

32E12SW0013 26 NOSEWORTHY

010

DIAMOND DRILLING

TOWNSHIP: NOSEWORTHY TWP.

REPORT NO: 26

WORK PERFORMED FOR: Cogema Canada Ltd.

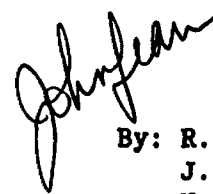
RECORDED HOLDER: Same as Above [xx]
: Other []

<u>Claim No.</u>	<u>Hole No.</u>	<u>Footage</u>	<u>Date</u>	<u>Note</u>
L 789458/ L 789459	BUR-02	245m	Mar/88	(1)
L 789357	BUR-05	278m	Mar/88	(1)
L 789358	BUR-06	247.2m	Mar/88	(1)
L 789359/ L 789358	BUR-07	260m	Mar/88	(1)
L 789468/ L 789467	BUR-08	228.3m <u>1258.5m</u>	Mar/88	(1)

(1) W8808.002, date filed April 89

COGEMA CANADA LIMITED
BURNTBUSH RIVER PROJECT
FINAL REPORT 1988
"DIAMOND DRILL RESULTS"
VOLUME 1 of 3

Ref. No. 88-CND-47-03A
(Document: #0135U)



By: R. St-Jean
J. Learn
Nov. 1988



32E12SW0013 26 NOSEWORTHY

010C

TABLE OF CONTENTS

	<u>page</u>
1. <u>INTRODUCTION</u>	1
1.1 General Statement	1
1.2 Location and Access	1
1.3 Summary of Work Performed to Date	1
1.4 Bedrock Geology of the Project Area	3
1.5 Objectives of the Drilling Program	4
2. <u>OVERVIEW OF FIELD WORK</u>	5
2.1 Line-cutting	5
2.2 Ground Geophysics	5
2.2.1 VLF and Magnetics	5
2.2.2 Induced Polarization	6
2.3 Reverse Circulation Drilling	6
2.4 Diamond Drilling	7
3. <u>DIAMOND DRILL RESULTS</u>	10
3.1 General Outline	10
3.2 Blue Lake Area	10
3.3 Burntbush Grid Area	14
3.3.1 Section 350E	14
3.3.2 Section 900W	22
3.3.3 Section 2000W	28
3.4 Spade Lake Area	32
4. <u>DISCUSSION OF RESULTS</u>	35
4.1 Blue Lake Area	35
4.2 Burntbush Grid Area	35
4.2.1 Rock Types	35
4.2.2 Structure and Deformation	36
4.2.3 Magnetics as a Mapping Tool	38
4.2.4 Alterations and Gold Geochemistry	40
4.3 Spade Lake Area	43

TABLE OF CONTENTS

	<u>page</u>
5. <u>SUMMARY AND CONCLUSIONS</u>	44
5.1 Recommendations for Further Work	47
6. <u>REFERENCES</u>	49

LIST OF APPENDICES

Volume 2 of 3:

APPENDIX I : DIAMOND DRILL HOLE DESCRIPTIONS

1. Summary Logs
2. Field Logs

Volume 3 of 3:

APPENDIX II : SAMPLE RESULTS

1. Chemistry Results
2. Thin Section Descriptions

LIST OF FIGURES

	<u>PAGE</u>
<u>Figure 1</u> : Location of the Burntbush River Property, Northeastern Ontario, Scale 1:250 000	2
<u>Figure 2</u> : Progressive alteration assemblages in the East South "C" ore zone at the Dickenson Mine, Red Lake District	42

LIST OF TABLES

<u>Table 1</u> : Diamond Drill Statistics	11
<u>Table 2</u> : Summary of Gold Results - BUR-12	34

LIST OF MAPS

- Map 1 : Diamond Drill Hole Locations Scale: 1:20 000
- Map 2 : L5050E, Diamond Drill Hole BUR-08,
Cross-Section Scale: 1:500
- Map 3 : L4900E, Diamond Drill Hole BUR-02,
Cross-Section Scale: 1:500
- Map 4 : L350E (south), Diamond Drill Holes BUR-05, BUR-06,
Cross-Section Scale: 1:500
- Map 5 : L350E (north), Diamond Drill Hole BUR-07,
Cross-Section Scale: 1:500
- Map 6 : L900W (south), Diamond Drill Holes BUR-01, BUR-03,
Cross Section Scale: 1:500
- Map 7 : L900W (north), Diamond Drill Holes BUR-04, BUR-10,
Cross-Section Scale: 1:500
- Map 8 : L2000W (south), Diamond Drill Holes BUR-09, BUR-13,
Cross Section Scale: 1:500
- Map 9 : L2000W (north), Diamond Drill Hole BUR-11,
Cross-Section Scale: 1:500
- Map 10 : L5900W, Diamond Drill Hole BUR-12,
Cross-Section Scale: 1:500
- Map 11 : Burntbush Grid Geologic Interpretation Scale: 1:5000

1. INTRODUCTION

1.1 General Statement

The Burntbush River project is a joint venture gold exploration program between COGEMA Canada Limited and AMERITEX Resources Limited. The property comprises 312 contiguous mining claims. The joint venture agreement was signed in May 1986.

1.2 Location and Access

The Burntbush River property covers about 50 km² in the townships of Hoblitzell and Noseworthy, northeastern Ontario (see Fig. 1). It is located approximately 90 km northwest of La Sarre and 20 km west of the Quebec-Ontario border (latitude 49°30'N, longitude 79°50'W, NTS 32E and 42H).

During the winter program, access to the area was by winter road via Tomlinson Road, which connects to a main E-W maintained gravel road joining La Sarre, Que. and Iroquois Falls, Ont.

1.3 Summary of Work Performed to Date

Most of the project area (300 claims) was staked for AMERITEX in January, 1984. The only work performed by them on the claims was an airborne VLF-EM and magnetics survey, which was contracted to Aerodat Ltd (Ameritex, 1984).

In May 1986, COGEMA and AMERITEX signed a joint venture agreement naming COGEMA operator of the exploration program and all subsequent work has been performed by ourselves. At this time, a block of 12 claims (previously held by DOME Explorations Ltd) was added to the property.

The first field program was performed in the summer of 1986, and comprised geologic traverses aimed at locating, mapping and sampling outcrops. Traverse spacing ranged from 50 to 100 m and numerous undocumented outcrops were found and described (COGEMA Reference No. 86-CND-47-02).

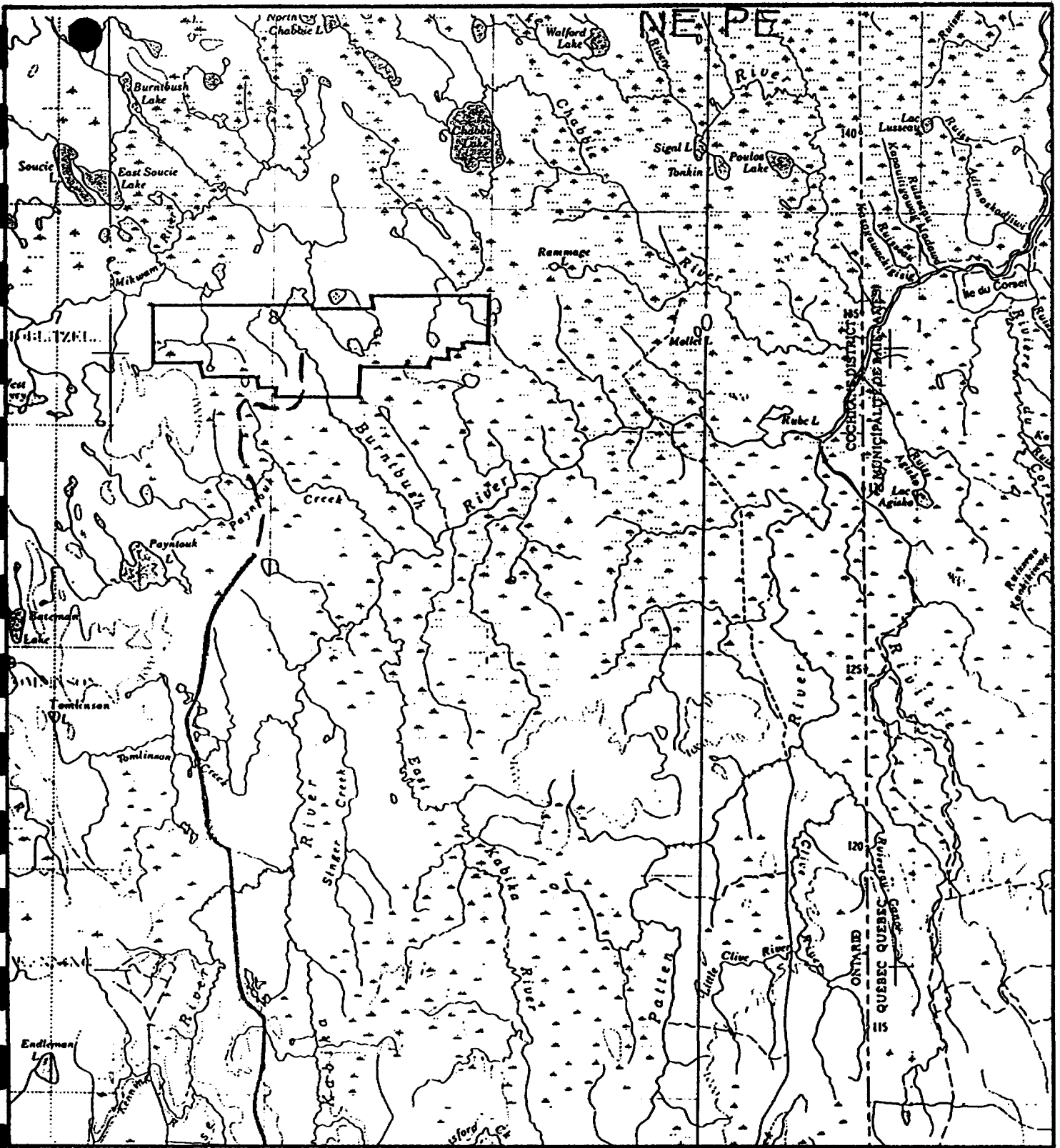


Figure 1 Location of the Burntbush River Property,
 Northeastern Ontario.
 Scale 1:250 000

- Tomlinson Road
- - - - Winter road to camp

Later, in the fall of 1986, five of the larger outcrops were stripped and detailed mapping was performed in order to better understand the geology. These outcrops are fairly well distributed across the property and represent an important step in understanding the property geology at a broader scale (COGEMA Ref. No. 87-CND-47-01).

In December 1986, a second airborne survey was commissioned, this time to DIGHEM Surveys Ltd, mostly because the previous airborne survey did not include low frequency or time domain EM instrumentation (COGEMA Ref. No. 87-CND-47-02).

The winter 1987 program consisted of reverse circulation (overburden) drilling at ~400 m x 400 m spacing and was planned to cover the southern one third of the property. Unfortunately, 23 of the planned drill holes could not be completed due to mild weather which made it necessary to abandon work on the east side of the Burntbush River.

Reverse circulation drilling was therefore resumed during the summer 1987 program. This program was designed to complete the reconnaissance holes not yet drilled, and also to perform some detailed follow-up drilling (~200 m x 200 m spacing) in areas of interest interpreted from the results of the winter program (see COGEMA Ref. No. 87-CND-47-02).

Work performed during 1988 includes:

- * line cutting of two grids (Burntbush and Blue Lake grids);
- * ground magnetics and VLF surveys over these grids and along two profiles of particular interest;
- * IP surveys over selected lines;
- * reverse circulation drilling of 40 additional sites;
- * 13 diamond drill holes for a total of 2904.5 m.

1.4 Bedrock Geology of the Project Area

The bedrock geology of the area was first studied by Thomson (1936) and more recently by Johns (1982). The following brief summary serves only as an introduction; the reader is referred to our earlier reports for more background information.

The property has been informally subdivided into a "northern low magnetic terrane" and "southern high magnetic terrane":

Very few outcrops occur in the north part of the property, and from these it is interpreted that the area is underlain by predominantly high grade metasedimentary rocks (turbidites), with lesser predominantly mafic, metavolcanic rocks. A few intrusive metagabbros are present and there are numerous late dykes and veins of various compositions.

The southern part of the property may be less strongly metamorphosed than the northern part, and outcrop exposure is somewhat better. Tuffs and flows of mostly intermediate compositions have been mapped. These rocks have been intruded by various others, including metagabbro and diabase, but veining seems to be less common than in the north.

It is believed that one or more major east-west structures transect the property and this is supported to some extent by our surface mapping.

1.5 Objectives of the Drilling Program

The main objective of the drilling program was to evaluate the gold potential of the property. Thus, 10 of the holes were drilled along three fences in the south-central part of the property (Burntbush grid) where reverse circulation drilling indicated variable rock types and weakly anomalous gold values (up to 31 ppb) and where airborne magnetics results suggested probable structural (but also possibly stratigraphic) contacts of potential interest.

The remaining three holes were more widely distributed across the property. Two holes were drilled in the metasediments: the first to test the strong E-W magnetic anomaly of the northeastern portion of the property (L4900E), the second to test an IP anomaly to the south of reverse circulation holes BOB-12 and BOB-114, where abundant gold grains were detected in pre-Wisconsinan gravels (Blue Lake grid). Finally, one hole was drilled west of Spade Lake (L5900W) to test a magnetic contact where reverse circulation drilling had again indicated weakly anomalous gold values (up to 28 ppb).

2. DESCRIPTION OF FIELD WORK

2.1 Line-cutting

During winter 1987, widely spaced lines were cut for the purpose of surveying reverse circulation holes. For this program (1988), approximately 200 km were cut and picketed to permit ground geophysical surveys, and correct positioning of reverse circulation and diamond drill holes.

Two grids and two profiles were cut or rechainned by EM Exploration Services Inc. (of Rouyn-Noranda, Que.): the Burntbush grid (line cutting 137 km, rechainning 5.4 km), the Blue Lake grid (line cutting 61 km, rechainning 3.3 km), the Blue Lake profile (L4900E, included in above) and the Spade Lake profile (L5900W, rechainning 0.9 km). Lines were cut 50 m apart and picketed every 25 m.

2.2 Ground Geophysics

2.2.1 VLF and Magnetics

These two surveys were carried out simultaneously by EM Exploration Services Inc. on the grids and profiles. Readings were taken on all lines at 25 m spacing (50 x 25 m lattice). The surveys were undertaken to aid in ground positioning of the drill holes, and to evaluate the usefulness of a more detailed survey compared to the airborne results, which were flown at 100 m spacing.

The VLF survey was done using a Geonic's "VLF-EM 16" instrument using the Cutler, Maine (NAA, 24.0 KHz) station. In-phase and quadrature components were read and hand drawn profiles were produced on-site. In all cases, readings were taken with the operator facing north.

The magnetics survey was done using an EDA "Omni IV proton magnetometer" while a base station monitored the diurnal variation. Every day, data were "dumped" through the base station and corrected readings were printed. A hand-contoured map was then produced.

At the end of the program, the VLF and magnetics data were digitized and computer drawn maps were supplied to us by the contractor.

The contractor's report covering these surveys has been compiled and is presented in COGEMA Ref. No. 88-CND-47-02 (volume 2).

2.2.2 Induced Polarization

A limited amount of IP work was performed to aid in drill hole positioning and to evaluate the usefulness of this method in the project area.

This survey was done on 6 lines (lines 3+50E, 51+00E, 56+00E, 64+00E, 68+00E, 71+00E) and also along the camp road (which approximately follows line 900W) by JVX, Ltd. (of Thornhill, Ont.). A total of 8.225 km was surveyed in five days. The contractor used a Scintrex IPR-11 multichannel time domain receiver and a Scintrex IPC-7 2.5 kW time domain IP/resistivity transmitter with an 8 hp motor generator. Each day, results were downloaded from the field instruments to a micro-computer and pseudosections were produced.

The contractor's report is presented in COGEMA Ref. No. 88-CND-47-02 (volume 1).

2.3 Reverse Circulation Drilling

Reverse circulation drilling was performed by Heath and Sherwood Drilling Inc. (of Kirkland Lake, Ont.); logging and sampling was performed by Overburden Drilling Management Limited (of Nepean, Ont.).

A total of 40 sites were drilled and these were distributed across 4 areas within the property: along the E-W magnetic anomaly in the northeast part (18 holes), in the area between the Burntbush River and Nedlog Lake (6 holes), in the southernmost part of the property west of the Burntbush River (5 holes) and along an E-W line located between the western property boundary and the large sheared metagabbro outcrop (11 holes).

A fully interpreted report has been prepared (COGEMA Ref. No. 88-CND-47-01) which describes this program.

2.4 Diamond Drilling

The diamond drilling contract was awarded to Les Forages Foranord Inc. (of Rouyn-Noranda, Que.) while drill hole surveying, core logging and core sampling were realized by Cogema's personnel.

A total of 13 holes were drilled for a cumulative total of 2904.5 m.

Drilling technique

The material used by Foranord consisted of:

- . two Longyear 38 unitized diamond coring drills equipped with BQ rods and BW and NW casing;
- . two unitized pump shacks equipped with sufficient water lines;
- . one Timber Jack tractor for drill moves and water hauling;
- . one bulldozer (D5 or D6) for trail maintenance and drill moves;
- . one propane heated water tank (5000 imp. gals) that was used where water supply was too remote.

Foranord directed the operations from their own base camp located at the old Newmont camp on the Burntbush River. The drills were run on two 12 hour shifts.

Drill hole surveying

All holes were carefully spotted on the grid before the arrival of the machinery. After the site was cleaned, the drill was positioned and levelled with the assistance of a Cogema geologist. Hole inclination was verified when the drill was in place.

During drilling, hole inclination was checked every 60 m using the acid etched tube method.

Core logging

All holes were logged and described in the field at 1:100 scale. Each box, once logged, was clearly identified with metallic embossing tape (hole No., box No., depth) and properly stored.

Core sampling and analysis

Core sampling was performed with several objectives in mind:

- * to analyze for gold in areas of interest;
- * to analyze for major elements in the "typical" rock units;
- * to analyze also for minor elements in the "typical" rock types since bedrock chips from the reverse circulation program are analyzed in this manner, and since the minor element package which we use includes a gold analysis;
- * to sample for thin sections to help understand the rock types and alterations present.

Sampling for "gold only" was done in two stages. At first, the core was sampled for gold at the discretion of the logging geologist; 50 cm long, half core samples were taken. After discussion, it was decided that larger samples (1.5 m long, half core) over more continuous zones would be preferable to smaller "punctual" samples. The drill core was then resampled using these new criteria.

A total of 669 samples were sent for "gold only" analysis; of these, 175 were sent to the assay laboratory of "Mine Yvan Vézina" in Destor, Que., and 494 samples were sent to Chimitec Ltée, in Ste-Foy, Qué.

Other samples taken are as follows:

- 89 samples analysed for both major and minor elements
- 11 samples analysed for major elements only
- 2 samples analysed for minor elements only

- 110 thin sections

Major and minor element analyses were done by Chimitec. See Appendix II for the analytical procedures and detection limits. Thin sections were made at Ecole Polytechnique in Montreal.

Control samples and reliability of results

During the sampling, quartzite control samples were inserted at intervals of approximately 25 samples, to help detect possible problems of contamination which might cause false gold anomalies.

COGEMA Canada purchased one ton of this material and it is used on all gold projects. Preliminary analyses of the quartzite done by Chimitec all gave <2 ppb Au (by neutron activation).

Twenty-one control samples were inserted into the "gold only" samples sent to Chimitec; twenty gave <5 ppb while one gave 20 ppb Au. Although one sample appears to be weakly contaminated, we feel confident that Chimitec has provided us with reliable results.

Ten controls were sent to Mine Yvan Vezina, and nine gave below detection limit results; the tenth sample gave 0.8 g/t which indicates the possibility of occasional strongly contaminated samples from this lab. Thus, any important anomalies should be rechecked by sampling the remaining half core (NOT the pulp or reject) before conclusions can be drawn.

Eight control samples were also introduced with the minor elements samples sent to Chimitec. The results show no evidence of contamination in any elements.

3. DIAMOND DRILL RESULTS

3.1 General Outline

Thirteen diamond drill holes were performed; a total of 2904.5 m were drilled. Drill hole locations are given on MAP 1, and a drilling summary is presented in Table 1.

Two of the holes were drilled in the eastern part of the property (Blue Lake area; BUR-02, 08), ten holes were drilled in the central part (Burntbush grid area; BUR-05, 06, 07 on L350E, BUR-01, 03, 04, 10 on L900W and BUR-09, 13, 11 on L2000W) and one hole was drilled in the western part of the property (Spade Lake area; BUR-12).

Results will be presented from east to west across the property (rather than in the order drilled) to facilitate discussion of the results.

Results presented are mainly a summary of the diamond drill (1/100) logs (see Appendix I), chemistry results and thin section studies (see Appendix II), but reference is also made to the various exploration results described in earlier reports (eg outcrop studies, reverse circulation drilling, airborne and ground geophysical work).

3.2 Blue Lake Area

BUR-08 (see MAP 2)

BUR-08 was drilled on the west shore of Blue Lake to test a weak IP response. The VLF profile also shows an in-phase inflection and corresponding reverse quadrature crossover; both of these are weak, low amplitude features.

No outcrop is exposed in this eastern part of the property, but the results of reverse circulation drilling suggested that metamorphosed greywackes (biotite ± amphibole ± garnet schists) would be intersected.

Table 1 : DIAMOND DRILL STATISTICS

<u>HOLE #</u> <u>DRILL #</u>	<u>STARTED</u> <u>COMPLETED</u>	<u>COLLAR</u> <u>CO-ORDINATES</u>	<u>AZIMUTH</u> <u>INCLINATION</u>	<u>OVERBURDEN</u> <u>BEDROCK</u>	<u>TOTAL DEPTH</u>
BUR-01 #01	22/02/88 25/02/88	X: 900W Y: 1340S	180° -45.5°	7.3 192.7	200
BUR-02 #02	25/02/88 02/03/88	X: 4900E Y: 2025N	180° -50.5°	46.1 198.9	245
BUR-03 #01	25/02/88 26/02/88	X: 900W Y: 1175S	180° -45.5°	6.5 142.5	149
BUR-04 #01	26/02/88 29/02/88	X: 900W Y: 775S	178° -45.5°	7.3 192.7	200
BUR-05 #01	29/02/88 11/03/88	X: 350E Y: 850S	181° -50°	52.4 225.6	278
BUR-06 #02	03/03/88 09/03/88	X: 350E Y: 500S	180° -50°	40 207.2	247.2
BUR-07 #02	09/03/88 14/03/88	X: 350E Y: 160S	179° -50°	44.9 215.1	260
BUR-08 #01	12/03/88 15/03/88	X: 5045E Y: 705N	174° -50°	37 191.3	228.3
BUR-09 #02	15/03/88 18/03/88	X: 2000W Y: 325S	180° -45.5°	20.8 236.2	257
BUR-10 #01	16/03/88 19/03/88	X: 900W Y: 350S	180° -45°	16.2 227.8	244
BUR-11 #02	18/03/88 22/03/88	X: 2000W Y: 775N	180° -45.5°	19.3 197.7	217
BUR-12 #01	20/03/88 23/03/88	X: 5900W Y: 050N	180° -45°	41 150	191
BUR-13 #02	22/03/88 24/03/88	X: 2000W Y: 200N	180° -45°	27.7 160.3	188
<u>CUMULATIVE TOTALS: O/B :</u>				366.5	
Bedrock :				2538	
Total :					2904.5

The main purpose of the drill hole was to see if there might be a relation between this and other IP anomalies to the east (within the Blue Lake grid area) and the presence of abundant gold grains in pre-Wisconsinan gravels preserved in a topographic "hole" to the immediate northeast of Blue Lake.

The principal rock type logged is greywacke. Foliation measures are mostly in the 60 to 80 degrees to core axis (tca) range, with a few readings of 50 to 60° tca. We interpret these results to mean that the rocks dip north at 55 to 75°, with local more steeply dipping sections. The greywackes are locally cut by thin (<1 m) porphyritic and mafic dykes.

The greywackes are fine grained quartz-feldspar-biotite schists. Minor garnet and/or amphibole porphyroblasts are locally present. The rocks are generally fresh and unaltered: calcite is present in variable amounts but is generally only a minor constituent.

Sulfide content of the rocks is very low. Pyrite was, however, smeared together with chlorite on many fracture planes. Where fracture density is significant, this pyrite could conceivably cause an IP response, for example at 110 to 125 m. This fracture zone would conceivably also explain the VLF anomaly.

The hole was not extensively sampled, due to the fresh appearance of the rocks, and due to the lack of structural deformation. The best gold value was 9 ppb, taken in a mafic dyke near the top of the fracture zone mentioned above.

BUR-02 (see MAP 3)

BUR-02 was drilled into the strong linear coincident high magnetic-EM anomaly which extends east-west across the northeastern part of the claim group. A ground geophysical profile (magnetics and VLF) was performed to facilitate hole positioning. The magnetics profile shows a well-defined peak anomaly with subsidiary magnetic features on the north flank. The VLF results show a low amplitude in-phase inflection with corresponding reverse quadrature crossover on this flank, which probably correlates with the northernmost of two parallel airborne EM anomalies detected with the DIGHEM survey.

No outcrop is exposed in this eastern part of the property, and at the time of drilling, no reverse circulation holes had been completed in this area. We concluded, though, from later reverse circulation drilling that the high magnetic response was due to the occurrence of mafic metavolcanic rocks of limited thickness, within the metasedimentary pile. This situation resembles the setting at outcrop exposures in the north-central part of the property (trench 1).

The field description of the core can be subdivided into two main units. Predominantly micaschists are logged down to about 95 m, and afterwards, mostly argillites are described. Foliation measures range from 40 to 45° tca down to about 105 m, from 105 to 120 m they gradually change to 60 to 70° tca, and they remain in this range to the end of the hole, except for the interval 195 to 206.5 m, where meter scale folds were observed. Acid tests indicate that between 120 and 180 m, the inclination of the drill hole changed from -47 to -33°, so we interpret these results to indicate mainly vertical to subvertical dipping units. The stratigraphy also includes minor quartzite, and has been locally cut by porphyry dykes.

The contact zone between the two main units is of particular interest since substantial sulfide mineralization is present. Both pyrite and pyrrhotite are present, mostly as coarse segregations in brecciated quartz-calcite clots. From 94.7 to 95.2 m the sulfide mineralization is described as "massive" and "earthy". Also, just below the interval of sulfide mineralization, at 98.3 to 100.6 m, the argillite is weakly graphitic and faulted. There is no obvious relationship between the sulfide mineralization and the fault.

Note that the position of the strongest magnetic peak does not correlate well with the location of the sulfide mineralization. Instead, it appears that the sulfides and graphite have caused the VLF response and subsidiary magnetic features on the north flank of the main peak (magnetic) anomaly.

The poor correlation between the main magnetic peak and the sulfide mineralization may be explained by the results of thin section studies and major element geochemistry. Although one sample, taken at 113 m, is clearly the same argillaceous greywacke that is predominant in BUR-08, the remaining samples have very high amphibole contents (up to 50%) and major element geochemistry more characteristic of tholeiitic basalt.

Textures observed in thin section are not typical of massive flow units, but show mineralogic banding at mm scale (which explains the metasedimentary interpretation given in the field). It is possible

that this indicates incipient migmatization, or that these are metatuffs or volcanic derived immature metasediments. In order to better understand the details of this drill hole, we should relog and more extensively sample it.

The rocks are generally fresh and unaltered (with the exception of the sulfide interval and graphitic fault) although minor calcite occurs, which decreases in abundance with depth.

Pyrite and pyrrhotite occur everywhere throughout the hole in minor quantities. Occasional thin intervals of quartz-calcite veining with coarse pyrite and/or pyrrhotite resembling the sulfide interval occur elsewhere in the hole over short (say ≈ 20 cm) intervals. In general, though, sulfide content is $< 1\%$, and decreases with depth.

The principal sulfide interval was sampled, and two of these gave results of 0.2 g/t Au; a few samples were tested for Cu and Zn, the best values received were 0.058% Cu and 0.264% Zn.

3.3 Burntbush Grid Area

3.3.1 Section 350E

Drilling along this section was performed mainly to investigate the geology and structure of the metavolcanic terrane east of the Burntbush River. We interpret from airborne geophysics and from bedrock elevation contouring that a northwest trending fault approximately follows the riverbed. The results of this profile were therefore also intended to test continuity of the stratigraphy and deformation across the fault.

Magnetics contouring in this part of the property is of low amplitude, in contrast with the variable susceptibilities encountered to the west, so a test IP line was performed here to aid in positioning of the holes.

BUR-05 (see MAP 4)

BUR-05 is the southernmost hole on the profile, and was drilled into a broad zone of weakly anomalous IP response. Coincident with the IP anomaly, the magnetics data show a transition from uniform (low) susceptibility to gently

increasing values towards the south. The VLF data are flat, but overburden thickness is considerable (≈ 32 m in the nearest reverse circulation hole).

No outcrops occur in the immediate vicinity, but numerous exposures of metavolcanic rocks have been mapped in the southernmost part of the property. These are all greater than 0.5 km away from the collar location. One large outcrop occurs at about 0.5 km to the southwest, west of the Burntbush River (trench 3), and it deserves mention since it is located along a high magnetic trend which passes just south of the drill hole.

The outcrop consists of two main rock units: a mixed tuff unit is intruded by metagabbro. The tuffs include a dacitic lapilli tuff sub-unit and an iron-rich tholeiitic sub-unit characterized by abundant magnetite, garnet and hornblende. They are thinly interbedded and folded at cm scale. The beds are nearly horizontal and fold axes plunge gently to the east. We have interpreted that the outcrop may indicate the presence of a parasitic anticline located on the north flank of a major anticlinal axis somewhere further south. A few weakly anomalous gold values were obtained from grab samples here, the maximum value was 30 ppb.

Most of the reverse circulation bedrock chip samples from this area are interpreted as intermediate metavolcanics, but the nearest sample is a sheared felsic tuff (BOB-101), which assayed < 2 ppb Au.

BUR-05 drill core can be subdivided into two main units. These are both mafic to intermediate metavolcanic units, but they are separated by a brittle fault zone at 206 to 238 m. The fault consists mostly of unconsolidated gouge and rock fragments locally cemented together with calcite. Associated with the fault, fracture related hematization extends into the adjacent units. Whereas foliations of the metavolcanics are generally near perpendicular to the core axis (eg 75 to 90° tca, suggesting north dips of about 45°), the main fracture trends in and adjacent to the fault are near parallel to the core axis. We have therefore intersected the fault at low angle, implying that the true thickness of the gouge zone may be less than ≈ 5 m.

The upper metavolcanic unit consists mostly of weakly foliated to massive rocks which fall in the calcalkaline basalt and andesite fields on a Jensen cation plot (see Appendix I). Variable amounts of amphibole poikiloblasts and/or biotite flakes are set in a very fine grained groundmass of recrystallized feldspar and quartz. Microscopic textures are indicative of shearing of moderate to strong intensity, which was not apparent at mesoscopic scale.

Within this upper unit, there are several 2 to 7 m sections with abundant (10 to 20%) garnet poikiloblasts. These intervals are characterized by high total iron and MnO contents and plot as tholeiites.

Below the fault, the metavolcanics are slightly more felsic, plotting in the calcalkaline andesite and dacite fields. Biotite is generally abundant, and amphibole occurs only locally over short intervals. The feldspar-quartz groundmass is very fine grained and completely recrystallized, and shearing is judged to be of moderate intensity.

The most extensive alteration in the drill hole is an elevated calcite abundance, mostly in the form of tiny dispersed grains and as fracture fillings. It is difficult to evaluate the significance of this calcite since it is also present as a late cement in the brittle fault. A one meter strongly sericitized band located at about 8 m below the fault gave the highest CO₂ value (≈7%). Chloritization is locally strong, but is not widespread. Finally, it should be added that the first 15 m of bedrock drilled was strongly fractured.

Sulfide content of the rocks is generally low. Minor disseminated pyrite generally accounts for <0.5% of the rock. In a 2.2 m band of altered, sheared felsic quartz eye tuff near the top of the hole, pyrite content may reach 1%. In the last 15 m drilled, pyrite abundance seems to have been increasing (up to ≈0.5%), where it was associated with occasional thin quartz veinlets. Pyrite content in the core seems insufficient to explain the IP data.

Most sampling for gold analysis was concentrated in and adjacent to the main brittle fault. A few weakly anomalous values were received immediately above (12, 40 ppb), within (10, 20 ppb), and below (15 ppb) this zone.

The best analytical value of 643 ppb Au was taken in the last 50 cm of core drilled (277.5 to 278.0 m). This result surprised us, as the core seemed fresh and unaltered. The closest sample taken is only 3.5 m uphole and gave <2 ppb; a weakly anomalous value of 10 ppb Au was received at 262.5 to 263.0 m. The pulp of the strongly anomalous sample was retested and gave 540 ppb. Further confirmation of this result is required, and it is suggested that the retained split core be sent for analysis, and that the last 10 to 20 m of the drill hole also be fully sampled.

Other weakly anomalous results received include values of 10 ppb and 37 ppb from weakly sheared garnet-rich tholeiites, and a 33 ppb result from the thin, strongly sheared felsic quartz eye tuff (near the top of the hole).

BUR-06 (see MAP 4)

BUR-06 was drilled into a much better defined IP anomaly than was BUR-05. The magnetics profile is relatively flat; the VLF profile shows a very subtle in-phase inflection coincident with the IP response.

The outcrops described previously (see BUR-05 introduction) are the only exposures close to BUR-06. Nearby reverse circulation bedrock chip samples are mostly of mafic to intermediate metavolcanic rocks; the closest sample (BOB-103) gave a gold value of 7 ppb.

In BUR-06, the predominant rock type encountered is a mafic to intermediate metavolcanic which strongly resembles those drilled in BUR-05. However, this hole is much less monotonous, since intercalations of several different units occur:

- . two thin (\approx 5 m) sections of quartz eye tuff are present near the top of the hole;
- . two thin (\approx 10 m) sections of feldspar porphyry are described;
- . a 20 m thick crenulated schist unit occurs at 120 to 140 m;
- . a 7 m thick aphanitic rhyolite occurs just below the crenulated schist unit.

Additionally, a few garnet-rich intervals, equivalent to those described in BUR-05 are present, and a brittle fault occurs at 183.5 to 195.7 m. Foliations are relatively uniform at 60 to 80° tca at the top and bottom of the hole, which we interpret to indicate north dips of 55 to 75°. In the interval 90 to 170 m though, local variations suggest less uniform dips and evidence of minor meter-scale folds.

The principal mafic to intermediate calcalkaline metavolcanic unit differs from those described in BUR-05 in that the amphibole porphyroblasts are smaller, and recrystallization of the feldspar-quartz groundmass is less advanced; relict plagioclase phenocrysts are only partially recrystallized. These rocks are only very weakly sheared.

Brief descriptions of the minor rock units are given below:

- . the quartz-eye tuff plots as a calcalkaline dacite and contains ≈10% quartz phenocrysts set in a fine grained groundmass of recrystallized feldspar and quartz. The quartz eyes are weakly strained and exhibit pressure shadows. The only ferromagnesian mineral is biotite;
- . the feldspar porphyry plots as a calcalkaline andesite and contains abundant sericitized plagioclase phenocrysts, along with minor coarse amphibole, set in a fine grained groundmass of recrystallized feldspar and quartz. Minor biotite flakes are present;
- . the crenulated schist unit is composed mainly of very fine grained recrystallized quartz and feldspar and with abundant coarse muscovite flakes which bend around relict plagioclase phenocrysts. In thin section, it is difficult to see a well defined, continuous crenulation cleavage, the mica flakes appear to be wrapped around phenocrysts, some of which are completely recrystallized. This rock plots in the calcalkaline dacite field;
- . the aphanitic rhyolite also plots in the calcalkaline field, and is composed mainly of very fine grained quartz and feldspar. Minor quartz eyes and relict plagioclase phenocrysts are preserved. The ferromagnesian minerals have altered to chlorite, and muscovite flakes are abundant (note: the high Na₂O analysis may indicate that the muscovite is in fact paragonite).

Shearing in hole BUR-06 is strongest in and adjacent to the crenulated schist unit. Elsewhere it is of weak intensity, but the degree of recrystallization suggests that minor widespread structural deformation is present.

The brittle fault zone consists mostly of unconsolidated gouge, and associated fracture orientations are again near parallel to the core axis. There is no apparent mineral alteration directly related to the fault.

Alterations include the widespread presence of minor sericite but this may be related to the greater abundance of felsic rocks relative to BUR-05. It is not clear whether the paragonite (?) seen in the aphanitic rhyolite is due to alteration or whether the original rock was sodium-rich. Chlorite is abundant in the crenulated schist, but in most other samples appears to be retrograde (see below). Calcite is never abundant (eg <5%) and is commonly not present. The first 25 m of core is strongly fractured.

Of interest is the occurrence of coarse chloritoid flakes and prismatic crystals in the metavolcanics below the brittle fault. These samples are strongly chloritized (no biotite or amphibole remains) and also strongly sericitized. One thin section showed about 3% tiny euhedral elongate tourmaline crystals. This part of the hole is strongly altered, and although the rocks plot as tholeiitic dacite to rhyolite, this does not reflect a primary bulk composition.

Sulfide content of the rocks is generally low. Pyrite concentrations of up to about 1% are present in the crenulated schist and aphanitic rhyolite units. The pyrite is extremely fine grained in these units and uniformly disseminated. Although the concentration is estimated to be relatively low, the number of individual sulfide grains is quite high. It is not improbable that these units are the cause of the IP anomaly.

But, this mineralization does not account for the VLF anomaly which alternatively, might be due to the brittle fault zone. If this is true, the fault might dip south and strike east-west (VLF profiles on adjacent lines to the east show a similar VLF response).

Continuous sampling for gold analysis was carried out in three separate parts of BUR-06: in fractured rock close to the bedrock surface, in the area of the crenulated schist and aphanitic rhyolite units and in and adjacent to the brittle fault. Punctual samples were taken elsewhere.

Near the top of the hole, in and adjacent to the uppermost quartz eye tuff unit, weakly anomalous values of 35, 21 and 10 ppb Au were received. Very local pyrite concentrations of up to 5% occur in this area. Further up, one result of 0.3 g/t (over 0.5 m) was also received, but the sample is bounded on either side by low gold values of 5 ppb or less.

Most samples taken in the crenulated schist and aphanitic rhyolite give background values; one sample shows 15 ppb. Just above these units, in altered feldspar porphyry, two samples gave 30 and 25 ppb Au.

Similarly, sampling in the vicinity of the brittle fault shows low gold values; one sample gave 10 ppb Au.

Deeper in the hole, a punctual sample of chloritoid-bearing rock gave 0.2 g/t Au. It is recommended that this part of the hole be further sampled, and a careful relogging of this part of the hole with particular emphasis on chloritoid abundance should also be done.

BUR-07 (see MAP 5)

The strongest IP response detected on section 350E was tested with BUR-07. The magnetics and VLF profiles are flat.

There is no outcrop near this drill hole. Reverse circulation bedrock chips to the south and west are predominantly mafic metavolcanics, but at 400 to 500 m away, to the north and east, biotite schists characteristic of the vast northern metasedimentary terrane are encountered.

The drill hole intersected a thick, well foliated and relatively uniform rock type over most of its length. In the field, there was disagreement as to whether this unit was metasediment or metatuff, and whether the sub-unit at 206.4 to 218.9 m contained pebbles or lapilli. The monotony of the drill hole is interrupted only by thin intervals of: a very fine grained graphitic unit (79.8 to 86.5 m), and a felsic tuff (at 91.8 to 108.6 m). Foliation measures in the first 45 m of core generally range from 60 to 70° tca, suggesting dips of 65 to 75° north. Below 90 m, foliations range from 70 to 85° tca, suggesting slightly gentler north dips of 55 to 70°.

The main rock type drilled is now interpreted to be a calcalkaline mafic to intermediate metavolcanic unit. Amphibole poikiloblasts and/or biotite flakes are set in a fine to medium grained feldspar-quartz groundmass. The foliation is generally defined by alternating ferromagnesian rich and poor domains at mm scale. Most thin sections appear to be only weakly deformed.

The graphitic unit is faulted and sheared and is composed mostly of very fine grained quartz and feldspar. Euhedral garnets are undeformed but inclusions within the poikiloblasts are well aligned. Presence of amphibole suggests the rock is tuffaceous.

The felsic tuff is conspicuously lacking in ferromagnesian minerals; chlorite and corroded garnet are present. Abundant relict sericitized plagioclase phenocrysts and lesser quartz eyes are set in a variably recrystallized quartz-feldspar groundmass. Samples taken from this unit plot as tholeiitic rhyolites.

Alterations are generally weak and are not widespread. Abundant dispersed calcite is present near the top of the hole, but elsewhere it was not present, or occurred as veinlets. Sericite alteration was evident in the felsic tuff, but is moderate to very weak in the more mafic rocks. Retrograde chloritization of biotite and/or amphibole is generally present, and is locally strong. The first 20 m of core is strongly fractured.

Pyrite occurs sporadically, but not uncommonly accounts for about 1% of the rock. The highest pyrite contents ($\approx 3\%$) were recorded in and adjacent to the graphitic tuff. This unit accounts for the strong IP response.

Sampling for gold analysis was not extensive due to the fresh, uniform appearance of the main rock type. Two samples taken near the bedrock surface gave 0.2 g/t Au. Other weakly anomalous results include a value of 17 ppb in felsic tuff, 14 ppb in the metavolcanic unit, and values of 13 and 21 ppb in the lapilli tuff sub-unit.

3.3.2 Section 900W

Four holes were drilled along this section located west of the Burntbush River primarily to ascertain whether or not the contrasting magnetics were due to structural features or due to normal (stratigraphic) rock unit boundaries. A test IP line was done along the camp's access road (which closely follows this section) and these results were used to aid in drill positioning.

BUR-01 (see MAP 6)

BUR-01 is the southernmost hole of this profile and is located near the southern border of the property. This hole, along with hole BUR-03 (to the north), was drilled to test the contact zone between low, uniform magnetics to the north, and high, variable magnetics to the south. BUR-01 was positioned to intersect an IP conductor coinciding with a well defined, but relatively weak VLF in-phase crossover with parallel quadrature response.

Nearby outcrops include trench 3, located at about 700 metres due east (see section 3.3.1), and a small outcrop of intermediate metavolcanic rock at 300 m to the west. This small outcrop is structurally similar to the layered rocks at trench 3 in that cm-scale open folds plunging gently to the east are abundant and the beds are near horizontal. Calcite alteration here is quite strong; the only sample taken gave 5 ppb Au.

Reverse circulation holes in this area are all classed as intermediate metavolcanics. Gold values range from <2 ppb to 7 ppb for most samples, but one sample, from BOB-158, which contains abundant free quartz and coarse pyrite (associated with the quartz but occurring also in the wall rock) gave 323 ppb Au. A second analysis gave 265 ppb. (Note that a result of 363 ppb was incorrectly reported in COGEMA Ref. No. 88-CND-47-01).

The hole is subdivided into two main units which alternate downhole. Mafic to intermediate flows (similar to those described in BUR-05 and BUR-06) predominate, and 5 m to 45 m thick intervals of lapilli tuff occur. Foliations range generally from 50 to 80° tca, but there is a gradual trend towards greater angles with depth. The units probably dip north at 60 to 80°.

The flow rocks are composed of poikiloblastic amphibole and lesser garnet set in a very fine grained recrystallized feldspar-quartz groundmass. Relict plagioclase phenocrysts are common and only weakly recrystallized. The only "fresh" sample analyzed (it shows, in fact, moderate chlorite and calcite alteration) plots as a calcalkaline basalt on the Jensen diagram.

The flow rocks become moderately magnetic with depth, and the increase in magnetite content may indicate that a mafic tholeiitic unit can be mapped using the magnetics contouring. This should be tested with additional sampling and analyses.

The lapilli tuff unit is characterized by rounded, elongate very fine grained felsic (to intermediate ?) clasts with mafic matrix identical to the flow unit. Contacts between this unit and the flow rocks are abrupt, and may be marked by late brittle fracture zones of limited depth extent.

Alteration of the mafic rocks includes extensive generally strong, pervasive calcite as interstitial dispersed grains and microfractures. Moderate chloritization of the amphiboles is also fairly extensive, but strongest in the first 100 m. At one of the brecciated contacts (between flow and lapilli tuff), sericitization was noted in addition to extreme calcite alteration.

Pyrite is the main sulfide mineral noted, and is everywhere present in minor amounts. In lapilli tuffs at 30-38 m, pyrite is more abundant (up to 5%) and this probably explains the IP response. The pyrite in this interval appears to be related to a small fracture/fault zone and is interpreted to be a mineralization rather than a primary feature. A second pyritic zone in the flow rocks at 156-166 m (up to 3%) was also seen. The VLF response may be related to the upper pyritic zone, or the fractured rock adjacent to it.

The two pyritic zones were sampled and most samples were sent to the Mine Yvan Vezina lab for analysis. In the upper interval (30-38 m), three values of 0.2 g/t were received and weakly pyritic hangingwall rocks gave weakly anomalous results up to 45 ppb Au (from Chimitec). The lower interval (156-166 m) also gave interesting gold values (up to 0.3 g/t). Both of these intervals should be resampled and sent for geochemistry analyses.

BUR-03 (see MAP 6)

BUR-03 was collared 165 m north of BUR-01 and was drilled to test whether or not the fracture zone at 30-38 m in BUR-01 was part of a larger structure. The magnetic profile shows low magnetics to the north, and higher magnetics (resembling the profile at BUR-01) to the south. VLF data are not flat, but no bedrock anomaly is interpreted.

Nearby outcrops and reverse circulation holes are as described for BUR-01.

The drill hole cut a monotonous mafic to intermediate metavolcanic flow rock, the same unit as has been described in previous holes. We recognize, however, two sub-units, one porphyroblastic unit (amphibole \pm garnet) and one fine-grained "massive" unit. Foliations are mostly in the 50 to 65° tca range, suggesting subvertical north-dipping units.

The porphyroblastic sub-unit most strongly resembles that described in BUR-06 in that relict feldspar phenocrysts have been well preserved. One such sample falls in the calcalkaline andesite field on a Jensen plot, but local thin intervals rich in garnet (eg 25% at 54-58 m) suggest minor tholeiitic flows are present.

We interpret the fine grained "massive" sub-unit to be the strongly sheared equivalent of the porphyroblastic rock. Microscopic textures are clearly indicative of this and include: discrete grain size variations of the recrystallized feldspar-quartz groundmass, near total destruction of amphiboles replaced by newly crystallized flaky to fibrous chlorite, and the presence of two subparallel foliations which may occur together, or which may truncate one another. The drill log also indicates that minor faulting/brecciation is commonly observed in the "massive" sub-unit.

In addition to the chloritization, we observe local pervasive calcite alteration and local minor sericitization. Sericite generally occurs in fractured zones.

Sulfide content of these rocks is quite low, but, pyrite was more commonly observed in the "massive" sub-unit.

Only a few "punctual" samples were taken in this hole. One sample gave 0.2 g/t but this is not considered to be of particular interest.

BUR-04 (see MAP 7)

BUR-04 is located 400 m north of BUR-03. It was drilled to investigate a strong magnetic-electromagnetic trend, and the southern contact of this trend.

There are no outcrops in this part of the property. Reverse circulation holes to the east gave weak Au values of 6 and 12 ppb in intermediate metavolcanics, to the southwest, Au values <5 ppb were received in a felsic metavolcanic.

The drill hole is subdivided into four units:

- * from 7.3-74.1 m: very fine grained tholeiitic dacite with abundant sulfides (pyrite >> pyrrhotite, up to 10% over significant lengths), may be thinly laminated or flow banded, i.e. probably a mixture of flows and tuffs, local minor amphibole and/or garnet poikiloblasts;
- * from 74.1-124.9 m: stretched feldspar porphyry, strongly sericitized elongate feldspars set in a very fine grained feldspar-quartz groundmass, falls in tholeiitic rhyolite field on Jensen plot;
- * from 124.99-200 m: mafic to intermediate porphyroblastic flow rocks similar to the main rock types described in BUR-01, BUR-03, except that here they plot in the tholeiitic andesite field on the Jensen diagram;
- * from 178.0-193.5 m: 15 m unit within the flows, above, of thinly bedded mixed mafic and felsic tuffs (or stretched lapilli tuff), strongly reminiscent of the layered rocks at trench 3 (see section 3.3.1).

Contacts between the units are abrupt, and strongly fractured. The first 25 m of sulfidic rock is also strongly fractured. The felsic porphyry is sheared, as are the adjacent units within about 5 m of the upper and lower contacts. Foliations are somewhat variable, ranging from 60 to 85° tca, suggesting north dips of about 50 to 75°.

Extensive moderate calcite and sericite alteration is observed in the sheared rocks, and a weak to moderate chloritization is observed in all units.

Sulfide content of this hole is quite spectacular in the uppermost dacitic unit, but pyrite is also quite abundant (average about 3%) in the first 20 m of the feldspar porphyry unit. Deeper in the drill hole, pyrite is common but rarely attains 1%.

BUR-04 was sampled continuously from the bedrock surface to 131 m, this includes the sulfidic dacite unit, the sheared feldspar porphyry and the sheared part of the mafic to intermediate flow unit. Most samples give trace (Mine Yvan Vezina results) or very low (eg <10 ppb) gold values. But, from 14-28 m, 5 of 12 samples gave results ranging from 24 to 60 ppb Au and two isolated samples in the feldspar porphyry gave 20 and 25 ppb Au.

Sampling below 131 m was punctual, but three relatively fresh-looking samples taken in the flow rocks gave 0.2 g/t Au.

BUR-10 (see MAP 7)

BUR-10 was collared at 425 m north of BUR-04, and is the northernmost hole of section 900W. The hole was drilled to test magnetic contacts suggestive of an east-west structure, and an east-northeast trending stratigraphic and/or structural contact. In profile, the east-west feature appears as a trough between two magnetic peaks, with an associated VLF in-phase inflection, the east-northeast feature coincides with the southern limit of the southern magnetic peak. In this area, the IP test line (camp road) has veered northeast towards the river, and the data suggest anomalous conductivity "off-line".

There is no outcrop near here; reverse circulation drilling in nearby holes indicated intermediate metavolcanic bedrock. The nearest hole gave 6 ppb Au, results at 400 m to the east and west gave 8 and 11 ppb Au, respectively. Note that these three reverse circulation holes fall on section E-E', which consistently gave weakly anomalous gold values.

In this hole, we drilled a non-uniform sequence of mixed tuffaceous rocks, along with a 40 m thick blue quartz porphyritic unit. In general, the tuffs are more felsic uphole, more mafic downhole. Foliations in the upper part of the hole range mostly from 50 to 80° tca, but are characterized commonly by 30° changes over short intervals.

Thereafter, foliations are more uniform, gradually changing from 60 to 70° tca (in the quartz porphyry) to 65 to 80° tca in the last 100 m drilled. This suggests that folding is common, but that with depth, units more consistently dip to the north at 60 to 80°.

In the interval 16.2-91.4 m (above the blue quartz porphyry), the rocks are mostly composed of fine grained biotite, feldspar and quartz with local intervals showing quartz eyes and/or altered feldspar phenocrysts. They are thinly laminated and weakly to moderately well sheared. Most samples analyzed for major elements fall in the calcalkaline dacite to rhyolite fields on the Jensen plot. One sample which plots as a calcalkaline basalt in fact carries 60% SiO₂ and is very strongly altered; another plots as a tholeiitic dacite: probably this is due to a local concentration of pyrrhotite.

The quartz porphyry could probably be included with the mixed tuffs of felsic tendency described above, but it does represent a uniform 40 m thick unit. It is moderately sheared.

In the interval 130.4-244 m, most thin sections show poikiloblastic amphibole, thus the tendency towards more mafic (calcalkaline basalt to andesite) compositions. The one sample which gives a tholeiitic chemistry trend contains significant garnet poikiloblasts and has an MnO analytical result of 0.46%, and was taken from a distinct 3 m thick unit. These more mafic rocks are generally only very weakly sheared.

This hole is mostly strongly altered, particularly in the more felsic rock types where calcite and sericite are abundant. Chlorite and epidote are also commonly observed along with very minor tourmaline and possibly also fuchsite. The mafic rocks are strongly altered in the same manner but slightly less so.

Pyrite is the main sulfide mineral, but pyrrhotite is commonly present in minor quantities. Sulfide abundance consistently approaches 0.5 to 1% in the more felsic rocks (i.e. down to about 130 m), and thereafter it decreases quite dramatically. At 87-90 m, pyrite content attains 10% over short intervals, and these local concentrations are coincident with sections where the foliations parallel the core axis.

We sampled this hole continuously in the first 50 m and in shorter sections (eg up to 15 m) in various other intervals, as well as punctually throughout. In the short section of abundant pyrite at 87.2-88.2 m, two adjacent samples gave 300 and 75 ppb Au. At 23.0-30.5 m a weakly anomalous zone (eg 10 to 25 ppb Au in 6 samples and 95 ppb Au in a seventh) occurs and just below this at 43.5-45.5, two adjacent samples gave 64 and 50 ppb Au.

3.3.3 Section 2000W

In effect, this section can be considered the northern extension of section 900W, since the magnetic contours suggest an east-northeast striking stratigraphy in these areas. Drill hole positions were chosen based on magnetics and/or geologic interpretations; no induced polarization was performed here.

BUR-09 (see MAP 8)

BUR-09 is the southernmost hole on this profile and was drilled across a strong magnetic anomaly. Magnetics contouring suggests that we may have drilled the north limb of a fold whose axial trace trends east-northeast. But, we also interpreted a possible east-west structure extending from this hole directly towards hole BUR-10.

No outcrops occur in this area; reverse circulation holes nearby include one hole at \approx 150 m to the west in an area of low magnetics, and one hole at \approx 250 m to the east in an area of high magnetics. The former drilled into an intermediate metavolcanic which gave 14 ppb Au, the latter was a felsic metavolcanic which gave 8 ppb Au.

The drill hole is subdivided into two main units. In the upper part of the hole (from 20.9-130.8 m), quartz \pm feldspar crystal tuffs were intersected. In the lower part (130.8-257.0 m), biotite rich tuffs with abundant felsic lapilli occur, along with a relatively coarse grained, massive feldspar porphyry unit which we interpret to be a late felsic dyke. Foliations in the first 75 m are generally 45 to 55° tca, suggesting vertical orientations. Thereafter, foliations are generally 60 to 75° tca, suggesting north dips of 65 to 80°.

The upper crystal tuff unit is composed of feldspar phenocrysts and quartz eyes up to several mm in size set in a very fine to fine grained recrystallized quartz-feldspar groundmass with minor biotite flakes. Locally, the quartz eyes become slightly stretched and partially recrystallized, and in these intervals the feldspar phenocrysts are also partially to completely recrystallized and may be totally lost in the groundmass. Thus, this unit can be subdivided into two sub-units, one of which is the sheared equivalent of the other. Most of these samples fall in the calcalkaline dacite field on a Jensen cation plot; one sample plots in the tholeiitic field but this sample carries significant pyrite.

The lapilli tuff in the lower part of the hole is composed of felsic, weakly porphyritic, rounded, locally elongate lapilli (fragments reach a maximum of about 20 cm) set in a fine grained groundmass of feldspar-quartz-biotite which is also weakly porphyritic. Two samples from this unit also plot as calcalkaline dacites.

Within the lapilli tuff unit, we observed two intervals of feldspar porphyry which we interpret to be dyke material. However, the contacts are concordant so they may alternatively be sills, flows or tuffs. The feldspar phenocrysts are pinkish and are generally about 1 cm in size, and the groundmass is massive to only weakly foliated, thus this unit is clearly distinct from the thinly laminated tuffs in the upper part of the hole. One sample analyzed for major elements plots as a calcalkaline rhyolite.

Alterations in the rock units are generally weak, most evident is the abundance of calcite in all rock types except the sheared tuffs in the upper part of the hole. Sericite/muscovite is also relatively common, but in quantities which are not unusual for felsic rocks.

Sulfide content of the drill hole is somewhat anomalous. The crystal tuffs generally contain 1 to 3% disseminated pyrite, and from 54 to 85 m, pyrite content is estimated at 5%. The lapilli tuffs also have a pyrite content of 1 to 3%, but no pyrite was observed in the feldspar porphyry dykes. The strong magnetic peak does not obviously correlate with any particular rock unit or mineralization, and seems to reflect an increased magnetite content recorded in the lapilli tuffs at 140 to 185 m.

Sampling for gold analysis is quite extensive in the upper laminated tuffs, whereas mostly punctual sampling was performed in the lapilli tuffs and feldspar porphyry dykes. A number of samples gave weakly anomalous gold values, the most significant being the interval 131.5 to 137.5 m (the top of the lapilli tuff where it is in contact with sheared crystal tuffs) where three of five samples gave 95, 70 and 55 ppb Au.

BUR-13 (see MAP 8)

BUR-13 was drilled into a low magnetic area in the north part of the "high magnetic terrane" to investigate the geology, and to test for the presence of a northwest trending fault interpreted from regional airborne magnetics. The VLF is flat.

Again, no outcrop is exposed near here; reverse circulation drilling results show mafic to intermediate metavolcanic bedrock. Hole BOB-58, at \approx 200 m to the southwest, gave 31 ppb Au.

We intersected a monotonous sequence of mafic to intermediate calcalkaline metavolcanics. Foliations range from 55 to 75° tca, suggesting north dips of about 60 to 80°.

These are composed of amphibole poikiloblasts and occasional relict plagioclase phenocrysts set in a fine grained, weakly recrystallized feldspar-quartz groundmass. Very minor, thin dykes of similar composition were also observed.

Alterations are weak and mostly restricted to sericitization of the relict plagioclase. The first 25 m of core is very strongly fractured, but it is difficult to conjecture whether or not this is a manifestation of a regional structure.

Sulfide content is low, but up to 5% pyrite was observed very locally.

Sampling for gold was very punctual due to the fresh, unaltered appearance of the core. One sample gave 260 ppb Au; it was taken adjacent to a pyritic interval and justifies some additional sampling in this hole. (A reanalysis of the pulp gave 290 ppb).

BUR-11 (see MAP 9)

BUR-11 was drilled at 300 m east of an outcrop of strongly sheared metagabbro (trench 2), which we interpret to lie approximately along the contact between the vast metasedimentary terrane to the north, and the metavolcanic terrane which lies to the south. Whereas the outcrops show a strong magnetic signature, the area drilled shows low, uniform magnetics. The purpose of this hole, then, was to investigate this deformation zone outside the intrusive body.

Other, undeformed metagabbro exposures occur to the northwest of trench 2, thus limiting the width of the shear zone to the north, but no other similar outcrops occur south of it. Much sampling was done in these gabbros, and a small percentage of the samples gave anomalous gold values up to 110 ppb, commonly related to local silicification.

Reverse circulation holes to south intersected mostly mafic metavolcanic rocks, but these are several hundred metres away. Perhaps of significance was the discovery of irregular gold grains in the basal till of BOB-94, although drilling at 200 m further north yielded no anomaly.

Most of the hole intersected sheared metagabbro. The magnetic expression of the outcrops may therefore be largely due to their proximity to surface (although overburden depth here is only 14 m). Schistosity is generally at 55 to 75° tca and shows truncations and minor folding. The hole ended in a weakly foliated to massive felsic intrusive.

Sheared metagabbro strongly resembles surface samples described in earlier reports: amphibole and feldspar are the chief constituents, and the well developed schistosity is mostly due to grain size variations and thin shear planes. In drill core though, we observe more biotite than we reported from the surface samples. Significant widths of barren white quartz vein are reported at 71 to 78 m.

The weakly deformed felsic rock is composed mainly of plagioclase phenocrysts. These are set in a weakly to moderately sheared quartz-feldspar groundmass which clearly comprises only about 20 to 30% of the rock. Garnet porphyroblasts are not uncommon.

Although the metagabbro is strongly deformed, it is only weakly altered.

Sulfide content is low, but short intervals of core may contain up to 5% coarse pyrite and/or pyrrhotite.

This hole was sampled continuously from 19.3 to 161 m (and punctually thereafter), but most results are low. Isolated weak anomalous values, eg 20-80 ppb Au are common, but are mostly bounded by adjacent background samples. One result of 480 ppb Au was received from a sample of sheared metagabbro right at the contact with the felsic rock. It too, is bounded by adjacent samples which give low values.

3.4 Spade Lake Area

One hole was drilled along section 5900W (BUR-12, see MAP 10) to investigate a magnetic boundary with a corresponding VLF response best described as a transition between low quadrature readings (to the south) and high quadrature readings (to the north).

No outcrop was found in this part of the property. But, at ≈800 m south of our claim boundary, Newmont has trenched to bedrock and exposed mostly felsic to intermediate crystal tuffs. There are very weakly sheared to strongly sheared; intensity of shearing in the trenches is stronger to the north. Subsequent drilling by Newmont intersected the following lithologies from north to south: a pink sodic granite, intermediate tuffs, a tholeiitic basalt, more tuffs, argillites. Shearing is described only in the southern tuffs, and erratic economic gold values were obtained over narrow widths, mostly in quartz-pyrite veins. Anomalous gold values are widespread (see COGEMA Ref. No. 87-CND-47-04).

Reverse circulation holes in this area intersected mainly a red coloured "felsic crystal tuff" which we later re-interpreted as the sheared equivalent of the pink sodic granite described by Newmont. Some holes intersected felsic to intermediate metavolcanic rocks as well, and overall, most holes gave weakly anomalous gold values ranging up to 28 ppb. Thus, the drill hole was positioned not solely on the basis of geophysical results.

BUR-12 intersected the reddish sodic granite over most of its length. We have chosen to call it a granodiorite porphyry. In the first 100 m, it is strongly sheared and fractured, and less extensive

sheared intervals also occur deeper in the hole. The shear fabric (foliation) is mostly oriented at 75 to 85° tca, indicating northerly dips of 50 to 60°. Near the end of the hole, we drilled two intervals of a felsic quartz eye tuff (xenoliths ?).

The "fresh" granodiorite porphyry is composed of weakly sericitized plagioclase phenocrysts and lesser quartz eyes up to about 1 cm large, set in a sheared groundmass of recrystallized quartz and feldspar, along with some biotite, sericite, calcite, chlorite and opaques. Although the core appeared massive, the groundmass is incredibly well oriented in thin section, wrapping around and between the abundant phenocrysts.

The felsic crystal tuffs are similarly weakly sheared, but few phenocrysts are present, mostly of quartz.

The major sheared interval (eg from 40 to 100 m), shows typical development of mylonite. In most cases, the rock cannot safely be identified as the sheared equivalent of the porphyry, it is very fine grained, may be grey or pink, and is strongly fractured (and oxidation related to the fracturing has stained much of the rock to a dirty yellowish colour). However, locally, where the rock is pink, even though it is well foliated and fine grained it closely resembles thinner, less intensely sheared intervals deeper in the hole.

Alterations in the main sheared interval are strong and include abundant chlorite, sericite, calcite and the development of uncommon minerals, one of which has been tentatively identified as vivianite. Alterations are weaker in the "fresh" granodiorite porphyry and the crystal tuff units.

Sulfide mineralization in the shear includes disseminations of fine grained pyrite up to about 10% of the rock over short intervals, and as coarser pyrite grains in thin quartz ± tourmaline veins. We also observed trace amounts of chalcopyrite and galena. Fine grained disseminations of arsenopyrite may be present; we have requested As analyses to confirm this, but results have not yet been received.

Gold values in the main shear are clearly at anomalous levels. These are summarized in Table 2.

Table 2 : SUMMARY OF GOLD RESULTS - BUR-12
(41.0 - 107.0 m)

<u>Depth</u> (m)	<u>Weighted Average</u> (Au ppb)	<u>Range</u> (Au ppb)	<u># samples</u>	<u>Recovery</u> (%)
41.0- 45.5	<5		3	100
45.5- 56.0	44	20- 65	5	75
56.0- 65.0	282	130-550	4	55
65.0- 68.0	35		1	40
68.0- 77.0	187	160-230	3	60
77.0- 84.5	7	<5- 20	5	90
84.5- 86.0	150		1	90
86.0- 89.0	30		1	80
89.0- 95.0	308	135-480	2	70
95.0-107.0	12	<5- 45	8	98

4. DISCUSSION OF RESULTS

4.1 Blue Lake Area

The main rock type of the "northern low magnetic terrane" is confirmed to be (argillaceous) greywacke. These have been metamorphosed to amphibolite facies, so that the term quartz-feldspar-biotite ± garnet schist better describes the rock.

Linear high magnetic trends within the metasediments are due to rocks of mafic metavolcanic affinity, generally carrying >50% amphibole with abundant calcic plagioclase (andesine-labradorite).

We interpret the greywackes to be a thick sequence of turbidite sediments, within which occur minor thin, but laterally extensive tholeiitic mafic volcanic units.

Although we drilled only two holes in this part of the property, one zone of possible interest was intersected in hole BUR-02. In this hole, at ≈92 to 98 m, a thin interval of sulfide mineralization occurs adjacent to a weakly graphitic fault zone. Unfortunately, core analyses gave low results for Au, Cu and Zn.

Elsewhere, the rocks were fresh and unaltered, and Au geochemistry results show low background values.

4.2 Burntbush Grid Area

4.2.1 Rock Types

The most common single rock type drilled on the Burntbush grid is a mafic to intermediate weakly foliated metavolcanic containing poikiloblastic amphibole ± garnet set in a finer grained mostly recrystallized groundmass of plagioclase, biotite and quartz ± relict plagioclase phenocrysts. We interpret these to be basalt and andesite flows which have been metamorphosed to lower amphibolite facies. This is the predominant rock type in holes BUR-01, BUR-03, BUR-05, BUR-06 and BUR-13, and is a subsidiary rock type in BUR-04.

Most of these show calcalkaline chemistry, but a few samples rich in garnet (high FeO) are tholeiites, and we suspect that BUR-01, which has anomalous magnetite content, may also be largely tholeiitic.

Pyroclastic rocks of similar composition also occur. Lapilli tuffs in BUR-01 have a matrix which is identical to the above rock type, but ashfall tuffs in BUR-07 and the last 100 m of BUR-10 contain more abundant biotite, and therefore show a better defined foliation. BUR-07 also contains minor lapilli tuff, and crystal tuffs occur in BUR-10.

Truly felsic metavolcanic rocks were drilled in only three holes. The stretched feldspar porphyry from BUR-04 (74.1-124.9 m) and a silicic quartz eye tuff from BUR-07 (91.8-108.6 m) plot as tholeiitic rhyolites, while the aphanitic (porphyritic) rhyolite in BUR-06 (143.4-150.7 m) plots in the calcalkaline field.

The remaining, intermediate metavolcanic rocks are variable in appearance. These include pyritic dacite tuffs and flows from BUR-04 (7.3-74.1 m), ash tuffs from BUR-05 (238-278 m), various units in BUR-06 (including quartz eye tuffs, ash tuff, feldspar porphyry, crenulated schist; all are of limited depth extent), crystal and lapilli tuffs in BUR-09, and ash and crystal tuffs in the first 130 m of BUR-10. For mapping purposes, we distinguish an intermediate subdivision only when a distinctive unit has a substantial thickness; in all other cases, we include these intermediate rocks together with the mafic or felsic units with which they occur (see logging summaries, Appendix I).

The intermediate metavolcanics are predominantly calcalkaline; but, the pyritic dacites from BUR-04 plot as tholeiites.

Intrusive rocks were drilled in hole BUR-11. Sheared metagabbro was logged in the first 140 m of core, and a more felsic, weakly sheared intrusive occurs afterwards.

4.2.2 Structure and Deformation

We have interpreted many of the rocks drilled in the Burntbush grid area to be sheared. It should, however, be emphasized that nowhere does the intensity of this shearing approach that observed in the metagabbro drilled in hole BUR-11. The drill core is easily compared with the outcrops exposed to the west, and for this reason, no detailed discussion is presented.

In hole BUR-09, we interpreted from mesoscopic observations that parts of the feldspar-quartz porphyritic schist were sheared based on textural relations. These sheared intervals show a better schistosity, stretching of quartz-eyes and destruction of feldspar phenocrysts.

In hole BUR-04, we interpreted the stretched feldspar porphyry to be sheared, mainly due to the highly elongate feldspar phenocrysts. But, further support for this interpretation was found in the form of dislocation of garnet porphyroblasts in the mafic to intermediate rocks immediately adjacent to the unit.

Finally, we suggested that the crenulated schist unit of BUR-06 was sheared, but we recognize that micaceous rocks need not be sheared to display a strong crenulation fabric.

Our field descriptions contain occasional references to shearing elsewhere, but we now interpret shearing to be more widespread than previously thought. This is due to microscopic examination of the mafic to intermediate amphibole schists which display the following:

- the groundmass in which amphibole ± garnet occurs is strongly recrystallized. Plagioclase and quartz are so fine grained that they cannot be distinguished in thin section. Furthermore, grain size variations within this groundmass, along with oriented biotite flakes, show the presence of two subparallel foliations which may occur together, and which also commonly truncate each other.
- samples in which these textures are poorly developed show relict plagioclase phenocrysts and a gradation between these and more strongly sheared examples can be described. As intensity of shearing increases, plagioclase phenocrysts become more strongly recrystallized, to the point where none remain. The more strongly deformed samples show stretched and dislocated amphiboles and/or garnets, and finally, amphibole may be completely destroyed and replaced by chlorite flakes. The strongest shearing is exhibited by the "massive" intervals in BUR-03. Note that the field log for BUR-03 shows a good correlation between minor faults and "massive" texture, and that this hole (along with the stretched quartz crystal tuffs in BUR-09) also shows more vertical dipping units, relative to the others.

Widespread shearing in this area might also explain why all of the clasts in the lapilli tuffs are so well rounded, flattened and elongate. Alternatively, these may be epiclastic deposits.

Using such widely spaced drill holes, combined with the paucity of outcrop exposure, it is difficult to map where deformation is most intense, or to speculate on the orientation of the strongest "shears". However, it is our interpretation that local areas within the grid are very strongly sheared, and that others are more or less completely undeformed, and that the remainder shows weak to moderate shear fabric.

In addition to shearing, we observed two brittle faults of possible regional significance. The fault in hole BUR-06 may trend east-west and dip south (based on fracture orientations and a weak VLF response). Orientation of the fault in hole BUR-05 is more speculative; we suggest that it may trend northwest and be part of a larger fault system which approximately follows the Burntbush River in this area (based on fracture orientations, regional magnetics interpretation, and the observation that the VLF response interpreted to correlate with the fault in BUR-06 continues east of the line, but disappears west of the line).

4.2.3 Magnetics as a Mapping Tool

Before beginning this drilling program, we postulated that the boundary zones between high and low magnetic trends within the "southern high magnetic terrane" represented stratigraphic and/or structural boundaries between different rock units. The results of our drilling support this interpretation, but detailed mapping using the available drill holes and the magnetics map is not possible.

For example, drill holes which intersected predominantly mafic to intermediate calcalkaline metavolcanics (flows and tuffs taken together, BUR-03, 05, 06, 07, 13) all fall in areas of low magnetics. Hole BUR-01 may be the only exception, since magnetics contouring shows an east-northeast trending zone of moderately high values. But, we suspect that additional sampling will show that magnetite content in this hole will substantially increase the iron content relative to the others, and that this represents a tholeiitic unit.

But, within these holes, different units of limited depth extent occur which have no apparent magnetic signature (for example, thin (≈ 3 m) tholeiitic basalt flows, or a 30 m unit in BUR-06 containing crenulated schist and aphanitic

rhyolite). Note that a change from mafic to intermediate flows, to intermediate tuffs in BUR-05 appears to correlate with a transition to higher magnetics.

Hole BUR-11, which drilled sheared metagabbro and a felsic intrusive is also located in low magnetics. Previously, we had interpreted that circular high magnetic anomalies located to the west and northwest of the drill hole defined the limits of the metagabbro, but now it seems possible that they are related to the bedrock topography. Thus, the true extent of this unit can only be guessed at.

The remaining three drill holes are all located along high magnetic trends. The southernmost of these, BUR-04, intersected ≈ 67 m of dacites, followed by ≈ 51 m of felsic stretched feldspar porphyry. The last 75 m of core is mostly mafic to intermediate metavolcanics, which correlates well with the decrease in magnetics towards the south. However, these have tholeiitic chemistry and so they differ somewhat from BUR-01, where magnetics is higher.

BUR-09 and BUR-10 appear from the magnetics map to occur on a fold; BUR-09 on the north limb and BUR-10 very close to the hinge, and on the south limb. It is interesting that foliations measures in the upper part of BUR-10 suggest that folding is common; this may support the interpretation that this magnetic feature really is a fold hinge.

BUR-10 intersected a mixed section of pyroclastics. These plot mostly as calcalkaline dacites down to 130 m and afterwards they become somewhat more mafic, plotting as calcalkaline basalt and andesite. This change in composition approximately correlates with a decrease in magnetics, we therefore place the last 100 m of this hole in the same (regional) unit as the flows and tuffs in BUR-03, 05, 06, 07 and 13.

BUR-09 intersected feldspar-quartz crystal tuffs down to 130 m, and these are followed by mainly lapilli tuff. Both units show calcalkaline dacite compositions, but only part of the lapilli tuffs correlate with high magnetic values.

Map 11 shows our geologic interpretation of the Burntbush grid. We have considered all of the available geologic data (from outcrop, reverse circulation and diamond drilling) along with the magnetics, and to a lesser extent, VLF and IP results.

This interpretation is necessarily somewhat preliminary, and the relationship of rock units across the interpreted structures is difficult to ascertain. The internal symmetry within each of these blocks is also not well defined.

It is, though, of interest that magnetics suggests that rock units strike east-northeast. Since we interpret the main shear in the north part of the grid area to strike east-west, and since we suggest that much of the foliations developed in the "massive" rocks to be a shear fabric, it can be postulated that the entire grid lies within a large east-west trending structural deformation corridor.

This also suggests that drill holes should have been oriented more southeast. This is not a major problem since the angular difference is small, but it indicates that the foliations dip more steeply than indicated in section 3.2.

4.2.4 Alterations and Gold Geochemistry

Section 350E

Alterations in BUR-05 and BUR-07 are more or less restricted to anomalous calcite abundance. In BUR-05 this may be more due to the late brittle fault which shows a calcite cement; in BUR-07, this calcite is present mainly in the first 50 m drilled.

Gold geochemistry in these two holes show mostly background to very weakly anomalous results. The best value of 643 ppb Au was taken in the last 50 cm of core from BUR-05. It is perhaps significant that the intensity of shearing seemed to be decreasing towards the end of the hole, and that thin quartz-pyrite veins become more abundant.

Alterations in BUR-06 are variable, due in part to the diversity of rock types. Sericite and paragonite (?) may be related to alteration (paragonite may be metamorphic derivative of pyrophyllite). We also consider that the chloritoid in the mafic metavolcanics towards the end of the hole is an alteration mineral. A brief review of the literature shows that:

- i) bleached wall rocks adjacent to ore at the Casa Berardi deposits commonly show a sericite-ankerite-chlorite-quartz \pm chloritoid \pm chromian mica assemblage (Pattison et al, 1986). Whereas chloritoid in BUR-06 is coarse and euhedral, chloritoid at Casa Berardi occurs as minute, usually microscopic grains. Sericite, chlorite, quartz and tourmaline are also present in the altered rocks in BUR-06, but ankerite and chromian mica have not been identified.
- ii) a progressive alteration package including chloritoid has been documented from the East South "C" ore zone at the Dickenson Mine (Red Lake district). Mathieson and Hodgson (1984) have shown that as intensity of alteration increases, hornblende content decreases rapidly and eventually disappears. Newly formed minerals include biotite, chlorite, chloritoid, staurolite, andalusite, and in the most strongly altered rocks, garnet (see Fig. 2). The analogy with BUR-06 is most pertinent since this part of the Dickenson Mine is within the metamorphic aureole of an intrusive body and is at amphibolite facies. Note that co-existing hornblende and chloritoid has not been found in these altered rocks in BUR-06.
- iii) at the Bousquet property, in the western part of the no. 6 mineralized zone, sheared and altered basalts locally contain up to 25% chloritoid crystals that cut across all tectonic fabrics (Tourigny and Hubert, 1986). This texture is remarkably similar to that observed in BUR-06.

Gold geochemistry results from BUR-06 show background to weakly anomalous results. However, the chloritoid-bearing rocks were inadequately sampled.

Section 900W

Chlorite alteration is moderate to strong and is extensive in holes BUR-01, 03 and 04. It is most evident in BUR-03 and the upper parts of BUR-01. Calcite and sericite alteration are also commonly observed in all of the drill holes.

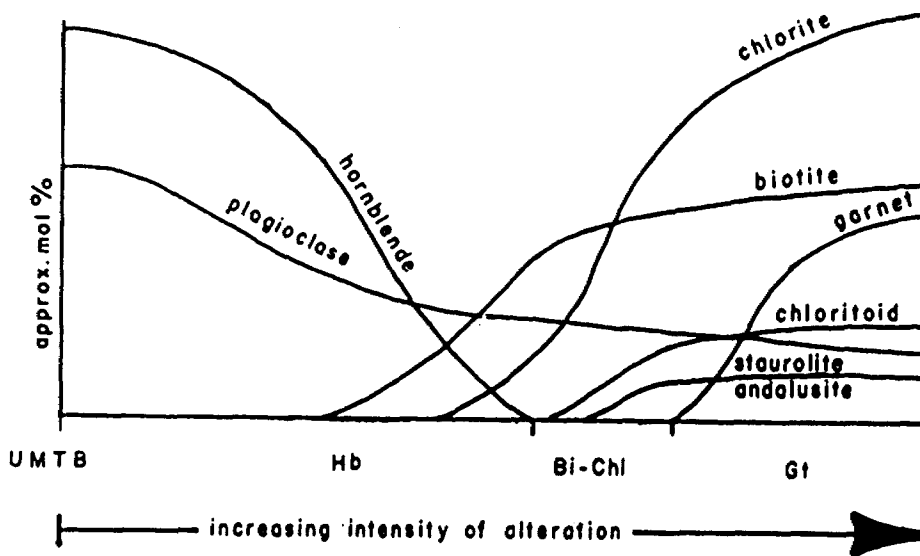


FIG. 7. Schematic representation of the variation in abundance of minerals indicative of alteration in mafic metavolcanic rocks in the ESC ore zone. Symbols: UMTB = unaltered metamorphosed tholeiitic basalt; Hb = hornblende or weakly altered facies; Bi-Chl = biotite-chlorite or moderately altered facies; Gt = garnet or strongly altered facies.

Figure 2 : Progressive alteration assemblages in the East South "C" ore zone at the Dickenson Mine, Red Lake district (from Mathieson and Hodgson, 1984)

Gold geochemistry results from drill core along 900W show mostly low background to weakly anomalous values. The pyritic intervals in BUR-01 should be resampled (eg 30-38 m, 150-165 m). Elevated results in BUR-04 (up to 60 ppb Au) are probably related more to anomalous pyrite abundance than to a gold mineralization event. Finally, in BUR-10, we interpret anomalous gold values (up to 95 ppb Au) to be of possible significance, but we suggest that two adjacent samples which give 300 and 75 ppb Au are related to a minor local zone of enriched pyrite content.

Section 2000W

Alterations along this profile are generally of weak intensity.

Gold geochemistry results give mostly low background to weakly anomalous results. A maximum result of 480 ppb Au, and other values up to 80 ppb Au in BUR-11 suggest that there is some Au mineralization to be found associated with the shear zone. Although one sample from BUR-13 gave 260 ppb Au, it is difficult to explain its importance. In BUR-09, anomalous results up to 95 ppb Au in lapilli tuff adjacent to sheared crystal tuff should be further investigated.

4.3 Spade Lake Area

In hole BUR-12, we drilled a shear zone which shows anomalous gold values (up to 550 ppb Au) over significant lengths. This shear zone approximately follows the northern contact of a sodic granodiorite porphyry intrusive. Undeformed rock north of the shear was not intersected.

This is considered to be the most important result of the 1988 exploration program. Problematic is the fact that fracture density is high and there was much core loss, making analytical results difficult to evaluate. But, the shear has a clear geophysical signature and should be fairly well delineated using surface methods.

5. SUMMARY AND CONCLUSIONS

Two holes were drilled in the eastern part of the property and we believe that the results obtained are applicable to all of the "northern low magnetic terrane".

We interpret the northern part of the property to be underlain by a thick turbidite sequence, within which occur minor thin, but laterally extensive tholeiitic mafic metavolcanic units. These metavolcanics can be mapped using magnetic contours since they have higher susceptibilities.

In hole BUR-02, a thin sulfide rich interval occurs adjacent to a weakly graphitic fault zone. Although Au, Cu and Zn analyses gave low values, this zone could have polymetallic base metal potential along strike. Till samples taken from reverse circulation holes do not, however, show any anomalous Cu or Zn values.

Elsewhere within the "northern low magnetic terrane", exploration work has not provided us with any indication of potential economic mineralization. But, it should not be forgotten that drilling by Dome Exploration Ltd in 1982, along a northwest trending EM conductor in the central part of the property, intersected quartz veining which gave a few values of 0.4 dwt/ton Au (≈ 0.7 g/t) over short (<1 m) intervals.

Within the Burntbush grid area, ten holes were drilled, and these have greatly improved our ability to interpret the geology in this part of the property.

Low magnetic areas are underlain by a calcalkaline mafic to intermediate metavolcanic sequence. These are mostly flows, but pyroclastics are not uncommon. The low magnetic band joining the area south of BUR-10 and drill hole BUR-07 may, for example, be dominated by tuffs. Within this sequence we also observe minor thin intervals of tholeiitic basalt and felsic to intermediate lithologies which have no apparent magnetic signature.

The main exception to this generalization is the northern part of the grid, which is characterized by low magnetic values where BUR-11 was drilled. The large mass of metagabbro which we intersected, and which outcrops to the west and northwest cannot be mapped by outlining the circular magnetic features as previously thought; these may alternatively be related to bedrock topographic highs.

Three main east-northeast trending high magnetic zones cross the central and western parts of the grid. The southernmost band is believed to represent a 100 to 200 m thick tholeiitic basalt unit, the central band represents sulfide-rich tholeiitic dacites in contact with a felsic feldspar porphyry unit, while the northern zone has the shape of a fold. This zone appears to be composed of a mixed succession of mostly intermediate calcalkaline (dacitic) pyroclastics.

These rocks have been metamorphosed to lower amphibolite facies, the predominant mineral assemblage in the mafic rocks, for example, is hornblende, biotite, plagioclase, quartz \pm garnet with minor retrograde chlorite.

All of the rocks are interpreted to be weakly to moderately sheared, and locally shearing is very well developed. It is strongest in the metagabbro of BUR-11, but is also well displayed in crystal tuffs in BUR-09, in the stretched feldspar porphyry in BUR-04, and in the mafic rocks in BUR-03.

Whereas foliations are interpreted to be mostly oriented east-northeast, with steep northerly dips, we suspect that these discrete "shears" trend east-west. Although we have suggested this to be evidence of a wide structural deformation "corridor", magnetics contouring to the west indicates foliations trend east-west there.

Our evaluation of alterations observed in the drill core, and of gold geochemistry results, suggest that this area holds good potential for economic gold mineralization. As a first observation we point to isolated strongly anomalous gold values which have been found in various parts of the grid:

- a value of 643 ppb Au in BUR-05, at the end of the drill hole where intensity of shearing drops off, and where thin quartz-pyrite veins start to appear;
- a value of 480 ppb Au in BUR-11, in sheared metagabbro at the contact with weakly sheared felsic rocks;
- a value of 323 ppb Au in reverse circulation hole BOB-158, close to BUR-01, in metavolcanics with abundant quartz veining and coarse pyrite;
- A value of 260 ppb Au in seemingly fresh, unaltered mafic rocks adjacent to a pyritic zone of limited depth extent.

As a second observation, we point to weakly to moderately anomalous gold values which occur over more significant lengths:

- in BUR-01, results of 15 to 45 ppb Au at 24-30 m, followed by a pyritic interval from 30-38 m within which 3 of 4 samples from 32-34 m gave 0.2 g/t Au;
- also in BUR-01, apparently isolated values of 0.2 to 0.3 g/t Au in a pyritic interval from 150-165 m;
- in BUR-09, results of 55 to 95 ppb Au in lapilli tuffs adjacent to sheared feldspar-quartz crystal tuffs;
- in BUR-10, results of 15 to 95 ppb Au at 24.5-31.5 m and 50 to 64 ppb Au at 43.5-45.5 m in weakly fractured mixed (intermediate) tuffs.

As a third observation, we suggest that chlorite and calcite alteration along profile 900W, and that chloritoid-bearing altered mafic metavolcanics in BUR-06 may have a relationship with Au mineralization nearby.

When these results are combined with the clear evidence of locally intense shearing, obtained from only ten drill holes, in an area of very poor outcrop exposure, the only problem which arises is where to spot the next generation of drill holes.

Finally, one drill hole was collared in the western part of the property, and here we intersected a granodiorite porphyry which is strongly sheared at its northern boundary. The true width of the shear is not known since we collared into it; no undeformed core was recovered north of the zone. Within this shear, disseminated pyrite and minor quartz \pm tourmaline veining with coarse pyrite was observed; also fracture density was high and this resulted in substantial core loss. Gold geochemistry results are very encouraging: nine samples gave greater than 100 ppb Au in two 9 m sections and one 6 m section, all between 56-95 m.

This hole represents the most encouraging result of the 1988 exploration program.

5.1 Recommendations For Further Work

At the present time, the proposed program for 1989 on the Burntbush River project is directed towards further evaluation of the western part of the property, in the vicinity of Spade Lake. We plan to:

- i) extend the Burntbush grid west. Depending on cost of line-cutting and ground geophysics we may extend the grid all the way to the western boundary of the property, or, alternatively, we may chose to select a specific portion of this part of the property for follow-up work. Line spacing will be 100 m. Note that the change from 50 m to 100 m spacing should not compromise our interpretive capabilities since there appears from detailed airborne studies, to be more uniform, east-west trending magnetics in this part of the property relative to the Burntbush grid area;
- ii) perform ground geophysics, including magnetics and an EM method. We will evaluate the possibility of replacing the VLF-EM method used in 1988, perhaps with a horizontal loop instrumentation which has a wider range of frequency options;
- iii) perform diamond drilling with three objectives:
 - . to test east and/or west the shear zone intersected in BUR-12, probably at intervals of 400 m;
 - . to drill a more or less continuous profile north from BUR-12 into the vast metasedimentary terrane in the vicinity of reverse circulation hole BOB-170;
 - . to test, also at 400 m intervals, the contact between the metasedimentary and metavolcanic terranes if this contact is determined from the profile drilling (above) to be sheared, as is suggested by our results in the Burntbush grid area.

We also plan to resample drill core stored in the field to further evaluate targets defined from our interpretation of the 1988 program. The main areas of interest are in holes BUR-01, BUR-05 and BUR-06, but additional major element analyses from these and other holes will also be requested.

But, we recommend also that the following work be done, either during 1989 or at a later date, depending on the availability of exploration funds. These are listed below in order of priority.

- i) humus sampling should be performed at relatively close spacing (eg 25 m) along the new cut lines in the vicinity of Spade Lake, to see if the gold mineralization encountered in BUR-12 has a related expression in the surficial organics. If such an association can be confirmed, a survey should be conducted over the Burntbush grid also;
- ii) the Burntbush grid should be extended east, to better place in regional context the results received from holes BUR-05 and BUR-06. Of particular interest is the area southeast of BUR-05, where bedrock conductors are interpreted to be present;
- iii) additional drilling on the Burntbush grid should be performed after results of the resampling program are received. We should follow-up the anomalous bedrock geochemistry from reverse circulation hole BOB-158, and we should do more work near holes BUR-05 and BUR-06. Additional work east and/or west of BUR-09 is also warranted;
- iv) finally, we propose that a careful profile by profile evaluation of the airborne electromagnetic and magnetic results be undertaken along the linear east-west trend north of Blue Lake. Based on quality of the anomalies, two widely spaced profiles might be chosen for drilling, to test the polymetallic base metal potential of the conductor.

6. REFERENCES

IRVINE, T.N. and BARAGAR, W.R.A. 1971, A Guide to the Chemical Classification of the Common Volcanic Rocks, Can. J. Earth Sci, v.8, p.523-548

JENSEN, L.S. 1976, A New Cation Plot for Classifying Subalkalic Volcanic Rocks, Ont. Div. Mines MP 66, 22p.

JOHNS, G.W. 1982, Geology of the Burntbush-Detour Lakes Area, District of Cochrane, Ont. Geol. Surv. Rept 199, 82p.

MATHIESON, N.A. and HODGSON, C.J. 1984, Alteration, mineralization, and metamorphism in the area of the East South "C" ore zone, 24th level of the Dickenson mine, Red Lake, northwestern Ontario, Can. J. Earth Sci., v.21, p.35-52

PATTISON, E.F., SAUERBREI, J.A., HANNILA, J.J. and CHURCH, J.F. 1986, Gold Mineralization in the Casa-Berardi Area, Quebec, Canada, in Macdonald J.A. (ed.), Proceedings of Gold '86, an International Symposium on the Geology of Gold: Toronto, 1986, p.170-183

THOMSON, R. 1936, Geology of the Burntbush River Area; Ont. Dept. Mines, Annual Rept v.45, Pt.6, p.49-63

TOURIGNY, G. and HUBERT, C. 1986, The Bousquet Property, in Hubert, C. and Robert F. (eds.), Structure and Gold, Rouyn to Val d'Or, Quebec; Geol. Assoc. Can., Mineral. Assoc. Can., Can. Geophys. Union, Joint Ann. Meeting: Ottawa, 1986, p.12-26

Various assessment files, Hoblitzell and Noseworthy townships, Office of the Resident Geologist, Kirkland Lake, Ontario:

AMERITEX	1984
COGEMA	1987, 1988
DOME	1982
NEWMONT	1986, 1987

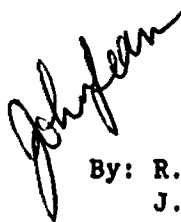
COGEMA CANADA LIMITED
BURNTBUSH RIVER PROJECT
FINAL REPORT 1988
"DIAMOND DRILL RESULTS"
VOLUME 2 of 3

A P P E N D I X I

DIAMOND DRILL HOLE DESCRIPTIONS

1. SUMMARY LOGS
2. FIELD LOGS

Ref. No. 88-CND-47-03
(Document: #0149U)


By: R. St-Jean
J. Learn
S. Ball
R. Mousseau
Compiled: November, 1988

1. SUMMARY LOGS

NOTES: The Summary Logs are intended to summarize the field logs in concise form and were prepared after reception of all chemistry data and after examination of thin sections.

Jensen cation plots (Jensen, 1976) are given for all samples on which major element geochemistry was performed. Sample numbers are given on the summary log to aid the reader in determining from which lithology samples were taken.

FeO and Fe₂O₃ components of the Fe₂O₃ total iron analytical results were calculated using the procedure recommended by Irvine and Baragar (1971).

SUMMARY LOG

BUR-01:

0 - 7.3

OVERBURDEN

7.3-200.0

MAFIC to INTERMEDIATE METAVOLCANIC ROCKS

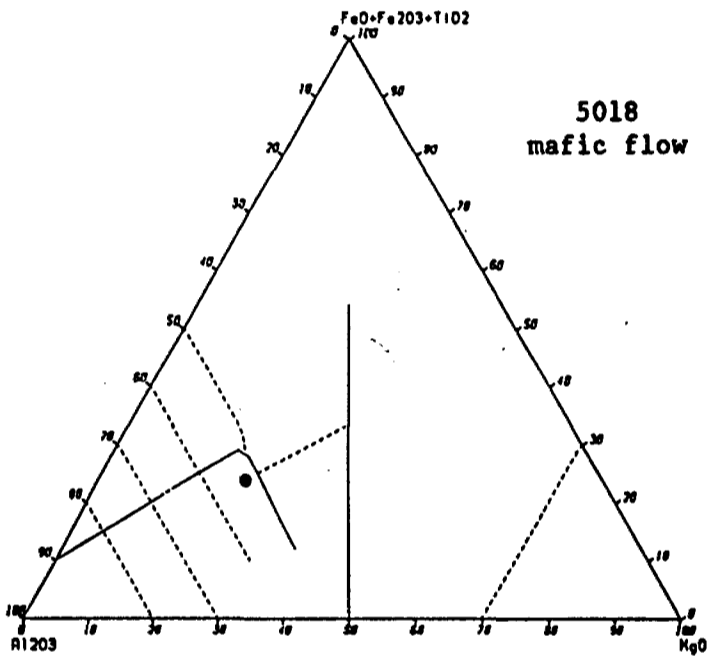
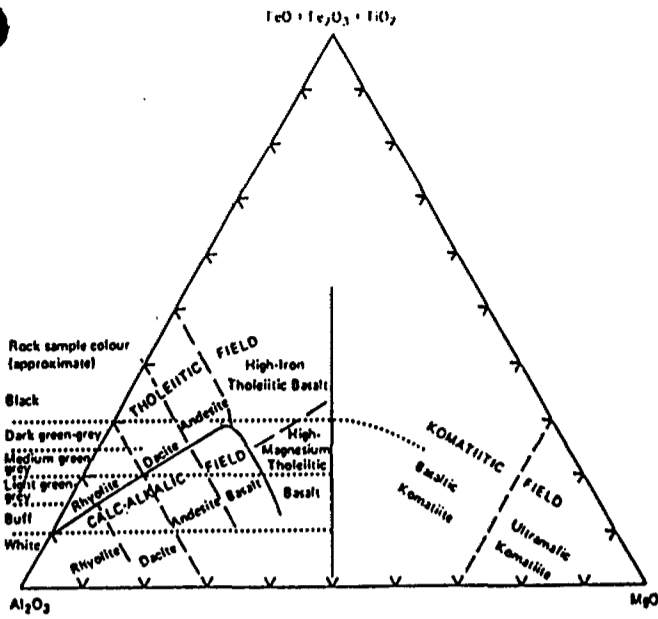
7.3- 28.5	amphibole ± garnet schist; flow
28.5- 38.8	amphibole ± garnet volcanoclastic schist; lapilli tuff
38.8- 55.6	amphibole schist; flow (5018, 5019)
55.6- 89.9	amphibole ± garnet volcanoclastic schists; lapilli tuff (5020)
89.9- 97.3	amphibole schist; flow
97.3-102.3	amphibole volcanoclastic schist; lapilli tuff
102.3-200.0	amphibole ± garnet schist; flow (5026)

SUMMARY OF GOLD ANALYTICAL RESULTS

- 1) at 12.5-13.0: 0.2 g/t; relatively fresh, punctual sample
- 2) at 24-30 m: 20, 40, 15, 45 ppb; fractured, weakly pyritic zone;
at 32-34 m: 3 of 4 samples give 0.2 g/t; 2-5% pyrite
- 3) at 150.1-150.6: 0.2 g/t; weakly pyritic healed breccia;
at 156.0-157.0: 0.3, 0.2 g/t; 1-3% pyrite;
at 163.0-165.5: 2 of 5 samples give 0.2 g/t; weakly pyritic

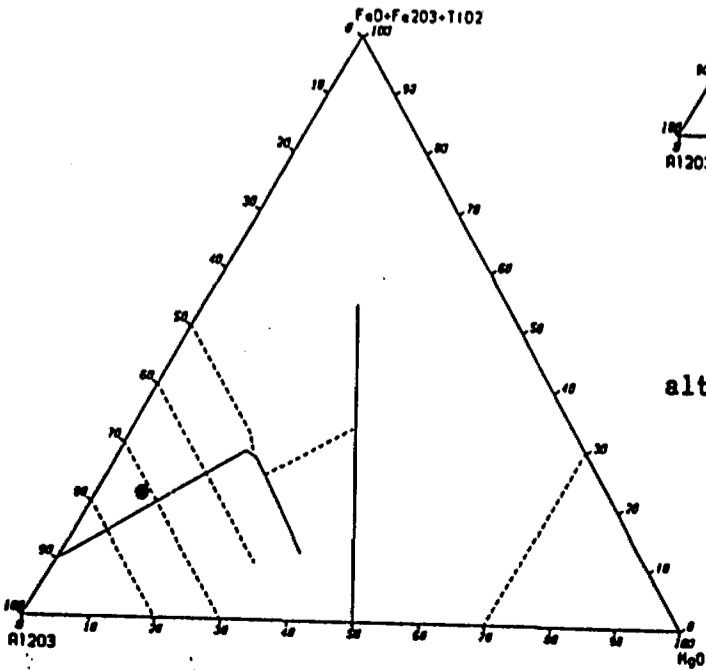
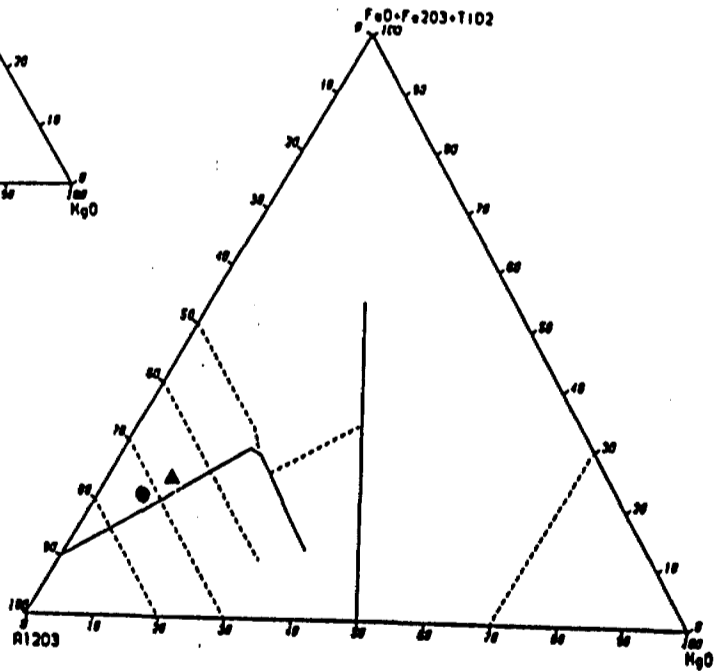
BUR-01

JENSEN CATION PLOTS



● 5020
volcaniclastic

▲ 5026
probably volcaniclastic
(clast: matrix not recorded)



5019
altered contact zone

SUMMARY LOG

BUR-02:

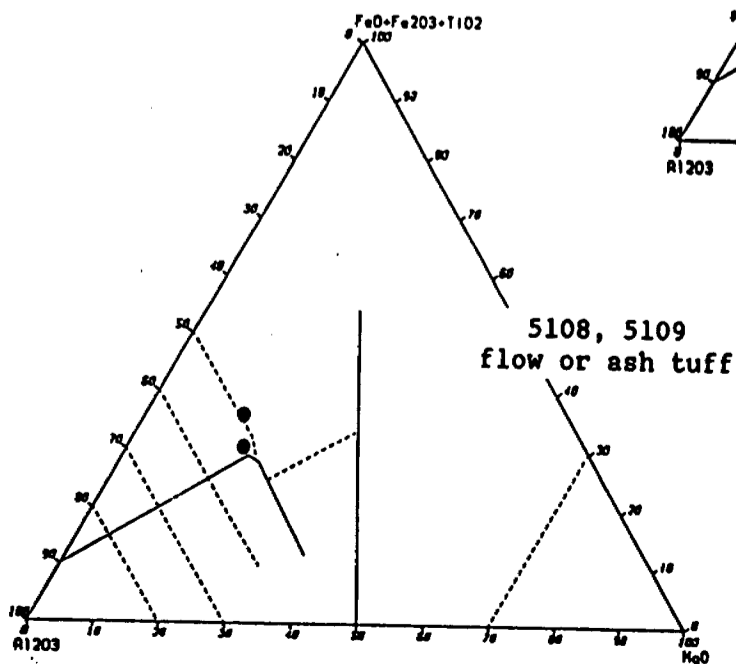
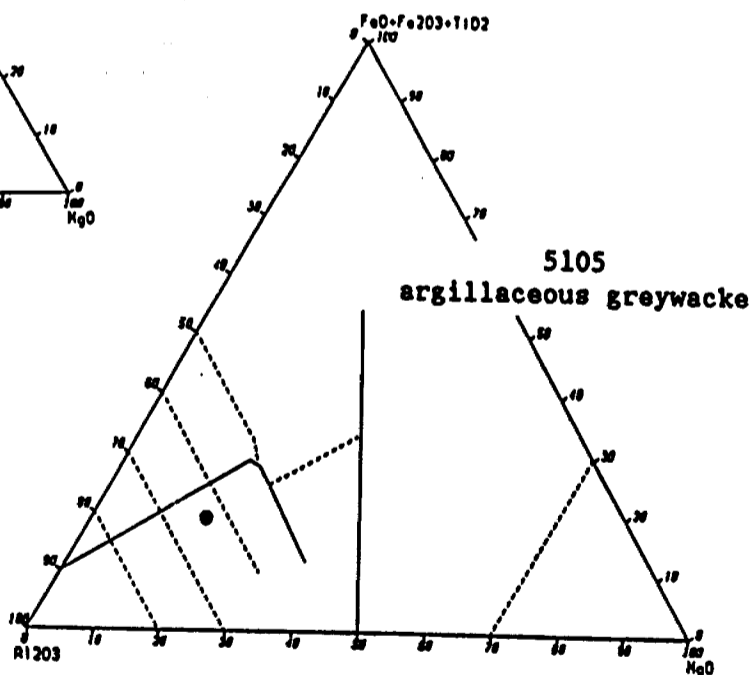
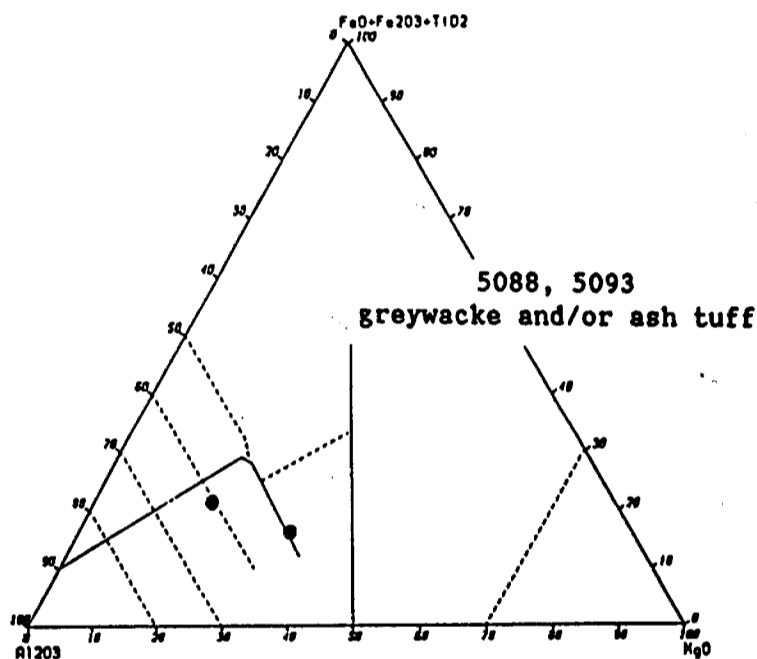
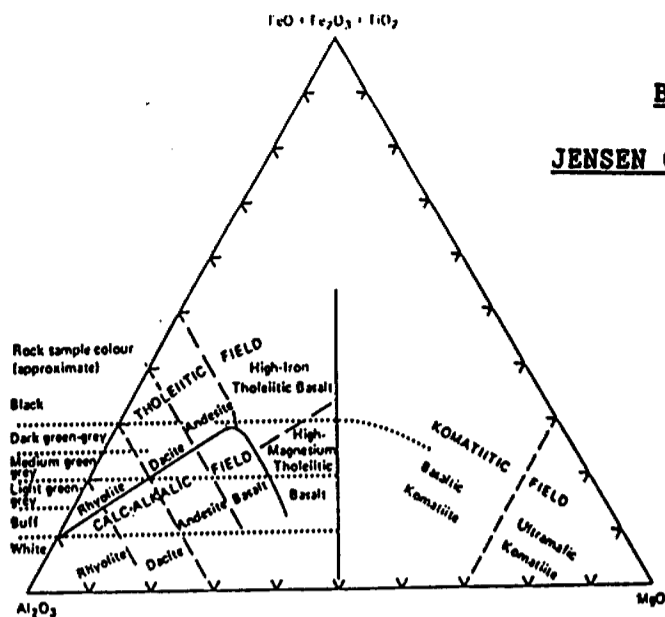
0 - 46.1	<u>OVERBURDEN</u>
46.1-132.3	<u>METASEDIMENTARY ROCKS</u>
46.1- 91.8	biotite ± amphibole ± garnet schist; greywacke and/or ash tuff (5088, 5093)
91.8- 97.8	strongly sulfidized schist (pyrrhotite = pyrite)
97.8-132.3	biotite ± garnet schist; argillaceous greywacke (5105) 122.5-127.2: feldspar porphyry dyke
132.3-245.0	<u>MAFIC to INTERMEDIATE METAVOLCANIC ROCKS</u>
132.3-195.0	amphibole-garnet schist; flow or ash tuff (5108, 5109)
195.0-206.5	interbedded quartzite and schist
206.5-229.7	feldspar porphyry dyke
229.7-245.0	amphibole ± garnet schist; flow or ash tuff

SUMMARY OF GOLD ANALYTICAL RESULTS

- 1) at 75.0-75.5: 0.2 g/t; quartz-calcite-pyrite-pyrrhotite veining
- 2) at 91.5-92.0: 0.2 g/t; 10% pyrrhotite, minor pyrite as breccia cement

BUR-02

JENSEN CATION PLOTS



SUMMARY LOG

BUR-03:

0 - 6.5

OVERBURDEN

6.5-149.0

MAFIC to INTERMEDIATE METAVOLCANIC ROCKS

6.5-149.0

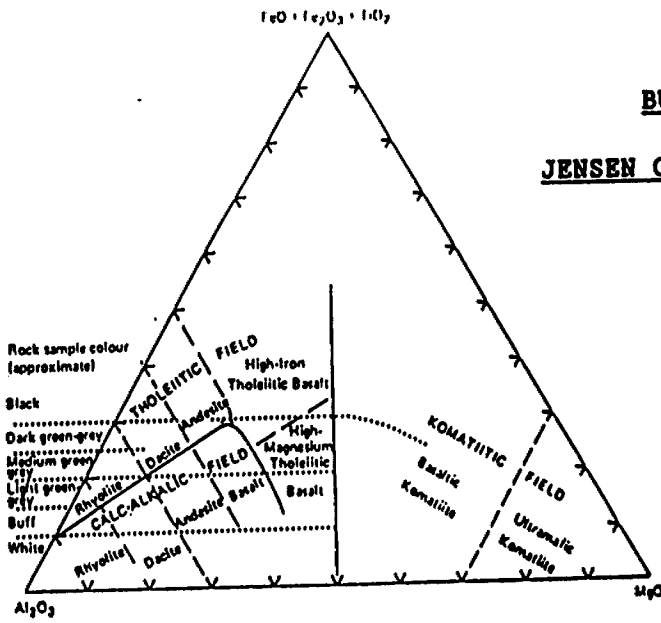
amphibole ± garnet schist; flow
(5049, 5050, 5055, 5057)

SUMMARY OF GOLD ANALYTICAL RESULTS

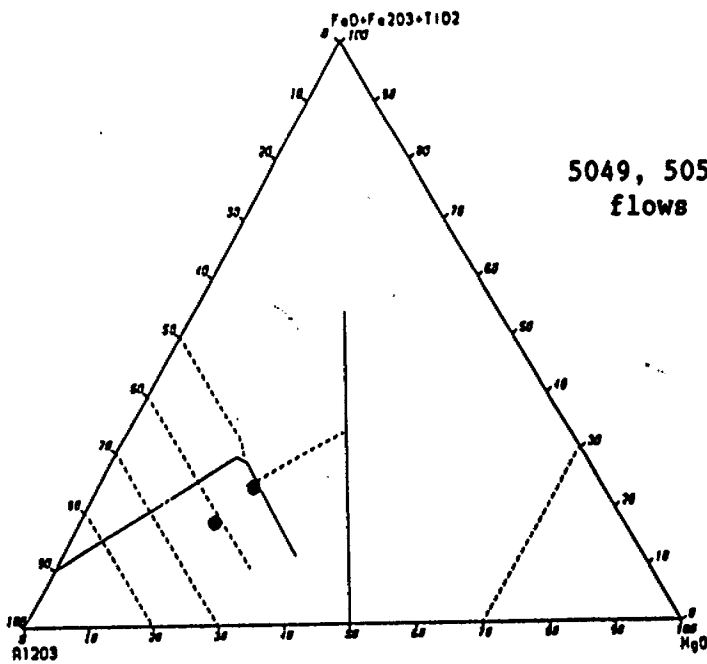
- 1) at 61.0-61.5: 0.2 g/t; weakly pyritic healed breccia, punctual sample

BUR-03

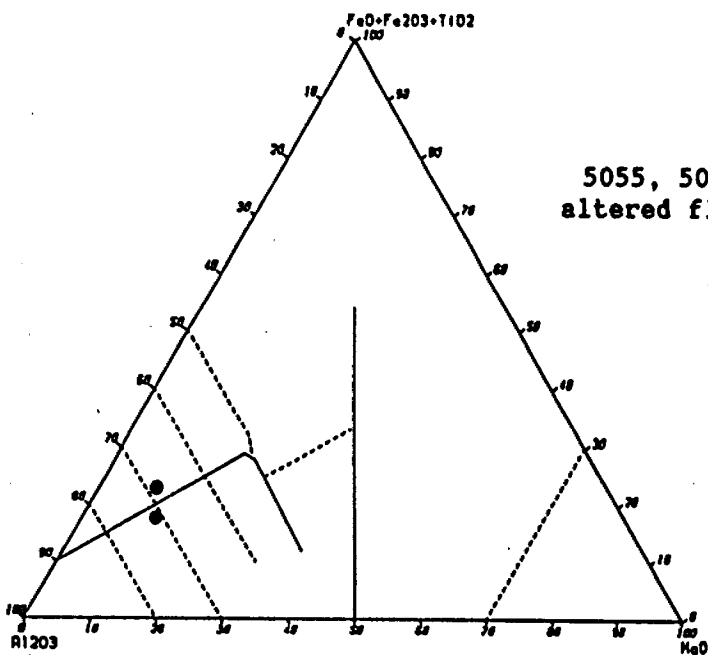
JENSEN CATION PLOTS



5049, 5050
flows



5055, 5057
altered flows



SUMMARY LOG

BUR-04:

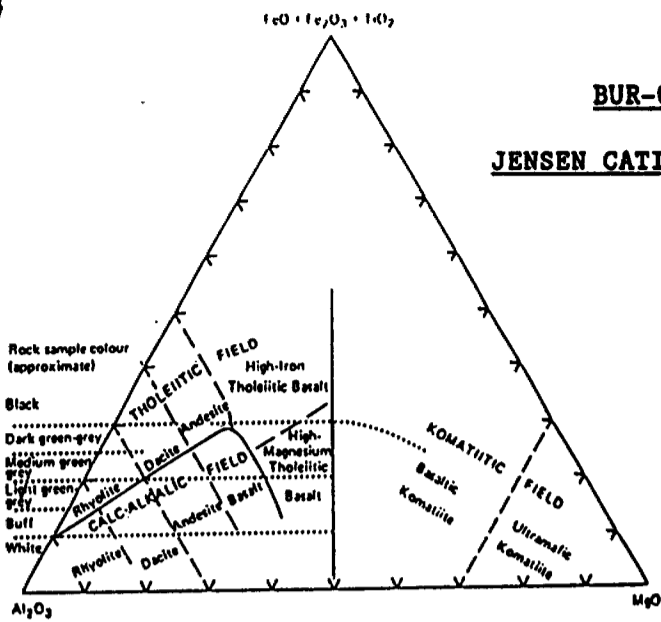
0 - 7.3	<u>OVERBURDEN</u>
7.3- 74.1	<u>INTERMEDIATE METAVOLCANIC ROCKS</u>
7.3- 74.1	sulfide-rich schist (pyrite < pyrrhotite); flow (5062, 5068, 5067)
74.1-124.9	<u>FELSIC METAVOLCANIC ROCKS</u>
74.1-124.9	stretched feldspar porphyry; porphyritic flow or sill (5074, 5075)
124.9-200.0	<u>MAFIC to INTERMEDIATE METAVOLCANIC ROCKS</u>
124.9-178.0	amphibole ± garnet schist; flow (5082, 5084)
178.0-193.5	amphibole ± garnet volcanoclastic schist; thinly interbedded mafic and felsic tuffs or stretched lapilli tuff (5086)
193.5-200.0	amphibole-garnet schist; flow

SUMMARY OF GOLD ANALYTICAL RESULTS

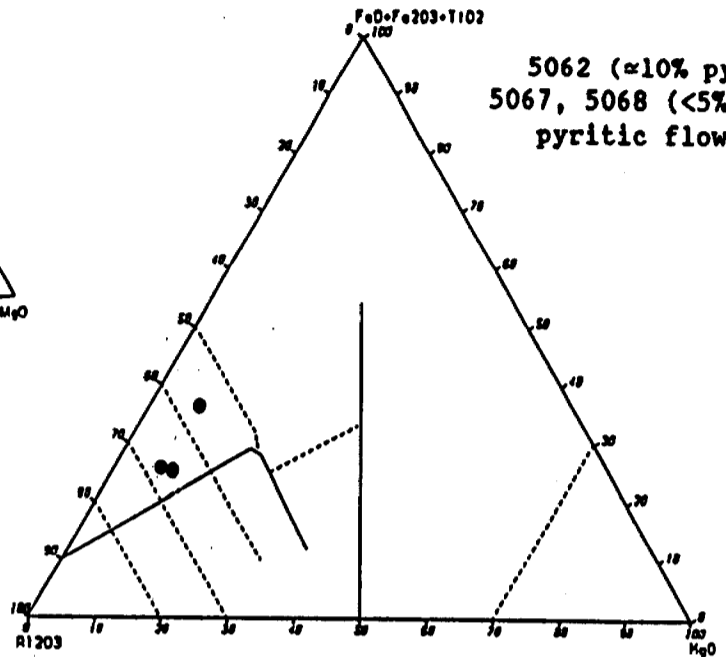
- 1) at 14.0-15.5: 40 ppb; up to 10% pyrite--pyrrhotite, quartz veinlets
at 17.5-25.5: 15, 60, 10, 15, 45, 24 ppb; up to 10% pyrite-pyrrhotite, quartz-pyrite veinlets
at 26.5-31.0: 25, 15, 15 ppb; 3-10% pyrite
- 2) at 81.0-82.5: 25 ppb; 3% pyrite
at 108.5-110.0: 20 ppb; relatively fresh sample
- 3) at 146.5-147.0, 157.5-158.0, 194.0-194.5: 0.2 g/t; weakly fractured, relatively fresh, punctual samples

BUR-04

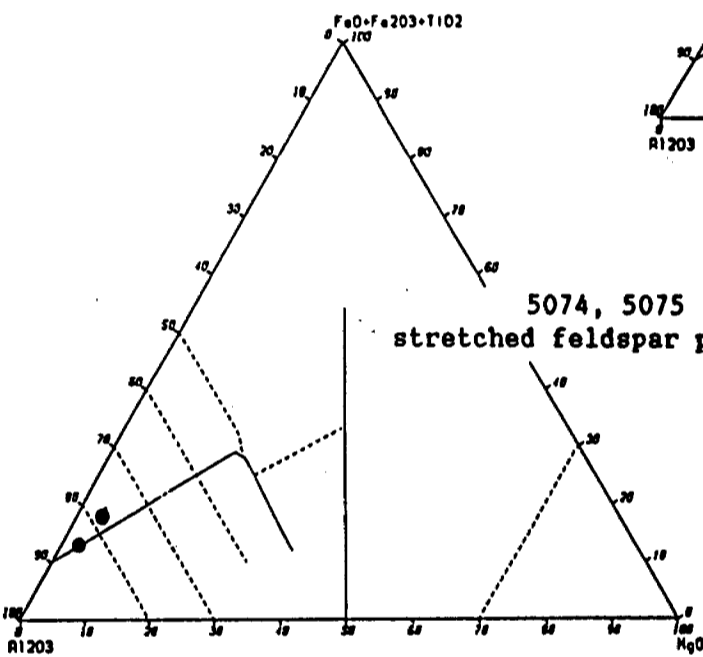
JENSEN CATION PLOTS



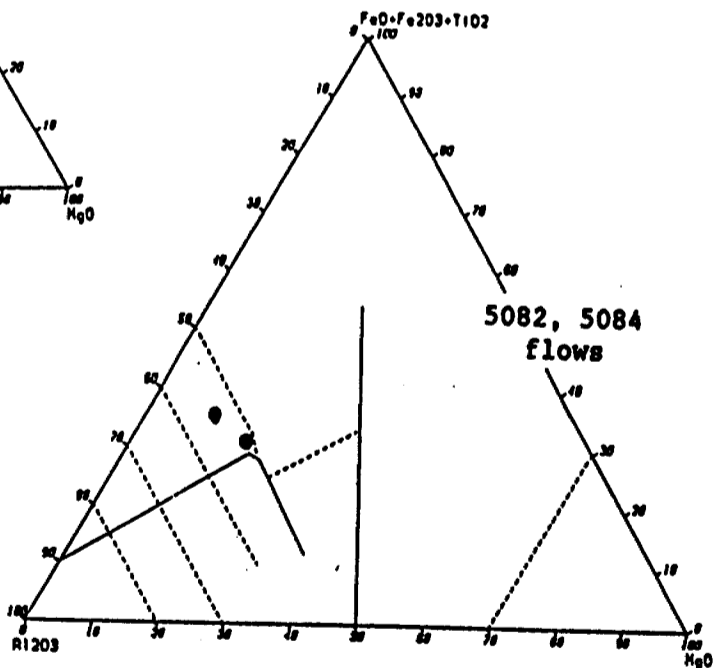
5062 ($\approx 10\%$ py)
5067, 5068 ($< 5\%$ py)
pyritic flows



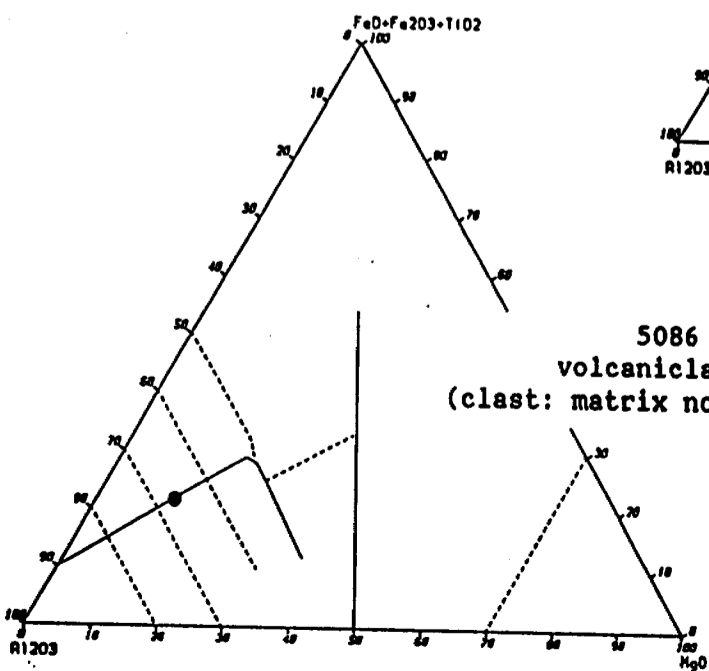
5074, 5075
stretched feldspar porphyry



5082, 5084
flows



5086
volcaniclastic
(clast: matrix not recorded)



SUMMARY LOG

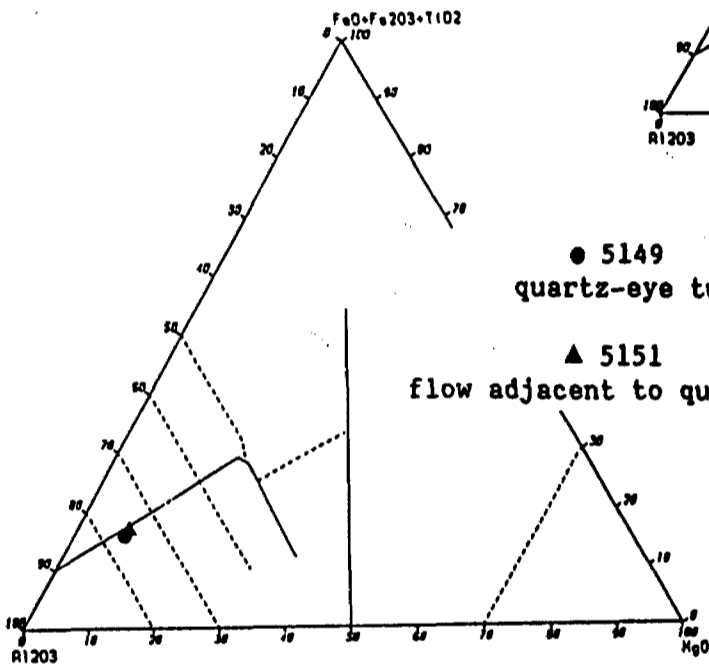
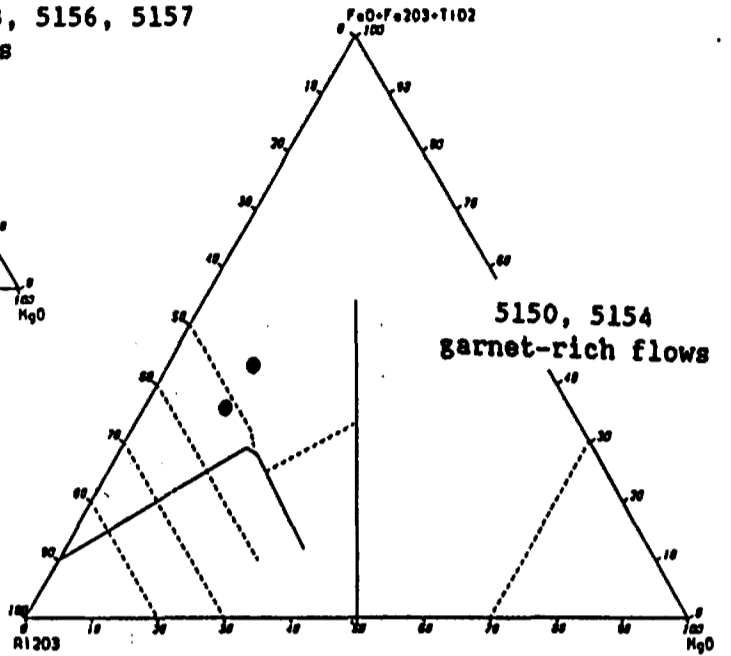
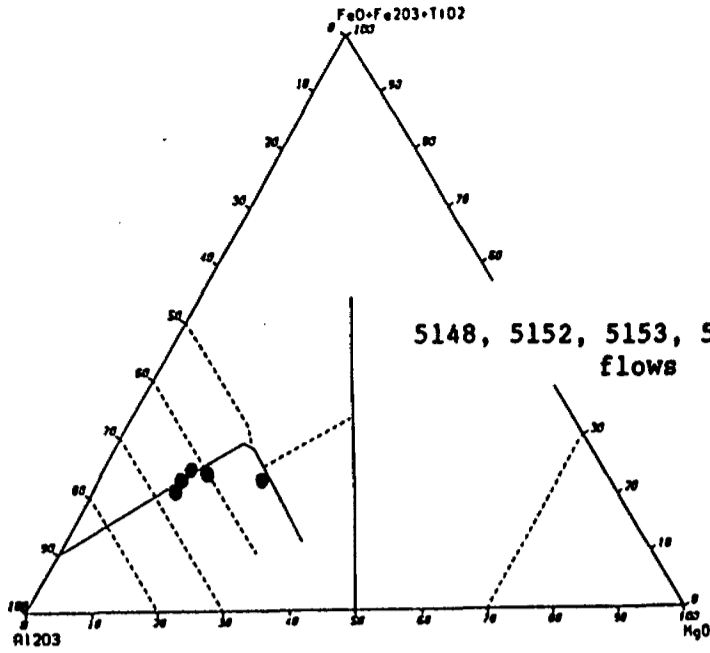
BUR-05:

0 - 52.4	<u>OVERBURDEN</u>
52.4-206.1	<u>MAFIC to INTERMEDIATE METAVOLCANIC ROCKS</u>
52.4- 67.0	amphibole schist; flow (5148)
67.0- 69.2	quartz-calcite-sericite schist; quartz-eye tuff (5149)
69.2-206.1	amphibole ± garnet schist; flow (5150, 5151, 5152, 5153, 5154, 5156, 5157)
206.1-238.0	<u>FAULT GOUGE</u>
238.0-278.0	<u>INTERMEDIATE METAVOLCANIC ROCKS</u>
238.0-278.0	biotite schist; ash tuff (5178, 5179, 5180, 5181, 5182)

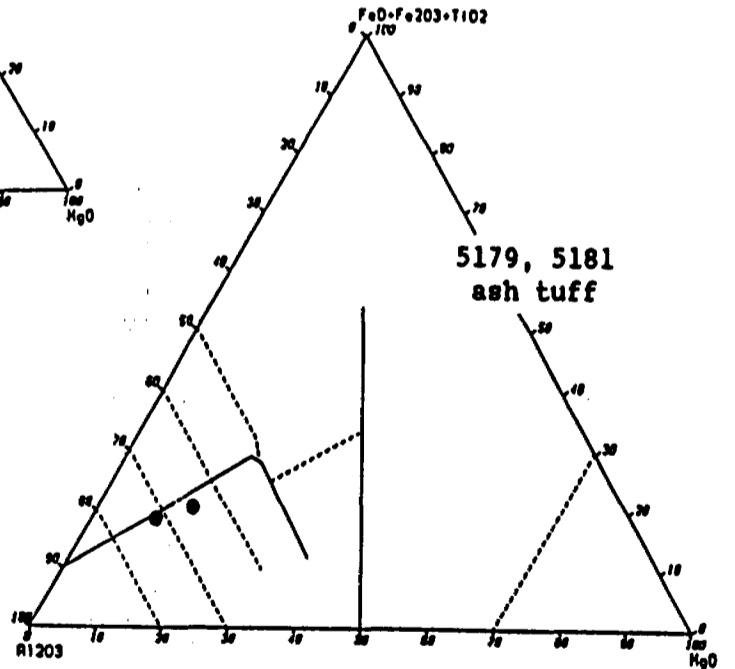
SUMMARY OF GOLD ANALYTICAL RESULTS

- 1) at 67.5-68.0: 33 ppb; thin, altered quartz-eye tuff, punctual sample
- 2) at 188.2-188.7: 37 ppb; relatively fresh, garnet-rich schist, punctual sample
- 3) at 205.0-206.0: 12, 40 ppb; hematite alteration adjacent to fault gouge
- 4) at 221.0-224.0: 20 ppb; fault gouge
- 5) at 277.5-278.0: 643 ppb; relatively fresh, punctual sample taken at end of hole

JENSEN CATION PLOTS

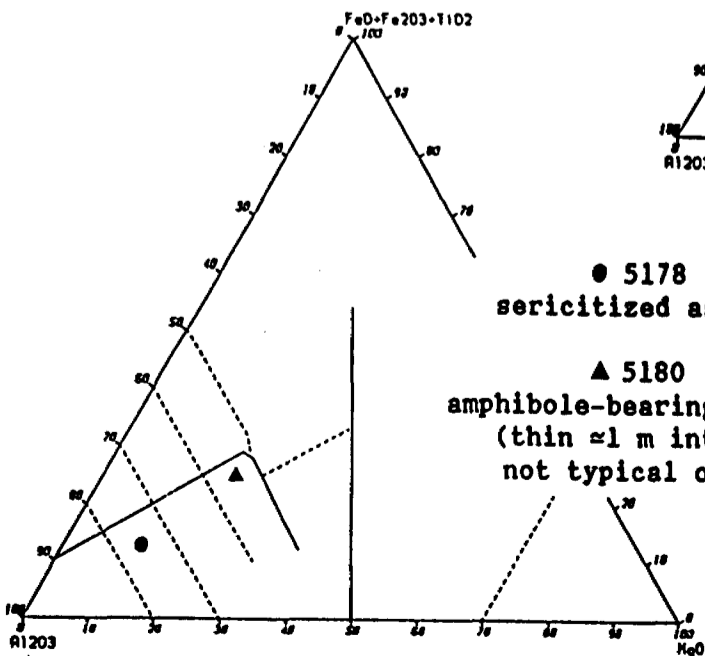


▲ 5151
flow adjacent to quartz vein



● 5178
sericitized ash tuff

▲ 5180
amphibole-bearing ash tuff
(thin ≈ 1 m intervals
not typical of unit)



SUMMARY LOG

BUR-06:

0 - 40.0

OVERBURDEN

40.0-121.6

MAFIC to INTERMEDIATE METAVOLCANIC ROCKS

40.0- 52.8	amphibole schist; flow
52.8- 57.5	biotite-quartz eye schist; quartz eye tuff (5115)
57.5- 62.2	amphibole ± garnet schist; flow
62.2- 68.1	biotite-quartz eye schist; quartz eye tuff
68.1- 87.4	amphibole ± garnet schist; flow
87.4- 92.0	biotite schist; ash tuff
92.0-108.0	amphibole schist; flow
108.0-121.6	feldspar porphyry; porphyritic flow (5118)

121.6-150.7

FELSIC to INTERMEDIATE METAVOLCANIC ROCKS

121.6-140.1	crenulated quartz-sericite schist; deformed crystal tuff (5123, 5129)
140.1-143.4	amphibole-garnet schist; flow
143.4-150.7	silicic aphanitic schist; porphyritic rhyolite (5135)

150.7-247.2

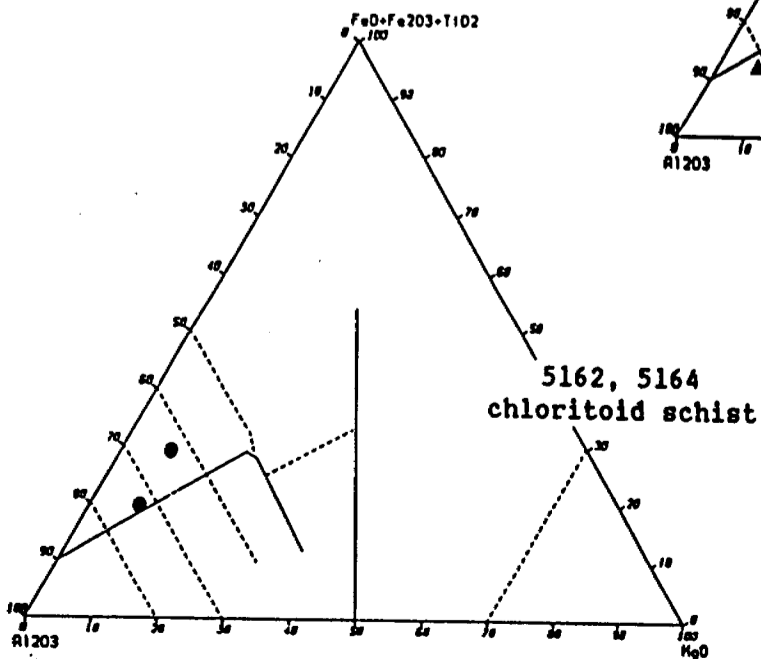
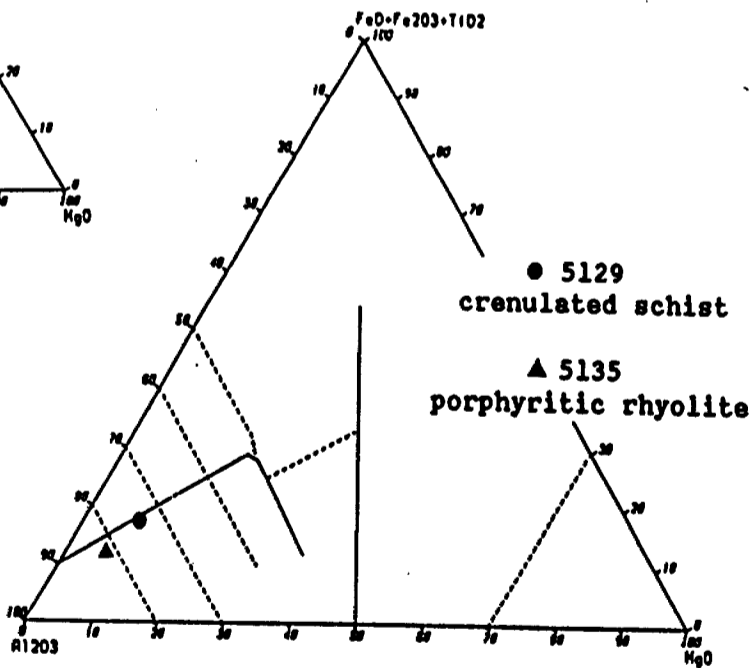
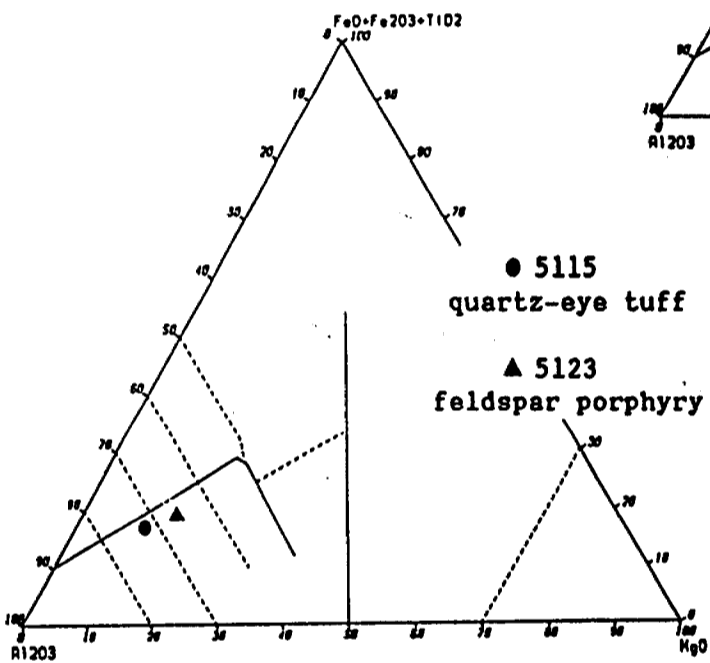
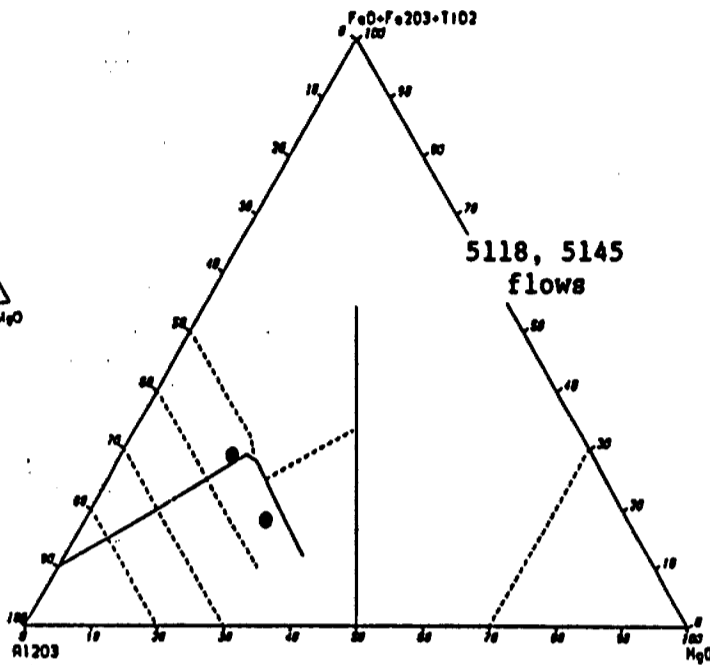
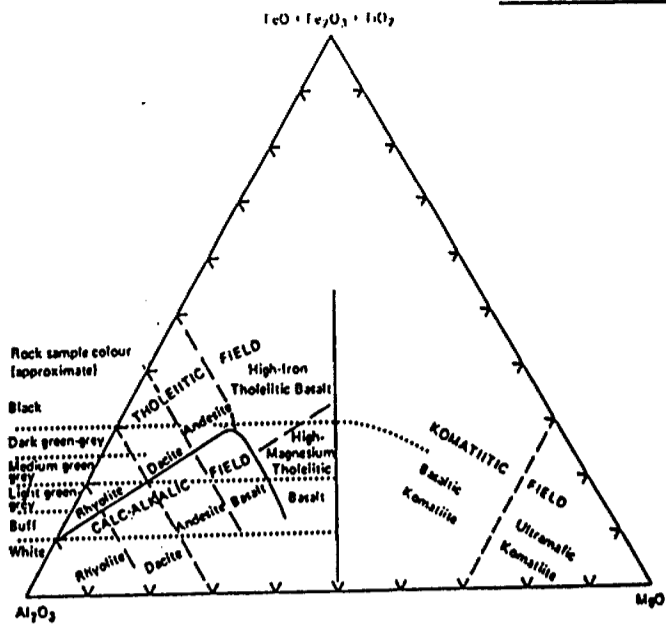
MAFIC to INTERMEDIATE METAVOLCANIC ROCKS

150.7-156.3	amphibole schist; flow
156.3-164.6	feldspar porphyry; porphyritic flow or dyke
164.6-183.5	amphibole ± garnet schist; flow (5145)
183.5-195.7	fault gouge
195.7-223.0	amphibole-garnet schist; flow
223.0-247.2	chloritoid ± garnet schist; altered flow (5162, 5164)

SUMMARY OF GOLD ANALYTICAL RESULTS

- 1) at 46.0-46.5 m: 0.3 g/t; spike anomaly in fractured amphibole schist
- 2) at 51.0-53.0 m: 35 ppb; fractured contact
at 56.0-56.5 m: 21 ppb; fractured quartz-eye tuff, weakly pyritic
- 3) at 115.0-116.5: 25 ppb; bleached section in feldspar porphyry
at 119.5-121.0: 30 ppb; chloritized section in feldspar porphyry, weakly pyritic
- 4) at 232.0-232.5: 0.2 g/t; chloritoid-garnet schist, weakly pyritic

JENSEN CATION PLOTS



SUMMARY LOG

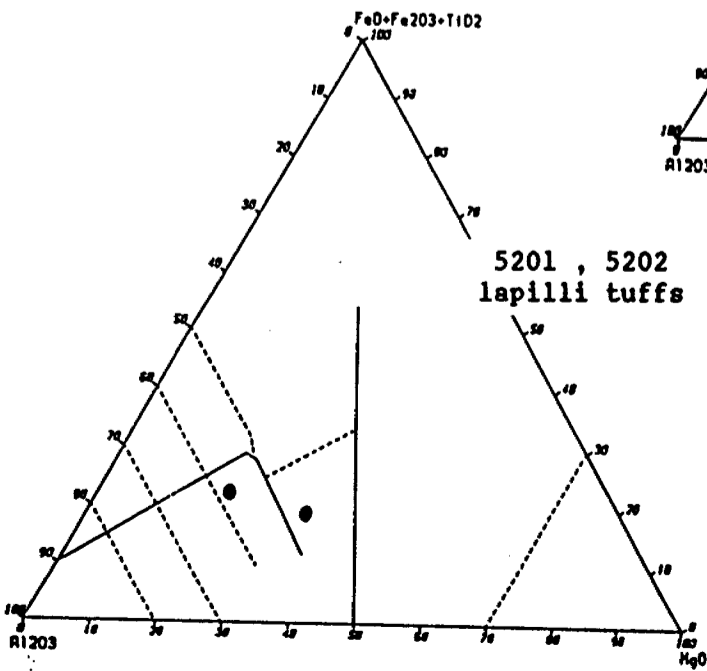
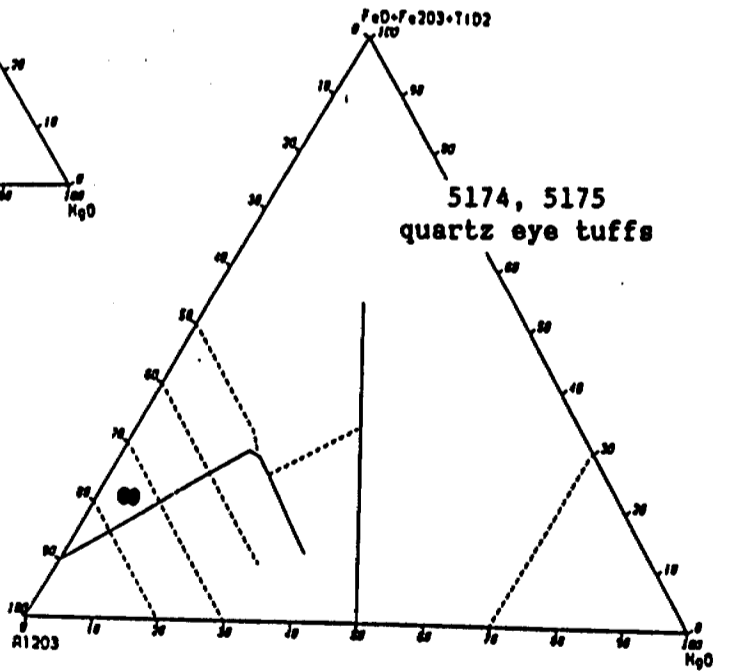
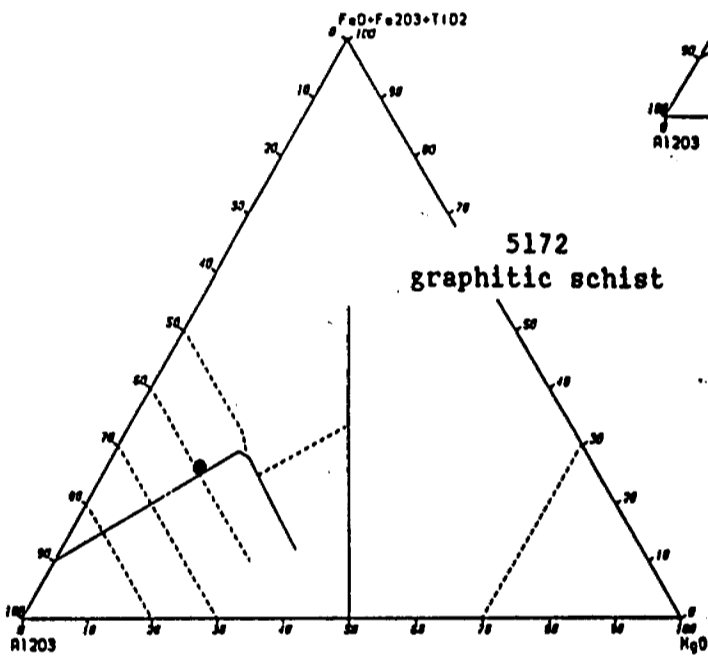
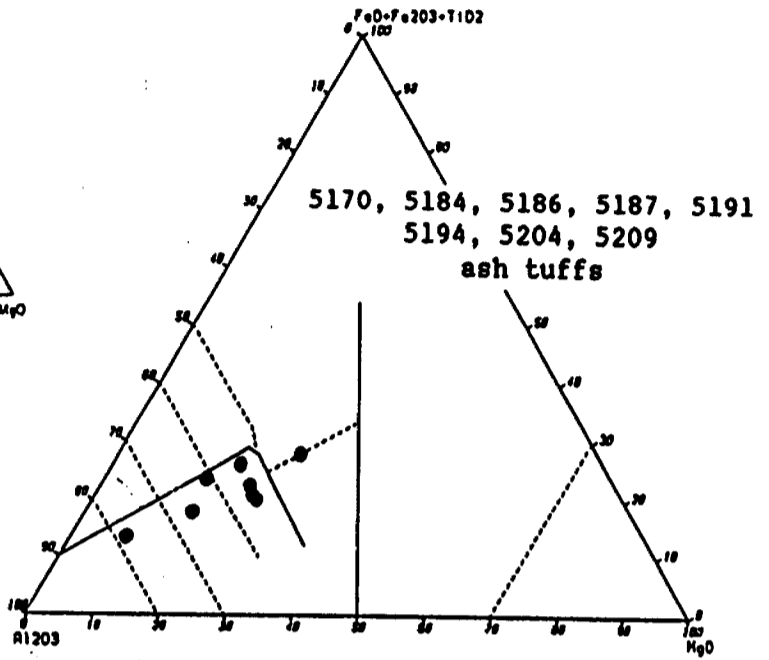
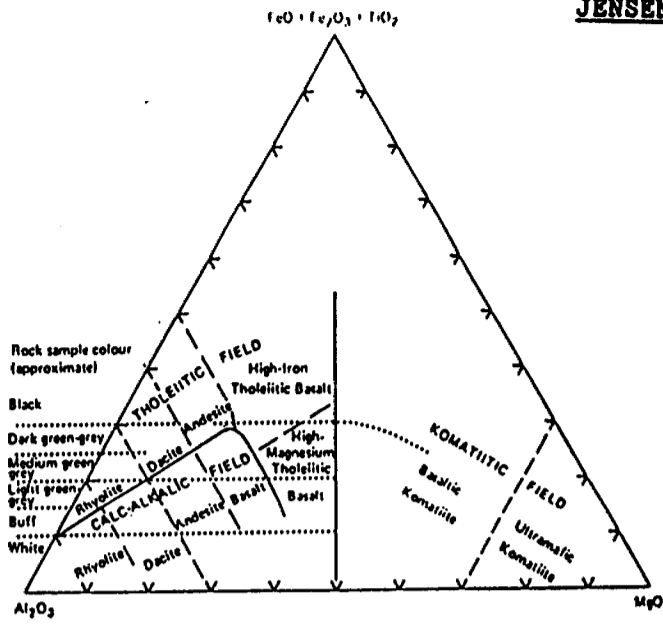
BUR-07:

0 - 44.9	<u>OVERBURDEN</u>
44.9- 91.8	<u>MAFIC to INTERMEDIATE METAVOLCANIC ROCKS</u>
44.9- 79.8	laminated amphibole ± feldspar ± garnet schist; ash and crystal tuffs (5170)
79.8- 86.5	graphitic schist; argillaceous sediment or tuffaceous sediment (5172)
86.5- 91.8	laminated amphibole ± garnet schist; ash tuff
91.8-108.6	<u>FELSIC METAVOLCANIC ROCKS</u>
91.8-108.6	quartz eye ± garnet schist; quartz eye tuff (5174, 5175)
108.6-260.0	<u>MAFIC to INTERMEDIATE METAVOLCANIC ROCKS</u>
108.6-148.0	laminated biotite ± amphibole ± garnet schist; ash tuff (5184, 5186, 5187)
148.0-206.4	laminated amphibole ± biotite schist; ash tuff (5191, 5194)
206.4-218.9	amphibole-biotite volcanoclastic schist; lapilli tuff (5201, 5202)
218.9-260.0	laminated amphibole ± biotite schist; ash tuff (5204, 5209)

SUMMARY OF GOLD ANALYTICAL RESULTS

- 1) at 63.0-63.5: 0.2 g/t; weakly pyritic punctual sample in fractured schist
at 73.5-74.0: 0.2 g/t; weakly pyritic, relatively fresh, punctual sample
- 2) at 218.3-218.8: 21 ppb; chloritized lapilli tuff, punctual sample

JENSEN CATION PLOTS



SUMMARY LOG

BUR-08:

0 - 47.0

OVERBURDEN

47.0-228.3

METASEDIMENTARY ROCKS

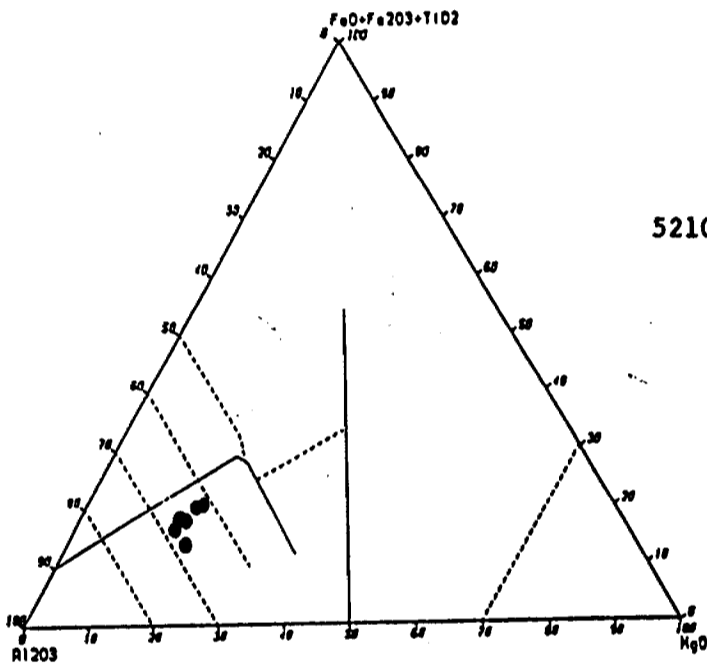
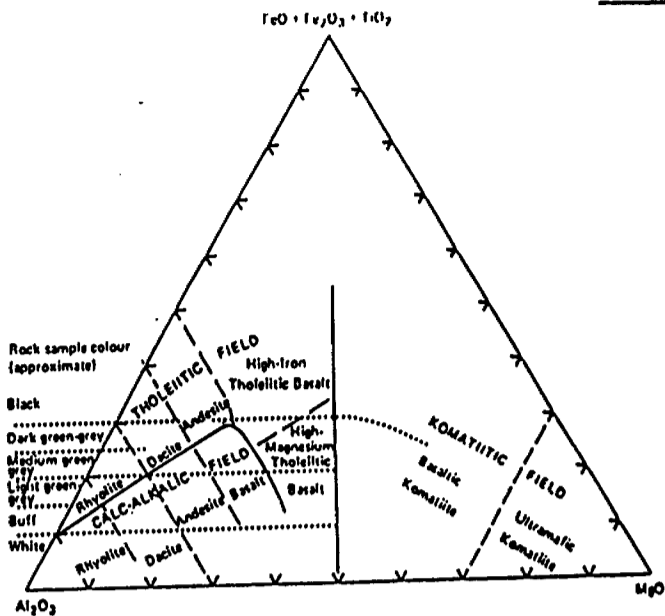
47.0-228.3

biotite + garnet schist; greywacke (5210, 5211, 5212, 5213, 5214, 5215, 5216, 5217)

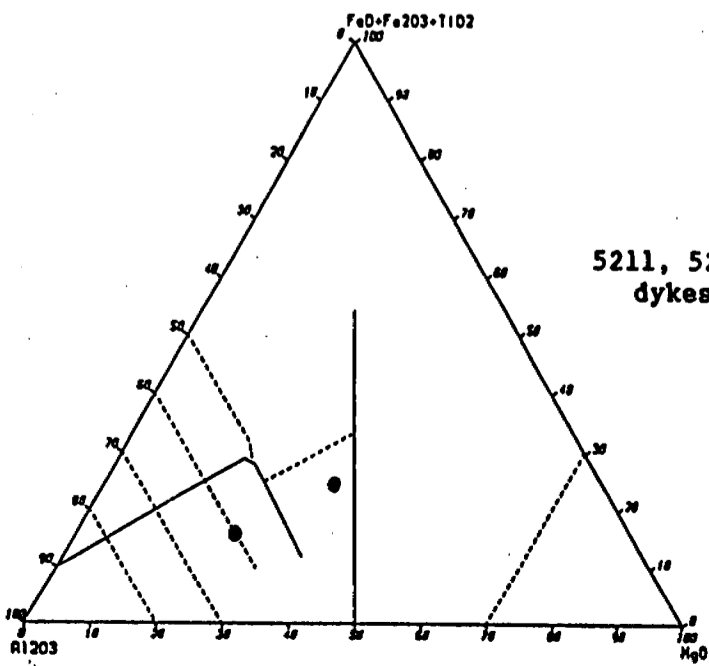
SUMMARY OF GOLD ANALYTICAL RESULTS

1) maximum result is 9 ppb

JENSEN CATION PLOTS



5210, 5212, 5213, 5214
5215, 5217
greywacke



5211, 5216
dykes

SUMMARY LOG

BUR-09:

0 - 20.9

OVERBURDEN

20.9-257.0

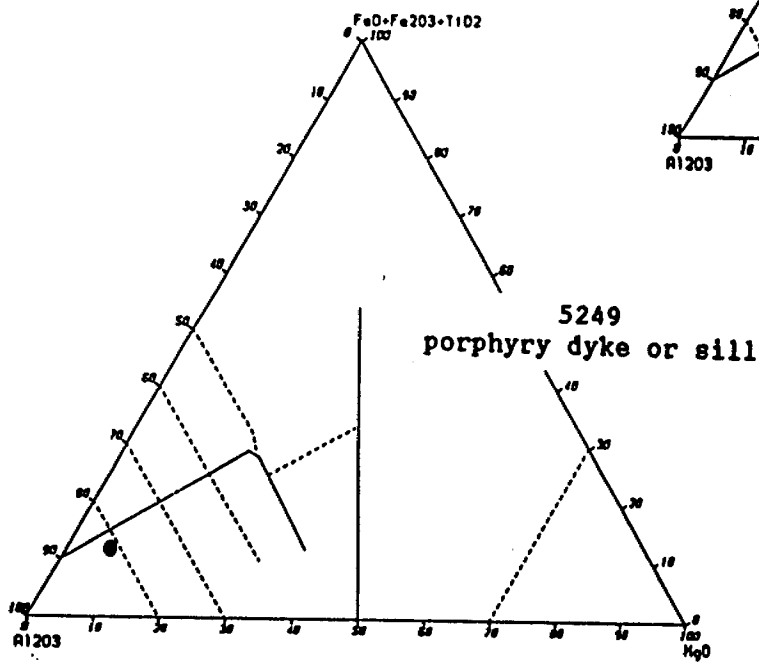
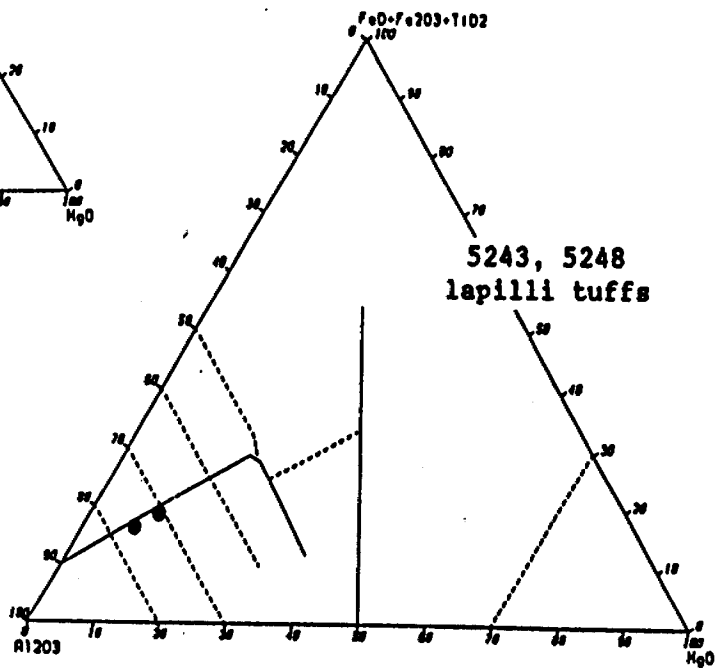
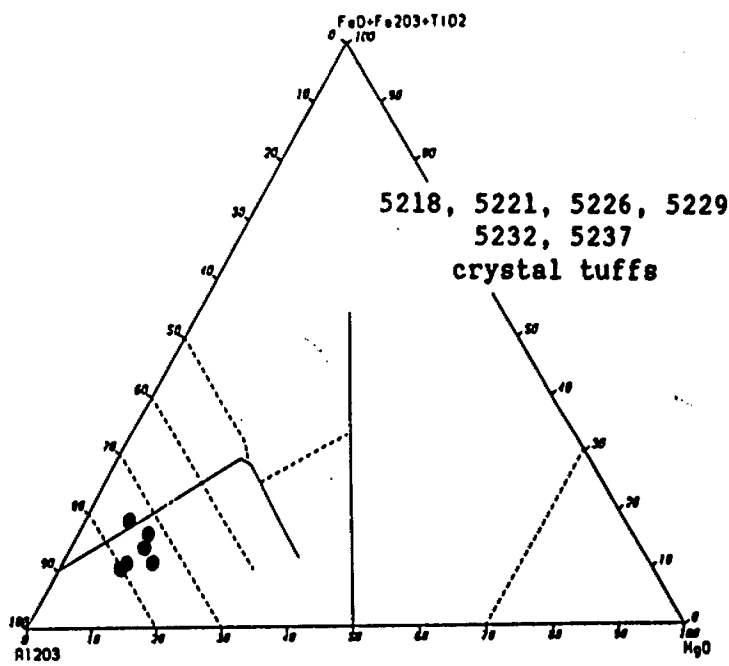
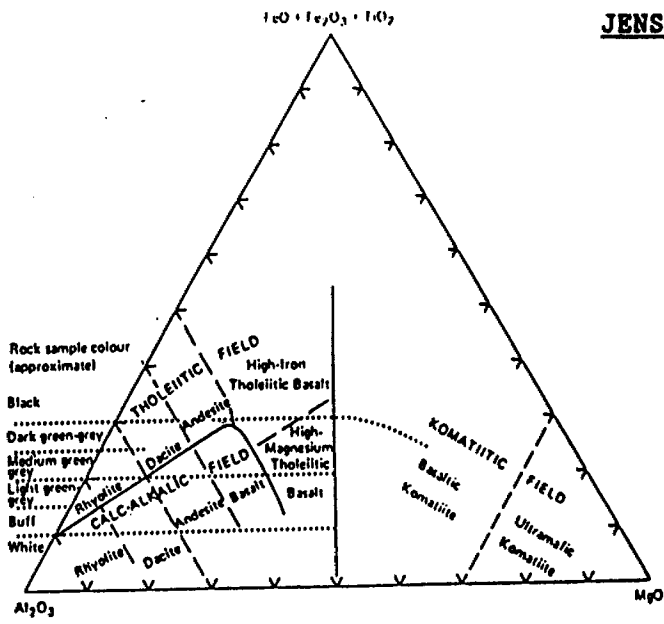
INTERMEDIATE (DACITIC) METAVOLCANIC ROCKS

20.9-130.8	feldspar-quartz porphyritic schist; crystal tuff (5218, 5221, 5226, 5229, 5232, 5237)
130.8-195.4	biotite-volcaniclastic schist; lapilli tuff (5243)
195.4-214.5	feldspar-quartz porphyry; dyke or sill
214.5-238.7	biotite-volcaniclastic schist; lapilli tuff (5248)
238.7-257.0	feldspar-quartz porphyry; dyke or sill (5249)

SUMMARY OF GOLD ANALYTICAL RESULTS

- 1) at 83.5-85.0 m: 20 ppb; 5% pyrite in sheared crystal tuff
- 2) at 101.5-102.0 m: 0.2 g/t; weakly sheared crystal tuff
- 3) at 124.0-124.5: 21 ppb; 3% pyrite in crystal tuff
- 4) at 133.0-137.5: 70 ppb, trace, 95, 55 ppb; lapilli tuff adjacent to sheared crystal tuff
- 5) at 148.5-149.0: 0.2 g/t; 3% pyrite in lapilli tuff, punctual sample
at 157.0-157.5: 69 ppb; 2% pyrite in lapilli tuff, punctual sample
at 161.5-162.0: 0.3 g/t; 5% pyrite in lapilli tuff, punctual sample
- 6) at 214.5-215.0: 0.2 g/t; 2% pyrite in lapilli tuff at contact with feldspar-quartz porphyry dyke, punctual sample

JENSEN CATION PLOTS



SUMMARY LOG

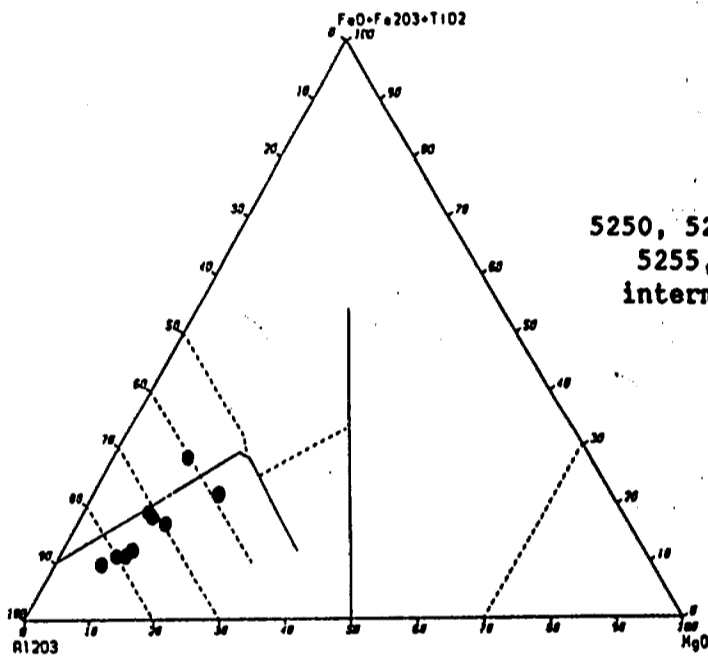
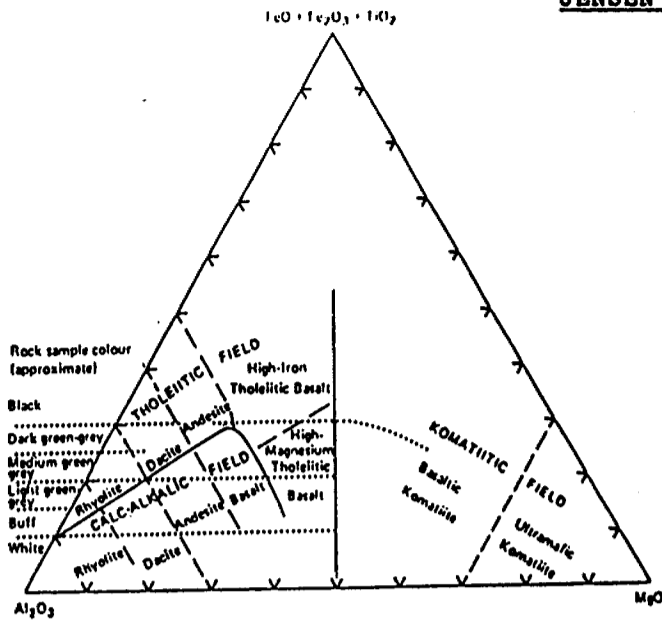
BUR-10:

0 - 16.2	<u>OVERBURDEN</u>
16.2-130.4	<u>INTERMEDIATE METAVOLCANIC ROCKS</u>
16.2- 91.4	mixed biotite-muscovite schist; ash and crystal tuff (5250, 5251, 5252, 5253, 5254, 5255, 5256, 5257)
91.4-130.4	quartz porphyry; quartz-eye tuff or sill (5260)
130.4-244.0	<u>MAFIC to INTERMEDIATE METAVOLCANIC ROCKS</u>
130.4-244.0	mixed amphibole-biotite schist; ash and crystal tuff (5261, 5262, 5263, 5264, 5265, 5682, 5683)

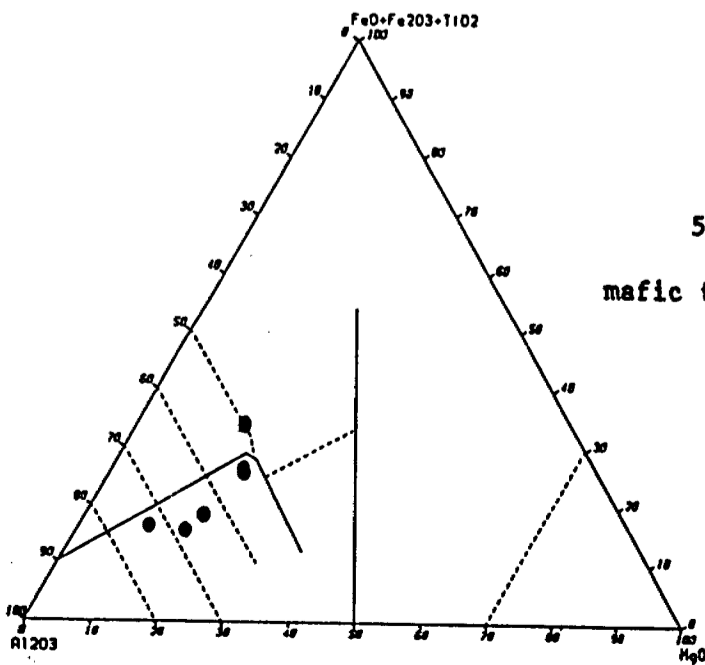
SUMMARY OF GOLD ANALYTICAL RESULTS

- 1) at 24.5-31.5 m: 15, 95, 25, 15, 19, 15 ppb; weakly fractured mixed tuffs
- 2) at 43.5-45.5 m: 64, 50 ppb; 2 m thick quartz-eye tuff, minor py, po
- 3) at 87.2-88.2 m: 300, 75 ppb; up to 10% pyrite in 20 cm open fold hinge

JENSEN CATION PLOTS



5250, 5251, 5252, 5253, 5254
5255, 5256, 5257, 5260
intermediate mixed tuffs



5261, 5262, 5263, 5264
5265, 5682, 5683
mafic to intermediate mixed tuffs

SUMMARY LOG

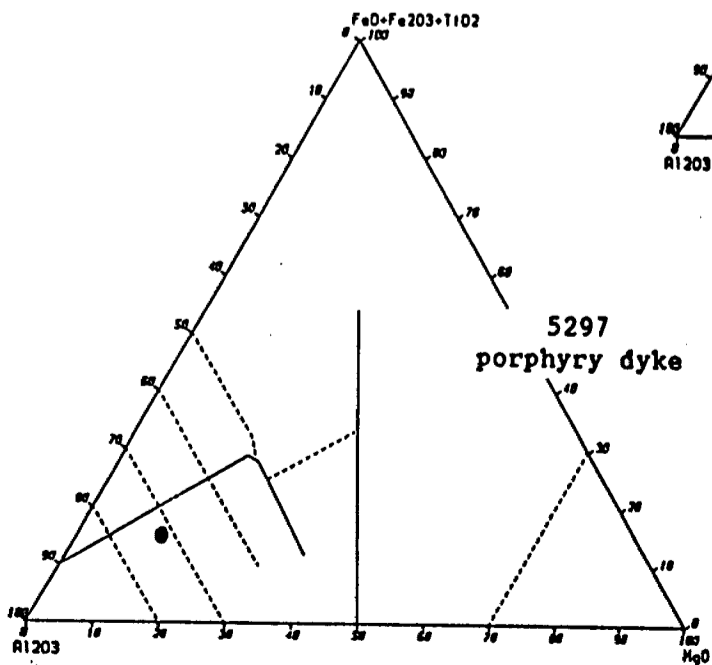
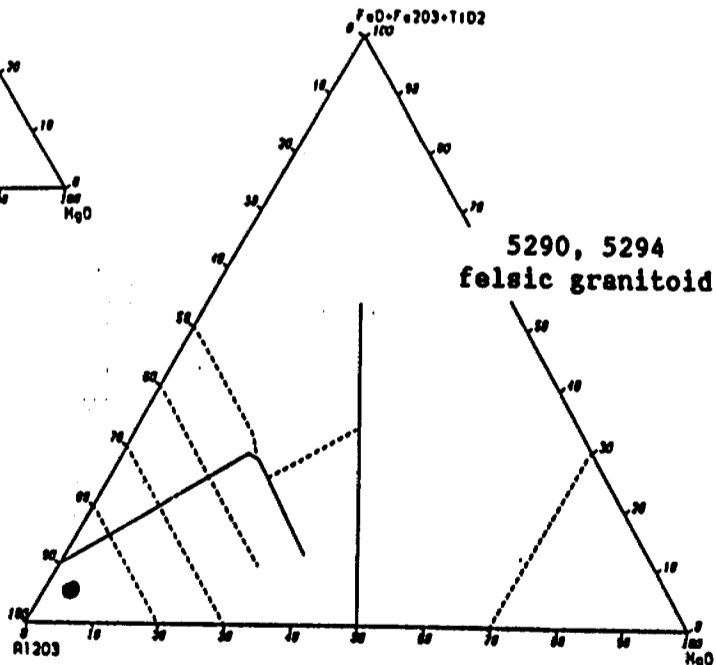
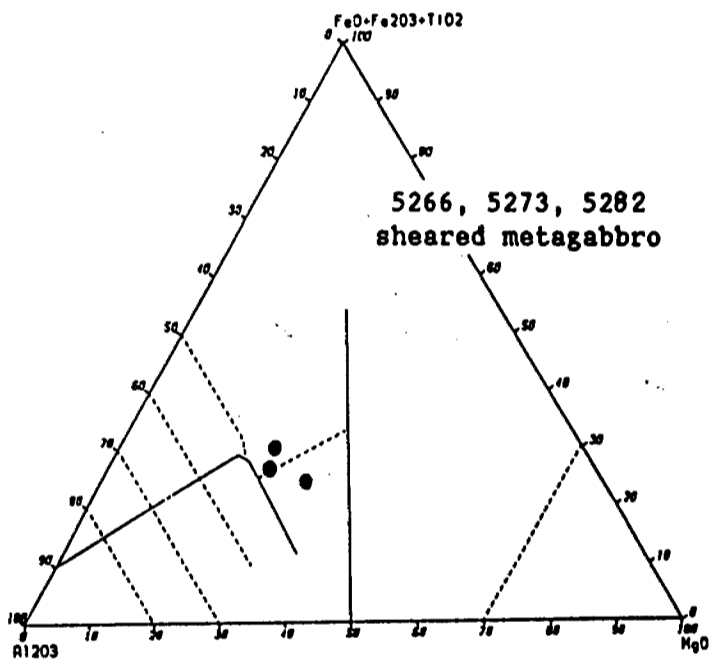
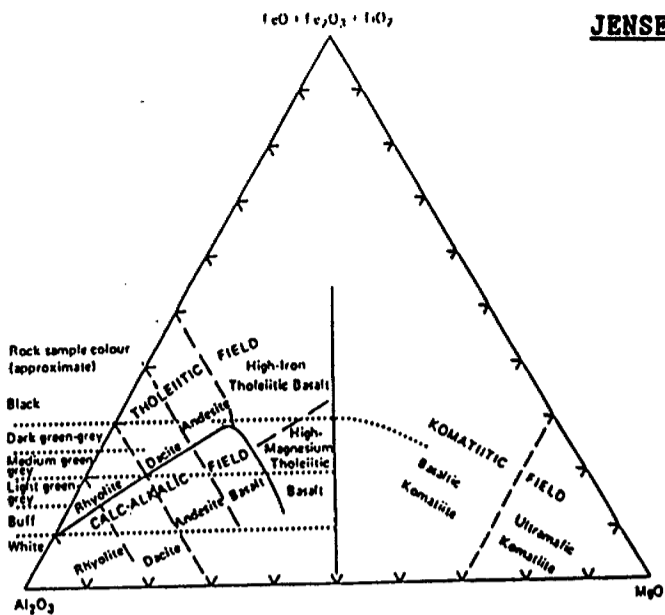
BUR-11:

0 - 19.3	<u>OVERBURDEN</u>
19.3-159.2	<u>MAFIC INTRUSIVE ROCKS</u>
19.3-159.2	feldspar-amphibole schist; sheared metagabbro (5266, 5273, 5282) 71.1-77.7 mostly white quartz vein
159.2-217.0	<u>FELSIC INTRUSIVE ROCKS</u>
159.2-217.0	equigranular felsic granitoid (5290, 5294, 5297)

SUMMARY OF GOLD ANALYTICAL RESULTS

- 1) at 105.5-106.0 m: 20 ppb; sheared metagabbro
at 113.0-113.5 m: 70 ppb; sheared metagabbro, brown alteration
at 119.0-119.5 m: 80 ppb; sheared metagabbro, 3-5% pyrite-pyrrhotite
at 129.0-129.5 m: 60 ppb; fracture zone in sheared metagabbro
at 131.0-132.5 m: 30 ppb; fracture zone in sheared metagabbro
- 2) at 150.0-150.5 m: 25 ppb; felsic dyke in sheared metagabbro
- 3) at 153.5-159.5 m: 20, 5, 480, 15 ppb; sheared metagabbro at contact
with felsic granitoid
- 4) at 165.0-165.5 m: 26 ppb; felsic granitoid, punctual sample
at 170.0-170.5 m: 65 ppb; quartz vein in felsic granitoid, punctual sample
at 174.5-175.0 m: 20 ppb; quartz vein in felsic granitoid, punctual sample
at 180.0-180.5 m: 53 ppb; quartz vein in felsic granitoid, punctual sample

JENSEN CATION PLOTS



SUMMARY LOG

BUR-12:

0 - 41.0

OVERBURDEN

41.0-191.0

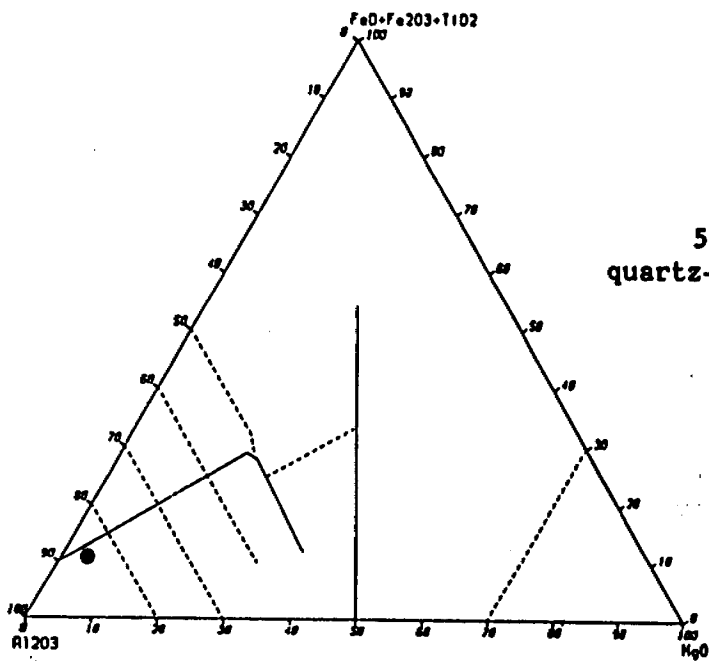
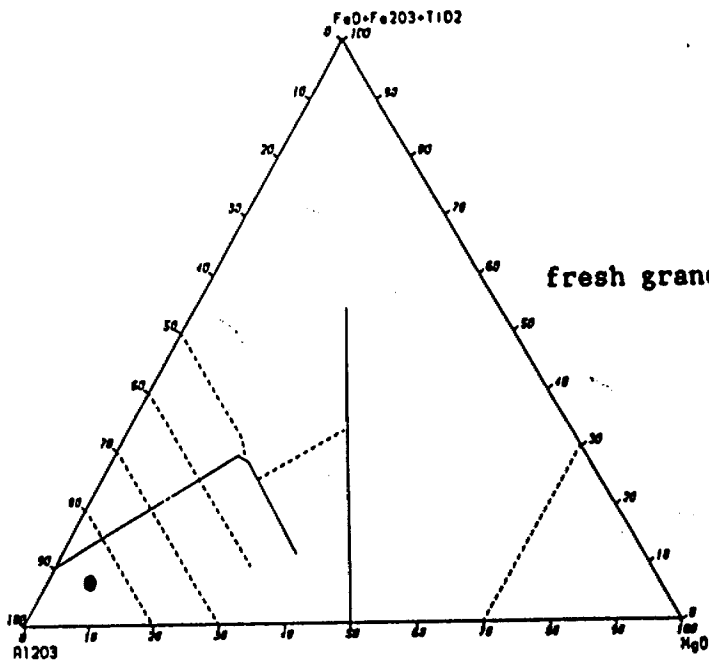
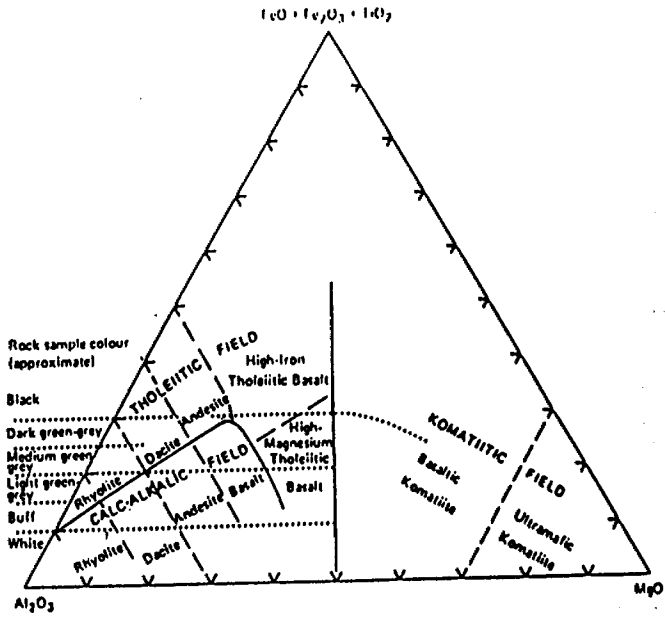
FELSIC INTRUSIVE ROCKS

41.0-147.4	granodiorite porphyry (5301)
147.4-158.2	quartz-eye schist; quartz-eye tuff (5309)
158.2-181.6	granodiorite porphyry (5311)
181.6-191.0	quartz-eye schist; quartz-eye tuff

SUMMARY OF GOLD ANALYTICAL RESULTS

- 1) at 45.5-78.5 m: 45, 20, 30, 40, 65, 140, 550, 180, 130, 35, 160, 230, 170, 20 ppb; sheared pyritic granodiorite porphyry
at 84.5-96.5 m: 150, 30, 480, 135, 15 ppb; sheared pyritic granodiorite porphyry
at 102.5-104.0 m: 45 ppb; sheared granodiorite porphyry
- 2) at 147.5-148.0 m: 25 ppb; pyritic quartz-eye tuff at contact with porphyry, punctual sample
- 3) at 173.3-173.8 m: 160 ppb; quartz vein with galena in fresh granodiorite porphyry, punctual sample

JENSEN CATION PLOTS



SUMMARY LOG

BUR-13:

0 - 27.7

OVERBURDEN

27.7-188.0

MAFIC to INTERMEDIATE METAVOLCANIC ROCKS

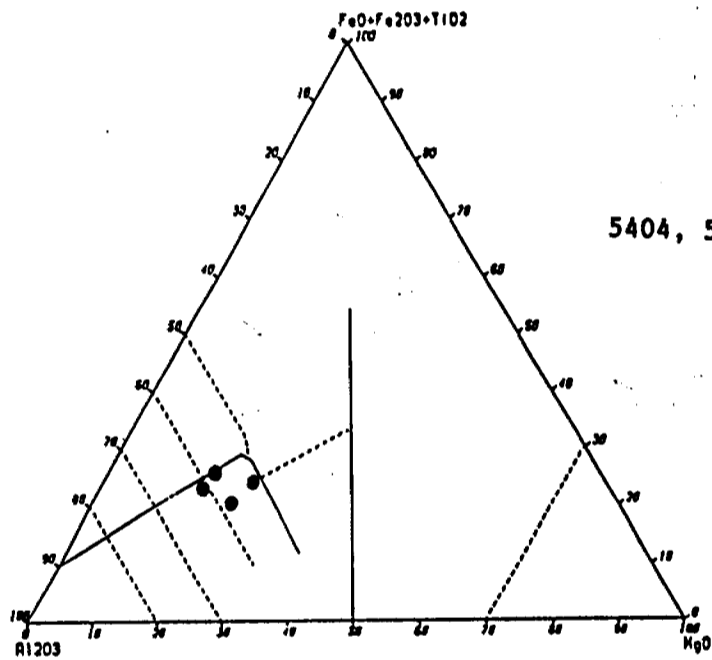
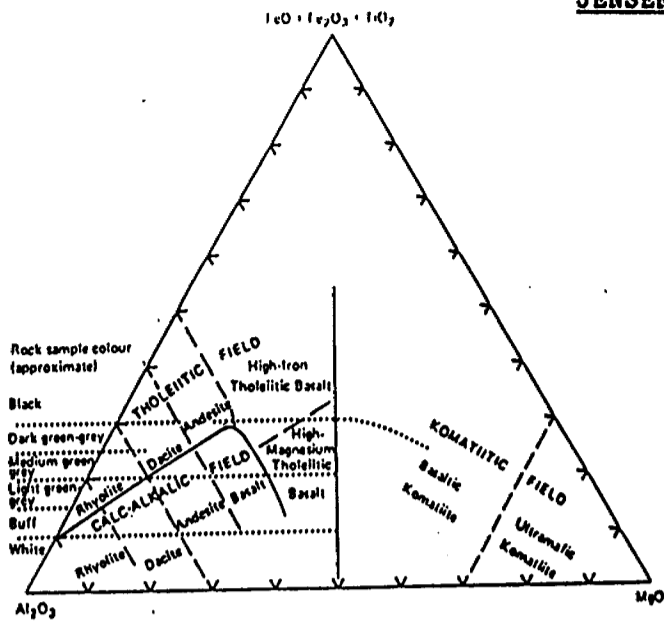
27.7-188.0

amphibole schist; flow
(5404, 5406, 5407, 5411)

SUMMARY OF GOLD ANALYTICAL RESULTS

- 1) at 83.5-84.0 m: 260 ppb; relatively fresh schist, minor pyrite, punctual sample
- 2) at 187.5-188.0 m: 21 ppb; relatively fresh schist, minor pyrite, punctual sample at end of hole

JENSEN CATION PLOTS



2. FIELD LOGS

The following notes should help the reader understand the manner in which core was logged, and also includes an explanation of information which is given in the logs in abbreviated form:

<u>COLUMN TITLE</u>	<u>DESCRIPTION EXPLANATION OF ABBREVIATIONS</u>
BOX:	core box number as received from drillers
DEPTH:	depth in metres (from drill floor)
% REC:	% recovery; generally given in 3 m intervals, i.e. measured length of core between driller tags expressed as %. However, if drill core can be fitted across drill tag, zone of core loss can be more precisely determined, and we have made every effort to do so
LOG:	graphic representation of drill log; the legend we use is still at a preliminary stage and will be presented in full at a later time
GRAIN SIZE:	visual estimate of grain size; where porphyroblastic or porphyritic rock types occur, grain size of groundmass and coarser minerals given separately
TEXTURE:	macroscopic rock texture
STRUCTURES:	foliations measures in degrees to core axis, folds and other features also reported here
FRACTURES AND VEINS:	F = fracture V = vein
- Density:	where fracture or vein density prohibits individual description (eg where 10 or more fractures of same orientation occur in limited depth interval), density of fractures (or veins) are given: number of fractures (or veins) per metre
- Angle:	angle of fracture (F) or vein (V) to core axis as suffix to feature eg. F40 is a fracture at 40° to core axis; in some cases where more than one identical fracture occurs in restricted interval, we prefix with the number of fractures eg 2F40, rather than report in density column

2. FIELD LOGS (cont'd)

COLUMN
TITLE

DESCRIPTION
EXPLANATION OF ABBREVIATIONS

- Nature: abbreviated description of fractures and veins including description of fracture eg

RO, RØ: rough
SM: smooth
SS: striations, slickenslides
V: vuggy
H, HE: healed, recemented

and also including description of minerals associated with fractures or veins, eg

cb: carbonate
cc: calcite
ch, chl: chlorite
cl: clay
cpy: chalcopyrite
ep: epidote
fs, fspr: feldspar
hem: hematite
kaol: kaolinite
lim: limonite
mt: magnetite
mu, musc: muscovite
ox: oxides eg limonite, or generally rusty surfaces
peg: pegmatoid
po: pyrrhotite
py: pyrite
Q, q: quartz
ser: sericite
Si: very fine silica cement
tm: tourmaline

other common abbreviations used:

Bl, bl: bleaching
bkn: zones of broken core, probably natural but perhaps locally due to drillers
bx: brecciation; dense fracturation of no apparent regular orientation
ft: minor fault

finally, we emphasize that fractures appearing on log are interpreted to be fractures; breaks parallel to foliation are generally not recorded (unless they are interpreted to be fractures) and places where the core has been broken by drillers to fit into core box are not recorded.

GEOT: Geotechnical parameters

- F: friability - a qualitative measure of rock competence
F = friable eg core can be broken with bare hands
VF = very friable eg core easily broken
EF = extremely friable eg clay
where this column is not filled out, hammer is needed to break core

2. FIELD LOGS (cont'd)

<u>COLUMN TITLE</u>	<u>DESCRIPTION EXPLANATION OF ABBREVIATIONS</u>
- R:	rock quality designation (RQD); a measure of fracture density commonly used in rock mechanics studies where the length of core in box in lengths of 10 cm or greater is expressed as % of one 3 m run in very fractured rock, RQD value is low, in non-fractured rock, RQD is 100; where this column is not filled out, RQD is >95%
COLOUR:	colour of core when wet lower case letters are tones: l = light m = medium d = dark capital letters are colours: B = black BL = blue BN = brown G = grey GG = greyish green/greenish grey GN = green O = orange P = pink PG = pinkish grey R = red W = white + = two colours which alternate repeatedly - = colour transitional between two colours
MINERALS AND ALTERATIONS:	a representation of occurrence of minerals of specific interest, abbreviations as for fractures and veins
SAMPLE #:	location and number of sample
TS #:	location and number of thin section
DESCRIPTION:	description given by logging geologist, we have also recorded Au analytical results here



DIAMOND DRILL HOLE RECORD
BURNTBUSH RIVER PROJECT

DRILL HOLE NO.: BUR-02

CLAIM NO(S): L789458 / L789459
TOWNSHIP : Noseworthy
DATE BEGUN : 25/02/88
COMPLETED : 02/03/88
LOGGED BY : J. Learn

CONTRACTOR : Les Forages Foranord
CORE SIZE : BQ
DRILL FLUIDS: bentonite, polydrill,
GS550, water

COLLAR CO-ORDINATES

	GRID	UTM
X:	<u>4900E</u>	<u>≈587000E</u>
Y:	<u>2025N</u>	<u>≈5485400N</u>
Z:	<u>≈281</u>	

DEVIATION RECORD

DEPTH	AZIMUTH	DIP	METHOD
60m		47°	HF 4%
120m		47°	HF 4%
180m		33°	HF 4%
240m		30°	HF 4%

DEPARTURE: AZIMUTH: 180°
INCLINATION: -50.5°
CHECKED BY: J. Learn

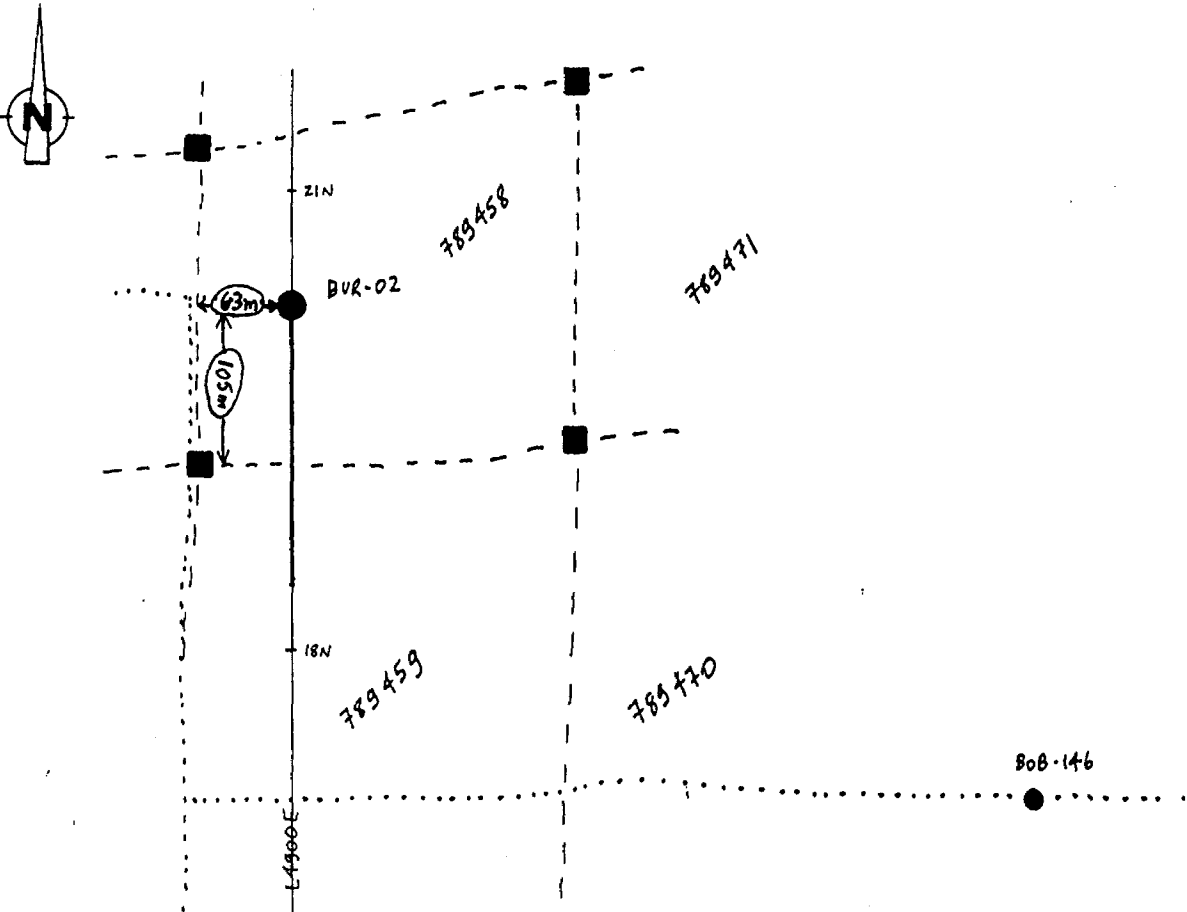
CHECKED BY:
J. Learn, R. St-Jean, S. Ball

DEPTHS: OVERBURDEN: 46.1m
END OF HOLE: 245.0m

HORIZONTAL COMPONENT: 182m
VERTICAL COMPONENT : 161m

REMARKS: drill floor to ground level 0.6m, trouble pulling casing:
left in hole NW from 0-37m, BW from 15-46m

LOCATION SKETCH 1:5000:



Box	Depth	% Rec	Log	Grain size mm - N40 - N40	Texture	Structures to core axis	Fractures and Veins			Géot F R	Colour	Minerals and Alterations						Sample #	TS #	Description
							Dens.	Angle	Nature			PY	PO	CC						
2	55																		- fracturation generally weak, core fits well together all fractures coated with thin layer of black chlorite in addition to occasional py and/or po - many breaks // S ₁ also coated with black chlorite not logged at left - quartz-calcite veins only logged at left where they are ~ 5cm thick, in most cases calcite present only on vein walls eg. 59.2, 59.4, 62.4 - py and/or po veins only logged when not // S ₁	
	56																			
	57																			
	58					S ₁ 45														
	59																			
3	60																			
	61																			
	62														5088	✓	n/a			
	63																			
4	64																			
	65																			
	66																			
	67																			
	68																			
5	69																			
	70																			
	71																			
	72																			

well foliated/locally porphyroblastic

Box	Depth 72	% Rec	Log	Grain size mm - 200 - 2000	Texture	Structures to core axis	Fractures and Veins			Goot F/R	Colour	Minerals and Alterations PY PO CC	Sample #	TS #	Description
							Dens.	Angle	Nature						
5	73														
	74											5089	t	74.4 - 75.3	qtz-cc-py-po veining // Sr brecciation at cm scale
	75											5090	t		
	76					61.40						5091	0.2		(qtz brecciated, filled by py/po)
	77											5092	t		sulfide grain size variable from very fine to ~2mm po & py total 5-10%
6	78									DGG BN					
	79														
	80				foliated										
	81											5093	✓ n/a	80.7	minor brecciation qtz-cc-py at above
7	82				well										
	83														
	84														
	85														
	86					51.45					MGG			84.7 - 91.8	predominantly MICA SCHIST as above, but with abundant interbeds of quartzite and pelite (cm scale) pelites are very fine grained black layers with ~10% garnet → metamorphosed turbidites
8	87														
	88														
	89														
	90					51.45									90.3 - 90.6 ~5% po in S ₁ as segregations and at 90.5 large py segregation ~5% py and 5% po 91.4 coarse po clots ~10% po

Box	Depth	% Rec	Log	Grain size mm - 20 - 200	Texture	Structures to core axis	Fractures and Veins			Goot FR	Colour	Minerals and Alterations PY IP OS CL EP N	Sample #	TS #	Description
							Dens.	Angle	Nature						
8	91													91.8-94.7 strongly sulfidized <u>MICA SCHIST</u>	
	92									dGG		5094	0.2	91.8-92.8 10% po as breccia filling	
	93				weakly brecciated					+ BN		5095	t	minor py	
	94				weakly brecciated							5096	t	92.8-94.5 generally 3-5% po, lesser py in foliation or patchy segregation but at 93.2 large segregation	
9	95				massive							5097	t	10% py, 5% po.	
	96				weakly brecciated	SI 40				dG + BN		5098	t		
	97				weakly brecciated							5099	t	94.5-94.7 coarse sulfide 15% po 10% py also coarse garnet ~5%	
	98				weakly brecciated							5100	t		
	99				faulted					dG		5101	t	94.7-95.2 v.f. graded earthy massive sulfide with colloform py textures minor cpy, possible sphalerite	
10	100											5102	t		
	101											5103	t	95.2-97.8 strongly sulfidized argillite ~3% py and 3% po mostly // S1	
	102													95.5-95.7 coarse py ~5%, po still 3%	
11	103													97.1-97.8 cpy < 1% in addition to py and po, some py grains 5mm	
	104				well foliated to massive	SI 40								97.8-100.1 argillite, f. graded black, well banded to locally massive, occasional coarser beds, possibly indicating tops uphole (graded bedding poorly developed).	
	105														
	106														
	107													98.3-100.6 core broken, cannot be fit together, clear fault gouge poorly cemented with rounded fragments at about 99.0	
108												5104			

Box	Depth	% Rec	Log	Grain size mm - 200 - 2000	Texture	Structures to core axis	Fractures and Veins			Géol FR	Colour	Minerals and Alterations PY PO CC	Sample #	TS #	Description
							Dens.	Angle	Nature						
14	127		+π +												
	128		+π			S1 65									
15	129				thinly bedded well foliated							S106	t		
	130											S107	t		
	131														
	132				porphyritic	C 90	F15 B F15	SM, PO							129.0-129.1 coarse py ~20% and po ~5% as breccia filling
	133					S1 45									129.1-129.6 irregular coarse po ~5% over internal segregations in breccia filling, also ~1% py
	134														
	135														
16	136				massive/porphyroblastic										132.6-131.75 very coarse po (~15%) and py (~15%) segregations associated with thin ~5cm quartz vein
	137														
	138					S1 60									
	139														
	140														
17	141														
	142														
	143					S1 70									
	144											S108	✓	C2	

Box	Depth	% Rec	Log	Grain size mm - 40 - 200	Texture	Structures to core axis	Fractures and Veins			Geot F R	Colour	Minerals and Alterations		Sample #	TS #	Description
							Dens.	Angle	Nature			Py	Alter			
17	145															
	146															
	147															
	148															
18	149															
	150															
	151															
	152					S, SS										
	153															
	154															
19	155															
	156															
	157															
	158															
20	159															
	160															
	161					S, G										
	162															

well foliated to massive / porphyroblastic

V 70 Q, PO

F 15 R, P, PO

F 40 S

F 20 S

PY | P | AL |

Box	Depth	% Rec	Log	Grain size mm - 200 - 2000	Texture	Structures to core axis	Fractures and Veins			Géot F/R	Colour	Minerals and Alterations	Sample #	TS #	Description
							Dens.	Angle	Nature						
20	163							F15	sm, po						
21	164														
	165														
	166														
	167														
	168														
	169														
	170														
	171														
22	172														
	173														
	174														
	175														
	176														
23	177														
	178														
	179														
	180														

well foliated to massive / porphyroblastic

S1.55

d6

179.0 - 187.6 argillite as above with appearance of amphibole porphyroblasts and slight colour change (greenish) garnets slightly less abundant amphiboles (~5-10% locally) are stretched in the foliation plane

S1.80

d6G

S109V L2

Box	Depth	% Rec	Log	Grain size mm		Texture	Structures to core axis	Fractures and Veins		Goot	Colour	Minerals and Alterations	Sample #	TS #	Description
				-N10	-N100			Dens.	Angle						
23	181					well foliated porphyroblastic stretched amphibole			F30	Ro					
	182														187.6 - 195.0 garnetiferous <u>argillite</u>
	183														(as above)
24	184										dgg				
	185						S1.60		F30	Ro					195.0 - 206.45 <u>quartzite</u> , with lesser <u>microschist</u> and <u>argillite</u> beds, shows open folding.
	186								F30	Sm					fold at 197.5 - 197.8 shows repetition of garnetiferous argillite bed on both sides of hinge zone which is in quartzite
	187														garnets locally abundant in these pelitic intervals up to 50%
	188														pyrite and pyrrhotite still common in segregations generally // S ₁
	189														locally 3-10% (say over a few cm) but overall ≤ 1%
25	190					well foliated / locally massive or porphyroblastic					dG				po generally more common than py here
	191						S1.65								
	192														
	193														
	194						S1.65								
26	195						FOLD								
	196						FOLD				2GG				
	197														
	198						FOLD								

Box	Depth	% Rec	Log	Grain size mm - 200 - 2000	Texture	Structures to core axis	Fractures and Veins			Giot FR	Colour	Minerals and Alterations PY, PO, CC	Sample #	TS #	Description
							Dens.	Angle	Nature						
	199					S1.70		F15	RO, PY						
	200							F50	SM						
	201							F70	RO, PO, CC						
27	202							F100	RO						
	203					S1.75		F80	RO, PY						
	204							F35	RO, PO						
	205					FOLD		F30	RO, PY, PO						
	206							F25	RO, PO					206.45 - 229.7	porphyritic intermediate to felsic dyke, with occasional rocks of argillite
28	207														
	208														very minor po, py disseminated
	209														feldspar phenocrysts up to ~5mm same dyke as above
	210														
	211														
	212														
29	213														porphyritic
	214														
	215														
	216														

Box	Depth	% Rec	Log	Grain size mm -N10 -N100	Texture	Structures to core axis	Fractures and Veins			Géol. F R	Colour	Minerals and Alterations py po chl ...	Sample #	TS #	Description
							Dens.	Angle	Nature						
	217		+												
	218		+												
30	219		+												
	220		+												
	221		+												
	222		+												
	223		+												
31	224		+												
	225		+												
	226		+												
	227		+												
	228		+												
	229		+												
32	230		+												
	231		+												
	232		+												
	233		+												
	234		+												

porphyritic with wall rock xenoliths

well foliated / locally massive, porphyroblastic

MG

dg

229.7 - 245.0

return to f-grained, generally garnetiferous argillite as above
 abundant po, lesser py on argillite adjacent to dyke, but overall much less abundant than above, however po, and py still occasionally present (always // S)

Box	Depth	% Rec	Log	Grain size mm - N10 - N100	Texture	Structures to core axis	Fractures and Veins		G&V F R	Colour	Minerals and Alterations	Sample #	TS #	Description
							Dens.	Angle (Nature)						
	235													
	236													
33	237													
	238													
	239													
	240													
	241													
34	242													
	243													
	244													
	245													
	246													
	247													
	248													
	249													
	250													
	251													
	252													

well foliated, locally massive, porphyroblastic

S, 70

dg

F25 sm

EOH

John Levan

DIAMOND DRILL HOLE RECORD
BURNTBUSH RIVER PROJECT

DRILL HOLE NO.: BUR-05

CLAIM NO(S): L789357
TOWNSHIP: Noseworthy
DATE BEGUN: 29/02/88
COMPLETED: 11/03/88
LOGGED BY: J. Learn

CONTRACTOR: Les Forages Foranord
CORE SIZE: BQ
DRILL FLUIDS: bentonite mud,
GS550, polydrill, H₂O

COLLAR CO-ORDINATES

	GRID	UTM
X:	350E	≈582500E
Y:	850S	≈5482400N
Z:	≈276	

<u>DEVIATION RECORD</u>			
DEPTH	AZIMUTH	DIP	METHOD
60m		49°	HF 4%
120m		48°	HF 4%
182m		47°	HF 4%
240m		47°	HF 4%

CHECKED BY:
J. Learn, R. St-Jean, S. Ball

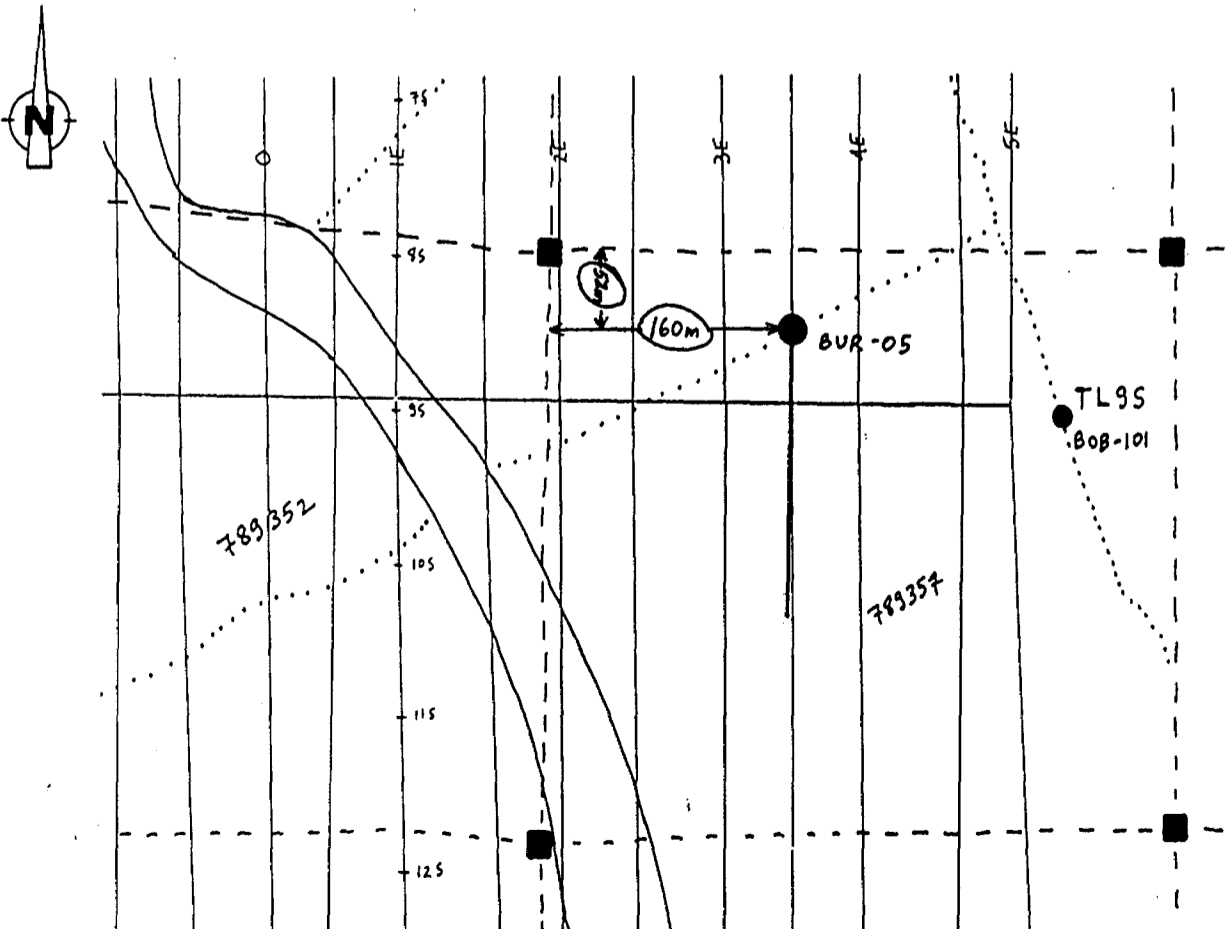
DEPARTURE: AZIMUTH: 181°
INCLINATION: -50.0°
CHECKED BY: J. Learn

DEPTHS: OVERBURDEN: 52.4m
END OF HOLE: 278.0m

HORIZONTAL COMPONENT: 186m
VERTICAL COMPONENT: 207m

REMARKS: drill floor to ground 0.6m, 53m BW casing left in hole (couldn't be pulled, sanded in)

LOCATION SKETCH 1:5000:



Depth (m)	Core size (mm)	Structure to core axis	Fractures and Veins		Color	Mineralogy and Alterations		Sample #	Notes
			Dens.	Angle		Nature	Py, P, m, Sil, cc		
42									
44									max 643 ppb (chromite sealment)
46									pres. 40 ppb More from Vejan t (1. schartzella)
48									
50									
52									OVERBURDEN 0-52.4
54		V			dg				52.4 - 67.0
56	40	<							f. grained, weakly foliated to massive looking mafic to intermediate volcanic flow rock amphibole, feldspar are major minerals <1% py visible but abundant microscopic py observed, disseminated everywhere - rock is strongly fractured with abundant rusty surfaces (limonite) - local minor garnet, porphyroblasts
58	100	<							
60		>							

weakly foliated to massive

5.80

F > 10

NE60
-90

FO
-20

N25.0

N > M

most fractured thin reddish red (rusty) surfaces, cc

45/90

Run	Depth (m)	%	Structure	Structures to Core Axis	Features and Veins	Minerals and Alterations	Sample
60			V				
62	55		V		NFB0-90 MFO-20 N7M		5148 ✓
64			<		F710		
66	40		V				
68			V		F75 →		5149 ✓
70	25		V		F70 F40 F20 OX		
72			V		F50 F50 F60 F30 F15		
74			V		F35 F60 F25 F60 F30 F60 F50		
76			V				
78			V				

weakly foliated to massive

most fractures have oxidized (rusty) surfaces, cc

67.0 - 69.2 quartz-calcite-sericite (?) schist
sericite is yellowish brown and therefore may be Fe-chlorite

abundant fine disseminated py. ~1%
quartz-calcite rich bands alternate at cm scale with phyllite rich bands but occasional bands are more uniformly composed of quartz-calcite and these bands have more granular texture

→ INTERFLOW SEDIMENT

69.2 - 89.2
f. grained to med gr. locally porphyroblastic mafic volcanic flow rock
garnets locally up to 10%, amphiboles much smaller eg 0.2 to 0.5 mm, and feldspar are major constituents
weakly foliated to massive texture

71.0 - 71.1 minor healed brecciated rock, thin microfractures pervasive
78.3 - 78.7 as above (breccia)

Box	Depth	Core	Structure	Minerals and Alterations	Sample	TS
5	78	V		Bx H,cc,Q F20 Ro F5,30 Sm,cc F30 Sm,cc	mGG dG	
	80	V		3F10 Ro,hm cc,Q F60 Ro,cc 2F55 Ro		
	82	V		F60 Ro 2F55 Ro		
	84	V		F45 Sm,cc F60 Ro 2F45 Ro F30 Ro,cc F30 Ro		
	86	V		F30 Ro,cc		
6	88	V		F55 Ro,cc F55 Sm,cc F30 Sm 2F45 Sm,cc F45 Ro,cc	LG dGG	5150 ✓ 10
	90	V		F45 Ro V15 cc,Q V30 Q	mGG	
	92	V		F45 Ro F40 Ro,cc		
7	94	V		V70 Q,cc		
	96	V		F45 Ro,cc F45 Ro,cc V75 Q,cc,py F60 Sm,cc V30 py,Q,cc F70	dGG	5151 ✓ 3 No TS!

general comment → the rock is not really uniform, there are cm bands with larger, more abundant amphiboles, cm bands with finer grain size etc, but over 20m interval, the rock is the same.

87.5-89.0 a few of the garnets have high length to width ratios, they have been fractured or stretched over short (i.e. a few cm) intervals of core.

→ contact at 89.2 not abrupt - arbitrary choice 10m

89.2-94.8

fine grained, weakly foliated to massive intermediate to mafic volcanic flow rock. Slightly more felsic in composition than above (increased quartz content)
 - occasional v. minor garnet
 - abundant v. fine (microscopic) pyrite disseminated

94.8-95.0 quartz vein, massive, calcite, pyrite mostly on vein walls

mainly foliated to massive

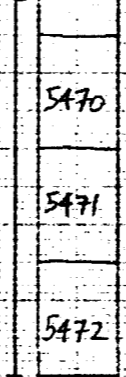
Elev	Dip	Fractures and Veins	Structures	Colour	Minerals and Alterations		Sample #	Description
					Minerals	Alterations		
96	95	V						
98		V						
100		V						
102		V						
104		V						
106		V						
108		V						
110		V						
112		V						
114		V						

Interval	Notes	Minerals	Alterations	Sample #
95.0 - 101.0	f. gr. to med gr. locally porphyroblastic mafic volcanic flow rock same rock as 69.2-89.2			
97.1 - 97.3	fault gouge - small rounded fragments 0.5-1 cm, probable area of core loss			
99.9	quartz vein with abundant cc, py on vein walls			
101.0 - 119.6	v. f. grained uniform, weakly foliated to massive mafic volcanic rock major constituents are amphibole and biotite abundant microscopic pyrite disseminated throughout			
101.0 - 103.0	common quartz veins with minor silicification gives appearance of coarser (still f. gr.) grain size			5152 ✓ 3
112.7	ws? on fx may be kaolinite → very soft non compact, powdery, but not sticky, soapy or clayey			

Well polished to massive

Depth (m)	%	Grain size (mm)	Structure	Fractures and Voids	Alterations	Remarks
114	V					
	V			F40 Sm		
116	V			F25 Sm		
11	V		5.90	F45 Ro, cc F45 Sm F35 Ro, cc V17 Q		→ contact at 119.6 not abrupt, arbitrary ±10cm. 119.6 - 161.6
118	V			V? Q		
	V			Bx cc		
120	V			F20 Ro, cc F60 Ro, cc F80 Ro, us?		f. gr. weakly foliated to massive mafic volcanic flow rock. locally porphyroblastic (garnets, and commonly, smaller amphiboles) major constituents are amphibole, feldspar
12	V			F15 cc, hm F20 Sm, Q, cc		
	V			F15 Sm, cc, hm V20 Q, cc, hm F25 Sm, cc F30 Sm, hm F45 Sm, hm		
124	V			V30 cc, Q		
126	V			F10 Sm, hm, cc F15 Sm, hm, cc F40 Ro, hm		
13	V		5.90	V40 Q, cc F35 Ro, Q, cc V65 hm, py		122.0 - 129.0 hematite on fractures often in equilibrium with pyrite.
	V			ZF60 Ro, py F45 Ro		
130	V			F25 Ro, py, cc ZV20 cc, Q ZV55 Q, cc		
14	V					
132						

Weakly foliated to massive



Elev. (m)	Dip (°)	Core No.	Description and Notes	Lithology	Mineral and Alterations		Sample #	Notes
					Py	Sil, CC		
132				F60 Ro,cc				
	V			V65 Q,cc				
				V60 Q,cc				
14	134			F15 Ro,cc				
	V			F15 sm,ccpy			5153	✓ 3
				F45 Sm				
136	V			F45 Ro,cc				
	V			F20 sm,cc				
				F30 Ro,cc				
				F45 sm,ccpy				
				F20 Ro,cc				
				F25 sm,cc				
15	138			F35 sm,cc				
	V			F30 sm,cc				
	V			F50 Ro,cc				
	V			F25 Ro,cc				
				F25 Ro,cc				
				F30 sm				
				F40 Ro,cc				
				F35 Ro,cc				
				F40 Ro,cc				
				F35 Ro,cc				
140				F35 Ro,cc				
142	100		5.90	F45 sm,cc				
	V			F50 sm,cc				
	V			F20 Ro,cc				
				F25 Ro,cc				
				BROKEN				
144			5.85	V45 Q,cc				
	V			V50 Q,cc				
16				F30 Ro,cc				
	V			F40 Ro,cc				
				F45 Ro,cc				
				F20 Ro,cc				
146								
	V							
148				F50 Ro, Q,cc				
17				Bx05 H, Q,cc, (EP)				
150								

irregularly foliated to massive

142.0-142.5 weak to moderate silicification of wall rock adjacent to 5m quartz vein

148.0-149.8 thin fracture zone nearly parallel to core axis, brecciation of wall rock cemented by calcite, quartz, epidote. wall rock silicified, very minor microscopic pyrite present <0.1%

Box	Core No.	Orientation	Structure	Mineralogy	Textures and Vains	Dens.	Angle	Nature	Color	Py	Po	Mt	Hem	Sil	Ec	Other
	150	V														
17	152	V			F20 H, Q, cc											
	154	V			F35 Ro F50 Ro, cc F25 Ro, cc F15 Ro	5.70								I		
	156	V			F35 Ro, cc F60 Ro, cc											5473 <5
18	158	V			F30 Ro, cc	5.75			dG							5474 <5
	160	V			F30 Ro, cc											5475 <5
	162	V			BROKEN F45 Sm, ch F45 Sm, ch F45 Sm, ch F30 Ro, ch F50 Ro, ch	5.65			dGG					I		
	164	V			F50 Sm, ch F30 Sm, ch F30 Ro, cc	5.70 5.55										
	166	V			F30 Ro, cc F20 Ro, cc F45 Sm, cc F35 Ro, cc, ha F55 Ro, cc, ch F35 Sm, ch F40 Ro, cc, ch	5.55			dG							
20	168	V			F70 G, cc, ch											

weakly to moderately foliated

contact fairly abrupt

161.6 - 192.7

f.g. weakly to moderately foliated mafic volcanic flow rock somewhat coarser grain size mostly due to amphiboles major constituents amphibole, feldspar locally porphyroblastic garnets occasionally up to 5% to 10% of rock. foliation better developed than previous unit and emphasized by presence of abundant mm calcite veins, etc.

Depth (m)	Core	Fractures and Veins	Structures	Minerals and Alterations	Compos	Notes
186						
23	V			Sv25 Q, cc		
188	V			F20 Ro, ch, py F40 Ro, cc, c F50 Ro, cc, py F80 Ro, ch, py	S154	37
190	V			F20 Ro, ch, py F450 Ro, ch, py F450 Ro, ch, py F20 Sm, ch		
24	V			F30 Ro, cc F90 Sm, cc F45 Sm, ch, cc F20 Sm, ch	S155	t
192	V					
194	V		5, 7.5	F50 Sm, cc	S156	9
25	V			F45 Sm, ch F35 Ro, ch, hm F30 Ro, ch, hm F70 Sm, ch F10 Ro, ch, hm		
198	V			F30 Sm, ch F50 Sm, ch, hm		
200	V			F30 Ro, hm		
26	V			F30 Sm, ch, py F55 Ro, ch, cc F45 Ro, hm	S482	<5
202	V		5, 7.0	F25 Ro, ch, py F45 Ro, ch, hm	S483	5
204	V			F45 Ro, hm, cc F35 Ro, hm, cc F30 Ro, hm	S484	<5

191.6-191.8 patchy fine grained pyrite and pyrrhotite present in rock. Some sulfide is // S, but in general, the distribution is patchy.

contact fairly abrupt

192.7 - 206.1

f.g. weakly foliated to massive mafic volcanic flow rock
major constituents: amphibole, feldspar
in reality, rock is not all that different from above unit, but foliation less well developed
grain size may be marginally smaller

203-206.1 rock has slight purplish hue due to hematization adjacent to fault, grain size slowly decreases towards fault

weakly foliated to massive

Log	Depth (m)	Core %	Structure	Fractures and Veins	Notes	Color	Pyrite (wt. %)	hem	Silice	Sample No.	Interval (m)	Description
Z6	204									5484		
Z7	206					dg				5157	12	
	206									5485	40	206.1 - 238.0 <u>FAULT</u>
	208					156±N				5486	5	beautiful fault breccia, mostly extracted from core barrel as unconsolidated granites, but several pieces of core 7.10cm available for study
	210									5487	45	angular fragments of altered wall rock (unrecognizable) in calcite rich matrix with little quartz, minor epidote. possible Fe carbonate, and occasional hematite
	212											a few recognizable garnets, very locally
	214									5488	10	important core loss reduced somewhat after 225m, at which point mud (Cassia) was used as drilling fluid
Z8	216									5489	45	fault intersected at low angle as indicated by major orientation of visible fractures and veins, true thickness may be ~5m
	218											little or no pyrite in consolidated areas
	220									5490	45	
	222									5491		

Brecciated

Box	Depth m	Log	Grain size mm		Texture	Structures to core axis	Fractures and Veins			Colour	Minerals and Alteration			Sample #		
			-No	-No			Dens.	Angle	Nature		F	R	Py	Ill	Silice	#
	222															
28	224														5491	20
	226														5492	25
29	228														5493	5
	230															
	232														5494	25
	234														5495	25
30	236														5496	25
	238														5497	25
31	240														5498	25
	240														5499	25

Core No.	Depth (m)	% Rec	Litho	Grain size mm -100 - 2000	Structures to core end	Fractures and Veins		Geol FR	Colour	Minerals and Alterations			Sample No.	Description
						Dens.	Angle Nature			py	hem	Sil, cc		
	240													
31	242											5499		
	242											5500	5	238.0-278.0
	244											5501	15	intermediate ash tuff(?) f. gr. weakly to moderately foliated rock
32	246											5502	<5	abundant biotite flakes w. light outline foliation but also presence of mm calcite veins // S ₁
	248													Unit as a whole is not uniform (variously altered veined, etc. due to proximity of fault) local amphibole rich areas eg. 242.0-243.6, 253-263
	250													→ minor fault breccia in unit due to proximity of major fault.
	252													247.5-248.5 local area of sericitization, somewhat better developed foliation abundant disseminated microscopic pyrite
33	254													
	256													
	258													
34	256													
	258													

Comment: Rock on this side of fault is definitely different than on other side. Offset is not minor. Alterations present are not strong and are not extensive. The fault appears to have broken the rock, but little evidence of ductile deformation is present except for one cm minor fold whose axial surface is on a fracture. However, further along same fracture, rock is not folded.

Depth (m)	Structure, Fractures and Veins (to core axis)	Dens.	Angle	Nature	Colour	Minerals and Alterations	Sample #	TS #	Description
258					mg				
260				F30 Sm, cc, hm F30 Sm, cc, hm 2F20 Sm, cc, hm F35 Sm, cc, hm F30 Sm, cc, hm F30 Sm, cc, hm Broken hm	dg				
262				F30 Sm, hm F45 Sm, hm F45 Sm, hm, cc F30 Sm, hm			5180 ✓	10	
264		S, 80		F50 Sm, cc					264-0-278-0 pyrite becomes more evident, most pyrite is associated with thin quartz veinlets in rock, some disseminated pyrite present
266				3F50 Sm, hm F25 Ro, cc					
268				F45 Sm, cc F45 Sm, cc 2F25 Ro, cc, cl	dg				
270		S, 90		F45 Sm, cc 2F40 Sm, cc F40 Sm, cc 2F40 cc, cl, hm IV 70 Q					
272				F470 H, cl F45 Sm, cc F45 Sm, cc F45 Sm, cc F45 Sm, cc, hm					
274				F450 cl, Q, py					
276		S, 85		2F45 Sm, cc, hm F25 Sm, cc, hm			5181 ✓	12	

Depth (m)	Lithology	Structure	Fractures and Veins	Colour	Minerals and Alterations	Sample #	Description
276				dg			
278			F45 Sincl			5782	643
280							278.0m EOH

John Lewis



DIAMOND DRILL HOLE RECORD
BURNTBUSH RIVER PROJECT

DRILL HOLE NO.: BUR-06
CLAIM NO(S): L789358
TOWNSHIP: Noseworthy
DATE BEGUN: 03/03/88
COMPLETED: 09/03/88
LOGGED BY: R. St-Jean

CONTRACTOR: Les Forages Foranord
CORE SIZE: BQ
DRILL FLUIDS: bentonite mud, poly-drill, GS550, H₂O

COLLAR CO-ORDINATES

	GRID	UTM
X:	350E	≈582500E
Y:	500S	≈5482750N
Z:	≈277	

<u>DEVIATION RECORD</u>			
DEPTH	AZIMUTH	DIP	METHOD
60m		48°	HF 4%
120m		43°	HF 4%
180m		42°	HF 4%
240m		41°	HF 4%

CHECKED BY:
J. Learn, R. St-Jean, S. Ball

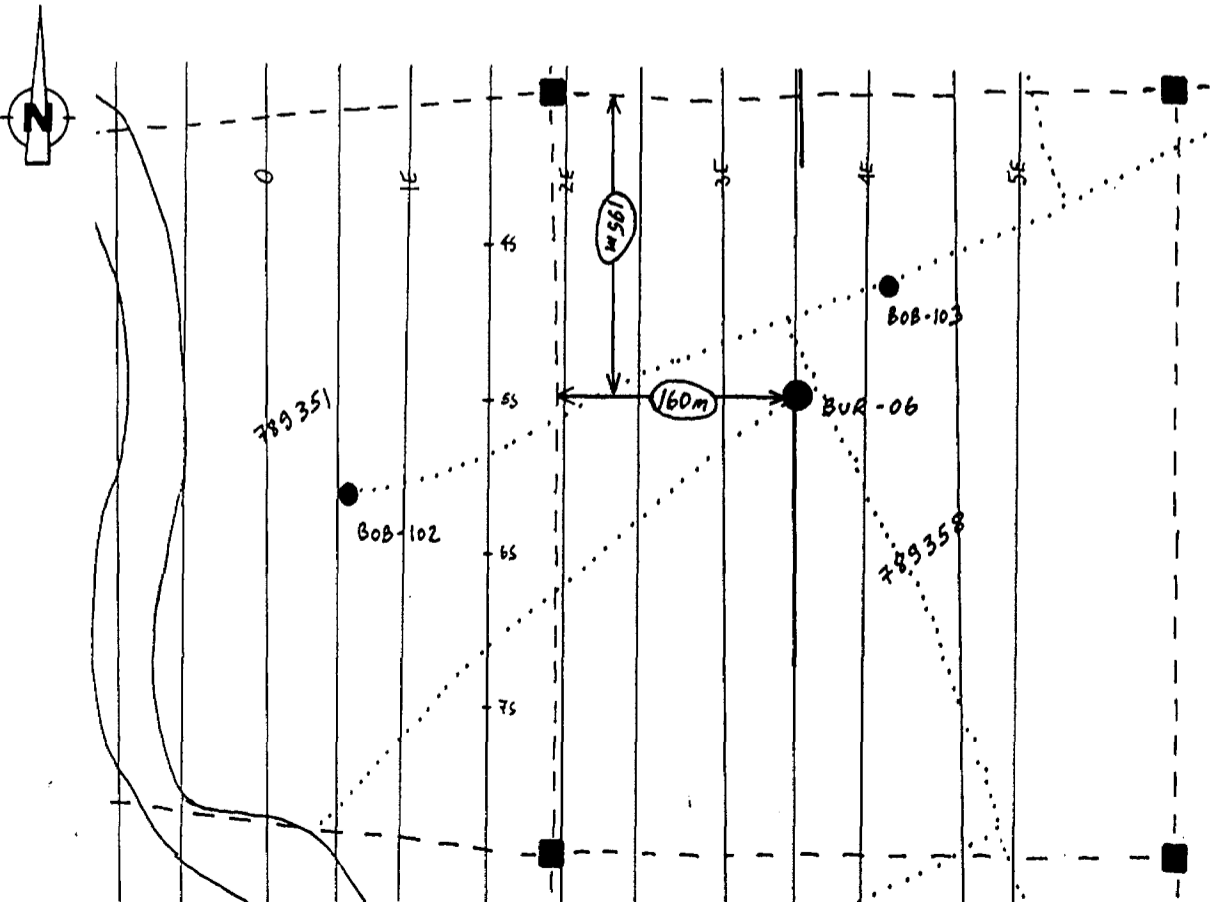
DEPARTURE: AZIMUTH: 180°
INCLINATION: -50.0°
CHECKED BY: R. St-Jean

DEPTHS: OVERBURDEN: 40.0m
END OF HOLE: 247.2m

HORIZONTAL COMPONENT: 176m
VERTICAL COMPONENT: 173m

REMARKS: drill floor to ground level 0.3m, casing pulled

LOCATION SKETCH 1:5000:



Depth (m)	Core ID	Structures	Fractures and Veins	Density	Angle	Nature	Colour	Pyrit	Minerals and Alterations	Sample	TS	Description
32												✓ envoyé pour analyses seulement 5145, 5162, 5164 max Van. Van. 0.3 g/t max Chimitec 35 ppb <u>0.0 - 40.00</u> OVER BURDEN
34												
36												
38												
40	70 V			5.70						5503		40.0-52.75 Garnet amphibole schist
42	60 V			5.70			dG			5504		Fine grained, massive mafic flows (basalts to andesite composition) foliation is weak to good, shows by orientation of amphiboles
44	100 V			5.70						5505		Pyrite is generally disseminated and in stringers in quartz "pockets" 41.0-42.4 Core is broken
46	72 V			5.65						5506		46.0-46.2 Healed breccia 47.3-48.1 Flow banding? 48.1-50.5 much chlorite alteration
48	100 V									5507		48.6-48.8 core is broken
50	88 V									5508		49.5-50.1 Core is broken
										5111		50.5-51.4 Brecciated, quartz remaining, disturbed foliation.
												51.4-52.75 Thin banding, becoming more felsic.

Box	Depth	% sec	Log	Grain size in ϕ - ϕ_{10} - ϕ_{60}	Texture	Structures to core axis	Fractures and Veins	Dens.	Angle	Nature	Color	py, mt	Minerals and Alterations	Sample #	TS #	Notes
3	50		V.V							H, cc Ro, cc				5508		51.7-52.4 Core is broken
														5112		
4	52		V							H, Q, cc Ro, cc S, m				5509	35	52.75-57.45 Mica schist Very fine to fine grained, thinly laminated intermediate to felsic tuff. (dacite comp.) N. good foliation along schistosity. Much disseminated pyrite which is also found in stringers in foliation planes. * Frequent stretched blue quartz (up to 6mm) protruding an augen texture in schistosity. Carbonates found in foliation planes.
	54		V							H, Ro Ro, H S, ch				5510	10	
	56		V								Py			5513		
5	58		V							Py S, m				5514		57.45-62.20 Amphibole-garnet schist Medium grained, massive to faintly banded mafic to intermediate flow? (andesite comp) Strongly chloritized. Some quartz segregations with pyrite stringers. Carbonates mainly in foliation planes.
	60		V							Ro, py				5511	45	
	62		V							Ro, cc, py				5512	45	
6	64		V							H, cc				5513	45	62.20-68.05 Mica schist Very fine to fine grained, thinly laminated intermediate to felsic tuff (dacite comp) N. good foliation along schistosity. Few disseminated pyrite Frequent stretched blue quartz up to 5mm protruding augen texture in schistosity. Boudinages of some quartz veins. Carbonates found in foliation planes.
	66		V							Ro, cc, py S, m, cc, p				5514	45	
	68		V							H, cc H, cc Ro, cc, ch Ro, cc				5515	45	

porphyroblastic, idio-blastic
AUGEN

AUGEN

Box	Depth	Core	Minerals and Alterations	Sample #	Description
	68	K V	F30 Ro, cc	5518	
		V >	F0-5 Ro, cc Bx Py, ch	5519	68.05-69.10 Amphibole schist
	70	V	3F15 Sm, ch		Medium grained, banded mafic to intermediate flow. Strongly chloritized. May be a mafic section of above.
7		V	F25 H, ch F30 Sm, ch F50 Sm, ch F60 Sa, Sm, py		
	72	V	4F45 H, cc, Q, py		
		V	F15 Ro, cc, py		
	74	V	F40 Ro, cc, ch		69.10-87.40 Garnet amphibole schist
		V	F50 Sa, py F25 Ro, cc, ch		Fine to medium grained, massive to banded mafic flow. Foliation weak to good shown by the orientation of amphiboles. Foliation is frequently disturbed (folds?). Pyrite is generally disseminated and in stringers in brecciated zones and in quartz pockets. Chloritization is pervasive.
	76	V	F45 cc 2F0 H, cc		
8		V	F45 H, ch, cc F40 Ro, cc, ch		
	78	V	F25 H, cc, py F50 Ro, cc, py 2F30 Ro, cc, py F55 cc, ep, py F5 cc		69.1-69.6 Healed breccia? flow top? 70.9-71.6 Core is broken 76.4-76.6 Healed breccia? flow top? 77.15-77.25 Pillows??
	80	V	3F35 Ro, Q, cc F45 Ro, cc 4F35 H, cc F30 Ro, cc, ep F20 ch, cc F45 Ro, cc, mm	5116 5117	79.8-82.4 dark brown alteration mineral Iron carbonate?
	82	V	F40 Ro F30 Ro, cc F50 Ro, ch F40 Ro, py F20 H, cc 4F10 H, cc		
9		V	2F5-10 H, ch F0 Xc, ch, py		
	84	V	F45 Sm, ch F30 Ro, cc F25 Ro, cc F50 Ro, cc, py		
10		V	9F60 H, cc		

Porphyroblastic / Leucoblastic

Elev.	Dip	Strike	Core No.	Structure	Fractures and Veins	Gent.	Colour	Minerals and Alterations	Sample	TS	Description
86	V				L45						86.2-87.4 up to 10% stretched garnets
88	V				L50						87.40-92.00 Mica schist. Fine grained intermediate to felsic flow? (Dacite - andesite comp.) Very gradational contact with above and under facies. Weak to good foliation. Few disseminated pyrite, some stringers
90	V				L55						88.1-88.4 Feldspar porphyry 88.5-88.75 Finely laminated tuff 89.55 1.5cm brecciated pyrite vein 89.55-89.75 Healed breccia 90.5-92.0 Gradually becoming more mafic
94	V				L60						92.0-108.0 Amphibole schist. v-fine to fine grained, massive intermediate to mafic flow (andesite comp.) Weak foliation. Few pyrite.
96	V				L65						92.4-92.6 Healed breccia? 99.6-99.7 Healed breccia
98	V				L70						101.5-101.8 "Tuffaceous section" 104.0-104.4 Black, very fine, very massive
100	V				L75						
102	V				L80						102.8-103.3 Bleaching along fractures
104	V				L85						

Box	Depth	% Rec	Log	Grain size (mm)	Structure to core axis	Fractures	Dens.	Angle	Nature	Alterations	h/m/cc	Sample #	TS #	Description
	104		V											
13	106		K						F30 Ro,cc F5 H,cc 3F30 Sm,cc -P30 cc					108.0-121.55 Feldspar porphyry intermediate flow (dacite-andesite composition) medium to coarse grained. Weak to good foliation may be a porphyritic dyke?
	108		V						F45 Ro,ss 3F60 Ro,cc F25 Ro,cc					108.0-108.2 Strongly sheared.
14	110		K						F30 Ro,cc F25 Ro,cc					110.35 3mm chert bed.
	112		V						2F70 Ro,cc 4F35 Sm,cc F30 H,cc,sh					
	114		V						8F70 Ro,cc					
	116		V						2F50 Ro,cc F50 Sm,cc	dg-mG				
	118		V						V60 H,V,Q,d F40 Ro,cc,sh F0 cc, Ro 4F40 Ro,cc					
15	120		V						3F60 Ro,cc P10 Ro,cc 2F10 H,cc,sh DF15 Ro,cc		5123	3	114.30-119.95 Strongly sheared, foliation transposed	
	122		V						5F30 Ro F15 Ro,cc P25 H,cc		5520	25	115.5-116.0 Bleaching along fractures.	
	124		V						F5 Ro 4F30 Ro,cc		5521	25		
	126		V						F0 H,cc 5F35 Ro,cc,sh F30 Ro,cc 3F35 Ro,cc	dg-dB	5522	25		
16	128		V						F25 Ro,cc		5523	25	119.95-121.55 Strongly chloritized	
	130		V						32V? Q, T, M		5524	30	121.05-121.20 Two Quartz-Tourmaline-fyrite veins	
	132		V						12F35 H, V, cc EP-PY	mg-mGG	5124	6		
			V								5125	6		

Depth	Dip	Strike	Core	Structure to core axis	Fractures and Veins			Geo	Colour	Minerals and Alterations	Sample #	TS #	Description	
					Dens.	Angle	Nature							
122	<										5525	<5		
16	<				4cm	F25	H,py				5126	t	121.55-140.1m Sericite schist	
	<					V40	Q,py,ch							very fine grained, thinly foliated intermediate volcanic? or tuff?
	<					F25	H,cc							Composed exclusively of sericite, quartz chlorite. Strongly crenulated
124	<					F25	cc,py				5526	<5		Finely disseminated pyrite through all facies
	<					2F35	cc,Ro							Quartz veins seen about parallel to core axis.
126	>					2F55	pl,cc				5527	<5		
17	<					F50	cc,ch				5528	<5		
	<					F25	Ro,cc							122.9-123.0 Quartz-tourmaline-pyrite vein
128	>					F10	Ro,cc,py				5127	t		
	<					F45	cc							
130	<					F180	cl,cc,py				5529	<5		130.3-130.5 Two small faults with clay gouge and breccia (less than 5mm thick)
	<					F50	cc,py							
	<					F30	Ro,cc,py				5530	<5		
132	<				4cm	V20	Q,py				5128	t		131.35-131.8 white quartz veins
18	<					F10	cc,py,Q		50	mg-mg	5531	<5		
134	<										5532	15		
	<										5129	<2		
136	>					F15	H,cc,py				5533	5		136.7-137.6 white quartz veins
	<					V0	Q,py,cl							
	<					V0	Q,py				5130	t		137.95-138.3 Core is broken
138	>					V0	Q,py				5534	<5		
19	<					V15	Q,py							
	<					2F15	Ro				5535	<5		
140	<					F55	Ro,py							

Box	Depth (m)	Core	Structure	Fractures and Vains	Dens.	Angle	Nature	Color	Alterations	Remarks	Sample No.	Description
19	140	V									5131	140.10-143.40 Garnet amphibole schist
		V									5536	fine to medium grained massive mafic flow.
	142	V						dg-mg				foliation show much variation.
20		V			2cm	V 40	H, cc, py				5537	1420-143.0 Fold? foliation passes from 90° to 0°, stretching of garnets from 1:1 to 3:1
	144	V									5132	
		V						mg			5538	143.40-150.70 Sericite schist.
		V									5133	
	146	V									5539	143.40-145.45 very fine grained
		V									5134	thinly foliated intermediate volcanic?
		V									5135	Lepidoblastic texture
		V									5136	Some disseminated pyrite and some pyrite in stringers
	148	V						mg-dbn			540	143.4-143.6 Several quartz stringers
		V									5137	
21		V									5541	
	150	V									5138	145.45-150.70 Extremely altered, strongly silicified, very fine grained felsic to intermediate volcanic? -Aphanitic texture
		V									5542	Porphyritic feldspar "shadows" can be seen
		V						dg-dbn			5139	
		V									5543	Very fine disseminated pyrite in all altered zone.
	152	V									5140	
		V									5544	
		V									5141	
		V									5545	
	154	V			5cm	V?	Q, ch, py				5142	146.05-150.5 Very strong bleaching along microfractures, intense epidotization or "saueritization"
		V									5546	
22		V										
		V										
	156	V						dg-mg				150.70-153.90 Amphibole garnet schist
		V										fine to medium grained, massive, intermediate flow rock
		V										Poor foliation, some disseminated pyrite
		V										Strong silicification to ~153m
23	158	V										

Box	Depth (m)	Grain size (mm)	Texture	Structures	Fractures and Veins	Minerals and Alterations	Sample #	Description
23	158							153.90-156.30 Amphibole schist fine grained, massive and banded mafic to intermediate volcanic flow (some blue quartz)
	160							
	162							156.30-164.60 Feldspar porphyry? Coarse grained, massive, granoblastic? intermediate flow? or dyke? Very mafic interbeds, very weak foliation. Brownish to greenish alteration Some interbeds show strong schistosity.
	164							
	166							164.60-183.50 Amphibole garnet schist Medium to fine grained, massive and banded mafic flow. Strongly chloritized
	168							
	170							
	172							174.2-174.4 Many blocky fractures
	174							
26	176							

GRANOBLASTIC?

AMPHIBOLITE

porphyroblastic

Box	Depth	% Rec	Log	Grain size mm	Texture	Structure to core axis	Dens.	Angle	Nature	FIR	Colour	Minerals and Alterations	Sample #	TS #	Notes
	176		V						F20 Ro,cc,py						
			V						V80 Ro,cc,py						
			V			S,75			F5F30 H,cc						
			V						ZF30 H,cc						
26	178		V						F40 Ro,cc		dg				
			V			S,70			V80 Ro,cc,py		-dgg				
			V						F15 Ro,cc,cc						
			V						F10 Ro,cc,cc						
			V						F20 H, Ro,cc						
	180		V						F5-10 Ro,cc,cc						
			V						V55 Ro,cc						
			V						F350 Ro,cc						
			V						F25 H,cc						
			V						F35 RO						
			V						F15 H,cc,hm						
	182	100	V						F35 Sm,cc				5547	<5	179.6 - 181.4 Amphibole schist medium grained, massive, granoblastic, amphibole porphyroblast intermediate dykes? strong "brownish" alteration.
			V			S,60			F45 Ro,cc						183.1 - 183.5 Becoming increasingly schistosed.
			V						J2F25 Ro,cc						
27			V						ZF25 H,cc				5548	<5	
	184		V						F15 H,cc						
			V						ZF10 cc,cl?						183.50 - 195.70 Mylonite
			V						F35 H,cc				5146	±	Strongly altered, strongly schistosed, locally brecciated tectonic mylonite. Silicified, locally bleached. Dark mafic intervals.
			V						F0-5 cl				5549	<5	
	186		V						F15? cl						
			V										5550	<5	185.1 - 193.0 Fault. Recupescation is very hard to estimate. Brecciated Pyrite and clay seen in the upper portion of fault. Evidences suggest that fault plane is at 15-20 degrees to core axis.
	188		V												
			V												
28			V						F10-5 cl Bx				5551	<5	
	190		V												
			V												
	192		V												
29			V										5552	<5	194.0 - 195.7 Several centimetres "purple" dykes? with feldspars & phenocrystals.
			V						F30 Ro,cc						
			V						F30 Ro,cc,cc						
	194		V						F45 Ro,cc,cc						

Depth (m)	Dip (°)	Strike (°)	Core size (mm)	Structure to core axis	Fractures and Veins			Mg	Mn	Fe	Ca	Mg	Fe	Ca	Description	
					Dens.	Angle	Nature									
29	194	100	V	ANCH	GRANODIORITIC	F4F30	H, cc								5553	CS 195.70-202.1 Amphibole garnet schist Medium to coarse grained, massive mafic-intermediate flow. Very chloritized, weak foliation. Disseminated pyrite. Rare quartz veins or pockets.
29	196	100	V	ANCH	GRANODIORITIC	F55 F70 V20 F45 F50	H, cc, ch R, cc, ch Q, ch, py R, cc, Q R, cc, Q								5554	10 Rare quartz veins or pockets
29	198	100	V	ANCH	GRANODIORITIC	F30 F15 F35 F60 F50 F35 F35 F0-5 F65 F40 F10 F20 F35 F15 F35	R, cc R, cc H, R, cc R, cc R, cc R, cc R, cc Q, ch serp? S, ch, H S, ch, H H, serp cl, BX cc							5147	t 198.5-201.5 Fracture filling a bluish, soapy appearance, very soft. Serpentine? ?	
30	200	100	V	ANCH	GRANODIORITIC	F25 F15 F20 F30 F45 F50	R, cc R, cc R, cc R, cc R, cc R, cc								5555	CS 203.4-203.5 Fractures are bleached
30	202	100	V	ANCH	GRANODIORITIC	F40 F40	R, cc cc, R								5556	CS 197.6-202.1 Very sheared, mylonitized gneiss, possible dyke intrusion.
31	206	100	V	ANCH	GRANODIORITIC	F40 F40	R, cc cc, R								5557	CS 198.5-199.3 Faults with soft clay gouge and/or hardened bluish clay. Generally strongly sheared rock, much brecciation.
31	208	100	V	ANCH	GRANODIORITIC	F10 F15 F35 F25 V60 V70?	R, cc R, cc, ch R, cc, ch R, cc, py Q, ch, py R, cc, py								5158	t 202.1-247.2 Garnet amphibole schists Fine to coarse grained massive to banded, mostly mafic flow. Foliation is weak to good. Lepidoblastic to granoblastic texture. Generally chloritized. Rare quartz veins or pockets. When seen, quartz veins show pyrite, chlorite and tourmaline. Pyrite is generally disseminated and in stringers.
32	210	100	V	ANCH	GRANODIORITIC	F0-5 V0 F40 F60 F30 F35 F55 F20	R, cc R, cc R, cc, py R, cc, py R, cc, py R, cc, py R, cc, py R, cc, py R, cc, py R, cc, py R, cc, py R, cc, py R, cc, py R, cc, py								5159	t
32	212	100	V	ANCH	GRANODIORITIC	F50 V70 V70	R, Q Q, py, ch Q, ch, py								5160	t

Core No.	Angle	Nature	py, mt, tm	hm, cc	Sample #	Notes
212	V	V15? Q, py, ch	1-2%			
32	V	F60 Ro				
	V	FF0-5 Ro, cc				
	V	F50 Ro, cc				
	V	F30 Ro, cc				
214	V	FF10 Ro				
	V	F55 Ro, cc				
	V	V80 Q, ch, py				
	V	FF10 Ro, cc, py				
	V	FF10 Ro, cc, py				
	V	FF10 Ro, cc, py				
216	V					
	V					
33	V					
	V	F45 Ro, cc				
	V	F35 Ro, cc				
218	V	FF0-5 H				
	V	F45 Ro				
	V	FF5 Ro, cc				
	V					
220	V	F0 H, cc	dggt			
	V	F45 Ro, cc				
	V	F60 Ro, cc				
	V	F40 Ro, cc				
	V					
222	V	FF15 H, cc				
	V	F10 Ro				
	V	F45 Ro, cc				
34	V				5161	t
224	V	F50 Ro, ch				
	V	F60 Ro			5162	n/a
	V	F45 Ro, cc				
226	V					
	V					
35	V					
228	V					
	V	FF5 Ro, cc				
	V	FF45 H, Q				
	V	FF40 Ro, cc				
	V	F60 Ro, cc				
	V	F30 Ro, cc				
	V	V80 Q, py, ch				
230	V	F50 Ro, cc, ch				

223.8 - 233.0 Very large
euhedral? amphibole
crystals (up to 1.5cm)
are growing.
P.S. Not amphibole but chloritoid
(from T.S.)

Depth (m)	Core Axis	Dens.	Angle	Nature	Colour	Py (m)	Time (h)	hm/cc
230				F50 Sm,ss				
35	V			F50 H,cc Q,cpy,cc ch				
	V			F45 Ro,py	d66.5mb			
232	V			F60 Ro,cc serp				
	V			F35 Ro,cc ch				
	V			F10 H,cc py,cc				
	V			F50 Q,cpy,cc serp?				
234	V			F45 Ro,cc				
36	V			F10 H,cc py,cc				
	V			F35 Ro,cc ch				
	V			F15 H,cc py,cc				
236	V			F45 cc				
	V			F45 Ro,py,cc				
238	V			F45 H,cc	d6			
	V			F60 Ro				
	V			F15 Ro,py,cc				
	V			F35 Ro,cc				
	V			F35 H,cc py,cc				
240	V			F40 H,cc py,cc				
37	V			F30 H,cc py,cc				
	V			F45 H,cc py,cc				
	V			F10 H,cc py,cc				
242	V			F35 Sm,cc				
	V			F20 Ro,cc, H,cc				
	V			F30 Ro,cc				
	V			F15 Sm,cc,cc				
244	V			F35 Sm,cc,cc				
	V			F30 Ro,cc,cc				
	V			F10-5 Sm,cc				
246	V			F45 H,cc				
	V			F40 Ro,cc,cc				
	V			F40 Ro,cc				
	V			F30 H,cc,cc				
	V			F10 cc,cc,cc				
	V			F25 Ro,hm,cc				

231.0 → 231.3 - up to 5%? magnetite
 Corroded garnets, hexahedral magnetite
 230.55 → 233.0 1-2 mm crystals
 of black tourmaline, in chloritized matrix
 Random orientation of tourmaline?
 needles (Needles up to 5mm
 long)
 P.S. Probably chloritoid

5163
 5164
 5165
 5166

TS
 0.2
 n/a
 t
 t

24
 247.2

SPG-11



DIAMOND DRILL HOLE RECORD
BURNTBUSH RIVER PROJECT

DRILL HOLE NO.: BUR-07

CLAIM NO(S): L789359 / L789358
TOWNSHIP: Noseworthy
DATE BEGUN: 09/03/88
COMPLETED: 14/03/88
LOGGED BY: R. St-Jean

CONTRACTOR: Les Forages Foranord
CORE SIZE: BQ
DRILL FLUIDS: polydrill, H₂O,
bentonite, GS550

COLLAR CO-ORDINATES:

	GRID	UTM
X:	350E	≈582500E
Y:	160S	≈5483100N
Z:	≈282	

DEVIATION RECORD			
DEPTH	AZIMUTH	DIP	METHOD
60m		45°	HF 4%
120m		43°	HF 4%
180m		42°	HF 4%
260m		39°	HF 4%

CHECKED BY:
J.Learn, R.St-Jean, S.Ball

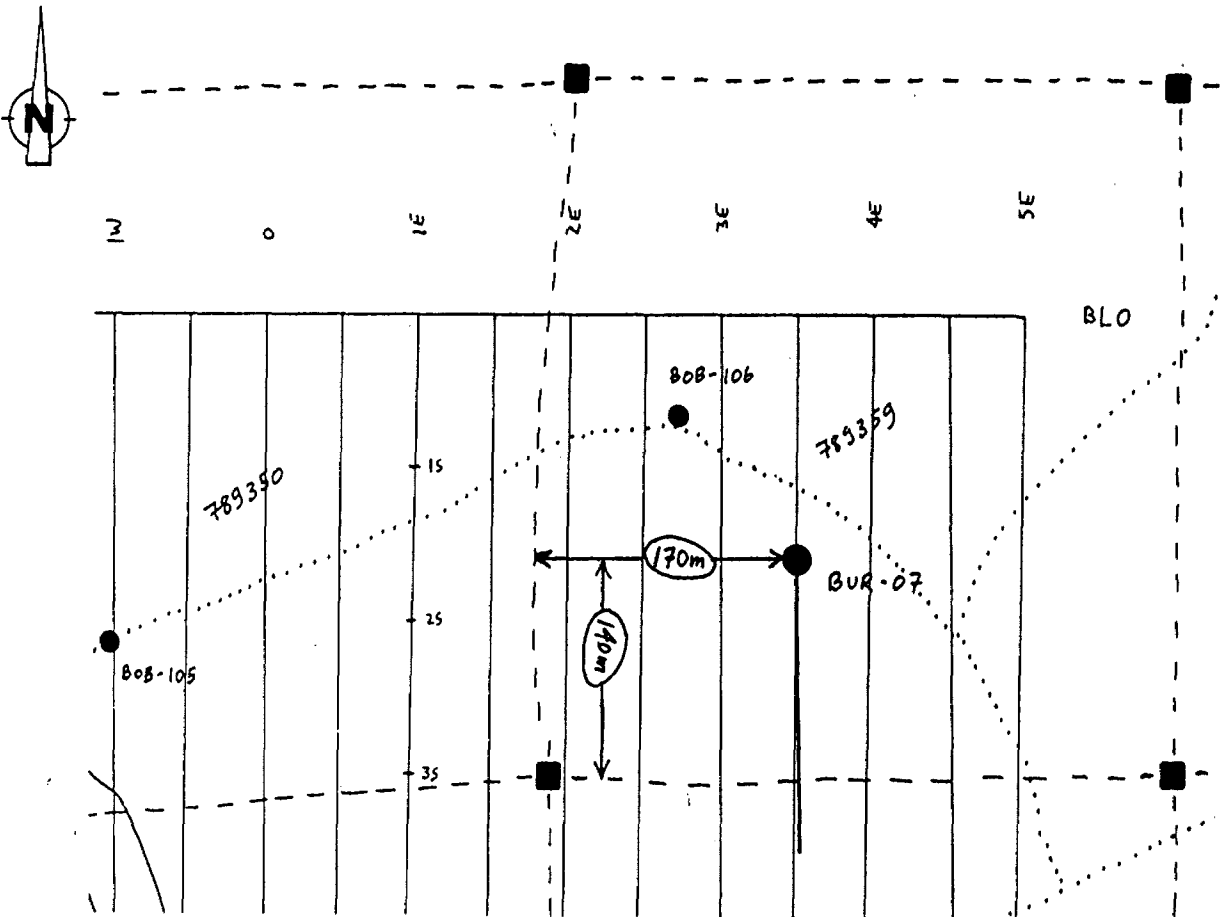
DEPARTURE: AZIMUTH: 179°
INCLINATION: -50°
CHECKED BY: J. Learn

DEPTHS: OVERBURDEN: 44.9m
END OF HOLE: 260.0m

HORIZONTAL COMPONENT: 189m
VERTICAL COMPONENT: 178m

REMARKS: drill floor to ground level 0.3m, casing pulled

LOCATION SKETCH 1:5000:



Box	Depth	% Rec	Grain size mm	Structures to core axis	Structures and Angles	Colour	Minerals and Alterations		Sample #	Description
							Py	Mt		
	37									envoyé pour majures seulement 5175, 5184, 5194
	39									
	45									0.0 - 44.90 OVERBURDEN
	41	0								max 21 ppb (Chimitec)
	43									
	44									
	45									
	46									44.90-79.80 Biotite-chlorite quartz schists
	47				S, 60					fine grained, lithic sedimentary or granitic good foliation, metamorphic texture Pyrite is disseminated and in small stringers in foliation or covering fracture planes. Few quartz veins. Calcite is found on almost all fractures. Some very fine grained massive intervals.
1	48								5167	48.0-48.2 Interm. feldspar porphyry (dyke?)
	49				S, 70					50.0-50.8 Bleached along fractures
	50	100								50.1-50.4 Interm. Feldspar porphyry (dyke?)
	51				S, 65					50.3-51.0
2	52									
	53				S, 65					
	54									

METABOLIC

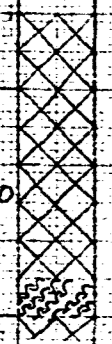
Depth (m)	Core No.	Texture	Structures to core axis	Fractures Dens.	Angle	Veins Nature	Geo. F/R	Colour	Minerals and Alterations		Sample #	Description
									Pyrite	Other		
55						F35 RO, AL	10					
56			S, 65			F35 RO, AL						
57						F35 RO, AL						
58						F35 RO, AL					5168	
59						F35 RO, AL						
60			S, 70			F35 RO, AL		d G				
61			S, 70			F35 RO, AL		d GG				
62						F35 RO, AL						
63						F35 RO, AL					5169	0.2
64			S, 65			F35 RO, AL	30					
65						F35 RO, AL						65.3-77.0 Strong calcite alteration and brownish staining iron carbonates?
66						F35 RO, AL						66.5-67.4 core is broken.
67						F35 RO, AL	57					
68			S, 70			F35 RO, AL					5170	5.70 <2
69						F35 RO, AL		m GG				
70						F35 RO, AL		d Bn				
71			S, 67			F35 RO, AL						
72						F35 RO, AL						

NEMATOBlastic

Box	Depth	% Rec	Grain size mm	Texture	Structural	Fractures		Color	Mineral	Alterations	Sample #	Description
						Dens.	Angle					
	73											
	74				S1.70			mGG			5171	0.2
6	75							d Bn				
	76											76.6-77.0 core is broken
	77											
	78				S1.55							
	79										5559	<5 79.80-86.50 Argillite
	80										5560	<5 very fine grained, massive, sheared graphitic argillite.
7	81							dG			5172	5 very fine disseminated pyrite. Some small garnets.
	82							dGG			5561	<5 82.0-86.3 core is very broken
	83											85.5?-86.0? Silicified brecciated fault gouge.
	84											86.50-91.80 Biotite-chlorite-quartz schist
	85										5562	<5 fine grained, amphibole and some garnets porphyroblasts - lithic sediment or graywacke? Foliation weak to good. Good pyritization. Quartz veining.
	87				S1.60						5563	<5
	88										5173	t
	89				S1.60							87.65-88.0 Bleached zone. 88.7-90.6 Brownish alteration 88.75 clasts?
	90											

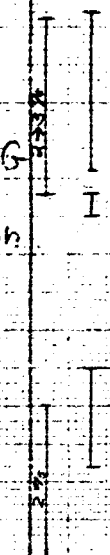
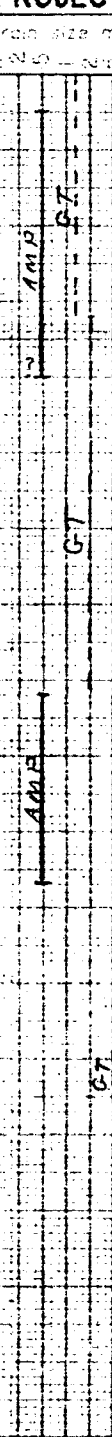
NEMATOBLASTIC

LEPIDOBLASTIC



Box	Depth	% Rec	Log	Grain size mm - N ₁₀ - N ₆₀ - N ₁₀₀	Texture	Structures to core axis	Fractures and Veins			Gent F R	Colour	Minerals and Alterations	Samples		Description
							Dens.	Angle	Nature				#	#	
12	110												5183	t	108.6 - 260.0 Biotite-chlorite-quartz schists fine to medium grained, well foliated. → Lithic sediment or Grauwacke? Foliation is good and relatively uniform Pervasive brown alteration, chloritization Quartz veining is minor. Pyrite is generally finely disseminated and also in small stringers. Calcite is seen in fractures only. Dark green banding due to very strong chloritization with development of idiomorphic amphiboles? Some garnets some amphiboles
	112					S170									
	114	100											5184	n/a	113.0 - 115.0 very fine grained 114.2 - 114.65 chalcophyite 116.2 - 118.75 Intense chlorite alteration
13	116					S165									
	118														
	120					S170							5185	t	
14	122														
	124					S160							5186	<2	124.4 - 124.9 Silver coloured metallic luster mineral associated with pyrite on 05° fracture.
	126					S175							5187	<2	
	128												5188	t	⇒ Stibnite? (Sb ₂ S ₃) No Galena

NEMATOBlastic



Box	Depth	% Rec	Core size mm	Texture	Structure	Structures and Veins			Cont	Colour	Minerals and Alterations		Sample No.	Depth	Description
						Jens.	Angle	Nature			Py	Mn			
18	146				S ₁ 75					mGG		5565		144.5 - 151.1 m Faulted zone Healed breccia with consolidated gouge, several mylonitized intervals Core is very broken in this interval.	
						FT 35 BX PY L 30 L 35 L 40 R 02						5566	<5		
						L 40 R 30 L 30 R 30 L 30 R 30 L 30 R 30 L 30 R 30 L 30 R 30						5567	<5		
	145.90					L 40 R 30 L 30 R 30 L 30 R 30 L 30 R 30 L 30 R 30 L 30 R 30						5568	<5		
19	150											5569	<5	146.1 Soft clay gouge 149.0 - 151.1 Brecciated 150.9 Soft clay gouge	
	152				S ₁ 75							5570	<5		
												5190	t		
20	154									dGG					
	150				S ₁ 75										
	100													157.1 chalcopyrite	
21	158														
	160				S ₁ 75										
	162														

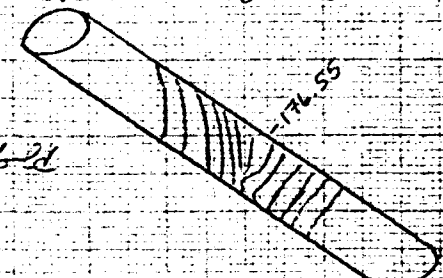
NEMATOBLASTIC

AMP

Box	Depth	% Rec	Grain size mm - 60 - 100 -	Structure Foliation axis	Fractures and Joints	Minerals and Alterations	Sample #	Description
	164							
22	166					dGG dBh		
	168						5191	14
	170						5192	t
23	172						5193	t
	174					dG dGG	5194	n/a
	176							176.55 Very rapid change of foliation
24	178							178.4-178.6 fold
	180							

NEMATOBlastic

AMP



Box	Depth	% Fe	Log	Grain size mm -40 - 100	Texture	Structures to core axis	Fractures and Voids			Geo. FR	Colour	Minerals and Alterations				Sample #	T #	Notes
							Dens.	Angle	Nature			Py	Qtz	Chl	Ill			
	182																180.9 chalcopyrite	
25	184	100				S, 70								5195	t		From 174.7 to 182 foliation is disturbed - folds? 182.0 Tourmaline	
	186					S, 85												
	188					S, 80												
26	190																	184.4 vein with quartz and Tourmaline
	192					S, 75												
27	194																	
	196	100				S, 85												
28	198																	

NEMATOBlastic

RDP

AMP

dG

dGG

dGG

d Bn

192

194

Depth	Grain size mm	Texture	Structures to core axis	Structures and Yards		Colour	Alterations		Sample #	Description
				Dens.	Angle Nature		Py	Alc		
28	200	100				dGG				
						dBn			5200	t
	202									201.5-205.4 bruciated bleached iron coloration along fractures
	204					dGG				201.7-206.4 Very fine grained, massive argillite? Chocolate brown colour very poor foliation; pyrite is found in some rare stringers.
29	206					mGG				206.4-218.9 Medium to fine grained good foliation conglomerates? Dark gray lithic fragments in greenish to brownish matrix. Clasts are stretched along foliation planes. Clasts are rounded? Several? fining toward top of hole sequences. few quartz veins.
	208			S, 75						
	210	100				dGG				
30	212			S, 80					5201	13
	214			S, 85						
	216			S, 85						

NEMATIC BLASTIC

AMP

AMP

AMP

AMP

dGG
dBn

dGG
mGG

dBn

PI

T.S. 2046

5201

520

13

Depth (m)	% R _v	Grain size (mm)	Structure to core axis	Fractures and Veins		Colour	Minerals and Alterations				Sample #	T _s	
				Dens.	Angle		Py	Mg	Al	Fe			CC
218						d Bn							
220	100					d G				5202	5202	21	
222						d + Bn				5203		t	
224													
226						m G				5204	5204	9	
228	98.9					d Bn				5205		t	227.35-228.6 Brecciated, bleached along fractures
230	100					d G							
232						d + Bn							
234										5206		t	

NEMATOBlastic

S.M.P.

S.85

S.75

Depth (m)	% Cementation	Grain size (mm)	Structures	Fractures and Veins		Comar	Minerals and Alterations	Sample #	Remarks
				Dens.	Angle				
34	100		GRANOBLASTIC			dG + dBn			233.95-235.55 Fegofan pheno- crists, intermediate intensive dyke? massive, granoblastic texture poorly foliated.
338				S170?		dBn + mGG			236.7-238.3 very fine grained interval.
35			NEMATOBLASTIC			mGG + dBn			241.1-243.4 very fine grained interval.
36	100			S180				5207	t
37								5208	t

Depth (m)	Core No.	Structure	Texture	Structure to core axis	Dens.	Angle	Nature	Remarks	Pyrite	Other Minerals	Grain Size	Other	Description
37							F55 RO						
							F40 SM, CC, H						
354							F30 NE, CH						
	100						F055 NE, CC					5109	5209
							F05 RO, CC, H	mGG					
							F30 SM, CC, H	dG					
38	356						F55 NE, CC						
							F35 RO, CH, H						
							F40 NE, CC						
	358						F70 RO, CH, CC						
							V30 NE, CC, LIT						
							F30 SM, CC, CH						
							F30 NE, CC						
							F75 NE, CC, CH	mGG					
							F75 NE, CC						
360							F75 NE, CC						

AMP

NEMATOBLASTIC

I

259.1 - 260.0 Slightly insectate healed fault

END OF HOLE

John St-Jean



DIAMOND DRILL HOLE RECORD
BURNTBUSH RIVER PROJECT

DRILL HOLE NO.: BUR-08

CLAIM NO(S): L789468 / L789467

CONTRACTOR : Les Forages Foranord

TOWNSHIP : Noseworthy

CORE SIZE : BQ

DATE BEGUN : 12/03/88

DRILL FLUIDS: polydrill, bentonite,

COMPLETED : 15/03/88

GS550, H₂O

LOGGED BY : J. Learn

COLLAR CO-ORDINATES

	GRID	UTM
X:	5045E	≈587150E
Y:	705N	≈5484050N
Z:	≈278	

DEVIATION RECORD

DEPTH	AZIMUTH	DIP	METHOD
60m		48°	HF 4%
120m		48°	HF 4%
182m		44°	HF 4%
225m		39°	HF 4%

DEPARTURE: AZIMUTH: 174°

INCLINATION: -50°

CHECKED BY: J. Learn

CHECKED BY:
J.Learn, R.St-Jean, S.Ball

DEPTHS: OVERBURDEN: 47.0m

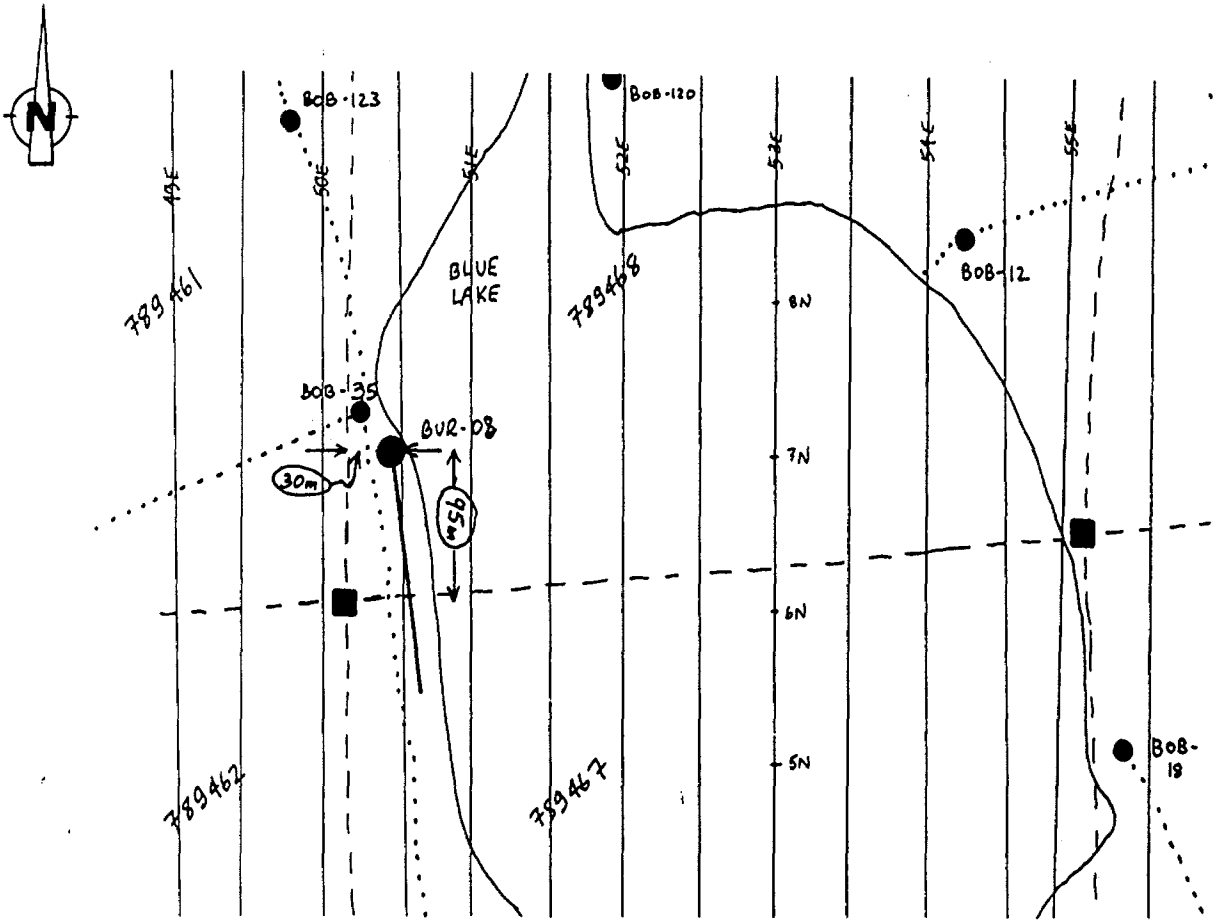
HORIZONTAL COMPONENT: 157m

END OF HOLE: 228.3m

VERTICAL COMPONENT : 165m

REMARKS: drill floor ground level 0.7m, left in hole 35m BW and 12m NW casing sanded together (12m pulled)

LOCATION SKETCH 1:5000:



Depth (m)	Structures	Fractures and Veins	Content	Minerals and Alterations	Sample #	Description
42						✓ max 9 ppb (Chimitec)
44						
46						
OVERBURDEN 47.0m						
48			-5,30			47.0-114.4 v.f. grained MICA SCHIST argillaceous greywacke. extremely uniform and monotonous foliation not well developed, f.g. nearly massive appearance tiny garnet porphyroblasts uniformly distributed, only rarely emphasize foliation planes generally 1-2% py very irregularly distributed as fine disseminations, on fracture planes, and in occasional tiny veinlets calcite very minor constituent sporadic occurrence as thin <mm veinlets more abundant at surface but even so is very minor constituent occasional coarser segregations of white feldspar, amphibole porphyroblasts to 2mm, with calcite (calcareous beds) eg at 59.7,
50			-5,40	F30 ch, py, Ro F25 ch, py, Ro	dG	
52				F60 ch, py, Sm F70 Sm, py, Ch F30 py, Ro F50 py, Ro		
54				F25 ch, ss F60 Ro		
56				F60 ch, py, Ro		
58			-5,60	F00 Ro F25 ch, py, ce F35 py, Ro py, ce, sp		
60			-5,40	F25 Ro, py		

Depth (m)	Grain size (mm)	Structures	Fractures and Veins	Geo.	Colour	Minerals and Alterations	Sample		Description
							#	TS #	
60			F40 py, Ro F45 Ro, py F50 Ro, py F25 Ro, py, ch						overall general impression is of fresh, unaltered, weakly deformed rock.
62			F55 Ro, py F55 Ro, py, ch V35 V, Q, cc						
64			3F20 H, py F30 H, py F40 Sm, ch, py						
66		-5,70	F60 Sm, cc		dg				
68			F50 Sm, py F60 Ro, cc F45 Sm, py 3F40 Sm, py						
70	100		F35 Sm, ch, py F15 Ro, cc, py F35 Ro, ch, py						
72		-5,60							
74			F45 Sm, ch, py						
76									
78		-5,70					5210 ✓	7	

Depth (m)	Grain size (mm)	Structures	Fractures and Veins	Geol.	Colour	Minerals and Alterations	Remarks	Description
78			F30 ch, Ro F30 ch, Ro F10 Ro, ch		py			
6 80	100	S, 80	F35 Ro, cc, py F50 Ro, cc, py V45 Q		dG			
82			F45 Ro, ch, py F65 Sm, ch					
7 84		S, 60						
86			V60 ch, cc Q, bio. F30 Ro, ch, py					
88								
90								
8 92								92.7 Presence of 2mm blue qtz grains noted.
94			F45 Ro, py					95.5-95.7 Ch, Amph. mch. band perhaps related to thin, irregular quartz veining
9 96			F45 Ro, py					

Depth (m)	Grain size (mm)	Structures	Structures and Veins	Colour	Minerals and Alterations	Sample #	TS #	Description
96								
98								
100			ZF30 Ro, ch, py					
102			F35 Ro, ch, ca					107.4 One cm amph-ch rich band or vein
104				dG				
106								
108								
110								
112								
114								
						5211	9	110.0-110.4 Amph, Chlorite rich band with coarse brown mica
						5212	6	
								113.4-113.7 Amph-Ch rich band

Depth (m)	Grain size (mm)	Texture	Structures	Fractures and Veins	Color	Minerals and Alterations	Sample #	Description
114					dG			
114.4-115.3		porphyritic	c.60	F50 H, Bl F40 H, Bl F50 H, Bl F35 H, Bl	mG			feldspar porphyry dyke, weakly to moderately foliated (biotite, v.f. pyrite), intermediate compn.
116			S.65	F35 Ro, ch				
118				F30 Ro, py, ch F35 Ro, py, ch, cc F50 Ro, cc, ch, py F35 Sm, cc F45 Ro, py F30 Ro, py, cc F35 Ro, py F50 Ro, py, cc F35 Sm, cc, py	dG			115.3-132.0 return to argillaceous greywacke (as above)
120				F3x Q, cc F40 Sm, py, cc				115.9-116.15 amph-clonite rich band with coarse brown mica
122			S.75	F30 Ro, ch, py V45 Q				121.1 → 121.3 Increase in ch-amph content perhaps related to thin quartz veining
124				V70 Q, cc F25 Ro, ch, cc F50 Sm, ch, py F25 Ro, ch, py				
126			S.65	F20 cc, Sm, ch, py F50 Ro, ch, py				
128								
130			S.60					
132								

Elev. (m)	Grain size (mm)	Structures	Fractures and Veins	Geo. (R, P, Q, etc.)	Colour	Minerals and Alterations	Sample #	Description
132								
132.0					mg			132.0 → 132.7 Feldspar porphyry dykes weakly foliated; phenocrysts slightly smaller & biotite content somewhat lower compared to similar dyke at 114.4 → 115.3. Very fine disseminated pyrites; intermediate composition
134								
136								
136.5								132.7 - 228.3 (E04) argillaceous greywacke (as before) more or less very uniform unit
138								
140								
142	100							136.6 - 137.6 amph. chlorite rich section with qtz grains up to 2mm
144								144.5 → 146.0 Biotite schist
146							523 ✓	4
148								
149.8								149.8 → 150.2 Amph-ch rich section
150								

Depth (m)	Core Description	Structures	Fractures and Veins	Geo.	Colour	Minerals and Alterations	Sample #	Description
150.3 - 150.5	short section of core				0.5% py			very fine grained with pyrite grains more or less oriented along fracture planes and veinlets, but of irregular form and distribution.
152			F40 Sm, ch F45 Sm, ch, cc py F35 Sm, cc, py V35 ch, py, H, Bl bleached					
154								
156			F40 Ro, ch, py F55 Ro, ch, py					
158			BF35 Ro, ch, cc LV60 Q, bio F26 Ro, py F50 Sm, ch F35 Ro, ch		dG			158.1 -> 159.4 Qtz grains up to 3 mm. Coarse bluish biotite. Amph - ch rich section.
160			F25 Sm, ch F70 cl, cc F45 Sm, ch					159.4 minor fault gouge and clay, wall rock adjacent to fault weakly hematized for ~ 5cm (both sides)
162			F30 Sm, ch F60 Ro, ch, cc py F30 Sm, py F40 Sm, ch F40 Ro, ch, py F20 Ro, ch, py					
164			F15 Ro, ch, py F30 Ro, ch, cc F30 Ro, ch F30 Sm, ch, py					
166			NF H, Bl F20 Ro, py					164.6 - 166.9 Thin stockwork of calcite veinlets/fractures with local bleaching of host rock
168								

Depth (m)	Interval (m)	Core Description	Fractures and Veins	Alteration	Sample ID	Notes
168						
21						
170						
22						
172						
174						
176						
23						
178						
180						
182						
24						
184						
186						

general additional commentary

v. fine grained, biotite well aligned but v.f. grained making foliation difficult to see
 rock is fresh, massive appearance
 garnets uniformly distributed
 ~1%
 pyrite almost exclusively occurring on fracture planes

dg

5214 v 22

Depth (m)	Grain size (mm)	Structures	Fractures and Veins	Minerals and Alterations	Sample	TS	Description
24 186	100		BKN				
188			V50 Q, cc, py				188.53 → 188.76 Qcc-py vein contains altered wall rock and 5mm gt.
25 190		S, 75	F25 Ro F20 R, ch, cc F25 Ro py				
192			V40 Q, py, BL				194.85 → 195.3 diffuse weakly oriented flecks of calcite in rock, I have seen this earlier in this hole over shorter intervals
26 194					5215 ✓	2	
196			F35 R, ch, py				
198		S, 65					
200							
27 202		S, 45	F30 R, ch, py V70 R, cc				202.8 → 203.75 Amph-ch rich rock which in this particular case, crosscuts mica schist foliation
		S, 70	F10 H, R, py		5216 ✓	3	203.15 → 204.2 Ch-Amph rich rock crosscuts mica schist foliation
204			F10 H, R, py				

Depth (m)	Structure/Fractures and Veins	Foot	Colour	Minerals and Alterations	Sample #	Description
204	F45 Ro, ch, py F45 Ro, ch, py F45 cl		py			
206	Bx H, cc F30 Ro, ch, cc F40 Ro, ch, py F60 Sm, ch, py F25 Ro, ch, py F60 Sm, ch F50 Sm, ch					
208	S, 85 1cm Bx65 H, cc					208.9 → 209.6 Fracture system nearly parallel to core axis, with weak hematization of adjacent wall rock.
210	F25 Ro, ch, cc py F0 Ro, ch, py		dg			
212	F30 Ro, py cl, stibate F20 Ro, ch, py F20 Ro, ch, py					211.8 well formed Sb ₂ S ₃ xls in clay, calcite with py in fx
214	S, 40 F45 Ro, ch, py					
216	S, 80 F45 Ro, ch, py					217.8 Thin Amph-ch rich vein at 60° tca.
218	F45 Sm, ch, py					
220	F20 Sm, ch, cc, py V70 Q				5217 ✓	C2
222	S, 70					

Depth (m)	Interval (m)	Structures	Fractures and Veins	Geochem	Minerals and Alterations	Sample ID	Description
222			F50 K ₂ ch ₂ l py				
224			V85 Q		dG		225.6 Qtz vein at 90° tca offset 3cm by ch-amph rich vein at 30° tca in mica schist + 60° tca in Qtz vein
226			2F40 K ₂ cc ch ₂ py				225.8 → 226.2 More ch-amph rich veins.
228		5.60	F40 K ₂ py ch				228.3 E04
230							
232							

John Learn

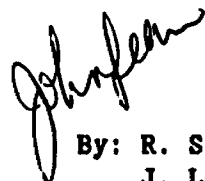
COGEMA CANADA LIMITED
BURNTBUSH RIVER PROJECT
FINAL REPORT 1988
"DIAMOND DRILL RESULTS"
VOLUME 3 of 3

A P P E N D I X I I

SAMPLE RESULTS

1. CHEMISTRY RESULTS
2. THIN SECTION DESCRIPTIONS

Ref. No. 88-CND-47-03
(Document: #0149U)


By: R. St-Jean
J. Learn
Compiled: November, 1988

1. CHEMISTRY RESULTS

REMARKS

- i) there are four sets of tables
 - . "gold only" results
 - . Cu, Zn from BUR-02
 - . major elements
 - . minor elements

- ii) for "gold only" results:
 - . MYV refers to samples sent to Mine Yvan Vezina
 - . TEC refers to samples sent to Chimitec

- iii) sample numbers prefixed with the letter "C" or referred to as "CTL" are quartzite control samples and are presented in the tables in the sequence that they were inserted and analyzed

- iv) negative results indicate results below the detection limit, i.e. "-" really means "<"

PROCEDURES and DETECTION LIMITS

A) Mine Yvan Vezina:

Fraction : -150 mesh (two stage crushing, grinding)
Extraction : 3 parts HCl: 1 part HNO₃ - aqua regia
Method : atomic absorption

Detection limit for Au : 0.2 g/t
for Cu, Zn : 0.001%

B) Chimitec:

Au ("gold only"):

Fraction : -150 mesh (two stage crushing, grinding)
Extraction : 3 parts HCl: 1 part HNO₃ - aqua regia
Method : fire assay - atomic absorption
Detection limit : 5 ppb

Note: normal Chimitec procedure is to crush entire sample,
then pulverize 250 g, then analyze 10 g;
for these samples, 500 g were pulverized and 30 g
were analyzed (to increase precision of analyses)

MAJOR ELEMENTS

SiO₂, TiO₂, Al₂O₃, Fe₂O₃ (total iron), MnO, MgO,
CaO, Na₂O:

fraction : -150 mesh
(two stage crushing, grinding)
extraction : metaborate fusion
method : emission - plasma
detection limit : 0.01%

K₂O, P₂O₅:

fraction : -150 mesh
extraction : metaborate fusion
method : emission - plasma
detection limit : 0.03%

LOI:

fraction : -150 mesh
method : gravimetry
detection limit : 0.01%

CO₂:

fraction : -150 mesh
extraction : H₃PO₄
method : gravimetry
detection limit : 0.05%

MINOR ELEMENTS

fraction : -150 mesh
method : neutron activation

detection limits :

Au	: 2 ppb
Sm	: 0.05 ppm
Sb	: 0.1 ppm
Sc, Th, U, Lu	: 0.2 ppm
As, Cs, Ta, Tb, Br	: 0.5 ppm
Eu, Hf, Mo, W	: 1 ppm
La, Ag, Yb	: 2 ppm
Cd, Co, Rb, Se, Ce	: 5 ppm
Te	: 10 ppm
Cr, Ni	: 20 ppm
Ba, Ir	: 50 ppm
Zn, Sn	: 100 ppm
Zr	: 200 ppm
Fe, Na	: 0.02%

Line	Hole no	Sample	From	To	Au ppb	Au g/t	Lab.
1	BUR-01	C5000	12.50	12.50	0	-0.20	MYV
2	BUR-01	5001	12.51	13.00	0	0.20	MYV
3	BUR-01	5444	24.00	25.50	20	0.00	TEC
4	BUR-01	5445	25.50	27.00	40	0.00	TEC
5	BUR-01	5446	27.00	28.50	15	0.00	TEC
6	BUR-01	5447	28.50	30.00	45	0.00	TEC
7	BUR-01	5002	30.00	30.50	0	-0.20	MYV
8	BUR-01	5003	30.50	31.00	0	-0.20	MYV
9	BUR-01	5004	31.00	31.50	0	-0.20	MYV
10	BUR-01	5005	31.50	32.00	0	-0.20	MYV
11	BUR-01	5006	32.00	32.50	0	0.20	MYV
12	BUR-01	5007	32.50	33.00	0	0.20	MYV
13	BUR-01	5008	33.00	33.50	0	-0.20	MYV
14	BUR-01	5009	33.50	34.00	0	0.20	MYV
15	BUR-01	5010	34.00	34.50	0	-0.20	MYV
16	BUR-01	5011	34.50	35.00	0	-0.20	MYV
17	BUR-01	5012	35.00	35.50	0	-0.20	MYV
18	BUR-01	5013	35.50	36.00	0	-0.20	MYV
19	BUR-01	5014	36.00	36.50	0	-0.20	MYV
20	BUR-01	5015	36.50	37.00	0	-0.20	MYV
21	BUR-01	5016	37.00	37.50	0	-0.20	MYV
22	BUR-01	5017	37.50	38.00	0	-0.20	MYV
23	BUR-01	5021	75.50	76.00	0	-0.20	MYV
24	BUR-01	5022	76.00	76.50	0	-0.20	MYV
25	BUR-01	5023	93.00	93.50	0	-0.20	MYV
26	BUR-01	5024	103.50	104.00	0	-0.20	MYV
27	BUR-01	5025	113.60	114.10	0	-0.20	MYV
28	BUR-01	C5025	126.90	126.90	0	-0.20	MYV
29	BUR-01	5027	138.50	139.00	0	-0.20	MYV
30	BUR-01	5448	146.00	147.50	-5	0.00	TEC
31	BUR-01	5449	147.50	149.00	10	0.00	TEC
32	BUR-01	5450	149.00	150.10	-5	0.00	TEC
33	BUR-01	C5450	149.00	149.00	-5	0.00	TEC
34	BUR-01	5028	150.10	150.60	0	0.20	MYV
35	BUR-01	5451	150.60	151.50	-5	0.00	TEC
36	BUR-01	5452	151.50	153.00	-5	0.00	TEC
37	BUR-01	5453	153.00	154.50	-5	0.00	TEC
38	BUR-01	5454	154.50	156.00	-5	0.00	TEC
39	BUR-01	5029	156.00	156.50	0	0.30	MYV
40	BUR-01	5030	156.50	157.00	0	0.20	MYV
41	BUR-01	5031	157.00	157.50	0	-0.20	MYV
42	BUR-01	5032	157.50	158.00	0	-0.20	MYV
43	BUR-01	5033	158.00	158.50	0	-0.20	MYV
44	BUR-01	5034	158.50	159.00	0	-0.20	MYV
45	BUR-01	5035	159.00	159.50	0	-0.20	MYV
46	BUR-01	5036	159.50	160.00	0	-0.20	MYV
47	BUR-01	5037	160.00	160.50	0	-0.20	MYV
48	BUR-01	5038	160.50	161.00	0	-0.20	MYV
49	BUR-01	5039	161.00	161.50	0	-0.20	MYV
50	BUR-01	5040	161.50	162.00	0	-0.20	MYV
51	BUR-01	5041	162.00	162.50	0	-0.20	MYV
52	BUR-01	5042	162.50	163.00	0	-0.20	MYV
53	BUR-01	5043	163.00	163.50	0	0.20	MYV
54	BUR-01	5044	163.50	164.00	0	-0.20	MYV
55	BUR-01	5045	164.00	164.50	0	-0.20	MYV
56	BUR-01	5046	164.50	165.00	0	-0.20	MYV

Line	Hole no	Sample	From	To	Au ppb	Au g/t	Lab.
57	BUR-01	5047	165.00	165.50	0	0.20	MYV
58	BUR-01	5455	165.50	167.00	10	0.00	TEC
59	BUR-01	5456	167.00	168.50	-5	0.00	TEC
60	BUR-01	5457	168.50	170.00	-5	0.00	TEC
61	BUR-01	5458	178.00	179.50	-5	0.00	TEC
62	BUR-01	5459	179.50	181.00	-5	0.00	TEC
63	BUR-01	5460	181.00	182.50	-5	0.00	TEC
64	BUR-01	5461	182.50	184.00	5	0.00	TEC
65	BUR-01	5462	184.00	185.50	-5	0.00	TEC
66	BUR-01	5463	188.50	190.00	-5	0.00	TEC
67	BUR-01	5464	190.00	191.50	-5	0.00	TEC
68	BUR-01	5465	191.50	193.00	-5	0.00	TEC
69	BUR-01	5466	193.00	194.50	-5	0.00	TEC
70	BUR-01	5467	194.50	196.00	-5	0.00	TEC
71	BUR-01	5468	196.00	197.50	-5	0.00	TEC
72	BUR-01	5048	197.50	198.00	0	-0.20	MYV
73	BUR-01	5469	198.00	200.00	-5	0.00	TEC
74	BUR-02	5089	74.00	74.50	0	-0.20	MYV
75	BUR-02	5090	74.50	75.00	0	-0.20	MYV
76	BUR-02	5091	75.00	75.50	0	0.20	MYV
77	BUR-02	5092	75.50	76.00	0	-0.20	MYV
78	BUR-02	5094	91.50	92.00	0	0.20	MYV
79	BUR-02	5095	92.00	92.50	0	-0.20	MYV
80	BUR-02	5096	92.50	93.00	0	-0.20	MYV
81	BUR-02	5097	94.50	95.00	0	-0.20	MYV
82	BUR-02	5098	95.00	95.50	0	-0.20	MYV
83	BUR-02	5099	95.50	96.00	0	-0.20	MYV
84	BUR-02	5100	96.00	96.50	0	-0.20	MYV
85	BUR-02	C5100	96.00	96.00	0	-0.20	MYV
86	BUR-02	5101	96.50	97.00	0	-0.20	MYV
87	BUR-02	5102	97.00	97.50	0	-0.20	MYV
88	BUR-02	5103	97.50	98.00	0	-0.20	MYV
89	BUR-02	5106	129.00	129.50	0	-0.20	MYV
90	BUR-02	5107	129.50	130.00	0	-0.20	MYV
91	BUR-03	C5050	32.00	32.00	0	-0.20	MYV
92	BUR-03	5051	42.50	43.00	0	-0.20	MYV
93	BUR-03	5052	52.40	52.90	0	-0.20	MYV
94	BUR-03	5053	61.00	61.50	0	0.20	MYV
95	BUR-03	5054	76.00	76.50	0	-0.20	MYV
96	BUR-03	5056	92.60	93.10	0	-0.20	MYV
97	BUR-03	5058	133.00	133.50	0	-0.20	MYV
98	BUR-03	5059	145.50	146.00	0	-0.20	MYV
99	BUR-04	5351	7.30	8.00	-5	0.00	TEC
100	BUR-04	5352	8.00	9.50	-5	0.00	TEC
101	BUR-04	5353	9.50	11.00	-5	0.00	TEC
102	BUR-04	5060	11.00	11.50	0	-0.20	MYV
103	BUR-04	5355	11.50	12.50	5	0.00	TEC
104	BUR-04	5356	12.50	14.00	10	0.00	TEC
105	BUR-04	5357	14.00	15.50	40	0.00	TEC
106	BUR-04	5358	15.50	17.00	10	0.00	TEC
107	BUR-04	5061	17.00	17.50	0	-0.20	MYV
108	BUR-04	5359	17.50	19.00	15	0.00	TEC
109	BUR-04	5360	19.00	20.50	60	0.00	TEC
110	BUR-04	5361	20.50	22.00	10	0.00	TEC
111	BUR-04	5362	22.00	23.50	15	0.00	TEC
112	BUR-04	5363	23.50	25.00	45	0.00	TEC

Line	Hole no	Sample	From	To	Au ppb	Au g/t	Lab.
113	BUR-04	5364	25.50	26.00	5	0.00	TEC
	BUR-04	5063	26.00	26.50	0	-0.20	MYV
115	BUR-04	5365	26.50	28.00	25	0.00	TEC
116	BUR-04	5366	28.00	29.50	15	0.00	TEC
117	BUR-04	5367	29.50	31.00	15	0.00	TEC
118	BUR-04	5064	31.00	31.50	0	-0.20	MYV
119	BUR-04	5368	31.50	33.00	5	0.00	TEC
120	BUR-04	5369	33.00	35.00	15	0.00	TEC
121	BUR-04	5370	35.00	36.50	-5	0.00	TEC
122	BUR-04	5065	36.50	37.00	0	-0.20	MYV
123	BUR-04	5371	37.00	38.00	-5	0.00	TEC
124	BUR-04	5372	38.00	39.50	5	0.00	TEC
125	BUR-04	5373	39.50	41.00	5	0.00	TEC
126	BUR-04	5374	41.00	42.50	-5	0.00	TEC
127	BUR-04	5375	42.50	43.50	-5	0.00	TEC
128	BUR-04	C5375	42.50	42.50	-5	0.00	TEC
129	BUR-04	5066	43.50	44.00	0	-0.20	MYV
130	BUR-04	5376	44.00	45.50	5	0.00	TEC
131	BUR-04	5377	45.50	47.00	-5	0.00	TEC
132	BUR-04	5378	47.50	48.50	-5	0.00	TEC
133	BUR-04	5379	48.50	50.00	-5	0.00	TEC
134	BUR-04	5380	50.00	51.50	-5	0.00	TEC
135	BUR-04	5381	51.50	52.50	-5	0.00	TEC
136	BUR-04	5382	53.00	54.50	-5	0.00	TEC
137	BUR-04	5383	54.50	56.40	-5	0.00	TEC
138	BUR-04	5069	56.40	56.90	0	-0.20	MYV
139	BUR-04	5384	56.90	58.00	-5	0.00	TEC
140	BUR-04	5385	58.00	59.50	-5	0.00	TEC
141	BUR-04	5386	59.50	61.00	-5	0.00	TEC
142	BUR-04	5387	61.00	63.00	-5	0.00	TEC
143	BUR-04	5070	61.00	61.50	0	-0.20	MYV
144	BUR-04	5388	63.00	64.50	-5	0.00	TEC
145	BUR-04	5389	64.50	66.00	-5	0.00	TEC
146	BUR-04	5390	66.00	67.50	-5	0.00	TEC
147	BUR-04	5391	67.50	68.50	-5	0.00	TEC
148	BUR-04	5071	68.50	69.00	0	-0.20	MYV
149	BUR-04	5392	69.00	70.50	-5	0.00	TEC
150	BUR-04	5393	70.50	72.00	-5	0.00	TEC
151	BUR-04	5394	72.00	73.50	-5	0.00	TEC
152	BUR-04	5395	73.50	75.00	-5	0.00	TEC
153	BUR-04	5396	75.00	76.00	-5	0.00	TEC
154	BUR-04	5072	76.00	76.50	0	-0.20	MYV
155	BUR-04	5397	76.50	78.00	-5	0.00	TEC
156	BUR-04	5398	78.00	79.50	-5	0.00	TEC
157	BUR-04	5399	79.50	81.00	-5	0.00	TEC
158	BUR-04	5400	81.00	82.50	25	0.00	TEC
159	BUR-04	C5400	81.00	81.00	-5	0.00	TEC
160	BUR-04	5412	82.50	83.50	-5	0.00	TEC
161	BUR-04	5073	84.00	84.50	0	-0.20	MYV
162	BUR-04	5413	84.50	85.50	-5	0.00	TEC
163	BUR-04	5414	85.50	87.00	-5	0.00	TEC
164	BUR-04	5415	87.00	88.50	-5	0.00	TEC
165	BUR-04	5416	88.50	90.00	-5	0.00	TEC
166	BUR-04	5417	90.00	91.50	5	0.00	TEC
167	BUR-04	5418	91.50	93.00	-5	0.00	TEC
168	BUR-04	5419	93.00	94.50	-5	0.00	TEC

Line	Hole no	Sample	From	To	Au ppb	Au g/t	Lab.
169	BUR-04	5420	94.50	96.00	-5	0.00	TEC
	BUR-04	5421	96.00	97.50	-5	0.00	TEC
171	BUR-04	5422	97.50	99.00	-5	0.00	TEC
172	BUR-04	5423	99.00	100.50	-5	0.00	TEC
173	BUR-04	5424	100.50	102.00	-5	0.00	TEC
174	BUR-04	5425	102.00	103.50	-5	0.00	TEC
175	BUR-04	C5425	102.00	102.00	-5	0.00	TEC
176	BUR-04	5426	103.50	105.00	-5	0.00	TEC
177	BUR-04	5427	105.00	107.00	-5	0.00	TEC
178	BUR-04	5428	107.00	108.50	-5	0.00	TEC
179	BUR-04	5429	108.50	110.00	20	0.00	TEC
180	BUR-04	5430	110.00	111.50	-5	0.00	TEC
181	BUR-04	5431	111.50	113.00	-5	0.00	TEC
182	BUR-04	5432	113.00	114.50	-5	0.00	TEC
183	BUR-04	5433	114.50	116.00	-5	0.00	TEC
184	BUR-04	C5075	115.99	115.99	0	-0.20	MYV
185	BUR-04	5076	116.00	116.50	0	-0.20	MYV
186	BUR-04	5434	116.50	118.00	-5	0.00	TEC
187	BUR-04	5435	118.00	119.50	-5	0.00	TEC
188	BUR-04	5436	119.50	121.00	-5	0.00	TEC
189	BUR-04	5437	121.00	122.50	5	0.00	TEC
190	BUR-04	5438	122.50	123.90	5	0.00	TEC
191	BUR-04	5077	123.90	124.40	0	-0.20	MYV
192	BUR-04	5439	124.40	125.00	10	0.00	TEC
193	BUR-04	5078	125.00	125.50	0	-0.20	MYV
194	BUR-04	5440	125.50	127.00	-5	0.00	TEC
195	BUR-04	5441	127.00	128.50	-5	0.00	TEC
196	BUR-04	5442	128.50	130.00	-5	0.00	TEC
197	BUR-04	5443	130.00	131.00	-5	0.00	TEC
198	BUR-04	5079	131.00	131.50	0	-0.20	MYV
199	BUR-04	5080	146.50	147.00	0	0.20	MYV
200	BUR-04	5081	157.50	158.00	0	0.20	MYV
201	BUR-04	5083	174.00	174.50	0	-0.20	MYV
202	BUR-04	5085	179.00	179.50	0	-0.20	MYV
203	BUR-04	5087	194.00	194.50	0	0.20	MYV
204	BUR-05	5470	126.50	128.00	-5	0.00	TEC
205	BUR-05	5471	128.00	129.50	-5	0.00	TEC
206	BUR-05	5472	129.50	131.00	-5	0.00	TEC
207	BUR-05	5473	153.50	155.00	-5	0.00	TEC
208	BUR-05	5474	155.00	156.50	-5	0.00	TEC
209	BUR-05	5475	156.50	158.00	-5	0.00	TEC
210	BUR-05	C5475	156.50	156.50	-5	0.00	TEC
211	BUR-05	5476	177.50	179.00	5	0.00	TEC
212	BUR-05	5477	179.00	180.50	-5	0.00	TEC
213	BUR-05	5478	180.50	182.00	-5	0.00	TEC
214	BUR-05	5155	191.50	192.00	0	-0.20	MYV
215	BUR-05	C5155	191.50	191.50	0	-0.20	MYV
216	BUR-05	5482	200.00	201.50	-5	0.00	TEC
217	BUR-05	5483	201.50	203.00	5	0.00	TEC
218	BUR-05	5484	203.00	205.00	-5	0.00	TEC
219	BUR-05	5485	205.50	206.00	40	0.00	TEC
220	BUR-05	5486	206.00	209.00	5	0.00	TEC
221	BUR-05	5487	209.00	212.00	-5	0.00	TEC
222	BUR-05	5488	212.00	215.00	10	0.00	TEC
223	BUR-05	5489	215.00	218.00	-5	0.00	TEC
224	BUR-05	5490	218.00	221.00	-5	0.00	TEC

Line	Hole no	Sample	From	To	Au ppb	Au g/t	Lab.
225	BUR-05	5491	221.00	224.00	20	0.00	TEC
226	BUR-05	5492	224.00	227.00	-5	0.00	TEC
227	BUR-05	5493	227.00	230.00	5	0.00	TEC
228	BUR-05	5494	230.00	233.00	-5	0.00	TEC
229	BUR-05	5495	233.00	234.50	-5	0.00	TEC
230	BUR-05	5496	234.50	236.00	-5	0.00	TEC
231	BUR-05	5497	236.00	237.50	-5	0.00	TEC
232	BUR-05	5498	237.50	239.00	-5	0.00	TEC
233	BUR-05	5499	239.00	240.50	-5	0.00	TEC
234	BUR-05	5500	240.50	242.00	5	0.00	TEC
235	BUR-05	C5500	240.50	240.50	-5	0.00	TEC
236	BUR-05	5501	242.00	243.50	15	0.00	TEC
237	BUR-05	5502	243.50	245.00	-5	0.00	TEC
238	BUR-06	5503	40.00	41.00	-5	0.00	TEC
239	BUR-06	5504	41.00	42.50	-5	0.00	TEC
240	BUR-06	5505	42.50	44.00	-5	0.00	TEC
241	BUR-06	5506	44.00	46.00	-5	0.00	TEC
242	BUR-06	5110	46.00	46.50	0	0.30	MYV
243	BUR-06	5507	46.50	47.50	5	0.00	TEC
244	BUR-06	5111	47.50	48.00	0	-0.20	MYV
245	BUR-06	5508	48.00	50.50	5	0.00	TEC
246	BUR-06	5112	50.50	51.00	0	-0.20	MYV
247	BUR-06	5509	51.00	53.00	35	0.00	TEC
248	BUR-06	5510	53.00	55.00	10	0.00	TEC
249	BUR-06	5113	55.00	55.50	0	-0.20	MYV
250	BUR-06	5114	55.50	56.00	0	-0.20	MYV
251	BUR-06	5511	56.50	58.00	-5	0.00	TEC
252	BUR-06	5512	58.00	59.50	-5	0.00	TEC
253	BUR-06	5513	59.50	61.00	-5	0.00	TEC
254	BUR-06	5514	61.00	62.50	-5	0.00	TEC
255	BUR-06	5515	62.50	64.00	-5	0.00	TEC
256	BUR-06	5516	64.00	65.50	-5	0.00	TEC
257	BUR-06	5517	65.50	67.00	-5	0.00	TEC
258	BUR-06	5518	67.00	68.50	-5	0.00	TEC
259	BUR-06	5519	68.50	70.00	-5	0.00	TEC
260	BUR-06	5116	80.00	80.50	0	-0.20	MYV
261	BUR-06	5117	80.50	81.00	0	-0.20	MYV
262	BUR-06	5119	95.00	95.50	0	-0.20	MYV
263	BUR-06	5120	101.00	101.50	0	-0.20	MYV
264	BUR-06	5121	101.50	102.00	0	-0.20	MYV
265	BUR-06	5122	103.00	103.50	0	-0.20	MYV
266	BUR-06	5520	113.50	115.00	-5	0.00	TEC
267	BUR-06	5521	115.00	116.50	25	0.00	TEC
268	BUR-06	5522	116.50	118.00	-5	0.00	TEC
269	BUR-06	5523	118.00	119.50	-5	0.00	TEC
270	BUR-06	5524	119.50	121.00	30	0.00	TEC
271	BUR-06	5124	121.00	121.50	0	-0.20	MYV
272	BUR-06	5125	121.50	122.00	0	-0.20	MYV
273	BUR-06	5525	122.00	122.50	-5	0.00	TEC
274	BUR-06	C5525	122.00	122.00	-5	0.00	TEC
275	BUR-06	5126	122.50	123.00	0	-0.20	MYV
276	BUR-06	5526	123.00	125.00	-5	0.00	TEC
277	BUR-06	5527	125.00	126.50	-5	0.00	TEC
278	BUR-06	5528	126.50	128.00	-5	0.00	TEC
279	BUR-06	5127	128.00	128.50	0	-0.20	MYV
280	BUR-06	5529	128.50	130.00	-5	0.00	TEC

Line	Hole no	Sample	From	To	Au ppb	Au g/t	Lab.
281	BUR-06	5530	130.00	131.00	-5	0.00	TEC
282	BUR-06	5128	131.00	131.50	0	-0.20	MYV
283	BUR-06	5531	131.50	132.50	-5	0.00	TEC
284	BUR-06	5532	132.50	134.00	15	0.00	TEC
285	BUR-06	5533	134.50	136.50	5	0.00	TEC
286	BUR-06	5130	136.50	137.00	0	-0.20	MYV
287	BUR-06	5534	137.00	138.50	-5	0.00	TEC
288	BUR-06	5535	138.50	140.00	-5	0.00	TEC
289	BUR-06	5131	140.00	140.50	0	-0.20	MYV
290	BUR-06	5536	140.50	142.00	-5	0.00	TEC
291	BUR-06	5537	142.00	143.50	-5	0.00	TEC
292	BUR-06	5132	143.50	144.00	0	-0.20	MYV
293	BUR-06	5538	144.00	145.00	-5	0.00	TEC
294	BUR-06	5133	145.00	145.50	0	-0.20	MYV
295	BUR-06	5539	145.50	146.00	-5	0.00	TEC
296	BUR-06	5134	146.00	146.50	0	-0.20	MYV
297	BUR-06	5136	147.00	147.50	0	-0.20	MYV
298	BUR-06	5540	147.50	148.00	-5	0.00	TEC
299	BUR-06	5137	148.00	148.50	0	-0.20	MYV
300	BUR-06	5541	148.50	149.00	-5	0.00	TEC
301	BUR-06	5138	149.00	149.50	0	-0.20	MYV
302	BUR-06	5542	149.50	150.00	-5	0.00	TEC
303	BUR-06	5139	150.00	150.50	0	-0.20	MYV
304	BUR-06	5543	150.50	151.00	-5	0.00	TEC
305	BUR-06	5140	151.00	151.50	0	-0.20	MYV
306	BUR-06	5544	151.50	152.00	-5	0.00	TEC
307	BUR-06	5141	152.00	152.50	0	-0.20	MYV
308	BUR-06	5545	152.50	153.00	-5	0.00	TEC
309	BUR-06	5142	153.00	153.50	0	-0.20	MYV
310	BUR-06	5546	153.50	155.00	-5	0.00	TEC
311	BUR-06	5143	161.00	161.50	0	-0.20	MYV
312	BUR-06	5144	163.50	164.00	0	-0.20	MYV
313	BUR-06	5547	181.00	182.50	-5	0.00	TEC
314	BUR-06	5548	182.50	184.00	-5	0.00	TEC
315	BUR-06	5146	184.00	184.50	0	-0.20	MYV
316	BUR-06	5549	184.50	185.00	-5	0.00	TEC
317	BUR-06	5550	185.00	188.00	-5	0.00	TEC
318	BUR-06	C5550	185.00	185.00	-5	0.00	TEC
319	BUR-06	5551	188.00	191.00	-5	0.00	TEC
320	BUR-06	5552	191.00	194.00	-5	0.00	TEC
321	BUR-06	5553	194.00	195.50	-5	0.00	TEC
322	BUR-06	5554	195.50	197.00	10	0.00	TEC
323	BUR-06	5147	197.00	197.50	0	-0.20	MYV
324	BUR-06	5555	197.50	198.50	-5	0.00	TEC
325	BUR-06	5556	198.50	200.00	-5	0.00	TEC
326	BUR-06	5557	200.00	201.50	-5	0.00	TEC
327	BUR-06	5558	201.50	203.00	-5	0.00	TEC
328	BUR-06	5158	203.00	203.50	0	-0.20	MYV
329	BUR-06	5159	207.50	208.00	0	-0.20	MYV
330	BUR-06	5160	209.00	209.50	0	-0.20	MYV
331	BUR-06	5161	222.50	223.00	0	-0.20	MYV
332	BUR-06	5163	232.00	232.50	0	0.20	MYV
333	BUR-06	5165	237.50	238.00	0	-0.20	MYV
334	BUR-06	5166	244.00	244.50	0	-0.20	MYV
335	BUR-07	5167	47.50	48.00	0	-0.20	MYV
336	BUR-07	5168	57.50	58.00	0	-0.20	MYV

Line	Hole no	Sample	From	To	Au ppb	Au g/t	Lab.
337	BUR-07	5169	63.00	63.50	0	0.20	MYV
338	BUR-07	5171	73.50	74.00	0	0.20	MYV
339	BUR-07	5559	78.00	79.50	-5	0.00	TEC
340	BUR-07	5560	79.50	80.50	-5	0.00	TEC
341	BUR-07	5561	81.00	83.00	-5	0.00	TEC
342	BUR-07	5562	83.00	86.00	-5	0.00	TEC
343	BUR-07	5563	86.00	87.00	-5	0.00	TEC
344	BUR-07	5173	87.00	87.50	0	-0.20	MYV
345	BUR-07	C5175	98.00	98.00	0	-0.20	MYV
346	BUR-07	5176	98.50	99.00	0	-0.20	MYV
347	BUR-07	5177	101.00	101.50	0	-0.20	MYV
348	BUR-07	5183	109.00	109.50	0	-0.20	MYV
349	BUR-07	5185	119.00	119.50	0	-0.20	MYV
350	BUR-07	5188	125.50	126.00	0	-0.20	MYV
351	BUR-07	5189	141.50	142.00	0	-0.20	MYV
352	BUR-07	5564	142.00	143.00	-5	0.00	TEC
353	BUR-07	5565	143.00	144.50	-5	0.00	TEC
354	BUR-07	5566	144.50	146.00	-5	0.00	TEC
355	BUR-07	5567	146.00	147.50	-5	0.00	TEC
356	BUR-07	5568	147.50	149.00	-5	0.00	TEC
357	BUR-07	5569	149.00	150.50	-5	0.00	TEC
358	BUR-07	5570	150.50	152.00	-5	0.00	TEC
359	BUR-07	5190	152.00	152.50	0	-0.20	MYV
360	BUR-07	5192	169.50	170.00	0	-0.20	MYV
361	BUR-07	5193	172.00	172.50	0	-0.20	MYV
362	BUR-07	5195	182.00	182.50	0	-0.20	MYV
363	BUR-07	5196	184.00	184.50	0	-0.20	MYV
364	BUR-07	5197	188.00	188.50	0	-0.20	MYV
365	BUR-07	5198	191.00	191.50	0	-0.20	MYV
366	BUR-07	5199	196.50	197.00	0	-0.20	MYV
367	BUR-07	5200	200.50	201.00	0	-0.20	MYV
368	BUR-07	C5200	200.50	200.50	0	-0.20	MYV
369	BUR-07	5203	219.00	219.50	0	-0.20	MYV
370	BUR-07	5205	227.00	227.50	0	-0.20	MYV
371	BUR-07	5206	231.50	232.00	0	-0.20	MYV
372	BUR-07	5207	244.00	244.50	0	-0.20	MYV
373	BUR-07	5208	247.00	247.50	0	-0.20	MYV
374	BUR-09	5219	31.00	31.50	0	-0.20	MYV
375	BUR-09	5571	31.50	32.50	-5	0.00	TEC
376	BUR-09	5572	32.50	34.00	-5	0.00	TEC
377	BUR-09	5573	34.00	35.50	-5	0.00	TEC
378	BUR-09	5574	35.50	37.00	-5	0.00	TEC
379	BUR-09	5220	37.00	37.50	0	-0.20	MYV
380	BUR-09	5575	37.50	39.00	-5	0.00	TEC
381	BUR-09	C5575	37.50	37.50	-5	0.00	TEC
382	BUR-09	5576	39.00	40.00	5	0.00	TEC
383	BUR-09	5577	40.50	41.00	-5	0.00	TEC
384	BUR-09	5222	41.00	41.50	0	-0.20	MYV
385	BUR-09	5578	41.50	42.50	-5	0.00	TEC
386	BUR-09	5579	42.50	44.00	-5	0.00	TEC
387	BUR-09	5580	44.00	45.00	-5	0.00	TEC
388	BUR-09	5223	45.00	45.50	0	-0.20	MYV
389	BUR-09	5581	45.50	47.00	-5	0.00	TEC
390	BUR-09	5582	51.00	52.50	-5	0.00	TEC
391	BUR-09	5583	52.50	54.00	-5	0.00	TEC
392	BUR-09	5224	54.00	54.50	0	-0.20	MYV

Line	Hole no	Sample	From	To	Au ppb	Au g/t	Lab.
393	BUR-09	5584	54.50	56.00	-5	0.00	TEC
394	BUR-09	5585	56.00	57.50	-5	0.00	TEC
395	BUR-09	5586	57.50	58.50	-5	0.00	TEC
396	BUR-09	5225	58.50	59.00	0	-0.20	MYV
397	BUR-09	C5225	58.50	58.50	0	-0.20	MYV
398	BUR-09	5587	59.00	60.50	5	0.00	TEC
399	BUR-09	5588	60.50	61.50	10	0.00	TEC
400	BUR-09	5589	62.00	64.00	5	0.00	TEC
401	BUR-09	5590	64.00	66.00	-5	0.00	TEC
402	BUR-09	5227	66.00	66.50	0	-0.20	MYV
403	BUR-09	5591	72.50	74.00	5	0.00	TEC
404	BUR-09	5228	74.00	74.50	0	-0.20	MYV
405	BUR-09	5592	74.50	75.50	-5	0.00	TEC
406	BUR-09	5593	75.50	76.50	-5	0.00	TEC
407	BUR-09	5594	77.00	78.50	-5	0.00	TEC
408	BUR-09	5595	78.50	80.00	-5	0.00	TEC
409	BUR-09	5230	80.00	80.50	0	-0.20	MYV
410	BUR-09	5596	80.50	82.00	-5	0.00	TEC
411	BUR-09	5597	82.00	83.00	-5	0.00	TEC
412	BUR-09	5231	83.00	83.50	0	-0.20	MYV
413	BUR-09	5598	83.50	85.00	20	0.00	TEC
414	BUR-09	5599	85.00	86.50	-5	0.00	TEC
415	BUR-09	5600	86.50	88.00	-5	0.00	TEC
416	BUR-09	C5600	86.50	86.50	-5	0.00	TEC
417	BUR-09	5601	88.00	89.00	-5	0.00	TEC
418	BUR-09	5233	91.50	92.00	0	-0.20	MYV
419	BUR-09	5602	100.00	101.50	-5	0.00	TEC
420	BUR-09	5234	101.50	102.00	0	0.20	MYV
421	BUR-09	5603	102.00	103.50	-5	0.00	TEC
422	BUR-09	5604	103.50	105.00	-5	0.00	TEC
423	BUR-09	5605	105.00	106.50	-5	0.00	TEC
424	BUR-09	5606	106.50	108.00	-5	0.00	TEC
425	BUR-09	5607	108.00	109.50	-5	0.00	TEC
426	BUR-09	5608	109.50	111.00	-5	0.00	TEC
427	BUR-09	5609	111.00	112.50	-5	0.00	TEC
428	BUR-09	5610	112.50	113.50	10	0.00	TEC
429	BUR-09	5235	113.50	114.00	0	-0.20	MYV
430	BUR-09	5611	114.00	115.50	10	0.00	TEC
431	BUR-09	5612	115.50	117.00	15	0.00	TEC
432	BUR-09	5613	117.00	118.50	10	0.00	TEC
433	BUR-09	5614	118.50	120.00	5	0.00	TEC
434	BUR-09	5615	120.00	121.50	15	0.00	TEC
435	BUR-09	5236	121.50	122.00	0	-0.20	MYV
436	BUR-09	5616	122.00	124.00	10	0.00	TEC
437	BUR-09	5617	124.50	126.00	5	0.00	TEC
438	BUR-09	5618	126.00	128.00	5	0.00	TEC
439	BUR-09	5238	128.00	128.50	0	-0.20	MYV
440	BUR-09	5619	128.50	130.00	-5	0.00	TEC
441	BUR-09	5620	130.00	131.00	5	0.00	TEC
442	BUR-09	5239	131.00	131.50	0	-0.20	MYV
443	BUR-09	5621	131.50	133.00	10	0.00	TEC
444	BUR-09	5622	133.00	134.00	70	0.00	TEC
445	BUR-09	5240	134.00	134.50	0	-0.20	MYV
446	BUR-09	5623	134.50	136.00	95	0.00	TEC
447	BUR-09	5624	136.00	137.50	55	0.00	TEC
448	BUR-09	5625	137.50	139.00	-5	0.00	TEC

Line	Hole no	Sample	From	To	Au ppb	Au g/t	Lab.
449	BUR-09	C5625	137.50	137.50	-5	0.00	TEC
450	BUR-09	5241	149.50	150.00	0	0.20	MYV
451	BUR-09	5242	152.50	153.00	0	-0.20	MYV
452	BUR-09	5244	161.50	162.00	0	0.30	MYV
453	BUR-09	5626	162.00	163.50	5	0.00	TEC
454	BUR-09	5627	163.50	165.00	-5	0.00	TEC
455	BUR-09	5628	165.00	166.50	-5	0.00	TEC
456	BUR-09	5245	182.00	182.50	0	-0.20	MYV
457	BUR-09	5629	188.00	189.50	-5	0.00	TEC
458	BUR-09	5630	189.50	191.00	-5	0.00	TEC
459	BUR-09	5631	191.00	192.50	5	0.00	TEC
460	BUR-09	5246	214.00	214.50	0	-0.20	MYV
461	BUR-09	5247	214.50	215.00	0	0.20	MYV
462	BUR-10	5632	16.20	18.00	-5	0.00	TEC
463	BUR-10	5633	18.00	19.50	-5	0.00	TEC
464	BUR-10	C5250	19.50	19.50	0	0.80	MYV
465	BUR-10	5634	20.00	21.50	-5	0.00	TEC
466	BUR-10	5635	21.50	23.00	-5	0.00	TEC
467	BUR-10	5636	23.00	24.50	10	0.00	TEC
468	BUR-10	5637	24.50	26.50	15	0.00	TEC
469	BUR-10	5638	27.00	28.00	25	0.00	TEC
470	BUR-10	5639	28.00	29.50	15	0.00	TEC
471	BUR-10	5640	30.00	31.50	15	0.00	TEC
472	BUR-10	5641	31.50	33.00	-5	0.00	TEC
473	BUR-10	5642	33.00	34.50	5	0.00	TEC
474	BUR-10	5643	34.50	36.00	5	0.00	TEC
475	BUR-10	5644	36.00	37.50	-5	0.00	TEC
476	BUR-10	5645	37.50	39.00	-5	0.00	TEC
477	BUR-10	5646	39.00	40.50	-5	0.00	TEC
478	BUR-10	5647	40.50	42.00	-5	0.00	TEC
479	BUR-10	5648	42.00	43.50	5	0.00	TEC
480	BUR-10	5649	44.00	45.50	50	0.00	TEC
481	BUR-10	5650	45.50	47.00	5	0.00	TEC
482	BUR-10	C5650	45.50	45.50	-5	0.00	TEC
483	BUR-10	5651	47.00	48.50	-5	0.00	TEC
484	BUR-10	5652	49.00	50.50	-5	0.00	TEC
485	BUR-10	5653	50.50	52.00	-5	0.00	TEC
486	BUR-10	5654	52.00	53.50	-5	0.00	TEC
487	BUR-10	5655	53.50	55.00	-5	0.00	TEC
488	BUR-10	5656	55.00	56.50	-5	0.00	TEC
489	BUR-10	5657	56.50	58.00	-5	0.00	TEC
490	BUR-10	5658	58.00	59.50	-5	0.00	TEC
491	BUR-10	5659	59.50	61.00	-5	0.00	TEC
492	BUR-10	5660	61.00	62.50	-5	0.00	TEC
493	BUR-10	5661	62.50	64.00	-5	0.00	TEC
494	BUR-10	5258	87.20	87.70	300	0.00	TEC
495	BUR-10	5259	87.70	88.20	75	0.00	TEC
496	BUR-10	5662	97.50	99.00	-5	0.00	TEC
497	BUR-10	5663	99.00	100.50	-5	0.00	TEC
498	BUR-10	5664	100.50	102.00	-5	0.00	TEC
499	BUR-10	5665	131.50	133.00	-5	0.00	TEC
500	BUR-10	5666	133.00	134.50	-5	0.00	TEC
501	BUR-10	5667	134.50	136.00	-5	0.00	TEC
502	BUR-10	5668	136.00	137.50	-5	0.00	TEC
503	BUR-10	5669	137.50	139.00	-5	0.00	TEC
504	BUR-10	5670	139.00	140.50	5	0.00	TEC

Line	Hole no	Sample	From	To	Au ppb	Au g/t	Lab.
505	BUR-10	5671	140.50	142.00	-5	0.00	TEC
506	BUR-10	5672	142.00	143.50	-5	0.00	TEC
507	BUR-10	5673	143.50	145.00	-5	0.00	TEC
508	BUR-10	5674	145.00	146.00	-5	0.00	TEC
509	BUR-10	5675	168.00	169.50	-5	0.00	TEC
510	BUR-10	C5675	168.00	168.00	-5	0.00	TEC
511	BUR-10	5676	169.50	171.00	-5	0.00	TEC
512	BUR-10	5677	171.50	173.00	-5	0.00	TEC
513	BUR-10	5678	173.00	174.50	-5	0.00	TEC
514	BUR-10	5679	174.50	176.00	-5	0.00	TEC
515	BUR-10	5680	195.00	196.50	-5	0.00	TEC
516	BUR-10	5681	196.50	198.00	-5	0.00	TEC
517	BUR-10	5684	228.50	230.00	10	0.00	TEC
518	BUR-10	5685	242.50	244.00	-5	0.00	TEC
519	BUR-11	5686	19.30	21.00	-5	0.00	TEC
520	BUR-11	5687	21.00	22.50	-5	0.00	TEC
521	BUR-11	5688	22.50	24.20	-5	0.00	TEC
522	BUR-11	5689	24.70	26.00	-5	0.00	TEC
523	BUR-11	5690	26.00	27.50	-5	0.00	TEC
524	BUR-11	5691	27.50	29.00	-5	0.00	TEC
525	BUR-11	5692	29.00	30.50	-5	0.00	TEC
526	BUR-11	5693	30.50	32.00	-5	0.00	TEC
527	BUR-11	5694	32.00	34.00	-5	0.00	TEC
528	BUR-11	5267	34.00	34.50	5	0.00	TEC
529	BUR-11	5695	34.50	36.50	-5	0.00	TEC
530	BUR-11	5696	36.50	38.00	-5	0.00	TEC
531	BUR-11	5268	38.00	38.50	-5	0.00	TEC
532	BUR-11	5697	38.50	40.00	-5	0.00	TEC
533	BUR-11	5698	40.00	41.50	-5	0.00	TEC
534	BUR-11	5699	41.50	43.00	-5	0.00	TEC
535	BUR-11	5700	43.00	44.50	-5	0.00	TEC
536	BUR-11	C5700	43.00	43.00	-5	0.00	TEC
537	BUR-11	5701	44.50	46.00	-5	0.00	TEC
538	BUR-11	5702	46.00	47.50	-5	0.00	TEC
539	BUR-11	5703	47.50	49.00	-5	0.00	TEC
540	BUR-11	5704	49.00	50.50	-5	0.00	TEC
541	BUR-11	5705	50.50	52.00	-5	0.00	TEC
542	BUR-11	5706	52.00	53.50	-5	0.00	TEC
543	BUR-11	5707	53.50	55.00	-5	0.00	TEC
544	BUR-11	5708	55.00	56.50	-5	0.00	TEC
545	BUR-11	5709	56.50	58.00	-5	0.00	TEC
546	BUR-11	5710	58.00	59.50	-5	0.00	TEC
547	BUR-11	5711	59.50	60.50	-5	0.00	TEC
548	BUR-11	5269	60.50	61.00	15	0.00	TEC
549	BUR-11	5270	61.00	61.50	-5	0.00	TEC
550	BUR-11	5712	61.50	63.00	10	0.00	TEC
551	BUR-11	5713	63.00	64.50	-5	0.00	TEC
552	BUR-11	5271	64.50	65.00	10	0.00	TEC
553	BUR-11	5714	65.00	66.00	-5	0.00	TEC
554	BUR-11	5715	66.00	67.50	-5	0.00	TEC
555	BUR-11	5272	67.50	68.00	-5	0.00	TEC
556	BUR-11	5716	68.00	68.50	-5	0.00	TEC
557	BUR-11	5717	69.00	70.50	-5	0.00	TEC
558	BUR-11	5718	70.50	72.00	-5	0.00	TEC
559	BUR-11	5719	72.00	73.50	-5	0.00	TEC
560	BUR-11	5720	73.50	75.00	-5	0.00	TEC

Line	Hole no	Sample	From	To	Au ppb	Au g/t	Lab.
561	BUR-11	5721	75.00	76.50	-5	0.00	TEC
562	BUR-11	5722	76.50	78.00	-5	0.00	TEC
563	BUR-11	5723	78.00	79.50	5	0.00	TEC
564	BUR-11	5724	79.50	81.00	5	0.00	TEC
565	BUR-11	5725	81.00	82.50	10	0.00	TEC
566	BUR-11	C5725	81.00	81.00	-5	0.00	TEC
567	BUR-11	5726	82.50	84.00	-5	0.00	TEC
568	BUR-11	5727	84.00	85.50	15	0.00	TEC
569	BUR-11	5274	85.50	86.00	10	0.00	TEC
570	BUR-11	5728	86.00	87.50	-5	0.00	TEC
571	BUR-11	5729	87.50	89.00	-5	0.00	TEC
572	BUR-11	5730	89.00	90.50	-5	0.00	TEC
573	BUR-11	5731	90.50	92.00	-5	0.00	TEC
574	BUR-11	5732	92.00	93.00	-5	0.00	TEC
575	BUR-11	5275	93.00	93.50	-5	0.00	TEC
576	BUR-11	C5275	93.00	93.00	20	0.00	TEC
577	BUR-11	5733	93.50	94.00	-5	0.00	TEC
578	BUR-11	5276	94.00	94.50	-5	0.00	TEC
579	BUR-11	5734	94.50	96.00	-5	0.00	TEC
580	BUR-11	5735	96.00	97.50	-5	0.00	TEC
581	BUR-11	5736	97.50	98.50	-5	0.00	TEC
582	BUR-11	5277	98.50	99.00	-5	0.00	TEC
583	BUR-11	5737	99.00	100.50	-5	0.00	TEC
584	BUR-11	5738	100.50	102.00	-5	0.00	TEC
585	BUR-11	5278	102.00	102.50	-5	0.00	TEC
586	BUR-11	5739	102.50	104.00	-5	0.00	TEC
587	BUR-11	5740	104.00	105.50	-5	0.00	TEC
588	BUR-11	5279	105.50	106.00	20	0.00	TEC
589	BUR-11	5741	106.00	107.50	-5	0.00	TEC
590	BUR-11	5742	107.50	109.00	-5	0.00	TEC
591	BUR-11	5743	109.00	110.50	-5	0.00	TEC
592	BUR-11	5744	110.50	112.00	-5	0.00	TEC
593	BUR-11	5745	112.00	113.00	-5	0.00	TEC
594	BUR-11	5280	113.00	113.50	70	0.00	TEC
595	BUR-11	5746	113.50	115.00	-5	0.00	TEC
596	BUR-11	5747	115.00	116.00	-5	0.00	TEC
597	BUR-11	5281	116.00	116.50	5	0.00	TEC
598	BUR-11	5748	116.50	117.00	-5	0.00	TEC
599	BUR-11	5749	117.50	119.00	-5	0.00	TEC
600	BUR-11	5283	119.00	119.50	80	0.00	TEC
601	BUR-11	5750	119.50	121.00	-5	0.00	TEC
602	BUR-11	C5750	119.50	119.50	-5	0.00	TEC
603	BUR-11	5751	121.00	122.50	-5	0.00	TEC
604	BUR-11	5752	122.50	124.00	-5	0.00	TEC
605	BUR-11	5753	124.00	125.50	-5	0.00	TEC
606	BUR-11	5754	125.50	127.00	-5	0.00	TEC
607	BUR-11	5755	127.00	128.00	-5	0.00	TEC
608	BUR-11	5284	127.90	128.40	15	0.00	TEC
609	BUR-11	5756	128.50	129.00	-5	0.00	TEC
610	BUR-11	5285	129.00	129.50	60	0.00	TEC
611	BUR-11	5757	129.50	131.00	-5	0.00	TEC
612	BUR-11	5758	131.00	132.50	30	0.00	TEC
613	BUR-11	5759	132.50	134.00	-5	0.00	TEC
614	BUR-11	5286	134.00	134.50	-5	0.00	TEC
615	BUR-11	5760	134.50	136.00	-5	0.00	TEC
616	BUR-11	5761	136.00	137.50	-5	0.00	TEC

Line	Hole no	Sample	From	To	Au ppb	Au g/t	Lab.
618	BUR-11	5762	137.50	139.00	-5	0.00	TEC
619	BUR-11	5287	139.00	139.50	-5	0.00	TEC
619	BUR-11	5763	139.50	141.00	-5	0.00	TEC
620	BUR-11	5764	141.00	142.50	-5	0.00	TEC
621	BUR-11	5765	142.50	144.00	-5	0.00	TEC
622	BUR-11	5766	144.00	145.00	-5	0.00	TEC
623	BUR-11	5288	145.50	146.00	-5	0.00	TEC
624	BUR-11	5767	146.00	147.50	-5	0.00	TEC
625	BUR-11	5768	147.50	149.00	5	0.00	TEC
626	BUR-11	5769	149.00	150.00	10	0.00	TEC
627	BUR-11	5289	150.00	150.50	25	0.00	TEC
628	BUR-11	5770	150.50	152.00	-5	0.00	TEC
629	BUR-11	5771	152.00	153.50	-5	0.00	TEC
630	BUR-11	5772	153.50	155.00	20	0.00	TEC
631	BUR-11	5773	155.00	156.50	5	0.00	TEC
632	BUR-11	5774	156.50	158.00	480	0.00	TEC
633	BUR-11	5775	158.00	159.50	15	0.00	TEC
634	BUR-11	C5775	158.00	158.00	-5	0.00	TEC
635	BUR-11	5776	159.50	161.00	-5	0.00	TEC
636	BUR-11	5291	170.00	170.50	65	0.00	TEC
637	BUR-11	5292	174.50	175.00	20	0.00	TEC
638	BUR-11	5293	177.00	177.50	5	0.00	TEC
639	BUR-11	5295	187.50	188.00	-5	0.00	TEC
640	BUR-11	5296	197.50	198.00	-5	0.00	TEC
641	BUR-11	5298	205.50	206.00	-5	0.00	TEC
642	BUR-11	5299	214.50	215.00	-5	0.00	TEC
643	BUR-12	5315	41.00	42.50	-5	0.00	TEC
644	BUR-12	5316	42.50	44.00	-5	0.00	TEC
645	BUR-12	5317	44.00	45.50	-5	0.00	TEC
646	BUR-12	5318	45.50	47.00	45	0.00	TEC
647	BUR-12	5319	47.00	48.50	20	0.00	TEC
648	BUR-12	5320	48.50	50.00	30	0.00	TEC
649	BUR-12	5321	50.00	53.00	40	0.00	TEC
650	BUR-12	5322	53.00	56.00	65	0.00	TEC
651	BUR-12	5323	56.00	59.00	140	0.00	TEC
652	BUR-12	5324	59.00	62.00	550	0.00	TEC
653	BUR-12	5325	62.00	63.50	180	0.00	TEC
654	BUR-12	C5325	62.00	62.00	-5	0.00	TEC
655	BUR-12	5326	63.50	65.00	130	0.00	TEC
656	BUR-12	5327	65.00	68.00	35	0.00	TEC
657	BUR-12	5328	68.00	71.00	160	0.00	TEC
658	BUR-12	5329	71.00	74.00	230	0.00	TEC
659	BUR-12	5330	74.00	77.00	170	0.00	TEC
660	BUR-12	5331	77.00	78.50	20	0.00	TEC
661	BUR-12	5332	78.50	80.00	-5	0.00	TEC
662	BUR-12	5333	80.00	81.50	-5	0.00	TEC
663	BUR-12	5334	81.50	83.00	-5	0.00	TEC
664	BUR-12	5335	83.00	84.50	5	0.00	TEC
665	BUR-12	5336	84.50	86.00	150	0.00	TEC
666	BUR-12	5337	86.00	89.00	30	0.00	TEC
667	BUR-12	5338	89.00	92.00	480	0.00	TEC
668	BUR-12	5339	92.00	95.00	135	0.00	TEC
669	BUR-12	5340	95.00	96.50	15	0.00	TEC
670	BUR-12	5341	96.50	98.00	-5	0.00	TEC
671	BUR-12	5342	98.00	99.50	15	0.00	TEC
672	BUR-12	5343	99.50	101.00	5	0.00	TEC

Line	Hole no	Sample	From	To	Au ppb	Au g/t	Lab.
673	BUR-12	5344	101.00	102.50	-5	0.00	TEC
674	BUR-12	5345	102.50	104.00	45	0.00	TEC
675	BUR-12	5346	104.00	105.50	5	0.00	TEC
676	BUR-12	5347	105.50	107.00	-5	0.00	TEC
677	BUR-12	5300	122.00	122.50	-5	0.00	TEC
678	BUR-12	C5300	122.00	122.00	-5	0.00	TEC
679	BUR-12	5348	122.50	124.50	-5	0.00	TEC
680	BUR-12	5349	125.00	127.00	-5	0.00	TEC
681	BUR-12	5350	127.00	128.50	-5	0.00	TEC
682	BUR-12	C5350	127.00	127.00	-5	0.00	TEC
683	BUR-12	5401	128.50	130.00	-5	0.00	TEC
684	BUR-12	5302	130.00	130.50	-5	0.00	TEC
685	BUR-12	5303	130.50	131.00	-5	0.00	TEC
686	BUR-12	5402	131.00	132.00	-5	0.00	TEC
687	BUR-12	5403	132.00	133.50	-5	0.00	TEC
688	BUR-12	5304	133.50	134.00	-5	0.00	TEC
689	BUR-12	5305	144.50	145.00	5	0.00	TEC
690	BUR-12	5306	145.00	145.50	5	0.00	TEC
691	BUR-12	5307	147.00	147.50	10	0.00	TEC
692	BUR-12	5308	147.50	148.00	25	0.00	TEC
693	BUR-12	5310	158.00	158.50	5	0.00	TEC
694	BUR-12	5312	174.50	175.00	-5	0.00	TEC
695	BUR-12	5313	181.50	182.00	-5	0.00	TEC
696	BUR-12	5314	190.50	191.00	-5	0.00	TEC
697	BUR-13	5405	83.50	84.00	260	0.00	TEC
698	BUR-13	5408	132.50	134.00	-5	0.00	TEC
699	BUR-13	5409	147.50	148.00	-5	0.00	TEC
700	BUR-13	5410	149.00	150.50	-5	0.00	TEC

Line	Hole no	Sample	From	To	Au g/t	Cu %	Zn %	Lab.
81	BUR-02	5097	94.50	95.00	-0.20	0.058	0.264	MYV
82	BUR-02	5098	95.00	95.50	-0.20	0.026	0.056	MYV
83	BUR-02	5099	95.50	96.00	-0.20	0.020	0.052	MYV
84	BUR-02	5100	96.00	96.50	-0.20	0.017	0.116	MYV
86	BUR-02	5101	96.50	97.00	-0.20	0.010	0.040	MYV
87	BUR-02	5102	97.00	97.50	-0.20	0.018	0.164	MYV
88	BUR-02	5103	97.50	98.00	-0.20	0.014	0.184	MYV

Line	Hole no	Sample	From	To	SiO2 %	TiO2 %	Al2O3%	Fe2O3%	MnO %	MgO %	CaO %	Na2O %	K2O %	P2O5 %	LOI %	TOTAL%	CO2 %
1	BUR 01	5018	40.50	41.00	51.04	1.14	15.65	9.85	0.14	5.33	8.93	3.16	0.05	0.21	4.30	99.01	2.52
2	BUR 01	5019	55.50	56.00	52.11	0.83	15.19	6.59	0.14	1.25	11.03	2.53	1.46	0.23	7.90	99.26	5.74
3	BUR 01	5020	71.50	72.00	67.42	0.55	15.64	6.36	0.17	1.36	4.48	3.06	1.59	0.12	0.80	101.55	0.43
4	BUR 01	5026	127.00	127.50	50.72	0.58	14.10	7.04	0.15	1.71	13.24	2.37	1.47	0.16	6.40	97.95	6.41
5	BUR 02	5088	61.50	62.00	54.67	1.02	15.54	7.85	0.20	3.63	10.30	3.36	0.83	0.20	2.80	100.42	2.04
6	BUR 02	5093	80.00	80.50	52.98	0.84	14.61	6.88	0.14	6.94	9.46	3.60	1.05	0.64	1.90	99.03	1.10
7	BUR 02	5105	113.00	113.50	62.71	0.63	16.33	7.79	0.09	3.53	2.38	2.33	3.74	0.29	1.00	100.82	0.11
8	BUR 02	5108	143.00	143.50	48.98	0.95	14.98	16.18	0.48	3.54	10.51	1.69	0.93	0.21	1.80	100.25	1.75
9	BUR 02	5109	179.50	180.00	52.07	1.05	15.94	13.46	0.39	4.27	12.16	1.44	0.39	0.15	1.00	102.33	1.00
10	BUR 03	5049	14.00	14.50	57.15	1.26	15.90	6.24	0.15	4.06	7.63	3.73	0.99	0.38	1.70	99.19	1.35
11	BUR 03	5050	32.00	32.50	52.80	1.37	14.28	8.78	0.22	5.04	6.97	1.93	1.02	0.28	6.40	99.09	3.36
12	BUR 03	5055	83.00	83.50	57.86	1.08	19.55	6.59	0.17	2.47	3.51	2.22	1.85	0.50	2.30	97.90	0.07
13	BUR 03	5057	130.50	131.00	50.82	0.97	17.49	8.08	0.11	1.77	8.15	3.65	1.73	0.27	4.70	97.73	2.73
14	BUR 04	5062	25.00	25.50	52.68	0.97	16.20	15.65	0.14	1.92	3.64	2.63	0.91	0.28	5.70	100.72	0.21
15	BUR 04	5068	47.00	47.50	57.09	1.07	18.61	10.09	0.17	1.48	4.60	3.22	0.69	0.33	2.00	99.35	0.20
16	BUR 04	5067	52.50	53.00	58.49	0.91	16.75	9.08	0.16	1.83	5.29	3.51	0.90	0.36	1.50	98.78	0.52
17	BUR 04	5074	83.50	84.00	72.57	0.50	12.91	2.62	0.11	0.35	2.99	3.08	2.01	0.28	1.60	99.02	1.08
18	BUR 04	5075	105.00	105.50	71.66	0.53	13.19	4.02	0.08	0.54	2.93	3.34	2.24	0.30	1.20	100.05	0.55
19	BUR 04	5082	169.50	170.00	53.95	2.70	14.66	11.31	0.22	3.84	9.28	2.82	0.04	0.54	1.30	100.66	1.03
20	BUR 04	5084	176.00	176.50	55.71	0.81	15.66	15.97	0.73	2.27	8.40	0.52	0.88	0.31	1.10	102.36	0.76
21	BUR 04	5086	182.00	182.50	58.87	0.86	16.60	7.67	0.24	2.42	6.56	3.33	0.89	0.42	2.10	99.96	1.00
22	BUR 05	5148	61.50	62.00	61.22	0.97	16.72	8.20	0.19	2.77	5.21	2.25	1.13	0.26	1.50	100.42	0.13
23	BUR 05	5149	67.50	68.00	60.11	1.36	16.48	4.10	0.11	1.35	7.09	1.97	2.02	0.33	6.40	101.33	3.08
24	BUR 05	5150	87.00	87.50	55.63	0.75	13.13	13.59	0.57	2.44	7.14	1.13	0.82	0.27	2.20	97.67	1.65
25	BUR 05	5151	94.00	94.50	59.24	0.84	20.26	6.19	0.13	1.71	5.21	3.66	0.63	0.19	1.40	99.47	0.15
26	BUR 05	5152	106.50	107.00	59.98	1.20	18.41	7.89	0.11	2.89	4.13	2.35	0.70	0.20	2.40	100.26	0.11
27	BUR 05	5153	134.00	134.50	56.99	0.94	17.30	10.06	0.28	3.68	5.93	1.89	0.51	0.24	2.50	100.32	0.58
28	BUR 05	5154	188.20	188.70	47.70	0.44	13.81	21.20	1.02	3.20	7.27	1.03	0.47	0.28	1.60	98.02	1.14
29	BUR 05	5156	194.00	194.50	49.22	0.99	15.63	9.54	0.08	6.11	7.98	2.02	1.49	0.33	4.30	97.70	2.41
30	BUR 05	5157	205.00	205.50	58.19	0.59	16.02	9.38	0.37	2.86	5.98	2.24	1.26	0.10	3.60	100.58	1.61
31	BUR 05	5178	247.70	248.20	48.41	1.06	18.42	4.36	0.10	2.21	9.30	2.06	4.24	0.38	9.20	99.73	7.02
32	BUR 05	5179	249.00	249.50	55.45	1.06	17.81	8.04	0.07	3.23	6.31	2.56	2.43	0.27	4.30	101.53	3.11
33	BUR 05	5180	262.50	263.00	50.36	0.98	16.57	10.72	0.16	4.95	10.65	1.06	0.71	0.22	2.90	99.27	1.45
34	BUR 05	5181	273.50	274.00	60.15	0.53	18.31	6.90	0.15	2.00	6.10	1.43	1.81	0.26	2.10	99.82	0.69
35	BUR 06	5115	56.00	56.50	64.68	0.52	17.03	6.00	0.09	2.00	3.75	2.21	2.46	0.28	3.20	102.22	0.10
36	BUR 06	5118	94.00	94.50	58.71	0.79	16.15	8.06	0.11	6.21	5.05	3.10	1.16	0.25	2.70	102.28	1.04
37	BUR 06	5123	113.00	113.50	53.76	0.80	20.76	8.23	0.15	3.76	6.86	3.45	1.07	0.16	3.00	102.00	1.11
38	BUR 06	5129	134.00	134.50	68.96	0.93	15.26	4.97	0.06	1.54	1.77	1.31	1.81	0.17	2.20	98.98	0.59
39	BUR 06	5135	146.50	147.00	65.02	0.49	17.53	3.60	0.03	1.04	2.86	7.43	0.79	0.38	2.70	101.87	1.27
40	BUR 06	5145	175.50	176.00	55.08	2.63	15.14	10.05	0.23	3.68	8.71	3.33	0.18	0.58	0.80	100.40	0.58
41	BUR 06	5162	224.00	224.50	61.60	1.19	19.28	6.91	0.17	1.69	1.94	1.71	2.04	0.40	2.40	99.34	0.20
42	BUR 06	5164	232.50	233.00	54.14	1.13	21.41	13.82	0.35	1.96	0.71	1.45	1.36	0.33	2.70	99.36	0.17
43	BUR 07	5170	68.00	68.50	44.35	0.42	13.98	8.22	0.12	4.65	15.67	2.48	0.77	0.10	8.00	98.76	6.03
44	BUR 07	5172	80.50	81.00	57.67	0.88	15.88	10.09	0.34	3.04	2.44	2.24	1.47	0.22	4.40	98.67	6.21
45	BUR 07	5174	94.00	94.50	72.89	0.20	13.12	5.56	0.06	0.79	1.56	3.34	1.14	0.11	1.90	100.67	0.73
46	BUR 07	5175	98.00	98.50	75.71	0.41	11.80	4.71	0.04	0.59	1.41	3.79	0.76	0.14	1.60	100.95	0.60
47	BUR 07	5184	114.50	115.00	59.34	0.98	16.20	10.00	0.38	5.17	2.90	2.14	1.32	0.33	2.40	101.16	0.16
48	BUR 07	5186	123.00	123.50	53.69	0.68	15.14	6.21	0.08	2.72	6.06	1.97	1.45	0.12	1.40	89.51	0.60
49	BUR 07	5187	124.30	124.80	61.28	1.47	16.04	8.29	0.12	3.22	4.47	4.67	0.55	0.39	1.20	101.70	0.18
50	BUR 07	5191	168.40	168.90	46.08	1.53	15.90	14.37	0.22	7.79	9.52	1.78	0.26	0.24	1.60	99.28	0.22
51	BUR 07	5194	175.00	175.50	51.15	1.57	16.35	10.58	0.18	4.67	9.59	2.86	0.27	0.14	1.30	99.06	1.04
52	BUR 07	5201	210.50	211.00	56.22	1.01	15.72	8.55	0.13	4.08	7.49	3.16	1.04	0.42	1.50	99.33	0.50
53	BUR 07	5202	218.30	218.80	54.32	0.78	15.27	9.31	0.17	8.34	5.10	2.39	1.23	0.27	2.90	100.08	0.39
54	BUR 07	5204	225.70	226.00	65.92	0.76	16.80	3.68	0.09	1.48	4.42	4.40	1.46	0.17	1.20	100.38	0.56
55	BUR 07	5209	254.00	254.50	57.04	0.86	15.63	8.59	0.13	5.34	6.01	3.37	0.73	0.33	1.80	99.83	0.52

Line	Hole no	Sample	From	To	SiO2 %	TiO2 %	Al2O3%	Fe2O3%	MnO %	H2O %	CaO %	Na2O %	K2O %	P2O5 %	LOI %	TOTAL%	CO2 %
56	BUR 08	5210	77.00	77.50	62.50	0.57	16.42	5.66	0.09	2.85	4.50	3.46	2.54	0.23	1.30	100.12	0.87
57	BUR 08	5211	110.00	110.40	49.72	0.47	19.88	7.46	0.13	6.46	9.75	2.84	1.60	0.28	1.50	100.10	0.24
58	BUR 08	5212	110.50	111.00	64.19	0.58	16.36	6.28	0.09	3.02	2.75	4.23	2.13	0.16	1.00	100.81	0.16
59	BUR 08	5213	145.50	146.00	59.77	0.63	16.41	7.28	0.09	3.50	1.97	3.77	3.04	0.23	1.40	98.10	0.05
60	BUR 08	5214	176.00	176.50	58.02	0.69	17.31	8.03	0.09	3.85	1.89	3.08	3.74	0.25	1.50	98.44	0.13
61	BUR 08	5215	194.85	195.30	58.54	0.56	16.07	4.54	0.08	3.63	7.08	5.00	2.19	0.39	3.40	101.69	2.25
62	BUR 08	5216	203.00	203.50	51.18	0.87	13.93	11.42	0.22	9.45	10.37	2.23	1.35	0.40	0.80	102.21	0.10
63	BUR 08	5217	218.00	218.50	63.21	0.61	16.40	6.36	0.08	3.30	3.06	4.21	2.46	0.22	0.60	100.51	-0.05
64	BUR 09	5218	25.50	26.00	64.34	0.40	15.66	3.04	0.13	1.54	5.01	2.38	2.93	0.27	2.60	98.31	1.51
65	BUR 09	5221	40.00	40.50	64.73	0.44	15.80	3.29	0.05	2.32	4.31	5.02	1.73	0.36	1.70	99.75	1.43
66	BUR 09	5226	62.00	62.50	63.65	0.39	14.78	3.82	0.22	1.77	5.15	1.67	3.32	0.33	5.10	100.21	2.55
67	BUR 09	5229	76.50	77.00	62.44	0.57	17.62	6.37	0.02	1.35	1.25	1.99	3.73	0.27	4.20	99.81	0.06
68	BUR 09	5232	89.00	89.50	66.14	0.39	15.88	2.86	0.08	1.52	4.70	4.84	1.85	0.23	2.50	100.99	1.66
69	BUR 09	5237	124.00	124.50	66.39	0.46	16.12	4.73	0.05	2.17	1.10	2.37	2.57	0.29	2.30	98.55	0.20
70	BUR 09	5243	157.00	157.50	64.31	0.57	15.21	5.96	0.10	1.80	3.16	3.33	2.39	0.29	0.60	97.72	0.60
71	BUR 09	5248	224.00	224.50	69.41	0.48	14.08	4.38	0.06	1.23	2.85	2.14	2.93	0.21	1.80	99.57	0.99
72	BUR 09	5249	246.00	246.50	65.10	0.40	15.89	2.66	0.03	1.26	2.68	5.72	2.68	0.23	1.80	98.44	1.34
73	BUR 10	5250	19.50	20.00	60.34	0.84	16.37	8.48	0.13	4.14	4.16	1.33	3.26	0.31	1.00	100.36	0.11
74	BUR 10	5251	26.50	27.00	66.84	0.59	16.77	2.55	0.05	1.13	2.42	0.67	4.07	0.23	3.80	99.14	0.93
75	BUR 10	5252	29.50	30.00	63.24	0.54	14.74	5.19	0.09	1.82	5.00	1.07	3.40	0.30	3.80	99.19	2.39
76	BUR 10	5253	43.50	44.00	64.14	0.72	13.87	9.26	0.11	2.08	3.52	0.67	2.71	0.25	1.60	98.93	0.52
77	BUR 10	5254	48.50	49.00	64.28	0.50	17.01	3.29	0.05	1.53	4.14	0.72	4.05	0.25	3.60	99.42	1.41
78	BUR 10	5255	64.00	64.50	62.58	0.43	17.05	3.40	0.06	1.75	5.57	1.43	2.93	0.28	4.00	99.48	1.63
79	BUR 10	5256	69.00	69.50	59.14	0.88	17.08	5.61	0.11	2.57	6.47	0.74	3.29	0.19	3.10	99.18	1.86
80	BUR 10	5257	81.00	81.50	67.14	0.77	15.45	5.58	0.08	1.76	3.44	0.96	3.01	0.27	1.80	100.26	0.64
81	BUR 10	5260	113.00	113.50	66.60	0.47	16.41	3.34	0.06	2.01	4.13	2.07	2.66	0.19	1.90	99.84	1.04
82	BUR 10	5261	131.00	131.50	54.48	1.10	15.08	15.30	0.46	3.92	7.06	0.81	1.20	0.19	2.30	101.90	1.14
83	BUR 10	5262	146.00	146.50	58.67	1.05	16.95	4.79	0.20	1.94	7.14	1.92	1.73	0.26	5.60	100.25	3.35
84	BUR 10	5263	161.00	161.50	58.89	0.96	16.35	6.58	0.16	3.64	6.43	3.21	1.47	0.16	1.60	99.45	1.11
85	BUR 10	5264	171.00	171.50	59.14	0.99	16.58	5.04	0.13	3.25	6.06	3.06	1.95	0.25	2.50	98.96	1.30
86	BUR 10	5265	185.00	185.50	54.29	0.91	15.50	10.46	0.26	4.47	6.61	2.83	1.05	0.29	1.40	98.06	0.88
87	BUR 10	5682	200.00	200.50	61.18	0.83	16.34	4.81	0.19	1.89	5.92	2.05	1.66	0.26	3.30	98.42	0.89
88	BUR 10	5683	217.50	218.00	48.83	0.86	14.82	10.37	0.18	4.28	12.54	1.39	0.63	0.27	5.10	99.27	4.21
89	BUR 11	5266	24.20	24.70	50.14	0.78	14.70	11.26	0.19	8.81	8.94	2.95	0.43	0.10	1.40	99.70	0.26
90	BUR 11	5273	68.50	69.00	46.88	1.68	16.25	14.94	0.23	6.68	8.08	3.20	1.01	0.41	1.30	100.66	0.46
91	BUR 11	5282	117.00	117.50	52.38	1.08	15.48	12.19	0.20	6.20	6.95	3.09	0.40	0.21	1.60	99.78	0.23
92	BUR 11	5290	165.00	165.50	75.94	0.08	11.97	1.27	0.02	0.33	1.04	5.87	0.46	0.05	1.50	98.54	0.69
93	BUR 11	5294	180.00	180.50	75.91	0.09	12.00	1.35	0.02	0.36	1.06	5.62	0.57	0.13	1.00	98.10	0.12
94	BUR 11	5297	198.50	199.00	62.64	0.70	16.34	4.44	0.08	2.37	4.12	5.37	2.44	0.30	2.30	101.09	0.72
95	BUR 12	5301	124.50	125.00	67.43	0.37	15.88	2.06	0.03	0.90	2.36	5.29	2.43	0.28	2.10	99.13	1.48
96	BUR 12	5309	154.00	154.50	70.48	0.71	14.42	2.10	0.04	0.47	2.79	0.33	3.79	0.29	3.70	99.12	1.13
97	BUR 13	5404	47.50	48.00	57.03	0.83	16.21	8.13	0.14	4.86	6.44	3.33	0.70	0.26	1.90	99.83	0.20
98	BUR 13	5406	95.00	95.50	58.25	1.12	16.28	8.24	0.11	3.36	4.74	3.85	1.03	0.31	2.60	99.89	0.32
99	BUR 13	5407	115.50	116.00	54.58	1.13	15.63	10.18	0.15	5.46	7.62	3.17	0.58	0.26	0.80	99.56	0.49
100	BUR 13	5411	187.50	188.00	52.98	1.23	16.46	10.32	0.15	3.64	8.62	2.08	1.52	0.27	2.30	99.57	1.84

Line	Hole	Sample	From	To	Au ppb	As ppm	Sb ppm	Ba ppm	Cd ppm	Cs ppm	Cr ppm	Co ppm	Eu ppm	Hf ppm	Ir ppm
1	01	5018	40.50	41.00	-2	0.6	0.2	-50	-5	-0.5	130	42	1	3	-50
2	01	5020	71.50	72.00	5	-0.5	-0.1	300	-5	3.8	77	12	-1	4	-50
3	02	5105	113.00	113.50	-2	-0.5	-0.1	720	-5	5.2	230	32	-1	4	-50
4	02	5108	143.00	143.50	-2	-0.5	-0.1	160	-5	1.0	270	63	1	2	-50
5	02	5109	179.50	180.00	-2	-0.5	0.1	-50	-5	-0.5	290	76	-1	1	-50
6	03	5049	14.00	14.50	6	-0.5	-0.1	260	-5	1.8	380	33	1	3	-50
7	03	5050	32.00	32.50	-2	-0.5	0.4	63	-5	1.1	420	38	1	4	-50
8	03	5055	83.00	83.50	5	-0.5	-0.1	290	-5	1.4	77	21	-1	4	-50
9	03	CTL	-9.00	-9.00	-2	-0.5	-0.1	-50	-5	-0.5	290	-5	-1	2	-50
10	03	5057	130.50	131.00	-2	0.9	-0.1	290	-5	-0.5	61	34	-1	3	-50
11	04	5062	25.00	25.50	24	14.0	0.4	56	-5	0.9	220	77	1	5	-50
12	04	5067	52.50	53.00	8	1.0	0.2	110	-5	3.0	200	27	-1	4	-50
13	04	5074	83.50	84.00	3	10.0	0.2	260	-5	3.7	89	10	1	6	-50
14	04	5075	105.00	105.50	-2	-0.5	-0.1	310	-5	5.6	60	-5	1	7	-50
15	04	5082	169.50	170.00	-2	-0.5	0.2	-50	-5	-0.5	280	57	2	4	-50
16	04	5084	176.00	176.50	-2	-0.5	0.1	180	-5	1.2	180	25	-1	5	-50
17	04	5086	182.00	182.50	-2	-0.5	0.1	210	-5	1.6	190	30	1	5	-50
18	05	5148	61.50	62.00	-2	-0.5	0.1	220	-5	1.7	230	25	1	3	-50
19	05	5149	67.50	68.00	33	0.8	0.1	450	-5	3.3	220	32	2	4	-50
20	05	5150	87.00	87.50	10	-0.5	-0.1	300	-5	0.9	95	15	2	6	-50
21	05	5151	94.00	94.50	3	-0.5	-0.1	210	-5	0.5	170	17	-1	4	-50
22	05	5152	106.50	107.00	3	-0.5	-0.1	140	-5	1.0	110	25	-1	5	-50
23	05	5153	134.00	134.50	3	-0.5	-0.1	120	-5	1.5	120	25	1	5	-50
24	05	5154	188.20	188.70	37	-0.5	0.3	200	-5	0.8	110	19	-1	4	-50
25	05	5156	194.00	194.50	9	-0.5	0.2	460	-5	4.3	190	41	1	3	-50
26	05	5157	205.00	205.50	12	-0.5	-0.1	300	-5	2.6	110	20	1	4	-50
27	05	5178	247.70	248.20	-2	-0.5	0.1	470	-5	2.8	50	12	-1	3	-50
28	05	5179	249.00	249.50	-2	-0.5	-0.1	350	-5	4.9	110	26	1	4	-50
29	05	5180	262.50	263.00	10	-0.5	0.1	110	-5	1.6	150	45	-1	3	-50
30	05	5181	273.50	274.00	-2	-0.5	-0.1	370	-5	4.1	120	17	-1	3	-50
31	05	5182	277.50	278.00	643	-0.5	-0.1	430	-5	3.9	88	16	-1	3	-50
32	05	CTL	-9.00	-9.00	-2	-0.5	-0.1	-50	-5	-0.5	270	-5	-1	2	-50
33	06	5115	56.00	56.50	21	1.5	-0.1	750	-5	2.3	160	20	1	4	-50
34	06	CTL	-9.00	-9.00	-2	-0.5	-0.1	-50	-5	-0.5	360	-5	-1	-1	-50
35	06	5118	94.00	94.50	-2	1.0	-0.1	140	-5	2.3	320	33	1	3	-50
36	06	5123	113.00	113.50	3	-0.5	-0.1	240	-5	1.9	130	22	-1	3	-50
37	06	5129	134.00	134.50	-2	0.6	-0.1	1200	-5	2.1	140	18	1	5	-50
38	06	5135	146.50	147.00	-2	0.6	0.1	200	-5	-0.5	120	15	1	4	-50
39	07	5170	68.00	68.50	-2	-0.5	-0.1	160	-5	1.1	620	53	-1	-1	-50
40	07	CTL	-9.00	-9.00	-2	-0.5	-0.1	-50	-5	-0.5	350	-5	-1	-1	-50
41	07	5172	80.50	81.00	5	-0.5	-0.1	360	-5	2.3	150	38	-1	5	-50
42	07	5174	94.00	94.50	17	-0.5	-0.1	200	-5	1.3	190	6	2	13	-50
43	07	5186	123.00	123.50	-2	-0.5	-0.1	170	-5	1.9	210	28	2	5	-50
44	07	5187	124.30	124.80	-2	0.7	-0.1	220	-5	0.8	110	34	1	6	-50
45	07	5191	168.40	168.90	14	-0.5	-0.1	-50	-5	0.9	270	69	-1	3	-50
46	07	5201	210.50	211.00	13	-0.5	-0.1	230	-5	1.5	230	42	1	5	-50
47	07	5202	218.30	218.80	21	-0.5	-0.1	210	-5	1.6	610	53	-1	3	-50
48	07	5204	225.70	226.00	9	-0.5	-0.1	250	-5	1.3	120	18	1	7	-50
49	07	5209	254.00	254.50	8	-0.5	0.1	77	-5	1.4	230	38	-1	4	-50
50	08	5210	77.00	77.50	7	1.4	-0.1	390	-5	2.8	210	27	-1	3	-50
51	08	5211	110.00	110.40	9	-0.5	-0.1	390	-5	1.6	250	42	-1	1	-50
52	08	5212	110.50	111.00	6	-0.5	-0.1	450	-5	3.3	250	29	-1	4	-50
53	08	5213	145.50	146.00	4	-0.5	-0.1	830	-5	6.9	250	36	-1	4	-50
54	08	5214	176.00	176.50	-2	-0.5	-0.1	1100	-5	7.9	280	40	-1	4	-50
55	08	5215	194.85	195.30	-2	0.6	0.1	1200	-5	3.5	140	20	2	4	-50

Line	Hole	Sample	From	To	Au ppb	As ppb	Sb ppb	Ba ppb	Cd ppb	Cs ppb	Cr ppb	Co ppb	Eu ppb	Hf ppb	Ir ppb
56	08	CTL	-9.00	-9.00	-2	-0.5	-0.1	-50	-5	-0.5	320	-5	-1	3	-50
57	08	5216	203.00	203.50	3	0.7	0.2	370	-5	2.6	490	62	1	2	-50
58	08	5217	218.00	218.50	-2	-0.5	-0.1	770	-5	5.4	250	27	-1	4	-50
59	09	5216	25.50	26.00	2	0.6	0.2	490	-5	3.7	100	14	1	2	-50
60	09	5221	40.00	40.50	-2	-0.5	0.1	610	-5	5.7	130	14	-1	4	-50
61	09	5226	62.00	62.50	11	2.2	0.2	680	-5	5.3	130	13	-1	3	-50
62	09	5229	76.50	77.00	17	1.1	0.2	690	-5	5.3	180	41	2	3	-50
63	09	5232	89.00	89.50	3	2.7	0.1	510	-5	4.5	110	13	-1	4	-50
64	09	CTL	-9.00	-9.00	-2	-0.5	-0.1	-50	-5	-0.5	340	-5	-1	2	-50
65	09	5237	124.00	124.50	21	0.6	-0.1	1100	-5	8.2	98	10	1	3	-50
66	09	5243	157.00	157.50	69	-0.5	0.1	710	-5	8.6	280	30	1	4	-50
67	09	5248	224.00	224.50	-2	0.9	0.2	830	-5	12.0	290	23	-1	4	-50
68	09	5249	246.00	246.50	-2	-0.5	0.3	1700	-5	6.1	92	9	1	4	-50
69	10	5250	19.50	20.00	-2	-0.5	0.2	530	-5	10.0	470	48	-1	4	-50
70	10	5251	26.50	27.00	95	3.0	0.8	1200	-5	6.0	290	15	1	3	-50
71	10	5252	29.50	30.00	19	5.1	0.6	970	-5	8.3	280	30	-1	3	-50
72	10	5253	43.50	44.00	64	0.6	0.2	560	-5	6.7	240	39	-1	2	-50
73	10	5254	48.50	49.00	3	1.6	0.4	1500	-5	5.7	270	17	2	4	-50
74	10	5255	64.00	64.50	3	2.8	0.6	1500	-5	5.7	210	20	1	3	-50
75	10	5256	69.00	69.50	8	1.7	0.6	970	-5	10.0	260	36	-1	5	-50
76	10	5257	81.00	81.50	6	0.6	0.4	610	-5	5.8	250	28	-1	3	-50
77	10	5260	113.00	113.50	-2	-0.5	0.2	1200	-5	5.4	120	15	-1	3	-50
78	10	CTL	-9.00	-9.00	-2	-0.5	-0.1	-50	-5	-0.5	360	-5	-1	2	-50
79	10	5261	131.00	131.50	11	0.5	0.2	790	-5	2.9	140	39	-1	4	-50
80	10	5262	146.00	146.50	5	8.8	0.2	510	-5	4.4	260	25	1	3	-50
81	10	5263	161.00	161.50	-2	-0.5	-0.1	360	-5	4.8	160	25	1	3	-50
82	10	5264	171.00	171.50	-2	5.3	0.2	340	-5	4.4	140	27	1	3	-50
83	10	5265	185.00	185.50	3	-0.5	0.1	240	-5	2.7	130	31	1	3	-50
84	10	5682	200.00	200.50	6	-0.5	-0.1	350	-5	3.1	110	19	1	3	-50
85	10	5683	217.50	218.00	5	-0.5	0.1	150	-5	1.7	160	46	1	2	-50
86	11	5266	24.20	24.70	5	-0.5	-0.1	-50	-5	0.6	690	60	-1	-1	-50
87	11	5273	68.50	69.00	-2	-0.5	-0.1	310	-5	7.6	120	68	2	3	-50
88	11	5282	117.00	117.50	4	0.8	-0.1	-50	-5	2.2	170	49	1	2	-50
89	11	5290	165.00	165.50	26	-0.5	0.8	320	-5	1.0	190	-5	-1	10	-50
90	11	5294	180.00	180.50	53	-0.5	-0.1	200	-5	-0.5	180	-5	-1	11	-50
91	11	5297	198.50	199.00	9	-0.5	-0.1	1300	-5	6.2	110	14	1	5	-50
92	12	5301	124.50	125.00	-2	0.9	0.3	1600	-5	4.4	110	7	2	3	-50
93	12	CTL	-9.00	-9.00	-2	-0.5	-0.1	-50	-5	-0.5	300	-5	-1	1	-50
94	12	5309	154.00	154.50	8	3.3	0.3	650	-5	5.2	160	25	-1	3	-50
95	12	5311	173.30	173.80	160	0.8	4.4	1100	39	4.5	170	9	-1	3	-50
96	13	5404	47.50	48.00	-2	-0.5	-0.1	190	-5	1.0	190	37	-1	3	-50
97	13	5406	95.00	95.50	5	-0.5	0.3	180	-5	1.1	110	37	-1	4	-50
98	13	5407	115.50	116.00	10	-0.5	-0.1	69	-5	1.1	110	44	1	3	-50
99	13	5411	187.50	188.00	21	-0.5	-0.1	270	-5	1.0	140	46	-1	3	-50

Line	Hole	Sample	From	To	Fe %	La ppa	Mo ppa	Ni ppa	Rb ppa	Sc ppa	Se ppa	Ag ppa	Ta ppa	Tb ppa	Th ppa	W ppa
1	01	5018	40.50	41.00	6.90	11	-1	79	-5	27.4	-5	-2	-0.5	0.8	0.7	-1
2	01	5020	71.50	72.00	5.10	12	-1	-20	55	10.0	-5	-2	-0.5	-0.5	1.6	-1
3	02	5105	113.00	113.50	6.10	27	2	88	120	19.0	-5	-2	0.6	0.6	6.9	-1
4	02	5108	143.00	143.50	13.00	4	1	93	28	43.8	-5	-2	-0.5	0.9	-0.2	-1
5	02	5109	179.50	180.00	11.00	3	-1	120	-5	49.9	-5	-2	-0.5	0.7	-0.2	-1
6	03	5049	14.00	14.50	4.70	12	2	92	14	27.0	-5	-2	0.6	0.8	0.7	-1
7	03	5050	32.00	32.50	7.50	13	-1	120	11	27.3	-5	-2	0.7	0.8	0.7	-1
8	03	5055	83.00	83.50	5.40	13	-1	35	43	20.6	-5	-2	-0.5	0.7	0.7	-1
9	03	CTL	-9.00	-9.00	0.20	13	1	-20	-5	0.2	-5	-2	-0.5	-0.5	1.9	-1
10	03	5057	130.50	131.00	7.00	11	1	41	34	20.9	-5	-2	0.6	0.8	0.5	-1
11	04	5062	25.00	25.50	11.00	11	2	140	10	20.3	-5	-2	-0.5	0.5	0.7	-1
12	04	5067	52.50	53.00	7.00	13	1	80	28	20.3	-5	-2	0.6	0.7	0.8	-1
13	04	5074	83.50	84.00	2.00	22	1	-20	40	9.2	-5	-2	0.7	0.9	2.2	-1
14	04	5075	105.00	105.50	3.20	23	2	-20	45	10.0	-5	-2	0.7	0.9	2.6	-1
15	04	5082	169.50	170.00	10.00	18	2	93	-5	30.4	-5	-2	0.8	1.5	0.3	-1
16	04	5084	176.00	176.50	13.00	17	1	54	22	19.0	-5	-2	0.5	0.7	1.4	-1
17	04	5086	182.00	182.50	6.60	16	1	77	23	22.0	-5	-2	0.6	0.7	1.5	-1
18	05	5148	61.50	62.00	6.10	13	1	38	39	18.0	-5	-2	0.6	0.6	1.3	-1
19	05	5149	67.50	68.00	2.90	20	2	61	58	15.0	-5	-2	0.7	0.9	2.0	1
20	05	5150	87.00	87.50	12.00	22	2	-20	26	20.0	-5	-2	0.8	1.0	1.8	-1
21	05	5151	94.00	94.50	4.90	12	1	-20	25	19.0	-5	-2	0.7	-0.5	1.4	-1
22	05	5152	106.50	107.00	5.80	14	-1	26	25	23.6	-5	-2	0.6	1.0	1.5	-1
23	05	5153	134.00	134.50	7.90	16	-1	47	13	19.0	-5	-2	-0.5	0.8	1.4	-1
24	05	5154	188.20	188.70	18.00	12	1	22	19	10.0	-5	2	-0.5	-0.5	1.6	-1
25	05	5156	194.00	194.50	7.80	11	-1	74	46	27.6	-5	-2	-0.5	0.8	0.7	-1
26	05	5157	205.00	205.50	7.30	14	1	20	33	13.0	-5	-2	-0.5	0.6	1.6	-1
27	05	5178	247.70	248.20	3.20	18	2	37	86	18.0	-5	-2	-0.5	0.7	0.4	-1
28	05	5179	249.00	249.50	6.50	15	2	42	51	20.0	-5	-2	0.5	0.8	0.5	-1
29	05	5180	262.50	263.00	8.50	10	1	110	20	29.0	-5	-2	-0.5	0.7	0.7	-1
30	05	5181	273.50	274.00	5.40	11	1	-20	60	11.0	-5	-2	-0.5	-0.5	1.5	-1
31	05	5182	274.00	274.50	5.50	13	2	-20	89	8.9	-5	-2	-0.5	-0.5	1.4	3
32	05	CTL	-9.00	-9.00	0.30	29	2	-20	-5	0.4	-5	-2	-0.5	0.7	3.4	-1
33	06	5115	56.00	56.50	4.50	27	2	36	60	7.1	-5	-2	-0.5	-0.5	4.0	-1
34	06	CTL	-9.00	-9.00	0.30	11	1	-20	-5	-0.2	-5	-2	-0.5	-0.5	1.6	-1
35	06	5118	94.00	94.50	5.30	10	-1	150	15	18.0	-5	-2	-0.5	-0.5	1.0	-1
36	06	5123	113.00	113.50	5.20	9	1	56	30	16.0	-5	-2	-0.5	0.6	1.0	2
37	06	5129	134.00	134.50	3.60	15	3	-20	63	15.0	-5	-2	0.6	0.9	1.5	1
38	06	5135	146.50	147.00	2.50	22	-1	46	30	6.3	-5	-2	-0.5	-0.5	3.1	-1
39	07	5170	68.00	68.50	6.30	3	1	210	25	27.2	-5	-2	-0.5	-0.5	0.4	-1
40	07	CTL	-9.00	-9.00	0.30	7	2	-20	-5	-0.2	-5	-2	-0.5	-0.5	1.1	-1
41	07	5172	80.50	81.00	8.20	13	2	44	42	22.9	-5	-2	0.6	0.8	2.2	-1
42	07	5174	94.00	94.50	4.70	51	3	-20	27	6.5	-5	-2	1.9	3.2	5.0	1
43	07	5186	123.00	123.50	5.00	19	1	74	53	16.0	-5	-2	0.8	1.0	1.6	-1
44	07	5187	124.30	124.80	6.10	14	3	37	14	24.5	-5	-2	0.7	1.1	1.2	3
45	07	5191	168.40	168.90	11.00	7	-1	96	14	41.6	-5	-2	-0.5	1.1	-0.2	-1
46	07	5201	210.50	211.00	7.30	17	1	79	25	22.6	-5	-2	0.6	0.7	1.2	-1
47	07	5202	218.30	218.80	8.00	8	-1	120	25	33.3	-5	-2	-0.5	-0.5	0.7	-1
48	07	5204	225.70	226.00	3.10	22	1	24	50	16.0	-5	-2	0.8	0.8	2.2	2
49	07	5205	254.00	254.50	7.30	12	1	100	13	22.3	-5	-2	0.7	0.9	0.9	-1
50	08	5210	77.00	77.50	4.70	22	2	56	88	14.0	-5	-2	-0.5	-0.5	3.3	-1
51	08	5211	110.00	110.40	6.30	10	-1	55	83	22.2	-5	-2	-0.5	-0.5	1.2	-1
52	08	5212	130.50	131.00	5.20	32	2	74	76	16.0	-5	-2	-0.5	0.7	7.7	-1
53	08	5213	145.50	146.00	6.40	34	4	98	130	21.1	-5	-2	-0.5	0.8	8.2	-1
54	08	5214	176.00	176.50	7.20	35	6	110	140	24.5	-5	-2	0.9	-0.5	8.7	2
55	08	5215	194.25	195.30	3.70	89	1	64	60	9.0	-5	-2	-0.5	0.8	13.0	1
56	08	CTL	-9.00	-9.00	0.40	23	1	-20	-5	0.5	-5	-2	-0.5	0.5	2.8	-1

Line	Hole	Sample	From	To	Fe %	La ppm	Mo ppm	Ni ppm	Rb ppm	Sc ppm	Se ppm	Ag ppm	Ta ppm	Tb ppm	Th ppm	W ppm
57	08	5216	203.00	203.50	10.00	19	1	100	50	41.9	-5	-2	-0.5	0.7	1.4	1
58	08	5217	218.00	218.50	5.10	30	2	80	92	16.0	-5	-2	-0.5	0.6	6.9	-1
59	09	5218	25.50	26.00	2.60	27	2	26	84	5.9	-5	-2	-0.5	-0.5	4.2	-1
60	09	5221	40.00	40.50	2.90	29	26	35	44	6.6	-5	-2	-0.5	-0.5	4.1	1
61	09	5226	62.00	62.50	3.20	24	-1	22	85	5.3	-5	-2	-0.5	-0.5	4.0	-1
62	09	5229	76.50	77.00	5.20	29	6	60	93	11.0	-5	-2	-0.5	0.5	4.0	3
63	09	5232	89.00	89.50	2.40	29	1	23	47	5.7	-5	-2	-0.5	-0.5	4.3	-1
64	09	CTL	-9.00	-9.00	0.30	10	1	-20	-5	0.2	-5	-2	-0.5	-0.5	1.7	-1
65	09	5237	124.00	124.50	3.80	31	12	36	80	6.5	-5	-2	-0.5	-0.5	4.2	2
66	09	5243	157.00	157.50	5.10	37	2	70	84	15.0	-5	-2	0.6	0.6	6.4	1
67	09	5248	224.00	224.50	3.60	34	2	41	100	12.0	-5	-2	-0.5	0.6	6.6	2
68	09	5249	246.00	246.50	2.30	41	-1	-20	70	4.0	-5	-2	-0.5	-0.5	3.8	-1
69	10	5250	19.50	20.00	7.10	13	-1	170	120	25.3	-5	-2	-0.5	0.7	0.9	3
70	10	5251	26.50	27.00	1.70	29	-1	48	110	12.0	-5	4	-0.5	-0.5	4.8	-1
71	10	5252	29.50	30.00	4.00	29	-1	73	93	13.0	-5	5	-0.5	0.7	4.2	1
72	10	5253	43.50	44.00	7.30	18	-1	97	82	13.0	-5	-2	-0.5	0.8	2.5	1
73	10	5254	48.50	49.00	2.70	44	-1	47	95	7.7	-5	-2	-0.5	0.5	6.4	-1
74	10	5255	64.00	64.50	2.50	33	-1	47	83	10.0	-5	-2	-0.5	-0.5	4.5	-1
75	10	5256	69.00	69.50	4.50	26	-1	77	100	19.0	-5	-2	-0.5	0.5	3.8	-1
76	10	5257	81.00	81.50	4.30	20	-1	64	79	14.0	-5	-2	-0.5	-0.5	2.6	-1
77	10	5260	113.00	113.50	2.70	28	-1	40	72	6.1	-5	-2	-0.5	0.5	4.1	-1
78	10	CTL	-9.00	-9.00	0.20	21	-1	-20	-5	0.3	-5	-2	-0.5	-0.5	2.6	-1
79	10	5261	131.00	131.50	12.00	14	-1	46	40	28.1	-5	-2	-0.5	1.0	1.1	1
80	10	5262	146.00	146.50	4.20	13	-1	45	68	25.3	-5	-2	0.7	0.7	1.0	-1
81	10	5263	161.00	161.50	5.00	14	-1	60	45	21.0	-5	-2	0.5	0.7	1.0	-1
82	10	5264	171.00	171.50	5.10	14	-1	49	75	20.4	-5	-2	0.8	0.7	1.2	-1
83	10	5265	185.00	185.50	8.60	13	-1	46	26	22.1	-5	-2	0.6	0.9	1.1	-1
84	10	5682	200.00	200.50	4.00	15	-1	26	59	18.0	-5	-2	-0.5	0.8	1.6	3
85	10	5683	217.50	218.00	8.40	11	-1	92	19	23.8	-5	-2	-0.5	0.7	0.9	1
86	11	5266	24.20	24.70	9.40	3	-1	86	-5	46.2	-5	-2	-0.5	-0.5	-0.2	-1
87	11	5273	68.50	69.00	12.00	25	-1	39	33	29.0	-5	-2	0.6	1.0	1.4	-1
88	11	5282	117.00	117.50	10.00	7	-1	26	-5	42.1	-5	-2	0.5	0.8	0.5	-1
89	11	5290	165.00	165.50	3.10	26	-1	-20	-12	11.0	-5	-2	0.8	1.5	3.4	5
90	11	5294	180.00	180.50	0.80	50	-1	-20	-13	3.5	-5	-2	2.8	3.3	7.8	8
91	11	5297	198.50	199.00	3.40	57	-1	26	74	7.2	-5	-2	0.7	0.9	6.2	-1
92	12	5301	124.50	125.00	1.70	38	-1	-20	69	3.3	-5	-2	-0.5	-0.5	4.2	-1
93	12	CTL	-9.00	-9.00	0.20	16	1	-20	-5	0.3	-5	-2	-0.5	-0.5	2.7	-1
94	12	5309	154.00	154.50	1.70	24	-1	23	110	10.0	-5	-2	-0.5	0.7	3.8	1
95	12	5311	173.30	173.80	2.10	31	-1	-20	56	2.7	-5	20	-0.5	-0.5	3.4	4
96	13	5404	47.50	48.00	6.60	11	-1	81	14	23.1	-5	-2	0.6	0.8	1.0	-1
97	13	5406	95.00	95.50	7.00	15	-1	30	20	23.0	-5	-2	0.8	0.8	1.1	-1
98	13	5407	115.50	116.00	8.30	12	-1	54	14	32.1	-5	-2	0.6	0.9	0.7	-1
99	13	5411	187.50	188.00	8.90	15	-1	59	44	36.8	-5	-2	0.7	0.8	0.9	-1

Line	Hole	Sample	From	To	U ppm	Yb ppm	Zn ppm	Ce ppm	Na I	Sn ppm	Te ppm	Zr ppm	Br ppm	Lu ppm	Sr ppm
1	01	5018	40.50	41.00	-0.2	2	170	22	2.00	-100	-10	260	-2.0	0.3	4.70
2	01	5020	71.50	72.00	0.3	-2	220	23	2.44	-100	-10	-200	-2.0	0.3	3.30
3	02	5105	113.00	113.50	1.9	-2	170	52	2.00	-100	-10	270	-2.0	0.2	4.90
4	02	5108	143.00	143.50	-0.2	3	190	10	1.40	-100	-10	-200	-2.0	0.4	2.80
5	02	5109	179.50	180.00	-0.2	3	180	5	1.20	-100	-10	-200	-2.0	0.4	3.00
6	03	5049	14.00	14.50	-0.2	-2	220	35	2.97	-100	-10	-200	-2.0	0.4	5.50
7	03	5050	32.00	32.50	-0.2	2	200	32	1.80	-100	-10	-200	-2.0	0.4	6.00
8	03	5055	83.00	83.50	0.2	-2	190	28	2.00	-100	-10	-200	-2.0	0.3	4.50
9	03	CTL	-9.00	-9.00	0.2	-2	-100	22	-0.02	-100	-10	-200	-2.0	-0.2	2.90
10	03	5057	130.50	131.00	-0.2	3	250	28	3.35	-100	-10	230	2.8	0.3	4.20
11	04	5062	25.00	25.50	0.3	-2	740	21	2.06	-100	-10	-200	-2.0	0.4	4.10
12	04	5067	52.50	53.00	0.3	2	170	24	2.85	-100	-10	260	-2.0	0.3	4.00
13	04	5074	83.50	84.00	0.5	2	-100	42	2.56	-100	-10	-200	-2.0	0.3	5.30
14	04	5075	105.00	105.50	0.5	3	160	47	2.68	-100	-10	420	-2.0	0.4	5.70
15	04	5082	169.50	170.00	-0.2	2	220	51	2.34	-100	-10	-200	-2.0	0.3	10.00
16	04	5084	176.00	176.50	0.2	2	160	35	0.51	-100	-10	350	-2.0	0.4	4.90
17	04	5086	182.00	182.50	0.4	-2	170	33	2.97	-100	-10	-200	-2.0	0.3	4.90
18	05	5148	61.50	62.00	0.4	-2	940	30	1.70	-100	-10	-200	-2.0	0.3	4.20
19	05	5149	67.50	68.00	0.6	-2	190	39	1.30	-100	-10	-200	-2.0	0.2	5.00
20	05	5150	87.00	87.50	0.5	3	150	41	0.86	-100	-10	470	-2.0	0.5	5.00
21	05	5151	94.00	94.50	0.3	2	120	23	2.73	-100	-10	-200	-2.0	0.3	3.50
22	05	5152	106.50	107.00	0.3	3	150	22	1.80	-100	-10	400	-2.0	0.4	4.70
23	05	5153	134.00	134.50	0.3	3	120	34	1.40	-100	-10	330	-2.0	0.4	4.90
24	05	5154	188.20	188.70	0.2	-2	140	20	0.89	-100	-10	-200	-2.0	0.3	3.00
25	05	5156	194.00	194.50	-0.2	2	190	25	1.60	-100	-10	-200	-2.0	0.4	4.30
26	05	5157	205.00	205.50	0.4	-2	100	27	1.70	-100	-10	210	-2.0	0.3	3.80
27	05	5178	247.70	248.20	-0.2	-2	400	34	1.50	-100	-10	-200	-2.0	0.2	4.40
28	05	5179	249.00	249.50	-0.2	-2	190	30	2.00	-100	-10	-200	-2.0	0.3	4.60
29	05	5180	262.50	263.00	0.2	2	200	21	0.88	-100	-10	280	-2.0	0.4	3.90
30	05	5181	273.50	274.00	0.4	-2	150	18	1.10	-100	-10	270	-2.0	0.2	2.80
31	05	5182	274.00	274.50	0.2	-2	120	27	0.55	-100	-10	-200	-2.0	0.2	3.00
32	05	CTL	-9.00	-9.00	0.5	-2	-100	47	-0.02	-100	-10	-200	-2.0	-0.2	5.50
33	06	5115	56.00	56.50	1.1	-2	190	52	1.70	-100	-10	230	-2.0	-0.2	5.80
34	06	CTL	-9.00	-9.00	-0.2	-2	-100	23	-0.02	-100	-10	-200	-2.0	-0.2	3.00
35	06	5118	94.00	94.50	-0.2	-2	130	16	2.07	-100	-10	-200	-2.0	0.2	3.30
36	06	5123	113.00	113.50	-0.2	-2	110	19	2.06	-100	-10	-200	-2.0	0.2	3.20
37	06	5129	134.00	134.50	0.4	2	160	34	1.00	-100	-10	340	-2.0	0.4	4.50
38	06	5135	146.50	147.00	1.0	-2	-100	40	5.19	-100	-10	-200	4.4	-0.2	5.10
39	07	5170	68.00	68.50	-0.2	-2	120	6	1.90	-100	-10	-200	-2.0	-0.2	1.40
40	07	CTL	-9.00	-9.00	-0.2	-2	-100	15	-0.02	-100	-10	-200	-2.0	-0.2	1.60
41	07	5172	80.50	81.00	0.4	3	240	24	1.70	-100	-10	340	-2.0	0.5	4.00
42	07	5174	94.00	94.50	1.3	10	-100	110	2.57	-100	-10	450	-2.0	1.6	15.00
43	07	5186	123.00	123.50	0.4	3	190	38	1.50	-100	-10	300	-2.0	0.4	5.60
44	07	5187	124.30	124.80	0.3	4	460	38	3.16	-100	-10	380	-2.0	0.5	6.20
45	07	5191	168.40	168.90	-0.2	3	200	18	1.40	-100	-10	360	-2.0	0.5	4.90
46	07	5201	210.50	211.00	0.3	2	160	33	2.47	-100	-10	-200	-2.0	0.4	4.20
47	07	5202	218.30	218.80	-0.2	-2	150	12	1.90	-100	-10	-200	-2.0	0.3	2.20
48	07	5204	225.70	226.00	0.5	2	110	41	3.26	-100	-10	340	-2.0	0.3	4.10
49	07	5209	254.00	254.50	-0.2	2	140	23	2.61	-100	-10	-200	-2.0	0.4	2.90
50	08	5210	77.00	77.50	0.9	-2	170	40	2.73	-100	-10	260	-2.0	0.2	3.00
51	08	5211	110.00	110.40	0.3	-2	140	16	2.10	-100	-10	230	-2.0	-0.2	2.00
52	08	5212	110.50	111.00	2.3	-2	150	57	3.27	-100	-10	340	-2.0	0.7	3.90
53	08	5213	145.50	146.00	2.2	2	180	61	2.85	-100	-10	-200	-2.0	0.7	4.20
54	08	5214	176.00	176.50	2.3	2	200	60	2.22	-100	-10	-200	-2.0	0.3	4.60
55	08	5215	194.85	195.30	2.3	-2	130	164	3.81	-100	-10	-200	-2.0	-0.2	11.00
56	08	CTL	-9.00	-9.00	0.4	-2	-100	37	0.03	-100	-10	-200	-2.0	-0.2	2.50

Line	Hole	Sample	From	To	U ppa	Yb ppa	Zn ppa	Ce ppa	Na I	Sn ppa	Te ppa	Zr ppa	Br ppa	Lu ppa	Sr ppa
57	08	5216	203.00	203.50	0.5	-2	200	35	1.80	-100	-10	-200	-2.0	0.3	4.10
58	08	5217	218.00	218.50	1.9	-2	130	51	3.02	-100	-10	-200	-2.0	0.2	3.80
59	09	5218	25.50	26.00	1.2	-2	380	48	1.90	-100	-10	-200	-2.0	-0.2	3.80
60	09	5221	40.00	40.50	1.1	-2	170	44	3.84	-100	-10	270	-2.0	-0.2	4.00
51	09	5226	62.00	62.50	1.0	-2	910	46	1.30	-100	-10	-200	-2.0	-0.2	3.60
62	09	5229	76.50	77.00	1.2	-2	230	51	1.40	-100	-10	-200	-2.0	-0.2	4.70
63	09	5232	89.00	89.50	1.1	-2	210	55	3.74	-100	-10	-200	-2.0	-0.2	3.80
64	09	CTL	-9.00	-9.00	0.2	-2	-100	22	-0.02	-100	-10	-200	-2.0	-0.2	1.90
65	09	5237	124.00	124.50	1.4	-2	230	63	1.90	-100	-10	250	-2.0	-0.2	4.90
66	09	5243	157.00	157.50	2.0	-2	180	63	2.59	-100	-10	350	-2.0	0.2	4.50
57	09	5248	224.00	224.50	1.4	-2	230	61	1.70	-100	-10	270	-2.0	-0.2	4.00
68	09	5249	246.00	246.50	1.0	-2	120	76	4.28	-100	-10	370	-2.0	-0.2	5.00
69	10	5250	19.50	20.00	0.3	-2	340	22	1.00	-100	-10	320	-2.0	0.3	2.90
70	10	5251	26.50	27.00	1.0	-2	-100	64	0.44	-100	-10	-200	-2.0	-0.2	5.40
71	10	5252	29.50	30.00	1.1	-2	170	64	0.79	-100	-10	-200	-2.0	-0.2	5.00
72	10	5253	43.50	44.00	1.1	-2	200	40	0.52	-100	-10	-200	-2.0	0.2	3.70
73	10	5254	48.50	49.00	1.5	-2	150	86	0.56	-100	-10	-200	-2.0	-0.2	6.50
74	10	5255	64.00	64.50	2.2	-2	200	71	1.10	-100	-10	-200	-2.0	-0.2	4.90
75	10	5256	69.00	69.50	3.9	-2	270	59	0.59	-100	-10	-200	-2.0	-0.2	4.60
76	10	5257	81.00	81.50	0.9	-2	240	47	0.67	-100	-10	-200	-2.0	0.2	3.80
77	10	5260	113.00	113.50	1.1	-2	240	60	1.50	-100	-10	-200	-2.0	-0.2	4.30
78	10	CTL	-9.00	-9.00	0.4	-2	-100	47	-0.02	-100	-10	-200	-2.0	-0.2	3.10
79	10	5261	131.00	131.50	0.3	3	360	30	0.67	-100	-10	-200	-2.0	0.4	3.60
80	10	5262	146.00	146.50	0.2	-2	470	33	1.60	-100	-10	-200	-2.0	0.2	3.70
81	10	5263	161.00	161.50	-0.2	-2	130	24	2.46	-100	-10	-200	-2.0	-0.2	3.40
82	10	5264	171.00	171.50	0.2	-2	610	23	2.48	-100	-10	-200	-2.0	0.2	3.50
83	10	5265	185.00	185.50	0.3	-2	190	23	2.23	-100	-10	-200	-2.0	0.3	3.30
84	10	5682	200.00	200.50	0.4	-2	180	29	1.50	-100	-10	-200	-2.0	0.3	3.60
85	10	5683	217.50	218.00	-0.2	2	150	24	1.10	-100	-10	-200	-2.0	0.3	3.00
86	11	5266	24.20	24.70	-0.2	-2	190	-5	2.42	-100	-10	-200	-2.0	0.2	1.80
87	11	5273	68.50	69.00	0.4	3	190	57	2.50	-100	-10	-200	-2.0	0.3	5.60
88	11	5282	117.00	117.50	-0.2	3	180	20	2.48	-100	-10	-200	-2.0	0.5	2.90
89	11	5290	165.00	165.50	0.6	5	-100	64	4.24	-100	-10	720	-2.0	0.7	6.90
90	11	5294	180.00	180.50	1.9	10	160	120	4.44	-100	-10	-200	-2.0	1.3	12.00
91	11	5297	198.50	199.00	1.2	-2	-100	100	3.83	-100	-10	-200	-2.0	-0.2	7.10
92	12	5301	124.50	125.00	0.9	-2	130	69	4.14	-100	-10	360	-2.0	-0.2	4.60
93	12	CTL	-9.00	-9.00	0.2	-2	-100	38	-0.02	-100	-10	-200	-2.0	-0.2	2.90
94	12	5309	154.00	154.50	1.1	-2	180	56	0.30	-100	-10	-200	-2.0	-0.2	4.50
95	12	5311	173.30	173.80	0.8	-2	4900	63	3.30	-100	-10	-200	-2.0	-0.2	3.60
96	13	5404	47.50	48.00	0.2	-2	-100	21	2.65	-100	-10	-200	-2.0	0.3	2.70
97	13	5406	95.00	95.50	0.4	3	240	30	3.16	-100	-10	560	-2.0	0.4	3.90
98	13	5407	115.50	116.00	-0.2	-2	170	28	2.61	-100	-10	-200	-2.0	0.3	3.60
99	13	5411	187.50	188.00	-0.2	2	210	35	1.70	-100	-10	-200	-2.0	0.3	4.20

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-02

Sample No.: 5093

Depth : 80.0

Field Rock Name: Metaschist

Major Minerals: (% - habit, grain size):

Qz } 30% include much needles like mineral?

Fp flog. }

Amphiboles green 20% (may be 7% pyroxenes?!) broken amphiboles

Chlorites. 25%

Biotites. 20% with zircons

Calcite ~ 2%

Minor Minerals:

Opaques 1%

Epidotes 3%

Sphines ≤ 1% euhedral

Apatite tr.

Veins, Fractures:

Greenish "rod-like" or needles inclusions in Quartz.

Alterations: Zircons produce pleurotic haloes in biotites and chlorite.

Clay alteration of Fp.

Rock Texture: lepidoblastic. much broken amphiboles fragments large biotite crystals. "Dirty sediment"

Rock Name: Greywacke or ash tuff

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION BUR-02 106.4 Sample No.: 5104

Field Rock Name: Argillite or mylonitized gneiss.

Major Minerals: (% - habit, grain size):

Quartz } 17%
Plagioclases }

Minor Minerals:

Opaques : graphite? + pyrite : 80%
Muscovites : 3 1/2%
Oligiste tr.
minor carbonates.

Veins, Fractures:

Alterations: Fe and Ti oxides

Rock Texture: Poeciloblastic.

Rock Name: Graphitic argillite

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION BUR-02 113.0 Sample No.: 5105

Field Rock Name: Massive argillite

Major Minerals: (% - habit, grain size):

Quartz } ~ 40% mean grain size 0.014 mm
Fp }

Lepidomelane (Biotites) } ~ 56% mean grain size 0.27 x 0.013 mm
Chlorites } mostly biotite

Minor Minerals:

Opages 3%
Amphiboles < 1%
Zircon < 1%
Tourmaline tr

Veins, Fractures:

Alterations: Zircon show metamictization of biotites.
Some clay alteration of feldspar

Rock Texture: Lepidoblastic

Rock Name: Biotite schist - argillaceous? grey wacke

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

BUR-02

143.0

Sample No.: 5108

Field Rock Name: Argillite

Major Minerals: (% - habit, grain size):

Quartz 15% .14 → .17 mm

Pl (Plag) 10% .14 → .17 mm

Amphibole ^{hornblende} + actinolite 53% Porphyroblastic .27 → .48 mm

Biotite 5% .14 → .17 mm

Calcite 5%

Minor Minerals: Garnets 5% (Pocilloblastic, Porphyroblastic)

Opagres 7%

Veins, Fractures: Several Calcite vein 1-5 mm

Alterations: Feldspars show some sericitization

Rock Texture: Strongly layered, (amphibole rich layer alternate with quartz rich layer) - Nemato-blastic, Lepidoblastic

Rock Name: Mafic (to intermediate) flow or ash tuff

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

BUR-02 179.5m Sample No.: 5109

Field Rock Name:

Argillite

Major Minerals: (% - habit, grain size):

Quartz } 35% grain size: 0.05 → 0.24 mm
Plag. } (mean 0.07)

green Amphibole (hornblende + actinolite) 35% ± Porphyroblastic mean grain size: 0.34 mm
(P₂OX?)

Calcite. 20%

Minor Minerals:

Opaques 5%
Garnets 4% Poeciloblastic, porphyroblastic
Chlorite. ≤ 1%
Epidote tr.

Veins, Fractures:

Calcite veins up to 1cm wide

Alterations:

Pervasive calcite alteration.

Rock Texture:

Xenoblastic nematoblastic, slight shearing?

Rock Name:

Mafic (to intermediate) flow or ash tuff

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION Hole No.: BUR-05 Sample No.: 5148
Depth : 61.5

Field Rock Name: Mafic to intermediate flow

Major Minerals: (% - habit, grain size):
Quartz } 83% groundmass
Feldspar }
Muscovite tr.
Biotite 12%
Chlorite 2%

Minor Minerals: Opagres 1%
Apatite tr.
Tourmaline tr.
Calcite 1% Epidote tr.
Garnets 1% porphyroblastic, poeciloblastic

Veins, Fractures: Quartz microveins with penetrative carbonate alteration.

Alterations: Some pyrite show a chlorite alteration ring. Oxidized pyrite. Some carbonate alteration.

Rock Texture: Lepidoblastic, strongly sheared.

Rock Name: Intermediate flow
This section shows a very uniform facies

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-05

Sample No.: 5149

Depth : 67.5

Field Rock Name: Quartz calcite sericite schist (tuff?)

Major Minerals: (% - habit, grain size):

Qz } 28% groundmass
Fp } + 15% Strained quartz phenocryst "eyes"

Calcite 47%

Muscovite 2%

Minor Minerals:

Opaques 5%

Rutile 3% ? dark bands in T.S.

Unaltered clasts (quartz-feldspar recrystallized)
(very "clean")

Veins, Fractures:

Alterations:

Pervasive calcite.

Rock Texture:

Strongly sheared, strongly altered

Rock Name:

Intermediate quartz eye tuff

COGENA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-05

Sample No.: 5150

Depth : 87.0

Field Rock Name:

Mafic flow.

Major Minerals: (% - habit, grain size):

Qz } 30% groundmass
Fp } + 5% Strained quartz phenocrysts (quartz eyes) and Feldspar
Amphiboles 35% Broken, porphyroblastic, poeciloblastic
Chlorite-Fe 8%
Garnets 15% Stretched, folded, porphyroblastic, poeciloblastic
Biotite 5%

Minor Minerals:

Opagres 2%
Zircon tr (Pleuroic haloes in amphiboles)
Muscovite tr

Veins, Fractures:

Alterations:

Clay alteration of feldspar

Rock Texture:

Strongly sheared, folded, lepidoblastic, nematoblastic

Rock Name:

Mafic flow (garnet rich)

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-05

Sample No.: 5152

Depth : 106.5

Field Rock Name: Mafic metavolcanic rock, very fine grained

Major Minerals: (% - habit, grain size):

Quartz	}	50%	fine grained groundmass
Feldspar			
Chlorite		30%	
Seicite		15%	

Minor Minerals:

Opagues	5%
Epidote (clinzoisite)	≤ 1%
Carbonates	< 1%
Zircon	tr

Veins, Fractures: Clay epidote - seicite in fracture

Alterations: Clay-alteration (dark dusting) surrounding fractures

Rock Texture: Strongly sheared, altered, crenulated

Rock Name: Sheared intermediate flow

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-05

Sample No.: 5153

Depth : 134.0

Field Rock Name: Fine grained porphyroblastic mafic flow

Major Minerals: (% - habit, grain size):

Quartz	}	20%	recrystallized? groundmass
Feldspar			
Carbonates (calcite)		30%	
Chlorite		3%	
green Amphiboles (hornblende + actinolite)		27%	porphyroblastic
Biotite		2%	
Pyroxenes		3%?	

Minor Minerals:

Opagues 5% sub-euhedral.
Zircon to in amphiboles
red mineral in biotite to oligoclase?

Veins, Fractures:

Alterations: ^{v. strong} Pervasive carbonate alteration
Chlorite rim around some amphiboles

Rock Texture: Nematoblastic, strongly altered

Rock Name: Intermediate flow

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-05

Sample No.: 5154

Depth : 188.2

Field Rock Name: Garnetiferous mafic flow

Major Minerals: (% - habit, grain size):

Qz } 10% groundmass
 Fp } + 10% Strained quartz porphyrogs?
 Amphib. 53% (hornblende + amphibole) porphyritic, poeciloblastic, fascicular
 Garnets 15% poeciloblastic porphyroblastic
 Biotite 2%
 Carbonates (calcite) 5%

Minor Minerals:

Opaques 5% poeciloblastic
 Zircon < 1% up to .17 mm - pleochroic halo in amphiboles.
 Tourmaline tr.

Veins, Fractures: Felsic clast or xenolith or band quartz-feldspar (biotite) to which is related much of the above Quartz-feldspar

Alterations: reaction rim (chlorite?) around pyrites
 Calcite alteration of amphiboles
 Sericite alteration of felsic portion

Rock Texture: Nematoblastic, slightly sheared, crenulated. locally lepidoblastic

Rock Name: Mafic flow (garnet rich)

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-05

Sample No.: 5156

Depth : 194.0

Field Rock Name: Mafic flow

Major Minerals: (% - habit, grain size):

Quartz } 25% fine grained groundmass
Feldspar }
Biotite 30%
green Amphiboles 30% hornblende + actinolite -
Carbonates (calcite) 10%
Chlorite 3%

Minor Minerals:

Opagones 2%
Zircon to in biotites - pleochroic haloes

Veins, Fractures: —

Alterations: Carbonate alteration

Rock Texture: Lepido-Nematoblastic, strongly sheared, slightly crenulated schist.

Rock Name: Porphyroblastic mafic flow

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-05

Sample No.: 5157

Depth : 205.0m

Field Rock Name: Hematized mafic flow

Major Minerals: (% - habit, grain size):

Quartz	}	40%	mostly groundmass
Feldspar			
Amphiboles (hornblende actinolite)		25%	porphyroblastic, poeciloblastic (fasciculated)
Biotite		12%	Carbonates (calcite) 10%
Chlorite (Fe)		3%	
Muscovite		1%	
Garnets		5%	porphyroblastic, poeciloblastic

Minor Minerals:

Opagres		3%	
Zircons		~ 1%	pleochroic haloes in amphiboles
Oligiste		tr	Brownish-red mineral
Apatite		tr	

Veins, Fractures:

Alterations: Chloritic reaction rim around opagres (pyrites)
 Moderately carbonatized facies
 Strong clay alteration of feldspar

Rock Texture: Lepidoblastic, sheared, slightly crenulated schist

Most porphyroblastic crystals are broken

Rock Name: Sheared intermediate flow

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-05

Sample No.: 5178

Depth : 247.7

Field Rock Name: Intermediate tuff

Major Minerals: (% - habit, grain size):

Quartz	}	~ 29%	ground mass
Feldspar			
Calcite		10%	
Sericite		5.3%	ground mass
Biotite		1%	
Muscovite		2%	

Minor Minerals: Opauques 5% sub-euhedral pyrite
Apatite ? < 1%

Veins, Fractures: Calcite veins

Alterations: Strong sericite alteration.

Rock Texture: Lepidoblastic, crenulated, sheared.

Rock Name: Sericitized intermediate ash tuff

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-05

Sample No.: 5179

Depth : 249.0

Field Rock Name: Intermediate tuff

Major Minerals: (% - habit, grain size):

Quartz	} 60%	mostly recrystallized, r-f grained groundmass
Feldspar		
Biotite	25%	
Calcite	5%	
Amphiboles	< 1%	

Minor Minerals:

Opagres	10%	very fine (^{0.007 mm}) grained and sub-cubical (0.07 mm)
Oligiste	tr	
Tourmaline	tr	
Apatite	tr	

Veins, Fractures:

Calcite veins.

Alterations:

Rock Texture: Generally fine grained, lepidoblastic, crenulated, sheared schist.

Rock Name: Intermediate ash tuff

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-05

Sample No.: 5180

Depth : 262.5

Field Rock Name: Intermediate tuff (amphibole rich)

Major Minerals: (% - habit, grain size):

Quartz	}	37%	mostly recrystallized groundmass "Strained" quartz
Feldspaths			
green Amphiboles		45%	Porphyroblastic, fasciculate Poeciloblastic, diablastic
Calcite		3%	
Chlorite		2%	
Biotite		10%	

Minor Minerals:

Opagues:	3%	
Oligiste	tr	
Zircon	tr	pleochroic halos in amphiboles

Veins, Fractures:

Alterations:

Rock Texture: Nemato-blastic schist

Rock Name: Mafic ash tuff (amphibole rich)

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-05

Sample No.: 5181

Depth : 273.5

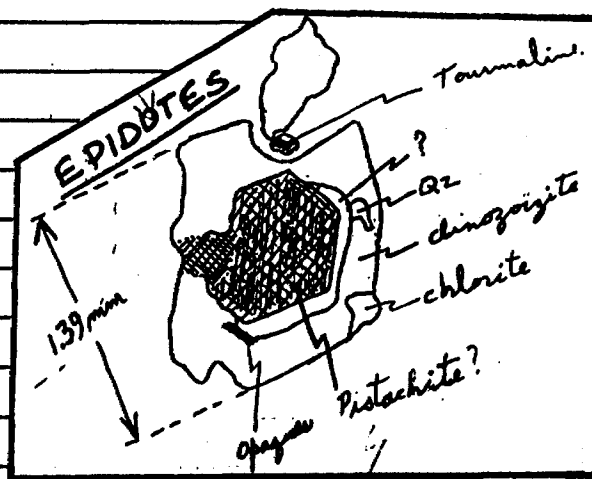
Field Rock Name: Garnet intermediate tuff

Major Minerals: (% - habit, grain size):

Quartz } 45% mostly recrystallized,
 Feldspath } generally finely grained, groundmass
 Chlorite 5% (Mg Al)
 Biotite 20%
 Muscovite 5%
 Carbonates (calcite) 15%

Minor Minerals:

Opagite 8%
 Epidote ~ 1%?
 Tourmaline (very small) ~ 1%
 Garnets < 1%
 Oligiste tr.



Veins, Fractures:

Calcite veinlets.
 Quartz veinlets.

Alterations:

Pervasive carbonates (and sericite?) alteration.
 Epidote alteration (2 phases?)

Rock Texture:

Lepidoblastic, very slightly sheared, strongly altered.

Rock Name:

Intermediate tuff

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-06

Sample No.: 5115

Depth : 56.2

Field Rock Name: Quartz eye, felsic to intermediate tuff.

Major Minerals: (% - habit, grain size):

Qz } 53% mostly recrystallized, fine grained groundmass
Fp } + 5% porphyric, stained "quartz eyes" (with fluid inclusions)
Biotite 20%
Muscovite 5%
Sericite ? 10%
Carbonates 5%

Minor Minerals:

Opagres 2% porphyroblastic euhedral figures.
Tourmalines <1%
Zircon tr
Rutile ? tr in biotite

Veins, Fractures: —

Alterations: Pervasive sericite/carbonate alteration

Rock Texture: lepidoblastic slightly sheared.

Rock Name: Intermediate "quartz eye" tuff

(Doc. #0005U - 11.05.88)

* 2 phases fluid inclusions in "quartz eyes"
(liquid-gas)

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-06

Sample No.: 5118

Depth : 94.25

Field Rock Name: Mafic flow

Major Minerals: (% - habit, grain size):

Qz } 45% mostly recrystallized, fine grained groundmass
Fp } + 7% porphyric, strongly altered, plagioclases
Amphiboles 30% porphyroblastic ± diablastic ± fasciculate
(or pyroxenes ??) mostly broken crystals
Biotites 10%
Chlorite 1%

Minor Minerals:

Opagres (biotite - rutile - ilmenite 7%)
Epidotes tr.

Veins, Fractures:

Calcite on fractures
clay alteration on fractures

Alterations:

Plagioclases are clay altered

Rock Texture: Nemato - lepidoblastic ± diablastic schist

Rock Name: Mafic flow

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-06

Sample No.: 5123

Depth : 113.25

Field Rock Name: Porphyritic intermediate flow or dyke

Major Minerals: (% - habit, grain size):

Quartz	} 37%	recrystallized groundmass
Feldspar	} +5%	porphyric strongly altered feldspar
Amphiboles *	25%	porphyroblastic, poeciloblastic, diablastic, fasciculate
Carbonates	5%	
Seicite / Clay?	20	(alteration of Fp phenocrysts)
Biotite	5%	

Minor Minerals:

Opaques	3%	
Zircons	tr	in amphiboles
Sphenes	tr	
Apatite?	tr	

Veins, Fractures: Calcite veining

Alterations: Seicite / Carbonate alteration from fractures
Strong Clay alteration of porphyric feldspar (shadows)
→ There was (maybe) up to 15% Fp phenocrysts

Rock Texture: Lepidoblastic

Rock Name: Porphyroblastic intermediate flow.

* Amphiboles may contain pyroxines?

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-06

Sample No.: 5129

Depth : 134.0

Field Rock Name: Sericite mica schist.

Major Minerals: (% - habit, grain size):

Quartz } 40% recrystallized ground mass
Feldspar } + 10% porphyritic, altered feldspar (plagi)
Muscovite 30%
Sericite 12%
Chlorite ? 3%
Calcite 5%

Minor Minerals:

Opaque 1%
Illegible tw
Tourmaline < 1%

Veins, Fractures:

Calcite vein

Alterations:

Clay altered porphyritic plagioclases

Rock Texture:

lepidoblastic, crenulated

Rock Name:

Porphyroblastic intermediate crenulated tuff

~ 10% porphyroblasts.

(Doc. #0005U - 11.05.88)

88-05-18

→ 1200ppm Ba

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-06

Sample No.: 5145

Depth : 175.75

Field Rock Name: Amphibole schist. - mafic flow

Major Minerals: (% - habit, grain size):

Quartz } 37% recrystallized groundmass
 Feldspar } 8% porphyritic, strongly altered plagioclase
 Amphiboles 32% (maybe horn) + diablastic (porphyroblastic) porphyroblasts
 Calcite. 3%
 Chlorite 2% (Fe)
 Sericite 10%

Minor Minerals:

Opagones 8% Pumpellyite tr.
 Oligiste tr
 Apatite ? tr
 Rutile <1%

Veins, Fractures:

Quartz-Calcite vein (with 2 phases fluid inclusions)
 Epidote Calcite vein / fracture

Alterations:

Calcite Sericite + ^{clay} + Epidote alteration related to a
 Calcite vein

Rock Texture:

Nematoblastic, cataclastic, altered

Rock Name:

Porphyroblastic intermediate to mafic flow.

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-06

Sample No.: 5162

Depth : 224.2

Field Rock Name:

Porphyroblastic mafic flow.

Major Minerals: (% - habit, grain size):

Quartz	} 37 %	mostly recrystallized groundmass.
Feldspar		
Muscovite	27 %	
Chloritoid	10 %	← Porphyroblastic, Pseudotachylitic
Chlorite	13 %	
Sericite ?	10 %	

Minor Minerals:

Opaques, 3

Veins, Fractures:

Fracture with sericite.

Alterations:

Sericitisation along fractures

Rock Texture:

Lepidoblastic

* folded / crenulated chloritoid.

Rock Name:

Intermediate flow - chloritoid rich

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-06

Sample No.: —

Depth : 231.20

Field Rock Name: Chloritized mafic flow

Major Minerals: (% - habit, grain size):

Quartz	27 %	subhedral, strained
Garnet	45 %	cracked Porphyroblastic / porphyroblastic.
Chlorite (Fe)	20 %	large
Amphiboles	tr	
Sericite	3 %	

Minor Minerals:

Opagres	5%	subhedral in garnets (magnetite)
Zircons	tr	in chlorite

Veins, Fractures: —

Alterations: —

Rock Texture: Idioblastic

Rock Name: Porphyroblastic rock" thin section is too small to give rock a name.

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-06

Sample No.: 5164

Depth : 232.72

Field Rock Name: Mafic flow tourmaline rich.

Major Minerals: (% - habit, grain size):

Quartz	}	20%	recrystallized groundmass
Feldspath.			
Chloritoid		35%	Very large poeciloblastic porphyroblasts
Muscovites	}	36%	
Sericites			
Chlorites		3%	

Minor Minerals:

Opagues	3 %	
Tourmaline	3 %	olive green.
Zircon	tr	in chlorite.

Veins, Fractures:

Alterations: Extremely sericitized

Rock Texture: Diablastic, lepidoblastic schist.

Rock Name: Intermediate flow - chloritoid rich.

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-07

Sample No.: 5170

Depth : 68.3

Field Rock Name: Intermediate flow or sediment?

Major Minerals: (% - habit, grain size):

Quartz } 27% mostly recrystallized groundmass
 Feldspar } with rare strained quartz phenocrysts
 Calcite. 35%
 Amphibole green + Pyrox? 25% ← Pseudotachylite, porphyroblastite
 Biotite / Muscovite 5%
 Chlorite Al Mg 3%
 Sericite. 3%

Minor Minerals:

Opagones 2%
 Epidote tr.

Veins, Fractures: Calcite veining.

Alterations: Very strong calcite alteration
Some sericite alteration

Rock Texture: Lepidoblastic, nematoblastic, sheared, schist.

Rock Name: Mafic ash tuff

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-07

Sample No.: 5172

Depth : 80.92

Field Rock Name: Graphitic argillite.

Major Minerals: (% - habit, grain size):

Quartz } 52% mostly fine grained (0.034mm) recrystallized groundmass
 Feldspar } + 10% rounded - polycrystalline quartz "clasts"
 Biotite 15%
 Amphiboles 5% porphyroblastic, poeciloblastic - "broken"
 Garnets 5% ± euhedral, porphyroblastic "cracked"
 Chlorite 3%

Minor Minerals:

Opagones 10% very fine dusting of opagones (graphitic)
 Oligiste tr.

Veins, Fractures: Quartz veinlets.

Alterations: - Clay alteration of Feldspar phenocryst.
(shadows)

Rock Texture: Lepidoblastic, slightly crenulated, sheared.
altered schist
relatively fine grained.

Rock Name: Graphitic argillite

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-07

Sample No.: 5174

Depth : 94.30

Field Rock Name: Intermediate tuff

Major Minerals: (% - habit, grain size):

Quartz } 35% → fine grained ± recrystallized ground mass
Fp (plag) } 45% → Plagioclase phenocrysts + polycrystalline quartz "clasts"
Biotite 4% ± rounded
Muscovite 11%
Chlorite 4%
Chloritoid 1%

Minor Minerals:

Opagres ≤ 1% few opagres
Zircon tr in chlorite

Veins, Fractures: Calcite veinlet

Alterations: Clay altered plagioclase.

Rock Texture: Lepidoblastic, slightly sheared, relatively fresh schist.

Rock Name: Felsic quartz eye tuff

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR 07

Sample No.: 5175

Depth : 98.25

Field Rock Name: Tuff.

Major Minerals: (% - habit, grain size):

Qz } 45% recrystallized groundmass
 Fp Plag } 37% Plagioclase phenocrysts + quartz polycrystalline "clasts"
 Chlorite 7%
 Sericite 10%
 Serpentine 2% replacing pyroxene??
 Biotite 1%
 Calcite 1%

Minor Minerals:

Opagues 1%
 Oligiste < 1%
 Zircon tr in chlorite and garnets

Veins, Fractures:

Alterations: Clay alteration of feldspar.
 Serpentine alteration of?

Rock Texture: Lepidoblastic, sheared, altered schist.

Rock Name: Felsic quartz eye tuff

Very similar to 5174

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-07
Depth : 114.75

Sample No.: 5184

Field Rock Name: Gneiss or argillite

Major Minerals: (% - habit, grain size):

Quartz } 38% mostly recrystallized groundmass 0.03 → 0.09 mm
Feldspar } 5% polycrystalline stretched quartz clasts?
Biotite 15%
Chlorite 40%

Minor Minerals:

Opaque 2%
Zircon tr in biotite / chlorite.

Veins, Fractures:

Alterations: relatively 'fresh rock'

Rock Texture: lepidoblastic sheared

Rock Name: Mafic ash tuff

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-07

Sample No.: 5186

Depth : 123.13

Field Rock Name: Intermediate tuff or granitoid

Major Minerals: (% - habit, grain size):

Qz } 20% fine grained recrystallized matrix.
Fp } +14% stretched quartz clasts (lapilli?)
Biotite ~ 10%
Chlorite ~ 1%
Sericit ~ 50%
Amphibole 1%

Minor Minerals:

Opaques 3%
Tourmaline ~ 1% olive green

Veins, Fractures: —

Alterations: Very Strong Sericitization

Rock Texture: lepidoblastic, layered, sheared, altered schist.

Rock Name: Intermediate ash tuff

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-07

Sample No.: 5187

Depth : 124.40

Field Rock Name: Intermediate tuff or graywacke

Major Minerals: (% - habit, grain size):

Quartz	}	58%	mostly recrystallized, groundmass
Feldspar	}	+ 2%	stretched quartz clast. - lathilli?
Amphibole	-	7%	porphyroblastic, psuedo-blastic
Chlorite	Fe, Mg-Al	14%	± fascicular
Biotite		4%	
Sericite		15%	
Calcite		< 1%	

Minor Minerals:

Opague		3%	
Sphene		tr	
Clinopyroxite	?	tr	

Veins, Fractures:

Sericitization along microfractures

Alterations:

Strong sericitization

Rock Texture:

Lepidoblastic - Nematoblastic, altered, slightly stretched schist.

Rock Name:

Intermediate ash tuff

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-07

Sample No.: _____

Depth : 137.95

Field Rock Name: Intermediate tuff.

Major Minerals: (% - habit, grain size):

Quartz } 65% mostly groundmass, mean grain size: 0.034 mm
 Feldspath. } + 7% quartz rich "clast", lapilli?
 Biotite 15%
 Chlorite (Fe) 7% Phyllosilicate's plane is not parallel to bedding
 Sericite 5%



chlorite + biotite.

Minor Minerals:

Opagones ~ 1%
 Zircons tr in chlorite and biotite.

Veins, Fractures:

Sericitization along micro veins

Alterations:

relatively fresh

Rock Texture:

Lepidoblastic, fine grained, thinly banded.

Rock Name:

Intermediate ash tuff

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-07

Sample No.: 5191

Depth : 168.6

Field Rock Name: Intermediate tuff; much amphiboles

Major Minerals: (% - habit, grain size):

Qz } 20% fine grained, recrystallized groundmass.
Fp } + 5% stretched quartz clasts (lapilli?)
Amphibole 49% Porphyroblastic, poeciloblastic (green hornblende)
Chlorite 15% (Mg-AL)
Sericite 5%

Minor Minerals:

Opaques 4%
Oligiste tr.

Veins, Fractures:

Alterations: Slight sericite alteration

Rock Texture: Nematoblastic, ± diablastic (lepidoblastic) schist.

Rock Name: Mafic ash tuff

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-07

Sample No.: 5194

Depth : 175.15

Field Rock Name: Tuff intermediate - Amphibolite.

Major Minerals: (% - habit, grain size):

Quartz	}	39%	fine grained groundmass
Feldspar			
Amphiboles (homblike)		45%*	porphyroblastic / poeciloblastic.
Seicite		5%	
chlorite		5%	
Calcite		≤ 1%	

* Long, very thin amphiboles

Minor Minerals:

Opaques	3%	much ilmenite?	(opaque needles)
Oligiste	tr.		
Clinopyroxite	3%		
Pistachite	tr.		

Veins, Fractures:

Alterations: Seicite.

Rock Texture: Nematoblastic, diablastic schist.

Rock Name: Mafic ash tuff

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-07
Depth : 204.6 m

Sample No.: _____

Field Rock Name: Argillite

Major Minerals: (% - habit, grain size):

Quartz	}	80%	mean grain size: 0.05mm fine grained, recrystallized groundmass
Feldspar			
Chlorite (Fe)		5%	
Biotite		15%	

Minor Minerals:

Opagues.	< 1%
Clinopyroxene	< 1%

Veins, Fractures: Calcite veinlets

Alterations: Clay alteration of feldspar.
Some calcite alteration

Rock Texture: Lepidoblastic, Isogranular, schist.

Rock Name: Argillite?

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-07

Sample No.: 5201

Depth : 210.65

Field Rock Name: Conglomerat.

Major Minerals: (% - habit, grain size):

Qz } 55% mostly recrystallized groundmass
Ep } 1% ← Rare Ep ^{phenocryst.} and quartz polycrystalline clasts
Amphibol 30% (hornblende + actinolite) porphyroblastic, poeciloblastic
deussate.
Biotite 12%

Minor Minerals:

Opaques 2% much rutile? (fine needles)?
Pistachite (epidote) tr
Oligiste < 1%

Veins, Fractures: Calcite microfractures

Alterations: Clay alteration of feldspar

Rock Texture: Lepidoblastic - Nematoblastic, banded, slightly altered schist.

Rock Name: Mafic lapilli tuff

(Doc. #0005U - 11.05.88)

Nice basal sections of amphiboles
TiO₂ rich bands.

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-07

Sample No.: 5202

Depth : 218.55

Field Rock Name: Conglomerate.

Major Minerals: (% - habit, grain size):

Quartz } 10% recrystallized groundmass
Feldspar } 38% ← stretched polycrystalline quartz clasts - lapilli-
Chlorite 20%
Amphiboles 20% (hornblende + actinolite) porphyroblastic
Biotite 10%

Minor Minerals:

Opaques 2%
Ilmenite tr.
Tourmaline tr.

Veins, Fractures: -

Alterations: Chloritization of amphiboles

Rock Texture: Nematoblastic, lepidoblastic, cataclastic, sheared

Rock Name: Mafic lapilli tuff

Note: poor quality thin section

(Doc. #0005U - 11.05.88)

Similar to 5201

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-07

Sample No.: 5204

Depth : 225.87

Field Rock Name: Grauwacke

Major Minerals: (% - habit, grain size):

Quartz } 80% mostly fine grained
Feldspar } +5% large polycrystalline quartz clast. - lapilli -
Muscovite 2%
Biotite 8% somehow chloritized.
Chloite 3%

Minor Minerals:

Opaque. 2%
Epidote tr
Zircon tr
chloritoid ? tr small grains?

Veins, Fractures:

Calcite veinlets.
polycrystalline quartz vein?

Alterations:

Calcite-Sericite alteration along fractures.

Rock Texture:

Xenoblastic, lepidoblastic

Rock Name:

Intermediate ash tuff

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-07

Sample No.: 5209

Depth : 254.20

Field Rock Name: _____

Major Minerals: (% - habit, grain size):

Quartz } 57% recrystallized fine grained groundmass
Feldspar }
Amphibole 25% (hornblende + actinolite)
Chlorite 10%

Minor Minerals:

Opaque ~ 5%
Oligiste tr.
Epidote 3%

Veins, Fractures:

Calcite - silica vein.

Alterations:

Sericite - calcite - epidote - chlorite alteration of amphibole
Pervasive sericite

Rock Texture:

Nematoblastic altered schist.

Rock Name:

Mafic ash tuff

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-08

Sample No.: 5210

Depth : 77.0

Field Rock Name: Argillaceous gneiss

Major Minerals: (% - habit, grain size):

Quartz } 60% ± recrystallized groundmass ϕ 0.07-0.1 mm
Feldspar } 8% strained, "quartz eyes" ϕ 0.5-0.7 mm
Biotite 25%
Muscovite 2%
Calcite 3%

Minor Minerals:

Opques 2%
Sphenes tr.
Zircon tr. in biotites

Veins, Fractures:

Alterations: relatively fresh rock
Some sericite

Rock Texture: Slightly lepidolastic schist

Rock Name: Gneiss

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-08

Sample No.: 5211

Depth : 110.0

Field Rock Name: Mafic minerals concentration in gneiss

Major Minerals: (% - habit, grain size):

Quartz	}	38%	mostly recrystallized groundmass
Feldspar			
Amphibole		45%	porphyroblastic - poeciloblastic
Biotite		10%	

Minor Minerals:

Opacities	2%
Sericite	5%

Veins, Fractures:

Alterations: Strong sericitic alteration

Rock Texture: Slightly nematoblastic, ± cataclased, altered schist.

Rock Name: Mafic Gneiss or dyke?

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-08

Sample No.: 5212

Depth : 110.5

Field Rock Name: Argillaceous gneiss.

Major Minerals: (% - habit, grain size): _____

Minor Minerals: _____

Tourmaline tr.

Veins, Fractures: _____

Alterations: _____

Rock Texture: Lepidoblastic

Rock Name: Gneiss. - identical to sample # 5210

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.:

BUR-08

Sample No.:

5213

Depth :

145.5

Field Rock Name:

Biotite schist

Major Minerals: (% - habit, grain size):

Minor Minerals:

Garnets 3%

Veins, Fractures:

Alterations:

Rock Texture:

Rock Name:

Garnwacke

identical to 5210

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-08

Sample No.: 5214

Depth : 176.0

Field Rock Name: Argillaceous gneiss

Major Minerals: (% - habit, grain size):

Quartz	}	60%	± recrystallized groundmass
Feldspar			
Biotite		35%	
Chlorite		1%	

Minor Minerals:

Opaque	2%	sub-euhedral.
Zircon	1%	in biotite - much pleochroic haloes.
Garnet	≤ 1%	← corroded pseudoblastic, porphyroblastic
Apatite	tr.	euhedral

Veins, Fractures:

Alterations:

Rock Texture: ± lepidoblastic ± equigranular

Rock Name: Gneiss

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-08

Sample No.: 5215

Depth : 194.85

Field Rock Name: Argillaceous graywacke

Major Minerals: (% - habit, grain size):

Qz } 25% ← ± recrystallized groundmass.
Fp (plag.) } 40% ← mostly plagioclase phenocrysts - altered.
Biotite 15%
Chlorite < 1%
Calcite 10%
Amphiboles 10%

Minor Minerals:

Opaque
Sphene tr.
Apatite tr.

Veins, Fractures: Calcite veins.

Alterations: Clay alteration of feldspar

Rock Texture: Slightly lepidoblastic

Rock Name: Graywacke.

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-08

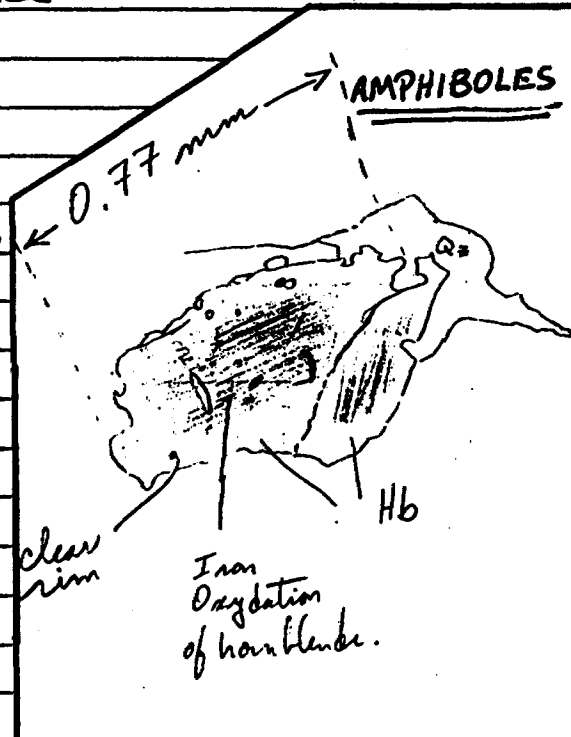
Sample No.: 5216

Depth : 203.0

Field Rock Name: Argillaceous gneiss

Major Minerals: (% - habit, grain size):

Quartz ~10% } filling voids of
 Feldspar ~10% } amphiboles
 Amphiboles 74% porphyroblastic
 sub euhedral.
 Biotite 5%



Minor Minerals:

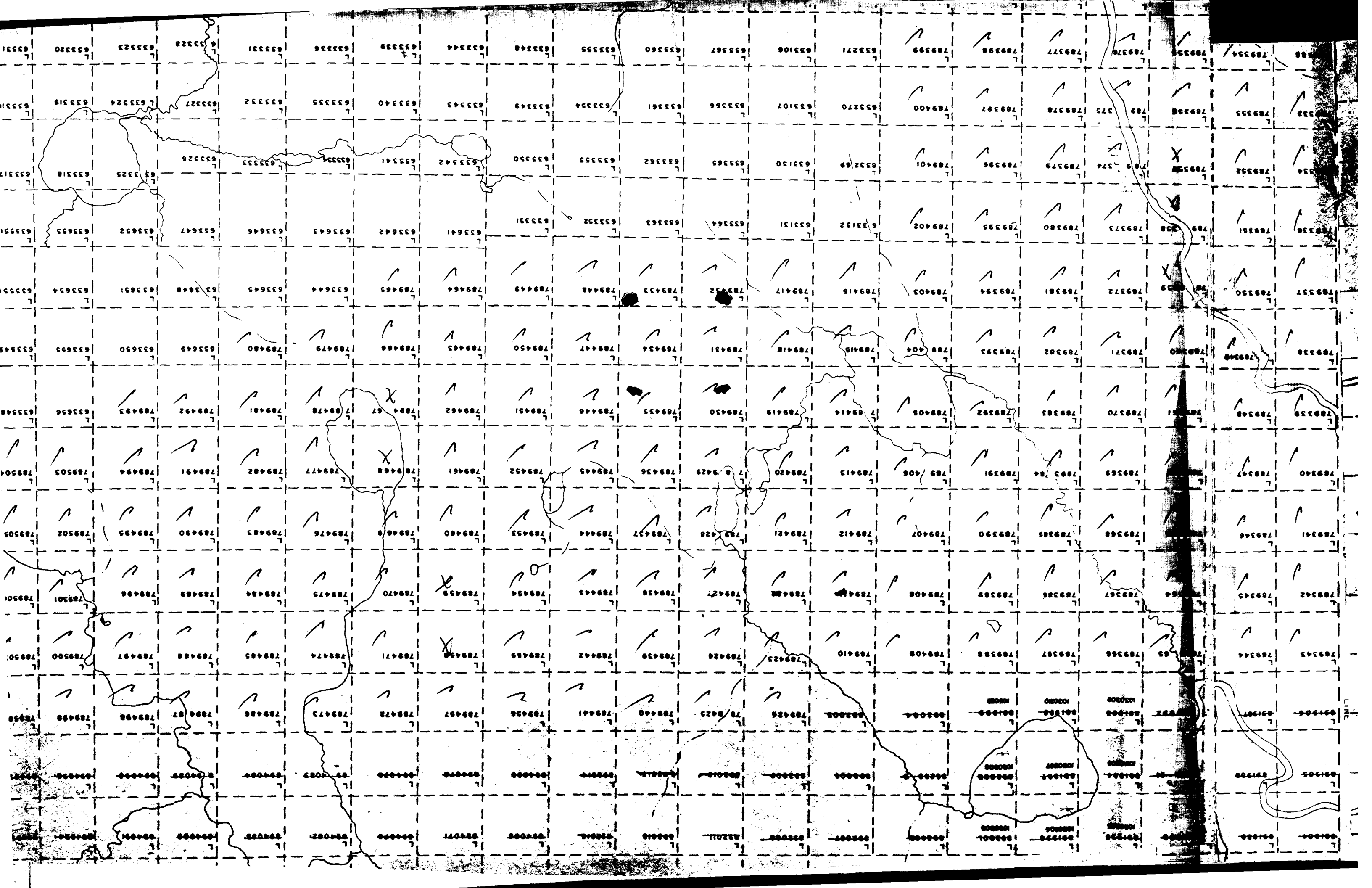
Opagres <1%
 Zircon tr
 Sphenes <1%
 Apatite tr

Veins, Fractures: Silica vein

Alterations: clay alteration of feldspar
 Strong sericitization
 Zoned amphiboles

Rock Texture: ± Decussate? (nematoblastic)

Rock Name: Mafic dyke?



COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-08

Sample No.: 5217

Depth : 218.0

Field Rock Name: Argillaceous gneiss.

Major Minerals: (% - habit, grain size):

Quartz } 73% ± isogranular groundmass
Feldspar }
Biotite . 25%

Minor Minerals:

Opaque 2%
Garnet < 1%
Zircon tv.
Epidote < 1% or clinozoisite

Veins, Fractures: Silica vein

Alterations: Strong sericitic/clay alteration along fracture.

Rock Texture: Lepidolastic

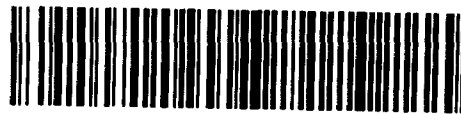
Rock Name: Gneiss.



Ministry of Northern Development and Mines

Report of Work

DOCUMENT W8908.0 Min



32E12SW0013 26 NOSEWORTHY

900

Ontario

Deblitzelle Noseworthy
Name and Postal Address of Recorded Holder

COGEMA CANADA LIMITED

4002

2000 Mansfield, Suite 400, Montreal, Quebec, H3A 2Z1

Summary of Work Performance and Distribution of Credits

Total Work Days Cr. claimed 8576	Mining Claim		Work Days Cr.	Mining Claim		Work Days Cr.	Mining Claim		Work Days Cr.
	Prefix	Number		Prefix	Number		Prefix	Number	
for Performance of the following work. (Check one only) <input type="checkbox"/> Manual Work <input type="checkbox"/> Shaft Sinking Drifting or other Lateral Work. <input type="checkbox"/> Compressed Air, other Power driven or mechanical equip. <input type="checkbox"/> Power Stripping <input checked="" type="checkbox"/> Diamond or other Core drilling <input type="checkbox"/> Land Survey		See attached list							

ASSESSMENT FILES
OFFICE
JAN 17
RECEIVED

All the work was performed on Mining Claim(s): See attached list

Required Information eg: type of equipment, Names, Addresses, etc. (See Table Below)

Diamond Drill Contractor: Les Forages Foranord Inc.
920 boulevard Rideau
C.P. 307
Rouyn-Noranda, Quebec
J9X 5C3

- Equipment:**
- 2 unitized drill shacks with super 38 Longyear core drills with hydraulic tower, hydraulic chuck, hydraulic mud mixer,
 - pressure pumps: Beam 435 with hydraulic motor,
 - supply pumps: Beam pump with AC 1 diesel motor in unitized shack,
 - BQ core barrels, rods, BW and NW casing,
 - bulldozer, timberjack, sloops, portable heated water tank (for transporting water to holes remote from river, lakes)
 - one full camp with kitchen, workshop, sleeping facilities.

Date of Report: 16 Dec 1988
Recorded Holder or Agent (Signature): Denis Lesage, V.P. Admin

Certification Verifying Report of Work

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

Name and Postal Address of Person Certifying

John Learn, 2000 Mansfield, Suite 400, Montreal, Quebec, H3Z 2Z1

Date Certified: 16 Dec 1988
Certified by (Signature): John Learn

Table of Information/Attachments Required by the Mining Recorder

Type of Work	Specific information per type	Other information (Common to 2 or more types)	Attachments
Manual Work	Nil	Names and addresses of men who performed manual work/operated equipment, together with dates and hours of employment.	Work Sketch: these are required to show the location and extent of work in relation to the nearest claim post.
Shaft Sinking, Drifting or other Lateral Work			
Compressed air, other power driven or mechanical equip.	Type of equipment	Names and addresses of owner or operator together with dates when drilling/stripping done.	
Power Stripping	Type of equipment and amount expended. Note: Proof of actual cost must be submitted within 30 days of recording.		
Diamond or other core drilling	Signed core log showing; footage, diameter of core, number and angles of holes.		Work Sketch (as above) in duplicate
Land Survey	Name and address of Ontario land surveyor.	Nil	Nil

DISTRIBUTION OF CREDITS

Doc.: 1608c

L789211	25	L789243	25	L789275	25	L789307	25	L789339	25
L789212	25	L789244	25	L789276	25	L789308	25	L789340	25
L789213	25	L789245	25	L789277	25	L789309	25	L789341	25
L789214	25	L789246	25	L789278	25	L789310	25	L789342	25
L789215	25	L789247	25	L789279	25	L789311	25	L789343	25
L789216	25	L789248	25	L789280	25	L789312	25	L789344	25
L789217	25	L789249	25	L789281	25	L789313	25	L789345	25
L789218	25	L789250	25	L789282	25	L789314	25	L789346	21
L789219	25	L789251	25	L789283	25	L789315	25	L789347	21
L789220	25	L789252	25	L789284	25	L789316	25	L789348	21
L789221	25	L789253	25	L789285	25	L789317	25	L789349	21
L789222	25	L789254	25	L789286	25	L789318	25	L789350	21
L789223	25	L789255	25	L789287	25	L789319	25	L789351	21
L789224	25	L789256	25	L789288	25	L789320	25	L789352	21
L789225	25	L789257	25	L789289	25	L789321	25	L789353	18
L789226	25	L789258	25	L789290	25	L789322	25	L789354	21
L789227	25	L789259	25	L789291	25	L789323	25	L789355	21
L789228	25	L789260	25	L789292	15	L789324	25	L789356	21
L789229	25	L789261	25	L789293	25	L789325	25	L789357	21
L789230	25	L789262	25	L789294	25	L789326	25	L789358	21
L789231	25	L789263	25	L789295	25	L789327	25	L789359	21
L789232	25	L789264	25	L789296	25	L789328	25	L789360	21
L789233	25	L789265	25	L789297	25	L789329	25	L789361	21
L789234	25	L789266	25	L789298	25	L789330	25	L789362	21
L789235	25	L789267	25	L789299	25	L789331	25	L789363	21
L789236	25	L789268	25	L789300	25	L789332	25	L789364	21
L789237	25	L789269	25	L789301	25	L789333	25	L789365	21
L789238	25	L789270	25	L789302	25	L789334	25	L789366	21
L789239	25	L789271	25	L789303	25	L789335	25	L789367	21
L789240	25	L789272	25	L789304	25	L789336	25	L789368	21
L789241	25	L789273	25	L789305	15	L789337	25	L789369	21
L789242	25	L789274	25	L789306	15	L789338	25	L789370	21

L789371	21	L789403	28	L789435	28	L789467	28	L789499	28
L789372	21	L789404	28	L789436	28	L789468	28	L789500	28
L789373	21	L789405	28	L789437	28	L789469	28	L789501	28
L789374	21	L789406	28	L789438	28	L789470	28	L789502	28
L789375	21	L789407	28	L789439	28	L789471	28	L789503	28
L789376	21	L789408	28	L789440	28	L789472	28	L789504	28
L789377	18	L789409	28	L789441	28	L789473	28	L789505	28
L789378	21	L789410	28	L789442	28	L789474	28	L789506	28
L789379	21	L789411	28	L789443	28	L789475	28	L789507	28
L789380	21	L789412	28	L789444	28	L789476	28	L789508	36
L789381	21	L789413	28	L789445	28	L789477	28		
L789382	21	L789414	28	L789446	28	L789478	28	L789561	38
L789383	21	L789415	28	L789447	28	L789479	28	L789562	38
L789384	21	L789416	28	L789448	28	L789480	28		
L789385	21	L789417	28	L789449	28	L789481	28	L892946	75
L789386	21	L789418	28	L789450	28	L789482	28	L892947	75
L789387	21	L789419	28	L789451	28	L789483	28	L892948	75
L789388	21	L789420	28	L789452	28	L789484	28	L892949	75
L789389	28	L789421	28	L789453	28	L789485	28	L892950	75
L789390	28	L789422	28	L789454	28	L789486	28	L892951	75
L789391	28	L789423	28	L789455	28	L789487	28	L892952	75
L789392	28	L789424	28	L789456	28	L789488	28	L892953	75
L789393	28	L789425	28	L789457	28	L789489	28	L892954	75
L789394	28	L789426	28	L789458	28	L789490	28	L892955	75
L789395	28	L789427	28	L789459	28	L789491	28	L892956	75
L789396	28	L789428	28	L789460	28	L789492	28	L892957	75
L789397	28	L789429	28	L789461	28	L789493	28		
L789398	18	L789430	28	L789462	28	L789494	28		
L789399	28	L789431	28	L789463	28	L789495	28		
L789400	28	L789432	28	L789464	28	L789496	28		
L789401	28	L789433	28	L789465	28	L789497	28		
L789402	28	L789434	28	L789466	28	L789498	28		

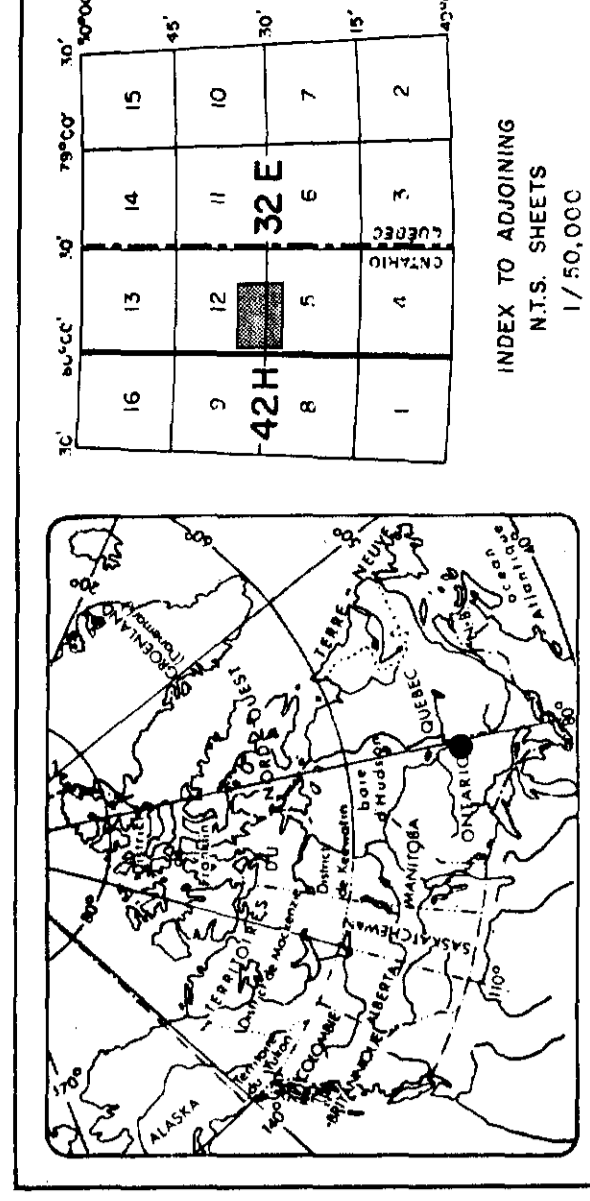
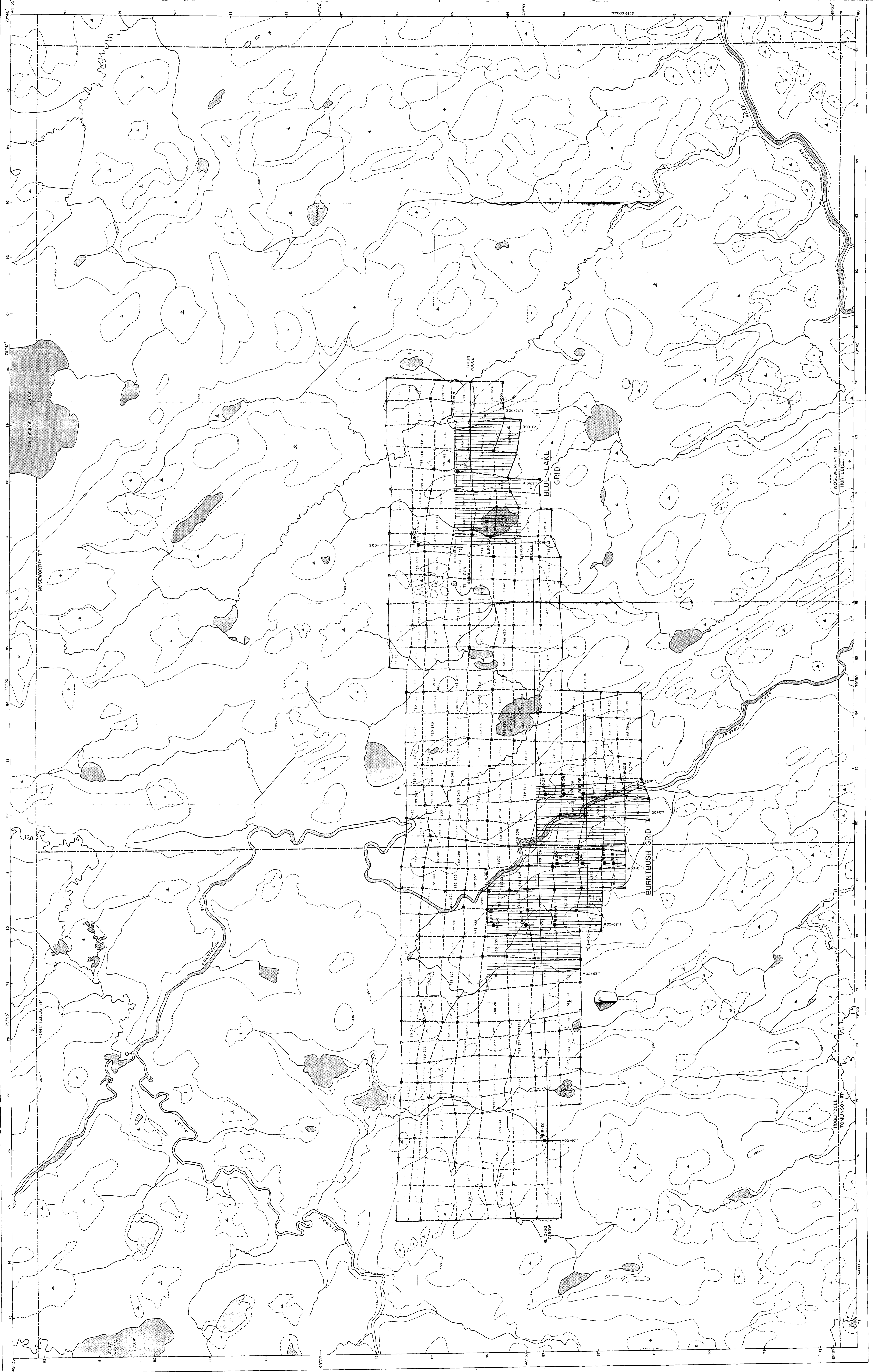
WORK WAS PERFORMED ON THE FOLLOWING CLAIMS:

L789239	BUR-12	0-191	meters	626.6 feet
L789304	BUR-11	0-217	meters	711.9 feet
L789316	BUR-13	0-71	meters	232.9 feet
L789317	BUR-13	71-188	meters	383.9 feet
L789318	BUR-09	0-257	meters	843.2 feet
L789326	BUR-10	0-14	meters	45.9 feet
L789329	BUR-10	14-244	meters	754.6 feet
L789332	BUR-01	0-200	meters	656.2 feet
L789332	BUR-03	0-149	meters	488.8 feet
L789335	BUR-04	0-200	meters	656.2 feet
L789357	BUR-05	0-278	meters	912.1 feet
L789358	BUR-06	0-247.2	meters	811.0 feet
L789358	BUR-07	203-260	meters	187.0 feet
L789359	BUR-07	0-203	meters	666.0 feet
L789458	BUR-02	0-154	meters	505.2 feet
L789459	BUR-02	154-245	meters	298.6 feet
L789467	BUR-08	147-228.3	meters	266.7 feet
L789468	BUR-08	0-147	meters	482.3 feet

Total: 2904.5 meters 9529 feet = 9529 days

Note: Also included in the report on drilling are analytical results and thin sections descriptions which would add an additional 920 days work; however, only 8576 days are needed to bring the total assessment credits over all 312 claims which comprise the Burntbush River property to the required amount of 200 days. Thus, the full five years' work has been performed and reported.

(Doc.: 1608c)

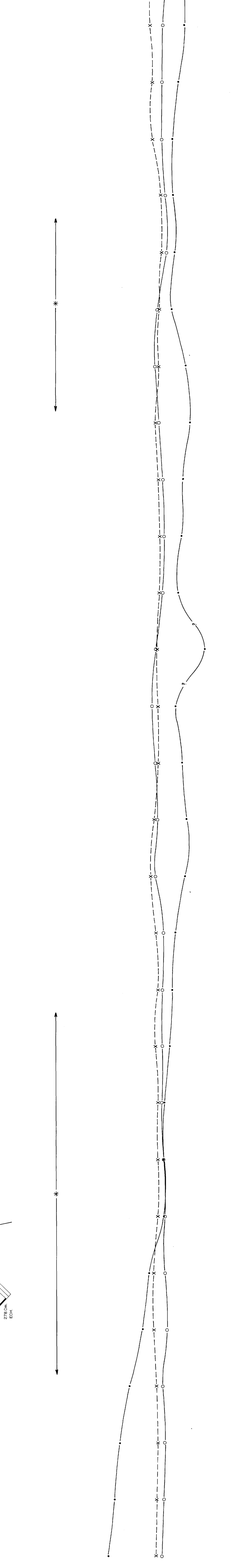
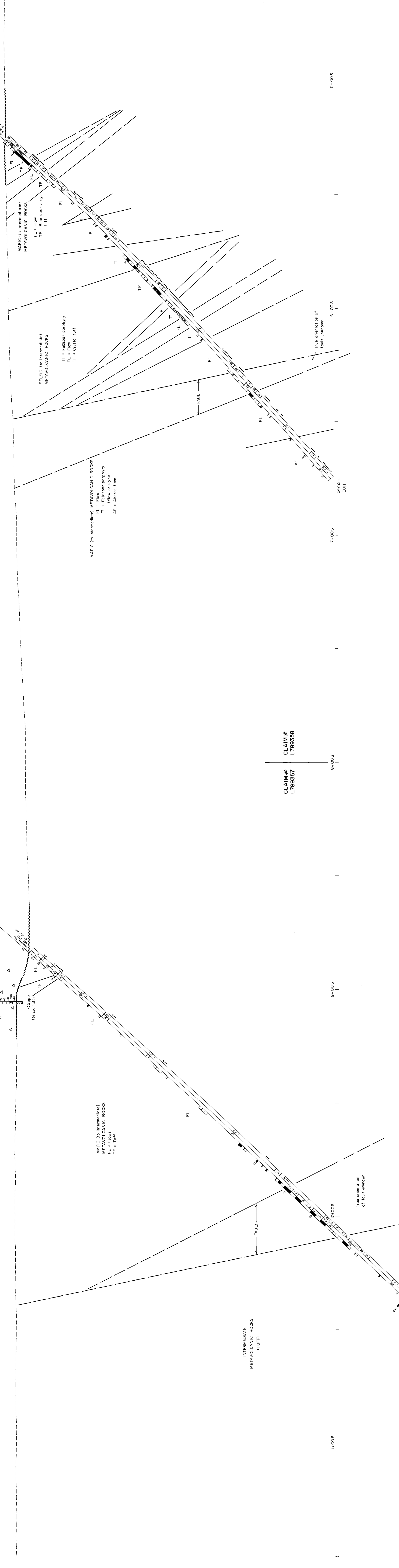
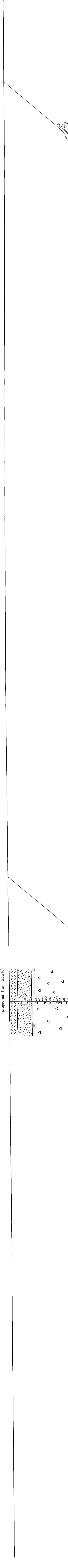


COGEMA Canada
 SCALE 1:125,000
 BURNTBUSH RIVER PROJECT
 DIAMOND DRILL HOLE LOCATIONS
 Prepared by: J. LEOPH, R. S. JAMES
 Drawn by: F. BLISS
 Date: 1988
 Sheet No. 88-CND-4703
 Column 47/66 Grid 52/38
 MAP NO. 1



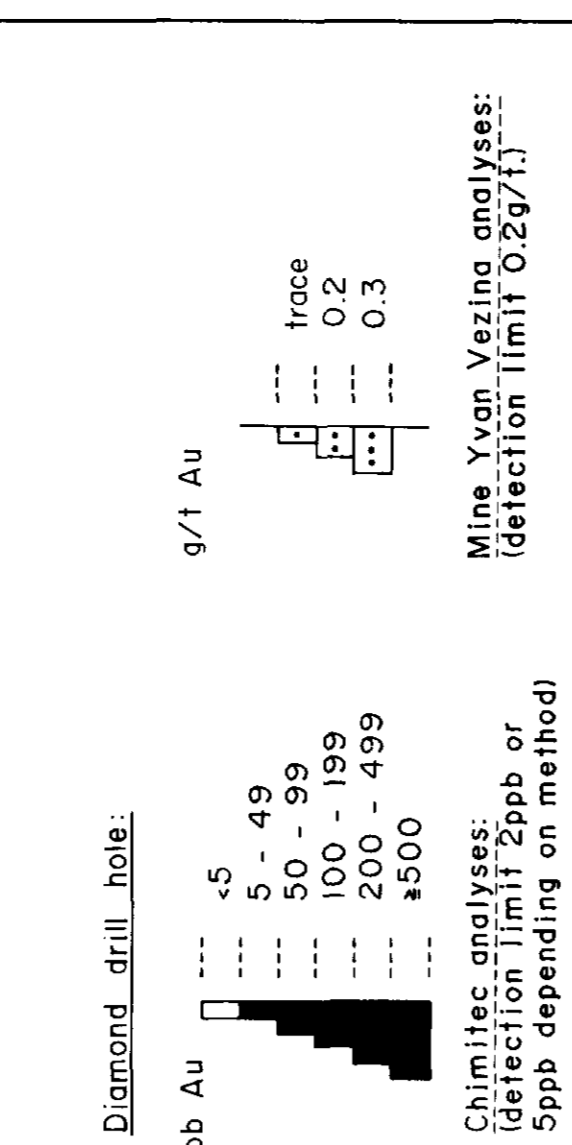
(m)
290 -
285 -
280 -
275 -
270 -

11+005 | 10+005 | 9+005 | 8+005 | 7+005 | 6+005 | 5+005

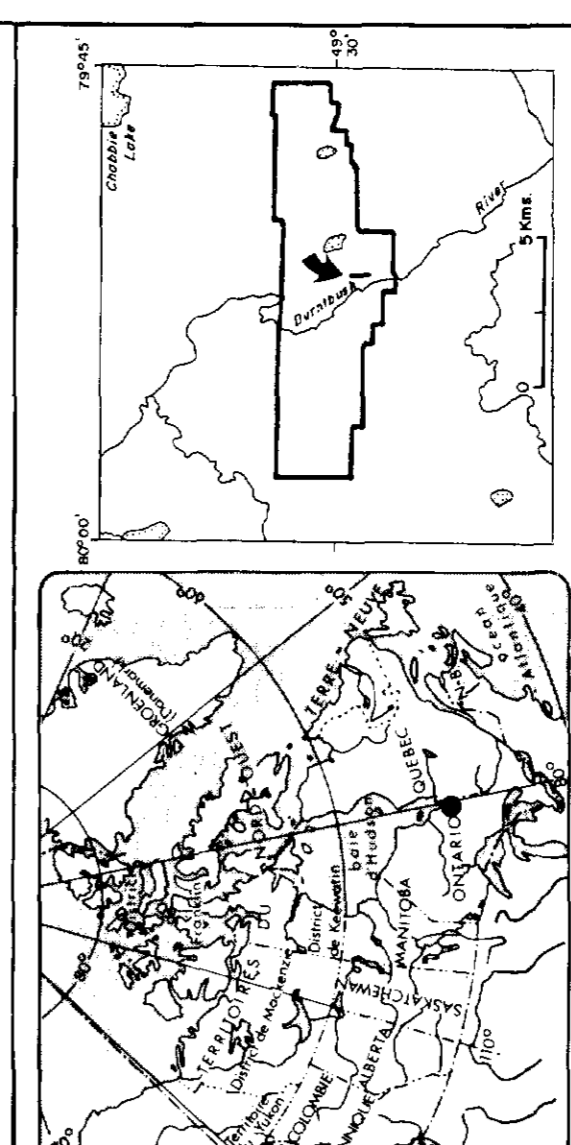


LEGEND

- OVERBURDEN UNITS:**
- Organics
 - Coarse IIII
 - Clayey II siltstone/clay and sand
 - Mudstone IIII
- DIAMOND DRILL HOLE GEOLOGICAL SYMBOLS:**
- Overburden / bedrock contact
 - Contact observed, untruncated using S, to core end
 - Shearing
 - Boundary sheared, untruncated using S, to core end
- SAMPLING:**
- Recovery, ROP any point where necessary
 - SP-1000, for 1000m, 1000m
- REVERSE CORRELATION:**
- III sample 1 Au with 100 ppb Au in IHC
 - Overburden / bedrock contact
 - Recovery sample Au result
 - 2 ppb



- GROUND GEOPHYSICS PROFILES:**
- Interpreted IP anomaly
 - Magnetics (1000 fT)
 - VLF-EM in - phase
 - VLF-EM quadrature



COGEMA
Canada
Lével, Ltd.

Scale 1:500

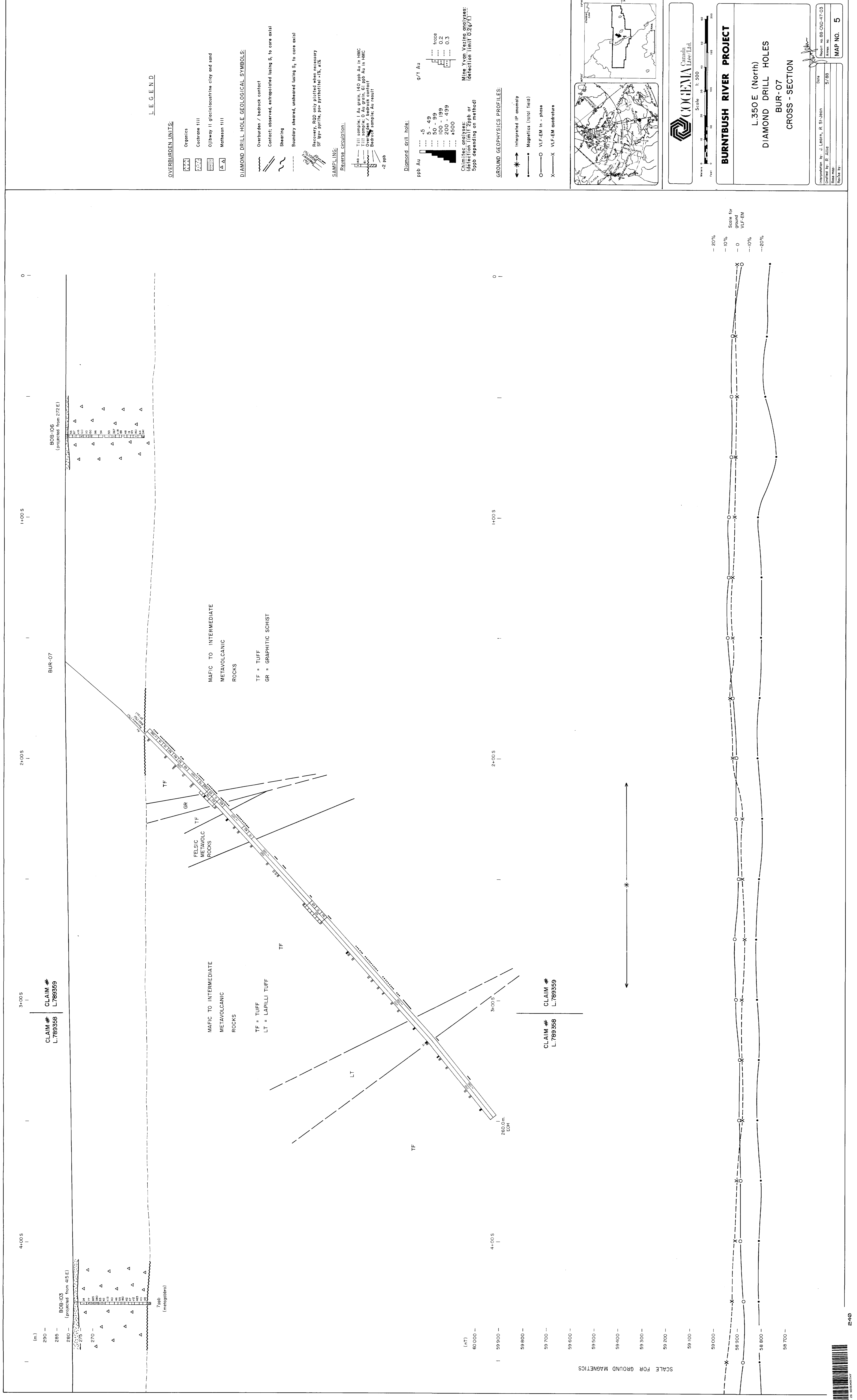
BURNBUSH RIVER PROJECT

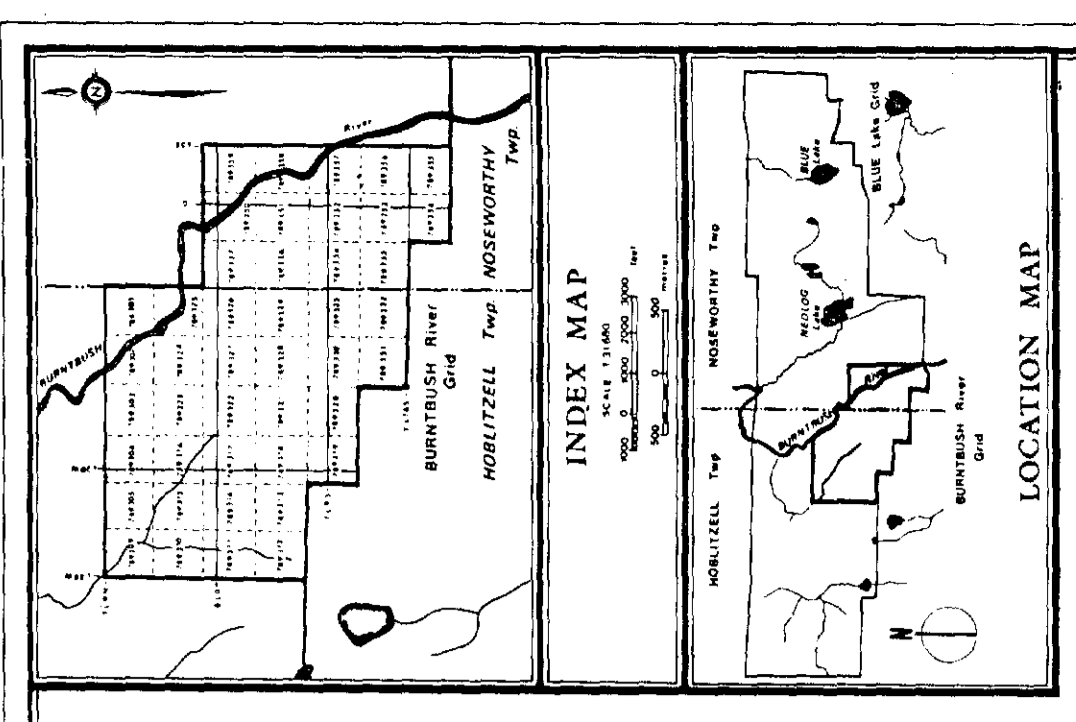
L350E (South)
DIAMOND DRILL HOLES
BUR-05, BUR-06
CROSS - SECTION

Prepared by: J. LEGG, R. SUTHER
Checked by: R. J. J. J.
Date: 5/88
Section: 88-CND-07-03
MAP NO. 4



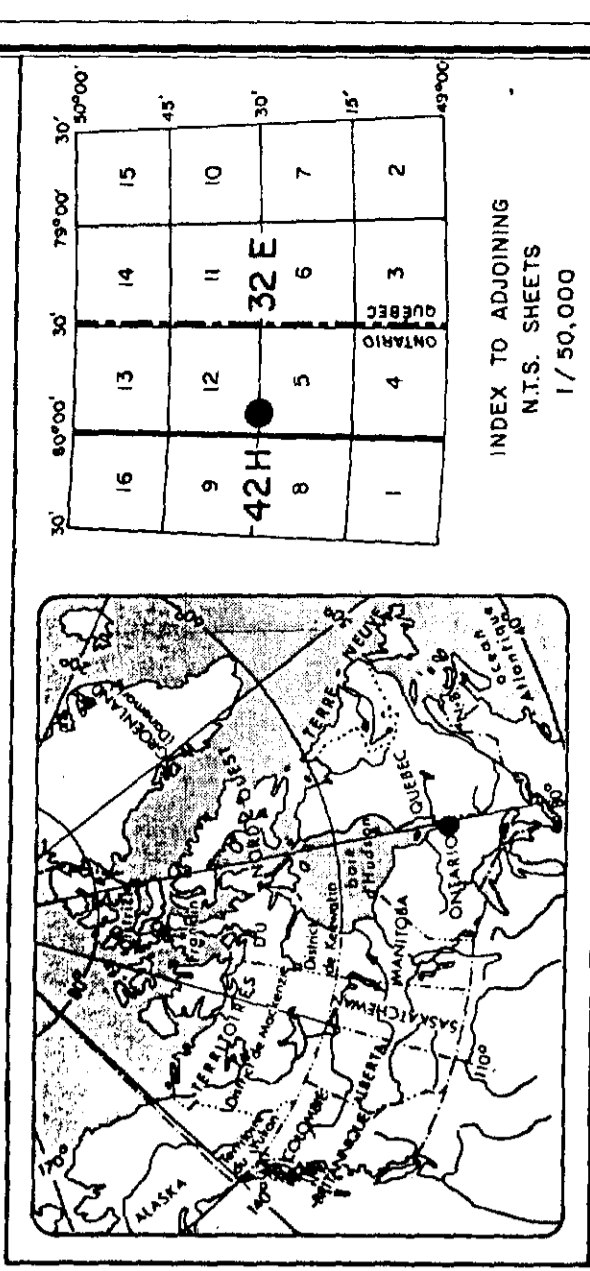
2130





- LEGEND**
- Diamond drill hole
 - Reverse circulation drill hole
 - Trenches, outcrop
 - Claim post located
 - Blazed line
 - Claim post approximate
 - Drill roads

Magnetometer survey (total field)
All readings in range of
50000 gammas

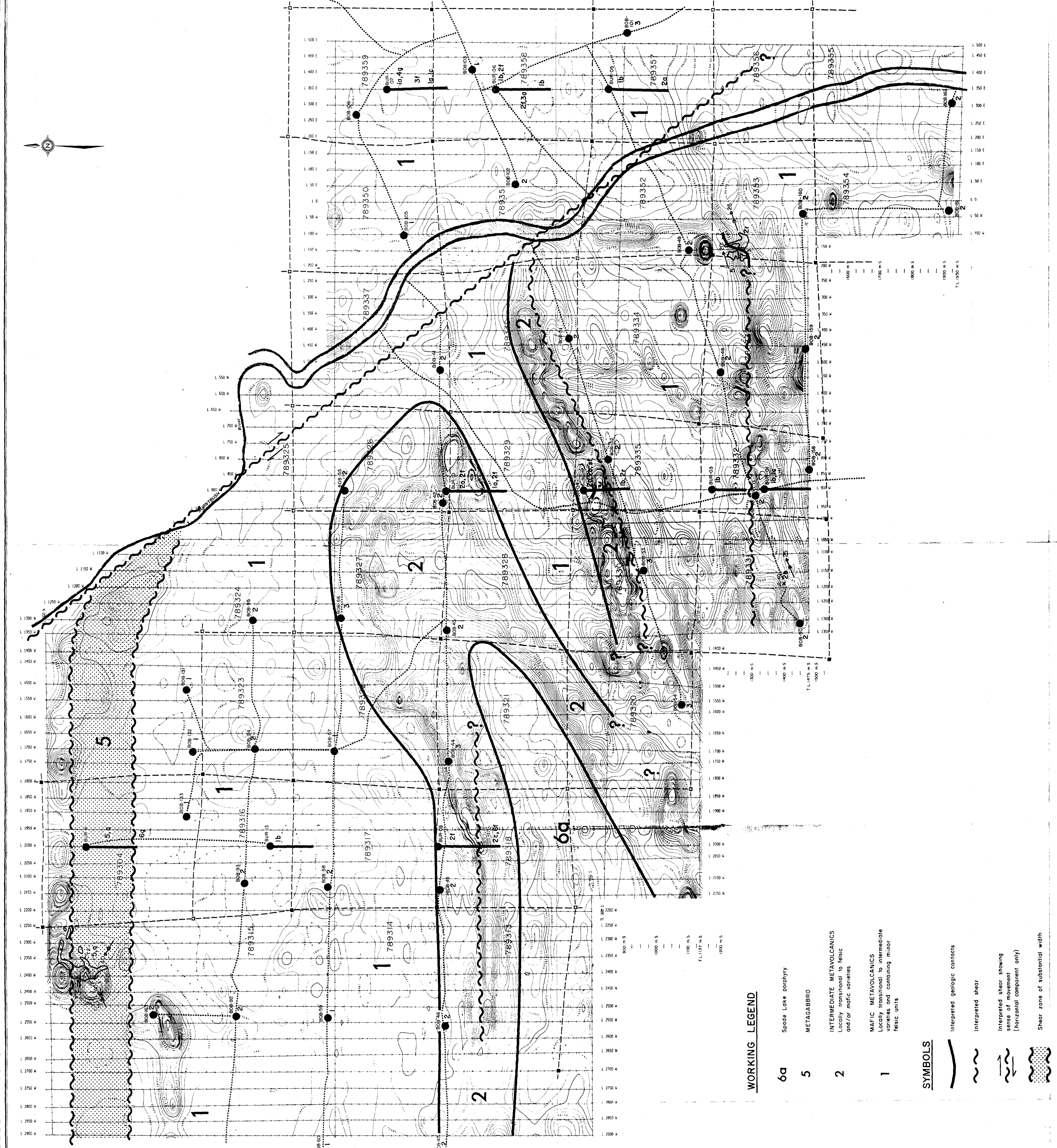


COGEMA Canada
L. Lévesque, R. St-John
Geologists

BURNBUSH RIVER PROJECT
Burnbush grid

GEOLOGIC INTERPRETATION

Map No. 08BND-47-03
Scale: 1:5000
Date: 1988
Sheet No: 2/88
Map No: 11



- DETAILED GEOLOGIC LEGEND**
- PROTEROZOIC**
- 8 Diabase dyke
- ARCHEAN**
- 6 FELSIC INTRUSIVE ROCKS
 - 6a Spode Lake porphyry
 - 6b Aplite granite
 - 6f Feldspar porphyry
 - 6g Green quartz diorite
 - 5 MAFIC INTRUSIVE ROCKS
 - 4 METASEDIMENTARY ROCKS
 - 4a Argillite, mudstone
 - 4b Greywacke (Group 1)
 - 4c Greywacke (Group 2)
 - 4g Graphitic argillite, lustriferous rocks
 - 4v Volcanlastic rocks
 - 3 FELSIC METAVOLCANIC ROCKS
 - 3a Fine-grained/aphanitic flows
 - 3b Porphyroblastic/massive flows
 - 3f Porphyritic flow or tuff/crystal tuffs
 - 2 INTERMEDIATE METAVOLCANIC ROCKS
 - 2a Fine-grained/aphanitic flows and/or ashfall tuffs
 - 2b Porphyroblastic/massive flows
 - 2c Lapilli tuffs/agonomera
 - 2f Porphyritic flow or tuff/crystal tuffs
 - 2r Mixed rapidly alternating mafic/felsic tuffs
 - 1 MAFIC METAVOLCANIC ROCKS
 - 1a Fine-grained/aphanitic flow and/or ashfall tuff
 - 1b Porphyroblastic/massive flows
 - 1c Lapilli tuffs/agonomera
 - 1e Pillow lava
 - 1g Gabbro sill

- WORKING LEGEND**
- 6a Spode Lake porphyry
 - 5 METAGABBRO
 - 2 INTERMEDIATE METAVOLCANICS
Locally transitional to felsic
and/or mafic varieties
 - 1 MAFIC METAVOLCANICS
Locally transitional to intermediate
varieties and containing minor
felsic units
- SYMBOLS**
- Minor fold axis
 - Mineral lineation
- sf. Sulfides very abundant >10% over part of drill hole
q. Thin quartz veins present (eq > 1m).

- SYMBOLS**
- Interpreted geologic contacts
 - ~ Interpreted shear
 - ~ Interpreted shear showing
horizontal component only
 - ~ Shear zone of substantial width