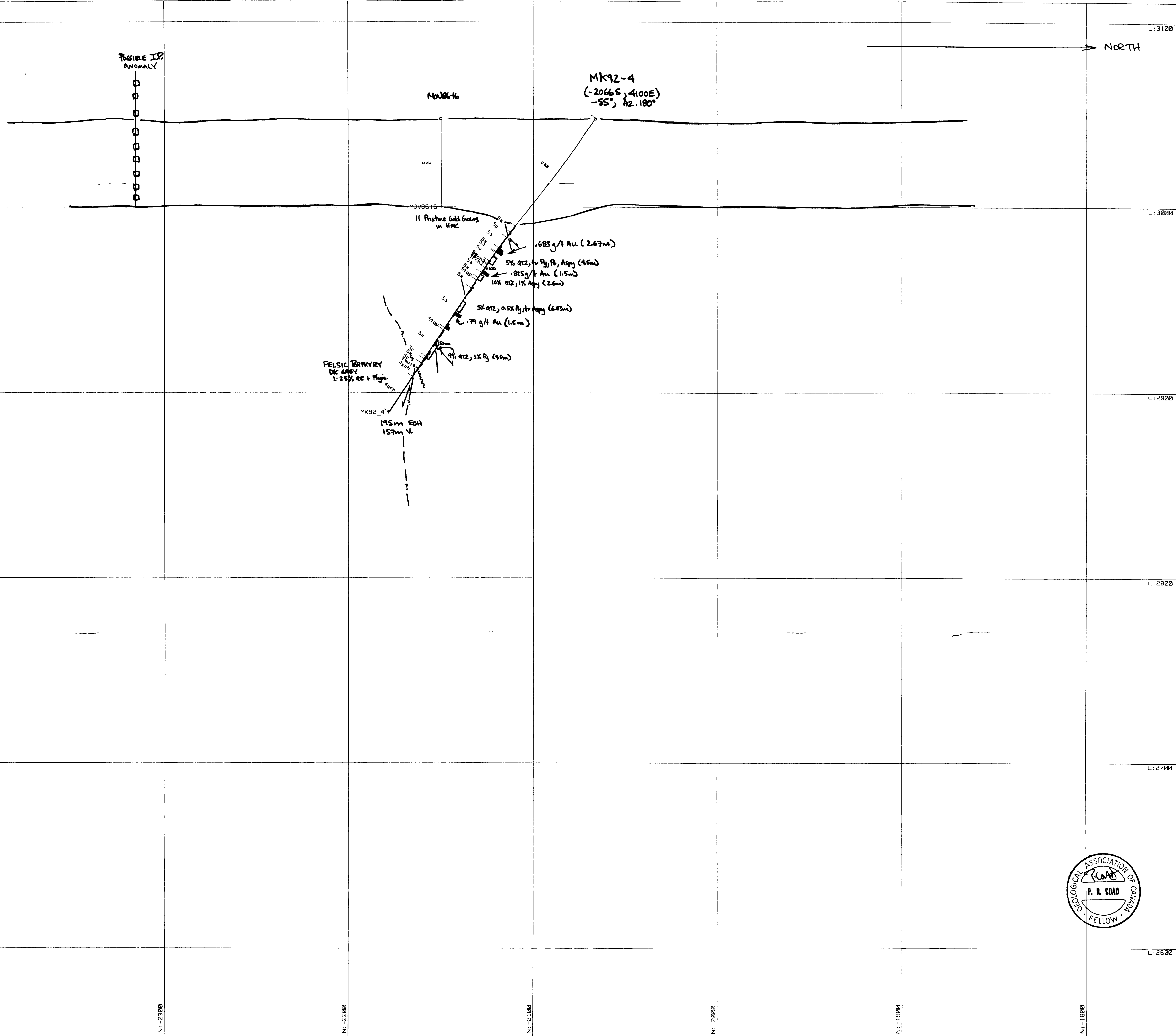
- 11 OLYNE DIABASE
- 12 QUARTZ DIABASE
- 13 HURONIAN SEDIMENTS
- 14 MATCHEWAN DIABASE
- 15 FELSIC INTRUSIVE ROCKS
- 16 MAFIC INTRUSIVE ROCKS
- 17 ULTRAFELSIC INTRUSIVE ROCKS
- 18 ULTRAMAFIC INTRUSIVE ROCKS
- 19 SEDIMENTS
- 20 INTERMEDIATE-FELSIC VOLCANICS
- 21 THOLEIITIC VOLCANICS
- 22 BOMATITIC VOLCANICS
- 23 IRON FORMATION
- 24 SULFIDES
- 25 OXIDES
- 26 ALTERATION



MIKWAM JOINT VENTURE  
1992 DRILLING NOSEWORTHY TWP.  
SECTION 3800E - MK92-3 & 262868  
Au-ppb 1mm/200 ppb Au

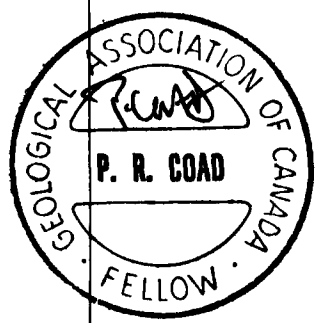
SCALE 1:1000

JULY 1992 1:1000 DWG MK92  
TRADER RESOURCE CORP.



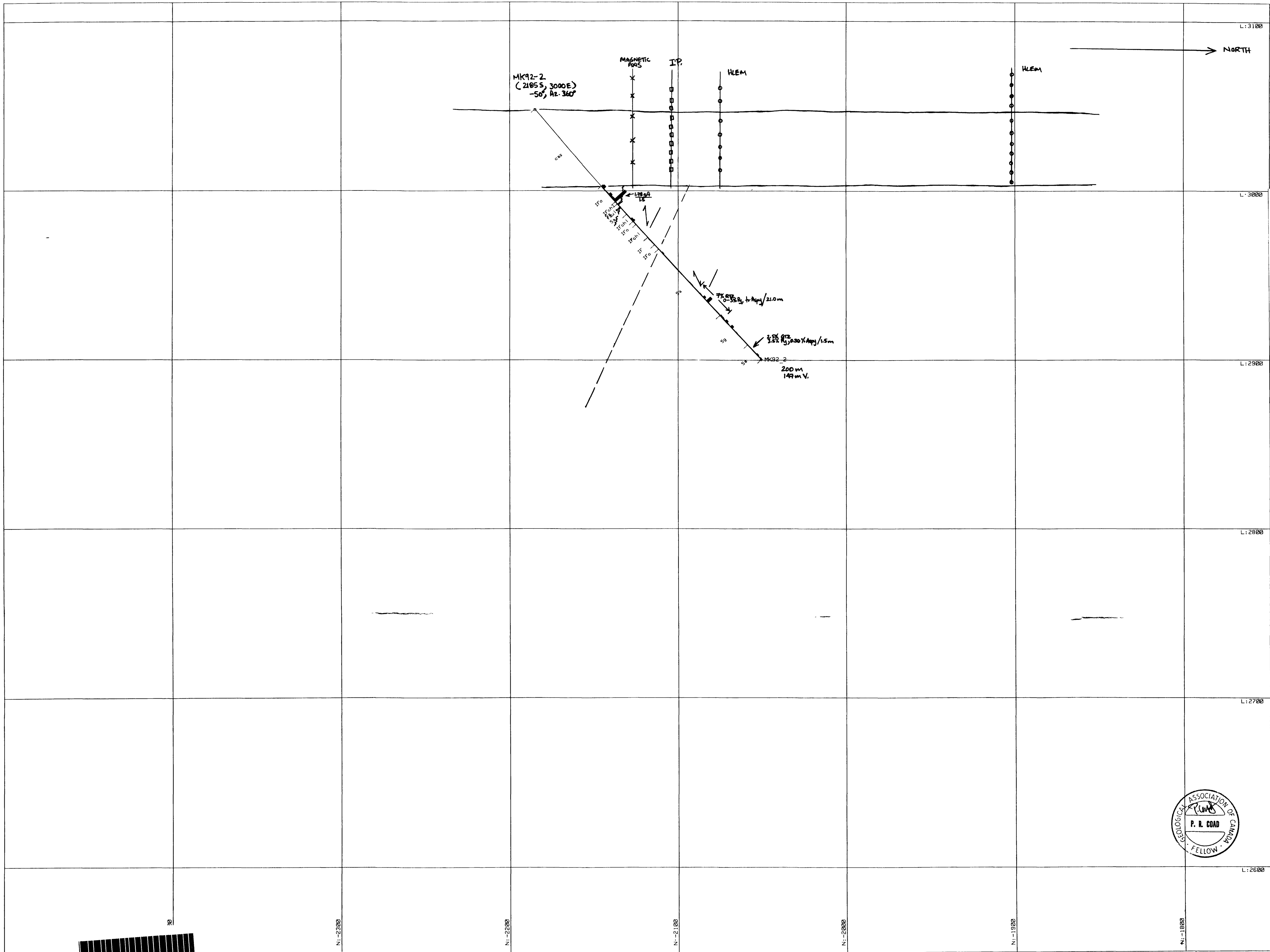
**LEGEND**

- 13 OLIVINE DIABASE
- 12 QUARTZ DIABASE
- 11 HIRONAKA SEDIMENTS
- 10 MAFIC INTRUSIVE ROCKS
- 9 MAFIC INTRUSIVE ROCKS
- 8 MAFIC INTRUSIVE ROCKS
- 7 MAFIC INTRUSIVE ROCKS
- 6 ULTRAMAFIC INTRUSIVE ROCKS
- 5 SEDIMENTS
- 4 INTERMEDIATE-FELSIC VOLCANICS
- 3 FELSIC VOLCANICS
- 2 KAMATYIC VOLCANICS
- 1 KAMATYIC VOLCANICS
- IRON FORMATION
- ALTERATION
- TEXTURE



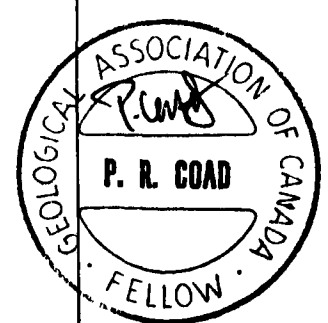
MIKWAM JOINT VENTURE  
 1992 DRILLING NOSEWORTHY TWP.  
 SECTION 4180E - MK92-4 & MOV86-16  
 Au-ppb 1mm/200 ppb Au  
 SCALE 1:1000  
 JULY 1992 | 1:1000 | DWG MKS1  
 TRADER RESOURCE CORP.





**LEGEND**

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



MIKWAM JOINT VENTURE  
 1992 DRILLING NOSEWORTHY TWP.  
 SECTION 3000 EAST - MK92-2  
 Au-ppb 1mm/200 ppb Au

JULY 1992 1:1000 DWG MIK48  
 TRADER RESOURCE CORP.





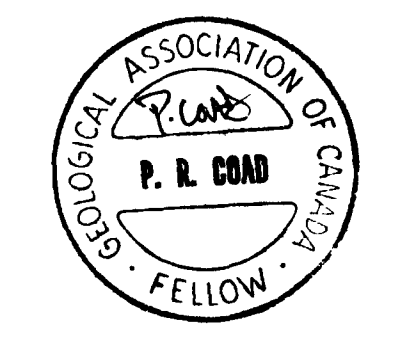
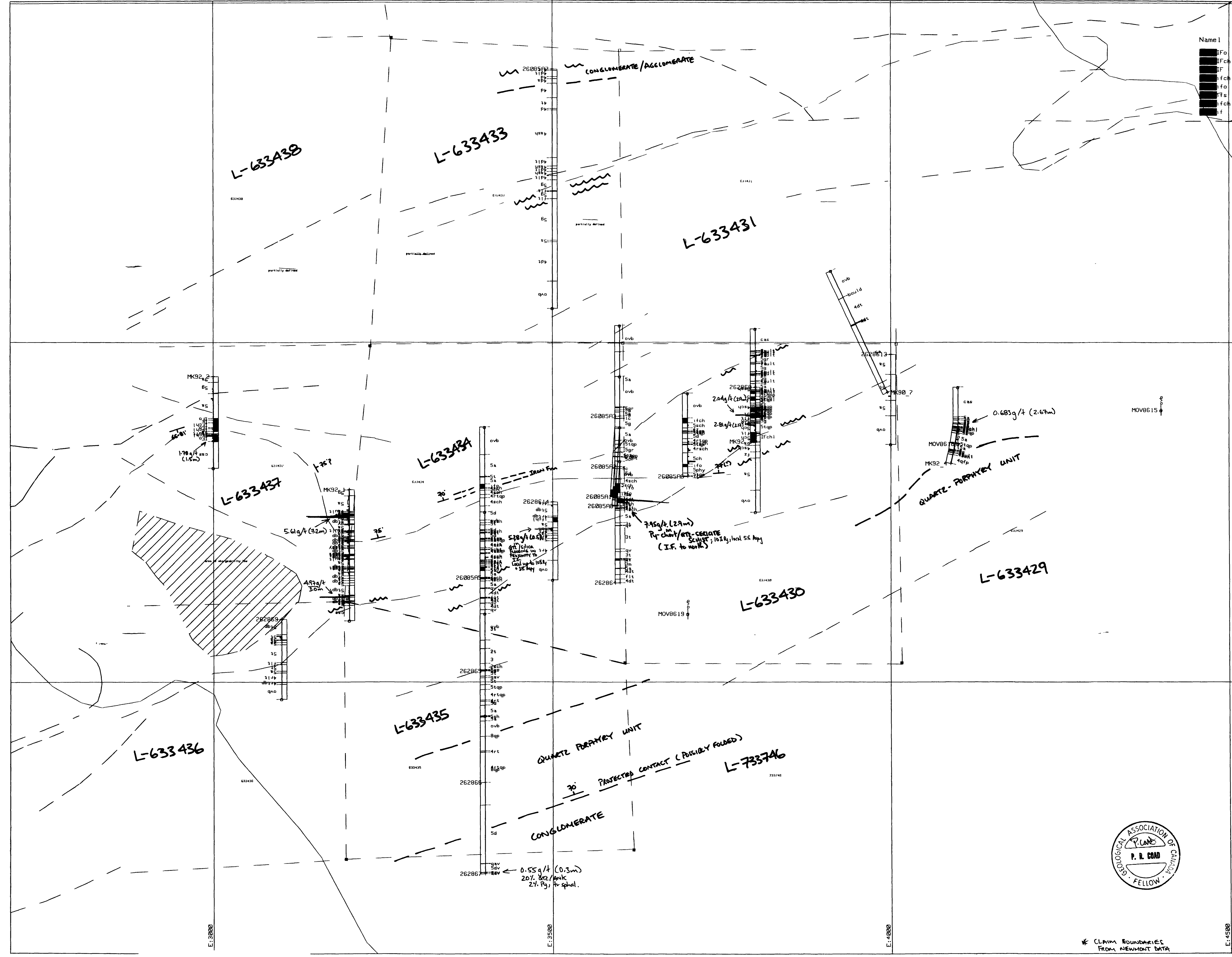
N: -1500

Name I	
IFo	Iron FM highlighted
IFch	
IF	
IFch	
IFo	
IFs	
IFch	
f	



LEGEND

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

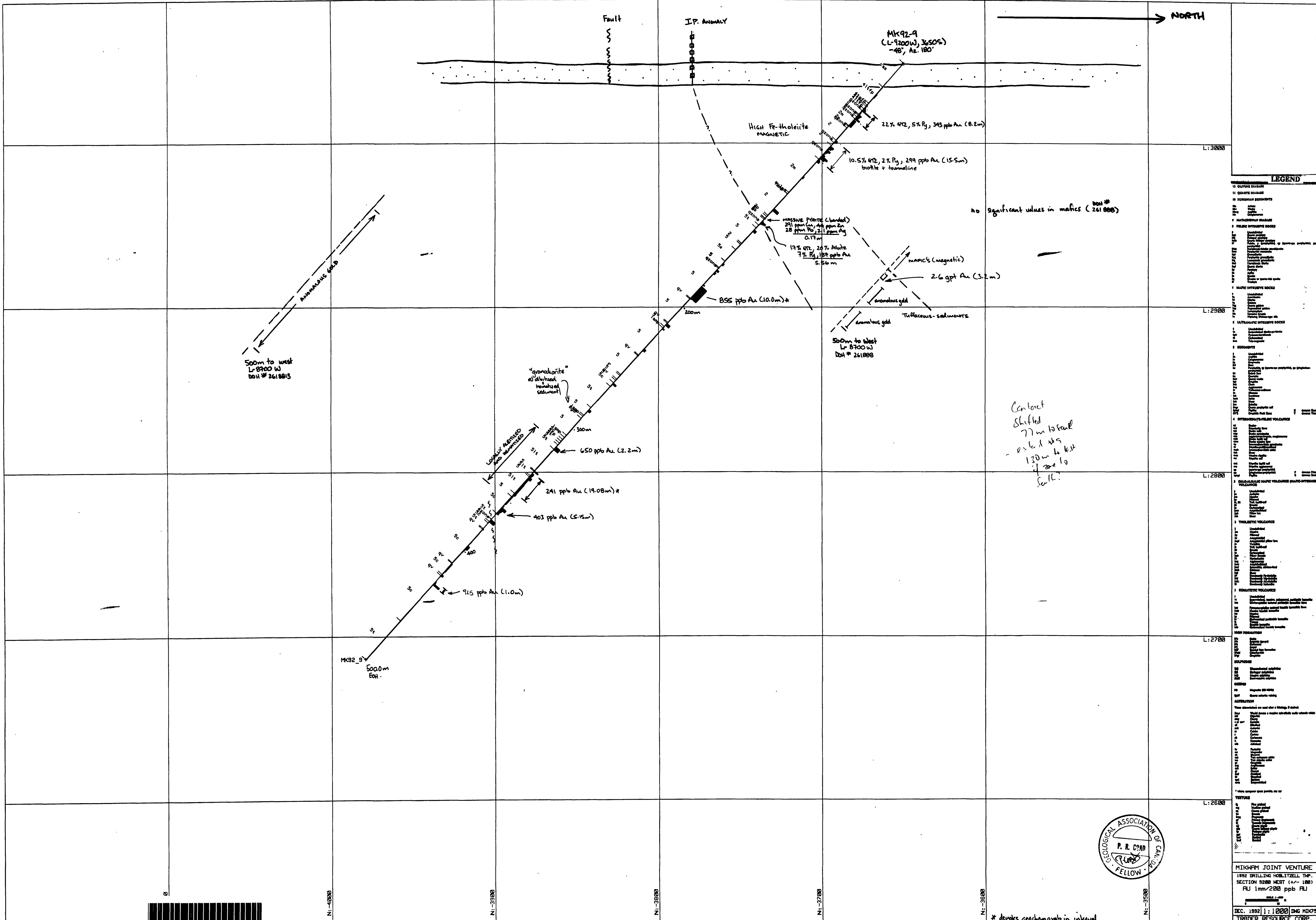


MIKMAJ JOINT VENTURE  
 1992 DRILLING NOSEORTHY T.M.P.  
 PLAN VIEW  
 Au-ppb 1mm/500 ppb Au  
 SCALE 1:2500  
 AUGUST 1992 | 2500 | ENG. MILES  
 TRADER RESOURCE CORP.



\* CLAIM BOUNDARIES FROM MEMOIR DATA





\* denotes geochemical in interval

**LEGEND**

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

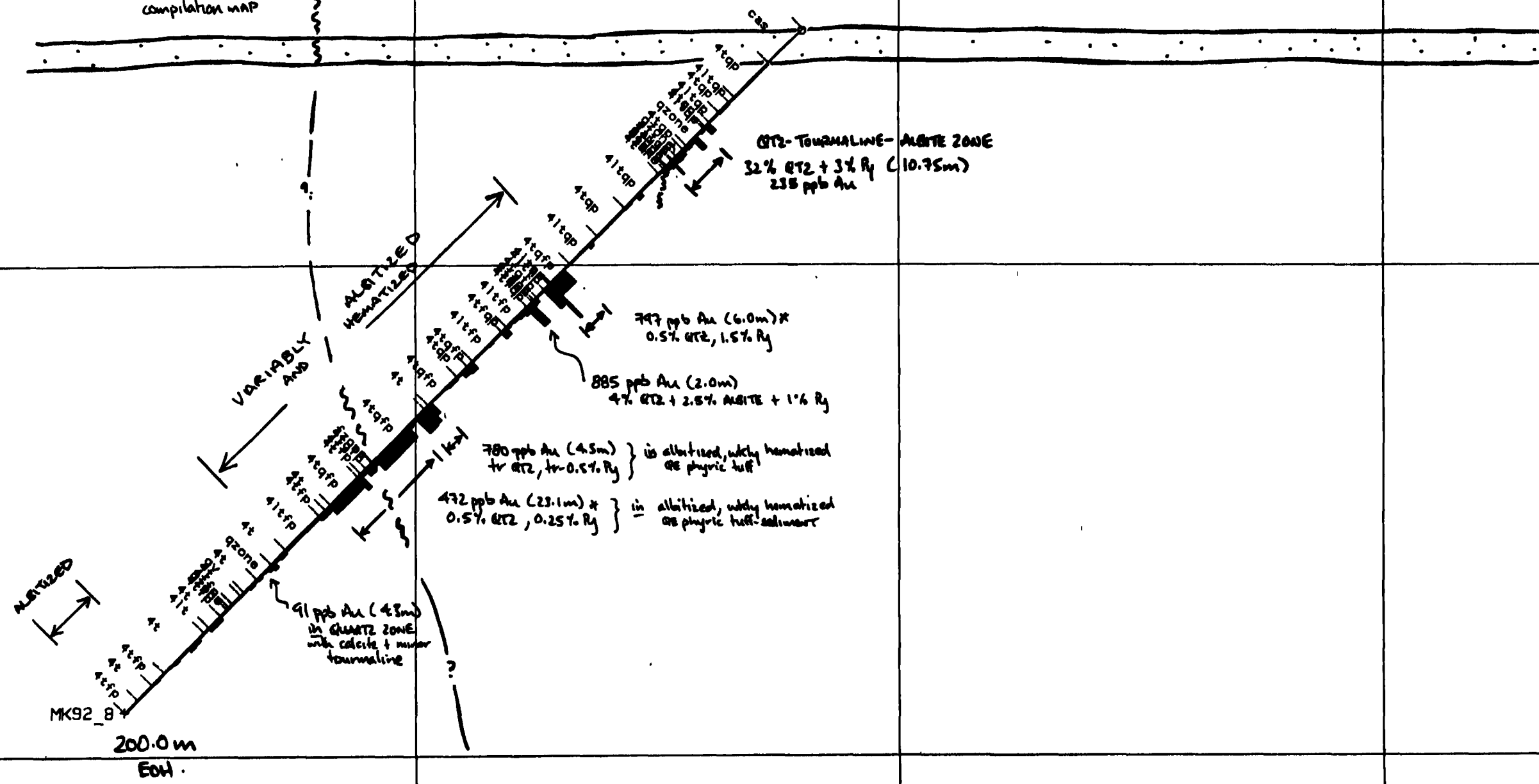
MIKWAH JOINT VENTURE  
 1992 DRILLING MOBILITZELL TRF  
 SECTION 9289 WEST (44-180)  
 AU 1mm/200 ppb AU

DEC. 1992 | 1:1000 | ENG MK92  
 TRADER RESOURCE CORP.

→ NORTH

LOCATION OF  
FAULT  
FROM 1:10000  
COMPLETION MAP

MK92-8  
(L-105100W, 3720S)  
-45°, Az 180°



L:3000

L:2900

L:2800

L:2700

L:2600

LEGEND

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

N:-4100



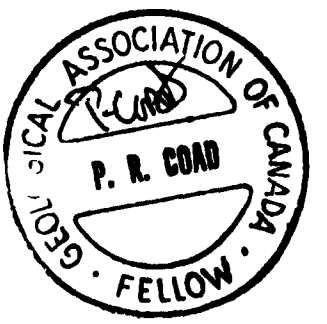
N:-3500

N:-3600

N:-3700

N:-3800

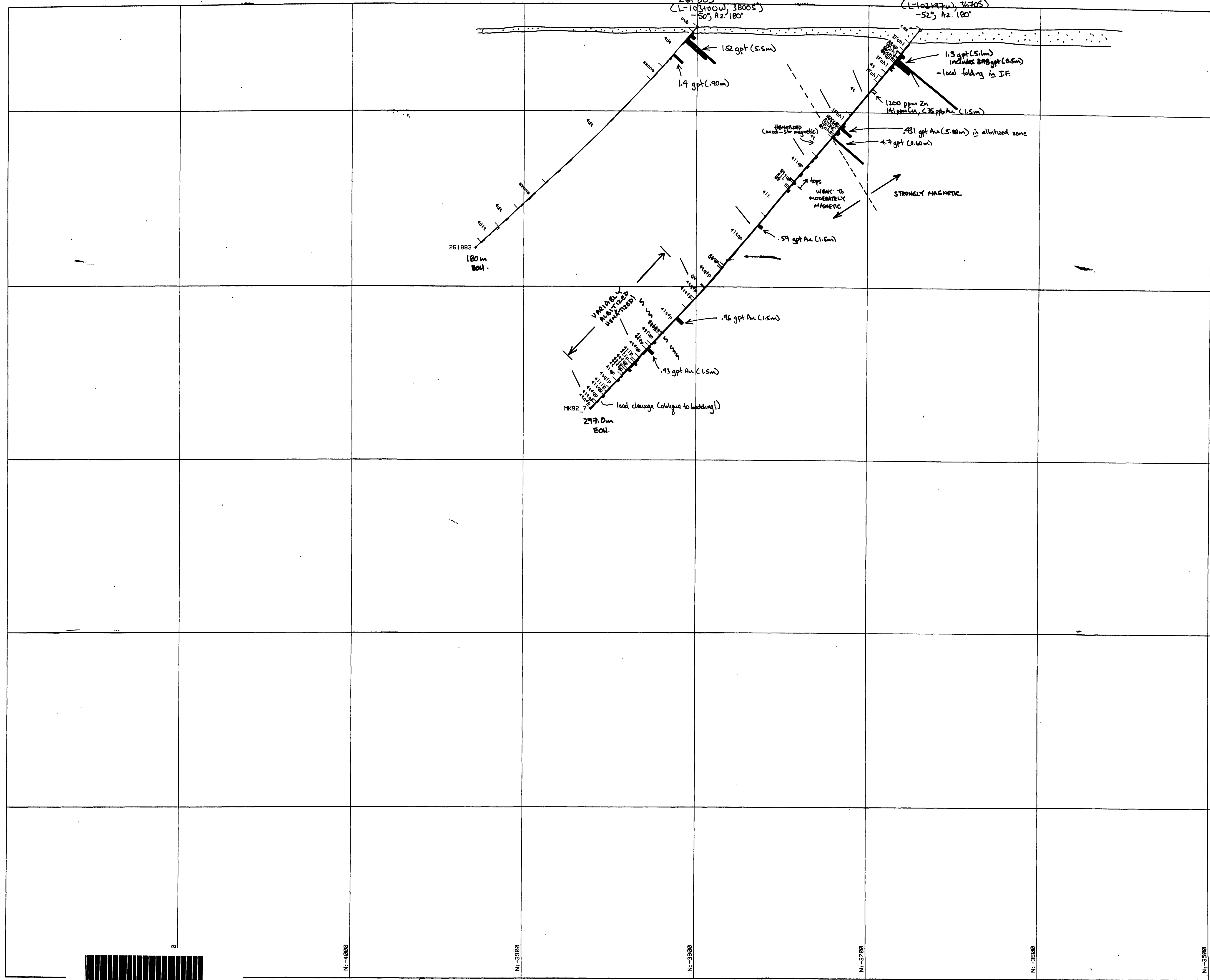
N:-3500



MIKWRM JOINT VENTURE  
1992 DRILLING HOBLITZELL TWP.  
SECTION 10500 WEST (4-50)  
AU 1mm/200 ppb AU

DEC. 1992 | 1:10000 | ENG MK92  
TRADER RESOURCE CORP.

\* GEOTECH GRASS INCLUDED IN INTERNAL



**LEGEND**

**OLYMPIC DIABASE**

**QUARTZ DIABASE**

**DIORITIC DIABASE**

**INTRUSIVE DIABASE**

**PLIIC INTRUSIVE ROCKS**

**MARIC INTRUSIVE ROCKS**

**ULTRAMAFIC INTRUSIVE ROCKS**

**INTERMEDIATE PLIIC VOLCANICS**

**CALCALKALIC MARIC VOLCANIC DAPIC/INTRUSIVE VOLCANICS**

**THOLEIITIC VOLCANICS**

**RODANITIC VOLCANICS**

**IRON PEGMATITES**

**DIAPYRITES**

**OCRES**

**ASTHENITE**

**TEXTURE**

**MIKIFRM JOINT VENTURE**  
 1982 DRILLING HOBILTZELL TWP.  
 SECTION 18388 WEST (44-75)  
 N2 100/100 gpt (1m); N2 100/100 gpt (1m)

DEC. 1982 1:1000 DMG MIKIFRM  
 TRADER RESOURCE CORP.



N: -4600

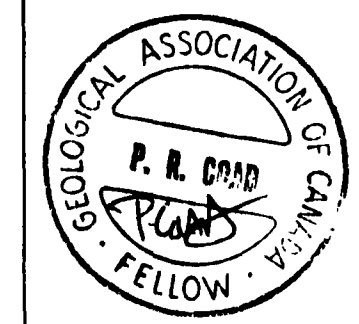
N: -3500

N: -3800

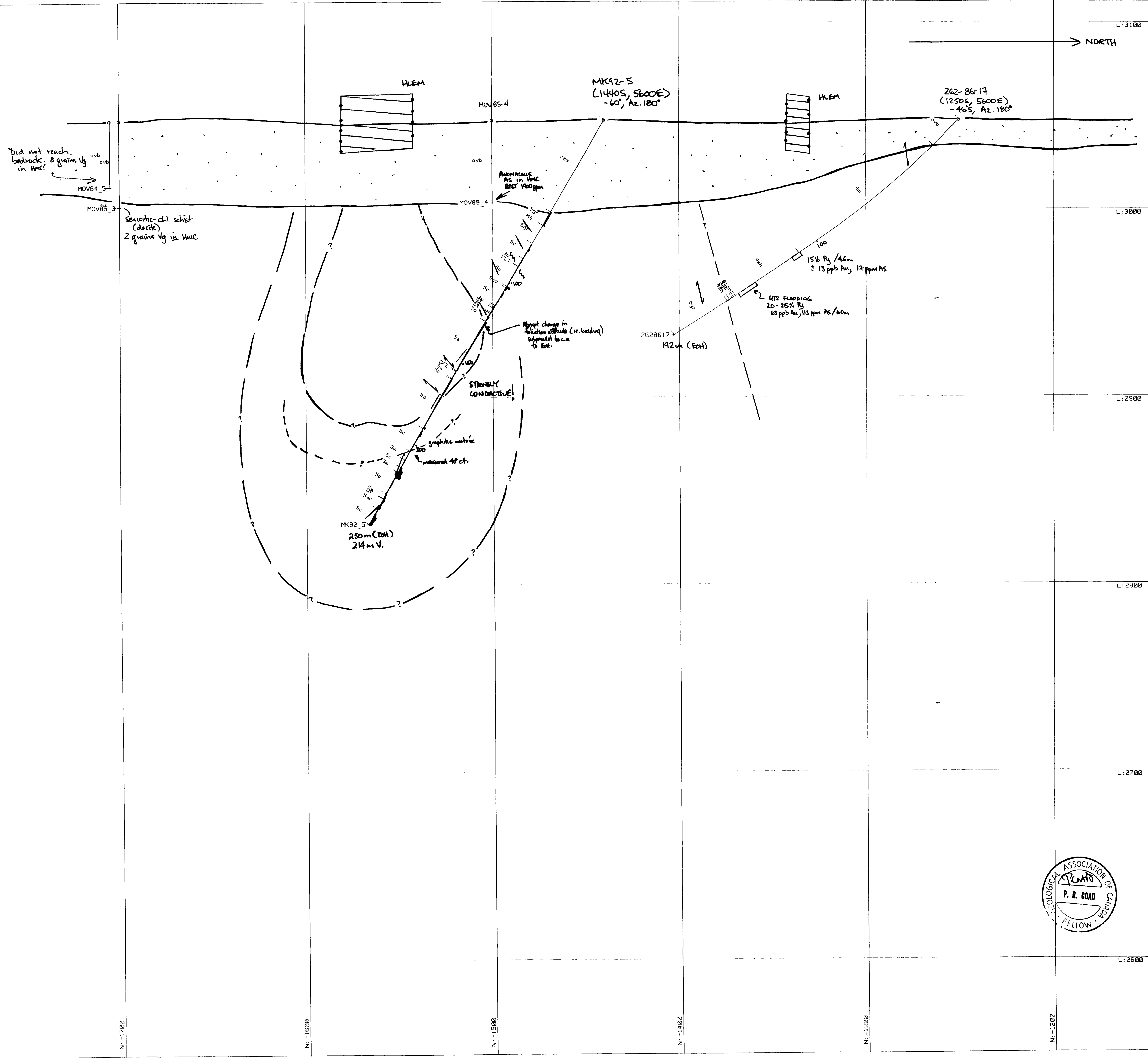
N: -3700

N: -3600

N: -3500

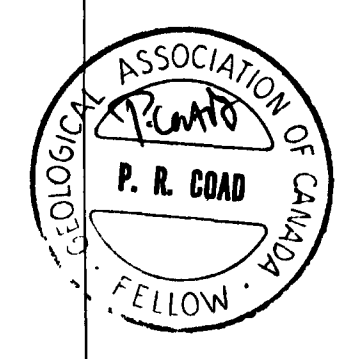






**LEGEND**

13	OLYNE DIABASE
11	QUARTZ DIABASE
10	MURONIAN SEDIMENTS
9	MATACHEWAN DIABASE
8	METACRYSTALLINE ROCKS
7	METACRYSTALLINE ROCKS
6	METACRYSTALLINE ROCKS
5	METACRYSTALLINE ROCKS
4	METACRYSTALLINE ROCKS
3	METACRYSTALLINE ROCKS
2	METACRYSTALLINE ROCKS
1	METACRYSTALLINE ROCKS
0	METACRYSTALLINE ROCKS
13	OLYNE DIABASE
11	QUARTZ DIABASE
10	MURONIAN SEDIMENTS
9	MATACHEWAN DIABASE
8	METACRYSTALLINE ROCKS
7	METACRYSTALLINE ROCKS
6	METACRYSTALLINE ROCKS
5	METACRYSTALLINE ROCKS
4	METACRYSTALLINE ROCKS
3	METACRYSTALLINE ROCKS
2	METACRYSTALLINE ROCKS
1	METACRYSTALLINE ROCKS
0	METACRYSTALLINE ROCKS



MIKWAM JOINT VENTURE  
 1992 DRILLING NOSEWORTHY TWP.  
 SECTION 5600 EAST  
 Au-ppb 1mm/200 ppb Au  
 JULY 1992 1:1000 DWG MIK52  
 TRADER RESOURCE CORP.

